CATALOG NO. 949

# LAFAYETTE CONCORD RADIO & TELEVISION

We guarantee you the immediate benefit of any lower prices prevailing after the catalog is printed.

We'll return any over payment to the penny.

29th ANNIVERSARY

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RADIO RECEIVERS

TELEVISION

HIGH FIDELITY

PUBLIC ADDRESS

RADIO TUBES



COMPONENTS



HAM EQUIPMENT



NEW YORK: 100 SIXTH AVENUE

CHICAGO: 901 W. JACKSON BLVD.

**BOSTON: 110 FEDERAL STREET** 

CHICAGO: 229 W. MADISON STREET

**NEWARK: 24 CENTRAL AVENUE** 

ATLANTA: 265 PEACHTREE STREET

**BRONX: 542 E. FORDHAM ROAD** 

phone numbers listed on page 1

# Where the World shops.



#### NEW YORK Lafayette mail and shopping headquarters are at 100 Sixth Ave. Can be reached by 6th, 7th and 8th Ave. Sub., **Canal Street Station** Phone: WAlker 5-8883

# shop

You can live in Saskatchewan, Teaneck, N. J. or Trincomali - it doesn't matter how far you are from the radio center of the world - you're right on the inside, now that you own this catalog ... you can get any item you want by mail and fast. Our remarkable mail service has been famous now for 29 years. It's been famous for its speed, the down-to-earth prices (which make most people shake their heads and say. "Don't understand how Lafayette-Concord can work on such a tiny markup!") and our unshakable reputation for reliability. Every printed word in this catalog is backed by guarantees. Anything you see on these pages can be yours just by dropping a card or letter to us. Send a trial order and see what we mean by LAFAYETTE-SERVICE.

# Guarantee

We guarantee Lafayette - the bonded Radio - to be satisfactory in every detail and to reach you in perfect condition - that it will give you the service you have a right to expect-that it represents full value for the price you pay.

Every buyer of a Lafayette radio set is entitled to a 30 day Free Trial Offer. If at the end of the period, you are not absolutely satisfied with your receiver. return it to us on or before the 30th day and your money will be refunded in full, less transportation charges.

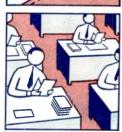
#### BIGGER STOCKS - LOWER PRICES

With 7 stores to keep supplied, and all our purchasing done through one central office, you can imagine the huge quantities of parts and components we buy each year. Naturally, with such complete stocks and rapid turnover, we can afford to work on slim markups... and we do just that. Almost every item in our catalog is priced lower than you would find it elsewhere.



#### FAST SPEED-SERVICE

Speed is our middle name! Our mailrooms and switchboards are constantly busy with orders pouring in from every corner of the globe. We usually ship merchandise within 24 hours of receipt of your order. If the branch to which you send your order is temporarily out of stock, there is no delay. Our inter-branch teletype system makes it possible to relay orders and make immediate shipments from another warehouse or branch store.



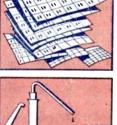
#### FRIENDLY COUNSEL

The men who serve you in Lafayette Radio centers are essentially engineers, not salesmen. If you visit one of our showrooms or write for advice, it will be given freely by our engineers without obligation on your part. Write, call or visit these departments in NEW YORK OF CHICAGO: AMATEUR, BROADCASTING, EXPERIMENTAL, INDUSTRIAL, INSTITUTIONS, SCHOOLS, SOUND, SPECIAL LABORATORIES, TELEVISION.



#### TIME PAYMENT PLAN

Now you can own a radio, sound system or any electronic equipment that you want, when you want it. All Lafayette centers have an easy time payment plan on radio, television, phonographs, sound and similar equipment. Time payments can be arranged through the mail . . . please write for details of plan and application blanks.



#### LAFAYETTE BUREAU OF STANDARDS

Trained technicians in Lafayette's testing laboratories examine and test every piece of equipment down to the smallest part. Every item sold, either through this catalog or over the counter in one of our seven stores, has been tested and approved by Lafayette's Bureau of Standards.



ENTIRE CONTENTS COPYRIGHTED 1949 PRINTED, PUBLISHED AND

# ...for Radios, Parts, and Television!!



#### BOSTON

New England — headquarters at 110 Federal Street, between South Station and the P.O. Phone: HU 2-7850

shop Phone: H

If no live was not for the second process, you'll find shopping a person as all of pleasure. Here you will see these catalog pages come to be the second will see the contest, understanding, choice and cooperation are the order of the day — every any.

Lafayette's efficient and spirited many of the cooperation are the order of the friendly way of the cooperation.

Now enjoy this friendly way of the cooperation are the at your nearest Lafa etter week.



#### ATLANTA

Radio and camera fans alike find their best values at Lafayette, 265 Peachtree Street Phone WAlnut 5140

# LAFAYETTE RADIO

29th ANNIVERSARY

#### BRONX

At 542 E. Fordham Rd just 3 blocks east of Third Avenue Phone FO 7-8813



Name of Street



#### NEWARK

Lafayette's New Jersey thorping center is at 24 Central Ave., just en proad Street Phone: MArket 2-1661



#### LAFAYETTE SELLS OVERSEAS

An orders outside of the continental United States by our main office in New York, and should be marked the attention of export department. All prices on such orders a net, F.O.B., New York warehouse, subject to change without notice. The merchandise is payable by either confirmed, procable credit, or by a remittance in United States Pollars on a New York bank, and should include country of the procasular expenses. All orders are to have a minimum merchandise value of \$10. Goods are packed in cardband cartons. For wooden export packing, there is an in the additional charge. Please send all correspondence by a for best saryles.



#### LAFAYETTE SERVES INDUSTRY

Purchasing Agents of industrial organizations, schools, laborator. Agents of industria

For the Boy Values... Shop Lafayette First!!



BANISH NOISE, INCREASE FIDELITY, WITH FMI

LAFAYETTE'S FM. AM TABLE SET

• FM for Noise-Free Reception

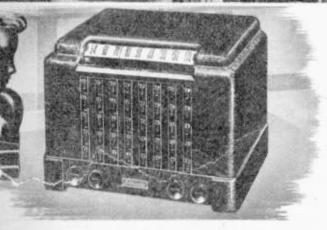
AM for Distance and Variety

FM is sweeping the country! Close behind comes Lafayette, with this beautiful table-model radio, designed to take full advantage of all the improvements inherent in FM reception. And that occastonal AM program not yet duplicated on FM, or sional AM program not yet auplicates on FM, or originating out of FM range, can still be brought in on the AM section of this versatile receiver. You can switch in an instant from static-free, high fidelity programs on the 88-108 mc FM band to top

pertermance on the 540-1700 kc broadcast band. Both FM and AM scales are clearly delineated on the easy-to-read, slop-ing illuminated "slide-rule" dial.

Circuits have been carefully designed for sensitive, efficient operation. Separate i-f coils are used for FM and AM. FM curoperation. Separate i-t coils are used for r m and AM. I m cuits include an r-f stage, mixer-oscillator, two 1-f stages, ratio detector, and beampower audio out; it. Frequency drift to be reduced to a negligible m. has been reduced to a negligible minimum. Other leatures inhas been reduced to a negligible minimum. Other leads of clude tone control, quality 5" P speaker, built-in AM and clude tone control, quality 5" P speaker, built-in AM end FM antennas, and connection for external antennas, where rM antennas, and connection is external antennas, where desired. Tubes include latest types: (2) 6BJ6, 12AT7,6BH6, 12AT6, 35L6, and 35Z5 (rectifier). Operates on d-cac, or 105-125 volts, \$0-60 cycles. Cabinet size: 12"x8"x7" Weight: 8 ½ lbs. 

Lots of 3......37.50



#### CONSOLE PERFORMANCE IN A TABLE MODEL

This Deluxe superheterodyne incorporates most of the features you'd expect to find only in a console radio. A push-pull output stage delivers 3 watts of undistorted signal to the powerful Alaico V 6" PM speaker. Negative feedback across the entire audio circuit greatly reduces hum level and insures excellent tone quality. A continuously-variable tone control·lets you pick the exact point of pleasing tonal response. The clearly-lettered "sliderule" dial slopes just enough so that it may be read from above or in front of the set And you'll be proud to display the smartly-styled Walnut plastic cabinet, with its unique grill design. A built-in loop eliminates the need for an outside antenna, but a connection is provided for those locations where one might be desirable. The tube complement includes one 6SA7, one 6SF7, one 6SL7-GT, two 25L6—GT, and two 2528—GT (rectifiers). Separate power supplies are provided for the output stage and for the rest of the set. Operates on 105-125 volts, a-c and d-c. Cabinet size: 121/2\*x9\*x84\*. Shpq. Wt; 12 lbs.

1N708-Each, in lots of 3...... 20.95 Each, singly...... 22.45



The tube complement includes a 12SA7 oscillator and first detector; 12SK7 i-f amplifier; 12SQ7 detector, audio, and AVC; 50L6-G\* beam-power audio output stage; and 35Z5-GT rectifier The cabinet measures 12"x81/4"x71/4". Weight: 9 lbs.

a few short months ago.

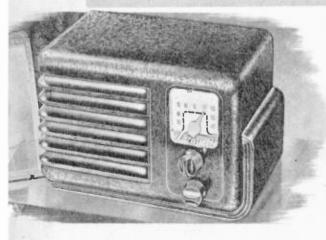


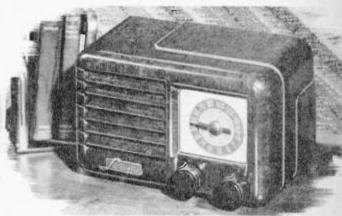
#### LUGGAGE-TYPE PORTABLE

Three-way portable in luggage-type case of striking appearance. Sturdy plywood cabinet is covered with attractive tan leatherette, contrasting with shiny plastic carrying handle and control knobs. Front panel is perforated brushed brass, with dial and markings stamped in red. Radio operates on a-c and d-c (110 volts), or on its own extra-long-life, self contained batteries. Improved superheterodyne circuit uses 4 efficient miniature tubes plus selenium rectifier. Set also has built-in loop and Alnico V PM speaker. Uses one 1R5, one 1L4, one 1U5, and one 2S4 tubes. Cabinet dimensions: 9½°x7½"x4½". Weight, less batteries: 7 pounds.

#### PLASTIC CASE PORTABLE

A three-way portable of smart, modern design in beautiful maroon and ivory plastic cabinet. Flexible plastic strap makes carrying easy, and lies flat when not in use. Tuning dial ramges from \$40 to 1650 kilocycles in large, easily-read numbers. Radio operates anywhere on 110 voits a-c, 110 voits d-c, or its own light weight batteries. The sensitive superheterodyne circuit utilizes one 1R5, one 1T4, one 1S5, one 2S4. A highly-efficient selenium rectifier is used instead of mextra tube. Beam power output plus a powerful Alnico V PM speaker assures plenty of volume and excellent tone. Cabinet measures: 4½ x7°x10". Weight, less batteries, only 6 lbs.





#### ECONOMY MODEL 5-TUBE SUPERHET

Here's a 5-tube radio packed with plenty of power and value at Lafayette's low price! The attractive plastic cabinet is designed to harmonize with modern furnishings. You can order it in a Walnut color to match dark furniture, or a gleaming ivory to match light furniture. An Alnico V PM speaker assures sufficient volume and clear tone. All the sensitivity and selectivity inherent in superheterodyne receivers are incorporated in the efficient circuits of this little set. The clock-type tuning dial with prominent numbers, coupled with vernier tuning, makes finding stations easy. The set operates almost anywhere...on a-c or d-c...with its built-in loop antenna, or an outdoor antenna if you prefer one. Included in the tube complement are: one 12BE6 pentagrid converter, one 12BA6 i-f amplifier pentode, one 12AT6 detector-audio-avc, one 50B5 beam-power output, and one 35W5 rectifier. Cabinet measures only 7" x 5" x 5½". Shpg. Wt: 9 lbs.

#### FULL-SIZE RADIO FOR LESS THAN \$10

For that second or third radio...for the children's room or the guest room...here is an inexpensive table-model radio at an unusually low price. A 4-tube TRF set, with many of the features of more expensive sets, it can be tuned in on the Kiddies Hour, the local disc jockey, the ball game, while the "family set" is receiving Mother or Dad's favorite program.

Sturdy cabinet neatly designed in walnut plastic. Large, easy-to-grip knobs operate the volume control and clock-type tuning dial. Power supply for the radio may be 110 volts a-c or d-c. Efficient circuits utilize one 12BA6 r-f pentode, one 12AT6 diode-triode, one 50B5 beam power pentode, and one 35W4 rectifier. The dynamic speaker gives clear tone at good volume. Cabinet dimensions: 9¼"x6"x5¾".

 1N426—Shipping Weight: 7 lbs.
 Fach.
 9.95

 Lots of 3.
 Each.
 8.95

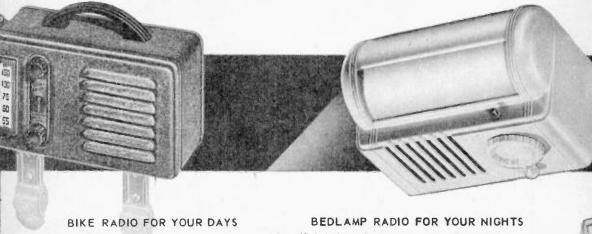


of 7-tube performance. Dial scale numbers are beautifully illuminated on dark green background. PM dynamic speaker with Alnico V magnet plus beam power output give ample volume with good tone quality. Operates from 6-volt battery at very low current drain. Tube complement includes one 6BE6, one 6BA6, one 6AT6, one 6AS5, one 6X4 (rectifier). Uses long-life nonsynchronous vibrator. Cabinet dimensions: 10½x6½x4½".

Lots of three, each......27.45

dial, making it easy to locate stations. The set works efficiently with any type of aerial; an antenna compensator being included for proper matching. Noisesuppression equipment for the average car is included. The metal cabinet has a brown Hammerloid finish with brown plastic knobs, and a maroon-and-white dial. Tubes used are 6BAS (two), 6BE6, 6AT6, 6AS5, 6X4, (rectifier). Size: 5\%x4\%x12\%."

1N623-For 6-V, battery...Shpg. Wt: 91/1bs...34.95 



Make this fine portable bicycle radio your constant traveling companion. Listen to your favorite program wherever you ride. Then when you leave your bike, detach it from the handle-bars and carry it with you as a personal radio. A special "theftproof" feature prevents anyone else but you from removing the set from the handle-bars. Housed in a beautiful maroon crinkle-finish case, the set mounts a four-section telescoping whip antenna and has a plastic corrying handle on itstop. Large, easily-read numbers appear on the tuning dial. A full-size Alnico V PM speaker assures ample volume with good tone. Uses one 1R5, one

174 or 1U4, one 1S5, one 3S4 tubes. Operates on two 1½-volt flashlight cells and one standard 67½-volt "B" battery. Cabinet dimensions: 71/4"x41/4"x31/4". Shipping Wt: 3 pounds.

1N420-With Tubes, Less Batt..... 19.95 20N19878-Batt, Kit. Shpg. Wt. 11b. ..... 1.52 "Soft light and sweet music" is the soothing combination you can have from this cleverly-designed bedlamp radio. Spend pleasant evenings reading in bed to the strains of your favorite melodies. Flip off the light and relax to the radio alone.

Padded, adjustable brackets let you mount the radio on any type of bed rati or headboard. The radio is a full-size, 5-tube superheterodyne, with built-in antenna and dynamic speaker. The bedlamp section contains a standard, tubular lamp, behind a curved, plastic diffusing shield, which unclips from the front of the radio to replace the lamp. The unit operates on 110 volts, a-c or d-c. Radio uses: 12SA7, 12SK7, 12SQ7, 50L6-GT, and 35Z5-GT (rectifier). Dimensions: 9½" x 5½" x 7". Shipping Weight: 8 lbs.

1N533-Bedlamp radio in walnut plastic...21.75

1N534-Bedlamp radio in ivory plastic......21.75 Lots of three (either color), each......20.75



#### SPEED RADIO-PHONOGRAPH

One compact, handsome portable case contains a highly sensitive 5-tube superhet radio plus an amplified phonograph for playing 33-1/3, 45 and 78 RPM records. This outstanding entertainment package features the new reversible cartridge pickup with dual needles for standard and microgroove records. Speed regulator on motor board permits instant changeover to each speed. Special disc is provided for adapting turntable to 1½" center hole on 45 RPM records. Plays all records with the lid closed. A full 5" Alnico V PM speaker gives excellent reporduction of high and low notes from records and radio. Tubbes: 125K7, 12SA7, 12SO7, 50L6GT and 35Z5GT. Attractive two-tone marcon and tan leatherette case measures 14½x8½x14". Shipping Weight: 20 lbs. For 105-125 V. 50/60 cycles AC.

1N544-Complete with Tubes...... 37.50 ......Each....... 34.95



#### AUTOMATIC PHONOGRAPH

an inexpensive automatic phonograph of exceptional quality to give you years of record entertainment. Compact, luggage-type case is finished in attractive two-tone brown and tan leatherette. Sturdy, precision-made record changer with even-running 78 RPM motor plays twelve 10° or ten 12° re-cords with the lid closed. A high fidelity crystal cartridge in lightweight pickup arm assures minimum record wear and wide range response. 3-tube high gain amplifier and 5° Alnico V PM speaker give faithful reproduction of your favorite recordings. Volume and tone controls are located on the outside of the case. Dimensions: 17x 13x9°. Shpg. Wt. 21 lbs. For 105-125 V., 50/60 cycles AC.
34N22694—Complete with Tubes......38.95

34N22694-Complete with Tubes ..... 38.95 Lots of 3...... Each...... 34.95



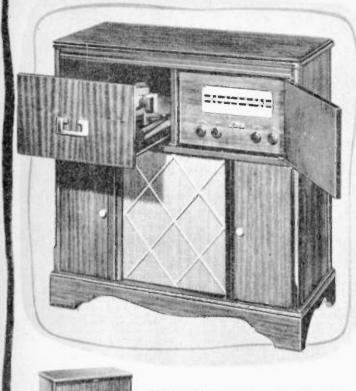
#### NEW AUTOMATIC TABLE PHONO



#### WAY SHORT WAVE PORTABLE

Enjoy both standard broadcast and 16-51 meter short wave bands...anywhere, anytime with this powerful, 6-tube, 3-way portable receiver. Plays on self-contained batteries or 110/220-volt AC-DC power source. You'll be amazed at the rich, full tone reproduced by the highly sensitive Alnica V PM speaker; also how easily the advanced superhet circuit brings in foreign and standard broadcasts with ample volume and excellent clarity. Features an automatic volume control, a built-in loop for standard broadcasts and a 42" telescoping whip antenna for short wave. Large, easy-to-read airplame type dial is calibrated in meters and megacycles on the short wave band. Tubes: 185, (2) 1N5, 1H5, 3O5, 11724. Handsome lugagae-type case is finished in attractive two-tone leatherette. A protective cover for the control panel slides into the cabinet during operation. Dimensions: 13x6x11/2. 

# Lafayette Offers Two Magnificent Console Combinations



#### BEAUTIFUL REGENCY CABINET

This splendid combination is assembled in an attractive Regency-styled mahogany veneer console cabinet hat harmonizes with any traditional furniture and interior decoration. Convenient space is provided alongside the speaker enclosure to store your most used albums of record favorites.

#### A Featured Value!

FM-AM Reception Plus Automatic Phonograph for the Cabinet Price Alone

# 2-SPEED RECORD CHANGER for LP & 78 RPM RECORDS

Here is a sensational radio-phonograph value that stands out above all competition! A powerful 8-tube radio PLUS staticless FM, combined with a fine automatic phonograph. You'll thrill to the full range reproduction of both records and radio . . . especially the brilliance of tone and noise-free reception on the FM band. Every feature of this exceptional instrument is the result of modern engineering design and finest workmanship. An advanced superheterodyne circuit covers the entire standard broadcast (540-1600 KC) and FM (88-108 MC) bands. Each band is equipped with its own built-in antenna for maximum signal: a loop antenna for AM and a dipole for FM. The full size speaker has plenty of reserve power and range to faithfully reproduce all the instruments of a symphony orchestra. For your record enjoyment, you can play a complete symphony or several hours of dance music with but a single record change. The quiet, gentle record mechanism plays ten 12-inch or twelve 10-inch records—automaticallv . . . either 78 or 33 1/3 RPM. A special reversible cartridge in the pickup arm assures proper balance and tracking on both types of records. Tubes: 12AT7, 6BE6, (2) 6BA6, 6AL5, 6AT6, 6AQ5 and 5Y3 rectifier. For 105-120 volts, 60 cycles AC. Dimensions: 33x3412x1612". Shpq. Wt. 90 lbs.

IN814-Shipping Weight 88 lbs. 139.50



# Shassis Speaker and

#### Chassis-Speaker and Record Changer for your Custom Installation...

# lafayette 12-Tube FM-AM Combination

Superb High Fidelity Reception Concert Hall Realism from

Your Symphonic Recordings

- Automatic Frequency Control For Top FM Performance
- New 3 Speed Record Changer For 33%-45-78 RPM Records
- Push-Pull Audio Output
- DeLuxe 12" Concert Speaker
- Latest FM-AM Circuit

Now...you can have true luxury in a radiophonograph combination at a moderate price. Everything you could possibly desire for complete listening entertainment, has been packed into this fine musical instrument: High fidelity FM reception on the 88-108 MC band; remarkable sensitivity and selectivity on all standard broadcast stations from 540-1700 KC; an automatic phonograph with the latest type record changer that plays ALL speed records; a handsome console cabinet of exquisite hand-rubbed mahogany veneers for added beauty and richness in your home.

No detail has been overlooked to make this radio-phonograph one of Lafayette's truly remarkable values. The smooth, fast operating precision record changer plays all makes and sizes of records . . . 7, 10, 12-inch, conventional or long-playing type. You can stack a group of 10 and 12-inch long playing discs on the instrument and enjoy up to 41/2 hours of your favorite music without interruption.

Modern engineering has worked wonders to give you the newest in circuit design including the advantages of an automatic frequency control for the FM band. This advanced development solves the problem of stability and increased accuray in FM tuning. The powerful, efficient circuit also includes push-pull beam power audio output, an automatic volume control and 12 tubes (including rectifier) for "in person" performance on both FM and AM. A loop and separate dipole antenna built into the cabinet, make outdoor installations unnecessary in most locations. High fidelity reproduction of records and radio is provided through the deluxe 12-inch Alnico V PM speaker and push-pull amplifier. Wattage is high enough to take care of peak output without distortion, yet capable of bringing out the softest passage of an orchestral selection. Tubes: 6BA6, 7F8, 6C4, 7AH7, 6SH5, 6SQ7, 7A6, 7F7, (2) 7C5 and 5Y3GT rectifier. Operates on 105-120 volts, 60 cycles AC only. Cabinet dimensions: 331/2 x 35 x 17". Shipping Weight

1N1209-Complete With Tubes 179.50 Same radio-phonograph as above except with a single speed record changer for standard 78 RPM records.

IN1207—Shipping Weight 98 lbs... 169.50 CABINET ONLY-Shipping Wt. 45 lbs... 72.50





### **Safayette** FM-AM Combination

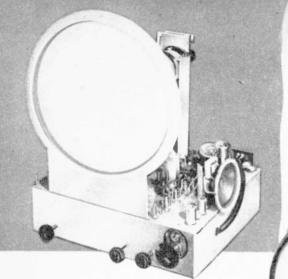
Here is the same chassis, speaker and phonograph unit described above except housed in a cabinet for the modern home. Consider this line console of striking design and functional beauty . . moided of selected hardwoods, bleached and hand-rubbed to a lustrous finish. The bevelod moiding and offset legs add a richness to the distinctive styling. Record changer compartment slides out for easy accessibility without disturbing decorative pieces on the cabinet top. Radio chassis and tuning controls are mounted in the adjacent spaces is hinged "slide-away" door tunks into the page prospace; a hinged, "slide-away" door tucks into the space pro-vided above the control panel. The lower section is covered vided above the control panel. The lower section is covered with attractive woven grille cloth concealing the befile and 12-inch high-fidelity speaker. Dimensions: 35" high x 36½" wide x 17½" deep Ship. Wt. 100 lbs.

189.50

\*Same FM-AM radio-phonograph except with single speed record changer for standard 78 PRM records.

179.50

CABINET ONLY—SMpping Weight 45 lbs. 82.50



# Lafayette Large Screen

For 1950, Lafayette brings you perfected and performanceproved television in the larger size screens at prices you want to pay. CONSOLES ... TABLE MODELS ... CHASSIS for custom installation—a model to fit every requirement of space and price. Lafavette television is "Eye-Fidelity" television . . . another way of expressing high fidelity reproduction in terms of visual enjoyment. Pictures come in clear and bright, and the sound is better too, because it's staticless FM. You will marvel at the life-like realism of the pictures. These fine quality units are ruggedly built with the best parts to give years of superb performance.

TV Cabinets on Page 10 TV Antennas Pages 108-109

121/2" DIRECT VIEW TV CHASSIS FOR **CUSTOM INSTALLATION** 

#### GIANT 16" TV CHASSIS

Here's exciting new big screen television in a precision-built chassis for your custom installation. A huge 145-square inch picture that can be viewed from any part of your living room in comfort and without eye-strain. Brilliant, life-like pictures of all TV programs brought into your home for full enjoyment. See and hear thrilling sports events, amusing comedy, dramatic presentations, movies and talent shows reproduced with amoeting realism. A new automatic frequency control system for horizontal synchronization assures are greater detail and new automatic frequency control system for horizontal synchronization assures greater detail and locks the picture in against normal noise bursts. Another development is the new high voltage power supply with improved regulation which provides far better contrast and brilliance. The large, extra bright picture permits day or night viewing without discomfort. All 13 channels are covered with highest sensitivity. Tuning is easy and precise. Top quality FM sound system reproduces music and speech with exceptional clarity and resonance. Dimensions: 23½"H. x 18½"W. x 20"D. Shpg. Wt. 85 lbs. Tubes and speaker included.

IN137-With 16" Picture Tube.....

209.00

# **RADIO CRAFTSMEN 16" TV TUNER**



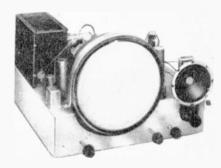
Literally a serviceman's dream! A deluxe, precision engineered video tuner of extreme sensitivity, designed especially for use with a 16" kinescope or any cathode-ray tube that operates at 12 kilovolts. High sweep voltage is more than sufficient for "giant circle" type operation. Here is the ideal chassis for a fine custom installation. The tuner is finished in gleaming polished CHROMIUM, neally arranged and wired for maximum efficiency and attractive appearance. An advanced circuit features an exclusive, fastcircuit features an exclusive, fast-acting automatic gain control with an extremely flat characteristic, that eliminates most external dis-

and eliminates most external disturbances in line voltages. 12 snapsin, replaceable channel, turret tuner is included. Four IF stages, a separate sound channel and four individually tuned RF circuits for each channel provide excellent sensitivity in fringe and weak signal areas. An automatic frequency control of horizontal synchronizing assures sharp images and freedom from picture "tearing." Two video amplifiers give full 4 MC bandwidth with negligible phase distortion. No audio amplifiers included, but cathode follower audio output (500 ohms) permits connection to any audio amplifier and preserves full benefits of FM sound with response of 20-20,000 cps. at less than 1% distortion. Input impedence 300 ohms; separate matched input transformer for each channel. Supplied with 22 tubes plus three selenium rectifiers, shafterproof glass escutcheon, flexible tube mount and poly-ethylene hi-voltage insulator, and all necessary hardware. Chassis dimensions: 16 x 16 x 15" high; (with picture tube mounted: 16 x 22 x 20"). Shap. Wt. less tube: 70 lbs.

Lafayette brings you another value-packed TV receiver for custom installation. A full

To receiver for custom installation. A full 65-square inch picture combined with outstanding TV reception, priced well below the market. This chassis incorporates all the fine features you want for maximum performance on all channels. It brings to life the whole world of sports, drama, news and entertainment with remarkable realism and delivers these fascinating pictures right into your home for the entire family to enjoy. A specially designed high voltage power supply makes possible far greater contrast and brilliance. Also featured is an automatic frequency control system that keeps the picture steady and minimizes station-to-station tuning. Dimensions: 13"H. x 18½"W. x 20"D. Shpg. Wt. 75 lbs. With tubes and speaker.

1N135—With 10" Picture Tube. 149.00



# Television for 1950

Thousands of satisfied customers have purchased Lafayette television by mail since the first station went on the air. If you are within the reach of TV stations, you want a receiver that can give you full enjoyment of all the wonderful programs now available. Our engineers are ready to advise you on how to obtain good reception in your area. Let us know exactly where you live and whether your home is on a hill or in a valley. We'll be able to be specific with practical suggestions. There is no obligation for this service. Remember though, Lafayette won't sell you a TV set unless they are sure you will get good reception!

TV Accessories on Page 111







mananan araban arab

Tuning is simple with the four easy-to-manipulate controls providing pin-point focusing and fast station selection. The picture is accurately and automatically synchronized with the latest type FM audio circuit. Both music and speech are reproduced with brilliant clarity and resonance. A top quality 10" speaker is supplied with the console receiver. The four-stage picture IF amplifier and two-stage video amplifier provide exceptionally high sensitivity with plenty of reserve power for weak signals and fringe area reception. Maximum video response and sharper contrast provided with 4 megacycle bandwidth.

IN146—Mahogany Console with Picture Tube
IN147—As above except Blonde Maple Finish
IN144—Machogany Table Model with Picture Tube
IN145—As above except Blonde Maple Finish
349.00
IN145—As above except Blonde Maple Finish
334.00

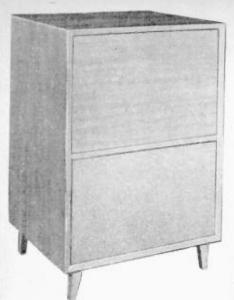
# BIG, BRILLIANT 12½" PICTURE POWERFUL 30-TUBE RECEPTION

Here's high quality, big-screen television at a real budget price! The dependable RCA 630TS circuit combined with an exquisitely finished deluxe cabinet of the finest woods, will add to the pleasure and beauty of your home. With this set, you can relax anywhere in the room and enjoy exciting sports events, thrilling drama programs, on-the-spot news broadcasts, movies, talent shows, comedians and musical presentations. Its 95-square inch picture is big and bright enough to permit comfortable viewing by the entire family and friends. This is tested and perfected television, engineered for the linest performance and sold direct to you for the best in dollar value. Clear, bright, steady pictures on all channels are assured with the high powered two-stage video amplifier, four-stage picture IF amplifier, RF amplifier and "synchro-lock" feature. The excellent FM sound system reproduces music and speech with brilliant clarity. Smartly-styled beautiful veneer cabinet is simply designed to harmonize with the finest interior decoration. Dimensions: 1814" high x 25" wide x 2014" deep. Shog, Wt. 110 lbs.

IN142-With 124" Picture Tube Mahogany Finish 269.50

IN142—With 1212 Picture Tube—Mahogany Finish 269.50 IN143—As above except in Blonde Maple Finish 279.50





#### MODERN CONSOLE TV CABINETS for 10° or 12° Tubes

Constructed of fine quality plywood with se-lected outside veneer, hand-rubbed to a rich and and the cabinet a distinctive appearance. Front panels removable; chasis shelves are cut out to accommodate Hallicrafters or RCA type chassis. Dimensions: 39-9/16" H, 24½" W., 21" D. Shipping W: 95 pounds.

For 15" or 16" Tubes

Dimensions: 42½" H., 25½" W., 25" D. Wit: 101 pounds.

40N24340-Blonde...... 60.00



#### FOR 15" OR 16" TUBES

Fine mahogany veneer cabinets expecially designed for the Tech-Master chassis shown on page 127. Neat, ctractive modern style blends with any surroundings. Completely drilled for all controls; has built-in safety glass over tube opening. Dimensions: 26½" W., 25" H., 23½" D. Shipping Weight: 68 pounds.

40N24344-Universal 15"-16". 54.50

# Modernize WITH

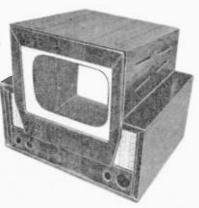
(Children and Children

Lafayette is proud to offer these distinctively styled cabinets of select woods to complete your custom television installation. Handsome table models...and distinguished consoles in a choice of finishes to blend with your interior decoration. All cabinets are designed to fit the TV kits and chassis shown on pages 8 mad 127. pages 8 and 127.

#### 16" TV PERIOD CONSOLE

Gracefully styled to blend with the conventional living room. Truly an impressive piece of furniture, solidly built of selected mahogany idly built of selected mahogany veneer woods, hand polished to a smooth satin tinish. Attractive grille cloth covers the speaker baffle which accommodates speakers up to 12" in diameter. The receiver controls are cleverly concealed by a hinged panel that closes flush with the cabinet when the set is not in use. Dimensions: 41" H., 26" W., 24" D. Shipping Weight: 110 lbs.

3N108-Mahogany Finish. 78.50 3N109-Blonde Finish...... 88.50



#### FOR 12" TABLE MODEL CHASSIS

A distinctive table model cabinet, A distinctive table model cabinet, created for the average living room. Smart-looking, seasoned mahogany veneer woods are superbly finished to blend with the finest furniture. The modern step design creates an unusually striking effect that is rich and impressive. The cabinet fits the RCA type 630 television chassis exactly, no cutting or trimming is necessary. Outside dimensions: 18% H., 25 W., 20% D. Shpg. Wt: 45 lbs. 40N24348-Mahogany Finish. 47.50

40N24831-Blonde Finish......52.50



#### FOR 15" OR 16" TUBES

This beautiful table model cabinet is solidly constructed of fine is solidly constructed of fine woods, hand-rubbed to an exquisite satin finish. Here is distinguished design in a deluxe model you'll be proud to own! Thoroughly reinforced throughout. Built-in, crystal clear lucite mask is attractively framed in matching panelling. Dimensions of 15" size: 24" W., 23%" D., 23%" H. Shpg. Wt. 50 lbs. 16" size same dimensions except %" higher.

40N24347-15" Mahogany. 72.50 40N24330-15" Blonde...... 77.50 40N24346-16" Mahogany..... 72.50

40N24329-16" Blonde...... 77.50



These table model cabinets, except No. 40N24344, can be supplied with blank panels (except for picture tube cutout) when specified.

#### FOR 10" TABLE MODEL CHASSIS

a handsome styled cabinet of fine walnut veneer Here's a handsome styled cabinet of fine walnut veneer, beautifully finished and polished. You'll be pleased with this solidly constructed model, drilled to fit the RCA 630 Type television receivers exactly. The picture tube is framed by a built-in lucite mask that gives protection to the tube and odds a professional touch to the overall appearance of the cabinet. Will fit all 10 inch kits and chassis shown on page 127. Dimensions: 14½" H., 24%" W., 21%" D. 

# fayette

Lafayette leads again with outstanding cabinet values for the finest homes. See cabinet values for the linest nomes. See these exquisite, custom designed console units for deluxe radio-phonograph and television installations. Here is liawless cabinetry with the charm of fine furniture... functional beauty that is simple and in seed tasks. good taste.

# justom Designed

CABINETS FOR

RADIO and TV



#### DELUXE PERIOD DESIGN CONSOLE

DELUXE PERIOD DESIGN CONSOLE
Here is an unusually fine credenza style console
of classic simplicity. Solidly constructed of choice
mahogany hardwood, hand-rubbed to a smooth satin
finish that matches the elegance of truly exquisite
furniture. Each section of the cleverly designed
doors folds in two when opened, and swings back
flush with cabinet sides, permitting easy access
to controls. Record changer mechanism is housed in
a smooth-sliding drawer. Attractive matching grille
cloth covers the acoustically constructed speaker
compartment. TV pamel accommodates picture tubes
up to 12½°. Dimensions: 44x40x43°.

349.50 3N112-Shipping Weight: 250 lbs...... 349.50

#### TELEVISION TABLES



Solidly constructed swivel top TV tables. Rotate your receiver for most convenient viewing angle. Shpp. Wt. 26 pounds. 20½x20½x pounds. 26" H.

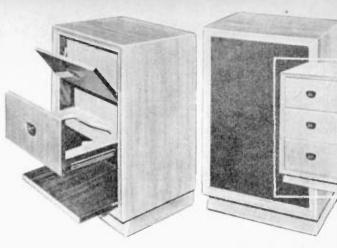
40N24339...14.25

21½x26½x26" H. 40N24338..... 15.75

Plain table, no swivel. 20½ x 20½ x 26" H.

40N25723..... 12.75 211/x261/x26" H.

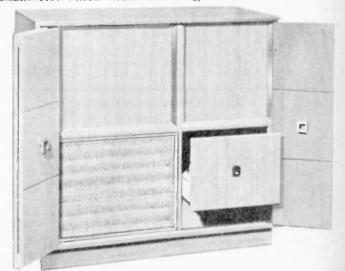
40N25726..... 14.25



#### MODERN RADIO-PHONO & SPEAKER CABINETS

Magnificent combination cabinets, constructed of the highest quality seasoned woods, perfectly matched and superbly designed for your custom installation of radio, phonograph and speaker. Three-section unit provided with tuner and amplifier compartments and slide record changer drawer with Webster model 356, 3-speed changer cut-out (can supply blank, if desired). Removeable ¼" finished wood panels for top and bottom compartments have solid brass friction lid supports. Tuner and amplifier shelves are removeable. Overall dimensions of equipment and speaker cabinets: 33½" H., 21½" W., 18½" D. Inside amplifier and tuner compartments: 20" W. x 9" H. Equipped with full length protective screen back. Mahogamy finished cabinet has green lacquered finish on back of drop lids and drawer pull-outs. Limed oak cabinet supplied with wine color lacquer instead of green. Matching speaker cabinet is available in mahogany with attractive green-grille cloth or limed oak with harmonizing wine-grille cloth (cream or brown also available). Cabinets are acoustically constructed and tuned for 12" or 15" speakers. Cabinet for 15" speaker has inner lip at port to lower resonant frequency to match that of a 15" speaker cone. Has a removeable front panel; entire inside lined with insulating material.

tire inside lined with insulating material.	100 50
40N24336—Mahogany Radio-Phono Console Cabinet	128.50
40N24335-Limed Oak Rudio-Phono Console Cabinet	128.50
40N24334-Mahogany Speaker Cabinet for 12" Speaker	79.50
40N24333-Limed Oak Speaker Cabinet for 12* Speaker	79.50
40N24327-Mahogany Speaker Cabinet for 15" Speaker	79.50
40N24328-Limed Oak Speaker Cabinet for 15" Speaker	79.50
COMBINATION PRICE: Radio-Phono and Speaker Cabinets	



#### BLONDE MODERN TV & RADIO-PHONO CABINET

This striking console is an outstanding example of distinctive modern styling. Full length folding doors are piano hinged and give easy access to radio, phonograph and TV controls. Attractive brass handles. Ample space for record changer, radio and TV chassis and picture tube. The TV panel is supplied uncut. Size: 44x40x49. Wt. 150 lbs.



#### TV SET TURNTABLE

Place on TV table and put re-ceiver on tumtable. Permits ro-tation of TV set to best viewing angle. Alum.; 16x16"

#### WEBSTER WIRE RECORDERS & ACCESSORIES

#### WEBSTER PORTABLE WIRE RECORDER



Model 180-1. Make instantaneous true-to-life wire recordings of your favorite radio programs, phonograph records, speeches, parties, meetings, and play phonograph these parties, and play them back immediately through the self-contained 6" speaker, or through an external amplifier or radio. Here's an inexpensive unit as easy to use as a radio. Notechnical knowledge required to operate. If desired, automatic to operate. If desired, automatic erase device removes old recording while new one is being made. High impedance crystal

cording while new one is being made. High impedance crystal microphone and 8-ft cord may be held in hand, suspended, or set on table while recording. Other features include an elapsed time indicator, a removable take-up drum, automatic stops and lock-fast operating lever. Lightweight portable case finished in attractive burgundy leatherette. Dimensions: 17 3/8 x 11-3/8 x 7½°. Supplied with 3 spools of recording wire, tubes, microphone and cable.

and or opinotic table of table	
35N22602—Shipping Weight 32 lbs	50
33N 10319—Input Cord to connect radio or phono	4.50
35N16304-Output Cord for external speaker or amplifier.	7.5
35N16322-TD422. Take-up drum for above recorder	1.59
and the same of th	

#### CONTROL BOX AND RECORDING INDICATOR



Type 183. A desirable aid for the above recorder. Attaches easily and provides push-button control for recording direct from radio or microphone; playback can be made through recorder speaker or radio. Recording level meter assures correct volume. Shpg. Wt. 3 lbs.

35N16317...... 29.50



#### RECORDING WIRE SPOOL ALBUM

Contains 10 spool-size boxes in sturdy burgundy finished cardboard. Titles can be written on boxes. 

#### NYLON THREAD LEADERS



For use in editing recorded wire or replacement of original wire leader, 600 feet, good for 100 spools using 3-ft leaders. 35N16327-Holds wire in place......

#### SLIDE-DRAWER HARDWARE KIT



#### WIRE RECORDER MECHANISM

Model 178. Connect this complete recorder circuit and pre-amplifier to radio or amplifier for finest quality wire recording and playback. Mount in record compartment of console or place on table. Pushbutton controls and easy-to-read recording level meter simplifies operation and permits accurate setting of recording volume. Other outting of recording volume. Other outstanding features include automatic stops to prevent wire from running off spool, elepsed time indicator



off spool, elapsed time indicator showing total time consumed for any section of a recording lock-fastoperating lever for secure settings at "Run", "Stop", or "Hewind" positions, and removable take-up drum. Metal case 11 x 11 3/8 x 5 5/8". For 105-125 Volts, 50/60 cycles

35N22519—Shipping Weight 23 lbs. 107.50 35N16321—Extra take up drum. 1.59

#### RECORDING WIRE AND ACCESSORIES Lots of 10, Each......1.27 35N16301-30-Minute Spool......2.9 Lots of 10, Each......1.91 35N16302-60-Minute Spool......4.90 Lots of 10, Each......3.18 35N16305—Empty Metal Spool 73 Lots of 10, Each 47 35N16306—Empty Plastic Spool 39 Lots of 10, Each 25

#### MICROPHONE STAND

Type MS111. Streamlined, sturdy cast metal matching base that snaps onto mike quickly and easily. Designed for mike used with Model 180-1 recorder. Use it for any stationary placement of mike, recording long programs. 



#### RECORDING HEAD

For replacement of head now in use on any Webster recorder models. Gives better response and erase than heads on original models.



#### MAILING BOX

Provides handy and easy method for mailing re-cording wire. Fast and low cost means of sen-ding messages between office and field. 

#### LAFAYETTE COMBINATION WIRE RECORDER-RADIO-PHONO



Here it is—all in one compact portable case! A wire recorder...a radio and a phonograph priced low to make this item an outstanding valitem an outstanding value. One hour of continuous recording of family gatherings, business conferences, interviews, speeches, radio programs and disc recordings from the built-in radio and self-contained phonograph. Automatically erases old material as it records. Shuts off automatically at the end of the spool when recording and rewinding. Equipped with a neon volume indicator and variable tone control. Visual indicator control. Visual indicator control. Visual indicator

control. Visual indicator provides a means for calculating the amount of feet recorded. provides a means for calculating the amount of feet recorded. Latest type superhet radio covers the entire broadcast band. Heavy duty, single speed 78 RPM motor drives a heavily weighted turntable. Lightweight crystal pickup. The high quality amplifier and full size PM speaker delivers 5 watts undistorted and faithfully reproduces music and voice. Supplied complete with Electro-Voice microphone and cable, tubes and 2 spools of wire (15 and 30 minutes). Modern, portable case covered in beautiful two-tone brown alligator grained leatherstead. ette. Top cover can be detached easily while instrument is beingused. Dimensions when closed: 14% wide x 19" deep x 9%" high. Operates on 105-125 V. 50/60 cycles. 

#### **NEW MASCO 2-SPEED DISC RECORDER**

Model RK5L. Complete self-contained 2-speed disc re-corder and play-back with built-in amplifier and 6\* Alnico speaker. Excellent for use in educational pro-grams, for orchestras, vo-calists, actors, language calists, actors, language students and in the rumpus



students and in the rumpus room. Features: Instant recording at standard 78 and 33 1/3-RPM; volume level indicator; adjustable crystal cutting head; 2 playback arms, one for standard 78 RPM & 33 1/3 transcription type & one for the new microgracove LP records: heavy duty recording motor and table. Separate input jacks for direct recording from a microphone; direct recording from radio to record. Recording from a microphone or radio may be independent or simultaneous. Master gain and tone controls allow for any desired volume or tone setting. A three-way switch provides independent selection of recording, 1913-back and PA without interaction. Tubes: (2) 6SLTGT, 6V6GT, 6U5, 6X5GT, rectifier. Hrown allicator fabrikoid covered case, 16 x 19% x 8%". 117-V. 60-cy. AC. 

#### RECORDING WIRE

For use with all wire recorders. Tested, unit sures good tone reproduction and long life.	
35N16311-15 min, spool wire	1.17
35N16312-30 min. spool wire	·····
Plastic Leader for units on this page. 35N16318	

#### TAPE AND DISC RECORDERS

#### LAFAYETTE TAPE RECORDER



Record your favorite AM, or FM programs,

Record your favorite AM, or FM programs, recordings, special events, meetings, etc. Recordings can be edited, spliced with scotch tape, erased, used over and over, and stored for long periods without deterioration. Up to one hour of recording on a 1200 ft. reel of twin track tape, 30 minutes in each direction. Frequency response 50 to 7000 cps. ±3 db. 6-watt power output. Heavy duty 5" PM speaker, High frequency erase. Revolves at 78 RPM; space provided for mounting a phono arm to make a combination tape recorder and phonograph. Special switch cuts out speaker when recording with a mike. Neon volume level indicator. Positive capstan drive gives constant speed, eliminates wow, and may be used to mount a conventional turntable. Housed in a rich brown pebbled leatherette carrying case, with white trim. Complete with crystal microphone, one thirty minute reel of twin-track tape and an additional empty reel. For 105-125 volt, 60-cycle AC. Dimensions: 21½ x 11½ x 10. Shipping Weight 38 lbs.

#### MASCO COMBINATION TAPE RECORDER AND AM RADIO



Model R3. Combination magnetic tape recorder, radio and PA system. Records continuously for one hour. Frequency response from 100 to 7000 cps ±3 db. 5 watts output. Recordings can be played back at least 5000 times without deterioration. Equipped with a permanent magnet type erase. 6 x 9° PM oval speaker. Capstam drive eliminates possibility of R3. Combination

type erase, 6 x 9° PM oval speaker. Capstam drive elimin at es possibility of "wow" and "flutter". Heavy duty motor and bearings require no oiling. Microphone and radio-phono input channels. Three outputs: to internal speaker, external speaker jack and jack for monitoring. Voluble). Tubes used: 6517, 65C7, (2) 6V6GT, 65A7, 65F7, 5Y3-GT rect. Two-piece portable case covered in brown alliquator fabricoid, measures 19% x 16 7/8 x 10% high. Complete with built-in AM superhetrodyne radio tuner, Electro-Voice 915 crystal mike with 7% ft. of cable and plug and 1200 ft. reel of plastic recording tape. For 117 V., 60-cycle AC. operation. U/L approved. Uses type A tape.

Model 375. Same as above, less radio. Tubes used: 6SJ7, 6S-C7, (2) 6V6GT, SY3GT rectifier. 35N22616......123.80

#### MASCO TAPE HANDLING MECHANISM



Model M-60. Same basic mechanism used in models R-3 and 375 shown above, Heavy-duty mechanical construction. Powerful shock

mounted motor requires no olling. One function switch to play, erase, rewind, stop and fast forward. Two heads, one erase and one record playback. Separate erase head control and position indicating light. Recording bias frequency 40 KC. Dimensions: 15% x 11 x 6". 35N22617-Shipping Weight 17 lbs......58.74

#### MASCO PRE-AMPLIFIER



#### MEISSNER RECORDER-PHONO-RADIO AND AMPLIFIER SYSTEM



A high fidelity crystal cutting head assures faithful recording of program material and an excellent crystal microphone is lumished for natural, lifelike recording. Normal and overload indicators simplify control of input levels and permit anyone to cut perfect discs. Easy-to-follow directions are given in the instruction manual. Radio broadcasts recorded by simply switching radio to one of the recording chamnels. Separate volume controls for microphone andradio input channels to the recorder allow programs to be mixed and blended with recording studio technique. Two turntable speeds, 78 and 33-1/3 RPM; up to 10-inch disc recording and 12-inch playback is provided with full control of tone and volume. Superheterodyner ecciver designed for reception over the entire broadcasts band with excellent sensitivity and selectivity. Amplifier serves as amnouncer or public address system. Provision made for connecting extra speaker where greater volume is required. Everything you need is furnished with Radio-Phono-Recorder. Built-in radio and amplifier are equipped with full set of seven tubes; crystal "hand or stand" microphone and its cable are in storage compartment ready for connection and immediate use. Complete unit, with cover, is only 19%" its cable are in storage compartment ready for connection and immediate use. Complete unit, with cover, is only 19½" square by 9½" high. Sturdy wooden case, attractively covered in durable airplane style fabrikoid. Storage compartment for records in removeable lid. For 115-volt, 60-cycle AC. Shpg. Wt. 52 lbs. See page 50 for recording discs.

#### INDUCTION TELEPHONE PICK-UP

Picks up telephone conversations Picks up telephone conversations with no tapping of wires or special telephone circuits. Simply place the phone base, either cradle or upright type, on the pickup platform and connect the leads to the high impedance input of any medium gain audio amplifier, or directly to recorder. When used for public address work a speaker at home or in another city can address large audiences without special telephone company emitment. phone company equipment.



35N22524-Induction Coil only...... 4.70

#### "SCOTCH" PLASTIC RECORDING TAPE

"SCOTCH" PLASTIC RECORDING TAPE

A new high quality magnetic recording tape. Offers better frequency response at slow speeds due to extremely thin magnetic coating. Low noise level because of uniform dispersion of particles and mirror like surface. Higher coercive force insureshigher frequency response and greater signal strength. Flot surface and large area provide positive contact with the recording head which gives greater dynamic range. Non-magnetic tape backing between the layers of magnetic coating in the reel minimizes "cross talk". Easy to handle. No snarls, back lashes or kinks. Freedom from breakage. Tensile strength 6 lbs. Easily edited and spliced with scotch splicing tape. Erases cleam with low power—no special erase head is required. Can be marked on back to indicate start and stop of different sound sequences in the same reel. Code A—magnetic coating wound facing out.

Stock No.	Size	Code	1 Reel	6/Ea.	36/Ea.
35N16410 35N16411 35N16412 35N16413 35N16414 35N16415	1/4" x 1200' 1/4" x 1200' 1/4" x 600' 1/4" x 600' 1/4" x 150' 1/4" x 150'	A B A B A	5.50 5.50 3.50 3.50 1.00	4.95 4.95 3.15 3.15 .90	4.40 4.40 2.80 2.80 .80 .80

#### TAPE RECORDING ACCESSORIES

"SCOTCH" SPLICING TAPE, 100" x 1/2". On metal utility dispenser. 

#### "SCOTCH" EMPTY PLASTIC REELS

Stock No.	Size	Holds	Each	6/Ea.	36/Ea.
35N16417	5" dia.	1/4" x 1200'	.60	.54	.48
35N16418		1/4" x 600'	.50	.45	.40
35N16419		1/4" x 150'	.15	.14	.12

"SCOTCH" LEADER STOCK. For ease in editing breaks. Spaced with 3% markings for accurate timing. 150 it. x % ". 35N16420-Lots/6 Ea. .45...Lots/36 Ea. .40...Ea. Singly .50

#### RECORD PLAYING EQUIPMENT

#### LAFAYETTE 78RPM LOW-COST RECORD PLAYER



Airplane-type luggage carrying case finished in durable leatherette. Bright contrasting metal fittings and heavy duty plastic handle. Large PM speaker and modern amplifier for full range tone quality. Pickup arm has crystal cartridge for replaceable or semi-permanent type needles. For 110 V., 60-cycles. AC. Weight: 10 lbs.

34N22672...... 16.95

#### PORTABLE RECORD PLAYER



78RPM Constant-speed, turn-table and motor mounted in a modern sturdy portable carry-ing case, covered in durable, two-tone Brown and Tan simu-lated alligator leatherette. lated diligator leatherette.
Built-in two tube amplifier.
Crystal pickup, volume and tone
controls. Plays up to 12" records with lid closed. Enclosed
Alnico V speaker reproduces Alnico V speaker reproduces all tones with excellent fidelity. 14x7x12½". 110 V., 60 cy. AC. Weight: 13 lbs.

34N22696...... 22.85

#### 78RPM WIRELESS AUTOMATIC RECORD CHANGER



Plays through any Broadcast radio set without direct connections by means of two-tube distortion-free oscillator built into base. Automatic record changer gives complete enjoyment of record changer and the major ment of record control of the cont

#### 78RPM WIRELESS RECORD PLAYER

Merely plug in and play through your present radio set. No wiring or special installation ne-



#### LAFAYETTE 45 RPM AUTOMATIC PHONO



Here's an excellently designed automatic portable phonograph that plays the new 7" 45 RPM records with plenty of power and rich tone quality. A stack of ten 7" records ords with plenty of power and rich tone quality. A stack of ten 7" records at one loading provides 50 minutes of uninterruped music — or a full hour and 40 minutes with one change. The simple "drop" mechanism built into the spindle eliminates posts and clamps to hold the records. Fast...quiet... noid the records. Fast...quiet... smooth change cycle takes only a few seconds. Last record repeats. Equipped with tone and volume controls and full range PM speaker. The handsome case is attractively covered in two-tone brown and tan. Measures: 12½x8½x8½". For 110-volt, 60-cycle AC operation. Shpg. Wt: 14 lbs. 

#### 3-SPEED AMPLIFIED PORTABLE PHONO

3-SPEED AMPLI
Play any size record up
to 12" with this new,
extremely compact portable. A simple slide
switch instantly requlates the speed of the
motor for 33 1/3, 45 or
78 RPM. Precisionbuilt motor runs at even
speed on all 3 positions.
All wood case houses a
full-size Alnico V speaker and carefully design-



#### 3-SPEED PORTABLE AUTOMATIC PHONO

A deluxe model phonograph that plays 33 1/3, 45 and 78 RPM records-automatically. Powerful 3-tube amplifier and high quality 5° speaker give J-tube amplifier and high quality 5" speaker give amazing tone quality. Oversize case permits playing of 12" records with the lid closed to minimize needle chatter and surface noises. Switch to any speed with convenient regulator on the motorbard. Has



convenient regulator on the motorboard. Has tone and volume control. Feather weight pickup features a dual reversible cartridge-each with its own long-life needle; provides instant change-over to play standard or slow speed records. Quiet, smooth-operating changer and motor. Rugged case covered in durable leatherette with contrasting bead.

#### 3-SPEED TRANSCRIPTION PLAYER

Ideal for professional use, schools, sales use, schools, sales meetings or home. 3-speed-78, 45 and 33-1/3 RPM-plays all size records, including 16" transcription type. Powerful 4-tube, pushpull ampliffer delivers full 4 watts output. Excellent quality 8" Alnico V PM speaker mounted in detachable top. Has microphone jack. Deluxe portable case measures 17 x 13 x 8½".



34N22703-Shipping Weight 17 lbs...... 42.50

#### 45 RPM AMPLIFIED RECORD PLAYER



This compact, open case phonograph is specifically designed for the new 45 RPM 7" records. A complete, powerful phono with built-in amplifier and speaker that built-in amplifier and speaker that gives you all the advantages of these slow-speed records: Brilliant tone, negligible needle scratch and unbreakable vinylite.

Each record plays 5-1/3 minutes, or the equivalent of a standard 12" record. New lightweight crystal pickup equipped with long life needle. Sturdy wood case covered in brown leatherette. For 110V., 60 cycles AC. Shipping Weight: 9-lbs.

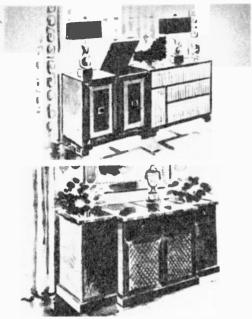
17.95

45 RPM RECORD PLAYER ATTACHMENT

Similar to above except has no amplifier. An easy, single connection converts your present equipment to play the new 45 RPM records.

#### 45 RPM WIRELESS RECORD PLAYER

Includes distortion-free oscillator for playing through standard broadcast radio. No wiring necessary. Same case and pickup as above.



TWO TYPICAL LAFAYETTE CUSTOM RADIO ASSEMBLIES

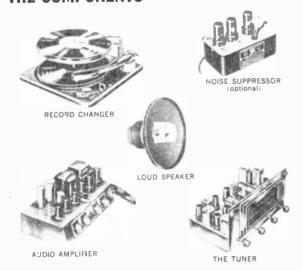
#### WHAT IS HIGH FIDELITY?

High Fidelity is reproduction of the studio or concert-hall program in your own home with such brilliance and clarity that vocalists and instruments - whatever their range of pitch preserve their individual identities. This achieves the rare quality known as "room presence:" the artists and their instruments are in the same room with you!

#### IS IT EXPENSIVE?

Definitely not. You can spend as little as \$150 on a custom assembly and get performance better than ready-made sets costing up to \$500. Your entire investment goes into functional audio-equipment rather than the "trimmings." You can install the components into a piece of existing furniture. A little ingenuity saves you hundreds of dollars. Note, too, that it isn't necessary to buy all the components at once. You can add one section at a time - as rapidly as you feel you can afford it. A television unit can be incorporated inexpensively, at any time, as part of your high fidelity system. By using your high quality sound system for television, you will be in a position to enjoy superb audio reception along with your video.

#### THE COMPONENTS



# LAFAYETTE HIGH FIDELITY COMPONENTS

#### SELECTING THE COMPONENTS

All Lafavette High Fidelity Centers (addresses on page 1) feature the newly developed "Selector Rack" which enables you to select your components "by ear." Here's how it works: all the famous components are wired for selection on a master control panel. You point out any possible combination to the Lafayette engineer. (There are thousands of variations.) Then you sit back and hear how your selection of a high fidelity system actually sounds. You can't go wrong in your choice because you make your own on-the-spot comparisons!

#### ASSEMBLING THE SYSTEM

Lafayette engineers will do all the necessary wiring and soldering to adapt your components. In many systems this is included without charge. No further electrical work is required. Aside from installing the components in the housing you select, it is only necessary to plug the components together.

Components can be plugged together ... easy as pie



#### CABINET INSTALLATION

For your convenience, Lafayette maintains a service for installing high fidelity components into your existing furniture at a moderate cost. Bring in or send your cabinet to us. We'll do the rest. If you prefer new custom furniture we can show you a complete line of modern and period cabinets. Our service is unique in that it combines expert woodworking craftsmanship with professional audio engineering.

#### **HOW TO ORDER BY MAIL**

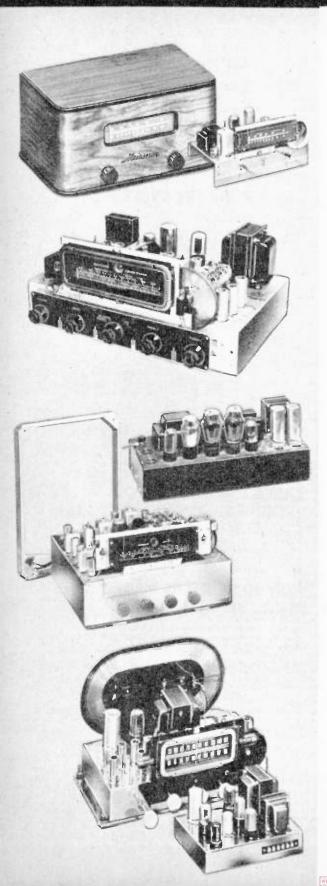
Thousands of music lovers who live too far from a Lafayette High Fidelity Center to shop in person have ordered by mail the high fidelity systems or separate units shown in this book with complete assurance and satisfaction. The personal advice and service of our engineers is as close to you as your mail box.

#### When you write please be as complete as possible. Tell us:

- 1. Which components are you interested in AM. Television, Record Player; Tape, Wire or Disc Recorder.
- 2. Which components you now own that you feel can be utilized.
- 3. What your system is going to be placed in (rough sketch, but complete inside and outside dimensions of the furniture to be used).
  - A. In an existing piece of furniture?
  - B. In a storage wall?
  - C. In a new cabinet?
- 4. How much would you like to spend.

Write to the High-Fidelity Division of the Lafayette Mail Order Write to the higher them. Some or the conter in New York or Chicago (whichever is nearer). Remember there is no charge or obligation for using this service.

### MEISSNER & RADIO CRAFTSMEN TUNERS



#### MEISSNER MODEL 8C FM TUNER

Same as above, except less cabinet; Shpg. Wt. 10 lbs. 30N22480—With Tubes....List Price \$51.50......Net 34.33

#### MEISSNER AM-FM TUNER

Model 9-1091-C. Here is a top quality unit for use wherever the very

#### MEISSNER AM-FM TUNER & AMPLIFIER

Meissner Am-FM Tuner & Amplifier

Model 9-1093. Undoubtedly one of the finest high quality AM-FM tuners and amplifiers on the market today. Frequency range 535-1620 KC on the AM band and 88-108 MC on the FM band. Audio fidelity is flat from 50 to 15,000 cps ±2 db. Hum level 85 db below full output. Designed for use with either crystal or magnetic pickup; has built-in predamp for GE reluctance and magnetic pickups (requires 65C7 tube not supplied). Sensitivity is less than 20 microvolis. Tuner has a two-position AM selectivity control for distant or local reception. Phono input jack controlled by panel switch. A combination tone control provides base boost up to 11 db at 40 cps, and treble attenuation up to 13 db at 10,000 cps. Output designed for 8 to 16 ohm speaker. Two indoor antennas are supplied. One indoor folded dipole, 300-ohm, for FM, and one 12x16° noise reducing loop for AM Provision is made for connecting external AM and FM entennas. Tuber (3) 65K7, 65A7, 6H6, (5) 6AG5, 6C4, (2) 9001, 6AL5, (2) 615, 6SN7CT, (2) 6L6, 5Y3G and 5V4G rectifiers and 6U5/6G5 tuning indicator. Chassis mounting space: Tuner 141/x123/x83°; Amplifier 71/sx18/14/x7°. For 105-125 volts, 50/60 cycles AC. Complete with tubes, Iwo antennas and hardware. Shpg. Wt. 50 lbs.

#### Radio Craftsmen Hi-Fidelity FM-AM Tuner

#### Radio Craftsmen Hi-Fidelity Amplifier

# LAFAYETTE, ESPEY & BROWNING TUNERS

#### LAFAYETTE AM TUNER

A budget priced AM tuner for high fidelity coverage of the entire broedcast band from 535 to 1720 KC. Particularly designed for public address and Hi-Fi custom installations. Has phono-radio changeover switch Sensitivity 30 microvolts; high impedance output. Features include a large, easy-to-read slide rule dial and automatic volume control. Low hum level. Uses the following tubes: 6BE6, 6BA6, 6AT6, 6X4 rectifier For 115 or 220 volts AC only. Dimensions: 10½x64x6". Shipping Weight 10 lbs.
30N22482—With Tubes.....List price \$54.35.....Net

#### LAFAYETTE FM-AM CHASSIS with Automatic Frequency Control

Build your own new FM-AM radio, or modernize an old radio console Build your own new FM-AM radio, or modernize an old radio console with this line quality chassis. Covers the entire standard broadcast band and the 88–108 MC FM band. Features automatic frequency control on FM for tuning stability, a full range tone control and automatic volume control. Chassis is wired for phonograph operation. Push-pull Learn power output provided with 11 latest model tukes plus rectifier. Output matches 3.2 ohm voice coil. Indirectly illuminated slide rule dial simplifies accurate tuning. Two indoor antennas are supplied one loop for AM and a folded dipole for FM. Loop Antenna measures 8½x13½x1½. Chassis dimensions: 13x9x9½°. For operation on 105–125 volts, 60 cycles AC only. Supplied complete with tubes, dial escutcheon and two antennas. Shipping Weight 25 lbs.

Net 72.50

#### ESPEY FM-AM TUNER & AMPLIFIER

A deli xe high fidelity combination unit, matched and precision built for the discriminating listener who wants to build his own FM-AM console. The tuner has two frequency ranges: 88-108 MC for FM reception and 540-1620 KC for standard broadcast use, an improved automatic volume control, and full range bass and treble tone controls. Featured also are separate tuned RF stages on both FM and AM for extreme sensitivity and low noise level between stations. Power supply and audio amplifier are included in the amplifier chassis. Uses the following tubes: (2) 6BA6, (2) 6BE6, 6C4, 6SG7, 6SH7, 6IS, 6SQ7, 6ALS and 6US tuning indicator.

AMPLIFIER POWER SUPPLY CHASSIS is especially designed to match the tuner described above. It uses (2) 615s in a balanced phasinverter, push-pull circuit driving (4) 6V6 triodes in a parallel push-pull output circuit. Includes (2) 5Y3GT/G rectifiers. High fidelity amplifier performance is assured through the use of an inverse feedback circuit, Tuner chassis dimensions: 13½x7½x8°, amplifier chassis dimensions: 13½x7½x8°, complete with e- uteneon plate, dial, two antennas and tubes. For 105–125 V., 50/60 cycles AC. Shipping Weight 40 lbs.

#### BROWNING FM TUNER & POWER SUPPLY

RV-10. An excellent way to add high fidelity FM reception to existing RV-10. An excellent way to add high fidelity FM reception to existing radio and amplifier systems. Small size premits easy mounting in cabinet, shelves, bookcases and drawers. Sensitive Armstrong circuit covers 88-108 MC band. Features tuned RF stage, two-stage cascade limiter, high impedance output, Phono-FM switch and self-contained power upply. Attractive edge lighted dial calibrated in megacycles and channel numbers. Tubes. (3) 6AU6, 7F8, (2) 6SI7, 6H6, 6U5 tuning eye and 80 rectifier. For 115-veilt, 60-cycle AC. Dimensions: 6½x11x8½%. Supplied complete with tubes, dial escutcheon, two audio shielded plugs and 8.8½ wire. 

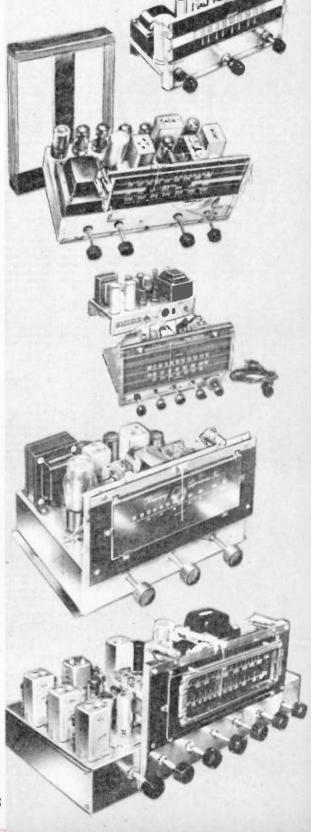
#### BROWNING FM-AM TUNER

Model RJ-12A. Precision engineered for high fidelity reception on the 88-108 MC FM band and \$30-1650 KC standard broadcast band. Famous Armstrong FM circuit features 2-stage cascade limiting. RF stage on both bands and high impedance output; drift compensated. FM audio response (lat from 20 to 15,000 cps ±1 ½ db. Separate RF and IF systems bath bands are times maximum performance and eliminates could response flat from 20 to 15,000 cps ±1 ½ db. Separate RF and IF systems on both bands assures maximum performance and eliminates coil switching. FM antenna input 300 ohms. No separate antenna required; FM antenna also serves AM. Tubes: (3) 6AU6, 7F8, 6SK7, 6SG7, (2) 6SJ7, 6H6, 6SA7, 6U5 tuning eye and 1N34 crystal detector. Dimensions: 7½x13½x9". For 115 volts, 60-cycle AC. With tubes, dial escutcheon and plastic window. Appearance Like RJ20 below: 30N22486—Shipping Weight 16 lbs. 113.78

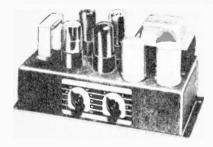
Model PF12. Power supply for above tuner. 6x3½x8". 30N22513—Shipping Weight 9 lbs.

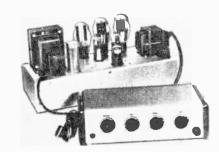
#### BROWNING FM-AM TUNER AND POWER SUPPLY

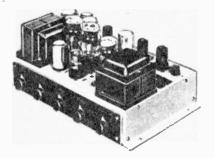
Model RJ-20. For the discriminating listener who wants the ultimate in 



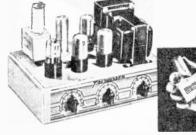
### HIGH FIDELITY AMPLIFIERS











#### BOGEN PH-10 AMPLIFIER

Low-Cost High Fidelity for the Home

This well-built 10-wattamplifier is recommended by authoritative sources for Hi-Fi radio and phonograph systems. Expensive auxiliary circuits and accessories have been omitted to provide a low-cost unit suitable for direct installation into many systems. Any radio tuner or crystal pickup may be connected directly to the input The 4-position tone control provides laboratory-selected responses: deep bass, mellow bass, with broadened hi-frequency range; "flat" response, well up into the high range; and extended response for FM and other HI-FI inputs. Hum is down 80 db from rated output. Push-pull output with inverse feed back gives range of 40 to 15,000 cps within \*= 1 db. Tubes are one 6SL7-GT, two 6V6, one SY3-GT (rectifier). Power input: 117 v., 50 cycles AC. Dimensions: 5"x11"x6".

2N155-Amplifier, complete with tubes, Shpg. Wt: 11 lbs. . ............

2N156- Amplifier, with tubes & with controls at end of 4-ft extension cables. \*

• WRITE FOR PRICES

#### **BROOK MODEL 12A3 AMPLIFIER**

All-Triode Circuit with a New Low in Distortion

"There is no manner in which the audio performance of the 12A3 could be improved by additional manufacturing expense" states the manufacturer of this fine unit. Here is a 10-watt, all low-mu triode amplifier with less than 1.25% total harmonic distortion at full rated output. Even for power peaks (of less than 1.25% total harmonic markable "transient peak circuit" included in the amplifier. The pre-amplifier and controls are in a separate unit connected by a 6-foot cable to the amplifier. A considerably longer cable can be used where required. Three inputs — two compensated for magnetic and variable reluctance pickups, and other provided for radio or crystal pickup — are furnished. Output impedances range from 1.5 to 24 ohms, plus 500 ohms from a separate winding. With treble and beas tone controls set for "flat" response, the frequency range is 20 to 20,000 cps within ± ½ db. Hum level is 75 db below rated output. Tubes used: four 6SI7 (triode-connected); one 6SH7, two 6JS, two 2A3, one 5U4-G (rectifier). Consumes 110 watts at 117 v., 50-60 cycles AC. Control unit is 12% x6% x3%," amplifier is 17x6% x8-1/8".

2N417-Amplifier and control units, including tubes. Shpg. Wt: 28 lbs...169.50 

#### H. H. SCOTT MODEL 210A AMPLIFIER

Hi-Fi Plus the Scott Dynamic Noise Suppressor

Designed by an organization producing mostly laboratory and broadcast equipment, the 20-watt Scott 210A sets a new standard of excellence fro amplifiers of its class. Designed especially for use with the new variable reluctance pickups, a special input for tuners and crystal pickups, a calibrated hi-frequency cut-off control, a "squelch" ctrait to eliminate noise during record-changer cycling, and the 4-tube Scott Dynamic Noise Suppressor (described below). With treble and base tone controls at midpoint and volume on full, the frequency response is down 3 db at 30 and 20,000 cps. Hamonic distortion is less than 2% and hum level is down 80 db at full rated output. Output impedance: 2-500 chms. Tubes used: 12SL7—GT, 6SL7—GT, 6SQ7 12SG7, 6SG7 (two), 6SN7—GT, 6L6—GA (two), 5V4—G (rectifier). Power input: 117 v., 60 cycles AC. Dimensions: 12 x 15 x 8%°. 

#### H. H. SCOTT DYNAMIC NOISE SUPPRESSOR

Model 111A. Newest version of the famous Dynamic Noise suppressor. Reduces annoying record scratch and motor "rumble" in any Hi-Fi system with this unit. Chassis mounts near other equipment; single control is at end of extension cable. Operating power for unit obtained through plug which fits octal-base output socket of amplitier. High impedance inupt and output circuits match most systems. Employs new mutual inductance gate circuit giving flat response 30 to 10,000 cycles. Useful range 20 to 14,000 cycles. Supplied complete with one 6SQ7 tubes, two 6SG7 tubes, cables, and accessories. Dimensions: 7x3%x4%".

22.01 28.91

Model 112A. Similar to above except has preamp for GE reluctance and similar cartridges. Flat response 30 to 17,000 cycles.

2N428......46.55

#### THORDARSON MODEL T-32W10 AMPLIFIER

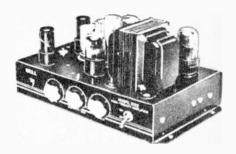
This 10-watt amplifier incorporates only those components necessary for a "flat ints 10-wait amplitier incorporates only those components necessary for a "liat" full-tange frequency response from a radio tuner or crystal pickup. You pay for nothing more. For variable reluctance pickups or a high-impedance mike the T-32-WOO pre-amplifier (listed below) plugs into a pre-wired socket. Volume, separate bass and treble tone controls. Output: 3-4, 6-8, 15-16 ohms. Hum level down 70 db. Tubes: 6SL7-GT, 6V6-GT (two), 5Y3-GT (rectifier). Power requirements: 115 volts, AC. Dimensions:

Thordarson T-32WOO Plug-In Pre-Amplifier, for use with T-32W1O Amplifier. Has correct gain and compensation for use with variable reluctance pickups. Also can be adjusted for "flat" response for use with hi-impedance mike.

### HIGH FIDELITY AMPLIFIERS

#### BELL MODEL 2122 AMPLIFIER

A Consumers Organization Recommendation



#### SCOTT LABS "MUSICALE" AMPLIFIER

Build or Improve Your High-Fidelity System

with this Lafayette "Best Buy"

A superb amplifying system with a conservative rating of 20 watts, built by a manufacturer whose name is associated only with the highest quality electronic equipment. The Scott "Musicale" amplifier was designed for those music lovers who want the utmost in high-fidelity reproduction — with no limit on circuits, size, or cost. It was produced originally to be a part of one of the world-famous Scott radio-phonograph combinations, which sell for as much as \$1000. Lafayette made a fortunate purchase of a limited number of these amplifiers, which enables us to offer them at a price usually asked for amplifiers of less perfect response and lower power ratings. and lower power ratings.

This amplifying system consists of two chassis containing a total of 14 tubes, including 2 rectifiers. The Voltage Amplifier — Control Unit mounts a brushed satin aluminum pamel, 15° x 3½°, with chrome-skirted control knobs. The Power Amplifier — Rectifier chassis is finished in the polished chrome that is typical of the craftsmanship of Scott equipment. Four feet of cable afford considerable leeway in the mounting of the two chassis.

way in the mounting of the two chassis.

The frequency characteristic is flat within ±1.25 db from 40 to 20,000 cycles at 20 watts output; uniform from 100 to 16,000 cycles. One input is provided for a crystal phonograph pickup; another to the 1st amplifier stage which cam be compensated for variable reluctance pickups. The famous Scott Dynamic Noise Suppressor circuits are incorporated as part of the Control Unit. Controls provided are Volume, Bass Tone, Treble Tone, Music (Noise Suppressor) Control, and Phono-Mike (Low and High Gain Input). Output stage uses push-pull 6L6s; output impedance 8/16 ohms. Control Unit size: 8° x 15° x 7½°, Amplifier: 8½° x 18½° x 8°.

Power requirements: 110-125 volts, 60-cycles a-c.

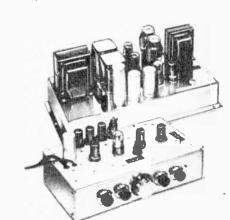
IMPORTANT - Do not restrict the capabilities of this amplifying system with an inadequate speaker, Select (from pages 42-44) a coasial speaker or a "woofer-tweeter" combination rated at not less than 20 watts and extending well into the high-frequency range. 

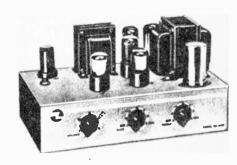
#### MASCO MODEL 10-HF AMPLIFIER

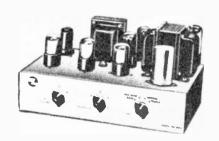
This is a 10-watt, 4-input high-fidelity amplifier, with built-in compensation and sufficient gain for variable reluctance pickups. Two of the amplifier inputs are equalized for current types of variable reluctance pickups; the third is equalized for crystal pickups; and the fourth is unequalized, for radio input. Separate treble and bass tone controls are provided permitting up to 12.5 db boost or attenuation to 50 cycles and  $\pm 15$  to  $\pm 14$  db variation at 15,000 cycles. Frequency characteristic is  $\pm 1$  db from 40 to 20,000 cycles when the tone controls are set for "flat" response. Two hum-balancing adjustments bring the hum level down 70 db from rated output. Rated output is 10 watts (with less than 5% distortion); peak output is 14 watts. Output impedances available are 2-4-8-16 and 500 ohms. Power requirements: 74 watts at 117 volts, 60 cycles a-c. A power receptacle on the chassis permits plugging in a radio or phonograph. Chassis is finished in gray hammertone. Dimensions: 12° x 7° x 5½°. Tube complement: two 6SL7-GT, one 6SC7, two 6V6-GT, one 5Y3-GT (rectifier). Weight: 1½ lbs. 

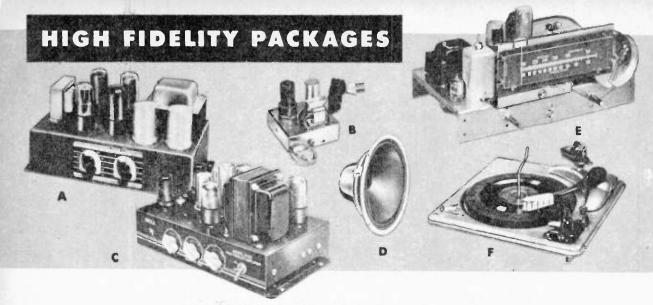
#### MASCO MODEL 10-EX AMPLIFIER WITH VOLUME EXPANSION

This is busically the same as the Model 10-HF amplifier described above, with volume expander circuits added to give up to 10 db expansion. A 4-position tone switch, giving selected response characteristics, replaces the separate tone controls of the 10-HF. Tube complement is three 6SL7-GT, one 6SC7, two 6V6-GT, one 5Y3-GT (rectifier). Weight: 12 lbs.









#### SELECT YOUR HI-FI COMBINATION FROM THESE FINE GROUPS

Now you can choose your own high fidelity radio-phonograph package from the precision-tested units listed below. For your complete listening pleasure, Lafayette offers a choice of two superb amplifiers (either the Bell Model 2122 or Bogen PH10), two top quality Webster record changers, the full range GE Model top quality Webster record changers, the full range GE Model S1201D speaker and phonograph pre-amplifier and the popular Meissner 8C FM tuner, In addition to the customary manufacture. er's tests given the individual units, Lafayette engineers will also

BELL MODEL 2122 AMPLIFIER

Fig. C. Recommended by a famous research organization for high fidelity custom installations. Frequency response 30-15,000 cycles +34db. Inputs for radio, magnetic, reluctance or crystal car-tridges. Individual bass and treble tone controls. Output impedances of 3.4 to 18 ohms to match any high fidelity speaker. Has low hum level. This amplifier is ideal for microgrocve record applications using the new type magnetic pickups. Output is 10 watts with a peak of 15. Dimensions: 7½" x 6" x 11½". Shipping Weight 15 lbs. Supplied complete with tubes. (See pages 16 and 19 tex additional amplifier specifications). for additional amplifier specifications.)

2122R-Same as above plus 4-ft. extension controls for remote control use.

#### BOGEN MODEL PHIO AMPLIFIER

Fig. A. Designed to give high fidelity amplification with minimum hum. Remarkable Multi-Fange Tone Control" provides four separate laboratory selected response curves to give the best performance. There's no guesswork for the user when selecting the proper tone balance for varying program material. Output 10 watts with a gain of 72 db  $\pm$  1 db from 40-15,000 cps. (Additional specifications on pages 18 and 19.)

PH10C-Same as above plus 4-ft, extension controls for remote control use.

#### WEBSTER 156-27 CHANGER

Fig. F. Plays twelve 10" and ten 12" 78 RPM records at one loading. Automatically shuts off after the last record. Lightweight GE variable reluctance magnetic pickup included for minimum wear- on valuable records. Only one control button is required for all operations of changer. Heavy duty, 4-pole single speed motor operates on 105-120 V.,.80 cycles AC.

wire all the plugs, cables and connectors for a nominal price of \$7.00 and then test the group together as a HI-FI system. Every item required for the installation, including all inter-connections, is included in the single price (except cabinet and speaker en-closure). For a choice of either modern or period design cabinets to house the package, turn to pages 10, 11, 22, 42 and 43 of this catalog... or use turniture of your own.

#### MEISSNER 8C FM TUNER

Fig. E. Brings in FM programs free of static and station inter-Fig. E. Brings in FM programs free of static and station interference—gives realistic high fidelity reception without distortion. The audio fidelity is flat from 50-15,000 cps. A modern, slide rule dial is calibrated in MC and channel numbers for fast, easy tuning of your favorite station. Precision-built, advanced circuit uses 6AL5, (2) 6BA6, (2) 6AG5, (2) 6C4 and 6X5GT/G rectifier. Chassis dimensions: 7½" x 11" x 5". Shipping Weight 7 lbs. Same chassis as above is available in polished cabinet. (See page 16 for additional specifications and information.)

#### GE PRE-AMPLIFIER AND SPEAKER

Fig. B. The model MSC pre-amplifier is designed for use with high fidelity reluctance cartridges. It uses a shock mounted 6SC7 tube in an equalizing circuit. Covers full audio range of 20-20,000 cps.

Fig. D. Model S1201D speaker is excellently constructed 12-inch Alnico V PM type. Molded one-piece cone assures brilliant fre-quency response. Power handling capacity: 25 watts.

#### WEBSTER 356-27 CHANGER

Fig. F. Three speeds . . plays all makes, all sizes and all speeds of records—automatically. Single switch makes speed changeover from 78, 45 and 33 1/3 RPM, last and effortless. Equipped with a lightweight arm that plays standard and LP records without weight adjustment. Pickup returns to rest after last record except 7" size. Shock mounted motor assembly assures smooth, quiet operation at any speed. Supplied with 10 spiders for 45 RPM records and two plug-in GE reluctance cartridges. Mounting: 5%" above plate; 234" below plate. Dimensions of motorboard: 1414" x 14".

NOTE: Below systems can be supplied with the Meissner 8C Tuner in wood cabinet if desired, at \$3.68 additional. Charge for wiring plugs, cables and connectors, and testing any group (see text at top of (eppq

#### HI-FI COMBINATIONS USING BELL AMPLIFIERS Stock No. Amplifier Changer Tuner Speaker Pre-Amp Accessories 30N21399 Bell 2122 GE \$1201D Meissner Webster None 113.66 BC Chassis 156-27 Required 30N21398 Bell 2122R Meissner All Necessary GE S1201D Webster None 123.39 Inter-Connecting Cables, Plugs, Jacks, Switches 8C Chassis 156-27 Required 30N21397 Bell 2122 Meissner GE S1201D None 125.08 Webster **BC** Chassis Required 356-27 30N21396 Bell 2122R Meissner GE S1201D Webster None Required H1-F1 COMBINATIONS USING BOGEN AMPLIFIERS Stock No. Amplifier Tuner Spenter Changer Fre-Amp Accessories Price Bogen PH10 30N213E5 Meissner 8C Chassia GE S1201D Webster 156-27 GE M5C 111.05 30N21394 Bogen PH10C Meissner 8C Chassis GE S1201D Webster 156-27 GE M5C All Necessary Inter-Connecting 113.76 Cables, Plugs, Jacks, Switches 30N21393 Bogen PH10 Meissner **GE S1201D** Webster 356-27 GE M5C 122.49 BC Chassis 30N21392 Bogen PH10C Meissner GE S1201D Webster GE M5C 125.21 8C Chassis 356-27 20

# SELECTED HIGH FIDELITY GROUPS

#### HI-FI PACKAGE

Here is a superb custom package for the discriminating radio and record listener who demands the linest in high fidelity reproduction. Complete standard broadcast AM and FM coverage for all your favorite radio programs and a top-notch record playing system that handles all speeds, types and sizes of records. This high fidelity equipment gives you the entire range of sound, from extremely low notes of the tuba to the highest notes of the oboe. Every unit in the package has been tested individually and in combination to assure maximum efficiency and perfect matching of all components. To achieve these excellent results, Lafayette technicians selected the fellowing outstanding equipment: (B) The famous high fidelity Browning Model RI-20 FM-AM Tuner; (C) a fine 12-wait Radio Craftsmen RC2 amplifier with a range of 20 to 20,000 cps to match the tuner; (E) the latest Webster Model 356-27 3-speed record changer with two GE reluctance cartridges; (A) Stephens Tru-Sonic Model 102FR 15" speaker—a high fidelity cospiral unit capable of handling 20 waits undistorted output; (D) the GE self-powered pre-amplifier for use with variable reluctance cartridges. The components are supplied with all interconnecting cables, plugs and jacks to permit immediate installation. Operates on 105-125 volts, 50/60 cycles AC. For additional information on the above components, see pages 16-19, 43 and 46.

COMPLETE PACKAGE NO. 1 (A-B-C-D-E) 30N21400-Ready To Install

295.74

#### HI-FI PACKAGE NO. 2

It's easy to enjoy a high fidelity radio and phonograph installation in your home with these fine components... economically priced for the modest budget. A compact, three-unit package that can be readily adapted to the smaller furniture piece or console cabinet. Model 1N1206 12-tube FM-AM single unit chassis (F) covers the standard broadcast and 88-109 MC FM bands. Features include automatic frequency control, push-pull output, a loop antenna for AM broadcasts and a folded dipole for FM. Full range reproduction of your finest classical records is assured with the (G) GE model S1201D 12" speaker and (E) Webster Model 356-1 3-speed record changer. Tested and matched components give top performance from records and radio. All interconnecting cables, plugs and jacks are supplied with the package. For 105-125 volts, 50/60 cycles AC. For additional information see pages 17, 42 and 46.

COMPLETE PACKAGE NO. 2 (E-F-G)

30N21401 Ready To Install

122.75

#### HI-FI PACKAGE NO. 3

Heres a precision built, 5-unit package for the discriminating listener who wants a high fidelity installation of unusually fine quality. The popular (H) FM-AM Espey Tuner (No. 30N22477) has separate bass and treble controls and individual RF stages on both FM and AM. A specially designed separate and individual RF stages on both FM and AM. A specially designed separate chassis incorporating the audio amplifier and power supply is carefully matched to the tuner for maximum efficiency. Parallel push-pull output in an inverse feedback circuit assures plenty of reserve power with utmost fidelity. Other components are the (E) Webster Model 356-27 3-speed record changer with 2 GE reluctance cartridges, (G) GE Model S1201D speaker and (D) self-powered pre-amplifier. The complete package is thoroughly tested before shipment and includes all necessary inter-connectiong cables, plugs and jacks for immediate installation. Operates on 105-125 volts, 50/60 cycles AC. For additional information see pages 17, 42, 46 and 48.

COMPLETE PACKAGE NO. 3. (D-E-G-H)

30N21402-Ready To Install

180.60

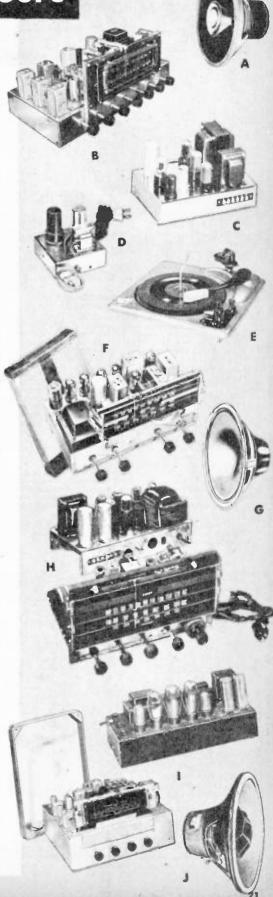
#### HI-FI PACKAGE NO. 4

Everything you need for an excellent high fidelity radio and record installation is contained in this outstanding custom package. In order to assure flawless AM and FM radio reception and superb tone reproduction of the finest symphonic recordings, we selected the "hard-to-beat" Meissner Model 9-1093 tuner and amplifier (I), the Altec Lansing Model 603B 15" Hi-Fi speaker with special multicellular horn (J), and the popular Webster Chicago Model 356-27 three-speed record changer (E) for all size and type records, with two GE reluctance plug-in cartridges. All units have been pre-tested and matched to assure perfect operating efficiency. The chassis is equipped with a built-in pre-amplifier for GE reluctance and magnetic pickups. Extremely sensitive and selective tuner, plus the powerful 18-watt push-pull amplifier brings in staticless FM reception and strong, clear standard broadcast programs with utmost fidelity over the audible range between 50 and 15,000 cps. Components are supplied with all inter-connecting cables, plugs, tubes, cartridges and needles. For operation on 105-125 volts, 50/60 cycles AC. For additional information and specifications on the above components, see pages 16, 42 and 46. formation and specifications on the above components, see pages 16, 42 and 46

COMPLETE PACKAGE NO. 4 (I-J-E)

30N21403 -Ready To Install.

289.13



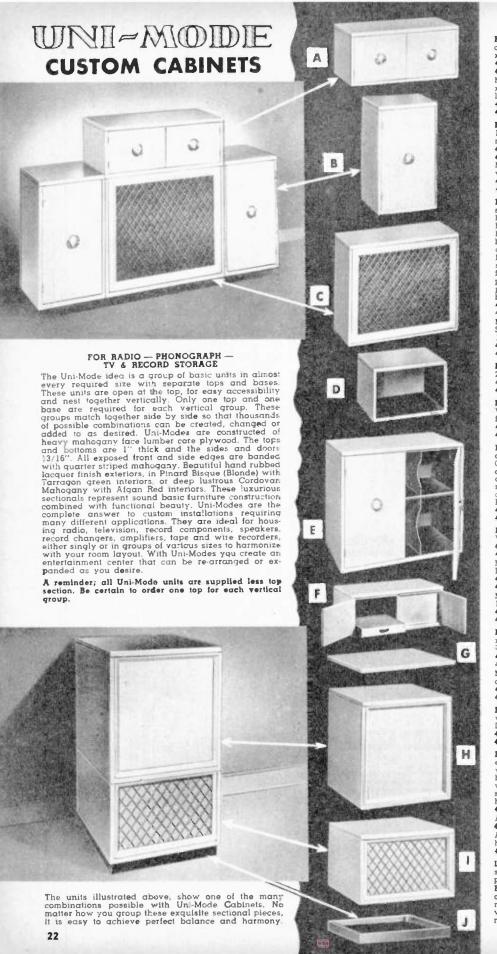


Fig. A. Mahogany cabinet, balanced construction, 35½"W.x18"D. x15" high. With doors.
40N25808—Shpg. Wt. 45 lbs. 37.60

40N25809 — As above, Blonde 37.60 Mahogany basic cabinet, 351/8"W. x18"D.x15" high. Same as above,

40N25804—Shpg. Wt. 32 lbs. 25.60 40N25805—As above, Blonde 25.60

Fig. B. Mahogany cabinet, 18"W.x 18"D.x30" high. With shelf and 18"D.x30" high. With shelf and right hinged door. 40N25790—Shpg. Wt. 50 lbs. 46.25 40N25792—As above, Blonde 46.25

Mahogany cabinet, as above, but left hinged door.

40N25791 40N25793 —As above, Blonde 46.25

Fig. C. Mahogany "tuned port" speaker cabinot, 24"W.x18"D.x30" high. Accoustically designed to enhigh. Accoustically designed to enhance the qualities of the finest high fidelity speakers. Heavy vibrationless construction. Metal grille with polished brass finish. Beautiful Lumite plastic grille cloth, sag and strain resistant. Scientifically designed port opening to provide bass reinforcement. Sup-

fically designed port opening to provide bass reinforcement. Supplied with 3/4" uncut plywood baffle for any size speaker.
40N25794—Shpg. Wt. 75 lbs. 53.40
40N25795—As above, Blonde 53.40
Mahogany "tuned port" cabinet.
Same as above except 35½"W.x
18"D.x30" high. 18"D.x30" high. 40N25812—Shpg. Wt. 85 lbs. 64.25

40N25813—As above, Blonde 64.25

Fig. D. Mahogany basic cabinet, 24"W.x18"D.x15" high. 40N25802—Shpg. Wt. 24 lbs. 21.85 40N25803—As above, Blonde 21.85

Fig. E. Mahogany cabinet, 351/8" W.x18"D.x30" high. With shelf, W.x18"D.x30" high. With shelf, four record dividers and doors. 40N25810—Shpg. Wt. 100 lbs 71.20 40N25811—As above, Blonde 71.20

Fig. F. Mahogany cabinet, with doors. 35½" W. x 18"D. x 12" high. One compartment for record changer has ball bearing slide drawer 2½" high. Other side for radio or luner has blank panel recessed for clearance of controls Panel easily removable. 40N25806—Shpq. Wt. 50 lbs. 48.95 40N25807—As above, Blonde 48.95

Fig. G. Mahogany top section, 18" W.x18"D.x1" thick. 40N25814—Shpg. Wt. 7 lbs... 8.00 40N25815—As above, Blonde 8.00

Mahogany top section. 24"W.x18" D.x1" thick.

D.x1" thick. 40N25816—Shpg. Wt. 10 lbs... 9.60 40N25817—As above, Blonde 9.60 Mahogany top section, 351/8"W x 18"D.x1" thick.

18"D.x1" thick. 40N25818—Shpg. Wt. 15 lbs. 12.00 40N25819—As above, Blonde 12.00

Fig. H. Mahogany cabinet, 24"W. x18"D.x15" high. With frame and 36" front panel. Ideal for T.V. sets. 40N25798—Shpg. Wt. 31 lbs. 33.20 40N25799—As above, Blondo 33.20 Mahogany cabinet. Mahogany cabinet as above except 24"W x18"D x24" high. 40N25800—Shpg. Wt. 45 lbs. 44.20 40N25801—As above, Blonde 44.20

Fig. I. Mahogany speaker cabinet, with grille and baffle. 24"W.x18" D.x15" high.

40N25796—Shpg. Wt. 35 lbs. 34.40 40N25797—As above, Blande 34.40

Fig. J. Island base section. Black enamel finish. Filler strip included with each base for dust proofing by closing gap between bases when Uni-Modes are assembled side by side. 17"W.x17"D.x2½"

As above, 23"W.x17"D.x2½" high.

40N25821—Shpg. Wt. 5 lbs. 4.80

40N25821—Shpg. Wt. 8 lbs. 5.60

As above, 34½"W.x17"D.x2½"

40N25822-Shpg. Wt. 12 lbs. 6.00

Locking: Although Uni-Modes nest securely, screws are furnished for permanent locking if desired.

Backs: Uni-Modes for radio use are equipped with screw fastened removable backs. Backs on models with panels or frames are fur-nished with ventilation openings.



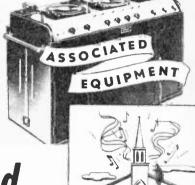




#### Guarantee

all Lafayette Sound Systems are fully guaranteed for one year

SUPREME IN STYLING YEARS AHEAD IN ENGINEERING TOPS IN STERLING PERFORMANCE







School Systems



from \$200



Factory Call Systems from \$100



Portable Systems from \$40



Intercoms from \$13

# the greatest values in sound



Your savings on Lafayette sound systems do not begin or end with our lower prices. Most of your saving is in the counsel and help you get be-fore and after you buy. Lafayette engineers consider

buy in person or by mail, with thoughts like these: "What are your basic requirements?" (not "How much sound system can we sell?") ..."Can you still use part of your present system?"..."Can we design a system flexible enough to expand later, if it becomes necessary?" They are out to prove to you: WHEN YOU BUY FROM LAFAYETTE YOUR DIVIDEND IS OUR SERVICE!



Lafayette Systems range in size from 8 to 75 watts, and include portable and mobile units. Lafayette Systems' are designed to give highest value per dollar, yet are rated conservatively to allow a good safety factor. Every Lafayette

System carries the 1 year guarantee shown on this page. And with Lafayette, you are sure of getting the performance listed in the specifi-



Accessories The choice of microphones, speakers, and other accessories is determined partly by the requirements of the system, partly, by what you desire to spend. Crystal mikes are least expensive and

are satisfactory for most general applications; the new Ceramic mikes, although somewhat more expensive, are more suitable where there are wide changes in temperature or high humidity. Dynamic mikes are more rugged, and are a good investment in the higher-priced field. Microphone fidelity should be consistent with the amplifier frequency range. Lafayette's skilled sound engineers will be glad to advise you and help you whether you choose one unit or a complete system—without charge. Do not hesitate to call or write.

Choose an amplifier with enough wattage for your purpose. Determine seating capacity or room volume in cubic feet for indoor systems, or area in square feet for outdoor systems. Then refer to the chart below for recommended wattage.

#### Have enough power to do the job

THE "QUIET" COLUMN in the chart gives you the required wattage for installation with low noise levels, such as funeral homes, hospitals, quiet offices and warehouses.

THE "NORMAL" COLUMN covers installation where normal room noise is encountered, as in small restaurants, large offices, light or medium manufacturing and residential areas.

THE "NOISY" COLUMN gives required wattage for locations with very high noise levels, such as heavy manufacturing (including boiler factories, pneumatic riveters, steel mills), large stadiums, outdoor street advertising and announcing.

	Area (	Coverage	Required Watts				
Seating Capacity	Indoors	Gutdoors	Quiet	Normal	Noisy		
750	280,000 cu. ft.	15,000 sq. ft.	7.5	11.25	15		
1500	600,000 cu. ft.	36,000 sq. ft.	15	22.5	20		
3000	1,200,000 cu. ft.	66,000 sq. ft.	30	45	60		
4500	1,800,000 cu ft.	96,000 sq. ft.	45	67.5	\$40		
6000	2.400,000 cu. ft.	126,000 sq. ft	60	90	120		
7500	3,000,000 cu. ft.	156,000 sq. ft.	75	112.5	150		
9000	3,600,000 cu. ft.	186,000 sq. ft.	90	135	180		

Speakers should be selected so that their total wastage rating is always slightly more than the rated output of the amplifier. It is better to use several speakers of lawer wat-tage to distribute the sound than to blust it at high volume from one high-power speaker.

### Safayette 8-WATT QUALITY SOUND AMPLIFIER

8-Watt Amplifier Specifications

POWER OUTPUT 8 watts at 5% distortion −12 watts peak
GAIN AND INPUTS Microphone 105 db, 2 meg
Phono 75 db, ½ meg
Phono 75 db, ½ meg
FREQUENCY RESPONSE 50 10 000 cps ± 2db
CONTROLS (3) Microphone, Phono, Tone
TUBES USED 61.66, 6SC7, 5Y3
OUTPUT IMPEDANCE OUTPUT IMPEDANCE POWER CONSUMPTI IMPEDANCE 4 and 8 ohms
CONSUMPTION 70 watts at 117 volte 60 cycle AC
IONS 7"x10½"x5¾" DIMENSIONS

8 watts normal and a full 12 watts peak output! (5% distortion is scarcely audible at the 8 watt level). Designed especially for users requiring a high-quality, small audience coverage amplifier. Frequency response is flat (± 2 db) from 50 to 10,000 cps. Tone control or adjustment of response to any accoustical condition. Separate controls for microphone and phonograph allow smooth fading and blending of musical background and voice announcements. Circuit includes inverse feedback for improved quality and reduction of hum and distortion. Illuminated control panel permits easy control adjustment in the darkest room. 2N157—With tubes and plugs - Shpg wt. 12 lbs......22.95

## afayette 8-WATT SINGLE & DUAL SOUND SYSTEMS

#### DUAL SPEAKER PORTABLE

Never before has so much value been brought together in one complete. Never before has so much value been brought together in one complete. 8-watt sound system Expertly engineered to the highest standards, and especially designed for store demonstrators, carnival and circus barkers, lecturers, masters of ceremony and others requiring small audience coverage up to 800 persens. Strong, compact construction makes carry-ing easy from one location to another.

Here are matched units—complete with everything you need to operate a quality public address system. The simple plug arrangement makes installation and operation, last and easy. Lafayette's 8-watt amplifier is quaranteed for one full year and covers replacement or repair of any defects in materials and workmanship. Separate microphone and phonograph inputs and controls permit use of recorded mucic as a background for announcements. This feature adds a professional smoothness to your presentations. All components are mounted in a single portable carrying case measuring 13x10%x17", and covered in handsome simulated rawhide in tan finish. Each of the two 8-inch PM speakers is mounted in a section of the two-pinec case. Included also is a Shure Model 710A section of the two-piece cass. Included also is a Shure Model 710A crystal microphone on a 6-inch desk stand with 7 feet of cable and plug. The amplifier fits into case for carrying, 70 feet of cable (35 feet for each unit) is attached to the speakers and is ready to plug into the amplifier. Complete 8-Watt Dual Portable System with amplifier, tubes, speakers, microphone, stand, cables and case.

44.95 2N184 - Shipping Weight 30 lbs....

#### SINGLE SPEAKER PORTABLE

Similar to above system but with single speaker and 35-ft. cable mounted

2N186-Shipping Weight 27 lbs.....

#### DUAL SPEAKER INDOOR SYSTEM

Engineered for use in small areas such as clubs, restaurants, small halls, churches, schools, offices, call systems, sales meetings and similar applications. Also practical for use in voice, diction, music and public speaking classes to familiarize students with microphone technique. Can be used with any record changer or player for a combination paging and music system in stores and talking commercial displays. Built-in tone control of the amplifier has extremely broad variation to meet your preference and the acoustics of different speaker locations. This is a complete sound system—ready to operate! Consists of an 8-wett amplifier (see specifications above), two 8-inch PM speakers mounted in two fabricals of the property keid wall baffles, 35-ft, cable and plug attached to each speaker. A Shure 710A crystal microphone on 6-inch desk stand with 7-ft, mike cable and attached plug, all tubes and instructions. For 105-125 volts, 50/60 cycles 2N185—Shipping Weight 40 lbs.....

#### SINGLE SPEAKER INDOOR SYSTEM

Save money Buy this smaller, economy system if your audiences total less than 400 persons. Similar to dual system described above, but with a single 8-inch speaker mounted in one wall baffle, and 35-ft cable 

Above systems available for 220V. AC with step down transformer,

MICROPHONE FLOOR STAND. Top quality adjustable stand with positive grip friction clutch that firmly locks telescoping unit. Adjusts from 35" to 68". Chrome plated uprights on 10" diameter black wrinkle finish base. 9\sec\*"-27 male threads for attaching to 14N22047-Shipping Weight 19 lbs...

# afayette 15-WATT SOUND SYSTEMS

#### PORTABLE MODEL

Here's a complete portable P.A. or music system packed with the most modern features and priced to please the modest budget. Sets up in a few minutes—ready to operate. No technical knowledge necessary. The system is ideal for lectures, sales meetings, auctions, for travelling dance bands and many other applications. The high quality pushpull amplifier has three input channels—Two for crystal, dynamic or other high impedance microphones, and another the record player or radio huns. The investor health. for record player or radio tuner. The inverse feedback feature eliminates hum and distortion. Separate bass and treble controls permit variation of lone to individual taste, and also reduce undesirable feedback due to adverse "on location" conditions. Amphifier is fused for complete proction against breakdown

tection against preaxdown.
All components are carefully matched to assure excellent
performance and trouble-free operation. The complete
system includes two 12-inch high fidelity GE PM speakers, system includes two 12-inch high fidelity GE PM speakers, the popular Astatic IT-30 crystal microphone with a response of 30-10,000 cycles, and a sturdy telescopic floor stand. Each speaker is mounted in one section of the strong, compact tabrikoid covered case. 70 feet of speaker cable (35 feet for each unit) and 20 feet of microphone cable with attached plug are also included. Dimensions of the case while closed: 14½,x18x27. Operates on 105-125 volts, 60 cycles AC. Complete 15-Watt Portable System with Tubes, Amplifier, Dual Speakers, Microphone, Floor Stand, Cables, Case and Instructions.

nstructions. 74.95 2N188 —Shpg. Wt. 80 lbs.....

Same system as above but with the Shure Model 55 moving coil dynamic mike for better pickup and less feedback

Amplifier Available for 220V. AC operation by means of step down transformer

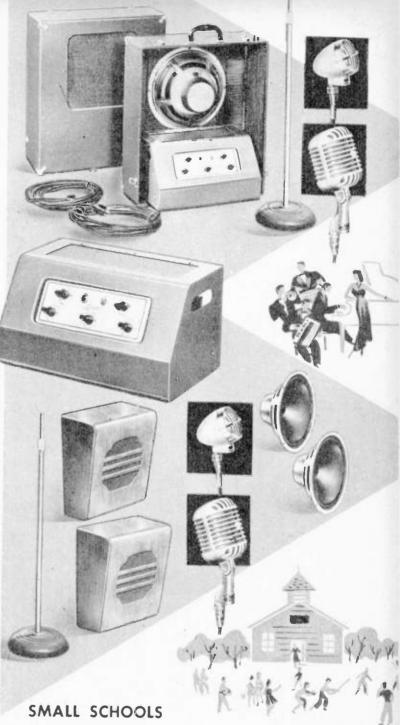
#### 15-WATT PERMANENT INDOOR SYSTEM

It's easy to set up a Lafayette P.A. system in small dance halls, school auditoriums, churches, gymnasiums, etc. This economy indoor system gives you excellent coverage where the area is no greater than 20,000 square feet. Everything is included for immediate installation and operation—even cables and plugs are already attached to speakers and microphone for fast, simple assembly. You receive a high quality 15-watt amplifier (see specifications below), two GE high fidelity 12-inch PM speakers mounted in two handsome walnut speaker baffles, 70 feet of speaker cable (35 feet for each unit), an Astatic JT30 microphone with 20 feet of cable and an ideal of the property of the prop

Same system as 2N195, but with Shure Model 55 moving coil dynamic microphone.
2N196

#### PHONOGRAPH ACCESSORY TOP

The top panel of the Lafayette 15-Watt Amplifier can be removed and replaced by another panel housing a 3-speed phono motor, turntable and crystal pickup for playing standard 78 and the new 45 and 33½ RPM records. A long life needle gives true reproduction of classical and popular music. All connections are made at the rear of the cabinet for protection



#### 15-Watt Amplifier Specifications

15-Watt Amplifier Specifications

OUTPUT

15 watts @ 5% or less distortion, 25 watts Peak
CHANNELS

2 Mikes and 1 Phono or 1 Mike and 2 Phono
GAIN.

Microphone inputs 120 db, Medium gain inputs 70 db
BASS TONE CONTROL

@ Maximum gives filst response or
TREBLE TONE CONTROL

@ Minimum gives 10 db attenuation @ 70 cps

HUM AND NOISE

Tone controls in Max. position; Mike channels 55 db below
15 watts, Medium gain channels 65 db below
15 watts
15 watts, Medium gain channels 65 db below
15 watts
15 watts at 117 vol.s, with phono top 105 watts
14 "x 8½" x 9½"; with phono top 105 watts
14 "x 8½" x 9½"; with phono top 11½" high

2N189—Amplifier only with tubes. Wt. 27 lb.....







# afayette 30-WATT SOUND SYSTEMS

#### POWERFUL PORTABLE MODEL

Lafayette's latest 30-watt portable system meets the major portion of all sound applications. It is the ideal rental system for the public address user, as well as a most versatile combination for theatres, auditoriums, school gyms and dance halls where exceptional tone quality and moderately high usable power are required. This modern, streamlined system is complete in every detail and surpasses anything offered to date.

to date.

The amplifier has three input channels with individual gain controls for noiseless mixing and fading; two high impedance microphone inputs and one high impedance phonograph input. The separate bass and treble compensators insure complete control of tone for individual preference and varying acoustical conditions. A pair of 616 tubes in a feedback regulated push pull circuit deliver 30 watts undistorted power. All connecting leads and cables between amplifier, microphone and speakers have been simplified to permit fast and easy installation and removal.

Included with this complete system are two heavy duty, 25watt GE 12-inch PM speakers which assure full range reproduction of voice or music without distortion, a Shure Model 707A-20 high impedance crystal microphone on an adjustable floor stand with 20 feet of cable and attached plug, an able floor stand with 20 feet of cabe and attached pug, an attractive, two-section fabrikoid carrying case measuring 18x141/x23" (with speakers and amplifier mounted in position), 70 feet of speaker cable and attached plugs (35 feet for each unit) already connected. Unit fused against burnout. Complete 30-Watt Portable Sound System with amplifier, tubes, microphone and floor stand, two speakers, cables, case and instructions. Nothing else to buy-ready to operate!

2N197—Shipping Weight 80 lbs..... Similar to above except with Shure Model 55 moving coil namic microphone. 2N251. . . . . . . . . . . . . . . . . 30-watt Amplifier and Tubes only. 2N250 Shipping Weight 27 lbs.

#### 30-WATT INDOOR SYSTEM

This is the permanent sound system especially designed for large halls, churches, school gymnasiums, night clubs, auditoriums plus a wide variety of installations requiring medium power. The heavy duty push pull amplifier and Shure Model 707A-20 crystal microphone give exceptional performance, free from hum and distortion. Two handsome walnut finished wood wall befiles provide correct acoustics for the two 25-wall CE-DM scrabers, 35 feet of cable and attached plurs are wood wall besties provide correct acoustics for the wood wall GE PM speakers. 35 feet of cable and attached plugs are supplied with each speaker unit. A telescopic microphone floor stand adjustable from 35" to 68" completes the equipment included with this outstanding sound system.

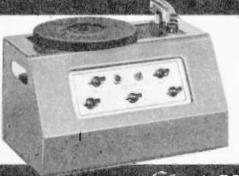
Complete 30-Watt Indoor System with amplifier, tubes, two speakers, microphone and floor stand, wall baffles, cables and instructions . . . ready to install and operate.

2N252 Shipping weight 78 lbs..... Similar to above except with Shure Model 55 moving coil dynamic microphone. Above systems available for 220V. AC operation with step

down transformer.

#### ACCESSORY PHONOGRAPH TOP

The top panel of the 30-watt amplifier can be removed and replaced by a substitute panel housing a 3-speed phonograph motor, turntable and crystal pickup for playing the standard 78 RPM and new 45 and 33½ RPM long playing records. This optional equipment, for either the portable or 



#### 30-Watt Amplifier Specifications

30-watt Amplifier and Tubes only. 2N250—Shipping Weight 27 lbs...

CARNIVALS



Really two sound systems for the price of one Plenty of power for any job—either mobile or indoor. Operates from any 6-volt storage battery or regular 110-volt, 60-cycle AC line at full 25 watts from either supply. Switching from one voltage to the other is automatic—merely change the plugs at the rear of the amplifier; nothing to get out of order and cause a burn out. Indoors and out, in any weather, this deiuxe mobile system is perfect for rallies, fairs, parades and regular P.A. work. Equipped with rugged, all-weather hermetically sealed projectors and driver units.

OUTPUT 25 watts
RESPONSE 50-10.000cps. ±2db.
GAIN Microphone 125 db., Phono 78 db.
OUTPUT IMPEDANCE 2, 4, 8, 500 ohms
CONTROLS Two Microphones, Phono, Tone (Separate ON-OFF switch)
SWITCHES ON-OFF AC, ON-OFF Phono Motor,
Standby Battery Saver Switch
POWER CONSUMPTION AC: 120 watts, 6-volt; DC: 22 amps.
THREE INPUTS 2 Microphone, 1 Phono
TUBES (2) 6SF5, (2) 717, (2) 6L6G, 5Vd,
PHONO Built-in with ON-OFF switch
DIMENSIONS 12" wide, 10" high, 11" deep

Universal mountings permit placing projectors on top of sound truck, field tripods, speaker platforms, roots or towers to carry sound clear and strong to point desired. Speaker lines and microphone cable dissonnect readily by means of plugs so that entire system can be carried indoors in a few minutes. Another feature of the heavy duty amplifier is the battery cover switch which allows you to cut off the plate voltage on 6-voit DC operation, thereby saving current during idle periods. The amplifier top is equipped with a built-in phonograph motor, turntable, crystal pickup and ON-OFF switch for playing standard 78 RPM records. Ladayette's one year guarantee on the amplifier is your assurance of satisfactory service. Complete 25-Watt Mobile System includes amplifier with tubes for 6-volt DC and 110-volt AC. two 20-inch high efficiency University Type PH projectors. Universal mountings permit placing projectors on top of sound truck, amplifier is your assurance of satisfactory service. Complete 25-Wall Mobile System includes amplifier with tubes for 6-volt DC and 110-volt AC, two 20-inch high efficiency University Type PH projectors with driver units and 35 feet of cable attached to each horn, Shure 505C hand microphone with push-to-talk switch and cable, plugs and the phonograph unit. The entire system is delivered ready for operation.

2N254-Shipping Weight 98 lbs 159.95 Complete Mobile System similar to above except with Shure Model 707A-20 microphone instead of the 505C, plus an adjustable floor

2N255-Shipping Weight 98 lbs.. 159 95 25-Watt Amplifier only with 78 RPM Phono Top. 2N348—Shipping Weight 45 lbs.

22N20028-Car Top Horn Carrier-Shpg. Wt. 8 lbs.-

#### YOUR SOUND PROBLEM SOLVED

Latayette Sound System Engineers will design or recommend sound systems in sizes other than those shown here. Send us your detailed requirements...for help in making the proper selection of mobile sound equipment.

#### Guarantee

ALL LAFAYETTE MOBILE SOUND SYSTEMS ARE FULLY GUARAN-TEED FOR ONE YEAR

A compact 10-watt mobile amplifier unit designed to operate from car, truck or bus battery and give small audience coverage. This is an ideal system small audience coverage. This is an ideal system for, bus announcing during sight-seeing tours, police safely campaigns, or any situation requiring announcements from a moving vehicle. The amplifier takes only 36 square inches of instrument panel space in buses or autos and can be mounted in any position—vertical, horizontal or lateral. It operates from a regular 6-volt auto battery or 117 volts AC for por able use. The highly efficient weatherproof speaker mounts easily under the hood or on the roof of any vehicle. Complete 10-watt Mobile System includes amplifier, tubes, University 1B8 speaker and 25-ft. cable, Shure 505C hand microphone and cable plugs. Delivered ready for installation and operation—nothing else to buy.

2N256—Shipping Weight 25 lbs.

10-WATT AMPLIFIER SPECIFICATIONS

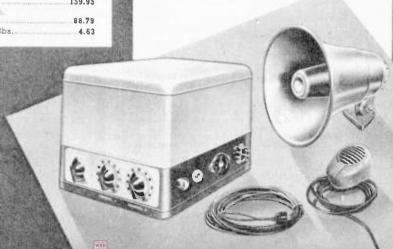
#### 10-WATT AMPLIFIER SPECIFICATIONS

10-WAIT AMPLIFIER SPECIFICATIONS

POWER OUTPUT: 10 watts, Class A (14 watts
peak). RESPONSE: ± 2 db 100-8000 cps. GAIN
110 db for crystal microphone: 75 db for phono.
0UTPUT IMPEDANCE: 3.8, 8, 15 ohms. CONTROLS: Microphone, phono. ON-OFF standby
(battery saver switch). TUBES: 6SF5, 6SL/TGT, (2)
6V6GT, 7Z4. VOLTAGE: 105-125 volts, 50 cycles
or 6 volts DC (storage battery). POWER CONSUMPTION: AC: 60 watts at 117 volts, DC:
amps at 6 volts (battery). DIMENSIONS: 6" wide,
6" high, 7½" deep.

#### REMOTE CONTROL FOR 10-WATT MOBILE AMPLIFIER

This is a compact unit which clamps to steering post of car permitting easy operation of the amplifier controls while driving. Individual control of microphone and phono channel provided. Supplied with 6-ft. cable, connector and clamp for attachment to steering post. 8.82





**DELUXE 60-WATT OUTDOOR SOUND SYSTEM** 

Lafayette has gone all out to give you a high powered sound system; with outstanding fine quality features to take care of every type of outdoor application; in ball parks, skating rinks, large auditoriums, stadiums, carnivals and armories. Especially engineered to deliver tremendous power without distortion or lose of type clarity. This result is achieved through the use of two engineered to deliver tremendous power without distortion or loss of tone clarity. This result is achieved through the use of two 807 high power output tubes in place of the conventional 6L6s. In addition, four 20-inch University type PH reentrant reflex projectors, and 25-walt driver units step up the efficiency of this system to such an extent as to make it equivalent to 90 watts in other systems. With these non-resonant storm-proof loudspeakers you can direct sound over long distances in the open sir to cover exactly the areas you desire. The horns are supplied with 140 feet of speaker cable (35 feet for each unit) and universal brackets to permit mounting on roofs, light towers, wells or under eaves of buildings. The high gain, heavy duty amplifier has three inputs: 2 microphone channels and 1 phonograph channel. Its advanced circuit design features the newest developments for outstanding performance at maximum efficiency channel. Its advanced circuit design features the newest developments for outstanding performance at maximum efficiency backed by Lafayette's one year guarantee. The attractive steel case is finished in neutral green with silver control panel. For 110-115 volts, 60-cycle AC. Complete 60-Watt Sound System includes amplifier with tubes, four 20-inch weather-proof projectors, four 25-watt driver units, Astatic IT-30 crystal mike with cable, adjustable floor stand, plus all necessary connectors and plugs. Entire system shipped ready to set up and operate. 2N257—Shipping Weight

150 lbs... Available for 220 V. AC operation with step down transformer.

# afayette 30-WATT

#### **DELUXE OUTDOOR SYSTEM**

Here's an all-purpose, low power outdoor system to take care of your P.A. installations in small ball parks, picnic grounds or school gymnasiums. Ready to install . . . easy to operate! It uses a heavy duly 30-wait amplifier with two individually controlled high impedance mike inputs and one phonograph input. Separate bass and treble controls provide wide variation of tone and adjustment for different acoustical conditions. Also featured are push pull 6L6s in an inverse feedback circuit to eliminate hum and distortion.

Complete 30-Watt Outdoor System includes amplifies with higher

and distortion.

Complete 30-Watt Outdoor System includes amplifier with tubes, two 20" projectors (University Type PH reflex) with 35 feet of cable and plug attached to each, two 25-watt driver units, Shure 707A-20 crystal microphone on an adjustable floor stad with 20-ft cable and plug.

2N259—Shipping Weight 88 lbs. 134-50

Complete System similar to above except with Shure Model 55

30-Watt Amplifler Specifications

30-watt Amplifier and Tubes only. 2N250—Shipping Weight 27 lbs...



#### Specifications-60 Watt Hi-Power Amplifier

OUTPUT 60 waits normal output, 75 waits peak power GAIN & INPUTS 2 Mike Channels 120 db, Phono Channel 85 db FREQUENCY RANGE ± 2 db, 30—12,000 cps OUTPUT IMPEDANCE 4, 8, 15, 83 and 333 ohns—70 and 140 volts TONE CONTROL "Selections" Frequency Range Selector TUBES USED 2—6SF5, 1—6SL7GT 2—807, 1—6V6GT plus 1—5Y3GT and 1—5R4GY rectifiers HUM AND NOISE LEVEL 52 db below 60 waits LINE DRAIN 220 waits at 117 valls, 60 cycle AC DIMENSIONS 17" wide, 111½" deep, 9½" high

60-Watt Amplifier and Tubes only. 2N162-Shpg. Wt. 60 lbs.....



#### MASCO MUSICAL INSTRUMENT PORTABLE AMPLIFIER SYSTEMS

#### MASCO 5-WATT ECONOMY MODEL

A complete musical instrument amplifier system in one lightweight A complete musical instrument amplifier system in one lightweight portable case. Ideally suited for musicians, singers, lecturers, circus barkers and other entertainment applications. High quality amplifier and large heavy duty 8" PM speaker insures bell-clear musical reproduction. Full 5 walts audio output at less than 5% harmonic distortion for powerful room filling volume. Extremely low hum level assures quiet operation. Dual channel inputs accommodate any standard electronic instrument Dual channel inputs accommodate any standard electronic instrument pickup or microphone; single volume control for simplified operation. Circuits are fused in compliance with Underwriters Laboratories specifications. Hardwood carrying case is sturdily constructed and attractively covered in two-tone blue and gray fabrikoid. Complete with tubes. Shpg. Wt. 15 lbs.

2N338—33 00 less 2% cash discount. Net 32.34

5-Watt Amplifier Specifications

POWER OUTPUT. 5 watts at less than 5% harmonic distortion INPUTS Two—suitable for mike or instrument pickup FREQUENCY RESPONSE. ±2 db 100 to 8000 CPS POWER GAIN. 105 db TUBES 6SL7GT, 6V6GT, 6XSGT (Rectifier) HUM LEVEL 60 db below output level of 5 watts POWER CONSUMPTION 30 watts at 117 volts, 60 CPS DIMENSIONS. 1154 x83½ x138 high

#### MASCO 18-WATT DELUXE MODEL

Designed for the discriminating musician, this new 18-watt music ampli-Designed for the discriminating musician, this new 18-watt music amplifier offers all the latest features for the finest musical instrument reproduction. Individual bass and treble controls vary the overtones from crisp, clear "highs" to rich mellow "lows." Amplifier's exclusive circuit design provides 18 watts of audio output at less than 5% harmonic distortion. Heavy duty 12" speaker mounted in acoustically designed case gives lifelike reproduction and eliminates false harmonics. Frequency response ±2 db from 50 to 12,000 cps. Three instruments or microphones, or any combination may be used separately or simultaneously by means of three separate volume controls. Voice and music may be combined with individual volume control of each. Sturdy hardwood case, covered in two-tone blue and gray fabrikoid. Complete with tubes. Shpg. Wt. 36 lbs.

10-Watt Amplifier Specifications
POWER OUTPUT
PEAK POWER
INPUTS Three, instrument or microphone
FREQUENCY RESPONSE±2 db 50 to 12.000 CPS
POWER GAIN110 db
TUBES
HUM LEVEL 62 db below output level of 18 watts
POWER CONSUMPTION 40 walts at 117 volts
VOLTAGE 105 125 volts, 60 cycles AC
DIMENSIONS

#### MUSICAL CONTACT MICROPHONES

Hi-impedance pickup designed for use with any musical instrument. Easily installed without special strings or changes. The brilliant rounded tone resulting from the use of these pickups far exceed the power of the musical instrument alone. Easy to install; will not mar 8-foot cable

N13746 (A) Less volume control. Shpg. wt. 4 lbs.....

N13745 (B) With volume control. Shpg. wt. 4 lbs........... 5.95





#### MASCO 12-WATT MUSICAL INSTRUMENT AMPLIFIER

A new streamlined design case incorporates the latest sound engine

#### 12-Watt Amplifier Specifications

POWER OUTPUT ... 12 waits with less than 5 % harmonic distortion INPUTS. Two suitable for interophone or managed in training the Legy PREOUENCY RESPONSE ... ±2 db 50 to 10,000 CPS POWER GAIN. TUBES (2) 6SL7GT, (2) 6V6GT. 5Y3GT (retifier)
HUM LEVEL 62 db below an output level of 12 wattu
POWER CONSUMPTION 60 watta at 117 volts, 60 CPS
DIMENSIONS 13" x8" x16 ½" high DIMENSIONS.....

#### MASCO 35-WATT PORTABLE SOUND SYSTEM

The powerful Masco 35-watt complete portable system is designed to give maximum efficiency and performance in a wide range of applications. It is ideally suited for use in chapels, recreation halls, side shows, campaigns, night clubs, carnivals, orchestras and various announcing uses. The entire system is easy to carry and various announcing uses. The entire system is easy to carry and set up—amplifier, speakers, microphone and cables are all housed in one compact portable case. Many important features and refinements are built into the excellently designed high fidelity amplifier. Separate bass and treble equalizer controls make it possible to attentuate or accentuate the high or low frequencies without affecting the opposite frequency range. Four input channels—three mikes and one phono, each with individual volume control, provide extreme versatility. The output is tapped at various impedances to match any speaker or speaker combination; selector switch permits easy adjustment. Excellent frequency response is flat within ± 2 db from 50 to 15,000 cps for superb reproduction of voice and music. Other "extras" include electronic mixing, humine operation, negative feedback and a slanted front panel with convenient "Dial-glo" indirect lighting. Amplifier is housed in attractively styled all-metal cabinet finished in blue and gray Complete Masco 35-Watt Portable System includes amplifier with tubes, two heavy duty, 25-watt Jensen 12-inch PM speakers (or equal), each with 25-ft, cable and attached plug, Astatic IT-30 semi-directional crystal mike with 12-ft, cable and connectors and a fine two-section case of solid, non-resonant construction, finished in water-repellent blue fabrikoid. Amplifier mounted on "slideeasy" boar Wt. 63 lbs. board. Shipped ready for installation and operation. Shpg.

 2N300—158.07 less 2% cash discount
 Net 154.91

 Masco Model MA-3SN Amplifier only, with Tubes
 2N303—93.00 less 2%
 Shpg. Wt. 32 lbs
 91.14

 2N304—Set of Mike and Speaker plugs for above
 2.13

Masco Model MA-35RCN Amplifier—Uses the same chassis described above for the MA-35N amplifier but has a built-in automatic record changer top. With tubes. Will not fit in portable 



#### MASCO 25-WATT MOBILE SOUND SYSTEM

#### MASCO 25 watt Amplifier Specifications

POWER OUTPUT 25 watt less than 5% distortion 40 watts Peak POWER OUTPUT 25 watta less than 5% distortion 40 watta Peas INPUTS Four 3 microphone, 1 phono FREQUENCY RESPONSE ± 2 db 50 to 15,000 CPS POWER GAIN Microphone, 133.5 db Phono, 79 db CONTROLS Six 3 microphone, Phono, Basa Treble Expanse Motor Switch and Battery, aver Switch TUBES 4 (J7 1 csl.7GT 1 -6SC7, 2 -6l.6G, 2 -724 rechifers) OUTPUT IMPEDANCES 4, 8, 15, 125, 250, 500 chima HUM LEVEL AC 64 db below output of 25 watta POWER CONSUMPTION AC 145 watta (b. 117 V includes phono motor). DC 23 Annp (a 6 V (battery) (includes phono inotor) VOLTAGE 10S-125 V, 60 cps AC or 6 V DC (storage battery)

It's pertable ... it mixile ... it operates on either 117 volt, 60 cycle AC or 6-volt OC storage battery. A ru oed and powerful, yelem especially insigned for sound truck and other outdoor applications. Meets all possible needs for P.A. installations at open-air theatre, election campaigns, police and fire department reside work, traveling

road shows, bathing teaches and other locations where AC power is



These two powerful high fidelity amplitier answer the need for top quality performance in large commer hal and industrial P.A. installations. They are suitable for heavy duty service covering large outdoor and indoor areas such as football fields, large auditoriums, rinke, etc. wherever numerous speakers are re-quired. Other fixed system applications such as paging and announcing in steel mills drydocks and heavy construction jobs make these superb instruments excellent for special custom jobs requiring tremendous power and good clarity. Both units feature four mike inputs and one phono input with separate controls for each, individual bass and treble equalizers and full electronic mixing of all channels. If remote control operation is desired, we recommend the model MASONR 50 watt amplifier. When used in conjunction with the Model RCB Remote Control Box, this amplifier provides independent or simultaneous operation of two mike channels up to 2,000 feet.

MASCO MODEL MA-SON. 50-Watt Amp. and Tubes. Wt.

2N309 111.00 less 2% Net 108.78 MODEL RCB. Remote Control Box for MA-50NR. 2N313 Shipping Weight 3 lbs. MASCO MODEL MA-75N. 75-W. Amp. & Tubes. Wt. 63 lbs 132.30 2N311-135.00 less 2%......

100-Ft. Cable & Plugs for Remote Control Box. 2N314—Shipping Weight 2 lbs..... 2N312-Connectors for above amplifiers..... 2.88

race tracksfor the BIG JOB • 常彩的物件图 MASCO DRIVER PRE-AMP

Model DR-5. Designed for use with 50 and 75-watt boosters shown on this page, but also suitable for mixing and adding extra microphone input this page, but also suitable for mixing and adding extra microphone input channels to low gain and booster amplifiers. Can be used in vertical rack or operating console. Four high-gain microphone inputs permit mixing four hi-impedance microphones. Separate bass and treble controls adjust to acoustics of installation. Front panel includes ON-OFF switch with pilot light. Fused for protection. Finished in blue and gray hammertone. Complete with tubes and instructions. Shpg. Wt. 20 lbs. 2N317—61.50 less 2% cash discount.

2N340 —Set of plugs for above.....

#### Specifications, MASCO Driver Pre-Amplifier

OUTPUT 1.9 volts at 500 ohms, less than 5% distortion INPUTS 4 microphones, 2 phono or radio. TONE CONTROLS: 9 db bass boost, 10 db attenuation at 50 cps. 10 db treble boost, 12 db attenuation at 10,000 cps. FREQUENCY RESPONSE ± 2 db 50 to 15,000 cps. POWER GAIN: Microphone, 97 db; phono, 65 db. TUBES: 6SL7GT, (5) 617, 6SN7GT, 6XSGT rectifier. OUTPUT IMPEDANCE: 500 ohms balanced or unbalanced line. HUM LEVEL: 35 db below zero level of ,006 watts. POWER CONSUMPTION: 40 watts at 117 volts. VOLTAGE: 105-125 volts, 60 cycles. DIMENSIONS: 15 x 8½ x 8½ s" high.



MASCO 50 and 75-WATT **BOOSTERS** 

#### Specifications, MASCO 50-Watt Booster Amplifier

OUTPUT: 50 watts, Class AB-1, less than 5% distortion, PEAK POWER: 70 watts. INP UTS: 500 ohms balanced or unbalanced line. FREQUENCY RESPONSE: ± 2 db 50 to 15,000 cps. POWER GAIN: 46 db. CONTROLS: master gain and separate ON-OFF switch. TUBES: (2) 65N7GT, (4) 6L6G, (2) 5V4G rectifiers. OUTPUT IMPEDANCES: 4, 8, 15, 125, 250, 500 ohms. HUM LEVEL: 60 db below output level of 50 watts. POWER CONSUMPTION: 185 watts at 117 volts. VOLTAGE: 105-125 volts, 60 cycles. DIMENSIONS: 17" wide, 12" deep, 8½" high. 79•38 2N318—81.00 less 2%.....Shpg. Wt. 41 lbs.......Net

#### Specifications, MASCO 75-Watt Booster Amplifier

2N320-Set of plugs for 50 & 75-Watt Amplifiers.....





### MASCO 28-WATT SCHOOL SYSTEM AMPLIFIER Easy To Install... Modest in Price

Educational in:titutions hospitals clubs and hotels find this excellent sound system amplifier a valuable addition to their equipment when used in conjunction with an external microphone, phonograph or radio.\* Especially designed to provide efficient control and distribution of radio. programs, phonograph music, lectures and paging to any number of rooms up to 36, singly, in groups or all at the same time. Calls may originate from any room to the master unit when proper interconnecting table is used. Other features include an indicator for correct volume level, separate volume controls that permit adjustment of calls, and two-way conversation to simplify communication. Shpg. Wt. 37 lbs. With

tubes. 2N324 —	6-room	Model	110 70	less	2%		Net	108	.49
2N325-1	2-room	Model	113 70-	less	2%			. Net	111.43
2N326-1	8-room	Model	116 70	less	2%			Net	114.37
2N327-2	4-room	Model	119 70-	less	2%			. Net	117.31
2N345-3	6-room	Model	137.70 -	less	2%	 		Net	134.95

\* We can supply radio, phonograph and microphone attachments to fit your requirements with the School System Amplifier.

#### Specifications for School System Amplifler

programs

phonogragh d music

lectures

POWER OUTPUT ... 28 watts, class AB-1 at less than 5% distortion External Microphone, phono and radio provision INPUTS.

External Microphone, phono and radio provision built-in intercommunication speaker FREQUENCY RESPONSE. ± 2 db 50 to 15,000 CPS POWER GAIN. Microphone 130 db; phono 85 db CONTROLS. Separate in and out volume controls, Function selector, "Talk-listen," Master Call, Station selector, On-off switches. Volume level indicator control TUBES 6SC7, 6SL7GT, 6SN7GT, 2—6L6G, 6U5, 5V4G (rectifier) OUTPUT IMPEDANCES. 80 ohm balanced line, constant voltage HUM LEVEL 64 db below output level of 28 watts POWER CONSUMPTION 145 watts at 117 volts VOLTAGE. 105-125 volts, 60 CPS CABINETS (Metal) Brown Hammertone, 16\*x9½\*x13\* high





#### MASCO DUAL-SPEED 16" TRANSCRIPTION PLAYER

MASCO DUAL-SPEED 16" TRANSCRIPTION PLAYER
Model TLS-16. This new deluxe model transcription player features in dual speed motor and two pickup arms each with the GE variable reluctance cartridge and long playing needle. The player is also equipped with a built-in pre-amplitier unit Ideal for reproduction of 16" transcriptions as well as the new microgroove records used by broadcasting studios, advertising agencies, lecturers and theatrical offices. An external speed regulator adjusts the heavy duty motor to play 78 or 33½ 10 and 12" records A wide range frequency response 5-walt amplifier includes individual bass and tretle equalizers that permit accurate tone settings. Separate microphone and phono inputs are provided. The powerful, fine quality 10" PM speaker is mortited in the removable cover of the case which service is an excellent baftle solved-front control panel with drop-leaf protecting piece, makes adjust ments easier and faster. Handsome, brown alliquator fibrikoid portable case measures 17½ x22x10½" closed. For 105 125 V 6) cycles AC. With Tubes. Shpg Wt. 48 lbs.

38N22691—121.57 less 2%

Model TP16AL. Same as above but with crystal cartridges in the dual pickups. Shpg. Wt. 43 lbs.

38N22670—108.80 less 2%

Net 106.62

#### UNIVERSITY "POWERMIKE" SOUND SYSTEM

UNIVERSITY "POWERMIKE" SOUND SYSTEM
Here is a new, complete voice-amplified sound system that has no vacuum tube amplifier. It operates on any 6 volt battery (standard dry cells or storage) and delivers 11/2 waits of undistoited audio power. The Powermike is an extremely rugged carbon microphone designed to give itouble-free performance over years of use. This compact, poitable sound system covers smith towds or projects sound up to 100 feet. It can be used any place—instantly Merely itess the button switch and fall Gives excettem voice reproduction in such applications as electromeering disp tching, canouncing and paging, building construction to e fishing itrifroad platforms, etc. A cigarette ighter adaptor may be plugged into the dashboard of an automobile for immediale 6 volt availability. Polarity can be disregated since the other container of the Powermike is isolated from the winner Frequency response 100 5000 cycles. Output impedance 24 o imp. In addition to the microphone the system includes a waterproof unit driven reflex speaker mounted on the battery ho isina and a off cord.

254-28
20N20710 Hot Shot Battery for above. Wt. 101/2 lbs.

20N20710 Hot Sho' Battery for above. Wt 101/2 lbs

### **NEW MASCO "Con-fer-phone" INTERCOM SYSTEMS**



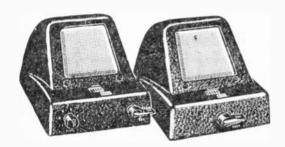
#### MASTER TO REMOTE 5-STATION SYSTEM

- ON-OFF Switch and Volume Control on Master Station
- •Two-Way Conversation Possible With Kemote
- •Separate Press-To-Talk Switch on Remote and Master Units
- •Remote Calls to Master ... Privacy Assured

Possible With Kemote ...Privacy Assured

Here's a popular type intercoin system with a single master
station that has provision for five remote stations. Especially adaptable for industrial and commercial use - in plants,
schools, offices and wherever there is need for private inter-office conversation between a chief executive and a maximum of five subordinates. The master station includes a
press-to-talk switch, station selector, volume control and
ON-OFF switch for instant contact between it and the five
stations...either all at once or any selected one. Press-Totalk leature on remote stations permits it to originite calls
to the master and at the same time assures privacy of conversation. Clear, natural voice reproduction. Both units are
enclosed in matching unbreakable cast aluminum housings
finished in attractive walnut hammertone. Dimensions: 6.5/8x
7.1/8x5%. Shpg. Wt of master, 6 lbs; the remote, 3½ lbs.
For 110 volts AC or DC.

Type JM5-Master Station, Complete with Tubes. 2N391-22.50 less 2% cash discountNet22.05	
Type JR-Remote Station. 2N392-7.65 less 2% cash discountNet7.50	
2N392-7.65 less 2% cash discountNet7.50	
3-Conductor Cable for above Intercom System.	
19N16148-Per 100 ft1.26	



#### MASCO MODEL JMR 2-WAY SYSTEM

•Easy To Install and Operate •Complete - Nothing Else To Buy

A complete two-station intercom system with one master and one remote. Ideal as baby "nurse" or for communication between any two points. Includes 50 feet of 3-conductor cable and complete instructions for easy installation. Plug into light socket, connect the two stations with the cable and it's ready to operate. The master has its own volume control, ON-OFF switch and press-to-talk switch. Hemote station also has a press-to-talk switch for originating its own call and to provide privacy if desired. Units are suitable for use as a two-way paging system. Unbreakable cast alumnum housings finished in walnut hammertone. Size: 6 5/8x 7 1/8x51/4". For 110 volts, AC or DC. U/L approved. Complete system with tubes and cable. Shpg. Wt. 10 lbs.

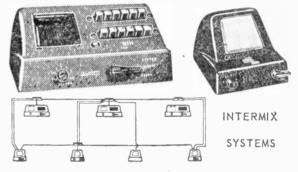
2N389-25.50 less 2% cash discountNet 24.99
Type JMRW-Same as above except units finished in white, 2N390-27.00 less 2% cash discountNet26.46
2N390-27.00 less 2% cash discountNet26.46
Additional cable for the above systems.
19N16134-Per 100 ft1.76

#### MASCO ALL-MASTER INTERCOM SYSTEM

- No Cross Talk
- •Instant Selection of One or All Master Stations
- Press-To-Talk Switch
- •Unbreakable Cast Aluminum Lousing

For less leg work and fast action, here's a flexible, modern system that features a total of six master stations. Provides instant communication between a master and five other masters. Each, unit can converse two-way with any or all masters in the system. They all have a press-to-talk switch, station selector and volume control with ON-OFF switch. The specially designed 3-tube amplifiers and matching Almico V FM speckrs juve sharp, clear reproduction of voice with ample sensitivity. Dimensions: 6 5/8 x 7 1/8 x 5½°. For 110 volts, 60 cycles AC. U/L approved. Shipping Weight 6 lbs.

Type 1M5. Complete Master Station With Tubes.
2N393-22.50 less 2% cash discount...Net, Each...22.05
7-Conductor Cable for use with as many as six master stations.
19N16093-Per 100 ft...7.20.......Net, Per ft........08
5-Conductor Cable for use with as many as four master stations.
19N16091-Per 100 ft...5.40......Net, Per ft...........06



#### 6 OR 12-STATION PUSH-BUTTON SYSTEM

A deluxe intercom system that can be installed as a Master-To-Master-To-Remote Intermix System, a Master-To-Master or Master-To-Remote installation, Master and remote units can be intermixed. Remotes can originate calls, Individual or group conversation is possible. Units have press-to-talk switch and volume controls; press-to-talk and "dictate" position on master stations. Walnut hammertone enamel case, 110 volts, AC or DC operation. Shpg. Wt. 8 lbs.

operations on pgs nes o 120s
12-Station Master Unit 2N395-40.77 less 2% cash discountNet39.95
6-Station Master Unit 2N394-34.77 less 2% cash discount Net34.07
Type JS-6 Rémote Station. With 6-position master selector and call switch. Shpg. Wt. 314 lbs.
2N398-11.97 less 2% cash discountNet11.73
Type JS Remote Station with Call Switch 2N397-8.40 less 2% cash discountNet8.23
Type JL Remote Station less call switch & selector 2N396-7.65 less 2% cash discountNet7.50
19N16134-Master-to-JL-kemote cable
19N20867-Master-to-JS or JS6-Kemote shielded cable .04/ft
Note: To connect Master to Master use one pair of twisted for each master in the system.
3-Pair for 2 or 3 Masters. 19N16138-Per ft05100 ft4.12
6-Pair for up to 6 Masters. 19N16140-Per ft07100 ft5.14
13-Pair for up to 12 Masters. 19N16180-Per ft20100 ft18.00
2N399-Junction Dox for Masters4.27



We stock both of the leading national brands. Your quarantee of fine quality it is ked by two of the most funous name, in the field of electronics, RCA and GE. All tubes are quaranteed for six months execute against burnouts as if the ikage.

There is a 5% additional discount on lots of 50 or more assorted RCA or GE tubes.

		NET E	ACH	_		NET I	EACH	Tube	List	NET E	ACH
Tube Type	Price	Lots 1 9	Lots 10	Type Tube	List Price	Lots 1 0	Lots 10	Tube Type	Price	Lots 1 9	Lots 10
0A2 0A3 VR75 0A4G 0C1 VR105 0B3 VR150	3 20 2 65 2 65 2 65 2 65 2 65	1.79 1.48 1.48 1.48 1.48	1.69 1.40 1.40 1.40 1.40	5 Y 4 G 5 Z 3 5 Z 4 6 A 3 6 A 4 'L A	1.50 1.80 2.65 3.20 3.20	.84 1.01 1.48 1.79 1.79	.79 .95 1.40 1.69 1.69	6L6G 6L7 6L7G 6N7 6N7GT	2.90 2.40 2.90 2.40 2.40	1.62 1.34 1.62 1.34 1.34	1.54 1.27 1.54 1.27 1.27
9 Y4 024 021G 1A3 1A4P	4.80 1.65 1.65 2.20 3.90	2.68 .92 .92 1.23 2.18	2.54 .87 .87 1.16 2.06	6A6 6A7 6A8 6A8G 6A8GT	2.55 2.00 2.00 2.00 2.00 2.00	1.48 1.12 1.12 1.12 1.12	1.40 1.06 1.06 1.06 1.06	6Q7 6Q7G 6Q7GT 6R7 6R7GT	7,09 1,80 1,80 2,65 2,65	1.12 1.01 1.01 1.48 1.48	1.06 .95 .95 1.40 1.40
1A5GT 1A6 1A7GT 1B3GT/8016 1B4P	1.80 3.20 2.00 2.65 3.90	1.01 1.79 1.12 1.48 2.18	.95 1.69 1.06 1.40 2.06	6AB5/6N5 6AB7/1853 6AC5GT 6AC7/1852 6AD7G	2 65 3 20 2.90 2.90 3.20	1.48 1.79 1.62 1.62 1.79	1.40 1.69 1.54 1.54 1.69	657 657G 658GT 65A7 65A7GT	2.65 3.20 2.65 1.65 1.65	1.48 1.79 1.48 .92 .92	1.40 1.69 1.40 .87
185 25S 1C5GT 1C6 1C7G 1D5GP	3,20 2,20 3,20 3,20 3,90	1.79 1.23 1.79 1.79 2.18	1.69 1.16 1.69 1.69 2.06	GAFGG GAG5 GAG7 GAHG GAK5	2.65 2.65 3.20 3.90 3.90	1.48 1.48 1.79 2.18 2.18	1.40 1.40 1.69 2.06 2.06	6SB7Y 6SC7 6SF5 6SF5GT 6SF7	2,40 2,00 1,65 1,80 2,00	1.34 1.12 .92 1.01 1.12	1.27 1.06 .87 .95 1.06
1D7G 1D8GT 1E5GP 1F4 1F5G	3.20 3.90 3.90 3.90 2.65 2.65	1.79 2.18 2.18 1.48 1.48	1.69 2.06 2.06 1.40 1.40	6AK6 6AL5 6AL7GT 6AQ5 6AQ6	2,40 2,00 2,65 2,00 1,80	1.34 1.12 1.48 1.12 1.01	1.27 1.06 1.40 1.06 .95	65G7 65H7 65J7 65J7GT 65K7	2.00 2.20 1.65 1.65 1.65	1.12 1.23 .92 .92 .92	1.06 1.16 .87 .87 .87
1F6 1F7G 1G4GT 1G5G 1G6GT	3.90 3.90 2.65 2.65 2.65	2.18 2.18 1.48 1.48 1.48	2.06 2.06 1.40 1.40 1.40	6AQ7GT 6AS7G 6AT6 6AU6 6AV6	2.20 6.75 1.50 2.00 1.50	1.23 4.53 .84 1.12	1.16 4.53 .79 1.06	ESK7GT ESL7GT ESN7GT ESQ7 ESQ7GT	1.65 2.40 2.20 1.50 1.50	.92 1.34 1.23 .84 .84	.87 1.27 1.16 .79 .79
1H4G 1H5GT 1H6G 1J6GT 1L4	2, 20 1,65 3,20 3,20 2,00	1.23 .92 1.79 1.79 1.12	1.16 .87 1.69 1.69 1.06	6E4G 6B5 6B6G 6B7 6B8	3.20 3.20 2.20 3.20 3.20 3.20	1.79 1.79 1.23 1.79 1.79	1.69 1.69 1.16 1.69 1.69	6SR7 6SS7 6ST7 6SZ7 6T7G	1.80 1.80 2.65 2.20 3.20	1.01 1.01 1.48 1.23 1.79	.95 .95 1.40 1.16 1.69
1LA4 1LA6 1LB4 1LC5 1LC6	2.65 2.65 2.65 2.65 2.65 2.65	1.48 1.48 1.48 1.48 1.48	1.40 1.40 1.40 1.40 1.40	6B8G 6BA6 6BE6 6BF6 6BG6G	3.20 1.80 1.80 1.65 4.80	1.79 1.01 1.01 .92 2.68	1.69 .95 .95 .87 2.54	6T8 6U5 6G5 6U7 G 6V6 6V6GT	2.90 2.00 1.80 3.20 2.00	1.62 1.12 1.01 1.79 1.12	1.54 1.06 .95 1.69 1.06
1LD5 1LE3 1LH4 1LN5 1N5GT	2.65 2.65 2.65 2.65 2.00	1.48 1.48 1.48 1.48 1.12	1.40 1.40 1.40 1.40 1.06	6BH6 6BJ6 6C4 6C5 6C5GT	2.00 2.00 1.65 1.65 1.65	1.12 1.12 .92 .92	1.06 1.06 .87 .87	6W4GT 6W7G 6X4 6X5 6X5GT	1.80 2.65 1.50 2.65 1.50	1.01 1.48 .84 1.48	.95 1.40 .79 1.40 .79
1P5GT 1Q5GT 1R4 1R5 1 <b>5</b> 4	2.65 2.65 2.65 2.00 2.40	1.48 1.48 1.48 1.12 1.34	1.40 1.40 1.40 1.06 1.27	6C6 6C8G 6D6 6D8G 6E5	2,00 3,20 1,65 3,20 2,20	1.12 1.79 .92 1.79 1.23	1.06 1.69 .87 1.69 1.16	6Y6G 6Z7G 6ZY5G 7A4 XXL 7A5	2.40 3.90 2.20 1.80 1.80	1.34 2.18 1.23 1.01 1.01	1.27 2.06 1.16 .95 .95
155 1T4 1T5GT 1U4 1U5	1.80 2.00 2.65 2.00 1.80	1.01 1.12 1.48 1.12 1.01	.95 1.06 1.40 1.06	6F5 6F5GT 6F6 5F6G 6F6GT	1.65 1.65 2.00 1.65 1.65	.92 .92 1.12 .92 .92	.87 .87 1.06 .87	7A6 7A7 7A8 7AG7 7B4	1.80 1.80 1.80 2.20 1.80	1.01 1.01 1.01 1.23 1.01	.95 .95 .95 1.16 .95
1V 2A3 2A5 2A6 2B7	2.20 3.20 2.20 2.65 2.65	1.23 1.79 1.23 1.48 1.48	1.16 1.69 1.16 1.40 1.40	6F7 6F8G 6G6G 6H6 6H6GT	3.20 3.20 2.65 1.65 1.65	1.79 1.79 1.48 .92 .92	1.69 1.69 1.40 .87	785 786 787 788 7C5	1.80 1.80 1.80 1.80 1.80	1.01 1.01 1.01 1.01 1.01	.95 .95 .95 .95
2E5 2V3G 2X2A 3LF4 3Q4	2.65 5.25 4.35 2.65 2.20	1.48 2.93 2.43 1.48 1.23	1.40 2.93 2.30 1.40 1.16	6J5 6J5GT 6J6 6J7 6J7G	1.50 1.50 2.90 2.00 2.00	.84 1.62 1.12 1.12	.79 .79 1.54 1.06 1.06	7C6 7C7 7E6 7E7 7F7	1,80 1,80 1,80 2,20 2,20	1.01 1.01 1.01 1.23 1.23	.95 .95 .95 1.16 1.16
3Q5GT 3S4 3V4 5T4 5U4G	2.40 2.00 2.00 3.90 1.50	1.34 1.12 1.12 2.18	1.27 1.06 1.06 2.06 .79	6J7GT 6K6GT 6K7 6K7G 6K7GT	2.00 1.50 1.65 1.65 1.65	1.12 .84 .92 .92	1.06 .79 .87 .87	7F8 7G7, 1232 7H7 7J7 7L7	2.65 2.65 2.00 2.65 2.20	1.48 1.48 1.12 1.48 1.23	1.40 1.40 1.06 1.40 1.16
5V4G 5W4 5W4GT 5X4G 5Y3GT	2.40 2.65 1.65 1.80 1.05	1.34 1.48 .92 1.01	1.27 1.40 .87 .95	6K8 6K8G 6K8GT 6L5G 6L6	2.40 2.90 2.40 2.65 3.55	1.34 1.62 1.34 1.48 1.98	1.27 1.54 1.27 1.40 1.88	7N7 7Q7 7R7 7S7 7V7	2.20 1.80 2.20 2.65 2.65	1.23 1.01 1.23 1.48 1.48	1.16 .95 1.16 1.40

### RCA and GE RECEIVING TUBES

		NET	EACH
Tube Type	List Price	Lots 1 9	Lots 10
7W7	2.65	1.48	1.40
7X7/XXFM	2.65	1.48	1.40
7Y4	1.80	1.01	.95
7Z4	1.80	1.01	.95
10	3.90	2.18	2.06
12A7	3.20	1.79	1.69
12A8GT	2.00	1.12	1.06
12AH7GT	2.65	1.48	1.40
12AL5	2.00	1.12	1.06
12AT6	1.50	.84	.79
12AT7	2.90	1.62	1.54
12AU6	2.00	1.12	1.06
12AU7	2.40	1.34	1.27
12AV6	1.50	.84	.79
12AW6	2.65	1.48	1.40
12AX7	2.40	1.34	1.27
12BA6	1.80	1.01	.95
12BD6	2.00	1.12	1.06
12BE6	1.80	1.01	.95
12C8	3.20	1.79	1.69
12F5GT 12H6 12J5GT 12J7GT 12K7GT	1.80 1.80 1.50 2.00 1.65	1.01 1.01 .84 1.12 .92	.95 .95 .79 1.06
12K8	2.40	1.34	1.27
12Q7GT	1.80	1.01	.95
12SA7	1.65	.92	.87
12SA7GT	1.65	.92	.87
12SC7	2.20	1.23	1.16
12SF5 12SF7 12SG7 12SH7 12SJ7	1.80 2.00 2.00 2.00 2.20 1.65	1.01 1.12 1.12 1.23 .92	.95 1.06 1.06 1.16 .87
12SJ7GT	1.65	.92	.87
12SK7	1.65	.92	.87
12SK7GT	1.65	.92	.87
12SL7GT	2.40	1.34	1.27
12SN7GT	2.20	1.23	1.16
125Q7 125Q7GT	1.50 1.50	.84	.79

#### Federal Miniature Selenium Rect.



Designed to last the life of the set. In that starting and low operating temp. 2 soldering terminals. Rectifiers may be connected as a doubler to supply 250 V. from 117 V. AC sour re. Models 43403455A and 438D3428A designed for television.

Stock No.	Type No.	МЛ	List Price	Each.	Lots 6 Each
37N10558	402D3452A	65	1.10	.65	.58
37N10559	402D3150A	75	1.30	.76	.68
37N10561	403D2625A	100	1.60	.94	.84
37N10562	403D2787A	150	1.95	1.15	1.03
37N10563	404D2795A	200	2.25	1.32	1.19
37N10564	404D34 <b>50A</b>	250	2.50	1.47	1.32
37N10557	438D3428A	500	3.80	2.23	2.01



#### Raytheon Sub-Miniature Tubes

Extremely compact, flat tuber. Lower voltage batteries can be used because of the low filament drain. Tubes can be either soldered or plugged into socket. Types with (\*) use 5-prong socket; (†) 6-prong; and (\*) 7-prong.

#### Receiving Tubes

Stock No.	Type No.	Each
37N24961	2E32*	1.56
37N24963	2E36*	1.88
37N24965 37N24967	2E42† 2G22†	1.56
37N24967	201221	1.56

#### Hearing Aid Tubes

37N24968	CK502AX*	1.88
37N24969	CK503AX*	1.88
37N24970	CK505AX*	1.88
37N24972	CK507AX*	1.88
37N24973 37N24974	CK510AX‡ CK512AX* CK522AX*	3.15 1.88

		NET	EACH
Tube Type	List Price	Lots 1 9	Lots 10
12SR7 12Z3 14A4 14A5 14A7	2.20 2.65 2.65 3.90 2.20	1.23 1.48 1.48 2.18 1.23	1.16 1.40 1.40 2.06 1.16
14AF7/XXD 14B6 14B8 14C7 14E6	2.20 2.20 2.20 2.20 2.20 1.80	1.23 1.23 1.23 1.23 1.01	1.16 1.16 1.16 1.16 1.16
14F7 14F8 14H7 14J7 14N7	2.20 2.65 2.20 2.65 2.65 2.65	1.23 1.48 1.23 1.48 1.48	1.16 1.40 1.16 1.40 1.40
14 Q7 14R7 19 19T8 24A	2.20 2.20 3.20 2.90 2.20	1.23 1.23 1.79 1.62 1.23	1.16 1.16 1.69 1.54 1.16
25A6 25L6 25L6GT 25Z5 25Z6	3.20 3.20 1.65 1.50 2.20	1.79 1.79 .92 .84 1.23	1.69 1.69 .87 .79 1.16
25 <b>Z</b> 6 <b>GT</b> 26 27 30 31	1.35 1.80 1.50 2.00 2.65	.75 1.01 .84 1.12 1.48	.71 .95 .79 1.06 1.40
32 33 34 35 35A5	3.55 3.20 3.20 2.00 1.80	1.98 1.79 1.79 1.12 1.01	1.88 1.69 1.69 1.06
35B5 35L6GT 35W4 35Y4 35Z3	2.00 1.65 1.25 1.80 1.80	1.12 .92 .70 1.01 1.01	1.06 .87 .66 .95
35Z4GT 35Z5GT 36	1.50 1.25 2.65	.84 .70 1.48	.79 .66 1.40

#### RCA AND GE TV PICTURE TUBES



RCA No. GE No. 36N24911 22.50 36N24912 36N24680 STP4 59.40 36N24915 23.80 36N24922 36N24682 71P4 16.88 16.50 36N24917 57.60 36N24918 36N24684 10BP4 27.50 36N24685 IN-P4 33.25 36N24919 36N24688 36.45 36N24923 36N24689 36N24690 34.40 36N24924 16AP4 55.88

#### Sylvania 1N34 Diode Detector



# Cinch Sockets For Sub-Miniature Tubes For hearing aids, radio controlled model airplanes, etc. Molded form, mice-filled, low-loss bakelite with rilver plated beryllium copper con-

| Stock No. | Type No. | Contacts | Each | 13N13116 | 2H5 | 5 | 13N13117 | 2H6 | 6 | 23 | 13N13118 | 2H7 | 7 | 24

		NET	EACH
Tube Type	List Price	Lots 1-9	Lots 10
37	1.80	1.01	.95
38	2.20	1.23	1.16
39 44	2.65	1.48	1.40
41	1.65	.92	.87
42	1.65	.92	.87
43 45 45 <b>Z3</b> 45 <b>Z5GT</b> 46	1.65 1.65 1.80 1.80 2.65	.92 .92 1.01 1.01 1.48	.87 .87 .95 .95
47	2.10	1.34	1.27
50	3.90	2.18	2.06
50A5	2.20	1.23	1.16
50B5	2.00	1.12	1.06
50L6GT	1.65	.92	.87
50 Y6GT	1.80	1.01	.95
53	2.65	1.48	1.40
55	2.20	1.23	1.16
56	1.80	1.01	.95
57	2.00	1.12	1.06
58	2.00	1.12	1.06
59	3.55	1.98	1.88
70L7GT	3.90	2.18	2.06
71A	2.00	1.12	1.06
75	1.65	.92	.87
76 77 78 79 80	1.65 1.65 1.65 2.63 1.15	.92 .92 .92 1.48 .64	.87 .87 .87 1.40
81	3,90	2.18	2.06
82	2,65	1.48	1.40
83	2,65	1.48	1.40
83 V	3,20	1.79	1.63
84 6 Z 4	1 ×0	1.01	.95
85 89 117L7/M7GT 117N7GT 117P7GT	20 2.20 3.20 3.20 3.20 3.20	1.23 1.23 2.18 2.18 2.18	1.16 1.16 2.06 2.06 2.06
117Z3	1.50	.84	.79
117Z6GT		1.34	1.27

#### LAFAYETTE SPECIAL

Fully Guaranteed High Quality TV Picture Tubes at Real Rock Bottom Prices

Stock No.	Type No.	Ea h
36N24980	10BP4	23.95
36N24981	121F4	29.95
36N24983	15AP4	43.50
36N24984	16FF4	44.70

#### DUMONT

Stock No.	1	Type	Each
36N24954		12QP4	34 75
36N24955		12RP4	34.00
26N24956		15DP4	53.50
36N24953		20BP4	222.75

#### RCA SALES PROMOTIONAL AIDS

Free promotional aids when ordered with tube quantities shown

Stock No.	RCA No.	Description	Each	No. Tubes
23N19363	RC-15	RCA Tube		
000110000	F11 1 4 0 4	Manual	.35	10
23N19986	PG-101	Powerand Gas		_
23N19984	1275-D	Tube Manual. Tube Char.	.10	5
		Booklet !	.10	5
23N18801	2F366	Triple Pindex	.75	20
23N18800	11-9940	RCA Resistor		
		Code_Pencil	1.49	50
23N18807		RCA Dummy		
23N18806	2F420	Cartons Service Decal	Free Free	

### IDUSTRIAL—TRANSMITTING—SPECIAL PURPOSE TUBES



RCA and GE tubes are manufactured with the most modern. high-precision equipment and are precested to insure long trouble free service. They are fully guaranteed by the world's two largest in inufacturers. As one of the largest distributers of RCA and GE tube, we carry a complete stock of industrial, transmitting and special purpose tubes. If the particular type that you want is not listed please write for a quotition.



RCA	1		GE	
No.	E 1ch	Type_	Nc.	Ła h
		OB3 / VR90	36N24568	1.20
36N24803 36N24804 36N24805 36N24806	2.25 29.00 29.00 2.00	1C21 2C40 2C43 2D21	36N24572 36N24573 36N24574	29.00
36N24807 36N24808	5.10 3.85	2E24 2E26	36N24575 36N24576	
36N24811 36N24812 36N24813	5.80 12.50 15.00	3B25 3C23 3D22	3 <b>6N</b> 24580	12.50
36N24943 36N24944	24.50 37.50	4E27 4-250A /5D22		
36N24945 36N24946 36N24814	48.00 110.00 27.50	4X150A 4X500A 4-125A /4D21		27.50
36N24815 36N24816 36N24818 36N24886 36N24819	1.50 1.75 8.05 159.50 1.95	5R4GY 6AG7Y 6J4 7C24 10Y	36N24583	1.50
36N24820 36N24885 36N24821 36N24822 36N24823 36N24947	13.75 115.00 13.75 4.30 4.75 24.25	203A 204A 211 801A 802 803	36N24588 36N24589 36N24590 36N24591	13.75 13.75 3.75 4.75

#### **RCA PHOTO TUBES**

Noted for their high quality and long of eriting life. High vice in and gas filled type.

Stock No	RCA Ty; e	Fa -h
36N24925	1P21	50.00
36N24926	1P22	14.75
36N24927	1P./8	15.50
36N24928 36N24929	1P.23 1P37	2.95 2.85
	TP 49	1.85
36N24930 36N24931	1P40	1.85
36N24932	IP11	2.80
36N24933	1P42	5.70
36N24843	868	2.50
36N24848	917	3.50
36N24849	918	3.10
36N24850	919	3.50
36N24851	920 921	4.15 2.05
36N24852		
36N24853	922	1.95 2.05
36N24854 36N24855	923	2.40
36N24856	926	2.90
36N24857	927	2.50
36N24858	9.1	1.50
36N24859	930	1.65
36N24860	931A	9.75

#### RCA CATHODE RAY TUBES

Incorporate all the recent improvements in material and dearm.

RCA		
No.	Eith	Type
36N24905	10.55	2APIA
36N24906	9.60	2BP1
36N24907	14.25	3APIA
36N24908	14.50	+KP1
36N24909	22.50	BPIA
36N24910	23.25	SCPIA
36N24913	17.75	51'P1
36N24914	30.75	7CP1
36N24895	32.25	7CP4
36N24920	15.50	913
36N24921	47.50	5527
36N24934	85.00	1816P4

We can supply all GE, RCA types not listed here due to space limitations; also Eimac, Taylor, Hytron & Heintz Kaufman.

RCA	1		GE	
No.	Lich	Type	No.	Eich
36N24948 36N24824 36N24949 36N24825 36N24826	13.50 34.25	804 805 806 807 808	36N24592 36N24593	
36N24827 36N24828 36N24829 36N24830 36N24831	4.00 14.50 3.30 4.05 16.00	809 810 811 812A 813	36N24595 36N24596 36N24597 36N24598 36N24599	
36N24832 36N24833 36N24834 36N24835 36N24836	14.25 6.90 1.65 12.50 13.75	814 815 816 826 828	36N24600 36N24601 36N24602 36N24603 36N24604	6.90
36N24837 36N24838 36N24887 36N24896 36N24839		829B 832A 833A 836 837	36N24605 36N24606	11.75
36N24840 36N24888 36N24841 36N24889 36N24890	2.00 13.75 138.00	841 843 845 849 857B	36N24609	13.75
36N24891 36N24842 36N24844 36N24845 36N24846	11.50 1.95 8.20 12.75 1.85	865 866Å 872Å 878 884	36N24610 36N24612 36N24614	8.20

#### RCA TELEVISION CAMERA TUBES

High- in slity climer i tubes designed and built to meet the rigid requirements of Television

Stock No.	Tyr - No.	Description	I Each
36N24935 36N24936 36N24937 36N24900 36N24938	2P23 5655 5769 5820 1848	Image Orthicor linage Orthicor Image Orthicor Image Orthicor Ironoscope	1300.00 1200.00
36N24939 36N24921 36N24940 36N24941	2F21	Iconoscope Iconoscope Monoscope View Fuider Kinescope	540.00 47.50 105.00

#### TV TRANSMITTER AMPLIFIER TUBE

Designed and engineered to meet exacting specifications. Please specify lesired charnel when ordering.

36N24942	Model RCA	8D21	1300.00
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#### SYLVANIA SPECIAL PURPOSE TUBES



Sylvania special purpose stro-botron tubes are used in to measurement of speed of revolving meahinery and studying them while in motion. No Fil iment voltage is recuired.

recurred.

The Electrollash tube, when used with silt tible equipment provide a fall int flash of daylint intensity with a darition of only 175000 seconds. Paints sharp clear shots of all subjects, day or math. Good for 10 000 flashes. Trigger takes are used to control high voltage required for photoflash tubes, welders etc. welders, etc.

No.	Type F	Lich
	.1D21 SN4 Strobetron\$	
	R-4350 Strobotron 1	
36N24993	R-4330 Flectroflash 1	5.80
36N24994	K-43-10 Flectre flash 4	5.00
36N24995	.OA5 Trigger Tube	4.40
36N24996	.X-6090 Ionization Tube.	2.00



#### THEATRE EXCITER LAMPS

Tune Velta Amm

Fir Sound on Film. 31%" long, 1" dis. Single contact bayonet base.

INO.	rype	A OHS	Amp.	E(1.
10N12240	T-8	10	5	. 59c
10N12241	T-8 .	10	7.5	59c
10N12242	T-8 .	8.5	.4	. 59c
10N12243				

RCA			GE	
No.	Each	Туре	No.	Each
36N24847 36N24861 36N24862	2.00 5.65 3.60	885 954 955	36N24615 36N24629 36N24630	2.00 5.65 3.60
36N24863 36N24864 36N24865 36N24866 36N24867	6.30 3.75 6.25 7.40 3.00	956 957 938A 1603 1612	36N24631 36N24632 36N24634 36N24635	6.30 3.75 7.40 3.00
36N24892 36N24868 36N24893 36N24869 36N24870	2.05 6.60 2.15 2.30 4.05	1614 1620 1621 1622 1623	36N24636 36N24637 36N24638	6.60 2.30 4.05
36N24871 36N24872 36N24873 36N24874 36N24875	4.00 2.65 1.85 1.40 3.10	1624 1625 1626 1629 1851	36N24649 36N24640 36N24642 36N24643	4.00 2.65 1.40 2.90
36N24876 36N24878 36N24894 36N24879 36N24880	1.85 7.40 8.20 15.50 10.30	20°0 8005 8008 8012Å 8013Å	36N24644 36N24646 36N24647 36N24648	1.85 7.40 15.50 10.30
36N24897 36N24898 36N24881 36N24882 36N24883 36N24884	22.00 10.00 3.10 2.50 3.10 1.60	8020 8025A 9001 9002 9003 9006	36N24649 36N24650 36N24651 36N24652	2.50 3.10

#### RCA SPECIAL RED TUBES

Specially designed for critical industrial applications, 10,000 hour life. Sturdy construction, uniformity and stability. Specifications similar to 6SL/CT, 6SN/CT and 6ST respectively. Send for free RCA Red Tube Bullotin, RCA 5RB 1002.
23N19926 FREE

Stock No.	RCA Type	Each
36N24904	691	7.75
36N24903	5692	7.75
36N24902	5693	6.40

#### **GE INDUSTRIAL TUBES** IGNITRONS

High peak current gas-filled tubes with mercury pool authode. Susply heavy current for use in spot or seam welding. Use in place of retiting northings for changing AC to DC.

No.	G-E Type	Fich
36N24776	GL 415	44.00
36N24777	FG-271	73.50
36N24778	FG 235A	110.00
36N24779	FG-258A	241.00

#### **GE THYRATRONS**

Grid-controlled gaseous discharge rectifier tubes with one or more grids to control the tarting of the talke current. Run D.C. motors directly from AC lines and hold desired motor speed constant.

Sto k No.	G F Type	Each
36N24784	FG-97	22.00
36N24785	FG-17	7.00
36N24786	FG-27A	21.00
36N24787	FG-33	21.00
36N24788	FG-57	19.50
36N24789	FG-95	23.00
36N24790	FG-105	48.00
36N24791	FG-172	65.00

#### **GE PHOTOTUBES**

Gas filled and high-vacuum type. No grid.

No.	G E Type	Each
36N24780	P-J22	2.20
36N24781	P-J23	2.50
36N24782	1P29/FJ401	2.95
36N24783	GL-441	4.50

**Television Pictures Tubes** Are on Page 35

No

### PILOT LAMPS AND SOCKETS

#### FULL-VIEW NEON PILOT LIGHT



Plastic head, built-in resistor for 110 volta. Uses NES1 neon bulb. Head unscrews to replace bulb from front panel. 1-7/32" long, extends 7/16" in front of panel. With intg. nut and washer, threaded 11/16—27.

10N14181-Red Hd. 10N14182-Amber Hd. 10N14183-Opal Hd.

Any color above, Each.....

#### I" ENCLOSED PILOT LIGHT

Single unit socket assembly unaffected by heat. Porcelain and brass. For standard S6 lamp, removable from front of pinel. Single 1" mtg. Paceted jewels, U.L. listed



94¢

10N14140—Red Jewel. 10N14141—Green Jewel. Either type

#### MINIATURE PANEL LIGHT



For panel mtg. S.C. Min. Bay. Base. Mts.in  ${}^3s''$  hole. With 12'' lead, nut and washer.

10N6436—Each.....

#### RELIANCE POLISHED CHROME BULL'S-EYES

Takes candelabri base bulbs type S-6. For panels up to 1/2" thick, 1" diameter glass jewel with set of 4 color discs—red, green, amberand white, lewel bezel



10N14174-Each. 10N14175—As above, with Red or Green faceted I" jewel 10N14176—Same as above, but with Miniadure Base.....



### 1/2" AND 3/4" JEWEL PILOT BRACKETS

For amplifiers, transmitters, etc. All have faceted jewels, highly polished nickel plated steel brakets. Standard jewelled brackels have ½" jewel requiring a 7/16" mounting hole. Lumbo bracket: have a ¾" jewel, requiring a 11/16" hole. Available with Candelabra 110V. Miniature Bayonet and Screw base sockets.

Base Type	Green   Ea.   Red   Ea.   Amber   Ed.
Assembly with Min. Screw 1/2" Jewel. Min. Bay. Brackets. Candelabra	10N6433 19c 10N6432 19c 10N6434 19c 10N6456 19c 10N6454 19c 10N6458 19c 10N6427 21c 10N6426 21c 10N6428 21c
Assembly with Min. Screw Candolabra	10N6330 35c 10N6331 35c 10N6332 35c 10N6333 35c 10N6334 35c 10N6335 35c

#### RUBBER DIAL LIGHT INSTALLER

For miniature and candela-bra in hard-to-reach places.

10N14137—Each..... 24¢



#### PORCELAIN RECEPTACLES FOR NEON GLOW LAMPS



Mounting hole spacing all types is 11/4" except 10N13327, which is 2". 10N13387 requires 11/16" socket hole in addition to mtg. hole. 10N13331—Candelabra (B) } ea. 94 10N13327-Edison (B) 10N13327—Edison (B) . . . . . 13c 10N13387—Candelabra (A) . . . . 33c



#### 2-CONTACT CAND. BAY. METAL SHELL SOCKETS

(A) Base Mtg. Type: Bakelite base, screw terminals. 1-7/16x1-5/16".



10N13389—Flush...... 29¢





#### PILOT LIGHT SOCKETS MINIATURE. CANDELABRA, BAYONET BASE



Туре	Min. Screw	Min. Bay.	Cand. Base
A B C D	10N6510 10N6511 10N6512 10N6513	10N6488 10N6489 10N6490 10N6514	10N6539 10N6557 10N6540 10N6564
OUR PRICE	10 for48c	Each76 10 for646 100 for5.766	Each10c 10 for90c 100 for8.10

#### GIANT 1" JEWEL BRACKETS

1" diameter faceted jewels. Candelabra takes 3 or 6 watt 110 volt bulb.

Color	Candelabra Base	Miniature Base	Bayonet Base	Each
Red Opal Green Amber	10N6403 10N6321 10N6322 10N6323	10N6404 10N6324 10N6325 10N6326	10N6405 10N6327 10N6328 10N6329	59¢

#### GE NEON GLOW LAMPS



For use in test in truments, On DC, only negative electrode glows. All except  $^{1}\nu$  watt types of use in test in truments. On DC, only negative electrode glows. All except 1/2-walt types of erate on 135-125 volts AC or DC and require minimum starting voltages (approx.) 65 on AC, 99 on DC. 12-walt minimum, tarting voltage 105 – recommended for AC only. Clear glass except 10N12929 whether the control of the control cept 10N12263 which is orange. Tax included.



Stock					Start ]	Volts		10
No.	Watts	NE No.	Bulb	Base	AC	DC	Each	For
10N12266	1	NE30	G10	A	60	85	40c	3.60
10N12267	2	NE34	S14	Λ	60	85	50ć	4.50
10N12263	2	NE34	S14	A	60	85	50c	4.50
10N12276	3	NE40	S14	A	60	85	60c	5.40
10N12264	14	NE45	T415	В	65	90	40c	3.60
10N12215*	1/25	NE51	T31,	C	65	90	10c	.90
10N12216*	1/25	NE2	T2	_D_	65	90	- 8¢	.72
10N12268*	1,	NE48	T416	E	65	90	350	3.15
10N12269*	12	NE29	GIO	E	105		45¢	4.05
10N12270*	1	NE32	GlO	E	60	85	45c	4.05
10N12271*	2	NE.26	Sl4	F	60	85	55c	4.95
10N12209*	14.	NE7	T412	D		70	31¢ i	2.79
* Paristarlass	Tura							

Bases: A.: Standard Edison. B.: Candelabra screw. C.: S.C. Min. Bay. D.: Wire terminals. E.: 2-Cont. Bay. F.: Sk. D.C. Bay. Cand.

#### GENUINE GE-MAZADA PILOT LIGHT BULBS





Both pilot and flashlight type both pilot and flashight type bulbs are Inted below, 68 wolt fulbs are for 6.3 volt recovers. Boad colors and in identity not bulb types. G-E Muzda bull's are standard in mot makes of radios.

#### Prices Below Include Federal Excise Tax Tubular Bulb, Miniature Screw Base (A)

Stock No.	Туре	Boad Color	Volts	Amps.	Each	10For	100 For
10N12274 10N12250 10N12254 10N12252	48 41 40 46	Pink White Brown Blue	2.0 2.5 <b>6-8</b> 6-8	.03 .51 .15 .25	15c 10c 10c 10c	99 c 67 c 67 c 67 c	8.91 5.94 5.94 5.94
T	ubular	Bulb, Mini	ature	Bayone	t Base	(B)	

	ubular	Duib, Min	iature	Dayonet	Dase	(12)		
10N12260	43 1	White	2.5	.50	9 c	60c	5.40	1
10N12259	49	Pink	2.0	.06	15c	990	8.91	ł
10N12217	1490	White	3.2	.10	11c	73c	6.57	l
10N12249	44	Blue	6-8	.25	10c	67c	5.94	ì
10N12284	47	Brown	6-8	.15	10¢	67c	5.94	l
10N12218	313	No Bead	28	1.17	28c	1.98	17.82	ŀ

10N12273	50	d Bulb, M White Bulb, Mir	6-8	.20	10c	66c	5.94	
10N12261 10N12285		White White	6-8		8¢	49c 49c		

#### FLASHLIGHT AND MISCELLANEOUS BULBS

G-3½ (C) is small round, G-4½ is lge, round, TL-3 (F) in lens bulb. P-3½ (not illustrated) is pre-focaled miniature flunge type roub.

		and the same of th			/ /		
Stock No. Ty	pe Bulb	Bead Color	Volts	A mps.	Eu.	l) For	100 For
10N12200 1: 10N12201 1: 10N12202 60: 10N12203 22: 10N12204 11:	G-4½ TL-3	Green Blue Brown White Pink	3.8 2.5 6.0 2.2 1.1	.30 .30 .50 .25 .22	10c 10c 11c 10c 10c	67e 67e 73e 67e 67e	5.94 5.94 6.59 5.94 5.94
10N12205 23 10N12206 PR 10N12207 PR 10N12208 26 10N12219 , 14	P-316 P-316 3X G-312	Purple Blue Green Blue No Bead	2.3 2.4 3.6 2.6 1.2	.27 .5 ) .5 ) .3 ) .20	10c 14c 14c 10c 15c	676 93c 93c 666 99c	5.94 8.37 8.37 5.94 8.91

#### 120-VOLT PILOT LAMPS





#### FRONT REMOVABLE JEWEL BRACKET

Mounts in 1116" hole. 12" jewel removeable; bulb can be replaced from

Min. Screw Base	Min. Bayonet Base	Color	Each
10N6416	10N6408	Red	29¢
10N6418	10N6410	Amber	
10N6417	10N6409	Green	
10N6425	10N6411	Opal	

### SHURE MICROPHONES AND ACCESSORIES

MODEL 55 - "UNIDYNE"

MODEL 33 — UNIDINE

Super-Cardioid, uni-directional moving coil dynamic, with new "Shure Uniphrase" principle. For public address and recording. Flat response from 40 to 10,000 cps. Impedance selector switch at rear of case to allow selection of Low, Medium or High impedance. Output is -56.1 db. into 35 to 50 ohms, -56.8 db. into 150-250 ohms, and -57.5 db. into 35,000 ohms. Tilting head adjustment. Complete with 25 ft. of cable and connector plug. Shpg. Wt: 4½ lbs.

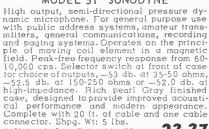
14N13689-List Price \$67.50.. Net 39.69

#### MODEL 556 "BROADCAST"

Super-Cardioid type uni-directional moving coil dynamic microphone. Uni-directional characteristic obtained by "Shure Uniphase" principle. Especially designed and tested to meet the requirements of the broadcast studio. Random noise pickup reduced 73%. Spring suspended in case to reduce mechanical vibration pickup. Frequency response Spring suspended in case to reduce mechanical vibration pickup. Frequency response from 40 to 10,000 cps. Switch at rear of case for selection of Low, Medium, or High impedance. Output –56,1 8b. at 35-50 ohms, –56.8 db. at 150-250 ohms and –57.5 db. at 35,000 ohms. Tilting head adjustment. With 7 ft. cable and connector. Shipping Weight: 4½ pounds.

14N13562-List Price \$92.50.. Net **54.39** 

#### MODEL 51 "SONODYNE"



14N13432-List Price \$39.75.. Net 23.37

#### MODEL 710A - "REX"



Semi-directional. Low-cost, dependable, hand-held, crystal mike. Ideal for Hams, P.A. systems and as replacement for home recording units. Excellent voice reproduction. Frequency response 60 to 6000 cps. Output -50 db. Burgundy red metalic finish. With stand adapter and 7-ft cable. Shpg. Wt. 1½ lbs.

14N13628-As above, but with "ON-OFF" switch.......7.06



MODEL 707A CRYSTAL MIKE

MODEL 707.4 CRYSTAL MIKE
Scmi-directional. High-impedance, mechanically isolated, moisture proofed Bimorph crystal. Sultable for amateur phone transmitters, P.A. equipment and cull systems. Good response for general voice and music reproduction. Output -51 db. Pearl gray finish and chrome grille. With 7-ft. cable. Shipping Weight 1½ lbs.

14N13630-List Price \$14.50...Net.. 8. 53 As above, but with 20-ft, cable, Output -54.5 db. Shipping Weight: 2 lbs.

14N13430-List Price \$16.00......Net......9.41



#### MODEL 737A "MONOPLEX"

Uni-directional. Super Cardiod wide-range crystal, diaphragm type, allows highly sat-islactory operation under adverse conditions of background noise and reverberation where or background noise and reverberation where conventional mikes would be useless. High impedance. Excellent for high quality P.A., communications, recording, etc. Response 50 to 10,000 cps. over wide range angle at front. Output -54 db. With 20-ft. cable and connector; swivel head. Satin-chrome finish. Shipping Weight: 4 lbs.

14N13431-List Price \$39.75..Net 23.37



#### MODEL 76B LAPEL MICROPHONE

Designed for public address, lecturing, portable trunsmitters and all general uses for intelligible reproduction of speech. Heavy lapel clip at rear of case permits user to move freely and have both hands free for demonstrations. Frequency response 40 to 6,000 cps. High-impedance

High frequencies accentuated for maximum clarity. Pressure actuated disphragm type crystal mike. High capacity, moisture sealed Graphoil Bimorph crystal. Output -57 db. Dia. 1-7/8". Withlapelchp, 25 ft. cable. Shpq. Wt: 1 lb.

#### NEW CONTROLLED RELUCTANCE PRINCIPLE

In the controlled reluctance microphone, the output voltage is induced in a coil of wire by causing a sound wave to modulate the reluctance of the magnetic circuit. An important feature of this type of unit is the ruggedness and stability that make it practically unaffected by heat and humidity, especially in tropical countries and all coastal areas.

#### MODEL 520 - "GREEN BULLET"

Controlled Reluctance Mike, Stability insured by unique control of the re-luctance of specially designed magluctance of specially designed magnetic system. High output, good response and high impedance without the need of a transformer. Practically immune to high temperatures and humidity. Frequency response 100 to 7000 cps. Output —52.5 db. Metallic green finish with plated grille. Supplied with 15-ft. cable. Shpg. Wt: 1½ lbs.

14N13632-List Price \$16.50.....Net....... 9.70



#### MODEL 510C - "HERCULES"

Controlled Reluctance Mike. Hand, desk or stand operated high output unit. Rugged — use either indoors or out-doors; ideal for tropical countries and coastal areas. Stability insured by u-nique control of reluctance of the magnetic system. High sensitivity and good fidelity are achieved because of bal-



anced armature transducer. Frequency response 100 to 7000 cps. Output level —52.5 db. Metallic green finish. With stand adapter and 7-ft. cable. Shipping Weight: 1½ lbs.

14N13637-As above but with "ON-OFF" switch...8.79

#### MODEL 505C - "RANGER"

Controlled Reluctance. A tough hand Controlled Reluctance. A tough hand microphone recommended for those applications where long lines are needed. Designed for crisp, natural voice response of high intelligibility. Fits snugly into palm of hand. Heavy-duty single-throw, double pole leaf type switch for push-totalk operation. Frequency response 100 to 9000 cps. Output -50.5 db. High impedance. Supplied with 7-ft. cable. Shipping Weight: 1% lbs.



14N13640-List Price \$25.00.....Net...... 14.70

#### Controlled Reluctance Cartridge

Shure Model R5. Ideal for replacement in cases of the Shure 707A design. High impedance, acoustically balanced-arma-ture transducer. Practically unaffected by heat and humidity. Response: 100 to 7000 cps. Output -52.5 db. With rubber mtg. ring 2½" dia. x 3/16" thick; Cartridge 7/8" depth. Shpg. Wt. 4 02. 14N13641-List Price \$9.00..Net 5.29



#### A88A - "GRIP-TO-TALK" SWITCH

Employs long life, leaf type switch element. Guaranteed ro with stand severest field requirements. Spring temper, phosphor bronze switch blades, with pure silver contacts. Large grip bar minimizes hand and finger tatique; assures positive contact. Slight downward pressure locks switch. No soldering necessary. Element can be rewired for other switching combinations. Satin Chrome finish. Shipping Weight: 1 pound.

14N13625-List Price \$10.75.....Net....... 6.32

### A83B - "ON-OFF" MIKE SWITCH

Rotary type. Quickly attached to any cable connector type Shure mike. No soldering necessary. Internal plug establishes connections. Bakelite arrow knob. Shipping nections. B Weight: 1 lb.

14N13594-List Price \$6.00...Net... 3. 53



#### A86A - INPUT TRANSFORMER

Solves problem of installations requiring long lengths of mike cables without loss of H-F response. Matches 35-50, 150-250 ohm mikes to high impedance amplifier unit. 7-ft. cable. 1-5/8" dia. x 2-7/8" L. Shpg. Wt: 1½ lbs.

14N13673-List Price \$15.25..Net 8.97



### ASTATIC - ELECTRO-VOICE - TURNER - AMPERITE MICROPHONES

ASTATIC T-3 CRYSTAL MIKE



Highly practical for studio set-ups, with amateur rias, intercom systems, P.A. installa-Highly practical for studic set-ups, with amateur rigs, intercom systems, P.A. installations and quality recording purposes. Microphone head can be tilted for semi-or non-directional use. Output level—52 dt; frequency response substantially uniform from 30-10,000 cycles. Supplied with interchangeable plug and socket connector, and 25-ft cable. Attractive all chyome finish. Shpg. Wt: cable. At

14N13670-List price \$27.35...Net.. 16.08 Model GT-3. As above with Grip-to-Talk Stand. Shpg. Wt: 5 lbs.

14N13525-List Price \$32.85...Net.. 19.32

#### ASTATIC "VELVET VOICE" CRYSTAL MIKE



Model 200. Convertible type, high impedance Model 200. Convertible type, high impedance unit providing wide range response. Detachable base makes it easy to use as a desk, hand or floor stand mike to meet practically every need. Output level —52 db; response 30-10,000 cps. Beautiful gold finish case and handle with bright chrome grille. 15-ft shielded cable. Shpq. Wt: 1½ lbs.

14N13364-List Price \$13.95...Net...8.20 Model 200-S. As above but with ON-OFF switch. Shpg. Wt: 1½ lbs.

14N13365-List Price \$15.00...Net...... 8.82

#### ASTATIC MULTI-UNIT MIKE

Model WR-40. A specially designed, high quality mike, recommended for studio, P.A. and recording purposes. Due to a scecial interior design this microphone is practically transparent to sound waves and cannot be acoustically overloaded. Able to handle up to 200-ft. cable with negligible loss of output. Substantially flat frequency response up to 10,000 cycles. Output level —56 db. Bright chrome finish with satis chrome grille. Supplied with 25-ft. cable. Shipping Weight: 4 lbs.

14N13425-List Price \$43.25...Net... 25.43

#### ELECTRO-VOICE CARDAX MIKE



Model 950. Moisture-sealed crystal element. High impedance, cardioid microphone with new Mechanophase principle provides true cardioid uni-directional pickup and relative-ly high gain. Selector switch varies response ly high gain. Selector switch varies response for hi-fidelity sound pickup or extra crispness of speech. Output -57 db. on flat curve, -48 db. on rising curve. Compact rugged construction for indoor or outdoor use. Tilting head. Built-in cn-cff switch. Satin chromium tinish. With 20-ft. cable, plug. Shpg. Wt: 4 lbs.

14N13720-List Price \$39.50..Net. 23.23

#### ELECTRO-VOICE "MERCURY" CRYSTAL MIKE



Model 911-20. Adds smartness and utility to economical P.A. and paging systems, recording equipment, hum rigs. Substantially flat response, 50-8000 cps. with an output level of -50 db. Can be used with any standard amplifier using high impedance input. High capacity crystal fully enclosed for greater moisture protection. Tiliable head; ON-OFF switch. With 20-ft. cable and built-in connector. Durable satin chromium finish. Shpg. Wit 3½ lbs.

14N13447-List Price \$24.00.. Net.. 14.11

#### "MERCURY" DYNAMIC MIKE

Model 611-20. Features exclusive "acoustalloy" - withstands model 011-20. reatures exclusive "acoustalloy" — withstands high humidity and temperature extremes. Response 50-8000 cps, substantially flat; output —53 db. Matches any input: Hi-Z, 50, 150, 250 or 500 ohms. ON-OFF switch; tiltable head. 20-ft cable and built-in connector. Finished in satin chromium. Shpg. Wt: 4 lbs.

#### LAFAYETTE-CONCORD CONTACT MIKES





High-impedance pickup for use with any musical instrument. Easily installed without special strings or changes. Enclosed with soft, non-marring material. With 8-ft cable. Shpg. Wt: 4 lbs.

14N13746-Less vol. control. List Price \$10.30..Net. 4.65 14N13745-With vol. control. List Price \$13.75...Net.....5.95

## ASTATIC JT-30 CRYSTAL MIKE

Excellent voice performance, especially suited for amateur, home recording and P.A. systems. Output level -52 db, providing ample reserve for use with high gain amplifiers. Supplied complete with concentric cable connector, wood handle, interlocking metal base and 15-ft cable. Wood handle can be removed and mike used on floor stand. Substantially flat response. Opalescent gray flinish with bright chrome grille. Shipping Weight 4 lbs.

14N13427-List Price \$16.95....Net.....9.97



#### ASTATIC CERAMIC MIKE

Model JT-30-C. Fine general purpose, high fidelity mike for hams, communications work and P.A. systems. Tough piezoelectric ceramic element cuts danger of accidental shocks, element cuts danger of accidental shocks, stresses and the effects of heat and humidity. Frequency response 30 to 10,000 cps. Output level -62 db. Adaptable to all existing hookups without change. Heavy interlocking base. Opalescent gray finish with chrome grille. Complete with 15-ft cable and concentric cable connector. Shpg. Wt: 4 lbs.

14N13428-List Price \$16, 15...Net..... 9. 50



#### ASTATIC CRYSTAL MIKE

Model K-2-S. Small size, dual diaphragm type crystal mike with switch. Twice the usual ca-pacitance permits correspondingly longer cable. Cannot be overloaded. Smooth undistorted repactrance permits correspondingly longer cable. Cannot be overloaded. Smooth undistorted reproduction; excellent for conference recording on tape or wire, P.A. installations and general applications where quality performance is required. Output level -62 db. Bright chrome finish. Equipment Includes plug and socket connector, and 25-ft cable. Shipping Weight: 2½ pounds.

14N13423-List Price \$32.85...Net.... 19.32



#### TURNER PROFESSIONAL DYNAMIC MIKE

Model U9S. Saddle tilts 900 for semi or nondirectional use. Response 40-9000 cps. Output —52 db. Gun metal finish. With 20-fit cable and connector. Switch gives choice of 50, 200, 500 ohms or high impedance. Shipping Weight: 5 lbs.

14N13754-List Price \$40.00..Net. 23.52



#### TURNER DYNAMIC MIKE

Model 22D. High impedance. For amateurs, call and paging systems. 90° tilting head permits semi-or non-directional operation. Quality Alnico magnet. Response 70-9000 cps. Output -54 db. Chrome finish. 7-ft cable and connector. Shipping Weight: 2½ pounds.

14N13751-List Price \$25.50..Net. 14.99



humidity protected crystal. Has automatic barometric compensator. Same design and characteristics as Model 22D except output of -52 db. Shpg. Wt: 2½ lbs. 

Model 22X. Mechanically shockproof mounting; high quality,

#### AMPERITE KONTAK MIKES





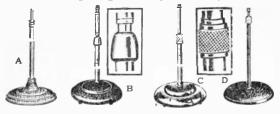


Faithfully reproduce the vibrations of any musical instrument. Moisture-proof rubber case. Response 40-6000 cps. Without volume control -40 db. 1"x3"x1". 15 ft. cuble. Ship-Weight: 2 lbs.

14N13675-High-Impedance. List Price \$12.00..Net.. 7.06 With volume control-30db.3"x1"x5/8".25 ft. cable.Shipping Weight 2 lbs.

14N13690-High Impedance. List Price \$18.00..Net.....10.58 14N13687-Strap for flat top guitars......59¢ "KF" Foot Volume Control, Provides smooth control of volume by footaction. 15 ft. cable. Shpg. Wt. 4 lbs. 14N13663-High Impedance. List Price \$18.00.. Net......10.58

### MICROPHONE STANDS AND ACCESSORIES



#### (A) LAFAYETTE FLOOR STAND

Smooth action adjustments from 35" to 64". Positive grip friction clutch firmly locks stand against slipping or sudden dropping. Full chrome uprights on gray shrivel finish base, 10" diameter. 5/8"-27 thread. Shipping weight 9 pounds.

#### (B) NEW ATLAS "SLEEVE ACTION" FLOOR STAND

Model MS12S. Adjust height of stand from 35" to 65" — automatically. Slight downward pressure on "sleeve-action" control permits telescoping section to be lowered. To raise, grasp at any point and merely extend. Cannot creep or change position without actual pressure. Full chrome uprights on gray shrivel base, 10" diameter. 5/8"-27 thread. Shipping Weight 12 lbs.

(C) ATLAS ALL CHROME FLOOR STAND

Model MS11C. Deluxe type stand adjusts easily and securely from 35" to 65". Full chrome finish on tubing and base assures lifetime wear; 10" diameter. Shipping weight 12 pounds. 5/8"-27 thread.

14N22084-List Price 11.00 ......Net........... 6.47 (D) BANQUET MIKE STAND

Beautiful polished chrome finish uprights on gray wrinkle base. Height adjustable from 13" to 22½". Rubber ring insulation covers entire 8" base to prevent slipping. Shipping 

#### LAFAYETTE-CONCORD FIXED DESK STAND

6" high. Chromium tube. 6" d wrinkle base. 5/8"-27 male threads for attaching to microphone. Shpg. Wt. 2/2 lbs. 6" diameter black

Atlas Adjustable Desk Stand

Newly designed two-section tele-scopic stand. Easily adjusted from 8" up to 13". Chromium finished heavy duty 5/8" and 7/8" tubing. heavy duty 5/8" and 7/ e, 6" dia. Shpg. Wt. 4 lbs. Gray base,

14N13537-List Price 4.50 ...Net.... 2.65



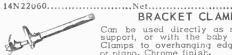


For adding and mixing two additional microphones than provided for by regular amplifier input. No complicated connections, just plug into mike jack of amplifier. Has three individually controlled high-impedance inputs. With 6 ft. cable connector and phone plug adaptor. Shipping Weight 2½ 1bs.

14N13642-List Price 18.95..Net.. 11.14

BABY BOOM ARM Quickly and easily attached to any standard floor stand. Has Universal swivel for adjusting

and locking into position. Adjustable for weight of any mike. Length of the arm 32".



#### BRACKET CLAMP

Can be used directly as microphone support, or with the baby boom arm. Clamps to overhanging edge of table or piano. Chrome finish.

14N13371-6" Long....



40

MIKE FLANGES, EXTENSION RODS
Widely used for neat inconspicuous
permanent mounting on desk top,
pulpit and amateur rigs. Fits all
standard 5/8"-27 mikes. Available in
standard 5/8"-27 mikes. Available in
standard 5/8" mounting centers. Extension rods male on both

ends. 14N13350-Male Fig.. 30¢ 14N13351-Female Fig. **30**¢° 14N13352-6" Ext. Rod..44¢ 14N13353-12" Ext. Rod....59











SINGLE CONTACT MIKE CONNECTORS AMPHENOL SERIES 75

Polished chrome plated brass fittings with 5/8"-27 threads.

A. Type 75-MC1F with coupling ring. 75-MC1F. Female 13N13359-Each..... 26¢ Type 75-MC1M. Male- fits above connector. 13N13360-Each...... 21¢

C. Type 75-PC1M. Male, non-shorting, chassis mount. Fits MC1F.

13N13361-Each...... 18¢

E D. Type 75-SP-PC1M. Same as PC1M but with floating center contact. 13N13385-Each...... 26¢

D. Type 75-CL-PCIM. Like 75-SP-PCIM except closed circuit type.

13N13268-Each...... 26¢ E. Type 75-MC1F-A. Angle type, female connector coupling ring; use with PCIM, etc.

13N13277-Each...... 59¢ F. Type 75-MC1P. Adaptor. Connects 75-MC1F to standard phone plug.

13N13388-Each..... 29¢





#### SINGLE AND DOUBLE PIN CONNECTORS AMPHENOL SERIES 80

Metal shells are heavily plated. Bakelite elements; screw type coupling rings. Shells may be utilized for second conductor. For cable up to  $\frac{1}{4}$ " diameter.

#### SINGLE CONDUCTOR

80M. Male (B) 13N13286-Each...... 42¢ 80F. Female (A)

13N13287-Each...... 42¢ Female Chassis connector. Mounts in a single 5/8" hole (C).

13N13288-80C..... **26**¢

#### TWO-CONDUCTOR

80-MC2F. Female (A) 13N13289-Each......52¢ 80-MC2M. Male (B) Female chassis connector. Mounts in a single 5/8" hole

(C). 13N13292-80-PC2F... 29¢







#### THREE AND FOUR CONTACT CONNECTORS **AMPHENOL SERIES 91**

Polarized shells. For use on  $5/8^{\circ}-27$  stands. With cable clamps. Spring cord protector. Interchangeable bakelite elements. Coupled,  $2 \frac{3}{4} \times 7/8^{\circ}$ . Coupling ring on male.

#### 3-CONTACT CONNECTORS

91-MC3M. Male (A) 13N13489-Each...... 65¢ 91-MC3F, Female (E) 650 13N13490-Each...... Female Chassis (C) 13/16"

hole.

13N13396-91-PC3F....**32**¢

### Microphone Switch

Type 75-MCIS. Attaches between male and female of any of the 75 series connectors. Push to talk or slide switch for permanent con-



#### ICA SHIELDED 3-WAY MICROPHONE PLUG

Barrel made of nickel plated brass. Fully insulated bushing.

13N13519-Each...... 85¢ As above but with bakelite 13N13521-Each.......**59**¢

4-CONTACT CONNECTORS 91-MC4M. Male (A)

91-MC4F. Female (B) 13N13499-Each..... Female Chassis (C) 13/16" hole.

13N13397-91-PC4F.... 35¢ Snap-on Mike Attachment

### Attaches any mike to any floor stand. 2-sec-tion ball bearing tion ball bearing spring sleeve permits quick removal or at-LI

tachment. No threading necessary. One section permanently fastened to stand. other to mike. Chrome plated brass.

14N13356...... 1.47



Phosphor bronze spring jack. Nickel brass shell. 13N13520-Each......88¢

13N13522-Jack, less shell. 

FLEXIBLE GOOSENECK

Attaches to any microphone stand. Cambe used where moderate adjustment is required, 5/8"-27 thr male and female ends. Chrome finish. 13" long. 

For the best values in CHICAGO, our customers recommend

### UNIVERSITY PROJECTORS, DRIVERS, SPEAKERS



#### UNIVERSITY REFLEX PROJECTORS

High efficiency exponential air column type projectors. Heavy-gauge all metal spun norm. Incor; orate design features that innorm, incorporate design features that in-ure superior acoustic results. Mon-resonant rubber runs with each unit. Will himdle 25 watts output. With universal "U" type mountling bia ket. Battleship grey finish, waterproofed for outdoor use. Less drivers. Overall lengths listed below are with driver unit installed.

No.	Model	Dia.	Length	Cutoff	Lbs.	Each
22N20049	PH.	20''	19''	150 cyc.	12	17.05
22N20047	!H	25.5"	22.5"	120 cyc.	18	26.17
22N20046	SMH	15.5"	16"	200 cyc.	8	14.41
22N21362	GH	30''	29''	85 cyc.	101/2	35.28



#### UNIVERSITY PAGING SPEAKERS

Intercommunicator "booster" speaker has Intercommunicator booster speaker has high projecting power. Clear sound output overcomes factory noises. Use as "Talk Back" speakers in intercom systems. High sensitivity permits initiating or answering calls at a distance. With adjustable mtg.

No.	Type	Watt.	Imp.	Freq.	Lbs.	Each
22N19349	MIL	3	8	400- 9,000	5	14.70
22N21322	MIL	3	45	400- 9,000	5	15.43
22N19348	IB8	12	- 8	300-10,000	7	19.11
22N24015	CR	18	16	250 6,000	11	24.70

#### CAR-TOP HORN CARRIER

all horn type sicikers and baffles used in mobile PA work. Waterproof plywood and angle and gutter hooks with adjustable



Straps included Size 8 x 4612".
Fas ly indiguishly and had or removed. Will not mar car finis 22N20028 -Shpg. Wt. 8 lps.



#### MODEL 2YC CONNECTOR

For connecting two-driver units to any trumpet 22N21305 - Shpg. Wt. 3 lbs.

#### UNIVERSITY DRIVER UNITS

Phenolic diaphragm; Alnico magnet. Hermetically sealed. MA-25 recommended for single speaker systems. 4½"Dx3¾"H. SA-HF effective in locations where noise level is high. 4½"Dx4¾"H. PA-30 and PA-30C have built-in line matching transformers 165, 250, 500, 1000, 2000-ohm terminals. Constant voltage taps 30, 20, 10, 5, 2½ W. permit 3 db. changes with each step. PA-30 maintains high varying intensity levels over long periods. PA-30C for broad-gasting, ohime, myter from white she transfer. casting chime music from church steeples. 63/4Dx63/4"H.



No.	Type	Range	Watts	Ohms	Lbs.	Each
22N21307 22N21308	MA-25 SA-HF	90-6,000	25 25	16	4	14.70 21.76
22N21363	PA-30	80-10,000	30	16	6	29.40
22N21364	PA-30C	70- 6,000	30	16	6	32.34

#### UNIVERSITY COAXIAL SPEAKER

Model WLC. Specially designed for outdoor installations with maximum protection Model WLC. Specially designed for outdoor installations with maximum protection against rain and other adverse weather conditions. Consists of 12" treated cone speaker, 25-wait unit driven tweeter and built in crossover network. Speaker enclosed in large volume, infinite baffle providing necessary loading for clear, low frequency reproduction. Corrosion-resist int, all metal construction. Adjustable "U" bracket permits easy horizontal and vertical positioning. Response 50-10,000 cycles. Impedance 8 ohms. Power 25 watts. Crossover 1,000 cycles. Dia. 33½", 20" depth. Attractive baked Gunmetal finish. Attractive baked Gunmetal finish.



22N21370-Shpg. wt. 70 lbs. . ....

#### LINE MATCHING TRANSFORMER

Designed for use with University speakers in indoor or outdoor installations. Housed in water tight enclosure with die cast mounting bracket which acts as combined support for both the transformer and speaker. Easily mounted on the "U" bracket of any trumpet with clamp provided, or screwed on any surface.

	Type		Sec. Imp.	Watt	Each
22N5899	5402	250-500-1000-1500-2000	4-8-16	25	11.76

#### MODEL PMA ADAPTOR

For mounting trumpet on pipe fitting. 22N21306—Shpg. Wt. 3 lbs.



#### UNIVERSITY TWEETERS -FILTERS AND ADAPTOR



#### UNIVERSITY TWEETER ADAPTOR

Model 4407. Converts any 12-inch conventional words 4407. Converts any 12-inch conventional type speaker to control type when used with model 4405 high pass Inter listed below. Consist of model 4401 single tweeter, aluminum hous n.j. mounting bar and all necessary hardware. Rosponse 2,000 to 15,000 cps. 12" dia., 2. Dog.

22N21329—Shpg. Wt. 6 lbs. ..... 14.70

### TWEETER AND FILTER IN CABINET



Model 4404. Self-contained 12-watt tweeter housed in attractive walnut cabinet. Includes 4402 tweeter and elec-trical equivalent of 4405 filter. Fre-

trical equivalent of 4405 filter. Frequency response 2,000 to 15,000 cps. Ideal for use where limitations prevent the use of built-in tweeter. 6-8 ohm imp=dance. Crossover freq. 2,000 cps. Size: 11½"Wx3¾"Hx6½"D.

22N21366-Shpg. Wt. 10 lbs.....

#### UNIVERSITY SINGLE AND DUAL TWEETERS





Provides efficient and economical method of extending upper regis-ter to obtain high fidelity speaker response. Reproduces frequencies between 2000-15000 cps. Recommended for FM

or AM sets, transciation regrodution and broadcast studio monitoring. Easily acred. Requires high puss filter, 440 listed

Model 4401, 6-war single tweeter. Converts the speaker of the average radio or phono ain lifter to a high fidelity system. Impeaan e 12 ohms. Sizu: 4½"Wx25g"Hx5"D.

22N21323-Model :401, Single type, W., 4 lbs. Model 4402. 12-watt, dual tweeter. For home and wired music systems, auditoriums, etc. Impedance 6 to 8 ohms. Size: 9½"x-25%"x5".

22N21324-Model 4402, Dual type. Wt. 6 lbs. ... 23.52

#### UNIVERSITY HIGH PASS FILTER



Model 4405. For use with models 4401, 4402 and 

### DUAL TWEETER AND FILTER





Model 4408. Designed for wide range reproduction requiring cutoff as low as 600 cycles. Recommended for two and three-way speaker systems, concert halls, theatres and auditoriums. Feaspeaker systems, concert fails, theatres and auditoriums. Features cobra horn of one piece aluminum casting flared to provide maximum vertical and horizontal dispersion; also has bakelite diaphragms, Alnico 5 magnets and aluminum voice coils. Response 600 to 15,000 cps. Impedance 16 ohms. Power 6 watts. Size 534"Hx73<sub>8</sub>"Wx111/6"D.

22N21367—Shpg. Wt. 8 lbs. Model 4409. Similar to above, 25 watt power.

22N21368

Model 4410. Cross-over network for above. Aluminum housing, insures proper attenuation rate at 600 cycle cross-over. 22N21369-Shpg. Wt. 4 lbs.....

901 W. Jackson Blvd. HAymarket 1-0422 Safayette Radio 229 W. Madison St. CEntral 6-5971

### HIGH FIDELITY SPEAKERS & CABINETS ALTEC LANSING HI-FI UNITS



#### MODEL 605 **SPEAKER CABINET**

Beautiful, hand-rubbed hardwood speaker enclosures that provide

22N21340	Model 605A in Walnut
22N213#1	Model 605A in Mahogany
22N21342	Model 605B in Walnut
22N21343	Model 605B in Mahokany



#### MULTICELL DIA-CONE SPEAKER

Model 603B. Large 15" cone for true bass reproduction. Motal diaphragm for high frequency coverage. Multicellular horn gives smooth distribution over a wide angle - 60° horizontally, 40° vertically. Dia-cone principle reproduces frequencies over 2000 cycles from an aluminum diaphragm secured directly to a 3° voice coil form. Voice coil impedance 8 ohms. Has large Alnico V permanent magnet. Power rating 25 watts. 7" deep. 225,19395—Shop Wt 21 lbs...63.00

22N19395-Shpg, Wt. 21 lbs... 63.00

MODEL 600B DIA-CONE

Economically-priced, high quality 12" speaker using the Dio-tone principle of high frequency reproduction from a metal diophragm. Highly efficient...light weight... small space requirement. Ideal for home use, sound reinforcement systems and industrial applications. 3" voice coil, with an impedance of 8 ohms, made from edgewound flat aluminum wire. Power rating 20 watts. Depth 5¼".

22N19394-Shpg, Wt. 15 lbs....... 38.00



#### MODEL 400B DIA-CONE

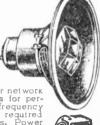
Lower priced 8" speaker of exceptionally high efficiency, especially desirable when used with an amplifier that delivers only 5-6 watts, Small size, lightweight, using the Dia-cone principle of high frequency reproduction from a metal disphragm, ideally suited for portable, compact uses requiring high output and top quality. Voice coil impedance 8 ohms; power rating 12 watts. pedance 8 o 3 5/8" deep.



#### 15" DUPLEX SPEAKER

Model 604B. This new, improved two-way speaker system is the standard professional unit in the sound indus-try wherever top quality is demanded. Large 15" low frequency speaker

22N19392-With Crossover Network... 143.00



#### HIGH QUALITY SPEAKERS

#### 15" CINAUDAGRAPH CINAXIAL



CIN-15B. Economical and space-saving 15-watt speaker that gives fine repro-duction from 55 to 15,000 cps. De-signed for FM, television and all uses signed for FM, television and all uses requiring innest reproduction over the widest frequency range. Easily connected to all home receivers having an 8-ohm amplifier output. Has a 5" high frequency unit. Bridging network is built-in; no controls are required. Alnico V magnets. Shipping Weight: 15 pounds.

22N19381-......27.93 CIN-12A. Similar to above but 12" size with 3" high frequency unit, 10 watts. Shpg. Wt. 10 lbs.

22N19364-.....16.17

### NEW! UNIVERSITY HI-FI COAXIAL



wound on a duraliminum suspension.
The shallow, curved shape of the cone
eliminates interference to the tweeter
and provides clean, low irequency reproduction. An Alnico
V magnet is used on both low and high frequency sections.
A dividing network and high frequency tone controls are included in an external housing. Adequate cable length is attached to the high frequency attenuator for panel mounting to

permit proper balance of lows and highs. Input impedance 6-10 ohms. Depth 7%".



#### GE S1201D SPEAKER

finish.

22N19352-Shpg. Wt. 9 lbs.....17.35

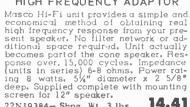
### RCA HI-FI 15" COAXIAL Model 51551. A heavy duty, highly efficient unit that gives two-speaker performance, Excellent for custom or professional installations requiring high fidelity at moderate cost. Two



night had lity at moderate cost. Two coaxially mounted units, one for low frequencies and one for high frequencies. Frequency response essentially flat from 40 to 12,000 cps. Power rating 25 watts. Input impedance 16 ohms. Uses 2 lb. Alnico V magnet. 22N19383-Shpg. Wt. 18 lbs...30.87



#### HIGH FREQUENCY ADAPTOR



22N19384- Shpg. Wt. 3 lbs..... 14.41



#### 8" RMC HYPER-MAG

A low cost replacement speaker of unusual quality. Has a center doine para-bolic projector for broad high frequency response. Uses a new magnet designed for linear response from 100 to 10,000 cps. Input impedance 4-5 ohms. Undistorted power rating 12-15 watts. Overall dimensions: 8 1/8" diameter x 31/4" deep.

22N19399-Shpg. Wt. 3 lbs.....8.35



WORLD HEADQUARTERS FOR ALL RADIO NEEDS

### TRU-SONIC HI-FI SPEAKERS & ENCLOSURES

15" SUPER COSPIRAL SPEAKER



Model 102FR. 20 watts power handling capacity. Seamless, molded curvilinear cone for lowest frequencies, and Silver Spiral differential diffuser give more extended range and greater efficiency than any single voice coil speaker. Reproducing range 30 to 14,000 cycles; flat 45 db from 50 to 9500 cps. Uses 4-lb powerful Alnico V magnet. Suitable for outputs from 8-16 ohms nominal impedance. Depth behind mounting panel, 8½°. Shipping Wt. 30 lbs.

22.21386.

52.92

#### 12" COSPRIAL SPEAKER

Model P22FR. Similar construction to above but  $2\frac{1}{2}$ -lb magnet and trequency range from 40-14,000 cps; power capacity 15



#### 10" HI-FI SPEAKER

Model 100. An economy model high fidelity unit for limited space installations. Full range frequency response from 70 to 8000 cts ±5 db; useable range 50 to 11,000 cps. Input impedance 6-12 ohms: power capacity 8 watts. Alnico V nagnet weighs 12 lbs. Depth behind mounting panel, 6".

22N21388-Shpg. Wt. 14 lbs... 29.40

#### STEPHENS 2-WAY SPEAKER SYSTEM

STEPHENS 2-WAY SPEAKER SYSTEM
For those who demand a superb hi-fispeaker installation. Rich, resonant
bass notes with crisp, vibrant highs to
produce a smooth, extended response
from 35 to 14,000 cps ±5 db. This is a
complete wide range speaker system
including an 800-cycle crossover network. Model P52LX low frequency
driver with 4.2-lb Alnico V majnet,
Model P-15 high frequency unit, and
814H4 cell li.F. from. Input impedance
is 10 to 20 ohms; input power 20 watts.
18\* wide, 27\* high, 14'," deep. Cam be
used for conversion of existing speaker
and radio installations, or as a new job
with the deluxe cabinets shown elsewith the deluxe cabinets shown elsewhere on this page.



22N21375-Model 409, Shipping Weight 50 lbs...... 117.60 Model 414. Two-Way Speaker System described above in Model 511 modern manayany cabinet (See opposite column). 22N21376—Shipping Weight 120 lbs......194.04 Model 412. As above in bleached maho jany cabinet.

22N21377.....194.04 Model 413. As above but in Model 516 modern low-boy mahogany cabinet (see opposite column).
22N21378—Shipping Weight 130 lbs......205.80

Model 410. As above but in Model 515 modern low-boy bleached mahogany cabinet.
22N21379.......205.80

22N21380-814-H 4-cell HF horn, Shpg. Wt. 12 lbs.......18.37 P-15 HF Driver, 20 watts, 1½ lbs Almco V magnet, Shipping Weight 15 lbs.

22N21310......41.16 800X-2 800 cycle Crossover Network. Shpg. Wt. 10 lbs.

#### 15" LOW FREQUENCY DRIVER

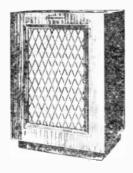
Model P52LX. Built to the most exacting standards of precision engineering, this Low Frequency driver unit is designed for use in separate two-way speaker systems. It employs a top quality 4 pound Alnico V permanent magnet to insure peak efficiency. Cone resonance 55 cycles. Characteristics: 20 watt power capacity, input impedance 16 ohms. Shipping Weight 30 lbs.

#### 15" COAXIAL SPEAKER



Model 106AX. Designed for highest quality custom installations, moni-toring for broadcast stations, and motion picture reproduction. Hecog-nized as the standard of excellence by which other speakers are judged. Combines in a single assembly a new low response to the cone type, and a high frequency reproducer of the multicellular type with a complementary crossover network. Frequency response 35 to 12,000 cps. 45 db; usable range 20 to 15,000 cps. Handles power input of 20 watts; 1200-cycle crossover frequency. Wide angle high frequency dispersion 40° x 80°. Input impedance a 6½-1b Alnico V magnet. Baffle opening, 13½"; depth behind the mounting panel, 10½".

REFLEX CABINETS

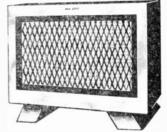


Model 511. Here is a truly Model 511. Here is a truly fine modern manogany cabinet constructed of the finest veneers by master craftsmen and hand-rubbed to a smooth, rich finish. Beautiful, simple design blends with the best interior decorations. Acoustically perfect for 15" speakers; uses the bassphuse-inverted reflex method of low end reinforcement. The atlow end reinforcement. The attractive grille is polished, vibration-proof brass, lacquered for extra protection. Accomodates the two-way speaker system and coaxial speakers described on this page. Dimensions: 24" wide, 32" high, 17" deep. Weight 70 lbs. 

Model 510. Same as above ex-

#### MODERN "LOW-BOY" CABINETS

Model 516. Mahogany. Furctional beauty comfrictional peauty con-bined with precise acoustic design mark it is striking speaker cubinet as an outstand-ing example of effective styling. Two sturdy offset base supports on the cabinet to creame an effect of clissic simplicity. Fine, handrubbed mahogany ve-neers are used throughout. A deluxe custom quality furniture piece that harmonizes with



that harmonizes with the decorative schemes of the finest homes and professional studios. The interior has been designed on the true bass retiev principle of reproduction. It brings out the full capacity of high fidelity spearer systems. Accommodates the two-way speaker system described on this page. Dimensions: 36" wide, 29'4" high, 18" deep.

Viodel 515. Same as above except bleached mahogany finish. 22N21384......88.20

#### 12" AND 15" SPEAKER BAFFLES

Finished and unfinished baffles for Finished and untinished battles for high fidelity speakers. Careful acoustic design assures excellent performance. Constructed of ½" plywood, with speaker mounting board, screws, tacks and special grille cloth. Dimensions of 12" cabinet: 231 x 33 1/8 x 12 5/8"; shpg. wt. 30 lbs. 15" size: 25 x 33½ x 13 5/8"; shpg. wt. 35 lbs. 23N23067-12" Unfinished

22N22067-12" Unfinished.. 16.25 22N22068-12" Tan Leatherette. 19.25 22N22065-15" Unfinished......19.25 22N22066-15" Tan Leatherette. 22.50

#### JENSEN BASS REFLEX ENCLOSURES

Economical, yet durably constructed of impregnated composition material. Finished in hammered brown lacquer. Designed especially for Jensen speakers out suitable for other makes.

B151. For 15" speaker. 30% x 27% x

22N 18998-Shpg. Wt. 43 lbs... 34.47 B121. For 12" speaker. 281/2 x 221/4 x

22N18996-Shpg. Wt. 34 lbs......29.08 B81. For 8" speaker. 22% x 18 x 9". 22N18994—Shpg. Wt. 24 lbs......20.58



#### JENSEN DELUXE ENCLOSURES



Handsome, beautifully finished bass reflex cabinets constructed of selected woods and hand-rubbed to a lustrous walnut finish. Distinctive styling, combined with perfect acoustical design bined with perfect acoustical des make these fine enclosures ideal home or professional installations. Has contrasting bronze wire grille. Accomodates Jensen or other high fidelity peakers listed in this catalog.

D151. For 15" speaker. 311/4 x 27% x 22N18946-Shpg. Wt. 50 lbs....**50.64** D121. For 12" speaker. 22N18945-Same Size & Weight....50.64

### JENSEN SPEAKERS



#### STANDARD PM SPEAKERS

A complete line of replacements for radio receivers, low power public address systems and intercommunication equipment. Highly efficient Alni o V magnets in ure maximum life. All models supplied less transformers. For a complete listing of output transformers to use with these speaker., look below.

#### P. M. SPEAKERS

Stock No.	Model	Size	Watts	V. C. Ohma	Output Trans.	Each
22N18960 22N18952 22N18968 22N19016 22N18969	P 4-X P 5-X P 5-X P525-V P6-W	4" 5" 5" 51,"	2.0 2.5 2.5 4.0 3.5	3-4 45 3-4 3-4 3-4	E E D E	2.44 2.91 2.53 3.23 3.32
22N19017 22N18970 22N19018	P7-U P8-U P8-V	7" 8" 8"	5.5 6.0 5.0	3-4 3-4 3-4	. D D	4.67 4.91 4.29
22N19076 22N19019 22N19020 22N18971 22N18972	P8-S† P69-V P69-T P10-T P12-T	8" 6x9" 6x9" 10"	8.0 5.0 7.5 8.0 9.0	6-8 3-4 3-4 6-8 6-8	C D C	7.60 4.65 5.64 6.26 6.97

†Extra heavy magnet.

#### UNIVERSAL OUTPUT TRANSFORMERS

Universal tube transformers match V.C. to 45\tilde{

No.	JENSEN	Application	Watts	Term.	Туре	Each
22N19026 22N19027 22N19025 22N19024 22N18965	ZX-1007* ZY-2005 ZX-1005* ZY-2003 ZX-1002*	Univ. Tube Univ. Line Univ. Tube Univ. Line Univ. Tube	25 16 16	Pintip Pintip Pintip Pintip Pintip	A A B B	5.73 5.73 4.23 4.23 2.94
22N18964 22N19031 22N19028 22N19029 22N19030	ZY-2002 ZP-1024* ZY-4002 ZP-1023 ZL-2021	Univ. Line Univ. Tube Univ. Line Univ. Tube Univ. Line	10 61/2 31/2 31/2 11/2	Pintip Solder lug Pintip Solder lug Solder lug	C D D E E	2.94 1.53 1.97 1.26 1.26

<sup>\*</sup>All primary windings center tapped.

#### **VOLUME LEVEL CONTROLS**



L-pad type controls that are highly satisfactory for controlling volume in speaker circuits tory for All models come complete with pointer knob and escutcheon.

Model ST -276. 6-8 ohms, 5-watt. 22N9015—Shpg. wt. 1 lb	1.29
22N9016 -Shipp, wt. 1 lb	1.29
Model ST-411. 8 ohms, 15-watt. 22N9018—Shpg. wt. 1 lb	1.76

#### PM CONCERT SPEAKERS





Use in all types of radios, phonographs, public address equipment and the Jensen Bass Retlex enclosures and cabinets. All models **less output transformer**. Transformers listed in opposite column.

No.	Model	Size	Watts	V.C.	Trans.	Wt.	Each
22N19075 22N19073 22N19077 22N19071	P 8-R P10-R P12-R P12-Q	8" 10" 12" 12"	10 12 13	6-8 6-8 6-8	C B B	4 lbs. 5 lbs. 7 lbs. 9 lbs.	8.97 10.88 11.47 16.32
22N19069 22N19078 22N19079	P12-N P15-Q P15-N	12" 15" 15"	15 14 20	8 8	A B A	16 lbs. 15 lbs. 17 lbs.	28.81 21.76 32.34

#### EXTENDED RANGE SPEAKERS

ALNICO V PM speakers providing high fidelity performance up to 10,000 c.p.,a. designed for monitoring in broadcast lations for replacement and modernizing units for F.M. and TV receivers for radio-phono combination, etc. Less output transformers

Stock No.	Model	Size	Watts	V.C.	Output trans.	Shpg. Wt.	Each
22N19021	P 5-TX	5"	4	3-4	E	3½ lbs.	4.70
22N19035	P 6-TX	6"	5	3-4	D	4 lbs.	5.29
22N18948	P 8-SX	8"	7	6-8	C	5 lbs.	8.35
22N19000	P12-SX	12"	9	6-8	B	6 lbs.	10.58
22N19036	P12-OX	12"	12	8	B	7 lbs.	17.20
22N19037	P15-OX	15"	14	8	B	9 lbs.	21.76
22N18999	P15-NX	15"	18	8	A	10 lbs.	33.66

#### "SPEECH-MASTER"



Model AP-10. Desk type PM speaker em-Model AP-10. Desk type PM speaker employs Per-Dynamic principle. For desk or wall mig. Ha. "tilt" adjustment, sturdy base. Dustproof, fully enclosed. Internal bracket for ½ x ½" transformer included. Hindsome gray hammered linish with satin chrome trim. Complete with base, swivel bracket plus 36" cord; 4 ohm voice coil; will hindle 5 w tits. Height 6¾"; Daimeter 5"; Depth 5"

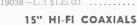
-Shpg. wt. 6 lbs.... Model AP-11. Similar to above, but less bare and swivel bracket. Mounts in 4-27/64" 22N18930—Shpg. wt. 4 lbs...... 8.17

### NEW JENSEN HI-FI SPEAKERS

#### 15" HI-FI COAX SPEAKER

#### With New Wide-Angle Acoustic Lens

Model H-510. Unsurpassed for the most critical applications including professional sound use, broadcast monitoring and home entertainment systems. Wide-angle acoustic lens 



### Model K-410. This new high efficiency speaker is recommended for custom instal-lations and professional apolication requiring best reproduction guality. Exceptionally smooth, wide range response from low frequency radiwide range response from DW frequency radiator and new high frequency until Input impedance 16 ohms; rated at 25 watts maximum, Integral frequency division system provided (for adjustable H.F. control network see opposite column). Depth 9"; baffle opening 1314". Shpg. Wil 22 lbe.

#### 12" HI-FI COAXIAL

Model K-210. Compact and low cost speaker for set. Provides high fidelity reproduction of high and TV set. Provides high fidelity reproduction of high and Ibw frequencier. Equipped with built-in bridging type frequency division system. Impedance 8 ohm; 12 watts.

22N19042....Shp7. Wt. 16 lbs. L...t 33.40...19.64
"L" type variable control for above, with escutcheon and bar knob. 22N19043



#### A-110 CONTROL NETWORK

Provides adjustable level and high frequency range controls for Model. H-510, K-410 and K-310 speakers. Mounts directly on speaker housing with plug-in connections. Impedance 16 ohre. Complete with plugical leg, knobs and screen. 22N19044 St.pg Wt. 5 lbs. List . 6.50 . . 15.58



#### Impedance-Adjusting Transformers

Designed to provide two alternate input impedances for Models H-510, K-410 and K-310 speakers. Plugs into socket on speaker terminal panel. Switch selects imp. Model T-101, 4 and 8 ohms.

22N19046Shpq. Wt. 2 lbs	. 7.06
Model T-102, 500-600 and 250 ohms, 22N19047.	7.06
Model T-103, 10,000 & 5000 ohms C.T.	
22N19048	7.06





### WALL BAFFLES-CASES-SPEAKERS

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#### WALNUT WALL BAFFLES

Beautifully polished walnut baffle for Deluxe sou	nd
systems. Frieze at lle cloth. 22N21325— 6 in th	5
22N21325— 6 in th	-
22N21326— 8 in. h	
22N21327—10-inch	09
22N20051—12-inch	10





Efficient enclosed speaker buffles with correctly angled front fires to provide coverage over a wide area. Sturdily built of selected wood. Brown leatherette covered. Average shipping weight 6

Stock No.	Spr iker	H. W. D.	E sch
22N20060	0."	8. x 71'x 436	1.69
22N20042		101/x 9 x 61/2	2.10
22N20055	10"	14 x12 x 81/	3.15
22N20056	12"	15 x14 x10	3.35

#### PORTABLE REFLEX SPEAKER ENCLOSURE



Insures perfect by a response. Designed to form the piece portails a cirrying case for two 12° speakers. Compact, early-fo-carry style. After taking overed in T in simulated raiwhide leither with contracting Brown grill. connectors to unstable the service of the service o 22N22055—Shpg. wt. 25 lbs..... 14.50

#### CARRYING CASE FOR AMPLIFIER, 12" SPEAKERS



Holds two 12" speakers plus implifier. Amplifier bolts to pan storides in or out of case quickly and early Holds my amplifier up to 14" wide x 14" deep x 11" high. Firm orner construction with metal from inshelf. 4 snap locks. Made of 3," thick plywood over red with T in similated rawhide leither. Overall Size: 163/4" wide, 243/4" high, 145/6" deep 243/4" high, 145/6" 22N22056—Shpg. wt. 24 lbs..... 11.95

#### CARRYING CASE FOR AMPLIFIER, 8" SPEAKER

Case hold to haimrifter and an 8" speaker at the same time. Heavy 

#### CASE FOR AMPLIFIER AND 2 SPEAKERS

Same as above excit for amplifier and two 8-inch speakers Size **22N22054** -: Lippin ; Weight 10 lbs. . . . . . . . . . . . .



#### **DUAL SPEAKER CASE**

in the peaker case similar to above 22N22061—Shpg. wt. 121/2 lbs..... 4.15



#### QUAM ALNICO V PM SPEAKERS

Alnico V mignet provides miximin. performan e with minimum weight. High onversion factor, 3.2 ohm V.C. Less Trans, 3½, 4, 51, are onu ire.



		V 11	1 age	I Alnico V	Depth	Shoa	
Stock No.	Dt 1.	Nor	Peuk	Magnet wt.	ı In.	Wt. Lbs.	Each
22N19306	31/ "		2.5	.68 oz	107		2.35
22N19311	4 "		3.0	1.0 oz.	2 16	3 ;	2.50
22N19310	4 "	21/2	334	.68 oz.	21/22	1	2.35
22N19314	5"	. ,	3.5	1.0 02.	21/10	1	2.62
22N19313	5"	3	41/	.68 oz.	2 tt	1	2.47
22N19304 ·	514"		4.0	1.0 oz.	21/8	11/4	2.74
22N19316	6"	4	6	1.00 oz.	2%	114	2.82
22N19317	61/5"		5.0	1.47 oz.	21/8	1	3.06
22N19324	7"		6.0	2.15 oz.	23172	1	4.27
22N19319	8"	6	8	2.15 oz.	33/6	2	4.23
22N19300	4x6"		3.5	.68 oz.	16	34	2.62

#### GE MODEL S1203D

\*\*\*\*\*\*\*\*\*\*

Popular 25 watt 12 inch P.M. speaker used in Lat syette public address systems. High efficiency incured by powerful 9 oz. High efficiency in used by powerful 9 oz. Alnigo V magnet incorper its the latest engineer.nadevelorments in scientifictine reproduction. Acou he illy checked in a sound; roof booth. Recommended for use with public address systems and for re-placement in home radios. Aluminum bare voice coils, molded cenes. With uni-versal transferrer mounting brackets. 8-ohm voice coil. Plated finish, Lusteron



22N19351—Shpg. Wt. 8 lbs. . . 12.05

#### GE PUBLIC ADDRESS SPEAKERS

Aluminum base voice coils provide higher wattage output and will not worp. Molded cones assure high tidelity and brilliant frequency response. Plated finish protected by new Lusteron treatment. Assembled with universal transformer mounting transformer mounting transformer mounting transformer.



Stock No	Model No	Di 1.	Almic > V Mignet Wt.	Wattage	Shrg. Wt.	Coast Each
22N19350	S1218D	12"	6.8	12	7	10.00
22N19351	S1203D	12"	9	25	8	12.05
22N19352	S1201D	12"	14.5	25	9	17.35

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#### GE REPLACEMENT SPEAKERS

Almico V magnets, aluminum foil base voice coils, molded cones universal transformer mounting brackets,  $3.2\ \mathrm{ohm}$  voice coils.

Stock			Mad	gnet	Cost
No.	Tyre	Size	W 1tts	Wt.	Each
22N19354	S400D	4"	4	1.3	2.50
22N19355	S525D	5 :"	-1	1.3	2.79
22N19356	S62FD	61/2"	4	1.3	3.23
22N19357	SoloD	61/5"	4	2.98	3.97
22N19358	S800D	8"	- 8	2.98	5.26
22N19359	S1000D	10"	12	6.8	8.97
22N19360		12"	12	6.8	9.70
22N19363	S7C3D	6"x9"	- 8	1.47	4.41



#### LAFAYETTE-CONCORD PM SPEAKERS

High audity permanent magnet speakers. High permeability Alm o V magnets used for utmost efficiency. One-piece scales cones, plated metal frames. Veice coil impedance 3.2 ohms up to 8° size, 0.8 ohms for 10° and 12°. All supplied less output transformer.



	Dia.	Wat	*S	1		
Stock No.	In hes	Nor.	P∈ik	Depth	Wt.	Each
22N19155	2	2	4	11/2"		1.75
22N19268	3	2	-1	11/2"	2	1.75
22N 19257	4	2	4	12 2		1.45
22N19269	5	3	5	12'7"	3	1.50
22N19270	6		7	2716	3	2.35
22N19271	8	/	. 9	312	4	2.55
22N19290	10	1,9	11	4.79	b b	4.45
22N19272	12	10	1.2	7.78	7 1	6.45
22N19258	-1x6	3	)	1 1/2	1 1 1	1.65

#### LAFAYETTE-CONCORD FIELD COIL SPEAKERS

Ideal for general replacement in AC-DC radios, an plificis and intercommunications ystems. Frequency response from 100 to 4500 cps, when properly baffled. Seamless molded one piece conest 3.2 ohms V.C.

\*Tapped at 300 ohm . † 6V Auto.

Stock No.	Dia.	Ohms	I Watts	Wt.	Each
22N19279	3	4.0	2	3	1.68
22N19115	4	450	21/	3	2.34
22N19261	5	6 volt†	21/	3	2.49
22N19262	5	450	21/2	3	2.39
22N19263	5	3000	21/2	3	2.39
22N19264	5	1800*	21/2	3	2.43
22N19117	6	6 voltt	31/2	-4	2.92
22N19118	6	1000	31/4	4	2.92
22N19119	6	1800*	31/2	4	2.92
22N19121	8	1000	4	6	3.63
22N19124	8	1800*	4	6	3.63
22N19292	8	2500	4	6	3.63
22N19125	10	1000	8	7	5.83
22N19126	12	1000	12	Q.	6.81

#### TELEVISION REPLACEMENT SPEAKERS

22N19277—4"x6". 60-ohm field; 3.2 V. C. 2½ W. Wt. 1½ lbs. 22N19278—As above but 100-ohm field. Either Type, Each

### **AUTOMATIC RECORD CHANGERS**

#### NEW 3-SPEED MARKEL CHANGER



· Plays Both Sides

· Plays All Speeds

Same as above except without wood finish cabinet base. List Price \$99.50 34N22464......Net......63.39

#### VM 3-SPEED RECORD CHANGERS



Model 406GE, Plays all

#### VM MODEL 4060GE CHANGER

Same as the 406GE described above except mounted on an attractive base 15x15x10". Wt: 10 lbs. 

#### VM MODEL 406 CHANGER

Similar to 406 JE except with stimilar fare and crystal cartridge instead of reluctuace type. No tree up required. Dimensions: 13-3/16" W. x 10%" L. x 74" H. 

#### VM MODEL 4060 CHANGER

Same as 40° except mounted on attractively finished base. Dimensions: 15x15x10". 

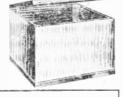
#### 45 RPM RECORD SPIDERS

Adapts center hole for standard size spiniles. 

#### RECORD CHANGER CABINET

This sturdy record critinet nakes a handsome ordition to any room. Constructed of beautiful straight crained walnut veneers. Pamel will fit Webster 356, 256 and 156. Twin hinge top. Satin-smooth finish. 22N19425-Shpg. Wt. 12 Lbs...14.95

As above with blank punel 14.95



SEE YELLOW SECTION FOR PORTABLE CARRYING CASES

#### WEBSTER-CHICAGO 3-SPEED CHANGER



34N22465-List Price \$43.00Less Cartridges-Net. 27.31
GE long playing cartrilge for those changer. 34N13485—List Price \$9.95 With NeedleNet
Same as above, but for stinlard 78 RFM records. 34N13500—List Price \$9.95. With NeedleNet 5.85
GE self-powered pre-amp. Shpg. Wt. 2 lbs. 34N13473—List Price \$15.95. With TubesNet
Same as above, less rectifier. 34N13465-List Price \$9.90

NOTE: For Full Descriptions On Above See Page 48.

#### WEBSTER-CHICAGO 3-SPEED CHANGER

Model 356-1. Similar to Webster model 356-27 except arm is surplied with staniard crystal cartridge with tandem needle. No pre-amp required. Shop. Wt. 18 lbs. 

WEBSTER-CHICAGO 3-SPEED CHANGER
Model 346-1. Same specifications as Model 356-1 except
measures 12x1214". Height grove plate 5-3/32"; below the
plate, 2-5/32". Shipping Weight: 15 lbs. 34N22467-List Price \$46.50......Net......29.62

#### NEW WEBSTER-CHICAGO 2-SPEED CHANGER



#### WEBSTER SINGLE SPEED CHANGER

Model 156-27. Provides intomatic playing of ten 12" or twelve 10" 78 Ri M records. Shuts of automatically after the list record. Home recordings or "inside out" records up to 12" size can be played manually. Smooth running, heavy duty, 4-pole motor operates on 110 volts, 60 cycles AC. Supplied with mounting template, instruction manual and hardware, for nounting on 5'8" board. Dimensions of motorboard: 14x14". Height above plate 6½", below plate, 2½". Complete with GE cartridge and needle. Only pre-amp required. Shipping Weight 18 lbs. 

#### WEBSTER SINGLE SPEED CHANGER

Model 156-1. Same as Model 156-27 described above except with stinding crystil pickup. No pre-amp required. Shipping Weight: 18 lbs.

34N22500-List Price \$38.50.....Net...... 24.52

#### WEBSTER SINGLE SPEED CHANGER

Model 146-1. Similar to Model 156-1 except does not shut off automatically. Size: 12x12". 5-3/32" above plate; 2-5/32" below plate. Allow additional ½" front, side und rear for 12" record cle mance. Shrg. Wt: 15 lbs. 

#### METAL BASES FOR WEBSTER CHANGERS Brown wrinkle finish. Mounting brackets welded in place.

Felt feet. Shipping Weight: 5 lbs. 34N22356-For Models 56, 156, 256 & 356......3.44

### PHONO MOTORS & RECORD ACCESSORIES

#### 45-78-33 1/3 RPM PHONO MOTOR



GI Model TS. Compact, triple-speed motor with powerful 2-pole, rim drive. Suitable for every installation drive. Sui uble tor every inerallation requiring dependable performance at low cost. Light weight construction; smooth quiet operation. Every running at all speeds. Fan cooling permits use in partially closed experiences. Employs two identical Neoporene belts for 45 and 33 1/3 RPM speed obtained directly from rotor shift. Speed regulated by simple external lever. Size: 316"Lx2½/"
Vx2.9/16"D below mounting plate. Complies with Underwritter Liboratory requirements. Complete with turntable, mounting a line and sized indicator dual ready for installation.

mounting title and streed indicator dial ready for installation. 115 V., 60-cycle AC.

34N22457-Sh. g. wt. 4 lbs

List Price 10.85. 6.51



#### ALLIANCE 3-SPEED MOTOR

Plays 33 1/3, 45, and 78 RPM renords. Turntable shait equiped with 11/2" removable senter disk to accommodate new RCA 45
RPM records. Speed change control permits instantaneous en-

o; e alion assured by rubber-shock mointed friction type motor. Mounting cen'ers 412"x338". Depth below base mtg. plate 21/2". 110 V., 60-cvclc AC.

34N22458-Shpg. wr. 312 lbs

List Price 10.95. 6.44

#### 3-SPEED PHONO-RECORDER ASSEMBLY



Model GI-R85-L. Employs dual purpp. e pickup carrindge and external speed in inge adjustment for 78 RPM and 33 1/3 LP records. Special spring turnished for chinging 33 1/3 RPM to 45 RPM. Cuts record up to 10" at

160 lines/inch and plays records up to 1.". Converin nt deith of cut adjustment. Dynamically balanced 4-pole motor. Compensating switch operated by steed change that. Size: 15"..."x1112" front to bick; 234"H above base plate; 37%" below lower edge of base plate. 115 V., 60 cycle AC.

35N22459—Shpg. wt. 17 lbs...... List Price 53.50. 32.10

### **DUAL SPEED PHONO MOTORS**





Compact, low cost dual speed rim-drive units with external lever type speed change control. Same size as present single speed motors.

Model DM. 78 and 33 1/3 RPM two-pole motor with 9' turn'able and mo ming plate. New stable rubber left um draze. For 110 volts, 60 cycles AC. Sharing weight 4 lbs.

34N22571-List Price 10.75.....

Model DR. Deluxe 78 and 33 1/3 RPM shielded two-pole phonomotor with 10" turntable. 2-diam. motor shaft rim drive.

34N22572—Shipping weight 6½ lbs. List Price 18.50 11.10

#### 45 & 33 1/3 RPM'S

GI Model DS. Compart, rum drive, 2-pole motor, 45 RPM speed obtained from rotor shall. Employs Neoprene belt for 33 1/3 RPM speed. Simple external lever controls speed. Dimensions: 31/6 Lx 21/4"Wx2 9/16 D below mounting plate. Complete with and mrg. plate ready to installation, 115 V., 60 cycle AC

34N22455-Shig. wt. 4 lbs.....

List Price 10.75 6,45

#### DUAL SPEED 45-33 1/3 RPM PHONO MOTOR

GI Model DV. Deluxe rim drive, 2 pole motor with I sim; e and points mechanism for shifting from one speed to the other. Speed thinge accomplished by means of an external push-pull lever. Speed the instruction is a case and lowers entire idler assembly, disengiges the idler wheel from the 2-diameter motor shaft and moves idler wheel from one diameter to the other. Size: 6"L x5g\*[Wx9g\*]D below mounting plate. Complete with 10" turntable and mig. plate. 115-volt, 60-cycle AC.

34N22456-Shpg. wt. 61/2 lbs

List Price 18.50. 11.10

#### CONSTANT SPEED MOTOR



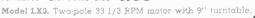
Model CX. Gear Drive. 78 RPM. Selfstating induction type. Fully enclosed helical cut gears in oif. Fan ooled. 414x416x31s" deep. For 110 V., 60 cycles. 10" turntable,

34N22525-W: 10 lbs. List Price 14.25 8.55 Model CX 3. 33 1/3 RPM. Wt. 16 lbs. 34N22529-List 16.00

#### RIM DRIVEN MOTOR

GI Model LX. Insulation between motor and mounting plate, and motor and turntable for quie' operation. Oil-less bronze bearings. Two-pole high speed motor. 78 RPM, 110 V. 60 cycles AC only. 9" T.T. Shpg. wt. 5 lbs.

34N22531—List Price 6.80 4.08



34N22573 -Ship; ing weight 5 lbs List Prine 8.00 4.80 Model LX45. 45 RPM R m drive, 2-pole motor with 9" turntable

34N22454—Shipping weight 4 lbs | List Price 8.00 4.80

#### PHONO OSCILLATOR

Elmco Model 119. For use with all types of phonos. Complict, well built unit. Tunes from \$50 to 1200 KC. Completely wired and ready for use. An article grey winkle finish. Supplied complete with phono-rack, 117N7 tube, antenna hank and operating instructions. For 110 volt AC-DC operation. 5.85

34N22460-List Price 9.95

#### ICA RECORD PLAYER SWITCH

Used for quickly connecting record players, FM and Television attachments into the audio amphifier of radio receivers. Provides change over from radio to record players without introducing hum. Cuts out radio on phono position



#### 3-SPEED STROBOSCOPE

Fisily and accurately checks turn thle speed of 33 1/3, 45, and 78 RPM phono motors. For 50 and 60 cycle. 3411200

#### LYRIC RECORD CARRYING CASE

Stores fifty ten-inch records safely and conveniently. Smooth, rounded corners, streamlined design with welded seams protect your records from scratches, dust and warpage. Littu strong steel and air raft alumnium combined in construction to form a very light combined in construction of form a very light and dutable case. Handy indexing system uses numbered tabs and dividers. Study snap-lock tastener, rubber cushions and leather carrying handle. Finished in two-tope brown ripple enamel. Shpg. wt. 7 lbs.



#### RECORD CASE

A fitting companion to an record player or phonograph. Rugged consist subset in fine simulated leather. Briss fings, player handle. Space for thirty 10 man ranno alog, home for thirty 10 rich small 31 or home s. With tab index, 11 4x1114x416". records.

34N21873-Shpg. wt. 3 lbs. Each, lots of three . . .....

2.49 2.25

#### HARMONY RECORD RACK

Ho'ds up to may 10 or 12 in, records. Steel frame has sheathed wire dividers

34N21874-Shpg. wt. 2 lbs .





#### LYRIC RECORD HOLDER

Why risk broken and siratched records when you am safety rile firty 10" or 12" records in oilly 12 in this of table or shelf space? Soft red felt covers the unbreakable

steel base and set a floris, keeping your records in perfect condition. Handy indexing system included helps you locate any troord in a few seconds. Handles are copper plated. A perfect guit for music lovers.

34N21894-List Price 3.50

Your cost 2.33

#### STANDARD ALBUMS

Attra tive mirron covers, 12 pockets, Opens flat, Index inside cover, Shpg. wt. 2 lbs.

34N21890--10-inch size...... 34N21891 -12-inch size..... 78c





#### **DELUXE RECORD ALBUMS**

Padded brown swirl leatherette. 12 pockets. Opens flat, Gold embossed Gothic design on back. Beautiful in appearance, unusually sturdy construction. Shpg. wt. 3 lbs.

34N21888—10-inch size..... 

### PHONO PICKUPS—ARMS—CARTRIDGES-PREAMPS

#### SHURE CRYSTAL PICKUPS



#### STANDARD AND MICROGROOVE

Model 901D. For use with standand and microgroove recordings. Has knob for turning cartridge to either LP or standard position. Excellent repro-ange high fidelity pressings.

and position. Excellent reproduction of new widerings high fidelity pressings. "Vertical Drive" cartridge makes possible true tracking of both standard and fine-droove retords with a needle force of only 7 grains. Output level at 33 1/3 RPM is 1.0 V.; at 45 RPM is 5 V; at 78 RPM 1.1 V. Frequency response to 6,000 cpc. Ine-cast aluminum arm scientifically curved for best tricking angle. Equipped with .0027" Osmium and .001" Sapphire replaceable needles. Shpg. wt. 12 oz

34N13511-List Price 16.25

(A) Model 901A. For standard 78 RPM recordings. Same "Vertical Drive" principle as above. Tricks with a force of only 7 grams. Frequency response to 6,500 cps. Output level 1.1 V. Constructed of die-ast aluminum, scientifically curved for best tracking angle. Sapphire replaceable needle.

List Price 11.75 6.91 34N13510-Shrg. wt. 12 oz......

(A) Model 901MG. For use with 33 1/3 and 45 RPM fine-groove re-Sapphire replaceable needle. Needle pressure: 5 gms. Output level 1.0 Volts. Vertical drive cartridge.

List Price 12.75 7.50 34N13509-Shpg. wt. 12 oz. . .....





(B) Model 900B. Muted Stylus Type for home or coin phonos. Overcomes noise and distortion. Has specially designed muted Osmium needle for longer record life—needle retracts when too much force is applied to cartridge. Low mass aluminum tone arm is designed for maximum, fai'hful 'ra king. Needle force is low 1 oz.; output voltage 1.8. Peak-free wide frequency response.

34N13419-Shirping weight 1 lb.

(C) Model 93A. "Glider" Type Pickup—Lightweight, replacement for pickups. Takes up to 12" records. High 1.8 volts output with response from 60 to 6000 cps. Changeable needle with pressure

. List Price 7.50 4.41 34N13417—Shipping weight 8 oz.

Model 96A. "Glider" type. Same as model 93A above, but with 4.3-volt output level.

34N13508-Shipping weight 13 oz .....

List Price 8.50 5.00



#### GE TRANSCRIPTION ARM

Model FA-21-A. Designed to mount the GE Variable Re-luctance Cartridge above. tions and those desiring the

tinest quality reproduction of lateral transcriptions and records Mass of the transcription arm reduced to the minimim toint through use of special design and mignosium alloy for moving parts. Low friction assured by precision cone type bearings. Mounts on motor boards whose dimensions from the center of the turntable to the edge of the mounting surface is at least

40.18 34N13514-Shpg wt. 1 lb....... Model RWP-001. Counterweight adapts above for L.P. reco

34N13515....



#### PICKERING CARTRIDGE REPRODUCER

Designed to give the highest quality reproduction of records and transcriptions. Will fit into almost any arm—"Keystone Clip" mounting permits adaylation to a large variety of arm shapes and sizes. Requires pre-amp equilibre 1.s'ed below. Includes sapphire stylus with tip radius of 0.0027

34N13493Model S-120M	9.90
34N13494—Model D-120M, with Diamond Tip	24.90
MICROGROOVE Cartridge, for new Long-Play records.	
34N13495-Model D-140-S, with Diamond Stylus	36.00
34N13498-Model S-140-S, with Sarphire Stylus	14.70
Bracket for mounting Pickering cutridge in Webster M	Iodel 356
three speed changers. No charge with order.	
34N13503—For S-120-M and D-120-M	Free
34N13504—For S-140-S and D-140-S	Free

Model 125H. Equalizer-amplifier. Designed for use with Pickering Cartridge Reproducers above. Compensates for average recording characteristics and raises output voltage as high as that obtainable from crystal pickups. Easily installed. Operates from power supply of amplifier or radio set. Normal HF characteristics flat to 15,000 cps; filter cuts off above 4,000 cps at 20 db/octive. 34N13496

# PHONO ACCESSORIES



Fig. A. Model RPX041. Variable Reluctante certi.dge with replace Fig. A. Model RPX041. Variable Reluctane contribute with replacable needle. Provides smooth, vidor range reproduction of both conventional and long ploying recrid. Fow most initial impedance. Small size and light in wilgit. Unaffected by widely varying temperature and hundry coince of Reproductions entire usable range. Output: 12 millivolts at 1000 wide. Presumptifier listed below is required between pickup and imput. Size 115/32 x34x916". For L.P. (33-1-3-8-45 RPM) record. (Complete with replaceable needle.

34N13485-List Price 9.95

0

Model RPX040. Same as above but for standard 78 RPM records Complete with replaceable needle.

34N13500-List Price 9.95

Each 5.85

34N108—Repla eable needle for L.P. cartridge 34N107-Replacement needle for Standard cartinge

Fig. B. GE Pickup Aim, with either standing of L.P. cyrtr.dges bove. Plys 10 or L." tecords. Can be used with any non-automatic record player. Fa tory balante for prope, string pres-sure, which can be adjusted it desired. Simple to ist ill. Single hole mounting. 24" lead, mounting rest and mounting template

with L.P. cartudge 9.38 34N13502-List Price 15.95 34N13501—List Price 15.95 with Standard cartildae ... 9.38

Fig. C. Model UPX-003. Self Powered Pre Anglatic for above carridges and pickups. Uses 1 6SC7 tube in equalizing circuit, plus relative. Includes my unitack, 14 output lead with phonoplus. 115 V., 60-cycle AC. 35%x35%x334".

34N13473- List Price 15.95. Shpg. wit. 2 lbs. With tube 9.38

Model SPX-001. As above less rectifier. Obtains filament and plate voltage from receiver or aim lifter.

Shpg. wt. 2 lbs. 5.82 34N13465- List Price 3.90 ....

#### BROADCAST CARTRIDGE

Model RPX-046. GE Broadcast type cartridge. Less needle. 6.73 34N13479

Model RPJ-004. Diamond Stylus, .001" radius. Stylus pressure 6-8 grams. For long playing records. 16.17

34N128 Model RPJ-003. Diamond Stylus. Radius .003". Stylus pressure

3<sub>4-1.4</sub> cc. for 78 RPM secords. 34N109

### **ASTATIC PICKUPS**



#### STANDARD AND MICROGROOVE

Model 6D. Civst il. For standard

sponse 50 to 7,000 cps. Output vol age 1.2 V. at 78 RPM O.9 V. at 33 1/3 and 45 kPM. Needle pressure 8 gr im.. Equip; ed with precious metal and sapphire stylus tips in reversible curtridge. Dark brown finish.

34N13512-Shpg. wt. ? lbs.

List Price 15.90 9.35



#### MICROGROOVE PICKUP

Model 507L-92-33. For use with 33 1/3 and 45 RPM long playing record C. c. il type. Frequency

range 50-10,000 cps. 1.6 voits output Needle pressure 10 grams. Needle not included, Opalescent gravitinish. List Pri te 8.00 4.70 34N13513-Shpg. wt. 11/8 lbs.

#### **ASTATIC TONE EQUALIZER**

For use between rystal jickup and amplifier, H is 4 positions: B iss, Med., Ht. O.f. Single hole mounting. Dimensions: 2"x2" 34N13475—Shrg. wt. 1 lb. . 1.94





CLARKSTAN PHONO NEEDLE PRESSURE Indispensable to the serv-

iceman! Checks weight and balance of pickup arm from one gram to

Has 2 scales, plus calibrated dial with 4:1 scale multiplier 1.50 34N447—Shipping weight 1 lb. ...

### PHONO PLAYBACK & RECORDING NEEDLES

All the needles listed below are 3-millimeter radius for use with standard 78 RPM recordings except where otherwise specified. Long playing and microgroove needles are 1-millimeter radius, designed

for use with the new Columbia 331¼ and RCA 45 RPM recordings. Precision made for best reproduction of all types of recordings. For exact replacement types see listings on cartridge page 50.

### JENSEN PHONO NEEDLES NEEDLE PACK

Sales kit demonstrates 3 Royal Jewel, 34N110—Kit with 6 Needles 6.00



#### ROYAL JEWEL NEEDLE



# Onser snank reduces house that distribute 1.47 34N111—Each LP needle for 33½ and 43 RPM record 34N175 Each 1.47 Lots of 13 15.00

#### CLASSIC NEEDLE



Lots of 13...... LP ncedle for 33% and 45 RPM records. **34N177**—Fa**ch** 83c

#### DUOTONE SHOCKPROOF NYLON NEEDLE

Elimin ites damage to needle or Eliminates damage to needle or record if pickup accidentally drops. Octium tip on steel spring set in Nylon bumper. 5,000 pkrys. 1.47



9.00

# 580

#### NEW MICROGROOVE NEEDLES OSMIUM ALLOY TIP

Designed for new, ion 1-11 lying and microgroove records. 16 offset shank for hi-fidelity softer 34N120—.001 " radius.....

### SAPPHIRE AND RUBY POINTS



Full tone needles for new long-playing and nacro-groove rectrict. Good for 5,000 plays. \*\*<sub>B</sub>\*\* of fiset shank for softer tone, 001 \*\* radius 34N121—Sarp hire Point... 98c

#### SAPPHIRE TIP STRAIGHT NEEDLE

Designed for the new lightweight pickups and the new Long-Play records, 001 frachus. **89c** 

#### JEWEL-TIPPED OFFSET-SHANK NEEDLES



### PERMANENT TYPE PHONO NEEDLES

Sapphire Tip Needle. Guar inteed to: 8,000 plays. Tapered duraluminum shaft contibletity eliminities tone distortion. Precisi in ground and polished point. For tone arms with leave th in 21/2 oz. pressure
34N117—List price 1.00...... 50c e i Lots of 24 .



Ruby Jewel Tip Needle. 12 000 plays. Double tend tapered shaft absorbs shock. Dramond polished tip.
34N118—List price..1.50..Each .88c Lots of 20, each.... 75c

#### STANDARD JEWEL-TIP NEEDLES

Duotone Durpoint—offset tyre, plays up to 4000 records.	59c
34N443	370
Walco Tru-Trac-sapphire point, plays 5000 record.	88c
34N170	900

#### WEBSTER TANDEM REPLACEMENT NEEDLES

Metal. For models 256 and 246 changers. 34N127	Lots o	f 10	2.00 ec
Osmium. For models 356 and 346 changers. 34N178 Singly 4.00 e i.			
Supphire. For models 356 and 346 changers.			

#### LONG LIFE PLAYBACK NEEDLES



1. Preciou. Metal point needle with offset shank. For maximum record sides without changing.
sudes without changing. 34N199 Eich 88c  2. Rehance 4000 play needle. Plautic case. Low surface noise.
34N443
3. Permo Point 2000 play needle with patented precious metal
34N164
3. Reliance Perm ment Point Needles 2000 plays. 34N165
4. Fidelitane "Floating Point" needle filters record scratch, 3 to 6 months average us. (1000 or more sides). Platinum point, Ideal for
changers. Each 50c
4. Deluxe Fidelitone "Floating Point" needle. As above, but good for
5000 plays. 1.00
9. Presto transcription metal alloy needle. Long life, Figh-fidelity. Semi-permanent self-lubricating joint. 40 to 50 hours on standard
records, longer on home recordings.  Fach 69c
11. Say hare Typed Playback Neidle! Permanent needle—plays 2000 course: 1 directed, with in minim wear. Excellent frequency char-
134 Pictors. A real value
STANDARD PLAYBACK NEEDLES

	. Red shark needles for acetate recording			
341	ested. <b>4N433</b> —Package of 100		Each	46c
10.	<ol> <li>Filter point highly polished six no it stee</li> </ol>	al needle.	Shudov	v tested.
34N 34N	<b>4N209</b> - Pickage of 10			ch <b>BC</b> lach 21c
	. High adelity, shadow tested stilel needle.			_
	0 sides. 4N430A —Parkinge of 10		Ea	ch 8c ach 15c
	. RCA steel phonograph needles. 4N153—Full Tone (Pack of 100). 4N160—Extra Loud (Pack of 100)		Fac	. 15c
10	O Packet jes assorted			1.00

10 Packet jes assoried	1.00
9. RCA Chromium needles. Green shank 34N357—Package of 6 Each	250
34N357—Pickate of 6 Lach	
10 Pickiges	1.80
9. Green Shank shadowgr y hed needles.	
Good for 12 11 sys each	460
Good for 1.2 plays each 34N432- Parkinge of 100	700
10. RCA R-1 Seal needler, designed for Ped Seal records.  34N141—Package of 50Each	300
34N141 Pickage of 50 Edch	2.00

### RECORDING NEEDLES 5. Larped edge sarrhire cutting needle for actitate discs. Precision out jewell to low surface noise and highest fidelity. Over 5 hours outling life. 353191

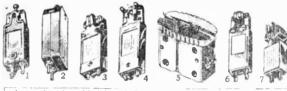
5. Like above, but with Long Shank to fit Presto Professional and Brush cutting heads 35N198.  6. Sat phire cutter ground to W. E. spec. For acetate discs. About 10 hours life. Can be reshurpened. 35N196.  6. Stell cutting needle for acetate; individually ground and lapped. Flutened shink. 35N439—Pinking of 3.  5. Stellite cutter for acetate discs. Extremely quiet. Cuts hundreds of side; an hereinforced. 35N337  8. Individually polished steel cutter for acetate discs. Will cut 15 to 25 10 in discs. 35N348—Package of 4.  6. Alloy cutter for acetate; harder than steel. Polish while they cut. Hand lapped. 35N434A—Package of 5.  55N648—Package of 5.  55N648—Package of 5.  55CA 55CA 55CA 55CA 55CA 55CA 55CA 5
6. Sarphire cutter around to W.E. spec. For acetate discs. About 10 hours life. Can be reshurpened. 35N196
6. Sarphire cutter around to W.E. spec. For acetate discs. About 10 hours life. Can be reshurpened. 35N196
10 hours life. Can be resharpened.  5. Ster I cutting needle for acetate; individually ground and lapped. Flattened shark.  5. Nt39—Parking of 3
6. Steel cutting needle for acetate; individually ground and lapped. Flattened shink 35N 439—Plack ago of 3
Flutened shimk 35N439—Pincking of 3
7. Stellife outer for acetate dis s. Extremely quief. Cuis hundreds of side; an he rechargened. 35N337
side; an be recharbened.  35N337  Each 1.18  8. Individually polished steel cutter for acetate discs. Will cut 15 to 25 10 in discs.  35N348—Package of 4.  8. Alloy cutter for acetate; harder than steel. Polish while they cut. Hand lupped.
25 10 in discs.  35N348—Package of 4
35N348—Package of 4
8. Alloy cutter for accetate; harder than steel. Polish while they cut. Hand lapped.
nonreage to the self-

### CARTRIDGES-RECORDING DISCS

#### CRYSTAL PICKUP REPLACEMENT CARTRIDGES

Replacement units with accompanying needles for all standard makes crystal pickups as recommended by minutacturers. Frecisi n made and individually tested.

#### **ASTATIC**



510 k No.	Model	Ivpe '	l'i s re	Out it	Fa L
34N13407	F 2	2	2 ; 04.	25 V.	3.23
34N140	B-4	2	2 ; 02.	2.5 V	3.26
34N13948	CQ1*+	7	f in.	7 V	1 4.41
34N13973	L 26A	1	? , oz.	1.4 V.	2.62
34N13965	L-40A	1	114 07.	ń.	2 62
34N13969	L-70A	1	1 , cz.	( ',	3.35
34N13972	L-71A	1	1 07.		3.91
34N13981	L-72A	1 1	1 : 07.	3 4.	3,91
34N13841	L-82A	1 :	21 0%.	3 A	3.27
34N13842	L-92A	1	1 0%	2.2 V.	3.53
34N13840	L-92 33	4	10 gr	1.6 V.	3.53
34N13790	LT 1 MA	4	.: 67.	1.0 7.	4.12
31N13843	LT 2 MA	4 1	1. 07.	1.0 V	4.12
31N13791	LT 3 MA	4 1	1: 07.	10 V.	4.12
34N233	M-22	1	274 02.	29 V.	3.26
34N13844	OT 2 JA	3	07.	. V.	5.24
34N13945	QT 2 MA	3	l oz.	.85 v.	4.94
34N13961	OT 3 M*	3	1 - , 07.	.7 V.	4.94
34N13962	OT311	3	1' 27.	.7° V.	5.23
34N13404	U-J†	5	or.	V.	5.23
34N13405	U-78-J1	5	r ar.	. V.	5.23
34N13980	Nylon-1-J‡	6	11.02.	1.0 V.	4.56
# 1A7.+1	a 1 . 1 II .				

\* With precious metal needle. † With supplier needle. ↑ With hylon heedle. # With special brackets for RCA 4 × RPM in largers.

#### REPLACEMENT NEEDLES FOR ABOVE

34N106 Precious met il tip for LT mod l		.88c
34N101 Previous metal tip for Model OTM.		38
34N102 -Surghire tip ne dle for Model QIJ		. 1.47
34N114 - Nylon n -edle for Model Nylon 1 I		1.76
34N138 - Milsup; hirefor UT cuttidge.		1.47
34N139 - 3 Mil s ij hire for U 76 J c ii tri 11.		 1.47

#### DOUBLE NEEDLE TURNOVER CARTRIDGE



Type LOD-II. Some as always except with front bracket for turnover knob used on VM

ch inders. 34N13847

#### REPLACEMENT NEEDLES FOR ABOVE

34N102—3 Mil sigglare tipped needle for 78 RPM records... 1.47 34N137—1 Mil supplare tipped needle for IP records....... 1.42

#### **RCA**

Stock No.	Model	Pressure	Oijut	Eich
34N215	310 0	2.7 02.	1.5 V.	2.52
34N249	37119	3 oz.	1.5 V.	2.82
34N277	33217	2.7 0'.	1.5 V.	2.52
34N280	331.22	2.7 oz.	1.5 V.	2.52
34N13424	311 6	3 07.	1.5 V.	2.85
34N13979	38610	2 07.	1.5 V.	3.33

#### WEBSTER

Model C2, 2½ oz. pressure; output 2.0 V. 34N13976—Fl inge mount....

### 2.65

#### REPLACEMENT CARTRIDGES FOR WEBSTER-CHICAGO CHANGERS

Type V 47. For Webster 3 i6-1 changer.	4.12
34N13708	4.12
Type V 42.2. For Webster 2.76-1 and 246 changer.	
24N12702	

#### RCA MAGIC TONE CELL KIT



Magic Tone Cell with "Silent Sarthre" semi-permanent jewel ty needle terlagl, filelity re-production. Output volts IV. Includes Magic Line cell, alent supphire jewel point and bardware.

#### SHURE CARTRIDGES



Reversible cartridge for playing 78, 331% and 45 RPM. Vertical Drive" construction. needle chuck rot ites on vertical axis. Meets needs of high needle wont compliance and fixelity for interpretery or cord. Response to 6000 g.s. Output 1 V.

Pressure 6 or mis. Type W22A. With 1 Mil. and 3 Mil sign phare needles.

34N13713.... Type W22AB. With | M | sqrplur- ind | M.l. osmium. ...........6.32

#### LEVER TYPE

Stock No.	Model	Pressure	Chitputi	Each
31N13985	W57.1	3, 07.	1.6 V.	3,26
31N13987	11.61	3, 02.	1.6 V.	3.26
34N13988	H 59.1	07.	2.5 \.	3.26
34N13193	W56A	11, 07.	4.3 \.	3.91
34N13835	W42B	1 07.	1.3 V.	2.02
31N13400	W53MG*	G gr	1.0 V.	5.00
34N13836	H 20B	1 07,	4.3 V.	4.41
11 .1				



\* With Osminin needle,

#### MUTED STYLUS TYPE

34N13991	W60.1	Loz,	T	1,6	V.	1	5.00	1
34N13992	W60B	l oz,	- 1	1,6	V.	1	4.41	ı
31N13837	WATB	04.	i	1,6	V.	ì	4.41	
34N13838	M 42B	L nz.		4,0	V.,		5.00	



#### NEW VERTICAL DRIVE TYPE

34N13839	W211* 3 gc.	i 1.0 V. i	5,15
34N13710	W21 \R^#   5 gr.	1.0 X	5,15
34N13711	W23 1 + n gr.	] 1.1 V. ,	5.15
34N13712	W23B‡ + 6 gr.	1.1 V.	4,56



\* With 1 Mit Supphire needle. | † With 3 Mil., apphire needle. † With 3 Mil. Oznam needle. | For RCA, 4 > kf M. hinger.

#### REPLACEMENT NEEDLES FOR ABOVE

34N105 -1 mil O m um needle for W53MG
- Fill 5 if I file needle for Would and all "Vertical Prive" Carti de s
34N103
ril Osmium nie fle fir W60B, W61B, W61B and ill "Vertical
Drive Curr 1; s.
34N104
34N174—1 mil. ai phine for all "Vertical Drive" type:

#### RECORDING DISCS

### PRESTO "ORANGE SEAL"

Sturdy duminum base couled with It stos special compound —have I w suitice noise and long playing I is.

Χo.	Size	Thorn	Lots 10 Each	Lots 50 Each
35N11960	612"	26c	23c	21c
35N11961 35N11962	10"	37c	33e 50c	30c 45c
35N11963	12"	75e	66c	60c

#### AUDIODISCS "YELLOW LABEL"

For an alcur, school or home use Acetate coated on aluminum bar. Do Herried and Libeled on both rides.

No.	Size	Fach	Lots of 25 Each
35N11990	\"	.70	.12
35N11997	11)"	.90	.54
35N11398	12"	1.50	.90
35N11399	16"	2.70	1.62

#### RECORDISC "ORANGE LABEL"

Admiratly suited to the average type of impleur transcription. Bond base, professional natrate

35N11969—Pkg. of 6 61/." 35N11970—Pkg. of 6 8" 35N11971—Pkg. of 6 10" 1.26

#### RECORDISC "RED LABEL"

Professional quality .021" thick aluminum base with mirror-like

No.	S <sub>1ZC</sub>	Each	5 for
35N11972	41.5"	20c	.90
35N11973	\"	27c	1.20
35N11974	10"	40c	1.80
35N11975	12"	53c	2.40

#### PRESTO "GREEN SEAL"

Finest gride—illuminim to a with special compound. Used by labor iteres to demonstrate the cipitalities of recording equipment. Thickness: .052".

No.	Size			Lots30   Each
35N11992 35N11967 35N11993	1314"	1.35 1.68 2.44	1.20 1.50 2.17	1.08 1.35 1.95

#### **AUDIODISCS "RED** LABEL"

For professional use. Anchate conted on smooth aluminum base. Dout le-sided with 3 drive pin I clc...054" thickness.

No.	Size	Each	Lots of 25 Each
35N11989 35N11994	8″ 10″	.80 1.15	.48
35N11995 35N11996	167	1.85 3.40	2,04

#### RECORDISC "PURPLE LABEL"

Smalar to Red Label, but with lighter weight aluminum base, in 1 m roi like nitrit coat.

No.	2176	Eich	5 for
35N11945		14c	.60
35N11916		20c	,90
35N11947	10"	30c	1.35

#### RECORD RENEWERS

For apetate records. Cleans, lu-35N15300—2-oz. bottle....26c 35N15301 -2-oz. bottle.....29c

### INVERTERS - POWER PACKS - GENERATORS

#### CORNELL-DUBILIER CONVERTERS



Provides, mooth, dependable peration of radios, amplifier, intercoms and other HPF appliance, Deliver, 110-volt, 60 y le AC from 6, 12, and 110 volt DC power source. Completely Rifflered for broadcast, hert wave and FM. Model tKS, 6810, 1288 and 1,8015 leating 4-way adult ble load control with Model tIOR10, in Tides 5-w y of the small board. Phintom switch can be added to Model 110825.

Stock No.	Typa No.	DC Input.	Int.		W	Size L			Last Price	Each
21N17285 21N17286 21N17287 21N17288 21N17289 21N17290 21N17291	6R10 12R8 12RU15 110R10 110RA15	6 12 12 110 110 110	55 125 120 200 150 200 300	100 80 150 100 150	13 413 413 413 413 413 413 413 413 413 4	(73 1/3 125 1/7 (73 1/3 25 1/7 173 1/3 (73 1/3 (123 1/2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12 19 12 22 10° 5 12° 5 22° 5	41.95 78.95 39.95	23.49

#### C-D REPLACEMENT VIBRATORS

Stock No.	Type No.	Repl. For Model	List Price	Each
21N6039	3103	6R5	10.65	6.26
21N6040	1123	6R0	14.85	8.73
21N6041	1315	110R10 110RT25 110RA15	10,65	6,26
21N6042	3077	110RT15	12.65	7.44
21N6043	3077V	110RT25	15.65	9.20
21N6044	3079	110RT35	16.85	9.91

#### C-D MOBILE MOUNTING BRACKETS

Stock No.	Type No.	For	List Price	Each
21N6045	3101	6R5, 12R8	1.95	1.1 <b>5</b>
21N6046	5165	6R10, 12RU15	1.95	1.1 <b>5</b>

#### C-D PHONO MOTOR CONVERTERS

Model 110PAS. For operation of automatic and manual record player
Surph Inflored 110-volt, 60-by th AC power toon 110volt DC one: Hammered et and finish. Hat tead for
permanent women in tillation. Output the voltempt a
interpret to a voltemperes continuous distributions.

21N17296 | Teat 195

Model 110PBS. Since as above rule with the restriction of the witch Forest trial run in 21N17297—Let 1: 35

#### ATR STANDARD & HEAVY DUTY RADIO INVERTERS

This newly developed line of D to AC inverter in eigenfully is one mended for operating AC Radio. Public Addr. System. Amphiliar, etc., from DC voltages. Extremely well filtered to increase the effect of the recombination of the all wave ratio reception. An model in tell is low by well 20 voltages. Extremely well filtered to increase all wave ratio receptions. An model in tell is low by well 20 voltage all the ending to the end of the e wt., 19 lb wt. 30 lbs.



	DC Volt	8.8	11.0	
No.	In: it	Ir t	Cort	Co t
21N17242			,5	23.37
21N17243	1.3	125	1 17	29.37
21N17244	3.2	1 )	1.	29.37
21N17245	11.)	23.5	151	29.37
21N17246*	227	3.25	273	42.63
21N17247	27.7 v. Ma. Int	*, 1	_ [5)	33.52

#### VIBRATORS FOR ABOVE

21N6048 -For 6V model. 21N6049 -For 110V model.

5.00

#### KATO GAS-ELECTRIC PLANTS

Filter d, shielded, compact and himtwight on test with good engineering practice to in ure raised durid hity and cover out it. Both models illustrated provide 115 volt. 6°C, b. AC at the rated wattages for continuous duty, and the first model, hown also provides 150 watt, at 6 volts DC for charging batteries. Both the arrecooled gasoline engines.

A. Portable upit, 500 watt unit has 1





Weighs 200 lb . . . 201.60 B. Model 26HAB4. Heavy duty unit. 1000 watt continuou duty o tiput. Sinale ylinder, 4-cy le, -4 hr enone Runs 1½ hours on one gallor it galoline. Manual starting.

21N19821— Weighs 295 lbs..... **264.00** 



Specially designed to meet the critical power convertion requirement, of TV. Delivers 110 volt 60 cycle AC from 110 V DC power source. RF filter I for broadcast, whost work, FM and TV. Mach I HORTIS feature. "phantom witch" and TV frequently, control. 11 RT is teatures frequency scritish and Di A kH plusion construction for the althor of bifantom witch."



110RT35 Fully automatic power conversion and '1! antomswitch.'

Stock Na.	Туре	Watts Int, Cont.		Shpg. List Wt. Lbs. Price	Each
21N17239 21N17293 21N17235	110RT25	300 250	61, \$123, \$\$12"	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	41.13

#### C-D "PHANTOMSWITCH"

Model 3155. For use with middle 110R25 and 110RT25. Self-orfitted plug-in unit. No wiring necessary. A domitically for received an architecture the operation of within the ACC antends.

21N17295 in 1445



#### C-D BATTERY ELIMINATOR-CHARGER

Model 110BA6. Provide to volt DC power from 11.) V , theyele AC to are to 60 waits continuous output Built-in voltmeter and ammade provide accurate, viable adjud-ment of output voltage. I per adjud-ment of output voltage. I per adjud-ment of output voltage. I per adjud-ged to the output voltage. I get a for a for-age choice of 4.5, o. 7, 8, 9 or 10 amps, and charging latter. Sile in "Wxx.1, "1x812"H.



21N17292 -St.g.: Wt. 16 lbs.—List \$1.95... 32.21

Model 110BA12. Sapt to an 112 V DC for servicing and testing 1.10, to, is and boat adds and appliance 1.20-wait continuous output Button ammeter and voltmeter 7 few with from 8 to 20 amps. ito V or 15 15 amp 112 V Henmar denamed this Nov. 7% WX 13 1.20 2.51. 21N17294 Shi y Wt. 211-15 Lit 85 50 .

#### **BROOKS PHONO-MOTOR INVERTERS**

Include the entantle of the direction of the entering of AC of one of the include in the control of the control

Model Z-1 traded to Will operate or the first love. A trade or record (1) to the meron because it 9.95







#### MALLORY VIBRAPACKS

Flority enveloped visit in the complete station of high voltage are to evertherm a torner higher years and a LC in complete with resource, anyther, the militiation in the militiation of the highest and militiation of the highest station of the highest



NOTE Two transparents of the one parents.

NOTE Two transparents define the end fluor echier. "b" manus is denoted proposed in the electric respective to the table precision to be relication where Borna, hould not be drounded.

Type VF-223 Filter-For all make up to pay where atmost hum better in and voltage resultation is required. 21N6060 4.70

<b>\</b> 0.	Туре	Vltg.	Output Voltage	Output	Туре	Each
21N6059	VP-5404	6,0	250	60 ma.	Self-Rect.	17.64
21N6090	VP-551	6,3	<u>125-150-175-200</u>	100 ma.	Self-Rect.	12.94
21N6094	VP-552	6,3	<u>225-250-275-300</u>	100 ma.	Self-Rect.	15.43
21N6091	VP-553	6,3	<u>125-150-175-200</u>	100 ma.	Tube Rect.	14.41
21N6095	VP-554	6,3	<u>225-250-275-300</u>	100 ma.	Tube Rect.	16.90
21N6066	VP-555*	6,3	.00	200 ma.	Tube Rect.	30.58
21N6067	VP-557*	6,3	(00	150 ma.	Tube Rect.	30.58
21N6092	VP-0556	12,6	225/250-275-50)	100 ma.	Self-Rect.	16.90
21N6068	VP-1558	32,0	225-250-275-50	100 ma.	Tube Rect.	18.37

Special Dual Packs for high output, Output vltg, not adjustable, † I dtered. Requires no filter.

Type VF-223 Filter-For all male unit pack where utmost hum suppression and voltage regulation is required.

#### REFLACEMENT VIBRATORS FOR VIBRAPACKS

1/10   10 / 4/11							
No. Vibro	packs Type	Each	No.	V'packs	Туре	Each	
27N6062 VP-551, 27N6063 VP-553, 555†, 5	551, \25	4.56 3.67	27N6065	VP-G556 VP-F558 brators requ	F-826	5.32 4.12	

### URGESS BATTERIES

#### STANDARD DRY BATTERIES

For radio or laboratory use. Suffix letter, of Lattery numbers denote type of terminal, Pl. –pluq-m; SC—prind clip; all others have screw terminals except \*with strap terminals,  $\dagger$  tip ped at 2212 volts;  $^{*}$  tip ped at 3, 412, 16 and 2212 volts.

Cat. No.	Burgess Type	Volt	Size	Shpg W. Std. Lts. Pkg.	Net Each Sqle. Std. Lots Pkg.
		11811	BATTERIES		

	"B" BATTERIES	
20N19822 21308PI†	45 81 x415 x72 e" 15 6	3.41 3.10
20N19832   21308SC†	45 81 xx4 15 ex711 e" 15   6	3.41 3.10
20N19824 10308PI†	45 8 2x4 2x7 1 13 6	3.26 2.96
20N19831 10308SC†	45 61 ex 41 ex 71 " 13 6.	3.26 2.96
20N19825 2308PI1	45 8 72x 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	2.38 2.16
20N19829 2308SC†	45 81 2x2 1 x / 1 8 6	2.38 2.16
20N19861 3308	45 41 x21 x51 316 1)	1.65 1.50
20N20683 X 30X	45   1   6   1   6	2.86   2.60
20N19865 ZBONX	45 17 <sub>8</sub> x31 <sub>-</sub> x51 <sub>6</sub> " 114 10	1.98 1.80
20N19826   5156P!	2216.414x23 (x2)10" 2" 10	1.39   1.26
20N19862 5156SC#	221/2 41 8x21/4x24 / 2 110 1	1.39 1.26
20N19863   4156	221 31 x21 x21 1 10	1.00 .91
20N20682 A15ST*	221° 35"x21-x25"   1   6	1 18 1 07

	"C" BATTERIES		
20N19868 5540 20N19866 5360 20N19827 2370PI 20N19867 2370BP 20N20686 B3BPX	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	.74 .67 .39 .35 .62 .56 .62 .56 .84 .76

		"/	BATTERIES			
20N20680 20N20679 20N19844 20N20685 20N20611 20N20678 20N20681	F4BP 2F2BP F2BP B2BP 422 2FBP 44	3 3 1 1 1 1 1 1 1 1 1 1 1 1	25 s x 25 x 44 s "  55 s x 1 s c x 44 s s"  55 s x 1 s c x 44 s s"  25 s x 1 s x 25 s s"  15 x 1 s x 25 s s"  25 x 1 s x 24 s s"  25 x 1 s x 24 s s"  11 s x 1 s x 44 s s"  11 s x 1 s x 46 s s"	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1.05 .53 .48 .23	51 95 48 44 21 48 60

#### "A" and "B" BATTERIES FOR HEARING AIDS

Stock No.	Burgess No.	Volts Sh	pg. /t.	Size	SIALI	Price : Single	
				156			

					A	RA	TIEKIE	.5			
-											
								g" diam. I			
		2ES			5 07.			'ir"diam.			
		TE						m" diam.			
	20N20687	2ZE	1	$1\frac{1}{2}$	11120	z.	114x19.	gxl <sup>29</sup> g"  1	100 [	15č	14é

	STANDARD "B	BATTERIES	
20N20693 XX22E 20N20694 XX30E 20N20677 U10E 20N20676 U15E 20N20675 U20E	145 7 oz. 12 15 2 oz 1		1.23   1.12   1.45   1.32   .62   .56   .78   .71   .95   .86

#### IGNITION-LANTERN-TELEPHONE BATTERIES

	Stock No.	Burges Volta	Shpg.   Wt.	Size	Std. Pkg.	Price Single	Each Std. Pkg.
-	20N19859 20N19846 20N19837 20N19838 20N19839 20N19841	4F4H   6 F4H   6 4F5H   7 <sup>1</sup> 2	3 lps. 7 lbs. 13, lbs. 8 lps.	25 8x25 8x45 h" 25 8x31 hx5 h" 294x814x63 h" 25 8x25 x374" 71 hx3-1 hx51 h" 81 2x31 hx51 h"	20 8 6 20 6	51c 99c 2.38 58c 3.06 3.51	46½6 90c 2.16 52½6 2.78 3.19



#### FLASHLIGHT CELLS

#### STANDARD BATTERY PLUGS

Fit all batteries above with II after their numbers. Will also fit amiliar make batteries. With fahne to k clips for cable.

Stock No.	Туре	Volt.	Ea.	Lot or 10
20N20591	3 prong	45	9c	.81
20N20592	3 prong	41 <sub>2</sub>	10c	.90
20N20593	5 prong	221 <sub>2</sub>	16c	1.44

#### PORTABLE "A" BATTERIES

Stock No.	But tess No.	Volt.	Ures Plug No.	Size 1. x W x H	WHLL RFPLACE Ever- Ray-o- eady Vac.	Shpq. Wt., Lbs.	Std. Pkg.	Price Each Std Sgle. Pkg	
20N19854 20N19850 20N20625 20N20610 20N19842 20N20613 20N19843 20N20626 20N19851 20N20628 20N20630 20N20630 20N20630 20N20631	2F 4F 2R CG3 E4H 1 2E-4L CG5 T5 F F 4FL E3 24 B5 C5	11/2 11/2 11/2 41/2 66 71/2 11/2 41/2 71/2 71/2 71/2	5 5 8 8 10 8 5 4	217 gx15 mx44 m" 25 x25 xx4 m" 21 xx15 mx44 m" 4x13 xx415 m 32 xx17 mx46 m" 317 xx17 mx46 m" 412 xx217 mx46 m" 317 xx17 mx46 m" 41 xx33 xx41 m" 317 xx13 xx4 m" 317 xx13 xx4 m" 317 xx13 xx4 m" 317 xx15 xx21 m"	742   P94A 746   P83A   P694A 747   P698L 687   P85A 743   P96A   P94L 736 724   SB 751C	1 2 4 oz. 2 2 4 3 1 1 4 3 3 3 1 1 4 1 4 2 3 4	6 12 192 12 12 6 6 6 6 18 6 24 10 6	.43 .33 .75 .61 .07 .06: .56 .5 .73 .66 1.43 1.33 .85 .77 .99 .90 .69 .63 .56 .51 .39 .33 .74 .6; .75 .68	8 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7

#### PORTABLE BATTERY PLUGS





Stock No.	ll-		Ea.	Lots 10
20N20590 20N20595	4 5	2-prg. "A" 2-prg. "A"	.03	.27
20N20596 20N20597	6	3-prg. "B" 4-prg. "A&B"	.04	.36
20N20598 20N20599	8	2-prg. "A" [4-prg. "A&B"]	.03	.27
20N20585 20N20586	10	3-prg. "A" 1-prg. "A&B"	.05	.45
20N20588 20N20589	12	I-prg. "A&B" I-prg. "A&B"	.05	.45
20N20594	, 14	5-prg."A&B"	.07	.63

#### PORTABLE "B" BATTERIES

20N20627		6712	snap-on	. 21 v2x1 1 v2x3 1 4"	467	4367	1	12	1.74 1.58
20N20612		40.	6	31 <sub>16</sub> x? 4x45,"		. 430P	3	6	1.65 1.50
20N20614		45	6	41/8x211 gx51 x"	762	P5303	3	12	1.82 1.65
20N20616		45	6	3' mx2' mx4' m"	738	P7R30	2	6	1.92 1.75
20N20617		45	6	$39_{16}x13_{4}x51_{2}$ "	482	P5S30	4	12	1.54 1.40
20N20615		45	snap-on	217 2x 11 2x 321 22"	+		12 oz.	12	1.28 1.16
20N20634	K45			221 Ext "xx27-"	457		1,2	1.2	1.64 1.58
20N20633	N60	. 23	naj-on	311 12x 1 14 x 311 16"	49)		114	6'	2.28 2.07

### SNAP FASTENER TERMINALS



Same battery terminals as used for Eveready type, 430, 435, 455, 467; Burgess type XX-45 and XX30 midget batteries. Sturdy, well-made terminals. Male and female

units sold separately. 20N11733- Male Snap Fastener.

20N11734- Female Snap Fastener. Any above, Ea. 4¢. Lots of 10, 32¢

#### COMBINATION PACKS FOR PORTABLES AND FARM USE

20N19871 5DA60 20N19874 6FA60 20N19875 4GA42 20N20618 G4B50 20N20624 6FA60 20N20620 GFB60 20N19872 F6A60	1½ & 97 7 1½ & 90 11 1½ & 63 11 6 § 75 12 1½ & 90 7 9 & 90 13 7½ A,9A,	5° p.x2° 1 px6° 7." 11° p.x5° 7.xx1° 22" 9x2x4° 43' 7." 12° p.x2° 1 p.x4° 1." 10x2° 1 p.x4° 1." 13° 7.xx2° 1 p.x4° 1."	AB84 AB419	5 3.47 6 3.47 5 2.88 7 3.47 51, 3.85 81, 3.85
20N19873   D5A60   20N19876   2F4B60   20N19877   F5M45	908 14 7 <sup>1</sup> <sub>2</sub> A,9 <sup>1</sup> B 14 6A,9 <sup>1</sup> B 9	9 <sup>5</sup> 8 x 2 <sup>5</sup> x x 4 <sup>1</sup> 2" 9 <sup>5</sup> 8 x 2 <sup>5</sup> 1 2 x 4 <sup>5</sup> 2" 10 <sup>9</sup> 16 x 4 x 4 <sup>1</sup> 3"	753 AB994   10896	6 3.45 5 4.45 9 4.59
20N20619 17GD60 20N19859 .TXX40 20N19860 F4A50 20N19864 G5A42 20N19869 1T5Z60 20N19870 G6M60	67 <sup>1</sup> / <sub>4</sub> B 1 <sup>1</sup> / <sub>2</sub> A, 97B 7 11 <sup>1</sup> / <sub>2</sub> A, 67B 11 6A, 75B 12 7 <sup>1</sup> / <sub>2</sub> A, 63B 14 17 <sup>1</sup> / <sub>2</sub> A, 97B 14 7 <sup>1</sup> / <sub>2</sub> A, 99A	99 px211 px412" 1511 px43 sx71 p" 213 xx111 xx75 p" 91 px211 px35 p" 91 8x21 px35 p" 91 8x21 px33 p"	758 AB82 AB-794	6 3.15 22 4.46 2 2.10 6 3.10 5 2.95 4 3.85
20N20635   T5Z50 20N20636   F6A60P	90B 14 6A,7½A, 75B 9A, 90B	10° 16×35 16×45 16" 87 16×321 12×211 12" 93%×223 12×45 16"	754 AB-878	7 3.85 4 3.15 6 3.50



### BATTERIES - MALLORY CHARGERS

#### RCA FLASHLIGHTS



RCA Model RT22RIP. Pre-focused for maximum spot. Silver-; lated zinc parabolic reflector. Rust resistant, nickle plated, drawn steel barrel. Pre-set bulb. Uses two VS001 batteries. 80c

20N20570



RCA Model LU010IP. Chromium plated brass case. Variable focus adjustment. 3-position roller switch. Uses 2 VS001 or cells.

2ON20571..... RCAPENLITE, LU020 Chrome plated brass burrel; durable spring clip; positive slide switch; bulb guard. Uses LS0.34 batteries.

20N20572.....

#### MICRO-LITE GLOW TIP

Miniature flashlight with tip 

#### SELENIUM BATTERY ELIMINATORS



For "A" and "B" buttery replacement in portable and farm ridies is n.j.4. / tubes. Converts . uch :

21N15704—Eliminator with rect..... 8.82

#### GE TUNGAR BULBS FOR CHARGERS



For replacement in chargers, "A" elim-inators, etc.

Cat. No.	Type	Amp.	GE No.	Eich
21N21901	В	2	12X825	3.31
21N21902		2	206501	3.31
21N21904		5	20X672	4.41
21N21903		6	189049	3.67
21N21911	D	15	217283	7.35

#### **GE TUNGAR-TYPE BULBS**

21N21907—Type B, 2 amp. Wt. 2 lbs2.	25
21N21906-Type C, 2 amp. Wt. 2 lbs2.	25
21N21908—Type D, 6 amp. rating.	
Wt. 2 lbs	55
21N21909—Type D, 15 amp. rating.	
Wt. 2 lbs4.	50

#### **HYDROMETER**

Live red rubber bulb and nozzle; beaded 

#### **BIAS CELLS AND HOLDERS**

0.710 00110 71110 1	
Biases high gain amplifiers. 20N6424	9c 15c 21c

#### INSTRUMENT PANEL PLUG FOR **BATTERY CHARGERS**

Permits charging of batteries through cigarette lighter recept icle. Plug fits into lighter receptacle on instrument panel. 6" leads connect to clips on leads of chargers. 1.18 21N15689—Shog. Wt. 6 oz... 21N15689 -- Shpg. Wt. 6 oz.....

#### RCA BATTERIES TO FIT ANY APPLICATION

Stock No. Volts Size Sim. to Std. Shpg. List Singly Burgess Pkg. Wt. Price Each	ly S	Singly Each	List Price	Shpg. Wt.	Std. Pkg.	Sim. to Burgess	Size Inches	Volts	Type No.	Stock No.
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#### PORTABLE "A" BATTERIES

20N20709	VS036	1 1/2	23/8×15 h	2R	48	1/4	.121/2		.08
20N20703	VS004	1 1/5	25/4x25/4x411-	4F	6	2	.95	.74	.68
20N20712	VS005	17	31. WX1 48X348	4FL	5	1 1/2	.90	.69	.63
20N20704	VS007	1 1/5	31 1x2 x-11 16	6F	4	2	1.25	.96	.88
20N20705	VS008	1 1/2	37/4x17 x103/4	8FL	6	3	1.75	1.35	1.23
20N20706	VS002	41/5	4x134x411	G3	6	1 1/4	.75	.58	.53
20N20707	VS009	6	25/8×25/8×418	F4P1	6	13/4	.95	.73	.67
20N20708	VS011	6	3%x1 [x10]	2F4L	6	3	1.75	1.35	1.23
20 <b>N</b> 20711	VS003	71/	37/ax29/ax41	LG3	5	2	1.10	.84	.77

#### PORTABLE "B" BATTERIES

20N20715   V	S014   45	37 p. x2 + 1x4 16	+ A30	1 6	2	2.15	1.65	1.50
	5013   45	39 11 x 1 13 10 x 5 1/2	M30	12	214	2.00	1.54	1.40
20N20717 V		41/ex256x51h	B30	6	2 3/4		1.81	1.65
	SO15 45	3x21/4x-1	230	10	1 77	2.50	1.92	1.75
		221 x2X31 x X 311 p	XX30	12		1.65	1.27	1.16
		2 25/8x3 1x1 16	XX45	12	1 74	2.25	1.73	1.58
20N20713 V		2 311 x 1 36 x 3 1.	N60	12	34	2.95	2.27	2.07

#### PORTABLE "A-B" BATTERY PACKS

20N20714	VS018	71/2-9-90	10 1/2 x 37 11 x 4 1/4 1	G6M60	6	71/41	5.50	3.85	
20N20730	VS019	71/2-9-90,	91/2x22 xx43/8	F6A60	6	6	5.50	3.85	
20N20721	VS046	6-75	12%x23;x41%	G4B50	6	61/21	4.95	3.45	
20N20731	VS047	9-90	13%x1/ix23;	G6B60	6	8:4	5.50	3.85	
20N20728	VS050	6 71/2-75	89 p. 27 p.x 311 p.	T. Z50	6	4	4.50	3.15	
20N20732	\ S054	1 4-90	10x21/c17/8	6TA60	5	61/2	5.50	3.85	
20N20733	VS057	71/2-9 90	93/ax2-px33/4	T > Z60	6	41/2	5.50	3.85	

#### FARM "A" BATTERIES

	711 <sub>16</sub> x211 <sub>p</sub> x7	20F	ô	71/2	3.30	2.31	
ZUNZU1Z3   VSO25   3	1111 <sub>F</sub> x4x6	20F2	1 1	1414	5.50	3.85	

#### FARM "B" BATTERIES

20N20724   VS027   45-22 1/2   81 µ x 41 µ x 73 µ   10306PI   4   11 1/2   20N20725   VS026   45 22 1/2   81 µ x 31 µ x 71 µ   2308PI   6   8	3.95   2.95	7
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#### FARM "A-B" BATTERY PACK

20N20729 VS022 1	1/2A-90B	153/4×414×618 /	17GD60	1	22	5.95	4.46	

#### INDUSTRIAL BATTERIES

20N20735 VS10o 11/2 21/2-45 21/8	(21 g x 2 3/4   4156	10   11/4	1.80	1.38	1.26
	-x 2 11 g x 4 3 g   4 FH	10   11/5	.70	.50	.465
	(25/g x 5 3 g   5308	5   31/2	2.15	1.65	1.50
	-x 1 27 g x 4 1 3 g   Z 30NX	10   11/7	2.58	1.98	1.80
20N20726, VSG28, 4 1/2   2 4:	1 x 3 <sup>7</sup> h 2 ½ x 3 <sup>5</sup> h 5 156SC 1 x ½ x 3 <sup>1</sup> / <sub>h</sub> 5 156SC 5 360 5 240	10 1 5 2 10 1/2 10 3/;	.81 1.80 .50 .95	.62 1.39 .38 .73	.56 1.26 .35 .67

#### FLASHLIGHT BATTERIES

20N20700 VS001 1 ½ 20N20701 VS03 1 ½ (baby)	1 11 ex 2 3 sz 1 1/22X 1 11 16	2 1	480 100	14 oz. 2 oz.	.10	.07	.065 .065
20N20702 VS034 1 ½ (penlite)	2x3761	Z.	120	1/2 02	.075	.06	.05

#### MALLORY MAGNESIUM-COPPER SULFIDE RECTIFIERS

Replacements for Battery Chargers, Eliminators, Pin-bell Machines, etc. All metal construction. Ruggedly assembled under high pressure to withstand severe whitations and shock. With Linds temperature from 90° to +265°F. "Self healing" rectifying film protects against accidental damage due to voltage surge. IBBR can be used for reversing the direction of HO model trains and IB12R for O gauge trains.

		AC Volt.	DC Volt.	Cont.		
Stock No.	Type No.	Inrut	Output	Amrs.	Used In	Each
21N10543	IB4R	3.6	1.7	1.5	GTC Battery Elim.	1.21
21N10544	IB8R	7.2	3.4	1.5	GTC Battery Elim.	1.44
21N10545	IB12R	10.8	5.2	1.3	Elec. Fence Supply	1.65
21N10546	IB12C1J	10.8	5.1	3.2	Mallory 3C, 6ÅČ4	3.21
21N10547	F16C3	14.4	6.8	3.9	Mallory 5535	4.50
21N10548	1S16CB7	14.4	6.6	6.0	Mallory 5535B, 6AC6	4.76
21N10549	F24H1P	21.6	10.4	4.8	Pin Buil Machines	5.03

#### MALLORY BATTERY CHARGERS

Convenient, efficient and economical charging Conveniint, efficient and economical charaing of any storage battery used in automobiles, buses, trucks, tractors, small bouts, airplanes, on the farm and for industrial applications. Taper charaing is designed into all Mallory charges to prevent damage to battery plates. Provides excellent power source for electroplating, telegraph systems, relays, generator fields etc. fields, etc.



Stock No.	Type No.	Charge Max.	—DC Amps Tuper to	Size Inches	Shpg. Wt.	List Price	Each
21N15698	6AC6(B)	6	4	4 <sup>7</sup> 11 x 736 x 3 <sup>5</sup> 16	7	19.95	13.03
21N15700	6AC10(A)	10	7	6x8x4 1/4	1214	27.95	18.91
21N17217	12AC5(A)	5	3	6x8x4 1/4	1034	35.96	23.48
21N15696	6AC4(B)	4	2	4 <sup>7</sup> 16 x 73/8 x 3 <sup>5</sup> 16	434	14.95	9.76

### TEST EQUIPMENT SECTION

Here is a representative selection of famous make, top quality test equipment for radio, television and industrial use. In addition to these latest, popular models, we can also supply any make not listed here, from our large inventory or on special order. Write for complete manufacturer's specifications.

#### TIME PAYMENTS ON YOUR TEST EQUIPMENT

You can take advantage of our liberal Time Payment Plan. Now, you can pay for this equipment on convenient monthly payments while you use it. Write us for terms on the particular instruments you want.

### TUBE AND SET TESTERS

#### RCP MODEL 802NA TUBE AND SET TESTER



Compact service shop ready to take out on the Job. Tests all receiving type tubes. Jack for noise test. 41/2" meter with large "Good-Ead-4½" meter with large "Good-Ead-Doubtful" section for tube testing. Eastly read figures, for set testing, battery test. Tests paper, mica and electrolytic condensers for leakage. Ranges: 0-10/50/500/1000 voits: DC or AC at 1000 chms per voit. DC milliammeter 0-1/10/100/1000 ma., 0-10 amperes. Ohmmeter 0-500/5000/100,000 chms, 1/10 megohms. 100,000 ohm range battery operated. Decibel measurements from —8 to +55 db. Output meter 0-10/50/500/1000 volts. Hardwood case with compartment and self-latching cover, battery and test leads. 100-130 V., 60-cyc. AC. 12½" x 12" x 5½". Shipping Weight: 11½ lbs.

58.31

.....58.31 25N21587.....

#### RCP "DYNOPTIMUM" TUBE TESTER



Model 322A. Easy to operate. Exclusive "Dynoptimum" circuit requires only 5 controls Exclusive "Dynoptimum" cir-cuit requires only 5 controls for complete tube check. Per-mits accurate checking of vide variety of old or new tubes, in-cluding the new miniature and sub-miniature receiving types. Provisions for checking indivi-Provisions for checking indivi-aual sections of multi-purpose tubes. Neon indicator lamp for quick testing of short and leak-

age between elements. Jack provided for headphone tests of tube noises. Operates on 100-130 volt, 50-60 cycle AC power supply. Model 322A is housed in handsomely styled open face steel cabinetwith sloping punel. 5\%x12\%x7"

25N21599-Shipping weight 11 lbs. 37.19

#### RCP ROLINDEX TUBE CHART



Model 105 roll chart unit to be used in conjunction with Tube Tester Models 322, 322P, 322AP, 802N and 802NA. The unit comes in a grey hammertone finish metal case with plastic window, designed to fit the test lead compartment of above equipment. Size: 3x8x2½. above eq Wt: 4 lbs.

#### RCP MODEL 8073 SERVISHOP



In one compact unit-Tube tester

#### RCP MODEL 8573 SERVISHOP

Similar to above except incorporates RCP Model 805B Tube and Set Tester which has roll chart and gives more extensive testing features. AC and DC voit ranges and output voit ranges up to 5000 V. Resistance red lings to 25 mags and ab reading ranges to +69. 161/2x121/x51/4".

#### STAR TUBE CHECKER



Model TE-1. Compact, precision-built tube tester. Light weight for portable or workbench use. Separate switching for each pin of each socket so any heater or plate voltage can be applied. Checks 570 different tubes including new noval. Crackle finish metal case. 9x7x3½°. Shoa. Wt. 6 lbs. Shpg. Wt: 6 lbs.

#### HICKOK TUBE AND SET TESTER



Model 534B Mutual conductance tester — checks all receiving-type tubes under operating conditions. Special switch enables checking useful tubelife. Scale reads direct-ly in micromhos—important in telely in micromhos—important in television where weak, but ordinarily passable tubes cause fuzzy pictures. Roll chart. Multi-tester ranges: AC-DC V 0-20/200/500/1000/5000, DC 20,000 chms/volts, AC 1000 chms/volt; ohms 0.1 ohms to 100 megs in 3 ranges; DC MA 0-5/20/200; 0-50 microamps; Capacitance .0001-150 mfd. Checks leakage on electrolytics and paper condensers. Checks inductance to 100 Henries. DB from -10 to +50 db. 110 V. 60 cycles. 17x18x8½".

Model 536. Portable Tube and Set Tester. All the features of Model 534B plus additional accuracy, dependability of particular interest to the exacting technician and laboratory engineer. Separate line voltage meter.

25N21458 - Portable Tester, Shpg. Wt: 38 lbs. .. 204.00

#### NEW HICKOK MODEL 600 TUBE TESTER



Dynamic mutual conductance type tester of unexcelled accuracy, reads directly in micromhos. Ranges: 0-3000-6000-15000. The only accurate dependable test for tubes, used by tube manufacturers in their own labs. Tests future life and gas content of tube under actual operating conditions. Operating voltages, including DC grid bias, are applied to every element. Signal is applied to control grid and meter reads AC component in plate current. Detects more weak tubes. Checks all latest types, including television. Attractively designed sturdy case in durable, red leatherette. Bracket in cover holds line cord Size: 7½x11½x16½° 25N21612 - Shpg. Wt: 21 lbs. Dynamic mutual conductance type

Acom Adaptor for the above Tube Tester

25N21613.......4.95

SUB-MINIATURE TUBE ADAPTOR FOR ALL HICKOK TUBE TESTERS. 25N21614 ......3.60

#### NEW JACKSON CHALLENGER TUBE TESTER



low cost, high quality instrument A low cost, high quality instrument for the serviceman who needs an extra instrument, Includes famous dynamic testing method which provides tube tests under actual use conditions. Tests over 700 types including TV rectifiers and sweep tubes. Has built-in roll chart. Makes noise and short tests. Features a combination push-button, rotary switch element and voltage selection.

### TUBE AND SET TESTERS

#### PRECISION TUBE AND SET TESTERS



Model 620-P. Newly designed to provide general purpose test of tubes and circuits of radio receivers. Complete portable service laboratory, tests all modern tube types. Dual short check sensitivity, free-point 10 element and short check lever selection. Individual tests of multi-section tubes. Built-in roll chart. Checks radio A, B, and C batteries under load. Circuit tester ranges: 5 AC, DC and Output ranges: 0-12/60/300/1200/3000 volts at 1000 ohms/volt; DC current 0-1.2/12/120MA, 0-1.2/12 amps; ohms 0-1000/100M/10 megs.; Decibels -12 to j64 db. Comes in hardwood portable carrying case. Size: 12x13x6\*\*.

Model 654P. Same as Model 620P except following ranges: DC V, 0-12/60/300/1209/6000, 20M ohms/volt; AC V, same as EC at 1000 onras/volt; Output Volts same as AC V; DC current 0-120 microamps, 0-1.2/12/120 MA, 0-1.2/12 amps; Ohms 0-6,000/600M/60 meg.; Decibels -20 to #70 db. 12\* x 13\* x 6\*.

Model 612-P. Tube and Battery Tester. Features same as model 620-P, but less set testing features. 

#### SUPREME TUBE AND BATTERY TESTER



Model 589-A, Easy-to-read full view scale, portable case, Universal floating flament circuit provides for testing old, new and future tubes. Neon lamp checks open circuits and leakage between elements. Built-in roll chart carries full tube setting data. New tube setting data supplied for one year at no extracharge. Tube tester has 18 flament voltages from % to full line voltages. Jacks provided for use of headphones for checking noisy, loose and bad connections. Checks A and B batteries under normal load, 1.5, 4.5, 6.0, 45, and 90 volts portable batteries tested on "Replace-Good" scale. New type lugage carrying case, plastic hardware and leather carrying handle. Gray wrinkle panel. For 110-133 volts, 50-60 cycles. Overall size: 11-1/8 x 8-7/8 x 5-3/8".

#### PRECISION TUBE AND SET TESTER



Model 10-20-P. Mutual conductance tube tester with new "Electronamic" feature, plus multirange Volt-Ohm-Milliameter and Battery Tester. The Electronamic feature checks tubes over complete path of operation. Tests all modern tube types. Free point lever element selection and interelement short checks. Tests radio A, B, and C batteries under load. Buill-in roll chart. Push-button operated circuit tester. Ranges: 6 AC-DC and output ranges. 0-6/260/300/1200/3000 at 1000 ohms/volt; DC Current 0-600 microamps, 0-6/60/300/1200 MA and 0-12 amps; Ohms 0-1000/100,000 ohms and 0-1/10 megohms; Decibel -20 to 164 db. With batteries and test leads. 13%x17%x6%."

Model 10-54-P. Same as above except DC voltage ranges are 20,000 ohms/volt: Current ranges 0-60/120 microamps, 0-11/12/120/1200 MA, and 0/12 amps; Resistance ranges 0-6000/600,000 ohms and 0-6/60 megohms; 6 Decibel ranges

Model 10-12-P. Tube and Battery Tester. Has same features as Model 10-20-P, but less set testing features. 25N21658-Shpg. wt. 21 lbs.....

#### EMC MUTUAL CONDUCTANCE TUBE TESTER



Model R200 BP. For the first time a mutual conductance tube tester with complete flexibility, at an unbelievably low price. Checks mutual conductance on a calibrated micromho scale as well as on a "Reject-Good" scale. 4%" meter. Checks tubes for gas content, shorted and open elements. Sufficient plate current to check both emission and mutual conductance. Flexible switching permits all testing tubes regardless of location of the elements on the base. Checks ballasts and voltage regulators. Built-in roll chart. Fused on front panel. Portable carrying case, 12½x18x5½".

57.13 Model R200 BP. For the first time

Model R200 BC. Same as above, but housed in attractively stylod sloping counter cabinet. 14x11½x5%. 

#### CONDENSERS TESTERS

#### SPRAGUE TO-3 TEL-OHMIKE



Speedy check locates open, in-Speedy check locates open, intermittent, or shorted condensers without removing them from the circuit. Direct reading dial, color coded to selector switch. Measures .00001 to 2,000 mfd. in 4 ranges, power factor from 0 to 50% at 60 cycles, 0 to 2,500 megohms insulation resistance. 2.5 by the 125 measures are the condense of the cond

ohms insulation resistance. 2.5 ohms to 25 megohms in 3 resistance ranges, and DC voltage in three ranges to 750 volts. DC milliamperes measured to 75 MA. in three ranges, Capacity and power factor of electrolytic condensers measured with rated polarizing voltage applied. Electrolytic leakage measured in MA. at rated DC voltage. For 115 volts, 60 cycles. 13½ x 10 x 5%.

#### JACKSON CONDENSER TESTER



JACKSON CONDENSER TESTER

Model 650-A. Push-button control gives fast, positive range selection for capacity and leakage test of electrolytic, paper or mica condensers. 4 ranges: 0,0001 to 1000 mfd. Scale expander provides two scale ranges for each push-button range. "Magic Eye" assures positive indications for both capacity and leakage tests. New principle gives positive leakage indication without bother of counting flashes or other inaccurate methods. Test voltages: 20, 100, 200, 300, 400, or 500.

Measures power factor on direct reading scale. Range calibrated from 0 to 60%. Dimensions: 8½x8½x6".

53.41

#### TEST EQUIPMENT CORNELL DUBILIER



#### C-D "BF-50" ANALYZER

Wein bridge with visual "eye" and power supply for leakage and insulation tests. Measures paper, mica, air and electrolytic condensers, from .00001 to 240 mids. Measures power factor, tests for shorts. With tubes. Walnut portable case, 6½" x 12" x 9%".

25N21727-Shpg. wt. 11 lbs. 41.80



#### C-D"BN" CAPACITOR BRIDGE

Measures accurately and quickly all capacitors between .00001 and 50 mids. Wein bridge circuit, with visual "eye" to indicate balanced condition. Direct reading scale. Uses 12A7 and 6AF6G. Indicates power factor, shorts. 3-5/8"x5"x3". For 110 volt, 60 cycles.

25N21728-Shpg. wt. 4 lbs.. 19.50



#### C-D CAPACITOR DECADES

Use with "BN" Capacity Bridge. Calibration chart with each. Rating: 600 volt DC; 220 volt AC; Tolerances available: 73% or \*5%. Bakeilte case. 3-5/8x5x3". 4 lbs.

25N21729 — To .011 mfd. in .0001 mfd. steps (5%)3.33 .25N21730 — To 1.1 mfd. in .01 mfd. steps (5%)....8.33 .25N21731 — Same except 3%....11.76 .25N21731 — To 10 mfd. in .10 mfd. steps (5%)....17.15

1.0 mfd. steps (5%)....17.15 25N21752 -- Same except 3%....19.11

### FM-TV SWEEP SIGNAL GENERATORS

#### RCA TV SWEEP GENERATOR



Model WR-59A. Frequency modulated TV sweep alignment genera-

model WR-59A. Frequency modulated TV sweep alignment generator—generates signals of fundamental frequency on all ranges:
12 TV RF channels, picture and sound IF, video (100 KC-10 MC), picture IF (2 bands: 5-15 MC & 20-30 MC), standard FM intermediate (10-11.5 MC), and spare 25-40 MC channel. Sweep width continuously variable. Output cable termination will match balanced or unbalanced lines. Unit develops a sweep frequency signal for a scope; a phasing control is provided. Return-trace blanking produces zero reterence line for me a surement of instantaneous voltages. Output impedance: RF, 150-0-150 ohms; IF and Video, 100 ohms. Output voltage. IV on all frequency ranges. Operates on 105-125 volts, 50/60 cycles AC. Blue-gray finished case measures 10x 13/x 7½. The unit is supplied complete with RF and IF/VF output cables.

25N21669-Shpg. Wt: 35 lba. 325.00

#### RCA TELEVISION CALIBRATOR



Model WR-39A. A rugged, portable service instrument that includes a marker signal generator, a dual crystal standard and a heterodyne frequency meter with built-in audio amplifier and speaker for zero best indication during scale calibration. This precision signal bed indication during scale carboration. This precision signal source generates marker frequencies for alignment of TV and FM receivers. The marker VFO operates on fundamentals. Continuous

ates on fundamentals. Continuous coverage frequency ranges: 4 bands from 19 to 110 MC and 2 bands from 170 to 240 MC. Two crystal oscillators are provided: primary standard operates at 2.5 MC and modulating standard at 25 MC. Output impedance 100 ohms; output voltage. 11 RMS. Blue-gray Hammeroid finish case measures 10x13½x7½°. Operates on 105-125 Volts, 50/60 cycles AC. Shpg. Wt. 22 lbs.

#### JACKSON TV-FM SWEEP GENERATOR



Model TVG-1. Complete, self-contained test instrument that requires only addition of an oscillograph for visual alignment of TV and FM radios. Coverage: 2-216 MC in 3 ranges: 2-12 MC, 12-108 MC, 174-216 MC all on fundamentals. Designed for accurate alignment of RF, Oscillator, IF and Trap Circuits. Sweep width adjustable from 100 KC to 12 MC. Built-in marker generator and cry-

adjustable from 100 KC to 12 MC. Built-in marker generator and crystal calibrated oscillator. 400-cycle modulation. Accurately calibrated, large dial with range coding for easy identification. TV channels and FM band clearly marked. For 105-125 V., 50/60 cycles AC. Finished in attractive two-tone grey and red case measuring 12½ x 7½ x 19\*\*. Supplied with coaxial type RF output and scope horizontal timing leads.

#### SILVER FM-TY SWEEP GENERATOR



Model 911. Designed specifically for visual alignment of wide band IF and RF amplifiers in FM and TV receivers when used with any good oscilloscope. Unit includes two built-in crystal marker oscillators individually adjusted to exactly land 5 MC. Markers are essential to correct alignment of TV receiver, video IF amplifiers. Amplitude of markers is variable to provide proper "pip" strength for circuit under est. Coverage: 2 through 226 MC In 3 ranges (2-77 MC; 60-154 MC; 151-226 MC) — no band switching required. This feature is achieved by a fixed frequency oscillator that beats its 114 MC signal with output of a 37-112 MC VFO to produce frequencies for all 3 ranges. Output voltage variable from 0 to ½ V. maximum; output impedance variable from 5-125 ohms. FM sweep variable from 0-10 MC. Supplied complete with tubes, marker oscillators, coaxial cables, ground clip lead, and 6-ft AC cord and plug. Operates on 105-125 volts, 50/60 cycles AC.

25N21546—Shpg. Wt: 14 lbs. 78.50

MORE FM-TV SWEEP SIGNAL GENERATOR ON

LOWER HALF OF FACING PAGE

HICKOK TV ALIGNMENT GENERATOR



Model 610A. A new model universal TV generator that replaces separate sweep generator, marker generator and crystal calibrator used in ordinary TV testing. Supplies signal to visually align a TV set to any of 12 channels from 44 to 216 MC. Frequency range 10-250 MC, directly calibrated on dial and readable to .5% accuracy. Variable sweep width 0-15 MC. Sweep frequency ranges: 0-40 MC, 35-75 MC, 75-115 MC, 150-230 MC. Self-contained markers (20-30 MC and 30-40 MC) readable directly on dial to .05 MC. Special generator included provides IF frequencies. Standby switch shuts off all B+ so generator tubes can be kept on. Output voltage: .75 V. maximum. Blue Hammertex finish case with satin chrome finish panel 14 x 16½ x 8". Shipping Weight: 31 lbs.

#### HICKOK MICROVOLT SIGNAL GENERATOR



Model 292X. New popular priced generator covers both upper channel TV and mobile band frequencies — on fundamentals. Fundamental frequency coverage: Bands A through G, 125 KC to 110 MC; Band H, 150-220 MC. Modulated and ünmodulated output calibrated from 1 to 100,000 microvolts. Self-contained crystal oscillator circuit has front panel jack permitting crystal outputs from 250 KC to 20 MC on fundamentals; and to 250 MC on harmonics. Modulated from 1 to 100,000 microvolts, 30 KC to 20 MC on fundamentals; and to 250 MC on fu

#### HICKOK TV CROSS HATCH GENERATOR



Model 620. New, crystal controlled linearity pattern generator for rapid servicing in borderline areas where broadcast reception is unpredictable. Provides means for checking and aligning horizontal and vertical linearity and drive controls, horizontal and vertical width, height and hold controls, horizontal AFC circuits. Stable video pattern consists of 12 vertical lines and 8 or 9 horizontal lines for faster alignment and trouble shooting. Checks relative receiver sensitivity. Output frequencies: 4 chamnels, 2-5 inclusive; only one is necessary for servicing. For 105-125 V., 60 cycles AC. Blue hammertex steel case. Model 620. New, crystal controlled

essary for servicing. hammertex steel case

#### FM-TV SWEEP GENERATOR



Newly designed model embodies the latest in engineering design, precision accuracy and simplicity of operation. Complete FM & TV frequency coverage of 2 to 227 MC on 3 bands. Sweep width 500 KC to 10 MC. Dial calibrated directly in frequency, no mental calculations necessary. Maximum output 500,000 microvolts. Bullt-in power line filter or pure RF. Steel cabinet finished in gray wrinkle enamel. 105-125 volts 50-60 cycle AC. Newly designed model em

#### Precision Sweep Signal Generator



Model E-400. Specifically engineered for TV and FM. Direct reading from 2 to 480 MC in 7 bands without skip. Harmonically calibrated from 240 to 480 MC. Narrow and wide band sweep to 10 MC and 0-10 MC are continuously adjustable. Wide range phasters are to the formula to the control for horizontal sweep. Has

ously adjustable. Wide range phasing control for horizontal sweep. Has built-in multiple crystal marker—calibrator holds 4 crystals at once. 10.7 motory band switch eliminate coil switching. 6½" etched aluminum 1500 point vernier tuning dial. Portable copper plated case with aluminum panel. Size: 10½x12x6". Complete with 2 crystals and test cables.

25N21701—Shap. Wt. 18 the

### AM-FM SIGNAL GENERATORS

SILVER FM/AM SIGNAL GENERATOR



Eight fundamental ranges, direct frequency calibrated to 1% accuracy, 90 KC through 170 MC. RC audio oscillator provides 400 cycle AM modulation, variable from 0 to nearly 100%. FM 90 KC through 210 MC with built-in electronic FM sweep variable from 0 to 500 KC. Output continuously variable from less than 1 microvolt, to over 1 volt. Metered position ladder attenuators; complete multiple shielding, 4 section line filter, colls mounted in rotary turret. 10:1. vernier dial. Permits design and service of AM and FM receivers by aural, meter or visual diignment

In rotary turiet. 10:1. verniet atal. Permits design and service of AM and FM receivers by aural, meter or visual alignment methods. Complete with 105/125 volt, 50/60 cycle built-in mains-isolating power supply, tubes, output cable and terminal box, 6 ft. cord and plug. Size: 12 3/8" long, 7 3/8" high, 5 3/8" deep. In grey steel cabinet with leather carrying handle. Shpg. Wt: 14 lbs.

#### PRECISION MODEL E200C



Units are individually hand calibrated to better than 1% on all 8 bands which range from 88 KC. to 120 MC. Fundamentals to 30 MC. Direct reading, no charts needed. Large full vision 6½" noglare dial with a 0-1000 point vernier scale allowing direct reading to one part in 1000. 400 cycle sine-wave audio oscillator provides modulation and external test signal from zero to 50 volts. Complete shielding including electrostatically shielded transformer and AC line is RF filtered. 0-100% modulation control more than triples signal utility. 110-volt, 50/60-cycle Black ripple finished, heavy gauge portable steel case. 10½x12x6". Shpg. Wt. 20 lbs.

Black ripple finished, heavily 10%x12x6". Shpq. Wt: 20 lbs.

#### NEW JACKSON TEST OSCILLATOR



Model 106. Standard AM type for testing AM and FM sets. Also as a marker generator for AM, FM and TV sweep generators. Fundamental freq. from 100 KC to 32 MC. Harmonics 28 MC to 120 MC. Two-circuit attenuator for controling signal strength. 400-cycle modulated signal or straight CW. Acquiracy: 40 ft 1%. CW. Accuracy: 1/2 of 1%.

25N21692

#### HICKOCK FM-AM GENERATOR



Model 288X. High degree of accuracy for servicing AM, FM and television equipment. Fundamentals used throughequipment. rundomentals used through-out entire range of 100 KC to 110 MC on AM output and 100 KC to 160 MC on FM output. Variable audio output: 0-15 KC is produced by heterodyne type oscillator. Decibel meter provides convenient means of measuring power

convenient means of measuring power and voltage and determining resonance in alignment work. A 100 KC and 1000 KC crystal controlled signal, accurate to 0.01% unmodulated or modulated at 400 cycles is available. By using harmonics of the crystal controlled oscillator, accurate signals up to 125 MC are obtained in multiples of 100 KC and 1000 KC. Complete with all tubes, necessary cables, instruction macnual. For 110 volts, 50/60 cycles. 14x16/x28°. Satin chrome finish panel and blue baked lacquer finished case. Singa, Wt. 30 lbs. chrome finish po Shpg. Wt. 30 lbs.

25N21455.....

#### AM SIGNAL GENERATOR



Here is a low-priced, precision manufactured product for laboratory technicians and radio servicemen. An extremely stable signal generator covering long wave, broadcast and short wave frequencies. RF from 100: short wave trequencies. RF from 100; KC to 25 MC in six bands of fundamentals and 19 MC to 75 MC in two bands of harmonics. Internal modulation of 440 cps variable from 0 to 100%. New RF and AF oscillators of highly stable design. Operates on 110 volts, 60 cycles AC. Dimenons: 8 x 10 x 12". See adjoining page for companion FM-V Sweep Generator. Shpg. Wt: 19 lbs.

#### SILVER GRID DIP ADAPTOR



New, tubeless electronic device allows direct measurement of all tuned circuits: RF, IF, etc., quickly and simply without the receiver being tumed on. Checks all oscillators, antenna systems, transmitters, trapcircuits—without mechanical coupling. Determines value of all coils and condensers. Requires no power supply or tubes; two simple connections permit quick attachment to any signal generator. Coverage: 100 KC through 300 MC by use of 3 calirated plug-in coils. Supplied with phone jack, coils and probe.

#### TRIPLETT FM-TV GENERATORS & MARKERS

#### TV-FM SWEEP GENERATOR



Model 3434. A new sweep signal generator with built-in markers for complete TV & FM servicing. Precomplete IV & FM servicing. Pre-cision engineered and designed for continuous coverage to 240 MC, Mar-ker frequency for IF 19.5 to 40 MC; for FF and Oscillator 57-240 MC;



#### TV-FM SWEEP GENERATOR

Model 3435, Here's a low cost, high quality sweep signal generator designed especially for the service engineer who has his own provision for an external marker (any good AM generator). Provides continuous range coverage to 240 MC for all TV carrier and IF frequencies. Sweep center frequency on three ranges: 0-60 MC, 60-120 MC, 120-240 MC, Continuously variable sweep width effective from 500 KC to 12 MC, with OFF position. Main frequency dial marker generator can be connected to the circuit under test through the panel connector. Metal case, with black sweeb baked-on enamel finish, measures 15-11/32 x 11-1/32 x 61/2. Has leather handle and copper plated feet for better grounding. For 105-115 volts, 50/60 cycles AC. Shpg. Wt: 24 lbs. Complete with leads and Tubes.

#### TV-FM ABSORPTION MARKER



Model 1235. Two ranges (10 MC to 27 MC and 17 MC to 50 MC) provide complete coverage of all present TV and FM, IF frequencies, plus provision for future additions. Can be used with any sweep generator as an external marker. Connects easily and quickly to curcuit under test through a panel connector. Provides control of marker dip ampliques leading to the following control to the footber for the control of marker dip ampliques to the footber of the foot tude. Includes co-axial cable for low-loss connection to sweep generators. Metal case with black suede baked-on enamel tinish measures 7 7/8 x 6 5/8 x 6 5/8". Shpq. Wt. 7 lbs. 24.01

#### TV-FM CRYSTAL MARKER

Model 1236. Companion unit for model Model 1236. Companion unit tor model 3435 above receives power by plugging into jack of 3435. Provides marker frequencies of crystal controlled accuracy for TV and FM, IF or RF requirements. Coverage up through 19 MC on crystal fundamentals; up through 216 MC on crystal harmonics. For faster checking of bandens characteristics of curves. of bandpass characteristics of curves, merely throw the switch to the desired crystal. Metal case, with black suede x 6 5/8 x 6 5/8°. Has metal handle. Shipping Weight 7 lbs.

25N21623-Less Crystals......19.11

### **VACUUM TUBE VOLTMETERS**

#### McMLIRDO SILVER VOMAX UNIVERSAL VTVM



#### MULTIPLIER PROBE FOR VOMAX VTVM



Converts Noiels 900 and 900 A V max VTVM to a TV Kilovoltmeter. Safe, direct meter resilings from 1/10 volt to 30,000 volts DC. Heavy duty methacrylate construction built for long life and hidd usage. Attaches easily and readily with plug-in tips. Each unit has been thoroughly tested in use assuring safety of operation.

25N21545 ..... 9.95

#### ELECTRONIC DESIGN V T VOLT-OHMMETER



Model 100. Extreme care in matching and choice of component parts has resulted in a high gadlity test instrument. DC ranges: 0-3/10/30/100/300/1000 vclts at constant input resistance of 11,000,000 ohms. Accuracy ±3%. AC ranges 0-15/30/100/300/1000 volts. 1000 ohms/volt sensitivity with accuracy of ±5%. Electronic channeter ranges: 0-1000/10,000/100,000 ohms; 1/10/1000 negohms. Complete with signal tracer probe, test leads, batteries. Case Size: 9 5/8 x 6 x 4 3/4%. 110-120 V. 50-60 cyc. AC. Chpg. Wt. 11 lbs. Model 100. Extreme rare in matching and

25N21710 .....

Ediprobe. Use with any VTVM. Permits use of high resistance DC scale to measure BF voltages with response of 60 cycles through 100 MC without loading circuit. 

#### VACUUM TUBE VOLT-OHM-CAPACITY METER



Electronics Measurements Model 300, New

#### HIGH FREQUENCY KILOVOLTYST



New, high voltage VTVM-aniOhmmeter with high frequency probefor TV servicing. DC Ki'ovolts:
0-10!/30M volts: AC Hanges:
0-10/30/100/300/100Cvolts: DC
Rang-s: 0-3/30/100/300/100V
volts; AC Hanges:
0-10/30/100/300/100V
volts: 3 Onn meter
Hanges: 0-1M/10M/100M ohms,
0-1/10 meys ani 0-1000 megs.
Maximum drain of 20 microamps
at 10 and 30 KV. HF frequency
response: 300 cycles to 300 MC.
Al input impedance 1 megolun/
strengency signal tracin; probe; davanced type Alnico 5 seven-inch meter, title 1 or easy readin;; separite high and
low voltage test leads. Dridge and lifter circuit meter individually calibrated for use with set of test leads, DC leads,
RF probe and batteries. High voltage test leads also provided. For 110-120 volts, 50/60 cycles AC. Housed in copper colored steel case incasuring 12 x 6 x 9". Shipping Wt.
15 ibs.

25N21517-Complete with High Frequency Probe. 150.00

#### RCA VOLT OHMYST

Model 195-A. Constant protection a-gainst meter burn-out. Ranges: 0-5/50 100/500/1000 DC volts at input impe-100/500/1000 DC volts at input impedance of 10 megohms; 0-5/10/50/1005 500/1000 AC volts on linear scale; 0-1000/10,000/1



25N21771...... 79.50

WV-65A. Same as above model except battery operated. AC voltmeter is 1000 ohms/volt and reads DC milliamps to 300 in five ranges. Also 0-10 amps DC. Batteries last up to 10 months with normal use. Hus isolating resistor in DC probe for measurement of DC voltages in high impedance AC circuits. Complete with batteries and leads.

25N21776-Shipping Weight: 10 lbs......59.50

#### RCA MASTER VOLTOHYMST





RCA crystal probe for converting DC circuit of any VoltOhmyst to read AC so RF voltages up to 100 MC are indicated lirectly on DC scale.

25N21775 - Shpg. Wt: 2 lbs.... 8.95

#### RCA MULTIPLIER PROBES



extends DC voltage range of RCA Volt-hayst 195, 195A and Chanalyst 170A to 30,000 volts, Mrasures DC voltages in 'V sits, K-ray machines and other high voltage tevices. Usevoltages in "V sets, X-ray machines and other high voltage levices. Use-lui in measuring output voltage of pulse-operated and RF power supplies and other high resistance voltage sources. 25N21695-..... ...15.95

Same as above but for all other model RCA VoltOhmysts and Chanalysts.

25N21697-.....15.95

#### HICKOK LABORATORY VTVOM

Model 209A. Measures any no sistance, capacitance, AC, IF and info voltages from 30 cycles to 300 MC, DC voltages, MMS and peak to peak voltage 



PR30 PRODE. Voltage nultiplier probe, Increases range of either of above to 30,000 volts DC.

### MULTITESTERS

#### SIMPSON MODEL 260 PORTABLE TESTER



Plack bakelite roll top safety case prevents injury or duninge to meter or tester. Accurate full scale readings. Ranges: Volts AC and DC 0-2.5/10/50/250/1000/5000 at 20, 2000 ohms/volt DC and 1000 ohms/volt AC. Output AC volts 0-2.5/10/50/250/1000/5000. DC microamperes 0-100, milliamps 0-10/100/500. DC amps 0-10. Decibels in five ranges from -10 to 452 db. itessistance 0-2000/200,000 ohms and 0-20 megohnis, center scales 12/1200/120K. All ranges controlled by a single rotary switch. Polished black case with roll-top cover. 5/x7x3". With test leads. Plack bakelite roll top safety case

#### TRIPLETT MODEL 630 MULTITESTER



Black molded plastic case with 5½ inch hed-Dot 50 microampere meter movement. Inch past: C-3/12/60/300/1200/6000 volts LC at 26,000 chms/volt. 0-3/12/60/300/1200/6000 AC V. at 5,000 chms/v. Direct reading of six decibel ranges from -30 to +70 db. 0-60 DC microamperes. 0-1.2, 12/120 DC milliamperes, 6-12 DC amperes. Hostistance: 0-1000/10,000/1 meg/100 meg, with centre scales of 4.4/44/4.4 K/440K. Condenser in series with AC voltage ranges. Single rotary switch. 3-7/32x5½x7½". With batteries and test leads. leads.

Black leather carrying case, Space for accessories, 25N21620—Shipping weight 3 lbs..... Multiplier probe to read up to 12,000 V DC on above. 25N21494—Shipping weight 2 lbs. 14.21 Multiplier probe to read up to 12,000 V DC on above. 25N21495—Shipping weight 2 lbs. 19.11

#### TRIPLETT LAB MODEL 630A MULTITESTER

A new, deluxe model multitester similar to the Triplett 630 A new, deluxe model multitester similar to the Implett 630 described above, but designed for laboratory use. This fine instrument features a hand drawn, mirrored scale for taking readings that are accurate to 1%. Further accuracy is assured through the use of special resistors with a tolerance of only ½ of 1%. Sturdy, black molded plastic case measures 3-7/32 x 5½ x 7½ . Complete with batteries and test leads.

#### CHICAGO MULTITESTER



Model 371. Strictly :1 C meter, its ranges are as follows: 0-3/15/30/300 volts, 0-25 milliamperes and a resistance scale of 0 to 10, 000 onns. Operates on 2-flashight cells, included. 1-7/8" x 03," x 3-7/8".

Model 312. For both AC and DC volts 0-25/50/125/250; Milliamperes; 0-10; up to 100,000 ohms. Plack bakelite case.

#### SUPERIOR MODEL 670 SUPERMETER



Combination volt-ohm milliammeter.

#### PRECISION SERIES 85 TESTER



Six AC, Output and DC voltage ranges: 0/3/12/60/300/1200/6000; DC ranges at 20,000 ohms per volt, AC and output at 1000 ohms per volt. 6 DC current ranges: 0-120 microamp, 0/1.2/12/120 MA; 0/1.2/12. Amp. Hesistance ranges: 0-6000/600M ohms, 0/6/60 megs. 6 DB: -26 to +70 db. Flotary range selectors for all standard functions. In modded bakelite cuse with plastic handle. 5:x7-1/8x3". Complete with ohmmeter Litteries is.

Dimensions: and test laids. 

Series 80, 1000 ohms/volt, 10 meg. res, 400 microampere 

#### NEW TRIPLETT 666R MULTITESTER



Model 666R. A new, precision manufactured pocket tester that provides a complete laboratory for voltage, rerigitured pocket tester that provides a complete laboratory for voltage, resistance and direct current checking. Beautiful streamline design with flush pamel controls. HED-DOT lifetime quaranteed 3" meter, 0-200 microamps. AC & DC Voltis: 0-10/50/250/1000/5000 at 1000 ohms/volt. DC MA: 0-10/100 and 0-1 amp. at 250 MV. Ohms: 0-3000/300,000 (center scale 20/2000); 0-3 megs (center scale 20/2000); 0-3 megs (center scale 20/2000); Negs (center scale 2

#### TRIPLETT MODEL 666HH MULTITESTER

Similar to Model 666H described above except for 0-200 microamp meter and following differences in ranges: 0-10/100 DC milliam.pre range and 0-2000/400,000 ohas with 12/2400 center scale, rias no megohn, on DC amp, ranges. All normal functions available from two language with a special 5000 V. Jack. Supplied complete with batteries, 50° test leads, clips and plags.

Black leather carrying case for Triplett Models 666R or 666Rh testers. 25N21577.......4.65

#### TRIPLETT ELECTRIC ANALYZER



Model 625NA. L'ulti-range, dual sensitivity. 6" meter with mirrored scale. R inges: DC volts 0-1.25/5/25/125/500/2500 at 20,000 ohms/volt, 0-2.5/10/50/250/100/5000 at 10,000 ohms/volt. AC volts 0-2/5/10/50/250/100/5000 at 10,000 ohms/volt. DC microaps 0-50, DC rullings 0-1/10/100/1000, DC mps (-10. Resistances 0-2000/200,000 ohms/40 n.e.js. DL ranges -30 to 459 db. Portable case, size 6x5/x2<sup>1</sup>/<sub>2</sub>". With test leads. Model 625NA. ! 'ulti-range, dual sensi-

Black leather arrying case. 

#### RCP MODEL 447 MULTITESTER



1000 ohms/volt. DC volts: 0-5/50/250/500/2500. DC ma: 0-1/10/100/1000. DC amps: 0-1/10. AC volts: 0-500/1000. Ohms: 0-500/100M/1 Meg. DB -8 to +55 db. Output ranges same as AC volts. Open-face hardwood case, test leads, battery. 3x8½x5″.

25N21722-Shpg. wt. 4 lbs.17.59 Model 447P, in portable hardwood 25N21721-Shpg. wt. 5 lbs.....21.51

### OSCILLOSCOPES

#### **DUMONT 5-INCH OSCILLOSCOPE**



Model 208B. Calibrated removable scale. Frequency range: Y-axis, ±10% from 2 to 

#### DUMONT 5-INCH OSCILLOSCOPE



Model 274A. Amplified Sweep Circuit over continuous range from 20 to 50,000 cycles. Input Impedance: Horizontal, 5 megohms: Vertical, 1 megohm. Deflection sensitivity: Max. vertical 0.65 RMS volt/in.; horizontal 0.65 RMS volt/in. Input signal may be applied to the vertical plates either directly or through the vertical amplifier through a switch provided on the front panel. Internal modulation of the horizontal beam is provided for by a separate terminal. Horizontal amplifier may be switched to either sweep signal. All-metal case finished in black wrinkle enamel. Leather handle. With scope tube grid safety plate. For 115 volts, 50-60 cycles. 14 x 8-5/8 x 19-3/8°. Shipping Weight: 35 lbs. Model 274A. Amplified Sweep Circuit

#### HICKOK 5-INCH OSCILLOGRAPH



Model 505A. Wide band vertical amplifier from 30 cycles to 1 MC. Horizontal amplifier 10 cycles to 50 KC. Deflection sensitivity .03 volts RMS/inch on vertical .2 volts RMS/inch on horizontal, 15 volts RMS/inch on horizontal direct. Input impedance is 1 megohm, 25 mmf. on horizontal Built-in Wide and Narrow-Band FM oscillator, 3-range frequency compensated attenuator network. Demodulator permits modulated RF signal to be viewed. Signal tracer phone jack. Self-contained mixer circuit for FM output with amy good signal generator. Return trace eliminator speeds up FM and AM FM oscillator modulation circuit permits internal or external FM oscillator modulation. Sinusoidal sweep with phasing control. Light.shield. Dimensions: 14" x 11½" x 19". Shipping Weight: 35 lbs. Model 505A. Wide band vertical amplifier

#### HICKOK 5-INCH OSCILLOGRAPH



Model 195B. Sinusoidal sweep with phasing control. Wide range sweep circuit oscillator. Deflection sensitivity, Vertical: .03 volts RMS/inch, direct 15 volts RMS/inch. Horizontal: .15 volts RMS/inch, direct 20 volts RMS/inch. Vertical amplifier 30 cycles to 1 MC. Horizontal amplifier 10 cycles to 50 KC. All input terminals at front of panel for convenience. Input impedance: Vertical: 1 meg., 25 mmf. Direct: 2.2 meg. Horizontal: 4 meg., 35 mmf. Direct: 2.2 meg. Light shield and calibrated screen. Blue Hammertex steel cabinet with metal handle. 105-125 volts, 50-70 cycles. 8-5/16 x 18-1/2 x 13". Scope tube cradled in rubber. With tubes. Shpg. Wt: 30 lbs.

#### NEW RCA 5-INCH OSCILLOSCOPE

Model WO-58A. Expressly designed for ser-

Model WO-58A. Expressly designed for servicing TV receivers. Gives accurate presentation of synchronizing pulses, deflection waveforms and composite video signals. Step by step tracing of defective signals. Vertical amplifier flat from 5 cycles to 2 MC. Horizontal amplifier ±10% from 6 to 100,000 cps. Deflection sensitivity vertical amplifier: 0.5 peak to peak V./inch. Input impedance: 1 mea/62 mmid. Tilt and overshoot on square wave response, less than 2% from 30 to 50,000 cycles. Peak-to-peak voltages can be read at all times during operation. Vertical range control is graduated in suitable voltage intervals, and a calibrating voltage source is provided. Supplied with crystal probe for use in kinescope socket of set under test. 5UP1 Cathode-ray tube easily and quickly replaced without tools. Blue-grey Hammeroid finish case measures 13½ x 9½ x 19-13/32°. For 105-125 volts, 50/60-cycle AC. Shipping Weight: 40 lbs.

345.00

#### SIMPSON FM-TV GENESCOPE

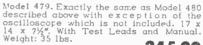


Model 480. A combination sweep signal generator and oscilloscope that pro-vides all necessary signal sources for proper alignment and servicing of FM and TV receivers. Equipped with high

and TV receivers. Equipped with high frequency crystal probe for signal tracing. Continuously variable attenuator. Both oscillator dials have 20-1 vernier control and 1000 division logging scale. FM oscillator ranges: 2-120 MC and 142-260 MC. Sweep width variable from 0 to 15 MC at a rate of 60 cps. AM oscillator: 3.5-15 MC, 15-70 MC and 75-250 MC. 30% modulation at 400 cycles or unmodulated. 5 MC crystal calibrator ±.05%; audio oscillator 400 cycles. Output impedance 75 ohms. Also features step attenuator for control of output. Handles on either side of case facilitates carrying. Dimensions: 22x14x7½". Supplied with test leads. Shipping Weight: 48 lbs.

25N21519-With Operator's Instruction Manual... 375.00

#### SIMPSON TV-FM SIGNAL GENERATOR





#### PRECISION 5-INCH OSCILLOSCOPE

Model ES-500. Excellent performance, visibility and operational flexibility at a moderate cost. Meets the needs of AM, FM and TV servicing work. Response, both amplifiers, from 10 cycles to 1 MC. Linear sweep circuit 10 cycles to 30 KC plus line or external sweep. Vertical amplifier deflection sensitivity. 02 volts/inch. 2 megohms input resistance and 22 mmfd capacity. Extended range horizontal amplifier with .5 volts/inch deflection sensitivity. Also features step attenuator plus continuously variable gain control in cathode follower input stage. ½ meg input resistance and 20 mmfd capacity. Has sweep phasing control for sinuscidal line sweep usage; wide angle bridge circuit. Heavy gauge aluminum panel with removable and rotatable light shield and mask. Black ripple steel case measures 8½14½x18². Shipping Weight: 35 lbs.

25N21521—Complete with Instruction Manual ...... 146.51

25N21521-Complete with Instruction Manual ..... 146.51

#### NEW JACKSON OSCILLOGRAPH



Model CRO-1. Here is an oscillograph that Model CRO-1. Here is an oscillograph that gives you wide or narrow range, and high or reduced sensitivity with the flip of a switch. This fine instrument is perfectly suited for labs and servicemen. 4.5 MC band width for observation and measurement of pulse wave forms. Vertical amplifier .018 RMS volts/inch on narrow band; horizontal amplifier .55 RMS volts/inch. Input impedance 6 megs/11 mmfd direct balanced; unbalanced 3 megs/22 mmfd. Horizontal amplifier 1.5 megs. Response on vertical amplifier 20 cycles to 4 MC ±1.5 db, easily usable to 5 MC. Saw tooth sweep frequency 20 cycles to 50 KC in five steps. Size: 10x12/4x 5". Shipping Weight: 42 lbs.



#### RCP SCOPE & SWEEP GENERATOR

Model TV90. Combines a complete oscilloscope Model TV90. Combines a complete oscilloscope and sweep generator into one con.pact unit for all TV testing, alignment and service. Variable linear sweep circuit from 10 to 45,000 cps., and a sensitivity of .285 RMS volts/inch vertical and .32 RMS volts/inch horizontal deflection. Input resistance 1 meg/20 mmfd. Sine wave response, uniform from 5 cycles to 200 FC with \*2 db. Frequency range of independent sweep generator 1.5 to 45 MC with choice of from .5 KC to 7 MC. For 105-130 V., 50/60-cycle AC. Supplied complete with tubes, probe, coaxial output cable and operating instructions. Hammertone grey case: 14 x 8 x 12½\*\*.

operating x 121/2".



#### **EICO 5-INCH OSCILLOSCOPE**

Low cost quality scope for general AM, FM and TV servicing. Deflection sensitivity: .65 and TV servicing. Deflection sensitivity: .65 V./ inch full gain. Horizontal sweep circuit 15 to 30,000 cps. Horizontal and vertical amplifiers 50 to 50,000 cps. 110-130 V., 50/60 crcles AC. 8/x13x17". 30 lbs.

Same as above in Kit Form 32N24552-NOTHING ELSE TO BUY 39.95

### INDUSTRIAL & SPECIAL TEST EQUIPMENT

#### PORTABLE GEIGER COUNTER



Keleket "Snooper". Earn the \$10,000 government bonus for discovery of ore having a content of .05% U308 with this complete, portable counter. Responds to radiation from radio-active materials. Designed for locating new deposits of carnotite, pitchblende, curite, or other radio-active materials; Uramium can be found even when covered with thick overburden. Highly sensitive to both beta and gamma rays. Small and compact it measures only two ordinary flashlight batteries are used for power. Battery life exceeds 50 hours. Uses single or double headphones, magnetic type, 1000 to 24,000 ohms impedance. May be connected to P.A. system for classroom demonstrations. Less phone, Shipping Weight: 3 lbs.

25N21635.



Model 185A. Permits the simultaneous observation, for purposes of comparison, of two or more independent signals on the screen of a single cathode ray oscillograph. Square wave signals may be used in studies of vacuum tube amplifiers and other networks over a range of 10 to 500 c.p.s. Switching rate 10-2000 times per second. Input resistance 100,000 ohms. All controls and connections on front panel for convenience and ease of operation. Complete with tubes. Black wrinkle finish steel cabisciples only. Model 185A. Permits the simultaneous

DUMONT ELECTRONIC SWITCH

40-60 cycles only. 

#### DUMONT VOLTAGE CALIBRATOR



Type 264-A. Designed to measure the peakto-peak voltage of any signal viewed on any
commercial cathode-ray oscillograph. Its
square-wave output is continuously variable
from 0 to 100 volts in 4 ranges. By throwing
a selector switch, the signal to be measured
or any of 4 ranges of calibrating voltage is
applied to the input of the oscillograph, eliminating the need
to switch leads between signal and calibrating voltage. Amplitude measurements of any part of a complex, composite
waveform may be made. Range: 0-0.1; 0-1.0; 0-10; 0-10.0 V.
Accuracy: \*55% of full scale on each range. Input impedance:
20 mmfd. Overall dimensions: \*4½ "x8"x5%".

39.50

PLEASE NOTE: Just a reminder that our test equipment is available on our convenient TIME PAYMENT PLAN. This applies to orders for this merchandise whether listed here or not. Lafayette-Concord can obtain any piece of test equip-ment you desire, on special order. Write for full details and manufacturer's specifications on the items you want.

INDUSTRIAL AND SPECIAL TEST EQUIPMENT



#### **DUMONT 3-INCH OSCILLOGRAPH**

Model 164E employs 3APIA tube. Amplified sweep circuit over continuous range from 15 to 30,000 cycles. Input impedance vertically: 1,000,000 chms; horizontally: 800,000 chms. Maximum potential 400 DC volts. Deflection sensitivity: maximum vertical 0.80 r.m.s. volt/in.; maximum horizontal .065 r.m.s. volt/in. Handly deflection-plate terminals available at rear. Frequency range: vertical and horizontal amplifiers both unifrom 5 to 100,000 cycles. Horizontal ampliform 5 to 100,000 cycles. Horizontal ampliform 5

form within 20% from 5 to 100,000 cycles. Horizontal amplifiers may be switched to amplify either sweep circuit or external signal, so that Lissajou patterns for frequency determination may be used. In black wrinkle finish steel cabinet. Plastic scope screen. For operation on 115 volts, 40-60 cycles. Size: 11-5/8\*x7-3/8\*x14\*.

#### RCP HI-MEGOHM MULTITESTERS

Accurate high megohm range requires no batteries or tubes. Rectangular 4-5/8" meters provide excellent readility with ±2% accuracy. Output ranges correspond to the AC voltage ranges. Attractive natural finish, portable oakcases with leads. Case has removable hinged cover with latch and feather handle. Dimensions: 8-7/8x7-1/2x4-3/4\*. Wit 4½ lbs.

Model 450AP-1000. Ohms/Volt Meter.

Model 450AP-1000 Ohms/Volt Meter Sensitivity Ohmmeter: 0/5000/ 500,000, 0-50 megs; DC V.; 0-5/50/ 125/500/2500; AC V.: 0-10/100/250/ 1000; DC MA: 0-2.5/10/100/1000; db: -9 to +55.

25N21522.....

Model 450BP-5000 Ohms/Volt Meter Sensitivity
Ohmmeter: 0/5000/500,000,0-100 megs; AC & DC volt ranges
and decibels same as Model 450AP. DC MA: 0-.5/10/100/

25N21523......**27.93** Model 459CP-20,000 Ohms/Volt Meter Sensitivity
Ohmmeter: 0-5000; 0-5/1000 megs; AC & DC volt ranges and
db. same as 450AP; DC MA: 0-.1/10/100/1000.

#### SPECIAL **PROBES**

#### REINER TYPE "Z" MULTIPLIER PROBES



Multiply the DC voltage ranges on your present VTVM 100 times. Especially designed with connectors to fit models of test instruments listed.

Stock No.	Manufacturer	Mfrs. No.
25N21800	Electronic Design Reiner Electronics Superior Instrument RCA VoltOhmyst	100 450, 451 400 MV-65A, WV-75A, 165A, 165S, 165
25N21800 25N21800 25N21801 25N21802 25N21803 25N21803	Triplett Elec. Inst. Electronic Instrument Precision Apparatus	162, 162A, 162B, 162C 2450, 2451 MA-113A, 210, 221, 221K EV-10 195, 195A 170A

YOUR PRICE, For Each of the Above Types...... 12.69

#### FEILER SIGNAL TRACING PROBE



Type TS-6C. Use with any high-gain amplifier as audible tracer or oscilloscope or VTVM as Visual tracer. IN34 crystal. Measures up to 50 volts RF. Shipping Wt: 1 lb.



Hickok Crystal Demodulator Probe Type 34. Used with any oscilloscope to trace up to 500 MC modulated RF thru any receiver from antenna post to detector or discriminator.

25N21759-Shpg. Wt: 11b. ..... 8.40

#### MULTITESTER HV PROBES



For all VTVM & Multimeters. Measures HV in TV FM x-ray. Utilize lowest range on your meter scale, and multiply readings by 1000. Increases range of any 20,000 ohms/volt multitester to 30,000

volts. Increases range of any 5000 ohms/volt multitester to 30,000 volts. 25N21805......**10.73** Increases range of any 20,000 ohms/volt multitester to 25,000 volts. 25N21806......10.73 Increases range of any 5000 ohms/volt multitester to 25,000 volts. 25N21807......**10.73** 

#### **NEW HICKOK TV PROBE**



Model TVP-1. With this probe, circuit characteristics shown in set manufacturers service manuals can be viewed accurately without misaligning stages, especially where capacitances in ordinary cable would produce improper pictures. Input impedance 25 mmfd. Frequency response linear 20 cycles to 1 MC. Supplied with 4-ft. heavy duty cord and spade connectors. Light, easy to handle black and chrome probe 25N21696.

### **TEST EQUIPMENT "Build-It-Yourself" KITS**

TEICO HIGH QUALITY KITS



#### OSCILLOSCOPE KIT

Model 400K. 5" oscilloscope. An indispensable aid for AM, FM and Television servicing. Horizontal sweep circuit 15 to 30,000 cycles. Frequency response of vertical and horizontal amplifiers 50 cycles to 50 KC. Deflection sensitivity .65 volts per inch full gain. Input impedance I megohm and 59 mmfd. Provision for external synchronization, test voltage and intensity modulation. test voltage and intensity modulation. Complete with tubes: 2-6SJ7, 2-5Y3, 1-884, 1-5BP1. Linear sweep with 884 gas triode. Graph screen. Size: 8½ "Wx 13"Hx17"D.

25N21688-As above, but wired. Ready for use. .........69.95



#### VTVM KIT

VTVM KIT

Model 221K. A precision type vacuum tube voltmeter kit at a price everyone can afford. 4½" meter. All multiplier resistors matched to 1% accuracy. DC and AC volt ranges: 0-5/10/100/500/1000. Ohmmeter ranges: 2 ohms to 1000 megohms in steps Rx1, Rx10, Rx1000. Rx10,000 and Rx1 megohm. DB scale: -20 to +55 db in 5 ranges. DC input resistance 25 megohms. AC input impedance is over 1½ megohms. Size: 9-7/16x 6x5". Complete with tubes. 32N24540. Shop Wt. 10 ths

32N24540-Shpg. Wt: 10 lbs. .. 23.95

#### H. F. PROBE KIT



Model P-75K. Germanium crystal probe for visual RF signal trac-ing and measurements to over 200 megacycles. For use with the above oscilloscope

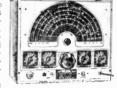


#### SIGNAL GENERATOR KIT

Model 320. Features highly stable Model 320. Features highly stable Hurtley oscillator with frequency range of 150 KC to 100 MC on 7 calibrated bands. Fundamentals to 34 MC. Can be modulated with pure 400-cycle audio supplied by Colpitts type oscillator included. Audio voltage can also be obtained externally. Simple to align. Handsome etched punel with easy-to-read calibrations. Complete with tubes. Ship-Weight: 22 lbs.  Build your own test equipment this practical, easy, money-saving way. Excellent for schools, laboratories, servicemen and hams. Instructions for step-by-step assembly and easy to follow diagrams, included in every kit. For other "build-it-yourself kits" see pages 125, 126 and 127.

#### FM/TV SWEEP GENERATOR KIT

A newstandard in FM and TV sweep generator performance. Features special Midline capacity tuning condenser. High frequency insulation throughout. Generator output can be denser. High frequency insulation throughout. Generator output cam be used as either frequency modulated or pure RF. Built-in power line filter. Sweep width 500 KC to approximately 10 MC. Frequency range covered in 3-bands: 2-77 MC; 40-154 MC; 151-227 MC. No bandswitching necessary. Tube lineup: 2-6SJ6, 2-6C4, 1-7Y4. Maximum output 500,000 UV. For 105-125 volts 50/60-cycle AC operation. Complete with tubes, cables, and heavy gauge steel cabinet, battleship grey crackle finish. Dimensions: 8x10x 12". Shpg. Wt: 25 lbs.



Same as above, but assembled and ready for use.

25N21736...... 34.95

#### MULTITESTER KIT IN PORTABLE CASE



32N24458-Shpg. Wt: 5 lbs. .13.45

#### FEILER SIGNAL TRACER KIT



Model TS-3. Electronic "stethoscope" that gets to the heart of radio troubles and a flash. Completely portable and AC operated. Uses biased diode dein a flash. Completely portable and AC operated. Uses biased diode detector probe. Does not upset the most critical circuits.5" PM dynamic speaker included. Makes addible all signals — 30 cps to 120 MC — RF, IF, Audio — without using special controls or tuning. Provision for output meter for silent tracing. Output connections to enable the use of an activation of the controls of

32N24565-Shpg. Wt: 22 lbs. Complete Kit...... 22.75 25N21778-As above, but assembled. Ready. For use...34.95

### SIGNAL TRACERS

#### SIGNALETTE SIGNAL TRACER



Vacuum-tube aid for signal tracing and quick check in alignment of sets. RF, IF and AF signals from 2500 cycles to 20 mc. Used for checking sensitivity, audio amplifier gain, and AVC. 

#### SIGNAL TRACER AND TEST SPEAKER

Silver model 905A. Effectively traces signals through AM, FM, TV sound and TV video R.F., I.F. and A.F. circuits. Built-in 18-watt output transformer and high-quality 6" PM speaker. Two panel knobs give instant choice of 30 transformer primary impedances. Speaker can also be used seperately. Probe frequency range: 20 cycles to 300 megacycles. Amplifier frequency range: 60 to 20,000 cycles flat to ±4½ db. Undistorted power output: 3.4 watts. Sensitivity: 50 microvolts for 50 milliwatt output. Probe capacitance: 2 mmfd. Probe input resistance: 2 megohms. For 105/125 volts, 50/60 cycles AC. Complete with tubes, probe 6 prod tips, 6-ft line cord. Silver model 905A. Effectively



#### PRECISION SIGNAL TRACER

AC operated portable tracer. Excellent for trouble shooting AM, FM and TV sound circuits from 30 cycles to over 100 MC. Seperate channel for audio frequencies. HF tube in probe with 2 the bit should be supposed to the separate channel for audio frequencies. 



#### FEILER APPLIANCE TESTER

Tests any appliance while in operation in a few seconds. Tells whether circuit is shorted, open or has correct resistance. Unique system of high indicators gives positive proof of condition of circuits. Operating from 95. dition of circuits. Operates from 95-125 volts DC and 25, 50 and 60-cycle AC, Tests any 95-125V. DC and 25, 50, 60-cycle electrical appliance.

Supplied complete with test leads, and a "Basic Course in the Fundamentals of Appliance Repair". Dimensions: 8 x 6 x

25N21516-Shpg. Wt: 10 lbs......18.95





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### PANEL METERS

#### TRIPLETT METER DIMENSIONS

Model	Flance	Body Dia.	*Body Depth
221-T, 241-T	.11 "	2 "	1 . "
	23 " .g.	2'+"	111111111111111111111111111111111111111
231-S 237-S	23,"	2'	14 ,"
321-T, 341-T	313"	23.7	15,"
327-T, 347-T	3" x 3"	231"	111 2
331-S	312" 3" x 3"	23/4"	1 7 7
337-S			1 1 -
* Indicate over	HI body del	ti. incli. iina	terr in ils.







#### SHURITE METERS

Model 550, round, with climit. Model 950, square, flange mounted. Both models require 2 \(\tilde{L}''\) hole

#### D.C. VOLTMETERS

	Model 5	٠.00	M del 950			
Range	No.	Each	No.	Each		
0->	25N11052	1.27	25N11010	1.42		
0 8	25N11055	1.27	25N11013	1.42		
0-10	25N11056	1.32	25N11014	1.47		
0-15	25N11057	1.37	25N11015	1.52		
0.25	25N11059	1.27	25N11016	1.42		
0.50*	25N11062	2.74	25N11019	2.89		
0-177	25N11063	1.47	25N11020	1.62		
0-150	25N11065	1.65	25N11023	1.81		
0-300	25N11067	3.18	25N11025	3.33		
0-500	25N11068	3.67	25N11026	3.82		

\* Indicate high resistance meter .

#### A.C. VOLTMETERS

0-15	25N11075	2.30	25N11031	2.25
0-150	25N11076	3.04	25N11032	3.18
0-300	25N11077	3.63	25N11033	1 3.77

#### D.C. MILLIAMMETERS

	MotT	350	Model 9	150
Ringe	No.	Each	No.	Each
0-3 0-5 0-10 0-15	25N11109 25N11050 25N11100 25N11101	1.96 1.81 1.71 1.32	25N11160 25N11150 25N11151 25N11152	2.11 1.96 1.86 1.47
0-25	25N11102	1.27	25N11153	1.42
0-10 0-100 0-150 0-200 0-300 0-100	25N11103 25N11104 25N11105 25N11106 25N11107 25N11108	1.27 1.27 1.27 1.27 1.27 1.27	25N11154 25N11155 25N11156 25N11157 25N11158 25N11159	1.42 1.42 1.42 1.42 1.42 1.42

#### D.C. AMMETERS

0-1		25N11091	1.27	25N11162	1.42
0-3	- 1	25N11092	1.27	25N11163	1.42
0-5		25N11093	1.27	25N11164	1.42
0-10		25N11094	1.27	25N11165	1.42
10.04	10	25N11098	1.27	25N11169	1.42
20-0-2	20	25N11099	1.37	25N11170	1.52

### A.C. AMMETERS

()-1		25N11081		2.30		25N I 1004	2.45
0-3	-1	25N11082		2.30		25N11005	2.45
C-5		25N11083		2.30		25N11006	2.45
0-10		25N11084		2.30		25N11007	2.45
0-50		25N11085	1	2.94	ļ	25N11008	3.09
	_						

#### RESISTANCE METER

Direct reading 10,000 ohm: 4.5 volt.: 25N11078.....1.76 25N11071 .....1.91

#### FLANGE FOR ROUND METERS 25N11041-284" Black Finish . . . . . Each 186



#### MARION MULTI-RANGER METERS

Foundation meter is deligned to permit the user to assemble a highly accurate Volt-Ohm-Milliams fer. Hive full 100 degree three-color scales reading 0-10, 0-50, 0-200 A.C. and D.C. Volt. 0-1, 0-10, 0-50, 0-500 Milliamps. 0-500, 0-100M, 0-1 Meg, 0-10 Megohms. —10 to 54 decibels. Available in three sizes as listed below.

No.		Model	Size	Each
25N10720		53SN	3" Square	7.84
25N10721 25N10722	1	55 57S	45," x 41," 7" x 816"	9.80

#### SHUNT AND RESISTOR KIT

Kit for Marion Multi-Ranger foundation meter. Consists of 14 met dized carbon film resistors and 4 Manganin wire wound shunts. Complete with schematic diagrams. 25N10719 8.16

### TRIPLETT ROUND AND SQUARE CASE PANEL METERS

Incorporate finest materials and workmanship. Molled ciles, ill terminals molded in. Sapphire jewels in adjustable screws. Accurate within 2%.

#### D.C. MILLIAMMETERS-ROUND AND SQUARE CASE

	2" Round 221.T	2" Square 227-T		3" Round 321-T	3" Square   32/-T	
Range	No.	No.	Eich	No.	No.	Each.
0-1 0-1.5 0-3 0-5 0-10	25N11208 25N11209 25N11415 25N11416 25N11210	25N11288 25N11289 25N11290 25N11298 25N11299	6.76 6.76 6.76 5.68 5.68	25N11200 25N11201 25N11411 25N11112 25N11202	25N11320 25N11321 25N11322 25N11323 25N11324	7.74 7.74 7.74 6 66 6.66
0-15 0-25 0-50 0-100 0-150	25N11211 25N11398 25N11212 25N11213 25N11417	25N11300 25N11306 25N11309 25N11311 25N11312	5.68 5.68 5.68 5.68 5.63	25N11203 25N11394 25N11204 25N11205 25N11413	25N11325 25N11326 25N11327 25N11328 25N11329	6.66 6.66 6.66 6.66
0-200 0-250 0-300 0-500 0-750 0-1000	25N11214 25N11418 25N11287 25N11215 25N11400 25N11401	25N11313 25N11314 25N11315 25N11316 25N11317 25N11318	5.68 5.68 5.68 5.68 5.68 5.68	25N11206 25N11414 25N11395 25N11207 25N11396 25N11397	25N11330 25N11331 25N11332 25N11333 25N11334 25N11335	6.66 6.66 6.66 6.66 6.66 6.66

#### D.C. MICROAMMETERS-ROUND AND SQUARE CASE

	3" Round 321-T			3" Square 327-T	
0-50	25N11352 •	10.68	0- 57	25N11354	10.68
0-100	25N11353	10.68	0-100	25N11355	10.68
0-200	25N11434	8.72	0-222	25N11356	8.72
0-500	25N11435	8.13	0-502	25N11357	8.13

#### A.C. YOLTMETERS-ROUND AND SQUARE CASE

	2" Round 231-S	2" Square 237-S		3" Round 331-S	3" Square 337-S	
Range	No.	No.	Each	No.	No.	Earh
0.5 0-10 0-15 0-25 0-50	25N11280 25N11281 25N11282 25N11283 25N11284	25N11449 25N11454 25N11455 25N11456 25N11380	5.68 5.68 5.68 5.68 5.68	25N11273 25N11274 25N11275 25N11276 25N11277	25N11459 25N11460 25N11461 25N11462 25N11381	6.66 6.66 6.66 6.66 6.66
0-150 0-300 0-500 0-15-150	25N11286 25N11409 25N11410	25N11457 25N11458 25N11453	6.76 8.33 11.56	25N11279 25N11406 25N11407 25N11408	25N11463 25N11464 25N11452 25N11465	7.74 9.31 12.54 13.52

#### A.C. MILLIAMMETERS

Model 23	1-S		Model 33	31-S	Model 23	31-S		Model 3	31-S
No.	Each	Ма.	No	Each	No.	Fach	Ma.	No.	Eich
25N11420 25N11269 25N11270	6.76 5.68 5.68	0-10 0-15 0-25	25N11419 25N11265 25N11266	7.74 6.66 6.66	25N11271 25N11272 25N11423 25N11424	5.68 5.68 5.68	0-50 0-100 0-250 0-500	25N11267 25N11268 25N11421 25N11422	6.66 6.66 6.66

#### D.C. VOLTMETERS

125 Ol ms per Volt.								
	Model 2	21-T	Model 321-T					
Range	No.	Each	No.	Each				
0-5	25N11247	5.68	25N11230	6.66				
0-10	25N11248	5.68	25N11231	6.66				
0-15	25N11249 25N11250	5.68 5.68	25N11232 25N11233	6.66				
0-25 0-50	25N11250	5.68	25N11234	6.66				
0-150	25N11253	5.68	25N11236	6.66				
0-250	25N11254	6.96	25N11237	7.94				
0-500	25N11405	8.53	25N11404	9.51				

#### D.C. VOLTMETERS

1000 Ohm /Volt Model 321-T.

Range	No.	Each
0-10	25N11240	9.21
0-50	25N11241	9.21
0-100	25N11242	9.51
0-150	25N11243	9.51
0-500	25N11244	12.94
0-1000	25N11363	11.66

#### D.C. AMMETERS

With internal chunt.								
Model 221-T Model 321-T								
Amps.	No.	Eich	No.	Each				
0-1 0-3 0-5 0-10 0-15 0-25 0-30	25N11223 25N11376 25N11224 25N11225 25N11377 25N11378 25N11379	5.68 5.68 5.68 5.68 5.68 5.68 5.68	25N11216 25N11372 25N11217 25N11218 25N11373 25N11374 25N11375	6.66 6.66 6.66 6.66 6.66 6.66				

#### A.C. AMMETERS

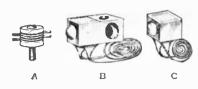
	Model 231-S		Model 331 S	
Amps	No.	Each	No.	Fach
0-1 0-3 0-5 0-10 0-25 0-30 0-50	25N11260 25N11261 25N11262 25N11263 25N11264 25N11384 25N11385	5.68 5.68 5.68 5.68 5.68 5.68 5.68	25N11255 25N11256 25N11257 25N11258 25N11259 25N11429 25N11431	6.66 6.66 6.66 8.66 8.66 8.66
				1



#### TRIPLETT POWER LEVEL INDICATOR

Up 6 and down 10 db. Zero db at 1.73 volts, 500 ohm line, 6  $\rm milliwatts^*$  Wt. 3 lbs. 25N11446 -- Model 321-T. 3" dia......13.33

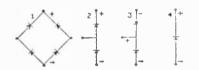
### METER RECTIFIERS

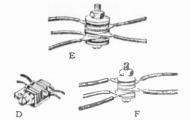


#### CONANT INSTRUMENT RECTIFIERS

General replacement for all types of meters and relays. "A" for applications requiring more than one milliamp current output. Disc diameter .50 inch. "B" for applications requiring good frequency response and less than one mill. current output. "C". Same as "B" but outside case fits standard midget fuse clip. Hatings shown are twice figures shown. Instantaneous are three times the figures shown.

No.	Diag.	Fig.	Volts	M.A.	Each
25N10569 25N10550 25N10551 25N10552 25N10552 25N10553 25N10553 25N10555 25N10555	2 3 4 1 2 3	A A A B B B B	10 5 10 5 10 5 10 5	30 30 30 30 5 5	2.06 1.50 1.50 1.18 2.06 1.50 1.50 1.18 2.06





#### **ELECTROX RECTIFIER UNITS** 5 ma at 3 volts DC

D. Full wave copper oxide rectifier in metal housing with four insulated 3-inch leads. Continuous output of 5 ma at maximum of 3 volts DC. Maximum input 4 yolts AC.

#### 20 ma at 3 volts DC

E. Full wave copper oxide rectifier in bakelite housing with tive insulated 3-inch leads. Continuous output of 20ma at maximum of 3 volts DC. Maximum input 4 volts AC.

#### 64 ma at 3 volts DC

F. Full wave copper oxide rectifier with five insulated 3-inch leads. Continuous output of 64ma at a max, of 3 youts DC. Max. input 4.1 volts

### **ACCESSORIES**





#### BAKELITE METER BOX

G. Sturdy heavy molied plastic meter case. Will withstand rugged use without damage to case or meter. Cverall dimensions 6 13/16" x 5 5/16". Inside dimensions: 6'2 x 5 x 2 1/8". Panel mounting screw inserts are molded

Bakelite Pa weight 1 lb. 25N21419-.. \_.....60c

#### RELIANCE METER CASES

#### AMPHENOL ADAPTORS

simple way to make aptors suitable for A simple way to make adaptors suitable for modernizing tube checkers and analyzers, adapting new tubes to old cirand for connections to output meter, phonograph pickup, etc. Socket tops & bases.



No.	Socket	Type	Price
13N13085	b (Octal)	44-8	14c
13N13086	Loctal	44-L	14c
13N13087	9 Pin (Noval)	44-9	26c
No.	Base	Туре	Price
13N13088	8 (Octal)	50-8SG	22c
13N13089	Loctal	44-13	39c

### TEST LEADS AND PRODS



#### PENCIL PROD KIT

Spring prongs at end of prods allow changing from spade lugs to phone tips or spring clips. Handles 6" long, X" diameter. Hed and Black kinkless wire. Kit comes complete with two alligator clips, two needle point phone tips and two tapered lugs.



#### ICA TEST LEAD KIT

Contains pair of test leads with 60" Red and Black kinkless wire, one end with insulated phone tips, other insulated removable banana plugs. Comes in leatherette case, complete with pair of alligator clips, spede plugs, needle points.

25N12861-Complete kit...... 2.06

#### WESTON TYPE TEST LEADS



64

5" long handles of red and black phenolic, with kinkless rubber wire. 65" overall length. Comes complete with molded finger grip tips

with set screws. 

#### CHO-CHO

#### INSULATED TEST PRODS

Type A: standard solderless phone tip with knurled collar; Type B has chuck and nut to hold plain phono needle; Type C has banana plug to fit standard banana jack. Available in fied and Black-specify color.

SOLDE	RLESS PROD (A)	
No.	Length	Each
25N12881 25N12884	51/4" 63/4"	24c 29c
25N12868	NEEDLE TIP (B)	24c
	5 1/8" A PLUG TIP (C)	26c
25N12912 25N12910	2½" 3.5/8"	24c 26c

"NO BREAK" PRODS ICA of and liv

Top grade insulated prods of solid brass, nickeled and covered with shockless live rubber—one Red, one Black. Tips are sharp pointed type. Other end of 50" kinkless rubber wires have solderless insulated phone tips.

As above but with standard phone tips. 25N13000--Pair......59e

#### ICA LABORATORY PRODS



Contains removable Contains removable
phono needle chucks.
Extra-long slim Elack
and Red handles
and Red handles
are £ inches long with
48 inch length heavy
duty kinkless and ex-

2

tra-flexible rubber wire. Choice of space or phone tips. 25N12978-Spade Tips.....Pair Each

25N12979-Phone Tips.....Pair **82**¢

#### 15,000-VOLT TEST LEADS



Designed for high vol-tage TV measurements. Thick walled bakelite handles with finger guards withstand 15,000 guards with finger guards withstand 15,000 Volt DC. 48 inch heavy cable connected to pluqs.

#### SAFE-T-TESTER

ester has spring in handle. Contact is made only when pressure is applied. 10,000 volts insulation. 7" handle, 48" leads. Ideal for small-space probing. Fits standard jack.

25N15237......88¢



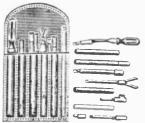


NEEDLE & SOLDERLESS TIP PRODS Red and Black colored kinkless were with sturdy fibre handles 4 inches long and 378 of an inch in dim.eter. Type A: chucks and nuts hold plain phonograph needles. Type B contains solderless tip with long point. Both type leads are 50 ins. in length.

NEEDLE TIP PRODS (A)	
No. Wire Ends	Pair
5N12976-Phone Tips( 5N12975-Spade Lugs(	53c
5N12975-Spade Lugs(	
5N12977-Alligator	65c
COLOTED SEC TIP DI LICE /	D)

SOLDERLESS TIP PLUGS (B) 25N12968—Phone Tips( 25N12969—Spade Lugs( 25N12970-Alligator......65c

### TV & RADIO ALIGNING TOOLS



#### ICA ALIGNING KIT

14 tools conveniently designed to telescope into six easy-to-carry units in compact case. Tools include: a flexible screwdriver, alignment tool, alliaator side clude: a flexible screwdriver, alignment tool, alliqator side v.ren.h, 6" insulated driver—metal nib, 5'16" and 44" nut wrench, 14" insulated square nut wrench, 14" hex metal side wren.h,  $2V_2$ " insulated driver with metal nib,  $V_4$ " hex slotted insulated wrench driver, 5/16"

hex insulated nut wrench, 5" and 6" insulated driver.  18N15088—Ki:
Asabove, less flexible screwdriver and aligning tool.  18N15089
A LOCAL WITH WELL WITH WEL
MEANY SUT THE TIME 4-IN-1 NEUTRALIZING TOOL
KEY SLOT NEUTRALIZIOT VIEW DENIEW
1/4" nut wrench with key slot and aligning screwdriver. Sturdily made of molded bakelite. Includes pen clip for attaching to pocket.
18N14915—Complete
HEX SOCKET ALIGNER
6" long with brass 1/4" socket head and screwdriver bit end.
18N15104—Shaft diameter 7/32"
03
ICA ALIGNING TOOL SET
6" long, 3g" diameter tool with brass wrenches for 1/4" and 5/16"
hex nuts, plus 7/32" screwdriver rod.
18N15083—Set, fits together
UHF ALIGNING TOOL
Amphenol polystyrene. Large end has a metal tip; small diameter end has been lengthened for TV set adjustments.
18N15075—Won't effect capacity of circuits
Additional action or and and an annual and
The state of the s

ICA LOW "C" ALIGNER

Low capacity screwdriver for aligning superhets. 14" bone fibre, two nibs: one recessed, one 1/2" long. 43e 18N15145

= 0 

ICA 5-IN-1 ALIGNER KIT

Combines 1/4" and 5/16" nut wrenches, miniature blade full-size screwdriver in fountain pen size tool.

FIBRITE SCREWDRIVER 2-ended driver for trimmer condensers. 18N15150-7/32" diameter 7" long 18N15151-5/16" diameter 7" long

SOLID TUNING WAND

6" rod, one end brass loaded, other core steel. Insulated.

V.H.F. FLEXITUNER Tuning wand, designed for FM, TV, and other high fidelity applications. Powdered iron core, copper slug ends. Increases, de-

creases inductance. 18N14977

NEUTRALIZING DRIVER Especially made for aligning coils, condensers, etc. Size: 61/4x1/4 18N15080 ....

#### NEON TESTER

(1) New neon electrical tester indicates voltage from 60 to 500 volts, operating on AC or DC. Especially useful in tracing shorts, open or grounded circuits. 29c 25N12958 .....

#### NEON CIRCUIT TESTER

(2) Shows open circuits, polarity, continuity, etc. Checks fuses in circuits. Tiny neon lamp glows on 11 ma. Coded leads have phone tips. AC-DC.

25N11310-90-550 V. Tester...... 59c Low voltage, alligator clip leads. 25N11308-5-50 V. Tester.....



#### TV SERVICING KIT

compact tool kit for all TV servicing. Contains 9 tools including one each of stock numbers 1/227, Big Stretch Aligner; 15228, Tran-Aligner; 15229, Slim Aligner; 15234, Tuning Wrench; 15231, Duril Aligner; 15232, Deep-Nib Aligner; 15233, Tuning Wand; 15233, Channel Tuner; also one stackpole core aligner. See copy below for description of these ding one each of stock numbers below for description of these tools. Supplied complete in leatherette case.



18N15226

4.09

#### "BIG STRETCH" ALIGNER

For adjustment of nested iron cores of Admiral, Zenith and similar TV sets. Extra thin, 9" bone fiber tool with  $6\frac{1}{2}$ " blade. Also for

18N15227

ATTENUATION .

#### TRAN-ALIGNER

Mew, all-insulated aligning tool for stindard IF and RF, and "K-Tran" midget transformers. Milled at one end, screw driver at other, 212" blade. Fiber handle.

18N15228—6" overall

SLIM ALIGNER

Has extra thin recessed blade and slim metal shaft for cramped probing in TV receivers. For Admiral and similar makes.

18N15229-Fiber handle ....

59c

#### TUNING WRENCH

Santa Anna Carrier and Anna Insulated fiber with extra thin recessed blide on one end and extra thin screw driver blade on other. Tenite handle, Designed especially for Zenith TV sets, etc.

18N15234-43/4" long ....

44c

#### STUB ALIGNER

Ideal when cramped space demands short insulured tuning tool. Exposed nib for screw driver type controls not carrying high voltages. Tough fiber handle.

#### DUAL ALIGNER

Narrow shaft, fiber alignment tool for trimmers, IF transformers, etc. Dual purpose type with recessed screw nib on one end and metal screw driver on other.

18N15231 ...

44c

#### DEEP-NIB ALIGNER

For tuning IF & RF shielded coils and trimmers. Fits under TV tubes without removing tubes. Insulated nib set in barrel end.



18N15232-21/2" L. x 1/4" diam. . . .

29¢

#### TUNING WAND

Extra thin diameter to fit small coil openings in TV sets. Flexible vinylite with brass insert in one end and molded powdered from ore in other. Russes or lowers inductance.





18N15235—For Zenith TV, etc. . . .

#### ADJUSTING TOOL

For aligning all iron core tuning systems. Screw driver blade on one end, socket screw driver on other.

ICA TELEVISION "CHANNEL TUNER"

A narrow, all-insulated screw driver of machined fiber. Ideal for deep, inaccessible tuning,  $V_8^{\prime\prime}$  blade on  $4V_2^{\prime\prime}$  shaft. 18N15233—7" Long ... ....

NEON TEST-O-LITE

Checks any voltage from 110 to 550 volts—AC or DC, spark plugs, action sets, apphances, etc. Distinguishes AC from DC. Comes in the pocified clip.

25N12983

**72c** 

### TOOLS: PUNCHES, CUTTERS & STRIPPERS

The following pages contain groups of important tools and accessories to speed the work of active radio servicemen, hobbyists and experimenters. We offer a representative cross-section of high quality cutters,

hand and electric drills, soldering irons, wire strippers, saws, wrenches, pliers, screw drivers, plus a variety of other handy miscellaneous items made by top companies noted for their precision manufacturing.

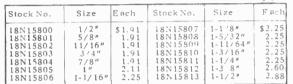
#### PIONEER SCREW ACTION SQUARE HOLE PUNCH



18N15077-3/4" Square Hole Punch............3.43

### PIONEER ROUND CHASSIS PUNCHES





#### RIVET-EYELET PUNCH SET

Hardened steel tool with cust from holder. Hex sides on holder assures firm grip in vise. Supplied complete with rivets and eyels is.

#### Rivet-Eyelet Assortment

100 assorted	rivets and	eyelets.	A 77.4
100 assorted 18N15066-P	er Package		

#### GENERAL PURPOSE STEEL CIRCLE CUTTERS









trovides easy, accurate method for cutting clean circular oles in brass, aluminum, steel, wood, bakelite, etc. Use rith ham! Frace or slow speed drill press. Finat-treated steel.

18N14720         JR         5/8 to 21.9         Round Round Medium.         78c           18N14711         4         7/8 to 4° Round Round Medium.         1.30           18N14713         5         1 to 512"         Round Heavy         1.88           18N14715         5         1 to 512"         Square Heavy         1.88
18N14717   1*   7/8 to 4"   Round   Medium   1.88   18N15069   5   11/4 to 8"   Square   Ex.Heavy   3.88

\*Has extra beading cutter.

#### AMP SHEARITE STRIPPER & CUTTER



Three tools in ore! Cuts and strips wire from sizes 22 to 12; mis brass or steel michine screws without or steel michine screws without dimoging threads, sizes 10-24, 10-12, 4-32, 6-32 and 4-4). His incorrately sized stripping notches and provise in

streaded cutter holes plus stud size guage stimped on tool. Mide of hardenedesteel; shock-proof plustic handle shaped to fit hand.

18N15592......**3.95** 

### FLEXTRON TV WIRE STRIPPER



A "must" for every TV servicem in's kit! Strips 300-ohm transmission line quickly — easily — clearly. Merely insert twin lead in opening at top, turn bar handle 900 and pull out stripped wire ready for use. Durable met il. 

#### DELUXE COIL WINDER WITH ACCESSORIES



i asy-to-use winds honey comb, spiderweb, or solenoid coils of various widths and diameters— equal in appear-ance to fictory Job. Indicator counts turn counts turns. With accessories for winding all types. Instructypes. Instruc-

18N14725.. 4.95

#### PORTABLE, EASY-TO-USE ELECTROPLATERS



Consists of 5/6" plating brush (for all metals); I oz. plating compound; I oz. metal cleaner; I oz. metal cleaner; I oz. metal polishing stick; set of wires and clips; illustrated frostions and notes on metals. Operates on two 1/2 V. dry batteries (not included).

COMPOUNDS FOR ABOVE: Plate 125-175 sq. in. 

#### NEW MPC WIRE STRIPPER

Mardoned steel lindes adjustible for wire bize, average little of them. Tool cuts insulation sharp and cleam, stars solitor, transit with early fullification for time to the interactories in places. In miles up to 10. 12 wire. 594



#### SPEEDEX HANDY WIRE STRIPPERS



Fast, pocket-size to l strips insula-tion easily from all types of wires and cables. Use on ends or center of wire. Will not damage solid or strended wire. Deluxe tools stay open while wire is removed.

Size	Standard	Each	Deluxe	Each
14-24 wire 12-20 wire 10-18 wire 300-ohm Twin-Lead	18N15538 18N15537 18N15539 18N15587	3.53	18N15565 18N15566 18N15567 18N15588	4.70

#### REPLACEMENT BLADES FOR ABOVE

18N15596-12 to 20 Wire Size..... 18N15597-14 to 24 Wire Size..... 18N15598-10 to 18 Wire Size..... 18N15599-Paratlel No. 18 POSJ..

18N15595-For 300 Ohn Line ...

88¢



#### SPEEDEX WIRE STRIPPER KIT

Continus wire striper, 7 different blades in steel box. Hindles No. 8 to No. 30 wire. Shpg. wt. 3lbs. Deluxe Stripper Kit .....10.00 18N15568. 18N15569-Standard Stripper Kit.. 8.82

#### QUICK STRIP INSULATION STRIPPER

Just the thin; to solve the servicemun's wire stripping problems. Rapidly and clearly strips all types of insulation from solid or stranded wire. All sizes from No. 12 to No. 22; also has slot to clean wire. High grade hardened steel gives years of service. Well designed, masy to





### PLIERS AND SCREWDRIVERS

#### KRAEUTER STANDARD PLIERS

From Kraeuters extra-quality "Standard" series—made to stand up under severe strain. Drop forged from extra high grade steel with "blue temper" finish. These are not the lower-priced "K" tools.

#### DIAGONAL CUTTING PLIERS 18N14942-41/4 " Length...... 1.53 18N14944→6" Length.................2.53

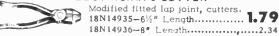
#### WIRE STRIPPING DIAGONAL CUTTER

As above, but with notch in blades for .062 wire and spring in handle.



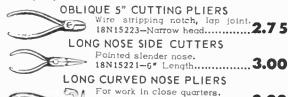
Side-cutting blades. Choice of short-jaw and long-jaw needle nose types. 18N14946\_5" Length Short-Jaw... 1.70 18N14945-6" Length Long Jaw......1.96

ELECTRICIAN'S CUTTER



#### GENUINE KLEIN PLIERS

Of finest alloy tool steel individually tempered for long-life cutting edges.



18N15224-6" Length...... 3.00 PARROTT JAW PLIERS



4-5/8" long; has adjustable jaws opening to 3/8" wide. Nickel plated steel. Wt: 2 oz. 

### "CAN'T ROLL" CENTER PUNCH

Tempered steel with large square head and knurled grip. 4-1/16" long. .325" dia. Wt: 1 lb.

18N14999......**12**¢

### BEVELED WOOD CHISELS AND CHISEL KIT



Correctly proportioned bevels—high grade heat-treated steel blades, Amberite handles.

18N15513-4" Blade...45¢
18N15515-4" Blade....52¢

18N15514-½" Blade...49¢
18N15516-1" Blade....56¢ 

#### STANDARD HAND DRILL WITH HARDWOOD HANDLE

3½, " gear wheel meshed with small gear at 4:1 ratio. ½" capacity chuck with 3 spring-controlled centered 18N14727-Overall length 11". Shpg. Wt: 11/2 lbs.



#### BREAST DRILL WITH 3/8" CAPACITY CHUCK

12½" long, full-size breast plate and 3½" gear meshed with small gears of 4:1 ratio. Includes 3/8" capacity chuck. Shipping Weight: 2 lbs. 18N14726...... **2.25** 



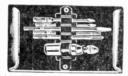
#### SWIVEL HEAD HAND DRILL WITH FLAT HUB BASE

Works around corners! Chuck head adjusts, locks to 7 positions, handle adjusts, locks along 180° base, 4" chuck. Overall length 84".



For boring small holes in hard or soft wood and soft metals. Multiple toothed spiral and center nut operating mechanism. Chuck has 4 steel jaws to hold drills securely. Index fing gives number and dia. of drill in each handle compartment. With 8 drill sizes: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32" and 11/64", Red plastic handle, nickle and aluminum metal parts. 9-1/8" long.

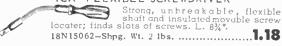
### SCREW DRIVER SET



A new, practical tool kit consisting of 5 tempered, ground bludes and chuck with amber handle. 3 standard screw driver bludes: 5½ x½ tip, 3x3/16 tip, 3-1/8"x1/8" tip; 2 Philips head Pl, 3½ L., P2, 4" L. Slotted Pl, 334" L., P2, 4" L. Slotted ly designed blades for positive

chuck accomodates specially fit. Packed in convenient leatherette tool roll. 18N14712....

#### "ICA" FLEXIBLE SCREWDRIVER



#### POCKET SCREWDRIVER

Transparent amber colored plastic dle. Tool steel blade, shockgroof		6 T
struction. With pocket clip.		O.E.L.
18N15323-3" length	10¢	

#### RATCHET SCREW DRIVER

With automatic return. Has 5 actions: automatically drives	
or draws screws, left or right driver. 201/2" extended; 12-5/8"	hand ratchet or rigid screw closed.
18N14733 - Weight 11/4 1bs	2.94

#### GRIPPER SCREWDRIVERS



Gripper holds screw, releases instantly when screw is driven—ideal for tight places. Amber plastic insulated handles with

tempered steel blades
18N14710— 2x5/32° Blades
18N14721- 4x5/32* Blades46¢
18N14709 6x5/32° Blades50¢
18N14722-10x5/32" Blades52¢
Same as above, but for Phillips head screws. Fits all sizes.
18N14746-2x5/32" Blades46¢
18N14747-4x5/32* Blades55¢
18N14748-6x5/32° Blades59¢.

#### RECESSED HEAD SCREWDRIVERS

Sturdily made with sure-grip wooden handles and steel blades.

No.	Size	Length	Cost	
18N15251	Up to 4	6-3/4"	25¢	
18N15252	5 to 9	8-3/8"	25¢	
18N15253	10 to 16	11-1/2"	33¢	

#### XCELITE SCREW DRIVERS

Polished chrome vanadium blades with tips ground for accurate fit in screw heads. Tough, shock-proof amber h males. Weight: 5 oz.



Stock No.	Mfrs. Type	Blade Size	Each
18N15240	R-144	4"x1/4" tip	.59
18N15241	R-146	6"x1/4" tip	.62
18N15242	R-148	8"x1/4" tip	.69
18N15243	R-182	2"x1/8" tip	.29
18N15244	R-184	4"x1/8" tip	.32
18N15245	R-186	6"x1/8" tip	.36
18N15246	R-188	8"x1/8" tip	.39

#### 4 IN 1 SCREW DRIVER

Ideal for mechanics, shop and home use. Solid brass with indestructible hardened steel bits — will not rust. Master screw driver contains other Master screw di 3. Weight 2 oz.



#### TAP, DRILL AND DIE SET

Useful set for handy men and model shop workers. Three 1" dia. dies (4-36, 6-32, 8-32) with die stock; three taps 6-32, 8-32) and



matching tap drills for these taps. Tap holder and mahogany case. Shipping Weight 3 lbs.

### SOLDERING IRONS AND ACCESSORIES

SOLDEKING IKONS
DRAKE "Instant Heat" SOLDER GUN New, quick-action trigger solder gun for busy ser- vicemen. Just press the trigger cn the pistol grip handle for instant soldering heat. Durable, handsome maroon plustic case, perfectly bal- anced for easy handling. Built-in spotlight keeps work in sight at all times. Designed with long, thin tip convenient for hard-to- reach and tight corner soldering. Tip easily removed. 135 W. on 115 V., 60 cycle AC. With extra 6½" soldering tip.  18N14872—Shipping Weight 3 lbs
10M14074- 07 tips: 1 kg; of zimi
DRAKE INDUSTRIAL IRONS—UNDERWRITERS LISTED  100 WATT IRON No. 600- 10. For switchboards, radio and other light manufacturing uses. Ideal for close quarters. Comes complete with 6 foot cord, stand. 3/8- inch tip.  18N15164—Shpg. Wt: 2 lbs
100 WATT IRON No. 600 for light manufac- turing purposes. Com- plete with 6 ft. cord, "Magic Cup" stand, 3/8-inch tip. 18N15551-Shpg. Wt: 2 lbs
60 WATT COMPACT IRON No. 400. A small tool for tight corners, delicute instrument wir- ing. 9-inches long, weighs 9 oz. With 6-ft. ccrd, "Magic Cup" stand. ¼" tip. 18N15157—Replacement Tip for Above

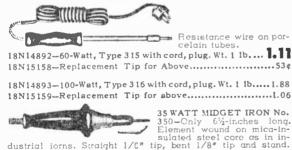
#### DRAKE DELUXE SOLDERING IRONS

100 WATT IRON No. 325 For general radio work Hida quality Nichrome wir	
on amber mica. Nickel plated. Complete with 6 ft. cord an plug. "Magic Cup" stand, 3/8-in. tip.	
18N15162—Shipping Weight: 1½ lbs	4
18N15152-Replacement Tip for Above73	¢
200 WATT IRON No. 425	

Highest quality Nichrome wire on amber mica. Nichel plated. Complete with 6-ft. cord

"Magic Cup" stand, 5/8-in. tip. 

#### DRAKE SPECIAL IRONS



HARMIC SOLDERING KIT

18N15178-Replacement Straight Tip......15¢



Shipping. Weight 1 lb.

Contains U.L. appvd. chrome-plated 75-watt soldering iron, steel scraper, spool of rosin core solder, stand, sandpaper. Instruc-tions. Wt. 3 lbs.

#### WELLER SPEED SOLDERING IRONS



STANDARD MODEL

SOLDERING TOOL No Waiting-Heats, Cools in 5 Seconds • Easy to Handle→Gets Into Tight Comers . New, Pistol-Type Grip Is Easy to Hold

• Built-in Spotlight Lights Up Your Work • Tips are Easy to Tin-Stays Tinned

The first really new idea in soldering tools. Operates on the resistance welder principle giving high current at extremely low voltage. No more waiting for iron to heat up—m-rely pull the trigger when it's time to solder. New type pistol arin acts you in close with a neat up—m-rety pull the trigger when it's time to solder. New type pistol grip gets you in close with a "feel" impossible to attain with conventional type irons. No bulky tip—no working in dark—spotlight lets you see where you are working. Tips stay tinned, solder easily, bend by hand. 100 watts on 115 Volts 60 CVC. AC

As above, with dual heat unit (100-135 W). 18N15186-Shpg. Wt. 3 lbs. ......13.67 18N15187-Extra Long Life Tip. Pkg. of 4...........25¢ 18N15188-Stud for Fastening Tip......10¢

WELLER HEAVY DUTY SOLDERING TOOL

For heavier soldering, 200 W. Dual Heat Unit (200-250 W.) 18N14870-Wt. 4 lbs...... 13.67 Rigid-Tip for above irons 18N14866 - Package of Two......35¢

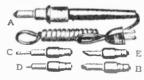
#### LENK GUN GRIP TYPE IRON



Perfectly balanced — lightweight — easy to handle all-purpose soldering iron. Spring construction cushions pressure for delicate work, protects handle and units, keeps handle cool and insures perfect soldering, always. Has built-in stand that rests iron safely on work table. Contains long-life element. Supplied with 4 tips: straight, 45°, 90° and heavy duty. Draws 75 watts on 110-120 volts AC or DC. Chrome-plated over nickel and copper. Overall size: 9½ "x 4½".

18N15101-With 6-ft cord & plug. Shpg. Wt: 1 lb.......3.26 

#### UNGAR ELECTRIC SOLDERING PENCIL



So tiny it can be handled as easily as a pencil! Efficient, well-constructed, for perfect soldering jobs. Only 3.6 ounces, overall length is 7" for use in tight comers, hardfor use in tight control to-reach places. 20 watts; heats in 90 seconds. Heatheast plastic handle. neats in 90 seconds. Heaters stant plastic handle. Line cord and plug. Operates on 110 volts AC or DC. UL approved. Uses any tip listed below.

#### UNGAR SOLDERING SET

Ideal for hobby work. Includes soldering pencil, 3 tips, flux and brush, core solder, emery cloth.U.L. approved.

18N15583-Wt: 6 oz. ... 2.19 Lots of 6 ...... Each ..... 1.65



#### UNGAR ELECTRO-CRAFT BURNING PENCIL

Burning pencil forms plastic, burns designs into leather, cork, wood and velvet. Embosses foil. Set consists of UL approved burning pencil, 6 brass interchangeable tips, 6 colors of metallic foil, emery cloth. 18N15582-With instructions . 1.65



### **SOLDERING IRONS AND ACCESSORIES**

#### KWIKHEAT 225-WATT IRON

Heats up in 90 seconds. Sturdy, long-lasting, with built-in thermostat. Handle stays cool. Can be used with tips 0,1,2,3,4,5,9. UL approved, 1-year guar-antee. For 100-125 volts AC. Supplied complete with No.

18N15121......**8.25** 

#### KWIKHEAT INTERCHANGEABLE TIPS



#### QUICK ACTION SOLDERING IRON

Lightweight iron gives soldering heat in a few seconds — at the flick of a switch! Flat, non-corrosive nickel-alloy tip contains heating element. No filing or tinning necessary; will not scale or oxidize. Modern, easy-grip handle has ON-OFF switch that controls heating action. Bucking coil" maintains soldering heat while soldering smalless wiring job up to No. 18 wire. For AC-DC. dering smallest List Price \$7,95.

### VASCO PETITE IRON

Compact, lightweight solder Compact, Hight Control of Light wiring, tight corners, and those really hard-to-get-at-places. Draws 25 waits, 3/16" diameter tip. Length designed for light tight corners, and 3/16" diameter tip. Length 6". Complete with cord and plug.



#### KESTER SOLDER & FLUX





Preferred by servicemen and large users. Uniform compound of tin and lead with evenly distributed and free-flowing flux.

		Acid Core 3/16"	Rosin 1/16" Thin-Core		
1 1b. Spool	18N14857 17¢ 18N14858 1.04 18N14859 5.00	18N14878 17¢ 18N14877 1.04 18N14879 5.00	18N14851 1.07 18N14852 5.15		



Kester Paste Flux. Non-corrosive. 

#### NEW KESTER "Resin-Five" SOLDER

A new flux-core solder that is absolutely non-corrosive and non-conductive. The better solder for TV...all radio and electronic parts. Easily solders zinc, brass, nickel plate, copper and ferrous allows.

copper una terrou	s diloys.		1.02
18N14741 -3/32*	diameter1	lb.	spool1.03
18N14742 -3/32"	diameter5	lb.	spool 4.95
18N14743 -1/16"	diameter1	1b.	spool 1.06
18N14744-1/16"	diameter5	1b.	spool

#### LENK ALCOHOL TORCHES



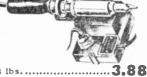
Double burner, alcohol fuel torch for heavy duty work. Adjustable for broad or needle point flame. Copper heat conductor in pressure chamber assures quick starting. Cleanser pin included in handle. 7x4½x2½". Shiping Weight 3 lbs.

#### AMERICAN BEAUTY 100-WATT IRON

No. 3138. America's most famous iron for those who want the very best! Heavily plated and polished metal parts. Length 12-7/8". 3/8" tip. 18N15171-With 6-ft. cord and stand. Wt: 2 lbs....... 5.36 18N15170-Extra tip for above......34¢

#### AMERICAN BEAUTY THERMOSTAT STAND

Adjustable thermostat regulates temperature of soldering irons. Molded plastic body. Operates on 110 volts, AC. Comes complete with cord, plug, receptacle for iron.



18N15169-Shipping Weight: 3 lbs.....

#### ESICO SOLDERING IRONS

High grade elements finest mica insulation. U.L. listed. For AC or DC. With co

· listed. For AC ord, stand, tips.	
losing Tenns	Enter Tire

Soldering Irons 18N14900-- 60 watts, 3/8° tip.....1.73 18N14902-100 watts, 3/8° tip.....2.32 18N14905-130 watts, 1/2° tip.....2.91 18N14901.....21¢ 18N14903.....21 18N15168.....32¢

#### ESICO 200-WATT SOLDER POT



Equipped with pilot light that indicates when pot is heating. Sturdly constructed but not top heavy. May be screwed to benches. Capacity ¼ lb. 1½ " x 1½ ". Height 4¼ ". 18N15554-Shpg. Wt: 31/4 lbs. ....4.41

#### ESICO THERMOSTATIC STAND



Thermostatic control stand makes it impossible to overheat iron. Keeps iron at desired heat while in stand. When removed, full current goes on. For up to 1 diameter tips.

18N14885-Shpg. Wt: 3 lbs. . 3.82

#### ERSIN MULTICORE SOLDER



Latest solder research development from secret Latest solder research development from secret British formula. Maximum flux action at correct solder melting point. Reduces surface tension of molten solder and metal wets rapidly. Fast melting, non-corrosive, non-sticky, non-toxic. 3-core construction insures constant flux. Hase excellent cleansing action. 40% tin, 60% lead. 14 gauge.

18N14802-7 lb. Spool......8.30

#### RUBYFLUID LIQUID FLUX

Produces strong joints with thin film of solder on brass, tin, copper. Non-corrosive.

#### NOKORODE CORE SOLDER

30% tin and 70% lead. A superior paste used for flux. Non-corrosive. No. 10 gauge. Approxi. 1½ oz. 



#### NOKORODE PASTE

Non-corrosive, fluxes all metals except aluminum without corroding or discoloring. Insures perfect soldered joint at extremely economical cost.

18N15277—Per Can......10¢

### COMPACT, ECONOMY MODEL LENK TORCH

Double barrel, self-blowing type torch for servicemen and home mechanics. Uses denatured or commercial alcohol. Leak-proof, non-clogging construction. Screw top and bottom. Size: 6x2x11/1".





### **ELECTRIC DRILLS & DRILL ACCESSORIES**

#### FAIRCHILD ELECTRIC HAND DRILL SET



More power, better quality drill kit designed specifidrill kit designed specifically for household use. Contains M" capacity drill with universal type 110-120 V. AC-DC motor. Chuck speed 1200 rpm. Grip and balance designed for easier and more efficient drilling. Thumb control switch conveniently located on top of veniently located on top of handle. Fitted steel case includes 7 high speed steel twist drills in sizes 1/16" to 1," by 32nts. Sturdy, li threeight aluminum housing, Wt. 6 lbs. 18N15765...... 19.95

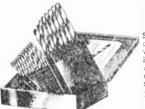




SET NO. M-7. Contains 7 drills 1/16" to 1/2" by 32mis with red bakelite stand 1/2" Ly 321.1s with red bakelite stand which serves as index with marked

18N15760-Shpg. Wt. ½ lb.....

SET NO. M-3. 13 drills 1/16" to 4" by 64ths with Huot index. Smallest, but with the most often used sizes. Shig. Wt. ½ lb.



SET NO. M-2. Contains 21 drills 1/16" to 3/8" by 64ths with Huot index. Medium size Huot index, with the extended drill size range, adding those often needed drill sizes. Shpg. Wt. 2½ lbs. 2.81

SET NO. M-15. Contains 15 drills 1/16" to ½" by 32nds with Puot index. Large size Fluot, with provisions for adding 14 drills of the 64th sizes. Most used larger sizes. Shpg. Wt. 3 lbs.

18N15763-.....**11.21** 

#### CENTURY HIGH SPEED DRILLS SOLD SEPARATELY

No.	Size	Each	No.	Size	Each
18N15770 18N15771 18N15772 18N15773 18N15774 18N15776 18N15776 18N15776 18N157778 18N15778	1/16" 5/64" 3/32" 7/64" 1/8" 9/64" 5/32" 11/04" 3/16" 13/64"	21¢ 21¢ 23¢ 23¢ 23¢ 24¢ 27¢ 28¢ 30¢ 32¢	18N15780 18N15781 18N15782 18N15783 18N15784 13N15785 18N15786 18N15788 18N15788	7/32" 15/64" 1/4" 17/64" 9/32" 19/64" 5/16" 21/64" 11/32" 3/8"	36¢ 38¢ 42¢ 48¢ 51¢ 54¢ 60¢ 65¢ 69¢ 83¢

### CONVERT YOUR DRILL TO A POWER-HAMMER

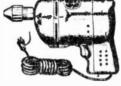


A highly efficient adaptor tool which converts an electric drill into a powerful hammer. Excellent for drilling into cement, stone, brick, tile, etc. Powerfully built for speed and efficiency and ease of operation. Size: 6-7/16x1-1/8". Selfefficiency and ease of operation. Size: 6-7/16x1-1 contained lubrication. An adapter tool at low cost.

18N15472-Less handle
18N15470—Handle for Power Hammer1.23
18N15471-Hammer Head3.33
18N15473-¼" bit for above70
18N15474-3/8" bit for above95
18N15475-'/' bit for above

#### BLACK & DECKER W ELECTRIC DRILL

Sensational ¼" drill value at a popular price. Powerful, high quality 2250 RPM motor equiped with 3-jaw Jacobs hex-key chuck, drills holes in steel, cast-iron, aluminum, brass, sheet metal, wood, plastic, etc. Also drives countersinks, wood augers, wire brushes and numerous cleaning, sanding and



polishing accessories. Instant release trigger switch can be locked "ON". Strong, light diecast aluminum housing fits hand. 7/8" long. For 110 V. AC

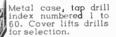
18N15797-Home Utility Model....Shpg. Wt: 5 1bs.... 18.95

#### GILBERT WINCH ELECTRIC DRILL

An economy model, ideal for medium home and shop jobs. Has self-tightening chuck attached to precision-built 1400 RPM motor. Enclosed in strong, die cast zinc housing with aluminum finish. Equipped with ONaluminum OFF togo OFF toggle switch. Convenient pistol-grip handle. For 110 volts, 60 cycles AC. Shpg. Wt: 4 lbs.



#### DRILL CASE



18N14702.... 2.45

### STEEL DRILL SET

9 drills, sizes 1/16 to 3/16". Expertly ground cutting steel. In strong hardwood

18N14708......**1.29** 



#### GREENE SAW ATTACHMENT FOR HAND DRILLS



### 5 TO 1 RATIO GEARED CHUCK

Made expressly for small electric drills up to and including one half inch. Well made of strong and durable materials.

18N14698 - Shpg Wt. 4 lbs...... 8.25



#### ELECTRIC DRILL ARBOR

Universal for all makes of electric drills from ¼ " capacity up. Shaft at drill end is ¼ " hardened knurled steel. Body of shaft is ½ ", suitable for all standard buffs, stones, scratch bushes etc. brushes, etc.

18N15094 ...... **59**¢

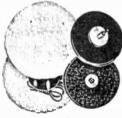


#### POLISHER & SANDER KIT

Converts your electric drill into a power polisher and sander to turn out professional jobs. Kit includes flexible 1/4" adaptor, silicon carbide sanding disc, lambswool polishing bonnet, and pattern for cutting additional sanding disc.

18N15755..... SANDING DISCS

PRG of 12 Assorted Nedium, Fine and Coarse Grit Discs 18N15795......68¢



#### HANDY, SUPER-FIBER PLUGS

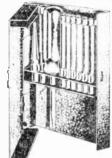


Easy to anchor bolts, screw eyes, etc. Safe, economical and reliable to use! Can be snipped without damage to the plug.

181	115476-1"	for 1/4"	hole, l	00	for <b>1.0</b>	
					for 1.60	
181	115478-11/2	" for 1/2	hole.	25	for 4.00	

### **NUT DRIVERS, WRENCH SETS & REAMERS**

### XCELITE MULTI-PURPOSE TOOL KIT



Sensational new kit with patented "stay-locked" fistener in the multi-purpose namile, assures firm, positive grip on tools. Earh unit shalls in easily and securely, yet car, be removed by pulling on the shalt. Case is made of sturiv metal with attractive motified finish. Organs live a book can metal with attractive mottled finish. Opens like a book; can be set on work bench or fastened on will or cutinate through two holes in back of the case. Kit includes; a multipurpose handle,  $1/8^{2}$  to  $5/16^{n}$  reamer,  $3/16^{n}$  and  $9/32^{n}$  Xcelite screwiriver thade and nine nutdrivers from  $3/16^{n}$  to  $1^{n}$ . All tools are chrome plated. Shpg. Wt: 4 lbs.

BIRME

通過 300

STEVENS-WALDEN "SPINTITE" WRENCH SET

> Invaluable for radio and electrical servicemen. Well made of cadmium plated steel and hardwood hansteel and hardwood handles—designed to stand up under years of regular use. Set includes 7 wrenches in convenient holder. Will handle following size nuts: 3/16", 1/4", 5/16", 11/32", 3/8", and 1/2". Weight: 3 rounds pounds.

> 18N15570.......3.82

### 

#### XCELITE DELUXE REAMER KITS

Designed for reaming wood, plas-Designed for reaming wood, plastic or sheet metal. Extremely hard cutting edges. Detachable handle made of unbreakable amber plastic. 4" long. No. 1, 1/8" to 5/16"; No. 2, 1/4" to 1/2"; No. 3, 7/16" to 11/16". RK-42 Kit. Nos. 1 & 2 reamers and handle in roll kit.



RK-43 Kit. Nos. 1, 2 & 3 reamers and handle in roll kit. 3.89 18N15249.....

#### XCELITE SUPER NUT DRIVER SET



Contains most popular so ket sizes. Plastic handles color coded for easy identification. Includes 7 wrenches from 3/16" to 3/8" in 1/32" steps. Made of hardened steel, carefully polished to insure snugfit of nuts. Deep enough to hold 2 nuts at one time. Complete in lockable holder. size: 7/4x7/4x1/4".

#### XCELITE NUT DRIVERS-STURDY, SHOCKPROOF

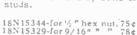
Time saving spin-type wren-ches meet every need! Un-breakable-transparent amber 

18N15335-for 7/16" hex nut. 18N15336-for 12" hex nut. 18N15336-for 12" hex nut. Any Above, Each.........69¢

# HOLLOW SHAFT

Extra-long hollow shaft. For installing and removing volinstalling and removing voi-ume controls and other panel equipment. Permits removal of nuts from volume controls with up to 5" shafts. Ideal for nuts blocked by bolts or

### TYPE



#### S-K WRENCH SET



New, all-purpose wrench set for work on ignition, carburetor and radio. 16 piece kit contains reversible ratchet, 2" md 6" extensions, flex handle, X bar, 3/16", 7/32", 1 4", 9/32" and 5/16" 6 pt. skts., 11/32", 3/8" and 7/16" 12 pt. skts., and 1/4", 5/16" and 3/8" 8 pt. skts. in 1/4" square drive. Chromium plated and polished. Wrench set is shipped in handy wrinkle finish metal box.

5-PIECE WRENCH SET

New Sampson small open-nend wrench set with ten dif-ferent openings- no dupli-cation of sizes. Wing-nut fastened for ease in carry-ing. Made of drop-forged tool steel, treated and hard-ened for extra strength. ½ to 7/8 sizes—marked on shank. Wt: 1 lb.

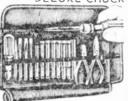
# SAMSON LEVER WRENCH



5 in I handy tool for all jobs—adjustable jaw makes it equally useful as pliers, locking wrench, clamt, pipe wrench, and toggle press. Instant adjustment or locking by turn of set screw. Double leverage multiplies pressure 1000 times.

18N14986-Wt: 2 lbs. 1.25

### DELUXE CHUCK TYPE SPINTITE KIT



Consists of chuck type handle for use with wrench shanks, screwdrivers and reamer. 3/16", 11/4", 5/16', 11/32", 3/8", 7/16' and 1/2" wrench shanks; 1/8", 3/16" and 1/4" by 4" screw drivers; 1/16" to 3/16" Ream awl; 7" long nose, 5" digoonal cutting pliers, neutralizing alignment wrench. In leutherette roll.

18N15572-Wt. 3 lbs. .... 9.11 18N15571-Less Pliers and neutralizer, Wt. 2 lbs......5.44

#### STEVENS-WALDEN MIDGET WRENCH SETS

For accurate work on meters, radios and other small appliances. Consists of 8 midget hex sockets 3'16 to 7'16", 3 double square sockets 1/4", 5'16" and 3/8" sizes; ratchet, airge and spiritte handles plus 6" long extension and sliding tee handle. Metal carrying case. Wt: 4 lbs.

18N15573-Deluxe Set Type 3100.....9.44 STANDARD SET: As above less ratchet, sliding tee handles and extension. Weight: 2 pounds.





steel with case hardened sock-ets. Hollow handle holds screw driver socket and 5 wrench sockets: 1/4", 5/16", 3/8", 7/16", 1/2". Handle and shank are 7'2 long; finished in white nickel.

RATCHET BRACE A low-priced 10" brace with Barber chuck and alligator jaws in semi-boxed ratchet. Steel-clad, ball bearing head. Mahogany finished hard-wood handle and head; wood handle and head; exposed metal parts nickeled and buffed. 

### GOOD QUALITY TOMAHAWK SOCKET WRENCH SET

Handy, compute little set for hard-to-reach places. Consists of 34" L humblated. Hexagon sockets. Cadmining plated. Hexagon socket sizes: 3/16", 1/4", 5/16", 3/8", 7/16", and 1/2", Shpg. Wtt 1 lb. 18N15589.....

#### TOOL STEEL REAMERS

Made of heat treated steel. Tapered shank has "T" handle for easy hand use. Enlarges 1/8" to 1/4", holes. 51,4" overall.

18N 15049......86¢

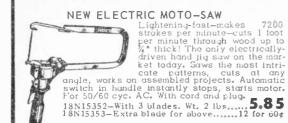
#### **AUTOMATIC PUNCH**



18N14992......23¢



### TOOLS FOR THE HOBBYIST



#### ALL-PURPOSE VIBRO-SPRAYER



Even amateurs can produce a professional looking paint job with this self-contained spraying unit. Specially designed to permit one-hand operation — and is complete in itself. Screw-top jar has a 24 ounce capacity. Equally adaptable for spraying other liquids, such as light oil, insecticides, D.D.T., etc. as well as paint. Here is a finely made sprayer that will last for years, giving you excellent service and results. For 110 volts.

18N15619-Lis	t Price	\$12.95	Dealers	Cost	Ea 9.	<b>7</b> 5
Dealer's Cost	Lots of	2			Each,	8.65
Dealer's Cost	Lots of	6			Each,	7.80

#### G.M. CO. ALL-STEEL HOBBY LATHE OUTFIT

fine precision tool for pre-A fine precision tool for precision work! Consists of 6½" high lathe head with ½x6%" shaft accurately turned and threaded at both ends with two flanges and nuts for grand-stones, buffing wheels and scratch brushes, 9/32" capacity chuck with 3 spring-controlled jaw hold drill in dead center. All steel unbreakable body with navel brass hearting



center. All steel unbreakable body with naval brass bearings for shaft. Complete outfit includes: 2-speed pulley; 4" flat face virified grinding wheel; 4" wire scratch brush with securely held wires; 4" laminated cotton buffing wheel; oak tamped leather belt complete with coupling; and one tamned leather belt complete with couplions of high grade polishing compound. 18N22399-Red Enamel Finish. Shpg. wt. 6 lbs. 3.75

#### MODELMAKERS VISE WITH 11/2" JAWS



Double parallel beams keeps Jaws aligned—prevents wobbling, insures steadiness of implement in the vise. Finer threaded worm screw provides tighter grip, more holding surface per inch. 1½ " Jaws open to full 2½ ". Equipped with double mountings for surface per inch. 1½" Jaws open to full 2½". Equipped with double mountings for permanent or temporary attachment to any bench or table—edge not exceeding 2-1/16" thick. Rust-resistant Bronze finish. Size fully closed: 5½x4x2".

18N15734-Shpg. Wt: 4 lbs..............2.55





Dirt-proof gear case with extra long bearings assure gears being in alignment and wheel running in dilgnment and wheel running true. All gears properly machined and meshed. Clamps on any table or bench. Adjustable tool rest for added ease in sharpening. Baked Red enamel finish. With 5" stone. Shrg. Wt: 4 lbs.

G. M. UTILITY GRINDER

A smooth running and long lasting Asmooth running and long lasting grinder — accurately made and assembled. Completely enclosed all steel gear case is finished in bright nickel plate. Extra long brass bearings assure proper adignment of gears and a true-running wheel. Clamps on any trible or bench up to 1-1/8" thick. Supplied complete with high Supplied complete with high grade fine abrasive wheel, tool rest and clamp. 18N15355-Weight 1 lb. .....



BURGESS ALL-PURPOSE TOOL KIT

Low Cost Kits for Home or Model Shop



Model V75. Vibro-Tool Master Kit. Here is the ideal experimenters and hobbyists tool kit that meets the needs of most wood, metal, leather, plastic and glass working problems. This handy package contains every basic tool necessary for marking and engruving metal and decorating glass and plastic It carries elices peems mightly and apply. marking and engraving metal and decorating glass and plastic. It carves, slices, peens quickly and easily. Supplied complete with vibro-tool and one of each of the following: V24 knife, V23 knife, V3 carbide point, V82 leather punch, V45 ball point, V87 standard modeler, V81 abrusive, V51 curved chisel, V55 V-shaped chisel and V115 stone. Packed in sturdy case for convenient storage. Operates on 110 volts, 60 cycles AC only. Shipping Weight 5 lbs.

18N15638-List Price 9.95. Dealer Price.....Each..... 7.50

#### LEATHER KRAFT KIT

Model V225. Vibro-tool Leather Kraft Kit. Complete with Vibro-tool and nine leather working attachments. Includes one each of the following ten basic leather working tools: V23 knife blade, V3 carbide point, V82 leather punch, V44 ball point, V86 deerfoot modeler, V46 ballpoint, V83 leather liner, V84 leather slotter, V85 double liner and cripper. Tool and accessories housed in sturdy convenient storage case. Operates from 110-volt, 60-cycle AC only. Shipping Weight 5 lbs. Model V225. Vibro-tool Leather Kraft Kit. Complete with

#### MARKING KIT

Model V77. Vibro-Tool Marking Kit. Consists of Vibro-tool and hard tantalum carbide point. For metals, plastics etc. Operates from 110-volt, 60-cycle AC only. 18N15620-List Price 7.50. Dealer Price.....Each.....5.65

#### DELUXE HANDEE GRINDER KIT IN STEEL CASE

Hand-size, with high-speed, 25,000 RPM motor. 27 accessories include: rubber polishing wheel and saw with mandrels; slitting saw; 2 steel cutters; 3 drills; push-pin mandrel; steel wire cavity brush; bristle brush; wire scratch brush; rubber disc; felt and rubber polishing points; felt polishing wheel; drum sander, discs; 6 mounted wheels, spe

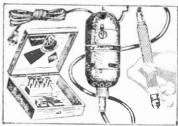
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discs; 6 mounted wheels, speed oil. 110-120 volts AC-DC. 

As above, but with 26 Mtd. Whis. for industrial use. 23.37 18N15264-No. 3011. Shpg. Wt. 4 lbs. 23.37 Deluxe outfit with 7 access.: 1/8" Collet; 5 Wheels; 1 Rubber Polishing Wheel; 1 Wheel Dressing Stone. Speed as 

#### FAIRCHILD FLEXIBLE SHAFT TOOL

The hobbyist's onswer to engraving, buffing, grinding and routine polishing needs! Precision, dynamically balanced 1/20 H.P. motor turns up 15,000 rpm at the handpiece—with power to spare when us-ing any of the 10 standard tools supsupplied. Phand-piece Pencil-size



plied. Pencil-size hand-piece permits precision work of professional quality, and takes any standard 3/32" or 1/8" shank tool. Flexible shaft is full three feet long and covered with plastic for clean, oil-free operation. Every electrical component checked at factory with 1500 volts for breakdown to ground. Complete with selected accessory tools, two wrenches, flexible shaft, motor and bracket for motor. Supplied in sturdy blond wooden cabinet. Operates on 110-120 volts. AC or DC.

### **TOOLS TO MAKE YOUR WORK EASIER**



#### GENERAL DRILL GRINDING ATTACHMENT

Precision-built tool designed for accurate repointing of twist drills. Adjustable for all popular drill point angles, including countersinks—correctly resharpens twist drills of following sizes: 1/8" to 3/4" fractional; 1 to 30 number size; A to Z letter size; and 3.0 to 19.0 millimeter size.

18N15759-Shpg. Wt: 2 lbs.....4.75

#### AIR PRESSURE TOUCHUP SPRAYER



POWER SPRAYER WITH 12 FOOT HOSE



Newest type of touch-up sprayer that operates from the spark plug of any automobile. Will spray paint, lacquer or my other free-flowing liquid. Comes complete with sprayer, pint glass jur, spark plug air check valve, compression time, set of adaptors and a twelve-frost hose.

18N14704-Shpg. wt. 6 lbs..... 4.70

#### VERNIER SLIDING CALIPER



Sharp pointed projections for accurate dividing, scribing, etc. 1.ock nut insures against errors caused by sliding gauge. Rule graduated in 16th and 32nds plus 5" depth gauge. Precision-made Shpg. Wt: 1 lb.

18N15027-....

#### WALSCO SERVICE TWEEZERS

Serve hundreds of useful purposes. Of polished nickel-plated spring steel.

G-C INSPECTION MIRROR

Long-handled inspertion mirror makes it possible to see inside chassis—inspect coils, parts, connections.



COMBINATION SQUARE



depth ... Elts many uses—try and mitre square, depth gauge, murking gauge, level and scriber. Graduated Bits and 16ths on one side, 16ths and 32nds on the other. 12" side, blide. 

COMBINATION SQUARE AND PROTRACTOR

6-inch square cultivated by 1/8" and 1/16" on edges. Edge turned down to prevent slipping. Protractor cultivated from 0 to 10 degrees. Also has true circles cut out for scribing sizes 1/4", 5/16", 1", 5/8", 1". 550000

TORPEDO LEVEL

Two plumbs—one 45° and one 90°, and one level vial are irroviled. Die cast, black baxelite with heavy piece of folished "nickeloid" top plate. 9x114x1/4". 



### WALSCO LIGHTWEIGHT STAPLE DRIVER

Fully automatic—for neater, faster jobs on wire and cable. Staples wires up to 4" diameter. Magazine holds 24 staples. With box of 250 staples.

hand.

the hand. 18N15090-Rubber Cap......22c

#### WALSCO CARBON TOOL STEEL STAPLES

handy strips especially made the Walsco Staple Driver Brown or outside, inside coated with cial clear insulating lacquer. special



#### FEATHERWEIGHT TACKER AND STAPLER

Quick, convenient tacker for attachin; light wire or spaghetti labels, etc.; tackin; on grille cloth or stapling papers, receipts, checks, etc. Precision-built—steel body with fine Black



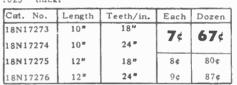


#### ADJUSTABLE HACK SAW

Accomodates 8" to 12" blades. Blade can be faced in four di-rections. Easy-grip composition handle, nickel-plated stock.

Complete with 8-inch blade. 18N17282—Shpg. Wt. 2 lbs. 79¢

FLEXIBLE HACK SAW BLADES
Excellent quality, heat-treated for extra hardness. Fits all standard frames. 1/2" wide, ness. Fit





ALL-PURPOSE HACK SAW

Handy for tight places. Fits where ordinary hack saws comport be used. Complete with 71/2" tapering blade. 18N17278—Hack Saw......**26**¢ 18N17279—Ex.Blades, Ea...12c

HEX AND SPLINE WRENCH KIT

Contains complete range of wrench keys, both hex (Allen) and spline (Bristo) for No. 2 to 3/8" screws; all wrench sizes used in electronic trade. Comes in durable leutherette

18N15488-Shipping Weight 8 oz.............97¢



G.M. CO. FLARING TOOL

Flares copper, brass and aluminum tubing without cracking or splitting New type slip on clamp can be slipped on or off instantly. Flares six most popular sizes: 3/16°, ½°, 5/16°, 3/8°, ½°, 5/8°. Bright nickel finish.

18N15732.. Weight 2 lbs...... 2.79



BLOCK PLANE

Cuts with or across grain. For light work. Black enameled cast cap with lever cam lock. Screw end adjustment of high carbon steel cutter. Rosewood knob handle. 7" long: cutter 1 5/8".

1.99

18N15617......Weight 1½ lbs..... SMOOTH PLANE



### UTILITY CABINETS AND PARTS DRAWERS

#### REPLOGLE DRAFTING MACHINE



Cuts drafting time by one-third! Eliminates use of T-square, pro-tractor, and triangles. Makes acturate drawings up to 16x22". Combination 90° angle, calibrated scale moves at any angle to any point on the masonite board. Includes 17½x23½x¼" board, steel arms, fittings, rubber

18N15092-Wt, 8 lbs...... 6.63

#### NEW UTILITY CABINET

An ideal all steel cabinet for stocking and storing small parts. Drawer partitions are removable, to make from two to eight compartments in eachdrawer. Identifi-cation card holders are part of the cation card holders are part of the drawer handles. Top and bottom of cabinet are embossed so as to fit securely when stacked. Silver grey, quality finish and strong construction make this cabinet an an excellent value. Dimensions: 6" wide x 6'4" high x 8" deep. Drawers measure 1-3/8" deep. Shipping Weight: 5 lbs.

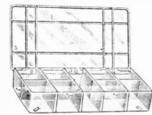


#### 4-DRAWER ALL STEEL CABINET

Attractive, impressive, practical in design. Emborsed cubinets fit securely when stack à in multiple units. Drawers are 8x10/x11/n each with card holder and terrovable partitions to furnish 2 to 12 comportments per drawer, Constructed of heavy gauge steel with no sharp eages, 7½x8½x10½. Brown, Shirping, Wt: 9 lbs. 



#### TRANSPARENT UTILITY BOXES



These attractive, crystalclear plastic boxes make ideal storage compartments for screws, nuts, bolts and hundreds of other small parts. Built-in partitions parts. Built-in partitions keep parts separated at all times. Tight, snug fit of hinged cover assures parts remaining in correct compartment even when carried upside down. 7x3½x1-3/16". Wt: ½ lb.

#### EQUIPTO STEEL DRAWERS WITH FRAME

A handy unit of exceptional quality for stor-ing your small parts. Use individually, stack



Use individually, stack or insert under counters and in shelving. Frames are welded into one strong, solid assembly that can be stacked with additional frames. Each of the eighteen drawers comes equipped with three adjustable and removeable cross dividers making four compartments possible. This makes a total of 72 adjustable compartments. Dimensions of crobinet: 34" wide x 13%" high x 12" deep. Dimensions of drawer: 11 7/8" x 5 3/8" x 3 1/8" high. Olive green finish. Shipped set up and ready for use. Shipping Weight: 76 lbs.

#### CHUCK ARBORS TO FIT ANY SMALL MOTOR

Fits shaft of any small motor in place of a pulley. With flange and locking nut to hold grinding wheels, saws, and other tools. ¼ " three-jaw chuck. Choice of four sizes.



No.	Unit No.	Motor Shaft	Cost
18N15095	495	1/4"	.83
18N15096	490	3/8"	1.05
18N15097	490-A	1/2"	.97
18N15098	490-B	5/8"	1.13

#### TEN DRAWER SMALL PARTS CABINET



A practical, heavy gauge steel cabinet especially designed for small parts. Provides ready storage space for resistors, con-densers, hardware and space for resistors, con-densers, hardware and other similar items. All drawers are 1½ deep and have removable dividers that adjust each compart-ment for one to 12 secment for one to 12 sections. Identification card

tions. Identification card holders on each drawer. Cabinets can be easily stacked, one on top of another. Each cabinet top has indentations that hold the feet of the one above. Sturdy construction — finished edges — handsome brown Hammerloid finish. Size: 16¼" wide x 8" high x 10" deep.

"SNAP-ON" TYPE PARTS DRAWER

The modern, convenient way to store small parts. A strong, compact combina-tion of gun-metal steel tion of gun-metal steel shells and water-clear plastic drawers. Merely snap together additional units on side, top and bottom to form strong metal cabinet with extra space. No tools required — simple to do; prongs and slots interlock



prongs and siots interlock securely and quickly. Plastic dividers make it convenient to sub-divide drawers into two or more compartments. Rails on bottom of drawers assure smooth easy movement under heavy loads. Dimensions: 6-1/16" long x 3-1/8" wide x 1-7/8" high. Weight: 9 oz.

#### ALL-STEEL MULTI DRAWER

Convenient and economical stor-



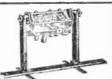
18N22381-Shpg. Wt: 10 oz. 10 for....2.70 Each...... 30¢

#### NEW UNION PERSONAL FILE CHEST

Indispensable as a safe place to keep in-Indispensable as a safe place to keep insurance papers, leases, contracts, correspondence, and other private or business papers. A systematic, time-saving, ready reference for instant use. Sturdily made of fire-resistant steel, equipped with spill-proof lock and two keys. Convenient, sturdy carrying handle with built-in identification card-holder. Comes with 10 Alphabetical A to Z dividers, 7 Budget Folders and 3 plain folders. Gray enamel finish. 12%x10%x5%.



18N22352-Shpg. Wt. 4 lbs. ..... 2.90



### CHASSIS, CHANGER CRADLE

Steel framework and cork-padded clamps keep your work off the table-holds chassis or phonochanger at any angle so you can work on the bottom of chassis without endangering tubes. Stands on table or work

bench. Adjustable for any size chassis or changer. Complete with standard clamps for grasping vertical surfaces of chassis or record changer. Groove in each clamp accommodates flanged-in bottom edge of chassis. Shpg. Wt: 3 lbs.

### **BALLASTS = LINE CORDS - FUSES**

#### JFD AIR-COOLED ADJUSTABLE BALLAST KIT



Handy new kit of adjustable AC-DC ballasts in eir-cooled perforated metal tube; designed to replace more than 2700 different types of ballast tubes. Contains 2 Type 'A, 2 Type 'B'', and 1 Type 'C'. Lallast; with book giving complete structures and replacement data. Type C' Fallatt, with 2005 in structions and replacement data.

#### REPLACEMENT TUBES FOR ABOVE KIT

7N6856-	Type	''A''	Ballast	8	Prong	O tal	
7N6857	Type	"B"	Ballast	8	Prong	Octal	
7N6858-	Tyra	''C''	Billat	4	Prong		004
Any Typ	e Abo	ove.	Each .				 88¢

#### JFD REPLACEMENT CHART

Use To Replace Tyles Type Beginning With	Numbers	Ending With
A K,L,M or B B ,K,L,M,BK,BL or BM		A,B,C,D,F,G or H A,B,C,D,F,G,H,S1,S2,S3
C To replace most 4-pro KX'55, 140 R165K and		as LX42, KX19,
UNIVERSAL	DECISTO	CORD

#### UNIVERSAL RESISTOR CORD

A replacement cord for all makes of receivers. One cord fit all type sets. Any normally und resistance from 22 to 330 ohms in one cord. Complete instructions cord. Complete in tructions supplied with each cord.



7N5321—Resistor cord. Shpa wt. 8 oz.

880

#### LINE CORD RESISTORS



Flixible turity cord for AC-DC radios, field rupplier, phono oscillator, etc. Ratings are at 3 amps. Voltage drop subtracted from line voltage. drop subtracted from voltage gives total v voltage gives total voltage applied to tube filaments.

1	No.	Ohms	Voltage Prop	No.	Ohm.:	1	Voltage Drop
ĺ	7N5322	135	40.5 volt-	7N5325	250		75.0 volt.:
	7N5332	157	45.0 volt	7N5329	280		84.0 volts
	7N5331	160	48.0 volt	7N5242	310		93.0 volta
	7N5323	180	54.0 volt	7N5326	330		99 0 volts
	7N5330	200	60.0 volt.	7N5241	360		108.0 volts
	7N5324	220	66.0volt	7N5320*	560		*78 75 volts

\*Asterisk denotes cord used in 3-way portable let: Voltage drop is calculated for .15 amp. drain.

### Any above Type, Each

#### SPECIAL AC-DC CORDS WITH PILOT LIGHT TAP

Similar above, but include four conductors, with pilot light tap. Tinned leads for added protection.

7N5334	160 Total Ohms	Tar ped at 24 Ohms
7N5335	180 Total Ohm.	Tapped at 25 Ohms
	200 Total Ohms	Tapped at 40 Ohms
	200 Total Ohms	Tar ped at 25 Ohms
7N5339	280 Total Ohms	Tupped at 40 Ohms

Äny Äbove Type, Each ..... 81¢

#### 220 VOLT TO 110 VOLT LINE CORD RESISTOR

American cord with standard male plug and female receptacle. European type with foreign plug and standard receptacle—ideal for servicemen abroad U.e with shavers, appliances. Standard 300 by the features.



ohm for sets using .3 amp. tubes, 50 ma. plate supply.



#### SIGNALITE 6 IN 1 PLUE TUSE

U. L. approved. Contains 6 sept to file links can be used six time without removing from socket. Signal lamp light in hock proof indicator cap when fuse towerements it until cap is turned to renew fure. Eliminates changing of fuses in dirk, fumbling to find blown fuse. Each amperace is made with different colored cap.

39N13250	1 10 Amp. Fuse, Orange Csp.	
39N13251	15 Amp. Fuse, Red Cap.	404
39N13252	20 Amp. Fuse, Blue Cap.	Each <b>48</b> ¢
39N13253	25 Amp. Fuse, Yellow Cap.	6 asst. 2.16
39N13254	30 Amp. Fure, Green Cap.	120 a. st. for 25.28

#### "METER BACK" FUSE MOUNT

Mounts directly on any meter terminal. Will not touch other posts. Takes l x  $^{-1}4\,''$  instrument fuses only.

	The state of the s	~	4
25N11049		29	Ģ.

#### JFD DUPLICATE TV REPLACEMENT BALLASTS

Exact duplicate ballasts for the television receivers listed below. Air cooled, perforated



Stock	Replaceme	nt for	Stock	Replacer	nent for	
No.	Make P	art No.   Ea		Make	Part No. 1	Each
7N6841 B 7N6842 B 7N6843 E 7N6844 E	elmont B9 elmont B9 merson 395 merson 395	M1653   1.3 M15822   1.3 M16067   1.3 7021   1.3 7022   1.3 7023   1.3	7N6850 7N6852 7N6853 7N6853 7N6854	Motorola Motorola Stew.Warn. Teletone Teletone Teletone	17A470303 17A485459 8W507300 TBR102 D TBR103D TBR104D	1.32 1.32 1.32 1.32 1.32 1.32

#### AMPERITE AC-DC BALLAST TUBES

By using those fine regulator, tubes are kept to within 5% of their correct voltage, even if the line varies from 85 to 135 volts. Complete with iterturg resistor that saves pilot hights and tubes. All KL types are Octal base.

\*Denotes exact replicement unit.

Any Type	Below, E	ach			<b>73</b> ¢
No. 7N12238 7N12237	Type 4P-45	No. 7N12225	Type 200R*	No. 7N12232	Type KL-45

#### REPLACES ALL AC-DC BALLASTS

Туре	Beginning With	Numbers	Ending With
KL-45	K, L, M or BK	36 to 67	A, B, C or D
KL-50H	K, L, M or BK	36 to 67	F, G or H
KL-75H	K, L, M or BK	67 to 105	F, G or H

#### TYPE 4P-45-4 PRONG DEPLACES THE FOLLOWING TYPES.

	L/P1 PM	A 21 2 1 1	15 105		11112.	
50A2	140R8	14 JL 44	LX42B	KX49B	LX4 C	KX55C
50B?	140R44	155L1	LX42C	KX49C	LX49D	LX55B
50X3T			LX42D	KX49D	KX55A	LX55C
147R4	11 L8	165R44		LX49B	KX55B	LX55D

#### LITTLEFUSES FOR TEST INSTRUMENTS

Type 8AG. Protect deficite instruments. Break circuit immediately on reaching blow point. Length 1" diam.  $^44$ ". May be used on 250 volts AC or DC. High Speed action.

	italo i No.	Rating	Max. Load Ma.	Re.: on 5 M 1. Load Ohm:	Each	Per 170	V-M Ohms Per V.	To Protect Milliam- meters
39N 39N 39N	112339 112385 112386 112387 112388	1/200 1/100	5 1 1 25 60 10 )	480 160 40 5 2	18c 12c 12c	14.70 9.80 9.80 7.35	over 1000 1000 500-1000 100-500 20-100	Galv. up to 0-1 1-10 10-25 25-75
39N 39N 39N 39N	112390 112391 112392 112393 112394 112395	3 h 1 2 3 4 1 2 2	200 300 400 600 1000 2000	3 5 3 2 2 2 .24	9c 6c	7.35	10-20 5-10 3-5	75-150 150-250 250-350 350-500 500-750 1000-1500

Littlefuses, Type 3AG, Rated at 25 ) V. No. | Amp. Each | No. | Amp. Each

39N12396	1 <sub>8</sub> 9e 1 <sub>4</sub> 9e 1 <sub>2</sub> 9e 3 <sub>4</sub> 9e	39N12378 1	4c
39N12397		39N12379 11	4c
39N12398		39N12380 2	4c
39N12399		39N12381 3	4c
Above, 100 fo	or 7.35	Above 130 for.	3.43

Littlefuses.	Type 3AG	Rated at 32 V.	
No.	Amp.	Each	100
39N12321 39N12322 39N12366	10 15 30	.025 .025 .03	1.96 1.96 2.45
Littlefuse A	uto Fuses.	. Type SFE 32 V	· .

Block NJ.	William	0.	76	EdGH	Let 100	
39N12368 39N12369 39N12370 39N12371	9 14 20	14	x 54 x 7 <sub>8</sub> x 11 <sub>16</sub>	3¢ 2½¢ 2½¢	2.45 1.96 1.96	
28/C FIISE		7:	X 1 " ‡ - 7 8 3 . T	wo piece		-

#### EXTRACTOR FUSE POSTS (B)

Stock No.	For Type	1	Knobs	Each
39N12328	8AG 1"		Screw driver slot	27 c
39N12329	8AG 1"		Thumb	26 c
39N12326	3AG 11 <sub>4</sub> "		Screw driver slot	26 c
39N12331	3AG 11 <sub>4</sub> "		Thumb	26 c

(C)	FUSE MO	UNTS.	Bakelite	base.

39N12382	Sub-panel, instrument	15c
39N12327	Sub-panel, 3AG	15c
39N12383	Panel, instrument	9 ć
39N12324	Panel, 3AG	15é





### IRC RESISTORS - KITS & CABINET ASSORTMENTS

#### IRC INSULATED RESISTORS-TYPE BT COMPOSITION **MEETS JAN SPECS**



Fully in ulated, moisture proof, filament type element in bakelite howing. Exclusive contraction features provide low operatind temperature and excellent power dissipation. Easily meet, the exacting requirements of TV. BTS corresponds to JAN RC10 and RC. J. BTA to JAN RC30 and BT-2 to JAN RC41. Toler in cell minimum.

quantities of 10 of one value. Specify relictance when ordering

#### STANDARD RMA CODE-SPECIFY RESISTANCE

, Ohms	Ohms	Ohm.:	Ohms	Ohms	Ohans	Megs.	Megs.
0.47	4 7	47	470	4700	47000	0.47	4.7
0.51	5.1	51	510	5100	51000	0.51	5.1
0.56	5.6	56	560	5600	56000	0.56	5.6
0.68	6 8	68	580	6800	68000	0.69	6.8
0.82	8 2	82	820	8, 00	8.000	0.82	3.2
1.0	10 0	100	1000	10000	780300	1 0	10 0
1.2	12.0	120	1200	12000	12000		12 0
1.5	15.0	157	1500	15000	13010		15 0
1.8	18.0	180	1800	18000	130000		18 0
2,2	22.0	220	2200	22000	220000	2 7	22.0
2,7	27.0	270	2700	27000	27000	2 7	
3 3	33.0	331	3300	33000	330000	3 3	
3 9	39.0	391	3900	39000	39 000	3 9	

1/2-Watt-BTS	1 Watt- BTA		2 Watt-BT-2
Size: be x 1 x"	Size x x 1, ".		Size 3, x 3, ".
Range 470 ohms to 22	Range 350 ohm to 22		Kim ie 470 ol nis to 22
megohin 10¢	neg hmc. 15¢		7N5263 20¢
7N5206			
100 of one value. 🗶 🔟	100 of one value.		100 of one
100 of one value. 6¢	Each	ł	value, Each 12¢

#### "BW" INSULATED WIRE-WOUND RESISTORS

Similar to the BT units listed above, but contain a wire wown Lelement, completely encased in molded conjound. Toler in a  $\pm 10\%$  Order sizes desired from tabulated listing above. Specify Relictance

1/2-Watt -BW-	
Size. 5/8 x 3/6". Ra 0.47 to 820 olums.	nge

1-Watt-BW-1 Size: 114 x 14", Ra 0,47 to 4700 ohins. '. Range

2-Watt-BW-2  $317 - 13_4 \times 21_{11}$ " 1.0 to 9800 ohms. Kange

15298 10¢	7N5259
of one value. 6¢	100 of one value. Each

20€ 15¢ 7N5299 9¢ | 100 of one value. 12¢

#### IRC METAL RESIST-O-CABINETS



Characteristics of the control with 4 non-confidence of the confidence of the confid

Assortment No. 4 100 BW ½ & bT. ½ watt assorted reight Range 47 ohms to 10 me johns.
7N5310 —With 9.80

Assortment No. 5 83 BW 1 & b1A 1 witt assorted resistors. Range 1, ohm. to 4.7

91 assorted insulated 3/2, 1 and 2 wait rem fors in duding 5 "Precestor" 

#### NEW IRC RESIST-O-KITS

Flat, pocket-sized all metal cale free with either of the is orthents below. Ten-range identified compartments. Contents cannot mix. Ideal forgervice calls or, mall bench stocks. Attractive blue and yellow finish. Measures 11 16" x 37%" x 65%".

IRC Assortment No. 7 45 BTS 14-walt, arsorted resulton Range 1,000 ohms to 2.2 me johnn 7N5313- With Cabinet...... 4.41

IRC Assortment No. 8 30 BTA 1-watt assorted resistors.
Range: 1,000 ohms to 1 megohm.
7N5314—With Cabinet.



#### IRC POWER WIRE WOUND VARIABLE RESISTORS

For all industrial and radio uses. Discipate heat rapidly, withstand heavy overloads, have great mechanical strength. All sup-Thed with contact band. Above ton with have alver contact. Mounting bracket, with all butter with units. Sies: ABA, 134" x 5.". DHA 1..." y 2..." FPA 41..." x 3.". all but the wait unit. Sines, ABA, 134" x 5 g; DHA, 134" x 7 g; DHA, 134" x 7 g; DHA, 134" x 34"; HAA, 612" x 115"; HOA 172" x 34"; HOA 172" x 15 g; HOA 175 g



7N5219 12¢ 7N5218 156 

75 | 50 | 80 | Watt | Watt | 7N5224 | 7N5225 | 7N5226 10 100 Watt 7N5227 W att 7N5262 Watt 7N5228 EPA ABA DHA ESA 71 .92 1 16 1.33 71 71 1 33 92 16 16 71 92 16 33 71 92 16 1 74 1 1.33 71 .92 16 1 92 71 92 16 33 71 71 1.74 92 1 16 1 33 71 92 16 1.33 2.14 1.74 93 21 73 73 21 21 1.39 93 93 .39 73 .93 1 21 1 39 1.79 2 18 73 93 21 39 73 73 93 21 39 21 1 79 . 39 1 78 00 28 47 78 00 1 89 28 1.47 78 00 28 1 1 47 2 30 1 1 89 03 39 2.01 03 39 1.56 ī 50 50 2 14 2 47 1 71 1.71 62 1 76 2 22 2 33 2.53 2 67 2 77 80 2 13 1 91 2 43

#### IRC WIRE WOUND FIXED POWER RESISTORS



Michine wound on non-hygroscopic that resists mechanical damage. Size: AB, 13,4" x ½"; HA, 612" x 11,4"; EP, 413" x 34"; HA, 612" x 11,4";

Aceu		H	Ó, 10 <sup>1</sup> 2″ x	148".	2
Available resi. CHM:	lo Watt 7N5210 AB	W att 7N5220 DG	50 Watt 7N5221 EP	.00 Witt 7N5222 HA	00 Watt 7N5223 HO
1 1 2 50	.34 .34 .34 .34	44 44 .44 .44	.80 .80 .80		
7· 100 150 200 200	.34 .34 .34 .34	.44 .44 .44 .44	.80	1.20	1 59
500 7:0 1000 1250 1500	.34 .34 .34 .37	44 44 44 46	. 80 . 80 . 80	1 20 1 20 1 20 1 22 1 22	1 59 1 59
2000 2250 2500 3000 3500	.37 .37 .37 .37 .37	46 46 46 46 46	. 85 . 85 . 85	1 22	1.62
4000 4500 5000 1000	.37 .37 .37 .42 .42	46 46 46 .52 .52	.85 .93 .93	1 22	1.62
7500 10,000 12,000 12,500 15,000	. 42 . 42 . 47 . 47 . 47	. 52 . 52 . 55 . 55	.93 .93 1.03 1.03	1 32 1 32 1 32	1.73 1.73
20,000 25M 30M 35M 40M	.51	55 64 64 64 64	1 03 1 15 1 15	1 45 1 57	1.84
50M 60M 75M 100M		.73	1 .25 1 .25 1 .44 1 .56	1.66 1.76 1.86	1.98 2.09 2.20

# OHMITE FIXED & ADJUSTABLE RESISTORS



#### BROWN DEVIL FIXED RESISTORS

Wire-wound, vitreous enameled units Tinned copper terminals. Protected against humidity. Tolerance  $\pm 10^{6}$ , . Wt. 3 oz.

#### OHMS

		CITIVID			
0.4‡ 10 0.6‡* 12†± 0.8‡* 15†± 1.† 20† 1.2†± 25 1.3†± 35† 2† 40†± 3† 75 4†* 75 5 100 7.5†± 105†	150	2 750*; 3,000 4,500; 4,000 4,500; 5,000	8,000 8,500†; 10,000 11,000† 12,000† 12,500 13,500† 14,300† 15,000 16,000† 17,500† 18,000†	20,000 22,500† 25,000 30,000 55,000 40,000 45,000 56,000* 60,000* 65,000*	75 000* 80 000* 85,000* 90 000* 95,000* 100 000*
	VATT	. +	20	-WATT	

### 5-WATT All sizes to 10,000 ohme except \$\frac{1}{No.} \quad \text{Ohm.} \quad \text{Each} \quad \text{All size} \quad \text{except of those marked \$\frac{1}{2}\$}

		200			
7N7103	1-1000	.31	No.	Ohms	Each
	1100-5000 000-10000 ±	.33 . <b>36</b>	7N7152 7N7152	0.4-1000 1200-5000	.44
10	WATT -		7N7152	5000-10000	.46 .52
All sizes exce			7N7152 7N7153	20000	.55
7N7150	0 4-1000 1100-5000	.34 .37	7N7153	JM-40M	.64
7N7151 11	000-10000	.42	7N7153 7N7154	45M-50M 55M-60M	.73 .73
	2500-25000	.51 .57	7N7154 7N7154	65M-80M 85M-100M	.86

#### VITREOUS ENAMELED FIXED RESISTORS

Lug type resistors, were wound on percelain cores. Vitreous on moded coaling protects and insulates the wire. Terminal lugs. Tolerance  $\pm 10^{\circ}i$ .



Sierance 110 (.					
Ohm.	25W <b>7N7125</b>	50W <b>7N7132</b>	100W 7 <b>N</b> 7139	200W 7N7144	
3 4 5	.47 .47 .47 .47	1.11 1.11 1.11 1.11 .80	1.66 1.66 1.66 1.66 1.20	2.20 2.20 2.20 2.20 2.20 2.20	
10 . 5 50 75 100	.47 .47 .47 .47	.80 .80 .80 .80	1.20 1.20 1.20 1.20 1.20	1.59 1.59 1.59 1.59 1.59	
150 200 250 500 750	.47 .47 .47 .47	.80 .80 .80 .80	1.20 1.20 1.20 1.20	1.59 1.59 1.59 1.59	
800 1000 1500 2000 2500	.47 .47 .51 .51	.80 .80 .85 .85	1.20 1.22 1.22 1.22	1.59 1.62 1.62 1.62	
3000 3500 4000 5000 6000	.51 .51 .51 .51	.85 .85 .85	1.22	1.62	
7500 8000 10,000 12,000 15 000	.55 .55 .59	.93 .93 .93 1.03 1.03	1.32 1.32 1.45	1.73 1.73 1.84	
20,000 25,000 30,000 35,000 40,000	.59 .67 .67 .67	1.03 1.15 1.15	1.45 1.57 1.57	1.84 1.91 1.91	
45,000 50,000 60,000 70,000 75,000	.76 .76 .76 .89	1.25	1.66 1.66	1.98 1.98	
80,000 100,000 125 000 150,000 175,000	.89	1.56 1.66 1.71 1.78	1.86	2.20	
200,000 225,000 250 000		1.84 2.08 2.08			

### STANDARD ADJUSTABLE SLIDERS

Screwdriver Type

Bakelite Knob T
-----------------

Diam.	No.	Each
5 " 2 16" 3/4" 1 1/4"	7N7193 7N7194 7N7195 7N7196	12¢ 12¢ 15¢

No.	Each
7N7197	18¢
7N7198	24¢
7N7199	24¢

#### OHMITE "LITTLE DEVIL" RESISTOR ASSORTMENTS FREE PLASTIC CABINET

You pay only for resistors! Contains 125 selected  $^{1}_{2}$ -watt resistors in 40 compartments. 40 values (10 ohms to 10 meas) most frequently used,  $9 \times 1^{4} \times 5^{1}_{1}$ ". Complete with cabinet and 1.8 resistors.

7N5313-Type CAB-1 Same as allove but with 1 with assortment 7N5316—Tyre CAB-2. 12.25 18.37

### OHMITE "LITTLE DEVIL" INSULATED RESISTORS

Insulated mold of plastic. Meet JAN glec took insulation in a lumidity and self water and a sign tests. Used in orthood equipment and in foremost his orderes. Disciple heat rapidly. Tolerance ±10°,



### STANDARD RMA CODE-SPECIFY RESISTANCE

Ohm. Ohn.	Ohms	Ol ms	Megohms	Megohms	Megohms
10   100 12   150 18   150 18   22   220 27   270 33   330 37   390 47   470 56   560 68   680 8.1   820	1,000 1,200 1,500 1,800 2,200 2,700 3,300 3,900 4,700 5,500 6,800 8,200	10 000 12,000 15,000 18 000 22 000 27 000 33,000 39 000 47,000 56,000 63 000 82,000	0.1 0.12 0.15 0.18 0.22 0.27 0.33 0.39 0.47 0.56 0.68 0.82	1.0 1.2 1.5 1.8 2.2 2.7 3.3 3.9 4.7 5.6 6.8 8.2	10.0 12.0 15.0 18.0 22.0

Size 3 \( ' \times ' \);" Max. 350 volts	1 WATT Size ' <sub>16</sub> " x 7 ½" Max. 500 volts	Size	WATT
	7N710115¢	7N7102	

NOTE: We can supply all RMA standard value resistors in 5% tolerance in multiple quantities of 10 of ne value. Send us your specifications and we will glidly surmit quotations.

### OHMITE "DIVIDOHM" ADJUSTABLE RESISTORS



Wire wound, vitreous en imeled on porcel in cores with a narrow strip of wire exposed to form a intest surface.

		& W	th.liler.	to form con	biot surface.
Olms	10W 7N7174	25 W 7 <b>N7175</b>	50W 7N7178	100W 7 <b>N7182</b>	200W <b>7N7185</b>
1			1.47		
2 3			1.47		
-4			1.47		
5	.71	.93	1.16		
10	.71	.92	1.16	1.74	2.14
25 50	.71 .71	.92	1.16	1.74	2.14
75		.92	1.16	1.74	2.14
100	.71	.92	1.16	1.74	2.14
1 0			1.16		
250	.71	.92	1.16	1741	
300		.52	1.16 1.16	1.74	2.14
400			1.16		
500	.71	.92	1.16	1.74	2.14
750	.71	.92	1.16		
800 1000		.92	1.16	:::::	1111
1 250		.94	1.16	1.74	2.14
1500			1.21		
2000	.73	.93	1.21		
250 2500			1.21		
3000	.73	.93	1.21 1.21	1.79	2.18
3500			1.21		
4000	.73	.93	1.21		
4500			1.21		
5000 6000	.73	.93	1.21	1.79	2.18
7000			1.28		
1200			1.28		
7500	.78	1.00	1.28		
8000			1.28		
9000	_ =::		1.28		
10,000	.78	1.00	1.28	1.89	2.30
15 000		1.03	1.39 1.39	2.01	0.40
20,000		1.03	1.39	2.01	2.42
25,000		1.11	1.50	2.14	2.47
30,000			1.50	2.14	2.47
40,000			1.50	2.14	2.47
50,000			1.62 1.62	2.22	2.53
80,000			1.80		
100,000			1.91		

# RELIANCE RESISTORS-SMALL PARTS CABINETS

#### INSULATED 1/2 AND 1 WATT RESISTORS



RMA color coded insulited resistors. Mosture and feat resist int. Sceniely inchored partial wire lead. Heal for congested witing in compact equipment

All resistors are constructed to the highest quality standards. Townouse level Each is compatily made to stall standards in the trainings for use where space is critical. RMA preferred values only. Guaranteed

Resis. Ohms	Lg Watt Cat No.	1 Watt Cit. No.	Recur. Ohn.	Watt Cit Iv	1 Watt
220	7N4250	7N4300	56 000	7N4278	7N4328
270	7N4239	7N4354	68 000	7N4279	7N4329
330	7N4245	7N4348	82 000	7N4280	7N4330
390	7N4251	7N4301	100 000	7N4281	7N4331
470	7N4252	7N4302	120,000	7N4282	7N4332
560	7N4253	7N4303	150 000	7N4283	7N4333
680	7N4254	7N4304	180 000	7N4240	7N4355
820	7N4255	7N4305	20 000	7N4284	7N4334
1000	7N4256	7N4306	270,000	7N4285	7N4335
1200	7N4257	7N4307	330 000	7N4286	7N4336
1500	7N4258	7N4308	390,000	7N4247	7N4350
1800	7N4259	7N4309	170,000	7N4287	7N4337
2200	7N4260	7N4310	560,000	7N4241	7N4356
2700	7N4261	7N4311	680,000	7N4242	7N4357
3300	7N4262	7N4312	820,000	7N4298	7N4353
3900 4700 5600 6800 8200	7N4263 7N4264 7N4265 7N4266 7N4268	7N4313 7N4314 7N4315 7N4316 7N4318	10 12 13 13	7N4288 7N4243 7N4248 7N4244	7N4338 7N4358 7N4351 7N4359
10,000	7N4269	7N4319	2.2	7N4289	7N4339
12,000	7N4270	7N4320	2.7	7N4249	7N4352
15,000	7N4271	7N4321	3.3	7N4290	7N4340
18,000	7N4272	7N4322	3.0	7N4291	7N4341
22,000	7N4273	7N4323	4.7	7N4292	7N4342
27,000	7N4274	7N4324	5.6	7N4293	7N4343
33,000	7N4275	7N4325	t. 8	7N4294	7N4344
39,000	7N4276	7N4326	8.2	7N4295	7N4345
47,000	7N4277	7N4327	10	7N4297	7N4347

1/2-Watt Size	4¢	1-Watt Size	<b>5</b> ¢
		Fich	
10 for <b>29</b> ¢100 for	2.49	10 for 38¢100 for	3.40

#### KIT OF 100 RESISTORS

An assortment of 100 popular care to be to. Kit colour approximately 50 1-wait 25 by wait and 55 by wait relation. All melitamental RMA color coded, Shipping weight, his 7N3816— Kit of 100 resistors, E+h Kit



#### RESISTOR COLOR CARD INDICATOR

Permit in that doubton of the value in olims of any kMA color oderine, for the circular rule can be set in a more interesting as are as unite. Full discrete, practed on indicator. 10¢ 7N3847...

Note: Calculator above free with order, for 20 or more Reliance carbon results.

#### OHMITE POCKET-SIZE OHM'S LAW CALCULATOR



Solves Ohm's Law problem, justly and early with one acting of his Notice and points to one confusion all value and active reading. Requires no shiftenth knowle described as "x9". RMA kesistor Color Code chart also included first in dy

23N19711—Portpaid in U.S.A....



#### 4 DRAWER ALL STEEL CABINET



#### IRC RESIST-O-GUIDE

A handy resultor color code chart that measures 3 x 5 inches It include, both the old ind the new Lylic code, bigether with tolerance designations. Also has Ohm's Law and a ruler printed on the Pyrolin card.

15¢ 23N19747....

#### 5 AND 10 WATT WIRE-WOUND RESISTORS



Tolerance within 5% All are would with genuine inchrome with on fine or raine full of Girls inteed acturally 5%. Time eactiple with leads and learn for early softening. When or learning specify are lessed.

Olm. Ohms Olm	OF mi		l Olms	Ohm:	Ohms
5   50 250 10 75 400 15 100 500 20 110 600 25 00 750 *Availat le in 10 watt dize		1 00 1 750 . 000 2750 500	2750 3000 4000 5000 6000 7000	8000 9000 10000 12500 15000	20000 22500 25000 30000* 10000*

17¢ 7N4438-5-Witt Kellet r. Eich, my sie-.... 

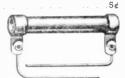


				Ohn				nach	
4	10	100	150 200	1000	. )UO 2:00	5000 10000	1	29¢	

7N4445 Sie ity o s fince 7N4446 Fata Shift for allove Engl

#### Reliance Vitreous Resistors

Contacted for the 10°, All and non-porous disapate heat tandity for a tay line not the marked for not change in value. Each marked for rc istin e.



#### 10-Watt Rating 3/8x13/4

No Oh	N	011	No	Ohrs	No	Ohms
7N4850 1 7N4854 10 7N4856 10 7N4861 30 7N4863 30 7N4864 30 E. i. h., Any Six	7N4873 7N4875	100 150 150 150 100 500 750	7N4876 7N4879 7N4880 7N4881 7N4883	1000 2000 2500 3000 5000	7N4886 7N4888 7N4889 7N4890 7N4893	10000 15000 20000 25000 30000

50-Watt 34x411 20-Watt Rating 1 2x2" No. Olms No. 2500 100 7N4910 7N4936 7N4959 7N4960 7N4938 3000 .150 500 7N4911 7N4913 7N4940 4000 5000 7N4963 1000 7N4915 5000 7N4919 100 7N4943 6000 7N4970 10000 500 7N4946 8000 7N4976 7N4920 10000 7N4979 7N4923 7N4947 15000 25000 20000 7N4949 7N4981 7N4926 7N4950 7N4930 0000 7N4983 30000 . 000 7N4892 100000 7N4985 50000 7N4934 \_\_\_\_\_<u>h\_\_</u> Ea th 66∉ 32¢ 32€



#### ALL-STEEL MULTI DRAWER

Convenient and economical storage for fitting and small part: Each unit con trated with a naue and let icsi med to interlock with other let icai med to interlock with other unit at tip cotton or added unit at tip cotton or added unit at tip cotton or added unit on lexiting factories for economy of the Early driver has handy full and holder for contents card. All tiel contribution finited in attractive two tone are en. Ample drawer do that it is two tone are en. Ample drawer and the strength of the contribution of the

18N22381- Shpq. wt. 10 oz 10 far. . 2.70 Each . . . .

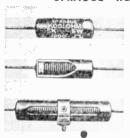
#### WIRT RESISTOR CABINET 24 ROOMY COMPARTMENTS

Handsome bland finish wooden and randome blood inter wowten and not do under the struct for the systematic and care structed treast in, mall on-denier and hardware in all producing tools. Sive you're and fortikely small part, at your furgitups, protects them from dumane by a notice to the large trools. Residence or on-



### SPECIAL RESISTORS & CLAROSTAT VOLUME CONTROLS

#### SPRAGUE "KOOLOHM" RESISTORS



New Tropicalized fixed resistors. Insulation has high di-electric strength, suidion has high disclectine strength, withstands red he it and is impervious to moisture. Units are encased in tubular ceramic shells which permit mounting in contact with metal parts without shorting,  $2b_2^{\rm or}$  tinned copper wire leads. Meet requirement of telewire leads. Meet requirement of television and other high-voltage circuit. Negligible result in a drift. Insulated for 10,000 volts. A couracy of isranteed to 10,000 volts. A couracy of isranteed capacitance up to 50 mc. and distributed capacitance is only 2 mild.

#### STANDARD FIXED

Ohms Ohms	Ohms	Ohm.
10   250 20 300 25 400 30 500 50 750* 75 1000 100   1250 150   1500	2500 3000 5000 7500 10,000 12,000* 12,500   15,000 17,500*	21,000 35,000 37,001 41,000 50,000* 77,000*
†-5 watt only.	*10	watt only.

Type 5K	T-5 W. 1 1/8 x 13,	/32"
No.	Ohms	Each
7N7513 7N7514 7N7515 7N7516 7N7517 7N7518 7N7519	10 to 5,000 7,500 to 10,000 12,500 to 15,000 20,000 25,000 30,000 40,000	30c 31c 35c 39c 49c 53c

#### Type 10KT-10 W. 13/4x13/32"

7N7520	10to 10M Ohms	34c
<b>7N</b> 7520	12M, 15M Ohms	38c
7N7521	. 17,500 & 20,000	42c
7N7522	25 00 )	49c
7N7523	30,000	53¢
7N7524	40,000	64c
7N7525	50,000	71c
7N7526	60,000 i	88c
7N7527	70,000	996

### STANDARD ADJUSTABLE

Type 10AD-10 W. 13/4x13/32" With adjustable clip.

Ohms	Ohms	Ohms	Ohms
10	200	750	3000
25	257	1000	4000
50	370	1500	5000
100	400	2000	<b>7500</b>
150	500	2500	10,000

7N7534-Any Above 58¢ 

#### NON-INDUCTIVE FIXED Type 10NIT-10 W, 13/4x13/32"

Ohms	Ohms	Olims	Ohms	
10 20 30 40 50 60	70 8) 90 100 250 400	500 750 1000 1250 1500 2000	2500 3000 3500 4000 5000 7500 10,000	
Stock N	0.	Ohms		
7N752 7N752 7N753 7N753 7N753 7N753	9 1.75 0 250 1 2	to 1000 0 to 200 0 to 400 5000 7500 0,000	0 . 54c	

### MALLORY YARD-OHM



Ohi	ms (	Cap. in		Stk. C	Ohms	Сар
No. Per			Any Type	No. P	er In.	Ami
7N4407	1	.707	Each	7N4411	50	.10
7N4408	5	.315	4.4	7N4412	100	.07
7N4409	10	.223	44¢	7N4413	250	.04
7N4410 2	25	.141		7N4414	500	.03

#### CONTINENTAL "NOBLELOY" X-TYPE RESISTORS

Now 1-watt resistor involving metal film principle, with accuracy of wire wound unit. No carbon u.ed. Metallic resistance film is formed on the surface of a low loss ceramic tube, then hermetically sealed by a layer of vitreous enamel. Ceramic tubes are hollow and allow greater area for heat dissipation Excellent resistance stability and negligible noise characteristics. Will with tand overloads of 200% and temperatures of 400 F, without change in value upon return to room 6 mperature. Critical tolerance within 1%. Size 9/32"x1". 11-2" tinned copper leads.



Ohms	Ohms	Ohms	Ohms	Ohms
1 10 25 50 100 200 400 500 1000 1450 2000	295 ) 3500 4000 4450 4950 5000 5500 5950 7450 8500 8950	9950 10,000 13,500 15M 20M 25M 30M 40M 50M 60M	85M 93M 100M 150M 200M 240M 250M 300M 400M 450M 490M	500M 600M 750M 800M 900M 1.0 Meg. 1.5 Meg. 2.0 Meg. 2.5 Meg. 3.0 Meg.

#### 7N7105—S pecify Resistance. Each.....

#### CLAROSTAT SERIES "M" AND "T" VOLUME CONTROLS



Compact, efficient with exclusive stabilized element. "T" type tapped controls listed below persupped commons listed below permit special functional operation not attain ble with other types of controls. Dia,  $1^1_h$ ". Shaft  $2''x^1_4$ " dia,  $3^n_h$ " bushing with nut.



dia. 3," but-hing with nut.
Switches to fit either type control litted below. Lest letter of type numbers listed below identities taper of control.

#### CLAROSTAT TAPER CODE

S— Linear, Std. Pot. U— Left Hand, Arit, and C Bia. V— Right Hand, C Bias Rheo, stat Z— Left Hand, Audio Shunt, AVC, Tone

W-Left Hand, Screen Grid Volt,

Y-Left Hand, Audio Shunt and AVC When Steep Taper is Desired

#### STANDARD CONTROLS

No.	Type	Ohms	No.	Type	Ohnis	No.	Type	Ohms
8N7353 8N7354 8N7355	M-5-8 M-8-8 M-11-8 M-15-8 M-49-8 M-20-U	500 1,000 2,000 3,000 5,000 5,000	8N7362 8N7363 8N7364 8N7365 8N7366 8N7367	M-10-8 M-11-8 M-16-Z M-47-8 M-49-8 M-51-Z	25,000 50,000 50,000 75,000 100,000 100,000	8N7378 8N7379	M-66-Z M-67-Z M-68-Z M-69-Z M-99-Z	1 Meg. 2 Meg. 3 Meg. 4 Meg. 5 Meg. 10Meg.
8N7357 8N7358 8N7359 8N7360	M-23-8 M-27-8 M-29-U M-30-V M-32-8 M-33-U	7,500 10,900 10,000 10,000 15,000 15,000	8N7370 8N7371 8N7372	M-55-8 M-64-Z M-58-8 M-60-Z M-61-8		8N7403 8N7404	M-37-U M-41-W M-15-W	10Meg. 20Meg. 25Meg. 50Meg. 500Mg.

### Your Cost, any of above controls ......

#### SERIES (T) TAPPED CONTROLS

No.	Type	Ohnis	Tapped	No.	Туре	Ohms	Tapped	I
8N7380	T-42	250,000	125,000	8N7388	T-111	2 Meg.	100,000	1
8N7381	T-69	350,000	75,000	8N7389	T-115	2 Meg.	500,000	ŀ
8N7382	T-78	500,000	100,000	8N7390	T-116	2 Meg.	1 Meg.	ı
8N7383	T-101	1 Meg.	50,000	8N7405	T-120	2 Meg.	400,000	Į
8N7384	T-102	1 Meg.	(100,000 (500,000	8N7391	T-121	2 Meg.	{250,000 500,000	ŀ
8N7385	T-103	1 Meg.	100,000	8N7406	T-123	2.5 Meg.		1
					_		1500,000	ı
8N7386	T-109	1 Meg.	225,000	8N7392	T-128	4 Meg,	500,000	ı
8N7387	T-112	1 Meg.	500,000					1
37 0		6 1		1				

Your Cost, any of above controls..... "M" & "T" AD-A-SWITCH PLATES 8N7398—SPST......35¢ 8N7399—DPST..... 440

#### CLAROSTAT WIREWOUND CONTROLS

Series 58. Wirewound controls with alloy wire precisely wound on thin bakelite rtrip. Perfect sliding contact. 14" chaft, 112"long. All controls listed elow are linear.



No.	Ohms	No.	Ohms	No.	Ohms	No.	Ohms
8N7048	1	8N7056	25	8N7097	200	8N7037	3000
8N7049	2	8N7057	30	8N7096	300	8N7084	5000
8N7051	4	8N7058	40	8N7095	400	8N7078	10000
8N7052	6	8N7099	50	8N7094	500	8N7073	15000
8N7053	10	8N7060	60	8N7093	750	8N7070	20000
8N7054	15	8N7061	75	8N7092	1000		
8N7055	20	8N7098	100	8N7090	2000		

Any Above Type—Each..... 8N7068 25000 8N7066 40000 8N7067 30000-Each..... 8N7065 50000—Each •8N7064 75000 8N7063 100000

### IRC "PRECISTORS" CARBON RESISTORS



Excellent for multipliers, lest equipment, HF TV circuits and RF high voltage systems. Guaranteed accuracy £1%. Type DCF  $12^{\rm cw}$  watti size  $^{\rm th}$   $_{\rm u}$   $^{\rm th}$   $_{\rm u}$   $^{\rm th}$  dam. DCH 1-watt, size  $^{\rm th}$   $_{\rm u}$   $^{\rm th}$   $^{\rm th}$ 

Ohms	Ohms	Ohms	Ohms	Megohms	Megohms
100 150 200 250 300 400 500	1,000 1,500 2,000 2,500 3,000 4,000 5,000	10,000 15,000 20,000 25,000 30,000 40,000 50,000	100,000 150,000 200,000 250,000 300,000 400,000 500,000	1.7 1.5 2.0 2.5 3.0 4.0 5.0	10.0 15.0 20.0

	Type DCF				Type D	CH	
Stock No.			Lots 25/Ea.*	Stock No.	Ohms	Singly Each	Lots 25/Ea.*
7N5229 7N5229 7N5229	200-4meg.	.88 .73 .88	.68 .56 .68	7N5230 7N5230	1/2-3 meg. 5 meg. 10-15meg. 20 meg.	1.18	.68 .90 1.13 1.35

59¢ \*Special indust. price applies to lots of 25 of one value.

### MALLORY VOLUME CONTROLS

#### MALLORY RADIO SERVICE ENCYCLOPEDIA - 6TH ED.



Only complete servicing reference on all pre-war and post-war receivers. As proximately 25% more listings than the 5th edition. Up-to-the-minute facts on correct replacement parts, volume and tone controls, capaci-tors, vibrator, circuit information, servicing hints, etc. Lit. radio set; by make and number ide-by-ride with replacement data on its components. Complete infor-

mation on IF peaks, correct tube complement, all conveniently arranged for instant reference. Provides for turther reference by listing page and volume in Rider. Manual where further information on the subject

may be obtained. 23N19748 --552 pages. Shipping weight 4 lbr.

#### UNIVERSAL VOLUME CONTROLS

The Mallory-Yaxley Volume Controls had on these page can be used to envice over 90% of all the radio be even new to be With comparatively few units, the servicer and is energy to requirements. Mallory-Yaxley Controls to the first minimum had adjustment or all this certifol; 3" shaft that in he shaft ned by nothing and breaking off consistential fig. all timished with the hold of the mallory to hardware. Authorized that the bloom's distribution and broading and breaking off consistential field the bloom's distributions. additter, and mounting hardware. Approved twitter (I. ted below) can be added to any control.

#### STANDARD UNIVERSAL TAPPED CONTROLS

Standard 11/2" diameter control, with top favarious applications. Furni hed with two nut., washer, ground terminal and knob adapter.
\*No provision for use with a witch; if cwitch is defined use TRP024. Hhas dotted the facilities sets. \*Special taper for ladar, erv. o. Othors are taper 1. Less switches.



2.00

No.	Type	Ohms	Tap'd	No.	Туре	Ohn.	Tapped
8N6543		40000		8N6588	TRP615	3 Meg.	900000
8N6545		60000 250000		8N6589 8N6590	TRP616 TRP617	50000 ) 60000	12000
8N6546 8N6547				8N6591 8N6593	TRP618	2 Meg.	250000
8N6577		500000		0140093	TRP620	2 Meg.	900000
8N6578 8N6579		500000	2.25000	8N6594*	TRP621	21, Meg.	
	TRP609:	I Meg.		8N6595 8 <b>N</b> 6596	TRP672	44000	{ 7000 14000
8N6583		2 Meg.	to-	9 <b>M</b> 0230	TRP623	_250000	50000
8N6586 8N6587	TRP613 TRP614†	2 Meg. 35/1000	400000	8N6576	TRP624	2 <sup>t</sup> , Meg.	{250000 {500000

### STANDARD UNIVERSAL DUAL CONTROLS

Consists of two volume controls strapped together and driven by a single shaft. Units listed service practically all receivers.

		Res. in Ohms		Res. in Ohms		Ta	Taper	
No.	Туре	Front	Rear	Front	Rear			
8N6684 8N6658 8N6685	CE GE GG	2000 10000 10000	5000 5000 10000	I IIV	I VI VI			

8N6686	GK	10000	50000	I	I
8N6659	LL	100000	100000		I
8N6687	LM	100000	250000		I
8N6749	MM	250000	250000		I
8N6689	NN	500000	500000		I

#### UNIVERSAL REPLACEMENT CONTROLS

All with two mounting nuts, washer, ground terminal and knob ad little. With involved units have adjustified bits teature the knisive Mallory-Yaxliy); carbon element units with adjustified bits in its where extracted.

VV	ire	VV	ou	nd	Co	ntı	ols
						-	

No.	Part	Ohm	T.pei	No.	Pist	Ohme	Taper
8N6660 8N6661 8N6662 8N6663 8N6664	Q R S T	2 0 10 . 0 . 30	4 4 4 4 4 4	8N6711 8N6675 8N6713 8N6741	G7* H* H7* A. MP*	10000 15000 15000 2000	7 2 7 4
8N6665 8N6666 8N6667 8N6732 8N6668		F 3 100 200 400 500	4 4 4 1	8N6738 8N6710 8N6740 8N6714	Y5MP F1 * Y10MP	5000 7500 10000 15000	4 1 4 1
8N6733 8N6734 8N6669 8N6719 8N6735	UC500	550 1000 1000 1000 2000	1 1 2 4	8N6715 8N6742 8N6676 8N6677 8N6716	Y25MP J KY K12	20000 25000 25000 50000 50000	1 2 1
8N6670 8N6704 8N6736 8N6671 8N6705	C12* A3MP* D*	2000 2000 3000 3000 3000	2 1 4 2 7	8N6717 8N6718 8N6729 8N6721 8N6745	ZI ZI:3 UC 310* UC50: Y:300MP	75 100 75000 100000 150000 200000	2 1 2 1 4
8N6706 8N6703 8N6737 8N6672 8N6707	A4MP* A5MP*	3000 4000 5000 5000 5000	1 4 4 2 7	8N6730 8N6728 8N6722 8N6723	"M" UC511† UC509* UC503 UC504	250000 250000 250000 750000 3 Meg.	1 2 1
8N6673 8N6709 8N6739 8N6674	F* F7* A10MP* G*	7500 7500 10000 10000	2 7 4 2	8N6724 8N6725 8N6726 8N6727	UC505 UC506 UC507 UC508	4 Meg. 5 Meg. 5 Meg. 9 Meg.	1 2 1

\*—His adjuitable bias feeture. Wire wour ligral have educable plate; carbon element control have external adjustable resistor. †—Has slotted shaft for autollet. Supplied Less Switch. 73¢

No. (4) Linear taper; for voltage divider circuits. No. (4A Modified linear tiper, similar to No. 4. No. (7) Wire wound element. For antenna and "C" bias.

#### EXPLANATION OF MALLORY VOLUME CONTROL TAPERS

No. (1) For audio or antenna shunt circuits. No. (2) For series circuits such an cathode voltage controls. No. (3) For antenna shunt and "C" bias circuits.

#### MOUNTING BRACKETS



Attachable switches to fit all universal, tapped, and dual controls listed on this page.

No.	Part	Type	Ea.
8N6288 8N12853 8N6289 8N6290 8N6291	6-9 8 7 13 14	S.P.S.T. S.P.D.T. D.P.S.T. 3-P.S.T. 4-P.S.T.	.35 .44 .44 .44

**CONTROL SWITCHES** 

Type A —Length 4". 
8N6561  $-1_4$ " diam.,  $\frac{1}{2}$ " flat. 
8N6562 $-\frac{1}{4}$ " diam.,  $\frac{3}{2}$ " flat. 
8N6563 $-\frac{3}{16}$ " diam.,  $\frac{1}{14}$ " flat. 

**EXTENSION SHAFTS** 

Type B—2" long, 14" diameter with 3<sub>E</sub>" slot. Enclosed in tight lifting tube. 8N6559—Each..... 26¢

For use where control mounts of:

Plated metal. Adjustable cha ic. Plated in mounting center

8N6297—Tyre RB-248—Mounting centers 116" to 23 8".

**8N6298**—Type RB-249—Mounting centers 23 x" to 27 x". Either Type, Each...... **15¢** 

### CONTROL HEY NUTS



#### VOLUME CONTROL WRENCH



For tan lard volume control nuts. 8N6387—No. 178—Erch.....15¢

#### MALLORY CONTROL DEALS

Fast-moving selections of Mallory controls, switches and accessories in neat, heavy-duty cal inet. Contains 95% of all your control needs. The cabinet has provision for the Mallory Encyclopedia (not supplied), and the cil inet if FREE. See facing page for full description of controls contained in there cabinets.

### MIDGETROL SELECTION

	3 2 2	U-48 U-53 U-50 U-44 U-18	l 1 9	U-55 U-39 U-41 US-26 UE-50	5	UP-10 Extra Spring Clips Extra U Clips Web Removing Tool
--	-------	--------------------------------------	-------------	--	---	---

8N7024.....14.55

#### MR SELECTION

4 MR-48 3 MR-53 2 MR-50 2 MR-44	1 M 1 M	R-18 R-55 R-39 R-41	3	M-26 M-27 M-28
--	------------	------------------------------	---	----------------------

8N7023.....14.55

4 UM-154	1 UM-118	2 M-27
	1 UM-163	1 M-28
2 UM-147	1 UM-142	5 SS-25
2 UM-156	3 M-26	1 SS-14
1 UM-140		
8N7027		14.55

### **MALLORY VOLUME CONTROLS**

#### MALLORY TELEVISION ENCYCLOPEDIA

200 page manual following the same format as the famous MALLORY RADIO SVCE. ENCY. Lists all makes and models T.V. sets through April, 1949, chowing values and replacement of controls and filter condenser... 35¢

#### TELEVISION CONTROLS

No.	Туре	Ohms	Price
8N6600 8N6601 8N6602 8N6603 8N6604	SU29 SU41 SU50 SU67 SUD1235	25M 100M 500M 5 Meg. 5 Meg. taj - ped at 1 Meg.	.88 .88 .88 .88 2.20

Switches: Uses same switches as Mallory type "U" midgetrols listed on right.

# 

### MALLORY "UM" AND "TM" JUNIOR CONTROLS

Ultra-compact controls featuring ross less con-position elements; attachable switches, plug-in type shafts. Both UM and TM types have slots which will take any one of the special shafts listed below. The TM types are similar to the UM but are provided with a tap as shown. TM type designed for use in lone con-pensal ingoriectity. All are \$\frac{1}{2}\psi\$ tinck, \$1^{1}\text{in}\psi\$ diameter. Complete with \$S1 shafts.

#### MALLORY "UM" TYPE JUNIOR CONTROLS

No.	Туре	Ol · · s & Taper	No.	Туре	Ol.ms & Taper
8N6926 8N6927 8N6928 8N6929 8N6931 8N6931 8N6933 8N6934 8N6935 8N6936 8N6937 8N6938 8N6938	UM114 UM118 UM119 UM120 UM121 UM122 UM124 UM128 UM129 UM133 UM135 UM137 UM138	5M(4A) 10M(1) 10M(2) 10M(4) 15M(1) 15M(2) 20M(1) 25M(2) 25M(4) 50M(1) 50M(4) 75M(2) 50M(4) 75M(2) 5Naft. Eacl	8N6940 2N6941 8N6942 8N6943 8N6944 8N6945 8N6947 8N6949 8N6949 8N6950 8N6950	UM140 UM141 UM142 UM144 UM147 UM159 UM151 UM156 UM158 UM163 UM163	100M(1) 100M(2) 100M(4) 150M(1) 250M(1) 250M(1) 250M(1) 500M(1) 500M(1) 750M(1) 1 Meg. (1) 2 Meg. (1)
1					2 -

#### MALLORY "TM" TYPE TAPPED CONTROLS

	TM240 I TM_41 I	Meg.	200M
8N7013* TM222	TM.242 I TM.243 I TM.244 I TM.246 2 TM.246 2 TM.249 2 TM.250 2 TM.250 2 TM.252 2 TM.254 2 TM.257 3 TM.257 3 TM.251 2	Meg. Meg. Meg. Meg. Meg. Meg. Meg. Meg.	200M 450M 450M 450M .00M .00M 15M 60M 250M 600M 125M 900M 900M 400M

Switches: Uses same switches as "MR" controls—see listing lower right.

#### MALLORY PLUG-IN SHAFTS

ACCORDING TO COMPANY AND AND A SECURE OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDR
Fit all UM and TM junior con-
trols. Adapt for use with most auto-
and home radios.
8N6989-SS17. Replaces any
slotted "In acu;" shaft to b"
long
8N6993—SS19386
8N6994 -SS20
8N6995-SS21. Motorola Model
1/D 26c
8N6996—SS22
8N6997 —SS23
8N6998—SS2418c
8N6999 SS25. Replaces standard
knurled shafts from 34" to 4" long.
Each
8N6809—SS26. Zenith sets . 186
8N6810 -SS27. Philos sets 18c
8N6820 - SS28. Motorola sets, 38¢
8N6821-SS29. Motorola sets. 18d
8N6822—SS30. Motorola sets. 18¢

12 1

0-13
8N6826-SS31 Philosopha 104
8N6827—SS32 Philopeole 194
8N6973-SS1. Replaces any 1,"
round shaft or 12" or 32" flat- lened shaft up to 4" long 186
8N6974—SS2
8N6975—SS3. Replaces any 57"
slotted shift up to 2" long 26c
8N6976SS4
8N6977— SS5
8N6978—SS6. RCA, Hud.on
H6
8N6983- SSII. Replices any 12"
. lotted shaft 2 to 4" long 26d
8N6984SS12 18c
8N6986- SS14. Replaces any 1,"
slotted shart to 2" long 26¢
8N6987—SS15. Replaces any "z". lotted shaft 4 to 6" long26é
8N6988—SS1618¢
0110000 10010

#### NEW MALLORY MIDGETROLS



Small diameter ( $^{15}_{16}$ "), special resistance element. New type contact for smooth, quiet operation. New shaft easily cut with side snips. With hardware and clips for

use with all set- cr. w. bringled, and push type knobs

No.	Typ = 1	Ohma	Taper	No.	Type	Ohms	Taper
8N7450	UI.	5M	(1)	8N7465	U-40	100M	(2)
8 <b>N</b> 7451	U-11	5M	(4)	8N7466	U-41	100M	(4)
8 <b>N</b> 7452	U-18	10M	(1)	8N7467	U-42	150M	(1)
8 <b>N</b> 7453	U-19	IOM	(2)	8N7468	U-43	200M	(4)
8 <b>N7454</b>	U-20	IOM	(4)	8N7469	U-44	250M	(1)
BN7455	U-21	15M	(1)	8N7470	U-45	250M	(2)
8 <b>N</b> 7456	U-D.E	15M	(2)	8N7471	U-46	250M	(4)
B <b>N74</b> 57	U-24	.:OM	(1)	8N7472	U-48	500M	(1)
3N7458	U-28	25M	(2)	8N7473	U-50	500M	(4)
3N7459	U-29	25M	(4)	8N7474	U-51	750M	(1)
3N7460	U-33	50M	(1)	8N7475	U-53	l Meg.	(1)
3 <b>N</b> 7461	U-34	50M	(2)	8N7476	U-54	1 Meg.	(4)
3 <b>N</b> 7462	U-35	50M	(4)	8N7477	U-55	2 Meg.	(1)
3N7463	U-36	75M	(1)	8N7449	U-56	2 Meg.	(4)
3N7464	U-39	100M	(1)	8N7478	U-57	3 Meg.	(1)
				8N7479	U-65	5 Meg.	(1)

#### TAPPED MIDGETROLS

No.	Type	Ohms	Tapped	No.	Type   Ohms	Tapped
8N7480	UT-420	250M			UT-443 1 Meg.	
8N7481 8N7482	JUT-4. 5				UT 450 2 Meg.	125M
	UT-423		L MOOT L		UT-448 2 Meg.	250M 400M
	UT-431				UT-451 2 Meg.	

#### ACCESSORIES

 8N7494—Exten ion Shaft Type UE-50.
 156

 8N7495—Idler Pulley Type UP-10.
 126

#### MALLORY TYPE "MR" JUNIOR CONTROLS



Ultra compact controls are similar to the types UM and TM junior controls listed at left except that they feature standard shafts, 3" long, milled the introl ingth and furnished with knob adapters (for iping type knobs). All are rated conservatively at 1, writh.

INO.	1350.	Oun	I INO.	Type	Unms
8N6900	MR14	5M(1A)	8N6913	MR37	75M(2)
8N6901	MR18	10M(1)	8N6914	MR39	100M(1)
8N6902	MR19	10M(2)	8N6915	MR40	100M(2)
8N6903	1.1R20	101.1.4)	8N6916	MR41	100M(4)
8N6904	MR21	15M(1)	8N6917	MR42	1 150M(1)
8N6905	MR22	15M(2)	8N6918	MR44	250M(1)
8N6906	MR24	20M(1)	8N6919	MR45	250M(2)
8N6907	MR28	25M(2)	8N6920	MR48	500M(1)
8 <b>N</b> 6908	MR29	25M(4)	8N6921	MR50	500M(4)
8N6909	MR33	50M(1)	8N6922	MR51	750M(1)
8N6910	MR31	50M(2)	8N6923	MR53	1 Meg.(1)
8N6911	MR35	50M(4)	8N6924	MR55	2 Meg.(1)
8N6912	MR36	75M(1)	8N6925	MR57	3 Meg.(1)

#### JUNIOR CONTROLS WITH FIXED KNURLED SHAFTS

Similar to type "MR" controls above, Lut have 3" universal knurled shaft for replacing original units of this type.

No.	Type	Taper		No.	Type	Taper
8 <b>N</b> 6637	MK400	250M(1)	11.	8N6639	MK402	l Meg.(I
8N6638	MK401	500M(1)	H	8N6640	MK403	2 Meg. (1

#### MRT Midget Controls—Single Tap

Fixed shaft. Fisy-to-cut channel chaft and insert fits all type knows. Nitte, washer and ground terminal furniched. 11.7" dir Switches below attach eacily.

				CC was	
No.	Tyre	Ohn.s	Tiped	No. Type Ohms Ta	pped
			50M	8N6772 MRT443 I Meg. 4	50M
	'MRT 1251		70M	8N6773 MRT460 1 Meg. 5	MOO
	MR [-128]	500M	5M	8N6774   MRT445   2 Meq.	5M
	MRT-126		1ºM	8N6775   MRT446   2 Meg.	15M
	MRT427		100M	8N6776 MRT447 2 Meg.	60M
	MRT430		150M	8N6777   MRT450   2 Meg.   1	25M
	MET:31		225M	8N6778 MRT448 2 Meg. 2	50M
	MRT+16		125M	8N6779 MRT454 2 Meg. 4	M00
	MRT440		200M	8N6780 MRT449 2 Meg. 6	M008
8N6771	MKT4 <8	l Meg	300M	8N6781 MRT451 2 Meg.   9	M000

MALLORY ATTACHABLE SWITCHES

Fit "UM," "TM", "MR" and "MRT" Junior con	trols	on	this page"
8N6968Single Pole, Single Throw. Each			35¢
8N6969 — Dout le Pole, Single Throw. Each			)
8N6970 —Single Pole, Double Throw, Each			.> <b>Л</b> .Л. ↓
8N6972—Four Pole, Single Throw. (Shorting Type)			.)

. . . . 1.09

# NDUSTRIAL AND P.A. CONTROLS

#### **OHMITE POWER RHEOSTATS**



Designed to produce permanently smooth, close Designed to produce permanently smooth, close control. Cer inno and metal construction. Provided with insulated shaft with provision to keep the rheostal from through on the pinel. The resistance were as wind over a shaft procedum cores. Each turn as looked assunst shift no by vitreous enough which all o covers the core and pase. Required "s," Wt. 1 h.

Model "	H," 2	5 W, 1	-9/16" dia	Model 1	'J,'' 5	OW, 2	5 16" dia.
No.	Total Of ms	Туре	Each	No. 8N7200	Ohm - 0,5	Type 030r	
8N8350	1	0140	3.44	8N7201 8N7202	1 2	0307	3.82
8N8362 8N8351 8N8363 8N8352 8N8364	6 8 10	0141 0142 0143 0144 0145	3.06	8N7203 8N7204 8N7205 8N7206 8N7207	8 12	0311 0313 0314 0315 0316	3.44
8N8365 8N8366 8N8353 8N8367 8N8390	15 25 35 50 75	0146 0147 0148 0149 0150	3.06	8N7208 8N7209 8N7210 8N7211	35 50 80 1.25	0317 0318 0319 0320	3.44
8N8368 8N8369 8N8370 8N8371	100 125 175 250	0151 0152 0153 0154	3.06	8N7212 8N7213 8N7214 8N7215	225 300 500	03.2 ° 03.2 3 03.2 4	3.44
8N8391 8N8372 8N8392 8N8373	350 500 750 1 000	0155 0156 0157 0158		8N7216 8N7217 8N7218 8N7219	1,000 1,600 1,600 2,500	0325 0326 0327 0328	3.64
8N8374 8N8375	1,500 2 500	0100	3.44	8N7220 8N7221	3,500 5,000	0329	2.00
8 <b>N8</b> 376 8 <b>N</b> 8377	3,500 5,000	0161 0162	3.64	8N7223 8N7223	8,000 10 000	0332	3.82

#### MODEL "K"-100 WATT (31/8" DIA.)

No. Ohna	Type	Each	No.	Jhm.	Tyre	Each	
8N8379 25 8N8380 50 8N8381 100	044b 0448 0449 0451 0453	5.35	8N6383 8N8384 8N8385 8N8386 8N8387	1 000 2,500 5 000	0460	5.35 5.73 5.73 6.12 6.88	

#### OHMITE "AB" POTENTIOMETERS

Two watt molded composition potentioneters designed especially for industrial, hiboratory and radio service use. If "" diameter x " "" thick. It" diameter x " "" thick. It" diameter x " "" mounting hole on panel. Requires 3." mounting hole on panel up to 14" thick. CU types are linear taper; CA types clockwise log. taper; CB types counter-clockwise log. taper; and higher which are ±20%; Two watt molded composition ; o-



No. Type	Ohms	No.	Type	Ohms
8N8810 CU5001	50	8N8822	CB5031	50,000
8N8811   CU1011	100	8N8823	CU1041	100,000
8N8812 CU2511	250	8N8824	CA1041	100 000
8N8813 CU5011	500	8N8825	CW2541	250,000
8N8814 CU1021	1000	8N8826	C'A2541	250,000
8N8815 CU2521	2500	8N8827	CU5041	500 000
8N8816 CU5021	5000	8N8828	CA5041	500 000
8N8817 CU1031	10 000	8N8829	C111052	1 Megohm
8N8818 . CB1031	10,000	8N8830	CA1052	I Megohm
8N8819 CU2531	25 (100)	8N8831	CU2552	∴5 Megohms
8N8820 CB2531	25 000	8N8832	CA2552	, 2.5 Mi gohins
8N8821   CU5031	50,000	8N8833	CU5052	5 Megohms
Any Type of Above Co 8N8834—SPST Switch	ntrols for "AB"	Controls		Each 1.76



#### MALLORY "T" & "L" PADS

For centrolling level of low impedance and o circuit in the or phono. Cont. DC rating 4 watts. With but knob, drill plate and mounture ruts. Let al. 15 " diameter x 11 " deep; T pad 15 " diameter x 11 " deep.

'L''	PADS		"T" PAD	S
No.	Type	Ohms Imp.	No.	Type
8N6356	L6	6	8N6362	T6
8N6355	L8	8	8N6363	T8
8N6357	L15	15	8N6364	T15
8N6358	L50	50	8N6365	150
8N6359	L200	200	8N6366	T./00
8N6381	L250	250	8N6382	T250
8N6360	L500	500	8N6367	T500
8N6361	L2000	2000	8N6368	T2000
"L" Pads		"T" F	Pads	
Any type abo	ve	2.20 Any 1	type above	2.50

#### CLAROSTAT 10-WATT OUTPUT ATTENUATORS

Type CIB: Compact constant imped-Type CIB: Compact constant impedance attenuisors desipate 10 waits in any position. Ideal for individual specific contribution in a distribution of the linear at matter, in 3 distributions. Mount in an ile hole, Bushing "a", staff i "long, With, d. il plate and knob. With it "long, With, d. il plate and knob.



io.	Ohms	No.	Ohnis	No.	Ohms	Any Type,	Each
8N7837 8N7838						6.37	7

#### CENTRALAB FADERS

#### Straight Fader

For use with high impedance input devices, and jukujs, mines, etc. Provide smooth, quiet fading from one source to another. Each typped at center.



Stock No. 8N9004 8N9005	Resistance Each Side c.t. 500M 1 Meg.	Your Cost
-------------------------------	---	-----------

#### Gain Control

Like above but without center

No.	Resistance	Each	
8N9000	250M		
8N9001	500M	102	
8N9002	l Meg.	1.03	
21/19003	2 Meg		

#### "Delta-T" Pad

Dual control maintining constant impedance to both sides. For sound amplifiers, recorders,

No.	Impedance	Each	
8N9006 8N9007 8N9008	50 ohms 200 ohms 500 ohms	2.06	

#### CENTRALAB POWER RHEOSTATS

Ideal for motor goed controls, etc. All metal frame; core inculated with treated asbestos. Were wound. All for ringle hole mounting; knob supplied. Diameter 2%, last large 3, x,  $\xi_{w}^{-1}$  long. Depth : ehind pinel: 25 watt units  $\frac{3}{4}$ %; 50 watt units  $\frac{1}{4}$ %. Solder lug



1		50	Watts			ı		25 V	atts		
No.	Ohms	Price	No.	Ohms	Price	No.	Ohms	Price	No.	Ohms	Price
8N8962	- 2	2.08	8N8991	300	2.21	8N8977	->	1.76	8N8957	250	1.76
8N8985	10					8N8978			8N8982		
8N8987	25					'8N8979			8N3958		
8N8988	(40)					8N8980			8N8983		
8N8986	100	2.06	8N8992	5000	2.35	8N8976			8N8984	5000	2.06
8N8989	150	2.06				8N8981	150	1.76			1

#### MALLORY CONTROLS

#### TYPE M-4 WATTS

Wire wound. Conservatively rated at 4 witts. Fully enclosed. 15% diameter. Mounts in  $^{1}$ <sub>16</sub>% hole. Shaft  $^{1}$ 4 diameter,  $^{3}$ 8 long. With dust cover.

#### RHEOSTATS

No.	Ohms	Type	Each
8N6480	1	MIR	
8N6481	2	M2R	
8N6482	3	M3R	
SN6483	- 6	M6R	
8N6484	10	M16R	
8N6485	15	M15R	E04
8N6486	20	M20R	<b>59</b> ¢
8N6487	25	M25R	
8N6173	10	M40R	
8N6174	50	M50R	
8N6175	60	M60R	
8N6176	75	M75R	

#### POTENTIOMETERS

No.	Ohms	Туре	Each
8N6503	20	M20P	
8N6492	50	M50P	
8N6495	100	M100P	73¢
8NG496	200	M200P	/
8N6497	100	M400P	
8N6498	1000	MIMP	
18N6499	2000	M2MP	0941
8N6500	3000	M3MP	82¢
8N6501	5000	M5MP	
8N6502	10000	M10MP	
8N6177	15000	M15MP	074
8N6178	20000	M20MP	97¢
8N6179	25000	M25MP	
8N6180	50000	M50MP	1 10
8N6181	70000	M70MP	1.15

#### TYPE C-2 WATTS

Wire wound. Extremely compact design makes them ideal for use where space is limited. Contact arm is grounded to the shaft. Overall diameter of unit is 1½..." Shaft ¼..." diameter and 3%..." L.

#### **RHEOSTATS**

No.	Ohms	Туре	Each
8N6197	6	C6R	
8N6198	10	C10R	-
8N6199	15	C15R	
8N6200	20	C20R	E0.
8N6201	30	C30R	59¢
8N6202	40	C40R	1 1
8N6203	50	C50R	
8N6204	100	C100R	1

#### **POTENTIOMETERS**

No.	Ohms	Type	Each
8N6205	- 6	(%P	
8N6206	10	CloP	
8N6207	15	C15P	
8N6208	20	C20P	
8N6209	30	C30P	724
8N6210	40	C405	73¢
8N6211	50	C50P	
8N6212	100	C100P	
8N6213	200	C200P	
8N6214	100	C400P	
8N6215	1000	CLMP	001
8N6216	3000	C3MP	82¢
8N6217	5000	C5MP	
8N6218	6000	C6MP	074
8N6219	10000	CIOMP	97¢
8N6220	15000	C15MP	

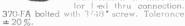
### **ERIE CERAMICONS**



### ERIE SILVER-MICA **BUTTON CON-**

**DENSERS** 





#### **Type 370-CB**

	Car			
No.	(mm.f)	Fa h	Trts 25	Lots 50
5N2250	15	.65	.60	.50
5N2239	25	.65	.60	.50
5N2251	50	.47	.43	.36
5N2252	100	.47	.43	.36
5N2253	150	.53	.43	.36
5N2254	200	.65	.49	.41
5N2225	250	.59	.54	.45
5N2255	300	.65	.60	.50
5N2256	400	.65	.60	.50
5N2257	500	.65	.60	.50
5N2258	750	1.00	.92	.77
5N2259	1000	1.29	1.18	.99

#### Туре 370-ГА

15	.65	.60	.50
25	.65	.60	.50
50	.47	.43	.36
100	.47	.43	.36
150	.53	.43	.36
200	.65	.49	.41
250	.59	.54	.45
300	.65	.60	.50
400	.65	.60	.50
500	.65	.60	.50
750	1.00	.92	.77
1000	1.29	1.18	.99
	25 50 100 150 200 250 300 400 500 750	25 .65 50 .47 100 .47 150 .53 200 .65 250 .65 400 .65 500 .65 750 1.00	25 .65 .60 50 .47 .43 100 .47 .43 150 .53 .43 200 .65 .49 250 .59 .54 300 .65 .60 400 .65 .60 500 .65 .60 750 1.00 .92

#### ERIE FEED THRU CERAMICONS



find through cer amic cond. %" Ichahody, 20 aauge amic lengbody. 20 aauge. ance ( 

#### HIGH VOLTAGE CERAMICONS



Type 410. For TV tower surgly, filter and by-pass applica-tion.. Special body desian aives extra long

creepage path. Low los, molded case 11." long. Conservitively rited at 15 K.V. Rod type termin ils. Cui icity 500 m.m.f.

5N2303-Each.										1.:	<b>32</b>
Lots of 25	. 1	13	3—	·L.	. 1	of	30	٦.			90c

#### **ERIE TUBULAR TRIMMERS**



Type 532. Plutic dielectric trimmer. Provides easy and process adjustment, titl flity of capacity. Wriking Voltage, 550 V. DC.

5N23015-5	MMF			_				ູ້	3	<b>2</b> c
5N2302-1.0-	8 MMF							Ţ		32c
Fither above,										
Either above.	lots of	50.						,		. 22c



#### ERIE DISC CERAMICONS

Flat Hi-K ceramic dielectric with silver fired on to the dielectric. Lead wires firmly roldered to the silver electrodes, Phenolic coated. Very efficient at high frequencies. 500 V. Toler ince ±20° c.

Stock No.	Type	Size	Value		Lots /50	
5N2318 5N2319	S11 821	19/2" dia. 3 4" dia.	.005 mm.	15c 18c	12 }c 15 c	10 c 12 c



#### FRIE NPO-GP CERAMICONS



Small fixed a spacitors. Cerainic dielectric with silver electrodes fixed on at a very high tempeture. Excellent HF chara-terrates. Dimensions Style K .562 "x.250", Style L .812 "x.250", St M 1.328"x.340", Style 334 1.213"x.415", Style 335 1.6 0"x.415". Styles 331 and 338  $17_2$ "x<sup>13</sup>

#### NPO CERAMICONS

Has zero temperature coefficient. "Q for NPO Cer iniccus above 30 mmf is 1000 or hi her. Below 30 mmf." "Q decreases shirtly as capacity decreases. Working Voltage, 500 Volts D.C. Below 30 mmf

'	Stock No.	Type	MMF	Eił	Lc's	Lets 100	Stock No	Туре	MMF	Eich	Lots/ 50	Lots/ 100
	5N2367 5N2270 5N2368	K K K	1.5 3 3.3				5N2273 5N2274 5N2275	K L L	20 25 33	29c	25c	20c
	5N2369 5N2271 5N2370	K K K	4.7 5 6.8	29c	25c	20c	5N2276 5N2277 5N2278	M M M	50 75 100	32c	27c	22c
	5N2371 5N2272	K K	8.? 10				5N2372 5N2373	334 334	150 175	35c	30c	24c

#### NEGATIVE TEMPERATURE COEFFICIENT CERAMICONS

Tul		Tubular type N080								
Sto k No. Type	MMF	Each	Lota	Lui. 100	Stock No	Туре	MMF	Each	Lots/ 50	Lots/ 100
5N2374 K 5N2375 K 5N2376 K 5N2377 L 5N2378 L	5 10 47 7 100	29c	25c	20c	5N2379 5N2380 5N2381 5N2382 5N2383	331 331 338 338 338	10 22 33 47 • 62	35c	30e	24c

#### **GP CERAMICONS**

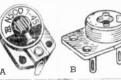
For general purpose applications such as by-pass in Fbb kind condenses, where temperature coefficient is not important. Capacity will not decrease more than  $20^{\circ}$ , not increase more than  $10^{\circ}$ , from their value at room temperature of the temperature is varied from  $-40^{\circ}$ C to 85°C. Power factor will not exceed 3 a. Rated voltage of GP1 is 500 V DC; GP2 350 V DC. Toler ince  $\pm 20^{\circ}$ e.

Sto k				Lots	Lots	. Houk	]			Lots/	Lots/
No.	Type	MMF	Fich	0	100	No.	Туре	MMF	Euch	>0	100
5N2280 5N2337 5N2338 5N2339 5N2340	1 K 1 K 1 K	10 12 15 18 22				5N2351 5N2352 5N2353 5N2289 5N2354	2K 2K 2K 2K 2K	330 390 470 500 560			
5N2281 5N2341 5N2342 5N2343 5N2344	IK IK	25 27 33 39 47				5N2355 5N2290 5N2291 5N2356 5N2292	2K 2K 2L 2L 2L 2L	1 000 1 200 1 500 1,500	15c	12½e	10c
5N2282 5N2345 5N2346 5N2283 5N2284	1 K 1 K 1 K	50 56 68 75 100	15e	12½.c	10c	5N2357 5N2293 5N2359 5N2359 5N2360	2M 2M 2M 2M 2M 2M	1,800 2,000 2,200 2,500 2,700			
5N2347 5N2285 5N2348 5N2286	2K 2K	120 150 180 200				5N2294 5N2361 5N2362	2M 2M	3,000 3,300 4,700	]	,	<u>}</u>
5N2349 5N2287 5N2350 5N2223	2 K 3 K	2 10 2 10 170 00				5N2295 5N2363 5N2364 5N2365 5N2366	2M . M . 34 . 335 . 335	5,000 5,600 6 800 7,500		15c	12c

#### **ERIE STAND OFF CERAMICONS**

Ideal for F.F. by-p iss to around. May be used to surport other circuit elements. Surplied in molth digit notic case for areater insulation a rather and mechanical strength. Both types mounted with 3.48 nut. Health above chassis when mounted—Type 323—11½ "Type 324—11½", Ideal for V.H.F. and U.H.F. argheotions. Tolerance #20%.

For h. lots of 50		30c	Each lots of 1	00	
Each					
5N2324 5N2325	100 500	323 323	5N2327	1500	324 <b>3</b> 54
5N2323	50	323	5N2326	1000	324
	I files from It				



#### CERAMICON TRIMMER

Give maximum and fifty and ease of adjustment. Capacity change constant per digree of rotation. Silver electrodes fired on ceramic rotir and base. 360 degree rotor completely covers entire track on stator thus preventing dust and other foreign matter from iffecting the characteristics of the unit.

Stock N	Tyr	Kinge MMFD	Temp Cost	Each	Lots/25	Lots/50
5N2331 5N2332 5N2335 5N2336	A TS2A	1.5-7 3 12 4 30 7 45	NPO NPO N500 N500	88 <b>c</b>	75c	60e
5N2246 5N2247 5N2248 5N2249	A TD2A	1.5.7 3-12 ench 4 30 sect. 7 45	NPO NPO N500 N500	1.47	1.25	1.00
5N2296 5N2297 5N2299	<b>B</b> 557	3-12 5-25 8-50	NPO NPO N750	73c	62c	50c

### ORNELL DUBILIER CONDENSERS

#### "BLUE BEAVER" TYPE DRY ELECTROLYTICS



Small, handy to use. Conveniently mounted. Hi-Formation Process a -sure: higher volt-

age breakdown Sealed in drawn-aluminari Cardbourd insulating lerves with polarity marked.

Stock	Type	CC Sees	-		
No.	72 be	Cap. Mfd.	Volts	Size	Each
5N1090	BR 102A		25		.44
5N1090	BR 202A	10 20	25 25		.44
5N1091	BR 252A	25			
	BR 202A BR 502		25	sxl p	.50
5N1093		50	25	PATES.	.56
5N1094	BR 550	5	50	7-x1 F	44_
5N1095	BR 105	10	50	5 syl1 p	.47
5N1096	BR 205	20	50	25×176	.50
5N1097	BR 255	25	50	3 x 17p	.53
5N1098	BR 505	50	50	5 VIII.	.62
5N1099	BR 415	4	150	5-X118	.44
5N1100	BR 815	` `	150	Past p	.47
5N1101	BR 1215	12	150	ExtE <sub>p</sub>	.50
5N1102	BR 1615	16	150	5 xx17 g	.53
5N1103	BR 2015	20	150	5 N 111 In	,56
5N1054	BR 3015	30	150	34/2	.59
5N1104	BR 4015	40	150	132	.65
5N1045	BR 5015	-50	150	7,12	.71
5N1046	BR 8015	50	150	(321)	.85
5N1105	BR 425	4	250	2511 m	.47
5N1106	BR 825	- >	250	2 sx17 <sub>16</sub>	.47
5N1107		12	250	5,12	.59
5N1108	BR 1625	16	250	311116	.65
5N1109	BR 2025	20	250	3111116	.71
5N1110	BR 4025	40	250	7, (21)	.82
5N1129	BR 145	1	450	est in	.17
5N1130	BR 245	2	450	1 XII to	.50
5N1111	BR 445	4	450	5x17pm	.53
5N1112	BR 845	\ \	450	3,132	.56
5N1047	BR 1045	10	450	7,82	.62
5N1113	BR 1245	12	450	7.82	.68
5N1114	BR 1645	16 (	450	7, \21,	.79
5N1115	BR 2045	20	450	18212	.88
5N1055	BR 3045	30	450	1×3	.97
5N1048	BR 4045	40	450	1×3	1.18
5N1116	BR 850	- 8	500	7 xx 111 pc	.76
5N1117	BR 1650	16	500	$1 \times 2^{1} \cdot 2^{-1}$	1.18

#### "EDL" CARDBOARD CASED **ELECTROLYTICS**



Multiple wax filled All common negative except (\*) separatisection. Center mount ing str 1; color coded

Stock No.	Type	Mfd.	Volts	Size	Ea.
5N1118	EDL 2055	5-5	25	5 N 13 L	.56
5N1119	EDL 2101	10-10	25	15131	.62
5N1120	EDL 3055	5-5	50	Sala	.65
5N1121	EDL 115	10-10	50	321	.68
5N1122	EDL NI5	4-4	150	1321	.68
5N1123	EDL SH5	5-16	150	1 1/21 1	.71
5N1124	EDL 2215	20-20	150	$7 \times 21_{2}$	.76
5N1131	EDL 4215	40-20	150	146×23	.88
5N1132	EDL 4415	40-40	150	F/3	1.00
5N1133	EDL 5315	50-30	150	1x3	1.00
5N1134*	EDL 221588			Dp. \27's	1.18
5N1135	EDL 2215C	20-20-20	150 (25	1757	1.12
5N1136	EDL 4215C	40-20 20	150 25	1/2%	1.18
5N1137	EDL 5315C .	50-30/20	150/25	11,53	1.23
5N1125	EDL 8125	8-16	250	1.727	.94
5N1126	EDL 1125	16-16	250	1/2%	1.00
5N1127	EDL 8845	2-3	450	152%	1.00
5N1128	EDL 8145	<u>\</u> -16	450	P45314	1.18

#### "BBR" MINIATURE **ELECTROLYTIC CONDENSERS**

Biby PBR type tilbul ir de trolytics. Hermetically se iled. Designed for use in compact, payment such as hearing aids, yocket radios, etc.

Stock No.	Type No.	Mfd.	Sur V.	Each
5N1081	BBR "0-6	50	4x11, 16	59c
5N1082	BBR 25 6	25	1/4x1', " 6	59c
5N1083	BBR 5-6	5	, x11, 1 6,	59c
5N1084	BBR 20 25	20	1/ x11 " "25	
5N1085	BBR 10-25	10	34,x11, ",25	59c
5N1086	BBR 10-50	10	1/2×11/16 50	59c
5N1087	BBR F-50	5	3/x11 16 "[50]	59c
5N1088	BBR 10-90	10	1/2x11, "90	59c
5N1089	BBR 16-90	16	1/x17 / 90	59c

Listed on these pages are fast selling C-D capacitors to till I raitically ill raidio C-D capacitors to fill pro-tically all radio and television service requirements. The se xcellent units are re-ornized standards excent it times are it confided in its resident throughout the industry and are procession in idealor accurate operation and long life. Whither it be a minimular tubular capacitor or a large Dyk mol transmitting type condition you in always assured of the collapsed of

#### MOLDED MICAS



Compact, in molded take life units. Recommended for use in low voltage circ ats. Palair fully tested for a currary of an activate value before the break lawn. Designed to give the pend take enrice where small size units are required. Types IW and ID (fig. A)  $^{13}_{18} \text{kg/s}^{-1}_{17}$  type SW (fig. B)  $^{7}_{16} \text{kg/s}^{-1}_{17}$ , All are 1000 V. Let 500 V, working except sizes higher than 0.06 mfd, which are 600 V, test, 300 V. working except sizes higher than 0.06 mfd.

ato k		Cip.		
No.	Type No.	MH.	Fig.	Each
5N1303	5W 5V5	.000005	В	15c
5N1355	5W 5Q1	.00001	В	15c
5N1356	3W 5Q2	.00002	В	15c
5N1357	5W EQ25	.000025	В	15c
5N1304 5N1305	5W FQ3	1.00003 1.00003	B B	15c
SN1358 5N1359	5W 5Q5	1000	B	12c
5N1360	SW STIS	.00015	B	12c
5N1361	5W FT2	.0002	B	12c
5N1362	5W 1725	0002	B	15c
5N1306	SW FT3	1.0003	B	15c
5N1307	⇒W LT4	1.000-1	В	15c
5N1363	5W T5	.0005	В	15c
5N1308	1W 5T6	0000	A	15c
5N1309	IW ST7	0007	A	15c
5N1310	IW T8	8000.	A	15c
5N1364 5N1311	1W 5D1 1W 5D15	.001	A	18c
5N1311	IW : D2	.0015	A A	18c
5N1312	W 5D25	.002	Ā	27c
5N1367	LW SD3	003	A	29c
5N1372	ID 5D4	.004	A	32c
5N1373	1D 5D5	.003	Â	35c
5N1374	IW D6	.006	Ā	44c
5N1377	1D 3S1	.01	A	7lc

#### "SILVER-MIKE" UNITS

Molded in low-loss red biskelite. Designed for u.e. in high Q electronic circuits where trequency thality and minimum loss must be maintained. All rated at 1000 V test, 200 V working. Tolerance #5", Sizes through .005 ½"; .004 and .005 ½"; thick; .001 through .003 ½"; .004 and .005, ½".

Fig. B-7 g " x 11 16"

Stock No.	Type No.	Mid.	Each
5N1351 5N1352 5N1353 5N1371 5N1383	1 R 5V5 1 R 5Q1 R 5Q25 R 5Q4 R 5Q5	.000005 .00001 .000025 .000034	.26 .24 .24 .24
5N1384	5R 5Q /	.00007	.24
5N1385	CR 5T1	.0001	.24
5N1386	FR 5T15	.00015	.26
5N1387	- R 5T2	.0002	.26
5N1388	- R 5T25	00025	.26
5N1389	' R 5T3	.0003	.32
5N1390	' R 5T4	.0004	.38
5N1391	5R 5T5	.0005	.41

#### Fig. A-15 "Square

E	N1392	1R 5D1	.001	.65
- 5	N1393	1R 5D15	.0015	.79
. 5	N1394	1R 5D2	.002	.79
. 5	N1395	1R 5D25	.0025	1.06
5	N1396	1R 5D3	.003	1.21
5	N1397	1DR 5D4	.004	1.26
	N11308	IDP SDS	005	1 22

#### "BLUE CUBS"

New molded plastic, Vikane impreg-nited, paper tulu lars with welded



leads. Withstands temperatures from to +212° F.

400	v	v	$\sim$

Stock   Type No.	Cap. Mfd.	Size Inches	Each
5N900 PTE-4S1 5N901 PTE-4S2 5N902 PTE-4S5 5N903 PTE-4P1	.01 .02 .05	11 TOX 1 1 16 7 16 X 1 5 16 1/2 X 1 5 16 1/6 X 1 9 16	15c 15c 15c 21c

	600	V	D	0
1		- (	0.1	

5N905 5N906 5N907	PTE-6D1 PTE-6D2 PTE-6D3 PTE-6D1 PTE-6D5	.001 .002 .003 .004 .005	11 2X 11 16 11 2X 11 16 11 2X 11 16 11 2X 11 16	15c 15c 15c 15c 15c
5N910 5N911 5N912	PTE-6D6 PTE-6S1 PTE-6S15 PTE-6S2 PTE-6S3	.006 .01 .015 .02 .03	7 p x 1 3 p 7 p x 1 3 p 7 p x 1 3 8 7 x 1 3 p 7 p x 1 3 p	15c 18c 18c 18c 21c
5N915	PTE-6S4 PTE-6S3 PTE-6P1	.04 .05 .1	11 p x 1 1 16 11 p x 1 1 16	21c 24c 26c

#### 1600 V DC

5N918 5N919 5N920	PTE-16D1 PTE-16D2 PTE-16D3 PTE-16D4 PTE-16D5	.001 .002 .003 .004 .005	7 13/8 7 13/8 7 16×13/8 1/2×13/8	32c 32c 32c 32c 32c
	PTE-16D > PTE-16Do PTE-16D1 PTE-16D75 PTE-16D8	.0055 .006 .007 .0075 .008	1/. x13/8 1/. x13/8 1/. x13/8 1/. x13/8 1/. x13/8	32c 32c 32c 32c 32c
5N930 5N931	PTE-16S1 PTE-16S15 PTE-16S2 PTE-16S25 PTE-16S3 PTE-16S4	.01 .015 .02 .025 .03	" p, x 1 16 " p, x 1 15 p 11 p, x 1 15 p	35c 35c 35c 35c 35c 35c

Same type of molded condenser except higher voltage for television. Size: 11 to x 1 15 fg. \*\*.

Stock No.	Type No.	Mfd.	Vltg.	Each
5N933	PTE-60T5	.0005	6000	79c
5N934	PTE-60D1	.001	6000	79c
5N935	PTE-60D5	.005	6000	79c
5N936	PTE-100TS	.0005	10.000	88c

#### "KR" DRY ELECTROLYTICS



Compact entred ton.
Color coded leads.
Seamlessdrawnmetal
can, mtg. nut. Dual can, mitg. nut. Dual units have separate sections except dual 20.

#### 450 Volts D. C. Working

Stock		Cap.	Size
No.	Type No.	Mfd.	Inches Each
5N1295	KR 504	4	1x21/5 1.00
5N1296	KR 508	8	1x2½ 1.03
5N1297	KR 512A	12	1x21/511.26
5N1298	KR 516A	16 .	1x31/51.41
5 <b>N</b> 1292	KR 520	20	13/4x21/21.56
5N1293	KR 530	30	13/ax31/ 1.76
5N1294	KR 540	-10	1 % x-1 % 2.00
5N1299	KR 548A	4-8	13-x3 11.47
5N1300		8-8	1 3/8×1 1.62
5N1354		8-16	1 34x4 1/2 1.91
5N1290		20-20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5N1302	KR 5888A	8-8-8	1 36x4 1/2 2.50

#### 600 Volts D. C. Working 136x3½ 1.76 136x4½ 2.35 1½x4½ 2.94 KR 604 KR 608 SN1050



#### WET ELECTROLYTIC **REPLACEMENTS**

Type "WK". Dry electrolytic, aluminum c ins. Can is negative, lug terminal. Rated at 450 W. 10 mfd. Replace wet electrolytics from 4 to 12 mfd., 20 mfd., 16 to 20 mfd., 30 mfd., 40 mfd., 30 mfd., 40 mfd., 30 to 40 mfd., 34 mounting stud with palnut.

Stock			Size	
No.	Type No.	Mid.	Inches	Each
5N1052	WR 10	10	1 1/8 x 2 1/2	.85
5N1053	WR 20	20	136x21/5	1.32
5N1057	WR 30	30	136x31/4	1.53
5N1056	WR 40	40	13/4×31/4	1.71

### **CORNELL DUBILIER CONDENSERS**

#### HIGH VOLTAGE SERIES CAPACITORS



Type DSTH for high voltage filtering, coulling and by-pass applica-

tions in television. Exceptionally large safety factor, double case construction. Withstands 85° temperature. Sturdy leads for mounting.

#### 3000 Volts DC

Stock No.	Type No.	Cap. MFD		Each
5N3201 5N3202 5N3203	DSTH 30D1 DSTH 30D5	.01	7/2 "x21/6" 1/4 "x21/6" 1/4 "x21/6" 1/6 "x23/8" 13/8 "x3"	56c 56c 59c 62c 71c

#### 4000 Volts DC

5N3205	DSTH	40T5	.0005	9 , "x236 "	59c
5N3206	DSTH	40D1	.001	15/4"x23/4"	59c
5N3207	DSTH	40D5	1.005	15 "x236"	62c
5N3208	DSTH	40S1	.01	1 "x27%" i	65c
5N3209	DSTH	40S5	1.05	1716"x31/2"1	73c

#### 5000 Volts DC

5N3210	DSTH	50T5	10005	11 "x21/5"	62c
5N3211				13 1 "x21/2"1	62c
5 <b>N</b> 3212				1116 x 23/4 "	65c
5N3213				13% "x31"	68c
5N3214	DSTH	50S5	05	1%"x41/2"	76c

#### MTV TELEVISION COND.



Metal cused, high voltage condensers. Dykanol filled and impregnated. Ideal for TV and other HV at plica-

tions, Rated 6000 V.

Stock No. Type No. 5N937   MTV 60T5 5N938   h1TV 60D5 5N938   MTV 60D5 5N940   MTV 60S1 5N941   MTV 60S3 5N942   MTV 60S5 5N942   MTV 60S5	Cap. MFD .0005 .001 .005 01 .03	Size Inches 1x134 1x154 1x154 1x24 136x256 136x256	76c 76c 76c 82c 88c 94c
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# "TVC" METAL TUBULAR CAPACITORS



Compact c in type withstands severe climati condition. Non-inductive, impregnated, filled with Dyknol to maintain high inculation resistance.

#### 600 Volts D. C.

Stock		Cap.	Size	
No.	Type No.	Mfd.	Inches	Each
5N1172	TVC 6D5	.005	7 HX 11/9	.56
5N1173	TVC 6S1	.01	7 p x 1 1 g	.56
5N1174	TVC 6S15	.015	7 mx 116	.59
5N1190	TV C 6S2	.02	7 px 1 1 8	.62
5N1191	TVC 6S3	.03	17 EX 1 - 2	.65
5N1192	TVC 6S4	.04	9 p x 1 1/8	.65
5N1193	TVC : S5	05	9 p x 1 %	.65
5N1194	TVC 6P1	.1	5/8 x 1 1/2	.73
5N1195	TVC · P25	25	3/ <sub>1</sub> × 1 13 µ	1.00
5N1196	TVC + P5	1.5	lxl1.	1.30

#### 1000 Volts D. C.

5N1175	TVC	10D5 1.005	176x15n	65c
5N1176	TVC	1051 .01	1" ×13,	65c
5N1177		10S15[.015	17 12X 1 1 In	71c
5N1178		1052   02	17 vex 19 g	71c
5N1179		10\$3 '.03	96x13 g	71c
5N1180		10S4  .04	5/8×21 lb	71c
5N1181		1085 .05	96x21	76c
5N1182	TVC	10P1 .1	9/4×21 u	88c

#### 1600 Volts D. C.

5N1185 TVC 16S15 .015 56x19 16 73 5N1186 TVC 16S2 .02 56x21 17 76 5N1187 TVC 16S3 .03 76x21 16 76	5N1184 5N1185 5N1186 5N1187	TVC 16S1 .01   17 cx 19 µ TVC 16S15 .015   56x 19 µ TVC 16S2 .02   56x 21 µ TVC 16S3 .03   76 x 21 µ 78 x 21 µ	71c 71c 73c 76c 76c 76c

#### "TLA" DYKANOL "A"

#### FILTER CAPACITORS



In sealed aluminium containers 41/x1/2 except (\*) which are 2½ hah. Mount in any position. C in negative.

Stock		( ':p.	Wka.	
No.	Type No.	Mf I.	Volt.	Fah
5N4195*	TLA 6020	2	€00	2.44
5N4196	TLA 6040	4	600	3.35
5N4197*	TLA 10010	1	1000	2,23
5N4198	TLA 10020	2	1000	2.91
5N4194*	TLA 15005	.5	1500	2.68
5N4199	TLA 15010		1500	2.91

#### "TLAD" TRANSMITTING COND.

Since as above except inculated c.in. 4V "  $\times 1 \frac{1}{2}$ " except (\*) which are  $2\frac{\pi}{2}$  " high.

Sto-k	Cap.	D. C. Wko	1-
No. Type No.	Mid.	Volt.	(Earth
5N4114* TLAD 6020		600	2.88
5N4115 TLAD 6040		600	3.79
5N4116* TLAD10010		1000	2.68
5N4117 TLAD10020		1000	3.35
<b>5N4118</b> * TLAD15005		1,00	3.12
5N4119  TLAD15010	1	1500	3.35

#### "TJU" DYKANOL "A"



Dyk and filled and impregnated. Porcelain tagh tension terminals for trouble free high voltage use. New impressal type mounting bracket for mark, easy mounting. Weight 4 lts.

Stock	Type	Cap.	Wkg.		
No.	No.	Mfd.	Volt.	Ht.	Ea
5N2994	TJU 6010	1	600	21 ,"	3.09
5N2995	TJU 6020	2	£00 s	27."	3.82
5N2996	TJU 6040	- 4	600	37, "	4.85
5N2957	TJU 6080	,	600	31 16"	7.20
5N2997	TJU 10010	1	1000	215"	3.38
5N2998	TJU 10020	2	1000	4"	4.41
5N3004	TJU 10040	-4	1000	45.,"	5.59
5N2958	TJU 10080	` `	1000	43;"	8.08
5N2959	TJU 10100	10	1000	45 ,"	8.97
5N2999	TJU 15010	1	15/00	4"	3.97
5N3000	TJU 15020	2	1500	41,"	5.69
5N3005	TJU 15040	4	1500	45 ,"	7,50
5N2960	TJU 15080	× .	1500	48,"	11.17
5N2991	TJU 20001	.1	2000	21,"	3.53
5N2992	TJU 200025	.25	2000	218"	3.82
5N2993	TJU 20005	.5	2000	27.,"	3.97
5N3001	TJU 20010	1	2000	37, "	4.85
5N3003	TJU 20020	2	2000	4"	5.73
5N3021	TJU 20040	4	2000	33;"	8.08
5N3019	TJU 30010	1	3000	33,7	10.73
5N3020	TJU 30020	2	3000	41,"	13.38
5N3022	1JU 50020	2	5000	6"	28.66

# "BRH" HIGH CAPACITY LOW VOLTAGE UNITS



Etched 1 Telectrolytic capanitors for power picks electric fence devices, telephone and DC tuning cur-

cuits. Aluminium can:, cardboard sleeves.

Stock	Type	Cap.			
No.	No.	Mfd.	Volts	Size .	Εu
5N2567	BRH601	100	-6	* , \1' tel	.68
5N2570	BRH6025	250	- 6	5 s X 17 16	.85
5N2568	BRH605	500	- 6	1,321,	1.00
5N5269	BRH610	1000	- 6	7,832	1.32
5N2573	BRH615	1500	- 6	7,87213	1.76
5N2574	BRH620	2000	- 6	1521	2.29
5N2575	BRH121	100	12	SALE	.73
SN2571	BRH1225	250	12	24/2	1.03
5N2577	BRH125	500	12	.521,	1.12
5N2578	BRH151	100	15	F 5347 16	.76
5N2572	BRH1525	250	15	3,12	1.12
5N2576	BRH155	500	15	7,521	1.23
5N2579	BRH251	100	25	5,32	.79
5N2580	BRH2525	250	25	7,52	1.18
5N2553	BRH255	500	25	1x212	1.32
5N2554	BRH501	100	50	3 4 X 2	.88

#### X'MITTING MICAS



Moulded in bakelite; mechanically strong; special impregnation; high insulation resistance. No magnetic material—reduces

Short, heavy terminals—minimum RF and contact resistance. India Mica. For grid and plate blocking.

#### Type 4 600 V. Wkg. 1000 V. Test

Stock No.	( D. No.	Cap. Mfd.	Each
5N4156	4-14050	.00005	.41
5N4157	4-13010	.0001	.41
5N4158	4-13020	.0002	.41
5N4159	1-13025	.00025	.41
_5N4160_	4-13050	.0005	.41
5 <b>N</b> 4161	4-12010	.001	.41
5N4162	4-12020	.002	.47
5N4163	4-12060	.006	.71
5N4164	4-11010	.01	.94
5N4165 5N4166	4-11020* 4-11030*	.02	1.29 1.73

#### 1200 V. Wkg. 2500 V. Test

5 <b>N</b> 4168	4-23010	.0001	.59
5N4169	4-23025	.00025	.59
5N4170	4 2 1050	.0005	.59
5N4171 5N4172	4-22010	.001	.73
5N4172	4-22020*	.002	1.12
5N4174	1 21010*	.005	1.41
2144114	1 4 21010"	.01	4.29

#### 2500 V. Wkg. 5000 V. Test

5 <b>N</b> 4175	4 53010	0001	.73
5N4176	4-53020	.0002	.82
5N4177	4-53025	.00025	.88
5N 4178	4 53000	.0005	1.00
5N4179	4-52010	.001	1.21
5N4180	4-52020*	.002	1.82
5N4181	4-52040*	.004	2.56
5N4182	4-52050*	.005	2.76

All thickness 11; except \*-7p.

### "DYR" CAPACITORS



Dyk mol filled and impregnited. For severe returnments of aircraft, marmin and tropical use. Moisture proof; withstands 81% C. temp. Metal case. 600 V.D. C. Wkg.

-				
Stock		Cur-	Size	
No.	Туре-	Mtd	Inches	Each
5N3006	DYR 6005	.05	11336X1X34	1.53
5N3011	DYR 6010	.1	11 16X1X34	1.56
5N3012	DYR 6025	.25	11 16X 1 X 3 1	1.65
5N3013	DYR 6050	.5	1 IEALATE	1.76
5N3014	DYR 6100	1.0	2\13 <sub>1</sub> x7 <sub>8</sub>	2.00
5N3015	DYR 6200	2.0	2x2x116	2.68
5N3010	DYR 60055	.05- 05	11316X1X34	1.94
5N3007	DYR 6011	. [-, ]	11-16X1X3 t	1.97
5N3016	DYR 6022	.25- 25	11 16×1×3 4	2.00
5N3008	DYR 6055	.5-,5	$2x1^{3}4\lambda^{7}s$	2.29
5N3017	DYR 6110	1,-1,	2x2x11/8	2.82
5N3009	DYR 6111	.111	11 16X 1 X 3 1	2.23
5N3018	DYR 6222	.252525		2.53
5N3023	DYR 6555	.555	2x2x118	3.06

# "DA" AND "DB" METAL CASED



Non-indu tively wound. Wax impregnated.

#### 400 Volts D. C. Wkg.

STORK			1	
No.	Type	Mfd.	LxWxT	Each
5N1277	DA 4011	.1	11 16X 1 X 3 1 "	1.03
5N1278	DA 4025	.25	113 16X1X 4"	1.18
5N1279	DA 4050	.5	113 to X1 x 7 n"	1.26
5N1342	DA 4100	1.0	2x134x1316"	1.53
5N1343	DA 4200	2.0	2x2x11/8"	1.97
5N1344	DB 4010	.11	113 16X1X3 1"	1.62
5N1345	DB 4025	.25~.25	2x114x34"	1.76
5N1346	DB 4050	.55	$2x1^{3}4x1''$	2.06
	600 V	olts D.C.	Wkg.	
5N1348	DA 6050	.5	2x131x1316"	1.62
5N1350	DA 6100	1.0	2x2x13/8"	1.85

#### MALLORY **ELECTROLYTIC CONDENSERS**



#### TYPE FP AND WP COMPACT DRY ELECTROLYTICS

For top classis mounting in filter and audio Expass circuit. Light weight. Hermotic lly ealed aluminum in.

SINGLE SECTION

Designed for twist prong mounting through suitable chassis slots. Solder lug type terminals all at one end SINGLE SECTION

ch N Type Mfl Volt Size Eich	No Type Mfd Volts Size Each
76	5N3708 FP144 2) 450   1"x2" 1.03 5N3791 FP145 30 45   1'x3" 1.15 5N3709 FP146 40 450   1"x3" 1.32 5N3681 FP140 8) 45) 1"x"x2" 2.29
DUAL SECTION	DUAL SECTION
23 5N3730 FP317 20 2 ) 1"v2" 1.21 91 5N3793 FP325 15 F 30 1 1 v.2" 1.23 93 5N3792 FP325 20 0 3 + 1"v3" 1.33	5N3665 FP231 20:20 450 1 "x3" 1.56 5N3711 FP238 45:40 450 F: "x3" 2.35 5N3712 FP245 80:10 450 F: "x3" 2.50 5N3731 FP237 3 ".8 450 F: "x.1" 2" 1.91
	91

	MULTIPL			MULTIPLE SECTION						
No.	Type   Cap. Mfd.	Wkg Volt.	S12++	Enh	N	Tyr	Cop Mfd	Wkg Volt.	Size	Each
5N3713 5N3795 5N3870 5N3714 5N3670 5N3798 5N3725 5N3732 5N3733 6N3871 5N3715 5N3716	FP354 20 20-20 FP357 40-4 1 40 FP357 40-0-20 FP307 10-10-10 FP389 10-10-10 FP330 15-15-10 WP302 15-15-1000 FP310 40-40-20 FP310 40-40-20 FP306 40-20-20 FP309 40-20-20 FP309 50-30 (100 FP328 15-10-20	150 150 150 350 450 450 150 25 150 25 150 25 150 25 150 5	1"x." 1"x3" 1"x2' 1"x2" 1"x3" 1"x3" 1"x3" 1"x2' 1"x1-2"	1.29 1.53 1.41 1.41 1.68 1.59 1.76 1.41 2.00 1.35 1.76 1.35	5N3718 5N3719 5N3668 5N3720 5N3720 5N3721 5N3673 5N3722 5N3723 5N3272 5N3724 5N373	FP371 FP35 FP352 FP352 FP419 FP424 FP420 FP420 FP413 FP411 FP411	30.10/20 30.20 20 10.10/20 .5.0 70 .40.20 1.15.10 20 1.15.10 20 2.15.20.20 4.30.10 20 4.40.70 20 10.10.10.10 2.20.20	3507.250 350 5 4507. 5 450 5 450 . 25 150 . 25 150 . 25 450 . 25 450 . 25 450 . 25 450 . 25 450 . 25 450 . 25	1 x3" 1"x5" 1"x3" 1"x3" 1"x3" 1"x3" 1"x2" 14"x1" 13"x2" 14"x3" 13"x3"	1.68 1.65 1.38 1.73 2.15 1.82 2.00 2.47 2.32 1.91 2.65
	EP - TC TELEVIS	ION CONDE	NSERS		MOIII	MITINIC	DIATES ES	D ED 14/D	CONDEN	CERC

FP — TC TELEVISION CONDENSERS

These capacitors have rean appear allowers. I for takey non-EP is a fabricated plate twist ground divitive Time 1 this ametal turbular dry, electrolytic cond. Extremely depend a bounded adversion enture conditions.

condition	ons.				
No.	Type	Mfd.	Voits DC	Size	Lith
5 <b>N</b> 387	4 WP505	10 Z 30 ch 16	3A ND	84"x?"	1.23
5N387 5N387 5N387 5N387 5N388 5N388 5N388 5N388 5N388 5N388 5N388 5N388 5N388 5N388 5N388 5N388	75 WP510 166 WP540 WP540 WP540 WP540 WP204 187 FP117 197 FP218 108 FP218 108 FP218 108 FP218 108 FP218 108 FP218 108 FP218 108 FP218 108 FP218 108 FP313 108 FP313 108 FP313 108 FP313 108 FP314 109 FP344 109 FP345 109 FP345	to 5 me tack lec. 5 Z 15759 sycle. 1.0 Z 60 c cles 250 1000 150 125-100 1.20-20 20-80 40-10 50-40 80-50 20-250-100 60-20 40-90-50 40-10-80	3V NP 3V NP 10-0-1 150 150 300 451 300 451 300 451 300 451 150 151 150-25 200-200 57 300-150 25 450-150 150 450-150 150 450-150 150 450-150 150 450-150 150 450-150 150 450-150 50 450-150 50 450-150 50 450-150 50	1" x2" 11 "x2" 14 "x." 14 "x." 11 "x3" 14 "x." 11 "x3"	1.71 2.65 2.50 1.68 2.09 2.47 2.41 1.85 2.32 2.30 2.76 2.53 2.76 2.53 2.35 2.35 2.35 2.35 2.35
5N392 5N392	21   FP395	4 7-40-10 4 1-40-40	450 450-450 (50)	13 x 3" 13 x 3"	2.53
5N392	23 FP411 24 FP421 25 FP428 26 FP431 27 FP433 28 FP433	40-10-10 230 60 10-10 20	300-300 3 1 (350-200 200-25) 400-400-300-25(400 400-300-25) 450-450-450-450-21(450 450-450-450-450-450-450-450-450-450-450-	13,"x3" 11,"x3"	2.65 2.68 2.70 2.65 2.44 2.62 2.65 1.76
5N393 5N393 5N393	30 TC420	5% 15750 cycle: 1 5Z 60 cycles 500		1 , " \27 \" 1 , " x27 \"	2.06

#### Cardboard Tubular Dry Electrolytics

Waxed cardboard tulies with in a liu taile. Type numbers marked (\*) have leade at bith ends. All multiple have common near two



No.	Type	Mid.	Volts DC	Si ·	5 9
5N3734 5N3735 5N3736 5N3737	ST595 ST597 ST598 ST599	8 16 20 30	450 450 450 450	34"x. 12" 1 p"x. 34" 1"x334" 1"x312"	.68 .91' 1.00 1.09
5N3738 5N3739 5N3740 5N3741 5N3742 5N3743 5N3744	2N509* 2N513* 2N514* 2N511* 2N520* 2N521 2N518	20-20 20-30 40-20 40-40 50-30 50-50 8-8	150 150 150 150 150 150 150 450	7 "x2" " 7 "x2" " 7 "x2" " 1 'x2" " 1 'x 7 " 11 "x 7 " 1 "x 3 "	.76 .88 .88 1.00 1.00 1.21
	Triple-Ty	pes 3N and	TN-Common	n Negative	
5N3745 5N3746 5N3747 5N3748	3N527* 3N533* TN125* TN129	(30-30) (20) (30-30) (20) (20-10) (10) (40-20) (20)	150	1 'x2'," 1 'x2'," 1 'x2'," 1 '8" x2'/8"	1.12 1.15 1.09 1.35

#### MOUNTING PLATES FOR FP - WP CONDENSERS

For 1 dia cans For 1 dia cans and 5N3674 Bikelite 5N3677- Metal Any Type 5N3675 Bikelite 5N3678- Metal 3¢Each 5N3676-Bakelite 5N3679- Metal 3¢Each

# MALLORY TC

#### TC DRY ELECTROLYTICS

Hermotically cale for aluminum case. Supplied with leads and inculating ture. Can be used umber all climatic conditions. Healfor under chaiss mounting. Average diameter 1".

		SINGLE	SECTI	ON TY	PE TO		
Stock No	C ip Mid	Wkg Voits	Ea h	Stock N	Ca <sub>I</sub> . Mid	Wka Voit.	Each
5N829 5N830 5N831 5N832 5N848 5N875 5N876 5N897 5N897 5N897 5N898 5N834 5N835 5N835 5N835	1001 500 1000 500 100 25 50 100 10 25 50 100 10 10 10 10 10 10 10 10 10 10 10 1	3 6 15 25 25 50 50 150 150 150 150	1.06 1.00 1.32 1.23 .44 .50 .59 .71 .47 .53 .62 .44 .50 .53	5N988 5N838 5N839 5N840 5N841 5N842 5N843 5N884 5N888 5N889 5N846 5N847 5N847 5N847 5N849	47 50 60 10 20 10 20 5 8 10 15 20 30 40 10	150 150 150 250 250 350 450 450 450 450 450 450 450 450 600	.65 .71 .76 .56 .71 .59 .76 .53 .56 .62 .76 .88 .97 1.18 1.59

#### DUAL COMMON NEGATIVE TYPE TCD No Volte .65 | 5N858 TCD62 10-10 .76 5N859 TCD-5 20-20 .88 5N860 TCD71 8-8 1.00 5N861 TCD72 10-10 .88 5N862 TCD74 15-15 5N852 TCD26 . 5 25 5N853 TCD45 . 0 20 5N854 TCD47 30-30 ./5 150 1: 0 150 350 350 450 .94 1.23 1.00 5N855 TCD48 40 40 1.00

5N856 TC			1.06	5N863 TC			
Oil treate way falls: All triple 1. havid All have w	non ind sealed.	u tive ngregr N t att	unita iate l ected		COMES GATE		)
No	Mfil	V lts	Each	No	Mti	Volts	Each
\$N3896 \$N3897 \$N3898 \$N3899 \$N3899 \$N3900 \$N3901 \$N3819 \$N3902 \$N3903 \$N3904 \$N3905 \$N3906	.01 02 05 1 .2 .35 5 1.0 .0001 .000.5 .0005 .001	400 400 400 400 400 400 400 400 600 600	14c 14c 16c 19c 24c 24c 31c 48c 14c 14c 14c 14c	5N3907 5N3908 5N3908 5N3910 5N3820 5N3821 5N3911 5N3912 5N3913 5N3914 5N3915 5N3823	.005 006 .01 02 .03 .04 .05 .06 .1 .25 .5	600 600 600 600 600 600 600 600 600 600	14¢ 14¢ 16¢ 16¢ 19¢ 22¢ 22¢ 24¢ 29¢ 42¢ 67¢

### SPRAGUE CONDENSERS



#### TYPE 68P MIDGET TUBULARS

#### FOR MINIATURE RADIOS

# SPPAGUE

#### 400 Warking Volts DC

OUU WORKIN	g voits	DC	400 V	Aotkiuč	VOITS	DC
No. Mtd	Size	Each	No.	MH.	Size	$E + 4 \cdot$
5N2494 001 5N2493 002 5N2492 003 5N2491 004 5N2490 005 5N2480 006 5N2488 016 5N2487 02 5N2488 05 5N2488 1 5N2484 25	1 x 11 n 2 1 4 x 41 m 2 0 x 11 p 2 x 11 p 2 x 11 p 2 x 12 p 3 p x 1 p 4 x 41 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m	.21 .21 .21 .21 .24 .24 .26 .29 .32 .41	5N2500 5N2501 5N2502 5N2502 5N2504 5N2505 5N2506 5N2507 5N2508 5N2499 5N2498 5N2497	003 014 005 006 01 02 1.05 1.1	14 x 11 p" 14 x 11 p 14 x 11 p 14 x 11 p 14 x 11 p 14 x 1 p 15 p x 1 p 15 p x 1 15 p x 1 p 15 p x	.21 .21 .21 .21 .21 .21 .24 .26 .29 .38 .44

#### 200 Working Volts DC

5N2509 .006 5N2510 .006 5N2511 .01 5N2512 .02		5N2513 .05 5N2514 .1 5N2496 .25 5N2495 .5	17.2X118 38X188	.29 .35 .41 .47
	100 Worki	ng Volts DC		
5N2520 .25	11 x11," .41	5N2521 .5	5.x11s	.47

#### MOULDED TELECAPS TYPE TM "600" LINE



All-purpo e, small size. Heat-resistant bakelite phenolic, paper tubular. For high-temperature TV receiver, auto-sets etc. Oil-filled. Sho k and humidity-proof, non-inflair mable.

No.	Mfd.	Ea.	1 Xo.	Mtd.	Ea.	No.	Mid.	Ea.	No.	Mfd.	Ea.
5N2627	.0001	.15	5N2632	.002	.15	5N2636	.006	.15	5N2641	.1	.26
			5N2633 5N2634								
			5N2635						5N2681		
5N2631	.001	.15				5N2640	,()6	.24			

#### TYPE "MB" MOLDED TUBULARS 1600 Volts Working, Oil Impregnated

No.	Mid.	Dia. Egt.	Each	I	No.	Mfd.	Dia. Lgt.	Each
5N2690* 5N2691 5N2692	.002	3x13," 3x13," 1x15,"	.32	ľ	5N2693 5N2694 5N2695*	. 0.2	1 <sub>2</sub> x2 ' <sub> </sub> x2 1 <sub> </sub> x2 <sup>1</sup>	.35 .35 .41

<sup>\*</sup>Temporarily upplied in waxed filled cirdboard tube pending completion of molds.

#### TYPE TVM - 6,000 & 10,000 VOLTS

No.	TVM	Mtd.	WADC	Size	Each
5N2696 5N2697 5N2698 5N2699 5N2700 5N2701	356 216 256 351 TVQ-116 TVQ-156	.0005 .001 .005 .0005 .01	6,000 6,000 6,000 1,0000 6,000	12x112 5x178 5x178 5x178 5x178 13x2" 1x3"	.79 .79 .79 .88 .82 .94

#### SPRAGUE "ATOMS"

Ultra-compact dry electrolytics sealed in tubes with outer insulating sleeve. Protected against "Blow-ups." 3½" bare leads riveted to end caps.

No.	Mtd.	Wkg. Vlts.	Size	Each
5N769	10	25	161155"	,44
5N770	25	25	"p \15 s"	.50
5N2680	5	50	"pAI58"	.44
5N2682	10	50	11 10 15/8"	.47
5N771	25	50	58115,"	.53
5N2841	50	50	11 pax [7 ,"]	.62
5N772	4	150	5 8×15 8"	.44
5N773	-	150	551155"	.47
5N774	12	150	1,115,"	.50
SN775	16	150	11 115,"	.53
5N776	20	150	341158"	.56
5N2840	30	150	13 lb x 1 7 8"	.59
5N777	40	150	8115/8"	.65
5N778	1	450	5 45 15 6"	.53
5N779	8	450	8 1 X 1 5 . "	.56
5N780	12	$4\bar{\phi}(1$	75115."	.68
5N781	16	480	L [5\21.5"	.79
5N782	20	450	7,121,8"	.88
5N783	10-10t	50	5 1234"	.68
5N3164	\$4 = h5 *	150	5 8123/8"	.68
5N2842	12-20*	150	11161238"	.73
5N3165	20-20*	150	3 1238"	.76



No.	Mfd.	Wkg. Vlts.		Lact
5N2683	20-20r	150	1527."	1.18
5N744 5N797 5N745 5N746 5N798 5N799 5N747	20-30* 30-30* 20-40* 40-30* 10-40* 50-30*	150 150 150 150 150 150 150	7 x23 8" 15 px23 8" 15 px23 8" 1 x23 8"	.82 .88 .88 .94 1.00 1.00
5N2843 5N784 5N785 5N2844 5N2845 5N787 5N2846 5N2684 5N786 5N2685 5N2685	10-20- 12-12* 8-16* 8-16† 16-16* 16-16† 8-8* 8-16*	150 200 200 250 250 250 250 250 450 450	1 b x23 8" 13 b x23 8" 14 b x23 8" 1 b x23 8" 1 b x23 8" 1 b x23 8" 1 b x23 8" 1 x25 8"	1.38 .76 .75 .94 1.32 .88 1.00 1.50 1.23 1.18

(\*) 3 leads. (†) 4 leads.

#### TYPE TVL TWIST-LOKS

TELEVISION REPLACEMENTS. Hermetically sealed for long life. Designed for 85°C operation up to 450 WVDC.

#### SINGLE UNITS

Stock No.	$\Gamma_{\rm MPC}$	Mtd.	W.A.D.C.	Dia. x L.	Each
5N2702	TVL-11	.5 ohm (a. 15,75 kc	3, non-pol.	1x2"	1.70
5N2703	TVL-12	1 ohm (a 60 cps	3, non-pol.	13/8×21/2"	2,65
5N2704	TVL-43	2000	6	13/8x2"	2.47
5N2705	TVL-1	50	150	1x21 g"	1.03
5N2706	TVL-61	40	150	13/8\2"	1.03
5N2707	TVL-70	15	250	152"	.82
5N2708	TVL-63	30	250	15212"	.91
5N2709	TVL-3	50	250	1x2"	1.12
5N2710	TVL-52	%()	250	1x312%	1.41
5N2711	177-4	100	300	1x4"	1.85
5N2712	TVL-5	80	350	13/gx21 2"	1.65
5N2713	TVL-15	10	150	Lx3"	1,32
5N2714	TVL-6	125	450	13/gx4"	3.38
	TVL-7	30	475	1x3"	1,53
5N2716	TVI>	10	175	13/gx2"	1.76
5N2717	TVL-9	4()	175	13/8×31 2"	3.82

#### DUAL UNITS

5N2718	TVL-10	1000 + 500	6, non-pol.	13/8×2"	1.73
	TVL-13	1000 + 1000	15	1x315"	2.88
5N2396	TVL-14	80   80	300	13 <sub>8</sub> x37."	2.26
5N2397	TVI-15	$20 \pm 10$	1(K)	137	1.47
5N2398	111-61	10 - 10	150	13 ,3"	2.35
5N2399	TVL-17	50-10	450 25	13 53"	2.18
5N2400	TVL-17	50±10	150	13 813"	2.50
5N2401	TA119	20.100	475 300	136x31."	2.41
5N2402	TVL-20	$40 \pm 40$	175	13433"	
41.474.00	1 4 17 17	111 1 111	1477	1 "403.5"	2.73

#### TRIPLE UNITS

5N2403 TVL-50	70±70-20	200 50	13/8×31./	2.35
5N2404 TV L-21	100 ± 10 ± 10	200.50	18200"	2.26
5N2405 TVL-22	80 ±80 60	250-200	13 331 "	2.50
5N2406 TV123	10 20 10	350 300 200	13 \31 ." 13 8\2"	1.71
5N2408 TVL-21	$80 \pm 40, 150$	400 50	13/1/1"	2.73
5N2409 + TVL-28	10 10 50	450, 350, 25	133"	1.56
5N2410 TV L-26	$30 \cdot 100 \pm 25$	450 25	13/8×2"	1.62
5N2414 TVL-52	$10 \pm 10 \cdot 10$	150 50	1x21.7"	1.68
SN2415 TVL-67	20 -10 50	450.50	1x3#	1.82
5N2417 TVL-29	10 +10 10	150 50	184\212"	1.91
5N2418 TVL-57	40 100 130	450 150 <b>50</b>	13 137	2.44
5N2419 TVL-65	$20 \pm 20 \pm 0$	150 350	13.8431.74	2.26
5N2420 TVL-53	$40 \pm 10 \cdot 10$	150 350	13/4×3"	2.06
5N2421 TVL-31	20 20 10	475 300 25	13 812"	1.97
5N2422 TVL-32	10 40 25	475/100 50	13/8\3"	2.73
5N2423 TVL-33	10 +10 +10	175	133"	1.76
5N2424 TVL-55	$30 \pm 30 \pm 20$	17.5	13/8x3"	3.06
0110101   1 111111	1711   1711   211	1111	1.7870	3,00

#### QUADRUPLE UNITS

5N2125	$TVL_{\pi^{i_0}()}$	$50 \pm 10 \pm 20.5$	300-25	18/6×31 2"	2,35
5N2432	T VL-34	10+10.10+10	350 300	13812"	1.82
5N2433	TVL-35	40 10 50 ±10	100 350 250	13 8X31 2"	2.62
5N2435	TVL~36 :	10+10+10 10	150 150	13/8/2"	1.79
5N2438	TV L-68	$60 \pm 10 \pm 10$ 20	450 250	13/ax3"	2.56
5N2442	TVL-56	10.30.30	450/400, 300	13/8x21 2"	1,82
5N2443	TVL-58	30 + 30 + 15 + 10	150	18/8×315"	2,50
5N2444	TVL-37	10.10.80.50	475 150 200 50	18/8×3"	2.70
5N2445	TVL-38	$40 + 20 + 10 \cdot 10$	475 25	186\3"	3.00
5N2446	TAL-59	10+10+10+10+10	17.5	13/8/2"	2.32
5N2447	TVL=10	40+20+10+10	475	13/sv3"	3.23

#### TYPE TVA ATOMS

Especially designed to take care of both television and radio. Small sized, metal-encased dry electrolytic tubulars. . . All are suitable for 85 C operation. . . \* TVA-11 through TVA-14 are specially designed miniatures for TV and FM discriminator circuits.

#### SINGLE UNITS

No.	TVA	Mid.	# LDC	Dia. v.L.	Each
5N2448	1	1(00)	6	15 <sub>16</sub> ×25 <sub>16</sub> "	1,32
5N2449	2	2000	6	11 b x 218 b "	2.29
5N2450	3	250	10	11 10 1 13 11 "	1.03
5N2451	4	500	10	1 [63.21], "	1.12
5N2452	5	10	2.5	11 11 11 11 11	.44
5N2453	1)	2.5	25	11 16 3 1 16"	.50
5N2451	7	50	25	11 10 1 10 10	.59
5N2455	8	100	25	11 113 "	.71
5N2456	9	250	25	7. v.115. W	1.18
5N2457	10	500	25	11 11 25 16	1.32
5N2458	11	1	50		.44
5N2459	12	-)	50	16 1 16 1	.44
5N2460	13	5	50		.44
5N2461	1.4	10	50	MAI IN	.47
5N2462	1.5	25	50	11 12 "	.53
5N2463	16	50	50	11 16% 1916" 11 v 113 . "	
5N2464	17	100	50	16 41 36	.62
5N2465	18	30	150	14 11 16	.88
5N2466	19	50	150	16 y 1 16	.59
5N2467	21	10	150	15 16\25 16"	.88
5N2535	22	20	150	11 1223 8	.62
5N2536	23	30		11 . 01 . "	.88
			450	1,10,75,.16	.97
5N2537	24	1()	150	11 p x 31 p"	1,18

#### **DUAL UNITS**

5N2538 5N2539	20 25*	$\begin{array}{c c} 20 + 20 \\ 10 + 10 \end{array}$	150 450	15 16 X 19 16" 15 16 X 29 16"	.76 1.09

\* Overall Diameter x Length in Inches.



901 W. Jackson Blvd. 229 W. Madison Street

HAYMARKET 1-0422 **CENTRAL 6-5971** 

# INTERFERENCE FILTERS - WAVE TRAPS

#### C-D QUIETONE INTERFERENCE FILTERS



Type IF-18. An efficient allwave compactive inductive type tilter for use in connection with all types of electrical appliances where interference conditions are severe. With frame connection for reduction of radiation. Bakelite care, him hed in Waln it. Riting, 110 volts AC or DC, 5 amperes. Reduces interference when installed between radio and outlet—suppresses noise conditions when installed at offending applications or motor. Shpg. wt. 5 bs.

4.91

ing appli ince or motor. SI 5N12493 -List Price \$8.35



#### FILTERS FOR USE AT THE APPLIANCE



Type IF-21. All-wave capacitive-inductive type filter for use on appliances where return lead cannot be made, u h as shaver, barber slipters. Bikelite use Riting 16 amperer at 110 volt. AC or DC, Wilnut himsh. Wt. 2 lbs. tinish. Wt. 2 lbs. 5N12495—List Price \$1.00...... 2.35

Type IF-19. Capacitive inductive type filter for use where interference is severe. Frame connection provided. In Bakelite hase, Walnut finish. 5 amperes at 110 V. AC-DC.
5N12494—Shipping weight 2 lbs. List \$7.00.
4.12

Type IF-22A. For use in connection with electric shavers such as Schick, Knapp-Minarch and aimilar type shavers 5 amperes at 110 volt. AC. Bakelite care, I lack finish Shpp, wt. 1 lb. Shipperes at 15 volt 76. But the ed.e, the Shipperes at 1b. 5N12496—List Price \$2.75.

Type 22B. Physically the same at Type 22A, but for use with Pack ind, Zephyr, Remindton-Rand, and Roman type electric shavers. Sampleres at 110 V. AC or DC. Blik-life case. SNI2497—Shipping weight 1 lb. List \$2.75. 1.62 1.62



#### INDUSTRIAL QUIETONE INTERFERENCE FILTERS

Type IF-7A. Capacitive-inductive type heavy duty filter for eliminating noise created by motors, oil burners, diathernly machines, elevators, etc. In steel cutout box 6"x6"x4" with knock-outs for BX cable or condust. For single phase 110-220 vots. AC or DC at 5 any eres. Ships, wt. 9 lbs.

7.35 steel cutout

Type IF-27. Capacitive-inda tive Leavy duly type for severe inter-terence from oil burners, motors etc. For 110 volts AC or DC at 5 amperes. In steel box with flexible leads. 5N12498—Shipping weight 5 lbs. List \$7.00.



#### FLUORESCENT NOISE FILTER

Type IF-54. Capacitive industries filter which provides extremely high attenuation over a wide range of frequencies. Suitable for fluorescent lights, sign flusher; etc. Drawn metal container 2"x2"x11.". In all ded wire leads 6" long. Rated at 2 amper or no 11 5.220 volts AC or DC. Shipp, wt. 1 II. SN12491—List \$2.25.



#### ICA "FILTERVOLTS"

All-Wave Model. Contain heavy duty R.F. choles, lar refilter capacitors, "Pl" hiter-unit. Eliminate noi.e. caused by irons, toasters, vacuum cleaners, etc. Ra's duty amps at 32, 110 and 3.1 volts AC or DC. For unwith any all-wave or broidcast re-eivers. "xix43." Shpq. wt. 5 lbs.
SN12508—List Price \$7.50

5N12508—Lut Price \$7.50. 4.41

Intermediate model. Eliminate: extremely nor y radio recention due to power line disturbances cau od lay lights, electrical appliances, etc. Can be installed at set or at source of interference. 45% x 334 x 13 m² set or at source of Shipping weight 2 lbs 5N12507—List Price \$4.50. 2.65



Designed expressly for use in the reduction tered in frequer y modulation and television reception. Can be used with receiver. sion reception. Can be used with receiver, hiving balanced or unual nucled afternity input impedances of 400, 300, 72 or 50 ohm; Easily installed across antenna terminals. 12N10255—Model 15-7510. 6-1 MC 12N10257—Model 15-7511, 13-27 MC 12N10259—Model 15-7513, 27-54 MC 12N10259—Model 15-7513, 54-108 MC

12N10260 — Model 15-7514. 108-216 MC Any Model, Li.t \$5.00. Each......



2.94

#### MEISSNER BROADCAST BAND WAVE TRAP

The copy flar Mess, ner wive frighter compact unit designed for the elimination of interference forced by trong broadcant stations. All are fully shielded and moniture protected. Limited coverage permits eaby a justinent. Full instructions are furnished for use as either reject or bypers arrangements. Shields are 13-x17, "in, in. Breckets for mounting the unit to the transfer of the processing of the proc this size or sit met are attached to the shield.

12N10261 - Model 15-8479, 400-700 KC 12N10262 - Model 15-8480, 650-1000 KC 12N10263 - Model 15-8481, 950-1600 KC Any Model, Lit \$1.50, Early



88¢

#### MEISSNER LINE FILTER

Type 15-7515. A combination in-ductor-capacitor type which filter. both sides of the line. Greatly reduces interference carried into the receiver by the power line. Especially true in a mall radio, with builtin antenna, where one side of the dine is connected to the chassis; thus introducing interference directly into the antennicircuit. Rating 110 volt AC or DC at 3 amps. 5N12502—Li + \$6.50.... 3.82



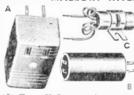
#### NOISE SUPPRESSOR

Eliminates noi e from 115 V. 50/60 cycle fluorescent. Leads shunted a ross power line. 414 "x134 "x

5N12520-Wt. 1 lb. . . . . 75¢



#### MALLORY INTERFERENCE FILTERS



(A) Type X-6 for a edium interrence. Plug into socket ahead f affected installation. Brown butic case. Size: 11, "x 21,6" x1". amperes at 110 volts AC or DC.

5N12509—Last \$1.60.... 94¢ 

(B'Type X-5. Tripled ipanityfiller with provi on for return lead to apphiance. For Vacuum Cleaners, food mixers, etc. 13, "x21g". 5 

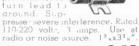
(B) X-3 Plug-in. Capacitive type for u.e.f. etween et and outlet. Rated 5 amps, at 110-220 volts, for high interference, 13 xx

5N12510-List \$1.80... 1.06

#### W-7 MOTOR TYPE

(C) Dual capacity unit. Use on motor brushes or rings. Bracket for intg. to frame. For moderate interference 110-220 volts. 78x

5N12512 —Last \$1.35.... 79¢ W-11. Like above, for severe interference. 1%x3". 5N12513—List \$2.10... 1.23 Z-6. A dual inductance-ca pacity filter with provision for re-



5N12516-List :3.60... 2.12

Type Z-4. Dual inductance-capacity for severe interference where return leaf is incorvenient. For vitrators, 1% "x3", 3 ampere: 110-220 volts. Wt. 8 oz.

5N12524—Li, t \$2.50... 1.47

Z-2. Capacitive-inductive. 3 amps. at 110-220 V. 13 x23 %".

5N12511-List \$2.20... 1.29

#### **HEAVY DUTY FILTERS**



LC-5. Inductance capacity interference. Rated 110-220 V., 5 amps. Has V., 5 amps. Has cord, plug and receptacle. 278 Case has mtg.

x3x312" high. flanges. Wt. 8 lbs. 5N12514 -List \$11.25.. 6.61

LC-10. Same as above, rated 110-220 V., 10 amps. 8.82 SN12515—List \$15.00.



### MERIT QUALITY TRANSFORMERS

















#### **VIBRATOR TRANSFORMERS**

Fxac' duplicie v.brito: 'r.h.stormats, P3068 replaces Chevrolet 986241, Philos CR4, CR6, CR8, P4076 for Cadillac 7256003, Chevrolet 985793, Oldsmobile 982399, Pontac 384171, P4077 for Burck 980690, 980733, 980741, 960745, 980797, 580798.

Stock No.	Tvoe lo.	Sec. DC to Filter	Dimen. H x W x D	Mtg	Euch
6N1915	F3068		23/10x25gx17g'	C	2.65
6N1916	F4076		31/4x.5gx25g''	JG	3.29
6N1917	F4077		315/16x21/4x23g''	JT	3.53

#### FIXED OUTPUT TRANSFORMERS

Fig. A. All (lass A operation except type A2936 which is class B, AB, Secondary impedance 3.5 chms.

Stock No.	Type	Pri. Impedance	Pri. M.A.	Max. Watts	Mtg. Centers	Ea h
6N1918 6N1919	A3025 A3026	2,500 5,000	50 40	3	134"	73c 73c
6N1934 6N1935 6N1936	A2935 A2927 A2936	5,000 ct. 8 000 10,000 ct.	150 20 75	18 3 10	2 13/16" 11 2" 236"	1.76 73c 1.41

#### UNIVERSAL OUTPUT

Fig. F. Matches single or push-pull tubes to voice coil. Primary imp: 4000 7000 3000-10000-14000 ohms ct. Ser. imp. 17 to 32.

Stock No.	Type No.			Mig. Centers	Din.ensions H x W x D	Each
6N1937	A2900	35	4	2"	13 8x23 8x11/4"	1.41
6N 1938	A2901	40	8	23 g''	15/gx2 13/16x11/2"	1.50
6N1939	A 2904	40	18	238'	21 4x27/ex17/8"	1.91

#### MERIT UNIVERSAL LINE TRANSFORMERS

Fig. F. To couple various line impedances to a voice coil. Primary imp: 500 1000-1500-2000 ohms.

Stock No. Ty	pe Sec.	Warrs	Mtg. Centers	Dim. H x W x D	Each
6N1931 A2	906 3.2, 6-8	10	23 g"	15,ex2 13/16x11/2"	1.32
	907 3.2, 6-8		23%"	214x27/8x17/8"	2.20
6N1933 A2	908 6-8, 16	24	3:8"	214x3 11/16x218"	2.35

#### **POWER TRANSFORMERS**

Fig. C. Receiver replacement type. For use in radio and amplifiers. Primary for 115 V. 60 cycle AC. Leads R.M.A. color coded.

Stock	Type	Plat	e	l Re	-t	Fil.	1	Mtg.	
No.	No.							Ctrs.	Each
6N1940 6N1941		480 ct 700 ct	50	5	2 2	6.3 ct	2.6	2x2 <sup>1</sup> / <sub>2</sub> " 2 <sup>1</sup> / <sub>4</sub> x2 13/16"	2.94 3.53
6N1942	P2966	700 ct	70	5	3	12.5 ct	9.0	21/4×2 13/16"	4.26
6N1925 6N1926 6N1927 6N1943 6N1944	P2951 P2952 P2953	700 ct 700 ct	40 70 90 120 150	5 5	233333	6.3 ct 6.3 ct 6.3 ct 6.3 ct	2.0 3.5 3.5 4.7	2x2½" 2x2½" 214x2 13/16" 2½x3½" 212x3½"	3.03 3.67 3.97 4.50 5.73

#### PLATE TRANSFORMERS

DC voltage ratings are approximate values at output of a 2-section choke input filter using M.V. rectifier tubes. Primary 115-volt, 60-cycle AC. (†) Both secondaries available simultaneously.

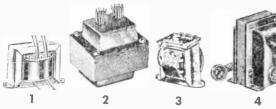
		Ser.	Sec.	I DC					1	
Stock No.	Type No.	Rm.: Volts	DC Volts	Sec.		Dim x W		D	Mtg.	Each
6N1995	P3157		500	250	45 gx	3 13/	16x	43 8	D	6.76
6N1996	P3158	1 550 ct 1080 ct 500 ct	400 1000†		45/8x	3 13/	16x	5"	D	8.23
6N 1997	P3159		400† 750 600	150 225	45 <sub>8</sub> x	3 13/	16x5	51/8"	D	7.94
6N1998	P3167	/1450 ct	1200 1000	300	53/4×1	61/8×4	**		EH	19.84

#### ISOLATION TRANSFORMERS

To provide isolation between line and associated circuits. Primary for 117 V, 50/60-cycle AC. Static shielding between primary and secondary. 117 V. secondary.

Stock	Type		Dimensions		
No.	No.	Watts	HxWxD	Mtg.	Each
6N1986	P3096	40	31/8x25/8x25/8"	В	3.38
6N 1987	P3197	80	37/8x3 3/16x31/2"	D,	5.00

### RELIANCE REPLACEMENT TRANSFORMERS



#### 1. FILAMENT TRANSFORMERS

Stock   Prime No.   Volt		Secondo Volts	ary	Secondary Amperes	Dimen. H x W x D	Each
6N1950 115, 60 6N1951 115, 60 6N1952 115, 60 6N1945 115, 60	cy.	6.3 c	t. t. t.	1 3 6		85c 1.20 1.59 1.65

#### 3. UNIVERSAL LINE TRANSFORMERS

Match voice coil to any tube, single or push-pull, universal line transformers match voice coil to 500, 1000, 1500, or 2000 ohm line. Shipping weight 2 lbs.

Stock No.	W 1"s	_ 3: c.	11 g. Cent.	Dim. H x W x D	Each
6N1949 6N19190 6N19191	10 18	3.2, 6-8 3.2, 6-8 6-8, 16	23 8 23/8 31 8	15/8x2 13/16x11/2" 21/4x27/8x17/8" 21/4x3 11/10x218"	.98 1.45 1.59

#### 4. STEP-DOWN AUTOTRANSFORMERS

Permits use of standard voltage motors accessories and appli-ances with line voltages from 220 to 250 V. 5060 cycles. Sec. voltage 110-125. Built in receptacle, cord with plug.

Stock No.	Wats	S ze	Wt.	Each
6N1981	80	35,8x3 x27/8	5	3.35
6N1982	150	37/8x35/8x31/8	7	3.98
6N1983	250	43 4x31/4x33/8	9	5.10
6N1984 6N1985	500 1.000	434x4 x33/8	12	6.40
0141292	1,000	7½x65/8x55/8	17	17.25

#### 2. POWER TRANSFORMERS-115V, 60 CYC. PRI.

Stock	H.V. Se	condary		Fil.		Fil.	Mtg.	
No.	Volts	DC Ma.	V.	Amps	V.	Amps.	Centers	Each
6N1958		40	5	2	ъ.3	2	2 x212	2.10
6N1959		40	5	2	6.3	2	2 x21/2"	2.19
6N1960		70	5	3	6.3	2.5	2 x21/2"	2.65
6N1961		90	5	3	6.3	3.5	214x2 13 16"	2.90
6N1962		120	5	3	6.3	4.7	21/2×31 8"	3.35
6N1963	750 ct.	150	5	3	6.3	5	21/2x31/8''	3.90

#### 1. UNIVERSAL OUTPUT TRANSFORMERS

							Dimen.	
	No.	Oper.	Imped ince	Imp.	Watts	Ctrs.	H. W. D.	Each
	6N1954	Sin. (	4000 7000	.17 /	4	2"	138x238x11,4"	.85
	6N1955	or	6000/10000	10			15/8x? 13/16x11/2"	
1	6N1956		14000 Ct.		18	23/8"	21/4x27/8x15/8"	1.19
1			3000/5000					
1					24	31/8	21/4x3 11/16x21/8"	1.59
-1		P.P. 1	10000	32 )				

#### 1. FIXED OUTPUT TRANSFORMERS Mtg. Ctrs.: \*2", †11/2", ‡2 13/16".

Stock No.	Pri. Imp.	Sec.	Pri. M.A.	Watts	Each
6N1964* 6N1947‡	2000 5000 ct.	3.2 3.2	60 150	5 18	.49 1.08
6N1965* 6N1966* 6N1948† 6N1967*	(PP 6L6) 5000 7000 8000 10000	3.2 3.2 3.2 3.2	40 30 20 30	5 5 3 5	.49 .49 .47 .49

#### 1. FILTER CHOKES-1500 V. INSULATION

Stoc No. 6N19 6N19 6N19	Henries 71 8.5 73 15	Current M.A. 50 75 110	Ohms 400 400	23/8'' 31/8''	Dimen. H x W x D 15/8x2 13/16x11/2" 21/4x3 11/16x21/6" 2 9/16x4x21/4"	Each .65 1.13 1.35
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### **UTC TRANSMITTING TRANSFORMERS**



G2 TO



#### CASE DIMENSIONS

Туре	Height	Width	Depth	Tvje	Height	Width	Depth
G2 G3 G4	25 m" 21 2" 215 m"	3 <sup>3</sup> ," 3 <sup>3</sup> ," 4 <sup>1</sup> ,"	117 p" 2 p"	G5 G7 G8	334" 455"	31," 45," 53,8"	4 <sup>1</sup> 2" 5 <sup>1</sup> 2" 5 <sup>3</sup> 8"

#### SINGLE SECONDARY FILAMENT TRANSFORMERS

Primaries tarped 105, 115 volts, 50/60 cycles AC.

No.	Type	Sec. Volts A	np:	In ul.	Сте	Lbs.	Eich
6N5853 6N5854 6N5855		2.5 c.t. 5 c.t. 6 3 c.t.	4	1500 v. 230 v. 15 0 v.	(1-3	4	3.14 3.14 3.14
6N5857 6N5858 6N5859	S-58	3 5 c.t. 2 5 c.t. 5 to 5.25 c.t.	20	10000 v. 1000 v. 500 v.	G 5	$\begin{bmatrix} & 1 & & & \\ & 1 & & & \\ & & 1 & 2 & \\ & & & 1 & 2 \end{bmatrix}$	4.41 5.39 4.41
6N5861 6N5862 6N5863	S-E1 S-62 S-63	7.5 tar ped, 6.3 c.t. 1) c.t. 14 v. c.t. tar red at 12 v. c.t., 11 v. c.t	10	3 )00 v. 5000 v. 5 )00 v.	G-5	6½ 6½	4.41 5.39 9.80

#### FILTER, SWINGING AND AUDIO CHOKES

Nos.	Type	Service	Ну.	Ma.	Ohm.	Calle	-bach
6N5823	#S-23	A id.o	500	5	6000	G^	3.33
6N5827 6N5828 6N5829 6N5830	*S-27 *S-28 *S-29 *S-30	Filter Filter Swing.	3) 20 10 5/25	/5 100 175 175	350 350 95 95	G-1 G-1 G-1 G-1	3 72 3.72 3.72 3.72
6N5831 6N5832 6N5833 6N5834 6N5836	*S-31 *S-32 †S-33 †S-34 ‡S-36	Filter Swing. Filter Swing. Swing.	20 5/25 20 5/25 5/25	225 225 200 300 400	120 120 90 90 85	G 5 G 3 G-7 G-7 G-8	4.90 4.90 6.86 6.86 10.29
6N5837	‡S-37	Filter	20	550	60	Ci-8	13.72

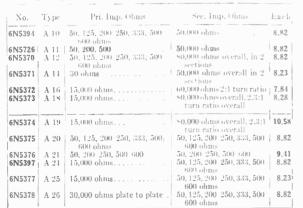
Shpg. wts.: #3½ lbs., \*6 lbs., †11 lbs., ‡15 lbs.

#### UNIVERSAL DRIVER TRANSFORMER

No.	Туре	A <sub>I</sub> plication	Case	Lbs.	Lich
		P.P. Driver plate to gr.1 of Class B tubes up to 400 watts output	Cl-4	4	5.10
<b>6N</b> 5810	S-10	P.P. 56, 6Cu Tribde, +Cb, or similar plates to 45's, 2Ab car 6L6's, self or fixed bias			4.61

#### ULTRA COMPACT AUDIO UNITS





#### UNIVERSAL INTERSTAGE EQUALIZER

Type CGE-1. The ideal device for all applications requiring frequency re ponse correction. Designed to be connected between two triods audio stages or mitch a high impedance (5000 to 30,000 ohins) cource to grid. Employ, resoto suppose of the second second second to the second to the second to the second secon 6N5399 —Shipping weight 3 lbs. 14.70



#### DYNAMIC NOISE SUPPRESSION INDUCTOR

Type CG-50. Incorporates two accurate High Omoils (.8 and 2.4 hy.) for use in dynamic note suppression curcuits. Effectively suppressed in far and needling one in high fid-lity phonographic order. Excellent circuit included. Case type RC (see listing below) 23 , " x 27 g'. H. ent Fxcel-

#### VARIMATCH MODULATION TRANSFORMERS

former For mid-hir i all popular types of modulator title, to flate modulator Class C in plate. tulie, to plate mojulate l Class C implifier stract Secondarie: are designed Scoondine: are designed to carry the rlate current of the Clas. Cotage. CVM-0 through 4 use RC care.





Sto s		Max. A idio	Watts Clas C	Din	ensiç	ns (	Slipg Wt.	
No.	Туре	Watts	Stage	L.	W.	Н.	Lbs.	Each
6N5359	( 'V.M- )	12	10-25	212"	3"	3"	3	5.00
6N5360	CVM-1	30	20-60	31 111"	415"	412"	- 6	8.23
6 <b>N5</b> 361	CVM-2	60		31,"	47,8"		12	12.05
6 <b>N</b> 5362	CVM-3	125	1 11-250	6"	4'16"	6"	20	17.64
6N5363	CVM-1 I	300	200-600	73,"	9"	512"	31	29.40
6N5364	CVM-5	600	457-1200 1	1"	11"	9"	89	67.62

#### UTC STANDARD VARITRAN VOLTAGE CONTROLS

Employs a Ldn.1 contact ridin 1 over the tranformer turns. Provides continuously-variable output voltage in m 0 to 13) vols without near at m of the circuit. All completely shelded. Type V-1 (lb.tr.) in load contact transfer with the contest of the milk on insulated strip. For 115 vols.



No.	Туре	Watte	Amp:		Size		Wt.	Price
21N5733 21N5771 21N5716 21N5772 21N5773 21N5774	V-0 V-1 *V1-M V-2 V-3 V-4	230 570 570 570 570 850 1250	2 5 5 5 7.5	5 5 5 5	x 6 x4 x816x3t x1012x3 x7 x41 x 7 x6	2" " " " " " " " " " " " " " " " " " "	10 lb 14 lb 14 lb 13 lb 19 lb . 37 lb.	11.27 17.15 28.42 14.70 21.56 31.36

\*Same as V-1, but includes 0-150 volt A.C. meter.

#### **OUNCER AUDIO UNITS**

Crinpa t quality franctioner, that we should one of meet the drop portable broadcast, hearing aid, aircraft and miling policition. High the left parallel for matter than 4 145,000 cp., i.e., 15 and units decrying DC which are for voice franceine from 15 1000 pc. Maximum level 0 db. Filly impreciated and sealed in drawn aluminum hosting 26" diameter, 11, " high.



Stock No.	Туре	Pri Impedance	Sec. Impedance	Each
6N5479 6N5480 6N5481 6N5482 6N5483 6N5484	O-1 ()-2 ()-3 ()-4 ()-5 ()-6	50, 20) /25   500/600 50, 200/25   500/600 7.5/30   15 00   1   15 00   1   1   1   1   1   1   1   1   1	50,000 P.P. 50,000 P.P. 50,000 P.P. 50,000 60,000 95,000 P.P.	7.79 7.79 7.06 6.17 6.17 7.06
6N5485 6N5486 6N5487 6N5488 6N5489 6N5491 6N5492	()-7 ()-8 ()-9 ()-10 ()-12 ()-14 ()-15	15,00 ) DC in Pri. 15,000 15 ) 10 DC in Pri 30,000 P. to P. 50, 200/250 200.	95,0 1) P.P	7.06 7.79 7.79 7.79 7.06 7.79 7.79

# **UTC LABORATORY TRANSFORMERS**

#### UTC LINEAR STANDARD TRANSFORMERS

High permentility ores and precisely balanced interleaved windings guarantee uniform frequency response, minimum, hum pickup and negligible wave from distortion. Vacuum-baked, impregnated coil. response, minimum hum pickup and on. Vacuum-baked, impregnated coil. Minimum distribut d dipacity and leakage reactance.

#### INTERSTAGE AUDIO TRANSFORMERS

Response  $\pm 1$  din, 2000 pp. Hom-pickup reductions on pared to include dype, -74 db, except LS-19 and LS-22, -50 din, LS-1 cases  $3^{1}_{-8}$ " long,  $2^{9}_{-8}$ " wide,  $3^{1}_{-8}$ " high,  $^{8}_{-8}$ S-2 uses  $4^{1}_{-8}$ " x  $3^{1}_{-8}$ " x  $4^{8}_{-8}$ ". Shpg. wt. 4 lbs., except LS-22, 9 lbs.



Primary Impedance, 15,000 ohms. For Single Plate.

				-1	SEC.
No.	Type	Use	Secondary	Max. Lev.	Each
6N5417 6N5418 6N5413	LS-19 LS-20 LS-21	Tognd	95,000 ohms; 1 1:1 60,000 ohms; 2 1 135,000 ohms; 3 1	+17 DB +14 DB +14 PB	14.11 12.35 14.11
Primary In	nped inc	e, 30,000 ohm	is. P. to P. for Push-	- Pull Plates,	
6N5419 6N5420	*LS-22 LS-25	To PP gral; To PP grads	89,000 ohms; 1.6 1 50 000 ohms; 1.3 1	+26 DB +17 DB	18.23 16.46

#### OUTPUT TRANSFORMERS-TO LINE AND VOICE COIL

The multiple tap, of these units provide a wide range of anyolian for every application. Have large cores and precipely balance  $t_i$  and releaved coil structure. Unequalled response  $(\pm 2 \text{ db}, 25\text{-}20,000 \text{ cg/s})$  with minimum harmoni distortion. In LS-2 case 4 lb'' long, 3 lg'' wide, 4 lb'' high. Shipa wt. 9 lt. . \*In LS-3 case 5 lb'' x  $-2 \text{ x} \cdot 4 \text{ lb}''$  is Shipa, wt. 17 lbs. 4 Push-pull, fixed bias for cathode follower drive.

No.	Туре	Pri. P. to P.	Secondary	Watta	Each
6N5421 6N5422 6N5412 6N5423 6N5424	LS-52 LS-54 LS-55 LS-57 LS-58*	8,000 ohms 8,000 ohms 5,000 & 3,000 5,000 & 3,000 2,500 & 1,500	500 to 1.2 30 to 1.2 500 to 1.2 30 to 1.2 500 to 1.2	15 15 20 20 40	16.46 11.76 16.46 11.76 29.40
6N5425 6N5426 6N5427 6N5423 6N5398 6N5429	LS-60A*† LS-61 LS-62A*† LS-6L1* LS-6L3* LS-6L3	4,600 12,000 & 6,000 4,600 9,000 ohms 9,000 ohms 3,800 & 4,500	15 to 1.2 500 to 1 2 500, 125 500 to 1 2 30 to 1.2 500 to 1.2	3) 15 30 30 30 30 55	20.58 16.46 20.58 24.70 16.46 29.40

#### HIGH LEVEL MATCHING TRANSFORMER

**Type LS-33.** High level line matching. Pri. imped 50 125, 200, ...0, 333, 500/600 ohms; sec. tinjed 1.2, 2.5, 5, 7.5, 10, 15, 2.1, 30, ...0, 12.1, 200, 250, 333, 500/000 ohms; ± 2 dir from 20 to 20 000 cps. Miximi. i level 15 watts. Size  $4^7 \, \mathrm{g} \, x \, 3^1 \! \mathrm{g} \, x \, 4^2 \, \mathrm{g}''$ . Weight  $7^1 \! \mathrm{g}$  los. 6N5493

#### HYBRID AND REPEAT COILS

Type LS-140. Line to line for isolating balanced and unbalanced circuits. Pri. and sec. imp. 500/600 ohms, split winding... ±1 db from 30-20,000 cps. Max. level ±10 db. Weight 3 lbs. Type LS-141. Three sets of balanced windings for hybrid service, center tapped Pri. and sec. 500/600 ohms. ±1 db from 3 \( \) 15, \( \) 700 \( \) pc. Weight 3 lbs. 6N5499

#### 2-SECTION FILTER CHOKE

Type LS-90. Filter choke with hum-bucking tap. Industance in ceries 50 hy at 50 MA DC; in parallel, 12.5 hy at 100 MA DC. DC resistance 510 ohms in series and 1.8 ohm, in parallel. Insulyton text voltage 2000 volts. House in LS-2 care 41.6" long, 33.2" high. Mount no centers 21.6" x3.11.6". 8.23 6N5411- Shipping weight 9 lbs.



#### UTC VARIABLE INDUCTORS

Specially designed for use in tune 1 1110 circuit Specially designed for use in tune 14 (10 cm state Aflustment of set screw on inde of cm terminal and ingle in industrance of plus 90% to -50% from mean value shown. Die cast case 111.2% long, 114.6% wide, 118.6% high. Mounting center, on terminal board side 118.6% by 112.6% Weight—51.2 ozo.

No. Type	Mean Hys. Each	No.	Туре	Mean Hys.	Each
6N5444 VI-C1 6N5445 VI-C2 6N5446 VI-C3 6N5447 VI-C4	.0085 .013 .021 .034 <b>6.34</b>	6N5458 6N5457 6N5458	VI-C13 VI-C14	13	8.07
6N5449 VI-C5 6N5450 VI-C6	.053 .084	6N5459 6N5460 6N5461	VI-C15 VI-C16 VI-C17	5.4 8.5 13.	0.50
6N5451 VI-C7 6N5452 VI-C8 6N5453 VI-C9	1.13 .21 1.34 8.07	6N5462 6N5463 6N5464		?1. 33. 52.	9.53
6N5454 VI-C10 6N5455 VI-C11	.54 .85	6N54 <b>6</b> 5	VI-C21	83.	10.08

#### UTC HIPERM ALLOY TRANSFORMERS

Light in weight and small in dimensions, with full dependability and fidelity for all compact envice application. Frequency range ± di from 3 to 20,000 cps. All incorporate a flips misalloy is set from one and hum on mode of all structure. Rame I die cast cale if of high conditional view alloy, for the dimbla k, and just a mounting with the termin I wither up or down. All me 23.4 Lighting W 31.4 High and weight 2 li



Low Impedance to Grid and Mixing Max, Level+15 DB.

1 No.	Туре	Application	Pri. Imp.	Sec. Imp.	Each
6N5466	H7-100		50,125,200, 250,333,500/ 600	60,000 two sections	11.17
6N5467	HA-100X	Same but with tri- alloy internal shield	THAT		14.11
€N5168	ri.\-101	mike, pi-kup, multiple line to	50,125,200, 250,333,500 600	120,000 in two sec- tions	12.94
	HA-101 X	same but with tri-alloy internal shield		\$0,000 in two sections	15.88
6N5470				500,125,200, 250,333,500 600	11.17
6NS471	HA-108X	Same but with tri-alloy internal shield			14.11

### UTC TOROID PERMALLOY CHOKES

New Permalloy, duct foroid units are used in New Permalloy, duct foroid unit, are used in audio, carrier, and supersonic applications requiring high Q and great stability HQA oil. have maximum Q of 200 at 5000 cycles HQB coils have miximum Q of 200 at 400 cycles. All coils have extremely low hum pickup, can be spaced closely, are herm-fically sealed, and idjusted to 1% toler unce.



HQA HOB

No.	Туре	Henrys	DC Ma. Max	Each	
6N5434 6N5435 6N5436 6N5437 6N5438	HQA-2 HQA-4 HQA-6 HQA-8 HQA-10	12.5 Mh. 30 Mh. 83 Mh. 2 3 Mh. 500 Mh.	400 160 70 65 40	6.86 6.35 7.84 8.82 9.80	
6N5439 6N5440 6N5441 6N5442 6N5443	HOA-12 HOA-13 HOB-5 HOB-7 HOB-10	1 2 ) Hy. Hy. 5 Mh. 2. Hy. 12. Hy.	20 60 30	10.78 10.78 16.66 18.62 21.56	





#### SOLA CONSTANT VOLTAGE TRANSFORMERS

A itematic regulation of voltage for all type of electrically operated earningent. They deliver a constant output voltage independent of transent or continuous variations in aurphy voltage to within ±1%. Especially recommended for processing lateratory equipment such as phot electric revices x-ray equipment, Link trainers, projection equipment, etc. Input 95-125V, but cycles, A.C. except those marked with (\*) which have additional input, 19-250 V. Soli transformers are available for 25, 50 cycles. Over 1000 types of Soli transformers are available. If those listed below do not lit your needs, write us for quotations. quotations.

Stock No.	Mfrs. Type	Output VA	Output V.	Dimensions Inches	Wt.	Each
6N1410	301002	1.5	6.3	51p" x 31g" x 21g"	412	18,50
6N1411	301003	15	115 0	55m" x 31g" x 21g"	412	18.50
6N1412	30488	15	6.0	51% " \ 25%" \ 37%"	6	15.00
6N1413	30492	15	6.3	511 6" \ 25 \ \ \ 31 6"	- 6	15.00
6N1414	30498	15	115 0	$511_{\mu}'' \times 25_{\lambda}'' \times 37_{\mu}''$	6	15.00
6N1415	30504	30	115 0	89 " x 43 " x 43 "	12	17.00
6N1416	30505	60	115 0	N 16" X 15" X 18 8"	13	24.00
6N1417	30806	* 120	115 0	911 " \ 13 " \ 13 "	17	32.00
6N1418	30886	120	115 0	11" " x 1 " x 43 "	26	32.00
6N1419	30507	250	115 0	1154" \ 615, " \ 554"	28	52.00
6N1420	30×0×	500	115 0	$-1112'' \times 615p'' \times 55\zeta''$	<del>-40</del> -	75.00
6N1421	30509	1000	115 0	1014" × 012" × 774"	110	125.00
6N1422	30811	2000	115 0	3114" x 912" x 77,"	205	225,00
°6N1423	30M×13	3000	115 0	14 <sup>11</sup> 16" × 10" × 93/8"	325	300,00
*6N1424	30 11 5 15	5000	115 0	241/8" x 423 4" x 97 16"	570	475.00

### HORDARSON REPLACEMENT TRANSFORMER









#### Thordarson Replacement Output Transformers

BAH type mounting, measure  $2^3$ , "x114"x13", " with 2" n.t.r. ctrs. Wt. 16. except type TS-24S61 which weighs 1 lb. in 1 has mtg. ctrs. of 23%". Class A operation 3-4 ohim secondary.

#### Service Output Transformers

	No.	Type	Pri. Imp.	Pri. Ma.	Watts	Each
(	N1880	TS-24S48*	4-5000	10	1	85e
€	N1881	TS-24S49*	7-8000	10	1	85c
6	N2143	TS-24S50	2000	55	5	82c
1 6	N2144	TS-24S51	5000	40	5	910
1 6	N2145	TS-24S52	7000	30	5	946
_ €	SN2146	TS-24S54	15000	10	5	97c

<sup>\*</sup> Midget Replacement: Mea. ires 21 8"x1"x13 16".

#### Universal Service Replacements for Single and push-pull plates

No. 6N2147	Type TS-24S60	Pri. Imp. 4M, 7M,				Each 1.41
6N2148	TS-24S61	8M, 10M, 14M, C.T.	40	ohms	8	1.53

#### Universal Replacement Power Transformers

Adjustable mounting brackets. All leads RMA color-coded. 117V 50-60 cycle input.

AGF Mtg.	GGV Mtg.	Thord.	Plate		Rect.		
Stock No.	Stock No.	Type No.	Voltage				Each
6N1882	6N1883	TS-24R00*	240-0-240			6.3V.C.T2A	2.88
6N1884	6N1885	TS-24R01*	325-0-325			6.3V.C.T. 2A	3.03
6N1886		TS-24R02*				6.3 V.C.T. 2.5A	
6N1888		TS-24R04*				6.3V.C.T. 3.5A	
6N1890		TS-24R05*				6,3 V.C.T4.7A	
6N1892		TS-24R06*				C3V.C.T.~4.7A	
6N1894		TS-24R07*				6.3V.C.T. 5A	
6N2088						6.3 V.C.T. 6A	7.29
	6N2098	T-22R32	350 0 350	110		6.3V.C.T. 3A	1020
						6 3V.C <u>.T3A (</u>	0.25

<sup>\*</sup> Thordarson Type No. shown is for AGF mtg. For GGV mtg., add "U".

#### **AUDIO INTERSTAGE TRANSFORMERS**

No.	Type	Mtg.	Application	Ratio	Each
6N2008	T20A16	BAH	Sal. pl. to sal. or FP and:	1:2	1.70
6 <b>N</b> 2009	T20A17	FGV	Sgl. pl. to sal. or FP grids	1:2	2.23
6N2010	T20A19	BAH	S ·1. or PP pl. to sgl. or		
1			PP arids	1:3	2.09
6N2011	T20A22	BAH	Sgl. pl. to gl. or FP grid.:	1:3	2.50
6N2012	T20A23	FGV	Sql. pi. to sql. or FP grid	13	2.70
6N2013	T20A24	FGV	PP plates to PP grads	1.3	2.94
6N2014	T20A25*	RTV	Sql. or PP pl. to sql. or		
1			PP grids	1:1.41	5.88

<sup>\*</sup> Fully potted; hum-bucking coil and core.

#### UNIVERSAL CHOKES

Newly designed Universal Chokes replace twinging or smoothing type. Voltage regulation not iffected. Provides more inductance throughout current range decreasing ripple voltage. \*Tuned a idio

Stock	Type	Inductai	ice Hy.	Currer	и МА	DC	Mig.	
No.	No.	Rated	Max.	Rated	Max.	Ohms	Type	Each
6N2015	T20C50	350	75	5	25	5500	BAH	2.03
6N2016	T20C51	35	15	15	25	1850	BAH	1.35
6N2017	T20C52	- 8	-4	40	65	450	BAH	1.29
6N2018	T20C53	12	- 8	80	100	375	BAH	1.79
6N2019	T20C54	- 8	-4	150	200	145	GGV	2.88
6N2020	T20C55	6	2	200	300	7.5	GGV	3.73
6N2021	T20C56	7	4	300	375	60	GGV	5.23
6N2022	T20C57	10	1)	500	600	65	PUV	20.29
6N2023	T20C58*	.75	.75	()	10	30	BAH	1.35

#### DRIVER TRANSFORMERS

Ì	Stock   Ty	pe	1	1	Pri.	Mig.	
Ì	No. No.		oes Output Tubes	Ratio	MA	Type	Each
i	6N2028 T201	D75 1-30, 1-49, 1-	6C5, 1J6, 19, 2-30, 2-4	9 2.4:1	3	BAH	1.62
		1H4 (single					
	6N2029 T201	D76 1-6N7, 6A6,		5.2:10	7	BAH	1.70
		1-76 (sgl. pl.				13/11/	0.50
	6N2030 T201	D77 [1-89, 6F6, tr		2.5:1	30	FGV	2.53
		1-6C5 (sgl. p					
	1		2-6F6 (class AB)				
	6N2031, T201	D78 2-61'6, Triod		2) 1:1	10	GGV	3.38
		2-6A6, 83	2-6N7 (class B)	1.			
	6N2032 T201	D79, 2-6N7 (sgl. c		5.2:1	30	FGV	2.88
		PP pri.)	B grids)				









GGV

DUAL TONE CONTROL An effective tone compensation network for sound systems. Treble and basis frequencies aften atc 1 or accentuated independently. For

TADC74 Tone Control Choke with Hum-bucking Coil and Core, DC ohms 220, Test volts 500, Mtq. Type RAV. ... 2.70 

#### 6N2149. FEEDBACK CONTROL TRANSFORMER

T2CA26 is the control element in a variable audio inverse feed-bick vislem, bass of compressor extander circuit. Viriable gain is produced by automatically controlling inverse feedback voltage. Superior to LC grid bias control, i.e. ponse fister, harmonic distortion does not rise. Transformer comes with complete distals on 10-Watt haddelity amplifier incorporating above circuit. Mtg. type RTV.

#### 6N2026 VIRDATOR POWER TRANSFORMERS

	0.00.00				
No.	Type	Primary	Secondary	Mtg. Type	Each
6N2093	T22R20	G-SV DC	250v DC 50 ma 325v DC 75 ma	$\frac{\text{CAV}}{\text{CAV}}$	3.73 4.41
6N2094	T22R22	6-SV DC 6-SV DC	325v DC 135 ma&		
6N2095	T22R24	(117V/AC)	6,3v CT 4.75A	GGV	8.47

#### AUDIO INPUT TRANSFORMERS

		-				
	ock lo.	Type No.	Mtg. Type		Turns Ratio	Each
		T20 \ 00 T20 \ 01	BAH	Line or mic, to single or PP grids Line or mic, to single or PP grids	1:10 1:20	1.85 2.70
6N	2002	T20A02	FGV	Line or mic, to PP grids Line to PP grid mic, to single or PP grids	1:20	2.85 6.23
				V.C. or low imp. mie. to grid	1:80	1.70

#### Transceiver Transformer

Stock No.	Type No.	Mtg. Type	Application	Turns Ratio I	Each
6N2003	T20 \03	$_{ m BAH}$	Single pl. to grid Line or mic, to grid	1:3.25	2.38

#### **OUTPUT TRANSFORMERS** Low Level Output Transformers (BAH)

Edw Devel Carpar Transfer										
Stock No.   Type No.   Application	Pri, Imp. 1500 to 3000 6000 to 12000 CT 8000 to 10000 CT 5000 to 7000 CT 2500 to 4000 CT 20000 CT	3.2 to 1	Power Output 3 3 8 8 8 8 3	Each 1.35 1.62 2.44 2.44 2.53 3.17						

\* Type FGV Mounting.

### Special Duty Hi-Level Output Transformers (GGV)

6N2111 T22864 6N2112 T22866 6N2113 T22868 Sgl & PP Pl 6N2114 T22870 to Line & VC 6N2115 T22872	10000CT 8000CT 6500CT 5000CT 3000CT	3.2 to 4 6 to 8- 15-250-500	25	4.23 4.23 4.41 4.53 4.53
6N2115 T22872 6N2118 (T22878	3000CT 3300CT	}	25 60	6.44

#### Universal Replacement to Multiple Voice Coil (BAH)

6N2116	T225741	Sglor PP Plto	14(0)0-1(00)0-5000-	1 to 30	25	3.73
		V.C.	6600-5000-3000-			
			2500 CT			
6N2110	T22862,	Sgl Pl to VC	1000-3000-2500-	1 to 30	8	2.50
	1 '		2000-1500			
6N2124	T22886	Sgl Pl or	From T-sourCT		3	1.85
6N2125	122887	PP Pl to VC	3500-2000	6 to 8	6	2.03
					8	2.20
L			1: . 1/ 1 C 1	/ DAUL		-

#### Matching Line or Lines to Voice Coil (BAH)

ì	6N2119	T92880	Sgl Line to VC	500 to 600	)	8	2.59
			Multiple		)	25	4.20
		T22583		2000-1500-	3.2 to 1	1.5	3,23
		T22884		1000-500	6 to 8-15	5	2.65
				111110-011	0,100,10	- 12	2.41
ı	6N2123	T22885	1				6.71

### FILAMENT TRANSFORMERS

These excellent quality filament transformers are wound with a single recondary. Carefully designed for improved voltage regulation and minimum heat rise. Rated for continuous operation at peak load; 117 volts, 50/50 cycles. Insulated for 1600 volts RMS.

No.   Type	Secondary V Amps.	Dimensions HxWxD	Mtg.	Lbs.	Each
6N2045 T-21F08	6.3CT   1	2x2 <sup>3</sup> 8x1 <sup>1</sup> 2	BAH	$\begin{bmatrix} \frac{3}{4} \\ 1 \\ \frac{21}{234} \\ \frac{23}{4} \end{bmatrix}$	1.85
6N2046 T-21F10	6.3CT   3	2x3 <sup>1</sup> 4x1 <sup>3</sup> 4	BAH		2.44
6N2047 T-21F11	6.3CT   6	3 <sup>1</sup> 6x2 <sup>1</sup> 2x2 <sup>1</sup> 4	CAV		3.62
6N2048 T-21F12	6.3CT   10	3 <sup>1</sup> 6x2 <sup>1</sup> 2x2 <sup>8</sup> 4	CAV		3.56

### STANCOR REPLACEMENT TRANSFORM



#### UNIVERSAL OUTPUT

No.	Тур	Application	Mt 1	E-ch
6N1675 6N1663 6N1637 6N1671 6N1670	A-3856 A-3822 A-3824 A-3850 A-381+	Sal or PP P1 (4M to 14M) to VC Sal P1 (7M to 10M) to VC Sal or PP P1 (4M to 14M) to VC Sal or PP P1 (4M to 14M) to VC . Sal or PP P1 (4M to 14M) to VC . Sal P1 (1500 to 10M) to VC	0000-0	1.53 1.29 1.62 1.73 1.53
6N1763 6N1574 6N1678 6N1673 6N1666	A-3880 A-2855 A-3830 A-3852 A-3830	PP P1 (4M to 14M) to VC PP P1 (3M to 14M) to VC	O O TID	2.88 2.47 3.82 2.09 2.88

#### **FIXED OUTPUT TRANSFORMERS**

Single Plate to Voice Coil, Class A.

No.	Type	Imped Pri	ance in Ohms Sec	Max Watt	Mtg	Each
6N1677 6N1578 6N1640 6N1576 6N1571 6N1645	A-3865 A-3330 A-3876 A-3328 A-2203 A-3877	1,500 2,000 2,000 4,000 4,000 5,000	6, 4, 2 3,5 4 3,5 8 4	5 5 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	A A A A A	1.38 1.23 1.03 .85 1.50 1.09
6N1659 6N1646 6N1573 6N1577 6N1648 6N1575	A-3310 A-3878 A-2313 A-3329 A-3879 A-3327	5 000 7,000 7,000 8 000 10 000 25,000	500 15, 8, 4 4 8 3.5 4 4	20 5 10 3 5 5	A A A A	4.09 1.06 1.59 .85 1.03 1.00

Push-Pull Plates to Voice Coil. All are Class AB except † - AB1.

6N1762	A-387?	5,000	15, 8, 4	. 18	TD	3.53
6N1661	A-3800	5,000	500, 250, 15, 8, 4	30	C	4.65
6N1662	A-3801†	6 600	500 250, 15 8 4	35	C	5.41
6N1647	A-2201	8 000	6	10	A	1.82
6N1657	IA-3304	10,000 7,000	500 15 8 4	25	C	4.23
6N1660	A-3311	10 000	500, 15, 8, 4	25	C	4.41
6N1667	A 3831	10 000	8 4, 2	5	A	1.59
6N1572	,A 2312	14 000	4	10	A	1.65
6N1676	A 3857	25,000	4	5	A	1.32

#### AUDIO TUBE TO LINE

No.   Type Application	Impedance Ohms	Mtg. Ea.
6N1599 A-3250 SglPlorPP	Pri -20M 10M, 5M	Q 2.65
Pl to line	Pri -20M CT. Sec-500 333 200 125 50.	

#### AUDIO LINE TO VOICE COIL

No.   Type	Watts	Impedance Ohms	Mt r.	E 1.
6N1764 A-3882	25	Pri -500 333 250	D	4.26
6N1765 A-3883	25	Pri-500	J	2.29
6N1595 A-3837*	15	Pn-500 Sec -8 4 2 65, 2 35 2, 1.5.	J	2.94
6N1636 A-7949	12	.7, .5, .3, .2, .1, .05. Pri –2M, 1500, 1M 500 Si c—6.8	J	2.03

<sup>\*</sup>Designed to operate one or more speakers in parallel across a 500 ohm line. For line to line or line to V.C.

#### **INPUT TRANSFORMERS**

No.	Туре	Impedince	Mtg.	HxWxD	Each
		Pri-4, Sec -25,000 Pri -200 and 5,000 Sec-60 000			

#### INTERSTAGE TRANSFORMERS

PUSH-PULL INPUT. Single Plate (7,000 to 20,000 ohms) to push-pull class "A" grid. All pri, are rated at 10MA-DC except A-4206 which is ISMA.

No.	Type	Mt 1.	Ritio	HxWxD	Each
6N1619	A 52-C	A	2:1	13 x23 x13 "	1.44
6N1651	A-53-C	A	3:1	13 x23 x13 "	
6N1690	A-63-C	A	3:1	15/8x274x11."	1.56
6N1654	A-73-C	A	3:1	2x314x184"	1.88
6N1589	A-4206*	C	3.25:1	31.x25.x256"	4.41

<sup>\*</sup>Has a pie-wound split secondary.

#### REPLACEMENT POWER TRANSFORMERS

Most popular sizes and rating: of 2.5 and 6.3 volt types are represented field w. All high voltage second iries are CT.

Count in ition Plate and Filament Supply, Type "M" mounting.

No.	w Type	F	late _	Rec.	Fil.	Amp	. Fil.	Mtg. Area	Wt.	Ea.
		Λ.	DC ma	V	Amp.	V	Amp.		Ľb.	La.
6N1706 6N1715		$\frac{650}{700}$	$\frac{\{t\}}{r}(t)$	5.0CT 5.0CT	2.0 3.0	2.5CT 2.5CT 2.5CT	1,0 9,0 3,5	$\frac{3\chi 2^3 {}_4{''}}{3^3 {}_8\chi 4^1 {}_4{''}}$	3 5	3.53 4.56
6N1714 6N1716	P=6()(16		90 120	5.0CT 5.0CT	3,0 3.0	2.5CT 2.5CT 2.5CT 2.5CT	3.5 12.5 12.5 3.5	331\3" 331\35%"	4	4.56 6.23
6N1785		120	10	5.007	2.0	6.3CT	2.0	23 (\3"	3	4.12
6N1735 6N1720 6N1786 6N1746 6N1787	P=6010	180 650 600 180 630	40 40 55 60 70	1 00.6 1 00.6 1 00.6	2.0	6.3CT 6.3CT 6.3CT 6.3CT 6.3CT	2.0 2.0 2.7 2.75 3.5	3\31\" 3\23\" 3\27\" 211 <sub>B</sub> \23\" 33 <sub>8</sub> \37\"	35 51 35 51	3.97 3.38 4.06 3.50 4.53
6N1721 6N1741 6N1722 6N1723 6N1743	P-6011 P-6312 P-6012 P-6013 P-6313	700 580 700 700 580	70 90 90 120 125	5.0CT 5.0CT 5.0CT 5.0CT 5.0CT	3,0 <sup>1</sup> 3,0 3,0	6.3CT 6.3CT 6.3CT 6.3CT 6.3CT	2.5 2.8 3.5 1.7 1.5	3\33 <sub>8</sub> " 3 <sup>3</sup> \$\3 <sup>3</sup> \$" 3 <sup>3</sup> \$\3 <sup>3</sup> \$" 4 <sup>1</sup> \$\3 <sup>3</sup> \$"	1 1 5 6	4.29 4.94 4.53 5.03 5.59
6N1724 6N1744 6N1726 6N1745	P-6014 P-6314 P-6165 P-6315	750 700 800 740	200	5.0CT 5.0CT 5.0CT 5.0CT	3.0 1.0	f.3CT 6.3CT 6.3CT 6.3CT	5.0 5.5 5.5 7.0	3 <sup>4</sup> 1\3 <sup>3</sup> 1" 1 <sup>1</sup> 1\3 <sup>7</sup> \" 1 <sup>1</sup> 2\4 <sup>1</sup> \" 4 <sup>1</sup> 2\4 <sup>1</sup> 4"	6 8 9 9	6.17 7.23 7.38 9.41

#### FILAMENT TRANSFORMERS

A wide range of voltage and current ratings is available for use with the commonly used types of receiving and transmitting tubes. Each transformer is designed to provide the best voltage regulation commensurate with its second invicuring rating and physical size. All Primaries 115 Volts 63 Cymles. All are 2500 voltansulation except \*7500 V., \$10,000 V., \$5000 V.

		Secon	diry	Dimensions		1	
No.	Туре	V	Amps.	HxWxD	Mla	Lbs.	Ea.
6N1728 6N1711 6N1707 6N1774 6N1708 6N1709 6N1709 6N1729 6N1729 6N1779	P-6133* P-4093 P-30°1 P-30°0 il P-3060 il P-3062 P-6135 P-6134 P-5014	2.5 CT 2.5 CT 2.5 CT 2.5 CT 5 CT 5 CT 5 CT 5 CT 6 3 CT 6.3 CT	5 6 10 10 3 3 6 10 1.2 3	211 bx 33 gx 21 4" 33 bx 25 gx 28 x" 34 bx 25 gx 28 x" 31 gx 25 gx 26 x" 31 gx 25 gx 26 x" 31 xx 21 gx 21 gx 31 xx 21 gx	SCCBCBCBNABB	1.5 2 2.5 2.5 2 2 2 3 1	2.65 3.82 3.67 3.35 3.53 2.82 3.23 3.53 1.56 2.65
6N1710 6N1775 6N1788 6N1740 6N1780 6N1782 6N1789 6N1732 6N1725	P-401 + P-3 )64 P-408 ) P-6308 P-5015 P-6138 P-4093 ‡ P-6134 P-4097	6.3 CT 6.3 CT 6.3 CT 7.5 CT 7.5 CT 10 CT	4 6 6 10 4 8 24 8 8	31,x25%x.1%" 31,x21,2x.1,"" 34x3x31,"" 31,x27,x23,4," 31,x27,x23,4," 51,x41,4x10" 37,x31,x31," 4x31,x35,"	C B C N B N FB N C	3 2 3.5 3.5 3.5 5 21 5 5	3.38 3.23 3.82 3.76 2.65 4.47 14.70 4.38 5.00

#### DC FILTER CHOKES

All are Type A Mtg. except \*-L, †-TD.

No.	Ty; e	Hys.	Ma.	Ohms	HxWxD	Ea.
6N1856 6N1699 6N1623 6N1700 6N1852	C-1515 C-1707 C-1003 C-1708 C-1355*	20 7 16 13 8	15 50 50 65 75	900 550 580 500 290	15/8×27/8×11/2" 13/4×23/4×13/" 2×31/4×13/" 2×31/4×13/" 21/4×23/6×13/"	1.06 .94 1.26 1.38 1.47
6N1624 6N1701 6N1585 6N1625 6N1584	C-1002 C-1709 C-2305† C-1001 C-2304	15 8 5 10.5 2.3	75 85 100 110 150	400 250 300 225 60	2½x3¾x2½″ 2x3¼x2″ 2 <sup>11</sup> ½x2¾x2¾ 2½gx4x2¼″ 2½gx4x2¼″ 2x3½x1¾″	1.73 1.62 2.35 2.18 1.53
6N1586 6N1702 6N1694 6N1696 6N1813	C-2309 C-1710 C-1080 C-1279 C-1333	3 7 3.5 8.5 8	150 150 50 50 50	90 200 200 400 450	2 <sup>1</sup> / <sub>4</sub> x3 <sup>3</sup> / <sub>4</sub> x2 <sup>1</sup> / <sub>4</sub> " 2 <sup>5</sup> / <sub>8</sub> x4x2 <sup>1</sup> / <sub>4</sub> " 1 <sup>5</sup> / <sub>8</sub> x2 <sup>7</sup> / <sub>5</sub> x1 <sup>1</sup> / <sub>2</sub> " 1 <sup>5</sup> / <sub>8</sub> x2 <sup>7</sup> / <sub>8</sub> x1 <sup>1</sup> / <sub>2</sub> " 1 <sup>5</sup> / <sub>8</sub> x2 <sup>7</sup> / <sub>8</sub> x1 <sup>1</sup> / <sub>2</sub> "	1.65 2.06 1.00 1.03 1.06

Free Stancor Catalog lists over 400 items, including audio and power transformers and reactors, power packs, radio transmitter kits and televicion components, for replacement and general purpose work. FREE 23N19969.

### TELEVISION REPLACEMENT PARTS

GENUINE



PARTS















#### RCA TELEVISION IF AND VIDEO COIL KIT

Contains all coils nees sary to build the picture, sound, and video circuit of a high guilty believes needed. Shown below in tording the first and the circuit of a high guilty believes needed. Shown below in tording the circuit of the circuit of

No	RCA Type	No. in Kit	D. ription	E+-h
12N10157 12N10158 12N10159 12N10160 12N10161	201K1 202K1 202K1 202K4	2 1 1 1 1 1	Sound If Fransformer Corvert - Transformer 1, t PIX IF 2nd PIX II Cathode Trap	1.29 1.29 1.38 1.06 1.29
12N10162 12N10163 12N10164 12N10165 12N10166 12N10167	203K1 202L1 203L1 203L1 203L2 203L3 203L4	1 2 1	Discriminator Transformer 3rd and 4th PIX IF Victor States Peaching Coul Victor States Peaching Coul Victor States Peaching Coul Victor States Peaching Coul Victor States Peaching Coul	1.62 .38 .26 .26 .26 .26

Deflection Yoke Type 201D1 for u e with Irect views i kinesca er requiring 50 magnetic deflection, such as RCA 7DP4 and 10BP4 Performance checked to close linearity limits. Provides required retrace time when used with typical deflection circuit; using RCA Horizontal output transformer 211T1, 204T3 or 204T1 and Vertical output transformer 204T2.

6NS977

COOD 1 Cooperation of the cooperatio

Focus Coil Type 202D1 for magnetically focused kine copes having deflection angle, up to 50 auch as the RCA 10BP1. Largiconductor size for corresponding operation.

Eight 4.41

Horizontal Output Transformers Type 211T1 to use with deflection yoke type 201D1 and with direct viewing tute. Such as 7DP1 and 10BP4. Auto-ir insformer primary provide, voltage for pulse rectified to supply kine case independental. Filament vanding to resulted to supply kine case independental. ded. Secondary is tapped for connecting with control Each 5.59 6N5975

#### TV PARTS FOR TRANSMITTING STATIONS

TYPE 201011 DEFLECTING YOKE, for use with 5WP15 Hyrr (CR tube and 5WP11 Transcriber Kinescope). 10.29 6N6019

TYPE 201D75 DEFLECTING YOKE ASSEMBLY. In dude keyed Jumbo Annulur 7-pin socket. For u.e with Image Orthicon., type, 5655, 2P23 and 5769. 182.77 TYPE 201D76 DEFLECTING YOKE, For type 1853-At I and cop

TYPE 201D77 DFFLECTING YOKE. For type 2F21 Monoscope 80.36

TYPE 202D75 FOCUSING COIL. For Image Orthicons, typ 104.37 TYPE 204D75 ALIGNMENT COIL ASSEMBLY. For Image Orthirons,

P. 3, 500 i and 5769. 6N6018

TYPE 204T1 HORIZONTAL OUTPUT TRANSFORMER. For deflection circuits using RF operated high voltage applier. For RCA Image Orthicon. (1923, 5655, 576.), Flying Spot CR Take (5WP15), and Transcriber Kinescope (5WP11). Used with RCA Deflecting Yokes 2 (1D1, 201D2 or 201D3.

Ion-trap Magnet Type 203D1. A necessity wherever kinescopes with ion-trap guns are u. ed. Construction is fool-proof—only two coils and a padded mounting yoke. Prevents ions from bombarding the sensitive one sciten.

.....Each 3.82 Write for full information on these and other Television components

No.	RCA Tile	Description	Each
6N5978	201D2	Deflecting Yoke Deflecting Yoke Deflecting Yoke Wigth Control Wigth Control	7.64
6N6002	201D3		8.76
6N6003	2 1D104		4.41
6N5979	201R1		.41
6N5980	201R3		1.29
6N5981	2 1R3	Horizont il Line irity Control	.47
6N5877	2 1R4*	Width Control	.59
6N5878	201R5*	Horizontal Linearity Control*	.71
6N6004	201T61	Power Tran. former (3)-tube)	15.29
6N6005	201T74	Power Tran. former (24-tube)	12.35
6N6006	201T8	Power Transformer (21-tube) Power Transformer (27-tube) Power Transformer (27-tube) Yoke Mounting Hood Focus Coil	11.17
6N6007	201T9		12.35
6N6008	201T10*		12.35
6N5982	201X1		.76
6N5876	202D2*		6.47
6N6009	2 3R1	Ion Trap Magnet (PM type)	1.23
6N6010	2 3R1	Hor. O. v. & Sync. Control Coil	1.06
12N10168	204L1	Filament Choke	.12
6N5986	204T.21	Vertical Output Transformer	2.94
6N5970	204T.3	Horizont il Output	7.06
6N6011	204T +1	Vertical Defl. Output Transf.	2.65
6N5971	208T1	Horizontal Block, Osc. Transf.	2.29
6N5972	208T.1†	Vertical Block, Osc. Transf.	1.62
6N5973	208T3	Horizontal Block, Osc. Transf.	1.62
6N5974	208T8	Horizontal Sync Diac. Transf.	1.35
6N6012	2 <sup>8</sup> T9†	Ver. Blocking O.c. Transformer	1.47
6N5976	211T2	Honzontal Output Transformer	11.17
6N6013	.11T3	Hor. Dell. Output & HV Transf.	5.59
6N5875	.211T5*	Hor. Dell. Output & HV Transf.	7.35

\*For To" set using 16AP4 TV Tabe. † U. d with both 16AP4 and 10BP4 Tubes.

#### RCA FRONT END TUNER

Type 201E1. Dingned especially for use with stagger timed IF's. Handles all 12 TV channels and plectide in edpirture and sound carriers. Timer include RF amplifier it use, converter itage, orcillator it is, time tuning control, channels with, converter transformer and all their aligning additionals. Unit are incunted and if ined. Mointron 4"chilist. 37.63.



#### RCA TV DATA BOOK

#### RCA TELEVISION COMPONENTS BOOK

32 page boo-let gives complete technical, installation and application dith on kCA TV components for use with 16AP4. Includes schematic drigram and parts list of deflection and HV circuit fully described in 23N19903



#### TV POWER TRANSFORMER

A top quality, precision made television power transformer with a rating of 2200 volt. at 2 MA. Filament voltages are 6.3 volt at 1 amp, and 2.5 volts at 2 amps. Up right mounting. Shipping weight 2½ it :: 3.75 6N1501....

#### REPLACEMENT PARTS FOR TRANSVISION SETS

Stock No.	Part No.	Percription	Each
6N10220	. 16	250 Micro H. Video Peaking Coil	.38
6N10221	17	73 Micro H. Video Peaking Coil	.38
6N10222	174	1st Pix IF, Trap 21.9-27.9 MC	1.32
6N10223	174	3rd Pix IF, Trap 21.9 MC	1.32
6N10224	175	2nd Pix IF, Sound 21.9 MC	1.59
6N10225	176	4th Pix IP, Fixe i	1.32
6N10226	177 & 318	Sound IF, 21.9 MC	1 47
6N10227	317	Sound Discriminator, 21.9 MC	1.62
6N10228	319	500 MicroH, Video Peaking Coil	.38
6N10230	365	Slug Coil	.44
6N5889	308	9 KV Hor. HV Output (Flyback)	3.45

#### HIGH VOLTAGE FLYBACK

Similar to RCA type 211T1. Horizontal deflection out torizontal deflection offi-justifier former used with deflecting yok - 201D1 or 201D3. Provides approxi-mately 9 KV for expellent picture Frillian ce in a 10" 10" or 12" tutle. Fillianent windin ringl , led. Second-



type 201R1 width control. Powdered iron core insures quiet operation.

6N5889....

#### 16-INCH FLYBACK

Similar to RCA type 211T5. Designed for use in pulse operated power supplies with no load kinescope anode potentials up to 13.5 KV. Ideally suited for conversion of 10 inch and 12 inch TV sets to the 16 inch size.

6N5888.....

#### ANTENNA - IF - RF - OSCILLATOR COILS STANWYCK COILS MEISSNER COILS

#### "PLASTIC" IF TRANSFORMERS

Trimmer base and coil form are moulded in one piece. Trimmers "floated" away from the base with an air gap between the bottom plate and the plastic base. Wide range Frequency adjustable in their side of Pre-set frequency, double-runed. Ifet if shield can and Litz wire. Unaite med by temper rure or humidity. Size 11,4" square by 212" high.

II.	VPUI		OUIPUI		
No.	Type	Set at	Type	No.	
12N 10373 12N 10376	16 6649 16 66°2	175 KC 262 EC	16-66 1 16-6654	12N10375 12N10378 82c	
12N10382	16 6658	456 KC	16 6660	12N10384 )	

#### HI Q IRON CORE "PLASTIC" IFS

12N10152	Tyre 16 6662   Inp	ut, perikad at 455 PC	1.23
12N10153	T/Fe 16 6663 Ou	t <mark>put, pe</mark> akud at 455 KC	1.23

#### "TWEET" FILTER OUTPUT IF

Type 16-6670. New output transformer with built-in "tweet" filter in secondary circuit. For replacement use in late model receivers that have "tweet" filter enclosed in IF output shield. Plastic, air-core construction. Shield can 11/4x11/4x1/2". Spade bolt on 13/16" centers. 12N10154

#### FM IF AND DISCRIMINATOR TRANSFORMERS



Model 16 6665 IF Transformer. For the new ultrahigh FM frequences. Permeability tuned to 10.7 MC. Mounted in rectangular shield can measuring  $1.7/16"\,x'/g''\,x'1\,29/32"$  with screw type mig. lugs. 1.73

12N10329-Shpg. wt. 8 oz.

Model 17 3484 Discriminator Transformer, Permeability funed to 10.7 megacycles. For use on New FM range. Same size as above. 12N10333-Shpg. wt. 8 oz.

#### STANDARD ANTENNA AND RF COILS



Designed to cover the BC band from 545 to 1580 KC (190 550 meters) with a 365 mmld tuning condenser. High impedance primaries, wound with Litz wire. Shielded coils are in blick crickle finished non-magnetic can. 11/8" dia., 21/2" high.

UNSHIELDED	
12N10046 Ant. Coil type 14-1010	1564
12N10047-RF Coil type 14-1011	1200
SHIELDED	
12N10044—Ant. Coil type 14-1004	772
12N10045-RF Coil type 14-1005	, , 50

### "UNIVERSAL ADJUSTABLE" UNSHIELDED COILS



Replace BC band coils in most receivers, accurately 

1.03 12N10009-type 14-1028 Osc.

#### OSCILLATOR COILS FOR 190-550 METER BC BANDS Used with 365 mmfd. condensers. IF xformers and RF and antenna coils. Shielded type is 1°4"x1½ Padders not supplied.



# Unshielded

## PHONO OSC. COIL FOR WIRELESS RECORD PLAYERS

456 KC OSC. COIL

BFO COIL

Type 17-6753. To supply beat note necessary for CW reception. Range, 290-650 KC: ; eaked at 456 KC. 138" sq.x312" high. Type 14-1033. For type 6SA7. Urshielded, 456 KCIF. Requires 350 mmid. padder cond. 365 mmid tuning cond. 12N10171 12N10332 ..... 50c 1.44

NOTE: SEE PAGE 94 FOR RCA AND OTHER TELEVISION COILS

#### MIDGET IF COILS

Iron core 455 KC midgets. Compression tuned, excertionally high gain due to specially designed rowdered iron cores. For general replacement u.e and new set construition of smill AC-DC receivers, ento radios and portables. Overall dimensions of can 34" square x 1% long.

12N10350---Wt. 2 oz. Midget AM Coil similar to above but with the addition of a i lastic lare with lug terminals and

s; ade bolt mounting lugs.

12N10358-Wt. 2 oz.

#### MIDGET FM COILS

THE STATE OF THE S

Newly designed slug tuned FM coils. High quality iron cores assure mix." im "Q" and gain when tuned to 10.7 MC. Band width 100 EC reik to risk. Symmetrical response curve. Polytyrene line individual alumnum can "4" square by 17%." ik. Symmotrical responce curve, aluminum can 34" square by

12N10355-Sh; g. wt. 2 oz. FM Distin pator. Times to 10.7 MC Bandwidth 330 KC peak to jeak j'us of minus 165 FC). Output 9 volts with input of 2 volts. This, it is consions time as above.

12N10356 Shig. wt. 2 oz.

LM Ratio Detector, For new FM attaults which eliminate limiter tube, 10.7 MC, band width 330 KC. 12N10357-Shia w.t. 2 oz.

#### FM IF AND DET. COILS

Newly designed Slag Tuned FM coils, maximum "Q" and guin at 10.7 MC. Low loss ceramic and middly non cores. Response curve symmetrical, extinue stability. Alumnum rase, 198" square by 3".



FM Discrimin iter same as above electrically fud me humically. Electrically centered secondary gives perfect symmetry between peaks. For 10.7 MC.

FM Ratio Detector coil, same const, as above 12N10359-Wt. 3 oz.

#### CARRON COILS

#### **UNSHIELDED 456 KC OSCILLATOR COIL**

Color coded, dowel tipe wound with cotton covered enamel wire, dehydrated, treated, il ish-dipi ed

12N10238- Padder value 360-470 mmfd. ...



#### UNSHIELDED UNIVERSAL ADJUSTABLE COILS

Fxact industance of replaced coil covering 550 1715 KC matched easily. Oscillator coil adjustable from 175 to 520 KC. Universal mtg. facilities.

12N10307-Antenna. 12N10309-RF. 12N10310 -Os Any Type Above, Each 73c

#### PEE WEE TYPE ANTENNA AND RF COILS

Secondaties "progressive" wound with Litz wire on  $V_2$ "xll2 impregnited forms. BC band covers 540-1500 KC with 365 mmfd. condenet. Ht impeditive primaries and coupling turns, complete with early grand mfg. bre kets.

12N10315 - Antenna. 12N10316--RF. Each





12N10320---RF

#### **RF CHOKES**

All purpose RF chokes wound on steatite dowels.

Both wirding and dowl impregnated, sealed permitantly radiust humidity. Mounted on 6/32" screw placing lag in easy connecting position.

No.	Induct.	Each	No.	Induct.	Ea h
12N10208	2.5 mh	29c	12N10211	10.0 mh	40c
12N10209	5.5 mh		12N10212	30.3 mh	44c
12N10210	7.5 mh		12N10213	60.0 mh	51c

#### LITZ WOUND ANTENNA AND RF COILS

New tyre bank winding for practically constant gain and selectivity over BC band. High impedance primaries. Tune 540-1500 KC with 356 mmfd. condenser. Unshielded type have univ. bracket, stand-off mtg. 134" centers. Size: 17,8X214".







### MALLORY & CENTRALAB SWITCHES

#### MALLORY GANG SWITCHES



Contact members heavily silver plated, and given a smooth hard finish. Contact shoe, of the self-cleaning type, is of iliver alloy. Switches provided with one permanent stop and one adjuitable top. Bishing: "a" indextend "a". Pointer type, Bake litte knob is supplied also.

Short	ting	Non-Sh	orting_		Total No-	Positions	
Stock No.	Type	Stock No.	Type	Gangs	Circuits	Per Cir.	Ea.
9N6248	1211L	9N6264	1311L	1	1	11	.91
9N6249	1215L*	9N6265	1315L*	1	2	5	.97
9N6250	1213L*	9N6266	1313L*	1	3	3	1.06
9N6251	1217L*	9N6267	1312L*	1	4	2	1.12
9N6253	1221L	9N6269	1321L	2	2	11	1.35
9N6254	1225L*	9N6270	1325L*	2	4	5	1.53
9N6255	1223L*	9N6271	1323L*i	2	6	3	1.65
9 <b>N</b> 6256	1222L*	9N6272	13.2L*	2	. 8	2	1.73
9N6258	1231L	9N6274	1331L	3	3	11	1.82
9N6259	1235L*	9N6275	1335L*	3	6	5	1.94
9N6261	1241L	9N6277	1341L	4	4	11	2.32
9N6262	1245L*	9N6278	1345L*	4	8	5	2.70
9N6281	1261L	9N6283	1361L	6	6	- 11	3.41
9N6286	1266L	9N6287	1366L	6	12_	6	4.35

<sup>\*</sup> Provided with OFF position.

#### "3100" SERIES SINGLE-GANG SELECTOR SWITCHES



Tap and circuit lele for liw tches with rame features along withher above. For use in many lyres of lest circuit. 2" notched thinks, "1" did. With black bar knob and mounting nut. "" buildings. "Indicate light, top.

				. 1.1	0 1 1	D .	
Shorting		Non Short'd			Contact.		
Stock No.	Type	Stock No.	Type	Circuita	per Cir.	Diam. I	lach
9N6878	31151	9N6888	3215]	One	5	114"	.68
9N6879	311121	9N6889	321131	One	12	114"	.68
9N6990	3122]	9N6890	32221	Two	2	114"	.68
9N6991	31231	9N6891	322 <b>3</b> J	Two	3	114"	.68
9N6880	31261	9N6892	3226J	Two	6	114"	.68
9N6881	31341	9N6893	32341	Three	4	11,"	.71
9N6882	31421	9N6894	32421	Four	2	114"	.71
9N6883	31431	9N6895	32431	Four	3	14"	.71
9N6884*	311171	9N6896*	321171	One	17	111 11 11	1.06
9N6885*	31291	9N6897*	32291	Two	9	111 11 "	1.06
9N6886*	31361	9N6898*	132361	Three	6	1 H 16"	1.15
9N6887*	3163I	9N6899*	-3263J	Six	3	111 16"	1.15

#### HARD ALUMINUM ETCHED PLATES

Numbers in white, Fit %(" bushings, 30 spacing for all switch types 1200L, 1300L and 114" bare 31001 and 3200L, spacing for all type 3100L, 3200L switches with 1146" base.



Marking	30° Space Cat. No.	20° Spalle Cat. No.	Marking Volume	30° St acr Cat. No. 9N6244	20 Space Cat No.
1 to 2 1 to 3 1 to 4 1 to 5 1 to 6 1 to 7 1 to 8 1 to 9	9N6224 9N6225 9N6226 9N6227 9N6228 9N6229 9N6230 9N6231 9N6232	9N6303 9N6304 9N6305 9N6306 9N6307 9N6308 9N6309 9N6310	Off-1 to 3 Off-1 to 4 Off-1 to 5 Off-1 to 6 Off-1 to 7 Off-1 to 9 Off-1 to 10	9N6235 9N6236 9N6237 9N6238 9N6239 9N6240 9N6241 9N6242	9N6313 9N6314 9N6315 9N6316 9N6317 9N6318 9N6319 9N6320
1 to 11 1 to 12 1 to 15	9N6233 9N6234	9N6311 9N6312 9N6243	Any above 9N6223	e, each ''0-100''.Eac	12¢

#### MALLORY PUSH-BUTTON SWITCHES

Non-locking types with black bakelite knob. For mounting in  $^7\, {\rm _{16}}''$  hole, panels up to  $^1\, {\rm _1}''$  .

No.	Туге	Contacts	Cost
9N6460 9N6461 9N6462 9N6457 9N6463	2001 2002 2003 2004 2006	SPST* SPST SPDT DPST* DPDT	.76 .76 .82 .94



#### SPECIAL SWITCHES



No. 1400L—12 positions; opens one line at a time while maintaining circuit through others. 134x21½" wide. 3." bushing 2" notched shaft. with knob & dial plate. 3.47

#### 24 POINT TAP SWITCH



No. 13124L —Suitable for use in test circuits, tribe checkers, and present. Special single-circuit 24-point nor-shorting witch. "a" bushing, 2" grooved shift. Complete with dial plate and ber-type knob.

#### CENTRALAB ALL-PURPOSE SWITCHES

#### MOMENTARY PUSH TYPE

For light duty applications, 1 amp, at 110 v. a.e. Silvere I contacts. Insulated  ${}^3\kappa''$  bushing,  ${}^3\kappa''$  long. Button extends  $\frac{1}{2}\%''$  from end of tushing. Available, with contacts normally closed or open.

Solution (1988)



#### "POSITIVE" AND "SPRING RETURN"

Lever Action. With knot. Plate, is alable for vertical mounting singly or in groups up to five.  $17\sqrt[n]{\ln \eta h_s} \sqrt[n]{\sqrt{n}}$  wide,  $1\frac{1}{2}\sqrt[n]{n}$  diep behind panel. Mig. centers  $1\frac{1}{2}\sqrt[n]{n}$ .

Short	ng i		Po T		N vn-Sho	rting
Stock No.	Туре	Poles	tions	Action	Stock No.	Туге
9N12825	1452	2	3	Positivo	9N12799	1454
9N12826	1453	2	3	Spring	9N12800	1450
9N12801	1456	4		Spr.n :	9N12802	1457
9N12804	1459	4	2	Positive	9N12803	1458
9N12805	1466	_2	3	Pos. Spr.	9N12806	1467



#### MOUNTING PLATES FOR LEVER SWITCHES

Black crackle inished iteel.

Stock No.	Gangs	Dimensions	Each
9N12794	1	./5 x 3, "	21 ć
9N12795	2	11/X 34"	24c
9N12796	3	314×112"	29c
9N12797	4	3x 2½, "	35¢
9N12798	5	34 x 3"	44c

#### TONE SWITCHES

Rotary a tion shorting type (except those marked f); have  $\frac{3}{4}$ " dissipation in  $\frac{1}{4}$ " insulated teel shaft,  $2^{+}_{4}$ " long. No knob. or plates.

Sto k No.	Type	Description	Eac	h
9N12768*		.P. 2 no.		
9N12769* 9N12770*		S.P. 3 pos. S.P. 2 pos.		
9N12820*	1473 I	D.P. 3 por.	. 590	
9N12771† 9N12772†		S.P. 2 po . D.P. 2 po .	. 446	
314121121				



\*Pos. action †Spring return. Non . horting

No. 1465. Single pole, four particlector is with lingle pole, single throw AC line will strated. The elector is with index one "off". Pos. index. Sharting contacts.

73¢

#### UNIVERSAL FLAT SWITCHES

Use many ways, from single pole ungle throw to 4 pole double throw. Bikelite insulation, non-horting teeth, Resture,  $\frac{5}{3}$  design for mounting. With  $\mathbb{R}^4$  mattend bar knob.



#### MALLORY 170 C CERAMIC SELECTOR SWITCHES

For radio receivers and low power transmitter are start Sn  $\alpha''$  indexing ascembly with adjustable stop. Heavy silver, plated sont acts. With knob.



No.	Type (	langs	('ir.	Pos.	Each
9N6625	172C	1	1	11	1.32
9N6626	173C	1	2	5	1.32
9N6627	174C	1	3 .	- 3	1,32
9N6628	176C)	2)	1 '	11	2.06
9N6629	177C	2	2 1	5	2.06
9N6630	178C.	.)	3 1	3	2.06
9N6631	1150C	3	1 i	11	2.94
9N6632	ISIC	:)	2	- 5	2.94

#### MALLORY 160-C CERAMIC SWITCHES



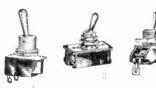
			insulation,	
			g, imi roved	
hravy	· dv	er plate	d contacts.	
For t	ransm	itters with	power up	
to 100	) watts	s. 4 conta	cts per circ.	
With	knob		-	

N,	Tyre(	ings	Cir.	Each
9N6642 9N6643	161C 162C	1	1 2	1.32
9N6644	163C	3	13	2.94
9N6645 9N6646	164C 165C	5	4 5	3.53 4.41

9N6647 above							
Each	 					12	2¢

<sup>\*</sup>Normally of en.

# SWITCHES FOR EVERY PURPOSE













### CUTLER-HAMMER NEW DESIGN SWITCHES

Approved type w.t. nickel-plated netal parts. Fast action—excellent for apphances, radio receivers, etc. Underwriters Appr. Stem length, fig. 1 and 2,  $^{15}\acute{e}''$ , fig. 3 and 4,  $^{11}\acute{e}''$ .

Stock			1	Amps (a		Lots/10	Lat (21
No.	Туре	Fig.	Poles	125v.	Each		Each
9N12836	8280K 16	1	SPST	6	.29	.26	23
9N12834	8282K14	1	SPDT	3	.35	.31	.28
9N12833	8363K7	1	DPDT	6	.59	.53	.48
9N12817	8360K7	i	DPST	6	.55	.50	.45
9N12813	7321K3	2	SPST	12	.69	.62	.56
9N12814	7320K3	2	DPST	iñ	.69	.62	.56
9N12837	8097K3	3	SPST	3*	.20	.18	
9N12832		4	SPDT†	3	.26	.23	.16
			- 1/1 1/1 1		. 40	.43	.41

\*Midget Rated AC | f With Dead Conter Position 5. On-Off switch plate for toggles. With locating projection. 9N12818—Each 3c 10 for 27c

#### HEAVY DUTY SWITCHES

Underwriters approved. Nickel-plated natal parts. Fast action. Hengle motor rated 1 hp. of 175/250v. Fig. 2—Stein  $\log^2$ 

No.		Amps (a 125v.	Amp. (a 250v.	Each	Lots/10 Eacl.	Lot. /21 Earth	
9 <b>N</b> 12815 / 361K5 9 <b>N</b> 12816 7 360K8	SPST DPST	15 15	10	1.10	.99	.89	



#### H & H ROTARY PANEL SWITCHES

Rated 3 amps., 125 volts. Approved type. With lockings. Shaft extends 1''; bushing  $3_8''$  in diameter. With hig terminals.

No.	Type	(Each	10 For	No.	Tyr+	Fich	19For
	S.P.S.T.†			9N12782			
					D.P.D.T.		5.04
9N12781	S.P.S.T.*†		3.15	9N12784	D.P.D.T.*	.64	5.76

\*Bushing extends 1". Others, 3, ". †3 amp., 250 volt.

#### ROTARY SWITCH PLATE

'Off-On'', witch | late. Etched aluminum and | lack. Size | 1"xl | 4". Clean c.t. 



#### H & H TWO CIRCUIT PUSH SWITCHES

In normal position, with plunger out one circuit is "on," and the other "off." When plunger is depressed, circuits are reversed. Slow make, quick break momentary contacts. Rated 1 amp. at 125V. AC Bu hind  $\log_{10}$  "dia., §" long.

#### METAL PLUNGER

Used on Supreme instruments and other popular make. 



### 10 For..... 4.14

BAKELITE TIP 9N12777--Red. 9N12778—Black. Each...... 57¢ 5 13



#### BAKELITE KNIFE SWITCHES

Heavily plated metal parts, bakehte base. Single pole type: 1½" long; double pole 2½". Excellent for use for switching high and low sections of television antennas.



No.		Туре	Eacl.
9N16830		S.P.S.T.	.50
9 <b>N</b> 16831		S.P.D.T.	.59
9N16832		D.P.S.T.	.68
9N16833		D.P.D.T.	.79
9N16834		3-P.S.T.	1.09
9N16835	1	3-P.D.T.	1.18
9N16836		4-P.S.T.	1.47
9N16837		4-P.D.T.	1.76

#### UNIMAX NEW PRECISION SWITCHES

Actuators attached to removable, interchangeable "adaptaplates".

Operating pressure, appro. 8 oz. All units SPDT, except MXO-1 which is SPST. Ratings: 15 amps, 125 volts; 5 amps, 250 volts; 60 cyc. Units vary only in style of actuator.

9N12653—MX-1 Rapic Pin Tyres (A)

9N12653MX-1 Basic Pan Type (A)	1.00
9N12654—MXL-1 Leaf Spring Type (C)	1.10
9N12655—MXO-1 Top Recet, Plunger Type B)	1 10
9N12656 -MXU-1 Bottom Reset, Plunger Type (B)	1 10
9N12657MXT-1 Hinged Leaf Spring Type	1.25
9N12658MYW.I Loof Service Polley Turk D	1.40
9N12658—MXW-1 Leaf Spring Rolle: Type D)	1.40
9N12659—MXO-1 Plunger, Small Spring Type (E)	1.25
9N12660 -MXA-1 Hinged Arm, Roller Type.	1.60
9N12661—MXY-1 Rever C-Acting Hinged Type	1.25
9N12662 MXF-1 Reverse-Acting, Hinged Roller Type	1.60
9N12663 -MXJ-1 Plunger Tvp+, For Panel	2.25

#### UNIMAX DESIGN KIT

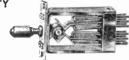
UNIMAX DESIGN KIT

Lalls many needs in the draft na rocin, model phop and maintenance aget. Make, available a versitied swit in type, for quick determination of tize, shape mounting and method of actualization, for particular application. Complete with two MXT-I SPDT base switches one MXT-I base with, with the street acting hinder arm. Adaptaplane, one style "I" gring plunder with threaded bash into to one hole panel mig., one "W" load springs with steet acting hinder arm. "Latential died springs, one "T" die it acting with leaf one. "Latential died springs, one "T" die it acting with leaf one. This style direct action with roller, roller is sently to to "L" and "T" adaptaplates. Screwr and rivels for attaching a histoplates.

9N12758—Complete. 3.00

#### FEDERAL ANTI-CAPACITY **SWITCHES**

Springs are phosphor bronze silver-plated, actuated by a cam roller. Dimensions:  $1\frac{1}{2}x5x^34^{\prime\prime\prime}$ .



				- J	
No.	Туј е	Each.	No.	Туре	Each
9N12852 9N12851	D.P.S.T. D.P.D.T.	1.90 1.90	9N12850	4-P.D.T.	2.25

#### CANOPY SWITCH

Rotary type, composition top, Very shallow, Wire leads, Rated 3 amps at 125 volts.

9N13342 -10 for 1.35.......Each 15¢



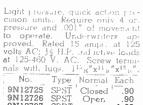
#### SLIDE SWITCHES

Compact slide culver plated switches in cadmium steel housing. All rates at 125 V. AC-DC,  $1^{1}$  § " mita chr.

No	Tyre	Amp.	Теппіі	Ła.	No	Type	Amp.	Term.	Ea.	
		_								
9N12842	SLST	./5		.16	9N12844	DPST	.50	4	.22	
21417042	21.171	7.0	J	.19	9N12840	DELLI	.50	1 6	.28	

#### STANDARD MU-SWITCH THERMOSTAT-TYPE SWITCH







MC , w.tcr. or signed for automatic control of temperature in elec-trically heated Frooders and incutators, or wherever an automatic electric heat control is desired. Maximum efficiency between 80° and 120° F. Has double ether-filled wafer and adjusting screw. Rated 15 amps. 125 V.; 5 amps. 250 V. AC only. Non-inductive loads.

9N12753..... 1.35

9N12727

**50**¢

### AMPHENOL AND JOHNSON SOCKETS

#### AMPHENOL 78 SERIES STANDARD TUBE SOCKETS



(1): Type RS, for replacement work. Steel adaptor plate for mounting centers from 1½" to 1 7/8". (2): Type S, for new work. Single 1 3/16" hole; firmly held by simple retainer ring. 9 and 11 prong sockets for Amphenol connectors. 7C fits small & large base tubes. T E1 0 I Danasa Es



	Type RS	Type S	Prongs	L. H.
	13N13057	13N13207	4	8¢
	13N13058	13N13208	5	8¢
	13N13059	13N13209	6	8¢
i	13N13060	13N13210	7S	8¢
ı	13N13061	13N13211	7L	8¢
ł	13N13056	13N13237	7C	10¢
J	13N13050	13N13212	8 Oct	10¢
1	13N13040	13N13045	8 lok	13¢
Į	13N13041	13N13213	9	12¢
1	13N13042	13N13214	11	17¢

(3): RECEPTACLE SHELL: For all type S above except 7L & 7C. 13N13110-Amphenol 23-1S Receptacle Shell......



# AMPHENOL "77-MIP" SERIES SOCKETS Molded from high-dielectric black bakelite, with molded-in plate for 1½ mtg. centers. Superior quality, strong and dependable. Firmly held. Won't rattle or come loose.

No.	Prongs	Each	No.	Prongs
13N13164 13N13165 13N13166 13N13167	4 5 6 7S	7¢ 7¢ 7¢ 7¢	13N13168 13N13169 13N13223 13N13224	7L 8 Oct 9



#### AMPHENOL MINIATURE TUBE SOCKETS

Type 78-7P for all 7-pin miniature tubes. Mounts in 5/8" hole. Retainer ring included. Black bakelite. Requires no mounting screws, nuts, orwashers; permits compact layouts.



#### MINATURE 7 AND 9 PIN SOCKETS

Newest miniature sockets for use with television, FM, auto radios, portables and other installations. 147 Series mount in 5/8" chassis hole, mounting centers 7/8", screw holes 1/8". 59 Series mount in 4" chassis hole; mounting centers 1 1/8". Top mountings have base shield.



Number	Pins	Mat'l	Type	Mtng.	Ea.	l
13N12576 13N12577 13N12578	9	Bakelite Bakelite Mica-	147-500 59-409 147-913	Bottom Bottom Top	14¢ 23¢ 24¢	
13N125,79	9	filled	59-407	Top	34¢	l

Tube Shields and Spring Assemblies for Above 13N12580-for 7-pin socket. Ht. 1 3/8"......8¢ 13N12581-for 7-pin socket. Ht. 1¾"......8¢ 13N12582-for 9-pin socket. Ht. 11/2"...... 12¢ 13N12583-for 9-pin socket. Ht. 1 15/16"......14¢ 13N12584-for 9-pin socket. Ht. 2 3/8"......14¢



# AMPHENOL "49-RSS" STEATITE SOCKET

For high temperatures, Won't absorb moisture. Low losses, Silver-plated, phosphor-bronze, low-resistance contacts.

1	No.	Prongs	Each		No.	Prongs	Each
į	13N13194	4	28¢		13N13197	7S	28¢
	13N13195	5	28¢		13N13198	7L	35¢
	13N13196	6	28¢		13N13199	8 Oct	28¢
				_			

#### AMPHENOL FLOATING OCTAL SOCKETS



98

Live rubber grommets itt into moda...holes - cushion-socket for vibration-free operation. Black bakelite dielectric Mounts in Live rubber grommets fit into mounting 1 3/16" hole above or below chassis. Two 4" screw holes on 1½" centers. Complete with 4 rubber grommets, 2 mtg. screws, plus unts and washers; nothing else needed for assembly. Type 77-MIP-8FK

13N13158-Floating Octal Socket, ......23¢

Kit for making floating connections using MIP type sockets. Contains 4 grommets, 2 mounting screws, nuts and washers. 

#### AMPHENOL POLYSTYRENE SOCKET

For extremely low losses at Ultra-High-Frequencies. Molded polystyrene base. Requires 1 1/8" hole. Mounting centers 11/4". Sharp nibs on mounting plate for perfect ground to chas-

13N13170-Octal, Type 54-8..... 28¢ 13N13160-Loktal, Type 54-8L.....32¢



#### AMPHENOL TV SOCKETS



8¢ 8¢

111 4

14¢

Extremely efficient, low-loss sockets for TV and cathode-ray tubes. Magnol Type CR socket has 11 silver-plated contacts; substantial barriers to reduce leakage losses, prevent voltage break-downs. Duodecal, Diheptal sockets have individual contact wells. al contact wells.

No.	Amphenol Type	Size	Each
13N13185 13N13190 13N13191 13N13192	59-402 59-415	Magnal Type CR Duodecal-Circle Dia. 1.063" Diheptal-Small for 2.050" Base Diheptal-Med. for 2.250" Base	71¢ 92¢ 98¢ 98¢

#### JOHNSON SOCKETS MINIATURE SOCKETS AND SHIELDS



STEATITE SOCKET WITH SHIELD BASE: Includes



metal ring which extends upward to form a shield base.

#### STEATITE UHF SOCKET 122-101

7-pin wafer socket with base shield, retainer spring, provision for mounting mica capacitors on socket for short leads. Small grid coils may be mounted on terminal ends. 4 mtg. holes 2.312" bet. centers. For tubes 826, 829, 832,



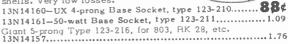
#### 122-237 SOCKET FOR 813 & HK257 TUBES

Low loss steatite socket excellent for use at high and ultra high frequencies. Cadmium plated contacts reintorced with recessed cadmium plated steel springs. I 7/8" mounting centers.

13N14158-Size: 2 5/8" Square, Each.....

#### LOW-ABSORPTION BASE SOCKETS

Ceramic base with cadmium-plated heavy phosphor-bronze contacts. Double fila-ment springs; heavily nickeled brass shells. Very low losses.



122-275 STEATITE INSULATED SOCKET

For Eimac type 4-125A and 4-250A tubes. Contacts cadmium-plated, reinforced with cadmium-plated springs. Metal parts countersunk: mounting holes bossed for panel mounting. 5 prong, 2-27/32" square, with 3/8" mounting holes on 2%" centers. Ideal for high frequencies, and high-temperature operation.



122-247 STEATITE WAFER SOCKET

7-pin socket for 829, 826, etc. Alum. base shield. 

#### MIDGET WAFER SOCKETS

Laminated Bakelite. Heavily plated, self-aligning, one-piece rugged, floating confacts.  $1\frac{1}{2}$  mtg. centers.

13N13114-4 prongs 13N13115-5 prongs 13N13121-6 prongs 13N13122-7, small 13N13125-7, large 13N13127-8, octal 13N13075-8, loktal

Your cost..... 10 for 54¢..... Each....... 6¢



MINIATURE WAFER for compact glass tubes (3/8" diameter), 7-pin type. Mounting centers are 7/8" apart. 13N13097.....8¢ 10 for.....

### PLUGS-CONNECTORS-TERMINAL STRIPS

#### AMPHENOL MINIATURE SHIELDED CONNECTORS





Fig. A. Shielded miniature connectors. Molded bakelite in cadmium

A B plated brass shells for cables up to 1/4". Shield can be soldered to shell where shielded a blo is used. 11 b day, 12 k f. Fig. B. Shielded mini ture chiesis receptibles and pluts for use with shielded miniature connectors. Mount in 1/4" dia, hole on 11; "centers.

#### Miniature Connectors Fig. (A)

	Male	Type No.	Female	Type No.	Cont.	Each
	13N13335	91-MPM-3L	13N13337	91-MPF-3L	3	21c
	13N13336	91-MPM-4L	13N13339	91-MPF-4L	4	24c
ı	13N13338	91-MPM-6L	13N13340	91-MPF-6L	6	26c

#### Shielded Sockets Fig. (B)

Female	Type No.	M ile	Type No.	Cont.	Each
13N12704 13N12705 _13N12707	78-PCG-3F 78-PCG-4F 73 PCG-5F	13N12696 13N12697 13N12698	86-PCG-4M 86-PCG-6M	3 4	21c 21c 24c

#### MINIATURE PLUGS AND SOCKETS



Interchangeable with miniature type connectors Sockets have puth-on mounting rings. Excellent for speaker connection...

				Q	W.
Sockets	Type No.	Pluq.;	Type No.	Contact.	Each
13N11599	78-S3S	13N12708	71-3S		9c
13N12701	78-S4S	13N12709	71-4S	4	9c
13N11542	78 S6S	13N12711	71-63	- 6	12c

#### CABLE CONNECTORS

Shielded cap, rubber grommet end opening. Consists of "5" type tube rockets and "CP" plug...



Female	Type No.	Milo	Typi- No.	Cont.	Eı h
13N11475	78-PF-4	13N11471	86-PM-4	4	18c
13N11476 13N11477	78-PF 5 78-PF-6	13N11472 13N11473	86 PM-5 86 PM-6	5	18c
13N11478	78 PF-7S	13N11474	86-PM-7S	75	18c
13N11491 13N11508	78-PF 8	13N11490	86 PM-8	8 Oct.	21c
13N11508	78-PF-9 78-PF-11	13N11506 13N11507	86-PM-11	9	23c 28c

Amphenol Type 79-CC4. Cable-clamp used with above connectors to reheve strain on soldered connections. 13N12712....

#### AMPHENOL RECEPTACLES AND PLUGS







Molded black bakelite insulation. 2-pole recepta-les with one elongated hole. May be used with hole. May be used with either standard or polarized type plugs. Underwriters Laboratory approved. Ratings: ISA-125V or 10A-250V. Dimensions: (A) Holes—1.172"; (B) Mounting Centers—1½" to 1½"; (C) Hole—1½", Mounting Centers 1¼".

#### Retainer Ring Type (A)

Stock No.	Type No.	Pole	Type	Each
13N11502 13N11503 13N11624 13N11625 13N11626	61-F 61-M 61-MP 60-F 60-M	2 2 2 3 3	Receptable Standard plug Polarized plua Receptable Polarized plua	18c 18c 18c 25c 25c
	W	ith Plate	e (B)	
13N11500 13N11501 13N11627 13N11640 13N11641	61-F1 61-M1 61-MP1 60-F1 60-M1	2 2 2 3 3	ke eg tacle Stim Fird glug Pol ir zed plug Kecepticle Pol inzed plug	20c 20c 20c 20c 27c 25c
	Flo	sh Type	e (C)	
13N11504 13N11505 13N11635	61-F10 61-M10 61-MP10	2 2 2	Receptable Standard plug Polanzed plug	28c 28c 28c
	Shielded C	able Co	nnectors (D)	
13N11546 13N11545 13N11647 13N11648 13N11649	61 M11 61-MP11 60 F11 60 M11	2 2 3 3 3	Recognicle Standard plag Polarized plug Recontrole Polarizad plug	32c 32c 32c 32c 39c 39c

#### TERMINAL STRIPS

Superior quality bak-lite terminal strips. Solder lugs mounted on his "thick insulation. Available

with 2, 3, 4	or to sol	der terr	nın ils. l	Single 6-32	mountir	ig hole.	
Stock No.	Term.	Fa.	10 for	Stock No.	Term.	Ea.	10 for
13N13145	2	6c	54c	13N13112	4	llc	.99
13N13123	3	9c	81c	13N13113	6	16c	1.44

#### JONES PLUGS, SOCKETS



Stand and Duty

Multiple contact - "400" series heavy duty (25 ampere) and "300" series ctandard duty (5 ampere) sizes. Cable type have clamps. Chassis type have brackets—heavy duty type at ends, stindard type at



Heavy Duty

#### · Plugs Fig. (A)

	Con-	Stock		Cost	I Stork		Cost '
	tacts	No.	Type No.	Each	No.	Type No.	Each
	2	13N12460	P-302-CCT	31c	13N12400	P-402-CCT	.52
	3	13N12418	P-303-CCT	34c			
1	4	13N12461 13N12462	P-304-CCT P-306-CCT	36c	13N12401	P-404-CCT	.64
ı	8	13N12462	P-306-CCT	40c 44c	13N12402 13N12403	P-406-CCT P-408-CCT	.74
ı	10	13N12464	P-310-CCT	49c	13N12404	P-410-CCT	.96
1	12	13N12465	P-312-CCT	54c	13N12405	P-412-CCT	1.08
ı			Sock	ets Fi	~ (P)		
ı				CIS FI	g. (b)		
ı	2	13 <b>N</b> 12466	S-302-CCT	31c	13N12412	S-402-CCT	.56
i	3 4	13N12419 13N12467	S-303-CCT S-304-CCT	35c	13 <b>N</b> 12413	S 40 LOCTE	
Į	6	13N12468	S-306-CCT	42c	13N12414	S-404-CCT S-405 CCT	.71
ı	8	13N12469	S-308-CCT	49c	13N12415	S-408-CCT	1.01
ĺ	10	13N12470	S-310-CCT	55c	13N12416	S-410-C'CT	1.16
l	12	13N12471	S-312-CCT	62c	13N12417	S-412-CCT	1.30
Chassis Type Plug (C)							
l	2 !	13N12472	P-302-AB	14c	13N12426	P-402-AB	33c
١	3	13N12420	P-303-AB	17c	131412420	F-402-MD	336
l	4	13N12473	P-304-AB	19c	13N12427	P-40-1-AB	40c
ı	6	13N12474	P-306-AB	23c	13N12428	P-406-AB	49c
1	- 8	13N12475	P-308-AB	26c	13N12429	P-408-AB	56c
1	10	13N12476 13N12477	P-310-AB P-312-AB	30c	13N12430 13N12431	F-410-AB P-412-AB	64c
1	12	121417411	T HZ-AD	34C	121/12/21	P-412-AD	7lc

# Chassis Type Socket (D)

2	13N12478	S-302-AB	15c	13N12406	S-402-AB	37c
3	13N12421	S-303-AB	18c			1
4	13N12479	S-304-AB	20c	13N12407	S-40-1-AB	49c
6	13N12480	S-306-AB	24c	13N12408	S-406-AB	59c
8	13N12481	S-308-AB	30c	13N12409	S-408-AB	71c
10	13N12482	S-310-AB	36c	13N12410	S-410-AB	82c
12	13N12483	S-312-AB	42c	13N12411	S-412-AB	93c

#### JONES HEAVY BAKELITE STRIPS

Type 140: ½, wide, 4½, high. Terminals are mounted on 36 centers, ½, metal to met il spicing over bakelite body. Type 141: 11½, wide, ½, high. Terminals mounted on 1, centers with 36 metal to met il spicing over bikelite. Type 142: 15, c. wide, ½, high. Terminals mounted on 7, centers, ¾, metal to met il spicing over bakelite.

	No. 140		No. 14	No. 141		12
Term.	Stock No.	Each	Stock No.	Each	Stock No.	Each
2	13N12527	14c	13N12539	18c	13N12714	.22
3	13N12528	20c	13N12540	24c	13N12715	.31
4	13N12529	25c	13N12541	31c	13N12716	.39
6	13N12530 13N12531	30c 34c	13N12542 13N12543	38c	13N12717 13N12718	.46
	13N12532	40c	_			.54
8	13N12532	40c 45c	13N12544 13N12545	52c 58c	13N12719 13N12720	.63
9	13N12534	51c	13N12546	65c	13N12721	.78
10	13N12535	56c	13N12547	72c	13N12722	.87
1 11	13N12536	6lc	13N12548	78c	13N12723	.95
12	13N12537	66c	13 <b>N</b> 12549	84c	13N12724	1.03

#### BAKELITE MOUNTING STRIP



Mounts parts on chassis.

Stock No.   Lugs   Each   10 for   Stock No.   Lugs   Each   10 for   Stock No.   Lugs   Each   10 for   13N13124   1   2e   14e   13N13135   4   4e   3: 13N13133   2   3e   16e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13134   3   3e   19e   3e   13N13137   6   5e   4: 13N13137   6   5
--

#### SCREW COLLAR TERMINALS

7/5 " wilder 3 ..." thick

ASI MICH. 35 THICK:		THE REAL PROPERTY AND ADDRESS OF THE PARTY AND		
Stork No.	Terminals	Each	10 For	
13N13140	2	7c	.63	
13N13141	3	12c	1.08	
13N13142	4	16c	1.44	
13N13143	5	19c	1 71	
13N13144	6	22c	1.98	
13N13230	7	24c	2.16	
13N13231	8	29c	2.61	
13N13232	9	32e 35c	2.88	
13/01/32/3	10	350	2.15	

### PHONE PLUGS - CONNECTORS

### MALLORY JUNIOR JACKS MALLORY PLUGS, JACKS



Compact, extend only 15<sub>6</sub>° behind the panel. Equipped with heavily-plated springs. -Open Circuit. 32c 13N6450—Each.... 32c 13N6451—No. 702. Circuit clos. 13N6449—No. 702A. Two circuit. 13N6435—No. 702B. Three circuit microphone jack. 44c 13N6479—No. 705. Two-circuit filament lighting. 13N6448—No. 706. Interstage,

#### MALLORY MIDGET JACKS

73c

filament control.

Each...



Mount Extremely compact. Mount in % "hole. Type A-1 "Infant" jack is not illustrated.

No.	Part	- 7.1	Ea.
13N6182	A-l	Open circuit	18c
			29c
			32c
13N6185	A-3A	Cir. Reverse	47c

#### LONG FRAME JACKS



Extend 31/8" behind panel. Have pure silver contacts as well as bakelite separators. No. 1 Open

13N6400-Each	JOC
13N6401-No. 2 Circuit	Closing.
13N6402-No. 2A. Two	Circuit
long frame jack.	47.
long frame jack. Either type, Each	.47 C

#### SIGNAL CORPS TYPE **JACKS**



Phone Jack: Type SC1A. Like Siq. Corps type JK-34A. Open circuit. Takes Mallory 75; W. E. 47A, 47B; Sig. Corps No. PL-47, PL-48, PL-55, PL-148, PL-155.

13N6301—Each............38c

#### FLAT PLUG



Ultra-compact type for use where space is limited. Molded bklt. body. 11/4" dia., 1/4" thick. 38c

100



No. 75. Two way. Bukelite shell. unchor included. 13N6295—Each As above, but nickel No. 75A. As above, with butter and the cable clamp included.
13N6346-Fach... 97c
No. 100. 2-Way Extension jack is equipped with fibre shell.

#### Microphone Plugs

13N6347—Each...

#### MIDGET JACKS



Fine grade bakelite insulation and tempered nickel silver springs. Mounts in 3% dia. hale in panels up to 3% thick. With mtg. nut and wshr.

mig. nut and warr.
13N6548—Closed cir. jack
13N6549—Open cir. jack
Improved short jack. Fits stand
ard 3-circuit mike plug.
246 13c 13N6550—Each....

#### POPULAR PHONE PLUGS



For 1 or 2 phone or speaker cords. Mckled bakelite shell 2'\footnote{1}'' diameter. With screw connections.
13N14974—Black. Ea...\276
13N14971—Red.

#### Metal Shell Type

10 for......4.41

#### "Stubby" Metal Shell

#### Midget Bakelite Plug

Bakelite shell. 21/4 "x %6" dia. Solder lug connections.

13N14960—Black. Ea....}

27c

13N14963—Red. Ea....}

#### Midget Metal Shell

Same	with	metal	shell.	21/4"
overall	X 9 6	diame	ter.	38c
13N148	1201	sacn		.3.40

#### CANNON TYPE XL CONNECTORS









Designed for use on all types of mikes, PA systems, standard radio equipment and for electrical installations requiring up to 3 wires with 15 amps. capacity. Patented latchlock device permits easy and positive insertion and removal. \*Zinc shells-1steel shell

#### STRAIGHT PLUGS

Stock No.	Туре	Must.	Description	Each
13N13321	XL-3-12*	1	Male (pin insert)	.71
13N13322	XL-3-11*	1	Female (socket insert)	.73

#### CLAMP TYPE PLUGS

	XL-3-12SC†   XL-3-11SC†	4	Male (pin insert) Female (socket insert)	1.62

#### WALL RECEPTACLE

13N13323 13N13341	2 2	Male (pan insert) Female (socket insert)	.59 .73

#### PANEL DECEPTACIE

174411						
13N13343   X 13N13344   X			Male (pin insert) Female (socket insert)	.68 .73		

ADAPTER RECEPTACLES Adapts microphones for use with Cannon Llugs.

radpis inicio	phones io.	apo mini o amini ,	
13N13347 13N13348 13N13349	XL-3-50T*		.62 .68 .76

### **AMPHENOL 83 SERIES UHF CONNECTORS**

UHF low-loss single contact connectors and adaptors for use with RG type cables. Small and large sizes for coax and twinax cables. Constructed of die cast zinc and machined brass shells, silver plated. Made for all practical applications.

2-pc. straight plug with low-loss mica-filled insert.

13N11550-Straight Plug 83-1SP

82c Receptacle chassis or box type. Low-loss mica-filled

1.21



Angle plug adapter. Polystyrene insert, pin and 1.46 13N11552-Angle Plug Adapter 83-1AP



"T" connector for receptacle charsts above. Factory 1.80 13N11553-"T" Connector 83-1T

Junction for use with straight plug above. Double

1.14 13N11554-Junction 83-1J.

Feed Thru Connector, similar in appearance to junction above but the need full length 2 hex. nuts plus polystyrene insert. 13N11555—F.ed Flau Connector 83-1F



Hoal for RG cables 8/U, 10/U, 11/U, 22/U, 63/U, 13N11556-Hood 83-1H

Adapter for small cable RG53/U. Use with straight plug. **21**c 13N11557—Adopter 83-168...

Ad it ter for small cable RG58/U. Use with straight plug. 13N11558—Adapter 83-185... **21**c

#### WALSCO MINIATURE PLUG AND JACK

Two-Conductor precision army type. Needs no screws; molded plastic case cements together. Ideal for hearing aids, speaker ex-

13N14961—Plug only (type PL-291). Each 32c

13N14962—Jack only (type JK-48). Each 44C

#### PL-54, PL-55, PL-68 PLUGS



Meet exacting government requirements. Will fit all standard Jacks. PL54—Short 2-way plug. 13N14965—Each..... 75c 13N14965—Lach 13N14966—Each PL68—3-way Mike Plug. 13N14967—Each

# BINDING POSTS-PHONE TIPS-PLUGS

#### PHONO TIP PLUG AND JACK



Single prong shielded plug used extensively for mike or phono pickup, other connections Phono

13N11774—Ji k. (B) 10 for ... 63c

13N12964 (C) 1/2" Centers 10c

through 1/8" hele and is 11 m better no inters. 13N11773-Pl-a. (A) .F++ 5c

Double Phono Jick mounted on





Conmander Post. Has 8-32 stud 29c 13N13084-Fiel...

#### **EBY TWIN POST UNITS**

Two binding posts molded into a heavy Bakelile base, 42c 13N13062









#### SPRING CLAMP **BINDING POSTS**

Insulated top. Spring clamp holds wire. Overall length 1".

13N13046—Each 15C



#### PLAIN BANANA JACKS AND PLUGS



Plug is 1'4" long. Junk is %' long and fils 14" hole in panels up to 3g "thick. Junk is % **7**c 13N12919--Plug. 60c 100 for ...5.40

4c 

# 6

#### MOLDED BAKELITE INSULATED TIP JACKS

Large drimeter molder longlite heads take all plane tips. Phosphor washer.

13N12877—Red 13N12878—Black	}	12c
Fifther Type, 10 for		



#### COMBINATION **JACK**

New type, Likes both phono tips and brinana Fluas. Fully insulated, with insulated wesher. In Red or Black. Specify

cotor de			91.91
1231120	1 20	Each	11c
10 for			99c
10 101			



#### INSULATED TIP JACKS

Have new type spring, which provide sure any contact. Mounts in  $^3$ <sub>6</sub>, hole. In Red or Black

Specify color.	90
13N12879 — Each	76
10 b r	80c



#### **AMPHENOL PHONE** TIP JACKS

Type 78-IP. Bakehte body. Take set and and plain or addedless obone tags. Mounts ecurely by me one of chapting Red or Black—, peatly

#### TIP JACKS



Mounted on "6" Bakelite. Contact springs grip cord tips securely. Double jack type. 13N13037—Fach... 90 81c Same as above. Try le jack 14c 13N13036—Each.....

#### **ALLIGATOR PHONE** TIP JACK



Allig iter clip fitted with standard phone tip jack. Fits test prods equipped with phone tip ends. Black-specifycolor. 13N12880-Each..... 10 for ...

#### CINCH STAND-OFF TERMINALS

Insulated; for TV and other harboral age electronage equipment. Microfilled Low loss is field to Mounts in  $S_{\rm m}^{\rm e}$  darm for hole. Provides excellent insulation for paising HV was either in the hore.

Shik N.	Tipe	L math	E i ·h
13N12965 13N12966	163 16L	11 2 "	44c



#### ALLIGATOR CLIPS



Powerful in r. 2" hip is  ${}^1_4$ " wide,  $2^3{}_4$ " hip is  ${}^1_4$ " wide. Steel non-rusting finith.

No.	Lingth	Lach	10 for
13N12955* 13N12956	23; "	5c 12c	44c 1.08
*End to co. 1:	11)(11) 1	plua.	

Correr with bronze spring. For RF work. Bets new 2" long. 9c

#### INSULATED ALLIGATOR CLIPS



Plated metal cope with insulated handles that take but may lugs. Han iles in Red or Black; operaty Steel non-rusting finish.

No.	Lon chil	E i	10 tor
13N12911	2 , "	8c	78c
13N12909	31/2"	15e	1.35
13N12949*	214"	12c	98c

'Currer-with bronze gring.

#### INSULATED BANANA JACKS AND PLUGS



Plug has set screw for solderless wire connection. Jack fits 1; 

13N12916	-Jack. Each	1, .	 9c
10 for	81c 100 for	٠.,	 7.60



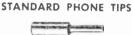


13N13183 I ach	<b>9</b> c	
13N13184Ovr	ill size: 11. ".	
Same but with	6-32 threaded	
stud 3/8 " long.	15-	

#### SOLDERLESS INSULATED PHONE TIP PLUGS



Solderless type: fit all standard tip jacks. Used on tist leads. In 



Heavily plated. Takes up to No 12c 13N14881—10 for..... 100 for.

#### PHONO NEEDLE PLUG



Insulated sleeve fits banana plug, and makes contact with prod.
Tip holds replaceable phono
needle. 114" long. Red or needle. Black. 12c

13N12917-Ea h. ... 10 for....

#### PHONE TIP AND LUG ADAPTERS FOR PRODS



For use with any banana plug. Fit: tip jacks or hin ling posts. Red or Plack.
13N12913—Phone tip end 13N12914—Spate lug n i 10c Either Type 10 tr. ...90c

#### PLAIN SOLDERLESS PHONE TIP PLUGS



All metal tip plug for tip prex use Solderless connection. 1% "long Solderless connection. 13N12943—10 for 54c As above but 11'8" long. 13N12944—10 for 54c Each

#### AMPHENOL BAKELITE JACKS AND PLUGS





Mount in 36 " hole with retainer ring included. Contacts recessed 1/6 ". Body may be used as a feed-thru. State choice, Red or Black.

### CLIPS-KNOBS





#### MUELLER CLIPS AND RUBBER INSULATORS

Spring-activated chips Type 27 and 27C are lateratory types with mech teeth on three sides, others have teeth in front only. Inculators listed opposite proper size chips. Chips marked + and + (3 each, 10 to a box). Insul 4 occurs 6 refer, 1 (11) k.

	Clips			Inst	ılator	S	
No.	Hape Size	Elieh	10 For,	Νο.	Type	Each	10 For
17N16029 *	1 15 115"	6·c	.41	17N16031	47	He	.73
17N160301	45C 115"	8c	,69	17N16031	47	11c	.73
17N16032*	48B 2"	6 c	.49	17N16033	49	11c	.73
17N16034	211 3"	He	.93	17N16035	26	23 c	1.57
17N16026*	27 21.7	8 c	.68	17N16028	29	17c	1.18
17N16027	970 215"	14c	1.22	17N16028	1.29	17c	1.18
17N160181	21 \ 4"	16c	1.47	17N16019	23	32 c	2.25

\* Cadmium plated steel. | Lead coated steel. | † Solid copper.



For connecting Pridger, Voltmeters, or anything larving binding polit with non-nomovials Leids.

...... 10 for **1.08** 17N16023 -12c - 1 h No 85. As above, less phone tip. 17N16020 -06c each. Plastic in all it of the other of the above No. 87, 17N16021—10c e ref

### MUELLER WEE-PEE-WEE CLIP



Non-ferrous R.F. Chp. Will not heat in high frequency circuits. Ideal for tapping coils. Length  $1^{11}{\rm g}^{*}$ . Coin letely insulated with Ked or Black jacket (specify color desired.

#### MUELLER "TWIN-CLIP"

Special type clip—has jaws on both ends. Makes a quick splice, re-cennects a broken lead, etc. Can be used for holding or racking parts

articles for display.
17N16025—10 for 69c..... .Euch 8c









#### **FAHNESTOCK CLIPS**

Grips wire with right pressure for good electrical contact without injury to wire. All are nickel-plated brass except† which are nickel-plated branze. All are  $\frac{1}{16}$  "wide except\* which are  $\frac{5}{16}$ ".

Stock No.	Fig.	Lgth.	Max. Wire	Mtg. Hole	10 For	1000 For
17N14824	В	1 "	No. 10	No. 8	8c	6.40
17N14828	C	1 1/16	No. 10	No. 8	14c	9.40
17N14826	Α	1 4 "	No. 10	No. 8	36c	29.00
17N14823*		24 "	No. 14	No. 6	7c	5.60
17N14825*	A	11/2"	No. 14	_ No. 6	30c	24.80
17N14820†	D	15/8"		Copper lug	44c	34.20
17N14821	E	14."	No. 12	No. 6-32	13c	8.50

### SCREEN GRID CLIPS

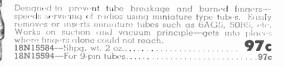
Miniature type for metal tubes. With wire ferrule. 2c 17N14985....

	•
For Glass Tube	os _
N14827	2c
For	10c

#### **BATTERY CLIPS**



#### G-C AMO MINIATURE TUBE PULLER



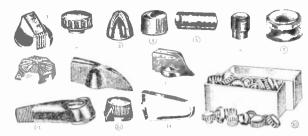


#### MINIATURE TUBE PIN STRAIGHTENER

Precision constructed steel die. Quickly straightens and aligns pins on types such as 50B5, 35W4, etc. Can be carried in tool box or fastened to bench.

18N15261—For 7-pin Miniature Tubes

59c 18N15262- For 9-Pin Miniature Tubes...



#### **BAKELITE KNOBS**

Mold d and polished without bak the knot of to \$\frac{1}{2}\tilde{\text{f}}\shall shalls All are set sets whyse except those marked with "which are brown past-button knob; it is knut-doller in; "have, ree, sed to s.

the days to the 4-3	41.44.		DC 04 14	31 01
No.	Type	Dia.	Ea. i	10
11N9655	1	1"	8 c	72 c
11N9693	21	- "	4 c	33 c
11N9736	3	3,"	5 c	44c
11N9737	3	- "	6c	54 c
11N9692	1	1,"	5c	44c
11N9694	5*	~ //	3 c	27 c
11N9695	5**	7.16	3 c	27c
11N9661	6*	1361"	4 c	33 c
11N9696	ti**	11,61"	4 c	33c
11N9657	7	11"	7 c	63c
11N9660	1 5	1 16"	7 c	63 c

#### Pointer and Lever Knobs

Polished Black bakelite. All have filled point is except "M" (has ridged top). For 14" shufts.

No.	Lgth. Ht.	Type	Ea.	10
11N13027	2" 5,"	- 9	9 c	72 c
11N13028	114" 5,"	9	6c	54c
11N13053	11 3" 910"	10	5c	44 c
11N13024*	114" 911"	*10	7 c	63c
11N9650	15,"17,0"	11	9 c	81 c
11N9651	21.2" 5 7"	- 11	llc	99 c

Red Bakelite.

#### MIDGET KNOBS

12. With and without the pointer illustrated. For small sets,  $m_{\rm p}$  " dia, Set screw,  $M_{\rm p}$  " shaft,

	With	Without!	10
Color	Pointer	Pointer	Ea. For
Walnut	11N9676	11N9680	6c 54c
Ivory	11N9677	11N9681	6c 54e
Red	11N9678	11N9682	6c 54c
Black	11N9679	11N9683	6c 54

#### KIT OF 50 KNOBS

13. Assorted sizes and colors in new, modern designs as used on the litest post-war sets. All standard shaft size openings. Four each of 12 different designs, two each of one design. Kit con-ciets of 12 set screw type, 18 knurled shaft type and 20 flatted

11N9662......2.48

#### G.C. KNOB PULLER

14. Knobs that are hard to grip can be easily removed with this knob puller. Simply slip the G-C puller behind the knob and pull of off. Saves time, the cabinet, and the knob. knob.

18N15042 ...

#### TV KNOBS FOR RCA 630TS CHASSIS

ements for the RCA 630TS chassis

Stock No.	RCA Type	Description	Each
11N9669	71598	Escutcheon Dial for Channel Sel	1.00
11N9670	71534	Station Selector	.32
11N9671	71535	Picture, Brightness or Ver. Hold	.21
11N9672	71537	Dummy Brightness	.18
11N9673	71533	Fine Tuning	.24
11N9674	71536	Horiz, Hold or Volume Control	.18
_	. 0	<b>-</b> 0 <b>-</b> 0 .	6













#### TRANSMITTER KNOBS FOR 1/4 IN. SHAFTS

All black bakelite but 11N13018 is a black lacquered wood

No.	Type	Size	Ea.	For	No.	Туре	Size	Ea.	For
11N13022	1	11/2"d.	30 c	\$2.70	11N13005	3	13/8"d.	20 c	\$1.80
11N13018	1	15%"d.	12 c	1.08	11N13013	3	15 8"d.	21c	1.89
11N13004	1	134"d.	31 c	2.79	11N13012	3	28/6"d.	26c	2.34
11N13011	1	21/6"d.	32 c	2,88	11N9885 11N9886	4	11/6"d. 11/6"d.	11c	1.08
11N13010	1	3" d.	41c	3.69	11N13007	5	13%"d.	19c	1.71
11N9896	2	116"d.	44c	1.96	11N13008	5	istra.	24c	2.16
11N13014	3	1½″d.	13c	1.17	11N13009	5	23/4"d.	32 c	2,88

#### G-C AUTO RADIO KNOBS





Fig. 1.  $^{13}_{16}$  " dia.,  $\frac{7}{8}$  " high. For either  $\frac{1}{4}$  " or  $^{3}_{16}$  " shafts; bushing included.

Pearl Gray. 1**1N9667—**10 for **1.62**. Ea...**18c** 11N9668-10 for 1.62. Ea...18c

Fig. 2. Chrome plated knob. Set screw mounting.
14" Shaft.
11N9665—10 for 1.62. Ea...18c

11N9666-10 for 1.62. Eq. . . 18c



#### KIT OF 100 KNOB SPRINGS

### SMALL HARDWARE

#### **DELUXE HARDWARE ASSORTMENT**



Our mosty of dur handware ussortment boxed. Centains over 1000 pieces of the most frequently used hardware; arsorted nor chine screws, nuts, bol's, rivets, et :17N14831—Wt. 4 lbs 97C

### PICKUP CARTRIDGE MTG. SCREWS



Cost massmining kup dim.
hims dicosciows, 1 1: X. 17N15483 24c

#### RADIO HARDWARE IN JARS



Most convenient way to keep your small hardware—glass jars with screw-on caps.

Any jar below 17N14675-Jar chly 33c

#### Round Head Machine Screws (A)

No.	Quantity,	S.ze
17N14650	100	4-sex14" long
17N 14651	100	4-36x1,2" long
17N14652	75	4-36x34" long
17N14653	90	6-32x 14" long
17N14654	03	C 10x1 2" long
17N14655	70	to fixia" long
17N14656	75	8-7. x a" long
17N14657	70	8-30x1/2" leng 1
17N 14658	65	8 -0x34" leng
17N 14659	0.3	10-30x12" leng
17N14660	50	10 37x3 4" long

#### P-K Top Screws (C)

No.	Quantity	Size
17N14665 17N14666 17N14667 17N14668	50 50 45 40	No. 4x½" No. 6x½" No. 6x¾" No. 7x½"
17N14669 17N14670	35 45	No. 10x3/4" No. 10x3/6"

#### Hexagon Nuts (B)

Nc.	[Quantity]	S:ze
17N14661	110	4 36x14"
17N14662	110	6-32x 44"
17N14663	90	6-32x5/16"
17N14664	90	8-30 x5/16"

#### Washers (D)

3 77 3 7	14001	110		_
1/19	14671	150	Ho. 6 Flain	- 6
17N	14672	15.0	No. 8 Plain	- 1
17N	14673	100	No. 6 Lockwash	PI
17N	14674	100	1 No. 8 Lockwashe	

#### **ESCUTCHEON PINS**



Fastens any type of escutcheon or name; late, 5/16" long. 17N14811--Per 100

#### RIVET AND EYELET ASST.



Special assertment of 55 pepular size 1.v. is and eyelets to sockets, etc. 24c 17N14840

#### BUMPER FEET



Felt, with No. 6 F-K screw for mounting. Felt is permanently clamped into place by metal ring 34" in dia.

17N	1475	7-	-Ea	ch	 	 	 40
10	For						35c
100	For						2.70



Heavy gauge strel. No. 6 mounting hole. Plated.

17N14951—14" Gicss 90c 4 fc: 3c

17N14952—1/2" Gicss 1.95 3 fcr 5c

#### "1000 PLUS" HARDWARE KIT



Here is a hardwing kit to fill the needs Here is a harawine kit to fill the needs of sity, eightharmore in the contractors, 100 and one teems needed it adherent jots every day, both him is conveniently signored that it sown conjustment box. Over 1000 asserted the risched lengths of the first him is conveniently signored that it is some in the horizon the first him is some in the horizon of asserted the first him is sometime. Also included one 100 cash of that and side and side news, 100 arcoited wood that and side in the first and eyelets 10 or it assorted liver and eyelets 10 or it assorted liver in theirs and 100 arcoited some is some first withers and 170 arcoited some in the withers. w mhers 1.49 17N14815—Sing. W. 4 its.

# 17N14838

#### ASSORTED BRACKETS

Ika. cf .8 most used angles, Frackets.

#### 1/4" METAL SPACERS



Raise compenents above chassis, etc. Fass Nos. 4, E, 8 sciews.

Stock	Height	For	Lots of
No.	Inches	Ten	
17N9868 17N9869	1/4	21c 25c	\$1.89
17N9870	3/4	29c	2.01
17N9871	1	32c	2.88

#### ASSORTED FIBRE WASHERS



Contains 100 plain and shoulder type to 1:1 No. 6, 8, 10 screws, and  $\frac{1}{4}$ ",  $\frac{3}{8}$ " and  $\frac{1}{2}$ " holes. 36c 17N14832

#### **ASST. SELF-TAPPING SCREWS**



40 most eiten used sizes. No nuts needed—start hole and drive through.

17N14687 ...

#### RUBBER GROMMET KITS



Kit "A" contains 12 asst. growinets in 4 sizes: 3/16-1/2". 'B" has 30 in same sizes.

17N14794—Asst. "A" 21c 17N14795—Asst. "B" 43c



#### **RUBBER GROMMETS**

Insulate holes in 1/16" metal panels, chassis. electrical ar pliances, etc.

Stock	Fits	Ins.de	Per	Per
No.	Hole	Diam.	Doz.	100
17N 14765 17N 14766 17N 14768 17N 14769	7/16" 7/16"	3/16" 5/16" 5/16"	9c 16c 20c 22c	60c 65c 70c 75c

#### RIGHT ANGLE BRACKETS

Mide of heavy meral. Width %".





#### WING NUTS

17N12926-6-3217N12928-10-32

I/N	12927-8-32 17N 1292	191/4-20
Fer	10	31c
Per	100 (assorted)	2.90



#### PLATED MACHINE SCREWS

Available in three types for all needs.

6 32 Round Head Screws

E'ock No.	' Len ith	Gross
17N14750	3 8''	39c
17N 14751	1/2"	42c
17N 14752	34"	46c
17N14753	1''	53c
17N14754	114"	68c

#### 8 32 Round Hend Screws

6 32 Flat Head Machine Screws  17N14760	17N 14755 17N 14756	34"	53c 58c
17N14761 1 41c 41c 46c	6 32 Flat	Head Machine	Screws
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		: '8'	



#### ANTIQUE FINISHED MACHINE SCREWS

No.	L . P	Leth.	Doz.	Gr. Lots	
17N14680 17N14681 17N14682	6 32 6 32 6-32	1" 112"	9c 10c 11c	95c \$1.02 1.18	

#### Round Head Wood Screws

Freck No.	S.ze	Length (	Gross
17N14780	4	38"	48c
17N14781	5	1, _ ' '	50c
17N14782	5	3 4"	54c
17N14783	5	1"	60c

#### NUTS & WASHERS-POPULAR SIZES





17N14804-6/37x14" hex nuts. Gr. 48c 17N14806-6/32x°/16' hax nuts. Gr.50c 17N14807-8/32x°/16' hax nuts. Gr.50c 

17N14809—No. 6 Washers 17N14810—No. 8 Washers 100 for **16C** 



### (A) LOCKING WASHERS



Fkg. of 100

B 🗐 20c

#### KNOB SET SCREWS

(B) Case-hardened headless set screws. 17N14786—1/8"x6/32" 17N14787—1/6"x8/32" 17N14788—1/4"x6/32" 17N14789—1/4"x8/32" 10 for 18c 1 50 for 75c



6

0

10

10c

15c

300

#### SOLDERING LUGS

In five types to fit all your solder-2 ing requirements.

(O)17N14812-No. 1 17N14813—No. 2

17N14814-No. 3, solderless type 17N14816-No. 4, 5/8" long

17N14818-No. 5, 7/8" long 34c Any above, per 100 .

Fer 1000



#### TAPERED LUGS

(6) Fits over all screws up to No. 10; shank fits up to No. 10; shank fits banana plugs. 11/4" long, 1/2" wide.

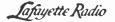
17N12954—Per doz 44¢



3.06

#### HEAVY DUTY SPADE LUGS

(7) Designed for battery terminals,	etc.
l inch long, No. 10 slot.	80
17N14912—Per 10	O£
Per 100	69c



afayette Radio 110 Federal Street HUbbard 2-7850

### RADIO CHEMICALS

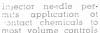
#### CEMENT SOLVENT AND THINNER



Used for loosening cement on speaker cones, voice coils and other parts where cement has been applied previously. Recommended also for thinning ridio cement, plastic cement and tablic cement. cement

38c 17N15821-4-oz Bortie 17N15822-3-oz. Bottle 53c

#### WALSCO CONTACTENE INJECTOR





most volume controls
without unsoldering connections or taking
control apart. This tool is made with highest quality surgicul type needle and an 44c

17N15823



#### G-C STRIP-X

Makes it easy to strip enamel .om magnet wire. Simply dip .om magnet wire. Simply dip he ends of the wire in Strip-X and the enamel will be removed; wire is then ready for soldering.

17N15826—2-oz. Bottle .

#### G-C MAGIC SCRATCH REMOVER POLISH



18c 17N15827-2-oz. Bottle 17N15828-9-oz. Borrle

#### **NEW LIGHT SHADE** SCRATCH REMOVER POLISH

For blonde maple, mahogany and all light woods. Removes scratches and makes the wood like new. Polishes at the same time.

18c 17N15829-2-oz. Bottle 17N15830-8-oz. Bottle

#### CARBON TETRACHLORIDE

An excellent all around cleaner for terminals and controls. Dissolves dirt and

17N15831—8-oz Bottle	39c
17N15832-16 oz Bottle	59c
17N15833—Quart Can	89c



#### RADIO SERVICE CEMENT

For cementing replacement cones and repairing 'orn cones. Used on glass to hold wires in place. Vibration-proof, waterproof, fast-drying. 17N15314-2-oz bottle brush attached to

cap. Each	
17N153154-oz. Bottle	
17N15316-8-oz. Bottle	1.03
17N15317—1-pt. Bottle	1.94

#### **LUMINOUS LITE-KOAT KIT**



Long-life, non-poisonous coating that absorbs light in daytime and glows in dark. Ideal to coat or stripe dials, knobs, switch plates, meter boxes, key holes, panels, instruments, hallways, staticases, etc. Contains generous quantity of Lite-Koat powder, Mix-Koat Top-Koat to protect finish, handy small brushes and thinner. Complete instructions and suggestions.

### LUBE-REX CONTACT CLEANER

Ideal for attenuators, push button switches, etc., as well as Philco Mystery Controls. Cleans contacts and prevents corrosion. Moisturerepellant, rust preventing-clings

17N15533-2-oz. Bottle 17N15534—Pin' Bortle 1.47

GRAFOLINE
Especially designed for noisy controls, switches, and wire wound controls. Merely apply to equipment and noises cease.
17N15535—2oz. Bottle
17N15536—Pint Bottle
119



#### AIR DRYING FINISHES

Here's good news for service-men! Now you can ge' truly professional-looking finishes in either crystal, wrinkle or smooth with these new, effi-

cient air-drying finishes. Easy to handle—simply apply and let dry. Grzes durable and lusting finish at a reasonable price. Air-dry or bake on metal or wood. Comes in handy 2-ounce or 8-ounce price. or 8-ounce sizes.

#### Wrinkle Lacquer (Crystal) Ounce 8-Ounce 2-Ounce

No.	Each	Color	No.	Each
17N15259		Black	17N 15309	
17N15319 17N15320	35c	Gray	17N15387 17N15388	1.03
17N 15320		Red	17N 15388	

#### Wrinkle (Varnish) Finish

17N15381	Black	17N15390	
17N15382	35c Red	17N 15391	1.03
17N15383	Gray	17N15392	

T-	elephone	2 (5moc	oth) Finish	
17N15384 17N15385	35c	Black	17N15393 17N15394	82c

2-oz. thinner for wrinkle varnish listed 17N15396

Thinner for telephone black and crystal

29c 17N15820-2-oz. Bottle

#### FLOCK SPRAY OUTFIT



Easy to operate. Beginners can turn out professional velvet-like flock jobs. Contains spray gun, ivory and brown felflock, undercoats to match, thinner, brush. 17N15489—Outfit. Shpg. wt. 3 lbs ... 6.17 17N15499—Spray Gun Only .... 2.55 142 oz. can felt flock.

17N15479-Brown 17N15481-Ivory 17N15480—Red 17N15482—Green 59c

EXTRA CONTAINERS or felt flock, 3½ oz. each (1 oz. covers 1½ to 2 square feet). 17N15491—Brown 17N15492—Ivoty 17N15493—Red 17N15494—Green 976 Any above, each

EXTRA UNDERCOATS—acts as colorbase, etc.  $\frac{1}{2}$  pint cans—cover appr, 10 sq. ft. 17N15498—Brown 17N15498—Ivory 17N15497—Red 17N15498—Green 976 Any above, each

EXTRA THINNER—use to clean brush and thin out undercoat. ½ pint can. 17N15499—Thinner....



#### **BAKELITE CEMENT**

For ce				
bakelite	and to	other	mate	rial.
17N15310	2-oz.	size .		35c
17N15311	8-oz.	size		1.29
17N1531	2-1-pt.	size.		2.45

#### WALSCO PLASTIC CEMENT



Cements plastics, metal, wood, alass. etc. Dries fast. Strong glass, etc. Dries fast. Strong bond. Waterproof and heat re-sisting. Especially made to resisting. Especi tribroken plastic cabinet knobs, grid caps, etc. Brush at inched to cap. Walsco No. 42, bottle. 17N15321

#### "WALSOLUB B"

learn chemical lubricant that in-stantly climinates noise on band-swifting, controls and other air-exposed contacts. Superior to graphie. Comes in convenient distube. 17N15378





#### DUCO CEMENT

Excellent for repairing speaker cones, cementing grille cloths, etc. 17N15257-Each 21c Lots of 12 ea. 19c

#### CONTACT CLEANING FLUID

Prepared to clean tuning con-denser springs, volume controls, band switches, etc. Prevents corrosion of contacts. With brush.







# MATERIAL S di gran

#### RADIO CHEMICAL KIT

A complete kit of 8 chemical necessities for servicemen in leatherette icemen in leatherette pocket case. Service ce-ment, Rubber Drive Ce-ment, Carbon-X, Grafo-

ment, Carbon-X, Grafo-line, Scratch Polish, Non-Sirp Compound, Dial Oil, and Contact Cleaner. Applicator attached to cap of each container for ease in use. 1.94 17N15529

#### COIL DOPE KIT

Has a polystyrene base and its power factor loss is negligible even if used for high frequency work. Will render articles moisture proof. May also be used for cementing parts made of polystyrene. Kit contains 2-oz. borlle of coil dope, 2-oz. botlle of special, thungrand two brushes.

thinner and two brushes. 17N15313





#### FELT-KOAT KIT

A 'must" for every servreman! Complete Flock
Finish Kit for applying
soft felt-like flock to phono turntables, displays,
tool chests, lamp bases,
and wire mesh on speaker, grilles, etc. Produces he-vy soft velvet-like coat that prevent's scratching. Easy to apply. Deluxe
Kit containing Brown flock, applicator,
undercoat, thinner and brush.
177115528 17N15528

COLOR CODING ENAMEL



coding coils, terminals. color Green, blue, red, yellow and a bottle of thinner included, as well as two brushes. thinner included, as well as two brushes. Employ your own system of coding—adds greatly to appearance of equipment 50c

#### CARBON-X FOR CONTROLS

Useful both as an electrical con-



## SPEAKER AND CABINET REPAIR NEEDS DIAL CABLE - SPRINGS

#### **TUFFLEX INSULATION**



material withinnumerable ... dustrial and home applied tions. May be used tor . nit. the interior of radio tonspies speaker cabinets and phono graphs. The unusual to the insulating qualities of this fabric make it applicable as well for automobile floor or deshibated used to a

Tufflox Insular  $\gamma$ , may be used to pad kneeling marchildren's play pens, bassinet pads, plus hundrents of other items. Tufflex is  $V_2$ -in, thick, and is sold in widths of 11 inches. Himmum length sold 7 feet. of 11 inches, 11mim 22N20941-7 it. for

Longer lengths, per foot 14c

#### CEMENT KIT

An efficien' cement kit for speaker cones, voice coils, r.f. coils and chokes. One bottle of all-purpose cemen', one bottle of thinner, and brush.

17N19499



#### PLASTIC CABINET CEMENT

Quinkly and easily repairs all Bakelite or Plaskon molded radio cabinets. Produces bond almost as strong as tubinet Dries quickly and holds securely. 2-oz. bottle complete with brush attached to bottle cap.

17N15273



SCRATCH STIK Handy pocket stick for servicemen removes scratches from radio cabinets in a july. Contains filler and scratch polish.

. 24c 17N15520---Each ...... 10 for.... .... 2.16



#### SCRATCH REMOVER KIT

Combination kit of 6 colors, popular shade of wood Scratch-Stik fillers and 2 bottles scratch remover liquid—walnut and cleat. Works on all light and dark wood.

17N15530 .....



CABINET REPAIR KIT Handy kit that may be used wit i Handy kit that may be used with excellent repairs in radio shopsores, frucks, etc. Small brushes in caps of all bottles make gut we parching of damaged aubiliers edsy. I'll contains bottle each of dark dark brown in rapie; etc. Sheat walnut spiril stain, polish renewer, French variable 3 sheets garnet finishing paper, steel wool, and cloth.

17N15527—Shpg. wt. 3 lbs. ....

#### CABINET TOUCH-UP KIT

For use on plistir, bakelite or wood cabi-tie's shades of shellac sticks, bottles of light and dark oil stain, bottle of metal shading la quir. Magic Scratch Remover, lamp, si itula, brushes, steel wool,

17N15521—Shpg wt. 3 lbs.



DRIVE RUBBERS

Kit of 24 contains eight different types of friction drive rubbers for replace-men' in popular receivers. 11N9400-Drive Rubber Kit ..... 88c

#### DIAL CABLE ADJUSTER

JOCUCIO 0

Handy aid for replacing slipped-off dial cable over dial drum. 18N15061-Each

DIAL LIGHT COLORING KIT

Red, Green, Blue and Amber, and a bottle of soivent. Each in screw top, wide mouth bottle. Dries in 1 minute. Color permanent.

18N15185—Cost, per Kit.......

JFD RADIO DIAL BELT KITS

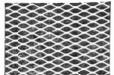
Assortments of the most popular sizes in use today. 11N9911—Asst. of 100........14.70 11N9910—Asst. of 25. For individual belts give JFD belt No. and 11N9909 .1. 3.94 .15 ea.

#### WALSCO ORNAMENTAL GRILLE

Heavy perforated grille, beautifully brushed brass" plured and lauquered with gold finish effect. For use over cloth of settening in custom built radios, P

22N19493- Size 12"x18" 1.62

22N19494--Size 12 x24'



FLOCKED GRILLE SCREENING
Flock No Size Color Stork No 22N19487 Each 8x11... Brown 50c 18x24 ' 22N19489 Brown

SPEAKER GRILLE CLOTH
Hindsome theza, 50 wide, it to your specified length.
22N20949—Per Yard 1.85 22N19496—12"x12"

SPEAKER SHIMS



Hon-Mirghetic Monelshims, 4e a h.004", .006", .008", .010 shims. In plastic case with pencil clip. 35¢ 22N19649-Earth

#### VOICE COIL DUST FELTS

Felt dises used on voice rous to keep dust out. C in be glued to any cone. Comes in z pack zge o: 25.

24c 22N14745-Pkg. of 25

#### WALSCO SPEAKER CONE PATCHES

Specially tabricated material and adhesive for repairs. 22N19647-12 Assorted Patches

24c

#### SCOTCH TAPE DISPENSERS

1. Desk Dispenser. Takes 1/2" or 34" tapes.

18N15035-Shpg. wt. 5 lbs. 2. Pias': Hand Dispenser. ½" tape. 18N15033—Shpg. wt. 6 oz .... 290

#### TRANSPARENT SCOTCH TAPE

1/2" size, 772" long. Fits both above 18N15046-Each 50c 6 for 2.70



#### FRICTION TAPE, 3/4" WIDTH

Polls ome packed in in-dividual boxes.

18N14829--2 Oz. each 12c 18N14842-4 Oz. each 22c

18N14843-8 Oz. each 39c



#### DIAL DRIVE SPRING ASSORTMENT



Handy kit for servicemen. Box contains 25 .p.m.ys of six different sizes of hard-to-get minon springs. Offered to you now at an unusual low price! 71c

11N9892-Shpg. wt. 1 lb.

C

105

#### DIAL DRIVE SPRINGS

High grade steel with rust proof springs. Kits offer five sizes to take care of all necessary requirements. 11N9890-Kit of 10 Assorted, Shpg. wt. 2 oz.

11N9891-Ki' of 10 Small Sizes. Shpg. wt. 2 oz. ......



#### WALSCO UNIBELT

Replacement for any dial belt. Cut to siz —join ends with simple zipper-like nector. Breaking strength over 60 5-foot spool with 10 connectors. con lbs.

1.62 11N9888-Shpg. wt 1 lb.

#### DETROLA DRIVE SPRINGS

replacements Detrola-U'ah Expansion spring with inserted core. 11N9893-Shpg. wt. 2 oz. . . . . . . .

#### BLACK NYLON DIAL CABLE

11N9927 \* Medium and Stand. 8-ft. Special Thin 10-ft.

### DIALS AND VARIABLE CONDENSERS

#### MIDGET SINGLE GANG CONDENSERS

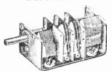


Firmly taked rotor and stator plates. Low-loss Lakelto in Jation. Ball bearing. Counter clockwise motion,  $^14''$  , haft, 1% x 1% x 1% x 1% deq.

11N10189*   15mmfd 11N10190*   25mmfd 11N10191*   35mmfd 11N10192*   50mmfd 11N10193*   75mmfd	59¢ 11N10198	1 100mmfd 5 150mmfd 5 250mmfd 5 410mmfd 5 450mmfd	<b>59</b> ¢
--	--------------	---	-------------

\*Double . paced.

#### DEFIANCE GANG CONDENSERS FOR FM-AM



Each - tions a timmer, all man im the profile and slower, in obtain the late time acts mod. See the form that a man the form the control of the form that a man the form the control of the form that a man the form the control of the form that the form the form that the form that the form the form the form that the form the

11N9792 -Shipet with him.... 1.65

4-Section: Tw. FM.:c tor., (a.): 18:-1. AMMF is to 12:- a.: main. AM o cillator. e.co., 1:2 maximiz. 11.50



#### FM GANG CONDENSERS SIMILAR TO ABOVE

3-Section: 11N9794—Si						
2-Section:						
11N9795-5	1 1	wt	1	li .		89 ¢



#### DEFIANCE GANG CONDENSERS

With aluminum, rlate, fall rearing rotor and low-loss mentation, a and 3 gaing unit, upplied with frimmer: on bottom. Shafts  $I_4^{\rm w}$  dian,  $I_4^{\rm w}$  lead, 3 into holes tapped for "speciew". All  $I^{\rm hw}$  half,  $I^{\rm hw}$  wide. All obS and I per section except out rection, on 456 KC Super types.

T.R.F.			456 Kc Super			
No.	Each	Gana:	Length	Rot it.on	No.	Each
11N9780 11N9781 11N9782 11N9783 11N9784 11N9785	.59 .89 1.39 .59 .89 1.39	1 2 3 1 2 3	17 m" 23 tr" 33 p" 17 n" 23 tr" 35 tr"	counter clock counter clock counter clock clockwise clockwise clockwise	11N9798 11N9799 11N9796 11N9797	.89 1.39 .89 1.39

#### 420-160 MMFD DEFIANCE GANG CONDENSERS

### MICA TRIMMER CONDENSER

Base of low-loss ceramic with India Ruby mica. Mosture resistant, Lugs bend easily.



No.	Plates	Range	Each
11N9537 11N9536 11N9535 11N9534 11N9533	1½ 2 3 4	2-30 MMF 4-80 MMF 9-180 MMF 25-280 MMF 45-380 MMF	12c 12c 16c 18c 20c
11N9532 11N9531	6	70-480 MMF 100-580 MMF	22c 24c



### BRASS SHAFT COUPLINGS AND BUSHINGS



Sizes	Fig.	In. cl.	Br 1. 5		1
1/4 X 14"	1	11N15014	11N15000		
3 X 3 "	1	11N15006	11N15001		
14 X 35"	i	11N15008	11N15002	Each	10 for
14 X 14 "	2	11N15017	11N15004	354	994
3% x 1, "	2	11N15018	11N15005	<b>8 8 4</b>	
14 x 38"	2	11N15009	11N15003		
Split Bush	mer l	(3) Increase	shaft dia.	14.80	v
		long Fach			

#### Brass & Fibre Shaftings For extensions, 14" dia.

11M12010 -0		
11N15011—6"	Fibre.	10
Each		12
11N15012-12"	Brass.	
11N1501312"	Fibre.	24

#### Panel Bearing Assembly

**4.** U.e. with rigid of  $-\exp$  ble coupling when mounting. For up to  $^{5}\mu''$  panels,

11 <b>N9563</b> —3″	long.	14"	Shaft. 20 ć
11N95626"	long.	34"	Shaft.26e
11N9564—Be	aring	only	6¢

#### CROFLEX TUNERS AND CALIBRATIONS





Tuners are flexible—may be adapted to any chassis. Condensers clockwise or counter clock wise-may be located in variou, position, relative to tuner. Choice of 5 different knob locations. All with horizontal double channel editoration, broad call Fand 55 to 170 and short wave 6 to 18. Models 234 and 236 have thard scale reading reverse, artitury 7 to 100. All have "3" dimension" edge lighted glass dial scales. Smallest size has one lamp cocket, all others have two. Hubs 3 g" dia. with 14" adartors.

#### Fully Adaptable-Choose for Size Only

Stor.	Midel	E. out the on Over all	Panel Cutout	Pointer Travel	Cost
11N9818 11N9819 11N9820 11N9821 11N9800	231 232 233 234 236	214 x 434" 216 x 116" 35 2x 15" 316 x 8 6" 4 x 1146"	178x+38" 113 p.x.>3 " 21 xx" - p.x./3 p" 3 g.x.>11 m"	315 16" 411 11" 512" 1 6 4 4"	2.79 2.94 3.15 3.53 4.56

Stock Calibrations: The that deal scales may be removed and retrievant put needly

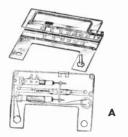
AM Broadcast Short-			AM Broadcast only,		
wave, double channel			single channel		
For Model	Houzontal	Vertical	Horizont il	Vertical	
231	† † † †	11N9822	11N9826	11N9830	
232		11N9823	11N9827	11N9831	
233		11N9824	11N9828	11N9832	
234		11N9825	11N9829	11N9833	
231 232 233 234	M Broadcast C 11N9834 11N9835 11N9836 11N9837	11 <b>N9838</b> 11N9839 11N9840 11N9841	AM/FM E 11N9842 11N9843 11N9844 11N9845	11N9846 11N9847 11N9848 11N9848	

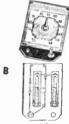
#### Crowname Horizontal Scales for Model 236 Dial

11N9801Di 11N9802Di	al Scale,	AM/FM	Broad	ast.	 	 	)	E04
11N9802 - In	al Scale,	AM Bro	adeast		 	 	}Each	<b>37</b> 4
11N9803Di	al Scule.	FM Broa	idea.t.		 	 	1	

#### MAGIC EYE ASSEMBLY









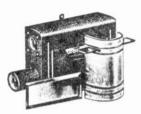
#### PERMEABILITY TUNERS AND DIALS

Complete assembly, includes dial, coils, knob shaft, cable, slug carriage, two High Q slugs, and clear plastic dial cover. Tunes RF and Oscillator coils. Superheterodyne circuit components pre tracked at factory. Use as the basis for compact receivers, no tuning gang capacitor needed. Gold, buff and brown finished dial scale. Covers 540 to 1600 KC.

11N10450 -Fig. B—With rectangular dial	
11N10451—Fig A—With clide rule dial and window4.05	
Regenerative Tunor Ideal for experimenters and hobbyists. Replaces	
, ingle gang variable conden, er. Tunes from 540 to 1600 KC. Pre tracked	
at factory. Complete with coil, 3 color dial scale. Same as Fig. B, but	

# PHOTO ELECTRIC EQUIPMENT & KITS

### WORNER FOTOELECTRIC ANNOUNCER



Model 61A. Complete light source and sensitive photo cell source and sensitive photo cell unit in one compact metal case. Mirror supplied for reflecting light beam back into photo cell window when placed up to 10 feet from the unit. Equipped with optical system to arrest unwanted light. Breaking of light beam activates chime or other warning device announcing entrace of persons through other warning device amouncing entrance of persons through doors, passages, driveways, etc. Operates from 115-volt, 60-cycle A.C. source.
21N15654-Wt: 7 lbs.. 20.14

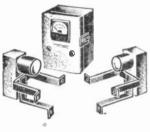
### PORTABLE "PLUG-IN" TIME SWITCH

AEMCO. Model 110. Designed espe-



### DE-TEC-TRONIC SMOKE ALARM

Model AP-415. Low cost photo electric indicator of smoke density passing through the flue of a boiler. smoke density passing through the flue of a boiler. Indicating meter and lights on front panel show when density of the smoke exceeds a predetermined value. Insures perfect combustion as well as keeping within limits of local smoke ordinances. Accessory warning devices such as bell may be connected to relay circuit. Ideal for hotels, hospitals, factories, etc., where breeching of boiler does not exceed 10-ft. In width. 115-V., 50/60 cycles. List Price \$90.00.





WORNER BURGLAR ALARM SYSTEM
Model 5100. Light source projects
beam of invisible infra-red light to
condensing lens of receiver. Interruption of light beam or disconnection of power to the unit operates a
relay which may be connected to
any audible or visible alarm device.
Alarm is continuous and can only
be silenced by the possessor of key
to pick-proof switch lock on the receiver. Mirrors can be used to project the light beam around a room to
protect several entrances simultaneously. Operates with light beam
up to 100 feet. For 110 volts, 60 cyneously. Operates with light beam up to 100 feet. For 110 volts, 60 cycles AC.

21N15659-Shpg. Wt: 10 lbs. 55.12

# **DETECT-O-RAY ELECTRIC EYE**



21N15725-With Outside Mirror. Wt: 7 lbs...... 27.78

### DETECT-O-RAY L-205 POWER RELAY



Carries 1000 watts, at 110 volts AC. For controlling most motors, machinery, etc. Input plugs into socket, output into motor, etc. Shpg. Wt. 2 lbs.

CETRON PHOTOTUBES FOR USE IN WORNER UNITS Type CE-23-C-Gas. 160 ma average sensitivity. 2(N10580-Shpg. Wt:8 oz..... Type CE-1-D-Gas. 100 mg average sensitivity. 2[N10581-Shpg. Wt: 8 oz.

### TORK ELECTRIC TIME SWITCHES

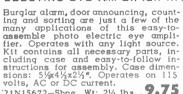


Model 191BP—Poultry House Lighting Timer. For morning and evening operation. Bright light circuit 2000 W.; dimmer 800 W.

21N15602...... 12.95 Personal Model similar to Model 191B but in portable case, fitted cord and plug and a clock controlled receptacle. Automatic control at 15-min. intervals of fans, heaters, bedside radios. Minimum setting of 45 minutes between on and off positions. 21N15603.....8.40

21N15604-Same as above but 1320 watt capacity......9.45

### ELECTRIC EYE AMPLIFIER KIT



21N15672-Shpg. Wt: 21/2 lbs.. 9.75





### PHOTO ELECTRIC LIGHT KIT

Dependable light source for above amplifier kit. Projects a beam of light 25 feet long. Light source kit includes light bulb, socket and all necessary parts including carrying case and simplified easy to follow instructions. Designed to operate on 115 volts, AC or DC current.

21N15673-Shpg. Wt: 21/2 lbs...5.83

### IRIS ELECTRIC EYE PHOTOCELL

Self-generating, barrier-layer type, mounted on plastic window. Develops several hundred microamperes depending on intensity of illumination and resistance of external circuit. No external battery required. Standard model sensitivity 15 microamperes, Jumbo 100 microamperes using 100 watt frosted tungsten lamp at 1 ft. Soldered pigtail leads.

21N10598-Stand. 1-3/16" sq. x1/4"..... 1.50 21N10599-Jumbo Model, 11/2" sq. x 1/4".... 3.00





### SELENIUM PHOTO-CELL

Barrier layer, self-generating type-light striking upon cell generates current sufficient to operate relays directly without the use of auxiliary power. Lifetime of cell is unlimited. 600 microamperes output at 100 foot candles. 2 inches in dia. mounted in handsome plastic housing. 21N10576-Photo Cell. Wt: 8 oz..... 9.37

### JFD TELEVISION ANTENNAS

### STRAIGHT LINE ALL BAND FOLDED DIPOLE

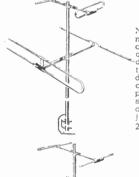


Model TA150. Here's a new TV array covering channels 2-13 and FM band with exceptionally broad frequency response. Unidirectional antenna characteristics maintain high front-to-back and front-to-side ratios over all channels. Two broadband folded dipoles and low band reflector operate off common 300-ohm transmission line. All elements constructed of corrosion-resistant aluminum alloy tubing. Exclusive crossarm rosion-resistant aluminum alloy tu bing. Exclusive cross arm clamp provides 4-point support; U-bolt clamp permits unlimited adjustment of elements for polarized and directed reception. Complete with 5-ft 1½" steel mast, twin lead jumper and all-angle base mount. Shipping Weight: 8% lbs.

### DOUBLE STRAIGHT LINE FOLDED DIPOLE



No. TA151. High qain, ¼ wavelength stacked array covers all channels and FM band. Duo TV channels and FM band. Duo-orienting bays seperate over-lapping signals and eliminate station interference. Gives more signal strength at greater dis-tances, especially in fringe areas. Component parts include exclusive crossam clamp proexclusive clossam clamp pro-viding 4-point support for mast and crossam, and special U-bolt clamp permitting unlimited adjustment of elements for po-larized and directed reception. Complete antenna includes 10-it. (two 5-ft sections) 14" cor-11. [two 5-it sections] 1%" cor-rosion-resistant steel mast, twin lead jumpers and % wave-length aluminum: jumper bars, and all-angle base mount. Shipping Weight 16% lbs.



### "RANGER" DUO-ORIENTING FOLDED DIPOLE ARRAY

No. R5. TV antenna covers channels 2-13 and FM band. Consists of two separate units: a high frequency and a low frequency folded dipole with reflectors. Each antenna section, can be oriented individually for maximum performance on high and low TV bands. Supplied pre-assembled, ready for installation. Includes 5-ft mast, all-angle base mount and twin lead jumper. Shpg. Wt. 8 lbs. 28N.218.26.List \$12.35.Net 7-26 28N21826-List \$12.35.Net 7.26

"RANGER" DUO-ORIENTING STRAIGHT DIPOLE ARRAY



No. R3. High and low band diroles with reflectors provide greater gain on all TV channels and FM band. 5-ft rugged steel must set in newly designed allangle base mount assures maximum durability under adverse weather conditions. Elements constructed of corrosion-resistant aluminum alloy tubing connected to mast with U-bolt clamp. Preassembled, ready for installation...no hardware necessary. Shpg. Wt: T½ lbs.
28N21832-List 11.05. Net 6.50 28N21832-List 11.05. Net 6.50

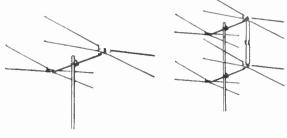
### INDOOR TV/FM ANTENNA

INDOOR TV/FM ANTENNA

NO.TA132. New! Superb performance on all TV channels and FM. Attractively designed and constructed "tip-proof" base of crystal glazed porcelain harmonizes beautifully with living room interiors. Felt pad protects furniture from scratches. The 3-section, polished brass telescopic dipoles extent to 44"; each measures 14" collapsed. Fully adjustable; orients simply and quickly in any direction. Unusually compact, portable antenna supplied complete with 10 feet of 300-ohm polyethylene twin lead. Shipping Weight: 1% lbs.

28N21833—List Price \$4.25. Net 2-50

28N21833-List Price \$4.25..Net 2.50



### ALL BAND CONICAL TV ARRAYS

No. TA160. Fine, biconical all band array gives excellent broadband and high gain response on all TV channels and FM. Lightweight, all aluminum construction — non-corrosive. Features a 20 broadside tuning angle and good front-to-back ratio on all TV frequencies. Low standing wave ratio permits direct coupling to 72, 150 or 300-ohm transmission lines with minimized energy transfer loss. Unique element bracket securely grips dipoles and reflectors which are completely pre-assembled for speedy installation. New crossarm clamp provides 4-point support for crossarm and mast; permits easy counter-balancing for antenna rotors. Shipping Weight: 6½ lbs. Supplied less mast.

### DOUBLE ALL BAND CONICAL

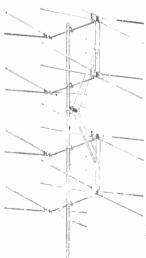
No. TA161. Stacking of TA160 TV array provides exceptionally high db gain on both bands. Particularly adaptable to fringe areas. Conical antenna design results in minimum noise, less fading and reduced multi-path reflections. 200 broadside tuning angle. In addition to other features described above for the TA160, this unit also includes % wavelength aluminum jumper bars. Shipping Weight: 11½ lbs. Supplied less mast.

### ECONOMY MODEL CONICAL

No. R60. Identical to No. TA160 except for galvanized steel crossarms and element brackets with aluminum elements. Has quickrig feature for easy assembly. Less mast. 

No. R61. Same as above except stacked array with jumper bar, Less mast.

28N21971-List Price \$24.00......Net......14.11



### DOUBLE STACKED CONICAL ARRAY

No. TA164. Double stacking of TA161 arrays offers unsurpassed db gain for pulling in weak signals from long distances. Especially engineered conical antenr a design reduces noise, fading and multi-path reflections to a minimum; gives excellent high gain, broadband response on all TV channels, and produces clear, steady pictures with full brilliance. Yavelength stacked bays; 2 wavelength stacked sections. Low standing wave ratio per wavelength stacked sections. Low standing wave ratio permits direct coupling to 72, 150 or 300-ohm transmission lines with minimized energy transfer loss. Element brackets completely pre-assembled. Antenna includes dipole and reflector frackets, crossam clamba, jumper harness, and aluminum jumper bars. Shipping Weight: 25 lbs. Supplied less mast. List \$61.80. 28N21831....Net......36.34

5-FT. EXTENSION ANTENNA MAST

New, corrosion-resistant steel mast made to fit all JFD antennas. One end is tapered. Specially designed "Jam Fit" construction with locking key. Fit readily into each other. 1½" outside diameter. List Price \$1.40.



For the best values in BOSTON, our customers recommend

### TELEVISION ANTENNAS

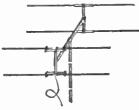
### QUAD-LOOP ANTENNA BY SQUARE ROOT

Quadrature-phasing antenna, achieves all the advantages of mechanically rotated antennas without any moving parts. Electrically controlled at the receiver by a single knob. Selects maximum gain for each channel regardless of the geographical location of the transmitting station. Requires no orientation, 90% assembled before delivery. Can be set up and installed in a short time. Sturdy all-metal construction has no moving parts to wear out or become defective. Constructed of two loops and four dipoles. Loops are used for high frequency reception and the dipoles



become detective. Constructed of two loops and four dipoles. Loops are used for high frequency reception and the dipoles for low frequency. When used on lower frequencies the loops act as resonated sections for the dipoles. Requires 4 conductor lead (two 300 ohm lines) from antenna. Less lead-in. Shpg. Wt. 00 lbs.

### TACO DOUBLE DOUBLET TV ANTENNA WITH REFLECTOR



A rigid, all-metal, all-weather system that gives improved FM, TV and AM reception. One of the most dependable TV antennas on the market today! Broadband and with a very good gain. Uni-directional—has high gath. Uni-directional—nas nigh signal-to-noise ratio. Antenna and reflector or each have two dipoles. Comes complete with 60 ft. 300-ohm transmission line, 5-ft. mast and mounting hardware, Wt. 15 lbs.

### VEE-D-X TV ANTENNA

New, highly directional antenna provides increased gain and steadier, clearer reception from stations as far away as 100 miles. Consists of 4 phased an-tenna elements, 4 reflector ele-100 miles, constitution and elements, 4 reflector each ments, 4 cross-arms, a 10½ mast, and all necessary parts and mounting hardware. Finest grade aluminum used throughout. Matching stub will match any impedance from 50 to 600 ohns Less transmission line. Full constitutions included. Wt. 28 instructions included. Wt. 28 lbs. List Price \$129.50. **76.15** 



### TRICRAFT TELEVISION & FM ANTENNA



Model 300—Designed to satisfy need for an all-purpose, all-wave antenna. Complete coverage of both television bands, as well as the per-manent FM band. Comes complete with 65 feet of 300-ohmtransmission line and all accessories for installation. Universal mounting bracket at base of 8-ft. mast for mounting on any roof or wall anale.

28N22036-Wt. 9 lbs. List Price 17.95..... 11.61 Auxiliary Kit. Converts above into two element ultra-high gain antenna.

28N21985-Wt. 5 lbs. List Price 15.80.. 13.88

### SLIDE RULE INDOOR ANTENNA

Dipole antenne ann calibrated with all TV channel numbers plus FM band. Simply extend one arm to desired channel...other



arm to desired channel...other arm extends automatically. Correct match for standard 300-ohm twin-lead transmission line minimizes "ghosts", inter-channel interference, etc. Instant push button closing retracts dipole arms into compact 4½ x 2½" case

ICA ALL CHANNEL INDOOR



TV ANTENNA Ideal for apartments. Can be placed under rug, on molding, in attic, etc. Polythyelene insulation. Complete with 10-ft. lead-in,

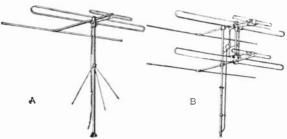
300-ohm twin lead transmission line. Shpg. 

300-OHM TWIN LEAD-IN



Special low-loss 300 ohm twin lead transmission line ideal for use with FM or any Television antenna listed on this page

Insulated line is water, acid, alkali and oil proof. 19N17130-Cost per foot.....21/1¢ Per 100 ft..........2.06



### AMPHENOL BROADBAND TELEVISION ANTENNA

Fig. A. Model 114-009. Provides higher, more uniform gain and broader response on all channels. Gives excellent picture brightness and assures the best TV enjoyment. Single direction radiation pattern throughout entire TV spectrum. High front-to-back and front-to-side ratios. Matches 300-ohm input circuit. All aluminum construction except for heavy, rust resisting mast. With swivel mounting plate, guy clamp, stand-off insulators. Less twin-lead. Shpg. Wt. 9 lbs.

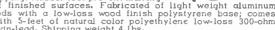
28N21817-List Price \$17.00......Net.....10.00 Same as above, but with 75-it. Amphenol 300-ohm Twin-Lead. 28N22044-List Price \$19.50......Net......11.47

### AMPHENOL TWO-BAY ANTENNA

Fig. B. Model 114-302A. Provides added high forward directive Fig. B. Model 114-302A. Provides added in the normal substitution of a single directional pattern over both upper and lower television channels, 2 to 6 and 7 to 13. Television set owners who live in fringe and outside areas can now get the same brilliant reception as set owners within the TV broadsame brilliant reception as set owners within the TV broad-casting areas. High front-to-back and front-to-side ratios. Efficient operation on all channels. High strength aluminum and aluminum alloy construction with rust-resistant steel mast. Complete with top and bottom bay connecting rods and two 5-ft. lengths of 1½" mast. Without lead-in. Shpg. Wt. 17

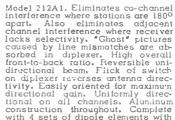
### AMPHENOL "TELESTAR" INDOOR ANTENNA

Model 114-024. Specially designed to fill the needs of those television owners who are unable to erect an outdoor antenna. Unique all-channel outdoor antenna. Unique all-channel television cross-over network. Can be rotated for highest efficiency and "ghost" elimination. Rods are cut to pre-tuned lengths, long rods for low band, short rods for high band stations. Base-weighted against tipping. Rubber feet prevent marring of finished surfaces. Fabricated of light weight aluminum rods with a low-loss wood finish polystyrene base; comes with 5-feet of natural color polyethylene low-loss 300-ohm twin-lead. Shipping weight 4 lbs.



RCA 212





### RCA "V" ATTACHMENT

Recommended for use in those locations where all stations are in the same general direction. Provides improved reception on all channels when mounted on low band dipole and dipole reflector antennas. Directional characteristics of such antennas will be uniform for all 12 channels. No adjustments are necessary except usual antenna orientation for maximum signal strength. Easily assembled and mounted on antenna

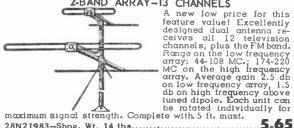
28N21825-List Price 1.30. Per Pair...... 76€





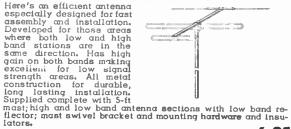
# TELEVISION AND FM ANTENNAS RELIANCE TV ANTENNAS

### 2-BAND ARRAY-13 CHANNELS



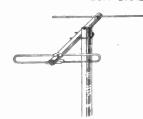
### IN-LINE ALL BAND ANTENNA

Here's an efficient antenna



lators.

### HIGH BAND ADAPTOR



Precision engineered high Precision engineered nigh frequency array consisting of a folded dipole with re-flector. Covers 174-220 MC range. Can be stacked with your present low band an-tenna to provide all-channel coverage or used individu-ally as a high band antenna. Constructed of durable tem-Constructed of durable tem-pered aluminum alloy which resists damage due to ad-verse atmospheric condi-tions. Supplied complete with 18" mast which can be been mast.

easily attached to your present antenna mast. 

### AMAZING WIND-O-LOOP ANTENNA

AMPHENOL FOLDED DIPOLE AND REFLECTOR

If the "landlord problem" is the only thing that stands between you and television pleasure—listen. Here is the ideal all-channel TV and FM antenna. It attaches to the window pane by means of two suction cups, or fits into wood with screws. Constructed of a single rectangular loop and one dipole. 25° of wire is permanently attached to antenna for convenience of installation.



AMPHENOL DOUBLE FOLDED DIPOLE

Receives FM from all directions. Does not require rotation and will give crystal-clear reception over the entire FM band. Sturdy light

weight aluminum construc-tion. Swivel mounting on flat or sloping roofs. With 75 ft. 300 ohm twin-lead, instructions.

28N21999-Wt. 5 lbs. 9.55

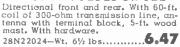
### FM ANTENNAS

### RCA FM FOLDED-DIPOLE ANTENNA AND REFLECTOR





TACO FM FOLDED DIPOLE



Reflector Assembly for above-makes antenna unidirectional.

23N22025-Shpg, Wt. 3 lbs......3.23

# For suburban and long distance, wide band, trouble-free reception. Rigid low-loss insulators and twin-lead transmission line pre-vent loss of signal. Swivel bracket permits installation on flat or peaked roofs. With 75 ft. 300 ohm twin-lead line and complete instal-lation instructions. 28N21998-Wt. 5 lbs.. 9.55

### BELDEN FM POLY-POINT ANTENNA

Model 8322. Double-folded dipole that provides an essentially circular radiation pattern. It. receives signals from all directions without turning. Carefully matched quarter-wave phasing stub provides high efficiency over the entire FM band. Strong, lightweight aluminum construction withstands severe ice loading and high winds. Easy to install. Special adjustable mounting base for flat or sloping surfaces. Factory assembled, ready for mount-

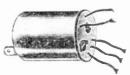
tory assembled, ready for mounting. Complete with 65-feet of Belden 300-ohm Transmission line, 5ft. mast and 4 three-inch Standoff Insulators, List Price 12.65.

# 0

FM ANTENNA Permits use of FM-antenna on either FM or AM without switching. Matches either band to an-

TACO TRANSFORMER FOR

6N5968-Shpg. Wt. 11/2 lbs.. 1.91



### FLEXIBLE FM DIPOLE

Consists of two folded dipole elements spliced to 300 ohm twin lead transmission line. Flattened end insulators permit use indoors under carpet, on room molding, etc. Losses in line measure only .85 db per i00 feet at 100 MC

### AMPHENOL 300 OHM TWIN LEAD-IN





# TV BOOSTERS-MOUNTS-LENSES-FILTERS



### ADJUSTABLE MAGNIFYING LENSES

This remarkable new lens reduces glare, improves contrast, intensities black and white and enlarges the screen as well. Filtered models contain no blue tinted oil like ordinary len.es. Made of special perfected material which enlarges and clarifies picture with brilliant intensity. Bracket hit any set—ther con.ole or table model—in Lidjustable for focusing and

enlarging. Cortict lens have cords.	11.73
31N24383-Ada rater Lons-7" Tulo 1:119.95	
31N24384 Adi, Clear I ns7" Tur - Lat 19.95	
31N24385 -Adi, Filter Lone-10" and 12" Tube, List 29.95.	. 17.61
31N24386 -Ada, Clear Lens-10" and 12" Tube. Let 29 95	. 17.61
31N24387 - Contact Filter Lens-10 Tule List 19.9	. 11.73
31N24388-Contact Clear Lars-10" Fulle. List 19 0	11.73

### FLAT ENLARGING LENS

Increase your TV picture three times with this new magnifier. Fighter, because it's plactic without liquid tiller. Fit surface makes it easier to look at Attractively. It inted in methog my. Lene may it suspense try its knacket, or mounted under the left.



31N24427 5x10".	Lit 1	3.98	 	 	 9.30
31N24428 0x12".					
31N24429-12x16	". List	19.95	 	 	 . 13.30

### SIG-MAX GIVES BETTER TV PICTURE



### **GENUINE POLAROID FILTERS**

You can now enjoy a full + 2 mind of TV with a tey, strain. The funcis political principle chiminales glare, "soft ns" the TV image and yet gives better definition. Durks come out sharper, lights easier to look at. Easily mounted with special adhesive strip.

31N24422	For 7" Screen	List 6.50
31N24423	For 10" Screen	List 10.00 5.88
31N24425	For 12" Screen	List 12.50
31N24424	For 10" Round Screen	Let 13.50

### LUMARITH FILTERS

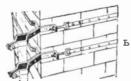
Low cost lumarith filters eliminate eye strain

31N24488	With adhesive strip	7' Screen
31N24489	With adhesive strip 1	.0" Screen
31N24490	With adhesive strip 1	2" Screen
31N24432	With adhesive strip 1	5" Screen
31N24414	With adhesive strip 1	6" Screen 1.95
31N24491	With adhesive strip	7" Round
31N24413	With adhesive strip 1	0* Round1.35

### SUCTION CUP FILTERS

### CHIMNEY AND WALL ANTENNA MOUNTS





Adjustable mounting brackets to fit any chimney. Can be installed without tools in 5 to 10 minutes. Over \$\frac{1}{3}0,000 \text{ lt. tensile strength.}

Complete with strapping.

(A) Mark of corrosion-resistant aluminum alloy. 28N21940. 3.95
(B) Made of heavy plated steel. 1.49





Constructed of heavy galvanized steel. Clearance of 12½" from mast to wall. Holds any pole from 1" to 1½" in diameter. 2.94

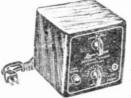
# POWER-PACKED ANCHOR BOOSTER

Model ARC-101-50. Recommended ty famous continuer research organizations—are 23½ times more gain in signal (thingth across all channels). Eliminate moise and mow patterns—in ikes one ut loor antennic unnecessitivin in may care. Features exclusive impedance in tchana of its output to ma ut of set. Int. Price \$37.0. 31N24438—Stirg, wtio. F. 22.05



### **NEW 2-STAGE ANCHOR BOOSTER**

Sans a above x +1 two days of an elication for extreme fraging 1 - 72 time in a clarific and the 31N24398 - Most FAC-101-100. In (\$44.95, N t) 26.43



### LAFAYETTE BOOSTER

Why ahead of the Forst rified in its dill invalue performance! Greatly incremes signal strength of all 13 channels where signals are weak, lust plug into any 115 volt outlet and attach between the antennal and receiver. No internal connections are necessary, lideal combination of economy and test rimance.

31N24403 List Price 35.00... 19.95

# MASCO 13-CHANNEL TELEVISION BOOSTER

Sentitive, all-of, final pooster that gives sharper, clearer receipts in intringe and weak signal areas. Easy to install and operate—works on any receiver without internal connections. Ships. wt. 6.

lbs. 31N24448—List 35.00. . . . **20.58** 



### JERROLD TV-FM BOOSTER

New model with Match-A-Tran variable step-impedance transformer, assuring best possible pictures on each channel. It pulls in weak stations in fringe areas and amplifies signals 20 to 30 times; the result is sharper, clearer pictures and brilliant FM sound. Helps

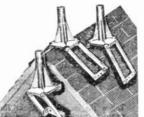
### JERROLD MATCH-A-TRAN

# TV INTERFERENCE ELIMINATOR

Dual absorption type wave trap that removes such complaints as FM and adjacent channel interferences, phase-shift, standing waves, and ghosts due to antenna mismatch, plus sound in pictures due to external causes. Has knob tuning, cluss, and twin lead input.

31N24444—Wt. 2 lbs.... 5.88





### SHUR ANTENNA MOUNT

Supports any standard FM or Television antenna array. Fits root tops, and sloping sides, house sides—fits anywhere. Mounting brackets are casily adjustable to any angle. Sustains weight of fixed standard array without need of guy wires. Rugged, cast aluminum mounting base fits antenna poles up to 1½° in diameter. Complete with all

SEE PAGE 88 FOR TELEVISION WAVE TRAPS

# ANTENNA TOWERS-ROTATORS-ACCESSORIES

### ALLIANCE BEAM ROTATOR



Remote control mechanism for rotating amateur beam and TV antennas directly to signal. Compact, low cost unit that's 

-List Price 49.95......NET 29.37 4-Cond. flat cable for above. 19N16064—Per 100-ft. 2.70.



STEEL ANTENNA TOWERS

# MAGNE-ROTOR

Improved TV reception with a motorized push-button Improved TV reception with a motorized push-button control unit (not an electric motor) that connects directly to any antenna. Sit in your living room and rotate your antenna for perfect peak reception on all channels. Locks at any point; cannot be turned by wind. Makes a complete 360° turn in either direction. Automatic signal light goes off when cycle is completed. Plugs into any 110-volt AC source.

28N21951-Ship, Wt. 8 lbs. List 29.95....NET 17.97



### SOUND-POWERED PHONE

Self-powered system for inexpensive 2-way talking-Ideal when installing radio and TV antennas—the antenna itself may be used as the line. Use at home or office as an intercom. Provides excellent fidelity up to 25 miles.

32N14015—List 12.50..........Per Phone 8.75

### **TELEMIRROR**

Plate glass mirror gives non-distorted reflection of picture tube exactly where you want it. Permits one man to do and efficient service job. Sturdy and lightweight 8x10" mirror with nickel plate steel frame. Handy slide on 44" stand provides quick and easy means of adjusting mirror to desired angle. Non-tip base in black crackle finish. 31N21964—Shpg. Wt. 7 lbs. List 6.95. . . . . . . 4.08

### STEEL GUY WIRE



Six strands of No. 20 high tensile strength, galvanized steel wire.

28N21927-50-Ft. Roll... 39¢ 28N21928—100-Ft. Roll . . . . . 69 28N21929—500-Ft. Spool . . . 2.95

### TWIN LEAD TRANSMISSION LINE



300-ohm flat twin lead transmission line for all TV installations.

19N1714C—100 Ft... **1.25** 

### 5-FOOT ANTENNA MAST

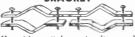
New, corrosion resistant steel mast. One end is tapered: Specially de-signed "Jam Fit" con-struction with locking key. Fit readily into each other. 11/4" outside diameter. 28N21978 824

### MAST EXTENDER BRACKET

This practical bracket makes it easy to add another mast to your present antenna installation. Vise-type clamps hold any 2 masts of equal or unequal diameter (%" to 2½"). Permits 4" bite on each mast. Long-life solid steel

with 6 guying points. 79¢ 28N21945.....Each 3.55

### TV MAST COUPLER BRACKET



Versatile unit for extending and adjusting antenna poles to most efficient position. Flexible and efficient position. Flexible and easy to install. Fits all poles up to 1½", also any 2 poles of different diameters. ½" thick alum. With zinc plated ½" bolts, nuts and washers, ready to use.

28N21946.....Per Pair 88¢

### STEEL TURNBUCKLES



Takes up guy-wire slack. Rust-proof galvanized steel. Size: 7%" open, 5½" closed.

28N21939 ..... Each 15¢ 10 For..... . . . . . 1.32

### **GUYED TOWERS**



### ANTENNA COMPASS

Speeds up TV installations. Permits one man

### TELECOUPLER FOR TV ANTENNAS

A low-cost solution to multiple installation of TV and FM receivers in radio stores, hotels and apartment houses. Small, newly designed electronic circuit, easy to install. Each one serves up to 8 TV sets. 3 units may be connected together for simultaneous operation of 24 TV receivers from one antenna. Provides

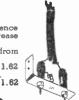
greatest isolation between sets with very small loss; operation of each antenna outlet completely independent. Matches either 300 or 75-ohm sets in various combinations.

28N21965—Shipping Weight 6 lbs.....



### SIGNAL KLEER WAVE TRAP

300-80-110. Eliminates FM image interference 



### INTERLOCK TY LINE CORD



Replacement cord for RCA, Philco, GE, Admiral and others. It has regular molded plug on one end and special rubber plug on other to fit TV sets. U/L approved.

33N13319-6 Ft. Brown Cord. . .

### VEE-D-X LIGHTNING ARRESTOR

### RCA LIGHTNING ARRESTOR

Specially designed to protect TV and FM receivers. Attaches to 300-ohm twin lead without soldering or strapping. May be mounted on any indoor water pipe from 1/2" to 2" diameter. 66¢ 28N24443—Shipping Weight 5 oz.....

### JFD LIGHTNING ARRESTOR



# J.F.D. ANTENNA ACCESSORIES

### INSULATORS

These economically priced insulators save time and effort on every TV/FM antenna installation. Mast lead-in and stand-off types keep cable lines secure and well anchored.

### MAST LEAD-IN



### FOR 1" MAST

**38N16962**—31/2" screw eye Ea. 9c 10 for 81c 50 for 3.85 **38N16968**—51/2" screw eye. Ea. 12c 10 for 1.08 50 for 5.13 **38N16970**—71/2" screw eye. Ea. 121/2c 10 for 1.13 50 for 5.37 38N 16962 -31/2"

### FOR 11/4" MAST

38N16963 -31/2" screw eye. Eq. 9c 10 for 81c 50 for 3.85 38N16964 ->51/2" screw eye. Eq. 12c 10 for 1.08 50 for 5.13 38N16965 -71/2" screw eye. **38N16965** -7½" screw eye. Ea. 12½c 10 for 1.13 50 for **5.37** 

### FOR 11/2" MAST

38N16966—31/2" screw eye
Ea. 11e 10 for 99e J0 for 4.70
38N16967—51/2" screw eye
Ea. 12e 10 for 1.08 50 for 5.13
38N16968—71/2" screw eye.
Ea. 13e 10 for 1.17 50 for 5.56

### TWIN LEAD STAND-OFF



First choice for fast, secure anchoring of transmission Single screw eye. 38N16957-100 for 3.04 Eq. 5c 100 for 4.27 Eq. 5½c 10 for 32c 38N16990-51/2 10 for 45c 38N16960-71/2 100 for 10 for 50c 4.75



Made of galvanized steel. For Twin Lead. 38N16994—31/2" Ea. 31/2c 10 for 32c 100 for For Coaxial Cable.
38N16995—3½" Ea. 10 for 32c 100 for

### PIPE STRAP



Fastens masts to walls, roofs, cor-nices, etc. Quickly nices. securely, made of galvanized steel. a. **5c** 10 for **45c** 

3.04

28N21938 Ea.

U-BOLT Made of galvanized steel. Supplied with nuts and washers in 28N21931 F-Ea. 15c 10 for 1.35

### COAXIAL STAND-OFF



Single screw eye for coaxial cable up to  $\frac{1}{2}$  diameter. Anchors cable lines securely. 38N16959— $\frac{31}{2}$  Ea.  $\frac{31}{2}$ c 100 for 10 for 32c

3.04 38N 16991-51/2 ....Еa. 5c 10 for 45c 38N16961-71/2". 100 for 4.27 Ea 51/20 10 for 50c 100 for 4.75

### DOUBLE MAST LEAD-IN



### FOR 1" MAST

38N 16974-- 31/2 Eq. 21c 10 for 1.89 50 for 8.98 38N16975—71/2" screw eye. Eq. 24c 10 for 2.16 50 for 10.26

### FOR 11/4" MAST

38N16980 $-3V_2^{\prime\prime\prime}$  screw eye. Eq. 21c 10 for 1.89 50 for 8.98 38N16981 $-7V_2^{\prime\prime\prime}$  screw eye. Eq. 24c 10 for 2.16 50 for 10.26

### FOR 11/2" MAST

**38N16982**— $3\frac{1}{2}$ " screw eye. Eq. 24c 10 for 2.16 50 for 10.26 38N16983— $7\frac{1}{2}$ " screw eye. Ea. 26c 10 for 2.34 50 for 11.11

### DOUBLE SCREW EYE STAND-OFF

Same as above, but less clamp.

38 <b>N21850</b> 10 for			14c 5.98	
38N21851 10 for	5 1/2" 1.44			

38N21852 7-1/2" Ea. 50 for 7.27 10 for 1.53

### SNAP-ON TYPE



3½" screw eye. 38N16992—1" Clamp For 60 10 for 54c 100 for 4.86 3½" screw eye. 38N16993—1½" 10 for .54 Ciamp Ea. 6c 100 for 4.86

### MAST CLAMP



Notched retaining clamp holds two masts firmly together in sturdy U-bolt. Made of galvanized steel 28N21922 Ea. 26c 10 for 2.34

### FLEXIBLE STRAPPING



Serves many uses in antenna installation work. Good for mounting masts on chimneys, posts, etc. Perforated steel. 44c

28N21948--25-Ft 91c 28N21949-100-Ft. 2.91

### DRIVE RING



Acts as dependable anchor for guy wire when hammered in at an angle. Made of galvanized steel.

28N21930 Ea. 100 for 4.27 10 for 45c

### ALL-ANGLE MOUNT



Permits setting of  $\frac{1}{2}$ " to  $\frac{1}{4}$ " masts at most suitable angle for maximum reception. Mude of rustresistant steel. W/ hdwe. 175 dz

28N21842 Ea. 44c

### MOUNT MASTER



Solves almost all untenna mast mounting problems. Perforated flange permits setting of mast at any angle. Mounts any-where—on (walls, flat) at any ar where—on slanted ro where—on walls, fla! or slanted roofs. Pre-assembled with hardware in place. Heavy teel.

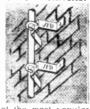
28N21843 4.41

### VENT PIPE MOUNT



Fits snug on roundshaped objects.
Firmly grips ½" to
1½" masts. Rust-resistant steel. Supplied with hardsista., plied ware. ware. 28N21841 Pr. 2.12

### U-BOLT BRACKET



One of the most popular and practical antenna mounts. Sturdy U-bolt securely grips all masts from 1" to 2" OD. Made of rust-resistant steel. Supplied with bridgeria.

with hardware. 28N21837—3" size 28N21838—4" size 28N21839—7" size Pr. 1.06 Pr 1.23 Pr. 1.47

### RING CLAMPS



Ruggedly structed: easily adjustable. Made of corrosion-resist-

ant steel. masts. 6c 10 for 54c 28N21917 Éa. 28N21917 Ea. 6c 10 for 54c For 11/4" to 11/2" masts.
28N21918 Ea. 6c 10 for 54c

### FLOATING" GUY RING



Free-floating, not bind. Retains guy wire securely. Made of galacteel. Free-floating, Will

ınast. 28N21919 Ea. 12c 10 for 1.08 For 11/4" mast. 28N21920 Ea. 12c 10 for 1.08 For 11/2" mast. 28N21921 Ea. 12c 10 for 1.08

### BRIDLE RING



Anchors guy wire securely and permanently. Made of galvanized steel. 28N21923 Ea.

10 for 45c 100 for 4.27

# CHIMNEY MOUNT

Can be erected in minutes ... without special tools or drilling. Adjustable, two-section design permits unlimited space ing between brackets for maximum support of masts ½" to 1½". OD Complete with two 12-tr lengths of 34 galyan. 100 Complete with two 2:th lengths of 34 galvan-zed steel bands and hardware. 28N21834

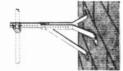
### WALL BRACKET



Anchors 7/8" to 11/4" masts safely and securely. Adjust able 6" to 15" from walls masts Heavy gauge rust-resistant

28N21835

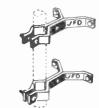
### **EXTENSION BAR**



Extension bar for above wall bracket. Extends range of wall clearance to 24".

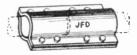
28N21836 1.76

### VERTICAL BRACKET



Extends masts 6" from wall, Grips masts ½" to 1½" OD. Made of corrosion-resistant galvanized steel. With hardware. Extends masts 6" from Grips masts 1/2" to 11/2 28N21840 2.12

### MAST CONNECTOR



Joins masts quickly and securely. Made of rust-resistant

steel.
For I'' to 11/8" masts. 28N21915 ..... 59c to 13/8" masts. 

# AM ANTENNAS AND ACCESSORIES



### **RELIANCE WINDOW MAST**

Enjoy the benefits of an outside aerial without the inconvenience of a roof installation. This fast, easy window installation. This fast, easy window most antenna improves relegion on roth standard broaderst and thort wave. Resuly installed in only three minutes. At the lead in strip, the wire ket down on sul, and the object done. 3 tention rode extens to 80 in thes, telescopes to 40 inches. Or timium planted steel construction. It is dosentally survey headers and the survey. i. a. s. rews, hordware and instruc-ons.

28N22006 -Shi q. wt. 11/2 lbs. 1.73

### LOW-COST AERIAL KIT



His 100 ft. 7 To derial wire, 40 ft. mail field lead in, 10 ft. ground wire, arrester, grown I ling, lead-in stig, 2 insulators, field kno.s.

28N16476—Shi q. wt. 6 h 1.09 1 CONDMY KIT: 1,) ft. 7 .- awith with a till lend it, lend in stip, ato itd clamp, 2 its flaters, null kinds knobs.

28N16478-Shi q. wt. 2 lbs. 69C

### ICA TENNA-SCOPE



New, built-in turi diradio antenna eliminates the use of an outside aerial and ground. Gives better relectivity and higher set needs that and higher set and any radio without the mean making any carruit changes.

28N16452-Shi g. wt. 1 lb. 1.76

### **ANTENNA LOOP**



For battery and midget sets. Reflaces antenna coil, high inductance permits removal of turns for adjustment. 434"x8".

28N16450—Each	48c
Lots of 10	

### ICA 3-IN-1 RADIO TUNER

Antenna tuner, wave tray, aerial elimingtor all in one instrument, defending on the manner of its connections to the radio set. Operates on any make or model set—enhancing performance.



10 for

### PLASTIC INSULATOR



Low-loss polystyrene insulator for use with 300 ohm twin lead. Holds line securely but will not pinch and change impedance. Attaches with a single wood or metal screw.

38N16958 100 for 4.50



WARD STAND-OFF INSULATOR Unique ¡ lasti: design holds any flat transmission line securely, but absolutely cannot pinch line or chinge impedance. Does not have to be strung on line. One screw attachment. Clear plastic cheds water.

38N16956-Euch

### MUELLER TWIN LEAD ANTENNA CLAMP

Here is a new standoff type insulator there is a new stancon type instantion that clamps on masts, cross-rins, [1] es, beams, etc. up to 13g" thick. Easy to use, grips mast securely, It rapidly supports the twin lead transmission line lead-in 2½" from the mast or [1] pe. All motal parts are complotely weatherproofed. Shipping



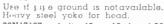
weight 6 oz. 38N17107—For Tw:n Lead. 10 for 1.37......Each 15c

### VERTICAL HOME ANTENNA

Eliminates d'ingerous horizontal wires, insures clear, noise-free reception. Includes special 12-ft. 4 section antenna mast of tust pool, flexible steel, 40 ft. load-in wire, 10 ft. ground wire, arrester, insulators, screws, 2 pipe straps, one strap mig. assembly.

28N21824—Shpg. wt. 4 lbs.....

### 3.70 3/8" PLATED GROUND RODS



28N17187 4 ft. 48c 10 for 4.56 28N17188 6 ft. 66c 10 for 6.27

### SINGLE LEAD-IN STRIP

Cap terminal each ond. 28N17101-Each 5c 10 for 45c



### "GRIP" GROUND CLAMP

Makes a vise-like grip on pipe. Sharp pointed screws make perfect contact.

10c 28N17105 ..... .0 : г

### PIPE GROUND STRIPS

Fro id anound clamp adjust the to fit any size pipe up to 2" in diameter. Provided with elip tor attaching ground lead. 28N17102

SAV: Mchil 10 for

### BRACH NEON DUPLEX ARRESTER

For the containing doublet antennar. Uses a little for the decided of an air alip or resis-tion of decword during lightning storms. Car-less heavy discharges sately. Fully Under-wright. Argroyed.

28N16701-Shpq. wt. 1 lb......

1.15

(A)

### PORCELAIN ARRESTER

(A) Housed in brown glazed; or selving 28N16753 - E.: h ..... 19c



### ARRESTER FOR DOUBLETS

(B) An approved affecter for the doublet type of antenna. Altigap type, inside the from ground. Poicel in case,

28N16950 .....

**AERIAL INSULATORS** Derendable rorcelain insulators. is sciew in type for holding lead-ins or grounds off walls; "D" is standard ng.l knob; "E" is strain insulator.

No.	Type	Size	Each	10	100
28N 16972	C	3"	51/2c	50c	4.50
28N 16986		7''	5c	45c	4.05
28N 16977	D	2"	4c	35c	3.15
28N16802	E	215"	5c	38c	3.45



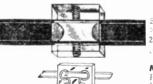
### **GLASS INSULATORS**

(F) Special tempered glass, unaffected by heat or cold. Has a high tensile strength and gives long, dependable service. Choice of 2 sizes, 3" and 34,4" long.

28N16850-3	" long	3	50
10 28N 168513	45c	100ong	4.05
201110001	- 4 1	011g	/(







### TWIN-LEAD SPLICE

Speeds splicing without the need ter twisting or soldering. .tl For

MOSELY DIPOLE CONNECTOR For center connecting 300 ohm line type folded dipole. Positive onto ction without soldering.

28N16953-Wt. 2 oz.....

### ANTENNA MOUNT

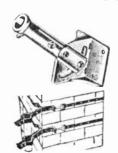
New "Universia" type for speedy ms' ill rien. Fits pip mst ill rich. Fits pipes, masts, up to 114 diameter. Allows complete retation and adjustment after installation. Cast aluminum base. Shi q. wt. 21/2 lbs.

28N22045

### CHIMNEY MOUNT BRACKET

Pair heavy plated steel brackets with sufficient binding to fit average chimney. Set up in 5 million without special tools.

28N22046-Shpg. wt. 2 lbs. 1.59



# AUTO ANTENNAS, VIBRATORS, AND ACCESSORIES



### MALLORY REPLACEMENT VIBRATORS

Mallory replacement vibrators for auto radios and fattery operated household receivers. Precision made, Mallory vi-brators are noted for their long life and trouble-free service. All vibrators are rated at 6 volts except types W24°A and W24b are rated at 4 volts and T4000, T4002 and T400° are rated at 2 volts.

Stock No.	Type	Each	"Lock you	Type	Each	Stock No.	Type	Lach
27N6114	-)-)-)	4.88	27N6136	294	2.62	27N6081	852	2.62
27N6096	245	4.12	27N6137	298	3.38	27N6085	553	2.62
27N7278	-245A	4.12	27N6093	505P	2.62	27N6086	154	2.62
27N6088	245(	4.12	27N7285	50·iP	3.38	27N7276	559	2.62
27N72801	W245A	4.12	27N6077	509P	2.20	27N6076	500	2.62
27N6097	246	4.12	27N6073	514	4.12	27N7293	870	2.62
27N7281	246A	4.12	27N6074	716	4.12	27N7287	903 M	2.20
27N7283	W246	4.12	27N6062	725C	4.56	27N6079	952W	4.12
27N6169	247	4.12	27N6107	742	4.12	27N6080	953 W	4.12
27N6098	248	4.12	27N7289	743	4.12	27N6081	954	4.12
27N6171	249	1.12	27N7277	745	4.12	27N7275	1100	2.62
27N6130	2730	4.88	27N6063	\$25C	3.67	27N7273	1501	3.38
27N6167	273D	4.88	27N6108	<20C	3.38	27N7271	T4002	5.70
27N6135	292	3.38	27N7292	839	3.38	27N7272	T4003	5.23

### MALLORY REPLACEMENT GUIDE

Includes alphabetical listing of radio and vibrator power supplies by mfg. and model number. Gives Mallory replacement in each case.

No charge with purchase of Vibrator. 23N19993

### MALLORY VIBRATOR DATA BOOK

A complete Technical in insul on the operation and application of 23N19992

### **CORNELL-DUBILIER VIBRATORS**



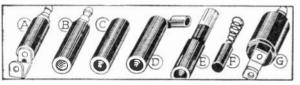
C-D, known to servicemen as one of the largest manufac-C-D, known to servicemen as one of the largest manufacturers of quality condensers, now offers a line of popular replacement vibrators built to the same rigid standards of quality for which they are famous. New "micro-metric" equipment permits e isy production maintenance of high telegrances. New ty, e pole coil and new type mounting. Completely enclosed in sponge rubber. Hermetically sealed.

Stock No. 27N6023	C-D Type C00	Mallory Equiv.	Each 2.62	Stock No. 27N6031	C-D Type	Mallory Equiv.	Each
27N6024 27N6025	C01 C03	510P 294C	2.62 2.62	27N6032 27N6033	C35 C42M	851 859†	2.62 2.62 2.20
27N6026 27N6027 27N6028	C20P	1100 S05P 654	2.62 2.62 2.62	27N6034 27N6035 27N6036	D06	248 249 273C	4.12 4.12 4.88
27N6029 27N6030	C23P	507P 859*	2.20	27N6037	D26	716	4.12

\* For Philos sets.

CORNELL-DUBILIER VIBRATOR GUIDE

### **RELIANCE AUTO RADIO SUPPRESSORS**



Quality black molded cases. Type

27N5283	Α.	Standard Spark Plug
27N5246	A	Special for Ford V8
27N5278	В	Compact Spark Plug
27N5247	В	Compact Spark Plug
		Type for Ford VS
27N5253	C	Cable Type for Buick
27N5285	D	Elbow Cable Type
27N5279	E	Standard Distributor
27N5293	F	Distributor Type fo
		Ford 1936 and earlie
27N5277	F	Distributor Type fo
		E-120 109 198 190 140

Description

Elbow Type for 1938 Plymouth

WHEEL STATIC ELIMINATOR

10 Assorted ... ke "A" with "L" connector.



27N5256

Each

Eliminates front wheel noise. Easy to install. Place in each hub cap. All rust-

. 14c

proof. 80 27N5294—Each..... 10 for..... ..72c

### WIRE WOUND UNITS G

Efficient type, do not impair motor Efficient type, do not impair motor efficiency. Low d.c. resistance, high inductance. Acts as r.l. choke. Extra rugged. 27N5296—Spork Plug Type. 27N5297—Distributor Type. 

### MASTER DISTRIBUTOR UNIT



### ANTENNA CONNECTOR



### RELIANCE "UNIVERSAL TYPE" AUTO RADIO ANTENNAS

### **ADJUSTABLE** TELESCOPIC

3 section, 56" type. Singlehole mount on any con-four. B ill Lewisel with lock-ing point permits adjust-ment to any angle and positive lock. Has excel-lent prik qui with minimum, note. Permanently attached shielded indisture proof to lead in and beyonet adapter. Rust-proof chromaum plated. 3 section, 56" type. Single

27N22007 ... 2.19 



3 sections, "o". Telescopes to 4". Single hole mount. Triple chrome plate their, with bake his meulation state discharge in Har 48 co.x lead-in with plants insulation, outer shielded loom, Layo-net and swivel con-

27N22009...3.19 Lots of 5........2.85

### ANTENNA RODS



For Buicks and other cars using similar windshield mount type antennas. 3 section, 36° maximum length. Easy to in till—set rod in socket and tighten set screw. Triple chrome plated brass with

27N21997—For Buicks . 1.49 

### SIDE COWL MOUNT



27N22000.....1.79 

Same features described above except 106-inches long, 4 section.

27N22001..... Lots of 5 ...... 2.75

### AUTONE AUXILIARY SPEAKER

Large 6"PM Speaker mounts in shelf behind rear seat, Largeb PM Speaker mounts in shell behind it at seat, enables passengers to enjoy clear reception without distracting driver. 3-way control switch mounts on dash, permits operation of front and rear speakers operately or together. May be used with home receivers also. Wire, escutcheon plate and arill instituted

22N19106-Shpg. wt. 3 lbs. . . . . . . .

### TIRE STATIC **NEUTRALIZER POWDER**





78c 







### ICA ADAPTERS

A. 27N16715—No. 2372—Lead-ın Adapter—Converts Delco to Motorola Fittina	,
Motorola Fitting	C
B. 27N16716—No. 2375—Motorola Pin Plug	60
C. 27N16717—No. 2378—Motorola Shielded Jack	2c
D. 27N16718-No. 2396-Adapter-Converts Motorola Pin Hug	
Delco Type	50

### **GENERATOR CONDENSERS**

Standard auto radio condensers designed to eliminate generator noise. Fully shielded. Dirt and oil proof.

Stock No.	Mfd	Each	10 For
27N14220 27N14215	.25	25c 27c	2.25
27N14216	1.0	39c	3.50

# BELDEN QUALITY WIRE & CABLE

















8204: 72 ohm twisted pair No. 18, strated
(7x26) No. 26 tinned; cotton wra; rull+:
in . 2 cond cable weather relating white
cotton triad overall; 100" O.D. 21 mint/fit
VP 61', Amen./C' 53dl at 1 m; 133 dl
at 100 m. r
19N20860Bulk Contract 3c
19N16174-500 it mool 10.88
8209: " ohm chielde i tw tell r r w
dit + and outer often tike 8204, 1.
current includes a open wrap and time it

TRANSMISSION LINE CABLES

Citi in in index i per wing copier i Find; 25° OD-2 in i /t i - tw.cn e inductor: VP 5°; Att i /C i i di it I me, I 4.9 lb it I 70 m l 19N 20861 — Bulk Coxtorit. 6c 19N 16162—570 ft. pool 22.20 32.20

| 19N16162—579 ft. p. od | 22,20 | 8205; Twisted pair, No | 4, h inded \( \frac{1}{2} \) \( \frac{1}{2

### Rubber Jacketed Portable Cord

N 18, tranded 41x3) base open, after wrip 14" rubber in Carled wa'r the crootton wrap, 12" rather over the

	Cond.	1 47- 24	Cost	Stock	
λο.	OD.	20.	Ιt.	λο.	10014
			_		_
5452	2-215"	19N20910	40	19N20909	3.17
×153	3-275"	19N20380	5 c	19N20379	3.97
8451	4-265"	19N20381	6.	19N20882	1.56
~ -					_

### SHIELDED AUTO & AIRCRAFT RADIO WIRE

Mfr's		Per I	t. '	100 Fr. S	pool
No.	Gauge	No.	Cost	λο.	Cost
S656 8655		19N16219 19N16218	5 c	19N20864 19N20865	3.67
5654		19N16223		19N20866	5.44

### Shielded Cable, Rubber Overall

No. 20, (transied (26x34) tunned appear cotton weap, rubber in . Callied with ottor brind, funed popper in id, Lotton wrap, rubber overall.

	8423, 3-c	ond."	8 124, 1-10	ind +
Pkg.	Stock No.	Each	Stock No.	Each
Per ft.	19N20869	.08	19N20870	.10
50 ft.	19N20843	2.91	19N20878	3,67
250 ft.	19N20845	15.47	19N20477	19.81

### LITZ WIRE, FOR RF COILS

19N16065 -8817: 7 No. 41, 2 nyl n wraps -100 ft . pool . . . . . . . 246

### TINNED BUS BAR, 100-ft. COILS

19N16111-8012, No. 14..., 81c 19N16112-3 11 15 ... 1.14

### MICROPHONE CABLE, VINYL COVERED





8411: No. 25 .trinded tirm d copper and
steel mixed, polyethylene in at aned copper
Frid; 40 mirfytt 110" OD.
19N20857—25 ft ->   Co.t 91¢
19N20858—100 ft. pool3.14
8401:Sime contraction: 8411 but heavier
n 25 · n f /tt , 200" 00
19N20846 ft
19N20847 11th 11th 2.20
19N20844 -l 1) ft post4.41
8422: 1 and No. 22, trin 1 1 (16x34).
Tann deropper, polyethylene in Cabled
with a tron brind and firm a opper braid;
ductor and remaining conductor connected
to theld. Vinyl over all.
19N20868 -Bulk, Cost per ft66
19N20874 -25 ft roil .1.32
19N20875 - 1) ft col . 2.65
19N20876 LOO ft . DO L 5.29

### RUBBER COVERED MICROPHONE CABLE



8410. Tinned copper and third teel. Health that for Mixed of Libberyam and third private braid; tuned one of truly the library black

DM 1 + 0 13	Kr L		
19N20833	-Balk	rotperft.	7c
19N20834	-Co.t	per off the confi	2.94
19N20935	Co t	in 10 ft. pool	5.66

# 8414

8200







### Indoor Aerial & Lead-in Wire

8414: Indoor aerial, flexille No. 25, 13 No 36 tinned, vinyl in .
19N16130 25 ft. card. Co t186 19N16131500 ft. pool1.84
8200: Leadan, No. 18, 7 No. 27 tinned, rubber m.: ,126" OD.
19N16228 — 100 ft. spool Cost
8206: Same, but tinned copper braid shield overall, 155" OD. 19N20871—Co.t.per ft

### 300 Ohm Twin Lead Wire

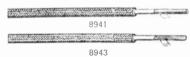
8225. One bare, one time thead, parallel conductor. No. 20 (7x.8) Fix.ble strandconductor No. 20 (7 ing; polyethylene ins. 19N17137—Price per 19N17137—Price per ft . Price per 100 ft. Price per 510 ft. 9.41

### Cathode-Ray Tube Lead Cable

8868: 20,000 voltaine., 200" OD. 19N20891 — 25 ft. spool. Co. t. 19N20892 — 100 ft. spool ....2.87

### SHIELDED PHONO-PICKUP CABLE

8431: Floxii Is and limp. No. 24, stranded (16x36) tinned; rubber ins., tened appear braid, cotton braid overall; .095 " OD. 19N20872 —B ilk. Cost per it..... ..36 19N20848—1 ) it. spool............... . . . . . . 2.35



### GENERAL USE HOOK-UP WIRE

Tinned conductor, cellulose acetate yarn wrap, cel. acet. braid, lacquer coating. 1000 V. breakdown, OD's from .072" to .087". Choice of black, blue, areen, red, yellow. 8941—No. 20 :olid 8943—No. 20 :randed Pkq. No. Each No. Each No. Each 100 ft. 19N16066 26c 19N16081 28c 100 ft. 19N16067 7.87 19N16069 8.82 1000 ft. 19N16067 7.87 19N16069 8.82

8945—No. 18 solid 8947—No. 18 stranded Pkg. No. Each No. Each 100 ft. 19N16070 294 19N16073 32c 1000 ft. 19N16072 9.55 19N16073 10.66

8938; No. 14 stranded, red and black only. 19N16082 110 ft. pool 1.70

19N16082—110 ft. pool 1.70 19N16157—50J ft. spool....



### LOW-LOSS RF PUSH-BACK WIRE

Tinned and tor two rellubre a relate yarn beautiff wixe 1 1000 voltabreak lown. OD's braid, wixel 1000 volt; break lown. OD's from 007" to 005". Black, blue, green, red,

rom. 607 to 2003 - Black, buth, green, red, 8841—No. 20 solvid 8839—No. 20 stranded Pkg. No. Erith. No. Each 25 ft. 19N16246 - 29 19N16249 - 32 1000 tt. 19N16245 8.97 19N16250 10.29 8861—No. 18 rolid 88 Pka. No. Eich 25 ft 19N16199 .31 100 ft. 19N16204 1.21 8844 - No. 18 stranded Each 19N16208 .35 19N16205 1000 ft. 19N16203 10.00 19N16209 11.02 8863 - No. 16 solid 8862 - No. 16 stranded Pka. No. Each No. Each 25 ft. 19N16220 .35 19N16230 .41 100 ft. 19N16221 1.43 19N16231 1.55 1000 ft. 19N16222 12.57 19N16232 13.90



### Rubber-Insulated Push-Back Wire

No. 2) tinned, rollon wrap, unvulcanized rubber in ., yarn braid, larguer coating, 2000 volts breakd win. Solid type has .075" outer diameter. Strandled type ha. .080" outer diameter. Green, blue, red, yellow, and black. Specify color. 8837---Solid 8838-Stranded

	No		No.	
25 tt	19N16258	.29	19N16261	.32
100 ft.	19N16259	1.15	19N16262	1.21
1000 ft	19N16260	9.93	19N16263	10.29
Shielde	H Hook-Up	for Gri	d Leads, etc.	
			tinned; rubb	
			it, tinned	
braid o	verall; .11	0" OD.	4000 volts	break-
down.				
19N162	93— 25 ft.	coil		59¢
19N162	94-100 ft.	.pool .		2.35

# BELDEN QUALITY WIRE AND CABLE

### CABLE FOR INTERCOMMUNICATION AND PUBLIC ADDRESS SYSTEMS

### INTERCOM AND SOUND SYSTEM CABLE



8740-42. 22 gauge solid copper; Formvar enamel coating; waxed cotton braid; color coded; conductors cabled in pair; overall brown cotton braid; lacquer coating. brown cotton braid; lacquer coating 8743-45. As above but vinyl plastic insulation

Туре	No. Cond.	Diam.	Stock No.	Per Foot	Stock No.	Per 100 ft.
8740 8741 8742 8743 8744 8745	2 4 6 12 18 30	.130 .180 .220 .255 .280	19N16134 19N16136 19N16138 19N16140 19N16142 19N16144	2c 4c 5c 7c 9c 15e	19N16133 19N16135 19N16137 19N16139 19N16141 19N16143	1.76 3.23 4.12 5.14 7.50 11.91

### SHIELDED INTERCOM AND SOUND SYSTEM CABLE



8734. 3-conductor; 22 gause. Tinned copper, flex. stranding; vinyl in; waxed cotton braid; color coded; one conductor tinned copper braid sheld; two conductors unshielded; brown cotton braid; la guer

G-0-11.									-
19N16147Per	ft								<b>6</b> ¢
19N16146 -Per	100	ft.							5.08

### PA CABLE - AMPLIFIER TO SPEAKER



8799. 18 gauge 2 conducto: bare copper; lexible stranding; Formwar enamel coet; flexible stranding; Formwar enamel coet; cotton wra; cotton braid; color coded; cortouctors cabled; tinned copy or braid sheld.

19N20867 - Per ft 4c

19N20814 - Per 100 ft. pool 2.79

19N20911 - Per 500 ft spool 13.86 8483. 18 gauge 3 conductor bare copper; vinyl plainte in ulation; rolor coded; conductors cabled 19N16148 -Per ft., 112¢ Per 170 ft...1.26

### COAXIAL CABLE

8229. 72 ohm. 2.2 Gauge solid. For use with television antenna. Bare copper; polyins Halion; finned copper kraid shield; black vinyl ethylene I last, insulation; tinned cor I lastic tacket. Br. il down voltage 2,000. 19N17138 19N17139



### VOICE COIL LEAD WIRE

8127. AWG No. 25. Bare copper wire braided. Stranding 32x40. Dia. .024". 10 ft. to a card. a card. 19N16153......14c



Test Prod Wire, Flexible and Limp

No. 18, 65 No. 36 tinned; cotton wrap, rubber overall; red or black. Specify color. 8899: 5000 volts ins., 140° OD. 19N16335—100 ft. spool. 1.47 19N16337—1000 ft. spool. 12.05 8898: 10,000 volts ins., 230° OD. 19N16332—Bulk. Cost per ft. 3¢ 19N16331—100 ft. spool. 2.35

### HEAVY RUBBER CORD

Type SJ. The thick helt of flexible rubber that covers the conductor made of mouth orderesisting, abrasion-proof high quality "jacket"



1	No.	Size	Ft.	100 Ft.
†	19N20945	18+-2-wire	4 ½ é	4.05
	19N20946	162-wire	5 é	4.50
	19N20947	142-wire	14 c	12.60
	19N20948	183-wire	5½ é	4.95

### PARALLEL RUBBER LAMP CORD

Both conductors sheathed in coulding of tough live subber. Groove between con-ductors allows easy separation without fear of running insulation. In Black and Brown-

# MICROPHONE & TRANSMISSION CABLE

### TWIN LEAD TRANSMISSION LINE



TWIN 300 LEAD Provide: proper match of antenna to all trailing 300 ohm amphenol 14-056 represent the latest decrim in RF transmission line. Provide: proper match of antenna to all trailing 300 ohm in rut FM and televior use with television receiver. In broad or use with television receiver. Polyetryle to include an adverse weather conditions.

19N17130 —Per foot

Per 100 feet.

### FEDERAL SHIELDED 300-OHM LINE

Type K-111. M.nimizes noise, "snov." and 'quo ts' due to transmission line pick-ups. Also offers excellent protection ad and ignation treet cars, fluorescent lights, diathering machines, 19N17136 Per 100 ft ....

AMPHENOL LOW-LOSS H F COAXIAL CABLE

### 300-OHM TUBULAR TWIN LEAD



14-271. Famous Angletro, hout, Particularly recommended for dislaw FM and TV and lattor. Durable The total rolvethy-me dielectric wall residues twenters. acids, alkalic and cit. Ferman , flexit le at temperatures actow  $\kappa = 70$  (

19N17129 75-ohm Amphenol 14-080 Twin Lead. E pec my for low impedit a 
 application
 2¢

 19N17131
 Per it

 Per 100 ft.
 1.90

Delectric is a solid flexible low-loss mechanically startle thermoplastic of Polyethylene proven nort efficient in high frequency transmission circuits. All cables listed to a mid, alkahs, oils end gasoline. All have a braid over the Polyethylene dielectric with a heavy Vinylouter covering overall. Many other conductor types available.

Stock.	Amphenol No.				tric O.D.	Cable O.D.	Co.+ Per Ft
19N17120 19N17121 19N17124 19N17122 19N17123	KG/8U RG/111U RG/22U RG/58U PG/59U	5.1 75 95 53.5 73	20 16	7x2t 7x2t No. 20 No. 20 No. 22	116"	.181" .195"	13c 13c 14c 7c 8c

### AMATEUR TRANSMITTING TWIN LEAD

75-ohm Amphenol 14-023. For amateur transmitting antennal yets in Conservatively rated at 1000 watts, at 30 MC or lower frequency 7¢ 6.48

300-OHM TUBULAR TRANSMISSION LINE: Type 14-076. For the up to 1 KW. Overcome monture effects on twin lead,  $^{1}2''$  outside 19N17133—100-ft. Coil......6.48 Per foot.....7€

# Single Cond. Crystal Mike Cable

Fiexal le stranded tunned copper with funned copper braid shield; cotton wrap and lacquered braid Rubb er overall.

19N20842—Dia. 280". Per foot

50-Foot Roll

2.40

100-Foot Roll

4.59



### Crystal and Veloc. Mike Cable

Low impedance, 2 conductors, color-coded, in abration-proof tinned copper the lding with outer covering rubber. 

### SILICONE COMPOUND





### 3 Conductor Shielded Cable

Three color-coded stranded conductors in 

### WIRE-CABLE AND SPAGHETTI

### PUSH BACK WIRE

### SOLID TINNED COPPER CORE TYPE

No stripping is necessary. Iust push back the double cotton - covered moisture -proofed braid No. 20 wire. 4 colors for circuit identification. Weight 2 lbs. per 100



### STRANDED TINNED COPPER CORE TYPE

Very flexible wire of multistrand tinned copper; equivalent to No. 20. Cotton braid pu hes bick easily. Available in 4 colors. Weight, 2 lbs. per 100 feet.

### 25-Foot Coils

19N16350 Red 19N16352-Black 19N16351 Grn. 19N16353-Yel. 19N16351 Grn. 191616 Your Cost (10 for 2.25), 24¢

50-Foot Coils

199-Foot Coils

1000-Foot Spools 19N16374 Red 19N16376 Black 19N16375 Crn. 19N16377 Yel. Your Cost, Per Spool..... 6.95

### MULTI-CONDUCTOR CABLE



A high grade, heavily insulated cable. Each lead has a different colored rulber jacket for easy identification. 20 gauge, stranded tinned copper wire. Cotton braid

No.	Wires	Per Ft.	100Ft.
19N16089	3	4c	3.60
19N16090	4	5€	4.50
19N16091	5	6c	5.40
19N16092	6	7ć	6.30
19N16093	7	8c	7.20
19N16094	8	9¢	8.10
19N16095	9	10c	9.00
19N16096	10	116	9.90

### BELL WIRE



roll. Your Cost.....38¢ 19N16051 — 25 it.

roll. Your Cost..... 15¢

Excellent grade 19N16338 -- 1/2 lb.

19N16354 Red 19N16356 Black 19N16355 Grn. 19N16357-Yel Your Cout (10 for 2.43), Per Coil. 27¢ 50-Foot Coils

19N16362 Red 19N16364-Black 19N16363 Grn. 19N16365-Yel. Your Cost (10 for 4.68), Per Coil. **52**¢

100-Foot Coils 1000-Foot Spool.:

19N16378 ked 19N16380-Black 19N16379 Grn. 19N16381-Yel Your Co.t, Per Spool...... 7.95

### COLORED RUBBER WIRE

Stranded and tinned 18 gauge copper wire covered with a live rubber compound. Very flexible; eazy to strip. Solders in-stantly. Available stantly. Available in three colors.

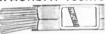


19N16272	Red	Your	cost e i.
19N16273 19N16274		5 for 1.00	<b>22</b> ¢

### COPPER BUS BAR

Round tinned copper bus bar No 14-24" length: 19N15965 Dights 100 lath: Your Co.t.... 19c 1.80

### SPAGHETTI TUBING



Highest grade cambri tubing. Red, yellow, green and black. 19N15960-Spenify Color Per 30-Inch Length ...... 636

### ASSORTED SPAGHETTI 8" LENGTHS

Bundle of twenty-four paeces. Malk of tring, could not bling. Consecting all ordered diameters & 19N15959...per в .ndle 19¢



### SPAGHETTI ON SPOOLS

H. shigrade varriche Leamitte tubing, 400 V. dreftetric strength. On jbre pool., 8 and 12-yard lengths.

For No. 12 wire, in 8-yard length 19N15952-Green 19N15951—ked 19N15955—black

19N15954 - Vellow

For No. 14 wire, in 8-yard length 19N15750 -Red 19N1575 19N15753--Niack 19N15752—Green

19N15751 - Yellow

For No. 18 wire, in 12-yard length;: 19N15754—Black Any of Above Sires, Your Cost, Per Spool..... .....67¢

### COPPER SHEILDING

Flexible, he willy tinned corper chielding clides over cables, bunches



Stork No. In. Dia.   Per Ft.   Per 100 F	L.
19N16233 5" 3¢ 2.41	
19N16237   13ta"   2½¢   1.53	
19N16238 34" 3½6 2.68	
19N16239 12" 6c 5.35	

### FINEST GRADE MAGNET WIRE



Highest au ility copper wire. Excellent for rewarding nower trans formers and chole: win !ing coil, or any other tricil purpo.e. Ideal for use in shops, schools, laboratorie:, oto

### Double Cotton

Popular with amateur, and experiment in Highest quality.

	Stock	i	rize	Ft.	Your	
1	No.	1	Bas	PerLb.	1, Lb.	1 2 Lb.
	19N20973		16	122	\$0.27	\$0.46
	19N20971		18	192	.27	.50
	19N20975		20	298	.30	.57
	19N20976		.).)	161	.37	.63
	19N20977		24	711	.43	.73
	19N20978		26	1050	.46	.80
	19N20979	ł	28	1630	.55	.97
	19N20980		30	2420	.60	1.14
	19N20981		32	3500	.80	1.37
	19N20982	į	34	4920	.98	1.77
	19N20983	'	36	6660	1.27	2.23

### Plain Enameled

Stock	Size 1	Ft.	Your	Cost	Stock	Size	Ft.	Your	Cost
.\0.	B&S	Per Lb.	Lb.	Lb.	No.	B&S	Per Lb.	<sup>1</sup> 1 Lb.	12 Lb.
19N20950	1 16	125	\$0.23	\$0.38	19N20956	28	2030	.33	.55
19N20951	18	202	.23	.10	19N20957	30	3220	.36	.59
19N20952	20	319	.25	.43	19N20958	32	5100	.41	.61
19N20953	-1.)	506	.25	.44	19N20959	34	5(15()	.46	.78
19N20954	24	5414	.27	.46	19N20960	36	12800	.59	.91
19N20955	26	1250	.30	.50	19N20961	-38_	20300	.78	1.15



### INDOOR ANTENNA WIRE

Multi-trind flex.ble copper with covered by a brown mero-mised cetton frind. For indoor or AC-DC antenna u.e. 25-ft. hink.

17c 19N16167-100-tt. Coil. 53¢ 17c



### TRANSMISSION CABLE

Consult, of twilted rul bersoovered a inductors over 1 by a 111-k weather; roof botton outer 



### COTTON TWISTED PAIR

18 g : 1 : -, 1 : " R C. wire with 1 cotton covering. Y-llow and green mixture. 3¢ 19N20902 — Per Foot. 6.75



### TELEPHONE WIRE

Per III) Feet 2. 19N20896 - Conductor No. 19. Per Ft. 446 2.45 Per 100 Feet .....



### SHIELDED LEAD-IN, HOOK-UP WIRE

10-strind wire covered with live rubber, waxe I cotton I raid and woven timed shield 19N16240-



3¢ Per Foot. 50-Foot Roll ... 1.35 100-Foot Roll ... 2.25



### THERMOPLASTIC HOOK-UP WIRE New thermopla trainculation strips clean-



### COPPER AERIAL WIRE

Made of the finest copper obtain ible. All rolls quarinteed to be full length and standird gauge as pecified. Fits any type derial.

### 

-	H),	Size	Per Coil	10 Coils
	19N16041 19N16042	7/20	32c 42c	3.14 3.99
	19N16043	7/22	59c	5.60

### ENAMELED STRANDED-100-FT. COILS

	Si 10	Per Coil	10 Coils
19N16117	7/2.	1.08	10.26

### SOLID ENAMELED-100-FT. COILS

No.	Size	Per Coil	10 Coils
19N16118	No. 14	81c	7.70
19N16119	No. 12	1.17	11.15

# INSULATORS

### Johnson Thru-Panel insulators



White glazed porcelain, non-hygroscopic. Specifically designed for high RF. lack types have terminals for connection alove and below panel—take, andard banana pl.q.. All have longest possible leakage paths. Nickel-plated brass hardware.

Stock	Type No.	Top	Bot.	Panel	Hard-	
	Typersor					12.
No.	1	Ht.	Ht.	Hole	Ware	Ea.
38N16736	135-10	111"	1 2"	1 2"	10 32	210
38N16737	135-40.1	11."	15"	1,"	Jack	26¢
38N16738	135-12	7.77	3.7	716"	10.326	18∉
38N16739	135-12.1	7.8"	3/8"	16"	Jack	24¢
38N16740	135-11	5 ,"	316"	i lb	6 32	15¢.
38N16741	135-15	13/8"	11 16	916"	10, 32	26€
38N16742	135-15J	13/8"	11 16"	916"	Jack I	35∉

### Johnson Stand-Off Insulators









All-purpose stand-offs of white alized porcelain. Supplied with nickel-plated hardware as listed hardware.

. 5	tock No.	Type No.	Fig.	Ht.	Hard- ware	Each
3	8N16746	135-22	1	1"	8.32	11¢
3	8N16748	135-22.1	- 4	1 "	Jack	14¢ :
3	8N16745	135-20	1	12,"	10.32	12∉
. 3	8N16744	135-20.1	1	120"	Jack	15∉
	8N17024	135-65	- 3	13 4"	-10.32	18∉
3	8N17025	135-66	- 2	231"	$^{-1}_4$ 20	41¢
3	8N17026	135-67	1)	412"	1 20	50∉
L						

### JOHNSON LEAD-IN BUSHINGS



For use where insulated mountings are needed. Type 5 of needed. Type 5 of white alized porcelain, Type 6 of Alsimag 196. All have long leakage path. Cushion washers and necessary hardware furnished.

			Dimensions	+
Stock No.	Type No	Fig.	Hr. Dia, Lht.	Each
38N17020	135-50	- 6	19" 31" 2"	21¢
38N17021	135-51	- 6	13 16" 11 14" 27 8"	29¢
38N17022	135-52	6	112" 13," 11,"	47∉
38N17023*	135-55	5	1 3 "1 3 1" 1 1 1"	18∉

\* Made of Alsimag 196.

### JOHNSON FEEDER SPREADERS



Ideal for receiver and transmitter leadins. High grade, low ab on tion, undered porcelum. Sitioone impreonited for fine toware repellent chiracteristics. Type 136-122 is provided with not hes for \$1\frac{1}{2}''\$ line spacing. All have \$\frac{3}{2}\xi1^2\_2''\$ rass section.

ŀ	Sto k No.	Турн Мо.	Lqth.	Each
	38N17027	136-122	2"	.10
	38N17028	135-124	4"	.14
	38N17029	136-126	6"	.18

### JOHNSON CONES



of ultra suc-im loss at high Threads tapped remic. Ideal f Made of ultra stealite anto ceramic. Ideal for mtg. condensers, coils, tube rockets, other HF apparatus. Complete with n.ta. hardware.

Stock No.	Type No.	Ht.	B. Dia.	Thread	Ea.
38N17005	135-500	5 <sub>N</sub> "	5 4"	6.32	.18
38N17006	135-501	1"	3 /"	8.32	.21
38N17007	135-502	112"	1"	8.32	.38
38N17008	135-503	2"	1!\(\z''\)	10/32	.44

### ICA STAND-OFF INSULATORS



Made	01	wł	nite	gla	70	d	i	n	S	u	lex
38N16											
38N16	731	ì	34"	high	h.						90
38N16	732	1	3,4 "	hial	h.						110

### NATIONAL ISOLANITITE PLUG AND SOCKET



For use v	/ith	XR-16	5 coil
forms.			
38N14614			4 54
PB-16 Plug.		4	4 34
38N14615			
XB-16 Socke	et		45≎

### NATIONAL STEATITE "CONES"

GS-6 and GS-7 tapped 10/32; all others tapped 8/32.



### National Isolantite Stand-Offs



Metal mor Ideal for r.i				ltom.
Stock No.	Type	Dia.	Ht.	Ea.
38N14479 38N14480	GS-1 GS-2	12"	136"	.24
38N14481 38N14482	GS-3 GS-1	3 "	27.7.	.60 .75
38N14475	GS4A	3."	67	1.05

### STRAIN INSULATOR



			glazed		
stra	111	in	sulator	tor	an
tenr	110	guy	wires		
38N	17	175-	-Each	<b>5</b> ¢	
1 ) F	OF				400

### RIRNBACH X-MITTER LEAD-IN INSULATORS



Glazed porcelain 234" high. With hware and washers for water light seal. With hard-

Stock No.	Rod	Bushing	Each
38N17037	10"	Metal	1.03
38N17038	15"	Metal	1.18
38N17039	10"	Porcelain	1.32
38N17040	15"	Porcelain	1.68

### SMOOTH COIL FORMS



Spenial value for servicemen-Blank bakelite forms, suitable for winding coil to any specifica-tion you require. 4, 5, and 6 prong types.

29N10060 - 4 prong type. 29N10061 - 5 prong type. 29N10062 - 6 prong type.

Any Above, Eich..... 21¢

### RELIANCE RIBBED COIL FORMS



Made of high quality low-loss Libelite. Ribbed for airspaced winding. Krarled fling for ease in handling, grooved for wave band index Eight ribs.

### Medium Size

Undrilled. 1	4	a	. 3	ш	34	Эľ	е	Τ		3.,8	h	. in	
29N9630—4-Pron 29N9631—5-Pron	Į								1	Eac	ch	-	<b>=</b> ,
29N96315-Pr in	1								ſ			-5	<b>5</b> ¢
29N9632—6-Pron	1								ì				386

### Small Size

Undrilled. 135"	diameter. 214" high.	
29N9988-4-Prong.	<u></u> <u>.</u>	
29N9989—5-Prong.	Each 25¢	
Z9149990 -0-Pron 1.		,

### AMPHENOL MINIATURE **POLYSTYRENE FORMS**





Un fulled $3_4$ " one, $1^4_{\rm P}$ " long. Permanent mtg, form has taked hole in centur for
self tapping ser wa.
29N11577—Permanent Mtg
29N9629_6-Propg Form 28c

### **AMPHENOL "912" PLASTIC RODS** SHEETS-TUBING-STRIPS



### "912-A" POLYSTYRENE RODS

Expertly molded from pure low-loss polystyrene. Available in 12" lengths for machining special coil forms and low loss

Stock No.	Dia.	Type No.	Each
38N8015 38N8067 38N8068 38N8069 38N8016 38N8017 38N8070	1/8" 1/8" 1/8" 1/2" 5/8" 1/2" 5/8" 1/2" 1/2"	19R125 19R250 19R375 19R500 19R625 19R750 19R1000	.02½ .08 .17 .30 .48 .68 1.26

### "912-A" SHEETS

Mide of low-loss Polystyrene, 12"x16" size ideal for use when a window pane leaf-in it deared

Stock No.	Typ- No.	Dimension	E+h
38N8025	19-0628	4x8x <sup>1</sup> 16"	.16
38N8028	19-0938	4x8x <sup>3</sup> 52"	.20
38N8108	19-093	12x16x <sup>3</sup> x2"	2.18
38N8026	19-1258	4x8x <sup>1</sup> x"	.24
38N8019	19-125	12x16x <sup>1</sup> x"	2.71
38N8027	19-2508	4x8x <sup>1</sup> x"	.39
38N8020	19-250	12x16x <sup>1</sup> x"	5.44

### "912-A" TUBING

Polystyrene tubes 12" long with 1 h" wall thickness. For coil forms, Extremely low

Stock No.	Type No.	Dia.	Ea h
38N8029 38N8030 38N8032 38N8031 38N8033 38N8034	19T3-062 19T4-062 19T5-062 19T6-062 19T7-062 19T8-062	5 lh"   3 /k"   1/2"   3 /4"   1 "	.09 .11 .14 .19 .23

### "912-B" STRIPS

A synthetic rean having transparency greater than most glass and with good insulation characteristics. Can be shaped (when heated), drilled, cut, etc. For coil supports, line spreaders, frimmer bases or publing post or tip jack mounting straps.

Stock No.	Type No.	Width	Thick- ne.	Ea.
38N8066 38N8085 38N8086 38N8087 38N8088 38N8089	65TS1-500 65TS1-1000 65TS2-500 65TS2-1000 65TS4-50 65TS4-1000 65TS8-50 65TS8-1000	1/2"	1 1 " " 1 1 " " 1 1 " " 1 1 4 " " 1 2	.18 .30 .22 .37 .30 .53 .58



### **AMPHENOL POLYWELD "912"**

Colories, transpar and and ready to use. Pure poly, tyrene in solution. Matchle, s for "doping" coating impreanting or sealing. Used as an adherent, Polyweld joins two section of polystyrene. It contains solvent, that a stridy "wold" surfaces into a under unit. Will not disturb as not constant, when used on coils, ceramica, wine or insulation. Recommended for VHF, UHF and general electronic applications. Applied by dipping, or with a bright. Dries, ufficiently in 4 to 8 minutes, leaving a hard transparent coating of pure polystyrene. Non-hygroscopic of pure polystyrene. Non-hygroscopic

17N15362-2 oz. bottle	29¢
17N153634 oz. bottle	38é
"916-2" Thinner for "912".	154

# FLUORESCENT FIXTURES FOR THE HOME

### ALL ADAPTOR TYPES SUPPLIED WITH CORD, PLUG AND 4" CUPS



### DRAKE FLUORESCENT FIXTURES

Gracefully rounded, rich modern styling makes these fluorescent fixtures ideal for kitchen, bedroom, hall or office. Scientifically designed and engineered for maximum lighting efficiency plus outstanding beauty. Steel reflector has baked-on white enamel finish. Streamlined, high-polish aluminum ends with choice of trim. Uses 2-20 watt lamps. Dimensions: 26x83/4x23/4". For 115-120 volts, 60 cycles AC. Shipping Weight 8 lbs. U/L approved. Less lamps.

### ADAPTOR TYPE

Stock No.	Trim	Each, Lots of 3	Each
33N25594	Chrome	5.37	5.85
33N25596	Chinese Red	5.67	6.17
33N25598	Blue	5.67	6.17

### FLUSH TYPE

33N25595	Chrome	5.97	6.50
33N25597	Chinese Red	6.27	6.83
33N25599	Blue	6.27	6.83



### **FLUORESCENT KITCHEN UNIT**

Maximum light without shadows or glare. End pieces completely cover body and sockets for protection, yet permit removal of lamps without disassembling unit. White baked-on enamel. Uses 2-712 20 wat: lamps. For 110-120 volt 60 cycle AC. 247/8x534". Less lamps.

5.35 33N25551-Shpg. wt. 7 lbs. Eq. 4. Each, in lots of 3... 4.80



### NEW FLUORESCENT KABNIT-LITE

Scientifically designed to throw soft, glare-tree fluorescent light all over the top of your range, sink or other work area. Has convenience outlet for plugging in other applicances. Finished in gleaming white, hip-proof, baked-on enamel with brilliant chrome trim. Maiches the most medern kitchen. Non-stati; lastic shield won't crack and can be cleaned easily with soap and water. Shipping Weight 4½ lbs. For 110 volts, 60 cycles AC.

33N25592-15-Watt 181/2" Long. Lis	st 7.95 Net <b>5.19</b>
	4.77
33N25593—20-Watt 241/2" Long. Lis	st 8.95 Net 5.85
Each, in lots of 3	5.37



### DELUXE DESK LAMP

1. Lights entire desk area. Shade and base of one-piece pressed steel, baked wrinkle-taupe finish. Uses 15 W. lamp. 1334" H., 1914" shade. Less lamp. List 8.35.

33N25	550-	-W	t. 8	3	lbs	- 40
						5.60
Each,	lots	oí	3			 4.98

### ATTRACTIVE **FLUORESCENT DESK LAMPS** FOR HOME & OFFICE

Fine quality lamps of durable construction and rich finish. Give excellent light coverage over work area.

### EXECUTIVE DESK LAMP

2. Blends with any decorative 2. Biends with any accorditive scheme—heavy cast base and column, bank bronze finish. Base has large pen and pencil well. Uses 15 W. lamp, 110 V. 60 cyc. AC. Less lamp.

33N:	25563	-W	t. 1	1	lbs.		
List	14.60	), Ec	ich			9.5	4
Facl	n. in	lots	of	3		9	76

### CIRCULAR FLUORESCENT LIGHT

Artistically designed fluorescent unit of heavy gauge steel. White baked-on enamel, chrome center trim. Flush type or adaptor type mounting. With glareless 32 watt circline lamp. 110-125 volt, 60 cycle AC. 12" x 334". Shpg. wt. 7 lbs. Fed. Excise Tax in-cluded.



Stock No.	Type	Ea. Lots of 3	Each
33N25556	Flush	7.02	7.64
33N25586	Adaptor	7.02	7.64

# THE REAL PROPERTY.

### DELUXE CIRCLINER

Fixture of unrivaled elegance-new Fixture of unrivaled elegance—new circular fluorescent light adds beauty to any room. "Neptune" model features attractive etched glass center ornament with polished brass tinial. Available in flush or adaptor type mountings. With lamp. 110 volts 60 cycles. AC. White baked-on enamel. 12" x 34/4". Wi. 7 lbs. Fed. Excise Tax included. List 16.45.

Stock No.	Type	Ea. Lots of 3	Each
33N25530	Flush	9.87	10.75
33N25581	Adaptor	9.87	10.75

### SHIELDED CIRCLINER

unusual lighting unit! Lumnaire fluorescent finished in White baked enamel with beautiful etched design glass bowl. Available for flush or adaptor mounting. With lamp, 110-125 V. 60 cycle AC. 14½" x 5", Wt. 6 lbs. Fed. Excise Tax included. List 20.90.



Stock No.	Type	Fa. Lots of 3	Eq.:h
33N25582	Flush	12.54	13.65
33N25583	Adaptor	12.54	13.65

### PIN-UP MIRROR LIGHT

Novel effect with excellent illumination—for homes, hotel: and institutions. Finest 8-inch plate glass mirror circled with fluorescent light. With 12-inch diameter, 32 watt glareless circline and 6-ft, cord and plug. Buffers on back allow an circulation between wall and fixture 110 V. 60 cycles. AC Shpg. wt. 9 lbs.



33N25558—Liet 19.95. Federal Excise Tax included. Each 13.03 11.97

### ALL-PURPOSE PIN-UP OR BED LAMP

Ideal for every room in the house . . . under kitchen tabine's over mirrors, desks, on any wall. Perfect for reading or sewing in bed. One lump is sufficient for a double bed. Plastic shield assures glare free light. Has U.L. app. cord and plug. 14-watt size. Complete with detachable clamps for headboard. Overall dimensions: 2x25 x21". Shipping weight 4 bs. Less lamp.

33N25590--- Ivory Trum .. Ea. Lots of 3 4.17 Singly 4.54 33N25591—Grained Walnut Trim Ea. Lots of 3 4.17 Singly 4.54

### LAMPLIGHTER FLUORESCENT LANTERN

Provides brilliant flood light at the flick of a switch—wherever you want it, indoors or out. No connections necessary—operates on standard portable 45 volt "B" batteries. An ideal lantern for camping, hunting, fishing, home or industrial use. Contains shatterproof plexi-glass window for absolute safety. Bottom is hinged for easy replacement of batteries and tube. Comes complete with standard 6-watt fluorescent type tube and two batteries. List 10.95. batteries. List 10.95.



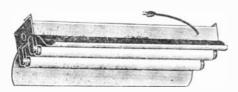
33N25564—Lantern	Size:	41/8"x7	7/8"x9"			 8.21
20N20614-Repfacem	ent I	Burgess	Batter	ies.	Each	1.82

# FLUORESCENT FIXTURES FOR STORES, OFFICES

A good fluorescent light installation in commercial and in-dustrial establishments increases the efficiency of workers. Better light and brighter work areas reduce eye strain and create pleasanter working conditions.

Power requirements are lower too, because fluorescent light gives illumination of greater intensity for the same wattage. Listed here are several industrial units attractively designed and carefully engineered to meet your needs.

# INDUSTRIAL UNITS FOR 105-125 V. 50-60 CYCLE AC OPERATION



### INDUSTRIAL PLUG-IN FIXTURE

Constructed for convenience—pluas into any socket. Adaptable for home or industricil use -provides intense dicieless light where you need it. Figureered for continuous row lighting over benches and machines; knockouts at each end of steel channel makes it rossible to mount units and to end in continuous rows of light. Latest type ballasis fully enclosed, with starters easily accessible on side. Uses 2.20 watt lamps, Gray steel housing, with high gloss Sno-white reflector. Complete with 6 ft. cord and 1 lug. less lamps. Overall size 4½" x 24" x 9½". Shipping weight 6 bs.

33N25567—List Price 8.90.

Each in bits of 3.55.34

33N25567-List Price 8.90 ... Each in 1 its of 3 Each, singly



### ALL-PURPOSE STRIP LIGHT-U. L. APPROVED

Ideal lighting units for stores, store windows, show cases, or homes and offices. Multiple knockouts for single unit or end to  $\epsilon r$  i mounting. Channel and cover White baked on incl. Sui plied

Cat. No.			Size	. o's 3 pa.   Each
33N25572 33N25573	1-20 W	31/2 ths	19 x 25 8 x 17/8" 25 x 25/8 x 17/8"	2.07
33N25574	1-40 W	9 lbs.	491 <sub>4</sub> x 1.5 <sub>8</sub> x 17 <sub>8</sub> "	3.54 3.85



### CHROME BRACKET FIXTURE-U. L. APPROVED

For home or commercial use! Handsome, practical design is adaptable anywhere. Uses 15 watt lamp. Rustproof chrome finish on copper plated steel. Size:  $191/2 \times 31/4 \times 31/2$ " high, less reflector; 41/2" high with reflector. Supplied less lamps.

Cat. No.			Wt.	Lois/3 ea.	Each
33N25576	Bracket alone		3 lbs.	2.64	2.87
33N25577	With convenience				3.11
33N25578	With reflector		31/2 lbs.	3.48	3.79
331452213	With reflector and	outlet	31/2 Ibs.	3.69	4.02

### MAZDA FLUORESCENT LAMPS

When purchasing lamps with any fluores ent fixture listed on these pages use 1st "Lots of" pit to instead of single price. Fluorescent lamps for use with fixtures described on this and opposite page. "White" I imps i toxide a quality of light approximating that of the incandescent I imp. "Daylight" lamps approximate that of daylight. All supply several times the usuble light of regular incandes ent lamps

Rated life of these lamps is better than 2500 hours. 85-watt lamps have mogul 2-pin base; all others have standard 2-pin base. "Circline" circular lamp (T10) requires special socket. Inside diameter is  $91/2 \times 1/8$ ".

Approximate shipping weights: 6 and 8-watt lamps—11/2 lbs.; 14 15, 20-watt lamps—2 lbs.; 30 and 40-watt lamps—31/2 lbs.; 85 watt lamps—6 lbs. Prices include Federal Excise Tax.



### DELUXE HEAVY DUTY FIXTURE-U. L. APPROVED

Quality high power factor fixture for high intensity highling, Flush, chain or stem mounting. Double knockouts at each end on top. Pressed steel housing and reflector of "glazenamel." 2:40 watt lumps. 48 x 13½ x 5¾". Less lamps.

10 Wall lamps. 10 x 1572 x 574 . Less lamps.	
33N25565—Wt. 27 lbs. Each, lots/3 7.68 Each.	8.36
	ch13.69
33N25690—U/L Approved cord and Plug Set, 6 ft. long	. 54c
33N25691—Levolier Switch with Pull Chain	75c
33N25692—8 ft. Galv. Tenso Chains with S Hooks, Pr.	64c



# ALL-STEEL LUMINAIRE FIXTURE-U. L. APPROVED

Engineered for uniform rich lighting, yet distinctively designed for decorative effect. All-steel baked enamel fixture is constructed for flush mounting. Uses two 40 watt lamps. Attractive end plates finished in durable white baked-on ename!  $494_2^{\prime\prime}$  x  $10^{\prime\prime}$  x  $6^{\prime\prime}$ . Fixture supplied less lamps.

33N25568—Wt. 21 lbs. Each, lots/3 9.60 Each. Same as above, but for four 40 watt lamps. Less lamps. Each. 10.46 33N25569-Wt. 35 lbs. Each, lots/3 14.34 ..... Each 15.61

### FLEXO ADJUSTABLE **FLUORESCENT LAMPS**

(A) General Model. Versatile industrial style fluorescent fixture with clamp-on base. Ideal for factory benches, tables and drafting boards. Two bolts clamp bare securely to any surface up to 3" thick. Spring-controlled swivel joints and double arm a tion permit easy manipulation of fixture to give you high in any desired position. Arm extends 36". Uses two 78, 15-W. lamps. For 110-125V., 60 cycles AC. Shpg. Wt. 15 lbs. Statuary bronze finish, baked-on enamel. (A) General Model. Versatile industrial

33N25560-Less lamps ....



(B) Portable Desk Model. Has all the features of the model described above except for the difference in the base. This unit has a weighted base with pen and pencil grooves, for desks and tables where screw clamp cannot be used. Shpg. Wt. 23 lbs.

33N25561-Less lemp

### MAZDA FLUORESCENT LAMPS

White	Davlight	G.E.	Size			Lote		Late	
Cat. No.	Cat. No.	No.	L. D.	Watts	F'cz -h	0.	Each	Lots	Each
33N25533	33N25534	T5	9 x 5/g"	6	.75	7	.68		
33N25527	33N 25528	T5	12 x 5 g''	8	.85	7	.77	24	.64
33N25496	33N25497	T8	18 x 1''	15	.62	Ŕ	.56	24	.73
33N25525	33N25526	T12	18 x 1½"	15	.75	7	.68	24	.64
33N25529	33N25530	T12	15 x 11/2"	14	.75	7	.68	24	.64
33N25535	33N25536	T12	24 x 11'2"	20	.75	7	.68	24	.64
33N25537	33N25538	T8	36 x 1"	30	.75	7	.68	24	.64
33N25539	33N25540	T12	48 x 112"	40	1.00	5	.90	24	.85
33N25531 33N25541	33N25532	T17	60 x 21 g''	*85	2.30	3	2.08	12	1.96
33N23341	33N25542	T10	1214" Od. 1	32	1.85	3	1.67	12	1.56

\*85 Watt lamp replaces old 100 Watt lamp.

# MODERN, LOW COST ELECTRICAL APPLIANCES

All the products listed below are high quality, low cost items designed to bring you the utmost in dollar value. Their smart appearance and precision construction is usually found only in more expensive ap- faithful and dependable service.

pliances. Heavy duty type elements....chip-proof, baked-on enamel finish...heavy chrome plate are a few of the features that assure you of many years of



### DUO-CHIME UNIT

Add a note of charm to your home with this attractive, melodious door chime. Rings differently for front and back doors. Operates from low voltage transformer (10-Irom low voltage transformer (10-18 volts) or from six-volt stor-age batteries. Sturdy all metal construction. Handsome cream and gold finish. Size: 6½x6½". Shipping Weight 21bs.

33N25410-List \$4.95, Net........... 3.30

Transf. for above

### PUR-AR-LITE AIR PURIFIER

An economical germicidal lamp, Ex-cellent for use in kitchens and bath-rooms. The Ozone producing ultraviolet rooms. The Ozone producing ultraviolet lamp destroys germs and bantishes unpleasant odors. Heavy aluminum construction. Wall type mounting. Operates from 110-volt A.C. only. Shipping Wt: 2 lbs. List Price \$6.95.





### CENTURY GLIDE-O-MATIC IRON



- Light Weight
- a Tilt Un Heel
- Thermostat
- · Side Mounted Cord

Light weight makes ironing faster and easier. Temperature control selector, side mountedcord, tilt up heel rest and cool plastic handle. Rated at 1000 watts, 110-volt A.C. Equipped with aluminium sole plate. U.L. approved. Shipping Weight: 6 lbs. List Price \$9.95.

Each, Singly......7.45



### **ELECTRIC MIXER**

Ideal for whipping pancake and waf-fle batters, cream, eggs, or other light batters—even mixes drinks. Full one quart capacity glass con-tainer with extra cover for storage. Full one quart capacity glass contrainer with extra cover for storage. Self-lubricating, sturdily constructed electric motor with push-button control. Two interchangeable mixing blades. For 110 volt AC-DC operation. Shpq. Wt: 7 lbs. List Price

33N25414-Each, Lots of 3.. 5.45 



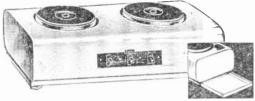
### RAINBOW 2-SLICE TOASTER

Produces evenly browned toast, Produces evenly prowned toast, quickly and easily. Slices of bread are automatically turned without handling when doors are opened. Pure Mica elements are wound with genuine Nichrome wire. Prowith genuine Nichrome wire. Flo-jecting base prevents tipping or shifting while in use. Chrome plated with black enamel base. 110 AC-DC. Shpg. Wt: 3 lbs. List Price 5.75. U.L. approved.

33N25420-Lots of 3, Each ...... 3.95

Each, Singly......4.30

### KORD ELECTRIC STOVE



For quicker, cooler cooking. Offers a choice of four different heats. "Drip tray" catches grease, pulls out for easy cleaming. Maximum powerdrain 1650 watts. Attractive white bakedon-enamel finish with nickel trim. For operation from 115-volt AC-DC. 19x10x5½". U.L. approved. Shipping Weight: 13 pounds. List Price \$11.85.

Each, Singly......8.89

### GRILL AND WAFFLE BAKER



Combination gill and waffle baker tousts sandwiches, grills meats, and bakes waffles. Top and bottom grill plates turn over easily to form grids for two 4½ square waffles. Dial indicator. Heavy chrome finish. For 110-115-volt AC-DC. U.L. approved. Shpg. Wt: 9 lbs. List Price \$14.10.

Each, Singly .......10.55

### RAINBOW WAFFLE IRON



- · Temperature Indicator
- · Even Baking
- · Non-stick Grids
- · Heavy Chrome Finish

Equipped with dial indicator in top to show when proper temp-Equipped with aid indicator in top to show when proper temperature is reached to pour batter. Expanding hinges for even baking. Waffles will not stick to grids. Heavy chrome finish. Underwriters Laboratory approved. For 115-volt AC-DC. Shipping Weight: 5 lbs. List Price \$10.45.

### KORD COMBINATION FAN-HEATER

Provides fam blown heat in winter and fan only for summer use. 2-position switch offers choice of fan only or combination of fan and heater. Rated at 1320 watts, 115-volt AC. Tan finish. Size: 11½x9½". Shpq., Wt: 8 lbs. List \$14.95

33N25421-Each, Lots of 3..9.95 Each, Singly ......11.20

Fan Blown Heater only, List \$10.95 33N25422-Each, Singly..... 8.20

### INFRA-RED HEAT LAMP

Lump for heat therapy or general use where concentrated heat is desired. May be employed as well for drying clothes, freshly painted surfaces — un excellent therapeutic aid for aches, pains, or soreness. Needs no involved installation just screw into ordinary socket. Operates on 110 volts AC-DC, 250 watts.

33N25503......**1.25** 





# **ELECTRICAL ACCESSORIES**







SINGLE SURFACE OUTLET. Brown Voca rounting screw. 33N13271- La., 8c . 2. BAKELITE PLUG. Sturdy prongs. 33N13306-Eu., 6c .... ... .. 10 for 54c 3. CORD SWITCH. For ceiling fixtures and 



4. 3-WAY SURFACE OUTLET. Brown. Pin type terminals, wood screw. 33N13279—Ea., 15c 10 for 1.35 5. CUBE TAP. Brown. 3 outlets. Shipping .... . ... 10 for **90c** 33N13282-Ea., 10c 6. HANDLE PLUG. Of soit rubber. Shipping weight 1 ounce. 33N13301—Ea., 6c ...... 10 for 54c



7. 3-WAY SURFACE OUTLET. plus in. With wood mounting screv 33N13280—Ea., 15c ... 10 10 ior 1.35 8. CURRENT TAP. Bakel te. Straight socket

33N13278--Shpg. wt. 4 oz. . . . 15c 9. DUPLEX FLUSH RECEPTACLE. 33N13329-Ea., 13c 10 for 1.17

55 to 63%. For 105 125 volts 60 cycle AC operation. Normal Power Factor



10. WALL PLATES. Dual outlet. Rippie design stainieus s'eel.

33N13326-Ea., 7c

10 thr 63c



11.MIDGET CORD CONNECTOR, 171 of the corn-33N13276--Ea., 20c 10 for 1.80 12. POWER CORD AND PLUG, 6ft, subber roid, brown bakelite Elug. 33N13285—Shpg wt. 6 oz. Ea.



13.CUBE TAP EXTENSION. Tromp. 9 th rubber cord, AC plug brown. 33N13318-Brown. E: 37c 10 or 3.33



14. HEATER CORD SET. AC plug, 7 it. heater cord and screwless plug.

lots/10, Earh

lots/10, Each lots/10, Each lots/10, Each lots/10, Each lot./10, Each

49c

49c

1.89

3.49 3.75

33N13317-Shpg. wt. 7 oz. ......49c

54c

2.10 2 10

2.10



23. PLUG FUSES. U/L approved. 5 per box. 23, FLOG F OSLIS, 0, 11 M, 39N13201—10 amperes 39N13202—15 amperes 39N13203—20 amperes 39N13204—30 amperes 39N13203—20 amperes 39N13204—30 amperes

5, either of above





27



.... 24c

26. INSULATED STAPLES. No. 5. 1/4" x5/8". 17N15950—Package of 100. ..... 14c 10 | ickages for ..... 1.26 27. PEARL PUSH BUTTON. 5%" diameter 33N13313— Each .20c 33N13313-1.80 28. MIDGET PUSH BUTTON, Brown, 15/16" 33N13311-..... Each. 14c





29. NO BLINK INSTANT STARTERS.

U. L. approved L. L. nores blinking. Sorver or uses to teach or, and is not af-ted of by accommendation. When lam is repland, starter again functions norm ally. Starts within 1 Second.

C .	No.	Thre	Lu:p	Ea.	10 for
33N	13825-	-FS2NA	15-20 W.	36c	3.24
33N	13826-	-FS'NA	30-40 W.	36c	3.24

30. STANDARD FLUORESCENT STARTER.

New, full reliable starter switch. Underwirters' approved. Starts in one second or less. Lamps light in a flash.

Jat. No Type -	Lamp	Ea.	LU for
33N 13802—FS 5	4, 6, 8 W.	30c	2.70
3N13810—FS 2	15, 20 W.	18c	1.62
3N13811—FS 4	30, 40 W.	18c	1.62
3N13813—FS 6	85, 100 W.	49c	4.41
3N13827-FS-12	32 W. Circ.	22c	1.98

31. FLUORESCENT SOCKETS.

For T8, T12 lennys, licatproof plastic, 33N13803—"black, Fig. 20c 10 for 1.80 33N13804—"White, Eig. 21c 10 for 1.89 33N13805— Birck Ed 12c 10 for 1.89 33N13806— Whigh Ed 12c 10 for 1.73 33N13807— State to 12c 10 for 1.73 33N13808—Black for T5 Pr "Corps, state so but and lampholder."						
33N13804— White, Et. 21c 10 for 1.89 33N13805— Birck Et. 12c 10 for 1.08 33N13806— White Et. 13c 10 for 1.17 33N13808— Black for T5 Pr 65c	For T8, 1	f 12 lam	ıs. He	atproo	f plastic.	
33N13805— Brock Ed 12c 10 for 1.08 33N13806— While E: 13c 10 for 1.17 33N13807— Stiffer E: 12c 10 for 1.08 33N13808— Black for T5 Pr . 65c	33N13803	n la*—6	k. F i.	20c	10 for	1.80
33N13806— While E: 13c 10 for 1.17 33N13807— Start E: 12c 10 for 1.08 33N13808— Black for T5 Pr 65c	33N13804	l—* Wh:	ro. E 1.	21c	10 for	1.89
33N13807 Stater Et 12c 10 for 1.08 33N13808 Black for T5 Pr 65c	33N13805	i— 131 w	·k Ec	12c	10 tor	1.08
33N13808— Black for T5 Pr 65c	33N13806	→ Wh:	e E:	13c	10 for	1.17
	33N13807	' S' ::	hr E	12c	10 for	1.08
*Comp. marrer so ket and lampholder.						
	"Comp	'ui'ei	so ket	and lo	ampholde	T.

SNAP'N WALL PLATES

33N25616—15W 4½ x 2 x 1¾"—1 lb. ... 33N25617—20W 4½ x 2 x 1¾"—1 lb. ... 33N25618—50W 85g x 2¾ x 1¾"—3 lbs. ... 33N25619—40W 85g x 3¾ x 1¾"—3 lbs. 33N25620—(2) 26W 57g + 2 x 1¾"—2 lbs. 33N25620—(2) 26W 57g + 2 x 1¾"—3 lbs.

High Power IC for 33N25614—30N25614—30N25615—40% 33N25615—40% 33N25615—40% 33N25605—(2) 40W 171, x, 33, x, 158 fig. 18.



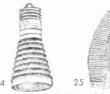




175.

15. FLUORESCENT BALLASTS. Underwriters' Listed. High power factor 90 to 100%. Normal

en' switch and pilot light combina-tions are postible. Early mount d. Supplied complete with all necessary hardware.



24. CONE ELEMENTS. 110 V 33N13304-07) V. La , 42c ... , o 1.89 33N13305 -1000 W. Za 68a .5 for 3.11 25. FITSALL IRON ELEMENTS. 110 . 10 for 4.15 33N13270- Ed., 45c

..... 54c

SNAP'N SWITCHES-OUTLETS-PILOTS



The presume sumps down elds thy and securely to write the No. 19, 20, and 21 rated at 15A., mo will tit. No. 19, 20, and 21 rated at 15A., 25 volts; 10A., 250 volts. No. 22 rated at 125 V.,

Brown Alloy	Each	White Alloy	Each	Description	Fig.
33N12350	6c	33N12351	7c	l cut-out	16
33N12352	6c	33N12353	7c	2 cut-outs	17
33N12354	6 <b>c</b>	33N12355	7c	3 cut-outs	18

Brown	Lerch	White	Each	Description	Fig.
33N12342	23c	33N12343	25c	SP Switch	19
33N12344	32c	33N12345	35c	3-way Switch	20
33N12346	15c	33N12347	18c	Outlet	21
33N12348	32c	33N12349	35c	Pilot Lite	22

# CRYSTAL SETS - MIKES - SPECIAL ITEMS

### MICROVOX MICROPHONE



Talk through your radio speaker with Talk through your radio speaker with this battery-powered microphone. No wires necessary. Take it to any room in the house up to 75 feet from your radio. Broadcasts between 1000 and 1700 KC. Merely tune your radio to a non-interfering point on the dial within this frequency range. Lightweight plastic unit is entirely self-contained, with power supplied by one flashlight cell and a "Minimax B" battery. Uses, a IL4 type tube with extremely low power drain. Rubber rimon base protects furniture against scratching. Dimensions: nubber rim on base protects turniture against scratching. Dimensions: 6%" high x 5½" deep x 5" base. Supplied complete with batteries and tube, ready for immediate use. Enjoy hours of real fun and entertainment.

Microphone with Sound Effects Kit listed below. 32N22621....

Add a professional touch to your next party with a pre-Mad a professional touch to your next party with a prepared radio program including script and sound effects. Sounds Effects Kit designed for use with the above mike includes 15 items for producing various sound effects. The kit also has three scripts (western, detective and historical), keyed to these sound effects. 



### **DESK MICROPHONE**

Permanent magnet type mike equipped with 18' cable. Bullet shaped design finished in black and nickel. Has exceptional capabilities for amplifying sound with minimum distortion and maximum of fidelity. Size: 4 x 3 x 3". Shipping Wt. 9 oz. 





A handy mike any youngster will enjoy. Works through speaker of any radio set. Does not interfere with reception. Push-switch for instant ON-OFF Handsomely finished. Push-button

### ELECTRIC MOTOR KIT & BOOK



The fascinating story of electricity told pictorially in 6 beautiful colors. 32 pages of the drama, history and principles of electricity in easy-to-understand language. Permanent metal binding and hard covers. 33 precision made parts and wire to assemble an electric motor that really runs. It's safe. Operates from flash light batterless. teries.

32N24455......**2.95** 20N20622-Batteries (2 req.) Ea....61/1¢

### DETECTORS, CAT WHISKER, CRYSTAL











screws. 32N13913—Each......46¢

3. Cat Whisker. Finest wire—correct tension-holds that sensitive spot. 32N13921-Envelope of 3......9¢

4. Supersensitive Crystal. Extremely sensitive crystal assures picking up more stations and gets them louder. Each crystal is meter tested after selection.

after selection. 32N13906—Same as above, 32N13901—Each......126

5. Crystal Detector. Includes ball and socket swivel arm, crystal with holder, base and clips.

32N13917-Each...... 22€ 

### RADIO PHONE WITH BATTERIES

### A Real Portable Radio Set



More than just a toy! A real one-tube portable radio set that plays anywhere. Dials like a telephone, to tune in favorite radio station. A wonderful personal radio for any boy or girlpermits them to listen to the program of their choice without disturbing the rest of the family

program of their choice without disturbing the rest of the family in the evening. Not a crystal set, but a real radio receiving set in a toy telephone. Oper-On-Off switch. Hadio phone is shipped complete with one tube and all necessary batteries.

### CONNECTICUT DUPLEX TELEPHONE SET

Handsome green finished all metal phone cases with built-in bell ringers and black bakelite mouthpieces. Separate earphone with black bakelite earphece. Uses 2 or dinary No. 6 dry cells at each station for lines up to 1000 ft. long. Longer lines up to 2000 ft. in length may be run by adding mere batteries. Ideal for house to garage, basement to upstairs, fam-house to outbuildings. Complete with 160 ft. of 19-guage white plastic insulated copper line wire, 2 phone stations and necessary hardware for wall mounting. 32N14002—Per set less batteries... 6.25



### SUPERTONE CRYSTAL SET



A big seller and there is plenty of good reason for its popularity. Remarkable results have been obtained and its scientific construction gives loud, clear, distortion-free reception. A supersensitive crystal is utilized which is mounted in a glass enclosure.

As above, without enclosed detector. Bakelite Housing. 32N13889—Little Wonder Crystal Set. Wt. 1 lb.....

### SUPERTONE RADIO KIT

An interesting, educational ready-to-assemble radio kit that is ideal for beginners. Includes molded bakelite base with contact slider, single headphone, and Supersansitive crystal as shown above. Complete directions for assembly and operation.

### TEE-NEE RADIO-NO TUBES, BATTERIES, CURRENT



No fussing with batteries, tubes, or plugging into power lines—new Tee-Nee radio needs only an aerial and a ground. Housed in a beautifully finished mahogany crackle finished steel case. Tee-Nee radio is supplied complete with single headphone with head band, but without aerial and ground wires. Size: 5\%" x 4\%" x 3".

### TEE-NEE PLASTIC CASE RADIO



Housed in a beautiful mahogany colored plastic case, justlike the big sets. Earphone sets into case when not in use. Set is shipped complete with single earphone, but without aerial and ground with.

wire.
Overall Dimensions: 4" long, 2\%" high, 1 5/8" deep.
32N13881-Model 100 Crystal Set. Shpg. wt. \% lb......2.36

LIKE TO MAKE THINGS? SEE PAGE 72 FOR HOBBY TOOLS

PHONOGRAPHS FOR THE YOUNGSTERS SEE YELLOW SECTION

# POPULAR TRAINING KITS

### 4-IN-1 RADIO KIT

An electronic kit that combines in a single unit almost every basic unit almost every basic function performed in radio. Combines an amplifier, code practice oscillator, radio receiver and miniature radio transmitter. Ideal for use at home or school. The code practice oscillator and transmitter. lator and transmitter may be used to help obtain a radio operator's license. The amplifier input is



for any high impedance make or phono pickup. The radio for any high impedance mike or phono pickup. The radio receiver is a five tube set using the following tubes: 35Z5, 50L6, 12SL7, 12SK7, 12SK7. A loop antenna is used for both transmitting and receiving; no outside aerial is necessary. Kit supplied complete with tubes, Alnico V dynamic speaker and all necessary parts, plus detailed step-by-step instructions, Pict-o-Graphs, block diagram and schematic.

### HIGH QUALITY TEN-WATT AMPLIFIER KIT



Conservatively rated unit with negligible distortion—employs exceptional bass reproduction method which eliminates booming method which eliminates booming tones. Output stage resistance coupled with pair of 6A3 tubes in push-pull. Circuit includes phase inverter and simple feed back.

Tubes: 6C5, 6N7, 2-6A3, 5U4G. Less speaker and tubes.

32N24512-Shipping Weight: 24 lbs. ......20.65

### 4-TUBE AM SUPER BROADCAST TUNER KIT



Unusually compact and efficient AC-DC AM broadcast-bani tuner kit for use with PA systems, industrial sound installations, or as a remote tuner for any radio receiver equipped with phono input jacks, or standard audio amplifier units. Superheterodyne circuit consists of converter stage employing 12SA7 tube in an electron-coupled oscillator circuit, 12SK7-IF. 12SC7-De's 6 output 35Z5GT-Rect. Complete with all 2-gang variable condenser, Crotes Tubes.

22N24532—Shinning Wainter 15.

# 

PERCO FM BASIC TUNER KIT Inexpensive FM tuner utilizes a new FM circuit that does away

new FM circuit that does away with limiters, discriminators, ratto detectors and the difficulty of peaking and tracking such circuits. Uses 14F8 and 35W4 tubes for earphone volume—or may be connected to any high inspedance input audio complete basic kit consists of: punched chassis base: 15MMF tuning condenser; IF coil assembly; mounting hardware and tie lugs; full instructions.

32N24475—Shipming Weight: 3 be

Special Four-Inch Ferco Dial Plate for the allove tuner. 32N24476—Shipping Weight: 1 lb......



### TWO-TUBE "POCKET" PORTABLE KIT

Operates on flashlight cells. Slips into your coat pocket with just enough extending out the top to tune. Built-in antenna, self contained batteries. Very good volume on local stations. Covers the broadcast hand with additional range on each side of the dial. Uses two IS4 miniature tubes in a standard regenerative-detector circuit transformer coupled to AF output stage. Case is easily made from cigar box. Less tubes, batteries, headset.

32824516\_Shap Wt 5 198 



One-tube oscillator when used with 1 to 1.5 volt output crystal pickup supplies sufficient modulated power to play records through radio receivers in other rooms at full volume without wired connections! Employs one 117N7-GT tube as both oscillator and rectifier. Easy-to-assemble kit includes all parts for oscillator, but less tube. For pickups, etc., see index. Shipping Weight: 4 lbs. 

### PRINTED CIRCUIT KIT



Standard Basic Kit (4-25 cc bottles) for experimenting with printed circuit methods. Resistors of definite resistance and wattage can be painted on

tance and wattage can be painted on an insulating base by using these conducting and resistance paints. Printed circuits are electrically the same as those using individual wires, resistors, etc. Easy to use. Paints take full advantage of small size of miniature and subminiature tubes. Fast arying. Packed in durable, attractive box including copper conducting raint, low, medium and high resistance paints and manual "Design and Repair of Printed Circuits".

32N24366.....7.12

### 4-TUBE HI-FI MUSIC AMPLIFIER KIT



AC-DC amplifier, includes a built-in equalization network and pre-amp, for use with GE Reluctance or similar pickups. Separate low gain input for FM-AM tuner. Two 12SC7 tubes used as pre-amp, and audio driver tubes. Continuously variable tone countral 2-50B5 beam

provide audio output of over 4 watts with frequency response over 12,000 cps. Phase inverter circuit. Selenium rectifier

### FM TUNER KIT



Easy-to-build, inespensive FM (frequency modulation) kit based on newly developed circuit design that makes possible the construction of FM tuner in a single evening! Circuit employs Fre Modyne FM detector using dual high freq. triode (14F8) with one section as HF local oscillator, the other as a converter, IF amp. and detector. Excellent for use in Metropolitan areas. Supplied complete with pre-formed, punched cad-

tan areas. Supplied complete with pre-formed, punched cad-mium plated chassis, large easy to read Cro-flex Illuminated dial, all necessary mounting hardware, etc., with tubes 14F8 and 35W4.

### PRE-AMPLIFIER KIT



Build your own pre-amplifier kit for use with the new General Electric variable reluctance or Plckering Pickup cartridges. The finished model is as fine a bass and treble compensated pre-amplifier as any available. Plate and filament power are received from associated receiver or amplifier. Kits are supplied complete with chossis, resistors, condensers with chassis, resistors, condensers, 6SC7 tube, and full instructions. Shipping Weight: 2 lbs. 

### FM RECEIVER KIT



Not just a tuner, but a complete receiver kit with its own wide range audio system and Alnico V PM speaker for full utilization speaker for full utilization of clear, static free reception! Employs 7 tubes and rectifier. May be operated either as a tuner or as a self-contained FM radio—

self-contained FM radio-both applications control-led by built-in switch. No ates from regular 300-ohm FM antenna and twin lead-in. Comes in brown plastic cabinet. Complete with tubes. Ship-ping Weight: 7 lbs. 

### EAGLE CRYSTAL KIT

Includes fully wound tuning slide-coil, crystal detector, and "cats whiskers". No sol-dering—needs only screwdriver. Shpg. Wt: 1 lb.

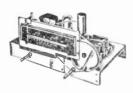
32N24465......88c



TECHNICAL INFORMATION GLADLY SUPPLIED

# RADIO KITS AND TRAINING SETS

### MEISSNER FM TUNER KIT



Model 8 C K. The famous Model 8C in kit form. Covers 88 to 108 MC FM band.
Recommended for use with Meissner model 4AK am-

Meissner model 4AK cmplifter or any high quality amplifter which has an input of 100,000 ohms or greater and which produces full output with 3 volts R.M.S. audio input. Response is flat within ±2 db from 50 to 15,000 cps. 300-ohm antenna input. 300-ohm

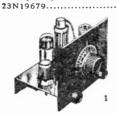
### MEISSNER PAKIT

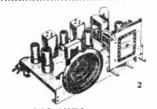


Model 4AK. High fidelity audio power amplifier with a response from 45 to 20,000 cps, flat within ±2 db. 20-wat output. Used with model 8CK above, it provides excellent FM reception. 500,000 ohm input. 4,8,15,250 and 500-ohm output impedance. Uses 6SN7GT, (2) 6L6G and 573GT. Easily assembled from detailed diagram and schematic. 110 V. 50/60-cycle AC. 10x8%x10". Complete with with tubes, wire, hardware, solder. Shipping Weight: 20 lbs. 32N24356.

### MEISSNER "HOW TO BUILD" MANUAL

Contains a wealth of information on basic theory, design and construction of AM, FM and TV circuits, phono pickups, audio amplifiers, speakers, disc recorders, etc. Fully illustrated with charts, radio formulae, schematic and pictorial wiring diagrams.





### MEISSNER RADIO KITS

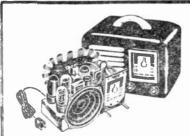
Provide students with a sound, practical training in elementary radio. Easy to assemble with the complete step-by-step instructions included. Receivers are simple to operate and provide excellent reception on standard broadcast and short wave bands. Enjoy building and learning by using these regenerative receivers. Supplied with plug-in coils for broadcast band 180 to 550 meters.

1. TWO-TUBE AC-DC RECEIVER. Uses one 76 tube as a detector and one 76 tube as a rectifier. 110 volt AC or DC. Supplied less tubes and headphones.

1. THREE-TUBE AC-DC RECEIVER. Uses one 76 tube as a detector and one 76 tube as an audio amplifier and one as rectifier. 110 volt AC-DC. Supplied with all necessary parts except tubes and headphones. 

Extra plug-in coils for use with above 2- and 3-tube kits.
32N10422-17 to 35 Meter Plug-in Coil 50¢
32N10421-35 to 70 Meter Plug-in Coil 50¢
32N10420-70 to 200 Meter Plug-in Coil 50¢
32N10423-545 to 1500 Meter (Long Wave) Coil1.23

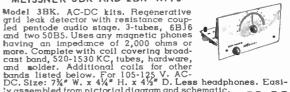
2. 6-TUBE TWO-BAND SUPERHET KIT. Calibrated to cover broadcast band of from 550 to 1600 kilocycles and shortwave band from 6 to 18 megacycles. Tuning control, band switch, and volume-control, with built-in On-Off switch beneath square illuminated dial. Untuned stage of RF amplification cn both bands. Peaking circuit for added sensitivity on short wave. Filter choke for hum-free operation at max. output. Has 125K7 RF amp., 12SA7 converter, 12SK7 IF amp., 12SA7 detector, AVC, 1st Audio, 35L6GT Power Amp., and 35Z5GT Rectifier. With instructions and all other parts needed including tubes and speaker. cluding tubes and speaker. 



5-TUBE AC-DC KIT

A really beautiful workmanlike job equal to a \$25 set when assembled. Features: New modern two-tone plastic case; five-tube superheterodyne, using 12SA7, 12SK7, 12SC7, 50L6 and 35Z5 tubes. Automatic volume control. Streamlined airplane dial covering 550 to 1600 KC, built-in loop antenna and Alnico V speaker. Complete with cabinet and tubes. Shipping Weight: 9 lbs. 

### MEISSNER 3BK AND 2BK KITS





ly assembled from pictorial diagram and schematic. 32N24358-Shipping Weight: 21/2 lbs. .....

Model 2BK. Battery trainer kit. Same as above, but battery operated; uses only two tubes, 1T4 and 3V4. Batteries required: 4½ V. "A" battery and 90 V. "B" battery. Complete with coil covering broadcast band, 520 to 1530 KC, tubes, hardware and solder. Other coils to cover additional tuning bands listed below. Less phones and batteries. 

PLUG-IN COLLS FOR ABOVE

TEOGRAPO TON ABOVE	-
32N24359-175 to 540 KC, Type 18-3500	.3
32N24360-1.35 to 4.5 MC, Type 18-3502	
32N24361-3.2 to 8.2 MC, Type 18-3503	50
32N24362-7.9 to 18 MC, Type 18-3504	50
32N24363-15 to 34 MC, Type 18-3505	50.



### 3-TUBE AC-DC STUDENT KIT

Simplicity of construction and foolproof operation will instill confidence in beginner's mind. Covers 550 to 1500 KC, operates on 110 V. AC-DC. Uses 2-615, 1-6SJ7 tubes. Less wire, tubes, solder and earphones. Simple to construct—all you need is a screwdriver, pilers, and a soldering iron. Complete with instructions. Shipping Weight: 3 lbs.

32N24459.....

### THREE-WAY PORTABLE KIT

Easy to assemble and simple to oper-Easy to assemble and simple to operate. Power switch conveniently located on front of set so that "AC-DC" or "Battery" may be selected without opening the case. 5" Alnico dynamic speaker. Leatherette covered case. Uses 1A7, 1H5, 1N5, 3Q5, 117 Z6 tubes. Less tubes and batteries.



32N20617-45V Battery (2 required)......Each....... 1.54 

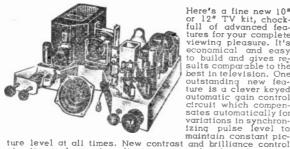
### 2-BAND RECEIVER KIT

Ideal for elementary radio training. &-tube, 2-band receiver kit equipped for operation on 110-volt AC or DC. Covers the following ranges: 550 KC to 1600 KC, 6 to 16 MC. Kit includes bakelite cabinet, complete, ready for assembly. Uses 12SK7, 12SA7, 12SQ7, 35L6, and 35Z5 rect. tubes. Less tubes.



# TELEVISION KITS—CHASSIS—ACCESSORIES

NEW TECH-MASTER 10" or 12" BLUE RIBBON KIT



Here's a fine new 10" or 12" TV kit, chock-full of advanced fea-tures for your complete viewing pleasure. A committee conomical and easy to build and gives results comparable to the best in television. One outstanding new fea-ture is a clever keyed automatic gain control circuit which compensates automatically for

ture level at all times. New contrast and brilliance control circuits rarely require adjustment once they have been set. Very high signal-to-noise ratio keeps pictures "locked-in" even with minimum signal input; annoying air plane "flutter" virtually eliminated. Circuit uses a phase discriminator for perfect results. Four stages of video IF provide full 4 MC bandwidth and picture detail. Three stages of sound IF, plus high quality discriminator using the latest 9-pin miniature tubes assure excellent FM television sound. Latest type all-channel turret tuner gives fast, precise channel selection. Uses the following latest type tubes: 6J5, (5) 6AG5, (2) 6BA6, (2) 6AU6, (2) 6AL5, (2) 6SN7, 6T8, 6K6, 6AC7, 12AU7, 6BG6, 1B3, 5U4 and 6W4. Supplied with stamped chassis, all parts, RCA tubes and step-by-step pictorial wiring in structions. All chassis components are already mounted. Shpq. Wt: 49 lbs.

32N24300—Less Picture Tube.

### COMPLETELY WIRED TV CHASSIS

Here are completely wired, aligned and assembled TV chassis, ready for operation. For those who haven't the time or interest to build their own, yet want top quality television at a moderate price. Ideal for installation in your own cabinet or a choice of those listed in this catalog. This powerful 29-tube receiver brings in all channels with sharp, steady pictures of excellent brilliance and contrast. With tubes and speaker, but less picture tube and cabinet.

IN138-Chassis for 10" Tube..Wt: 68 lbs... 169.50 IN139-Chassis for 12%" Tube..Wt: 68 lbs... 179.50 IN140-Chassis for 15" Tube...Wt: 68 lbs... 189.50 IN141-Chassis for 16" Tube...Wt: 75 lbs... 199.50

### TECHMASTER 16" CONVERSION KIT

Here's good news for owners of 630TS type chassis. There's no longer any need to be satisfied with your present 10" or 12" screen because now, Lafayette makes it easy for you to enjoy giant size TV. Sit back and relax in any part of the room and watch your favorite programs without eyestrain or discomfort. No need to crowd around the set to see the picture properly. Here's 16" conversion kit that contains all the components required to adapt your old 630 type TV receiver to the huge 16" size. Do not confuse this with cheaper conversion kits that omit critical components and which give you compromise results. Kit contains everything you need to convert your present set to a 16" size: Flyback transformer, focus colls, width control, linearity control, 16" bracket, resistors, condensers, 1B3 rectifier and full instructions. Less picture tube. 

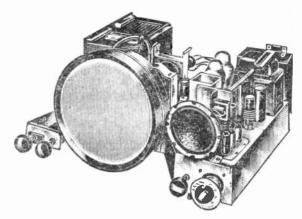
### TELEVISION TUBE MASKS

High quality masks of crystal clear plastic. Protects tube and gives cabinet professional finish. Attractive gold bronze

Stock No.			Stock No.		
31N24415			31N24418		
31N24416	12" Tube	4.19	3 IN24419	16" Tube	8.40
31N24417	121/2" Tube	4.19	31N24420	20" Tube	10.85

### HOOD & RING FOR 16" TUBE

FOR CABINETS TO HOUSE TV KITS, SEE PAGE 10 FOR PICTURE TUBES, SEE PAGE 35



### TECH-MASTER 16" TV KIT "Circuit-Aligned" Components - 31 Tubes

Build your own duplicate of the famous RCA 630-TS circuit with this deluxe TV kit. Simplified wiring diagrams make it possible for practically anyone to wire the complete unit over a week-end. Now you can enjoy giant screen TV of superlative quality and save money at the same time. No special skills or knowledge is necessary to turn out a real professional job you'll be proud to show to your friends. A thoroughly sound voltage doubler circuit, using two 183's, has been designed to provide full voltage and current to drive up to a 20" picture tube and still give excellent brilliance, definition and sweep. The "circuit-aligned" components supplied with the kit keeps final adjustments down to a neglible minimum, and these can be made without additional equipment. A 211T5 flyback transformer, a 202D2 focus coil, 201R4 width control and other fine components are also supplied. Included too is the RCA 12-channel front end tuner, completely wired, aligned and tested. All chassis components already mounted, 630-TX Deluxe TV kit, complete with tubes, speaker, parts and instructions. Shipping Weight: 67 pounds.

# LAFAYETTE 630-TS TELEVISION KIT 10" to 15" Model

Here's the kit to buy if you want a high quality television receiver in the 10" to 15" size. Precision-enqineered RCA front end tuner is completely wired and aligned with factory assemble chassis components. Balance of the wiring recessary to complete the set takes only a few hours. All instructions are included — it's really easy to assemble! The powerful 31-tube circuit (including picture tube) assures sharp, clear, steady pictures of exceptional brilliance. Dual controls are provided for picture and FM sound, horizontal and vertical adjustments. Kit includes tubes, speaker, all parts and instructions. Shpg. Wt: 47 lbs.

32N24555—Less Picture Tube.

Universal mounting bracket for 10 to 16 inch tubes.

### TECH-MASTER STANDARD TV KIT

The 630-TK standard 10" to 15" TV kit is similar to the mod-The 530-TK standard 10" to 15" TV kit is similar to the mod-el described above, except that it is offered at a lower, econ-omy price because no components except sockets are mount-ed. In every other respect it is the same on the deluxe mod-el — same quality front end and components, plus complete instructions. Includes tubes, speaker, & all parts.

Dress up your television kit set with dial plates. Consists of etched plates in pleasantly contristing tones of metal and marcon. One plate of each for contrast, off-volume, sensitivity control, vertical hold, horizontal hold, channel selector, and brightness control. Set of 6 plates as described above.

DIAL PLATES

### TV SECOND ANODE CONNECTOR

For television tubes. Silver plated snap button type plug, well insulated by  $1\frac{1}{2}$ " diameter rubber protective cap. Snaps into opening on side of tube. Supplied with 12" wire lead.

# RIDER'S MANUALS & TEXTBOOKS

### RIDER'S SERVICE MANUALS



Authoritative information on all the latest radio receivers. Now, more than ever before, is the time to buy the complete set of these practical manuals.

Vol. 19-Over 2100 pages of servicing data of over 100 manufacturers. Cover sets to May 1949, record changers, etc. "How it Works" book.

23N20040......19.40

Volume 1-5-Ciant 2000-page volume abridging the first five manuals. Volume 1-5.

Cat. No.	Vol.	Year	Price	Cat. No.	Vol.	Year	Price
23N20039 23N20038 23N20036 23N20027 23N20025 23N20026 23N19784	18 17 16 15 14 13 12	1948 47-48 46-47 45-46 1942 41-42 40-41	19.40 16.17 8.23 19.40 16.17 16.17	23N19898 23N19738 23N19893 23N19892 23N19951 23N19942	7	39-40 1939 1938 1937 1936 1935	16.17 16.17 16.17 16.17 16.17 12.25

MASTER INDEX: 204 pages covering Rider Manuals Vol. 1-15.

### FM TRANSMISSION AND RECEPTION



Over 400 pages of up-to-the minute information on Frequency Modulation. Tells fust how FM signals are transmitted and received, covers the theory of FM and methods of operation of FM transmitters of all types. FM receivers and antennas are discussed, as well as solutions of servicing problems.

23N19734-Postpaid in U.S.A. ...... 3. 53

# ALL BOOKS ON THIS PAGE POSTPAID IN

# convenient pocket-size textbooks make John Rider your personal instructor. Each book written in simple language, with detailed illustrations to supplement the text. Sturdy, handsomely bound hard covers. Each book 96 pages. Alternating Currents in Radio Re-Resonance and Alignment.

Learn radio theory and practice the "Hour a Day with Rider" way! Four convenient pocket-size textbooks make

Automatic Volume Control. 23N20033.....

### CATHODE RAY TUBE AT WORK

New edition completely rewritten and vastly enlarged. The theory is greatly expanded—all scopes and syncroscopes manufactured during the last 10 years are described. Written to serve all users of scopes. Size 8½ x 11. More than 2,000 illustrations.

### THE METER AT WORK

A practical book for all who employ electric meters in radio or allied arts. Tells how meters work, how they should be selected for various applications, how to design them, extend their ranges, etc. Book is cleverly arranged with test separated from illustrations. 152 Pages.

### THE OSCILLATOR AT WORK

Covers all types of signal generators and oscillators, how they function and where they can be used, how to get maximum utility out of your oscillator, how to test and reapir inefficient units. Theory and practice interwoven with diagrams. 256 Pages.

### VACUUM TUBE VOLTMETERS

Favorite tool of engineers and service-men! Makes possible dynamic measurements under any conditions with minimum of time and effort. Explains theory and practical applications of the different types plus their calibrations. 180 Pages.

23N19783--Postpaid...... 2.45

# CONTINENTAL U.S.A.

### INSIDE THE VACUUM TUBE

Explains simply and clearly the theory and operation of the vacuum tube with illustrations and diagrams anyone can illustrations and diagrams anyone can understand, serves also as an excellent foundation for advanced knowledge of tubes in general. Explains characteristic curves, and their associated load lines, power amplifiers, use of pentodes as triodes, etc. Also describes "acorn" type, cathode-ray and gas-filled tubes, and photo-electric cells.

23N20034-124 Pages. Postpaid. 4.41

### Record Changers and Recorders

Record Changers and Recorders
All the information you need to repair
these highly-complicated mechanisms.
Treats service problems of specific
makes—sharp, clear pictures illustrate
every phase of operation. Includes plan
of analysis that applies to all changers.
Covers, motors, drives, cutting heads,
needles, pickups in addition to record
changers and recorders. Stroboscope
disc included for checking turntable
speed. 744 Pages.
22N10642 Pages.

23N19642-Postpaid...... 8.82

### Broadcast Operators Handbook

Takes the reader behind scenes of a broadcast station and tells the role that station personnel play. Comprehensive treatment of control room and studio operating, operating master control, remote control operation, and emergency and preventive maintenance.

23N19743-288 pages. Postpaid. **3.23** 

### 30-1000 MC RECEIVING ANTENNAS

Written expressly for those not familiar with the theory and practice of antennas, by an expert with 2 years experience. Emphasis is on Television antennas, but covers all types, (propagation over the band of frequencies, and many other details.)

### RIDER TELEVISION MANUALS VOLUME 1



Over 1400 pages crammed with absorbing information about 1946-7 and early '48 TV receivers of leading manufacturers. Circuit descriptions, adjustments of various trimpers traps traps formars values. mers, traps, transformers, voltage and resistance readings, parts lists, etc. Schematics and patterns lists, etc. Schematics and patierins on giant pages equalling six regular pages. Scaled for easy reading! With 200 page "How It Works" book below and separate index. Volume 1.

### TV MANUAL VOLUME 2

Covers 1948 latest TV sets, TV kits and boosters up to Jam. 1949 made by 67 manufacturers. Equivalent of 2300 pages. Includes schematics, waveforms, test patterns, parts list, etc. "Changes" section gives data on revisions of previous models. Has accumulative index covering Vols. 1 & 2.

### RIDER'S TV BOOK "HOW IT WORKS"

Explains theories underlying operation of TV receivers: transmission and reception of TV signals, frequency standards and antennas. Description of RF Oscillator, Video Amplifier, Tubes, Power supplies, etc. Also covers alignment and servicing.

23N19920-200 pages. Postpaid in USA...... 2.65

# TV PICTURE PROJECTION & ENLARGEMENT

Combination of theory and practice. Includes properties of light, refraction and lenses, TV picture, modifications of Schmidt projection system, refractive projection, etc. Over 100 illustrations.

### PA EQUIPMENT MANUAL VOL. 1

VOL. I

If you install and service PA systems, you'll want a copy of this newest addition to the Rider Manual Library of circuit data. Contains specifications of 147 manufacturers of PA equipment from 1938 to 1948. Covers PA systems, outdoor announcing, musical instruments and phonographs, theater and church hearing aids, intercom systems, etc. Includes schematics, voltage and resistance tables, tube and chussis layouts, installation notes, operational instructions and impedance matching. 2024 pages plus a "How It Works" book and index. and index.

23N19726-Postpaid in USA... 17.64

### PA INSTALLATION AND SERVICING

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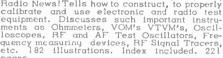
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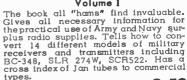
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16N14286— 12 volts 1.32	16N14292— 12 volts. 1.3
16N14288— 24 volts J Each	16N14297— 24 volts Each
16N14289 115 volts 1.65	I6N14304—110 volts1.6

### SPST NORMALLY OPEN KEYING RELAY



Oversize silver contacts handle filament centertap keying of any stage up to 2000 volts on plate, and AC primary keying up to 1 KW, 3000 volt insulation. Provides clean make and break at highest keying speed. SPST double break. 6 volt AC coil. 2.65

### ADJUSTABLE OVERLOAD RELAY WITH ELECTRIC RESET



### PRICE COAXIAL ANTENNA TRANSFER RELAY



Type 6350 Relay. SPDT Relay, with a capacity of 750 waits RF if impedances are matched. Provided with three SO-299 female receptacles to accomodate plays on RG-8 U cables to antenna, transmitter

on RG-8 U cables to antenna, transmitter and receiver.

Complete with coil for 110 volts, 60 cycles AC operation.

16N14133—Shipping weight 1 lb.

Type 6381, same as above with the addition of two sets of auxiliary contacts, one SPST normally open and one SPST normally closed, both rated at 250 ma., 300 volt DC. Use for ECO and receiver switching. Size with auxiliary contacts 4½x3x2".

10.78 16N14134-Shipping weight 1 lt ...



### AMPERITE THERMAL RELAY

SPST normally open, closed by heater after delay (in seconds). In octal tube envolope, Heaters draw approx, 2 waits. Contacts rated 115 volts, 3 amps AC or 440 volts, 2 amps AC. Breakdown voltage between contacts 1000 volts and between contacts and heater 1500 volts.

Delay	Type No.	6.3V Henter	Type No.	115V Heater
5	6N05	16N14400	115N05	16N14399
10	. 6NO10	16N14409	115N010	16N14410
15	6NO15	16N14401	115N015	16N14405
20	6N020	16N14411	115N020	16N14412
30	6N030	16N14402	115N030	16N14406
45	6NO-15	16N14413	115N045	16N14414
60	6N060	16N14415	115N060	16N14416
75	6N075	16N14403	115N075	16N14407
90	6N090	16N14417	115N090	16N14418
120	6N0120	16N14404	115N0120	16N14408
Any Type, E	ach			2.35

### W.L. REMOTE CONTROL HEAVY DUTY MIDGET



Type 507-549. Single-Pole, double-throw, single brosk. 110 volt AC operation. Silver-to-silver self-cleaning contacts. Rating: 20 amps. AC namelly open, 15 amps. AC normally closed. 16N14124—Weight 1 lb.....

### ADVANCE 300-OHM LINE RELAY



K1504. RF Efficient, D.P.D.T. inidaet type AC tr insmit-red ive relay is well insulated for RF applications. Silicone alass material is used for insulation or arm-time and stationary contact assemilles. Line spacing maintained by solder lugs. 500 watt RF input. Overall: 17½x1½ vis. 6. Up to 115 V. AC or 40 V. DC. Consumption 4 VA.

### POTTER-BRUMFIELD RELAYS

TYPE "PR" HEAVY DUTY POWER RELAYS

Will start motors up to 1 HP, high heater loads, etc. Will start motors up to 1 HP, high heater loads, etc. Cont. duly type—will not overheat because coils take only 2 w its on DC and 5VA on AC. Larger copper shaded pole-quee provents AC chatter. Heavy contact pressure. Sturdy return spring and screw terminals. Metal parts heavy plated; coils impregnated with varnish. Contacts of double break typer rated at 20 amps. and single break types at 15 amps, 110 volts AC non-inductive load. All ratings are for continuous duty.

No.	Type	Conta its	Coil Volts	Each
16N14254	PR3A	SPST-DB-NO*	6V/60cy AC	\$3.10
16N14255	PR3A	SPST-DB-NO*	110/60cy AC	3.10
16N14100	PR3A	SPST-DB-NO*	220V/60cy AC	3.10
16N14256	PR4A	SPST-DB-NC*	6V/60cy AC	3.15
16N14257	PR4A	SPST-DB-NC*	110/60cy AC	3.15
16N14258	PR5A	SPDT	6V/60cy AC	3.20
16N14262	PR5A	SPDT	110 60cy AC	3.20
16N14101	PRSA	SPST	220V/60cy AC	3.20
16N14263	PR7A	DPST-NO	6V/60cy AC	3.65
16N14264	PR7A	DPST-NO	110/60cv AC	3.65
16N14102	PR7A	DPST-DB-NO*	220V/60cv AC	3.65
16N14244	PRIIA	DPDT	6V/60cv AC	4.90
I6N14245	PRILA	DPDT	110,60ey AC	4.90
16N14103	PRIIA	DPDT	220V/60cv AC	4.90
*NO-norn	nally open	. *NC-norma	ally closed.	

### "MR" SERIES FOR LIGHTER LOADS

Double break contacts rated at 10 amps: Single break at 8 amps 110 V A.C. 60 cycle non-inductive load. AC coils require approx. 2 watts; DC  $1\frac{1}{2}$  watts. Size:  $1\frac{16}{2}x^{2}\%^{6}$ .



No.	Type	Contacts	Coil Volts	Each
16N14104	MRIA	SPST-NO	6V/60cy AC	\$2.00
16N14109		SPST-NO	110V/60cy AC	2.00
16N14110	MR3A	SPST-DB-NO	6V/60cy AC	2.30
16N14111	MR3A	SPST-DB-NO	110V/60cy AC	2.30
16N14271	MR5A	SPDT	6V/60cy AC	2.15
16N14272	MR5A	SPDT	110V/60cy AC	2.15
16N14112	MR7A	DPST-NO	6V/60cy AC	2.60
16N14144	MR7A	DPST-NO	110V/60cy AC	2.60
16N14273	MRIIA	DPDT	6V/60cy AC	2.80
16N14274	MRIIA	DPDT	110V/60cy AC	2.80

### PLATE CIRCUIT RELAYS

Armature spring adjustable for applications Armature spring adjustable for applications requiring closing or opening on specified currents or voltages. Table below shows standard factory adjustments for current to energize, also minimum after readjustment of spring. (A) LS series. (B) LM series.



No.	Туре	Amps.	Corl Ohms	Mın. Cur.	Std. Cur.	Cost
16N14279 16N14281 16N14209	LS5* LS5* LM5*	4 4 5	2,500 5,000 2,500	6.0 4.3 2.4	9.0 6.3 6.3	\$1.90 2.20 2.30
16N14210 16N14211 16N14212	LM5* LM5* LM11†	5 5	5,000 10,000 2,500	1.7	4.5 3.2 9.0	2.55 2.95
16N14212 16N14213 16N14214	LM11†	5 5	5,000 10.000		6.3 4.5	3.40 3.65 4.05



\* Denote SPDT. † Denote DPDT.

### AUTOMATIC LOCK RELAY ELECTRIC RELEASE

Employs two coils—one to operate relay and another to release the lock. Includes  $^{5}$  in silver dome-shaped contacts rated conservatively 4-20A. When circuit to operating coil is closed 4-20A. When circuit to operating coil is closed momentarily the normally closed contacts open and the normally open ones close with the relay in this position even when current is removed. To return positions to normal, current is applied to "release" coil removing



DPDT contacts, 110 volt, 60 cycle coils 4.30 16N14142 16N14143—EL5A—SPDT contacts. Shpg. wt. 2 lbs.... 3.75

### ADVANCE COUNTING RELAY

24 positions step relay. For "wired music," counting, switching applications. Manual reset. His SPST witch for an indicator half; switch closes on first impulse. Call voltages 110 V. AC. One neutral position. "4" chaineter shaft extends 114". Size: 118x1116x31",".

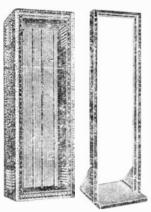


5.00 16N14145...

### ADVANCE TIME DELAY RELAY

Type 304B. For preheating tube fil iments and similar uses. Relay provides an adjustable delayed make (10-60 sec.) for the controlled circuit which remains closed until the initial circuit is broken. 1/4" pure silver contacts; 10 cmps at 115 V. A.C. (consentative) AC (non-inductive). 

# STURDY RACKS, PANELS AND ACCESSORIES



### STEEL CHANNEL RACKS

For standard 19" Long panels, University diriled, Base 16x20", 1stated with pot-welds dicorners, Hole, tagged for 10s32 screws, Black rapples.

73% 1156	/13," E	inclupies.
24N22150		17.05
W: 85 h		
24N22151	30)1, b	met spice.
24N22151 Wt 57lb		14.26

### **ENCLOSED RACKS**

to axe 31-tacl enland in late may with training and for act in late may with training at top and bottom (Mark triple at a wall of the first triple at a wall of the first triple at the fi

Stock No	Hightin.	Pinel Stir	W.	14, L:	C t, E i h
24N22145	4 "	3531"	-	10	27.93
24N22146 24N22148	8.21."	61 1 " 77"		175	41.45 49.39



### 1/16" STEEL TABLE RACKS

Universal drilling of characters all stindard cannot be predicted as severe of him room for a medical control of the predicted as a medical control of the predicted as a medical predicted as a medical control of the predic

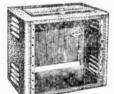
24N2210225"	Wt.	33 li	3.24
24N22103-3 "	${\textstyle \bigvee_{i=1}^{k-1}} i$	36 1	 6.76

### RADIO PANELS

Suitable for text is trussent and red a girll rate his

	STEEL Wrinkle			3/16" BAKELITE PANELS Black Polished Finish	
St>→ N		*.;	Fr h	Stock No.   Tree In .   Rela	
24N22218 24N22219 24N22220 24N22221	7x1 " 7x11" 7x11" 7x13"	2 2 3 4	.47 .53 .71 .81	24N19600 110" 1 1.32 24N19601 112" 1 1.62 24N19602 1114" 1 1.91 24N19603 7x18" 1 2.41	

### DELUXE STEEL CABINETS FOR RACK PANELS



- · Standard Mounting
- · Built-in Louvres

Heavy-duty—a metribuilt of  ${}^{1}_{00}$ ", iteel, finished in Black ripple. Welded construction streamline lide i in Neatly rounded corner. Universally, if both total of the line and proceedings of the light with snapslock, in Hangelen in Black deep. Also available in state gray finish on special order.

Stock.	Over-II	P m 1	1 Der	Wt.	
No.	Dimen ion.,	Spir (	Le din	Lb	Each
24N22188	1 13x 1x 312"	9351, 1"	T; Chily		9.70
24N22071	14. Lc 319"	List '	n Inde	1	11.76
	[ 14 vilz.31]"			-	16.32
	26x2i= 3½"				18.82
24N22199	[303,x/12,31g"	3 x1+"_	Profite	_ 3	20 87

### RECESSED METER PANELS



Metrician research matrix the constraints probably and the metrician matrix of the metrician matrix of pendictors to a blood of the probably religious bed. As council the  $4-3^{\prime\prime}$  meter

24N22204—Black	51,x19"	4.70
24N22205Circy		4.70



### CHROME HANDLES



### CHROME VENTILATING LOUVRES

Aids a distinctive touch to my receiver, and lifer, transmitter, or any office in tallation. Each rand, chrome fam. had deed "Air-Gate" made up of 5 worthlating Duvres. Air pace 5 tween louvre.

	tween monning note corrett; 4. 6 ' D	3.41176.054.40
of hole. 54". Langth of	Duvres: 4¼". Size: 57 gx3"	624
24N22234-Shoot wt. 8	07	53¢





### HEAVY STEEL RACK PANELS

1. Heavy daty 1,5" should and fir all standard 19" rick. Available with either tlack rapple of a marked late graveragle bracket.

Black Grey	light. In.	Lis. Lu h	Bluck	Grey	Hght. In.	Lbs. Each
24N22169 24N2211 24N22170 24N22119 24N22171 24N22120 24N22160, 24N22121 24N22161 24N22121 24N22162 24N22123	517	5 .73 7 + .85 8 .91 9   1.15	21N22161 24N22165 2 N22166 21N22167	2 !N21 125 2 1N 22 126 2 1N 22 127 2 1N 22 128	11 151 1715 11914	13   1.82   11   2.12   15   2.26   16   2.44

### 1/16" STEEL MOUNTING BRACKETS

2. Pand n	: 1	beath i	3 7 "	hi th	21 cinting	holes drill	. Par 68¢
24N15271-	- 1	Kril	t	h 1 +	- 31 P		. Par <b>BO</b>
							1.00
24N15269		a. R.o. I	h r	h 1 .	Sec. 12	"	Par 1.21

### GRILLE PANELS

Mediata evit litra eller a dischialotik frica e. 1978 v. i. Cell was wattaliya bing dintata paralanta reada mille llet co. 1974



St. k.No.   St. Briek	No Pinel High		h_h
24N22420 24N2 24N22422 24N2 24N22424 24N2 24N22426 24N2 24N22428 24N2	8123	23 x 1 15 " 4 · · · · 15 " 7 · · · 15 " */5 x 1 1 · '	2.26 2.41 2.65 2.94 3.38

### RACK SHELVES

De amod to be a confirment of the rack with a telebrate and the rack with a telebrat

### **Chassis Supporting Angles**

For heavy we into a countried in his arter to Dote lines with a mount of the kind point of the lines are to 100 miles and 100 miles are to 100

### STEEL AND ALUMINUM CHASSIS

Four Clib, with direction of the thing direction and doubt direction. Stell has a No. 20 and a very distance that a contract of the last and the contract of the last and the contract of the



	Stee		Alummum		
DEF	Ν.	Lich	No.	Earti .	
4 1 1 3 2x 1 2" 5x 1 2x 1 2" 7x 2x 1" 7x 1x 1" 7x 1x 1" x1 x "	24N22391 24N22211 24N22212 24N22213 24N22214 24N22215	.62 .67 .82 .88 .97	24N22237 24N22238 24N22239 24N22243 24N22244	.76 .95 1.06 1.14	
/x15x /* x1/x /"	24N22216 24N22217 24N22226 24N22227 24N22393 24N22394	1.26 1.26 1.38 1.29 1.94 2.44	24N22245 24N22246 24N22247 24N22248 24N22395 24N22396	1.47 1.47 1.64 1.79 2.35 2.62	

### BLACK RIPPLE STEEL BOTTOM PLATES

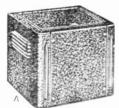
VV 111 VA	1 , , 10 71	1 11 1 1	( )/, [ [	- > 1 'T	purib .
No.		WI 10 LT	No.	_ · ·	Wr. Cost
21N.22C28 21N.2C235 24N.2C241 24N.2C242 24N.2C249 24N.2C256 24N.2C256	1 1 1 1		21N22260 24N22461 24N22461 24N22272 24N22272 24N22366 21N.2397 24N22398	1 1/ 1 1/ 1 1/ 3 1."	2 Ll65 2 Ll68 3 Lp71 3 Ll82 5 ft82 4 L1.03

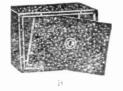
### STEEL CHASSIS WITH BOTTOM COVER PLATES

How, but the "p" to the fored constrained drilled to the standard month alter set base, where terms

No	W. L. D.	LL .	E i. ]	No.	W. L. D.	Lb	Ea
24N22229	8x17x3"	10	2.47	24N22156 24N22230 24N22232	13x1/x "	13	2.94

# **FOUNDATION CABINETS, CHASSIS & METER CASES**





### DE LUXE HINGED STEEL CABINETS

A. Aftra two streamlined calinet, with the entraper of redital and removable frontly and Slate may be a with the entraper of this ventilator change. All without that the

11.	i	ł xı	K [ ]	1 : 1	I · C · ·	-
	_					
24N22087		· vI ɔ	c" (	. "	X , Y , "	4.26
24N22093		14.1.3	(*· "	* Y . '	, < 'X "	4 41
24N22089		x 145	r ** "	v 1. "	x . · ×	5 29
24N22091	1	. x	d2" - 1	y   Se"	l wl.x "	8.23

### STANDARD HINGED STEEL CABINETS

Similar to acov	e, le - i rome tr	11 J. W. P. 15 11	at ratio avec	
No.	H xL xD.	L cold	i r Cha	Fire
				-
24N22200	Exl xE"	E-x 5- "	'X 'X '	2.94
24N22201	Fxl.xC"	8x1 "	7 x *x . "	3 23
24N22202	Hx14x8"	Ex1."	1x1 x.	4.12
24N22203	1. x2 x1. "	1. x1="	1 xl.xs"	7.64

### GENERAL UTILITY STEEL CABINETS

B. Streamlined, sturdily made steel calinet, designed for use in radio or other altied fields. All are made of sheat steel, constricted with spot welded reinforced corners. Tops and better are easily reinsorable and held firmly in place by means of self-tip ring screw; which are included with the cabinets. Handsome black rip ple funch dives a neat, efficient appearance. Available in 10 sizes to fit all requirements.

11	Size	tri i Wt.	1.1.5
24N22209	4x_x4"	2 1: .	.76
24N22210	4x 1x5"	- 11	.82
24N22174	6xcxt"	3 11 3.	.97
24N22175	SaSato"	5 11 4.	1.47
24N22173	10x8x?"	+ lt .	1.85
24N22176	10x-x1 "	7	2.35
24N22177	11x1_x8"	+ 11	2.53
24N22181	1.x7x0"	514	1.82
24N22182	15x9x7"	10 H s.	2.56

### Miniature Utility Cabinets with Attached Chassis



Indispensable when I initing electronic devices using miniature tubes. Front and rear panels are removable and fastened with self-tapping screws, permitting easy accessibility. U of if for HF converters, TV amplifiers and power supplies. Plack wrinkle from the

Stock No.	H xW.xD	Charat. Size	Fach
24N22430	4x4x2"	lx <1 ex 1 7 c"	.93
24N22431	4x'·x3"	1x41xx.7x"	1.03
24N22432	5x4x2"	114 x 21 4 x 2 7 5 "	1.03
24N22433	tx'x4"	184×41×× 178"	1.13
24N22434	5xbx4"	11 <sub>3</sub> x51 <sub>8</sub> x37 <sub>8</sub> "	1.13
24N22435	бхбхб"	1%x47x574"	1.18



### AMPL. CHASSIS & COVERS

Chassis stanged from 1-per, old rolled steel, with I lack ripple fine h. 6" deep covers are state dray, s" high chasis drilled for 1 often plate, that pupplied). I cluve models similar to standard, but an lude chromin, relating and handle.

Standard Models				DeLuxe Models			
No.	Size	Wt.	Ea th	No.	S17.0	Wt (Each	
		-					
						9 lbs. 3.62	
						11 lt s. 4.70	
24N22135	7x1.x ="	III ibs.	3.38	24N22185	/x x - "	11 lt t. 4.85	
24N22136	10x14x4"	11 lt s.	3.67	24N22186	10x14x4"	11 .1 s. 5.29	
24N22137	10x1.x±"	13 lbs.	3.82	24N22187	ICxlix+"	119 lbs. 5.59	



### PORTABLE STEEL CABINETS

For a cillator, transceiver,, etc. Renevat le front and tack panels. Leather handle. Black ripple finish.

24N22273—Size. 12x7%x/" 2.50

24N22274--Size 15x7%x7" 2.9

### MINIATURE ALUMINUM CHASSIS

Open end chairs of hard aluminum. Has ¼" flance on bottom to permit fastening down of chassis, or attaching it to a bottom plate. Extremely useful for small receivers, outloard user such as narrow hand FM adjutors or where space is limited. Etcl. (d. al., m. m. fir a.).



C. p. L. P.	Lanction (HxW.xD.)	Each
24N22436 24N22437 24N22438 24N22139 24N22440 24N22441	2' x x 3 4 x 1 1 1" 1 3 4 x 3 1 x 1" 5' 1 x 4 1 2 x 1" 2 3 4 x 5' x 1" 3 3 4 x 4 1 x 1 1 2" 3 x 5 1 x 1 1 1"	.29 .32 .35 .35 .35
24N22442 24N22443 24N22441 24N22443 24N22446	$\begin{array}{c} 5^{3} 4 \times 4^{7} \times 1^{4} 2^{2} \\ 4 \times 3^{4} \zeta \times 1^{2} \\ 4 \times 4^{4} \times 1^{2} \\ 4 \times 1^{4} \times 1^{2} \\ 4 \times 1^{4} \times 1^{2} \end{array}$	.44 .35 .38 .41

### HINGED COVER CABINETS

Rudged steel cal net with a no ling of lids to arranged that bottom, front or back panel may be removed for circuit wirner. Attractively finished in black riggle enamel.



Stork No.	Dimensions (W.xD.xH.)	Uses Chassis	Each
24N22385	9x5x' "	812x484x112"	2.35
24N22386	1 x-x/"	11x1x2"	2.94
24N22387	12x2x7"	llx/xz"	3.38
24N22388	1.x11x8"	11x10x3"	4.03
24N22389	14x8x/"	13x7x2"	4.03
24N22390	18x1.2x9"	17x11x3"	5.06





### SLOPING PANEL STEEL CABINETS

### DELUXE METER CASES





### STANDARD SPEAKER CABINETS

A. Louvied back cover with dots for wall hanging. Made of durable theel tool with Halk ripple enamel finith.

24N22140		Carmet Size:				0
24N22141		Calainet Size:				
		Cal met Sizes				
24N22143	1 L" Striker	Catemet Size:	lbx!bxº"	Wt. 2	11Ls. 6.3	1

### SLOPING FRONT CABINETS

B. Front panel removable. Rear opening for leads and ventilation Slate arry may le fine howith red tripled trim. Less challes.

			_		
24N22092	sxetx -"	For Cha. 1.	7x7x2"	+ Wt. 9 lbs.	3.88
24N22093	nx L0x8"	For Cha as	7x4x2"	Wt. 10 lbs. 1	4.26
24N22094	8x14x8"	For Chassis	7x13x2"	Wt. 11 lbs.	5.59
24N22096	12x18x12"	For Chassis	10x17x3"	Wt. 17 lbs.	7.50

# TRANSMITTING KEYS-PHOTOFLASH EQUIPMENT



### Linguaphone Code Lesson Records

Learn code this easy way at your own convenience. Speed processes from 2 to 15 words per minute. Operate on any 78 RPM phonograph or record player. In fudes textbook and 5 double-ticed 10" discs in album.

29N21895 -Shpq. wt. 6 lb - . . . . . 9.80



# Gardiner Automatic Tape Sender

Model S1, with ident 110 volt AC motor Variable code speed from 1 to 60 words per minute. Three controls motor witch, contact with thand peed ontrol. Termin distoriscillator or buzzer. Comes with 10 rolls to tale perforated.

29N14060 24.00

### VIBROPLEX TRANSMITTING KEYS "CHAMPION"

nexpensive, yet exceptional sending qualities assure speed and ease of oper-ation. Single lever, two pairs of zontart points (one tor dots and one for da, hes) Bright limith parts with contrasting black





### "ORIGINAL"

For communications work where speed and perfect Morse are essential. Simile lever. Two pairs of contact points one for dot, other for dother Unlimited sending possibilities. Polished parts, base. Complete with cord and

wed je. 15N14057—Shpg. wt. 5 lbc. **15.95** 

CARRYING CASE for above keys. Plush-lined, black morphoco; reinforced corners, lonk and key. Size:  $6^34$ x $3^34$ x $4^44^2$ . 15N14059—Shpg. Wt. 3 lbs.....

### SPEED-X KEYS AND CODE SETS CODE PRACTICE SET MODEL 450



Constant frequency adjustable buzzer and a standard hand key with  $\frac{1}{8}$ " silver contact; mounted on a brown bakelite base 6" x 4". Uses  $2-1\frac{1}{2}$  volt cells (not included). Metal parts plated. Code card included.

2.65 15N14027 — Shippin a weight 2 .h. . . . . 20N20622-11g volt cell for above..... 

### BUZZER WITH BAKELITE BASE AND CAP

Model 400. Operates on 2-1V. oils or "C"	patt-ry.
15N14021—Adjustment on vibrator. Resistance 2 of ms	1 10
Resistance 2 of ms	1.10
20N20622-11g V calls 61/2c 20N19867- C"	Batt. 57c





### CODE PRACTICE KEYS

Model 300: provided with two adjustments Has bukelite have, silver contacts, and me

chined parts 15N14041—Shpg. wt. 1 lb. 



### ICA DELUXE SIGNA-TONE

Audio Oscillator with 3 output frequencie nested the supposes and keys may be connected the supposes and keys may be conton. Will tollow bug at all speeds. With tube and all-outsined speaker. For 110 V. AC-DC 7/4x41<sub>2</sub>x4". Shpg wt. 4 lbs. 29N14086



### KEY WITH SWITCH

M-100 Telegraph key with switch to close contacts. Lactured brass base. 2.90 

# Photoflash Power Supplies-Lamps-Capacitors

### CONDENSER PROD. HI-VOLTAGE POWER SUPPLY TYPE PS-1



### **CORNELL-DUBILIER** PHOTO FLASH CAPACITORS

Type HKGT. For use in high-speed photographic equipment. Compact and light-weight. Heavy duty internal leads connected to bakelite cup insulated

Stock No.	C-D No.	Cap. Mfd.	Watt Sen.	Size, Inches L x W x H	Wt. Lbs.	Each
7000000				DC Peak		
5N3040	HKGT(A00	15	30	334×214×434	214	10.00
5N3041	HKGT1A01	25	50	334 x 43 16x 43 1	1.41	11.17
		22	50 Volt	DC Peak		1
5N3042	HKGT115	28	71	3"4 x 4 16 x 13 4	41,	18.23
		25	00 Volt	DC Peak		
5N3043	HKGT1A02	15	5)	334 x 21/2 x 65 x	31,	10.00
5N3044	HKGT103	25	80	331x49 16x65 4	53/	13.52
5N3045	HKGT104	32	100	344 x44 16x61 4	6	21.56

### AMGLO PHOTOFLASH LAMPS

Light intensity 100 times sunlight, 10,000 flasher for bulb-or h 17,0,000 second. High rolor temperature of 65000 Kelvin with standard arc into Mountous, tundard teprona

Type 5804X40:15) watt se : 12 to 18 MFD. 36N10584 Shipping weight 1 lb
Type 54R4X-60-200 watt sec. 18 to 36 MFD. 36N10585-Shipping weight 1 lb
Type 48U4X—100-600 waft sec 50 to 300 MFD. 36N10586 Shipping weight i lb 16.17
<b>Type 68N9T</b> -200 watt sec. 100 to 400 MFD. <b>30N10387</b> Shipping weight 1 lb
Type 78M9T—337 with set 100 to 600 MFD. 36N10588—Shipping weight 1 lb
Type 88M9T—300 wait sec. 100 to 600 MFD. 36N10589 – Shipping weight 1 lb

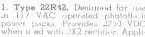
### MALLORY PHOTOFLASH CONDENSER

FP240. For those phototlash lamps designed to operate in the 900 to 1000 volt range, uch as GE FT220 in I Aniglo 68N9T 78M9T and 88M9T Made up of two separates up a stora of 50 into each, 450 volts DC rating Two must be connected in peries to withstand the 900 volts required for phototlash tube.

5N3046 -Shipping Weight ½ lb.

2.65

### Thordarson Photoflash **Transformers**





1. Type 22R42. Designed for use in 117 VAC operated photoffich power packs. Provides 2290 VDC when u ed with 2X2 rectition. Application note and circuit diagram of a typical power pack supplied Size 31% wide, 25% high ind weight 3 lbs. 6N2140 33.888

photo flash power packs and ignition circuits.



New alloy contacts discharge capacitor through Limp, handle hundreds of amps during flash. 2500 volt insulation.



Stock No.	Mig. No.	Coil	Contacts	Each
16N14150	FR1A	6VAC	SPST, NO	3.00
16N14151	FR5A	6VAC	SPDT	3.25
16N14152	FR11A	6VAC	DPDT	4.25
16N14153	FR1D	2VDC	SPST, NO	3.00
16N14154	FR5D	2VDC	SPDT	3.25
16N14155	FR11D	2VDC	DPDT	4.25

### HEADPHONES AND ACCESSORIES



DELIANCE	Y TYPE SIN	IGLE & DOUB!	F HEADPHON	ES

RELIANCE DX TIPE SINGLE & DOUBLE HEAD HORES
1. Powerful bi-polar magnets, featherweight shells, adjustable
cloth covered headband.
cloth covered headband. 15N13892—2000-Ohn: Headset. Each
15N13893-3000-Ohm Headset. Each
2. SINGLEUNIT HEADSETS. With clock-steel band attached.
15N13896-1000-ohm single set. 41/2-ft. cord90¢
15N13897-1500-ohm single set. 41/2-ft. cord98¢
Caps and diaphragms fit all above phones,
15N13894-Cap

### 15N13895-Diaphragms...... 50 ACME DE LUXE LIGHTWEIGHT HEADPHONES

1. Chrome steel magnets. Extremely light—weighs only 6 oz. complete with 2 units, 4½-ft. cord, netal headband. 15N13904—Double Headset. 2000 ohms DC resistance... 1.48 15N13905-Single Headset, 1000 ohms DC resistance.....95¢

### BRANDES "ADMIRAL" HEADPHONES

1. Powerful magnets. With 5 ft. cord, adjustable clips. 2.15
15N13929-3000 ohms2.30
15N13930-5000 olms2.75

### BRANDES "SUPERIOR" HEADPHONES

Similar to above but with exposed screw terminals. 15N13925-2000 ohm Headset	1.99
15N13936-Bakelite Cap-fits all models. Each	18¢
15N13935-Aluminum Cap-fits all models, Each	
15N13937-Diaphragm only-fits all models. Each	5¢

### **BRUSH "HUSHATONE"**

7 Small, streamlined, modern, thoroughly dependable extension loud speaker designed to end "radio irritation" in your home. Provides individual listening choice by merely slipping it under bed or sofa pillows or under the puff of a loose, pillow-back chair. Hushed tone allows listener to enjoy radio without annoying others. Hushadone is made of molded plastic with attractive chromium trim. Compactly styled—measures only 4 3/16" in diameter and 1 1/16" thick. Loudspeaker complete with convenient detachable extension cord.



### HEARING AID FOR RADIO

New headphone type hearing device increases radio enjoyment for persons who find it difficult to hear radio programs properly, also for private lis-

who find it difficult to hear radio programs properly, also for private listening without disturbing others. Quickly and easily attaches to any radio in 10 or 15 minutes; it can be wired into the set by a maintenance man or yourself, if you're handy with a few simple tools. The headset is supplied with a three-way switch device that permits you to listen with the speaker only, the phones only or both at the same time. Specially constructed low resistance headphone matches voice coil of the speaker.

er.	
er. 15N13865 <b>4.12</b>	
15N13866-Same as above, but with single phone3.37	
15N13867-3-Way Switch Adaptor only1.85	



### TELEX TWINSET

Model 3725. An entirely new way to hear with a headset! Never before such comfort, lightness, all-day-long ease of use. Actual sound is piped directly into ear through a slender, tubular sound arm mounted on a locking balland-socket joint. Fully adjustable to fit any head share, any ear size. Plastic ear tips effectively block out background noise. Ruggedly built, chrome-plated receivers are sealed against dust and corrosion. Z-nickel headband encased in Tenite plastic. Excellent sensitivity combined with superb full range high-fidelity makes the Twinset perfect for communications and experimental installations, as well as transcribing, theatre work, etc. Impedance: 1000 ohms. Supplied with single 5-foot Monocord which plugs into one receiver thus avoiding entangling cord. one receiver thus avoiding entangling cord. 

Model 3735.—Same as above, but 64 ohm impedance 15N13869.





### CANNON BALL "CHIEF" ALL BAKELITE PHONES

1. High grade, sensitive phones in molded bakelite housings; leather covered adjustable band; 5-ft. cord. 15N13948-2000 ohms imp. Shpg. Wt. 2 lbs. Per set.... 2.50 15N13949-3000 ohms imp. Shpg. Wt. 2 lbs. Per set...... 2.82

### BRUSH CRYSTAL PHONES

3. Range 60 to 10,000 cps. High impedance. Light and comfortable. Padded adj. headband. With 5 ft. cord. 

### TRIMM HEADSETS

4. "Dependable" Model: Economy Bakelite set. Chrome-steel magnets. 15N13914-2000 ohms..... "Professional" Model: As above but 4000 ohms. "Featherweight" Model: Lightweight. Only 4 oz. Bakelite shell and cap. Forged cobalt-steel magnets. Adjustable steel 15N13919-24,000 ohms impedance. 15N13918-4,000 ohms impedance. Either type. Ea......5.88

15N13912-Same as 15N13908 but less plug.......8.53 15N13938-Same as 15N13939 but less plug......8.53

### BRUSH CRYSTAL SINGLE UNIT HEADSET

### BRUSH CRYSTAL LORGNETTE PHONE SET

### TELEX MONOSET WITH TENITE TUBES

6. Stethoscope type with replaceable ear pieces to hang above earlobes, instead of being inserted into ears. Lightweight, comfortable—gives excellent fidelity. Operates on 2000 ohms. Thru-line volume control clips to lapel, is easy

### TELEX MINIATURE RADIO PILLOW SPEAKERS



### **FXTENSION CORD CONNECTOR**

Sturdy moldad body with two openings, one at each end, designed for insertion of two 





### HEADPHONE CUSHIONS FOR ALL PHONES Fits all type of headphones. Made of soft rubber.

10 Pairs for.... 5.85 15N13943-Pair......65¢

PHONE AND SPEAKER CORDS 4½ FT. LONG



Sturdily made, with cotton braid insulation. 41/2-feet long. 

# ANTENNAS-MOUNTS-DIALS

### PREMAX MOBILE ANTENNAS & MOUNTS

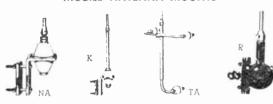
Designed to meet the most rigid transmission and reception repersonnel to meet the most rigid transmission and to refer to it requirements for police, fire, municipal, public utility, transportation, commercial, governmental and analour services. Carefully degrand and engineered to withstand the hard usage and trouble free performance there services domand.

### GRADUATED DIAMETER STEEL RODS

Staint so steel rode of varying dianchers are juined socurely and permanently into a single graduated length which provides high the principle wind resistance and lengths. "Wilep" type

With to the fit plent base.	9 4	. 82
28N21845 - Model AS-170, 7	72" len 1 2.6	3
28N21846 - Model AS-178. 7	78" long	76
28N21847-Mcd LAS 184, 8	84" long 2.	88
28N21848-Mcdel AS 190. 9	90" long	.00
28N21849-Model AS-196. 9	96" long	.09

### MOBILE ANTENNA MOUNTS



Type NA. Insulated Bumper Mounting. Flates are heavily cadplated steel; white glazed ceramic cones. 28N21811...

Type K. Insulated Bumper Mounting. Antenna rod fits into section of heavy I rars tubing attached to the insulator and permits 10° adjustment in height of antenna. Nut and compression sleeve lock antenna into place. White glazed ceranic insulator.

Type TA. Trunk or Panel Mounting. For Premax Style A crany  $\mathbb{P}_{d}^*$  antenna. Fastens to car lody or trunk or to any horizontal surface such as a roof. Lower support is colid licers rad joined to a 12° brass tube carrying antenna. Upper support is 24° brass rod adjustable on antenna tube and also in insulator assemblies to fit contour of car. Ceramic cone insulators. Maximum 10° adjusts to fit contour of car. Cadmium-plated.

28N21813... Type R. Insulated universal mounting of "split-ball" type. Solid aype K. insolved universal mounting of spir-ball type. Solid cast cronze, which bolts directly to our joinel or other surface through heavy plastic disc inculation with witer-proof dasket and steel hack plate. Baked black enamel tinich, bits tyle A or any 147 automatics. 28N21814...

### 2-METER BEAM ANTENNA



Model 200-EA. Designed especially for use on 2 Moter am iteur band. Unit is a hi-gain, troad band parasitic array. Precut for the middle of the 144 to 148 MC band. Uses a folded dispole the 144 to 148 MC band. Uses a lotted dispote driven element with three directors and one reflector. Directors spaced 1.1 wavelength, re-flector spaced 1.15 wavelength. Furnished with standard Elincor swivel bracket, cup be mounted

either in the vertical or horizontal plane. Designed to be fed with RG8/U 52-ohm coaxial cable. Boom is 1" aluminum tuling, all elements are %". Complete with hardware and 

### AMATEUR FOLDED DI-POLE ANTENNAS



transmitting and receiving on amateur bands. Exact frequency for flat line operation. Instructions included for cutoperation, increations included for cut-ting to any degreed intermediate fre-quency. Has substantial gain as long wire radiator. Supplied complete with 75 feet of 1 ad-in cable and two sturdy strain insulators.

Stock No.	Di-pol- Length	Band	Application	Fich
28N21960	137 ft.	80 meter	Use on all Lands	8.08
28N21961	66.2 ft.	40-meter	Ure on 40M 20M and 10M	5.85
28N21962	3 3 ft.	20 meter	For low power DX	4.38
28N21963	17.1 ft.		Proudband for chifting frequency to avoid ORM	3.50

### NATIONAL TYPE "ACN" DIAL

Designed for E. C. os ill stor or U.H.F. receiver parallel scale for hand calibration, 0-100 linear scale at aude, 2 extra vales, lucite dial and pointer 51 vernion, 17 h. dtt. Franc. 5\*x71.\*.



3.30 3.00

### NATIONAL TYPE "ICN" ILLUMINATED DIAL

2 d. il lights provide ill alim it is cr. ill Einds. Di il window blanked out in semicincular siespe to prevent shidow tishing. Siele com a ZCN is "x 71;". 11N14477 - Weight 2 lbs.

### NATIONAL "MCN" SMALL SCALE DIAL

### MILLEN 10039 PANEL DIAL

Compact panel dial with ongletely self-



### NATIONAL "B" VERNIER DIAL

Ratio variable from 6:1 to 20.1. Black Bakelite

ancii, a diameter.		
11N14367-Clock 200-0 in 400°.	. 1	Each
11 <b>N</b> 14368—0-100-0; 180°.		2.70
Type "BM" - Without variable	ratio.	
11N143710-100-0; 180°.	1	Each
11N14372-Clock, 200-0; 360°.	(	2.10



### ICA MINIATURE DIALS



### PRECISION VERNIER DIALS

Have etched calibrations graduated from zero	)
to 100. Large flanged knob has tushing for	
1,4" knob-shufts, Shpu, wt. 1 lb. 11N142364" Di i. 32 ° Rot	
11N142364" Di 1. 32 ° Rot	
11N14237—254" Dia. 325° Rot	
11N14238—4" Diet. 180° Ret	í
11N14239— 2 - " Di i. 180» Rot	



### NATIONAL R & O DIALS

Type	0-31/2" Dia	il. Nickel	silver.	Marked
0-100.	180° counte	r-clockwise	. Large	Hasy-to-
grip ce	entral kneb. Fe	or le" shai	ft.	1.00
11N14	567			1.00
Type	R-1%" Dial.	Etched n	ickel silve	r. 180°.
Marke	d 0-10. 1,4" sh	aft.		
11N14	568			60c



### ICA CHROME DIAL PLATES

		on Chrome in finish. Cali	
0-100.	Citain sai	m musii. Can	1 1(111(1115)
11N14184 11N14191 11N14192 11N14193 11N14194 11N14195	180° 325° 180° 325° 180° 325°	2" Dia. 2" Dia. 3½" Dia. 3½" Dia. 4" Dia. 4" Dia.	43e 43c 67c 67c 76c 76c



### ETCHED METAL DIAL PLATES

Black dril plate, collibrated 0-10 an 300°, 21 x111 p°, with 4 mtr. holes. Specify Marking: Plain, Tone, Record, Gain, Mike.

15c



### MILLEN PANEL TRANSFERS

1/d" Block letters for	
11N8012—Black on	White
11N8013—Whr on	Black



# TRANSMITTING VARIABLE CONDENSERS—CRYSTALS

### **BUD MIDGET CONDENSERS**



Small and sturdy with high mechanical and electrical efficiency. Insulation used is Steatife. Rotor and Stator plates are brais and are the-

parts to conductin plated. Condens to have both front on I rear learning, with either a parts. hine type plates (strength line wave length), or some aroular plat is strength line copacity)

### Semi-Circular Type—I Bearing MMFD - Double

Stock No.1	Tyr ··	Max.	Mп	Capi	$E \approx h$
11N10827	MC1861	15	-1	.060*	1.31
11N10828	MC1862	351	į.	.0(0)	1.71
11N10829	MC1863	. ()	-7	1.060"	1.89
11N10830	MC1864	75	()	.060*	2.20
11N10831	MC1867	100	12	.060"	2.60

### Two-Gang Variables

Capacities shown are per sertion

Stock No. Type	Мох.	Mm.	Gap	Each
11N10834 MC1882A		7	.0.11"	2.84
11N10832 MC1884A		-4	.0b0"	
11N10833 MC188FA	35	- 11	.060"	2.89

### HEAT RADIATING GRID AND PLATE CAPS

Use at terminals of transmitting	tubes. Pro-
tects glass. 36N14377—For HK-24	35c
301414310—FOF 3 1-1, FIX-34	
<b>36N14381</b> —For 100-T, 807	49c
36N14388—For 866, T-125	59c

### MILLEN PLATE CAPS

Steatite covered cap, for transmitting tubes.
Type 36001, 16, for 866, etc.
Type 36001, '16, for 866, etc. 29N8055
<b>Type 36002</b> , %", for 807, etc.
29N8056
Type 36011. Extra tight. Snap action top but-
ton to grip release.
29N8052—9, " dia

### NATIONAL GRID CLIPS

Easily removed. Tinned grip end for solder-
ing. For transmitting tubes 866, T20, 809,
812, etc. ½ di imeter.
29N14441
Ceramic safety grip "," diameter for 866.
T20, 809, 812, etc.
29N14598
29N14599-Ceramic as above but 36" for
807, etc

### NATIONAL MIDGET **CONDENSERS**





A. "ST" type: 180° straight-line wave-length

type 270° rotation straight-line fre-

riucney (	1010 St A	SHORE.		
Stock No.	T 200	Minida.	Histes	Ea th
11N14300	STHSL	15	3	1.65
11N14299	5T35	35	9	1.85
11N14291	ST50	0	11	1.90
11N14293	STIGO	100	20	2.10
11N14295	ST140	140	27	2.30
11N14294	STIFO	1 0	29	2.30
11 <b>N</b> 14296	STH2: 0	250	32	2.70
11N14303	ET D 50	50-50	11-11	2.30
11 <b>N</b> 14280	SE-50	. 0	11	2.30
11N14282	SE-100	100	20	2.60
11N14287	SEH33	335	43	3.50

### **BUD TINY-MITE CONDENSERS**

Designed for u.h.f. circuits. Extremely com-Designed for w.h.f. circuits. Extremely compact. Have rigid construction, close fitting bearings, Steatite insulation. Soldered Friesplates are bright cadmium | fated. 3-way mounting. Shaft on single units permits gangliag. Panel spice 1½x11g.\*

### SINGLE-GANG CONDENSERS

Stock No.	Mmfd.	Plates	Each
11N9539	3-15	£;	1.13
11N9540;	4-25	9	1.18
11N9541	5-35	13	1.32
11N9542	6-50	19	1.42
11N9543	9-100	37	1.69
11N9545*	4-10	7	1.16
11N9546*	5-15	11	1.25
11N9547*	5.5-25	17	1.47
11N9548*	6-35	21	1.62

### 2-GANG CONDENSERS

Stock No.	Mmfd.	Plates	Each
11N9512	3-15	1.	2.30
11N9513	4-25	9	2.55
11N9514	6.50	19	2.67
11N9515	9-100	3'7	2.89
11N9516*	4-10	7	2.20
11N9517*	5-15	11	2.45
11N9518*	5.5-25	17	2.60
11N9519*	b-35	21	2.84

\* Double spaced.

### NATIONAL LOW POWER UNITS



"TMS" Aluminum plates and frames; Isolantite insulation; long; both panel mounting and 2-hole base mounting; ad

bearing: TMS units have 10.00% an app. TMSA units, .005; 1 ½x2½x 2,4 Ali 1000 Peak Voits, ex ap 1 InN14555 and 11N14556 are 2000 Peak Voits.

Stock No.	N :t'l No	No. of	Each
DEDCK NO.	and Cap.	r icro .	Each
11N14550	TMS-100	9	2.60
11N14551	TMS-150	1 -1	2.80
11N14552	TMS-250	22	3.30
11N14553	TMS-50D*	5-5	4.40
11N14554	TMS-100D*	9-9	3.20
11N14549	TMS-300	27	3.80
11N14555	TMSA-35	7	3.90
11N14556	TMSA 50	11	4.40

\* Split stator models.

### NATIONAL NEUTRALIZING CONDENSERS

NC600. For use with 6L6r and similar output tubes. Thumb screw adjustment for varying capacity .5 to 4 mmid. Isolantite insulation. NC800A. High voltage disc type for RCA 800, HK54, etc. Screw adjustment; 3-hole

STN. For 10, 45, 47, etc. 3000 VP; 18 minfd.

Stock No.	Type	Application	Each
11N14252		For 6L6s, etc.	.32
11N14259		For 800, etc.	3.00
11N14476	STN	For 10, 45, etc.	2.07

### **BUD SINGLE BEARING MIDGET CONDENSERS**



Constructed identical to Midget Con-densers with the exception that these condensers have front bearing only .024" air gap.

### Semi-Circular Type-Single Bearing

Stock		MM	FD.	No.	
No.	Type	Max.	Min.	Plates.	Each
11N10835	MC-1870	15	3	3	.88
	MC-1872	33	4	5	.98
	MC-1873	50	5	7	1.08
	MC-1875	100	7	14	1.23
11N10839	MC-1876	140	8	19	1.37



### **BLILEY CRYSTALS**

CF3 single signal filter crystal for IF filter. Frequency  $455\,\mathrm{kc}$ ,  $\pm$  5 kc, free of spurious responses  $\pm$  7 kc, 5.00 29N13855

**SMC 100** dual frequency crystal provides either 100 kc.or 1000 kc. source. 1000 kc.  $\pm$  .05%, 100 kc. can be adjusted to zero beat. For alignment of receivers.





### TYPE AX2 FOR AMATEUR USE





29N13856....

### CRYSTAL SOCKETS

		while it 33002. 4 spacing, 125 fins. Steame it	nsul :-
ı	7.7	tion. 29N8050	30c
	0	29N8050 Millen 33102, .487* spacing, .095 pins.	
		Millen 3 (102, .487 spacing, .095 pins.	20-
1	29N8057	Million 3 3102. 1407 spacing, 1095 pins.	JUC
	Millen 33202.	. 🦅 spacing, 125° pins. Diedilie insulcition. 💢	
1	<b>29N</b> 8051		JUC
	Amphenol 54	-2 Polystyrene. ¼" spacing, .125" pins.	20
			ZZC
	Millen 33202. <b>29N8051</b> Amphenol 54		30c 22c

### CRYSTAL HOLDER ADAPTORS

Mosley 5-75 adapts 1/2" spaced holder to 3/4" spacing.

29N8054
Mosley 75-5 adapts 34" spaced holder to socket with
1/2" spacing or to octal socket.
29N8059 34C



### NATIONAL SHAFT COUPLINGS

11N8461—TX-8. Isolantite insulation	6	Oc
11N8470—TX-9. Steatite in all ition		.75c
11N8471—TX-10. Phenolic insulation		.40c

### NATIONAL FLEXIBLE SHAFT COUPLINGS



Isolantite insulation, short length of flex, shafting Drives 1/4;" shaft any angle to 90°.

11N14529[X-13. /1	
11N14531-TX-11. Without	150
lantite insulation 4'78"	. 42c
SOLID Isolantite couplings:	
11N14501—TX-1. 1	. 65c
11N14502—TX-2. 31/4"	75c

11N14530-TX-12. 45/8"



Flexible Coupler for 14\* shafts or for extending aft at an offset angle. Insulated. 30c 11N9751-Bakelite 11N9750—Cer imic.....

### TEKNI-CALS DECAL LABELS

Provides the custom-set builder, the amateur, the minutacturer, and the experimenter with an ideal assortment of decal labels. Each set contains a wid variety of markings with ample duplicates. May be cut off, contained, or rearranged. Tokini-Cals are easy to apply, handromely made and give long, satisfac-

11N19885-Television Markings. Set of over 1,000. 11N19888—Audio Markings. Setol over 1,000.

11N19889—Dial Markings, Set of over 50, 11N19890—Transmitter Markings, Set of over 1,000, 11N19891—Receiver Markings, Set of over 1,000, Any Set Above, Each....



1.32

### HAM COILS & CHOKES

### BARKER AND WILLIAMSON







Type B

### JUNIOR AND TYPE B INDUCTORS

Type A. Jun ors for powers up to 75 waits input with plate voltages up to 8:0. Fitted with standard 5-prong steatite base. Dimensions: 3½,x1½,x3½,\*.

Type B for powers up to 150 waits input with plate voltages up to 1.00. Steatite base and plug-in jack mounting. Overall dimensions: 3½,x2½,x4½, Capacities shown (in mil) to reson ite to L.F. and of the bind can a stually be 5 to 20 min less because of tube and wring capacities. of tube and wiring cap icities.

JUNIORS					TYPE B			
Band   Cap.   Band   Mmf.   Stock No.   Each			Cap.   Stock No.   E					
		EN	D LIN	KED				
6 10 20 40 80	15 22 34 47 60 105	JEL 12N10460 12N10461 12N10463 12N10464 12N10465 12N10435	1.38 1.38 1.38 1.38 1.38 1.38	14 21 33 36 36 10	BEL 12N10479 12N10480 12N10482 12N10483 12N10484 12N10438	2.41 2.41 2.48 2.83 3.16 3.44		

		CENT	ER LI	NKED		
		JCL		1	BCL	
6	15	12N10466	1.38	14	12N10485*	2.41
10	16	12N10467	1.38	20	12N10486*	2.41
20	16	12N10469	1.38	34	12N10488*	2.48
40	33	12N10470	1.38	37	12N10489*	2.83
80	53	12N10471	1.38	39	12N10490*	3.16
160	100	12N10436	1.38	120	12N10440	3.44

		VAR	ABLE	LINK		
1		JVL			BVL	
6	15	12N10472	1.38	15	12N10491*	1.93
10	22	12N10473	1.38	14	12N10492*	1.93
20	21	12N10476	1.38	25	12N10494*	2.00
40	31	12N10477	1.38	29	12N10495*	2.28
80	46	12N10478	1.38	46	12N10496*	2.61
160	95	12N10437	1.38	110	12N10444	2.88

\* With center Lip.

Stochte I lick Bar Arsembly for end or center link Type B inductors (former type Abu).

12N10497.

S5c

12N10498.

3.44



### B & W TYPES T AND HD

Type T: Up to 100 witts input. Link for you all to esente diaked models hand don jick bise—sime link for alugin rolls on all 1 in its Mailyes bod imp. of 72 ohms. Mail 7½ x61 ½x57.

Type HD: He ivy deather plus bor and junito binana plugs. But types center tipped, Mit, space 11½0x77.

Capacities: Cimbol 1 to 0000 mail minimum capatits.

TYPET			TYPE HD			
B ind	Cit. Minii	Stock No.	Cot Filh	Cup. Mnd.	Stork No.	Cost Euch
		CENT	ER LI	KED		
10 20 40 30 100	19 21 34 55 100	TCL 12N10199 12N10501 12N10502 12N10503 12N10445	2.89 2.96 3.30 3.65 3.93	20 20 20 34 105	HDCL 12N10511 12N10513 12N10514 12N10515 12N10447	5.85 6.54 6.88 7.56 8.60
		VARI	ABLE I	INK		

		VARI	ABLE L	INK		
10 0 40 80 100	17 22 29 39 85	TVL 12N10504 12N10506 12N10507 12N10508 12N10446	2.20 2.28 2.61 2.96 3.10	16 18 33 41 90	HDVL 12N10516 12N10518 12N10519 12N10520 12N1048	4.48 5.16 5.50 6.19 7.23

160 85 12N10446 3.10 90 12N10148 7.23
Stoatite Lick Bar Assembly for center link Type T mausters (old
type A54). 12N10509
Base Assembly and Swinging Link for virial lelink Type T Inductors.
12N105105.50
In k Bar Assembly for center link Type HD Industris.  12N10521
Bre Assembly and Swinging Link for viriatle-link Tyre HD Inductors.
12N10522 6 88

### **BARKER & WILLIAMSON TURRETS**

Fist, positive bind withing for amoteur rigs. Shorts unused contourings. Shorts unused coils, eliminates absention effects. Cover t 0, 40 20, 15, 10 meter bands by shift rotation. %" intg. hole.



### **BAND HOPPERS**

For up to 75-w itts. U.e. same coil design as Juniors. Tunes must variable a practor. For interacting coupling between 2 power tub some beam-power tubes in 1 tracks.

12N10523—Type 2A. Mtg. space 31½ (x2\*, Depth 3\*,....

### 75 AND 150 WATT TURRETS

75-with for link coupling sin ibsended or nush-pulli low-power stages with tubes at voltages up to 8 0.6% dis. 4° deep. 150 watt for sin ite, double-ended circuits, voltages to 1000.

12N10524—75-west ITCL center linked, center tapped.

12N10525—75-with ITEL, end linked intringed.

12N10526—150-watt BCL, center linked center tapped. Each. 11.69

12N10527—150-watt BEL, end linked, untapped, Each. 11.69

### TURRET DIAL PLATES

Sturdy aluminum with bake Lenam I finish. 214° dia. For use with turnets and band hoppers list diabove. 

### JOHNSON SPRING CLIP FOR INDUCTOR COILS

Take: No. 20 to No. 10 wire. Lock screw adjustment. 12N16749—Spring Clip. Each.



### NATIONAL HI-FREQUENCY COILS

### RELIANCE RF CHOKES

wound section Lol intite form. m. ohm., **22c** 12N10106 - 2.5 ohm; 150 m; 50 ohm; 12N10109 - 2.1 ohm; 250 m; HD typ · .





### PARASITIC SUPPRESSOR

Non-inductive 50 ohm resistor with choke of 0.3 mh., .003 ohms DC. 

### **OHMITE POWER LINE CHOKES**

Stock	М.Н.	Oh	ms.	Core	Cost
No.	Tut.	A	D.C.	Dan.	E 1.
12N10017		25	.15	** X 9 15, #	1.26
12N10018	15	10	.07	61/x ;*	2.11





### BUD HF AND UHF R.F. CHOKES



### NATIONAL CHOKES

12N14429—R100—2½ r.i. : O olan DC r.s. 12 m.i. wire b ii (A) 12N14421—R100U—As above, this. ...38c 42c mtg. (B)... 





### MILLEN HASH FILTERS

Elimin its interference from near any vapor recthers. Type A for 82 or 83 tilves; Type B for 866's. Connect in 115 1 ds, close to tulle. 

### **OHMITE RF PLATE CHOKES**

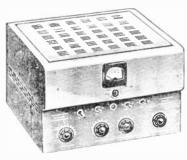
Single layer wound on low power factor steatite or plastic core. Non-magnetic mtg. brackets with Z-7.

Stock No.	Mod.	Range	M.H.	Dimen.	Cost
12N10084	L-460	320 to 520 MC	0.20	1/ x 'm"	19c
12N10097	Z-235	160 to 350 MC	-0.84	.1 X 3 16 1	19c
12N10086	2-144	80 to 200 MC	1.8	1/1 X 376"	19c
12N10087	Z-10	35 to 110 MC	7.0	7/8 x 32"	19c
12N10092	Z-28	20 to 60 MC	21.0	1 34 x 5 16"	25c
12N10093	Z-14	7 to 35 MC	44.0	2x716°	40c
12N10094	Z-7	3 to 20 MC	84.0	6x16"	92c



# LATEST LOW-COST HAM EQUIPMENT

### STANCOR 125-WATT TRANSMITTER KIT



Model ST-202-A. Build your own compact desk type transmitter to cover the 80, 40, 20, 15, 11 and 10-meter bands. Crystal controlled CW. AM and FM modulator units easily added if desired. Cabinet has built-in chassis, markdesired. Cabinet has built-in chassis, mark-ed panel and bottom plate, plus all circuit and construction com-

pius, pius all circuit and construction components, and instruction manual. The only extras needed are milliammeter, five tubes, crystals and set of 150 watt B & W standard PA tank-coil.

Simplified band-switching exciter circuit. Has adjustable link coil antenna coupling. Simultaneous screen keying of both exciter tubes. Break-in operation. Uses 6V6, 6L6, 5R4GY, 5Y3G7. For PA you can use a 35T, 35TG, HK54, 5514, 811 or 812 (wide range neutralizer provided). Terminals provided at rear of cabinet for key, antenna feed line, AM modulator and remote standby switch. Gray wrinkle finish case measures 14-1/16x9x13-3/16".

29N21020—Shipping Weight: 55 lbs

### STANCOR MOBILE TRANSMITTER KIT



Model ST-203A, 25 watts model SI-203A. 25 watts plate power input. For mo-bile and fixed location phone, "Press-to-talk" op-

sockets, switches, metal cover and mounting base. Instruc-tions included. Shipping Weight: 11 lbs.

29N21024-Transmitter Kit only, not wired............44.70 29N21034-As above, wired and assembled......58.90

### SPERTI TWO-WAY HAND TRANSCEIVER



New, exclusive design stable oscillator and receiver. Covers 144-148 MC (2-meter band). Ideal for transmitter hunts, emergency work, loating, flying or racing. Maximum performance has been packed into the smallest possible size and weight. Push-to-talk switch. Frequency is set at the factory and will stay in band unless tampered with. Slide-rule dial can be locked. Folding dipole antenna. Case measures 10x3x2". Shpg. Wt. 5 lbs.

29N22450-Per unit, less batteries 33.81 20N20627-(2) "B" Batt. for above. Ea. 1.74 20N20622-"A" Batt. (2 required) Ea... 61/2 \$

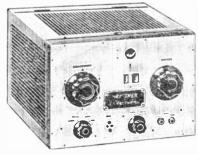
### HARVEY WELLS 50-WATT PHONE & CW TRANSMITTER



No plug-in coils! Covers 8 bands from 80 to 2 meters at the flick of a switch. Crystal controlled on all bands. No oscillator or multiplier tuning necessary except to resonate the antenna. For fixed station or mobile operation from AC, Vibrapack or dynamotor. Use as exciter when increasing output. Includes the following tubes: 6AQ5 crystal oscillator, 6AQ5 buffer-multiplier, 807 final amplifier, (2) 6L6 Class B modulators. Controls include: band switch, excitation, antenna loading, amplifier tuning, power-on, carrier-on, meter switch and phone-CW switch. Dimensions: 12%x7%x9". Shipping Weight: 20N21038—With Tubes

20N21038-With Tubes...... 99.50 30N21039-Power supp.for above. 39.50

### MEISSNER SIGNAL SHIFTER KIT



Amateurs, save money! Build this newly designed precision signal shifter. Features precision signal shifter. Features built-in 10, 11, 15, 20, 40 and 80 meter turrer mounted coils. 6-position band switch, no coils to change. ECO or crystal 6V6 oscillator, 807 doubler amplifier. Eye tube key and tuning Indicator. Factory assembled shielded turret unit. Voltage regulation. Built-in

unit. Voltage requiation. Built-in power supply uses VR150, VR75, (2) 5Y3 and delivers 6 watts output. Vernier dials. With instructions, tubes and all necessary parts including solder and wire. Over-all dimensions: 13-13/16x13-1/4x8-3/4". Shpg. Wt: 23 lbs. 

29N10394-6-meter coil strip for above kit......4.00 29N10384-160-meter coil strip for above kit............4.00

### MEISSNER FMX PHASE MODULATOR

Designed exclusively for use with Model EX signal shifter. Combination of two gives amateur a complete low power phone and CW transmitter at a low price. Deviation control



29N21099-Shipping Weight: 4 lbs. Less tubes...... 12.00

### SILVER ABSORPTION WAVEMETER

Model 903, 1600 KC to 500 MC, Low-Model 903. 1600 KC to 500 MC. Low-loss tuning capacitor, inductor socket, resonance-indicating lamp. Wide fre-quency—two tuned circuits. On six ran-ges inductor is paralleled with capaci-for, seventh (400-500 MC) is quarter-wave transmission line with series tuning (no lamp coil). Size: 3½x3½x3½. Less inductors.

29N2129I-Shpg. Wt: 1 lb...... 3.30

Plug-In Inductors-Each 65¢

MC

29N21292...1.6-3.7 29N21296.. 40-100 29N21293.. 3 5-R 29N21297..100-300 29N21294.. 8-15 29N21298..400-500 29N21295....17-40 MC







### SILVER FIELD STRENGTH METER

Model 903A. Converts the Model 903 Model 903A. Converts the Model 903 Absorption Wavemeter described above to a field strength meter by adding a 1N34 rectifier, 0-1 milliammeter sen-sitivity control and phone jack to the unit. Shpg. Wt: 2 lbs.



# SIMPSON MODEL 240 HAMMETER VOM

Complete, wide range AC-DC VOM to Complete, wide range AC-DC VOM to check high voltages and components of transmitters and receivers. No external multipliers needed. Sensitivity: 1000 ohms/volt. Rugged, accurate 3" meter. Ranges: 0-15/150/750/3000 AC volts; 0-15/75/300/750/300750/3000 DC volts; 0-15/150/750 DC MA; 0-3000/300,000 ohms. Size: 3x5-7/8x2-1/2". Shipping Weight: 3 lbs. Supplied with, test leads and attached alligator clips.



# a irraiters AMATEUR RECEIVERS

SX-42

### HI-FI FM-AM RECEIVER



This model combines in one superbly engineered unit, a top-flight standard and VFH communications receiver covering all frequencies from 540 KC to 110 MC. The tremendous frequency range is made possible by "split-stator" tuning system and the use of dual IF transformers. A discriminator and two limiter stages are available on bands 5 and 6 (27 to 110 MC) to permit reception of FM signals. True high fidelity is assured by the powerful 8-watt audio system with flat response from 50 to 15,000 cycles. Controls are arranged for maximum convenience and simplicity of operation. Freedom from drift and maximum stability are provided by temperature compensation and the use of Type VR-150 voltage regulator. Crystal filter circuit combined with variable IF channel width offers six point selectivity on four lower bands. Band-spread dial calibrated for 3.5, 7, 14 and 28 MC bands plus logging scale. Crystal phasing, CW pitch, sensitivity, four-position tone control for low, medium, HI-FI and bass are all conveniently located on the front panel. External connections include 500 and 5000-ohm speaker outputs, phone jack, phone input jack, socket for external power, doublet and single wire antenna and remote control connections. Red dot markings for broadcast reception and green for FM reception, simplify operation for general use. Tubes: (2) 6AG5, 7F8, 6SK7, 6SG7, (2) 7H7, 6H6, 7A4, 6H6, 6SL7, (2) 6V6, VR-150, 5U4G rect fier.

Attractive, modern styled cabinet harmonizes with the most luxurious surroundings. Finished in a rich, deep gray with satin chrome trim. Top opens on piano hinge for easy accessibility to tubes and chassis. Dimensions:  $20 \times 10\% \times 16\%$  deep. Shipping Weight 71 lbs. Complete with tubes. For 105-125 volts, 50/60

30N21070-Model SX-42, Less Speaker and Adjustable Base...Net.. 275.00 30N21069-Model SX-42U. As above but 115-250 v., 25-60 cyc......287.50

### FM-AM "SWL" RECEIVER



30N21079-Model SX-62. With Tubes, but less speaker...... Net.. 269.50 Model SX-62U. Same as above except for 110/220 volts, 25/60 cycles AC. 30N21105......NET.....282.00

### FM-AM SHORTWAVE RECEIVER



Here is all you would expect from a truly fine communications receiver plus extra coverage to include the 6-meter and FM broadcast bands. Offers continuous coverage from 540 KC to 55 MC with an additional band from 86 to 109 MC. One tuned HF stage and 7F8 dual triode converter assure an exceptionally good signal-to-noise ratio. Dual IF transformers provide a 455 KC IF channel for operating frequencies below 44 MC, and a 10.7 MC II channel for the VHF bands. Audio response to 10,000 cycles. Switching of IF frequencies is automatic. Separate electrical bandspread dial is accurately calibrated for the amateur 3.5, 7, 14, 28 MC bands. Other important performance features include temperature compensation for freedom from drift, series type noise limiter, permeability-adjusted inductances in the RF circuits, separate RF and AF gain controls, and adjustment on rear for "S" meter. Speaker output is tapped for 500 and 5000 ohms. Uses the following tubes: 6BA6, 7F8, 6SG7, (2) 6SH7, 6H6, 6AL5, 615, 6SQ7, 6V6, 5Y3GT rectifier. Handsome gray steel cabinet with satin chrome trim and plano hinge top, fits into any surroundings. Dimensions: 18½ x 8 7/8 x 12" deep. Shipping weight 44 lbs. For 10s-125 volts, 50/60 cycles AC.

30N21064-Model SX-43. With Tubes, but less speaker.....NET...... 159.50 Model SX-43U. Same as above except for 110-220 volts, 25-60 cycles AC. 30N21065......NET......169,50

# MATCHING SPEAKERS





MODEL R-42 SPEAKEH. Features the bass reflex principle of sound reproduction in a sleek, highly functional design cabinet to match the SX-42 and SX-62 receivers shown above. An 8" heavy duty PM speaker gives excellent full range response. Two-position tone switch on front panel permits rapid changeover for communications or high lidelity reception. Terminals on real factors and the same part of ingeover for communications or high fidelity reception. Terminals on rec 500-ohm input. Satin-finish, gray metal cabinet measures 17 x 11½ x 12½ deep.

MODEL R-44 SPEAKER. Large oval size in a professional style cabinet with ample baffling, gives excellent low frequency response. Especially designed as a companion unit for SX-43 receiver shown above. Heavy duty, PM speaker in 6 x 9" size. Two-position tone switch. Dimensions of rich satin-gray finish cabinet: 18½ x 8½ x 9 5/8" deep. 30N21066-Shipping Weight 19 lbs......NET. **24.50** 

## RECEIVERS & TRANSMITTERS



Superior performance at moderate cost, Frequency range in 4 bands, continuous from 540 KC to 43 MC. Variable pitch BFO and 3-step tone control. "Microset" permeability tuned RF coils for high sensitivity. Special break-in terminals operate to cut out receiver when your transmitter is in operation. Has latest series noise limiter, AVC, CW-Phone switch, phone jeck, RF sensitivity and volume controls. Bandspread control with full electrical bandspread. For either single wire or doublet amenna. 7 tubes plus rectifier and boliast tube: 65G7 RF Amp., 65R7 Conv., 65R7 lst. If Amp., 65R7 2nd. If Amp., 61R5. Ind. Det., 65C7 BFO and AF Amp., 25L6GT Output, 25Z6GT Rectifier and Earlist tube. Attractive satin black steel cabinet with brushed chrome trim. Top opens on plano hinge. Size: 18½ x 9 x 9½ deep. Con plate with speaker. 115 V. 25-60-cycle AC-DC.

Employs new 2 MC IF for improved image rejection. Positively eliminates am-Employs new 2 MC IF for improved image rejection. Positively eliminates amateur images or repeat points within the amateur bands. Incorporates the larest series type noise limiter circuit. Voltage stabilized oscillator, iron core II transformers. Built-in PM dynamic speaker, 2½-waits output. Slide rule type dial. Separate bandspread control and scale for fine tuning with full electrical bondspread. Frequency range: 5 bands from 540 KC to 54.5 MC. External conecitions for phone tipes, phono input, single wire or doublet antenna. 7 tubes plus rectifier: 6C4 Osc., 6BA6 Mixer, two 6BA6 IF Amps, 5116 Det., AVC, ANL, 6SC7 BFO and 1st Audio, 6K6GT Audio Output, 5Y3 Heatifier. Satin black steel cabinet with brushed chrome trim. Top opens on piano hinge. Size: 12 7/8 x 7 x 7% deep. 115-volt 50/60 cycle AC.

Model S53U same as above but 115/220-volt, 25-60-cycle operation.

30N21104.....

A specially designed and constructed receiver with built-in speaker. Components are made to withstand the effects of sea air and humidity. Temperature compensation assures drift-free reception. Permeability adjusted "microsist" inductances in the RF circuits add to the stability and high quality. Besides the four tuning ranges, from 132 KC to 13 MC there are three pre-tuned channels for fixed frequency operation. Flas a 1020-cycle range filter for better voice reception on ranges. Equipped for 110-volt AC operation; provision is also made for the addition of power supply combinations listed below permitting operation from either 6, 12 or 32-volt batteries. 9 tubes pius rectifier: 6SS7 RF Amp., 7AB Conv., two 6SS7 IF Amp., 7C6 Det., 7A6 ANL, 6SS7 BFO, 351.6-GT Output and 35Z5GT Rect. Functional gray steel cabinet with plano hinge top. With doublet or single wife antenna connection, phone jack and 6, 12 or 32-volt sockets. Size: 18½ x 8½ x 9 5/8".

30N21059-Shipping Weight 31 lbs.

Directly calibrated variable master oscillator. Complete in one case: narrow band FM and calibrated five band VFO, with built-in power supply. Power output from 4.5 watts at 3.5 MC to not less than 2.5 watts at 29.7 MC. Dia! directly calibrated in 7 ranges to all amateur bands from 3.5 to 29.7 MC. NiFTM available on all ranges. FM deviation 1200 cps on all frequencies. Audio response flat from 100 to 5000 cps. Provision for oscillator keying for break-in operation. Check switch for beating oscillator against incoming signal without putting transmitter on air. Built-in pre-umplifier for high impedance crystal or dynamic microphones. 3 crystal sockets for spot frequency operation. Tubed used: (3) 6BA6, 6L6, VR105, VR150, 5Y3GT rectifier. 105-125 V. 50/60-cycle AC. With tubes, less crystals. 12% x 7 x 7%\*\*.

Offers narrow Bana FM and CW, plus provisions for AM, to give maximum flexibility on 5 bands. A completely self-contained, medium power unit for the modern amateur. Consists of a crystal controlled or VFO oscillator, a frequency modulator with speech amplifier and a buffer and final amplifier. High stability and low FM distortion. The 4-65A type tube in the final stage is cooled by a 3-inch 800-RPM fan. Plate input 185-wetts for approximately 12 watts output. Operation switch has 3 crystal positions plus VFO and NEFM; band selector switch changes multiplier coils 3.5-4, 7-7.3, 14-14.4, 21-21.45 and 27.16-29.7 MC. Check switch turns on oscillator for spotting signals on receiver. Plate switch controls all "B" power and makes connections for remote control. Deviation control adjusts for 0.4 ratio on all bands. 5 tubes plus 2 voltage regulators and 3 rectifiers: Three 6BA6-Osc., Freq. Modulator and Speech Amp., 6L6 Buffer, 4-65A Final, VR-150 and VR-105 Hegulators, SY3GT and (2) 866 Rectifiers, Attractive gray steel cabinet with satin chrome trim. Plano-hinge top with Interlock, Size: 20 x 10% x 16" deep. For 115-volt, 50/60-cycle AC operation. operation.

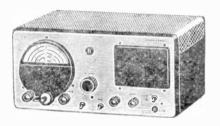
7 TUBE AC-DC RECEIVER



7 TUBE AC RECEIVER



"SEA FARER" RECEIVER



MASTER OSCILLATOR

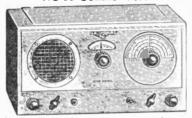


125 WATT TRANSMITTER



## MODERATELY PRICED NATIONAL RECEIVERS

#### NC-33 COMMUNICATIONS RECEIVER



A top performer in National's fine line of quality receivers— packed with expensive set features yet priced within the modest budget. Four tuning bands provide continuous coverage from 500 KC to 35 MC. Main tuning and bandspread capacities connected in parallel on all bands

parallel on all bands for bandspread operation at any frequency within tuning range. Fully calibrated dial-stations can be readily separated and logged. Amateur, police and foreign broadcast bands clearly identified. Band-switching achieved with 4-position switch. Other big set features include Automatic Noise Limiter, CW oscillator and pitch control for adjustment of beat note. Send/Receive Switch, and choice of two audio output circuits, 5" PM Speaker. Phone-Jack cuts out built-in speaker when headphones are in use. Antenna input designed for any single wire or doublet antenna. Tunes to ship calibrating and international SOS band. Front-panel mounted controls include: Main tuning, band selector switch, beat oscillator pitch control, code-phone switch, noise limiter switch, and audio gain. and audio gain.

New superhet circuit uses latest type high efficiency tubes: 12SA7, 12SG7, 12H6, 12SL7, 35L6GT, 35Z5GT, Rectifier. For 105-125 V, 50-60 cycles AC or 105-125 V DC. Cabinet has Gray enamel finish. 16½" x 8¾" x 8½".

#### NC-57 RECEIVER



Sets a new high for per-formance in the moderate price field! Provides Phone and CW reception over the entire frequency spectrum of 550 KC to 55 MC in 5 bands. Built-in power supply, PM speaker and front panel mounted controls assure accurate, stable operation. Voltage

cuit holds short wave signal steady when voltage changes.
Controls include Main Tuning, Bandspread Tuning, Band
Switch, RF Gain, RF Trimmer, BFO-MVC-AVC, ANL Switch,
AF Gain, BFO Pitch, Tone Control and On-Off Switch.

Ar Gain, BFO Pitch, Tone Control and On-Off Switch. Superhet uses: 6SG7RF amps, 6SB7Y conv., 2-6SG7 IF amps, 6H6 Det., AVC, ANL, 6SN7 Audio amps, BFO, 6V6GT Audio amps, 5Y3GT rects, VR-150 voltage rect. Antenna terminals for single, double or co-ax antenna lead-in. Provision made for connecting external "S" meter plus other accessories. 105-120 V, 50-60 cyc. AC. Gray enamel finish. 16½ x 11½ x 8½". Wt. 33 lbs. Complete with tubes.

30N21266-NC-57 Receiver...... 89.50 30N21274-"S" Meter Wt. 21bs......14.95

#### NC-173 COMMUNICATIONS RECEIVER

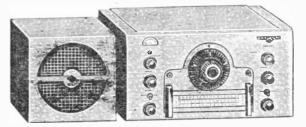
Appearance identical to NC-183 at right. Latest model for amateur and commercial use, with complete coverage 540 KC to 31 MC, plus 48-56 MC for Amateur 6-meter band. Separate bandspread tuning knob and dial for 80, 40, 20, 10 and 6-meter amateur bands. New "double-action" type noise limiter with variable threshold control for both CW andphone signals. Separate AVC amplifier permits using AVC on phone and CW. New wide range crystal IF filter offers six positions to meet all receiving conditions.

Other features include "S" meter in AVC classifications.

all receiving conditions. Other features include "S" meter in AVC circuit for use with phone and CW signals, continuously variable tone control headphone and phono jacks on front panel. 3.5 watts audic output at 8 or 500 ohms for speaker operation. Antenna input circuit equipped with panel trimmer for maximum performance with any antenna. Superhet circuit with 11 tubes and rectifier-1 R.F. Amp., separate stabilized HF osc., 1st det., 2 IF's, diode 2nd det., AF limiter, AVC amp., stabilized BFO, 2 AF stages. For 110-120 or 220-240 v., 50-60 cycles. Gray metal cabinet, 19% x 10 1/8 x 12%". Complete with tubes.

30N21254-Table Model Receiver. Wt. 70 lbs...... 189.50 30N21256-Rack Mounting Receiver. Shpg. wt. 70 lbs..189.50 30N21255-Table Model Speaker. 8 ohms imp. Wt. 121bs....10.00 30N21257-Rack Mntg. Speaker. 8 ohms imp. Wt. 12 lbs..10.00 30N21279-NBFM Adaptor for Receiver above. Wt. 3 lbs...17.95

#### HRO-7 COMMUNICATIONS RECEIVER



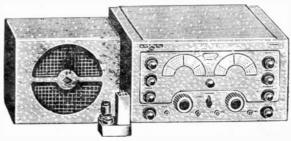
Ultra-modern HRO receiver with many new features! Wide-range adjustable selectivity with 6-position switch for crystal filter operation. Calibrated dial for complete coverage plus maximum bandspread on amateur bands. Plug-in coil sets for 1.7-30 MC—adjust for radio range, communications, marine, and broadcast-band frequencies by adding coil sets for 50-430 KC and 480-1700 KC. Automatic noise limiter clips noise on both positive and negative peaks, provides AVC for code reception. Two new miniature tubes, high frequency oscillator and voltage regulator for extreme oscillator stability. Accessory socket gives 6.3 volts AC, 150 volts DC regulated, and 240 volts DC unregulated for FM adaptor, crystal calibrator or HF converter.

or Hr converter.

Radio-Phono switch, 2 tuned RF, 2 IF stages, manual and AVC, calibrated "5" meter, micrometer-type dial with 20-to-1 precision gear drive, receiver disabling terminals for transmitting. 11-tube plus voltage regulator circuit assures high signal-to-noise ratio, image rejection, sensitivity. Requires power supply listed below. Gray enamel cabinet. 19½ x 10 x 10".

30N21253-HRO-7 Rec., tubes, coils. Wt. 60 lbs... 292.50 30N21252-Matching MCR Speaker. Shpg. wt. 10 lbs.....12.00 30N21265-Power Supply for Receiver above. Wt. 15 lbs. (Operates from 115-230 volts 50-60 cycles)................20.36 30N21280-NBFM adaptor for Receiver above. Wt. 3 lbs...16.95

#### DELUXE NC-183 COMMUNICATIONS RECEIVER



Latest engineering and radio circuit developments in a modern high gain superhet circuit. Complete frequency coverage 540 KC to 31 MC plus 48 to 55 MC amateur bands. Two tuned RF stages provide extremely high sensitivity and image rejection. Minimum drift for phone or CW reception assured by voltage regulated oscillator and BFO. Separate main tuning and bandspread dials, calibrated directly in frequency and with separate logging scales. Six-position crystal filter ranging from "Broad" to "Shap" permits reception of phone or CW signals atmaximum level of intelligibility despite channel interference. Noise limiter suppresses electrical interference on both Noise limiter suppresses electrical interference on both phone and CW:

phone and CW. Illuminated signal strength meter with adjustable sensitivity. Output circuit uses two 6V6 tubes providing undistorted output of 8 watts, with 11 watts maximum. Output terminals for 8-ohmspeaker or 500-ohm line. Provision for connecting high-impedance record-player pick-up plus Narrow Band FM adaptor unit. Highly-efficient low-drain tubes include: 2-6SG7 RF, 1-6SA7 det., 1-6J5 oscillator, 2-6SG7 IF's, 1-6H6 2nd det., 1-6SJ7 BFO, 16-6AC7 AVC amplifier, 1-6H6 2nd det., 1-6SJ7 AF, 1-6J5 phase inverter, 2-6V6GT audio output, 1-VR-150 and 1-5U4G Rectifier. For 110-120 or 220-240 v., 50-60 cycles AC. Smooth Gray enamel steel cabinet. 19½ x 10 1/8 x 15".

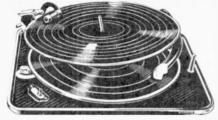
30N21268-Receiver with Tubes. Wt. 80 lbs...... 268.00 30N21269-Matching 10" Speaker. Shpg. wt. 12 lbs......14.00 30N21270-Narrow Band FM Adaptor. Shpg. wt. 3 lbs....16.95

#### OTHER NATIONAL RECEIVERS & ACCESSORIES AVAILABLE

30N21271-HFS Receiver/Converter. Wt. 25 lbs.... 142.00 30N21272-Power Supply for above. Shpg. Wt. 15 lbs....22.43 30N21259-NC-46 Receiver, Shpg. Wt. 50 lbs......97.50 30N21258-Speaker for above, in cabinet. Wt. 9 lbs......9.90

30N21273-NC108T FM Receiver-Tuner. Wt. 24 lbs. 99.50 30N21276-Tilt Base for NC-33, NC108, HFS, HR07......3.95 30N21277-Tilt Base for NC-173. Wt. 5 lbs.................3.95

# LAST MINUTE SPECIALS



#### JUST RELEASED! NEW GARRARD "TRIUMPH" 3-SPEED CHANGERS

The famous Garrard changer—"Built like a battleship with the precision of a watch"—now with three speeds. Too late for inclusion in the regular section of our catalog. Plays all records of all sizes and all speeds, automatically (78-45-33-1/3 RPM in 7-10-12" sizes). No records of any type need be played manually. Features a fully automatic stop regardless of the type of record being played. The motor is heavy-duty, quality engineered to assure constant speed with no wows, wavers or variations. Record may be rejected at any time. True-tangent pickup with minimum tracking error. Specially designed toneam eliminates disturbing resonance. Mounting dimensions: 15%"x13%"; requires 5%" clearance above base plate and 2%" below.

Model C. 100-130-volt. 60-cycle AC. With turnover crystal

Model C. 100-130-volt, 60-cycle AC. With turnover crystal cartridge and needles.

Model E. As above but supplied with two GE plug-in profes-

Model P. As above, but with two Pickering high fidelity car-

NOTE: Models E and P require preamplifiers. See page 48.



#### TRIONIC 16" TRANSCRIPTION ARM

New type slide cartridge holder allows instantaneous mounting. Any cartridge not over \( \frac{\pi}{n} \) wide may be used with the arm. Leaf spring clamp connects the pickup to ground. Outch twist of the thumbscrew and the cartridge is held securely until released. Can be used with all records up to 17°. Installation of cartridge is simple and efficient, silver-plated, spring loaded plungers maintain positive electrical contact. Height adjustment from 1-11/16° to 2-5/16° above base plate. Weight adjustment from 5 grams up. Arm rest. Grey wrinkle finish, brushed chrome trim. wrinkle finish, brushed chrome trim.

..... 22.05 34N13516.....



#### LIVINGSTON "UNIVERSAL" PICKUP ARM

New curved reproducer arm accommodates practically any cartridge, including LP types that use a 1 mil stylus. For use with new Columbia LP records plus regular or studio recordings. Tracks well on 12" or 16" table. Complete with two sliding counterweights—one to vary stylus weight to 6 or 8 grams pressure for LP records, other for regular records. 

#### QUANTITY LIMITED!

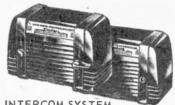


#### SPECIAL VALUE RECORD CHANGER

Improved automatic record changer, Jam proof and child proof—tone arm can be moved at any time without jamming unit or changing adjustments. Plays records manually or automatically—plays ten 12" or twelve 10" records at one setting Singer or the setting

plays tell 12 of twelve 10 records at one setting. Single control for simplified operation, Lightweight crystal tone arm assures hi-fidelity reproduction. Constant-speed 110 volt 60 cycle AC motor. Base plate 11½x13½". Requires 6" above and 2" below panel board.

99N9593—Shpg. wt. 12 lbs......Only **JO.95** 



TWO-WAY INTERCOM SYSTEM

Complete two-way system! Ideal for nurseries, restaurants, factories and homes. Units quickly installed without special tools. Remote stations can be placed up to 2,000 ft. from Master stations. Uses 50L6 and 12SJ7 audio amplifiers plus selenium rectifier. Plastic cabinet. 8½x6x4½". With tubes, AC cord and plug and 50 ft. of hookup wire.

99N9582-Shipping Weight: 8 lbs. ..... 12.95 

#### MICROGROOVE DUAL SPEED ADAPTER

Adapt your standard 78 RPM red ord player to play the new 33-1/3 and 45 RPM LP records. Comand 45 HPM LP records. Complete kit, including a speed reducing table which rests on top of the regular turntable. Has a simple planetary mechanism to reduce rotation. Special pickup assembly with switching arrangement to engage or release the speed reducing mechanism. Complete with Astatic FLC LP crystal pickup.

#### LOUDNESS CONTROL



Livingston Model MB. A new superb tone-compensated unit that will increase your listening pleasure. Combines the best features of conventional tone and volume controls to provide the proper aural balance at all levels. Compensated for 22 intensity levels. Designed for chassis or panel mounting; shielded, compact and requires a mounting space of only 2½ deep by 2-1/8 in diameter.

#### PORTABLE RECORD CHANGER CASE

Lightweight, compact portable changer case with convenient, easy-opening cut-away top-Handsomply styled in Tan and Brown simulated leather fabribrown simulated leather abri-koid over all-wood construction. Attractive Ivory plastic trim throughout. Insides covered with Tan simulated leather fabwith an simulated leather tab-rikood. Bright contrasting metal fittings and durable plastic handle. Ample room for mount-ing 3 or 4 tube amplifier and up to 8-inch speaker. Takes the Webster 156, 256, and 356 changers. Motor, and amplifier boards uncut. 19/1x15x9/2".



22N22063-Portable Changer Case, Shpg. Wt: 15 lbs. 11.95

#### DELUXE RECORD CHANGER CASE

Handsomely styled, lightweight and compact record changer case. record changer case. Rugged construction with covering of extra-fine simulated alligator fabrikoid. Strongly sewn edges reinforced with sturdy leather. Nickeled locking snaps with key included. Blank covered motor board. Inside dimensions: 17x14½x11".

13.95



22N22064--Wt. 10 lbs.....

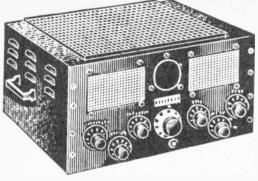
#### PORTABLE AMPLIFIER CASE



Covered with handsome Tan simulated rawhide leather to match reflex speaker enclosure. Top can be completely removed for easy access to amplifier. Two sturdy simulated leather handles. All corners protected by metal shelds. Bottom is equipped with metal bumper slides. Overall Size: 15x15½x20" wide. bumper slides. O 15x151/2x20" wide.

22N22057-Wt. 17 lbs....9.75

# MORE FOR EVERY DOLLAR



#### 20 WATT DELUXE HIGH FIDELITY AMPLIFIER

You can save up to \$30 on this 20-watt deluxe amplifier, with the assurance that you are getting a quality amplifier of reputable make. Lafayette had a chance to buy these fine amplifiers from a well known manufacturer at a remarkably low price and we are able to pass the saving on to you. Here is a unit capable of superb reproduction of both voice and music with a frequency range of 50 to 15,000 cycles. It's ready for rack installation or use as an individual unit. Equipped with a moster gain control to regulate all channels without resetting individual controls. Output impedances 2, 4, 8 and 500 ohms. The dual tone controls provide independent adjustment of base and treble. All connections are easily made at the rear of the amplifier. Convenient ON-CFF switch located on front panel. Screw-in type fuse easily replaced. Tubes used are two 12517, 6517, 6517, 6517, on 6L.6C and a 523 rectifier. Sturdy functional type cabinet with side mounted carrying handles, is made of heavy-guage steel finished in handsome black crackle. The amplifier fits any standard relay rack. Dimensions: 19½° wide by 17½° deep by 9½° high. Operates on 105-125 volts, 60 cycles AC only. Underwriters Laboratory Approved.



#### 25-WATT AMPLIFIER WITH RECORD CHANGER TOP

Take advantage

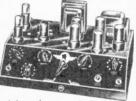
25-WATT AMPLIFIER with efficient, smooth-operating automatic record changer for 10 and 12" records. Dimensions: 14 x 14 x 11%".

As above, except 16-WATT AMPLIFIER with automatic re-cord changer. Dimensions: 14x14x11½". 2N409-Shipping Weight 36 lbs.....

#### LAFAYETTE HI FI AMPLIFIER AND ROLL-OFF CONTROL

A 10-watt Hi-Fi amplifier, spe-cially designed to handle even

146







#### AIRCRAFT COMMUNICATIONS SET TRANSMITTER-RECEIVER-INTERCOM

#### **BRAND NEW!**

Pilots the world over realize the great safety value in maintaining "two-way" radio communication during cross-country flight. Through a special purchase, Lafayette is able to offer you this outstanding two-way communication system, which also furnishes broadcast reception and intercommunication within the plane itself. This is a brand new set...not surplus, made to sell originally for \$200. The receiver and combination transmitter and power supply are divided into two separate units and joined by an interconnecting cable for easy installation. Equipment operated from controls located on the receiver: 3-position control for Tower-Voice-Range; ON-OFF switch and volume control, tuning control and band switch.

The receiver has a choice of two bands, controlled by a pos-

switch and volume control, tuning centrol and band switch. The receiver has a choice of two bands, controlled by a positive interlocking band switch with positions "A" (direraft) and "B" (broadcast). "A" covers the transmission frequencies from 195 KC alloted to direraft radio range and tower stations. "B" covers the standard broadcast band from 550 to 1600 KC enamling pilots to "home" on broadcasting stations, in addition to receiving entertainment programs. Sensitivity rating 3 microvolts, or better, at 50 milliwatts. A tuned RF section produces high selectivity. Undistorted output 300 milliwatts, maximum output 500 milliwatts, provides strong volume for any number of headphones in the aircraft. Tubes: (2) 14A7, 14O7, 14B6, 14A4, Overall dimensions: 3%"H x 5 11/32"W x 5 23/32"D. Transmitter is crystal controlled, power amplified and employs high level modulation 10 wattoutput. Operates on any single frequency between 2 and 7 mc making it applicable for marine and ham use as well as aircraft. Side tone and automatic changeover relay are provided. Power supply utilizes a vibrator and is completely shielded. Overall dimensions of transmitter and power supply: 5 5/8"H x 7 1/8"W x 8%"D.

Complete set includes the following: Receiver, Transmitter.

ply: 5 3/8<sup>th</sup> x / 1/8<sup>th</sup> x 20% D.

Complete set includes the following: Receiver, Transmitter, 3105 KC Crystal, Power Supply, Loading Coil, Interconnecting Cable, antenna Lead and Cable, Headphone and Microphone Cablé, Tubes, Fixed Wire Antenna Kit and Shock-

For 6-volt operation-requires 10.25 amps. Transmitter uses (3) 7C5 tubes.

99N9613-Shpg. Wt. 11 lbs....List \$200.00. ............49.50 



#### NEW! MODEL APN-1 ALTIMETER MEETS CAA REGULATIONS

An invaluable aid for pilots making blind landings. Conforms to CAA requirements of Feb. 1949. Made to sell originally for six hundred dollars. This is a bramd new 14-tube electronic altimeter consisting of a receiver, transmitter, altitude meter, altitude limit switch, two 11" antennas, plugs and sockets. Measures absolute altitude from 3 ft. to 4000 ft. and also gives an alarmif the height of the plane varies more than ten leet from the setting on the altitude limit switch. Has indicator zero, outer-low range, inner-high range, limit indicator, and calibration adjustments. Range and ON switches on altitude meter. Altitude limit switch has 11 positions in 25 ft. steps from 50 to 300 ft. Provision is also made for connection to control an automatic pilot. Other sockets include limit switch, limit indicator, battery input, transmitter antenna and receiver antenna. 3 amp. fuse with spare mounting-Front and chassis can be easily removed by releasing locking screws for easy inspection and maintainence. Measures only 18\*x9\*x17\*. Shipping Weight: 32 lbs. 99N9616-For 24 to 28-volt DC operation...... 32.50

USE OUR ORDER BLANK FOR FASTEST POSSIBLE SERVICE

# SUPER SPECIAL VALUES

#### A.TUBE AM SUPERHET TUNER



A miniature type tuner (540-1600 KC.) with big unit design. Here's an easy way to add an AM radio to your P.A. system, portable amplifier, record player with built-in amplifier, wire recorder, etc. Measures only 5"W. x 4"D. x 4½" H. Self-contained 115 V AC-DC, hum-free power supply with approximately 10 V. high impedance audio output. Permeability tuned IF transformers. Maximum output adjustable in 3 steps: 10-5-1 volts. Supplied complete with 4 tubes (12BE6, 12BA6, an instructions, circuit diagram, attached

12AT6, 35W4), operating instructions, circuit diagram, attached 5-ft antenna and  $2V_2$ -ft shielded output cable. Tested and aligned.

30N22479—Shipping weight 6 lbs..... 12.85

#### CARRON PORTABLE PHONO

Low-prired acoustic phonograph with fine tone and plenty of volume. Improved type mechanical reproducer requires no tubes. Constant speed 78 RPM motor operates on 110 volts, 50 cycles AC and plays all size records including 12". Fully enclosed motor. Housed in sturdily constructed, easy-to-carry case finished in attractive blue, bakedon enamel. Size: 14½ x 12 x 7". Shipping weight 14 lbs. Low-priced acquistic phonograph on enamel. Size. 1778. Shipping weight 14 lbs. 9.75

Lots of 6, each 9.25



#### HIGH GAIN AUDIO PREAMPLIFIER



This 5-tube, 4-stage preamplifier is an excellent item for service shops and various installations requiring additional gain. Uses 6517 1st stage, 2-65N7 2nd and 3rd stages, 615 as 4th stage and 5Y3GT rectitier Additional equipment includes 65 mil power transformer, 2 heavy duty chokes and 35 mid. condenser. Input suitable for high impedance microphones and high impedance microphones and high impedance microphones. Dimensions: 7½" high, 9" wide and 9" deep. For 110-volt, 60-cycle AC. Shipping weight: 10 pounds.

39N9804—Less Tubes

This 5-tube, 4-stage preamplifier is an excellent item for service shops and various intentions and visual various intentions. Also shops and single circuit panel. Dimensions: 7½" high, 9" wide and 9" deep. For 110-volt, 60-cycle AC. Shipping weight: 10 pounds. This 5-tube, 4-stage preamplifier is

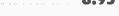
99N9604—Less Tubes

#### ELECTRIC KIDDY PHONO

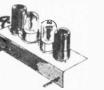


OFF switch and needle cup. Sides finished in bright blue with decorative front. Has 6 ft cord and plug. Dimensions: 13" wide, 12" deep, 61/4" high overall.

34N22693-Shipping weight 7 lbs.



#### 4-TUBE AMPLIFIER



Push-pull output circuit designed for use with crystal pick-up. 4-tube amplifier wired on right angle metal chassis includes volume control, pilot light, shielded lead and power line cord and plug. Tubes used (2) 35A5, 14B6, 35Y4. Shipping weight 3 lbs.

99N9608-Less Tubes

2-TUBE PHONO OSCILLATOR Play music from your rec-ord player through your radio without connecting wires. Recorded music is

99N8006 ......

#### HI-FI CARTRIDGE AND PREAMP



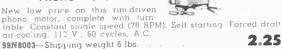


Now, the famous Hi-Fi variable reluctance cartridgs s yours, at a fraction of the usual cost. A—The PREAMP permits the use of the cartridge in any phono that has a crystal pick-up. High impedance output connects to any phono input. 2-pos icn switch for high or average frequency response. With tube B—The CARTRIDGE gives Hi-Fi response, 50-10,000 cps. 80 m livolt output; force of 15-30 grams. Retractable sapphire styles with replaceable, felt, record cleaning pad. 2.95

**34N13478**—Cartridge, Wt. 2 oz.

34N13479-Preamp. Wt. 2 lbs.

#### SINGLE SPEED PHONO MOTOR

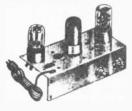


sent by radio waves to radio. Aluminum chassis, (2) EF-50 tubes. Wt. 2 lbs.

#### THREE TUBE PHONO AMPLIFIER

Build your own hi-fidelity record player or changer. Variable tone control, 2 watts output, 501.6, 12SQ7, 3525 reet. Phono motor connects to amplifier. Less tubes, output transformer Shpg. wt. 2 lbs.

99N9584



#### 3-SPEED PHONO MOTOR

Feature bargain! Plays 33 1/3, 45 and 78 RPM records. His 9'' turntable and external speed regulating lever.

99N8009-Shipping weight 6 lbs.

5.49

#### TONE ARM AND HEAD

Replacement for 95% of all non-electronic reproducers. Takes stan-dard needles, plays up to 12" rec-ords. Black and nickel finish.

34N13415- Head only 34N13416-Arm only

98c 1.25



#### MLP1 CARTRIDGE

99N8010





quency response. Approximately 1 volt output. Low tracking force

99N3577 -- Shipping weight 12 oz.

#### L.P. PICKUP

A Lorg Playing pickup for the 33-1/3 and 45 RPM, long-playing rec

STANDARD PICKUP

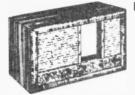
Standard crystal phono pickup for playing the conventional 78 RPM rec ords. Curved arm for best tracking.

99N8002 - Shipping weight I lb.



FOR INDUSTRIAL EQUIPMENT CONSULT OUR INDUSTRIAL DEPARTMENT

# **DOLLAR-SAVING VALUES**



#### **Beautifully Finished Cabinets at Sensational Prices**

#### WALNUT CABINET

A Really Territic Buy! Handsome walnut cabinet, heavy construction. Dimensions: 20 wide x 1334" high x 9" deep. Ornamental brass strip around escutcheon panel. Ideal for replacing old style cabinets and for kits. Supplied with buniper feet to protect turniture. Made to

Panel drilled and cut out. ruly fine set. Panel drilled -Shipping Weight 14 lbs.. 1.59



#### ROSEWOOD CABINET

Handsome rosewood cabinet. 15" wide x 9½" high x 7" deep. Slidewide did opening. Ideal for replacing old style cabinets and for kifs. Handsomely finished. Supplied complete with three holes drilled for volume and tuning controls. ing controls. 1.19

99N7088-Shipping Weight 4 lbs.



#### INTERCOM CABINET

Handsome walnut cabinet. Excellent for use as a master intercom station. Sturdily constructed of fine seasoned woods. Dimensions: 1214" wide x 714" high x 734" deep. Cabinet is slotted for speaker. Holes for switches and 99N7086—Shipping Weight 5 lbs.



#### RADIO CABINET

Beautiful walnut or mahogany cabinet (please specify type). Dimen-sions: 19" wide x 10½" high x 8" deep. Dual grilles for use with one or two speakers. Heavy flocked wire



#### SPECIAL VALUE! FM FRONT END

Newly designed with latest circuit developments for extremely stable and sensitive operation. Ideal for use with PA systems or for remodeling AM receivers Frequency coverage from 88 to 108 MC Large easy-to-read slide-rule dial for fast tuning. slide-rule dial for fast tuning. Antenna provision for 300 ohm line. IF frequency is 10.7 MC. Tubes used: 6AK6 RF amplifier, 616 oscillator, mixer, detector, 6U5 tuning eye indicator. Dimensions: 8" x 5" x 3". Supplied sions:

complete with tubes, dial and ins. 30N21484—Shipping Weight 10 lbs. dial and instructions. 14.95



#### PERMEABILITY TUNER

For use in standard broadcast receivers to replace variable condensers and associated coils with a single unit. All are simultaneously slug tuned. Each can be individually adjusted for tracking alignment. Complete with antenna coil, oscillator, padder coil and schematic diagrams for building 5 and 6-tube superhet receivers. 4" x 2½" x 2½". Dial drum 2½".

99N3574-Shpg. Wt. 2 lbs. ...



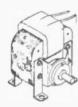
#### **LOOP ANTENNA**

Matches input impedance of permeability tuner above. Finest copper wire on sturdy fibre board.

99N3575--Shpg. Wt. 1 lb. ....

#### 5BP1/5GP1 C-R TUBES

Brand new 5BP1/5GP1 cathode ray tubes perfect for oscilloscope use. Green fluorescence with medium persistence. Large five in this screen, medium shell magnal 11 pin base. 6.3 voltheriter, anode No. 2 voltrage 2500 volts. East tube is individually boxed 99N9559—Shpg. Wt. 3 lbs. 2.95



#### **ELECTRIC MOTOR**

Makes the handiest tool on your work-bench. Attach a flexing, sanding and buiting operations Great for model-makers. 1/20 h.p. motor turns at 2900 RPM-does the

2900 RPM- does the job in half the time! 14" shaft, 34" long. is 31/4" x 234" x 31/2" high. For 50/60-cycle AC 9—Shipping Weight 3 lbs.3-89



#### LIVE RUBBER MOUNTS

Excellent live rubber mounts for floating variable gang condensers, sockets, and record changers to prevent microphonics. 5/16" diam. x 5/8".

90 98N14798--10 for..... ..... 60c 100 for.....

#### RECORD CHANGER MOTOR



Heavy du:y record hanger motor. act replacement for Seepurg Model L record changer 4-Seepurg Model L record changer 4-pole motor is vibra-

pole motor is vibration isolated from mounting bracket by three live tubber grommets. Motor turns at approx. 1700 RPM heavy rubber covered idler wheel at 318 RPM. Bracket has flange holes on 2 x 5 centers for mounting 12' insulated lends 99N7082—Shipg Wt 5 lbs 2.25

#### RCA ISOTAP TRANSFORMER



Permits speedier servic-ing of ACDC receivers, provides give er schety in servicing and many other advantages. Has other advantages. Has voltage tapped primary and secondary—primary is set to power line voltage and secondary receptuales give choice of 117V, 165V, or 130V supply.

8.95 6N1600-Shpg. Wt. 15 lbs. . .

#### SPECIAL FEATURE! THROAT MICROPHONE



Carbon m.ke works into any 200 ohm impedance input circuit. Adjustable strap fits any neck. Full freedom of

rull freedom of hands and head work. With strap, 10" cord, plug. 99N7060—Shpg. Wt. 1 lb.

#### 0-150 AC VOLTMETER

Black bakelite case. Has 234" panel opening. 3½" rlange. White scale with black lettering. Range: 0-



#### O-20 DC MILLIAMMETER

Black bakelite case. 21/2" flange mounting type. Range: 0-20. Hardware in-

99N4122-Wt. 1 lb 2.39

#### "MINI-VOLT" METER



Indicates voltage of available power lines, warns of voltage drop due to faulty equip-ment, checks for

blown fuses, grounds, transformer and 

#### 67 1/2 VOLT BATTERY



Big value-671/2 volt "B" batteries for personal portable radios. Replaces Burgess XX45, etc. Fully quaranteed. Size: 13/8 x 2 11/16 x

9986599 1.45

# BEST BUYS OF THE YEAR

#### 225 OHM 5" DYNAMIC SPEAKER



replacement in radio receivers, intercommunication and paging systems. 225 paging systems.
ohm 5" dyna ohm 5" dynamic heavy pot, hum bucking coil and double shielded transformer to match output im-pedance of 50L6. Ex-cellent for voice and 99N7013 ..... 99c

99N7032-Same, less transi........69¢

#### 3" 450 OHM SPEAKER



A quality speaker for general replacement. In call systems, hearing aids, small radios. Has 450 ohms field coil. Flat response, when properly aids. adfiled, from 100 to 4500 c.p.s. Formed 1 pc. cone. Less transformer.

#### 5" 3000 OHM SPEAKER

5" dynamic speaker for general replacement. Flat response covering from 100 to 4500 c p.s. Formed one piece cones, 3000 ohm field. Less transformer. 99N7031—Shpg. Wt: 3 lbs....... 954

#### 5" 450 OHM SPEAKER

For general replacement purposes in radios, record players, paging, intercom systems. Response 100 to 4500 cps, Rated 2½ watts. Field coil 450 ohms. 99N7030—Shpg. Wt: 3 lbs...... 1.39

#### ALNICO V OVAL SPEAKER



Alnico V 1.47 oz. 4x6 rec-Aintee V 1.47 oz. 4x6 rectangular mount with 3% x4%" mounting centers. Dustproof spider and voice coil. 3-4 ohms V. C. impedance. Rated 3 watts. 4½ peck. Voice coil terminals on transformer mounting. Less transformer. 1.29

#### 6 x 9 OVAL PM SPEAKER



Ruggedly built, 6 x 9" oval PM speaker. De-signed to riged specifications, with permanently aliqued cone and coil construction. Seam-less, felted cone; dust-proof. Voice coil impedance. dance 3.4 ohms. Rectangular mount with 61/2x 41/4" mtg. centers. 4%" mtg. centers. 99N7033.....2.39

#### **OUTPUT TRANSFORMERS**



Single 1DS, 1LB4, 1J5, 1T5, 12A7, 38 to voice coil. Pri. 16,000 ohms 10 ma. DC max. Sec. 3.2 ohms, 2 watts. Mtg. 2".

99N6591...... **39c** 

#### OUTPUT TRANSFORMER



Single ended secondary, with impedance of 4 ohms. Unshielded strap type mounting. Color type mounting. Color coded leads. 2000-ohm is for 50L6.

Each 99N5151-2000 ohms..... 99N5152-7000 ohms..... 390 99N5153-10000 ohma.....

#### 15" PM SPEAKER



A deluxe, heavy-duty speaker for public address, auty speaker for public address, auditoriums and all high quality radio-phono installations. Features 1½ lb. Alnico V magnet and a power hand-line argative of and a power hand-ling capacity of 25 watts. Voice coil impedance 6-8 ohms. Perma-nently aligned coil and cone construction...

moisture and dustproof. Equipped with mounted leads and speaker plug for easy installation.

#### 12" RCA SPEAKER



Genuine RCA replacement speaker gives top quality reproduction of bass and treble frequency range. Handles up to 15 watts. Uses strong 6.8 oz. Alinico V magnet; woice coil impedance 3.2 ohms. Also ideal for new installations requiring quality at low cost. Precision engineering and parts have been

built into this speaker to give it years of trouble-free service. 99N7023......**4.75** 

#### 12" ALNICO "V" SPEAKER



Replacement for FM-AM receivers 12" PM dynamic speaker with Alnico V permanent speaker with Ai-nico V permanent magnet. Magnet weight of 6.8 oz. is equal to 20 oz. of conventional magnets. 1" voice coil with 6.8 ohms impedance. Ca-pacity is 14 to 18 watts. 99N7010..5.95

#### 10" PM SPEAKER

Here's an excellent replacement speaker at low cost. Rugged, dust-proof construction. 6.8 oz. Alnico V magnet. Voice coil impedance 3.4 ohms.

99N7019...... **3.15** 

#### ALNICO PM SPEAKERS



New Alnico magnet provi New Alnico V magnet provides max. performance with min. weight. Ideal as replace-ments in radios, record players and auto radios. Voice coil termi-nals on transform-C imp. Less trans-

er bracket, 3.2 ohms V.C. imp, Less transformer. 99N7011-99N7009—5-inch PM 1.39 99N7028—3-inch PM 1.69

#### OUTPUT TRANSFORMER



500-ohm line, 8-ohm voice coil output transformer. Multiple taps. 18 watts. Color coded leads. Mount-ing center 2-7/16".

99N5 154...... 69c

#### PLATE TRANSFORMER



Fully cased, electrostatically shielded plate rectifier transformer. Heavy duty model with 117 V., 50/60-cycle primary. Secondary: 625 V. CT at 160 MA and and 5V. at 3A. Color coded leads. Mounting centers 2½x2-7/8".

#### POWER TRANSFORMER



A real bargain special power transformer. Single shell mounting, electrostatically shielded. Has extruded shell for two-hole mounting. Primary 117V., 50/60 cycles. Secondary outputs: 600 V. CT at 50 Mil, 6.3 V. at 2A, 5V. CT at 2A. Color coded leads. real bargain spe-

#### 15 HENRY, 50 MA. TOTALLY **ENCLOSED CHOKE**



120 ohms D.C. resistance. Fully shielded, strap type mounting. Compact, efficient; has many uses. Size: 15/6"x2"x11/4". 69c

#### 30 HENRY CHOKE

50 ma. 450 ohms DC resistance. Un shielded, strap type mtg. Size 2½x1½x 2-1/8".

98N246-Shpg, Wt: 2 lbs...... 59c

#### 4 HENRY 500 MIL. CHOKE



Heavy duty, 500 ma. 12 ohms DC resistance. Wax coated to with-stand effects of moisture. Overall size: 3½" x3½"x4". Mtg. centers 134"x3". 99N6594.....**2.39** 

#### 25 HENRY FILTER CHOKE



Excellent quality 25 Henry Filter Choke; 60 MA, 200 ohms DC resis-tance. Unshielded, strap type mounting. Overall dimensions: 2-3/8x2x dimensions: 2-3/8x2x 1-5/8". Mtg.center 2-7/8".

99N5 155 . . . . . 49c

#### VIBRATOR TRANSFORMER



Primary 24 V CT. Secondary 300 V CT, 60 MA Hermetically sealed in Black crackle metal case. Eight 5/32" mg. 

99ที่5097...... 37c

#### SPECIAL! TV REPLACEMENT Vertical Output Transformer



Equivalent to RCA Type No. 204T2. Couples output tube to deflection yoke. Specially impregnated. Strong, rigid mounting brackets with 2x2-3/8" mounting centers. Color coded leads.

# "LIMITED QUANTITY" SALE



#### HANDY TERMINAL STRIP KIT

Kit of 10 assorted terminal strips with from 2 to 28 terminals. Hi-quality phenolic insulation with either screw or solder lug terminals. Mounting holes or brackets on each strip. 29c



#### KIT OF 25 MICA CONDENSERS

Kit of most popular size bakelite mico capacitors for servicemen, amateurs, and experimenters. Unmarked, but all guaranteed perfect. High quality units at an unusually low price.



#### KIT 25 TUBULAR CONDENSERS

Top quality brand tubular condensers at a real bargain price. Wax impregnated, non-inductively wound. Standard working voltages and capacities range from .002 mfd. to .5 mfd. With long flexible pigtail leads. Individually tested to meet RIMA standards. 976. 99N278- Shpg wt. 1½ lbs..... 97c



#### KIT 100 ASSORTED RESISTORS

An exceptional resistor value for the radio serviceman, experimenter and amateur. Kit contains 100 assorted popular resistor sizes with waitage ratings from ½ to 2 watts. All resistors are RMA color coded 



#### VITREOUS ENAMEL RESISTOR KIT

Bargain assortment of 20 high quality vitreous enamel and cement coated wire wound resistors. From 5 to 25 watts. Wide assort, of values.



#### KIT CERAMICON CONDENSERS

10. Kit of 25 popular sizes. All condensers color coded. Flexible pigtail leads. wt. 1 lb.

#### **BAKELITE RADIO KNOBS**

Molded and polished walnut bakelite knobs for 1/4" shafts, "A" is spring clip push on type, 17/6" dia. "B" is for knurled shafts, 1" dia.

99N249	B	40	30€	2.00
No. 98N9625		Each	10 for	100 for
D 15 1	OI AII	urieu	atturia,	1 414





#### KNOB KIT

20 assorted popular knobs in a variety of sizes. 99N6984.....**39c** 



Threaded stud; suitable for wooden or metal cabinets. Strong construction; chrome plated, 2 keys and necessary hardware. 99N300......**29c** 





#### CATHODE-RAY TUBE SOCKET

Bakelite television tube socket especially made for 10BP4, 12KP4 and 7JP4 picture tubes. 5 tinned colored leads. 99N301......**39c** 



150

#### TELEVISION ION TRAP

Prevents ions from bombarding sensitive TV tube screen. Fool-proof construction. Only two coils and padded mounting yoke. 99N5160......69c

#### TELEVISION FOCUS COIL

For magnetically focused kinescopes having deflection angles up to 50° such as the RCA 10BP4. Large conductor size for corrosion-free operation. 99N5159......**1.95** 



#### BELDEN 60-WATT SOLDERING IRON

Here's a nationally



Here's a nationally known make iron of excellent quality; for rapid, light duty soldering. Has 1½" long copper screw-on tip. Long-life element. 6" long shaft permits easy access to far corners. 12" long. 6-ft cord, plug and stand included. 120-v. AC-DC. U/L app.

99N8007...... 99N8011-Extra Tip for above...... 

#### STEATITE NEUTRALIZING CONDENSER

Variable from 3 to 11 mmfd. by plunger action. For neutralizing low power amplifier stages. Mounts in 3/8" hole.

99N3171-10 for 45¢......Each **56** 

#### 4-SECTION CONDENSER FOR FM-AM



Two FM sections, each 18.5-1.2. AM RF section, 420 maximum; AM oscillator section 162 maximum. Each section has a trimmer; also featured are aluminum plates, ball bearings, %" shaft and low-loss insulation.

99N3579......98c

#### SINGLE SECTION CONDENSER



Capacity 500 mmid. Ideal for low or medium power transmitters, and test equipment. Steatite insulation. 2x1-7/8x6-5/8".

99N3571-Shpg. Wt. 2 lbs...69c

#### APC AIR PADDER CONDENSERS

Ceramic insulated air padder condensers ideal for oscillator circuits, IF transformers, fixed tuned circuits, etc. which require constant capacity. Screwariver slot adjustments.



#### JOHNSON VARIABLE CONDENSER



Rugged compact unit for use in medium, low power transmitters. .032" thick aluminum plates. Steatite insulation. Heavy phosphor bronze contact springs. Capacity 12 mmid. to 244 mmid. .045" spacing. Approximate breakdown voltage is 2000 volts. Slotted shaft %" dia. %" long.

#### SPECIAL FOUNDATION ASSEMBLY

For transmitter or receiver. Metal rame, 10 contact female receptacle. 140 mmfd, variable condenser at top. Coil socket, dual crystal socket, male contact. Spring locking clip. Size: 4 x 1½ x 2½".

99N3553-Shpg. Wt. 1 lb....22c



#### WIRT VARIABLE REGULATOR

Use with any 110 volt AC instrument to compensate for irregular line voltage. 65 watt unit adjustable to five positions. 

## **VOLTAGE DIVIDER KIT**

Kit contains 10 wire wound resistors with moulded bakelite cases. Metal mounting strap conducts heat from unit without shorting. This kit will fill your need for voltage dividers at a low price. 99N265......69c



## HARD-TO-BEAT BARGAINS

#### LINE CORD RESISTORS



Rated at	.3	amps	for	radios,	phonograph
oscillator			n e		396

99N2938—135	ohms		<b>39c</b>
99N2939180	ohms		39c
99N2940-220	ohms		39c

#### 220 TO 110 VOLT LINE CORDS



Standard plug and receptacle. 300 ohm for sets using .3 amp tubes, 50 ma plate supply Total capacity 350 ma.

99N2942—Same but foreign plug }98c 560 ohm for sets using .15 amp tubes, 50 ma plate supply. Total cap. 200 ma. 98c

#### ATTACHMENT PLUG BASE

Brown bakelite in the usual construction. Screws into strong Rodale "Female" type. standard socket. 99N299-

Each,

10 for



#### AC RECEPTACLE



Quality standard single AC receptacle. Fits 13%" dia. hole. Metal mtg.strip.15%"ctrs. 12c 99N281. Each 12c 10 for 1.08

#### SUPER SAVINGS

Octal Base Tube Sockets

#### 6-PIN SOCKET

Octal socket. 112 inch mounting center number 4, 6, blank. 98N13180-Each 10 for



#### COMPOUND TYPE



Flush mtg. phenolic com-pound socket in steel saddle. With 4 grounding lugs, silver-plated con-

99N6979-Each . . . 10 for

#### CERAMIC SOCKET

July duty, octal socket.

1½" mounting centers.

Silver plated cylindrical pin contacts. Ceramibody in ster' Ceramic shell. 4 7c

98N13109--Each 10 fcr

10 for

63c



#### TUBE SHIELDS

Highest quality all aruminum tube shields for use with 1S4, 1R5, 1T4, etc. Has retainer spring inside. 34" dia. x 134" deep. Highest quality all aluminum





#### UNIVERSAL 6 VOLT VIBRATOR

Popular brand name vibrator. Replacement for Mallory 294, 4-4, Radiart 5300, SC-1, Utah NP-42, Delco 5,040,000, 5,052,378 and Meissner EO1.

#### VIBRATOR REPLACEMENTS



High-quality vibrator re-placement for General Electric 2-volt sets, Model 530. A real bargain price! 1.25

99N3969

99N3958

99N3971

Replaces Stock No. Mallory Radiart Each 854 505P 99N3951 5320P 99N3952 249 246 5406 5411 99N3953 98c 99N3954

#### 12-VOLT VIBRATOR

5409

Amazing value in a vibrator replacement brought to you by Lafayette's tremendous purchasing power. 12-volt, 4-prong non-synchronous. Replaces the Mallory G826 or equivalent. Can size, 1½" dia., 3½"ht.

#### 24-VOLT VIBRATOR

Here's the celebrated Mallory vibrator at a give-away price! M561C replacement vibrator. 5-prong base, 24-volt battery synchronous vibrator. Long-life and trouble-free service. Can size

99N3967

#### AUTO SPEAKER SPECIALS

These speakers are ideal for auto replacement. Field coil type, 6 v. Shpg. wt., 21/2 lbs. 99N7024—6" Speaker **2.47** 

99N7026-8" Speaker . 2.25

#### AUTO RADIO ANTENNA

Bargain special, three section, triple chrome-plated side auto antenna. Stainless stee auto antenna. Stainless steel rod section and solid brass tubing. Brass tubes tapered to keep mois-ture and dust out. Extends from 25-inches to 66-inches. High quality bakelite mounting insulators prevent signal shorting to car body. Complete with 32-inch fool-proof low loss shielded cable and necessary mounting have.

99N9596

## **AUTO RADIO SUPPRESSORS**



quality. cable type, spark plug noise suppressor. In black molded case.

99N302-10 for 72c

8c

#### ANTENNA CABLE

Heavy phosphor bronze antenna cable at special bargain price. Approximately 115 foot roll of 42 strand cable with strong linen core.

99N5140-5 for 3.00

Each 69c



#### 50-FT. ROLL CABLE

Durable plastic insuconductor intercom cable. Color conductors are of No. 22 solid wire. Can be easily unstranded and used as radio hookup wire.

99N5139-Shpg. Wt. 1 lb. ...

#### TERMINAL STRIP



High quality Phe-nolic insulation with two screw type lug terminals. Terminals marked Gnd. and Phono.

99N280-10 for 35c

#### TWIN TIP JACK

High-quality twin tip jack on laminated strip.

99G4231 10 for

45c



#### **DPDT SLIDE SWITCH**

Double pole, double throw slide switch with spring return. Spring may be easily removed if desired.

99N4230-Each ... 10 for 90c

Z-O TWO METER CHOKE



High frequency sole-noid choke. Designed to prevent resonance in to prevent resonance in the 2 meter band. Rated at 2 mh. and 1 amp. DC resistance 0.19 ohms. 134" lg. and 1/4" dia. Pigtail leads 11/2" long. Insulated and protected by moisture proof coatina

99N3576-6 for 25c

Each 5c

#### SPRING LID LIFT



Heavy duty spring type lid lift. Spring tension adjustable to counter-balance any type lid. For right hand cabinet mounting.

99N6995

SELENIUM RECTIFIER No warm-up period. Saves space. Only 1½x 1½x1-1/16". Fits where tubes won't. Two rectifiers may be connected as a voltage doubler to supply 250 V. at 80 ma from 117 V. AC power

supply 98N 10560



#### INTERMEDIATE FREQUENCY TRANSFORMER

High gain, permeability tuned. 375 KC normal peak, satisfactory operation at 455 KC peak. Screwdriver slot adjustments—one on top, one on bottom. 5 solder lug terminals on bottom  $1V_{2}x_1V_2x_2V_4^{**}$ . 2 spade mounting studs 6-32x  $3_{6}^{**}$  on  $13_{6}^{**}$  mounting centers.

99N5129-Each

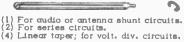
10 for

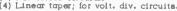
# OUTSTANDING BARGAINS

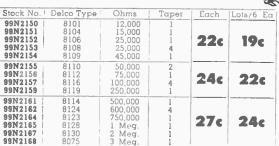
#### **DELCO VOLUME CONTROLS**

Ultra compact controls featuring quiet composition elements, attachable switches and plug-in type shafts. All are ½" thick, 1 1/16" dia. Complete with 4" shaft.

DELCO VOLUME CONTROL TAPERS







#### TAPPED CONTROLS

No.	1	Delco	1	Ohms	Tapped at	Each	Lot/6 Ea.
99N2170 99N2172 99N2173 99N2175 99N2176 99N2178 99N2179 99N2180		8151 8156 8159 8162 8163 8165 8168 8173		250,000 500,000 500,000 1 Meg. 1 Meg. 1 Meg. 1 Meg. 2 Meg.	50,000 100,000 150,000 50,000 100,000 250,000 500,000 250,000	29c	27с

#### SWITCHES FOR ABOVE

Following Delco controls are same as above except that they have fixed covers—and do not take the attachable switch.

No.	Delco	Ohms	Tapped at Taper	Each  Lots/6 Ea
99N2158	8117	125,000	1	
99N2160	8121	300,000	1	22- 10-
99N2163	8125	600,000	1	22c 19c
99N2166	8129	l Meg.	1	
99N2169	8154	150,000	80.000	
99N2171	8164	350,000	50,000	97- 94-
99N2174	8161	500,000	200,000	27c 24c
99N2177	8166	I Meg.	200,000	



#### 1/2-MEG CONTROL WITH SWITCH

Full length shaft. Compact, sturdy construction. 500,000 ohms resistance, with switch. Three solder lug terminals

29c 99N2140



#### **DUAL POTENTIOMETER**

Enclosed smooth action carbon type controls. Front section 2 megohms, rear section 40,000 ohms. 3%"-32 threaded bushing.

99N8137-Lots/10 Ea. 19c Each, Singly 15c



#### POPULAR SIZE VOLUME CONTROLS

Servicemen, experimenters stock up now on these popular size volume controls at these unbelievable low prices. Standard 1/4" dia. shafts, approx. 11/2" long.

99N2114-500 ohms 99N2116--75,000 ohms 99N2117-100,000 ohms 99N2118-200,000 ohms

99N2119-Dual 600 ohms

80 72c

#### 25-WATT POWER RHEOSTAT

Popular brand power rheostat at a special bargain price. Ceramic and glazed porcelain construction throughout. %" dia. bushing. 1/4" dia. x 1/2" shaft

496 99N2122-20 ohm 99N2121--5000 ohm 69c



## SPECIAL FEATURE!

#### RELIANCE VOLUME CONTROLS

Full ler	ngth shft	. Stand. 3/8"	bushing. Switches are affixed, SPST.
Less Switch	With Switch	Res. Ohms	Тарег
8N8112 8N8115 8N8114 8N8116 8N8117 8N8113 8N8118 8N8105 8N8111	8N8119 8N8129 8N8120 8N8121 9N8126 8N8122 8N8122	25,000 50,000 100,000 250,000 500,000 1 megohm 1 megohm 2 megohm	Linear, for voltage-divider circuits. For audio or antenna shunt circuits. For audio or antenna shunt circuits.
Less Sv	vitch-E	ach	32e



With Switch-Each





42c

#### WIRE WOUND VOLUME CONTROL

1. Smooth acting wire wound 1000 ohm, 4 watt. % "-32 threaded bushings, 14" x %" shafts. Body dia. 15%" x 5%". 99N2096--Each, 19c Each, Lots of 10, 17c

#### POTENTIOMETER

2. Fully enclosed carbon type control,  $3_0^{\prime\prime}$ :32 threaded bushing, 13,000 ohms,  $11_0^{\prime\prime}$  dia. x  $1_2^{\prime\prime}$ . Shaft  $1_0^{\prime\prime}$  dia. x  $1_2^{\prime\prime}$ . 98N9158—Each, 10e . . . . . . . . . . Each, Lots of 10,

#### POTENTIOMETER WITH SWITCH

3. 160 ohm 4 watt, insulated rotor and switch. Straight taper. 3/8",4hr. bush. 1/2" shaft. 5/6" bush. Snap-on switch. 12c 98N8142-Each, 15c Each, Lots of 10.

#### CARBON VOLUME CONTROL

1. Compact  $1V_8$  dia.  $V_2$  deep. 1 Megohm, less switch.  $V_2$  shaft  $1V_2$  lg. Potentiometer taper. Requires  $V_2$  behind panel. 99N2041-Each, 19c 17c Each, Lots of 10,



#### 9 WATT POTENTIOMETER

4. Smooth acting 185 ohm control, with S.P.S.T. switch.  $21/8^{\prime\prime}$  dia. x 1". Shaft  $1/4^{\prime\prime}$  lg. 3/8-32 threaded mounting bushings.

98N8143—Ea. 12c; Lots/10, Ea. 10C



#### 1000 OHM POTENTIOMETER

5. I'ully enclosed smooth action carbon type control. Body 1" diameter x 1/2" deep. Shaft 1/4" diameter x 1/4" long. 15c 98N8108-Each 18c Lots of 10, Each



#### 1000 OHM POTENTIOMETER

6. Nationally known. With S.P.S.T. switch,  $\frac{1}{6}$ "-32 threaded mounting bushings, solder lug terminals. Body 1" dia. x  $\frac{1}{6}$ ". Shaft  $\frac{1}{4}$ " dia. x  $\frac{1}{4}$ " dia. x  $\frac{1}{4}$ 4" iona.

98N8124--Ea. 25e; Lots/10, Ea. 226



#### WIRE WOUND POTENTIOMETER

7. Smooth acting control, 200 ohm, 2 watt wire wound poten tiometer. Body size: 11/4" diameter x 5/6" deep. Shaft: 3/4" x 1/4" diameter. Standard 3/6"-32 threaded mounting bushing. Lots/10, Each 8c 98N6350-Each 10e

#### 3 WATT RHEOSTAT

An exceptional value, smooth acting 20 ohm wire wound control.  $1/4^{\prime\prime}$  dia. x  $3/4^{\prime\prime}$  long flatted shaft.  $1/6^{\prime\prime}$  dia. x  $3/6^{\prime\prime}$ . 98N8163— Each &c .. . . . Lots 10/, Each 56





# MORE FOR EVERY DOLLAR



Receives all TV channels plus FM.
Range 44-108 MC on LF Array: 174-220
MC on HF Array: Average gain 2.5
D.B. on LF Array: 1.5 D.B. on HF Array
ave tuned dipole. Arrays electronically separated by patented divider network, and individually rotable for maximum signal strength. Lightweight tempered aluminum alloy.

99N9612-Wt. 14 lbs.....

## SENSATIONAL PRICE SLASH!



STRONGER TV SIGNAL WITH "TELEMATCH"

NOW

Gives the maximum transfer of television signals by matching the anienna to the re-ceiver. Simple to install, Just fasten to an-tenna posts on back of your set and rotate control knob for most satisfactory picture.



#### THREE-CONDUCTOR CABLE

3-circuit mike plug PL-68 connected to rubber-covered 3-conductor 4' cord. Ter-minates in two connecting lugs, tinned ground lead, and tie cord fastened to eyehole lug. Flexible and durable.



#### LOW-COST JACK BOX

Consists of one 3-circuit jack, one 150M potentiometer and 5 position rotary switch enclosed in aluminum case 4½" long, 3" wide, 3" high. Com-

plete with knobs.

25c 99N3959-Shpg. wt. 2 lbs.....

#### SHIELDED PHONO CABLE

High quality flexible #24 shielded phono pickup cable. Cotton braid 99N5161-1.50/100 ft......Per Ft.



#### TRANSMITTING KEY

General purpose trans-General purpose trans-mitting key on a heavy die cast base, all mounted on a swinging bracket thigh clamp. 1/8" pure silver contacts. Key can be easily removed from clamp. Adjust-able bearings. Supplied with 5-foot cable and PL-55 phone plug.

99N4034---Each.....



#### POWER WIREWOUND RESISTORS

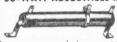
Excellent quality; include famous brand names. Some cement coated; others vitre-

No.	ı	Watts	1 (	Ohms	Each	Lots	10/ea.
99N135	ı	5	-	1,000	.06		.05
99N268		8		10,000	.08		.06
99N122		10		10	.09		.07
99N123	}	10		100	.09		.07
99N310	)	10		400	.09	ļ	.07
99N311		10		500	.09		.07
99N312				1,000	.09	1	.07
99N124		10		4,000	.09		.07
99N313	3	20	- 1	500	.15		.13
99N314		20	)	2,250		-	.13
99N315	5	20	1	5,000	.15		.13

#### 50-WATT ADJUSTABLE RESISTORS

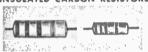
WIRE

WOUND



Vitreous enameled on porcelain cores with a strip of wire exposed to form contact. With slider and mtg. brackets. 99N316—2 Ohms ...... 99N317-1000 Ohms

#### INSULATED CARBON RESISTORS



Insulated, RMA color coded, Guaranteed

Stock	*** 1	01	Lots 10	
No.	Watts	Ohms	Each	Lots 100
99N318°	1/2	470	02c	1.50
99N319*	1/2	33000	02c	1.50
99N320	1/2	1 Meg.	02c	1.50
99N321	1	1000	03c	2.25
99N322	1	12000	03c	2.25
99N323+	2	68	08c	7.00

\*Allen Bradley

†Wirewound

#### KOOL OHM 120-WATT RESISTOR



Heavy duty, 10,000 ohm, 120-watt wire-wound resistor. Large surface area for heat dissipation. 1 1/16" dia; x 8 15/16". With rod and mounting hardware

99N269.

#### UNSHIELDED R. F. CHOKES



All-purpose chokes. Universal wound, accurately rated. Thoroughly impreg-nated. Give troublefree service.

98N 10133---

#### PUSH BUTTON SWITCHES





7. Solder lug term. Leaf spring momentary action. Requires 5%" behind panel. 99N4175—SPDT	
99N4181—DPDT	
21/8x3/16x7/8" high serew terminals. 99N4176—Shpg. wt. 2 oz	

#### MINIATURE SOCKET



Molded bakelite; for 7 pin miniatures. Fits 1R5, 1T5, 1S4, 1S5. Metal mtg. shell, 22-mtg. holes on 7/8" ctrs.

7c 99N282-Each ..... 10 for .....

#### CERAMIC SOCKETS

Low loss. Top and sides glazed. Reenforced springs 21/4" long, 15/8" wide. Centers 1-27/32".



No.	Prongs	Each	10 for
98N13065	5	9c	80c
98N 13067	7s	9c	80c



#### MOLDED SOCKETS

Sockets are made of molded bakelite for top mounting or sub-panel mounting. Positive contacts have 1-11/16 inches mounting cen-

No.	Prongs	Each	10 for
98N13090	4	9c	80c
98N13091	5	9c	80c
98N 13092	6	9c	80c
98N13093	I 7L-S	9c	80c



#### PILOT LIGHT SOCKET

Two-contact bayonet-type Two-contact bayoner are socket. Requires 3/4" dia. hole for mounting flange. With retaining ring, 2 solder lugs.
99N247—Each 15C

1.35 10 for



#### NEON GLOW LAMP

1/4 watt. Two-contact bayone-type base. Resistor-less type for 105-125 V. AC-DC. AC starting voltage 65, DC, 90. For test instruments.

10c



#### ARGON BLUE GLOW LAMP

Blue glow 2½ watt lamp. Used in newest photographic contact printers, useful as nite-lite. Start-ing voltage AC 65, DC 90. For ing voltage AC 63 Edison type socket.

98N 12279

1/4" SHAFT FLEXIBLE



## COUPLING

Four coupling two 1/4" dia shafts or for making shaft extensions. Insul. 18c 99N246---Ea.... 1.60 10 for

#### DIAL SCALE

2½x3¼" rectangular dial scale for right hand clos-ing broadcast band condensers. Fig. Figures from 55 For AC-DC sets,

small portables. 99N147 5c 10 for.....



#### DIAL CRYSTAL

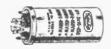
Formed and stamped one-piece dome type plastic crystal for above dial scale. Water-white with ¾" space for pointer. 99N146-10 for 40c Each.

#### PILOT LAMP SHADE

Fits tubular type pilot lamps. 99N248---Each ..... 10 for .. 20c 100 for.....1.00



## SOLAR CONDENSERS UP TO 95% DISCOUNT



#### TYPE DY "TWIST PRONG" MOUNTING

A standard metal cased unit Hermetically A standard metal cased unity networks, sealed base assures long life, proper venting and great rigidity Idea! for many types of service. Light in weight, compact. They save assembly space and time. Terminal codes clearly stamped on

case.	
No. Cap. Mfd.	Volts Each
99N3400 5000	1.5
99N3401 2000	.6 14c
	50
	10 For
	1.25
	25
00M2407 00 10	
99N3408 30-20	50 1 19c
123142403 DO-DO 11	50   10 For
	50, 25 <b>1.75</b>
	00
	50
	50
	00 ' 00/25
99N3416.40/50 14	00/300 <b>22c</b>
[99N3417 16-16 4	50
	30
	1.95
	30
	50/25 50/350
99N3423 20-20-20 2	
	50
99N3425,40-20-10 1	50 <b>25c</b>
99N3426 40-20-20  1	50
	50 10 For
	50 <b>2.25</b>
	50 50 <b>25e</b>
99N3432 15-15/1200 1	50/1.5
99N3433 40-20/100  1:	50/10   10 for
39N3434 10-10/10  15	50/25
	30/23
39N3436 20-10/10  1:	50/25
	50/25   <b>25¢</b>
99N3439:30-20/10	50/25   10 for
[99N3440'30-20/20 15	50/25
99N3441 30-50/100  15	50/25 2.25
99N3442,40-20/100  15	50/25
99N3443 40-40/20  1:	50/25 25c
99N3444 50-50/20 11:	50/25
99N3445 50-50/40  11 99N3446 60-40/10  15	00/23
	2.25 <b>2.25</b>
	00/25
99N3449 30-2075 121	50/200 25¢
99N3450 30-30/25 130	00/25
99N3451 80-40/20  30	00/25   10 for
99N3452 10-15/20  35	50/25 2.25
99N3453'10-20/20 35	50/25 !

#### TYPE DY (continued)

No	Cap Mfd.	Volts	Price
99N3454	15-15/20	350/25	25¢
99N3455	20-20/20	350/25	
99N3456 99N3457	30 30 /20	350/25 350/25	10
199N3458	10-10/20	1400/25	for
99N3459	20-10/20	400/25	2.25
99N3460	20 20 / 20	400 25	OF-
99N3461	30-10/20	400/25	25c
99N3462	15-15/20	450/25	10 for
99N3463 99N3464	15-15/40 20-20 20	450/25	
99N3465		450/25	2.25
99N3466		450/25	25€
99N3467		450/350	234
99N3468	8-8 8	475/100	10
99N3469	30/20/20	350/300/250	for
99N3470	15/20/20	400/300/25	2.25
99N3472 99N3473	10/40/16	450/ <b>400/350</b> 150.	25¢
99N3474	10-40-40-30	150.	10
99N3475	30-15-15-15	300	for
99N3476	40-40-20/200	150/10	
99N3477	60-40-20, 200	150/10	2.25
99N3478	40-30/100-40	150/25	25¢
99N3479 99N3480	30-20-20/100 75-75-75/30	150/25	
99N3481	80-40-30/100	150/25	10
99N3482	30-50/20/100	150/50/10	for
99N3483	40-40/20/200	150/50/10	2.25
99N3484	50-50-50/25	200/25	25-
99N3485	60-40-20/50	300/25	25c
99N3486 99N3487	30-30-15/30 30-30-10/20	300/50 350/25	10 for
99N3488	40-40-20/20	350/25	2 25
99N3489	10-10/10-10	350/300	2.25
99N3490	30-30-15/20	450/50	25€
99N3491'	30-30-15/30	450/50	10
99N3492	40-40/5/20	350/250/25	for
99N3493	30-30/15/20	350/300/25	2.25
99N3494 99N3495	10-10/10/20 30/20/10/20	450/350/25 350/300/250	
22142423	100/20/10/20	330/300/230/	140



#### "MINICAP" DRY ELECTROLYTICS

Small hermetically sealed metal cased. Units have axial bare wire leads. Dual units have common negative. Same less paper insulating tube.

puper mau	idining rub	e.	
No.   M	fd.   Volts	Each	10 for
99N3341 2	5   25	12c	1.08
99N3342	b   25	10c	90c
99N3343' 1	0 25	10c	90c
99N3344	2 50	08c	72c
99N3345: 1	0 50	12c	1.08
99N3346 2	25   50	12c	1.08
99N3347 S	50   50	12c	1.08
99N3348 1	00 50	12c	1.08
99N3349	8   100	10c	90c
99N3350 1	0   150	12c	1.08
99N33511 2	50   150	12c	1.08
	4 250	12c	1.08
99N3353	5 250	12c	1.08
99N3354 10	)-10 450 l	19c	1.70

#### WAX IMPREGNATED CONDENSERS



coded leads.

Single, dual and triple section condensers.
Wax impregnated coaled cardboard tubes. 5" long color-

39c

39c 39c

29c

No. Cap. Mid. Volts Each 10 for 99N3310 16 450 29c 2,60 99N3311 30-30 99N3312|8-8 300 32C 3.50 450 3.50 99N3313 40-40-12 39c 3.50 99N3314 80-40-20 0 150 /200 150/10 100 150/15 39c 3.50 99N3315 100-20/ 39c 3.50 99N3316'80-20/100 3.50 2.25 39c 99N3317 20-10 99N3319 40-20/20 150/25 39c 3.50 99N3321 40-20/20 99N3321 50-20/10 99N3322 50-50/20 99N3323 60-30/150 99N3324 20-16/10 150/25 39c 3.50 39c 3.50 150/25 39c 3.50 150/25 / 39c 3.50 29c 2.60

#### PLUG-IN DRY ELECTROLYTICS

99N3325|8-8/25 | 450/25 99N3326|40-40-40-10|150 99N3327|30-20-20/25|150/25 99N3328|20-10-5/50 | 450/25

Type DO. Plugs into octal socket. Replaces wet electrolytics pro-viding surge voltage does not exceed 525 volts.



3.50 3.50

3.50

2,60

No.   Cap	. Mfd.   Volts	Each
99N3329 15-15/		25c 10 for 2.25



#### TYPE D DRY ELECTROLYTICS

High quality, metal cased units. Insulated can unit with flexible leads. Provides excellent protection against humidity. cellent protection against h Mounts in %" hole. Less Palnut.

No.	Mfd.	Volts	Each	Ī	10	for
99N3331	4	600 !	39c		3.	50
99N3332	8	475	49c		4.	40
99N3333	8	600	59c	- 1	5.	30
99N3334	8-8	450	59c	- 1	5.	30



#### TYPE DT ELECTROLYTICS

Extremely small size units for use where

No.	Mfd.	Volts	Each	10 for
99N3335	50	25	10c	) 90c
99N3336	100	25	10c	90c
99N3337	8	50	8c	72c
99N3338	10	50	10c	90c
99N3339	16	100	8c	72c
99N3340	4	150	8c	72c

#### SILVER MICA CONDENSERS

Molded bakelite silver mica condensers. All individually tested for accuracy of capacity, voltage breakdown and leakage. All rated at 500 volts DC working are 1000 volt test, those tested at 300 volts DC working are 600 volt test.

Stk. No.	Mid.	WVDC	Туре	Price
99N3270 99N3267 99N3265 99N3272 98N3448 99N3230	.000075 .00005 .000025 .0001 .000125 .00015	500 300 300 300 <b>500</b> 500	000000	Each <b>6c</b> 10 for 54c
98N3502 98N3531	.00033 .00082	500 500	0	Each 8c 10 for 72c
98N3386 99N3231 99N3232 99N3268	.001 .0011 .0019 .0022	300 500 500 300	O S S S	Each 15¢ 10 for 1.35
99N3233 99N3271	.0038 .0049	500 300	S S	Each 24c 10 for 2.15







#### MOLDED BAKELITE MICA CONDENSERS

Stock No.	Mfd.	WVDC	Type	Price
98N3397	.0000047	500	0	
98N3485	.000025	500	0	
98N3430	.000027	500	0	Each
98N3488	.00005	500	0	
98N3489	.000075	500	0	4c
98N3375	.000125	300	0	
98N3479	.00015	500	S	10 for 35c
98N3491	.00015	500	0	
98N3573	.000175	500	O	
98N3494	.0003	500	0	Each Sc
98N3496	.0005	500	0	10 for 45c
98N3456	.0005	500	W	10 101 436
99N3254	.001	•500	0	Each 6c
98N3385	.0068	300	S	10 for 50c

# OUTSTANDING BARGAINS



#### SOLAR DY CONDENSERS

Outstanding values at give away prices 'Twist Prong' away prices 'Twist Prong' type Hermetically sealed.

Other values listed on page 154

Stock	Сар	Volt	Pri	ce
No.	MFD		Each	6 For
99N3355	30-30	150	.19	1.75
99N3356	40-20	150	.19	1.75
99N3357	20-10/50	450/50	.25	2.25

#### **ELECTROLYTIC CONDENSERS**



#### HI-FREQUENCY ANTENNA

Hi-Frequency Antenna Designed for use with Signal Corp SCR-522 transmitter-receiver. Ideal for use with high frequency (100 156 MC) amateur equipment. Overall length is approximately 30 inches. 99N9581-Shpq. wt. 4 lbs

### MIDGET INPUT XFORMER

6-8 ohms to single grid. Unshielded, with 4 color coded leads. For small PM speaker used as mike. 13 gx1 gx1/4"



9c 80c

#### TYPE 3AG FUSES

For Radios and Amplifiers

**99N287**—1/8 amp 99N285—1/4 amp 99N288-3/4 amp 99N286-11/2 amp

100 for 89c

#### HAMMARLUND RF CHOKE

250 mh, 60 ma, DC res, 420 ohm In heavy plastic case. 250 114" dia. x 134". 98N8526 Type RFC





#### AIR PADDER CONDENSERS

Ideal for circuits requiring con stant capacity under all conditions. 9-100 mmfd 11/8" deep. Fits 11/2" dia. forms.

98N10091-Each Lots of 10......1.95

**ACORN TUBE SOCKET** 

Low loss socket with rugged spring contacts for 954 and 955 tubes. Ceramic

Lots of 10





OIL IMPREGNATED TUBULARS

Oil filled, 3.5 mfd, 330 V, AC, Solder lug. 98N2981—2"x134"



#### OIL FILLED STANDOFF TRANSMITTING CONDENSERS

An excellent buy for Hams. tangular metal case. Oil filled and impregnated. Porcelain standoff insulators with solder lugs and locknuts. Hermetically sealed.



Any type

Stock No.	MFD	Working Volts	Dimensions H x W x D	Fig.	Shpg. Wt.	Each
98N2316 99N3288	15	1000	3x3 <sup>3</sup> / <sub>4</sub> x1'' 3 <sup>3</sup> / <sub>8</sub> x1 <sup>1</sup> / <sub>4</sub> x2 <sup>1</sup> / <sub>2</sub> ''	占	8 oz. 1 lb.	19c 69c
99N3289 99N3290	10 16	600 600	5½x2¾x1¼" 5¼x2¾x2½8"	ĀĀ	2 lbs 3 lbs.	1.20



#### OIL IMPREGNATED PAPER CONDENSER

Cylindrical type can, solder lugs. 2 mfd. at 600 W.V. DC. 11/2" dia. x 23/4". 99N3238



Stock No.	Illust.	MFD	WVDC	Each	10 For
99G3217	A	.25	600	.17	1.35
99G3246 99G3248	Α	.5	600 600	.19	1.50
99G3251	В	.1x.1	600	.25 .19	2.25 1.50
99G3260	A	.lx.lx.1	400	.09	.75
99G3259 99G3250	A	.5x 5	100	.09	.75
3343230	Б	23	25	.19	1.50

## BARGAINS IN PAPER TUBULARS

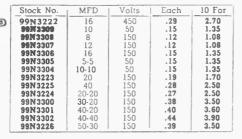
Excellent quality paper by-pass condensers at new, unbelievably low prices. Sizes are those most used by servicemen and ex-



Stock No.	Cap. MFD	Wkg. Volts	Each	10 For
99N3284	.001	600	.06	.54
99N3297	.01	400	.04	.35
99N3285	.25	600	.09	.81

#### SPECIAL CONDENSER VALUES

A great opportunity to save money on condensers, Midgets have bare wire leads. Can types hermetically sealed, spade mounting lugs. Polarity indicated



#### CARDBOARD ELECTROLYTICS

Compact cardoard tube electrolytics with uni-

Lots of 10 2.60





#### 25 MFD 25V. METAL TUBULAR CONDENSER



#### CERAMIC CONDENSERS

Extremely compact and stable. Flash tested at 1400 V, 500 DCWV. Leakage resistance 10M megs. Each 3c



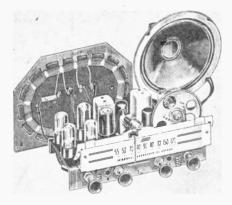
#### G.E. 12-VOLT DYNAMOTOR

Excellent for aircraft, mobile transmitters, farm use, etc. 12-volt input at 2.2 amps. 250-volt output at .05 amps. Dimensions: 234" dia. x 4½" long. 3 7/16" x 7/16" mounting centers. Complete with 8" wire

99N9599---Shpg. Wt. 5 lbs. ..

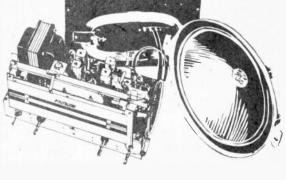
10 for 25e

# AM-FM CHASSIS VALUES



#### LOW-PRICED DELUXE AM CHASSIS

Save money—install it yourself! Here is a superb-performing radio chassis at a dollar-saving price—a supersensitive superhet radio with 10" speaker for maximum volume and tonal range. Automatic volume control eliminates atmospheric tonal range. Automatic volume control eliminates atmospheric fading and volume rises, maintains listening level you set with manual control. Continuously variable tone control adjusts from deep-throated bass to clear-tone treble. Latest push-pull audio circuit brings you 3 watts output for glorious realism to your radio reception. Built-in loop antenna eliminates trailing wire or outside antennas—provision made for outside antenna should you desire one, large easy-to-read slide rule dial tunes entire broadcast bund. Tubes used: 6SA7, 6SF7, 6SL7, 2-25L6 plus two 25Z6 rectifiers. Overall size: 8" x 113%" x 7". 24.95 IN701—Ehipping weight 10 pounds.....



#### NEW FM-AM CHASSIS AND SPEAKER

NEW FM-AM CHASSIS AND SPEAKER

Here's a powerful, deluxe FM-AM chassis that brings in both your favorite regular broadcast programs plus brilliami, staticless FM-a two-band receiver for the price of one! This is a complete unit, including a built-in power supply and 10" heavy-duty speaker...ready for installation in an existing cabinet or one of your own choosing. Latest type FM-AM circuit of high sensitivity and selectivity. Covers 550 to 1600 KC and 88 to 108 MC bands. Large easy-to-read slide rule dial makes tuning simple and fast. Other features include a built-in loop for standard broadcast reception and connector for external FM antenna. Also has a 3-position tone control and FM-AM bandswitch. An input jack is provided for consection of a record player. Tubes: 12AT7, 6BE-6, (2) 6BA6, 6AQ5, 6AT6, 6AL5 and 6X4. For 110 V, 60-cycle AC.

## DOLLAR SAVING TUBE SALE!!







#### DOLLAR SAVING TUBE SALE!!

Some are boxed, some are bulk, but they are all name brands, fully guaran-teed tubes such as GE, RCA, Sylvania, etc. Quantities limited.

Type	ach
1S5	59€
	49€
	89¢
	81¢
	67¢
	49€
	59¢
	67€
	67€
	67¢
6S17	62¢
6SO7GT	62¢
6V6GT	59€
12 A6	79¢
12SA7GT	69¢
12SG7GT	62€
12SK7GT	63¢
12SO7GT	63¢
14B6	59¢
35B5	67¢
35L6GT	67¢
35 Y4	59¢
35Z5GT	49¢
5085	67¢
50L6	69¢

#### SPECIAL PURPOSE TURES

or Ecime i our out	1000	
99N2905-0D3/VR150Lot	10/Ea. 39€	
99N2903-954Lot	Ea. 44¢	
	En. 29¢	
99N2904-Ein.ac 15ELot	Ea. 89¢	
99N2902-7193Lot		
	Ea. 19¢	

#### IF TRANSFORMER SPECIAL!

Air core, condenser tuned, shielded IF. 456 KC normal peck. Stand-ard spade mig. lugs. Can size: 1 3/8" x 1 3/8" x 3".

98N10069—Input...... 98N10070-Output..... 39c



#### AC-DC COILS Hi-gain, unshielded, 175-

550 meters. H1-1mpedance pri., 4 bank Litz wound sec. Tunes with .000365 98N10012—Antenna Coil. 32c

20 Assorted Trimmers, Padders. Most are stand-

#### 98N10203... 5-PUSH-BUTTON SWITCH

ceramic.

Each button DPDT; all common in normal position. Shafts extend 214". 98N12592-Lots/10.49..Ea. 66



### Plate Load Relay



Heavy-duty 6000 ohms SPST. Normaly open. Rated 10 amps at 110' V. 2%x1 5/8x1". Mtg. centers 2 5/8".

99N3978......89c



ALL-AMERICAN TUBE KIT Popular replacement kit of five standard brand tubes. Includes one each of 50L6, 35Z5, 12SQ7, and 12SK7 tubes. A real bargain in replacement tubes. Wt: 31bs. List Price 6.95. 99N9549......2.96

#### ADJUSTABLE S.P.D.T. RELAY



Sensitive relay, 2000 ohm coil, For plate circuits, photo-cell applications. Min. pull-in current only 2.5 mg, 2-mtg. holes, 33/8 x 21/8 x

99N4033.. 1.49

#### SPECIAL RELAY



45 V DC relay, 2000 ohm coil. Contacts: one set of SPDT rated 50 amps, at 6 volts to 20 amps, at 110 volts, and one set of SPST normally open contacts rated 5 amps at 6 5 amps at 6 volts to 2 amps. at 110 V. Excel-

lent for tube circuits, photocell alarm systems, hosts of other applications.  $3\frac{1}{2}$ x  $2\frac{1}{4}$ x  $3\frac{5}{6}$ . Dust cover, mounting screws, and wiring diagram.

99N3983....

#### 4 P.D.T. 24 VOLT RELAY



V<sub>8</sub>" pure silver contacts rated at 3 amps. 110 volts AC, 250 ohms DC coil for 24 volt operation, 6-32 threaded mounting holes on 1½" mounting centers. on 175" mounting Size: 2x15/8x15/8". mounting centers.

99N3996.....

#### S.P.D.T. RELAY



SPDT contacts of #" diameter fine silver, rated at 550 watts non-inductive load at 60 cycles. Coil operates on 19 to 29 volts 50-60 cycle AC, DC resistance of 50 ohms, 1500 volt insulation. 21/4×15/8×11/8".

69c 98N5950.....

# PACKAGED HARDWARE

#### ASST. MACHINE SCREWS

All standard sizes used in electronic and similar work in handy inex-pensive assortment. Contains approximately 40 Nos. 6, 8, 10 screws

17 15458—Assortment. 17 15458—Assortment. 17 15458—6-32x½, pkg. of 35. 17 115458—6-32x½, pkg. of 35. 17 115458—8-32x½, pkg. of 30.

#### SMALL SCREWS AND NUTS

Special assortment of extra small screws and nuts Nos. 2 and 4 needed in electronic and experimental work; for fastening small parts, and for replacing rivets. Approximately 30 assorted screws and 30 assorted nuts.

#### SELF TAPPING SCREWS

Cut their own thread in either metal or plastic ideal for mounting parts on chassis, replacing rivets and eyelets. Package of approx. 30 assorted sizes. 17N15450—Assortment. 17N15451—Pkg. app. 25, size 6x3/6. 17N15452—Pkg. app. 25, size 8x3/6.

#### PHONO PICK-UP SCREWS

Knurled head steel screws, antique bronze. For popular pick-ups and recording heads. Approx. 10 asst. 17N15409—

#### WOOD SCREW ASSORTMENT

Handy assortment for workshop or home. Contains approximately 30 round and flat-head screws of popular sizes in brass and steel to meet all your requirements.

#### ORNAMENTAL SCREWS

Real value! Antique bronze finished rosette head screws for mounting speakers and other radio installa-tions. Pkge. contains 15 asst. sizes. 17N15449-

#### SPADE BOLTS

Indispensable for attaching condenser coils, IF cans, for Experimenters, Servicemen and manufacturers. Stud size 6-32. Hole size No. . Package of approx. 25 assorted lengths. 17N15443—

#### SMALL SCREW ASSORTMENT

Handy assertment for home or workshop. Contains approx. 30 small brass & steel wood screws sizes 1 to 3 up to 3%" for name plates and escutcheons. 17N15454-

#### RUBBER FEET

Made of oil resistant synthetic rubber for radio phonograph and amplifier bases. Screw or tack type. Package of 12 assorted screw type. 17N15407—

of assort, tack type, Pkge. of as. 17N15408—

#### SNAP-IN TRIMOUNTS

To fasten dial scales, loop and tennas and backs on plasti cabinets, etc. Pkg. of 30 asst. 17N14839-

#### HOLE PLUGS

10 assorted size snap button hole plugs up to 1/16" thick. Per. 10 asst.

17N14837-

#### VENTILATING PLUGS

Forchassis, amplifiers, racks, transmitters, etc. Snaps into 1" hole. Pkg. of 2 plugs. 17N15460-

## LUGS

Available in 6 popular sizes for radio and electronic work. Tinned

Stock No.	Fig. No.	Approx. No.
17N15419 17N15420	Asst.	40
17N15421	2	30 25
17N15422 17N15423	3 4	25 25
17N15424 17N15425	5	25

#### RADIO KNOB SPRING



Finest grade se-lected steel lected steel springs in all regular sizes and shapes. Package of approximate-ly 16 assorted ly 16 a:

#### SPECIAL MOUNTING NUTS





#### **SPACERS**

Assortment of metal and insulating spacers. Accommodates No. 6 and No. 8 screws. 17N15402—App. 12 asst. insulat 17N15403—App. 12 asst. metal

## SMALL COTTER & HAIRPINS Assortment of most popular sizes

of cotter and hairpins. Valuable aid in radio and phonograph repair. Package of approx. 50.

#### STEEL SET SCREWS

Hardened steel set screws, for radio knobs, record changers, etc. Approximately 15 assorted sizes. 17N15400-

#### **METAL WASHERS**

Cadmium plated. Steel washers. Approx. 80 assorted small sizes. 17N15433—

#### RINGS AND "C" WASHERS

Standard types and sizes for servicing of volume controls and record changers. Sizes for shafts 1/6" to 5/16" diam.

Description Approx. No. Rings and Washers 35
C washer 1/4" shaft 25
C washer 3/16" shaft 25 Stock No. 17N15427 17N15429

#### SPRING WASHERS

For record changer, automatic tuning assemblies.
Assortment of approx. 15
assorted phosphor-bronze
and steel iriction washers. 17N15404

ANY ITEM ON THIS PAGE 24¢

#### **EXPANSION SPRINGS**

Handy for radio, electrical shops, laboratories. Assortments contain various sizes for record changers and dial drives. 17N15434—10 Asst. large springs, 17N15435—10 Asst. small springs.

#### **FUSE CLIPS**

Made of nickel plated spring brass for single hole mounting. Pkg. 10 assorted. 17N15428-



#### MACHINE SCREW NUTS

"Small Pattern" nuts for electric trades. Cadmiúm plated.

17N15446	Asst.	3.5
17N15447	6-32	3.5
17N15448	8-32	30



#### **ACORN NUTS**

Improves appearance on panel assemblies and cabinets. Pal type strel nuts, self locking. Cadmium plated. Pkg. of 12 asst. 17N15444—

#### **CHASSIS MOUNTS**



Long lasting resilient synthetic rubber. To give chassis floating effect. Pkg. of 10 assorted. 17N15432—

#### PHONO MOTOR DRIVES

Precision-made replace-ments for standard motor drives. Made of abrasion-resistant synthetic rubber to insure long, serviceable

No.	I.D.	O.D.	Thick	Per
17N15413	2"	23 8"	5,32"	2 2 3 4
17N15414	1½"	13/4"	3'16"	
17N15415	7/8"	11,8"	3,16"	
17N15416	1'8"	3'8"	1/4"	
17N15417	53/4"	6"	3/16"	



#### CORD STRAIN RELIEFS

Provides a grommet and strain relief in one piece. For use on appliance, radio and amplifier power cords. Will prevent insu-lation of wire from being cut or damaged. Package of 4. 17N15431—



#### ANGLE BRACKETS

Handy brackets of various lengths and shapes. Pre-cision made of steel, or brass and plated. Pkg. of approximately 15 assid. approxim 17N15418-







Three assortments of key wrenches to fit all standard Hex and spline accket screws used in radio and electronic equipment. A "must" for the servicemant Asst. of 4 small Hex wrenches to fit set acrews No. 4 to 1/4", cap screws No. 2 to 8. 17815410—
Assortment of 3 modium.

Assortment of 3 medium Hex wrenches to this set screws  $V_4$ " to 7/16" and cap screws No. 8 to 5/16". No. 8 to 5/ 17N15411-

Asst. of 4 small spline wrenches to fit set screws 1/4"-7/16"; cap scws. No. 8 to 5/16".
17N15412—

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RETURNS

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#### PARCEL POST RATES FOR ALL ZONES

Parcels up to 8 ounces may be shipped anywhere in the United States for 6¢. Parcel post shipments to any zone must not exceed 70 pounds. The limit of size on all parcel post packages is 100 inches

in length and girth combined, at widest point. Example: a package 35" long, 10" wide and 5" high measures 65" in length and girth combined (length 35", plus twice 10" width, plus twice 5" H.equals 65").

ZONES								
Wt. In Lbs.	First Up to 50 Mi.	Second 50 to 150 Mi.	Third 150 to 300 Mi.	Fourth 300 to 600 Mi.	Fifth 600 to 1000 Mi.	Sixth 1000 to 1400 Mi.	Seventh 1400 to 1800 Mi.	Eighth Over 1800 Mi.
1	\$0.09	\$0.09	\$0.10	\$0.11	\$0.12	\$0.13	\$0.15	\$0.16
2	.11	.11	. 12	.15	.18	.20	.24	.27
3	.12	.12	.14	.18	.23	.27	.33	.38
4	.13	.13	.16	.22	.28	.34	.42	.49
5	.14	.14	.18	.25	.34	.41	.52	.61
6	.15	.15	. 20	.29	.39	.48	.61	.72
7	.16	. 16	. 22	.32	.44	.56	.70	.83
8	.17	.17	.24	.36	.50	.63	.79	.95
9	.18	. 18	. 26	.39	.56	.70	.89	1.06
10	. 19	. 19	. 28	.43	.61	.77	.98	1.17
11	.20	.20	.30	.46	.66	.84	1.07	1.29
12	.22	.22	.32	.50	.72	.92	1.16	1.40
13	.23	.23	. 34	.54	.77	.99	1.26	1.51
14	.24	.24	.36	.58	.82	1.06	1.35	1.63
15	.25	.25	.38	.61	.89	1.13	1.44_	1.74
16	.26	.26	.40	.65	.94	1.21	1.53	1.85
17	.27	.27	.42	.68	.99	1.28	1.63	1.97
18	.28	.28	.44	.72	1.05	1.35	1.72	2.08
19	.29	.29	.46	.75	1.10	1.42	1.81	2.19
20	.30	.30	.48	.79	1.15	1.49	1.91	2.31
Each Added lbAdd	l ¢	1¢	2¢	4¢	6¢	7¢	9¢	11¢

#### EXPRESS CHARGES

Express Charges are determined by the weight of the shipment and distance of Destination Office from Originating Office. The following chart will enable you to estimate charges.

Maximu tance ir		50 Mi.	150 Mi.	300 ML	500 Mi.	750 M:•	1000 Mi.	1500 Mi.	2000 M1•
Cost up 1	o 5 lbs.	\$0.78	\$0.89	\$0.91	\$0.93	\$1.00	\$1.01	\$1.09	\$1.37
11 11	10 lbs.	.86	.99	1.05	1.10	1.21	1.24	1.41	1.96
11 11	15 lbs.	.92	1.13	1.19	1.26	1.44	1.48	1.73	2.55
11 11	20 lbs.	.96	1.24	1.32	1.43	1.66	1.71	2.05	3.14
11 11	25 lbs.	1.0:	1.37	1,47	1.59	1.88	1.96	2.37	3.74
11 11	35 lbs.	1.10	1.60	1.75	1.92	2.32	2.43	3.01	4.92
11 11	45 lbs.	1.20	1.84	2.03	2.25	2.77	2.90	3.65	6.11
11 11	55 lbs.	1.28	2.08	2.27	2.58	3.21	3.38	4.28	7.29
11 11	75 lbs.	1.47	2.55	2.83	3.24	4.07	4.33	5.56	9.66
17 11	95 lbs.	1.66	3.04	3.38	3.90	4.98	5.27	6.84	12.03
11 11	100 lbs.	1.68	3.14	3.55	4.07	5.20	5.51	7.16	12.62

#### INSURANCE

Parcel Post and Express insurance rates are based on declared value. ALL PARCELS WE SHIP MUST BE INSURED.

Valuation	PARCEL	POST	Cost
Up to \$ 5.	00		.\$0.03
\$ 5.01 - 25.			
25.01 - 50	.00		15
50.01 - 200	.0000.		25
	EXPRESS		

tion thereof, charge is \$0.10.

#### **EXPRESS & FREIGHT**

Express and freight shipments are sent transportation charges collect. If your station has no agent, please send sufficient money to cover transportation. Charges are the same either way. All over-payments are promptly refunded.

#### C.O.D. SHIPMENTS

Transportation charges on C.O.D. parcels are slightly higher than those sent prepaid. C.O.D. charges in addition to the regular postage cost are as follows (including insurance):

Valuati	ion Extra	Charge
. Up to \$		
\$ 2.50 -	5.00	
5.01	25.00	
25.01	50.00	
50.01 -	100.00	50
100.01 -	150.00	
150.01 -	200.00	60
Post Office	gleo charges an exti	ra small

money order fee on each C.O.D. po Save these fees by remitting in full. order fee on each C.O.D. parcel.

NOTE: Equipment built or ordered especially to meet customers requirements not subject to exchange, credit or refund. All orders for special merchandise must be accompanied by d'deposit.

# Oto 10403 are turning to

#### S-40A. THE RADIO MAN'S HOME SET

A complete, high quality communications receiver that offers superior performance in the medium price range. Handsomely designed and expertly engineered to give you the latest radio developments in a cabinet of functional beauty. Chassis of exceptional sensitivity and power, including built-in PM speaker. Tuning range covers 540 KC to 43 MC on four bands. Wide vision main tuning did and experts to be sensitived. Tuning range covers \$40 KC to 43 MC on four bands. Wide vision main tuning dial and separate electrical bandspread dial for precision tuning. Settings for broadcast band marked in color for simplified use. One stage Rf amplification uses 65A7 converter mixer for best signal-to-noise ratio. Rf coils are permeability adjusted "micro-set" type. Temperature compensated oscillator. Audio response to 10,000 cycles. External controls for doublet or single wire antenna, phone jack and socket for external power supply. Other controls include 3-position Tone, BFO Pitch, Receive/Standby, Noise Limiter Switches, AF and RF gain. Tubes: 6SG7, 6SA7, (2) 6SK7, 6H6, 6JSGT, 6SQ7, 6F6G, SY3GT rectifier. For 105-125 volts, 50/60 cycles AC. Satin black steel cabinet with brushed chrome trim measures 18½" wide, 9" high, 9½" deep. Shipping Weight 32 lbs.

30N21094—Complete with Tubes & Speaker 79.95 Model S-40AU. Same as above except for 115/250 volts, 25-60 cycles AC.

30N21085 .....



# hallicrafters radios



S-38 AC/DC RECEIVER

Exceptional performance in a communications receiver at the lowest price. Continuous AM reception from 540 KC to 32 MC on four bands. CW pitch control adjustable from front panel, automatic noise limiter and self-contained PM dynamic speaker are a few features that make this inexpensive set a leader in its field. Compact, functional design and high performance on both short wave and standard broadcast, make it ideal for use in den, library or any room in the house where a good extra receiver is desired. Accurately calibrated main tuning dial with separate electrical bandspread dial. Controls include Speaker/Phones, AM/CW and Noise Limiter Switches, AF gain and Receive/Standby. Tubes: 12SA7, 12SK7, (2) 12SQ7, 35L6GT and 35Z5GT rectifier. For 105-125 volts AC/DC operation. Steel cabinet in black wrinkle finish with brushed chrome trim measures 12%" wide, 7" high, 7¼" deep. Shipping Weight 14 lbs.

30N21081—Complete With Tubes & Speaker.......39.95 



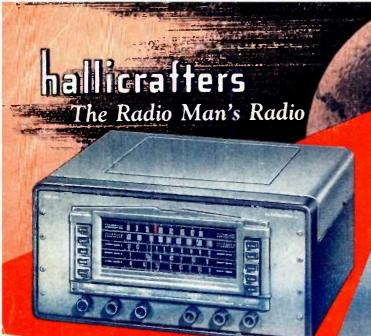
## NEW SX-71 COMMUNICATIONS RECEIVER

Designed expressly for superior Ham Band performance in the moderate price range. A new type of receiver, value-packed with features specifically Designed expressly for superior Ham Band performance in the moderate price range. A new type of receiver, value-packed with features specifically asked for by Hams. Extra sensitivity, selectivity and stability, definitely superior image rejection with double superheterodyne circuit, plus built-in narrow band FM reception. Extra wide dials for main and bandspread tuning. Continuous AM reception from 538 KC to 35 MC and 46 to 56 MC. Has built-in limiter and balanced detector stages for hiss-free NBFM reception. Double conversion gives image rejection of better than 300 to 1 at 28 MC. One RF, two conversion and 3 IF stages yield high gain for sensitivity of 1 microvolt. Sharp selectivity as indicated by 14 KC band width even before cutting crystal filter into circuit. Audio peaked for communications frequencies, with 3 watts output. Bandspread dial calibrated for 80, 40, 20, 10 and 6-meter bands. Other controls BFO pitch, 3-position selectivity, crystal phasing, AF and RF gain, Receive/Send. "S" meter control in rear. Has 500-ohm output for separate speaker. Tubes: 6BA6, 6BA7, 6BE6, (2) 6SK7, 6SH7, 6SN7, 6SC7, 6AL5, 6K6GT, VR-150 and 5Y3GT rectifier. For 105-125 volts, 50/60 cycles AC. Gray steel cabinet with satin chrome trim measures 18½" wide, 8½" high, 12" deep. Shipping Weight 33 lbs.

Speaker for above in matching cabinet.

30N21106 .....





#### FAMOUS S-47 HIGH FIDELITY FM-AM RECEIVER

Here is a high precision, fine quality receiver. The chassis lends itself perfectly to custom installations of your own choosing. Specially designed cabinets, bookcases, end tables or built-in sound systems are a few suggestions you can adapt to meet your requirements for high fidelity radio reception. A superb chassis that is all radio, made simple to operate with push-button controls and a wide, easily read dial. This is a powerful 14-tube (plus rectifier) FM-AM set covering the standard broadcast band-540-1720 KC, the FM band-88 to 108 MC and short wave band-5.9 to 18.2 MC. The short wave band has separate bandspread tuning ranges of 9-12 MC and 15-18 MC.

Automatic frequency control gives unprecedented ease of tuning on FM ... with unequalled accuracy. Circuit electronically "locks in" selected stations and keeps it in perfect tune. The push-pull output stages provides 10 watts audio with a response of 30 to 15.000 cps for rich, resonant tone. Separate bass and treble controls supply sufficient tone variations to satisfy the most discriminating listener. Any speaker with an impedance of 500 ohms can be used. Receiver also has input jack for high impedance phono pickup. Uses the following tubes: 6BA6, 6BE6, 6I6, (3) 6SG7, 6SH7, 6AL5, (2) 6J5, (2) 6SQ7, (2 6V6GT and 5U4G rectifier.

The handsome gray steel case with satin chrome trim measures 20" wide x 1014" high x 16" deep. Shipping weight 66 lbs. Operates on 105-125 volts, 50 60 cycles AC. Supplied less speaker.

30N21067-Complete With Tubes ...... 229.50

Model S-47U Same as above except for 110/120

volts. 25-60 cycles. 30N21101 245.50

30N21072-R42 Speaker (See Pg. 142-143).... 34.50

#### **NEW S-72** ALL-WAVE PORTABLE RADIO

You'll be in touch with the outside world wherever you go with this extra-sensitive all-wave portable receiver. Super-powered for excellent performance on AC, DC or battery operation. Covers standard broadcast and three short wave bands: 540 KC to 30.5 MC on four tuning ranges. This includes all popular foreign and domestic short wave broadcast bands, aircraft and police bands, plus six Ham bands. Circuit design includes one stage of tuned RF for extra sonsitivity and selectivity, and an automatic noise limiter to aid reception in areas with heavy electrical noise. Operates from a built-in loop for broadcast stations and a 27" whip for short wave reception. Tubes: 1T4, 1R5, (3) 1U4, (2) 1U5, 3V4, plus a long-life selenium rectifier. External connections include a phone jack on panel and provisions for attaching an extra antenna, if desired. Automatic changeover from battery to electric power to protect batteries. The sturdy plywood cabinet is finished in handsome brown leatherette with brass plated hardware and attractive escutcheon finished in antique silver. Dimensions: 14x-121/4x71/4" deep. Shipping Weight 16 lbs. Power cord for 105-125 volts DC or 60-cycle AC fits inside set when not in use.

30N21100-Less Batteries 79.95

20N19870-Battery Pack for above.......3.85