## It Pays to Buy from Sears

When you purchase radio or public address equipment from Sears you know that you will be completely satisfied. Because Sears guarantee that every article you purchase will give you the service you have a right to expect. If for any reason whatever you are not satisfied with any item purchased from us, we want you to return it at our expense. We will then exchange it for exactly what you want or refund your money, including any transportation charges you have paid.

When you buy from Sears, you also save on transportation charges: Although all merchandise is shipped from Chicago, you pay shipping charges only from our nearest Mail Order House, except in a few instances where otherwise noted. There are ten of these Sears Mail Order Houses conveniently located throughout the United States. This means added savings for you.

Sears also maintain a staff of technicians to answer any questions regarding radio or sound equipment, you may have. If you have a special problem, write to us... our radio department will be glad to help you. Just adelress your letter to Sears Personal Service, Radio Department, Chicago.

## Previous Catalogs Withdrawn

Effective November Ist, 1941, this cotolog supersedes and concels all previous radio supply and public address equipment cotalogs which we have published.
We can not supply merchandise listed in this catalog at prices lower than those shown
unless market developinents or changes in manufacturers' established prices permit us to do so. You will always be given the advantages of the lowest prices.

## Concerning Prices and Taxes

On many items in this catalog the manufacturer establishes the prices at which we are permitted to sell ... and reserves the right to change such prices without notice. In view of this we, too, must reserve the right to change our selling prices on such goods whenever we are required to do so.

If you should order an item which has advanced slightly in price, we will explain it to you as we bill your order. Should the price advance be great, we will advise you before shipping, and you can make additional remittance by return mail or instruct us by letter in accordance with your wishes.
We also reserve the right to add any Federal, State or local taxes which may affect the cost or selling price of any merchandise listed in this catalog.
You are protected, of course, on all of your purchases by our guarantee of SATISFACTION OR YOUR MONEY BACK

## Special Order Merchandise

Ordinarily we go out of our way to get special or unlisted items for our customers. We regret that we must temporarily discontinue this service because of the extreme difficulty in obtaining such goods.

However, we still have small quantities of merchandise on hand which were listed in our last year's catalog. If the item you want does not appear here but is listed in last year's Radio liere but is listed in last year's Radio
Equipment or Silvertone Sound System catalogs... we may be able to supply your needs. Write to Sears Personal Service Dept., Cliticago for information.

## How to Order

Select the articles you want from this catalog and write them down on one of our order blanks or any piece of paper. Put down the catalog number, quantity desired. the name of each article and the price

## Send Easy Payment Orders to

Seors-Roobuck's Mail Order House in Chicago, Boston. Kansas City, Allanta, Seattle, Philadelphia, Dallas, Minneapolis. Memphis, Los Angeles. Send CASH ORDERS to Sears Chisago Mail Order House
Merchandise will be shipped from Chicago, but you pay transpor tation charges only from your nearest Sears Mail Order House, except in a few instances where ot herwise stated.
Be sure to include additional money in your remittance to pay postage as charges for parcel post shipments must be paid in advance. We return every penny you send over actual postage required to cover shipping charges from your nearest Sears Mail Urder House.
For ordering merchandise on Easy Iayments, see instructions below.

## Sears Easy Payment Plan

A Convenient Way to Buy
Why not order everything you need at one time . and pay for it on convenient Easy Terms? Just a little each month will purchase anything we sell in orders of \$10 or more. Don't hesitate to ask for Easy Terms. Sears requirements are simple and casy to neet . . based on character and income. List the things you want and fill in the few simple questions on the Easy Payment side of the enclosed order blank. The deposit table at right and the monthly payment table below will show you the exact deposit to send with your order and the amount payable monthly.

Deposit Table

| If cash price of oroer a mounts to | $\left\|\begin{array}{c} \text { Send } \\ \text { with order } \end{array}\right\|$ | If cash price of order amounts to: | $\begin{gathered} \text { Send } \\ \text { with order } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| \$10.00 to \$15.00 | 3.00 | \$100.01 to \$120.00 | \$24.00 |
| 15.01 to 22.00 | 4.50 | 120.01 to 140.00 | 28.00 |
| 27.01 to 30.00 | 6.00 | 140.01 to 160.00 | 32.00 |
| 30.01 to 40.00 | 8.00 | 160.01 to 180.00 | 36.00 |
| 40.01 to 50.00 | 10.00 | 180.01 to 200.00 | 40.00 |
| 50.01 10 60.00 | 12.00 | 200.01 to 225.00 | 45.00 |
| 60.01 to 70.00 | 14.00 | 225.01 to 250.00 | 50.00 |
| 70.01 to 80.00 | 16.00 | 250.01 to 275.00 | 55.00 |
| 80.01 to 90.00 | 18.00 | 275.01 to 300.00 | 00 |
| 90.01 to 100.00 | 20.00 |  |  |

Monthly Payment Table

| If Cash Prite Less Deposit (Unpaid Balance) Amounts to | $\begin{aligned} & \text { We Will Add for } \\ & \text { Easy Payments: } \end{aligned}$ | Amount Payable Monthly is: | If Cash Price Less Deposit (Unpaid Balance) Amounts to: | We Will Add for Easy Payments: | Amount Payable Montity is: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Up to $\$ 10.00$ | \$1.00 |  | $\$ 60.01$ to $\$ 65.00$ 65.01 to 70.00 | $\$ 6.25$ | ¢7.00 |
| $\$ 10.01$ to 11.00 11.01 to 12.00 | 1.05 1.15 | \$ | 70.01 to 75.00 |  | \$7.00 |
| 12.01 to 13.00 | 1.25 |  | 75.01 to 80.00 80.01 to 85.00 | 7.75 8.25 | \$8 |
| 13.01 to 14.00 | 1.35 |  | 85.01 to 90.00 | 8.75 |  |
| 14.01 to 15.00 | 1.45 |  | 90.01 to 95.00 | 9.25 |  |
| 15.01 to 16.00 | 1.55 | \$300 | 95.01 to 100.00 | 9.75 10.50 | \$9.00 |
| 16.01 to 17.00 | 1.65 |  | 10.01 to 110.00 |  |  |
| 17.01 to 18.00 18.01 to 19.00 | 1.85 |  | 110.01 to 120.00 120.01 to 130.00 | 11.50 12.50 | \$10.00 |
|  |  |  | 130.01 to 140.00 | $\begin{aligned} & 12.50 \\ & 13.50 \end{aligned}$ | \$10.00 |
| 19.01 to 20.00 | 1.95 |  | 140.01 10 150.00 | 14.50 |  |
| 20.01 to 22.00 | 2.10 |  | 150.01 to 160.00 | 15.50 | \$11.00 |
| 22.01 to 24.00 24.01 to 26.00 | 2.30 250 |  | 160.01 10 170.00 170.01 to 180.00 | $\begin{aligned} & 16.50 \\ & 17.50 \end{aligned}$ | \$12.00 |
| 26.01 to 28.00 | 2.70 |  | 180.01 to 190.00 190.01 to 200.00 | $\begin{aligned} & 18.50 \\ & 1850 \end{aligned}$ | \$13.00 |
| $\begin{array}{lll}28.01 & 10 & 30.00 \\ 30.01 & \text { to } & 33.00\end{array}$ | 2.90 3.15 | 00 | 200.01 to 210.00 | 20.50 | \$14.00 |
| 33.01 to 36.00 | 3.45 |  | 2 i 0.01 to 220.00 | 21.50 | \$14.00 |
| 36.01 to 40.00 | 3.80 |  | 220.01 to 230.00 | 22.50 | \$15.00 |
| 40.01 to 45.00 | 4.25 |  | 230.01 to 240.00 | 23.50 |  |
| 45.01 to 50.00 | 4.75 |  | 240.01 to 250.00 $250.01 \text { to } 260.00$ | $\begin{aligned} & 24.50 \\ & 25.50 \end{aligned}$ | \$16.00 |
| 50.01 to 55.00 55.01 to 60.00 | 5.25 | 0 | 250.0110270 .00 | 26.50 | \$1700 |
| 55.01 to 60.00 | 5.75 |  | 270.01 to 275.00 | 27.25 | \$17.00 |




## New Hallicrafters SX-32 Communications Receiver

- Thirteen Tubes (Including Rectifier Tube).
- Frequency coveroge 500 KC to $40 \mathrm{MC}-6$ Bands.
- Two Tuned Radio Frequency Stoges-21 F. Stoges
- Three Siep Crysial Filler.
- Sir Selectivity Positions.

Here is the result of 600 carefully analyzed reports and recommendations from radio experts. . . including specifications offered by Government engineers. It is brand new ... distinguisked in performance effortless in operation ... and priced extremely low for a receiver of this exacting quality.
With the exception of several features, the SK-32 Super Skyrider is the same receiver as Hallicrafters' famous precision model SX-28 described on Page 5. The essential difference between the two models is that the Model SX-32 does not have a main dial vernier and locking feature, or Bass Boost. Also the noise limiter on the SX-28 is adjustable whereas on the SX-32 it is automatic. Other than this, Model SX-32 is the same carefully enfincered receiver as the SX-28 . . and at a much lower price.
Covers the range from $500 \mathrm{K.C}$. to $40 \mathrm{M.C}$. in six bands. Has 13 tubes including rectifier tube. Two stages of preselection, micremeter scale tuning. Inertia control, two I.F. stages, temperature compensation. Six step variable selectivity from broad I.F. to crystai filter. Amplified 4VC. Rigid heavy flame welded chassis. Automatic noise limiter and beat frequency oscillator. Separate R.F. and A.F.

- Amplifled Automatic Volume Conirol Action.
- Calibraled Band Spread Tuning.
- Inerlio Controlled Main Tuning Dial.
- Push Full 6VGGT Audio Oulput.
- Aulomatic Noize Limiter.
gain controls. Calibrated band spread. Jeweled S-DB meter. Tubes used are: 6AB7 1st R.F.; 6SK7 7 2nd R.F.: 6SA7 Mixer; 6SA7 Oscillator; 2-6SK7 I.F's.; 6B8 AVC. Amplifier; 6 H 6 Automatic noise limiter and 2nd detector: 655 beat frequency Oscillator: 6SC7 1st Audio: $2-6 \mathrm{~V} 6 \mathrm{GT}$ push pull output and A5Z3 rectifier. All controls required of a thoroughly first class conmunication receiver are there. All components are treated for both tropical and sub-arctic operating conditions. Supplied with a standard 19 -inch panel for relay rack mounting and handsonte gray steel cabinet, size $201 / 2 \times 141 / 2 \times 91 / 2$ inches.
57 NPM 17982 -SX-32 for 110 volt 60 cycle AC operation. Complete with tubes less speaker. Shipping weight. 87 pounds. Not mailable...... $\$ 149.50$ 57 NP 018813-PM23 10-inch PM speaker. Shipping weight. 18 pounds. ........... . . . . $\$ 15.00$ 57 NPM 17993-R8 8-inch speaker in Reflex Console as illustrated on Page 5. Shipping weight, 67 lbs . Not mailable
$\$ 29.95$
57 NPM 17995-R12 12-inch speaker in Reflex Console as illustrated on Page $\overline{5}$. Shipping weight, 72 pounds. Not mailable.
$\$ 34.50$


Inertio Controlled Moin Tuning Dial


Single Signal Reception in 3
asy Adjusiments


Colibrated Band Spread Dial


Six-Position
Seleclivity


## Hallicrafters S-29 Sky Traveler

A portable designed to communications receiver tolerances. Take it with you wherever you go, or use it at home. Operates on either 110 volt AC or DC or from its self-contained batteries. Mounted in an attractive black crackle finished cabinet with rounded corners. Size, $7 \times 81 / 2 \times 131 / 4$ in. Frequency coverage from 542 KC . to 30.5 MC . ( 553 to 9.85 meters) on four bands. Self-contained antenna with high gain coupling circuit provides truly remarkable reception throughout its tuning range.
Frequency Range: Band 1-542 to 1490 KC ., Band 2 -1.43 to 4.35 MC ., Band $3-4.12$ to 11.9 MC ., Band $4-11.26$ to 30.5 MC .
Tube Lineup: 1-1T4 RF Amplifier; 1-1R5 Mixer; 1-1P5-GT 1st. IF Amplifier; 1-1P5-GT 2nd. IF Amplifier; 1-1H5-GT 2nd. Detector. AVC, 1st audio: $1-3 Q 5-G T$ Output Amplifier: $1-1 \mathrm{G} 4-\mathrm{GT}$ Beat Oscillator; 1-1G4G'l' Noise Limiter; 1-50Y6GT Rectifier.
Controls: Main tuning, Bandspread. R.F. Gain. A.F. Gain, Band Switch, Power Switch. AVC Off. On switch, BFO Off-On Switch, ANL Off-On Switch, Send-Receive-Standby Switch.
Connectors: Doublet Marconi Antenna Socket, Phone Jack, Battery Cable with Plugs, AC/DC Cord. 57 NP 017994 -Model S-29 complete with tubes and batteries. Shipping weight, 25 pounds . $\$ 69.50$

# HALLICRAFTERS communication World Famous . . Used by the Governments 



## Sky Buddy-Model S-I9R

## $532^{50}$

\$8 Down

- Continuous Coverage 44 MC to 545 KC
- Electrical Band Spread on All 4 Bands
- Unifarm Sensitivity on Ten Meter Band - Illuminated $360^{\circ}$ Band Spread Scale - Buill-in 5-inch Speaker Floats in Rubber

One of America's most popular low priced communication receivers. Features the same electrical band spread system used in higher priced Hallicrafters models. No other receiver at this low price has smoother electrical band spread action. Positive, gearless rotor sections eliminate back lash. Conveniently arranged controls: Stand-by Switch, Band Selector, On-Off Switch, Main Tuning, Band-Spread Tuning, AVC On-Off, Audio Gain (volume), B.F.O. Switch and Pitch Control. Also equipped with Headphone Jack which silences speaker when phones are plugged in (see Page 13 for standard phone plugs). Superheterodyne Circuit employing six modern tubes (including rectifier tube). A highly desirable receiver for the short wave fan as well as the beginning radio amateur. Much better designed for specialized short wave work than a six-tube household radio. For 110 volt 60 cycle AC operation. For 6 -volt Storage Battery operation order Vibrapak 57 NP 018289 listed below for which a socket is provided on rear of chassis. Black crackle finish metal cabinet $17 \frac{1}{2} \times 81 / 2 \times 81 / 2$ inches. Shipping weight, 24 pounds.
57 NP 018806 -Sky Buddy complete with tubes $\$ 32.50$ 57 NP 018289 -Vibrapak for operating above and other Hallicrafters Receivers from 6-volt Storage Battery. Shpg. wt., 12 lbs ... $\$ 11.76$


Sky Champion-Model S-2OR 5450<br>\$12 Down<br>- Autometic Noise Limiter; Qaiet Reception<br>- One RF Stoge and Two IF Stages<br>- Inartio Type (Flywheel) Band Spread Tuning<br>- Complete Coverage 44 MC to 540 KC<br>- Separate RF and AF Gain Controls

Compared with the Sky Buddy there's more than enough extra value in the Sky Champion to justify the additional cost. First it has a Noise Limiter. which is extremely important for high frequency work. Also it has a stage of RF, indispensable for 10 Meter operation. A full complement of nine tubes (inc. rectifier tube) eliminates circuit compromises which are necessary in cheaper sets. Tubes used: 6SK7 RF Amplifier, 6 K 8 first detector-mixer oscillator, 6 SK 7 first IF Amplifier, 6 SK 7 second IF Amplifier, 6SQ7 second Detector AVC first Audio, 6F6G second Audio Output, 6H6 Automatic Noise Limiter, 6J5GT BFO, 80 Rectifier. All essential controls for good amateur reception: RF Gain, Band selector. Audio Gain, AVC on-off, BFO On-Off, ANL On-Off,' Tone Control and Power Switch, Pitch Control, Main Tuning, Electrical Band Spread Control, Send-Receive Switch. Also headphone jack for standard phone plug. Built-in Speaker, silenced when phones are plugged in. Battleship gray finished metal cabinet. $181 / 2 \times 81 / 2 \times 98 / 8$ in. deep. Vibrapak Socket on back for 6 volt DC Operation; see Vibrapak 57 NP 018289 listed at left. 57 NP 018802 - $\mathrm{S}-20 \mathrm{R}$ for 110 volt 60 cycle AC. Complete with tubes. Shipping weight, 31 pounds
\$54.50 57 NP 018852 -Universal Model for $110-250$ volt, $25-60$ cycle AC. Shipping weight 32 pounds.


## Hallicrafters Defiant—Model SX-24

$\$ 7450$
Less Speaker $\$ 16$ Down
An "all-out" Ham receiver! One of the best values in the Hallicrafter line. Practically ALL the features found on higher priced receivers. . including Six position Crystal Filter, (three for phone and three for C.W.); built-in " S " Meter; and external speaker. Nine tube Superheterodyne Circuit. Frequency coverage 540 KC . to 43.5 MC . in four bands. Controls are RF Gain, Band Selector, Selectivity and AVC, Main Tuning, Tone, Crystal Phasing, Band Spread, ANL, AF Gain, Pitch Control, BFO On-Off, Stand-by Switch. Excellent frequency stability throughout a wide range of the voltage, humidity and temperature variations. One Stage of Pre-selection. Socket for plugging in Vibrapak listed above at left, for 6 volt DC Operation. Gray finished Metal Cabinet, $191 / 4 \times 91 / 2 \times 101 / 8 \mathrm{in}$. For 110 volt 60 cycle AC. Speaker impedances 5000 and 500 ohms . 57 NP 018812-SX-24 Complete with tubes and Crystal. Less Speaker. Shipping weight. 41 pounds . $\$ 74.50$
57 NP $018813-$ PM-23 ten inch PM Speaker in cabinet as shown. Shipping weight, 17 pounds.

- Automatic Noise Limiter Assures Quiel Operation
- Jeveled D'Arsonval "s" Meler
- Accurately Calibrated, Illuminated Band Spread Diaf
- Six Position Variable Selectivity
- Frequency Range fram 540 KC to 43.5 MC

4 . . SEARS, ROEBUCK AND CO.

## Type Receivers of $\mathbf{8 4}$ Countrics




# Super Defiant—the Complete Answer to Good Reception 

# \$9450 <br> \$20 DOWN <br> - Twelve Tobes (Including Rectifier Tube) <br> - Two Stages of Preselection <br> - Separate Calibrated Band Spread Dial <br> - Compensated Oscillator Circuil for Stability <br> - 5ix Step Variable Selectivity 

Remember the thrill of your first QSO? Of course you do! Nobody ever forgets it. If you consider that oue of your greatest experiences just wait until you've spent your first evening with your new Super-Defiant!
Among its outstanding advantages are extreme sensitivity and more and better audio quality. The design of the crystal filter makes possible critieal CW operation. In addition the sensitivity of the receiver is raised from 2.8 to 4 times in the "CW Xtal" position when the receiver is tuned to the exact resonant frequency of the crystal itself. This means more usable sensitivity.
Two stages of Preselection. Both IF Stages are expanded in the "Broad IF" position for high fidelity performance. An effective AVC keeps most signals at uniform audibility. The ANL reduces static as much as $70 \%$ !

## Super Skyrider - Model SX28

\$17950<br>- 15 Tubes (Including Rectifler Tube)<br>- Two stages of Preselection<br>- Micrometer Band-Spread dial with Lock<br>- Misrometer Scale Tuning, Inwrtia Contralled<br>- Band Pass Audio Filfer

Combines features of finest home sets with those of advanced communication receivers. 15 tubes (including rectifier), 2 stages preselection, 2 RF stages. Output is push-pull 6V6GT providing 8 watts undistorted. Sensitivity at 5 milliwatts is 2 microvolts up to 21.5 MC , and 4 microvolts 21.5 to 42 MC . Coverage: (1) 550 KC to 1.62 MC , (2) 1.5 to 3.1 MC . (3) 2.9 to 5.9 MC , (4) 5.75 to 11.5 MIC , (5) 10.3 to 21.5 MC , (6) 204 to 42 MC . Six pasition Selectivity: (1) IF Broad, (2) IF Medium Broad, (3) IF Sharp, (4) Xtal Broad, (5) Xtal Medium Broad, (6) Xtal Sharp Calibrated band-spread and micrometer scale turiag, both with fly wheel action. Beat frequency oscillator. Adjustable noise limiter. Bass boost. 10, 20, 40 and 80 meter amateur bands calibrated. Wide angle " $S$ " meter. Band pass audio filter. Signal-to-image ratio. Phono Jack for standard phone plug. Receptacle for DC Vibrapak (listed above): Speaker output impedance 5000 and 500 ohms for PM reproducer. Cabinet Size $201 / 2 \times 10 \times 143 / 4-\mathrm{in}$. Gray metal finish. For 110 volt 60 cycle AC. Shpg. wt., 87 lbs. Not Maitable. 57 NPM 17992 -With tubes and Crystal. Less speaker.
$\$ 179.50$
57 NPM 17995 -Hallicrafters-Jensen bass-reflex enclosure with 12 -inch speaker. Shown Size $30 \times 16 \leq 221 / 2$-incles, Shipping weight, 72 pounds.......... $\$ 34.50$ 57 NPM 17993 -Hallicrafters-Jernsen bass-reflex enclosure with 8 -inch speaker. Size $231 / 2 \times 10^{1} 4 \times 171 / 2$ inches. Shipping weight, 67 pounds.

Twelve tube (including rectifier) circuit. Frequency coverage 540 KC to 42 MC in four bands. Separate calibrated band-spread dial. Oscillator compensation for greater frequency stability. Six position variable selectivity. "S" meter calibrated in "S" and db. units. Push-Pull output of 8 watts undistorted. Front panel controls RF Gain, Selectivity Crystal Phasing, Audio Gain, Pitch Control, Main Tuning, BandSpread Tuning. ANL Switch. Tone, Stand-by Switch, and BFO On-Off. External connections forSend-Receive terminals, 500 and 5000 ohm output, single wire or double Antenna. Headphone Jack for standard phone plug. Gray finished steel cabinet $191 / 2 \times 91 / 2 \times 111 / 8$ inch. For 110 volt 60 cycle AC. $\mathbf{5 7}$ NP 018899 -Moded SX-25. With tubes, less speaker . $\$ 94.50$ Shipping weight, 74 pounds. Not Mailable.
57 NP 018289 -Vibrapak to operate SX-25 on 6-volt storage battery. Shipping weight, 12 pounds.
\$11.76
57 NP 018813-PM-23 ten inch speaker in cabinet. Shipping weight, 17 pounds.
\$15.00


Speaker finished in machine gray



## National NC-200 Receiver

- Twelve Tubes Including Rectifier Tube
- One Stage of Pre-Selection-Two I. F. Slages
- Newly Developed Tuning in Ten Ranges
- Coverage Cantinuausly 490 KC to 30 MC

Super-quality twelve tube communications receiver! Features an entirely new tuning and bandswitching arrangement providing TEN accurately calibrated ranges, each hav ing an individual dial scale. Six for general coverage of 490 KC to 30 MC and four band spread ranges for the $10,20,40$ and 80 meter amateur bands. Note that the 500 KC marine frectuencies are covered. Single control tuning. Good design has eliminated need for antenna compensator. Sensitivity is particularly high-an input signal of only one microwatt provides 1 watt of audio output. New R.F. coupling circuit maintains full sensitivity up to highest frequency covered by receiver. Amazingly high signal to noise ratio: better than 30 db at 10 meters. New high frequency oscillator eliminates detuning effect of R.F. gain control. Frequency drift practically eliminated by use o temperature compensating condensers if six. and frst atector circuits as well as high both phone, CW A V C holds audio output within 2 dh . Tubes used 1-6SK7. R.F.preselector, 1-6k8 first detector, 1-6J5 H.F. oscillator, 1-6SK7 First I.F. 1-SK7 Second selector, 1-6K8 first detector, 1-6.5 H.F. oscillator, 1 TSK. First I.F. 1-SK. Second Phase Inverter, 2-6V6 output. 1-5Y3G Rectifier. For 110 volt $50-60$ cyrle A.C. Handsome gray crackle finish steel cabinet. Size, $191 / 4 \times 101 / 2 \times 121 / 4$ in. Here is a communications receiver that is one of the very best made. You can afford it, too.. on plan. See Page 2 for details. Not mailable. Shipping weight, 85 pounds. 57 NPM 17961 -Complete with tubes and 8 -inch speaker in matching cabinet, size. $151 / 2 \times 101 / 2 \times 93$ in

Hammarlund HQ-I20-X Receiver

- 12 Tubes Including Rectifier Tube
- Full Range Crystal Filter
- One R. F. Sloge-Three I. F. Stages
- Naise Limiter-Calibroled Dial


Only $\$ 36.00$ Down

Never before have so many outstanding features been built into a single receiver, meters) Ira-modern 12 -tube set has a range from 54 mate experimenters. This is no ordinary receiver, no redesigned broadcast set it is specially enpineered from start to finish for exacting communications work. Because of its const ruction, the inclusion of the broadcast band in no way lessens the efficiency of the set at higher frequencies.
Equipped with the new full range crystal filter that opens up a new field in radiophone communication; special high gain R.F, stage with antenna compensator: uniform sensitivity; three I.F. stages with silvered mica condensers and permeability tuned transformers; exclusive tuning condenser design; calibrated dial; noise limiter, and many others. The stability, sensitivity, and selectivity of the new HQ-120-X are exceptionally fne. The voltage regulated power supply provides csillar circuit provides a degree of stabilicy high enourh to warrant specibrating the band-spread dial in megacycles for each amateur band from 80 to 10 meters inclusive. This dial has an additional $0-200$ scale for calibration at ther frequencies. The general coverage dial is also calibrated in megacycles. High Gain R.F. stage with its antenna compensator control, provides maximum image rejection and highest signal-to-noise ratio with all types of antennas. By special circuit arrangement, the gain of the entire receiver is held relatively constant in all amateur bands and provides accurate " S " meter readings. Another feature is the uniform output of the crystal fiter
Specially designed $15-g a n g$ tuning condenser in the " $\mathrm{HQ}-120-X$ " provides constant band-spread throughout its entire range. There are six sections in the main tuning condenser, and nine sections in the band-spread condenser. The special design of the turing condenser, combined with an unusual dial arrangement provides 310 degrees band-spread on each amateur band.
Noise limiter designed to effectively remove automobile ignition interference and similar disturbances. It works with or without the AVC system and there are no delicate threshold controls on the panel
Because of its full-range selectivity Because of its full-range selectivity, this filter is applicable to both phone and controlled from the panel. Three positions for phone reception, the first of which provides a band width wide enough to admit good quality music. Two positions in the selectivity range are for single C.W. reception. The sixth position cuts the crystal out of the circuit. Black etched panel and crackle finish metal cabinet with handles. Measures 17 y in in. long $\times 10 \mathrm{in}$. high $\times 14 \mathrm{t} / 4 \mathrm{in}$. deep. Operates on 105 to 125 volt $50-60$ cycle A.C.
57 NP 018433 -HQ-120-X. Receiver complete with tubes, crystal futer and 10 in. P.M. Dynamic speaker, less speaker cabinet. Shpg. wt., 56 lbs...... $\$ 168.00$ 57 NP $018434-$ SC.10. Cabinet for $10-\mathrm{in}$. P.M. speaker finished to ma:ch re ceiver. Size is $12 \mathrm{k} \times 12 \mathrm{k} \times \mathrm{x}$ in. Shipping weight, 8 pounds


> New National NC-45 Receiver $\$ 5750$ Only $\$ 12.00$ Down

- 8-tubes including Reclifior Tube
- Aulomatic Nolse Limiler
- For AC or AC-DC Oparation
- Two I.F. Stoges

Here is the new popular priced National receiver about which the nams are talking Covers 540 K.C. to 30 M.C. in 4 bands. Employs an efficient superhet circuit- 8 tubes including rectifier. 6K8 first detector and oscilator; two 6L6 l.F. stages with permeability tuned iron core transiormers; 6SO7 second detector-AVC-- first Audio: 6H6 self adjusting series valve noise limiter; 25L6G out put and 2525 rectifer. CW oscillator is a 6J7. Dual tuning for general coverage and band spread. Tuning scales accurately calibrated in megacycles. Electrical band spread uses a separate two-gang capacitor with separate dial. Separate audio and I.F.gain controls. Stand-by position. Terminals for remote stand-by control on rear of chassis. Antenna conrections for either doublet or conventional system. Black crackle finish steel cabinet.
57 NP $010669-$ NC-45. Receiver Complete with tubes and 8 -inch speaker in matching cabinet. For 105-130 volt AC or DC operation. Shpg, wt., $45 \mathrm{lbs} . . . . .$. 57 NP 010870 - NC-45A. Same as above except for $105-130$ volt $50-60$ Cycle AC operation only. Shipping weight, 45 pounds.

See Page 2 for natice regording passible changes in prices


## Hammarlund Super-Pro $\$ 318.0$ Write for Terms

- 18 Tubes Including Recifíar Tube 12 Gang \&and Spread Condenser Two R.F. Slages - Three I.F. Stages - Improved Noise Limiter

The last word in -eceiver engineering! Full range selectivity from less than 100 cycles to approximately 16 KC . Crystal filter has five ranges of selectivity varying from "single-signal, to $21 / 2 \mathrm{KC}$. for phone reception. Improver nois limiter. 18 tubes including rectifier tube. Band spread system with a 12 -gang band spread condenser. Exclusive cam-operated band changing knife switch. Six silver-plated contact fingers insure dependable low resistance contact for each circuit. No moving part carries current to cause noise or to provide stray coup link. Silver-plared shortcircuiting springs automatically short out the unused colls at all times. Also has a beat oschlat, At, call aigh mainal hig ine stages of tuned R.F, for imagefree recepton and high signals o-pseratio 14-wat audio amplier, separate poweriful retal cabinet Receiver measures
 and 0 . 57 NPM 18426 F-Covers 15 to 560 meters. . . . . . . . . . . . . . . . . . . . . . . . 3318.00 57 NP 18431 F-Speaker Cabinet. Shipping weight, 12 pounds. \$5.10 Shipped from factory in New York, from where you pay transportation,

DeLuxe Cabinet . . .. RME99 $\$ 1666^{32}$

- Exclusive Crystal Band Pass
- Covers 540 KC to $33,000 \mathrm{KC}$
- Velvet Smooth Control
- Regulator Contzolled Oseillator ter
- Six Position Selectivity

Designed to gatisfy even the most critical hum or professional operator. Tuning range 540 KC to $33,000 \mathrm{KC}$ in six bands. Full calibrated band spread from 3500 to spread scale is semi-circular- 8 inches in dameter with indirect flat illumination White calibrat'on on dead biack Dackground for matimume bility. Band $\varepsilon$ pread scale carries additional artitrary scale permitting calibration of any narrow band of frequencies within the tuning range (excluding broadcast range) Illuminated meter calibrated with carriep level in unts of 6 decibels and also in $R$ units. Utilizes roltage regulator tube for maximum stability. Employs high $\mathbf{Q}$ permeability adjusted R.F. and oscillator coils on the lower frequency ranges.
Uses new wide spacin3 oscillator condenser sections for extremely high stability and improved design of chassis for maximum dissipation of developed components porates grounded cal hode type high frequency oscillator for improved stability. Receiver provide: for uniformly high sensit wity with ligh signal to noise ratio. New type crystal filter with siz degrees of I.F. welec ivity and controlled phasing. IF frequency of crystal is 465 KC . Solid cast aluminum chassis irame gives unmatched chassis rigidity and st rength. Includes CW beat oscillator with variable pitch control on the panel. Terminals are provided for break-in operation. Relay control circuit for external relay circuit is provided and built-in. Audio output of 4 watts at
both 4,000 and 600 ohms supplied by receiver. Employs new highly effective auto-

For Sears Easy Terms See Page 2
matic noise silencer with manel adjustment for percentage of modulation. Mak's possible to provide more effective slencing for weak, under-modulated, and CW signals. Has both manual and automatic gain cone rol.
Weatherproofed for operation under most adverse climatic conditions. Housed in heavily finished furniture steel cabinet wit hall ccn' rols designated by white lettering on ront panel. Chaess is easily removable from cabinet, and accessible from mechanical) marks a new high in quality communication equipment engical and and manufacturing. All metal components are either non-ferrous or are furniture steel heavily cadmium plated or baked finush. Cabinet 19 in. long by $8 \%$ in. high by $10 \%$ in deep, wrinkle finisherd. Top of chassis accessible through hinged hd on top, and external connections accessible on exposed rearchassis. Standard power supply $105-125$ volts, $50-60$ cycle. Speaker Iurnished xs 8 in. in diameter, ElectroDynamic Type in metal baffe of matching finish.
57 NPM 10892 -RME-99 Recelver in stando.d steel sobinet. Shown above at right. Size, $19 x 10 y_{2}=9$ inches. Includes 465 KC Crystal, set of 12 zubes, 8 -inch Electro Dynamic Speaker in cabinet to match. For 105-125 Volt, 50-60 Cycle AC. Black or Gray. Stote colar. Shipping weight, 69 pourids. No mailable.......... $\$ 160.78$ 57 NPM 10893 -RME-S9 Roveivur in Deluxe Cobinel. Shown abave at left. Same as 57 NFM 10892 except in oversize two-tone DeLuxe cabinet.
Shipping weight, 72 poundz
$\$ 166.32$


New RME 43 Receiver

- Coverage 550 KC to 33 MC
- Calibroted, Band Spread Dial
- © Pasition Variablo Selectivity
viruble cree $=1$, wh is for dion i.n. Temperst ure colvipisaled esallater crimpon. nis. Iour , asts side output Contro. RF. Gin, Aadio Itve', Seardhy, Band. Chanse, I3F.O.






 miluily a r ceir is and relal lanal asiread



57 NP $010894-$ RME \& Neocive comriete vith


Selling prices an all communication receivers ere
sel by the manufaciuter In view of this we cennot guarantes the prices shown in this cofolog for ony definite fime. We must reserve the richt to chango our selling prict whenever the morulice turer requires us to do so See Page 2 for detrits


## Howard Model 437A

## 9 Tubes -One R. F. Stoge - High "Q" R, F, Circull <br> - Crysial Filter Available <br> \$6195

One of radios outstanding muderately $\$ 14$ Down ceivers! Uses nine tubes (inciuding rectifier) and incorporates most of the features desired in a fine piece of communication equipment Has circuit simlar to Model 436A shown ai right, but with one 6SK7 tube and I.F. stage added. A new three section main condenser gang; band spread condenser gang and coil assembly is provided. Alsc added are R.F. gain control, crystal in-out switch.
The 6SD7G ${ }^{9}$ R.F. tube is mounted to allow mini mum lead leng:h. By proper coll design and short eads, increaserl sensitivity has been obtained with a minimum of circuit noise. An exceptional y good image ratio results from the extremely high "Q" R.F
Scuit. Crystal filter action is very effective
Steel cabener is finished in black wrinkie finish to match Progressive Series Accessories. Dimensions $151 / 491 / 4 \times 9$ in. deep. For operat on on $105-125$ volt 60 cycle AC supply. Only a few dollars down and a small amount monthly will quichly pay for this fine receiver on Sears Easy Terms. See Page 2 for com
plete details. Shipping weight, 28 pounds.
57 NP 010871 -Model 437A Complete with tubes and built-in Jensen Electro Dynamic Speaker, Less Crystal...................... $\$ 1.95$ 57 NP $010872-A s$ above with factory installed
Crystal Filter ................... $\$ 69.75$


Howard Model 436A

- 8 Tubes (Ineluding Rectifier Tube)
- Trigger Type Nalse Limiter $\$ 4175$
- Coveroge 54 K.C. to 43 M.C
\$10 Down
Engineered to new high standards. Has tuned R.F. stage on all bands. New trigger type noise limiter cricuit. Electrical Band Spread employs a separate condenser with linear calibration over 8 in. separate ering $340^{\circ}$ Ceramic coil forms used on all oscillator coils. 555 to 7 Metets - 540 K.C. to 43 MC.
Eight Tuhts: 6SD7GT T.R.F., 6SA7 Mixer Osc. TKK 1.F. Amplifier, 6SQ7 [Det. and 1st A.F., 6Y3G Rectioner FIywheel tuning noise Limiter. the new Howard Inerita Knobs which assure fast smooth tuning. Used on main tuning and bandspread. Other features found in Model 436A are. beat frequency oscillator, iron core 1.F. transform-e-s, built-in Jensen rectro-dynámic speaker, silver plated shielding. A. $\mathbb{C}$. , send-recelve switch, headphone jact on front panel, doublet or standard antenna connections. arid copper plated chassis. Black Hrinkle finished steel cabinet. Gize $151 / 4 \times 91 / 4 \times 9 \mathrm{in}$. For 110-120 volt $50+50$ cycle A.C
57 NP 010873 -Motel 436A Complate with tubes and built-in speaker. Shpg. wt., 27 lbs..... $\$ 41.75$ 57 NP 010870 -Morlel 435A. Same as Model 436A plete with wubes and built-in Speaker. Circuit employs 7 tuhes including rectifier tuber. Shipping weight, 26 punds. .. .. ... 336.75


# ECHOPHONE Receivers 



## Echophone EC-2 Receiver

- Elght Tubes Including Recilifar Tube
- One R. F. Stoge on All Bands-One I. F. Stoge
- Automatic Noise Limiter


## ${ }^{5} 2^{550}$

- Seporole 5-inch Permanent Magnep Speaker

This elficient 8 -t ube Communication Receiver represents one of Radio's outstanding values. It has I stage of R.F. On all bands, one I.F. stage with all I.F. coils wound on ceramic coil forms. Automatic noise limiter coperates with a flip of a switch. Separate B.F.O. for C.W. operation. Frequency coverage includes broadcast band and ex-
tends through 10 meter band. Calibrated bandspread scale on 80-40. tends through 10 meter band. Calibrated bandspread scale on 80-40 20 and 10 meter amateur bands. Electrical bandspread at all frequencies in tuning range.
Controls: Main tuning. Band spread tuning, audio gain. Band switch. AVC-B.F.O. on-off switch. Automatic noise limiter on-off. Receive-standby switch. Speaker-phone switch.
Tubes Used in Model EC-2: 6SD7GT R.F. Amplifier. 6K8 Converter 6SK7 1.F. Amplifier. 6SC7 Audio Amplifier and B.F.O. 251,6GT Power Output. 25Z6GT Rectifier. 6H6 ist Detector and Automatic Noise Limiter K35 Ballast Tube.
Band Coveroge: Band $1-545$ to 2100 KC ; Band 2-2.1 to 8.1 M.C. Band $3-7.9$ to $30.5 \mathrm{M} . \mathrm{C}$. For 110 volt AC or DC operation. Gray wrinkle finish.
57 NP 019705 -EC-2 Receiver and tubes with separate speaker
(speaker not illustrated). Shipping weight, 20 pounds. $\$ 4250$ (speaker not illustrated). Shipping weight, 20 pounds....... $\$ \mathbf{4 2 . 5 0}$


## Echophone EC-I Receiver

## - Three Bonds Caver from 545 KC. to 30.5 MC <br> - Six Tubes Inciluding Recther Tube <br> $\$ 24{ }^{50}$ <br> - Self-Contoined Permonent Mognet Speaker

- Electrical Bandspread

For the beginning Radio Amateur or short wave fan. Priced to fit any purse. Gives real communication receiver performance. Offers these modern features: Covers 545 KC to 30.5 MC ( 550 to 9.85 meters) in three bands. Electrical bandspread. Beat frequency oscillator. Good selectivity and exceptional sensitivity. Bandspread logging scale. Dial calibrated in megacycles with all important service bands indiDialed.
Tube dineup in Model EC-1: 12 K 8 converter, 12 SK 7 I. $\overline{\mathrm{F}}$. amplifier. 12SQ7 second detector, AVC, first audio. 35L6PT second audio, 12 J 5 beat oscillator, 2525 rectifier
Controls: Main tuning, bandspread, band switch, audio gain, standby, speaker-hwad phone switch, combined B.F.O.-A.V.C. on off. Phone tip jacks and doublet antenna connections on rear of chassis. Metal cabinet, gray wrinkle lacquer tinish. Speaker mounted in receiver cabinet. Size, 7 inches high $\times 107$ inches wide $\times 7 \%$ inches deep. For 110 volt AC-DC operation. Available on Sears Easy Payment Plan For details see Page 2.
57 NP 018819 -Shipping weight, 13 pounds
524.60

## Echophone EC-3 Receiver and Speaker

- 9 Tubes Including Rectifier
- Auromatic Noise Limitor
- 4-Position Variable Selectivity
- Preselection All Bands
- CW Monito Four position selectivity: (sharp crystal, broad crystal, sharp I.F. and broad I.F.)

Crystal phasing condenser enables operator to eliminate objecionable heterodynes and abta single signal C.W. operation. Automatic noise limiter. Broad crystal position allows phone recep. tion with ability to balance out interfering heterodynes. Phone tip jacks connected to isolated transformer winding, thus insulating phone jack circuit completely from power circuit.

Separate B.F.O. fo C.W. reception with variable pitch control. Coverage includes broadcast band and extends through 10 -meter band. Calibrated bandspread scale on 80, 40, 20, and 10 -meter amateur bands. Electrical bandspread, fly-wheel tuning at all frequencies in the tuning range Monitoring circuit emables operator to listen to his own C.W. transmission.
Controls: Main tuning. Bandspread tuning. R.F. gain. Audio gain. Crystal phasing. B.F.O. pitch. Band switch. Selectivity control. AVC-BFO on-off switch. Speaker-phones switch. Automatic noise limiter on-off. Monitor-receive-standby switch.

Tubes Used: 6SD7GT-1st R.F. Amplifier. 6K8 Converter. 2-6SK7-1.F. Amplifiers. 6H6-2nd detector and Autamatic Noise Limiter. 6SC7-1st Audio and B.F.O. 25I.6GT Output. 25Z6GT Rectifier. K29D Ballast Tube.
Bond Coveruge: Bard 1: 545 to 2100 KC . Band 2: 2.1 to 8.1 M.C. Band 3: 7.9 to 30.5 M.C. For 110 voll AC or DC. Gray wrinkle finish. Size, $8 \frac{1}{2} \times 9 \frac{1}{4} \times 151 / 4$ in. Matching 6 -inch P.M. Speaker. 57 NP 019706 -Moded EC-3 Recoiver. Complete with tubes, external speaker and crystal. Shipping weight, 25 pounds

- Separot Speaker
- Crystal Filter
- Fly Wheel Tuning
ping wish.


## Wherever you go this

 ECHOPHONE PORTABLE Will Keep you Informed On the Latest World Events!- Amateur Braadcasts
- Foreign News
- Aviation Broodeasts
- Siandord Broodcasis



## Echophone EC-4 Portable Receiver

- Compoct-Light in Welght-Complet
- Tuning Range from 545 KC to 30.5 MC
- AC-DC or Self-Contained Battery-Operoted
- Two Built-ín Loop Antennae Hinged to Cabinel
- Electricol Bandspread
- Automallc Noise Limiter
- Panil Contrals Profected
- Two 455 KC I.F. Sloges


New portable communications type receiver with many modern features. Gives you the same topnotch performance that regular type communication receivers do. Compact-light in weightentirely self contained. Tuning range is 545 KC to 30.5 MC ( 550 meters to 9.85 meters) in four loop Antennae, hingrd to the cabinet and independent of each other. Each of these Antennae have the optimumi inductance value for the frequencies on which they are designed to work. They are automatically brought into the circuit as position of band switch is changed. Terminals for external antennae. All panel controls protected by hinged front door. Tubes and batteries accessible.

Panal Confrols: Main tuning control with dial calibrated in megacycles. Electrical bandspread Ponel Confros: Main tuning control with dial calibrated in megacycles. Electrical bandspread
control with separate logging scale, volume; power switch; B.F.O. on-off; standby switch. Autocontrol with separate logging scale, volum
matic Noise Limiter on-off:, phone jack.

Tubw lineup: IR5 uscillator, IR5 converter, 2-IT4 I.F. stages; IS5 second detector, AVC: IS5 B.F.O. and noise limiter; $2-3 Q 4$ power tubes; $50 Y 6$ rectifier. Self-contained power supply consists of one Eveready No. 482 and two Burgess $2 F 4$ batteries; or set will operate on 110 volt AC or DC without circuit changes
Substantial wrinkle-finish steel cabinet, size $9 \%$ inches high, $61 / 2$ inches wide and 5 inches deep. Built-in $31 / 2$-inch Permanent Magnet spuaker.
57 NP 019707 -Complete with tubes and batteries. Shipping weight, 16 pounds....... $\$ 49.50$
Selling prices on all Echophone Communication Receivers are controlled by the monutacturer. If they should require us to advance the prices shown in this catalog, we must do so even though the cotalog hos olready been mailed to you. For more complete information regarding possible price changes, See Page 2.


Easy-fo-Assemble Receiving Kits for the Junior Ham!

## Philmore Beginners' Kits

These simple receiver kits make radio sets which actually work. With plug-in Melers. Battery models use one 11 volt "A" battery and one use one 45 volt " B " batiery. Instructions. For headphorie Coils supplied cover 200 to 530 meters

57 NP 10445 -1-Tube Baffery Kif. Uses 1 Type 30 57 NP
tuber. Less batteries and tube. Shpg. wt., 2 lbs. $\$ 1.27$ 57 NP 10446 -2-Tube Batfery Kif. Uses 2 Type 30 Shipping weight, 4 pounds......
57 NP $10490-2$ Tube AC.DC Kit for us* on 110 volr
Shipping weight, 3 pounds. 7 ubes. Less tube
$\$ 2.25$
57 NP 10447 - Shof Wove Coils for battery Kits. 13
to 240 meters. Shipping weight, 8 ounces.
er Set of 4 coils
ame as above. Shipping weight, 8 ounces.
72c


Meissner Deluxe "Signal Shifter"
ECO, equipped with oscillator keying for CW "breakin operation. Allous instant frequency change in any imperlance link output circuit permits compling to Lowstage in the transmitter; has RF power output of approx. $71 / 2$ watts on $1.7,3.5 .7$, and 14 MC bands. Three-way control switch on panel for "Standhy," "Manual (On," or "Automat ic On"; built -in relay provides full automatic on-off control with transmitter control switch. "Manual-On" position permits checking frequency at will to move to any desired snot in the land With one set of coils and tubes (1-tif $6,1-6 \mathrm{~L} 6$, 1-5X4G. 1-VR150, 1-VR105). For 115-rolt 60-cycle AC. Black or gray linish. Specify choice, also wave
length of coil wanted. Available on Sears Easy Payment Plan. see Page 2. 57 NP 017955 -Shipping weight, 35 lbs... \$51.20

## Addifional Cails

or 10, 20, 40, 80 or l60-meter band stote hand
57 NP 18407 -Shpg. wt., 2 lhs. Per set of $3 . . \$ 2.69$

## Meissner Students' Kits

## Has ir elficient circuit which uses the new 1.4 volt tubes givirg greater bat tery economy and high sensitivity cast band; no th.bes or batteries. 1 -Tuse Kit

 57 NP $18408-$ - Tube Kit for heacphone reception. Uses $1-1$ E4G tube, $1-1 / 2$ volt " $A$ " battery and $1-45$volt " $B$ " oatter'j. Shipping weight, 3 pounds. $\$ 3.23$ 67 NP 18409 -2-Tube Kit. Requires 1 1C5G. 1-IE4C tubes and $1-11 / 2$ volt " $A$ " and $2-45$ volt " $B$ " ${ }^{2}$. $\$ 3.88$ batteries. Shipping weight, 3 pounds.
57 NP $18410-$-Tube Kif. Requires $1-1 C 561$ 1EAG. olt "C batteries. Shipping weight.
$\$ 4.85$
Meissner Plug-in Coils
57 NP $18411-70$ to 200 Meters. Wi., 4 oz. Ea 416 57 NP $18412-351070$ Meters. Wt.. 4 oz. Ea. 41 c 57 NP $18413-17$ to 35 Meters. Wi.. 402 E. Ei. 41 c


## Stancor 25-8 Transmitter Kit

Here is a s-mple CW transmitter with self-contained antenaa thning. Operates with 25 watts input to a 6L6G on als bands from 160 to 20 meters.

Oscillator circuit is a grid-jlate tybe permitting Ono-band cherration with 160,80 and 40 meter crystals. of operation. Lieway is provided for for each hand types of oscijlater circuirts. such as the tri-tet. Well filtered tis. ${ }^{2}$ volt age is derived from the power supply which uses: Type 80 tube. No high voltage is present on top of the chassis. Either a low irppedance or variable inpedance out
put is available for coupling various types of annenna put is available for coupling various types of antenna systems. Pilot light serves as tuning indicator and Accessories required: End Link Aar-Wound Plug-in coil, Mounted crystal, 161.6 and 1-80 tube, 1 6.ivolt 150 MA . Pilot light bulb. Chassis size, $91 / 2 \times 61 / 4 \times 2$ inches. Shipping weight, 10 pounds.
57 NP $10199-K i t$ less accessories described $\$ 17.95$

Philmore AC-DC Kits
Easy-to-build kits composed of better
parts than the Philnore Beginners
$\$ 745$ Rit shown at far left. Powerful enough
to operate a loud speaker which is included in kit. Set of coils furnished covers the broadcast band. With extra coils listed lelow range may be extended to cover short wave bands also. All parts are included except tubes and batteries 57 NP 10981 -3-Tute Bottery Kit. Tubes required 1-1C5G. $2-1 \mathrm{H} 5 \mathrm{GG}$. Patteries required $1-1 / 2$ volt "A." $2-45$ volt " "B" and $1-71 / 2$ volt "C."
shippiog weight, 5 pounds.
 57 NP 10484 - 3-Tuke Electric Kif for operation on 110 volt AC or 1DC. Tubes required 2-Type 6C6 and Shipping weight, 6 pounds ................ $\$ 7.45$ 57 NP 10494 -Set of 6 coils to cover 17 to 200
Meters. $\$ 1.44$


## Stancor 10-P Transmitter Kit

Compact, low power phone CW transmitter kit, cov ering four-band operation. Uses a 655 tube in an untuned bystal oscillazor circuit and a 6L6 as an R.F. amplifier. Audio-section consists of a 6 L6 in Class Apiate and screen modulating the 6LG K.F. amplifier. Kit requires single button carbon mike. High percentage of modulation can be obtained with a class tion an amplifier input up to 20 watts is allowable Frequency range, 1.7 to 14.4 MC Crystal contrabled Fequency range, $1 . i$ to 14.4 MC Crystal controlled Cable A.C. Available on Seares. For 110 -volt 5060 ew dollars down and a small amount monthly Page 2 for complete details. 57 NP 017950 -Kit of Parts and Inst ructions for assembliry. Notubes, crystal, coils, meter, microphone in coil. See l'age 18. Shpg. wt., 14 lbs ...... $\mathbf{\$ 2 6 . 9 5}$ 57 NP i 8351 -0-100 D.C. Triplett Square Type $\$ 3.60$
seE page 2 for notice concerning prices in this catalog.


Philmore Blackbird Set An efficient crystal receiving set which will receive broadcasting through headphones over a considerable distance. Manel. Completecly assembled front panel. Completely assembled. Black crackie tinish. Sliuping weight. 3 lbs.
57 NP $18772-1$. and antenna................ $\$ 1.69$

## Galena Crystal

Galena Crystals are all carefully tested at factory. Very sensitive in reflex and crystil sets. Shpg. wt.. 4 oz .
57 NP 18776 -Each

6

## Monarch Crystal Set

A sensitive and attractive erystal set Tunes stat:ons as far as 25 miles away proof, glass-enclosed volume. Has dust graved calibrated dial with bar knobraved calibrated dial uith bar knob. ssembled. Shetal case. Completely 57 NP 10488.
$\$ 1.21$
Fized Crystol
Point of highest sensitivity determined factory and fixed to prevent varia tion. Shipring weight. 4 ources.
NP 18775
$46 c$
Best results arm obtained with gystal siets
when long. outsido Antenva and 2000 nm
When long. outsido Anten wa and
earphones are
are
earphones are used. Sre Paje 13 for
Earphones, Pago 27 for Antenna wire.

Breadboard Crystal Set Kit
Supplied in easy-to-assemble kit form. Will prot ide unusualiy fine reception of local broadcast stations. Kit centains condenser wrys al hardivare , wire tions, and diagram. Easy to build. 57 NP 10489 -Shpg. wt., 4 lbs. $\$ 1.40$

## Crystal Detecter Stand with

 Meter Tested CrystalSwivel arm contacts any point on crystal quietly and easily. Lises clip terminals Furnished with extra sensitive meter tested crystal.


Philmore Supertone Set This compact crystal set will provide good reseption from broadcasting stations as far as 25 miles away. Tunes in stations with surprising clarity and volume. It is very sensitive and reliable. Crystal Unit is enclosed in a dust proof ghass cover You can have hours of fun Bakelite base. Completely assembled. Shipping weight, 1 pound 8 ounces. 57 NP 10479.

79c
Covered Crystal Only
Gustproof-super sensitive crystal 57 NP 13774 -Shpg. wt., 8 oz... 23 C

## STANCOR Transmitter Kits



## Stancor Kit＂40－P＂

High performance radiophone－tele－ graph transmutter of 40 watts in－ put．Uses a simple straightfor－ ward rircuit consisting of a 6J5G crystal ascillator，6L6G buffer－ $\$ 58^{75}$ 6.3 vol：filament tap is used）Class C Amplifier．Three $6.3 \mathrm{vol:} \mathrm{filament} \mathrm{tap} \mathrm{is} \mathrm{used)} \mathrm{ClassC} \mathrm{Amplifier}$. tuned circuits employing one wound and two Bud，B． and W．，or Johnson air－wound end link plug－in coils for put frequency combinations．Audio section consists of putirequency combinations．Audio section contists of class ABI as modulators．Crystal or similar micro－ phone may be used．Speech amplifier and modulator phone may be used．Speech amplifier and moduator Heavy duty power supply uses a 523 rectifier．All metering is done in the negative reiurn of the high voltage using a meter switching system．Break－in CW terminals on rear of Chassis．A $17 \times 10 \times 3$－inch chassis furnished drilled and punched．Slate－gray panel size 8 zx x G 15 also included．Accessories required： $0-100$ 3 －inch DC Milliamme：er，coils as stated above，crystal， cabinet and 1 －6J5G， 1 －T220 or RK 12，1－6SJ7，1－6N7， 87 NP $010196-40-\mathrm{P}$ Kit of parts less meter，coils， crystal，cabinet and tubes．Shpg．wt．． $45 \mathrm{lbs} . . . \$ 58.75$ G7 NP 018093 －Cabinet as illustrated．Sfot colop．
Gray or Black．Shipping weight， 30 pounds．．$\$ 8.08$


## Stancor 60－N Transmitter

Self contained $6 t$－watt Phune－C
W ．Transmitter Kit．Emission： W．Transmitter Kit．Emission： Al－A3．Output circuit：Low im－
pedance two－wire line．Power input pedasce two－wire ine．Powerinput
$\$ 70^{50}$ to final： 60 wasts phone and C．W．Lass Accessorim requency range． $28-30 \mathrm{M}$ ．out with alternate circuit）Crystal Control．Power Consumption 275 V．A．at 115 volis 60 cycles．Chassis dimensions $17 \times 10 \times 3$ inches．Tubes re cycles．Chassis dimensions 17x10x3 inches．Tubes re－ 1－RK60．Coils required：L1－Bud＂OCL＂or B and W ＂Junior＂Center Link for each band；L2－Johnson tube socket center link 160 meter for 160 and 80 meters； separate coil for each of ot her bands．Meter required． $0-200 \mathrm{M}$ ．A．Triplet z －inch． $8 \% \times 19$－in．panel．For 110 － volt n0－cycle A．C
87 NP 018092 －Kit less cabinet，tubes，coils，crys－ tals，and meter．Shpe．wt．， $45 \mathrm{lbs} . . .$. 57NP 018093 －DeLuxe Cabinet as shown above． Gray metal tnish．Shipping weighe， 30 lbs．．．．$\$ 8.08$

New Stancor Hemenual Valuable circuit information on transmitter Kits．
B7NP $10194-48$ pages．Postpaic in U．S．A．．． 15 c



## Stancor IIO－C Transmitter Kit

 Self contained 100 －watt C．W．orPhone．featuring Cathode Modula－
tion．R．F．carrier power is there－
fore greater than if conventional plate modulation were used．Ania pate modulation were used．Anla
$\$ 16$ Down newer system have generally found it both economical arid satisfactory．Type of emission：A1 and A3．Out put circuit：Low impedance two－wire line．Power input final stage： 80 to 100 watts．Frequency range 1.7 to 1－4．4 M．C．（ $2 \mathrm{~s}-30 \mathrm{M.C}$ ．with Alternaie Circuit）．Crys－ tal Control，Power consumption 322 V．A．at 115 volts 60 cycles．Chassis dimensions $17 \times 10 \times 3$ inches．Tubes used 1－7L6G，1－812，1－6SJ7．1－6C5，2－6V6，1－523． 1－RK60．Coils required：L1－Bud＂OCL＂or Barker and W illianison Center Link for eactı trand；L，－Johnson twbe socket center link 160 for 160 and（or） 80 meters， separate coil for each of the other bands．Meter re quired，Triplett $327 A$（3－inch） $0-200$ D．C．M．A． cywtal，Velocity，or dynamic microphone may be filaments of tubes before plate power is applied $8 * \times 19$－in of tubes belore plate power is applied $8 \mathrm{zx} x 9$－in．panel．Chassis is correct size for rack moun
ing．For 110 －volt 60 －cycle A C．

57 NP 018095 －Kit of parts，less tubes，co：ls，crystal， cabinet and meter．Shipping weigh：， 50 pounds． 570.75 57 NP 018093 －DeLuxe Cabinet as shown．State color．Gray or black．Shipping weight， 30 pounds．$\$ 8.08$


It＇s Easy to Assemble Stancor Transmitter Kits

## Stancor 69 Transmitter Kit

Sixty－watt input crystal controlled ：ransmitter．Works eithe on phone or C．W．on any band from 10 meters to 160 meters．Af controls are convenieny locatedon rros cil and crystal changing with interlocking switch which permits col and crystal changing $\$ 7500$ Cabled wiring harness makes hookup quick and easy．Tubes used ass Accessorims 1－Hy 69 R．F．Amplifier，1－6AC7 Mike input．2－6L6 Modulators，1－83 and I－80 rectiliers，1－6V6 crystal oscillator．Kit price includes parts，special meter，and cabinet，size $16 \times 91 / 2 \times 11$ inches．Coils required：Barker and Williamson end Link Junior，Barker and Williamson center link Junior，Barker and Williamson variable link Junior．For 110 －volt 60 －cycle A．C．
57 N 010197 －Kit of parts less tubes，crystal，and coils．Shipping weight， 45 pounds

## Stancor DC－3 Transmitter Kit

Extremely compact，lightweight radio phone transmitter．De－ signed for aircraft，marine，porkable and emergency applications where source of power is 6 or 12 voles I）．C．Entirely self－contained． Maximum of two crystal cont rolled 2 and 6.5 M C Channels select able from front panel． 8 to 9 watt carrier．Accessories needed： 1－6J5GT（or 12J5GT），2－6V6GT tubes，crystals，single button carbon＂nilke＂with relay switch and niniature antenna change－over relay（optional） Gray metal cabinet，size， $6 \times 6 \times 6$ 为 inches 67 NP 010198 －Kit of Parts including circuit components，cabinet，shock absorbing mountings，eight－foot battery cable，and two vibrators（one spare）．Shipping weight， 30 pounds

Sears Easy Terms offer an easy way to own one of
these Stancor Transmitter Kits．See Poge 2 for details

# You'll Get Plenty of "Sock" from a Hallicrafters Transmitter 

New Hallicrafters S. 33
2 $1 / 2$-Meter Transceiver
Complete, self contained $21 / 2$-Meter radio station including transmitter
and receiver. Solight and compact and receiver. Solight and compact
that it can easily be carried while in operation. Tunime ranged $112-118$ in operation. Tunis range $112-118$ Uses 1-3Q5 tube as R.F. Oscillator in transmit position and as self-quenching detector in receiving position. 1 ho tube as microphone amplifier tor $1-305$ as power output Stage for when receiving, modulator for transmit ing. To rage receiving and as ton; to listen, release it. Tuning Control functions as frequency setting control for either receiving or tran:meting. Builtin $3 / / 2$ inch P.M. spelter, serves also as mike when transmit ting. Matched antenna mounts on side of cabinet which is 10 in . high, $61 / 2$ in. wide.: $41 / 2 \mathrm{in}$. deep. Total weight including batteries is only 16 lbs. Gray metal finish. Carefully engineered by Hallicrafters .. the world's largest builder of amateur radio equipment. Complete within itself. no additional accessories to carry, no extras to
buy. And don't forget that like everything else at buy. And don't forget that like everything else at
Sears. this Hallicrafters Sky Trainer is available on Easy Terms. Just a few dollars mont hay. See Page 2 for details.
57 NP 019620 -Model S-33 Sky Trainer. Complete 18 pounds.................................... $\$ 29.50$

## Hisillicrafters HT-6 25 Watt

Phone and CW Transmitter
A real thrill awaits you when You operate the Hallicrafters HT-6 1 ranımister. It is new in
design principles, a real amateur design principles, a real amateur
phone and silo oo either 807 ar an quality unit throughout. Using power adolf or an RK39 in the final R.F. stage the power output is 25 wat ls on most bands. Frequency range is $1 .{ }^{\text {. }}$ MC to 60 MC . Coils for any three amathur bands may be plugged in and pretuned.
Tube complement: 1-6L6 Cisc.-dbli., e-RK39 or 1-6J5 Audio Amplifier, $2-6 \mathrm{~L} 6 \mathrm{G}$ modulators and $2-523$ rectifiers Power drain about 120 wat:s CW and 225 watts phone. Size- 20 in long, 9 in. high, 15 in . deep. Gray metal finish. For operation on 116 volts, 56-60 cyc e AC
57NPM 19610 -Model HT-6 with tubes, less coils and crystal Shpg.wt., 67 lbs . Not Mailable. ... $\$ 110.00$ 57 NP 19611 -Coils for 160,80 , 40 or 20 meter coperanion. Shipping weight, 3 pounds. Set....... $\$ 8.00$ 57NP 19612 -E C.O. unit for 160, 80 , 40 or 20 mete operation for corresponding cols listed above. Ship ping weight. 2 pounds. Each ...... ......... $\$ 4.50$ 57NP19613-St t of coils for 5 or 10 meter operation
$\stackrel{\text { on twice crystal }}{\text { Shipping weight }} 3$ rounds 8 ounces Set..... $\$ 8.50$

## Hallicrafters HT-9 Radio Telephone

 and C.W. Transmitter
## Plate modulated phone and CW unit..rated at 75 wat is phone carrier and 100 wat ts CW output. Provides operation on any five ire- <br> $\$ 45$ Down

quenches between 1.7 and 30 megacycles. Clean, chirpless keying, excellent voice quality, instantaneous band change, and complete circuit metering.
Tubes used: 1 GF6 Oscillator, 1 6L6 Doubler, 1-814 Power Amplifier, 1 6F5 Audio-mput amplifier, 4 6L6G P.P parallel Modulators. ${ }^{2} 866$ rectifiers 1-5Z3 Exciter Rectifier and 2-Audio Rectifiers. Controls: audio gain (with on-off switch for audio section), P. A. plateruning. Switches: $F$ laments. Plate. Trans-mit-Standby, Meter Switch. Band Switch, Phone-CW witch. Meters: P. A. Plate. P. A. grid, Modulator Plate-exciler plate, P.A. plate tuning scale. Key, receiver standby and antenna relay connections on rear janet. Dull black front panel on gray famished cabinet. Cabinet size: 28 inches wide, $181 / 2$ inches deep, $111 / 2$ inches high. For 110 volt $50-60$ cycle A.C.
57NPM182s - With tubes. less crystal :s and coils. Shag. wt., 73 lbs . Not mailable......... . $\$ 225.00$ 57 NP18292-Coils for 160,80 , or 40 meter band. (State band.) Ships, wt., 1 lb .8 out. Ea. band...... 59.50 57NP18293-Coils for 20 or 10 meter band. (State trend wanted.) Shpg. wt., 1 lt .8 oz . Ear. band. $\$ 10.50$

## Abbott MRT-3

## 112-116 M. C. Transceiver

 $\underset{\substack{\text { Basically designed } \\ \text { for mobile opera- } \\ \text { ton n Its small size }}}{\text { (1) }} \mathbf{\$ 1}$ and shape mateideal for use in ideal for use in an automobile, truck boat or plane: in fact anywhere that it is convenient to use a 6 -volt storage
battery. Where 110 volt 60 cycle Ac is available, the MRT-3 can be over is available, the Mom an AC power supply havingan output of 300 volts at 100 M . A and 6.3 volts at 3.5 amperes. The ant ant coupling coil is merunted on a pols styrene rod and is easily variably. The working range will vary between 5 and approximately 50 miles depending upon location and conditions. It has a power rating of 20 watts input which is 6 or 7 times that of the ordinary portable type transceiver. Tubes used: 1-HY-75, 1-6C5, 1-6V6. or 6L6. Any good single button carbon microphone will work satisfactorily. P.M. dynamic speaker is built inter the cabinet which is $9 \times 8 \times 4$ inches See Page 2 for Sears 57 NP 10226
57 NP 10226 -ART- 3 Transceiver, assembled, less tubes, microphone and battery. Shipping wt. 12 lbs. 328.81 57 NP $012540-30$ - 12 BS 6 -volt vibrator
power supply. Shpt. wt., 8 lbs .118 .82

## Abbott CK-3

## 112 M. C. Transceiver

## (B) Ideal 112-116 Megacycle ( 2 \% Meter) transceiver for portable and mo- <br> $\$ 682$

 for portable and mobile use. Range varies from two to the ty miles depending upon location and conditions. The DK -3 feat ares inductive antenna coupling which is continuouslv variable from front panel, providing for maximum efficiency for button 200 ohm carbon. Any single may be used. Tubes used: $1-615 \mathrm{GT}$ and 1-6G6G. For strictly pori: 1 -able an antenna consisting of two pieces of copper or consisting of two pieces of proximately 17 inches long will wive good results. Operation nay be either from AC power pack giving between 135 and 180 volts $D C$ in addition to filament supply or from three 45 volt "B" bat tries such ats Burgess M30 and four No. $4 \mathrm{FH} 1 / 2$ volt " 1 " batteries. Controls are tuning, volume, Send-Receive. in adatt:on to microphone and headphom: Jacks. Gray wrinkle finish steel case, size 1: incheslong, 11 inches high, 4 inches wide long. 11 inches high, 4 inches wide.
57 NPO10230-Assembled. Les 3 tubes. batteries, headphone. antenna, and mike. Shipping weight, 12 bs s. $\$ 18.82$

Stentor 112-T

## Transceiver Kit

(A. An extremely
compact trans
ceiver for the Ama- 20 ceiver for the Ama to $116 \mathrm{M} . \mathrm{C}$.) band. A Hytron HY-75 serves as R.F. oscillator for transmit ting and as en ultra-Audion selfquenching detector for receiving 1-6J5, and 1-6V6 serve as speech. Amplifier-modulator for transmitting and as Audio stases when receiving. Has built-in 3 硅 inch P.M. speaker. Transmiting-poupr output is 10 to 15 watts. Speech input is or a single butten coupling for maximum performanise with convent wal type $21 / 2$-Meter Antenna. Power requirements 300
 voits D.C. at 3.35 Amperes from setarate AC. operated powerpack or battories. Pow supply is not included. Accessories required: $1-\mathrm{HY} 75,1-6 \mathrm{~J} 5$, $1-6 \mathrm{~V} 6$ Tubes, $1-15$ volt bias battery, Microphone, Antenna, and suitable power supply. Kit includes all other parts and attractive gray wrinkle finssh cabinet size 103 in . long, $61 / 2$ in. deep and 6 y , in. high. For Sears Easy Terms. see Page 2. Shag. wt., 12 lbs. 57 NP 010195
$\$ 22.40$

[^0]

## Bud

## Code Practice Osclllator

For individual or classroom code instruction. Oscillating circuit produces note duplicating that of continuous wave note elegraphy. Built-in Maknetic speake wich render speaker is then silenced. Tone and volume, both con trollable by knobs on front pancl-operate up to 20 pairs of headphones over a distance of several hundred feet. Phone Jack tits standerd phone plug. Any number of keys may be used. Operates on 110 volt AC or DC. Gray finished steel cabinet. Size $41 / 2 \times 7 \% \times 3 / 4$ in. deep. For keys see Page 13. 57 NP 10915 -Complete with tube, operating and hookup instructions, and nternational Morse Code Card. $\$ 8.18$

## Earphone Model

Excellent for group Code instruction work Has all the features of model described above, except built-in Speaker. Operates up Magnetic Speakers. Any rumber of keys may be connected in paral el for group practice Gray crackle finished retal cabinet, size $41 / 2 \times 3 \% \times 3 \%$ in. For 110 volt AC or DC power. Shipping weight, ${ }^{*}$ pounds. 57 NP 10916 -Complete with tube. hook. up, operating instruction and Inter- $\$ 7.10$

## Extra Speakers

Three-inch Magnetic Speakers designed for use with the two Practice Oscillators deabed above. Several speakers can be conare plugged into . and this used. Speaker standard phone plug are not included. See Page 13 for phone plugs. May be connected with any two-conductor insulated copper wire. Crackle gray metal cabinet. $41 / 4 \times 4 \times 4$ 57 NP, Shipping weight, 4 lbs. 57 NP 10917
$\$ 2.40$

## Key and Phone Outlet Box

For terminating Key and Earphone connec Fors in Code practice installations. Box made of bakelite. Size $44 \times 2 \% / 41 / 2$ inches Jacks take standard two way phone plugs shown on Page 13. Shpg. wt., 1 lb 57 NP 10918

## Signal Twin Practice Set

(A) Memorizing the Code alphabet requires but a few evenings of study . . but each letter and figure must be recognized by its sound. This twin practice code by sound. Set includes two keys, non-adjustable buzzers and cude plates mounted on metal bases equipped with binding posts for battery and connectirg wire. Instruction Manual and 75 reet of wire, also furnished. Requires two No. $611 / 2$-volt dry cells for operation (see Page 37). Shipping weight, 3 pounds.
57 NP 10770 -Complete set
$\$ 2.20$

## Mac Oscillotone

(B) Code practice oscillator for either 110 volts AC or DC. Built-in speaker eliminates need for headphones. Two level volume control. Two frequency tone control. II7N7GT Tube furnished. An ideal instrument for code anstruction or practice. Made by T. R. McElroy. world famous as a manufacturer 57 NP 10203 -Shipping wt., 6 lbs
$\$ 7.50$

ICA Triplex Code Practice Set
(C) An ideal instrument to leara Telegraphy-Radio Code Signals and Blinker \&r Navy Signaling. Oniy 2 standard flashlight batteries needed. Code sets are connected by either set. Complete instructions.
57 NP 18797 - Set of two instruments and 50 feet of connecting wire. Less batteries. Shipping $\$ \mathbf{2 . 3 2}$
weight, 3 pounds. ...........................

57 NP 18798 -Single Instrument. No wire Shipping weight, 1 pound 4 ounces. .......... $\$ 1.15$

## National Oscillanor

(D) Small Code practice audio oscillator which will make it easy for you to learn the radio telegraph code in a week or two. Also suitable as an audio signai for 1.C. W. ultra high frequency bands. Requires a type 30 tube and four ordinary flashlight batteries. Steel case black wrinkle enamel finish
57 NP 19164 -Less batteries and tube.
$\$ 3.95$

## Popular Code Practice Sets

 Ideal for beginners. Moulded of

57 NP 18743


Speed-X Practice Set Winia Hi-s requency buzzer and a spe cells. Hookup diagram on carton Shpe. wt.. 1 lb .4 oz .
$\$ 1.62$

## High Frequency Buzzer

Construct your own code practice sera. Improved design, either atandald or senubautomatic key, and 2 dry cells are all that are 57 NP 18748 -Shipping weight, 8 ounces. Each ...... 73 C

Signal Ecanomy Sot A good and inexpensive instrument. Consists of a key lever, non-adjust tinished metal base with rubber fect. Ideal for code practice Ship feet. weal 2 poundsactice. Ship ping weight, 2 pounds.
57 NP 10772 -Each.
$\$ 1.03$


Signal Practice Set Designed for those who want an extra well made instrument of a key and high frequency of a key and high frequency buzzer mounted on a mahogany ing posts. Code is printed on a ing posts. and fastened to the base. Adjustable buzzer. Why not add this set to your Easy Term order. See Page 2. Shipping weight, 2 pounas. 57 NP 10771 -Each. $\$ 2.35$


Learn Spanish Quickly and Easily With These Phono-Records

## ICA Spanish Language Record Course

Spanish. nest to English, is today ealled the world's nost

 a weabulary of more than 2000 Spanith words and to Con-
 alsu include nix mionthy cor responence. Nuy Hork. You vill low surprised juw duickty you will iearn the language. Simp-
ping weikht,
pounds. 57 NP 10385 pounds


Complere Code Lesson Court
for Only

LINGUAPHOHE Code Lesson Course

## Code Practice Phono Records

 Master the Code quickly and eazily with this set of records. Play them on your phonograply alphabet tapped out. Sharp, clear and with per feel precision. As you listen your EYE follows the dot and dash equivalent in your text... and another. 10 lessons, 14 exercises. on 5 double faced, 10 -inch, electrically eranseribed recosde.Durable album. Sipg. wt., 6 lbs. 57 NP 10300 -Complete with text... $\$ 8.33$

# Keys and Hecclohones 



Speed-X Speed Key
(D) Durable, heary duty Semi-Automatic heavy chrome with black wrinkle base and casting Base $3 \times 61 / 8 \times 3$ in plug and cord extra (see 57 NP 18743 below) Shirping weight, 4 pounds.

WP 18740 -Model 515
\$5.44
Speed-X Professional Key (E) Has heavy duty $1 / 1$-inch coin silver con arm. Extra fast vibrator arm anc Dot U ipring designed for long life and heavy work Adjustable from 8 words per minute ul Will hold adjustment at all speeds. Potished chromum plated base and machined parts. mple 57 NP 18741 -Madel 501. . ....... $\$ 10.29$ 57 NP 18742 -Model 500. Same as above except black wrinkle base and chrome plated machire parts. $1 / 1$-inch coin silver
contacts............................... $\mathbf{\$ 7 . 9 4}$

## Vibroplex "Champion"

(11) Designed for radio use. Features clarity, able from 10 words per minute able from 10 words per minute up. Single mium finished machine parts, black crystal tinished base. Fio circuit closer. Plug and Cord extra (see $57 \mathrm{NP} 18: 48$ below). Shipping weight, 4 porunds.
$\$ 9.75$

## Vibroplex "Lightning Bug'

(C) One of the latest models. Single Iever type with inproved flat pendulum. instantly adjustable dot contact spring. Circuit breaker parallel with pendulum. Two pairs of contact poirts. Polished chromium Complete with cord and plug. Shipping weight, each. 4 pounds. 57 NP $10781 \ldots . . . . . . . . . . . . . . .$. . $\$ 13.67$ 57 NP 10782 -LheLuxe Model, Chrome fin-
ished base, Jeweled

## Mac Professional Type Keys



## Models SIOO,200,300

Streamlined metal base with black wrinkle tinish. Finely balanced Bronze bearing screws. Huge 316 -
in. contacts. Shipping weight, each, 1 pound.
57 NP 10204 -Model 200\$2.25 57 NP 10205 -Mudel 300. Same as above with base metal $\mathbf{p a r t s}$ ch-ome plated. ..... $\$ \mathbf{3} .45$ 57 NP 10209 -Amaieur Model. Lirge Contacts. Polystyrene plas tic base. Circuit closing
switch. Model $\$ 100$ $\mathbf{\$ 1 . 6 5}$


## Model S 600 Key

Combines senii-automatic key per ection with striking beauty of debluish heavily chromed base with bishacks toprevent glare. Matinum
platinoid for dashes. Stainless s.teel coil springs and bearings. Swe dish blue steel main spring and $U$ pring. Bronze bearing screws Bronze alloy pigtail. Bakelite insuation throughout. Molded plastic dot paddle and dash button. Shipping weight, 6 pounds
$\$ 11.85$

## Mac-Model P 500 Key

 Black wrinkle finish over Parkerized base. Chrome finished machined parts. Bakelite irsulatio silver contact s. Circuit closer. Model P 50057 NP 10201 -Shipping weight, 5 pounds.
$\$ 7.50$


Spaed-X 320 Key
Black wrinkle enanieled extra heavy diecast base. large sturdy polished chromium plated key arm with adjustable steel bearings. Heayy brass connectorstrip. Inmproved Navy Type knob and $1 / 4$-in. pure Shipping weinh each 2 pounds.

57 NP18744. $\$ 1.91$

## Speed-X

300 Key Inexpensive and well built practice key for the beginner. Base is moulded of Walnut color Bakelite, with all machine parts finished in bright nickel. Perfect action-sim:ple adjustments, coin silver contacts. No circuit ciosing lever. Shpping weight, each 1 pound-
57 NP 18745 88C

## Signal Standard

 Key No. II2-K Designed for beginners who want a key that is scientifically correct yet moderate :n price Has black enamel met al base mounted on mahogany linished wood base. Key lever isbright nickel plated. Contact pcints are made of pla key. Shipping quality each 2 pounds. weigh


Telegraph Equipment
Reguation sounder and profes isherl wood base, lirass bridge aluminum scunding bar. Nickel plated key iever. Sounder is. ohms.
57NP10773-Complete. $\$ 3.38$
57 NP 10775 -Sounder only wood base. Shipping only on $57 \mathrm{NP} 18738-\mathrm{Key}$ only. 18 base. Withot: closing lev- $\$ 1.65$ er. Shpg.wt, $11 \mathrm{~h} . . . \$ 1.65$ 57 NP 10771 -Key only. No Shipping weight, 1 lb.... $\$ 2.00$




57 NP 18877 - Wh.. 2 Ibs. (C) Cannontell Mastur" Ype ….. $\$ 8.52$ cealed terminal type. Adjustable headband $1 / 2$-foot cord
 57 NP $18881-2000$ Ohm Din phone Type. Shpe. wt., $1 \mathrm{lb} \ldots . . . \mathrm{C} .89$
(E) Cannon-Ball "Grand" single 57 NP $18884-1000$ Ohms............ 71 lc

## Headphone Adapters

(F) Consists of speaker silencing switch box with pin tip phone jacks, 3 -foot connecting cable and Adapter which goes bet ween out put tube and its.regu lar tube socket of radio. Shipping
57 NP 12961 -Single 6 prong. . $\$ \mathbf{1 . 9 1}$ 57 NP 12962 -Single 8 prong... 1.91 57 NP 12962 -Single 8 prong. 1.91
57 NP 12963 -i) ouble 6 prong. 2.19 57 NP 12964 -Double 8 prong. 2.19

For Sears Easy Payment


Plan, see Page 2. forst cold with pin tip ends. 57 NP i 8875 -Double Type. Ship-
ping weight, 2 pounds ............. $\$ 6.47$ (D) 57 MP 18876 --Single Type.
3.47 Connon-Boll "Dixie" Headphones, Outside ving weight each, l pound.
57 NP $18882-3000$-Ohm. ........ $\$ 1.65$ 57 NP $88883-2004-\mathrm{Ohm}$

(1) Ear Cushions. Made of sponge rubber.

57 NP 10375 -Pair..................23C

57 NF 10786 -Single Oprn Circuit 220
Stidoet Jack, Econnimy type. Nut shimen
57 NP 17833 --single open circui
57 NP 18244 - 3-way for mike lines. Ea. 28 c

Speed Key Replacements
(14)
57 NP 18747 ..... 18 c
(11) Plup and cord set for semidatumatic 57 NP 18748. ..... 58 C
Adjustable Pa
ping wright. ed
57 NP 18737Ship
15

# Bring Your Rig Up to Date With 

 Modern Power Tubes
## Guarantee

Power tubes areguaranteed for 90 days against defects in materials and work－ manship．When returning power tubes， be sure to state（1）Date purchased from Sears（2）number of hours tube was in ervice（3）How it was used in circuit． （4）Plate potential．

Hytron Power Tubes

| Typ＊ Number | Catalog Number | Shpe． Wt． | Price Each |
| :---: | :---: | :---: | :---: |
| Hy 24 | $\overline{57}$ NPM 13250 | 1 lb | \＄1．60 |
| Hy 302 | 57 NPM 17663 | 1 lb ． | 2.7 |
| Hy 312 | 57 NPM 13251 | 1 lb | 3.50 |
| Hy 40 | 57 NPM 17551. | 1 lb | 3.7 |
| Hy 402 | 57 NPM 17661 | 1 lb ． | 3.7 |
| Hy 51 A | 57 NPM 17562 | 2 lbs | 4.75 |
| Hy 512 | 57 NPM 17554 | 2 lbs | 4.7 |
| Hy $61-807$ | 57 NPM 17566 | 2 lbs. | 3.50 |
| Hy 65 | 57 NPM 1326 | 1 lb. | 3.00 |
| Hy 67 | 87 NPM 13254 | 2 lbs | 7.7 |
| Hy 69 | 57 NPM 17564 | 2 lds | 3.95 |
| Hy 75 | 57 NPM 13255 | 2 lbs. | 3.95 |
| Hy 1148 | 57 NPM 13256 | 1 lb ． | 2.26 |
| Hy 615 | 57 NPM 17560 | 1 lb ． | 2.25 |
| 866A．866 | 57 NPM 175 | 1 lb ． | ． 50 |
| 866 Jr ． | 67 NPM 17657 | 1 lb ． | ． 05 |
| 8014－801 | 67 NPM 13253 ． | 1 lb ． | 2.50 |


| RCA Power Tubes |  |  |  |
| :---: | :---: | :---: | :---: |
| Type Number | Catalog Number | Shpe． | ${ }_{\substack{\text { Price } \\ \text { Each }}}$ |
| ${ }^{2033}$ | 57 NPM 1750 | ${ }^{5} \mathrm{ibs}$ S | 510.00 |
|  |  |  |  |
| ${ }_{803}^{800}$ | 57 NPM 17502 | ¢ 6108. | 18.00 |
| 805 | 57 NPM 17604 | 5 lbs ． | 13.60 |
| （807 | 57 NPM 17512 | ${ }_{2}^{21058}$ | 3.50 |
| 809 | E7 NPM 17507 | 2105. | 7.65 |
| ${ }^{1810}$ | 67 NPM 17508 | ${ }_{6} 6 \mathrm{los}$ ． | 13.50 |
| 811 | 57 NPM 176 | ${ }_{2}^{21085}$ |  |

Hyiron Ceramic Base Tubes

| Туре Number | Catalog Number | Shpe． We． | Price Ench |
| :---: | :---: | :---: | :---: |
| 6ABGTX | 67 NPM 1325 | $80{ }^{8}$ | 5.95 |
| 6J5GTX | 67 NPM 10228 | 8 dz ． | ． 95 |
| 617 GTX | 67 NPM 13258 | 8 oz | 5 |
| 6K7GTX | 57 NPM 13259 | 8 oz ． | 95 |
| 6k8GTX |  | 8 oz ． | 1.30 |
| 6L6GT | 57 NPM 17569 | 808. | 1.25 |
| 6V6GTX | 67 NPM 13261 | 802. | 1.05 |
| 6SAJGTX | 57 NPM 13262 | 802. | 1.05 |
| 6SJ7GTX | 57 NPM 13263 | 8 oz ． | 1.06 |
| 6Sk7GTX | 167 NPM 13264 | 808. | 1.05 |

Hytron Miniature Base Tubes

 | Hy 115．Hy 145 | 67 NPM 13266 | 8 oz． | 2.60 |
| :--- | :--- | :--- | :--- |
| Hy 125．Hy 155 | 67 NPM 13267 | 8 oz． | 2.50 |

| RCA Power Tubes |  |  |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Type } \\ & \text { Number } \end{aligned}$ | Catalot Number | Shpe． Wt． | Price Each |
| $\square_{13}$ | E7NP积175：3 | 6．tis． | 522.0 |
| 814 | 67 NPM17514 | 5 lbs ． | 17.5 |
| 815 | 67 NPM 13085 | 2 lbs. | 4.6 |
| 816 | 57 NPM 13086 | 116. | 1.0 |
| 828 | 57 NPM1 7583 | 5163. | 17.60 |
| 865A．866 | 57 NPM17621 | 4 lbs． | 1.50 |
| 972 | 57 NPM17523 | 6103. | 9.00 |
| 902 | 57 NPM 17631 | 3 lbs | 7.50 |
| 913 | 57 NPM17633 | 2103. | 4.00 |
| 1608 | 57 NPM 13087 | 116. | 4.00 |
| 1610 | 57 NPM13088 | 116. | 2.0 |

Raytheen Power Tubes

| $\begin{gathered} \text { Type } \\ \text { Number } \end{gathered}$ | Catalog Number | Shpe． Wt． | Price Each |
| :---: | :---: | :---: | :---: |
| 烠 12 | E7NPM17586 | 1 lb ． | 52.50 |
| RK 20 A | 57 NPM 17587 | 3 los | 15.00 |
| RK 37 | 57 NPM 17694 | 1 lb ． | 6.95 |
| RK 39 | 57 NPM 17696 | 116. | 3.60 |
| RK 43 | 57 NPM 17699 | 1 lb | 1.60 |
| RK 49 | 57 NPM 17602 | 1 lb | 1.25 |
| RK 60 | 57 NPM 17617 | 1 lb | 2.75 |
| RK 62 | 57 NPM 17608 | 116. | 3.60 |
| 866A－866 | 57 NPM 17615 | 116. | 1.60 |
| Gammatron Power Tubes |  |  |  |
|  |  |  |  |
| HK 54 | 67 NPM 17565 | $2 \mathrm{lbs}$. |  |
| HK 254 | 67 NPM 17666 | 4 lbs ． | 12.50 |
| Eimas Power Tubes |  |  |  |
| 351 | S7NPM17572 | 2108. | $1 \$ 6.00$ |
| 100TH | 67 MPM 17673 | 4 lbs ． | $13.50$ |

RCA Power Tubes

| $\begin{aligned} & \text { Type } \\ & \text { Number } \end{aligned}$ | Catalog Number | Shpe． Wt | Price Each |
| :---: | :---: | :---: | :---: |
| 1613 |  | 1 ib ． | $\overline{3} 8.75$ |
| 1614 | 57 NPM13090 | 1 lb ． | 3.50 |
| 1616 | 67 NPM13091 | 11 b. | 5.75 |
| 1624 | 67 NPM13092 | 1 lb ． | 3.50 |
| 1851 | 67 NPM17637 | 1 lb ． | 2.10 |
| 8005 | 67 NPM17548 | 1 lb ． | 7.00 |
| 9001 | $67 \mathrm{NPM13093}$ | 1 lb | 2.60 |
| 9002 | 67 NPM13094 | 116. | 2.00 |
| 9003 | 57 NPM 13095 | 1 lb ． | 2.50 |
| VR105．30 | 57 NPM 17540 | 116. | 1.25 |
| VR150．30 | 67 NPM 17641 | 1 lb ． | 1.25 |

Raytheen Special Sound Tubes
For use in high gain P．A．amplifiers． very low hum and mictophonic char acteristics．Shipping weight，ea．， 8 oz

| Type Number | Catalor Number | Each |
| :---: | :---: | :---: |
| SS．5U46 | 67 NPM 13275 | \＄0．67 |
| SS．5V4G | 67 NPM 13276 | 1.03 |
| SS．5Y36 | 57 NPM 13277 | ． 51 |
| SS．6C5G | 67 NPM 13278 | 67 |
| SS．6F6G | 57 NPM 13279 | ． 67 |
| \＄S．617G | 67 NPM 13280 | ． 67 |
| SS．6K6G | 57 NPM 13281 | 67 |
| SS．6L6G | 57 NPM 13282 | 1.24 |
| SS．6L7G | 67 NPM 13283 | 1.03 |
| SS．6NEG | 67 NPM 13284 | 1.51 |
| SS．6V6G | 57 NPM 13285 | ． 84 |
| SS．6X5 6 | 57 NPM 13286 | .67 |

All iransmitting iubes shipped by express only

## RCA Radiotrons for All Radio Receivers

## Top Quality Tubes

RCA Radiotrons are universally accepted．Serv－ icemen and Amateurs alike know that these tubes are unsurpassed in quality of materials，work－ manship，and in uniformity of electrical charac－ teristics．

## Order 15 or More and Save

Take advantage of Quantity Prices！The single lot price quoted below is $40-10 \%$ off standard list price．If 15 or more tubes are ordered at one time we will allow you a discount of $50 \%$ of list；or ex－ actly $1 / 2$ of list price．

Shipping weighis for Tubes： 1 tube， 8 oz．： 2 ：ubes． 12 oz．； 3 tubec， 1 lb ．； 4 tubes， 1 lb .4 oz．； 6 tubes， 1 lb ．
12 oz ．： 7 tubes． 2 lbs． 4 oz ．； 8 tubes， 2 lbs 6 oz．； 9 tubes， 2 lbs .10 oz ．； 10 tubes， 2 lbs 12 oz ．； 15 tubes， 3 lbs.

| $\begin{gathered} \text { Type } \\ \text { Number } \end{gathered}$ | Catalos Number | List Price | Net Price Each | Type Number | Catalog Number | List Price | Not Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 024G | 57 NP 13300 | \＄1．65 | \＄ 0.91 | 6F8G | 57 NP 13339 | \＄1．25 | \＄0．74 |
| 1A5G | 57 NP 13301 | 1.65 | ． 91 | 666G | 57 NP 13340 | 1.25 | ． 74 |
| 1 A 5 | 57 NP 13302 | 1.25 | .74 | $6 \mathrm{HH}_{6}$ | 57 NP 13341 | 1.05 | ． 62 |
| IAJG | $\overline{57}$ NP 13303 | 1.56 | ． 91 | Бн6¢ | 57 NPP 13342 | 1.05 | .62 |
| IC5G | 57 NP 13304 | 1.56 | ． 91 | 615 | 57 NP 13343 | ． 85 | ． 50 |
| 105GP | 57 NP 13305 | 1.25 | ． 74 | 6156 | 57 NP 13344 | ． 95 | ． 56 |
| 1 F7GV | 57 NP 13306 | 1.65 | ． 91 | 617 | 57 NP 13345 | 1.25 | ． 74 |
| IHAS | 67 NP 13307 | ． 95 | ． 56 | 6176 | 57 NP 13346 | 1.05 | ． 62 |
| 1H5G | 67 NP 13308 | 1.25 | ． 74 | 6K6G | 67 NP 13347 | 1.05 | ． 62 |
| 1N5G | 67 NP 13309 | 1.56 | ． 91 | $6 \mathrm{K7}$ | 57 NP 13348 | 1.05 | ． 62 |
| IV | 67 NP 13310 | ． 95 | ． 56 | 6k7G | 57 NP 13349 | 1.05 | ． 62 |
| 243 | 67 NP 13311 | 1.90 | 1.12 | 6K7GT | 57 NP 13350 | ． 95 | ． 56 |
| 2AS | 157 NP＊13312 | ． 95 | ． 56 | 6 Kg | 57 NP 13351 | 1.25 | ． 74 |
| 2A7 | 67 NP 13313 | 1.05 | ． 62 | $6 \mathrm{L6}$ | 57 NP 13352 | 1.90 | 1.12 |
| 5V46 | 67 NP 13314 | 1.55 | ． 91 | 6L6G | 57 NP 13353 | 1.90 | 1.12 |
| $5 \times 46$ | 57 NP 13315 | 1.05 | ． 62 | 6 L 7 | 57 NP 13354 | 1.58 | .91 |
| \＄Y3G | 57 NP 13316 | ． 65 | ． 38 | 6 N 7 | 57 NP 13355 | 1.55 | ． 91 |
| 5 546 | 57 NP 13317 | ． 70 | ． 41 | 6Q76 | 57 NP 13356 | ． 85 | ． 50 |
| 573 | 67 NP 13318 | 1.05 | ． 62 | 6Q7GT | 57 NP 13357 | ． 85 | ． 60 |
| 524 | 67 NP 13319 | 1.25 | .74 | 6SAT | 57 NP 13358 | ． 95 | ． 56 |
| $6{ }^{6} 4$ | 57 NP 13320 | 1.55 | ． 91 | 6SC7 | 57 NP 13414 | 1.25 | ． 74 |
| 6A6 | 57 NP 13321 | 1.65 | ． 91 | 6SJ7 | 57 NP 13359 | 1.05 | ． 62 |
| 6A7 | 57 NP 13322 | ． 95 | ． 56 | 6SK7 | 57 NP 13360 | ． 96 | ． 56 |
| 6 A 9 | 57 NP 13323 | 1.25 | ． 74 | 6SO7 | 57 NP 13361 | ． 95 | ． 66 |
| 6A8G | 57 NP 13324 | ． 95 | ． 56 | 6us | 57 NP 13362 | 1.25 | ． 74 |
| 6Aagt | 67 NP 13325 | ． 95 | ． 66 | 6V6 | 67 NP 13363 | 1.90 | 1.12 |
| 6AF6G | 57 NP 13326 | 1.55 | .91 | 6V6G | 57 NP 13364 | 1.25 | ． 74 |
| 687 | 57 NP 13327 | 1.25 | ． 74 | 6X56 | 57 NP 13365 | 1.05 | ． 62 |
| 6 CS | 57 NP 13328 | 1.05 | ． 62 | 12A7 | 57 NP 13366 | 1.90 | 1.12 |
| 6 CSE | 57 NP 13329 | ． 95 | ． 56 | 12 k 7 GT | 57 NP 13367 | ． 95 | ． 56 |
| 6 66 | 67 NP 13330 | ． 95 | ． 56 | 125 k 7 | 57 NP 13368 | ． 96 | .36 |
| 6C8G | 67 NP 13331 | 1.55 | ． 91 | 12SQ7 | 67 NP 13369 | ． 96 | ． 56 |
| 606 | 57 NP 13332 | ． 95 | ． 56 | 1223 | 57 NP 13370 | ． 95 | ． 56 |
| 6E5 | 57 NP 13333 | 1.05 | ． 62 | 19 | 57 NP 13371 | 1.25 | ． 74 |
| 6 FS | 67 NP 13334 | 1.05 | ． 62 | 24.4 | 57 NP 13372 | ． 85 | ． 50 |
| 6FS6 | 57 NP 13336 | 1.05 | ． 62 | 2516 | 57 NP 13373 | 1.55 | .91 |
| 6 F6 | 57 NP 13336 | 1.05 | ． 62 | 25L6G | 57 NP 13374 | 1.25 | .74 |
| $6 F 66$ | 57 NP 13337 | ． 85 | ． 50 | 25LGGT | 57 NP 13375 | 1.05 | ． 62 |
| $6 F 7$ | 67 NP 13338 | 1.55 | ． 91 | 2575 | 67 NP 13376 | ． 95 | ． 56 |


| Type Number | Catalog Number | $\underset{\text { Price }}{\text { List }}$ | Net Price Each |
| :---: | :---: | :---: | :---: |
| 2576 | 57 NP 13377 | \＄1．25 | \＄0．62 |
| 2526G | 57 NP 13378 | ． 96 | ． 56 |
| 2526GT | 57 NP 13379 | ． 95 | ． 56 |
| 吝6 |  | ． 70 | ． 41 |
| 27 | 57 NP 13381 | ． 65 | ． 38 |
| 30 | 57 NP 13382 | ． 95 | ． 56 |
| 32 | S7 NP 13383 | 1.25 | ． 74 |
| 33 | 57 NP 13384 | 1.25 | ． 74 |
| 34 | 57 NP 13385 | 1.25 | ． 74 |
| 35 | 57 NP 13386 | ． 95 | ． 36 |
| 35L6GT | 57 NP 13387 | ． 96 | ． 66 |
| 3575GT | 57 NP 13388 | ． 80 | ． 47 |
| 36 | 57 NP 13389 | ． 95 | ． 56 |
| 38 | 57 NP 13390 | 1.05 | ． 62 |
| 41 | 57 NP 13391 | ． 80 | ． 47 |
| 42 | 57 NP 13392 | ． 80 | ． 47 |
| 43 | 67 NP 13393 | 1.05 | ． 62 |
| 45 | 67 NP 13394 | ． 75 | ． 44 |
| 46 | 57 NP 13395 | 1.05 | ． 62 |
| 47 | 67 NP 13396 | 1.05 | ． 62 |
| 50L6GT | 67 NP 13397 | 1.05 | ． 62 |
| 56 | 67 NP 13398 | ． 75 | ． 44 |
| 57 | 67 NP 13399 | ． 86 | ． 50 |
| 58 | 67 NP 13400 | ． 85 | ． 50 |
| 59 | S7 NP 13401 | 1.55 | ． 91 |
| 714 | 67 NP 13402 | ． 85 | ． 60 |
| 75 | 67 NP 13403 | ． 80 | ． 47 |
| 76 | 67 NP 13404 | ． 85 | ． 50 |
| 77 | 67 NP 13405 | ． 85 | ． 50 |
| 78 | 57 NP 13406 | ． 85 | ． 50 |
| 80 | 57 NP 13407 | ． 65 | ． 38 |
| 83 | 67 NP 13408 | 1.25 | ． 74 |
| 84／624 | 67 NP 13409 | 1.05 | ． 62 |
| 89 | 67 NP 13410 | ． 95 | ． 56 |
| $\left.\begin{array}{l} 6 A C 7 \\ 1852 \end{array}\right\}$ | 67 NP 13411 | 2.30 | 1.35 |
| $\begin{aligned} & 6 A B 7 \\ & 1853 \end{aligned}$ | 67 NP 13412 | 1.90 | 1.12 |



## Dependable Crystals, Carefully Cut from Brazilian Quartz

# (A) Bliley Crystol Holder <br> (4) Crivy Crystol Holder. Molded Bakelite. For l-inch 

Shipping weight ech, 4 uuncer 57 NP 18285 -For 20-40 Meter Crystals ........95c 57 NP 18286 -For 80-160 Meter Crystals .........95c (B) Type BC3. For the 40, 80 and 160 -meter bands. The (B) accurately-cut crystal is an active oscillator ard has a drift of only 23 cycles /me./ degree centigrakiti Stain-less-steel hulder cover
weight, each, 8 ounces
57 NP 18260 - Within 5 KC . of specified frequency
in the $40-80$-meter bands negative drift....... $\mathbf{\$ 3 . 3 5}$ 57 NP 18261 -Within 10 KC of specified fre- 3.35 quency in the 160 -nieter band ( $\pm$ ) drift
3.35 57 NP 18262 F -At exact integral specifed KC 's 4.95
in the 40 or 80 meter bands. Allow 10 days for shipmert. 4.95 (C) Trpe B5. A superior low-drift crystal for the +0 -meter maximum of $( \pm) 4$ cycles $/ \mathrm{mc} . / \mathrm{C}^{\circ}$. Oscillat ing frequency is accurately calibrated and guaranteed correct within $\pm .03 \%$ in your transmitter at normal room temperature. Compact holder equipped with 2 -prong socket. Shipping
weight, each, 8 ounces.
$57 \mathrm{NP} 18263-7.0$ to 7.3 MC . within 5 KC . of
specilied frequency. State frequency......... $\$ 4.80$ $\dagger 57$ NP $18264 F$-Frequency to exact integral specitied KC's. State requency wanted 5.80 $\dagger$ Shipped from factory in Erie, Pa., from where you pay
(D) Type HF2. This fully dependable mounted crys tal has high activity comparable to lower fre
quency crystals. Easily excsted. Enploys the har nonic vibrating pronciple. Can be used in any con ventional triode. pentode or Tri-tet oscillator. The only precautions necessary are the usual, low-loss design considerations required for all high-fre quency circuits. Avoid Kegenerative or Pierce cir 57 NP 18269 - Amateur cach. 8 ounces.
57 NP 18269 -Amateur 20 Meter Band,
drift $(-) 20$ cycles $/ \mathrm{mc} .{ }^{\circ} \mathrm{C}$. within $15 \mathrm{KC} . \$ 5.75$ drift $(-) 20$ cycles $/ \mathrm{mc} .{ }^{\circ} \mathrm{C}$. Withn
$57 \mathrm{NP} \$ 8270-14.4 \mathrm{in} 15.0 \mathrm{MC}$. drift $(t)$
5.75 (C) Type LD2. This mounted, precision low-drift carefully cut from selected Brazilian Quartz. It posse'sses high activity and has a frequency drift not exceeding plus or minus 4 cycles /me./ degres centigrade. The holder is low-loss molded bakelite with crystal held under the constant pressure be tween two stamless stcel elect rodes. Plugs into
any standard 5 -prong tube socket. State frequency. Shystandard -prong tube socket. Siade requer wright, each, 4 oz.
$57 \mathrm{NP} 18272-$ Within 5 KC . of specilied 57 NP $18272-$ Within 5 KC. of specilied $\$ 4.80$
frequency 57 NP 18273 F -Supplied io exact integral speci-
feed KC's. Shipped from factory in Erie, Pa., from where you pay transportation. Allow $10 \$ 5.90$
(F) TYPE VFI. By a mere twist of the control knob ou (he Type VFl Variable Frequency Crystal Unit, You can instantly shift your transmitter frequency. Crystal is easly excited and requires no circuit considerations. Up to 6 kC . variation with the 80 -meter unit or 12 KC . With the 40 -meter unit. When frequency multiplying the variation is proportionatey increased Each crystal is individually finsished for best variable frequency performance and has a drift rot exceeding ( $\pm$ ) 4 cycles /mc./degree centigrade. The crystal ( $\pm$ ) i cycles /mc./degree centigrade. athe minimum frequency. is only slightly less than the activity of a corresponding lixed frequency unit, and decreases somewhat as the frequency is in8 ounces.
57 NP 18274 -Within 5 KC . of specified $\$ \mathbf{6 . 6 0}$ 57 NP 18276 -- Withm 15 KC . of specilied
minimum frequency in the 40 -meter band... 6.60 57 NP 18276 -- Withm 15 KC . of specilied
minimum frequency in the 40 -meter band... 6.60
(G) Type CF1. Assures maximum selectivity and minimo any standard 5 -mreng tube socket. Shipping weight, each, 4 ounces.
$57 \mathrm{NP} 18279-$ Fol $456 \mathrm{KC}, 465 \mathrm{KC}$ or 500 KC ., I.F. (Specify one wanted)

## 0.4 <br> 

## National Vertical Holders

(14) Insulating material made of R39. Nickel finished

ers. resonator -ype Shp wr. 4 oz in recelv- $\$ 1.65$
 Hammarlund $\times 5-2$ Crystal Socket
(J) Pure Isolan'ite with heavy re-inforced contacts. fammarlund XP-53 coil form. Mounting centers
 57 NP 18445 , 18 ping weight, 3 ounce Crystol Holder Socket
(6) For plugging in standard quartz-crystal holders Contacts are of silver-plated phosiphor-bronze. IEC

## (Unmounted Crystals

## Superior X-Cut Crystals

These fine $X$-Cut Crystals are furnished to us by one of Anlerica's largest and best known crystal liboratories. Omly Brazilan Quariz suscd in the n:anuracture of these superibr units. Each crystal carcully checked for operating performance Temperature coeflicient is approximately (--) 20 cycles /muc./
Our large stock of crystals assures you of fre-
ureency selections very close to those which you orde ver mos than KC above or below your specifications. Size. 1 inch square. Specify irequency.
57 NP 18287 -For 80 and 160 -met er band. $\$ 1.50$
Shipping weight, each, 3 ounces. .......... $\$$. Shipping weight, each, 3 ounces. .........
$57 \mathrm{NP} 18288-$ For 40 -meter band. Ship.
ping weight, each, 3 ounces. ............. 1.95


## NATIONAL

Oscilloscope

## Type CRM

Unless the performance of your Lransmitter has been checked by the Cithode Kay and carrier-shift meth ods, thermocouple meters are no. to betrusted to keep your modulation below the point of distortion.
This small inexpensive oscilloscope will enable you to adjust your rig and check up on your modulation Cathode Ray tube and one $6 \times 5$ rectifier. Self-contained 60 -cycle sweep or external audio sweep for securing trape\%oid pattern may be used. Sieel case, size $41 / \mathrm{a} 61 / 8 \times 8$ inches. For 110 -volt, 60 -cycie A.C. 57 NP 19007 -Leses tubes
$\$ 12.20$
7 NPM 17533 -RCA91:3 tube.
Shipping weight. 2 pounds. Not mallable. ... 4.04
57 NP 13413 --RCA6K5 tube.
Shipping weight, 4 ounces Mailoble. ..... 87 C


## Advance and Staco Relays

(P) Advonce H.D. Relays, Handles 15 Anips. D.P.I).T. Isolantite base and cross arre. $1 / 4$-inch silver size, $31 / 2 \times 233 \times 1 / 2$ inches high. Shipping weight, 2 pousids.
$\$ 5.40$
(O) Advance General Purpose Reloy. Eni ire relay is inches. For 110 volts A.C. Shippling weight, each, 1 pound.
57 NP 19402 - Type 953SP- DT . . . . . . . . . . . $\$ 2.10$
(B) Staca Antenno Change-Over Reloy, , ís-inch pure silver contacts. Handles a ampere's. Double bole, A.C. Shipping weisht. 2 pounds. $\$ 294$

## Allied Control Co. Relays

(5) Type P.C. Layer wound impregnated coils. Cadcal mon pon D.C. Siliconstect on A.C. Rating 5 ampsof non-inductive A.C. Not more than 10 operations per minute. SPDT plate circuit type. Adjustable for pull-in from 6 to 8 mills and droq) out at 3 to 5 mills. 2500 -ohm coil. Shipping wejght, 1 pound. \$1.47 57 NP 10480 -Each
57 NP 10481 -DPITT-For 110 volis A.C
(T) Type H Antenno Change Over. Layer wound coils. ank circuits. Impregnated. Alsimag insulation. Wide spacing throughout. D.P.I).T. contacts with ample wipe and high contact pressure. Silver contact: $1 / 4$ inch diameter. Shipping weist $t .2$ pounds.
57 NP 10482 -For 125 volts A.C
$\$ 5.44$

## BUD Variables



## Bud Junior Transmitting Condensers Single and Dual Types

A The low minimum capacities of these units make them especially suitable for Alsimat Alsimag 19 stator insulation. Electro soldered construction. Formed brackets on space $3 \times 2 \%$ inches. ${ }^{*}$ Indicates Dual Types

| Catalog Number | Type | $\begin{aligned} & \text { Range } \\ & \text { Mmid. } \end{aligned}$ | Air Gap. Inch. | Plates Per Sec. | Frame lenght | $\begin{aligned} & \text { Shpe } \\ & \hline W . \end{aligned}$ | $\begin{aligned} & \text { Prive } \\ & \text { Euch } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 NP 10675 | JC 1525 | 4-50 | 051 | 7 | $21 / 2 \mathrm{in}$. | 2 lbs . | \$2.15 |
| 57 NP 10678 | JC 1526 | 6-100 | 051 | 13 | $2 \% / 8 \mathrm{in}$. | 2 lbs . | 2.59 |
| 57 NP 10677 | JC 1532 | 6-55 | . 078 | 11 | 3 in . | 2 lbs . | 2.47 |
| 57 NP 10678 | JC 1534 | 9-110 | . 078 | 21 | 41/is 1n. | 2 lbs . | 3.00 |
| 57 NP 10679 | JC 1540 | 9-55 | . 144 | 17 | 4\% in. | 2 lbs . | 3.00 |
| 57 NP 10680 | JC 1541 | 12-80 | . 144 | 25 | 53/16 in . | 3 lbs . | 3.44 |
| 57 NP 10681** | JC 1551 | 5-50 | . 051 | 17 | $41 / 16 \mathrm{in}$. | 2 lbs . | 3.62 |
| 57 NP 10682** | JC 1553 | 6-100 | . 051 | 13 | 5 in. | 3 lbs . | 4.74 |
| 57 NP $10683^{*}$ | JC 1559 | 6-55 | . 078 | 11 | 51/4in. | 3 lbs . | 4.26 |
| 57 NP 10684 | JC 1561 | 9-110 | . 078 | 21 | 75/6in. | 3 lbs . | 5.35 |
| 57 NP 10685 | JC 1565 | 9-55 | . 144 | 17 | 87/íin. | 3 lbs . | 5.00 |

## Bud Stat-Air Condenser

(B) Designed to parallel the tuning Condenser in Multi-band R.F Amplifiers to maintain proper L/C atio over large frequency ranges. Elec ric soldered brass plates. Alsimag 19 insulation. Mounting area $1 / 1 / \times 1 / 1 /$ inches. FA 781 Cap., 100 Mmfd Air Gap. 144 in. A high quality condens made to Bud exating standards. 57 NP 10698
\$3.88

## Bud Deuble Gang Midgets

(C) Cadmium plated plates. Ceramic weight, ea.. 1 pound.
57 NP 10 B89-MC 942. Range 4 to 20 Mmid. per sec. 6 Midline plates. $\$ 2.35$ Frame length 3 in........... $\$ 2.35$ 57 NP 10690-MC 1887. Range 8 to 50 Mmid. per sec. 15 Semicircular
plates. Frame length $51 / 4$ in.... $\$ 2.76$ Seo top of Naxt Column for Single
Gang - Single Bearing Midgetz

## Miniature Condensers

## Bud Midget Condensers

(1) Alsimag 196 insulation. Semi-Circular Cadmium finished plates. Double bearing 57 NP 10691 -MC 1853. Range 6 to 50 Mmfd. 7 plates. Air Gap. 024 in . $\$ 123$ Length $1 *$ in. Shpg. wt., 8 oz...... \$1.23 67 NP $10692-\mathrm{MC}$ 1863-Double Space. Rang plates. Length $2 \%$ in. Shpg. wt., $8 \mathrm{oz} . \$ 1.50$ plates. Length $2 \%$ in. Shpg. wt., $8 \mathrm{oz} . \$ 1.50$
57 NP $10693-\mathrm{MC}$ 1867-Triple Spaced 57 NP $10693-\mathrm{MC}$ 1867-Triple Spaced
Range 10 to 50 Mmfd . Air Gap .095 in Range 10 to 50 Mmfd . Air Gap 095 in Shipping weight, 1 pound....
$\$ 1.85$

Bud Tiny Mite Cendensers
(1) For tuning ultra-high frequency Circuits. Alsimag 196 insuras Panel Mounting piated plates. Panel Mounting Space Shpg. wt, ea., 8 oz . 57 NP $10694-L C 1641$ Range 37 NP 15 Mmfd . 5 plates.... 76 c 57 NP $10695-$ LC 1643 Range 57 NP $10695-L C$ Range 1643 Re
5 to 35 Mmfd. 13 plates.... 94 c 57 NP 10896 -LC 1645 Range 57 NP $10896-L C$
7 to 75 Mmfd. 29 Plates. S 1.18
(1)

## Tuning and Band Spread

## Condenser Comblnation

 Experimenters! Here is a real value A3-gang Superheterodyne-type 281.2 Mmid. tuning Condenser (D) and a 3 gang 12 Mmid. band spread condenser to match will hardly believe. And a price you Shaft diam, 33is Shaft diam., $3 /-1$ in, Our supply simited, so hurry if you want our pair. Shp\%. wt., pair. 5 lbs as our supply lasta. par as long $\$ 1.49$

## 0.0 <br> 




## Hammarlund Variables

## MC Midget Condenser:

(A) Isolantite insulation. Silver plated um plated soldered wiping contact. Cadmiinch air gap. Shpg wt each. 1 inch air gap. Shpg. wt., each, 1 Ib

| Catalog Number | *Plates | Capacity Range Mmf. | Price Each |
| :---: | :---: | :---: | :---: |
| 57 NP 19433 | M | 320-13 | \$2.40 |
| 57 NP 19435 | M | 200-10 | 1.98 |
| 57 NP 19436 | M | 140-8 | 1.80 |
| 57 NP 19438 | M | 100-7 | 1.68 |
| 57 NP 19439 | S | 100-7.5 | 1.68 |
| 57 NP 19442 | M | 50-6 | 1.44 |
| 57 NP 19444 | S | 35-5 | 1.38 |
| 57 NP 19445 | S | 20-4.5 | 1.32 |

## SM Star Midgeta

(B) Bakelite insulation. Straight line Shaft $1 /$-inch diameter Size is 19 inch wide by $1 \%$ inch high. Shipping inch wide by $1 \%$ inch

| Catalog <br> Number | Capacity Range Mmr. | Price Each |
| :---: | :---: | :---: |
| 57 NP 19654 | 15-3 | \$0.54 |
| 57 NP 19655 | 25-3.5 | . 54 |
| 57 NP 19656 | 50-4 | . 60 |
| 57 NP 19657 | 100-6 | 72 |
| 57 NP 19658 | 140-7 | . 84 |

## APC Micre Condensers

(C) Extremely compact condensers. Ideal as air dielectric trimmers for gand condensers, I.F. iransformers and for padding r.f. circuits. Isodered brass rotors and stators. Screw driver adjustment. Air gap 015 -inch. Will fit $11 / 4-i n$. diameter cans. Shipping weight, each, 1 pound.
$\qquad$

 | $57 N P 19647$ |  |  |  |
| :--- | ---: | ---: | ---: |
| $57 N P 19649$ | $100-5.5$ | 27 | 1.14 |

## HF Micro Condensers

(D) Cadmium plated soldered brass plates and isolantite insulation effective in tuning or trimming high frequency circuits. Shipping weight each, 1 pound.

| Calalop Number | Capacily Range Mmi | Pricto Each |
| :---: | :---: | :---: |
| 57 NP 19639 | 17-5.3 | \$0.84 |
| 57 NP 19640 | 35-3.6 | . 96 |
| 57 NP 19641 | 50-4.1 | 1.02 |
| 57 NP 19642 | 100-5.6 | 1.26 |
| 57 NP 19643 | 140-6.7 | 1.44 |

## for Ham Gear



## National Dials and Knobs

(E) "BM" Dial-"Velvet Veruier" action. Variable ratio drive. Black Bakelite case. Diarneter, 3 inches. For $1 / 4$-in. shaft. Shipping wt., each, 1 lb .8 oz . 57 NP 19039-0-100-0 for either clockwise or count er clockwise condenser. 180 degrees
57 NP $19040-200$ to 0 clock wise. 360 degrees

(1) Black Palnter Knobs

Shipping weight, each, 4 ounces 57 NP 10319 -l $1 / 1 \mathrm{in}$. 57 NP 10320 -1 5 in 57 NP $10321-2 \%$ in 57 NP $10322-11 / 4 \mathrm{in}$ less pointer
(1) Bar Knob. Black Bakelite Shipping weight, each, 4 ounces 57 NP 19712 - $11 / 4$ inches 57 NP 19713 - $21 / 4$ inches
(10) 57 NP 10325 -Diam., 1 in . Wal
weight, 2 oz....................... $8 \mathbf{8}$
(1) Round Type Walnut finish. Sinip-

57 MP 10326 -Diam , 2 C
57 NP 10327 -Diam., 1 in..... $10 c$
(P) Wing Typa. Walnut Finish. Ship
$6 c$
.75

57 NP 10328 -Diam. i3í in.... 8 C 57 NP $10329-$ Diam. 1 in.


All Purpose Condenser
(5) National EMC Condensers have high electrical efficiency, and reliable caliage Rating 1000 volts. Plate Shape is straight line wave length.

| Catalog Number |  | No. 01 Plates | Shpg. ${ }_{\text {Wrat }}$ | Pitiel Each |
| :---: | :---: | :---: | :---: | :---: |
| 57 NP 19105 | 150 | 9 | 2 lbs . | 2.14 |
| 57 NP 19107 | 350 | 20 | 12 lbs . | 2.80 |

## Type TMC Condensers

Same general appearance as Type EMC. Fhere peak voltage does not exceed 3000 . Aluminum plates, with buffed edges. Isolant:te insulation. Fine quality rigid frane.

| Catalog Number | Capacity | Shpe. Weight | $\begin{aligned} & \text { Prine } \\ & \text { Foth } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 57 NP19092 | 100 | 2 lbs . | \$2.97 |
| 57 NP19093 | 150 | 2 lbs . | 3.46 |
| 57 NP19095 | 100-100 | 3 lbs . | 4.95 |

Type TMS
(F) Designed for :ransmitter use in low power stages. Compact, rigid, dependsis, or on two stand-ofr insulators chas-

| Catalog Number | Csp. Mmi. | Volts | Shps Wt. | $\begin{aligned} & \text { Prise } \\ & \text { Eacin } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| $57 N P 19496$ | 100 | 1000 | 2 lbs. | \$1.65 |
| 57 NP19197 | 150 | 1000 | 2 lbs. | 1.81 |
| 57NP19:00 | 50-50 | 1000 | 2 lbs. | 2.47 |
| 57NP19801 | 100-100 | 1000 | 2 lbs. | 2.97 |
| 57NP19103 | 50 | 2000 | 2 lbs. | 2.14 |
| 57NP19*04 | 50-50 | 2000 | $2 \mathrm{lbs}$. | 2.64 |

## Typo SEH

(C) The SEH Concenser hav $270^{\circ}$ St raight.Isolantite. Two rotor bearings. Air gap .018 inch.

| Catalog Number | Capacity Mmi. | Shpg. Wt. | $\begin{aligned} & \text { Pricy } \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 57 NP 19118 | 250 | 2 lbs. | \$2.14 |
| 57 NP 19120 | 335 | 2 lbs. | 2.31 |

We have in stock many Hammarlunc, National, Cardwell and Johnson Variables which do not appear in this catalog. If the type you require is not listed on these pages, write to Sears Personal Service Department, Chicago, giving monufacturer's number of condenser wanted


National Type ST
(11) Has $180^{\circ}$ Straight-Line-Wave length plates. General construction is the same as the SEH Condenser except its overall height is less. All n:odels are double bearing. Two split-stator models are available 57 NP 19137 'ias .018 inch Air Gap; others have .026 inch Air Gap.

| Catalos Number | Cap. Mmt. | Shys. Wi. | Price fact- |
| :---: | :---: | :---: | :---: |
| 57 NP 19131 | 50 | 1 lb . | \$1.18 |
| 57 NP 19133 | $10)$ | 1 lb . | 1.48 |
| 57 NP 19135 | 150 | 2 lbs . | 1.65 |
| 57 NP 19137 | 250 | 2 lbs. | 1.98 |

## "Experimenter" Models

(J) All-brass consitruction. Bakelite insulation. Kotor has one bearing. Removable platez. Items narked ${ }^{*}$

| Catalog Number | Cap. Mmt. | Ar-Gap | Price Eacl |
| :---: | :---: | :---: | :---: |
| 57 NP $19121^{*}$ | 15 | . 045 inch | 56 c |
| 57 NP $19122^{*}$ | 25 | . 045 inch | 56 c |
| 57 NP $19123^{*}$ | 35 | . 0.55 inch | 66 c |
| 57 NP 19124 | 50 | . 017 inch | 59 c |
| 57 NP 19125 | 100 | . 017 inch | 66 c |
| 57 NP 19126 | 140 | . 017 inch | 82 c |

## Type UM

(6) Designed for ult ra-high frequency use. Smali nough for convenient mounting in shield cans Particularly useful for tunirg receivers, transmitters and exciters.
Shaft extension: at each end of the rotor permit easy ganging when used with flexible coupling. Cari be mounted by the angle foot supplied or by and spacers. Air Gap, 01:and spacers. Air (aap, . inch. Shipping weight, each.
1 pound.

| Catalog | $\begin{gathered} \text { Capp } \\ \text { Mint } \end{gathered}$ | $\begin{aligned} & \text { Price } \\ & \text { fach } \end{aligned}$ |
| :---: | :---: | :---: |
| S7NP19142 | 15 | S0.82 |
| S7NP19143 | 35 | 99 |
| 57NP19144 | 50 | 1.06 |

For Easy Torms
Soe Page 2


Hammarlund Type MEX Padder Meximum calpacity, 30 mmfs . Size 5 又 n. Shipping weight, 4 ounces. 57 NP 19498
CA Ceramic

## Pedders

For aligning tandem con-
 bronze sprung contacts. Shpg. wit., each, 8 oz.

| Catalog | $\begin{gathered} \text { Minimum } \\ \text { Copy Mmidd } \end{gathered}$ | $\begin{gathered} \text { Max } \\ \text { Cony Minid. } \end{gathered}$ | Price F Ku |
| :---: | :---: | :---: | :---: |
| 57 NP 12950 | $\square$ | 50 | c |
| 57 NP 12951 | 12 | 120 | 248 |
| 57 NP 12952 | 130 | 450 | 27 c |

## Coil-Chokes and Inductors

Powermaster Iron Core I. Fs.
(A) Ceramic base, selected India ruby mica pre-aged plates assure stability of operation. Can size $1 \%$ in. square $\times 31 / 2 \mathrm{in}$. high. Transformers for grid Frequaney I input TFA Shipping weight, each, 1 lb

| $\begin{aligned} & \text { equency } \\ & \text { K.C. } \end{aligned}$ | Input TFR Catalog No. | Prica Each | utput TFR atalog No. | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| 175 kc | 57NP10800 | 980 |  |  |
| 456 KC | $57 N P 10801$ | 98. |  |  |
| 1500 KC | 57NP10802 | \$1.18 | 57 NP10805 |  |

## Powermaster Double Tuned I. Fs.

(B) Ceramic base and selected mica dielectric. Standsize $1 \%$ in square 3 am tubes, as 6 A7, etc. Shipping weight, each, 1 pound | Fre- | Input Price | Interstate |
| :---: | :---: | :---: |
| Price Output | Price |  |



 Center-Tapped Outputs
Gatalog Number

| Froquancy KC | Catalog Number | Price Each |
| :--- | :--- | :--- |
| 175 KC | 57 NP 10830 | 70 o |
| 456 KC | 57 NP 10831 | 70 c |

## Powermaster 2-Pie High Imped. Colls

 Cover broadcast band ( $540-1750 \mathrm{KC}$ ) with antenna section capacity of tuning condenser. As specified(C) Shiolded-Round Can $1 \% \times 2 y$ in. high.| Tuning Cond'sr Antenna Coil | Price | R.F. |
| :---: | :---: | :---: | :---: | :---: | :---: |





## R. F. Chokes

(E) Insulex mounted, designed for short wave work Suitable for any circuit position. Impregnated with special R.F. lacquer. Shpg. wi., each, 4 oz

| Gatalog Number | Inductance M. H. | $\begin{gathered} \text { D. C. } \\ \text { Resistance } \end{gathered}$ | Current M. A. | Price, fach |
| :---: | :---: | :---: | :---: | :---: |
| $57 \mathrm{NP1} 10352$ | 2.5 | 30 olims | 150 | 21 c |
| $57 \mathrm{NP10353}$ | 10.0 | 73 ohms | 150 | 27 c |
| 57 NP10354 | 30.0 | 136 ohms | 125 | 32 c |
| 57NP10355 | 80.0 | 222 ohms | 12.5 | 44 e |

Pig Tail R.F. Chokes
(F) High frequency pigtail type R.F. Choke. In ance 16 ohms, capacity 150 M.A. Shpg.wt., 3 oz . 19 c


Spoce Wound R. F. Chokes
G Sirap leads. Insulex low loss form. Enameled wire. Impregnated. Shipping wt., each, 4 oz

| Catalog Number | Induclance M. H. | $\begin{gathered} \text { D.C. } \\ \text { Resistance } \end{gathered}$ | Current M. A. | Price. Each |
| :---: | :---: | :---: | :---: | :---: |
| 57NP10360 | 2.5 | 24 uhms | 150 | 24 c |
| 7NP10361 | 10.0 | 78 chme | 150 | 32 c |
| 57 NP10362 | 60.0 | 195 chms | 125 | 44 c |
| 57NP10363 | 800 | 250 ohms | 125 | 49 e |

High "Q" R. F. Chokes
(1) ICA Iron Core high "Q" R.F. chokes. High im ides maximum inductance with minimum siz

| Catalog Number | Inductance M. H. | $\begin{gathered} \text { D.C. } \\ \text { Resistance } \end{gathered}$ | $\begin{aligned} & \text { Current } \\ & \text { M. A. } \end{aligned}$ | Price, Esch |
| :---: | :---: | :---: | :---: | :---: |
| 57NP10356 | 2.5 | 30 ohms | 150 | 35 c |
| 57 NP10357 | 10.0 | 73 ohma | 150 | 42 c |
| $57 \mathrm{NP10358}$ | 300 | 136 ohnt | 125 | 48 c |
| 57NP10359 | 800 | 222 ohms | 125 | 610 |



## E. F. Johnson Hi-Q Plug-In Inductors



57 NP $10059-$ Steatite socket
Shipping weight, cach, 8 ounces.

## Rotating Coil Type

For inputs up to 350 watts. Wound on ribbed ceramic forms. Rotor link for coupling. 10, 20, 40 meter units couple into impedances as high as 600 ohms. 80, 160 meter ling coil for capacity coupled slages. Shug, wt., ea., 2 lbs.

| With Link |  | gand Maters | Less Link |  |
| :---: | :---: | :---: | :---: | :---: |
| Cataiog Number | Each |  | Catalag Number | Each |
| 57 NP 10054 | \$2.20 | 10 | 57 NP 10060 | \$1.15 |
| 57 NP 10055 | 2.32 | 20 | 57 NP 10061 | 1.23 |
| 57 NP 10056 | 2.41 | 80 | 57 NP 10062 | 1.29 |
| 57 NP 10057 | 2.50 2.59 | 80 160 | 57 NP 57 NP 10064 | 1.41 |


(A) National R175 Choke. Suitable for either parallel or series for circuits of transmitters or up to 3000 volts modulated plate supply. DC resistance, 6 ohms,
800 MA ., 2.25 MH . Dist. Capacity. 0.6 uufd. Shipping weight. 1 pound.
57 NP 19155 -Each
$\$ 1.81$
(B) National Honeycomb Coil Transminer Chakes. Universal chokes with honeycombed-type windings. Rated at 600 ma . continuously 016 amperes Isolantite core Shipping weight, each, 8 ounces.
$57 \mathrm{NP} 19298-\mathrm{R}-\mathrm{L} 52$. For 80 and 160 meter bands. $\$ 1.35$
Inductance, $4 \mathrm{~m} . \mathrm{C}$. D. resistance 10 ohms.
(C) $57 \mathrm{NP} 19300-\mathrm{R} 154 \mathrm{U}$. Same as R-154 except that it has no insulating pillar or third mounting $\$ 1.15$


## Plug-In Coils

Ribbed Bakelite forms. Space wound. For 140 Mmid. tuning condenser. Two windings, tickler and grid input Size: Diam., $1 \%$ 57 NP 18791 -Set of four 4 -prong to cover 9.5 to 217 meiers. Shipping weight, 1 pound..... \$1.29 57 NP 18792 -Set of two meters. Shpg, wt., 12 oz.99C 57 NP $18793-$ Single 4prong coil to cover 9.5 to 21 meters. Shipping
weight, 8 ounces.


TYPE OEL is End Cinked. Type OCL s Center Linked. Capacity given in
table is the total catable is the total capacity required to une to resonance at the low frequency end
of the band. 35 C of the band.


57 NP 10047 -4-prong coil form only. Shipping weight, each, 6 ounces.
57 NP 10048 - 5 -prong coil form only. Shipping weight, each, 6 ounces.

Mounts in 5 -contact tube socket. Rated at 100 W . Ideal for oscillator, low-rower amplifier stages. Ribbed ceramic forms. Holes provided tor internally mounting Johnson "J" condenser Shipping weqght, each, 6 ounces. shiping weyt, each, 6 ounces

| With Center Link |  | 8and Maters | With End Link |  |
| :---: | :---: | :---: | :---: | :---: |
| Catalog Number | Each |  | Calalog Number | Esch |
| 57 NP 10042 | 970 | 10 | 57 NP 10049 | 916 |
| 57 NP 10043 | 970 | 20 | 57 NP 10050 | 910 |
| 57 NP 10044 | $97{ }^{\circ}$ | 40 | 57 NP 10061 | 910 |
| 57 NP 10045 |  | 80 | 57 NP 10052 | $91{ }^{\circ}$ |
| 57 NP 10046 | 970 | 160 | 57 NP 10053 | 918 |

(D) National Law Frequency Oselllatar Coil. Two separate inductances, closely coupled, in an aluminum shield. Secondary inductance $6.25 \mathrm{~m} . \mathrm{h}$. tunes to $100 \mathrm{~K} . \mathrm{C}$. with .00041 Mf . condenser. Type ORR.
57 NP 19301 -Shipping weight, 6 ounces. .99c (12) National R-100 U Choke. Inductance $2 \% / \frac{1 / 2}{} \mathrm{~m} . \mathrm{h}$.; 50 dist ributed capacity 1 mmf.; D.C. resistance weight, 4 ounces rating 125 M.A. Shipping 57 NP 19303 -Type R-100 U.............39c Hove you read the notice on Page 2 regarding possible price chonges? If exploins why we cannat guarontes prices in this cotolog.
(F) National R-100 Choke. Isolantite mounting. Continuous universal winding in 4 sections. Same electrical 57 NP 19304 -Type R-100. Shps. wt., each, 40 oz. 33 C

(C) Hammarlund CH-500 Choke. Inductance $2.5 \mathrm{~m} . \mathrm{h}$. D.C. resistance 8 ohms. Distributing capacity 57 NP 19693 -Shippling weight, 8 ounces...... $\$ 1.05$
(14) Mommarlund CHK Midgot Choke. Size $1 / 1 / \mathrm{in}$. long $x / y$ in. diam. Inductance $2.1 \mathrm{~m} . \mathrm{h}$.; D.C. resistance 25 ohms,
57 NP 19694 -Shipping weight, 4 ounces....... .30 C


## Bud Air Wound

 Transmitter CoilsFor use in tank circuits where input powe- does not exceed 150 Watts. Coils, Air-Wound win enameled copper wire. Mounting bar, Alsimag 196. Hardware, nickel plated brass. Capacity given is
that required to tune at low end of that required to tune at low end of
band. Shipping weight, each. pound.


57 NP 10941 -Mounting Base. Shpg. wt., ea., 8 oz. 598 All items in this catalog available All itoms in this catalog availa
on Ensy Torms. See Page 2

##  <br> BARKER AND WILLIAMSON Inductors

## B. and W. Swinging Link Inductors

You can buy no finer apparatus for adjustable link setups. Supplied with 4 plugs to provide twin metering in the plate circuits of push pull stages. all coupled direct

| $\begin{aligned} & \text { 8and } \\ & \text { (Meter) } \end{aligned}$ | Typo BVL 100 Wates |  | (B) | Type TVL (4) |  |  | Typ HDVL 1 Kilowatt |  | (4) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catalog Number | Shpg. Wi. | Price | Cotalos Number | Shps. Wt. | Price | Catalog Number | Shipping Weight | Pric |
| 160 | 57NP7650 | 12 uz . | \$2.10 | 57NP7656 | 1 lb | \$2.25 | 57NP7661 | $21 \mathrm{lbs.4} \mathrm{uz}$ | \$5.25 |
| 80 | 57 NP7651 | $120 z$. | 1.90 | 57 NP7657 | 1 lb | 2.15 | 57 NP7662 | 2 lbs. 4 oz. | 4.50 |
| 40 | 57 P7852 | 1202. | 1.65 | 57NP7658 | 11 b | 1.90 |  | $2 \mathrm{lbs} 4 \mathrm{c}_{2} \mathrm{uz}^{2}$ | 4.00 3 |
| 20 | 57 NP7653 | 12 oz | 1.45 | 57NP7659 | 1 lb | 1.65 | 57NP7684 | 2 lbs. 402. | 3.75 |
| 10 | 57NP7654 | 12 uz . | 1.40 | 57 NP7660 | 11 | 1.60 | 7 NP7665 | 2 lbs. 40 oz . | 3.25 |

57 NP 7666 -BVL Base, Swing Link and Jack Bar Shipping weight, 12 ounces.
$\$ 2.50$
57 NP 7667 -TVL, Base, Link and Jack Bar. Shipping weight, 2 lbs.. $\$ 4.00$ 57 NP 7668 -HDVL Base, Link and Jack Bar. Shipping weight, 4 lbs. 5.00 Model HDA. High impedance antenna matching coil for HDVL link assemblies With three inductance clips and alsinag mounting base. 57 NP 7740 -Shipping weight, 1 pound 4 ounces.
57 NP 7741 - Model TA high impedance antenna matching coil for 250 watt or 100 watt link assemblies. Shpg. wt.. 1 lb .
. $\$ 4.00$
1.75

Barker and Williamson Plug-in Types
All coils are center tapped in case you want to use them that way. A complete selection of


| Types B and BL Rating 100 Watts |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 160 | 11 l | 157NP7669 | \$1.75 | 57NP7674 | \$2.50 | 57 NP7679 | 2.50 | 78.0 | 110 |  |  |  |
| 80 | 1 lb . | 57NP7670 | 1.55 | 57NP7675 | 2.30 | 57 NP7880 | 2.30 | 39.0 | 52 | 16 | 2.5 | 31\% |
| 40 | 1 lb . | 57 NP7671 | 1.30 | 57 NP7676 | 2.05 | 57NP7681 | 2.05 | 120 | 43 | 14 | 20 | $31 /$ |
| 20 | 1 b | STNP7672 | 1.05 | 57 NP7877 | 1.80 | 57NP7882 | 1.80 | 3.0 | 40 | 14 | 2.0 | 3 |
| 10 | 1110 | S7NP7673! | 1.00 | 57 NP7678 | 1.75 | 57 NP7683 | 1.75 | 1.1 | 28 | 12 | 2.0 |  |


| Typen BX and BXL Aating 250 Watts |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 160 | ${ }^{1} 1 \mathrm{lb} .4 \mathrm{cz} .57 \mathrm{NP7684}$ | \$1.80 | 157NP7689 | 2.80 | 57 NP7694 | \$2.80 | 84 |  |  |  |  |
| 80 | 11b. 4 iz. 57NP7685 | 1.60 | 57 NP7690 | 2.60 | 57NP7695 | 2.80 | 37.0 | 54 | 14 | 3.0 | 4 |
| 40 | 1 lb. 4 uz . 57 NP 7686 | 1.35 | 57NP ${ }^{\text {6 } 691}$ | 2.35 | 57 NP7696 | 2.35 | 10.0 | 51 | 14 | 2.5 | 4 |
| 20 | 1 lb .4 cz .57 NP 7687 | 1.10 | 57NP7692 | 2.10 | 57NP7697 | 2.10 | 2.8 | 45 | 14 | 20 | 4 |
| 10 | $1 \mathrm{lb}+\mathrm{toz} .157 \mathrm{NP} 7688$ | 1.05 | 57 NP7693 | 2.05 | 57NP7898 | 2.05 | 1.0 | 35 | 12 | 2.0 | 4 |


| Types T and TL Rating 500 Watts |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 160 | $1{ }^{1} 1 \mathrm{~b}$ 4 4 zz E7NP7700 | 81.85 | 57NPT705 | \$2.85 | 57NP7710\| | \$2.85 | 740 | 115 | 12 | 50 | 5 |
| 80 | 1 lb .4 uz . 67 NP7701 |  | S7NP7706 | 2.65 | 57 NP7711 | 2.65 | 35.0 | 60 | 12 |  | 5 |
| 40 | 1 lb 4 oz . $57 \mathrm{NP7702}$ |  | 57NP7707 | 2.40 | 57NP7712 | 2.40 | 13.5 | 38 | 12 |  | 5 |
| 20 10 |  |  | 57NP7708 | 2.15 2.10 | 57NP7713 | 2.15 2.10 | 4.3 1.3 | 30 25 | 12 | 2.5 5.0 | 5 |

## B. and W. 25 and 75-Watt Coils

25-Wof "Bobies." Tuning Capacities required at low end of band: All 160 meter coils. $100 \mathrm{Mmfd} ; 80,40,20$ and 10 plain and
 mum plate potential 350 volts. Shpg. wt., each, 10 oz . 57 NP 17730 -Not Tapped. State band wanted. 57 NP 177332 End Linkedk Siare band wanted... 57 NP 17733 —Center linked. State band wented.
75-Watt "Juniors" Tuning Capacities required al tand. All uniors." Tuning Capacities required at low end of band: All $160 \mathrm{M}-100 \mathrm{Mmfd}$; All $80 \mathrm{M}-50 \mathrm{Mmfd}$; All $40 \mathrm{M}, 20 \mathrm{M}$,
and $10 \mathrm{M}-25 \mathrm{Mmfd}$. Maximum plate potential 850 volts. Siate and wate Mmfd. Maximum plate potential 850 volts. State
bond wanted. Shipping weight, 1 pound. 57 NP 10950 -End Linked.
57 NP 10951 -Center Linked and Center Tapped.............. 1.00
57 NP 10952 -Variable Center Linked, Center Tapped... 1.00
$\$ 1.00$


## Accessories for B. and W. Coils

 (A) Jock Bort. Shipping weight, each, 8 ounces.

(B) Plug Bars. Shipping weight, each, 6 ounces 57 AP 17758 -FWr T-TL-TVL Coils.
57 NP 17759 -For B- Md BNC Coils
57 NP 17760 For B-BI-BVL Coils.
(C) Staalite Bushings. Shipping weight, 3 ounces
(C) 57 NP 17747 Diam. $1 / 2$ in. Lengh \% in
(D) 5 feonite Post Insulotors. Diameter $1 / 2$-in.

57 NP 17751 -Length $1 / 4 \mathrm{in}$. Shpg. wi., $402 \ldots . .$.
(E) inductance Clip.
g 7 NP 17756 - $h$ hipping weight, each, 2 ounces

(F) Hammarlund Transmitting Cail Form. Made of low loss XP-53. Winding diameter, $21 / 4$ inches; lensth over all, $31 / 2$ inches, exclusive of prongs. Mounting brackets included. Shpg. wt., each, 8 oz. 57 NP 19669 -TCF-4. 4 prong 57 NP $19670-$ TCF-5. 5 prong
(G) Hommarlund Receiving coil form made of XP-53 Has a special threaded molded inside to permi mounting a Hammarlund APC air padding condenser Diameter, $1 / / 2$ inches. Length, $2 \%$ inches. Shipping weight, each, 4 ounces.
57 NP 19675-SWF-4. 4 prons
57 NP 19676-SWF-5. 5 prong
57 NP 19677 -SWF-6. 6 prong
(16) ICA Plug-in Cail Forms. Low-lose ceramic for use in receivers or low-power stages of transmitters. Ribbed type with side slot and holes for easy winding. $1 / / 2$ inch diameter. Available with either four or live prongs. Shipping weight, each, 6 ounces. 57 NP 10346 - 4 Prong. Each 57 NP 10347-5 Prong. Each.
(J) Hommarlund Grip Tep Forms. The low loss and stability of these forms of extruded Isolantite afford efficient high irequency performance. Have black enameled handle. Numerous loles. Diameter, $11 / 2$ inches, length $21 / 2$ inches exclusive of orongs. Shipping 57 NP 19673 -CF-5. 5 prons.


## Bud 100-Waft Band

 Switch AssemblyFor operation on 10, 20, 40, 80, For operation on 10, $20,40,80$, 5 coil assemhiy, designed for use in push-pull plate circuits, or in push-puld plate circuits, or plate neutralization is used. Coils in assembly. center-tapped and center linked. Either single section $100-\mathrm{mmid}$. condenser or dual section $200-\mathrm{mmfd}$. condenser is required to iune all bands. signed for use in single-ended pentode plate circtit s and single-ended grid circuits. End-linked. $100-\mathrm{mmfd}$. condenser is required to tune all bands.
Mounting area 7 in . wide $\times 4 \mathrm{in}$. high $\times 4 / 1 / 2 \mathrm{in}$. deep. Installation instructions and dial plate furnished. Shpg. wt., each, 4 lbs 57 NP 10900 -XCS-1
$\$ 6.47$ 57 NP 10901 -XCS-2. Not illustrated


## Bakelite

## Tubing

Smooth polished material having 1 is inch side wall. The standard for winding your own coils Available in either three inch or six inch length. See page 29 for Short Wave Coil data book that will give you all information needed for coil winding. Shpg wt. each, 12 oz.

| Diam. inches | Cotalog Number | $\begin{aligned} & \text { 3-inch } \\ & \text { Length } \end{aligned}$ | 6 -inch Length |
| :---: | :---: | :---: | :---: |
| 1 | 57 NP 13225 | 260 | 50 c |
| $11 / 2$ | 57 NP 13226 | 26 c | 50 c |
| 2 | 57 NP 13227 | 260 | 50. |
| $21 / 2$ | 57 NP 13228 | $26{ }^{\circ}$ | 500 |
| 3 | 57 NP 13229 | 26 c | 50. |

Smoll Ribbed Type Coll Form. 1 \%-inch diameter and $21 / 4$ inches high. Moulded ribs and low. loss winding. Available with 4, 5 or 6 prongs. Shipping weight, each, 2 ounces.

Rim Type Coil Form. Low loss, high dielectric strength. Moulded rim 2316 inches righ. Available with 4,5 or 6 prongs. Shipping weight, each, 2 ounces.

| Prongs | (1) 5 mall Rlbbed Typo |  | (b) Rim Type |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Cotalog Number | Prico Each | Catalog Numbar | $\begin{aligned} & \text { Price } \\ & \text { Esech } \end{aligned}$ |
| 4 5 6 | 57 NP 10364 57 NP 10365 57 NP 10366 | 16 c 15 c 16 c | 67 NP 10367 57 NP 10368 57 NP 10369 | 120 120 120 |

National Plug-in Coils
All will tune with 30 mmi . condenser. Specity End-Link, Center-link or swing-Link. Swing-link type not available for 5 and 160 -meter bands. Plug-base included; socket and insulators are extra. Shipping weight, each, 1 lb.
5 7NP19310-160-M.Coil90c $57 N P 19273$ - 80 M Coil $67 N P 19274-40-\mathrm{M}$. Coil. 90 c 7NP19274- 40-M. Coil.90c
 $57 N P 19276-10-\mathrm{M}$. Coil.

# STANEOR Broadcast Qualify Transformers 

## Poly－Pedance ．．．All Purpose Transformers

With ratios far present and future needs．Carrect impedance always possible．Ratios are conveniently changed．
Poly－Pedance Driver Transformers

| Calalog Number | $\left.\begin{array}{\|c\|c\|} \hline \text { in } \\ \text { in } \\ \text { Walts } \end{array} \right\rvert\,$ | $\left\lvert\, \begin{gathered} \text { Pri. } \\ \text { M.A. } \\ \text { Per Side } \end{gathered}\right.$ | $\begin{gathered} \text { RATIO } \\ \text { Primary to } \\ 1 / 2 \text { Secondary } \end{gathered}$ | Mounting Dimensions，In HI．Wd Depth | $\begin{gathered} \text { Type } \\ \text { Mount. } \\ \text { ing } \end{gathered}$ | Shpe Wt | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $57 \times 18000$ | 15 | 6 | $\mid 1.25: 1,1.4: 1,1.61$ | $31 / 3 \quad 2 \%$ 3 | $1)^{*}$ | 3 lus． | $\overline{54.80}$ |
| $\overline{57 N P 18001 ~}$ | 15 | 60 | $\left\lvert\, \begin{aligned} & 2.6: 1,3: 1,3.2: 1, ~ \\ & 3.4: 1,4: 1,4.5: 1, ~ 5: 1\end{aligned}\right.$ | $31 /\left.\left.2\right\|^{25 / 8}\right\|^{3 / 1 / 4}$ | 1）＊ | 3 Ibs． | 4.80 |

## Poly－Pedance Modulation Transformers

| Catalog <br> Number |  |  |  |  | 0 <br> Dime |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ［ 57 NP 18007 c |  |  |  |  |  |  |  |  |  |  |  |

Poly－Pedance Line Drivers

| Catalog Number | Cap.Watts | RATIO <br> Primary to $1 / 2$ Secondary | Mounting Dimensions，Inches |  |  | Type Mount－ ing | Shipping Weight | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Hi． | Wd． | Depth |  |  |  |
| 57 NP 18010 | 15 | $\begin{array}{llll} 1: 0.75, & 1: 0.85, & 1: 1, & 1: 1.25, \\ 1: 45, & 1: 75, & 1: 2, & 1: 25,25, \end{array}$ | －3／6 | 2\％ | $31 / 2$ | I）＊ | 3 lbs ． | \＄4．41 |


Universal Power Transformers

| Cateo | ${ }_{\text {No }}^{\text {Not }}$ Tubs |  |  | Moution |  | $\underset{\substack{\text { Price } \\ \text { bach }}}{ }$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | （tio |  |  |  | $\stackrel{+}{6}$ | （ 2.79 |



| Catas | Outout |  | come |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57MP10139 | Sinle |  | 4 |  |  | $\frac{1}{1}$ | 51.09 |
| 57 NP 10140 | Universalas | 1．500，zi．000 4.4 .000 | 10 | Q | 14\％$\times 2 \%$ \％xis | 1 | 1.09 |
| 57NP10141 |  | Stomo | 8 |  |  | 1 | 1.09 |
|  | sinile ores |  | 20 | J | $21,16 \times 3 \%$ x $21 \%$ | 2 | 2.06 |

## Output Transformers to Line and Voice Coil

| Catalog Number | Dutput Tubes | Max． Audio Watts | $\begin{aligned} & \text { Type } \\ & \text { Mts } \end{aligned}$ | Dimensions（in） Mt．Width Depth | Shpg． Wt． Lbs． | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 57 \text { NP10146 } \\ & 57 \text { NP10149 } \end{aligned}$ | Primary 2,000 ohms，Sec． 4 ohms． <br> Primary 7,000 ohms．Sec． $0,7,1,1.4$ ohms． | 5 | A | 15／16 $\times 23 \times 11 / 16$ | 1 | \＄0．68 |
| 57 NP10158 | Prinuary $10,000 \mathrm{ohms}$ ．Sec． $2,28,4$ ohms． Primary 25,000 ohms．Sec． 4 ohms． | 5 5 | A | $\begin{aligned} & 1 \% \times 2 \% \times 11 / 2 \\ & 1 \% \times 27 / 16 \times 15 / 16 \end{aligned}$ | 1 | .85 .94 |

[^1]
## Plate Transformers

Enservatively rated to supply maximum rated errent under continuous operation，D．C．

| Catalog Number | o．C． Voltage Atter fitter | Taps | $\begin{aligned} & \text { Current } \\ & \text { in } \\ & \text { M.A. } \end{aligned}$ | Type Mount ing | Mounting Dimensions |  |  | Shpg．Wt． | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Height | Width | Oepth |  |  |
| $57 \mathrm{NP} \mathrm{P}^{-18017}$ | 400 |  | 250 | 11 |  | 玡 ${ }^{\text {in }}$ | 3 m in． | 9 Itrs． | \＄5．17 |
| 57 NP 018020 | 750 | 601）－4011 | 300 | 11 | $4 \% \mathrm{in}$ ． | 33411. | $51 / 2 \mathrm{in}$ ． | $16 \mathrm{lls}$. | 8.14 |
| 57 NP 018021 | 1000 | 750 | 250 | 1） | 4\％in． | 3\％in | 5\％／8i1． | 17 lbs | 9.26 |
| 57 NP 018022 | 1010） | 750 | S09） | $f$ | 7 in ． | 61／a in． | 万7／in． | 32 llss | 15.58 |
| 57 NP 018023 | 1250 | 1000 | 300 | 1 | 7 in ． | $71 / 8$. | $61 / 2 \mathrm{in}$ ． | 26 lbs． | 14.40 |
| 57 NP 018025 | 1560 | 1250 | 300 | 1 | 7 in． | $7 \%$ in． | $6{ }^{3} 8 \mathrm{in}$ ． | ${ }^{3} 0$ Jhes． | 15.88 |
| 57 NP018030 | 2000 | 1750 | 300 | F | 7 in ． | $71 / \mathrm{in}$ ． | 7 in. | 32 tbs | 18.23 |
| 57 NP018031 | 250 | 2000 | 300 | 1 | 7 in ． | $71 / \mathrm{in}$ ． | 7\％$/ 6 \mathrm{in}$ ． | 4.3 lbs. | 24.11 |

Get all the equipment you need，now！Only o little eoch month on Eosy Terms．See Page 2 for detalls


Filament Transformers－Single Secondary

| Catalog Number | Primary Voltage | Secondary |  | Type Mount． ing | Mounting Dimensions， Irches |  |  | Insulation in Volts | Shpg．Wi． |  | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Volts | Amp． |  | Ht， |  | Depth |  | LD | Oz． |  |
| 57 NP 18052 | 115 | 25 | 525 | N | 27016 | $21 / 2$ | 23 36 | 1.650 | 2 |  | \＄1．47 |
| 57 NP $1805{ }^{3}$ | 115 | 2.5 | 10 | 13 | $31 / 8$ | $21 / 2$ | $21 / 6$ | 10.000 | 2 | 8 | 2.41 |
| 57 NP 18054 | 115 | 5 | 3 | ${ }_{13}^{13}$ | 31 |  | $21 / 3$ | 1.650 | 2 |  | 1.65 |
| 57 NP 18055 | 115 | 5 | 6 | 13 | 31.0 | $21 / 2$ | 23，4 | 2.500 | 2 | 8 | 2.06 |
| 57 NP 18062 | 115 | 63 | 3 | 13 | $31 / 8$ | $21 / 2$ | 21／4 | 1.650 | 2 |  | 1.74 |
| 57 NP 18063 | 115 | 6.3 | 6 | 13 | $31 / 1$ | $21 / 2$ | $23 \%$ | 1.650 |  | 8 | 2.06 |
| 57 NP 18064 | 11.5 | 7.5 | 4 | $\stackrel{13}{1}$ | 31\％ | $21 / 2$ | $21 / 2$ | 2.500 | 2 | 8 | 1.76 |
| 57 NP 18065 | 115 | 7.5 | 8 | N | 3\％ | 31／4 | $31 / 2$ | 2.500 | 4 |  | 2.79 |
| 57 NP 18068 | 115 | 10 | 4 | 13 | $31 / 2$ | 3 | 2 $7 / 3$ | 2.500 | 3 |  | 2.23 |

## Filament Transformers ．．．Multiple Secondary

| Catalog Number | Primary Voltage | Secondary |  | TypeMount Mount ing | $\begin{gathered} \text { Moun!ing Dimensions } \\ \text { Inches } \end{gathered}$ |  |  | Insulation Voltage | Shipg WI． | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | volls | Amp． |  | Ht． | Wd． | Depth |  |  |  |
| 57 NP 18073 | 115 | 2.58 | 5.0 4.0 | B | $31 / 2$ | 3 | 3 | 2.000 | 4 lbs. | \＄2．47 |
| 57 NP 18074 | $105-11.5$ | 5．19 6.3 C゙T | 3.0 60 | ${ }^{\circ}$ | 3\％ | 31／4 | $31 / 4$ | 2，500 | 5 Ibs． | 3.53 |
| $\overline{57 N P 18075}$ | 115 | 6．3 7.5 | 3.0 40 | B | $31 / 2$ | 3 | 3 | 2，500 | 4 lbs． | 2.47 |

Filter Chokes

| Catalog Number | Inductance in | Maximum Curfent in M．A． | O．C． <br> Resistance in Ohms | Volts Insula－ tion | Type Mount－ ing | MountingDimensions，Inches |  |  | Shag WI．， | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Henries |  |  |  |  | Ht． | － | $\overline{\text { Depth }}$ |  |  |
| 57 NP 18042 | 25 | 140 | 160 | 3000 | S | 31／6 | －25 | 2\％ | 5 Lus． | \＄2．23 |
| 57 NP 18043 | 20 | 175 | 100 | 3000 | ¢ | 314 | 2\％ | $2 \%$ | 3 lhes． | 2.12 |
| 57 NP 18044 | 15 | 200 | 80 | 3000 | C | $31 / 2$ | $21 \% 6$ | $31 / 8$ | 4 lbs． | 2.76 |
| 57 NP 18045 | 15 | 250 | 60 | 3000 | C | 312 | 21516 | $31 / 2$ | 5 lbs． | 3.23 |
| 57 NP 18046 | 12 | 300 | 80 | 5000 | 13 | 4\％ | 3\％ | 3\％ | ${ }^{4}$ Ibs． | 5.09 |
| 57 NPO 18048 | 3 | 500 | 65 | 5000 | N | 4 | 6， 10 | 57／9 | 19 lbs． | 11.11 |
| 57 NP 18050 | 13 | 300 | 80 | 3000 | N | 41／2 | 31／4 | 31／2 | 9 Lhss． | 3.70 |
| 57 NP－18083 | 30 | 80 | 350 | 1650 | c | 31／80 | 2\％ | 2\％ | 3 Its． | 1.82 |

Filter Chokes


Swinging Chokes

| Calalog Number | Induc． <br> tance in <br> Henries | Maximum Current in M．A． | D．C． Resistance in Ohms | volts Insula－ tion | Type Mount． ing | Mounting Dimensions Inches |  |  | ｜Shpg．Wt． | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | MP | Wd． | Depth |  |  |
| 57 NP 18033 | 8－40 | 175 | 100 | 200 | ！ | $31 / 6$ | 25 | 25 | 3 1tss． | \＄2．23 |
| 57 NP 18034 | 8 8－30 | 200 | 80 | 2000 | ¢ | $31 / 3$ | 21516 | $31 / 8$ | 4 \％s． | 2.76 |
| 57 NP 18035 | 8－30 | 250 | 60 | 3000 | c | ． $11 / 2$ | 21316 | $31 / 2$ | 5 ibs． | 3.23 |
| 57 NP 18036 | $8-25$ | 300 | 80 | S006） | I） | 4\％ | $37 / 8$ | 3\％ | 9 lbs． | 5.09 |
| 57 NP018038 | $5-20$ | 500 | 65 | 5000 | － | \％ | $61 / 6$ | 57 | 19 lbs ． | 11.11 |
| 57 NP 18039 | 5－25 | 200 | 120 | 3015 | N | 33\％ | $31 /$ | $31 / 4$ | 5 lbs． | 2.94 |
| 57 NP 18040 | 8－30 | 250 | 60 | 3000 | ${ }_{3}$ | $31 / 2$ | 21916 | －31／2 | 4 lbs ． | 2.94 |
| 57 NP 18041 | 5－25 | ． 300 | 80 | 3000 | N | 41／2 | 37／4 | ＋ $31 / 2$ | 9 lbs． | 3.70 |

## Microphone Transformers



# oincie Adiustable and Fixed Vitreous Resistors Adjustable and Fixe Vitreous Resistors 

## Centralab Radiohms

Standard kadiohms without tap. Wall Type Resistor hiks
inner circumicrence of moted baketite case. Exclusive nonthminum shati extends $3 \%$ inches frotn case; minched deep. Sivit for pushomor set screw knoh. See resistance chart below.

| Centralab | Numbar |  |  |
| :---: | :---: | :---: | :---: |
| Without Switch | With Swith | Ohms | Usual Circuit Location |
| $72-118$ | 62.118 | 5100 | Voltage livider |
| 72-107 | 62-107 | $1.040)$ | Voltage Ibivider |
| 72-101 | 62.101 | 2.0049 | Voltage livider |
| $72-108$ $72-110$ | 62-108 | 5.000 | Vohtage Divider |
| 713-204 | 52-204 | 5.401 | Autenna Shust |
| 72-114 | 62-114 | 10.009 | Voltage livoider |
| 70-20.5 | 52-20.5 | 11,000 | Antenna C.Bias Two Tubes |
| 72-10) | 62-1100 | 10.040 | Ambenna Shunt |
| 72-111 | $62-111$ | 25.000 | Voltage 1)ivider |
| 72-103 | 62-103 | 50,000 | Voltage Divicler |
| 72-117 | $62-117$ | 50.000 | Tone (ameral |
| 72-104 | $62-104$ $62-121$ | 100.000 250.000 | Voltage bivider |
| 72-105 | 62-10.5 | 500,000 | A. F. Grich or Tone |
| 72-106 | 62-106 | 500.000 | Voltage livider |
| 70-20.3 | 52-20.3 | 500.000 | Series in K. F.plates |
| 72-140 | 62.140 | 750.000 | A. F. Grid or Tone |
| 72.116 | 62-116 | 1 Mes. | A. F. Grid or Tone |

57 NP 17450 - Withuut Switch. Sive Centralab number 59C
also. Shipping weight, etach, 5 ounces ....
57 NP 17451 - With Switch, Give Centralab mumber 88 c
also. Shipping weight, each, ounces...................
Tapped Standard Radiohm

| Centralab Number |  | Resistance |
| :---: | :---: | :---: |
| Without Switeh | With Swilch |  |
| 72-138 | $62-138$ | 250,100 |
| 72.134 | 62-134 | 500,000 |
| $72-135$ $72-142$ | $\begin{aligned} & 62-135 \\ & 62-142 \end{aligned}$ | ${ }_{2}{ }^{1}$ Meg |

57 NP 17444 - Without Switch. Give Centralab number 88 C



Centralab Fixed Resistors
center core of resistance matenial is surrounded by a denase against humidity. Recanse resistance is mall in diameter and uniformily distrbined or entire lengeh. Centralabs sperifi

(C) Resistors with Radial Leads (Shown at upper lefi). State 57 NP $18710-5.5$-Watt. Each.. . . . . . . . . 7 e 57 NP 18711-1-Watt. Each. 57 NP 18712-2-Watt. Each.

Ohmite C. T. Resistors

| $\begin{gathered} \text { Onms } \\ \text { Ressit- } \\ \text { emel } \end{gathered}$ | $\begin{aligned} & \text { Far Hater or } \\ & \text { Filament } \\ & \text { Valtage Up to } \end{aligned}$ |  | ${ }_{\substack{\text { Price } \\ \text { Efen }}}$ |
| :---: | :---: | :---: | :---: |
| $\qquad$ Wirewaft-I -Wert ping weight, each, 3 uances. |  |  |  |
| 20 50 100 | 2.5 5.0 8.3 | 44 | 218 210 210 |
| (c) <br> Brown Bevil- 10 Wast <br> 57 NP 18714 -State resistance wanted. Ship |  |  |  |
| $\begin{array}{r} 20 \\ \substack{20 \\ \hline \\ \hline 0 \\ \hline 0 \\ \hline} \end{array}$ | $\begin{array}{r} 7.5 \\ 10 . \\ 10.0 \\ \hline \end{array}$ |  | ${ }_{\text {c }}$ |

## R. F. Plate Choke <br> (G) Rated at 1,000 , nasi For 5 peter ${ }^{4}$ mateur band ofthme slupoing wright $\mathrm{s}^{\text {unnces }}$ 57 NP 18715 -Each 150



| Cstalog Number | $\begin{array}{\|l\|l} 07 \mathrm{~ms} \\ \text { Resist } \\ \text { Ance } \end{array}$ | Price Each | Catalog Number | Ohms Resist. ance | $\begin{aligned} & \text { Price } \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 57 NP19501 | 2 | 44 c | 57NP19515 | 1.000 | 440 |
| 57NP19502 | 3 | 44 c | 57NP19516 | 1,500 | 44 c |
| 57 NP19503 | 5 | 44c | 57NP19517 | 2.000 | 44 c |
| 57 NP195C5 | 10 | 44c | 57NP19518 | 2,500 | 44 c |
| S7NP19509 | 50 | 44 c | 57NP19519 | 3,000 | 44 c |
| 57 NP19511 | 300 | 44 c | 57NP19520 | 5.000 | 44 c |
| 57 NP19512 | 100 | 44 c | 57NP19521 | 7,500 | 44 c |
| 57 NP195*3 | 540 | 44c | 57NP19522 | 10,000 | 44 c |
| 57NP19512 | 750 | 44 c | .. . ..... |  |  |

## 25 Watts



## 50 Watts



| Calalog Number | 1 hmm | $\begin{aligned} & \text { Prke } \\ & \text { Each } \end{aligned}$ | Calalog Number | Ohms | Price Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 37NP19545 | $5 \overline{0}$ | 88. | 57NP19553 | 15,000) | $\$ 0.9$ |
| 57NP19547 | 1,500 | 88 c | 57NP19554 | 20,000 | . 97 |
| 57 NP19549 | 2,500 | 880 | 57NP19555 | 25,000 |  |
| 57 NP19500 | 5,000 | 88c | 57NP19556 | 50,000 | . 12 |
| 57NP19551 | 7.500 | 97 | 57NP19557 | :00,000 | 29 |


 wanted iromabovolist. Shpg, wt., each, 207 IOC 57 NP 10751-1-Watt. Each

## Ohmite Dividohm Vitreous Resistors 10 Watts <br> 75 Watts

(B) Complete with brackets. Size $6 x^{4} / \mathcal{S}_{6}$ inch. Monnting

| Catalog Number | Ohms | Price Each | Catalog Number | Ohmes | $\begin{aligned} & \text { Price } \\ & \text { Each } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| S7NP19563 | 501 | \$1.15 | 57NP19570 | 10.000 | \$1.29 |
| S7NP1956i4 | 1,000 | 1.15 | 57NP19571 | 15,000 | 1.29 |
| 57 NP1956i | 2.500 |  | 57NP19573 | 25.050 | 1.29 |
| 57NP19568 | 5,000 | 1.15 | S7NP19574 | 50,050 | 1.47 |

## 100 Watts



| Catalog | Onms | Price |  | Onms | ${ }_{\text {Price }}^{\substack{\text { Pex }}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \overline{10,000} \\ & \text { 25: } 5000 \end{aligned}$ | 51.47 | 57NP195888 | - 75 | ${ }^{\text {S1.76 }}$ |

## 200 Watts

(B) Furnished with brackets. Size $101 / 2 x 11 / 4$ inches

| Cstalog Number | Ohms | Price Each | Cataloe Number | hms | $\begin{aligned} & \text { Price } \\ & \text { Exch } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 20 (100) | \$1.94 | 57NP19601 | $50,000$ |  |
| S7NP1959\% S7MP19600 | 20,1000 | 2.26 2.26 | 57NP19602 <br> 57 NP19603 | $\begin{array}{r} 75,000 \\ 100,400 \end{array}$ | 2.26 2.26 |

## Adjustable Lugs

A With serew head. For use on Dividohin Resistors.

| Diametar Inches | Catalog Number | Price Each |
| :---: | :---: | :---: |
| $\begin{aligned} & 11 / 68 \\ & 11 / 4 \end{aligned}$ | $\begin{aligned} & 57 \text { NP } 18732 \\ & 57 \text { NP } 18733 \\ & 57 \mathrm{NP} 18734 \end{aligned}$ | 60 90 90 |

## OHMITE

Brown Devils



Vitreous Wire Wound Resistors Porcelain core. in-wath units are $1 \% x \%$ inch. 20 -watt $57 \mathrm{NP} 18721-10$-wat units. Specify resi, tance $\mathbf{2 6 C}$ Eacit ( 12.000 ohtne up) 57 NP 18722-20-watt units available in resistances inarked toy an asterisk (*) in table below. Specify 4 (C 57 NP 18723-20-watt unitg of 21,000; 25.000; 30,000; Each ... . . .... ..... ....... . ........ SOC

| tham | Ohm 3 | Ohms | Ohms | Onms |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 35 | 450 | 1.750* | 8.000 |
| 2 | 40 | 5006 | 2,000* | 9.000 |
| 3 | $50^{*}$ | 600 | 2.250 | 10.000 |
| 4 | 75. | 700. | $2.500 *$ | 12.000 |
| ${ }_{7} 5$ | $100^{\circ}$ | $750{ }^{\circ}$ | $3.000{ }^{\circ}$ | 12,500 |
| 7.5 | 125 | 800 | 3.500 | 14.300 |
| $\therefore 0$ | $150{ }^{\circ}$ | 900 | $4.000^{*}$ | $15.000{ }^{\circ}$ |
| 12 | 200 | $1.000{ }^{\circ}$ | 4.500 | 16,000 |
| 1.5 | $250{ }^{\circ}$ | 1.100 | 5,000* | 17,500 |
| 20 | 300 | 1.200 | 6.000 | 18,000 |
| 25 | 350 | 1.250* | 3.000 | 20.000 |
| 30 | 400 | 1.500* | 7.500 | 25.000 |

Kit of 24 Carbon Resistors



## CORNELL-DUBILIER Capacitors

Transmitting Capacitors
(A) C-D Dykanol Transmitting Filter Capacilors Type rJu. Dependable units for amateur, broadcast and commercial transmitters. Compact, lightweight, safely-rated. Universal mounting clamp, well-insulated terminals. fireproof.

| $\begin{array}{c}\text { Cataloe } \\ \text { Number }\end{array}$ | $\begin{array}{c}\text { Cap. } \\ \text { Mid. }\end{array}$ | $\begin{array}{c}\text { Size. Inches } \\ \text { Length Width Thick }\end{array}$ | $\begin{array}{c}\text { Prices } \\ \text { Each }\end{array}$ |
| :--- | :--- | :--- | :--- | 1000 Volts D.C. 660 pme Rect. A.C. Slipg. wt., 2 Ibs

 1500 Volti D.C. 1000 rms Rect. A.C. Shpg. wi., 3 Ibs.
 2000 Volts D.C. 1500 rm Rect. A.C. Shpe. wet. 4 Ibs.
 2500 Volts D.C. 1800 pms Rect. A.C. Shing.wt., 0 ths


## Type TQ Dykanol Units

(B) Equipped with small insulated terminals and Seldom has the amateur been offered such a fine line of D-X transmitting capacitors at such low prices!

| Catalog Number | Capacity Mid. | $\begin{gathered} \text { Size, Inches } \\ \text { Length, Oiam. } \end{gathered}$ | Price Each |
| :---: | :---: | :---: | :---: |
| 1000 Voles O.C. Shipping weight, 2 pounds |  |  |  |
| $\begin{aligned} & 57 \text { NP } 18611 \\ & 57 N P 18612 \\ & 57 \text { NP } 18613 \end{aligned}$ | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ |  | $\begin{array}{r} \$ 1.98 \\ 2.70 \\ 3.42 \end{array}$ |
| 1500 Volts D.C. <br> 57 NP 18615 | Shipping weight. 3 pounds$213 \% \times 21 \$ 3.42$ |  |  |
| 2000 Volts D.C. | Shipping weight. 4 pounds |  |  |
| 57 NP 18617 | 2 | $4 / 4 \times 2$ | \$3.60 |

## Tubular Electrolytics

(C) Extremely small, handy to use. Completely eliminates exact duplicate replacement capacitors. Polarity is clearly indicated on a protective
varnished cardboard sleeve fitted over aluminum cartridge. Iermetically sealed. Shipping weight, each. 4 ounces.

| Catalog <br> Number | Capacity MId. | $\left\|\begin{array}{l}\text { Size, Inches } \\ \text { Length Width }\end{array}\right\|$ | Prict Each |
| :---: | :---: | :---: | :---: |
| 45C Volte D.C. |  |  |  |
| 57 NP 18635 57 NP 18636 | $\begin{aligned} & 4 \\ & 8 \end{aligned}$ | $1316 x$ 210 | 42 c 45 c |
| 57 NP 18637 | 12 | $2 \mathrm{x} \times \mathrm{x}$ | $54{ }^{\circ}$ |
| 57 NP 18638 | 16 | $21 \% \times$ | 660 |
| 57 NP 18639 | 20 | $21 / 2 \times 1$ | 72 c |
| 250 Volts D.C. |  |  |  |
| 57 NP 18645 | 8 | 196x ${ }^{6}$ | 360 |
| 57 NP 18646 | 12 | $21 / 8$ | 480 |
| 57 NP 18647 57 NP 18648 | 16 | 2 $21 / 8 \times$ x | 54 c 80 c |
| 150 Voles D.C. |  |  |  |
|  |  |  |  |
| 57 NP 18650 | 8 | 136x \% | 30 c |
| 57 NP 18651 | 8 | $136 \times$ | 33 c |
| 57 NP 18652 | 12 | 1918 $\times$ | 368 |
| 57 NP 18653 57 NP 18654 | $1{ }^{16}$ | 11716x ${ }^{18}$ | $4{ }^{4} \mathrm{~F}$ |
| 57 NP 18655 | 40 | 24\% $\times$ 3 | 510 |
| 25 Volts O.C. |  |  |  |
| 57 NP 18656 | 10 | $11 / 2 \times 1 / 2$ | 300 |
| 57 NP 18657 | 25 | $13 \times 316$ | 36 c |

## Dykanol Filters

(D) Type TLAA Dykanol Filter Units in cylindrical aluminum containers. Ideal or portable transminal is well insulated, the other being the metal can itself. Insulating washers as well as a large spade lug are provided Shipping weight each 1 pound.

| $\begin{aligned} & \text { O.C. } \\ & \text { Volts } \end{aligned}$ | Catalog Number | Cap. Mid. | Size, Inches Lgth. Oiam | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| 600 | 57 NP 18567 | 4 | $41 / 2 \times 11 / 2$ | \$2.70 |
| ${ }_{1}^{1000}$ | 57 NP 18569 57 NP 1857 | 1 | $41 /{ }^{4} \times 1 / 2$ | $\begin{array}{r}2.34 \\ 2.34 \\ \hline\end{array}$ |

## Paper Tubular Units

(C) Non-inductively wound, specially sealed and impregnated. Wire leads. High melting point wax ends. Shipping weight, each, 4 ounces.

|  | ${ }_{\substack{\text { capacily } \\ \text { Mid. }}}$ | $\underset{\substack{\text { Price } \\ \text { Each }}}{\text { cen }}$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |



Mica Receiving and Transmitting Capacltors


## Greafer Efficiency



## Sears Economy Dry Electrolytic

## Capacitors in Cardboard Containers

Each unit imbedded in high grade wax and then sealed in an impreg nated carton. This insures efficient operation under the most adverse conditions. New high voltage formation, gives complete protection against surges and high peak voltages. Etched foil construction. Color-coded leads.

| Catalog Number | Capacity Mid. | Working Voltege | Size, Inches Wide Thick Long | Shipping Woight | Prica Each |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 57 NP 10529 57 NP 10574 <br> 57 NP 10578 | $\begin{gathered} 8 \\ 8 \\ 8-8 \end{gathered}$ | $\begin{aligned} & 450 \\ & 450 \\ & 450 \end{aligned}$ | $\begin{aligned} & 3 \times 11 / 1 / \times 2 \frac{1 / 2}{3} \\ & 11 / 2 \times 11 / 6 \times 31 / 2 \end{aligned}$ | 88 oz 12 oz $1 \mathrm{lb}$. | 410 440 640 |



## Economy

 Tubular ElectrolyticsHigh quality . . . low priced. Hermetically sealed and scientifically vented. Etched foil construction. Shipping weight. 4 ounces.

| Calalog Number | Working Voltage | $\begin{aligned} & \text { Cspacity } \\ & \text { Mid. } \end{aligned}$ | Price Each |
| :---: | :---: | :---: | :---: |
| 57 NP 10631 | 2.5 | 10 | 19 c |
| 57 NP 10632 | 25 | 25 | 26 c |
| 57 NP 10626 | 150 | ${ }_{8}^{8}$ | 24 c |
| 57 NP 10627 57 NP 10628 | 150 150 | 12 | $25^{\circ}$ |
| 57 NP 10629 | 1.50 | 20 | 310 |
| 57 NP 10630 | 150 | 40 | 35 c |
| 57 NP 10610 | 450 | 4 | 290 |
| 57 NP 10611 | 450 450 | 8 | 31 c |
| 57 NP 10613 57 NP 1063 | 450 450 | 16 $8-8$ | 47 c 530 |

We regret that we connot guorantee prices
in this catolog for any specific length of lime. See notice on Poge 2 for details.


Radio Hardware in Glass Jars and Envelopes
A convenient way to keep small radio hardware in order. Jars have screw tops. Shipping wt. of jars, each. 1 lb .; of envelopes, each, 4 oz .


## Economy Priced



Hamsl Here's an Opportunity to Get a Better Filter for Less Money An extremely for tunate buy enables us to offer you genuine Aluminum cased Oil Capacitors for a 6 nike 1000 working-volt filter-for loes equal filter capacity for this voltage for so little money. Furthermore, you wouldn't get comparable result; or as long life. Capacizors such as these are extremely difficult to get because of the scarcity of alumi num. Since our supply is limited we suggest you send your order without delay.

.$\$ 1.59$
Two for (Shipping weight, 1 pound 12 ounces)
Each (Shipping weight, 1 pound)

## Wax Impregnated Paper Tubulars



Non-inductively wound, specially sealed and impregnate.- Wire leads. High melting point wax ends. Average shipping weight, 4 ounces

| Catalog Number | Capacity Wifd. | Price Each |
| :---: | :---: | :---: |
| 400 V | D.C. |  |
| 57 NP 10500 | 01 | 6 c |
| 67 NP 10501 | 02 | 6 c |
| 57 NP 10502 | 03 | $6{ }^{\circ}$ |
| 67 NP 10503 | 04 | $6{ }^{\circ}$ |
| 57 NP 10504 | 05 | 6 c |
| 57 NP 10505 | 06 | 6 c |
| 67 NP 10506 | ${ }^{1}$ | 8 c |
| 67 NP 10507 | . 25 | 10 c |
| 57 NP 10508 | 5 | $14{ }^{\circ}$ |
| 57 NP 10509 | 1. | 20. |


| Catalor Number | I Cap. Mfst 1 | Each |
| :---: | :---: | :---: |
| 600 Volts D.C. |  |  |
| 57 NP 10510 | .00] | $7{ }^{\circ}$ |
| 67 NP 10511 57 | .0022 | $7{ }^{\circ}$ |
| 67 NP 10513 | 1014 | $7{ }^{\circ}$ |
| 67 NP 10514 | 005 | 70 |
| 67 NP 10615 | 006 | $7 \mathrm{7c}$ |
| 57 NP 10516 | .01 02 | $7{ }^{\circ}$ |
| G7 NP 10518 | 03 | $9{ }^{\circ}$ |
| 67 NP 10519 | 04 | $9{ }^{\circ}$ |
| 67 NP 10520 | 05 | 9 c |
| 57 NP 10495 | . 06 | $9{ }^{\circ}$ |
| 57 NP 10496 | - 12 | 10 c |
| 57 NP 10497 | 25 | 14. |
| 57 NP 10498 | 5 | 210 |



## Radio Hardware

## Assortment

Packed in an indestructible metal ctility case with compartments 25 Assorted Parker-Kalon selftapping screws. 20 assorted rubber grommets. 25 assorted K nob set screws. 100 assorted lengths Sis machine screws. 50 assorted lengths Kiz $_{2}$ machine screws. 25 assorted lengths 1932 machine serews. 75 assorted lugs. 100 5 iz nuts. 50352 nuts. 251912 nuts. 100 assorted $\$ / 32$. Y/32. 19/3 shakeproof and plain washers. sorted Eyelets 30 Assorted fiber washers. 25 Spade bolts. Shipping weight, 2 lbs. $\$ 203$ 57 NP19767 $\$ 2.03$

## ICA Master

## Assortment

Assortment packed in substantial metal box similar to abo Assid, round head machine screws: 100 assorted lengths- $\$ 36$ 75 assorted lengths- 5 60 assorted lengths- $5 / 2$ 30 assorted lengths- $10 \xi_{2}$ Assed. Flat head machine screws 50 assorted lengths- $\$ 12$ 40 assorted lengths25 assorted lengths-193 75 assorted
75 ascors. 1 Parker Kat
75 assorted Parker-Kalon Self-$100-46$ tapping screw
$100-9 / 6$ nuts
$150-6 / 12$ nuts
$150-1 / 2$ nuts
100 - 1962 nuts
Shipping weight, 3 lbs.
57 NP 13235.

## 1000-Piece

## Assortment

Radio hardware used by dealers, servicemen, amateu-s, experi pieces of assorted machine screws -wood screws - nuts - bolts -rivets - eyelets - lugs lockwashers - fiber washers metal washers - bakelite washers - rubber grommets, etc. Shpg. wt., 1 lb . 10 oz . 57 NP 19709
.\$1.35

## Threaded

## Brass Bushings

## rdeal for raising sub-panels, chas

 sis, and condensers.57 NP 17811 -16 assorted lengths from $1 / 4$ inch to $3 / 4$ inch. Threaded tor 932 screws. Shipping wt.. $4 \mathrm{oz} . . .$. .... 566 cept threaded for As above cept threaded forthz screws.
16 for...................... 68 Angle Brackes A handy assortment of 30 , popular sizes. Nickel plated. Shipping weight, 8 ounces.
67 NP 17813
Per boz of 30 .
Rubber Grommets
Twenty-eight assorted sizes Shpg. wt. 8 oz.
57 NP 17814 -Per box...35c
Fiber Washers

One hundred assorted sizes o both plain and shouldered st yles Shpg. wt., 8 oz.
67 NP 17816 -Per box. . 35 C
Set 5 crews
A handy assortment of 25 in all popular sizes, Used on knobs 57 NP 17816 -Per box. 50 c



in Tab Type Fiberboard Cases
(14) These types afford the utmost in reliability Conservatively rated at 525 surge volts but will stand surge:s af up to $5 t 0$ volts and come back or more! Rated Working Voltage is 451 ) Volts. Cual Units have 4 leads. Shippirg wt., 8 oz .

| Catalog Number | Cas. Mtds. | $\begin{gathered} \text { Size } \\ \text { Inchez } \end{gathered}$ | Price Esch |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 57 \mathrm{NP} 13012 \\ & 57 \mathrm{NP} 1301 \end{aligned}$ | $88$ | $\begin{aligned} & 3 \times 16 \times 21 / 2 \\ & 1 / 4 \times 1 / 1821 / 2 \end{aligned}$ | $\begin{aligned} & 566 \\ & 88 \mathrm{c} \end{aligned}$ |
| 57 NP 13014 <br> 57 NP 13015 | $8$ | $\begin{aligned} & \text { Units } \\ & 41 / \times 1 \% \times 1 \\ & 41 / 8 \times 1915 \times 1916 \end{aligned}$ | $\begin{aligned} & 56 \circ \\ & 880 \end{aligned}$ |

## High Quality Sears Powermaster Condensers

 Mita Condensers
## Dry Electrolytics

 Dual tubular dry electrolytic capacitors. Common negative type, Mounting straps. Shipping weight, each, 3 ounces.

## Mueller Bałtery Clips

(d) Type 60s. Slim jaws. Fine meshing teeth. banana plug Has screw which eliminates soldering when wire connection are made. Non-corrosive finish Length 2 inches 57 NP 12680 -Each (Shpg. wt. 202 . 5 C 10 fer (Shipping weight, 4 ounces) ....38c
(3) Type 60Hs. Insulated red or black handie. Similar to 57 NP 12680. Svote color. 67 NP 12681 -Each (Shpg. wt., 2 oz.). \|c 10 for (Shipping weight, 6 ounces) $\ldots .84$ c C getting into tight places. Length, $2 *$ inches. Non-corrosive finish. 57 NP 12682 -Each (Shps. wt., 2 oz.).. 6 C 10 for (Shipping weight, 6 ounce ) .... 44 c
(0) Type 45, "Pee-Wee" Clip. $11 / 2$ in. Iong. Jaw spread \% in. Stee, bright finish. S7NP 12883 - Fach (Shpg wi To for (Shipping weight, 6 ounces) oz.). 4c Type 48B. Meshing teeth type, larger than inch. Steel, bright finish in. Jaw spread ${ }^{2}$ is inch. Steel, bright, finish. Cap. 10 Amps.
57 NP 1268 C -Each (Shpg. wt., 3 oz .). 4 c 57 NP 1268 - Each (Shpg. Wt., 3 oz.)..44
10 for (Shipping weight, 6 ounces) ... 34 e Type 27. Length $21 / 2$ in. Jaw Spread $\%$ in 57 NP 12688 - Each (Shpg wt, 3 oz.). 8C 57 NP 12686 -Each (Shpg. wt., 3 oz.).. 8 C
10 for (Shipping weight, 8 ounces) ... 69 e (E) Type 24A. Grip teeth type. Stands erect on battery post. Lead coated. Copper shunt protects spring. Length 2 有 inches. $J a w$
67 NP $12684-$ Each (Shpz. wit., 3 oz .). 8 C 67 NP 12684 -Each (Shpg. we., 3 oz.). 8 c
10 for (Shipping weight, 8 ounces) .... 69 c 10 for (Shipping weight, 8 ounces) ....69c Type 21A. Heavy duty, lead plated. Steel. Length 4 inches. Jaw spread $11 / 4$ inches.
Capacity 50 Amps.
57 NP 12693 -Each (Shpg. wt., 4 oz.). I3C 10 for (Shipping weight. l pound)... $\$ 1.19$ (F) Batery Clip Insulotor. A convenient proshocks. Pair consists of 1 red and 1 black. Made of rubber.


| far Clip | Crtalog No, | Ea. Pair | 5 Parrs |
| :---: | :---: | :---: | :---: |
| 45 | 87 NP 12687 | 18 c | 50.86 |
| 24.4 | 57 NP 12688 | 38 c | 1.28 |
| 48 A | 67 NP 12689 | 18 c | . 59 |
| 214 |  | 66 c | 2.25 |
| 27 85 | 57 NP 12691 57 NP 12692 | $24 c$ 12 | . 83 | (G) Screw Torminal Strips. Bakelite 3 tha in. thick. Shipping wt.. each, 3 oz. 67 NP $17393-2$ terminals 9c


 87 NP 17397-6 terminals.................... 23 e (11) Sakellte Lug Strips. 2, 3 or 4 terminals. Shipping weight, each, 3 ounces. 67 NP $17398-2$ terminals.
. 3 c $67 \mathrm{NP} 17399-3$ terminals.
$67 \mathrm{NP} 17400-4$ terminals.
(1) National Power Tube Plate Cop (1) National Power Tube Plate Cop. Safety plate grip of Molded R-39. For 866 and opening will receive spark plug cable. Ship ping weight. 4 ounces. SPG 21 57 NP 19253 -Type SPG. Each......2|c (1) Spring Clips. Nickel plated brass. Ship67 NP 17401 -Single: 1 inch long 67 NP 17401 -Single; 1 inch long. Per Dozen. 7 NP 17402 -Double; $11 / 2$ inches long. Per LDozen
(1) Grid Caps. Insulated type. Made of spring bronze with rubber cover. Supplied with 2 -inch wire. Shipping weight, 3 oz . 7 NP 17414 -ror 866 type tubes. Ea.9c 57 NP 17839 - For glass recciving type $\mathbf{5 c}$
tubes. Each.................................
(00) Grid Cops. Cadmium plated. For glass weight, each, 3 ounces. weight, each, 3 ounces.
$57 \mathrm{NP} 17412-$ style
67 NP 17412 -style (M) for glass ubes. Each
77 NP 17413 -Style (M) for me......... IC
 $67 N P 17840-S t y l e$
tubes. Each.........................

(1) Crowe Anodized Dial Plates. Legible black tigures on a silvery-white color background. $25_{16} \mathrm{in}$. high $\times 2 \%$ in. wide. Tone $0-10$
Gain 0.10
Master Gain 0.10
Mierophone 0-10
Mierrophome $0-10$
Microphone No. $10-10$
Microphone No. $20-10$
Radio-Microphone 5.0.5
Record-Microphone 5-0.5
Volume 0.10
Fadef $5 \cdot 0 .-5$
Bass $5 \cdot 0.5$
Treble $5 \cdot 0.5$
57 NP 19702 -Slote markIng. Shipping
weight, 3 ounces. Each................ 21 C (C) Crawe Etehed Aluminum Switch Plates
(0) black $\quad 57 \mathrm{NP} 19700$-Shipping weight, 2 oz .7 C (8) "On-of"' switch plate. Etched aluminum,
(B) 57 NP 19701 -Shipping weight, $202 \ldots 7 \mathrm{C}$ 24. SEARS, ROEBUCK AND CO.

## Steatite and Botrelite Sockets



## Amphenol Tube Sockets

(A) Bakellis. Furnished with universal adapter plate. Shipping weight, each, 4 oz .
57 NP 19772 -4-prong
$7 c$
57 NP 19773-5-prong
57 NP 19774 -6-prong.
57 NP 19776 - 7 -prong (large)
57 NP 19777-8-prong (octal)
Miniature 100
(B) Stealte, Shipping weight, each, 4 ounces

57 NP 19778-4-prong.
$24 c$
57 NP $19779-5$-prong
57 NP 19780-6-prong. .......i)
57 NP 19782 -7-prong (large)
$24 e$
$24 e$
$24 e$
57 NP 19783 -8-prong (octal)
29 c
24 c

## Laminated Bakelite Sockets

(C) High grade sub panel wafer type socket for tacts. Mounting enters lo inche Shipping weight, each 202 : for 106 ounces.

| Prongs | Catalog Number | Price Each | $\begin{aligned} & \text { Ten } \\ & \text { For } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 4 | 57 NP 12928 | 5 c | 45 c |
| 5 | 57 NP 12930 | 5 c | 45 c |
| 7 -s | 57 NP 12932 | $5{ }^{\circ}$ | $4{ }^{46}$ |
| 8 | 67 NP 12933 | 50 | 45 c |

## Johnson No. 210 Socket

(0) For use with type 10, 800, RK20, 825, 866 and similar tubes. UX 4 -prong base. Nickel brass shell. Heavy wiping contacts. Porcelain 57 NP 10032 -Shipping weight, 8 oz..... 50c No. 211 Standard 50 -watt UX Socket. Other57 NP 10033 -Shipping weight. 1 lb $\quad 73 \mathrm{C}$


## Tube Shields

(4) For $5 T 12$ bulbs. Consists of two snug-fitting half shields with cap and base. Clamp ring furnished. Shippthg weight, each, 4 ounces.
 67 NP 17876 -For short tubes, withaut grid
saps, as 6 Y5 $, 12 A 5, ~$
67 57 NP 17877 -For long tubes with grid caps, 6 C 57 NP 17878 -For STI4 Bulbs. ST14 domeshaped tubes such as 24A, 32, 35, 2A5, . 6C

## 3-Plece Shield

(B) Ventilated 2-piece body for ST12 bulbs, such as 55,57, 2A7, etc. Made of aluminum. Shell, 1\%/ in. diameter, $31 / 2 \mathrm{in}$. high. $41 / 2 \mathrm{in}$. overall. eaph, 4 ounces grid lead. Shipping weight, each, 4 ounces.

18 C

## GT Tube Shields

(C) 57 NP 17881 -One-piece metal without cap (D) 57 NP 17882 -With grid lead type cap and 4 ground clip. Shipping weight, each,
$5 c$

## Grid Cap Shield

(c) For metal tubes. Fits firmly over grid cap of tube afiording complete shielding. Slotted wire.
67 NP 12936-Shipping weight, 2 ounces 9 C

## National Sockets

(c) Isolontito coil socket. Fits National 6-prong coils. Type XR-6. 7 NP 19175 -Shipping weight, 8 oz. .... 49C
(F) Natianol Pentoda Acorn Tube Sockel. Copper base, built-in by-pass condensers for stable high requency operation.
weight 8 . Shat
$\$ 1.32$
(G) National Isolanitit Type XC receiving type

57 NP 19178 -4 pronght, each, 4 oz. ...39C
57 NP 19179 - 5 -prong
$39 c$
$39 c$
57 NP 19180 - 6 -prong. .
57 NP 19181 -7-prong, small
57 NP $19182-7$-prong, large
57 NP $19182-7$-prong, large
57 NP 19183 -8-prong, octal
39 c
390
Insulex Wotar Sockets. Not Illus. Similar to (G). For ultra high frequencies. Circular groove. Recessed contact rivets. For base board or subpanel mounting. Shpg. wi., ea., 4 oz. ....25C 57 NP 17870 -No. 2601-5-prong.
57 NP 17871 -No. 2602-6-prong,
57 NP 17872 -No. 2603-7-prong, large 57 NP 17872 -No. 2603-7-prong, large 28 e 57 NP 17874 No. 2605 - 8 -prong, smal
(A) National CIR Isolantio receiving type sockets. Contacts grip tube prong for its full length. Sockets for glass tubes have stand-off insulation that allow center mounting for bread board layouts. 8 -prong sockets have metal stand-offs. Shipping weight, each, 8 ounce
57 NP 19184-4-prong.
$27 c$
57 NP 19185-5-prong.
57 NP 19186 -6-prong......
57 NP 19187 -
$57 \mathrm{NP} 19187-7$-prong, small
$57 \mathrm{NP} 19188-7$-prong, large
57 NP 19188 -7-prong, large
57 NP $19189-8$-prong, octal
$27 e$
$27 e$
$27 e$
278
$27 e$
$27 c$


## Crowe Aluminum Title Plates

Anodized aluminum finish, silvery-white color background, with black figures. Size He inch $x$ 13 inches, furnished with self-tapping screws. The use of these attractive plates will give your rig that professional touch. See list below for Shipping weight, each, 2 ounces. 57 NP 18100 -Each

9 C

AC Input
AC Volts
Amplifier
Antenna
Beat Osc.
Beat Osc
Ist Buf. Dblr. Grid
2nd Buf. Dblr Grid
3rd Buf. Dbir. Grid
lst Buf. Dblr. Plate
2nd Buf. Dblr. Plate
3rd Buf. Dblr. Plate
1st Buffer Grid
2nd Buffer Grid
3rd Buffer Grid
1st Buffer Plate
2nd Buffer Plate
3 rd Buffer Plate
Class A Modulator
Class B Modulator
Crystal Osc. Grid
Crystal Osc. Plate
D.C. Voltage

Filament Voltage
Gain Control
Gain Control

Ground
nput
Key
Micraphane
Modulator Grid
Modulator Prid
Monitor
Neut. Condenser
Oft-On
Oscillator
Out put
Plate 1
Plate 2
Plate Voltage
Phone-CW ${ }^{\text {b }}$
Power Amp. Grid Power Amp. Plate Rectifier Screen Current Spector
Speaker
Speech Amp.
Sp. Amp. Dvr. Plate
500 Ohm Input
500 Ohm Output

[^2]
## Every Good Hookup Deserves a Calbinet



## De Luxe Hinged Steel Cabinets

Sides and backs have ventilating louvres. Backs have opening for ca ble connections, etc. Top panel Botioms have 4 embossed teet Finished in Marine Gray tipple enamel.

| Gatalog inumber | Size, Inches | Shpe. Weight | Price |
| :---: | :---: | :---: | :---: |
|  | $8 \times$ | 8103. | \$3 |
| 9 | $8 \times$ | 9 los. |  |
| 7890 | $8 \times 14 \times 8$ | 10 lbs. | 4.12 |
| NP1789 | $12 \times 20 \times 12$ | 13 lbs. | 6. |



## ICA DeLuxe Meter Case

Designed to harmonize with modern radiuenclusures. Finished in Marine Gray ripple enamel. Trimmed with attractive ton Also suitahle for midgat spenkers Size, $41 / 2 \times 411641 / 4$ inches. Available with opening for either small or large meters. A good looking and durable case. Shipping weight, 2 pounds.
67 NP 12969 - With opening ${ }^{23}$ \%ís $\$ 1.03$
57 NP 12970 - With opening $\$ 1.03$ 213/6 inches for large meters.


Heavy Duty Chassis Bases

| Size, Inches | Shipping Woight | Black Wrinklo |  |
| :---: | :---: | :---: | :---: |
|  |  | Catalog No. | Esch |
| $8 \times 17 \times 2$ | 6 1bs. | 57 NP 19900 | \$1.59 |
| $8 \times 17 \times 3$ | 6 lbs . | 57 NP 19901 | 1.76 |
| $11 \times 17 \times 2$ | 8 l las. |  | 1.76 |
| $11 \times 17 \times 3$ | 9 lus. | 57 NP 19903 | 1.91 |
| $13 \times 17 \times 3$ | 10 lbs . | 57 NP 19804 | 2.26 |
| $13 \times 17 \times 4$ | 11 lbs. | 57 NP 18805 | 2.50 |

## Economical Metal Cabinets

Black ripple finish. Front and back
removable. Can be fastened to cabinet. removable. Can be fastened to cabinet y self tapping screws.



## New ICA Amplifier Chassis

"Air gate" ventilators are chrome plated Red striped chrome finished molding chrome plated handles. Gray ripple en amel finish. All sizes 9 inches high chassis pans 3 inches deep.

| Catalog Number | Size, Inchos Bepth i Lenelin |  | Shipping Wt., Lbs. | Price, Each |
| :---: | :---: | :---: | :---: | :---: |
| 67NP17883 | $51 / 2$ | 10 | , | \$2.91 |
| 57 NP 17884 |  | 12 | 10 | 3.79 |
| 57 NP1 7885 | 8 | 17 | 11 | 3.79 |
| 57 NP17886 | 10 | 14 | 12 | 4.26 |
| 57 NP17887 | 10 | 17 | 13 | 4.41 |

## Chassis Brackets

Drilled to fit Par-Metal chasis base. Panels used mus be at least 7 inches high Made of 1 -inch steel. Du rably finished in Black baked on ripple enamel. Available in three sizes.
57 NP 18937 -For 8-inch base. Shipping wt. 57 C 7NP19938-For 1l-inch base. Shipping wt., 84 c 57 NP 19939 -For 13-inch Per Pair........... $\$ 1.02$


## Steel Meter Panels

At the low price of these ready drilled meter panels it hardly pays to put yourself to the trouble of drilling your own. These att ractive professional type panels are available with eiher three or fiwe holes and for both two inch and three inch meters. Sulstantially made of //inch steel. 51/4 inches high. Black or Gray ripple finish. These are quality panels at price you can altord. Finushed to match either steel or masonite rack panels. When ordoring state color of panel wanted.

| Catalog Number | No. of Holes | $\begin{gathered} \text { Mater } \\ \text { Size } \end{gathered}$ | $\begin{aligned} & \text { Shper. } \\ & \text { Wt. } \end{aligned}$ | Price Each |
| :---: | :---: | :---: | :---: | :---: |
| 57 NP 19940 | 3 | 2 in . | 6 lise. | \$1.05 |
| 57 NP 19941 | 5 | 2 in . | 6 1ts. | 1.53 |
| 57 NP 19942 | 3 | 3 in . | $6 \mathrm{lbs}$. | 1.05 |
| 57 NP 18943 | 5 | 3 in . | 61 lss. | 1.53 |

## Standard Weight Chassis Bases

| Size, Inches | Shipping Weight | Cadmium. Plated |  | Black Ripple |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Catalog No. | Each | Catalog No. | Each |
| $7 \times 9 \times 2$ | 3 lbs . | 57 NP 19717 | \$0.59 | 57 NP 19733 | \$0.59 |
| $7 \times 11 \times 2$ | 3 lbs . | 57 NP 19718 | . 65 | 57 NP 19734 | . 65 |
| $7 \times 12 \times 3$ | 4 lbs. | 57 NP 19719 | . 70 |  | . 70 |
| $7 \times 17 \times 3$ | 5 lbs. | 57 NP 19721 57 NP 19723 | . 86 | 57 NP 19737 | . 86 |
| $8 \times 17 \times 2$ | 6 lbs . | 57 NP 19723 | . 84 | 57 NP 19739 57 NP 19740 | .94 1.15 |
| $8 \times 17 \times 3$ | 6 1bs. | 57 NP 19724 | 1.15 | 57 NP 19740 57 NP 19743 | 1.15 |
| $10 \times 14 \times 3$ | 5 lbs. |  | 1.01 | 57 NP 19743 | 1.01 |
| $10 \times 17 \times 3$ | 5 lbs. | 57 NP 19728 | 1.05 | 57 NP 19744 57 NP 19745 | 1.05 |
| $11 \times 17 \times 2$ $11 \times 17 \times 3$ | 4 lbs. | 57 NP 19728 67 NP 19730 | 1.41 1.58 | 57 NP 19745 57 NP 19746 | 1.41 1.58 |
| $11 \times 17 \times 3$ $13 \times 17 \times 3$ | $51 \mathrm{bs}$. 6 lbs. | 57 NP 19730 57 NP 19732 | 1.68 1.65 | 57 NP 19746 57 NP 19748 | 1.58 1.65 |

For complete information about prices and possible price changes affecting merchandise shown in this catalog, be sure to read the special notice which you will find on the inside front cover.


Bud De Luxe Cabinets
Removable panels fit flush with rounded corners. Rear is stopped 2 inches above bottom to allow tor leads. Cabinet has hide at each side of pant Aut $/ 2$ inch looking gray crackle finish. Depth, 8 in 57 NP 17910 -Panel size, $8 \times 10$ inclies. Shpg. wL.. 7 Ibs. Each. $\$ 3.09$ 57 NP 17911-Panel size, $8 \times 12$ inches. Shipping weight, 8 pounds Each.
$\$ 3.41$
57 NP 17912 -Panel 57 NP $17912-$ Panel size, $8 \times 1$
Shipping weight, 10 pounds. Each
$\$ 3.73$


## Desk Panel Racks

Made of $1 / 1 \mathrm{~s}-\mathrm{in}$. cold rolled $17 \times 13-\mathrm{in}$, in size with welded Made of 1/is-in. cold rolled steel with welded joints. Panel mounting serews and washers furnished. Black ripple
57 NP 019909 -Singlo Unit. With door on on only. Size. $8 \% \times 19 \times 131 / 2$ inches deep. Phanel space, $8 x \times 19$ inches. 57 NP 019910 -As aluve. Size, $121 / 4 \times 19 x$ $131 / 2$ inches deeg. Panel space. $\$ 6.45$
$121 / 4 \times 19$ inches. Shpg. wt., $27 \mathrm{lbs} . . \$ 6.4$ 67 NP019911-Double Unit with door on
 57 NPMi 19913 -Guedruple Unit. door on rear panel only. Size. $35 \times 19 \times 131 / 2$ $\begin{array}{ll}\text { inches deep. pane space. } \\ \text { Shipping weight, } 55 \text { pounds. } & \$ 12.30\end{array}$


## Bakelite andSteel Panels

Bakelite panels are black, mirror fin sh. Laminated. Tensile strength 8,000 pounds per square inch. Thick
 thick, finished in black ripple enamel These sturdy panels are available in standard sizes as histed below. Why not add the sizes you need to your Easy Payment order . . . buy everything you need at one time. Your order need total only $\$ 10$ or more to take advantage of Sears convenient Easy Pay ment Plan. See Page 2 for complete information

| Size.Inches | Bakolite |  |  | Black Riople Steel |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cataloz No. | Shpg. wt. | ce E | tatiog No. | Shpe. wt. | Prico E |
| $7 \times 10$ | 57 NP 12971 | 2 b . | \$0.85 | 57 NP 12977 | ${ }_{5} 4$ lis. | 30.37 |
| $7 \times 12$ |  | ${ }_{3}^{2}$ libs. | 1.15 | 57 NP 12978 |  |  |
| $7 \times 14$ $7 \times 18$ $7 \times 24$ | 57 NP 12973 | 31 lbs. 3 lbs. | 1.32 1.70 | 57 NP 12978 | ${ }^{6} \mathrm{l}$ | . 69 |
| ${ }^{7 \times 21}$ | 57 NF 12976 | ${ }_{5} 4$ liss. | 1.98 2.29 |  |  |  |

## Slotted Standard Rack Panels

Uniformly slotted steel or Masonite panels to fit all relay racks listed on this page. Standard 19 -inch engths. Steel panels are $1 / 3$-inch thick, Masonite is fis-inch thick. Steel panels cithei Black ur Grdy rip ple finish. Be sure to staie color wonted, when opdering Masonite Black only Masonite is non-magnetic: sturdy and tough. Can be easily worked with wood working tools. Available in six different sizes as listed below. These are top quality rack panels. Both types, steel and masonite offer strong and rigid support. Slot ted to fit amateur standard relay racks. Finish is attractive and exremely durable.

| Size, Inchas | Steel (State Color) |  |  | Masonite (Black Ripple Only) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catalog No. | Shag. Wt | Price Ea. | Catato No. | Shpe. Wi. | Price Ea. |
| $3 \longdiv { 5 1 2 9 }$ | 57 NP 19925 | 51 bs. | \$0.54 | 57 NP 17901 | 1 lr . | \$0.47 |
| $51 / 4 \times 19$ | 57 NP 19926 | 71 bs. | . 69 | 57 NP 17902 | 1 lb . | . 62 |
| $7 \times 19$ | 57 NP 19927 | 8 llas. | . 76 | 67 NP 17903 | 11 l. | 68 |
| $88_{1} \times 10$ | 57 NP 19928 | ${ }^{\circ} \mathrm{O}$ | . 90 | 57 NP 17904 | 2 2bs. | 82 |
| $10 \% \times 19$ | 57 NP 19929 | 10 los. | 1.11 | 57 NP 17905 57 NP 17906 | ${ }_{3}^{2}$ liss. | . 94 |
| 121/4 $\times 19$ | 57 NP 19930 | 12 lbs . | 1.32 | 57 NP 17906 | 3 ltas. | 1.06 |

## Radio Shop Needs

## Serviceman's Neutralizing and Aligning Tool Kit

 Includes every combination of tools which a service radio receivers. Units telescope into each other forming four separate tools when assembled. Comes in an attractive black artificia! leather vest pocket carrying case. Shipping weight, 1 pound.57 NP 17846 -Complete with Case
$\$ 2.79$
Deluxe Kit contains all items in above kit plus flexihle crewdriver and "magic" aligning tool. Shipping veight, 1 pound
57 NP 17847 -DeLuxe Kit
Complete with Cas
\$3.38


## All-Purpose Test Lead Kit

Insulated fittings provided for every type of testing. Equipped with one pair of lest teads which have 60 -inch red and black kinkless ive rubser wire. One end has insulated phone tips and other end insulated removable banana-type plugs. Extra fittings are plug-on type. Includes: 1 pair test leads, 1 pair insulated alligator clips reedle points-red and black. Artificial leather cased and black, 1 pair insulated
 57 NP 17848-Shipping weight, 1 pound


Johnson Plugs and Jacks

(3) 57 NP 10024-No. 75 Pluk for above \%-11. shank .. . 4 4\%
(0) 57 NP 10025-No. 75 A Plug Saine, with $1 / 1 / 6$ in. shank. $\ldots 4 / 2 \mathrm{c}$
(C) 57 NP 10026 -No. 75 C . Tapped Iluy Has Screw in Head . 5 c

Insuline Couplings. . Rods . . and Bushings
(4) ICA All Purpose Test Leads. Has Interchange able Tips. Made of sturdy Fenoline Tubing Sharp Point Jhone Tips- which fit all standard jacks. Other end equipped with Split Banana plugs-allowing for interchange of spade lugs phone tips, or alligator clips, which are supplied Shipping weight, 8 ounces
57 NP 17864 -Complete Kit
.98 c
(A) Fused Test Lead Set. Handles so constructed that standard radio fuse can be inserted in barrel of each lead for protection of meters trument fuses, and 3 sets of rips supplied 57 NP 17865 -Shpg. wt., 8 oz . Each..
(B) Standord Test Leods. Slender handles insulated less wire 50 inches long. Needle points color coded. Shipping weight, 8 ounces. 49 C 57 NP 17403 - With phone tips 57 NP 17404 - With spade terninals $49 c$
$49 c$ 57 NP $17405-$ With alligator clips 496
(C) Deluxe Test Prod Sep. With finger grip molded tips. Red and black fenoline handles 5 inches inches long. Sharp pointed penetrating tips which screw into handles. All connections are properly soldered to provide low resistance connections. Color coded.
57 NP 17406 -Shipping wt., 8 oz
$79 c$

(A) ICA A-in-1 Noutralizing Tool. Fenoline barone end. Fenoline insert has $1 / 4-\mathrm{in}$. nut wrench and key seat on one end and metal tipped neutralizing screw driver on other end
57 NP 17852 Shipping 36c
(8) Sllding Lever Switch. Has many applications toggle switch. Sire $11 / 2 \times 1 / 2 \times 1 / 4$ inch. Shipping 57 NP 17849 - Single bole Single Throw. 20 C 57 NP 17860 -- Single Pole I Bouble Throw . 57 NP 17851 -I)ouble t'ole Double Throw. .26c (C) Bat Handle Switeh. A most convenient siyle.

57 NP 19755-1/4 (1) \% inch
. 10 c

Fiber shafting. Round. $1 / 1 /$-inch diameter.
57 NP $19758-6$ in. long. Shippigg weight, 4 sunces ..... . 106
(C) Panel bearing asserobly, for numting volume controls, con-

(E) Insulated bushings for insulating condenser shafts, or as grom-
7 NP 19766 -

## 

## National Accessories



Everything needed to make an efficient Marconi type Antenna System.
Not to be confused with other low priced kits in this price range which are Not to be confused with other low priced kits in this price range which are
generally supplied with very thin (7g) Acrid Wire. Contains to feet of 7/2s copper ateral wire, insulators, lightning arrester. For all radios A very good value at this price. Shipping weight, 2 pounds. 57 NP 4702 -Complete Aerial Kit

## Silvertone "Seven Seas" Noise-Reducing Aerial

A $\$ 5$ quality! Extremely high suppression of manmade static and great sensitivity on all wave wire: 50 feet of weather-resistant two conductor lead-in wire t wo iron core noise-reducing transformers. Permanent connectionsareatl soldered. Accessories include: two aerial intulators: three 6 -inch lead-in insislators; one double window lead in strip; 50 feet of ground wire. For all radios except AC-DC sets. Shipping weight. 5 potnds.

(A) Vis-O-Glow lightning Arreator, Diffelent from all dinclarges saifly. shippang wt each, 8 oz. 69 c 57 NP 12486-Singte type 57 NP 14719 -Duplex type.
(B) "Storm King"; Lughtning Arrester. Original non-air tory use. Made of genvine Bakelite. 57 NP 12488 -Single type. Shipping wt., 8 oz. 42 C

(C) Glazed Porcelain Strain Insulator. Mrims an ideal insulatur ior antembinstallations. Length $21 / 2$ 57 NP 4715 Fing weikht. Eich. 10 for 31 c (D) Ground Clamp. A husky clamp that will stand visefinish. Buy theae clamps in lots of 10 and save. Ship ping werght, each. 4 ounces. 220 57 NP 4716

## RCA "Magic Wave" Noise-Reducing Aerial

New highly eamint noise-rphucing an- enna tor every type of radio installaion. Transmission line can be any ength. Covers 530 to $23,000 \mathrm{kc}$. Completely assembled. Includes: Iron Core Antenna and Receiver Coupling trans ormers, $60-\mathrm{t}$. Antenna wire, $45-\AA$ ransmission Line, 00 .f. Bround Wire Gamp. Shipping weight, and Ground 57 NP 12527 -Complete kis

Rust-Resistant Antenna Spring
(A) Prevents antenna sag. Powerful, compression type rust-resistant spring. Comes complete with porcelain insulator and rings. Especally suited for douhlet type antenna to prevent swaying. Include several of these handy spring adjustels with your next order. Shipping weight. 1 pound.
57 NP 12493 -Each
24 c

Permeability Tuned Antenna Loap
(B) Designed to replace out side antenna system on any radio. Duplicates built in loops of modern sets. .ooj) inductance is variatele by means of permeabilty tuninz; instantlvadjustable to the exact requirements of set in which it is instatled. Complete, easy-tounderstand instructions make installation tasy. Improves selectivity and reduces noise. May be used with all radios including portable and midget sets. Size $9 \times 7 \times 1 \frac{1}{2}$ inches . . Small enough to attach on the back of the radio cabinet,
57 NP 10487 -Shipping weight. 1 lb .8 oz.
$\$ 1.10$ 57 NP 12483 -ICA Tenmascope. As above
except capacity tuned. Shipping' wt., 2 lbs
$\$ 1.15$

## Indeor Antenna-Dynatrol Filter

(C) Combination indoor atrial and line noise filter. line as antenna. May be used in conjunction with regu lar outside intenna to gain increased pickup. Serves to reduce noise and improves set sensitivity. Binding post connections. For all radios excent $A C-D C$. 57 NP 12490 -Shipping weight, 1 pound $\$ 1.03$

## Belden AC-DC Aerial Wire

(G) Belden indoor aerial wire. Flexible. 18 feet No. 23 (G) $(20 \times 3(\mathrm{G})$ double wrap brown cotton 57 NP 12529 -Shipping weight, 4 ounces

## Belden Litz Wire on Spool

(-) Ilas two wraps of tram silk. 100 feet to spon 57 NP $19386-1$ Pel spool

## Flexible Spaghetti Tubing

(E) Colurs: Black, Yellow, Red or Gieen. State color wanted. Shipping weight, 1 ounc
57 NP 19387 -Per 30 -inch length

(E) tead-In Strip. I Huco insulated braid over zinc strip 57 NP $12492 . . . . . .$. .........Each 3 c 10 for 24 C
(F) Lead-In Insulator. For fastoning lead-in wires to wall. Bakelite eye, cadmium jlated screw. Strong 57 NP 12484 -3-inch. Each


Push-Back Belden Hookup Wire
(D) Double braid, push back. Waxed. Size 20 tinned Avaltuble in following coiors: (ire Red, and Iblack. State color. 25 -foot spoot. Shipping 57 NP 8 ounces.
(1)

## Belden Aeriol Wire

| Strended and Solid Enameled Copper |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Ca alor No. | Size, Kind | Coil. Fi. | Shpg. Wi. | Per Coil |
| 57 NP 19350 | 7-22 51 r . | 75 | 11 b .80 c | 50 c |
| 57 NP 19351 | 7-22 Sir. | 100 | 2 lbs . | 64 c |
| 57 NP 19352 | 12 Solid | 100 | 21 b | 77 c |
| 57 NP 19353 | 14 sulid | 100 | 1 H ) 8 c | 52 c |
| Bare Copper |  |  |  |  |
| 57 NP 19354 | 7-22 Sir . |  | 1 lb . | 34 c |
| 57 NP 99355 | 7-22 Sir. | 100 | 2 1bs. | 45 c |
| Aubber Covered Lead-In Wiro |  |  |  |  |
|  | 18 Str. | 100 | 211 sm | 45 c |
| 57 NP 19357 | 16 Str. | 100 | Hse. 8 | 55 c |

## Belden Magnet Wire

like practically everything else the radio man uses. Magnet wir should be of the highest quality for best resulti. Why take a chance on poorly insulated "barsain" quallty when you can se genuine Belden magnet wire at these low praces. Metal spools Each spool is one continuous length. Shipping weights, $1 / 2$-poound spools, 1 pound; 4 -pound spools, 8 ounces.


$\$ 1.15$

## 

## Available on Easy Terms, See Page 2

## Fact-Filled Service Manuals by John F. Rider

## Rider's Trouble Shooters' Monuals

No serviceman can anticipate the year, make and model of the next set that will come to his bench. It may be anywhere up to ten years old. For this reason you be anywhere up to ten years old. For this reason you
must have the volume of Rider Manuals that contains the servicing information on that particular set, or else risk a haphazard job-wasted time-a a broken delivery promise and a disgruntled customer. Get your full
money's worth out of every Rider Manual-buy it the money's worth out of every Rider Manual-buy it the
day it comes out. Benefit from the complete servicing information that only Rider Manuals can give you: Data on alignment, I.F. peaks. operating voltages, parts lists and parts values, voltage ratings of condensers, wattage ratings of resistors, coil resistance data, and all the other information that is vital if you are to know exactly what the manufacturer put in that receiver. Size $9 \times 111 / 2$ in. Postpaid in U.S.A

| Catalog Numbe | Volume Number | $\begin{gathered} \text { Covers } \\ \text { Radios Up to } \end{gathered}$ | Number of Pages | Price |
| :---: | :---: | :---: | :---: | :---: |
| 57NP18148 | XII | April, 1941 | 1652 | \$9.80 |
| S7NP18149 | XI | June, 1940 | 1652 | 9.80 |
| 67NP18150 | X | 1939-40 | 1664 | 9.80 |
| 57 NP18151 | IX | 1938-39 | 1672 | 9.80 |
| S7NP18152 | VIII | 1937-38 | 1650 | 9.80 |
| 57NP18153 | VII | 1936-37 | 1600 | 9.80 |
| 67NP18154 | VI | 1935-36 | 1240 | 7.35 |
| E7NP18155 | V | 1934-35 | 1200 | 7.35 |
| S7NP18156 | IV | 1933-34 | 1060 | 7.35 |
| 67NP18157 | III | 1932-33 | 1070 | 7.35 |

## Combinotion Manuals

57 NP 18160 -Combines Volumes I, II, III.
Postpaid in U.S.A. ........................
67 NP 18161 -Combines Volumes IV, V,
$\$ 22.05$
$\$ 22.05$

## Abridged Combination Manual

Service data and wiring diagrams of the most popular receivers covered in Volumes I. II, III, IV, V. This represents $90 \%$ of service requirements for radıós of 1919 to 1924. Cloth bound, uniform in size with other Rider Manuals.
57 NP $10716-$
$\$ 12.25$

## Vocuum Tube Voltmeters

By John F. Rider. The vacuum tube voltmeter is rapidly forging to the front as a favorite tool of the radio Serviceman. This book contains eleven fact-filled chapters on its use. 180 pages. Hard covers. 111 illustra-
57 NP 10704 -Postpoid in U.S.A
$\$ 1.47$

By John F. Rider. More and more broadcasting stations are going on the Air with F.M. More and more receivers and converters are being bought and will need to be serviced. This book equips you to bettel do the job. Thoroughly covers the subject. 136 pages. Flexible Cloth bound. Profusely illustrated. 57 NP 18146 -Postpaid in U.S.A.

98 c

## Oscillotors at Work

John F. Rider wrote this book because servicemen have been asking for it. It contains descriptions of all types of oscillators-how they function-where they are used -how they are employed in servicing and how they should be serviced. It tells all you need to know about this important phase of radio. It enables you toget the most from your test oscilator. Size $51 / 4 \times 73 / 4$ diagrams. $\$ 147$ 57 NP 18196 -Postpoid in U.S.A
$\$ 1.47$

## Cathode-Ray Tube ap Work

The cathode-ray tube oscillograph is the most universally used testing instrument in the radio servicing field. All servicemen should be thoroughly familiar not only with the theory underiying the cathode-ray tube, but ulso with its functioning in the cathode-ray oscillograph to servicing problems. Unretouched oscillograms illustrate the text. 336 pages. Over 450 illustrations. Published by John F. Rider.
$\$ 2.45$

## Servicing Superheterodynes

To analyze the different portions of the circuit quickly and find trouble without loss of time. you need a thorough knowledge of circuit theory. In this text Rider has analyzed each portion of the superheterodyne circuit. Tells how different troubles occur in the various parts and how these troubles can be recognized and corrected. 288 pages. Hard bound cover S7 NP 18197 -Postpaid in U.S.A.

95 c

## Servicing by Signal Tracing

By John F. Rider. Explains how you can locate troubles in any receiver-old or new-more quickly and more accurately than ever before. This system of receiver
testing uses the one factor conimon to all sets-the SIGNALS-as a working basis. Size. $5 \% \times 8 \%$ inches. 360 pages. Hard bound cover. 111 ustrated. 67 NP 18179 -Postpaid in U.S.A
$\$ 1.96$

## New Radcraft 1941 Manual

Service data on more than 1800 receivers. 736 pages $40 \%$ larger page size means more information per page. Carel included has heen a popular one one that service model inchuded has been a popular one, one that service engineers will detinitely have to repair. Covers re-
ceivers manufactured in 1940 and up to June, 1941. Page size $10 \times 12 \%$ inches: 2 inches thick. Artificial leather covered stiff binding. 67 NP 10719 -Postpaid in U.S.A.
$\$ 9.80$

## Otficial Radio Service Manual

Volume VII. Contains schematic diagrams and service data on 1936-37 and early 38 receivers. 1,800 pages of material which radio men use every day. Wiring dia3,000 different illustrations. Bound in hard, loose-leaf covers-pages may be removed and replaced. Size$9 \times 12$ inches.
$\$ 9.80$

## Radio Construction and Repairing

By Moyer \& Wostrel. 444 pages dealing with construction, testing and repair of receiving sets. Includes Television 4th edition. Simplifies difficult repair jobs. Cloth bound
57 NP 10703 -Postpaid in U.S.A..
$\$ 2.45$

## Ghirardi's Rodio Physics Course

Revised edition. A remarkably clear, complete and easily understood course in radio, sound and electricity Leading radio schools throughout the world recommend this course. 972 pages, 508 illustrations. Hard covers 57 NP 18182 -Pos
$\$ 4.00$

## Trouble-Shooter Handbook

New Edition. Greatly enlarged. Contains most comprehensive collection of receiver "case histories" ever published. I.F. peak frequencies and alignment data. Much valuable data on auto sets. Size, $81 / 2 \times 11$ inches.
500 pages. Cloth bound. Postpaid in U.S.A. 500 pages. Cloth bound. Postpaid in U.S.A. 57 NP 18184
$\$ 3.50$ 57 NP 18185 -Modern Radio Servicing and Radio Trouble-Shooters' Handbook. Combinotion
$\$ 7.00$

## Modern Radio Servlelng

One of the best texts ever published on raclio service work. A complete course on the most up-to-date methods of locating and correcting troubles in radio receivers. Fully explains use of test instruments. 706 57 NP 18183 -Postpoid in U.S.A
$\$ 4.00$

## "Supreme" Manuals

## New 1941 Rodio Diogroms

Latest diagram manual of most popular 1941 radio circuits to help you repair modern sets. All the circuits really needed by you are included. A real "on the joh" parts lists. Over 400 models, 192 pages, large size $81 / 2 \times 11$ in. Stiff paper cover. A "'Supreme" publication. $\$ 1.50$
57 NP 10710 -Postpoid in U.S.A

## 1940 Rodio Diagrams

Contains over $80 \%$ of all 1940 circuits usually needed Includes service information, repair hints, alignment dope, and parts lists on new portables, television, FM. signal tracing. amplifiers, inter-communicators, etc. 212 pages, $81 / 2 \times 11$ inches. Stiff paper cover. A "Supreme" publication. $\$ 1.50$

## Mast-Otfen-Needed 1939 Diagrams

Includes circuits and servicing data on every one of the Important radio sets made during the 1939 season. ments, record changers, etc Over on portables, alignneed service for many years to come. 39 manufacturers represented. 192 , pages, $81 / 2 \times 11$ inches. Stiff paper cov er. A 'Supreme publication. 57 NP 10717 -Postpaid in U.S.A.
$\$ 1.50$

## 1926-1938 Diagroms

Here in one handy manual you have all the diagrams of hint-giving, trouble-shooting circuits make your job hint-giving, trouble-shooting circuits make your job diagrams, alignment data, parts lists, and hints. Size $81 / 2 \times 11$ inches, 244 pages. Stiff paper cover. A "Supreme" publication. 57 NP 10718 -Pospaid in U.S.A.
$\$ 1.95$

## Completa Radio Courso

An exact reprint of the well known Radio Technical Institute Course in a single large volume. Reprinted in 1941. Contains information on signal-tracing television. visual alignment, P.A., photo-cells, etc. All about AVC. how to use an oscilloscope, what feedback is, resonance action, and every other fact you must know to be expert in your work. Course is complete and can be used by regular test equipment, explanation of signal tracing, television to the minute, recording dope. Stiff paper cover. A "Supreme" publication.
57 NP $10712-P o s t p o i d ~ i n ~ U . S . A . ~$
$\$ 1.95$

## Simplifed Servicing by Comporison Method

 Repair radios in minutes instead of hours. Revolutionary COMPARISON technique permits you to do expert only a volt-ohmmeter. Many simple, point-to point cross-reference, circuit suggestions locate the faults instantly. Plan copyrighted. Covers every radio setnew and old models. Conplete in handy manual, size $8 \times 11$ inches, 112 pages. Stiff paper cover. Over 1,000 practical service hints, 16 large, trouble-shooting blueprints. Charts for circuit analysis. 114 tests using a 5c resistor. Developed by M. N. Beitman. A "Supreme publication.57 NP 10713 -Postpaid in U.S.A.
$\$ 1.00$

## Silvertone Service Manual

An amazing bargain! Authentic, thorough, completely illustrated book of exclusive inside information on 450 models of active Silvertone Radios-Covers all Silvertone models, 1928 to 1937. Complete parts list with hisi prices and numbered schematics enables you to quickly select any required replacment. Alrgnment procedmace Instruction for measurement of sensitivity, and image repair procedure. Tube interchangeability and a wealth of other valuable information. Order this great service manual today. Size, $9 \times 11 \times 21 / 4$ inches. 972 pages. Thick, stiff buckram cover.
57 NP 18162 -Postpoid in U.S.A................ $\$ 1.39$

## Ameteur Reference Books



## Clearly Written Books for the Radio Amateur <br> \author{ The "Redio" Handbook 

}Shori Wave Beginner's Book

Completely new and greatly enlarged edition of the well known amateur reference book formerly called "Jones Radio Handhook." Contains valuable information not elsewhere avanlable on the latest in short wave transmitters, receivers and accessories. Chap-
ters on service and equipment antenna data, and tube characteristics. Constructional articles galori characteristics. Constructional articles galore. Iunhound. We supply the latest editions. 57 NP 18190 -Postpoid in U.S.A.
$\$ 1.60$

## Amateur Newcomer's Handbook

Written in exsy-to-understand language. Starts at
the beginning and takes youstep by step through the process of mistering the principles, learning the coxt and passing your first license examination. Also bells you to build your first simple, effective equipment as applicints for a generas amatedr license are required as applicants for a genera amatedr license are required
to answer. Thorough, yet concise answers are also given. Will save you nuch time in qualifying for your "ticket." Radio law and regulations pertaining to 88 pages.
57 NP 18191 -Postpaid in U.S.A
35 c

The Radio Amateur Call Book
An indispensable reference book for every ham shack.
Lists over 70,000 amateurs of all countries. Gives schedules of time, weather, and press reports from principal short wave stations throughout the world Lists and interprets international abbreviations of $Q$.
$\mathbf{R}$, and $T$ signals. We supply the latest edition. R , and T signals. We supply
$8 * / 4 \times 11 / 4$. Siff paper binding.
57 NP 18163 -Pestpoid iit U.S.A
$\$ 1.25$

## Amafeur Course

Covers Elementary Electricity - the Vacuum "Iube-Amplifiers- Transmitters-Amplitude ModulationPower Supplies-Antenna and Feeders, Regeneration
-Circuits-Construction-Learning Code. ()ver 200 illustrations - 144 pages.
57 NP 18164 -Postpeid in U.S.A

Gives information on time conversion tables-aerials - noise elimanation - radio tubes-conl windingschematic diagrams-amplifiers for short wave This buok solvese. 15 illustrations- 40 pages This burk
57 NP 1

## 10 Most Popular Short Wave Receivers

Ten outstandung short wave receivers have been se illustrated ivith compsete layout. photographs of the completed set, hookup and all specifications, 75 it.
lustrations- 40 patges. Tells how to buld famous Dustrations- 40 pages. Tells how to buld famou: 57 NP 18187 -Postoaid in U.S.A ... ... .. 25C

Short Wave Coil Dafa Book
The difference between a gond and a poor radio set is usually found in the construction of coils. Coil winding information is important, and in this new coll botek all the latest "dobe" is given. Every expery pages. Instructions on how to wind your own coils and 57 NP 18186 -Postpaid in U.S.A.. .. ... . 25 C

How to Become an Amateur Radio Operotor Covers: System of sending and receiving -Defiricions tons of receivers used by elcetric circuits-Descrip mons of receivers used by amateurs-Amateur twans that apply to onerators-Appendix which cogulations that apply to operators-Appendix which contains inlustratimns, 72 pagor. Covers all you wall be required 57 NP 18165 -Posppaid in U S.A. 38 C

How 10 Build and Operape Shorp-Wave Seps Contains a wealth of information. Dozens of short bunlt -hookups and diagrams aplenty. 150 illustra tions-- 72 pages. Contains much data found in no other book.
57 NP 18166 -Postpoid in U.S.A
38 c

## Reference Books for Ham and Serviceman

RCA Guide for Receiving Tubes
Every serviceman, Ham and Expermenter should hav a copy of this completely revised edition. Contents in cludes circuit diagrams, a thorough discussion of vac 224 pages. 57 NP 10400 -Postpaid in U.S.A

## Kadio Engineering Handbook

## Second edition. Each section is prepared by an expert

 Has technical data on tubes, circuits, sound systems, and other apparatus. 850 pages. No serious follower of radio can afford to be without this standard hand-book. Cloth binding. 57 NP 10702 Ping.
$\$ 4.90$
Amplifier Handbook and P.A. Guide Essential technical data compiled from an exceptionally large number of sources. Volume covers nearly a hundred different subjects, co-ordinating every con ceivable branch or sub-division of Public Addres 57 NP 10701 -Postpoid in U.S.A.

## Elemenfary Mathematics

Contains a special chapter on radio mathematics and problems. Made easy to understand with charts diagrams, illustrations, and exercises. fin pages. $6 \times 3$ in. Paper weund.
57 NP $10700-$ P.
$50 c$

Tochniques of Recording
lome recording is an interesting and fascinating acavity. With a good working knowledge of its technique and suitable cquipment. highly satisfactorv records can be inexpensively produced from any source of
nusic or speech. This casy-to-understand book gives you information required in non-technical langrings. Coitaith: sepdrate chapters on various components o 43 pages. Size. $7 \times 101 / 2 \mathrm{in}$. Stiff paper binding 57 NP 18198 -Postpaid in U.S.A .. .. . . 98 C

Frequency Control with Quariz Crystals Published by Bliley Electric Co. Table of contents includes: Theoretical Considerations, Anti-Resonance Temperature, Vibration, Holders, Power, Activity llustrated. 30 pages. Size $61 / 4 \times 91 / 2$ inches. An im portint booklet becituse some of the information given s not available in printed form elsewhere. 57 NP 18189 -Postpzid in U.S.A.

## RCA Guide for Transmitting Tubes

Cew Hanl guide covering valuable technical informa tion on RCA tubes for engineer, expermmenter, and amateur. Contains 72 pages including bractirel cir taled neutralizing and tumng data 57 NP 10401 -Postpaia in U.S.A25 c

## A. R. R. L. Publications

A.R.R.L. Amafeur Handbook

This is the acknowledged standard manual of amateur communication. Tells the things which are needed for a suggestions on how to learn the code. Explains traffic suggestions on how to learn the code. Explains traffic handing procedure and good operating practices. Covers fundametitals of electricity and radio and carties and operation of all modern amateur apparatus. No one who asipires to become a licenned Radio Amateur can well get along without this gredt book. We supply the latest edition. Stiff paper cover. Size $61 / 2 \times 91 / 2 \mathrm{in}$.
57 NP 18168 -Pospoid in $1 \mathrm{~S} . \mathrm{SA} .00$
A.R.R.L. Amafeurs' License Manual

Going after your first ham "ticket"? You need this Manual for its instructions on where to apply, how to go about it in the right way-and, most important of all, for about 200 ivpical license exam questions and answers All the "dope" on every phase of amateur licensing procedure, and the complete text of the new regulations.
About 75 pages. 57 NP 18169 -Postpaid in U.S.A .............. 25 C
A.R.R.L. How to Become a Radio Amateur Features equipment which, although simple in construction, conforms in every detail to present practices. The klving long and satisfactory service-while at the sarne time it can be built at a minimum of exprense. Complete operdting instructions and references to sources of de tailed information on licensing procedure are siver pages of well illustrated text
57 NP 18170 -Postpaid in

## A.R.R.L. Hints and KInks

Hundreds of good ideas which other amateurs have found helpful. Will help you solve many of your riadn 57 NP 18172 -Postpaid in

## A.R.R.L. Antenna Book

A comprehensive manual of amateur antenna design and construction, by the heisdquarters staft of the American Radio Relay League. Sixteen chapters, profusely illustrated. Both the theory and the practice of all types of antennas used by the amateur, from simple doublets to multi-element rotaries, including long wires, rhomboids, vees, phased systems, u.h.f. systems, ctc. Feed systems and their adjustment. Construction of masts, lines and rotating mechanisms. The nost comprehensive and reliable information ever jpublished on the subject. Over 57 NP 18173 -Postpaid in U.S.A

## A.R.R.L. Logbook

The law requires that Amateurs maintain a log. This is one of the best. Spiral bound. Has 39 log pages, 39 note page's. "Q" Signals, graph paper, message number
57 NP 18174 -Postpoid in U.S.A. .........
A.R.R.L. Butlding an Amateur
Radioielephone Transmiter
Written for the man who has a class $C$ or class $B$ license A companmon book to "Hlow to Become a Radio Ama 'phone. Descripition of inexpensive low-power trans nitier and modulator. whth complete operating instruc tions plus antenna information of particular interest in 160 and 10 -meter operation. Tells what a new or inexperienced harn should know before attempting to use phone. Stindard QST size and format. Abourng pages Paper bound.
57 NP 18171 -Postpaid in U.S.A.

## Calling C. $\mathbf{Q}$

Ham radio appears for the first time as popular literature. The interesting saga of the most fascinating hobhv readably and authoritatively written by Clinton
B. Desoto, WICBI). Nothing technical, simply a grand answer to the friends and family who ask. allateur radio all about? Few hans will be able to put it down
bound.
57 NP 10714 -Postpaid in U.S.A
$\$ 2.00$


## so

45

## Radio City

## Tube Tester Kit

Model 309K. Here is your opportunit y to save money on a new tube tester while getting exactly the kind of a wiring job you want. The parts supplied with this Radio City Model 309 Tube Tester (see Radio City Model 309 Tube Tester (see
Page 32 for description). Simply follow Page 32 for description). Simply tollow kit. Diagram is so clear and complete kit. Diagram is so clear and complete
that even the novice should have no trouble in finishing the instrument in one evening's work. Everything you need except meter and case, is included in the kiteven the hookup wire is furnished.
57 NP 10459 -Complete Kit of parts Shipping weight 8
57 MP 1047 , pounds
57 NP $10475-$ Meter only
Shipping weight, 2 pounds.
$\$ 10.45$
Shipping weight, 2 pounds.
57 NP $10460-$ Counter tyi
$\$ 3.50$
case not illustrated. Wt., 3 lbs
$\$ 2.00$
and Portable Case as illustrate
Shipping weight, 5 pounds.... $\$ 4.00$


Radio Cify Volt-Ohm= Milliammeter Kits
Why not build your own Volt.Ohm Milliarnmeter and save the difference? You can buy just the foundation meter if you like, or the meter and all necessary parts Mod 4 wK KM.
Model 440k ki. Hlustrated above. Made Mor use with 3 -inch square D'Arsonval -Mil Meter (listed below) giving 1000 ohms per volt on D.C. Provides follow ing scales D.C. volts: 0-5-50-250-500 2500: D.C. Milliamps: $0-1-10-100-1000$; D.C. Anıps.: $0-10 ;$ A.C. Volts: $0-10-100$ 500-1000; Resistance 0-500-100,000 ohms -1 megohm. D.B. ranges: -8 to -55 in 4 scales; vutput ranges same as AC volts. Complete wiring instructions fur nished. Bitteries incladed.
57 NP 10467 -romplete parts including pance range as !ited above. Less $\$ 3.55$
neter. Shpg. wi., 57NP 10468-Complete parts needed for as listed above. Leess meter. Ship- $\$ 175$ ping weight. ipound .... 57 NP 10466 -Three-inch founda- $\$ 3.65$
tion meter. Shps. wt., 2 IUs 57 NP 10476 -Hardwond case. size $\$ 1.00$ Model 411 K Kit. Has $41 / 2$-inch 5000 ohnis per volt Meter (on D.C.). See Radio fion of ranges and illustration of com plete instrument.
57 NP 10463 -Complete Kic of parts and panel. Less meter andicase. All AC $\$ 10.25$ 57 NP 10462 - Foundation Meter $\$ 7.75$
only. Shipping weight, 3 tbs. . 57 NP 10464 - Open face hardwnod Ship above. Size $81 / 2 \pi 101 / 2 x+1 / 4$ inchess weight, 3 pounds $\$ 1.95$

## Triplett Model I200F

$\left.\begin{array}{l}\text { Volt Ohm Milliam- } \\ \text { meter with push- } \\ \text { button control. }\end{array}\right\}$ Buttons of differ- $\$ 8$ Down and D.C. Voltage, Current and Resistance ranges. All switches are locking type, and only one need be set for each test. This means less switching contacts. Depressing any one button release's any other. Tester also has a separate release button. D.C. Volts. $0-10-50-250-500-1000$ at 25,000 Ohms per volt. A.C. Volts, 0 10-50-250-5001000 at 1000 Ohms per Volt. D.C. Milliamperes, 0-1-10-50-250. D.C. Microamperes. $0-50$ (through separate jacks). Resistance 0-500 Low ( Ohms. shunt type circuit; $0-300,000$ Ohms: $0-3$ and $0-3$ Megohms, series type circuit. Selfput readings available on A.C. Voltage cances, through a built in is Mid condenser Meter is a 4 -inch triplet! "Red-Dol" which is your zuarantec of lifetime service. Plug-in rectifier. Metal case size $7 \% \times 6 / 255 \%$ inches. Elastic strap inside cover for carrying atments, this volt-ohm-nilliammeter is built to the very hishest standards. Shipping weight, 14 pounds.
57 NP 017928
.$\$ 30.03$

## Triplett Model 625T

Highly sensitive Volt Gives you a compact portable tester with 12 C.-D.C. rankes to$\$ 21^{56}$ 5000 volts. six D.C. current ranges including microamperes. milliamperes, and amperes: three resistance ranges. D.C and A.C. Volts: $0-215-10-50-250-1000$ 5000 at 1,000 ohms per volt on both. D C. current ranges $0-100$ microannperes $0-1-10-100$ milliamperes, and $0-1-10$ amperes. Resistance ranges: $0-400$ ohms (shunt circuit), $0-50.000$ ohms and $0-4$ megohms (series type circuit). Self con ained batteries for all resistance ranges complete insulation for high voltage testing provided hy black molded case. Red Dot lifetirne meter, with extra long .58-inch scale. Cartıidge loading batadjustment. Case size $6 \times 51 / 2 \times 21 / 2$ inches dipeine weirht 6 pounds $2 \times 21 / 2$ inches hipping weight 6 pound
57 NP 012591
$\$ 21.56$

## R.C.A. Voltohmyst 165

 Junior Voltohmysta very popular efficient service $\$ \mathbf{5 0}$ instrument. Small, \$10 Down type volt-meter and ohnmeter. An ideal instrument for the service shop or laboratory. Une of its most outstanding features is its extremely high input resistance and stable operation. Line voltage tluctuations or differences in tubes do not affect its accuracy. The DC electronic volt-meter ranges are: $0-3-30-100-300-1000$ V. AC at 1000 ohms per volt; 01000 megohms in 6 ranges. No zero reset when changing scales. No leads to short. Meter accuracy, $2 \%$ at full scale. Gray steel cabinet, $97 \times 47 / 8 \times 4816$ in. With tubes and tes leads. For $105-125$ volts, $50-$ Terms, epe 2 Shipping weight Terms, see Page 2. Shipping weight, 14 pounds.
57 NP 013141

We regrel that we cannel guarantee the prices in this catalog. This is because the manufacfurers of radio and test equipment establish the prices of which we are permitted to sell... and reserve the right to change such prices without notice. See Page 2 for details.

## Triplett and Readrite Accurate Panel Meters



Triplet Melers, Famous for fine workmanship and dependiatility. Rugged D'Arsonval movement assures accuracy within $2 \%$. Cienuine polished sapphire-jeweled bearings are set in adjustahle screws, with balanced aluminum-rilbed-type pointers. Metal dials finished in
white enamel with large, easily-read scales. Zero adjusting screw on white enamel with large, easity-rea
front of meter. In bakelite cases.
Reodrite Meters Modul 55 D.C. Accuracy within 5\%. D.C. meters are polarized vane, solenoid type. Kequire 23 ga-inch mounting hote. Have easy-reading white dialulack lettering and full nickel-finish metal mounting use No. 65A llange ring.


Readrite Model 95. An at tractuve new model. Beautiful black lacquer inch hole for mounting


## READRITE Mounted Pocket Meters with Battery

 Model 511. Scales 0-3-30-300 D.C. Volts and 010,000 ohrns. Black wood case, size 25 x'2 3 x 2 in. leads. Shipping weight, 5 pounds. 57 NP 18865Model 510 Volt-Ohmmetar. Same as Model 511 hist ed at left. but with the following rankes: 0-300 1).C volls: 0 10,000 ohms. Cum 57 NP 18866

## Modern Service Instruments

## 

## Radio City Model 432

(4) Multi-scale D'Arsonval meter 0-1 mil, accu rate within $2 \%$. Individual low ohm scale.
D.C. Volts $0-5 / 0-50 / 0-500 / 0-1000$ at 1000 ohms per volt sensitivity. ID. Milliomparas
$0-1 / 0-10$. Ohms $0-500 / 0-50$, $000 / 0 / 500,000$ $-1 / 0-10$. Hm s Zero meter adjustment. Hardwood case. 57 NP 018830 - Model 432. Shipg. wL., 4 ibs
 57 NP 018828 -Model 456. Ranges as in Model 432 in A.C., D.C.
4 db. ranges. Ohms $0 / 5000 / 500,000$. Shpg. wt., 4 lbs... $\$ 9.75$ 57 NP 017948 -Model 433. Similar to Model 432. Same ranges,

## Readrite Model 738

(B) Pocket Volt-Ohm-Milliammeter with Triplett 3-in. Meter, Knob operated zero adjust ment. Scales: D.C. Volts $0 / 1.5 / 15 / 150$. Low ohms (shunt type circuit) $0-500$ with 25 hm point in center of scale. $0 / 500,000$ ohms (series circuit) Molded Case $31 / 1655 \% / 8 \times 21 / 6 \mathrm{in}$. Test leads and batteries inct. 57 NP 018862 -Shipping weight, 5 pounds.
Model 739. Pocket Volt-Ohm-Milliammerer. A general test instrument, equal to 25 single units. Has selector switch for all rankes...separate knob-operated zero adjustment for resistance measurements. . precision Triplett three-inch meter with $0-15-150-750-1500$ (D.C. at 1000 ohms per volt); D.C. Mil-$0-15-150-750-1500$ (D.C. at 1000 ohms per volt); D.C. Mil-
liamperes $0-11 / 2-15-150$; Resistance, Low ohms, $0-500,0-500,000$ hms series type circuit Molded case, size $31,16 \times 5 \% \times 2 \%$ Test leads, included. 57 NP 018861 -Shipping weight, 5 pounds
$\$ 10.67$

## Radio City Model 446

 $0 / 10 / 100 / 500 /$ ionn 3 range ar ohmmeter

Complete $0 / 500 / 100,000 / 1$ Meg. Low range ohmmeter is low current drain back up type reading as low as 0.1 ohm. Center of scalc
reads only 14 ohms. 4 db . ranges- 8 to $15 / 12$ to $35 / 26$ to $49 / 32$ to 55 . 4 ourput ranges-same as AC volts. Meter sensitivity 1 millianjpere or 1000 ohms per volt. 57 NP 017947 -Shipping weight, 4 pounds
.510 .73

## Supreme Model 543

(D) Pocket Multimeter in bakelite case. 3-in. one-mil meter with a sensitivity of 1000 ohms. Single rotary selector switch provides following ranges:-0/200/200,000 ohms; Direct Current-0/6/60/600 M A. ; A.C $-0,115 / 150 / 600 / 3000$ voltage measurements in radio and television receivers. High voltage ranges may be used on transmitter and scope. $\$ 13.47$ Model 542 Multimeter. $3 \times 5 \% \times 2$ in. 4 D.C. mil ranges (with first scale division 5 microamperes) of $0 / 0.3 / 6 / 30 / 150 ; 4$ D.C. volt ranges (with first scale division $0 / 1$ volt) of $0 / 6 / 150 / 300 / 1500$, resistance ohms ranges (with 1 ohm first scale division and 25 ohms center scale) of
ranges (with first scale division 0.1 volt) of $0 / 6 / 30 / 150 / 600$; 4 ranges (with first scale $0 / 6 / 30 / 150 / 600$. 4 decibel ranges of 4 output ranges of
$-6 /+10,+8 /+24, ~$
$22 /+38,+34 /+50$.
3 in. square meter with 200-microampere movement. 5000 ohms per volt sensitivity. Ohmmeter ranges, including megohm range operated by batteries. $\mathbf{5 7}$ NP 018846 -With batteries. Shpg. wt., 2 lbs... $\$ 17.59$
$\$ 2445$
Precision Model 844 L
(B)
(4) Volt-Ohm-Mlillammeter $4 \%$-inch A.C. and D. ${ }^{\text {a }}$ microamperes mete00 ohms per volt: $0-12 / 60 / 300 / 600 / 1200$ / 6000 volts. D.C. current ranges: $0-1.2 / 12 / 60 / 300 / 1200 \mathrm{MA}$; and $0-12$ Amperes. Resistance ranges; $0-400$; $0-100,000 ; 0-1$ meg.; and $0-10$ megs. Batteries mount inside of case. Six decibel ranges from -12 to 70 db . Six Output Ranges, same as A C. voltage ranges. Wire wound shunts and multipliers are of $1 \%$ accuracy. Individually calibrated for $2 \%$ D.C. and $3 \%$ case and test leads. Baiteries required, one 57 NP 13100 and one 57 NP 13112 ' see Page 37). Shipping weight 6 pounds.
57 NP 018391.
.$\$ 24.45$
Model 845L. Similar to Model 844L shown above (A). Combines in a single compact unit, two complete Multirange testers-one of 5,000 ohms per volt provides for accurate measurements in high resistance circuits, and the other at 1000 ohms per.voit fol standard sensitivity measurements for point-topoint voltage reading comparisons as furnished by receiver manuacMicroampere meter used is 44 square and housed in a bakelite case scales: 0/12/60/300/600/1200/6000 Volts D.C. at 5000 ohms per volt ; $0 / 12 / 60 / 300 / 600 / 1200 / 6000$ Volts D.C. at 1000 ohms per volt. Resistance ranges with self-contained batteries $0 / 2000 / 200,000 / 2$ megs $/ 20$ megs with 15 ohm center on $0 / 300$ Microamps current ranges, $0 / 300$ Microamps $0 / 12$ Amperes. Db ranges -12 Milliamperes, Output ranges same as AC voltage ranges. All wire wound shunts and matched metallized multipliers are of $1 \%$ tolerances. All instruments individually calibrated for $2 \%$ D.C. and $3 \%$ A.C. overall accuracy. Walnut finished hardwood case with carrying hanand test leads not furnished. Requires one 57 NP 13100 and one 57 NP 13112 batteries (see Page 37). Shipping weight, 7 pounds. 57 NP 012583
$\$ 28.37$
57 NP 012582 -Model 845P. Same as 845 except with cover and compartand batteries. Shipping 3033 weight, 9 pounds.
\$30.33
(B) Model 834. Provides 31 AC and DC ranges to 6000 volts, 600 milliamps and 5 megohms with 1000 ohms per voltages. Noexternal batteries or multipliers. Has $31 / 4$-inch bakelite cased 400 microampere meter. Hardwood case size 7x4y/2 $\times 3$ inches. Ranges: $0 / 12 / 60 / 300 / 600 / 1200 / 6000$ volts AC and DC: $1.2 / 12 / 60600 \mathrm{DC}$ milliamps; $0 / 5000 / 500,000$ ohms $/ 5$ megohms. -10 to +70 db; Six output ranges same as A.C. volts. Each inDC and $3 \%$ AC accuracy Batories and test leads not furnished. Furnished and test leads not furnished. Furnished whout test leads. Shipping weight 4 pounds 4 pounds
57 NP 012584
$\$ 19.55$
pAge 31
RADIO EQUIPMENT

## 



## \$2|02

 $1550-0$ tuhe checker $T$ it and all metal, 19 . glass. OZ4, cold anode recilfers, actail, loctal and Q A Pecifolate voltage co relative iest Trest R.ibellase tuta a weperic billow tube chart included Hot interelere ins shoritand loakase tes hetween il individual elements Hol cathoute levape test. Hugh en-lifits neon indication Nobe icotime revide for audible te $t$ of noisy tubes. Individual the t of each ection of full wase rectifers duo diodes and all multipurpase tubes. Spare acket provides for future tuines with new hise arrangemint a. Adjustable for all lin voltages, $105-135$, wizh line vollage indication direcily on metrr. J-inch siquare D'Arsonval meter, accurate within 2 g. Direct reading. Attractive artificial leithr covered catrying cace, sire $11 / 4 \mathrm{x} 12 \mathrm{x}$ inches For 110 vols $00 / 60$ cycle A C.57 NP 017925 - Model 309P. Combination Portable and Counter Model Shpg mil. 13 pounds $\$ 21.02$ 57 NP 017939 -Model 300 C. Counter Model. Hard wood save, no cover. Shpg. Wi., 11 pounds $\$ 18.57$


## American Model 4101

## $\$ 1785$

有 6,7.7L octals, turfals, istantang is Peanut, Angle ended. :loating nlaseries new RCA Midget loctals All rists for Gu lity seread directly on a 4 y -in jeweled D 1 reonval isp meier. New puch-bution in lictecs ucually found onty in more expenswe zesters Also tests nortrand liateagos up to 2 megehme in all tubes. Teis beth plats in recitiers and individual sections sush $\Rightarrow$ dieles. riodes, pentodes, etc, in multspurpo. tubes Has a newly developed voltave regulator which enables you to commensite for the particular line volines in sour wohly. A some semet and an extra switch bant assures positive prostiction against obsolescence. Stit
 prinel hinshed in chrome red and black land rubixd wosalen cabinet with cover. Operates on 110 velt 0 cycle A.C. Complete with instructions. L.ow price and impressive appearance are the outstanding features of this instrument. It is as accurate and as well made as you will find at this price
57 NP 017936 -Shipping wetght, 15 pounds $\$ 17.85$

## Readrite Model 432A

## $\$ 20^{31}$

 monular price. May be used as a port able or counter tesser. Tests all re cerving tubes including 4, 5, b, and atures, Bantam Jr., Gawebu: Rectifiers and the hagh vollage 11 volf serpes. Also has ballast tube continuity ter. Separite plate teis for diedes and rectifiers Will not deactivate 15 volt or other tuhes deon short fest indicates the chort and liskag betmen iny twoelements Filament voitise supplied n 1,1 nep irom 11 to 110 voltsResults ate read directly on the Goond Bad threecolor scale Triplett Red Dot hifeume suaranteed indcating instrument. This inst rument has rws genuine apphire jewel bearinge and finest quality parts Separate line voliage control meter permio consaint ine indication and control, without shatchang and redjusting load controls. A.C. op rated- 10 volts, 60 cycles. Complete with artacial leather case. Here sa tube checker that will give you mont his of relable service... and at a price that you can alford to pay Shipsing weight, 18 pounds.
57 NP 018867 - Model 432A


Triplett Model 1612


57 With this tube tester any one can make accurate tests with greater
speed. Has large 6 -in. scale Red Dot lifetime-guaranteed measur$\$ 8$ Down ing instrument. Tester will not become obsolete because froment 1 voltages are to 110 volts, all transformer connections are made for use on future tubes with voltages between these ranges.
Model 1612 has a fully balanced RMA circuit and leakage test for cathode and heater and inner elements, with short tests between any two elements, check for open filaments, hot leakage check, separate section tests of multi-section tubes, and separate plate test of full-wave rectifiers.
Illuminated speed-roll chart. Streamlined, heavy seamless steel case. Size is $15 \% \times 11 \% \times 6$ inches. For 110 -volt 60 -cycle A.C.Shipping weight, each, 30 pounds. 57 NP 018306 -Model 1612 Counter Type $\$ 32.18$ 57 NP 018307 -Model 1613 Portahle as illustrated above, with a detachable cover. Case size with cover-


Supreme Model 589

## s32 ${ }^{\text {83 }}$

Tube and battery tester. Tubeto circuit, but pass through pat ented Double Floating Filament ts all tube elements to any possible matically reconnects all tube elements to any possible tube base arrangement. Since any or all elements o each socket can be rotated to any desired position only one socket of each tupe is necessary. Tests every ype of tube from $3 / 4$ volt to full line voltage unde proper load. Tests separate sections in muli-purpose tubes. Checks all leakages, shoris, open elements and hlament continuity with a neon lamp. A carcuit insert is provided for checking noise. leakage, loose and bad connections. Battery testing circuit provides proper load at which each battery is to operate, planily portable radio types. Condition of the bartery is indi cated on an English reading scale. Roller type tube chart lists tubes in numerical order. This model is specially designed by Supreme Engineers to anticipate changes in tubes and circuits for years to come. 57 NP 017940 -Shipping welght, 19 lbs . $\$ 32.83$


Precision Model 910p
\$ $19 \begin{aligned} & \text { Tests all tubes including gaseous } \\ & \text { rectiliers and ballast types for both } \\ & \text { mastual conductance and cathode }\end{aligned}$ structure. Accommodates all Fila ment voltages from 1.4 to 120 volts Automatic push button system. Dual free point fila ment terminal selection. Visible filament continuity ests. Varying AC signal applied to control grids Meter reads in plate circuit ; indicainons entirely de pendent on control action (transconductance) of each intervening elenents. Meter indication instantly hows up any tube having an open element. Ho athode leak joise est pin jack incorporated for mar ery simply. Noise test pin jacks incorporated for ear miniature type lamps. Built-in roller cests for ai Micro-line adjustment. Pilot light (on-off) midicator Fused line plug. Hardwood portable type case. Size, $12 \times 13 \times 6$ in. Shipping weight, 18 pounds 57 NP 018359 - Model 910P. Hassin meter $\$ 37.19$ 57 NP 012585 -Model 912P. Same is 91012 excepi raciuties and meter

## Siennal Generators



## American Model 4103

fienerates R.F. signals
fronn 100 K.C. to 30 mega-
cycles on Fundamentals.
cycles on fundamentals.
and from 30 mekacycles to

## $\$ 15^{85}$

 (w) megacycles on Harmonreaddurect onfinch dial. Mectrations aro fected druve gives positive vernier control. Different Sine-Wave Audio Frequencies, 400 1 OM1 Ind $\overline{1}, 500$ cyck. Aut one of ihese Audio Frequencies: may be used to modulate the R.F. Has an improved electron-coupled ascillator carcult for the A.F. section. Modern desizn full-range attenuator. This instrument has a heavy gauge bright metal panel finished in 3 colors Howerd in ${ }^{2}$ treaminea shelded cabinet. For $105-1115$ volt 60 -cycle A.C. operation. Artiticial leather covicred case. Size: $14 \times 6 \times 11$ in. A grod signal generator at a price every service man can afford. Only a small amount downand a few dollars monthly. See Page 2 for and a few dollars monthly. See Page 2 for
completedetails. Shipping weight, 10 pounds. 57 NP 010790 -Model 4103 . $\$ 15.85$


## Radio City Model 702

Signal Generator with
exrremily wid wave cuv-
erage clontinuously vari- $\mathbf{\$ 2 7 3 9}$ able from 95 kilocycles to

$$
100 \text { megacycles. } 5 \text { funda- }
$$

mental bands include 95 K.C. to 25 M.C. Accurately calibrated and directly or by a 5 to 1 ratio planetary drive. Output can be modulated or unmodulated at will. $30 \%$ morlulation at 400 cycles, sine wave from This 400 -cycle independent, 400 cycle circuit nal use, 6 -voli maximum avalable for exterplying external source of Provision for applying external source of modulation. Can wobbulator for all icillographic wave and $y$ sis. Separate shielding of coil assembly attenuator and R.F. circuits. Attenuation in approximate microvolts by five-step lad der attenuator, 1 to 500,000 . Shorting of all coils not in use prevents dead spots, etc A.C. operated. Shiproving weight, 14 pounds. 57 NP 018826 -Model 702

Million Model a
Skilfully engineered sig.
nal generator. Capaplic
of productng an artific $\$ 2995$ varied in Amplitude varied in Amplitude Complet irom a few Microvolts to approximately
100,000 Microvolts. Uses separate coils indwidually trimmed, eliminating dead individually trimmed, eliminating dead ing 60 K . C". on harmonics, Large scalesa to al of over 40 inches-make.close read ings easy. Separate audio output available through regular attenuator and multiplies for Public Address and audio work. The R.F. uutput is controlled by a complete resistance attenuator of the double range type: one control $0-100$ and a multiplier having steps of $1.10,100,1000$. Units are in approximate microvolts. Case size $10 x$ 10x7 inches. Designed for operation on 115 volt $50-60$ cycle A.C. This is an improved version of last year Model OD Shipping weight, 10 pounds.
57 NP 010795 -Model Q. . . . . . . $\$ 29.95$


## Supreme Model 571

Signal generator designcd to reduce to a minimum, drift of oscillat or frequency caused by change in line $\$ 43^{07}$ voltage humidity and temperature. Accuracy is within $1 / 2$ of $1 \%$ on any frequency. Produces 6 types of signalsall hum free- (1) Straight C.W., (2) 400 cycle, $30 \%$ standard audio modulated R.F. (3) 400 -cycle $75 \%$ high level audio modulated R.F., ranges from $65 \mathrm{~K} . \mathrm{C}$. to $20.5 \mathrm{M} . \mathrm{C}$. on fundamentals and to over 60 M.C. on harmonics. Ony 2 basic scales. Uses an electron coupled oscillator circuit with air-dielectric condensers and iron core colls resulting in a tically free from frequency drift Dual rat dial Illuminated scale Two molation levels ( $30 \%$ and $75 \%$ ) 400 -cycle note has no quency change from one type signal to another quency change from one type signal to another volt, riu-cycte A.C. Shipping weight, 19 pounds. 57 NP 018845 - Model $571 \ldots .13 .07$


Signal Generator Hicock Model 188
This fine signal generator is specifically designed Amplitude Modulation receivers. It costs a little more than ordinary service oscillators, but if you witl read the 12 mints helow, you will quichly see
that the Model 188 is not an ordinary instrument. 1 Wide Band Frequency Modulated R.F. Output. 750 K.C. Sweep K.C. to 133 Megacycles. (Modulated internally at 60 cycles for visual alignment of wide band frequency modulated and television R.F. and I.F. Stages.

2 Frequency Modulated R.F. Output (Firequency modulated standard sweep- 150 K.C.) 100 K.C. to 133 Megacycles. Modulated internally at 400 cycles, or can be inodulated from external source from 10 to 15,000 cycles.
3. Frequency Modulated R.F. Ontpit! (30 K.C. sweer; stanciatd for isual alignment of amplitude modulated receivers) from $100 \mathrm{~K} . C$. . 10 Megacycles.
4 Amplitude Modulated R.F. Output ( 400 cycles) 100 K.C. to 110 Megacycles, (or can be externally modulated from 50 to 15,000 cycles). Unmodulated R.F. Output 100 R.C. to 110 Megacycles. Four crystal controlled outputs, accuracy within $01 \%$
100 K.C. Modulated ( 400 cycle) -100 K . C. io $15,000 \mathrm{~K}$
7100 K.C. Unmodulated- 100 K.C. 10 15,000 K.C
81000 K.C. Modulated ( 400 cycle) 1000 K.C. to 100 Megacycles 91000 K.C. Unmodulated - 1000 K..C. to 100 Megacycles
10100 to 10,000 Cycle Variable Audio Frequency Output. 11400 Cycle Fixed Audio Out put.
12 Synchronized Sweep Voltage for Oscillograph use.
Self-contained Power Level Meter. Three Ranges. -10 to +6 , to +22 +22 to +38 db , and $0 / 3.5 / 20 / 140$ volts. Seven Fundamental Con tinuously Variable R.F. Ranges with accuracy better than $1 / 2 \%$ $100 \mathrm{K.C}$. to $300 \mathrm{~K} . \mathrm{C} .0300 \mathrm{~K} . \mathrm{C}$. to $850 \mathrm{K.C} .850 \mathrm{K.C}$. to $2.6 \mathrm{M} . \mathrm{C}$ 2.6 M.C. to 8.0 M.C.. 8.0 M.C. to 24.0 M.C., 24.0 M.C. to $60 \mathrm{M.C}$. 60 M.C. 10110 MC
Two Negative Resistance Audio Frequency Oscillators. 400 cycles fixed and 100 to 10,000 cycle variable. Accuracy approximately $5 \%$ )ut put voltage continuously variable from 0 to 1.0 Volt.
All coils but 60 to $110 \mathrm{M} . \mathrm{C}$. are ligh " O " iron core type permeability and capacity tuned. Each oscillator connes completely equipped and upplied with all necessary connecting cables. 27 -page manual fur-



## Aligns Receivers Under Normal Conditions

Laboratory type signal generator for all A.M., F.M., and Television receiver requirements. Gives you servicing by signal substitution . the new modern dynamic speed approach to receiver alignment and ad justment probtems. Eliminates the need of aligning AVC receivers with the volume controi set at maximum, and signal generator at minimum Supplies its own Are voltage, and accordingly assures accurate and eficient Signal-Subeircuit adjustment. Also spectally designed for servicing by adjustment and alignment problems. Provides full frequency coverage from 90 K .C. to $88 \mathrm{M.C}$. in six bands. Large full vision $61 / 2$-inch dial. tyble sine wave oscillator indepor circuit. Coaxial out-put cable. 40 yyce suation Variate modution control $100 \%$ modulated R.F. signal. For 110 vol, calibrated to provide 60 steel case. Size $12 \times 101 / 2 \times 6$ inches. Shipping wisht, 19 puunds. BT HF 0i83ys-Model E 200........................................ 39.15 We reserve the right to change our pir Increasting cosis require us to do so. See notice on Poge 2 for details

## Dependeble Condenser and Set Anclyzers

## 

# Rider <br> Chanalyst <br> $\$ 107^{50}$ \$24.00 Dawn 

Offers an easier and more accurate method of checking radio receiver troubles. No matter how complicated the circuit . regardess of the number or types of tukes used, the Ch
noses the problem.
noses the problem.
Testing with the Chanalyst is done without the use of adapters or plugs. It will trace signal from antenna of adapters or plugs. It will trace signal from antenna to speaker in RF dF, or AF stages... indicating where hum. Checks operating voltages at any point without loading the circuit. Checks frequency output of the oscillator section in supers. Shows wat tage consumption of the set during operation. Locates troubles in intermittent receivers by means of dividing the set into five basic sections .. . exch section winalyst panel. Size $14 \% \times 16 \times 9$ inches. Comes complete with 12 tubes. Like everything else in this catalog the Rider Chanalyst is availabe on Easy Terms. Turn to Page 2 and see for yourself how easy it is to own this superior instrument
57 NP 018371 -Shipping weight, 28 Ibs... . $\$ 107.50$


Clough Brengle
$\$ 4750$ Bridge—Model 230

Measures capacity and resistance accurately. Capacity range 2 mfd . to 200 Mfd . Electrolytic condensers polarized during capacity tests. A full wave rectifier supplies D.C. continuously adjustable up to 500 Volts for application to condenser under test. New scale eliminates computations in leakage tests--direct read ing on leakage-per-Microtarad dial. Measures resist ance 2 ohms to 20 megohms. Insulation resistance measureinents 0 to 2500 megohms.
Welded steel case and lid with slip hinges. Case finished in black wrinkle: Panel in nickel and black. Size with lid closed $10 \times 81 / 2 \times 7$ inches. For 115 volt $50-60$ cycle A.C. operation.
57 NP 018370 -Shipping weight, 15 tbs.... $\$ 47.50$
Prices on testing equipment ape set by the manufacturer. We therefore cannot guarantee prices in this calalog for any deflnite time, See Page 2 for further details

## Readrite <br> Model 432 A-742 <br> $\$ 2896$

Combination Tube Tester and Volt-Ohm-Milliammeter. All the advantages of separate units, plus the onvenience of having both instruments combined in a
Has Model 432-A Tube Tester that accurately tests Il receiving type tubes now in general use. Volt-OhmMilliammeter section is a separate panel with range elector, switch, ohmmeter zero adjuster, jacks and Precision 3 -inch indicating instrument with a sensiivity of one mil. Volt-Ohm-Milliammeter ranges are: A.C.-D.C. Volts 0-10-50-250-500-2500 (D.C. at 1000 hms per volt): D.C. Milliamperes 0-1-10-100: Re100,000 ohms and $1 / / 2$ megohms. Ohmmeter is battery 100,000 ohms and $1 / / 2$ megohm

Circuit is more accurate than ordinary ohmmeter power supply circuits. Black artincial leather case with handle. $13 \times 101 / 5 \times 7$ in. Silver color and black panels. Large compartment for accessories and tools. For Sears Easy Payment Terms, see Page 2 57 NP 018884 -Shipping weight. 20 lbs.... $\$ 26.88$


American Model 4102
$\$ 2985$
Combination Tube Tester and Radio Analyzer. Tests all tubes from 1.4 to 117 Voits, including 4, 5, 6. 7, 7 L . octals, loctals, Bantam fr.* Peanut, Single Ended, Moating lilament, Mercury vapor Rectiters, RCA Midget loctals, etc. All tests for quality are read Ranges: $0 / 300 / 30,000 / 300.000 / 9$ Megohms. $6 \mathrm{D} . \mathrm{C}$. Volt Ranges; (at 5000 ohms per volt) $0 / 3 / 10 / 50 / 250$ / $500 / 5000$ Volts, 4 A.C. Ranges; (at 1200 ohms per volt) $0 / 15 / 150 / 1590 / 3000$ Volts, 4 D.C. Ma. Ranges; $0-200$ Micro-Amps. $0-2 \mathrm{Ma} / 0-20 \mathrm{Ma} / 0-200 \mathrm{Ma}$., 2 D.C. Amp. Ranges; 01 Amp./10 Amp., 2 Capacity Ranges; .0005-.05-.05-50 Mifd., 2 Inductance Ranges: $1-70 / 70-10 \mathrm{M}$ Henries, 4 Decibel Kanges; $-20+18$ $+38+58+88$ D.B. 4 Outpu! Ranges: $0-15 / 0-150 /$ 0-1500/0-3000 Volts, 4 Power Output Ranges; watts based on 6 M.W. at 0 db . Hardwood cabinet and cover: sise $5 / 2 \times 13 \% \times 141 / 4 \mathrm{in}$. Operates on $90-125$ voits 60 cycle A.C. With test leads. This analyzer is an excellent value. Not equal to our higher priced instruments but well worth this low price.
57 NP 017937 -Shipping weight, 17 lbs..... $\$ 29.85$


## Solar Analyzers

$\$ 25^{48}$

Measures capacity from .00001 to 70 mfds . power factor, resistance up to 2 megohms, insulation resistance. and detects defective condensers. Inst rument is also a continuity meter and visual bridge balance. All readinys direct and independent of line voltage variations. No headphones or meters are required. For 110 volt, $60-$ cycle A.C. Requires 1-6E5 and 1-IV tube. Shipping weight, 9 pounds. 57 MP $018377-C B-1$ - 60 with tubes. . . . . . $\$ 25.48$

Madel CC=1-60
Similar to above but measures resistances up 102 megohms and capacities from .00001 to 800 mfd . Power factors of condensers up to $50 \%$; Insulation resistance to 1,000 megohms. D.C. test voltages available up $50-60$ cycle A.C. Shipping weight, 10 lbs. 57 NP 017975 - With tubes.


Cornell-Dubilier Compact Bridge<br>$\$ 12^{37}$

Measures all types of condensers bet ween . 0001 and 50 mfd. Indicates power factor of electrolytic condensers. Useful as a continuity meter and for locating opens, shorts, high or low capacity, high power factor, etc Direct-reading ranges are calibrated directly in microfarads. Supplied with test leads and instructions, less tubes (uses 12A7 and 6AF6G). For $110 / 120-\mathrm{volt}$. 60 cycle A.C. Size: $3 \% \times 5 \times 3 \mathrm{in}$. Ideal for servicemen because of its compact size.
57 NP 017985 -Model BN. Shpg. wt., 3 lbs.. $\$ 12.37$

## Cornell-Dubilier-Madel BF50

Measures capacity of paper, mica. electrolytic con$50 \%$. Resistance up to 1500 meg. Requires 12 A 7 and 57 NP 010649 -Shipping weight. $11 \mathrm{lbs} . . .$. \$31.12

For Easy Terms
See Page 2


## Supreme Model 599 <br> $\$ 42^{63}$

Includes all the features of tie Supreme Model

 sensituvty 12.
 rankes- with instrument and fully protected anteed with instrumen and A. th bino wi.t. 3 direct current rankes 0,6 , whon urement oscren. piste , suphy and DC


 current with 3.5 ohms center scile. Brown luggane type caste sice $11 / 1 / \times 5 / 4 \times 5 \%$.
57 NP 017941 -Shipping wt.. 16 lbs... $\$ 42.63$ 57 NP 017578 -Counter model with $\overline{\text {-inch }}$ meter, Shipping wh., 20 los... ..... 553.85


## Solar <br> CE Exam-eter <br> $\$ 4400$ <br> \$8.50 Down

The only capacitor analyzer available having atl these features! Quick-Check dynamic test: For Shorts, Opens, High R.F. Impedance, Intermitients. Tests can be made without removing capacitors from receiver. Capacity Eridge: Measures from in mmf. tu 2000 mid . Resistance Rridge: Measures eseistance from 50 olms io 7.5 megohms. Megohm Aeter. Measures insulation resistance directly from 2 to 10.000 meqohme. Milliamminter. Measures leakage to 50 milliamperes at 0-550 V.D.C. Bownr Factor: Measures to 戸r, F.J. D.C. Vacuuin Tube Continuously Variable D.C. Voltage Supply vontinuousiy Variable D.C. Voltage Supply A.C. Motor Starting Capacitors Test A.C. Motor Starting Capacitors. Tests lience Conhigh. For Easy Terms see Page 2 for details. 57 NP 012780 -Shipping weight. 11 thw.$\$ 44.00$

## Radio City Model 802-A <br> $\$ 46^{99}$ <br> $\$ 10.00$ Oown

 Ias $41 / 2$-inch meter accurate within 2 宕. Includes decibel meas old tubes and provides for all heater or flament voitages up of ful line voltage. provides for all heater or hament voltages up to ful leakage tests on each individual element Individual tosts ut leakige tes miry purpose tube full wave naciticr due diodes atc. Linte voliage regulation from 10310135 wolts No Multi-tester provides Four Range D.C. voltmeter 0;10/50/500 1000 at 1000 ohms per volt sensitivity Four Ranges A neter $0,10,50,500 /$ livis. Four kange DC. milliammeter $0 / 1$
 $0 / 500 / 5000 / 1,000,000 / 10,(100,000$. Low ohm ranke has center scale at 5 ohms and each of the first ten divisione rean 0.1 whm. Four Ranke [3.13. Meter 8 to $15 ; 15$ in $29 ; 29$ to $19 ; 32$ (o 551$). \mathrm{B}$ Four Range entput meter. Artificial leather casw size $12 \times 121 / 2 \pi$ in. For 110 -volt (6)-cycle A.
57 NP 018835 -Model 802A. Shipling weight. 18 lhs $\$ 46.99$
 50G flug-in analyzur unit in cover. Shpug. Wet., 17 lbs..... $\$ 33.27$ sube chat: Shipping weishl is pounds $\$ 39.1$ 57 NP 017946 Model 80.3A. Same is Model 802A except with
robl tube chart. Shipping weight. 99 lba

## Triplett

Model Il83
$\$ 53^{75}$
$\$ 10.50$ Down
Voll-Ohm-Mlliammeter, Tube Taster, Free Paint Testar. A.C.-- D.C.
Volts 0 10-50-250 1000 at 10,000 ohms per volt 1).C.- 2000 olnts per volt A.C. A.C. Voitage ranges may be used for output readings. D.C. Milliamperes 011050250 . Resistance 0-500 low Ohms, shunt curcuiti () 1500 and (0-150.000 Ohms, 0-1.5 Neon Shorts Test shows slightest interelement shormand leaktges mitite cathodess are not. eeparate plate tests for diode and rectifiers, Semarate Line Voltage Meter. Wlexible Tube Tester Suitching. lever tyse. geves individual control for each tubt prong, three lever surtch settings reduited ter mosit tubes; never mor in less than four second cart be spunfrom one end to the ot her number tubes, cutting in half lencth of the chart ves paper charts easily illached, or the entire chart mechanism can be feplaced. Red Ihot Lifetime Guaranted 4 -meh indicating insirument. Complete Frep l'oint Tester makes all serites and paralled neted connectors Has snekets for all tulxes; (plug adapters and Midgets if desited Heavy metal case with broun suede effect baked enamel tinish.
57 NP 017933 --Shipping weight. 25 pounds

## Precision

## Series 920



PAGE 35 . . . RADIO EQUIPMENT

# Get Everything You Need Now! See Page 2 for Easy Terms 



## Shock Proof Socket Wrenches

(A) Socket wrenches with transparent amber shockproof handles. Blades or hand nut sizes used in radio work. Shpg. wt., ea., 8 oz.
$57 \mathrm{NP} 17416-316$ in......40c $57 \mathrm{NP} 17420-\%$ in.... 44C
 57 NP 17418 - $1 / 1 \mathrm{in}$ in..... 40c 57 c NP17422-1/2 in
 57 NP 17423 -Complete set of abo
Shipping weight, 2 pounds 4 ounces.

## Craftsman Diagonal Pliers

(B) Vanadium steel. Hand honed cutting jaws. Highly polished. B) Be sure to stote length wanted.

9 NP4506-6-inch. Shipping weight, 6 ounces. Each... \$1.59
-inch Shipping weight, 8 ounces. Each
$\$ 1.85$

## Craftsman Long Nose Pliers

C) Drop forged from Vanadium steel. Polished slender pointed nose. Milled jaws. Length 6 inches.

Each
$\$ 1.35$

## I. C. A. Circle Cutter

(D) Cuts round holes in bakelite, masonite, wood, hard rubber, aluminum, tin, sheet wial Adjustab holes $\%$ inch to 8 inches in diameter. 57 NP 104

## I. C. A. Shearing Punches

(E) Puts round socket and condenser holes in radio chassis bases in a hurry. Shearing action eliminates hammering. Only other grade tool steel. Will last for years. Shpg. wt., ea., 2 lbs. 67 NP12990-K inch. $\$ 1.59 \quad 67$ NP12993-1/4 inch. $\$ 1.79$ 57 NP12991-11/4 inch. $1.79 \quad 57$ NP12994-1\% inch.: $\$ 1.99$ 57 NP12992-11íinch. 1.79
57 NP12995-Replacement Screw for all sizes. Shpg. wt., 4 oz . 2lC

"ATR" Inverters-D.C. to A.C. With an ATR Inverter, it is possible to obtain 110 -volt 60 -cycle A.C. from 6 -volt batteries. These units are designed especially for operating standard A.C. radios, P.A. systems, amplifiers, etc. Plug-in vibrator has ten $1 / 4$-in. diameter contacts. Features include: 4 -point voltage regulator, fuse protection on-off switch. metal case. Sizc: $7 \% \times 8396 \times 4$ is inches.

Radio Type with Filler

| Catalog. Number | $\begin{aligned} & \text { Tnput } \\ & \text { voils } \end{aligned}$ | Watts Cont. | Inter. | Shipping Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 57 NP 017987 | 6 | 75 | 85 | 17 pounds | \$15.26 |
| 57 NP 017988 | 12 | 100 | 125 | 17 pounds | 15.26 |
| 57 NP 017989 | 32 | 100 | 150 | 17 sounds | 15.85 |
| 57 NP 017990 | 32 | 180 | 200 | 27 pounds | 22.05 |
| 57 NP 017991 | 110 | 150 | 250 | 17 pounds | 15.85 |

## ATR "B" Battery Eliminator

Eliminates expensive " $B$ " batteries. Operates on flashlight cells or storage battery in car. Delivers 90 volts D.C. at 10 milliamperes. Cuts equivalent "B"" inent one-six ins about la less equivalent B 90 volts at 10 milliamperes. Requires five flashlight cells in series.


1.37


## Cornell-Dubilier "Quietone" Interference Filters

(D) Model IF-19. An efficient capacitive-inductive type filter for use where interference is severe. Has binding post for ground connection. walnut or ears provided. Bakelite case, state Size: $4 \times 23 / 2 \times 27 / 4$ inches. 57 NP 10600 --Shpg. wt., 4 lbs. Each. $\$ 2.55$
(B) Model IF-18. An efficient all-wave, capaci-tive-inductive, sectional-band type filter for use in connection with elect rical appliances when interference conditions are severe. Has binding post for making ground connection. In walnut $5 \times 3 y \times 2 \%$ inches.
57 NP 10601 -Shpg. wt., 6 lbs. Each. . $\$ 3.18$
(C) Model IF-7A. An ideal filter designed to block severe radio interference caused by motors, yenerators, elevators, diathermy mafactory, office, and apartment building installafactory. Office, and apartment building installations. This Quietone consists of low-loss coils noise conditions in both Broadcast and ShortWave receivers. A heavy-duty, capacitive-inductive filter for single phase, $110-120 \mathrm{~V}$. AC-DC at 5 amps. Housed in a heavy steel cut-out box, with hinged cover, finished in gray enamel. Size: 6x6x4 inches.
57 N P 10602 -Shpg. wt., 9 lbs. Each. $\$ 4.77$
(4) Model IF-21. All-wave capacitive-inductive 110 V electric shavers, barber citppers. Size: $4 \times 2 \% \times 2 \%$ inches.
57 NP 10603 -Shpg. wl., 2 lbs .8 oz. . $\$ 1.59$
(F) Model IF-6, For all types of home electrical appliances where interference is of moderately low intensity. Installed between appliance and power line with short return lead which reduces radiation. 110 V . AC-DC at 5 amps. Walnut finish. Size: $2 \times 1$ \%is in. diameter.
57 NP 10604 -Shpg. wt., 1 lb. Each.... (G) Model IF-4. Ideal for use with small radio (G) receivers, such as AC-DC midget sets, ete where noise level is not too severe. Connects in power line between the radio receiver plug and wall receptacle 110 V . AC-DC at 5 amps . At tractive walnut finished case. Housed in metal shell. Size: $2 \times 1$ 羔inches diameter.
$57 \mathrm{NP} 10605-$ Shpg. wt., 1 lb . Each. . . 48C (C) Model 1F-5. For small appliances such as food mixers, hair dryers, etc.i where radio at 5 amps . Walnut finish.
57 NP 10606 -Shpg. wt., 1 lb. Each.... 48C
(C) Model IF-22. Filter for 110 V . shavers.

57 Nh P 10607 -For Schick, Knapp. . . . . \$1.12 57 NP 10608 -For Packard, Reming-
ton-Rand, etc............................ $\$ 1.12$


## Cabinet Repair Kit

(A) A complete kit that will meet any emergency. You cabinets, inobs ondent or nicks the shellac sticks and melt them in with the spatula and alcohol lamp. On light scratches use the General Skratch lamp. On light scratches use the General Skratch ficial leather finish box. Included 9 shades of stick shellack, 1 bottle each of light and dark stain, 1 bottle metal shading varnish, I bottle of polish, 1 Skratch Stik, 1 alcohol lamp, i spatula, 2 touch-up brushes, steel wool, sand paper, rubbing felt, rubbing fluid and wiping cloth. Directions included. 57 NP 10470 -.Shipping weight, 2 pounds. . . $\$ 1.91$

## Radio Chemical Kit

(B) Portable chemical kit to carry with you. Complete with 8 chemical compounds in a neat artificial leather pocket case. Includes the following 8 necessities: Service Cement (for radio and speaker repairs), Rubber Drive Cement (for cementing rubber dial drives to shafts). Carbon-X (for noisy volume controls), Lube-Rex (radio contact lubricant). Scratch Polish, Non-Slip Compound (for dial drives), Dial Oil, and Contact Cleaner. A handy applicator is attached to
the cap of cach container to make it easy to use.
57 NP 10474-Shipping weight, 2 lbs ...... \$1.02

## General Skratch Stik

(C) Did you ever accidentally scratch a embarrassing cases like this if you have in your pocket a G-C Skratch Stik. Comes in a handy case...easy to carry.
57 NP 1047 i-Shpg. wt., 4 oz . Each. $2 \mid \mathrm{C}$

## Walsco Unibelt

(5) An adjustable dial belt that is a great time and trouble saver for radio men. It comes open! Can usually be installed without taking dial mechanism apart. Can't slip or stretch. Full instructions 57 NP belt. Shipping wt. 6 oz $6 \%$ P 10887 -Ad justable from 57 NP 10885 -Adjustable from $101 / 2$ to 13516 inches
57 NP 10880 -Ad justable from
147, 16 to $17 \%$ inches.
Dial Cable on Spools
(D) 42 strands phosphor bronze over linen 57 NP 10472 - 25 ft . spool. Shippi weight, 1 pound..................... 68 c
25-Ft. Spool Heavy Braided Linen Cable. 57 NP 10473 -Shipping wt.. $1 \mathrm{lb} . .68 \mathrm{C}$

## Eicor Generators

300-WaH Generator - Johnson 4-cycle \%-H.P. gasoline motor. Cast iron base. Fuel capacity, gasollon. Speed 1800 K.P.M. Push Button start er if 16 -volt storage battery is provided for starting. Delivers 300 watts at 110 volts, 60 cycle A.C. and 150 watts at 60 volts D.C. (not simultaneously). Shipped from factory in Chica go, from where you pay freight. Shpg. wt., 95 lbs. 57 NPM 12824 F $\quad \$ 71.50$

450-Watt Model
Has 1 horse power Johnson engine with float feed carburetor. Shpg. wt., 103 lbs . feed carburetor. S

## Walsco Staple Driver

(A) Ideal for Radio Servicemen, Public Address and Inter-com men, Electricians and Telephone men. Automatically sets staples in place and drives them hone with one gentle stroke. Adjustable fitting regulates depth staple is driven into materia one clip of 23 staples. Shipping weight. 1 lb .8 oz .
$\$ 3.33$ 57 NP $10882-$ Box of 1000 staples. Shipping wt., 1 lb .

## Craftsman Soldering Iron

(B) Adjustable 3 -in. soid copper tip is 3 inches longia-year guar by baffle plates. Chromium plated finish. Rubber covered cord and plug. 110-120-volt current. Approved by Underwriters. 9 NP 5411-Shipping weight, 1 pound 8 ounces
$\$ 2.19$



## Ray-O-Vac Dry Batteries

Scientifically designed... made from finest quality materials... and built under rigid laboratory supervision. Heavy gauge, seamless, Jeak-proof zinc cans of uniform thickness insure longer life. Guaranteed fresh and dependable. Will replace batteries shown below. To order from the table below, find the number of your old battery in the third column. The first column on the same line shows you the catalog number for the replacement battery. Order from Sears and save.

Replacement Bapterles for Rodlo Test Instruments

| Calator Number | $\begin{gathered} \text { Ray-0.Vac } \\ \text { Number } \end{gathered}$ | Will Replace Burgess No. | Voltage | Type | Size inches | Shipping Whicht | Price Eaeh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 57 NP 13109 | 7 R | 2 | 1.5 | Pente |  | 402. | \$0.04 |
| 57 NP 13115 | 2 LP | 2 | 1.5 | Unit Cell (Leak Proof) | $23 / 519$ \% | 4 oz . | . 10 |
| 57 NP 13103 |  | $\stackrel{6}{6}$ | 1.5 | Standard Dry Cell. | $21 / 2 \times 6$ | 2 lbs . | . 30 |
| 57 NP 13108 | 49 TC | 4 FA | 1.5 | Clip Terminal "A" | 25x ${ }^{5} 5 \times 4$ | 8 oz . | . 28 |
| 57 NP 13105 | P94A | ${ }^{4} \mathrm{~F}$ | 1.5 | Two l'rong Socket. | $25 \times 2 \% \times 4$ | 1 lb . | . 38 |
| 57 NP 13100 | $531{ }^{\text {5 }}$ R | 5360 | 4.5 | Screw Terin'l. "C. | $23.4 \times 2116 \times 296$ | 8 | . 28 |
| 57 NP 13111 | 531 | 4.32 | 4.5 | Strap Termi I. Flashlight | 2 2/6x $\times 116 \times 2 \%$ | 802. 802. | . 20 |
| 57 NP 13114 | P698-A | 2 F 4 | 6.0 | Plug-1n "A | 31/0 $\times 215 / 4 \times 51 / 2$ | 2 lbs. | . 77 |
| 57 NP 13106 | 231 W | 2370 | 4.5 | Pluz-In |  | 1 lb .8 oz | . 25 |
| 57 NP 13110 | $\mathrm{P}^{2} 5151$ | 5156 PI | 22.5 |  | $4 \times 212 \times 31$ | 2 lds. | 69 |
| 57 NP 13112 | - $\times 130$ | 230 N | 45.0 | - | 3/8 $\times 1 / 8 \times 4 / 8$ |  | 1.23 |
| 57 NFI3113 | 1.5303 | B-30 | +5.0 | Plug-In "B" | 41/6 $\times 2916 \times 5{ }^{\text {\% }}$ | 2 llys | 1.02 |

Due to circumstonces over whish we hove no controi,
we cannot guarontee prices in this cotolog for ony definite time. Read notice on Page 2 for defolls.


## Auto Filter Condensers

(A) Two .5 mfd. capacitors in one can. Can grounded. For shunting around generator to render high charging rate. $2 x$ in.

39 c
(B) Single section units for use on battery side of (B) Surce of interference. Capacity .5 mfd . size $316 x$, 16 in.
57 NP $12502-$ Shpg. wt., 4 oz. Each $21 c$ (C) Distribut

57 NP 12503 -Shpg. wt., 4 oz . Each. ... I9C 57 NP 12503 -Shpg. Wt., 4 oz. Each.... 19 C
(D) Distributor Condenser for 1934 to 1936 ord ${ }^{2}$
57 NP 12504 -Shpg. wt., 4 oz. Each. . 19C

## Vibrator Buffer Condensers

(2) High quality Buffer Condensers for all replacement purposes. Metal postage stamp type with two insulated leads. Oil filled. 2000 volts peak. Al Vibran Shpg wer Condenser

| Catalog | ${ }_{\text {cup }}^{\text {cupd }}$ | Size, <br> lincles | ${ }_{\substack{\text { Price } \\ \text { Each }}}$ |
| :---: | :---: | :---: | :---: |
| 57 NP 12507 | . 0097 | 1x11/20\% ${ }^{1}$ |  |
| ${ }_{57}{ }^{7}$ NP 2505 | 01 | ${ }_{1 \times 1} \times 10 \times 10 x^{3} 322$ | $19 \%$ |
| ${ }_{57} 57 \mathrm{NPP} 12510$ | . 02 |  | 19 |

## Auto Radio Suppressors

Bakelite encased, carbon type. First quality throughout. Shpg. wt., each. 3 oz
(F) 57 NP 12512 -Bracket type......IOC
(G) 57 NP 12513-Snap-on type......IOC
(A) 57 NP 12514 -Short Type for V8 10 C
(D) 57 NP 12515 -Cable type.........IOC
(1) 57 NP 12516-Distributor type $\mathbf{1 2 C}$
(D) 57 NP 12517 -Distributor Type. IOC


## Wire Wound Suppressors

Efficiently eliminates motor noises. Does not impair motor efficiency. Only 30 ohm resistance. Shipping weight, each, 3 uz. (P) 57 N P 12520 - Distributor Type. 30c (R) 57 NP 12521 -Elbow Spark Plug Type. . 30 e (S) $57 \mathrm{NP} 12522-8 \mathrm{rachet}$ Sparh Plug Typo. 300

(4) Lead=1n Adapters. Converts standard (1) Lad 10 Motorula fitting,
57 NP 12997 -Shipping weight, 3 ounces. I5 C (2) Converts Motorola lead to Delco fitings.
(1) Universal Aorlal Boostor. Designed to in(1) crease signal pickup of Auto Seeto hy bert, pr malling reiweell derial and Radio. Standard Fittings.
57 NP 12998 -Shipping weight. 4 nunces. $26 C$

AUTO RADIO VIBRATORS


## Guaranteed for One Year

ATR and POWERMASTER Vibrators will meet practically every re placement need. If you can not identify the unit needed from either of the lists below, write our Personal Service Department giving make ret repla your old part numbers 200 lower than the replacement numbers pivan here Fx part numbers 200 lower than mple Oricinal replacement 221
Shipping weight of Vibrators, each, 10 ounces.

| Powermaster Catalog No. | Replactas Mallory Numbers | Replaces Radiart Numbers |
| :---: | :---: | :---: |
| 57 NP 12700 | 221. 292 | $\begin{aligned} & 2742,2743,2747,2819,2807, \\ & 3300,3313,3375,3880 \end{aligned}$ |
| 57 NP 12702 57 NP 12703 | $\begin{gathered} 220 \mathrm{~A} \\ 25 \mathrm{t}, \underset{253}{220 \mathrm{~B}} \end{gathered}$ | $3264.3399,3442$ |
| 57 NP 12709 | 294. $508 \mathrm{P}, 600.650$. 901M, 902M, 세! | 3782, 3806. $5300,5.305,5310$ <br> 5325 P 5340 Mi 534 M |
| 57 NP 12715 | 250,282! ${ }^{\text {P }}$ 5001 | \$330, 5322 |
| 57 NP 12717 | 294C, 602, 6.51 .652 .8 .52 | 5303,5339 |
| 57 NP - 2724 | 2731 |  |
| 57 NP 12727 | 245, MU4 | 4402.5409 |
| 57 NP 12730 | , 523,9511'. M16 | , 4012.5411 .54201 , 5421 |
| 57 NP 12733 | 240,511 | 5400 |
| 57 NP 12739 | 222 | 3308. 3.315 |




Silvertone All-in-One
Deluxe 14-Watt
Public Address System for Small Groups
\$6375 $\$ 14$ Down
Club Modol

This compact self-contained 14 -Watt Public Address System is especially suitable for lodges, clubs, sales meetings, morlishments which require both phonograph and microphone reproduction of fine quality and medium power. The system is so easy to set up and place in operation that even the novice can get it going in five minutes' time or less. System is comCompact and durable. There are only two simple plug-in connections to make when placing the Presto-Pak in operation. Available in three models: (i) With a ten-record capacity tion from the operator; (2) With a standard 78 R.P.M. motor (3) With a professional type dual speed ( $331 / 2$ and 78 R.P.M.) motor and long tone arm for playing up to 16 -inch transcriptions. All three models have a 5 -tube high gain amplifier using Phonograph Gain, Hi-Lo Tone Compensation. Microphone gain 118db. Harmonic Content at 14 watts, approximately $51 / 2 \%$. For 120 volt $50-60$ cycle A.C.
57 NP 012860 - Club Model. With automatic record changer, foot speaker cable, crystal mike and stand as illustrated, 7 -foot mike cable. Takes $12-\mathrm{in}$. or smaller records. Shipping weight, 32 pounds. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 563.75 57 NP 012861 -Standard Model. Same as above, except with manually operated phonograph instead of automatic record
changer. Takes 12 -in. or smaller records.
Shipping weight, 48 pounds. ...................... $\$ 54.50$
$\$ 54.50$
57 NP 012862 -Professional Model. Dual speed phonograph for 16 -inch or smaller records. 12 -inch concert records, 10 -inch PM speaker with 25 -foot cable. Without
$\$ 72.25$


- Tone Control
- Volume Control
- Quier Motor
- Crystal Pickup

Public Address Record Player When played through any Silvertone Public Address Amplifier, this machine will provide entertainment of ultra-fine in this record player. It is provided with tone control and volume control on motor board for the convenience of the operator. Good looking and durable. Black artiticial leather covered carrying case, size $71 / 4 \times 131 / 6 \times 151 / 4$ inches. Quiet running, powerful motor with 6 -foot power cord. 10 -inch turntable. Astatic crystal pickup. Standard speed of 78 R.P.M. record player. Available on Fasy Terms. See Page 2 for details.
57 NP 018900 -Shipping weight, 29 pounds

Webster Standard Automatic
Record Changer
One of the simplest most positive acting, and fool-proof of the popular priced automatic record changers. Very easy to install, simple to operate. Four convenient con-
trol buttons: one for playing 10 -inch records, one for tro buttons: one for playing 10 -inch records, one for
12 inch records, one for changing from automatic to manual operation, and one for rejecting records during ords with each loading. Last record on turntable plays until machine is stopped. Crystal pickup. Motor board measures $14 \times 14$ inches. Mechanism extends $51 / 4$ inches above and $4 \mathrm{y} / 2$ inches below nounting plate. For 110 volt 60 cycle AC. Shipping weight, each, 30 pounds. Needle......................................................... 57 NP 013139 -With Lew Pressure Permanent Sap-
phire Stylus..................................... $\$ 29.26$

with tubes. Good quality crystal microphone with stand 57 NP 010294 -For 110 volt 60 cycle A.C.

General Industries Automatic
Record Changer Plays twelve 10 -inch or ten 12 -inch records changing from one size record to another, or when setting for manual operation. Reject but ton instantly rejects record in playing posioscillating trip grooves. Pickup supported at all times when not resting on record. Base plate size $14 \times 14$ inches. Deluxe rim drive motor, rubber insulated from base plate, pick-
up, and turntable. For 110 volt 60 cycle A.C. Shipping weight, 25 pounds.
57 NP 013130 -With Medium Pressure
Crystal Pickup...With Low Pressure Crystal
57NP 013128 - With
Pickup. . . . . . . . . . . . . . . . .
Talk-a-Phone
Portable
Recorder
$\$ 14$ Down
Illustrated at left. Actually three instruments in one: (1) A well designed, easily overated
home recorder. (2) an efficient record player with a very fine tone, (3) a complete elow power Public Address System including amplifier, microphone, and loud speaker. Makes excep. phone pickup. Has plus for line from radio to make direct recordings of radio programs. Powerful 78 R.P.M. motor. Magnetic cutting head crystal play-back head. Cuts 10 -inch or smalier blanks. 110 lines to the inch outside to inside. Adjustable for cutting depth. Elec. tric-eye recording level indicator. 3 -wat t ed case, size 16×16×14 inches. Comes complete Shipping weight, 40 pounds.

Portable Record Player and Amplifier
Model G 44. Similar in appearance to portable recorder shown above. Has 2-watt amplifier, PM speaker, self starting 78 R.P.M. motor, and offset head crystal pickup. Volume and tone control. Tone arm rest and needle cup. Removable record compart
57 NP $010295-$ For 110 volt 60 cycle AC. Shipping weight, 16 pounds. .
$\$ 25.25$


Silvertone Recording Discs
Safety discs. For home recording. Durable, non-inflammable. Machined steel base. Coated two sides. Playing
time per side: $61 / 2$ inches, 1.5 minutes; 8 inches, 2 time per side: $61 / 2$ inches, 1.5
minutes; 10 inches, 3.5 minutes.

| Catalog <br> Number |  | Sire <br> In. | Shipping wt. |  | Exch | ${ }_{\text {Sor }}^{\text {Six }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Esch | For Six |  |  |
| 57 | NP 5883 |  | $61 / 2$ | 502. | 1 lb . 3 oz . | 15 c | \$0.79 |
| 57 | NP 5884 | 8 | 9 oz . | $2 \mathrm{lbs}$.8 oz . | 20 c | 1.09 |
| 57 | NP 6885 | 10 | 11 oz . | 3 lbs .4 oz . | 30 c | 1.69 |

Professional Quality Recordiscs Cellulose nitrate composition surface coating on processed bond or metal alloy base. Used by the advanced operator because they afford recordings with less surface noise. Because shavings are inflammable, discs must
be used with caution. With each order for 10 or more discs ( 12 -inch size excepted) we include a handy record album at no extra charge.

| Size <br> In. | Bond Base |  | Alloy Base |  | Shpg. Wt. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cataloe Mo. | Ea. | Cataloe No. | E. |  |
| ${ }_{8}^{61 / 2}$ | $57 N P 13150$ $57 N P 13151$ | 80 ${ }^{8}$ | 57NP 13154 57 NP 13155 | 176 | 5 SOz 9 Oz. |
| 10 | 67 NP 13152 | 200 | 57 NP 13156 | 34 e | 11 oz . |
| 12 | 57 NP 13153 | 44. | 57 NP 13167 | 57. | 1 lb . |



New Rek-O-Kut Units
An overhead recording mechanism consisting of feed screw, vertical magnetic cutting head, pin of turntable. Cuts 100 lines per inch. Fin of tures Universal cutter mount; horizontal or oblong crystal cutter may be substituted nished. Micrometer adjustment for Stylus angle. Swivel arrangement for easier align-
ment of mechanism with turntable. Simplified ment of mechanism with turntable. Simplitied
carriage lift for accurate spot recording. For twelve inch or smaller records. Recording motor must be used with unit because an ordinary phonograph motor is not sufficiently powerful for recording.
57NP010957-Rek-O-Kut Recording Unit less motor and turntable. Shipping weight, 5 pounds. 57 NP 10958 F-Rek-O-Kut Motor and 12 -inch ( 12 -pound) Dual Speed table with disappearing drive pin. Professional quality equipment. Shipping weight, 24 pounds.
$\$ 49.50$ Shipped from Factory in New York, N. Y., from where you pay transportation.


## Webster DeLuxe Record Changers



With this Deluxe machine you can mix 10 -inch and 12 -inch records, in the same loading. Plays 15 to 17 records. Die cast base, low pressure tone arm, Astatic L-40 pickup and many other refinements not found in lower pricud machites. Mountang plate is $131 / 2 x 171 / 2$ inches long. Extends $54 / 4$ inches atove plate and thanches below plate.
A.C. Shipping weight, each 34 pounds.
57 NP 013135 - Witls rentovable heedle head. ........ $\$ 48.51$ 57 NP 013136 -- With permanent sapphire Stylus. . 51.45 57 NP 013133 -Model 5596. With Deluxe ChangerRecorder Mechanism, ot her wise same as 5 NNP013135. $\$ 60.27$ 57 NP 013134 -Model 5596-S. With DeLuxe Changer--
Recorder Mechanism, otherwise same as $57 N P 013136$. $\$ 63.21$

```
Why not have the best
st . . . it costs so little by the
```

month on Seart Easy Terms. See Page 2 for details.

## General Industries $\$ 2311$

Dual Specd Model . . a a complete record player and fecorder on a single table. Cuts records up to 10 -inch and plays records up to 12 -inch in size, at eit her $3 x$ o torowing . N. Lurntable speed changed by merely hrowing switch Walnug grain finislical aieel luse late, fastic trimmed nutor. Ien-inch welghted turntable. Mediun pres notor. Een-inch welghted turntable. Mediunn pres Base plate size 15 inches long. $111 / 2$ inches wifle. Ex tends $21 / 2$-in. above and 3 -in. below plate. For 110 volt 60 cycle A.C. Shipping weight, 20 lbs . 57 NP 013131 -IDual Speed Model A 57 NP 013129 --Single Speed Model. 78 K. P. M. Bas same as Dual Speed Model above. Shippin weight, 17 lbs.
$\$ 19.55$

## RCA Automatic Record Changer <br> $\$ 19^{65}$

 An outstanding value! Pickup uses a sapphire point. and pressure is counterbalanced to provide a maxinium needte notse coming from the pickup on the record. Record capacity is sullicient to play any of the standard albums now avalable having a capacity of $10-12$-incil or $12-10$-inch records. The last record is repeated until motor is switched off.' Records may be renowed from the turntable without the necessity of turning the record support levers. Throughout the entire operation, it is unnecessary for the operator to touch the pickuparm. After the records are loated on the support posts and the motor turned on, all operations are controlled by a "Start - Reject" but ton. It is not necessary in place the arn? on the lirst record in order to start operation. A new feature called the safetv-clutch provicles an andihle clicking cound in casts uf janss, due to warped records, nechanical binding or improper operation. This salety-clutch removes pressure from tre parts causing the jain or bind, thus avoiding damage to records or mechanism. Output: 5.0 volts at 400 cycles. Impedance: 150,000 ohnis at 1000 cycles. For 115 -volt 60 -cycle. A.C. Dimensions. Width, 145 í inches. Itepth, 131 in-inches. Height, 4 inches clearance required above the moturboard. $31 / 4$ inches clearance required benea57 NP $013140-M o d e l$
9932 . Shipping weight, 17 pounds.

## Permo-Point Microspector

## 

 Instructions inc-luded. (Not shown.) ....50C
## 



## Micro Matched Point Set

Tone Equalizer, Scratch Filter and Pickup Arms
(A) Astatic Tone Equalizer. An adjustable tone compensa (A) tion network recommended or use with all crystial pickups. Connects hetwann pickup and amplifici. I Kotat ry switch provides four equalizing circuits. Dial plate knob. Instructions.
57 NP 17770 -Shipping weight. 1 pound
(B) Phonograph 5 cratch Filter. Suppresses needle scratch from eit her crystal or magnetic pickup
(C) Quality Magnetic Pickup. Immune from damage due to hot weat her. Frequency response not quite as hagh pitched as crystal. For 12 -inch or smaller records Brown linished steel shell.
57 NP 17913 -Shipsling weight. 2 pounds ... $\$ 2.10$ (0) RCA Model 9868 Pickup. Molded brown bakelite shell. range 70 to 7.000 C.P.S. Output 1.5 Volts at requency with 500,000 ohm ioad. Needle pressure 2.7 ounces. For 10 or 12 -inllifecords.
57 NP 13142 -Shipping weight, 2 pounds.
$\$ 3.20$
(E) Shure Model 97 AN Crystal Pickup. A new lightweight pick-
up of Hi-voltage and Lo-pressure. Npedle pressure 1 ounce. (Jutput voltage 1.4 Volts. Frequency range $60-7000$ c.p.s. Pernanent sapphire stylus. Fol 10 -inch and 12 -mel records. Mount ing centers $\bar{i} 1 / 2$ inch. Cable length 14 inches. Mahogany linished molded plast ic arm. 57 NP 12795 -Shiplsing weight. 1 pound
$\$ 3.82$
(F) Astatic Model FP-18. New Astatic model with permanent sapphire st ylus which eliminates changing needles. Low pressure stylus (about one ounce) neans long record lite. Design protects against accidental damage to sty smillee records. Frequency range 30 to 7000 c .p.s. Output 2 volts. Statuary bronze finish
57 NP 17949 -Shipping weight. 2 pounds
$\$ 9.70$
(G) Astatic B-10 Crystal Pickup. For 10 and 12 -inch records. Tru-Tan offset head reduces tracking error to 1.5 degrees on at beinch record. Rotating head facilates need Telaphong. Elack and bright chrome plated trim.
57 NP 17766 - Shipping weight, 3 pounds
$\$ 10.29$

## 18-Watt Amplifier Daluxe Silvertone Amplifier for Use with Phonograph ${ }^{5} 26^{50}$

 18-watt phonograph amplifer of superb audio guality. Has every refinement which could rically reproduced phonograph records.Bass Boost. Phonograph records do not normally present the low notes in their original strength and richness. To compensate for this deficiency in tone balance we have built into this amplifier an electrical circuit which restores the se lower frequencies to their origi-
nal intensity. Bass bonst control provides rising characteristic at low frequency end rising characterıstic at low frequency end
which attsins a maximum gan of dib at 80 which "t thins a maximum gain of reat this feall not be fully apprecycles. This feat ure will nut be fully appre-
ciated, however, urdess a batile is provided whach is large enough to reproduce the funrlamental of these low notes. Thee lunget the air travel path between front and back of the lond speaker, the lower the notes which will be reproduced. A good PM. Joud speaker is also essential. Jensen PM 12B or A12 PM is highly recommended. See Page 48.
Automatic Volume Expansion. Provides your recorded music with vibrant, lifelike quality Every variation in volume is faithfully re created in a variety of strength and tone color
Fidelify. Response is flat within $11 / 2 \mathrm{db}$ beiween 50 and 10,000 cycles when all controls are in normal position.
Controls. Bass Boost, Treble Attenuation, Master Volume and Expansion.
Tubes Used, 1-6H6, 1-6J5, 1-6SA7, 1-6N7, 2-6L6G, 1-5Z4. Power consumption: I15 watts
Output Impedance. 3,6,250, and 500 ohms for IM Speaker
Input Impedance. For high impedance crystal or magnet ic phono prickup.
Amplifier Size. 13 inches long, 7 inches wide. 7 inches high. For 110 volt 60 cycle A.C.
57 NPO 12870 -Amplifier complete with tubes. I.ess Speaker. Shpg. wt.. 18 lbs...... $\$ 26.50$


## G. I. Phono Motors

Gieen Hyer 1 he old reliable. Noiseless: self
starting. Bronze finish. For 110 -volt, (io cycle A.C. $57 \mathrm{NP} 017776-$ Model A. 78 R.P.M. $\$ 9.44$
10 .inch turntable. Shpg. Wi.. 11 lbs. $\$ 9.4$ 57 NP 017777 -Model D. Dual speed
10 -inch turntable. Shpg. wit. $13 \mathrm{ibs} \.$ \mathbf{2 . 7 0}$ Model RX. Rim Drive. 78 R.P.M. Self-starling induction type. Rubber insulated. S-inch
turntable. 110-volt. fol cycle A.C. Shipping weight, 10 pounds.
57 NP 017775
Recording Motor, Heavy duty rim drive. Dynamically balanced motor, rubber insulat ed. Self-starting. Turntable shaft revolves Oilless bronze bearings. Retractable drive pin pernits playing of standard records. Depth, mounting turntable. For 110 volt 60 cycle $A$ 57 NP 017974 -Shpg. Wt., $15 \mathrm{lbs} . . . \$ 7.23$


Infercommunication Equipment


Two Master Stations which may call each other, . . one has privat hook up with sub-station. Either moste stafion may also communicate



7-Watt Silvertone Public Address System Small-Compact-Portable
$\$ 2995$

Small, compact loud speaker system. Designed to answer the needs of those who require sound reinforce ment equipment of ready portability and operating simplicity. This system does not have the far-reaching power of our larger two-speaker systems but it has enough to make hearing comfortable throughout the average banquet hall, lodge room, or country club assembly room. Merchandise demonstrators, aucfind it ideal for their purpose sales managers will also nd it ideal for their purpose
Comes complete with plug-in connections for one microphone and one electric phonograph pickup (similar to 57 NP 18900 listed on Page 38 ). The volume control serves for microphone gain when knob is turned to left of dial plate center line: for phonograph when knob is trol for making satisfactory ad justments within con ous enclosures Has an with 25 -foot cable and a rood quality crystal speaker phone with desk stand and 25 -foot cable are also urnished. Carrying case is covered with good quality artificial leather; size $13 \% \times 133 \times 101 / 2$ inches. For 110 volt, 60 cycle AC operation.
57 NP 012875 -Complete system, consisting of Amplifier, tubes, speaker. Microphone and stand as illusrated, cables and carrying case. Shipping weight

Order Everything You Need at One Time and pay for it on Seors Convenient Easy Terms See Poge 2 For Defoils.


## 7-Waft

 SilvertoneAmplifier
and Tubes
$\$ 13^{95}$
Output impedance 4000 ohms direct from plate of tube. Field supply for 1500 ohm electro dynamic speaker. Input channels: microphone and phonograph with fader control. Tone control. Microphone gain 110 db .; phonograph gain 70 db .; tubes used: $1-6 \mathrm{SC} 7$, 1-6L6G. 1-5Y3G. Anplifier size $10 \times 8 \% \times 61 / 4$ inches. For 110 volt 60 cycle AC operation. Shipping weight. 12 pounds.
67 NP 01287
$\$ 13.95$

Two-way communication befween the master station and any one of flve sub-stations. Calls originate at elther the master station or any one of the sub-stations.

3


Multiple System permits up to 10 stations to conduct 5 two-way con-
versations at the same time. Any versations at the same time. Any station ean eall any other station with absolute privacy.


## Easily Installed Two-Way Communication Systems

These systems are extensively used in business offices, factories, shops, restaurants and stores for maintaining instant and direct two-way communication between two or more offices or positions. Each installation must have at least one master station. The number of substations is immaterial so long as the master station selected has enough switch positions to accommodate the desired number. In general practice, the master station is turned on at the beginning of the business day and kept in readiness for instant operation. To call any substation in the system, the operator simply shifts indicator knob to the number corresponding to the station to be called, presses the talk. switch and makes the call. Any substation may originate a call to the master station as long as the power is on at the master station. Voice at substation will be heard at Master staion regardless of switch position at the "Master. To his switch to the proper number For paging must set the Master Station may be so . Fidusted that all subtations in the system will reproduce the voice at the "Master." '
A special silent feature shuts out all extraneous noises originating at sub-stations-yet permits normal substation-to-Master-station calls. Furthermore the Master station enjoys complete privacy. At no time can a substation listen in to the Master station except when called.
Voices will carry in open air with good understandability to a distance of 25 to 50 feet from substation iocation. Individuals at substations may reply without couching unit, at an equal distance away from the substation. For 110 -volt AC or DC.

## For Hook-ups as Shown In Dlagram (1)

(C) Standard Master Station-Model LP-5. For use with 5 or less substations. Handsome walnut finish hardwood cabinet, size $9 \%$ inches long, 53 inches deep, 8 inches high.
67 NP 010270 -Shipping weight, $10 \mathrm{lbs} . . . . \$ 19.95$ Standard Master Station-Model LP-10. For use with 10 or less substations. Otherwise same as Model LP-5. 57 NP 010271 -Shipping weight,
10 pounds.
\$24.95

Silvartone-Shure Crysial Microphones are either non-directional or semidirectional... dsponding upan the angle to
which they are tilled. Crystol microphones are gonerally used where eed-bark is not a problem. They ure slightly highor plich ad than other types and are therefore mistion.
(A) CRYSTAL MICROPHONE


Silvertone-Amperite Volocity Mierophones arebidifectional. Thoy pick up sound from front and bock ... but are completely daad from the sides. They are more affectlve than a erystol microphone foed bock. 1 maing
(B) VELOCITY MICROPHONE


Silvertone-Shure Dynamie lype Cardioid Microphones offer the moat effective way of eliminating feod. back. With this type of mike, a Public Address Syslem may be uted with out danger of sound rebounding from walls, celiing and fioor bock into the loud speaker. In addifien to this feature Cradold mert tone quality.
(D) DYNAMIC MICROPHONE


Easy to Operate - No Technical Knowledge Needed

For beauty of cone ...ease of operation ... and allaround usefulness this modern 14 -watt Silvertone Public Address System is certainly without a peer in the medium power field
In this, as in all Silvertone Public Address Systems. you'll find the sarne high quality components, the same generous safety factors in design, and the same atten tion to detail which has always distinguished Sears Equipment. We have designed this system expressly for the man or woman without technical knowledge of such apparatus. We ve made it so easy to set up and so tool proof in operation that no one, however inexperienced are of the plug in type and are so arranged that connec tions cannot be improperly made. Set up requires less than 5 minutes.
A high gain 5 tube circuit provides amazing microphone sensitivity. This is of great value where micro hone must be placed away from source of the sound. Two speakers are needed with any Public Address ysimum in coverage and clarity is to $b$ this system provides adequate bafle for speakers which are generally placed on opposite sides of the auditorium or stage.
All equipment packs into a single artificial leather covered carrying case measuring only $17 \% \times 121 / 2 \times 91 / 2$ inches, An ideal system for traveling entertaners, musicians orators, political speakers, small cafes, dramatic clubs, schools, and churches
For example, in churches, the installation of this modern 14 -watt sound system would immediately fulfill two delinice functions-improve the hearing conditions for pastor. In schools, where the speaking conditions for the acoustics interfere with the enjoyment of school plays and entertainments, this easy operating Silvertone sound system offers an economical and dependable solu tion to a serious problem
Orators and political speakers will also find this Silver tone system of vital importance. With its aid every part of the speech is certain to be heard... even by those in the audience seated far from the speaker's stand Operates oniy on $105-130$ volt, $50-60$ cycle A.C

Amplifier Specificutions, 5 pubes: $1-6 J 7 G, 1-6 Y 7 G$. $2-6 \mathrm{~V} 6 \mathrm{G}$, and $1-5 \mathrm{~V} 4 \mathrm{G}$. Circuit: Resistance coupled employing 3 stages on the microphone input and 2 stages on the phonograph input. Inputs: One crystal, velocity, dynamic, or sound cell microphone and 1 high inipedance phonograph. Output Impedances: $3 \frac{1}{2}, 7 \frac{1}{2}, 250$ and 500 ohms. Individual volume Controls for microphone and phonograph provide unrestricted mixing and fading of these two when used simultaneously. Continuous Tone control for adjustment of bass or treble response to fit individual requirements. necessity for "hugging" the microphone to get satisfactory pickup. Ruby Pilot lamp shows through bullseye on front panel when power is on. Quality Com ponents used throughout. Tone Quality that even hair splitting engineers call good. Sturdy auto body steel chassis and ventilated cover durably and attractively finished in two-tone baked-on Gray crackle enamel. Results in a far better piece of apparatus than has ever before been sold at this low price. Overall size of ampli fier unit is $61 / 2 \times 6 \times 11$ inches Frar 110 volt, $60 \mathrm{cyclc} \mathrm{A} . \mathrm{C}$. power consumption 85 watts.
8e sure to state mierophone and type of stond wanted If Dynamic Cardioid Type Microphone (D) is wanted instead of Microphone (A) or (B) add $\$ 10.00$ to price; or Cardioid. ype mike stand is wanted instead of desk stand add $\$ 2.50$ to pric
57 NP 18914 -Silvertone 14 -watt amplifier and tubes. Shipping weight, 8 pounds
$\$ 22.50$ 57 NP 21 , 280 , 9 att Speakers, choice of microphone (A), or (B), 25-foot microphone cable and desk type microphone tand. Shipping weight, 35 pounds two baffes, choice of one microphone (A), or microphone cable and desk type micrand. Shipping weight, 42 pounds
stand
$\$ 49.95$ 57 NP 012892 -Portable single-speaker outfit with choice of one standard microphone $A$ or $B, 25$-loot microphone cable and floor type microphone stand. Shipping weight, 28 pounds
$\$ 48.50$ 57 NP 012893 -Portable two-speaker sys foot cable and floor stand. Shpg. wt., 35 ibs


## Complete with Tubes, Case and Speaker

The last word in electrical amplification for musical instruments. The Aristofone requires no specially can use any gitar equal the results from special-built instruments
Aristofone accommodates two different instruments at one and the same time ... an important made for amplifying the pickup of a stand ard veloc made for ampliying the pickun of a standard veloctyazing possibilities for entertainers! Announcements and vocal solos can be picked up by the standard microphone, while instrumental musical selections are picked up by the instrument microphones. Reed or brass instruments as well as the harmonica secure marvelous effects with the Aristofone. Reed organs and pianos may also be used.
Amperite Kontak Microphones, described on Page 47, are used on the instruments. These small microphones slip under the strings of the instrunent, or may be held in side of the amplifier case control instrument pick-ups any standard microphone. The convenient location of the controls makes it easy ooperate. Foot pedal (5/NP18209-Page 47) may be used to control instrument microphone if desired. or 57NP18207 microphone (Page 47) having a builtin volume control, is also suitable. Two Kontak Models SKH or KKH can be used simultaneously. Case is covered with a good grade of artificial leat ther. Slze, $\overline{0} 12 \times 121 / 4 \times 17 / 2$ inches. System has a 5 -tube, 8 watt amplifier which operates on 110 -volt, 60 -cycle

57 NP 018960 - Aristofone, tubes, case and speaker. No microphones. Shipping weight. .... $\mathbf{\$ 2 6 . 5 0}$ 19 pounds.
57 NP 018961 -As above, with one Kontak model SKH microphone ( $E$ ). Shipping weight, 21 pounds
$\$ 33.50$
57 NP $018962-$ Same as 57 NP 018961, except with one Amperite foot pedal volume cont rol (G) $\$ 41.50$ 57 NP 012895 -Aristofone, Tubes, Speaker and one Kontak Microphone Model KKH (F). Shipping weight, 21 pounds
57 NP 012772 -Conventional Microphone (A) or (B) (State Choice) and Silvertone floor $\$ 17.50$

57 NP 012773 -Silvertone Shure Cardioid Dynamic Microphone (D) and Silvertone floor stand. $\$ 27.50$
Shipping weight, 14 pounds.............. $\mathbf{2 7}$


## 7 Feafures Why 70 Watt Silvertone Amplifiers Are Betfer

I Automatic Volume Control. Maintains desired volume Automatic Volume Control. Maintains desired volume
level as astablished by volume control sattings. Velvetsmooth operation Irrespectivo of input signal voriotions.
2 Automatic Valume Exponsion. The most important single contribution ta amplifier design in pecent years. Crescendos which are barely perceptible thraugh ordinary omplifiers become soul-stirring surges of swelling vol. ume when heard through this silvertone.
3 Outpul Level Indicator. Colibrated diractly in waths, Gives you occurate instrument control over volume. Predewithout experimentation.
4 Four-Channel Remote Control Connections. Two of our emote control units shown on Page 7 will provide distont monitoring of all 4 channels of this amplifier.
5 Power Sloge Connections. For power requirements beyond the rated 70 watts of amplifier, one ar more 70 wott power stages can be used.
6 Output Impedances, four: taps at 62.5, 125, 250, 500 ohms provide suitable impedance motching for speaker requirements of up to 72 speakers. The number of speakers you can use is limited only by the amount of power you wish to feed to eoch.
7 Separate Plate and Filament Switches. Protects circuip during warm-up time, allows amplifer to became inoperative without allowing flaments to cool.

## 22-watt A. c. SILVERTONE All-Purpose Sound System


$\$ 41^{50}$
Amplifier, Tubes, Dust
Cover and Phonograph Mechanism

- Seven-Tube Amplifier Circuit (including Rectifier Tube)
- No Complicatod Controls - Phonograph Unif Built Into Amplifier Dusi Cover
- Sufficient Amplificatlon Power for Entertaining 1000 People
- Easily Operated-Phonograph Plays Standard 10 and 12-inch Recards
- Microphone Volume Control for Mixing and Fading with Phonograph

One of the most extraordinary values ever offered in loud speaker equipment. A complete, easily operated system without complicated controls . . . designed expressly for those without technical knowledge of Public Áddress equipment.
For school use this all-purpose outfit will more than justify its low cost. The phonograph is built into the amplifier dust cover. This makes for great convenience and flexibility whenever it is desired to change locations of the unit. Has sufficient power to use for the enter tainment or instruction of groups. of 1000 people or less. Reproduces 10 -inch or 12 inch standard 78 R.P.M. records with splendid tone quality. Ideal for dancing, music appreciation classes, gymnasium and indoor drills.
Either one or two microphones may be used with this Silvertone All-Purpose system. Each microphone has an individual volume control for mixing and fading with the phonograph. This is particularly desirable in schools because the microphone is educationally valuable as an outlet for pupil selfexpression. It develops skill in technique of speech drama, and music. Dramatic presentations produced before the studio microphone have distinct contributions to ofer in overcoming self-consciousness. With he distractions of a direct audience re self-assurance and poise, when speaking before a group.
With two microphones this system is also well suited to churches. One microphone can be used by the pastor and the other by the choir-thus les and the singers. It will enable congregations to
hear comfortably and thus take added inspiration from the church service.
Small orchestras will also benefit from this system. Two microphones are usually sufficient for bands of up to six musicians. The phonograph feature will be of value for intermission uses.
Amplifier Specifications: Seven tubes including rectifier tube-2-6J7, $1-6 \mathrm{SC} 7$, $1-6 \mathrm{~N} 7,2-6 \mathrm{L6G}$, crophone gain 125 db ; phonograph rain 80 db . Input crophone gain 125 db ; phonograph gain 80 db . Input channels, 3 mikes and phonograph.) Gray finish by E. R.P. I.
57 NP 012865 -Silvartone 22-watt amplifer with tubes. Leess dust cover and phonograph 3175 57 NP 12866 -Dust Cover and phonograph mechanism for above amplifier. Shipping weight, 11 pounds
$\$ 9.75$
Portable Public Address System consists of Amplifier, tubes, two 12 -inch speakers with 25 -foot cables, carrying case, choice of one microphone A or B with 25 -foot microphone cable, one 3 -section dust cown floor stand. Does not include amplifier listed above, easily attached to amplifier. 57 NP 012867 - Shipping wt., 59 lbs.
$\$ 69.95$
If Silvertone-Shure Crystal Microphone $\mathbf{C}$ shown on Page 43 is wanted instead of $A$ or $B$ specify on order-and add $\$ 5$; Microphone D instead of A or a is $\$ 10$ additional. Be sure to state choice of micra-

## Powerful 70-Watt Silvertone Amplifier

Hers it the "ensimetr" atmeltor a brillitant ex
 Qcoits of $n$ un ramm led lig limitation of time ar: eatis litel fir "Fuict colsu rinc" jok-




 phams hand one phot rerapl. Hic comulete mixing and fuinu Conirols for all tour channts. Thas 1= a pimi neume for wh tae of mernphote pich ut
 qurren wit instut cont


bigins to fall off on lower frequencos. You get faulter rebriduction it i watt it i) ihrough the projer mampulatson af thete controts
Circuif. Giventien iubes. Malern Inverne fredthal tran former conded carcuit provides amoth. distortante. peifurm ree. Five wisk in wre hah -en-rtivity and ierfece piration wafiany type high mpedant nicrophone you miy wish to ue exopt Grboin siz Size $1012 \times 9 \times 2112$ inche. long Gray
 Lacensed thy Electrical Keheafch Prawiucts. Inc. under U, batenis of Mrerican Tellphone and Tulegraph Company and Western Electric Company. Not Mallable.
57 NPM 8970 Ampltier and tutes, only shipping weight. 55 pounds

## SILVERTONE Anti-Feed Back 35-waft Sound Systems



Designed to take full advantage of the great new Shure Bros. Cardioid Microphones. More volume without feedback! Performers can stand farther away from the microphonel Microphone and loud speakers can be placed close together where necessary. System easily set up in any location because there are no feed-back problems to he anved. Thee inicrophone gain cunltuls provide for six microphones éspecially desirable feature where large orchestras or stage productions require several microphones. Split volume control and single low gain ( 85 db .) channel provides for two phonographs or other high channel provides for two phonographs or other signal sources. Frequency response $\pm 2 \mathrm{db}$. 50 to 10.000 c. p.s. Output impedances $31 / 2,71 / 2,250$. and 500 ohms. Hum level is 56 db . below rated out put. Harmonic content at 35 watte $5 \%$ os less. Gain 127 dh. Highfiequency tone control provides 15 db . cut at $10,000 \mathrm{c}$, p. . Jack and volume control for 8 -ohm monttor speaker ... an invaluable feature when amplifier is remote from speaker nel work.
 censed by Electrical Research Products Inc. under U. S. patents of the American Telephone and Telegraph Co. and Western Electric Co. Price does not
include Remote Control.

57 NP 08902 -Amplifier only with set of 12 matched tubes, less remote control. Shpg. wt., $31 \mathrm{lbs} . \mathbf{5 6 6 . 5 0}$

## Complete System for Fixed Installotions

 Consists of above Ampli fier with 12 matrhed tubes two 16 -watt 12 inch Pubtic Address Speakers with our cables, one nloor type microphone stand, 1 erys. tal type cardoid Mierophone as illustrated at (C) above with 25 foot cable. See Page 48 for Speaker enclosures. 57 NP 012881 -Same as 57 NP 012880 except with Dynamic Cardioid Microphone as shown at (D) above instead of crystal Microphone. $\$ 99.95$

## Portable Systems

Complete portable system consisting of amplifier and natching set of 12 tubes, 2 12-inch, 16 watt speakers, microphone floor stand, and cardioid crystal Microphone (C), 25 -ft. microphone cable and 3 -piece carrying case. Less remote control. Mailable. Shipping weight, 68 pounds. 57NP 012882
$\$ 104.50$ Portable system as above except with Dynamic type Cardioid Microphone (D), instead of crystal micrephone. Less remote control.
$57 \mathrm{NP} 012883-\mathrm{Mailable}$. Wt., $70 \mathrm{Ibs} . . . \$ 109.50$

## Remote Control Unit for 35-Waft and 70-Watt Ampliflers

Provides control of two channels from any desired point wit hin the enclosure served by the system, and is of great value in adjusting vylume levil for who may appear on any single program. It elimi-
nates the difficulty of obtaining complete auditility without introducing feedback. Incl. 50 feet of cable, but longer lengths are available if required. Designed for 35 watt deluxe and 70 wattamplifiers only.
$57 \mathrm{NP} 08925-$ Shipping weight 6 pounds. $\$ 6.50$

## 10 Reasons Why

Shure Cardloid Equlpped Silvertone Sound Systems are Better
1 More volume without feadback ..., the Audiance heors betler.
2 Pict-up of audience nalse and reflected saund is reduced $66 \%$.
3 No need to hug the mike and hide the face. PerNo mare freedom-can stand farther away from the micraphone
4 Microphone and loud speakars mey te placed close Mether where necessory
5 Better and cleorer reproduction of vaice and musle beceuse the cardaid gives praminence and deffin. lian to the sound you pick Up af the frant of the mieraphone.
6 Problems af microphone placement are simplifiedyau have greater freedam in maving the microphane.
7 Sound system may be set up in ony lacation. Na warry abaut roam acaustics or autdoar prablems.
8 Silvertane Systems are madernly designed far "eyeappeal" as well os "sound appeal.
9 You make everrbody happler: The oudience relezes -and hears the papfermuis witioul any strain. The pertarmers get mare applause-they knaw the con hnows he has dane a gaod iob and is proud of mon knows he has dane agood job and is proud af his installation.
10 Your awn "eors" will tell you the difference!

## Silvertone Heuring Aids Complete With Earphone

 rins, If the is 3 uth, d finto thit couth it
















# SILVERTONE 30-watt Storage Baftery or A. C. Operated Public Address Systems 

\author{

- Operates from 6-valt DC or 110-volt 60 -cycle AC <br> - Instantly Convertible for Either Power Source <br> - Stand-by Battery Saver Switch <br> - High and Low Tone Compensation. <br> - Fading and Mixing Controls for Mike and Phono <br> - High Quality Crystal Phono Pickup <br> - Attractively Finished Two-tone Steel Case
}


57 NPM 12885 -Basic Systom. Amplifier phonograph unit, tubes, two 12 -inch 13 -watt PM speakers. 25-ft. catles, choice of microphone ( $A$ ) or ( $B$ ) shown below, $25 \cdot$ foot mike cable, nike $\mathbf{~ h a n d l e . ~ S h i p p i n g ~ w t . ~} 91 \mathrm{lbs} . . . . . . . .$. 57 NP 018903 -Ampljlier-phonograph unit with tubes only. Shpg. wt. 49 lbs .


57 NPM 12886 -Complete Mobile System, Ampli-fier-phonograpls unit, tahes. two 12 -inch 13 -watt PM speakers, 25 -foot cables, two 5 iNP 10964 cone (A) or (B) microphone (state choice) with 25 -foot cable. mike handle, less auto top mounting plat form Shipping weight each,
116 pounds
$\$ 107.50$
57 NP 17441 -Auto top neounting
4.95


University Equipped System. University diaphragm driver units and reflex projector's with this amplifier greatlv increase its efficiency. At specch frequencies these reproducers have an elect ro-acoustic conver sion efticiency of about 50 , as compared with 10 to $20 \%$ for cone iype speakers.
57 NPM 12887 -Amplifier-Phonograph unit, tubes, 1 wo University SAH Iriver units. two University LH projectors, $25-\mathrm{fol}$ speaker cables, microphone (A) or (B) (state choice) with 25 -foot cable and microphone handle. Shipping woight. 110 prounds.
$\$ 149.95$
For Sears Easy Terms, see Page 2,

## Works Anywhere-Use It Indoors or Outdoors

Ideal for sound truck or passenger car installations. Attracts crowds everywhere . . . a most effective medium for announcing and advertising new products and for promoting sales of all kinds. Conmnands attention at fairs, carnivals. theatrical events, political rallies, lodge benefits, rallies, community events and patriotic celebrations.

Operates equally well from regular 110 -volt, 60 -cycle A.C. or an ordinary 6 -volt automobile battery. Delivers 30 watts of distortionless power to two giant $12-\mathrm{in}$. speakers making yoices intelligible for at least a city block. Has more than enough power to cover indoor gatherings of 2000 people.

When operating from a 6 -volt storage battery, the amplifier draws 19 amperes when phonograph is still, or 22 amperes when phonograph is running. Therefore the average automobile generator will keep the battery charged when the system is being used in a moving car: Even if no charging is done during operation, about 6 hours of service is possible from a fully charged 150 -ampere hour battery.

Amplifier and phonograph is combined in one compact unit. There are no circuit chang-
es to make when switching from battery to A.C. operation-no power pack to install. All you need to do is plug it into the outlet and it's ready for immediate operation. Since this systen is independent of power lines. it is ideal for evangelists. political campaigners, carnivals and road shows. and all sound truck operators. Because it will operate on A.C. whenever available, it is doubly desirable for those who entertain indoors as well as outdoors. Simple to operate, easy to move about.

Specifications: 7 -tube, 30 -watt amplifier, with inputs and volume controls for 1 crystal, velocity, or dynamic microphone, and one phonograph. Output impedances $31 / 2,71 / 2$, 250 and 500 ohms brought out to 7 -prong speaker receptacles. Battery-saving standby switch which reduces battery drain during intermissions but keeps tube filaments at operating temperature ready for instant service. Phonograph has crystal pickup. High and Low tone compensation and miaster gain control. Two-tone gray wrinkle baked-on enamel finish. Ruby bull's-eye on front panel. Microphone and speaker equipment optional.

See different type systems listed at left,


## Silvertone All-Purpose Speaker Case

- Two-Piece Artificial Leather Covered Case
- For Mounting Two 12-inch Speakers
- Two Steel Speaker Flares Reduce Feod-Back
- Cases Provide Increased Boffie Area

One of the most practical speaker enclosures made. It consists of a two piece artificial leather covered case. Size $18 \times 18 \times 19$ inches within which may be nounted two 12 -inch speakers back-to-back. Also included are two steel speaker flares which neatly nest within the case when speakers are not in use or, mount by means of wing-nuts on the outside of the case when system is in operation. Our customers who desire to use their systems both indoors and out have found them very convenient. For use on moving automobiles they may be strapped vement. For use on moving automobiles they may be strapped
to the top of the car or mounted on our standard auto top to the top of the car or mounted on our standard auto top
mounting plat form No. 57 NP17441 listed on Page 48. This really works out better than conventional steel projectors because of the increased baffe area provided by the cases.

For indoor use they may be either suspended from ceiling, hung on walls, or simply placed upon the stage. Flares simplify indoor installation problems by reducing feed-back. 57 NP 018958 -Case and speaker flares without speakers. Shipping weight, 30 pounds

## $\$ 18^{95}$ <br> Less Speaxer



# SILVERTONE Deluxe 30-Watt Universal 6-Volt DC- IIO-Volt AC Public Address Systems 

## - Automotic Record Changer-Long Playing Programs

- Instantly convertible for Either Source of Power
- Multiple Input Channels for Two Mikes and Phono
- High ond Low Tone Compensation.
- Stondby Battery Saver Switch
- Fading and Mixing Controls for All Channels
- Atractively Finished Two-Tone Cobinet



## Adaptable for All Types of Public Address Work

Sears were the first to offer a universal 6 -volt DC-110-volt AC public address system equipped with an automatic record changer Our engineers. pioneers in building this type of equipnent, are now old heads at the business. Their experience has equipped them to design apparatus which is adaptable for either outdoor or indoor Public Address work.

Formerly these All-Purponse systems were known as "Moblle" units. They were used principally for advertising purposes on moving automobiles and got their power from the 6 -volt storage battery of the car. Now, however. there are probably as many of these outfits being used on 110 -volt 60 cycle AC as there are on battery current.

Political campaigners and evangelists particularly are making extensive use of this deluxe Silvertone system because of its adaptability to widely differing applications. Should therc be a meeting or rally, for instance, at some out-of-the-way place where electricity is not available, storage battery power could be used. For meetings in localities served by electric lines. city current is of course used Indoors or vut. on E-volt DC or 110 -volt 60
cycle $A C$ the system is equally powerful. No circuit changes are necessary when changing from one form of power to the other. Two power cables are furnished-one for battery power, the other for AC. Socket connections are so designed that no mistake can be made in changing cables.

Automatic record changer plays eight $10-$ inch or seven 12 -inch standard 78 R.P.M. phonograph records. All recurds may be played through without attention on the part of the operator. Changer is positive and smooth in operation ... no jamming, no trouble, no hitch. Amplifier utilizes a modern 10 tube (including rectifier) circuit and gives full 30 watts of usable power without distortion. There are two microphone channels in addition to the phonograph chamel, all provided with individual volume controls for mixlng and fading as desired. High and low tone compensation in continuously variable degrees.
Handsome steel case finished in two-tone green crackle enamel, baked on for long wear Overall size of case is $27 \times 11 \times 15$ inches deep.

See different lype systems listed at right.
C) Silvertone Shure Uniplex Mike Cardioid crysuat type. Reduces reflected sound $66 \%$. Lessens background noise and increases pickup range. If any sys tem on this Page or Page 44 is wanted with this microphone instead of Microphone (A) or (B) allow $\$ 5.00$ additional

(D) Silvertone-Shure Unidyne Mike Cardioid dynamic type. Unaffected by heat and humidity. affected by heat and humidit y.
Response 40 to 10,000 cycles. If any system on this page or Page 44 is wanted with this microphone instead of microphone (A) or (B) shown on Page 44 allow $\$ 10.00$ additional.


57 NPM 12897 -- Basic System. Amplifier-Phonograph Unit, tubes, two 12 -inch 16 -watt P.M speakers, 25 -foot cables, microphone (A) or (B) on Page 44 (state choice), 25 -foot mike cable, microphone handle. Shipping weight, 95 pounds
$\$ 124.50$
57 NPM 18929 -Amplifier-Phonograph and tubes only. Shipping weight, $71 \mathrm{lbs} . \ldots . .594 .50$


57 NPM 12898 -Complete Mobile System. AmplifierPhonograph Unit, tubes, two 12 -inch 16 -watt P.M speakers, 25 -foot cables, two 57 NP 10964 cone projectors with 57 NP 10965 mounting fixtures, (A) or (B) microphone on Page 44 (state choice) 25 -foot mike cable, microphone handle. Less auto top mounting platform. Shipping weight, 91 pounds
$\$ 137.50$
57 NP 017441 -Auto Top Mounting
platform. Shipping weight, 10 pounds
$\$ 4.95$


Univarsity Equipped System. If you want the absolute "tops" in a sound system for outdoor use where audible range need not exceed two average city blocks, here is the combination for you.
57 NPM 12899 -Amplifier-Phonograph Unit, tubes, two University SAH Driver Units, two University LII Projectors, 25 -foot speaker cables, microphone (A) or (B) on Page 44 (state choice), 25-foot mike cable, Microphone handle. Shipping weight, 120 pounds. $\$ 179.95$

Avallable on Seors Easy Terms
See Page 2 for complate details

(A) Ordinary Mike tionol or non-directional nicrophones pick oudience and back. ground noises as shown.
(B) Cardiaid Mik. A true unidirectional the voice or music of the voice or music of from feed-back.

\$2911
For Terms
See Poge 2

## Shure "Unidyne" Unidirectional Microphone

This cardioid type dynamic mike offers the latest scientific developments in microphone design. Gives true unidirectional performance front, but is dead at the rear. thus cut ting down troublesome reflecthons and background noises. Easy to set up your sound system in any location without worrying about room acoustics or outdoor problems: Well adapted to cither indoor or outdoor use because it is jractically unaffected by heat or humidity.

## Unidyne Microphone-Medel 55 C

High impedance. May be used with any crystal microphone am plifier with mput mpedance of 10.000 ohms or more. Smooth wide angle reproduction of 40 to 0,000 cycles. Pick-up at rear is down to 12 to 15 dl). Head tilts through $90^{\circ}$ angle. Has huilt-in cable con nector. Jighly polished chronie finished case, size $41 / 4 \times 31 / 4 \times 31 / 2$ inches. Complete with 25-foot cable
57 NP 018205 -Shipping weight, 5 pounds.
. $\$ 29.11$
Broodcast Unidyne Microphone-Model 555
For those who demand the very finest. Specially suspended double wind screened mosing coil system. Built-in transverse vibration isolation unjt. Kubler Aloating 18 -inch cable stub. Swivel mount (See small ilustration 57 NP 12789 F -Morlel 55
Shipping weight, ti jounds
$\$ 38.81$
57 NP 12790 F -Model 555C for high impedance
38.81

## Shure Uniplex <br> Cardioid Crystal Microphone

## Here is another Shure development that is mak

 ing sound history. A Unidirectional Crystal. somet hink unthought of before the cardioid prin who prefer a crystal microphone and the many who prefer a crystal microphone and are having Unplex. it is daily natke you to try this Shure practical in countless locations where bad acous icall condlitions coupled with conventional mikes have rendered them useless. Output level -63dt Rear resiounst down approximately 15 db . below this. Special moisture proof Graphoil Bimorph Crystal. Response 30 to 10.000 cycles. Swivel head. Chrome finished case. Size $31 / \times 33$ inches deep. Supplied with 25 -foot cable. Shipping See Page 2 57 AP,
(A) 57 NP 19793 -This stand is furnished as stand $\begin{aligned} & \text { Silard equipment with Silver- }\end{aligned}$ chrome plated rings at joints. Adjustable 48 to 65 in . 10 -inch cast $\$ 495$ base with rubber cushion all around. \% $-7-27$ thread. Shpg. wt., 10 lbs. $\$ 4.95$

## Swivel-Type Table Stand

(B) 57 NP 18216 -Black wrinkle base. Chrome plated tube. Ht., 10 多 in. 57 NP 18217 -Same as above except without swivel. Height, $81 / 2$ in. \$1. 19 \%-inch -27 thread. Shipping weight, 4 pounds 8 ounces$\$ 1.19$ Uritity Micraphane Handle
(C) 57 NP 18215 -Ebonized wood with Brass threaded insert. W-inch 50 C Volvet-Action" Flaar Stand
(D) 57 NP 018213 -Tubes of heavy brass, heavily chrome plated. Ten-inch Thetal base, black crackle finish. St and is ad justable from 36 toc $67 \mathrm{irl} . \$ 3.95$

Desk Stand far Carban Microphone
(E) 57 NP 10699 -Black wrinkle finish. $5 \%$-inch dianmeter octagonall $\mathbf{~ r i n g . ~ 8 - i n c h ~ s p r i n g s . ~ S h i p p i n g ~ w e i g h t , ~} 4$ pounds. . .............. $\$ 1.59$

6 -inch Carbon Mleraphane Ringa
(F) 57 NP 18218 -Chrome finish. 8 rust proof springs included. Fits $\$ 1.27$ Microphone Cover
Ming phon Cover
(G) 57 NP 12782 -Just the thing to keep dust and moisture out of your mike. Shure Studla Stand
Shure Studle Stand
(Hiction lock clutch
$57 N P \quad 018214$-Model S55A. Super-positive frict
able 48 to 70 in. leg spread $151 / 2$ inches. Iridescent gray enamel
Adjust


## or Public Address Work



Z

## Amperite Dynamic

 Microphone New Amperite PGH microphong Pressuure gradıent dynamic typeUnidirectional, with improved $\$$ $\$$ pattern; has low est keedback point of any diaphragm nike; lla esponse, free from annoying peaks; range 40 1,000 c.p.s.; high output -56 db ; not affected by temperature, altitude or humidity: Alnico magnet; complete with switch and "station type" cable comnector and 25 -foot cable. Excellent for hinest type installations. Deluxe chrome Model PGH. Ship ping weight, 3 pounds.
57 NP 017951
$\$ 18.82$

## Stondord Madel

Like above, but range from $70-8000$ e.p.s. and
with $12-1$ t. cable. For speech and nusic. Model PGAH. Slupping welght, 3 lbs. 57 NP 017952
$\$ 14.70$


Amperite Velocity Microphone
$\begin{aligned} & \text { Amperite "RB" microphone } \\ & \text { with Acoust ic Compensator. } \\ & \text { Excellent for close talking }\end{aligned} \$ / 470$ distant pickup. Free fron
hackground noise. Acoustic Compensator pe mits increase of high frequencies by merely moving finger button. Frequency range 40 to 11,000 c.p.s. output- 65 dh . ("hrome plated

## Model RBHK High Impedonce

 57 NP 018200 -Shipping wt., 8 lbs.... $\$ 24.70$ Model RBMK Low Impedonce ( 200 ohms) 57 NP 018201 -Shipping weigh$\$ 24.70$
Popular Priced Model RSHK
Same as ahove oxcept frequency range 60 to 8000 c.p.s. High impedance. Chrome plateri finish. oot cable
57 NP 018202 -Shpg. wt., 8 lbs.
$\$ 18.82$

## Turner Model 99 Dynamic Microphone

(Af lop, left.) Of all the conventional type Dynamic Microis one of the have come toour attention, he of the few mikes built to withstand the hard knocks of day-in-and-day-out use Its almost complete absence of peaks lets you work close i necessary; it won t blast. Designed for the man who cant afford to have a failure. Indoors or out, regardless of climate or temperature you get sure-fire operation with this superb instrument. Gives clear, crisp reproduction of either sueech or sound. Output - 52 db . High impedance. Gun metal finished case. Furnished with 25 -foot cord. E 7 NF 018228 -Shlpping weight, 5 pounds
$\$ 19.10$

## Turner $33 \times$ Crystal Microphone

As good a Semi or Non-directional crystal microphone as there is made today for the moncy. Output - 52 db . Kesponse -10.000 c.p.s. go degree (i.he head. Mand somely designce 57 NP 017980 -Shipping weisht 3 pounds.
57 NP 017966 -Shipping wright, 3 pounds
$\$ 13.23$
Turner Model 33D
Dynamic type microphone. Otherwise same as 33 X above. Shipping weight, 3 pounds
57 NP 017967
$\$ 14.70$


| Microphones, Connectors and Other Accessories |  |
| :---: | :---: |
| (3) Dant Misprshone-Fur home use in | (C)(1)(C) Amphenal type MCl Connectors. For microphones |
| ${ }^{\text {NP }} 18$ | ires shell fornsecond conductor. Accommodates catbe up io $\mathrm{V} / 4$ |
|  |  |
| Has new type hight imperd | $57 \mathrm{NP} 18232-\mathrm{MlCM}$. Male, with roupling threads....24c |
| arnet | 57 NP 18233 -I'CIM. Male conmeztin far chatsis niount- |
|  | (A) Ampheriol cable Connectors. Mictall casent. Male plugs |
| ackle metallic finisl? Complete with | c |
|  |  |
| , | 57 NP 18239-5 pr |
| sered stranted wire | 57 NP 18240-5 contact $f$ |
|  | 57 NP 18241-6 |
|  |  |
| ing sensitivity of home nicinpluonem | (D) Break-in Swirch. For all microphone circuits having sin- |
|  |  |
| Ha | rt |
| fort hame uye in connme |  |
|  |  |

## Genuine Amperite Kontak Mikes

These microphones faithfully reproduce the vibration of any musical instrument on which they are placed. Frequency range 40 to 9000 cps . Output level -40 db . Suitable for use on all string instruments such as guitars, violins, string bass viols; or
other instruments including pianos, harmonicas, trumpets, clarinets, etc. Can he used withicas, Amplifier or with modern radios of 6 or more tubes Cannot be used without anmplifier or radio. 15 -foot cable. No phone plug or attaching clamp.
(A) Standard Model SKH for use with Public Address Amplifier. No volume control. Fool pedal con57 NP 018206 - Shipping wt. lib...... $\$ 7.06$ standard Model KR for use with home radio sets Standard Model KR for use with home radio sets.
Similar in appearance to Model SKH. High out put. Similar in appearance to Moncl SKH. High out put. 57 ND $012775-$ Shipping
$\$ 7.06$ (B) Deluxe Model KKH for use with I Jublic Address 57 NP 018207 -Shipping wt., 1 lb ..... . $\$ 10.58$ (C) Fool Padol Controi. Fior Model SKH and Model (C) Fool Psdol Control. For Model SKH and Model (D) Clamp. For attaching Amperite Kontak micro(D) phones to musical instruments. Adjustable phones to musical instruments. Adjustable 1/́
$71 / 4$ inch.
7 NP 18251 -. Shipping weight 8 ounces. 59 C

## Shure Stratoliner for Speech

(A) This beautiful new microphone is now available
with special speech characteristics for commerwith special speech characteristics for commer cial and amateur phone work. Extra high nutpul
-297 dh Swivel heald. Furnished with 7 -foot rub ber covered cable.
57 NP 012794 -Model 708 S . Complete with
desk mount to match. Shpg. wt., 4 Ibs.... $\$ 12.06$ 57 NP 012799 -Model 708 HS . Without
desk mount. Shpr. wt., $3 \mathrm{lbs} . . . . . . . . . . \$ 10.29$

## Shure Super-Level 70ST

(B) Communications Microphone New streamlined dexk mount plus titering which protects against Rrystal microphone ( 66 dh output avallable in a speech sicrophone (26 dh. below I volt for 10 -bar pen signal), shure high-efficiency speech characand static. Built-in cable connector; 7 -foot shielded cable. Satin-chrome plated head, iridescent gray desk mount.
57 NP 018893 -Model 70ST. Complete with Desk Mount. Shpk. wi., 4 tbs..... 57 NP 018894 -Model 70STH. Wit hou desk mount. Shpg. wit., 2 lbs.
$\$ 14.99$

Shure Crystal Microphone-707A
(C) Smooth frequency response for voice and music bar aigh output ever 79.1 db. below one volt per gray Moisture-sealed limorph Crystal, neechanically iso lated. Standard $\$$-inch-27 thread. 7 -foot shielded cable with spring protector
57 in P O12788-Complete with desk stand Shipping weight, 4 pounds
$\$ 8.52$
57 NP 012798 -Model 707A without desk
$\$ 7.34$

## Universal XX Carbon Microphone

(0) Double Button. One of the most popular micro phones of its type on the market. Its -50 db output insures maximum volume on either high or low gain ainplifiers. Highly polished chrome plated Diameter, $21 / 2$ inches. Thickness, 13 inches. I)ura luminum diaphragm. Frequency range 40 to 6,000 57 NP 18227-Shipping wi but
$\$ 5.88$

## Universal Model W Carbon Mike

(c) Single Button. Combines high sensitivity, light inches. Thickness $1 / 2$ inch. Impedancer only 200 ohms inches. 57 NP 18226 --Shipping wi rase
$\$ 1.76$


(D)


Nafionally Famous
JEISEN SPEAKERS New.. Powerful BetterTone Quclity


Jensen Coaxial and Concert Speakers
The nev. Coaxal vexakers bring you the hagh type of performance wbianable only in a peciatily dewigned and vordinited double speshersysten. Esch peather handla its portor of the total freguency range No ingle Doaker cin do justice to the inmenvely brond arecirum requred for high fidelity reproduction The low

Model JHP-52. Iluce 15 inih P.M. unit Huthly rec-
 Sic hieh delits reprorluction Excellnt for tiM Hith fretuency fange control switch on extension 5ite Not recornmended for $\mathrm{P} A$. work. $\$ 2911$ 57 NPO 013164 shiphing welght, 23 lhs Model JCP 40, New 12 1n. Couxial Spaker. Simplified
 hish frectuency control Ratink8 uatts contmucous. "At 「ype. Vence Cuil impudance fohms. 67NP0.13165-Shmpiny welght, lf lb4
$57 N P 13166-S T$ toliciontrol. Sneswi


New Hypex Projectors
The irnat tokise mavimum "punch" and
 misicil riguraduceson b't in limitiof all Typo H24 Hypex Horn. De 11 twate 24 in
 - El cores ruct on inirac wels Inmbed in ris lis onneciran fer standard 57 NPO 13167 Shriv wi.
 Type U-20 Annulor P,M. Driver Unit, Ka' ed
 57 NPO13169 \$21.17

| P.M. Type |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Catalor no motel | VCImp | Rz'ent | Sho m : | Esh |
| 57NP 17431 PM 12C | ${ }^{3}$ | 10 victs | Plis | \$9.11 |
| 57 NP 17434 PM 12 B | 8 | 14 walts | 13 lh . | 18.52 |
| 57 NP 017435 A 12 PM | 8 | 15 w.atim | 18 lbs | 24.11 |
| Electro-Dynomic Typo |  |  |  |  |
| 2500 whm or 1250 chmi Field Conl ispeafy Choice |  |  |  |  |
| 57NP 13170.C 12R | 8 | 10 wat:3 | 3 lbs | 57.50 |
| 57NP 13171 B 12X | 8 | 124 watts | 12 lbs . | 12.05 |

See lisilings on Page 20 for Speaker Transformers

(A)


Jensen Enclosures
(A) Whole octaves are added to music .... speech is
crisp and intelligible. Objectionable resonance and boom is eliminated and perforinance becomes more independent of acoustic environment when these batiles are employed. Combines Peri-dynamic and Bass
Reflex principles. Brown lacquer finish. Shipped taken apart. Easy to assemble. All hardware included. 57 NP 017438 -BR121 for 12 -inch speaker.
Size $304 \times 234 \times 12 \%$ in. Shpg. wt., 471 bs... 57 NP 013178 -BR151 for 15 -inch speak-
$\$ 15.58$
er. Size $331 / 4 \times 25 \times 13 \%$ in. Shpg, wt., 601 lbs -
18.23
(B) CA Cobinets. Bass Reflex construction. Made of 1. 57 NP $013163-C A 12$. For I2-inch speak
ers. Size $311 / 2 \times 273 \times 12$ in. Shpg, wi., 401 lbs $\$ 27.10$ 57 NP 013161 -CA15 for 15 -inch speakers. 31.90


Speaker Case
(C) Deluxe quality single speaker carrying case. Built to accommodate a 10 -irch or 12 -inch speaker and
provide enough baffle area to give you good tone quality. Cheaper cases, of which there are many varieties, are usually too small to give you this necded area
Covered with a heavy grade of artificial leather. Size overall $16 \times 16 \times 12$ inches.
57 NP 017495 -Shpg. wt., 12 lhs.
$\$ 3.95$
Walnut Wall Baffle
(D) For 12 -inch speakers. Beautifully finished walnut Exeer cabinet with attractively designed grill. Slope front gives the proper directional effect to the speaker. Furnished, complete with hardware for mounting speaker. Shpg. wt.. 8 lbs . 57 NP 017443 - Model SM 12


Type LH Projector Heavy gaugesteel. Exposed edges have oversize beads, No metallic resonance or ratte. Each horn
tested throughout audio spectrum. 30 to 10,000 cycles at maximum power. Coupling thread ping welght, 19 pounds.
57 NPM $17483 \ldots . . \$ 21.99$
Type SAH Driver Unis
Enclosed in spun aluminum head assembly. Watertight. Ideal for outdoor use. Handles 25 to 30
watts. Shpg. wt., 8 lbs .
57 NP $017481 \ldots . . \$ 19.40$

University Reflex Speaker
University speakers easily justify their cost. have superb tone quality and through their inof your amplifiers electrical energy into sound
waves, thus increasing power output. Driver Units: Only highest quality materials and workmanship are used in University driver
units. Pole pieces are made from $99.7 \%$ pure "Armco". elect rical quality iron. Surface of the "Alnico" Magnets and washer shaped pole pieces are ground microscopically hive method of voice coil centering these units have fal greater efficiency than can possibly be realized with ordinary speakers. the voice coil as compared to the usual $50 \%$. Prolectors: The driver unit exponential horn acoustic efficiency. A correctly designed combination having up to $50 \%$ electro-acoustic conversion efficiency at speech frequencies, as
compared to about 10 to $20^{\%}$ for cone spuakrs. To obtain proper "loading" without undue length and bulkiness, these projectors are times the overall length of the horn itself. Woterproof Chombers: Reflexed chambers of University Projectors act as a trap against the
possibility of any water entering the mouth of the driver units.

See Listings at Left for


Projectors and Mounting Fixtures











48 . . SEARS, ROEBUCK AND CO.


[^0]:    All prices on Hallicrafters, Stoncor and Abbott radio equipment shown on these two pages are set by the manufacturer, We therefore must reserve the right to change our selling prices whenever the monufocturer requires that we do so. See notice on Page 2 for complete details.

[^1]:    matching imperlance values of 500 ．
    
    

[^2]:    See natice regarding prices on Page 2

