

## WHOLESALE

## RADIO SERVICE CO. inc.

 IOO SIXTH AVE GORNER GRAND ST.

Under the remarkable Lafayette 30 -Day Free Trial Plan, all hazard is eliminated from radio-sel buying. No longer do you hove to gamble uncertoinly on a receiver from its picture and description in a catalog, or from a demonstration staged under conditions altogether different from thase in your own home. Order any Lafoyette receiver in this catalog, try it in your own home for thirty days, and then decide for yourself, after long thought, whether it is entirely satisfactory in all respects.
If it is not, refurn it to us in its original condition and you will receive a full refund (less transportation charges, of course) without arguments or questians of any kind

Cauld anything be fairer or more honest?

## WHAT THIS MEANS TO YOU

Think of what this inprecedented offer means to yaul You will never regret the purchase of a receiver you pick under these conditions-you will never have ta apologize to your self, to your fomily or to your friends for a radio set that is unsuited to your own particulor location.


You will have plenly of time to test the sensitivity, selectivity, tone quolity and volume of the Lafayelte you choose. Try it during daylight and during darkness, in good weather and bad weather. Keep a log of the stotions you pick up, ond wotch how astoundingly the set reaches out after the distant ones!

You will rediscover the first thrills of radio as you go touring the air lones. If you stay up late and keep a sharp ear for station announcements, you will be able, under favorable conditians, ta bring in both coasts, Canada and Mexico.
See haw strong and well made it is, and how smaothly it operates for every member of your household

Look inside the cabinet and examine the chassis, for after all the chassis is the radio set. Notice the sturdy, clean.cut construction, the campleteness of the shielding, the accessibility af all parts.
Call in your neighbors and ask then ta compare your Lafoyelte with their own sets. After you have gathered oll their reports and compared them with yours, then make a final decision.

## AN EXCLUSIVE LAFAYETTE OFFER

Only Lafayette dares make this offer so openly and fearlesslyl It is the fairest offer ever made by a radia set manufacturer, an offer with a foundation in the rigidly maintained quality af Lafayelte products

## GUARANTEE CERTIFICATE

Every purchaser of a Lafayelte radio receiver receives a 30 -Day Free Trial Certificate, a reproduction of which appears at the left. It is absolutely fair and oper, the exact conditions being staled.

## LAFAYETTE INTEGRITY

The Lofayette record of 11 years of steady growth and un blemished repulation is behind this 30-Day Free Trial Offer We could not make it if it were not for aur supreme confidence in our merchandise.


## Our New York Salesroom is RADIO HEADQUARTERS!

## CONSULY OUR NEW SERVICE DEPARTMENT

Far the convenience and assistance af our cuslamers we maintain a large and well equipped service department on the fifth floor. At very low charges, we repair all makes of sets, amplifiers, etc., in the shortest possible time. If you want expert, reliable attention, bring yeur service problems 10 us.

## HOW 10 REACH 100 SIXTH AVENUE

No motter where yau live in the metropolitan district, you con get to Whalesale Radia easily and quickly by auto, bus, elevated or subway, With the aid of the map on the right, you con't possibly gei lost. 100 Sixth Avenue is at the corner of Grand Street, one short block north of Canal Sireel and the Holland Tunnel exit. Look for our signs on the building. Plenty of parking space on Sixth Avenue and the side streats.
The Grand Street station of the 6th Avenue "L" 保umbers 6 on the map) is a short black to the east. The northerly exits of the Canal Street station of the new 8th Avenue subway (numbers 8 on the map) ore directly across the street. The Conal Sireet station of the 7th Avenue subway (numbers 7 on the map) is one street away. There ore always numerous policemen on duly in the vicinity. Don't hesitate to ask them for help in getting your bearings, os they all know Wholesale Radio and 100 Sixth Avenue.


# no dirsold <br> <br> The TRUE MEANING of <br> <br> The TRUE MEANING of WHOLESALE RADIO'S WHOLESALE RADIO'S FAMOUS FAMOUS POLICY. 

 POLICY.}

In other words, you can never buy from anybody cheaper than you can buy from Wholesale Radio Service. We will not be undersold!

Remember, there are no hidden strings to this offer! Wholesale Radio Service will sell you anything in radio at the lowest possible price.

If a competitor cuts prices after seeing this catalog, we will meet his price reduction. And despite the competition of illegitimate racketeers who are unloading obsolete, junk merchandise on the public, we will continue to sell brand new guaranteed merchandise at the lowest prices in the radio industry.
it IS OUR PROMISE AND GUARANTEE - backed by the resources of the largest institution of its kind in the country -that we will sell only honest, legitimate merchandise at the lowest prices for which the same merchandise can be purchased elsewhere. It pays to buy from Wholesale Radio Service Co!

COMPANY, INC., is NOT and never has been associated with any other radio concern.


## B.IDO SझRIVC CO.

amanang you SPEEDY


One section of aur Huge Slock Room. Scientific, orderly shelf arrangement assures you of perfect, clean merchandise and efficient service.

A corner of our


Shipping De. partment, where $94 \%$ of all orders areshipped within 24 hours or less. Ample floor space is pro vided for efficient, careful pack. ing ta prevent breakage. All orders checked 3 times for occurocy.

Every radio sel goes through a finol test of performonce and efficiency before leaving our quar. ters. These men are constanlly engaged in this work in our Final Test Department.

# LAFAYETTE NOMAD.... 

 PORTABLE RECEIVER for BROADCASTAC-D.C! and POLICE BAND

Here is the first A.C.-D.C. receiver that has the Important features hitherto confined to A.C. sets costing twice as much. The new Lafayette Nomad not only works on either A.C. or D.C., but it also has an odvanced superheterodyne circuit with partial aulomatic volume control, dynamic speaker, and the extended wavelength range of $75-550$ meters i It not only brings in all the regular broad. cast stations, but also scores of interesting police, television, airplane and amateur stationsl The owner of a Lafayette Nomad never has a dull momenl!

## IINE FREQUENCY NOT IMPORTANT

This sel is universally adapled without adiustment to either 110 volts alternating current or 110 volis direct current. The superheterodyne circuit assures good sensitivity and selectivity. Sensitivity is rated at 15 microvalts (fifteen millionths of a volt) per meter. Selectivity is carefully adjusted to less than 20 kilocycles separation. The image ratio is relatively high, being rated at 600 to 1.

## SIMPLE WAVE CHANGING DEVICE

Short wave reception from 75 to 200 meters as well as standard wave reception from 200 to 550 meters is effectively and readily secured through adjustment of a two-position switch. The control arrangment includes fan dial of direct connected type and three knobs: one for funing, a second for volume control and the third for wave changing. No movable ar plug-in coils are employed.

## DYNAMIC SPEAKER USED

The full five-inch dynamic speaker assures a high degree af fidelity in program reproduction. The power output is one watt which represents more volume than the average room requires.

## new high vacuum rectifier

The tube combination is as follows, one type 75,77 and 78 , ane type $\mathbf{4 3}$ and one trpe 2525 . The use of the new 2525 high vacuum rectifier, instead of the usual mercury vapor fube, assures a minimum of tube trouble and also the minimum use of resistance in the
 Model R.71-Lafayetle 4-Tube "LITTLE TREASURE" with matched Dynamic Speaker for $105-120$ volts, $50-60$ cycles A.C. Complete with Tubes. Code Delta. Shpo. wi., 25 lbs. Overall dimensions: $13 \frac{1}{2}$ inches long, 9 inches high, $81 / 2$ inches deep. List, $\$ 31.50$.
Your Cost $\qquad$ ${ }^{\$} 13.95$
Model R.72-Lofayette 4-Tube "LITTLE TREASURE" with matched Dynamic Speaker for $220-240$ volts, $50-60$ cycles A.C. Complete with Tubes. Code Dicky. Shpg. wt., 25 lbs. Overall dimensions: $131 / 2$ inches long, 9 inches high, $81 / 2$ inches deep. List, $\$ 34.00$.
Your Cosit
$\$ 15.95$

power line circuit. The overall operating temperafure of the recelver is therefore low and the life of the fubes and parts greater. Power consumption is only 40 watts.

The infermediate amplifier stage is permanently funed and sealed at the factory, thus eliminating a possible source of servicing trouble.

## HANDSOME MODERN CABINET

The cabinet of the Nomad is severely simple but very striking in appearance, with a cross-grain pattern of effective design. The loud speaker opening is adequate for sound distribution but not conspicuous enaugh to be distracting to the eye.

Model L-20-Lafayette Nomad 5-Tube A.C.-D.C. Superheterodyne, complete with tubes, for 110 valts O.C. and 110 volis, $25-60$ cycles A.C. Dimensions: $11 \times 8 \times 6$ inches. Shpg. wi., 12 lbs . Code Avise.
List $\$ 35.00$. Your Cost
${ }^{5} 17.50$

## LITTLE TREASURE

Here is a stunning little receiver, camplete with loud speaker, that can be put almost any place. Measuring only $131 / 2$ inches long, 9 inches high ond $81 / 2$ inches deep, If Ats conveniently in boak shalves, on desk or table tops, even in some drawers.
The Little Treasure uses only four fubes, but packs a "wallop" that must be heard to be appreciated. The circuit is of the improved funed radio frequency type, with a measured autput of 3,000 milliwatts.
The selectivity is uniform over the entlre broadcast band, 200 to 550 melers. Obtaining this uniform selectivity was a major accamplishment on the part of Lafayette engineers, previous T. R. F. receivers being notoriously deficient in this regard.
The Little Treasure uses ane 57, one 58 and one 47 -all pentodes -and an 80 rectifier. A high percentage of the theoretical amplification obtainable from these pentodes is actually realized.
In boosting the amplification to such a high level, Lafayette engineers have not sacrificed tone quality or circuit stability, which is too often what happens in small receivers.

A dynamic speaker-not a cheap magnetic cane-daes full iustice to the rodio circuits. As this is mounted in the center of the cabinet, the top, sides and boltom of the latter provide good baffle area.

The simple and dignifled appearance of the cabinet will strike an appreciotive response. The front panel simulates lacewood; the overall finish is American wolnut.

# LAFAYETTE MINSTREL.... Jhe MIGHTY MIDGET! 

The Minstrel is a five-tube superheferodyne with the added feature af tone contral. Tube for tube, in all-round performance, it has no equal an the market today. Yau can demonstrate this remarkable little set alangside of same larger and more expensive recsivers, and its tone quality, sensitivity and valume will "elinch" Its own sale.

## FOUR PENTODES USED

The high efficiency of the Minstrel is due ta the use af pentades (five-olement fubes), which perfarm the work af practically iwa fubes of former types. Of the five fubes in the set, four are penlades, the fifth being on 80 rectifier that furnishes smoathly fltered direct current of the praper valtages far the stable aperation of the amplifier, ascillatar and defectar circuits. Uses $2-57$ 's, 1-58, 1-47 and 1.80.

## sensitive superhet circuit

The superheteradyne circuit, universally acknawledged to be the best circuit known ta radio science, is emplayed to full advantage. A stage af preselection, mode passible by a three-gang variable candenser (unusual in sefs af this size) prevents image interference and is respansible far $\mathbf{a}$ high degree of selectivity. This warks inta a composite ascillatar-first detectar stage, which in furn feeds a high gain Intermediate amplifier stage, followed by a pawer defector and a final power autpul fube. Wavelength range, 20010 550 melers.

## DYNAMIC SPEAKER

A heavy dynamic loud speaker, securely balted in place, handles the full autpul of the powerful circuil without distortion.

## CONTROL THE TONE YOURSELF

The tane cantral enables the user ta cut aut the high nates and emphasize the laws, to his awn liking. This feature will frequently make a sale, as many people are slightly tane deaf and need an adiustment of this kind.

## BUILT-IN AERIAL

A built-in aerial adds greatly to the convenience of the Minstrel. Of course, o regular outside aerial may alsa be used If moximum results are desired. A phonagraph pick-up lack is provided, so that owners of plak-ups may take advantage af the fine audio amplifier and laud speaker. The dial is af the full visian type and is easy to read.

## MAYFAIR...

The new Lafayelfe Mayfair is a navel four-fube A.C. receiver built in upright form instead of the usual harizontal form. Althaugh iteasures anly 9 inches wide, $111 / 2$ inches high and $51 / 2$ inches deep, it is very grace: fully proportioned and will find immediate faver with many peaple who prefer a set accupying very little base area.

Reception af palice, amateur and airplane statians with the Mayfair is made passible by a special tapped coil system. In the upper position the set cavers the regular 200-550 meter braadeast band; in the lawer, the 75-200 meter band. This is ane af the very few small sels capeble of such aperation. Listening to the police radia alarms is particularly goad fun. Circult uses a high goin type 58 pentode as tuned radio frequency amplifier, type 57 defector, type 47 aujput pentade and type 80 rectifier. Dynamic spoaker gives astanishing valume and clarity. Moy the used with regular autside aerial or with built-in antenna. All metal chassis of strong canstructian. Cabinel rastefutly finished in twa-tane mahogany effect.
 fubes. For 110 valts, $50-60$ cycles A.C. Dimensians: $9 \times 111 / 2 \times 51 / 2$ inches. Shpg. wt., 6 lbs .
Code Marus. List, $\$ 25.00$. Your Cost. .
s 11.75


# cus TUBE DUAL <br> <br> MANTEL RECEIVER 

 <br> <br> MANTEL RECEIVER}

## 3750

WITH ANTI.ACOUSTICAL MOUNTING OFTHECHASSISANDIMPROVED AUTOMATIC VOLUMECONTROL

## Lafayelle-Perfected Superheferodyne Clircuit

The perfected superheterodyne circuit, worked out by lafayelle engineers, employs the newest R.F. and A.F. pentodes. There are three 57 's, as oscil-lotor-mixer, second detector, and autamatic volume control tubess two 58 's, as R.F. and I.F. amplifiers; one 47, as audio output tuber, and one 80 as full wave rectifier. The chassis is of all-metal construction, with full shielding.
The sensitive and auick-acting automatic volume control keeps volume and uniform level over wide range of signal inputs. Sensitivity is 3 microvolts per meter. Full 10 kc , selectlvity without side-band cutting. Maximum audio output is $21 / 2$ watts, which is far in excess of ordinary room require. ments. Smooth tone control.

The chassis of the 7-Tube Dual Speaker Superheterodyne is entirely free from the cab. inet, being supported on resilient sponge rubber. This method of mounting prevents audio feed back from the speaker to the chassis and eliminates microphonic or bonging" noises. An exclusive lafovette feature, char. octeristic of our custam-built sops.


Madel L.18-Lafayette 7-Tube Mantel Receiver with Twin Speokers for 105.120 volts, $50-60$ cycles A.C. Complefo with Tubes. Cade Manif. Shpg. wt. 50
s37.50 lbs, List \$83.50, Yaup Cost.

Madel L-19-Lafoyette 7-Tube Monfel Receiver with Iwin Speakers for 220 valls, 60 cycles or 110 volts, 25 eycles A.C. Complete with Tubes. Code Manue. Chassis dimensions: 10 inches high, 15 inches wide and 10 inches deep. Shpg. 52 lbs. Lisi $\$ 90.00$. Yaur cosi... $\$ 40.50$

The odvantages of dual speakers are by no means limited ta big console receiveps. Here is a campact table model Lafayette 7-Tube Superheterodyne with TWO DYNAMICS and a chassis having the latest and best circuit features.

Don't consider this remarkable custom-built receiver a "midget." The handsome cabinet that houses the two speakers and the chassis stands $173 / 4$ inches high, 17 inches wide and 11 inches deep, and is so gracefully proportioned that you would never guess it contained so much radio apparafus!

The two speakers are "pitched" differently, and repraduce the entire range of audible broadcast frequencies with really amazing naturalness. This set is a revelation to people accustamed to the limited response of most single speaker sets. The new Lafayette 7-Tube Dual Speaker receiver is a bel musical instrument as well as a fine piece of furnifure. Try this set under our 30 -day free frial plan cnd ': convinced yourself!

## BUILT IN ANTENNA TONE CONTROL

Jube Super Het

The lolest refinemants in superheterodyne cir cuit design are incorporated in the Lafoyetle 7 Tube Superheterodyne, which sells for a remarkably low price and constitules one of the best "buys" in a market abounding with baroains. Lafoyalte engineers have accomplished what was considered impossible of first: the develapment of a low priced "super" with the new tubes and many genuine features without departing in the slightes from the astablished high Lofoyette stondards of warkmonship, canstruction ond performance
Full advantage is token in the corefully engineered cireuit of the high gain and versatility of the new six-prong lubes, which are used as follows: One 58 R.F. pentode os pre-amplifies, one 56 as oscillator, one 58 R.F. pentode os first detector, ane 58 as 1.F. amplifier, one 55 dua-diode as second detector and auta-


LITHE SYMPHONY
The combination of the Lofoyette 7 Tube Superheterodyne and a high grede phonagraph furntable and pickup makes a musical instrument of priceless volue. With electrically-cut records of the new long running type ploying through distortionless oudio amplifier and dynamic speaker, you can cammand the world's best music.
With the top down, the turntable is completely hidden. The cabinet is o beoutifully simple exomple of furniture croftsmanship. Dimansions, 21 inches high, 19 inches wide, 15 inches deep.
The 7 Tube Superheterodyne in the truly handsome table model cabinet shown at the right needs no sales tolkl Just let people look of it and hear it, and they will morvel at its sensitiviry, selectivity. tone quality and generally smooth operation.

Model M-35-Lafoyette 7 Tube Superhetero dyne chassis, with matched dynamic speaker, camplete with tubes. For 105.120 volts, 50.60 cycles A.C. Dimensions, 13 inches wide, 10 inches deep, 7 Inches high. Shpo. wt. 28 lbs. Code Bugle. List Price $\$ 56.00$. Your Cast.

Model M-37-Lofoyette 7 Tube Superheterodyne Montel receiver, completo with pubes. For $105-120$ volls, $50-60$ eveles A.C. Dimen. sions, 19 inches high, $101 / 2$ inches deep. $151 / 2$ inches wide. Shpg. wt. 40 lbs . Code Dandy. List Price $\$ 62.50$.
Your Cost.
s27.95

Model M-53-Lofoyette 7 Tube Superheterodyne phono-radio combination, complete with tubes. For $105-120$ volts, $50-60$ ercles A.C. Dimensions, 21 inches high, 19 inches wide, 15 inches deep. Shpg. wt. 97 lbs . Code Donor. List Price $\$ 122.00$. Your Cost.
${ }^{5} 54.75$

# rutest 4 tube A.C.D.C. "омрРАст" with a REAL DYNAMIC SPEAKER! 



## LAFAYETTE 6 TUBE A.C. - D.C. RECEIVER

## FOR THE HOME, HOTEL, CLUB AND FARM

## Umiversal-can be used on A.C. or D.C. Curront

VOLTAGES-FROM 32 to 220
RANOE-208 to 550 metors
The Now Trutest 4-Tube A.C.-D.C. "Compact" is the Sensotion of the Radia Industry. Although it meosures only $91 / 2 \times 61 / 2 \times 51 / 2$ inches overall, II includes a REAL Dynamic Laud Speaker-nol a magnetic. Uses the very latest type lubes-1 type 39 R. F. Amplifier; 1 type 36 Delectar; 1 type 38 output pentade and 1 type 2525 Rectifier. It is astonishingly sensitive, and in most lacations works perfectly with anly a small indaor aerial thrown on floor in bock af sel; this is already attached to sel. Na ground connectian is required. Is ideal for travelers. The one-piece cabinet is of unbreakable steel, finished in Dork Brawn, with decorative Gald Clath over speaker opening. Shpg. wt., 12 lbs . Code Pigeon. Camplete with R.C.A. Tubes. Your Cost ..........................................s 1.75
Model 7.20 -Altachment to use this set on 32 ar 220 valis. Your cost for this altachment.
2.00

FREE Portable cariying case with every order for three sets


Madel s.st-Lafayatte 6-Tube A.C.D.C. Receiver, camplote with fubes, far 100.125 valis D.C. and $100-120$ valts, $25-60$ ercles A.C. Dimensians: $17 \times 141 / 4 x 9$ inches. Shog. wi., 29 lbs. Code Laire. List, $\$ 0.00$.
Your Cos1 ................................................. 85.95 Here is a 6-Tube universal A.C.D.C. recelver that will work anywherel Uses the latest type lubes, with push-pull audio amplifior and 1-type 2525. The latter is the now voltage dauble tube. Range: 200 to 550 meters:
With 20 microvalt per meter sensitivity and 10 kilocycle selectivthy, this Lofayette receiver with its super-dynamic speaker is o real performer, with valume enaugh to supply dance music and tane quality of the highest arder. Hos varioble tane contral and special line filter to keep out naise. Tatal power consumption only 35 watts. Handsome table madel cabinet is finished in American walnut, a beautiful and durable waod. Stands 17 inches high, $141 / 4$ inches wide, and 9 inches doep.

## NEW/LAFAYETTE "PIGMY" 5 TUBE A.C.--.C. with REAL DYNAMIC SPEAKER/



This Nev: "PIGMY" 5.Tube A.C.D.C. 200 to 550 Meter Receiver with its beautiful Burl Walnul Cobinot, piano finished, sots it apart as on instrument of Quality. Measures anly 11 inches wide: $75 / 2$ inches hlah and $51 / 2$ inches deep. The Volume ond Tone Quality leave nothing to be desired. Full deep tone is assured by the special Dynamic Speaker used. It uses 5 tubos1 type 39; 1 type 36 , one type 37; 1 type 42, the new power aul. put tube, and 1.2525 Rectifier. Is quiet and econamical in aperation. Shpo. wt., 18 Ibs.
Model 7. 30 - 5.Tube A.C.-D.C. "Piomy' Far 100-120 volts D.C., and 100.120 valts, $25-60$ eycles A.C. Cade Rasel. Complete with R.C.A. Tubes. List, 825.00 .
Your Cost
${ }^{s} 15.95$

## the of FOBEIGN Biciption. 

Covers all the Short

## Wave stations as

 well as the regular broadcast bands two receivers in onelEVERY modern rodio circuit feoture known to the engineering profession has been incarparoled in the custam built DUAL WAVE by Lafoyefte engineers. All af the following features contribute to the efficiency of the receiver on both the short woves and the regular broadcast waves: static contral, autamatic volume contral, class " $B$ " omplification, tone control, ultro selectivily, with new type preselector, and sensitivity such as anly a praperly designed superheteradyne can provide. Na straining of ears or the imagination with the DUAL WAVE; this set brings in the signals and lets you hear them through the full voiced $d y$ namle speaker in comfort. Lafayette engineers have made special provision to keep out code interference picked up by the intermediate omplifier regardless of the setting of the tuning dial. Every short wave listener will thank the Lafayette designers for this achievement.

## PRE.SELECTOR

A threa-gang variable condenser is utilized in o pre-selector circuit on the broadeast band, and in combination with a low frequency intermediate frequency omplifier offards better selectivity than ever before oblained from combination wave receivers of this type. This means freedom fram interference and enables you to tune in out-af-town stations on the broadcast band even while lacals are operating full blast.

## STATIC CONTROL

The new Lafoyalle DUAL WAVE is one of the first shart and broad. cost wave receivers to employ an interstotion naise suppressor. This functions on signals as weak as 50 micravalis, and eliminates the rush of power in the speaker when the set is tuned off a corrier wave and the autamotic valume cantral tends to bring up the circuit to moximum sensitivity. Static and man-made interterence batween stations ore thus kept dawn to an absolute minimum.

## CLASS "B" AUDIO AMPLEFICATION

Regordless of the incoming signal strength, you cannot overlood the DUAL WAVE receiver, becouse of the efficient design of the ctass " 8 " oudio amplifier. Tremendaus amplification is secured without distortion, the three type 59 tubes being operated in the mast odvantogeous monner. The lotest R.F. and A.F. pentodes are used 3 -59, $2-57,3.58,1.55,1.80$.

## TONE CONTROL

In oddition to the interstation noise suppressor, this receiver olso includes a tone contral, which helps to minimize high frequency etmospherics. The owner can odiust the tone to suit his own tostes ar the acaustical. requirements of the roam.

## AUYOMATIC VOLUME CONTROL

There is na delay in the action of the perfected autamotic valume
 radio is at your command Not only does this remarkable sat bring in all the regular broadcasting stotions on the 200-550 meter band, but also short-wave broadcasting stations in London, Paris, Berlin, Madrid, Rome, Moscow, Sydney, Buenos Alres, Tokio and Khabarovskl Also numorous polico radio alarms, alrplanes in flight, transoceanic radiophones and hundrods of distant amatour stations. Doos this sound incredible? Not at all-many sarisfled DUAL WAVE owners entertain their friends with foroign programs regularly. You hear music and announcoments iust as you do from local stations. The scale is calibrated and you need only furn the single funing knob to bring in all these fascinating statlons.

The DUAL WAVE combines oll the feafures of regular broad. cast reception with the limitless thrills of the short waves. No longer are two separate receivers necessaryl New stations are opening everywhere, and short-wave broadcasting is improving almost as rapidly as regular broadeasting has during the last soveral years. The custom built Lafayette DUAL WAVE does away with critical dial manipulatian and makes short wave reception easy as well as interesting.
control built into this set by Lafayette engineers. It uses the type 55 duo-diode, and responds instantly to any changes in the car. rier wave intensity. This feature is of particular importance an the shorl woves, where foding is more pronounced than it is on the broadcast band.

## FREEDOM FROM CODE INTERFERENCE

Anyone who is purchasing o dual wave receiver for the first time is not aware of the importance of eliminating untunable code interference. In practically all previous combination wave recoivers o high intermediate Irequency, In the neighborhood of 400 kilocycles, was used. As there are many powerful commercial radio telegroph statlons working in this regian, considerable trouble was experienced because the I.F. amplifier would plek up their signals together with the regular programs to which the set was tuned. In the new Lafayello this trouble has been eliminated by the choice of an intermediate frequency of 115 kila. cycles.

## INCREASED SENSITIVITY

Stations never heard before on previous sels can be braught in with excellent strength on the new DUAL WAVE. Increased sensilivity made possible by careful circuit adjustment is responsible for this superiority.

## TWIN SPEED DIAE

The dial on this recelver has two driving ratios, one high and the other low, which can be selected instantly by means of a litile shift lever under the main tuning knob. Use the fine ratio for the short waves, the other for the broadcast band.

## Enduring construction

Lafayotte custam.precision workmanship is evident throughout.


|  | - Jelegtivity/// |  |
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|  |  | $1000 \times<=43.000$ |
|  | KHOGGES | RESONANCE |
|  | +30 20 | -10 20 | The shape of the selectlvity curve of the 12 -Tube receiver indicates the sharp tuning of this Lafayelte set. Freedom from interference is assured.

A degree of sensitivity sufficient for the reception of extremely distant stations is indicated by the sonsitiv. tity curve of the Lafoyette 12 -Tube receiver

## $\star$

The Six Star Lafayette Receiver
SHUTS OUT MAN-MADE STATIC BETWEEN STATIONS-new outomatic noise suppressor, rodio's greatest odvoncement, relects interference and noises between stafions.

MANUAL INTERFERENCE CONTROL-regulates the action of the automatic noise suppressor. Set control af a point just above the interference level, and enjoy pure, undisturbed, noise-free reception.

AUTOMATIC VOLUME CONTROL-diode type. Eliminotes the nerve. wrocking blasting when tuning from weak to strong stations. Assures easy funing. Diade type defectar eliminates harmonic dlatortion.

TRIPLE DIAL TUNING-an assurance of beffer performance. Enables you to visibly defermine the sefting of tuning condensers, volume adlustment and tone control adiustment.

PERFECTED LAFAYETTE TONE CONTROL-full range, allowing complete fone groduations from the very low bass to the brilliant highs. Enables you to suit your own taste as to tonal quality.

IMPROVED TWIN VOICE DYNAMIC SPEAKERS-specially designed to carry the great output of the receiver. One speoker is pitched for high notes and the second for low notes, which arrangemeni results in an overall fidelity of practically $100 \%$ within the extremes of 70 to 4500 cycles.

## Two Splendid Cabinet 12 TUBE SUPERHET



Madel L-6-Lofoyelta 12 Tube De Luze Superheterodyne for $220-240$ volts, 60 cycle A.C. Complete with RCA, Arclurus or Lafayelle pubes. Size, 42 in . high, 25 in . wide and $143 / 4 \mathrm{in}$. deep. Shpg. wt. 138 Ibs. Code Floral. $\$ 71.25$

## THE VICEROY

A 12 Tube Superheterodyne combining the advantages of fauliless rodio reception with an exceedingly fine exomple of furniture raftsmonship.

Turn to pages 14 and 15 and reod the complete description of the chossis which mokes the VICEROY one af the outstanding radio values of the yeor.

## $\sqrt{6} 6^{50}$

## CUSTOM BUILT SETS

For those who are not sotisfled with ordinary radio performance and whose home surroundings demand distinctian in appearance, thls receiver leaves nothing to be desired. No radio could possibly offer more. Sensitivity that bridges vast distances and brings in stations fram the four corners of the continent; selectivity that permits no interference fram high pawered locals even on odjacent channels; power that projects programs through greal dynamic speakers with full, healthy vitality-and eye-filling beauty that can not fail to delight the most discriminating judge of fine furniture.

## THE CONSOLE

The design of this cabinat is the creation of a furniture stylist and artist, faithfully followed by the master craftsmen engaged in its construction. Top and sides are of fiveply birch; radia panel of center matched rotary walnut veneer. Arch is of matched lacewood with controsting overlays. Flanking the radio panel are pilasters of beaded and fluted hardwood. The apron and understructure fal. lows the aulline of pilasters and panel, and are flanked on both sides with gracefully lurned moulding which join apron to the legs. The same motif is carried out in all four legs, which are braced with bentwood stretchers. Extremely massive construction used throughout, with careful attention poid to correct baffie areas. A truly beautiful and artistic console custom built throughout.

Madel L-5-Lafayette 12 Tube De Luxe Superheterodyne for $105-110$ volts, 60 eycle lolso 105. 110 voll, 25 eyele) A.C. Complete with RCA, Arcturus or Lafayelte tubes. Size, 42 in . high, 25 in . wide and $143 / 2 \mathrm{in}$. deep. Shpg. wt. 135 Ibs. Code Foncy, Lisi, $\$ 150.00 . \$ 66.50$
Your cost.....................

## Models ofte Zafayette DE LUXE ERODYNE

## THE REGENT MODEL

A 12 Tube Superheteradyne designed far those who feel that they are entitled ta the most luxurious performance and elegance that radio affords.

Turn back to pages 14 and 15 and read the detailed descriptian of the chassis which is contained in this marvelous recoiver. Here is the finest Lafayette in Lafayette history-a Radio De Luxel

## FOR PEOPLE OF TASTE

The REGENT is our finesil A radio for the discriminating lew. Its Twelve New Type High Gain Tubes, all of which are there for a purpose, provide on immense reserve of surging power instantly available and always under perfect control.
There is comforting satisfaction in owning a hundred horse-power automobile capable of a hundred miles per hour-not because you want to drive that fast, but because you like to knaw that should you care to, you can ouf-distance athers. By the same loken it is comfarting to own such a receiver as the REGENT with its wealth af power. acute sensitivity and hair-line selectivity.

## EVERY MODERN FEATURE

No feature which could possibly add to the satisfoction of radio entertainment has been omitted in the design of this master receiver-NOISE SUP. PRESSOR with its amazing obitity to suppress the annoyances of man-made static and afmaspheric disturbances; VISUAL TUNING METER which en ables you to adjust for exact resonance. VISUAL VOLUME ADJUSTMENT, a great improvement aver the old method and VISUAL TONE SELECTOR, which enables yau to make tone adiustments by sight and not guess.

The consale af the REGENT is truly a masterpiece. Designed by an artist, made by master croftsmen from a wide variety of hordwood veneers, it stands alone in its class and elegance.
Double sweep pilasters of chaice burl walnut Mank the radia panel of begutifully grained rotary wal nut. In contrast arch and apran are af ariental wal nut lighter in tone. Legs and understructure are beautifully carved and turned.
 Model Ls-Lafayette 12 Tube De Luxe Superhet for 105.110 volts, 60 cycle A.C. Size 42 in . high, 26 in . wide and 15 in . deep. Shpg. wt. 115 lbs. Complete with Tubes. Code Flute. List, \$175.00. Yaur Cost.
Madel L-4-Lafoyetle 12 Tube De Luxe Superhet for $220-240$ volts, 60 eycle A.C. Size, 42 in . high, 26 in . wide and 15 in . deep. Shpg. wt. 115 Ibs. Complete with Tubes. Code Flyer. List, \$181.50. Your Cost

## Ohe WorkD's Oinest Musical Combination



Picfured above is the cabinet of this combination. One of the most beautiful slidin door cobinels ever creoled, an artistic combination of pore hardwoods. The sliding doors are of center matched bull walnul. Radio panel is of select straight grain American wainut, flanked by two pillars of matched rotary walnut. The canopy has an inlay af curly Africon walnut aver which is a genuine wood carving in Acantus. Speaker opening is faced with a golden cover grille eloth, and directly beneath is a drop doar which opens ta the record compartment. Extra heavy lop of 5 ply American walnul veneer covers phonograph and automatic record changer Top is suspended on piano hinges, with automatic locking bracket. Sides of cabinel are unusually heavy to provide adequate baffle area for the receiver's tremendous valume. Four handsomely carved and furned legs with extra heavy stretchers. The warkmanship throughout represents furniture craftsmanship of the highest type.

## Complete with Capohart Record Changer

 Model 1.9-Complete with $105-120$ volt, $50-60$ evcle A.C. Di mensions: $471 / 2 \mathrm{in}$. high, $231 / 2 \mathrm{in}$. wide and $181 / 4 \mathrm{in}$. deep. Model L.8-Camplete with $220-240$ volt, 80 crcle A.C. Dimen-
sions $471 / 2 \mathrm{in}$. high, $231 / 2 \mathrm{in}$. wide and $181 / 4 \mathrm{in}$. deep. Shpg.
 wt. 185 lbs, Code Colus. List $\$ 390.00$.

## Net

${ }^{\$ 154.50}$

## Complete with Standard Two-Speed Motor

 Model 1.9-Complete with $105-120$ voll, $50-60$ eycle A.C. Shpo. w. 173 lbe Code Colre. List $\$ 270.00$. Not\$II9.50 Model t-19-Complete with $220-240$ volt, 60 cycle A. C. Shpg. wt. 173 lbs. Code Colit. List $\$ 280.00$. Nof

CAFAYETTE 12 TUBE De Cuxe SUPER-HET and AUTOMATIC RECORD CHANGER


The warld's supreme musical reproducer, a deluxe phono-radio combination with the new Lafoyette 12. Tube Superhet and the famous Capehart Phono graph and Automatic Record Changer. The finest in radio-unequalled reception with your Lafayette -ond a phonograph that will reproduce your records perfectly. PLUS the CAPEHART AUTOMATIC RECORD CHANGER, which mokes It possible to listen to 3 hours of music without interruption, without the constant necessity of changing records. The world of music-the finest record and radio enter-toinment-ol your fingertips with the world's greatest musical combination-the LAFAYETTE-CAPEMART PHONO-RADIO.
The chassis used in this combination is the Lafayelte 12-Tube De Luxe Superheterodyne with AUTOMATIC NOISE SUPPRESSOR, which shuts out man-made static and other naises belween stations, aUTOMATIC VOLUME CONTROL, LAFAYETTE PERfected tone control. Perfected 12-TUBE SUPERHET CIRCUIT, DUAL DYNAMIC SPEAKERS, and a list of additional ourstanding features which makes this set the finest and greatest lafayelle ever devoloped. Full details of this chassis will be found an pages 14 ond 15 of this catalog.
The Capehart Automatic Record Changer needs na introduction. Equipped with new electrical transcription pick-up. Plays 10 and 12 -inch records, and is completely autamatic. The last record repeats until restacked or when master switch is furned off. By using the new "Victor 12" records you can listen to 3 hours of continuous music. Plays with a two speed motor. $331-3$ and 78 R.P.M. records.
The Lafayette Dual Speed Electric Pick-up is scientifically developed to reproduce with absolute fidelify the intricate chromatic elements of the most difficult musical compositions. Many exclusive fealures, including rubber damping. The Dual Speed Motom-33 I-3 or 78 R.P.M.-is the very newest type. All gears are completely enclosed. Silent spiral cut gears made from laminated Bakelite. Long oversize self-lubricating bearings. Will not averheat in closed cabinets.


LONG WAVE SUPER-HET
200 to 2,000 METERS MEDIUM and LONG WAVE

While broadsasting in the United States Is confined between 200 ond 550 meters, the European stations cover the wide range of 200 to 2000 maters. The new Lafayette 7 -Tube Superheterodyne, which covers this entire band without plug-in coils, brings ta European radio listeners all the advanced features found in the lotest American sets. A heavy duty selector switch on the front ponel enables the owner to tune in either the 200-550 or $850-2000$ meter bands.

PRE-SELECTOR STAGE
A stage of pre-selection, made possible by a three-gang funing condenser, functions on all wave lengths and gives the receiver knife-edge selectivily without sideband cutting. Automatic vol. ume control eliminates between-station blasting and greatly re. duces foding.

NO CODE INTERFERENCE
The intermediote frequency amplifier is funed to 115 kc ., a value that prevents the sef from picking up telegraph stations. This is an extremely importont provision; most dual-wave receivers use a much higher frequency and suffer very bodly from code in. terference.

EFFICIENT TUBE ARRANGEMENT
The newest R.F. and A.F. pentodes are used to their fullest advantage in a circuit that represents months of laboratory research by Lafayette engineers. A type 58 -tube functions as first detector, 1.56 as local oscillator, 1.58 as I.F. amplifier, 1.56 as diode detector and automatic volume control tube, 1.56 as first audio, 1.47 as output fube and 1.80 as full wave rectifier.

PERFECT TONE QUALITY
A power operated dynamic speaker gives unexcelled quality of reproduction with volume enough for any room. Chassis includes connections for phonogroph pick-up.

LAFAYETTE IO tube TRIO SUPER-HET 15 to 2,000 METERS..... SHORT, MEDIUM and LONG

The new Lafayetfe 10-Tube "Trio" Superheterodyne is truly on international receiver, os it tunes to all the short wave channels, the regular 200.550 meter broadcost band and also the Europeon $850-2000$ meter broadcost range. The whole world is at the fingertips of the owner of a "Trio"l

ELEVEN BIG FEATURES

1. Pro-selectlon-a 3 -gong condenser, in combination with o low frequency I. F. amplifier, affords selectivity beyond onything ochieved before.
2. Automatlc Volume Control-acts instontly to cut out station blosting and to reduce fading.
3. Static Control-eliminates condition coused by automotis volume contral flooding set with power when funed of carrier of station.
4. Freedom from Code Inferference-low infermediate frequency of 115 kc . keeps onnoying telegroph signals out of set.
5. Tone Control-enobles user to odiust tone response to suif his own laste.
6. Class "B" Audlo-tremendous power without distortion with - finely engineered circuil using three lype 59 tubes.
7. Twin speed Dial-for fine funing on short woves, quick funing on broadcost bands. Directly calibrated dial.
8. Increased senslifivity-permits the reception of distant stofions inaudible with other receivers.
9. Favorable Image Ratlo-eliminates cross modulotion and mysterious whistles.
10. Enduring Construction-all.metal chassis will last indefin. itely.
11. Latest Tubes-sef uses $2-59,3-57,3.58,1.55,1-80$.



Model E.204 Lafayelfe 10-Tube "Trio" Superheterodyne chossis, with motched dynamic speoker and complete with tubes. For $110-220-240$ volts, $25-60$ cycles A.C. Dimensions, $9 \times 10 \times 131 / 2$ inches. Shpg. wt. 42 lbs. Code Bucks.
List Price $\$ 102.00$.
Your Cost $\qquad$ $\$ 49.75$
Model E-226 Lafoyefte 10-Tube "Trio" Superheterodyne receiver in handsome cabinet meosuring $19 \times 16 \times 111 / 2$ inches, complete with lubes and speaker. For $110-220-240$ volts, $25-60$ cycles A.C. Shpg. wi. 50 Ibs. Code Binga. List Price $\$ 110.00$.
Your Cost.
${ }^{5} 53.95$

No Federat Tax to be Added to any of our pricen.


## First Battery Short Wave and Broadcast Receiver

The 8-Tube Dual Wave in the average farm ar small town location will easily bring in both East and West Coast stations on the broadcast band, dozens af foreign short-wave broadcasting stations, and hundreds of airplane, police, amateur and experimental stations below 200 meters. Wavelength range, 15 to 550 melers. No bothersome plug-in coils, just turn a knob on the frant panel to shift wave ranges. Selectivity in the order of 10 ke. means easy separation of inferfering stations. Sensitivity, 10 microvolts.

In rural communities canditions are ideal for both short wave and broadcast recep tion. Here is where the 8 -Tube Dual Wave will prove a popular numberl it is the first battery operated shapl and broadcast wave set.
This is no weak old "squealer", but a Superheterodyne with AUTOMATIC VOLUME CONTROL. This means that fading on either the short ar long woves is kept down to a minimum-a vitally important consideration in rurol districts.

## CLASS "B" AUDIO

Volume enough to supply music for born dances is assured by a lafoyette development of class " $B$ " audio amplification. Great economy of battery current. Tubes used are 2-34's, 2-32's, 2-30's, 2-49's. Required batteries: Eveready 2 volt "Aircell" (or equivalent in dry cells), one $22 \frac{1}{2}$ volt " $C$ " bottery ond three or four 45 -volt " $B$ " batteries

No effort or expense has been spared to make this set a real custom-built instrument. Precision parts and careful Lafayette engineering are evident throughout.


Madel E-24-8. Tube Dual Wave battery set, in midget cabinet with permanent magnet dynamic speaker and RCA, Arcturus or Lafayette ubes. Less batteries. Dimensions: 13 in . wide, 9 in. deep, $16 \frac{1}{4} \mathrm{in}$. high. S7pg. wt. 33 lbs. Code Bolbo.
List Price \$87.50.
Yaur Casi
\$41.95
Model V19973-Evereody Aircell "A" battery. Sel of Burgess " $B$ " and " $C$ " batteries $(135$ volts " $B$ ", $221 / 2$ valts

equalizes the grid and plate voltages in the proper proportion as the " $B$ " batteries deteriorate slowly through use

Tubes used: $6-30$ 's, $3-34$ 's. Batteries required: Eveready 2 -volt "Aircell", one $221 / 2$ volt and one $41 / 2$ volt " $C$ " botteries and faur 45 volt " 8 " batteries. Specially matched, permonent magnet dynamic speaker is available.

Madel L-11-9-Tube Superheterodyne, battery operated chassis with permanent magnet dynamic speaker, less batteries and lubes. Chassis dimension: 14 inches wide, $93 / 8$ inches deep, $71 / 4$ inches high. Shpg. wt. 40 Ibs. Code Tortar. List Price $\$ 75,00$.
Your Cast
s33.50

## IN-CONSOLE CABINET

Madel L-12-9.Tube Superheterodyne, battery operated chassis with 8 inch permanent magnet dynamic speaker, in console shown on right, less tubes and bolleries. Dimensions: 42 inches high, 24 inches wide, $141 / 2$ inches deep. Shpg. wi. 100 lbs. Code Tempo. List Price $\$ 96.50$.
Your Cast
\$44.50
Madel V19112-Sel of specially matched RCA, Arcturus or Lafayelte tubes for 9 -Tube Superheteradyne. Shpg. wt. 6 lbs. List Price $\$ 18.30$.
Yaur Cosi
Madel V-19973-Set of Burgess " $B$ " and " $C$ " batteries and Eveready "Alrcell" for 9-Tube Superheterodyne. ( 180 volts " $B$ ", $41 / 2$ and $221 / 2$ volts " $C$ "). Shpg. $w t$. 52 lbs.
Your Cost
\$13.20

Of great importance to cantinued economy of operotion is the
automatic bleeder circuit of the 9 . Tube Superheterodyne, which
PAGE 20

## 

## Lafayetre consoles



## PHONO-RADIO COMBINATION

This is an unusually oftractive Phono-Radio Combination Console, built of the chaicest Walnul Ve. neers. Four leo design, becutifully carved. Radio panel of American Wal. nut, flonked with pilasters of decorotive moulding. The entire Console conforming to the latest style in Radio Furniture. Work. manship and finish is of the finest. Full fashianed hinoed top of selected Woinut. Dimensions are 42 in . high, $231 / 2 \mathrm{in}$. wide and $161 / 2 \mathrm{in}$. deep. Inside Phono. Comportment dimensians: $33 / 4 \mathrm{in}$. high, 21 in . wide and $133 / 4 \mathrm{in}$. deep. Shpg. wl. Ibs. \$17r09-Code Lotus. Console only, less phono equipment or set. List price, $\$ 32.50$. Your Cost

\$15.95



## The MONARCH

This mossive console is o master piece of the cabinet-maker's art II was especially designed by a well-known artist ond made by master craftsmen. Top and sides of five-ply birch; radio panel of center matched rotary walnut ve. neer. Arch is of matched lace. wood with contrasting overlays. Flanking the panel ore pilasters of beaded and fiuted hardwood Apron and understructure follows he oulline of pilasters and panel, and is flanked on either side with grocefully furned mouldings which ioin apran to the legs. Designed to fit into the most luxurious homes. Overall size, 42 in . high, 25 in . wide and $143 / 4 \mathrm{in}$. deep. Inside dimensions: 25 in . high. $181 / 4 \mathrm{in}$. wide and $1 \mathrm{l} / \mathrm{hin}$. deep. Shpg. wt. 75 lbs .
s11710-Code Bilbo. Console only. List Priee, \$35. Your Cost


The MADISON

## PHONO-RADIO

 COMEINATIONIf is seldom that a phonograph-radio combination cab inet os fine as THE MADISON is cre. oted. It is almost unnecessory to state that only the finest hardwoods have been used, thot the workmanship is by the most skilled craftsmon. that the designer is indeed on artist. The sliding doors of this noteworthy cabinet ore of center matched butt wolnut. Rodio panel of stroight grain Americon wolnut, flonked by two pillars of moteh Rotory walnut. Conopy hos on inlay of curly African wolnut over which is a genvine wood corving in Acanfus. Speaker opening is faced with o golden color grill eloth, and direetly underneath is a drop door which when opened reveals a phonograph record comporiment. Extro heovy lop of 5 ply American walnut Veneer covers space for phonogroph. Top is suspended on plano hinges with automatic locking bracket. Dimensions: $471 / 2 \mathrm{in}$. high, $241 / 2 \mathrm{in}$. wide and $181 / 4$ in . deep. Inside dimensions: 30 in . high, 22 in . wide, $151 / 4 \mathrm{in}$. deep. Shpg. wi. 140 lbs
sir707-Code Decal. Console only, less equipment. \$
List Price, s110.00. Your Cost ........................... sil108-Code Decre. Console with Capehart Dual Speed Unif,

 with overlays darkened to simulate black walnut. Sides ore of heavy three ply gum wood. Three piece lop of solid gum wood. All joints are mortised and reinforced with heavy blocks. Outside dimensions are 18 in . high, 10 in . deep, $151 / 2 \mathrm{in}$. wide; inside dimension: $151 / 2 \mathrm{in}$. high, $91 / 4 \mathrm{in}$. deep, 13 in . wide. Shpg. wf. 15 lbs . Mantel Cabinet only. List Price, $\$ 7.50$. \$17706-Code Conse. Your Cost


ASSEMBLE AND WIRE


Tube combination: 3-58's, 1.57, 1-56, 2-59's, 1-80. For $110-120$ volis, $50-60$ eycles A.C.

Model V22037-Trutest Economy 8 Tube Kir. Less fubes and spoaker. Shpg. wi. 28 lbs. Code Trute.
List Price $\$ 35.00$.
Tour Cost.

Your Cost.

Tour Cost. and a solderino iron. $\qquad$


Rola-6 ir.ch dynamic speaker and complete sat of lubes for 5 Tube Kil. 1800 ohms field resisfance. Shpg.wt. 12 lbs . Code Doure. $\$ 5.01$
Your Cost

1 AVE you always thought that superheteradynes ore complicated and therefore difficull for the service man or constructor to put together? Some superhefs are, but not the Tru. test 5 Tube kitl With the chassis and all the parts corefully prepered for you, you can assemble this kit very easily either for your own use or for ready resale in a midget or small console cabinef. You derive pleasure as woll as profit from the work.
In keeping with the modern Irend, Lafayette engineers have made the 5 tube chassis small and compact, but without sacri. ficing electrical efficiency. The metal chassis measures only $101 / 8$ inches wide, $63 / 4$ inches deep and 6 inches hlgh overall, and it will therefore fit a wide variety af cabinels.

All lour fubes in the radio circuit are pentodes, the Ath being an 80 rectifier. Neadle sharp tuning is provided by o three-gang variable candenser, with a slage of preselection ahead of a combined oscillator-first defector stage using a type 57 R.F. pentode. Following is a high gain intermadiate frequency stage, working af 175 kc . and using a type 58 pontode. This foeds inta a type 57 power second defector, which terminates in a type 47 audio pentode. Any standard dynamic speaker with a field reatsi. once of 1800 ohms may be used.

Thie selectivity, distance getting obility and "wallop" of this great liflle performer make il an oulstanding development of Lafayette engineering skill.

Natting has been overlooked in making the Trutest 5 Tube kit complete in all defails. A screwdriver, a pair of pliers and a soldering iron ore the only tools you need. Defailed instructions and dlagrams posifivaly prevent you from making errors.

Tube combination: $2-57$ 's, $1.58,1.47,1-80$. For 110.120 volfs, 50.60 cycles A.C.

Model JR Dx'er-5 Tube Superheterodyne Kit. Less lubes and speaker. Shpg. wt. 19 Ibs. Code Feule. List Price, $\$ 32.50$. Your Cost. $\$ 14.95$

Model JR Dx'er-Complete kil of 5 specially matched fubes for Jr DXR 5 Tube Kit with matched dynamic speaker. 1800 ohm field. Including proper oufpul trans. former. Code fidel. Your Cost.


Event dealer and service man knows that the installa lion job is what eats up the praft in the sale af most outa radia sets. Here of last is an all-electric auto receiver that is EASY to install. No culting or marring of the car, no special tools are necessary. Can be Installed in 30 minutesl Chassis, loud soeaker and "B" power unit are oll in ONE compoct unit. Convenient remote funing from small cantral that clomps to sleering column.

## SPECIAL AUTO TUBES USED

The fubes used in this sel are of the special 6.3 voll type, made particularly for outomabile service. They continue to work of full efficiency even when the car's boltery is below normal voltage. Tube cambination, iwa 36 's, ane 85 , ane P.861, one 37 , and one 89 triple grid power tube.

## AUTOMATIC VOLUME CONTROL-NO VOLUME FLUCTUATION

Variation in volume while the cor is in motion is practically eliminated by an improved method of autamatic volume contral. Sensitivity is better than 10 microvalts per meter, selectivity better than 10 kilocycles, assuring complete customer satisfaction.

## SELF-CONTAIMED "日" SUPPLY

Model S.97-LAFAYETTE ALL-ELECTRIC AUTO
RADIO. Complete with chassis, power unif, loud
The self-cantained " $B$ " supply, operating on the car storage battery, eliminates troublesome " $B$ " batteries and makes the Lafayette All-electric as conventant to install, operate and service as any ordinary A.C. set. Total drain on the car batiery anly $51 / 4$ amperes. All necessary resistors and condensors for ignition, interference, elimination are furnished.

## 



A very popular low priced auto sel. Substantially made with separale funer-amplifrer and dynamic speaker. Mounted under the dash, on the bulkhead, under the foat board or under front seats.
The receiver measures only 5 by 7 inches, and uses five new type fubes (1-36, 2-38's, 2-39's) in an extremely efficient T.RF. circuit. Tuning range 195 to 550 meters.
Three shielded connected cables sove much time in wiring. Complete accessories include universal mounting bracket, Illuminated steering column control with lock switch and 30 inch flexible control shaff, dynamic speaker, five fubes, spark suppressars and antenno equipment. "B" batteries are not furnished, as many people will want to use some form of eliminator. Plate voltage required, 135 valts.

In ordering specify number of cylinders in car.


No Federal Tax to be Added to anh of our prices.

# This new Latoyette UNIVERSAL Auto Rodio, which obtains all necessary power from the car's staroge battery, is one of the first auto 

 sots to take full advantage of the entirely new and impraved serles of law drain autamabile tubes. It is a masterpiece of compactness and efficiency, custam built thraughaut to the mast rigid Lofoyette specificatians.Six funed circuits are used, with the fubes in the follawing arrangement,
One type 77 advanced radia frequency pentade as bath first delectar (mixer) and oscillatar. Twa type 78 advanced vari-mu tubes in the radio frequency and intermediate frequency amplifier stages. One type 85 diade-triade as bath secand detectar and first audio frequency amplifier. One type 41 advanced pawer pentade in the secand audio stage. One type 624 high vacuum rectifler in the pawer unit.
Sensitivity is rated at $1 / 2$ microvalt per meter. Selectivity is carefully adiusted by praper chaice of intermediate frequency to allaw at least 20 kc . separation and still enable the sel ta be tuned easily. Wavelength range, 200-550 meters.

## Unique Single Unit Construction

The combined unlt arrangement, in which the chassis, pawer pack (B baltery eliminalar), dynamic speaker and cantrols are all housed in a single container af $12 \times 51 / 2 \times 61 / 4$ inch size, assures maximum odaplability ta all makes of autamabiles. The receiver is sa arranged that it may be hung an brackets from the underside of the instrument board ar placed on the floor-boards alongside of the driver's seat.

## Simple Controls

The cantral is very simple and includes a lighted fan dial and two knabs, ane for funing and the other far valume. The an-aff switch is on the back of the valume cantrol, with separate lock and key. A special remote contral unit, which clamps to the steering column and permits the driver to tune the set, con be supplied at slight additional cost. Write far camplete detalls . . . no obligation on your part.

The five-inch dynamic speaker gives abundant valume with perfect elarity of tane, the output of the set being ane watt. The diade type outomatic volume contral tends to equalize all signals to a paint predetermined by the setting af the manual volume contral. This feature further eliminates the "blasting" effect when tuning from strong to weak stations and adds materially to the lite of the output pentade by reducing the likelihaod af audia averlaading.

## No Extra Batteries Required

Na batteries are required other than the regular six-valt slorage battery in the car. All " $B$ " and " $C$ " batteries are eliminated by the use of a special vibrating type power unit which is an integral part of the receiver assembly. The tatal current drain on the battery is oply 4.85 amperes!

Model L-20-Lafoyette UNIVER. SAL Auto Radio, complete with lubes. Dimensions: $12 \times 51 / 2 \times 61 / 4^{4}$. Shpg. wt., 20 lbs. Cade Borna.
List $\$ 69.50$.
your cost.
-29.95

## Auto Radio ficcessories



## Remote

 Control UnitDesigned for the convenience of those who have auto radio sets not yet equipped with remote control. Can be adapted to control any auto set. Case finished in black enamel. Illuminated dial with clear-cut, sharply-defined divisions. Universal mounting. Key Lock Switch preventing set from being used unless unlocked. Micrometer volume control. Unit is assembled in a pressed steel case; assembled in a pressed indestructible, lightweight and indestructible,
rust-proofed, and finished in black. Size $31 / 2 \times 41 \mathrm{~K}^{\prime \prime}$. Shipping welght 2411 bs.
N14236-Complete with $30^{\circ}$ flexible shaft and one coupling.
Your Cost
Each.
\$2.00
N1s237 Univeraal Coupling .. 15 N14238 Add ${ }^{\prime}$ cable per ft
N14239- $1 /$ steel rod, per

celvers. It has been mobile reand is particularly suited tion in an automobile. Is installed in metal case with standard black finish. Provision is made in the design of the speaker to eliminate the collection of dunt or dirt in the moving parts, and the dirt in construction is bult to withstand construction is bulit to withstand the most severe road shock. Has adjustable luge for installation on the dash of car and a $30^{\circ}$ armored cable enclosing all leads. Has a $71 / 2$ ohm field coll. Shipping weight 12 lbs . W19184 For single 38 tube. W19185-For single 41 tube. W1918 --For single 43 tube. Your
Your
Cost.
Jensen Dynamic Auto This Auto Speaker on Speaker on
performance performance
alone is alone is beling used as Standard Equipment for a great many auto


Anto Speaker Anyone looking for real quallty $\ln$ an Speaker $t h i s$ new model. En-goud-looking, felt-lined metal cabinet with rich black crackle finish. This greatly decreases the chances of picking up ignition noises. Volof picking up and tone comparable with the ume and tone comparable with the clear and remarkably faithful. The response is uniform throughout its frequency range. Is provided with a single stud mounting and is furnished with 4 ohm field. Shipping weight 5 Ibs.
W19178 - For single 38 tube. w1917. For single 41 tube. W19180-For single 43 tube.
Your
Cost.

## Auto DX Aerlal

At last a satisfactory auto aerial! More volume, clearer reception, lems interference. Completely out of sight. A solid zine plate, $40 \times 41 / \mathrm{s}^{\prime \prime}$. sight. A solid zinc plate,
rolled ediges. Complete with 10 it. roled eojes. covered lead-in and ail rubber covered lead-in and all
neceasary a crestorles. Fits every neceasary accesomeres. Firs every
car made. Shipping welght 5 lbs. R27130

## Your Cost

Oxford Dynamic Auto


This is a small cumpact dynamic epeaker that will handle large volume without distortion. A vailable in two types for use with push-pull 38s or 41s. Han an attractive metal case. For 6-volt current; has 4 -ohm field. Rugged construction to withstand all vibration shock and jars. Equipped with terminals without cords. Shlpping weight 7 lbs. W19222-For push-pull 38s. W19233-For push-pull 41 s Your Cost
3.25

## Centralab Auto Radio Suppressors

Centralab Suppreasors are from $50 \%$ to $500 \%$ more effective than other types in eliminating motor spark noise from the radio. They resort to no camouflaging, but provide full $11 /{ }^{\prime \prime}$ resistance. The reaistance material and the ceramic jacket are baked together as one solid rod with the granite-like ceramic fully enclosing and protecting the resistance. The "Baptism of Fire" at 2,700 degrees insures great electrical and mechanical strength, so there is no need to hide a miniature resistance in an eyeappealing shell. The Centralab is a $100 \%$ supprensor-as the crusssection shows. Note the solid black llne in the center extending all the way through. This is resiatance material. Units are moisture-prool, rugged and able to stand mechanical shock

Spark Plug Suppressor Distributor Suppressor E5278-List 40c
Your Cost
$20^{\circ}$
E5279-List 40c
Your Cost
$20^{\circ}$

## Auto Ignition Silencer Kits



To suppress the radio-frequency disturbances picked up by the automobile radio set from the gnition system of car
Neatly packed in attractive boxem. Each set has one generator condenser in leakproof metal cylinder; one diatributor resistor and a spark plug resistor for each cylinder. Each part of very beat quality
$31 / 2 \mathrm{mfd}$. condenser on 4 cylinder kit, 1 mfd . condenser on 6 and 8 cylinder krit.
E5280-Four cylinder. Listes3.25 \$1.39
E5281 Six cylinder. Liat $54.50 \$ 1.85$
E5282 Eight cyllinder. List $\$ 5.50$
Your Cost
\$2.29

## Janette Rotary Converters

These sturdy and efficient Converters permit the operation of A. C. radios, small electrical appliances, etc., from a direct current source. They are equipped with a special filter which prevents converter interference from reaching the radio. If the converter is not for use with radio and filter is not deaired. deduct $\$ 7.00$ from price. The 80 -watt size will operate all midget bets and small electric motors. The 110 -watt size will operate radios up to 9 tuhers; the 150 -watt size, for larger receivers and those using "50 type power tubes and the 300 -watt size will operate any ordinary public address amplifier or vacuum cleaners, washing machines, heating pads and similar apparatus.
$\begin{array}{llll}\text { Stock } & \text { Output input Your } \\ \text { No. } & \text { Watte } & \text { Amps. } & \text { Cost }\end{array}$
Stock
$\qquad$

| Y19806 | 80 | 5.4 | \$28.00 | Y19807 | 80 | 1.5 | \$28.00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y19800 | 110 | 6.5 | 34.25 | Y19803 | 110 | 1.9 | 35.00 |
| Y19801 | 150 | 8.5 | 37.95 | Y19804 | 150 | 2.4 | 38.75 |
| Y19802 | 300 | 15. | 51.95 | Y19805 | 300 | 4.0 | 49.50 |



Output Input
Yput Your

Ward De Luxe Car Antenna


Closely woven copper-chrome-nickel plated wire suspended out rigid frame. More sensitive, in must casen excels roof type. Impossible to short or ground. Rubber splash guard furnishod. Shipping weight 5 lbs . All neresary accessoriea furnished.
R17131-Lint price $\$ 4.25$ Your Cost Each
${ }^{s} 1.65$

## Hercules Car Antenna

Closely woven copper mesh, avered with a black syn. thetic leather. It is $52^{\prime \prime}$ long and is mounted underneath the car. It may be suspended from any part of the chassis. Extremely sensitive. Shipping weight 4 lhs.

Your Cost
$85^{c}$
R17133- $6^{\prime \prime}$ wide.
\$1.25
Your Cost $\qquad$


Distributor Silencer for Automobiles Radios


To eliminute pick-up from iknition coil. By connectins the Silencer to the low then. sion end of coil, and ground ing its case to the metal of car these noises will bueliminated. Shlpping weight 3 lbs.
P14217
Your Cost
$85^{\circ}$

$(1) \mathrm{B}^{-j}$

## Generator Silencer

To eliminate generator interrerence. Ground case to geners-P14215-. 5 mid . Your Cost Each P14216-1. mid.
Your Cost Each

## Automobile "B" Eliminators

## The Lafayette Inverter



The New Lafayette Inverter is a proven engineering achlevement giving 110 volts alternating current from direct curreat lines. It is quiet, efficient and economical. Proper peration guaranteed. No longer is it necessary to have an A.C. receiver re-made into a less efficient D.C. type. If you are located in a direct current district, simply inntall a Lafayette Inverter between your supply line, and the simply intala a Latayette Inverter between your supply line, and the Radio Set, electrical appitiance or equipment, and it winers admit that A.C. receivers are superior performers, due to the fact that alternating current can be atepped up to suit the requirements of proper voltages lor the best performance of radio tubes; must power tubes require voltagee much higher than that delivered by the regular direct current supply, in order to work properly. To select the proper type for your needs simply ascertain the direct current voltage available, then the approximate watts rating of the radio recelver or other apparatus. For your kuldance a 7-tube set is rated at about 75 watts; a 9 -tube

- 90 watss; 10-tube 105 watts and 12 -tube- 130 watta. These Invertera in addition to the above uses, efficiently operate medium and small size Neon gas-tube signs in direct current districts. Overali size of unit, 11 " long; 64 " wide and 7 "high. Shipping weight 20 lbs .

| Stock | Input | Watt | Your | Stock | Input | Watt | Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Voltage | Rating | Cost | No. | Voltsge | Rating | Cost |
| $\mathbf{Y 1 9 8 3 5}$ | 110 | 100 | $\$ 19.50$ | Y19838 | 110 | 150 | $\$ 21.00$ |
| $\mathbf{Y 1 9 8 3 6}$ | 220 | 100 | 20.50 | $\mathbf{Y 1 9 8 3 9}$ | 220 | 150 | 22.50 | $\begin{array}{lllrllll} & 19835 & 110 & 100 & \$ 19.50 & Y 19838 & 110 & 150 \\ Y 19836 & 220 & 100 & 20.50 & \bigvee 19839 & 220 & 150 & 22.50 \\ Y 19837 & 32 & 75 & 1950 & & & & \end{array}$

## The Lafayette Auto Converter

 this Unit, but care should be taken not to overload it. It is fool proof and requlres no attention except olllng about once a year. Its current consumption is extremely small. The Unit is small; fts size being $61 / 2 \times 71 / \times 31 \mathrm{hm}^{\prime \prime}$. and it is compuctly assembled. Can be easily installed in any car or boat. The constant unvarying voltage supplied by this Converter guarantees the maximum results in the quality reproduction, volume and tone of your radio receiver. Can be fastened to the dash board on autos; with the remote control mounted on steering wheel column. It easily pays for itself in the saving of the money spent for the frequent renewal of " $B$ " batteries. Is vibration and shock proof. Units are factory tested and guaranteed lor proper operation Shipping weight 18 lbs .
M14227-Your Cost
\$24.50

## Gen-E-Motor Auto "63" Eliminator

This high efficiency Gen-e-motor replaces the " $B$ " batteries in Automobile Radio Receivers, and in all kinds of Battery Sets. It makes the Automobile Radio Receiver allelectric, developing more volume, better tone, greater selectivity and distance, at no cost for operation. The Gen-emotor is combined motor and generator operating from a 6 -volt storage battery. Is easity installed on any
car and will operate any Automobite Radio Receiver designed for " car " and will operate any Automobile Radio Receiver designed or under the most trying and exacting conditions. A dependable source of " $B$ ", power insuring uniform reception. Sets up no interference In ladio aet. Can be mounted in an exceptionally small space$41 / 2 \times 6^{\prime \prime}$. The combined generstor and motor is precision built and will last for years without attention. Uses the latest type noise filter. Will carry up to $25 \%$ overload. Is fool-proo?. Shipping weight 17 lbs.

# For 6 Volt Auto "A" Battery Supply 

| Stock | Code |  | put | Inter- | A. Batt. | Stock | Code |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | No. | Volts | M.A. |  | Drain. | No. |  | Volts |  |  |
| P14219 | B-135-T | 135 | 30 | 671/2 | 1.42 | P14212 | A-3280 | 180 | 30 |  |
| P14220 | B-180-T | 180 | 30 | 90 | 1.94 | P14213 | A-3235 | 136 | 30 | 67 |
| Llst $\$ 21.00$ <br> Your Cost (elther unit) |  |  | \$T?35 |  |  | List $\$ 21.00$ <br> Your Cost (elther unit). |  |  |  |  |

## Emerson

 $6{ }^{6}$ B"
## Power Unit



This "B" Power Unit is an efficient substitute for the "B" batteries in all Automobiles as well as in battery type sets. Ellminates " $B$ " battery troubles and their expensive replacement costs. The Unit operates from a 6 -volt "A" battery, delivera 180 volts at 40 M .A. It uses no "A" battery current except when operating provided with a 90 -volt tap. For autos, polleecars, aeroplanes, motorboats, etc. Compact and self-contained easily installed-eliminates ${ }^{\prime} B^{\prime \prime}$ butteries. Consists of an efficient Dyna motor, rubber mounted, and Filter, mounted on a steel base plate. Readily installed in any car, under floor boards or in body. Overall size $78 / 4 \times 45 \times 6 K^{\circ}$ high. Shipping weight 17 Jbs .

N14222-List price $\$ 27.95$
\$13.15


For 32 Volt Lighting Plants


Mallory-Elkon Auto "B" Eliminator The New Mallory Eikon Auto "B" Eliminator develops more than sufficient ' 8 " Power for any and all types of Auto Recelvers. Operates at a minimum current drain directly of the regular car storage battery. Your first cost is practically your last it will outllive your
 car. Insures freedom from "B" battery troubles, eliminates heavy replacement expense, and makes certain perfect radio reception at all times. Is one of the most popular and largeat sellers because of its quality construction. Is found in many of the principal police ear radio signal systems, and is standard factory equipment in one of this country's finest automobiles-the Cadillac-16. The case is of heavy gauge metal, cadmlum plated. Among its many features of heavy gauge metal, cadmium plated. Among its many leakifea dependable radio reception; its universal application-suitable for all popular makes of stand-
 rotary parta, does not need oiling; no attention, and does not set up any interference. Is dry; is complete-nothing else to buy and is easily installed - can be placed in any position. Guaranteed in accordance with R. M. A. Standards. To summarize:-1. No tube required. Eliminates the hazard of expensive rectifying tubes. 2. Higher efficiency. $60 \%$ efficient; highest ever attained. 3. Less buttery drain: $1 / 5$ less than previous models. 4. More output power; a type for every output requirement. 5. No noise; silent In operation. 6. Smaller size; compactly built; can be installed in many places in your car. 7. Simplified construction; fewer parts; expertly designed. 8. New lower price; placing an all electric auto radlo within the reach of everyone. Complete installation and general instructions are enclosed. Specify tubea used when ordering to insure recelving the proper model. Shipping weight 21 lbs . N14223 - Mallury-Elkon Auto "B" with self-rectilying Elkonode complete $\$ 10.29$ with cable. List Price $\$ 17.50$. Your Cost
with cable. List Price $\$ 17.50$. Your Cost

## 1. C.A. Super Short Wave Converter

This device will tune wave lengths between 60 and 200 meters, police calls, amateur
airplane and coast guard stations. This converter makes a superheterodyne receiver out of T.R.F. set and can be connected to any A.C. radio. Makes use of the entire receiver
 and should not be confused wita older type Which used only the sudio tubes in the recelver. dines $1-27$ tube which obtains its power from your Radio through adaptors furnished with brown crackle finish and decorated bras dial, tuning knob and vernier. Shipping weight 8 lbs . List Price $\$ 8.00$ (less tube). $\$ 4.55$
$\mathbf{L 2 6 2 7}$ Your Cost Each......

ami-your cortsach

# LAFAYETTE De Luxe 6 Tube A.C. SHORT-WAVE RECEIVER 

Built-in Power Pack

## 14 to 115 Meters

## An Advanced Set for Amateur and Communication Purposes

For amateur operatars and advanced short-wave broadcast "fans" wha do their short wave listening seriously, we affer an advanced receiver in the form of the new Lafayette A.C. set. This has a wave. length range of 14 to 115 meters, covered by low-lass plug-in coils in coniunction with a special split section variable condenser. For the sake of convenience, the power pack has been built into the set, which is therefore complete except for tubes and loud speaker.

## TRF-REGENERATIVE CIRCUIT

The circuit comprises a high gain funed radio frequency stage using a type 58 tube, working into a regenerative detector using another 58. This is followed by a 56 voltage amplifier and a final outpul stage using two type 59's in push-pull. Type 80 rectifier. This combination is universolly acknowledged to be an extremely sensilive and smooth working one, develaped to a high degree of efficiency by Lafayette engineers.
Single dial funing with antenna trimmer. Velvet action regeneration control. Each stage is individually shielded, eliminating all feed bock troubles common to high gain S.W. receivers. Power pack in separofe compariment, assuring complete freedom from hum. Works dynamic speaker at full volume; jack for earphones provided.

We have engineered and built this receiver of the finest quality materiols passible, only the highest grode of workmanship has been used in its construction. We are pleosed to offer this complete receiver, with power pack incorporated, to the amateur operalor
and shorl-wave fon at a price that he wauld expect lo pay for the receiver chassis alone. No expense has been spared to make this receiver the outstanding short-wave set of the year. Signals are clear and crisp, more volume than one would require on a dynamic speaker.

## METAL CABINET

Strong steel cabinet measures $121 / 2$ inches long, 12 inches deep, $83 / 4$ inches high. Has hinged top for easy insertion of coils and lubes. Adequately ventilated. An extramely well designed and ruggedly built receiver, attractively finished in black erystalline mark-praof finish.

Model M-10-Lafoyelte 6-Tube A.C. Short Wave Re. ceiver, camplete with plug-in coils and drum dial, less lubes and loud speaker. For $105-120$ valts, $50-60$ eycles A.C. Dimenslons: $121 / 2 \times 12 \times 83 / 4$ inches. Shpg. wh. 44 lbs . Code Fleur. List $\$ 90.00$.
Your Casl.
$\$ 37.50$
Model M.11, complete with tubes, $\$ 42.90$

## LAFAYETTE .... BATTERY TYPE SHORT-WAVE RECEIVER



Lafayelte engineers have nol overlookea the mony amaleurs and short-wave broadcasl enthusiasts who live in unwired districls. They hove designed a special battery model set that has all the circuil fealures of the six-tube A.C. model with the economy and conveniences of bottery operation.

## battery pentodes used

The battery model uses four tubes: a type 34 R.F. pentode as the funed radio frequency amplifier, a type 32 as regenerative delector, a type 32 as screen grid voltage amplifier, and a type 33 audio output pentode. In overall sensitivity this set is practically the equal of the A.C. model, hoving slighlly lower oudio output only because of the limitations of battery supply. Wave range, 14-115 meters with plug.in colls.

## WORKS ON AIRCELL BATTERY

The new Lafayette 4-tube receiver works on a two-voll AirCell for filament current and 135 volfs of " $B$ " baftery. A long cable for battery connections is supplied. All stsel cose, neatly finished in black erystalline, has hinged lop. Meosures $121 / 2$ inches wide, 6 inches deep, $83 / 4$ inches high. Suitable far outomobile use because of its strong construction.

## Model M-15-Lafayette 4-Tube Boltery Type Short Wave

 Receiver, camplete with plug-in coils and drum dial, less tubes, batleries and laud speaker. Dimensions: Minet. List $\$ 70.00$. Your Cost.
Model M.16-SW Battery Sel,complete with tubes. $\$ 31.50$



# Scientific Radio TUBES 



## LAFAYETTE PRECISION TUBES

Lafayelte Radio Tubes ore offered to meel the de. mands and exacting needs of a vait number of Dealers and Service Men who wish to increase their margin of profit from tube soles without leopardiz. ing the good-will of their customers.

## strictiy first quality fubes

Do not confuse Lafayette Tubes with other law price tubes/ A big majority of those selling in their price range are "seconds"-lubes whish have been reiected because they do not measure up to the manufacturer's specifications. Lafayeties are "FIRSTS" - GUARANTEED PERFECT ANO OF UNIFORM QUALITYI

## precision made

Lafayelte Tubes are the perfect praduct of coordinated efforts of engineers and craftsmen, and of the mos modern automatic tube moking machinery. The same care which is used in the selection of parts is also exercised in every step of all monufacturing
processes: from the blowing of the "flare" to the final inspection.

## thoroughiy seasoned

After manufacturing processes have been completed. each Lafayatte lube is once more examined for shorl and open circuits and ploced on a rack where voltages are applied to the electrodes for some time. This step "seasons" the tube and stabilizes its characleristics. After "seasoning" it is again tested for emission, A.C. output, gas and leakage. In these tests extremely accurate instruments are used.
why they are lower in price
Lafayette Tubes cost as much to manufacture as other standard tubes. They are lower in price because our distribution costs are lower than thase who must conduct tremendously expensive adverlising campaigns in order to distribute their produets. We sell direct ta you and eliminate the costly advertising expense you and the consumer must pay when you buy ather tubes.

Lafoyette Tubes are Guaranteed for Six Monthsl (Breakage and Burnouts alone are excepted)

|  | $230 \begin{aligned} & \text { List } \$ 1.30 \\ & \text { Your Cost }\end{aligned}$ | 243 | $5 \begin{gathered} \text { List } \$ 2.80 \\ \text { Your Cost } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  | $231 \begin{gathered} \text { List } \$ 1.30 \\ \text { Your Cost } \end{gathered}$ | $245 \text { rour Cost }_{\text {List } 1.15} 520$ | $277 \underbrace{\text { Lis1 } \$ 1.05}_{\text {Your Coss. }} .820$ |
| 112A | $232$ | $246{ }_{\text {reur }}^{\text {rist } \$ 1.55} 70$ cost | $278 \begin{aligned} & \text { Liss } \$ 1.65 \\ & \text { Yourcost } \end{aligned}$ |
| 1 | $233$ |  | 279 List \$2.60 |
| 1997 |  |  | $280 \mathrm{~L}_{\mathrm{Lss} 190 \mathrm{c}}^{\text {Yourcost }} 40 \mathrm{C}$ |
| 199X ${ }_{\text {Your Cost }}^{\text {List } 51.50}$ | $235 \text { List } \$ 1.50$ | - List 54.00 ( 1.98 | Your Cost |
| 2014 Your |  |  | $282 \begin{aligned} & \text { List } \$ 1.20 \\ & \text { Your cost } \\ & \hline \end{aligned}$ |
|  | 237 Your | $255 \text { List } \$ 1.00$ | $283 \begin{aligned} & \text { List } \$ 2.10 \\ & \text { Your Cost } \end{aligned}$ |
| $222 \begin{gathered} \text { List } \$ 2.00 \\ \text { Your Cost } \end{gathered}$ | $238 \text { Vist }$ | $256 \begin{gathered} \text { Your cont } \\ \text { List } \\ \text { Li.20 } \\ \hline \end{gathered}$ | $285 \text { Your Cost }$ |
| Your Cost | $239 \begin{gathered}\text { List } \$ 1.80 \\ \text { Your Cost } \\ 816\end{gathered}$ | $257 \text { Your Cost } 74 c$ |  |
|  | $241 \begin{gathered} \text { List } \$ 1.60 \\ \text { Your Cost } \\ 720 \end{gathered}$ | $258 \begin{gathered} \text { List } \$ 1.65 \\ \text { Your cost } \\ \hline \end{gathered}$ | $296 \begin{aligned} & \text { Your Cost } \\ & \text { List } \$ 2.70 \\ & \text { 1.2; } \end{aligned}$ |
| 227list $\$ 1.05$ <br> Your Cost | $242 \begin{gathered} \text { List } \$ 1.60 \\ \text { rour Coot } \\ 720 \end{gathered}$ | $259 \text { Lust } \$ 2.00$ | 298 <br> List $\$ 2.50$ Your Cost |



Arcturus Blue Tubes offer you exclusive advantages that have gained wide consumer acceptance. Lang Life - Arcturus Tubes have established an unchallanged warld's record for lang life. Lfe Like Tone-Comparison in any Radio Receiver shows the im. praved tane of Arcturus Tubes. Immunity to Overlaads-Tubes re. sist averlaads os high as $50 \%$. Less Hum-Comparative tests show that Arclurus Tubes have $52 \%$ less hum than other tubes. Blue Tubes-This distinctive calor assures dealers of repeat business on Blue Tubes. Guarante-Tubes are guaranteed to give efficient service for six months; shauld any fubes purchased from us fail to do so-we will cheorfully and promplly replace them; breakage and burn-auts excepted.

|  |  | List | ur |
| :---: | :---: | :---: | :---: |
| Type | Description | Price | Cost |
| 014 | Amplifier and Datector | \$0.80 | \$0.42 |
| 10 | Pwr. Amp. and Oscillator | 5.00 | 2.45 |
| 12 A | Amp. | 1.30 | . 4 |
| 24 | A.C. Screen-Grid Amp. | 1.40 | . 10 |
| 27 | A.C. Amp. and Detector. | 1.05 | . 56 |
| 31 | Dry Cell Pwr. Amp. | 1.30 | . 67 |
| 33 | Dry Cell Pwr. Pentode | 2.10 | 1.12 |
| 34 | Vari-Mu R.F. Pentode | 2.15 | 1.15 |
| 36 A | Autamoblle Tetrade | 1.80 | . 16 |
| 57A | Autamobile Triode | 1.40 | . 15 |
| 58A | Autamabile Pentode | 1.60 | . 84 |
| 39A | R.F. Pentode | 1.80 | . 96 |
| 41 | 6.3 V. Pwr. Pentode Amp. | 1.60 | . 84 |
| 42 | 6.3 Y. Pwr. Pentode Amp. | 1.60 | . 84 |
| 44 | 6.3 V. R.F. Var.-Mu Pent. Amp | 2.85 | 8.58 |
| 45 | Pwr. Amp. | 1.15 | . 68 |
| 46 | 2.5 V. Class "B" Pwr. Amp. | 1.55 | . 81 |
| 50 | 7.5 V. Pwr. Amp. | 4.00 | 2.12 |
| 51 | (Some os 35) Super Control Tetrade. | 1.65 | . 87 |
| 56 | A.C. Amp. and Detectar | 1.20 | . 64 |
| 57 | R.f. Pentode | 1.65 | . 87 |
| 58 | R. F. Pentode (Vari-Mu) | 1.65 | . 87 |
| 714 | Last Audio Stoge Pwr. Amp | . 95 | . 50 |
| 80 | Full Wave Rectifier | . 90 | . 48 |
| 81 | Half Wave Rectifier. | 3.50 | 1.85 |
| 02 | Full Wave M-V Rectitler | 1.20 | . 69 |
| $99 \%$ | Dry Cell Amp. and Defector. | 2.25 | 8.10 |
| $99 x$ | Dry Cell Amp. and Delector. | 1.50 | . 7 |
|  | A. F. Rectifler, Fused (Replace 82) | 1.80 | . 9 |
|  | A.G. Rectifier, Fused (Replace 83) | 2.05 | 1.09 |
|  | G.A. 5.0 V. Power Pentode | 2.75 | 8.46 |
|  | P.2. Pwr. Pentade 2.5 V. | 1.55 | . 85 |
|  | P.Z.H. 2.5 Pwr. Pentade | 2.75 | 1.46 |
|  | WUMDERLICH TYPES | List |  |
| Type | Descriptian |  | Cost |
| A | 2.5 V. 5 Prang | \$3.00 | \$1.76 |
| 8 | 2.5 V. 6 Prong | 3.00 | 1.76 |
| 8 | 6.3 V. 6 Prong | 3.00 | 1.76 |
| AA | 6.3 V. 5 Prang | 3.00 | 1.76 |
|  | is volt trpes | List | Your |
| Type | Description | Price | Cost |
| 22 | S. G. R. F. Amp. | \$7.50 | \$3.97 |
| 16 | Defectar | 4.00 | 2.12 |
| 28 | Amplifier | 3.00 | 8.59 |
| 30 | Pawer Amp. | 3.00 | 1.59 |
| 32 | Hi. Mu. Amp. | 3.00 | 1.57 |
| 40 | Amplifier | 3.00 | 1.59 |
| 48 | Amplifier | 3.00 | 1.59 |

QECAUSE OF THE UNSETTLED TUBE SITUATION, PRICES ARE SUBJECT TO CHANGE. IN LINE WITH OUR POLICY OF SELIING AT THE LOWEST PRICES, WE WILL PASS ON TO YOU ANY RE. DUCTIONS IN PRICES, MADE BY TUBE MANUPACTURERS AFTER THIS CATALOG APPEARS.

## With Every Order For Seventy-Five ASSORTED SYLVANIA TUBES

We GIVE yau FREE, an Adapter that fully meets the requirements of thase dealers having fube testers purchased prior to the intro. duction of the new fubes. This adapter permits the utilization af the ald testers for lesting new type tubes and at the same time provides an accessary that will harmonize in appearance with the original equipment.

| Type | Description SYIVANIA | List Price | Youp Cost |
| :---: | :---: | :---: | :---: |
| 00A | Defector ....... | \$4.00 | \$2.12 |
| 084 | Amplifier and Detectar | 0.80 | 0.12 |
| 10 | Pwr. Amp. and Oscillator | 5.00 | 2.65 |
| 13 A | Amplifier | 1.30 | . 61 |
| 15 | Detectar and Oscillator. | 2.85 | 1.51 |
| 19 | Pwr. Amp. | 2.85 | 8.51 |
| 20 | Dry Cell Pwr. Amp. | 3.00 | 8.59 |
| 12 | Sereen.Grid Amp. | 2.00 | 1.06 |
| 14 | A.C. Screen-Grid AmD. | 1.40 | 10 |
| 2525 | Rectifier Doubler | 2.00 | 8.06 |
| 16 | A.C. Amp. | . 85 | . 15 |
| 17 | A.C. Amp. and Detector | 1.05 | . 56 |
| 19 | 2.5 V. Double Grid Detector | 3.65 | 1.98 |
| 30 | Dry Cell Amp, and Detector. | 1.30 | . 67 |
| 31 | Ory Cell Pwr. Amp. | 1.30 | . 67 |
| 51 | Dry Cell S-G Amp. | 1.90 | 8.00 |
| 38 | Dry Cell Pwr. Pentade | 2.10 | 8.12 |
| 34 | Varl-Mu R.F. Pentode | 2.15 | 8.15 |
| 35 | Super Cantral Tetrade | 1.50 | . 78 |
| 36 | Automobile Telrode | 1.80 | . 96 |
| 37 | Automobile Triade | 1.40 | . 75 |
| 38 | Automobile Pentode | 1.60 | . 84 |
| 39 | R.F. Pentode | 1.80 | . 16 |
| 40 | Migh-Mu Amp. | 2.00 | 8.06 |
| 41 | Cathode Type Pwr. Pentade | 1.60 | . 84 |
| 42 | Cathade Type Pwr. Pentade. | 1.60 | . 84 |
| 43 | Pentode far D.C. Line Sve. | 2.50 | 8.32 |
| 41 | Super-Cantrol R.F. Pentode | 2.85 | 1.58 |
| 45 | Pwr. Amp. | 1.15 | . 61 |
| 46 | Pwr. Amp. | 1.55 | . 81 |
| 47 | Pwr. Pentode | 1:50 | . 78 |
| $4)$ | Pwr. Amp. | 2.80 | 1.48 |
| 50 | Pwr. Amp. | 4.00 | 1.12 |
| 51 | Voriable-Mu Tefrade | 1.65 | . 87 |
| 55 | Duplex Diode.Triode | 1.60 | . 65 |
| 56 | A.C. Amp. and Defector | 1.20 | . 64 |
| 57 | R.F. Pentode | 1.65 | . 87 |
| 58 | R.F. Pentade Vari-Mu | 1.65 | . 31 |
| 59 | Pwr. Amp. | 2.00 | 1.06 |
| 69 | 6.3 V. Double Grid Detectar | 3.65 | 1.93 |
| 714 | Last Audio Stage Pwr. Amp. | . 95 | . 56 |
| 79 | Pwr. Amp. | 2.60 | 1.39 |
| 80 | Full Wave Rectifier | 90 | . 48 |
| 81 | Half Wave Rectifier | 3.50 | 1.85 |
| 82 | Full Wave M-V Rectifier. | 1.20 | . 64 |
| 83 | Full Wove M-V Rectifier | 1.55 | . 12 |
| 85 | Duplex Diade-Triade | 1.60 | . 85 |
| 89 | Triple Grid Pwr. Amp.. | 1.80 | . 95 |
| V. 99 | Dry Cell Amp. and Detector. | 2.25 | 1.20 |
| X.99 | Dry Cell Amp. and Defectar | 1.50 | . 79 |
| 864 | Det. Amp. | 2.10 | 8.11 |
| 866 | Half Wave Mercury Rectifier. | 6.75 | 5.57 |
| Type | Descriptian SPARTON | List | Your Cost |
| 182 B | 5 V. Pwr. Amp. | \$2.35 | \$1.25 |
| 183 | 5 V . Pwr. Amp. | 2.10 | 1.18 |
| 485 | 3 V. Def. \& Amp.. | 1.85 | . 98 |

Sylvania tubes are guaranteed for six monthe (burnouts and breakage excepted)

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# 1) Last Minute Specials QUANTITY_LIMITED <br> <br> Silver-Marshall Power and Audio Transformers 

 <br> <br> Silver-Marshall Power and Audio Transformers}

## No. 360 <br> Power Transformer for 7 Tube Receivers

 Ideal for general replacement purposes. Furcient voltage for receivers up to 7 tubes. The following are the electrical characteristics; 2.5 volts at 12 amps. 5 volts at 2 amps. $350 / 350$ high voltage at 70 M. A. electrosistic shield. Fully shielded. Soldering lug terminals at bottom. Size $41 / 2 \times 31 / 2 \times 31 / 6^{n}$ high. Shippling weight 10 lbs .C203-
Your Cost
$\$ 3.15$

## 347 Power Transformer

 for Model 72.4 AC.
## 10 Tabe Receivers

Genuine replacement Power Traneformer for Silver Marshall Model 724 A. C. sufficient voltage for 10 tube receivers. Has the followtube receivers. Has the 12 ollowing windings: 2.5 volts at 12 amps . 2.5 volts at 3 amps . C. T., 5 volts at 2 amps. $375 / 375$ high voltage at 100 M . A. Size 5 $51 / 24 \times 43^{\prime \prime}$ high. Fully shfelded. For 110 120 volts, $25-60$ cycle. Shipping weight 141 bs .
C2404
Your Cost. $\qquad$
No. 346
Power Transformer for 10 Trabe Receivers Ideal replacement for other sets than Silver Marshall. Will supply filament and plate voltages up to 8 tubes; has the following windings: 2.5 volts at 14 amps. C. T. 5 volts t 2 amps $375 / 375$ high voltage at 100 M . A. $110-120$ volts 60 cycle. Size $4 \mathrm{~B} / \mathrm{g}^{2} 5 \mathrm{~s} / 814^{\prime \prime}$. Shipping weight 14 lbs .
C2405
Your Cost Special
$\$ 3.50$

## Filter Chokes

We have listed below election of ilter chokes that can be used in filter circuits of power packs, sets and also as output chokes, for pull tubes.
pull tuberd arso
hordarson Tapped Choke, rated at 20 henry, 60 M. A. 640 ohms. apped at 350 ohms. Size $21 / 1 \times 2 \times 2^{\prime \prime}$ Shipping weight 2 lbs.
C2424-
Your Cost.


Jefferson Choke, 20 Henry, 60 M. A. 140 ohms. D. C. resistance. same size an above. Shipping wt. 3 lbs. C2425 -
Your Cost
$70^{\circ}$

## Low Resistance Choke 10 Henry - 50 MA.

Here is a fine quality Choke, midget in size, rated at 10 H., 50 M . A. Only 80 ohms. D. C. resistance. Size $21 / 4 \times 13 / 2 \times 17 / /^{2}$. Shipping weight 2 lbs. C2426
Your Cost
$39^{\circ}$

## Power Amplifier

 Transformer For 2-81s, 1-50, 1-24 Tubes Silver Marshall No. 10120, supplies filament and plate voltages for the above tubes. Make the ideal Power Transformer for all types of public address systems. 1144 volts at 70 M . A., $71 / 2$ volts, $2.5 \mathrm{amps} ., 71 / 2$ volts at 1.25 amps . $21 / 2$ volts at $13 / \mathrm{amps}$. Electro static shield. Size $531 \times 41 / 2 \times 31 / 2^{\prime \prime}$. Upright or inverted mounting Shipping weight 13 lbsC2106-
Your Cost $\qquad$ 53.71

## Reavy Duty Power Transformers for 8 Tube Receivers

 Flush Mounting TypeExtra Heavy Duty Power Transformers for general replacement in formers for generai replacement in
8 tube sets. The electrical characteristics are as lollowA: $21 / 2$ acteristics are as lollows: $21 / 2$
volts at 14 amps. 5 volts at 2 amps., $375 / 375$ volts, high voltage amps., 376/375 volts, high voltage at 80 M . A. for $110-120$ Vilus, $60-$
60 cycle. Size $33 / 4 \times 43 / 33^{\text {. Mount- }}$ ing centers, $33 / 4 \times 3^{\circ}$. Shipping weight 12 lbs.
C2407
Your Cost
$\$ 3.50$
for 25 windings as above, except $33^{2}$ 20 60 cycle operation. Size 168.
$C 240$

C2408
Your Cost
53.65

## General Replacement <br> Power Transformer

 3364Here is a General Replacement Transformer that will exactly fit over 100 receivers. Any cambination of the following tubes: 1.5 filament for 226 tubes, 2.5 tiament for 224, 227, 235 tubes; $£ .5$ filament for 245 or 247 tubes; 5 volts for 280 tube. High voltage 350 350 at 75 M . A. Primary $110-115$ volts, $50-60$ cycle. Saipping weight 7 lbs.
C2l22-
SI.40

## Output Transformer

 Unshielded No. 241Unshielded Output Transformer, single, 71,45 or 50 , to a magnetic speaker. Heavy duty type. Spright mounting. Soldering lug terminals at top. Size $23 / \times 24 / 4$ $31 / /^{\prime \prime}$ high. Shipping weight 4 lhs " high
C2410.
Your Cost Special
$75^{\circ}$

## Second Stage Andio

 No. 256For use between Standard First and Second Stage. Ratio 3.5 to 1. Size $23 / 4 \times 21 / 4 \times 2^{2}$ high. Shipping weight 3 lbs .
C2411
Your Cost $\qquad$ $75^{\circ}$
Outprit Transformer No. 222
For use between a single Power Tube and a Magnetic Loudpeaker. Ratio 1 to 1. Complete shielded in a heavy metal con tainer $4 \times 315 \times 31 / 4=$ Equipped with four phone tip jacks for connections. Shipping weight 6 Ibs C2414
Your Cost Special
$75^{\circ}$

## Input Transformer

## No. 257

A push-pull Input Transformer designed to operate between one plate and two grids. Open mounted with terminal strip. Shipping weight 2 lbs .
C24is
....
Output Transformer
No. 10121 Unshielded
A Transformer designed to couple one 45 - or $50-$ type tube to $15,-30$ or 60 -ohm loads by means of a four tapped Becondary. Size $35 / 833$ 体 $21 / 2^{\prime \prime}$. Shipping weight $416 s$.
C2417
Your Cost

Andio Transformer No. 220
Provides substantially straight-line amplification from 30 to 5000 cycles. After 5000 cycles the amplication falls off rapidly
 to discriminate against static, regenerative squeals and noise level beyond the musical range. Turn ratio 3 to 1 . Shipping weight 61 lbs . C2 209 -List $\$ 4.90$
Your Cost, Special
$70^{\circ}$

## Andio and Phono Coupling Transformer

 No. 225RConsists of a high impedance primary and the secondary is tapped to connect a magnetic pick-up. Black enamel case. $25 \times 24 \times 313^{\prime \prime}$ high. Shipping werght 3 lbs.
C2l12
Your Cost $\qquad$

## First Stage Audio

 No. 225Designed for use between any Standard Detector and First Audio Tube. Flat amplification curve up to 5000 cycles. Ratio 4.3 to 1 Shipping weight 3 lbs.
C213 List 5480
Your Cost, Special...... 78 ${ }^{\circ}$
Audio Coapling Trans. former No. 272
A split choke type used for Coupling a 224 Detector into two 245 tubes in P. P. It is divided into two equal halves of approximately 250 henries per hal. Used in 724 AC and 724 DC superhets. Open type. Size $21 / 2 \times 21 / 6 \times 2^{\prime \prime} \mathrm{high}$. Shipping weight 2 lbe. C2l16
$75^{\circ}$

Thordarson P.-P. Output The genuine
Thordarson Thordarson put transformer used to couple a single output stage of '71, 45 , ' 50 type tubes or in push-pull, matches the im pedance o

these tubes. Can beused on all types of dynamic speaker voice coils. Replaces that burned-out trans-
 ${ }^{246 x}$
C2423
${ }_{\text {Cour Cost }}$
$75^{\circ}$ P P 245 Ampiners using either 245 or 247 tubes. Unabield has mounting brackets. 30 henry, 75 M. A., D. C. resistance 350 ohms. Size $31 / 4 \times 21 / 2 \times 21 / 3^{\prime \prime}$. Mounting centers, $15 / 5 \times 2$. Shipping weight 3 lbs . C2401 C2401

## 30 Henry- $\mathbf{7 5}$ MA. Filter Choke

## 30 Henry- 100 MA. Fitter Choke

For all high power amplifiers, using 247 or 250 type tubes. One of the incest Filter Chokes that has ever been offered at this price. Exremely low D. C. resistance of 350 ohms. Unshielded, open mounting with brackets. Size $31 / 2 \times 21 / 2 x$ $2 \%^{*}$. Mounting centers, $2 \times 2^{\circ}$ Shipping weight 4 lbs.
$69^{\circ}$
Thordarson Audio Transformers and Filter Chokes

Genuine Thordarson Products. The audio a very husky job, ratio 4 to 1, primary 1100 ohms. D. C. resistance, secon dary 10,000 hms. D. C. re istance. Un$31 / 4 \times 21 / 5 \times 215^{2}$. Mounting centers, $15 / 8 \mathrm{x}^{\prime \prime}$. Shlpping weight 3 ltos. C2400
Your Cost
$\cdot 5^{c}$

Designed for Loftin-White Power Amplifiers. Supplies flament and plate voltage for 227, 224, 245 and 280 tubes. Can also be used as a replacement in receivers. Size $43 / 4 \leq 4 \times 4^{\prime \prime}$ high. Primary 110-120 volt, $50-60$ cycle. 900 volts, 40 M A., 5 volts, 2 amps., $21 / 2$ volts, 5.5 amps. C. T. $21 / 2$ volts at 3.5 amps . Shipping weight 9 lbs.
C2427
Your Cost
s2.75
Loftin-White Amplifier Power Transformer

$\$ 12.50$

## 

## Oxford Dynamic Speakers New Twin Speakers



The use of two Electro-Dynamic Speakers with matched and balanced tone ranges is one of the most popular methods in use at the present time. One gives unusually faithful reproduction of the extreme low notes, while the other responds to the brilliant high overtones. The entire reproduction is compensated over the entire musical range, giving vastly improved fidelity. Speakers furnished with 2500 ohm field and output transformer for push-pull 45 s and 47 s . Shipping weight


## 12 lbs. <br> $6^{\prime \prime}$ Twins <br> W19158-P-P 45 s <br> Cost Per Pair Either Type..... $\$ 4.75$ <br> Oxford A.C. Dynamic Speakers

This A. C. Dynamic Speaker is one of the finest of this make, for use on 110 volt 60 cycle A. C. Designed for use in radio receivers, amplifiers, etc. Faithful reproduction, and built to handle tremendous volume without distortion. Uses type ' 80 rectifier. Has hum bucking coil which removes the usual A . C. hum from the reproduction. Equipped with output transformer for pushpull 46 s and 47 s . Shipping weight 15 lbs.
$8^{\prime \prime}$ Twins
$19160^{-}$

W19160-P-P 45 s
Cost Per Pair
Either Type..... $\$ \mathbf{S}$

$$
\begin{aligned}
& 812^{\prime \prime} \text { Model } \\
& \text { W19162 For P-P } 47 \mathrm{~s} \\
& \text { W19163-For P-P } 463 \\
& \begin{array}{l}
\text { Your Cost } \\
\text { Either Type...... } \$ .85
\end{array} \\
& \text { W19165-For P-P } 47 \\
& \text { W19165-For P-P } 46 \mathrm{~s}
\end{aligned}
$$

## Special Dynamic Speakers



This is an unequalled speaker value. A special Midget Model $6^{\prime \prime}$ in diameter, for use in all types of Midget Receivers. It I is a remarkable tone with plenty of volume. Equipped with output transformer for single 45 or 47 . Well made of new high grade materials. Supplied with 2500 ohm field. Surprisingly faithful reproduction. Rugged construction. Shipping weight 8 lbs.

W19166-For single 45
W19167-For single 47
Your Cost Either Type

## Single Speakers

This Dynamic Speaker Chassis is similar in design, workmanship and materials to the $81 y^{"}$ Model described above, with the exception that this is a D. C. Model, and requires that the power is supplied from the radio receiver, amplifier, or other source of supply. It has the same charscteristics and is made for use in Radio receivers, amplifiers, etc. Furnished with output transformer for pushpull 45 s and 47 s . Is equipped with hum bucking coil. Shipping weight 12 lbs .

W19150 For push-pull 45s
W19151-For push-pull 47s
Your Cost
For Either Type Speaker
s2.95

## Special Value Magnetic Speakers

This Magnetic Speaker Chassis is ideal for Thany uses, For radio receivers, new instal lations as well as for replacements in old type sets. for automobile sets. as an extrs type sets, for automobileted to set and used extention used in another room. Has an exceptionally good reproduction with a fine tone range. The tone is full and deep. Wing The Unit is without ratting or hlasting, The unit is simple is col

special steel
ano io mado fram -noisture
proof fabric, formed into shape. Sturdy metal framework. Is more efficient than many higher priced magnetic chasses. The Unit is of the balanced armature type and is magnetically and electrically centered Is highly sensitive, with quick response to the lightest impulse remarkable value at the price quoted. Shipping weight 7 lus W19152-
$\$ 1.35$

This new Type FB-7 Receiver is designed to secure what corresponds to commercial performance from a receiver designed for amateur use. Uses the very latest type of S. W. superheterodyre circuit. Designed to take full advantage of latest 50 series tubes. Uses two stages of intermediate frequency. Second detector is power type, and feeds directly into single power pentode audio stage; power output $3-1$ watis. Operates best with speakers of 5000 ohms. Suitable for C. W. as well as phone. Oscillators used eliminate any tuning drift. Coils shielded. Intermediates tuned, assuring peak efficiency, Straight frequency line tuning; 270 degree condensers spread the band over $50 \%$ more dial space than 180 type. Image suppression has been increased 500 times over any receiver, not employing an additional stage ahead of first detector. Can be useed with phones. All metal cabinet. Will work effectively with filament transformer and "B" Batteries. Shipping weight 28 lbs.
N13866-List Price $\$ 45.00$
Your Cost (Less Tubes, Coils and Power Supply). 26.46 N13868-General coverage coils, 20 to $33 ; 27.2$ to $42.8 ; 39.4$ to 66.6 55.5 to $88 ; 81$ to 115.3 . Five sets of coils in pairs.

Your Cost Per Pair (Specify Coil Range desired)..... $5.6 \%$ N13869-Band Spread Coils in pairs, for 20, 40, 80 and 160 meter bands, covering phone and C. W, portions
Your Cost Per Pair. (Specify Coll Range desired)
N15858-No. 5887-AB
Power Supply Less Tube

Sprague Midget

## Condensers

This type condenser is very popular with Servcemen and set builders. as well as replacements for by-pass and filter condensers used in the condensers used in the ceivers. Of highest quality materials.
Stock

| Stock |  |  |
| :--- | :--- | :--- |
| No. | Capacity | Voltage |
| D4200 | .0005 | 400 |
| D4201 | .001 | 700 |
| D4202 | .005 | 500 |
| D4203 | .006 | 400 |
| D4204 | .01 | 500 |
| D4205 | .02 | 700 |
| D4206 | .04 | 400 |
| D4207 | .05 | 500 |
| D4208 | .06 | 350 |
| Y |  |  |

Your Cost Each. Per Dozen

| D4210 | .1 | 400 |
| :--- | :--- | :--- |
| D4211 | .2 | 400 |
| D4212 | .5 | 200 |
| D4213 | .25 | 400 |

Your Cost Each. 400

Per Dozen.

| D4215 | $.1-.1$ | 400 |
| :--- | :---: | ---: |
| D4216 | $.015-.015$ | 1500 |
| D4227 | $.01-.01$ | 400 |
| D4228 | $.02-.02$ | 400 |
| D4219 | $.01-.1$ | 400 |
| Your Cost Each |  |  |

Your Cost Each
Per Dozen.

## G. E. Tap

This General Electric Bakelite Twin Tap, provides one additional outlet Tap, provides one additional outlet Rating of 15 amperes at 125 volts; 10 amperes at 250 volts W⿵13313-Your Cost Each 12 For
G. E. 3 Mfd. 600 Volts
 RE-45-RE-75
The official replacement part No. DI ment part No. DL
2961390 . Metal 2961390. Metal container,
$23 / 4 \times 5 \times \frac{3}{4}$. $23 / 4 \times 5 \times 3 /{ }^{\prime \prime}$. Mount-
ing bracket. Flexiing bracket. Flexiweight 2 lbs . B487 Your Cost. $35^{\circ}$
C. E. Condenser $41 / 2 \mathrm{MF}$. 800 Volts


Genuine G. E. Filter Condenser for amplifiers and P. A. systems. Metal container. Size $51 / 4 \times 15 / 3 \times 2^{3 /}$ " high Flexible insulated leads. Shipping weight 3 lbs.
B477-List $\$ 4.00$
Your Cost Special
$55^{\circ}$

## Socket Prong

A necessity for Set Builders anć Amateurs. Make your own low loss sockets on your base or sub-panel. Your Cost for 1220 c

VICTOR

## Control

For further details see page 41

## C. R.L. Volume Controls

 Specials These "'spe cials" CRL volume controls can be used in
many of the commercial re ceivers.
H9697-5000 Ohms Radiohm. H9699-75,000 Ohms Pot. Your Cost Each
$19^{\circ}$
Dual Volume Control-5000 ohms wire wound and 15,000 carbon H9696
Your Cost Each
$19{ }^{\circ}$

## Carter Jacks

Never before have these well known Jack Switches sold at any thing like our new low price, Just another example of how Wholesale saves you
One
gpring.
Ophen
Circuit.

## F6280

$5^{\text {c }}$
Type 102A. Two springs, breaks one circuit and breaks another when plug is inserted. F6281
Your Cost Each
$5^{c}$
Type 103. Three springs; two open circuits closed when plug inserted. Fil. control. F6282
Your Cost Each.
$5^{c}$
Type 104. Four springs. Two circuits broken when plug is inserted; makes another.
F6283
Your Cost Each
Type 105. Five springs. Makes two circuits; breaks two when plug is inserted.
F6284
Your Cost Each.
Dozen, any Type
HEHTwo Circuit Switch
This heavy duty
 switch has many uses in the shop and Laboratory. Ideal where heavy current is used. Operates as follows, 1st spap, Circuit No. 1; 2nd snap, Circuis No. Off. Diameter of base $31 \%^{\prime \prime}$. Three holes for supporting screws, spaced 23". Shipping weight 2 lbs

## $\mathrm{N12820}$

Your Cost Special.
Faradon 15 Mfd. 1000 Volt Condenser Block


For high power receivers. Two 2 mfd. at 900 volt; two 2 mfd . at 600 volt; two 2 mfd . at 300 volt: one 2 mfd . at 150 volt; one 1 mfd . at 150 volt; provided with 9 soldering lugs. Sealed in metal container, Size $37 / 8 \times 5 \times 41 / 2 n$. Faradan No. 3776-A. Shipping weight 7 lbs B689 Your Cost Special
\$2.25

## R. F. Coil Assembly



For Radiola Models 17, 18, 33 $41,50,51,60,62$ and 64.
Consists of Antenna and $2 \mathrm{R} . \mathrm{F}$ coils with R. F. chokes, trimmer coils with R. F. ${ }^{\text {cond }}$ chokes, trimmen
condensers and R. $F$. by-pass condensers mounted on metal terminal strip. Coils are $11 / 2 \times 11^{\prime \prime}$. Some have Isolantite trimmer condensers. Shipping weight 1 lb .

For Models 17 and 50 H10016-RCA No. 8293

For Models 18 and 51. H10017-RCA No. 8318. Your Cost Either Type
$95^{\circ}$
For Models 60-62-64. $\underset{\substack{\text { H10018-RCA } \\ \text { Your Cost Each } \\ \text { 8341. }}}{ } \mathbf{\$ 1 . 7 5}$

Short Wave Change-Over Switch


One of the finest short-wa ve changeover switches made. Consists o three sections: First and second sec tions have a common double pole to four positions; rear unit is single pole, lour positions. Double contact, positive action. Pole contacts are insulated from shaft Size $3 \times 2^{\prime \prime}, 2^{\prime \prime}$ shaft over all. Shipping weight 1 lb .
E6466
Your Cost Special
$49^{c}$

## R.C.A.-Radiola Wave-Trap

This efficient Wave-trap was designed and made by RCA, to increase the selectivity of their Radio Receivers; Models No. 17, 18 and 33. It accomplishes this with unusual success. It may also be applied to any other set with equal effectiveness. For separating stations, eliminating interference of other proyrams, to reduce static this wave-trap has no equal. Is especially adaptable to your set if you are troubled with a particular interfering station. It is very emcient in helpiag eo separale the jumde
stations at the low wave length end of the broadcast instructions are enclosed. Shipping weight 1 lb . ${ }^{\text {instructi }}$

## 016175

Your Cost Each
In lots of $10,53.50$


## R.C.A.-Radiola Catacombs



For the Radiola Six Tube Models No. 24, VIII.
C2176-Part No. 8150. For Model No. 25; Six Tube. C2177-Part No. 8111 For Models No. 28, 30, 30-A, 32 Eight Tube Sets.
C2178 Part No. 8118.
These are the original catacombs made by RCA for their own sets,
as outlined above. Shipping weight 7 lbs .
s 1.25
Your Cost, Elther Type

## NA-ALD Fade-Out Announcer



Be able instantly to hush the radio without leaving your chair. If the phone rings-if you wish to make a remark and be heard to call someone in the next room orif you wish to reduce the voice or instrument not pleasing to you- fade out or diminish the volume with this Fade-Out. Simple to attach. Can flexible tingel set. The conts hooks slip over antenna and ground posts. Shipping weight 8 oz .
$K 11640$ List $\$ 1.00$
Your Cost Each

## Metal Chassis



For Receiving Sets, Transmitters, and Amplifiers. Heavy gauge prossed steel. Six models. Shipping weight 4 lbs.
No. 1 Chassis, same as illustrated. Used for Amplifier; 3 tube set or experimental purposes. M12885- Your Cost
"A" Midget Chassis, cadmium
plated. $101 / 4 \times 7 \frac{9}{8} \times 2^{\prime \prime}$. Open sides; 8 cut-outs. For 4 tube set. Mount holes.
M12870 Your Cost Each, Special
"B" Chassis, $13 \times 81 / 5 \times 2$ " ${ }^{3}$. Red Lacquer. Open sides. 13 eut outs. For 7 tube set. Holes for mounts. M12871 Your Cost Each
"C" Chassis. Cadmium plated. 13x91/4x31/8". Open sides. 15 cutouts. For 8 tube set. Ample mount holes.
M12872 - Your Cost Each
"D" Chassis. Cadmium plated. 12 $3 / 4 \times 8 \times 3$ ". 9 cut-outs. For 5 tube set. Mount holes.
M12873 Your Cost Each
" 1 " " Chasis Cadmium 15 cut-outs. For 8 tube set. Mount holes.
M12874-Your Cost Each
B. E H. Dual Switeh

For Time Delay; Ra-dio-Phono, and LongShort Antenna
 over.
Two toggle switches mounted on a bracket, front unit is single circuit, 125 volts, 3 amps.; rear unit is an s.p.d.t., 3 amp ., 125 volts for long-short Antenna or phonoradio change-over. Operated by a $11 / 4$ " shaft. First $1 / 4$ turn, the front unit is thrown in circuit, and rear unit makes contact with one pole; next $1 / 4$ turn, rear unit is thrown on opposite pole. Shipping weight 8 ozs.
M12823
Your Cost Each
$65^{\circ}$
Slotted-Shaft Toggle Switch
 Made by CutlerHammer. 125 volts, 3 smps. For replacement where switch is part of the
volume or
M12822
Your Cost Each
Per Dozen, $\$ 1.25$
Carter No. 2 Jack Switch


Single circuit jack switch. Complete with knob and plate. F6287
Your Cost Each
6 for $\$ 1.25$.

## Yaxley <br> Phono-Radio Switch

This is a double poledouble throw switch; the same as used in the Victor Combination Receivers. tion Receivers Mingle hole.
F6294-
Four Cost
In lots of 12, $\$ 2.50$.

## Hart\&Hageman

 Rotary Snap SwitchSwitch will stand 250 volts at 3 amps .
M12819
Each
$12^{c}$
In lots of $10 \$ 1.00$


## Heavy Duty Rheostat

This is a heavy duty Rheostat made by DeJur. Is adaptable for many uses among which are for controlling electrical apparatus, also for use in circuits having a very
heavy amperage drain. The form is of moulded Bakelite. Is fitted with a pointer Knob. Rheostat has a $31 / 2$ ohm winding of the highest grade resistance wire, and has a maximum carrying capacity of 3 amps . Shipping weight 1 lb .

| H 9708 |
| :--- |
| Your C |

Your Cost Each

Vector Orthophonic Sound Box Special Value:


Genuine Victor Saund Boxes for replacement in Orthophonic Victrolas and combination Radio and Victrolas. Shipping welght 1 lb
For Model No. 10 Victor Jr.
s 1.50
A122-Your Cost
\$1.65
For Model No. 2 Orthophonic A123-Your Cost
\$1.75
For Model No. 11-E A124-Your Cost
$\$ 1.95$
A125-Your Cost

## Victor Tungsten Needles

The genuine Victor Tungsten Needles. Each plays over one hundred records as clear and distinct as the first one. A185-Your Cost
Per Box of 8 Needles


## General Electric

## Time Clock

Used in RCA centralized radio systems. Will handle any electrical device up to 660 watts 110 volts. Acts automatically, will turn the radio on or off at regular intervals by simply setting the adjustments on the face of the clock. The same time setting principle is to be employed when this clock is in use with any other electrical appliance. Is equipped with adapted to most circuits. 110 volt 60 cycle. Size $61 / 2 \times 41 / 2 \times 3$. Shipping weight 12 lbs. U18084
Your Cost
$\$ 12.50$

## Direct Drive Dial



The ultimate in dial simplicity. A new travelinglight full vision direct ravels with pointer makng dial settings much easier to read. With an attractive full vision escutcheon. Shipping welght 6 oz .
H9877-


$10^{c}$

## Gold Seal

Type 227 Tubes
It will pay you to stock up on these exceptionally high grade bargain tubes. Boxed and guaranteed for thirty days. Shipping weight 1 lb . V19105
Your Cost Each. .25 $5^{\circ}$


## Skinderviken Mike Button

Many interesting experiments can be made with this "mike" button. M13485Your Cost Each $75^{c}$


## R. C. A Photophone Amplifier Used in the Auditorium Radiola

 This is the Power Amplifier to use for installations requiring the last word in amplifiers. Incorporates the jdeal type of circuit to obtain the best tone quality without distortion. Furnishes the field current for three Photophone Dynamic Speakers. Main Amplifier utilizes 2 type 50 s and 2 type 81 tubes, together with double dry Westinghouse Rectox Unit for rectifying the field supply current. A separate power pack, utilizing a single type 80 tube, supplies filament and plate voitages for a suitable Tuner using 7 heater type tubes, slso voltages for a meparate pre-amplifier unit using 4 type 26 tubes, which can be cut in ahead of the type 60 tubes. Is furnished with an extra filter capacitor for the elimination of line and extraneous noises. This is a perfect replacement amplifier for all Theatre Installations and Public Address Systems. It leaves nothing to be desired in the matter of Volume, Tone, Reproduction and Response. Use with the RCA Photophone Dynamic Speaker, or any Heavy Duty Dynamic. Shipping weight 150 lbs . Y19879-Your Cost for this Special Amplifier
$\$ 85.00$

## Presto Record Maker Outfit

Records M Made Instantly
Thls is the finest Recording Device available. It will make perfect records of your own voice in your own home and play them back immediatelyl Will also reproduce ANY RECORD with a fidelity of tone never before attained. So simple a child can operate it. Presto Record Maker (complete with motor-recording and reproducing tone arms, cabinet and hand micro-phone-ready to operate). Shipping weight 40 lbs . Y19880-List Price $\$ 85.00$
Your Cost...
s27.50


## Portable - Dual Speed Electric Motor and Pick-up

Dual Speed, $33 \%$ and 78 R. P. M. electric phonograph motor with special high impedance pick-up. Encased in a sturdy and grained fabrikoid covered carrying case The electric motor is the farnous Green Flyer, noted for its silent operation as the gears are of laminated bakelite and are run in oil at all times. The motor is of the induction type. Has $12^{\prime \prime}$ turntable, volume control, speed fndicator and manual switch for either speed of $331 / 3$ or 78 R. P. M. Case is unusually attractive in appearance with padded top. Size $13 \times 18 \times 7^{\prime \prime}$ high. For 110 volt 60 cycle operation. Shipping weight 25 lbs. Y22031-List $\$ 60.00$ Your Cost Special
\$23.95

RCA-Victor 250 Amplifier


This is a chance to own a high power 250 amplifier, designed and built to exacting standards by RCA-Victor. Utilizing 1-'26; 1-'50 and 2-'81 tubes. Output transformer matches 11 ohm voice coil of a dynamic speaker. Will supply voltage and current to any 1000 ohm field of a dynamic Undistorted output, 5 watts, which is sufficient to handle gatherings up to 500 or 1000 persons. Will operate three full size dynamic speakers or 6 magnetic speakers. An excellent power amplifier for public address systems and phonograph pickup reproduction. RCA Model AP-736 (SPU 24). Shipping weight 66 lbs .
P15732- $\$$
Your Cost Each (Less Tubes). . $\$ 9.95$

## Janette Rotary Converter

## Special: <br> SI9.50 <br> [200 Watt Output

110 Volt D.C.
to 110 A.C.


This sturdy con-
verter permits the operation of A.C. radios, small electrical appliances, etc., from a direct current source. It is equipped with a pecial filter which prevents converter inter ference from reaching the radio. Will operate large radio recelvers and those using 'b0 type power tubes and a public address amplifier or vacuum cleaners, washing machines and simiar apparatus. This device is a mecessity in those metropolitan and suburban areas which are supplied with only direct current electricity. Shipping weight 55 lbs .
Y19881-List $\$ 65.00$
Your Cost
$\$ 19.50$

## Powertone Superior Radio Tubes At Bargain Prices

Placed on the market by one of the foremnst manufacturers in the radio industry to answer the demand of the service man for a first grade tube at a low price. Meter tested, in accordance with specifications of highest quality tubes. Every tube subject to a six months guarantee.

Type Description 112 11 5 V. Pwr. Amp. 171 5 V. Pwr. Amp. $199 \times 3.3$ V. Det. \& Amp. 199 V Det. Amp. 2015 V. Det. \& Amp. 210 7.5 V. Pwr. Amp. 22442.5 V. S. G. Amp. 226 1.5 V. Amp.
$227 \quad 2.5$ Det. \& Amp.

## White Automatic

## Record Changer

 The White Automatic Record Changer is the most flexible unit of this type ever offered. It is finely finished, neat in appearance and occupies very little space, due to the ellmination of cumbersome record racks. Fully automatic, will play either the 10 or $12^{\prime \prime}$ records, whether they are warped or not. Any record can be repeated or ejected at will. It is easy to load, carries full support for the records at all times, thus them. Its flexibility is 0 warp itsem. Its flexibility is remarkable and due to its small size, it sodapts with an amplifier and speore impossible. It can be installed in a cebinet with an amplifier and speaker, or it may be plugged into an existing radio set. Due to the ingenious design of the ejecting mechanism, it will not chip or mar records in any way. It can be started or stopped, loaded or unloaded at will. Has positive clamp preventing slippage of a record while playing, This automatic record changer must be mounted on an angle of $45^{\circ}$ or a $21^{\prime \prime}$ slant. Overall dimensions of changer, $9 y^{\prime \prime}$ high, $121 / 2^{\prime \prime}$ wide, $131 / 2^{" \prime}$ long. For 115 volt, $50-60$ cycle. Shipping waight 25 lbs.Y19894-Your Cost


## Carbon Resistors

A very fortunate purchase enables us to offer these reliable carbon Reastors at unbellevable low price. Only Ohmages listed below, availnble at these bargain prices. Better order at once.

## 1 Watt

Resistance in Ohms

| 150 | 3350 |  | 100000 |
| :---: | :---: | :---: | :---: |
| 200 | 4000 |  | 150000 |
| 400 | 5000 |  | 250000 |
| 500 | 7000 |  | 500000 |
| 600 | 10000 |  | 750000 |
| 1000 | 15000 |  | 1 Meg. |
| 1200 | 25000 |  | 11/2 Meg. |
| 1500 | 30000 |  | 2 Meg |
| 2000 | 35000 |  | 21/2 Meg |
| 2500 | 50000 |  | 3 Meg . |
| 3000 | 75000 |  |  |
| E5100- |  |  |  |
|  |  |  |  |
| 6 for ...... 15 c 12 for. .... 25 c |  |  |  |
|  |  |  |  |
| 2 Watt |  |  |  |
| Resistance in Ohms |  |  |  |
| 1000 | 4000 | 16000 | 30000 |
| 1500 | 7000 | 17000 | 35000 |
| 2000 | 14000 | 18000 | 40000 |
| 3000 | 15000 | 20000 | 45000 |
| E5050 |  |  |  |
|  |  |  |  |
| for. . . . . . . 25 c c it for. .... 45c |  |  |  |


| Your |  |  | Your |
| :---: | :---: | :---: | :---: |
| Cost | Type | Description | Cost |
| 50.39 |  | 2 V. Pwr. Amp. | 50.59 |
| . 38 | 232 | 2 V.S. G. Amp. | . 79 |
| . 65 | 233 | 2 V. Pent. Pwr. Amp. | . 79 |
| . 65 | 235 | 2.5V.Var-Mu.R.F.Amp | p. .53 |
| . 32 | 245 | 2.5 V. Pwr. Amp. | . 39 |
| 1.25 | 247 | 2.5 V. Pent. Pwr. Amp | . 52 |
| . 53 | 250 | 7.50 V. Pwr. Amp. | 1.29 |
| . 35 | 280 | 5 V . Rectifier | . 39 |
| . 37 | 281 | 7.5 V. Rectifier | 125 |


$\$ 19.75$


Types for neutralizing R. F. am plifiers, antenna coupling, tuning verniers, regeneration control, and short wave tuning circuits. $1 / 4$ shaft with knob. Ship. wt. 3 lbe H10204 - 000015 mfd . . ..... $\$ .49$
H10205-. 000025 mfd
H10206-. 000050 mfd
H10207-. 000100 mfd
Sangamo "LIHini" Mica
Condensers


Molded bakelite, available in the following capacity: .0001, . 000125 00025.

D4170 State capacity
Your Cost Esch
12 for.
D4176-. 001 mfd
Your Cost Each
12 for.

\section*{| $5^{\circ}$ |
| :---: |
| $\mathrm{sec}^{c}$ |
| 7 |}

Aerovox Mica Condensers Type 1460
04183 . 00025 mfd .
Your Cost
12 for.
$\Delta^{c}$

C R L Volume Control Crosley part No. 6598. Special Volume Control for Model $71-\mathrm{A}$ 25000 and 15000 ohms. C1868Your Cost ... T5 $5^{c}$

## Victor "ABC"

Power Transformer
For Models,
$\mathrm{R}=32$

Original
Victor ABC
Pictor ABC
Traner
Trans-
Utilizing,
6 - 26 s ;
$2-45 \mathrm{~s}$, and


1-'80. Removed from Victor amplifiers, but are guaranteed in perfect operating conditions. Shipping weight 11 lbs .
C2158
Your Cost, Special
${ }^{\text {s }} 1.25$


M田 N T T O N
Electrolytic Condensers
SPECIAL:
8 MPD. Single 27c Triple Five [5-5-5] 45c

## Genuine

## Kellogg A. C. Tubes



Description
Pwr. Amp. 2.94
R.fr. Coil for RCA-Victo=
Model R-43
Part No. 7261. Con-
sists of a choke coil primary, enamel wound secondary and mountingbracket
K10108 -
Your Cost
$55^{\circ}$

Can be used in many other sess and circuita 50 Watt rating $\times 20492-12500$ ohms Your Cost Ench IniDozen Eots. . . . . .
$\times 20493-10000$ ohm 30 w. rating Cos
In Dozen Lots.


For Edison ESpliteri
Receivers


Stock

| Stock |  | Peak | Your | Stock |  | Peak | Your |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Capacity | Voltage | Cost | No. | Capacity | Voltage | Cost |
| D2700 | 8 | 45.5 | \$0.27 | D2706 | 5-5-5 | 480 | . 45 |
| D2701 | 18 | 450 | . 65 | D2707 | 8-8-8 | 430 | 1.35 |
| D2702 | 20 (low volt) | ) 25 | .40 | D2709 | 18-9-9 | 430 | 1.95 |
| 02704 | 8-8 | 480 | . 95 | D2710 | 8-8-8-8 | 430 | 2.25 |
| D2705 | 5-15 | 480 | . 95 | D2711 | 8-8-18-18 | 430 | 2.45 |

Parcel Post Rates for Various Zones
Parcels up to 8 oz . may be shipped anywhere in U.S. A. for $14, \mathrm{c}$ for each 2 oz . Rates Subject to Change by U. S. Postal Authorities

| Zone Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cost for 9 to 16 oz. | 8 Bc | 8 C | 9 Sc | 10 c | 11c | 12 c | 14 c | 15c |
| Each addit'l Ily. or fraetion | 1.1 c | 1.1 c | 2 c | 3.5 c | 5.3 c | 7 c | Sc | 11 c |

## TERMS

Wholesale Radio Service Company buys for cash and sells for cash. That is the secret of our low price policy. We cannot afford to give credit as we ask none ourselves.

We ship C. O. D. if desired, providing a deposit of $20 \%$ accompanies your order. We eammot ship C. O. D. without a deposit. C. O. D. packages can be shipperl to all parts of the United States, Porto Rico, Hawaii, Alaska and Mexico. We CANNOT ship C. O. D. to any country outside of the United States, excepting those mentioned. Orders generally, cannot be sent Parcel Past, C. O. D. care of banks, as most banks refuse to handle such shipments.
The safest and best way to send money is by postal, express, or telegraph money order, bank drait or firm checks. Do not send cash. If absolutely necessary to send cash, reglster the send ce

ON ALL ORDERS FOR FIFTY ( $\$ 50.00$ ) DOLLARS OR MORE DEDUCT $2 \%$ FROM THE TOTAL AS A TRANSPORTATION ALLOWANCE.
IMPORTANT. Indicate catalog number and stock number on order blank. The number of this catalog shown on front cover is 54 .
When ordering, specify method of shipment you prefer. In the upper right hand corner of the order blank you whil find a series of squares marked "Express," "Parcel Post." "Freight." "Boat." and "Best Way" arranged for your instructIons. ALL MERCFANDISE SHIPPED BY EXPRESS SUBJECT TO INSPECTION if you specify this in your order blank.

If you find it necessary to return any merchandise for adjustment please write, stating full detalls, BEFORE returning package. We will IMMEDIATELY forward necessary shipping instructions. Your cooperation in this respect will be apprectated-and it will help us to give you better service.

## FOREIGN ORDERS

Orders from forcign countries receive careful attention. They are packed and shipped to cosure very prompt and satisfactory delivery.
Our terms on ALL foreign salne are as follows: Payment in New York by letter of eredit against documents, or $50 \%$ deposit WITH ORDER, balance sight draft against Bill of Lading. All quotations F. O. B. 100 Sixth Avenue, New York, with slight additional charge for export packing. PRUS SHIPPING CHARGES. Remittance by draft on New York bank in U. S. Currency. We do not recommend that you send us foreign money orders, or checks as shipment will be delayed until cleared.

The average Parcal Post rate on foreign shipments is 14 c per pound. Insurance rate averages $11 / 4$ per cent of the order's value, with a minimum rate of 25 cents.

Our catalog prices are F.O.B. warehouse, packed for domestic shipment. For Special export packing and delivery to pier, there is a slight additional charge covering our extra costs. There is no extra charge for shipments to points outside the United States, which can be form warded packed as for domestic shipment.

## PARCEL POST

Freight and Express shlpments are sent transportation collect. Orders shipped by parcel post must be prepald, and we thereore request that you INCLUDE POSTAGE FOR PARCEL POST SAIPMENTS. Estimate the cost of postage to your town by finding the weight of the articles you are purchasing (weight of each item is given in catalog) determine the zone in which your town is located, and then from the above chart
you can find the cost of sending the package to your town. Example: Mr. John Jones IIves in Edwight. West Virginia. He orders a condenser, which according to the catalog wetghs 3 pounds. The nearest blg city to Edwight is Charlestown. which he finds from the above chart is in the 4th zone. The cost of sending 3 pounds to the 4 th zone is 16 c and he adds this amount to his remittance plus cost of insurance.

## INSURANCE

All parcel post packages are covered against damage or loss. Insurance costs and postage should be added to the amount sent. Charges are as follows:sent. Charges are as phen value of parcel is up to $\$ 5.00$

Charge is 5 eents
betwoen
5.00 \& $\$ 25.00$
25.00 \& $\quad 50.00$

After $\$ 100.00$ value the charge for each $\$ 50.00$ addltional is 5 " extra

## C. (D. D. SHIPMENTS

Transportation charges on C. O. D. parcels are slightly higher than those fully prepaid. $C$. $O$. D. charges in addition to the regular postage costs outlined are as follows including insurance:When value of pareel is up to $\$ 5.00$ the extra charge is 12 e (Inel. ins.) | 4. |
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100 . & \& & 150 . \\
150 . & \& & 200 .
\end{array}
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" 32 c (
For eneh $\$ 50.00$ value ahove $\$ 200,00$ the charge is se moro (ineluding insurance). The Post Office also charges an extra small money order fee on eaeh C.O.D. pareel

If you are doubtrul as to the correct amount. do not hesitate to send us suffcient postage. We GUARANTEE to refund any excess remittance.

Parcel post shipments to all zones must not exceed 70 pounds. The limit of size on all parcel post packages is one hundred Inches in length and glrth combined. Example: a package 35 inches long, 10 inches wide and 5 inches high. package 35 inches inces 65 inches in length and girth combined. (Length 35 inches, plus $2 \times 10$ inches width, plus $2 \times 5$ inches helght. equals 65 inches).

## OUR SEIRVICE

We endeavor at all times to give you the finest possible service. According to figures prepared by our Traflic Department. $96 \%$ of all orders are shipped within 24 hours of recelpt. Very often orders go lorward within a few hours after their arrival. All packages are inspected before shipment to avold errors and delays.
Occasionally we have to back-order an Item. This is due to some unavoidable slowness on the part of the lactorles in making deliveries. Our system of maintaining a large stock on hand of all Items avolds such delays constderably.

## PLEASE: NO MAIL ORDERS UNDER $\$ 3.00$

We ask your cooperation! Plense do not send in orders for less than $\$ 3.00$. Mail orders for less than $\$ 3.00$ cannot be profitably bandled as such orders would increase our operating expenses and result in an increase in prices. Where orders'are shtpped, which amount to less than $\$ 3.00$, we have found from actual experlence that the transportation costs are proportionately much higher.


Acknowledged the finest remote control mechanism that has ever been offered the public, practically fool-proof. Engineered and Built by Westinghouse. Used on the most expensive Radiola and Victor receivers
and combinations. Undoubtedly the best buy in the radio market today. Bring your receiver up-to-date, by installing this Automatic Remote Control Assembly. Can be attached to most receivers.

The Remote Control feature is unique in that it not only allows control of the receiver from a distant point but also pre-selects the desired station accurately. Manual tuning, other than necessary for the original setting of the selector buttons, is therefore eliminated. Selection of any one of six stations, adjustment of volume control, or turning the receiver on or off may be accomplished at one or more remote pointa from the receiver. Operation of the tone control or local distant switch must be done at the or local distant switch must be done at the
receiver. The remote consista of a capacitor receiver. The remote consisty of a capacitor
motor coupled to the gang condenspr through a motor coupled to the gang condenspr through a
aeries of gears; a series of drums and contactors series of ghich the motor is started in the right direcby which the motor is started in the right direc-
tion for a given station and stopped at the right tion for a given station and stopped at the right
point; a special volume control geared to the point; a special volume contro geared to the remote control box by which these operations are controlled.
The motor is provided with a tapped reactor and condenser for changing the phase angle of the applied current so that operation in either direction may be secured. The motor operates at 23 volts for the station selector and 18 volts for the volume control.
The proper direction of operation and stopping of the motor selection of a desired station is controlled by a series of drums and contactors. The drums hold the contactors in the proper position so that whon a particular selector bosition so depressed, the motor will turn in the right direction when the contactor is at the point on the drum where it is half way between each contact, the motor stops. This is $180^{\circ}$ from the hole that is used to set the drum for a par-
ticular station. A pilot lamp is located on the remote control box, a common lead is used for the lamp and the selector buttons, by doing this, when a selector button on the box is pressed, the current through the common lead is increased, like wise the voltage drop in the lead is increased. The result is that while the motor is running the pilot lamp becomes very dim. As soan as the motor stops, the lamp flashes bright, thus indicating that the motor has stopped and the station is tuned in. If the station is not then station is tuned in. If the station is not necessary to press the + volume heard, it is necessary to press the + volume control button a littie at
The setting of the drums is made by the pins on the front panel of the control unit. These are known as the setting buttons. The selection button is pressed and the drum is moved by the motor until the corresponding contactor is midway between the contacts. The pin will now fall in the hole in the drum if pushed In by the finger. Holding the pin firmly in the hole, the desired station is then accurately tuned in by means of the manual station Selector Knob. After tuning the pin is then released.
The cable to the remote control box supplied with the remote control is twenty-five feat in length. If, however, it is desired to place the remote control box at a greater distance from the set, any twelve conductor cable, the wires of which are No. 14 or larger in size, may be used to aplice onto the regular cable and increase the total length up to seventy-five foet.
This remote control assembly may be attached succeadully to any electric or battery recelver provided it has the following physical char-
acteristics. The variable condenser must be of the ball bearing or easy moving type. This control is equipper with an eccentric gear arrangement whereby the arrangement of the variable condenser and control unit may be geared up to match any port on of the laminated gear of the control. However, in many cases it may be neceasary to take off the gear arrangement on the control unit, by removing a pin that goes through the entire shaft, and connecting a sos" enupling unit.
The control unit, exeluding the transformer and capacitor pack, is $5^{\prime \prime}$ long, $4^{1 / \beta^{\prime \prime}}$ deep, $6^{\prime \prime}$ high, capacitor pack, Drive shaft extends $21 /)^{\prime \prime}$ from housing overall. Drive shat extends gear; center of gear is 2 s, "from front including gear; center of gear is 28 from ront
of control housing. This means that you would of control housing. This means that you would have to have clearance of at least $1 / 2$ from the end of the variable condenger and the cabinet. It might be a suggestion to install the receiver chassis and the control unit in a closet or out of sight, as once the original setting is accomplished, you would always have the selection of six different stations. Volume control is supplied with this unit, but the present volume control need not be distarbed, as the present volume control may be turned to maximum volume and control level controlled by the remote box. A full set of instructions and service notes supplied with each unit, this explains in detail the full operation of this device and one ahould have very little trouble installing it in most receivers.
For operation of 110 volt, 60 cycle only. Shipping weight 20 lbs.
Y1s225-
SI2.50


## Drives 20

## Full Size

Dynamic Speakers


## Full Frequency Response No Loss of High Notes

The majority of Class " $B$ " audio amplifiers do not respond very well to the higher frequencies. Lafayette sound engineers have overcome this shortcoming by using a direct coupled driver which accentuates the higher frequencles; this in turn compensates for the loss in the Class " $B$ " stage, resulting in an amplifier having uniform response over the entire audible range.

## High Gain

Technically, the characteristics of this amplifier are as follows: It has a gain of 83 db . at 1000 cycles, is only minus 3 db . at 50 cycles and actually rises to plus 2 db . at 5000 cycies above the overall gain of 83 db . Input impedence 500000 ohms; output impedence 4, 8, 15, 500 and 2000 ohms.

## 28 Watts Power

Conservatively rated, this amplifier will deliver 28 watts undistorted output. In an actual mesaurement in the laboratory, a 40 -watt incandescent lamp was connecued across the 500 ohm output circuit. With a 1000 cycle audio frequency generator feeding one-tenth of a volt to the input, the lamp burned at full brilliancy! Dlstortion level $9 \%$.

## Drives 20 Speakers

The Lafayette Class " $B$ " amplifier is powerful enough to drive 20 full size dynamic speakers when properly connected. Under no circumstances
shouid the average single speaker be connected to the output of this amplifier under full load.

## Circuit Data

The circuit of this amplifier employs a single type 57, directiy coupled into a 69 , which in turn drives a pair of 59 s in Class "B". The rectifier tube is the new mercury vapor type 83.

## Component Parts

All parts are carefully tested with precision accuracy, and they are designed to give the maximum of service. Both the power transformer and the choke assembly are designed to handle twice the normal current to which they are subjected under full laad. These husky units each measure $61 / 2 \times 6 \times 5^{\prime \prime}$. Overall, the amplifier is $111 /^{\prime \prime}$ deep, $20^{\prime \prime}$ long and $10^{\prime \prime}$ high.
P15760-Lafayette Class " $B$ " Amplifier, ecmpletely assembled and wired. For 100-130 voits, $50-60$ cycles $A$. C, less tubes and loud speakers. Dimensions: $116^{\prime \prime}$ deep, $20^{\circ \prime}$ long, $10^{\circ}$ high. Shipping weight $61^{\circ}$ liss. List Price $\$ 97.50$ Your Cost
$\$ 42.50$
P15757-Complete amplifier with RCA or Arcturus tub
547.75

## "B" Public Address System

With the proper accessories, the Lafayette Class "B" Amplifier makes an ideal P. A. system, capable of carrying voice and music to indoor crowds of as many as 10,000 people. The amazing performance of the Lafayette Class " $B$ " Amplifier is made possible by the advanced engineering principles involved in its design and the very high quality of its components. Its output is really tremendous, and must be heard to be appreciated. It is ideal for permanent installations in theatres, churches, dance halls, skating rinks, lodge rooms, etc.

## Special Matching Transformers

By means of the special matching transformers supplied, the loud speakers may be placed in the most advantageous positions, regardless of the length of the connecting lines, and will all produce uniform results This is very important from the standpoint of good reproduction.
Service men or sound specialists can buy a complete system, as illustrated above, or they may select as many of the accessories as they need for a particular installation. All the parts listed are guaranteed to be up to the usual high Lafayette standard.
P15780-Complet public address ampliier consisting of the following Class " B " 28 -watt amplifier as described; 1 Lafayette Model 50 microphone, with DeLuxe floor stand and 25 ft . cable; 6 Photophone speakers with individual field exciters; 1 Pre-amplifier control box, and 4 Matching transformers. Complete with RCA tubes. Shipping weight 540 lbs. List Price $\$ 500.00$
Your Cost.
5227.50

P15781-Same as above but with 10 RCA 106 type speakers. A. C excited. Shipping weight 530 lbs .
List Price $\$ 525.00$
Your Cost
${ }^{\text {s }} 237.50$

# At Last <br> A SIX-VOLT AMPLIFIER 

# Operates entirely from auto battery 

## Current drain only 8 amperes

## No "B" Battery

No more worries about run down "B" batteries or weak signals! The new Lafayette Six-Volt Portable Amplifier-entirely self-contained and ready to operate-always works at full efficiency. Only source of power required is six volt storage battery such as used in all cars. Draws only eight amperes leas than the headiights-and therefore does not involve any changes whatsoever in the car's electrical system. Compare this economy of operation with the current drains of 18 and 20 amperes of previous amplifiers of this kind!
The low current drain of the new Lafayette Six-Volt Amplifier makes it possible for radio dealers and service men to install this unit, along with a separate storage battery, in unwired places where the use of a small public address amplifier is desired for a short time. An 80 - or 100 -ampere hour battery will give a full day's service, and can readily be replaced by a fresh battery if further use is to be made of the amplifier.

## Constant Plate Voltage

The filaments of the six tubes are run directly on six volts. Plate current is supplied by a special generator, entirely closed in and requiring no special attention. No vibrating points to stick or burn out. Plate voltage is constant, amplification at maximum at all times.

## High Gain Class "B" Circuit

Advanced design of circuit is responsible for unprecedented gain of 85 db . Six tubes are used: one type 36 as voltage amplifier, feeding one type 89 pentode driver, in turn working into four type 89 s in Class "B" push-pull parallel. Output of 10 watts is enough to cover large outdoor crowds. These tubes are extremely rugged and are made especially for rough automobile service


## Solves the portable probiem

We recommend the use of a large single Racon unit with a triple connector for three horns.
Connections are provided for quick connection of six-volt dynamic speaker field coils, and also for the local microphone current supply. One of the features of this amplifier is a voice coil impedance matching switch, controlled by a small knob on the front of the chassis. This enables the user of the amplifier to adjust the output most satisfactorily to the particular loud speaker or combination of speakers that he intends to use. Maximum output efficiency is thus maintained under all normal operating conditions.

## Compact Construction

In designing the Six-Volt Amplifier Lafayette engineers have kept in mind the space limitations of portable amplifiers. The whole unit measures only $10^{3} 3^{\prime \prime}$ wide, $88^{\circ} 6^{\prime \prime}$ deep and $7 \frac{1 / 4}{}{ }^{\prime \prime}$ high, and is therefore easily mounted under the dashboard, on the running board, on a back easily mounted under the dashboard, on the running board, on a back seat, or in the baggage compartment. This amplifier is unusually
tile and will find a wide variety of applications in portable work.
Construction throughout is extremely rugged, and workmanship is of the best. Built to last!
P15768-Lafayette Six-Volt Arnplifier, less tubes, microphone or speaker. Dimensions: $10^{3} \frac{7}{7}^{\prime \prime}$ wide, $8 \frac{1}{8^{\prime \prime}}$ deep and $73^{\prime \prime}$ high. Shipping weight 30 lbs. List Price $\$ 130.00$

## Your Cost

P15767-Complete with RCA or Arcturus tubes, consisting of 1-36, Your Cost
$\$ 65.00$

## Lafayette Portable Six-volt Public Address Outfit

A complete public address outlit using the new Lafayette Six-Volt Amplifier can easily be put in the back of a small car. With no heavy "B" batteries to carry around, and with the car's regular battery furnishing all necessary energizing current, the apparatus is light and compact and can be set up in a few minutes.
Maximum volume is available at all times, the output of the special Lafayette power unit being constant and independent of temperature or weather conditions. This is an important leature from the standpoint of portable use, as " $B$ " batteries carried in a car are quickly affected by extremes of heat or cold and cannot be relled on.
The outhit illustrated on the right will find great favor among such The outht illustrated on the right will find great favor among such
users as merchandise demonstrators, patent medicine salesmen, users as merchandise
P15768-lafayette Six-Volt Portable Amplifier as deserlbed. List Price 5130.00
${ }^{5} 59.50$
Y19758 Junior Dynamic speaker unit, with triple connector and three $31 / 2 \mathrm{ft}$. long, $221 / 2^{\prime \prime}$ diameter trumpets. Shipping weight 23 lbs.
Your
Cost
$\$ 94.50$
M13420 Lafayette Double Button Microphone with desk stand, $3^{\prime \prime}$ in diametor, ${ }^{2 \prime}$ thick. Shipping weight 7 lbs. List $\$$ I 5.45
Price $\$ 35.00$. Your Cost.......................... 5 . M13423-Lafayette Double Button Hand Mierophone. Shipping weight 4 lbs. List Price $\$ 23.00$ Your Cost
$\$ 10.45$
P15773-Microphone control bnx. Dimensions, $9^{\prime \prime}$ wide, $6 \frac{1}{2 \prime \prime}$ high. $5^{\prime \prime}$ depp. Shipping weight 5 the.
List Price $\$ 20.00$
Your Cost
58.50

P15771 Complete Lalayette Six-Volt Portable Publie Address Outfit, including loud speakers, Lafayette microphone with desk stand and
 P15772 Same as above but with Lafayette Double Button Hand Microphone.
Your Cost
5164.45


P15767-Completeset of RCA or Cunningham tubes for fier, consisting of 1-36, 5-89s Your Cost

## A High-Gain Amplifier for only



## s9.75

## Uses new type tubes

## Works 3 or 4 Dynamics Speakers

## Lafayette Quality and Workmanship Throughout

Here is the biggest little amplifier ever brought out at a price that defies competition. Measuring only $81 / 4^{\prime \prime}$ wide, $6^{\prime \prime}$ deep and $81 / 8^{\prime \prime}$ high, this latest addition to the famous lafayette line is a completely selfcontained two stage power amplifier capable of working three or four dynamic speakers to full capacity, and that means it has real "sock." Because of its small size, its low price and its remarkable efficiency, it will find many uses in public address work.

## Latest Type Tubes

To show how up-to-the-minute this job is, we merely need mention that it uses the latest type tubes. There is a 57 capacity coupled to a 59 , a combination that produces the extraordinarily high amplification of nearly 100 db . Output $3 / / 2$ watts. Actually these two tubes do the work formerly done by four tubes! A type 83 mercury vapor rectifier, noted for its low internal resistance and small voltage drop, is employed as rectifier.

## Lafayette Standards Followed

Don't get the idea from the price that this is a cheap amplifier. The Lafayette standards of good parts and careful workmanship have been met very strictly. All parts are of generous oversize proportions, and carry the usual Lafayette guarantee. All Lafayette amplifiers-this
one included -are designed for continuous operation, so there can be no skimping. All-metal construction is used, with the whole unit neatly finished in durable lacquer.

## Numerous Application

Numerous applications for this handy amplifier will suggest themselves to the wide awake service man, dealer and experinenter. To mention a few: for public address systems in small meeting halls, restaurants, markets, theatres, etc.; to replace old style amplifiers in radio receivers having good tuners; to "electrify" old horn-ty pe phonographs; for hearing aids, etc. The phonograph market is a particularly good one, as there are thousands of old talking machines in existence that their owners want to keep.
P15790-Lafayette Two-Stage Amplifier, completely assembled and wired. Less tubes and loud speakers. Dimensions: $81 / 2^{\prime \prime}$ wide, $6^{\prime \prime}$ deep $518{ }^{\prime \prime}$ high. Shipping weight 15 lbs. Your Cost
59.75

P15791-Complete Amplifer with RCA or Arcturus tubes consisting of 1-57, 1-59, 1-83.
\$52.70

## Push-Pull 3 Stage Amplifier

# With new type 59 Tubes <br> only s14.95 

Where vo.ume enough to operate five or six dynamic speakers is required, we recommend the new Lafayette Three Stage Amplifier, whose tremendous power and marvelous response will make listeners wonder how such a compact unit can be so effective. With an undistorted output of six watis, this amplifier is actually a "power" amplifier.

## Three Stage Circuit

A type 57 is capacity coupled to a 56 , which in turn is transformer coupled to two 59 s in push pull. The required plate current is supplied in humless form by an 83 mercury vapor rectifier. The overall amplification is so great that special input connections to the second stage are provided for phonograph pick-up. If a piek-up is connected directly to the input of the first stage, the last stage will actuaily overload.

## Tone Control Provided

Another welcome feature is a tone control. Such controls have proven their value on radio receivers; why not on amplifiers? In many installations a little tone correction is highly desirable to overcome peculiar acoustical conditions and may mean the difference between mediocre reproduction and good reproduction.

## Oversize Parts

This husky amplifier is another credit to the skill of Lafayette engineers Heavy, oversize power units and metal construction mean long and satisfactory life. Unit measures $12^{\prime \prime}$ square and $91 / 2^{\prime \prime}$ high; doesn ${ }^{\circ}$ take up much room, but how it does work! No wiring in sight; everything under the chassis. Supplied with and without output transformer

## Consult Us On Special Amplifiers

Please feel free to call on us at any time for advice on your amplifier or public address problems. Our sound engineers have designed many units for apecia! purposes and have had wide and varied experience in this field. Get our plans and prices before you buy elsewhere. We guarantee complete satisfaction.


P15795-Lafayette Three Stage Amplifier, completely assembled and wired. Less tubes, loud speaker and output transformer. Dimensions: $12^{\prime \prime}$ square, $91 / /^{\prime \prime}$ high. Shipping weight 30 lbs .
514.95 P15797-Complete amplifier with RCA or Arcturus tubes, consisting of 1-57,1-56, 2-59s, 1-83. Your Cost
$\$ 19.90$ P15796 Same as above, but with output transformer less weight, 33 lbs.
$\$ 17.45$

## Lafayette Microphone Control Box

Serves a dual purpose in the Control of Microphones. It varies the sensitivity andit prevents the continual re-filling of carbon granules due to breaking down from the heat generated on account of using a current beyond the rating of the Microphone. The Unit is equippen with a D. C. Milliameter, and a variable control for these purposes. Enclosed in a metal case $51_{4}^{\prime \prime}$ wide; $51 / 4^{\prime \prime}$ high and $61 / 8^{" p}$ deep, and finish in black. Shipping weight 61 bs . P15794 Your Cost.
$\$ 9.50$

## Lafayette Loftin-White Amplifier Family de luxe modets

## 245 Push Pull

The Lafayette Loftin-White 245 Push-Pull Amplifier, 1933 Model, is the result of several years of development. Previous models using the older tubes gave widespread satisfaction, and wow Lafayette engineers now Latayette engineers, after months of experimenting, a
of the newer, higher gain tubes.

## Clean Cut Circuit

A clean cut, straightforward circuit characterizes this amplifier. The initial stage uses a type 57 tube, coupled by the famous Loftin-White method to a pair of 45 's in push-pull. The high amplification and absolute clarity of this reliahle and time-tried combination leave nothing to be desired. An 83 mercury vapor rectifier supplies plate voltage. This new type rectifier has a very low internal resistance. and the regulation characteristics of the power system are exceptionally good.

Works Five Dynamics.
The undistorted output of the modernized 245 Push-Pull Amplifier is four watts, enough to drive four or five dynamic speakers at full volume. address operation: medium size theatres, skating rinks, dance halls, addriss operation: medium size theatres, skating rinks, dance halls, unit within the means of many prospective purchasers of P. A. systems who were scared off previously by the high cost of other makes of amplifiers of equivalent capabilities.

## Rugged Construction

Rugged construction throughout make this an outstanding amplifier.


## The Result of Years of Research!

## Quality Performance

Reproduction that is comparable with the highest priced amplifiers on the market. Even when using the maximum power output of this amplifier the superb tone is maintained the same as when operating at lower levels. Designed upon the most advanced of present-day engineering principles, it is positively in a class by itself in the field of sound amplification. Oversize parts are used throughout, but the whole unit measures only $12^{\prime \prime}$ wide, $7^{\prime \prime}$ deep and $71 / /^{\prime \prime}$ high. Built for continuous operation, and is therefore ideal for public address or interoffice call systems which must be kept "alive" all the time. Breakdown of any of the parts is practically unknown. In its manufacturs only components of the very highest quality are used insuring long and trouble-free operation.
P15723-Lafayette Loftin-White 245 Push-Pull Amplifier, completely assembled and wired. 1ess tubes and loud speaker. Dimensions $12^{"}$ wide, $7^{\prime \prime}$ deep and $73 / 3^{4}$ high. Shipping weight Your Cost

P15724 -Complete amplifier with set of RCA or Arct sisting of 1-57, 2-45's, 1-83.
Your Cost
s22.70
P15721-Lafayette Loftin-White 245 Push-Pull Amplifier with output Transformer to $5-15 \mathrm{ohm}$ voice coil, and 500 ohm line.
Your Cost
$\$ 50.00$
s21.75

Lafayette Loftin-White 250 Push-Pull


The 250 Push-Pull Amplifier has been designed to take full advantage of the unique Loftin-White principle and is recommended to those requiring greater power and coverage than that provided by the other units docribed on this page. Its stability of operation is amazing and trouble usually arising from unmatehed 250 tubes is completely eliminated. More amplification is obtuined than from any other amplifier using the same rube combination. Has enormous output of fifteen watts, capable of operating eleven full size dynamic speakers at high volume and will provide ample volume to cover audiences of 2000 to 3000 persons, making it ideal for use in small theatres, clubs, etc. The frequency characteristic $t$ aken between 30 and 8000 cycles is comparatively flat as the curve taken on the amplifier shows only 4 dbs. drop at 10 KC ., a remarkable performance. The curve shows a gain of 65 db . at 400 cycles. Circuit consists of a type 57 feeding into the push-pull 50 's, with two 81 halfwave rectifiers supplying high voltage for the plates. Output impedances, 500 und 4000 ohms. This adapts it for line transmission work as well as high impedance speakers.
P15742 Lafayette Loftin-White 250 Push-Pull Amplifier, less tubes and speakers. Dimensions, $111 / 2^{\prime \prime}$ deep, $20^{\prime \prime}$ long, $8^{\prime \prime}$ high. Shipping weight 65 lbs.
For $105-120$ volts, $50-60$ cycles A. C. List Price $\$ 100.00 \$ 42.50$
P15722 Complete amplifier with RCA or Arcturus tubes, consisting of $1-57,2-50{ }^{\prime} \mathrm{s}, 2-81$. Your Cost
2A401-Matching transformer for matching 500 ohm implifiers to $5-15 \mathrm{ohm}$ voice colls. Shipping weight 61 bs . List Price.
Your Cost
$\$ 18.00$
$\$ 18.00$
....
\$52.75
line of above
57.50

Lafayette Loftin-White "Little Giant"


This baby giant of Amplifiers will dellver more power, tube-for-tubes and preserve a more uniform frequency response curve than any similar piece of apparatus on the market. Its frequency response between 30 and 8000 cycles has a variation of but 3 DBs . Gain at 400 cycles 54 DBs . Maximum undistorted output 3 to 4 watts (sufficient to operate 4 full size Dynamic Speakers or 10 Magnetic Speakers at their full capacities.) The necessary input for maximum output is 175 millivolts. Output impedance 4000 ohms and is directly from tube. Power consumption 40 watts at 115 volts 60 cycle. This ampliffer developed in our own labor. atories with the full cooperation and technical advice of Loftin-White staff. Its filter circuit employs two 1000 volt Flechtheim and an Aerovoz dry electrolytic condensers units that insure long and trouble-frew operation and perfect fittering. Special plus or minus $5 \%$ resistors ars used in plate and grid circuit. Oversize Power Transformer and Chokez, designed in conformity with highest R. M. A. standards. Pressed stee designed in conformity with highest R. M. A. standards. Pressed stex Irame in attractive black crystalinine finish. Tubes required, $1-67$.
$1-U X 245$ and $1-U X 280$. Size $6 \times 8 \times 7^{\prime \prime}$. Ideal for those requiring a com. pact unit for ample coverage of indoor gatherings at 1000 or less persons. pact unit for ample enverage of indoor gatherings at 1000 or less persons. Suitable for microphone or phonograph reproduction. No output trans.
former included. Shipping weight 17 Ibs. For $105-120$ volt $50-60$ cycle A.C. P15738 - Lafayette Loftin-White "Little Giant" Amplifier, completely assembled and wired. Less tubes and speakers. Dimensions, 8,. wide $6^{\prime \prime}$ deep, $51 /{ }^{\prime \prime}$ high. List Price.....................530.00 \$ T2. 95
P1573
P15739-Complete set of amplifier with RCA tubes, consisting of 1-57, 1-45, 1-80. Last Price.
$\$ 34.00$
Your Cost

## Lafayette 250 Public Address System



Everything needed for a powerful public address system capable of covering as many as 3000 people is included in this outfit, which is ideal for auditoriums, race tracks, dance halls, and many other public places. The main unit is the DeLuxe Lafayette 250 Push-Pull Amplifier, which has an output of 15 watts undistorted power. The perfect clarity and uniform response of this high grade instrument is a delight to the ear. This amplifier, like all the other amplifiers in the Lafaytte line, is designed for continuous operation and hard service. Once installed, it requires practically no attention and may be perated by inexperienced persons. It is a Lafayette custombuilt product. The whole outfit consists of the following: 1 DeLuxe Lafayette 250 Push-Pull Amplifier, completely assembled and wired; Lafayette model 50 double button microphone, with DeLuxe adjustable fioor stand and 25 ft . connecting cable; 1 Microphone pre-amplifier and control box, one special matching transformer; and 3 RCA 106 type dynamic speakers, A. C. operated, complete with RCA tubes. Shipping weight 200 lbs

P15745-Public Address System complete with RCA tubes. List Price $\$ 290.00$
s129.50
If desired, the system will be supplied at the same price as above with 2-RCA Photophone speakers, with individual field exciters in place of
106 's.
Lafayette Hearing Aid


The importance of supplying individual hearing aids to partially deaf people who attend movie theatres, churches, etc., is now being generally realized. The Lafayette Hearing Aid is a complete outfit developed by Lafayette engineers to supply the increasing demand for suitable equipment. It consists of the Lafayette Loftin-White DeLuxe 245 Push-Pull Amplifier and accessories as listed below. The single head-phones may be held against either ear without disturbing the hair or the head in any way. Inidividual control boxes are supplied with each earphone. Following are the parts used:
Lafayette Loftin-White 245 Push-Pull Amplifier, Pre-Amplifier Control box, Lafayette M13421 Double Buttom Microphone with desk stand and 12 ft . cord.
P15776 Complete outfit as described, less tubes and earphones. Shipping weight 60 lbs .
Your Cost
P15777-Complete outfit as described, with tubes.
Your Cost
54.50

Your Cost .................................................. 50.51
Nhipping Shipping weight 1b
P15711-Individual Volume Control boxes, complete with flat type plug
3.75

Your Cost Each
P15710-Special Matching Transformer. Shipping weight 5 lbs.
$\$ 3.11$
$\$ 5.10$

## Lafayette Inter-office System



A simple public address call system will soon pay for itself, in time recovered, in many offices and factories. The Lafayette Inter-Office System was designed to fill this need. It consists of a double button microphone with desk stand pre-amplifier and microphone control box and a dynamic speaker, with such accessories as a 12 ft . microphone cord, 20 ft . speaker cable, microphone batteries and microphone suspension springs. You have the choice of two amplifiers: for one, two or three speakers, a LoftinWhite unit with a single 45 output tube; for five speakers, a similar unit with push pull 45 s . These amplifiers are designed for continuous operation.
P15716 Inter-Office System, complete as Isted above with single 240 amplitier and one special D. C. dynamic speaker, less tubes. Shipping weight 75 lbs. List Price $\$ 90.00$
Your Cost.
\$42.50
P15717-Same as P15716 above, including 1-57, 1-45 and 1-80 RCA or Arcturus tubes.
Your Cost.
s 44.50
P15718-Inter-Office System with 245 Push-Pull Amplifier and one special D. C. dynamic speaker, less tubes. Shipping weight 75 lbs List $\$ 110.00$
Your Cost
'49.25
P15719 Same as P15718 above, including 1-57, 2-45 and 1-83 RCA or Arcturus tubes.
$\$ 52101$
Special Dynamic Speakers, extra.
Vour Cosi Each
57.50

## Lafayette D. C. Amplifier



Listen, you long suffering residents of D. C. districts: Lafayette engineers have just finished a D. C. amplifier that is a knockout No more weak results or wasted current: The new Lafayette D. C. amplifier has an output of 5 watts, and works five or six dynamic speakers with all the "push" that has been possible to date only" with A. C. amplifiers. The new type 48 ( 30 volt filament) tubes help do the trick. Three stages of amplification are used: a type 36 capacity coupled to a 37 , this in turn feeding two 48 s in push pull. The overall gain is 90 db . This is the first D. C. amplifier pull. The overall gain is 90 "wallop" is the we recommend it very highly. Absence of wasteful line resistors makes this amplifier highly. Absence of wasteful line resistors makes this amplifier
extremely economical and efiminates the hazard of fire. Output extremely economical and eliminates the hazard of fire. Output
impedancea of 5,15 and 500 ohms are available for loud speaker mpedances of ${ }^{\text {m, }}$ is and high specifications. All metal construction; chassis measures 123/4" long, 8 " $"$ deep and $8^{3} 4^{n}$ high.
P15785-Lafayette D. C. Power Amplifier, completely assembled and wired. Lees tubes and loud speaker. Dimensions, 12 $3^{3 / 4}$ " long, $81 /{ }^{\circ}$ " deep, $89 / 4$ "high. Shipping welght 15 lbs. List price $\$ 50.00$

Your Cost.
\$T?.50 P15786-Co
1-37, 2-48s
Your Cost

## Lafayette <br> Dual Speaker



There are many usesf or a really portable public address system that amplifier. A gain control on the side of the case permita smooth and a man can carry single-handed and get up in a short time. The new quiet adjustment of the volume from a whisper to a roar. The person Lafayette Dual Speaker System fills the bill perfectly. Not only at the "mike" can talk in a very quiet tone and still have his words come is it compact enough to carry in a train or in the rumble seat of a car, but it also is a high quality electrical instrument incorporating the newest developments in amplifier practice.

## Ingenious Construction

Almost every cubic inch of space in the strong carrying case, measuring $15^{\prime \prime}$ square by $10^{\prime \prime}$ deep, is utilized. The two sides come off, , and they act as baffles of two dynamic speakers mounted in them. These sides are equipped with folding leet that keep them upright when they are placed on a stage, lecture platiorm, show case, etc. Inside the case is a special amplifier using a type 57 tube capacity coupled to a type 59. with an 83 supplying plate current. The output of $31 / 2$ watts is enough to work the speakers to capacity. Just plug the line cord into any A. C. outlet and the outfit is ready to operate.

A sensitive two-button hend microphone fits securely in a strong elip. Mierophone current is furnished by dry cells in a bor next to the
out of the speakers like thunder.

## High Efficlency Attained

In the design of a portable amplifier every part must justify its weight by operating at maximum efficiency. Lafayette engineers have care ully gone over the entire circuit and have realized the absolute maximum from the apparatus. Sample amplifiers were subjected to the most strenuous tests and operated perfectly without failure of any kind.
P15765-Lalayette Dual Speaker Portable Public Address System Dimensions $15^{\prime \prime}$ square, $10^{\prime \prime}$ deep. Shipping weight 40 lbs . List Price $\$ 85.00$
Your Cost
\$34.50
P15766 Complete with RCA or Arcturus tubes, consisting of 1-57,


## Portable Public Address System <br> \section*{Made by United Sound Engineering Co.}



One of the most powerful portable systems ever constructed, using a single Wright DeCoster Dynamic Speaker in one section of the split case. It incorporates three stages of amplification; type 24A tube feeding a type 27 tube and coupled into push-pull 47 s , with a type 80 rectifier in a specially designed circuit giving exceptionally high gain. The output of this amplifier is $71 / 2$ watts, and the gain 83 deb. The current supply for the microphone is furnished from the amplifier power pack. It is fitted with a leatherette-covered carrying case and the corners are protected with metal. The size of the carrying case is $18 \times 18 \times 10^{\prime \prime}$. The outfit includes a double button microphone in desk stand, amplifier unit, control panel, loudspeaker, carrying case, cords and plugs This amplifier is adupted for auditoriums, clubs, political gatherings and general public address work. It will cover audiences of 500 to 1000 people. Extra loudspeakers may be connected to cover larger gatherings.
P15759-Portable Public Address System, as described, less tubes. Shipping weight 35 lbs . List Price $\$ 79.00$
Your Cost. .
P15758-Complete with RCA or Arcturus tubes ensistine of 1-24 1-80.
Your Cost Complete.


## Lafayette Heavy Duty 50-Watt Power Amplifier



A custom-built, carefully engineered amplifier for use where perfect reproduction is required or where extreme difficulties must be overcome. Built of the finest quality of materials and under the supervision of Built of the finest quality of materials and under the supervision of
Lafayette engineers. Every part used in this amplifier carefully tested Lafayette engineers. Every part used in this amplifier caretuly jostan one custom-built as carefully as was the original model
Where exceptionally high volume level is required, as at airports, baseball and football parks, in noisy factories, ete., the new Lafayette 50 -watt amplifier unit will give supreme satisfaction. It uses two 50 -watt of the 845 type tubes in a class "A" push-pull circuit, with two type 866 high-voltage mercury vapor rectifier in the power system. Must be operated by a "driver" of at least two stages. Perfect quality of reproduction even at maximum output. The weight of this amplifier and the heat developed by the tubes demand special precautions in mounting. With the exception of the plate elips of the rectafier tubes, all wiring is concealed beneath the steel chassis. This is a high-grade unit that can be selected with complete confidence by anyone needing an extremely powerful amplifier.
P15770-Lafayette 50 -Watt Heavy Duty Power Amplifier, less tubes. Dimensions $18^{\prime \prime}$ wide, $10^{\prime \prime}$ deep, $9^{\prime \prime}$ high. Shlpping weight 58 lbs. List Price $\$ 180.00$
Your Cost
SIO5.84

incorporating the lateat development in tubes and circuit this Tuner was designed to meet the demand for an ideal "radio pick-up" for theatres hotels, clubs and pub lic address power amplifier systems While it was designed for use with the La fayette Power Ampli fier, it will give excel lent performance with any good power amplifier. High Selec-tivity-With its four tuned circuits with approximately 10 approximately 10 its band-pass selector there is practically a complete elimination of side band suppression, making possible the very finest tone quality, espe cially when used in conjunction with the Iafayette Power Amplifier The new 58 type cubes used in the two radio frequency stages handle the usual signal voltages without cross-modulation and modulation distortion, and give a wide range to the sensitivity control without sffecting the tone quality or selectivity. Freedom from oscillation Elimination of tube hiss and other background noises. Thorough shielding. The detector circuit is such that the tuner may be hooked up with any standard audio input, by connecting one lead to the grid of the first audio tube of any amplifier; type of tube does not matter. Tuner has its own filament supply, and requires 180 to 250 volt ${ }^{3}$ " supply at 25 M . A. from filtered supply of Power Amplifier. Furnished with cord and plug, and attachment leads to amplifier. Shipping weight 00 lbs. N1384G-Complete, less tubes.
Yowr Cost
${ }^{\$ 16.95}$
\$19.40
Yame equip
ment as above, complete with tubes

## Kenyon Class B Amplifier Kit 25 Watts Output

Mare is an all purpose Class "B" amplifier, has sufficient gain for use with a microphone, electric pickup or a recording detone quality over the entire frequency range. The output is greater than 20 watts. Recording laboratories, public address engineers and experimental labboratories will wel-
 come the universal features of this amplifier. The input transformer is designed for a low impedance dynamic microphone, a 50 -ohm line or a 200 - or 500 -ohm double button carbon microphone. The windings on the transformer are arranged also for three 500 -ohm lines simultaneously used or for three 200 -ohm lines used the same way, or for a 500 -ohm line and 200 -ohm line. The tubes used in this aniphifier are $1-24 \mathrm{~A}$, impedance coupled through a 250 henry reactor to a single 46 , used as a driver to two 46 tubes in the output stage. An 82 type Mercury Vapor Rectifier is used in full wave. The secondary of the output transformer has a $500-\mathrm{ohm}$ winding and a $15-0 h \mathrm{~m}$ winding. The $500-\mathrm{ohm}$ winding will carry up to 10 voice coils from a line matching transformer. The $15-0 h m$ winding will carry up to 4 voice coils in series parallel.

Stock
No.

P15850

## Part No.

Shown on Diagram -

Description
BLG Universal Input Transformer
BC3000 250 Henry Parallel Feed Reactor
8461 Class "B" Driver Input Transformer
53.30

Class "B' Driver Input Transformer $\quad \mathbf{3 . 6 0}$
B46PT Class "B" Power and Filament Transformer. 1140 volts C. T. at 150 mills. $21 / 2$ volts at 3 amps., $21 / 2$ volts at 3 amps . C. T., $2 \frac{1}{2}$ volts at 10 amps C. T.
BC100 10 Henry Swinging Class " B ", Choke..... 2.40 BC100 10 Henry Swinging Class "B" Choke...... 2.40 Special price for complete parts as listed above with Metal Chassis free. Shipping weight 35 lbs .
\$24.10 Your Cost

Complete set of Condensers, Resistors, etc., for amplifier. Shipping weight 3 lbs .
P15851-
Your Cost
\$12.95
Amplifier with all parts, completely wired, ready for operation on 110 volts, 60 -cycle A. C. Shipping weight 40 lbs .

## P15852

${ }^{5} 45.75$

Here is your opportunity to purchase a precision re corder at an extremely low price. It is simple to operate and easy to attach. Faithfully records either voice or musical programs with fine fidelity of tone. Anyone can install this recorder to their present turntable, provided the motor of the turntable is of sufficient power for this purpose. It has been designed to operate most satisfactorily with our Lafayette DeLuxe Push-Pull 245 Amplifier, described on page 45 of this catalog; but will work as well with other amplifiers, provided they have sufficient gain for microphone pick-up.
It is the most practical Semi-Professional Recording Device for all types of recording on aluminum record blanks. It is possible to record very fine reproductions of radio programs, home entertainment, transeription programs, advertising talks, sound truck recordings, etc. Any one can install this Recorder in a few minutes, only a single $1 /{ }^{\prime \prime}$ " hole is required to mount it. Attach it to your present surntable, providing it has a motor of sufficient power and of constant speed for this purpose. When ready to record, press the lifting lever to the down position, you are now ready to start actual recording. The special design of this Recorder allows full size record recordings, the same length of playing time as had on the standard phonoraph records. The Recorder may be operated at 78 or $331 / 3$ R. P. M.

It is solely designed to be used in conjuncticn with a Microphone and Power Amplifier, volume to be regulated according to the requirements of the individual person. The recordings are made on a specially prepared aluminium disc and can be replayed on any standard phonograph, electric or spring motor driven. When using a high quality Microphone and Power Amplifier, the Trutest Recorder makes records that are outstanding in quality and are comparable to standard transcription recordings. This Recorder is beins used by broadcast engineers, service laboratorics, and dancing studios Especially recommended to the serviceman for making extra money, by recording udvertising talks by local merchants and then repro ducing through a public address system or sound truck installation It is extremely simple to operate and records instantaneously Records are practicaly free from needle scratch and background noise. In recording, no unusual volume is necessary. The amplifier can be of small output if necessary, volume can be of normal room level. A specisl cutting needle is suggested for quality recordings. Fibre needles are used for reproduction

## Complete Cutting Mechanism

Consisting of center spindle, cutting head, threader, hardware and swivel arm. Shipping weight 10 lbs.

| Stock | Impedance of | Your |
| :--- | ---: | ---: |
| No. | Cutter | Cost |
| P15877 | 15 ohms | $\$ 18.95$ |
| P15878 | 500 ohms | 18.95 |
| P15879 | 4000 ohms | 18.95 |



## Turntable, Recording Head, Motor and Playback Pick-up

The most reasonably priced, complete recording and reproducing outfit ever offered. It consists of complete recording and cutter head, a powerful motor of 78 R.P.M., of constant speed. Mounter on a panel, together with a high impedance play-back pick-up This outfit is especially suitable for installations where the presen turntable motor is not sufficient for recording. Only the highest quality workmanship is used throughout. Shipping weight 23 lbs P15875

## Your Cost

$\$ 39.50$
This outfit can be used in conjunction with the Amplifier listed below, and a Dynamic Speaker, to reproduce all recordings made with this Unit. This would make a complete Recording and Play-back Unit adaptable for home, clubs, societies, stores, etc.

## Specially Designed Amplifier for Recording Purposes

We have developed a special Power Amplifier, suitable for microphone, transcription or general recordings. It has exceptionally fine quality and high gain. For further details refer to page 40.
P15876
559.75

# LI Radio Service Mens' Library 



## Gernsback's Official Ratiso Service Manual 1933 Edition

The new intormation contained in this 1933 edition of The Uficial Radio Service Manual is invaluable to Service Men and Engineers. In it only practical material and not complicated theory has been included. It is a marvel of simplicity in masceup; the desired information may be found easily and quiekly. Many features not found in the previous editions are included. Free Question and Answer Service, which was so popular in previous
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## 1932 Edition

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New Edition. Completely revised. This valuable encyclopedia, written in easy language that even an ordinary layman can understand, contains within its covers information, on radio and all its allied lines, that no radio-minded individual or serviceman can radiord to be without. Gives all practical data on Rado transmitting and receiving, Sound pictures, Public Address, Television, PhotoPicturen, Public Aduress, 1048 pages, 500 complete electric cells, etc. 1048 pages, 600 complete articles, 1100 additional definitions and references. 130 tables and graphs. Alt in alphabetical order and simply treated. Thoroughly
covers new Superbetrodynes, Short Wave covers new Superbetrodynes, Short wave
Receivers and Converters and Aviation Radio. Self indexed to Y $\mathbf{~ Y} 19938$ Your Cost Each
53.92


The Service Man's "Almanac"
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1,000 pages of valuable information for Service Men, Experimenters and Set Buildcrs. Over 2,000 diagrams and charts. The most complete and authoritative volume on Radio ever published. A complate guide to the servicing o A complite guide to the servicing ond model of radio receiver both new and old. In addition to its wealth of technical data it contains much easy-tounderstand information and hints on Trouble Shooting, Set Analyzers, Power Amplifiers, Eliminators and Power Units. Loose-Leaf style; may be kept up to date by supplementary service provided by Publisher, at nominal cost.
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Do you know all that you should to enable you to service superhets a a profit?... Are you familiar with the yarious kinds of superbeterodyne circuits? . . . Do you know the function of the individual parts
standard superheterodyne receiver-of an autodyne superhet? standard superheterodyne receiver-o frequency"? . . Can you adjus the Atwater-Kent "double spot" interference-climinating system Servicing Superheterodynes answers all of these questions and many more. It gives you all of the information you need have about superhe receivers. This book is a Best Seller. 10,000 copies have been sold within the 3 months since it was announced. 163 pages, type set, pro fusely illustrated, cloth bound. Y19927-Your Cost

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The information every Service man needs arranged in alphabetical order for handy reference. Practical and unique. Covers Industrial Radio, Radio Service, Sound Pictures, Television and Radio Broadcasting from "A to Z." Everything explained in simple, every-day language. Contains 550 illustrations, defines 3800 terms. 300 pages. Size $6 \times 9 \times 18 \mathrm{~m}$. Bound in maroon buckram, stamped in gold Many thousands of men in every branch of gold. Many housands of men in whanch of radio have felt the need of and will welcome this handy and practical dictionary. No one need be Shlpping weight 3 lbs
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Servicing an el tor is absurdly simple once yo get the "hany of it. In this Refrigeration Manual every part is care-
 ully explained furnished of every known machine special care given to the servicing end. The tools needed are illusead. trouble shooting charts, and other trouble shoo
service data. $\operatorname{OVER} 1,200$ DIAGRAMS; 450 OVER $1,2 \cup 0$ DIAGRAMS; 450 leatherette cover. Regular list price $\$ 5.00$
$51{ }^{c} \left\lvert\, \begin{aligned} \text { rice } 55.00 \\ \text { Y19904-Your cost. \$ } \\ \text { S. }\end{aligned}\right.$ supers.
Yupers.
Electrad Resistor and Volume Control Mandbook


A perpetual loose-leal guide kep constantly up to date by revised ists sent you our times as year with out additional charge. It shows at a glance exactly the value of resistors or volume controls required for al standard Radio Receivers. Contains resistor circuit diacrams and tains reful information covering much use in Pors Pocket size $\begin{array}{ll}\text { over } \\ 5 \times 8 \% & 1000 \\ \text { receivers. Plexible black fabrikoid }\end{array}$ covers. Your cost. \$1.00

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List Price, Any Volume, 50c.
Your
$39^{c}$
(*Size $71 / 2 \times 10^{\prime \prime}$ )

# Hámmarlund 

## Hammarlund Comet "Pro" Short Wave Superhetrodyne

The Comet "Pro" is a hlgh frequency Superhetrodyne Receiver designed to meet the exacting demands of professional operators and advanced amateurs interested in the reception of both code and voice advanced amateurs interested in the reception of both code and voice
signals in the frequency range from 20000 K . C. to a 1500 K . C., or signals in the frequency range from 20000 K . C. to a 1500 K . C., or
15 to 200 meters. In addition to being an excellent general purpose 15 to 200 meters. In addition to being an excellent general purpose receiver it is also ideally suited for experimental and research work
involving frequencies in that range where high sensitivity, low noise involving frequencies in that range where high sensitivity, low noise
level, and great selectivity are important. The present model includes level, and great selectivity are important. The present model includes
certain improvements made possible through use of the new " 50 series" tubes and employment of the recently developed "electron coupled" type of oscillator. These major changes, plus a number of minor refinements, result in improved selectivity, even greater sensitivity and complete stability under all conditions of operation. A Pentode output tube is now used in a special circuit to provide humless reception at either loud speaker volume, or on headphones. An attractive metal cabinet of improved design is now standard equipment. This Cabinet effectively shields the entire receiver and provides the ventilation necessary for cool and efficient operation. I The old type Walnut Cabinet will continue to be available as optional equipment at no additional cost. The new "Pro" retains all of the original features that made the receiver so popular, almost over-night. Among these that made the recelver so
features are the following:
features are the following: $1 / 2$ microvolt per meter. Selectivity of 1. Sensitivity of better than $1 / 2$ microvolt per meter. Selectivity of
1000 times at 10 K . C . off resonance. Noise level so low as to be 1000 time
negligible.
negligible.
2. Intermediate ascillator for $\mathbf{C} . \mathrm{W}$. code reception, also valuable as a 2. Intermediate ascillator for C. W. code reception, also
"station finder" in searching for weak phone stations.
"station finder" in searching for weak phone stations.
3. Band spread tuning at all frequencies within the range of the receiver.
4. Smooth control of sensitivity; tone control for noise suppression; vernier tuning controls.
5. Isolantite coil forms, coil sockets and condenser insulation. Litz wound Intermediates. Complete shielding. Instrument type control panel.


That the "Pro" is a remarkable and unusually efficient receiver is perhaps best attested by the character of its users. To enable you to judge the "pro on this basis the following partial list of prominent users is provided: Bell Telephone Laboratories, Internationa! Tel. \& Tel. Co., National Broadcasting Co., Columbia Broadcasting System, American Radio News Service, American Airways, Eastern Air Transport Co., Northwest Airways, Transcontinental and Western Air, Inc., Canadian Signal Department, Naval Reaearch Laboratory, Marine Signal Corps, War Department Message Center, Naval ObMarine Signal Corps, war Department Message Center, Naval for communications, air-port, broadcasting, police and other equally imcommunications, air-port, broadcasting, police and other equally important services, the Pro is so easy to tune that even the novice can ment. Operators of amateur stations, especially phone stations, praise the receiver highly for its ultra-selectivity, low noise level and its efficient band-spreading tuning system. Shipping weight 61 lbs . The "Pro" for A. C. 110 volt 60 cycle operation

N13833-- "Pro" Receiver, less tubes. List $\$ 150.00$ Your Cost.
883.11

N13835-"Pro" Receiver, with tubes. List $\$ 162.55$
Your Cost.
${ }^{5} 95.00$
N13836- "Pro" Chassis, less tubes. List $\$ 1.35 .00$ Your Cost.
\$79.38
The "Pro" for battery operation, listed below, uses four " 39 s ", two " $36 \mathrm{~s}^{\text {" }}$ and one " 89 ". Shipping weight 48 lbs.

N13838-"Pro" Receiver, with tubes. List $\$ 138.60$
Your Cost.


Here at last. The last word in A. C.-D. C. Portables. The set the entire country has been waiting for. A strictly Universal set, can be used country has been waiting for. A strictly eitiversal set, can . C. Ased honest-to-goodness Portable Set that beats them all. It uses the latest honest-to-goodness Portable Set that
The "Pal" employs five tubes, but takes up less space than the ordinary The "Pal" employs five tubes, but takes up less space than the ordinary
four tube portables. Was designed and assembled to meet the popular four tube portables. Was designed and assembled to meet the popular has been attained throughout in sensitivity, selectivity volume and tone, due to the fact that every unit in this Kit was selected with this purpose in view.
First, it uses the newest and most powerful type tubes that could be employed, such as the latest type small envelope '43 power output pentode, as well as the 25-2-5 Rectifier; the ' 43 with an amplification factor far in excess of anything yet developed in this type tube, the rectifier a new voltage doubler, doubling the input voltage, and eliminating power transformer entirely
Then the circuit, simple but most effective and designed to obtain the maximum from every tube and part used in the set.
Lastly the parts, chosen for their quality, compactness, adaptability and efficiency. Simplicity has been the keynote throughout so much so that even a novice should be able to complete the assembly and wiring of even a novice should be able
The set has excellent sensitivity, bringing in locals with a small antenna; distance stations with a fifty foot zerial. Selectivity is exceptional in distance stations with a fifty foot aerial. Selectivity is exceptional in
spite of the few tuned circuits, due to improvement in coils, compact spite of the few tuned circuits, due to improvement in coils, compact accurately matched condensers, and in part to the fact that its sensitivity
is such that only a small antenna is needed. No ground is ever used on is such that only a small antenna is needed. No ground is ever used on
this type set, as the circuit is connected tr the light line one side of which this type set, as the cir
is generally grounded.
is generally grounded. ordinarily obtained from large size Receivers. Volume is more than ample. Finally the "Pal" is compact in every sense of the word; can be packed in a corner of the traveling case.
All parts for the Lafayette "Pal" are included in a complete Kit which contains resistors, condensers, coils, sockets, ete., and also a drilled metal

## Service Men <br> Set Builders

 Take Advantage of the Enormous Demand Build the Universal A. C.-D. C. Lafayette "Pal" Portable with Dynamic Speaker
## For Yourself For Customers For Friends

chassis, tubes, and matched dynamic Speaker. In addition complete instructions and diagram are provided with each Kit, so that successful operation of the "Pal" is pre-assured
Plug the "Pal" into any A. C. or D. C. 110-120 volt socket. It will work well anywhere. Shipping weight 9 lbs.
N13840 -Complete Kit Lafayette "Pal" Portable. Includes all parts, drilled chassis, matched dynamic speaker, matched set of tubes, instru tions and diagram.
Your Cost.
\$11.95

N13842 Special Metal Cabinet of artistic design.
Your Cost.
${ }^{\text {s }} 1.50$
N13843-Special leatherette carrying case.
Your Cost
$95^{\circ}$
N13844-Schematic Diagram, liat of parts, and complete instructions free with Kit. if purchased separately Your Cost
$25^{\circ}$


## $\mathbb{N} A T \| O \mathbb{N} \mathbb{A}\langle\mathbb{N}>S . W$. RECERVERS

New National S.W. Receivers SW. 58 and SW.34


Where utmost sensitivity, with extremely low background noise level, together with u:cequalled flexibility and ease of control is required, these receivers are outstandingly in a class by themselves

## A. C. SW-58

Complete set of parts for 5 tube A. C. 58 Short-Wave Receiver using two type 58, variable-Mu Pentodes (or 227) first Delector, type 56 245 output tubes for 110 volts, 60 cycle A. C.
N13850 List less tubes and powe supply 579.50 Your Cost Each.. $\$ 4.75$

## N13851-As above completely wired

 Your Cost Eachs52.63

## D. C. SW-34

Complete set of parts for SW-34 for battery operation. Employs two type 234 Variable-Mu screen grid R.F. and Detector, type 230 first audio and two type 231 output tubes.
N13852-List less batteries and
tubes $\$ 75.00$
Your Cost N13853-As above, completely wired and tested. $\$ 49.98$
Your Cost.....


## National 3

## Tube Thrill Box

The sensitivity of the SW-5 is so grest that the push-pull stage is seldum, if ever, used when the recelver is being employed in amateur communication work. Same circuit, and all other essential festures, as the famous SW-5, except for a more compact layout and the elimination of the last or push-pul stage. It is designed especially for air craft, portable and amateur communication use
A highly desirable feature found only in this recelver is the calibrated volume control, which thus serves as an audibility meter A. C. Model-Uses 2-'68s and 1-'22

N13817-List $\$ 35.50$
$\$ 20.83$
Your Cost (less coils)
Complete with three sets of band spread coils for $20-40$ and 80 meter bands. Coils to cover other bands may be selected from page 98. Less tubes.
N13818 List $\$ 55.00$
Your Cost.
s32.34
D. C. Model-Usee 2-'36s and 1-'37. May be operated from a filament transformer and "B" batteries or a filament transformer and "B" eliminator. Less tubes and coils.
N13819-List $\$ 35.50$
Your Cost
Complete with 3 sets band spread, coils N13820-List $\$ 55.00$
Your Cost.
520.88
${ }^{\$} 32.34$

## New National-S-Meter Receiver

Complete set of parts for newly designed receiver covering range $31 / 2$ to $71 / 2$ meters. Coils also furnished for use on amateur 20 and 30 meter phone bands. Receives ultra S. W. transmissions now on the air, including television programs, experimental airplane beacon nignals (U. S. Navy), amateur phone transmitters. Extremely high signal-to-noise ratio. Single-control tuning. tivity control, push-pull Pentode power output for loud-speaker oper tion. Made for full A. C. operation. Ready to operate N13816-List $\$ 89.50$ (less power supply)

## Your Cost Special

N13822-Power supply completely wired. List $\mathbf{\$ 3 9 . 5 0}$ Your Cost

## National "AGS" <br> Communication Type S.W Receiver

The National "AGS" is a professional type Short Wave Receiver developed by National Engineers in conjunction with the Airways Division of the U.S. Department of Commerce and isiguaranteed to provide the finest possible type of recelving equipment. Extremely high sensitivity and selectivity, combined with easy operation, rigid con struction to maintain frequency calibration and dependability o performance are outstanding features. Nine tubes are used (4-236s, 4-237s, and 1 -238) in circuit comprising a stage of
tuned R. F. and first detector using screen-grld tubes; a high frequency oscillator; two stages o extremely selective high-gain screen-grid 1. F. amplification I. F. power detector; automatic volume control working in con junction with both R. F. and I. F amplifiers; beat frequency oscillator and pentode output for phones or loudspeaker.


## PRINCIPAL FEATURES

 Single dial ( $270^{\circ}$ ) straight fre quency tuning. Calibration curves and station chart. Coils changed from front panel. Automatic and Manual volume con trol. Extremely rigid mechanics construction Relay rack mount ing (size $8^{3} \times 19^{\prime \prime}$ ) Frequency ghe 2400 to 15,000 quency Heterodym osillator for Heterodyne oscillator for C. W reception.N13856 Completely wired and laboratory-tested with coils to cover 15000 to 2400 K . C. (less tubes).

## Your Cost

$\$ 161.70$
Power Supply for AGS
AB. Wired Power Supply for above Receiver, on $105-120$ volts,
50-60 cycle A.
Your Cost
(Less Tube)
s20.58

## National Power Units

## For A. C. S-W Reception

N13810-5880-AB-S-Completely wired power supply for use with the ACSW-45 and 58 Thrill Box using the ' 45 tubes in the output stage on 105-120 volts, $50-60$ cycle current supply. Leess tube List $\$ 39.50$ Your Cost
s 23.22
N13812-5580-AB-S220-Completely wired power supply for use with the ACSW-45 and 58 Thrill Box using the ' 45 tubes in the output stage on $220-230$ volts, $50-60$ cycle current supply. Less tubes. $\$ 23.2,24$
List $\$ 39.50$. Your Cost .................................

## National "58C" <br> Communication Type S.W Receiver

The popularity of the National Model SW-58 Short Wave recelver and the growing demand for rack panel types had led to the develop ment of the NATIONAL " $58 \mathrm{C}^{\prime}$ " which is essentially the same as the SW-58 in circuit detail except for its rack panel construction and an added stage of R. F. The SW-58C has two tuned circuits, uses the new 58 tubes as R. F. and detector, 227 as first audio and a pair of 245 s as final audiostage. It is adso avallable for 234, 230 and 231 tubes for air cell battery operation. A set of four coils which plug in on front of panel cover the frequency range of 2.6 megacycle to 22 megacycles while special coils are available for extendABS. Wired Power Supply for 58-C. Cost (less tube)

ing the range to include all freouencies between 150 kilocycles and megacycles. Panel is blaok erystaline finish and dial is 270 degree, stralght frequency line tuning. Aluminum case. N13855-Completely wired and laboratory-tested with coils to cover . 6 to 22 M. C.

Net Price
(less tubes).
${ }^{5} 83.30$
${ }^{\$} 23.23$

## National Ultra High Frequency Converter

Designed particularly for use in the 56-60 MC smateur band, which is spread over approximately 100 dial divisions. All the features of first detector and oscillator of the U. H. F. Receiver described above are incorporated in this converter, with the addition of a special I. F. transformer and a low impedance output coupling tube. Suitable for use with either the six-volt D. C. or $21 / 2$
 volt A. C. tubes. The combination of these points results in a unit of unusual sensitivity $9 \times 10 \times 7$ ". Tubes, $2-224$ or $2-236,1-227$ or 1-237.
N13861-Type HFC-58 Converter. Complete set of parts in Metal Cabinet (less tubes). List $\$ 39.50$
Your Cost.
23.22

Magravod

## Dynamic Speakers

Magnavox, Leaders in the Radio Reproducer field since 1911, have put the experience gained in its twenty-two years of leadership, into every speaker and part manufactured. All were developed for maximum performance in the field for which they were designed, with finest tonal response throughout the entire range-Newest models are more compact. A complete set of speakers for all purposes are included in the latest models for "Midgets" consoles, and for auto use in both battery and eliminator type sets, as well as a line Magnavox quality assures you of long life and trouble free performance.

## Model 150



An ideal chassis for Midget type receivers; a compact, powerful reproducer. The tone is rich, full, true and natural. Response uniform throughout the audlo range. Has a 2500 ohm tield. Cone dia. $6^{\prime \prime}$; depth $4^{\prime \prime}$. Shipping weight 9 lbs.
W19325-For single or push-pull 45 s .
W19326-For single 47s.
W19327-For push-pull 47s.
No. 150-X. This model is the same as above, but has an 1800 ohm field, tapped at 300 ohms.
W19328-For single 478. List $\$ 7.50$
Your Cost Either Type.
$\$ 4.40$

## Model 152

This speaker constructed of the finest grade materials, has an excellent response over the entire audio range with plenty of volume. Cone dia. $10^{\prime \prime}$ : depth $639^{\prime \prime}$. Has a 2500 ohm field. Carries 10 watts without distortion. Shipping weight 10 lbs .
W19333-For single or P-P 45 s. W19334-For single 47s.
W19335-For P-P 47s.
. List $\$ 10.50$ (either type)
Your Cost Either $\$ 6.18$

## Model 154

Similar to but larger than the No. 150. Its size makes It suitable for all consolettes. Has depth and richneas of tone, with even response. Has a 2500 ohm field. Cone dia. $8^{\prime \prime}$; depth $41 / 5^{\prime \prime}$. Handles 7 watts easily and without distortion. Shipping weight 8 lbs.
W19329-For single or P-P 45N. W19330-For single 47s. W19331-For P-P 47s. List $\$ 9.50$ (either type) Your
Type.

## Model

## "Midget" Model

This midget is the very latest, and embodies all of the high qualitles of the larger sized Dynamic Speakers. It was developed to meet the demand for an extra small speaker, especially desired in compact sized "Midget" Radio Receivers. Has volume, tone and reproduction to meet the most exacting demands. With 2500 ohm field. Cone dis. $5^{\prime \prime}$. Shipping weicht 6 lbs. W19348-For single 45s. W19349-For single 47s. List either type $\$ 5.00$
Your Cost Each
s2.94

## Magnavox Permanent Magnet <br> Dynamic Speaker

This dynamic speaker was designed as a replacement for magnetic, as well as insensitive dynamic speakers. No field excitation. Acoustic properties of the highest. Ideal for battery sets, also school and hotel installations. Overall size $101 \mathrm{~s}^{\prime \prime}$; depth $51 / \mathrm{m}^{\prime \prime}$. Shipping weight 11 lhs.
W19323-For output of 71 As and $45 s$ W19324 For output of 38 s . List $\$ 12.50$ Either Type.
57.35

## RCA Photophone Dynamic Speaker

Designed for use in Western Electric Sound Installations, Theatre Sound Systems, Auditoriums and Dance Studios. One of the most powerful reproducers ever built. Nothing better for public address use. A monster in size and output. It will handle an undistorted output of 15 watts. The field resistance is 1000 ohms. Voice coll impedance 8 ohms. For our large public address systems listed elsowhere in this catalog, we have highly recommended and have included in the complete systems this photophone speaker. This speaker mounted on the special baffle board will reproduce faithfully diameter is $15^{\prime \prime}$. Shipping weight 110 lbs . For D. C. field supple. No output transformer supplied.
W19203-List $\$ 110.00$
Your Cost Special.
${ }^{5} 12.50$

## For A. C Operation- 115 V. 60 Cycle

Same speaker as above, equipped with special rectifying unit, using a single 280 tube, for supplying sufficient voltage and current for operating the above speaker, This combination gives absolute humless reproduction. Shipping weight 120 lbs . 115 volt, 60 cycle. Your -Complete Photophone Speaker and Rectifying Unit Tube. Your Cost,
Special

## The hew MasAMCNTE DYNamic Speakers

These new Lafayette Dynamic Speakers, designed for maximum performance, and embodying every worth while feature used in speaker construction, are made under the direct supervision of the M agnavox engineers. Made of the highest quality materials obtainable, and subjected to every conceivable test, they are unsurpassed in tone and volume. They fully measure up in every respect to our demand for an outstanding leader in this field. The response is uniform over the entire audio range. Has a remarkable fidelity of reproduction, with a clear rich natural tone. We unreservedly recommend them to all our customers, believing them to be the finest produced at anything near the prices quoted. They are furnished with a 2500 ohm field.

Model "MA" A compact little unlt only $61 / 2^{\prime \prime}$ in diameter, $4^{\prime \prime}$ deep. Handles watts. Shipping weight 8 lbs. W19280 Single or P-P '45s. W19281-Single '47s.
List $\$ 8.50$
$\$ 3.41$

## Model "MB"

A slightly larger unit suitable for larger midrets and consoles Cone 8 inches. Depth $44 / 2$ inches. Shipping weight 9 lbs.

## W19288-For single or P-P ${ }^{\mathbf{4}} 45 \mathrm{~s}$. W19289-For single 47 s . List $\$ 10.00$ <br> Net. <br> s. 4.50 <br> Model "MC" <br> The most popular gize for consolea; 101/ "cone; $6^{\prime \prime}$ deep. Shipping weight 10 lbs . <br> W19284-Single or P-P'45s. W19286-For single ${ }^{4} 478$. List $\$ 12.50$ <br> s5.50

## Victor Replacement Speaker

This dynamic speaker, manufactured by Magnavox, is designed expressly for the Victor R-32, RE-45, R-52, RE-75 and other models of this type. Has the same identical characteristics, including height and depth; diameter of cone; cord and plug; field; etc. Scientifically designed for maximum volume, witt. full rich tone. Response uniform over entire musical range, with fidelity of reproduction. Only the highest grade of material and workmanship used; the finest grade of wire. machine wound, insuring uniformity in its coils; Cone is a superior special milled parch-
 tering Rered accurately, eliminateal as a replacement wherever a 3000 ohm field speaker is required. Case is black finished. Overall size 91.4" high; $9^{\prime \prime}$ wide; $6 / 4^{\prime \prime}$ deep. Shipping weight 12 lbs .
W19391-List $\$ 20.00$
Your Cost Each
Best "Midget" Magnetic Speaker
A "Midget" magnetic speaker only 5 " overall. with high sensitivity and fidelity of reproduction never before obtained from a speaker of this type. Unit will handle about 112 wasts and supplied to match any of the standard power tubes. $2 \frac{1 / 8 "}{}$ deep. Shipping weight 2 ibs.
Wi9 W19392 -
Your Cost
s2.25


## Best "Midget" 5" Dynamic Speaker

This "Midget" aynamic speaker, only 5" overall, has a practically flat response, with good reproduction. Input transformer supplied to match any standard power tube. Supplied with 2500 ohms. In two models Wí9393-For P-P 71s and P-P 45s. W19394-For single 47 . List $\$ 5.00$
2.45

## Sparton Replacement

 SpeakerThis brand new Sparton Replacement Dynamic Speaker, is a marked improvement over the old models used in the Sparton Receivers. It was carefully designed for maximum volume, and has a lifelike sparkling tone, rich in its fullness and depth, without stress. Its reproduction of orchestral music is amazing in its definition. The chassis is of heavy gruge metal, rigidly supporting the cone, which is of the best grade parchment. The
 cone is suspended with the finest quality tanned leather, and is accurately center. Has a field coil of 5000 ohms, making it a desirable speaker for Loftin White Ampliners and the like, for which it is especially suitable. as well as a repiacement unit Shipping weight 11 lbs .
W19399 For 301-A. C., 600, 610, 620 Models.
List $\$ 15.00$
Your Cost

# |lensen <br> ERECTRO.DYNAMIC SPEAKERS 

## Jensen Auditorium Models



Years of constant research and improvement in previous Jensen Auditorium Electro-Dynamic Speakers now leads to the new Auditorium Models the most progressive step ever made in eloctro dynamic speaker design. In sound output these new Auditorium Speakers are $400 \%$ more efficient than the conventional type Bass response is unusually good, without any "boom" effect. Jensen Auditoriun Speakers are fully capable of handling continuously 15 watts of energy, but the sound output from 15 watts electrical input is at least three times greater than that from other speakers of equivalent cone area. Construction and performance are area. Construction and performance are beyond comparison. Dimension beight, $13^{33 / 2}{ }^{\prime \prime}$; depth, $813 /$

For 110 Volts A. C.
W19246-For P-P 45s, 50s W19197 For P-P 468
s39.69
List 567.50-Your Cost
and are priced
niticimade
For $\mathbf{1 1 0}$ Volts D. C. $\mathbf{2 5 0 0}$ Ohm Field
W19248 - For P-P 45s, 50s
W19198 For P-P 468
${ }^{\text {s }} 26.45$
18t $\$ 45.00$. Your Cost
ormers and can
Auditorium Models are equipped with input
be furnished to match all standard impedances.
Jensen Permanent Magnet Speaker


A high grade Dynamic Speaker, scientifically constructed of the finest materials, requiring no field excitation. Designed and developed for use in battery receivers, auto sets, also where A. C. or D. C. current is not available. Where magnetic speakers are used and the tone is thin and flat, it will fill the requirements for Dynamic Speaker reproduction. Has a unlform response over entire audio range. The field excitation is supplied by the permanent magnet, and does not diminish in strength. Is $9^{i 13} /^{\prime \prime}$ high 9 " wide; $51 /$ " $^{\prime \prime}$ deep. Shipping weight 11 lbs. W19234PM1-For 45s W19249 For 368 or 47 s W19196-For P-P 89s S8.82

## Wright DeCoster Speakers

With its operating flux of 145,000 magnetic lines in the air gap extreme senslnetic lines the air gap extreme sensed. tivity without distortion is assured. On official tests these ungifiers having an undistorted dled amplifiers having an undistorted output of 25 watts without developing
any rattles or showing signs of breaking any ra down.
No finer reproducer has ever been designed for public address work than the famous Wright DeCoster. Shipping weight 45 lbs. each. Dimensions $12^{\prime \prime}$ wide, $914^{\prime \prime}$ deep, $121 / /^{\prime \prime}$ high. Model 207: For 115 volt, 25-50-60 cycle A. C., with output transformer. W19300-List $\$ 72.50$

## Your Cost.

Model 208: Same as Model 207 except without output W19305-List $\$ 68.50$ Your Cost.
Your Cost ....................................................
Model 205X: For 110 volt D. C., 750 ohm field. With output trans former
W19301-List $\$ 52.00$
Your Cost Mod 10.30 W19306 Your Cost
: For 110 volt D. C., 750 ohm field. No output transiormer W19304-List $\$ 34.80$ Your Cost Model 215 : ( $10^{\prime \prime}$ cone). For 220 volt D. C. 2500 ohm field transformer W19303-List 534.00 . Your Cost Model 217: ( $10^{\prime \prime}$ cone). For 100-120 volt C 25-50-60 W19308 List $\$ 50.00$. Your Cost

${ }^{5} 42.60$
s27.64
d. With output 40.18 s30.50

Jensen Auditorium, Jr. Model D-8-G is the latest addilion to the Jensen line. Is used as a monitor in theatres, or recording studio play-backs. Excellent uniformity of response. A. C. unit employs a high voltage rectifler system. Input transformer supplied for operation with type so or smaller type tubes. Posts are arranged so tubes connected in push-pull parallel or singly. may be properly connection. $110^{\prime \prime}$ deep. Shipping
weight 21 lbs.
A. C. MODEL

W19235-P-P 45 or 50 . W19236-P-P 47 s. W19237-P-P 46s. List $\$ 35.00$
Cost
Cost.
M
60 el D-15 A. C. Of standard design this model is for 110 volts A. C. 60 eycle power supply, and with transformer suitable for push-pull 458 , 47 s or single tubes. Specify type. Shipping weight 12 ihs. Overall W19249 ForP-P45s. W1922s ForP-P47s. List 520.00 St Your Cost
Model D-9 A. C. Is an all purpose speaker uspd with radio set amplifer or other amplifier system. For 110 volts A. C., 60 cycle. Transformer for P-P $45 \mathrm{~s}, 47 \mathrm{~s}$ or single tubes. Specify type. Shipping weight 14 lbs. Overall tize $1012^{\prime \prime}$. Cone diameter $914^{\prime \prime}, 51 / 2^{\prime \prime}$ deep. Shipping weight 14 !bs.
W1924_ForP-P45s. W19245 ForP-P478. List $\$ 25.00$.
Your Cost. . . . . . . ....................................

## Jensen Concert Model

## This new Concert Model is avallable in

 four types, and was designed for the lateot model radio receiving sets. Their rugged construction and high efficiency make them capable of handling' high inputs with remarkably natural reproduction and tone. Their performance is fully equal if not superior to much higher priced models. Equipped with Jensen Tym-Flex Cone which can he readily removed without disassembling the entire speaker. Cone has the special centering device. The response is unusually uniform throughout. Tone is full, rich and natural, without stressing. Available in standard design, but may also be had with any design for particular operating requirements. All these types for D. C. operation, include a 2500 ohm field ments. All these types for D. C. operation, include a 2500 onm feld coil, of the highest grade wire, machin$18^{\circ}$ cord. Furnished in brown finish

$$
\begin{aligned}
& \text { Model D-19 } \\
& \text { ismeter } 10^{\prime \prime}
\end{aligned}
$$

Overall diameter $10^{\prime \prime}$. Shipping weight 13 Ibs.
W19192 Single or P•P 45R
W19193 Single or P-P 47s
List $\$ 10.50$.
Your Cost
$\$ 6.15$
Model D-16

## Overall diameter $8^{\prime \prime}$. <br> Shipping

 weight 8 lbs.W19238 Single or P-P 45 s Lint $\$ 9.50$.
List 59.50 .
$\begin{array}{ll} \\ & 5.58\end{array}$


Overall diameter $6{ }^{\circ}$ Mod weight 7 lbs.
W19194-Single or P-P 45 s W19195-Single or P-P 47 s List $\$ 7.50$.
Your Cost.
Nodel T-1
Overall diameter $5^{\prime \prime}$. weight 6 lhs.
W19187-Single 458 W19188 Single 47s List $\$ 5.00$. Your Cost

D. C. MODEL W19189-P.P 45 s or 50 s . W19190-P-P 47 s.
W19191-P-P 46 s. W19191-P-P 46s. List 522.50 List 52

## Wright DeCoster Model No. 225

A smali speaker which is exceptionally efficient on both the highs and the lows. Servicemen anxlous to please their customers will make more of an impression substituting this Midget Speaker for any small speaker which is not giving perfect satisfaction
This new epeaker is suitable for installations in all sound and reproducing instruments used indoors. sound and reproducing instruments used indoors. Has a standard field resistance of 2500 ohms and output transformer to match impedances listed belo. 110 volts D.C.Shipping weight 18 ibs 8 for 110 volts D. C. Shipping weight 18 lbs. W19318-For single or P-P 45 s . W19319-For Single 47 s . W1.320 For P-P 47 s .

## Wright DeCoster "Midget"

Made especially for high quallity instruments, and is consintent with Wright DeCoster high standards.
This new "Midget" Dynamic Speaker has a remarkable volume, with clear undistorted tone. It was designed to meet the demand for a amall dynamic speaker, with all of the high quality characteristica of the larger sizes. The fidelity of reproduction is splendid. Cone is $41 / 2^{\prime \prime}$ : larger sizes. The $6 \frac{1}{10}$; depth $3 \% \mathrm{~g}^{\mathrm{m}}$. Is furnished with 2500 ohm field. outside diameter 6 /b;
Shipping weight 6 lbs.
Whipping weight 1931 For single 45 s .
W19316-F
List 57.50
W19317-F or single 47s or 38 s .
Your Cost
s.40

[^0]
## RCG) Lowest Prices on Genuine RCG Speakers


R.C. A. Victor

Radio Speaker

Cunsista Maynetue Speaker Chassis, selected for this unit, mounted on a Walnut twotoned Panel, which is $131 / 2^{\prime \prime}$ high; $1142^{\prime \prime}$ wide and $11 / /^{\prime \prime}$ deep. Has a brown metal ornamental Grille, backed with Bronze Cloth. Speaker is enclosed in heavy fibre protective covering heavy fibre protective covering
Cone diameter $9^{\prime \prime}$; depth $51 /{ }^{\prime \prime}$. Cone diameter $9^{\prime \prime}$; depth $51 / /^{\prime \prime}$ special tapped impedance transformer, and selector switch. Controls for transformer and selector are mounted in the lower corners of the front panel. Can be used wherever a high quality Magnetic Speaker is desired. Excellent response to high and low frequencies, without stress, and with full natural reproduction; with plenty of volume. Shipping weight 10 lbs . W19170
Your Cost Special.
s.95


## R.C. A. $100 \cdot$ A

## Magnetic Chassis

This is the famous 100-A Magnetic Speaker Chassis, housed in a strong protective Fibre Casing, faced with an Ornamental Grill; finished in Brown. This Speaker Unit, one of the most popular of its type, consists of the Cone, Frame, Magnet, Motor Mechanism and Filter Unit. The method of mounting the complete unit provides easy access to the different parts. The simple and rugged design of this Loudspeaker makes it practically trouble-proof, and permits easy and simple adjustments if at all necessary. Acoustically this speaker gives an excellent response to all frequencies employed in the broadcasting of both music and speech; electrically it is of the electromagnetic type, and is provided with a special filter for eliminating high frequencies that are not in the acoustical range, which would be reproduced as noise and distortion if the filter was not used. This is a remarkable bargain at price quoted. Shipping weight 5 lbs. W19172
Your Cost for Entire Unit
$\$ 2.95$


## R.C.A. 106 A.C. Dynamic Speaker Chassis

 Latest ModelThe tremendous power handling capacity of this fine reproducer makes it especially suitable for de luxe radio installations. One
$\therefore$...... Chassis, mounted in Metal Frame $14^{n}$ high $12^{\prime \prime}$ wide. Cone diameter is $10^{\prime \prime}$, depth $6 \frac{1}{2}$ A heavy gauge metal case is mounted to the frame below the field coil, containing Transformer, supplying the filament voltage for the typer, 80 rectifier, with a high voltage field type 80 rectifier, with a high voltage feld winding; filter condensers; output trans-
former and socket for rectifier tube. Transformer is tapped and speaker can be used for single or push-pull '71-As, 458 or 50 s . An exceptionally fine Dynamic Speaker, for 110 volt, 60 cycle A. C. Has an absolute tone fidelity and a remarkably even response throughout the range of all frequencie wis171 audible band. Shipping weight 23 lbs W19171-Your Cost Less Tubes

ST2.50

## Victor A.C. Dynamic Chassis

One of the latest Improved Dynamic Speaker Chassis, of new type construction similar to the RCA No. 106, but with larger field. One of the most rugged chassis designed. Used for radio receiver amplifiers, power amplifiers, public address systems, etc. For 110 volt 60 cycle A. C. Deaigned for push pull 458 or 47 s Has tremendous volume, full tone without stressing and faithful reproduction, with a practically flat response curve Equipped with power transiormer, filter condenser, etc., for its field supply, output transformer rectifier socket cord and plug. Has a field impedance of 7500 ohms. Specify type when ordering. Overall size $111 / /^{\prime \prime}$ high; $10^{3 / 4}{ }^{3}$ wide; $5 \% / g^{\prime \prime}$ deep. Cone diameter overall $10^{\prime \prime}$; inside diameter $71 / \mathrm{a}^{\prime \prime}$. Shipping weight 30 lbs . W19175-For push-pull 45 s . For push-pull 47 s . Wi9175-For push-pull 458
Your Cost (Either Type).
. 9.95

Walnut Speaker Cabinet Will fit any Dynamic or Magnetic Chassis up to 10 in. Dia.


This is a high grade fine quality Walnut Speaker Cabinet artistically and ex pensively designed by one of the largest cabinet manufacturers. Front frame of cabinet is of a fine walnut in a deep rich grain. The grill is in a slightly contrasting tone, with a dull finish and is backed with a gold bronze cloth. This is a cabinet that will materially enhance any surrounding in which it is placed. Constructed throughout of the ished. This is one of the best values in cabinets at the price quoted. Sides of cabinet are reinforced. Size $16^{\prime \prime}$ high; $14^{\prime \prime}$ wide; and $10^{\prime \prime}$ deep. Shipping weight 10 lbs.
R. C. A. Radiola Speaker Filters

## For Model 100-A



This special unit comprised of a filter choke and condenser, can be installed on any type of magnetic speakers. It gives that rich mellow tone, and brings out the bass notes. By substituting this filter in place of the one on Model 100-B and 103 speakers it will give you the same tone quality so well known to the Model 100 A . Size is $11 / /^{\prime \prime}$ high and $183^{\prime \prime}$ in diameter. Is equipped with two mounting brackets. RCA Part No. 1969. Shipping weight 1 Ib .
Your Cost Each
$20^{c}$

## For Models 100-B and 103

Is very similar in appearance to the above fliter, but its characteristics are to emphasize the high notes of the speaker reproduction. This unit may also be installed in place of the one in 100-A Speakers and will modify the tone and bring up the high notes. RCA Part No. 5853. Shipping weight 1 lb. $20^{c}$


Celotex Dynamic Speaker Baffles

## Thismaterial

 is ideallor speaker bat lles, its nonresonant qual itymakesit far superior $t$ n wood for the purpose. Is inexpensive and without doubt the finest sound insulator ever developed-guaranteed to be sound-proof On the two sizes below quoted without hole, add 50 c to net price if hole is desired and specify size of hole. Shipping weight $21 / 2$ lbs. to sq. ft .|  | Size |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Inches | Size of Hole | Net |
| Y19793 | $12 \times 12$ | $7{ }^{1 / 2}$ or 9 " | \$ . 30 |
| Y19794 | $18 \times 18$ | 7 \%h or $9^{\prime \prime}$ | . 80 |
| Y19795 | $24 \times 24$ | $71 / 2$ or $9^{\prime \prime}$ | 1.40 |
| Y19796 | $36 \times 36$ | 9" | 2.63 |
| Y19797 | $48 \times 48$ | 9 " | 4.40 |
| Y19798 | $36 \times 72$ | No Hole | 5.30 |
| Y19799 | $48 \times 72$ | No Hole | 7.05 |

## UtahStadiumA.C.124"Cone

This Speaker is used in Power Amplifiers, Public Address Systems etc., using ' 45 or ' 50 ty pe tubes. Is for 110 volt A. C., 60 cycle supply, and with transformer sultable for either single or push-pull 45 s or 50 s Has 6 volt dry rectifier. Overall size 113 自" wide; $121 /{ }^{\prime \prime}$ high; 71/6" deep. Cone diam eter $10^{\prime \prime}$. Shipping weight 20 lbs .
W19215-For single 45 s.
W19298--For single 50s
Your Cost.
W19216-For P-P 453
W19299-For P-P 50 s
Your Cost.
$\$ 6.95$
${ }^{5} 8.45$

## Stewart-Warner Dyphonic Speaker Chassis

Here, without doubt, is one of the most sensational speaker bargains ever offered in the history of radio Stewart-Warner-a name with a history of remark able success-offers a remarkable product at remarkable price. This excellent speaker gives clear dynamic tone and volume, without distortion Sturdily, compactly built. Cadmium coated against rust. Individually packed in original sealed cartons for your protection. Shipping weight 5 lbs W19214-
Your Cost
${ }^{5} 1.95$


## Speaker Replacement Parts

RCA Radiola Speaker Cone


W19559 Your Cost, Special W19576 Your Cost

## Replacement Cones for Standard Speakers

## Stock

 W19500 Set or Speaker Diam. Cour W19501 Atwater Kent $53-55-76$ W19502 Atwater Kent 87-89 W19503 Bosch 20 W19505 Bosch 31 W19505 BoschW19506 Bosch. . Brunswick Model D W19508 Brunswick Model 15 W19509 Brunswick Model B
W19510 Brunswick Model E W19511 Colonial Model 33. W19512 Colonial Model LL 18 W19513 Crosley Model 40S W19514 Edison R4, R7, R57 W19515 Everready W19516 Everready..... NR 80-95 W19518 Jensen D4 W19519 Jensen D7 Concert 19521 Jens D9, W19521 Jensen D9, outer spider $W 19522$ Jensen D15, inner spider. W19523 Jensen D16. W19524 Jensen Auditorium W19525 Magnavox
W19526 Magnavox W19527 Magnavox W19528 Magnavox
W19529 Majertic Gió Midget W19530 Majestici G1 W19531 Majestic G2 W19532 Majestic G3 W19533 Majestic G5, W19535 Majestic G13 W19536 Newcomb-Hawley W19537 Oxford, two-pointspider. W19538 Oxford, three-point spider Oxford
W19540 Peerless Copper Coil W19541 Peerless Copper Coil. W19543 Peerless Copper Coil W19544 Peerless Wire Wound W19545 Peerless Wire Wound
W19546

Philco
W19547 Philco 20, 21, 70, 90 large W19550 Philco 86. W19551 Philco 511 W19553 Philco 50,5

W19554 RCA R-4, 6,
W19555 RCA 14, 18
W19556 RCA 34, 36
W19557 RCA 47, 48, 57
W19558 RCA 104, 105 .
W19558 RCA 104, 105
W19559 RCA 106
W19560 Rola Series "F W19561 Stromberg-Carlson W19562 Stromberg-Carlson
W19563 Temple
W19564 Temple
W19565 Temple Auditorium
W19566 Utah Cub
W19567 Utah Midget (i coil).
W19568 Utah
W19570 Utah Stadium
W19571 Victor RE 32-45.
$W 19572$ Wright DeCuster W19573 Wright DeCoster. W19574 Wenith 50, 52 . W19575 Zenith 50, 52

Brand New Gentine Victor Speaker Voice Coil and Cone Improved - Re-enforced R-32, RE-45, R-52, RE-75
 The genulne late improved type, the same as being used by Victor for replacement in
Models R-32, RE-45, R-52 and RE-75. Has re-enforced voice coil assembly, assuring you of a dependable replacement cone. Do not accept substitutes in place of this Victor cone. Due to our large purchasing offer you this replace-
ment cone at a low price. Shipping weight 41 bs . W19571 Your Cost, Special
$95^{\circ}$
Field Coil for Victor Speaker The genuine replacement for Victor Speakers used in model receivers, RE-75. Can also be used in other speakers. 3,000 ohms,
sistance. Size,
$31 / 2{ }^{\text {re" }}$ long, $31 / 2^{\prime \prime}$ over-all di-
a meter.

 | Shipping weight 9 lbs. |
| :--- |
| W19476-Your Cost............ |

## For RCA Photophone, 104 and 105 Speakers

The Genuine Field Coil used in the above speakers. Can also be used in other speakers using 1000 ohms, D. C. resistance, 100 volts at 100 mils. Size, $4^{\prime \prime}$ long, $4^{1 / 4}$ " over-all diam., $2^{2 \prime}$ hole diam. Shipping weight 13 lbs.
W19457-
Your Cost.............................
Apex-Gloriatone-U. S. Radio
and Television and
Montgomery-Ward Chassis 26
This is the genuine Utah Field Coil used in the above receivers. 11500 ohms, tapped at 9040.
Utah 7" S
W19450
Your Cost Each
${ }^{\mathrm{s}} 1.75$
RCA Radiola Magnetic Speaker
Motor Mechanism for Model 100 and 102
The genuine replacement unit, No. 707 ,
complete motor mechcomplete motor mech-
anism less magnet. Individually boxed. Guaranteed perfect condition. Shipping W19451 List $\$ 12.65$
Your Cost, Special


For Models 100-A, 100-B, 103 Speakers
Similar in appearance to above. RCA Part No. 1964 and 5854, motor mechanism. Shipping weight 5 lbs

## Wig452-List $\$ 9.80$

Your Cost, Special.
s 1.25
RCA Radiola Speaker Rectifiers
Part No. 5878, used in Part No. $\mathbf{~ M o d e l} 62$ receiver. SupModel 62 receiver. Can also be used for the 106 A. C. speaker, or any
speaker having a 1000 speaker havin

2.45

Your Cost Each
Per Pair


## Genuine RCA-Radiola Magnetic Speaiker Coils

RCA Part No. 1966, for RCA Model recei vers 30-A, 50 and 51 and all centralized radio magnet speakers. The official replacement magnet coils for the RCA speakers No. 100-A, 100-B and 103
D.C. resistance of 1200 ohms.Can also pe used for other speakers using this size coil. Size of each coil. 1 " ${ }^{\text {" diameter outside, } 1 \text { " thickness, } 1 \text { " }}$ hole diameter.
W19212
Per Dozen
For RCA-Radiola 100 Speaker, Western Electric 540-AW RCA Models $\mathbf{3 0 - V i c t o r ~ C o m b i n a t i o n s ~}$
The genuine replacement No. 708 magnet coils, used in many other speakers. Size, $81 /$ " $^{\prime \prime}$ diameter outside, " thickness, or " $^{\text {" }}$ hole diamete
Your Cost Each.
Per Dozen

| Replacement Field Coils |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock |  |  | $r$ |
| No. | Set or Speaker | Ohms | Cost |
| W19413 | Atwater Kent 53-55-65 | 650 | \$2.90 |
| W19414 | Atwater Kent 53-55-65 | 1750 | 3.20 |
| W19415 | Colonial 31-32 | 400 | 5.40 |
| W19416 | Colonial 31-32 | 6000 | 5.90 |
| W19417 | Colonial 33 A . | 2500 | 3.20 |
| W19418 | Colonial 33 A . | 6000 | 3.20 |
| W19419 | Colonial 33 D | 550 | 2.90 |
| W19420 | Colonial 33 D. C | 900 | 2.90 |
| W19421 | Crosley M 45 | 350 | 2.90 |
| W19422 | Crosley M 45 | 1500 | 3.20 |
| W19423 | Crosley M 45 | 2500 | 3.20 |
| W19424 | Everready $10^{\prime \prime}$ | 2250 | 3.20 |
| W19426 | Everready $12{ }^{\prime \prime}$ | 2250 | 3.20 |
| W19427 | Fada $P$ | 800 | 2.50 |
| W19428 | Jensen D4 | 2250 | 3.20 |
| W19429 | Jensen D7-D8 | 1500 | 3.80 |
| W19430 | Jensen D7-D8 | 2500 | 3.80 |
| W19431 | Jensen D9-D15 | 550 | 2.20 |
| W19432 | Jensen D9-D15 | 1000 | 2.50 |
| W19433 | Jensen D9-D15 | 1250 | 2.50 |
| W19434 | Jensen D9-D15 | 1650 | 2.90 |
| W19435 | Jensen D9-D15 | 1800 | 2.90 |
| W19436 | Jensen D9-D15 | 2500 | 3.20 |
| W19437 | Jensen D12 | 2300 | 3.20 |
| W19438 | Magnavor | 1000 | . 97 |
| W19439 | Magnavox | 1800 | 1.09 |
| W19440 | Magnavox | 2000 | 1.18 |
| W19441 | Magnavox | 2300 | 1.03 |
| W19442 | Magnavox | 2500 | 1.09 |
| W19443 | Magnavox | 3000 | 1.21 |
| W19444 | Magnavox | 5000 | 1.32 |
| W19445 | Magnavox | 7500 | 1.47 |
| W19446 | Majestic G1 | 2750 | 3.80 |
| W19447 | Majestic G2 | 2750 | 3.80 |
| W19448 | Majestic G5 | 1000 | 3.80 |
| W19449 | Newcomb-Hawle | 2500 | 3.20 |
| W19455 | Newcomb-Hawle | 7500 | 3.20 |
| W19456-57 Philco 65, 76, 77, Part No. |  |  |  |
| W19456 | 57 Philco 65, 76, 77, 86,87, 95, 96, 111 | $\begin{array}{r} \text { Part N } \\ 2850 \end{array}$ |  |
| W19458 | Philco 20, 21,..... | 2768 | . 75 |
| W19459 | Philco 50, 51, 52 | 02942 | 1.05 |
| W19460 | Philco 70, 90 | 02987 | 1.35 |
| W19461 | Philco 90, | 02988 | 3.00 |
|  |  | Ohms |  |
| W19462 | Peerless 8 $15 \mathbf{y}^{\prime \prime}$-10 | 575 | 3.35 |
| W19463 | Peerless 81/"-10 | 1500 | 3.95 |
| W19464 | Peerless 12 | 1000 | 3.80 |
| W19465 | RCA 57 | 15 | 2.90 |
| W19466 | RCA 57 | 1200 | 3.20 |
| W19468 | RCA 106 | 550 | 3.20 |
| W19469 | RCA 106 | 6000 | 3.35 |
| W19470 | Rola Series | 250 | 3.35 |
| W19471 | Rola Series | 1500 | 3.95 |
| W19472 | Rola Series F- | 1200 | 1.90 |
| W19473 | Rola Series F- | 1500 | 1.90 |
| W19474 | Rola Series F- | 1800 | 1.90 |
| W19475 | Rola Series F- | 2500 | 1.90 |
| W19476 | Rola Series F | 6000 | 1.90 |
| W19477 | Rola Series L | 15 | 2.50 |
| W19478 | Rola Se | 2500 | 3.20 |
| W19480 | Sparton | 5000 | 1.50 |
| W19481 | Stromberg-Carlson. | 2500 | 3.80 |
| W19482 | Stromberg-Carison | 7500 | 3.95 |
| W19483 | Temple (all models)... | 250 | 3.95 |
| W19484 | Temple (all models)... | 2250 | 4.20 |
| W19485 | Utah 9" | 2250 | 3.20 |
| W19486 | Victor 32-45-75 | 3000 | 1.75 |
| W19487 | Zenith 52 | 550 | 3.20 |
| W19488 | Zenith 52 | 2500 | 3.80 |
| W19489 | Zenith 52(early models) | 2500 | 3.80 |

## Theatre and Public Address Equipment

## Racon Dynamic Speaker Units <br> <br> Giant Unit

 <br> <br> Giant Unit}

A powerful Dynamic Unit especially designed for use with trumpet type horns. Handles 8 watis continuously or 25 watts peak. Ha 15 ohm voice coil and requires $6-8$ volts at 1.1 amps for field excitation. Ha ing horn or the trip!e coning horn described below Weight $\underset{\text { Wour }}{ } \mathbf{W}$ Less Transformer Your Cost Each
35.25

Coupling Transformers
A400 Coupling Transformer for above unit 500 ohms impedance. Your Cost Each

4000 ohms
$\$ 4.50$ A402-As above 4000 ohms.
Impedance. Your Cost Each

## Racon Master Unit

Similar in appearance to the above unit. Continuous operating capacity $6-8$ watts, peak 25 watts. 15 ohm voice coil; $6-8$ volts at 1.1 amps. field current. Weight 18 lbs. W19266-Your Cost Less
Coupling Transformer
$\$ 29.40$

## Racon Junior

Handles 6-8 watts continuously or 20 watts peak. 15 ohm voice coil. 6-8 volts at 1.1 amps . field current. Weight 11 lbs. Complete, Less Coupling Transformer W19267
Your Cost.
520.50


Racon Baby Continuous operating capac18 watts. Voice poak capacity Field current, 6 volts at 14 amp. Weight 9 Ibs. Complete, Less Coupling Trans-
former.
W19268-List $\$ 25.00$
Your Cost Each sh25. ${ }^{s} 14.70$
Racon Super Giant
Particularly adapted for theatre and auditorium. 6-8 volt field excitation. 1 ampere consumption at 6 volts. 15 ohm voice coil impedance Contínuous operating capacity 8 watts. Peak load capacity 25 watts. Shipping weight 20 lits.
Y19754-List $\$ 75.00$
Your Cost

## Racon Reproducers

Made of fabric,imand hardened.
 ${ }^{s} 44.10$

## Bud Electro-Dynamic Unit

Here is the Unit that sets new standards in speaker performance. It represents an ad vance in diaphragm and voice coil construction that from a performance standpoint puts it in a produces music and speech with utmost fidelity superb tone and perfect enunciation, without undue stressing of treble or bass. Chattering and beckground noises have been eltmineted This This unit is the only one in which the voice coil can be replaced without factory service diaphragm replacement can be made in a few minutes by any operator or ser vice man. The voice coil of the Bud unit will stand up under voltages that would paralyze or burn out coils of the older type. It is assembled or taken apart by means of one large master screw. This unit has a capacity of 26 watts on the input, not to exceed 15 volts at two amperes alternating current. Impedance of voice coil is 16 ohms. Exciting energy of field coil must be $6-8$ volts at $11 / 2$ amperes, which can be secured from 6-volt storage battery or an especially designed Bud dry rectifier. Specify 16 or 18 thread when ordering Y 19278 -List $\$ 45.00$
Your Cost Each.

Bud Aluminum Trumpets

This Bud Aluminum Trumpet Horn is setting entirely new has been designed along perfect
scientific lines, with the view of eliminating any feed back, and to give the full natural resonance, with freedom from muffling. Clear, bell-like, and astonishingly realistic in tone-light in weight free from all the old dangers of exposure humidity and atmospheric changes. It posure, humited for atre, auditorium or seneral insured if directional sound and long distance door use are desired. Extremely light weight coverage are desired. Extremely lother and atand complete immunity from weatner and atmospheric action. Rudial insuring full natural resonance. Conbell and insuring fuli natural in three sections for greater convestructed in three sections for greater conve-
nience in handling, storing and transportation.
nience in handling, storing and transpo
4 Ft. Horn wisht 10 lbs
Shipping weight 10 lbs
Y 19756 Cost Each.
s35.25
6 Ft. Horn with 24 In. Bell
Shipping weight 12 lbs
Your Cost Each
\$41.15


## Dynamic Field

 Exciters Units for supplying proper field current to above Racon units from above Racon units irom110 volta.C. supply line. 110 voltA. C. supply line. hum. Shipping weight 12 lbs. W19272-For one IRacon Unit. W19272-For 2 Racon Units. Wist $\$ 35.00$. Your Cost Each. W19273 For 4 Racon Units. ${ }^{\text {s }} 11.76$ ${ }^{5} 19.50$ List $\$ 60.00$. Your Cost Each.

## Bud Field Exciter



Asubstantial, heavy duty power supply for field exUnits. Current Bud Units. Current rec-
tification is by means of a compact means of a compact and rugged by-meard design. Operates on 110 volts A. C. with an output of 6 to 8 volts D. C. at 4 amperes, sufficient to operate 2 Bud Units. No Hum or Overheating.
Y19760-List $\$ 22.50$
Your Cost Each.
$\$ 13.50$ guaranteed to
withstand
all climatic temperatures and moisture without effect. Light in weight and non-porous.

## 31/2 Ft. Trumpets

STDRMPROOF MODEL. Equipped with metal beaded edge, cast aluminum ferrule and suspension ring. Guaranteed for 1 year. For outdoor use in all climates and weathers. Shipping weight 20 lbs .
Y19788-List Price 540.00
Your Cost Each..........23.4. Your Cost Each
DeLUXE MODEL.
Equipped with metal beaded edge, cast aluminum ferrule and suspension ring. For indoor or temporary outdoor use. Shipping weight 17 lbs .
Y19789-List Price $\mathbf{\$ 2 5 . 0 0}$
${ }^{s} 14.70$
REGULAR MODEL Equipped with metal beaded edge, metal ferrule and suspension ring. Adapted for $7 / 3-18$ thread unit. For indoor use only. Shipping weight 17 lbs
 Your Cost Each

## 6 Ft. Trumpets Bell $30^{\prime \prime}$ Round

STORMPROOF MODEL. Equipped with metal beaded edge, cast aluminum throat and $4^{\prime \prime}$ suspension ring. For outdoor use in all Y 19791 -List Price $\$ 65.00$ \$38.22 Your Cost Each REGULAR MODEL. Equipped with metal
beaded edge, cast aluminum throat, and $4^{\prime \prime}$ beaded edge, cast aluminum throat, and $4^{\prime \prime}$
suspension ring. For Indoor use only. Shipping suspension ring,
weight 31 lbs.
weight 31 Liss.
Yes
Net
Net.

## Bud TriplejAdapter



Ilustrating the use of the Bud Triple Adapter which permits the installation of three trumpet horns on a single unit. The adapter is of cast aluminum and brass, and is machined and threaded ready for use. Diversion angle is 100 degrees.
Triple Adapter
Y19758-List $\$ 17.50$
$\$ 10.30$
Dual Adapter
Y19759-List $\$ 13.50$
Your Cost Each....

## Racon Radial

Particularly
adapted for use on
trucks, tower equipment,
amusement
parks and

public address use, where a circumferential coverage is desired. Horn is equivalent to a bank of twelve 6 -foot trumpets, and covers so perfectly, there are no dead spots. Equipped with cast aluminum throat, cold rolled steel suspension brackets, re-inforced edge. Stormproof. Demountable. Size $43^{\prime \prime}$ wide; $50^{\prime \prime}$ high. Shipping weight 45 lbs., without units and brackets.
Y19762
List $\$ 275.00$ Radial Horn only; Stormproof. List $\$ 275.00$
Y 19763 Cost Radial Horn 01070 Master Units, and Coupling Tete, with four List $\$ 495.00$
Your Cost.
5291.06 Y19764 Radial Horn complete, with four Super Giant Units, and Coupling Transformer. List $\$ 595.00$
Your Cost
349.86


## Wright

## Decoster Dynamic Horns

Combination expmential horn and speaker covering for Dynamic Speakers is made of a non-resonant material that greatly improves material. Length $48^{\prime \prime}$. Bell $23 \times 22^{\prime \prime}$. Shipping material. Nength 48. Bell Y 19782 - List Price $\mathbf{5 3 8 . 0 0}$
Your Cost Each
HORN No. 10. As above with flare at both
sides instead of at bottom. Size $30 \times 211 / \mathrm{a}^{\mathrm{M}}$.
sides instead of at bottom.
Y 19783 -List 538.00
Your Cost

## Racon Triple

 ConnectorFor connecting three $31 / 2 \mathrm{ft}$. rumpets to one Unit. For use in airplane and public address installations where great coverage must be real-
ized from a single unit. Brase
 with threaded collars $7 / 8 \times 18^{\prime \prime}$ for horns and unit Dispersion angle 90 degrees. Shlpping weight 6 lbs.
W19274-List Price $\mathbf{\$ 2 0 . 0 0}$
Your Cost Each

## Duall Super Recorder

With this remarkable device, it is now possible to make those perfect recordings, on aluminium, composition or celluloid blanks. No finer Recorder has ever been offered on the radio narket before. Truly a professional model, custom built to exacting standards, at a price that you would expect to pay for a home recorder that is nothing but a plaything. Servicemen should profit from an item of this nature, people are naturally curious and will gladly pay to hear their voices come over on their own phonograph combinations.


A money-maker for those that can solicit their neighborhood stores, making advertising recordings of their products and then reproducing through a public address system to several thousands persons.

Some of the features of this precision Super Recorder are worm and wormgear liberally dimensioned to withstand long wear. Feedscrew "/8" in diameter, runs on hardened pivots and is interchangeable. Inside-out feedscrews furnished if desired. Positive feed giving uniform spacing, no overlapping lines. Feed mechanism supplied with form spaaing, no overlapping lines. Feed mechanism supplied with
cutterhead for aluminum, or aluminum and celluloid. Cast parts cutterhead for aluminum, or aluminum and celluloid. Cast parts
attractively finished in black crackle. Other parts heavily chromium attractively finished in black crackle. Other parts heavily chromium
plated. Equipped with Professional Type Recorder with a perfectly balanced high impedance pickup for play-back. Cutterhead is 15 ohms impedance. Playback pickup 5000 ohms. Turntable and Motor Assembly mounted on a $16 \times 16^{\prime \prime}$ panel of $7 / 3^{\prime \prime}$ laminated board, walnut or mahogany finish. Overall depth $10^{\prime \prime}$. A specially adapted motor of constant speed, $1 / 20 \mathrm{H}$. P. 78 RPM , under all load conditions is provided. Motor has more than sufficient torque for aluminum and celluloid recordings, and will not slow down on periphery of turntable. A special rim drive designed and developed which together with motor suspension make this entire Assembly run noiseless and without vibration. Maintenance of constant speed during recording and reproduction is notable. The Standard Assembly consisting of turntable and feed mechanism is built for 80 line recording on $12^{\prime \prime}$ diameter records, Feed outside-in. Driving pins near center of $12^{\prime \prime}$ diameter records, Feed outside-in. Driving pins near center of
turntable are provided for cellulold recording, and can be removed turntable are provided for celluloid recording, and can be removed
when recording on aluminum. Complete assembly, Professional when recording on aluminum. Complete assembly, Professional
Recorder, 15 ohms impedance, with 5000 ohm play-back pick-up for Recorder, 15 ohms impedance, with 5000 ohm play-back pick-up for
aluminum recording. 115 volt, $50-60$ cycle motor. Shipping weight aluminu
30 lbs .
Y19889-list $\$ 275.00$
Your Cost, Special.
$\$ 119.50$
Same equipment as above, except furnished with a Two Speed Drive Motor for 78 and $331 / 5 \mathrm{RPM}$. Complete. Shipping weight 34 lbs . Y 19890
Your Cost.
$\$ 150.00$


## 16-Inch Turntable and Motor Assembly

For recording long continuous programs on one blank, we have developed a special $16^{\prime \prime}$ Turntable and Motor Assembly of the following specifications: Panel $20 \times 20 \times 7 \mathrm{~s}^{\prime \prime}$ laminated board, walnut or mahogany finish. Extra heavy $161 / 2^{\prime \prime}$ turntable driven by a $1 / 20 \mathrm{H}$. P. motor with our special rim drive assuring constant speed. Assemblies provided with either 78 or $331 / 6$ RPM. drives as desired. The recorder is provided with an 80 line feed screw; inside-out or outside-in feeds are furnished. A combination celluloid or aluminum cutting head is provided with this outfit. When ordering, specify RPM. and type of feed required. 15 ohm impedance cutter head. 5000 ohm impedence playback pick-up. Shipping weight 45 lbs .
Your Cost
Extra feed screw for any desired number of threads.
$\$ 168.00$ 3 lbs
Your Cost Each
$\$ 12.00$
Same equipment as above excent furnished with a Two Speed Drive Motor for 78 and $331 / 3$ RPM. Shipping weight 52 lbs $Y 19888$ Your Cost
s 199.50

## Double Turntable Assembly

For recording continuous radio programs, duplication of recorded programs or transcribing of records we build a Double Turntable Assembly of the following speclfications: Panel $16 \times 32 \times 7 / \mathrm{s}^{\prime \prime}$ laminated back pick-ups are provided. of both motors are carefully adjusted so that both turntables operate of both motors are carefully adjusted so that bot
with utmost uniformity. Shipping weight 68 lbs . with utmost uniformity. Shipping weight 68 lbs .
Y19885-Y19885-
${ }^{\$} 235.00$

## Overhead Feed Mechanism

 To Attach to Your Present TurntableWe offer this device for those who desire to attach this Unit to their own turntable. Has an adjustment for proper alignment. A Motor of constant speed and rating of $1 / 20 \mathrm{H}$. P. minimum is recommended for this unit; be sure there is sufficient power in your motor to operate it. Turntable should be flat, with about $1 /{ }^{\prime \prime}$ felt covering, and securely fastened to motor shaft. Is furnished with supporting bracket for resting unlt, when swung of turntable. Equipped with 15 ohm impedance cutter head, and 5000 ohms impedance play-back pick-up. impedance cutter head,
Shpping weight 12 lbs.

## Dual Speed CAPEHART Automatic Record Changer

This dual speed 3315 and 78 RPM. Automatic Record Changer, is the most practical device for continuous playing of the Victor 10 or $12^{\prime \prime}$ recordings, or any other compositions, or Victor 10 or 12 recordings, or any other compositions, or aluminium records. Plays both old type and New Victor long pick-up, noted for tine tone quality, and absence of needle scratch. An excellent device for the Home, public address systems, theatre, ballroom, etc. For local advertising using either aluminum or composition recordings of your own, the Automatic Record Changer has no equal. Using ten long playing Victor records, you can listen to four hours of music without a stop. Completely automatic, last record repeats until re-stacked or when master switch is turned off.
An encore may be had of any record. Additional equipment includes a reject device and unloading lever. Can be mounted in your own cabinet, or in our DeLuxe Cabinet, made expressly for the accommodation of this mechanism. Radio Receiver Power Pack and Speaker can also be installed in this cabinet. Base 141/5141/4. Height above mounting board, $7 \mathrm{~K}^{\prime \prime}$; depth below $3^{15} 16^{\prime \prime}$. Shipping weight 30 lbs .

S17750-Mechanism complete, less cabinet.

## Your Cost



S17749-M
Your Cost $\$ 92.50$
Special Pick-up Matching Transformers, 5 terminal, makes it possible to match the pick-up impedance with most radio sets and amplifiers. Shipning weight Your A403
Your Cost. .

Dual Speed Adapter Plays Both the NEW and OLD Type Records $331 / \mathrm{s}$ and 78 RPM.


Attach this to your present phonograph motor and enjoy the new long playing and the regular old style records. Fits all makes of phono graphs. Just lift off your present turntable and drop this adapter on in its place. By merely pressing a lever you play either type of record. 33 ,3 the long playing record, 12 to 25 minutes of uninterrupted musical entertainment, or the 78 RPM. oid style records. Disc is $12^{\prime \prime}$ in diameter, will accommodate all 7 lbs.
Y 19893 -List $\$ 6.00$
Your Cost.
s3.95

## Phono Motors and Accessories

## Genuine Sapphire <br> Reproducing and Cutting Needies <br> 

Genuine Sapphire is used exclusively. It is one of the most durable minerals known today. The scientists' table rates the hardness of the sapphire at $90 \%$, only ten points less than that of the diamond. By hardness we mean the resistance a substance offers to abrasion or scratching, and this is most important when applied to minerals, for durability is measured by proportional hardness. Thus, the Genuine Sapphire, finds itself the only rival to a diamond. If the needle is not dropped or used on a rough surface, it will prove to have a very long and durable life
Type AW is used for cutting (grooving) and recording on Blank Aluminum Discs. It will work on practically all commercial recording machines as well as home made equipment.

## A192

\$2.25
Type AWS is a modified AW with point and angle made especially to cut on ERAYDO metal and on Aluminum where lighter weight cutters or lower powered motors are used. A193
s2.75

## Type BW needle is made for recording and

 reproducing on PRE-GROOVED materials, such as the Victor type black composition home recording discs or pre-grooved celluloid. It will also make a satisfactory recording on pre grooved aluminum dises.A194-Vour Cost
${ }^{s} 2.50$
Type CW will reproduce regular commercial records such as Victor, Columbia, Brunswick etc. also electrical transcriptions when ali above are made to play at the rate of 78 revolutions per minute.
${ }^{\text {s }} 1.75$
A195 Your Cost $\qquad$
Type DW for cutting, grooving and recording on Celluloid. This needle does not push away the material but cuts out a fine thread of cellu-
loid while recording. A196-Your Cost
s.00

Type DD, Special DIAMOND NEEDLE for Celluloid, used for professional recording.
our Cost
\$ 15.00
Type AD, Genuine Diamond Needle for cutting recording on blank Aluminum Discs. Usec A189-Your Cost.
${ }^{5} 6.95$
We guarantee all Sapphire Needles against any defects as they are tested and inspected before shipment. Used extensively by recording studios, laboratories, universities, language schools etc.
B. M. S. Microphones

## Stasdio Model

Junior Model
These are real Microphones for Home Broadcasting-not Toys. Easily attached to your Radio Receiver. On the Junior you simply press a button to cut out the Radio Program and cut in the Microphone, and release it to bring back the program. On the Studio Model this is accomplished by a sliding contact switch. Amusing and mystifying a riot of fun at home gatherings, parties, club affairs, etc. In fact can be used wherever there is a radio set installed. Make your fact can be used wherever there is a radionget announcements and joshings come right out of the Loudspeaker in the middle of a chain Broadcast; impersonate your favorite radio Stars and Announcers. Is quickly and easily attached to any radio set. Does not need to be disconnected from the set, as it does not interfere with the broadcasting in any way. External parts thoroughly insulated; bronze finlshed case. Complete instruc tions are enclosed in each. Shipping weight 2 lbs.
$331 / 3$ or 78 R.P.M. for A.C. or D.C. Operation
A new induction type motor that may be adjusted for either old style recordings at $78 \mathrm{R} . \mathbf{P} . \mathrm{M}$. or the new $331 / 3$ R. P. M. records. Gears are completely enclosed and run in oil. Silent laminated Bakelite spiral cut gears. Over-size self lubricating bearings. Will not overheat in closed Automatic stop available at slight extra cost. Shipping weight 15 lbs .

A102 Single Speed, 78 R. P. M. Motor.

A120-For 105-120 volt, 50-60 cycle A. C
Your Cost
A121-For 110 volt D. C. operation.

Bodine Motors

tion For 78 R PM Mhew totally celera reduction gear has fewer parts and is more reduction gear has fewer parts and is more
compact and efficient than the famous RC-10. Many other new refinements combine to make it one of the finest motors of its type. For use on A. C. 110 volt line only. Shpg. wt. 13 lbs A108-List Price $\$ 25.00 \quad$ St. $\$ 1$


Per Dozen. A131-Closed Type Each Per Dozen

## Needle Cups

Statuary bronze finish
Diameter 11/4". A130-Open Type Each

Pick-Up Volume Controls


Made for use with phono pick-ups, power amplifiers and mike hook-ups. Compietely phone cord. G8399-List Price $\mathbf{\$ 2 . 5 0}$.
$\begin{array}{ll}\text { Your } \\ \text { Cost } \ldots . . . & 0^{c}\end{array}$
 C
C
c
c
 m13379-Junior Model.
Your Cost Each
M13380-Studio M odel.
Your Cost Each.


## New "Green-Flyer" Governor Controlled Two Speed Motor

 cabinets. $10^{\circ}$ turntable. Has dial and pointed needle indicator. Hardware nickel plates. $\$ 6.95$

## Direct Carrent Motors for 110 Volts

A101-Two Speed Motor same as our No. A100, but for D. C. current. .......................................................................... 5 A103-Single Speed, 78 R. P. M. Motor same as our No. A102, but for D. C. $\$$ II.
current. Your Cost. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $5 ~$ If $12^{\prime \prime}$ Turntable is desired for any of the above motor, add 40 c to net price and so specify-

## Special Recording Motor Dual Speed

This motor is specially constructed and is preferred for recording. Similar specifications to the above 2 -Speed Model except that field and rotor are ha longer and that the motor is much more powerful. Complete with $12^{\prime \prime}$ turntable. Shipping weight 15 lbs.
${ }^{s} 11.95$
517.50 -Grooved Aluminum Records

| Stock | Your Cost |
| :---: | :---: |
| No. Size | Each |
| A204 - $6^{\prime \prime}$ | 18 c |
| A205 - $8^{\prime \prime}$ | 30c |
| A206-10 ${ }^{\prime \prime}$ | 45c |
| A207-12" | 59 c |

## Edison Phono Needles

## The best made. Steel. Medium, Loud or Extra

 Loud. Fifty to the package.
## A190-

Net per Package
10 Packages for.
55c
Also in metal enamel display stand, holds 60 packages; 2 dozen Extra Loud, 1 dozen Medium and 2 dozen Ioud; each package containing 50
needles. Your Cost Special
$\$ 2.95$

## Recording Needles

A special designed Steel Needle, for cutting or Arooving and recording on aluminum records. Your Cost Package of 3

## Reproducing Needles

Bamboo needle for playback on aluminum or A21

Automatic Stop for Phono Motors
For Electric Phono Motors. Adjustable to operate at any point on record. Arm automatically trips switch which cuts off current to motor. Works with any type tone arm A135 Your Cost Each

## PHONO PICXUPS and ACCESSORIES

## RCA Photophone Oil Damped Reproducer with



## Special

## Scratch Filter

This R.C.A. Photophone Reproducer Arm and Pick-up Head, furnished with a special Scratch Filter, is one of the finest units of this type work talking pictures brondeasting stations and large installations where the finest quality of reproduction is required. This unit is suitable for ither $331 / 8$ or 78 R.P.M. recordings. Plays records up to $16^{\circ}$ and has a regular mounting shaft is " long, set in a double adjustable balancing rame. An overall length of $15^{n}$ counter balance set to permit exact reproducing pressure on the record. This pick-up has been rightly named the finest of electrical plck-ups. 20 ohm impedance. Shipping weight 10 lbs A160 Your Cost
$\$ 24.50$

## RCA-VICTOR-Two Speed-Balanced

 Pick-up
## $331 / 3$ and 78 R.P.M.

The RCA-Victor Inertia Type Pick-up, perfectly balanced to give remarkable tone quality over the entire frequency range. With suitable balancing weight for reproducing the $331 / 3$ and 78 r.p.m. recordings. An excelent pick-up
Pubic Address systems and Theatre installations. This type pick-up was the original equipment on Victor Combinations and RCA Electrola T-5. 200 ohms imp. Shipping Y140-
6.95


## RCA. Victor

 Brunswick Low Impedance Pickup Head Used on all the early model of the RCA-Radiola, Victor Brunswick, etc. Cobalt stee permanent magnet, and is housed in a bronze finished brass case. Lifelike fidelity of tone: ir equency response exceptionally good. Special Victor connection plug. A173.wt. 1 lb .$\$ 1.70$

High Impedance Pick-up Head This pick-up head is identical to the above one in appearance, with the exception that the case is finished in a rich dull gold lacquer. It has a D. C. resistance of 900 ohms, and an impedance of 3300
A173--Your Cost.
$\$ 1.70$


Victor Pick-up Head Models RE-45 and RE-75
The Genuine replacement pick-up Head, No. 60250, used on the above Victor Combinations. Impedance 200 ohms. Individually boxed. Guaranteed in perfect condition. Shlpping weight 21 lss . A177-Liat $\$ 20.00$
52.60

## RCA-RADIOLA PICK-UP HEAD

Models 67 and 47.
The Genuine RCA Pick-up Head, used on Model 67 Combination. Special design for this model. Impedance 200 ohms. No. 2601. Shipping weight 2 lbs. A17 - List $\$ 12.30$ Your Cost, Specia


This RCA Reproducer is offered to the public at an exceptionally low price. Is mounted on a round metal base. The volume control is built into the metal base; gives mooth and silent operation. Has with 10 ft impouble cord Supplied with 10 ft . double cord. Can be used as a replacement, where an inexpensive, yet good pick-up is needed. Shipping weight 8 lbs.
A15s- $\$ 4.50$

## RCA Victor

## Magnetic

## Pick-up

 HeadsThis is the same magnetic pickup head as is used on
 all late model t ceivers of RCA-Radiola, Graybar, RCA-Victor, General Electric, RCA Photophone, etc. Low
impedance of approximately impedance of approximately
twenty ohms. Straight neck type. twenty ohms. Straight neck type. A170 Brown finish. \$2.
Your Costt. A171-Nickel finish. S3
2.15

## RCA-Victor

 Pick-up Coils These replacement magnet pick-u coils for all model of RCA-Victor General Electric, Westinghouse, Graybar, etc. Size ${ }^{11 / 16 x^{1} / 16 x^{\prime} \cdot y^{\prime \prime} \text { ". }}$ Hole is $\mathrm{m}^{2} \mathrm{x}$ A174 RCA No
A175-RCA No. 2641-200 ohms Impedance.
A176-RCA No. 2254-3300 ohms Impedance. Any Type

New Improved Lafayette Pick-up Dual Speed: 33-1/3 or 78 R.P.M.

## Designed to meet the

 needs for playing both $331 / 5$ and 78 R. P. M. records with the same pick-up. In tonal quality, in range covered, in simplicity of installation and in ease of operette electric pick-up is ette electric pick-up is vastly superior to all existing forms of phonograph electric plek-updevices. A scientifically developed instrument which reproduces with absolute fidelity the intricate chromatic elements of the most difficul musical compositions. Unique in that it is rubber damped providing absolutely clear reproduction free from the customary pick-up noises. Many exclusive features have been incorporated in to the manufacture of the Lafayette Super-Pick-up, no effort having been spared in its preparation. Avallable in 2500 or 5000 ohms impedance. Special impedances to order at special prices on request. Specify type when ordering. Shipping weight 5 lbs. A138 Complete with Volume Control. Your Cost Each.
\$6.25

## Lafayette Professional Jr.

Has same general characteristics as above pick-up. Plays only $16^{\prime \prime}$ records. Specify high or low impedance. Shipping weight 6 lbs . A137- Cour Complete, with Volume Control
s9.75

Pacent
For $331 / 3$ and 78 R. P. M.

Your Cost
A150 - No 160 Phonovox with $16{ }^{2}$ wo tor 7.94 records. Equilpped as described above. List Price sic.00
Your cost $\mathbf{\$ 9 . 4 0}$

## Audak Model 30 Pick-up



Fortunate purchase enables us to offer celebrated Audak No. 30 Pjek-up at raction of former price. Quality proven y performance. Limited supply; take dvantare of offer. Less vo
A145-List Price $\$ 21.50$
Your Cost Only.
3.75

Model No. 20. Smaller model pick-up
Model No. 20. Smaller model pick-up
One of the popular sellers. Same qualOne of the popular sellers. Same quat-
ity as Model No. 30. Shipping weight ity as
5 lbs .
Your Cost, Less Volume Control

## Winchester Dual Speed Pick-up <br> For 33 ) and 78 R.P.M. Records

One of the finest instruments of its kind Bakelite throughout; highly polished. Noted for fidelity of tone. Angle Tone Arm with Ball Bearing Tracking. Equipped with thumb screw which adjusts the pressure of pick-up on record. Rotating head makes for rapid
 needle change. It works into the grid of tube. By replacing the old style 78 r.p.m. pick-up, with this New Winchester you will be able to play the new long playing records. Shipping weight 3 lbs.
4.75

## Trutest Scratch Filter



## Practically eliminates the irritating, annoying and objectionable scratching caused by the fric-

 tion of the needle, by filtering this out. It improves the tone quality by a clearer rendition of the record played, almost as it was originally recorded, eliminating background noises. Equipped with phone tip jacks for the input side to the pick-up, and also with binding posts on the output side to the amplifier, or to the radio phonograph jack. Shipping weight 3 lbs. A118 Your Cost, Special

With Removable Cover
A New Resistance, Continulity and Capacity Tester. For Set AnalyzIng, Testing Voltages, Milliamperes, Resistance and Capacity.

This new tester embodies in one instrument the very latest methods for Immediate location of trouble of radio receivers, without removing the chassis from cabinet. This outfit analyzes the radio circuit from set socket, giving resistances, continuities, capacities and short-circuits. Two hjgh quality direct reading meters are provided. They are calibrated as follows: D. C. Meter 1.2 division lower scale, $0-30-300-600$ volts and $0-30-800$ M. A. upper Scale, $0-5000$ ohms, $0-3$ megohms. A. C. Meter-Calibrated for 110 volts eycle, reads in mids. Wower Scale, . $008-.25 \mathrm{mids}$. Upper Scale, $1-10$ mids. Also for line voltage. For testing resistances, two 22,2 volt batteries and one small flashlight battery are contained in battery compartment. A rheostat is provided to obtsin calibrating voltage of A. C. meter. For testing resistance voltage dividers, series resistors, transformer primaries and secondaries, fllter chokes, speaker fields, capacities of paper and mica condensers of various tube circuits; through the set-socket, two plug-in cables and separate cords are provided. Individual tests, separate from plug connections, for all of the above, can also be made through jacks provided. Set troubles are located quickly and easily with this outCover Strong, portable case, coverate battery compartment panel. Shipping weight 13 lbs . K11015-List Price $\$ 55.00$
Your Cost Each.
\$32.34


## NEW READRITE

 COMBINATION SETS

No. 576
A combination of the No. 406 Tube Tester, the No. 710 Circult Analyzer and the No. 550 Oscillator. An oscillator is now an important part of every up-to-date serviceman's equlpment. The same applics to tube-testers. Testing tubes, alligning tuning condensers of T. R. F. sets and tuning condensers and Intermediates of superheterodynes, testing receiver circuit, including capacities and resistances, all these necessary operations can be performed, quickly, easily and accurately. The Oseilator and Tube Tester are on one panel with the Set Teater in a drawer underneath. Closing the case automatically locks the drawer in place. Case size $223 \times 5 \times 1 / 2 \times 81 / 2 / 5$ inches high. Shipping weight 24 lhs. $\$ 49.98$
K1ioo - List $\$ 85.00$. Your Cost Each

No. 577
Same as No. 576 but with No. 407 Tube and Short Tester instead of the No. ${ }^{406}$.
s52.92


No. 406.710
Consists of No. 406 and No. 710 combined in a single leatherette covered case, size $21 \times 14 \times 71 / 2$ inches. A handy instrument for analyzing set circults and accurately testing tubes. Shipping weight 14 lbs. List $\$ 50.00$ K11011-
$\$ 29.40$

No. 407-710
This combination provides combination Tube and Short Tester with Set Analyzer. Case same appearance and size as Nos. 406-710. K11012-List $\$ 55.00$
Your Cost
\$32.34

## Household Utility Tester

## Readrite Model 900

Here is an instrument that every well equipped service station and serviceman should possess. The wide awake service station and serviceman should always be on the outlook for new avenues for profit and increased usefulness to the customer. Let the customer know that you are in a position to help him when his refrigerator, household appliance, etc., gets out of order. You can be the handyman for
 the home. This instrument is do signed for servicing electrically operated refrigerators, ironing machines water pumps, oil burners, stokers, ventilating systems, ranges and general appliances. Input and output outlets with connecting cords, plugs and appliances. Input and output outiets with connecting cords, plugs and elips for measuring volts and amperes. A. C. Ammeter reading up to 20 reading Ohmmeter $0-40,0-10000$ ohms for continuity testing. Leatherette case $1031 / \mathrm{x} 9 \times 31 / \mathrm{I}^{\prime \prime}$. Complete with removable cover. Shipping weight 15 lbs .
K11018-List $\mathbf{\$ 2 2 . 5 0}$. Your Cost
\$13.23

## No. 610



This tester contains the same equipment as the No. 710. The equipment as the No. 710 . The
panel and all equipment are in a panel and all equipment are in a top of an extra large leatherette top of an extra large ieatherette carrying case which is equipped
with a lock. Has space $61 / 4 \times 13 / 4$ with a lock. Has space 6 coxis/4tubes, tools, etc. Test equipment and panel is removable and may be used as a complete test panel for shop use. Case size $141 / 2 \times 7 \times 71 / 2$ inches. Shipping weight 10 lbs . $K 11013$ List $\$ 30.00$.
Your Cost Each.

## 406-Tube Eezter

Equipped with slx and seven prong sockets for teating new type tubes. Tests all tubes without adapters. Connects to A. C. supply line. Has illuminated dial. Ideal for dealer's counter use. Easy to operate. A separate button provides for testing both plate of ' 80 tubes. Meter protected by fuse. A push button provides two plate readings for determining the conductance and worth of a tube. Size $10^{3} / 3 \times 7 \times 41 / 4$ inches. 60 cycle A. C. Shipping weight 7 lbs. $K 11000$ Model
406. List $\$ 25.00$. Your Cost.


## Model 407

Same as Model 406 except that it also provides a complete short test for tubes. All shorts, gas, and leakage tests are made with tube heated under operating conditions. Same socket is used for tube worth and short tests. For 60 cycle A.C.
$K 11002$ List Price $\$ 30.00$. Your Cost
$\$ 17.64$
Models 406 and 407 for 25 cycle A. C. at $\$ 1.47$ additional.

FREIGHT ALLOWANCE NOT ALLOWED ON READR ITE INSTRUMENTS checking all parts of tube circuits by connecting to set sockets. Tests rately. Plate volts, line and power super volts are also measured. The grid swing test for tubes is used. Just push one button for the screen grid tubes and another for the other type tubes. The battery is used for continuity testing of transformers, chokes, etc. Capacity and resistance charts are furnished, showing use of instrument for testing sistance charts are furnished, showing use of instrument for Thesting condensers reading may be used separately with the jack terminals provided. Scale readings are: $0-20-60-300-600 \mathrm{D}$. C. volts, $0-10-140-700 \mathrm{~A}$. C. volts and $0-15-150$ M. A Contains new wiring with 6 -hole and 7 -hole cockets. Tests new type tubes as well as old types. Housed in a strong case with a leatherette covering. Attractive. Compact. Complete Fills every need for radio set testing. Size $103 / 1 \times 31 / 2 \times 8^{\prime \prime}$. Removable cover. Shipping weight 7 lbs. $\mathbf{K 1 1 0 2 6 - L i s t ~ \$ 2 5 . 0 0 ~}$
Your Cost
${ }^{\mathrm{s}} 14.70$

## Set Analyzer and Tube Tester




Reading Ohmmeter Model 500 Mounted in seamlens steel cases 4 ins. in diameter. Model 500 provides direct readines of ohmages up to 10,000 and D. C. volts up to 4.5. Model 502 furnishes readings to 10 ,nishes readings to
000 ohms on one 000 ohms on one scale second scale, for voice colls and shorted turns of IF transformers. Both are complete with a small 3 cell flashlight battery and leads. Shipping weight, 2 lbs.
K11020 List $\$ 6.00$
Your Cost.
Model 502
$K 11005$ List $\$ 7.00$
Your Cost
s3.53
$\$ 4.12$

Readrite Resistance Meter Model 501
 No. 501. The same meter as No.
that used in the No. 550 instruthat used in the No. 550 instru-
ment. Has flange for panel mounting. A thoroughly reliable instrument at a popular price. Requires 3 small flashlight cells, which with resistance to be measured are connected in series with meter. Used for testing resistance in radio sets and circuits generally. Fine for continuity tests. Extreme diameter, $21 / 4 \mathrm{ins}$. Shipping weight, 1
1 lb .
K1 Your Cost, Each
503 Reistor. 1150 ohms, with jack terminals. For use with 22.5 volt battery to increase reading of No. 500 Ohmmeter to 60,000 ohms. K11165-List Price $\$ 1.50$ Your Cost.

## Readrite Capacity Model



Model 800
No. 800. This efficient capacity meter, which capacity meter, which
should be part of the should be part of the vice man, is used for testing paper condensers only. The A. C. meter reads directly in microfarads .008 to 10 . Two scales, upper, 008 to 25 ; lower 1 to 10 mfd . Contains rheostat, switch, test leads, and plug for A. C. 60 cycle connection. In a seamless metal case 4 1/" ${ }^{\prime \prime}$ in diameter baked enamel finish. Full instructions and charts are furnished for testing from 10 to 400 henrys, and resistances of from 40 to 100000 ohms. Shipping weight 2 lbs.
K11022-List $\mathbf{\$ 8 . 0 0}$
Your Cost.
s 4.70

## Readrite Capacity Tester No. 850

 A new instrument for testing Electrolytic and Paper Type Condensers. Has two meters: an A. C. meter calibrated in mictofarads-double scale .008 to 10 mids . and an A. C. meterwhich connects to 60 cycle A. C. supply line and is adjusted to 100 volts. Leaky and faulty Electrolytic Condensers are easily tested with this instrument. Tip jacks provide for test leads when testing condensers independent of receiving set. Seamless metal case. A instrument. Instructions supplied. Shipping weight, 3 lbs. K11031-Without Cover. K11032 With Cover. List 517.00. Your Cost

Counter and Portable Direct Reading Tube Checker


Readrite Model 443
A tube tester customers can read. For store and field testing. Contains large 4/4" precision meter mounted in panel in case cover. Visible at right angle when cover is open. Meter scales cover all new and old type tubes, indicating red for poor, yellow for doubtful and blue for good tubes. Rheostat and A. C. voltmeter are incorporated for controlling line voltage. Two tube charts in cover of under test. Shipping weight, 15 lbs. For 60 cycle. J11019 List $\$ 5.00$
Your
Cost $\ldots \ldots \ldots$

## Test Oscillator No. 550



A completely shielded, self modulated Oscillator. Covers enate bands. Tuning dial direct reading for $120-185$ and $550-$ 1500 KC. Sharp second and third harmonics cover interme-dratesk-in Test lead wires and break-in adapter are supplied Wheter equipped with output meter, Direct reading dial has large swing and widely spaced scale divisions. Rotating switch has position for Broadcast and Intermediates. Attenuator control tube and battery compartments separately shielded. Calibration controlled by trimmer. Oscillation carefully calibrated at factory. Very compact and strong. Size, $6 \times 12 \times 5$ ins. Licensed under A. T. \& T. patents. Shipping weight, 11 lbs.

K11029-Less Panel Output Meter. List $\$ 30.00$. Your Cost
K11030-Complete with Panel Output Meter List $\$ 35.00$. Your Cost

## Readrite Exploring Coil

Designed for Servicemen's use in localizing r.f. trouble. The preferred use is in conjunction with a signal rupplied by an oscillator, which is inducted into the grid of the
tube when the Exploring Coll is placed tube when the Exploring Coll is placed around the tube. Trouble is traced by
ellminating parts of the circult where it is ellminating parts of the circult where it is
found that the induced signal from the Exoloring Coil is satisfuctory. In the Superheterodyne circuit this coil is used also for peaking the intermediates. When used with an output meter the amount of gain nance the parts of a r.f. circuit. Full directions furnished.\$2. 05
Shipping weight, 1 lb . KL1033-Your Cost. ...........

## New 1933 Supreme AAAI Diagnometer

Analyzer Tube Tester Shielded Oscillator Ohmmeter Megommeter and Capacity Tester



## ${ }^{\text {s }} 144.50$

Teats 4, 5, 6 and 7 Prong Tubeswithout use of adapters. Analyzer circuit consists of a universal A. C.-D. C. multimeter of the copper oxide rectifier type with a tandem selector switch and a D. C. milliammeter which is always connected in the plate circuit. This provides readings of circuits and tubes under analysis with ipulation of switches. Provision is made for testing old style battery sets as well as the newest A. C. Bets. Tube Checker circuit includes five tube testing sockets with necessary switches for testing all types of tubes including pentode and variable mu. Another valuable feature of the Diagnometer is the completely shielded and attenuated Oscillator which is desigaed for tuning over a range of approximately 90 to 1500 kilocycles. Fre quencies higher than 1500 K . C. can be calibrated when desired by means of harmonics. Suitable for all r, f. and i. f. adjustments. For resistance measurements the Diagnometer is equipped to determine resistances up to 500,000 ohms and 0-5 megohms. A Capacitor Tester for
testing condensers from approximately .002 to 10 mfds , is also provided.
YOU NEED THE AAAI DIAGNOMETER Nothing else is needed for the modern service department and when you go out on a service call your complete service department goes with you in one compact instrument. All necessary accessories are included for use with the Diagnometer, including analyzer plug, cable, power supply plug and an 85 page booklet of radio data. Hardwood carrying case $67 / 3 \times 111 / 4 \times 1878$ Shipping weight 35 lbs . $\$ 144.50$
K10550-Your Cost Each


## Jewel 444A Analyzer

Pattern 444 is a 2-meter analyzer for every type radio receiver and for teating full wave rectifier, variable mu, output pentode, pentodes having a direct conmu, output pentode, pentodes having a direct con-
nected fith element, and the new six prong type tubes.
A. C. and D. C. circuit tests are controlled by separate rotary selector switches. In addition to set socket tests, twenty-four ranges are available at pin jacks-for external testing. Among these are three output meter ranges and three resistance ranges.
The instrument ranges are: A. C. Meter- $0-4-8$ amperes $0-100$ M. A. and $0-4-8-160-400-800$ volts; D. C. Meter--12-60-120 M. A. 0-6-12 30-60-120-300-600 volts, 0-1,000-10,000-100,000 ohms and low-medium-high out put ranges.
Accessories supplied: Test leads with insulated prods and molded pin-plugs, test leads with clips for speaker voice coil leads and molded pin-plugs, line plug and cord with molded pin-plugs and an adapter for output measure ments at tube socket, instruction book. Dimensions $12{ }^{2} \times 12 \times 4 \frac{1}{2}{ }^{\prime \prime}$. Approximate weight 12 lbs Your Cost Each
s86.25


## Jewel Test Oscillator Model 563

This instrument combines every Oscillator feature necassary for servicing modern radio recelvers and Jewel dependability at a very low price. Output adjustable to any frequency in the broadcast band from 550 to 1500 KC and in the two intermediate bands of 125 to 185 KC and 175 to 450 KC . Completely shielded. Operates from self-contained batterics, carried in the case. Output continuously variable from zero to maximum. A separate high output is provided for neutralizing. Single control adjusts output frequency. Three position switch allows instant change to any of the three frequency bands. Calibration curve for each wave band carried in cover. Filament rheostat and tapped "A" battery provides proper filament voltage at all times. Trimmer adjustment permits spotting at any much used intermediate frequency at a convenient point on the dial. Handsomely finished metal carrying case with frequency at a convenient point on the dial. Hat
J10251-Jewel 563 Test Oscillator completely equipped with shielded output lead, calibration curve, instruction chart, type '30 tube and all necessary batteries. Less Output Meter. curve, instruction char
Lhipping weight, 9 lbs.
'34.90

## Jewel 559 Output Meter

Allows the relative output of a recelver to be determined visually. Consists of a Jewel $25 / 4$ inch D. C. instrument in a full wave copper-oxide rectifier circuit, housed in a molded Bakelite case equipped with a non-shatterable glass scale cover. Furnished complete with long test leads and an adapter. Shipping weight, 3 lbs.
J10252-Jewel pattern 559 Output Meter
List Price $\$ 20.00$. Your Cost.
${ }^{\text {s }} 14.70$


## "Macklyn" <br> Set Analyzer and Tube Tester

This combination set analyzer and tube tester is truly the "Last Word" in testing equipment. In its design you will find all the good points hitherto reserved for analyzers of considerably higher price and the absence of those objectionable qualities that demand complicated adjustments. The "Macklyn" makes every test pended upon and a simplicity that saves time and money. Every imaginable reading is made by the mere pressing of buttons. There are no complicated and delicate switches to oosen with wear, miss contact or short circuit. The meters used are of new design and the volt meter is high resistance. Both D. C. meters have a zero adjustment and pointers are well damped. The three meters used have scale readings of 0-10-100-600 volts D. C., 0-20-100 D. C. Milliamperes and 0-8-150 volts A. C. Measures: Plate Voltage, Plate Current-Screen Grid Voltage, Screen Grid Current, Suppressor Grid Voltage, Suppressor Grid Current, Grid Voltage, Line Voltage, Tests for Continuity, checks Resistances and tests and measures capacities. Tests every tube using 4, 5, 6 or 7 prong base. Gives grid test on all heater type tubes. Teats both plates of the 280 tube individually and also tests the 281 type. The Alden narrow plug is supplied with three Alden lock-on Adapters. This is a very important feature as only the costly analyzers use this plug, the only one that will fit into small or narrow spaces found in midget sets. The case is of walnut, besutif plly tinished and the cover is removable. Complete instructions are furnlshed with each instrument. Size: $11 \times 91 / \times 37$.". Shipping weight 6 lbs .
J10510-List Price $\$ 35.00$. Your Cost
\$20.58


## Preston <br> Set Analyzer and Tube Tester

Designed for instant and simple operation. All circuit and tube tests can be quickly and accurately made. No rotary switches are used and each particular test has its own individual push button, thus eliminating confusion and waste of time common in ordinary switch arrangements. Before leaving the laboratory, this instrument has been approved, not only by engineers but also a group of mpartial servicemon who demanded efficiency in operation. Three meters are used with scale readings of $0-10-100-600$ volts D. C. $0-10-150$ volts, A. C., and 0-20-100 milliamperes. Pin from the D. C. meters. This instrument is ideal for testing voltages of plate, grid, screen grid and cathode, as well as plate current, filament voltages and line voltage. Has continuity test for set circuits, choke and transformer windings, etc. The design is such that resistance measurements and capacity measurements can be quickly taken and a calibrated chart showing meter readings in both ohms and microfarads is provided for mounting inside the cover of the instrument. Included in the most complete equipment is a seven conductor cable and long plug, three adapters, screen grid connectors, continuity leads with prods and detailed instructions for every imaginable cest. The panel is of Bakelite, engraved for eacb push button and pin jack. Leatherette case 10x75 $\times 3 \times 1 / 6^{\prime \prime}$ in size. Cover is not removable. Shipping weight 4 lbs. $\mathbf{~} 10495$ List Price $\$ 25.00$. Your Cost
$\$ 13.95$

Build this low price Hickok High Range Volt-ohmmeter
 ng D. $C$ resistance values, tinuity of circufts. No tinuity of circuits. No erviceman or service hop should be without a high range volt-ohmneter, it is necessary in the servicing of present day sets and super-het Circuits; high resistance values to determine, high voltages to measure. This unit when constructed according to simple instructions furnished should prove of vast importance to every serviceman. Simplicity of operation. This accu rate volt-ohmmeter is pre-calibrated. Anyone can assemble the parts in an hour, without any worry about calibration.
Large size meter, 31/2" body diameter, 41/4" fange; Bakelite case, 1333 ohms per volt resist ance. Knife-edge pointer assures ease and Recuracy of reading
Resistance values, from 1 to 1000000 ohms. D. C. voltages, $0 / 3 / 30 / 300 / 600$ volts.

Voltage adjuster to calibrate meter to batteries. LIST OF PARTS
1 Hickok Meter.
1 Change-over Switch. 3 Burgess C
Potentiometer for Battery Adjustmen 1 Sotentiometer of Diagrams and Instructions.
1 Set of Diagrams and Instructions.
Every part used in this instrument i
Every part used in this instrument is as accurate as the parts used in the complete Hickok the compling systems.
The complete kit includes all parts except case. Shipping weight 6 lbs.
K1174-Your Cost
K11173-Factory Wired.
s 18.00 Your Cost
s23.00

## Weston 563 D. C. Circuit Tester

An instrument for checking resistance values and continuity of circuits. Consists of a model 301 meter, having two resistance ranges -5000 and 50000 ohms mounted in a black bakeite case. Has a toggle switch for range selection. $60^{\prime \prime}$ test leads included. Self-contained battery. Dimensions: $38 / 8 \times 31 / x^{\prime} \times 218^{\prime \prime}$ Shipping weight 3 lbs
List Price $\$ 21.00$
Your Cost Each



## The Latest Development in Vane Type Meters. D. C. Meters with Zero Adjustment

Every improvement and advantage that goes to make up a quality product has been incorporated in these instruments. Made by and for craftsmen to whom "precision" is a watchword. The magnets are large and made of chrome steel. Wide scales make for easy reading and long pointers come to rest immedi-
ately due to excellent damping of these instruments. Only D. C. meters have zero adjustment. Meters of 300 volts or more have an external resistor and each voltmeter has 200 ohms per volt. All meters have a wide flange and are finished in dull black. Over all dimensions, $256^{\prime \prime}$; Panel Hole, 21/5"

| D. C. Voltmeters |  |  |  | D. C. Ammeters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Resistance 200 Ohms per Volt |  |  |  | Stock |  |  |  |
| Stock |  | List | Your |  | Amps. | Price |  |
| No. | Volts | Price | Cost | J10530 |  | \$1.00 | \$0.58 |
| $J 10511$ | 0-10 | \$1.00 | \$0.58 | J10532 | 10-0-10 | 1.00 | . 58 |
| $J 10512$ | 0-50 | 1.50 | .88 .75 |  | 10-0-10 |  |  |
| J10513 | 0-150 | 3.00 | 1.75 2.35 | Preston A. C. Type |  |  |  |
| J10515 | 0-8-160 | 3.00 | 1.75 | Meters |  |  |  |
| J10516 | 0-20-100 | 2.50 | 1.47 |  |  |  |  |
| $J 10517$ | 0-60-300 | 4.00 | 2.35 | A. C. VOLTMETERS |  |  |  |
| $J 10518$ | 0-10-100-600 | 5.00 | 2.94 | Stock |  |  | Your |
|  |  |  |  | ${ }^{\text {J10535 }}$ | $\begin{gathered} \text { Vol } \\ 0-15 \end{gathered}$ |  | Cost |
| D. C. Milliammeter |  |  |  | J10536 | 0-150 | 2.75 | 1.60 |
|  |  |  |  | $J 10537$ | 0-8-150 | 8.00 | 1.75 |
| Stock No. | Millia | List Price | Your Cost | A. C. Millammeters |  |  |  |
| J10520 | 0-5 | \$2.00 | \$1.18 | Stock |  | List | Your |
| J10521 | 0-10 | 1.50 | . 88 | No. | Milliamp | Price | Cost |
| J10522 | 0-15 | 1.00 | . 58 | J10538 | 0-15 | \$2.00 | \$1.17 |
| $J 10523$ | 0-25 | 1.00 | . 58 | J10539 | 0-50 | 2.00 | 1.17 |
| $J 10524$ | 0-100 | 1.00 | . 58 |  |  |  |  |
| $J 10525$ | 0-150 | 1.00 | . 58 | Preston A. C. type meters do not came equipped with zero adjustment. |  |  |  |
| $J 10526$ | 0-200 | 1.00 | . 58 |  |  |  |  |
| $J 11527$ | 0-20-100 | 1.50 | . 88 |  |  |  |  |



# Franklin <br> <br> Portable Tube Checker 

 <br> <br> Portable Tube Checker}


The ultra modern in portable tube testing equipment. Tests all tubes announced to date including the 83,85 and 89 . Provision has also been made for testing the 6.3 volt series of six-prong tubes and the 2.5 and 6.3 volt series of seven-prong tubes without the use of adapters of any kind, or any changes n circuit wiring.
In all Franklin tube testing equipment the plate, grid and other parts of the tube are energized with the proper voltages of Direct Current of various magnitudes as governed by the characteristics of the tube. When a tube is placed in a socket of a Franklin tube testing instrument, the same voltages are applied to the tube as when it is in use in a properly designed radio receiver, with the manufacturers' recommended voltages applied thereto. In addition to rapidly and accurately testing all modern types of tubes, this instrument is designed for use in making cizcuit, continuity, and point-to-point tests on radio receivers. Voltage taps on the end of the instrument case are provided for this purpose, also for, the testing of condensers of all types, and resistors up to $2,000,000$ ohms, literally making the instrument a junior set analyzer. Dimensions $7 / 4$ high $51{ }^{\prime \prime}$ wide; 2\%" deep.
K10975-Your Cost
$\$ 24.75$

## Tube Checker Model D-33

The Model D-33 is identical to the Model H-33 in every respect, except that the Model D-33 does not have provision on the end of the instrument case for continuity tests, etc. Checking a tube is a very fast operation with the inside of the lid of the instruments, and at a glance complete data on a normal tube is available. Shipping weight $53 / 2$ lbs. K10976-Your Cost.
23.75

## Franklin <br> Universal Meter Set Analyzer <br> Model 33-8

A compact set analyzer that w.ll enable the service man to quickly analyze and trouble ghoot right in the customer's home. You can now repair many jobs right on the spot and so not deprlve the customer of the use of his radio set for any length of time.
The Model 33-B Set Analyzer is the latest development in small, single meter, inexpensive testing instruments, or use in making a complete analysis of a radio receiver. Some of the tests which may be made with the Mode $33-\mathrm{B}$ are Output Tests on receivers, to check overall sensitivity; two resistance scales for point-to-point resistance tests filament, plate, grid, Bcreen, cathod voltages; plate current and grid current for checking the amount of distortion in audio amplifiers, etc The resiatance scales will check up to 1000 and 1000000 ohms. The output meter, being of the rectifier type, has a very high degree of sensitivity, and is actuated by a signal with a very low modulation percentage. A new feature found in the Model 33-B analyzer is the method of testing external circuits. A switching arrangement is used which enable pinjacks. The same two pinjacks are used for all voltage aneasurements, pinjacks. The same two pinjacks are used for all
A.C. and D. C. voltage scales are: $0-5-10-250-500-1000$. Current scale are: $0-5-10-100 \mathrm{MA}$ and $0-1$ ampere A.C. or D. C. All seales are a vail able for testing external circuits. Dimensions $91 / 2^{\prime \prime}$ high; $12 \frac{1}{6} \%^{\prime \prime}$ wide ${ }^{11} 1 /$ /re $^{\prime \prime}$ deep. Shipping weight 71/2 lbs.
K10977-
Your Cost
s50.50
Front or Bottom Illuminated Type Code TM103

$$
\begin{aligned}
& \text { No. } \\
& \text { K11180 } \\
& \text { K11181 } \\
& \text { K11182 }
\end{aligned}
$$

$\mathbf{K 1 1 1 8 3}$
Scale
M. A.

|  | $0-7$ |
| :--- | :--- |
| $0-118$ |  |
|  | $0-15$ |

High resistance type
milliammeters used in the plate current in sets for visual tuning. Mounted in strong metal case. The K11188 circuit is brought to resonance when the needle K11189 swings to itsfurthest position. Scale and pointer K11190 behlnd glass covered opening. $6^{\prime \prime}$ cable leads, K11191 attachment studs and nuts supplied.

No escutcheon included at above price Escutcheons as IHustrated
K11192-List Each 30c
Your Cost............
D. C. Voltmeters
( 300 ohms per volt. $3^{\prime \prime}$ case)
Stock No. Volts List Net

| Stock No. | Volts | List | Net |
| :--- | :---: | ---: | ---: |
| K11122 | $0-300$ | $\$ . .50$ | $\$ 2.65$ |
| K11123 | $0-500$ | 5.50 | $\mathbf{3 . 2 3}$ |
| K11124 | $0-60 / 300$ | 4.50 | $\mathbf{2 . 6 5}$ |
| K11125 | $0-750$ | $\mathbf{6 . 0 0}$ | $\mathbf{3 . 5 3}$ |

D. C. Milliammeters

| D. C. Miniammeters |  |  |  | Stock No. | M. A. | List | Net |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stock No. | M. A. | List | Net | K11138 | $0-25$ | \$3.00 | \$1.76 |
| K11126 | 0-25 | \$3.00 | \$1.76 | K11139 | 0-50 | 3.00 | 1.76 |
| K11127 | 0-100 | 3.00 | 1.76 | K11140 | 0-100 | 3.00 | 1.76 |
| K11128 | 0-200 | 3.00 | 1.76 | K11141 | 0-250 | 3.00 | 1.76 |
| K11129 | 0-400 | 3.00 | 1.76 | K11142 | 0-500 | 3.00 | 1.76 |
| D. C. Ammeters |  |  |  | A. C. Ammeters |  |  |  |
|  |  |  |  | Stack Nc. | Amps. | List | Net |
| Stock No. | Amps. | List | Net | K11143 | 0-1 | \$3.00 | \$1.76 |
| K11130 | 0-1 | \$3.00 | \$1.76 | K11144 | 0-3 | 3.00 | 1.76 |
| K11131 | 0-5 | 3.00 | 1.76 | K11145 | 0-5 | 3.00 | 1.76 |
| K11132 | 0-10 | 3.00 | 1.76 | K11146 | 0-10 | 3.00 | 1.76 |
| K11133 | 0-50 | 3.00 | 1.76 | K11147 | 0-50 | 3.50 | 2.06 |

## Weston Meters



## Model 301 <br> D. C. Instraments

Permanent magnet moving coil type. Accurate within $2 \%$. Whey are supplied as Voltmeters, meters and Microammeters. Weight approximately 8 ounces.

## Model 301 <br> A. C. Instruments Rectifier Type

Extremely high sensitivity A. C. instruments are obtained by using a full-wave copper oxide rectifier in onjunction with a standard Model 301 D. C. movement. They have the excellent damping, even scale
characteristics and high over-load characteristics and high over-load
capacities of the D. C. instruments. Temperature errors at ordinary room ternperatures and frequency errors over the power frequency
range of 25 to 133 cycles are neglirange of 25 to 133 cycles are negli-
pible. Frequency errors on higher gible. Frequency errors on higher frequencles up to 35,000 cycles may be corrected for as the instrument 25 of $1 \%$ for each thousand cycle per second.
in general conditions the instrument may be relied upon to within $5 \%$ accuracy.

## Model 301

## D. C. Voltmeters

Approximate resistunce in ohms per olts, $200 ; 200$ volts, 250 volts, 300 ; $300-600$ volis, $666 ; 600$ to 2000 volts, 66; above 2000 volis, 100. Extreme width $31 / 1$ inches. Stock

| Stock |  | List | Your |
| :--- | :--- | :--- | :--- |
| No. | Range | Price | Cost |


| No. | Range | Price | Co |
| :---: | :---: | :---: | :---: |
| J10603 | 3 | \$8.00 |  |
| $J 10604$ | 5 | 8.00 |  |
| $J 10606$ | 8 | 8.00 | \$5.88 |
| J10607 | 10 | 8.00 |  |
| $J 10608$ | 15 | 8.00 |  |
| $J 10615$ | 150 | 10.00 | 7.35 |
| $J 10618$ | 800 | 14.00 | 10.28 |
| $J 10619$ | 500 | 16.00 | 11.76 |
| J10620 | 1000* | 25.25 | 18.56 |
| 110622 | 2000* | 42.75 | 31.42 |

Resistance $\mathbf{1 0 0 0}$ Ohms per Volt Stock J10659 $J 10660$
$J 10662$

| Model 301 <br> D. C. Milliammeter |  |  |  |
| :---: | :---: | :---: | :---: |
| 8tock |  | List | Your |
| ${ }_{\text {N1067S }}$ | Range | Price | Cost |
| ${ }_{\text {J1067S }}$ | 1. | 39.00 |  |
| J10676 $J 10677$ | 1.5 | 9.00 | 56.61 |
| $J 10677$ | 2 | 9.00 |  |
| $J 10678$ | 3 | 9.00 |  |
| J10679 | 5 | 8.00 |  |
| J10680 | 10 | 8.00 |  |
| $J 10681$ | 15 | 8.00 |  |
| $J 10683$ | 25 | 8.00 |  |
| $J 10684$ | 30 | 8.00 |  |
| J10685 | 50 | 8.00 | 5.88 |
| $J 10686$ | 100 | 8.00 |  |
| $J 10687$ | 150 | 8.00 |  |
| J10688 | 200 | 8.00 |  |
| $J 10689$ | 250 | 8.00 |  |
| J10690 | 300 | 8.00 |  |
| $\int 10691$ | 500 | 8.00 |  |
| J10694 | 150/15* | 13.00 | 9.56 |
| J10695 | 150/30* | 13.00 | 9.56 |
| - Three | binding | ost type | self. |

Model 301
D. C. Ammeters

## Stock <br> Stock No. $J 10630$ $J 10635$ $J 10637$ $J 10638$ $J 10639$ $J 10640$ $J 10652$ $J 10654$

R
Range
1
5
10
15
20
30
$3-0-3$
$10-0-1$
$30-0-3$


## Weston Model 301

## Rectifier Type-A.C.•D.C.

## Volts-Milliamperes

Designed for the serviceman who desires to build a multi-range instrument to fil his particular testing requirements. It is for use with external shunts and externa resistances for measuring D. C. voltages and current and A. C. voltages. This instrument is of the permanent magnet moving coil type with a self-contained copper oxide-rectifier for the A. C. measurements. It is self-contained for 5 volts and 1 milliampere A. C. and 50 millivolts and 1 milliampere D. C. It has a double scale-one for A. C. and the other for D. C., each calibrated 0-5 volts. Non-inductive chaperon wound wire. Accurate within 1/6 of 1\%. Insulation tested. Temperature coefficient negligible. ....... I3.97
cenngex Jewel Ohmmeter

## Pattern 89

These instruments are mounted in cases of molded Bakelite with suitable terminals. A $11 / 2$ volt cell, mounted in the case makes it independent of out side sources of energy, a magnetic shunt provides convenient adjustment to compensate for variations in cell voltage. Very accurate. Shipping weight 3 lbs . J10238-0-1000 ohms. List $\$ 16.50 \$$ T 2. I 3 Your Cost
J102xy-0-3000 ohms.
Your Cost Each.
.....
List $\$ 16.50$
$\mathrm{J} 10240-10,000$ ohms. List $\$ 16.50$
Your Cost., 0.0 ohm . List $\$ 16.5$
J10241-0-30,000 o
Your Cost Each ....... List $\$ 19.50$
Your Cost.
J10244-0-10-1,000 ohms. List $\$ 25.00$
Your Cost.
J10245-0-5,000-50,000 ohms. List $\$ 19.50$

## Dayrad Oscillator

For all Intermediate Frequency alignments between $170-185-\mathrm{KC}$, 127-133KC, 254-266KC. Powertul and accurate alignment of stages in broadcast band ( $550-1500 \mathrm{KC}$ ). A self modulated radio frequency
oscillator which generates signals
in the IF bands. Harmonics of these signals are utilized when the oscillator is used to align RF stages in the broadcast band. Provided with a variable output control for governing the amount of RF energy to be supplied to the receiver. Shielded dummy anof cast aluminum. Requires one No. 2 Y 19962 (or Burgess 5156) Eveready B battery, two No. 2 flashlight cells and one type '30 tube for operation


##  <br> Model 476 <br> A. C. Ammeters Approx. Your No. Amps. Total Res. Cost

| 10775 | 1 | .2030 |  |
| :--- | :--- | :--- | :--- | :--- |
| $J 10776$ | 1.6 | .082 |  |
| $J 10777$ | 2 | .05 |  |
| $\mathbf{1 0 7 7 8}$ | 3 | .024 | $\$ 5.88$ |

$J 10779$
$J 10780$ J 10780
J 10781 J10782 $J 10783$
$J 10784$

## Model 476

 Milliammeters\section*{Stock} No. amps. Total Res. Cost | J 10785 | 15 | 2000 |  |
| ---: | ---: | ---: | ---: |
| J 10786 | 25 | 690 |  |
| J 10787 | 50 | 175 | $\$ 5.88$ | $J 10788$

$J 10789$ $J 10789$
$J 10790$

$$
60
$$

$$
\begin{aligned}
& 4.7 \\
& 1.1
\end{aligned}
$$



Erdi Rectifier Umits


Designed for Converting a a Universal one which can be used to measur both direct and rents. By the proper choice of Multiplier resistances and shunts or an accurate miliammeter, any may be accurately measured, and when equipped with this Rectifier, the same A. C. values may be asceride coated discs to give full wave rectification. Operates instantanepressed voltage and reaulting 15 M. A. for Use in Meter Con$J 10571$
Jour Cost Each
$\$ 2.50$
30 M . A. for Use in Microphones $J 10572$
Your Cost Each

# "Van" A.C. and D.C. Shunts and Multipliers <br> Accuracy Limits 2\% 

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock |  | List | Your |
| N10.925 | Ohms 4950 | Price | Sost |
| K10926 | 5000 | 1.00 | . 58 |
| K10927 | 10000 | 1.00 | . 78 |
| K10928 | 40000 | 1.25 | . 73 |
| K10929 | ${ }^{45000}$ | 1.25 | . 73 |
| K10930 | 50000 | 1.25 | . 73 |
| K10931 | 95000 | 1.50 | . 88 |
| K10932 | 100000 | 1.50 | 88 |
| K10933 | 245000 | 2.00 | 1.18 |
| K10934 | 250000 | 2.00 | 1.18 |
| K10935 | 500000 | 3.00 | 1.76 |
| K10936 | 1000000 | 3.50 | 2.06 |

This popular line of meters is manufactured by an organization which has been continuously making meters for the past fifteen years. This improved design of the moving coil meter, permits of greater simplicity in construction than has heretofore been possible. The result is unusual ruggedness, highest accuracy, and freedom from interference from dust and other foreign matter. The meter is perfectly balanced in all positions, and the moving system is exceptionally well demped From the mounting of the espphire bearing to the construction fo the mane the materipp workanship and desian con of the magnet, the macerias, workmanship and design, conform to the highest quelity, and wostimproved practice. The accuracy of the meters is guaranteed within wo percent. Contrary to the present day trend, where quality is sacrificed to lower costs, Beede meters represent improved quality and design, which in turn, result in lower production costs. This saving is reflected in the extremely low prices for this line of quality instruments.

| D. C. Milliammeters- <br> Single Range |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock |  | Divi- | List |
| No. | Range | sions | Price |
| J10415 | 0-1 | 50 | \$6.00 |
| $J 10416$ | 0-3 | 60 | 6.00 |
| $J 10417$ | 0-5 | 50 | 4.75 |
| $J 10418$ | 0-10 | 50 | 4.75 |
| $J 10419$ | 0-15 | 60 | 4.75 |
| $J 10420$ | 0-20 | 40 | 4.75 |
| $J 10421$ | 0-25 | 50 | 4.75 |
| 310422 | 0-50 | 50 | 4.75 |
| 310423 | 0-100 | 50 | 4.75 |
| $J 10424$ | 0-250 | 40 | 4.75 |
| $J 10425$ | 0-300 | 60 | 4.75 |
| J10426 | 0-500 | 50 | 4.76 |
| $J 10427$ | 0-1000 | 50 | 4.75 |

D. C. Ammeters-Single Range Ranges up to 50 amperes have self-contained (internal) shunts. Ranges above 50 amperes have external shunts.

| Stock |  | Divi- | List | Your |
| :---: | :---: | :---: | :---: | :---: |
| No. | Range | sions | Price | Cost |
| $J 10430$ | 0-1 | 50 | \$4.75 |  |
| $J 10431$ | 0-5 | 50 | 4.75 |  |
| $J 10432$ | 0-10 | 50 | 4.75 | \$3.25 |
| $J 10433$ | 0-15 | 60 | 4.75 |  |
| J10434 | 0-50 | 50 | 4.75 |  |
| J10435 | 0-100 | 50 | 4.75 |  |
| J10436 | 0-200 | 40 | 7.75 | 5.33 |
| $J 10437$ | 0-300 | 60 | 8.25 | 5.65 |
| 110438 | 0-600 | 50 | 9.00 | 6.18 |

The shunts (urnished have a drop of 50 milli volts + or - $5 \%$
D. C. Voltmeters-Singte Range

Resistance approximately 125 ohms per volt

Stock Range Divi- List Your | No. | Range sions | Price | Cost |
| :---: | :---: | :---: | :---: |
| 10350 | $0-1$ | $\$ 4.75$ |  | $J 10350$

$J 10351$ J10351 $J 10352$ J10353
$J 10354$
$J 10355$
$J 10356$
$J 10355$
$J 10356$ $J 10356$ $J 10357$ $J 10358$ $J 10359$ $J 10360$ $J 10361$ $J 10362$
$0-1$
$0-2$
$0-3$
$0-5$
$0-15$
$0-25$
$0-50$
$0-100$
$0-150$
$0-250$
$0-300$
$0-500$
$0-100$
We can supply Double, Triple and Multiple range meters. On special orders write for prices.

## Littelfuses for Test

## Instruments

Designed to insure and protect meters and protect meters
 and other expensive pendable and accurate. Has many laboratory
uses. Breaks eircuit immediately on reaching uses. Breaks elrcuit immediately on reaching
maximum milliampere load. Length ${ }^{\prime \prime}$; $\underset{\text { diameter } 1 / 4{ }^{\mathrm{m}} \text {. }}{\text { maximum }}$


## Na 2 Dm

Printed on the finest grade Bristol Board, with clear lettering, and sharp cut figures. Many useful combinations may be made by using these in conjunction with various shunts. K10946-Dial No. 1 K10948-Dial No. 3 K10947-Dial No. 2 K10949-Dial No. 4 List Price, Each, 75c Your Cost.
$45^{c}$

## Laboratory Test Prods and Accessories

## Neutralizing Tool



Carried in the pocket like a fountain penhas clip for pocket. $1 / 4^{\prime \prime}$ nut wrench with key slot and neutralizing screwdriver on
removable Inside rod; s/s" nut wrench in one removable inside rod;
end of outside barrel. Made of durable nonconductive material that will stand hard usage. Shipping weight 8 oz.
P14915-Your Cost Each
$51.5045^{c}$
Majestic and Crosley Alignment Attachments

Crasley


Fit neutralizing tool No. P14915 listed above. $\xrightarrow{\text { P15084 }}$ Youst

## Balneut for Majestic Sets

Overall length $21 / 2^{\prime \prime}$. Has screw driver and offiset socket for $/ 4$ " hex nuts that extends tool handle $11 /{ }^{\prime \prime}$.

For Crosley Sets
Extends tool $136^{\prime \prime}$. Has socket in end for P15 square nuts.

Alligator Neutralizing Wrench and Screw Driver


Alligator wrench with 5 /" opening. Securely fastened to extra strong high insulation rod size $1 / 4 \times 41 / 4^{\prime \prime}$. Hardened steel screw driver blade.
P14921-Your Cost


## Standard

## Test Prods

Sturdy handles of high insulating properties; one red, oneblack. $50^{\prime \prime}$ leads with chucks for phonograph needle. Shipping weight 8 oz . M12975-Spade Ends.
M12976 Pin Tip Enda.
Your Cost (either)
Per Pair.
$23^{\circ}$
M12977-Spring Clip Ends.
Your Cost Per Pair
$39^{\circ}$

## Bandy Test

## Clip Leads

These Test Clip Lead are a vailable in various lengths and come in red and black wire per pair.
They consist of A1ligator type test clips soldered on each end. They are ideal for experimental purposes and all laboratory test connections. Available lengths:
M12920-12" Wire.
Your Cost Per Pair
M12921 24" Wire.
Your Cost Per Pair
M12922-36" Wire.


Your Cost Per Pair

## Test Pluge

These Test Plugs come in pairs of red and black with spring prongs attached to an insulated plece. They are ideal for temporary or permanent connections where a plug of this type is required.
$\mathrm{M12970}$.
M12970-Your Cost Per Pair

## Neutralizing Tool Set with Metal Nibs

Polished black bakelite handles. Two tools. One consists of a $9 /{ }^{\prime \prime}$ diameter $6^{\prime \prime}$ long tube on each end of which are heary brass nickel plated socket wrenches for 8 fo and $1 / 4$ "hex nuts. The other tool fits inside the first tool and consists of a "/a" solid rod, one end of which has a strong screw driver blade, the other end is of special magnetic stoel. P15083-Your Cost.
$85^{\circ}$

## Four-in-One Neutralizer Compensator and "Tool Kit"

## 

Combines in a fountain pen size compact tool that can be carried in your vest pocket, 1/" and $5 /{ }^{\prime \prime}$ nut wrenches, miniature blade screw driver for neutralizing and a full size insulated handle general purpose screw driver. Made of fine quality extra strength fiber. Fountain fine quality extra strength fiber. Fountain pen ciup prevents losing irom pocket. When closed, no sharp points are exposed to tear clothing.
P15082- Your Cost.
$85^{c}$

Neutralizing and Compensating Screw Driver

Bakelite knob, diameter 1" fastened to 1/4" hard rubber rod projecting $3 / 8 \%$. Hardened screw driver blade.
$26^{\circ}$

Pencil Type Test Prods
These test prods are
 in large demand due to their serviceability and special features, such as interchangehandles. Spring prongs at the end of prods allows changing prods allows changing from spade lugs to
phone tips or to spring phone tips or to spring
clips. Tight and clips. Tight and
sturdy connection at all times. Handles are $6^{\prime \prime}$ long and only $1 /{ }^{\prime \prime}$ in diameter, ideal for getting into tight places. Needle point phone tips are used for piercing through insulated wire for good contact; body of tips act as standard tip for use in phone tip jacks. Are also convenient for scraping surfaces for good contact. Equipped with 5 ft . black and red flexible wire. Comes complete with two Alligator Clips, two needle point Phone Tips, and two tapped lugs; the latter will fit all screws up to No. 10 in diameter
P12971
Your Cost Per Pair Complete.
$79^{\text {c }}$

## Alligator Test Clip

This new type of Alligator
Testing Clip is made on the new principle, long and thin. It is only "/4" wide and $2 "$ long. Has a soldering feature on the inside of the barrel for easy soldering
rhey are ideal for testing purposes on meters, test boxes and electrical apparatus.
M12955-Your Cost Each......... Per Dozen.
.50 c


Tapered Lugs
These lugs are ideal for all kinds of connections due to the fact that they are tapered and will take all screws up to number 10. Are made of brass and are neatly nickel-plated.
M12954-Your Cost Per Doz
$15^{c}$
50 For


## Laboratory

## Test Prods

Improved type. Has bronze tip with needle point and heavy body. Answers two-fold purpose of needle prod and phone and are extra heavy. Red and black covered leads 5 ft . long. Shipping weight 8 oz . M12978-With Spade Tips. M12979-With Phone Tips. Your Cost (either type). M12980- With Spring Clips Your Cost
 10 For.

Eby Triple Posts
Bakelite strip. Three posts. gnd., long ant. and short ant.
M13029-
Your Cost Each ISc
Your Cost Each. 50 ......... $5^{c}$
Eby Twin Jacks
Bakelite moulded strip
for standard phone tips. Mounting hole centers M1303
M13030--Phono.
M13031-Speaker ${ }^{c}$
M13032-Field each


Eby "Ace" Binding Post Non-removable knurled rubber top. Brass bolt and body. Complete with lug and nut. Marking M13027-Specify marking desired.


Your Cost Each. 50 c Per Hundred 53.45

Improved Testing Plugs and Lugs


M12961-No. 1. Hook Type Connector with Insulated Sleeve Insulated Steeve. M12962 No. 2.
"U" Type Connect Insulated Sleeve. Your Cost Each
nector and Sleeve Your Cost Each M12965 No. 4. Insulated Sleeve. Mour Cost Each M12964-No. 5. Insulated Sleeve. Your Cost Each M12966-No. 6. Heavy Connecting Your Cost Each. Insulator.
Your Cost Each.
M12968-No. 8. Nickel-plated. Your Cost Each

M12967-NO 7 IO............... ${ }^{c}$



## Multi-Adapter

Here's what you have been looising for-nothing like it, forty-in-one Adapter Change. High grade tube checking adapter, tests over 40 tubes. No leads, no jacks or plugs, no complicated directions. Resist ances and toggle switch for instant reading of both plates of dual plate tubes, beautifully and ruggedly made, a typical Na-Ald product. Tubes it will check in practically any checker are $19,29,33,36,37$, $38,89,41,42,44,46,47,49,52$, 70, 80, 82, 83, 85, 88, 89, 93, 95 $985,986, \mathrm{G}-2, \mathrm{G}-4, \mathrm{LA}, \mathrm{PA}, \mathrm{PZ}$ PZH, WUNDERLICH A and B Nu-Ald No. 950XYL. Shipping vioht 2 lbs
K11553-List $\$ 6.00$
Your Cost Special $\mathbf{3 . 5 3}$
For Testing Wunderlich 6 Prong Tubes and Type 29 and 69 in any Tester or Analyzer 965GG
 6 hole top, 5 prong base, the two grids of the top socket are connected together and brought down to grid prong of base, thus converting tube to a standard three element type for testing in type 27 five prong sockts. Shipping weight 8 oz . $K 11552$ List $\$ 1.00$ Your Cost
$59^{\circ}$
For Testing Wunderlich Five Prong Tubes 955GGKL
 5 hole top, 5 prong base, the two grid holes are connected together and brought down to the grid pin. Cathode pin connects to a flexible ead with a connection Which fits the cap of Wunderlich tube. Other through. Used for testing Wunderlich tubes in ltube testers Also used with adapter 955 GGKC for testing Wunderlich tube circuits in set testers and analyzers Shipping weight 8 oz .
Your Cost
$73^{\circ}$

## 955GGKC

CompanionAdapter to 955GGKL 5 Hole Top 5 Prong Base Cathode hole connects to a wire lead and tube cap; grid hole connects to two grid pins; other connections are through. Companion adapter to 955 GGKL .
Shipping weight 8 oz
Your Cost
$73^{\circ}$
For Testing B.R.Raytheon Malf Wave Gaseous Rectifier Tubo Circuits in any Analyzer The two adapters listed below, used together, are required for this purpose. Both have 4 Hole Tap4 Prong Base. 944 BRA -The plate and negative filament holes are connected to the anode and cathode pins, respectively other connections dead.
Shipping weight 8 oz
K11548-Lis
$59^{\circ}$
944BRB-The anode and cathode holes connect to the plate and negative filament pins, respectively other connections dead. Shipping weight 8 oz
K1is49 List $\$ 1.00$ Your Cost
$59^{c}$

## NA-ALD Analyzer Plugs and Associate Adapters



K11547—Li ist $\$ 1.25$
Your Cost. hole to 5
$73^{c}$ 968 DS 6 hole to 6 p K11546-Llst $\$ 1.25$ Your Cost
967 SS 6 hole to 7 pro ter with locking stud connected to controi-grid prong.
Your Cost.
$73^{\circ}$
$967 \mathrm{SGL}-6$ hole to 7 prong adapter with locking stud. Con-trol-grid prong connected to lead with clip for attaching to controlgrid stud on a nalyzer plug. K11577-List $\$ 1.50$ Your Cost.


For Testing 7 Prong Tubes in Set Analyzers with 906L Plug


To be used with Alden 906 Istch lock analyzer plug. Adapter with center stud goes on analyzer plug and fits into seven prong socket of sets. Adapter with seven hole top is connected by lead to suppressor grid contact and fits into six hole socket ol
analyzer. Shipping weight 2 lb . analyzer. Shipping wei
List $\$ 2.75$
List $\$ 2.75$
\$1.62


965-KS
57-58 Tube Checker Adapter in connecAdapter in connec-
tion with any tube tion with any tube socket. Shipping

## weigh $\$ 1.00$ <br> 51.00

Your Cost $59^{c}$

## NEW :

7 Prong Plug with Asso. ciate Adapters 907 NL


Bring your analyzer up-to-date by installing this complete set of plug and 3 associate adapters. Available with 5-foot cable Made Available with 5 -ioot cable Made insulated latch for locking adapinsulated latch for locking adap-
ter to plug. Shipping weight 8 oz.
K11554-907WL-List Price $\$ 3.50$
Your Cost
$\$ 2.06$
907 WLC- With cable
K11555-List Price
53.23

Your Cost
socket.
K11556-List Price $\$ 1.25-73^{\text {C }}$
Your Cost
Your Cost
$975 \mathrm{DS}-7$ hole top to 5 prong socket
$K 1155$
Your Cost
$974 \mathrm{DS}-7$
st Price $\$ 1$
$73^{c}$ 974 DS
mocket
K11558-List Price $51.2573^{c}$
Your Cost
Complete kit of 1 analyzer plug
and 3 adapters. Shipping weight 5 lbs.

| K11559-List Price $\$ \mathbf{\$ 1 2 . 2 5}$ |
| :--- |
| Your Cost......... |
| 7.25 |

Analyzer Plug 905L


Latch Lock Especially useful for replacing plugs on test equipment, connecting bench testing equipment and for making Your own analyzer.
Very rugged. Moulded hakelite body. Moulded plug has a 5 prong UY base with a controlgrid cap on a handle for control grid connec5 ft. six wire cable, five wires going diand the sixth to the control-grid cap. Also equipped with special latch for locking adapters to plug. Latch is dead. adapters to plug. Latch is dead electric shock.

K11525 - Without cable, without adapter.
Yist \$3.00.
$\$ 1.76$
K11526-With cable, without adapter. List $\$ 5.00$ \$2. 94

## Associate Adapters

For 905 Analyzer Plug 954 DS-Adapter. 5 hole top ${ }^{4}$ prong base omits cathode. Your Cost $\qquad$ $72^{c}$
956 DS -Adapter. 5 hole top, 6 prong base. The suppressor grid prong of the adapter is connected to the center post. Used for recent model Supreme testers.
K11573-List Price, Each $\mathbf{\$ 1 . 2 5}$
$72^{c}$

## Universal Testing

## Adapters

Have break in the
plate circuit with connections by cord tip jacks. Filament, grid and cathode connections also have conjacks, enabling you to make many tests through this adafter. You may the use of current by connecting test plate meter in series with the plate circuit; test plate voltage by connecting voltmeter between plate connections and cathode or filament connections; grid voltage by connecting a voltmeter between grid connections and cathode or filament connections; filament current by connecting a voltmeter acrass the filament. Shipping weight 8 oz . 944PTT-4 prong
K11560-List 5150
Your Cost
$88^{c}$
955PTT--5 prong
K11561-List $\$ 1.50$ Your Cost
966PTT-6 prong.
K11562-List $\$ 1.50$
Your Cost


Oscillation Control Adapters


Breaks grid connections with tip jacks. for controlling oscillation by attaching resistor in series with grid cirused for geners testing of grid circuits. Shipping weight 8 oz . 91.25 - U base, K11563-List K11564-List $\$ 1.25$
Your Cost Each
$73^{\circ}$

## Neutralizing Adaptert

For use in bal ancing neutralizing condensheterodyne or neutrodyne sets. One filament is dead enabling dead
use an ordinary

tube for balancing. Shipping weight 8 oz. K11565-4 prong- 944 N K11566-5 prong- 955 N
List $\$ 1.00$
Your Cost Each
$59^{\circ}$

## Balancing Adapters



For listening in on ny stage, thus enabling you to properly balance that f the orate iermine ating proverly. Proating properly. Pro-
vided with cord tip jacks for use with
head phones. Shipping weight 8 oz . $K 11567$ + prong 944 GP
K11568-5 prong-955GP
List \$1.50


## Listening-In Adapters

For listening in on frequency
stages with head phones. ting $D$ X stations that are not audible in the speaker. Useful when you desire to listen in without
 disturbing the rest
connections are brought out to cord tip jacks. Shipping weight 8 oz .
K11569-4 prong 944PT
K11570-5 prong 955P T
K11571-6 prong-966PT
List $\$ 1.25$
Your Cost Either Type

## Bring Your Set Up-to-Date By Substituting New Type Tubes



Tests the New 25 and 30 Volt Tubes

## (c) cime

965AC
Don't throw away your old tube checker. You can test even the new 26 and 30 volt tubes with it by using this new series lamp and 48 tubes in the 27 socket, by using a lamp in series. Shipping weight 2 lbs. Your Cost.
$.52 .50 \$$
1.47

$$
965-2525
$$

This adapter checks separately both plates of the new 25 volt doube used in the latest universal and transformerless sets. Used in the 27 socket of any tube checker With a 40 watt lamp in seriea. Simtoggle switch for testing both plates separately. Shipping weight 2 lbs.
K11610 List...52.50 \$1. 47
Your Cost........
Last Minute Specials 9PL, new universal output meter
adapter. Contacts the plateadapter. Contacts the plate-
prong of $4,5,6$ or 7 prong tubes whether small or medium based. K11603-List
Your Cost
977 MS-Adapter $10 .$. , 7 medium 7 prong plug to the new small base 7 prong plug Your Cost
977SM-Adapter for use in a regular medium 7 hole socket to take the new small base 7 prong tubea. K11605 List.... 51.00
Your Cost.........59

## New Speaker-Silencing

## Phone Adapters

955PGT-For single 5 prong pent. K11578 Your Cost. $51.253^{\text {c }}$ 955 PGW-For P. P. pent
K11579 -
Your Cost.
$\$ 1.47$ pentode, $41,42,43,48$ prong List. K11580 Your cost $73^{\text {c }}$ 966PGW-For P. P. 6 prong pentodes, twin adapters
List.
K11581-
Your Cost
s 1.47

Two Type 47 Pentodes in a 71 Circuit
 UX base and a green ring $U Y$ are dead. socket top interconnected with an 8 " lead. One adapter has a filament clip from each flament prong so that the filaments of the pentodes may be connected in series whatever the filament connections in the set may be. K11582-List. $\$ 2.50$ Your Cost

For Replacing 224 and 235 Type Tubes with 57 or 58 Tubes


965 KS adapter takes the new 57 tube in a 24 socket or the 58 tube in a 51 or 35 socket 21 times the mufactor and over 50 per cent greater transconductance so is a much better tube than the 51 Moreover the 58 tube uses less power than the 51. Shipping weight 8 oz.
Your Cost
. $\$ 1.00$
59

To Use a 27 Tube in a 4 Prong Socket 954 KL
An adapter having a UX base and a green ring UY socket top with three 30" leads. Replace the UX tube with the adapter and 27 tube. Connect the red and green leads to black i black lead connect the grid bias resistor or C battery. Shipping weight 8 oz.
K11587-List
Your Cost.
$\$ 1.50 .88^{c}$

Type'41 or PZH Pentodes in Place of ' 38 Tubes
 For Automobile Sets Only
Makes the necessary connections for inserting a type ' 41 in place of a '38 type tube. It has a six prong receptacle on top and five prong base plug. The grid terminal of the top socket is brought out to a wire lead having a screen grid cap on its end which is to be inserted in the grid weight 8 oz .
$K 11583$ List
Your Cost.
$51.2573^{c}$

## Tube Bases

Moulded, polished black

Vin
Vissize. Hollow prongs, polished nlekel finish. Easy to solder leads on inside of prongs. Overall diam
 weight 8 oz
K11599-4 prong
K11600-5 prong
K11601-6 prong
K11602-
Each-7 pron

## (NA-ALD Adapters

For Testing Both Plates of 280 Tubes for Jewell 209, Weston 533 and 555 Tube Testers

944JY
Fourhole top prong base, gives second plate of 280 second plate of 280 type tubes. Crosses
plate connections. Grid hole is connections. Grid hole is con-
prong. Plate hole and grid prong

## 955G-2 For Testing Diode Tubes <br> For tresting double plate tubes such as G-2 Majestic. Has internal refor radin switch plates. Shipping List <br> K11543 <br> Your Cost <br> ST. 76

K11595 Lis
Your Cost.
$\$ 1.50$
$83^{c}$
For Testing Type 33,46, 47, PZ Pentodes Tubes in 4 Prong Socket 954KPC
5 hole top, 4 prong base, current for pliwd from plate prong. Tests 46, 47 and PZ type
tubes in 245 tubes
socket. Test 33

socket. Test 33
type in 226 socket
and heater connectiond, plate Shipping weight 8 oz
K11534-List. . . . S1.00
Your Cost.
1.0059

For Testing 41, 42, 68, PA and PLH Tubes in TubeCheckers 965-CG
To check the 41, tubes in tube check ers having a UY screen-grid socket applied to the heater contacts A single adapter having a UY base and blue ring 6 hole top with control-grid stud mounted on the side. Shipping weight ${ }^{8} \mathrm{Kz}$. 1158 -List Your Cost $\qquad$ $73^{\circ}$ 965-SL
Used in the UY
socket of Supreme
socket of Supreme
$2 \mathrm{~J}, 3 \mathrm{~J}, 4 \mathrm{~J}$ and 5 J
and 400 B N4 with
different adapter
different adapter
socket analysis
6 prong tube circuits.
Also used to check 6 .
in Hicked check 6 prong tuibes in Hickok equipment. A single adapter with a UY base and a blue ring 6-hole top having a $6^{\prime \prime}$ lead ending in a phone tip termina
K11539 List. .... $51.25 \boldsymbol{7} 3^{\text {c }}$
For Testing the 55 and 85 Duplex-Diode Triode Tubes in the 27 and 37

Sockets of any Tube
Checker
965-55


An elongated single UYapter having a UY base and a blue ring socket top with a 6 " lead ending in
a control-grid clip. The adapter has a resistance network toprovide the voltage and a toggle switeh for testing sections of the trode and diode e. Salpping K11597-L
11.76

## 982 for Mercury

## Rectifier Tubes



982 teats the 82,83,
88,985 and 986 88,985 and 986 iffers. Has protectiveresistance and toggle switch plates. Adsting both is placed in socket used to regularly ubes, adjust voltchecked. Shipping tube being checked. Shipping K1542-Li $\qquad$ 1. 76 Twin Adapter for Testing 33, 46, 47 and $P 2$ Pentodes in Set Analyzers Type 974


Twin adapters with a 5-ft. interconnecting lead. Both adapters have a 5 contact top and a locater ring and the other a pink one. Place the pink ring adapter in the set socket and the black ring adapter in the UY analyzer socket. Shipping weight 1 lb . M11590 List. $\$ 2.50 \$ 37$ Your Cost.
1.47

For Testing B. R.
Raytheon Half Wave Gaseous Rectifier Tubes in any Tube Tester 944BRR
Four hole top, four prong base, a s.ngle low ring, containing the proper resistor to safely test the BR tube in any
 like an 81 tube. Grid and plate holes dead. Shipping weight K1i5. Your Cost $\qquad$ 1.47

For Testing the 33, 46, $47,49, G A, C A$ and P2 Tubes in Tube Checkers
 A single adapter having a UY base and a blue ring UY socket top 49, GA, CA and PZ
tubes in tube checkers having a UY triode socket and provision for supplyheater contscts. Shipping weight K11535 List
$51.0059^{c}$

## Miscellaneous Adapters and Testers

## New Readrite Adapters

 ocket．Complete instruction chart furnished with each adapter．This adapter will bring your tube tester right up－
 Your Cost No． 167 is a special Readrite Nos． 610 and 710 set testers connected to the cable plug for lesting seven－prong tube with one center prong on a seven－prong plug．Shipping weight 8 oz
K11515－List $\$ 1.00$
Your Cost．
$59^{\circ}$
No． 57 Adapter is used for testing 57． $58,89,41$ and 42 type tubes in early model tube testers which are provided with sockets for testing the 245 or 210 type tubes． Consists of a six－hole socket on a four－prong plug．Shipping weight ${ }_{K}^{8} \mathbf{O Z} 1509$ List 75 c
Your Cost
Na－ald Adapter No． 975 DW


Socket analysis of 7－prong tube vircuits with set analyzers which aan test the 24 －tube circuits．Twin lead．The 7 －prong adapter has a 5 －hole top with a $6^{\prime \prime}$ lead with eontrol－grid clip．The 5－prong adapter has a 7 －hole top and R6
lead ending in a phone tip．Meas－ area all voltages and current． K11606－List $\$ 3.00$ Your Cost

## 975DSW

Same as above，except for the new type set analyzers having a UY atch lock analyzer plug K11607－L


No． 58 Adapter earller model earlier model set ing a six－hole ocket when used for testing circuits using
six－prong tubes． This is a double dapter con－ nected with a
$40^{\prime \prime}$ cord．Shipping weight 1 lb ．
 K11510－List $\$ 1.50$ Your Cost．

## $83^{c}$

No． 175 Adapter is used to test from the seven－hole receiving set socket using the No． 59 tube This is used in Readrite mode No．245－A，No．700，and No． 600 eaters．It is a double adapte connected with a $40^{\prime \prime}$ cord．Ship ping weight 1 lb ．
K11512 List $\$ 2.00$ \＆
Your Cost．．．．．．．．．．

No． 176 Adapter is used for test ing from the seven－hole receiving set socket using the No． 59 type
tube，used in Readrite Model 610 tube，used in Readrite Model 610 and 710 testers，which are not equipped with seven－hole sockets． Double adapter connected with a $40^{\prime \prime}$ lead．Shipping weight 1 lb ．
K11513－List 51.50

Victor Speaker Plug Used on the Victor
speaker，for Set Mod－
els R－32，RE－45，R－52，
RE－75．Heavy plated
contact prongs molded
in genuine Bakelite．
Equipped withametal
guard．Shipping
weights oz．
Wig23
Your Cost
Each．．．．．．．
Victor Female Receptacle


Used on the Victor amplifier，for Models R－32，RE－45，R－52，RE－75． Equipped with 16 heavy duty Genuine mositive contact springs Four isolated contact springs for use of speaker field supply and out－ put to voice coil．Other twelve springs are for plate and filament voltages for receiver． W19222－
Your Cost

## Short－o－Tester

Contains $21 / 4$ volt lamp and small flashlight battery．In when its fexible lead and pin terminal are introduced into the circuit．Ideal for testing eontinulty．May also be used as trouble flashlight．When used with Neon lamp $D$ approximate strength Complete with battery and bulb Shipping weight 1 lb ．
m129R4－List $\$ 2.00$ ．Your Cost Each

## Detect－o－Lite

A Neon lamp enclosed in a Bakolite case with two flexible leads．Indi－ $D$ C．Detects live and $C$ ．or Dide of house wiring systems．In－ eide of house wiring systems．In－ between 110 and 560 ．Shipping weight 80 oz
112985 －List $\$ 1.50$
rour Cost
$88^{c}$


## DELUXE MODEL

Similar to the standard model ex－ cept that leads are longer，remov－ able and instrument enables one to reach hard－to－get－to places．More convenient to use．Shipping weirht 1 lb ．

Make Tour Own Adap－ ters Using the Eby Tube and Circuit Socket Sections
Eby Tube and Cir－ cuit Adapters have interchangeable them adaptable to every adapter quirement．
moulded Bakelite

moulded Bakelite
socket section fits
into a standard tube base sec－ into a standard tube base sec－
tion．A $1 / 0^{\circ}$ hole is provided in the side of the standard plug sec－ the side of the standard plug sec－
tions for bringing in leads for cutting in external circuits．Any combination can be worked out with these adapter sections．Ship－ ping weight 8 oz．

Wired Tube and Circuit Adapters Without Hole At Side
Stock Combination Your M13010 4 to 4 M13011
M13012 $M 13013$
M13014
M13014
M13016
M13017
4 to 5
4
5
5 to 6
5 to 5
5 to 6

Unwired Tube and Circuit Adapters
Has a $1 / 4$＂hole on side for external connections．Dimensions of as－ sembled adapters：Body， $13 / 1$ x $1^{\prime \prime}$ high．Tube prongs $3 / 2^{\prime \prime}$ long． Shipping weight 8 oz．
Socket Section Stock Number of Prongs

Your

\section*{| No． | Prongs |
| :--- | :---: |
| M13115 | 4 |
| M13116 | 5 |
| M13117 | 6 |
| M13118 | 7 |
| M13119 | Plug Section |
| M13120 | 4 |
| M13121 | 6 |
| M13122 | 7 | <br> M13115 <br> M 13117 <br> M13119 <br> M13121

M13122}

Readrite Adapters
 ing the 5 －prong cable plug for testing in four plug for testing K11500－Lis

## Your Cost．

No． 45 adapter contains


位
K11501－List 75 C
Your Cost．

## Phono Adapters

 For sets using＂C and detector circuin ready equipped with convenient pick－up connections． List Price $\mathbf{5 1 . 0 0}$ Mour Cost $55^{\circ}$Wafer Type
Sets having Grid Leak Detection
${ }_{\text {MourCost Each }}$
$23^{\circ}$


## Eby Plug and Socket Cable Connectors

Moulded Plug Cable Connectors installations where wires of a cable are connected to the prongs of the male plug．Designed to it the standard tube sockets and Eby fe－ male cable connectors．Equipped with soldering lugs and remov able cap．Shipping weight 8 oz ． Stock No．of Size Hole Your No．Prongs in Cap Cost M13041 M13042 $\qquad$省＂。＂

## Female Socket Cable Connectors

Moulded female connector consists of a moulded cap and a socket as sembly．The two fit together by
means of a bayonet arrangement which permits quick and positive as－ sembly and disassembly．Ship－ ping weight 802
Stock No．of Size Hole Your

| No． | Prongs | in Cap | Cost |
| :---: | :---: | :---: | ---: |
| M13043 | 4 | $5 / "$ | 5.19 |
| M13044 | 5 | $5 / 7$ | .19 |
| M13045 | 6 | 7.19 |  |

## Eby Laminated Male

 PlugsTheee male plugn offer one of the simplest and lowest cost methods of mak－ circuit connection vircuit connections．Laminated Bakelite discs．

| Stock | No．of |
| :---: | :---: |
| No． | Prongs |
| M13037 | 4 |
| M13038 | 5 |
| M13039 | 6 | Your

Cost $\begin{array}{lcr}\text { M13037 } & \text { Prongs } & \text { Cost } \\ \text { M13038 } & 4 & 5.08 \\ \text { M13039 } & 6 & .08 \\ & 6 & .08\end{array}$

## Na－ald Phono－Radio

## Adapter

949SW－Adapter connects a phono－ graph piek－up to a UX tube and pro－ vides a method of switch from Radio
to Phonograph． by means of two phone tip connectors and two $18^{\prime \prime}$ leads
to be attached to a switch．This pro－
 vides a suitable arrangement with． out disturbing any wiring or the adapter．A suitable toggle switch can be mounted either on the from or side of cabinet．No switch sup－ plied．Shippink weight 8 oz
K11608－List $\$ 1.25$
$73^{\circ}$
ICA Speaker Adapter


So designed that additional speaker can be connected to all radio sets using push－pull amplification with－ out rewiring or making any noldered connections． tubes thus connecting the extrn turaker across the plates．Com－ apeaker across the plates．Com Shipping weirht 8 oz List $\$ 100$ Shipping wesht $112 \mathrm{ce1}$ 5－Prong Your Cost

## YAXLEY Plates and Gang Switches


schools, etc., where a selection of two or more programs are offered Also in meter circuits and test equipment, to break both sides of line. Multiple gang switches with two to ten points are adaptable or switching from short to broadcast or long wave reception in combination receivers


All switches have low capacity contact arm. Prices on 5 to 10 points

- 5 to 9 gang quoted on request.
 For Loud
Speaker,
Aerial and
Ground
with
Duplex A. C.

Loud Speaker Jack-aerial and round pin jacks and duplex A. C. receptacles three-gang plate. Shippinp weight 1 lb . each.
No. 353 -Brass F6389-Bakelite No. 353
List Price $\$ 3.00$
Your Cost $\ldots \ldots . .76$

Trutest Rotary Switches


Sturdy construction steel end plates; $1 / /^{\prime \prime}$ shaft. Noiseless in operation. Double surface cutting, self cleaning silver plated contacts. Bakelite insulation, rustproof frame. Size $11 / 3 \times 23 / \%^{"}$ length depending on number of sections. Shaft 1 in. long. Wiring diagram with each For Converters and S-W Supersections. Shlpping weight 1 lb . each.
M12842 Each
$98^{c}$
For a two range TRF Receiver; or where a long-wave or short-wave band and broadcast band are to be included in one chassis; 6 pole 2 position, three sections Each
s1.15
For a superhetrodyne circuit combined with a TRF stage; 6 pole 5 M12844-Each...... 3 s. 31

These multi-point rotary tap switches as illustrated have been especially designed to meet the requirements of the most exacting Radio and Electrical Engineers for use in short wave and long wave receiving sets, test equipment, radio sound installations, etc. Single gang units with from two to ten points are commonly used in tapping resistances, transformer, coils, etc. Two gang units with two to ten points are widely used in wiring radio receiving systems in hote!s, hospitals,


Loud Speaker and Duplex A.
Outlets
Phone Jack and two
A. C. Receptacles.

No. 242.
F6416-Brasa
F6417-Bakelite
List $\$ 2.00$
Your Cost Each
${ }^{5} 1.18$
Antenna and Ground Outlet
Two Pin Jacks marked Ant." and "Gnd." No 156.

F6406-Brass
List 5.75
Your Cost Each
e
$44^{\circ}$
Volume Control and


Your Cost Each
wo Jacks for Dual
Channel System
Both marked "Radio". For speaker
tion. No. 142.
F6408-Brass
F6409 Bakelite
List $\$ 1.75$
Your Cost Each
Shipping Weigh
1 Lb. Each


For Loud Speaker or Mead Phone
No. 135, Single Jack, marked "Radio." ShipFing weight 1 lb
F6405-Brass
List 90 c

## st Ench

$53^{\circ}$
For two or more loud speakers on same line. Has 2200 ohm impedance to compensate when one speaker is connected. No. 134, single jack marked radio. Shipping weight 1 lb .
F6397-Brass F6398-Bakelite
List $\$ 2.50$
Your Cost
venience outlets
For Aerial,
Ground and
Duplez A. $\mathbf{C}$.
Two Pin TipJacks
and two A.C. Re-
ceptacles. No.
256. Shipping
weight 1 lb
F641-Brass F6415-Bakelite
List $\$ 1.50$
Your Cost Each

No. 256A. Same as No. 256 ex cepting with Underwriters Special Yaxley 2-gang outlet box. F6395-Brass $\mathbf{F 6 3 9 6 - B a k e l i t e}$
List, with box $\$ 2.00 \$ \$$ Your Cost $\qquad$

$79^{\circ}$

No. 133A. Same as 133 but including Underwriters special Yaxley single gang outlet box with buitt-in separator
F6393-Brass F6394-Bakelite List Price, with outle box. 51.70
\$1. 10


No. 132. Same as 137, described above, but has twelve conductor jack with plug.
6391-Brass. F6392 Bakelite
List Price $\$ 3.00$
SI. 76
Shipping Weight 1 Lb . Each

Yaxley Cable
Connector Parte Pin Plugs


Featuring Bakelite insulation; positive spring contacts; no loosening of pins or springs in soldering. Polarized
terminals.

## Cover Type

F6375-No. 635. Pin plug with cover- 7 conductor
List Price $\$ 1.00$
Your Cost
$59^{\circ}$
F6376-No. 625. Pin plug with cover- 12 conductor.
List Price $\$ 1.25$
Your Cost
$74^{c}$
F6377-No. 631. Pin Plug with mounting ring 7 conductor. List Price $\$ 1.00$
Your Cost
F6378-No. 617 Pin plug with mounting ring 12 conductor with mounting ring
List Price $\$ 1.25$

## List Price $\$ 1$

$74^{\circ}$
Shipping Weight 1 Lb. Each

## Receptacle Plugs



Designed for easily and quickly making or breaking multiple connections. Are used in radio and receivers, sound equipment, etc.

## Ring Type

F6379-No. 645. Receptacle plug with cover- 7 conductor List Price $\$ 1.00$
Your Cost
59
F6380-No. 615. Receptacle plug List Price $\$ 1.25$ Your Cost

F6381-No. 644. Receptacle plug with ring 7 conductor. List Price $\$ 1.00$
Your Cost.
$59^{\circ}$
F6382-No. 614. Receptacle plug with ring- 12 conductor List Price $\$ 1.25$
Your Cost.
$74^{c}$
Shipping Weight 1 Lb . Each

# UNIVERSAL MICROPHONES 



## Universal Model "LL"

An extra rugged heavy type two-button broadcast Microphone. The entire assembly is of high carbon steel, ground to within .001 of an inch accuracy. The diaphragm is of alloy of exactly the proper hardness and stretch to secure the best regults. Pure gold contact points on each side The materials used and the precision of manufacture combine to make this model stand out as the superlative microphone, reproducing range of from 30 to 7000 cycles.
Model "LL" is $31 / 2^{\prime \prime}$ in diameter by $13 / 4$ " thick and is standard 200 ohms per button Net weight $21 / 4 \mathrm{lbs}$. Shipping weight $31 / 2 \mathrm{bs}$. M13403-List Price $\$ 75.00$
Your Cost Each

# Universal Model "KK <br> A substantial, solid twn-button broadcast Microphone with a very minimum hiss. Model "KK s carefully constructed of the finest materials with a 24 Kt . pure gold spot center alloy diaphragm which is held under tension. Diaphragm has a thickness oi only $002^{\prime \prime}$ The frequency Fange of the "KK" is all that can be desired in a carbon microphone, from 50 to well over 6000 cycles Buttons 200 ohms each. Entire microphone <br>  finished in 24 K . "polished gold. It is $21 / \mathrm{m}^{\prime \prime}$ in diameter and $1 / 4$ "thick. Each unit is carefully tested before shipment Net weight $11 / \mathrm{lbs}$. Shipping weight $21 / 2$ lbs. M13404 List Price $\$ 50.00$ <br> Your Cost Each. 



Baby Mike for Home

## Entertainment

Baby Mike is a genuine single-button carbon microphone of 200 ohms resis tance in a die-cas tance in a die-cas
mounting $3 y^{\prime \prime}$ high An outstanding fea ure is adjusting screw at top near press button permitting operator to leave circuit open or解 eature is the cushioning of diaph the speaker Finished in highly polished chromeplate. Complete with 25 -foot cord, prong adapter for conpection to tube pin plues for connection to acks or hinding posts and detafled instruction aeks or binding postandretion and severa heetods of adaptation. Shipping weight 4 lbs M13439-I ist Price $\$ 7.50$ Your Cost


## Universal

## Model"QRXF"

QRQ Microphone Mounted on Junior Input Stage
An ideal combination for ama teur usage. Simple and very easy to connect. Requires one fashlight mono-cell for operaion. The transformer improves both volume and quality over any direct application of microphone to detector tube. Has potentiometer volume control which also operates battery switch. When used for home entertainment, the program and speech may be returned and faded in and out by the volume Amplifier box finished
ni330 1 Lite Price s12.00
Your cost teach
${ }^{\text {s }} 7.06$

## Torpedo Microphones



New type of microphone supplied to grow the and gicrophones which in themselves are fully protected, more compact, and can quickly demounted. Connection is made to three spring jacks into which telephone pin terminals are plugged Not supplied with cord. The polished chrome plated perforated and screen cup housings are of heavy brass and are firmly fastened. Can not be removed accidentally. Supplied in standard models "BB", "KK,", "LL." Maxi mum shipping weight 4 lbs
m13471 - With "BB" Mike 1bs. List Price $\$ 30.00$

Shipping weight 7 Your Cost
${ }^{s} 17.64$
M13472-With "KK" Mike. 6 lbs. List Price $\$ 55.00$
Your Cost
m13473-With "LL" Mike
7 lbs. List Price $\$ 80.00$
hipping weigh

Your Cost
547.04

We can supply all Universal products, whether or not listed in this catalog, at maximum trade discounts.

## New Midget Models 2-Button Lapel Microphone



This model confirms the reputaquality and performance. A full fledged, aturton tonedinstrument craftamanship. Thin, and light in weight, this is truly a laboratory designed, built and tested unit. The hiss, common in all carbon microphones has been reduced to a minimum thus assuring perfect reproduction of pronunciation and one's stress of chusen words. With this microphone clipt to the of voice and with head held at any angle, the result will always be of the highest quality result will always be of the highest quality or replaced. Diameter $21 / \mathbf{N}^{\mathrm{N}}$, thickness $3 / \mathrm{s}^{\prime \prime}$ Shipping weight 1 lb . M13438-List Price $\$ 25.00$

## Your Cost

${ }^{\text {s }} 14.70$


Universal Mo Universal Mod-
el "W", the Perfected
Watch Model Mierophone, is
the smallest completely protected and button microphone manulactured. Supplied particularly for the many special uses requiring a snall, very sensitive compact microphone that can be depended upon to give full quality performance. A favorite type for use in hidden positions or on the coat lapel. High sensitivity, light wieight and compactneas are the special features of this model. 200 ohms. Equipped with Pure Gold Spot Center Diaphragm, completely enclosed. Size $17 /{ }^{\prime \prime}$ in diameter, $1 / 4$ in depth. Shipping weight, 3 diam
M13443-Li
Price $\$ 3.00$
s. 1.76

Super-Sensitive Midget
Model "Y"
Universal Modeliohter smaller lighter, smaller than Model "W"", described

ahove. It is of the same general construction, except that the front face of the microphone is the diaphragm proper. This model is extremely sensitive, whep placed in any hidden position, it will pick upsounds and conversations. Recommended for use where high sensitivity and extreme compactness are necressary. Should be placed in protected locations, behind screen or grill work. Suitable for use with some of
the less expensive types of ear phones. Because of the exposed diaphragm, great care must be exercised in landling. Shipping weight 1 lb . M13444-List Price $\$ 2.00$
s 1.18


## Universal

 Model "BB'Themost popular double-button publi address Microphone in America. Nearly twice as heavy as any othe microphone in its class. Built to hair-line precision An idea of it ruggedness can be obtained by the fact that Model "BB" is 3 " in diameter and 2 " thick Built especially for voice pickup, public addrese work and for amateur broadeasters, etc. Beautifully finished in highly polished chrome plate. 24 K . pure gold spot centers. Frequency re sponse 70 to 5000 cycles, 200 ohms per button Net weight 1 lb . Shipping weight $21 / 2 \mathrm{lbs}$ M1340 -List Price $\$ 25.00$ Your Cost Net
14.70

## Universal Model "X"

Available in either single or two button type. Resistance 200 ohms per sistance 200 ohms per button. May be mounted in any position. Scientifically damped, laboratory tested. Dur-aluminum diaphragm, pure gold contact points. Frequency re-
sponse 100 to over 4000 sponse 100 to over 4000 .
cycles. Beautifully inished. Shipping weight, 31 bs M13412-Single Button Model "X". Lis Price 57.50
Your Cost Each
M13413- Double Button Mode Price $\$ 10.00$
Your Cost.
s. 4.41
\$5.88


## Universal

## Madel "A"

The most highly developed single button microphone on the market. Constructed with solid 24 K . gold faced button and highest grade carbon granules which reduces emely aminimum Equipped with an extremely thin, light weigh diaphragm which is also gold faced. The scientific damping permits Model " $A$ " to handle frequencies from 100 to 3000 cycles. Single button is 200 ohms resistance. Diameter 3" thickness 1)4" Polished chrome finish. Shipping weight 3 lbs
Your Cost
s8.82


Universal "Hiandi-Mike"
A vailable in both single and double button types. Pre-eminent for al uses where a hand microphone is desired. Intended for voice only and in this field it has a maximum volume with clear and clean cut speech reproduction. Finished in beautiful chrome plate. Has on and off switch and 15 " loot cord 200 ohms per button. Shipping weisht $21 / 2 \mathrm{lbs}$
M13409-Single Button. List Price $\$ 10.00$
$\$ 5.88$
M13410-Dour Bost.
List
$\$ 8.82$

## Free:

Eight Microphone Springs with each Universal Microphone

## LAFAYET'TE Microphones



## Model "75"

DELUXE MOOEL "75" is unquestionably the finest two-button carbon microphone that money can buy. Response, $30-8000$ cycles. Extra large and rugged. Resistance, 100 ohms per button. Designed especially for studio and other uses where perfect reproduction of hoth music and the spoken word is required. Stretched diaphragm is of Duralumin .002 inch in thickness, with solid gold contact points where the carbon contacts the diaphragm. This nsures an absolute minimum of carbon rush, resulting in an extremely quiet carbon unit. Diaphragm is protected by a steel screen to prevent damage from handling or accident. Extra heavy chromium plated brass frame measures $3^{7 / 4}$ inches in diameter, $1^{13 / 4}$ inch hick. Actual weight, 2 lbs., 3 ozs. Shipping weight 5 lbs . M13422 List 575.00
Your Cost Each.
\$34.50

## Model '50'"

DELUXE MODEL " 50 " is a substantial, solid, two-button broadcast microphone, with a very minimum of hiss. Carefully constructed of the finest materials, with 24 Kt . pure gold contact points. Duralumin diaphragm of only .002 inch in thickness. Microphones similar to the model 50 are used in many broadcasting stations around the country and are giving satisiactory service. Heavy brass
 frame, chromium plated. Frequency response, $30-7000$ cycles. Diaphragm protected with steel screen. Equally suitable for voice or music. Resistance, 100 ohms per button. One of the finest carbon microphones over offered at our low price. Each unit is critically tested and inspected before shipment, and carrips standard R. M. A. guarantee. Size, 31218 inches diameter, $26 / 4$ inch thick. Actual weight $1 / \mathrm{lb}, 9 \mathrm{ozs}$. Shipping weight 5 lbs. M13421-List Price $\$ 50.00$

## Your Cost Each

s22.50


No. 1

## Lafayette

 Floor Stands Extra QualityLafayette microphone stands are turdy in construction, beautiful appearance and makea welcome addition to any public address systera. Stand No. 1 is of modernistic design with satin siver and black finish. Columns are fluted and bases are attractively designed in the modern manner. Extra heavy construction and weighted banes. baops in sides of Bases have felt tips.
 Extends from 36 to 70 ins. The Lafayette Stand No. 2 is of the same rugged construction. Made of a rich satin finish white metal with die cast ring and weighted base. Ring is 7 ins. in dismeter and base is 5 ins. in diameter. Adjustable from 46 to $741 / 5 \mathrm{ins}$.
Stand No. 1. Shipping wt. 10 lbs . M13431-Your Cost.
${ }^{s} 8.75$
Stand No. 2. Shipping wt. 10 lbs . M1342 Your Cost.


## Lafayette Desk Stands



Type A


Type 8


Type C

The styles illustrated above, while of different design are of the finest construction throughout. Type " $A$ " is of modernistic design, satin silver and black finish. Fluted column. Extra heavy with weighted base. Loops in sides of barrel for cables. Base has felted tips. 9 ins. high. Ring, 6 ins. Shipping welght 10 ibs. M13430- Your Cost.
3.95 Type " $B$ " has a rich satin finish that makes it comparable with stands costing twice as much. Height $111 / 2 \mathrm{ins}$; diameter of ring, $6 \% / 4$ ins; digmeter of base, $51 / \mathrm{in}$ ins. Shlpping weight 4 lbs. Your Cos
s2.45
Type "C" is a very nest appearing stand of satin finish white metal with die cast ring and weighted base. Ring is 7 ins . in diameter; base s 5 ins. in diameter. Overall height $13 \frac{3}{1}$ ins. Neither of these types are adjustable. Shipping weight $61 /$ lbs. Stand only. N13427-Your Cost
53.50

## Lafayette Suspension Ring

 New type, cast in Bronze, nickel plated, with 4 spring loops; 4 outside lugs. Including 8 locking springs. Diameter $5 \% / 夕^{\prime \prime}$. Shipping weight 1 Lhlbs. M13448-Your Cost\$1.45


Model

## "Twenty-Five"

A very efficient two-button carbon Microphone which will give entirely satisfactory service in less critical public address in stallations. Frequency re sponse, 40 to 4000 cycles Resistance, 100 ohms per button. Heavy chromium plated brass frame. Special alloy diaphragm with 24 Kt . gold contact points. Size $2^{3}+$ inches diameter, $2 / 10$ inch thick. Shipping 4 lbs.
M13420-List Price $\$ \mathbf{2 5 . 0 0}$
\$10.95 Your Cost Each

## Double Button Utility Microphone Stretched dural diaphragm with gold spots under each

 button. Built especially for portable use. Very rugged construction. Volume con trol built in handle. Res 100 ohms per button. Finished in sanded oxidized copper. Complete with 26 ft. of silk covered cable. Shipping weight 3 lbs M13483-LLst $\$ 23.00$14.95 Your Cost

## Singla Button

Utility Microphone
Especially designed for use where a utility microphone of
single button construction is desired. Intended for volce only Best quality material and workmanship throughout. Finished in beautiful polished plate. Equipped with an off and on witch and 12 ft . of silk covered cable. Shipping weight

M13482-List Price $\mathbf{\$ 8 . 5 0}$
Your Cost


## Lafayette Input Stages



## Double Button

For two button microphones and consists of potentiometer volume control, transformer, switch and a battery receptacle enclosed in a wooden cabinet $4 \times 61 / 2 \times 51 / 2$. For matching any two-button microphone to filament and grid o tube if connected to amplifier or phonograph ack. The volume control is across ind ary of the transformer. Box finished in blac eatherette. Equipped with 25 F .2 . 2 onducto cord and full directions.
M13487-Llst Price $\$ 12.50$
Your Cost....................... $\$ \mathbf{5}$

## Single Button

Similar to above; for all single button micro phones. Shipping weight 4 lbs . $31 / 26 \times 31 / 2$ ins


# Mirŕaphanes 

 M13388- Your Cost M13389-Your Cost M1 weight 1 lb . M13385-List $\$ 12.00$ Your Cost$\approx \approx \approx$


These Microphones and other products made by Ellis, are manufactured and assembled with the strictest and most precise workmanship possible, under the most rigid tests devised for their inspection while un der process. All materials are subjected to a series o inspections and tests to insure their absolute uniform ity. The same care is exercised to insure these prod ucts reaching you in the same perfect condition a when inspected. All the experience and knowledge gained in thirteen years work, have been concentrated on making Ellis' products the finest in their line. A an example of this the Demountable type was designed for prevention from theft, and exposure to the weather, by making the Unit easily removable and replaceable from the supporting frame. The cable conlections are entirely independent. The Unit ean be ectioved whout disconnecting ony wires, without emoved unlacing and relacing a set oprigs, and without chance of a mistake be made in cable connection when reconnecting the Uait. The various models o microphones described are made to cover the genera needs and requirements. We have incorporated ever worth while feature in our new microphones. This with the quality of the materials and workmanship used, guarantees our units to give the utmost ratisfaction, in clear, clean cut natural reproduc tion, and a censitivity developed to the highest degree, with a frequency range all that could be desired by the most exacting. Only the highest grade carbon granules, used in all models. All these features insure superior performance under the most trying conditions.

## E1lis Models 30 and 29

The Ellis Microphones Models 30 and 29 differ from each other only as to diaphragm material and adjustment. Both operate best at from Cour to ohms D. C. per button. Frequency curve from 30 to 8000 cy cles. Relatively flat from 64 to 6000 cycles. The size of either type: $41 / 2^{\prime \prime}$ in diameter and $1 \mathrm{~s} / \mathrm{K}^{\prime \prime}$ thickness. The Model 30 is recommended for Voice and Music. It is designed for general high quality microphone reproduction Music. Broadcast studio for pirh quality reproduction. 2. Remote control Broadcast studio, for high quality reproduction. 2. Remote control pub-up connecting with broadcasting studios. 3. Indoor and outdoor public address systems. Comes nickel plated. The Model 29 is recom-
 microphone made in America today. It is especially suitable for: 1. All sorts of public address systems. 2. Broadcast-station announcing of voice. Has been successfully used in pleck-up of music. This unit is also nickel plated. The Ellis Microphones models 30D and 29D correspond to Models 30 and 29 plus the incorporation of a new and exclusi ve mounting feature. This feature makes the microphone easily removableand replaceable from'the supporting frame and adds to prevention from theft and exposure to the elements. Demountable types come complete with fitings. Model 80. Shipping welght $31 / 4 \mathrm{lbs}$. List $\$ 40.00$
Model 29. Shipping weight $31 / 4$ libs. List 540.00 Model 30D. Shipping weight $33 / 2$ ibs. List $\$ 45.00$ M13390-Your Cost, with demountable feature. Model 29D. Shipping weight $31 / 2$ lbs. List 545.00

Model 10
The Ellis Model 10 is designed to meet the demand for a low priced two-button microphone. Regardless of this fact it is the most efficient unit made today in its price class, both as to the quallty of materials and workmanship used. While this model is not recommended for music, It is most effective for voice, public address systems, amateur broad casters, speaker wagons, etc. In this particular field, it has a maximum volume, reproducing speech clearly and aistiactly ot 6 to B M. A per button and operates best at 6 to 6 M. A. per button and the lit al guaraitee is 400 . $A$. per $C$. Total internal resistance 400 ohms D. C., or 200 ohms D. C. per button. Its frequency $\left\{\begin{array}{l}\text { range is from } 45 \text { to } 4000 \text { cycles. Diameter over- } \\ \text { all } 8 \% / 8{ }^{\prime \prime} \text {; thickness } 11 / 4^{*} \text { over-all. Shipping }\end{array}\right.$
s5.75

## Ellis Microphone

## Model 12

The Ellis Model 12 Hand Microphone is the only unit of its kind made today. It is a real twobutton microphone. The diaphragm consists of a special corrugated, gold plated metal. This unit is especially useful for industrial talking picture machines, home recording, public address outfits, etc. It operates best at six to eight milliamperes per button Limit of gusrantee 10 M . Total internal gusiantee 400 . . per button. 200 ohms D. C. per button. The frequency range is from 45 to 4000 cycles. Dimensions range is rom 45 to 400 cycles. Dimensions are as follows: Diameter of unit, 2 " ${ }^{\circ}$ " c ciameter of handle, 11 "; thickness over all, $13 /{ }^{\circ}$ and length over all, $63 / 4$. Unit is nickel plated and is furnished complete with 6 ft . of unshielded M13386-List Price $\$ 15.00$ Your Cost Each
$\$ 23.50$
$\$ 23.50$
$\$ 23.45$
$\$ 26.45$

Ellis Microphone Model 25
The model 25 Ellis Microphone meets the universal need for a less expensive microplone hav ing the qualities of the higher priced models. The frequency
 response is from 40 to 7000 cycles. Resistance per button is 200 ohms . Used for broadeast of music and voice, etc Nickel plated. The Model 25 D corresponds to Model 25 except that it has the new quick-demountable feature making it easily removable and replaceable and alows the cable connections to be entirely inde pendent. Model 25. Shipping Y 382 -List $\$ 30.00$
Your
517.64 Model 25 D . Shipping weipht Meature
Your Cost Each 20.55

## Ellis Microphone Model 20

Exceedingly effective for both voice and music in the following use: Small outdoor public-address systems, where it is possible to
pick up voice and music at close range. By pick up voice and music at close range. By
taking advantage of the fact that this unit is less sensitive than the larger models, it is possible to minimize or completely eliminate "feed back" and other noises. In this case, one has but to reduce current to two or three milliamperes per button and speak directly into the microphone. This instrument operates best at from four to eight milliamperes per button. Limit of guarantee, ten millia mperes per button The total resistance is 400 ohms D. C. or 200 range of from 60 cycten. It has a 6000 . range of $31 \mathrm{c}^{n}$ cles to 600 cycles. 11 im All units are nickel plated. Shipping weight $21 / 2$ lbs
M13387-Liat Price $\$ 25.00$
${ }^{5} 14.70$

## Ellis Portable Stand



This new stand strong appeal to those in the figid, ilghtin rigid, light in
weight. Legs
 have ${ }^{\text {a }}$ spread of $28^{n}$ in insuring stability. Height adjustable from $31 / 2$ to $61 / 2 \mathrm{ft}$. Legs fit a special casting designed to prevent twisting. Fittings are heavily nickel-plated bronze. Stand has new type head and elghtspeciallocking springs. Folded is $25^{\prime \prime}$ long. Has black parkerized rust
weight 11 lbs .
M13491-List 518.00
Your Cost.
${ }^{\text {s }} 10.58$

## Desk Stand

Designed to meet the demand for a low-priced stand. Is especially adaptable for the Ellia No. 10 and No. 20 Model Microphone. Stand comp iron, finished in Aluminum Lacquer. 5 lbs.
M13492-Size 514x71/" Your Cost

## Condenser Microphone

At last, a real Condenser Microphone with many features and performance approximating the most expensive types. Was designed after years of study and experimentation and it is offered to the most critical. The Head of the Microphone is milled from the bar and heavily plated. The case and base are of cast Aluminum finished in Black Crystal. Two stage amplifier is built into the case, using 2 type ' 30 tubes. Output is 50 and 200 ohms. Head easily removable. Can be used as replacement of any type Carbon Microphone. Battery supply of 6 volts and 180 volts needed for operation. No hiss, no distortion, will not blast. Its reproduction is clear, clean-cut and natural toned, with a sensitivity developed to the highest degree, and a frequency range to satisfy the most exacting. Gives superior performance under all conditions. Practically flat response. ance. Shipping weight 20 lbs.
M13497-List $\$ 65.00$. Your Cost.
538.20

## Two-Button Carbon Microphone

A two-button quality Mi crophone, ruggedly constructed; finished in Chrome Plate. Has pure Gold contacts, and Gold plated alloy diaphragm. Correctly damped. Tctal reohms per button. Has a natural tone. Low hiss level. Fitted with suspension rings. Microphone diameter $23 /{ }^{3}$ ". Shipping weight 1 lb .

M13496-List $\$ 10.00$
Your Cost.

s.88

# Microphones and Microphone Accessories 

## Trutest Shielded Microphone

 Cable
## 

This rubber covered shielded microphone cable consists of three conductors color coded in a very closely woven tinned copper shielding with $3 / 8^{\prime \prime}$ outer covering, 50 per cent pure para rubber. This cable is especially intended for outdoor use and is absolutely westher and abrasion proof. Shipping weight 10 lbs. per 100 ft .

## Your Cost, per Foot.

| 12 Ft . for. . . . 50.65 | 50 Ft for. . 52.45 |
| :---: | :---: |
| 25 Ft. for.... 1.25 | 100 Ft . for . . . 4.80 |

## Shielded Microphone Cable



First quality shielded three conductor Microphone Cable that will stand the hardest usage without becoming torn or cracked. Ends provided with suitable lugs for easy connection. Very popular for indoor installations.
Q16132 Shipping weight for $50 \mathrm{ft}, 21 / 2 \mathrm{lbs}$. 6 Ft. for ... S0.35 25 Ft. for .... 51.15

## 5 Wire Rubber Covered Shielded

 "Mike" CableRe-enforced with eord, rubber covered, stranded color coded microphone cable. Heavy cotton braid outer layer, ribbon sleeve shield, $10^{" 1}$ Hive rubber. Excellent for Condenser Mikes. Outside diameter 9 ". For all outdoor temporary or permanent jobs. Shipping weight Q16100 Your Cost, Per Foot. Per 100 Feet, $\$ 9.00$

## Super Service Shielded Microphone Cable



## 7/8 ins. outside diameter

7 conductors of No. 14 stranded copper wire for 3 and 4 microphones on a mixing panel. This wire is identical with that used by large broadcasting stations and especially recommended for the better type of large P. A. systems. Each conductor is color coded. The unusually heavy conductor is color coded. The unusualiy heavy and close shielding is well protected by a tough
live rubber jacket. It is impossible to damage this wire no matter how rough the job. Shipping this wire no matter how rough the job. Shipping
weight $12 \mathrm{fbs}, 100 \mathrm{ft}$. Q1 6099 - Your Cost per Ft. 50 Ft. for . . . $\$ 9.75 \quad 100 \mathrm{Ft}$. for . . $\$ 17.50$


Stock ${ }_{0}^{\mathrm{No}} \mathrm{N}$. 016081 Q16082
Q16083
Q16084
Size
6 ft.
12 ft
26 ft
50 ft
100 ft.

## -at Armored Connectors

 Same speciflca tions as above but complete with best grade mored male and female connec tors.Shipping
Weight
Your
1 lb.
2 lbs.
3 lbs.
6 lbs.
6 lbs.
$11 \mathrm{lbs} . \quad 5.50$

## Microphone Springs

These microphone springs are made of the finest grade tempered steel, with formed loop ends
M13402 Set of 8 for

Bruno Condenser

## Microphone


truly professional instrument. Made with micrometer accuracy and tested thoroughly over the entire audible range. Has a flat response curve from 60 to 8000 cycles.
Can be used for broadeasting, public address, or wherever perfect reproduction is required. There is no hiss or other extraneous noises. Overtones and coloring are reproduced perfectly. The spoken voice is life-like
The construction of the Bruno Microphone is such as to make it operate equally well at high or low altitudes. It is not affected by climatic con-ditions-such as moisture or temperature. A 2 tube resistance coupled amplifier using two 864 tubes supplies the necessary amplification. Output transformer with an impedance of 200 ohms is supplied. Transformers with other output impedances can be supplied. Specify impedance desired when ordering. Shipping weight 14 lbs.
M13474-Microphone Head. Shipping weight 5 lbs. List Price $\$ 40.00$
Your Cost.
${ }^{s} 19.50$
Microphone and amplifier complete-table model. Less tubes. Shipping weight 30 lbs . M13494-List Price $\$ 88.00$
Your Cost.
M 1349
15 lbs.
Your Cost

## Professional Broadcaster

 Is simply connected to any Radio set, and affords a high class Public Address System, without disturbing the use of the radio set. Sufficlent volume to entertain a large audience. Used in home, hall, club, lobby, auditorium, etc. As much volume as the maximum volume of your radio set. Designed for voice, music pickup, amateurs, public announcers, broadcast artists, etc. Switch provides for interrupting radio reception at distance and intertrol regulated to control side tones and room choes even when rooms are not acoustically perfect. Complete apparatus inpludes High Grade Microphone, Batteries, Battery Compartment, Batteries, Battery Compartment, Set, Volume Control, and Microphone Input stage. High grade phone Input stage. High grade
statuary bronze finish. Shipstatuary bronze
ping weight 7 lbs.
M13498-Model ${ }^{\circ}$
List 57.50
Your Cost.
54.40

M13499
$\$ 10.00$
Your Cost.
$\$ 5.88$


3 Wire 10 Foot Microphone Cable


This Microphone Cablecombines the finest grade or rubber insulation and cotton covered fabric for each of the individual 3 conductors. The wire used is of the highest quality copper and strands are of continuous lengths. The entire assembly of 3 conductors are woven into a cotton braid, together with a heavy rubber jacket The rubber covering is of extremely live rubber. The rubber covering is of extremely live rubber, and is especially adaptable for Mierophone and public addross installations due to its extreme flexibility and abllity to withstand the hardest wear and tear. It is guaranteed to be oil and water proof. Furnished only in 10-foot lengths. Shipping weight 5 lbs
Q16131
Your Co
Your Co
Your Cost per Length.

## Connecticut Floor Stand Mike

Surprisingly good performance, heavy metal base finished in nickel and light green. Adjustable 48 to $64^{\prime \prime}$. On and off switch and 50 ft . cord. Can be attached to any radio for home broadcasting. Also ideal for amateur use Complete with stand and microphone. Shipping weight 11 lbs. $\$ 5.5(1)$

## Table Mike


$14^{*}$ high, finished in Nickel and Light Green. Steel Case contains Input Transformer and $O n$ and $O f f$ Switch. Has 50 ft. cord. Requires two dry cells. Suitable for amateur use. Shipping weight 2 lbs . Your Cost
Less Cells $\ldots 3.51$

## Trutest Carbon Granules

Contains sufficient granules to refill one 2-button microphone. Greatest care must be taken to accurately measure quantity to be used for refill. Under no circumstances should fingers be used to handle granules. Keep vial tightly closed. Shipping weight 1 lb . M13481-
$45^{\circ}$

## Portable

## Microphone Plugs

Equal to Bakelite in dielectric properties. Has three plugs with banana spring expansion that make positive connection with standard jacks. Size $17 / 6 \times 1 \frac{3}{4} \times 3 / 8^{\prime \prime}$
M13004-Your Cost Each M13005 Female Plug for above Your Cost.


## Armored Bakelite Microphone

 ConnectorsNo better Connectors made for use with Carbon Microphones. use with Carbon Microphones. Bakelite throughout providing perfect insulation; spring contacts nsuring positive connections. Heavily armored Plug and Socket to prevent damage, and to lock cable, preventing individual connections from being pulled out. Prong settings permit only one correct coupling. Diameter $13 / 2^{\prime \prime}$. Shipping weight 1 lb . M13401 Plug.
$25^{c}$
Your Cost Each M13400 Socket
 Your Cost Each Composition.
so Foot 7 Wire Shielded Mierophone Cable with Heavy Cast Aluminum Locking Connectors
 1/" diameter. This shielded cable of finest grade materials, encloses Stranded Copper wire, each insulated with each insulated with
rubber jacket, covered rubber jachet, covered with waxed coiton. Each covering colored for easy tracing. Woven shielding of tinned fine copper wire encloses the 7 conductors and the entire assembly covered with a heavy black vulcanized gum rubber Compound; oil water and acid proof. Shielding makes a perfect electro-static shield; can be used for additiona! conductor. Cable very flexible; will stand severe service. Fitted with 7 wire coupling pluga. Used for all public address work, both in and outdoor. Shipping weight 18 lbs . Q16130 Your Cost per
Cable with Plugs.

## POWER TRANSFORMERS



| T ans. | T-5002 | T. 4900 | T-5003 |
| :---: | :---: | :---: | :---: |
| Height | 3" | 3\% ${ }^{\prime \prime}$ | 33/8" |
| Width | 374. | 37/8" | 37/8" |
| Depth | 2390" | 31/4" | 31/4" |
| Size of Hole | $\begin{aligned} & 133 / /^{\prime \prime \prime} \\ & x 48^{\prime \prime} \end{aligned}$ | $\begin{aligned} & 12 / 8^{\prime \prime} \\ & 2^{7} / 6^{\prime \prime} \end{aligned}$ | $\begin{aligned} & 19 / 8^{\prime \prime} \\ & 2^{1 / 4} \end{aligned}$ |

THORDARSON

For many years Thordarson has supplied the leading receiver manufac turers with their transformers. The design of the Thordarson Replacement Transformers has been prediment Transformers has the experience and knowledge gained in this field. Thordarson manufacturing skill and Thordarson manufacturing skill and
facilities contribute to give a defacilities contribute to give a de-
pendable line of transformers that pendable line of transformers that can well be considered the standard
of the industry. The liberal use of the basic materials in the makeup of the transformer-iron, copper and insulating materials-insures a dependable product.
Thordarson Replacement Transformers are guaranteed to be as good or better than the original transformer installed in the receiver. In order to furnish a guaranteed product no effort has been anteed product no effort has been made to copy the original power transformer. Too of ten many of these originals fall far short of good engineering practice and to dupli-
cate would only mean further cate would only mean further
trouble. Thordarson Replacement Transformers are designed to fit the electrical requirements of the receiver. These transformers are conservatively rated, there is no skimping, no order line ratings. High operating temperature, which means ruin to the average transformer, has been carefully avoided

The new Universal Nounting consists of an enclosing shield frame arranged for convenient mounting Each shield is provided with a knockout which can be easily re moved with a screw driver to permit any or all leads to be brought ut for above chassis wiring Normally the connecting leads are mally the the base for brought out thro gh it is but a fer ub-panel wiring and it is but a minutes work for the service man to make whatever lead position changes he finds necessary. The job, when installed
finished appearance.
These replacement power trans ormers are designed with high and ow voltage windings which most nearly meet the requirements of the receivers to be serviced. Each is designed to operate on 115 volts 50 to 60 cycles. The secondary windings are carefully insulated from each other and individually forminate in coded leads each $8^{\prime \prime}$ terminate in cases two or more long. In some cases two or mided low voitage windings are provided These win used either singly or in parallel to supply falament and heater voltage. Great care has been exercised in coding the leads to permit easy identification. A complete circuit diagram is enclosed with each transformer, for the added convenience of the service man.

T-3381
FOR: 5-'26s 1-'27 1-971, AND 1-'80.

ping weight, 6 lbs.

T-2971-E
FOR: 5-'26s] 1-'27 2-71s AND 1-'80.

1.5 volts at 2 amps.; 1.5 volts at 3 amps.; 2.5 volts at 2 amps. 5 volts C. T. at 2 amps.; 5 volts at C2 amp. 650-volt C. T. high voltage mary 115 volt $50-60$ cycle. Size, $334^{\prime \prime} \times 4^{4} \times 4^{\prime \prime}$ high

Shipping weight $6 \mathrm{lbs} \$ 2.94$

## T-3624-E

For 5-'27s or '24s 2-'45s or '47s and 1-'80
 A power transformer of the upright mounting type equlpped with solder lugs and for use with heater type tubes and pushpull 245 s or 247 s . It has sec ondaries as follows: 730 volts with C. T. at 100 milliamperes (high voltage); 5 volts at 2 amperes with C. T. (280 fil); 2.5 volts at 3 amperes with C. T. ( 245 s or 247 s ) and 2.5 volts at 9 amperes ( 5 heater type tubes). Primary $110-120$ voits, $50-60$ cycles. tubes). Primary $110-120$ voits, Mounting holes Size $37 / x 4 y / x 43 /$ high. Mounting holes
A248-Your Cost
1.5 volts
amps.;
1.5 at 3 amps., 2.5 5 volts 2 amps. 5 voits $\mathbf{C}$. T. at 2 C. amp. 600 volt C. T. high voltage mary 115 . Pri-$50-606$ lbs. Size $333^{\prime \prime} \times 4^{\prime \prime} \times 44^{\text {" }}$. Ship-
52.94

| Thordarson Number |  | T-5601 | T-5602 | T-5603 | T-5604 | T-5605 | T-5002 | T-4900 | T-5003 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ```Secondary No. 1 High Voltage``` | $\begin{aligned} & \text { Plate +Bias } \\ & \text { Volts D. C. } \end{aligned}$ | 225 | 300 | 300 | 300 | 300 | 275 | 300 | 300 |
|  | Current M. A. - D. C. | 70 | 70 | 105 | 105 | 100 | 40 | 70 | 80 |
| Secondary No. 2 Rectifier Filament | Volts Amperes | $\begin{aligned} & 5 \\ & 2 \end{aligned}$ | 5 <br> 2 | 5 2 | 5 2 | 5 2 | $\begin{aligned} & 5 \\ & 2 \end{aligned}$ | $\begin{aligned} & 5 \\ & 2 \end{aligned}$ | 5 2 |
| Secondary No. 3 Filament or Heater | Volts Amperes Type of Tubes No. of Tubes | $\begin{gathered} 11 / 2 \\ \cdot 26 \\ 4 \end{gathered}$ | $\begin{array}{r} 23 / 2 \\ \cdot 27^{2} \\ 5 \end{array}$ | $\begin{gathered} 11 / 2 \\ 55^{26} \\ 5 \end{gathered}$ | $\begin{gathered} 21 / 2 \\ 12 \\ \& 27 \\ \& P_{w r 3} \\ 5+2 \end{gathered}$ | $\begin{array}{r} 2312 \\ 97^{23} \\ 5 \\ \hline \end{array}$ | $21 / 2$ 5 Hers. \& Pwirs. 3 | $21 / 2$ <br> $81 / 2$ <br> Htrs. 8 <br> Pwrs. <br> 5 | $21 / 2$ <br> 12 <br>  <br> Pwrs. <br> 7 |
| Secondary No. 4 Filament or Heater | Volts Amperes Type of Tubes No. of Tubes | . ${ }^{136}{ }^{13}$ | $\begin{gathered} 21 / 2 \\ 15 / 2 \\ .45 \\ 1 \end{gathered}$ | $\begin{gathered} 11 / 2 \\ { }^{11} 26 \\ 1 \end{gathered}$ |  | [ ${ }^{231 / 2}{ }^{3}$ |  |  |  |
| Secondary <br> No. 5 <br> Filament or Heater | Volts Amperes Type of Tubes No. of Tubes | $\begin{gathered} 2316 \\ 3 \\ 27 \\ 2 \end{gathered}$ | 1 | $\begin{gathered} 219 \\ { }^{137} \\ 2_{1}^{2} \\ 1 \end{gathered}$ |  | ( ${ }^{21 / 6} 3$ |  |  |  |
| Secondary No. 6 Filament or Heater | Volts Amperes Type of Tubes No. of Tubes | $\begin{gathered} 5 \\ 71-\mathrm{A} \\ 2^{3} \end{gathered}$ |  | $\begin{gathered} 21 / 2 \\ 3 \\ 45 \\ 2 \end{gathered}$ |  |  |  |  |  |
| Stock Number <br> List Price <br> Your Cost Each |  | $\begin{aligned} & \text { A260 } \\ & \$ 5.00 \\ & \$ 2.94 \end{aligned}$ | $\begin{aligned} & \text { A261 } \\ & \$ 5.00 \\ & \$ 2.94 \end{aligned}$ | $\begin{aligned} & \text { A262 } \\ & \$ 6.00 \\ & \$ 3.53 \end{aligned}$ | $\begin{aligned} & \text { A263 } \\ & \$ 6.00 \\ & \$ 3.53 \end{aligned}$ | $\begin{aligned} & \mathrm{A} 264 \\ & \$ 6.50 \\ & \mathbf{\$ 3 . 8 2} \end{aligned}$ | $\begin{aligned} & \text { A270 } \\ & \$ 3.50 \\ & \$ 2.06 \end{aligned}$ | $\begin{aligned} & \text { A224 } \\ & \$ 4.00 \\ & \$ 2.35 \end{aligned}$ | $\begin{aligned} & \text { A277 } \\ & \$ 4.50 \\ & \$ 2.64 \end{aligned}$ |

## Thordarson T-3740



This power transforme has been selected by many of the set manufacturers as standard equipment. A unit of the better type. Made to give service. A subpancl mounting unit or heater type tubes and $245 s$ in push-pull. It has secondaries as follows: No. $1-2.5$ volts at 9 a mperes with C. T. (5 heaters); No. 2 with C. T (2-245s); No. 3-750 volts with C. T. at 110 milliamperes (high voltage); No. 4-5 volts at 2 amperes ( 280 fil ). Overall dimensions,

Shipping weight 10 lbs .
Shipping weight 10 lbs.

## Thordarson High

 Power TransformerFor Two '50s, or '10s and Two '81s
$21 / 2$ Volts at 7 Amperes


Thordarson Figh Powe Transformer is cased and fully shielded and furnishes "A, "B" and "C" curren to 2 -' 50 s or ' 10 s and fila ment and plate voltages to a receiver. Delivers 1100 volts A. C. at 150 mils., 7 h/s v. at 3 amps., $23 / 2$. at amps. All connections brought out to a bakelite terminal strip at bottom. All windings are center-
tapped. Operates on $100-$ 130 volts, $50-60$ cycle A. C. current, tested a 2500 volts. Size, $5^{\prime \prime} \times 4^{\prime \prime} \times 4^{1 / 4 " ~ M o u n t i n g ~ c e n t e r s . ~}$


Tritest Transformers

Trutest Power Transformers truly deserve the popularity accorded them by the radio service field．As a power trans－ former is of ten both the most important and costly part of a receiver，we have seen to it that Trutest Power Trans－ formers possess a higher rating than any transformers of their kind．You have the protection of a higher safety actor when using Trutest Power Transformers
In order for a service organization to be profitable it must strive to satisfy its customers．With Trutest Power Trans－ formers as replacements，your customers will be assured of long and satisfactory operation．Furnished in both flush and horizontal mountings in the large variety of sizes given below，these transformers should prove applicable to most any receiver on the market．Even power transformers of urgent model receivers using the 82 rectifier can be replaced with Trutest Power Transformers of the flush mounting type
Experimenters and set builders will find in Trutest Power Transformers a solution to their long－felt wants．Compactness，ease of wiring and general appearance will go far to eliminate that＂home made＂look．On Flush Mounting Types，soldering lugs terminate on an insulated strip and protrude through the sub－panel．The Upright Horizontal Types have Lug terminals on one side and feet are provided on bases；the slight elevation permitting air circulation under cores．The Flush Mounting Types designed for use with the new＇ 82 rectifier should prove of special interest to those Experimenters and Set Builders wishing to make use of this latest type tube．

## For Short－Wave Converters

 MOUNTING AREA： $3 \times 2$／amMOUNTING DIMENSIONS： $21 / 2 \times 2$＂． PRIMARY： 110 volts， $50-60$ cycle SECONDARIES：（1） 400 volts C．T．-25 M
（2） 5 volts， 2 amps，（280 Filament）． （3） 2.5 volts C．T．， 3.5 amps ． Shipping weight 3 lbs．

Flush Mounting Type 4 C1500 Your Cost

Horizontal Mounting Type Same tube characteristics as above．Size
 4 C1501
Your Cost Each
s1．25

## 4 Tube Midget Receivers

For Two $23 / 1$ Volt Heater Tube，One $21 / 2$ Volt Power Tube and One 280 or One 282 Rectifier
MOUNTING AREA： $3 \times 21 / 5^{\prime \prime}$ ． MOUNTING DIMENSIONS： $21 / 2 \times 2{ }^{\prime \prime}$ PRIMARY： 110 volts $50-60$ cycles． SECONDARIES：（1） 600 volts C．T． 40 M ．A （plate）．
（2） $21 / 5$ volts 5 amps ．C．T．（2 heater and
（3） 5 volts 2 amps． volts 3 amps ．（one 282 filament）． Shipping weight 3 lbs ．

## Flush Mounting Type

4C1490－Using 280 Rectifier．
4C1497－Using 82 Rectifier． Your Cost Each

## Horizontal Mounting Type

 Same tube characteristics as above．Size $3 \times 334 \times 3^{\prime \prime}$ ．Mounting centers $13 / 4 \times 213 / 8^{\prime \prime}$ 4 C1502－Using 280 Rectifier． Your Cost Eachs 1.05


## 4 Tube Midget Receivers

 For Two 21／2 Volt Heater Tubes，One 2 Volt Power Tube and One 280 or 82 MOUNTING AREA： $2^{12} 16 \times 3 \times 3 / 8^{*}$ MOUNTING DIMENSIONS： $214 \times 213$ 化＂ PRIMARY： 110 volts， $50-60$ cycles． SECONDARIES：（1） 700 volts C．T．-50M．A．（plate）．
（2） 5 volts， 2 amps．（one 280 filament），or $21 / \mathrm{volts}, 3 \mathrm{amps}$ ．（one 282 filament）． （3） 2.5 volt C．T．， 5 amps．（ 2 heaters and 1 power tube）．
Shipping weight 31 lbs ．
Flush Mounting Type 4C149e－Using 280 Rectifier． 4 C1496 Using 82 Rectifier． Your Cost Each

Horizontal Mounting Typ
Size $3 \times 33^{\prime \prime}$ ．Mounting centers $13 / 4 \times 213$／${ }^{4}$ 4 C1495－Using 280 Rectifier． Your Cost Each $\qquad$ ${ }^{s} 1.35$

## 5 and 6 Tube Receivers

For Three or ${ }^{\prime}$ Four 215 Volt Heater Tubes， One $21 / 2$ Volt Power Tube and One 280 or MOUNTING 282 Rectifier MOUNTING DIMENSIONS： $31 / 3 \times 21 / 2^{\circ}$ PRIMARY： 110 volts． $50-10$ cycles
SECONDARIES：（1） 700 volts C．T．-70 M A． 5 ．plate）．
（2） 5 volts， 2 amps ．（one 280 filament），or （8） 2.5 volta， 8.75 amps．（ 3 ore 428 heaters and 1 power cu be）．
Shipping weight 6 lbs．
Flush Mounting Type 4C1492－Using 280 Rectifier ${ }^{4} \mathrm{C} 1498$－Using 82
s1．38
Horizontal Mounting Type Size $3 \times 33 \times 8 \times 1 /{ }^{\prime \prime}$ ．Mounting centers $31 / 6 \times 2^{\prime \prime}$ ． Your Cost Each． 280 Rectifier．$\$ \mathbf{I} .50$

## Class B Power Transformer

For Public Address Systems－High Power－Low Cost for 7 Heater Tubes；3－46s，and I－83 Rectifier


The release of the Type｜Tritest Power Transformers，carefully selected 46 Double Grid Tube silicon steel core，high grade copper，insulation and the Type 83 Mer－of the finest quality．Can be operated at its curl Vapor Rectifier rated output without heating or any drop in makes possible the con－ struction of an amplifier that will deliver 20 watts or more of audio power at a very reason that full power may be obtained with negligible
distortion，it is extremely important that the power supply is carefully designed and have sufficient capacity，since the plate current of the power tubes varies over a wide range with each signal impulse．This Transformer is o each signal impulse．This Transformer is of C1516． the same high quality material，as is all of the Your Cost Each

MOUNTING AREA：41／8 $3^{3}$／${ }^{\prime \prime}$
MOUNTING DIMENSIONS： $23 /{ }^{3} 3^{3} / h^{\prime \prime}$ PRIMARY： 120 volt． $50-60$ cycle． sECONDARIES： $580 / 580$ volts at 175 M ．A
5 volts C．T．， 3 amps．
2 次 volts C．T．， 8 amps．
$21 / 2$ volts C．T．， 10 amps．
Shipping weight 10 lbs ．Flush Mounting Type


## 6 Tube Receivers

## Push－Pull Power Tubes

For Three 21／2 Volt Heater Tubes，Two $21 / 9$ Volt Power Tubes and One 280 Rectifier MOUNTING AREA： $3^{7 / 16} \times 4^{1 / 9^{\prime \prime}}$ MOUNTING DIMENSIONS： $23 / 4 \times 37$ 有＂ PRIMARY： 110 volts， $50-60$ cycles SECONDARIES：（1） 660 volts C．T．-80 M （2） 5
（2） 5 volts， 2 amps ．（ 280 filament）．
3 2．5 volts，C．T．（2 power tubes）．
（4） 2.5 volts， 5.25 amps ．（ 8 heaters）．
Shipping weight 8 lbs．

## 4 C1505

Flush Mounting Type
Your Cost Each
s 1.75
Horizontal Mounting Type
Same tube characteristics as above．Mounting centers $31 / 8 \times 2^{\prime \prime}$ ．
4 C1506－
\＄1．85

## 7 and 8 Tube Receivers

For Four or Five $21 / 2$ Volt Heater Tubes， Two 2 $1 / 2$ Volt Power Tubes and One 280 or 282 Rectifier
MOUNTING AREA： $31 / 8 \times 3^{3 / 4}$＂
MOUNTING DIMENSIONS： $31 / 2 \times 21 / 2$＂
PRIMARY： 110 volts， $50-60$ cycles．
SECONDARIES：（1） 700 volts C
M．A．（plate）
（2） 5 volts， 2 amps．（one 280 filament），or 2.5 volts， 3 amps．（one 282 filament）
（3） 2.5 volts C．T．， 3 amps ．（ 2 power tubes）．
（4） 2.5 volts， 8.5 smps ．（Four or five heater tubes．）
Shipping weight 8 lbs．
Flush Mounting Type
4C1507－Using 280 Rectifier．
4C1499－Using 82 Rectifier．
Your Cost Each．
${ }^{\text {s }} 1.95$
Horizontal Mounting Type
Same tube characteristics as above．Mounting centers 3 ix
C1508－Using 280 Rectifier
Your Cost Each
s2．10

## 9 and 10 Tube Receivers

MOUNTING AREA： $43 \times 3^{3 / 4}$＂．
MOUNTING DIMENSIONS： $\mathbf{3} \times 3$＂$/ 2$ ．
PRIMARY： 110 volts， 60 cycle．
SECONDARIES：（1） 720 volts C．T．-110
M．A
（2） 5 volts at 2 amps ．（280）
（3） 2.5 volts at 3 amps．
（4） 2.5 volts at 12.25 amps．
Shipping weight 9 lbs．
Flush Mounting Type
4 C1509
Horizontal Mounting Type Same tube characteristics as above．Mounting centers $25 / 5 \times 3^{7} / \mathrm{m}^{\prime \prime}$ ．
4 C 1510
Your Cost Each
s 2.40

## Special Note

Refer to Page 91
For Complete Listing of Class＂B＂Audio Transformers and special Chokes．It is Necessary to Use Special Audio Equip－ Tent When Constructing Class＂B＂Am－
plifiers

# POWE R TRANSFORMERS 

 Transformer

## No. 95-38

 For Models 33, 33X 34, 34 X and $35-\mathrm{A}$ ZE 10 Power UnitSupplies filament and plate voltages for the following tubes: $5-27 \mathrm{~s}$ and 1-'80. Delivers 220 to 240 volts D. C. at 50 mils. using 2 and 4 mid . in the filter circuit. If a 150 ohm choke is used ahead of the condenser, the D. C. voltage will be approximately 190 . Shipping weight 7 lbs.
A227-Your Cost Each...... $\$ 2.25$

## ZENITHI ZE-50,ZE-60 <br> 2E-70 <br> An exact duplicate of the origi- nal Zenith No. 95-67 Replacement Power Transformer used in the above model receivers. Fur nishes filamen and plate voltages for the following tubes: ${ }^{8-27 s} 24 \mathrm{~s} ; \mathrm{S}^{3}$ <br>  weight 9 lbs. C1980-Your Cost 54.10 <br> ZENITH <br> Super-Het. Models 10, 11, 12

 For sets utillzing 4 '24s; 1-"27; 2-'45s, and 1-80 tubes. lbs. C1981YourCost $\$ 2.65$
For Models 102, 112, 122 Sametubesas above, 25 cycle op-
eration. Shipping eration. Shippi
weight 14 lbs. cig82 Your $\$ 3.75$
Cost 3.75


92 power transformer of the Original Zenith No. 96-100 replacement. Has three $21 / 3$ volt windtubes; 1 for 1 heater tube (AVC) 1 for 2 power tubes; one Mazda lamp. Ship-
ping weight 9 libs.
54.95

Zenith Plate Transformer 2E-18 Power Unit

Models 35 PX, 35APX,37-A
Part No. 95-61 High voltage winding and $71 / 2$ volt winding for 2 -'81s. Has mounting bracket for choke like the original part. Shipping weight 8 lbs . $\underset{Y}{\text { Your Cost }} \$ 3.75$

Transiormers


Guaranteed
Replacements Designed for Philco Replacements,Guaranteed to be equal to the original. General purpose replacement The usual method of installing these transformers makes possible a very neat arrangement with all wiring out of sight under the base panel. Black enameled steel case, with a flange for mounting. Average shipping weight ons hook-up furnished with each trans average shipping weight 8 lbs . Refer to list below for our stock number.

| Chassis | Tubes Uned ( 1 - -80 , and) | Philco Part | Stock No. |
| :---: | :---: | :---: | :---: |
| 20-220 | 3-'24s; 1-'27; 2-'71A | 4234 | C1955 |
| 65 | 2-'24s; 1-'27; 2-'45s | 3516 | C1956 |
| 70 | 4-'24s; 1-'27; 2-'45s | 5117 | C1957 |
| 76-77 | 3-24s; 1-'27; 2-45s | 3868 | C1958 |
| 86 | 4-'26s; 1-'27;2-'71s | 3271 | C1960 |
| 87 | 4-'268; 1-'27; 2-'45s | 3400 | C1959 |
| 90 | 4-248; 2-27; 2-'45s | 4938 | C1961 |
| 95-96 | 3-24s; 3-27; 2-'45s | 3752 | C1962 |
| 111-211 | 4-248; 4-27; 2-'45s | 4446 | C1963 |
| 111-211 | 4-24s; 4-'27; 2-'47s | 5594 | C1954 |

For additional Philco Power Transformers see

models....

## Bosch Power

 Transformers
## Model 28



This is the original Bosch power Transformer as used in the above model receivers. Also adaptable for sets using the follow-2-'71As and 1-'80. Shipping weight 10 lbs. C2254 Your Cost
53.95

Model $29-825$
Similar in appearance to above, for sets using 4-26s; 1-'27; 1-'10, and 2-'81s. Shipping weight 11 lbs. Cost............ 4.20


## Model 58

Similar in appearance to above, for sets using $4-248 ; 1-27 ; 2-45 s$ and $1-{ }^{\prime} 80$ tubes. Shipping weight 10 lbs.
C2261-Your Cost.
\$3.65

## Model 60

Similar in appearance to above, for sets using 5-24s; 1-27; 2-45s and 1-80. Shipping weight 13 lbs.
C2262-Your Cost
33.75

## Model 4925 cycle

An exact duplicate of the original replacement. Utilizes $4-{ }^{-26 s, ~} 1-{ }^{-2} 27,1-10$ and $2-81$
tubes. C2248-Your Cost.

## Spatton

## Power Transformers

These power transformers are made by Thor darson, all new merchandise and fully guaranteed; designed according to specifications of the originals except to withstand more service abuses and over-loads. Fits the chassis exactly in all Sparton Receivers. These are not surplus and should not be confused with units selling at a lower price.
Models AC-7, 62 and 63


Sparton Nr. B-1454
Official replacement for the above Sparton models, using 5-C-401s; 2-71-As; and 1-Raytheon type tubes. Shipping weight 7 lbs
A229 $\quad$ Yourcost $\$ 2.31$
Models69,79,79-A and 89 Sparton Nr. B- 1938
Identical in appearance to above transformer. Utilizing, 6-484s; 1-C585 or C586, and 1-C-280 tubes. Shipping weight 7 ilbs. $\$ 3.54$
A230- Your Cost............. 3.

## Model 930

Sparton Nr. B-2249
Identical in appearance to above. Utilizing $6-\mathrm{C}-484 \mathrm{~s}$; or 485 s ; 2-C-182s, 182-Bs or 183s and
Your Cost
$\$ 1.95$
Models 589, 591, 593, 931
Sparton Nr. B. 2339
 Replacement for the above models utilizing 7-C-484s, or 485s; 2-C1828 or C-183s, and weight 10 lbs. Yourcost 4.05 Models 301 , $564,570,750$ Part B-2538
Similar in appearance to above transformer Utilizing $7 \mathrm{C}-484 \mathrm{~s}$ or $485 \mathrm{~s} ; 2 \mathrm{C}-585 \mathrm{~s}$ or 586 s , and $2 \mathrm{C}-281 \mathrm{~s}$. Shipping weight 10 lbs . Your Cost
\$7.06
Models $600,610,620,737$ Sparton Nr. B-2794
Similar in appeazance to above transformer Utilizing the following tubes: 7 C-484s or 485s; 2 C-183, and 1 C-280. Shipping weight ${ }_{\text {A } 236}^{10 \text { lbs. }}$ Your Cost
$\$ 3.95$
Model 89-A Sparton Nr. C-292
Replacement power transformer for the above receiver. Util-
 and 2-C-281s. Shipping weight 8 lbs . A231
Your
Cost.

## \$6.50

## Model 109

SPARKS Ensemble and Deluxe Sparton Nr. C-257
Identical in appearance to above. Utilizing 6-C-484s; 2-C-585s, and 2-C-281s. Shipping weight 8 lbs.
W232-Your Cost
$\$ 7.05$
Models IOI, 110 , 111 , 574 and $87{ }^{\circ}$
Sparton Nr. C-374 C-398
Identical in appearance to above. Utilizing $6-\mathrm{C}-484 \mathrm{~s} ; 2$ 2' $^{26 s} ; 2-\mathrm{C}-585 \mathrm{~s}$, and 2-C-281s. Shipping weight 8 lbs.
57.40


## Brand New Victor

## Replacement Power Transformer Models R-32, R.52, RE-45 and RE-75

To meet the ever increasing demand for a quality replacement power transformer for the above Victor Models, at a reasonable price, we have developed a replacement transformer that is guaranteed to be better than the original transformer in every respect. In order to furnish a guaranteed replacement we made no effort to copy the original power transformer. The original transformer, as did many so-called replacements, fell far short of good engineering practice and to duplicate would mean further trouble. This replacement transformer is conservatively rated, there is no skimplng, no border line ratings. Through the liberal use of iron copper and insulating materials, the basic materials in the makeup of thistransformer, insures a dependable replacement unit. Utilizes the following tubes: 6-'26s; $1-{ }^{\prime} 27 ; 2$ - $^{\prime} 45 \mathrm{~s}$ and $1-{ }^{\prime} 80$. Fully shielded in a heavy gauge case. In order to allow for the over-size transformer, the metal container is larger in height but will fit the chassis exactly. Terminal lugarrangement number as the original. NO CHANGESNECESSARY TO INSTALLTHIS REPLACEMENT UNIT Shipping weight 13 lbs
C2185 Your Cost
$\$ 2.70$

## Radiola Model 30-A A.C.

The Official RCA part No. 8274 power transformer used in the above recelver.
transformer has a 68 primary using the UV Ballast tube in geries to ab sorb fluctuations in the line voltage between 40 and 60 volts. Supplies filament and plate current to the follow 719; and 2-81s, as rect
 fiers. For replacement use only the Genuine Part. Our quantity is limited. Shipping weight 8 lbs. C2175-List \$16.00-Your Cost

## Radiola Model 41



These are the genuine RCA power transformers for use with this receiver. Supplies filament and plate voltagea for 4 -'26s; 1-'27; 1-'10, and types of power packs used with this set.
For STERLING PACK, mounted in heavy cardboard container. RCA No. 8399. Shlpping weight 9 lbs.
54.50

## C2159-Your Cost.

For RECEPTOR PACK, mounting brackets. RCA No. 8405. Shipping weight 7 lbs. C2160-
Your Cost, Either Type
54.50

## Radiola Models 42 and 48 Victor Models 14,15 and 17 Westinghouse Model WR-4 General Electric Model T-4I Graybar 678, RC-3

The genuine RCA power transformer for the above receivers, utilizing, $4-24 \mathrm{~s}$ 2-'45s and $1-\quad 80$ tubes. Brand new and guaranteed RCA part No. 8609. Shipping weight 9 lbs. 110 volt, 60 cycle. C2155
Your Cost
$\$ 1.65$
For 120 volt, 25 cycle opera tion. Shipping weight 11

C2143

$\$ 3.05$

We carry the most complete stock of Genuine RCA-Radiola and RCA-Victor Replacement Parts. These Replacement Parts cover from the early battery and electric receivers up to and including their current models. We will be pleased to quote on any item that you may require.

Genuine Radiola Power Trans. former for RCA Models 64,67 Victor Models $9-18,9-54$

This is the brand new, Genuine RCARadiola Power Translormer for the above models. They were manufactured by Westinghouse or replacement in these receivers. It is practically an mpossibility to manufacture a replacement for these eceivers at a price
asking. For $8-27 \mathrm{~s}, 1-50$ and $2-81 \mathrm{~s}$. $110-120$ volts, $50-60$ cycle. Shipping weight 25 lbs . C2157
Your Cost.
9.40

For $110-120$ volt, 25 cycle. Shipping weight 29 ibs.
Your cos
\$14.45
RCA Victor Models R-II, 18 and 18-A, RAE-26, R-21
General Electric K-62 Graybar Model GB-9 Westinghouse WR-I5
Original replacement power transformer for the above receivers. Supplies plate and filament voltages for the following tubes: 6 heater tubes; 2-47s and 1-'80. Shipping weight 9 lbs C2189

rour $\operatorname{cost} \mathbf{3 . 9 5}$
RCA Victor R-7 "Superette" General Electric $\mathbf{S - 2 2}$ Graybar 8 Midget
Similar in appearance to above. An exact Suplar in appearance to above. An exact plies filament and plate voltages for the fol owing tubes: 2 '35s; 2-'27s; 1-'24; 2-'45s and $1+80$. This transformer is made from
the finest quality merchandise. Shipping the finest quality merchandia
$\$ 1.90$
C2187-Your Cost
-. 2
RCA Victor Models R-50, R-55, RE-20, RAE-59 and RAE-79

## General Electric

## [1-32, H-72

GraybarModel GB-100 Original replacement. Supplies voltages for 7 heater tubes; 2-'47s and 1-'80. Shipping weight 15 lbs .
C2190 -
Your Cost.

## POWE F TRANSFORMERS

Radiola Models 17, 18, 33, 50, 51; Brunswick 2KRO, 3KRO, 3KR6, SKR, 5KRO, SKR6; Victors 7-11, 7-25, 7-26, 17-8; Graybar 311 R.C.A. PART NO. 8335

This is the genuine power transformer for the above models, utilizing $4-26 s$; $1-27 ;$
$50-60$
cycle
coperation. Shipping weight 9 lbs.
C2150-
Your Cost
${ }^{\$ 1.65}$
Same as above except for part No. 8340. Shipping weight 11 lbs. C2151
 Your Cost.


## Graybar 500.550

## Radiola Moelels 44, 46, 47

Identical to above in appearance. A Qual ty Transformer in every respect; built exactiy like the original RCA part No. 8472, for $3-24 \mathrm{~s} ; 1-145$ and 1-'80. Brand new and guar anteed to equal the original in service. Shipping weight 11 lbs.
C2152-Your Cost Each
52.75

Same as above, except for 25 cycle operation Shipping weight 18 lbs.
C2192-Your Cost
$\$ 4.45$
For Radiola Models 60 and 62 Brunswick 3NC-8 and 5NC-8 Graybar Model 340
Identical to above in appearance. An exact duplicate of RCA part No. 8344, and the correct replacement for the above receivers For use with $7 \sigma^{\prime} 27 \mathrm{~s}, 1-^{\prime} 71 \mathrm{~A}$, and $1-^{\prime} 80$. Brand new and guaranteed. Shipping weight 10 lbs C2153
Your Cost Each
$\$ 2.75$
Same as above, except for 25 cycle operation Shipping welght 12 lbs .
C2191 - Your Cost
. 4.45

## Radiola Model 66

RCA Auditorium Phonograph Graybar Model 600
Identical to above in appearance. An exuct duplicate of RCA part No. 8483 and the correct replecement for the above receivers, Utilizing 6-'27s; 1-4 45 and $1-80$ tubes. Shipping weight 13 lbs .
C2154-Your Cost
53.50

Same as above, except for 25 cycle operation. Shipping weight 15 lbs ,
C2193-Your Cost.
s. 4.95

Radiola Models $80-82-86$ Graybar Models 700.770-900 General Electric 3I-5I-71

## Westinghouse Models WR 5-6.7

Genuine replacement power transformer Identical to above in appearance. For the above recelvers, utilizing 4-'24s; 2-27s; Shipping weight 15 lbs .
s. 75

Victor Models 35-39-57, RE-73
Same tube combination as above.
\$1.75


## Elison

Plate Transformer Models R-1, R-2, C-2 For use with the above models. Tapped primary, 100 , 110 and 120 volt, ingle high voitage windbetter than the original Ship ring weight 7 lbs C2350
$\$ 2.85$

## Edison Models R-4, R-5,C-4

 These power transformers are identical to the original Edison part, both in size and electrical characteristics. Fully shielded with connecting lugs on bottom. Holes for mounting are center to center, $41 / 5 \times 434$, size $6 \times 51,5 \times 5$. Shipping weight 10 lbs . Supplies filament and piate voltages for the $30-60$ cycle operation. Shipping weight 15 lbs . C2251 Your Cost. C2252-Fir 25 cycle operation. weight 17 lbs. Your Cost and C-2. The original filament transformer for use in the above model receivers. Supplies filament to 4-26s; 1-27 1-'250 and 1-'81 tubes. Brand new and guaranteed. Shipping weight
C2338-Your Cost Each


## Splitdorf Model M-5

The original filament transformer for Splitdort Model M-5. Similar in appearance to above Supplies filament to $4-{ }^{\prime 2} 26 \mathrm{~s} ; 1-27 ; 1-50$ and 1-80 tubes. Brand new and guaranteed Shipping weight 4 lbs.
C2339-Your Cost Each.

## Stewart-Warner Power

## Transformer

 950 Series Models 951, 952, 953, 961, 962, 963 An exact duplicate of the original StewartWarner power transformer, both in size and electrical characteristics. Supplies flament and plate voltages for the following tubes: $3-24 \mathrm{~s}$; 2-'27s; 2-'45s, and 1-'80. Shipping weight 8 lbs.

## Power Transformer

for RCA 104 Power Speaker
Models 30 and 32 and Victor Panatropes Designed for use with UV876 or UV886 ballast tube in the primary. Ideal for power amplifiers and transmitters. $71 / 6$ and transmiters. 73/2 $71 / 2$ volts at $11 / 2$ amp., high voltage 1100 c . t. at 200 mils. Can be used with a 30 ohm, 100 watt resistor in plaee of ballast tube. Size $6 \times 4 \times 4{ }^{3}{ }^{\prime \prime}$ high. Shipping weight 15 lbs.
C2307-Your Cost
s 1.85

## Stromberg-Carlson Models 635-636

The genuine Stromtransformer. Utilizes $5-27 \mathrm{~s}$; 1-71A , and limited supply is our hausted, replacements will be furmished identical to the original in
every respect. Shipping weight 12 lbs .
C2256
Your
s3.95

## For Model 638

Similar in appearance to above. For 26 to 60 eycle operation. The original StrombergCarison replacement part No. 18446. Shipping weight 15 lbs .
57.45

## Models 641-642-652-654

 846-848

Designed according to specifications of the original part both in electrica characteristics and
size. For the modsize. For the mod-
els utilizing, $3-24 \mathrm{~s}$
 80 Shipping
weight 12 lbs .
For Models
641-642-652-654 C2257 $\qquad$ $\$ 3.55$

## For Models 846-848

For models utilizing 3-'248; 3-'27s; 2-'45s, and 1.-80. Shipping weight $14 \mathrm{lbs} . \$ 4.50$
C2258-Your Cost

## Models 12 and 14

Designed according to the original specifica Cions oi Strombergollowiny tubes : $24 \mathrm{~s} ; 2-27 \mathrm{~s} ; 2{ }^{2}-45 \mathrm{~s}$ and 2-808: $110-120$ and $2-808$ : $110-12$ 1has heavy duty cycle las heavy duty sec weight 14 lbs.
C2282
Your Cost


Kolster Models 6J and 6K
An exact duplicate power transformer of the oricinal part. Supplies filiment and
 Shipping weight 8 lbs . C2066-
\$4.45
Kolster International K-60 and K-70
Replacement power transformer that will fit the chassis exactly. Supplies flament and plate voltages for the following tubes: 6 1-80. Shipping weight 8 C2067 Your Cost
s 4.25
Kolster International K-80 and K-90
Similar in appearance to above. Supplies filament and plate voltages for the following tubes: 7 heater C2068 Your Cost

## Freshman Replacement

 Power Transformers

The original re placement power transformers for els ", $Q$ " and " $Q$ -
 1-71A and 1-'80 $3 \times 4^{\prime \prime}$ deep. Shipping weight 9 lbs.

## For "(Q) Receivers



## "HFL" Power Transformer Universal Replacement For 7 Tube Receivers

100-130 V.: or $220 \cdot 240$ Volt 25 to 60 Cycle


Designed for use with "HFL" receivers, but due to the flexibility of the windings and voltage input, it can be used for most any type of circuit requiring a flush mounting type transformer. plate voltages for 4 heater tubes, 2 power tubes, and 1-80. 700 volt C. T. 100 MA. Size, $4 \times 31 / 4 \times 31 / 4$ high. Mounting centers,


## Genuine Earl and Freed Power Transformers

These are the genuine Power Transformers used in the receivers below.

## Earl Models 21 and 22

 Freed Models 55 and 56Utilizing, 3-'26s; 2-'27s


2 - $^{\prime} 71 \mathrm{As}$ and $1-80$ tubes. Shipping weight 6 lbs.
Your Cost .....................2.91
Earl $24,31,32,33$ and 41 Freed $65,78,79,90$ and 95 Utilizing, 6-'27s; 2 -' $^{-} 48 \mathrm{~s}$, and $1-180$ tubes. Ship ping weight 8 lbs.
s3.95
Transformer Coil
With Terminal Strip


Earl Models 24, 31 32, 33 and 41
Freed Models 65,78 79,90 and 95
The genuine Transformer Coll, to be assembled with lamina tions of old power transformer Shipping weight 4 lbs. C2288
$\$ 1.95$

## Freed-Eisemann

Models Nr. - 57 and Nr. 60


Replacement for the above models. Power transformer supplies filament and plate voltages for the following tubes: 4-'268; 1-'27; 1-'71A, and 1-80 tubes. Shipping weight 6 lbs .
C2285-Cost..
Your 3.95

## POWE TRANSFORMERS



## Atwater-Kent Models 55-55C

This transformer is the identical to the original A. K. part. Utilizes the follow. ing tubes, 3-'24s; 1-80. Slze $4 \times 5 x$ 43/3". Shipping weight 11 lbs .
C2250 Your $\$ 3.70$
Cost


## For Models 60 and 60 C

Similar in appearance to above transformer. Shipping weight 11 lbs. $\$ 3.70$
c2246-Your Cost.........

## Plate Transformer Model 66



Similar in appearance to above. Supplies filament to 5 heater tubes, $2-^{\circ} 50 \mathrm{~s}$ and $2-^{-81} 8$. Shipping weight 10 lbs.
C22
Your Cost.
$\$ 3.75$

## 8 Tube Power Transformer

## 115 Volt-60 Cycle

Will supply flament and plate voltage for 5 heater tubes, 2 power tubes ( 45 's or 47 's) and one 280 rectlfier. Can be used as is general replacement or for the new set builderSize, $29 / 4 \times 4 \times 31 / 4$ mountShipping weight 7 lbs.
C1F01-Your Cost Each SI. 75

## 10 Tube Power Transformer 115 Volt 60 Cycle

Similar in appearance to above, except for 10 tube receivers. Will supply filament and plate voltages for the following: 7 heater tubes, separate winding for 2 power tubes ( 45 's or type, size, $233 \times 4 \times 31$ rectifier. Flush mountins type, size, $23,3 \times 4 \times 31$ ". mounting centera.


# POWE TRANSFORMERS 

## Jefferson Power Compact With Heavy Duty Choke

For 5 '27s; '24s; or '35s; ${ }^{\prime 2}$-'45s, and 1-'80 Consists of a standard Jefferson power trans-
 former and a heavy duty choke sealed in a compact metal container. $110-120$ volts, 50-60 cycle. 700 volts, high voltage at 110 mils, C T. Size $7^{\prime \prime}$ long, $31 / 2^{\prime \prime}$ wide, $51 / 2^{\prime \prime}$ deep. Bottom brackets or convenient mounting. Shipping weight 19 lbs.
C1730-Your Cost Special.
$\$ 2.45$

## General Motors

Models $120,130,140,150,160$
Steinite Models

$$
40,40-\mathrm{A}, 40 \mathrm{~S}, 45-\mathrm{A}
$$

An exact duplicate o the original Steinite Utilizing 5-'27s; 2-'71As and 1-'80 tubes. Shipping weight 10 lbs.
$\underset{\text { YourCost }}{\text { C2276- }} \$ 3.40$


220 Volt to 110 Volt

## Step-Down Transformer



## Radiart Variable Step-Down

 $\mathbf{2 0 0} \mathbf{- 2 5 0}$ Volts to $\mathbf{1 1 0 - 1 2 0 ~ V o l t s ~}$ Variable primary Size $33 \times 31 / 4 \times 4$ high. Mounting centers $17 / 6 \times 33 /{ }^{\circ}$ 。 $16^{\prime \prime}$ lamp cord with female receptacle for 110-120 volt outlet, 5 ft . lamp cord with male plug for 200-250 Input. 160 watts. Shipping weight 9 lbs. weight-List. $\$ 7.50$.

Your Cost.

## Replacement Power Transformers

| Leplacenemt power transiornines |  |  |  |
| :---: | :---: | :---: | :---: |
| Name of Radio | Model | $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { Your } \\ & \text { Cost } \end{aligned}$ |
| ATWATER-KENT | 37 and 38. | C2255 |  |
|  | 40, 56,57 Complete Pack. | B1381 B1376 | $\begin{array}{r} 4.95 \\ 4.95 \end{array}$ |
|  | 42, 44, 45, 52 Complete Pack. | B1316 B1375 | 4.95 7.25 |
|  | 55 and 55-C............... | C2250 | 3.70 |
|  | 60 and 60-C. ........ | C 2246 C 2245 | 3.70 3.75 |
|  | ${ }_{66} 66$ Filament Yransiormer Transformer. . . . . . . . . . . . . . . . . . . . . . | C2244 | 3.25 |
| ALL AMERICAN | Lyric 90 <br> D and H | C2200 C 2201 | 53.75 3.95 |
| MOHAWK | $D$ and $H$ |  |  |
| APEX | ${ }_{36} 26$ Gloritone........ . | $\begin{aligned} & \mathrm{C} 2205 \\ & \mathrm{C} 2206 \end{aligned}$ | \$2.35 4.50 |
|  |  | C2207 | 4.95 |
|  | 28-A, 29 and 31 | C2212 | 4.25 |
|  | 46, 47 and 48 | C2208 | 3.95 3.95 |
|  | Case 80 | C2210 | 3.95 |
|  | 8-B................ | C2211 | 4.50 |
| AMRAD | 81 Bel Canto Series. 7191 | $\begin{aligned} & \mathrm{C} 2281 \\ & \mathrm{C} 2215 \end{aligned}$ | $\begin{array}{r} \$ 3.10 \\ 3.50 \end{array}$ |
| ARGUS | .195-B. . . . . . . . . . . . . . . . . . . . . . . . . . . . | C2213 | \$6.95 |
| BOSCH. | . 28 | C2254 | $\$ 3.95$ 4.20 |
|  |  | C2336 C 2260 | 4.20 3.65 |
|  | 49 (25 cy cle) | C2248 | 7.95 |
|  |  | C2261 | 3.65 |
|  |  | C2262 | 3.75 3.50 |
| BALKITE | .A-3, A-5, A-7. ........................ | C2203 | \$4.50 |
| BRANDES | B-10 and B-11. | C2050 | \$2.95 |
|  | B-15 and B-16.......................... | C2051 | 4.70 |
| BREMER-TULLY | 6-40, 6-41. | C2220 | \$3.50 |
|  | S-14, ${ }^{\text {che }}$, $21, \mathrm{~S}-81, \mathrm{~s}-82$ | $\begin{aligned} & \mathrm{C} 2365 \\ & \mathrm{C} 2220 \end{aligned}$ | 3.95 3.50 |
| BRUNSWICK | $\text { 2-KRO, }{ }_{5-K R 6}{ }^{3-K R O,} \text { 3-KR6, 5-KR, 5-KRO, }$ | C2150 | \$1.65 |
|  | 2-KRO, 3-KRO, etc. 25 cycle. ............ | C2151 | 3.25 |
|  |  | $\text { C } 2153$ | 2.75 |
|  | $3-\mathrm{NC} 8$ and $5-\mathrm{NC} 8,25$ cycle <br> S-14, S-21, S-81, S-82. | $\begin{aligned} & \mathrm{C} 2116 \\ & \mathrm{C} 2365 \end{aligned}$ | 4.75 3.95 |
| CLARION | 51, 53 and 55. | C2233 | 34.15 |
|  | 60. | C2232 | 4.50 |
|  | 90 .................................. | C2234 | 4.50 |
| COLONIAL |  |  |  |
|  | 32 <br> 33 and 95 | $\begin{aligned} & C 2279 \\ & C 2280 \end{aligned}$ | 3.50 3.75 |
|  | 33 and 35 , $38-117,39-125$. | C2225 | 3.45 3.45 |
|  | 44................. | C2226 | 3.45 |
|  |  | C2227 | 3.45 |
| COLUMBIA RADIO | Screen Grid 8. . . . . . . . . . . . . . . . . . . . . . . | C2305 | 54.15 |
| COLUMBIA-KOLSTER | 930-300. | C2057 | \$6.75 |
|  |  | C2058 | 6.75 4.65 |
|  | 950 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | C2059 | 4.65 |
| CROSLEY | Power Converters, 104-105-106 Bandbox. | C1882 C1888 | \$1.45 |
|  | 602 Bandbox | C1888 C1890 | 1.45 1.10 |
|  | Power Converters 104-R and 105-R | C1889 | 1.45 |
|  |  | C1884 | . 90 |
|  | 608, 25 cycle........................... . | C1885 | 1.75 |
|  | 704. | - ${ }_{\text {C1387 }}$ | 1.95 |
|  | 30-S, $31-3$, $33-\mathrm{S}$ and 34-S. | C1883 | 1.95 |
|  | 706 Showhox and 704-B. | C1850 | 3.25 |
|  | $40-\mathrm{S}, 41-\mathrm{S}, 42 \mathrm{~S}$ and $82-\mathrm{S}$. | C1851 | 4.95 3.95 |
|  | 32, 40 and 41 . | C1853 | 3.95 3.95 |
| DAYFAN (General Motors) | A-5003, A-5091... | C2230 | \$4.45 |
| DAYFAN(General Motord) | A-5005 Series, 4041 ................. | C2231 | 5.25 |
| EARL | 21 and $22 \ldots \ldots$ | - $\mathrm{C}^{2} 2286$ | \$2.90 |
|  | 24,31,32, 33 and 41. coil only ............. | $\begin{aligned} & \mathbf{C 2 2 8 7} \\ & \mathbf{C} 2288 \end{aligned}$ | 3.95 1.95 |
| EVEREADY | 1,2 and 3.......... . . . . . . . . . . . . . . . . | . C 2254 | \$3.85 |
|  | 30 series............................ | . 22283 | 3.50 2.80 |
|  | 40 and 50 geries......................... | C2284 |  |
| EDISON | $\mathrm{R}-4, \mathrm{R}-5$ and $\mathrm{C}-4 . . . . . . . . . . . . . . . . . . . ~$ | C2251 | 54.75 |
|  | R-4, $\mathrm{R}-5$ and $\mathrm{C}-4,25$ cycle. .......... | . $\mathbf{C 2 2 5 2}$ | 5.75 |
|  | R-6 and R-7 |  | 3.95 2.85 |
|  | $\mathrm{R}-1, \mathrm{R}-2$ and $\mathrm{C}-2$ (Plate trans.). <br> R-1, R-2 and C-2 (Filament Transf.) | $\begin{aligned} & \text { C2350 } \\ & \text { C2338 } \end{aligned}$ | 2.85 4.75 |
| FADA | 10, 11, 16, 17, 20, 30, 31 and $32 \ldots \ldots \ldots$ | C2277 | \$3.50 |
|  | 25, . . 1.1 , . . . . . . . . . . . . . . . . . . . . . . | C2351 | 3.95 |
|  | 35 and $35-\mathrm{B}$............. | - C 2352 | 3.95 |
|  | $41,42,44,46$ and $47 \ldots \ldots \ldots$ | - $\mathbf{C 2 3 5 3}$ | 3.95 3.95 |
|  | 50, 70, 71, 72 for E-420 Power Únit .... | . $\mathbf{C} 2355$ | 3.95 |
|  | 50, 70, 71, 72 for 180 Power Unit. . . . . | C2356 | 3.95 |
|  | 75 and 77 ............................. | C2357 | 3.95 |
|  | 45 (KU) . . . . . . . . . . . . . . . . . . . . . . . . . . . . | . C 2358 | 3.95 |
| FREED-EISEMANN | NR-57 and NR-60 | C2285 |  |
|  | NR-80 <br> NR-85 | $\begin{array}{r} \mathbf{C} 2323 \\ \mathbf{C} 2321 \end{array}$ | 4.25 3.95 |
|  |  |  |  |

$\$ 4.40$

Replacement Power Transformers Continued


# Powen TRANSFOHMERS 

Power Transformer for 8 Tube Receivers
Here is a universal flush mounting a universal trash mormer, for replacement in receivers using up to 9 tubes. Equipped with leads and soldering lugs. Extra heavy windings: 2.5 V . at 8.5 amps. 2.5 V . at 3 amps. $5 \mathbf{V}$.
 at $2 \mathrm{amp} .340 / 340 \mathrm{high}$ voltage at 90 M. A. 115 V. $50-60$ cycle primary Size, $3^{3} \times 31 / 1 \times 21 / 2^{\prime \prime}$, mounting centers, $21 / 2 \times 31 /{ }^{\prime \prime}$ Shipping weight 8 lbs .
\$1.85

## Power Transformer for <br> 4 and 5 Tube Receivers

Here is a midget power transformer that can be used for replacement in many of the 4 and 5 tube midget receivers. Flush mounting type. Has the following windings: $21 / 2$ volts at $7 \mathrm{amps} . ;$. T. 5 V. at 2 amp. $340 / 340$ volts at 50 M . A. 115 V . $50-60$ cycle primary. Size, $3 \times 21 / 6 \times 18$ " Mounting centers, $21 / 2 \times 2$ ". Shipping weight
C2431-Your Cost


C2431-Your Cost

Ozarka Radio 220 Volt Power Transformer

$5-127 \mathrm{~s}, \quad$ '24s, or ${ }^{\prime} 35 \mathrm{~s}$;
$2-145 \mathrm{~s}$, or 47 s ; 2-80.
This husky built power transformer, for 220 volt operation, made for usein Ozarka Radio receivers. Ideal for replacement in other sets using the above tubes where 220 volt is available. Size $2^{3}{ }^{4} \times 37^{7} \times 4^{3}{ }^{4}$ "high. fight or inverted. Ship-
ping weight 8 lbs.
s 1.95

Loftin White Power Transformer FOR SINGLE '45 OR '47 AMPLIFIER
Used in our Lafayette LoftinWhite Amplifiers. High voltage 900 v . at 40 M . A. C. T. 5 volts at 2 amps ., $21 / 2$ volts at 1.5 amps , $25 / \mathrm{m}$ volts at
5.5 amps. Size $4 \times 2^{8,4} \times 31 / 4 \%$ high. Mounting Centers, ${ }^{415 \times 2^{* *} \text {. Shipping weight } 7 \text { lbs. }}$

Stromberg-Carlson Speaker Field
Power Supply Transformer
Combines $\qquad$ primary winding tapped at 110 and 120 volt, $50-60$ cycle; secondaries, 5 volt 2 amp . for 280 tube, Hish voltare winding $C$. $T$. This is an exact duplicate of the original both electrical and physical characteris tics. Shipping weight 11
C2346-Your Cost. .....


## POWE TRANSFORMEHS

## Power Transformer Columbia

Model S. G. 8 An exact duplicate of the original power transformer for the Screen Grid 8 Model of Columbla Radio Corp; Utiliz. ing, 3-24s; 2-27s; 2'45s, and $1-80$ tubes. C2305Your Cost.

${ }^{5} 4.15$


## Fada Models

$10,11,30,31$
An exact duplicate of the original Fada Power Transformer No. 1696-x Utilizing 5-'27s; 1-'71A and $1-80$. Shigping
weight 9 ib. C2277Your
Cost
S. 3.50

## Sonora Model A-31

Fits exactly in chassis as the origlnal Sonora Power Transformer, using a Genuine Thordarson transformer, For sets, utilizing 4-24s; 1-27; 2-45s, and 1-'80 tubes. Shipping weight 2 lbs. C2275-
Your


Amrad Bel-Canto Model 81
The original Amrad power transformer, utilizing $3-24 \mathrm{~s}$; 2 -' $^{27 s}$; 2-45s and 1 -'80 tubes. Shipping weight 12 lbs. C2281-

```
$3.10
```


## Eveready Power Transformers

## 30 Series

Identical in size and electrical characterstics as the original. For sets utilizing -87 s 2-71as and -80 tubes. Shipping weight 9 lbs . C2283 Cost.


## 40 and 50 Series

Similar in appearance to above transformer. For sets utilizing, $5-{ }^{-27}$; or ${ }^{~} 24 \mathrm{~s} ; 2$ ' $^{*} 45 \mathrm{~s}$; and i-'80 tubes. Shipping weight 9 lbs. $52.8(1)$ ur Cost

General Purpose Replacement for Any Receiver Usimg 4-26s 1-27, 2-71As, 1-80
A quality replacement power transformer that can be used in any retubes: Atwater-Kent, Crosley, Radiola, Fresteman, Kolster, Fencral Motors, Day, Generaling Kors, an, Steinite, etc. The flexible color-coded leads are of sufficient length
 to permit easy and direct wiring. For 110 -volt, 60 -cycle. Size, $38,4 \times 33 / 6 \times 23{ }^{3}$. Shipping weight 6 lbs. C1472-
Your Cost
s 1.75
Same tube combination as above, except for $2{ }^{5}$-cycle operation, 110 -volt.
C1471
Your Cost.
$\$ 2.75$

Replacement Power Tramsformers Continued

| Name of Radio | Model | Stock No. | Your Cost |
| :---: | :---: | :---: | :---: |
| PEERLESS | Series 20 Electrostatic. . . . . . . . . . . . . . . . | C2140 | \$4.85 |
| PEERLESS | Courier 65: 651, 652 and 653.............. | C2290 | $2.50$ |
| PHILCO | 15................................. | C1909 | $\$ 3.30$ |
|  |  | C1955 C1910 | $\begin{aligned} & 2.75 \\ & 3.60 \end{aligned}$ |
|  |  | C1951 | 2.55 |
|  |  | C1956 | 2.75 |
|  | 70 | C1957 | 2.75 |
|  | 76 and 77 | C1958 | 2.75 |
|  |  | C1960 | 2.75 |
|  | 87 | C1959 | 2.75 |
|  | 90 (2-45s) | C1961 | 2.75 375 |
|  | 90 (1-47) | C1952 | 3.75 |
|  | 90 (2-478) | C1953 | 3.30 |
|  | 91-121... | C1911 | 2.85 |
|  | 95 and 96. | C1962 | 2.75 2.75 |
|  | 111 and 211. | C1963 | $2.75$ |
|  | 112 and 212. | C1954 | 2.75 |
|  | 500 Series (511).......................... | C1964 | 2.95 |
| RCA-RADIOLA | 104 Loudspeaker . . . . . . . . . . . . . . . . . . . . . . | ${ }^{C 2307}$ | 51.85 |
|  |  | $\begin{aligned} & \mathbf{C 2 1 7 5} \\ & \mathbf{C} 2307 \end{aligned}$ | 5.95 1.85 |
|  | 17, 18, 33, 50,$51 ; 60$ cycle. | C2150 | 1.65 |
|  | 17, 18, 33, 50,$51 ; 25$ cycle. | C2151 | 3.25 |
|  | $44,46,47,60$ cycle. | C2152 | 2.75 |
|  | 44, 46, 47; 25 cycle. | C2192 | 4.45 |
|  | 60 and 62; 25 cycle. | C2191 | 4.45 |
|  | 66; 60 cy cle. | C2154 | 3.50 |
|  | 66; 25 cy cl | C2193 | 4.95 |
|  | 41, Seceptor Pack | C2159 | 4.50 |
|  | 64 and 67; 60 cy cle | C2157 | 4.50 9.40 |
|  | 64 and 67; 25 cycle. | C2137 | 14.45 |
|  | 42 and 48; 60 cycle. | C2155 | 1.65 |
|  | 42 and 48; 25 cycle. | C2143 | 3.95 4.75 |
|  | 80, 82, 86; 60 cycle. | C2256 | 4.75 1.75 |
|  | 80, 82, 86; 25 cycle. | C2141 | 2.95 |
|  | 80, 82, 86; 220 volt. | C 2142 | 3.75 |
|  | Superette (8 tube), 60 cycle. | C2187 | 1.90 |
|  | Superette ${ }^{\text {Superette }} 8$ tube ${ }^{\text {a }}$, 25 cycle. 220 volt. | C2146 | 1.95 4.10 |
|  | Radiolette (4 tube), 60 cycle. | C2188 | 1.65 |
|  | Radiolette (4 tube), 25 cycle. | C2147 | 3.25 |
|  | Radiolette ( 4 tube), 220 volt. | C2148 | 3.70 |
|  | R-11, 18 and 18-A; 60 cycle. | C2189 | 3.95 |
|  | R-11, 18 and 18-A; 25 cycle. | C2069 | 5.25 5.25 |
|  | R-50, R-55 and RE-20, 60 cycle. | C2190 | 3.95 |
|  | 105 Loudspeaker......................... | C2199 | 9.25 |
| SONORA | A-31 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | C2275 | \$3.20 |
| STEINITE | $40,40-\mathrm{A}, 405$ and $45 \mathrm{~A} \ldots \ldots \ldots .$. | C2276 | \$3.40 |
|  | 70, ...................... . . . . . . . . . . . | C2217 | 3.95 |
| SPARTON | AC-7, 62 and 63. | 1229 | \$2.30 |
|  | 69,79, $79-\mathrm{A}$ and 89 | A230 | 3.54 |
|  | 930 . . . . . . . . . | A228 | 1.95 |
|  |  | A231 | 6.50 |
|  | 109 Sparks Ensemble and DeLuxe. | A232 | 7.05 |
|  | 101, 110, 111, 574 and 870 | A233 | 7.40 |
|  | 589, 691,593 and 931. | A234 | 4.05 |
|  |  | A235 $\mathbf{A} 236$ | 7.06 3.95 |
|  | $\begin{gathered} 600,610,620 \text { and } 737 \\ 410 \end{gathered}$ | A236 A 250 | 3.95 4.65 |
| STEWART-WARNER | 950 Series $951,952,953,961,962,963 \ldots$ | C2272 | \$5.95 |
|  | 100-A and 100-B...................... | C2242 | 3.75 |
| STROMBERG-CARLSON | 10 and 11.... | C2370 | \$3.75 |
|  |  | C2282 | 4.10 |
|  | 19 and 20. | C2371 | 3.95 |
|  | $29 . .$. | C2372 | 3.95 |
|  | 635 and 636 | C2256 | 3.95 |
|  | 638, 25-60 cy cle. | C2249 | 7.45 |
|  | 641, 642,652, 654. | C2257 | 3.55 |
|  | $846 \text { and } 848 .$ | C2258 | 4.50 3.50 |
|  | 846 Speaker Transformer. . . . . . . . . . . . | C2346 | 3.50 |
| VICTOR | R-32, RE-45, R-52 and RE-75 (new type). | ${ }^{C} 2185$ | \$2.70 |
|  |  | C2155 | 1.65 1.75 |
|  | 7-11, $7-25,7-26$ and $17-8,60$ cyele | C2150 | 1.75 1.65 |
|  | 7-11, $7-25,7-26$ and 17-8, 25 cy cle ........ | C2151 | 3.25 |
|  |  | C2157 | 9.40 |
|  | 9-18 and 9-54, 25 cycle. | C2137 | 14.45 |
|  | R-7AC. ............. | C2187 | 1.90 |
|  | R-5AC. | C2188 | 1.65 |
|  | R-11. | C2189 | 3.95 |
|  | RAE-59, RAE-79.... . . . . . . . . . . . . . . . | C2190 | 3.95 |
| WESTINGHOUSE | WR-4........................... | C2155 | 51.65 |
|  | WR-5, WR-6 and WR-7. | C2156 | 1.75 |
|  | WR-10A . . . . . . . . . . . | C2187 | 2.90 |
|  | WR-14. | C2188 | 1.95 |
|  | WR-15. . . . . . . . . . . . . . . . . . . . . . . . . . | C2189 | 3.95 |
| TEMPLE | 8-60, 8-80, 8-90 ..................... | C2120 | 33.75 |
| ZENITH | 33, $33 \mathrm{X}, 34,34 \mathrm{X}:$ ZE-10 Power Unit.. | A227 | 52.25 |
|  | 50-60 and 70 Series: ZE-50, ZE-60, ZE-70 |  |  |
|  | Power Units | C1980 | 4.10 |
|  | former. | C1983 | 3.75 |
|  | Super-Het, 10, 11 and 12, 60 cycle | C1981 | 2.65 |
|  | Super-Het, 102, 112, 122, 25 cy cle. | C1982 | 3.75 |
|  | 91, 92.............................. | C1984 | 4.95 |
|  | Z\| 7 Plate Transformer. ............. | C1985 | 4.50 |

# Trutest 



PRICE LIST
"Guaranteed Like Original"
Tube Combination
4-'26s 1 -'27 1-'71 1-'80
Your
Cost
$\$ 3.20$
$4-26 \mathrm{~s} \quad 1-27 \quad 2-71 \mathrm{~s} \quad 1-80$
3.40
$4-26 \mathrm{~s} \quad 2-27 \mathrm{~s} \quad 2-71 \mathrm{~s} \quad 1-80$
3.70
$5-27 \mathrm{~s}$ or ' 24 s 1-'45 or '47 1 -' 80
$5-27 \mathrm{~s}$ or ' $24 \mathrm{~s} \quad 2-45 \mathrm{~s}$ or ' $47 \mathrm{~s} 1-80$
5-'27s
$2-45$ or ' 50
$1-10$
$1-81$
$5-27 \mathrm{~s}$ or ' $24 \mathrm{~s} \quad 1-10$ or '50 $1-81$.
$5-27 \mathrm{~s}$ or ${ }^{\prime} 24 \mathrm{~s} \quad 2-10 \mathrm{~s}$ or '50s $2-31 \mathrm{~s}$
$6-27 \mathrm{~s}$ or ' $24 \mathrm{~s} \quad 2-10 \mathrm{~s}$ or '50s 2 -' 81 s

## Remanufactured in Every Detail

Where there is not available from our stock for replacement, TRUTEST REPAIR SERVICE is recommended for any make or model of receiving set.
Send in the defective transformer, we will rebuild it in every detail as when it was originally installed in the set, laminations and original casing will be used, coils will be completely rewound with the very best grade of copper and insulations. Mechanically and electrically, the transformer will reach you in the original state as when new, except a higher safety factor, concerning the coil itself, will be allowed
The rebuilding of these transformers is done under the supervision of experienced transformer Engineers, they are checked and put under actual load before shipping. Send in the old transformer prepaid by express or parcel post, specify on your order, name and model number of set, giving exact tube combination. Be sure your name and address is on the package.

## Sparton, Cardon or Kellogg Type Tubes

5 or 6-484s or 401; 2-71a r C182B; -'80.
6 or $7-484 \mathrm{~s} ; \quad 2-{ }^{\prime} 50 \mathrm{~s} ; 2$-'81s.
For Transformers in wax or pitch, a charge of 50 c is added. High voltage transformers for radio sets, which consist only of rectifier filament and plate supply windings. On these the price can be estimated from $\$ 2.00$

1 or $2-' 10 \mathrm{~s}$ or ' $50 \mathrm{~s} 2-$ - 81 s .
$7-199 \mathrm{~s} \quad 1$ or $2-10 \mathrm{~s}$ or $50 \mathrm{~s} 2-81 \mathrm{~s} \ldots . . . .6 .95$
Transformers using Raytheon tube in place of 280 or $281,25 \mathrm{c}$ less than above prices.
to $\$ 3.00$.

Trutest Universal Replacement Power Transformers

## Built for Extra Eeavy Duty Service

The most complete line of universal replace ment power transformers, with flexible tube combinations and adjustable mounting frames that permit an adequate range of mounting adjustments for all practical purposes. They are so ingeniously designed and so expertly built that there is hardly a receiver of otindard make that can not be honestly and economically serviced by means of one of these types listed on tn.s page. We say honestly because we know their electrical characteristics to be right by actual use, and because we know them to be a quality product of a reputable manufacturer.

For efficiency, durability and stability under general operating conditions, these transformers are unsurpassed. You are prepared for any emergency by carrying one or two of each of these types on your shelves at all times. Onc each enables you to service over 250 different sets on short notice. The very finest grade of copper, insulation and steel is used in the manufacture of these products. No skimping, no border line ratings. Especially built oversize to afford a large safety factor. Equipped with soldering lugs mounted on a fibre strip.

## Physical Dimensions

Fo- 5-227's, or 224 's, 1-245 or 247, 1-280.
Primary: 110 volts $50-60$ cyclea.
Secondaries: (1) 700 volts C. T. 70 M. A. (plate) (2) 5 volis C. T. 2 amps . ( $1-280$ filament)
(3) 2.5 volts C. T. 1.5 amps . ( $1-245$ or 247 fil ament)
(4) 2.5 volts C. T. 8.75 amps. ( $5-227$ 's or $224{ }^{\prime} \mathrm{s}$ filament). Shipping weight 6 lbs
110 volts 50-60 cyeles.
$\$ 2.20$
For 110 volts 25 cycles. Shipping weight 10 lbs . C1467
$\$ 3.95$
For 7-227's, or $224^{\circ} \mathrm{s}, 2-245$ 's or $247^{\prime} \mathrm{s}, 1-280$. Primary: 110 volts $50-60$ cycles.
Secondaries: (1) 700 volts C.T. $110 \mathrm{M} . A$. (plate)
(2) 5 volts C. T. 2 amps. (1-280 filament)
(3) 2.5 volts C. T. 3 amps. (2-245's or 247 's filament)
(4) 2.5 volts C. T. 12.25 amps . ( $7-227$ 's or 224 's flament). Shipping weight 10 lbs .

$$
110 \text { volts } 50-60 \text { cycles }
$$

s2.85
For 110 volts 25 cyeles. Shipping weight 15 lbs. C1465
Your Cost


We carry in stock at all times, a most complete line of every type and style of power transformers. Special power transformers, requiring different type windings, can be supplied at a most reasonable cost, to your own specifications. We will be pleased to quote on large quantitics to jobbers and set manufacturers


For 6-226's, 1-227, 2-171A's, 1-280 Primary: 110 volts $50-60$ cycles. Secondarles: (1) 570 volts C. T. 70 M . A. (plate) (2) 5 volts C. T. 2 amps. ( $1-280$ filament) (3 2.5 volts C. T. 1.75 amps . (1-227 filament) ( 455 volts C. T. ${ }^{1} / 5 \mathrm{amp}$. (2-171A's filament) (5) 1.5 volts 6.3 amps. ( $6-226$ 's filament) Shipping weight 6 lbs .
110 volts $50-60$ cycles.
C1476-Your Cost
${ }^{8} 2.65$
For 110 volts 25 cycl C1466 Your Cost
$\$ 3.95$
For 6-227's, or 224's, 2-171A's, 1-280
Primary: 110 volts $50-60$ cycles.
Secondaries: (1) 570 volts C. T. $70 \mathrm{M} . \mathrm{A}$. (plate) (2) 5 volts C. T. 2 amps. ( $1-280$ filament) (3) 5 volts C. T. 12 amp ( $2-171 \mathrm{~A}$ 's filament) (4) $21 / 2$ volts C. T. $101 / 2 \mathrm{amps}$. ( $6-227^{\prime} \mathrm{s}$ or 224's filament) Shipping weight 6 lbs. 110 volts $50-60$ cycles.
C1463-Your Cost
$\$ 2.75$
For 110 volts 25 cycles. Shipping weight 10 lbit

## C1464

Your Cost
${ }^{5} 3.95$

## Miscellaneous Transformers and Chokes



## Power Transformer

For Apex Models 29 and 31 Series Mont-gomery-Ward Models 3035, 3037, 3065, 3067 The original replacement
 transformer for above receivers. ${ }^{21 / 2}$-volt winding for 5 heater and 2 power tubes,
280 tube, and high voltage winding. 120 -volt, 60 cycle primary Fully Shipping weight 10 Jbs . C2212
Your Cost. $\$ 4.25$

## Power Transformer and Choke

## For Knight Model $8 / 9$

An exact duplicate of the original part. Combines power trantormer and fiter choke. Designed to afford a high safety factor and will operate the required num-
ber of tubes without heatber of tubes without heat-
ing. Shipping weight 13 ing. Shipping weight 13



Stromburg-Carlson Filter
Inductor Assembly for Models 641-642-652-654
 An exact duplicate of the original Stromberg-Carlson replacement part chokes, tapped, in one container. Shipping weight 6 lbs. C2373Your Cost. .
$\$ 3.25$

## G. E. Step-down 220 Volts to 110

 Volts - or to Step-up 110 Volts to 220 Volts
G. E. Auto Transformer for reducing 200-220 A. C. to $100-$ 120 A. C. or increas-$\operatorname{lng}_{200-220} 100-120$ volts. Idea! for operating 110volt radio or electrical machines from 220 volt line. Has many uses in the experimenter's lab. Output. 275 KVA ( 275 Watts). Size, $73 / 2 \times 13 / 4 \times 33 / 4$ deep. Shipping weight 14 C2269
Your Cost, Special
$\$ 1.95$

Philco 4 Tube Midget Power Transformer


An exact duplicate of the origi nal Philco Part No. 7421. Primary $105-125$ V. $50-60$ eycle, $C$. at 2 amps . High voltage power tubes. Shipping weight 4 lbs . C1950-
Your Cost
\$1. 65

Grebe SK-4 Power Transformer
A quality replacement power transformer that will exactly replace the original in every respect, except primary is for 110-120 volt, no ballast required when using this replacement. Supplies filament and plate voltages for the foland plate voltages for the fol$2^{\prime} 45 \mathrm{~s}$, and 1 ' 80 . Shipping weight 11 lbs .
C2235
Your Cost.
s 3.95


## Kolster Domble Choke

## FOR KOLSTER

 Models, 6F, 6J, 6K 6R, K20, K21, K22, K23, K25, K27
Columbia Models
$\mathrm{C}-1, \mathrm{C}-2, \mathrm{C}-3, \mathrm{C}-4$
The Official Replacement double chokefor the above models, Coil No. 1939, 800 ohms, Coil No. 2159
1300 ohms, D. C. resistance. Slize $6 \times 31 /{ }^{\times 2} \times{ }^{\prime \prime}$ Shipping weight 5 lbs .
C2063
Your Cost
5I. 75

## Freed and Earl Double Choke

 Double Choke Units for Freed M odels 55, 56 78, $79,79-5,65,95$ and 33 also for Earl-21, 24, $31,32,31-S, 32-S$, and 41 Can be used in any 30 henry 100 M a are 400 ohms. Size weight 3 lbs .
## C2393

Your Cost, Each.


## Freed-Eisemann Double Choke

Identical to above in appearance, except has terminal strip for connections. For Models NR-60, NR-57, NR-57A, NR-80. Same size and shipping weight.
C2394
Your Cost
$90^{c}$
General Purpose Power Transformer 5-227S, 2-171AS, 1-280


Can be used in Balkeit A3, A5, A7; Fada 16, 17, 20, 32, 50, 70, 71, 72 Crosley 804, Eveready 30 Series, and Steinite 40-A, 5-A. 21/2-volt winding for $5-227 \mathrm{~s}$, 5-volt winding for 2-171As, 5 -volt winding for 280 tube; $285 / 285$ volt at 60 MA .120 -voit primary. Size, $41 / 2 \times 31 / 4 \times 31 / 2$ inches. Mounting centers $21 / 2 \times 27 / 8$ inches. Soldering weight 7 lbs . C1515
Your Cost
$\$ 2.45$

## "B" Eliminator Transformer

A popular replacement unit for all "B" Elimi nators, 5 -volt winding for H0 tube and 500 -volt H. $V$. winding centertapped. Can be used with Raytheon type tube, by disregarding 6 -volt winding. Size $21 / 2 \times 21 / 2 \mathrm{x}-$ C214". Shipping weight 4 lbs.


C2291
Your Cost.
\$1.65

Universal Replacement Power Transformers

Here is a line of Universal Replacement Power Transformers that will meet the demand of the service man for a quality product at a low Price. They have the Bracket, can also be mounted inverted in place of the flush type transformers, by removing the bracket on the side with the soldering lugs. The materials and workmanship is of high quality Electrostatic shield. Diagram of hook-up furnished.

4, 5, and 6 Tube Sets
2.5 volts. $5 \frac{1}{4}$ amperes, C. T. for heater tubes. 2.5 volts, 3 amperes C. T. for power tubes 5 volts, 2 amperes for 280 tube. $330-330$ volts, 60 M . A. high voltage shield grounded to core Primary 116, 60 cycle. Size 21/2 $\times 31 / 4 \times 39{ }^{\prime \prime}$ Shipping weight 6 lbs.
C1
$\$ 1.70$
7,8 , and 9 Tube Sets
2.5 volts, $91 / 2$ amperes, C. T. for heater tubes. 2.5 volts, 3 amperes, C. T. for power tubes. 5 volts, 2 amperes for 280 tube. 330 - 330 volts, 75 M . A. High voltage shield grounded to
 $3^{3} 4^{\prime \prime}$. Shipping weight 7 lbs .
C1469-Your Cost Each
8 I.90

## 10, 11 or 12 Tube Sets

2.5 volts, 14 amperes, C. T. for heater tubes. 2.5 volts, 3 amperes, C. T. for power tubes 5 volts, 2 a mperes for 280 tube. $330-330$ volts, $100 \mathrm{M} . \mathrm{A}$. High voltage shield grounded to core. Primary 115,60 cycle. S
$33 / 4$. Shipping weight 7 lbs. ${ }^{33}{ }^{3}$. Shipping weight 7 lbs
$\$ 2.20$

## 8 and 9 Tube Receivers Universal Replacement

For 6 Heater Tubes, 2-45s or 47s and 1-80 Rectifier.
This is ideal for general replacement work, it has been used in many Can be installed in upright or inverted position. $376 / 375$ velts at 100 MA .2 .5 volts at 9 amps. $i_{2} 2.5$ volts at 3
amps.
5
 amps.; 5 volts at ${ }^{2}{ }^{2}$
amps. For $105-120$
volt, $50-60$ cycle primary. Size, $41 / 2 \times 31 / 2 \times 41 / 2^{\prime \prime}$ high. Mounting centers, $2 \frac{3}{5} 6^{\prime \prime} \alpha^{313} / \mathrm{K}^{\prime \prime}$. Shipping weight 9 lbs.
C1488-List Price $\mathbf{\$ 8 . 0 0}$
${ }^{s} 2.45$
Same as a bove, except for 220 volt, $50-60$ cycle operation. Shipping weight 10 lbs . C1474-List price 510.00
$\$ 4.25$
Same as above, except for $105-120$ volt, 25 cycle operation. Shipping weight 10 ibs .
Your Cost, Special
$\$ 3.95$
Steinite Replacement Power Pack Models 261, 262.

Complete-Power Transformer, Condenser, Chokes and pecially for replace. ment in Steinite Models 261-262. All conelsined in all containge metal case. Terminal board for connections, Bakelite connectith 280 socket.


Completely wired ready for operation. For any set using 5-26s, $1-27,2-718$ and $1-80$ tuber. 110 -volt, 60 -cycle. Shipping weight 13 lbs .
B942
Your Cost, Special

## GENUINE CROSLEY PARTS

Power Transformer No．W－22356 for Model 122
 Cenune Crosley Re placement Power Trans－ rormer．Supplies fila－ ment and plate voltages for the following tubes： 2－35s， $3-24 \mathrm{~s}, 1-47$ and 1－80．Mounts inverted with leads brought out to a terminal strip with soldering lugs．Shipping weight 10 lbs ．
C1897 Your Cost $\qquad$ s2．10

## For Models 47 and 48

 Crosley Part No． 21432 Original transformer de－ igned for use in the above model receivers employing the following tubes：（Model 47－2－ 224 s ；1－245 and 1－280 tubes）；（Model 48－3－ 224s；1－245 and 1－280 tubes）．This trans－ former is ideal for re－ placement work，being compact in size，shielded and provided with leads for direct wiring．For $110-120$ volt， $50-60$ cycle operation．Shipping weight 5 lbs Your Cost
$\qquad$
 Power Con． verters 104．R and 105－R Crosley part No． 4299 May also be used in sets employing 4－＇26s； 1－＇27， 1 － $71 A_{\text {，}}$ and Raytheon rectifier
tube．Size， $41 / 2 z$ $35 /$ inches．Shipping C1889 Your Cost $\qquad$ ${ }^{\$ 1} .45$

## For Model AC－7

Crosley part No．3315． $5-999,1-12 \mathrm{~A}$ and Raytheon rectifier．Size $33 / 8 \times 3 \times 31 / 8$ inches． hipping weight 6 ibs．
$\$ 1.10$
For Power Converters 104,105, 106 Bandbox
Crosley part No．4682．Consists of Power Transformer and Panel．Has female 10 lead connection and fuse clips．Brown crystalline finish．Size $4^{1 / 4}$ x $81 / 2$ $33 / 4$ inches deep Shipping C1882－Your Cost Each
${ }^{5} 1.45$

For Models 30－S，31－S，33－S and $34-5$


Crosley part No． 6682 Original power trans－ former for above sets． May also be used in other sets using 2－＇24s， 2－＇27s，2－＇45s and 1－＇80． Size $4 \frac{1}{2} \times 3 \times 43 / 1$ inches． Shipping weight 6 lbs．
Each．
Your Cost
$\$ 1.95$

## For Model 608

Crosley part No． 5145 ． 3 －＇26s， 1 － $27,1-31 \mathrm{~A}$ and 1－80．Size $31 / 2 \times 23 / 6 \times 33 / 4$ inches high c184－Your Cost Each C18e4 Your Cost Each
$90^{c}$ Crosley part No． 5160 ．Same as above except for 25 cycle current．Shipping weight， 6 lbs C1885
Your Cost Each
s 1.75
For Models 704－B and 706 Showbox
Crosley part No．5115．Shipping weight， 6 1bs．
C1850－Your Cost Each

Ist Stage Audio and P．P． Input Transformer Assembly For Models 41－A， 42，704， 706

An exact duplicate of the original Crosley replace－ ment part No．5315．Con－ sisting of 1st Stage Audio Trangiormer and P．P．In－ put Transformer．No changes necessary to install this unit．A quality re－
placement in every respect， brown lacquer finish，equipped with spade bolts，ready for mounting，fits the chassis． mounting holes．Hook－up diagram fur－ nished with each unit．size， $242 \times 1 / 10$ 43 ＂．Shipping weight， 3 lbs .52 .25
C1892－Your Cost Each．．． 24.2 Double Audio for Model 608 Identical in appearance to above．Crosley part No．5125．Genuine replacement． weight，3 1bs．Cost Each．．．$\$ \mathbf{S}$ ． 98
C1880－Your

P．P．Input Transformer Models 60．S，61－S， 62．5，63．5
 Crosley part No．7167．Push－ Pull Input Transformer for the above receivers．Has two separate secondary windings． Genuine Replacement．Ship－ ping，weight， 2 lbs Your Cost
51.25

P．P．Input for Models $\mathbf{3 0 - S}, 31 \cdot \mathrm{~S}$ ，
$33 \cdot \mathrm{~S}, 34 \cdot \mathrm{~S}, 40 \cdot 5,41 \cdot 5,42 \cdot 5$ and 82－S
Similar in appearance to above．Straight Push－ Pull Input Transformer．Crosley part No． 6590．Shipping weight， 2 lbs． C1849－Your Cost Each $\qquad$ $95^{\circ}$

## P．P．Input and P．P．Output Choke for Model 804

Crosley replacement Part 5670，push－pull input and push－pull output choke in one container． This is an exact duplicate of the original part．
Shipping weight 3 lbs． Chipping weight 3 lh
2.45

Type＂B＂Audio Crosley part No．2015．Ratio 4：1．Used in Crosley Pup． Easy to mount；an ideal general replacement audio． Black enamel case．Size 13 ins．wide， $2^{11}$／6 ins．long， $23 / 10$ ins．high．Shipping 2 lbs C1876
Your Cost Each


## Type＂C＇＂Andio

Crosley part No．2014．Ratio 9：1．Used in Crosley＂Pup．＂Black enameled case．Similar in appearance to the above．Size， $23 / 8 / 8$ inches long， $1^{3} \frac{1}{2}$ ins．wide， $21 / 3$ ins．high．Shipping weight， 21 lbs ．
C1877－Your Cost Each
$35^{\circ}$

## Model 704－A

Crosley part No． 4905. Shielded in metal case． May also be used in other sets using 4－＇26s；
1 －＇27；2－71A＇s；1－＇80． Size， $4 \times 4 \frac{1}{4} \times 48 / 4 \mathrm{in}$－ ches high．Shipping weight， 9 lbs．
C1886－Your
Cost $\$ 1.95$

## Model 704

## Crosiey part No． 4715 －

4816．Identical in appearance with above transformer． $4-26 \mathrm{~s}, 1-27,1-{ }^{\prime} 71 \mathrm{~A}$ and $1-80$ Size $45 / 3 \times 4 \times 45 / 8$ inches high．Shipping weight C1887－Your Cost Each．．．．．I I．
C18s．



THESE COILS ARE THE GENUINE CROSLEY REPLACE－ MENT ANTENNA AND R．F．PARTS． THEY ALSO CAN BE USED FOR OTHER SETS．IDEAL FOR BUILDER．

YOUR CHOICE OF ANY OF THE I ${ }^{\circ}$ FOLLOWING COILS，EACH
Shipping weight，any coil， 1 lb ．
MODELS 20， 21 AND 22
C1855－R．F．Coil No． 6435
MODEL 804 JEWEL BOX
C1857－Antenna Coil No． 5761
C1858－R．F．Coil No． 5762 C1862－Antenna Coil 54， 77 AND 91 C1861－ADDEL 401 BANDBOX JR Antenna or R．F．Coil No． 4201 1860 ELS 602，704，704－A AND 704－B C1860－R．F．Coil No． 4365 C1863－MODEL 705 MODELS 608 706， ，42，GEMBOX MODEIS 609 AND 610

GEMBOX
C1864－R．F．Coil No． 5872


## 30 H Filter Choke

 Models 41－A， 42 and 804 Jewel boxCrosley part No．4935．Used as filter choke in above sets or fiter choke in above sets or
other sets requiring choke of 350 ohms D．C．resistance at 60 mils．Shipping weight， 2 lbs． C1870
Your Cost Each


Double Filter Choke 30－H．$=\mathbf{8 0}$－M．A． Crosley part No．4692．Dou ble choke in one can． 30 hen－ ries each at 80 m ．a． 150 ohms， D．C．resistance，each section． Brown crackle case．Size 37／8 $\times 21 / 4 \times 23 / 4$ Inches high．Ship－ ping weight， 3 lbs． C1881
Your Cost Each．．．69


## Detector Choke

Crosley part No．3490．Used in Crosley A．C．power unit for model A．C． 7 receivers． 7000 ohms D．C．resistance， 100 hen－ ries．Size， 2 渒 ins．long， $1^{3 / 4}$ ins． wide， $2 y / 3$ ins．high．Shipping Vour Cost Each

## Crosley Plate Choke

Crosley part No． 3325 ．Used in plate choke assembly in A．C．supply unit of Model A．C． 7 receivers． 1800 ohms D．C．resistance．Size， $2^{3}$ 自ins．long， $17 /$ ins．wide， $2^{3}$ 价 ins．high． C1sping weight 2 lbs． C1sfi－Your Cost Each．


## 



## Trutest Presents an Entirely New Line of DELUXE AUDIO EQUIPMENT

The excellent performance of Trutest Audio $\mid$ Coils are layer wound, carefully tested, and equipment is a direct result of intelligent design, unusual care in manufacture, and selection of high quality material. Special high quality steel is used in the core laminations and a coil structure is employed which provides low distributed capacity, low capacity coupling, and a high coupling factor. In all cases where center-tap connections are employed these are brought out between sections or coils and never from within the winding. Sections and coils are so arranged as to give absolute magnetic and inductive symmetry and bulance. Trutest Audio equipment offers a number of definite advantages in design, material and workmanshlp. Amplification curve is practically flat, and wave form distortion entirely absent.

## Interstage Audio Transformers

These units for use in large concert hall a mplifiers, public address systenis as well as in radio receivers. A unit for every type of audiorequency amplification
1st Stage Audio, DeLuxe, ratio $31 / 2: 1$.
Your Cost..................................
2nd Stage Audio, DeLuxe, ratio 4 C1581-
Your Cost
Push-pull Input, DeLuxe, ratio C1579-
Your Cost
 C1582-
Your Cost
Push-puil Input split secondaries isola patio 1.75:1. C1562 - Your Cost Each
s2.75
Trutest Deluxe Screen Grid


## Audio Coupler

Designed to couple the output of any Screen Grid Detector, such as 57, 58, 224 or 235, to an Audio Amplifier Tube, will give from two to three times as much amplification as resistance coupling. Better tone quality over the entire frequency range. Fully shielded in a metal case having a pleasing black shrivel finish. Size $31 / 2 x 21 / x^{2} 21 / 4^{\prime \prime}$. Shipping weight 3 C1594-Your Cost
$1 / 4^{n}$. Shipping weight 3

## Tube-to-Line Transformers

Tube-to-Line Transformers are required in amplifier installations that are separated in sections. These units are used to couple the output stage of the amplifier with a 200 or 500 ohm line which distributes power to other amplifiers or the reproducers.
Two 250 or 245 type tubes to 500 ohm line, 15 ohm winding for voice coil or monitor
C1591
Your Cost
.4.45 winding for C1592- Your Cost
Operating out of General purpose tube to 500 and 200 ohm lines.
C1593-Your Cost
s3.75

## [Mixer Transformers

Input, two button microphone, 200 ohm to grid of tube.
C1587-Your Cost
\$1.95
Input, two button microphone, 200 ohm to 500
ohm line. Your Cost.
C1590- Yo.............
Input, two button microphone, 200 ohms to a 50 ohm output. For using four microphones with fous of these transformers; with secondaries in series feeding into a 200 ohm line. \$4.25
C1598-Your Cost..............

Phonograph Pick-Up Transformers
Input, pick-up to grid, primary impedance 500 , 1000. 2000, and 4000 ohms.
$\$ 3.95$
C1586-Your Cost
Primary i
Input, pick-up to grid. Primary impedax.ce to match C1596-Cost.
Your Con
failure traceable to coil defects are almast un-
heard of. Core steel is treated for maximum magnetic value. Dimensional accuracy of laminations and assembly insures complete freedom from the perplexing hum caused by even a slight irregularity in these respects. Maintenance of such exacting standards of material and workmanship is possible through
 our poily of Laboratory are held responsible not only for design, bus for factory production itself.
Shielded in a heavy gauge steel case, having a pleasing black shrivel finish. Size $21 / 3 \times 21 / 4 \times 31 / 3^{\prime \prime}$. Average shipping weight 6 lbs.

## TRUTEST Replacement Audios and Chokes

Replacement Audios and Chokes This complete line of TRUTEST Replacement Audios, Dutputs and Chokes, has been very popular with the Radio servicemen in their popular with the Radio servicemen in their
dally work of replacing defective audio parts of daily work of replacing defective audio parts of radio receivers. Only the best material and workmanship is used in construction of these transformers. TRUTEST replacement Audios and Chokes are of medium size, semi-open form, with strap mounting and bottom plate, Cadmium plated. Average size $31 / 4 \times 2{ }^{1} \times 133^{\prime \prime}$. Mounting centers, spaced $27 / 8^{\prime \prime}$. weight 3 Ibs.

## Outpists

Output, Single ' 45 type tube to a $5-15$ ohm voice coil of dynamic speaker. C1553-Your Cost
Output Push-Pull '45s type fubes to ohm voice coil of dynamic speaker. C1554-Your Cost.
Output, Single Pentode coil of dynamic speak
Output, Push-pull Pentodes, voice coil of dynamic spouks, voice coil of dynami
Cutp Push-pull 239 Output, Push-pull, 233, 238 to a $5-15$ ohm voice cail of dynamic speaker.
C1564-Your Cost


Audios
Audio, either stage of straight audio amplification. Ratio 3 to 1. Push-pull Input from ........... .. 5 Ratio 2.5:1.
C1551-Your Cost.
Push-pull Inter-st. . . . . . . . . . . . . . S2 ${ }^{c}$ 2 grids. Ratio 1.75:1 2grids. Ratio 1.75: Push-pull Input, Split Secondaries between 1 plate and 2 rids Res (isolated), C1562- 1 plate and 2 grids. Ratio 1.76:1.
Your Cost

Phomograph and Microphone Matching Transformers
Phonograph Pick-up transformer 3000 ohms to grid of tube.
C1559-Your Cost
\$I.20
Single Button Microphome transformer, 200
C1560-Your Cost.
Double Button Microphone trans ohms each side of center-tap. \$ $\mathbf{C 1 5 6 1 \text { - Your Cost.... } 2 5}$ Input- Pick-up to 1. 25 $500,1000,2000$, and 4000 ohms. $\$ 2,25$ C1563-Your Cost ............... \$2.2.

## Filter Chokes

Choke, 25 henry at 25 M. A. D. C. resistance of 830 ohms .
C1557-Your Cost
Choke, 11 henry at $60 \mathrm{M} . \mathrm{A} . \stackrel{\mathrm{D}}{ }$. C of 300 ohms .

## C1558-Your Cost

Choke 30 henry at 75 M A D. C.
hoke, 30 henry at 75 M. A. D. C. resistance of 1.000 ohms, center-tapped
Choke, Hour Cost
Choke, Heavy Duty, 30 henry at 125
D. C. resistance of 200 ohms.
Ci570-Your Cost. . . . .

## RCG) RCA-RadiolaVitor Replacement Audios \& Choke ent

Brand New-RCAVictor Push-Pull Input and Output Transformer for RCA Models 80, 82 and 86, Victor R-35, 39 and 57, G. E. H-31, H-51, H-71.
 Exact du plicate of replacement 8554 and No. 61151 . Consists of pull input and one push-puil output transormers in one can. Voice coil impedance 8-10 ohms. ALL DISE IS USED IN MAKING DISE IS USED IN MAKING Shipping weight 5 lbs C1998-
Your Cost Each
Ra
Radia Double Chokes Models 18-33-51, Part No. 8336 Thisheavy duty, rugzed Filter Choke is the ideal choke for all types of filter circuits, power amplihers, eliminators, transmit-
ters and power ters and power
packs. When packs. When
connected in parallel, you at 200 mils. In serles, 60 henries at 100 mils. Each choke has a 1000 volt insulation test, D. C. resistance 500 ohms. Fully shielded in metal case with special insulating compound. Size $51 / 4 \times 3 \frac{3}{1} \times 2^{7 / 6^{\prime \prime}}$. Shipping weight 6 1bs.
c2171-Your Cost.
For Radiola Models 17 and 50 C2181-RCA No. 8288
For Radiola Models 60 and 62 C2182-RCA No. 8345
For Radiola Models 44-66-47 C2183-RCA No. 8475 For Radiola Model 66
C21st-RCA No. 8486. Shipping weight, 8 lbs .
Either Alove Chokes. Your Cost
${ }^{5} 1.40$
Radiola Single Audio Radiola Models 60 and 62 Brunswick 3NC8


5NC8 Graybar Model 60
This is the genuine Radiola Part No. 5805, single No. 5805 , single audio stage ror receivers. Shipping weight 1 lb .
C2173-List 54.80 Your Cost.

$95^{\circ}$
speaker by addition of tw A 10 condensers across line. Shipping weight 3 lbs. Primary 350 ohms, secondary 6 ohms. C2170-Your Cost

Intermediates
Radiolas 60, 62, 64, and 66
 Here is the gen uine "I. F.' fransformer Models, each has been peaked has been peaked
at its correct frequency at the RCA Factory Our supply ping weight 8 oz . limited.Ship

For Radiola Models 60, 62, 64 1st, 2nd, 3rd, "I. F." Transformer. (RCA No. 8342.)
c21ci
Your Cost Each
51.35 For Model 66
1st, and 2nd "I. F." Transformer. (RCA No. 8481)
Your Cost Each.
ST.65 3rd "I. F." Transformer. (RCA
No. 8482). C2166- ${ }^{\text {Your Cost }}$ Your Cost $\ldots . . . . .$.
For Model 67 1st intermediate stage, RCA 8481. C2165
Your Cost $\qquad$ 2nd int
ediate stage
Your Cos
$\qquad$
3rd intermedlate stage C2162
Your Cost s 1.65
1.95

## Genuine Push-Pull Inter-Stage and Push-Pull

 Output Audio AssemblyRCA- Victor Models R-50, R-55, RE-20, RAE-59 and RAE-79. G.
E. Models H-32 and H-72. Graybar Model GB-100, RCA No. 8711
 Consists of a push-pull inter-stage audio, primary 2300 ohms center-tapped, secondary 7600 ohms center-tapped. Output, push-pull audio, primary
600 ohms center-tapped, secondary, 10 ohms. Can be used with any receiver or power amplifier using p.p. pentodes in the output stage to the voice coil of a dynamic speaker. Unusually small in size, $3^{3} \mathbf{4}^{\prime \prime}$ high, $2 \times 2.4$. Metal container, completely shielded and pitched against moisture. Crimping lugs for ensy mounting. $12^{\prime \prime}$ color coded leads for direct

C2001-Your Cost
\$2.25
Victor P. P. Input and Output Transformer R-32, R-52, RE-45, RE-75

econd. 16,000 ohms. Output ms 500 ohms, Second. 6 ohms to Prim. coil of a dynamic speaker. Ship ping weight 5 lbs .
C1995-Your Cost

## Victor Choke

## R-32, R-52, RE-45, RE-75

 The genuine Choker Filter their receivers Has a D C. re sistance of 200 ohms. 30 henry at 125 mils . A good choke for general ure. 21/2". Guaranteed. Shipping weight 6 bs.
C1997
Your Cost

Thisis the gen-
$57^{\circ}$
Victor Audio
R-32, R-52 RE-45, RE-75
Thegenuine
Audio Trans-
formerfor
coivers. Prl-
mary 1200
ohms, tapped at 50 ohms for phono. pickup. Secondary 2800 ohms. Brandnew
teed. Shipping weight 4 lbs . $\boldsymbol{y g}^{\mathrm{c}}$
RCA Photophone Photo Cell Matching Transformer

Consists of a single winding, of 4000 ohms, tapped at Can also be used ss phonograph pickup matchingtrans. ormer, such as used Electrola end table combination. Shipping weight 2 liss.A180 $\$ \mathbf{S}$
RCA Victor Phono. Pick. Up Inpat Transformer Primary 20 ohms, secondary 5500 ohms D. C. Resistance. Shipping ohms wight 2 libs.
Alsight
$28^{c}$

RCA Radiola Audio Transformer For Models RR, RX, R3, R3A, R4, R7B, R9, R20 and R-30-A, Part No. 557-2182
 The genuine replacement audio used in the first or second stare of any battery, D. C. or A. C. receiver. Universal mounting. Ratio 3:1. Primary D. C. resistance ary 5800 ohms ${ }^{\prime \prime}$ D. C. resistance.
Size. $3 \times 13 / 4 \times 13 / 4$. Shipping weight 21 bs.
C2006
Your Cost Each
$45^{\circ}$
55.00

## Coupling Reactor

RCA Models 44,46 and 47

 input transformer used to couple a ' 27 to a single ' 50 typetube The genuine RCA-Radiola replacement No. 5869 $\mathrm{Sh} i p \mathrm{ping}$
weight
5 lbs

C2002
Your Cost Each
52.85

Output Transformer
Used to couple a single ' 60 type tube to a $8-15 \mathrm{ohm}$ voice coil of a dynamic speaker. RCA part No. ${ }_{5747-5868 \text {. Shipping weight } 5 \mathrm{lbs} \text {. }}^{\text {namic }}$ C2003. $\$$. 5
Your Cost Each
Output Transformer Models 17-50
 The Official RCA part No. 5683 output trar.sformer for the above models. Primary 600 ondary 800 ohms. Single output to a magnetic speaker. Size $2 \frac{1}{2} \times 3 / \frac{1}{2} x$ 21/2. Shipping weight 21 bs . $3 \mathrm{c}^{c}$ C2168-Your Cost.
$35^{c}$


150 MA . chokes mounted in a meta housing. D. C. resistance of each section is 400 ohma. Size $5 \frac{1}{2} \times 3^{1 / 2}$ $\times 31$ section Mounting cmiters, $21,4 \times 33^{n}$. Shipping weight $81 / \frac{1}{2} \mathrm{lbs}$. C1574-List $\$ 17.40^{\circ}$ Your Cost Speciol. $\qquad$
RCA Filter Choike 30 Henry 150 MA. Models 64 and 67


Genuinere-
placement choke, Part No. 5867, D. C. res. of 300 ohms. Size $3^{3} 4 \times 2^{3}<\times 3^{\prime \prime}$ Shipping weight A182
List $\$ 8.90$
$\$ 2.25$
Your Cost 105 Loudspeaker
Similar in appearance to above,
A183-List $\$ 6.75$ \$T. 65

# Guaranteed Replacement Audio Transformers 



## Jefferson Transformers

Class "B" Input Transformer


This was designed as a coupling unit for class "B" amplifiers The engineering features embodied in the construction of this transformer, as well as the perfect workmanship and highest grade of materials used enable us to produce a unit truly conforming to the requirements to provide a reserve power for an extended range of volume. This nput transformer has a flat response curve ings of ample capacity to handle the maximum output of the amplifier. Has tapped primary and secondary windings making it adaptable and secondary windings making it adwp ' 46 's in push-push, or for coupling two '27 push-pult in push-push, or for coupling two 27 push-pult
tubes to two 46 push push tubes. Housed in tubes to two ' 46 push push tubes. Housed in
an attractive hlack enameled case, fully shielded, with lugs on the side mounted on bakelite panel. Complete instructions and wiring diagram accompany each unit. Size 31/2" high; 21/2" wide; 2//8" deep. Shipping
weight 214 lbs.

## Class "B"' General Purpose

Filter Choke
Designed and recommended for use as a general purpose filter choke, but is also particularly applicable as a second section class "B" amplifier choke. grade wire is used for this
 choke and the core is of the finest steel. It has the same general construction as that of the input choke listed here. Resistance 190 ohms; nominal inductance 10 henries, 150 M . A. Sturdy and of generous proportions, with windings completely shielded. proportions, with windings completely 1 nieled. Lugs on side on bakelite panel. Size 3 . 16 high. C1917 List $\$ 3.20$ whpping weight $\$ 1.828$
Your Cost.


## Class "B'" Filament

## Transformer

This unit was developed to supply the demand for a fila ment transformer to be used with a plate supply trans former especially designed for class "B" amplifiers. Has a filament winding for ' 82 mercury type rectifer, one 46 driver and two 46 push-push inpliners sufficient capacity to take care of eight 13, amp. heater filaments, or fourteen 1 amp heater filaments. Has black enameled housing, completely shielded. Lugs are mounted on a bakelite panel on side of transformer. Full instructions and diagram enclosed with each
unit. Size $41 / 4^{\prime \prime}$ high; $314^{\prime \prime}$ wide; $311^{\prime \prime}$ deep. unit. Size 41/4" high; 31/4" wide; $34^{" 1}$ deep. C1918-List $\$ 6.95$ the
${ }^{3} 3.95$

## Class "B" Input Fitter Choke

This choke is designed for use with the Jefferson filament and plate supply transformers adaptable as choke in put for class "B" amplifiers, as it aids materially in maintaining the close regulation desirable for this type amplifier. As is the
 ule with this high grade of products, only the best materials are used, and utmost care exercised in its assembly. Resistance 190 ohms; 10 H . Capacity of winding 150 M . A. Sturdy and of generous proportions, with windings completely shielded, and lugs brought out of side and mounted on bakelite panel. Size $3^{1 / 10^{\prime \prime}}$ high; $2^{13} / 0^{\prime \prime}$ wide; $3^{\prime \prime}$ deep. Shipping weightt $21 / 2$ lbs.
C1919-List $\$ 3.20$ Your Cost.
$\$ 1.82$
Each Jefferson class "B" transformer comes complete with diagram showing terminals and the method of connecting same to circuit.

Shielded Universal Output Transformer


This unit is recommended for use with Nos. ' 12,71 , '31, '33, '38, $46, \cdot 47$ or ' 50 type tubes, single or pushtype tubes, single or pushpull with any present day dynamic speakers. Also has Primary) for magnetic speaker. Windingsaresealed in the case, guarding against damage caused by moisture. Lugs provide convenient primary and secondary connections. Size ${ }^{31} 1 /{ }^{10}$ high; $2^{\prime \prime} \times 2{ }^{1}{ }^{\prime \prime}$. Shipping weight $21 / 2 \mathrm{lbs}$ C1926-List $\$ 5.00$

## Your Cost

$\$ 2.25$

## New Star Sealed Tapped Input

 Sealed in the case to pre vent open circuits from moisture this unit is an outstanding example of a low-priced, yet high quality product. The coils are machine wound to insure accuracy and uniformity The finest rolled high sili- con steel is used for the laminated core, which is so designed and assembled as to insure even distribution of flux through the entire circuit. Assembled in black enameled sheet steel cases and has nickeled binding posts. Windings are completely shielded binding posts. Windings are completely shielded high, $25 / /^{\prime \prime}$ wide, $27 / \mathrm{B}^{\prime \prime}$ deep. Shipping weight 11 b . $\$ 2.50$
\$1.IS

## Your Cost

Jefferson Replacement Audio


## This is the Jefferson Uni-

 versal compact audiotransformer, ideal for retransformer, ideal for rewhere space is limited. It has two sets of brackets for either horizontal or
vertical mounting. Primary, 500 ohms; Second-
ary, 1000 ohms. For single audio stage. Size $13 .{ }^{10} \times 2^{3} 8^{\prime \prime} \times 218$ ". Shipping weight 2 lbs.
C1905-Your Cost..................

## Class "B" Output Transformer



This output transformer was developed for use in new push push amplifier circuits. Highest grade silicon steel is used for the laminations, the core being so designed as to make for an even distribution of flux. Coils are made of the finest grade wire specially wound to insure aceu racy and uniformity, and are thoroughly impregnated. Has tapped primary and secondary windings suitable for coupling Wo 46 tubes to various types of speakers, o speaker combinations having voice coil resistances of $1,3,6$ and 10 ohms. Size $31 / 2 /$ $2{ }_{2} \mathrm{jbs}$
C1915-List $\mathbf{5 6 . 2 5 - Y o u r ~ C o s t ~}$
\$3.55

## Class "B" Plate Transformer

This transformer was designed primarily for use with the new '82 mercury type rectifer to supply the required plate voltage for class " $B$ " amplifiers. It has sufficient voltage when operated in conjunction with the input filter choke to work the 246
push-push amplifier at its
 push-push amplifier at its maximum output, and in addition to this it has the capacity to supply high voltage current or the average ten tube set. It is generously designed and has permanently contained good regulation. Is completely shielded in a stee case, with black enamel finish. All connections are brought out to lugs on the side of housing, and are mounted on a neat bakelite panel on front of the transformer. Only the highest grade of materials and finest workmanship are grade of materials and finest workmanship are
used in the construction of this transformer There are complete instructions and wiring diagrams furnished. Size $41 / 2^{\prime \prime} \mathrm{high} ; 31 / 6^{\prime \prime}$ wide $33^{\prime \prime}$
c1920
deep. Shipping weight $51 / 2 \mathrm{lbs}$ C1920 List $\$ 8.75$
s 4.98

## Jefferson Concertome Audios



## Bottom Lugs-Side Lugs

Jefferson concertone sealed transformers are de signed to amplify, evenly and uniformly n! notes within the musical scale on either A. C. or D. C. receivers. Their use in audio circuits give increased sensitivity, greater distance, and insures a good volume of clear, pure and undistorted reproduction of programs, with all the vital harmonics and rich overtones so essential to true tonal quality. Heavily insulated throughout, safe for use with power tubes, assembled and sealed into a beautifully black aembled and sealed into a beautifully black enameled metal case. The primary impedance
is extremely high and exactly correct for A. C. is extr
tubes.
Push-pull Input, lugs on bottom, for use with 171-A, 245, 247, 250, 231, 233, 238 and 210 tubes. Primary, 1500 ohms, 7000 ohms, total.
C1900-Your Cost
s 1.40
Push-pull Input, lugs on side, same charac teristics as above.
$\$ 1.75$
Push-pull Input, lugs on bottom, has a ratio of 35 to 1 , for use with 171-A, 231, 245, 280 tubes. Primary, 300 ohms total, Output to a 10 ohrm Voice coll of a Dynamic Speaker
C1902
Your Cost
${ }^{\mathrm{s}} 1.45$
Push-pull Output, lugs on side, same characteristics as above.
s 1.45
Push-pull Output, lugs on bottom, for Pentode output only. Primary, 600 ohms; Secondary 10 ohms, to Voice coil of a Dynamic
Speaker
cisos Your Cost
$\mathbf{I . 6 5}$
C1504 Your Cost
Cos

## KENYON AUDIOS

The ideal audio transformer possesses four important characteristics; uniform response, high efficlency, low wave-form distortion and reliability. These points are inherent in Kenyon units plus a fifth, minimum inductive and

## Stock

P-15800 Input; 1 plate to 1 grid. 3:1 ratio
P-15801 Input; 1 plate to 2 grids in P-P. 2:1 ratio each side
P-15802 Input; universal line to 1 grid
P-15803 Mixing universal line to uni versal line
P-15804 Output detector plate to universal line
P-15805 Input; two windings on primary, one for detector piate or high impedance pickup to 1 grid, another for double button mike or low impedance pickup to 1 grid
P-15806 2 plates to 2 grids. 1.75 to 1 ratio each side.
P-15807 Output; P-P ' 458 to 500 and 15 ohm line, tapped at 8 and 4 ohms.
P-15808 Output; P-P '50s or triple twin to 500 and 15 olm line tapped at 8 and 4 ohms.
P-15809 Output; 1 ' 50 , ' 45 or triple twin to 15 ohms tapped for 8 and 4 ohms
P-15810 Output; P-P W E 252 A's to 500 ohm line
P-15811 and a 15 ohm line tapped at 8 and 4 ohms.
utput;' 47 to 15 ohm voice coil, tapped at 8 and 4 ohms
P-15812 Output; P-P 47 's to 500 and 15 ohm line, tapped at 8 and 4 ohms.
P-15813 Output; P-P 48 plates to 500 and 15 ohm line, tapped at 8 and 4 ohms.
P-15814 Output; P-P 38 's to 15 ohm line tapped at 8
P-15815 Prime A output; P-P ' 453 to 500 and 15 ohm line, tapped at 8 and 4 ohms.
P-15816 Driver input; 1-89 plate to $2-89$ grids Class B. P-15817 Driver input; 1-245 plate to 2-245 or $250^{\circ}$ s grids in A Prime amplification. .
P-15818 Driver input; 1-46 plate to $2-46$ grids Class B P-15819 Driver input; 1-53 plate to $2-59$ grids Class B P-15820 Driver input; P-P '45s to 2-210 grids Class B P-15821 Driver input; P-P '50s to 203A grids Class B
P-15822 Class B output; P-P 59 plates to 500 and 15 ohm line, tapped at 8 and 4 ohms
P-15823 Class B output; P-P 89 plates to 15 ohm line, tapped at 8 and 4 ohms
P-15824 Class B output; P-P 46 plates to 500 and 15 ohm line, tipped at 8 and 4 ohms.
P-15825 Class B output; P-P 46 plates to R. F. modulator. Sec. 4000 ohms.
P-15826 Class B output; P-P 59 plates to R. F. modulator. High imp. sec.
electro-static pick-up. The cases have a silver finish which adds to the professional appearance of an amplifier or an aluminum or cadmium plated base.

| List <br> Price | Your <br> Price |
| :--- | :--- |
| $\$ 4.50$ | $\$ 2.70$ |
|  |  |
| 5.00 | $\mathbf{3 . 0 0}$ |
| 5.50 | $\mathbf{3 . 3 0}$ |
| 5.50 | $\mathbf{3 . 3 0}$ |
| 5.50 | $\mathbf{3 . 3 0}$ |
|  |  |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock No. | Description | List Price | Your Price |
| P-15827 | Class B output; P-P 210 plates to R. F. modulator. High imp. sec. | 7.50 | 4.50 |
| P-15828 | Class B output; P-P 203 A plates to a 2500 ohm load. | 15.00 | 9.00 |
| P-15829 | Audio line matching transformer. Handle up to 20 watts. Input 500 ohms. Output 2, 4, 8, 15 ohms. | 8.00 | 4.80 |
| P-15830 | Power transformer; P-P 245 or 247 amp . and tuner. Pri. 115 volts 60 cycles A. C. Sec.: 375-0-375 at 100 M . A., 5 volts at 2 amps., $21 / 2$ volts C. T. at 3 amps ., $21 / 2$ volts C. T. at 10 amps .. | 7.50 | 4.50 |
| P-15831 | Class B Power Trans.; P-P 46 amp . and tuner. Pri. 115 A. C. 60 cycles. Sec. $570-0-570$ at 150 M . A., $21 / 2$ volts C. T. at $3 \mathrm{amps}, 21 / 2$ volts $C$. T. at 3 amps., $21 / 2$ volts C. T. at 10 amps . | 10.00 | 6.00 |
| P-15832 | Class B Power Trans.; P-P 59 amp . and tuner. Pri. 115 A. C. 60 cycles. Sec. $570-0-570$ at 165 M . A., $21 / 2$ volts C. T. for two 59 filaments. 5 volts, 3 amps. for 83 rectiffer $2^{1 / 5}$ volts C. T. at 10 amps . for amp. or tuner. | 12.00 | 7.20 |
| P-15833 | Power Trans.; P-P 250 amp. and tuner. Pri. 115 volts 60 cycles A. C. Sec. 600-0600 at 150 M . A., $2-71 / 2$ volts C. T. 3 amp . windings, one $21 / 2$ volt 10 amp . winding. | 0.00 | 6.00 |
| P-15834 | Plate and fil. supply for transmitter using 250 or 210 tubes. $2-7 \frac{1 / 2}{2}$ volt C. T. 3 amp . windings for $2-281$ 's and $2-250$ 's or $2-210 ' \mathrm{~s}$. $1-21 / 2$ volt C. T. winding 10 amps . Bigh voltage 1500 C . T.. | 12.00 | 7.20 |
| P-15835 | Filament trans. Sec. $21 / 2$ volt C. T. 10 amp. 2000 volt insulation. | 5.00 | 3.00 |
| P-15836 | Filter choke 15 Henries, Max. D. C. 150 M. A. D. C. resistance 210 ohms | 4.00 | 2.40 |
| P-15837 | Class B input filter choke. D. C. resistance 110 ohms. | 4.00 | 2.40 |
| P-15838 | Filter choke 10 Henries, Max. D. C. 200 M. A. D. C. resistance 100 ohms. | 4.00 | 2.40 |
| P-15839 | Filter choke 30 Henries, Max. D. C. 90 M. A. D. C. resistance 350 olms. | 3.50 | 2.10 |
| P-15840 | Audio parallel feed choke, 250 Henries, Max. 15 M. A. D. C. resistance 4700 ohms. | 4.50 | 2.70 |

## AMERTRAN AUDIOS AND CHOKES




Amertran Audio-Frequency Transformers have long been considered the "Standard of Excelleace" by leading radio engineers and the world's best musicians. Second in importance only to the electrical perfection of these transformers is the fact that their construction assures a long useful life. A large percentage of failures in audio frequency transformers is traceable to moisture entering the windings either while in service or during the process of manufacture, and subsequently becoming the cause of disintegration as a result of electrolysis after D. C. plate current has passed through the primary winding for a period of time. In the manufacture of Amertran transformers all moisture is thoroughly removed from the windings before they are sealed in the case with a special moisture-proof insulating compound. As a result the finished product is practically hermetically sealed and is protected against even the corrosive and electrolytic action of moist salt air in tropical climates.

## Phono. Pick-up Transformers

$5000-6000$-, or 8000 ohm pickup to 1st stage De Luxe. No. 389. A333-Type 1 List $\$ 8.00$ Your Cost No. ${ }^{406-A .}$
A334-Type
Fist $\$ 15.00-$ Your Cost

## $\$ 8.62$

## Tube-To-Line Transformers

Two 250 - or 245 type tubes to 200 ohm line or $1-915$ ohm dynamic speakers in series parallel. No. 678. A335-Type 3 List $522.00-$ Your Cost
${ }^{s} 12.74$ Two 250 - or 245 tspe tubes to 500 ohm line. 15 ohm monitor winding. No. 3332.
A336-Type ${ }^{3}$ Your Cost .
5 T2.74
Two 210 - or 112 type tubes to 500 ohm line, 15 ohm monitor winding. No. 3540.
A337-Type 3
List $\$ 22.00-$ Your Cost
\$T2.74

## Filter Chokes and Reactors



## Audio Transformers and Chokes



## Sangamo Audios Push-pull Input

Sangamo Audio Transformers are well known to leading Radio engineers and the world's best musicians. The entire frequency range is covered by use of these transformers. Primary, 2000 ohms; secondary, 8000 ohms, Size $3 \times 21 / 4 \times 2^{\prime \prime}$. Mounting centers $34_{4}$ " Shipping weight 3 lbs.
$85^{\circ}$

## Push-pull Output 247 to Dynamic Speaker

Identical in appearance to above. Output impedance matches $8-15 \mathrm{ohm}$ voice coil of dynamic speaker.
C2397-Your
C2397-Your Cost

## Push-pull Output 245

to Dynamic Speaker
Identical in appearance to above. Output impedance matches $8-15$ ohm voic dynamic speaker
C2398-Your Cost.

## Shielded Pacent Push-pull



## Input

Transformer
Fully shielded and protected against climatic tected against climatic
conditions. Primary D. C. resistance 1800 ohms, secondary D. C. ohms, secondary D. C. resistance 13,000 ohms. Noted for its high a mplifi-
cation without distortion. cation without distortion.
Suitable for high power Suitable for high power
ampliflers. Pleasing black la equer finish. Overall size $33 \times 21 / 2 \times 21 / 2^{\prime \prime}$.
Shipping weight 4 lbs.
C 2347 -Your Cost................

## Rauland Laboratory

 R-500 Audio Transformer

C2265-List Pric
Your Cost, Special.
Filter Choke 30 IR.-100 MA. A quality filter choke, having an Inductance of 30 henry at 100 M . A D. C. resistance of 3 A. ohms. Ideal for all types of circuits reguiring a high qual ity fiter choke. Its low D. C. resistance makes it a popular unit for set builders and for piacement purposes. C1569-Your Cost


## Rauland R-14 Audio

## Transformer

That burnt-out transformer in your commercial set affords an opportunity to improve radio resultsreplace with Rauiand R-14. 8000 ohms D. C. ohms; Secondary, 8000 ohms D. C. resistance. C2266-Shipping
C2266-Shipping weight 4 lbs .
$50^{\circ}$

General Purpose Replacement Audio Transformers This compact and efficient transformer makes an ideal unit for of popfig replacement of burned out or obsolete transformers in battery and electric sets, and especially so where space is at a premium. It can also be mounted upright or horizontal as conditions call or. Can be used in the first or second audio stage, and with all types of tubes, possessing a high quality of performance. Has a good response over the audio ranke of frequencies, with a correIt is completely housed in an attractive enamel metal casing, fully shlelded, with soldering lugs terminating on a bakelite strip. Size $3 \times 158 \times 1 /{ }^{\prime \prime}$ ". Shipping welght C2348-Your Cost Each

## DeLuxe Audio TransSormer

 Ratio $31 / 2$ to 1One of the finest Audlo Transformers made. Can be used in the first and second Audio stage. Sealed in an oval case, made of the finest aluminum. To be mounted inverted, leads connected through bottom of chassis. Mounting is made by use of two "/k screw luge attached to case. Size, $1^{13} \times 21 / 4 \times$ 27/3" high. Primary, 1200 ohms Secondary, 7000 ohms D. C. resistance. Shipping weight 2 lbs. In Lots of Ten Each



Push-pull Input Audio Isolated Split-Secondaries


Shipping weight $11 / 2 \mathrm{lbs}$.
Just the transformer for D. C. recelvers and Triple-Grid Amplifiers. Priresistance, Secondresistance, Secondohms D. C. resistance each section ance each section mounting typo. mounting type. C2337-Your Cost Each
1.25

## Heavy Duty Filter Choke

Heavy Duty Filter Choke that has an inductance of 30 henry, at approximately henry, at approximately 150 mils . D. C. resistance o 700 ohms, For use in a
filter circuit for power packs-and pow fiers. Size $3 \times 3 \times 212^{\prime \prime}$. Shipping weight 5 lbs . C1572 Your Cost


Special Audio Trans-


The same quality Audio Transformer as the Large Rauland Laboratory Grade, R-500. Open Frame strap mounted, finished in cadmium plating. Can be used as 1st or 2nd straight Audio Stage. For use with all types of tubes. Available in either upright or horizontal type. Size overall $21 / 4 \times 23 / 8 \times 3 \% /{ }^{\prime \prime}$. or horizontal type. sizping welght 3 bs.
Upright Type Mounting
C 2334
Horizontal Type Mounting
Horizontal Type Mounting
C2335-Your Cost, Either Type

Kellogg Matched P.P. Input and Output


To greatly improve the tone quality and volume of your radio, install a pair of these Genuine Kcllogg Matched P.P. input and output audio transformers. Laboratory matched to ingure perfect audio balance matched to insure perfect audio balance throughout the entire frequency range. Nothing better for Public Address Systems and Power Amplifiers. A very fortunate purchase enables us to sell these below actual production cost, but our QUANTITY IS LIMITED, and no more can be had at this price. Size $31 / 4 \times 21 / 4 \times 31 / 4$ ". Shipping C2332-Your Cost Per Pair
$\$ 1.29$ P.P. INPUT se C2333-Your Cost P.P. OUTPUT

C2399-Your Cost
$55^{\circ}$
Pentode Output Transformer to a Magnetic Speaker


Specially designed to couple a single pentcouple a single penthigh impedance maghigh impedance mag-
netic speaker, Open netic speaker. Open
frame strap mounting frame strap mounting
type. Size
23
$\mathbf{3}^{3} \times 2$ type. Size $2^{3} \times 2 y_{1}$ x
$13 / 4$. Shipping weight
Cisil
s 1.10
Thordarson 1:1 Transformer


For use as an output tranyformer for magnetic speakers or in the last audio stage of an amplifier. Silicon steel core, Black enamel steel case. Size $215 \times 215 \times 3^{\prime \prime}$ high. Mounting holes $21,0^{\prime \prime}$ center to center. Shipping weight ${ }^{3}$ libs. Your Cost.
$59^{\circ}$

## Trutest Fleavy Duty

 Choke $30 \%$.125 M. A. A choke that is rated at its true inductance value. Ideal for replacement and new set
 product Its low D. C
resistance of 180 ohms makes it an ideal filter choke. Size $3 \times 2 \times 233^{\prime \prime}$ high. Mounting centers 38/ Shipping weig

## General Radio

## Audios

Types 285-H, 285-D
The Audio Transformers for the present day electric rcceiver
as well as the early battery sets. Tone Quality beyond comparion, that is General Radio Audios. Type 285-H, high amplification, ratio 6 to 1 . Type 285-Dj ratio 3 to 1. They maintain a general uniform response throughout the audio requency band, with increased volume, and are for all types of tubes. The 6 to 1 ratio especially adaptable for short wave work using single audio stage. Laminations and windings of the highest grade materials. Fully shielded. Size $31 / 2 \times 31 / 4 \times 2 /^{\prime \prime}$ Mounting holes $218^{\prime \prime}$. Shipping welght 3 lbs. Mounting holes 238 C1710-Type 285-H.
Either Type
$\$ 1.20$

# THORDARSON Auclios and Chokes 

## AUDIO TRANSFORMERS

R-100 Andio
 The ideal replacement for that burned-out or obsolete audlo transformer. The R-100 possesses the same high quallity of performance that characterizes Thordarson Audio Trans formers, Ratio $31 / 2$ to 1 . Size, $2-7 / 16 \times 1^{1 / 2 x}$ 2 taches high. Shpg. Wt., 2 lbs. 4A213-Four Cost
$\$ 103$

## R-103 Audio

Similar in appearance as above R-100, also made for replacement purposes. An audio coupling transformer of higher qual$1 \%$ at a sman increase in price 4A240-Your Cost
\$118

## R-200 Audio

 The special core material of this transformer (Thordarson DX Metal) has a permeablity $50 \%$ greater than that of the finest grade silicon steel formerly employed andincreases the transformer increases the transiormer
 inductance Ingly. An ideal Feplacement Audio translormer of the inished construction. Ratio Wt., 3 lbs. $\$ 125$ 4A214-Your Cost, only.

## R-300 Audio

Similar in appearance to above. Supreme in musical performance brings a greater realism to radio reproduction. The amplification range has been extended still farther into the lower register so that duced with amazing fidelity. Same size and shipg. wt. as R-200. 4A239-List \$5.00. Your Cost.
s.35

## R-400 Audio

Similar in appearance to above. The amplification curve of this transiormer is practically a straight line from 30 to stage or Input stage. Ratio 3 to 1 . Size. $23 \times 2 \frac{1}{2} \times 3$ in. high.
4 A15 List 55.00.
Your Cost.
s2.35

## FILTER CHOKES

30 Fenry- 50 Mils. T-1892-A
 Open Irame type choke.
Designed to filter a current of 50 mils. Inductance of 30 henrys, 450 ohms d.c. resistance. Ideal for midget recelv$21 / 2 \times 13 / 4 \times 21 / 8$ in Mounting centers, $31 / \mathrm{ligh}$ in. shpg. Wt. 3 lbs. 6 E 2A246-Your Cost $0{ }^{-}$

## 30 Henry- 85 Mils. R-196

 A fully shielded and indarson. D.C resistance of 360 ohms. For filter circults and speaker output coupling. size, $21 / 2 \times 2^{1 / 2 x}$ 3 ln. 4 A 242 -Your Cost ......... $\$ \mathbf{1 6}$


R-105 SPEAKER DUTPUT CHOKE


A high quality output choke designed to couple a pair of '71 or ' 45 type tubes to a high impedance speaker or to the transformer in the dynamic speaker. size, $\frac{1}{3} / \mathrm{sk2} \times 2 \mathrm{~m} / \mathrm{in}$. Shpg. Wize,
$4 \mathrm{A241}-$
\$103

## PUSII-PULL INPUTS

## R-101


types of sets.
Wt., 3 lbs.
P. P. INTER-STAGE AUDIO T-2973
A special audio transformer to couple two stapes of Push-pull am-
plification. Especially applicable for use in power amplifiers for public address work to prevent tube distortion in the first stages of the audio amplifier. Ideal
for use with Type 45 ,
' 47 and '50 power tubes in the output stage. Size, $3 \frac{1}{2} \times 3 \times 33 / 4 \mathrm{in}$. high. Shpg. Wt. ${ }_{2}$ 1bs.

T-4304 PUSH-PULL INPUT
A transformer serving the same purpose as type T-2408 but possessing a ratio of 2 to 1. May be used following a screen gidd power detector having parallel plate 245 , 247 and 250 types or porer with in the push-pull stage. Size, $312 \times 3 \times 33 / 4 \mathrm{in}$.
high. Shpg. Wt., 5 ibs.
T-2408 PUSE-PULL INPUT Designed to couple a stage of straight audio amplifipower push-pull using any of the expsting usypes of power amplifying $1 / 2 \times 21 / \times 3$ in $1-1$ Size. Wt. 4 lbs.
4A217-List $\$ 4.00$
Your
Cost.........


## THORDARSON

 FILAMENT TRANSFORMEIRS

These Thordarson Fllament Transformers are made of the finest material that is obtainable and are fully teed and guarandowns. Supplied with 5 -foot lamp cord and AC plug.

## T-2445

Supplles: $1 \frac{1}{4}$ volts for $4-{ }^{-2} 26$ s; 2.5 volts for $2-27{ }^{5}$ volts for $2-71$ As. Size, $234 \times 5^{3 / 4} x$


## T-3081

Supplies: 1.25 volts at 3 amperes, 2.5 volts at $31 / 2$ amperes. For small sets and amplifiers. Size, $2 \frac{1}{2} \times 3 \times 31 / 4$ in. high. Shpg. 4A301-List $\$ 4.00$, Your Cost...... $\$ 236$

## T-2504

A special filament supply for Kellogg or other stmilar 3 volt heator type tubes. 3 volts at 10 amperes. Size, $31 / 2 \times 3 \times 31 / 4$ 1n.
high. Shpg. Wt., 5 lbs.
SO 36 4A302-List $\$ 4.00$. Your Cost
\$236

## T-2610

A special filament supply for Arcturus or other similar 15 volt fllament tubes. 15 volts at 2 a amperes, c.t. or 8 tubes. Size. 4A303-List \$4.00. Your Cost..... \$236

## PUSH-PULL DUTPUTS

T-2623


A special push-pull output transformer designed 210 or 245 push-pull stage or into a push-pull speaker. This Transformer replaces the one in the base of the speaker. Secondary connects directly to the moving coil having a d.c. Iesis. tance between 4 and 8 ohms. Primary 1200 ohms. Size, $3^{\frac{1}{2}} 2 \times 3 \mathrm{x}$ $3^{3}$ ins. Shpg. We. 5 lbs. cost. $\$ 2.35$
4 A218-List $\$ 4.00 . \quad$ Your
T-2903 PUSH-PULL OUTPUT Similar in appearance to above. Designed Similar in appearance to above. Designed into a dynamic speaker. The secondary of this transformer connects directly into the moving coll of the dynamic unit. It is conservatively rated to carry the high output current and voltage of power amplifiers of this type. Slze, $31 / 2 \times 3 \times 37 / 4 \mathrm{in}$. high. Shpy. Wt., 5 lbs.
$4 A 238$. Ist $\$ 4.00$. Your cost. $\$ 2.35$

## PENTODE OUTPUT T-4B4B

Designed for use win
Single Pentode output to
the moving voice coll of the moving voice coll of a dinamic speaker, havtween 4 and 8 ohms Turn ratlo 30 to 1 . Impedance ratio 932 to 1 Size, $2 \frac{1}{2} \times 2^{\frac{1}{2}} \times 3 \mathrm{in}$. high.
 4A219-List $\$ 3.00$
Your Cost
\$176

## P.P. PENTODE OUTPUT

## T-4831

Identical to above transformer, except for push-pull pentodes in the output stage to the moring voice coll of a dynamic speak${ }_{8} \mathrm{er}$, having a d.c. resistance between 4 and 8 ohms. Turn ratio 38 to 1 impedance of 1444 to 1 . Same size and shipping
weight as above. $\$ 206$
$\mathbf{4 A 2 2 0 - L i s t ~} \$ 3.50$. Your cost......
$\$ 206$
COUPLING TRANSFORMERS FOR 'IO TYPE TUBES FOR CLASS "'B'" DR PUSH-PULL


## INPUT

OUTPUT
Thordarson has developed a pair of transformers for the new system of amplification known as Class "B" or "Push-pull" circuit. It is possible, with this system, to obtain great amounts of power output from comparatively small tubes. This system models of battery receiving of the later been applled in speech amplifiers. It has latest application is its use in Modulators in amateur sending stations. The Input Transformer, couples a pair of The input in Push-pull. to a pair of pair tubes in Pushpull. The Output Transformer is arranged to couple a pair of ' 10 tubes in Push-pult to the oscillator tubes in the transmitter. The secondary winding is arranged so that it may be coupled either to a single 10 oscillator, two 10 oscillators in Push-pull or two ios in parallel. Circuit diagram, including power supply is available with each pair of these fransformers. The input transformer size is $33 / \times 33 / 4 \times 31 / 2 \mathrm{in}$.

Input Transformer T-5100 2A244-List $\$ 7.50$ Cost $\mathbf{4 1}$
Outpat Transformer T-5101
2A24E-List $\$ 10.00$
\$588

## ATWATER-KENT and MAJESTIC REPLAGEMENTS

## Atwater-Kent Power Units



These are the first high quality Replacement Power Packs to be offered for Atwater-Kent receivers. Heretofore servcemen have had to accept makeshift packs assembled from reclaimed and surplus material, which naturally gave poor and short lived service. By contracting for a large quantity of these units we were able to get packs made up from brand new first quality materials that were made eapecially for the purpose. They are equal or superior to the original
units. Color coded exactly like the originals. Planograph units. Color coded exactly like the or
of hook-up furnished with each unit.
For Models 40, 56 and 57
Shipping weight 17 lbs
${ }^{4} 4.95$
For Models 42, 44, 45 and |For Models 43, 46, 47 and 52
Shipping weight 17 lbs.
B1376-Your Cost. <br> }

Replacement Blocks for
Majestic 7BP6, 8BP6, 9BP6 and "A" Eliminators
These TRUTEST Replacement Block models produce a lasting and satisfactory job-one that you will be proud of. Built especlally for us, to our own high standards of excellence, from the best quality brand new materials. They are exact duplicates of the originals in every detail. It is very important for the service man to get blocks which are guaranteed as to materials and workmanship. Other Houses are listing blocks for the Majestic models with " 250 " tubes at the same price they are asking for "171" and " 245 " units, but we have in vestigated them and all that we have tested contain 400 volt condensers which
can not possibly stand up under the higher can not possibly stand up under the higher plate voltage of " 250 " tubes. These units are guaranteed new, perfect, and built to exact specifications. The Standard TRUTEST Replacement Block for the " 250 " Pack contains two 2 mid . 1000 volt units; one 3 mid. 600 volt unit and two 1 mfd .600 volt condensers, which is in accordance with the Majestic requirements, so that you can buy these TRUTEST blocks with confldence and
assured satisfaction. These can be also used for sets, packs and eliminators requiring a condenser block of these specifications.

For Majestic 78P6
(Sets with 171 Type Tubes) Size $83 \times 1 \times 21 / 2 \times 41 / 2^{\prime \prime}$. Shipping weight 6 lbs B1070
Your Cost Each.
\$1.95
For Majestic 9BP6
(Sets with 245 Type Tubes)
Size $89 / 4 \times 21 / 2 \times 41 / 2^{\prime \prime}$. Shipping weirht 4 lbs Size 87/4
Your C
ast Each.
$\$ 1.95$
For Majestic 8BP6
(Sets with 250 Type Tubes) 1000 volt test Condensers. Size $8^{3} \times 21 / 2 \times 41 / 2^{\prime \prime}$. Shipping weight 6 lbs.
$\$ 3.75$
B1069-Your Cost Each
For Majestic "A" Eliminators Size 31/6
B849-
Your Cost Each
32.45

## 53

Shipping weight 19 lbs. Shipping weight 19 lbs.
${ }^{5} 7.50$
7.50 8
8

\section*{Trutest

## Trutest <br> For "倍" Eliminators



For replacement in Majestic " $B$ " Eliminators. You would not want better blocks than these sturdy units. This block is built exactly to the original in accordance with the exact Majestic specifications from brand new first grade specifications from brand new
merchandise, guaranteed as to quality. They will give you the kind of service you have a right to expect for your money. Composed of right to expect for your money, Composed designed, and carefully built to give long and satisfactory service. The electrical characteristics have been identically duplicated. As this was one of the most popular "B" Eliminators made, and was sold in such tremendous quantitics, there will be a steady demand for replacements of this block for years to come, and the service man with foresight, that will lay in a supply of these, will eventually cash in on the requirements and demand for this block in the future. Shipping weight 5 lbs.
 Your Cost Each
 B84G-For Majestic Special Master "B".
Your Cost Each.
$\$ 1.95$

## Majestic Model 20 Chassis <br> Condenser Bank and Input

 P. P. TransformerReplacement for the Original Majestic Condenser and P.P. Input Transformer Assembly, Part No. 38 min . Two 2 mo 1 mid., and P.P. Input 1 mid., and P.P. Input $\$ 20.00$. Shipping weight $\mathbf{C} 1064$

## Majestic $90-\mathrm{B}$ Condenser

 An exact Duplicate of the Original Majestic Filter Condenser, in size and electrical characteristics. It contains: Three 2 mid. and one 1 mfd . Shipping weight 6 lbs.$\underset{\text { Your Cost.... }}{\text { B1065-65 }}$
3.75
 . . . . . .


## CDNDENSER BLDCK5.

Trintest

## For

A.K. 37
and 38
$\$ 1.85$


These blocks, built to the exact specifications of the originals contain filter condenser block and 3 chokes, two high voltage filter chokes and one speaker choke. By placing an order for a huge quantity of these units we are in a position to bring the Serviceman a thoroughly reliable unit for about the same price others are asking for surplus and deteriorated materials. These are brand new and Guaranteed. Why take a chance with others? Shipping weight 7 lbs . B1378-
Your Cost Each
s 1.85

## Genuine

Replacements
55 F and 55 FC , 3 rd type 60 C . (5 Taps). Part No. 14320. Condenser Code 1-A-5.
81367
Your Cost .... \$2.91
Model 66. Part No. 14880. Condeaser Code E-1.
81366

## t.

Model 70 (L Chassis). Part No. 1 1-E-3 (5 Taps).
1365--
$\$ 2.90$
Your Cost

```
shpping weight 5 ib
```


## Genuine Atwater-Kent

## Condensers

 For Model 45A. K. Part No. 14247, Condenser Block. Shipping weight 4 lbs . Your Cost
$\$ 1.95$


## Condenser

## For Model 36

"Y"P Power

## Unit

These condenser blocks are the Genuine At are the Genuine Atused in the Model 36. used in the Model 36, brand new and in perfect condition. Shipping weight 7 lbs .
B1380-SETS HAVING SERIAL NUMBER B1382-SETS HAVING SERIAL NUMBER ABOVE 260,000
Your Cost
either Type
either Type

## CONDENSER BLDCK5

Radiola Model 64
Victor 9.18 and 9.54
Part No. 8368 Filter Capacitor


The Genuine Radiola Filter Condenser Bank. Contains: Four 4
mid. one 2 mild., one 2 mid. and two
1 mid . These 1 mid . These capacitors are using 1000 volt condenvery best foil and paper. Do not confuse this block with the so-called replacements on the market. Shipping weight 13 lbs . B1011-List Price $\$ 30.00$ Your Cost. $\qquad$ $\$ 9.50$

## For RCA Model 67

The Genuine Replacement Filter Condenser, Part No. 8504, comprising three 2 mid., two 4 mfd . and two 1 mfd . Similar in appearance to above. Shipping weight 13 lbs .
81007 -List Price $\$ 28.20$ B1007-List Price $\$ 28.20^{\circ}$ Your Cost.

## 2 Mid. Filter



Condenser 400 V. D. C.
Radiola replacement No. 551 , 2 mfd . filter condenser 400 volts D. C., used in Models 20, 25, 28, 30, 32, 104 loudspeaker, unirectron and duo-rectron amplifiers. All brand new, never been used before. Size $41 / 4 \times 23 / 6 x^{5 / 8}{ }^{\prime \prime}$, lurs. Shippingtal container, two solderin B52s - Your Cost 1 lb .

RCA 4 MEd.

## Filter

Condenser 800 Volt Working Voltage
The genuine RCA 4 mid. 800-volt condenser. Used in Model 104 loudspeaker and Model This A. C. receiver placed the 7 and 3.9 mid. condenser as first used in the RCA sets. For use in all high power amplifiers, using 210 or 250 type tubes. All are brand new and packed in individual cartons, and are guaranteed. Metal container, $11 / 5 \times 41 / 2 \times 5^{\circ}$. Two insulated soldering lugs. Shipping weight 2 lbs . B687-Your Cost Each
 Sixfor.

Faradon Capacitors for RCA 30-A D. C. Faradon No. WS 3787. RCA Filter and By-pass Condenser block, 11.5 m d. Shipping weight $3 \frac{1}{2}$ lba. Your Cost $\$$ I. 95 Faradon No. WS 3786, RCA Filter and By-pass Condenser block, 12 mfd. Shipping weight $31 / 2 \mathrm{lbs}$. B1000-
Your Cost... \$2. 25

For Radiola Model 30 .A A. C. Faradon WS 3781 RCA Part No. 5674, Filter and By-pass Condenser block. 15 mfd. Shipping weight 4 lbs.
$\$ 4.45$
BRAND NEW
Cenuine Victor Filter
Condenser Blocks Replacement
for Models


Filter and By-pass Condenser Assembly Models R-11, R-I8, R-18A and RE-21
Genuine replacement part No. 7273, comprising one 4 mid . one 6 mid., lour .5 mid., two 1 mfd ., five .1 mfd . and one .05 mid . All in single meta! container. For $25-60$ cycle receivers. Shipping B533-List
B53 Cist Price $\$ 10.00$

## Radiola Model

 41 A. C.The original condenser banks used in Radiola Model 41. Shipping weight 4 lbs.
Receptor Power Pack Yloos-RCA No. 8404 Your
Cost
Son

Sterling Power Pack B1003-RCA No. 8397

$\$ 3.95$
 B1003-RC
Your Cost $\qquad$ ${ }^{8} 4.65$


Filter Condenser Models R-50, R-55, RE-20, RAE-59 and RAE-79
The genuine RCA replacement filter condenser block part No. 8712-64905, comprising ane 2 mid., one 3 mid . two 5 mid .

## weight 5 lbs

 and one .1 mid.B531-Your Cost $\$ 3.25$

## Radiola Models

 33, 44 D. C. Part No 8494 The Genuine Radiola Filter and Push-pull Input and Output Assembly for the above models. Contains: Two P. P. Audio transformers, and one 3 mfd ., one 2 mfd ., two .5 mid. Brand new and guaranteed. Shipping weight 7 lbs , 81002-List $\$ 22.25$Your Cost.


## Genuine RCA

Radiola Condensers
Radiola 17.50
Brunswick PR-17.8
Victor 7-25
Part No. 8289
Genuine replacement fliter condenser for the above sets. Contains: Two 3.5 mfd . one 3 mid., one 2 mfl . two 1 mid . Brand new and g1020-Leed. Shipping weight 6 lbs .
1020-List $\$ 19.20$
Your Cost $\qquad$ \$1.85
RCA Models 44-46-47
Graybar 500-550
Part No. 8476
The original replacement filter condenser for the above models. Contains: Three 2 mfd . one 1.25 mfd ., one 1 mfd ., one .5 mfd . and one .25 mid ., slso output choke. Shipping weight 6108.

31016-List $\$ 19.00$
Your Cost $\qquad$ $\$ 2.35$

## Radiola Model 60

 Graybar Model 300 Brunswick Model 5NO
## Part No. 8346

The original Radiola filter condenser. Contains Three 2 mfd ., four .5 mid . and output choke Shipping weight 6 lbs.
Your Cost $\qquad$ \$1.85
Graybar Model 340
Radiola Model 62 Brunswick 3NCB, 5NC8 Part No. 8382
The original Radiola placement filter condeneer for the above models Con tains: One models. Conmid., one 1 mfd., three .5 mid. Shipping weicht 6 ibs
 mid. Shipping weight 6 lbs

## Filter Capacitor

## For Field Supply Unit

Part No. 8384
For above model receivers. Original RCA part. Contains: One 4 mfd., two 1 mfd. Shipping weight ${ }^{4} \mathrm{lbs}$.
${ }^{\text {B1013 L List }} \$ 8.25$
Your Cost
$\$ 2.21$

## Coupling Unit <br> Part No. 8383

For above model receivers. The original RCA part. Contains: One audio transformer output to the voice coil of the dynamic speaker. One .5 mfi . condenser and a 12 henry choke. Shipping weight 7 lbs .
81012 -List $\$ 12.00$
Your Cost
$\$ 2.71$
Auditorium Radiola-Phonograph Radiola Model 66
Graybar Model 600
Part No. 8487
Original Radiola part. Contains: Two 2 mfd . one 1 mfd , one . 5 mfd . and a 515 ohm output choke. Shipping weight 6 lbs.
B1c10-List $\$ 18.25$
Your Cost
\$1.60
Radiola 18-33-51
Brunswick, 2Kro, 3Kro, 3Kr6 SKr, 5Kro, 5Kr6, Victor 7-11, 7-26 Graybar Model 311 (Part No. 8333)
Original flter condenser for above sets. Contains: Two 1 mfd . one. 5 mifd . and output choke. Guaranteed brand new. Shipping weight 4 lbs .
B1019-List $\$ 7.40$
Your

## Miscellaneous Filter Blocks and By-Pass Condensers

## Solar Mica Condensers



Stock No.
D 3450 D 3451 D3452

03454 D3454 | D34 |
| :--- |
| D 3455 | D3458

D 3463
D34 D3365
D3465
D3466
D 3467
D3467
03468
03469 D3469
03470 D3470
D3474


Best Quality. Cellophane Wrapped
These uncased sections are in every respect the same as the sections used in the standard trutest type filter condensers. Non-inductively wound of high grade dielectric paper. Thoroughly imprengated with high melting point compound to protect them against heat, provided with insulated wire leads for direct connections. Sections are carefully dipped in a special wax compound which forms an extra heavy
coating to prevent them from absorbing moisture coating to prevent them from absorbing moisture wrapped in moisture-proof cellophane.


Fada Model 70 Condenser Block
Made exactly like the original Fadn block. Guaranteed. Shipping weight 5 lbs.
B1197

## $\$ 3.91$



Sparton By-Pass Condemsers


These replacements are Identical in appearance and capacities as the appearance and capacities as the denser sections used in makicg these quality replacements

For Models 10, 15 and 56
Contains the following capacities: $2,3, .3, .3,2, .2, .2 \mathrm{mfd}$. In single metal contalner. Shipping weight 2 lbs.
B665 Your Cost
${ }^{5} 1.60$
Sparton No. A-6717, contains the following capacities: $3, .4,2, .2$ B666
Your Cost
\$ I. 40
For Models 16 and 16AW Sparton No. A-6716, contains the following capacities: .2, .3, .2, .3, 2, $2, .2 \mathrm{mfd}$. Shipping weight 2 ${ }^{\text {l }} \mathrm{B} 667$
B667-Your Cost


For Models 5 and 9 Sparton No. A-6625, contains the (ollowing capacities: $.3, .3, .3, .1$. ibs.
B668

Dubilier
Zenith Receivers PL-1145
Anideal filter condenser block for
general replacegeneral replace-
ment purposes. The high voltage sections make it suitable for use in amateur transmitters. Contains the following capacities: 2 mfd. 800 volts, 3 mid . 600 volts, 3 mfd .400 volts, 1 mfd . 200 volts, $1 / 4 \mathrm{mfd}$. 400 volts. Fully shielded in metal case. Size $81 / 2 \times 5 \times 21 / 4^{\prime \prime}$. Shipping weight B692-Your Cost
$\$ 1.25$

## Stromberg-Carlson

 FilterModels 635, 636 The original Stromberg Carlson filter condenser Total capacity 23 mfds Shipping weight 11 lbs . $\underset{y}{\text { gour Cost. }} \$ 3.75$

Splitdorf Condenser Block


Made by Aerovox for Splitdorf Receivers. Common, black-green tracer; 3 mid. yellowtracer; 3 mid yellowgreen tracer; $11 / 2 \mathrm{mfd}$.
two tan leads; 1 mfd . two tan leads; 1 mid . brown-green tracer;
H mid. purple-green 15 mid. purple-green
tracer, all at 300 volt tracer, all at 300 volt D.C. $12^{\prime \prime}$ leads, con$5 \times 5 \times 3$ " Shipping weight 6 lbs.
weight $1 \mathbf{l b}$. D4223-Your Cost

Fada Model 43 Condenser EBLock Built according to the nal Fards of the original Fada condenser Contains: 2 mid. at 600 volts, 2 mfd. at 400 volts and 2-1.0 mids. at 400 volts. Shiping
$\underset{\text { Your }}{\text { Yost }} \mathbf{2 . 9 5}$


Condenser Blocks for Eveready
Models 1, 2, 3, Bosch Model 28
This is the original con denser block and filter choke for the above EverSet utilizing $4-26 s, 1-27$, - 71 As and $1-80$ tubes. 80 ma .2 mfd . and 4 mfd . filter condenser at 400 vole Metal container. Shipping weicht 7 lbs.
B1349
Your Cost Each
$\$ 2.75$

Sparton Filter Condenser Blocks for Models 69, 79, 89

Sprague By-Pass Condenser For U.S. Radio and Apex Models Part No. 1757 -Combines two .5 mid . and one .1 mid . Separate common lor one .5, can is common for 1 and other 5 mfld . Can also be used in other sets. Size
$13 \times 21 / 6 \times 1 / 2^{\prime \prime}$. Shipping $1 \ln ^{21 / 0 \times 13 / 2} \cdot \operatorname{Shipping}^{c}$

These are brand new con-
 denser blocks made especially or replacement in Sparton models. Only the highest
grade of paper and foil used in the construction of these units. The original specifications have been strictly adhered to. For guaranteed Sparton replacements. Shipping weight 5 lbs .
3975
Your Cost..... \$3.75

(2)
$2-2$
DIN
Condenser Blocks for U. S. Radio $\mathbb{E}$ Television Co. Glóritone and Apex Receivers
Made in accordance with the original condenser blocks. These blocks will replace those in U. S. Radio \& Television, Apex and Gloritone Receivers.
Apex Models 28, 48 and 48A
$3-24 \mathrm{~s} ; 2$-'27s; 2-'45s; 1-80. 1.-3.-1.-1. mfds. Has 5 leads. Shipping weight 4 lbs. $\$ 2.35$
B1410-Your Ccst.
pex Model 36
$4-26 s$; 1-'27; 1-71A, and 1-80. 1.-1.-1.-1. $.5-.5 \mathrm{mfds}$. 6 terminals. Shipping weight 4 lbs. B1409
Your Cost.

## Apex Model 37

 mids. 8 leads. Shipping weight 41 hs . B1408-
Your Cost.
Apex Model 41
5-'27s; 2-'45s; 1-'80. 1.-1.5-1.-1. mfds. 4 leads. Shipping weight 4 lhs.

Apex Models $46,46 A, 47$ and 47
-'24s; 2-27s: 2'45s and 1-80 1.215-5-1 mfds. 5 leads. Shipping weight 4 lhs. B1405
Your Cost.

## Faradon Capacitor



Tocal capacity, 12 mid., 300 operating volts $\mathbf{D}$. C. mid., Brown 3 mid., Blue 3 mfd., Yellow 2 mid.,
 Container, size $6 \times 333 \times 21 / 2$ ins. Made for replacement ins. Mationally known set. in a nationally known
Shipping weight 4 lbs . B683
Your Cost. ..... 95

## Faradon Condenser

Block
A 4.5 mfd . Block rated at 400 volts D. C. Black-ComWhite 1 mfd ., White White 1 mid., Green .25 mid., Green- .25 mid. Size 3yi4x $21 / 2$ ". Shipping weight 2 lbs

$.75^{c}$

## 2 Mfd

 1.5 Mfd 450 VoltsSize $31 / 2$ $\times 4 \frac{3}{4} \times$ $11 / 2$ ins.
Makes an ideal replacement nit for general purpose work. For use in Radio receivers and power amplifiers. weight $21 / 2 \mathrm{lbs}$
B679-Your Cost Each In Lots of Ten, Each 22c

## Bremer-Tully Ef Briswick

 Condenser Blocks

Original replacement con denser blocks for BremerTully and Brunswick receivers. Can also be used as a general replacement unit. When ordering specify color spot required. Shipping For Brunswick Models 14,
21 and 31
81311 Red Spot. Your Cost
Brunswick Models S14, S21, and S31
Bremer-Tully Models $\mathbf{S 8 1}$ and $\mathbf{\$ 8 2}$
B1312-Green Spot.
B1314-Blue Spot.
Cost any Type, Each Bremer-Tully Models 81 and 82
81315-Yellow Spot.
Your Cost Each

Guaranteed Replacement


## Condenser Blocks



Model HIQ 30.
KING
Model "J".
KOLSTER-COLUMBIA


Unit. 80 - 80 , 8 PB6 Power
Unit. ........................
Model 90, Serles 9PB6 Power Unit. Models $90-\mathrm{B}$ and $100-\mathrm{B} . .$. Model 20 Condenser and Input Transformer................... Model 30 Condenser and Choke Assembly........................ $B 1066$

PEERLESS

| Model 65 | B1045 | 3.60 |
| :---: | :---: | :---: |
| Model 70 | 81044 | 2.95 |

PHILCO


RCA-RADIOLA

| Models 17 and 50 |  |  | 22-57.................... B865 | 4.50 |
| :---: | :---: | :---: | :---: | :---: |
| Models 17 and 50.... | $\begin{aligned} & \mathrm{B} 1020 \\ & \mathrm{~B} 1019 \end{aligned}$ | $1.85$ | Model Super-Het.; 11, 12, 14. . 8864 | 2.50 |
| Model 30-A Filter... | B1018 | 6.75 |  |  |
| Model 30-A By-Pass. | B1017 | 4.45 |  |  |
| Models 44, 46 and 47 | $B 1016$ | 2.35 |  |  |
| Model 60 | B1015 | 1.85 |  |  |
| Model 62 Filter..... | 81014 | 2.15 | ALL. AMER. MOHAWK |  |
| Model 62 Field Filter | B1013 | 2.20 | ALL AMER. MOHAWK |  |
| Model 62 Coupling Unit | B1012 | 2.70 | A \& B Elim. Condenser Block. 8895 | 4.00 |
| Model 64 Filter Block. | 81011 | 9.50 |  |  |
| Model 64 By-Pass Unit. | B1008 | 150 |  |  |
| Model 67 Filter Block. | B1007 | 13.50 | A' Eliminator Block. . . . . . . . 8858 | 1.25 |
| Model 67 By-Pass Unit | B1006 | 1.55 |  |  |
| Models 80, 82 and 86. | B1005 | 2.75 | FADA "ABC" POWER PACK |  |
| Model 41 Receptor Pack | B1004 | 2.65 | "A" Condenser. . . . . . . . . . . . . ${ }^{\text {B857 }}$ |  |
| Model 41 Sterling Pack. | B1003 | 4.65 | "B' Condenser Block . . . . . . . B856 | 3.25 |
| SILVER-MARSHALL |  |  |  |  |
| Model 30. | B985 | 4.65 | France |  |
| Model ABC 850 | 8986 | 4.16 | Model 102 "A" Elim........ . ${ }^{\text {P855 }}$ | 2.25 |
| Sheridan Model | B987 | 1.96 |  |  |
| Power Supply Un | B988 | 3.31 |  |  |
| Model 773 | B989 | 1.47 | FARRAND |  |
| Model G | 8989 $\mathbf{B 9 9 1}$ | 1.47 1.63 | "B" Elim. Condenser........ 8854 | 3.95 |
| M odel 726 | B989 | 1.47 |  |  |
|  |  |  | EXIDE WILLARD |  |
| SPARTON |  |  | Eliminator Condenser. . . . . . . B853 | 3.25 |
| Model AC-5. | . 8980 | 3.45 |  |  |
| Models AC-7, 62 and | B979 | 3.25 | GREENE AND BROWN |  |
| Model 109 | . 8978 | 3.75 |  |  |
| Model 89-A | . 8976 | 3.75 | "A") Ellm. Condenser....... 8858 | 3.00 |
| Models 69, 79 and 89 | B975 | 3.75 |  | 3.95 |
| Model 301 - | B974 | 5.90 | "B" Super Condenser . . . . . . B850 | 3.75 |
| Model 930 | 8973 | 3.25 |  |  |
| Model 737. | D3317 | 1.30 1.30 | MAJESTIC |  |
| Models 589 and 931 | D3317 | 1.30 | "A" Elim. Condenser....... B849 |  |
| SONORA |  |  |  | 2.45 1.98 |
| Models B-30 and B-31. | B950 | 2.90 | "B" Master Condenser. . . . . . B847 | 1.98 |
| DeLuxe 44. | . 8949 | 7.90 | "B" Special Master Condenser.B846 | 1.98 |
| STEINITE |  |  | PHILCO |  |
| Models 40-A and 45-A | 8960 |  | "ABC" Elim. "B" Condenser. 8845 | 3.00 |
| Models 40-C, 60-C and 102-C | 8941 8939 | $\begin{aligned} & 3.25 \\ & 3.95 \end{aligned}$ | ABC Elim. B' Condenser. ${ }^{\text {asas }}$ |  |
| M odels 70,80 and 95 | B938 | 3.65 | STERLING |  |
| Models 261 and 262. | B937 | 2.95 |  |  |
| Model 991. | 8936 | 4.35 | "A"Elim. Condenser....... . . B844 | 3.00 |

## STROMBERG-CARLSON

| Models 10 and 11. | 8920 | 3.45 |
| :---: | :---: | :---: |
| Models 12 and 14. | B919 | 5.10 |
| Models 635 and 636 | B918 | 3.75 |
| Model 638 | B917 | 3.75 |
| Models 641, 642, 652 and 654. | 8916 | 3.95 |
| Models 846 and 848. | B915 | 3.95 |
| TEMPLE |  |  |
| Models 860, 880 and 890 | 8905 | 4.25 |
| Model 761. | B904 | 4.00 |
| VICTOR |  |  |
| Models 9-18 and 9-54 | B1011 | 9.50 |
| Model AP, 736, Power Unit | 8891 | 4.75 |
| Models R-32, RE-45, R-52, |  |  |
| RE-75. 39 and | B890 | . 75 |
| Models 35, 39 and 57. | B892 | 3.25 |

## ZENITH

Model ZE-10 Power Unit No 22-40........................ Unit No. 22-41. Model ZE-13 Power Unit N
22-46............................. Model ZE-16 Power Unit No. 886 2-48. 17 Power Unit B Model ZE-17 Power Unit No. Model ZE-18 Power Unit No M2-57. Model

LL. AMER. MOHAWK

DUMONT
"A" Eliminator Block. . . . . . . . B858
ADA "ABC" POWER PACK
"A" Condenser. B " Condenser Block . . . . . . . . . B856 RANCE

FARRAND
"B" Elim. Condenser.........B854 3.95

# CONDENSER BLOCK5 

RCA Radiola Midget By-Pass Condensers for all Models Chassis: $120,130,140,150,160$ Filter Block
Madeexpressly for the above series of General Motors model receivers. Will fit the chassis exactly, changes are unnecessary: Guaranteed. Shipping weight 8 lbs.
81125
Your Cost


## Zenith <br> Replacement <br> 22.59

The official replacement condenser for Zenith Radio. Can also be used as a general replacement. Black common, Green 2 mid., Blue 4 mid., Yellow 4 mid., two Whites 25 4 mfd. two Whites 25 mfd . Size $61 / 2 \times 41 / 2 \times 2$.
ins. Shipping weight 5 lbs. B863-Your weight $15 c$ B863-Your
Cost Special

## Ozarka Radio Filter Condenser



General purpose replacement filter condenser bank. Consists: Two 2 mfd. One 4.5 mfd and two .5 mfd . at 400 v. D. C. in metal container. Size $23 / 2 \times 2 \times 51 / 8$ ins. high with mounting dange. Shipping weight 3 lbs.
B489-Your Cost, Special

# Replacement By-Pass Condensers 

## No.

 1748-SA For Model 32 The genuine Colonial By pass condenser. 1These replacement by-pass condensers are made for replacement ACTLY DUPLICATE the original in every respect. The listing below covers the entire Crosley line of receivers. All are brand new and guaranteed. Shipping weight 10 oz .

| Stock | Crosley | Your |
| :--- | :--- | ---: |
| No. | Part No. | Cost |
| B700 | W4013-B | 50.30 |
| B701 | W4232-B | .75 |
| B703 | W4381-B | .48 |
| B704 | W4919 | .30 |
| B705 | W4968 | .26 |
| B706 | W5862 | .95 |
| B777 | W5863 | .80 |
| B708 | W5943 | .24 |
| B709 | W6428 | .45 |
| B710 | W7753 | .55 |

## 

Majestic $70,90,180$ Series By-Pass Con-
 Part No. 717. Shipping weight 1 lb .


## General Mot Condensers

Made especially for replacement in all General Motors quality sections used.

| Stock | Part | Total | Your |
| :---: | :---: | :---: | :---: |
| No. | No. | mfd. | Cost |
| B735 | 1206156 | 4. | $\$ 2.00$ |
| B736 | 1206397 | .2 | .42 |
| $\mathbf{B 7 3 7}$ | 1207239 | 1.0 | .72 |
| 8738 | 1206834 | .7 | .90 |
| 8739 | 1200158 | .2 | .51 |

Atwater-Kent By
Genuine Replacements Condensers for all late model receivers. Detector By-Pass B1425 A. K. Part No. 15263 - Con denser $\mathrm{B}-2, \mathrm{H}-2$. B1426-A. K. Part No. $16745-\mathrm{Con-}$
denser H-7, H-13


Your Cost, Either Type
R. F. By-Pass B1427-A. K. Py-Part No. 16462 Condenser $\mathrm{H}-5, \mathrm{H}-11$ 31428-A. K. Part No. 15262Condenser B-1, H-1, H-9, H-20. Your Cost, Ejther Type


D3961-
Your Cost Eac

## Crosley Replacements

| Stock No. | Crosley Part No. | Your Cost |
| :---: | :---: | :---: |
| 8711 | W7944 | 50.40 |
| 8712 | W20186 | . 60 |
| 8713 | W20187 | . 22 |
| 8715 | W20446 | . 55 |
| 8716 | W20447 | . 30 |
| B717 | W20449 | . 38 |
| 8718 | W22412 | . 55 |
| B719 | W22995 | . 40 |
| B720 | W23736 | . 65 |

$y-P a s s$ Condensers
A.K.By-Pass Condenser

## rt 15158

An exac
An exact the original Atnal At-
water-
Kent By- 0 Pass Condenser for their re-
ceivers.
Fu 1 i $y$
guaranteed

guaranteed. This unit is of exceptional value. Shipping weight 1 lb .
B510-Your Cost
$.95^{c}$
R. F. By-Pass Condenser
 For Models 37, 38, 40 ,
42,44 and 2,44 .
46. The very best condensers for these receivers. Exact size and capacities. Guaranteed. Shipping weight 8 oz. D3960-
D3960-
Your Cost Each

## By-Pass Condenser Block

For RCA 80, 82, 86; H-71: Westing H-51, -71: Westinghouse WR-5, 6, 7.8
Part No. 7058
Contalns three $.1 \mathrm{~m} / \mathrm{d}$. and one 0.5 mfd . and one 1.0 mfd . in metal container. An excepdenser. Can be used in general by-pass wor Your Cost. B532
 Your Cost

For RCA Models
17-50-60-62-64 Part No. 5681
B481-
Your Cost
For RCA Model 41 A. C.
Part No. 5664: One $1 / 2 \mathrm{mfd}$. B484-
Your Cost
$10^{c}$
For RCA Models 44-46-47 Part No. 6002: One $14 \mathrm{~m} / \mathrm{d}$. One
 Part No. 6003: Three il m B486-
Your Cost
$23^{c}$
RCA Model 33 A. C.
Part No. 5996: One 5 mfd . Three Your Cost

RCA Model 18 and 51
Part No. 2241: Four 3/2 mids.
B483-
Your Cost Each
Shipping Weight i Lib


RCA-Victor Replacements

Sparton Tabular Condensers
New and improved type, fully shielded in a metal shell. Made expressly for Sparton replacement.
B545-. 25 mild .
Your Cost $33^{c}$
B546- $.5 \mathrm{~m} / \mathrm{d}$
Your Cost $39^{c}$
$8547-1.0 \mathrm{mfd}$
Your Cost $40^{\circ}$


Cardboard Container
B511-. 25 mfd . B512-~. 5 mfd .
Your Cost Either ma
Type
$33^{\circ}$
Sparton By-Pass Models 9.A, 410 and 420 Exact dupli cate of the original part tion of .3 mfd . Guaranteed to re place the original in every respect Shipping weight 8 oz .
B54
s1.05

## By-Pass Condenser

## Assembly

Models R-50, R-55, RE-20, RAE-59 and RAE-79
Part No. 7285, comprising one .1 mid mid., 6 leads. Shipping weight 2 lbs .
B530-List Price $\$ 3.50 \$$ S Your Cost
Part No. 7286, similar in appearance to above, comprising one 1 mid., one .5 mfd ., three .1 mfd All have separate common leads
10 leads. Shipping weight 3 jbs


## Radiola Model 64

Victor Models 9-18, 9.54
Part No. 5862 By-Pass Assertioly The Original Radiola By-Pass Condenser One 2 mid Tentains One 2 and Three 1.6 mfd. and Three 1 mfd. Shipping weight 3 lbs. cour s1.45

## Radiola Model 67

Part No 8498 By-Pass Assembly Similar in appearance to above. Original Part. Contains: One 2 midd., Two 1.5 mfd. and Three 1 mid. Shipping weight 3 lbs . B1006-List $\$ 9.75$
Your cost
s 1.55

## Capacitor Pack

Radiola Model 66
Graybar Model 600
Similar in Appearance to Above. This is the genuine Radiola Part No. 6021. Capacitor Pack, comprising five $1 / 2 \mathrm{mfd}$, two .05 mfd . by-pass condensers and one audio transformer. Our quantity is C2172
Your Cost
5.75


The perfection of the Dry Electrolytic Condenser, a major contribution to the radio industry, was made by P. R. Mallory \& Co. who pioneered, developed and perfected this art, and revolutionized condenser design and manufacture. Many millions of

Mallory-Elkon Dry Electrolytic Condensers are assembled in America's finest radio receivers. They are the first choice of the leading Radio Engineers and receiver manufacturers. Maximum microfarad capacity, light weight, extreme compactness and
lowest cost per microfarad, considering quality, has made MalloryElkon the world's largest manufacturer of Dry Electrolytic Condensers exclusively. We present herewith an assortment for practically every replacement requirement

## Cardboard Container

 Single and Dual Sections The cardboard box type of dry electrolytic condenser offers the maximum mid. capacity combined with minimum size and weight. It is also the most economicul in cost and lends itself most readily to any position of mounting. Ideal for replacing blown paper condensers by simply slipping into the original by simply supping ito the oriolage ${ }^{-450}$; Maximum Surge Voltage $500.41 / / \times 11 / 2^{\prime \prime}$. Shipping weight 1 lb .| Stock No. | Cap. Mid. | Dimension Thickness | Your Cost |
| :---: | :---: | :---: | :---: |
| D2775 | 2 | 110 | 50.56 |
| D2776 | 4 | 110" | . 65 |
| D2777 | 6 | 1366" | . 76 |
| D2778 | 8 | $13 / 6{ }^{\prime \prime}$ | 85 |
| D2779 | 4-4 |  | 1.06 |
| D2780 | 4-8 | 13 | 1.24 |
| D2782 | 6-8 | 2 | 1.32 |
| D2783 | 8-8 | 2" | 1.44 |



## Tubular Cartridge Dry Electrolytic

Tubular dry electrolytics completely sealed by special metal caps in each end and impregnated with special insulating wax, in-
auring long and satisfactory life, auring long and satisfactory life.
Are $2^{3} 4^{n}$ long; diameter siven Are ${ }^{2}{ }^{3}$ Shiphg; diameter


## Round Inverted Metal Can with 6 "Leads Single and Dual Sections This inverted Single and Dual

 Section type is provided with $6^{\prime \prime}$ flexible leads for single ${ }^{8 \prime \prime}$ " hole mounting. Maximum Mfd. capacity in Minimum space. Onestandard size aluminum can. D. C. working voltage 450; Max. surge voltage 500 . Size $47 / 8 \times 13$ 名". Shipping weight 1 lb .

| 428 | Shipping weight 1 lb |  |
| :--- | :---: | :---: |
| Stock | Cap | Your |
| No. | Mid. | Cost |
| D2736 | 4 | 5.82 |
| D2737 | 6 | .94 |
| D2738 | 8 | 1.00 |
| D2739 | 10 | 1.24 |
| D2740 | 12 | 1.32 |
| D2741 | $4-4$ | 1.56 |
| D2742 | $4-8$ | 1.73 |
| D2743 | $6-6$ | 1.76 |

## Rectangular Metal Can Multiple



This type affords the service man with multiple sections of dry electrolytic condensers in a rectangular metal can, having flanged mounting feet for easy and rapid mounting, especially in replacing. Positive and negative of each unit is tions are insulated from the container. D. C. working voltage 450 . Shipping voltage 450
weight 1 lb .

| Stock | Cap. |
| :---: | :---: |
| No. | Mfd. |
| D2760 | $4-6$ |
| D2761 | $4-8$ |
| D2762 | $6-8$ |
| D2763 | $4-4-4$ |
| D2765 | $8-8-8$ |

## Round Upright

## Metal Can Single,

 Dual and Multiple
## Section

These single, dual and multiple section (universal mounting) condensers are furnished in round aluminum cans with lugs. Be cause the electrolyte is absolutely dry, they are greatly preferred by service men for replacing wet and semi-dry condensers in a made before the dry electrolytic condenser was perfected by Mallory-Elkon. All negative
terminals are grounded to the can. D. C. working voltage 450 ; Surge voltage 500 . working voltage 450 ; Surge voltage 3 lb. Shipping weight 3 lb .
Stock
$\underset{\substack{\text { No. } \\ \text { D275 }}}{ }$
D2756
D2757
D2758


M-8-8
8
9-9-18
$8-8-8-8$
$8-8-18-18$
$9-9-18-18$


D2759

## Cardboard Bypass

The cardboard By Pass type is to provide the service man with a dry electrolytic condenser smaller in size than the paper condensers they are to replace as originally used in filter and audio by-pass circuits. Size $238 \times 11 /$ /n" $^{\prime \prime}$. Shipping weight 1 lb .
$\begin{array}{rc} & \begin{array}{r}\text { D.C. }\end{array} \\ \text { Cap. } & \text { Work } \\ \text { Mfd. } & \text { Volts } \\ .5 & 450 \\ 1.0 & 450 \\ 2.0 & 450 \\ 4.0 & 200 \\ 10.0 & 100 \\ 25.0 & 50 \\ 10.0 & 25 \\ 25.0 & 25\end{array}$

Stock
No.
Your


These condensers are of the dual type. Isolantite bases, conditioned to resist molsture, and to maintain surface resistance. The principal use for these condensers is the tuning of intermediate frequency trans former stages in superheterodyne receivers. Materials are of the highest grade, as beth are dependent upon the quality of these condensers. Size 113 $^{11}$ " for 2 " shield.
Stock No. Range
$140-220$
$70-140$
$10-70$

List
$\$ 1.00$
.90
.80
Your Cost Each
$\$ .39$
.35
.30

## Trutest Adjustable Padding Condensers

These Trutest Condensers; single type, are used for trimming aligning compensating and padding, or wherever a high quallty compact adcompensating and padding, or wherever a justable condenser is required. The same high quality mat
is used for these.
is used
Stock
$H 973$
$H 9735$
$H 9736$
H9737

Range $\quad$ Your Cost
140.220
$70-140$
$10-70$


## Hammarlund Equalizer

This is a very tiny equalizing condenser, having a capacity
range of from 25 mmfdsminmumto 80 mmfds.maximum. These petite condens-
ers are very efficient for use as neutralizing and balancing condensers. Can be attached directly to condenser or to binding post of socket. Is also useful for balancing multiple tuned circuits, or for equalizing gang condensers; are also used for antenna trimmers. Has a high grade mica dielectric. with flexible phosphor bronze plates and a moulded bakelite hase. The size of base is $11 / 4^{7}$ by
H9749
Per Dozen
Per Dozen.
Your Cost Each.
$51.3512^{c}$


# Trutest DRY ELECTROLYTIC CONDENSERS 



Trutest Dry Electrolytic Condensers offer the widest selection avallable. Their unusual value for replacement use results both from mechanical adaptability and the superior performance, with higher voltage protection, which are inherent features of "Trutest Unsurpassed Quality."

| Multiple Sections |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock | Cap'y Mid. | Can | Your | Six |
| No. | At Anodes | Diam., Ins. | Cost | For |
| D3316 | 8-8 | $21 / 3$ | \$1.15 | \$6.55 |
| D3330 | 9-9 | $21 / 2$ | 1.25 | 7.15 |
| D3317 | 5-15 | $21 / 2$ | 1.30 | 7.40 |
| D3325 | 8-18 | 3 | 1.65 | 9.40 |
| D3327 | 18-18 | 3 | 2.25 | 12.80 |
| 03331 | 4-4-4 | 23/3 | 1.35 | 7.60 |
| D3318 | 8-8-8 | 3 | 1.60 | 9.10 |
| D3320 | 9-9-18 | 3 | 2.30 | 13.10 |
| D3319 | 8-8-8-8 | 314 | 2.10 | 12.00 |
| D3321 | 8-8-18-18 | 31 | 3.25 | 18.50 |
| D3322 | 9-9-18-18 | 314 | 3.25 | 18.50 |



Cardboard type, two heavy mounting flanges, mounts under chassis. Separate terminals for each sec

| Stock No. | Capacity mid. | Size | Your Cost Each | $\operatorname{Six}$ |
| :---: | :---: | :---: | :---: | :---: |
| D3369 | 8 | 11/4×116 | \$0.49 | \$2.80 |
| D3370 | 4-4 | 18/8×114 | . 70 | 4.00 |
| D3371 | 4-6 | $13 / 811 / 4$ | . 80 | 4.55 |
| D3372 | 4-8 | 13/3x11/4 | . 90 | 5.10 |
| D3373 | 6-6 | $13 / 8 \times 11 / 4$ | . 90 | 5.10 |
| D3374 | 6-8 | $11 / 2 \times 1 \%$ | 1.00 | 5.70 |
| D3375 | 8-8 | 11/3×17\% | 1.05 | 6.00 |

Single 8 Mfd. Condenser 8 mid. 500 v peak Condenser is used in new installations and replacements. Designed for filtering of rectified current, and not injured by current surges. In round aluminum can, of standard size, fits hole for $3 / 4^{\prime \prime}$ studs. Can is insulated from the condenser sections, and not grounded. Color coded wire leads. Guaranteed. D3315-List $\$ 1.10$
$54^{\circ}$

## Trutest 8 Mfd. Cardboard Container

This 8 mfd. 500 v peak condenser s similar to above, excepting that t has a waxed cardboard container. Used for set building; in replacement work, and to substutute for old type wax paper condensers. is thoroughly insulated. Size $4 / 4 \pi 136 \pi / 8$. Ship-p314-List $\$ 1.00$ Your Cost.
$45^{\circ}$


Single and Dual Sections
Single and Dual Sections furnished in round aluminum cans, of one standardized size, fitting any single mounting hole designed for $8 / 4$, studs. The cans are not grounded and are adequately insulated from the condenser sections. Color coded $6^{\prime \prime}$ wire leads, 500 volt peak voltage.
Stock
No.
D3323
D3332
D3333
D3334
D3326
D3335
D3336

| Cap'y <br> Mid. | Your Cost <br> Each | Six <br> For |
| :--- | ---: | ---: |
| 4 | $\$ 0.44$ | $\$ 2.50$ |
| 6 | .70 | 2.85 |
| 10 | .75 | 4.30 |
| 12 | 100 | 5.70 |
| $4-4$ | .75 | 4.30 |
| $4-8$ | .95 | 5.40 |
| $6-6$ | .95 | 5.40 |

The eapacity of Trutest Dry Electrolytic Condensers is practically constant over a wide frequency range. The excellent power factor characteristlic of these units, under normal temperature conditions, means that electrostatic and effective capacities are practically the same, resulting in efficient filtering.


Plain Cardboard Filter and

## General

## By-Pass Units

Suitable for use in the manufacture of radio sets or for replacetute for wax paper condenser blocks. They are light and compact and can be mounted in any position. Used for Filter "C") Bias by-pass and densers.
Cardboard Container- -500 Volts Peak

| Stock | Cap'y | Size | Your Cost Each | Six For |
| :---: | :---: | :---: | :---: | :---: |
| D3346 | , | x | " $\$ 0.36$ | \$2.05 |
| D3347 | 6 | x | . 42 |  |
| D3348 | 8 | 4 | 43 | 2.45 |
| D3349 | 10 | $45 / 813 / 1$ | $1{ }^{\prime \prime} .65$ | 3.70 |
| D3350 | 12 | 41/8x ${ }^{\text {\% }}$ /81 | $11 /{ }^{\prime \prime}$. 75 | 4.30 |
| Ca | dboard | By-Pass | Size Contaln |  |
| Stock | Cap'y | Peak | Your Cost | Six |
| No. | Mfd. | Voltage | Each | For |
| D3351 | 2 | 500 | \$0.32 | \$1.85 |
| D3352 | 4 | 220 | . 34 | 1.95 |
| D3353 | 10 | 50 | . 34 | 1.95 |
| D3354 | 25 | 25 | . 38 | 2.15 |

Low Voltage Electrolytic Condensers
Round Cans with $1 / /^{\prime \prime}$ Mounting Studs Stock Cap'y Peak Your Cost Six No. Mid. Volt.

|  | Your Cost | Six |
| :--- | :--- | ---: |
| Size |  |  |
| Each | For |  |

## Effect of Frequency Changes on

 Capacity and Power Factor

The capacity and IV power factor curves, represent measurement of 8 mfd condensers, 500 voit
peak rating, at 25 peak rating, at 25 degrees Centigrade; the power factor taken by the Wien curves clearly show the capacity of the Trutest Dry Electrolytic Condensers remains almost constant from 60 to 6000 cycles, and the power actor remains very low, under all ordinary operation conditions.

## Capacity and D. C. Leakage at Varying Temperatures

Curves show average variation in capacity and D. C. leakage, under changing temperature conditions. They represent measurements of 8 mfd. 500 volt peak rating Trutest Dry Electrolytic Condensers. D. C. leakage wes measured at 500 volts, after the application of
voltage for five minvoltage for five min-
utes. The capacity utes. The capacity
remained practically remained practically constant throughout a temperature range of from 40 to

Trutest Dry Electrolytic Condensers meas ured under variable voltage conditions at a temperature of 25 deg. centigrade, show less than . 2 M . A. leakage at the rated peak voltage of 500 volts. All types of Trutest Capacitors may be used with utmost confidence in their reliability.


Multiple Sections
These multiple section condensers are
made in two styles. made in two styles.
One in plain cardOne in plain cardboard container, used for sub-base and subpanel mounting; the other in a rectangular aluminum can, for base on and about the chassis. The condenser sections are thoroughly insulated from each other. Separate terminals are brought out from each section The capacity of these condensers is practically constant over a wide frequency range, with low constar foctor under any ordinary conditions power factor under any ordinary conditions of peak voltage, unless otherwise listed
Plain Cardboard, Dual Sections. Compact, electrolytic, for A. C. and D. C. sets. Stock Capacity Working Size Your Cost $\begin{array}{cccc}\text { No. } & \text { Mfds. } & \text { Voltage } & \text { Each } \\ \text { D3361 } & 4-4 & 200 & \$ 0.45 \\ \mathbf{0 3 3 6 2} & 5-5 & 35 & 39\end{array}$
Plain Cardboard, Multiple Sections. 500 volts D. C. peak.

| Stock No. | Cap. in Mids. | Size | Your Cost Each | $\underset{\text { Fix }}{\text { Six }}$ |
| :---: | :---: | :---: | :---: | :---: |
| D3337 | 4-4 | $1^{3} \mathrm{x} \times 1 /{ }^{\prime \prime}$ | \$0.70 | \$4.00 |
| D3338 | 4-6 | 13*11/" | . 80 | 4.50 |
| D3339 | 4-8 | 13/5x11/" | . 90 | 5.10 |
| D3340 | 6-6 | 13 ) ${ }^{11 / 6 "}$ | . 90 | 5.10 |
| D3341 | 6-8 | $115 \times 1 \%$ | 1.00 | 5.70 |
| D3342 | 8-8 | 132617 ${ }^{16}$ | 1.05 | 6.00 |
| D3364 | 4-4-4 | $21.40{ }^{17}{ }^{\prime \prime}$ | 1.00 | 5.70 |
| D3365 | 6-6-6 | $218 \times 17{ }^{\prime \prime}$ | 1.15 | 6.55 |
| D3366 | 8-8-8 | 21:917\% ${ }^{\text {" }}$ | 1.40 | 8.00 |

## Rectangular Aluminum Cans

Single and multiple sections. 500 volts D. C. peak.

| Stock No. | Cap. in Mids. | Size | Your Cost Each | $\underset{\text { For }}{\text { Six }}$ |
| :---: | :---: | :---: | :---: | :---: |
| D3302 | S-4 |  | \$0.48 | \$2.75 |
| D3303 | S-8 |  | . 58 | 3.30 |
| D3343 | 4-6 | 186x13 | . 90 | 4.90 |
| D3344 | 4-8 | 136x14" | . 98 | 5.65 |
| D3345 | 6-8 | $110 \times 1{ }^{\circ}$ | 1.10 | 5.25 |
| D3305 | 4-4-4 | $210 \times 1{ }^{10}$ | 1.08 | 6.15 |
| D3306 | 6-6-6 | $21 / 8 \times 17{ }^{\prime \prime}$ | 1.30 | 7.40 |
| D3307 | 8-8-8 | 21881716" | 1.60 | 9.00 |

## Trutest Dry Electrolytic Cartridge Condensers

## 

Enclosed in waxed cardboard containers with metal ends and $1^{3 / 4}$ "tinned wire leads. Hermetically sealed. Very convenient to use. Compact.

| Stock | Cap'y <br> Mid. | Work <br> Volts | Your Cost <br> Each | Six <br> For |
| :--- | :---: | :---: | :---: | ---: |
| D3380 | 5 | 25 | $\mathbf{S 0 . 2 0}$ | $\mathbf{\$ 1 . 1 5}$ |
| D3381 | 10 | 25 | .23 | 1.30 |
| D3382 | 25 | 25 | .25 | 1.40 |
| D3383 | 50 | 25 | .30 | 1.70 |
| D3384 | 5 | 50 | .25 | 1.40 |
| D3295 | 10 | 50 | .30 | 1.70 |
| D3297 | 25 | 50 | .38 | 1.15 |
| D3387 | 5 | 110 | .30 | 1.70 |
| D3388 | 10 | 110 | .40 | 2.40 |
| D3389 | 1 | 220 | .30 | 1.70 |
| D3390 | 2 | 220 | .35 | 2.00 |
| D3391 | 4 | 220 | .40 | 2.25 |

# Thutest By Pass and Electrolytic <br> Condensers 



TRUTEST Assorted
By-Pass Condensers


A very handy assortment for the Service Man. Contains 12 of the most popular capacities in drawn metal cans. easorted as followe. Shipping weight 3 lbs.

| No. | Cap.y Mfd. | Voltages |
| :---: | :---: | :---: |
| 1 | .1 | 200 |
| 1 | .25 | 200 |
| 2 | .5 | 200 |
| 2 | 1. | 200 |
| 1 | .1 | 300 |
| 1 | .25 | 300 |
| 1 | .5 | 300 |
| 1 | 1.5 | 300 |
| 1 | .5 | 400 |
| 1 | 1. | 400 |

Your Cos


These Handy Strips Should Be in Every Serviceman's Tool Kit
Furnished in the following Handy Strips-containing one each of the following cartridge condensers:

| Strip "A" |  |
| :--- | ---: | :--- |

## Cornell "Cub"

Cartridge Condensers
Tubular paper Condensers thoroughly impregnated in wax. The handiest type to use.
Stock Can'y Diam. Work Your
 Stock Can'y Dinm. Work Your
No. Mid. In. Volis Cost

|  |  |  |  |  | ock |  |  |  | Our |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\text {No. }}$ | Mid. | In. | Volts | Cost | ${ }^{\text {No. }}$ | Mid. | In. | Volts | Cost |
| D3200 | . 01 | . 440 | 200 | \$0.10 | D3215 | . 06 | . 580 | 400 | \$0.14 |
| D3201 | . 02 | . 580 | 200 | . 10 | D3216 | . 1 | . 580 | 400 | . 13 |
| D3202 | . 03 | . 580 | 200 | . 10 | D3217 | . 2 | . 775 | 400 | . 15 |
| D3203 | . 05 | . 580 | 200 | . 10 | D3218 | . 25 | . 775 | 400 | . 17 |
| D3204 | . 1 | . 580 | 200 | . 10 | D3219 | . 3 | . 975 | 400 | 19 |
| D3205 | . 2 | 775 | 200 | . 14 | D3220 | 5 | . 975 | 400 | 24 |
| D3206 | . 25 | . 775 | 200 | . 12 | D3221 | 1-. 1 |  | 400 | . 22 |
| D3207 | . 3 | . 775 | 200 | . 16 | D3222 | .05-.05 |  | 400 | . 22 |
| D3208 | . 5 | . 975 | 200 | . 16 | D3223 | . 004 | . 440 | 600 | . 10 |
| D3209 | .1-. 1 | ... | 200 | . 18 | D3224 | . 005 | . 440 | 600 | . 10 |
| D3210 | .2-. 2 |  | 200 | . 23 | D3225 | . 006 | 440 | 600 | 10 |
| D3211 | . 01 | . 440 | 400 | . 10 | D3226 | . 01 | . 440 | 600 | . 10 |
| D3212 | . 02 | . 580 | 400 | . 12 | D3227 | . 015 | . 580 | 600 | . 12 |
| D3213 | . 03 | . 580 | 400 | . 12 | D3228 | . 02 | . 580 | 600 | . 12 |
| D3214 | . 05 | . 580 | 400 | . 13 | D3229 | . 1 | . 775 | 600 | . 17 |

## Cornell Cub Cartridge

 Condenser KitHere is a kit that contains 25 of the most popular capacities used to servce every make and type of receiver Every service man should have this all times to pr. You are prepared at lenser troublope following cor capacities and voltage rating are the capacities and voltage ratings

| Units | Cap. | Volts | Units | Cap. | Volts |
| :---: | :---: | :---: | :---: | :---: | ---: |
| $\mathbf{4}$ | .01 | 400 | $\mathbf{2}$ | .05 | 400 |
| $\mathbf{4}$ | .02 | 600 | $\mathbf{2}$ | $.05-.05$ | 400 |
| $\mathbf{4}$ | .1 | 200 | $\mathbf{2}$ | .5 | 400 |
| $\mathbf{3}$ | .1 | 600 | $\mathbf{2}$ | .5 | 200 |

Complete Kit of 25 . Shipping weight ${ }^{4}$ lbs. 3239 Your cost.... 3.35

## Cornell "Cub" Condenser Kit

This Condenser Kit contains an assortment of the most popular capacities used in the leading sets. Units are rugged, compact, reliable and stand up under the most rigid operating conditions. With this Kit any Radio Receiver can be quickly serviced with dependable condensers. This kit can be kept complete by re-stocking with standard "Cub" Condensers. Kit contains the following capacities, and their working voltages. Shipping weight 4 lbs.

| Units | Cap'y | Volts | Units | Cap'y | Volts | Units | Cap'y | Volts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | . 0001 | 600 |  | . 01 | 400 | 4 | . 25 | 200 |
| 3 | . 00025 | 600 | 6 | . 02 | 400 | 3 | 25 | 400 |
| 2 | . 001 | 400 | 4 | . 05 | 400 | 3 | . 5 | 200 |
| 2 | . 002 | 400 | 6 | . 1 | 200 | 3 | . 5 | 400 |
| 3 | . 006 | 400 | 6 | . 1 | 400 |  |  |  |
| D3238 | List P | ce $\$ 18$ |  |  |  |  | 6 |  |



## 'Cub' Condenser Clips

Type "A" Horizontal Stock

No. Diam: List Cost 03241 . $440^{\prime \prime} \$ .055 .03$ 03242 .580" . 05 . 03 D3243 .775" . 10 . 05 | D 3244 | $.975^{\prime \prime}$ | .10 | .05 |
| :--- | :--- | :--- | :--- |

## Type

 StockNo. Diam. ListCost D3245 .440" \$.10\$.05 D3246 .580" . 10 . 05 | D 3248 | .775, | .15 | .08 |
| :--- | :--- | :--- | :--- |
| D 3248 |  |  | 15 |

## Aerovox Hi-Farad Dry Electrolytic Condensers

(Cardboard Containers) These units have exactly the as the Hi-Furad Dry Electrolytics in metal containers but have been enclosed in paper to reduce their cost to a minimum. minals securely riveted Operte perfectly over a wide range of temperatures, May be mounted very close to each other without causing electrostatic coupling. Peak Stack 500 volts. Stock

## Capacity

D 3526
D3527
D3527
D 3529
D3529
D3530
D 3532
D3532
D 3528
D
D3533
D3531
D3
D3534
(*) Dual section; capacity of each section. 1.47
Wire Wound Resistors Type 986

Designed especially for use in A. C. filament circuits. All terminals are solidly anchored, the units are center tapped and the terminal lugs re designed to simplify mounting and connecGuaranteed accuracy $10 \%$. A vailable wanted).
10 ohms
30 ohms
50 ohms
3970
Your Cost Each.

## (\%)

Type 981
Wire wound on flat fibre strips. The extremely ow inductance and distributed capacity of these units make them Ideally suited for use as grid suppressors. Available in following ohmages (state value wanted). $100 \mathrm{ohms} \quad 250 \mathrm{ohms} 500 \mathrm{ohms} 750 \mathrm{ohms}$ 03971 Specify size.
Your Cost Each
250 ohms
1500 ohms
3972 - Specify size

## Aerovox Resistor Mountings <br>  <br> Takes any standard grid leak or resistor. Bakelite base, phusphor bronze clips. D3990-Single <br> D3991-Double <br> Your Cost Each



## Mi-Farad

 Dry Electrolytic CondensersContain no liquid to spill or freeze. May be mounted in any position.
These Aerovox DRY Electrolytic Condensers are the field. development in the field. Their DRY characteristics make it possible to mount them upright, horizontally or at any desired angle. All units are made for universal mounting. They may be handled and mounted in the same manner as wax paper unit. Their cost per Micro the attainment of a high degree of filtering with consequent improvement in tone and elimina tion of hum. Their high voltage peak without series connection) permits their practical use in most of the standard compara most of the standard compara
tively high voltage power supply filter circuits. Self healing and surge proof. Compact and ligh in weight. Unaffected by temperature. Leakage current very

## Type E Upright Mountings

Stock Cap'y of Peak Size Inches Your


A good selection of capacities in general use Genuine Aeromolded Bake molded Bake and units, sealed nainst extrem emperature moisture and chemical action. The dielectric is of finest grade India Ruby Mica and plates are tinfoil. Condensez element thoroughly impreg nated. Size of units, $1^{3 / 4} 4^{\prime \prime}$ and $11 /$ " mounting $^{\prime}$ centers $5 /{ }^{\prime \prime}$ " wide. Combination mounting type. Kit consists of the following units: 3-. 0001 $3-.0002,5-.00025,3-.0005,3-.001,3-.002$, $2-.003$ and $2-.004$ Mid. Shipping weight 4 lbs
$03800-\mathrm{Kit}$ of 24 Units. Your Cost
s 3.43

## Type "S" Screw Mounting,

## Top Connected

Here is a very compact dry type of Electrolytic Condenser, especially suitable for all genera purpose By-Pass filtering. Used generally for Pentode C Bias By-Pass. Can be mounted pither on top of panel or under chassis. Selfhealing and surge prooi. Ideal for all Midget healing and


500 Volts D. C. Peak, working volts, 450 Stock Capac- Size Inches You $\begin{array}{lcccc}\text { No. } & \text { ity } & \text { Diam. } & \text { High } & \text { Cost } \\ \text { D3540 } & 1 & 13 / 8 & 2^{5 / 6} & 50.60 \\ \text { D3541 } & 2 & 13 / 8 & 2^{5 \%} & .72\end{array}$ D3541
D3542

## Type PR Condenser

This type condenser is very useful in circuits where the voltage is low and the capacity necessary is high Are used for the by-passing of C bias resistors in audio requency cir fiers, for by-passing the "C" bias circuit of second detector of Super het circuits, etc.

|  | Mid. | Volts | $\mathbf{D}^{\text {Size }} \mathbf{L}$ | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| D3752 | 50 | 6 | $58.821 / 4$ | \$0.63 |
| D3753 | 10 | 25 | 810 | . 45 |
| D3754 | 25 | 25 | $75 \times 2$ | . 60 |
| D3755 | 10 | 50 | 516214 | . 51 |
| D3756 | 25 | 50 | $11 \times 23$ | . 66 |
| D3757 | 5 | 100 | 7 $\times 1^{2} 1$ | . 45 |
| D3758 | 10 | 100 | $11 / 8 \times 23$ | . 63 |
| D3759 | 25 | 100 | 11/623/4 | . 75 |
| D3760 | 4 | 150 | 14x23/4 | . 45 |
| D3761 | 8 | 150 | 11/82\% | . 60 |
| D3762 | 2 | 200 | $11 / \times 23$ | . 45 |
| D3763 | 4 | 200 | 11/ $\times 23 /$ | . 51 |
| D3764 | 8 | 200 | $11 / 4 \times 23$ | . 66 |



21

| Stock <br> No. <br> 5 | Resist. Ohms WATTS | List Price ( $13 x 1^{\prime \prime}$ ) | Your Cost |
| :---: | :---: | :---: | :---: |
| $\times 20200$ | 5001 |  |  |
| $\times 20201$ | 1000 | \$0.35 | \$0.21 |
| $\times 20202$ | 5000 |  |  |
| $\times 20203$ | 10000 |  |  |
| 10 | WATTS | (1/4x1847) |  |
| $\times 20204$ | 1000 |  |  |
| $\times 20205$ | 5000 |  |  |
| $\times 20206$ | 10000 | . 35 | . 21 |
| $\times 20207$ | 20000 |  |  |
| 15 | 5 WATTS |  |  |
| $\times 20209$ | 5000 |  |  |
| $\times 20210$ | 10000 |  |  |
| $\times 20211$ | 20000 |  |  |
| $\times 20212$ | 30000 | . 65 | . 39 |
| X20214 | 50000 |  |  |
| $\times 20215$ | 70000 |  |  |
| 20 | 0 WATTS | (7/6x3") |  |
| $\times 20217$ | 20000 |  |  |
| $\times 20218$ | 30000 |  |  |
| $\times 20219$ $\times 20220$ | 40000 | . 75 | . 45 |
| X20220 | 50000 |  |  |
| $\times 20221$ | 75000 |  |  |
| $\times 20222$ | 100000 |  |  |

. .




Absolutely noiseless and permanent on full load. Either type available in the following resistances.

| Ohms | Ohms | Megohms |
| :---: | :---: | :---: |
| 100 | 100000 | 3.0 |
| 250 | 150000 | 4.0 |
| 500 | 200000 | 5.0 |
| 750 | 240000 | 6.0 |
| 1000 | Megohms | 7.0 |
| 2500 | . 25 | 8.0 |
| 5000 | 5 | 9.0 |
| 7500 | . 75 | 10.0 |
| 10000 | 1.0 | 15.0 |
| 25090 | 1.5 | 20.0 |
| 50000 | 2.0 | 25.0 |
|  |  |  |
| $\times 20199$ Type 1094, 1 watt. |  |  |
| Your Cost, Either Size. |  |  |
|  |  |  |



## By-pass Condenser

These condensers are probably better known to manufacturers and service men than any line of by-
passes on the market. Made of special foil, non-inductive dielectric, thoroughly impregnated, and compactly built. Sections are her metically sealed in stamped metal cases, with convenient soldering. Are available in capacities and voltage ratings used in standard radio cir for all replacement work. Mounted by means of a strip on each side of the can, with ${ }^{1 / 4}$ " hole.

| Size 2 | Type 60 Single Section |  | high. |
| :---: | :---: | :---: | :---: |
| Stock No. | Cap'y Mid. | Working Voltage | Cost <br> Each |
| D3874 | . 05 | 200 |  |
| D3875 | . 1 | 200 | . 25 |
| D3876 | . 25 | 200 | . 29 |
| D3877 | . 5 | 200 | . 35 |
| D3878 | . 05 | 800 | . 28 |
| D3879 | . 1 | 300 | . 28 |
| D3880 | . 25 | 300 | . 36 |
| D3881 | . 05 | 400 | . 30 |
| D3882 | . 1 | 400 | . 30 |
| D3883 | . 25 | 400 | . 39 |
| Type 60 Multiple Section |  |  |  |
| D3884 | .1-. 1 | 200 | 5.39 |
| D3885 | . $25-.25$ | 200 | . 48 |
| D3886 | .1-.1-. 1 | 200 | . 54 |
| D3887 | . 1 -. 1 | 300 | . 42 |
| D3888 | .1-1 | 400 | . 45 |

## (0) Aerovox <br> 

 degrees. Drawn metal containers with encircling rugged steel mountng bracket Stock
No.
D393
D393
D393

## Aerovox

Cartridge Condensers
Especially suitable for radio service
work because of their high quality work because of their high quality paper urrapped. Very compact. Non-inductive. High insulation resistance.
Stock

No. | No. |
| :--- |
| D3911 | D3913

D3914 D3914

D3915 D3916 \begin{tabular}{l}
D3917 <br>
D3918 <br>
\hline

 D3933* 

D3919 <br>
D3920 <br>
\hline

 

D3921 <br>
D3922 <br>
\hline
\end{tabular} D392 D332

D392
D392

| D3926 | .1 | 400 | $\mathbf{. 1 6}$ |
| :--- | :--- | :--- | :--- |
| D3934* | $.11-.1$ | 400 | .30 |
| D3905 | .006 | 600 | .43 |

## Moulded in bakelite. Capacity pre

 determined by a patented process Not alfected by extreme temperature, moisture and chemical action. Stock| No. | Capacity | List | Net |
| :---: | :---: | :---: | :---: |
| D3844 | . 00004 | \$ 30 | 5.18 |
| D3845 | . 00005 | . 30 | . 18 |
| D3846 | . 00007 | . 30 | . 18 |
| D3847 | . 000075 | . 30 | . 18 |
| D3848 | . 0001 | . 30 | 18 |
| D3849 | . 00015 | . 30 | . 18 |
| D3850 | . 0002 | . 30 | . 18 |
| D3851 | . 00025 | . 30 | . 18 |
| D3852 | . 00037 | . 30 | . 18 |
| D3853 | . 0005 | . 30 | . 18 |
| D3854 | . 001 | . 30 | . 18 |
| D3855 | . 0015 | . 35 | . 21 |
| D3856 | . 002 | .35 | . 21 |
| D3857 | . 0025 | . 35 | . 21 |
| D3858 | . 003 | . 45 | . 27 |
| D3859 | . 004 | . 45 | . 27 |
| D3860 | . 005 | . 45 | . 27 |
| D3862 | . 006 | . 55 | . 33 |
| D3862 | . 0075 | . 65 | . 39 |
| D3863 | . 01 | . 75 | . 45 |
| D3864 | . 015 | . 90 | . 54 |
| D3865 | . 02 | 1.05 | . 63 |
| D3866 | . 025 | 1.65 | . 99 |
| D3867 | . 03 | 2.00 | 1.20 |
| D3868 | . 035 | 2.35 | 1.41 |
| 03869 | . 04 | 2.70 | 1.62 |

## a <br> 

Type 1460, Mica
One of the most popular mica types with service men, experimenters and set builders. Has two holes through body for mounting. Mounting centers either 1Y" or 13 ". Ruby mica dielectric. Very
compact. D. C. working volt. 460 . Compa


## Type 1467 Mica

Equipped with wire leads for connections. Size ${ }^{25}$ /n $^{\prime \prime}$ square. Ruby mica dielectric thoroughly impreg nated. D. C. Working voltage, 250 Stock

| Stock | Cap'y | List | Your |
| :---: | :---: | :---: | :---: |
| No. | Mids. | Price | Cost |
| 03787 | . 00004 | \$ . 20 | 5.12 |
| 03788 | . 00005 | . 20 | . 12 |
| 03789 | 00007 | . 20 | . 12 |
| 03790 | . 000075 | . 20 | . 12 |
| 03791 | . 0001 | . 20 | . 12 |
| 03792 | . 00015 | . 20 | . 12 |
| D3793 | . 0002 | . 20 | . 12 |
| 03794 | . 00025 | . 20 | . 12 |
| D3795 | . 00037 | . 25 | . 15 |
| D3796 | . 0005 | . 25 | . 15 |
| D3797 | . 001 | . 25 | . 15 |
| D3798 | . 0015 | . 35 | . 21 |
| D3799 | . 002 | . 35 | . 21 |

002


Dual Sections; capacity of each


## Aerovox Transmitting Condensers <br> \section*{Electrolytic}



## Paper Type

Designed for heavy duty power supply units. Ideal for use in all D. C. generators or rectified A. C. output circuits used to feed filter circuits of transmitters and heavy duty ampliflers. Non-inductively wound to provide good power actor and low equivalent series resistance characteristics. Oil impregnated.
Stock Cap'y Volt. Size Your No. Type Mids. D. C. In. Cost $\begin{array}{llllll}\text { D3560 } & 1003 & 1 & 1000 & 4 \times 5 \times 11 / 4 & \$ 2.25\end{array}$ $\begin{array}{llllll}03561 & 1003 & 2 & 1000 & 4 \times 5 \times 2 & 3.90\end{array}$ $\begin{array}{llllll}\text { D3562 } & 1503 & 1 & 1500 & 4 \times 5 \times 21 / 2 & 3.75 \\ \text { D3563 } & 1503 & 2 & 1500 & 4 \times 5 \times 5 & 6.45\end{array}$ $\begin{array}{llllll}\text { D3564 } & 2003 & 1 & 2000 & 4 \times 5 \times 3 & 6.30\end{array}$ $\begin{array}{llllll}\text { D3565 } & 2003 & 2 & 2000 & 4 \times 5 \times 61 / 8 & 11.70\end{array}$ $\begin{array}{llllll}\text { D3566 } & 2503 & 1 & 2500 & 4 \times 5 \times 5 & \mathbf{7 . 5 0} \\ \text { D3567 } & 3003 & 1 & 3000 & 4 \times 5 \times 61 / 8 & 9.60\end{array}$
$\begin{array}{llllll}\text { D3568 } & 3503 & 1 & 3500 & 4 \times 5 \times 6 \% / 8 & 11.10\end{array}$

These high voltage dry elec trolytic condensers represent a distinct advance in design of transmitting condensers. They will withstand their rated voltages for long periods of time without deterioration.

Stock
No.



Size ${ }^{\operatorname{In} .}$. $2 \times 5 \times 17$ $4 \times 5 \times 11 / 4$ $4 \times 5 \times 1$ $4 \times 5 \times 1$ $4 \times 5 \times 13$ $4 \times 5 \times 21 / 2$ $4 \times 5 \times 3$ $4 \times 5 \times 61$ $4 \times 5 \times 31$ $4 \times 5 \times 6$ $\times 121 / \times 5 \quad 10.35$ $\begin{array}{ll}\times 5 \times 3 \times 5 & 20.10\end{array}$ | 6.90 |  |
| :--- | ---: |
| $\times 6 \times 76$ | 12.90 | $4 \times 131 / 1 / \times 5 \quad 24.90$ $4 \times 5 \times 6$ //8 $\quad 8.25$ $\begin{array}{ll}4 \times 93 \times 5 & 15.60 \\ 4 \times 19 \times 5 & 30.60\end{array}$



## Pyrohm Center Tapped

 Filament ResistorsThese center tapped resistors are designed for use across the filaments of transmitting tubes o obtain the electrical center of the filament. amp of best grade resistance wire of a low emperature coefticient, wound on special fired on fully protecting the registance which is fred on, fully protecting the resistance wire gainst oxidation and accidencal injury. Posiwill safely carry the plate and grid current of the tube without heating.


Ohms

List $\$ 1.00$-Either type.
Wounting Brackets for above, completo with threaded rod, nuts and washers.
D3598

Type 61 Single Section


| Stock | Cap'y | Working | Your <br> Cost |
| :--- | :--- | :--- | :--- |
| No. | Mifd. | Voltage | Each |
| D3889 | 1. | 200 | $\$ .51$ |
| D3890 | .5 | 800 | .48 |
| D3891* | 1. | 300 | .72 |
| D3892 | .5 | 400 | .51 |

Type 61 Multiple Section

| Stock | Cap'y | Working | Your |
| :---: | :---: | :---: | ---: |
| No. | Mid. | Voltage | Each |
| D3893 | $.5-.5$ | 200 | $\$ .63$ |
| D3894 | $.25-.25$ | 300 | .60 |
| D3895 | $.5-.5$ | 300 | .81 |
| D3896 | $.1-.1-.1$ | 400 | .72 |
| D3897 | $.25-.25$ | 400 | .66 |

Type 62 Single Section Size $234^{*}$ long, $24^{4}$ " wide, $1^{*}$ high (11/3* high).
Stock Cap'y Working
Your
Cost $\begin{array}{cccc}\text { No. } & \text { Mid. } & \text { Voltage } & \text { Each } \\ \text { D3898* } & \text { 2. } & 200 & 5.87 \\ \text { D38999 } & 1 . & 400 & .75\end{array}$
Type 62 Multiple Section $100 \quad 5.96$

AEROVOX C | Aerovox |
| :---: |
| Filter |
| Con: | densers

Non-inductive. Paperdielectric. passing 90, 135 and 180 volt taps of voltage Thoroughly 3 m pregnated with pecial formula compound. The salety factor and insulation rea standards. Metal cans.


|  | 200 volts D. C. |  |  |
| :---: | :---: | :---: | :---: |
| D3939 |  | ${ }_{2}^{18} 8 \times 113 / 3 \times 8$ | . 34 |
| - ${ }^{\text {D3940 }}$ | 1.0 2.0 |  | 0 |
|  | 400 Volts D |  |  |
| D3944 | . 1 | 14\% $\times 113$ Cox | . 39 |
| D3945 | 1.0 | $216 \times 1{ }^{12} \times 1 \times 10$ | . 81 |
| D3946 | 2.0 | $2116 \times 112 \times 21 / 2$ | 1.35 |



## Electrad Volume Controls cons.)

Manulacturer
Kolster Radio Corp.
K-82,
${ }^{980}, 205, \mathrm{C} 1, \mathrm{C} 2, \mathrm{C} 4, \mathrm{C} 5, \mathrm{C} 6$, K-60, K-62
$\begin{array}{ll}\text { K } 120 & \text { K } 1222, \\ \text { K140 } & \text { K142, }\end{array}$ $\begin{array}{llll}\mathrm{K} 110, & \mathrm{~K} 112, & \mathrm{~K} 120, & \mathrm{~K} 122, \\ \mathrm{~K} 132 & \\ \mathrm{~K} 140, & \mathrm{~K} 142,\end{array}$ K113, K123, K133, K143 K114.

## Montgomery Ward \& Co

2822, 2895, 2897, 2827, 111, $3035,3037,3065,3067,1522$, 1562, 20W, 65-520, Model 49, 26P, 26PX, 1955, Recital $62,1040$.
${ }_{26 \text { W }} 181$ Chassis, 27 W Chassis Commander, Cavalier.

## Peerless

## Series 20, Peerless.

Series K-70.

## Philco

82, 5, 86, 87, 511, 521, 531, 541
Transitone $95,96,96 \mathrm{~A}, 30,211$ $211 \mathrm{~A}, 15,47,91 \mathrm{~L}, 91 \mathrm{~B}, 91 \mathrm{X}$ $71 \mathrm{H}, 71 \mathrm{~L}, 71 \mathrm{~B}$. $70,70 \mathrm{~A}, 90,90 \mathrm{~A}$

Model 95.
Models $112,112 \ddot{A}, 112 \mathrm{E}, 212$, $212 \mathrm{~A}, 212 \mathrm{E}$

Models 20, $20 \mathrm{~A}, 70,70 \mathrm{~A}, 270$, 270A, 220.
Models $50,50 \mathrm{~A}$.
RCA VIctor Co.
Radiola 16
Radiola 17, $50,41,7-25,7-54$
Radiola 18, 33, 51, 7-11, 7-22.
Radiola 44, 46, 47
Radjola 60,62
Radiola 64, 67, 9-18, 9-54..
Radiola 64 (Sensitivity Con trol).
Radiola 66
Radiola 80, 82, 86, 35, 39, 51 Radiola R-S, R5X Kı̈̈.
Radiola Super
Radiola R-11.
Radiola R-11..............
Radiola Supereti (Tone Control)
Radiola 46 DC
Radiola RAE
59, RAE 79, R50, R55, RE28
Radiola RAE 26, R11 (Tone Control)
Radiola 80 Series (Phono, Volume Control).
Radiola 42
R-32, RE45, RE52, RETV
R-15, 48, 92
R-14
Sllver-Marshall
 Model 86 Á, $710^{\prime}, 740,724 \ldots$. $620,630,635,644$ SC-2
$722-30,30 \mathrm{~B}, 60 \mathrm{~B}, 75 \mathrm{~B}-90 \mathrm{~B}$,
Bearcat-Midget, SM D1 Super R Superhet, Q. S. W. Super 727 Allwave
37, 38, 39.
Sonora Phonograph Co.
3R, 4R, 2RP, 25
B-31.
Stewart-Warner Corp.
Models 950, 980, Battery 950, 970, R100C, DC
900-811.
R100A, R100B, R100E
Models 102A, B. E., RioiA R101B

G7980 G8048

G7935
G7936
G7937
G7938
G7939
G7939
G7940
G7941
G7942
G7943
G7933
G7944
G7934
G8065 G8013

G8066

## G8067

G8054
G8068
G7979
G7979
G7991 G7985 G7986

G7903
G7911
G7910
G7905
G7924
G7912
G7908
G7902

G8087 G7909

68022
G7903
G7902

## Stromberg Carlson Telephone

 Mfg. Co.1A, 1B, 501, 502, 601, 602,633,

G7902 $\mathbf{5 0 . 5 9}$ G7906 . 59 G7904-59 G7911 . 59

G8074 1.06 G8089 . 66

Manufacturer
Stock Your

## Stromberg Carlson Telephone

Mfg. Co.- (Cont.)

## 634, 523, 524

ort Shaft)
G7905 $\$ 0.59$


G7991
846, 848 (Double Shaft)
G7965 641, 642, 652, 654 (Long Shaft) 25, 26 .
Models $10,11,16$
Models 19, 20, 21
Models 12, 14
Models 22, 24, 27
Models 38, 39, 40, 41
Temple Corp.
8-61, 8-81, 8-91.
$G 79771.32$
United Air Cleaner Corp.
106B, 440, 10B, 666C, 666, 104. G7902 Sentinel 114. $108 \mathrm{~B}, 9$ G7904
G7923
108 Super Midget.
G7914
U. S. Radio \& Television Corp. Case 80, A pex 36, 37, 50, 60, 90, 99.

Apex 31, 32, DC Model 33, Model 30 Auto, Gloriatone Late 27, 26, 29, 32, Apex 49, Batt. Gloriette 20. Gloriatone Early 27.
Gloriatone 28, 29, 32
No. 8 Series Super Heterodyne, No. 10 Series Super Heterodyne. G7907


Genuine Radiola Controls RCA Model 16 Part No. 5666, Filament Rheo-F6775-Your Cost

Models 44-46-47
Part No. 6005, 2900 ohms
Volume Control. Special
glotted shaft.
Cost
$65^{\circ}$
Models 60 and 62
Part No. 5811, 450 ohms, Volume Control. F6777-
Your Cost $\qquad$ ${ }^{\$ 1.05}$

Model 66
Part No. 6027, 550 ohms, Volume Control.
F6778 Cost. $\qquad$

## Model 64

Part No. 2334, 2,750 ohms, Sensitivity Control F6779
51.05

Part No. 2336, 1250 ohms, Volume Control. F6780
Your Cost $\qquad$
Part No 574 for battery operated sets.
F6781-Vour Cost
Part No. 1424, 60 ohm Volume Control tubular.
F6782~Your Cost
RCA Models 25-28-30 A. C.
Part No. 905, 100 ohm Filament tubular F6783-Your Cost. ..................... 20 $0^{\circ}$

RCA Models 30-A and 32 A. C.
Part No. 905, 100 ohm Filament Resistor.
F6783
F6785. 1963, 250 ohm Volume Control.
Your Cost

## RCA-Radiola

The only complete and accurate line of replacement volume controls made expressly for the RCA-Radiola series of Receivers. The relength in ohms, taper
special mounting have been designed and built from the original RCA parts. This is the only list of controls that are necurately made for these recelvers. Refer to complete listing for the correct type of control for your needs.

## Crosley Replacement:

A complete and accurate line of recontrols forthe Crosley receivers. Made with apecial Made with special
inal parts. All guaranteed to fit the chassis exactly. Refer to complete listing for the correct control.

Centualab


## Combination "L" Pad

Bakelite Case $2 \times 3 /{ }^{3 \prime}$
Threaded Bushing $1 / 1 / x / 1 / 2$ " long.
Shaft $14 \times 1 / 2$ " long. haft gro
a wire wound and tapered graphite control providing constant impedance to the line. It is recommended for low impedance systems, such as output control of moderate power not exceeding 4 watts and input to small public address systems where price is a factor and the high efficiency made possible by the Centralab T-Pad is not an absolute necessity.
lliustrated above without cover to show conatruction. Stock controls have metal cover providing complete protection from dust.

| $\begin{aligned} & \text { Stock } \\ & \text { No. } \end{aligned}$ | $\begin{aligned} & \text { C.R.L. } \\ & \text { No. } \end{aligned}$ |  |
| :---: | :---: | :---: |
| H8975 | 96-004-Resistance | 15000 ohms |
| H8956 | 96-003-Resistance | 10000 ohms |
| H8955 | 96-002-Resistance | 5000 ohms |
| H8959 | 96-007-Resistance | 500 ohms |
| H8958 | 96-006-Resistance | 200 ohms |
| H8976 | 96-008-Resistance | 100 ohms |
| H8957 | 96-00b-Resistance | 50 ohms |
| H8954 | 96-001-Resistance | 10 ohms |

Lint Price $\$ 3.00$
Your Cost
$\$ 1.47$


## Centralab Power

 "L" Pads
## Commercial Typo

Employed in output cir cuits where the amount of power does not exceed 10 watts. Commonly used as a voice coil control of Dynamic Speakers. The unit provides constant impedance to the line and thus, when used in multiple circuits, does not disturb the adjust ment of other sections of the same circuit. The resistance units are wire wound for maximum power rating and housed in the same moulded Bakelite case as the T Pad. Provides single or three hole mounting.
Diameter of control $312^{\prime \prime}$
Depth of control $2^{\prime}$ approximately.

| Stock | C.R.L. |
| :--- | :--- |
| No. | No. |
| H8953 | $94-003-R e s i s t a n c e ~$ |
| 100 ohms |  |
| H8952 | $94-002-R e s i s t a n c e ~$ |
| H0 ohms |  |
| H8951 | $94-001$-Resistance 15 ohms |

List Price $\$ 5.00$
Your Cost.
s. 2.45


Giant Type The Giant Power "L" Pads consist of two heavy wire wound sections of large dimensions. These units are recommended for installations in sysuems where the output exceeds 10 watts. For example: large public address systems where multiple circuits of large amplitiers are employed.
The units are mounted with no covering to allow free circulation of air a bout the resistance units and thus permit a free dissipation of heat. These units provide a means of control which maintains a constant impedance upon the line, and may thus be operated in multiple without disturbing the adjustment of other circuits disturbing the adjustment of othe
Unit provides single hole mounting.
Diameter of unit $2^{\prime \prime}$
Depth of unit $21 / 2^{\prime \prime}$ approximately
The resistance specified is the equivalent line mpedance.

| Stock | C.R.L. |
| :--- | :--- |
| No. | No. |
| H8765 | 47-209-Resistance 50 ohms |
| H8764 | $47-209$-Resistance 15 ohms |

List Price $\$ 5.00$
Your Cost.
${ }^{s} 2.45$

Free Volume Control Guide will be sent with orders of 5 or more CRL Controls The revised listing of Centralab volume controls that the serviceman has been waiting for. This list consists of "Specials" that are manufactured and built for the particular set that it is intended changes necessary to install these units. You may order by our stock number; or speciry the Centralab number if you wish. A complete line of Centralab volume controls and by-products carried in stock.

## Name and Model

A. C. Dayton Co.

Na vigator.
A. C. Dayton
All-American Mohawk

$$
\begin{aligned}
& \text { "D-L" Series } \\
& \text { "H." Series. } \\
& \text { "J" Series. }
\end{aligned}
$$

"K" Series.

## Amrad

70-7100 Belcanto Series. 81.
84.

Atwater Kent Mig. Co. 33 Series Filament, 84.
$61,61 \mathrm{C}, ~ 72,66, \mathrm{H}, \mathrm{H} 2$
"Spe cial", 67 C , Batt. Set 222 tubes 82 Q .
 Series, "Special" L1.
${ }_{82 \mathrm{~F}}^{\mathrm{L}} \mathrm{-1}, 84 \mathrm{D}, 89,84 \mathrm{Q}$ Batt., 89 ,

## Bosch

107, 116 , 46, 126, 136, 146, 166. 176, 96-DC, 96-A 80-Auto Receiver "S
48 and 49 "Special" 54, 56 .
58, 62 "Special"
54-DC "Special"
5A, 5B, 7A 73, 133
60,61, 64 "Special"
20, 31, 32
73, 74,
Bremer-Tully Mfg. Co..
7-70, 7-71 "Special".
81, 82, $14,21,81,81 \mathrm{~A}$
85,36

85, 36
S-81, S-82
Brunswick-Balke-Collender Co.

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Colonial Radfo Corp.

SG-32AC, 83 AC " Special
$40,43,44,47,47 \mathrm{E}, 48,48 \mathrm{E}, 50$
"Special"
Columbia Radio Corp.
Screen Grid 8 "Special"
SG-5, SG-7
al"......
SG-9.
$H 8839$
.$H 8858$

## Columbia-Kolster



K42, K43, K44, K4
50-AC, Special
960
100 Series.
60 Series, $31-33$ Columbia.
32-34.
1-33 Columbia

## H8839

H8860

| $H 8926$ |
| :--- | :--- |
| 1.47 |

$\begin{array}{ll}H 8922 & 2.21 \\ 48858 & 73\end{array}$
$H 8858$
$H 8838$

| $H 8838$ |
| :--- |
| $H 8807$ |

$H 8807$
48813
70 Series, 80,90 , "Special".
48793
Crosley Radio Corp.
$60-\mathrm{S}, 61-\mathrm{S}, 62-\mathrm{S}, 74$.
61, 602 Bandbox, 608 Gembox, 610,609 Gembox, and Gemchest, 704 Jewel Box, 704-A Jewel Box, 704-B Jewel Box, 705 Showbox, 706 Showbox "Special"

H8861

H878S

Stock Your
4884350.73

H8858 . 73

H8812
. 48812
H8872
H8863
. 48858
H8861
H8863

H8863 . 73
H8723 1.96
$48862 \quad .73$ H8846 1.71

M8902 1.96 $H 89121.47$

$$
. \text { H8808 . } 98
$$

.98
.98
.73
.73

$$
\begin{aligned}
& .73 \\
& .73 \\
& .73
\end{aligned}
$$



H8839 $H 8832$ $H 8895$
 H8910 H8961 H8887 H8871 H8803

## 48890

18794
48812
8886
$\begin{array}{lr}\text { der Cor } & \\ H 8811 & .98 \\ H 8794 & .98 \\ H 8804 & .98 \\ H 8796 & 1.47 \\ H 8793 & .98 \\ H 8744 & .73 \\ H 8863 & .73\end{array}$
$H 8758 \quad .73$
H8740 H 8961
$18934 \quad 1.47$ 8839.73

Earl Radio Corp.
 dorf

| 2, C3, | H8724 | 1.47 |
| :---: | :---: | :---: |
| R-200. | H8840 | . 73 |
| M6, R11, M-6, Specia | H8701 | 1.47 |
| Controls, one of each R4, R5 |  |  |
| and C4, R6, R7, Later Model. | H8897 | 1.96 |
| C | H8839 | . 73 |
| ES 62 | H8724 | 1.47 |
| R122 | H8859 | . 73 |
| 250. | H8841 | . 73 |
| R6 and R7, Early Model, |  |  |
| Phono. | H8830 | 2.71 |
| R4, R5, C4, Early Model | H892S | 2.96 |
| Abbey "Special" | 48724 | 1.47 |
| Abbey Jr. "Special" | 48701 | 1.47 |
| E-175. | 48858 | . 73 |
| R6 and R7, Later Mod | H8897 | 1.96 |
| Eveready |  |  |
| 1,2,3. | H8862 | . 73 |
| 30, 40 Seri | 48865 | . 73 |
| 51. | $H 8840$ $H 8892$ | .73 1.47 |

## Fada

7, 480A, SF $50,80-\mathrm{A}, \mathrm{CA}-475$.
$30,30 \mathrm{Z}, 31,31 \mathrm{Z}, 10,10 \mathrm{Z}, 11$ 11 Z, D. E. Special Long Shaft $50,70,71,72,51$ Long Shaft. $16,16 \mathrm{Z}, 17,32,32 \mathrm{Z}, 18 \mathrm{DC}$, Special Shaft.
35C 35B, 40AC, Original Control.
$25,25 \mathrm{Z}, 15 \mathrm{M}, 15 \mathrm{M} Z$, Special
Shaft.
75, 77, 35, 35Z. Special Shaft 43, 762, KF, KG
122-KE.
KA-41, 42, 44, 46, $47,81,84$ 86 DC .
$48831-47$
$\begin{array}{ll}H 8831 & 1.47 \\ H 8837 & 1.47\end{array}$
H8848 1.47
$\begin{array}{ll}H 8898 & 1.98\end{array}$
H8932 1.47
$\begin{array}{lll}H 8962 & 1.47\end{array}$
H8889
H8915
. H 8869
. H 8874
KW-48, 49, Sw. Type........ H8809

## Freed-Eisemann Radio Corp.

FE3ON and $30-32$ 40N and
$48 \mathrm{~N}, 50$, NR78 and NR79-AC,
NR80-DC, NR80-AC, NR85,
470.

# Controls 

## Name and Model

NR5, NR6, NR7, NR8 and 8A,
NR9 and $9 \mathrm{~A}, \mathrm{NR10}$, NR12,
FE15, FE18, NR20, 66 and
66A, NRT7, NR53, NR78-DC
79.DC, NR55-DC, NR55 and
56-DC NR60-DC, NR60-AC, NR57, NR70.
NR95.
NR90S-AC
NR879, 905GA, NR657, "Special"

## Freshman Radio Corp.

| G-60, Q15 and Q16, 605M, "Special" | H8786 | 73 |
| :---: | :---: | :---: |
| 3 Q 15 and $3 \mathrm{Q}-16, \mathrm{~N} 12, \mathrm{~N} 17$, |  |  |
| 2-N, QD-16-S, Series Q-D-16, |  |  |
| "Special" | H8746 | . 73 |
| H, K and K-60-S, M, L and LS | H8786 | . 73 |
| 41-AC and Earl 41, 31, 32A, |  |  |
| $31 \mathrm{~S}, 32 \mathrm{~S}$ | H8840 | . 73 |
| 21AC, 22 (Earl), 21, 22 | H8718 | 1.47 |
| G | H8858 | . 73 |
| 21-DC, 24, 31, 33-DC | 8879 | . 73 |
| General Electric Co. |  |  |
| T41-RC3 | H8905 | 1.47 |
| H31, H51, H71 | H8867 | . 73 |
| S-22, S-22X-S-4 | H8744 | . 73 |
| T-12. | H8877 | . 73 |

## General Motors Radio Corp. (Day-Fan)

| 5033, 5066, 5065, 6 tube, 5057, 6 DC, 32 DC, $110-6-\mathrm{M} . \mathrm{G}$. | H8869 |
| :---: | :---: |
| 8-AC, 5077, 5080. | H8860 |
| A5005-A5020 | H8861 |
|  | H8838 |
| 5003-5004-5010-5091-48 "Spe- |  |
| Cial" ${ }^{\text {Delco } 3002 ~ A u t o ~ " S p e c i ~}$ | H8726 |
| Delco 3002 Auto "Speci | H8834 |
| MA"120A, | H8913 |
| 211, S9-A, S9-B | H8806 |
| 220, S10A, S10B | H8818 |
| S-38, 253, 254, 255, 256, 257, |  |
| 258. | H8806 |
| S3A, 253, 254, 265, 256, 257, |  |
| 258. | H8793 |
| S2A, S2B, 216 and 251 | H8817 |
| 216, 217, 219, 250 | H8861 |
| S1A, 216, 217, 219 and 250 | H8806 |
| Graybar Electric Co. |  |
| 700, 770, 900. | H8867 |
| 678 | H8905 |
| Graybarette. | H8877 |
| 8 Midget. | H8744 |

A. H. Grebe \& Co. Inc.

| 428 Synchrophase AC-6; Syn chrophase AC-7 <br> AH-1. | $\begin{array}{r} H 8838 \\ . H 8859 \end{array}$ |
| :---: | :---: |
| Early Synchrophase SK4-AC | H8900 |
| SK4-DC | H8811 |
| HS4-1, 2, 3 , | H8813 |

Grigsby-Grunow (Majestic)


## Kellogg Switchboard \& S

 $\begin{array}{rr}H 8858 & .73 \\ H 8720 & 1.96 \\ H 8903 & 1.96 \\ H 8930 & 1.47 \\ H 8840 & .73 \\ H 8923 & 1.96 \\ H 8721 & 1.98 \\ H 8859 & .73 \\ H 8793 & .98 \\ H 8866 & .73 \\ H 8914 & 1.47 \\ H 8901 & 1.96 \\ H 8797 & .98 \\ H 8799 & 1.47 \\ H 8856 & 1.47\end{array}$6 tube 507,520 series.....
"B", 7 tube...
520 series, $533,534,535 .$.
$536,5$.
$\mathrm{K} 24,2 \mathrm{6}, 27,28$.
Supply Co.

Colin B. Kennedy Corp.
KR 15 and 16 "Royal" 60 "Royal" 80 ...
12 S.G., 10, 20, 20B, "Special"
$\begin{array}{lr}. H 8863 & .73 \\ H 8871 & .73 \\ H 8861 & .73 \\ H 8861 & .73 \\ H 8931 & .73 \\ H 8858 & .73 \\ & \\ H 8859 & .73 \\ H 8863 & .73 \\ H 8928 & 1.96 \\ H 8869 & .73\end{array}$
Stock Your

H8879 $\$ 0.73$
$\begin{array}{ll}H 8839 & .73\end{array}$
$\mathrm{H} 8840 \quad .73$
H8905 1.47
H8893 1.96

H8786


Montgomery-Ward
$\mathbf{1 5 2 2}, \mathbf{1 5 6 2}, \ldots$
$2822,2827,2895,2897$.
$2955,2957,30.3067$.
3035, 3037, 3065,
S. G. Battery Set......
Montgomery-Ward
$\mathbf{1 5 2 2}, \mathbf{1 5 6 2}, \ldots$
$2822,2827,2895,2897$.
$2955,2957,30.3067$.
3035, 3037, 3065,
S. G. Battery Set......
Montgomery-Ward
1522, $1562, \ldots 2892897$.
$2822,2827,2895,2897$
$2955,2957,3065,3067$.
3035, 3037.
S. Gattery Set. .....

## Philco

$\left.\begin{array}{|cc|}\text { Name and Model } & \begin{array}{c}\text { Stock } \\ \text { No. }\end{array} \\ \text { Your } \\ \text { Colin B. Kennedy }\end{array} \right\rvert\,$
$\mathrm{K} 20,22,25,27$.
$\mathrm{K} 20,22,25,27,123,23, \mathrm{~K} 30,32$.
$\mathrm{K}-21,24,28$

## Seri, 1,2

 $1,2,3,96,96 \mathrm{~A}, 92,95,95 \mathrm{E}, 11$ and $11 \mathrm{~A}, 211,211 \mathrm{~A}, 296,296 \mathrm{~A}$. $111,111 \mathrm{~A}, 112,112 \mathrm{~A} .$.$76,77,77 \mathrm{~A}, 70$
Series. Transitone No. 3, 30..
Baby Grand 20, 20A, 220,41 . $42,220 \mathrm{~A}$.
40 . 41, 42

## C. A. Victor

4-Circuit, RC3, R15, RE17,
R-32, RE-4 $\mathbf{5}, \mathbf{R}-52, \mathbf{R} \mathbf{E}-7 \mathbf{5}$.
5-Circuit RE-35, RC-2A, RE 39, RE-57, RE-73, RE-34, 42 . R5, R5X
R7' Superhette
$7 \mathrm{~A}, \mathrm{R}-11$, RE-18.
R50-R55.
R57, 82.
"Radiola"
80, 82, 86.
Silver-Marshall Inc. 630.

4, SM-730 Around the world
740 AC Coast to Coast. .
714.
$722 \mathrm{AC}, 30 \mathrm{~B}, 60 \mathrm{~B}, 75 \mathrm{~B}, 95 \mathrm{~B}$
770 SM690.
37, 38, 39, 782.
683, A, F, D, EG, J, 716, 7 ว่3 R5.

## Sonora Phonograph Co., Inc.

2RP-25, 3R \& 4R, 5R, A-30,
A131, A-32, A-36, A-46, A-40,
44 DeLuxe, A3D, A31
E-A1.
H8746

Sparks Withington Co. (Sparton)
$62,63,110,110$ DeLuxe, 931 ,
301, Sparks Ensemble, 600,
610, 620
AC7
39.
$69,79,79$ A $, 89,89 \mathrm{~A}, 109,55-$
101-103
$H 8840$

101
301,930, 589, 574, 737
235, 235 D С
$235,23$.
$5 \& 9$.
Steinite Radio Co.
30.
Sup

Super Heterodyne "Special". .
$40,50,102,40 \mathrm{C}, 60 \mathrm{C}, 102 \mathrm{C}, 70$.
$80,90,15,16,412,420,210$,
$230,420,450$
$230,420,450$.
261,262 series.
$990,991,992,993$
$990,991,992,993 . .$.
Midget 21, 23 "Special"
Midget "Special"
$22,25$.
26,
421,425 or $21.203,600,605$.
$630,635,642,643$.

| .$H 8838$ | .73 |
| :--- | :--- |
| $H 8842$ | .73 |
| .$H 8860$ | .73 |

## VOLUME CONTROLS

$\qquad$


Constant Impedance "Tr" Pad A network of three reaistances housed in a large dust and moisture tight case. Two wire wound sections offer constant resistance to the input and output circuits while a tapered graphite section provides smooth attenuation of volume level. Bakelite case $31 / \times 1^{3}$ "deep.
Furnished with Bakelite knob.


Constant Impedance "II," Pad f


Recommended for individual control of magnetic speakers such as central izedschool sybtems hotels, hospitals, or where one or more speakers are added to the home recelving get. The two graphite resistances provide constant resistance to the hine with smooth volume control of the individual speaker without changing the adjustIment of other speakers on the same line. Safe lenergy dissipation 1 watt.
H8967- 5000 ohms
H8908-10000 ohms
Your Cost Eoch
s 1.47

## Phonograph Pickup Fader for

## Two Turn Tables

This control is made up of a potentiometer with an extra lug contact located at the center of the resistance. It provides both volume control and a fade-over switch for two phonograph pickups and turn tables. Bakelite case $21 / 4 \times 1 / 2^{\prime \prime}$, shaft $1 / x^{1 / 2}$ long. Shaft and
bushing fully insulated from
all terminals. Single hole mounting. H8829-100000 ohms Resistance of each H8827-50000 ohms half of the control H8828-25000 ohms
Your Cost Each.


## VOLUME CONTRDLS

Name and Model

| Stewart-Warner Corp. |  |  |
| :---: | :---: | :---: |
| 500, 520, 525, 806 |  |  |
|  | H8839 | . 73 |
|  | H8727 | . 73 |
| 715-720, R-100A, R-100B, |  |  |
| R-100E |  |  |
| sid | 28 |  |
| $801-802$ | H8860 |  |
| 817. | H88 |  |
| $970-\mathrm{AC}-98$ | H8913 | 7 |
| 305, 315, 320 | H8876 | 3 |
| , | H893 | . 73 |
|  | H883 | . 73 |

# Centralab Volume Controls 



## (1) Centralab <br> Free Volume Control Guide will be sent when ordering 5 or more C. R. L. Controls.



## 

 Announcing a new line of Centra- It is not necessary and often notlab Volume Controls to meet the demand for a quality volume control at a low price. The same high quality as used in all of Centralab's products and years of experience in the resistance field go into making these controls the finest This list covers the 10 most popular controls and are guaranteed to givelasting satisfaction. Centralab replacement controls can be used on any set repardless of the make or type control originally used.
desirable to connect the replace ment control in the sarme circuit location as the original. Where the original control was of the wire wound type so located as to carry considerable current better and smoother volume control will result by using Replacement Control No. H9002 shunted from Antenna to Ground. The con nections to the old control should then be suldered and taped to provide maximum volume at all times, with the Antenna control adjusted for the necessary volume level.

## E1f Potentiometers Three Terminala

Can be used for Tone, Pick-up and Volume Controls. Shaft extends 13/" Irom case, milled flat for set screw or push-on knobs. Bakelite case, $11 / 2 \times 1 / /^{\prime \prime}$ Bushing, $y^{2} \%^{\circ}$


These replacements will exactly duplicate the original in all operating easentials, although not necessarlly in appearance, since the original has been manufactured by someone else. These controls will give superior performance, particularly true where the original control may have been a wire wound such as those used in Philco Models 50, 50A, 41,42 and 46 .

| Stock | Philco |  | Resistance | $\begin{aligned} & \text { Your } \\ & \text { Cost } \\ & \$ 0.63 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| No. | No. | Philco Models | Ohms |  |
| H9013 | 4463 | Transitone Auto Radio | 500000 |  |
| H9014 | 4098 | 96, 96A, 296, 296A, 30, 111, |  |  |
|  |  | $111 \mathrm{~A}, 211,211 \mathrm{~A}, 112,112 \mathrm{~A}$, |  |  |
|  |  | 212A, 212............ | 500000 | . 68 |
| H9015 | 3076 | $511,521,86,82,83,87$ | 10000 | . 73 |
| H9016 | 3790 | 92 and 95 | 10000 | . 73 |
| H9017 | 5839 | $51,51 \mathrm{~A}, 52,52 \mathrm{~A}, 551,551 \mathrm{~A}$. | 5000 | . 39 |
| H9018 | 5232 | $50,50 \mathrm{~A} . . . . . . . . . . . . . . . .$. | 5000-2000 | . 93 |
| H9019 | 4141 | 41, 42, and $46 \ldots . . . . . . .$. | 5000-2000 | . 93 |

## Centralab <br> Twin Junior Controls



Abbreviations<br>L. H.-Increases with clockwise rotation. R. H. Increases with counter clockwise rotation. Sym.-Tapered symmetrical.

There are so many possible combinations in twin volume controls that most replacements are adapted to one manufacturer's set only. There are many receivers now giving troublesome operation with single controls, however, that may be improved immensely if the single control is replaced with part number H8912 where the original control was in the "C" Bias circuit, or with part H8913 where the original control was in the screen grid circuit. These controls have long shafts adapted to a variety of sets. The other Twins are popular replacements for particular receivers as named and duplicate the original shaft and bushing length. Case diameter 1\%". Depth $1 / /^{*}$ Combination Case Diameter $2 x^{3} 4^{\prime \prime}$. Two resistances completely insulated from each other and from the shaft and bushing.
H8926-Kolster-Brandes for models K-42, 43, 45. Combination 25000 ohms graphite for antenna, 6000 ohms wire wound for screen grid.
H8892-Eveready-National Carbon: Special control. Shaft case R. H., Max. 10000 ohms C-2600 ohms. Back case Sym., Max. 500000 ohms.
H8900-Temple: Special control. Shaft case Sym., Max. 10000 ohms C 5000 ohms. Back case L. H. Max. 500000 ohms. C. 125000 ohms H8904-Victor: Models RE-34, 35, 39, 57, 73. Special taper and bushing for 5 -circuit replacements. Shaft case L. H., Max. 50000 ohms, C-25000 ohms. Back case L. H., Max. 1000 ohms, C-375 ohms H8905-Victor, R. C. A., G. E., etc.: Models RC-3, R-15, RE-17, R-42. Special taper and bushing for 4 -circult receiver replacements. Shaft case L. H., Max. 50000 ohms, C- 20000 ohms. Back case L. H., Max. 50,000 ohms, C -4000 ohms.
H8911-Victor: Models R-32, R-52, RE-42, RE-75. Special taper
and bushing. Both cases L. H., Max, 4000 ohms, C-300 ohms.
H8912-Potentiometer controls antenna, radiohm control "C" bias Shaft case L. H., Max. 10000 ohms, C-2000 ohms. Back case R. H., Max. 25000 ohms, C-1500 ohms.
H8913-Potentiometer controls antenna. Potentiometer controls screen grid. Shaft case L. H., 10000 ohms, C-1500 ohms. Back case Sym., 50000 ohms. C-25000 ohms.
H8914-Special Twin replacing wire wound control in 1930-1931 Philco Midget and small receivers. Shaft case L. H., Max. 5000 ohms, C-1200 ohms. Back case R. H., Max. 350 ohms, C-150 ohms.
List Price $\$ 3.00$
Your Cost Each
s 1.47

## How to Connect Centralab Volume Controls

Connections should always be made so that volume increases when the knob is turned clockwise. For that reason the left hand radiohm is used with circuits giving maximum volume at maximum resistance, such as when the control shunts a transformer coil. Right hand such as when the control shunts a transtormer coil. Right hand radiohms are used where maximum volume is obtained at minimum resistance, such as a series control to vary the R. F. C bias or plate right hand tapers according to their circuit location. In connecting right hand tapers according to their circuit location. In connecting these controls bear in mind that the shaft and bushing are insulated from all current carrying parts and may be mounted direct on the panel regardless of its potential. This is an advantage for easy assembly, and avoids hand capacity in critical circuits.

## No. 40 Series Composition



## Element

Thuse controls are particularly suited for use in circuits requiring very critical curves and where there can cuiting, that is detrimental cuiting, that is, detrimental lowering of the resistance between end terminals. The hikh insulation provided between shaft and live parts allows use of this control in circuit positions where the potential to ground may be several hundred volts. A positive wiping action between the resistance element. and the dise.

| Stock No. | Ohms | Stock No. | Ohms |
| :---: | ---: | :---: | :---: |
| G8330 | 1,000 | $\mathbf{G 8 3 3 5}$ | 25,000 |
| $\mathbf{G 8 3 3 1}$ | 2,000 | $\mathbf{G 8 3 3 6}$ | 50,000 |
| $\mathbf{G 8 3 3 2}$ | 3,000 | $\mathbf{G 8 3 3 7}$ | 75,000 |
| $\mathbf{G 8 3 3 3}$ | 5,000 | $\mathbf{G 8 3 3 8}$ | 100,000 |
| $\mathbf{G 8 3 3 4}$ | 10,000 | $\mathbf{G 8 3 3 9}$ | 250,000 |
|  |  | $\mathbf{G 8 3 4 0}$ | 500,000 |

Your Cost,
Each
$50^{c}$
No. 40 Series Dual Potentiometers

Stock
No.
Description
0,000 ohm Antenna Taper50,000 ohm Screen Grid Taper with 1 " shaft
G8351 Same as above, with $2^{\prime \prime}$ shaft. . G8352 10,000 ohm Antenna Taper1,000 ohm Var. Mu Blas, with 1 " shaft.
G8353 10,000 ohm Antenna Taper25,000 ohm Screen Grid Taper, with 1 " shaft.
G8354 10,000 ohm Antenna Taper25,000 ohm Screen Grid Taper,
with switch and 1 " shaft. with switch and 1 " shaft
G8355 $10,000-50,000$ ohm Pot. with
G8356 10,000-2,000 ohm Pot. with switch.
No. 20 Series Wire Wound Volume and Tone Controls


No. 20 Series
provide rugged, double wiping the possibility of noise to a minimum and provide the longest possible life. Completely enclosing the unit in a tightly covered metal shell prevents the entry of dust and foreign particies which might cause scoring should they reach the raceway.
Without Switch

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| No. | Ohms | Control |  |
| G836 | 200 | Variable-Mu Cathode | G83 |
| 8361 | 400 | Mierophone Button | G8371 |
| 8362 | 1000 | Untuned Antenna | G8372 |
| 8363 | 2000 | Untuned Antenna | G837 |
| 64 | 3000 | Untuned Antenna | G8374 |
| 8365 | 5000 | Antenna Shunt |  |
| G8366 | 10000 | Antenna and Cathode |  |
|  |  | Bias | G8376 |
| 36 | 25000 | F. B | G8377 |

Without Switch
Your Cost.... $0^{\text {C }}$ With Switch $71^{c}$


## Replacement

 Volume Controls for StrombergCarlsonAll these controls are genuine Frost, made for replacement in StrombergModels 635 and 636

Front control, No. P-17961
G8322-Your Cost
Rear control, No. P-21688
G8323-Your Cost
Models 641, 642, 652, 654 Front control, No. P-18598 G8325-Your Cost
Rear control, No. P-18599
G8324-Your Cost
Models 846 and 848
Front control, No. P-18930
G8326-Your Cost
Rear control, No. P-18599
G8324-Your Cost.
Model 638
Front control, No. P-18422
G8328-Your Cost
Rear control, No. P-18421
G8327-Your Cost
$70^{\circ}$ $65^{\circ}$ $50^{c}$ $75^{c}$ $55 c$ $70^{c}$

## Original Zenith Volume

## Controls

The original Dual Volume Control used in type with A. C. switch used in Models 52, 53, $522,532,54,542,55$, $602,613,622,642,672$ ', 71, 72, 73, 77, 712, 722, 732, 777. Zenith Part Na. 63-122.
\$1.48
Your Cost, Each
Single Unit, with switch, used in Models 52 , 53, 522 , $532 ; 54,542 ; 55,57 ; 62,64,67,60$
and 61 ; early models of $602,613,622,642,672$. and 61 ; eary models of 602, 613, $622,642,672$. G8321-Your Cost.

1. 23 Single Unit- $33,34,35,35 A, 342,352,352 A$, $362,35 \mathrm{APX}, 11,12,14,15,16,17,31,32$, 333,353 A.
G83e1-Your Cost, Each.
 392A.
G8342-Your Cost, Each.
$\$ 1.25$

## Replacement Volume Control

For Victor R-32, R-52,
RE-45, RE-75 A greatly improved desit made by Frost, designed electrically for the above Victor receivers. No changes necessary to install this control. Smooth and noiselesg in operation. Gire wound. Shipping weight 1 lb . G8290-Your Cost


No. 70 Series Volume Controls
 Composition element bakelite case with metal dustproof back cover, durnished either with or without "built-in" switch. This series has the full wiping contact between wiping contact between the movable member and the hard smooth composition resistance element. ${ }^{21} /{ }^{\prime \prime}$ " in depth, $1^{\prime \prime}$ shaft length, $11 / /^{\prime \prime}$ " in diameter, Without Switch With Switch Stock
$\begin{array}{rrr}\text { No. } & \text { Ohms } & \text { Controls } \\ \text { G8299 } & 1000 & \text { Untuned Antenna }\end{array}$ G8300 2000 Cathode Bias G8298 3000 R F Primary Shunt G8301 5000 Antenna Shunt G8302 10000 Antenna or R. F. G8303 25000 Phonograph Pick-up G8304 50000 .Screen Voltage G8305 75000 Variable-Mu


## No. 80 Series Composition

 ElementVolumeand Tone Controls
Combining the latest and highest development in control engineering. Designed with a view of satisfying the most critical and sensitive circuit requirements. It is constructed with a moulded bakellte housing. Full wiping contact.

With Switch
Without Switch Stock Ohms
No. C8400 Ohms G8401 1000 Untuned Antenna No. G8401 2000 Cathode Bias G8421 G8403 5000 R. F. Primary Shunt G8422 G8404 10000 Antenna Shunt $\mathbf{F}$. G8423 G8405 25000 Phimary Shunt

G8424

G8406 50000 Screen Voltage G8425 G8407 75000 Screen Voltage G8426

Cathode Bias G8409 250000 Audio Transformer

G8427
G8428

G8410 500000 Audio Transformer
G8429
Whist Tone Control G8430
Without Switch
Your Cost.... $1^{\text {With Switch }} 80^{c}$

## No. 2890 Series Composition

## Element Type

(Bakelite Case and Cover-Shaft Not Insulated

G8313

Entire shell and back cover are of genuine bakelite which prevents capacitance and inductance. Available with most critical resistance gradients and will carry a maximum amount of current. Is of the time-tried and proven rocker arm-roller contact assembly, utilizing our latest improved resistance element.

This is the Frost Control with
These Frost controls have interchangeable shafts and the standard resistance can be used in sets similar to Stromberg-Carlson and Zenith, which were designed with a special shaft that can be taken from the old control and be replaced in the new. We continue to guarantee Frost resistance curves and housings guarantee Frost resistance curves and housings
to be within commercial standards of electrical and mechanical accuracy.

| Without Switch |  | With Switch |
| :---: | :---: | :---: |
| Stock No. | Ohms | Stock No. |
| G8379 | 5000 | G8389 |
| G8380 | 10000 | G8390 |
| G8381 | 15000 | G8391 |
| G8382 | 25000 | G8392 |
| G8383 | 50000 | G8393 |
| G8384 | 75000 | G8394 |
| G8385 | 100000 | G3395 |
| G8386 | 250000 | G8396 |
| G8387 | 500000 | G8397 |
| Without Switch | c | witch |

 ductance. Available with most critical

## Interchangeable Shaft <br> - Interchas

 Without SwitchStock No.

G8306 100000 R. F. Plate Voltage G8314 G8297 250000 Audio Transformer G8294
G8307 500000 Audio Transformer
Without Switch
Your Cost.... $5^{\text {c }}$ With Switch $-65^{c}$

## CLAROSTAT Ad-A-Switch Wire Wound Volume Controls

## and Switch Coverplates

Listed below a series of Clarostat Wire Wound Controls designed to fill the jobber's, dealer's and serviceman's demand for reliable wire wound single controls which can be used either with or without switches as required. The plain dust-guard coverplate supplied with these controls can be pried off and a switch type dust-guard coverplate can be shapped in its place to convert the switchless unit into a switch unit. These units are supplied less knob, with insulated shaft and bushing.


Clarostat Replacement Volume Controls


FOR VICTOR MODELS
R-32, RE-45, R-52, RE-75
Dual volume control, $3800-3800$ ohms. Shipping weight 8 ozs. on
any 1 control. $\$ \$ 1$
any 1 control. Your cost. $\$ .30$

Radiola Volume Control Strips

For the serviceman that wishes to repair the old volume control by nstalling a new resistance strip in place of the defective one. For Models 18, 33, and 51.

## ZENITH 50, 60, 70 SERIES

 Dual volume control, used in late models of 50, and 60 Series, all of the 70 Series. Supplied with or without A. C. switch.F7051-Without Switch.

## Your Cost

Each
si. 10
F7052-With A. C. Switch Your Cost Each
$\qquad$ ${ }^{1} 1.60$

## RADIOLA Models 42, 48

 VICTOR Models R-14, R-15 Made for the above receivers. No changes necessary to install this unit.F7053-Your Cost.
${ }^{\text {s } 1.30}$

## G7670 2000 ohms

For Models 44, 46, 47, 64 G7671-3000 ohms. For Models 60 and 62 7672 - 450 ohms
For Model 66
G7673-550 ohms.
For Model 64.
G7674-1250 ohms.
In Dozen Lots...

# Thutest 

## Trutest Vitreous-Enameled Fixed Resistors



The very finest Vitreous Enameled Resistors practically any circult, amplifier or radio reoutstanding mech the outstanding mechanical tages; low coefficient of expansion eliminates strains at junction of resistance wire and lugs. High resistance to oxidization under firing prevents high resistance contacts between resistance wire and Jugs. Vitreous enamel insulation. Capable of withstanding high temperature. Non-porous-does not absorb moisture. Rapid heat dissipation-positive ug contact-long life and permanent resistance value. TRUTEST VITREOUS ENAMELED RESISTORS are equipped with Monel Metal Contact Lugs which do not crystalize or lose their strength under aring. By replacing with TRUTEST RESISTORS, you are assured of ong and satisfactory service. These Resistors are of the highest quality obtainable and cost no more than a cheaper grade. They are conservais individually marked.


| Stock |  | Milli- |  | Your | Stock |  | Milli- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | amps. | Volts | Cost | No. | Ohms | amps. | Volts | Cost |
| E4955 | 10 | 2230 | 22 |  | E4972 | 7000 | 84 | 590 | \$0.40 |
| E4956 | 20 | 1581 | 36 |  | E4973 | 7500 | 81 | 610 |  |
| $E 4957$ | 50 | 1000 | 50 |  | E4974 | 8000 | 79 | 630 |  |
| E4958 | 100 | 707 | 70 |  | E4975 | 9000 | 74 | 670 | \$0.48 |
| $E 4959$ | 250 | 447 | 111 | \$0.33 | E4976 | 10000 | 70 | 700 |  |
| $E 4960$ | 500 | 316 | 157 |  | $E 4977$ | 12000 | 65 | 780 |  |
| E4961 | 700 | 267 | 185 |  | E4978 | 12500 | 63 | 790 |  |
| $E 4962$ | 750 | 258 | 192 |  | E4979 | 15000 | 57 | 850 |  |
| $E 4963$ | 1000 | 223 | 200 |  | E4980 | 17500 | 53 | 940 | \$0.50 |
| E4964 | 1500 | 182 | 275 |  | E4981 | 20000 | 50 | 1000 |  |
| 54965 | 2000 | 158 | 315 |  | E4982 | 25000 | 44 | 1100 |  |
| E4966 | 2250 | 149 | 330 |  | E4983 | 30000 | 41 | 1200 | \$0.55 |
| E4967 | 2500 | 141 | 350 |  | E4984 | 40000 | 35 | 1400 | . 55 |
| E4968 | 3000 | 129 | 375 | 50.40 | E4985 | 50000 | 31 | 1550 | . 60 |
| 54969 | 4000 | 111 | 450 |  | E4986 | 60000 | 29 | 1750 | . 60 |
| E4970 | 5000 | 100 | 600 |  | E4987 | 75000 | 26 | 1950 | . 65 |
| $E 4971$ | 6000 | 91 | 640 |  | E4988 | 100000 | 22 | 2200 | 2. 65 |

Trutest-Semi-Variable Resistors-Vitreous Enameled Replacement Voltage Dividers for all Circuits


Trutest-Semi-Variable Resistors are the most practical replacement voltage dividers ever made. They are protected from mechanical and electrical injury through the use of Vitreous Enamel over four-fifths of the surface. Easily carried in tool kit without fear of breakage if ordinary care is taken. They permit installation in practically any circuit or receiver as the adjustable without be set to the proper place ings. Just set the lugs to the readings. Just set the lugs to the desired points and you immediately have a
made-to-order voltage divider. The adjustable lugs have small contact buttons so that several taps may be
used without "shorting out" much resistance. Trutest Resistors are ound over an Isolantite porcelain tube which supports the wire and esists the pressure of the contact button, thus freeing the winding rom any strain. The wire is held frmly in place by the Vitreous Enamel which not only insulates each turn but also provides a ready path for the dissipation of the generated heat. Vitreous Enamel is one of the best conductors of heat and permits using the units to the ful imit of their ratings. Mounting brackets furnished with each unit. Each unit is equipped with one sliding contact.

25 Watts ( $2^{\prime \prime}$ Long $x 5 / 8^{\prime \prime}$ o. d.) Stock Resist. Max. List Your
No. Ohms CurrentPrice Cost

50 Watts (4"Long $\times 5 / 8{ }^{\prime \prime}$ o. d.)

| Stock | in Current List |  |  | Your Cost |
| :---: | :---: | :---: | :---: | :---: |
| No. | Ohms | max | Price |  |
| $\times 20770$ | 100 | 700 | \$1.30 |  |
| $\times 20771$ | 200 | 500 | 1.30 |  |
| $\times 20772$ | 300 | 406 | 1.30 |  |
| $\times 20773$ | 400 | 353 | 1.30 |  |
| $\times 20774$ | 500 | 316 | 1.30 |  |
| $\times 20775$ | 800 | 252 | 1.30 |  |
| $\times 20776$ | 1000 | 224 | 1.30 | Each |
| $\times 20777$ | 1500 | 182 | 1.30 | \$0.53 |
| $\times 20778$ | 2000 | 158 | 1.30 |  |
| $\times 20779$ | 2500 | 141 | 1.30 |  |
| $\times 20780$ | 3000 | 129 | 1.30 |  |
| $\times 20781$ | 4000 | 112 | 1.30 |  |
| $\times 20782$ | 5000 | 100 | 1.80 |  |
| $\times 20783$ | 6000 | 91 | 1.45 | \$0.58 |
| $\times 20784$ | 7000 | 84 | 1.45 | \$0.58 |
| $\times 20785$ | 8000 | 79 | 1.45 |  |
| $\times 20786$ | 9000 | 74 | 1.60 |  |
| $\times 20787$ | 10000 | 71 | 1.60 | \$0.61 |
| $\times 20788$ | 12000 | 65 | 1.60 |  |
| $\times 20789$ | 15000 | 58 | 1.75 | 4 |
| $\times 20790$ | 20000 | 50 | 1.80 | 74 |
| $\times 20791$ | 25000 | 45 | 1.80 | 74 |
| $\times 20792$ | 30000 | 41 | 1.85 | 90 |
| $\times 20793$ | 40000 | 35 | 1.90 | 95 |
| $\times 20794$ | 50000 | 82 | 1.95 |  |

## 6" Long $x / 88^{\prime \prime}$ O. D. -75 Watts

Stock
No.
No.
N20800
120800
$\times 20301$
$\times 20802$ $\begin{array}{r}\times 20801 \\ \times 20802 \\ \times 20803 \\ \hline 20804\end{array}$ $\begin{array}{r}\times 20803 \\ \times 20804 \\ \times 20805 \\ \hline\end{array}$ 20805
$\times 20806$
$\times 20807$ $\times 20808$
$\times 20809$ $\times 20810$
$\times 20811$ $\times 20812$
$\times 20813$ $\times 20813$
$\times 220814$
$\times 20815$
$\times 20816$

Resist. Max.
in Current List Your
Ohms in M.A. Price Cost

| Stock No. | Resist. Max in Current |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\times 20817$ | 15000 | 71 | 2.30 | 0.7 |
| $\times 20818$ | 20000 | 61 | 2.30 | . 84 |
| $\times 20819$ | 25000 | 55 | 2.45 | 84 |
| $\times 20820$ | 30000 | 50 | 2.50 | 88 |
| $\times 20821$ | 40000 | 43 | 2.55 | 88 |
| $\times 20822$ | 50000 | 39 | 2.60 |  |

## Extra Sliders

As the above semi-variable resistors are supplisd only with one slider, it will be necessary to use the same number of sliders or taps as on the divider or resistance being replaced.
X20825-Your Cost Each

## 

| Name and Model | Resistance | Stock No. | Your Cost | Name and Model | Resistance | Stock No. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACME |  |  |  | BOSCH-(Continued) |  |  |  |
| AC-7 | 2500-1200-200 | $\times 20400$ | \$0.67 | 62, 63AC............. | 1400-2600-250 | $\times 20437$ | \$0.70 |
| AC-7. | 200-290 | $\times 20401$ | . 45 | 62, 63DC | 20000-5000-900-150 | $\times 20438$ | . 95 |
| ALL AM. MOHAWK |  |  |  | BRANDES (Kolster) |  |  |  |
| A, B, C, D, E, F, G, H | 2000-2000-1000-300-900 | $\times 20402$ | . 90 | B-10.............. | 5600-0-1800-1 40-1000 | $\times 20439$ | . 90 |
| C-6............. | 3000-2000-2500-900 | $\times 20403$ | . 90 | B-11 | 1800-0-450-45-2500 | $\times 20440$ | . 90 |
| Lyric K. | $.908-150-650-40-250$ $2000-1700$ | $\times 20404$ | . 90 | B-15, B-16 | 2500-45-410 | $\times 20441$ | .85 |
| AMRAD |  |  |  | BREMER-TULLY |  |  |  |
| AC-7.. | .2175-1555-350 | $\times 20405$ | . 75 | 6-50, 6-41 | $\begin{aligned} & 3000-560-6500-5000- \\ & 1660 \end{aligned}$ | $\times 20442$ | . 74 |
| APEX |  |  |  | 8-20, 8-21. | 4900-5500-3000 | $\times 20443$ | .70 |
| $8$ | $550$ | $\times 20406$ | . 98 | BROWNING-DRAKE |  |  |  |
| 10. | 500-1000-1800-600-425 | $\times 20407$ | .95 |  | 2600-3900-8450-4500- |  |  |
| 20. | .55-1250-3750 | $\times 20408$ | . 80 |  | 850 - $8000-2500$ | $\times 20642$ | 1.20 |
| 26. | 1000-2640 | $\times 20409$ | . 65 | 54. | 800-2220-1000-2500 | $\times 20643$ | 1.20 |
| 26-P | .640-360-2640 | $\times 20410$ | . 80 | BRUNSWICK |  |  |  |
| 27. | 4700-8400-10700 | $\times 20411$ | .73 | B-17, PR-17-8 | 1690-205-2140-3750-410 | $\times 20444$ | .65 |
| 28. | .7000-700-2200-70 | $\times 20412$ | . 80 | S-KR, $3-K$, $2-\mathrm{KR}$, etc | 1600-1900-440 | $\times 20445$ | . 35 |
| 48. | .700-2200-700 | $\times 20413$ | . 80 | 3NC8, 5NC8........... | 400-350-350-190 (Bias) | $\times 20446$ | . 60 |
| ARGUS |  |  |  | 3NC8, 6NC8. | 2250 (Plate Resistor) | +20447 | . 50 |
| B-125. | . $300-435-735$ | $\times 20414$ | . 80 | 3KR8 (AP-736). | 7230 ohms | $\times 20448$ | . 95 |
| B-195. | . 4000-460-700-65-280 | $\times 20415$ | 1.75 | 3KP8 (AP-736)... | 1870-1228-1500-197- |  |  |
| ARSORPHONE |  |  |  |  | 1970 | $\times 20449$ $\times 20450$ | 1.00 .80 |
| $\mathrm{A}^{\text {R }}$. | $1500-20000-0-1300-275$ $1100-250$ | $\times 20416$ $\times 20417$ | .90 .50 | 3-NW-8 $3-N W-8$ | $\begin{aligned} & 310-3860-310 \text { (Bias) } \\ & 2200-300-4000-1280 \end{aligned}$ | +20451 | .80 1.00 |
| R-11 | $.1100-250$ | $\begin{array}{r} \times 20417 \\ \times 20418 \end{array}$ | . 50 | $3-\mathrm{NW}-8$. | 1500-1000-250-130-160 | $\times 20452$ | 1.00 |
| R-11.... | 2000 |  | . 70 | $3,8,10,11,13$ | 4920-900-700-90-40-120 | X20453 | 1.00 |
| AUDIOLA |  |  |  | PR-0......... | 4250-4250-3200 | $\times 20454$ | . 95 |
| 81 Series.... | .2300-2100-850 | 120419 $\times 20420$ | . 75 |  |  |  |  |
| Super Pentode. | .10000-10000-4000 | $\times 20420$ | . 73 | $28$ | 8500-7000 | $\times 20458$ | . 70 |
| BALKEIT |  |  |  | 28. | 2200-4000-1000 | $\times 20459$ | .70 |
| AB6, 180-A, 180-B. | $6000-3000-1800$ $3600-770$ | $\times 20421$ $\times 20422$ | . 70 | 28. | 50000-25000-25000 | $\times 20460$ | . 80 |
| C | . $4600-770$ | +20422 | . 55 | 32 AC | 100-40 | $\times 20461$ | . 50 |
| B-7, B-9 | .7700-12000-4800 | $\times 20424$ | 90 | 32 AC | 210-210 | +20462 | . 50 |
| A-7.... | 10000-3200 | $\times 20425$ | . 85 | 32, 33, 34 | 2400-1800 | $\times 20465$ | 1.00 .60 |
| AB6, 135, B-135. | .6000-3500 | $\times 20426$ | . 70 | 32 DC. . | $24.9-1800$ <br> 1.9 hms | $\times 20466$ | . 90 |
| $805 C H$ |  |  |  | 82 DC | 1.43 ohms | -20467 | . 24 |
| 28. | . 5000 | $\times 20427$ | . 55 | 32 DC | 5.7 ohms | -20468 | . 35 |
| 29-825 | 10000-10000 | $\times 20428$ | . 85 |  | 100000-65000 | $\times 20469$ | . 50 |
| 29-825 | 2000 | X20429 | . 30 | 36 DC | 1.83-17.6-68 | $\times 20463$ | . 95 |
| 28.... | .1200 | +20430 | . 25 |  |  |  |  |
| 48. | .950-1450-2000 | P20431 $\times 20432$ | . 65 | Screen-Grid 8 | 7500-10000 | $\times 20470$ | .70 |
| 49 | 1650-800-1950 | $\times 20432$ | . 65 | Screen-Grid 8...... |  |  | .70 |
| 58. | .2050-1950-180-950 | $\times 20433$ | .70 | COLUMEIA (Kolster) |  |  |  |
| 54 DC | . 5 ohms | $\times 20434$ | . 28 | C-1, C-3. | 3000-3000-220-60-840 | $\times 20471$ | .75 |
| 54 DC | 22 ohms | $\times 20435$ | . 28 | C-2, C-4. | 900-120-90 | $\times 20472$ | . 60 |
| 60. | 1300-2380-160-950 | $\times 20436$ | .70 | C-5, 961 (205). | 7200-60-90-700 | $\times 20473$ | .70 |

## Trutest Universal Vitreous <br> Enamel Voltage Dividers <br> Can be used in $\mathbf{9 0 \%}$ of Receivers

This voltage divider is truly a Universal unit. With a stock of these on hand the service man is in a position to repair ninety percent of the receivers giving voltage divider trouble. They were designed to meet the requirements of practically all receiver and power pack circuits. One of the principal features of this divider is that no meters or testing equipment are necessary to install these units, as the resistance scale is divided into four equal sections on the resistor, and by means of the sliding contacts, you are able to adjust to the proper ohmage quickly and accurately. One or two of the undesired sections can be shunted out if not desired. They can be used in any electric set, B ellminator, a mplifier, etc. The ease with which they can be adapted to any purpose requiring this type of resistor, make them an ideal unit for laboratory and experimental use as bias resistors, etc. These resistors are made of the finest quality resistance wire, wound on an Isolantite tube and coated with vitreous enamel which is fired on and thoroughly protects and covers the wire against accidental injury, moisture, and oxidation. They can be used under heavy loads without injury to wire windings as the co-efficients of expansion of the entire product are practically the same. As a precaution the resistance wire and the terminals are coated with cement, protecting joints from enamel, when the unit is frea. The tendency of a formation of oxide on the joints of the divider which would
reduce its efficiency is guarded a gainst. To be sure of efficient operation reduce its efficiency is guarded against. To be sure of efficient operation these should be selected covering the required value under operating conditions.
Equipped with 4 Variable
50 watts- $3 / 4$ " $\times 4$ " long.

| $\times 20728$ | 13000 ohms | 50.85 | $\times 20732$ | 25000 ohms | $\$ 0.95$ |
| :--- | :--- | ---: | :--- | :--- | ---: |
| $\times 20729$ | 15000 ohms | .85 | $\times 20733$ | 36000 ohms | 100 |
| $\times 20730$ | 18000 ohms | $\mathbf{8 5}$ | $\times 20734$ | 41000 ohms | 1.00 |
| $\times 20731$ | 25000 ohms | .85 | $\times 20735$ | 45000 ohms | $\mathbf{2 . 0 0}$ |

## Steimite Voltage Dividers



Replacement dividers and resistor for Steinite receivers. 11900 ohms, tapped at 5000-5000 and 1900 $\mathbf{x h m s . ~}^{50}$ watt, ${ }^{50}$. long. $45^{c}$ Per Dozen. $\qquad$ $\$ 5.10$
450 ohm Resistor, 75 watt rating, $6^{n}$ long, $3 / 4$ diam.
$\times 20646-Y$ YurCost Each $35^{c}$

Per Dozen.
$\$ 3.95$



For Peerless Courier and Kylectron Sets. Total resistance 225000 ohms; tapped at 100000,25000 ; 50000 ; and 50000. $3^{3}{ }_{4}$ in. long. $\times 20558$

Genuine Philco For Model No. 65


Total resistance 2700 ohms; tapped at 2000 and 700 . Can be used separately such as the 700 ohm as a C Bias Resistor, and the 2000 ohm as a dropping resistor in the field of a speaker.
$\times 20554$
Your Cost Each.

General Motors Voltage Dividers Model M. A. LIttle General


Original replacement voltage dividers for above receiver. 46000 ohms, tapped at 25000-15000 and 6000.
$\times 20525$
Your Cost Each.
$55^{\circ}$
2265000 ohms, tapped at 2 meg.250000 and 15000 ohms. $\times 20526$
Your Cost Each.
$55^{\circ}$

## VOLTAGE DIVIDERS [Continued]

| Name and Model | Resistance |
| :---: | :---: |
|  |  |
|  |  |
| 930-300 | 2000-140-500 |
| C-500. | 2000-135-500 |
| 902, 930, 980 | 2100-120-430 |
|  | 1650-410 |
|  | 6000-2200-135-700 |
| 940. | 2500-45-410 |
|  | 9000-3200-140-70-700 |
| 950. | 30000-20000 |
| 980. | 6000-55-100 |
| CROSLEY |  |
| 704 AC Jewelbox | .540-55-55 |
| 704 AC...... | .3475-1525 |
| 77, 77-1, 120 | 1750-2000-225-320 |
| DAYFAN |  |
| $6 \mathrm{Jr} .5524,5525$. | 2000-3000-1300 |
| 6050 Power Unit. | 1400-3500-5800-7000- |
| 5080 Power Unit. | 180-650 $1100-100-2000-3300-950$ |
| EARL |  |
| 81, 31S, 32, 32S, 41, 33, | . 4000-0-750 |
| EDISON |  |
| R-1, R-2, C-2 . . . . . . . . . . . . . 12500 |  |
| R-4, R-6, C-4 | 10000 |
| R-1, R-2, C-2. | .750-750 |
| All Models | 8000 |
| FADA |  |
| 42, 44, 41, 46, 47. | 800-300-100 |
| FEDERAL |  |
| D, E, F, G, Units . . . . . . . . . . . . 135-2000-300-350$\qquad$$\begin{aligned} & 135-2000-300-350 \\ & 3500-13000 \end{aligned}$ |  |
|  |  |
| FREED |  |
| 78, 78S, 79, 79S, 90, 90S, | .4000-0-750 |
| FREED-EISEMANN |  |
| NR-11................... . . 7.5 ohms |  |
|  |  |
| NR-57, NR-60. . . . . . . . . . . . . . . 1750 ohms |  |
|  |  |
| NR-57, NR-60... . . . . . . . . . . . $350-2000$ |  |
| NR-70 . . . . . . . . . . . . . . . . . . 1150-2000-350 |  |
| NR-80................... 20000 -350 |  |
| NR-485 | 1900-2000-350 |
| FRESHMAN |  |
| $\text { N-11, N-12. . . . . . . . . . . . . . . . . . } 15000-6600-3300-4$ |  |
| "G". . . . . . . . . . . . . . . . . . . . . ${ }^{15100-3000-4300-12 ~}$ |  |
|  |  |
| M60-S. . . . . . . . . . . . . . . . . . . . . 10.9000 .12500 |  |
|  |  |
| GENERAL Motors ${ }^{\text {M }}$. . . . . 20,300 |  |
|  |  |
| "A." Chassis, 120, 130, 140, 150, ${ }_{160}$ |  |
|  |  |
|  |  |
|  | 800-59-1863-2000-465 |
|  |  |


| Stock No. | Your Cost | Name and Model | Resistance | Stock No. | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | GENERAL MOTORS (Continued) |  |  |  |
|  |  | M. A. Little General 252 | .150-18000-14550 | $\times 20527$ | \$0.55 |
| $\times 20474$ | \$0.95 | 251 (S2A \& S2B). | 4800-7600-6900 | $\times 20528$ | . 95 |
| $\times 20475$ | . 40 | GRAYBAR |  |  |  |
| $\times 20476$ | .45 | 17 | 1690-205-2140-3750-410 | $\times 20444$ | . 60 |
| P20477 $\times 20478$ | . 70 | 500, 550 | 2800-900-3600-110 |  |  |
| $\times 20478$ $\times 20479$ | . 70 |  |  |  |  |
| $\times 20480$ | 1.00 |  |  |  |  |
| $\times 20481$ | . 70 | 311 | 1600-1900-440 | X20445 | . 28 |
| $\times 20482$ | . 70 |  | 400-350-350-190 (Bias) | +20446 | . 65 |
| $\times 20483$ | . 70 | 340 | 2250 (Plate Resistor) | +20447 | . 40 |
|  |  | 600 | 375-90 (Bias) | $\times 20513$ | . 50 |
| $\times 20484$ | . 70 | 600 | 4800 (Plate Resistor) | $\times 20514$ | . 40 |
| $\times 20485$ | . 72 | 678 | 3200-830-120-715 | $\times 20639$ | . 60 |
| $\times 20486$ | . 90 | GREBE |  |  |  |
| $\times 20488$ |  | SK-4. | 677-2200-62 | $\times 20515$ | . 80 |
|  | . 70 | SK | 7000-10000-1500 | $\times 20516$ | 1.05 |
|  |  | AC-6 | 750-2800-5900 | $\times 20517$ | . 70 |
| $\times 20489$ | 1.15 | AC-6 | 6300-95-695 | $\times 20518$ | . 65 |
| $\times 20490$ | 1.10 | AC-7 | 20000-6000 | $\times 20519$ | . 80 |
| $\times 20$ | . 50 | GULBRANSEN |  |  |  |
|  | . 29 | HAMMERLUND |  |  |  |
| $\mathbf{X} 20493$ | . 45 | Hi-Q 30 | 800-2000-1400-3000-2000 | $\times 2052$ | . 75 |
| $\times 20494$ | . 65 | Hi-Q 31 | $.2400-2800-1850-3750-$ | $\times 20522$ | 1.05 |
| $\times 20495$ | . 29 | HOWARD |  |  |  |
| $\times 20497$ | . 65 | 135-A | 1600-12000 | $\times 20523$ | . 90 |
|  |  | KELLOGG |  |  |  |
| $\begin{array}{r} \times 20499 \\ \times 20500 \end{array}$ |  | $523,528 \text {. }$ | 1000-3000-1500-1000- | $\times 20537$ | 80 |
|  | $\begin{array}{r} .95 \\ .85 \end{array}$ | KOLSTER |  |  |  |
|  |  | 6J, 6K, 6R | .3000-3000-220-900 | $\times 20538$ | . 70 |
| $\times 20491$ | . 55 |  |  | $\times 20539$ | . 65 |
|  |  |  |  | $\times 20540$ | . 50 |
| $\times 20501$ | . 50 | K-21, K-23. . . . . . . . . . . . . . . . . . 90-125-900 |  |  | . 55 |
| $\times 20502$ | . 50 | K-24...... . . . . . . . . . . . . . . . . $34400-3800-55-80-140-$ |  |  |  |
| $\times 20503$ | . 50 |  | 360 | $\times 20541$ | . 70 |
| $\times 20503$ | . 50 | K-38 | .3600-55-75-700 | $\times 20542$ | . 70 |
| $\times 20504$ | . 80 | K-42. | .840-140-2600 | $\times 20543$ | . 70 |
| $\times 20505$ | . 85 | K-43 | 1600-1000-380 | $\times 20544$ | . 90 |
| $\times 20506$ | . 65 | K-44, K- | 1450-650-200-350 | $\times 20545$ | . 80 |
| $\times 20507$ | . 70 | K-48. | .1500-2000-100-2000 | $\times 20546$ | . 70 |
|  |  | K-50. | .1525-2500-280-400 | $\times 20547$ | .90 |
|  |  | K-60, K-6 | 4000-1500-1500-200 | $\times 20548$ | . 90 |
| $\times 20508$ | . 60 | K-70, K-72 | 3000-3000-2000-200 | $\times 20549$ | . 90 |
|  |  | K-90, 92-, 80, 82 | 6000-7000-3000-250 | $\times 20533$ | . 90 |
| $\times 20509$ | . 65 | MAJESTIC |  |  |  |
| $\times 20534$ | . 75 | 20 | . 4000-7000-750-150 | $\times 20550$ | . 90 |
| $\times 20535$ | . 75 |  | .2360-3800-3460-0-101- |  |  |
| $\times 20536$ | . 75 |  |  | $\times 20551$ | 1.00 |
|  |  |  |  | $\times 20552$ | 1.00 |
|  |  | PHILCO |  |  |  |
| $\times 20510$ | 1.15 | 20, 20-A | .1400-187-75-0-2470-975 | $\times 20553$ | . 60 |
| $\times 20511$ | 1.10 |  | .2000-700 | $\times 20554$ | . 65 |
| $\times 20512$ | 1.40 | 76, 77, 77-A | .800-250 | $\times 20555$ | . 60 |



## RCA Voltage Divider

 For Model 32 A.C.The original RCA Replacement Voltage Divider for che above and 1700 ohins RCA No, 2023 $\times 20708$ -
Your Cost. $\qquad$ $.95^{\circ}$

## For Model 30-A

Similar in appearance to above. Original RCA Part No. 2021. 6700 ohms, tapped at $3000,2000,300$, 500 and 900 ohms.
$\times 20559$ - Your Cost.
$95^{\circ}$

## Replacement <br> Voltage Dividers <br> For Victor Models <br> R-32, RE-45, R-52, RE-75 <br> 

The genuine Victor Replacement Voltage Divider. Total resistance, 4325 ohms, tapped at 2000 , 1350, 200 , and 775 ohms.
$\times 20632-Y o u r C o s$
$\times 20632$ - YourCost Each $65^{\circ}$

R. C. A. Voltage Divider Strip Eor Models 18 © 5


Wire wound Resistor Strip, tapped at 490,1900 and 1600 ohins. RCA Part 2242 . Overall size 45A1824. ins. 2242 . Overall size 43 $\times 2045$ ins.

$$
\begin{aligned}
& \text { Plate Resistor for } \\
& \text { RCA } 60 \text { and } 62
\end{aligned}
$$

Part No. 5816. 2250 ohms. Resistance Strip similar in appearance to above.
X20447-Your Cost.
$40^{\circ}$
Bias Divider-Models 60 and 62 Part No. 5810. Tapped at 400 , 350, 850 and 190. Resistance Strip as above.
$\times 20446$ -

## R. F. Bias Resistor For Model 66

Part No. 6026. Resistance Strip 465 ohms, tapped at 90 ohms. $\times 20513-$
$40^{c}$
A. K. C. T. Resistor


Used in Atwater Kent sets, 20 ohm center tap resiatance, tapped at electrical centers. $6^{\text {c }}$ F6551-Your Cost Each.

## VOLTAGE DIVIDERS［Continued］

| Name and Model | Resistance | Stock No． | Your Cost | Name and Model Rexistance | Stock No． | Yous Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PHILCO－（Continued） |  |  |  | SAMSON＂PAM＂－（Continued） |  |  |
| 76，77，77－A． | ．2000－1500－1400 | $\times 20556$ | \＄0．65 | Pam Model 210. ．．．．．．．．．．．1560－775－11000 | $\times 20588$ | \＄0．80 |
| 87．．．．．．．．．．．．．． | ．3785－157－0－640 | $\times 20557$ | ． 75 | PABC 2．．．．．．．．．．．．．．．740－90－90 | $\begin{array}{r} \times 20589 \\ \hline \end{array}$ | ． 60 |
| PEERLESS |  |  |  | PABC $2 \times . . . . . . . . . . . . . . .1500-2000-500$ | $\times 20590$ | ． 75 |
| P2，．．．．． | ．100000－50000－50000－ |  |  | PABC $3 . . . . . . . . . . . . . . . . ~ 460-60-50 ~$ | $\times 20591$ | ． 60 |
|  | 25000 | $\times 20558$ | .75 | PABC $4 . . . . . . . . . . . . . . . . . .1750-1100$ | $\times 20592$ | ． 75 |
| RCA RADIOLA |  |  |  |  | $\begin{array}{r} \times 20593 \\ \times 20594 \end{array}$ | ． 80 |
| 17． 50 | ．1690－205－2140－3750－410 | $\times 20444$ | ． 60 | DeLuxe．．．．．．．．．．．．．．．．．．．．．．45－15－310－30 |  |  |
| 18，33， | ．1600－1900－440 | $\times 20445$ | ． 50 | SONORA |  |  |
|  | ． 4920 （Resistor No．4） | $\times 20705$ | ． 95 | B－30，B－31 ．．．．．．．．．．．．．．．800－1000－1200－4000 | $\times 20595$ | ． 75 |
| $80 .$ | ．620－3380（Resistors Nos． 2 and 3） | $\times 20706$ | ． 95 |  | $\times 20596$ | 1.25 |
| 30 | ．2600－1400（Resistor |  |  | 885 ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 5000 －150－700 | $\times 20597$ | ． 75 |
|  | No．1） | $\times 20707$ | ． 95 | 2900－5001 | $\times 20598$ | ． 75 |
| 30－A | 3000－2000－300－500－900 | $\times 20559$ | ． 95 | C－885 ．．．．．．．．．．．．．．．．．．．．．2500－3000－3000－675 | $\times 20599$ | ． 95 |
| 80－A | .300 ohms |  | .25 | SPLITDORF |  |  |
| 82. | .4920 （Resistors Nos． 2 |  |  | ＂Abbey＂，．．．．．．．．．．．．．．．．． 12500 | $\times 20492$ | ． 29 |
|  | and 3） | $\times 20705$ $\times 20708$ | .95 .95 | ＂Abbey＂．．．．．．．．．．．．．．．．．．． 10000 | $\times 20493$ | ． 40 |
| $83 . \mathrm{D} \cdot \mathrm{C}$ | ．438－286－1590－1700 | ＋20708 | ． 95 | ＂Abbey＂．．．．．．．．．．．．．．．．． 8000 | $\times 20495$ | ． 29 |
| 83 D．C | ．166－118 | $\times 20709$ | ． 95 |  |  |  |
| 33 D．C． | ．16－16－16 | $\times 20710$ | ． 75 | 22． | $\times 20600$ | ． 85 |
| 41 （Receptor）． | ．12300－8000－5000 | $\times 20560$ | ． 95 | 26．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．88000－8000 ${ }^{\text {800 }}$ | $\times 20601$ | ． 75 |
| 41 Sterling）． | ．17400－8600 | $\times 20561$ | ． 85 | 40．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． $3000-11740-4270-1190$ | $\times 20602$ | ． 90 |
| 41 （Sterling）． | ．4200－380－1420 | $\times 20562$ | ． 95 | 50．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．8100－11750－5200－827 | $\begin{array}{r} \times 20602 \\ \times 20603 \end{array}$ | .90 |
| 44. | ．2800－900－3600－1100 | $\times 20563$ | ． 95 | $70,80,95$ $.10000-10000-2440$ | $\times 20604$ | ． 95 |
| 44. | ．500－0－1460－540－0－80 | $\times 20564$ | .75 | 991．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 1000 －1000－250－0－250 | $\times 20605$ | .70 |
| 46． 47 | ．2800－900－3600－1100 | $\times 20563$ | ． 95 | 991．．．．．．．．．．．．．．．．．．．．．．．．．1000－1000－250－0－250 |  | ． 70 |
| 46， 47 | ．1460－540－0－80 | $\times 20565$ | ． 95 | STROMBERG |  |  |
| 44， 46 D．C | ．195－165－110 | $\times 20712$ | ． 95 | 10，11．．．．．．．．．．．．．．．．．．．．．．4000－100－780 | $\times 20607$ | ． 70 |
| 44， 46 D．C | ．2250－1925－1190 | $\times 20713$ | ． 95 | 10，11．．．．．．．．．．．．．．．．．．．．4760－3200－1900 | $\times 20608$ | ． 80 |
| 44， 46 D．C | ．16－16－16 | ＋20710 | ． 75 | 12，14．．．．．．．．．．．．．．．．．．．．4000－4000－3025 | $\times 20609$ | ． 90 |
| 42 and 48 | ． $3200-830-120-715$ | $\times 20639$ | ． 60 | 12，14．．．．．．．．．．．．．．．．．．．．．5000－100－1210－260 | $\times 20610$ | ． 80 |
| 60,62 | ．400－350－350－190（Bias） | $\times 20446$ | .65 | 403－B ．．．．．．．．．．．．．．．．．．．27－6 | $\times 20611$ | ． 70 |
| 60， 62. | .2250 （Plate Resistor） | $\times 20447$ | ． 40 | 403－B ．．．．．．．．．．．．．．．．．．3000－2500 | $\times 20612$ | .70 |
| 64. | ．1280－4000－300－2200 | $\times 20566$ | 1.10 | 403－B．．．．．．．．．．．．．．．．．．．．3000－70－700 | $\times 20613$ | ． 70 |
| 64. | ．1500－1000－250－180－160 | $\times 20567$ | 1.00 | 635，636．．．．．．．．．．．．．．．．．．．2500－3000－3000－770 | $\times 20614$ | ． 90 |
| $64,67$. | $.310-3850-310$（Bias） | $\times 20568$ | ． 80 | 638．．．．．．．．．．．．．．．．．．．．．．2500－6000－500 | $\times 20615$ | ． 90 |
|  | ．375－90（Bias） | $\times 20513$ | ． 50 | 846，848．．．．．．．．．．．．．．．．．．．．6000－3200 | ＋20616 | ． 70 |
| 66 | ． 4800 ohms（Plate） | $\times 20514$ | .70 | 846，848．．．．．．．．．．．．．．．．．．4350－1700－330 | $\times 20617$ | ． 70 |
| 67. | ．2400－960－240－115－215－ |  |  | 846，848．．．．．．．．．．．．．．．． 725 ohme | $\times 20618$ | ． 40 |
|  | 100 | $\times 20569$ | ． 95 | 403，403－A ．．．．．．．．．．．．．．．2500－3000－3000－70－770 | $\times 20647$ | ． 90 |
| 67 | ．1435－3400－300－2200 | $\times 20570$ | 1.10 | 641，642，652，654 ．．．．．．．．．1450－4000－3000－1300 | $\times 20619$ | ． 85 |
| 104 Loudspeaker | ．4920（Resistor No．4） | $\times 20705$ | ． 95 | 641，642，652，654 ．．．．．．．．．1780－3200 | $\times 20620$ | ． 75 |
| 104 Loudspeaker． | ．620－3380（Resistors |  |  | $641,642,652,654 \ldots . . . . . . .170$ | $\times 20621$ | ． 25 |
| ， | Nos． 2 and 3） | $\times 20706$ | .95 | 641，642，652，654 ．．．．．．．．．7800－4500－3000－4000 | $\times 20622$ | ． 90 |
| 104 Loudspeaker | ．2600－1400（Resistor |  |  | Early 10，11．．．．．．．．．．．．．．．4760－3200－5900－100－780 | $\times 20623$ | ． 90 |
|  | No．1） | $\times 20707$ | ． 95 | Early 10，11．．．．．．．．．．．．．．4760－3200 | $\times 20624$ | ． 90 |
| 105 Loudspeaker | ．1325－65－140－1446 |  |  |  | $\times 20625$ | ． 70 |
|  | （No．1） | $\times 20571$ | 1.25 | Early 10，11．．．．．．．．．．．．．．．1100－2000 | $\times 20626$ | ． 70 |
| 105 Loudspeaker | ．1050－1300－1325（No．2） | $\times 20572$ | 1.25 | Early 10，11．．．．．．．．．．．．．．3000－3000 | $\times 20627$ | .70 |
| 105 Loudspeaker．． | .4000 ohms（Nos． 3 |  |  | TEMPLE |  |  |
|  | and 4） | $\times 20573$ | 110 | D．C．．．．．．．．．．．．．．．．．．．．11－12 | $\times 20628$ | ． 60 |
| Duo－Rectron Amplifier | ．1050－6000－2950－3000 | $\times 20713$ | 1.50 | 7－60， $7-80$ ．．．．．．．．．．．．．．．．．．．．．．． $8000-1600-8000-4000$ | $\times 20629$ | ． 75 |
| Uni－Rectron Amplifier． | ． 4920 （Resistor No．2） | $\times 20705$ | ． 95 | 8－60，80－90 ．．．．．．．．．．．．．．．．．．900－5200－750 | $\times 20630$ | ． 60 |
| Uni－Rectron Amplifier | 650－100－275（Resistor No．1） | $\times 20714$ | .75 | THORDARSON |  |  |
| Uni－Rectron Amplifier． | ．2450（Resistor No．3） | $\times 20715$ | ． 75 | R－171 Power Unit．．．．．．．．．．．2000－3000－3000－3000－ |  |  |
| SILVER－MARSHALL |  |  |  | 2000 | $\times 20631$ | ． 75 |
| 651 | ．3800－4200－730－990 | $\times 20574$ | ． 90 | VICTOR |  |  |
| 651 | ． $6200-1000$ | $\times 20575$ | 1.25 | 7－11，7－25，7－26 ．．．．．．．．．．．．1690－205－2140－3750－410 |  | .75 1.10 |
| 655 | ． 11350 ohms Divider | $\times 20576$ | ． 95 | 9－18，9－64 ．．．．．．．．．．．．．．．．．．． $1280-4000-300-2200-1000-250-130-160$ | ＋20567 | 1.00 |
| 659 | ．10－300 ohms Divider | $\times 20577$ | ． 95 | 9－18，9－54．．．．．．．．．．．．．．．．．．．．．．．． $310-3850-310$（Bias） | ＋$\times 20568$ | 1.00 .80 |
| 660. | ．6000－4000－1500 | $\times 20578$ | ． 80 |  | $\begin{array}{r} \times 20568 \\ \times 20632 \end{array}$ | ． 70 |
| 672，669． | ． $3000-0-1250-1250$ | $\times 20579$ | .70 | R－32，RE－45，R－52，RE－ 17. | ＋20639 | ． 60 |
| SPARTON |  |  |  | 14，16，17．．．．．．．．．．．．．．．．． $3200-830-120-710$ | 入20633 |  |
| AC－7，62， 63. | 2200－70 | $\times 20580$ | ． 50 | VESTINGHOUSE ELECTRIC |  |  |
| 110 | 20000－2000－7000 | $\times 20581$ | ． 90 | WR－4．．．．．．．．．．．．．．．．．．．． $3200-830-120-715$ | $\times 20639$ | ． 60 |
| 110 DeLuxe | 7000 | $\times 20582$ | ． 60 | ZENITH |  |  |
| 110 DeLuxe | 900 | $\times 20583$ | ． 25 | ZE－10，ZE－12，ZE－13，ZE－15， |  |  |
| Sparks Ensemble | 3000 | $\times 20584$ | ． 65 | ZE－16 Power Units．．．．．．．．．6000－7800－8000－2500 | $\times 20635$ | ． 75 |
| SAMSON＂PAM＂ |  |  |  | ZE－18 Power Unit．．．．．．．．．．13000－11000－9500－1800 | $\times 20636$ | ． 90 |
| Pam Model 25 | ．30000－800 | $\times 20585$ | ． 70 | ZE－11 Power Unit．．．．．．．．．． $3200-1200$－1200－1600 | $\times 20637$ | ． 90 |
| Pam Model 25. | ． 60000 | $\times 20586$ | ． 75 | ZE－50，ZE－60．ZE－70 Series |  |  |
| Pam Model 210. | ．1540－19300 | $\times 20587$ | ． 80 | Power Units ．．．．．．．．．．．．．．．．2800－2850－850 | $\times 20628$ | ． 90 |



## CDumannelammang 0

## Trutest Resistances

Wire wound filament resistances． Dependable construction；run true to rating．Resistance values of $1,2,3,4,5,6,7,8,9,10,15,25$ ， $30,40,50$ and 60 ohms．
03997－List 15c
Your Cost Each．
Resiatance values of 100,200 $300,400,500,600,700,800,900$, 1000 and 1500 ohms．

## D3998－List 25c <br> Your Cost Each

Center Tap Resistances Same as a bove，but tapped nt the electrical center．A vailable in 10, $20,30,40,50,60,100$ and 200 ohms．
D3999 List 30c
Your Cost Each
$12{ }^{c}$

YAXLEX Grid Resistors


Wire wound for the grid line． Mount directly to socket．Illus－ trated above．

| Resistance |  |  |  |
| :---: | :---: | :---: | :---: |
| Stock | in | Mounting | Net |
| No． | Ohms | Centers | Price |
| F6315 | 100 | 13 后 in． | \＄． 18 |
| F6316 | 200 | 17\％ | ． 18 |
| F6317 | 300 | 121／4 | ． 18 |
| F6318 | 400 | 1囱 | ． 18 |
| F6319 | 500 | 117\％2 | ． 18 |
| F6320 | 600 | 1\％16 | ． 24 |
| F6321 | 700 | 191.6 | ． 24 |
| F6322 | 800 | 13／4 | ． 24 |
| F6323 | 1000 | 115 | ． 24 |
| F6324 | 1500 | 213／2＊ | ． 24 |
| F6325 | 2000 | $3^{13} 16$ | ． 24 |
| F6326 | 3000 | 4 | ． 24 |

## 

Truvolt Adjustable Resistors
Now, beside the incorporation of a new 10 watt line, many new improvements and still greater advantages are to be gained through the use of this time-tested product. The adjustable clip has been redesigned to aford more efith each B, C, and D type resistor. A new protective insulating sleeve is supplied with each resistor. There is now greater insulation (1000 volt insulation) to heat conducting copper core. Selftapping screws are supplied to it inside diameter of tube.


MOUNTING SELF.TADPINE -SCREW lava tuae

ENAMELED COPDER

## TYPE A- 10 WATTS

 Stock Reaiatance Current Your No, in Ohms| No. | ms | M. |  |
| :---: | :---: | :---: | :---: |
| G7150 | 1 | 3150 |  |
| G7151 | 2 | 2200 |  |
| G7152 | 2.5 | 2000 |  |
| G7153 | 3 | 1800 |  |
| G7154 | 5 | 1400 |  |
| G7155 | 7.5 | 1150 |  |
| G7156 | 10 | 1000 |  |
| G7157 | 15 | 815 |  |
| G7158 | 20 | 700 |  |
| G7159 | 25 | 630 |  |
| C7160 | 30 | 570 |  |
| G7161 | 50 | 450 |  |
| G7162 | 75 | 360 |  |
| G7163 | 100 | 315 |  |
| G7164 | 200 | 220 |  |
| 67165 | 300 | 180 | Each |
| G7166 | 400 | 158 | \$0.30 |
| G7167 | 500 | 141 |  |
| G7168 | 800 | 112 |  |
| G7169 | 1000 | 100 |  |
| G7170 | 1250 | 89 |  |
| G7171 | 1500 | 81 |  |
| G7172 | 2000 | 70 |  |
| G7173 | 2500 | 63 |  |
| G7174 | 3000 | 56. |  |
| G7175 | 4000 | 50 |  |
| G7176 | 5000 | 45 |  |
| G7177 | 7500 | 36 |  |
| G7178 | 10000 | 31 |  |
| G7179 | 15000 | 26 |  |
| G7180 | 20000 | 20 |  |
| 67181 | 25000 | 16 |  |


| TYPE $\underset{2^{\prime \prime}}{8-25}$ Long |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Resist- | Current |  |
| Stock | ance in Ohms | Milli- amperea | Your |
| G7212 | 100 | 500 | 50.49 |
| G7213 | 200 | 363 | . 49 |
| G7214 | 250 | 320 | . 49 |
| G7215 | 300 | 289 | . 49 |
| G7216 | 400 | 250 | . 49 |
| G7217 | 500 | 224 | .49 |
| G7218 | 750 | 182 | . 49 |
| G7219 | 800 | 177 | . 49 |
| G7220 | 850 | 165 | . 49 |
| G7221 | 1000 | 158 | . 49 |
| G7222 | 1250 | 141 | . 49 |
| G7223 | 1500 | 129 | . 49 |
| G7224 | 2000 | 112 | . 49 |
| G7225 | 2250 | 105 | . 49 |
| G7226 | 2500 | 100 | .49 |
| G7227 | 3000 | 91 | . 49 |
| G7228 | 3500 | 84 | . 49 |
| G7229 | 4000 | 79 | . 49 |
| G7230 | 4500 | 75 | .49 |
| G7231 | 5000 | 71 | .49 |
| G7232 | 6000 | 64 | . 49 |
| G7233 | 7000 | 60 | .49 |
| G7234 | 7200 | 59 | . 49 |
| G7235 | 7500 | 58 | . 49 |
| G7236 | 8000 | 56 | . 52 |
| G7237 | 9000 | 53 | . 55 |
| G7238 | 10000 | 50 | . 58 |
| G7239 | 12000 | 45 | . 58 |
| G7240 | 15000 | 41 | . 58 |
| G7241 | 20000 | 35 | . 67 |
| G7242 | 25000 | 32 | . 67 |
| G7243 | 30000 | 29 | . 73 |
| G7244 | 40000 | 25 | . 76 |
| G7245 | 50000 | 22.5 | . 82 |
| Weigbt 1 unit in carton, 1 oz . |  |  |  |
| Weight 12 units in container, 13 ozs. |  |  |  |
|  |  |  |  |

TYPE C-50 WATTS 4" Long

| Stock | Resistance in | Current | Your |
| :---: | :---: | :---: | :---: |
| No. | Ohms | amperes | Cost |
| G7246 | 100 | 700 | \$0.79 |
| G7247 | 200 | 500 | . 79 |
| G7248 | 300 | 406 | . 79 |
| G7249 | 400 | 353 | . 79 |
| G7250 | 500 | 316 | . 79 |
| G7251 | 750 | 259 | . 79 |
| G7252 | 800 | 252 | . 79 |
| G7253 | 1000 | 224 | . 79 |
| G7254 | 1250 | 200 | . 79 |
| G7255 | 1500 | 182 | . 79 |
| G7256 | 2000 | 158 | . 79 |
| G7257 | 2250 | 149 | . 79 |
| G7258 | 2500 | 141 | . 79 |
| G7259 | 3000 | 129 | . 79 |
| G7260 | 3500 | 119 | . 79 |
| G7261 | 4000 | 112 | . 79 |
| G7262 | 4500 | 105 | . 79 |
| G7263 | 5000 | 100 | . 79 |
| G7264 | 6000 | 91 | . 87 |
| G7265 | 7000 | 84 | . 87 |
| G7266 | 7200 | 83 | . 87 |
| G7267 | 7500 | 82 | . 87 |
| G7268 | 8000 | 79 | . 87 |
| G7269 | 9000 | 74 | . 87 |
| G7270 | 10000 | 71 | . 96 |
| G7271 | 12000 | 65 | . 96 |
| G 7272 | 15000 | 58 | . 96 |
| G7273 | 20000 | 50 | 1.05 |
| G7274 | 25000 | 45 | 1.08 |
| G7275 | 30000 | 41 | 111 |
| G7276 | 40000 | 35 | 1.14 |
| G7277 | 50000 | 32 | 1.17 |
| G7278 | 60000 | 29 | 1.23 |
| G7279 | 80000 | 25 | 1.31 |
| G7280 | 100000 | 22.5 | 1.47 |
| Shippin | veight 1 | unit, 8 |  |

TYPE D-75 WATTS $6^{\prime \prime}$ Long

| Stock | Resistance in | Current <br> Milli- | Your |
| :---: | :---: | :---: | :---: |
| No. | Ohms | amperes | Cost |
| G7281 | 100 | 865 | S0.94 |
| G7282 | 200 | 610 | .96 |
| G7283 | 300 | 500 | . 96 |
| G7284 | 400 | 432 | .94 |
| G7285 | 500 | 387 | . 94 |
| G7286 | 750 | 316 | .94 |
| G7287 | 800 | 306 | . 96 |
| G7288 | 1000 | 274 | .96 |
| G7289 | 1250 | 245 | .94 |
| G7290 | 1500 | 224 | . 96 |
| G7291 | 2000 | 194 | .94 |
| G7292 | 2250 | 182 | .94 |
| G7293 | 2500 | 173 | . 94 |
| G7294 | 3000 | 158 | .94 |
| G7295 | 3500 | 146 | .94 |
| G7296 | 4000 | 137 | .94 |
| G7297 | 4500 | 129 | .94 |
| G7298 | 5000 | 122 | .96 |
| G7299 | 6000 | 112 | . 96 |
| G7300 | 7000 | 103 | .96 |
| G7301 | 7200 | 102 | . 36 |
| G7302 | 7500 | 100 | .99 |
| G7303 | 8000 | 97 | . 99 |
| G7304 | 9000 | 19 | 95 |
| G7305 | 10000 | 87 | 1.18 |
| G7306 | 12000 | 79 | 1.15 |
| G7307 | 15000 | 71 | 1.26 |
| G7308 | 20000 | 61 | 1.25 |
| G7309 | 25000 | 55 | 1.31 |
| G7310 | 30000 | 50 | 1.31 |
| G7311 | 40000 | 43 | 1.31 |
| G7312 | 50000 | 39 | 1.46 |
| G7313 | 60000 | 35 | 1.62 |
| G7314 | 80000 | 31 | 1.62 |
| G7315 | 100000 | 27 | 1.62 |
| Shippi | weight p | unit, |  |

noiseless resistor (wire wound) with

| Stock No. | Ohms | Max. Current in $M$. | Stock No. | Ohms | Max. Current in M.A. | Stock No. | Ohms | Max. Current in M.A. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E4790 | 5 | 445 | E4803 | 250 | 63 | E4816 | 1000 | 31 |
| E4791 | 10 | 315 | E4804 | 300 | 58 | E4817 | 1250 | 28 |
| E4792 | 15 | 260 | E4805 | 350 | 53 | E4818 | 1500 | 26 |
| E4793 | 25 | 200 | E4806 | 375 | 52 | E4819 | 1600 | 25 |
| E4794 | 40 | 160 | E4807 | 400 | 50 | E4820 | 1750 | 24 |
| E4795 | 50 | 140 | E4808 | 450 | 47 | E4821 | 2000 | 22 |
| E4796 | 60 | 129 | E4809 | 500 | 45 | E4822 | 2250 | 21 |
| E4797 | 75 | 115 | E4810 | 600 | 41 | E4823 | 2500 | 20 |
| E4798 | 100 | 100 | E4811 | 700 | 38 | E4824 | 3000 | 8 |
| E4799 | 125 | 89 | E4812 | 750 | 37 | E4825 | $\$ 500$ | 17 |
| E4800 | 150 | 81 | E4813 | 800 | 35 | E4826 | 4000 | 15 |
| E4801 | 200 | 71 | E4814 | 850 | 34 | E4827 | 4500 | 14 |
| E4802 | 225 | 66 | E4815 | 900 | 33 | E4828 | 6000 | 13 |
| List Price 25c. |  |  | List Price 25c. |  |  | List Price 25c. |  |  |
|  |  |  | Your Cost <br> Each |  |  | $\text { Your Cost } 5^{\text {Cach }}$ |  |  |

anlimited life should be used. The Truvolt Type PG resistors have a which means that the ohmic value will be the same for any current or woltage within the ratings as listed below.

Yach

These wire wound resistors have unlimited life should be used. The been particularly developed to fulfill the serviceman's requirement of a quality resistor that can be used to replace defective carbon type to replace defective carbon type pigtail resistors of the lower ohmic

Accuracy

+ or $-5 \%$



## Truvolt Wire Wound Pigtail Resistors



## Truvolt Flemible Resistors



5 Watts - 5 in. Long with Pigtails




## Quality Counts in Little Jhings Joo! BESAFE $3 U \mathrm{C}$ Metallized RESISTOR'S

## Precision Wire Wound Resistors

I. R. C. Precision Wire Wound Resistors have been developed to meet the most exacting demands of accuracy. Especially adapted for use as meter multipliers and shunts to increase the range of single range voltmeters and milliammeters and for other equipment such as faders, gang controls, pads, etc.

The winding form of these units as illustrated with WW3 resistor is made of non-hygroscopic (non-moisture absorbing) ceramic having high

## I $\mathbb{R}$

## Power Wire Wound Resistors



These new Power Wire Wound Resistors are rugged, permanent, accurate and possess an added advantage of Positive This is due to a ring mouldich the nichrome wire masees embedding itself into the metal. Select the value wanted from the following list, sizes and prices of rom the following in column to pight various types given in column to right.
Ohms Ohms Ohms Ohms

| Ohms | Ohms | Ohms | Ohms |
| ---: | :---: | ---: | ---: |
| 1 | 200 | 3000 | 20000 |
| 5 | 300 | 5000 | 25000 |
| 10 | 500 | 7500 | 30000 |
| 25 | 1000 | 10000 | 40000 |
| 50 | 2000 | 12500 | 50000 |
| 100 | 2500 | 15000 |  |

## Type "PA"

3 Watt Power Wire Wound (Max.) " long by ${ }^{3}$ " ${ }^{\prime \prime}$ diameter. Tolerance $5 \%$ Range up to 5000 ohms (see list). List 50 c . E5196
Your Cost
$23^{\circ}$

## Type "PB'"

5 Watt Power Wire Wound (Max) $18 / 3$ " long by "in" djameter. Tolerance $5 \%$ Rance up to 15000 ohms (see list). List $50^{\circ} \mathrm{c}$. E5197
Your Cost
$29^{\circ}$

## Type "'PC'

10 Watt Power Wire Wound (Max.) " long by $" \mathrm{f}^{\prime \prime}$ diameter. Tolerance $5 \%$ Range up to 30000 ohms (see list). List 65 c . 55198
$38^{\circ}$

## Type "PD"

15 Watt Power Wire Wound (Max.) $3^{\prime \prime}$ long by "/on" diameter. Tolerance $5 \%$. Range up to 50000 ohms (see list). List 70 c E5199
Your Cost


Precision wire wound type. Guaranteed accuracy $1 \%$. Length $2 \frac{1}{6}$ inches. Stock
$\left.\begin{array}{rrrrr}\text { No. } & \text { Ohms } & \text { M. A. } & \text { List } & \text { Cost } \\ \text { E5150 } & 1 & 1000 & \$ 1.50 \\ \text { E5151 } & 2 & 707 & 1.50 \\ \text { E5152 } & 8 & 577 & 1.50 \\ \text { E5153 } & 4 & 500 & 1.50 & \\ \text { E5154 } & 5 & 448 & 1.50 \\ \text { E5155 } & 6 & 407 & 1.50 \\ \text { E5156 } & 7 & 377 & 1.50 \\ \text { E5157 } & 8 & 353 & 1.50 \\ \text { E5158 } & 9 & 333 & 1.50\end{array}\right\}$

| Stock | Resistance | List |  |
| :---: | :---: | :---: | :---: |
| No. | Ohms | Price | Your |
| E5125 | 200 | \$0.75 | 50.50 |
| E5126 | 500 | . 75 |  |
| E5127 | 1,000 | . 80 | . 55 |
| E5128 | 2,500 | . 80 |  |
| E5129 | 5,000 | 1.00 |  |
| E5130 | 7,500 | 1.00 |  |
| E5131 | 10,000 | 1.00 | . 68 |
| E5132 | 12,500 | 1.00 |  |
| E5133 | 15,000 | 1.00 |  |
| E534 | 20,000 | 1.15 | . 78 |
| E5135 | 25,000 | 1.25 |  |
| E5136 | 30,000 | 1.25 | . 85 |
| E5137 | 35,000 | 1.25 |  |
| E5138 | 40,000 | 1.25 |  |
| E5139 | 50,000 | 1.50 |  |
| E5140 | 60,000 | 1.50 | 1.03 |
| E5141 | 75,000 | 1.50 |  |
| E5142 | 100,000 | 2.00 | 1.37 |

insulation qualities, high mechanical strength and low coefficient of expansion.

Because of the special sectional construction which permits the winding of adjacent sections in opposite directions a non-inductive winding of low distributed capacity, is made possible. The impedance characteristics of these units are practically uniform and independent of frequency up to 50,000 cycles.

## Metallized <br> Replacement Resistors <br>  <br> $1 / 2$ Watt <br> 1 Watt <br> 2 Watt

We stock I. R. C. metallized type F-1/2 (1/5 Watt), Type F-1 (1 Watt) and Type F-2 (2 Watt) in the following ohmages. Only the 1 -watt resistors, however, are available in ohmages above 5 megohms. Select resistors wanted from this list, specify re sistance value and quote stock number shown opposite each type below.

| Ohms | Ohms | Ohms | Megohms |
| :---: | :---: | :---: | :---: |
| 100 | 6000 | 50000 | 2 |
| 250 | 7000 | 75000 | 216 |
| 500 | 8000 | 100000 | 3 |
| 1000 | 9000 | 150000 | $31 / 2$ |
| 1500 | 10000 | 200000 | 4 |
| 2000 | 12500 | 250000 | 5 |
| 2250 | 15000 | 300000 | * 6 |
| 2500 | 17500 | 400000 | * 7 |
| 3000 | 20000 | Megohms | * 8 |
| 3500 | 25000 | $1 / 2$ | *9 |
| 4000 | 30000 | 1 | -10 |
| 5000 | 40000 | $11 / 2$ |  |
| * Available in 1-watt type only. |  |  |  |
| E5250 Type MF-1/2 (1/2 Watt). 1". Pigtail Type. List 30e Your Cost. |  |  |  |
|  |  |  |  |
|  |  |  |  |
| E5251-Type F-1 (1 Watt). Length 2". |  |  |  |
| Pigtail type. List 30c P? |  |  |  |
| Your Cost Each............... |  |  |  |
| E5252-Type F-2 (2 Watt). Length $2^{\prime \prime}$ |  |  |  |
| Pigtail type. List 40c |  |  |  |
| Your |  |  |  |

With I. R. C. Metallized Resistors you obtain a guarantee of quality, a guarantee of uniformity possible only from makers of standard merchandise.

## Free

I. R. C. Resistor Replacement Guide sent FREE with an order for 10 or more I.R.C Metallized Re sistors. R. M. A. Color Code Chart FRES with each order for three of Metallized Resistors.

double dies in conjunction with a paste lite cerac. This is baged for hours, and then fired at over $2,500^{\circ} \mathrm{F}$. After such a baptism of fire, no ordinary service or overload temperatures can damage the resistor. No moisture can possibly penetrate, so age can not change the resistance value. Due to their particular method of construction they are guaranteed the most noiseless Resistor madel R.M.A. Color Coded. Wire leads $11 / 2^{\prime \prime}$ long.
Free R.M.A. Standard Resistor Color Code with every 10 resistors We Stock Centralab Resistors in the following Ohmages

| Ohms | Ohms | Ohms | Ohms | Ohms | Ohms |
| :---: | ---: | ---: | ---: | ---: | :---: |
| 200 | 2500 | 8000 | 20000 | 100000 | 500000 |
| 300 | 3000 | 9000 | 25000 | 150000 | Megohms. |
| 500 | 3500 | 10000 | 30000 | 200000 | 1 Meg. |
| 1000 | 4000 | 12000 | 40000 | 250000 | 1.5 Meg. |
| 1500 | 4 Meg. |  |  |  |  |
| 1500 | 5000 | 15000 | 50000 | 300000 | 2. Meg. |
| 2000 | 6000 | 17000 | 75000 | 40000 | 2.5 Meg. |
|  |  |  |  |  |  |

$2000 \quad 6000 \quad 17000 \quad 11 / 2000$ WATT
Type 316. Size $1 / 418 / 6^{\prime \prime}$ Any resistance listed.
Your Cost Each.
$15^{c}$
Type 314. Size $1 / 1 \times 1$ ". Any WATT
E5276-List 30c. Your Cost
$15^{c}$
In Lots of 10
When ordering specily Stock No. and Resistance


## Centralab

## Resistor Service Kits

A convenient package of ten Type 316 ( $11 / 2$ watt) resistors. Many additional values oan be obtained by connecting two of these in series or parallel. Quick Reference Wall Chart Free win each kit: Stock Stock Stock Stock Stock Stock Shipping Ntock Stock Stock Stock No. No.
E5285 E5286 E5285 E5286 $\begin{array}{rrrr}200 & 500 & 3000 & \\ 500 & 1000 & 1000\end{array}$
$\begin{array}{lll}1000 & 1000 & 10000\end{array}$
$\begin{array}{llll}1500 & 5000 & 35000 & 2000\end{array}$
200010000
250020000
300025000
350030000
300030000
50000
1000075000


## 1 ®C

## Metallized

## Resistor Kits

These Kits contain assortments of Resistors that will permit you to meet practically every service requirement. Various resistance values, in addition to those represented by the resistors, can be obtained by connecting two or more of them in series or parallel.

## Certified Kit No. I

 The original I.R.C. Kit that proved so popular with Service Men. Contains twenty 1 watt Metallized Units ranging from 500 ohms to 3 megobms. The certified seal insures factory guarantee and factorytested units. Shipping weight 21 bs . E5272-List $\$ 6.00$
## Certified Kit No. 2

Contains an assortment of twenty type F-2 Two Watt Resistors. Made for Service Men requiring units of higher wattage. Values range from 500 ohms to $1 / 2$ megohm. Factory sealed, factory tested and factory guaranteed. Shipping weight 3 \}bs. E5273 List

The New

IRC Combination Kit No. 6


This Kit consists of a set of 69 Resistors selected to fit the needs of any emergency. There are used in watt resistors ceivers on sceount of their size, and are those their size, and are those most needed for replacements. 1 watt resistor with formulas showing how thousands of values can be quickly made up. 2 watt resistors for higher wattage replacements. 5 watt resistors are the sizes that tak the greatest load, and that burn out most fre quently. These are the quietest type of resistor, that gives excellent re sults in amplifiers of al types, and lastly the 10 watt resistors needed Value of Resistors in Kit. ... $\$ 17.40$ as for replacing burned out sections IRC Resistor Indicator. Steel Cabinet
Resistor Guide Book
Color Code Chart
Total Value.
You Save.
Special Kit Complete
Your


## The New 1. R. C. Resistor Indicator



This Indicator is an instrument that has been designed and prepared for the service man, to enable him to determine the exact resistance value without the use of meters. The Indicator is a calibruted wire wound resistor covering a range of 0 to 100000 ohms. It is mounted on a bakelite panel, equipped with clips for connecting the unit into any Radio Receiver, and a test prong to regulate the resistance. The Unit is used to determine the actual resistance value giving best operating results in any receiver. Regardless of whether the service man has a circuit diagram or not, this Indicator gives a quick definite reading for the necessary resistance values without the use of an Ohmmeter. Here is a new service helf that will save you many a bad half hour. Shipping weight 2 lbs . E5299-List Price $\$ 4.00$
Your Cost
2.35


## Certified Kit No. 3

Midget receivers have brought into existence midget resistors. These resistors in this kit are needed for replacevalues used by radio set manufacturers. Kit contains 20 resistors from 50 ohms to 3 megohms. Shipping weight 3 lbs E5268-List $\mathbf{\$ 6 . 0 0}$ Your Cost.
s3.50

## New Handy Grid-Bias Kit

Contains 10 assorted Resistors of F-1 and F-2 and Powe Wire Wound (5-Watt) type required to bias the following tubes: ' 24, ' $26, ~ ' 27, ~ " 71 A$, ' 10 , '45, '50, '47. The kit also contains resistance values that can be used as grid
 Your Cost

|  |  | No Shorted Turns. A basic feature of all two-bearing National Midget Condensers is the insulated front bearings, resulting in no shorted turns. <br> Exclusive Constant-Impedance Pigtail, a patented National feature. One of the many advantages that make National Midgets such consistent and invariable performers. This electrically perfect connection to the rotor eliminates the noise crackle and varying impedance (A. C. inductance) of the brush type of contact. <br> Isolantite, acknowledged high efficiency dielectric, is used for insulating National Midgets-reducing dielectric losses to a minimum. <br> Aluminum plates; thick, polished all over, with wide polished rounded edges, are used in the National SEU Ultra-HighFrequency Midgets. Non-resonant characteristics of aluminum plates prevent microphonic feed-back from plate vibration. <br> National Condenser Designations SE-270 degree rotation, SFL. ST180 degree rotation, SLW. SS- 180 degree rotation, SLC. H-High capac-ity-close spacing. U-Ultra short wave extra wide spacing. HS-High capacity, single bearing. D-Dual type. N -Neutralizing Condenser. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N | No. | $\begin{gathered} \text { Capacity } \\ \text { in } \\ \text { Mmf. } \end{gathered}$ | $\begin{aligned} & \text { Air } \\ & \text { Gap } \end{aligned}$ | Bea ing | Plat <br> Shap | $\begin{aligned} & \text { Rote } \\ & \text { Plate } \end{aligned}$ | Stato Plate | $\begin{aligned} & \text { bept } \\ & \text { behin } \\ & \text { Pane } \end{aligned}$ | ur |
| N14280 N14281 N14282 N14283 N14284 N14285 N14286 N1427 N14288 N14289 N14290 | 75 100 150 SEH-200 250 300 335 SEU- 15 20 25 | 50 75 100 150 200 250 300 335 15 20 25 | .026 .026 .026 .0175 .0175 .0175 .0175 .055 .055 .055 | 2 2 2 2 2 2 2 2 2 2 2 | $\begin{gathered} 270^{\circ} \\ \text { S.F.L. } \end{gathered}$ | $\begin{array}{r} 6 \\ 8 \\ 10 \\ 15 \\ 14 \\ 16 \\ 20 \\ 22 \\ 8 \\ 4 \\ 6 \end{array}$ |  |  | $\mathbf{\$ 1 . 7 8}$ 1.90 2.05 2.20 2.20 2.35 2.35 2.50 1.47 1.62 1.62 |
| N14291 N14292 N14293 N14294 N14295 N14296 N14297 N14298 N14299 N14300 $N 14301$ N14302 | ST- 50 75 100 150 STH 200 250 300 335 STN- ST STS 18 26 60 | 75 100 150 200 250 300 385 $18-3000 v$ 15 25 50 | .026 .026 .026 .026 .0175 .0175 .0175 .0175 .065 .0175 .0175 .0175 | 2 2 2 2 2 2 2 2 2 1 1 1 1 | S.L.W. ${ }^{180^{\circ}}$ | 6 5 <br> 8 7 <br> 10 10 <br> 15 14 <br> 14 13 <br> 16 16 <br> 20 19 <br> 22 21 <br> 4 3 <br> 2 1 <br> 2 2 <br> 4 3 <br> 6 per sec. 5 per sec. <br> 7  <br> 7  |  |  | 1.05 1.18 1.33 1.47 1.62 1.77 1.90 2.05 1.18 .82 .88 .94 |
| N14303 N14304 | STD- 50 STHD-100 | 50 per sec 100 per sec | .026 .0175 | 2 |  |  |  | $29 / 4$ $23 / 4$ | 2.05 |
| N14305 N14306 $N 14307$ $N 14308$ $N 14309$ $N 14310$ $N 14311$ $N 14312$ $N 14313$ $N 14314$ $N 14315$ $N 14316$ $N 14317$ N14318 N14319 | SS- 50 75 100 150 SSH-200 250 300 350 SSN- 18 SSS- 20 30 50 SSD- 50 SSHD-100 150 | 50 75 100 150 200 250 300 350 $18-3000 \mathrm{v}$. 20 30 50 60 persec. 100 per sec. 150 persec. |  | 2 2 2 2 2 2 2 2 2 1 1 1 1 2 2 2 | S.L.C. | 5 <br> 7 <br> 9 <br> 12 <br> 11 <br> 13 <br> 16 <br> 18 <br> 3 <br> 1 <br> 2 <br> 3 <br> 5 <br> 5 | 4 <br> 6 <br> 8 <br> 12 <br> 10 <br> 13 <br> 15 <br> 18 <br> 3 <br> 2 <br> 2 <br> 3 <br> 4 <br> 4 per sec <br> 5 |  | 1.05 1.18 1.33 1.47 1.62 1.75 1.90 2.05 1.18 .82 .88 .94 2.05 2.65 2 |
| Shafts $1 / 6^{\prime \prime}$ dia. Standard order above with shaft exten |  |  |  |  |  |  |  |  |  |

## Cardwell Condensers Cardwell Dual Featherweight

This dual Condenser of 350 mmids., each section is de-
signed for light signed for light
weightand compactness, and is
 used in Aircrafts, Portables, Midgets, etc. Shipping weight 2 lbs . H8581-List $\$ 5.50$ Your Cost $\qquad$

## Midway Featherweight



The Midway is a small, compact and extremely light-weight variable condenser, especially suited for air-craft equipment, portable sets, etc. Desirable in receivers, transmitters and oscillatoramplifiers where weight and space are a factor. Very finely constructed-no
swedged rivets ar eyelet heads to swedged rivets or eyelet beads to become slack. Aluminum is used throughout with the exception of bearings. A Real Condensernot a midget. Shipping weight 2 lbs.

## Receiving Type

Have .081 air gap and are also suitable for low power transmitting sets using 210 tubes.

| Stock | Your |  |  | Cap. | Split | You |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Cost | Type | Plates | Mmf. | Stator | Cos |
| H8563 | \$1.24 | 401-B | 3 | 26 | H8545 | \$1.9 |
| H8564 | 1.30 | 402-B | 5 | 50 | H8546 | 2.2 |
| H8565 | 1.35 | 403-B | 7 | 70 | H8547 | 2.35 |
| 18566 | 1.41 | 404-B | 11 | 105 | H8548 | 2.47 |
| H8567 | 1.47 | 405-B | 15 | 150 | H8549 | 2.59 |
| H8568 | 1.62 | 406-B | 25 | 260 |  |  |
| H8569 | 1.77 | 407-B | 38 | 365 |  |  |

Have . 07 air gap suitable for transmitters using up to 75 watt tubes. Rotor and Stator plates have edges well rounded and are bighly pol-

## shed.

| Stock |  |  | Max. Cap. Your |  |
| :--- | :---: | :---: | :---: | :---: |
| No. | Type | Plates | Mmf. | Cost |
| H8550 | $408-\mathrm{B}$ | 5 | 22 | $\$ 1.80$ |
| H8551 | $409-\mathrm{B}$ | 7 | 35 | 1.92 |
| H8552 | $410-\mathrm{B}$ | 11 | 50 | 2.20 |
| H8553 | $411-\mathrm{B}$ | 15 | 70 | 2.50 |
| H8554 | $412-\mathrm{B}$ | 21 | 100 | 2.92 |
| H8555 | $418-\mathrm{B}$ | $\mathbf{3 1}$ | 150 | 3.77 |

## Taper Plate Condensers

This type condenser was the first designed to meet the demand for ample separation on all wave-lengths. In this condenser a straight frequency tuning cuive is secured by a regular variation of the thickness of the air dielectric with a pronounced gain in efficiency, compactness and mechanical strength. Shipping weight 4 libs.

| Stock |  | Max. | List | Your |
| :--- | :---: | :---: | :---: | ---: |
| No. | Plates | Mmids. |  | Cost |
| H8573 | 3 | 75 | $\$ 4.00$ | $\$ 2.35$ |
| H8574 | 5 | 150 | 4.00 | 2.35 |
| H8575 | 7 | 220 | 4.25 | 2.50 |
| H8576 | 11 | 350 | 4.75 | 2.79 |
| H8577 | 15 | 500 | 5.00 | 2.94 |

 Especially recommended for short wave receivers; The 201-E has two plates which may be variable which may be variable
spaced, affording a low capacity. Is unequalled for short waye work.
Stator plate adjustable to afford maximum cajacities from 50 to 10 mmfds. Constant minimum 7 mmids. Shipping weight 2 lbs.
Hour Cost.
s2.35

S-E Two Gang Receiving Condenser A two-gang condenser built especially
for short wave T.R.F. and superhetrofor short wave T. R. F. and superhetrowave receiving condenser in which both rotors are fully insulated from each isolation of all circuits is thus made possible. Tuned impedance coupled of using shunt feed with RF chokes and coupling condensers, or a blocking condenser in tuned circuit. $\mathbf{B}$ plus connects direct to rotor* Size, $21 / 2 \times 21 / 2 \times 5^{\circ}$. Shipping weight 8 lbs.
N14323-50 mmi. List 55.50 . Your
N14324-100 mmf.
List $\$ 6.50$. Your Cost.

## Equimeter Condensers

A very superior line of single section Variable Condensers of from 50 to 1000 mmf . capacity. Heavy aluminum construction throughout

with isolantite insulation. An extension collar with $/ 4 "$ sha
Shipping weight 3 lbs. (SPRAIGHT WAVE LINE TYPE) Stock Capaelty

| Stock | Capacity <br> No. <br> N14. | List |
| :---: | :---: | ---: |
| N1435 | 50 | $\$ 2.50$ |
| N14326 | 100 | 2.50 |
| N14327 | 150 | 8.00 |
| N14328 | 200 | 8.50 |
| N14329 | 250 | 8.50 |
| N14330 | 350 | 3.75 |
| N14331 | 500 | 4.00 |
| N14332 | 1000 | 5.50 | Court N14325 Mm

2.50
2.50
8.00
8.50
3.75
4.00
5.50


Trutest Variable Compact Short Wave and Broadcast Condensers


These Trutest Tuning Condensers are of the very latest design. Greater variety of capacities, and smaller physical sizes. Fully shielded bestruction. Positive electrical struction. Positive electrical contacts. Trimmers are rigid and retain their settings after adjustments. Ball bearings, self-alligning and smooth in action. Heavy aluminum plates. Shaft'and frame of steel, cadimum plated. All singie section $1 / 4{ }^{\prime \prime}$; all multip

## Short Wave Compact Condensers

| Stock <br> No. <br> H9716 <br> H9717 <br> $H 9718$ <br> H9719 |  |  |  | Shipping |
| :---: | :---: | :---: | :---: | :---: |
|  | Cap. | Gangs. | Size, Inches | Werght |
|  | . 0001 |  | 176033 $6 \times 1 \%^{\prime \prime}$ | 1 lb . |
|  | . 00015 | 1 |  | 1 lb . |
|  | . 00025 | 1 | $176 \times 3{ }^{3} 10 \times 1$ \% | 1 lb . |
|  | . 0001 | 2 | $176 \times 3{ }^{3} 10 \times 21 / 2$ | 2 lb . |
|  | . 00015 | 2 | $17 / 8 \times 3$ / $6 \times 21 / 2{ }^{\prime \prime}$ | 2 lb . |
|  | Broad | ¢ Cor | act Conde |  |



Your
Cost
$\$ 0.75$
.79
.79
1.25
1.25
$\$ 0.75$

Bushing for conversion to $3 / /^{\prime \prime}$ shalt
"Precision" Condemsers for Superhets


## and T.R.F.

Contribute a marked improvement to the Superheterodyne ment eliminating the necessity for by eliminating the necessity for Units conslst of one or more preselector condenser sections mounted on the same shaft with a tracking condenser for the oscillator. Heavy in construction, with ball-bearing shafts. Have mountings for trimmers on either side so that direction of rotation may be either clockminum Plates slotted, for micrometric adjustment. Exceedingly low minimura. Manufacturers type.
Stock Shipping
$\qquad$


## Precision Condensers for T.R.F. Circuits

Same construction as above Condensers except that all sections are identical in capacity curve; the correct type for T. R. F. sets. Manufacturers type.


\section*{DRIVE CABLES, BANDS AND BELTS FOR

## STANDARD

\section*{RADIO

## RADIO <br> RECEIVERS

| The strongest dial cable obtainable. Braided around a tough flexible core are sixteen strands of pure phosphor bronze wire. Made for rough usage. All Cables, Bands and Belts, and, in some instances, strong Linen Cord, are made up according to the speciflcations of the original used in each particular receiver. For example: Two belts ( L and R ) are furnished for Atwater Kent, Columbla and Temple Models. Three belts are furnished for Atwater Kent Models 44, 60 and 61. No frayed ends exposed. Ends, loops and eyelets are firmly soldered. |  |  |  |
| :---: | :---: | :---: | :---: |
| Make of Set | Model | Stock No. |  |
| Atwater Kent | 30 | H9820 | 0.18 |
| Atwater Kent | 55 | H9821 | . 18 |
| Atwater Kent | 35, 37 | H9822 | . 20 |
| Atwater Kent | 44 | H9823 | 37 |
| Atwater Kent | 60, 61 | H9824 | . 37 |
| Amrad | 84 | H9825 | . 18 |
| Bosch | 48A | H9826 | 20 |
| Bosch | 8A | H9827 |  |
| Bosch | 58, 60 | H9828 | . 20 |
| Bosch | 28 | H9829 | 20 |
| Balkeit | All | H9830 |  |
| Bremer-Tull | 14,21 | H9831 | . 13 |
| Brunswick | 14, 21 | H9832 | . 13 |
| Colonia | 31, 32 | H983 |  |

The strongest dial cable obtainable. Braided around a tough flexible core are sixteen strands of pure phosphor bronze wire. Made for rough
usage. All Cables, Bands and Belts, and, in some instances, strong Linen Cord, are made up according to the speciflcations of the original used in each particular receiver. For example: Kent, Columbla and Temple Models The belts are furnished for Atwater Kent Models 44, 60 and 61. No frayed ends exposed. Ends, loops and eyelets are firmly soldered.

## Make of Set

Atwater Kent Atwater Kent Atwater Kent Atwater Kent Amrad

Make of Set Colonial Columbia Crosley Emerson Eveready 1st Nationa Freed-Eisemann Freshma
Grebe Krebser* Kolster Kellog Majestic No. 1 Majestic No. Peeriess Philco
RCA RCA RCA
Sparton Steinite Temple * Heavy cord with beads on ends; springs.

Model Stock No. Net $38,34,35,37$ H9834 $\$ 0.40$ |  |  |
| :--- | ---: |
| 40 All $60 \mathrm{~s}, 804 \mathrm{H} 9835$ | .40 | 601, 601, 622, 607 H9837 * Heavy cord

$\dagger$
Linen cord.


## Best Quality Dial Cable

## By Foot or Spool

yet flexible Sixteen strands phosphor bronze wire braided around tough core. Standard size diameter. Can be usect on any dial having cable drive. H9881-Your Cost Per Foot . . . . . . . . . . . . . . $\mathbf{5 1 . 7 5}$. 72

## Brunswick Dial Scales

For Models $11,11 \mathrm{~A}, 12,12 \mathrm{~A}, 16,17,18$, 24, 25 and 33


[^1] Model Brunswick receivers. All holes and slots are already punched. Graduated in kilocycles 75 "made of the best quality celluloid. Size including cutout. H9880-Your Cost Each Per Dozen.

## TRUTEST DIALS



NEW IMIPROVED DRUM DIAL
 One of the best on the
market. Extra heavy die market. Extra heavy die cast white
struction. $\begin{aligned} & \text { metal eon- } \\ & \text { Illuminated. }\end{aligned}$ Celluloid scale 0-100 courterclockwise rotation. Size $53 / 2$ inches high, 33 inches deep. $15 / 8$ inches wide. Knob shaft $1 / 4 \times 13 / 2$ inches.
 inches. Shpg. Wt. 2 Lbs.
$2 \mathrm{H} 9809-D i a l$
only for $1 / 4$
 inch sh
2H9810-Dial on
inch shaft.
Each
Escutch $70 c$ tra. Each
2H9812-Insulated
Socket extra. Each 17 c 08 c


NEW NATIONAL

## NW-6 DIAL

An improved precision dial. Designed for laboratory and other appa-
ratus where it is necessary to calibrate readings to $1 / 10$ of a dial scale silver construction engraved with black figures. 5.1 ratio. For $1 / 4$ inch shaft. Dlameter 6 inches. Shpg. Wt. $11 / 2$ lbs.
Stock No. 2H14360 $100^{\circ}$ to 0 , $180^{\circ}$ S15.00 $\$ 8.82$ $\begin{array}{lllllll}2 H 14361 & 150 & \text { to } & 0 & 270^{\circ} & 15.00 & 8.82 \\ 2 H 14362 & 200 & \text { to } & 0, & 360^{\circ} & 15.00 & 8.82\end{array}$

## National dials Types G and H

 Scale is projected onto a dial opening by a brilliant Hluminator. Figures greatly enlarged and easy to read from any angle. Rainbow types change color as dial is rotated. Beautiful burnished sllver escutchType G Dise Dial For use when tuning con-
denser is at right angles
 to the front panel. Monocolor, standard green. $2 H 14353$-Counter clockwise. $0-100$ \$620
 List $\$ 3.75$. Your Cost

## Type H Drum Dial

Employs the patented Drum Dial mechanism with its powerful non-conducting drive and spring take-up. Monocolor type, Green. 2114365 -Monocolor. Counter $\$ 294$
 100-0. List $\$ 5.00$. Your Cost 2H14357-Rainbow. Counter clock wise 0-100. List $\$ 5.50$. Your Cost. . $2 \mathrm{H14358}$-Rainbow. Clockwise $100-0.3$ List si.50. Your Cost. Clockwise 150-0.

## Tilitestedials

TRUTEST DUAL RATIO Wedge Drive Fan Dial For Short Wave Sets or Converttion Bromblast and Short Wav Excellent for Excellent for Su-
per - Heterodynes or any line tuning Easily mounted Very smooth and very smooth and
powerful. From Fast to Slow speed Fast to Slow Speed
at a touch of the at a touch of the
lever. Ratio in 180 degrees movement of conden ment of conden
 ser, Fast Speed 6
to 1. Slow Speed 30 to 1. $4 \%$ inch scale to 1. Slow Speed back at 30 degrees. Escutcheon $23 /$ inches high, $21 / 4$ inches wide. Completc with pilot socket, escutcheon, reducing bushing (for elther $1 / 4$ or $3 / 8$ inch shafts) screws, knob, etc. Shpg. Wt., 2 Lbs. $\$ 245$ 4\#9818-Your Cost
SIPOT LIGITT FULL-VISION

## MIDGET DIAL

Just the dial for that New Set. Spot Tuning, Full Vision, beautifully finished escutcheon. Angle Amber 100. Wedge drive, no backlash or slipping, For $\%$, inch condeneon finished in antique bronze. Size $3^{3 / 4}$ Ins. high, ${ }^{3}$ Ins. Wide. Price pilot socket. (No bulb.) Shpg. Wt., 2 Lbs 4H9819
TRUTEST DIRECT DRIVE FULL-VISION DIAL

Replaces thet old fash

loned dial on your set new sets. Pointer attaches to condenser shaft. If panel is cut out for escutcheon, simply attach pilot socket and bulb and your set is brought up to $2 \%$ inches high, 3 inches wide; Inished in bronze. Pointer and Escutcheon. (No socket or b
$418978-$
4H9878-
$25^{\text {c }}$

## $\mathbb{N}$ ATIONAL

## 



New Nation1 Full Vision Dial
This new Dial fills a definite need for a dial having none usually so noticeable in a unit of this type. Scale is full 7 inches in length, insuring accuracy in reading. Pointer moves evenly across the scale and remains vertical at all positions. Smooth plled either silver or antique bronze. State preference. Shpg. Wit., 3 Lbs.
SN14377 100-0 $180^{\circ}$ Clockwlse
$\begin{array}{llll}\text { SN14377 } & 100-0 & 180^{\circ} & \text { Clockwlse } \\ \text { 3N14378 } & 0-100 & 180^{\circ} & \text { Counter } \\ \text { Clockwise }\end{array}$ $\begin{array}{lllll}3 N 14378 & 0-100 & 180^{\circ} & \text { Counter Clockwise } \\ \text { 3N14379 } & 0-100 & 270^{\circ} & \text { Counter } \\ \text { Clockwise }\end{array}$ $\begin{array}{llll}\text { 3N14378 } \\ \text { List price } \$ 4.00 & 270^{\circ} \text { Counter Clockwise } \\ \$ 235\end{array}$
Your Cost Each .....
Precision Vermier Dial Type N
For use in amateur and other radio equipment requiring the utmost preciof one-tenth of a Reading
is possible. Dial attaches to tace of panel at three points, making accurate mounting very easy. Metal Dial Shipping Weight, 3 lbs. very casy. Metal Read- De- Your Cosi
Stock No.
$2 H 14363$
$2 H 14364$
2F14365
ing grees
2H14365
$2 H 14366$

Spot Light Full Vision Dial
The latest idea in dials. Spot light ravels with pointer, making dial settings easier to read. For \% inch $\begin{array}{lll}\text { shaft. } & \text { Size } & 41 / 8 \\ \text { inches } & \text { wide, } & 3 y_{g}\end{array}$
 inches high. Ain ber celluloid scale, $0-100$ counter clockwise. Price includes pitot light socket. Shpg. Wt.. ${ }^{1}$ Lb.
2H9808- Dial and Escutcheon, less
bulb. Your Cost Each......... Cost Each

## MIDGET DIAL

Especially sultable for sets. scale is 3 inches wide; escutcheon $21 / 6 \times 21 /$ inches high. Amber cellulold scale 0-100. For knob shaft $y / 4$ inch. Has pilot light socket but no bulb. Shpg. Wt., 1 Lb 2H9807-Complete with Escutcheon
$59^{c}$

FAN TYPE DIAL
Outside diameter dial 4 inches. For \%-inch shaft. Knob shaft luloid inch long. Celcounterclockwise Has pilot light socket Escutcheon socket. $23 / 4$ inches high 2\% Inches high, Shpg. Wt., $11 / 2$ Lbs.
2H9813-Dial
Each. $44^{c}$
Exeon Plate, 12c

## NATIONAL

Type $66 B^{99}$ \& ${ }^{66} C^{9}$ 4 in. Dials
Easily and quickly atcools, fitted with beautiequipped with variable ratio of 6-1 to 20-1. 'Type
Type "C" Includes illuminator and bracket.

## TYPE "B"

Shpg. Wt, 3 Lbs.
2H14367-Clockwise $(200-0)$
List $\$ 2.500^{\circ}$. Your Cost................. $\$ 1 \mathbf{4 7}$
List $\$ 2.50$ Your Cost.....................
$2 H 14368-$ Dual range $(0-100-0)$
$180^{\circ}$. List $\$ 2.50$. Your Cost........ $\mathbf{4 7}$


2H14369-Clockwise (200-0) $360^{\circ}$. \$1 75 2H14370-Dual range ( $0-100-0$ ) \$ 75 $180^{\circ}$. List $\$ 3.00$. Your Cost

TYPE BM-3 INCR DIAL
Similar in appearance and design to the Type B Dial except that diameter is 3 in . and it does not incorporate variable ratio feature. Not illuminated.
$2 H 14371$-Dual Range (0-100-0). \$118
LH14372-Clockwise ( 2000 )
List $\$ 2.00$. Your Cost............... $\$ 18$

## KURTZ-KASCII Bakelite Dials

Made of molded Bakellte. Requires only one hole for condenser shaft and two sinall holes to secure dial to panel for mounting.
Ratio 100 to 1 . Allows. Raty fine tuning Unex.
celled for broadcast receivers as well as short wave work. No gears to strip and no back-lash are its distinctive features. Fits Stock No. Range Size Your Cost Ea.
 2119803
$2 H 9804$
2149905
2119804
$\begin{array}{lll}2119806 & 100-0-100 & 47 / 8 \\ 210 \\ 219806 & 0-100-0 & \end{array}$

Wafer Sockets
Forsub-pane mounting. Made of with one piece contact springs, cadmiun plated oxidation. Soldering terminals are provided
with two holes, and shaped to concentrate heat of iron, to speed up soldering and insure perfect contact. Marked: Plain. 226, 227, $250,280,281,171-\mathrm{A}, 82$ and 83 , 56, 57, 58. State marking desired. M13070- $\mathbf{4}_{5}$ Prong In Lots of 12 for. Tubes M13071-6 Prong Your Cost Each In Lots of 12 for M13069-7 Prong Your Cost Each.50




No. 12
Made to suit the requirements of grade testing instruments, and receiving equipment. Because an their sturdy construction, are especially recommended where sockets are subjected to excepsockets are bubjected to exceptionally severe service, as well as serting and withdrawing of tubesserting and withdra
M13072-4 prong.
Cost Each. .......
M13073-5 prong.
Cost Each. M13076 - 6 prong. Cost Each M13077-7 prong. Eby Sub-Panel Moulded

## Socket

No. 8
This type 8 socket similar in construction to the that is has a separate laminated bakelite plate base, and is especially designed for sub-panel mounting. Has recessed ring, moulded through contact holes to facilitate easy in sertion of radio tubes. mertion of radio tub. M13085 Cost Each. M13086-5 prong. Your Cost Each. For the New Tincs $5^{c}$ M13087-6 prong. Your Cost Each. M13088-7 prong.
 Y

This new type was designed to meet the demand for a panel mounting socket. Is structed than the "Button" type. Made of best grade Bakelite. with two mounting ears, and with strong spring contacts. Used in radio Panel hole $1^{3} / 0^{\prime \prime} ;$ mounting holes No. 424. 4 Prong Red or Yellow. K11624

Cost Each K11625
Nour Cost Each. 6 Prong Blue Rin K11626
Your Cost Each No. ${ }^{437}$ K11627 M13082 7 Prong
Your Cost Each

## Benjamin Sockets

 The popular long life socket. Posi-
tiveside-wiping connections Molded Bakelite construction
M13110-4 Prong
Your Cost Each
M13111 5 Prong Your Cost Each $29^{\circ}$
$35^{\circ}$ Eby

## Isolantite

Sockets
Isolantite is a new
snow-white ma-
insulatine quality.
insulating quality. Its low lose at high frequencies makes it the beot material for sockets. M13074-4 Prong Your Cost Each M13075-5 Prong Your Cost Each 13081-6 Prong

## Hammerlund

Isolantite Sockets
 loss sockets have been combined with low improved broadcast and short wave reception available to everyone. Constant resistivity and perfect contact eliminate noise of solantite for lowest losses and
highest surface resistivity. Glazed highest surface resistivity:
top and sides, rust prool side gripping contacts. Sub-panel or base mounting. Four, five,six and seven prong types. $21 /{ }^{\prime \prime}$ " long by $15 /$ / $^{\prime \prime}$
wide. Ideal for low power transmitters.


Pilot Sockets
Set Builders Type


Perfect insulation Positive contact. Made of composition. 410220
H10221-5 Prong
$10^{c}$


Screw Type
Has screws for attaching to chassis or sub-panel. H10222-4 Prong
H10223-5 Prong
$15^{\circ}$

$14^{c}$
$20^{\circ}$


Beautifully turned and carved walr.ut knobs in two sizes. Far superior in design and workmanship to any we have ever offered. Have set screws for mounting on 1-4" shafts.

$\frac{\text { H9867-D } 12 \text { for.. }}{\text { Kurz-Kaseh }}$
A special selection of A special selection of Knobs, that will enhance the appearance of 127 No. 127-11/4. Ornamental top. H9889
Your Cost Each

## 12 For.

12For ......... 90c
No. 242-13名". Ornamental
Hour Cost Each
12 For.
No. 17-11/8". Arrow.
H9885
Your Cost Each

## Radio Knobs

12 For

## 5 c



## Extra Fine Knobs


(E) An especially beautiful design. Made of molded Bakelite with covering of statuary bronze
Larkes
Your Cost Each
12 for
(F) The

Knobe very latest in Radio molded Nothing like it before, molded Bakelite with inlay of Jewelers' enamel in beautifu colors. One size only: 13io
H9869.
Your Cost Each . . . . . . 12 for
 No. 132-11/5". Octagon-Pyramid.
H9887-Cost Each 12 For Cost Each........................... $\$ 1.00$ No. 187-1 118". Octagon Flat Top.

Your C
12 For
65c 12 For

## RCA Radiola Knobs



These Knobs are made to push on y" shaft. There is no set screw required, but the end of the shaft must be milled. Types A and B are made of Dark Brown Bakelite; types $C$ and $D$ are made of a high grade polished Hard-wood. All have heavy bronze spring clips. H9895-Type A
H9896-Type B
Your Cost Each
H9897-Type C
H9898-Type D

## Radio Enobs

 your radio. or control 98$\qquad$ H9891
Your Cost Each
In Lots of 12

## Trutest Super-Het Coil Kits

Composite Oscillator-Detector-I. F. 175 K. C.


High gain com posite coil used tector, oscillator and first I. F transformer, eliminates the use of one tube with no
efficiency. Top tuning. Factory peaked at 175 ding condenser necessary as it is made for the new pecial tracking oscillator section of variable condensers of .00036 mid Enclosed and fully shielded in a quare aluminum can, $3^{\text {u }}$ high, ${ }^{2}$ quare. Has two spade bolts H9997-

## Litz Wound Antenna

## Coil

Lattice wound primary on colover secondary.

eaked to pre variation of ang antenna stage by prevenis loss antenna length. Ring prequencies and facilitates phasing. Bakelite form $7 / \mathrm{x}^{23} \mathrm{~K}^{\prime \prime}$. Suitable for Bake as antenna stage in TRF or Super-Het circuits. Shipping Super-Het wight 8
Your Cost Each
$45^{\circ}$
Litz Wound R. F. InterStage Coil

7 or 8 Tube Super-Eet. Coil Kit with Precision Variable Condenser
1-56; 2-57; 2-58; or Wunderlich; 1 or 2-47; 1-80 or 82


This is the finest kit of coils, together with the precision variable condenser, that you can possibly buy for the construction of a 7 or 8 tube superheterodyne receiver employing the latest type tubes. By equip Lrutest DeLaxe products for the power transfinest tone quality of any recelver, either factory og, a set havinkm built, can be had. Anyone with a small knowledge of radla can easily hook-up this kit within a few hours. Has 10 kilocycle tuning. Provides extreme pickup. Has tremendous sensitivity and selectivity per stage. These identical colls are used in the finest, most up-to-date factory made recelvers. Complete blue print diagram showing the necessary resistances, the Complete blue print diagram showing the necessary resilstances, con-
color code of the different wires on the coils and where they are connected. The kit includes: One Litz wound antenna coil; one Litz nected. The kit includes: One Litz wound antenna coil; one
wound R. F. coil, one Litz wound oscillator coil; two I. F. transformers peaked at 175 K . C. Has top tuning. All are fully shieded in square aluminum cans, $3^{n}$ high, $2^{\text {a }}$ square. Two $6 / 32$ bolts for mounting. Complete kit of coils with four gang .00036 variable condenser, blue print diagram, for use with S. G. type tubes. Shipping H9991
Your Cost Per Kit H9992-
Your Cost
\$7.10

Cost
For Wunderlich or .55 dual detector. Has C. T. winding kit with variable condenser H9993-Your Cost......................................................... For Wunderlich or 55 dual detector. Complete kit, except no variable
condenser.
H9994-Your Cost. ...............................................

5 Tube Midget Super-Fiet. Coil Kit
For 2-57; 1-58 or Wunderlich; 1-47; 1-80.


Essential kit of three coils: a very compact band pass pre-selector; a composite detector oscillator and first I. F.
peaked at 175 KC . In $2^{*}$ square aluminum cans, $3^{\prime \prime}$ high. An out-
put $I$. F. with highest gain known in I. $F$. coils, in a round aluminum can, top tuning, 13/" high, $11 / 4^{\prime \prime}$ in
range approximately 160 to 550 meters on three gang .00036 variable condenser. Using these coils and other high quality parts, a set having a sensitivity of 5 micro-volts per meter. Complete blue print diagram furnished with this kit. No variable condenser is supplied with this kit, but one can be selected from the condenser page in this catalog. Complete kit of coils. Shipping weight 3 lbs. H9995-For screen-grid tubes. Your Cost.
H9996-For Wunderlich or 55 Detector Tube.
Your Cost.

## New Hammarlund I.F.

 TransformersThese coils are identical to those used in the Hammarlund Comet Receiver They provide one microvolt sensitivity and aselectivity
of 1000 times at 10 K C. of resonance. K. C. of resonance. $10 / 41$ Litz with a power factor of 01 or a Q of 100 . Coupling is very slightly below optimum. Designed for use with 58 or 35 type tubes. Tuned by adjustable condensers with mica dielectric and isolantite base. Wax impregnation and sturdy construction provide excellent stability. The shield can is
 H8538-Peaked at 116 K . C . H8539-Peaked at 175 K. C List 52.25
H8540-Pea
1.32

H8540-P
Your Cost.
s 1.95
s2.20
4.90
s. 7.25 H1011
Your Cost Each
1.08

Trutest Short Wave I.F.
Transformer Peaked at
465 K. C.
A special short wave
intermediatefrequency transformer. designed lo peaking at 465 K . C. although adjustments from 430 to $470 \mathrm{~K} . \mathrm{C}$ can be made. Fully shielded in a square aluminum can, $2^{\prime}$ square, $3^{\prime \prime}$ high Shipping weight 8 ozs. H9709

ost Each.
A. C. - D. C. Midget
Coil Kit
4 Tube- 2 Gang Condenser


Here is your chance to construct an A. C.-D. C. receiver employing the latest type tubes. The coils and variable condenser is especially designed for use with this type of receiver. Both have been used by several manufacturers in the construction of their receivers. Anyone can wire up the entire set within a few hours. The coils are Litz wire wound, size $21 / 4 x^{7 /} /^{" 1}$. Two gang variable condenser, with trimmers, self adjusting bearings that provide smooth, easy rotation. Plater are of heavy aluminum, shaft and frame of steel, cadmium plated. Bakelite insulation. $1 /{ }^{\prime \prime}$ shaft, size $21 / 2 \times 31 / 4 x$ $178^{\prime \prime}$. Shipping weight 4 lbs. Complete kit of two coils and 2 gang condenser. Explanatory blue print diagram furnished. $\$$ 1. 95

## T. R.F. Coil Kits - Plug-in Coils-Shields

## Long Wave R. F. Coil

A very recent development in coil winding for long wave transformers or any application requiring large
inductance values, Banked four layers deep. Range 550 meters to 1200 meters with a .00035 mfd. condenser; up to 2000 meters with a .001 mfd condenser. Size $27 / \mathrm{K}^{2} 11 /{ }^{\prime \prime}$. Shipping weight 8 oz.
H10091- Your Cost.

## Trutest Shielded R. F. Coils

 Very sensitive. For use with all types S-G tubes and .00035 condenser. Antenna Coil; primary 14 turns No. 28 D.S.C., secondary 130 turns No. 30 enam. R.F. Coil: primary 61 turns No. 31 enam, secondary 130 turns No. 30 enam. Coil $7 / 82^{\prime \prime}$ high shield $21 / 4 \times 2 \%$ "high. Sets ofthree have one Antenna Coil and two R.F. Coils; gets of four have one Antenna Coil and three R.F. Coils. Shipping weight 8 oz .
H10087-Set of 3
Your Cost.
H10088-Set of 4 H10088-Set
Your Cost.

## $75^{\circ}$

Untuned Assembly A combination of a self tuned bifilter transformer peaked at $550 \mathrm{~K} . \mathrm{C}$. and a detector plate choke coil which finds popular use as an additional Radio frequency stage in 4,5, and 6 tube receivers both for home use and automobile receivers. Sínce no external tuning is required, the only additiorial expense involved is for the Assembly itself and extra tube. Size $11 / 2^{\prime \prime}$ high by $11 / 2^{\prime \prime}$ in diametor. Shipping weight 8 oz.
 H10094-Your Cost

Shielded T. R. F. Coil Kits Secondary Litz Wire Bank Wound


Litz wire coils on form $21 /$; 10 ng Mounted in shields ${ }^{17}{ }^{7}{ }^{\text {" }}$ dia. provided provided mounting lugs. Sol derlug connec-
tions. Most efficient T.RF. colls ever designed Exceptionally high gain ( 62.5 at 1500 K . C. and 42.5 at $550 \mathrm{K.C}$. ). Covers band 550 to 1700
K.C. (police calls). For . 00036 Mid . Type K.C. (police calls). For . 00036 Mid. Type
Condensers. Blue print of circuit diagrams included.

For 4 Tube Set
2 Coils; 1 Antenna-1 R. F. For 2-24; 1-47; 1-80 or 1-57; 1-68; 1-47; 1-80 tubos. H10045-List Price $\$ 1.75$
Your Cost.
$89^{c}$
For 5 Tube Set
3 Coils; 1 Antenna-2 R. F. For 2-35; 1-24; 1-47; 1-80 or 2-57; 1-58; 1-47; 1-80 tubes. H10046-List Price $\$ 2.60$
51.34

For 6 Tube Set
4 Colls; 1 Antenna-3 R. F. For 3-35; 1-24; $1-47 ; 1-80$ or $3-57 ; 1-58 ; 1-47 ; 1-80$ tubes. H10047-List Price $\$ 3.25$ Your Cost.
R. F. Coil

H10090
Your Cost
Antenna Coil
H10089
Your Cost.
s1.75
$48^{\text {c }}$
$48^{\circ}$

## Conoid Coils



Conoid R. F. Coils are fully shielded and selfsupporting in a copper container. Suitable for Portable, Midget and Automobile receivers. Refor ease of mounting, either panel or sub-panel. Operates with . 00035 mfd . condenser. Soldering Lugs marked with their respective connec tions. Shipping weight 8 ozs. Size 2y/a diameter., $100_{0}$ high.
H10083-Antenna Coll
H10084-R. F. Coil
Your Cost (either type).

## Matched Set of Four

1 Antenna Coil, 8 R. F. Coils. \$T. \$35
H10086-Your Cost (per set)...
Short Wave Plag-in Coil Set 4 Prong Base


Four coils, wave length range 15 to 200 meters, on .00014 condenser. Bakelite forms $11^{*}$ diameter by $21 /$ "high. Four prong base with connections soldered to prongs. H10040-Set of four. Your Cost.
Two coils, like above to cover broadcast range 200 to 550 meters on .00014 condenser. H10041-Set of two.

National Plug-in Inductances


| Stock | Coil |
| :--- | :--- |
| No. | No. |
| N14400 | 10 |
| N14401 | 11 |
| N14402 | 12 |
| N14403 | 13 |
| N14404 | 14 |
| N14405 | 15 |
| N14406 | 16 |
| N14407 | 17 |
| N14408 | 18 |
| N14409 | 19 |
| N14410 | 20 |
| N14411 | 21 |

Meter

| $\begin{array}{c}\text { Net } \\ \text { PerPr, }\end{array}$ | $\begin{array}{c}\text { Special Amateur and } \\ \text { Television Coils }\end{array}$ |
| :---: | :---: |


| Range |
| :--- |
| $9-15$ |
| $14-25$ |


original R C A, Victor, 175 K. C., I. F. Transformer Coils for Models 80, 82, 86

## For First I. F. Stage

 Loosely coupled, having a 1 " diameter copper disc between coils. The primary resistance is 39 ohms , and H10037-Per Dozen 52.75 C Your Cost

Trutest Shields for New Type Tubes
Made of aluminum, natural finish. Three pieces: base, barrel and cap. Barrel dlameter $15 / \mathrm{m}^{\mathrm{n}}$. Overall height $15 /{ }^{\mathrm{n}}$ ". For New Types 56,57 and 58 tubes. Covers tube entirely. Shipping weight 1 lb .
M13265-Lots of 10 , Each 12 e Your Cost Each.

I $4^{c}$
Short Type-Grid terminal projects up through opening at top. Three pleces: base, barrel and cap. Aluminum, natura finish. Diameter of barrel $35 / 8$ Shipping weight i Heig

M13266-Lots of 10, Each 9c Your Cost Your



## Trutest Tube Shield

A beautifully finished tube shield For all types of R. F. tubes Three slots on bottom of shields for direct wiring. Size $43 / 8{ }^{\prime \prime}$ high, $21 / 3^{\prime \prime}$ in dlameter. Removable base. Shipping weight 1 lb . M13259-Per Dozen $\$ 1.25$ Your Cost.
Each.
$I 2^{c}$

## Trutest Tube Shield

A two-plece tube shield, made of the finest aluminum. Periorated at top and bottom. Second section has slot for screen grid wire. Mounted by means of screw-lugs furnished with means of screw-lugs furnished with
each shield. Size $53 /{ }^{" 1}$ high, 17/8" each shield. Size $6 y /{ }^{2}$ high, 12 .

M13260-Per Dozen $\$ 1.25$ I2c

## Kolster

Variometer
For replacement in Kolster Models K-20, 22. 25, 48A, 48B. Brand new condition Solves new condition. Solves tune the serial circuit, disposing of its distributed ing a new Variometer in
ing a new variometer in
often improves the reweption. Shipping wis 2 lbs.
H10050-List $\$ 6.00$
Your Cost Special


## -

## Trutest Special

## Tube Shield

Complete, copper-plated finished tube shield. Removable top and bottom base. Size $5^{\prime \prime}$ high, $211^{\prime \prime}$ diameter. Perforated for ventilation. Very popular shield, at a low price. Shipping weight 1 lb M13261-Per Dozen $\$ 1.20$ Your Cost Each.
$12{ }^{\circ}$


## Trutest Coll Shield

One of the most popular coil shields made. One piece, rugged aluminum, die-drawn. Size $3^{3}{ }^{\prime \prime}$ high, $21 / 2^{\prime \prime}$ diameter. Mounting flange, holes space, 2 Y/s". Shipping weight 1 lb .
M13257-
M13257-

## Trutest Coil Shield

A rugged Aluminum coil shield. Base is drilled for wire connections. Top shield fits on base by means of two set on base by means of two set screws. Size ${ }^{\text {diameter, Shipping weight } 1}$ diame
M13256-
M13256-
Your Cost Each.

## RADIO FREQUENCY CHOKES



H10214
Your Cost.

Pilot Chokes
Universal
wound, 18 millihenry, uncased R. F. choke, de ingned for use in the plate circuit of 2nd de tector in 175
K. C. superhets. 11/2x1/3"
$30^{\circ}$
H10215
Your Cost


Samson helcal winding table oper table oper ation as a choke over a
wide band of requency. Mounted and sealed against moisture. 85 mh.
H10097-
Your Cost
125 Millihenries.
$85^{\circ}$
H10098 - Your Cost .... Samaon unmounted. Has moist
proof coating, 85 Millihenries. H10099
Your Cost Each. . . . . . . . .
125 Millihenries, unmounted


Your Cost Each.
$69^{\circ}$


This little, compact and efficient radio frequency choke coil which has a very low minimum dis tributed capacity and which is available in 80 millihenries inductance for general use in broad-

## receivers.

and short wave
H10121-Your Cost
$30^{\circ}$

## Majestic Intermediate Frequency Coils

Can be used in majestic and other receivers requir-
ing 1. F. transformer coils of these specifica-
tions. For all 175 K.C. intermediates. Rated induct ance of 40 mh . each section Accurately wound on an isolantite tube. Perfectly insulated.
H10048-
$12^{\circ}$
YourCost
25.

## Trutest Coil Forms

## For Short Wave or

 broadcast band coils. Contacts of coil forms fit into any standard 4 or 5 prong tube socket. Has moulded ridge on top for ease of grasp.
## जाए

Choice of 4 colors: Yellow, blue, red and green. State color when ordering. Shipping weight 8 ozs
H10060-4 Prong
Your Cost Each

## H10061-

Set of four 4 -Prong Forms
Set of four 4-Prong Forms
Your Cost per Set.
Set of four 5-Prong Forms
Shipping weight 2 lbs .
$14{ }^{\text {c }}$ $15^{\circ}$ $50^{c}$ $55^{\circ}$

## oneycomb Coils

Mounted Duo Lateral Honeycomb Coils for broadcast and long-wave reception. Note:- 50 mmf . is assumed to be the minimum capacity of the 17 Plate condenser plus the parasitic capacity of the wiring of the circuit. Also 75 mmI , to be the minimum of the 23 -plate condenser.


Single mounting receptacle, fits all above type honeycomb coils. Perfect contacto
H10015-Your Cost Each.
$65^{\circ}$

| Capacity range of condenser in Miero-Miero Farads |  | 350 mmf . 17 plate |  | 500 mmf . 23 plate |  | Your Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wavelength in Meters |  | Wavelength in Meters |  |  |
| No. | Turns | Min. | Max. | Min. | Max. |  |
| H10000 | 25 | 80 | 220 | 100 | 260 | 50.84 |
| H10001 | 50 | 160 | 430 | 200 | 510 | . 90 |
| H10002 | 75 | 240 | 620 | 290 | 750 | . 95 |
| H10003 | 100 | 310 | 830 | 380 | 990 | . 99 |
| H10004 | 150 | 480 | 1360 | 590 | 1500 | 1.02 |
| H10005 | 200 | 650 | 1690 | 780 | 2000 | 1.05 |
| H10006 | 300 | 980 | 2600 | 1200 | 3100 | 210 |
| H10007 | 400 | 1300 | 3500 | 1600 | 4120 | 1.14 |
| H10008 | 500 | 1700 | 4400 | 2000 | 5300 | 1.32 |
| H10009 | 750 | 2500 | 6500 | 3020 | 7800 | 1.65 |
| H10010 | 1000 | 8400 | 8800 | 4100 | 11500 | 1.72 |
| H10011 | 1250 | 4400 | 10400 | 5300 | 13500 | 1.98 |
| H10012 | 1500 | 6400 | 14000 | 6500 | 16500 | 2.31 |

National
90 millihenries Multisection winding chole able for both short and broadcast work. Very compact, built as to fit into any standard grid-leak mountin ping weight 6 ozs. 22 - our Cost Short-wave choke, National No N14423
$42^{\circ}$

## Trutest

These R.F.chokes are lattice wound, mounted, easy to all circuits and receivers. 8 millirecives.
H10100
Your Cost.
$19^{\circ}$
H10101-Your Cost
$24^{\text {c }}$
For Short Wave Work, 5.5 mh . H 10102 t. $18^{c}$

## RCA•Radiola

R. F. Filter Coil With Condensers Models 44-46-47 Genulne replacement Part No. 6000. Comprising Micarta strip with 3 terminals, 2 bypass condensesrs, 1 R. F. ng bracket. Can be used in any receiver, especially suitable for Screen Grid Audio
czoon-Your Cost
$35^{\text {c }}$

## Air-King S. W. Coil Kit

 A reasonably priced short wave plug-in coil set for circuits needing high amplification with low loss. Forms of bakelite. Handles engraved with coil number. Four coils cover range from 15 to 210 meters when used with a .0001 mid . condenser. Excellent for the short H10070
## Television <br> \section*{Coil Kit}

Made expressly for Televiston signals. Covering the band from 100 to 212 meters, when used with 00015 mid. tuning condensers, these are plug-in coils that bring results. Complete set of 3 coils 2 R. F. and 1 Detector coil. Wound with genuine Litz Wire. Size 11/* weight 3 ilbs. H10059
Your Cost per Set
$\$ 1.50$
Victor R.F. Coils Used in Victor Models R-32, RE-75 receivhigh. Complete set of coils, 1 antenna, 3 R. F. coils. Tunes with .00035 mfd . con denser. weight 8 lbs
H10055-
Your Cost $.45^{c}$


Trutest Super-Het. Short Wave Converter Coil

## Assembly



An assembly of short-wave coils and a low capacity switch, eliminating the inconvenience of plug-in coils. Just a turn of the switch enables choice of the $10-20,20-40$, $40-80$, and $80-200$ meter bands. Designed to be used with a two tube circuit consisting of a first detector and an oscillator. The output then may be fed to a standard T.R.F. or a Super-Het. 200-550 meter broadcast receiver, this completes a combination of a very efficient short-wave Super-Het. receiver plus the regular broadcast recelver. All power can be furreceiver by the regular broadcast receiver. Equipped with knob and length. For use with a wang 00014 length. For use with a 2-gang . 00014 mp furnighed conder. Diagram of hookup furnished. Shipping weight3
H10104-
Your Cost

Selector Switch


Same as used In above Unit. Consisting of a three-pole four-position escutcheon plate included. Shipping weight 1 lb.

# YAXLEY $s_{\text {witches and }}$ Accessories 

Yaxley Pup Jack
No. 417. For speaker connections and battery leads. Mounts hole. ShipFing weight 2
Yaxley Insulated Tip Jack No. 422. Bakelite Cap. Red and Black for Positive Phone tip nests all the way in jack. Mounts in $1 /{ }^{\prime \prime}$ hole. Shipping weight 2 oz. Fer Pair

## Yaxley Tip Jack

 No.16. Tip Jack with positive single conductorcontact, is used contact, is used
for test panels, instruments, battery leads, and in sets for aerial and ground, battery and apeaker connections, etc. Hole $2 /{ }^{\prime \prime}$ ". Easy and convenient to mount.
F644 -List 30c
Your Cost Each
$18^{\text {c }}$


Panel Lights
No. 330. Panel Light, is a convenient reflector for Can also be used for instrument panels, clocks, etc. Mounts in a single $1 / 2^{\prime \prime}$ hole. Is of nickeled brass.
F6390-List 50c.
Your Cost.
$29^{\circ}$


Moulded TwinTip Jacks Shorting Type
No. 432. The circult is automatically closed when the tips are removed. Moulded bakelite with single hole mounting. M13035-List 25c Your Cost.
$15^{c}$
 Jack Switches These
Junior Jack S witches
are used formoun-

Yaxley Junior Jacks ting in a small space. Switch lies parallel with panel. Has smooth self wiping positive action. Furnished complete with Black Knob; on-ofl
plate. Mounts in $1 /$ panel hole, plate. Mounts in $9 / 1$ "panel h
up to $1 / 4$ "thick. Is $13 / 4$ deep.

Two-Position Switches F6471-No. 730. Single pole, double throw.
List 85c. Net. ..................... 50 c F6472 No. 740. Double pole,
single throw. single throw.
List 95 c . Net. F6473-No. 745. List $\mathbf{5 1 . 1 0}$. Net Five Spring. F6474-No. 760. Double pole double throw.
List $\$ 1.25$. Net
F6475-No. 733. 3 pole....73c throw. List \$1.25. Net FC469-No. 744. 4-pole......7se throw. List $\$ 1.60$. Net...... 94c

Three-Position Switches F6440-No. 732. Single pole, double throw, center off. List 85c. Net................... 50 e double throw. center off. List \$1.20. Net. F6442-No. 763. 3 -pole.....70c throw, center off. List $\$ 1.55$. Net. F6443-No. 764. Lhrow, center oft.
Yaxley Midget Jack
Switches
 name plate. Sis"
hole mount. Single pole, single throw.
F6446-List 50c
Net.
No. 11. Single pole double throw F6447-List 65c

38

Much smaller and requiring less mounting space than the long jack, they are used where apace is at a premium. Extends only $11_{4}$ " behind panel. Shipping weight 6 ozs . F6450-No. 701. Open circuit. List 40c. Net. . . .............. . 23c F6451-No. 702. Circuit closing. List 55c. Net. . F6449-No. 702A. Two circuit List 55c. Net. ....... 32 F6452-No. 703. Sin. Cir. Fil. Control. List 65c. Net.
F6453-No. 704. Interstage
List 75c. Net.
F6448-No. 706. Intorstage Fil. Control. List 95c. Net.

## Bakelite

Insulated Jacks
No. 407. These Jacks have attracti vely colored Bakelite caps; Red for Positive Black for Negative. Tip nests all the way in the
jack. These caps leasen danger of shorting. Mountsin "质" hole up to 3/8" panel thickness. One-Black; One-Red.
FEA55-List per Pair 35c
Your Cost................

## $\square \square$



Tip Plugs
No. 415 . For No. 415. For Jacks. Used for test leads in meters, panels. For use with Tip Jacks Nos. 407, 416,417 F643 - List 10c each
Your Cost Each
No. 15. Same eonstruction as No. 415, except has longer tip. To be used with Tip Jacks No. 16, 422. F6439-List 15 c each

Yaxley Push Button Switches
 are a vailableina wide range of spring combinations. Furnished complete with black Bakelite knob. Mounts anels up to 1/"
F6460-No, 2001. Make contact. List 90c. Your Cost Each. . .53c F6461-No. 2002. Break contact. List 90c. Your Cost Each. . . 53c F6462-No. 2003. Single Pole, double throw List \$1.00. Your Cost Each. . 59C F6457-No. 2004. 2-pole, 2-ctet. List \$1.20. Your Cost Each. . 59e F6464-No. 2005. 2-pole, brk. 2-F6464-No. $\mathbf{c t c t .}$ List $\$ 20$
Your Cost Each . . . . . . . . . . . 59c F6465-No. 2006. 2-pole, double throw. List $\$ 1.50$. Your Cost Each. . . . . . . . . . . 88c F6463-No. 2007. Mk-2, brk-1. List $\$ 1.30$. Your Cost Each 76e F6468-No. 2008. 2-pole, double throw. Make before break.
List \$1.65. Your Cost Each . . 97e

## Pilot Light Bracket

No. 310. Light Bracket has an attractive Jewel mounted so that pilot bulb illuminates it, when your set is on. A reminder to urn it of at F6436-List 30c Your Cost Each


|  | Yaxley Tip Jacks |
| :---: | :---: |
|  | No. 416. This is one of |
|  | the most popular types used. |
|  | hole. |
|  | F6437-List 15c. |
| 2 | Your Cost |

Cutler-Hammer Switches


## Cutler-Hammer

 Toggle Switch

General purpose. $3 / 2^{\prime \prime}$ shaft. 3 amps . at 125 volts. Approved by UnderM12836 M12836
Pach Dozen 5
Long Shank Switch Sarce as above except has long shaft; $1^{\prime \prime}$. M12835-M12835-

[^2]$2{ }^{2}$
D. P. D. T.Toggle

A suitable switch for meter panels. Shalt $1 / 4^{\prime \prime}$ long. Not suitable for 110 volt A. C.
M12833
Each.

## NATIONALLY ADVERTISED RADIO BATTERIES

## and Exide Batteries

There is no better storage battery made than the Exide. Those listed below are made especially for radio uses and are fully guaranteed to give you service which is aatisfactory in every way. Cases are of one-piece hard molded composition warranted not to crack or leak. We list various sizes and voltages to meet every radio requirement.

## Stock No. <br> $Y 19775$ $Y 19776$ $Y 19777$ $Y 19780$ $Y 19779$ $Y 19780$ $Y 19781$ <br> EVEREADY AIR CELL

To supply filament current to type '30, '81, '32, '33 and '34 two volt tubes. Guaranteed only when used in connection only when used in connection
with a receiver designed for it. With a receiver designed or ive. If used with a built up receiver,
insert suitable resistors to keep insert suitable resistors to keep
voltage down to that actually voltage down to that actually
required, and so that the maximum drain will not exceed . 65 amperes, otherwise tubes and battery may be damaged. Will deliver upward to 1000 hours'
service with a 7 -tube receiver service with a 7 -tube receiver when used $21 / 2$ to 3 hours per day. Shipping weight 33 lbs .
Y19973-List Price $\$ 8.50$
Your Cost Each


Burgess "A"" "B"' and "C" Batteries


Uniform quality insures equal current drain and lowinternal resistance.

| Stock No. | Bur- <br> gess No. | Volts | Size Inches Shpg. Unit <br>  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SUPER "B" BATTERIES |  |  |  |  |  |  |  |  |
| $\overline{Y 19850}$ | 21308 | 45 | $41 / 48 \%$ | 7\%88 | 16 | 6 | \$2.95 | \$2.25 | \$2.07 |
| Y19851 | 22308 | 45 | $31 / 71$ | $71 / 6$ | 101/2 | 6 | 1.95 | 1.49 | 1.37 |
| Y19855 | 2305 | 45 | $81 / 833$ |  | 11 | 6 | 2.25 | 1.74 | 1.58 |
| Private Car Type |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| STANOARD "B" BATTERIES |  |  |  |  |  |  |  |  |  |
| $\overline{\gamma 19859}$ | 10308 | 45 | 41/68 | 7 | 14 | 6 | 2.60 | 2.00 | 1.82 |
| Y19860 | 2308 | 45 | $31 / 816$ | 7 | 11 | 6 | 1.75 | 1.35 | 1.23 |
| Y19861 | 6308 | 45 | $21 / 2$ 41/4 | 578 | 11 | 5 | 2.00 | 1.54 | 1.40 |
| Y19862 | 5156 | 2215 | 29 㑲 46 | $23 / 4$ | 5 | 10 | 1.25 | . 97 | . 88 |
| Y19863 | 3145 | 221/2 | 2 3\%/8 | 21. | 2 | 10 | 1.25 | . 97 | . 88 |
| STANDARD "C" BATTERIES |  |  |  |  |  |  |  |  |  |
| Y19866 | 5360 |  | 23 你 13/4 |  | 1 | 10 | . 40 | . 31 | . 28 |
| Y19867 | 2370 | $41 / 2$ | 18. | 3 | 2 | 10 | . 40 | . 31 | . 28 |
| Y19868 | 5540 | $71 / 2$ | 7) 4 | 27 | $31 / 2$ | 10 | . 75 | . 58 | . 53 |
| SOUNO PROJECTION BATTERY |  |  |  |  |  |  |  |  |  |
| Y19871 | 22328 | 45 | 31/4 78/80 | 71/1 | 101/2 | 4 | 2.50 | 1.95 | 1.75 |
| RAOIO "A" BATTERY |  |  |  |  |  |  |  |  |  |
| \19875 | 6 A | 11/2 | 6x21/2 |  | 3 | 25 | . 50 | 31 | 28 |

## Universal Muller

Battery Clips Lead coated clips. Heavy apring. Positive contact jaws.

## 016062 -No. 24A. Lead coated.

 $212^{\prime \prime}$ long.Each.
............. ${ }_{58 \mathrm{c}}$
Q16061-No. 48B.
$2^{\prime \prime}$ long.
Each.
Q16060-No. 45. Pee Wee. Nickelplated. $11 / 2^{\prime \prime}$ long.

10 for.
Q16063-No. 21A. Lead coated.
$37{ }^{37}$ long.
Each.
10 for.

## Mark Time Switches

 mportant radio programs aremissed through sheer orgetfulness People fall asleep, to awake hours later and find their set still operating. Thousands prefer to be awakened by a cheery radio announcement, rather than by the terrifle din on an alarm elock. The It is only $2^{9} x^{7} 6^{\circ}$ deep excluding knob. Turns ON or OFF any time from five minutes to fifteen hours.V18178-List $\$ 4.40$ \$2.
Your Cost..........

## Mark Time Switches A time switch of numerous uses. Turns current on and off at any prede termined time governed by <br>  setting of ex

ternal dial, marked in 15 minute divisions. Maximum limit of time 15 hours. Enclosed in bakelite case. Ideal for electrical appliances, or the Rzdio. Shipping weight 4 lbs. Table model size $51 / 2 \times 31 / 4 \times 23 / 4{ }^{n}$
A very convenient and safe electric watchraan that never fails.

V18180-List $\mathbf{5 6 . 9 5}$
Your Cost Each


## Wall Model

Mechanism is designed for installing in standard wall flush box. Capacity 10 amperes, at 125 volts. Underwriters Lab. approved. Complete with Bakelite wall plate. Shipping weight
v18181-List $\$ 4.50$ \$3.09
Your Cost Each.

## Eydrometer



Live red rubber bulb and nozzle; beaded float. Shipping weight 3 lbs P15694
Your Cost Each
$25^{\circ}$

Trutest Automobile Battery Charger
This efficient and inexpensive charger will
keep your battery up to its full capacity at all times. You cannot
afford to be without one with the increased demand on your automobile battery due to the use of your auto radio and other necessities of present day cars. This is an essential part of your car equipment. A simple installation and it is ready for use. Attach the clamp-on receptacle to the dashboard of your car and attach the two leads from the receptacle to the When you drive into your garage at night simply plug your charger into the receptacle and it will give your battery the necessary boost to keep it up to its full capacity. Shipping
weight 7 lbs. N14200-Your Cost

Mallory Elkon Automobile "A"


Here is the solution to that ever-present and increasingly important problem of a run down Automobile Battery. With present day development of the necessities used in an Auto,
there is an increasing demand placed upon the Battery; a demand it is unable to meet unaided. The solution, an easy and most economical one is - Use this Charger. No installadion necessary-simply attach clamp-on re and ground-that's all. Size $73 / 4$ "long; 31/0 wide; $31 /{ }^{\prime \prime}$ deep. Shi
P15698-List $\$ 9.75$ Your Cost.

National Velvet This rugged unit has been designed with liberal factors of safezy. Operates 1 to 6-tube sets, including power tube. Provided with protective voltage adjustments, adjustable taps giving the following voltages: 22-45 for detector, $45-90$ for r.f., $90-135$ for Audio and full 180 volts at 35 M.A. for Power Tube (Nonadjustable). Shipping weight 18 lbs. Silent, Hum-rree output. Black crystaline case. Your Costless Tube

## SUPER VELVET "B"

A strictly heavy duty unit with output of 70 M.A. at 180 volts. Similar in appearance and operation to the above unit except that the 180 volt output is adjustable. Its output of 70
M.A. is sufficient to furnish current to receivers from 1 to 9 tubes. Black crystalline steel case. Shipping weight 26 lbs
H14381-List $\$ 39.50$
Your Cost with Tube.

B" Eliminator

$\qquad$

## Interference Filters - Voltage and Tone Controls

## Insuline Popular Filtervolt



This model Filtervolt has more than twice the capacity of the Filtervolt, Jr., and is especially recommended for use in cases where the capacity of the Filtervolt. Jr., is not sufficiently large to eliminate all the noises. This Model can be installed either at the radio set, or at the source of the apparatus causing the disturbance. It is constructed of heavy duty condensers, making it an ideal noise eliminator for disturbances caused by electric heating pads, irons, toasters, vacuum cleaners, sewing machines, motors up to $1 / 8$ horgepower,

I.C.A. Senior

## Piltervolt

 A heavy duty model which filters out man-made static caused by electric aigns, large electric motors, oil burners, and other larger machines. Can be used on all types of gets either A. C. or neat metal japanned case, size $51, \frac{2}{2} \times 34 \times 8$ case, size $5,2 \times 63 \times 812^{\circ}$ Equally effective on 25-60 cycle, L12618-List 515.00 Your Cost Each.
1.C.A. Jr. Filtervolt Elimuates noises from the

## Aerovox Interference Filter

Receiving sets are afflicted with a great many troublesome noises coming from electric signs, motors, washing machines, oil burners, etc. which can be eliminated by connecting this device between the receiver and the power upply. More effective when used in series ith the power line supplying the interfering machine, yet accomplishes remarkable results when used at the radio outlet. A necessity for satisfactory reception in localities where noises are very pronounced. Complete with power cord. Shipping weight 4 lbs . D3550-List $\$ 5.00$ Your Cost Each
s2.94

| L12602-List $\$ 3.50^{\text {woight } 8}$ ozs. |
| :--- |
| Your Cost........... |
| 25 |


C. E. Tungar Bulbs
radio caused by heating pads, switching on and of ights, toasters, vacuum cleaners, etc. Plugs into power supply outtet and has receptacle for inserting radio power cable. Small, neut and compact 2 lbs . Li2616-List s3.00. Your Cost.. $\$$ I. 70


Filterette Senior Especially ing post to connect return wire rom Filterette to frame of applior D. C. maximum potential: 110 current: 5 amps. Shipping wimum 41 bs.
Yist Price 55.50
Your Cost
s3.24
Filterette Junior


A compact Filterette for household appllers, small hair dryers, fans and cash registers are easity made
interference use of a Filterette, Jr. The function of the Filterette is to pre-
vent the distribution along wiring circuits of impulses or disturbances having frequences within the broadcast band. In bakelite case $13 \mathrm{~g}^{\circ}$ in ong. In provided with binding post or connecting return wire from Filterette to frame of appliance. MaxD. C. Shipping weight 1 lb . Li2G01-List $\$ 1.85$
Your Cost Each.... $\$ 9$
 mended for port able elec trical apcausing more in terference than that supprensed by the Filtertue, Jr., most satisfactory for use In metal case $2^{\circ}$ dia. and $4^{\circ}$ long is connected between receptacle and appliance provided with bindiom Filteretto to fet of volts. A. C. or D. Each.


Stock No.
221900
221901
221902
221903
Z21904 Chargers Your Cost

## Esch.

 Your Cost Each.

## Tungar Type Bulbs

First quality, thoroughly reliabl unlts for use in chargers, "A" and perlect merchandise.
221905-6 6 mp . bulb for Trickle
Your Cost Each 221906 - 2 amp. bulb -10 21907 -2 amp bulb with 221908 amp buib Your Cost Each
1.70
si. 90
${ }^{1} 1.90$
84.75

Dial Filterette
Applied to the con tacts causing interforence when a dial telephone is used.
May be mounted within the base it will not interfere in any way. Is contained in bakelite tube $1^{\prime \prime}$ in diameter and 11/2" stalled using only screw driver. Ship


Made by The Radio Corporation of America. This Universal Filter Unit is a small, compact, semi-portable unit to be used with motors heating pads, contact devices, violet ray apparatus, etc. The filter is capable of carrying a continuous current of 235 amperes at 125 volts A. C. or D. C. A six foot extension cord complete with attachment plug is provided. A binding post is provided on the end of filter unit and, whenever used in conjunction with a motor, connection should be made between post and motor frame, otherwise connect from pust to a good ground connection. Completely sealed in a metal case, finished in a pleasing bronze acquer. Size $53 / 5 \times 23 / 4 \times 23 / 3^{\circ}$ high. Shipping ${ }^{\text {weight }} 5 \mathrm{lbs}$
${ }^{5} 1.95$


## Aerovox <br> Interference Filter

 Type IN-26 A lighter duty unit than the ducing the noises in radio sets produced by electric fans and produced by electric fans and similar small machinery. Suitable for any 110 volt A. C. Line, or any D. C. Line of 200 or less volts. Most effective when used at the source of interierencD3551-List \$2.25
Your Cost
\$1.32

## Aerovox Type IN-25 <br> Interference Filter

This Unit can be installed at any wall outlet, the screw which mounts it on the wall plate serving as the ground connection to the grounded conduit box. It is recom
 mended for use with sta tionary equipment such as ong extension leads. For 200 volt D. C., 110


Elkon Replacement Rectifiers


The recommended replacement unit or Majestic "A" eliminators. May also be used on following eliminators: Mayolian, Elkon, Phlleo, Webster, Knapp, General Inst.
Metro, Fada, Bernard, Sentinel and Briggs \& Stration. 3 amperes Shipping weight ${ }^{4}$ ibs. List $\$ 7.00$
Your Cost
53.75

## Elkon Rectisiers



For Philicotron "A" and "AA" Replaces the wet jar rectifiers used in the Philco Trickle Chargers "A" Fliminators and "A" and "B" combinations. Are noiseless- nothing to get out of order, trouble and careproof. Any one can make the replacement; it does not require a service man. Simple to attach, only two wires to connect-no liquidsno attention-just satisfaction. Replace all low voltage Philco liquid rectifiers with new Elkon XP-12 solid dry rectifiers. Shipping weight 2 lbs.
A430-List $\$ 4.00$
52.35

## B-L Rectifying Units



Type "B" full-wave units are made for dynamic speakers, " $A$ " powers, signaling equipment, etc. Type $\mathrm{B}-12$ is for such " A "' eliminators as Acme, Sterling, Arco, Stewart, France, Galvin, Green-Brown, etc. Type B-16 is for Green-Brown, Type D Norden-HAUCK No. 3A. Tohe Deutchman, Webster, Valley type DMA, etc. Shipping weight A435:-
List 54.50. Your Cost 24.65 A436..Type B-16
List 55.00 . Your Cost 2. 94

## Elkon Rectifiere

For Trickio and Tapering Charger
Thousands chargers using Elkon Dry Rectiflers need re-
placing. There lanothing to wear out in the chargers, but
 units should be replaced after 5000 hours use. Type XB-4 (3 units to set) should be used in the Elkon Type B and T, National Battery Co., Acme and Bernard. Type X-12 should be uned in the Fikon Type $\mathrm{F}_{\text {, }}$ W. L. S. and Song Bird. Shipping weight 1 lb .
B429-Type XB-4. List $\$ 4.00$ net.
Your
B432-
Your
Cost.
s2.35
$\$ 2.35$



The New Connecticut French Type Cradle Phone is designed to fill the demand for an inexpensive portable type telephone and signal system. Standard dry cells for permanent installations and over 150 feet lines. Basc of phone is of heavy gauge steel and contalns operating mechanism, including buzzer and necessary connections. Finished in light green. Shipping weight 8 M13440-List $\$ 7.50$
Your Cost Per Pair $\$ 5.50$


Now Feather-weight Head Phones
You would scarcely know you had them on. . . So light and so comfortable that hours of continuous use does not bring the wearer the slightest discomfort. They are efficient too; their total resistance of 4000 ohms makes them extremely sensitive to DX and weak signals. sensitive to DX and weak finished in crackle maroon lacquer. finished in crackle maroon acquer.
Phone units similarly finished. Shipping
N13935--
s1.35


Cannon Ball Phones
The biggest phone value we have ever offered! A high grade, extremely sensitive pair of head phones at a price that defies competition. Aluminum shells. AdjustMolded hard rubber caps. Total resistance 2000 ohms. Complete with cords. Shipping weight 2 lbs. N13930-
\$1.I0

## Ear Phone Cushjons



These cushions, made of soit rubber, are ideally suited for amateur, wireless operator and others
using phones over a long using phones
N13940-List Per Palr 75c $25^{\circ}$
Your Cost.................


Yaxley Double Phone Plugs
Have many uses, such as to plug in one pair of phones; or one speaker; or one pair of phones and one opeaker; or two speakers. lated to prevent shorting.

[^3]

Frost DX Special Fones 2,0,0000hms Impedance Designed by uct is the result of over thirty years experience ture of the highest grade telephone equipment. These phones fully meet the requirements of amateurs and DX fans. Are extremely sensitive to the faintest sound. This type easily adjustable; can be worn for hours without the slightest discomfort. Wire is the finest grade, enameled, and machine wound on the magnet bobbins insuring accuracy. Magnets are of a special steel; diaphragms of finest gauge metal respond to the faintest impulse. Shells are of polished aluminum with black composition caps. Equipped with a five-foot fexible cord, very durable insuring long wear. Has standard phone tips. Its impedance of 20000 ohms
make it a very handy phone for make it a very handy phone for
testing and peaking intermediate frequency transformers in superhet receivers, also for all-around testing. N13931-List $\$ 5.00-\$ 2$,
Your Cost Per Pair..

## Frost Fones

## 2000 Ohms $\$ 1.38$ Pair

Long a big favorite with the radio man because of their all-round high man because of their all-round high quality, lightness of weight, and ease of adjustment for perfect com-
fort. Carefully and scientifically fort. Carefully and scientifically made. Unexcelled or testing or
reception. Shipping weight 2 lbs . N13932 2000 ohmsYour Cost Per Pair.
1.38



Brandes Phones
A scientifically made set of head phones designed for those demanding a superior article. They are
full-size yet are unusually comfort-fuli-size yet are unusually comfort-
able to wear. Shells are of polished aluminum. Resistance 2000 ohms. Adjustable. Wob covered flexible steel head band. Complete with cord. Shipping weight 2 lbs Special Price Per Pair \$1.25 N23936-Extra Caps Each. N13937-Extra Dlaphragms
 $\frac{\text { NL3338-Extra Headband Each } 30 c}{\text { Lightweight Head phones }}$
 Weight 5 oz . Tbese phones have every feature insuring reproduction, and service. Are and service. Are in size; light in weight, and easily adjusted. The articulation is clear, and the faintest sound can be readily distinguished. Shells of polished aluminum. Shipping weight 1 lb .
Wist $\$ 2.25$ - Your Cost
$97^{\circ}$ N13928-4000 ohms-ST $52,50-$ Vour Cost
List


## Tested Crystals

These guaranteed crystals are of the highest grade lected and tested for sen-

## sitivity and tone

N13900 Galena-
N13901-Super-Sensitive
10
$10^{c}$

## Winchester Headphones with

## Built-in Detector

## "A A Pocket Radio Set"

One of the most ingenious and remarkable radio sets ever devised. Can be carried in the devised. Can be carried in the pocket. Ideal for the camper, traveler or anyone desiring their own individual radio set A pair of scientifically constructed head-phones, containing a built-in detector, with tuning device covering the entire broadcast band. Used on regular antenna, or attached to light socket with condenser plug interposed. Of the highest quality, with special compressed crystal, ultra-sensitive over entire surface. Made of bakelite with coils of 2000 ohms impedance; 4000 ohms in all. Flexible steel headbands, fully covered and easily adjusted. These can also be used as regular headphones by disconnecting variable condenser
N13915
Your Cost
${ }^{3} 3.75$


The most inexpensive radio receiver on the market. Using no batteries or power of any kind; good, clear reception can be had within 10 to 25 miles of the broadcast station, depending upon local conditions. Very sensitive crystal with adjustable cat whisker. Shlpping weight 1 lb .
N13889
Your Cost Each
$59^{\circ}$


Blackbird Crystal Set ${ }^{5} 1.77$

An efficient receiving set which will receive broadcasting loud and clear. Has super-sensitive crystal enclased in dust-pruof glass shell, Bakelite tuning knob, aerial ground and phone binding posts mounted on front panel. Front panel is modernistic gold finish and cabinet is black leatherette. Shipping weight 5 lb N13 877
Your Cost Each
s 1.77
"Selective'" Crystal Set


A remarkable small set which performs in a manner equal to many single tube receiv.00035 mid. variable condenser, glass enclosed adjustable crystal, tuning slider, binding posts for antenna and ground, and double connection posts for two pairs of head phones. Mounted on brushed nickel panel. Attractive slamting faced cabinet. tortionless and selective reception. Ship-
ping weight 5 lbs
N13886-List Price $\$ 5.00$
Your Cost
s2.45

## Philmore 1, 2, and 3 Tube Sets



These receiving sets have been designed and are a development of a well known circuit universally applauded for its selectivity. The improved circuit has been amended to eliminate cumbersome controls employed in the original circuit by means of a fixed condenser and spider webb coil used as a primary, secondary and fixed tickler. These new features assure easy tuning, additional selectivity and sensitivity and plenty of volume. These sets employ the new 2 volt tubes which draw but very little current and which are economically operated from dry cell batteries

1 TUBE SET
N138s0-Requires one dry "A" Battery, one $22 \frac{1 / 2}{}$ voit "B" Battery and one type 230 Tubo; Head phones and Aerial. Less A ccessories Your Cost
s 4.45
N13881-Complete with Batteries and Tube (no Headphones or Aerial). Shipping weight 15 lbs. 2 TUBE SET
N13882-Requires two dry "A" Batteries, one 45 volt "B" Battery, two type 230 Tubes, Headphones and Aerial. Shipping weight 9 lbs . (Less Accessories). Your
Cost
s5.25
N13883-Complete with Bat
terles and Tubes (no Headphones or Aerial). Shipping weight 27

## N13884-3 TUBE SET

N13884-Requires two dry "A" Batteries, two 45 volt "B" Battwo 230 and one 231 tubes, Headphones or magnetic speaker and Aerial. Shipping weight 33 lbs . Less Accessories
Your Cost Each
N13835-Complete with - Tub and Batteries (no Head Tubes or Aerial). Shipping weight 9 lbs Your Cost
Each
$\$ 13.95$

## Special Aerial and

 Headphone KitA specially matched set of Headphones and complete Aerial-Ground equipment for use with any of the Philmor Sets listed on this page. Ship-
ping weight 5 liss.
N $13890-$
Your Cost

## New Hammarlund Transmitting Condensers



The NEW HAMMARLUND Transmitting Condensers incorporate features usually associated only with high power transmitters. The use of extruded Isolandie ency. Heavy cast aluminum ency. Heavy cast aluminum end plates shield. Shafts are denser thoroughly. Shafts are
beyond panel mounting bushings. Overall width $4^{11} /{ }^{2}{ }^{\prime \prime}$, height 3 垎" Maximum shipping weight 5 lbs . Imf. Plates Plate Plate *Plate Voltage Overall Your


Rel Transmitter Dial


| Suitable for all |
| :--- |
| major controls | of the Xmitter Can be rotated to any position and locked there ing the handle. Has additional scale space for individual cali cast aluminum, cadmium lacque finish. Shipping weight 3 Your Cost Each...

s 4.20

## Bradley Radiostats

 Power Rheostats espe- cially de radio transmitting mittin
apparatus. Type E2111: Resistance 4 to 150 ohms. Capacity $1 / 2 \mathrm{~K}$. W. Shipping weight 5 lbs.
Nour Cost Each
s. 5.42 Type E210: Resistance 4 to 150 ohms. Capacity 75 watts. Shipping weight 2 lbs .

## N14129

s3.34
Type E210: Radioleak: Variable grid leak. Range, 5000 to 30,000 ohms. Shipping weight 2 lbs.
N14130-
Your Cost Each.....

## Deagan



## Station Chimes

For the amateur phone man and the broadcast station. Adds individual touch to station. Four perfectly pitchod notes. Tuned to a perfect chord-impossible to play out of tune. Simulates bugle-calls or clock tower chimes. Complete will hammer, book of 80 calls and 6 musica N14013-
Your Cost Each.

## 50 Watt Twbe Socket

 Fits -03A, -11 $-45,-72$ and 50 standard 50 watt tubes Isolantite base. Metal parts nicke plated. Phos phor bronze contact Shipping weight $\$$, Your Cost Each
$\$ 1.62$

## Antenna Insulators

## Antenna Feeder Spreaders

Bakelite. $8 / 4 \times 1 / 6$ " thick. " $I$ " bolt and recessed washer holds No. 12 or 14 wire. Permanent grip. Ideal for Zeppelin Antenna. Light in weight high insulating properties 916818-Spaces 5 apart. Mour Cost Each
$15^{\circ}$


## Pyrex Antenna

 InsulatorsStrong and neat; a size for every amateur purpose. Stock Length Power No. Overal! Rating R16805 3\% $\begin{array}{ccc}\text { R16806 } & 713^{\prime \prime} & 250 \text { Watts } \\ \text { R16807 } & 121 / 4 & 11 / 2 \mathrm{KW}\end{array}$ $\begin{array}{ccc}\text { R1680 } & \text { 71/3" } & 250 \mathrm{Watts} \\ \text { R16806 } & \\ \text { R16807 } & 121 /{ }^{\prime \prime} & 11 / 2 \mathrm{KW}\end{array}$

## Cost

Cost
0.17
.68
2.06


Shell Only
Nofittings. For those who wish to provide thei own rods and fittings. Ship ping weight 4
${ }^{\prime \prime}$ lbs.
R16816-43/88615
List $\$ 1.00$

## Amateur Type

Diameter 2th".
 Supplied with braes rod, 4 brass jamb nuts, 2 brass washers, 2 rubber washers and 2 rubber gaskets. Shipping weight 3 lbs. R16813-15" rod. Your \$I.S R16814-20" rod Your $S \rightarrow 5$
Cost

## Pyrex Stamdoff

## Insulators

These high-grade Insulators are the last word in stand-off type units. Oval base size $31 / 2 \times 15 /{ }^{\prime \prime}$ " Diameter of glass 1 "/ ". Have flashover value when dry of 21.5 and 56 KV , respectively. Shipping weight 2 lbs . R16808 high overall. Your Cost Each. ${ }^{5} 1.54$ R16809-7" Wour Cost Each
$\$ 1.72$


Consists of a key and special hlgh frequency buzzer mounted on a frequency buzzer mounted on a poilshed wood base. Connect a dry battery to the binding post on the set, press the key and a buzzing sound resembling radio note will be produced. An casy and quick means of learning the code Base $7 \times 43 / /^{\prime \prime}$. Shipping weight 2 lbs.
N14001- Cost Each... \$1.98
New Speed Bug


Improve the speed and legibillty of your oode transmission with this new improved "bug." Pressure on one side of lever produces a on oneth unbroken train of dots; on the other side, the dashes. Adjustable for perfect sending from approximately 8 words to as high approximately 80 words per minute. Contact as 50 words per minute heavy enough to use on points heavy enough to use on most amsteur although one should be used if current is very high. Shipping weight 6 lbs .
N1000 List $517.00 \$ 9.79$
Your Cost Each...

## Trutest Oscillating Quartz Crystals

Truteat Crystals are carefully ground from the finest quartz obtainable to precision thickness.
Finished Crystals: 80 and 160 Meter Bands, approximately one inch square, $X$ or $Y$ cut, calibrated guaranteed accurate to one-tenth of $1 \%$ or better. Specify Frequency Desired when ordering and we will supply nearest stock crystal calibrated. M13456
Your Cost
$\$ 3.95$
Oscillating Quartz Blanks, 1 " square, rishnded frystals but uncalibrated.
M13461-
Your Cost
s2.50
Also can supply specialties in Quartz.
ments.

## Crystal Holder

Made of heavy nicke! plated brass and bakeite. Has standard prongs. Ground oxidecoated metal bottom contact and spring brass upper contact. Size $21 / 4 \times 11 / 2 \times 5 / 6^{\prime \prime}$.
N14098
Your Cost
Less Crystal
s 2.40

## Base Receptacle for

 Crystal RoiderMade of Bakelite. Insulating qualities insure minimum of loss, resulting in maximum efficiency. N14099-
Your Cost

proaches crystal control. over-all frequency coverage. Built in an aluminum cast box. Large condenser plate spacing prevents


## R.E.L. 5 Meter <br> Pole Oscillator

Designed for those who desire the ultimate in DX transmission of 5 meters. Equipped with 8 foot aluminum tube which makes an ideal half wave voltage fed radiator. Gives an additional 8 foot height to antenna. Unit is connected to control room by ${ }^{4}$ wire quency and then elevated to permanent operating place. Water-tight case. Consists of two UX tubes In push-pull circuit, frequency control tank condenser, resonating condenser and other component
parts. Uses 01A or 45 tubes. Shipping weight 15 Ibs. N14033
Your Cost L.ess Tubes
Ner Foot
Per Foot. Wire Weather Proof Cable IT2c

## The New Electron Coupled Frequency Meter

The latest development in frequency meter design. Accuracy is 0.025 . Changes of battery volt ages do not affect calibration. The output is im mensely rich in strong harmonics, stability ap-
frequency shifts with temperature changes. A $6^{\prime \prime}$ diameter dial engraved in 200 divisions with micrometer indicator allowing dial to be accurately read to one part in 2000. Uses a 36 type tube with 135 volts "B" or a 24 with 180 volts "B."
N14047-Un-calibrated. Wired.
13 lbs.
Your Cost
$\$ 29$

N14048 Calibrated $1715-2000 \mathrm{~K}$ on dial. Curve is plotted on cross section paper $16 \times 20^{\prime \prime}$ Specify tube to be used. Shipping weight Your Cost
s36.00 N14049-Kit consisting of case, special Variable Condenser, dial and special coll with complete data. Shipping weight 13 lbs . Your Cost
322.50


## Modulator Unit

 For Oscillator Contains the necessary modulator circuit equipment and Weston plate milliammeter for indicating current drawn byboth oscillator and modulator tubes. Designed for either of two tube combinatlons: Two 33 pentodes as modulators and $01 \mathrm{~A}^{\prime} \mathrm{s}$ as oscillators or two 47 's with two $45 \%$. Finest parts used throughout. An 8 foot cable is furnished for connecting power supply. Grey crackle finished cabinet, size $13 \times 73 / 46^{\prime \prime}$. Shipping weight 15 lbs . N14031-
Your Cost Each
${ }^{\text {s } 25.50}$


Trutest Filament Transformers
Rugged and wel made; guaranteed to deliver their rated voit ages and loads ing. 110 -volt primary. All have 10000-volt insulation except
 Maximum shipping weight 7 lbs.
Stock
Seiondary $\begin{array}{ccc}\text { Stock Seiondary } & \text { Your } \\ \text { No. } \\ \text { Nolis Amps. } \\ \text { Cost }\end{array}$ N14078 N14079

$\mathbf{N} 14080$ $\begin{array}{lrr}\text { N14081 } & 71 / 51 / 5 & 5-4 \\ \text { N14082 } & 71 / 2-71 / 5-7 / 2 & 4-4-4\end{array}$ | -4 | $\mathbf{5 . 0}$ |
| :--- | :--- |
| 6 | $\mathbf{4 .} 25$ |

$\qquad$
Tritest Domble Chokes Two chokes each being approximately 20 henrys mounted on same core, rated at 160 M.A. For two N14091
Your Cost Each.
56.25 Same as above rated at 250 M.A. Shipping weisht 18 lbs. N1092-
s9.25


REL R.F. Chokes Pie wound. for hokes
power tubes. Effective 15 to 90 meters. D. C. resistance 12.9 ohms. Shipping weight 1 lb . $7 \mathrm{H}^{\mathrm{C}}$

## 500 M.A.

## Chokes

Single layer winding on bakelite. 15 to 90 meter band. $26 \mathrm{MH} \mathrm{D} . \mathrm{C}$ 5.20 mm . Shipping weight 1 lb . N14051-
90 to 200 meter band. 73 M 7.1 ohms. Shipping weight 1 lb . N14052-

 Stock Ind |  | Hys. | Mills |
| :--- | :---: | :---: |
| No. | Hos6 | 10 |
| N14087 | 250 |  |
| N14087 | 30 | 160 |
| N14088 | 30 | 250 |
| N14089 | 30 | 350 |
| N14090 | 30 | 500 |

## Filter Chokes

Big heary units made to stand hard usage. Accurately rated andfully guaranteed.
 Maximum

| No. | Hys. | Mills |
| :--- | :---: | :---: |
| N14086 | 10 | 250 |
| N14087 | 30 | 160 |
| N14088 | 30 | 250 |
| N14089 | 30 | 350 |
| N14090 | 30 | 500 |

Webster Class "6B" Transformers


Properly engineered transformers for class "B" modulation using 210 tubes. (See Dec. issue QST.) Type A1-910 Input Transformer and Type AM-811 Modulation Transformer (for 2). Shipping weight 25 N14096-
Your Cost Per Pair
8.50

Webster Class "B" Transformers designed for use with push-pull 250 tubes as the exciting amplifier for a palr of UV 203 As . Shipping weight 30 lbs.
N14097-
${ }^{\text {s }} 14.75$

## Trutest

1500, 2000 and 3000 volt, C.T.

200 M.A.
600 Watts
Dlectrostatic shield grounded
to cover. Has to cover. Has
seven terminals deliveringlabove

rugged and carefully made Transformer, guaranteed to deliver its rated voltagee and current without heating. 115-volt Primary. Slize 43/4 $\times 7$ 1/4 $\times 5$ /4 high. Shipping weight 40 lbs .
N14076-
Your Cost Each
\$11.50
2000, 3000 and 4000 Volt TRANSFORMER
Identical in appearance with the above unit. Rated at 1200 watts. Delivers 300 M. A.'at above,'voltages. Shipping weight 55 lbs .
N 14077 - Cost Each. $\$$ T 6.50

C. T. 10 amps . Sec. Shipping weight131 Type 4586. 5 volts Type $41 /{ }^{\prime} \times 65 / 8 \times 65 / 8^{\prime \prime}$ Sec. $68{ }^{2} 63$. weight $\mathbf{A 2 0 5}-$ Your Cost

## Filament Heating Trans-

 formers Type T-2383 12 volts C. T.at $176 \mathrm{~V} . \mathrm{A}$.
 Shipping weight 15 lbs A315
Your Cost. Type T-2382. 12 voli 5008 V. A. Size $31 / 2 \times 41 / 2 \times 4^{\prime \prime}$. Shipping weight $71 / 2$ lhs.
A316-Your Co Type 3680 cost ... 3.3 amp. Size $31 / 2 \times 3 \times 33 / 6$ ". Shipping weight 6 lbs . s317-Your Cost

Filament Heating Tratas formers 45 Series 2

## $-7.15$

## Shipping

 $\$ 8.80$
## Thordarson Transformers

T
44
liv
of A306.
Your Cost
11.76 Type 4455. Delivers out of filter
2000 volts at 250 $71 / 6 \times 9 \times 71 / 8{ }^{\prime \prime}$ Shipping weight 52 A307-Your Cost. $\$ 20$.64 Type 4460. Delivers out of filter 2000 volts of 750 M . A. Size $10 \times 12 \times 10^{\circ}$ Shipping weight 126. ${ }_{\text {A308 }}$ Your Cost. ${ }^{5} 49.95$ Type 2387-A. $1000-0-1000$ volts and $1500-0-1500$ volts. Capacity
300 V. A. Size $71 / 2 \times 53 / 4 \times 71 / 2^{\prime \prime}$. Shipping weight 23 lbs. A309
Your Cost.
\$II.IS Type T-2388-A. 1500-0-1500 volts and 2000-0-2000 volts. Capacity 500 V. A. Size $71 / 2 \times 61 / 5 \times 81 / 2$. Shipping weight 30 lbs . A310 Your Cost

Plate Supply Transformers
 offilte
500 volt at 150 M.A. Size 8 6 5/8 "
Shipping
weight 24 lbs.
 3


A312 $\$ 5.85$
Type 4456. 25 henries. 250 M . A. Size $55 / 6 \times 55 / 685 \%{ }^{\prime \prime}$. Shipping welght 30 lbs. Cost $\$ 8.80$
A313-Your Cos Type 446125 henries 750 M Size $12 \times 8 \times 8{ }^{*}$. Shipning weigbt 58 Size
libs.
A314 A314-Your Cost 529.6

## Unshielded

## Reactors

Type T-2353. 6 henries at 150 M . A. 3000 volt insulation. Ship $8 \times 3$ 3 $\times 3$ 有 Shipping Wght 515 l lbs. $\$ 2,04$
A319-Your Cost Type T-2071. 30 henries, 150 M. A. 3000 volt insulation. Size $2^{3} 3 \times 31 / 2 \times 6^{\prime \prime}$. Shipping weight 7 A320-Your Cost .. \$5.88 Type 2027. 30 henries, 300 M . A. 3000 volt insulation. Size $5 \times 31 / 2 x$ ${ }^{8} 321$ - ${ }^{3}$ Your Cost

## Reactors Type $4451 .{ }^{25}$ henries. 250 M . henries. 250 M.A. <br> $61 / 2 \times 41 / 2 \times 43 / 2^{\prime \prime}$ Shipplng weight 20 lbs. <br> s <br>  <br> Filter

 Your Cost.

Audio Transformers
Type B1-For coupling two 245 tubes operating in push-pull at noras a class "B" or modulator. Type BO designed to couple a class ' $\mathrm{B}^{\prime \prime}$ amplifier or modulator empioying two $210 s$ to ohms. Taps are provided for oper3000 ating with the fllowing loads. ohms. Shipping weirht 26 lbs N14095-List Per Pair $\$ 21.00$ Your0

These four lines of Transmitting Tubes, namely Lafayette, RCA, Duovac and DeForest were chosen as representative of the Forest in this particular type of tube. Unibormity of quality, thorough seasoning and formity of quality, thorough seasonigg and stabilizing of characteristics, as well as extra
high vacuum insuring long life and perfect high vacuum insuring long life and periect performance, is guaranteed you when you
purchase any of these tubes. Every tube
received is carefully checked and tested in the most modern apparatus before their deIl very or shipment to you. You are assured of FRESH tubes at all times, as production of this type is rigidly geared to actual demand, and particularly so as we enjoy the largest tube business in the country, which alone would assure you of receiving fresh and perfect tubes.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Type | Description Cost | Type | Description | Cost |
| 210 | 15-Watt Oscillator and Power Amplifier . . . . . . . . . . . . . 5 5.88 | 210 | 15-Watt Oscillator and Power Amplifi |  |
| $\begin{aligned} & 210 \\ & 866 \end{aligned}$ | Mercury Vapor Half-wave Rectifier . . . . . . . . . . . . . . . . . . 3.65 | 866 | Half-wave Mercury Vapor Rectifier |  |
| 872 | Hot Cathode, Half-wave Mercury Vapor Rectifier . . . . . . 12.15 | 872 | Hot Cathode, Hall-wave Mercury Vapor Rectie | 15.00 15.00 |
| 242 | 50-Watt Osclilator Power Amplifier and Modulatar . . . . . 12.15 | 242 | 50-Watt Oseilator Power Ampliner and Modula | 15.00 |
| 845 | 50-Watt Linear Power Amplifier and Modulator, .1. .... 12.15 | ${ }_{2}^{845}$ 203A | 50-Watt Oscillator R.F. Amplifier and Class "B" Modu- |  |
| 203A | 50-Watt Oscillator R.F. Anplifier and Class "B" Modulator. | 203A | 50-Watt Osciliator R.F. Amplifer and Class ${ }_{\text {lator }}^{\text {75-Watt Oscillator and Power Amplifier . . . . . . . . . . . . . . }}$. | 15.00 22.50 |
| 852 | 75-Watt Oscillator and Power Amplifier . . . . . . . . . . . . . . . 18.25 | 852 | Neon Type Tube for Scanning Discs. | 10.00 |
| Crater | Neon Type Tube for Scanning Discs . . . . . . . . . . . . . . . . ${ }^{80.10}$ | 860 | Neon Type Tube for Scanning Discs... ${ }^{\text {Stiol }}$ | 37.50 |
| 860 | Screen Grid 75-Watt Radio Frequency Amplifier......... ${ }^{30.35}$ | 849 | $350-$ Watt Oscillator Modulator and Power Amplifier | 160.00 |
| 849 | 350-Watt Oscillator, Modulator or Power Amplifer . . . . . 129.61250 | 885 | Screen Grid Radio Frequency Amplifier | 15.00 |
| 865 | Screen Grid Radio Frequency Amplifer. . .....ilice........ 78.98 | 204A | 250-Watt Radio Frequency Oscillator and Amplifier. | 97.50 |



## Characteristics of Transmitting Tubes

## Transmitting Tabes

 Type $10-71 / 2-$ Watt Oscillator. Adaptable as an Oscillator, R. $\mathbf{F}$. Amplifier, A. F. Amplifier and Frequency Doubler. High voltage breakdown. Ideal for Crystal control Oscillators. Filament voltage 7.5; amps 1.25. Plate voltage 350 volts. Current 40 M . A.Type '65-71/2-Watt Screen Grid R. $F$. Amplifier. Useful as "buffer" amplifier in telephone transmitters. Especially used for transmitters. Especiauy used Also
frequencies above 3000 kc . Als frequencies above 3000 kc . Aiso
useful as a crystal controlled Osciuseful as a crystal controlled Osci-
lator. Fil. vol. 7.5 ; amp. 2. Plate voltage 450.

Type '41-High-mu Voltage Amplifier, designed primarily for use in resistanee coupled circuits. Useful as a radio frequency am-
plifier. (Class B 450 max.) (Class plifier. (Class B
$\mathrm{C} 350-450$ max.)

Type '03-A-Standard 50-Watt Oscillator, R. F. Amplifier and Class B Modulator. Developed for general use in Amateur transmitters, or where bigh voltage gain is desired. Fil. volts $10 ; 3.25 \mathrm{amps}$. Plate 1250 volts; 125 M . A.
Type'45-50-Watt Linear Power Amplifier and Modulator. Not recommended for use in $R$ F. eir-
cuits. Primarily an A. F. tube. cuits. Primarily an A. F. tube. As modulator, fil. volts $10 ; 3.25$ amps. Plate 1250 volts; 75 M. A.
Used as output tube in an audio system.
Type '52.-Standard 75-Watt Oscillator and Power Amplifier. Plate lead is brought out thru the side; grid lead from the top. Ideal for 14 megacycle operation. 2000 . 10 volts at 3.25 amps. Plate 2 man dissipation $100^{\prime}$ watts.
Type '11, also '42-General Purpose Medium Power Tube as it
functions well as an Oscillator, Modulator, Radio or Audio FreMuentator, Radifer. Filament 10 quency Ampliner. Plate voltage $1250 ; 125 \mathrm{M}$. A. maximum.
Type '60-Medium Screen Grid Tube, designed primarily for use Tubs, designed primarily for use as a Radio Frequency Power Am-
plifier, particularly at frequencies plifier, particularly at frequencies in excess of 3000 kc . This 75 -watt tube has a filament voltage of 10
at 3.25 amps. Plate mod. 2000 , un-mod. 3000 volts.
Type '04A-Standard 250 "Watter." An Oscllator and R. F. Power Amplifier; can also be used as a Modulator. Negative Grid Bias, Class B, 100 volts; Class C, 175 volts. Filament 11 volts at 3.85 amps. Plate 2000 volts; 200 M. A.

Type '49-350 Watts. Oscillator, Modulator or Amplifier. Especially as a Modulator or Speech Amplias a Milament of ipechlempu-
amps. Plate 2500 mod., 3000 nonmod. voltage. Normal negative grid bias 87 volts.
Type '66-Hot Cathode Malfwave Mercury Vapor Rectifier to provide an ideal D. C. Power from an A. C. supply for transmitting and kindred work. Maximum inverse peak voltage to be applied to anode is 7500 volts. Fil. 2.5 volts at 5 amps .
Type '72-Half-wave Hot Cathode Mercury Vapor Rectifier. (Greater current carrying capacity
than the 66 tube. Has same than the '66 tube. Has same qualities and merit. Takes 5 volts at 10 amps . Maximum peak plate current 2.5 amperes.
Crater-Crater Neon Type Tube is used in the reproduction of Television pictures with lens type scanning discs. Produces intense light source. Striking voltage 180; Maximum current 40 M.A. approx. Crater light source .030.

## EC <br> For Years <br> Regarded Among the Finest

CeCo Tubes gained prominence chiefly for their long life and smooth performance, for while there were countless makes of tubes available on the market, the best tubes were good only if they performed satisfactorily. In our experience we have found that CeCo Tubes were uniformly zood, hence their immense popularity. Among the many reasons that CeCo Tubes had for years been regarded as among the finest made, was that only the highest grade of materials obtainable was used in their manufacture. This in conjunction with the most modern equipment and expert workmanship under direct supervision, all contributed to uniformity of quality so essential to insuring long Iffe and smooth performance. Guaranteed for six months (burn out or breakage excepted).

## CECO TUBES

\$4.

Cost

|  | CECO TUBES |
| :---: | :---: |
| Type | List |
| 43 | 2.50 |
| 15 | 1.15 |
| 46 | 1.55 |
| 47 | 1.50 |
| 50 | 4.00 |
| 55 | 1.60 |
| 56 | 1.20 |
| 57 | 1.65 |
| 58 | 1.65 |
| 59 | 2.00 |
| 71 A | .95 |
| 80 | 9.90 |
| 81 | 3.50 |
| 82 | 1.20 |
| 83 | 1.55 |
| 85 | 1.60 |
| $\mathrm{~V}-99$ | 2.25 |
| $\mathrm{X}-99$ | 1.50 |
| 864 | 2.10 |
| 866 | 6.75 |

# Noise Suppressors and Filterers 



This trutest noise suppressor kit consists of one antenna noise suppressor unit; one receiver noise suppressor unit with a special shielded transmission line. As Its name implies it is for the elimination of all nolses, crashes and other forms of man-made interference. The kit can be installed in a few minutes. Receiver unit is tapped; use tap giving loudest signal. Shipping weight 10 lbs.
L12607
$\$ 2.50$
Akaformer Noise Reducer Kit


This system consists of the use of specially designed transformers for the elimination of all forms of man-made static, nolses etc., due to local disturbances; these are generally picked up by the aerial and ground, and transmitted to the radio receiver along with the original signal intercepted. A special feature of this system is that it is possible to connect from one to four recei vers using the single antenna. The kit contains two tra:rformers; one for antenna, and one for the receiver, also shielded cable enclosing tinned stranded copper lead-in. For installations of more than one radio receiver a separate receiver transformer is required fo each raio are of few minuter. Shipping weight 8 lbs.

L12628-
Your Cost Complete Kit.
${ }^{5} 2.94$
L12629-Additional Receiver 5 IT3
Transformer Your Cost Each.

## Lynch 6"No-Stat" 6'AllWave" Antenna System

Consists of a pair of impedance matehing trans formers which allows the use of a shielded transmission line of any length without lass of signal strength; this line preserves the purity of the original signal intercepted by the himh antenna, and at the same time eliminates almost all of the cracks, crashes and other noises commonly classed as "man-made" static. Has hort wave tap, for recention down to about 20 meters. Eliminates soldered connections by 20 meters. Eliminates soldered connections by positive permanent low-loss ones. Recelver impedance matching transformer is used up to that number, Polycoupler on installations above that number, Kit consists of: 1 antenna impedance matching transformer; 1 receiver impedance matching transiormer; 50 it shielded transmission cable. Shipping weight 10 lbs.


Lynch Noise Reducing Antenna Products

## Lynch Transposition Blocks



The mechanical design of the blocks reduces the electrical losses to an absotute minimum, and offsets the ravages of weather and molsture, in order to secure the greatest possible signal strength. Results are most satisfactory on both regular broadcast as well as on short wave
wave-leneths. Shipping wave-lengths. Shipping weight 1 lb .
${ }^{5} 1.47$
Complete kit of Kit of 10

## Lynch "All-Wave" Antenna Coupler

This Antenna Coupler ensbles securing the best possible results from the various noise-reducing antenna systems, without regard to the wave length on which reception is desired. Shipping weight 1 lb . R17106-List 51.50 - Your Cost Each $88^{c}$

## Lynch "UU.S.N. Standard'" Antenna Insulators

These Insulators are especially designed to eliminate the loss of radio frequency energy due to leaky, faulty and defective insulators. They are an absolute necessity for the D. X. fan, and will improve reception and volume from weak and distant stations. Shipping weight 3 lbs, R17107-List, Complete Kit of 8, 53.00 Your Cost
s 1.76
Per Kit of 8

## Lynch

## Polycoupler

Used where multiple receiver installations are made to the same antenna system; each receiver requiring one of these units. This unit replaces the receiver impedance matching transformer on installations above 4 receivers Full instructions and diagram enclosed. Shipping weight 2 lbs . R17112-List $\$ 5.50 \$ 3.24$

## Lynch Doublet Coupler

For use with all types of Receivers in which the " $\Delta \downarrow$ Wave" Coupler cannot be employed because of shielding, lack of space, or any other reason. Shipping weight 2 lbs.
R17113-List $\$ 1.00-$ Your Cost
$59^{\circ}$


## Cage-Acrial Spreaders

These Aerial Spreaders are used when the cage type of aerial is to be used to take advantage of its great pick-up qualities, and its freedom from directional may also be used in amateur transmitting systems. Shipping weight 5 lbs.
R17108-List, Complete kit of $10,52.50$

## Your Cost

Kit of 10.
${ }^{\$ 1.47}$

Filterizer Kits
The new improved fil-terizer-for keeping manmade static out of the receiver-utilizes the simple principle that most radio principle that most radio wiring picked up on the lead in from the aerial, and will not reach the set if it is kept off the lead-in and aerial. The filterizer keeps radio noise out of the receiver by providing an aerial outside the field of radio noise and carrying broadcast signals to the receiver through a ilterized lead in system. Loss of signal which has been an objection to the use of old style hielded lead in syo hielc is obvisted in ems is obviated in the filerizer by the se of two specially

the RF-1 at the aerial and the RF-4 at the set. the RF-1 at the aerial and the Rhiplag weight 10 lbs.
12603
Your Cost for This Kit
s2.73

## Tobe Special Filterizer

A special filterizer to replace the kit described above, when heavy line noises predominate in the interference received with the program on your radio receiver. No matter what make of radio you have-no matter where you live the filterizer will give you relief from radio noises. Easily installed-requires no attention. Shipping welght 10 lbs .
Your Cost Complete Kit
\$5.73


## Battery Cables

Five ft . cables complete with terminals
Q16085-7 Conductor. Your Cost Each...... . Q16086-8 Conductor. Q16087-9 Conductor. Your Cost Each...... 50c 916088-10 Conductor.

## Battery Cables by the Foot

A high grade, well insulated cable. Each lead a different color for easy identification.

| Stock | No. <br> Wires | Per Ft. | $\begin{aligned} & \text { Por } \\ & 100 \mathrm{Ft} . \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 016089 | 3 | 3 c | \$2.50 |
| Q16090 | 4 | $31 / 2 \mathrm{c}$ | 3.00 |
| Q16091 | 5 | 4 c | 3.50 |
| Q16092 |  | 415 c | 3.95 |
| Q16093 | 7 | 5 | 4.55 |
| Q16094 | 8 | 612 c | 5.15 |
| Q16095 | 9 | 7 c | 5.80 |
| Q16096 | 10 | 8 c | 6.35 |

## Kolster 15 Conductor, 50

 Ft. Stranded Cable50 ft . stranded, 15 conductor, shlelded cable. Each conductor 7 strand flexible strand, liexdie rubber braid
covered. Tinned covered. Tinned ductors used for ductors used for pickup or micro-
phone completely
harible braid copper wich in turn flexible braid copper, which in turn is cotton braid covered and brought out to lead for grounding. Color coded leads. Ideal for Publie Address and Power Amplifier systems. Shippling welght 10 lbs . Q16097-Your Cost Special.

"DX" Roof-Porch-Attic Aerial Length 5 ft . Has 10 ft . of rubber covered leadin soldered to aerial. Ideal for Super-heterodyne and new "higb-gain" sets. Used by many dealers as regular equipment because of low cost, easy installation and high efficiency. Full assembled, ready to "string up." Shipping weight 3 lbs.
R17124-Your Cost
$75^{c}$

## GIANT DX'ROOFAERIAL <br> SUPER POWER ON DISTANCE  10 Foon caGE

50 FI: OF 7 STRAMD COPPER YYIRI
Super power on distance. Ready to string up. 25 ft soldered lead-in. Very powerful without loss of selectivity. 10 ft . cage witb 150 ft . 7 -strand copper wire. Shipping weight 5 lbs . R17128-
$\$ 1.95$
Your Cost
Same as a bove except with 50 ft . 7 -strand wire. Length 10 ft . Shipping weight 4 lbs. R17123-

$\$ 1.05$

## (andern

## "DX' Window Sill Aerial

For use on outside window sill, under couch or in closet. Absolutely non-directional. Especially for use with Superheterodynes. Has 10 ft . rubber covered lead-in soldered to aerial. Length 31 ", height $6^{\prime \prime}$. Shipping weight 6 lbs . R17129-
Your Cost Each
$95^{\circ}$

## Window "DX" Aerial

This is a five wire cage Aerial similar to the above, with the exception that it has two 16 inch brackets of heavy iron to support the cage vertically outside of the window. Is especially designed for Superheterodynes, which require an aerial of large capacity in a small area. It is common knowledge that a long aerial picks up considerable interference, while a short single wire antenna tunes in the noise level; this DX Aerial tunes sharp and clear. Is weatherproofed, and has soldered lead-fn. This is a unit of the highest attainable effieiency and is particularly adaptable for use on all of the new high-gain sets. Is non-directional. Shipping weight 5 lbs. Length 5 feet Camplete with brackets and wood screws.
$\qquad$
Your Cost

No. 30-Produces great volume; ideal for all sets. 5 spacer rings; length 30 ft. Contains 150 ft enameled copper wire and has 25 ft . R17121
${ }^{5} 1.80$
ning: non-directional. Fully assembled cages, ready to string up. No 200 for short roofs. 5 heavy zinc spacer rings. Length 20 ft . Contains 100 ft. enameled copper wire, 25 ft , rubber covered lead-in, soldered to aerial. Shipping weight 5 lbs.
R17122- Your Cost.
${ }^{5} 1.45$

## Inside or Outside "DX" Aerial

A powerful aerial for all midget sets. Made of gets away from interfering with neighbors solid copper metal, fastens by means of hooks antenna. Complete with hooks and soldered and is not visible from inside. May also be used inside in window frame back of curtain.
Most midget sets and all TRF sets work better Most midget sets and all TRF sets work better
with a powerful outside aerial; this installation

## Sta•Put Aerial



A layer of heavy tin foil deposited on a specially treated adhesive fabric that sticks instantly wherever it is applied. The tin foil is highly conductive to radio waves and provides the antenna system of unusual efficiency. Ideal for use along mouldings, baseboards or on an auto top. 65 ft in t R16164 Your Cost Each.


## "American" All-Directional Antenna

## DLAM $\rightarrow$ Recommended for short

 Wave and general radio eception. Positively non-directional. Pure copper drum, $14^{\text { }}$ in diameter with collar for mounting on wooden pole or pipe. Has a clip for attaching lead-in. Shipping weight 6 lbs . List $\$ 4.00$.R17119 Your Cost Each.

## Our Special Ground Clamp

A very special value. Makes a vise grip on pipe. Has sharp pointed screw that penetrates surfacing and makes perfect contact. Has screw for conpecting ground wire R17105-Net Each
12 for 100 for
$95^{c}$
$54^{\circ}$
Ground. Fitting with Cisthing Approved by The Underwriters Laboratories. Genuine moulded Bakelite.
R17097-List $\$ 1.25$ Your Cost. $\qquad$ ...
$75^{\circ}$

## Insulated Staples

For holding inside lead-in and ground wires in place. Never be without them.
R15950-Per Box of 100
$10^{c}$

## Ground Clamp

Standard type. Sharp teeth bites through rust or paint on pipe. Insures good connection. For pipes up to $3 / 1^{\prime \prime}$.
R17103-Your Cost Each.


12 for..............
For 11 M" $^{\prime \prime}$ Plpe
Same as above except for larger size pipe.

## R17104

Your
12 for.


Ideal Ball Aerial
No set is better than its aerial and no other aerial matches the Ideal Ball Aerial in satisfactory results. Less static, greatlo increased selectivity and guaranteed protection against corrosion and oxigition are but a few of its eatures Absolutely nan eatures. Absolutely nan. irectionable, the ball is pure aluminum and R17075 pilshed.

Your Cost $\$ 3.24$
Junior Ball Aerial has Junior Ball Aerial has same characteristics ex-
cept that ball has $8^{\prime \prime}$ diameter.
R17076-List $\$ 3.00$ Your Cost.
. 3.00 $\qquad$ s1.75
The installation kit consists of: 25 ft . lead-in wire; $1-8 \mathrm{ft}$. collapsible mast; 1 universal mast base; 50 ft. copper Guy wire; 4 porcelain insulators; 1 window lead-in and 1 ground clamp. Your Colist $\$ 3.50$

S2.IO

## Aero Aerial Wire

Many strands of very fine wire of high conductivity over which is laid a special covering of neutral buff color. An indoor aerial of unusual efficiency, 100 ft . spools. Shipping weight R16167
Your Cost Each. IS $5^{c}$
Per Dozen.
$\$ 150$


## Insulteman

Replaces outdoor antennas. Not connected to the light sockets. Handsomely finished bakelite case. Size 5x53, x1. Contains a number of feet of new type filtered aerial wire with condenser which gives capacity of 75 ft . antenna. Mounts anywhere. Shipping weight 1 lb .



## Ribbon Aerial



Consists of a gold colored metallic braid woven into a strip of fabric about $8 / 8$ " wide. A neat and efficient aerial for stringing above moulding or baseboard. Held in place by thumb tacks. 65 ft . to roll. Shipping weight $8{ }^{8}$ R16163
Your Cost Each
$29^{\circ}$

## Ground Rods



New design with clip whicb makes positive and permanent connection. Heavy steel yoke for driving head. 1/8" drawn steel, cadmium plated
Shipping weight 2 lbs.

## R17187 <br> E1718. <br> Per Dozen

4 Ft. Length


6 Ft. Length
R17188
Your Cost Each

## Pipe Strips



Atrip of pure copper with holes adjustable to fit clamp is dipe up to ${ }^{\prime \prime}$ in any size Has spring clip for attachHas spring clip for attach-R17102-Net Each.

## AERIAL KITS \& ACCESSORIES

## Tubular Steel Masts

Made of welded steel tubing with black baked-on enamel finish. Guy wire disc at top. MADE IN FOUR SIZES R17139-Single Section. 3 ft . Shipping weight $21 / 6 \mathrm{lbs}$.
o
Your Cost Each . $49^{\circ}$ R17142-Double Section 6 ft .7 in . Shipping weight 4 lbs. Cour Each. $98^{\text {c }}$ R17143-Triple Section. 9 ft. ${ }^{4} \mathrm{in}$ ibs. Your $\$$ Shipping weight Cost Each
R17144 - Quadruple Section. 12 ft .9 in . Shipping weight 8ys las. ST2.25

## A Special Value



Dealers eqpecially will appreciate this item. A thoroughly reliable protector that can be retailed at a low figure without sacrificing their margin of proft. Porcelain body. Shipping weight per doz. $31 / 2 \mathrm{lbs}$. R16753-Your Cost,
Each.
12 for 65 c
100 for $\$ 4.90$

## Wirt Lightning

## Arrester

The lightning arrester that fulfllts its promise. Petticoat insulation, a most important feature, is found only in Wirt Arresters. The terminals are extra heavy and a bracket is provided for rigid fastening. Comes complete with brass mounting serews. Simple to install and
positive in action. R16737-Your Cost Each $45^{c}$


Wall Insulator For supporting wiring on instruments or may be used for supporting lead-in Glazed porcelain 2 $1 / 8$ ins. high. Shipping weight 8 oz Your Cost Each.

## Screw-in Stand-Off

Strong
porcelain porcelain insulator
withwood with wood
 <br> \section*{base. Ht <br> \section*{base. Ht <br> 2Y/ins.}

## Your Co

## Each <br> $\$ 4.50$ per 50

## Baby Insulator

For suspending wires in side the house. Soft rubber insulator. Screw 1 1/5 R16973 Por R16973-P
Box of 10.
$18^{c}$

New Premax Mast A new, simple oneplece mast that will
fill a big demand. Easy to demand. Easy to use, practical in design, durable and low in rod with a Parkerized rust-proof finsh. Adjustable base fits flat or sloping roofs, $31 / 2 \mathrm{ft}$. high. Complete with guy insulatora needed Shippins needed. Shipping weight 2,12 bos. R17138 Your Cost $35^{\circ}$


## Lafayette

## Deluxe Aerial Kit

No finer aerial kit on the market than this one. Has shielded lead-in wire that is very effective in reducing interference caused by high tension wires. By grounding the shielding disturbing mpulses are carried to the ground Also has tinned copper antenna wire that will not corrode. Shipping relght 4 ibs. Kit consists of the ollowing: 75 ft. $7-24$ Tinned Copper aerial Wire, 60 ft 16 Str. Shielded Ground Wire, 1 Lightning Arrester, 2 Porc. Insulators 1 Ground Clamp, 1 Lead-in Strip, 2 Insulated Screweyes, 2 Nail Knobs, 5 Insulated Staples.
Q16475-Li
\$1.45

## Lafayette Aerial Kit

Everything necessary for an efficient serial installation. All items are of the very best quality. Ideal for the dealer furnishing standard antenna kit with radio set sales. Shipping weight 4 lbs . Contains the following: 100 ft . 7-24 Copper Wire, 50 ft . No. 17 Rubber Covered Lead-in Wire, 25 ft.
Rubber covered Ground Wire, 1 Approved
 Insulators 2 Nail Knobs. Q16476-List $\$ 1.25$. Your Cost
$65^{c}$

## Standard Aerial Kit

A low price kit containing all essentials for a dependable and efficient aerial system. A very good dealer item. Shipping welght 2 lbs. Contains: 90 ft . $7 / 25$ Copper Wire, 60 ft . Lead-in, 10 ft . Ground Wire, 2 Porcelain Insulators, 1 Copper Ground Clamp, 1 Lead-in Strip, 2 Nail Knobs.
Q16477-List 90c
$45^{\circ}$


## Economy Aerial Kit

Espeelally designed for Midget Sets. The lowest price kit on the market made up of first quality merchandise. Shipping weight 2 lbs. Contains: 100 ft . 7/27 Copper Wire, 25 It. Rubber Cov ered Lead-in, 1 Lead-in Strip, 1 Ground Clamp, 2 Nail Knobs, 2 Porcelain Insulators.
Q16478-List 75c
Belden Aerial Kit
R. M. A. Standard

Nationally advertised; nationally known for quality. The most popular number in a very popular line of aerial kits. Shipping weight 4 lbs. Contains: 100 ft . $7 \times 22^{\prime \prime}$ Beldenamel, 25 ft. Belden Flexible Colorubber, 50 it. $7 \times 22^{\prime \prime}$ All-Rubber-Lead-in Wire, 1 Belden Arrester, 1-15" Belden Lead-in Strip, 1 Belden Ground Clamp, 2-3" Belden Glass Insulators, 3 Nail-on Knobs, 2 Galvanized Scr sulated Staples, Instruction Shee
s 1.75

## Belden Aerial Kit

Similar to above but contains: $7 \times 22$ Bare Copper Aerial, 35 ft . AllRubber Lead-in Wire, 1 Belden Arrester, 1 12-inch Belden Lead-in Strip, 1 Belden Ground Clamp, 23 -inch Glass Insulators, 2 Nail-on Knobs, 2 Galvanized Screw Eyes, 1 Instruction Sheet. \$1.00 R16480-List $\$ 1.75$. Your Cost

## Lead-in Strips

Copper Core with waterproof lac quered webbing. Length $12^{\prime \prime}$. Has new screw type terminals.
R17100
Your Cost Each
As a bove with Fahneatock terminals. R17101
Your Cos
Each..
100 for $\$ 2.90$


## Nail-it Knobs

Heavy white porcelain nail knob. Height 13/3". Diameter $11 / 2^{\prime \prime}$.
R16977-Your
Cost Each ..... $1 / 2$
50 for 60 c
100 for $\$ 1.00$
Screw Eyes
Length 2 ins. Shipping weight per box, 1 lb . Each

Belden Lead-in Strips


Tough Colorubber insulation over thin, flat strip. Waterproof. Bends easily under window without breaking. Clips riveted and soldered at both ends. $12^{3 \prime}$ long.

## R17099-Your Cost

## Screw-in Knobs

For attaching lead-in or round wires to pusts or buildings. Wire passes through center of porce lain. With screw 3 ins. R16972
Net Each ..... $3^{c}$
12 for $30 \mathrm{c} \quad 100$ for $\$ 2.00$

## Antenna Spring

 HiJumpunombTakes up slack in aerial. Spring R16980-Your Cost Each.
(and quality.

Bare Copper Wire
$7 / 27$ STRANDED Shipping weight, $100 \mathrm{ft} ., 1 / 2 \mathrm{lb}$. Q16112-100 ft. coils. Lots Each Lots of Lots of


| Q16113-100 |  |  |
| :---: | :---: | :---: |
| Single | Lots of | Lots of |
| Lots Each | 25 Each | 50 Each |
| 16 c | 15c | 141/5c |

## Q16114-100 ft. coils.

Enamelled Copper Wire
The very best grade enamel; will not chip or crack. Guaranteed full measure and size.


No. 14 SOLID
Q16118-100 ft. coils.
Single Lots of
Lats Each
29 e
29e
No.
Q16119-100 12 SOL. coils. $\begin{array}{ll}\text { Qi6115-100 } \\ \text { St. coingle } \\ \text { Lots of } \\ \text { Lis Each of } \\ 25 & \text { Each }\end{array}$

Solld Shielded Wire

2-Conductor, No. 19 solid ennmel copper wire, heayy waxed cotton braid, copper braided shield, overull cotton braid. Ideal for perman ent public address systems and for panel hook-up work. Your Cost Your Cost 3 -Condu
$Y 20850$ Y20850
Your Cos

1 Ft .100 Ft.
$6 \mathrm{c} \quad \$ 5.50$
Ft. 100 Ft.

## Belden Automobile Radio Wire

## 

This wire is eapecially designed for automobile and airplane radio installations. Makea an excellent shielded lead-in wire, also ground, where considerable interference, noise and local pick-up is experienced. A job using this wire means a job free from any wire trouble as is experienced in using an inferior grade of wire and one not expressly designed for this type of work. No. 12 ( 65 strands of No. 30 Tinned) Cambric wrapped with heavy tinned shielding, for "A" battery or " $A$ " eliminator needs. Shipping weight per 100 ft . 3 lbs . Q16223 Your
100 ft. 100 16 trand Tinned). Same as above Fo. "B" battery, speaker and other leads, antenna and accessories. Shipping welght 100 ft . 4 lbs .
Q16224-
Your
$30^{\mathrm{c}}$

## FOR <br> MICROPHONE <br> CABLE <br> SEE PAGE 75

## Lead-in

## Wire

Verygood quality. The
grade usually used for serv

ce work. No
17 copper well insulated with pure rubber
Q16200- $\quad 25 \mathrm{Ft} .50 \mathrm{Ft} .100 \mathrm{Ft}$.
Single Lots.. 10c $15 \mathrm{c} \quad 27 \mathrm{c}$ Lots of 10 Ea. 9c 14c 26 c
Shpg. wt. lbs. 3/4
1


Belden

## All-Rubber

## Lead-in Wire

Well known for
its special rubber compound covering which strips quickly and easily. Big time saver for and soldering. Shipping weight per 100 ft .3 lbs .
Q16225-No. 14 Seven Strand. 50 ft . per carton. Your Cost. 50.47 250 ft . per spool. Your Cost 2.20 Q16226-No. 16 Seven Strand 50 ft. per carton. Your Cost. $\$ 0.29$ 250 ft . per spool. Your Cost. $\frac{1.32}{2.06}$ 500 ft - per spool. Your Cost. 2.06 Q16227-No. 18 Seven Strand
500 ft . per spool. Your Cost. 51.76

## Antenna Wire

We Guarantee our wire to be First Quality, Full Length and Standard Gauge as specified. It has been called to our attention that some houses are cutting short lengths and selling undersize wire in order to quote a low price. Our prices are the very lowest, consistent with standard size, length and


Beldenamel Aerial Wire Beldename aerial wire has ong been known as the finest wire available for permanent an enna installa of the fineat grade copper is very heavily enameled with a permanent compound, and will stand up indefinitely under heavy strain, and the severest weather condi tions. Each coil is attractively boxed and the 1000 ft . length is wound on a heavy steel spool. Shipping weight per 100 ft .4 lbs Q16279-7 $722^{\prime \prime}$ Beldenamel.
75 ft. Your Cost
100 ft Your Cost
150 ft . Your Cost
1000 ft . Your Cost
4.40

Q16230-No. 12 Beldenamel, solid 100 f. Your Cost......... 50.59 1000 ft . Your Cost......... 5.30 100 ft . Your Cost

## Belden Tinned Aerial Wire

An old standby. Very popular where installations are wanted $7 \times 22^{\prime \prime}$. Shupping weight per 100 ft .

Q16228-100 ft. per coil. 4 T Your Cost. ....... \$ I Your Cost

## 016125

Brown Rayon 125 ft. \$I. $\$ 3$
Your Cost.........
Q16126
Brown Cotton 60 ft. ....... I $^{\text {C }}$ Your Cost


Q16127
Brown Cotton 1000 ft . \$ $\$ .31$
Q16128-100 ft. Litz Wire 20/38 stranded Beldenamel with two sprvings of green silk.
Your Cost Per Spool.....59

## Auto Ignition Wire



This standard 7 mm . black lacquered braided wire very popular or use in automobile ignition and high tension work. Can also be used in Neon Eigns. This wire is the same as used in the ignition systems of the most expensive automobiles. Shipping weight 4 lbs.
Y20852-100 ft. spool.
${ }^{s} 1.75$
Your Cost
designed for Neon sign use. Shipping weight 4 ibs.
Y20853-100 ft. spool. $\$$ 2.25

## Battery Charging Cable

Thls wire is particularly designed for battery charging stations and for any requirement that needs an exceptionally flexible heavy rubber covered single conductor stranded covered single conductor stranded cable. It is impervious to acid and acid fumes. Weatherproof. Shipping weight 100 ft .6 lbs .
Y20854- Your Cost
Per 100 Ft. Spools
$75^{\circ}$

## Armored Cable



For auto, radio, outdoor, P. A. systems and oil burner installations. The armor when grounded acts as a shield which also makes this wire suitable for microphone installations. Of highest quality. Is weather proof and will stand up indefinitely under heaviest strains. Shipping weight per 100 ft 8 lbs . Gauge No. $16 \quad 1$ Ft. 100 Ft.
Q20855-Single Cond. 21/5c $\$ 1.95$ $\begin{array}{lll}\text { Q20856- Double Cond. } & 3 \mathrm{c} & \mathbf{2 . 2 5} \\ \text { Q20857-Triple Cond. } & 4 \mathrm{c} & \mathbf{2 . 5 0}\end{array}$


## Belden Shielding

Tinned copper shielding for "B" battery leads, speaker leads, leadins, and various connections in the radio chassis. Solders easily. Shipping weight per 100 ft. 3 lbs. Your Cost
Porft.
Q16215-Inside diameter $\% / 3$
Your Cost Per Ft
Q16216 Inside diameter
Your Cost

## Best

## Grade

## Lead-in

## Wire

A heavier and better grade than
the above. Con

## the above. Con-

sists of a core of No. 14 tinned copper wire covred with a layer of durable rubber compound and a layer of cotton braid. Weatherproofed braid. Strips clean; solders easily. Standard code wire. Q16203- 25 Ft .50 Ft .100 Ft . Single Lots. . IIc 27c 52 c $\begin{array}{lll}\text { Singlo Lots.: 14c } & 27 \mathrm{c} & 52 \mathrm{c} \\ \text { Lots of } 10 \mathrm{Ea} . & 14 \mathrm{c} & 26 \mathrm{c} \\ \text { S1c }\end{array}$ $\begin{array}{lll}\text { Lots of } 10 \mathrm{Ea} . & 14 \mathrm{c} & 26 \mathrm{c} \\ \text { Lots of } 25 \mathrm{Ea} . & 13 \mathrm{c} & 25 \mathrm{c} \\ 50 \mathrm{c}\end{array}$

## (2x)

## Shielded Lead-in

## Unexcelled for lead-in and ground

 connections. 16 strands No. 29 (equal to No. 16) with layer of cotton over which is a layer of pur ive rubber covered with a shueld ing of tinned copper braid. Insula tions, skins easily and wire tinned for easy soldering. Q16212- 50 Ft 100 FEach
Shpg. wt. lbs $\qquad$


Belden Shielded Lead-in and Ground

## Wire

Effective in reducing static caused by high tension wires and othe sources that radiate disturbin noises. Consists of a stranded cor with a heavy braid of tine tinned copper wire which serves as hield. Easy-strip rubber inas trounded

SIZE 14
50 Ft .100 Ft . 250 Ft

|  |  |
| :--- | :--- | :--- |

Shpg. Wt SizE 16
q16210-50 Ft. 100
Your Cost 50.65

Shpg. wt. lb. | Q |
| :--- |
| Q |

# UNBEATABLE PRICES 

## Magnet Wire

This wire is universally used for coil winding of every description for radio and technical experimental operations. We have found that for this type of work a wire made of the purest copper and best grade insulating material is highly important. Our magnet wire answers the strictest specifications as to quality and exactness of gauge. This wire is neatly put up in single lengths on spools. Shipping weight 1 lb . each

## Enamel



| Stock |  |  |  |
| :---: | :---: | :---: | :---: |
| No. S |  | $1 / 6 \mathrm{Lb}$. | 1/2 Lb. |
| $\times 20950$ | 16 | \$ 14 | \$ . 25 |
| $\times 20951$ | 18 | . 15 | . 26 |
| $\times 20952$ | 20 | . 16 | . 27 |
| $\times 20953$ | 22 | . 17 | . 28 |
| $\times 20954$ | 24 | . 18 | . 29 |
| $\times 20955$ | 26 | . 19 | . 35 |
| $\times 20956$ | 28 | . 21 | . 37 |
| $\times 20957$ | 30 | . 23 | 42 |
| $\times 20958$ | 32 | . 25 | . 46 |
| $\times 20959$ | 34 | .29 | . 52 |
| $\times 20960$ | 36 | . 33 | . 60 |
| $\times 20961$ | 38 | . 38 | . 70 |
| Double Cotton |  |  |  |
| Stock |  | Price |  |
| No. | Size | $3 / 4 \mathrm{lb}$. | $1 / 2 \mathrm{lb}$. |
| $\times 20973$ | 16 | \$ .16 | \$ . 28 |
| $\times 20974$ | 18 | . 17 | . 31 |
| $\times 20975$ | 20 | . 18 | . 34 |
| $\times 20976$ | 22 | . 21 | . 39 |
| $\times 20977$ | 24 | . 24 | . 46 |
| $\times 20978$ | 26 | . 29 | . 55 |
| $\times 20979$ | 28 | . 35 | . 67 |
| $\times 20980$ | 30 | . 41 | . 79 |
| $\times 20981$ | 32 | . 51 | . 97 |
| $\times 20982$ | 34 | . 73 | 1.38 |
| $\times 20983$ | 36 | 1.00 | 1.90 |
| of Above Magnet Mires. |  |  |  |
| Enameled ${ }_{125}$ |  |  | D. S. C. |
|  |  |  | 125 |
| 125202 |  |  | 199 |
| 319 |  |  | 314 |
| 506 |  |  | 494 |
| 804 |  |  | 778 |
| 1280 |  |  | 1220 |
| 2030 |  |  | 1910 |
| 3220 |  |  | 2960 |
| 5100 |  |  | 4570 |
| 8080 |  |  | 6980 |
| 12800 |  |  | 10500 |
| 20300 |  |  | 15500 |

## Power Pack Fiookup Wire

This is a heavy duty rubber covered stranded hookup wire intended for use where heavy currents will be carried. Especially deairable for use in $11 / 4$ and $21 / 3$ volt flament cireuits where the amperage is high. The 14 gauge wire is rated at 15 amps at 110 volts. R16285
Your Cost 100 ft . Coil.... $)^{c}$
The 12 gauge wire is rated at 20 amperes. Shipping weight 3 lbs. to 100 ft . R16288-
Your Cost 100 ft . Coll.... $1^{\circ}$ The same wire may also be had in twisted pair for use in A. C. leads.
R16287R16287
14 Gauge 100 ft. Spool. $\$ 1.75$
Your Cost......... R16288-

Twisted Pair
For Filaments


20 gauge. 16 strands No. 29 ered with eotton braid. Color black. Shipping weight 25 ft . coil 12 oz . One piece coils. Q16278-
30 c
50 Ft .
100 Ft
101.15

## Book-up Wire

Rubber Insulated cotton braid. Lacquered braid which prevents the wire from Iraying as easily as ordinary wire. Put up on appools of 250 ft . Shipping weight 5 lb . R16345-
Your Cost.
$90^{c}$
4 Spools (Assorted Colors).

## Colored Rubber Hook-up Wire <br> 

No. 18 stranded and tinned copper wire covered with colored rubber compound. Solders instantly. 25 ft . to coil. Colors black, red or green; state color wanted. Shlpping weight per coil, 6 oz
Q16275-Your Cost per 15 c 25 Ft
10 Coils
....................... Push-Back Wire


## Double Cotton Brald

Size 19 copper wire, tinned for easy soldering. Extra heavy insulation slips back easily. Essential for a neat and quick job. Very fine quality, not to be confused with cheaper grades which are not really "push-back." Colors: red or black. Shipping weight 6 oz . coil 25 ft . One piece coils.
Q16327-
$\begin{array}{lll}25 \mathrm{Ft} . \text { Coil } & 50 \mathrm{Ft} . & 100 \mathrm{Ft} \\ 17 \mathrm{c} & 33 \mathrm{c} & 65 \mathrm{c}\end{array}$

## Stranded

## Push-Back Wire

The same high quality as the above. Size 18. Stranded and tinned. Red or black. One piece coils. 25 Ft . Coil $50 \mathrm{Ft} \quad 100 \mathrm{Ft}$.

22-Gauge Stranded
Copper Blook-up Wire


Seven strands of No. 29 wire Cotton and rubber under waxed braid covering Tinned. Colors: Black, Yellow, Red, Green. Shippiece coils.
plece coils.
25 Ft .
25 Ft.
14 c

## Corwico plexibus

A flexible insulated multi-stranded tinned copper hook-up wire. Is covered with a varn!shed cambric flame-proof insulation. Colors: Red, Green, Yellow, Brown, Black. Specify color when ordering. Shipping weight $8 \mathrm{oz} .49^{c}$ R16340-25 Ft.-Your Cost.

## Stranded Push Back Wire

## - fich

For thase who prefer stranded to solid, we offer this old standby in black 19 gauge tinned copper hookup wire. Shipping weight for 100 ft. 2 lbs.
R16321-
Your Cost 100 ft. Coil ... $35^{c}$ Your Cost 500 rt. \$1, 75
Spoois.... $1000 \% 1$ Your cost 1000 it. 82.
Spools................
2

## Solid Push Back Wire

This 19 gauge solid wire has the popular black push back insulation. No stripping necessary. Just push back the insulation and the tinned wire is ready for soldering. Shipping weight 2 !bs. weight 2 !b
Your Cost 100 ft. Colli.... $40^{c}$ Your Cost 500 ft . \$I. 85
Spool Your cost 1000 it. 83.51
spool. ...............

## Belden Rook-wp Wire

 No. 18 Stranded Tinned Copper, insulated with " "Belden colorubber.25 ft. coils available in Green, Blue. Red, Brown or Yellow. Shipping weight 8 oz .
Q16290-Your Cost..... $8^{\circ}$
1000 ft . apools a vailable in Natural, Browe or Red. Shipp ng weight 151 lbs.
Q16291-Your Cost. \$.50
(Specify color when ordering).

## Belden Shielded <br> <br> Hook-up Wire

 <br> <br> Hook-up Wire}Same wire as above but with clowely woven tinned copper shielding for 1198 with screen grid tubes. Shipping weight 3 lbs .

## R18294-

b.

100 Ft. Your Cost
$\$ 1.20$

## Service Wire Kit



A real money saver. This assortment contains practically every type of wire useful for Radio Service. Contents total approximately 200 ft . in lengths varying from 4 to $24^{*}$. Various wires aro pushback R. C. hookup shielded, pushback R. C. hookup shielded, heavy A. C. leads, spaghetti, ete. heavy A. C. leads, spaghetti, ete. Shjpping weight 5 lbs.
R16299-Your Cost.

## Corwico <br> \section*{Braidito}

A superior hook-Asuperiorhookup wire. Eithry
solid orstranded solid orstranded and tinned. Furnished in red, yellow
blue, green and blue, green and color wanted. Shipping welght 1 lb . Q16325-No. 600 Solid copper seore. 25 ft.in carton. List, 30c.
Your Cost Each
$17^{\circ}$
Q16326 No. 601 Stranded copper core. 25 ft . in carton.
List, 35c.
Your Cost Each.
$20^{\circ}$

## New Type Parallel Lamp Cord

The very latcest develop ment in lamp cords. Due to the great demands for a
wire that is abrasion proof and wire that is abraof, this wire has been made available. It is similar in aize and appearance to the regular cotton or silk covered lamp cord. The two rubber covered wires are contained in a jacket of extremely tough live rubber. The rubber is put on by a new electrolytic process which makes for a perfect seamless covering. This wire is approved by the underwriters and can be had in orchid, green, white and brown. Specify color when ordering. Shipping weight 3 lbs . ordering. Y20920-18 gauge. Your Cost:


## Approved <br> Reinforced Cord <br> 

Used indoors for portable machines and drop cords, insulated with belt or seamless rubber and covered No. 18. (Black only.) Shipping weight 6 lbs . to $100 \mathrm{ft}_{\text {t }}$.
Heavy Reinforced $1 / 32$ R. C.
Heavy Reinforced $1 / 32$ R. C.
 $\begin{array}{lll}\text { Your Cost } 252 & \$ 2.75 \\ \text { Light Reinforced } \\ 1 / 64.25 \\ \text { R. }\end{array}$ Y 20910 - 1 Ft. 250 Ft . 1000 Ft $\begin{array}{llll}\text { Your Cost } 2 \mathrm{e} & \mathbf{\$ 2 . 5 0} & \$ 8.25\end{array}$

## Approved Heavy Duty Cord



The thick belt of $50 \%$ para rubber that covers the conductor is made of smooth oil-resisting, abrasionproof, high quality rubber. This fexible waterproof, oil-resisting, non-kinking cord is just the thing for hard service. Especially suitable for outdoor work, garages, portable devices; in fact, on any pob where abllity to stand abuse is a primary factor. Shipping weight ${ }_{7}$ a primary facto
$\begin{array}{cccr}\text { Stock } & & & \text { Per } \\ \text { No. } & \text { Size } & \text { Per } & 100 \\ \text { Y } & \text { Ft. } \\ \mathbf{Y} 20945 & 18-2 \text {-wire } & \text { 2t/5c } \$ 1.95 \\ \mathbf{Y} 20946 & 16-2 \text {-wire } & 5 c & 4.50 \\ \mathbf{Y} 20947 & 14-2 \text { 2wire } & 6 c & 5.90 \\ \mathbf{Y} 20948 & 18-3 \text {-wire } & 5 c & 4.50\end{array}$

## Approved Fisture and Appliance Wire

This is the highest type of wire a vailable for this purpose. Is especially desirable for the better grade and more permanent installations. This desirable for the Board of Fire Underwriters approval, and therefore is wire meets the Board ofical inspection bureaus. The Fire Insurance Companies particularly require approved cord for all radjo and electrical installations. The slight additional cost of this wire may mean a real saving to you in case of fire, or inspection by your electrical board, as it might mean that the matter of a settiement would be held up, due to the violation, in not using Approved Lamp Cord.

## Parallel Cotton <br> Cord Approved

## $=\rightarrow=(9) \mathrm{c}$

A popular number with the service man. For hooking up radios, ex tensions, etc., available in green, white, brown, maroon, yellow, black. Specify color when ordering. Shipping weight 3 lbs . to 100 ft .
2 Conductor 18 Gauge 1/64 R.C. Y20935-
Your Cost Per Foot
Your Cost Per Foot
Your Cost 100 Feet.
Your Cost 500 Feet.
Your Cost 1000 Feet
2 Conductor 18 Gauge 1 si 6.75 $Y 20936$
Your Cost Per Foot.
Your Cost 100 Feet.
Your Cost 500 Feet.
Your Cost 1000 Feet

## Single Fixture Wire Approved


Silk or cotton. Very handy for hooking receiver up to aerial and ground as well as for general fixture use in extensions, etc. Silks come in white, old gold, maroon and brown. Cotton available in white and brown only. Specify color when ordering.

## Gauge 18 1/64

Silk Cotton
Y20915

| 100 ft. | $\mathbf{5} .55$ | $\$ .45$ |
| :---: | ---: | ---: |
| 500 | $\mathbf{f t} .45$ |  |
| $1000 \mathrm{ft}$. | $\mathbf{3 . 9 5}$ | $\mathbf{1 . 7 5}$ |

Gauge 18 1/32
Y20916

| 100 ft |  |
| :--- | :--- |
| 500 ft | $\mathbf{2 . 2 5}$ |
|  |  |

1000 ft . 3.75
Gauge 16 1/32
Y20917


New code insulation lamp cord. Consists of two conductors laid parallel and covered with braided silk. Has inner braid. The neatest cord for portable lamps, extension lights, etc., a vailable in the following popular colors: White, brown, maroon, old gold, black, green. Specify color when ordering. Shipping weight 3 lbs .100 ft .

18 Gauge $1 / 64$

## Y20937

Your Cost Per Foot
I $1 / 2^{c}$
Your Cost 100 Feet
11.20

Your Cost 250 Feet.
2.25

Your Cost 500 Feet.
4.00

Y20938-
Your Cost Per Foot
Your Cost 100 Feet
Your Cost 250 Feet.
$2^{2 c}$

Your Cost 500 Feet.
$\begin{array}{llrr}\mathbf{Y} 20918 & 100 & \mathrm{ft} & .95 \\ & 500 & \mathrm{ft} & \mathbf{3 . 2 5} \\ & & \mathbf{2 . 7 5} \\ & & \text {. } 75\end{array}$

Code Wire

## —unber

National Electric Code Standard 1/4" rubber. 14 gauge. This heavyduty black twisted pair cottoncovered wire is the finest wire obtainable for jobs that call for a wire of large current carrying capacity and ability to stand plenty of abuse. Shipping weight 5 lbs. per 100 ft.

No. 14 3/64
Y20890
$21 / 2^{c}$
. $\$ 2.15$
Your Cost 100 Feet

## Approved Twisted Pair Cotton or Silk Covered



Preferred by many for the same uses as a parallel cord. An old standby for wire users. This type of wire does not kink. Avsilable in marcion, brushed brass, old gold, blue, white, brown. Shipping weight 3 lbs. to 100 ft . Specify catton or silk also color when ordering.

Per Ft. 100 Ft .250 Ft .500 Ft 2c Twisted No. $161 / 32$
r20940
$21 / 2 \mathrm{c}$

## Cotton Lamp Cord

Size No. 18 1/32, approved, used or portable wiring and drop ights. Tightly woven, cotton covered over live rubber insulation. Shippink weight 4 lbs. to 100 ft
r20900- 1 Ft .250 Ft .1000 Ft . Your Cost 1c $\$ 2.10 \quad \$ 7.40$ No. 181/32-Twisted Black Y20901- ic $\quad \$ 2.10 \quad \$ 7.40$ Your Cost 1 c Green and Yollow No. 18 1/


Your Cost



Approved Asbestos Covered Cord

## Special Wire Offer



Cotton
Y20875-200 Ft. $181 / 64$ Single conductor for Aerial, Ground and General Use.
Y20876-250 Ft. $221 / 64$ Single conductor for Hookup, etc.
Y20877-100 Ft. $141 / 32$ single conductor for General Heavy Fila. ment Work.
Y20878-100 Ft. $181 / 64$ Twisted Pair conductor Green and Yellow for Drop Cords, Extension, etc.
Y20875-50 Ft. No. 14 Twist Pair for Power Amplifier, etc.

The purchase of several million feet of fixture wire permita us to offer a large relection of popular sizes and colors at prices far below the present market. It is now possible for you to have a selection of wire that will take care of any job you have at extremely low cost. Shipping weight 4 lbs .100 ft .

## Silk

Y20880-100 Ft. 18 1/32 Parallel All Colors for Extensions, etc. Y20881-100 Ft. 18 1/64 Parallel, for Installations, etc
Y20882-100 Ft. $181 / 64$ Twisted Pair for Filament Leads and Portable Work.
Your Cost Each Spool...85 Your Cost Complete
Assortment of 8 Spools
$\$ 6.50$

## Special Silk Parallel Wire



An unusual value on the two sizes of wire widely used for radio extensions, convenience outlets, lamps and other uses too numerous to mention. Available in White, Brown, Old Gold, Green, and Maroon. Shipping weight 3 lbs. Maroon. Shipping weight $\begin{aligned} & \text { to } 100 \mathrm{ft} \text {. Specify color when }\end{aligned}$ ordering.
Y20925-
100 Ft . $\quad 500 \mathrm{Ft} . \quad 1000 \mathrm{Ft}$.
85 c . $\quad \$ 3.60 \quad \$ 5.25$
Gauge $201 / 64$
Y20926-
75 c

Telephone Wire


Service men will find this wire of great use in general work, eapecially when hooking up the very popular inter-communication phones in private homes. The conductor consists of No. 19 solid wire with the heavy $1 / 32$ insulation wrapped in clasely woven cotton braid with the standard telephone tracer.

2-Conductor No. 19 1/32 Y20895-Shpg. wt. 21 bs .100 ft . 100 Ft .500 Ft .1000 Ft
Your Cost 95 c S4.20 $\$ 7.50$
3-Conductor No. 19 1/32 Y 20896 -Shpg. wt. $31 \mathrm{lbs}$.100 ft .
Your Cost $\$ 1.50 \quad \$ 5.70 \quad \$ 9.90$



## Fitsall Flatiron

## Element

Iron replacements. Will fit over $90 \%$ of the irons on the market, including G. E. Hot Point, Sunbeam, etc. Shiping weight 1 lb . M13270 Your Cost Each
Carton of 10
Carton of 10

$22^{c}$
$\$ 2.09$

## The "Craftsman"

The improved tool chest with the automatic cantilever tray that pulls into position when box is opened-all contents handy to get at. Made of heavy gauge, cold rolled steel with electric welded fush seams. Finished in especially hard baked enamsel, olive green in color. hard baked enamel, olive green in color. Has permanent emborsed rule on cover. Movable tray partitions. Matched hardware with lock and key, Size $14 \times 61 / 106^{\prime \prime}$. Shipping weight 7 ibs P14871
Your Cost Each



## 4 Way

 Table Tap Made of Bakelite. Very contaching geveral appliances (percolator toaster grill etc) to (per le wall outlet. Comes complete with $1 / 2 \mathrm{ft}$ silk cord. Shipping weight M13303 Your Cost Each$38{ }^{\circ}$


## Heater Plugs

Genuine Bakelite Iron Plug with switch. Very attractively designed. Has coil to protect cord. Shipping weight 8 oz . M13290 Each.
Carton of 10.

## Armored Plug

Cold moulded Heater Plug, ar mored with heavy nickel plated teel sleeve.
M13291-
Your Cost Each Carton of 10 .
Bakelite Beater Plug Large plug, black Bakelite. An unusually good plug for the money. M13292-Each Carton of 10 $10^{c}$

Trio-Tap Bakelite extension sets with handie M13294

M13296- Each. $39^{c}$

$\$ 1.85$


Midget
Push Button Bakelite. Only
$1^{18}$ is inches wide. M13297-
Your Cost Each

| Square Push Button |  |
| :---: | :---: |
| Bakelite. Size |  |
| 1/13298. |  |
| Your Cost Each |  |
| Carton of 20. | \$2.2 |

Bakelite Baseboard Outlet
This handy device enables you to quickly install an outlet in any part.of the house. Made of brown bakelite with center mounting wood screw. Shipping weight 8 oz .
M 13312
Your Cost Each
20 For

## Single

Name Plate
Size $21 / 6 \times 2 /{ }^{2} /{ }^{\prime \prime}$
M13300-
Your Cost Each
Carton of 12. appliances.
Carton Ef 10


9 ft. Each. $29^{c}$


## Small Rubber Plug with Eiandle <br> M13301 <br> Your Cost Each $6^{c}$



## Twin Socket One-piece Bakelite. M13279Your Cost <br> Carton of 10

## Snap-It Cord Set

Brown Bakelite appliance plug with convenient snap switch. Brown silk cord and standard 2-piece outlet plug. Individually boxed. Shipping weight 2 lbs. V18303
Your Cost Each
Carton of 10
$34^{\text {c }}$
6 Ft. Special Rayon Silk Cord Set with cold mold cap and regular beater plug. Shipping weight 2 lbs. V18302
Your Cost Each. Per Dozen.


Electric Heater Elements
Best grade Resistance wire with stand-
M13304-Cone Shape .

 with the fingers hold the two halves in place and also permit them to separate slightly when appliance prongs are
inserted. This allow's a circulation of air through plug as well as removing all tension on the plug itself. Shipping weight 8 ozs. M13289
Your Cost Each.
Per Dozen

Non-Twist Plug
No more twisted cords with
this new plug. Approved by
the board of fire underwriters.
Shiping weight 8 oz.
M13277 Cost Each......
Your Cose
Per Dozen............. $\$ 2.20$ Your Cost Each..

M13305 Straight Type. Your Cost Each.
Carton of 10 .
. $\$ 2.25$
Cigar Lighter Unit
Fine quallity resistance mica top.
M13286.
\$2.25 Carton of 10


\section*{Rubber Cord Connector <br> | Unusually neat appearance narrow flat blades. M13302-Each Carton of 10 |
| :---: |
|  |  | <br> Handle Cap <br> Bakelite. Very popular. Bakelite.

M13281- <br> Each. <br> Carton of 25 <br> 51.00}

## Pendant Switch

For controlling ceiling light. Has outlet at bottom for

[^4]



Current Tap


Made of Bakelite with one lamp and two appliance outlets. Shipping weikht 8 oz M13278 Your Cost Ea
Carton of 10.


## Angle Plug

Bakelite. One - piece construction M13280 Each.
Carton of 10.
T20
.$\$ 1.05$

## Trio Plug

Bakelite. Three
lets from 1 plug. M13282
M13282PerDozen.


## Fused Triple Outlet Plug

 Protects delleate in. strumozit́s, appliances, ete Pre vents mair-fuses from blowing. Standard cartridgefuses instantly re placed when necessary. Shipping weighty 1b. Your Cos Replăcement fuses for sam M12326-Box of 4. Your Cost
Hubbell Cord Receptacle



## Areu Set Builders Accessories



## Hard Rubber and Bakelite Panels

## Made enpecially for Radio Panels. Color, black.

 Thickness ${ }^{3} / 4$ ". First quality guaranteed. II size required is not listed we can cut Special Sixe Panols at $11 /$ cents per square inch for rubber and $21 /$ cents persquare inch for Bakelite. Special size panels will not be shipped C. C square inch for Bakelit

BAKELITE

| HARD | RUBBER |  | BAKELITE |  |
| :---: | :---: | :---: | :---: | :---: |
| Stock No. W19630 | $\begin{aligned} & \text { Your Cost } \\ & \$ 0.49 \end{aligned}$ | $\text { , Size } \times 7{ }^{*} \times 10^{0 "}$ | Stock No. | our Cost $50.98$ |
| W19631 | . 59 | 3) "87"x12" | W19601 | 1.20 |
| W19632 | . 69 | 3/ " ${ }^{17} 7^{\text {" }} 114$ " | W19602 | 1.45 |
| W19633 | 88 |  | W19603 | 1.85 |
| W19634 | 1.03 | 3010x7"x21" | W19604 | 1.95 |
| W19635 | 1.25 |  | W19605 | 2.15 |
| W19636 | 1.35 | 306"x ${ }^{\text {"x }} \times 26$ " | W19606 | 2.70 |
| W19637 | 1.48 |  | W19608 | 2.95 3.12 |
| W19638 | 1.59 | $3 x_{6} \times 7 \times 30^{\prime \prime}$ |  | 3.12 |

## Aluminum Cans

Shipped knocked down. Corner posts drilled for stock.
Stack $N$ M13250
M 13251 M13252 M13253
M13254

## 

Bus Wire
Round, Tinned Copper, 2 ft . Lgths G15965-10 Lgths. 100 Lgths Your Cost 16 c
Q15966 10 Lgths. 100 Lgths
Your Cost $26 \mathrm{c} \quad \$ 2.05$
Shpg. wt., Ibe. 1 $\qquad$ 2.05
8

## Terminal Clips


and very convenient Hot tin dipped for easy soldering. Often used as Antenna and Ground connections and power terminals. Furnished complete With two screws. Envelope of 5 Clips.
P14938-Your Cost. $\qquad$
Mounting Lugs For Anohoring Shield Can to Chassis. Made of cadmium plated steel. Flat end with hole to fit 6-32 screw. Threaded and size 6-32. P14955
Your Cost for 10.
$\theta^{c}$
Your Cost per 100

## Regular <br> Type

Nickel Plated Brass. P14881-Per Dozen $\square$ 76 Per Gross.

## Easy Solder

 Type

Insert wire, drop solder in hole. Plated. Shipping Preight 6
P14882-
Per Dozen

## Morris Universal Coil Winder

This handy machine will wind Honey Comb, Spiderweb, or Solenoid coils of varlous widths and diameters, from any gauge vire in general use for coils. An deal machime for experimenters and amateurs for the purpose of fabricating coils to special speci like job equal in appearance to like iob equal in appearance to
factory made coils. Includes all accessories necessary for winding the various types. Has recorder and indicator that counts turns.
Black enamel finish. Shipping weight 6 Jbs .


Soldering Paste
The quickest acting paste
The quickest acting paste on the market, put upina
convenient collapsible convenient collapsible Outiasts other pastes two to one. Will solder where others fatl. Shipping weight 8 oz.
P14873-
Your Cost
$15^{c}$
12 for .
Solderall
An amazing preparation except aluminum. Comes in handy tube.
P14860-Single tubes. Your
Cost $\ldots \ldots \ldots$ $7^{c}$ P14861-Display box o 24 tubes. Shpg. wt. 4 lbs .

## Weids All

Mendechina, glass, marble, tile, wood, leather, furniture, utensils, etc. Solders aluminum, iron, lead, tin, tanks, radiators, auto parta, etc.
Your


Display box of 12. Shpg.
Your Cost


## Insulating <br> Pitch

This pitch is specialy treated
for low melting point, making its use very
simple. It is simple. It is
put up in two sizes P14864 - Ship-
ping weight 31 bs.for 14 oz. can $33^{\circ}$
P14865-Shipping weight 12 lbs
${ }^{1}$ gal. can.
\$1.12



P14725-List $\$ 7.50$
Your Cost Each $\$ .40$


Approved by all leading radio engineers. Makes low loss joints. Esch
tin contains a coil of soldor. Will not spatte
spatter.

Rasin Core Acid Core
Per tin. Shipping weight 8 oz . List $\$ 0.2$
Display carton of 10 tins. Shipping weight 3 lbs. List $\$ 2.50$ \$ 40 Your Cost


## Peerless Fiux

A non-carrosive fux for quick

soldering. Can contains. 2 ozs. Shipping weight | 8 |
| :--- | 14862

Your
Cost $10^{c}$
P14863-One dozen cans. Shipping weight 3 Ibs
Your Cost


## Adjustable Drilling

 TemplateA tool of many uses in the shop. Indicates the exact location for drilling of hotes in panel or baseboard of
any radio set. The adjustable template fits perfectly on any piart and is then the in position by themb aut. Eliminates the possibility of wrong drilling. Complete with ful instructions for operating. Shipping weight 1 lb .
P14935-List 50c
Your Cost.
$19^{\circ}$
Double Phome Plug T) This phone plug bakelite and the hardware is of brass nickel plated It takes 2 cord tips which are held firmly in place with 2 screws. Individually packed. vidually
P14884
P14884
Your

Nickel Plated Brass Nuts,解鯺



## Machine

 Screws6/32 Round Head

| Stock No. | Length | Doz. | Gross |
| :---: | :---: | :---: | :---: |
| P14750 | $1 /{ }^{\prime \prime}$ | 3 c | 32c |
| P14751 |  | 4 c | 42 c |
| P14752 | 4 | 5 c | 55 c |
| P14753 |  | 6 c | 60c |
| P14754 | 11/4 | 8 c | 70c |
| 8/3 | Rou | tead |  |
| P14755 | 16" | 5 c | 42 c |
| P14756 | 4 | 6 c | 48 c |
| 6/32 Flat | Head | ine | Screws |
| P14760 | 1/8" | 3 c | 32c |
| P14761 |  | 4 c | 42 c |
| P14762 | \% ${ }^{\text {c }}$ | 5 c | 55 c |
| P14763 |  | 6 c | 60c |
| P14764 | 11/4 | 8 c | 70c |
| 6/32 Dval | Head M | hine | Screws |
| P14770 | $1{ }^{10}$ | 3 c | 32c |
| P14771 |  | 4 c | 42 c |
| P14772 |  | 5 c | 55 c |
| P14773 |  | 6 c | 60c |
| P14774 | 11/4* | 8 c | 70c |

Hen Nuts, Knurled Nuts

## (0) (0) Washers

P14804-6/32x/4" Hex Nuts. Envelope of 20; Net.
P14805-8/32xizn Hex Nuts Envelope of 20; Net Per 100
P14806-6/32x ${ }^{3}$ " Hex Nuts $^{\text {n }}$ Envelope of 15; Net Per 100
P14807-8/32xs/ " Hex Nuts. Envelope of 15; Net Per 100.
P14808-6/32x/8" Knurled Nuts-Envelope of 6; Net Per 100.
P14809-No. 6 Washers. Envelope of 25; Net. Per 100.
P14810-No. 8 Washers. Envelope


Machine Screw Nut

## and Washer

## Assortments

Each assortment contains 12 oval head machine acrews, 12 nuts and 12 washers. Brass nickel plated. Shipping weight 6 oz P14800-6/32x $1 / 2$
Your Cost Per Box
P14801-6/32x $1 / 6$
Your Cost Per Bor
P14802-6/32x1"
Your Cosí Per Box

## Special Washer

## Assortment

Contains 200 pieces of asworted fibre washers, metal washers, asbestos wiashers and eyelets. The most handy sing for the service grade of material used. Shipping weight 1 lb
P14846
Your Cost Per Box.
$25^{\circ}$

## Radio Hardware

(\%


Fahnestock Clips


A handy assort meat for vicekit Contains various sizes of boot h ered and plain fibre washers in cardboard box. 100 pieces. Shipping weight 8 oz. P14832
Your Cost Per Box....... 25

## Angle Bracket

Contains
Assortment
28 of the
most pop-
ularan:
gles and
used on
the aver-
age radio
set. Solid
brass neatly nickel plated. A very handy arsortment that no aervice man should be without. Shipping P14838-Your Cost Each, 25sc

## 17 Piece POLISHING HEAD OUTEIT



Set consists of a polishing head with 3 Jaw chuck holding drills up to $1 / 4 \mathrm{in}$., $4-\mathrm{in}$. circular saw, saw table complete with guide,
size $8 \times 8 \mathrm{in}, 5 \mathrm{ft}$. of round belt, bumng comsize $8 \times 8 \mathrm{in} ., 5 \mathrm{ft}$. of round belt, bumng compound, 4 -in. Wire brush, 3 -in. cotton buffer,
$1_{2}$ in. by 4 -in. grinding wheel and set of 9 $1 / 2$ in. by 4-in. grinding wheel and set of 9 twist drills, size to to is in. Polishing head has two speed pulleys. An ideal small
outfit for home shop or garage. No one who works with tools should be without this set. Shpg. Wt., 8 lbs.
P14746-List. \$6.50.
Your Cost Complete
\$310

## GOOD

Pロロ1, PRICED

## DOUBLE BENCH GRINDER

Cast frame finished in red enamel with 3 mounting holes. $13 / 4 \mathrm{in}$. bearings with spring cover oil cups. Shaft $1 / 2$ in. in diameter $x \operatorname{cin}^{1 / 2}$ ins. long. Pulley $1 \%$ ins. in diameter for round or flat belts. Theels ins. Suide. Shpg. Wheel has separate adjustable guide. Shpg.
Wt., 10 lbs . 2P14738-List, $\$ 5.00$. Your Cost


## G. M. CO. COMBINATION BENCH OUTFIT



A complete clamp-to-bench outiit with a 10 to 1 gear ratio consisting of a grinding wheel. 4 ins. in diameter and $1 / 2$ in. wide, steel chuck ior twist drills up to $1 / 4$ in., 4 in. circular saw, 4 in. great number of wses are brush. This outnt has a shop. Sharpens knives, drills; cuts radio panels, tubing and wood; drills holes in chassis and panels; buffs radio knobs, silverware and has many other uses. Vise handle bench clamp will fit all size tables up to $1^{17}$ ins. in thickness. Ad-2-in. splndle bearing with oil fitting at top. Body fnished in red enamel. All working parts polished. Shpg. Wt., 8 lbs. 2 I 14744 -List, $\$ \mathbf{i . 0 0}$. Your Cost.
${ }^{\$ 195}$


## G. M. CO. ELECTRIC <br> HAND DRILL

A sturdy $1 / 1-i n$ hand drill with GENERAL ELECTRIC A.C.-D.C. MOTOR and BALL THRUST BEARING in spindle. Special anti-iriction bearing on armajaw geared chuck. Has tognie Jaw geared chuck. Has toggle
switch on top of plstol grip, easily operated with thumb. Complete with 9 feet of heavy rub-ber-covered cable and plug. This tool will stand the "gaff" of drils. Shipping weight, 10 lbs .

## Bench Grinder

A dependable clamp-to-bench grinder which will be very useful in the work shop, bome and garage. Will fit any bench up to $11 / 2$ ins. in thickness. Grind ing wheel is 4 ins. in diameter and 1 in wide. Adjustable steel grinding guide. Has dirt proof gear case with extra long bearing which assures gears being in allgnment and
Shpg. Wt., 6 lbs. 2P14729-List, $\$ 2.00$. Your Cost
$85^{c}$



Llst, $\$ 2.00$
Your Cost
G. M. Co. Hand Drills Finely machined hand drills with p-inch hardened chuck Jaws. Accurately meshed gears. Polished
hollow hapdle for hollow handle for much needed tool much needed tool bench. Shpg. Wt., 2 lbs . side knob.

P14724-Without side knob. Z1st, $\$ 1.50$
Your Cost
79

## AUTOMATIC FEED BENCH DRILLS Small Size

 $1 / 4^{\prime \prime}$ Chuck The finest tool for the money we have ever offered. Feed is entirely automatic, seli adjusting to the cutting speed by means tension screw. C)utch maintainsa drilling pressure just sumcient for maximum ariling speed without breaking bit. All working parts suspended on poldrill to be raised or drill to be raised or Owered. bo ma chuck. Overall height $93 / 4$ ins. This is a finely finished recommend to all radioPour Cost, Each $\$ 16515150$


2P14872-List. $\$ 12.00$. Your Cost

## MOTOR DRIVEN BUFFER

## AND GRINDER

Not a toy, but a real electric motor driven buffer and grinder for the workshop with a pulley on each end of motor shaft for driving other apparatus. High spaed $1 / 50$ h.p. motor, revolves 5000 R.P.M. On and off toggle switch on end of motor. Does work in a few minutes that otherwise would take several hours. Grinds, sharpens, pollshes and drives other tools. Mounted on a strong cast base with gour mounting holes. Complete with high grade grinding wheel, buffer and two pulleys. cord and attachmeat plug. Shps. Wt.
9 lbs.

Carbon Twist Drills


Used in hand, automatic or breast drills. Set of 60 ; wire gauge sizes: sith wire gauge drill block. Shpg. Wt. 9 lbs .
P14706-Your Cost
s 2.49 Set of 1 to 60 Drills only Wt. 3 lbs.
P1407Your Cost $\$ 1.5 ?$ DRILL BLOCK, durably made Non-corrosive metal; dull nickel finish. Block holes drilled and permed, not punched. Shpg. Wt, 6 lbs.
${ }_{\text {P14708-Your Cost . . . . } 95^{c}}$ ASSORTMENT 9 Drills; sizes $1 / 6$ in. to ${ }^{3}$ in in. Good steel; fast cutting. In wood box. Shpg. Wt., 2 lbs. P14709 Your Cost ......33 $3^{c}$ SAME assortment; paper wrapped. P147
Your Cost
$23^{\circ}$


## Vises-Soldering Irons-Hack Saws-Torches



A very serviceable vise for the Radio man. Good steel, carefully with highly polished jaws and wandle. Accurately cut spindle thread. Equipped with vise type clamping handle. Will clamp to board or bench up to $2^{\prime \prime}$ thick.
Has anvil behind faw. Made in Has anvil behind Jaw two sizes.
P14727-Jaws, $21 / 2^{\prime \prime}$ wide. Ship-
ping weight 7 ins.
List $\mathbf{5 2 . 0 0 - Y o u r ~ C o s t . . . . ~} 3$
P14728-Jaws, 31/2" wide. Ship-
ping weight 10 lbs .
List $\$ 3.00$
51.39

SwivelVise
Unequaled for the Home, Garage, or Farm Different swivel positions are bysily obtained springpluncer aspriy pon Gray pon, in grain. Jaws are $\rightarrow$ accurately machined, pollshed and laequered. Screw parts nlekelplated. Jaws open $21 / 3^{\prime \prime}$, and have double steel guide rods. Fitted
with adjustable clamp. Base finished in Black Japan, and body with Red Baking Enamel. Width of jaws $21 / V^{\prime \prime}$. Shipplng weight 7 lbs . P14705-List $\$ 2.75$ SI. 25

Goodell-Pratt Radio Tool Set
A very high quality set of tools for the radio man. Every tool finel finished and thoroughly dependable. Set consists of: A ratchet tool holder that may be adjusted for either right or left hand motion by a quarter turn of knurled collar, 3 screwdriver blades sizes $81 / 2 \times 1 / 3^{\prime \prime}$, $41 / 2 x^{3} / 6^{\prime \prime}$ and $2 x / 6^{\prime \prime}$; one $6^{\prime \prime}$ shank for holding sockets, three hex sockets- 28 , is and $1 / 4$ : one wir bender for bus wire, one reame Shipping weight $11 / 2 \mathrm{lbs}$.

## Jackson Electric Soldering Irons



This is a full size soldering iron $11^{*}$ in length. Black enamel handle and nickel plated metal case. Removable tip $70^{\prime \prime}$ in diameter. 50 watt iron. Shipping weight 2 lbs.
P14850-List $\$ 1.25$
Your Cost.
$59^{\circ}$

## 

Heavy Duty Irons
Extra heavy irons desighed especially for industrial or shop use. Heating element and all parts are renewable. Tip removable. Metal parts nickel plated. Extra large handle. Shipping weight 2 lbs. P14874-75 Watt
List $\$ 2.75$
P14853-100 Watt
List $\$ 3.75$
Your Cost
s1.45
${ }^{5} 1.95$


P14995


A 75 watt soldering iron of exceptional value. Length of iron $12^{\prime \prime}$ with $7 /$ ol $^{\prime \prime}$ removable tip. Nickel handle. Shipping weight 2 lbs . P14851-List $\$ 2.50$
Your Cost........... $\$$ I

## 

## 220-Volt Irons

This thoroughly reliable 75 watt iron designed for use on 220 volt A. C. Element is wound on amber, with mica and steel core. Extra large black enameled handle Complete with heavy duty cord and plug. Shipping weight 2 lbs P14852-List $\$ 3.00$ SI. $\$ 0$
Your Cost Each....

## Hack Saws Pl4994 Yourtat Cost

Nickel plated frame. Adjustable
8 to $12^{\prime \prime}$ complete with one $8^{\prime \prime}$ blade. Shipping weight 2 lbs.

## Pistol

Grip
P148995
Your $35^{c}$
For bladea
Enameled
wood handle. Complete with one $8^{\prime \prime}$ blade. Shipping weight $21 / 2 \mathrm{lbs}$.

## Hacksaw Blades

## Made of Tungsteel. Strictly first

 quality. Very flexible. Fast cutting and long lived. Fully guaranteed. Shipping weight 1 lb .P14965
$8^{\prime \prime}$ per Doz
P14966
$10 "$ per Do
$10{ }^{\prime \prime}$ per
P14967 12" per Doz $25^{c}$


## $0 \rightarrow-\square$

## Esico "Midget",

The finest 65 watt iron on the market. Accurately machined tip which perfectly fits the heating element. Tip removable. Fine grade A Nichrome element enclosed in heavy gun metal steel case. Element removable. Hardwood handle, walnut finished and var. nished. Complete with cord and plup. Shipping weight 2 lbs. Y14848-
51.31


## "Our Special"

Unquestionably the finest low priced Electric Soldering Iron on the market. The heating Soldering Iron on the market. The heating element 18 of finest Nichrome wire and is constructed in identically the same manner as most high-priced irons. This tool has two tips of different sizes which makes it especially suitable
for the Radio Man's requirements. Polished for the Radio Man sequirements. Polished steel shank, brass Ferrule, black wood handle 55 watts. Shipping weight 3 lbs. P14849
Our Special Price
$79^{\circ}$

## $\square=\square$

## "American Beauty"

America's most famous Soldering Iron. Made for those who want the very best. The very finest materials and workrnanship throughout. Metal parts are nickel plated and highly pol-
ished. Improved heat-proof handles. Lencth ished. Improved heat-proof handles. Length $12 \% \%^{\prime \prime}$. Full 100 watt rating. Complete with ${ }^{3 \text { B" }} 1485$
Your Cost Each
$\$ 5.50$
A smaller "American Beauty" "with straight metal case for ease in soldering in corners and tight places. Consumes 50 watts; "盾" tip. Shipping weight 2 lbs.
P14856 Your Cost Each

$\$ 3.25$

## Power Sprayer

This compact Power Sprayer is made to operate from the spark plug of any automobile or auto-truck. is especially suitable for use in paint hops, garages, general repair work, sprayer, of this size and type. It aprayer, of this size and type.
will spray lacquer, paint, varnish, whil spray lacquer, in aint, varnish, shellac, insecticide, in fact any other
finely mixed freely flowing mixture or finely mixed freely flowing mixture or
fluid. Is furnished complete with sprayer, pint jar container, spark plug
air check vaive, compression tank, a sparkplugs, and 12 feet alr hose. Shipping weight 11 lbs . $\$ 2.25$ P14704-List $\$ 7.50$ - Your Cost Complete.

## Handy Sprayer

Ideal for touch-up or complete job with light paint, Duco or Lacquer. Air pressure supplied by any automobile tire. Complete with glass jar, 6 ft . of hose, and adjustable spray tip. Designed to operate perfectly with very low pressure, will spray approximately four jars from one tire containing 35 lbs pressure. Shipping weight 5 lbs.

## $x-2=-1$

## Esico "Junior"

A beautiful craftsman's tool. Extensively used in the United States Navy. Perfect fitting replaceable tips. Grade "A" Nichrome resistance wire heating element, wound on lava insulation and encased in blue steel one piece case. Very quick heating. Maintains constant and even temperature. Handle will never get hot. A quality tool built for years of service. Consumes 85 watts. Shipping weight 2 lbs. List $\$ 2.75$ P14854-Your Cost Each
$\$ 1.90$

P14705-List, Complete $\$ 1.25$
Your Cost

1.25

## Lenk Torches

## [Automatic]

 These alcohol torches are abig favorite with the Radio big avorite with the Radio
Man because of their neatMan because of their neat-
ness, effictency and ease of operation. Made of brass nickel plated, highly pol-
ished. Entirely automatic. Type A: Double burner, one for needle polnt flame, add the attachment for heavy hame. Pressure release valve tion and leaks. Cleaning pin in handle. Size $7 \times 48 / 4 \times 3^{7}$. Shipping weight 4 lbs.
List $\$ 5.00$ Your Cost $\$ 2.95$ Type B: Almost as large as type A, holds enough fuel to burn 3 hours with one filling. Starts in 20 seconds. Ideal for heating
soldering iron where no current soldering iron where no current is available. Size $7 \times 31 / 4 \times 2^{\prime \prime}$.
Shipping weight 3 lbs. P14867-weight 3 lbs.
P14867-
Your Cost
$\$ 1.78$


Type C: A very handy little torch for the tool box. Solid base makes it mechanically leak proof. Screw cap makes loading easy. Nozzle cap prevents evap-
oration. Copper heat conductor generates quickly. Size $61 / 8 \times 2 \frac{1}{6}$ $\times 1 \mathrm{~K}^{\prime \prime}$. Shipping weight 2 lbs. List 51.50
P14868-Your Cost
Type D: (not illustrated) Sa in Pe D. (ance as Type C. Same in appearance as Type C; smaller who have only occasional use for a torch. Size $51 / 4 \times 21 / 6 \times 10$. ShipPing weight 2 lbs. List $\$ 1.00$ P14869-
Your Cost Each.

## Pliers

DIAGONAL CUTTING
Cutting jaws of this Plier come together perfectly "They cut the insulation as well as the wire." Length 5\% P14944-
Per Pair.

LONG NOSE
A truly fine tool with a side cutting blade that is sharp, and will stay so. Length 632 Per Pair
\$1.60


A high grade nickel plated, parallel action Plier with external cutting jaw. Great
leverage arrangement permits cutting of hard wire with comparatively little pressure. Length $5^{\prime \prime}$. Shipping weight 1 lb. P14894
Your Cost Each
$69^{\circ}$
${ }^{s} 1.95$

Contains ten practical tools which are in most general use for radio servicing- $3^{\prime \prime}$ screwdriver, screwdriver, scriber, reamer, countersink, pliers, center-punch, socket wrench set for hex and knurled nuts, and 3 wrenches for hex nuts. Packed in attractive box. Shipping weight 2 lbs . List $\$ 3.00$.
P14908-Your Cost
${ }^{\text {s }} 1.95$


Selected by the Boy Scouts of America, as official because its design, hardness, quality of steel, heat treatment, and composition makes it-one of the finest hand axes ever made. The head cannot come off, and the handle cannot loosen or break. It is a etrong, safe, keen cutting axe, and the inlaid second growth hickory scales give perfect grip. Absolutely Muaranteed. Shipping weight 3 lbs. $\$$ B
P15070 Your Cost.............

## Can't-iol Center Dunch

Made of exceptionally tough, swaged Carbon Steel. Heads
and points are pollshed and the grip is knurled 2 P" point

I( ${ }^{c}$

## Radio

## Reanler

The handiest tool
for reaming holes in radio panels, wood, light metals, etc Length of blade $4^{\circ}$. Will ream holes from $1 / 8^{\prime \prime}$ to $8 / 8^{"}$. Shipping welght 8 oz . P15065
Your Cost Each.
Combination Tool and Pliers

NO
-A combinstion tool consisting of two tooth jaws for gripping round objects, two wire cutters, hammer, hatchet, tack pulser and screw driver. A handy tool around the P14924 List $\$ 1.00$

## Your Cost

NO. 2 Diagonal cutting pliers of drop forged steel, fully polished. Case hardened Length $51 /{ }^{\circ}$ ". Shipping weight $1 \mathrm{lb} .2<c$ NO. 3 -Telephone pliers. Length bur " long nose with side cutter. Drop forged teel with case hardened jaws, fully polished. Shipping weight 1 lb . P14926 List $50.75^{\circ}$. Your Cost ...35 NO. 4-Combination pliers with 5000 volt insulated handle. A very fine pair of pliers of high grade material and workmanship. P14927-List so.90. Your Cost. $12^{c}$ NO, 5-Genuine Pexto extra long reach, flat nose pliers with lap joint. Length $61 \mathrm{~h}^{\prime \prime}$. A handy tool for reaching deep, narrow places. Shipping weight 1 lb .
Your Cost.
$49^{\circ}$
NO. $6-\mathrm{Co}$
No. 6-Combined side cutting and burners pliers, fully polished. Length $8^{\prime \prime}$. For mechanics, plumbers and gas fitters. It has three
wire cutters and the handles can be used as wire cutters and the handles can be used as
screw driver and reamer respectively. Shipping weight 1 lb .
$49^{\circ}$
Official Scout Axe


## Parallel Action

r

## Kraeuter Linemen's Pliexs

Of special alloy
steel-drop
forged, these are
made to meet the demand for
the demand lor linemed iner surpassing any other eve produced. It is perfect in finish, workmanship and material. Length $81 / 2^{\prime \prime}$. Shipping welght P15075-Your Cost
. 2.95
Kraeuter Long Fine Needle


Furnished with an extra long nose, for reaching into difficult places,


## End Cutting Nippers

A very fine tool especially built to cut wire, small screws and nals, in Hardened jaws. Vardened jaws. in every kit. Shipping weight 1 P1457
Cost
Per $37 c$
 mium plated steel. Contains one each of the following
 Phipping weight 21/2 lbs. $39^{c}$

?

## Wrench Set

Here's a handy little Item for your tool kit. 10 in 1 slot-lock wrench set that will take all medium size nuts in general use, either square or hex. When wrench is not in use they are locked in compact bundle by the handy clip. Shipping weight ${ }^{1} 1 \mathrm{lb} 14732$-List 70 c Net..... $35^{\mathrm{c}}$

## End <br> Wrench <br> Set



## A handy pocket set for repair $44^{\circ}-3$ 10

 men, auto andradio mechanics, electricians, etc. Ideal for adjusting nuts in small spaces. Set consists of 3 double end wrenches and genuine leather case. Sizes are: $1 / 4^{\prime \prime}, 5 / 4^{\prime \prime}, 3 / 8^{\prime \prime}, 7 / 4^{5}, 1 / 2^{\prime \prime}$ and odd sizes.


## Quick Return Rachet

Ideal for drawing or driving screws that are hard to get at. When pressure on the handle is released, it automatically returns to the extended position, ready for the next stroke. Bits have new type panel non-skid points. Tempered, toughened, fully polished and twice tested. Complete with 3 bits. Shipping weight 1 lb .
P15063-Your Cost Per Set
2.35

## Elousehold Scales

No home should be without a scale - here are three very inexpensive ones which are sccurate. Steel spring and indicator. Brass face. Japanned body. Complete with ring and hook. Shipping weight 1 lb . Capacity 25 lbs .
P14983-Each
Capacity 40 lbs
P14984-Each
Capacity 50 lbs .
P14985-Each


## Screw Drivers, Push Drills 8 Wrenches



The most practical Screw Driver ever d veloped. Has gripper which automatically stays at any point on shank. May be used for screw gripping serew driver to start screws in all difficult places, or may be used as ordina screw driver. Made of finest material; each blade, specially tempered entire length, of blade, specially tomper hexagon steel. Hard maple handle springy hexagon tool steel. Hard maple handle
of good length. Slender type for radio work. of good length. Slen
Shipping weight 1 lb .
P14721-Blade $4 x^{3} / \mathbf{z}^{\prime \prime}$. List 50c
Your Cost Each
P14722-Blade 10xs/m". List 60c
Your Cost Each

## $33^{\circ}$

$39^{c}$

## RADIO SOC $\square=0$ <br> All Steel Set <br> This set will stand the hardest usage. Five interchangeable sockets: $1 / 4^{\prime \prime}, 3 / /^{\prime \prime}, 1 / 8{ }^{\prime \prime}, 7 /$ n $^{\prime \prime}$ and screw driver bit. Cadmium plated. Knurled handle. Sockets easy to remove, yet will not loosen while working. Shipping weight 1 lb . P14749-Your cost... $45^{c}$



Service Screw Driver A low priced and very popular Screw-Driver, with polished blade and attractively finished red handle fastened with bead lock. Blade of forged steel. Shipping weight 11 b . forged steel. Shipping weig
P15056-Three inch blade P15055 Five inch blade. Your cost
Either Type

## $10^{c}$

One dozen Screw Drivers put up on counter display card in equally assorted blade length . $2^{\prime \prime}$ and $3^{\prime \prime}$. Black handle with nicke lated blade and ferrule. Blade is carefully P14740-Per Card of 12 . List $\$ 1.20$ Your Cost P14741-Set of 3, Assorted sizes. weight 8 ozs. List 50.30 weight 8 ozs
Your Cost

Ratchet Screw Driver Tool steel blade. Nickel plated ferrule, hard wood handle. Has position ratchet adjustment left or holds blade rigid. Shipping weight 1 lb .

| Stock | Blade |  |
| :---: | :---: | :---: |
| No.. | Length | Net |
| P14969 | $3^{\prime \prime}$ | 45 c |
| P14970 | $5^{\prime \prime}$ | 50 c |

Screw Holding Screw Driver


This Screw Driver is a necessity for every ane who uses tools. For use in inaccessible places where the ordinary screw driver cannot be used ffectively in inserting or extracting screws Made of tempered tool steel. Some of its adrantages are: It holds screw tight while using: prevents loss of screw; indispensable in assembling and is the only screw driver having the automatic release. Handle is insulated, enabling it to be used safely in electrical work. Grippers are of blued spring steel. Shipping weight 2 lbs P15061-8" long Your Cost P15062-10
$75^{c}$ $95^{c}$


Screw Driver Bits
Round shank for $1 / 4^{\prime \prime}$ chucks. 3 blades to set: $9^{1 / g^{n}, 1 / 4^{n}, 1 / 2^{\prime \prime} \text {. }}$ Shipping weight 8 ozs . P14946 Your Cost
$39^{\circ}$

## Countersinks

Made of tool steel hardened and tempered. (*) Round shank, others square shank. Shipping weight 8 ozs. Stock Dia. Your $\begin{array}{lll}\text { No. } & \text { Dia. } & \text { Your } \\ \text { Nost }\end{array}$ P14916 P14917 P14918 14

Electricians Screwdriver

Simply constructed, but strong and durable. This is an exceptionally good se
quoted.
Slender polished blade with forged point, hardened and tempered. Nickel plated ferrule; Electrician's style handle; length
Shipping weight 1 lb . P15059 Your Cost Each
porno

## $0=0 \operatorname{coc}=0$

Ratchet Screw Driver A heavy duty tool, with reversing and locking ad justment. Beat quality steel; nickel plated. Mahogany finished hardwood handle. Has two blades different in size. Shipping weight 2 lbs.
${ }^{\$ 1.59}$

## P14742- <br> Your Cost.

## Mand

## Goodell-Pratt

## Ratchet Screw Driver

Can be used as automatic Screw Driver or the ratchet can be locked, for use as plain screw driver. Simple in construction but strong and durable. The handle is lacquered hardwood, polished steel parts.
Supplied with two interchangeable blades, Supplied with two interchangeable blades,
hardened tempered and polished. I ength hardened tempered and polished. Length
closed without blade $91 /{ }^{"}$. Shipping closed without blade, 91/2". Shipping weieht 2 1bs.
P14720-

Tretest Ratchet Screw Driver
May be used as Ratchot Screw Driver to drive screws or locked and used as regular screw driver to drive and draw serews. Mahogany finished hardwood handle. Polished metal parts. P1/fis- Your Cost Each

## 0 Cl <br> Antomatic <br> Push Drill

Made of best quality steel, fully hardened and nickel plated. Extra heavy spring. released by turn of knob at top of handle. Handle contains 8 drill points sizes $1 / x^{\prime \prime}$ to Shipping weight 2 lbs.
P14930-List $\mathbf{\$ 2 . 5 0}$
P14930
Net.
$\$ 1.15$

## Coodell-Pratt Radio

 Screw DriverSometimes known as a Jewelers' screw driver. Has long slender screw especially suitable for radio blade especially suitable for radio
work. Small enough at end to use work. Small enough at end to use for removing set screws from
radio knobs. Hammer forged radio knobs. Hammer forged
blade, nickel ferrule. Hardwood blade, niekel ferrule. Hardwood
handle. Length of blade $3^{\prime \prime}$. A very flne quality tool throughout. Shipping weight 8 ozs . P14949 Your Cost Each.
$29^{\circ}$

## (2) wimbencita

## Alligator Wrench

Drop forged steel. For square or hex. nuts $1 /{ }^{\prime \prime}$ to $11 /{ }^{*}$ "Has three die openings in center, sizes ${ }^{3} / h^{\prime \prime}$. ping weight: $11 / 2$ lang. ping weig
Your Cost Each.

## Baby Shockless Serew Driver



P15057-Set of 3: 1 of each
Your Cost Per Set of 3 .

Made with a special handle, $2^{\text {" }}$ long, which gives a perfect grip and complete protection against electrical cannot loosen or turn in the handle Shipping weight 2 lbs
P150ss Complete Card of: Four 11/2" screw-drivers. Four $2^{\prime \prime}$ screwdrivers. Four 3 , screw-drivers. Your Cost Card of 12.


## Shockless Screw Driver

## untix

A popular priced insulated handle Screw Driver for electrical, house hold and automotive work. Handle and Ferrule are moulded in one piece of Black and Red Composition. Blade is nickel plated and have straight side point. $6^{\circ}$ long. Shipping weight 1 lb .
P15060
Your Cost


6 ft. Folding Rule
Made of boxwood, finished in yellow enamel. Metal bound. Length 6 ft . Shipping weight 8 oz.
$10^{c}$

## Steel Folding Rule

Non-rusting, light weight, non-breakable Length 6 ft ., divided in $1 / \mathrm{of}^{\prime \prime}$. Big numerals deep etched. Shipping weight 1 lb . P14968
Your Cost Each
$55^{\circ}$
6 ft. Automatic Steel Tape
This automatic tape is made of a special rigidflexible stecl; enclosed in solid brass case; fully nickel plated. Figures clearly etched on tape. Push-button controlled spring recoil. Dependable and is guaranteed accurste. Shipping weight 2 lbs. P14974-Your Cost Each
$79^{c}$

## "Lamco" Work Bench Strongly Built <br> for Garage Factory, Shop or Home Use <br> 

Sub-structure made of $11 / 3 \times 1 / 8^{\prime \prime}$ Angle-Iron securely are welded for rigidness. Stringers are inverted to allow for nesting in of lower shelf. Fastener plates at corners for additional firmness. Slotted foot reat for anchoring to floor. Top made of $2^{\prime \prime}$ kiln-dried Douglas Fir, vertical grain. Size $24 \times 60^{\prime \prime}$ top; 31 Inches high. Delivered knocked down. Shipping weight 80 lbs.
P14942-Your Cost Each.

## Ratchet Brace and Bit Outfit

Steel brace fully nickel plated with wood knob and handle. finished in mahogany. Has 10" sweep, round knurled alligator jaw chuck with spring. Equipped with ring ratchet adjustment. Complete set of 6 James Swan auger bits in a convenient wooden box with slide cover. Finest quality steel bits in the followRatchet brace with above set ol bits. Shipping pieight 6 lbs.
Your Cost $\$ 4.75$
Your Cost. R14738--Liace only. P14736-List $\$ 2.00$

Shipping
$\$ 2.59$ Your Cost......................... \$1.I0


James Swan Auger Bits
Forged of the higheat Forged of the highest quality tool steel; bright finish. Bore fast and clean without binding. Double cuttery, deep spur. Six bits to set. Sizes: $1 /{ }^{\prime \prime}$ ",
 Wood box. Shipping
weight 3 lbs. weixht 3 lbs. Plif37- $\$$ I. 59

## Economy Brace

Round knurled alligator chuck with heavy apring. Wooden knob and handle, finished in mahogany. All steel parts fully steel parts fully
polished. Has $10^{\prime \prime}$ sweep. Shipping sweep. Ship
weight 3 lbs. P14739-List $\$ 1.00$ Your Cost.

s 9.95

(


Cold Chisel and Punch Set
Best grade tool steel, machine
 $18 \delta^{\prime \prime}$ Cold Chisel, 2 Punches and 1 ${ }^{\text {libs. }}$ P1980 Your Cost.....33 $3^{c}$


## Adjustable Circle

## Cutter

Designed for cutting holes of 1 to 4 inches in Bakelite, Hard Rubber, Sheet Iron, Brass, Tin, Wood, Linoleum, Beaver Board, etc. A real tool for the radio mechanic, carpenter, automobile mechanic, and plumber. Used in a breast drill, hand brace or machine. Best quality tempered tool steel, hizhly polished. Will not creep. Ideal for cutting socket and meter


P14718 holes, etc.

No. 1. Adjustable Circle Cutter with a beading cutter attached Shipping weight 6 lbs. $\$ 1.95$ P1417-Your Cost
EXTRA CUTTER No. 2. Adjustable Circle Cutter ${ }_{\text {P1 }}{ }^{\text {onlitis }}$ P14718-
\$I.I9 P14716-Your Cost Each

## Handy Coil Spring Assortment

This handy assortment contains 100 compression and extension springs, with tensions from 1 oz . to 25 lbs. These springs are most useful in the garage, factory, work-shop, home-crafters, etc. Shipping weight $31 / 2 \mathrm{lbs}$.
P14715
Your Cost per Set. ST. $2 \boldsymbol{\$}$

Caliper Rule


Measures inside and outside diameters up to 3 Inches, calibrated in 1/hand la part of an inch. Has knurled locknut. Shipping weight 8 P14891-Your Cost
$10^{\circ}$

## Precision Micrometer

## p-ctury

1"x1000th of an nch. Frame shows decimal equiva32nds and 64ths of an inch. 32nds and 64 ths of an inch.
Micrometer has lock nuts which Micrometer has lock nuts which
clamp the spindle. Also a ratchet stop. A spanner wrench for adjusting mifrometer to take up wear or tool is included. Each micrometer in attractive polished wooden case. Shipping weight 2 lbs. $\$ 3.25$
P1506f-Your Cost

## Pruning Shears



California pattern. Duco finish Malleable iron handles. Length, $8 \% 4^{"}$. 2 s/" tool steel blades. Lever catch. Shipping weight 1 lb .

## P14979

Your Cost Each
$29^{\circ}$

## Wood Chisel Set

Beveled edges, honed ready to use. $34^{\circ}{ }^{\circ}$ blades. Leather tipped hickory handles. Set of four chisels. Sizes: $1 / 6^{*}, 313^{\prime \prime}, 3 / 4^{4}$ and $1^{\prime \prime}$ Shipping weight 2 lbs . P14982-Per Set of 4 . Your Cost
$69^{\circ}$

## Block Plane

A 7" plane with hardened and tempered steel cutter $13 / /^{\prime \prime}$ wide. Adjustable cutter. A real value. Shipping welght 14730 libs. Your Cost.

55


## Pocket Level

Guaranteed accurate. Non-freezing Liquid. Nickel plated. Length $2 \mathrm{~s} / \mathrm{g}^{\prime \prime}$. Shipping weight 8 oz P14981-Your Cost Each.

## Carpenters' Clamps

Malleable Iron. Used to hold glued joints
while setting. P149
Each........ ID ${ }^{c}$ 3 For. . . . . . . . . . 25c P14923-2" jaw openEach
3 For.
$15^{c}$


# Cr 



S Tap Wrench
Highest quality carbon tempered. The hardened, perfectly fitting jaxis will take up to
open easily. Shipping weight 2 lbs. P14714-
Your Cost
$25^{\circ}$

## Brace Drill Chuck

This brace drill chuck has hardened jaws, and is finished in white nickel. Capacity 0 to $1 /{ }^{\prime \prime}$ dia. drille. Shipping weight 3 lbs. P1413-
Your Cost
$29^{\circ}$

## Steel Letter and Figure Set



Marks mezal, leather, wood, etc. Very handy for marking your tools. Complete alphabet and numerals 0 to 9. Complete with anvil and hammers. Shipping weight 7 lbs. P14977-
Your Cost
$\$ 1.49$


## Yankee Radio Tool Set No. 106

This combined Tool Set No. 105 and Radio Drill No. 1431 is especially designed for radio work, A beautifully balanced, small, powerful Arill, with a $4-t 0-1$ ratio of gears for speed, Special Radio Chuck ${ }^{1 / 4}$ "capacity, length $91 / 2^{\prime \prime}$. It makes a complete set of all Yankee Radio Tools. With this combination tool set, of the Tools. With this combination tool set, or the ratchet screw driver and blades, with the Radio Drill, all radio mechanical work can be taken
care of, such as driving and withdrawing care of, such as driving and withdrawing
Bcrews, reaming, nut run ups, drilling, etc The handsome mahogany finished tool chest in which it comes, has compartments for each tool, so all may be handily gept in order, when not in use. Packed one in cardboard box Shipping weight 5 lbs.
P15025
Your Cost
\$7.45

## Yankee Radio Tool Set No. 105

Set contains 1 No. 230 Ratchet Screw Driver ( $614^{\prime \prime}$ " overall) right and left hand and rigid. Blades $51 / 2 x^{3} / 6^{\prime \prime}$ for long reach, between wires, etc. Blades $31 / 2 \times 1 / /{ }^{\prime \prime}$ for small screws on dials.
Blades $21 / x^{2} \times 1 / 4$ for heavy screws, aerial work, etc. CounterBlades $21 / 4 \times 1 / 4$ for heavy screws, aerial work, etc Counter-
sink, for countersinking heads of screws. Sockets (two) $1 / 4$
 and "盾" hex with 4 " shank. Covers all small nuts. Reamer for enlarging holes in panel. $1 / \mathrm{I}^{\prime \prime}$ "to $3 / \mathrm{h}^{\prime \prime}$. Wrench, one end "作" "or square or hex., the other $1 / s^{\prime \prime}$ hex. for jacks, etc. Wire Bender for making loops and bending wire.
It takes care of all screws; reams and countersinks; runs up nuts, bends and loops wire, and has wrench for jacks and s/4 hex. or square nuts. A touch on shifter gives right and left ratchet and rigid. Packed one set in box. Shipping weight 1 lb .
P15026
Your cost For Complete Sot................ $\mathbf{2 . 9 5}$


## Pexto Wing Dividers



Finest forged steel, full polished finish. Thumb screw adjustments. For describing arcs and circles and transferring measurements to and from a steel rule, and a great variety of laying out work. "Pexto" name appears on every tool. Length 12 inches. Shipping weight 2 lb P15046 Your Cost
$59^{\circ}$

## Rivet-O-Punch

A tool of a thousand uses. For miking solderless lugs in electrical work. A very handy tool for the radio mechanic, especially in lay-out work. Also used for making holes in leather, fibre, paper, or canvas. Of pressed steel, designed especially for strength. Useful where many sheets are to be fastened into one compact file, also samples and inserts to letters. Indispensable in the shop, home or office. Furnished complete with a box of brass eyelets. Shippling weight 1 lb . P15046-List Price $\mathbf{\$ 2 . 0 0}$
$59^{\circ}$


U. S. Army genuine leather luggage strap, with new double prong double grip buckle. For luggage carriers on cars, salesmen's cases. trunks, and many other uses. Made to sell at much higher price. Shipping weight 1 lb . P15047
Your Cost Each
$\$ 2.00$ most trucks, tractors and aisplanes. Shipping weight 8 oz . each.
P15146-7/8" Thr. No. 3-1" Hex P15147-1/2" Pipe Thr. No. 7-1" Eex. P15148-Metric. No. 9-1" Hex.
 Your Cost. Each.
Set of Six

## G. M. Co. Spark Plug

Perfection in workmanship and the finest materials obtainable are combined in this Hy-Ten Insulator Plug. Especially adapted to high compression motors. Manganese electrode and firing pins are adjusted and set for quick starting and better performance under all conditions. A wider range of service in hot or cold motor with an absolute guarantee of satisfaction. Available in four sizes to service all passenger cars, and ———n

## Notched Hedge Shears



Made of best qual. ity drop forged stee) Blades highly pol shed, accurately round and set Case hardened bol and nut spring tension washer, copperized seamless steel ferrules. Each blade tang has a patent clutch spring maling it impossible for pateat clutch spring making it impossible for fande to loosen. Size 7" cuting blade. Shipping weight 4 lbs.
P15100
s1.19

## Grass Shears

Malleable Grip Handles. Tempered forged steel blades. Beveled edges. Black finish on blades;
 red on handles. Blades $51 / 2^{\prime \prime}$. Shipping weight 2 lbs P15101-
Your Cost
$35^{\circ}$

## Garden Shears



A New Garden Shear with an exclusive feature that makes it easy hat makesit easy to cut flowers. prune vines and prune shrubs. A metal finger holds the stem or twig as it is being cut. If a flower is being cut, finger holds it until you put it in the basket; if a twig until you cast it aside. Only one hand is needed. Made of fully tempered drop forged steel; rust proof nickel, and red lacquer finish. Shipping weight 2 lbs. P15102
Your Cost
$79^{\circ}$

## Pruning Shears

High grade, bevel poland hook. Tempered, taper thread screw, improved Rustless coll springs: inside spit $91 / 2^{\prime \prime}$. Shipplag weight 2 lbs.
P15103
Your Cost
$65^{c}$

## Ladies Hedge Shears

Fully polished blade of drop forged steel accurately ground and set. Case hardened bolt and nut, spring washer. $6^{\text {th }}$ cutting blade. Shipping weight 3 lbs .
P15104
Your Cost. $\qquad$ $\ldots 65^{c}$

## Forged Steel Pruning Shears

One-piece construction. Hardened and tempered
 to give it exceptional blade and hook. Lock nut and bolt design. Size 9". Shipping weight 2 lbs. P15105 Your Cost.

## Quality Grass Shears

Forged, steel polished blades; fitted with apring tension washers. Green Duco finished $\qquad$ handles. Standard size $6^{\prime \prime}$ blade. Overall 123/4". Shipping weight 2 lbs . P15106 Your Cost.

## Quality tools at LOWEST PRICES

## Combination Lathe

This lathe fills the want of any amateur mechanic for wood-turning and metal turning. With its equipment it will turn, drill, saw, polish and grind. It is solidly built of first class material and well constructed. It comes equipped with the following: " 3 -jaw chuck, $3^{\prime \prime}$ face plate,
$3^{\prime \prime}$ metal saw, $4^{\prime \prime}$ wood cutting saw, $4 \times 1 / 2$ " grinding wheel, T-rest, tail stock, center points, $4 \times 6^{\circ}$ saw table with guide. Just the lathe for the serviceman and experi- dismeter of spindle $83 / /^{\prime \prime}$, length of bed $18{ }^{\prime \prime}$ " menter. Fully guaranteed. Dimensions: menter. Fully suaranteed. Dimensions:
Height of spindle $51 / 2 "$, diameter of spindle


## Wood Workers' Vise



A well-designed new type of Wood Workers' and general utility vise. It will hold almost any shape article securely and tight. The jaws are ground smooth on the amel finish. Size of jawg $6 \times 312^{\prime \prime}$. Jaws open *. Shipping weight 20 lbs . Pour Cost.
$\$ 1.25$

## Williams Multisocket

 Wrench

This 8 -n $n-1$ Cadd mium Plated eight different 12 -point openings. Small head
 preventing all slipping and rounding of the nuts' corners. Swivel heads, with index spring to retain working opening in position for use, permit handle to be operated at practically any permit hande to be operated at practically any The entire wrench is drop forged, heat-treated The entire wrench is drop forged, heat-treated
and finished in cadmium plate. Is $9^{\circ}$ long. Shipping weight 4 lbs.
P15066 List $\$ 4.00$
s2.25

## Platinum Point File

This is a special
signed for spark plugs or coils. Also used for Ignition trouble and as a general utility file. P15073-Your Cost Each.

## Auto Jack



An unusually fine Jack at a very low price. Both screws turn out to full height. The load is carried on a thrust bearing built of $1 / /^{\prime \prime}$ balls in an enclosed race. The long $48^{\prime \prime}$ handle, operating from the center of the jack, will turn up any passenger car withoo lise. Heif caparity is


## The Walker No. 530

 Auto Jack

This triple entenion Screw Jack has suffient range to handle any of the modern low-built cars. It is a Universal Car Jack. Closed height $51 / 4$ "; power raise $9 \%$ ". Extended height
14/\%. Capacity one and $148 / 8$. Capacity one and one-quarter tons. Turning
type folding handle 51 " long, with universal socket joint and turning handle grip. Sturdily constructed. Will give years of service. Shipping weight 10 lbs Your Cost
s 4.25

## Crucible Steel Files

## Madity bab

## 1Lemanity

ufacturer to sell
at higher prices. We are very fortunate to be able to offer you this quality merchandise at attractively low prices. These files are made of best crucible steel and tempered. State length desired.


## P15036-Round Bastard Files

 Six For Pisojī-Regular Taper Files 95c Length ....... 5 in. 6 in. 8 in. Cost Each..... 9e 9e 11e | Six For | 11 c |
| :--- | :--- |
| 62 c | 16 c |
| $15038-5 \mathrm{Cim}$ | 90 c |

$\qquad$ CostEach...... 7 c ... 8 c in Six For P15039-... 40c 45 c 53c Length....... 4 in . 8 c in. 6 in. | SixFor......... 45c 45 c | 45 c | 5 c |
| :--- | :--- | :--- |

## Wood File Handles

 Polished hard wood, fitted with a brass ferrule. Will take all files of medium size. ShippingWhirlwind Hand Saw


These saws are warranted to be of high grade spring steel; accurately tempered. A tool of real merit. When buying a Whirlwind Quality real merit. When buying a Whirlwind Quality finest materials and workmanship. Neatly etched, set and filed ready for use. Hardwood varnished handle. Shipping weight 41 lbs . P15072
Your Cost.
$.95^{c}$
Master Cabinet Set
 Warranted Spring Steel, accurately tempered
blade. Consists of $12^{\prime \prime}$ Mitre Saw, Saw Pand $12^{\prime \prime}$ metal cut-
ting compass saw. With interchangeable handle of hardwood. Shipping weight 5 lbs .
Your Cost Each

## Motor Arbors

## These Arbors fit directly on to the shaft of any small

 motor in place of the pulley.Made of the finest grade metal. Each Arbor is equipped with flange and locking nut to hold grinding wheels, circular saws, buffing wheels, ete. Has a chuck, with three hardened jaws. Shipping weight 2 lbs.


## Bench Plane

Adjustable, amooth bottom, with double steel Irons. Handles and Knobs of polished
selected Hardwood. selected Hardwood.
long; $2^{\prime \prime}$ blade. Ship
Has polished sides. 9 long; $2^{2 \prime}$ blade. ShipPing weight 6 Ibs.
${ }^{\text {s }} 1.65$

## Williams Superplier

Appents to mechanics because of its ability to operate in cramped quar-
$\qquad$ ters with minimum effort. The thin narrow jaws get in and hold with a bulldog grip. The knurled handles provide a firm hand grip, even when greasy. Drop forged fromspecial chromealloy steel and carefully heat-treated. Blued gun-metal finish. Length 91/2". Shipping weight 2 lbs. P15067-List $\$ 2.25$
s 1.45

## Fine Quality Scratch Awls


$\qquad$ These Awls have a hardened
$\qquad$ steel, needle pointed blade, passing through the entire length of the selected hardwood handle. Has nickeled ferrule. Blade is $3 \% 8^{\prime \prime}$ long and $61 / 2^{\prime \prime}$ overall. Shipping weight 1 lb .
P15068 Your Cest Each
$15^{\circ}$

## Metal File Handle

## กำ

Japanned. Will fit all sizes of files, drills. gimlets, etc. Will take any type of tool with a shank less than $\mathrm{z} / \mathrm{s}^{\circ}$. Fitted with steel set a shank less than $/ 8$ Figted with steel set weight 1 lb .
P15042-

## Coping Saw Frame Adjustable Handle <br> The blade can be easily adjusted to face any

adjusted to face any desired direction by the pins at both ends of the
blade. Blades tightened by turning handle and locked at any angle. One blade furnished with each frame. Shipping weight 3 lbs P15091
Your Cost
$27^{\circ}$
Steel Coping Saw Blades, Two Pin Ends, fits above; also standard frames. Shipping weight 2 lbs
P15092-Your Cost Per Dozen.... IS
Close-

## Cut

## Hack Saw

Fits where ordinary hack saws cannot be used. Valuable for radio and auto mechanics, electricians, machin!sts, etc. Frame contains a special design wave set, 10 " blade. Broken Hack Saw Blades may also be used. Shipping veight 2 lbs
P15093 - Your Cost
$59^{\circ}$
Extra Blades for above.
P15094
Plum Cost for Three.
$30^{\circ}$

## Back of OUR GUARANTEE

## our BUREAU of STANDARDS

## TESTING LABORATORY...



## randorantise

We guarantee each and every article in this calalog to be exactly as described and illustrated.
We guarantee every item in accordance with the standard warranty of the Radio Manufacturers Association to opera'e in the manner intended by the manufacturer; that it represents full value for the price you pay; that it will reach you in perfect condition
We will exchange or repair any merchandise returned to us that contains any mechanical or electrical imperfection in accordance with the R. M. A. guarantee
We pledge ourselves to strict adherence to the guarantee of the Radio Manufacturers Association.

WHOLESALE RADIO SERVICE COMPANY, INC.

## More than a Guarantee-A Pledge of Service!

Or the protection of our customers, we maintain a private 'Bureau of Stondards," which is equipped with the finest lest apparolus and manned by a staff of experienced, practical-minded rodio engineers. Every modern laboratory device known to the radio art is ovalable.

## COMPLETE CHECK UP

Before any article is listed in the Catalog of the Whale. sale Radio Service Co., Inc., it must go through this "Bureau of 5 tandards " and be checked completely tram every mechanical and electrical slandpoint. Many sets and accessories are also taken to different locations in and around New York and subjected to further field tests Automobile receivers, for instance, are actually out in cars and driven a few hundred miles. They are then relurned to the laboratory and examined again for possible break. downs or weak points.
The sensitivity, selectivity and sone quality of all re.
ceivers are subjected to particularly searching scrutiny, as these factors determine the generol worth of o sel. Our engineers do not rely on their ears and eyes alone, but make quantitative measurements with precision meters. Detailed records are kepl of all these tests for fulure reference.

## PRICE NO CONSIDERATION

The price of an item is of no interest to our Bureau's expert test men; anly its overall quality and its ability to meet the claims made for it concern them. They are iust as likely to reject a ten cent condenser as a $\$ 200.00$ oscillator! It is because of their unbiased judgment and freedom from oulside influence that we are able to make such broad and honest guarantees and to offer a 30 day free trial offer. The various views of the Bureau on this page will give you some idea of its extent and facilities. Please understand that this laboratory is part of our own organization and is located right in our own building.


## WHOLESALE


[^0]:    Lafayette, Wright DeCoster, Magnavox and Jensen speakers can Lafayette, Wright Transformers other than those supplied can be had at a $10 \%$ additional cost. These are specials and delivery will be slightly delayed.

[^1]:    These transparent dial scales are for the above

[^2]:    Per Dozen. . . . . $\$ \$ .90$

[^3]:    Refer to Page 132 for Extension Cords, Extension Cord Connectors and Phone and Speaker Cords.

[^4]:    C. E. Cord Connector Brown Bakelite. Flat contacts M13288
    Your Cost Each.
    

