Electronic

Sets-Supplies-Apparatus

...for Trade—Industry—Communication—Public Utility—Vocational

-Transportation - Experimental and Hobby Applications

PUBLIC ADDRESS SYSTEMS

RECORDING EQUIPMENT

KANSAS CITY

You're hours closer to 8.4

BATTERIES

VOLUME CONTROLS

TRANSFORMERS

TOOLS AND SERVICE AIDS

> WIRE AND CABLE

CONDENSERS RESISTORS

BURSTEIN-APPLÉBEE

1947 CATALOG NO. 471

1012-14 MEGEE ST.

KANSAS CITY, 6, MO.



Entire contents copyrighted 1946 by Burstein-Applebee Co.

"MASCO" AMPLIFIERS—QUALITY AT LOW COST!

35 WATT AMPLIFIER-RECORD CHANGER

TILLS A TWO-FOLD NEED IN SOUND SYSTEMS—A high class medium power amplifier, AND a dependable record changing mechanism — ALL IN ONE! This fine amplifier is a NATURAL FOR SCHOOLS, N I G H T CLUBS, FUNERAL HOMES, AUDITORIUMS, DANCE HALLS, etc. TRUE DEPENDABILITY is assured



etc. TRUE DEPENDABILITY is assured by the rugged construction features of the MA35RC RECORD CHANGER - AMPLIFIER COMBINATION — all components designed to stand 75% OVERLOAD without damage! Two microphones and phonomay be used simultaneously through the use of separate controls. ELECTRONIC BASS AND TREBLE EQUALIZER for critical control of music frequencies between 50 and 10,000 cycles! MULTIPLE OUTPUT allows for flexibility of speaker arrangement. INVERSE FEEDBACK reduces harmonic distortion, improves wave form on over-all response. RECORD CHANGER will play EITHER 10 or 12-inch records—pick-up with Astatic LP-6 HIGH FIDELITY cartridge with PERMANENT SAPPHIRE stylus. GAIN, Microphone, 126db; Phono, 78db. TAPPED OUTPUT for 2-4-8-15-500 ohms. Hum level, below zero level, minus 20db. Controls, Phono, 2 for microphone, and 2 for tone control. Separate On-Off switch. 8 TUBES, 2/7C7/; 1/7B4; 1/7F7; 1/6V6GT; 2/6L6GA; 1/5U4G. Power Output, FULL 35-WATTS undistorted; Power consumption is 130 watts. Dimensions, 15"x15"x5". 1/7B4; 1/7F7; WATTS undis 15"x15"x9".

Stock No.

"Masco" Model MA35RC. TOUR COST \$98.93



25-WATT PHONO TOP MOBILE AMPLIFIER

UNIVERSAL 6-VOLT DC-115 VOLT

UNIVERSAL 6-VOLT DC-118 VOLT
AC PROVIDES PORTABLE P. A.
COVERAGE OF VOICE AND MUSIC
FOR AUDIENCES OF 1000 to 2500;
operates from ElTHER 6-volt storage battery or standard 115 volt AC
line! A rugged high powered DE
LUXE amplifier applicable to ALL
USES for outdoor sound. FULL 26WATTS power output with wide
range frequency response of 50-10000
cycles; RIPPLE FREE output on
trols for microphones and phono; individual volume controls for microphones and phono; individual for microphone 125db;
Power consumption: AC, 120 watts; 6-volt battery, 2-6L6GA, 1-5U4G.
Power consumption: AC, 120 watts; 6-volt battery, 2-2 amps. Battery
saver Stand-By Switch. Heavy steel cabinet 12"x10"x8" finished in gray
crackle trimmed with black and red. Amplifier and tubes only, complete with operating instructions.

Suppose Value 25 Worth Amplification.

Super-Value 25-Watt Amplifier



Super-Value 25-Watt Amplifier

Permits use of TWO microphones and phono in multiple ELECTRONIC mixing circuit—
Indistorted 25-WATT OUTPUT provides pleasing volume and tone quality for coverage of small room audiences to auditoriums seating 2500 persons, MAXIMUM SERVICE AND DEPENDABILITY AT MINIMUM COST FOR CHURCHES, SCHOOLS, CLUBS, OR RENTAL FEATURES: Response 50-1000 cycles at hum level of —55db. below 25 watts; HUMLESS OPERATION AND FINE TONAL QUALITY; Beam Power Output, tapped 2-4-8-15-500 ohms for matching any one or group of speakers. Separate controls for 2 microphones, phono, and tone; INVERSE FEEDBACK CIRCUIT; Gain is 125db on microphone and 78db on phono. 7 Tubes: 2-7B4, 1-7F7, 1-7N7, 2-6L6GA and 1-5U4G; power consumption, 120 watts. In heavy steel case 15"x8"x8" in gray baked crystal with red and chrome fittings and trim.

Stock No. "Masro" Model MA25

"Masco" Model MA25 YOUR Amplifier and Tubes COST \$47.63

SUPER-VALUE 25-WATT PHONO TOP AMPLIFIER MODEL MA-25P:—IDENTICAL IN AMPLIFIER SPECIFICATIONS TO Model MA25 described above. Has 78 rpm. PHONO TOP with "Astatic" Crystal Pick-up, exactly as shown on MA17P below. Stock No. 30A94; MODEL MA25P Amplifier & Tubes, NET \$58.36



"MASCO" 17-WATT PHONO TOP AMPLIFIER

De Luxe 17-watt amplifier and A. C. OPERATED

78 r.p.m. constant speed turn table with "Astatic" tangent head crystal pick up mounted on top of amplifier cabinet. OVER-ALL ELECTRONIC MIX
ING for microphone and phono input. Frequency response of 50-10,000 cycles and low hum level of minus 22 db make this an ideal voice-music amplifier. Gain is 118 db on microphone and 74 db on phono. BEAM POWER OUTPUT using 2-6L6GA tubes together with 1-7CT; 1-7FT; and 1-5Y3G. Individual controls for phono, microphone, and tone; separate AC switch. Tapped outputs of 2-4-8-15-500 ohms. Interchangeable for use with ElTHER PM OR ELECTRO-DYNAMIC speakers. Power consumption, 90 watts at 115 volts 60 cycle, A. C. Size 12" x 10" x 8".

Stock No. Phono-Amplifier. "MASCO" 17-WATT PHONO TOP AMPLIFIER

Phono-Amplifier. YOUR "Masco" Model MA17P.....COST

YOUR

SUPER-VALUE 17-WATT ALL-PURPOSE AMPLIFIER IDENTICAL TO ABOVE MODEL MA17P except does not have phono top. A little 'honey' with plenty of power to cover indoor audiences up to 1500 persons. Stock No. 36486; Model MA-17 Amplifier & Tubes, NET \$34.10

PORTABLE ELECTRIC PHONO

OMPLETE ELECTRIC PHONOGRAPH;
PLAYS 10" OR 12" RECORDS WITH
COVER CLOSED. 3-tube amplifier has
2.5-WATT POWER OUTPUT. Stardy,
CONSTANT SPEED MOTOR and "Astatie" Crystal Pick-Up, Heavy duty 5-inch
PM speaker and acoustically built cabinet PM speaker and acoustically built cabinet assure EXCELLENT TONE QUALITY. Separate Volume and Tone controls; covered needle cup. Rugged, handsome carrying case, 144"x174"x7", airplane cloth covered; weighs only 13 lbs. Complete with tubes and instructions, for 115-volt AC. Stock No. 30A7. "Masco" MAP3 Electric Phono.....COST 50-WATT DE LUXE HI-POWER AMPLIFIER

50-WATT DE LUXE H
POWER AND DEPENDABILITY
AT LOW COST—PEAK POWER
OUTPUT OF 64 WATTS! May be
used with from 2 to 12 speakers
with HIGH QUALITY reproduction
for most any use from a small
room and a few people to a large
anditorium and undiences up to
8,000! QUALITY FEATURES INCLUDE: FREQUENCY RESPONSE
50-10000 eveles, plus or minus 2db.



3-Inputs, 2 microphones and phono; individual Bass and Treble attenuators, 4-6L6GA tubes used individual Bass and Treble attenuators, 4-6L6GA tubes used in Push-Pull parallel output, tapped to match any impedance; 2-4-8-15-500 ohms. GAIN, microphone 130db; phono 80db. Hum Level, below zero level, —22db. TUBES, (LL) 2-7C7, 1-7F7, 2-7N7, 4-6L6GA, 2-5U4G. RIPPLB FREE operation; Inverse feedback; 75% overload safety factor, fuse protected. Separate "Off-On" switch and fuse. Power consumption is 240 watts at 115 volts 60 cycle AC. In heavy steel cabinet 16"x10"x10" finished in gray ripple enamel with black and red trim. Stock No. "Masco" MA50 Amplifier, YOUR \$75.35

Complete Your "MASCO" Sound System With these CASES-SPEAKERS-TRUMPETS-MIKES









7.94

No. 30A10; "B" Parabolic Baffle, ALL STEEL, for 12" speakers, bell opening 20"; over-all length 18"; wt. 9 lbs..... No, 30A23; "C" "Jensen" PM-12C 12" PM Spkr.; No. 30A23; "C" "Jensen" PM-12C 12" PM Spkr.;
6 ohms, 10-W. Ea.
No. 30A122; "C" B-A SPECIAL 12" PM; 6 ohms, 10 watts. Net
No. 34A131; "C" B-A SPECIAL 12" PM; 6 ohms, 9 watts. Net
No. 30A123; "C" B-A SPECIAL 12" PM; 6 ohms, 9 watts. Net
No. 34A100; "B" Walnut Speaker Baffle for 12" speakers. Net
No. 34A100; "D" Walnut Speaker Baffle for 10" speakers. Net
No. 34A101; "D" Walnut Speaker Baffle for 10" speakers. Net
No. 30A11C2; "E" University LH 4½" Trumpet, 25" dia. bell;
Complete with Model PAH 25-watt, 9 lb. PM Driver Unit, Ea.
No. 30A12C2; "E" University PH 3½" Trumpet, 20" dia. bell;
Complete with Model. SAH 25-watt, 5 lb. PM Driver Unit, Ea.
No. 20A891; "F" Shure Uniplex Cardioid Crystal Mike. . . . Ea. 57.33

37.94

BRUSH HUSHATONE

BRUSH HUSHATONE

The "MUSICAL PILLOW" CRYSTAL

SPEAKER! Fine for those who like to

listen to their radio after other members
of their family have retired! Has high
sensitivity and GOOD TONE QUALITY—
equal to cone type speaker because of
special PLASTIC DIAPHRAGM. Ample
output with low power consumption!

Molded plastic case, CHROME trim. 4 \frac{3}{8}" dia. x 1\frac{1}{1}{8}" th
dipped in disinfectant solutions; no parts to lose. Wt. ½

Stock No. "Brush" Model BA-303 "HUSHATONE" Speak
204848 Complete with 10-ft. Connecting Cord. Net 1



thick. 1b. "Brush" Model BA-303 "HUSHATONE" Speaker. \$6.37



3-Inch Midget "PM" Dynamic Speaker Needed for REPLACEMENT in thousands of AC-DC compact receivers; INTERCOMM. SYSTEMS. and ideal for experimental use. FULL 1½-WATTS with 4-ohm V.C. SIZE, 3½" square, 1½" deep; Mtg. holes on 2½" centers. Wt. 8 oz.

centers. Wt. 8 oz. NET Stock No. 14A628; 3" PM SPEAKER. EA.

Ultra-Midget 2-In. "PM" Dynamic Speaker Tiniest of all PM Speakers, yet has PLENTY OF "PUNCH". Full 1-WATT capacity without blasting; 4-ohm voice coil. Size, 2½" square, 1%" deep; mtg. holes on 2" centers.

Stock No. 14A627; 2" PM SPEAKER NET EACH \$1.91

COST 12-INCH "PM" SPEAKERS:-"B-A" BARGAINS listed above as Nos. 30A122 and 30A123, are described in detail on PAGE 27 OF THIS CATALOG. Other speakers on Pages 8 and 9. MICRO-PHONES and Stands, Complete listing Pages 8, 10 and 11. WALL AND PORTABLE BAFFLES, Complete listing Pages 5 and 17. WALL AND

The Newest Bogen Sound Equipment

Model EX-326 De Luxe 32-Watt Mobile Amplifier



DUAL PURPOSE AMPLIFIEE designed for use on EITHER 110 volt A.C. OR 6 votb battery current! CONSTANT SPEED PHONO MOTOE, rim drive; NO "wows" or waver on either battery or AO current! AMPLIFIER AND PHONO ASSEMBLY built as integral units—ALL INSIDE THE CABINET with hinged cover closing over entire unit. hinged cover closing over entire unit.
Three Imput Channels allows mixing
of 2-Microphones and Phono at the

Three Input Channels allows mixing of 2-Microphones and Phono at the same time. TRIPLE RANGE ELECTRONIC TONE CONTROL provides complete control of Bass, Treble, and Middle register; permits PERFECT adjustment of tone and volume, regardless of indoor or outdoor use; creates ANY TONE RANGE ELECTRONIC TONE CONTROL provides and Middle register; permits PERFECT adjustment of tone and volume, regardless of indoor or outdoor use; creates ANY TONE RANGE Battery saver switch—cuts "B" power but leaves tube filaments "ON" Battery saver switch—cuts "B" power but leaves tube filaments "ON" Leaver to AC is AUTOMATIC! ILLUM-INATED sloping panel with all controls grouped for fast, accurate amplifier control. Scientifically ventilated case for cool operation at all times. Technical Specifications: 8-TUBES; 3-7B4; 2-7F7; 2-6L6G; 1-5U4G. OUTPUT: 32 watts undistorted peak power; 40 watts at less than 5% distortion; Gain. 120db on Microphone, 31db on phono; High Impedance Input; Output, 4-8-15-250-500 ohm. Frequency Response, 30-12.000 cycles, plus or minus 1db.; current drain, 6-volt DC battery, 23.5 amps., 120-watts on 110 volt A.C. Shockproof "Astatic" crystal pick-up. Heavy steel cabinet, ripple gray enamel size 18"x16"x10", high. Complete with all tubes and instructions.

Stock No. 30A17; "BOGEN" MODEL EX-226 AMPLIFIER, NET EACH S149.35

Model E-1620 "Universal" Mobile Amplifier



23 - WATTS UNDISTORTED OUT-PUT! For operation on EITHER 6-volt battery (DC), or standard LINE VOLTAGE, 117 volt, 60 cycle AC. OUTSTANDING FEATURES include

VOLTAGE, 117 voit, 60 cycle AC, OUTSTANDING FEATURES include hermetically sealed vibrator, 2-tube vibrator circuit, resistor strip wiring (as used in ALL units built for U. S. Army), CONSTANT SPEED, rim drive motor. TWO INPUTS, each 500,000 ohms, for Mike and Phono may be mixed and faded through 2 independent gain controls, additional Bass Treble compensator provides excellent frequency response control. TAPPED OUTPUT transformer provides 4-3-15-250-500 ohm outputs at terminal strip and dual speaker plug sockets. FREQUENCY RESPONSE, 30-14,000 cps., plus or minus 2.5db. GAIN: Microphone, 109db; Phono, 67db. PHONO ASSEMBLY has built-in power supply, Astatic Crystal Pick-up; and operates on AC or Battery without speed variation or waver. 6-TUBES with 6L6G outputs, provide 19-WATTS on battery operation and 23-WATTS on AC operation at less than 5% distortion, PEAK OUTPUTS are 39 watts on AC and 30-watts on battery operation. Heavy steel cabinet, with handles, size 15\%'x10"x12\%' high; finish, ripple gray. Cpt, with tubes and instructions. "Bogen" Model E1620 is built throughout to meet the most rigid U. S. Army specifications—the identical unit supplied by the hundreds for Army use is now being produced for YOUE NEEDS!

Stock No. "BOGEN" MODEL E1620 MOBILE YOUR 30A99 6-V. DC; 110-V. AC AMPLIFIER... COST

\$101.43



50-Watt Booster Amplifier—Model G050

ADDS 50-WATTS OF AUDIO POWER OUTPUT TO ANY SOUND INSTALLATION by the simple method of connecting the output of any existing low or medium power output amplifier to the input of the NEW G050! NEW FRATURES include 2-807 transmitter type tubes in Push-Pull output, with tube regulated screen voltage; multi-stage inverse feedback circuit; oil filled input stage condenser; safety interlock switch, and built-in provision for stand-by relay control without change of power transformer! Input:—one 500,000 ohm with provision made for addition of transformer for use on zero level input from telephone line. Output:—48-16 ohm tapped output, plus 2 constant voltage (63 and 125V.) taps for use on modern, special hook-ups. GAIN:—48db; Frequency Response:—20-20,000 cps. plus or minus 1db; GAIN CONTROL mounted on rear of chassis; power switch and pilot light on front panel. 6-TUBES, including 2-type 807's; providing power output of 50-watts at less than 5% distortion! Heavy steel cabinet is 17"x11½"x3½"; for operation on 110/125 volt, 60 cycle A.C.; power consumption, 206 watts. Ripple gray finish.

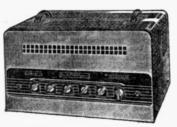
44Dacanti Model SDC-50 Demote Control Unit

"Bogen" Model SRC-50 Remote Control Unit

Consists of remote control unit and 50 ft, of special cable with plugs for quickly attaching to "Bogon" Amplifiers designed for its use—Models EX326; EX35; E70 and E30 produced before May, 1946, and for all EX35. Permits "mixing" and "fading" of any two channels from remote location.

Model E75 Triple Input 70-Watt Amplifier

Exclusive "BOGEN" DUAL CON-STRUCTION—TWO 35-watt amplifiers driven by a pre-amplifier common to both! Delivers 70-WATTS at less than 4% distortion with EXOEPTIONAL TONE with EXCEPTIONAL TONE
QUALITY. Allows one 35-watt section to be used in emergencies as
safeguard against complete breakdown! Dependable and adequate
for HIGH POWER INSTALLATIONS AT AIRPORTS, ATHLETIC
FIELDS, STADIA, DANCE HALLS,
etc. Triple input channels, 2 mike
and phono may be mixed simultaneously through three high impedance inputs, COMPLETE VARIATION OF OVER-ALL TONE by bass and treble tone compensator.
GAIN is 124db on mike and 95db on phono, FREQUENCY RESPONSES,
30-14000 cycles, 1 db. Built-in remote control provision. OUTPUT. each



35-Watt Hi-Quality Amplifier--Model EX-35



"BOGEN" EX35 De Luxe Amplifier Only. Complete with Tubes and Instructions. Net.... \$98.34 30A18

Model E-30 "Trail Blazer" 30-Watt Amplifier



Model E-14 "Pacemaker" 14-Watt Amplifier



7-TUBE, HIGH GAIN AMPLIFIER with INPUTS for TWO MIKES AND PHONO. Full range ELECTRONIC Tone Control by Bass and Treble Tone Compensators. Output impedances of 4-8-15-250-500 ohms, available impedances of 4-8-15-250-500 ohms, available at both terminal strip and speaker sockets, Frequency Response, 40-12000 cycles, plus or minus 1.5db; GAIN is 125db on Microphones and 85db on phono. FULL 14-WATTS OUTPUT at less than 5% distortion — PEAK POWER OUTPUT, 25-watts! Consumes 90-watts at 117 volts, 60 cycles, A.C. Complete with all tubes, instructions, in steel cabinet size 14"x7%"x8". Finished in gray ripple, sloping, lighted panel.

Stock No. 30A96; BOGEN MODEL E-14

AMPLIFIER YOUR COST

Model E-10 De Luxe Economy 10-Watt Amplifier



A medium power, 2-speaker amplifier at a LOW PRICE! FULL 10-WATTS OUTPUT at less than 5% distortion; FREQUENCY RESPONSE, 65-9000db, plus or minus 2db. TWO INPUTS (500,000 ohm); 1-Phono and 1-Microphone; Tapped OUTPUTS of 4-8-15-250 and 500 ohms; 3-CONTROLS, one each Microphone Phono and Tone Dilat. PLUG. 250 and 500 ohms; 3-CONTROLS, one each Microphone, Phono, and Tone, DUAL PLUG-IN SPEAKER SOCKETS; 7C5 Beam Power push-pull output, GAIN:—114db on Mike and 75db on Phono, Current drain is 88-watts at 117 volts, 60 cycle A.C. Steel cabinet in gray ripple, size 7"x11"x7'\frac{1}{16}" high.

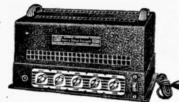
30A125; BOGEN MODEL E-10

\$36.16

Bogen Phono and Public Address Amplifiers

MODEL PV-20A DE LUXE PHONO AMPLIFIER

THE TRUEST MUSIC YOU
EVER HEARD! NEW "Controlled Expander" — Exclusive in the
NEW PV-20A — makes this new
Phous Amplifier "TOPS" in fine
musical amplifiers! 8 - TUBES
provide 20 - WATTS Class "A"
and interfed power output. 4-2-4" undistorted power output; 4-8-16-125-500 ohm tapped output al-lows any type or combination of fine speakers.



CONTROLLED EXPANDER

"CONTROLLED EXPANDER"—
unique new expansion control,
with its level standardizing circuit provides maximum expansion at a
constant average level, or, with Expansion Control at "minimum" setting, expansion is eliminated, but constant average level is maintained;
Further, expansion is made independent of level at which record was
cut, the "controlled expander" compensates automatically for all variations in original recording levels. Electronic Tone Corrector has separate controls for bass and treble "boost" or "cut". Frequency Reeponse is 30-15,000 cps., plus or minus 2db. MODEL PV-20A is not
"tube critical"—not a single critical type of tube is used, completely
eliminating "michrophonism" and special tube selection. This marvelous amplifier has the shortest time constant ever—no more time
lag—no "thumping"—nothing but pure music of the finest tone quality
you ever heard! HUM L'EVEL is held to minus 64db. Input: 1—Phono,
at impedances of HC-500M ohms—76db gain; LC-250M ohms—97db
gain; M-10M ohms—84db gain. MODEL PV-20A is conservatively rated
at 20 watts—ACTUAL power output is 30 watts at distortion of less
than 5%! Complete with 8 tubes in steel case with end-mounting
flanges; size 15"x8"x94".

Model "PV-10" High Fidelity Phono

Model "PV-10" High Fidelity Phono



Model "PV-10" High Fidelity Phono
Amplifier

10-WATTS OF HIGH FIDELITY AUDIO OUTPUT! Specially designed for the amplification
of FINE MUNIC in the Home, Club, or School!
Faithfully amplifies EVERY TONE in the entire musical register—is equipped with exclusive
fixalght Line Volume Expander, instant and
automatic in operation, has absolutely no time
lag or chopping effect; requires no adjustments,
and reproduces ANY TYPE OF RECORD, Symphony, Dance, Orchestral or Vocal with a NEW
realism of tone far beyond previous standards of fine reproduction! Absolutely humless in operation; Bass and Treble tone compensators assure
complete variation at will of the over-all tone range. 4-8-15-250-500
ohm tapped output allows connection to ANY speaker. Mounting
flanges at ends of steel cabinet, size 11"x"7"x", high. Fine cabinets,
now equipped with out-of-date record playing equipment, may be
EASILY converted to the FINEST RECORDED MUSIC REPRODUCER
by Model PV-10 in conjunction with a good automatic changer or sinsize. 4-foot remote control cable, allowing installation of amplifier in
base of cabinet, with controls mounted elsewhere as may be desired,
is OPTIONAL EQUIPMENT as listed below.

\$41.89

Stock No. 31A52; PV-10C with REMOTE CONTROLS; NET... \$41.89

Stock No. 31A52; PV-10C with REMOTE CONTROLS;

\$46.30

MODEL E-66 UNIVERSAL MOBILE AMPLIFIER
Operates on EITHER 6-VOLT DC; or 110
AC! Compact, inexpensive 8-WATT amplifier—designed to Police standards. Ideal for
"BALLYHOO" purposes, or for POLICE,
ETIRE. OF EMERGEMON OF STREET





\$57.18

Dual Speed Heavy Duty. Record Player
Top quality, heavy duty record player for the
"Sound" operator—for playing ALL types of 10" and
12" standard records, and up to 18½" Professional
recordings with the least possible motor speed walver
or "wow". DUAL SPEED heavy duty "Green Flyer"
motor handles either 33½ or 78 RPM recordings.
"Astatic" type AB-8 Crystal Pick-up; 10-inoh turntable. Sturdy, luggage covered case, 15½"x13"x7½".
For use with ANY standard amplifier or radio.
Stock No. "BOGEN" Model 8007
20A97
114-Volt Record Player. NET. 110-Volt Record Player, NET



Brens An Grant

"Bogen" Model G-50 New-Low Cost 50-WATT "P.A," Amplifier

50-WATTS OF DISTOR-TIONLESS AUDIO POW-ER - MANY FEATURES USUALLY FOUND ONLY IN HIGH PRICED UNITS!

TUBES, driven by low source impedance cathode follower, assure excellent output grid regulation and maximum power output with minimum distortion. INPUTS for TWO Microphones and Phono, all high impedance, and all may be used and mixed simultaneously by separate controls on each channel. Microphone input feedback circuits provide automatic compensation for wide tube variations, banishes critical first stage tube selection; use of low output impedances on input tubes ELIMINATES HIGH FREQUENCY LOSSES in early stages. PUSH-PULL TYPE 807 OUTPUT TUBES provide REAL HIGH POWER with excellent regulation and DISTORTION FREE! New type DUAL OUT-PUT:—tapped impedances of 4-8-16 ohms, PLUS TWO CONSTANT VOLTAGE TAPS of 125V, and 63V, permit use of speaker matching transformers which are tapped for power—ALL outputs available at Terminal Strip and TWO Speaker Sockets! Frequency Response:—30,000 cps. within plus or minus 2db. GAIN:—120 db on Microphone Inputs; 70db on Phono Input. Hiuminated sloping panel has Tone Compensator Control, two microphone controls, phono control and master power switch. Oh filled condenser in input section of filter; tube regulated screen power for output tubes; Multi-stage inverse feedback; interlock switch—ALL make this amplifier OUTSTANDING. Heavy, welded steel chassis in steel cabinet with recessed handles, size, 9½ "x 17"x11½"; gray hammerloid finish. COMPLETE with 2—TF; 2—68L7; 1—68N7; 1—5H4GY: 1—5Y3; and 2—807 tubes, and full operating instructions. Stock No. 80A126; MODEL G-50 AMPLIFIER; YOUR COST \$94.96

Portable Speaker-Amplifier Cases-Wall Baffles









STREAMLINED PORTABLE METAL SPEAKER "A":--Modern baffle area for good reproduction with average Ample

dynamic speaker.	Rounded	Corners, morar	Billio and nandice	
Stock	Hole	For		Your
No.	Size	Speaker	Dimensions	Cost
5A127	4 3/4 "	6-INCH	10"x10"x6"	\$3.00
5A128	6 1/2 "	8-INCH	12"x12"x7"	3.59
5A129	11 "	12-INCH	16"x16"x8"	6.32

"B":-WALNUT FINISH DESK OR WALL MOUNT SPEAKER BAFFLES, Solidly constructed of veneered ply-wood; scientific acoustic design for best reproduction of voice and music when equipped with a GOOD dynamic speaker! Sloping front properly directs speaker output for BEST results, Pleusing WALNUT finish.

Stock	For	I	Dimensions					
No.	Speaker	H.	w.	D.	Cost			
84A103	6-INCH	8 5% "	7 % "	5 % ™	\$2.75			
84A102	8-INCH	101/4"	9 "	5 1/4"	3.35			
84A101	10-INCH	115%"	11 "	714"	3.97			
34A100	12-INCH	14 "	13 ½ W	8 1/4 "	5.10			

Hius. "C":—PORTABLE: DUAL-SPEAKER, AMPLIFIER CASE. Designed for "Bogen" E-14; E-20; E-30 or other large amplifier fitting in space provided. BAFFLES 2-12 INCH SPEAKERS and is fitted with cable blocks for storing speaker cable. Blocks in amplifier space prevents amplifier sliding out when carried. Heavy, durable construction; solidly fastened carrying handles. AVAILABLE IN TWO SIZES AS LISTED BELOW:

MODEL K-20 has Amplifier space 14"x8"x8", over-all size is 16"x14 \(\frac{1}{2} \)" x20" high; gray leatherette covered.

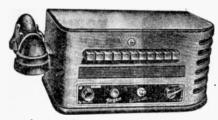
Stock No. 30A127; MODEL K-20 CARRYING CASE; NET \$14.99 MODEL K-30; Amplifier space is 15" long, 8" high, 94" deep; over-all size, 16" wide, 144" deep, 20" high.
Stock No. 30A128; MODEL K-30 CARRYING CASE; NET \$14.99

Hus. "D":--AMPLIFIER CARRYING CASE, De Luxe type of heavy plywood, completely reinforced and covered with handsome gray leatherette. Cover, held with 4 heavy duty clasps, slips off quickly for access to amplifier, which may be used without taking off base of case. Heavy carrying handle, reinforced corners. FITS "Bogen" E-35 or any other unit equal to or Jess than INSIDE dimensions of 18½" long, 12½" deep, 10¾" high. Stock No. 80A129; MODEL 133X AMPLIFIER CASE NET \$12.20

"B-A" ALWAYS HAS THE NEWEST IN "PUBLIC ADDRESS" EQUIP-MENT—no matter what your needs may be—CALL ON US, "B-A" PRICES are always the LOWEST possible, but are subject to change without notice to those in effect on date of shipment.

Bogen "Communo-Phone" Inter-Comm Systems

De Luxe Model "LC" All-Master System



THE VERY BEST IN ELECTRONIC INTER-COMMUNICATING EQUIPMENT—"LO" DE-EQUIPMENT—"LO" DE-LUXE systems provide TWO possible means of communication between widely separated locations — LOUD SPEAKER re-ception, OR, "French" ception, OB, "French" HAND SET standard tele-

MODEL LC20: 20-Station capacity ALL MASTER, WITHOUT Privacy French Phone, complete with tubes, Stock No. 32A225 YOUR COST \$67.62 MODEL LC20H; 20-Station capacity ALL MASTER, WITH PRIVACY FRENCH HAND SET PHONE, complete with tubes, Stock No. 32A226 PLEASE WRITE FOR PRICE

LE LUXE TYPE "LA": 10 and 20-STATION CAPACITY; MASTER-REMOTE INTERCOMM SYSTEMS. IDENTICAL to Model LC illustrated and described above, EXCEPT, systems made up of ONE MASTER UNIT and up to 10 or 20 REMOTE UNITS as may be needed. WIRING requires 2-conductor unshielded twisted cable between Master and "LAR" Remotes; or two pairs of above cable for Model LRS Remote Units, MASTER UNITS MAY BE HAD with or without PRIVACY FRENCH PHONE. All Masters operate on 110 volt, 60 cycle AC current.

MODEL LA10 MASTER UNIT, for up to 10 Remote Stations of either type LAR or LRS; complete with tubes.

Stock No. 32A227; MODEL LA10 MASTER
UNIT ONLY, NET EACH

MODEL LA10H MASTER UNIT, WITH PRIVACY FRENCH TYPE PHONE, for up to 10 Remote Units, complete with tubes.

Stock No. 32A228; MODEL LA10H MASTER
UNIT ONLY, NET EACH

MODEL LA20 MASTER UNIT, for up to 20 Remote Stations of either

MODEL LA20H MASTER UNIT COMPLETE WITH PRIVACY FRENCH TYPE PHONE for up to 20 of either LAR or LRS Remote Units. Stock No. 32A230; MODEL LA20H MASTER UNIT ONLY, NET EACH PLEASE WRITE FOR PRICE REMOTE UNITS FOR EITHER 10 OR 20 STATION MASTER UNITS ABOVE; MODEL LAR REMOTE UNIT, with Volume Control, but without break-in switch to initiate calls to Master Unit. Stock No. 32A231; MOD'EL LAR REMOTE STATION ONLY, NET EACH STATION ONLY, NET EACH PRICE STATION ONLY, NET EACH STATION ONLY

MODEL LRS REMOTE UNIT, with Volume Control, has BREAK-IN SWITCH for initiating calls to Master Unit.
Stock No. 32A232; MODEL LRS REMOTE
\$11.02

		ing—elimina noisy operat	te unsightly ion due to esigned for	ke EASY CA y "joints" a loose connect Bogen System	nd prevent
Stock No.	Model		Terminals	SIZE	NET EA.
14A530	2AJ	12-A	29	4"x8 1/4"	\$2.73
14A581	2CJ	12-C/LC10	13	4"x81/4"	
14A582	2SJ	LA-10	26	4"x81/4"	1.76
14A583	58J	LA-20	52	4"x814"	2.91
14A584	9.A.J	219 A	52		3.53
14A585	9CJ			4"x81/4"	3.38
TALKOOD	9 C J	LC-20	26	4"=814"	0.44





"BOGEN" TYPE "A" COMMUNO-PHONE SYSTEMS, shown above, consist of ONE "MASTER" UNIT from which calls may be originated to any number of REMOTE stations, up to the capacity of the Master Unit, as listed below. "Master" stations may select ANY remote station with which they wish to talk—REMOTE STATIONS can not call other Remote units in the system, but may call the "Master" unit when such remotes are equipped with "CALL SWITCH". Persons at Remote stations may answer calls from Master at distances of 2^a to 30 ft. with perfect clarity. SIMPLE TO INSTALL: "COMMUNO-PHONE" SYSTEMS require ONLY ordinary 2-conductor twisted telephone wire for connecting Master units to Remotes WITHOUT CALL SWITCH; or connecting Master units to Remotes WITH CALL SWITCH. Separate "runs" must be made from Master to each remote in system, REMOTE STATIONS may be several hundred feet from Master Unit. Note the following FEATURES:—ALL MASTER units have Volume Control, Pilot Light, and On-Off Switch; 3-tube amplifiers use I each 35Z6, 50L6 and 12SI7 tubes. High quality resistors, condensers; positive contact selector switches and SILVER PLATED, wiping contact "Press-To-Talk" switch on Master units. Cabinets are of RICH Walnut Plastic. MASTER UNITS are 10%" long, 6" wide, 7" high; Wt. 7 bs. Remote units are 64" wide, 6" high, 3" deep; wt. 1% lbs, 5-ft. Multicables supplied with all Master Units.
"Communo-Phone" MODEL 4-A MASTER: for up to FOUR remote

"Communo-Phone" MODEL 4-A MASTER: for up to FOUR remote units. Has EXTRA FEATURE of "ALL" and "SILENT" switch posttlons which permits calling ALL Remotes at once, and shutting out background noise coming in from Remote Stations.

Stock No. 31A19; MODEL 4A MASTER UNIT, \$27.93

Stock No. 31A20; MODEL 12-A MASTER: for up to 11 remote units; with tubes and instructions. NET EACH \$29.99

Stock No. 31A23; MODEL 219-A MASTER: for up to 18 remote units; complete with tubes and instructions.

'COMMUNO-PHONE" MASTER UNITS WITH PRIVACY EAR PHONE ALL the above Master Units may be had as follows, with Privacy Ear Phone which cuts out the speaker of the Master Unit and switches incoming conversation to a PRIVATE EAR PHONE. Stock No. 32A218; MODEL 4-A With Privacy Phone, NET EA. 332.05 Stock No. 32A218; MODEL 12-A With Privacy Phone, NET EA. 34.11 Stock No. 32A219; MODEL 219-A With Privacy Ph., NET EA. 36.75

REMOTE STATIONS FOR "COMMUNO-PHONE" 4A; 12A; 219A

MASTER UNITS
Stock No. 31A21; MODEL "AR" without call switch; NET EA. \$5.15
Stock No. 31A22; MODEL "RS" WITH CALL SWITCH; NET EA. 6.61

CABLE FOR INSTALLATION OF ABOVE MASTER-REMOTE



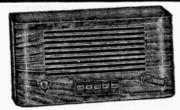
"Bogen" TYPE "C" Intercommunication Systems are expressly designed for INSTANT COMMUNICATION between several offices or other locations, affording each the facility of calling and conversing with any other at will and in PRIVATE! Each station is a "Master" and can call any other "Master" independently. Several pairs of "Masters" can converse at once without interference TYPE "C" MASTER UNITS are identical to Type "A" units described in detail at top of this page—wiring is SIMPLE as all that is required is the running of a cable having ONE more conductor than there are Master units in the system. FRIVACY EAR PHONE Master units permit continuous conversation WITHOUT the necessity of using the "Press-to-Talk" switch.

No. 32A220; MODEL 6C; for up to 6 stations.....NET EACH \$29.99

No. 31A24; MODEL 12C; for up to 12 stations....NET EACH \$30.87

Conversa Jone

Push-Button Intercomm. Systems





COMPLETE, BASIC INTERCOMMUNICATION SYSTEM, CONSISTING OF DE LUXE 5-STATION MASTER UNIT AND ONE REMOTE UNIT—additional "Remote" units may be purchased with system (as listed below), or may be added to the original 2-station system at any later date when needed! BASIC SYSTEM consists of ONE Model MS-5 PUSH BUTTON MASTER UNIT, and ONE Model SS-5 REMOTE UNIT—air cushion packed in a damage-proof shipping carton RRADY TO INSTALL! THESE FEATURES MAKE THE NEW "CONVERSA-FONE" a new "High" in QUALITY and a new "Low" in price for modern intercomm systems! FOUR TUBE AMPLIFIER, 2-125J7; 1-50L6; 1-35Z5 (NO BALLAST TUBES USED) provide full 2-WATTS OUTPUT—ample power to overcome noisy sub-station locations with ADDITIONAL FEATURE of 4th tube functioning as a super-sensitive remote pick-up amplifier! "Mallory" PUSH BUTTON SELECTOR SWITCH provides facilities for up to 5-REMOTE STATIONS (Type SS-5) in locations that may be several hundred feet from Master Unit: "LOOK-IN" FEATURE on Push Buttons enables Master Unit ocall 2 or 3 Pemote Stations at once—REMOTES have sufficient power, supplied by Master, to answer and carry on a conversation at distances up to 50-FEET from Remote locations. SELECTIVE MONITORING or "Listening-In" by Master Units may be had by merely pushing "in" locking type push buttons on Master Unit, shuts out ALL NOISE originating at remote locations—the ONLY time Remotes can be heard is when their push button is "IN" on the Master Unit: 4-INCH "PM" SPEAK-BRS with "Alnicov" Magnets are used in BOTH Master and Remote Stations are equipped with "C-H" CALL SWITCHES—can initiate a call to "Master" unit at any time Master is "On". HEAVY DUTY "Press-To-Talk" Switch on Master Unit: designed to ELIMINATE dirty contacts and "mushy" communication—has "shorting" feature to prevent transformer burn-out in use! Output impedance is \$15 ohms—permits use of TRUMPET Remote stations (such as "University" Model 1BS) for outdoor locations. INSTALLATION is extermely simple with full detailed instructions furnished—cable required is an

MODEL MS5-885 Master-Remote Intercommunication system, with 4-tubes, MS5 Master Unit and SS5 Remote Unit, detailed installation intubes, MS5 Master Unit and SS5 Remote Unit, detailed installation instructions; wt. 9 lbs.

Stock No. 32A234; CONVERSA-FONE BASIC

SYSTEM, YOUR COST

\$35.94

MODEL SS5 REMOTE STATIONS (up to FOUR additional Remotes may be used with MS5 Master Unit).

Stock No. 32A235; CONVERSA-FONE REMOTE \$8.97

CONNECTING CABLE for ALL "Master-Remote" Intercomm. Systems. Stock No. 2A140; 3-CONDUCTOR INDOOR CABLE, PER FT.....4c Stock No. 2A142; 3-CONDUCTOR OUTDOOR CABLE, PER FT.....4c

Low Cost All-Master Systems "Dalmotron"



Cost Ali-Master Systems

THE ONLY NON-COMPLICATED

"ALL MASTER" INTERCOMMUNICATION SYSTEM AVAILABLE! NEW ELECTRONIC

PRINCIPLE and Patented circuit—EACH "DALMO" STATION has only HALF an
amplifier—the calling station uses the amplifier in
the "called" station, in
addition to liw own, to
make a COMPLETE.
circuit for 2 - WAY
conversations! A N Y
NUMBER FROM 2
TO 4 "DALMO"
UNITS MAY BE
USED IN A SYSTEM
— requiring only in-- requiring only in-terconnection with 4 wires from station to station! ANY TYPE

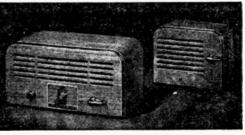
each station is set to suitable volume at installation, and thereafter let alone! "DALMO" STATIONS PROVIDE clear, natural voices over long distances—ALL STATIONS may be called AT ONCE—or any namber muy talk in "conference"; THREE conversations may be conducted at one time on a 4-station system! CABINETS are molded, soft-black, 4½" high and require desk space only 6% x6". Pleasing, sloping speaker grille, Station Selector and Press-to-Talk switches on lower front. EACH "DALMOTRON" STATION is complete with 1 each type 50L6 and 3525 tubes, FOUR-INCH "PM" dynamic speaker, 6-ft, power cord, and complete instructions. FOR OPERATION ON 165-125 Voits A.C. or D.C. Wt, 4 lbs. each.

STATIONS, NET EACH

Talk-A-Phone Systems — De Luxe in

ter-Communication Design and Operation

EITHER 110 V. AC OR DC! LOW POWER COST! EASY TO IN-STALL! HI-POW-ER OUTPUT — sufficient to operate trumpet type speakers such as "University" IB8 on "Master - Rem o t e" installa-



MODEL ER-40 "MASTER" REMOTE SYSTEMS, 10-STA, CAPACITY



MODEL ER-40 "MASTER" REMOTE SYSTEMS, 10-STA. CAPACITY

Master Remote Systems consist of a single Master Station and up to ten Sub-Stations. Master Stations can call each Sub-Station individually or all Sub-Station at any time. Sub-Station may answer or originate a call to the Master, but cannot communicate among themselves. Switch on Sub-Stations is used when originating a call to the Master, but is not used when answering a call. Person at Sub-Station may answer at a distance of 25 to 50 feet from the unit, 3000 feet of cable may be used between stations, A system may be built up starting with the Master Station and one Sub-Station, and Sub-Stations added as required. Master Stations have a full 2½ watt output, SILENT OPERATION, to eliminate noises from Sub-Stations not in use; variable volume control adjustable at each Master from a whisper to full room volume; PRIVACY EARPHONE (optional) which disconnects speaker when lifted to insure absolute listening privacy. Master Stations are housed in beautifully finished choice walnut wood cabinets, finished both back and front, measuring 12"x64". Sub-Stations are in matching walnut wood cabinets 74"x24"x64". For operation on 110-115 volts AC or DC.

MODEL KR-40; DE LUXE 10-STATION MASTER UNIT, complete with

MODEL KR-40; DE LUXE 10-STATION MASTER UNIT, complete with tubes, instructions, and wiring diagram. Wt. 10 lbs.
Stock No. 31A6; Model KR40 Master Unit Only; EACH..... \$34.69

MODEL KR-40C; DE LUXE 10-STATION MASTER UNIT with PRIVACY For Phone, complete with tubes and instructions, wt. 11 lbs. Stock No. 3147; Model KR-40C Master Unit Only; \$43.51 ... \$43.51 YOUR COST

SUB-STATION, MODEL RU-43 DE LUXE, from 1 to 10 may be used with EITHER of above Master Units, Wt. 4 lbs.
Stock No. 31A8; Model RU-43 De Luxe Sub-Station; EACH \$11.14

Model KS-60 De Luxe All-Master Systems



Model KS-60 De Luxe All-Master Systems

(Master Units are identical to illustration at left above.)

All Master Systems consist entirely of Master Station units. Any station may converse with any other station at will, and several separate two-way conversations may be held at the sametime with absolute privacy and without cross-time with absolute privacy and without cross-time with absolutely no eavesdropping by other stations, Stations may call other Stations even though power is not turned on at station called, and volume on incoming calls may be adjusted at each station. In systems not operated. "ALL MASTER SYSTEMS" may be built up starting with two stations added as required up to a total of ten in all.

MODEL KS-60: DE LUXE ALL MASTER, 10-STATION unit, complete

MODEL KS-60; DE LUNE, ALL MASTER, 10-STATION unit, complete with tubes, instructions, wiring diagram; wt. 10 lbs. Stock No. 3149; MODEL KS-60 MASTER UNIT; EACH ... \$34.69

MODEL KS-60C: "ALL MASTER" UNIT; EACH ... \$60 above, except has PRIVACY EACH PHONE; wt. 11 lbs.

Stock No. 31A10; MODEL KS-60C MASTER UNIT; EACH \$43.51

Connecting Cable for "All Master" systems: one more conductor in cable than there are Master Unit in system—length is combined distance from 1st to last Master Unit in system; 11-conductor cable listed below is recommended for these systems.

Stock No. 2A144; 11-CONDUCTOR UNSHIELDED CARLE, FT. 18C

NOTE:—All "Tulk-A-Phone" Master Units listed above are equipped with JUNCTION BOXES at end of 5 ft., 11-wire cable to facilitate wiring connections and climinate noise.



Top Quality—good looking REAL letterommunication system with handsome NTEEL cabinets, 4½ x x 4½ x 15 minster and Remote units in handsome NTEEL cabinets, 4½ x x 4½ x 15 minster and letterommunication beautiful in gray baked in

REFLEX SPEAKERS UNIVERSITY DRIVER UNITS



HIGH EFFICIENCY REFLEX TRUMPETS.
"University" all metal, weather-proof projector trumpets have stood the test of "battlefront" conditions—their famous "RUBBER RIM" tends to eliminate all possible rattles and resonant vibration. These trumpets when used with "University" hermetically sealed DRIVER UNITS assure a weatherproof, WATERPROOF outdoor loud speaker with assurance of continual, long life operation, regardless of climate or temperature. Noncorrosive finish limits possibility of rust or deterioration. UNIVERSAL "U" BRACKETS permit mounting of trumpets in any position. NEW MODEL "GH":—Super Reflex Trumpet; 6-FOOT AIR COLUMN; 30" diameter (cf. 6-FOOT AIR COLUMN; 30" diameter tion or for voice. Made of Aluminum; 25" long (without driver); ght 22 lbs. 900 dispersion. HIGH EFFICIENCY REFLEX TRUMPETS.

duction or for voice. Made of Aluminum; 25" long weight 22 lbs. 90° dispersion. Stock No. 30A121; MODEL "GH" TRUMPET ONLY;

YOUR COST ... MODEL "LH" REFLEX TRUMPET—4½-FOOT AIR COLUMN; very satisfactory for BOTH VOICE AND MUSIC; low frequency cut off, 120cps. Bell diameter, 25½"; length 18½". Made of heavy steel finished in gray weather-proof cnamel. Wt. 5 lbs. 90° dispersion, Stock No. 30A30; MODEL "LH" TRUMPET ONLY;

MODEL "PH" REFLEX TRUMPET—3½-FOOT AIR COLUMN; ideal for voice, low frequency cut off, 150 cps. Bell dia. 20"; length, 15". Does a fine job on combination voice and music jobs. Heavy steel, gray enamel finish; wt. 10 lbs. 80° dispersion, 8tock No. 30A29; MODEL "PH" TRUMPET ONLY;

gray ename: 1,110.5.

Stock No. 30A29; MODEL, "PH" TRUMPET—2½-FOOT AIR COLUMN; made of aluminum with 15½" dia. bell, 12" long; wt. 6 lbs. Low frequency cut-off is 200 cps. 75° dispersion.

Stock No. 30A28; MODEL "SMH" TRUMPET ONLY;

\$12.05



"University" P-M Driver Units UNIVERSITY "PM" DRIVER UNITS ALL UNIVERSITY "PM" DRIVER UNITS are designed for CONTINUOUS OPERATION at rated nower input. Justly deserving their reputation of "BREAKHOWN PROOF", the units listed herein "stand up" under the most severe conditions of nsage and weather, MODEL "PAH" HEAVEL

nsage and weather.

MODEL "PAH" HEAVY DUTY 25-WATT DRIVER UNIT: Frequency range of 80-6,000 cycles,
Voice Coil impedance, 16 ohms. Height, 5";
dia. 5\(\pm\^2\); wt. 9 ibs. Thread size, 1\(\pm\^{-1}\)8. Absolutely WEATHERPROOF in construction, binding terminals

Stock No. 34A135; MODEL PAH DRIVER UNIT ONLY: .. **\$31.1**6 MODEL "SAH" 25-WATT STANDARD "PM" DRIVER UNIT; Handles

full 25-waits power input at frequency range of 90-6,000 cycles; 16-ohm voice coil; binding post connections. Size is 5" high, 4%" dia., wt. 5 lbs. Absolutely WEATHERPROOF. 1%"-18 threads. Stock No. 34A134; MODEL SAH DRIVER UNIT ONLY; \$21.76

. \$21.76 MODEL "MAH" 12-WATT MEDIUM POWER "PM" DRIVER UNIT; MODEL MAIN 16-19-31 MEDIUM KUWEN AM ANALYSIS UNIX. faithfully reproduces voice or music in frequency range of 100-6,000 cycles. Impedance, 8-ohms; size, 3\%" dia., 3" high; wt. 2\% lbs. Thread

size is 1%"-18.
Stock No. 31A25; MODEL "MAH" DRIVER UNIT;

360° RADIAL CONE-SPEAKER PROJECTORS



"UNIVERSITY" MODEL RBP-12; RICH TONE QUALITY equal to large wall speaker enclosures! Large accoustic chamber with rubber cushioned opening correctly loads rear of cone speaker for FULL RANGE reproduction of VOICE OR MUSIC! Frequency uniform down to 60 cycles. Dia. 27"; ht. 11"; wt. 19 lbs.

Stock No. 34A114; MODEL RBP-12 PROJECTOR ONLY MODEL RBP-8; SAME AS ABOVE FOR 8-INCH CONE SP 34A115:

\$20.58 \$11.52

PARABOLIC BAFFLE



For 12-Inch Speaker 20" Bell Heavy Steel

Vibration and WEATHERPROOF for most severe field service; NEW interlocking WATER-TIGHT SEAL between sections. Mounting holes drilled fit any 12-inch speaker—mtg. boits supplied. Hangin loops supplied, or may be mounted on baffle fixture at right. Baked BLUE-GRAY we at her resistant named [injub]. enamel finish. Stock No. 39A10;

Parabolic Baffle Mounting **Fixture**

Easy, convenient mounting for all parabolic baffles on SOUND TRUCK, WALL, or any desired surface, Consists of 8" diameter base with long shoulder to securely

hold %" threaded pipe; saddle fix-ture for baffie, with swivel adjust-ment controlled by large thumb nut; 12" high over all. Black nut; 12" his crackle finish.

Stock No. 30A10; Model SM-12; Your Cost \$7.94 Stock No. 84A113, ST-8 MTG, Your Cost. \$2.79

Complete High Efficiency Announcing Speakers



Ideal for use indoors or outdoors in connection with EITHER P.A. Amplifier, or INTER-COMM, system, TWO MODELS — IBS Directional, or IBR Radial, these fine speakers are COMPLETE with hermetically sealed driver units—have famous "University" or units—have famous "University"

Radial, these fine speakers are COMPLETE with hermetically sealed driver units—have famous "University"
RUBBER RING to eliminate vibration
and resonant sounds. For continuous
operation under ALL CONDITIONS.

Model IBS Complete Directional Speaker; 60° dispersion; frequency 3005000 cycles; 12-WATTS, 8-ohm voice coil. Projects to 1/5 mile. Hermetically sealed BUILT-IN DRIVER UNIT, Complete with mounting
bracket, height 9", dia. 9"; wt. 6 lbs.

Stock No. 34A132; "UNIVERSITY" MODEL IBS. Your Cost \$17.64

Model IBE Complete RADIAL Speaker; 360° sound dispersion, projects
to ½ mile! Power capacity 10-WATTS; frequency response is 300-5000
cycles; 8-ohm voice coil. Hermetically sealed DRIVER UNIT built-in!
Height 10"; dia. 9"; wt. 5 lbs.

Stock No. 34A133; "UNIVERSITY" MODEL IBR. Your Cost \$20.00

NEW Model. "MIL" Complete Directional Speaker—A NEW "UNIVERSITY" PAGING AND INTER-COMM speaker requiring ONLY 3WATTS audio for satisfactory operation! Frequency range is 300-5,000
cycles; dispersion 80°, v.C. 8-ohms. Only 6" dia. and 7" high; wt.
3½ lbs. SAME STYLE AS MODEL IBS shown at right above except
has special ball and socket joint, allowing an adjustment to ANY
ANGLE NECESSARY, POWER CAPACITY, 5-WATTS.

Stock No. 34A106; YOUR COST

NOTE: EITHER of the above work beautifully as a sub-station on most
INTERCOMMUNICATIONS SYSTEMS, permit TALK-BACK at distances up to 50 ft.—should be used for ALL outdoor installations.

Microphone Boom-Pulpit Stand-Trumpet Tripod

Microphone Boom-Pulpit Stand-Trumpet Tripod



t Stand-Trumpet Tripod

"A":—Portable, Adjustable, PULPIT MICROPHONE STAND. ADJUSTS QUICKLY TO ANY ANGLE
—attaches to ANY object 2" thick
or less INSTANTLY by screw clamp
with BALL and SOCKET JOINT
to hold tight to irregular surface!
DOUBLE ADJUSTMENT BOOM
extends 21" at full length, "mike"
attachment with %"-27 thread has
180° rotation with thumb-screw
control—UNIVERSAL JOINT for 3way adjustment of boom at ture control—UNIVERSAL JOINT for 3-way adjustment of boom at turn of knob, Mike cable feeds THROUGH BOOM, out of the way! Folds into compact size for carrying. Finished in bronze; wt. 2 ibs. Stock No. 31A50; PUL-PIT MIKE STAND; NET \$8.20

"B":—UNIVERSALLY ADJUSTABLE HOOM FLOOR MICROPHONE STAND. A "MUST" FOR EVERY COMPLETE SOUND SYSTEM; allows advantageous placement of "mike" for orchestra pick-up, or for single selected instrument such as plano in RECORDING or "PA" installations. Has heavy 12-POUND TRIPOD BASE, rubber floor gripe and long sleeve for pipe upright to eliminate strain; lower standard is heavy 1" pipe which, with upper standard of 34"x" POLISHED CHROME pipe, allows upward adjustment of mike to 6 feet from Noor. Finger-tip control angle adjustment for positioning of boom in 180° are from straight up to straight down. Boom extension control has DUAL leather cushioned, positive locks. Boom threaded %"-27 for ANY "Mike". FINISH:—Upper rod and fittings in POLISHED CHROME, lower rod and base, satin black. Wt. 16 lbs. Stock No. 30:488-2; Model HB-3 FLOOR BOOM STAND; NET \$14.41

Stock No. 30A88-2; Model HB-3 FLOOR BOOM STAND; NET ## 14.41

"O":—"UNIVERSITY" MODEL TS-10 HEAVY DUTY REFLEX TRUMPET TRIPOD. FOR QUICK, SECURE PLACEMENT OF TRUMPETS
OR HIGH POWER SPEAKERS at any height from 6 to 10 ft. Withstands wind pressures of 50 m.p.h; FOLDS to a length of 43" for easy
handling. A giant in strength with center column of 1%" dia pipe and
upper collar bracket having holes drilled to fit ANY University trumpet
or super-power speaker mounting. TRIPOD LEGS of 1" pipe are assembled to center column with outriggers and sliding collar with surefasten locking screw; allowing 2-ft. adjustment in height of speaker,
and positive locking at any height with a single lever! Tripod legs
have sharp points to securely grip any type of surface. Weather-proof
gray finish. Wt. 25 lbs. have snarp points to securely gill and the same gray finish. Wt. 25 lbs.
Stock No. 30A108. "UNIVERSITY" MODEL TS-10
HEAVY DUTY SPEAKER TRIPOD; YOUR COST

.....\$23.52 "University" Trumpet

and Driver

Fittings

"A": - "UNIVERSITY" "PMA" ADAPTER

"B":—"University" 2YC DUAL ADAPTER. Permits the use of TWO DRIVER UNITS ON A SINGLE REFLEX TRUMPET! Makes any of the trumpets listed on this page a 50-WATT power speaker. Acoustically correct in construction, the 2YC adapter has male threads to fit ANY trumpet, and female threads for ANY of the driver units disted herein. Size, 4%" long, 2" wide, 2%" high; wt. 8% oz. net.

Stock No. \$1A48; Your Cost\$5.88

"Veivet Action" **Professional** Mike" Stand

OVER-SIZE BRASS TUBES: 1%" dia. lower and %" dia. upper. Adjusta 42"-72" 12-INCH Non-Tip BASE! "ONE-CLUTCH

Non-Wear action Wt. 15 lbs. TRIPLE CHROME stems, gun-metal base; 5"-27 thread. base; 5"-27 three No. 32A1; MS-20

STAND:



NEW COAXIAL SPEAKERS

Provide a co-ordinated two-way reproducing system in which separate reproduction channels handle most effectively their particular pertion of the total frequency range of incoming reception. The full, rich value of low frequency reproduction available from these fine speakers is BEST WHEN USED WITH JENSEN BASS REFLEX ENCLOSURES!

4-POSITION HIGH FREQUENCY RANGE CONTROL as furnished with 4-POSITION HIGH FREQUENCY RANGE CONTROL as furnished with Models JAP-60 and JHP-52 lowers frequency cut-off in four steps to suit program quality; enables taking full advantage of the extended high frequency range in high quality programs, yet instantly adjusts for most acceptable results when some distortion is present. For high quality, moderate level reproduction, JENSEN COANIAL SPEAKERS are the best obtainable for HOME RECEIVERS, RECORD PLAYING EQUIPMENT, OR RADIO STATION USE!

JHP-52 (15-Inch) Coaxial Speaker With Range Control



Excellent for high quality FM-AM radio receivers, phonograph reproducers, monitoring and professional applications. Comes complete with special high frequency range control on extension cable with escutcheon and knob. When installed in Jensen Bass Reflex Enclosure, range extends smoothly from 50 to 12,000 cps., with substantial contribution in the 15,000 cycle region. P.M. design. Power rating to 14 watts. Input impedance, 500 ohms. P.M. design. Power rating, 12

No.	30A21.	Model	JHP52	Coaxial	Speaker as
desc	ribed.				@9/ Q1
YOU	R COS	т			\$34.81

JAP-60 (15-Inch) Coaxial Speaker With Range Control

Highly efficient. For the most exacting professional applications. Overall response approximately 3 db. higher than JHP-52. Frequency range when installed in Jensen Bass Reflex Enclosure 50 to 12,000 cps. with controlled contribution in 15,000 cycle region. High frequency range control lowers cut-off in four steps to suit program quality. While intended for moderate level operation, a power rating of 14 to 15 watts guards against overload distortion. P.M. design. Furnished with special high frequency range control on cable, control knob and escutcheon. Input impedance, 600 ohms.

No. 30A20, Model JAP-60 Coaxial Speaker as described. YOUR COST

JCP-40 (12-Inch) COAXIAL SPEAKER

The JCP-40 makes available at low cost extended range performance never before possible with a 12-inch speaker. An ideal replacement and modernizing unit. Same physical dimensions as a conventional 12-inch speaker. Effective range of reproduction 50 to 10,000 cycles with some contribution up to 12,000 cycles. Terminals provided for ST-606 high frequency control. Voice coil impedance 6 ohms, power rating 8 to 10 watts. P.M. design.

Stock No. 30A22. Model JCP-40 Coaxial Speaker. YOUR COST \$20.73

HIGH FREQUENCY LEVEL CONTROL FOR JCP-40 SPEAKER (ST606) Control, connecting cable, escutcheon and knob, permits instant accommodation to program quality; also for general purpose, 16-ohm 15-watt level control. With %"x1" long bushing.

Stock No. 13A193, HIGH FREQUENCY LEVEL

MIGH QUALITY OUTPUT TRANSFORMERS FOR JAP-60 and JHP-52. Match push-pull tubes to 500 ohms; without voice coil taps. Output is plus or minus 1db. from 30 to 15,000 cps. In metal can, not mountable directly on speakers.

No.	13A190.	Model	Z3155.	3,000	ct.	to	500	ohms.	Your	Cost\$8.97
No.	13A191.	Model	Z3156,	5.000	ct.	to	500	ohms.	Your	Cost\$8.97
No.	13A192.	Model	Z3167,	10,000	ct.	to	500	ohms.	. You:	Cost\$8.97



CONCERT SERIES Jensen P.M. Dynamics

NEW "ALNICO-5" CONCERT SPEAK-ERS, replacing models below, will be shipped on orders as available.

SUPERB TONE QUALITY and faithful SUPERB TONE QUALITY and faithful highly efficient reproduction make these CONCERT SPEAKERS IDEAL FOR USE IN RADIO, PHONOGRAPH, AND P. A. INSTALLATIONS where exceptionally fine reproduction is desired! LESS TRANSFORMERS, see listing at right for matching transformers,

Adaptable for use in any good baffle or speaker housing.

Over-all	Stock	Jensen	Voi	ce Coil	Your
Diameter	No.	Model	Imped	l. Watts	Cost
8-inch	34A130	PM-8C	6	8	\$ 8.20
10-Inch	34A131	PM-10C	6	9	19.08
12-Inch	30A23	PM-12C	6	10	11.58
12-Iuch	30A24	PM-12H	8	12	17.55
12-Inch	30A25	A12-PM	8	15	28.81
THE A LINE	TD	4 1 D14	~ .		

Matching Transformers for above P lected from listings shown at right. PM Concert Dynamics should be seJENSEN "P-M" DYNAMICS









8-Inch

12-Inch

NEW "ALNICO-5" PM SPEAKERS ARE COMING to replace all the models listed below. "B-A" will automatically ship the NEW "ALinsted below. "B-A" will automatically ship the NEW "AL-on ALL Orders as these NEW SPEAKERS become available! models listed below. NICO-5" on ALL Ore

			Voic	e Coil	Mount-	
Overall Diameter	Stock No.	Jensen No.	Imped.	Watts	ing Depth	Your Cost
4 inch	14A600	PM4-FS	4	2	21/8	\$2.56
5 inch 6 inch	14A601 14A602	PM5-FS PM6-ES	4	214 314	31/4	2.62 3.26
8 inch	34A107	PM8-D8	4	5	4	4.70
8 inch	34A108	PM8-GS	6	7	4	5.73
10 inch	34A109	PM10-G8	6	8	5	6.56
12 inch	34A110	PM12-GS	6	9	6¾	8.20

(NOTE: The above LESS TRANSFORMER; see below for transformers.)

"Jensen" Electro-Dynamic Speakers

		I	Voice	e Coil	Field	Mount-	
Overall Diam.	Stock No.	Jensen Model No.	Imped.	Watts	Coil Res.	ing Depth	Your Cost
4 Inch	14A603 14A604 14A605	H4-8 H4-8 H4-S	4 4 4	3 3 3	3000 1000 450	216 216 216 216	\$2.38 2.38 2.38
5 Inch	14A606 14A607 14A608 14A609	H5-8 H5-8 H5-8 H5-8	4 4 4	3 3 3	2750 1000 450 6 Volt	2 to	2.44 2.44 2.44 2.44
6 Inch	14A610 14A611 14A612 14A613	H6-S H6-S H6-S H6-S	4 4 4 4	3 3 3	2750 1800 1000 6 Volt	2 1/4 2 1/4 2 1/4 2 1/4	2.68 2.68 2.68 2.68
8 Inch	34A122 34A123 34A124 34A125	F8-RS F8-RS F8-RS F8-RS	4 4 4	4 4 4	2500 1800 1000 6 Volt	3 11 3 11 3 11 3 11	3.50 3.50 3.50 3.50
10 10	34A126 34A127	G10-RS G10-RS	6 6	8	2500 1250	51/4 51/4	6.14 6.14
12 Inch	34A128 34A129	G12-R8 G12-R8	6	8	2500 1250	614	7.62 7.62

(NOTE: The above LESS TRANSFORMER; see below for transformers.)

Jensen Adjustable Impedance Speaker Transformers
Model "X" Plate Matching Transformers.
Adjustments are made with flexible lead and pin tip jack. Impedance values are voice coil, 4,500, 7,000, 10,000 and 14,000 ohms and all except voice coil may be center tapped for push pull tubes.

	Fact. No.		oil	For Use	on Mode	el	Net Ea.
13A182	ZX1004	6	PM8C.	PM12C.	G12RS	PM12GS	\$2.30
13A183	ZX1005	8	PM12H,	A12PM			3.09
13.A184	ZX1012	6	JCP-40				3.09

Model "Y" Line Matching Transformers. "line" impedance values; 500, 1,000, 1500, 2000, and For matching

voice coil. Stk No. Fact. No. Voice Coil For Use on Model ZY2001 ZY2003 PMSC, PM12C, G12RS, PM12GS PM12H, A12PM, A12 EGRS, D8RS, PM8US, PM6DS, PM6DS G10RS, PM10GS, PM8GS, PM6GS 13A185 \$2.30 13A186 ZY2007 ZY2008 1.68 1.68 Z.V2009 Ġ 3.09

13A189 JCP-40 The above transformers have terminal boards with adjustable clips, for selection of desired matching characteristics. NO soldering.

Model "P" Low Cost Plate Matching Transformers

Require soldered connections, but otherwise perfectly suited for use with

нреакега	specified	below.	•	
Stk No.	Fact. No.	Voice Ceil	For Use on Model	Net Ea.
13A178	ZP1020	4 H4	S, H5S, H6S, F&RS, PM4FS	
			PM5FS, PM6ES, PM8ES	\$1.06
13A179	ZP1021	4 E61	RS, D8HS, PM8DS, PM6DS, PM6DS	1.47
13A180	ZP1022	6 G1	ORS, PM10GS, PM8GS, PM6GS	1.47
	Model	"L" Low Co	est Line Matching Transformers.	
13A181	ZL2020	4 H4	S, H6S, H6S, F8RS, PM4FS,	
		I	PM5FS, PM6ES, PM8ES	1.06



Bass Reflex Peri-Dynamic Enclosures Bass Reflex Peri-Dynamic Encrosures suitable for practically ANY environment in Studio, Home or Institution; TYPE D CABINETS reflect distinctive beauty of design and finish. Built of beautifully grained WALNUT striped paneling, attractively styled; they incorporate the Jensen BASS REFLEX principle to "get" the BEST out of any good speaker, but—PAR EXCELLENT REPRODUCTION IS OBTAINED only with Jensen CONCERT DYNAMICS; or the "last word" in speakers—Jensen CO-AXIAL SPEAKERS Models JAP-60; JHP-52, or JCP-40!

 Model D-121
 For Speaker Size 12-inch 27% "x31½"x12"

 D-151
 15-inch 27% "x31½"x14"

Your Cost \$36.46

NEWEST DEVELOPMENTS IN QUALITY MICROPHONES







"A":-MODEL V-1 VELOCITY; provides maximum pick-up front and "A":—MODEL V-1 VELOCITY; provides maximum pick-up front and back, substantially flat frequency response, 40-8,000 cps; high sensitivity specially rolled pure aluminum ribbon in steel reinforced frame with reflection-free woven metal housing—all set in locking type cradle to allow titt of 90°. OUTPUT LEVEL is minus 65db below 1 volt. "ON-OFF" slide switch in housing base. Standard %"-27 stand coupler with built-in shock absorber. Size 2%"x2%"x6%"; wt. 2 lbs. With 20 ft cable. HI-IMP. Stock No. 20A897; "ELECTRO-VOICE" Model V-1; . Your Cost \$19.32

"B":—MODEL 630 DYNAMIC; Versatile HIGH FIDELITY all purpose microphone, ruggedly built for heavy duty service; unusually HIGH OUTPUT for speech and music, indoors or outdoors; grill design minimizes wind noise. Frequency response is 40-9,000 cps with output level rating of 53db; 90° arc TILTING HEAD for directional or non-directional pick-up; "ON-OFF" slide switch. Standard %"-27 thread; Satin Chromium finish; size 2"x4%"x4%"; wt, 1% lbs. Cpt. with 20 ft, cable.

HI-IMPEDANCE. Stock No. 20A895; "ELECTRO-VOICE" Model 630-C; Your Cost

"C":--MODEL 605 LOW COST DYNAMIC; specially recommended for Schools, Churches, Theatres, and general P. A. use where performance and ability to "stand the gaff" count! Frequency response, 50-7500 cps, substantially flat; Output level 57db.; non-directional at low frequensubstantially flat; Output level 57db.; non-directional at low frequencies becoming directional at higher frequencies; head is fixed tilted at angle of 22. Standard %"-27 thread, Satin Chrome finish, size 2"x3\%" x 2\%"; wt. 12 oz.; Impedance, direct to grid, 25000 ohms; with 20 ft. shielded cable

Model 605-20; Your Cost

"D":—MODEL 950 CARDIOID Crystal Cardax; DUAL FREQUENCY RESPONSE for high fidelity sound or extra crisp speech—selector on back adjusted with screw driver, "In" position for wide and rising response—"Out" position for wide and flat response with full, natural reproduction, An IDEAL "MIKE" for soloist or orchestra, single speaker or group work—INDOORS OR OUT! Output 57db in OUT position, 48db on IN position; wide range, wide angle pick-up at front—dead at rear; tilting head; Satin Chrome finish, sixe 2½"x2½"x6½"; wt. 1½ ibs. Standard ½"-27 thread; "ON"-"OFF" switch; 20 ft. cable, HI-IMP. Stock No. 20A100; "ELECTRO-VOICE"

Model 950; Your Cost

Model 726; Your Cost

"E":—MODEL 606 Differential DYNAMIC; NEWEST DEVELOPMENT of "E-V"; in a moving coil, ANTI-NOISE dynamic; specially designed for use in Airport Control Towers, Police and Special Event broadcasting; high-noise INDUSTRIAL applications; close talking Public Address—indoors and outdoors! Hi-Z, 25,000 ohm impedance with output of 57db at response of 100-6,000 cps. substantially flat to sounds of close origin. "Acoustalloy" diaphragm; head at fixed tilt of 22; Satin Chrome finish; 2/8"-27 thread; 8 ft, shielded cable; size 2"x84,"x24,"; wt. 12 os. Stock No. 20A649; "ELECTRO-VOICE"\$19.11

AMPERITE PG DYNAMIC

Model 606-8; Your Cost

Brings studio quality to ordi-nary PA Jobs-you can HEAR the difference! UNIDIREC-TIONAL pick-up pattern HIGH pattern H



OUTPUT of minus 60 db. RESPONSE of 70-8000 cps; FLAT and FREE of peaks. REDUCES FEEDBACK to peaks. REDUCES FEEDBACK to lowest point of all disphragm microphones. IDEAL FOR EITHER SPEECH OR MUSIC! Case designed for high efficiency in accordance with modern acoustic principles. TILTING HEAD, ON-OFF SWITCH! True dynamic rug-OFF SWITCH: True dynamic rug-gedness; not affected by tempera-ture, attitude, or humidity. HI-IMPEDANCE, 13 ft. cord and cable connector. "PGAH" Dynamic,

Stock No. 20A900. \$14.70 Stock No. 20Kno. 20

AMPERITE



KONTAK

Quickly Attaches to Any String Instrument or Plano!

Instrument or Plano!

Reproduces vibrations of instrument through entire audio range.

Operates on Magnetic Induction principle; has OUTPUT LEVEL of minus 30db over a FREQUENCY RANGE of 40-9,000 cycles! Unaffected by temperature, pressure, moisture! Up to 5 "KONTAK" mikes may be connected in parallel. With or without VOLUME CONTROL as listed below. Model SKH; Without Vol. Control, Stock No. 20874: Stock No. 20874;

Stock No. 20874; \$7.06 Model KKH, WITH VOLUME

......\$10.58

DYNAMIC: CRYSTAL AND CARDIOID MICROPHONES . A "MIKE" FOR EVERY USE!



"A":—MODEL 556 SUPER CARDIOID BROADCAST DYNAMIC; Has ALL the essentials for HIGH QUALITY Broadcasting, Recording and Public Address work! Ideal for either Symphony or Vocal work, pick-up pattern reduces pick-up of random noise by 73%; minimizes room reflection, reduces feedback and background noises, simplifies microphone placement and provides freedom of movement for the performer—ALL with BETTER pick-up and reproduction! SMOOTH, peak-free response 40/10,000 cycles over a wide angle at front; rear response down 15db by virtue of UNIPHASE unidirectional accustic network—DOUBLE WIND SCREEN permits QUIET outdoor operation. Spring suspended in live rubber eliminates stand vibrations and shocks—an unusually rugged "mike" practically immune to effects of molsture, temperature, and mechanical vibration. Tilting head (to 96°); size 4¼" high, 3%" wide, 3%" deep; wt, 4½ lbs. Standard %"-27 thread with adapters available at no extra charge for use with W.E. or RCA stands.

stands.

MODEL 556-C; High Impedance model for direct connection to ANY amplifier with input impedance of over 30,000 ohms—has OUTPUT LEVEL of 55db below 1 volt per bar.

Stock No. 20A894; MODEL 556-C with 18 in. cable;

YOUR COST

MODEL 556-B; Low Impedance Model (150-250 ohms) includes internal high quality high-permeability core, impregnated transformer and is recommended for use in ALL cases where long cable lengths are required—may be fed directly into any standard low-impedance input amplifier. Output level, into 250 ohms is 56.8db below 1 milliwatt for 10-bar signal. With 18" cable.

Stock No. 20A898; MODEL 556-B (150-250 ohms); .. \$48.22

YOUR COST

-MODEL 55 SUPER-CARDIOID UNIDYNE DYNAMIC; for HIGH "B":—MODEL 55 SUPER-CARDIOID UNIDYNE DYNAMIC; for HIGH QUALITY Public Address, Recording, Broadcasting use—permits increased loud speaker levels without feedback and brings out the fullest tone values in music or speech—without voice strain or distortion! "UNIPHASE" acoustic network holds rear response down 15db. Provides smooth, peak-free response of 40-10,000 cycles with OUTPUT of 55db below 1 voit per bar. Head is same size as Model 558 above, tilts to a 90° angle; has standard %"-27 thread and is complete with 25 ft. cable and plug. FINISH of BOTH models 55 and 556 is SATIN CHROME. Stock No. 20A892; MODEL 55-C High Impedance,

YOUR COST

"C":-MODEL 730-B "UNIPLEX" CARDIOID CRYSTAL; provides frequency response of 40-10,000 cycles over a WIDE RANGE ANGLE at front, and is practically unaffected by sounds at rear! Output level is 63db below 1 voit per bar. Long life CRYSTAL is triple sealed against moisture—"Cardioid" construction allows highly satisfactory operation where conventional microphones would be useless! PlyOTED CASE allows pointing of "mike" at sound source, or pointed upward for non-directional, horisontal plane pick-up. SATIN CHROME case is 31/4" dia. and 3%" deep, with built-in cable connector for %"-27 thread. Complete with 25 ft. shielded cable and connecting plug. \$21.87 YOUR COST

YOUR COST

"D":—MODEL 508-C "STRATOLINER" DYNAMIO; (High Impedance). Rich and expensive in appearance and engineered with response characteristics to assure HIGH QUALITY REPRODUCTION for heavy duty use in any location—FOR MUSIC OR VOICE! Output level is 67db below 1 voit per bar, Has moving conductor system, practically unaffected by heat or humidity; die cast case with swivel head and builtin cable connector is 2½" dia., 4½" long; has %"-27 standard thread. Finish is rich metallic gray. Complete with 25 ft. shielded single conductor cable.

"D":-MODEL 708-A "STRATOLINER" (RYSTAL, High Impedance. Identical in size and case construction to Model 508-C above—a Low COST but expensive looking "mike" with wide range response, free from undesirable peaks, and providing GOOD reproduction of BOTH voice and music. Semi-directional, but may be tilted up to horizontal position for non-directional use. HIGH OUTPUT level, 53.0db below 1 voit per bar. 25' cable.

Stock No. 29A889; MODEL 708-A CRYSTAL,

"E":—MODEL 76B CRYSTAL LAPEL MICROPHONE—176" in diameter! Especially designed for high quality reproduction of speech—attaches to coat lapel, is inconspicuous, weighs ONLY 1½ os. Has specially accentuated high frequency response for maximum intelligibility—smooth and free from undesirable peaks. Frequency response is 40-6,000 cycles; OUTPUT level is 57db below 1 voit per bar. Gray finish with lapel clip and attached 25 ft. shielded, eingle conductor cable.

Stock No. 20A652; MODEL 76-B LAPEL MIKE,

ACCESSORIES FOR USE WITH "KONTAK" INSTRUMENT MICRO-PHONES. MODEL KF FOOT PEDAL VOLUME CONTROL, connects to Model SKH to control and vary volume by variable foot pressure

on pedal. Stock No. KONTAK

TURNER MICROPHONES for Certified De













"A":—MODEL U-98 VARIABLE IMPEDANCE DYNAMIC — ONE MICROPHONE FOR ALL NEEDS; impedances of 50-200-500 OHMS or HIGH IMPEDANCE available by the twist of a switch on the back! ADJUSTABLE for semi or non-directional use, Model U-9S is completely free from peaks and holes over its frequency range of 40-9.000 cycles. Output level at high impedance is minus 59db. Professional in construction and appearance, tilting head, complete with 20 ft, detachable cable; gun metal finish.

construction and appearance, tilting head, complete with 20 ft, detachable cable; gun metal finish.

Stock No. 20A888; MODEL U-98 DYNAMIC: Your Cost... \$23.52

"B:"—MODEL 33-D DYNAMIC; LOW IN COST and built to withstand hard usage and bad climatic conditions. Smooth, high level dynamic cartridge with FREQUENCY RANGE of 40-10,000 cycles with OUTPUT LEVEL of minus 54db. Tilting head, satin chrome finish, with 20 ft. shielded cable set. High Impedance.

Stock No. 20A884; MODEL 33-D DYNAMIC: YOUR COST \$15.88

"B":—MODEL 33-X CRYSTAL; IDEAL LOW COST "MIKE" FOR RECORDING, PUBLIC ADDRESS, OR COMMUNICATIONS USE. High capacity crystal has response of 30-10.000 cycles, free from peaks, output level of minus 52db; low feedback. Crystal impregnated against moisture; blastproofed. Ruggedly built, tilting head, satin chrome finish. Complete with 20 ft. shielded cable set.

8tock No. 20A883; MODEL 33-X CRYSTAL, YOUR COST \$14.41

"C":—MODEL 9-D "Han-D" MIKE DYNAMIC hand microphone. HANG

"C":—MODEL 9-D "Han-D" MIKE DYNAMIC hand microphone. HANG IT—HOLD IT—OR FIT IT to any standard microphone stand—engineered for maximum voice response, and natural music pick-up; specially recommended for bad climatic conditions, intense heat and rough handling uses. "ON-OFF" SWITCH; response of 60-7,000 cycles with output level of minus 50db. Satin Chrome finish with 7 ft, detachable cable. High Impedance.

Stock No. 204886; MODEL 9-D "Han-D", YOUR COST.... \$15.88

"D":—MODEL 22X HIGH IMPEDANCE CRYSTAL; TOPS in performance at very low cost—clear, clean, sharp reproduction with feedback held to absolute minimum. Built-in wind gag permits outdoor operation; IMPREGNATED CRYSTAL guards against moisture; automatic barometric compensator. High level minus 52db. RANGE 30-7,000 cycles. 90 tilting head permits any position from horizontal to vertical. cycles. 90 tilting head permits any position from he With 7 ft. cable set. Stock No. 20A881; MODEL 22-X CRYSTAL MIKE;

....**. \$11.7**6 YOUR COST ..

"D":-MODEL 22-D HIGH IMPEDANCE DYNAMIC; Identical in appearance and case construction to Model 22-X; has HIGH LEVEL dynamic cartridge for SMOOTH reproduction indoors or out at all frequencies. RANGE, 30-8,000 cycles; Output minus 54db. Complete with quencies.

7 ft. cable set.
Stock No. 20A882; MODEL 22-D DYNAMIC MIKE;

"E":-"CHALLENGER" MODEL CX HIGH IMPEDANCE CRYSTAL; dependable, neat in appearance, LOW COST! RANGE, 50-7,000 cycles, OUTPUT minus 55db; SHOCKPROOF crystal cartridge—moisture sealed; barometric valve; wind gag to prevent blasting. Chrome type finish, with 7 ft. removable cable set.

Stock No. 204879; MODEL "CX" CRYSTAL MIKE;

.....\$9**.**56

"E":-"CHALLENGER" MODEL CD HIGH IMPEDANCE DYNAMIC: rugged and dependable for all uses on voice or music—clear cut reproduction; RANGE, 50-7,000 cycles; OUTPUT, minus 52db. Chrome type finish; 7 ft. removable cable set.

8tock No. 29A880; MODEL "CD" DYNAMIC MIKE;

....\$11.47 YOUR COST



Turner "Colortone"—Microphones in Color!

NEW, HIGH QUALITY CRYSTAL AND DYNAMIC MICROPHONES IN STREAMLINED, RICH, COLORED PLASTIC CASES! MODEL 50 DYNAMIC, a New high impedance "mike" with an unusually smooth, even response over its entire RANGE of 30-8,000 cycles. BASE RESPONSE has been raised 2 to 4 db in extreme lows and free from all sharp, resonant peaks! ALNICO v magnet, nickel alloy, hydrogen annealed transformer core, pure aluminum voice coil—all enclosed in humbucking shield! 90 tiltable head for directional or non-directional operation. Coupling is standard %"-27 thread. Complete with 20 ft. shielded cable. Size, 4½" long, 2½" wide, 4½" high, YOUR CHOICE OF THESE RICH COLORS:—Dark Green, Lemon Yellow, Ivory, Orange, Red! PLEASE STATE CHOICE OF COLOR IN YOUR ORDER.

Stock No. 20443; MODEL 5D DYNAMIC; YOUR COST \$17.64

MODEL 5D HIGH IMPEDANCE CRYSTAL: Identical in appearance and available in SAME COLORS listed above for Dynamic Model. For VOICE OR MUSIC; with automatic barometric compensator, blast proofed; impregnated crystal. RANGE 30-8,000cps; OUTPUT is minus 52db. 20 ft. cable set. CHOICE OF COLORS.

Stock No. 204642; MODEL 5X CRYSTAL; YOUR COST... \$14.70

Crystal and Dynamic **Quality Microphones**



Stock No. 20A877; MODEL JT-30 With Stand; YOUR COST

"B":-MODEL N-30 HIGH IMPEDANCE CRYSTAL, HIGH FIDELITY; WIDE RANGE. Response, 30-10,000 cps., substantially flat and free from peaks. OUTPUT minus 52db, Tilting head is gray with chrome grille, size 5½" high, 2½" dia. and 3½" deep. Wt. 2 lbs, 15 ft, cable set. Stock No. 204648; MODEL N-30 CRYSTAL MIKE; MODEL N-30 CRYSTAL MIKE; \$11.26 YOUR COST

"C":—MODEL "DN" DYNAMIC—NEW AND IMPROVED with advanced ideas. For varying temperatures and high humidity locations—rugged construction. Tilting head. Substantially flat response of 50-7,000cps. at output level of minus 55db. High Impedance model illustrated has type "S" "ON-OFF" switch. Gray with bright CHROME grille. Size 6½" high, 2%" dia.; 4%" deep. 15 ft. cable.

\$16.08

"C" (Less Switch):—MODEL DN-500 LOW IMPEDANCE DYNAMIC MIKE. Identical to Model DN-HZ in features, uses, and construction, except designed for 500 OHM load impedance. Output is minus 66db. 15 ft. cable.
Stock No. 20A651; MODEL DN LOW IMPEDANCE; NET.. \$14.46

MICROPHONE ACCESSORIES



"E" "F" "G" "A":—"Velvet Action" 24-POUND, DE LUXE STUDIO FLOOR STAND. Adjustable 42" to 72"—BRASS TRIPLE CHROME PLATED oversize tubes, 1\%" outer and \%" inner. 4-INCH CLUTCH with bakelite collet defies wear. Semi-tripod base has 17" spread—is rubber cushioned to absorb shocks. Cpt. with \%"-27 and \%" adaptors.

Stock No. 32A2; "MS-24" DE LUXE FLOOR STAND; NET \$11.47

"B":-Velvet Action" ALL CHROME ADJUSTABLE FLOOR STAND. NON-TIP BASE has "anti-tip" points between rubber leveling pads!
BRASS TUBES are TRIPLE CHROME plated, outer tube %" and inner
tube %" in diameter. Bakelite "collet" clutch mechanism—easily
adjusted with ONE HAND after setting to weight of mike. Adjusts
35" to 65" in height—10" base. Standard %"-27 thread.
Stock No. 34A8; MODEL MS-11C FLOOR STAND; NET.... \$6.70

"B":—"Velvet Action" LOW COST ADJUSTABLE FLOOR STAND; Identical to Model MS-11C described immediately above, EXCEPT has gun-metal finish base and SUPER CHROME tubes. %"-27 thread. Stock No. 32A3; MS-12C FLOOR STAND;

-"GRIP-TO-TALK" DESK STAND; Grip Bar operates relay type ON-OFF switch, for remote control of amplifiers and transmitters, Over-all height, 8½"; CHROME tube and switch bar with gray wrinkle base. Socket connector, spring cable connector and 8 ft. 2-conductor shielded rubber cord. Wt. 3 lbs.

Stock No. 31A58; Astatic MODEL G Desk Stand; NET.... \$6.44

"D":—"Velvet Action" BANQUET STAND; Adjustable 18" to 32"; same size BRASS tubes and type clutch as MS-12C; 5 lb. base is 8" in dia., has rubber bumpers. Super Chrome finish tubes with red lined gun-metal base. "-27 thread.

Stock No. 31456; MODEL TS-5 BANQUET STAND; NET....\$4.17

"E":-TRIPLE CHROME-BRASS TUBE DESK STAND; 7" high with 6" dia. felt padded base in gun-metal finish, \(\frac{5}{4}'' - 27 \) thread. \$1.44

"F":—BAYONET LOCK, ALL CHROME, DETACHABLE DESK STAND. Handle with %"-27 thread locks in felt padded base with half turn for DUAL USE as hand or desk mike stand. ALL CHROME. Stock No. 20A104; MODEL AG 2-PIECE DESK STAND; \$1.69 \$1.62

"H":—TURNER "THIRD HAND"; Holds mike in ANY position, flexible goose neck has %"-27 thread; slips over neck.

Stock No. 32A213; TURNER 3-H "THIRD HAND"; NET.....\$2.94

Presto Recording Equipment

MODEL K RECORDER



A PORTABLE SOUND RECORDER, BECORD PLAYER AND PA SYSTEM COMPLETE IN A CARRYING CASE. Light and compact, it is ideally suited for sales training and industrial schools, teachers of speech, music and dramatics or for any need requiring a quality re-corder that is portable and can be set up in a few minutes.

in a few minutes.

Records 15 minutes continuously at 33% RPM on side of 131%" disc. May be connected to any house radio set to record complete radio programs. It also makes 6, 8, 10 or 12-inch records and plays all makes phonograph records. As a voice amplifying system, it will serve audience of about 500 persons.

of about 500 persons.

In spite of its low price, it contains many features of much more expensive outfits such as: Magnetic cutting head and pick-up of a design used in highest grade equipment . . A full sized 6-tube amplifier having push-pull triodes in the power stage . . A frequency equalizer for 33½ RPM recording and a tone control for suppressing needle scratch when commercial records are played . . A safety cam lever for lowering the cutting head to prevent accidental damage to sapphire needles . . A detachable dynamic loud speaker mounted in reinforced leatherette carrying case which may be namic loud speaker mounted in reintored leatherette carrying case which may be operated at any distance from the recorder . . . A cutter feed mechanism located beneath the turntable where it is

protected from dust or accidental damage . . . Provisions for quick change from cutting outside-iu to inside-out . . Rubber tired 12" dual speed heavy cast metal turntable with heavy constant speed motor. Turntable speed can be changed in 5 seconds from 78 to 33½ RPM by removing pulley on motor shaft. Amplifier control panel has volume indicator meter, combination high frequency equalizer and tone control, dual volume control selector switch for recording, playback and P A operation and mike receptacle. Turntable chassis contains jack for loud-speaker connection, monitoring headphones, a radio set or external pick-up. Feed mechanism cuts 112 lines inside-out or outside-in.

Frequency response: Amplifies, without protected from dust or accidental damage

cuts 112 lines inside-out or outside-in.

Frequency response: Amplifies, without equalization uniform within 2 db from 50 to 8,000 cycles. Cutting head and pick-up response 80 to 5000 cycles. Amplifier gain measured at 1000 cycles. 110 db. Ample for any crystal or dynamic microphone.

Housed in a dark gray leatherette carrying case size (closed) 19½"x15½"x16"x14", weight 46 lbs. Complete for operation from 110 Volt 60 cycle AC. Microphone, discs or needles are not included so if needed should be ordered separately.

No. 30A117

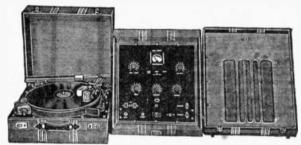
EACH.....

YOUR COST \$348.00

PORTABLE 16" TRANSCRIPTION, RECORDING and PLAYBACK EQUIPMENT, FOR HIGH GRADE RECORDING PRODUCTIONS. Makes continuous 15 minute 33% RPM electrical transcriptions of quality as required by broadcasting stations. Also makes 78 RPM recordings on 6, 8, 10 or 12" disc and will cut 11½, 13½ and 17½" master recordings for commercial pressings, also for reproductions of electrical transcriptions or phone records for auditioning requirements, As a PA will provide sound for audiences up to 500 persons.

Among its many outstanding features are: Its turntable with the simple foolproof drive system that eliminates vibration and holds turntable speed absolutely constant. . A lever to change turntable speed instantly without stopping. . A lever to adjust mechanism to cut either from outside-in or center-out. . A switch on amplifier panel shifts amplifier input instantly from one cutting head to another. Programs running an hour or more may be recorded without interruption if two turntables are used . . A cam lever to lower cutting head gently for prevention of damage to needle . . A vibration damper on cutting head suppresses vertical modulation in the record groove caused by surface irregularities in the disc . . . Cutting arm may be unlocked from the feed mechanism to cut spiral starting and run out grooves.

MODEL "Y"-2 RECORDER



Time scale on cutting arm shows starting point for each size record and elapsed recording time at both 78 and 23½ RPM . . Cutting head feed mechanism is located beneath turntable where it is protected, with parts hand-finished and fitted for performance equal to overhead lathe type mechanism commonly used . . Amplifier includes a two microphone mixer, high and low frequency equalizer and a change-over switch for continuous recording or re-recording. Amplifier controls include two mike input gaim controls, playback gain control and continuously variable treble and bass equalizer controls, a switch for changing instantly between cutting heads and pick-ups, (when two turntables are used) and a selector switch which connects the amplifier for recording, playback or public address operation.

Also contains volume indicator meter, telephone line input jack, monitor jack, two turntable receptacles, two mike receptacles, and power switch.

ceptacles, and power switch.

Frequency Response: Amplifier adjusted for flat response, \$0 to 10,000 cycles. Turned to right the treble control produces a max. peak of 17 db at 6,500 cycles. Turned to left it acts as a scratch filter, giving a max. attenuation of 26 db at 5000 cycles. The bass control produces a max. peak of 20 db at 100 cycles. Cutting head response 50 to 8,000 cycles. Pick-ups, for checking purposes only, 70 to 7,500 cycles. Any high impedance crystal or dynamic microphone can be used with this equipment.

Outfit consists of two reinforced cases.

with this equipment.

Outfit consists of two reinforced cases covered with gray aeroplane cloth. The turntable case (closed) size 20 ½x11x9", weight 49 lbs.; the other houses the amplifier and a 10-inch PM dynamic with enclosed baffle speaker. The amplifier and loud speaker fit together in a single case 23 ½x12x20", weight 57 lbs.

Complete except for microphone, needles or discs. (See elsewhere in this catalog for such items.) For 110 volt 60 cycle AC operation.

operation.

No. 80A118

YOUR COST \$741.00

10A 16" **TURNTABLE**



For broadcast stations and others

MODEL 75 A RECORDING TURNTABLE

A LIGHT WEIGHT, HIGH QUALITY PORTABLE 16" dual speed unit adaptable to a variety of professional, industrial and educational uses, Consist of a precision cast aluminum turn table, rim driven by a heavy duty silent motor fully superded on The

driven by a heavy duty silent motor fully suspended on rub-ber, and a cutting mechanism with a pitch of 112 lines per inch, outside-in or inside-out, together with a high quality

together with a high quality
pick-up.

The entire assembly is
mounted in a gray leatherette
carrying case, 11x19x20\(\frac{1}{2}\) when closed. Weight approx, 49 lbs.

Frequency response of the cutting head is 50 to 8000 cycles, impedance 8 ohms. The maximum power level required from any amplifier
used with this recorder is plus 20 db. Frequency response of the
pick-up is 70 to 7,500 cycles. The turntable motor requires 60 watts
110 voits AC, 60 cycles.

Stock No. 380A119 YOUR COST EACH.....

We Can Supply Everything in PRESTO Equipment. Write Us.

Type 300A Re-Recording Equipment

Consists of an auxiliary turntable, which mounts on top of the recording turntable, and an external pick-up mounted on a pedestal cording turntable, and an external pick-up mounted on a pedestal. For re-recording or dubbing, has several important advantages over a separate driven turntable. The rotation of the recording and playing turntables is locked together so that the playing time and pitch of the duplicate record are identical with the original. No wows or waves can be introduced during the re-recording since any variation in speed will occur simultaneously on both tables. It is less expensive than a second complete turntable.

Stock No. 31A49 YOUR COST



Recording and Playing Needles & Accessories

WALCO "400" Series



PACKAGED Individually in a BEAUTIFUL PLASTIC CASE

12 needles in plastic cases to an attractive display box.
Every "Walco" needle is scientifically designed to reproduce with the highest fidelity, screen-ing out distortion, hiss and scratch noise—and float, feather-light, along the groove—treating records gently.
WALCO WS-400

WALCO WS-400

Floating Jewel Sapphire
Rating: Up to 10,000 Plays
Retails for \$2,50

Each one packaged in individual
plastic case with jeweler's screwdriver for easy user installation
in the new pick-ups.
No. 18A329, Net Each ... \$1.50
No. 18A330, \$12 ... \$15.00

WALCO WR-400

RUBY JEWEL

Rating: Up to 6000 Plays

Rating: Up to 6000 Plays
Retails for \$2.00
Made of Ruby, slightly less durable than sapphire. The Ruby is
precision ground and highly pollabled . . . provides perfect trackfnc.

No. 18A496, Net Each No. 18A497. Display of 12 \$12.00 WALCO WA-400

Precious Metal Needle Long Lasting to 4000 Plays Retails for \$1,50

For those preferring a less expensive needle, the Precious Metal offers all the Walco features, No. 18A498, Net Each No. 18A 490. Display of 12 \$9.00

Jensen Royal Jewel

Royal Jewel
Sapphire
Shank is flat to insure correct position
and vibrationless grip.
Shock absorber spring action minimizes scratch, assures longer record life. Flat construction creates
less air agitation, reduces needle
talk to minimum. Natural Sapphire Tip gives permanence, extra
smoothness, protects records. Resmoothness, protects records. tail at \$2.60 Each.

18A327, Net Ea. \$1.50 \$15.00 18A328, Card of 12....

Service Men's Packet

Contains 6 JENSEN needles, 3 each of the \$1.00 and \$2.50, in a handy folder for pocket or kit, Handy to carry along on service calls, \$10.50 Retail Value.
No. 18A364, Per Kit\$5.25

Audio Sapphire

Especially designed for playback use on Audio-disc and similar recordings. Will play from 6,000 to 10,000 coated discs or commercial

Presto Sapphire

A semi-permanent playback needle for recordings and vinylite pressings. Average life 500 hours. 18A337, Net Ea. \$1.25

WALCO "IRIDIUM" LONG PLAY PHONO-NEEDLES

Tipped with an amazingly durable Tipped with an amazingly durable precious metal alloy, provides matchless high-fidelity reproduction for over 4.000 plays. An important self-polishing feature spares the destructive abrasive wear and tear. List \$1,50, No. 18A362, Each \$1,00.

12 Lots Each 90c

Precious Metal Playing Needles Gerett Miracle Point **JENSEN** 5000 Play

18A331, Net Ea....700 18A332, 12 for ... \$6.00 Flat shank to insure correct position and vibration-less grip. Shock Absorber spring action design absorbs vibration and shock, minimizes scratch, assures longer sign absorbs vibration and snock, minimizes scratch, assures longer life for records. Flat construction creates less air agitation, reduces needle talk to a minimum. Precious Metal Tip of special alloy gives long life, full tonal range,

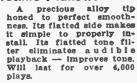
Retails for only \$1.00.

Especially recom-mended for coin op-erated changers. Long wearing precious metal point, accurately tap-ered, ground and pol-iehed to fit record iehed to fit record groove. Life, 2.000 or more plays. 18A384. Net Ea.40c

Gerett "Victory"

An outstanding 50c long life all purpose, playing needle. Up to 5,000 plays on light pick-ups. 18A335. Net Ea. 35c 12 Lots 30c

The POPULAR Lifetime Pfanstiehl



18A833. List, \$1.50.

yet protects records.

 Shadograph Steel Playing Needles



18A338 (Fig. 1) Straight Shank for light pick-ups. Package of 100 34C 18A339 (Fig. 2) Bent Shank for

Package of 100 54c

Universal Stroboscope

Turntable Lubricant, the proper oil for turntables. Made with graph-



Famous Makes Recording Discs For Professional, Home, or Commercial Needs

Audiodisc Red and Yellow Label, as well as Presto Green and Red Label, are stocked in both glass and aluminum when available. We will ship whichever is in stock, unless you specifically state one or the other is not acceptable. Prices Given are to users who can buy in case lots, (Cannot be assorted.) Sold in Case Lots Only.

Audiodisc Red Label

Audio Master Disc 4A3. 13¼". Ea. ...\$1.83 Packed 25 4A4. 17¼". Ea. ... 3.06 to a Case Audiodisc Yellow Label

Popular

Wilcox-

Gay Recordio

Discs

Presto Green Label

For Professional Needs 18A893, 10". Ea. ...\$,80 30 in Case 4A7, 12". Ea. 75 80 in Case 4A8, 16". Ea. 1,50 25 in Case

Presto Type "B"

For Audition, Reference or Educational Needs.

18A306, 10". Ea. ... **3.48** 30 in Case 4A9, 12". Ea. 30 30 in Case 4A10, 16". Ea. 1.08 30 in Case



Finest for Home Recording

Recordio Paper Discs. Give excellent reproduction. Light and flexible so they can be mailed without damage. Record on both

. 60c \$1.00

18A309. 8" disc.

Pkg. of 6...

Recordio High Fidelity
Red Label Metal Discs.

The tops in metal base discs for home recording. Record on both sides. Come packed six to handy paper album.

18A313. 8" disc.
Album of 6...

\$2.00

18A315. 10" disc.

Album of 6...

\$3.00

Album of 6\$3.00

Special Prices to quantity buyers of Recordio Discs. Write for special prices.

RecorDisc Recording Discs

Coated with cellulose nitrate-proven best for high fidelity, life-like reproduction, long wearing quali-ties, to withstand age and play-back without cracking or peeling. All types listed record both sides. Orange Label—Bond Base

For home and practice use where low price is required. Thick compo base, 6 to Pkg.

10 Pkg. Lote @ Pkg. Disc. No. 18A308 \$.62 1.03 1.44 3.53 .88 1.23 10 " 18A811

Red Label--Aluminum Base Made on heavy .021 aluminum, the last word for recording and compare with those used by broadcasting stations and studios.

All Sizes Packed 5 to Package 6 ½" 18A359 \$1.03 \$.83 \$8" 18A360 1.37 1.18 10 " 18A361 2.06 1.76

Frequency Record

A high grade 12" recording at 78 RPM for checking response characteristics of amplifiers, pick-ups, speakers, etc. Range 50 to 10,000 speakers, etc. Range ou ... evoles. Frequencies are voice announced, 18A365. Net Each\$1.76

All Types Recording Needles









Stellite

Sapphires—Hardest point with lowest friction make the finest cutting points and are the longest wearing. Can be resharpened.

Stellites—A hard metal alloy is comparable in cutting qualities to the sapphire, but do not last near as long.

Steel—A good needle for general use, but must be changed often.

Sapphires

18A348. Audio Professional, standard short dural shank.....\$4.35
18A349. Audio Professional, long

| 18A344. | Presto | Professional, short dural shank. | Ea. | S4.80 | 18A355. | Presto | Professional, short dural shank. | Ea. | S4.80 | 12 for | S1.00 | 18A346. | Presto | Presto | Prof. short dural shank. | Ea. | S4.80 | 18A376. | Audio, Long Dual Shank. | Ea. | S3.60 | 18A347. | Presto | Semi-Prof. | S1.00 | 12 for | S1.00 Stellites

		8	itee	1					
1	18A354.	Preeto.	Pkg.	of	8.		\$	1.0	00
1	18A355.	Audio.	Pkg.	of	3.		S	1.0	ŌŌ
١	12 for .					٠.	\$	4.	00
1	18A356.	Walco.	Pkg.	of	Б.	٠		.6	5 o
	18A354. 18A355. 12 for . 18A356. 18A357.	Wilcox	Gay.	Ea				. 2	5 0



Off Automatic and Manual Recorders

18A317-

Book on How to Make Good Recordings. Tells all about it. 85c

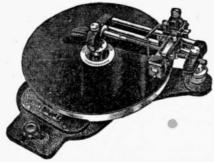
Record Lubricant-Reduces surface noise and wear on needlee and record. May also be used as a pre-recording lubricant to reduce surface noise.

18A819. Per 4 oz. bottle......29c



REK-O-KUT RECORDING EQUIPMENT

"Master-Pro" Overhead Recording Mechanism _ and _ Dual Speed 16-Inch Recording Motor **Assembly**



"MASTER PRO" OVERHEAD RECORDING MECHANISM-CRYSTAL OR MAGNETIC

UNIVERSAL MODEL for use with ANY turatable with standard center Pin. NEW CUTTER MOUNT permits use of most makes of Magnetic or Crystal Cutters. DRIVE GEARS totally closed. Wear-proof STAIN-LESS STEEL LEAD SCREW, turns on hardened steel ball bearings.

NEVER needs oil.

BRONZE "HALF NUT DRIVE", positive—will not "group". Micrometer depth of cut control assures positive uniform groove; adjustment spring prevents damage to either stylus or "cut" while making adjustments. Patented END SUPPORT instantly levels mechanism for varying thickness of blanks. EXCLUSIVE SPIRALING method for "steep" or "shallow" spiral at a single motion. CHIP COLLECTOR keeps cutting stylus and armature FREE of cuttings. HEAVY DUTY CONSTRUCTION—"MASTER PRO" is a 15-POUND PRECISION BUILT MASTERPIECE OF STEEL AND BRONZE; built for long and trouble-free recording service of the highest character—is the "answer" to the needs of the Broadcast and Recording Industry for a dependable, highest quality recording mechanism. Easy and positive in operation; requires no complicated installation! Both models listed below cut 120 lines per inch, outside to inside. SPECIAL FEED SCREWS cutting 106 lines per inch, outside-in, or 120 lines per inch, inside-out, are available at same prices on special order.

"MASTER PRO" MAGNETIO Overhead recording mechanism. COM-NEVER needs oil. BRONZE "HALF

"MASTER PRO" MAGNETIC Overhead recording mechanism, COMPLETE with Low Impedance (8-ohm) Magnetic Cutting Head, uses
any type of GOOD cutting stylus. MODEL "M-5". Your \$175.00
Stock No. 30Add. "Muster Pro" Magnetic Recorder. Cost \$175.00
"MASTER PRO" CRYSTAL Recorder, with "BRUSH" MODEL RC-20
Crystal cutting head. REQUIRES Model T-46 Matching Transformer
listed helow. listed below. Stock No. 30A65.

Stock No. 30A65.
"Master Pro" Crystal Recorder. MODEL "B-5"... Your Cost \$175.00

NEW MODEL "V", DUAL SPEED RECORDING MOTOR ASSEMBLY —33½/78 R. P. M.

Precision, single unit construction LATHE TURNED, cast aluminum turntable has disappearing drive pin and rubber turntable pad—1" diameter POLISHED STEEL SHAFT has forced feed lubrication and rotates on ball bearing, 1/20 h.p. constant speed motor; dual and single speed Neoprene idlers have adjustable stops for idler pressure regulation. 14-pound machined mounting base has lathe bored and lapped 3-point bearing. Easily installed in 15 minutes, permanently!

Stock No. 30A63; MODEL "V" Recording Motor. \$165.44

MODEL T-45 MATCHING TRANSFORMER, for use with "Brush" RC-20 Crystal recording head. Has input taps of 8 and 500 ohms for tapping voice coil or 500-ohm line of amplifier—required where no high impedance output is available.

"REK-O-KUT" VM-9 RECORDING LEVEL METER

A top-notch instrument in cast aluminum case with dial easily READ-ABLE AT DISTANCES TO 25 FEET! Permits one-man recording—Artist himself may record exactly as he delivers, assuring faithful reproduction of his own distinctive style. Operates from outputs of \$/15/200/500 chms.

Stock No. 20A812. Recording Level Meter. Your Cost.....\$29.50

New! "Rek-O-Kut" Transcription Turntable

Dual speed; 33½ and 78 RPM; essentially FREE FROM "WOW" on either VERTICAL transcriptions. 15½" TURNTABLE for specific purpose of EASY CUE-ING—allow record to overlap ING—allow record to overlap &" so operator can hold disc by pressure on RIM rather than face! Speed regulation held to ½ of 1% at 78 and \$3%. Rumble is 45db below

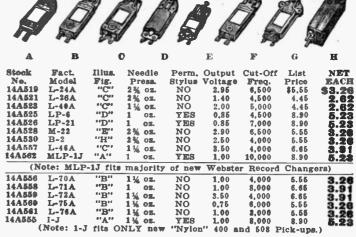


Rumble is 45db below maximum recorded level—
MEETS ALL N.A.B. STANDARDS! NOTE THESE EXCLUSIVE FEATURES:—Machined cast iron base, 3-point mounting to sliminate twist; rubber motor suspension mounts dissipate vibration; beavy cast aluminum turntable with SELF-OILING shaft and bearing—long wearing idler and motor bearings. "Neoprene" idlers and formca motor brush assembly assure long and positive drive, 20 POUNDS
OF SATISFACTORY SERVICE! Finish is gray. Complete with template and instructions. plate and instructions.

Stock No. 30A115; MODEL "G-2" FRANSCRIPTION MOTOR; NET

\$125.00

"ASTATIC" PICK-UP CARTRIDGES



RCA CEYSTAL CARTRIDGE (Astatic #401A)—REPLACES cain RCA MODELS 31050, 31156, 32632, 38122, 38217, 34225, 34207. cartridge Stock No. 14A581. (Fig. "B".) CRYSTAL

The following NEW ASTATIC CARTRIDGES are exact replacement for old model discontinued cartridges as follows:

NEW L-26A; replaces old models L-22A; L-27A; L-32A.

NEW L-70A; replaces old model L-25A.

NEW L-72A; replaces old model L-50A.

NEW L-40A; replaces old model L-41A.

NEW LP-21; replaces old model LP-23,

NEW M-23; replaces old model LP-23.

SHURE CRYSTAL CARTRIDGES



NEW "SHURE" LEVER-TYPE CARTRIDGES identified by or or in listing below will replace most Rochelle Salt flat-type cartridges of other makes. "ALUMINUM CASE CARTRIDGES weigh only .48 or and when installed as replacement for older die-cast cartridges, will REDUCE needle force from ½ to 1 or. For most record changer replacements the W58A of W59A are recommended.

	Fact.	111.		List	Your
No.	No.	Fig.	Replacement for	Price	Cost
14A534		"A"	Shure 97A; Hi-Low & other 1 oz	\$4.00	\$2.35
14A535	W-59A*	"A"	99-181; 99-180; P88S; W40A; 41A.,	4.45	2.62
14A586	W-58A*	"A"	99-182; P908; P92B; W42A Shure	4.45	2.62
14A537	W-57A**	"A"	Shure "Glider"; P87; P87B; 98A		2.62
14A539	W-27C	C.,	Bakelite, UNIVERSAL TYPE	5.00	2.94
14A569	W-56A**	"A"	Shure P89		2.62
14A570	W-57AN**		(W57 with Perm. Stylus)		4.09
			Comment of the contract of the	V. 0 U	-4.US

NEEDLE FORCE AND OUTPUT VOLTAGES OF "LEVER TYPE CARTRIDGES'

W57A; W57AN; W58A, Needle Force % oz. Output Voltage 1.6 volta. W59A; Needle force, 1 oz.; Output Voltage, 2.5 volta. W56A; Needle force, 1% oz.; Output Voltage, 4.3 volta.

"Astatic" Replacement Recording Heads



The models listed below will replace the cutting heads in more than 90% of all home recorders. CRYSTAL and MAGNETIC cutting heads are NOT interchangeable electrically. "ASTATIC" recording heads assure excellent power sensitivity, wide frequency range, and a high order of needle stiffness—ALL necessary and vital to high quality transcriptions. transcriptions.

Astatic Medel X-26 CRYSTAL Recording Head:—Driving voltage, 75 V. RMS; upper frequency limit, 5,006 cps.; wt. 5% oz.; size, 1%"x%"x 3%"; Oxidized finish. Illus, "C" above. Stock No. 14A532; CRYSTAL RECORDING HEAD, Your Cost \$7.53

Astatle Model X-29A CRYSTAL Recording Head:—Driving voltage, 120 V. RMS; upper frequency limit, 6,500 cps.; wt. 5½ oz.; size, 1½"x½"x 3½"; Oxidized finish. Illus. "C" above. Stock No. 14A533; CRYSTAL RECORDING HEAD, Your Cost \$7.53

Astatic Model M-41-8, MAGNETIC Recording Head:—Driving voltage, 2 V RMS; upper frequency limit, 7.000 ops.; wt. 8% oz.; size, 1%"x\frac{1}{2}"x \frac{1}{2}"x \frac{1}{2}"

Selected PHONO PICKUPS for BROADCAST; P.A. or HOME

"ASTATIC" Nulon EQUIPPED CRYSTAL PICKUPS



"ASTATIC" NYLON 1-J Crystal "NYLON"—as employed in the new "ASTATIC" NYLON 1-J Crystal Pick-Up Cartridge as used in PICK-UP MODELS 400 AND 508 as listed below, IMPROVES PERFORMANCE in needle life, frequency response, below, IMPROVES PERFORMANCE in needle life, frequency responses, suppresses mechanical resonances, improves tracking at low needle pressure, and reduces record wear—ALL OF THESE IMPROVEMENTS made possible by using NYLON in the manufacture of BOTH the NEEDLE CHUCK and SAPPHIRE TIPPED NEEDLE! The Nylon Needle is easily replaced by another of its kind, thus giving ALL the benefits of the permanent or fixed stylus PLUS the advantage of easy replacement when necessury!

"A":—ASTATIC STUDIO MASTER "400" WITH NYLON CARTRIDGE. Modern, streamlined TRANSCRIPTION PICK-UP for use on lateral recordings of ALL SIZES. Low Pressure (1½ 02.) with new swivel base ADJUSTABLE to desired height on mounting board. Offset head reduces tracking error; low friction pivots for constant needle pressure, and low vertical inertia for ideal tracking even on warped records, Response 50-8,000 eps.; output voltage of 1.0 volt; 12½" long over all, 24" cable lead, finish of Light Brown Hammerlin. Mtg. Center 10½". Stock No. 144553;

STUDIO MASTER "400" PICK-UP; NET..... "B":—ASTATIC MODEL 508 CRYSTAL PICK-UP WITH NYLON GARTRIDGE. NEW and finest pick-up for home record players—employs NYLON 1-J cartridge with replaceable NYLON NEEDLE. Reponer 50-8,000 cps.; 1½ oz. needle pressure; 1.0 volt output. Flanged base improves appearance. FOR ALL 10" and 12" records. Over-all longth, 8%"; mtg. centers, 8", wt. 1½ lbs.

Stock No. 14A554; ASTATIC MODEL 508 PICK-UP; NET. \$10.79

"C":—ASTATIO HIGH OUTPUT CRYSTAL PICK-UP; NET.. Q LV- I V
centers, for all 10" and 12" records, OUTPUT VOLTAGE of 3.5 average
at 1000 cps. across 5 meg. load! USES NEW L-72 cartridge, 1½ oz.
needle pressure. Flanged base. 13" cable lead; over-all length, 7%".
Wt. 1% lbs.

Stock No. 14A564; MODEL 510 HIGH OUTPUT PICK-UP; NET \$4.41 **MODEL 510 HIGH OUTPUT PICK-UP; NET **P*:—ASTATIC MODEL 507—NEW LOW COST, HIGH PERFORMANCE PICK-UP, Ideal for manual record players, original equipment or replacement of older, less efficient pick-ups. Frequency range, 50-4500 cps. 0.6 output voltage; 7" mtg. centers; over-all length 7%". With L-40 1½ oz. cartridge; for ALL 10" and 12" records. New streamline design with flange base. Wt. 1½ lbs.

Stock No. 14A563; MODEL 507 ECONOMY PICK-UP; NET... \$3.23

ASTATIC "NYLON 1-J" CRYSTAL PICK-UP CARTRIDGE, complete with NYLON SAPPHIBE TIPPED NEEDLE:—tapered shank of needle held in cartridge without needle screw, is easily pushed out by 2-64 thread screw (supplied) when necessary to change needles. Adjustable NEEDLE GUARD PROTECTS NEEDLE AND CRYSTAL CARTRIDGE from damage by accident or rough handling. 1½-oz. needle pressure. 1.0 voit output at 1000 cps.; frequency response, 50-8,000 cps. FOR REPLACEMENT IN MODELS "400" and "508" PICK-UPS. Fin terminals. Stock No. 14A555, "NYLON 1-J" CARTRIDGE, "55-23

ASTATIC SAPPHIRE TIPPED, KNEE ACTION, NYLON NEEDLE; replacement needle for Pick-Up Models "400" and "508" pick-ups. Stock No. 18A374; "NYLON" SAPPHIRE NEEDLE ONLY; NET. \$1.76



magnetic PICK - UPS; HIGH FIDELITY — EASY "AUDAX" MOVING INDUCTOR principle eliminates ON RECORDS! "AUDAX" MOVING INDUCTOR principle eliminates the bugaboo of moving mass—vibratory monientum reduced to almost vanishing point. Needle-point pressure about 1% oz., ideal for high fidelity! Specifications: RESPONSE, FLAT within plus or minus 3 db. to about 6,500 cycles; rising bass curve reaches about 8db. at 50 cycles. complete with mounting template, instructions. FINISH, Black and Silver. Stock No. 32A200. "Audax" Model L-17. FOR RECORDS \$12.23 Stock No. 32A201. "Audax" Model L-18. FOR RECORDS \$12.23 TO 18". Over-all length, 13%". HIGH IMPEDANCE. Net Ea. \$22.23

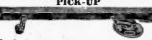
BRUSH PL-20 CRYSTAL PICKUP

ALL RECORDS up to 174" ter. Low pressure (1 oz.) re-record wear and background

noise to minimum. Sapphire stylus used in test showed little wear after 250 hours! WIDE RANGE frequency response of 50-6000 cps. (flat within plus or minus 2.5db.; slight rise to 10,000 cps.), SUPPLIED WITH High Impedance Equalizer for "Constant Velocity" recordings used commercially, Quickly installed on most record players; black molded plastic arm with SATIN CHROME metal parts. Net Wt. 24. lbs.; shipping wt. 8 lbs.
Stock No. 32A202. "Brush" Model PL-20. Your Cost

"firush" Cartridge ONLY FOR MODEL PL-20 PICK-UP above; Stock No. 14A540; BRUSH MODEL PL-2-Z CARTRIDGE, NET.. \$9.82

ASTATIC PROFESSIONAL PICK-UP



Ideal for Broadcast or Transcription Studio use—BALL BEARING swivel base with accurately counterbalanced tone arm 16" long for records up to 16". Low friction pivots exert constant 1 oz needle pressure. Permanent Sapphire stylus. Plays "warped" records. Output: 0.85 voits; 50-7000 cps. "Astatic" HP16.

"Astatic" HP16. No. 32A203. Your Cost \$16.38



favorite with all who KNOW ick-ups! Frequency, 50-4000 cps.; % oz. needle pressure. B-2 bake-tie enclosed cartridge! Vibration isulated arm, ball bearing swivel ase. Distortion-free, WIDE LANGE reproduction with high pick-upsi base. Distortion-free, WIDE RANGE reproduction with high output of 2.5 volts. 12" lead. Blk.

Model S-8, for 10' and 12" records; has 8" mounting center, 912 No. 32A211.

Model 8-12, for 16" records; 12" mounting center, 1514" long.
No. 32A212.

Your Cost

ASTATIC LOW PRESSURE



FINEST FOR HOME OR P.A. USE

— Permanent Sapphire Stylus is protected by "U" guard. 1 oz. pressure. Frequency 50-700 cps.; 0.85 voit output; LP-21 cartridge, 8" mfg. center. 13" cable. High fidelity tone reproduction, low record weer Blob moreous finishments. wear, Rich marcon finish

No. 32A207: \$10.79



TONE EQUALIZER MODEL E-4P Provides TON'E COMPENSATION for ALL CRYS-TAL PICK-UPS:

ASTATIO "TRU-TAN" PROFESSIONAL



MODEL B-16

DeLuxe Off-Set arm crystal pick-ups with BALL BEARING swivel buses and "Tru-Tan" heads that reduce tracking error to 2.4° os a 16" record! 50-4,000 cps. MODEL B-16 is designed for lateral transcriptions up to 16" is free from mechanical reconnect theres

from mechanical resonance through from mechanical resonance through entire audio range. Response characteristic may be altered to suit conditions by modification of input circuit. Over-all length is 14"; needle pressure, 2% oz. With 24" S. C. shielded cable and arm rest. Black and Chrome finish.

No. 32A205.

"ASTATIC" B-16, NET \$14.70

MODEL B-10: DeLuxe pick-up for ultimate of fidelity in reproduction of 10" and 12" records! Has Type "B" selected cartridge with needle pressure of 2% oz. Ball bearing swivel base and "Tru-Tan" head. 8" mtg. center. With 2' SO shield-ed cable and arm rest. Finish black and chrome. 50-4,000 cp No. 32A206.

ASTATIC B-10, EA... \$11.46

ASTATIC AB8M—MOBILE PICK-UP



Specially designed for ALL mobile uses — mechanically balanced to "track" on recordings even in a vertical position without jumping! Hinged head ti osition without groove Hinged head tilts up for Jumping! Hinged head tilts up for quick needle change. Frequency 60-4000 cps.; Type B-2 Cartridge, 2\fomega oz. needle pressure 7" mtg. center; 13" lead. Smooth black enamel finish. FOR ALL 10" and 12" records. No. 32A209; NET \$8.17

ASTATIC MODEL AB-8



Wide range, undistorted reproduc-tion of all 10" and 12" records. Frequency, 50-4000 cps.; 234 oz. for ALL CRYSTAL PICK-UPS;
Bass, Med., HiFl, and "Out".
Easy to install.
1-hole mtg. 2" dia. x ¾" thick,
Chrome and Black finish.
No. 14A565; E-4P; NET \$1.94

New Shure "Glider"

New Shure "Glider"

NEW LEVER - DRIVEN CARTRIDGE with needle force of only I to 1½ oz.; light weight curved arm of low mass and NO springs or counter weights.

ALUMINUM CASED CRYSTAL weighs only .43 oz.! FINER REPRODUCTION IN WIDE RANGE for all lateral cut recordings at speeds of either 33½ or 78 RPM. Output voltage 1.6 volts at 1,000 cps. at groove amplitude of .84 mil. Designed for EITHER semi-permanent or permanent stylus; adjustment screw prevents damage to stylus due to accidentally touching turntable. Complete with Arm Rest and 14" leads. Single hole mounting! Response, 60-6000 cps.

810A868

"SHURE" GLIDER PICK-UP. For ALL Records up to 12".

Net \$3.59

Red Hot BARGAIN! -Nationally Known Make **Brand New-**



(While stock on Stock No. 20A656 hand laste)

Brand New—Nationally Known Make
CRYSTAL PHONO PICK-UP
with New "Astatic" L40A Cartridge
Exactly the SAME UNIT USED
IN THOUSANDS OF POST-WAR
RECORD PLAYERS! L-40A
CARTRIDGE is LOW PRESSURE—1½ oz; output is 0.6 volt
with frequency cut-off of 4500
cps.; Single bole mount on 7"
center. Die cast arm, 13" leads.
B-A BARGAIN PHONO PICK-UP.

...EACH \$2.95 FOR \$27.95

Selected Automatic Record Changers - Record Players



Garrard "RC60" De Luxe Automatic Mixer-Changer

Plays BOTH 10"
AND 12" BECORDS
— INTERMIXED
IN ANY SEQUENCE,
absolutely NO ADJUSTMENTS Decessary — just a flick of a switch starts R-60 and it stops automatically after

automatically after last record 1 ast record 2 ast record



MODEL RC-60. NET.... QUI-oU

Super-Value Record Changer

NEW, POST-WAR 2-POST CHANGER

—no changing of blade position for
different size records! Plays TEN 12"
or TWELVE 10" records automatically
but not intermixed. A "LOW COST"
CHANGER THAT JUST CAN'T BE
BEAT. Has non-resonant tone arm
with low pressure crystal pick - up
cartridge. SINGLE CONTROL—"Automatic", "Mannal" and "On-Off" positions are controlled by a single knob—
merely press this knob to refect any

tions are controlled by a single knobmerely press this knob to reject any
record, Dependable motor with 24"
AC leads; 18" shielded pick-up leads.
Finish is new Autum Gold stipple
space necessary due to curvature of changer base on right and left hand
sides is 15½" wide x 14½" deep. Space required ABOVE top of cabinet
is 4%"; BELOW motor board, 3 inches. Furnished complete with
mounting instructions and template.

NET
Stock No. 30443. "SUPER VALUE" CHANGER....EACH
\$22.05

"UTAH" Complete Automatic Electric Phonograph

"UTAH" Comp A COMPLETE RECORD AMPLI-FIFE AND AUTO-MATIC CHANGER UNIT; plays TEN 12" or TWELVE 10" records with no attention — repeats last record on "stack" until turned off.

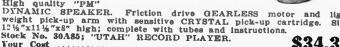
Expertly engineered and BUILT BY International DE-TROLA Corpora-tion for its "UTAH"

tion for its "UTAM Division, WOOD CABINET, sturdily built, assures EXCELLENT TONE QUALITY.

3 - TUBE AMPLIFIER, including rectifier, with individual Tone and Volume controls.

Volume controls. High quality "PM" DYNAMIC SPEAKE

Your Cost





"Masco" Model MRC-5 Portable Record Player

COMPLETE AUTOMATIC RECORD CHANGER—POWERFUL 3-TUBE, 2½-WATT AMPLIFIER, and 5-INCH "Alnico-V" PM DYNAMIC SPEAKEE, A REALLY PORTABLE MUSICAL INSTRUMENT—plays TWELVE 10-inch, or TEN 12-inch records, AUTOMATICALLY through its own amplifier and speaker system. Record changer is latest 2-POST type, eliminates record spoilage, unfalling in action! CONTROL PANEL has separate TONE and VOLUME controls, Self-starting, high quality phono motor—motor controls have "Reject", "Automatic" and "Manual" positions in addition to 10" and 12" settings. Rugged wood carrying case of

controls have "Reject", "Automatic" and "Manual" positions in addition to 10" and 12" settings. Rugged wood carrying case of correct acoustic design allows machine to be played with lid closed, has 2-TONE leather-covering. Size, 19%"x4%"x6"; for operation on 115 volt, 60 cycle With Tubes and instructions. Wt. 24 lbs. NET \$49.50

Webster "56" Single Post Floating Spindle AUTOMATIC **RECORD** CHANGER

SIMPLIFIED DE-SIGN. Plays standard 10" or 12" discs with a "change" cycle of "change" cycle of SECONDS! NO NOISE! Assures MAXIMUM PROTEC-



MAXIMUM PROTECTION to valuable records warped or chipped edge records! AUTOmatically shuts off after Last Record has Been
PLAYED! Plays TEN 12" or TWELVE 10" records, Manually plays
"home recordings" or "inside-out" records up to 12". CUSHIONMOUNTED, 4-POLE HEAVY DUTY MOTOR "Astatic" MLP-1 pick-up,
feather light needle pressure. Handy PUSH BUTTON CONTROL 14inch square mounting base, 2" over-ail height, 6½" above and 2½"
below mounting base—ALL INSTALLATION DONE FROM TOP—fast—
easy! Finish, brown hammerloid with brown trim; with template, 36"
AC 115 volt motor lead and AC plug.

No. 39A41. "WEBSTER-CHICAGO" MODEL 56. Your Cost \$26.66

UTAH MODEL 550C

AUTOMATIC RECORD CHANG-ER — changes TWELVE 10-INOH records, quietly and sure-ty, in change cycle of 8 to 7 seconds! NEVER REQUIRES OIL OR GREASE—all bearings permanently lubricated at fac-tory. TONE ARM is light weight and is adjustable in



tory. TONE ARM is light weight and is adjustable in height for varieus types of needles. Needle pressure, 1% or. FREQUENCY range, 50-5000 cycles. "U-L" approved CONSTANT SPEED MOTOR with NEW GEARLESS DIRECT DRIVE to ball-bearing, 9-inch turntable. CHANGER MECHANISM DRIVE is by means of spiral steel spring-type belt—no stretch, and no trouble as with old style rubber belts. Even speed of turntable at ALL times eliminates objectionable "WOW"! Direct, rim drive has automatic tension spring for positive, even transfer of power to turntable—speed is held to within CLOSE LIMITS of 78 RPM. over a reasonably wide voltage variation. Steel mounting base is in neutral Beige baked Hammerlin enamel, SIZE 16% "x12%". Clearance below motor board is 3"; above mounting beard, 5%", including full stack of records and shock mountings; minimum space required inside cabinet is 12% "x13%". Small size and simple, fool-proof construction make UTAH MODEL 5500 ideal for all replacements of original installations, or for new radio-phone and P.A. use. Complete with template and all instructions. Wt. 12 lbs.

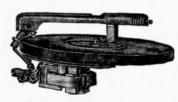
Stock No. 30A72; "UTAH" MODEL 550-C....... COST

New! "Ballentine" Quiet Phono-Motor



Quiet Phono-Motor
The Identical meter NOW
USED BY THE THOUSANDS
in Record Players produced by
Manufacturers who are PARTIGULAR about the QUALITY
and ruggedness of the phonomotor used in their products!
This fine phono-drive has plenty of power for ANY record player, is
SUPER-QUIET in operation. MOTOR is for 110 V. 60 cy. AC; DOUBLE
fan cooled; sealed bearings. QUIET FRICTION DRIVE 9-inch turntable. 3-point suspension, RUBBER CUSHION MOUNTED on triangular
mounting plate of heavy steel, Mounts in 6" space; depth 24". 22"
AC motor leads. Wt. 3½ ibs.
Stock No. 5A144; "BALLENTINE" Phono Motor, Your Cost \$4.38

Red Hot Bargain RECORD PLAYER KIT



"BALLENTINE" QUIET DRIVE PHONO MOTOR AND "ASTA-TIC" CL-407 FEATHERWEIGHT PICK-UP with low pressure 14 oz. Crystal cartridge. Pick - up arm is supplied with SAFETY REST. Read features of "Ballentine" motor above — NOTE THE COMBINATION PRICE, and see WHAT A BARGAIN THIS IS! Combination MOTOR and see WHAT WHAT A BARGAIN Combination MOTOR and PICK-UP, \$6.95

5-Lots \$6.70 EACH

WIRELESS PHONO OSCILLATOR

SMALL IN SIZE — EASY TO INSTALL—
Makes a "Wireless" Record Piager when used in conjunction with ANY type of single or automatic record changer! Operates by tuning radio set to any "dead" spot on dial between 800 and 1700kc to enable set to receive STRONG SIGNAL from 24" antenna of this oscillator. CONFORMS TO F.C.C. REGULATIONS! Size only 5"x2"x 34". COMPLETE with type 117L7/M7GT tube and instructions. 110v. AC.-DC. "WIRELESS" PHONO OSCILLATOR; WITH TUBE. \$5.95



Quality CABINETS FOR PHONO MOTORS—RECORD CHANGERS



PORTABLE CABINET FOR AUTOMATIC RECORD CHANGERS (Left above). Sturdy construction of glued ply-wood covered with durable leatherette—depth below blank motor board is 4%"; inside height of lid is 5%"—sufficient clearance for MOST standard makes of RECORD CHANGERS. Motor mounting panel is 15%"x15%". Over-all outside dimensions are 16½" square x 11%" high. Equipped with solid carrying handle and double safety catches. Motor board is blank with AC cord cut-outs. PORTABLE CABINET. ..<u>net</u> ea. \$10.43 No. 30A90

wide, 1752" long, 7%" deep.

Block No. 30A131; DE LUXE PORTABLE CASE; NET EA. \$12.75



NEW! 12-INCH WALL BAFTLE—WELDED STEEL! Correctly designed for ALL Public Address applications. Solid WELDED construction throughout — no edges or loose grille to rattle, Louvre type grille is part of baffle body—provides HIGH FIDELITY reproduction with GOOD 12" speaker. Built-in CELO-TEX baffle, Brown and Tan or Gray wrinkle enamel. No. 30A134; BROWN & TAN BAFFLE Ch. \$4.72 \$4.73 No. 30A135; GRAY BAFFLE



EVEREADY Batteries

NEW! "Mini-Max" A-B PACK; No. 758, 11/2-90 Volt; standard 3-prong plug, SIZE 10% "x4½ "x7"; wt. 15 lbs. List \$7,50.

NEW! "Mini-Max" PORTABLE A-B PACK:—7½ and 9-volt "A"; 90-volt "B". FOR "ZENITH" and many other portable sets. SIZE, 10½"x 21A2R: No. 254 "A+R" PACK, Lint 25.45; NET EA

	0, 210.	101 25-	4.7 B.	AC ILI	DID! A	3.70, 17831	Mark San a	Ψ,	
"Mini-	Max" an	d Stand	ard "	B" BA	TTER	IES FOR	PORTA	BLE	SETS
9tock	Fact.		D	imensi	ons	List	Net		
No.	No.	VOLTS	L	W	H	Each	Ea.	Qty.	@ Ea.
21A17	455	45	2 %"	1 "	3 1/4 "	\$1.75	\$1,32	6	\$1.21
21A18	467	6712	2 7/8"	1%"	3 1/4 "	2.45	1.84	6	1.68
21A19	482	45	3 %"	1%"	5 1/2 "	2.15	1.62	6	1,47
21A21	738	4.5	3 "	3 48"	4 % "	3.15	2,38	6	2,17
21A29	487	45	5 1/8"	216"	7 1/4 "	2.50	2.02	10	1.83

		EVEREADY	"C" BAT	TERIES	}			
21A6	768	l Plug-in	1 2234	2	\$1.70	1	1	\$1.17
21 A8	763	Screw Term.	+ -22	13 os.	1.30	.98	5	.89
21A7	771	Plug-in	434	3/4	.75	.56	5	.51
21 A23	773	Scr. Term. & Lead	733	10 oz.	.90	.68	5	.62
21 A9	781	Screw Term.	+-433	3/4	.45	.33	5	.30
21A27	412	End Strips	2212	1 1/3 oz.	.95	l .		.64
		TO TO TO A TO T AT	4. A ff. Th A ft	DOWNSON BY BUILDING				

		FU	WINDDE A	DWITTERING			
Cat. No.	Eveready No.	Volta	Connections	Size Inches LgthWHgt.	Ship Wt. lbs.	List Ea.	Net Ea.
21A10 21A11 21A12 21A13 21A14 21A16 21A16	718 741 742 743 745 746 747	6 11/4 11/4 11/4 11/4 41/2	Plug-in Plug-in Plug-in Plug-in Plug-in Plug-in Plug-in	3+1x2+1x5+1 3+1x2+1x5+1 2+1x2+1x4 3+1x2+1x3+1 10-1x3+1x1+1 3+1x1+1x1+1 10-1x3+1x1+1	31/4 31/4 2 21/4 31/4 11/4 31/4	\$1.70 1.60 .90 1.25 1.70 .75 1.80	\$1.17 1.10 .68 .94 1.28 .56 1.36
	DRY CEL	LS PT		nd LANTERN	BATTE		,

Cat.	Factory	Description	Unit	List	Net	Unit
No.	No.		Pkg.	Each	Each	Pkg.
21A1 21A2 21A3 21A4 21A5	950 935 915 409 No. 6	Large Unit Cell Small Unit Cell Penlight Battery Lantern Battery Ignitor Dry Cell	48 12 12 1 1 12	\$0.10 .10 .075 .70 .49	\$0.08 .08 .06 .47 .35	\$3.06 .76 .59 .47 3.82



TABLE MODEL RECORD PLAYER OR RADIO-PHONO COMBINATION CABINET (Illus, at left above). Gennine WALNUT veneer in pleasing Waterfail design, Sturdy construction with walnut veneer over heavy ply-wood. Speaker grill at left takes 5" or 6" speaker—ample room at right of grill for radio set dial and controls. FITS ANY TYPE OF PHONO MOTOR with ample room for either complete radio set chassis, phono oscillator, or phono record amplifier and speaker. Mounting panel is 15%"x12%". Over-all dimensions, 16"x13%"x10%" deep. COMBINATION PHONO CABINET. \$11.63 Stock No. 30A130; NET EA.

POLISHED VENEER RECORD CHANGER BASE CABINET (Right above). QUICK—LOW COST MOUNTING BASE FOR ANY RECORD CHANGER—heavy plywood construction with highly polished veneer finish. Ample room for a "wireless" phono oscillator in base. Over-all step 171414 "at high

POLISHED VENEER PHONO MOTOR BASE CABINET (Below above), Strong, trim, good looking mounting base for ANY PHONO MOTOR! Ample room for "Wireless" Phono Oscillator in base if wanted. Overall size, 12\%"x10\%"x3\%" high.

Stock No. 30A187; RECORD PLAYER
BASE CABINET; NET EA.

Radio Cabinets for Experimental and Replacement Use







Left above:—Waterfall front, fine looking blank cabinet for radio chassis with 7 to 10 tubes. Reinforced dovetail construction with glued corner braces. INSIDE DIMENSIONS, 13%" long, 6" deep, 7½" high; over-all size, 15%" long, 6%" wide, 8%" high. Shaded WALNUT finish. Stock No. 3A21; LARGE SIZE RADIO CABINET; NET EA.

Center above:—Blank, WALNUT finish radio cabinet for 5 to 6-tube chassis. INSIDE DIMENSIONS, 104" long, 4%" deep, 6%" high; OUT-SIDE, 10%" long, 5%" wide, 7" high.
Stock No. 3A20; MEDIUM SIZE RADIO CABINET;

NET EA.

Right above:—WALNUT finish blank front radio cabinet for 4-tube chassis. INSIDE DIMENSIONS, 8%" long; 3%" deep; 5%" high. OUT-SIDE, 9" long, 4%" wide, 6" high. Stock No. 3A19; SMALL SIZE RADIO CABINET; NET EA. \$2.30







PORTABLE SINGLE SPEAKER-AMPLIFIER CASE (Illus. at LEFT above). Designed for the smaller P.A. or Phono amplifiers and mounting baffle for ONE 10" or 12" speaker. Outside dimensions are, 18%" high, 14%" wide, 9%" deep. Stock No. 30A136; AMPLIFIER-SPEAKER CASE; NET EA. \$11.93

"BOGEN" PORTABLE SPEAKER BAFFLE (Illus, CENTER above).
Strong, %" plywood DUAL 12-INCH SPEAKER BAFFLE, divided diagonally—each section serving as a baffle assuring GOOD TONE QUALITY. Grills protected by strong screen; rattle-proof snap locks; strong leather handle—metal corners and bumper feet. Size, over all, 24" high, 16" wide, 10" deep.
Stock No. 304137; BOGEN MODEL 134X
SPEAKER BAFFLE; NET EA.

\$12.79

"BOGEN" DE LUXE DUAL 12-INCH SPEAKER BAFFLE (Illus. BIGHT shove), COMPLETELY ENCLOSED, designed for HEAVY DUTY SPEAKERS and will contribute considerable to the quality of reproduction of ANY sound system! Acting as "Infinite" baffles, they have a special GRILL VENT above speaker grill to eliminate "boominess" or cavity resonance. Built of heavy %" plywood with reinforced corners, rubber bumper feet, and NON-RATTLE safety catches. 2-TONE leatherette covering. Outside dimensions, closed, 22\%" high, 18" wide, 12\%" deep.

Stock No. 30A138: BOGEN MODEL 140

Stock No. 30A138; BOGEN MODEL 140 SPEAKER BAFFLE; NET EA. **\$18.67**

"PRECISION" HIGH QUALITY TEST INSTRUMENTS

TUBE-BATTERY-SET TESTERS SERIES 954



OHMS PER VOLT:

37 Range Multimeter PLUS Dynamic Mutual Conductance type tube testing of ALL tubes: 1.4 to 120 volt!

TESTS BATTERIES under proper load, BIG 4%" METER!

TUBE TESTS: Automatic Push Button System for dual free point tube terminal selection; eliminates obsolescence! All tubes tested under specific and correct loads and voltages. Varying AC signal applied to control grids, meter in plate circuit. Tests for EACH SECTION of mulplate circuit. Tests for EACH SECTION of multi-element types; provides HOT CATHODE leak-age and shorts tests; Phone jack for NOISE TEST; Tests ballasts and pilot lights. Roller Tube Chart. Micro-Line AC line voltage control. SET ANALYZER FEATURES:-

RANGES of 0-3-12-60-300-600-1200-6000 volts et 20,000 OHMS PER VOLT on DC and 1000 shms per volt on AC.

DC CURRENT RANGES of 0-60-300 Micro Amps., 0-3-30-120-600 M.A.; 0-12 Amperes, RESISTANCE RANGES of 0-6000-600,000 and 60 MEGOHMS, center low ohms scale of 35; all en self contained battery! DECIBEL RANGES of Minus 12 to Plus 70db; OUTPUT RANGES, same as AC volts. ACCURACY is 2% ON DC, 8% on AC. COMPLETE in walnut finished case, 12"x13"x6", with tool compartment, test leads and batteries. and batteries. No. 35Al. Series 954P. Your Cost... \$99.20

920-P SET AND TUBE TESTER

Has ALL the TUBE AND BATTERY TEST-ING FEATURES described above for Series 954 PLUS 33-RANGE AC-DC MULTI-RANGE SET TESTER, SIX AC and DC VOLTAGE RANGES of 0-12-60-300-600-1200-3000 at 1000 ohms per volt. Five DC Current Banges of 0-1.2-12-120-600 MA and 0-12 Amps. Four Besistance Ranges of 0-400-100,000-1 Meg.-10 Meg.; all on self-contained power supply! Six Decibel Banges of --16 to +64db. Six Output Banges same as AC volts. Has BIG 4%" METER, Pilot light, double fused line plug. Portable case 12"x18"x6", complete with batteries and test leads.

No. 35A2. "PRECISION" Series 920-P. Your Cost \$84.22

SERIES 915 TUBE MERCHANDISER



Inspires CUSTOMER CONFIDENCE — will increase TUBE SALES! 9-INCH SQUARE METER ILLUMINATED by chromium reflector.
ROLLER TUBE
CHART directly beneath meter. TESTS
ALL TUBES AND
RATTERIES with BATTERIES BATTERIES with DIRECT READING test on 3-COLOR scals. "ELECTROtest on 3-COLOR
scals. "ELECTRONAMIC" test circuit
insures accurate results. Has ALL features of model 954P
as pertain to tube and

as pertain to tube and battery tests, In heavy steel cabinet, black ripple finish with CHROME TRIM, size 23" high x 16" wide. Bottom depth, 10", tapering to 4" at top. Weight, 37 lbs. No. 35A73; SERIES 915;

SERIES 912-P TUBE AND BATTERY

TESTER



Identical in TUBE and BATTERY testing features to Series 954 described above; does NOT have Multi-Meter functions. ROLLER TUBE CHART; BIG 4%"
ENGLISH READING
METER. Portable METER. Portable case, size 12"x13"x6", with instructions.

No. 35A3. "PRECIS-Series 912-P.

Your Your S61.20



MODEL E-20:—
FOUR TYPES OF SIGNALS, selected at will. Unmodulated RF: 400-cycle modulated RF: 400-cycle Audio Output and EXTERNALLY modulated RF. 400-cycle Sine-Wave Audio Oscillator, independently controlled, provides test signal from zero to over 50 volts. Dual Calibrated RF Attenuators, separately shielded for smooth control of RF signal. Variable modulation control, 0-100%. AVC Substitution System-E-200 supplies its own AVC VOLTAGE, controllable at front of panel from 0-50 volts. "Servicing by Signal Substitution" book, operating instructions. In metal cabinet 101%"x12"x2"; 20 1bs. Stock No. 35A5, "PRECISION." E-200 Signal Generator. Your Cost

"EV-10" V, T, VOLTMETER AND 39-RANGE MULTIMETER

MODEL E-200:



BUPREME ACCURACY—voltage regulated bridge type circuit, Full vision, 7-INCH, 400 microampere rugged meter!
ZERO CENTER SCALES on all ELECTRONIC VOLTS-OHMS RANGES! Independent zero adjustment of both ends of ohms scales, SINGLE "OHMS" SCALE for all SIX ohms ranges! SINGLE MASTER RANGE SELECTOR for zero center volts! Indicates voltage polarity WITHOUT REVERSING LEADS! Shielded CO-AXIAL PROBES, 4 ft. long; OVERLAPPING RANGES for ALL normal, insulation resistance, or cond. tests.

POPULAR "E-200" SIGNAL GENERATOR

POPULAR "E-200" SIGNAL GENERATOR
6 DIRECT READING BANDS; 90%c to 4mc—doubles to
88mc! IDEAL FOR ALL NEW AND OLD STYLE RECRIVEES! 0-1000 point VERNIER BALL BEARING DIAL
with twin hairline indicators; 6 FEET OF EASY-TO-BEAD
8CALES! SILVER PLATED CONTACT, ceramic spaced,
band switch. ZERO DRIFT, SILVER MICA LOADING
CONDENSERS. HAND CALIBRATED TO BETTER THAN
1% ACCURACY! Famous "Precision" UNIT OSCILLATOR
construction. Check these OUTSTANDING FRATUBES OF
MODEL E-280:—

SERIES RF-10 VACUUM TUBE PROBE

An accessory item to Series EV-10, the RF-10 provides direct measurement of super-sonic, R.F. and U.H.F. voltages. Consists of flexible, rubber covered, shielded cable connecting directly to EV-10 panel; bakelite probe tube housing with attached low capacity probing the and type 3002 tube. All operating voltages applied through connecting cable. Complete with weight 3 lbs.



YOUR \$13.31 Stock No. 35A74; RF-10 PROBE, Complete Series 856 Super-Sensitive Multi-Tester

44 Ranges; 20,000-1000 Ohms Per V. Sensitivity SERIES \$56 LABORATORY TESTER has adequate circuit son



SERIES 832S 81 Range AC, DC MULTIMETER

DC 1000 O.P.V. 0-6-80-160 - 300 - 600-1200 Volts.

AC 500 O.P.V. 12-60-300-600-1200-2400 volts.

AC Output, as for AC volts. DC Current: 0-1.2-12-120-600 M. A. DC Resistance: 0-5000-500,000; Meg. with exter-

nal batt. Db: -10 to Accuracy 2% ou DC; 3% on AC. 3-Inch Meter.

Only 7"x41/4"x3".

Complete with Batteries and Test Leads. "PRECISION" Model 832S

34 Range 6000 Volt AC-DC V.O.MA



4%" SQUARM METER with these RANGES: 0/12/60 / 309/ 600/1200/6090 AC - DC and output volts at 1000 ohms per volt! High voltage circuits pro-tected, DO CURRENT: circults 0 / 1.2/12/60/ 300/1200 MA.; 0 / 12 Amp. B E S I S T-

\$64.15

ANCE: 0/400/100,000 Ohms 1/10 Megohms. Provision for all batteries Inside case. DECIBELS: Minus 12 to plus 70 in 6 ranges. RANGE SELECTOR has double wiping silver plated contacts with ceramic spacers between sec-SELECTOR has double wiping saver contacts with ceramic spacers between tions. In WALNUT finished case with movable cover, size 9"x10"x6"; wt. 8 lbs. batteries and test leads.

Stock No. 35A8, "PRECISION" with

YOUR \$23.97 Stock No. 35A8. "PRECISION" \$36.87 Model 844-P. YOUR COST...... \$36.87

Modern ELECTRONIC TEST INSTRUMENTS

"HICKOK" MODEL 534-P

TUBE AND SET TESTER

DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER!
Combined with
20,000 OHMS-PER-VOLT

SET TESTER!

POST-WAR MODEL 534 IS THE POST-WAR MODEL 534 IS THE ANSWER to YOUR need for the VERY BEST tube and set tester money can buy! NOTE THESE FEATURES: — ROLLER CHART TUBE TESTER tests ALL tubes by true DYNAMIC MUTUAL CONDUCTANCE METHOD—exactly the method used by Tube Manufacturers!



true DYNAMIC MUTUAL CONDUCTANCE METHOD—exactly the method used by Tube Manufacturers! TESTS ALL SIZES AND TYPES OF TUBES including new miniatures, Acorns, etc. Has filament voltages to 117 volts. Combination indicating meter shows test results in MICRO-Olims and standard "Replace", "Doubtful" and "Good" on 4½-inch scale. GAS TEST provision eliminates "gassy" tubes which ruin AVC and IF stages. Sensitive NOISE TEST detects RF disturbances. LOCATES SHORTS—hot or cold. TESTS DIODES separately with LOW VOLTAGE to prevent paralysis of elements. LINE VOLTAGE INDICATOR. DUAL RECTIFIERS are used to energize BOTH plates and grids of tubes under test. Makes accurate tests of GRID CONTROLLED RECTIFIER TUBES. SPECIAL FEATURE allows continuity checks, plus a wide range of voltage checks. OBSOLESCENSE ELIMINATED BY EXCLUSIVE NEW "HICKOK" DESIGN—simple—easy to operate; AND IT DOES REJECT ALL THE BAD TUBES! SET TESTING FUNCTIONS;—20,000 Olims-PER-VOLT on D.C. measurements of 0-20-200-500-1000-5000 voltas D.C., and at 1000 ohms per volt on the same ranges for A.C. VOLTS! RE-BISTANCE from 0.1 to 100 MEG. on 3 overlapping ranges WITHOUT EXTERNAL BATTERY! CAPACITANCE from 0.0001 to 100 MFD in overlapping ranges; checks LEAKAGE of electrolytic and paper condensers! INDUCTANCE to 100 HENRIES, with or without D.C. component; with higher ranges by simple calculations. CHECKS HUM IN ANY STAGE OF RECEIVERS. MODEL 534 USES 4 TUBES, 1/83; 1/573GT; 2/6H6's!

BATIN CHROME PANEL in black imitation leather covered HARD WOOD portable case, size 17"x18"x8½"; wt. 33 lbs. 20-4 9-2 E-9

WOOD portable case, size 17"x18"x8 \(\frac{1}{2}" \); wt. 33 lbs.

Stock No. 35A33. "HICKOK" MODEL 534. YOUR COST \$135.53

MODEL 532-P DYNAMIC MUTUAL CONDUCTANCE PORTABLE TUBE MODEL 532-P DYNAMIC MUTUAL CONDUCTANCE PORTABLE TUBE TESTER. Identical to Model 534 described above as to TUBE TESTING functions—TESTS ALL RECEIVING TUBES including Octal, Loktal, Miniature, Ballast, Magic Eye, Acorn types—provision made for NEW TYPES—Model 532-P won't become obsolete for a long time to come! Has Line Voltage test, DUAL INDICATING METER with 4½" scale calibrated in MicRO-OHMS and standard English reading markings—as easy to use as a dial telephone! Appearance is same as Model 534-P illustrated above EXCEPT does not have jacks in upper left hand of panel for multimeter functions. Legible, modern SATIN CHROME PANEL in carrying case, size 17"x18"x18"; wt. 25 lbs. Stock No. 35A34. "HICKOK" MODEL 532-P.\$118.78

MODEL 532-C DYNAMIC MUTUAL CONDUCTANCE COUNTER TUBE TESTER. Here is the tube tester that will SELL PLENTY OF TUBES—and test EVERY TUBE ABSOLUTELY CORRECTLY. Has same tube test functions as Models 534-P and 532-P described above and panel lay-out is identical to illustration for Model 534-P except does not have multimeter Jacks, or functions. SLOPING PANEL of SATIN CHROME in beautiful rounded corner cabinet.

Stock No. 35A35. "HICKOK" MODEL 532-C. YOUR COST \$118.78

"HICKOK" MODEL 203 ELECTRONIC MULTIMETER



4-TUBE ELECTRON-IC universal test in-strument—PROVIDES BOTH A.C. AND D.C. voltage measurements with extremely HIGH INPUT IMPEDANCE! INPUT IMPEDANCE!
BIG 5-INCH METER
has 17 INCHES OF
SCALE LENGTH.
Electronic DC Ranges
O-2.5-10-50-250-1,000
D.C. VOLTS with input impedance of 14
MEGOHMS! Electronic A.C. Ranges
O-0.5-2.5-10-50-2501,000 A.C. VOLTS
with input impedance
of 2.5 MEGOII MS!
ELECTRONIC MEof 2.5 M E G M E -ELECTRONIC M E -ELEC-

TER PROTECTION against possible damage by overloads. ELECTRONIC OHMMETER for resistance measurements FROM 1/10th OHM TO 1,000 MEGOHMS! Conventional MILLIAMPERE METER measures to 1-AMPERE IN 5 RANGES. Six-position RANGE CONTROL and four-position SELECTOR SWITCH have clean, clear-cut numerals for easy reading. Zero Balance Control adjusts electronic circuits to meter zero; Ohms Adjust Control for Ohmmeter balance. CABLE SET includes shielded cable for AC volts; shielded cable for DC volts with 6 MEGOHM ISOLATING RESISTOR in test probe; TWO unshielded cables for use in ohmmeter and milliampere measurements. VOLTAGE REGULATED POWER SUPPLY for operation on 110 volts, 60 cycles at FULL ACCURACY with wide line fluctuation. In baked crackle metal cabinet with SATIN CHROME panel, size 6"x8%"x114"; wt. 14 lbs. Stock No. "HICKOK" MODEL 203

TRONIC MELECTRONIC** MEL

"HICKOK" MODEL 288-X

Wide Range SIGNAL GENERATOR



Wide Range SIGNAL GENERATOR
7 R. F. RANGES 100 KC to 110 MC
A NEW AND FINER UNIVERSAL, CRYSTAL CONTROLLED instrument with FREQUENCY MODULATION meeting ALL REQUIREMENTS for servicing Frequency or
Anaplitude modulated receivers and Television equipment! FUNDAMENTAL OUTPUTS: FREQ. MODULATED RF 750kc
sweep, of 100kc to 133mc.; on 150kc sweep
from 1000kc to 133mc. Internally modulated
at 400 cycles or can be modulated
for external source from 10 to 15,000
cycles. Frequency modulated output at 30kc sweep, 100kc to 110mc
for visual alignment of amplitude modulated receivers. Amplitude
Modulated 400 cycle RF output from 100kc to 110mc may be externally modulated from 50-15,000 cycles. Unmodulated RF output of
100kc to 110mc. CRYSTAL CONTROLLED OUTPUTS—ACCURACY OF
01%—100kc-15,000kc; 1,000kc-100mc, MODULATED AT 400 CYCLES;
and 2 identical bands immodulated at same frequencies as above! A.F.
OUTPUTS: 100-10,000 cycle variable and 400 cycle fixed with all ranges
controlled by output attenuator. Synchronized sweep voltage for
oscillograph use with RF voltage of OVER 1-VOLT available below
3mc! 7 FUNDAMENTAL, continuously variable R.F. RANGES OF:
100-300-850kc; 850kc-26mc; 2.6-8-24-60-110mc; with overall ACCURACY
OF BETTER THAN ½½! TWO NEGATIVE RESISTANCE AF OSCILLATORS—400 cycle fixed, and 100-10,000 cycle variable with output
voltage continuously variable from zero to 1 volt; accuracy of 5%;
6-RANGE DB,VOLTMETER with ranges of Minus 10 to Plus 38db in
3 Ranges; and ranges of 0-3.5-20-140 volts: Supplied with 6 TUBES,
and socket for VR150-30 voltage regulator if voltage regulation is desired to combat line voltage fluctuation. For use on 110 volt, 50-65
cycle AC current, COMPLETE WITH CRYSTAL, tubes, 27-page instruction book, and set of cables. Size 13'x13''x''; wt. 23 lbs.
Stock No. "HICKOK" MODEL 288X
Your
STALL TORS—400 output and output meter, the 277X will

MODEL 277X SIGNAL GENERATOR

For those who do not require a DB and output meter, the 277X will "fill the bill". HAS ALL FEATURES OF MODEL 288X described above, INCLUDING CRYSTAL CONTROL. Appearance and size same as Model 288X except band scale dial is centered at top of instrument panel. Complete with instructions,

Stock No. 35A66; "HICKOK" MODEL 277X; Your Cost.. \$125.95

MODEL 277 SIGNAL GENERATOR

This fine Signal Generator HAS ALL THE FEATURES of the 288X described in detail at top of this column EXCEPT it DOES NOT have Crystal Control, or the Output Meter. Crystal socket is installed but no crystal furnished. Stock No. 35A67; "HICKOK" MODEL 277; Your Cost. \$116.13

"HICKOK" MODEL 156 TRACEOMETER

"HICKOK" MODEL 156

FIVE PRECISION METERS — PLUS
BUILT-IN MONITOR SPEAKER ALLOWS 7 SIMULTANEOUS MEASUREMENTS AND SIGNAL TRACING
THOUGH ENTIRE RECEIVER WITHOUT INTERFERING WITH NORMAL
OPERATION! THE MOST ADVANCED
AND COMPLETE INSTRUMENT FOR
SIGNAL TRACING AND RAPID SERVICING OF "FM"; "AM"; AND TELEVISION
RECEIVERS! Built-in, voltage regulated
power supply; I1 tubes with voltage regulator!
Vacuum Tube Voltreter in the supply of the supply





"HICKOK" 305 OSCILLOGRAPH "HICKOK" 305 OSCILLOGRAPH
Specifically designed for "FM"; "AM";
and TELEVISION servicing — provides
COMPLETE VISUAL ANALYSIS, stage
by stage from antenna post to speaker!
The only 3-INCH 'SCOPE WITH SELFCONTAINED MIXER CIRCUIT — allows
use of ANY R.F. OSCILLATOR—modulating its output within its frequency
ranges! Has self-contained Wide and
Nurrow band F.M. oscillator; Demodulator, Video Amplifiers; Signal Tracer;
and Visual A.C. V.T.V.M. 11 tubes, 11"x
13"x15\%"; wt. 55 lbs.
Stock No. "HICKOK" Your \$\Phi 4 A \Phi \Phi \Phi

Stock No. "HICKOK" Your \$\Phi 4 A \Phi \Phi \Phi 13"x15'4"; wt. 55 lbs. Stock No. "HICKOK" Your \$142.59 35A40 Model 305. Cost \$142.59

"Supreme" MODERN TEST INSTRUMENTS

Model 561 COMBINATION AF-RF SIGNAL GENERATOR



FOUR INDISPENSABLE HIGHEST QUAL-ITY INSTRUMENTS IN ONE!

- *-5-BAND R.F. OSCILLATOR; 65ke to 20me. -AUDIO FREQUENCY GENERATOR; 15-
- ELECTRONIC FREQUENCY MODULA-
- -CARRIER and MODULATION MONITOR. -ALL FUNCTIONS PUSH BUTTON OP-ERATED!

AF and RF GENERATORS MAY BE USED TOGETHER or separately as desired—pro-vide ANV type of signal required for testing

and alignment of radio receivers or other electronic equipment. Elecand alignment of radio receivers or other sectronic equipment, Electronic tronic Frequency Modulator produces double image pattern with automatic synchronization; has TWO VACUUM TUBE VOLTMETERS to monitor RF voltage and percentage of modulation: METERED RF OUTPUT registered from 0 to 89% modulation—OSCILLOSCOPES will be a "must" in future radio servicing; MODEL 546 "Supreme" 'Scope, or other GOOD 'Scope is ALL YOU NEED with this fine instrument for a complete servicing levelors. a complete servicing laboratory

a complete servicing laboratory:

ADDITIONAL FEATURES OF MODEL 561: RF GENERATOR specially designed to insure high stability and good wave form; FIVE RF BANDS ON ONLY TWO SCALES! Last band covers to 60mc on harmonics. Calibration accuracy LESS than ½ of 1% through use of adjustable iron core RF coils and air trimmers. USE OF SEPARATE TUBE AS BUFFER AMPLIFIER provides smooth carrier control and linear modulation. Fully shielded output attenuator for signal control of ½/100,000 microvoits. Audio frequency generator produces excellent wave from with LESS than 5% harmonic content; frequency response is virtually FLAT 30 to 10.000 cycles and down 2db at 15.000 cycles. 150 Milliwatts power output with open circuit voltage of 25 volts. COMPLETE with all cables, tubes and instructions. OAK CABINET is 12"x15%"x8%"; wt. 30 lbs.

No. 35A12. "SUPREME" MODEL 561. YOUR COST... \$133.87

Model 562 "AUDOLYZER"

Complete LOW COST DYNAMIC SIGNAL TRACER — VACUUM TUBE VOLT-METER! Consists of a high gain, 5 BAND tuned amplifier - with demodulator, and aneaker: PLUS a 7-range Vacuum Tube tuned amplifier — with demodulator, and speaker: PLUS a 7-range Vacuum Tube Voltmeter, ranges 0/1/8/10/30/100/300/-1000 DC volts with input impedance of 15 Megohins! Center zero scale eliminates shifting test leads for polarity changes. EASY TO OPERATE—Audolyzer



changes. EASY TO OPERATE—Audolyzer allows you to HEAR the signal as it passes through the receiver—no signal means a dead stage, Indicates HUM or DISTORTION, checks SIGNAL QUALITY. Tells the frequency to which ANY receiver circuit is tuned—checks GAIN measurements—checks A.V.C. and A.F.C. circuits. A really practical, TIME-SAVING instrument. In oak case, 12"x15"/2"x10", Wt., 30 lbs.

Stock No. 35A16, MODEL 562 "AUI/OLYZER". Your Cost \$124.46

MODEL 546-A 3-INCH OSCILLOSCOPE

PROVEN BY FOUR TEARS OF THE TOUGHEST SERVICE in the hands of Engineers, Laboratories, and factories—IDEAL COMPANION INSTRU-MENT TO MODEL 561 shown above for a COM-PLETE, MODERN VISUAL SERVICING LAB-ORATORY—soon to be so necessary for successfully servicing new sets. Provides speedy IF align-



fully servicing new sets. Provides speedly IF alignment, RF peaking, hum location, and checking AVC and AFC circuits! ALL CONTROLS ON FRONT PANEL including special terminals for direct connection to deflecting plates! Can be used with or without the specially designed and sensitive linear amplifiers, VERTICAL and HORIZONTAL AMPLIFIERS have high impedance input and wide frequency response. Built-in Linear Sweep Generator provides timing axis 15 to 30,000 cycles. Positive, STABLE SYNCHRONIZATION internal or external. Observations made by use of internal or external sweep—permits observation of voltages and currents which cannot be passed through amplifier; frequencies to 100kc may be inspected with Model 546! In OAK CASE 13½ "x11½ "x7½"; wt. 23 lbs. Complete with all tubes and instructions. Stock No. 35A13. "SUPREME" MODEL 546A, YOUR COST \$87.95

Model 592 Push Button VOLT-OHM-MILLIAMMETER

DOUBLE METER SENSITIVITY - 25,000 and 1,000 OHMS-PER-VOLT ON D. C. ANY meter range or function obtained in a second! Depress ONE button on left side of panel for "function" and ONE button on right side of panel for desired nute on right add of panel for desired range. ONLY ONE PAIR OF PIN JACKS FOR 43 RANGES. Separate heavy duty binding posts for 14 amp. range. LEAK-AGE CHECK of all paper and mica condensers on 50-Meg. resistance range. NO SAFETY SWITCH TO HOLD DOWN ON AC—special circuit minimizes burn-outs; Copper oxide rectifier GUARANTEED, same as any other part. "DB" conversion chart furnished for readings on any line of known impedance.



DC VOLTS: (25,000 or 1,000 Ohms per Volt); 1-31/2-7-35-140-350-700-1400. AC VOLTS: .1-7-35-140-350-700-1400. OHMS: ½-500-5.000-500.000-500.000-5 Meg.-50 Meg. WITH internal batteries; DC CURRENT: 0-7-35-140-250 MA; 0-14 Amps. DECIBELS: —0 to +46. OUTPUT: 0-7-35-140-250 MA; 0-10 CONDENSER EFQUIRED.

Stock No. 35A15; "SUPREME" MODEL 592, Your Cost... \$57.77 AC VOLTS:

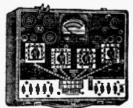
MODEL 576 SIGNAL GENERATOR



A COMPLETELY NEW INSTRUMENT—THE UI.-TIMATE IN SIMPLICITY of operation! 5-BANDS. TIMATE IN SIMPLICITY of operation! 5-BANDS.
2-DIAL SCALES on ILLUMINATED HAIR-LINE.
DIAL! Double calibration for ACCURACY, DUAL
TUNING RATIO for speed of operation! ELECTRON COUPLED CIRCUIT designed and built for
MAXIMUM frequency stability, protected against
shifts via line voltage, temperature, aging and
humidity, Continnously variable FOUR STEP ladder multiplier—double shielded throughout. R. F.
BANGES of 65-205kc; 650-2050kc; 2050-6500kc; 6.526.5mc; harmonics to 32mc! R.F. CARRIER 50%
modulated at 400 cycles, may be cut off for unmodulated at signal, 400 cycle A.F. with continuously
variable voltage output min. to max. Jack provided for external audio
modulation, Heavy steel gray wrinkle case 9½x8½x7%"; wt. 15 lbs.
Complete.

Complete. Stock No. 25A14; "SUPREME" MODEL 576; Your Cost.... \$67.57

Model 599-A Tube and Set Tester



*TESTS ALL BECEIVING TYPE TUBES,
*TESTS ALL PORTABLE SET BATTERIES. *TESTS SETS—27 Multimoter Ranges *TESTS ALL PORTABLE SET BATTERIES *ROLLER TUBE CHART.
*BIG 3-INCH ENGLISH READING METER.

Accuracy-All tubes tested at correct loads.

Accuracy—All tubes tested at correct loads. Neon lamp visual filament continuity. Neon leave tubes. Checks ballast tubes and pilot lamps. Protection from Obsolectence by patented Return Circuit. Head Phone Noise Tests. Battery condition indicated on English reading "Replace-Good" scals. Brand Grared Roller Tube Chart setting for all tubes. 20 set testing ranges and functions: 0.2 to 1600 D. C. Volta in 5 carefully selected ranges: 0/6/15/150/600/150/0 0.2 volts first scale division to cover all potentials normally encountered in radio service. D. C. Mits 0/6/60/600; 0.2 M. A. First scale divisions, Output Volts 0.2 to 600. No button to hold down—no external condenser necesservice. D. C. Mits 0/6/60/600; 0.2 M. A. First scale divisions, Output Volts 0.2 to 600. No button to hold down—no external condenser necessary, Resistance 0.1 Ohm to 28 Msgohms in 4 ranges: 0/200/20,000/2 meg./20 meg. with 3.5 ohms center scale. Leakuge tests of paper and electrolytic condensers. English reading 3" square meter. Ribbed Black High-lighted Panel housed in smart laggage type carrying case with removable lid. Size 11\(\frac{1}{6}\times 83\) "x' "x' 11 lbs. Stock No. 35A10. "SUPREME" MODEL 599-A. Your Cost.. \$61.25

MODEL 589-A ROLLER CHART TUBE TESTER

Identical in size and appearance to Model 599-A described above except DOES NOT HAVE SET TESTING FUNCTIONS. Tests all types of receiving tubes and batteries in accordance with description of these functions for Model 599-A above.

Stock No. 35A11. "SUPREME" MODEL 589-A. Your Cost.. \$47.97

Model 504-B TUBE-BATTERY and SET TESTER

Mode! 504-B TUBE-BATTERY
The very newest version of radio's finest
complete portable laboratory. TESTS ALL
TUBES, including newest Bantams and
Miniatures at correct anode voltages and
rated loads, with provision for NOISE TEST.
GOOD-BAD BATTERY TEST, Model 504A
has in-built properly rated loads for festing
all standard "A" and "B" batteries.
CONDENSER LEAKAGE TESTS, for high
voltage filters, and low voltage high capacity by-pass units—ALL at their correct
working voltages.

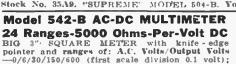
working voltages.

39-RANGE VOLT-OHM-MILLIAMETER 0.1 to 2.500 volts D. C., 7 ranges. 0.1 to 1,000 volts A. C., 5 ranges. 7 DIRECT CURRENT RANGES of 10 micro

7 DIRECT CURRENT RANGES of a micro amperes to 10 amperes, 0.1 to 1.000 OUTPUT VOLTS, no external condenser necessary.

0.1 TO 20 MEGOHMS RESISTANCE RANGES, in 5 overlapping ranges with LOW OHMS CENTER SCALE OF 3.5 OHMS! SPEEDWAY OPERATION—used for BOTH tube testing and multimeter ranges. ONE PAIR OF PIN JACKS for ALL ranges. PUSH BUTTON SELECTORS require only one button in left hand row and one in right hand row to bring ANY RANGE OR FUNCTION into use. QUALITY CONSTRUCTION in the control of the c to bring ANY RANGE OR FUNCTION into use. QUALITY CONSTRUCTION includes 2% accuracy on D. C. and 3% on A. C.; heat treated and aged ceramic resistors for all voltmeter functions; wire wound resistors for all current measuring ranges; SiLVER PLATED PUSH BUTTON CONTACTS. Size, 14% "x12% "x5%"; wt. 20 lbs. In polished OAK removable hinged lid carrying case.

Stock No. 35A9, "SUPREME" MODEL, 504-B. Your Cost... \$87.71



ALL PRICES in this catalog are subject to change to on date of shipment in accordance with OPA regulations, to those in effect



New ELECTRONIC TEST INSTRUMENTS

POPULAR McMURDO SILVER INSTRUMENTS Model 900 "VOMAX"



A TRUE Vacuum Tube Voltmeter in EVERY voltage, resistance, db func-tion! Complete VISUAL DYNAMIC signal tracing from 20 cycles to over 100 mc by withdrawable r.f. probe. "VOMAX" STABILIZED V.T.V.M.

signal tracing from 20 cycles to over 100 mc by withdrawable r.f. probe. "VOMAX" STABILIZED V.TV.M. CIRCUIT eliminates errors by grid and gas current effects by a NEW INVENTION—its DC input resistance may be made as high as desired—is 56 and 126 megohms for different voltage ranges. Balanced circuits of three dual tubes wipe out usual tube and voltage variations. Big 4%"-INCH METER covers 51 RANGES on 5 color-differentiated scales! DC VOLTS: 3/12/30/120/300/1200 at 51 megohms input resistance. DC VOLTS: 7.5/30/75/300/750/3000 at 126 megohms input resistance, DC VOLTS: 7.5/30/75/300/750/3000 at 126 megohms input resistance, DC VOLTS: 3/12/30/120/300/1200 with EFFECTIVE circuit loading of 6.6 megohms; 8 mfd. 6 RESISTANCE RANGES—0.2 through 2000 Megohms! 6 D.C. CURRENT RANGES—1.2 M. A. through 12 Amperes. DECIBEL ACCURACY, MINUS 10 through PLUS 50 db (0 db to 1 mw in 600 ohms), in 3 RANGES. ABSOLUTELY STABLE: 1 ZERO ADJUSTMENT SETS ALL RANGES—no probe shorting to get a meating-less zero which shifts the moment probes are separated. Honest, factual accuracy—plus or minus 3% on D.C.; 5% on A.C.; 20 ohms through 100 megacycles!—plus or minus 2% of full scale, 1% of indicated resistance value. Meter is 100% protected against burn-out on Volts/Ohms/db, In steel cabinet with leather handle, 12% "x7%"55"; wt. 11 lbs. Complete with all tubes; 48" test leads and permanently cabled removable r.f. diode probe; full instructions.

Stock No. 35A18; Model 900 "SILVER" VOMAX; Your Cost \$59.85

Model 905 "SPARX"

AURAL-VISUAL DYNAMIC SIGNAL TRACER. A new money and time-TRACER. A new money and time-saving tool—a detector, audio amplifier, and test speaker for EASY dynamic testing of ALL receiver circuits, phono pick-ups; speakers; microphones, etc. Traces, and indicates GAIN OR LOSS of signal by TWO METHODS—"SPARX" speaker AND type 6E5 magic eye tube. Visually indicates presence of grid and plate voltages. "SPARX" tests SIGNAL QUALITY at every point in a radio receiver—is so SENSITIVE it



NAL QUALITY at every point in a radio receiver—is so SENSITIVE it will pick up near-by broadcast stations by merely contacting its prod to loop of small AC-DC sets! "SPARX" consists of a 4-TUBE THREE STAGE, 65db GAIN A.F. AMPLIFIER AND SPEAKER with two 48" cast prods, ONE of which contains NEW RADAR TUBE, isolating capacitor and resistor—loads circuit under test with only 3 mmfd. and .5 megohm—will not disturb usual i.f.; r.f. or a.f. circuits. Panel switches permit 6E5 tube to indicate signal input, superhet osc, or other voltages; or connect amplifier to "SPARX" speaker or output jacks; or connects test speaker directly to output jacks. COMPLETE with tubes, test prods, instructions, size 12\pm\"x7\pm\"x5\"; wt. 11 lbs.; 105/125 volts 50/60 cycle AC. Stock No. 35A62; McMurdo Silver "SPARX"; Your Cost... \$39.90

New "Silver" Model 904 CAPACITANCE-RESISTANCE BRIDGE

DIRECT READING 5-INCH DIAL with 8 100:1 ranges to indicate capacities of 10 mmfd. through 1000 mfd. AND resistance of 10 0HMS through 1000 MEGOHMS — READS LOW CAPACITY TO 4 mmfd. and LOW RESISTANCE to 4 OHM! ACCCURACY of low values is held to plus or minus 3% or better up to 100 meg. Two special HIGH C and to accurately reach 1000 megohms/

100 meg. Two special HIGH C and R ranges have expanding circuits to accurately reach 1000 megohms/mfd. with "open" dial scales for easy reading! INTERNAL D.C. POTENTIAL 0/500 VOLTS measures ALL types of capacitors with CORRECT voltage applied during measurement!—is applicable to electrolytics and to insulation resistance testing! Direct calibrated 0-50% Power Factor Control for .1/1000 mfd, and 0.5% for .001/0.1 mfd, at accuracy of 5%. Electron Ray Tube controlled by 3-position lever switch for bridge balance or into any 0-10 or 0-100 milliameter for direct indication of capacitor leakage. Complete with 3 tubes, 307 test leads, instructions. Size, 12% "x7%" "x5"; wt. 11 lbs. Draws 35 watts on 105/125 volts AC at 50/60 cycles,

Stock No. 35A61; "SILVER" MODEL 904 BRIDGE, Your Cost

\$49.90

COMING! "Silver" 906 AM-FM Signal Generator

COMINGI "Silver" 906 AM-FM Signal Generator

NOW in "the works" and PROMISED for early 1947 delivery! 8

RANGES; 90kc to 170 mc—ALL RANGES ON FUNDAMENTALS; selected by ROTARY TURRET MOUNTED INDUCTORS wound on "Steatite" forms! Wein Bridge 400 cycle R-C oscillator of variable ampliude, may be cut out, used to modulate the signal generator, or to provide FREQUENCY MODULATION at any ontput frequency! DUAL
attenuators—directly METERED OUTPUT variable 0 to 1 volt! Same
size as "Vomax"; wt. 18 lbs. Cpt. with tubes, instructions and 50-ohm
shielded output cable. We will accept your ADVANCE ORDER for
Model 906, when accompasied by remittance, for SHIPMENT when
available, ALL ADVANCE ORDERS WILL BE SHIPPED IN EXACT
ROTATION RECEIVED BY US, and at prices in effect on date of shipment. ment. Stock No. 35A63; "SILVER" MODEL 106; Your Cost \$89.90

New! Du Mont Low Cost 5-INCH 'SCOPE!



ONT LOW COST 5-INCH 'SCOPE!

DU MONT'S NEW TYPE 274 FIVE-INCH OSCHLLOGRAPH provides EVERYTHING YOU

NEED in a GOOD instrument for radio servicing—AT A LOW PRICE! SPECIFICATIONS:
FREQUENCY RANGE: Sine wave response (at
full gain) uniform within plus or minus 29%
from 20 to 50,000 c.p.s., down less than 50%
100,000 c.p.s. 8-inch cathode-ray tube. Linear
time-base, 8 to 30,000 c.p.s. Identical vertical
and horizontal amplifiers—20 to 50,000 c.p.s.
Provision for intensity modulation. INPU'T
IMPEDANCE: Vertical-direct 5 meg. 60 mmf;
amp. 1 meg. 70 mmf; Horizontal-direct 5 meg. amp. 1 meg. 70 mmf; Horizontal-direct 5 meg. 60 mmf; amp. 1 meg. 70 mmf; Horizontal-direct 5 meg. 80 mmf, amp. 5 meg. 30 mmf. DEFLECTION 8ENSITIVITY: Amplifiers at full gain 0.65 r.m.s. volt/in. direct plus or minus r.m.s. volts/in. LINEAR TIME BASE: Variable from

The New POCKETSCOPE

A POCKET SIZE oscilloscope — COMPLETE PERFORMANCE! DESIGNED FOR THE RADIO SERVICEMAN for ready use in the study of wave shapes, measurements of study of wave shapes, measurements or modulation, frequency, phase shift, voltages, power, distortion—adjustment of audio amplifiers, radio, television, and FM receivers and transmitters, or ANY other apparatus producing electrical waves! May also be used to trace tube characteristics, hysteresis, and other curves. Magnetically shielded 1-INCH cathode ray tube has TELESCOPING LIGHT SHIELD at correct spele for hest vision:





"Solar" Model C-F EXAM-METER



"Solar" Model C-F EXAM-METER

The most comprehensive CAPACITOR ANALYZER available — the ONLY ONE with
"Solar" parented "QUICK-CHECK" CIRCUIT:
Operates without disturbing set wiring or soldered connections in the QUICK location of
Intermittent, "Open" or "shorted" capacitors of
ALL types—PLUS high power factor and high
r-f impedance electrolytics! WIEN BRIDGE
capacitance measurements for ALL condensers
from 10 mmf. to 2000 mfd, on four overlapping,
long scale ranges; Power Factor of ALL electrolytics, polarized or not, is indicated on special
POWER FACTOR scale when making capacitance checks; range 0-55 per cent. Stepless, inbuilt test voltages 0-550 volts indicates leakage on meter scale. INSULATION RESISTANCE, 3-10,000 meg, indicated on meter, Wheatstone bridge resistor tests, 100 ohms to 7.5 megohms, on 2 long scale
ranges; reads high values to 10,000 megohms. AC-DC Vacuum Tube
Voltmeter; SCALES, 0-550 DC volts in 3 ranges; meter can NOT be
damaged by excess voltage on any scale. AC SCALES, 10-50 volts for
audio output measurements. 4½-INCH METER, recessed. ETCHED
BRIDGE SCALES, scratch proof. In gray wrinkle metal case, 12% "x
10"x5½" deep; wt. 12% lbs. Complete with tubes and instructions.

\$58-50

"SOLAR" CBB Cadacitor Tester

"SOLAR" CBB Capacitor Tester



Improved, up-to-the-minnte version of the popular pre-war CB model with ADDED 3rd capacitance range to permit servicing of 3-way portable sets and motor starting capacitors. "Magic Eye" 6E5 tube gives direct panel indication of Capacitance, Power Factor, Leakage and Resistance, ALL on color coded scales that match range switch settings. Capacity measurements .00001/800 mfd. of electrolytic, paper, mica and air cond. Directly indicates Power factor of electrolytic, Indicates Indicates in the color of the col

RADIO TEST EQUIPMENT FOR MODERN SERVICING NEEDS

NEW! "Webster" Model 70 Mixer-Changer



Paultlessly changes and plays TEN records, E1THER 10" and 12" INTERPRET props 1EN records, EITHER 10" and 12" INTERMIXED —or full stacks of either size. "Astatic" NYLON PICK-UP CARTRIDGE and PICK-UP CARTRIDGE and NYLON SAPPHIRE TIPPED semi-permanent needle pro-vide a new conception of FINE MUSIC—Fibre chang-FINE MUSIC—Fibre chang-er gear and FAST CHANGE CYCLE with automatic drive mechanism release assure QUIET changing AT ALL TIMES!

Motor and entire cush-rubber and spring CUSH-ION MOUNTED — hand-brown Motor and entire assembly somely styled with brown Hammerloid enamel finish. Size, 14" square, 24" below

MODEL 2432—WIDER RANGE SIGNAL GENERATOR. SIX BANDS, continuous and overlapping from 75KC to 50MC! Strong 2nd and 3rd harmonics provide for extended coverage to the new "FM" bands. Turret-type coll assembly for positive band switching, rotates iuside a copper plated steel shield! Aluminum dial with ETCHED MARKINGS, directly geared for fast settings has total of 66 INCHES scale length. Stability assured by air trimmer capacitors, permeability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and electron coupled circuit. Voltage regulated power supply, interneability adjusted colls, and MODEL 2 ERATOR. WIDER RANGE SIGNAL



MODEL 2405 WIDE RANGE: 25,000 OHMS-PER-VOLT-VOLT-OHM-MILLIAM METER — 10 PUNCTIONS.
6-INCH SQUARE METER, with 5.6 inch scales! Plug-In rectifier, moilded case, impregnated. Banana Jack panel connections and heavy duty selector switch insure trouble-free, low contact resistance connections, fool-proof operation on ALL ranges. NOTE THESE RANGES: 0-10-50-250-500-1000 DC VOLTS, 25,000 O.P.V. 0-10 DC AMPS, at 250 M.V. 0-1-16-50-250-50 DC M.A. at 250 M.V. 0-50 DC MICRO-AMPS, at 250 M.V. 0-10 MEGOHMS, all with self-contained batteries! AC Volts-Output volts: 0-10-50-250-500-1000 at 1000 ohms per volt. Condenser in series with AC volts PUT VOLTS. AC Amperes: 0-0,5-1-5-10 at 1-voltamp 10 to Plus 15-29-43-49-55 db. CAPACITY CHECK O



AC Volts-Output volts: 0-10-50-250-500-1000 at 1000 ohms per volt. Condenser in series with AC volts ranges for OUT-PUT VOLTS. AC Ampereus: 0-0.5-1-5-10 at 1-voltampere. DB: Minus 10 to Plus 15-29-43-49-55 db. CAPACITY CHECK OF PAPER CONDENSERS possible by following data in instruction book. Complete with 14 and 22½-volt batterios, in metal case 10"x10"x5%" with removable hinged cover; finished in 2-tone tan/brown baked enamel; wt. 11 lbs. 50-inch banana plug test leads included.

Stock No. 35A25. "TRIPLETT" MODEL 2495. Your Cost... \$57.33



GRAIN LEATHER CARRYING CASE FOR MODEL 625-N; has space carrying handle. \$5.15

No. 35A23; Model 629 Leather Case; YOUR COST. MODEL 666-II HANDY POCKET VOLT-OHM-MILLIAM-MODEL 666-R HANDY POCKET VOLT-OHM-MILLIAM-METER. REAL "POCKET SIZE"—3½"x5%"x2%"; black MOLDED CASE—3-inch meter has 2-color, clearly legible scales for these RANGES: A.C. and D.C. VOLTS 0/10/50/250/1000/5000 volts, BOTH at 1000 ohms per V. D.C.M.A.: 0/10/100/500; Resistance: 0/300 ohms, shunt circuit, 10 ohms center scale; 0/250,000 ohms, series circuit, 3.700 ohms center scale. SELECTOR SWITCH for all rendings; 50-inch test leads, with battery and inst. Stock No. 354.29; MODEL 666-H; \$19.60 Your Cost

LEATHER CARRYING CASE FOR ABOVE IN-STRUMENT Stock No. 35A79, Type 669 Case, Your Cost., \$3.92



MODEL 2425 TRANSCONDUCTANCE TUBE TESTER. Dynamic Mutual Conductance QUALITY readings in MICROMOHS—a truly COMPLETE TEST through EVERY tube clement for QUALITY—GAS—SHORTS and OPEN ELEMENTS of ALL RECRIVING TUBES! EASIEST and FASTEST OPERATING of ALL TRANSCONDUCTANCE tube testers—only ONE socket for each tube here strong translation. MINIATURE AND tube base group, including MINIATURE AND SUB-MINIATURE TYPES—spare socket space provided for future new types. FULL RANGE

SUB-MINIATURE TYPES—spare socket space provided for future new types. FULL RANGE FILAMENT VOLTAGES—0.75/110 voits. COL-OR-CODED METER SCALE—3½" long, reads in Micromahs 0/2500/5000/10.000; PLUS English reading "Good"—?—"Bad"; 4½-INCH METER!
Line voltage indication in AC VOLTS! Wide angle NEON indicator for "shorts" and leakage. 3-POSITION LEVER SWITCHES, settings for all tubes clearly shown on book type tube chart printed in large type on heavy book "stock". Metal case 10"x10"x5%; "; detachable hinged cover; rubber feet for vertical or horizontal use of tester. Two-tone tan and brown finish and panel, Wt. 12 lbs.

Stock No. 35A77; "TRIFPLETT" MODEL 2425, Your Cost \$63.20

MODEL 2413 POPULAR PRICED TUBE TEST-M(DEL, 2413 POPULAR PRICED TUBE TEST-ER. Tests ALL receiving tubes gaseous recti-flers, resistor and ballast tube continuity, pilot lamps and electrical apparatus and appliances for shorts or open circuits! 4-INCH SQUARE METER has English reading tube scale PLUS line voltage indication directly in AC volts. Only ONE socket for EACH type of tube base, includ-ing newest sub-miniature types, wide angle NEON glow indicator shows slightest inter-ele-ment short or leakage by hot cathode method. 4-INCH METER with 3½-inch long scale. 3-position lever switching for speed and maximum operating simplicity. FULL RANGE filament position lever switching for speed and maximum operating simplicity. FULL RANGE filament voltages, 0.75/10 voits. Space for extra socket for possible future NEW tube types. Book type tube chart printed in LARGE TYPE on heavy duty paper is carried in detachable cover of instrument. Steel case is 10"x10"x5\%", finished in 2-tone brown baked enamel. Wt. 12 lbs.

Stock No. "TRIPLETT" MODEL 2413

Your \$48.51

Portable Tube Tester ... 35 4 26



Your \$48.51



in the minds of customers, SLOPING FRONT et in 2-TONE hammered enamel finish cabinet with rounded to 15 4 "x11 4 "x6"; wt. 13 4 lbs.

"TRIPLETT" Model 3212.

Your Complete with results of the customer of th

PANEL is set in 2 corners. Size 15 %" Stock No. Complete with instructions

Your \$62.23

"TRIPLETT" RADIO-MOTOR-APPLIANCE TESTER



Tests power consumption of RADIOs, small motors, and household appliances under operating conditions. TWIN METERS in dicate power consumption in WATTS and line voltage in A.C. VOLTS; 2½" scales, clearly marked. RANGES: WATTS, 0/750/1500 at 6 amps.; rated at 10 amps. maximum—"Off-On" switch protects watt-meter against motor starting loads. TWO RANGES. 0/130/260, with toggle selector switch for ACCURACY—2%. In leather case 6½"x4½"x3¾"; wt. 2 be. A21.

A.C. VOLTS TWO RANGE both ranges. 35A21

-Meissner Analyst-12-Tube SIGNAL TRACER

Designed for rapid solution of difficult service problems, "ANALYST" permits rapid location of faults IN ANY CIRCUIT OR PART of radio receivers, sound equip-ment, etc. CONSISTS OF: AUDIO CHAN-OR PART of radio receivers, sound equipment, etc. CONSISTS OF: AUDIO CHANNEL, single stage audio amplifier with 6E5 MAGIC EYE indicator, 2-position multiplier and attenuation from 0.1/1009 voits AC; has output jack for use with CRYSTAL phones. OSCILLATOR CHANNEL: 8-60/15.000kc; two tubes and 6E5 MAGIC EYE INDICATOR; has 3-band tuner 600/1700/5000/15000 KC. RF:IF CHANNEL. 3-band. 3-stage HIGH GAIN tuned RF amplifier—3-tubes with 6E5 MAGIC EYE indicator; THREE OVERLAPPING RANGES of 95/250kc/240-615kc/600/1760kc. Has 10-step attenuator, multiplier and equipped with phone jack for checking signal quality with headphones — ALL coils fully shielded. LINE CURRENT CHANNEL: current range of 0.3/3 Amperes with selector switch and AC plug for received cord; MAGIC EYE indicator; tests receivers for proper current drain. ELECTRONIC VOLTMETER: 10 Meg. input resistance—ZERO CENTER SCAUES OF 0/5/25/125/500 DC VOLTS—MEAS-URES RECEIVER VOLTAGES at tabe elements while set is in operation withfout affecting normal functions, COMPLETE with all input and output cables, 12-TUBES, instructions; Steel cabinet with leather carrying handle, size 9 %*xii\four xiii\four xiii high, wt. approx. 35 lbs. Deep etched Silver and Black panel with bright red control knobs.

\$111.57



control knobs.
Stock No. 35A65; "MEISSNER" ANALYST: Your Cost \$111.57

Special Selected TEST INSTRUMENTS FOR EVERY NEED

"SPRAGUE DE LUXE" MODEL TO-2 "TEL-OMIKE"

TESTS AND ANALYZES ALL TYPES
OF CONDENSERS, with results shown
on direct reading scales, from .00001 to
2,000 Mfd! Built in POWER SUPPLY
and high quality built-in VOLTMETER
takes all the "guess" out of testing condensers—variable controls and selector switches make it easy to apply the EXACT WORKING VOLTAGES to the



EXACT WORKING VOLTAGES to the condenser under test. MAGIC EYE tube indicates results of all tests and the TEL-OMIKE CONDENSER CHARACTERISTIC MANUAL tells at a glance just what actual readings on the instrument should be for "GOOD" and "BAD" condensers of all types. TEL-OMIKE ALSO measures resistance from ½ ohm to 5 Meg. on direct reading scales. Insulation resistance from ½ ohm to 5 Meg. on direct TOR up to 50% on direct reading scales. Voltmeter Ranges are, 0/15/160/500/1500 D. C. Volts, and CURRENT RANGES of 0/15/15/50 M. A. TEL-OMIKE will detect opens, shorts, grounds, INTERMITTENT SHORTS, in ANY radio component or circuit. Size 17½ "25" x6"; wt. 14 Nour & 14 Nour & 15 Nour & 15 Nour & 16 Nour

Your \$51.45 Stock No. 35A19, SPRAGUE "TO-2" TEL-OMIKE.

The New "RCA-RIDER" 162-C CHANALYST



THE MOST USEFUL AND FAR-REACHING SINGLE TEST INSTRUMENT MONEY CAN BUY! Allows MONEY CAN BUY! Allows application of the same systematic method of analysis to ALL RECEIVERS regardless of age or type. TESTS EVERY POINT UNDER SUSPICION

TESTS EVERY POINT UNDER SUSPICION without interfering with operation of receiver under test, or being limited by ANY "special" circuit design! Solves "Intermittents". Checks the presence, character or absence of signal, including operation between circuits; provides positive identification of oscillatory conditions and CONSTANT MONITORING of the various circuits in the receiver! LOCATES NOISE SOURCES within the receiver and other hard-to-find troubles in A FRACTION OF THE TIME required by any other method!

hard-to-find troubles in A FRACTION OF THE TIME required by any other method!

HERE IS WHAT YOU GET IN THE "CHANALYST":—5-TUBE IF-RF CHANNEL covering frequency bands of 600-1700kc; 240-630kc; and 55-260kc. Pick-up channel is through shielded cable with 1 mmfd. capacitance. Input attenuation of 10000 to 1 by 4-step capacitive attenuator. 3-TUBE OSCILLATOR CHANNEL; covers frequency bands of 600-1700kc; 1660-4900kc; and 4800-15000kc, Checks oscillator operation, output, frequency and drift. 3-TUBE AUDIO CHANNEL; resistance-capacity coupled and flat over a range of 50-50.000 cycles. Amplifier sensitivity is 1/10th volt full indication and operative over input voltages of 1/10th to 1000 volts. Has jack for hi-impedance phones. Attenuation ratio 10000 to 1. ELECTRONIC VOLTMETER employs one tube, CENTER ZERO METER with ranges of —5 to +5; and same Plus-Minus voltage readings in ranges of 25, 100 and 500 volts. Has INPUT RESISTANCE OF 10 MEG. on ALL scales and has 4-position selector switch. Has over-all accuracy of 6% at full scale with single probe lead for contact between voltmeter and point under check. 2-TUBE WATTAGE INDICATOR; indicates power consumption of receiver under test from 25 to 250 watts. INTERMITTENTS may be located within 5 or 6 MINUTES after the first "fade" when receiver has been turned "on" for 10 minutes preceding actual test! Complete with 12 TUBES, instead of the content of the

Stock No. "RCA-RIDER" Model 162-C Your \$162-50 CHANALYST. Complete as described... Cost

"RCA" Model 195-A Voltohmyst THE IDEAL INSTRUMENT FOR SIGNAL TRACING AND DYNAMIC TESTING—Incorporating basic innovations and improvements unknown in such an instrument pre-

media unandar, war!
ELECTRONIC A.C. VOLTS—D.C. VOLTS—
BESISTANCE — VOLUME UNITS — A-F
VOLTMETER — OUTPUT METER — "FM"
ALIGNMENT INDICATOR,
6 HIGH RESISTANCE VOLTAGE RANGES,
FM at 10 Megohm constant input of 0/5/

6 HIGH RENISTANCE VULLAUE RANGES, DX. at 10 Megohm constant input of 0/8/10/80/100/800/1000 D.C. VOLTS. RESISTANCE, .1 Ohm to 1000 Ohms; ONE SETTING ONLY FOR ALL RANGES—20 cycle to 100kc flat frequency response up to 100 volts with input impedance of 200.000 to 100 volts with input impedance of 200,000

to 100 voits with input impedance of 200,000 ohms and 170 voits!

A.C. VOLTS/ DECIBELS: 0/5/10/50/100/
500/1000 by a linear diode rectifier reading directly on D.C. scale, and with a flat response of 20 to 100,000 cycles! Big square meter with electronic overload control is of NEW DESIGN; has "Alnico" magnet with scale printed on BRASS for clean, clear and well spaced numerals. Anti-static treated PLASTIC CASE has non-breakable front. Complete with ground lead, isolating probe, cable and instructions. In metal cabinet, size 9%" high x 6%" wide x 6%" deep, gray wrinkle finish with panel of BRUSH CHROME, reverse etched. Power required is 14 watts at 105-125 voits, 50-60 cycle A.C. reverse etched.
cycle A.C.

"RCA" MODEL 195 "VOLTOHMYST" Your Complète with Tubes and Instructions.... Cost \$69.50

Simpson FINE SERVICE INSTRUMENTS



MODEL 330 MUTUAL CONDUCTANCE
TUBE TENTER—tests tubes in percentage
of rated DYNAMIC MUTUAL CONDUCTANCE.
REVOLUTIONARY in testing,
REAL tube merit—AND—Model 330 18
FAST—very few switch settings to make
to test ANY tube with AUTOMATIC RESET which, at the push of a button,
RETURNS ALL PUSH-BUTTON AND
ROTATING SWITCHES TO NORMAL
for the next tube test! 4½-INCH METER
has "English" reading scale, PLUS calibration in "MICROMOHS" for REAL
tube worth! Tests EVERY type and base of tube at filament voltages
from 1.1 to 117 volts; with ONE socket for each base type—INCLUDING all the newest miniature, sub-miniature and "Acorn"
types. NEON glow tube for "shorts" tests. All tubes tested with voltage applied automatically, under conditions approximate to radio-set
operation. In heavy fabricoid covered case, leather corners, removable
cover, size 15½ "x9½"x6½"; wt. 16 lbs. With instructions and tube
chart.

SPARENT **INTERSON*** MODEL**, 330. Vany Coat**

Stock No. 35A80; "SIMPSON" MODEL 330; Your Cost.... \$96.53

NEW WIDE RANGE SIGNAL GEN-ERATOR, MODEL 415-AM/FM 70kc/ 130mc; DIRECT READING DIAL, in bakelite case is calibrated for these bakelite case is calibrated for these RANGES: 75-200; 200-600; 600-1750 KC, and 1.5-4.5; 4-15; 14-30; 29-65 and 58-130MC! Controlled RF output over en-



and 1.5-4.5; 4-15; 14-30; 29-6b and b8130MC! Controlled RF output over entire range; no separate connection for
high, uncontrolled output needed as on
MOST other signal generators; output
practically constant over ENTIRE frequency range! High fidelity modulation
up to 100-% from below 60 cps to over
10 KC per second, 0-100% modulation
with either 400 cycle sine wave or external source; with voltage range from
0 to 20 volts available for external use; no unwanted frequency modulation present. Low loss RF coils, individually calibrated by variable inductance and variable minimum capacitance, provide ACCURACY in
calibration—coils are mounted on rotating turret coil assembly for
QUICK range change and shortest wiring. Coils and tuning condenser
are individually shielded with an additional common shield over BOTH
assemblies, Cabinet is COPPER PLATED steel for maximum shield
effect, exterior black wrinkle enamel, leather strap; size 5%"x11%"x
15¼"; wt. 22 lbs. Complete with instructions and cables.
\$112.70



FAMOUS MODEL 260 SET TESTER

Precision accuracy—20,000 OPV on DC and 1000 OPV on AC volts—4½-INCH METER has long, easy reading scales for these 26 RANGES; 7 FUNCTIONS:—DC VOLTS, 0-2½/10/50/250/1000/5000; AC and OUTPUT VOLTS 0-2.5/10/50/250/1000/5000; DC M.A. 0-10/100/500; DC Microamps 0-100; OHMS, 0-2000 (12 ohms center); 0-200,000 (1200 ohms center); 0-20 MEGOHMS (120,000 ohms ctr.) DB minus 10 to plus 52 on 5 RANGES, Molded case with leather handle, size 5½ "x7"x3"; wt. 3½ lbs. Complete with test leads and instructions. Stock No. 35.460;



"ALL APPLIANCE" VOLT-AMP-WATTMETER

BRAND NEW!—FOR ALL TYPES OF ELECTRICAL APPLIANCES—USEFUL





BRAND NEW!—FOR ALL TYPES OF ELECTRICAL APPLIANCES—USEFUL FOR AIR CONDITIONING AND REFRIGERATION SERVICING — ANY-WHERE A MOTOR IS USED! Indexed panel clearly shows volts — amperes — watts functions — insures QUICK and CORRECT meter readings. Break-in "speed cable" furnished with instrument is 4-conductor and color coded—leads are first connected to binding posts on instrument panel, then the plug is placed in electrical outlet—and appliance to be tested is plugged into it—properly connecting meter into the circuit! 3-inch meter with large scale has these ranges: A. C. CURRENT, 60 CYCLES; 0-150; 0-300 VOLTS; 0-3; 0-15 AMPERES; 0-30; 0-600 0-1500; 0-3000 WATTS, Binding post arrangement allows use for checking line voltages, or as wattmeter or ammeter. SIZE, 8x2½"x5½" high, wt. 2½ lbs. Complete with "Break-in" cable and plug; instructions. plug: instructions.

Stock No. \$5A82; "SIMPSON" MODEL 390; Your Cost \$38.71

Test Instruments for the Modern Service Shop



"JACKSON" MODEL 637

SPENDY, PUSH-BUTTON OPERATRD; DYNAMIC OUTPUT; COMBINATION TUBE TESTER WITH COMFLATE UNIVERSAL METER
RANGES, TESTS ALL TUBES, In-EANGES. TESTS ALL TUBES, including latest sub-miniatures; tests BALLASTS; tests CONDENSERS for "skerts" and "leaks". Has new high veitage power supply to enable more occurabe tests of tubes requiring high plake voltages. Has NOISE TEST jacks on panel for phone use. LARGES, inch case METKE, ILLUMINATED. Universal Meter ranges, PUSH-BUTTON OPERATED ner: 0-10-100-250-500-1000-2500 AC-DC VOLTS. 6-3,000-300,000 OHMS; 0-30 MEG. 0-1-40-100-250 DC M.A.; 0-10 AURIERS, DC; DB RANGES, Minus 10 to plus 14-34-546b In finest OAK case with removable hinged lid; size 14%"x 13% "xe"; wt. 14 lbs. Complete with instructions and tube chart. Ntock No. 35A47; "JACKSON" MODEL 627;

43% "x4": wt. 14 lbs. Complete with instruction Ntock No. 35A47; "JACKSON" MODEL 627; \$8**0.3**6 KOUR COST



"JACKSON" MODEL 636

BOTARY TUBE CHART; PUSH BUTTON OPERATED: DYNAMIC OUTPUT TUBE TESTER, UP-TO-THEMUNUTE TESTS FOR EVERY TUBE MINUTE TESTS FOR EVERY TUBE TYPE from oldest 4-pin base to new-TYPE from oldest a position for any types! Spare socket position for any that may appear in the rew tubes that may appear in the future — as near OBSOLESCENCE PROOF as it is possible to build a modern tube tester. High voltage power supply; NEON shorts and leakage tests; phone jacks for NOISE TEST. Gray leatherette covered case is 14"x12"x5", wt. 11 lbs. 14"x12"x5"4"; wt. 11 lbs. ck No. 35A46, "JACKSON" Model

"JACKSON" MODEL 640



PUSH-BUTTON OPERATED TEST OF TAXON 1900c - 30mc; 6 - RANGES PUSH-BUTTON OPERATED TEST OSCILLATOR. 1906c - 30mc; 6 - RANGEN; ALL on fundamentals! DIRECT READING, FULL RANGE DIAL is glass enclosed, ½ of 1% ACCURACY on all ranges! Powerful signal output of pure RF, or 20% modulated RF carrier; AF voltage for external use, Heavily shielded with CAST ALUMINUM PANEL in unit-welded" case 8½78 ½786" finished in gray ripple morocco, "Snap" leather carrying handle, Complete with all tubes, shielded output cable, and instructions. Stock No. 35A48; "JACKSON" Model 640.

640.



"JACKSON" MODEL 650-A PUSH-BUTTON CONDENSER TESTER. Simple to operate—SPEEDY—capacity readings almost instantaneous; leakage tests by morely pressing a button! RANGES:—00001/1 mfd.; 001/.1 mfd.; 1/200 mfd. 101.0 mfd. classife RANGES:—.00001/1 mfd.; .001/.1 mfd.; ./1/100 mfd.; 50/1.000 mfd. clearly marked on LARGE, GLASS ENCLOSED SCALE with new "Jackson" SCALE EXPANDER indicating pointer—doubles effective scale length! Test voltages, 20/500 volts; me assures POWER FACTOR, 0-50% on direct reading scale. Electron Eay tube shows exact balance or indicates presence of lenkes. Rifer Electron Ray tube shows exact balance or indicates presence of leakage. 8 ½ "x 8½ "xe" steel case with snap-on cover. Stock No. 35A49; "JACK-\$48.02

"FEILER" SIGNAL TRACING ANALYZER.

Will quickly pay for their in time saved in ANY Service Shop — large or small! For BAPID TESTS of any receiver or amplified without complicated and bothersome adjustments! Quickly locates Noise, Ham, Poor Sensitivity, Speaker Defects, Open Compling Condensers and Colls, loops, transformers, cheens faulty revisions, locates INTERMITTENTS! SMALL SIZE, only 6%"x4%"x3%" with HAND SIZE PROBE 1" dia, x 4%" long which houses NEW, war developed MINIAwhich houses NEW, war developed MINIA-TURE tube and circuit components. HERE IS A DEPENDABLE TEST INSTRUMENT THAT BECUIRES NO SPECIAL SKILL TO OPER-ATE-yet is a real time saver in any shop! Complete with necessibatteries but requires headphones for operation, Stock No. 35A44; "FEILER" SKINAL TRACER; NET.....\$11.



"Robson-Burgess" High Quality—Low Cost-ALL PURPOSE AC-DC Multitesters

ALL PURPUSE AU-UU MUITITESTERS

MODELS, MT-100 and MT-200, are IDENTICAL IN SIZE, 5"x8"x21/2";
and have the UNUSUAL FRATURE of a SLOPING PANEL, providing
In choice either 55° or 65° angle of meter; rubber feet on case for
EITHER angle of use, and handy carrying handle. Finish is gray
orystaline enamel, with panels of Etched Aluminum in beautiful
new "Aluminite" flatsh. YOU CAN'T GO WRONG ON A "ROBSONBURGESS"! BUT THESE FINE INSTRUMENTS FROM "B-A" AT A SAVING IN PRICE!



MODEL MT-100; 3 1/2" round 1 ma movement meter wire wound universal shunt, all shunts and multipliers held to accuracy of plus or and multipliers held to accuracy of plus or minus 2%. 15 RANGES as follows: DC Volts:—0-5-50-350-500-1900. AC Volts:—0-10-100-500-1,-900-2,000. DO Milliamperes:—0-10-100. Ohms:—9-10,000-100,000 Ohms; 0-1Megohm, Stock No. 35A55; MODEL MT-100 \$19.85

MODEL MT-200: % M. SOVER STANDER STAN



MODEL MT-200; 3\%" SQUARE, 400 micro-amp. movement meter with rectifier compensation insuring ACCURACY on low AC ranges. Guaranteed 2\% over-all meter accuracy. AC/DC VOLTS: 0-5-15-50-150-500-1500. DC Milliamperes: 0-10-100-500. Resistance: 0-10 Megohms in four ranges with center scale readings of \$6/\$50/\$600 and \$6000 ohms—NO EXTERNAL Stock No. 35A55; MODEL MT-200; \$23.45



"SUPREME" POCKET MULTIMETER "SUPREME" POCKET MULTIMETER MODEL 548 with full miss 3-inch one mil meter is TDEAL for general utility use in the modern SERVICE SHOP—is a little dandy for "HAM" use! 2-color panel with special HIGH VOLTS JACKS and SINGLE SELECTOR SWITCH for all ranges. RANGES:—AC-DO Voits, (½ voit first scale division) 0-15-150-500-3000 voits. DC MA.: OHMS: (1-ohm readable on scale):—0-2002-200000. Bakelite case 5 % x3 ½ x2 ½ "; wt. 2 lbs. Stock No. 35A70; "SUPREME" MODEL 543. Pocket Multimeter. Stock No. 35A70; Pocket Multimeter. NET

.**\$18.57**



NEW! "SUPREME" MINIMETERS

NEW! "APPROVED" LOW COST SIGNAL GENERATOR



Packed with FEATURES that make MODEL A-200 OUTSTAND-ING IN THE SIGNAL GENERA-TOR FIELD! NEW POST-WAR TOR FIELD: NEW POST-WAR CIRCUIT assures MORE ACCURACY AND STABILITY! 8-RF BANDS: 100ke to 75me! HUGE, DIALI is 9% wide at base, has Lucite hair line pointer and large direct drive knob. MULTI-COLOR SCALES for each MULTI-COLOR SCALES for each band have widely separated calibration marks and large figures for accurate readings. 6-FUNDAMENTAL BANDS, 100kc to 25mc; —100 / 250kc; 190 / 500kc; 420/1000kc; 100g/3000kc; 2.8 to 9mc and 8.9 to 25mc; 7th Band covers 18-50mc on second harmonic; 8th Band; 27-75mc on powerful third harmonic Internal modulated at 440 cm. 48-

powerful third harmonic Internal modulated at 449 cps. 48-30,000 cps. EXTERNAL modulated at 440 cps. 48-30,000 cps. EXTERNAL modulator. Continuously variable RF-AF fine Attenuator Control; specially designed ULTEA-STABLE 2-terminal RF oscillator. Cathode Follower Tede—Attenuator settings have no effect whatever ou frequency! Modulation percentage continuously variable at front panel from 0 to 190%. Extremely LOW LEAKAGE on ALL bands, electrostatically shielded transformer. Co-Axial Output Lead! REAL QUALITY BUILT—"Hammerlund" INVAR double spaced, ceramic insulated variables assure NO capacity change or sweating in hunid climates or in radical temperature changes! Oil filled condensers, 4-standard tubes; in 16-ga. steel cabinet with 16-ga. Aluminum panel; case size 12"x10"x7"; wt. 31 lbs.; Battleship gray crackle enamel. A BEAL, High QUALITY SIGNAL GENERATOE IN EVERY RESPECT!
Stock NO. 35-384; "APPROVED" MODEL A-200,
Complete with all tubes and instructions; NET EACH. \$49.50

FAMOUS "HEWLETT-PACKARD" LABORATORY TE MENTS for Laboratories and Industrial Plants are a "B-A" for PROMPT SHIPMENT—SPECIAL CATALOG request, giving complete descriptive information and WESTE FOR IT! available



PRECISION METERS



3" Square Case PANEL METERS

In square flush mounting bakelite cases, completely dust-proofed. D.C. instruments are the D'Arsonval type; A.C. instruments of moving fron repulsion type, air damped. All incorporate jeweled bearings, aluminum pointer, white dial with easy-to-read scale, and zero adjustment screw on front. Accurate within 2%. All listed below mount in 2%" hole, extend 1%" behind panel.

D.C. MILLIAMMETERS

MU	DEL	327-T

Range M. A.	Stock No.	Net Ea.
0-1	20A813	\$6.53
0-15	20A814	5.39
0-50	20A815	5.39
0-100	20A816	5.39
0-200	20A817	5.39
0-200	20A818	5.39
0-500	20A819	5.39

D.C. AMMETERS

MODEL 327-T

Amps.	Stock No.	Net Ea.
0-1	20A820	\$5.39
0-10	20A821	5.39
9-25	20A822	5.39

D.C. VOLTMETERS

MODEL 327-T, 125 OHMS/VOLT

Range		
Volts	Stock No.	Net Ea.
0-10	20A835	\$5.39
0-50	20A836	5.39
0-150	20A837	5.39
0-800	20A838	7.68
0-500	20A839	8.49
NOTE: W	e can supply	on special
	regular prices	
	riplett panel r	

A.C. VOLTMETERS

MODEL 337-T

Range Volts 0-5 0-10 0-150	Stock No. 20A828 20A829 20A830	Net Ea. \$5.39 5.39 6.53
0-300	20A 831	7.51

A.C. AMMETERS

MODEL 337-T

Range Amps. 0-3 0-10 0-25	Stock No. 20A832 20A833 20A834	Net Ea. \$5.39 5.39
0-25	20A834	6.53

D.C. MICROAMMETERS

MODEL 327-T

Range		
Micro Amps.	Stock No.	Net Ea.
0-100	20A823	13.72
0-200	20A824	11.11

THERMO AMMETERS

Model 347-T with Internal Couple

Range R.F. Amps 0-1	Stock No. 20A825	Net Ea. \$6.34
0-2.5	20A826	6.34
0-5	20A827	6.34

"HAIRLINE" ACCURACY PANEL METERS



Designed, engineered and manufactured in their entirety in the new, modern plant of Supreme Instruments Corporation: "SUPREME" METERS have thoroughly PROVED their dependability and accuracy in thousands of "SUPREME" Test Instruments used by our Armed Forces in the War. Long lasting, HAIRLINE ACCURACY is assured by these QUALITY FEATURES: — extremely rugged assembly using double bridge construction and "Alnico" bar magnets; selected pivots and jewels and high torque movements reduce friction. FOR LONG LIFE ACCURACY — USE "SUPREME": Designed, engineered and manufactured in their

"SUPREME" 3" SQUARE METERS
Meter case dia. 2%". Mounting: Meter case dia. 2%". Mounting: 6-32 stude moulded in front flange

OB.	2 7	Centers.		
D.	C.	MILLIAM	METERS-3-	INCE
		Wast.	Stook	Va

	Fact.	Stock	xonr
Range	Model	No.	Cont
0-1	8107	17A663	\$6.17
0-6	3110	17A664	5.83
0-15	8112	17A665	5.83
0-25	8114	17A666	5.83
0-50	8115	17A667	5.83
0-100	8117	17A668	5.83
0-250	8119	17A669	5.83
0-500	3121	17A670	5.83
0-750	3122	17.4671	5.83
	MICDOAMM		****

D.C.	MICROAMMI	ETERS-3	-INCH
0-50	3103	17A652	\$14.33
0-100	3104	17A653	12.50
0-200	3105	17.A654	11,00
004-0	3106	17A655	8.33

D.C. AMMETERS-3-INCH

0-60	3131	17A691	5.8
0-25	3130	17A690	5.8
0-10	3128	17A689	5.8
0-5	3127	17A688	5.8
0-1	3123	17A687	\$0.8

D.C. VOLTMETERS-3-INCH

(1,000	Ohms Per	Volt Moven	nents)
0-3	3133S	17A681	\$7.33
0-10	3135S	17A682	7.33
0-25	31369	17A683	7.33
0-50	31379	17A684	7.33

D.C. VOLTMETERS-3-INCH

(100	Onms Per	voit movem	entsi
0-10	3125	17A672	\$5.83
0-60	8137	17A678	5.83
0-150	2129	17A674	5.83

"SUPREME" 2-INCH SQUARE
METERS
Meter Case dia., 23". Mounting:
6-32 studs moulded in front flange
on 1%" centers.
D.C. MILLIAMMETERS: 2-INCH

ı	D.C. M	IILLIAMM	ETERS;	2-INCH
i	l	Fact.	Stock	Your
ı	Range	Model	No.	Cost
	0-1	2107	17A656	\$5.83
	0-5	2110	17A657	5.67
i	0-15	2112	17A658	5.67
	0-25	2114	17A659	5.67
	0-50	2115	17A660	5.67
	0-100	2117	17A661	5.67
	0-250	2119	17A662	5.67
	D.C.	VOLTMET	TERS: 2-	INCH

0-250	2119	17.4662	5.67
D.C	VOLTME	TERS; 2-1N	СН
(1,000	Ohms Per	Volt Mover	ments)
0-3	2133S	17A675	\$6.50
0-10	2135S	17.A676	6.50
0-25	2136S	17A677	6.50
0-50	21378	17A678	6.50
-150	21398	17A679	7.17
0-500	2141S	17A680	9.17

"CONANT" INSTRUMENT RECTIFIERS



For applications requiring DC output current
for meters, relays or
other apparatus where
frequency of AC source
extends into audio range.
Type M - Serlew 500; Full Wave
Bridge Rectifier Output 10 V. 30 For

Bridge Rectifier Output 10 V. 30 MA.

No. 14A629. Net Each\$2.06
Type H - Series 500; Half Wave Rectifier Output 5 V. 30 MA.

No. 14A631. Net Each 88c
Type B-Series 160; For applications requiring good frequency response over entire commercial and audio range. Full Wave Bridge type, Output 10 V. 5 MA.

No. 14A630. Net Each\$2.06

→ BURSTEIN-APPLEBEE CO. – KANSAS CITY, MO.

"RADIOHM

STANDARD and MIDGET RADIOHMS as listed below all have attached 2½-inch shaft, flatted, and with universal mill full length, BTANDARD RADIOHMS are 1%" in diameter, 76" deep overall; MIDGET RADIOHMS are 1 3/64" in diameter. SWITCH COVERS for Standard or Midget Radiohms are available, as listed.

Ohms	(Un-Tapped)	CRL	Standard	Stock	Midget	Stock
Besistano	e Usual Circuit	Curva	Fact. No.	No.	Fact. No.	No.
500	Voltage Divider	1	A 100	14A274	N-157	14A214
1,000	Voltage Divider	1	A101.	14A275	N-158	14A215
2,000	Voltage Divider	1	A102	14A276	N-159	14A215
8,000	Voltage Divider	ī	A103	14A277	N-160	14A217
4,000	Voltage Divider	1	A104	14A278	N-161	14A218
5,000	Antenna Shunt	6	A106	14A279	N-162	14A219
7,500	Voltage Divider	1	AF-107	14A280	NF-163	14A220
10,000	Antenna, C-Bias	1	AF108	14A200	NF-107	14A221
10,000	Antenna, C-Blas	4	AF110	14.A281	NF-108	14A222
10,000	Antenna Shunt	6	AF111	14A282	N-109	14A223
15,000	Antenna, C-Bias	8	AF112	14A283	NF-110	14A224
25,000	Voltage Divider	1	AF115	14A201	NF-113	14A225
25,000	C-Bias	4	AF116	14A284	NF-164	14A226
50,000	Voltage Divider	1	A118	14A202	N-114	14A237
50,000	Tone Control	6	A119	14A203	N-115	14A228
75,000	C-Bias	4	AF121	14A285	NF-166	14A229
100,000	Voltage Divider	1	A122	14A204	N-116	14A230
100,000	AF Grid or Tone	6	A123	14A205	N-117	14A231
200,000	AF Grid or Tona	1	A125	14A206	N-168	14A232
200,000	C-Bias	4	AF126	14A286	NF-169	14A233
250,000	AF Grid or Tone	6	A127	14A 207	N-102	14A234
600,000	Voltage Divider	1	A128	14A208	N-118	14A235
500,000	Series in RF Plata	4	A129	14A287	N-170	14A236
500,000	AF Grid or Tone	6	A130	14A209	N-103	14A287
750,000	AF Grid or Tone	6	A131	14A210	N-171	14A288
1 Meg.	AF Grid or Tone	6	A 132	14A211	N-104	14A239
2 Mogs.	AF Grid or Tone	6	A133	14A212	N-155	24A240
3 Megs.	AF Grid or Tone	6	A134	14A213	N-156	14A241
YOU'R CI	HOICE of the above	un-tap	ped STAN	DARD		70.
or MIDG	ET RADIOHMS, Net	Each		· · · · · · •		73c

TAPPED MIDGET RADIOHMS

	•	~		
Fact.	Stock	Resistance	Tapped at	
No.	No.	Max. Ohms	Ohms	Usual Circuit Location
NT-147	14A242	250,000	125,000	Tapped Audio Grid
NT-148	14.A254	350,000	75.000	Tapped Audio Grid
NT-149	14A243	500,000	250,000	Tapped Audio Grid
NT-150	14A244	1 Meg.	200,000	Tapped Audio Grid
NT-152	14A255	2 Megs.	400,000	Tapped Audio Grid
NT-153	14A245	2 Megs.	. 1 Meg.	Tapped Audio Grid
		the above tapped		Q1 A0

SPLIT KNURL MIDGET RADIOHMS

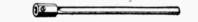
Required on many late model radio sets equipped with knobs that will not fit standard flatted shaft. Split knurled shaft, $2\frac{3}{16}$ " long, can be cut to desired length. Use midget type switch covers listed below.

Transmice.		_	Pactory	DIUGE	74.00
Ohms	Curve	Туре	Number	No.	Each
25 M	4	Plain	NK-137	14A246	\$0.73
50M	6	Plain	NK-138	14A247	.73
260 M	6	Plain	NK-139	14A248	.73
500M	6	Plain	NK-140	14A249	.73
1 Meg.	6	Plain	NK-141	14A250	.73
2 Megs.	6	Plain	NK-142	14A251	.73
F00M		Tapped 🤣 50M	NK-143	14A252	1.09
1 Meg.		 Tapped @ 300M 	NK-144	14A253	1.09

ATTACHABLE SWITCH COVERS

FOR STANDARD CONTROLS			F	OR MIDG	ET CONTROLS
Fact.	Stock	Net	Fact.	Stock	Net
No.	No.	Each	No.	No.	Each
K-10	14A261	S.P.S.T35c			S.P.S.T35c
K-11	14A262	S.P.D.T44c	K-156		S.P.D.T44c
K-12	14A263	D.P.S.T44c	K-157	14A268	D.P.S.T440
K-15	14A264	Four Point44c	K-158	14A269	Four Point 44c
K-16	14A265	S.P.D.T.			
(Clo	ckwise)	44c			

"RADIOHM" EXTENSION SHAFTS AND COUPLERS





CRL ECONOMY AMPLIFIER CONTROLS

Designed primarily for inexpensive sound equipment, fading and mixing systems. Non-rubbing contact for smooth, quiet operation. Will dissipate 1 watt. All units 1%" diameter, 18" deep, with 2%" shaft

Resistance		CRL	Stock	NET
Ohma	Description	Number	Number	EACH
500M	Gain Control	M-141	14A288	\$1,03
1 Meg.	Gain Control	M-142	14A289	1.03
500M	Straight Fader	MT-144	14A 290	1.18
1 Meg.	Straight Fader	MT-145	14A291	1.18
200	"Delta-T" Pad	MX-147	14A292	2.06
600	"Delta-T" Pad	MX-148	14A293	2.08

EE—CENTRALAB VOLUME CONTROL GUIDE 8tk, No. 14A294. Request with order for CRL controls. FRFF.

ALLORY Replacement Volume Controls

Taper Number 1 is a modified logarithmic left hand taper used in antenna and audio circuits, or where only the center and left hand termin-

Taper Number 2 is a right hand logarithmic taper. Used as in cathode voltage control, or where center and right hand terminals are used.

Taper Number 3 is a combination left and right hand taper. For use in circuits where the control must perform both as a shunt and as a series Taper Number 4 is a linear taper. Band wherever a control should be such that voltage is propertional to the degree of rotation.

Taper Number 4A is a modification of the regular linear taper Number 4.

Tuper Number 7 is made only in the wire wound type of control and is a form of left hand taper. This taper is desirable for the antenna shunt plus bias control, wherein greater attenuation is obtained by increasing the bias voltage.

Standard Controls

	tanoaru C		
*Ext	ernal Adj. R		
Stock	Mallory	Ohms	Taper
No.	Type	Res.	No.
14A1	*E12	5 M	1
14A2	Y5MP	5 M	4
14A3	*G12	10M	1
14A4	*UC501	10 M	2
14A5	YIOMP	10M	4
14.10	*H12	15 M	1
14.47	*Y	20 M	1
14A8	*J	25 M	2
14A9	Y25MP	25 M	4
14A10	K12	50M	1
14A11	*K	50M	2
14A12	Y50MP	50M	4
14A13	Z12	75 M	2
14A14	*Z	75M	1
14A15	L _	100M	1
14A16	. *UC510	100M	0
14A17	Y100M1	100 M	4
14A18	UC502	15 9 M	1
14A19	Y200MP	200 M	4
14A20	M	250M	1
14A21	*UC509	250M	2
14A22	Y250MP	250M	4
14A23	N	500 20	1
14A24	UC513	500M	2
14A25	Y500MP	500 M	
14A26	UCE 03	750M	1 .
14A27	0	1 Meg	
14A28	Y1000MP	1 Meg	
14A29	P	2 Meg	
14.130	UC504	3 Meg	. 1
	the above, witch, Each		73c

Standard Wire Wound **Controls**

Nominal rating, 4-waits. Fixed channel shaft 2%" long with inset to fit all types of knobs. 1%" Dia.; 2 to 20M Ohms.

"Has adjustable bias feature. Fixed

•Has	adjustable	bias feat:	IFe.
Stock	Mallory	Ohms	Taper
No.	Type	Res.	No.
14.A31	Q	2	4
14A32	R	6	4
14A33	9	10	4
14A34	Ť	20	4
14A35	ַ ע	30	4
14A36	v	60	4
14A37	W	100	4
14A38	x	200	4
14A39	A400P	400	4
14A49	A	500	1
14A41	A550P	550	4
14A42	В	1000	1
14.143	UC500	1000	2
14A44	AIMP	1000	4
14.145	*C12	2009	1
14A46	*C	2000	2
14/147	A2MP	2000	4
14A48	*1)12	3600	1
14A49	*D	3000	2
14A50	*A3MP	3000	4
14A51	*D7	3000	7
14A52	*E	5000	2
14.153	*A5MP	5000	4
14A54	*E7	5000	7
14A55	*F	7500	2
14.156	* Ital	7500	7
14A57	*G	10000	2
14A58	*A10MP	10000	4
14A59	*G7	10000	7.
14A60 14A61	*H	15000	7 2 7
14A62	*H7 *A20MP	15000 20000	4
	he above.	20000	
	itch. Each	,	73c
NOTE			
Numbers	Please sp	orders to	elim-
	on your	OLGIELS CO	GUM -
****** CII	Ot or		

Universal Single Carbon Replacement Controls Standard—1½" Dia. Midget "MR"—1¼" Dia. All Have 8" Flatted Shafts

"MR" Midget Controls

IMIH		t Contro	
*Exter	nal adjustat	ole resistor	inc.
Stock	Mallory	Ohms	Taper
No.	Type	Res.	No.
14A63	*MR14	5 M	4A
14.164	*MR18	10M	1
14.165	*MR19	10M	2
14A66	*MR20	10M	4
14.\67	*MR21	15 M	1
14A68	*MR22	15M	2
14A69	*MR24	20M	1
14A70	*MR28	25 M	2 4
14A71	*MR29	25 M	
14A72	MR33	50M	1
14A73	*MR34	50M	2
14.3.74	MR35	50M	4
14.375	MR36	75 M	1
14A76	M R 39	100M	1
14A77	MR40	100M	2
14A78	MR41	100M	4
14/179	MR42	150M	1
14A80	MR44	250M	1
14A81	MR45	250M	2
14A82	MR 48	500M	_ 1
14A83	MR50	500M	4
14.\84	MR51	750 M	1
14A85	MR53	1 Meg.	1
14A86	MR55	2 Meg.	1
14A87	MR57	3 Meg.	1
	the above,		720
	itch, Each		JU
6 -			

"UM" Universal Plug-In Shaft Midget Controls (11/4" Diameter)

E3/ 2000	V	/8 = manual (~ 1 /
	*Exter	rnal adj. re	s. inc.
Supplied	With SS-1	Universal	Shaft
Stock	Mallory	Ohms	Taper
No.	Туре	Res.	No.
14A88	*UM114	5 M	4A
14.189	*UM118	10 M	1
14A90	*UM119	10 M	2
14A91	*UM120	10 M	4
14A92	*UM121	15M	1
14A93	*UM122	15 M	2
14A94	*UM128	25 M	2
14A95	*UM129	25M	4
14A96	UM133	50M	1
14A97	*UM134	50M	2
14A98	UM135	50M	4
14A99	UM140	100M	1
14A100	UM141	100M	2
14A101	UM142	100M	4
14A102	UM144	150M	_ 1
14A103	UM 147	250 M	1
14A104	UM149	250M	4
14A1 0 5	UM154	500M	1
14A196	UM156	500M	4
14A107	UM158	750M	1
14A.108	UM161	1 Meg.	1
	the above,	,	720
Less Sw	itch, Each		196



Attachable **Switches for** All Types of

	1444	BHOLA COUL	4012
Switcher	for All	11/2" Dia, Con	trols.
Stock	Mallory	Switch	Net
		Action	Ea.
14A109	6-9	S.P.S.T.	\$.35
14A110	*6T	S. P. S. T.	.44
14A111	7	D.P.S.T.	.44
14A112	.8	S.P.D.T.	.44
14A113	13	**3P.S.T.	
14.1114			
		**Shorting typ	
62 : A B-		/ AP Tht 43 4 -	
Switch	es for 1	%" Dia, Contr	D48.
		Switch	
Stock No.	Mallory Type	Switch Action	Net Ea.
Stock No. 14A115	Mallory Type M26	Switch Action S.P.S.T.	Net Ea.
Stock No.	Mallory Type M26	Switch Action S.P.S.T.	Net Ea. \$.35
Stock No. 14A115 14A116 14A117	Mallory Type M26 *M26T M27	Switch Action S.P.S.T. S.P.S.T. D.P.S.T.	Net Ea. \$.35 .44
Stock No. 14A115 14A116 14A117 14A118	Mallory Type M26 *M26T M27 M28	Switch Action S.P.S.T. S.P.S.T. D.P.S.T. S.P.D.T.	Net Ea. \$.35 .44 .44
Stock No. 14A115 14A116 14A117	Mallory Type M26 *M26T M27 M28 **M23-2	Switch Action S.P.S.T. S.P.S.T. D.P.S.T. S.P.D.T.	Net Ea. \$.35 .44 .44 .44 .44



Heavy Duty Type "M" Wire Wound Rheostats and **Potentiometers**

Dissipate 4-watts, insulated com tant arm. 281° effective electronic rotation. Use type 395 dial plate.

TY	PE "M" R	HEOSTAT	8
Stock	Mallory	Ohma.	Amps.
No.	Туре	Res.	Cap.
14A120	MO5R	3/4	2.80
14A121	MIR	1	2.00
14A122	M2R	3	1.40
14A123	M3R	3	1.15
14A124	M4R	4	1.00
14A125	MGR	6	.82
14A126	M10R	10	.63
14A127	M15R	15	.52
14A128	M 20R	20	.45
14.1129	M 25 R	25	.40
14A130	M30R	30	.37
14A131	M40R	40	.21
14A122	M50R	50	.28
14A 183	M60R	60	.26
14A134	M75R	75	.23
14A185	M100R	100	.20
	he above Ty		500
	ta, Net Ea		59c
TYPE			
Stock	Mallory		M.A.
No.	Туре	Res.	Cap.
14A136	M16P	15	520
14A137	M 20 P	20	450
14A138	M25P	25	400
14A130	M30P	30	370
14A140	M40P	4.0	220
14A141	M50P	50	280

14A141	M50P	50	280
14A142	M60P	60	260
14A143	M75P	75	230
14A144	M100P	100	200
14A145	M2001	200	140
14A146	M400P	400	100
14A147	M500P	500	90
14A148	M600P	609	82
Any of th	e above Typ	e "M" 📂	10 -
Potention	neters, NET	EACH	'3c
14A149	MIMP	1,000	63
14.1150	M2MP	2,000	45
144461	200000		

M4MP

14/4100	PI D MI P	5.000	28
iny of the	above Ty	pe "M" O	0 -
Potention	eters, NET	EACH O	2e
14A154	MIOMP	10,000	20
14A155	M15MP	15,000	16
l4A156	M20MP	20,000	14
14A 157	M25MP	25,000	13
any of the	above Ty	pe "M"	7
			7.40

4,000

M50MP M70MP iometers, NET EACH 7 1 C 50,000 70,000 14A159 The above Type Potentiometers, NET EA. \$1.15

Etched Dial Plates

Calibrated 0-10 in proper degrees match-ing rotation of various volume controls and rheostate

No. 14A160: Type 395 for use with "M" and "WW" controls.
No. 14A161: Type 396 for use with when switch is used,

1946 Mallory Encyclopedia



New Volume 5 OVER 450 PAGES of service in-formation.

VOLUME CON-TROL TUBE AND IDENSER REQUIREMENTS THOUSANDS OF MODELS— CONDENSER RIDER'S reference for every set listed. Size 8 % "x10 %"; wt. 2 % lbs. ... \$1.25 ANY OF THE EACH Stock No. 16A26.



114"	Dla.	"T	RP"	C	ONT	ROLS
			shaf	ŧ	and	insert)

Mallory	Total	Tap
No.	Res.	Res.
TRP623	250M	50M
TRP603	250 M	110M
TRP606	500M	100M
TRP610	1 Meg.	30 M
TRP608	1 Meg.	200M
TRP609	1 Meg.	500M
TRP612	2 Meg.	15M
TRP618	2 Meg.	250 M
TRP613	2 Meg.	400M
taper for f	ader serv.	
	No. TRP623 TRP603 TRP606 TRP610 TRP608 TRP609 TRP612 TRP618 TRP618	No. Res. TRP623 250M TRP603 250M TRP606 500M TRP610 1 Meg. TRP618 1 Meg. TRP609 1 Meg. TRP612 2 Meg. TRP618 2 Meg.

Any of the above, Less, Switch, Each

ı	11/4"	Dia. "TM"	CONTRO	LS
I	Supplied	With 88-1	Universal	Shaft
I	Stock	Mallory	Totai	Tap
ł	No.	No.	Res.	Res.
1	14A173	TM220	250M	50M
Į	14A174	TM227	500M	100M
ļ	14A175	TM240	1 Meg.	200M
I	14A176	TM 248	2 Meg.	250M
		the above,	@4	.08
i	Less Sw.	itch. Kach		•VO

UNIVERSAL REPLACEMENT PLUG-IN SHAFTS (TM-UM)

No. 14A177, type SS1, replaces any 4" round, 3" or 3" flatted No. 14A171, type SS1, replaces any 4" ro und, h" or h" flatted shafts to 4" long. No. 14A173, type SS16, replaces any 4" shaft to 10½" long, has 2" flatted surface at end.

No. 14A179, type SS25, replaces any standard knurled shaft from %"

to 4" long

to 4" long.

No. 14A180, type SS2, replaces any fa" diameter shaft to 4" long.

YOUR CHOICE OF THE 18C

No. 14A181; type SS3, replaces any fa" slotted shaft to 2" long.

No. 14A182; type SS11, replaces any fa" slotted shaft 2" to 4" long.

No. 14A183; type SS15, replaces any sh" slotted shaft 4" to 6" long.

YOUR CHOICE OF THE ABOVE, EACH26c Volume Control Fittings

No. 14A184: Mallory 178, wrench for hex nuts and bushings.
No. 14A185; Mallory RB248, 1%" centers mounting bracket.
No. 14A186; Mallory RB249; 2%"
centers mounting bracket.

No. 14A187; Mallory A11260/2, hex shoulder nut for thick panels, %" No. 14A188: Mallory A11260/12, 14" hex shoulder nut.

UNIVERSAL EXTENSION SHAFT

No. 14A189; Mallory RS242, 14"x4" with "1" fiat. No. 14A190; Mallory RS243; 14"x4" with 14" flat.
No. 14A191; Mallory RS244, 72"x4" with 1/64" flat.

ANY OF THE ABOVE,

RC REPLACEMENT VOLUME CONTROLS IR



THE "CENTURY" LINE; 1 1/8 DIA. CONTROLS
FILLS EVERY SERVICE NEED

no longer need the Service Man look
for an "exact duplicate" control

for an "exact duplicate" control among hundreds of listings; the new IRC CENTURY LINE provides the RIGHT control for the job—EVERY ONE WITH THE "FAMOUS 4" ONE WITH THE "FAMOUS 4" Metalized resistance element, smooth, noiseless, moisture proof and permanent; "Knee Action" contactor, 6 fingers give positive uniform contact; Spiral Connector, eliminates most frequent source of noise by positive connection between contactor and terminal; Coil spring thrust washer, prevents end play.



UNIVERSAL TYPE "D" TAP-IN SHAFT

Complete with dou-hie flatted shaft for push-on or set ser knobs. Additional

	listed	below.	
Stock	IRC	Ohme 1	aper
No.	Type	Res,	No.
14A416	D11-103	500	A
14A417	D11-108	1M	A
14A418	D11-110	2 M	A
14A419	D11-112	3M	Ā
14A420	D11-113	4 M	A
14A421	D11-114	5 M	_ A
14A428	D13-114	5 M	C
14A423	D14-114	6M*	D A
14A424 14A425	D11-116 D11-116	750 0 10 M •	Â
14A426	D13-116	10M	C
14A427	D14-116 D16-116	10M* 10M*	F
14A428 14A429	D14-118	1531	Ď
14A430	D16-118	15 M •	F
14A431	D16-119	20 M *	F
14A432	D11-120	25 M	Ā
14A488	D14-120	2531	Ď
14A484	D16-120	25 M	F
14A485	D11-123	50M	A
14A436	D13-123	50M	C
14A487	D14-123	6011	Ď
14A438	D13-125	75M	C
14A439	D14-125	75 M *	D
14A440	D11-128	100M	A
14A441	D13-128	100 M	C
14A448	D11-129	200M	A
14A443	D14-129	200M*	
14A444	D11-130	260M	A
14A445	D13-130	250M	C
14A447	D14-130	250M	D
14A449 14A451	D13-132 D11-133	350M	Ç
14A452	D11-133	500M 500M	A
14A454	D14-183	500M	Ď
14A456	D11-137	1 Meg.	
14A457	D13-137	1 Meg.	
14A463	D13-139	2 Meg	
14A469	D13-140	3 Meg	Č
14A470	D11-141	5 Meg.	. A
14A471	D11-143	10 Meg.	. A
	⁄ watt R		ed,
Your Choice	of above	. 7	3c
Net Each .		4	<u>JC</u>

TYPE	"D" TAPP	ED CO	NTRO	LS
Hock	IRC	Ohma	Та	per
No.	Type	Res.	TAP	No.
14A446	D13-130X	250M	125 M	Sp.
14A448	D18-130X	250M	60 M	H
14A450	D18-132X	350M	75 M	н
14A453	D13-133X	500M	125M	H
14A455	D18-133X	500M	50 M	Sp.
14A458	D13-137X	1 Mg.	250 M	Н
14A459	D17-137X	1 Mg.	35 M	Sp.
14A460	D18-137X	1 Mg.	100 M	Sp.
14A461	D19-137X	1 Mg.	100M	Sp.
14 A 462	DVC-539X	1 Mg.	500 M	Sp.
14A464	D13-139X	2 Mg.	500M	H
14A465	D17-139X	2 Mg.	150 M	Sp.
14A466	D18-139X	2 Mg.	1 Mg.	Sp.
14A467	D18-139X	K 2 Mg.	(250M	
	2-Taps		(150M	Sp.

	e-rehs		(100M Sp.
14A468 D1	9-139X	2 Mg.	50M Sp.
Your Choic	e of abo	ve,	@4 AA
Net Each			DI.UJ



Tap-In Shafts for All Above Controls

	Net
Type .	Each
3-piece slotted	26c
Knurled slotted	18c
Solid 4" round	18c
Auto Radio	18c
	3-piece slotted Knurled slotted Solid 4" round



UNIVERSAL TYPE "DS" FIXED SHAFT **CONTROLS**

(All are 1%" x 17" thick.)

-		
Stock	IRC	Ohms Taper
_No.	Type	Res. No.
14A400	DS11-116	10M A
14A401	DS14-116	10M* D
14A402	DS14-120	25 M* D
14A403	DS11-123	60M A
14A404	DS11-128	100M A
14A405	DS13-128	100M C
14A406	DS11-130	250M A
14A407	DS13-130	250M C
14A410	DS13-133	500M C
14A412	DS13-137	1 Mg. C
14A414	DS13-139	2 Mg. C

*270-Ohm, ½ Watt Res. Included. Type "DS" Controls,

Net Es	i ch		4	3 C
TYPE	"DS" TAPP	ED CO	NTRO	LS
Stock	IRC	Ohms	Т	per
No.	Type	Res.	Tap	No.
14A408	D813-130X	250M	125M	Sn.
14A409	DS18-130X	250M	60M	H
14A411	DS13-133X	500M	125 M	H
14A413	DS13-137X	1 Mg.	250M	Н
14A415	DS13-189X	2 M P	KOOM	H

"DS	' Tar	ped	•	Cor	itr	ola,	. @	1.09
Net	Each		٠.				. Ψ	T.O.
SW	ITCH	ES	F	OR	, 44	D"	ANI	"D8"
614 - 1			_	_	_			

SWILL	nes r	OR "D" AND	"DS"
Stock	IRC	Туре	NET
No.	Ņο,	Switch	EACH
14A506	41	S.P.S.T.	\$.35
14A507	42	D. P. S. T.	.44
14A508	43 .	S.P.D.T.	.44
14A509	4.5	Four Point	.44
14A510	47	*S.P.D.T.	.44
(*At clo	ckwise	position.)	



Clutch-Type "DC" Controls With friction clutch drive for

auto radio use. Stock IRC Ohms Res. to No. Type Tap Res 14A472 DC13-130 250M DC18-130X 50M 250M 14A474 14A475 DC13-133 500 M DC13-133X 500M 125 M 14.1476 DC13-137 1 Meg. DC13-137X 14A477 1 Meg. DC13-139 2 Meg.

DC13-139X 2 Meg. 14A479 500M "DC" Controls, Your Choice, Net Each. \$1.09



Dual Controls

Specially selected to cover most needs. Size, 14"x14". At-tachable switches as listed below.

Stock	IRC		Res.	
No.	Type	Unit	Ohms Taj	per
14A482	35-1620	Panel	10M	C
		Rear	25 M	E
14A483	61-1623	Panel	10 M	F
		Rear	50M	A
14A484	33-2828	Panel	100M	C
		Rear	100M	C
14A485	33-3030	Panel	250M	C
		Rear	250M	C
14A486	33-3333	Panel	500M	C
		Rear	500M	C
14A487	33-3737	Panel	1.5 Meg.	C
		Rear	1.0 Meg.	C
14A488	33-3939	Panel	2.0 Meg.	C
		Rear	2.0 Meg.	C
Choice o	of above,		04 0	•
Net Ea			\$1.8	Z

14A511, No. 21 S.P.S.T.

EXPLANATION OF IRC VOLUME CONTROL TAPERS

Taper "A": Uniform resistance change over entire range.

Taper "C": Has logarithmic curve for audio or antenna shunt.

Taper "F": Tapered at both ends for control of grid bias and antenna circuit, must not be used with heavy currents.

Taper "H": A tapped logarithmic curve used as audio level control for authority heave companying heavy curve used as audio level control for authority heavy currents.

automatic bass compensation. Taper "D": Tapered at both ends for grid bias and antenna control.

MASTER REPAIRMAN'S CONTROL CABINET

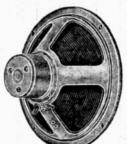
STANDARDIZED REPLACE MENT STOCK of farmous TYPE "D" CONTROLS, SWIT TYPE "D" CONTROLS, SWITCH-ES, AND SHAFTS consisting of 18 most often needed controls, 6 switches and 5 shafts of needed types — NO "DEAD" STOCK — EVERY CONTROL A "FLOW STOCK —



types — NO "DEAD" STOCK —
EVERY CONTROL A "FAST MOVER" EASILY REPLACED FROM
OUR REGULAR STOCK WHEN
NEEDED! COVERS 87% OF ALL
VOLUME CONTROL REQUIREMENTS IN THE SERVICING OF OVER 10.850 MODELS AND MAKES
OF RADIO SETS! The all metall, removable hinged front, 23 compartment cabinet, size 14½"x73½"x4½", is FREE—Comes to you packed at
the factory with the controls, switches and shafts listed above having
a total "list" value of \$24.95,
Stock No. 20A876, "IRC" Volume Control Kit. Your Cost.. \$18.17

MOST NEEDED "EXACT DUPLICATE" CONTROLS

Special TWO GREAT VALUES!



"STAR VALUE" 12-INCH "PM" DYNAMIC: — Ultra - conservative rating of 16-WATTS—TESTS in "B-A" Laboratory indicate FINE REPRODUCTION OF VOICE AND MUSIC under AUDIO LOAD UP TO 13-WATTS! 1-inch Voice Coli; 6-8 ohms impedance. Heavy steel frame with bracket for transformer. DUSTPROOF construction, Wt. 7, 165 Wt. 7 lbs. Net \$9.45

SPECIAL" 12" PM DYNAMIC: "STAR SPECIAL" 12" PM DINAMICO-CONSERVATIVE RATING — 8 WATTS! Will "Take" 10-watts satisfactorily, Has Voice Coil; 6-8 ohms impedance. 6 1/2 lbs. No. 30A123; 8-Watt "PM", Ea. \$7.95

A Red Hot "B-A" Bargain Special! "SUPREME" PRECISION ACCURATE

DC OHMS: 0-1000-100,000.

Wire-wound resistors, ½ of 1% accuracy!
SIZE ONLY 3"x3"x6"; wt. 2 lbs.
Special Model—EXCLUSIVELY at B-A! "B-A" BARGAIN YOUR \$16.95 35A72 MODEL 543-S



35c

Transformers for Every Purpose



UNIVERSAL REPLACEMENT POWER TRANSFORMERS 3A mig.; All plate and filament windings are C.T.)

(78	rant municite east		.,	Prince or							
Stock No.	Thord. No.	$\mathbf{v}^{ ext{Pl}}$	ate M.A.	Rect.	Fil.	V.	ment A.	Dia W.	nensio D.	ns H.	Your Cost
13A214 13A107 13A108 13A109	T13R01 T13R02 T13R03 T13R05*	650 700 700 700	50 70	5.0 5.0 5.0 5.0	3.0 3.0 3.0	2.5	4.0 7.25 9.0 9.0*	3 2 11 31/4	21/3 21/3 31/3	214	\$3.41 3.66 4.15 4.88
13A110- 13A110- 13A216	T13R00 T13R06*	550 700	70 120	5.0 5.0 5.0	3.0	5.0 2.5 2.5 2.5	0.5 10.5 12.5* 12.5	3 1/4 3 1/4	2 11 3 14 3 14	314	4.39 5.62 4.88
	Have ext	*	. win	dings	of 2.1	5 volts		amp	٠.		
13A111 13A112 13A113 13A216 13A114 13A116 13A116 13A217	T13R11 T13R12 T13R20 T13R13 T13R14 T13R15	480 580 700 610 700 700 750 800	50 70 70 90 120 150	5.0 5.0 5.0 5.0 5.0 5.0 5.0	3.0 3.0 2.0 3.0 4.0 4.0	6.3 6.3 6.3 6.3 6.3 6.3	2.0 2.5 3.5 3.5 4.7 5.0 5.14	3 2 3 3 3 4 4 4 4	22223	23 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2.93 3.17 3.66 3.66 4.39 4.88 5.62 6.34

Shielded, Upright Mounting, Heavy Duty Powers For Amplifiers, Transmitters, or heavy doty replacements. Upr (2G) mtg.: plate and filament windings center tapped. replacements. Upright

Stock No.	Thord.	v.P	late M.A.	Rect. V.	Fil. A.	Filar V.	nent A.	W.	mensi D.	DDS H.	Your Cost
13A218 13A117 13A219	T70R78 T70R61 T17R37	680 770 700	70	5.0 5.0 5.0	2.0 2.0 3.0		1.5 2.5 3.5	3 1 3 1 3 1 4 3 1 6	234 314 314 312	45% 45% 45%	\$4.15 4.64 4.57
13A118 13A220 13A119	T92R21	700 700 778	120 200	5.0 5.0 5.0	3.0 4.0 3.0		4.5 4.7 5.0	35/8 35/8	378 487 417	4 H 5 % 4 H	6.10 5.13 7.32
13A120 Note: *H 13A122	T75R50* as 80 volt T89R28†	BIAS	TAP	5.0 5.0	3.0	6.3 2.5 6.3	1.5 10.0 6.0	3¾	434	4 11	7.56
TOPTILL	10011201	650		5.0	2.0			334	514	47/8	11.22

Note: †Has 75 volt BIAS TAP.

6-VOLT VIBRATOR POWER TRANSFORMERS

	41-4 41471	4 8 4 5 4 6 1 8 4 5 4 6	_ ,,,,,,,,					
Stock No.	Thord. No.	D.C. Volts	M.A.	Type Mtg.	W.	mensi D.	ons H.	Your Cost
13A221 13A222 13A223	T14R33 T14R34 T14R35	225 250 260	40 50 60	3C 3C 3C	214	2% 2% 2%	31/4 31/4	\$2.93 3.41 3.66

FILAMENT TRANSFORMERS

All primaries 115 volts, 50-60 cycle. All secondaries center tapped.											
Stock No.	Thord.	Secon	Amp.	Volts Insul.	Mtg. Type	w.	mensio D.	ons H.	Your Cost		
13A123 13A224 13A124 13A225 13A226 13A125 13A126 13A127 13A127	T19F88 T19F75 T19F90 T19F83 T19F85 T19F80 T19F97 T19F98 T19F98 T19F99	2.5 2.5 5.0 5.0 6.3 6.3 6.3	2.5 5.0 10.0 5.0 13.0 1.0 3.0 6.0 10.0	1600 1600 7500 1600 1600 1600 1600 1600	2B 2B 3C 2B 3C 2B 3C 2B 2B 3C 3C	232333335	222221222222	2½ 3¼ 3¼ 4 1½ 2½ 4 2½	\$1.95 2.19 2.93 2.19 3.90 1.30 1.71 2.68 3.41 2.19		

"C.H.T." SERIES—SINGLE SECONDARY FILAMENT TRANSFORMERS Superior voltage regulation, continuous duty, low temperature operation. PRIMARY 105/115 volts; CENTER TAPPED SEC.

	4 46 4 4 4 4 1		, , B M C						
Stock No.	Thord.	Seco Volts	ndary Amps.	Volts Insul.	Mtg. Type	W.	mensi D.	ona H.	Your Cost
13A228 13A229 13A230	T11F59 T11F64 T11F53	5.0 10.0 2.5	5.0 10.0 10.0	2000	3U 3U • 3U	3 4 1 4 1 4 1	3 41/6 33/4	3 1 5 1 4 1 4 1 1	\$7.32 9.75 8.30

REPLACEMENT FILTER AND INPUT CHOKES

28 II B	THOSE CHARTER ASSET	CHORGE	o ffrida Le	F C 6.43 Tri	W. CHWI	11114111	I M III O	OM A		
Stock No.	Thord. No.	Hen.	M.A.	D.C. Res.	Volts Ins.	Mtg. Fjg.	W.	mensi D.	H.	Your Cost
13A231 13A141 13A232 13A142	T-13C26 T-13C28 T-47C07 T-44C02	8 10 12	40 65 75 80	530 460 410 405	1600 1600 1600 1600	3B 3B 3B 3B	2% 2% 3% 1%	15% 13% 2 25%	1% 2 21/4	\$.89 1.18 1.62 1.46

FILTER CHOKES FOR AC-DC RECEIVERS 13A233 | T-14C63 | 8 | 55 | 300 | 1600 | 3B | 2 H 15/4 | 15/4 | \$.98

53	T-14C64	10	55	350	1600	313	2 7/8_	1%	1%	.98
	DEDI AC	EME	NT A	HTDI	IT TP	ANG	FOR	MEI	25	

All are conventional open shell type with leads or lugs.

Stock	Thord.	Output	Imped	ence	Max.	Mtg.	Your
No.	No.	Tubes	Pri.	Sec.	Watts	Ctr.	Cost
13A234 13A235 13A236 13A237 13A238 13A239	T14S81 T14S82 T14S83 T14S84 T13S37 T13S39			3-6 3-6 3-6 3-6 1/2/4 1/2/4	5 5 5 5 5	2" 2" 2" 2" 2"	\$1.22 1.22 1.22 1.22 1.22 1.22

Amplifier and Small Transmitter Filter Chokes

• .			
A SAF A PRINCIPLE A	THE TOTAL DESCRIPTION OF A T	A MIDT TELLED	OFFID A NUMBER OF BUILDING

Stock No.	Thord. No.	Ind. Hy.	M.A.	D.C. Res.	Volts Insul.	Mtg. Fig.	W.	mensi D.	ons H.	Your
13A148	T-17C00B	12	150	231	1600	2F	21/8	3	31/3	\$2.68
13A150	T-67C49	5	200	80	1600	2F	3	236	31/3	2.68
13A151	T-75C51	13	250	121	1600	2G	31/8	334	5	4,88

Matched Transmitter Input and Filter Chokes

For AMATEUR, AMPLIFIER, or EXPERIMENTAL USE.

TRANSMITTER INPUT CHOKES											
Stock No.	Thord. No.	Ind. Hys.	D.C. M.A.	D.C. Res.	Volts Ins.	Mtg.	w.Di	mensi D,	ons H.	Your	
13A171 13A172 31A32 13A173	T-19C35 T-19C36 T-19C37 T-19C38	5-20 5-20 5-20 5-20	200 300 400 500	130 105 90 75	3000 3000 5000 4000	2D 2D 2J 2J	3½ 3½ 3½ 4¼ 5½	31/4 31/4 51/2 6	414 458 6 712	\$3.90 6.83 12.20 14.64	

TRANSMITTER SMOOTHING CHOKES											
Stock No.	Thord.	Ind. Hys.	D.C. M.A.	D.C. Res.	Volts Ins.	Mtg. Fig.	w.	iuensi D.	ons H.	Your	
13A175 13A176 31A33 13A177	T-19C42 T-19C43 T-19C44 T-19C45	12 12 12 12	200 300 400 500	130 105 90 75	3000 3000 5000 4000	2D 2D 2J 2J	3½ 3½ 4½ 5½	384 384 512 6	4¼ 45% 6 716	\$3.90 6.83 12.20 14.64	

PLATE SUPPLY TRANSFORMERS

These plate transformers are rated in D.C. voltage from a two section filter, including voltage drop through rectifier tubes. Electrostatic shield between primary and secondary. PRIMARY 115 Volts 50-60 Cycles.

Stock No.	Thord.	D. C. Volts	D. C. M. A.	Mtg. Fig.	w.Di	mensi D.	ons H.	Your Cost
13A131 31A34 31A35 31A36 31A37 31A38 31A39 31A40 31A41	T-19P55 T-19P58 T-19P61 T-19P65 T-19P63 T-19P64 T-19P67 T-19P68	400 or 500† 750 and 1000 1500 or 1750 2000 or 2500 1000 or 1250 1250 or 1500 1500 or 1750 1750 or 2000 2000 or 2500	250 150/200** 300 300 500 500 500 500 500	2G 2G 2K 2K 2K 2K 2K 2K 2K 2K	378 412 611 611 614 616 616	3155 7518 8 8 8 6 7 7 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	47/8 61/8 63/4 63/4 7 9 111 9 111	\$ 5.34 14.64 21.95 30.25 25.13 29.03 40.50 48.79 57.09

†Bias tap at 30-v. **designed for double rectifiers and will deliver both secondary ratings simultaneously.

DRIVER TRANSFORMERS FOR SPECIFIC APPLICATIONS

Designed with CORRECT primary to secondary ratios for tubes specified; assuring good regulation and minimum driver distortion on the positive grid leaks. The first 3 listed below are Mtg. style 3B and the balance style 2F.

parance	Rtyle ar						
Stock No.	Thord.	Driver Tubes	Output Tubes	Cl.	Pri. M.A.		Your
13A240 13A241	T-78D46	1-30 1-6F6 Tri;	1-1J6G;19;2-30	В	7	21/8"	\$1.46
13A243		1-42 Tri; 1-2A5 Tri. 1-6A6; 6N7; 6C5.	2-6F6; 6L6 etc. 1-6A6; 6N7	AB	31 10	234"	1.96
13A245		2-6C5; 56; 76.	2-6F6; 42; 2A5;	_	"		
13A253	T-17D04	2-6F6 Tri.	4-2A3; 6B4G 4-6I.6	AB AB2	10 32	2 14 " 3 % "	3.17

HEAVY DUTY OUTPUT TRANSFORMERS

Stock No.	Thord.	Output Tubes	Pri. Im	pedence Sec.	Max. Watts	Mtg. Ctr.	Your Cost
13A157 13A158 13A244	T67851 T67854 T17810	PP Cl. A PP Cl. A, AB Sgl. Cl. A	14000 5000 2500	4, 8, 15, 500 4, 8, 15, 500 2, 4, 8, 500	20 30 8	2 11 "	\$3.41 3.90 2.93
13A160 13A161	T17811 T17812	PP Cl. AB1 PP Cl. AB1	8000* 4300*	4, 8, 15, 250, 500 4, 8, 15,	15 25	3 11 "	4.39 4.39
13A162 13A248	T17813	PP Cl. AB1 PP Par. AB1	6600	250, 500 4, 8, 15, 250, 500 4, 8, 15.	34	2117	5.86
13A163	T75875	PP Cl. A,	10000	250, 500 4, 8, 15, 500	60 _.	2 H/"	6.34 3.90

Note: *Indicates 10% feed back winding.

UNI	VERSAL I	LINE TO V	OICE COIL	OUTP	UT T	RAN	FOR	мю	R8
Stock No.	Thord. No.	Ohms II Pri.	npedance Sec.	Max. Watts	Mtg. Fig.		nensio D.	H.	Your
13A164	T60S48*	500/1000 1500/2000	Pri. as 500 ohm.	10	-				
i			.06 to 8 ctc.	10	2E	33/8	21/2	3	\$2.93
Note: *	1 to 6 #T	60SH8 (ma	y be conn.	in par	. to 5	00 oh	m li	ne).	

UNIVERSAL TUBE TO VOICE COIL OUTPUT TRANSFORMERS 156 \$1.46 T13S38** 4000-7000 T57S01** 8000-10,000 Adj. | .1/29 8 3E 21/8 2 2E 21/4 2 154 1.95

. 8

1071101	10.00	1	OΓ	14,000	0	8	ļ
Note:	**Univ. S	gle.	90	P.P.			

ı	II.7	NIVERSA	L TUBE TO	LINE OU	TPUT	TRA	NSF)RMI	CKS	i
		T61825 Sgl. Cl. A	2500-4000 5000-6000 7000	500	10	2E	3%	21/5	3	\$3.17



UNIVERSAL POWER TRANSFORMERS

All Are Type "M" Mounting, Supplied With Universal Brackets.

Stock No.	Stancor No.		ate MA	Fil. V.		il. No. : V A.	Fil. N	lo. 3 A.	Mtg. Area	Your Cost
13A 83	P-6001	650		5.0					2½x3	\$2.88
13A 84	P-6002	700		5.0		5 7.2	5	*****	21/2×3	3.70
13A 85	P-6009	550		5.0			5 2.5-CT.	10.5		4.26
13A 86	P-6005	700		5.0	3.02	.5 9.0	2.5-C.T	. 3.5		4.26
13A 87	P-6003	700		5.0	3.02				2 11 x3 1/8	3.88
13A 88	P-6004	700		5.0	3.02.				31/8×3%	4.53
13A 89	P-6007	800	110		3.02) 2 . 5-C.T.	. 3.5	31/8×3%	5.82
13A 90	P-6289	420		5.0	2.0 6.)		2½x3	2.88
13A 91	P-6297	480		5.0	2.06.	.3 2.6)		21/2x3	2.88
13A 92	P-6010	650	40	5.0	3.06	3 2.6)		236x3	2.88
13A 93	P-6119	600	55	5.0	2.06	.3 2.1	7		2½x3	2.94
13A 94	P-6120	630	70	5.0	3.06		5		2 Hx3%	3.92
13A 95	P-6011	700	70	5.0	3.06	3 2.1	5		21/4x3	3.70
13A 96	P-6312	580	90	5.0	3.06		3	• • • • • •	35 x2 H	4.46
13A 97	P-6012	700	90	5.0	3.06		5	• • • • • •	2 +1x3 %	4.15
13A 98	P-6013	700	120	5.0	3.06.	3 4.	7		31 x3 4	4.62
13A 99	P-6313	580	125		3.06		5			4.94
13A100	P-6014	750	150		3.06	3 5.6)		31x3%	6.08
13A101	P-6165	800	200		4.06		5		354x454	7.02
13A102	P-6314	700	200		3.06		5		435x3%	6.88
13A103	P-6315	740	275		3.06	3 7.0			434x33	9.40
13A104	P-6293	600		5.0	3.06	3 2	2.5-C.T	7.5		4.17
13A105	P-6294	750		5.0	3.02		6.3-5.0	3 5		4.88
		1. 50	-	0	0.0		2 5-C.T.		- 16x0/8	-100
13A106	P-6008	750	180	5.0	3.06	3 3.	3 2.5-C.T		3 14x41/8	6.53

TUBE CHECKER MODERNIZATION TRANSFORMER

105-125-125 V. 60 cy. Pri. with 19 TAP SEC.; 1.1/1.4/1.5/2.0/2.5/3.0/8.5/5.0/6.3/7.5/12/25/30/35/50/70/85/110/177 Sec. volts. "A" mtg.;
2\%" H., x 4\frac{1}{16}" W. x 2" D. Wt. 2.6]bs. Stock No. 13A70. Stancor P1834-3; With Inst. Net Each.... \$6.76

6-VOLT D. C. OR 115 VOLT A. C. VIBRATOR TRANSFORMER

6-VOLT UNIVERSAL VIRRATOR TRANSFORMERS

Stock No.	Stancor No.	DC Volts	dary M. A.	Type Mtg.	H.	niensie W.	D.	Your Cost
13A67 13A68 13A69 13A206	P4061 P4062 P4063 P6131	250 260 285 330	50 65 75 100	N N N	31/8 31/8 31/8 31/2	21/3 21/3 21/3 21/8	3 3 3 3 2 2 2	\$2.97 3.44 3.91 4.26

INPUT TRANSFORMERS Single Button Microphone Push-Pull Grids.

Stock No.	Stancor No.	Impedance (C Pri. 8	Ohms) Ratio ec. Overall	Mtg. Type	H.	nensic W.	D.	Your Cost
13A2	A4742	200 4000,00	00 CT 1:64	8	214	21/8	23/6	\$1.94

DYNAMIO MICROPHONE 028 PICK-UP TO SINGLE GRID 13A3 A4709 4, 8, 15, 30 **106,000 1:60 E 2½ 2½ 2½ 2½ 2½ 2.76** Bingle or Double Button MICROPHONE OR LINE TO SINGLE GRID 13A4 A4351 50, 125, 200, 89,000 1:13.3 E 2 3 1 11/4 2.4 333, 500 3 1 1% 2.41

SINGLE OR DOUBLE BUTTON MICROPHONE, OR LINE TO LINE A4350 50, 125, 200, 50, 125, 200, 150 333, 500 133, 500 3 1 1% 2.73

INTERCOMMUNICATION INPUT TRANSFORMER

 Stancor No. A4744; V. C. to Sgl. Grid; Pri. 4; Sec. 25,000 ohms. Mtg.

 "A", entire coil shielded; 1%" H., 2%" W., 1½" D. Wt. ½ lb.

 Stock No. 13A1. NET EACH

TRANSCEIVER INPUT MIKE AND PLATE TO GRID

Stancor A4413; PRI: 200/10,000 ohms; SEC: 90.000 ohms; 10 watts

Max. Audio; STATIC SHIELD between Pri. and Sec. windings; size
2½ "X1½ x2½" high. Wt. 1½ lbs. Type "J" mounting.

Block No. 13A207. "TRANSCEIVER TRANSFORMER."

Your Cost, Each

INTERSTAGE TRANSFORMERS

SGL, PL, (7,000 to 15,000 ohms) TO P.P. CL, "A" GRIDS

Stock	Stancor	Turns	Pri.	Mtg.	Dimensions	Your
No.	No.	Ratio	D.C.ma	Fig.	H. W. D.	Cost
13A208 13A209 13A6 13A7 13A8 13A66 13A210	A-52C A-62C A53C A-63C A-73C A-4719 A-64C	2:1 2:1 3:1 3:1 3:1 4:1	10 10 10 10 10 10 10	A A A A TD A	1 % 2 % 1 % 1 % 1 % 1 % 1 % 2 % 1 % 1 %	\$1.20 1.41 1.20 1.41 1.76 3.09 1.56

PUSH-PULL PLATES (7,000 to 15,000 ohms) to P.P. CLASS "A" GRIDS 13A10 | A-4711 | 1:1 | 10 | A | 11/4 27/6 11/2 | \$1.76

P.P. PLATES	(7,000 to 20,0	0 0 ohms) '	TO PARAL	LEL P.P. GR	ID8
13A9 A-4208	0.7:1	15	C 3 1 2 1 6 2 1	254 25	\$1.76
13A11 A-4774*	8:1	10		21 13	2.03
13A12 A-4775*	3:1	10		3 23	2.70

Note: *Above denotes Split Secondary.

REPLACEMENT DRIVER TRANSFORMERS SINGLE DRIVERS-Single Plate to Push-Pull Grids,

Stock	Stancor	Primary	Pri1/2 Sec.	D.C.	Mtg.	H.	mensi	ons	Your
No.	No.	Imped.	Ratio	ma	Fig.		W.	D.	Cost
13A13	A4722	10,000	2:1	30	TD	2 H	28/4	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$2.35
13A14	A4752	10,000	2/1.5/1: 1	40	A	2	31/4		1.96
13A15	A4713	10,000	2:1	30	A	15/8	27/8		1.44
13A16	A4401	20,000	2.66:1	25	J	2 H	27/8		2.12
13A17	A4292	10,000	2.5:1	20	A	15/8	27/8		1.44

PUSH-PULL DRIVERS-Push-Pull Plates to Push-Pull Grids 13A9 | A4208 * | 20/30M | 2.8:1 | 15 | C | 3 % 25% 25% | 3.35 NOTE: #A4208 has split secondary for inverse feedback.

UNIVERSAL OUTPUT TRANSFORMERS

Stock	Stancor	Output-	Impeda		Max.	Mtg.	N1	Itg. Si		Your
No.	No.	Tubes	Pri.	Sec.	Watts	Type	H.	W.	D.	Cost
13A19	A-3856		4.000 }		4	O	13%	23%	1%	\$1,47
13A20	A-3823	Single	7,000		8	Q	15%	278	132	1.47
13A21	A-3850	or	8,000	Adj.	8	J	2	2%	134	1.47
13A22	A-3852	Push	10,000	1	18	J	2 16	21/8	2	1.88
13A23	A-3870	Pull	or	to	18	_Q	2	31/4	2	1.88
13A24	A-3890	Plates	14,000	30	15	ΤĎ	2 11	23/4	2	3.06
13A25	A-2855		all Ct.	.	15	L	2	$2\frac{1}{16}$	13/4	1.76
13 A 26	A-3830		3000, 5000]			1		1	
		P.P.Plts.	6600, 7000	L ا						
			800, 10000	Adj.	00	_	0.11		01/	0.70
13A27	A-3849	TT_:	C. T.	사본다	20	Q	2 11	3₩	21/4	2.73
13A21	A-3849	Univ. Sgl. Plte.	1500, 2000 4000	1 to					- 1	
		ogi. Fite.	5000, 7000	30					- 1	
		ĺ	10000	1 1	10	Q	15%	21/8	11/2	1.47
13A30	A-3822	Single		7, 1, 1.4	10	, e	128	278	173	1.001
137100	74-0022	Class A		2, 2.8, 4	5	Q	1%	236	11%	1.15
	т	UBE-TO-	•		RANSI				. • •	
13A28			2500, 4000				1			
13A28	A-3841	Univ. Sgl. Plte.		- 1						
		ogi. Pite.	JUUU			_	l			

6,000, 7000 500 10 J 211 3 A 234 \$3.67

	13A29		P.P.Plts.	8000, 10,000 12,000 14,000 C.T. ICE COIL					21/4	3.67
	13A31	A-3857	Single or	25000C.T.	4	۱.	11/	0117	11/	\$1.26
ĺ	13A32	A-3831		10000	0.40	 l .	1	278		

13A33 A-2312 P.P.Cl.B. 10000 P.P.Cl. A 14000 11/2 10 A 31/4 1% 1.47 13A34 A-3878 7000

CRYSTAL RECORDER OUTPUT TRANSFORMERS

Stock No.	Stancor No.	Application	Audio Watts	Mtg. Fig.	H.	wensi W.		Your Cost
13A211	A3854	Sgl. 7m ohm Pl. TO 70m ohm Crys. cutter AND 4-ohm voice coil	10		21/4	38/	21/4	\$2.59
13A212	A3860	P.P. 10m ohm pl. TO 70m ohm crys. cutter AND 4-ohm voice coil	10	A	214	3%	21/4	

PLATE TO VOICE COIL HEAVY DUTY OUTPUTS-HIGH LEVEL

					0 -					
13A35	A-3851*	P.P. Cl.	4400	4, 8, 15,	00		014	0.14	01/	
		AB1		250, 500	30	C	31/2	2 👭	378	\$4.70
13A36	A-3800	P.P. Cl.	5000	4, 8, 15,			1			
		A or AB	1	250, 500	35	C	31/8	31/4	31/6	4.41
13A37	A-3303	Sgle. or P.P. Cl.	4000	4, 8, 15			'	-, -		
		A or B	1	500	20	C	31/6	25%	25%	3.44
13A38	A-3304	Single or	1		20	~	78	-/8	-/6	0.44
	1	P.P.	7000	4, 8, 15,		Į.	1			
	l	Cl. A or B	10000	500	25	C	33/2	25%	25%	3.76
13A39	A-5528	P.P.	1			1	1			
		Cl. A	4000	4, 8, 15,	8	C	33/8	25/8	23/6	3.29

FILTER CHOKES-Smoothing Chokes for DC Power Supplies.

Stock	Stancor	Ratio		D.C.	'Volts	Mtg.		ltg. Si	ze	Your
No.	No.	Ind. at M.	A. DC	Ohma	Insulat.	Type	H.	W.	D.	Cost
13A41	C-1706	4.5	50	300	1500	A	1 ∦	21/8	1 🛧	
13A42	C-1707	5	50	500	1500	A	1 🚠	28%	1 %	.88
13A51	C-1515	20	15	900	1500	A	15%	2 11	11/2	.94
13A43	C-1003	16	50	550	1500	A	13%	3 ∰	15%	1.18
13A44	C-1708	13	65	460	1500	A	13%	31/4	2 11	1.18
13A52	C-2303	2.5	130	100 .	- 2000	A	2	3%	15%	1.44
13A45	C-1002	15	75	400	1500	A	21/4	3 11	13%	1.65
13A46	C-1709	- 8	85	250	1500	A	13%	314	.2 11	1.56
13A47	C-1710	7	150	200	1500	- A	21/2	4	2	1.94
13A50	C-2305	5	100	275	1500	TB	2%	23/4	21/8	1.94
13A48	C-1001	10.5	110	200	3000	A	21/2	4	2	2.06
13A49	C-1421	7	140	160	3000	C	31/8	21/2	234	2.97
13A53	C-1410	4	175	100	3000	Ĉ	31/4	21/2	233	2.82
13A54	C-1411	4.5	200 -	80	3000	C	31/8	2 14:	314	3.67
13A55	C-1412	5	250	60	3000	C	3%	2 11.	-314	4.32
13A56	C-2308	8	300	- 80	3000	, C	45%	3%	37/8	6.38

.. AC-DC CHOKES

4 4	the Country of	The latest the second	to be to be set of	The state of the s	ALCOHOL: THE	1. 4 4	4 4	ALC: THE RE	Array of the state of the
13A60	C-1080 C-1279 C-1215	3.5	50	200	1500	A	18%	211	138 50.94 138 .94 136 .94
13A62	C-1215	9	50	500	1500	A.	15%	211	136 .94



"RCA" RECEIVING AND SPECIAL PURPOSE TUBES

EVERY TUBE GUARANTEED BRAND NEW AND PERFECT "B-A" BETTER DISCOUNTS MAKE LARGER PROFITS FOR YOU!

						-				THE REAL PROPERTY.	-			-
Stock No.	Tube Type	List Each			Stock No.	Tube Type			10 Up Each		Tube Type		NET EA.	10 Up Each
21A50 21A51	OZ4 OZ4G	\$2.20 2.20	\$1.29 1.29	\$1.08 1.08		6BF6	1.6			21A221	7H7	2.65	1.56	1.30
21A52	1.13	1.80	1.06	.88	21.133	6C5	1.50 1.50 1.30 1.30	88. (.74	21A223	7437	2.65 1.80	1.56 1.06	1.30 .88
21A53 21A54	1A4P 1A5GT	2.20 1.50	1.29 .88	1.08	21A133	6C5GT 6C6	1.39	.79 .79		20A172	7R7	2.20 3.20	1.29 1.88	
21A55 21A56	1A6 1A7GT	1.80 1.80	1.06 1.06	.88 .88	21A136	6C8G	2,20	1,29		121/1224	734	1.80	1.06	.88
21A57	1B4P	1.80	1.06	.88	\$1.1138	6D8G	1.35 2.20	1.29	1.08	20A174 21A225	10	1.80 3.90	1.06 2.29	.88 1.91
21A58 21A59	1B5/25S 1C5GT	1.80 1.80	1,06 1,06	88. 88.	21A139 21A140		1.50	88. ¢		21A226 21A227	12A7 12A8GT	2.65 1.35	1.56 .79	1.30 .66
21A60 21A61	1C6 1C7G	1.80	1.06	.88			1.33		.66	21A228	12AH7GT	2.20	1.29	1.08
21.162	1D5GP	1.80	1.06 1.06	.88 .88	21A142 21A143	6F6G	1.50	.74	.61	21A324	12AT6 12BA6	1.50 1.80	.88 1.06	.74 .88
21A63 21A64	1D7G 1D8GT	2.20 2.65	1.29 1.56	1. 98 1.30	21.7144	6F6G 6F6GT 6F7	1.15 2.20				12BE6 12AU7	1.80	1.06 1.06	.88 .88
21A65 21A66	1 E5GP 1 E7G	2.20 3.20	1.29	1.08	21.A146 21.A147		1.80				12(:8	2.65	1.56	1.30
21.167 21.168	1F4	1.80	1.06	.88	21.1148	6116	1.84 1.50	.88	.74	21A231		1.35 1.60	.79 .88	.66 .74
21A69	1F5G 1F6	1.80 2.20	1.06 1.29	.88 1.08	21A 150	6H6GT 6J5	1.50 1.28				12J5GT 12J7GT	1.35 1.50	.79 .88	.66 .74
21.A70 21.A71	1F7G 1G4GT	2.20 1.80	1.29	1.08 .88	21.A151 20.A718	6J5GT	1.25 2.65				12K7GT 12K8	1.35 2.20	.79 1.29	.66 1.08
21A72 21A73	1G5G 1G6GT	1.80	1.06	.88	21A152	6.17	1.80	1.06	.88	21A236	12Q7GT	1.25	.74	.61
21A74	1114G	2.20 1.35	.79	1.08	21.A153 21.A154	6J7GT	1.50 1.50		.74		12SA7 12SA7GT	1.35 1.80	.79 1.06	.66 .88
21.475 21.476	1H5GT 1H6G	1.50 1.80	.88 1.06	.74	21A155 21A156		1.35 1.50		.66 .74	21.A 939 21.A 240	128C7 128F5	1.80 1.50	1.06	.88
21A77 21A78	1J5G 1J6G	2.65 1.80	1.56 1.06	1.80	21.4157	042.265	1 50	0.0	.74	21.1241		1.80	1.06	.88
21A79	11.4	2.20	1.29	1.08	21A159	6K8	1.35 1.80	1.06	.66 88,		12SH7	1.80 1.80	1.06 1.06	.88 .88
21A80 21A81	1LA4 1LA6	3.20 3.20	1.88	1.57 1.57	21.A160 21.A161	6K8G 61.5G	1.80	1.06	.88		128J7 128J7GT	1.50	.88 .88	.74
21A82 20A165	11.B4 11.E3	3.20 1.80	1.88	1.57	21.1162	ATT ALL S	2.65 2.65	4 7:49	1.30	21A246	128K7 128K7GT	1.35	.79	.66 .74
21A83		3.20	1.88	1.57	21A164	6L7	2,20	1.29	1.08	21.7 248	12SL7GT	2.20	1.29	1.08
21A84 21A85	1LN5 1N5GT	3.20 1.80	1.88 1.06	1.57 .88	21A 163 20A 168	6L7G 6N7	2.20 2.20	1.29 1.29	1,08 1.08		128N7GT 128Q7	1.80 1.25	1.06 .79	.88 .66
21.486 21.487	1P5GT 1Q5GT	2.20 2.20	1.29 1,29	1.08	21A167 21A168	6N7GT 6Q7	2.20 2.20 2.20 1.80 1.25	1,29 1,06	1.08. .88		128Q7GT 128R7	1.50 1.80	.88 1.06	.74
21A88 21A89	1R5 184	2.20	1.29	1.08	21.4169	6Q7G	1.80 1.25 2.20 1.26 2.20 2.20	.71	.61	20A176	12SR7GT	1.80	1.06	.88
21A90	185	2.20	1.29	1.08	21.3171	6K7	1.25 2.20	.74 1.29	.61 1.08	20.1177		2.65	.79 1.56	.66 1.30
21A91 21A92	1T4 1T5GT	2.20 2.20	1.29	1.08 1.08	21A173	687GT	1.25 2.20	.74 1,29	.61 1.08	20A178 21A251	14A5 14A7/12B7	3.90 2.65	$\frac{2.29}{1.56}$	1,91 1,30
20A655 21A93		1.80	1.06	.88	91.A 174 21.A 175	687G	2.20	1.29	1.08	20A179 20A180		2.20	1.29	1.08
21A94 21A95	2A3 2A5	2.65 1.35	1.56	1.80	21A176	68A7GT	1.35 1.50 2.65 1.80 1.89	.88	.74	20.1181	14E6	1.80	1.06	.88
21A96 21A97	2A6	1.35	.79	.66	21.1177	68C7	1.80	1.56 1.06	1,30	20A182 20A183	1437	2.65 2.65	1.56 1.56	1.30 ° 1.30
21A98		1.50	1.06	.74	21.178	68F5	1.35	.79	.88	20A184 20A185	14Q7 14R7	2.20	1.29	1.08
21A99 20.1166	2E5 3.18GT	1.80 3.20	1.06 1.88	.88 1.57	21.A179 21.A180	68F5GT 68F7	1.35 1.80 1.80 1.80	.79 1.06	.66 .88	21.1253	15	2.65 1.80	1,56 1.06	1.30
21.1100	3Q4	2.20 2.20	1,29 1,29	1,08 1,08	21A181 21A182	68G7	1.80	1,06 1,06	.88	21.1257	19 24A 25A6	1.25	.74	.61 1.30
21A102	384	2.20	1.29	1.08	21.1183	68J7	1.50	.88	.74	21A259	251.6	2.65	1.36	1.08
20A641 21A103 21A104	STI	2.20 2.65	$\frac{1.29}{1.56}$	1.08 1.30	21.4185		1.50 1.60 1.35 1.60	.88 .79	.74	21A260 21A261	25L6GT 25Z3	1.50 1.35	.88 .79	.74
21A 104 21A 105	5U4G 5V4G	1.35 2.20	.79 1.29	.66 1,08		68K7GT 68L7GT	1.50 2.20	.88 1,29	.74 1.08	21A262 21A263	25Z6 25Z6GT	1.80 1.35	1.06 .79	.88
21A 106 21A 107	5W4	1.50	.88	.74	21.1188	68N7GT	1.80	1.06	.88	21A264	26	1.05	.62	,51
21A108	5Y3GT	1.50	.88 .56	.74	21A 189 21A 190	68Q7GT	1.35 1.50	.79 .88	.66	21.A265 21.A266	30	.95 1. 3 5	.56 .79	.47
21A109 21A110		1.05 1.50	.62 .88	.51 .74	21A191 21A192	68R7 6887	1.50 1.35	.88	.74	21A267 21A268		1.35 1.80	$\frac{.79}{1.06}$.66 .88
21A111 21A112	5Z4 6A4/LA		1.06	.88 1.08	21A 193 20A 171		2.20 2.20	1.29 1.29		21 A269 21 A270		2.65	1.56 1.06	1.30
21A113 21A114	646		1.29	1.08	21A 194	6T7G	1.80	1.06	.88	21.1271	34	1.80	1.06	.88
21.4115	6.18	1.80	1.06	.88		61'7G	1.80 1.35	.79	.66		35A5	1.35 1.80	.79 1.06	.66 .88
	6A8G 6A8GT		.79	.66 .66	21A 197 21A 198	6V6 6V 8GT	2.65 1.60 2.20	1.56	1.30	21A274 20A721	35L6GT 35W4	1.35 1.15	.79	.66 .56
21A118	6AB5/6N5	2.20	1.29	1.08	21A 199 20A653				1.08	20A186 21A275	35 Y 4	2.20 1.80	1.29 1.06	1.08
21A120	6AC5GT	1.50	.88	.74	21.1200	6X5	2,20	1,29	1,08	21.A276	35Z4GT	1.10	.65	.54
21A122	6AC7/1852 6AD7G	3.20 2.20	1.29	1,57 1,08	21.A 201 21.A 202	6X5GT 6Y6G	1.35 2.20	.79 1.29		21A277 21A278		1.15 1.35	.68 .79	.56 .66
21A128 21A124		2.20 3.20		1.08	21A203 21A204	6Z7G 6ZY5G	2.65	1.56	1.30	21A279 21A280	37	1.15 1.50	.68 .88	.56 .74
21A125	8AG7	3.20	1.88	1.57	21.1205	7.14	1.80	1.06	.88	21A281	39/44	1.35	.79	.66
20A714 20A715	6.1 L5		1.06	.88	21.1206 21.1207	7.17	1.80 1.80	1.06	.88	21A282 21A283	42	1.16 1.15	.68 .68	.56 .56
21A49 20A716	6AQ6	1.80	1.06 1.06	.88	21A208 21A209	7R4	1.80 1.80	1.06 1.06	.88	21A284 21A285	43	1.50 1.10	.88	.74
21A319 21A820		1.50	.88	-74	21.A210		1.80	1.06	.88	21A286	4523	1.50	.88	.74
21A126	6134G	1.80 2.65	1.56			7B6 7B7	1.80° 1.80	1,06	.88	21A288		1.50 1.50	.88 .88	.74
21A127 21A128	6B6G	2.65 1.50 1.80	.88	1,30	21.1214	7B7 7B8 7C5 7C6	1.80 1.30	1.06	.88	21A289 21A291	49	1.50 1.80	.88 1.06	.74 .88
21A129 21A130	6B78	3.20	1.06		21.A215 21.A216		1.80			21A292 20A187		8.20	1.88	1.57
21.A131 31.A132	6B8	2.65	1.56	1.30	21A217	7E6	1.80 2.20	1.06	88	20A722	50B5	2.65 1.80	1.56	1.80 .88
21A321	6BA6	1.80	1.06	.88	21.1218 21.4219	7F7	2.20	1.29	1.06	21A294		1.50	.88	.74
21 A 3 2 2	A13 EA0	1.80	1.06	-68 I	51A770	7G7/123 9	2.86	1.56	1.30 [21A295	53	2.20	1.29	1.08 l

Stock No.	Tube Type	List Each		16 Up Each
21A296	55	1.50	.88	.74
21A297	56	1.10	.65	.54
21A298	57	1.25	.74	.61
21A299	58	1.25	.74	.61
21A300	59	2.20	1.29	1.06
21A326	70L7GT	2.65	1.56	1.30
21 A 301	71A	1.25	.74	.61
21A302	75	1.15	.68	.56
21A303	76	1.25	.74	.61
21A304	77	1.25	.74	.61
21A305	78	1.25	.74	.61
21A306	79	2.20	1.29	1,68
21A307	80	.95	.54	.47
21A308	81	2.65	1.56	1.30
21A309	82	1.89	1.06	.88
21.1310	83	1.80	1.06	.88
21A311	83V	2.65	1.56	1.30
21A312	84/6Z4	1.50	.88	.74
21A313	85.	1.25	.74	.61
21A314	89	1.35	.79	.66
21A315	1171.7/M7G7	3.20	1.88	1.57
21A316	117N7GT	3,20	1,88	1.57
21A317	117P7GT	3.20		
20A654	117 Z 3	1.80	1.06	.88
21A318	117Z6GT	2.20	1,29	1,05
VOLT	AGE REGUI	ATO	R TU	BES

VOLTAC	SE REGULATOR	TUBES
St. No.	RCA Type	Net Ea.
20A700	OA2	\$2.30
20A701	OA3/VR75	1.20
20.1702	OC3/VR105	1.20
20A703	OD3/VR150	1.20
20A740	874	2.50
20A630	991	.75
CAT	HODE RAY TUE	RES

CATI	IODE RAY	TUBES	
20A775	2A P1-A		9.50
20A776	3AP1-A		13,00
20A777	5BP1-A		20,50
32A236	5CP1-A		21.00
20A778	7CP1		24.00
32A237	902-A		9.75
20/1640	913		10.25

PHOTO	ELECTRIC	TUBES
20A734	1P29	2.55
20A704	868	2,15
20A636	918	2.60
20A705	921	1.75
20A637	922	1,80
20A706	923	1.75
20A707	927	2.50
20A798	929	1.75
20A638	930	1,50
20A639	931-A	9.25

SPECIAL	PURPOSE TUB	E8
20A732	OA4-G	1.15
20A745	1B3GT/8016	1.95
20A 709	3A4	1,65
20A710	3A5	1,50
20A711	5R4-GY	1.30
20A713	6AK5	3.15
20A631	6F4	5.55
20A632	6J4	4.90
20A720	12A6	1.10
20A719	12K8-Y	1.15
20A633	12L8-GT	1.95
21A48	26A6	1.90
21A47	26C6	1,00
21A46	26D6	1.75

SEE PAGE 82 FOR OTHER SPE-CIAL PURPOSE AND TRANS-AND MITTING TUBES.



"RCA" Electron Tube Reference Book 1947 Edition

1947 Edition
VEST POCKET
ENCYCLOPEDIA:
Characteristics
BOTH electrical
and physical of
500 types of EOA
CEIVING TYPES! Dated Diary
section; World Atlas section; RADIO DICTIONARY of special terms
used in tube business; COMPLETE
list of all Standard BROADCAST
STATIONS in U.S.A. A \$1.00
BOOK AT A BARGAIN!
Stock No. "RCA" Pocket
16A118 Tube Mauual, Ea.. 45C

Papular MALLORY · AEROVOX · SPRAGUE Condensers

Aerovox 'Dandee' Mallory 'TC' Sprague 'Atoms' Tubular **Electrolytics**



Aerovox—Mallory—Sprague. Finest quality available, standard compact dry electrolytic tubulars, ideal for all applications. Fully rated and clearly marked for capacity, voltage and polarity. Specify make wanted, adding to the stock number A=Aerovox, M=Mallory, S=Sprague.

480	Working	Volts .	150	Working	Volte	50	Working	Volta
Cap.	Stock	Price	Cap.	Stock	Price	Cap.	Stock	Price
Mfd.	No.	Ea.	Mfd.	No.	Ea.	Mfd.	No.	Ea.
4	15A201	\$.52	4	15 A 221	\$.37	5	15A236	\$.37
8	15A202	.55	8	15A222	.41	10	15 A 237	.41
10	15A203	.63	12	15A223	.44	25	15A238	.52
13	15A204	.66	16	15 A 224		50	16A239	.63
16	15A 205	.82	20	15A225	.52	100	15A240	.89
20	15 A 206	.89	80	15A226	.55 .59	25	Working	Volts
40	15A207	1.30	40	15A227	.63	10	15A241	.37
8-8	15A208	.96	50	15 A 228	.82	25	15 A 243	.44
.8-8	15A 209	1.22	8-8	15A229	.74	50	15A248	.55
10-10	15 A 210	1.04	20-20	15A230	.96	100	15A244	.82
*4 Le			-3-20	40A230	.00	10-10	15 A 245	.63



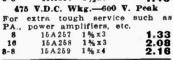
dry electrolytics of high voltage voltage formation spe cifically designed for use wherever wet electrolytics were used be fore. Will stand high peak voltages and handle A-C ripples that might cause ordinary

		rking 600 V	
Cap.			Your
Mfd.	No.	Size	Cost
8	15A251	1 % x 4 18"	\$.85
16	15A252	1%747"	1.22
25	15A231	1 1/3 x 5 16"	1.45

Can Type Dry **Electrolytics**

Extremely c om pact etched foil dry electrolytics in drawn metal cans. May be mounted in any position—above or below aub-panel. With standard threaded bushing, lock nut and insulated wire leads. Can is completely in-Can is completely in-sulated from sections.

450	V.D.C. W	kg525	V. Peak
Cap.	Stk.	Can	Your
Mfd.	No.	Size	Cost
8	16A263	1 12%	\$.96
16	15A254	1 131/4	1.41
80	15A255	1%x3	1.78
8-8	15 A 25 6	11/4×3	1.45
475	V.D.C. W	kg.—600	V. Peak
For 6	wire tour	h service	such as





Compact Can Type Dry **Electrolytics**

Light, compact, easy to mount. Connections are made to lug terminals. Cans are in the majority of sizes 1" dia. and 2" to 8" long.

Cap.	Volte	Stock	Your
Mfd.	D.C.	No.	Cost
10	450	15A270	\$.66
15	450	15 A 271	.89
20	450	15A272	1.00
40	450	15A273	1.45
10-10	450	15A274	1.08
20-20	450	15A275	1.49
10-10-1	0 450	15 A 276	1.41
20-20	150	15 A 277	.89
80-30	150	15A278	1.00
80-50	150	16A279	1.19
40-40	25	15 A 280	.89
1 10-1	0-20	1	
450	450x25	15A281	1.19
20-1 850x	0-20 350x25	16A283	1.19

HIGH CAPACITY LOW

Voltage Tubulars
Compact like above, in aluminum tubes with external insulating cov-

Cap.	D.C. Wkg. Volts	Stock No.	Price Each
1000	3	15A1518	\$1.30
1000	6	15A1519	1.56
500	15	15A1520	1.56

HIGH VOLTAGE Can Types, 600 V. Wkg. 800 V. Peak

Specially popular for P.A., theater and other applica-tions where voltage is high and surges run over 600 V.

	Cap.	Stock		Your
,	Mfd.	No.	Size	Cost
1	4	15.A232	1 x4 7 "	1.67
	8	15A233	1% x4 76"	2.34
	16		1 1/2 x 4 1/6 "	

8 mfd., 800 volts DC working, in rectangular metal can $4\frac{1}{2}x1\frac{1}{2}x\frac{1}{2}$, with mtg. flange and insulated with mtg. flange and insulated leads from bottom, SPRAGUE No. RC 88. No. 15A289, Net Each .. \$2.45



MALLORY Universal Mtg. Tubular **Electrolytics**

Supplied in waxed cardboard tubes with mtg. feet so they can be mounted vertically. An vertically. An adjustable strap is included for horizontal mtg. if desired. All are 450 V. D.C. working.

Cap.		Stock	Net
Mfd.	Size	No.	Ea.
8	% x 2 1/2 "	15.A 284	\$.55
16	13 x 2 34 "	15A285	.82
20	1x234"	15A286	.89
30	1 x 3 1/2 "	15A287	1.33
8-8	18 x 2 % "	15A288	.96

MALLORY MT Miniature Metal Tubulars



The small size so useful for hearing aid and personal radio applica-tions. Supplied in metal tubes with external insulation sleeves.

1	Cap.	D.C. WI	g.	Stock	Net
1	Mfd.	Volts	Size	No.	Ea.
1	.001	100	9 X 3/2	15A367	\$.48
1	.002	100	72 X 1/2	15A368	.48
1	.005	100	32 X 1/2	15 A 369	.48
	.01	100	21/64x 1/2	15A370	.52
1	.02	100	21/64x }}	15.4371	.52
1	.05	100	21/64x1 da	15A372	
ı	.1	100	21/64x1%	15A373	.59
1	.001	600	12 x 13	15A374	.48
Í	.002	600	9 x 13	15A375	.52
ĺ	.005	600	7 x	15A376	.55
	,01	600	21/64x1 18	15A377	.59



Aerovox Mallory Sprague Paper Tubulars

Aerovox—Mallory—Sprague, compact, non-inductive wound, sealed in wax impregnated paper tubes with wax filled ends and bare wire leads. Standard quality throughout. Specify make wanted, adding to the stock number A for Aerovox—M for Mallory—S for Sprague.

	600 Volt			400 Volt	
Mfd.	No.	Ea.	Cap.	Stock	Price
.0001	15 A 304	\$.15	Mfd.	No.	Ea.
,00025	15A306	.15	.05	15A326	\$.15
,0005	15A306	.15	.1	15 A 327	.18
.001	15 A 307	.15	.2	15A328	.22
.002	15A308	.15	.25	15A329	.22
.003	15 A 309	.15	.5	15A330	.33
.004	16 A 310	.15	1.	15A331	.44
.005	15A311	.15		1000 Volt	
.006	15A312	.15	001		
.01	15A313	.15	.001	16 A 332	5.18
.015	15 A 314	.15	.002	15 A 333	.18
.02	15 A 3 1 5	.15		16 A 334	.18
.025	15A316	.18	,006	15 A 335	.18
.03	15A317	.18	,01	15 A 336	.29
.04	15 A 318	.18	.02	15 A 337	.29
.05	16A319	.18	,05	16 A 339	.33
.06	15 A 320	.22	.1	15 A 339	.44
.1	15A321	.22	Oil in	pregnated	i, wax
.25	15 A 322	.33	filled		cased
.5	15A323	.44	oll fi	lled tubui	lars in
1.	15A324	.74	colum	n at right	

Save By Buying These Kits Kit of 15 Condensers

Contains 2-.01; 2-.06; 4-.1; 2-.25; 1-.5 Mfd. 600 volt and 2-.1; 1-.26; 1-.5 Mfd. 400 volt Paper Tubulars. \$2.58

Kit of 25 Condensers

Contains 3-.01; 3-.02; 3-.05; 8-.1; 4-.25 Mfd. 600 volts and 4-.5 Mfd. 400 volt Paper \$4.20 18A202-YOUR COST, Per Kit.

Mallory 1600 Volt Oil Impregnated Wax Filled No.

.0005	15 A 341	\$,33
.001	15A342	.33
.002	15 A 343	.33
.004	15A344	.33
.005	15A345	.33
.006	15A346	.33
.007	15A347	.33
.008	15A348	.33
.01	15A349	.33
.015	15A380	.33
.02	15 A 351	.33
.03	15 A 35 2	:33
.05	15A353	
1600	Volt Oil	
Harme	tionly	ruied
nerme	tically	e a le d
metal	tubes.	Exter-
nally	insulated	. Sup-
plied	with rer	novable
mount	ing stray	. Ideal
for vil	brator ar	d high
voltag	e couplir	ıg.

002	15 A 356	5.41
003	15 A 357	.41
005	15A358	.41
008	15 A 359	44
01	15A360	.52
015	15A361	.55
02	15 A 362	.51
2000		Filled
005	15A363	.59
0075	15A364	.63
01	15 A 366	.00

Uncased Paper Condensers

Non-inductively wound, neatly shaped and wrapped in black varnish paper. Ends sealed with pitch, and provided with amply long insulated leads.

Ideal for filter block repair work.

	600 Volts	D.C. Working	
Mfd.	No.	Size	Ea.
1	15 A 301	3 14 x 1 1/4 x +1	.81
2	15A302	3 1/4 x 1 78 x 1 7	1.22
4	15 A-303	4 % x 1 % x 1 % *	2.42

Midget Micas

"A"-	g" square,	Aerovox	Туре
1467.	Bakelite c	ase. "B	"—Type
1468 (nly 45/64x	29/64".	Bakelite
case. 1	000 V. Test	, 500 V. V	Vorking
Mfd.	"A"	"B"	Ea.
.00004		15 A 2	\$.12
,00005	15A3	15A4	.12
.0001	15 A 5	15 A 6	.12
.00015	15 A 7	15 A 8	.12
.00025	15 A 9	15A10	.15
.0005	15 A 11	15 A 12	.15
.001	15A13		.18
.002	15A14		.24
.003	15 A 15		.29
.004*	15 A 16		.32
.005*	15 A 17		.35
.006*	15A18		.44
.01*	16 A 19		.53
.con 37	Tost 300	Working	

High Voltage Micas



Aerovox Type 1450 (left), bakelite Cases 1¼" square, lug teri 1000 V. Test, 600 V. working. Type 1456 (right). bakelite 1¼"x13½" with lugs and more

holes.		test. 1	250 V w	orking.
Cap.	No.	Price	No.	Price
Mfd.	1000 V	. Ea.	2500 V.	Ea.
.00005	15 A 26	\$.26	15A41	\$.50
.0001	15A27	.26	15A42	.50
.00025	15 A 28	.26	15 A 43	.50
.0005	15A29	.26	15A44	.50
.001	15A30	.29	15A'45	.65
.002	16A31	.32	15A46	.97
.003	15A32	.41		
.004	16A33	.41		
.005	15 A 34	.41		
.006	15A35	.47	15A47	1.24
.01	15A36	.59	15A48	. 1.98
.02	15 A 37	.85	l	

Type 1652, 5000 V. Test, 2500 V. Working

Heavy	duty, molded bakel	ite, siz
1 16"x1	". Have threaded	holes.
Mfd.	No.	Pric
.00005	16A51	\$.65
.0001	15A52	.68
.00025	15 A 5 3	.70
.0005	15 A 5 4	.81
.001	No. 15A51 15A52 15A53 15A54 15A54 15A56	1.00
.002	15 A 5 6	1.59
.005	15 A 5 7	2.4

AEROVOX SILVER MICAS

Encase	d in XM	molded	bakelite.	1000 V.	test, 600	v. work	ing. + 5	% Tol.
Type 1	464 (Fig.	"A")	Type 1	469 (Fig	g. B. abo	ve at left) size 7	x11".
Mfd.	No.	Ea.	Mfd.	No.	Ea.	Mfd.	No.	Fa.
.00075	15A61	\$.71	.000005	15 A 69	\$.35	.00015	15A77	\$.35
.001	15A62	.88	.00001	15A70	.29	.0002	15A78	.35
.0015	15 A 63	1.06	.000025	15 A 71	.29	.60025	15A79	.35
.002	15A64	1.06	,00004	15A72	.29			
.0025	15A65	1.41	.00005	15 A 73	.29	.0003	15A80	.53
.003*	15A66	1.59	.00007	15 A 74	.29	.00035	15A81	.53
.004*	15A67	1.68	.000075	15 A 75	.29	.0004	15A82	.53
.005*	15A68	1.76	.0001	15A76	.29	.0005	15A83	.53
9600 W	That 30	A Wke						

The Standard of Quality. The World Ground



Type BTS, BTA, BT2 Insulated Metalized

Insulated Metalized

Newly-designed compact size general purpose resistors with a metallized element sheathed in an over-all coverist of moisture proof phenolic compound. Meet rigid JAN - BF specifications. Non-inductive. Have pig-tail wire leads. Tolerance plus or minns 18%.

STANDARD RMA CODE—Specify Values

Ohms	Ohms	Ohms	Ohme	Ohme	Ohms	Ohms	Megs	Megs
0.47	3.6	24	189	1,300	10,000	75,000	0.47	3.6
0.51	3.9	27	200	1,500	11,008	82,000	9.51	3.9
0.56	4.8	30	220	1,600	12,000	91,000	0.56	4.3
0.62	4.7	33	240	1.800	13,000	100,000	9.62	4.7
0.68	5.1	36	270	2,000	15,000	110,000	9.68	5.1
0.75	5.6	39	300	2,200	16,000	120,000	0.75	5.6
0.82	6.2	43	330	2,400	18,000	130,000	9.82	6.2
0.91	6.8	47	360	2,700	20,000	150,000	0.91	6.8
1.9	7.5	51	390	3,000	22,006	160,000	1.0	7.5
1.1	8.2	56	430	3,300	24,000	180,000	1.1	8.2
1.2	9.1	62	470	3,600	27.000	200,000	1.2	9.1
1.3	10	68	510	3,900	30,000	220,000	1.3	10
1.5	11	75	560	4,300	33,009	240,000	1.5	11
1.6	13	82	620	4,700	36.000	279,000	1.6	12
1.8	13	91	680	5,100	39,000	300,000	1.8	13
2.0	15	100	750	5,600	43,000	330,000	2.0	15
2.2	16	110	826	6,200	47,000	363,000	2.2	16
2.4	18	120	910	6,809	51,000	390,000	2.4	18
2.7	20	130	1,000	7,500	56,000	430,000	2.7	20
3.0	22	150	1,100	8.200	62,000		3.0	22
2.3	24	160	1,200	9,100	68,900		3.3	

100 Lot prices applies to purchase of one Value Only

1/2 Watt—BTS
Size 1/8 x 1/4". Meet
Spec. JAN-R11 RC10 or RC20. Range 470 ohms to 22 megohms. 1 Watt—BTA
Size 11 x 4". Meet
Spec. JAN-R11 RC30 Range 330 ohms to 22 megohms.

2 Watt--RT-2 Sixe 1% x %". Meet Spec. JAN-R11 RC41. Range 470 ohms to 22 megohms. Each. 10c Lots 4c | Each. 10c Lots 6c | Each. 15c Lots 8c

"BW" Insulated Wire-Wound Resistors

**BW"* Insulated Wire-Wound Resistors

Similar to the BT units listed above, but contain a wire wound element, completely encased in moided compound. Tolerance plus or minus 10%. Order sizes desired from tabulated listing above. Specify Resistance, 1/2 Watt—BW-1

Size %x%." Range 0.47 to 820 ohms.

184 1002 100 F.

185 14x 14x 16x 100 ohms.

185 1402 100 F.

186 1402 100 ohms.

186 1402 100 ohms.

15.11001. 100 5C 15.11003. 100 6C 15.1006. 100 8C

This Cabinet FREE with the following Kits!



Total of 100 1/4 watt Resistors. 33A20. List value \$13.12. Your Cost
Kit No. 3: 6 Type BWI, and 77 BTA.
Total of 83 1-watt Resistors.

33A21. List value \$14.11. . \$8.30 Your Cost



Precision Wire-Wound Resistors

I(R)C PRECISION

_WW2 **WW1**-

	Typ		1		Тур	WW-2				
15A1017 15A1018	15 88	15A 1035	20000)	\$1.04	15A105	53 750,0 54 1 Meg	00 3.4	4 15A105 2 15A105	5 1 1/4 Me 6 2 Meg .	g. 5.73 7.64
15A1019 15A1020 15A1021	25)	15A 1038	22500 25606 30000	1.23	Stock No.	Res.	Type Yeur Cest		Bes. Ohms	Your
15 A 1022 15 A 1023 15 A 1024	100 \ 88(15A1040 15A1041 15A1042	50000/ 60000 75000	1.45	15A1057 15A1058 15A1059		66c	15A1969 15A1070 15A1071	30000 1 40000 50000	1.04
15A1025 15A1026 15A1027	400 { 880 500 }	15A 1043 15A 1044 15A 1045	100090 150000 175000	2.03	15A1060 15A1061	1900 }	69 c		60000 75000	1.23
15A 1028 15A 1029	1500 880	15A 1046 15A 1047	200000 225000	2.24	15A1062 15A1063 15A1064	5000 7500 }	76c	15A1074 15A1075	100090 150000	1.42
15A1030 15A1031 15A1032	2500 3000 360 5000 3000	115 A 1050	275000 1 275000 3	2.41	15A 1065		84c	15A1076 15A1077 15A1078	200000 250000 30000	1.99
15A1033	7500 } 960	ISA 1051	500000		15A 1067 15A 106R	200001	.04		400000 500000	2.29

IRC POWER WIRE-WOUND RESISTORS

These famous IRC resistors have a durable cement coating, non-hygroscopic ceramic core, careful winding and highest quality resistance wire. Built to stand overloads, intense heat, dampness, humidity, and even salt water immersion. You'll find these by far the coolest, longest-lived power resistors for every service replacement, amateur, experimental and broadcasting need.

Type AB, 10 WATTS in values to 20,000 chms. Over 30,000 chm are 5 watt. All are 1%" tong, fr" dia. In values as listed below. Specify Resistance. Ohms Ohms Ohms Ohms Ohms Ohms





Type DG, 20 Watts. Size 2x4".

Available in all values as shown above.

15A1009. 1 to 15,000 ohms.....Net Ea. 54c 15A1010. 20,000 to \$0,000 ohms. Net Ea. . 85c

Adjustable Types. Furnished With One Pressure Band

25 to 200 Watt types now furnished with New Positive Pressure Band—prevents oxi-dation and corresion at point of contact eliminates wire damage and breakage—Can-not be adjusted too tightly — Designed for





n e n	Туре	ABA1	0 Wat	ts. Size	1%x & ".	-
	Ohms	Ohms	Ohms	Ohms	Ohme	Ohme
	6	50	200	750	2,000	5,000
ABA JOW	10	100	300	1,000	2,500	7,500
SENTENCEMENTON A REGULARIST A SE	25	150			3,000	10,000
COSTUMENTAL AND DESCRIPTION OF PERSONS ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSES	15A1011.	Choice	Each			. 58e
	15.11012.	Extra F	Bands_		_.	. 8e

Type DHA—25 Watts. Size 2½ x9/16". With 1 Band

5 10 15 25	50 100 150 200	250 300 500 750	1,000 1,250 1,500 2,000	2,500 3,000 5,000 7,500	10,000 15,000 20,000	15A1501. 5 to 5,000 ohms. 73c 15A1502. 7.500 to 15,00084c 15A1503. Over 15,00092c 15A1013. Extra Bands15e



Type EPA---50 Watts

Each resistor complete with mounting brackets and one new type positive pressure band. Size 4 ½ 1 %. Ranges as listed.

Ohms	Ohms '	15A1504	Ohms]	15A1505	Ohms?	15A1506
100 250	1,500 2,500	Net Ea.	10,000	Net Ea.	50,000	\$1.45
500	3,000	\$4.15	20,000	\$4.26	75,000 }	15A1507
1,000 15A1014,	5,000 Extra 1	Bands	25,000]	15c	100,000 }	\$1.68

100 Watts Type HAA—Adjustable

Size 6 % x %" in ranges shown below. Price includes mounting brackets. Specify values wanted. Each complete with mounting brackets and one new type band.

181	andard Stock K	
Ohms)	Ohm	
100	15A1506 10.00	
200	Choice 15,90 29,00	
600	Net Ea. 25.04	
1,000	30,00	
1.500	EA 04	
2,000 2,500	\$1.68	0 15A1511
5.000	75,00	00.00
	100,00	0) 32.28

200 Watts Type HOA---Adjustable

Size 101/2x11/4" in ranges shown below. Prices include mounting brack, ets. Specify values wanted. Each complete with mounting brackets and one new type band.

Standard Stock Ranges

•	Ohms '	1	Ohmas)	1
	100	15A1512		15A1518
	500	an	15,000	Ob -4-
1	1,000	Choice	20,000	Obeles Net Ba
1	2,000	Net Ea.	25.900	7400 100
ı	2,600	\$2.52	50,000	00 00
1	5,000	44.04	75,000	\$2.95
١	10,000	110 TO-A Y	100,000)	
١	15A10 Abov		Bands fo	" 19a
	ADOV	e. Net. Euc	n	

Center Tap Insulated Wire Wound RESISTORS



Bakelite encased and capable of standing high temperature. Ideal in balancing circuits in sets and transmitters. Will carry up to 5 watts. Overall length 24%.

No. 15A1081. 10, 20, 50, 100 or 200 ohm. Specify ohmage wanted. Choice Each

COLOR CODE GUIDE For Resistors



One of the most handy resistor Color Code Guides yet devised The standard EMA range is automatically and accurately indicated. Everyone should have several on 21c No. 16A116, Each......

Fuses Neon of Pilot Lamps • Indicators

Type 8AG Littelfuses for Test Instruments



Designed especially for the protection of delicate Designed especially for the protection of deficate test equipment, galvanometers, microameters, milliameters, volt meters, etc. Glass enclosed; 1"x ¼" dia. accurately rated, high speed action, short time lag. Voltage rating up to 250 AC or DC. For higher voltages use fuses in series.

					Voltmeter	sed to Protect Milliam	
Amps Current Rating	Max. Load M.A.	Aver. Resist. 5 M.A. Load	Stock No.	Net Each	Ohms Per Volt	All Magnetio Types	Thermo Couples Types
1/200	5	500	12A1100	22c	over 1000	Galv	0- 5
1/100 1/32 1/16	10 25 60 100	110 20 5.0 3.0	12A1101 12A1102 12A1103 12A1105	16c 16c 11c 10c	1000 500-1000 100-500	Up to 0- 1 0- 10 0- 25 0- 75	0- 10 0- 25 0- 60 0- 115
1/2	200 300 400 600	6.2 3.0 2.5 .40	12A1106 12A1107 12A1108 12A1109	9c	10-20 5-10 3-5	0- 150 0- 250 0- 350 0- 500	0- 200 0- 300 0- 400 0- 600
1 11/2 2	1000 1500 2000	.24	12A1110 12A1111 12A1112	7c		0- 750 0-1000 0-1500	0-1000 0-1500 0-2000

Auto and Radio Fuses

Type 3AG 1¼" long, ¼" diam.	0		in made to restrictions	30
Btock		тря.	Net Each	Box of 5
No.	21	ating	LHCH	
12A1113		1/4	10c	47c
12A1114		1/2	9 c	44c
12A1115	Volts	%	9c	44 c
12A1116 \	to	1	5с	22 c
12A1117	250	1 1/2	5с	22 c
12A1118		2	5с	22c
12A1119		2 1/2	5с	22 c
12A1120 {		3	Бc	22 c
12A1121		5	4 c	19c
12A1122		6	4c	19c
12A1123	Volts	10	4 c	19c
12A1124	to	15	4 c	19c
12A1125	32	20	4 c	19c
12A1126		25	4 c	19c
12A1127		30	4 c	19c
12A1128-SI	°E. 14	amp.		Philco

Auto Radio and others using short-

Each4c; Box of 5 19c

G-E Neon Lamps



Have many applications on test signal indicators, equipment. for night lights, etc. Average life 3000 hours. For 105-125V. AC-DC except those marked which are for AC only, All are clear glass. With Standard Screw Base which are

			Net.	
No.	Type V	Fatte	Ea.	100
16A141	814	3	60 c	540
16A142	814	2	50c	45c
16A143	G10	1	40c	36 c
16A144	G10*	1/8	40c	360
With	Candela	bra !	erew B	850
16A145	T41/2	1/4	40c	36c
Double	Contact	Con	d. Bay.	Base
	Resistor	less '	Туре	
16A146	814	2	65c	59 c
16A147	G10	1	45c	41c
16A148	T4 1/2	14	45c	41c



Handy for many needs. Only 1%" long x %". For any voltage above 90V. DC or 65V. AC at .3 ma. Require current limiting resistance .2 meg. for 105-125V., .6 meg. for 210 to 250V. Has single contact beyone. contact bayonet base. 10 @ **13**c 16A149, ea.....14c 10 @....13c 17A1150, socket for above 60

Fuse Mountings



(1) Use where connections are above chassis or panel. 12A1129. For 8AG, 1" fus. Ea. 13C 12A1130. For 3AG 1'4" f. Ea. 13C 12A1130. For 3AG 1%" I. Ea. 13C (2) For below panel connection. 12A1131. For 8AG 1" fus. Ea. 16C 12A1132. For 3AG 1%" fu. Ea. 13C (3) Mounts directly on meter terminal. Will not touch other

12A1133, For 8AG 1" fuses only. (4) Spring clips for any length ¼ diameter fuse.

12A1134, 12 to pkg. Per pkg. 16c

Handy Fuse Retainers



2 piece metal outer shell with fibre inside insulation. 2½"x%" standard for 3AG, SFE14, SFE20 and similar tubular fuses. 12A1135. Ea. ..9c; 10 @ ...3c 2½"x½", Jumbo for 3AG, 4AG, SFE14, SFE20, SFE30, etc. 12A1136. Ea. ..17c; 10 @ ...16c



Extractor Fuse Post

All bakelite. Mounts in 5%" hole on panel or chassis up to 76" thick. Recessed extractor knob casily removed with screwdriver or coin. Underwriters approved. 12A1137. For 8AG 1" fuses....29c 12A138. For 3AG 1¼" fuses...29c

Porcelain Sockets



Screw Base Type 16A176. Standard 14c 12A1168. Candel'bra 8c 12A1169. Miniature 8c

Bayonet Sockets



Double contact, bayonet metal shell socket for 2-contact bayonet neon lamps at left. 12A1170, Each.. 44c



Especially for biasing first audio in high gain amplifiers. Supplies 1 volt plus or minus 10%. Circuit identical to 'C' battery. Adjustidentical to 'C' battery. Adjustable, where current does not exceed one microampere.

12A1139—12A1140—12A1140

1 V. Cell 1 1 V. Choice. 24C

Mounting for above



Genuine General Electric

Mazda Panel Bulbs

				_	
(A)			lin. S	crew E	lase
Cat.	Mazd	a			Cost
No.	No	Volts	Amp		for 10
16A151	41	2.5	0,50	\$.09	\$.59
16A152	42	3.2	0.35	.12	.78
16A153	40	6.3	0.15	.09	.59
16A154	45	2.5	0.50	.12	
16A155	46	6.3	0.25	.09	.59
16A156	48	2.	0.06	.15	.97
t6A157	292	2.9		.11	.78
(B) 1	abula)	rM	in. Be	syouet	Base
16A 158		2.5	0.65	.09	.59
16A159	44	6.3	0.25	.09	.59
16A160	49	2.	0.06	.15	.97
16A161	47	6.3	0.15	.09	.59
16A162	291	2.9		.12	.78
(C)	Rout	ıdM	in. Sc	rew H	ase
16A163	14	2.5	0.30	.09	.59
16A164	13	3.8	0.30	.09	.59
16A165	50	6.8	0.50	.10	.64
(ID) I	Round	I—Mi	n. Ba	yonet	Base
16A166	51	6.8		.08	.52
16A167	5.5	6.8	0.4	.08	.52
$\overline{}$					



S6 Candelabra Base

110-190 V. Bulb

6 watts, clear glass, can-delabra base. For indica-tor and other needs.

15c 10 Lots 16A 168. Net Ea. . 15C Lots . . . 15C Type T4½ Bulb, identical to above except straight side instead of pear shape. ½" dia., 1½" high. volt, 6 watt, cand, screw base. 16A170. high. 120

39c Lots35c Each..

Victor Pilot Bulb

PILOT LAMP SOCKETS



Up clips or brackets are as most inustra-tions show. Down types are in reverse brackets extends below recpt.

Min. Screw Base Type (3) Clip Brackets 12A1142, Clip up. 12A1143. Clip down 6C (4) Adjustable bracket. 12A1144. Up Type 12A1145. Down type 6C (5) Unmounted. Use rubber grommet as holder.

12A1146, Min.Scw. 12A1147, Min. bay. 6c (7) Squeeze and clip in dial slots.

12A1148, Min. Scw. 12A1149, Min. bay. 8C Min. Bayonet Base 8) 12A1150. Brk. U

(8) 12A: 12A:1151. . 6c Brack down OC (9) 12A1152. Clip Up. 12A1153. Clip down 6c For Candelabra 110 V. S6 Screw Base Bulbs (10) 12A1154. Bracket

up. 12A1155. Bracket down Choice Ea.10c ASSORTMENT

10 assorted various types pilot sockets. Some as above and others including insulated types.

45c Per Asst. Dial Light Coloring Kit

Per Kit



Contains on e bottle each of solvent, red, green, amber and purple coloring. To coat clear bulbs to be used as colored dial lights. 11A65 35c



Jeweled Pilot **Brackets**

Well made with 14' faceted glass jewels.
Mount in 17" hole.
Specify color wanted. Red Green, Amber.

Hed Green, Amber.

12A1156, Min. Screw Socket ... 19o

12A1157, Min. Bay. Socket ... 19c

For 110 V., Type 86 Lamp

4" jewel in bracket like above.

Mounts in 4k" hole. Candelabra.

in || no.c. |
for S6 bulb. hole. Candelau... socket for Amber. 8. Net Ea. 12A1158.

Pilot Light Jewel

4" jewel on threaded shank with mounting nut. Requires 18" in panel. Red, Green, Amber. holes 12A1159. Choice, Ea.



Front Removable Jawel **Brackets**

Mounts in 12" hole. 1/2" faceted jewel: removable so bulb can be replaced from front. Red, Green,

Amber. 12A1160. Min. Screw Socket .. 29c



Type 50

Horizontal dressed up design. be adjusted for a variance of panel thickness up to ¼". Extends only 1%" back of panel. Bulbs removbe adjusted for a variance thickness up to '\u03b4''. Extends only 1\u03b4'' back of panel. Bulbs removable from front. Mounts in \u03b4'' hole. Specify Red, Green, Amber. 12A1162. Min. Screw Socket ...410 12A1163. Min. Bay. Socket ...41c



110 Volt Giant Panel Light

All purpose light with 1" frosted pearl glass jewel. Chrome finished "slip fit" bezel holds color disc be-"silp fit" bezel notes color disc behind jewel. Color shows when light is on. Mounts in panel up to ½" thick. Available in Red, Green and Amber. STATE COLOR DESIRED. 12A1164. Uses S6 base bulb....76c



Enclosed **Pilot** Light

Underwriters' approved, single unit socket assembly unaffected by heat. All porcelain and brass construc-tion. Requires single 1" hole for mounting. Faceted jewel in choice of Red or Green. Uses S6 candelabra base bulb. 12A1165. Net Ea.

BULB REMOVER



Rubber tool for removing practi-cally every type pilot bulb from places awkward to your fingers. places awkward No. 12A399. Each



AAF Cockpit
Lamp.
Complete with press to light
and rheostat switch, 24 V. GE
1818 bulb and swivel base.
Lens is so arranged that light
may be focused to spot or
flood as desired. Will take flood as desired. Will take any miniature bayonet base bulb, making it the ideal trouble lamp; also has many other uses. 3A5, Spec. Ea. \$1.95

DIALS, KNOBS AND INDICAT





To increase or reduce shaft diameters of volume controls, condensers, etc., for ganging units, or to extend shaft lengths even of different Available in insulated or brass.

COURTINGS

		2224	
Hole	Stock	No.	Net Ea
Sizes	Insulated	DEBB	4.6
4"-14"	12A1181	12A1184	10 for
3/4"-3/4"	12A1182	12A1185	84 96
14"-14"	12A1183	12A1186) 31.30

EXTENDERS (Shaft %" Long) Hole Shaft Stock No. Size Dia. Ins. Brase 12A1187 12A1190 %" 4" 12A1188 12A1191 Stock No. ns. Brass TOp. 4" 12A1187 12A1190 4" 12A1188 12A1191 5" 12A1189 12A1192 10 fo \$1.30

EXTENDERS (Shaft 11/4" Long) 4" 12A1193 12A1196 12A1193 12A1196 21c 12A1194 12A1197 10 for 12A1196 12A1198 \$2.00

BRASS OR INSULATED SHAFTS 13c Brass 14" 6" 14" 12" 14" 6" 12A4 25c Brass 12A6 Insulated 13c 20c 1/4 " 2/8 " 12" 12" 12A8 Insulated 36c



12A10-

SPLIT BUSHING

To reduce dial holes from %" to %" or to increase %" shafts to %" dia. %"

12A1200. Ea.

PANEL BEARINGS



Cadmium plated brass for panels up to %" thick. Furnished separately or with \$" or 6" cadmium plated brass shafts. 12A1359—Bearing Only\$0.10 With 3" shaft -With

FLEXIBLE SHAFTS



Phosphor bronze. When used with suitable couplings, control of units at angles up to 90 degrees with the panel is permitted.

No. Hub Dia, Length COST \$0.25 12A12

FLEXIBLE COUPLINGS All Fit 1/4" Shafts



National TX19, compact 1 1/2" TOLA dia., compact 118" dia., canvas Bakelite in-sulated coupling free from backlash. 12A1361, Ea. ...38c

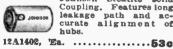
National TX9, 1%" dia., Steatlte insulation.



Johnson No. 250, 1%" dia... Steatite with Steatite with dia. Steatite phosphor spring.

12A1360, Ea. ...47c Johnson No. 251A, 1 m like above 24" dia.

12A1408, Ea.82c



Johnson Steatite solid Coupling. Features long leakage path and ac-curate alignment of hubs.

Johnson Compression Coupling, Ideal for coupling together & shafts where they need sulated. Will not burr

not be insulated. 12A1199. Ea.

POPULAR DIALS All Fit 1/4" Shafts





Ministure Type-1%" Diameter
(A) NATIONAL TYPE B — Neat
etched silver dial as used on HRO
receivers. Marked 9-10 over 180°

clock wise. BAR KNOB—HRP-P, as used on HRO dial. 1%x%" with pointer. Net Each 24c 12A14

(B) ICA. Chrome silver dial with black etched numerals. With finger grip black knob. Marked 10-0-180°. 12A15. Net Each





31/2" Diameter for 1/4" Shafte (A) NATIONAL TYPE O. Attractive circular-grained Nickel Silver. Reads 0-100 over 180° Large cc. fluted finger grip knob. 12A16. Net Each 99c (B) MILLEN Heavy Gauge Nickeler 0 to 100 cc. Large bakelite bakelite hub shaft





ICA 2% and 4" Vernier Dials (A) Beautiful chrome silver, Etcho-(A) Beautiful chrome silver, Etcho-Engraved with black numerals and calibrations. With finger grip, flanged knob, marker and hard-ware. 0 to 109—180°.

\$1.33 12A20. Net Ea.



NATIONAL TYPE ACN An ideal in strument dial for test and lab needs. Uses Velvet Vernier drive unit, with 2 blank remov-

able scales. Holes in pointer for making calibration points. Size 3x74". 3x74". 12A21. Not Ba. \$3.00

NATIONAL HRK KNOB diameter black bakelite full grip turning knob. Non-tiring. For receivers or X-mitters. Net Ea. 57c

GORDON Hand Wheels



Bakelite wheel with pointer. Fits all %" shafts. Tuning con-trols that will add to appearance the appearance your equipment.

Hand Wheels with Pointer and 180° Scale Complete Wh. Scale

ı	No.	Dia.	Dia.	Not Ea.
1	12A23	1 1/6"	316"	\$0. 76
	12A24	1%"	3 1/4 "	\$1.06
Į	12A25	21/4"	2% **	\$1.09
1	12A26	314"	514"	31.23
				inter with
	270° BC	ale for ga	in contro	82c
1	Net Eas	sh		04C

Hand Wheels With Pointer Only 12A28—114", less scale53c 12A29—194", less scale53c 12A30—214", less scale52c 12A31—314", less scale34c

FLUTED KNOBS

Quality black bakelite. Attractive, prefessional in appearance. Fluted rim for good grip. All for ¼" shafts. Brass bushed.

Loss Pointer

12.434—14". Net ..220
12.435—14". Net ..33C
12.435—34". Net ..41c
with Pointer

12.432—14". Net ..44C
12.433—24". Net ..44C Fings Type
12A40—3 12". Net ...
12A41—3". Net ... 52c

BAR KNOBS

Fit 14 1 shafts, Recessed set screws.



B)		Black Black	12A46	11c
	14."	Red Black	12A44) 12A45	8c
A)	2"	Black	12A43	10c
	911	Red	12A42)	Cholce

DIAL PLATES





Supplied Less Knobs. For choice knobs to use with these, se-

(A) BLACK SATIN FINISH Plates Made of brass, black finish with etched silver lines and Nos. Cali-brated 0-100.

Diam-Stock De-YOUR 180 325 No. 12A1201 eter COST \$.27 .27 .36 12A1202 12A1203 -31/4" 180 12A1204 325 (B) CHROME FINISH PLATES

Grain satin finish with black etchoengraving on chrome silver back-

ground.	Calibrated	0 t	o 100.	
12A1205	2 **		180 .	3.47
12A1206	2 "		225	.47
12A1207	236"		180	.78
12A1208	31/4"		225	.7à
12A1209	4 "		180	.82
12A1210	4 "		325	.82

(A) BLACK BAKELITE PLATES

(C) RECTANGULAR TYPES Made of brass, black finish with etched silver markings, Size 1%"x 2%", calibrated for 300° rotation. Marked 1 to 16, %" hole. Marked 1 to 10. %
No. Marking

12A1218 Record Choice Microphone Each 12A 1215 Gain 24c Tone -Plain, calibrated 12A1217-

1-Inch Name Plates



12A1218 "Microphone" 12A1219 Phono

12A1220 On-Off 15c



Made of brass-characters and bormade of brass—characters and bor-der chrome; background etched dark black. Available in all com-monly used markings—state on or-der your needs. Stocked with 125 different letterings. No. 21A1007. Choice, Each

BAKELITE KNOBS Set Screw Type. Fit %" Shafts









	-			
	7	8		Ð
Тур	Stk. No.	Dia.	Color	Nel
1	12A1221	1"	Wal.	150
2	12A1222	34."	Wal.	120
3	12A1223	1%"	Blk.	14
4	12A1224	"	Wal.	110
4	12A1225	.1"	Wal.	110
5	12A1226	76"	Wal.	130
6	12A1227	1/4"	Blk.	120
6	12A1228	17,"	Whi.	90
6	12A1229	1/2"	Bwn.	80
7	12A1230	1"	Blk.	120
7	12A1231	1"	Wal.	120
8	12A1232	1"	Wal.	100
9	12A1233	11"	Wal.	120
9	12A1234	11 "	Iv.	90
9	12A1285	11 "	Red	9.
9	12 A1236	11 "	Blk.	9.
_				

KNOBS FOR FLAT SHAFTS Spring



colors. 12A1240 Walnut \ %" Dia. 12A1241 Ivory Choice Ea. 11c 12A1243 Walnut) 1" Dia. Ivory) Choice Ea. 11C 12A1244 KNOBS FOR KNURLED SHAFTS 12A1246 Walnut | %" Dia. 12A1247 White | Choice Ea. 10c

Push-On Knob Springs

Assortment of 35 most pepular types. A handy kit for any shop. Per Kit



KNOB FELIS 18A2. Box 25 24c

Choice of 2



58c

Bakelite Knob Assortment



10 Assorted, Brown, Black, Ivery. Bakelite knobs, push-on type to fit standard 4" knurled shafts as used on most makes of sets.
17A286. Per Asst. of 10..... 49c 25 assorted includes types as above and others. No. 18A850. Per Asst. of 25 99C

DIAL POINTERS



10 assorted pointers for replacement needs many make

12A1171. 50c

Dial Belts-Ballast Jules-Resistor Cords











Woven Fabric Made-Up **Dial Belts**

Exact duplicates of originals. Finest quality, heat and moisture proof. Treated to prevent slipping. State make and model of set for which desired. 21A1006. Each

Dial Cable Clips

Envelope of 50 for use on all types of Dial Drive Cord assemblies. Envelope of 50 for use on all types of Dial Drive Cord assemblies, Make up your own special cords with these clips.

17A1009, Env. of 50 Clips.. 24C

Phosphor Bronze Cable

A good quality cable made of phos-phor bronze wire, braided on a

finely spun glass core. 11A66, Per 25 Foot Spool... Linen Dial Cable Made of black woven linen as used originally by maker of set.

11A67. Extra Thin. 48c

25 Ft. Spool ... 11A68. Medlum. .83c Cable Assortment

Contains 12 ten-foot lengths most often needed types bronze, and metal cables. retal cables.
Per Assortment.. \$2.80

Assorted Cable Spool

A sectioned spool containing 15 feet each of the 3 most popular types dial cable. types dial cable. \$1.18

Cable Clamps, Eyelets Same as used on all dial cables. Assortment of 60 in handy jar. 11A72,

Dial Cord Dressing In sticks to apply to slipping dial

Dial Oil

Dial UII

A special oil for radio dials and fine mechanisms. Treated with graphite. Long lasting. Will not gum. Handy 4 oz. spout can. 15C

11A75. Each 15C

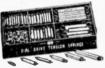
Dial Drive Cement

To cement rubber dial drives to metal shafts, rubber mountings to chassis, or any rubber to metal

RADIO

and

PHONO



Kit of 25 **Assorted** Dial Springs

Contains 6 sizes that will take care of any dial job. 11A77. Kit of 25 65c 11A78. Pkg. of 10 assorted aprings of various sizes.... 11A79. Pkg. of 10 assorted. small dial springs

Kit of 25 Dial Belts



Woven fabric made-up dial belts in handy kit with chart. \$3.97



Speaker Shims

Kit of 16 Swedish Steel Shims assorted in hand case No. 11A158 38c

Klt of 20 Fibreloid Shime in assorted 81Zes. 11A159 35c

Cable Eyelet Tool

Consists of base and clincher, Handy for rivet-ing or turning eyelets on

Per Set





Drives No. 17A1004-Envelope of 2 No. 16 Phono Drives for General Indus-tries RX-LX Motors, etc.

Per Env. No. 17A1005—Envelope of Phono Drives for Alliance Model 80 and Motorola Motors.

Per Env.

A Kit of 25 assorted popular rubber friction drives for all popular models. No. 18A70, Per Kit 88C

Idler Pulleys Kit of 10 assorted idler pulleys. 59c



300 **Feet** Dial Cord

With Cord Rack FREE

With this unit, you can replace dial cord on practically any set made since 1934. Keeps your stock useable to the last inch and you save over \$1.00 on the 300 feet.

Assortment Includes—
100 Ft. pre-stretched Special Thin

100 ft. pre-stretched Special Thin Cord, fibreglas core. Just right for most small sets. 100 ft. of pre-stretched Standard Cord, fibreglas core, dia. 031". 100 ft. of Medium Cord, for larger table models and

300 Ft. Cable With Rack \$5.22



JFD Adjustable AC-DC Ballasts

New Improved Type 3 Types Take Care of Most Ballasts Used

As you know, we have been

As you know, we have been unable to supply the popular adjustable ballasts as listed in our catalog. JFD now advises they are again available, and in a new improved type. They come in an air couled, person come in an air couled, person come in an air couled person could be a supply to the couled be a su and in a new improved type. They now come in an air cooled, perforated shell with larger insulating surface and longer and heavier resistance wire, insuring more accurate action—longer life. Somewhat higher in price than the old type but worth the difference.

15A2000-Type A, 8 Prong Choice 15A2010—Type B, 8 Prong 15A2011—Type C, 4 Prong

SERVICEMEN'S KIT

Contains 5 Ballasts. 2 Type A, 2 Type B, 1 Type C, together with listing for over 25 replacements these will take care of and complete instructions, 15A2012, Per Kit ... \$4.41 | Adjustable 22 to 330

RESISTOR CORDS For AC-DC Sets



15A2016 330 ohms 18.0 to 24.0 v. 15A2012 350 ohms 12.0 to 17.0 v. 32.0 to 44.5 v. 15A2019 220 ohma 45.0 to 52.0 v. CHOICE. EACH

FOR 3-WAY PORTABLES High resistance (560 ohms) for 3-way AC-DC Battery Portables. 15 A 2022 tube is employed.

> **Universal AC-DC** Line Cord

Adjustable 22 to 330 ohms.

Amperite Ballast Tubes for AC-DC Sets

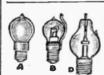
Amperite Type No.	Stock No.	Replaces Bal- last Tubes Starting With Letter	Num- bered From	Ending in the Letter
KL. 45	15A 2000	K. L. M. or BK	36 to 67	A, B, C, or D
KL. 75	15A2001	BL or BM	67 to 105	A. B. C. or D
KL. 50H	15A2002	K. L. M. or BK	36 to 67	F. G. or H
KL. 75H	15A2003	K. L. M. or BK	67 to 105	F. G. or H
KL. 5081	15A2004	K or L	40 to 100	81

Exceptions to Above Chart For BK49B, order Stock No. 15A2005, and for L55B order No. 15A2006.

4P-45, 4-prong base, Stock No. 15A2024 replaces any of the following.

140R4 50X3T 40A2 185L8 KX42C KX49C KX55B 140R8 165R8 40B2 185L44 KX42D KX49D KX55C 300R4 LX42C 165L4 185R8 LX49C LX55B 165L8 185R44 320R4 LX42D LX49D

140L4 LX55C LX55D 140T.8 KX55A 140L44 165L44 200R. Stock No. 15A2007. 250R, Stock No. 15A2008, All Types Net Each



SHELDON Mercury Vapor Charger **Bulbs**

replace Tungar or Rectigon Will bulb of like rating and type. Produce more rectified current, cost less to operate, last longer and

Stock No.	Fig.	Amps	Net Ea.
16.1137	D	2	\$2.35
16A138	A	2	2.35
16A139	D	6	2.94
2A31	D	15	5.88



Battery Hydrometer

Large size with beaded float 11A157 54c



Handy Touch-Up Sprayer **Uses Spare** Tire for Air

Operates on low pressure from spare tire or any other air container. Air-tight valve, adjustable spray tip, rubber hose and two 4-oz. jars. Handy for touching up cabinets, panels, etc. cabinets, panels, etc.
No. 11A5. Complete \$1.15

G-C PHONO TURNTABLE SERVICE STAND



Here is just what you have been looking for, An adjustable stand to hold phono-turntables while making repairs and adjustments. It raises the turntable about 15" above the bench so you can easily look under the mechanism to check it while in operation. Can be easily privated on the awivel joints as that pivoted on the swivel joints so that repairs can be made without re-moving turntable from stand. Easadjusted to all sizes and types phono-turntables. Sturdily made of steel. Every service shop

No. 15A2030. Net Ea... \$3.91 Phono Needle Cup



Phono Neeule Nickel-plated with snap spring cover. Hole in center of base for bolt-ing down to motor board. Dia. 11/2", can be set into hole. No. 18A375, Net Each..... 10C

DIO MULTI-GANG, SELECTOR and ALL WAVE SWIT



Centralab Positive and Spring Return Switches ever Action

Supplies	d wi	th ki	nob as	.59c
Shorting Stk.	Ty	pe	Non-Shorti	ng Type Stk.
No. P	oles	Pos.	Action	No.
12A700	2	3	Positive	12A706
12A701		3	Spring	12A706
12A702	4	2	Spring	12A707
12A708	4	2	Positive	12A70
12A704	2	3	Pos. & Spr.	12A709
,	WOT	Marie		

MOUNTING PLATES
For mounting above switches singly or in gangs of 5. Black crackle finish steel.

	Gangs	Dim.	Each
12A713	1	2%x %"	12c
12A714	2	1½x %"	18c
12A715	8	2 14 x 1 1/4"	21c
18A716	4	3 x21/4"	26c
12A717	5	8% x3 "	29c
-			

Spring Return Switches

Bpring Return Switches

Beplacements for intercommunicator talk-back switches. All are two-position. Shaft returns to original position when knob is released. Rotation against spring in clockwise position. Normal position is counter-clockwise. All have long shaft that can be cut to length. 12A710—1 Pole, 2 Position... 38c 12A711—2 Pole, 2 Position... 38c 12A712—4 Pole, 2 Position... 59c

FEDERAL Anti-Capacity Switches



Springs and contacts of silver plated phosphor bronze. Actuated by a cam roller. Size 24x5x

12A451. 12A452.		\$1.90 \$1.90
		· · · 3 1 . 3 U
12.1453.	4PDT	\$2.25

Centralab Momentary Push Switches



For many light duty applica-tions, meter insertion test equipment, etc.

Rate 1 amp. at 110 V. A. C. Silvered contacts. Insulated %" bushing. %" Insulated %" bushing. %"
Button extends 1/2" from end long. of bushing. 12A718. Momentary open29c 12A719. Momentary closed ...29c

H & H Two-Circuit **Push Switches**





No

In normal position, with plunger out, one circuit is "on" and the other " ne circuit other "off". When plunger is de-pressed, circuits are reversed. Slow make, quick break momentary contacts. Rated 6 amps at 125 A. C. Bushing 17 dia., %" 1 (A) Metal Plunger. Used on long. Used on Supreme instruments and also other

popular makes.

12A720. Ea. 41c 10 @ ...38c

(A) Bakelite Tip.

12A721. Red } Ea. ...49c

12A722. Black 10 @ ..44c Ea. ...49c (B) Bakelite Button. 12A723. Red } Ea.50C 12A724. Black. } 10 @ ..45C

Rotary Switches



MALLORY GANG SWITCHES

Types 1206L and 1300L Series

Used in a very wide range of applications. Have I fixed and I adjustable stop, laminated bakelite insulation and phosphor-bronze springs. 2 gang switches are spaced ½": 3 and 4 gang are spaced 1". Notched 2" shaft is easily shortened. Require 15" mtg. hole. If necessary can be disassembled, the spacers cut down to required length of switch and spacing of sections. With bar knob but less dial plate. See plates for 1¼" switches listed below.



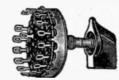
Sho	rting	Non-Sh	orting	a	1	Post-	NET
Cat. No.	Туре	Cat. No.	Туре	Gangs	Poles	tions	EACH
12A454	1216L	12A455	1316L	1	1	1-6	\$0.77
12A456	1211L*	12A457	1311L+	1	ī	1-11	90.
12A458	1215L	12A459	1315L	ī	2	1-5	.96
12A460	1213L	12A461	1313L	1 1	2	1-3	1.06
12A462	1212L	12A463	1312L	ī	4	1-2	1.12
12A464	1226L	12A465	1326L	2	2	1-6	1.25
12A466	1221L*	12A467	1321L*	2	2	1-11	1:35
12A468	1225L	12A469	1325L	2	- 7	1-6	
12A470	1223L	12A471	1823L	2	- 6	1-3	1.54
12A472	1222L	12A473	1322L	2	8	1-2	1.64 1.73
12A474	1236L	12A475	1336L	3	3	1-6	1.71
12A476	1231L*	12A477	1331L*	3	2	1-11	
12A478	1235L	12A479	1335L	3	6	1-5	1.83 1.93
12A480	1246L	12A481	1346L	4	4	1-6	2.12
12A482	1241L/*	12A483	1341L*	- 4 l	- ă	1-11	2.32
12A484	1245L	12A485	1845L	4	8 ,	1-5	2.70
12A486	1251L*	12A487	1351L.	5	Б -	1-11	2.89
12A488	_1256L.	12A489	1356L*	5	10	1-6	3.57
12A490	1261L*	12A491	1361L*	6	6	1-11	3.41
12A492	1266L.	12A493	1366L.	6	12	1-6	4.35

*Types marked with * have no third or "off" position with all circuits open. All others have. 12A494. Universal mtg. bracket RB254 for all above18c

MALLORY SINGLE-GANG CIRCUIT SELECTOR SWITCHES



3100J and 3200J Series
Very sturdy and have a wide application in tap switch needs. Have 2" notched shafts; silver contacts; %" threaded bushing. Low resistance wiping contacts. All 111 base dia, types have adjustable stops. All are with bar known and mountainers. knob and mounting nut.



Cat. No. Type Cat. No. Type Totes tions Dia. F 12A495 3115J 12A498 3215J 1 1-5 1½" 1½" 12A499 3112J 12A498 3212J 1 1-12 1½" 3 12A503 3123J 12A500 3222J 2 1-2 1½" 1½" 12A503 3126J 12A504 3226J 2 1-6 1½" 1½" 12A503 3134J 12A506 3234J 3 1-4 1½" 1½" 12A509 3142J 12A508 324J 4 1-2 1½" 1½" 12A509 3143J 12A510 3243J 4 1-2 1½" 1½" 12A511 31117J 12A612 32117J 1 1-17 1½" 1½" 12A513 3129J 12A614 3229J 2 1-9 1½"	Net		- 1	1 -	·		orting	Non-Sh	ting	Shor
12A495 3116J 12A498 3216J 1 1-5 1½" 12A499 3112J 12A498 32112J 1 1-12 1½" 12A499 3122J 12A500 3222J 2 1-2 1½" 12A501 3123J 12A502 3223J 2 1-3 1½" 12A503 3126J 12A504 3226J 2 1-6 1½" 12A506 3134J 12A506 3234J 3 1-4 1½" 12A509 3142J 12A508 3242J 4 1-2 1½" 12A511 31117J 12A612 32137J 1 1-17 1½" 12A513 3129J 12A514 3229J 2 1-9 1½"	Each	1				Poles	Туре	Cat. No.	Туре	Cat. No.
12A497 31112J 12A498 32112J 1 1-1-12 1½π 12A499 3122J 12A500 3222J 2 1-2 1½π 12A501 3123J 12A502 3223J 2 1-3 1½π 12A503 3126J 12A504 3226J 2 1-6 1½π 12A507 3142J 12A506 3234J 3 1-4 1½π 12A509 3143J 12A510 3243J 4 1-3 1½π 12A511 31117J 12A510 3243J 4 1-3 1½π 12A511 31117J 12A512 32117J 1 1-17 1½π 12A513 3129J 12A514 3229J 2 1-9 1½π	3.68	_		-		1	3215.J	12A496	3115J	
12A499 3122J 12A500 3222J 2 1-2 1½ 1 1/4 1 12A503 3123J 12A502 3223J 2 1-3 1½ 1/4 1 1 1 1/4 1 1 1 1 1 1 1 1 1 1 1 1 1		,				l î l		12A498	31112J	
12A501 3123J 12A502 3223J 2 1-3 1½ " 12A503 3126J 12A504 3226J 2 1-6 1½ " 12A506 3134J 12A506 3234J 3 1-4 1½ " 12A507 3142J 12A508 3242J 4 1-2 1½ " 12A509 3143J 12A510 3243J 4 1-3 1½ " 12A513 3117J 12A512 32117J 1 1-17 1½ " 12A513 3129J 12A514 3229J 2 1-9 1½ "	.68					2		12A500	3122J	12A499
12A503 3126J 12A504 3226J 2 1-6 1¼ 11¼ 12A505 13134J 12A506 3234J 3 1-4 1¼ 11¼ 12A506 3234J 4 1-2 1¼ 11¼ 12A506 3243J 4 1-2 1¼ 11¼ 12A510 3243J 4 1-3 11¼ 12A511 31117J 12A512 32117J 1 1-17 11¼ 11 12A513 3129J 12A514 3229J 2 1-9 11¼ 1	.68					2			3123J	12A501
12A506 3134J 12A506 3234J 3 1-4 1½ 1½ 12A506 3242J 4 1-2 1½ 12A509 3143J 12A508 3242J 4 1-2 1½ 1½ 12A510 3243J 4 1-3 1½ 12A511 31117J 12A512 32137J 1 1-17 1½ 1½ 12A513 3129J 12A514 3229J 2 1-9 11½ 14 1	.68					2			3126J	12A503
12A507 3142J 12A508 3242J 4 1-2 1½" 12A509 3143J 12A510 3243J 4 1-3 1½" 12A513 3117J 12A512 32117J 1 1-17 1½" 12A513 3129J 12A514 3229J 2 1-9 1½"	.68			1 :		2			3134.J	12A505
12A509 3143J 12A510 3243J 4 1-3 14 1 12A511 31117J 12A512 32117J 1 1-17 11 11 12A513 3129J 12A514 3229J 2 1-9 111 1	.71			;		ı i				12A507
12A511 31117J 12A512 32117J 1 1-17 111" 12A513 3129J 12A514 3229J 2 1-9 111"	.71					7				12A509
12A513 3129J 12A514 3229J 2 1-9 111"	71			0.1		1				12A511
	1.06		4 1	1 :		9				12A513
12A515 3136J 12A516 3236J 3 1-6 111"	1.08			1 :					3136J	12A515
124617 21627 194710 22627 3 1-0 178	1.16		# I	1 4		3				

MALLORY SWITCH PLATES FOR ABOVE

For switch, tone, or volume control. Easy to read figures on black. 75" hole. For 114" and 115" dia, switches. Net Price, Each12c



For 1 1/4 " BASE SWITCHES-30° SPACING

	ype Marked	No.	Туре	Marked	No.	Туре	Marked
12A727 12A728 12A729 12A730 12A731	373 1 to 3 374 1 to 4 375 1 to 5 376 1 to 6 377 1 to 7	12A733 12A734 12A735 12A736 12A737 12A738 12A739	380 381 382 383 384	1 to 10	12A740 12A741 12A742 12A743 12A744	386 387 388 389	Off 1 to 6 Off 1 to 7 Off 1 to 8 Off 1 to 9 Off 1 to 10

For 1 11/16" BASE SWITCHES-20° SPACING

12A745 453 12A746 454 12A747 455	1 to 3 12.4752 460 1 to 10 12.4759 477 Off 1 to 7 1 to 4 12.4753 461 1 to 11 12.4769 478 Off 1 to 8 1 to 5 12.4754 462 1 to 12 12.4761 479 Off 1 to 8

MALLORY JR. JACK SWITCHES

Mount in 18" hole on panels to 4" thick. Extend 118" back of panel. With black pointer knob. "On"-"off" plate with 2 pos. switches, 3 position have center off position.



2 Position Type 3 Position Type

I	NO.	Action	Lype	Net	No.
ı	12A519	SPST	720	\$.65	12A523 12A524
i	12A520	SPDT	730	.79	12A524
Į	12A521	DPST	740	.88	12A525
,	12A522	DPDT	760	1.15	12A526

Action Typ DPDT 762 SPDT

24-Point Tap Switch

Special single circuit 24 point non-shorting switch. %" bushing, 2" grooved shaft. Complete with dial plate and bar-type knob. 12A527. Each\$2.06

YAXLEY Ceramic Switch



Low loss ceramic insulation, wide contact spacing, improved heavy silver plated contacts, For transmitters with power up to 4 contacts per circuit. With knob as shown.

No.		langs C	ir. Ea.
12A528	161C	1	1 \$1.32
12A529	162C	2	2 2.09
12A530	163C	3	3.02
12A531	164C		4 3.80
12A532			5 4.73
			e for above
number f	rom 1 to	4	120
Type 1400	L Circui	t Open	ing Switch.
			e lines for
			ling meter
and mal	ntolpa e	theat	gh circuit
on other	interine e	· curou	Ru circuit
on other	II lines.		C 2 / Q
1%A555. N	iet Ea		\$3.48

Universal Flat Switch

Use as SPS., SPDT. DPST. DPDT. 3PST. 3PDT, 4PST, 4PDT. Non-shorting type. %" deep, 2%" shaft. With bar knob.



12A533. Your Cost, Ea.

Tap Switch

Positive snap action. Strong wiping contact

grounded to shaft and bushing. In operation, contact breaks between makes. Bushing length %". Shaft is" from end of bushing.

No.	Positions	No.	Positions
12A534	2 Points	12A540	8 Points
12A535	3 Points	12A541	9 Points
12A536	4 Points	12A542	10 Points
12A537	6 Points	12A543	11 Points
12A538	6 Points	12A544	12 Points
12A539	7 Points		AZ I UILLE
Cholce.	any of	Ot I	
		Choice,	any or
above.	= 0	ahovo	

Each.... 5UC Each.... 65C YAXLEY Push Button Switches

 $^{7_6}_{16}$ hole mtg. for $\frac{1}{4}$ panels. Locking type release

manually. Non-locking type is self restoring. S. P. Make Contact 12A545. Type 2001. Non-lock 12A546. Type 2001L Locking **76c**

S. P. Double Throw 12A547. Type 2003. Non-lock...

2 Pole Make 2 Contacts
12A548. Type 2004. Non-lock 94C
12A549. Type 2004L Locking

Midget Jack Switch

Type 10, SPST Compact. Mounts in 18" hole in 14" panels. Has black knob pointer and "off - on" name plate.



12A767. Net Ea.380

Slider Switches



For any need where & small switch is wanted — mike current, tone control, low power supplies, etc. Comes complete with mounting plate. 12A768. SPDT ..230

12A769, DPDT .. 290



Switches and Relays for most ANY need

H & H Switches





Toggle or Bat Handle

Underwriters' approved; 3 amp. 5v.; 1 amp. 250v. For controlling Underwriters' approved; 3 amp., 25v.; 1 amp., 25v.; 1 amp., 25v. For controlling radio sets, small motors, lamps, meters, etc. Mounting sleeves all M' diameter and it' length. Two lockunts included. Very rugged. Best quality. Laminated bakelite or fibre insulation. Solder lug consections. Nickel finish on mounting ants and covers.

Single Pole-Single Throw, 2 Lugs Makes and breaks a single circuit, standard "on" and "off" switch. 12A770 Toggle | Chc. Ea. 35c 12A771 Bat Hand. | 10 @ 29c Single Pole—Double Throw, 3 Lugs
Can also be used as 3 way.

Can also be used as 3 way.

12A772 Toggle | Chc. Ea. 49c

12A773 Bat Hand. | 10 @ ... 42c

Double Pole—Single Throw, 4 Lugs

Cuts two circuits in and out or

on" and "off" for two circuits.

12A774 Toggle | Chc. Ea. 67c

12A775 Bat Hand. | 10 @ ... 57c

Double Pole—Double Throw, 6 Lugs

Feeds two circuits into either one

on two pairs circuits. two pairs circuits.

12A776 Toggle | Chc. Ea. 77c 12A777 Bat Hand. | 10 @ ... 650

H & H Hi-Power Type



Double Pole-Single Throw Rated 12 Amps at 125 Volts

Extra Heavy Duty Power Type
D.P.D.T. with Neutral Center
An extra large heavy duty Double
Pole, Double Throw Switch with
neutral position in the center for use
in heavy current circuits such as

H & H Rotary Switches



For knob operation. 3 - amps., 250 volts. Mounting sleeve-%" diam., sleeve le %". Knob shafts tend 1" bey sleeve length beyond threaded sleeve

Single Throw, 2 Lugs Single Pole-...36c 12A781. Each 39c; 10 @ Single Pole-Double Throw, 8 Lugs 12A782. Each 52c: 10 @ ...50c

Double Pole—Single Throw, 4 Lugs

12A783. Each 62c: 10 @ ...56c Double Pole—Double Throw, 6 Lugs 12A784. Each 55c; 10 @ ...51c

Porcelain Switches



Knife Type Porcelain compact knife switches. Screw terminals.

13A550. SPST Size 1"x1%"....13c 12A551. DPDT Size 1%"x2%".16c 12A552. DPST Size 1%"x1%".23c 12A553. DPDT Size 1%"x2%".27c

Carling Toggle Switches



For general purpose mounting sleeves. Rated sleeves. Rated 3 amps. at 125 V., A. C. With 2 mtg. nuts. 10 @ 21c 25c

30c 46c

Type Cat. No. Each 23c 27c 33c 12 A 786 12A788 DPST 12A789 %" shank as 12A786. DEDT SPST, otherwise same

12A780. Ea. 25c: 10 @ ...23c Off Position in Center, SPDT. otherwise same as 12A787. 12A791. Ea. 31c: 10 @ ...27c

Carling Momentary Plunger Type **Switches**

Handy for Countless Needs

Double-Pole, Double Throw 6 lug switch suitable for testers, meter panels, etc. Makes DP, ST by using 4 lugs. 1 amp. 125 volts AC only. 15/32" shank, %" long. 12A792, Ea. 50c; 10 ...47c

Single-Pole, Two Circuit
4 lug switch. 1 amp. 125 voli
AC only, 15/32" shank, %" long.
12A793. Ea. 28c; 10 @ ...25



Carling Hi-Power Toggle Switch

20 amp., 125 volts; 10 amp., 250 volts. long. Bat handle, bakelite base, SPST

12A794. Ea. 10 @



"On-Off" Plate For Standard Toggle Switches

12A785. N. P. Steel. Each 2c: 10 @ 1 1/2c



Slide Switch "Off-On"



12A799. Ea. . 29 c



Nut Type Acro Switch

Push button type, very compact, §§" dia. x 1½" over all height. Fitted for panel mtg. Fitted for panel mtg. Actuation is by bake-lite plunger. Rating is 15 amps. at 115 volts

D.C. loads because Ideal for Ideal for D.C. loads because of double break feature. 12A812. Type 3NO5-5P—N.O. 1.62 12A813. Type 3NC5-5P—N. C. 1.62



The Acro Miniac Switch

A truly small, fully enclosed switch, only 1½" long, ½" wide and only a trifle over ½" thick. Has 4 mtg. holes ½" dia. Unusually well adapted for stacking in multiple assemblies. All parts non-corrosive, stainless steel pin actuator and fine silver contacts. Operating pressure 6 to 9 oz. movement differential .003 -.006. Rated at 15 amps. 115 volts A. C. 12A809. Type 2MCl-1A—N.C. 1.32 12A811. Type 2MCl-1A—N.C. 1.32 truly small, fully enclose

The New RELAY with INTERCHANGEABLE COIL



made by GUARDIAN Universal Series "200" Select the relay of your choice, either S.P.D.T. or D.P.D.T. and coil of any Standard voltage as listed. Takes only a few seconds to assemble and requires no adjustonds to assemble and requires no adjust-ment. The Interchangeability of the coils ment. The Interchangeability of the course makes it possible for you to change from one voltage to another by just buying the required coil instead of the complete relay, giving you a wide range of flexibility. Contact points are of fine silver,

NET EACH 19A31...6 Volts 19A32...12 Volts 19A33...24 Volts 19A34 115 Volts \$1.18 ...\$1.47

tion and all necessary hardware. 19A42, COMPLETE KIT, at only



GUARDIAN Standard Relays

No. 19.447—Model K100 Keying Relay S.P.S.T. norm. open. Pure silver contacts break clean. Operates from 5-15 V. AC or 1½-4 V. DC source. Size 2½x2½x1%". \$4.13

source. Size 2½x2½x1½".

Net Each
No. 19A48—Model R100, for RF Circuits up to
1 KW and 28 MC. Alsimag 196 insulated.
S.P.S.T. for 115 V., 60 cycles.
S1ze 2½x1x2". Net Each
No. 19A49—Model A100, Antonna Relay insulated with alsimag 196. Also for heavy duty
in RF circuits up to 28 MC. D.P.D.T. for 115 V. AC.
S1ze 2½x2x2½". Net Each

44.49

No. 19A50—Moner Atouc, as above but \$1.5.1.

\$2.50

Size 2%x1x2%". Net Each

No. 19A51—Model X100 Adjustable type Overload Relay. Can be set to open primary circuit at any current load from 150 to 650 MA. Panel type push-button reset.

\$7.56 Size 4x2 1/2 x3 1/2 Net Each



POTTER BRUMFIELD Standard

Relays Type PR Relays For 110 Volt 60 Cycles

For motor starting up to 1 H.P., heater load to 20 amps, or any con-trol circuit requiring fast switchneater loan to 20 amps. or any control circuit requiring fast switching. Coil operates on approx. 3 watts. Won't heat in continuous duty. It is in continuous at the control of the contro

16A183 PRSA SPDT 16A184 PR7A DPST-NO

"MR" Type Compact, for light loads. Han-

dle 8 amps A. C. or 4 amps D. C. non - inductive

non inductive loads. Adjustable spring. No current carried thru spring. 2%" L., 1%" W. 1%" H. A.C. coils require approx. 2 watts; D.C., 1½ watts.

No. Type Contacts Coil-V. Ea. able spring.

No. Type Coutacts Coil-V. 16A185 MR5A SPDT 6AC \$1.86 16A186 MR5A SPDT 110AC 16A187 MR11A DPDT 6AC 2.66 16A188 MR11A DPDT 110AC 1.66 16A189 MR5D SPDT 6DC 1.86 16A190 MR11D DPDT 6DC 2.68 Plate Circuit Type: Similar above. Handle 6 amps 110 V., A.

16A191, LM5—2500 ohms .. \$2.05 16A192 LM5,—5000 ohms .. 2.30 Non-adjustable spring only 1% high, SPDT.

The wide application of this type

\$2.80 2.90 3.10 3.60 _2500 ohms ...\$1.68 _5000 ohms ... 1.99 16A193, L85-16A194. LS5---5000 ohms ...

Acro Switches



The wide application of this type switch is familiar to most all who use switches. Case is of plastic 11% "x1%"x27/32", drilled formounting two 6/32 screws on 1" centers. Type 1P mounts through panel, 1%" sleeve. Rated 10 amps. at 15 volts; 5 amps. at 230 V. AC. TYPE 5L X-Position R-Position X-Position

X-Position X-Position R-Position at 15 voits; 5 amps. at 230 v. Ac.

Movement Differential: Type 1A—.005"; Type 5L—.030"; Type 1P—.003".

Operating Pressure: Type 1A=2-3 oz.; 5L=1½-2½ oz.; 1P=8-10 oz.

1A—Pin Type

Mfrs. Stock Net Code No. Ea.

No. XO-1A 12A800 93 XO-5L 12A803 1.02

N.G. XC-1A 12A801 1.33 XC-5L 12A804 1.02

D.T. XD-1A 12A802 1.12 XD-5L 12A804 1.24

RD-1P 12A803 2.16 Circuit Code NO, XO-1A N.C. XC-1A D.T. XD-1A

Mike Connectors Phone Plugs Jacks a

AMPHENOL Connectors for Microphones



Type 75 SINGLE CONTACT PRESSURE TYPES For Cable or Chassis





For Attaching to Cable

Female, MC1M Male single contact made by pressing together and tightening coupling ring. Spring tord protectors accommodate cables to 4" dia, Brass chrome plated.

Net																			3	2	C
12A3 Net	1	2.	1	М	C	31	11	М	1	1	М	а	1	θ					9	C	•
Net	٠																			v	·
			ú																	_	

PC1M, mounts in .385" hole to ground to chassis or 1/2" hole when two circuits are desired independent of chassis. Furnished with insulating washers, solder lug and lock nut. Use MCIF or MCIFA as cable connector. 12A313. PC1M. Not 19C
SP-PC1M, identical to above PC1M
but has heavy coil spring which
pushes center contact forward.

CL-PC1M Closed Circuit Type. Same as PC1M but circuit closes when as PC1M but circuit closes when cable connector is removed, eliminating open circuit grid howls. Contact is spring actuated. 26C

Handy Fittings for Use With **Above Connectors**







MC1FA CCC-1 All Chrome Plated

MC18 Microphone Switch

Attaches between male and female of any of the above connectors. Push-to talk or slide switch for

MC1F-A Angle Connector

Right angle female cable connector for use with any above male types. 12.3.317.

MC1P Phone Plug Adaptor Makes a standard phone plug out of MC1F or MC1FA connectors. 12A818.

Not Ea. CCC-1 Cap and Chain

To seal chassis units when not in use. Keep dust out, Fit either types 75 or 80. 12A319. Net Es. 32c



Switch For Phonos. Record Players, Etc.



Туре 80 2-CONTACT PLUG-IN TYPES For Cable or Chassis





For Attaching to Cable 2 contact of the sleeve and prong type, with screw type coupling ring to prevent accidental disconnection.

Spring cord connector takes cables to fs". Brass chrome plated. 12A320, 2 Con. Male MC2M...52c 12A321, 2 Con. Female MC2F. 52c For Chassis Mounting

A shielded chassis connector for \$\frac{1}{2}\]' hole. With lock nut and washer.

12A322. 2 Con. Male PC2M ... 29c 12A322, 2 Con. Male PC2M ... 29c 12A323, 2 Con. Female PC2F. . 29c



Type 91 8 and 4 CONTACT CONNECTORS

For Cable or Chassis





91.MC3M 91-MC3F

For Attaching to Cable Can also be screwed into microphone having standard %"-27 thread, by removing spring cord connector and cap. Shells are

phone having standard %"-27 thread, by removing spring cord connector and cap. Shells are polarized. 3 contact connectorstake cables up to %" dia.; 4 contact to %" dia.

12A3224. 3 Con. Male MC3M ... 65 c
12A3225. 3 Con. Female MC3F. 65 c
12A3226. 4 Con. Male MC4M ... 71 c
12A327. 4 Con. Female MC4F. 71 c
For Chassis Mounting

For Chassis Mounting
Mounts in [8" hole in panels or chassis up to 4" thick. 12A329. 3 Con. Female PC3F. 32c 12A331. 4 Con. Female PC4F. 35c 12A332. Cap and chain to fit above

STAND CONNECTORS



Chrome plated, % "-27 threads.

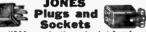
A-Screws on top on stand to permit easy removal of mike.

12A333, 3 Con. 65c 12A334, 4 Con. 71c

B-For use between mike and stand, providing cable outlet at side, so it is not necessary to run cable thru stand. 12A335. Net Ea



JONES Sockets



Type "300 series" polarized plugs and sockets. Bakelite with metal shells and cable clamps. Small size with heavy tight grip contacts, yet

	Plu	Sockets						
tacts	No.	Ea.	No.	Ea.				
2	12A336	24c	12A343	25c				
3	12A337	26c	12A344	27c				
4	12A338	280	12A345	290				
6	12A339	32c	12A346	34 c				
8	12A340	370	12A347	40c				
10	12A341	41c	12A348	45c				
12	12A342	45c	12A349	51c				



PANEL TYPE Plugs and Sockets

Same as above except with angle brackets for panel mounting.

Con-	Plu		Socket						
tacts	Cat. No.	Ea.	Cat. No.	Ea.					
2	12A559	11c	12A350	11c					
3	12 A560	13c	12A351	14c					
4	12A561	15c	12A352	16c					
6	12A562	18c	12A353	20c					
8	12A563	22c	12A556	25c					
10	12A564	25c	12A557	30c					
12	12A565	28c	12A558	34 0					

MALLORY Phone Plugs and Jacks



way phone plug, bakelite shell. 12A361, Type 75Net 380 2 way plug, shielded metal shell. 12A362. Type 75NNet 59c 3 way Microphone plug, bakelite. 12A363. Type 76 Net 59c 2 way plug, shielded metal shell like 75N above, except has built-in cable clamp.

12A364. Type 75A Net 97c Extension Jack, 2 way, fibre shell. 12A365. Type 100 Net 76c

Long Frame Jacks

See diagram below A1, A2, and A2A 12A366. No. 2. Circuit Closing. .47c 12A368. No. 2. Circuit Closing. .47c

Mallory Jacks





Diagram helow list types available in each; Midget and Junior Jacks.
JUNIOR JACKS. Neat, small
mounting in 1/8" panel hole. Ex-JUNIOR JACKS. New mounting in 18" panel h tends 14" back of panel.

MIDGET JACKS. Extremely com-pact. Mount in %4" hole. Special metal assures finest spring action Special

	Туре	Cat. No.	E
=	Midget A1 Junior 701	12A381 12A369	\$.18 .32
=	Midget A2 Junior 702		.28
	Midget A2A Junior 702A		.32 .44
=	Junior 702E Micro. 12A3	— 3 c 79, Each	ircuit
	Junior 703 cuit Fliame	nt Contr	ol.
	12A372, Eac Junior 703A	h —Circui	50c
≕∣	versing.		50 -

12A373, Each 50c
Junior 703B — 3 Circuit
Micro, one Circuit Closing. 12A380, Each ... 50c
Junior 703C—Double Circuit.

12A374, Each50c Junior 704—Interstage. 12A375, Each 59c

Junior 704A — Two Circuit Filament Control. 12A376, Each59c Junior 704B - Two Cir-12A306, Each 58c

Junior 765-Two Circuit Filament Lighting. 12A377, Each

Junior 706 - Interstage Filament Control. 12A378, Each 740





Signal Corps Jacks

JK34A, same spring arrangement as Al in diagram above. Fits standard plugs.

SPECIAL VALUE PLUGS



(A) Two-Way Standard Models, takelite, barrel size %"x1 %".
2A386. Net Ea. 33C; 10 @ 29c (A) Two-Way Standard mouses.
Bakelite, barrel size %"x1\formalism".
12A386. Not Ea. 33c: 10 @ 29c
Metal, barrel size \formalism'x2\formalism'.
12A387. Not Ea. 58c: 10 @ 52c
(B) Stubby Metal Barrel.
Two way type, barrel \formalism'.
12A388. Not Ea. 47c: 10 @ 42c
(C) Midget Phone Plus
Bakelite, barrel size \formalism'sx1". Solder

lug connections.
12A389. Net Ea. 35c 10 @
Metal, barrel size fi"x1". 12A389. Net Eas.
Metal, barrel size 1 "x1". Solde.
Metal, barrel size 1 "x1". Solde.
lug connections.
12A390. Net Ea. 41c: 10 @ 37c
(D) Flat Phone Plug
Bakelite, 1 "dia., %" thick. Staycord anchor.
12A391. Net Ea. 55c: 10 @ 50e
(E) 3 Way Mike Ping
Barrel size 4 "x1; "".
Bakelite 55c. Metal
Bakelite 55c. 12A393

Portable Type Jacks



Single Open Circuit. Will fit all standard plugs. Ideal to make up extension cords for phones, speakers, etc. Barrel 11"x2 1/2".

Bakelite 41c Metal 12A394 41c 12A395

Midget Short Jacks



Small compact. Quality bakelite insulation. Mount in %" hole on panels up to %" thick. Fit standard size phone

standard size photos plugs.

12A396. Open Circuit 19c
12A397. Single Closed Cir..... 21c
12A398. 3 way for mike plugs. 29c Bakelite



Knife Type Bakelite ba base Bakelite base, contacts and blades N. P. For panel or base mounting.

12A795, SPST 12A796, SPDT 12A797, DPST %"x1%"...... 21e
%"x1%"..... 35e
1"x1%"..... 41e



Lever Action SWITCHES

Mallory Series 5000

Series 5000
Available in six different circuit
combinations, all with positive indexing, two, three and four positions 20° apart, with either shorting or non-shorting contacts. Mtg.
holes 1%" between centers, Has
push-button type knob.
SHORTING TYPE

12A422, 4 Pole 2 Position, Ea. 68c 12A423, 4 Pole 3 Position, Ea. 68c NON-SHORTING TYPE 12A424, 4 Pole 2 Position, Ea. 686 12A425, 4 Pole 3 Position, Ea. 686

Jones Terminal Strips



Type 140 has %" W x 12" high bakelite base; %" term. centers. 141 is 1½ x ½", has ½" centers.

	Туре	140	Туре	41		
ľerm.	No.	Ea.	No.	Ea.		
2	14A541	130	14A547	164		
4	14A542	220	14A548	286		
6	14A543	320	14A549	416		
8	14A544	410	14A550	534		
0	14A545	510	14A551	650		
2	14A546	600	14A553	776		
		000				

NOD Sockets * PLUGS * Fittings





'8" Rockets



"CP" PLUGS







3-14 Shell

Receptacles AC Pluge

"S" TYPE SOCKETS AND TYPE PLUGS

Extremely compact high di-electric bakelite bodies. Quick, easy to mount to chassis or panel with retainer ring supplied. No need of acrews or rivets. Fit chassis or panels from 19 gauge (.044") to 16 gauge (.062").

	kets	Plu	Plugs			
Stk.			Stk.			
No.	Ea. C	ontacts	No.	Ea.		
12A48	\$0.08	4	12A58	\$0.08		
12A49	.08	5	12A59	.08		
12A50		6	12A60	.08		
12A51	.08	7 small	12A61	.08		
12A52	.08	7 large	12A62	.08		
12A53	.10	7 comb.				
12A54	.10	8 octal.	12A63	.10		
12A55	.12	8 loctal				
12A56	.12	9	12A64	.12		
12A57	.17	11	12.165	.17		
Note:	The ab	ove sock	ets and	plugs		
and a	lso the	AC rec	eptacles	and		
plugs :	at right	fit the l	nolders l	oelow.		

3-14 ADAPTOR SHELL

AC RECEPTACLES and PLUGS

Handy, compact and can be mounted directly to panel or chassis same as plugs or sockets at left or in holders shown below. Rated at 15 amps. for 110 V., 10 amps at 250 V. Receptacle has both solder lugs and binding screws; plug has binding screw.

12A121. Plug, Net Ea. . 12A122. Recpt., Net Ea.

MOUNTINGS FOR "S" SOCKETS, "CP" PLUGS AND AC UNITS







12A69



3-30A-For extending any of the

3-33A—To side mount on wall or work bench any of above sockets, plugs or receptacles. Makes a ver-

satile outlet for radio or electrical

61-61-For below surface on all types radio and electrical appara-tus. Use with above sockets, plugs



61-61

3-30A

with "S" sockets, "CP" 116e plugs, AC receptacles and plugs listed above.

(A) Steel mounting plate with slot-ted mtg. centers to fit centers from 1\%" to 1\(\gamma_8\)". to 178".

Net Ea. 7c

12A70Net Ea, 11C





Type PF-PM, made of "S" sockets and "CP" plugs snugly covered by plugs snugly covered by a steel cap 1" in height. A rubber grommet protects cable from abrasion. Small, sturdy, easy to take apart for assembly. Accommodates cables up to 18" diameter. Black

Japanne	i.		
Contacts	Male	Female	Net Ea.
4	12A72	12.180	\$0.19
5	12A73	12A81	.19
6	12A74	12A82	.19
7 small	12A75	12A83	.19
7 large	12.176	12A84	.19
8	12A77	12A85	.21
8	12A78	12A86	.23
11	12A79	12A87	.28
	TOCKTOO	CTITUTE	



Type 15 CAB Cad, plated steel to over above cable or AC
ors. Locks them firmly
er in spots where accide mectors. gether in spots where accidental pull-apart is to be guarded against. Supplied in sets of one male and female.Per Sct 18c SHIELDED AC CONNECTORS



or AC receptacles and plugs.



Most practical of all for use AC. Assembled molded bakelite sembled from bakelite units the same

Plug Net Ea. 28c Receptable .. Net Ea. 28c 12A90.

CABLE CLAMP



For use with cable or AC connectors listed above and at left. Fits in place of grommet.
Relieves strain and
can also be used on
panels and chassis to

anchor cables firmly in place. Slips into any shape hole 18" to %". No crews needed. Net Ea. 7C

3-RPH Rubber Handle



Converts above AC or Cable Plugs into Easy Units. 12A88 11c







(A) "MIP" SOCKETS

The MIP is a sturdy bakelite socket molded together with a steel mounting plate so it cannot vibrate or come loose. 1%" mtg. centers.

Prong	Stk. No.)		
4	12A93	Choice	P7 .
5	12A94)	Net Ea.	70
6	12A95	1	= -
7 small	12A96		
7 large	12A97	Choice	Q
Octal	12A98	Choice Net Ea.	οι
12.1102.	Polystyre:	ne UHF O	ctal 28 (
2A103. 1	Polystyrer	18	
1	UHF Loc	tal	320
		P" SOCK	

MINIATURE SOCKETS



78-7P and 54-7P fit type 1R5, 1S4, 1S5, 1T4, 9001, 9002 and 9003 tubes, 78-5H fits Hyrton Bantam, Jr., HY 113, HY 115 and HY 125 tubes, 78-5P fits Raytheon CK501-2-3-4 series, 78-S3S fits RCA

series. 78-838 fits RCA
pee Wee and Cetron
CE-5BB and CE20 photocells.
Mount in a %" hole with snap-on
mounting ring. All are bakelite except 54-7P, which is polystyrene.

Cehr agai	T to service	10 p-00	
Stk. No.	Туре) ,	Net Ea.
12A123	78-7P		
12A125	78-511	7	12c
12A124	78-5P	,	-
12A126	78-S3S		10c
12A127	54-7P		24c
12A118	78-6H 6	Prong	Min.
Socket	for Coil	Forms,	etc 13c

Speaker Plugs



No. I 12A128 Prongs 4 12A133 9 12A134 12 12A135 20 13A129 12A131 BULB TESTER SOCKETS

Combination 7 contact socket for either large or small 7-prong tubes, with large center contact for testing dial or flashlight bulbs with screw or

bayonet base, 12A136. With Mtg. Plate, Ea. 32c



Compact socket for screw or bayonet base miniature bulbs. Mounts in %" hole, bulbs. A held in by retainer ring, furnished.

Type "RS" Bakelite Type "RSS" Steatite

Type RS, a popular socket for re-placement needs. Bakelite body placement needs. Bakelite body assembled with retainer ring to reassembled with retainer ring to removable steel plate with slotted mounting holes to fit 1½ to 1½ mig. centers. Socket body, less plate, can be used directly to chassis or panels and held in place with the retainer ring.

Type RSS is identical except for Steettle hody.

Steatlte hody

"RS" Ba	kelite	,	"RSS" Ste	attte
Stk.	Net		Stk.	Net
No.	Ea.	Prong	No.	Ea.
12A104	.08	4	12.1112	.28
12A105	.08	5	12A113	.28
12A 106	.08	6	12A114	.28
12A 107	.08	7 small	12A 115	.28
12A108	.08	7 large	12A116	.36
12A109	.11	7 comb.		
12A110	.11	8 octal	12A117	.28
9 4 1 1 1	12	9 lootal		

MINIATURE PLUGS AND SOCKETS MOLDED TYPE



Extremely compact, ideal for all plug-in connections where space is limited. Sockets mount in %" dia. hole. No screws or rivets needed. tacts Plugs

3 12A138 12A139 Choice Each 10c

SHIELDED TYPE





For use where shielded plugs are desired. Male may also be used with sockets above. Cad. plated brass shells, \right\rangle " long x \(\frac{5}{6}" \) dia. used plated long x For cables up to fe" O.

Cat. No. Con-Female tacts Net Male 12A142 12A143 12A144 12A145 21c 24c

Miniature Connectors



metal shell over bakelite elements. Male plug 2 screw holes so prongs can be cessed as in illustration Only 1%"x%", bakelite eleme Takee as in cable to dia. Net Female

Con-Male tacts No. 12A146 No. 12.\148 E ALL

Ea. 21c 12A149 2A149 24c CHASSIS TYPE For use with above male plugs. Mtg. Centers 14". 12A150-3 contact

12A151-4 contact



15-C-CHA Chassis Type. Consists of one threaded shell to be used with "S" type sockets or the AC receptacles above and a shell that slips over the "CP" plugs sockets or the AC receptacles a shell that slips over the or AC plugs. Net Per Set 18C 19 A 2 1

Bakelite Wafer Sockets



For glass or metal tubes. Positive grip contacts in laminat-ed bakelite. 11/2" mtg. centers.

Prongs No. 12A157 12A158 5c 6 7 12A159 12A160 12A 161 Oct.

Base Mounting Sockets



One piece bakelite sockets for surface mounting 1%" mtg. centers.

2A152-4	Prong									۰				27 c
12A153—5	Prong	٠	۰	٠		٠	٠		٠	٠	٠		٠	29C
12A154-6	Prong	۰	٠		۰	۰	٠		۰	۰	۰		•	320
12A1557	Prong			٠	۰	۰	•	• •		۰	۰	۰	•	35c
12A156-O	ctal		٠	٠				• •			٠	٠	٠	38C

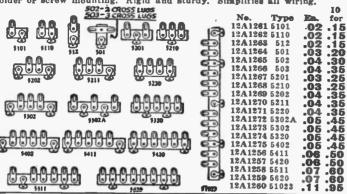
Lugs, Terminals . Banana d Phone ty Phugs Jacks

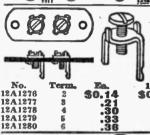
SOLDERING LUG STRIPS

Very popular for all types of radio-amplifier work. Terminals securely riveted to bakelite insulation strip. Mounting lugs for quick, handy solder or screw mounting. Rigid and sturdy. Simplifies all wiring.

502-1 CROSS LUGS

No. Type Ea. for

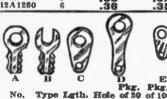




BAKELITE TERM. STRIPS

Note the type lug used on this strip. Made of 18" high grade black bakelite with terminal lugs mounted into place. Terminals have non-removable and equipped with 8/32 screws and have mounting holes.

	_			
0	No.	Torm.	Ea.	10 🙃
.13	12A1281 12A1282	7	\$0.43	\$0.42
.20	12A1282	8	.53	.52
.29	12A1283 12A1284	9	.60	.59
.32	12A1284	10 Lugs Only	.66	.65
-30	CONTRACT	Page Out	.05	0.4





Pkg. of 100 of 20 70 70 27c 27c 27c 27c 27c 27c 27c 27c 27c 6-8 12 A 1287 P C 7070 12A12R9 6-8 12A1290 12A1291 4-6 12A1292 80 Shake-

0 **Proof**

E

		- 13	/pe
Stk.	Hole	Pkg.	Pkg.
No.	Siso	of 20	of 100
12A1298	4	\$0.13	\$0.45
12A1299	8	.14	.50
12A1300	8	.15	.55
12A1301	10	.15	.55

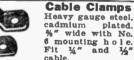
Type Lgth. Hole of 20 of 100 3 H %" Rivet 8c 30c 4 I %" 8 10c 45c 56c 6 J %" 10 16c 65c 7 J* 14" 19-64 270 96c No. 12A1293 H 12A1294 I 12 A 1295 12A1297 *Heavy duty type as used on automotive cables, etc.

Lug Assortment

100 assorted lugs, cable clamps, small clips, etc., in varied types and sizes. Always handy. 18A8-Per assortment35c

Terminal Assortment

25 assorted terminal strips with lugs attached. A BARGAIN. Per assortment 35c



mounting hole. cable.

12A1803—½", pkg. 20 25c 100 for 12A1804—½", pkg. 20 25c \$1.05

Trimounts A handy fastener wide-ly used in radio. Illustrations are approximate actual size.

(A)—12A1305 Choice

(B)—12A1306 per pkg. -12A1307 (D)-12A1308 D)—12A1308 11C Per Assortment of 40 (1) RIVETS 29c

Nickel plated, %" diam, 12A1309—18" lgth, 12A1310—4," lgth.

Choice 25 for ... 15c Nickel plated, fe" long. 12A1311—1/4" diam., 12A1312—7-64" diam., 12A1313—11-64" diam., Choice 25 for ... 20c

Per Assortment of 50 Eyelets and Rivets

SPADE TYPE SOLDERING LUGS

chassis.

8-32

Cad. plated. 6-32 screw end. 12A1302. Pkg. of 20. 11c 100 43c

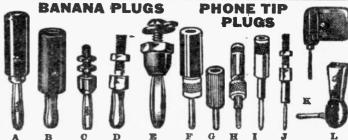
Angle Mounting Brackets



Hardened brass, N. P. width %". No. Style Size Ea. 10 for Sixe Ea. 1/4"x 1/4" 1/40 1/4"x 1/4" 20 1 "x1" 30 1/4"x 2/4" 40 12A1314 12A1316 - 1 %"x2%" 4c %"x1%" 3c 12A1318 'Æ



12A1319—¼"x½". Ea. 4c 10 @ 3c 12A1320—½"x%". 'Ea. 5c 10 @ 4c 12A1321—¼"x%". Ea. 5c 10 @ 4c 25 Assorted Brackets, Including of above and other om e 35c



(A) Insulated, solderless, side screw connection. Bed or Black. 12A1042-Net Ea. 14c 10 @ 13c

(B) Insulated, prong split in center for spring action. Red or Black. 12A1043-Net Ea. 15c 10 0 14c

(C) Nickeled brass, spring section tinned. 1", 6-32 thread. 12A1041—Net Ea. 9c 10 @ 8c

(D) Metal, split prong. Hex shank. 6-32 thread. 12A1045-Net Ea, 90 10 0 (E) Phosphor bronze spring. Hex

shank. Removable 6-32 screw. 12A1046-Net Ea. 9c 10 @ (F) Insulated, perfect solderless connection by tightening knurled collar. Over all 1%" long. 12A1050—Red or Black1c

(G) Insulated, midget, sleeve Ideal where space is limited. long 12A1051—Red or Black 11c (H) Nickeled brass, solderless nection with knurled collar. Over all length 1%".
12A1062—Net Ea. 9c 10 080

(I) Nickeled brass, shank fits ba-nana plug, tip fits all phone tip jacks. 15%" over all. 12A1053—Net Ea. 8c 10 @7c

(J) Threaded shank for attaching to instruments or for replacement in test prods. 12A1054—Net Ea. 9c 10 @80



up to 7."
90 10 @ panel. Nickeled, fits up to 12A1047-Net Ea. 80 (B) Insulated head. Mounts in %" hole, up to %" panel. Red or Black. 12A1048—Net Ea. 11c 10 @ 10c (C) Takes either phone or banana s. Insulated head. Mou hole in up to 1/4" panels. Mounts in

12A1049-Net Ea. 14c 10 @ 13c

PHONE TIPS



Type. 12A1085 160 Doz. 100 for \$1.20 Easy to Solder Type. 12A1086 Doz. 25c SOLDER FLOWS IN HOLE 100 for \$2.00

Standard



Pin Plugs and Jacks

...56a

For recording units, receivers and many makes Auto Radios. No. 12A1087-Pin Plug. Ea. . . 9C No. 12A1088-Socket & Shield 15C

High Volt. Plugs and Jacks



Handle 1,000 Voits at 10 Amps., giant size insulated for U.H.F., diathermy, etc. Plug. 3% over all. 12A1069—Ea.330

Jack, for panels up to 4" thick 12A1070—Ea.

PHONE TIP JACKS



(A) All Metal, phosphor bronze contacts. Mounts in %" hole in up to %" panels. Brass N. P. 12A1657—Net Ea. 9c 10 @ 6c (B) Insulated 75" head, phosphor bronze contacts. Red or Black. 12A1658—Net Ea. 1 c 10 @ 10c (C) Insulated over all. %" head countersunk for snug fit. %" over all. Mounts in panels up to %" thick, Red or Black. 12A1659—Net Ea. 1 c 10 @ 10c

thick. Red of Black.
12A1059—Net Ea. 11c 10 @ 10c
(D) Metal, flush type. Mounts in
4" hole, panels up to %" thick.
12A1060—Net Ea. 9c 10 @ 8c

Phone Tip



(A) Sure contact. Flush mounting. Nickel tip jacks mounted in bake-lite strip. 2" long, 11" wide, mount-

ine strip. 2" long, 1½" wide, mounting hole 1½" centers.
12A1061—Net Ea. 8c 10 @7c
(B) Insulated head jacks mounted on a bakelite strip, 1½" wide, 2" long, ½" apart.

12A1062-Net Ea.

Mallory **Bakelite Head**

Tip Jacks
Round head type
418, mounts in \(\frac{1}{2} \)
to \(\frac{1}{2} \)
thick. Supplied with insulating washers. Red or Black.

12A1063—Ea. 15c 10 0 13c Hexagon head type 420. Mount in %" hole. With insulating washers Red or Black.
12A1064—Ea. 14c 10 @12c

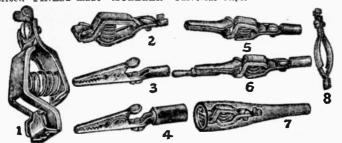
999-Piece Hardware Asst.

Assorted machine screws, nuts, wood screws and washers of many types and sizes. All Quality Stuff and useful time and time again. 8A86.

18A6

Clips-Connectors Test Leads and Prods~

A type for every need. Standard packages of 10 clips; 5 marked + and n. Types marked with asterisks (*) are solid copper, others are all with bright finish; the battery types are lead coated. Have connections—no solder needed. Interlocking necks prevent jaw FINEST made "MUELLER" Universal Clips. connections



BATTERY CL	IPS WIT	H GRIP	TEETH-FIG.	1
------------	---------	--------	------------	---

Mfrs. Type 24A 21A	Ampe. 25 50	Size Length 2 % "		Stk. No. 11A162 11A163	Net Ea. 8 C 13 C	Box of 10 \$0.68 1.18
	TEST	CLIPS WITH	MESH T	EETH—FIG.	2	
45	Б	1 1/4 "	56 "	12A1000	Бc	\$0.35
45C*	10	11/4"	34"	12A 1001	8c	.55
48B	10	2 "	% "	12A1002	Бc	.35
27	10	2 78 "	% "	12A1003	10c	.70
27C*	40	2 7 "	% "	12A1004	16 0	1.40
82	10	2 "	⅓"····	12A1005	11c	.90

Type \$2 has needle between jaws for piercing insulated wires. telephone work. Types 27 and 27c have meshing teeth on 3 sides.

ALLIGATOR CLIPS-FIGS. 3, 4 Fig. 3 is all metal, length 2". Fig. 4 has insulated red or black shank over-all length 2'\". Both fit banana plugs. Asterlsk (*) indicates solid copper.

Туре	Fig.	No.	Ea.	
608	3	12A1006	6c	\$0.45
60CS*	8	12A1007	10c	.80
00HS	4	12A1008	12c	.95
60CH	S* 4	12A 1009	17c	1.20
	INSU	LATORS-	-FIG. S	ž .
		k, specify		
For C	lip	Stk. No.	Net Ea	. 10 For

INSU	ILATORS-	-FIG. 7	f
Red or blac			
For Clip	8tk. No.	Net Ea.	. 10 For
45, 45C	12A1014	9 c	\$0.75
48B, 82	12A1015	10c	.60
24A	11A164	190	1.80
21 A	11A165	330	3.20
27. 27C	12A1016	110	.90
85. 85T	12A1017	6c	.40

CROCODILE CLIPS-FIGS. 5. 6 Either Fig. 5 or 6 fit banana plugs. Type 85, Fig. 5, length 2%". 12A1010. Ea... 80 10 for... 45c
Type 85T, Fig. 6, has standard
phone tip on one jaw, otherwise
same as type 85. Ideal for connecting Bridges, Voltmeters, etc., as type ng Bridges, hav or anything having binding posts with non-removable heads.

12A1011. Ea.... 14c 10 for ... 94c WEE-PEE-WEE CLIP-FIG. 8 Type 88 Non-Ferrous R. F. Clip. Will not heat in high frequency circuits. Ideal for close places, for tapping coils, etc. Length 1 1 7. 12A1012. Ea.... 13c 10 for... 90c Insulators for above. Red or black. 12A1013. Ea....5c 10 for 40c

HEAVY DUTY ALLIGATOR CLIPS



black handle. Insulated red or Over-all length 8 %

2% "long, loop in barrel for large Ea. 8c 10 70c 12A1018. 17c 10 \$1.60 Wire. 12A1019.

FAHENSTOCK CONNECTORS



Special Prices on Fahenatock Clips to Quantity Buyers. Write for quotation, stating types and quantities wanted



Made up of best quality flexible, kinkless wire 48" to 50" long.

LABORATORY TYPE-FIG. 1 With removable phono needle chucks and 6" slim red and black handles knurled at end for finger grip ease. Heavy duty kinkless wire with knurled grip handle, insulated

with knuried grip handle, insulated solderless plugs.

11A166, ICA Type 400. Each 97C

PHONO NEEDLE TYPE—FIG. 2

With chucks in which phono needles can be replaced at will. Slim handles and extra flexible kinkless wire and standard phone tips. Slim
4" red and black handles.

4" red and black handles. 11A167, ICA Type 382. Each 59C UNBREAKABLE TYPE—FIG. 3 Long, narrow brass handles covered with shockproof live rubber sleaves. Naedle not to red. sleeves. Needle point tip prods and insulated solderless plugs.

11A168. ICA Type 331. Each 68C

ALL PURPOSE TYPE—FIG. 4
Sturdy slim 6" Fenoline handles
with sharp point tips. Equipped
with banana plugs allowing for interchange of spade lugs, phone tips or alligator clips all supplied.

11A169, ICA Type 312. \$1.47

HIGH VOLTAGE TYPE-FIG. 8 Safety up to 10,000 volts. For use wherever high voltage prevails. Has low voltage drop due to heavy cop-per leads. Large diameter 6" prods with guards to prevent finger slips. Leads are of 18 gauge 67/36 copper with heavy wall. Handles and prods of bakelite with very little metal exposed. 11A170. ICA Type 475. Ea. \$2.35

TEST LEAD PRODS, WIRE AND CHUCKS



With screw in chuck to hold phono needles. Red or Black Fenolite handle.

lite handle. 11A175. Each

With threaded solderless plug. (3)



(A) With Phone Tip Jack in Shank has insulated shank with tip jack in barrel. Connects has insulated anything equipped with ps. Over-all length 2%". clip to anyt phone tips. Red or Black.

12A1020 Net, Ea... 31c For... \$2.90 (B) With Combination Jack in Shank—For Phone Tip or Banana Plug. Red or Black.
12A1021. Net, Each 35C

Neutralizing Tool

BARGAIN. ..30c 11A232 only Sturdy, unbreakable. Has metal collars each end with ¼" and 16"



and electricians and inest polarity of AC or DC for blown fuses, tracing ground line in AC circuits, as an RF indicator, spark and cable tester, an RF indicator, spara plug and cable tester, etc. Can be used on voltages of 60 AC to 500 volta AC or DC. volts AC or DC. 35C

To make your own, and replace-ments for all types test leads.

(5) Heavy duty bakelite prod for

(b) Heavy duty bakelite prod for high voltage needs. Has finger guard ring, minimum of metal exposed. Length 6" over all. 11A178. Black Bakelite 670 (6) Heavy duty bakelite with threaded midget sharp point exposed only %". Measures 2" over all.

all. 12A1034. Black Bakelite. Es. 32c

PRODS-TERMINALS To Fit Banana Type Pinga. COMBINA TIONCLIPS



Ideal for use with test leads, etc., which have banana plugs.

which have banana plugs.

(1) Insulated shank fits banana plug to convert it to phone tip plug or sharp point prod.

12A1038. Red or Black. Net Ea. 100

(2) Insulated shank fits banana plugs to convert to spade terminal.

12A1039. Red or Black. Net Ea. 12c

(3) Metal shank fits banana plugs or van be soldered direct to wire leads.

WESTON TYPE TEST LEADS



long handles of red and black phenolite. Molded finger grip tips. \$1.03

other RADIO



RH

BH designates Binder Head; BH, Round Head, and FH, Flat Head. Top quality plated brass and steel machine screws at prices that represent a nice saving over usual quatations for all milar quality. usual

SIZ	E 2-56 1	MACHINE SO	REWS	1 SIZE	10-32 1
Lgth.	RH St	k. BH Sti	. FH Stk.	Lgth.	
Ing,	Numb		Number		Numbe
-18"	19A701			1 "	19.1775
14"	19A702	X	19.4850	1 1 1 1 1	19A776
5 "	19A702	19A852	19A851	11/4"	19A884
%"	19A703		19A853		
	e above.	*****		CHUICE	above,
	or 20c	500 for	. 80c	100 for	75c
	- 200	000 101	. 000	4 1/4 "	19A885
Size	4-36 M	ACHINE SC	REWS	6 "	19.4886
1/2 "	19A981			Cholce	above,
	e spore		19A987	Each	
			-0 0	2000	
100 10	r 22c	500 for	JUC	SIZE	10-24 N
SIZ	E 4-40 3	TACHINE SC	REWS		
3/4 11	19A705	19A704	16174413	14."	
1/4 "	19.4707	19.1706		% "	19A887
18"	19A854	19A708		1/8 "	19.A888
- 1 2"	19A855	19A709		% "	
1/2"	19A711	19A 109	10.1070	3/4 "	19A782
16			19.1856	76 "	
56.7			19A992	Choice	above,
11 "			19A 1051	100 for	35c
16			19A 1053		
% "	19A712	*	19.1994	0.000	
1 1/2"	19A997				1/4-20 B
Choice	above,		. 90c	% "	19A889
100 fc	P 22c	500 for	. JUC	17."	19A784
0.000				%"	19A785
SIZI	E 6-32 N	IACHINE SO	REWS	76 "	19A890
36 "		19A713		11""	19A786
3 " 18 "	19A857	19A714		1 1/6"	19A891
1/4 "	19A995	19A715		1 1/4 "	
Ye"	19A983	19A716	19A717	1%"	19A892
% "	19A858	19A718	19A719	136"	19A788
16 "	19A996	19A720	*	15%"	
1/2"	19A859	19A721	19,1722	Cholce	ahova
Choice	above,	40		100 for	
100 fo.	r 30c	500 for d	1.25	100 101	90C
16"				0.00	
5/2 "	19A860	19A724	10.000	SIZE	14-18 M
12 "		19A726	19A725	1,6,"	19A894
16 %"	19A723	19 A 727		1 2 "	19A895
36 "		10.4.00	19A728	Choice	above
	19A729	19A730			\$1.25
Choice	above,	•	4 50	100 101	31.20
100 for	r 35c	500 for a	1.50		
1 "	19A733	19A734		64	, H
1 1/4 "	19A861	1071104		AND THE	AS
1 %"		19A735		190	All i
1 1/2 "	19A737	19A736			brass
1%"	19A738	19A862		W7 -	
11/6"	19A 863	19A789		For	0.D. 8
1 %"	19.1864	19A1030		Screw	Size
1 82 #	19 A 740	10/11/30		2-56	15 " 19

.

19A741

19A744 19A745 19A746

19A748

19A750

19A753

19A754

19A 759

19.1999

19A762

.....

19.1766

19A768

19A1028 19A882 19A991

500 for.

SIZE 10-32 MACHINE SCREWS

500 for. \$1.85

500 for. \$1.95

500 for. \$3.25

19A770 19A770X

SIZE 8-32 MACHINE SCREWS

500 for. \$2.50

BH 8tk. FH 8tk.

Number Number

19A743 19A743X

19A868 19A984

19A747

19.1749

19A752

19A755 19A757

19A760

19A876

19A765 8

19A769

19A880

19.4772

\$2.25

quotat	ons for	slmilar	quality.
SIZE	10-32 M	ACHINE SCI	REWS
Lgth.		BH Stk.	
Ins.	Number	Number	
1 "	19A775		
	19A776		
1 1/4 "	19A884		
Choice	above.	Oh-	0.0=
	75c	500 for \$	3.25
4 14 "	19A885		
6 "	19.4886		
6 "	19.4886 above,		2c
6 " Choice Each	19.1886 above,	******	
Choice Each SIZE	19.1886 above,		
Choice Each SIZE	19A886 above, 10-24 M.	ACHINE SCI	
Choice Each SIZE	19.A886 above, 10-24 M. 19.A887	ACHINE SCI	
Choice Each SIZE	19A886 above, 10-24 M.	ACHINE SCI	REWS
Choice Each SIZE	19.A886 above, 10-24 M. 19.A887	ACHINE SCI 19A778 19A779	REWS

19A783

	above,	500	for	\$1.5	0
SIZE	1/4-20 N	IACE	UNE S	CREW	-
% "	19A889				
17.77	19A784				
1/4" %"					
24	19A785				٠.
7/8 "	19A890				
1 "	19A786				
1 1/4"	19A891				
1 1/4 "					
			19A787		
1 % "	19A892				
11/4"	19A788				
1 57 "				10.40	0.0
Cholce			*****	19A8	00
100 for		500	for	53.9	5

SIZE	# -18	MA	СH	I	N	11	0		SCR	E	7	V	9	,	
1 "	19A894 19A894	5													
Choice 100 for	above, \$1.2	5	501)	1	te	ы	ľ	\$4	te	4	2		5	,



Hexagon Nuts

A Size for Every Need. All have plated finish on brass or steel.

D. Stock Per Per

F'or	O.D.	Stock	Per	Per
Screw		No.	100	500
2-56	å."	19A1026	\$.30	\$1.25
4-40	7, 7	19A789	.30	1.25
4-40	34."	19A1052		1.25
4-32	34."	19A790	.30	1.25
6-32	18 " 89 "	19A792	.30	1.25
6-32	2"	19A896	.30	1.25
8-32	16.7	19A793	.35	1.50
8-32	96.11	19.7794	.35	1.50
10-32	36.00	19A897	.35	1.50
10-32		19A795	.35	1.50
10-24	· 14 "	19A796	.35	1.50
10-24	%"	19A797	.35	1.50
12-24	7	19A898	.35	
14-20	% "	19A798		1.50
14-20	1/2-11	19A799	.65	2.75
14-28	73 17	19A800	.65	2.75
16-18	16 **	19A801	.65	2.75
16-24	1/2 "		.95	3.95
18-54		19A899	.95	3.95
	ELAST	IC STOI	P NUTS	3
			25 for	100 for
4 90	37.07.1	0.0.1.0.0		

10-32 %" 19A840 .25 .80	4-36 6-32 10-24 ½-28			.25 NUTS	.80 .80 .80 .80
-------------------------	-------------------------------	--	--	-------------	--------------------------

RACK SCREWS and WASHERS





Steel-	-Bright	Nickel	Finis	h
No.	Sixe and Thread	Lgth.	Pkg.	Pkg. 100
9A930 9A931 9A932	6-32 8-32 10-32	14 "	:11	.39 .50
9A933	10-32	1/2" 3/4"	:17	.50 .55
9A934	Type Size	6) 6)	ners.	.53
9A985 9A986	Size Size	8	.15	.53

G E

Plated on bras or bronze. FLAT TYPE FIG. E Stook Fits O.D. Size No. 19A900 Screw 500 100 # 2 # 4 19A901 .50 *######## 19A902 19**A903** 19**A964**

.15 .15 .15 .20 .25 19 4 9 0 5 19A906 .60 .75 .75 19A907 19A908 #10 #10 #10 19A909 19A910 19.11041 .25 19A913 %" .30 %" .30 %" .35 %" .35 %" .35 %" .35 WASHERS 19A911 .95 1.25 .95 1.25 19 4 9 1 2 19A 1042 19A1043 19A 1045 19A1046 1.25 .75 .25

FLAT LEAD 19A914 #10 .25 19A915 19A 1044 35 HERS FIG.
... .20
%" .25
%" .25
%" .25
%" .45
%" .45
%" .45
%" .45
%" .95
WASHERS
... .30 SPLIT WASHERS FIG 19A916 19A813 194814 19A 1038 19A815 19.\1039 19A816 19A917 19A817 19A918

19A819 SHAKE-PROOF WASHERS Fig.30 1.230 1.240 1.6 (x½" .45 1.9 WASHERS Fig. 19A919 # 4 # 6 # 8 19 4 9 2 0 14 x 1/2 " 19A 1036 SHAKE-PROOF 19A806 # 4 # 4 # 6 # 8 19A922 . . .

1.25 1.25 1.65 1.65 .30 .40 .40 .45 .50 .60 19A808 #10 19A 1037 19A 1035 19A810 19A1034 19A1040 19A811

104890 .20 .20 # 8 #10 %" %" 19A821





Bakelite and

Ideal for insulating needs on metal panels. The flat bakelite types are especially sized for mates as follows: For 12A1377 and 12A1378 use 12A1383. For 12A1279 use 12A1385. For 12A1380 use 12A1384. Extruded thickness is \$\frac{1}{2}"\$—other dimensions as below.

FIBRE EXTRUDED TYPE -Dimensions

Stk. No.	0.D.	Hole	Thk	. Doz.	100
12A1377	1	%	1/4	.20	1.25
12A1378	3/4	%	7,	.20	1.25
12A1379	1/4	18	3.	20	1.25
12A 1380				20	1.25
12A1381	- %	11/64			
12A 1382	%	9/64		.15	
FL		AKEL	TÉ	ŤŸĎF	
12A1383		%		.15	.95
12A1384		14			.95
12A1385		- 57	17	15	.95
12A1386		1/4	33	.10	.85
12A 1387		1/4	- 32	.10	.85
12A1388	1/4	No. 8	17	.10	.85
F	LÄT.	FIBR	RΫY	PE	.00
12A1389	1/4 #	.110	18"	.08	.65
19A 1050	6 22	32"	16"	.08	-65
12A1390	% "	9/64"	J. w	.08	.65
19A 1048	14, **	9/64"	10 #	.08	.65
12A1391		16"	100	.08	.65
12A1392	1/2 #	14."	32 #	.08	.65
19.11049		3.0	16 "	.08	.85
12A1393	- 12° #	16.00	100	.08	
	All I	78	1.6	.00	.65



Cadmium Plated

			Committee	T Transcours
ROUN.	D HE	AD	GIMLET	POINT
Stock			a. YOUR	COST
No.	Size	Ins.	Per Doz.	Per 100
19A941	6	1/5 "	\$.15	\$.90
19A942	8	1/4 "	.15	.90
19A943	8	% "	.16	1.00
	RO	UND	HEAD	
19A944	6	1/4 **	.14	.75
19A945	6	1/3"	.15	.86
19A946	6	3/4 "	.15	.80
19A947	8	1/4"	.15	.80
19A948	8	3/4"	.20	1.10
BINDE	R HI	EAD-	-BLUNT	POINT
19A1047	8	34."	.14	.78
19A 1031	8	1,6 "	.15	.90
	HEX	AGO	N HEAD	
19A949	6	34.0	.14	.75
19A950	6	1/2 "	.15	.80
19A951	8	1/4 "	.15	.80
19A952	8	34."	.18	1.20

Tap Screw Assortment

100 Assorted, including some of above special self tap styles and other regular tap screws in pop-ular sizes, 19A953. Per Assortment ... 500



1.25

.95 .95

.95 .95 1.95 1.95 1.95

.50

.25 .25 .85

Phillips Type Self Tapping Screws

The screw that goes in faster and straighter with less effort. Perfect fit of Phillips drivers prevents burred heads and marred work.

Round	head, sha	rp poi	nt.
Stock	Sizo	Pkg.	Pkg.
No.	Lgt.	20	100
19A954	8x ½ "	25c	\$0.95
9A955	8 x ¾ "	30c	1.20
19A956	8x1 "	35c	1.35
9A957	6x 1/4"	17c	.70
9A958	6x 1/4 "	20c	.80
9A969	6≖¾″	25c	.95
9A960	6x1 "	28c	1.10

Headless Set Screws



12A 1394-12A 1395-- 8/32x7/16" - 6/32x1/8" - 8/32x8/16" 12 A 1396-12A1397-10/32x1/4" 19A 989-10/32x7/16 19.1 990-10/32x56"

Choice,27c Per Doz.

Wood Screws Brass, Nickel Plated ROUND HEAD STYLE

Stock Size Lgth. YOUR COST Per Dz. Per 100 \$.12 \$.86 .17 1.09 .17 1.20 .23 1.67 No. 19.4937 Dia. Ins. %" 1/3" %" 19A939 19.1940 5

Cap Nuts

Wing Nuts





BRASS--NICKEL PLATED

 Size
 No.
 Doz.
 Size
 No.
 Doz.

 6-32 19A924
 29
 6-32 19A927
 35

 8-32 19A925
 29
 8-32 19A928
 35

 10-32 19A926
 29
 10-32 19A929
 35



"C" WASHER ASST. 50 assorted. Handy for servicing volume controls, 19A965, Per Asst. 24c

WASHER ASSORTMENTS

100 Assorted Flat and Extruded type FIBRE Washers. 450 19A966. Per Asst. 45C 100 Assorted Flat BAKELITE and .65 100 Assorted Flat BAKELI'.85 FIBRE Washers, .65 19A967. Per Asst.

1%" 1%" 1%" 1%"

21/4"

Lgth.

Ins. 16 " 16 "" 16 " " 16 " " 16 " " 16 " " 16 " " 16 " " 16 " " 16 " " 16 " " 16 "" 16 " " 16 " " 16 " " 16 "" 16 "" 16 "" 16 "" 16 "" 16 ""

% "

1 1/8 " 1 1/8 " 1 1/2 "

1%"

36"

100 for

19A740 19A1032

19 A 865

19.4866

RH Stk.

Number 19A988

19.1986

19A869 19A982

19A870

19A751

19A871 19A756 19A872

19A873

19A761

19A764

19487

19A767

19A879

19A881 19A773

19A883 Choice above

50o

19A874X

Choice above,

100 fer 40c

Choice above,

100 for 45c

Choice above

100 for 75c

Choice above.

100 for 55c

.53



Nickel Plated Brass Machine Screws

Best for Looks and Durability.

4	4-36 ROUN	ID HEAD	
Stock	Lgth.,	Pkg.	Box
No.	Ins.	of. 20	of 100
19A1000	.14.	\$.07	\$,24
19A1001	₩	.07	.27
19A1002		.10	.38
	6-32 ROUN		
19A1003		.07	,30
19A 1004		.07	.30
19 A 1005		.08	.35
19A1006		.09	.40
19A1007		.12	.60
19A1008		.13	.60
	8-32 ROUN		
19A1009		.10	.40
19A1010		.12	.45
19 A 1011	1/2	.15	.50
19A1012		.18	.75
19A1029	11/4	.20	.80
	6-32 FLA		
19A1018		.10	.40
19A1019		.12	.45
19A1020		.15	.65
19A1021	1	.20	.75

Ornamental Head Screws \$-32 statuary bronze with rosette 19A980. Assortment of 25.. 24c



Low Prices on Stand-Off Insulators-Bushings



Low loss ceramic, threaded each end for standard machine screw sizes. No. 1-34" SQUARE INSULATOR No. Ins. Size Each 19A1062 1 " 10-32 10 12A1363 1 ½" 10-32 10 12A1364 1 ½" 34-20 10A1061, ¾" sq. x 1" high tapped for 10-32 screw, Ea.. 10 C No. 2-36" SQUARE INSULATION % " % " .03 12A1365 8-32 %" BOUND INSULATOR 12A1366 No. 4—½" ROUND INSULATOR 2A1369 %" 6-32 .04 2A1368 %" 6-32 .04 2A1366 1 " 6-32 .05 19A1054 12A1369 19A1056 19A1056 1 " 6-32 .05 19A1057 1 4" 6-32 .07 12A1367 1 4" 6-32 .07 No. 5 Bushing, %" hole for panels up to 4" thick. Bushing 10 C No. 6—34" ROUND INSULATOR 12A1370. Pkg. of 12 10 C No. 6—34" ROUND INSULATOR 12A1372 2 " 10-32 .12 19A1027 2 " 10-32 .12 -1" BOUND INSULATOR 1½" ¼-20 2 " 10-24 1½" dia. No. 6-19.11058 .15 19A1059. 1¼" dia. x 1½" threaded for ¼-20 screw. En high, threaded for \(\frac{1}{2} \cdot 20 \)
serew. Ea.

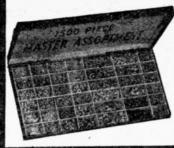
25 Assorted from above and other good usable sizes.50c 19A978. Per Asst. Steatite

19A1067

BUSHINGS Fits %" diameter hole.

Set ga illustrated 6c

Servicemens Handy Hardware Kit



42 Individual Compartments, each 43 Individual Compartments, each containing a different type of most select and most often needed hdwe. Included is a wide variety of sizes, lengths and heads machine acrews, nuts, washers, including many insulating types—also grommany insulating types—also grommets, spacers, lugs, rivets, eyelets, etc., etc. Around 1,500 pieces. Box is of stardy cardboard, dividers securely fastened, from which it is easy to select sizes and items as needed. This is a truly De Luxe Assortment and a REAL BARGAIN also. GAIN also. **\$2.45**

999-Piece Hardware Assortment

Machine screws, nuts—many types and sizes—washers, lock, shake-proof, flat, fibre, bakelite—rivets, eyelets, insulating washers, wood screws, ctc., etc.—at least 999 pieces—ti's all mixed in a fibre can but is Quality Stuff and useful time and time again in any walk of life. Every Piece Clean, Bright 3A36. Per Asst. 99c



Handy Assortments—Bargain Priced



WOOD SCREWS

Brass. ¼ lb. pkg. approx. 200 100 assorted pieces. Assort-many sizes flat, ment of most shake proof, C diame-10/1968. Per Asst. 15° ters and lengths. 19A968,

METAL SPACERS AND BUSHINGS

countless Some tapped for for 6/32 and 8/32.

25 to pkg. 39c ^{19A977}. 25° 18A20 ...

PILOT

SOCKETS

dial light sockets at an extremely low price.

Per Asst. 45c

MACHINE

SCREWS

many types and

19A978. 29° Per Asst. 29°

ANGLE

MOUNTING

sizes. A handy pacin any shop.

100 assorted of

most

package

18A1.

assorted

METAL WASHERS 100 assorted

washers, etc.

VELLUTEX Insulating WASHERS

100 assorted needs. 19A977.

soldered. 18A25.

Per Asst.

COIL FORMS

Wire

TERMINAL

and CONNECTORS

BAKELITE WASHERS

bre plain and Per Aset. 21° shoulder washers, bakelite and fi- 18A6. spacers, etc.
Many varied
sizes and types.

100 assorted clamps, small 4/36, 6/32, 8/33 clips, etc., always and other sizes. 19A974. 19°

SNAP BUTTON HOLE PLUGS

EYELETS

50 assorted in ASHERS types and sizes assorted needed in radio.

SOLDERING LUGS

100 assorted 19A975.
Per Asst.

100 assorted in varied types and sizes. Induction in varied types and sizes. Induction in variety in variety in variety in variety in variety in variety.

18A8. 18A8. Per Asst. 35° RUBBER MOUNTS

20 Assorted of BRACKETS

25 Assorted of most useful sizes, thickness, For 12 Assorted of many types and sizes. Very handy to have around.

18A7.

18A7.

Per Asst.

19 Assorted of various dia, and HANDLES are thickness. For 12 Assorted of with spring cushioning is desapes and findinges. Buy.

18A8.

18A8

25 assorted paper coil forms from 1½" to 3½" long and 18" to ½" to 4" diam. Ideal to tached. Always diam. Ideal to tached. Always wind your own needed in radio coils, chokes, etc. work.

TERMINALS

17A289. 25C 18A9. Per Asst. 35°

SET SCREWS

50 assorted a nd y for hole sizes 6, 8 100 Assorted of headless and with untless needs. and 10. Handy solderless type heads for knobs ome tapped for for insulating but can also be and other uses. 49c 19A971. 25c



RUBBER GROMMETS, CHASSIS MOUNTS AND BUMPERS

60 assorted rubber items so oft needed in ra-dio and electrical work; Included are sponge rub-ber blocks and washers fo floating condens ers, etc. A mos handy collection for most collection of hard items.

19A976. Per Asst. 60° CABINET AND DRAWER



Most Popular HARDWARE Handy to Get at in These **Glass Jars**

MACHINE SCREWS 100, cadmium and nickel plates steel and brass screws in most pop-ularly used sizes in round, flat, oval and binder heads. An assort-ment that ie handy for all purpose needs in handy glass, screw tom

19A961. Per Asst. 35c 180, 6-32 machine screws, assorted heads, iength and finishes, in handy glass jar. 40c machine screws. ..50c Per Asst. of 100
HEXAGON NUTS

SOLDERING LUGS 100, assorted various types and sizes, handy for anyone who does any soldering with wire. 19A964. In glass Jar..... 30c

Escutcheon and Name Plate Screws

60 Assorted small escutcheom 18A19. Per Assortment 24c

FAHENSTOCK SPRING CLIPS



No. 17A267. 25 assorted types and sises

METAL GROMMETS 50 Assorted Various Sizes -14m No. 19A1064

25c Assortment **Handy Assortment**



25 Assorted Brackets, cable clamps and fuse clips.
19A1065, Per Asst.25c



Grid & Plate Clip National No. 12 for 16 caps.

18A220. Ea. 8c; 100 @3c CARBON BRUSH

Assortment 0900333333333

50 Assorted of various sizes and shapes with springs as illustrated and others. Brushes can be altered to fit your job if need be. No Repair or Service Man should be without this asst.

19A1068. 95c Per Asst.

TBURSTEIN-APPLEBEE CO.-KANSAS CITY, MO.

Bushings Spacers · Grommets · Etc.

Bushings, Spacers UB

Available in Insulated or Brass uite the thing for raising condensers, transformers, sub-panels,

				etc.
10	R	IAMETE	14" D	
For	Each	. Brass	Het.	Ins'l't'd
.23	.03	12A 1459	3/4 11	12A1449
.26	.03	12A1460	8/, 11	12A1450
.28	.03	12A1461		12A1451
.33	.04	12A1462		32A1452
.40	.05	12A1463		12A1453
10		IAMETE		
For	Each	Вганн	Hgt.	Ins'l't'd
.28	.03	12A1464	14. **	12A1454
.31	.04	12.11465	3/6 27	12A1455
.35	.04	12.11466	16 #	12A1456
.41	.05	12A1467		12.A 1457
.46	.05	12.11468	1"	12.11458
+0	, U J	1 0.81200	ET A TABLE	TITE

THREADED TYPE BRASS Threaded on the inside to take a

9-35	screw,	AU 8	ure 5/4″ du	18.
No.		Length	ı Each	For 10
12A1	469	3/4 "	\$0.03	\$0.28
12A1		%"	.04	
12A1	471	1/2"	.05	
12A1		8/ //	.05	
12A14	473	1"		
When .	2 . A		.,	, 190

Bushing and Spacer Assortment 25 Assorted threaded and plain, various lengths and dia. 18A20. Per Asst. of 25..... 39C

THREADED BRASS RODS

Ideal for making your own long screws by cutting to any desired length. Supplied in 12" lengths.

tempets.	Duppincu	THE TALL TABLE	um,
12A1474	6-32	\$0.22	20 c
12A1475	8-02	.22	200
1CA1476	10-32	.28	26c





(A) Suap in type, forces into metal any type panel or chassis hole.
) Fasteus with knurled nut, For any need where a grommet bushing is desired — more dura and dressier than rubber types, (A) Insulated Snap-In Type

Stk.	Hole			Net
No.	Size	I.D.	Long	Ea.
12A1477	3, "	14"	16 "	8c
12A1478	16"	16"	3,8 "	10c
(B)	Insulated	Knur	led Nn	t
12A1479	% "	1, "	86."	8c
12A 1480	16 "	2"	8/8 "	10c
12A1481	1/2 **	3/4 19	7 11	12c
12A1482	16"	16"	12"	13c



ALLES.	I.D.	PIE.	1.61	WDDALL.
Hole	Hole	No.	Doz.	ment
18 19	3 "	12A1483	.23	of 15
13.7	3/4.11	12.11484	.23	18A21
3/2 **	34.11	12.X1485	.25	90
18"	18"	12A1486	.26	28c
	GI	CM RUBE	ere e	Assort-
		on accor	72320	ment
5 m	76"	12A1487	.32	of 15
11 "	3/4 "	12A1488	.32	18A22
1/2 //	8/1/1	12A1489	.34	
211	2 11	12 3 1 3 0 0	30	320



CSE221		Permor		
	microp	honic d	isturt	ances.
No.	Dia.	Thick	Ea.	10 Lots
12.11491	114"	116"	.06	.05
12A1492	116"	,b, 11	05	0.4
17A 1493	1 "	14 "	05	.07
12A1494	84.00	5,11	.ñã	'83
12A1495.	Flat v	asher	tyne	with-
out shou	lder 1	dia.	14.9	thick
size 8 hol	e Net	Wa.	/6	90
10 Lots,	En.		• • • • • •	
18A23.	Legarton	ant of	90	26
2012/000	PODOL MITTO	cut Off	AU .	rupper
mounts, g	gromme	ts, etc.	Asst,	39c

Felt and Rubber Bumpers



A B U D

(A) Felt attached to metal base in which is embedded a 6-32" screw for attaching where desired.

12.A143. Ea. 3c Per Doz. 23c

(B) Rubber with recessed cavity for No. 6 or 8 screws.

12.A1444. %" dia., %" high, Dz. 25c

(C) Felt covered tack bumper, \(\frac{7}{16} \)" dia. Can be tacked or pushed in.

12.A1446. Pkg. of 25. Per Pkg. 29c 12A1446. Pkg. of 25. Per Pkg. 29c (D) Flat felt, fasten with glue. 12A1447. Pkg. of 100......35c



For Cushioning

Condensers and trans-formers to give them floating effect. Usually 3 sets are mounted on condenser

12A1448. Ea. 5c 10 Lots, Ea. 4c



Snap Button Hole Plugs

A round, flat head, metal button with spring flanges which snap right into the hole. Holds accurely, yet easily removed. Used to seal adjustments, cover unused holes, etc. Will fit in any material up to \(\text{L}''\) thick

Stock	Hole	Price
No.	Diam.	Each
12A1335	8, 11	.03
12A1336	1,6 "	.04
12A1337	%"	.04
12A 1338	8 <u>Z</u> "	.05
12A1339	1 1/4 "	:08
12A1340	114"	
	- 14	.07

Assortment of 10 hole plugs, 18A10. Special, Per Asst. 29c



Snap Fastener **Battery Terminals**

Same as used on many midget type batteries. 12A1341. Per set male & female 12c

Auto Body Plug



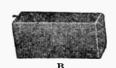
Attractively covers aerial holes in auto tops, cowls, holes in auto tops, cowls, etc. Large flat-headed machine screw with lock washer rubber spacer and nut. Chrome plated brass. For %" hole. 11.1161-Each16c

ANTENNA HARDWARE For Auto Aerials





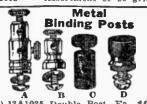
Aluminum Shield Can



(A) Shield can of drawn alum-4"x 1-34" with 78" dia, hole Glass or Metal Tube Grid Caps and Shields



Cat. No.	Тур	Description YOUR COST
12A1342	A	For standard type glass receiving tubes 1c
12A1348	G	Metal tube Grid Shield, with slot for lead 10c
12A1349	D	Positive grip grid clip for glass tubes 4c
12A1350	D	Positive grip grid clip for metal tubes 4c
12A1351	E	Transmitting tube size, soft rubber insulated 180
12A1352	F	Insulated test clip with 10" cord and phone tip20c
12A1353	C	Grid cap for standard glass tubes
12A1354	C	Grid cap for standard metal tubes 1c
12A1355	H	Insulated, for all tubes, 12" lead and phone tip 23c
12.A 1356	1	Isolantite insulated transmitting cap
12A1357	J	Universal fits all metal and glass tubes
12A1358	K	For standard tubes with 12" lead
18A205	As	sortment of 25 grid caps
ACCOUNTS.		



A B (A) 12A1025. Double Post, Ea. 12C (C) 12A1027, Single.

Fits 6-32 stud... 7c (D) 12A1028. Heavy Duty, Ea. 18c



Has banana tack in top takes wire or phone tip inside knurled insulated top. 12A1029. Ea.

Eby Ensign, non-removable top. Black composition top.

Spring Type With 8/32 Stem.



Long 12A1374 Ea. 12c

Tube Shield



12c Each Special, **Glove-Tite**

Bantam Tube Shield For GT Type Tubes No. 3A65

Per Box of 5.....30c **MILLEN Flexible Coupling**



Has universal joint. Designed for appli-cations where high torque in 18A652. is desired.36c Each

BARGAINS IN EBY All Metal - Non-Removable



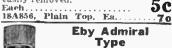
12A1375. Special Ea. 15C
Type 95V—Has needle contact for piercing cable without removing insulation. Cap Cap dia., %", height open 1 ½", closed ½". Stem 12/24x %" long. All brass, nickel fin-

12A1376. Special Ea. 25C 19.11085, Identical to above except long stem. Each.....

Insulated Spring Type

Binding Post 1/6" dia. black bakelite top, pushes down on spring to provide hole for standard tip. Has 6-32 1/2" Jong

tem. 18A855, with marking that can be easily removed. 5c



Binding Post Knob %" dia. of molded bakelite, 37" high, base 38x4" thick with 8-32x 33 x 14 " stem.

No. 18A857

15c Special Each.... 15 Terminal Barrier Strip

6-32 x 14 4

Bakelite, 6½ x ½ x ½", binder head screws. 18A822, Type 15-141

Double Binding Post



Double made of brown bak No. 18A849, Special

e connector type of brown bakelite. Sturdily Each.....

Service aids for the KIT, SHOP or L



Koatil Wrinkle Varnish **Brushes** On

Require No Baking or Heating, Dry Fast

Same professional finish as used on P.A. Test equipment, I.F. transformers, chassis, panels, racks, etc. Easy to apply. Can be brushed or sprayed. to apply. Can be brushed or apply 64.

11.447—2-oz. bottle. Black ... 26c

11.448—½-pt. Black ... 73c

11.450—2-oz. Silver Gray ... 26c

11.450—½-pt. Silver Gray ... 73c 11A50—1/2-pt. Silver Gray ... 73c 11A51—2-oz. bot. Brown ... 26c 11A52—1/2-pt. Brown ... 73c Black Crystalizing Lacquer Produces a profession

Produces a professional crystal effect on metal panels or parts. Can also be used for wood or other ma-

Satin finish lacquer enamel of rich professional looking appearance. Not a lasting, fast drying, one-coat finish.

11A55-2 oz. ... 21c 11A56- 62c **Chrome Paint**

Fast drying ready mixed aluminum paint leaves chrome - like finish. paint For E For P.A., Speakers, Chassis, etc. 11A289. 4 oz.....35C 8 oz.....65C



RMA **Color Coding** Kit

11A57. Per Kit. 88C

Use for sockets, coils, jacks, parts, etc. Kit contains jar each of red, white, black, brown, orange. gray. purple, blue, green and yellow high quality fast drying lacquer enamel. Complete with brush and color code Scratch



Remover Kit Handy combination kit containing 6 Stain Crayon fillers and 2 bottles of scratch fluid. For light and fluid. For light and dark shades of wood.

Scratch Remover Polish



Chassis Cleaner

Removes dirt, gerease, scum from radio chassis, etc. Non-explosive, Will not surface.
-8-oz. bottle 29c injure surface.



For HF Coils, in-sulation, etc. An ultra low - loss com-pound made from Polystyrene and rec-ommended for HF work. Absolutely no loss in Q—fast dry-ing — maintains coil characteristics. 11A25--

2 Oz. The Original "Liquidope" For holding all wave coll windings firmly in place. Antomatically tightens winding and gives tough, pro-tective film, assuring firmness and preventing characteristic changes due to moisture or weather. Non-Inductive, fast and clear drying.

21c 2-oz. bottle Insulating Dipping Varnish

Clear, amber colored insulating varnish. Produces smooth, tough film, waterproof, oilproof, non-corrosive. For field coils, buzzing or noisy transformers and choke coils. Dip or apply with brush. Requires no baking, dries in air. Protects, insul-



Insulating Cambric

Breakdown voltage 10,000 vol Handiest item volta. any service shop for insulating. Pro

vents grounds and shorts on field coils, transformers, resistors, con-densers, wires, etc. Dry, Yellow Cambric in rolls of over 210 sq. ins.



grade fibre sheet paraf-High fined for insulation purposes. Fine for field coils, transformers, etc. .010 thick, sheet of 240 sq. in. 29c



.010 thick, sheet of 240 sq. in. 29 c
Radio Tape
Radio Tape
Special %" Width
High quality friction
tape, specially made
for radio work, where
narrow tape is more
practical. It eliminates tearing and

-65-Ft. Roll 11A81-Radio Chemical



Kit 8 radio chemnecessities, icai including bot-tle each of Service Cement,

Drive Cement Rubber Carbon Grafoline, Scratch Polish, Non-Slip Dial Compound, Dial Oil, and Contact Cleaner. 11A32—Per Kit

Radio and Refrigerator Cabinet Repair Kits



frigerator Cabinet Repair Kits

For Refrigerator, Store, Washing Machine
or other porcelain cabinets. Kit contains lacquer enamel, tinting colors, glazing compound,
solvent, spatula, steel wool, sand paper, mixing tins, brushes, etc., everything to do a
perfect job—no skill needed.

11A1—Your Cost. Complete Kit.... \$1.56

For Wood, Plastic or Bakelite Radio Cabinets. A complete Professional Kit in a handy
black leatherette finish case. Contains 9 shades
of shellac sticks, bottles of light and dark off
stain, metal shading lacquer, polish, scratch
remover, alcohol lamp, spatula, brushes, steel
wool, sandpaper, etc.—everything to do a professional job on any type or color cabinet,
knobs, etc. knobs, etc. -Complete Kit 11A2-



Plastic Cabinet Touch-Up Kits

Contains six shades of lacquer enamand brushes. Easy enamel touch up scratches and nicks in plastic

11A63-Per Kit 59c



Radio Service

Cement and Solvent

For Radio and Speaker For Radio and Speaker Repairs. Fast drying, water proof, vibration proof, will not crack or shrink. Ideal for speaker cones and can also be used on glass, metal or bake-lite. Clear in color, spreads

Also ideal for loosening old ce-tent, cleaning switch points, volment. ume controls, etc.

11A35— 21c 11A36— 38c

Cement-Solvent Kit

Consists of a bottle each of cement and solvent in a kit to carry along 11A37—Per Kit 29c on lob.



Service Cement in Tubes

Same cement as above except in handy tube for direct application. 11A38—Per Tube25c

Bakelite Cement



Made especially for Bakelite and Plastics, Cements bakelite to bakelite or to other materials.
Produces bond as strong
as material itself. Ideal for cabinets, knobs, dials, 11A39-2 Oz. Bottle

Dial Drive Cement In handy tube. Cements rubber dial drives to metal shafts, etc. 11A76—Per Tube25c

Cabinet Repair Glue Finest quality, fast drying, Will not cut cabinet. Holds fast. 11A41—4 Oz. Bottle 25c Film Splicing Cement

For Splicing Motion Picture films or similar material. Makes splice as strong as film itself. as rum itself.
-1-Ounce Bottle 15c



Turntable Replacement **Felts**

11A42— 7%" diam. 11A43— 9%" diam. 11A44—11%" diam. Use Fabric Cement Ea..... listed below Use Fabric Cement listed below to apply turntable fells above.

Radio
Fabrics
For Construction or Repular

AEROPLANE CLOTH AEROPLANE CLOTH
Like used on newest portables and
luggage. Ideal for repairing torn
or damaged portable cases. Beautiful appearance. Color: Grey,
plain finest quality,
21A1008—36" wide. Per Yd. \$1.32
(Apply with Fabric Cement below.)

LEATHERETTE FABRIC For instrument cases, portables, etc. Same as used by most manufacturers on original cases. Ideal for repairing or new work. 21A1009—36" wide. Per Yd....88C (Apply with Fabric Cement below.)

SPEAKER GRILLE CLOTH Finest quality with beautiful tapestry offect pattern. Harmonizes with any high grade cabinet. 11A45—Large, size 18x20"....59c 11A46—Small, size 9x18". For small cabinets, midgets, etc......310

Fabric Cement

These Chemicals Speed Contact & Control Repairs



made to eliminate noise on controls and contacts without taking them apart.

To eliminate noise GRAFOLINE. CARBON-X. For noisy carbon controls. Apply on the worn and noisy spots and the job is done. 11A23—2 Oz. Bottle440

CONTACT DOPE. To prevent corrosion and eliminate noise on Elec-trical or Radio switches, contacts, relays, etc. Put up in handy, longneck tubes. 11A22—Per Tube 180

LUBE-REX. Moisture repellent, rust and corrosion preventive and cleaner for all types contacts, switches, attenuators, locks, reels, guns, dial mechanisms, phone equipment, etc. Clings to metal. equipment, etc. Clings to metal. 11A21—Per 2-Oz. Bottle29c CONTACT AND ATTENUATOR SERVICE KIT. Consists of special contact cleaner and corrosion lubricant for noisy attenuators, tuners.

CONTACT AND CRYSTAL CLEAN-ER. To clean crystal and delicate contacts without injury.

11A19—Per 2-Oz. Bottle......180

Varnishes, Stains, Etc., For Cabinet Repairs

FRENCH VARNISH. Biends the repaired part with the original. Easy to apply and dries fast. 11A13—Per %-Pt. Can 38c FRENCH VARNISH KIT. Contains PENETRATING STAIN. PENETRATING STAIN. Spirit Type. To cover scratches and nicks on cabinets, furniture, pianos, etc. Penetrates, darkens the corners. For all woods. Walnut finish. 11A9—Per ½-Pt. Can......38c SPIRIT VARNISH STAIN. Fast

RUBBING OIL. For rubbing down newly finished cabinets or furni-ture. Takes off the high gloss and produces satin-like finish. 11A8-Per Quart

TOUCH-UP KIT. Includes light and dark stain, brushes, wiping cloth and scratch filler. Handy to service scratches and dents on the

11A18-Per Kit . LEMON OIL POLISH. Polish those sets after repair for customer good-will. Fast working. Low cost. 11A7—16-Oz. Bottle27c

FLOCK FINISH KIT, To apply felt-like flock on turntables, etc. Produces heavy, soft veivet - like coat. Kit contains Flock, Applicator and Undercoat. 11A6-Per Kit .

Dries quickly—does not stain through cloth. Cements firmly—does not become brittle. For all fabrics listed above.

11A11—1/2 pt. can. EACH.....44c 11A12—Per 4-Oz. Can25c

Genuine BELDEN CABLES

ESPECIALLY DESIGNED FOR PUBLIC ADDRESS MICROPHONE, INTERCOM, and AUTO RADIO USES

Flexible Crystal Microphone Cable



\$401 for ribbon or crystal and sin-3401 for ribon or crystas and single button carbon mikes—or sow impedance transmission lines. 3411 for lapel mikes. Low capacity yubber core and special stranding

give extreme flexibility plus un-usual tensile strength. 8431 for pick ups (over-all cotton braid).

No.	Туре	Per Ft.	100 Ft.
2A101	8401	7 c	\$5.24
2A102	8411	5 C	3.72
2A103	8431	3 c	1.94

Shielded With Rubber Jacket Overall Cable



For mikes, transmission lines, amductor of size 20 stranded tinned wires. Conductors all are color coded, cabled together over which is a woven shield, ther cotton served, then overall covering of rugged rubber jacket. Number of conduc-tors does not include shield, which may also be used as a conductor.

Cat.		Num.	Per	100
No.	Туре	Cond.	Ft.	Feet
2A104	8422	2	.07	\$5.48
2A105	8423	3	.08	6.27
2A106	8424	4	.10	8.10
2A107	8425	6	.12	10.07
2A108	8426	6	.14	11.76
2A 109	8427	7	.16	13.50

Unshielded Rubber

Like above, but no shield. For outdoor or indoor speaker lines, etc., where cable is subject to wear and moisture. Conductors are of size 18 wire except the 4 conductor type which has 2 size 18 and 2

Cat.		Nnm.	Per	100
No.	Туре	Cond.	Ft.	Feet
2A110	8452	2	.04	\$3.08
2A111	8453	3	.06	4.60
2A112	8454	4	.07	5.68

Over-All Glazed Cotton



For speaker installations, remote control equipment, multiple circuit 500 thm transmission lines, battery cables, etc. 3, 4 and 5 conductor cables, etc. 3, 4 and 5 conductor cable of size 20 (stranded tinned) capite of Size 29 (trained times) . 620 ruober, color coded, cabled conductors with overall brown abra-sion proof "Basket Weave" braid. 6, 7, 8 and 9 conductor for use where high current must be carried with a low potential drop. Has 2 size 16 conductors 1-32" rubber and balance same as 3, 4 and 5 conductor cable above.

Cat.		Num.	Per	100
No.	Type	(ond.	Ft.	Feet
2A113	8443	3	.03	\$2.37
2A114	8444	4	.04	2.94
2A115	8445	5	.04	3.36
2A116	8446	6	.06	4.98
2A117	8447	7	.07	5.64
2A118	8448	8	.08	6.65
2A119	8449	9	.09	7.19

Transmission Line Cables



12 solid, cellophane wrap .035" rubber twisted pair with overall cotton braid weather proofed.
2A123. Belden 8210. 2A123. Belden 8210. Per Ft.....06: 100 ft.... \$4.64 Winder.

72-Ohm Twisted Pair



For Broadcast and Short Wave For the majority of all wave re-ceivers and of any half wave dipole antenna, 18 stranded tinned, cotton wrap low capacity rubber, color coded, twisted pair, overall white cotton braid, weather proofed.

2A124. Belden 8204. 2A124. Belden 8204. Per ft. ..3c; 100 ft. .. \$2.40

Shielded Twisted Pair



Recommended for lead-ins where interference is great. 18 stranded tinned, cotton wrap, rubber covered, color coded, twisted pair; paper wrap and tinned copper shield over twisted pair. Overall white cotton braid; weather proofed.

2A125. Belden 8209. Per Ft. ... 5c; 100 ft.... \$4.57

Commercial Twisted Pair



22 stranded tinned, paper wrap rubcovered, color coded, twisted, overall black cotton braid, pair, overall bl. weather proofed.

2A126, Belden 8205, Per ft. ..2c; 100 ft. .. \$1.60

Shielded Twisted Pair With Solid Conductors



Ideal for P.A. and Inter-Coms. 2 conductors of size 19 solid, enam-eled, wrap cotton, color coded cot-ton, braid waxed, twisted pair with overall bare copper shield.

2A127, Belden 8799. Per ft....4c; 100 ft.....\$2.58

Intercom and PA Cable

Solid conductors of size 22 tinned copper, plastic insulation Color Coded, conductors cabled in pairs; over-all brown cotton braid.

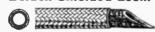
Cat.		Num.	Per	100
No.	Type	Cond.	Ft.	Feet
2.A94	8740	2	2 c	\$1.72
2.195	8741	4	4 c	3.13
2.196	8742	6	5 c	3.86
2A97	8743	12	9c	7.36
2A98	8744	18, 11	2½c	10.45
2A99	8745		21/40	19 82

Phono Pick-Up Cable

Small diameter, flexible and limp. Shielded with black cotton braid over-all.

No. 2A103. Belden 8431. \$1.94 Per Ft. 3c 100 Ft.... \$1.94

Belden Shielded Loom



Finely woven tinned copper shielding over impregnated loom. Provides low capacity shielding for any auto wire or cable and for auto antenna lead-ins.

2A138--- 18" dia. Per ft.8c



E01

Type

Wire Stripper and 5 in 1 Tool 15c

Combination Wire Stripper, Screw Driver, Scraper, Cutter and Wire Winder.

Solid or Stranded Push Back Wire CELLULOSE ACETATE BASKET WEAVE RAYON BRAID



Excellent general purpose wire consisting of tinned conductor. heavy wrap of cellulose acetate, "basket weave" abrasion-proof rayon braid, heavily lacquered. No. 20 recommended for all general wiring of circuits under 300 volts; No. 18 for home and auto radio filament circuits, and No. 14 for heavy duty uses as in transmitters and amplifiers. Puncturing voltage of all sizes, 1550 volts. D. C. insulation resistance, 325 meg. State colors wanted—Black, Red, Green, Blue, Yellow.

Size 20 Solid Type 8941	Size 20 Stranded Type 8943
22A1— 25-Ft. Coil	22.A3- 25-Ft. Coil
22A2— 100-Ft. Coil90	22A4— 100-Ft. Coil 1.00
2A3-1000-Ft. Spool7.20	2A4-1000-Ft. Spool 8 50
Size 18 Solid Type 8945	Size 18 Stranded Type 8947
22A5- 25-Ft. Coil	Size 18 Stranded Type 8947 22A7— 25-Ft. Coil
22A6 100-Ft. Coil 1.00	22A8— 100-Ft. Coil 1.10
2A5-1000-Ft. Spool9.26	2A6-1000-Ft. Spool9.63
Size 14 Stranded—Availal	ole in Black or Red Only.
22A9—Type 893825-Ft. Coil	39c 22A10-100 Feet \$4.37
RUBBER BASKET W	EAVE BAYON BRAID

RUBBER BASKET WEAVE RAYON BRAID

For high voltage circuits in power packs and public address amplifiers.

Consists of No. 20 tinned conductor (stranded or solid), cotton wrap, .010" rubber, "Basket Weave" abrasion-proof rayon braid, heavily lacquered. Puncturing voltage 6900. D. C. insulation resistance, 1000 megs.

State colors wanted—Black, Red, Green, Blue, Yellow.

Size 20 Solid Type 8837

22A11— 25-Ft. Coil \$.36 22A13— 25-Ft. Coil \$.37

22A12— 100-Ft. Coil \$.36 22A14— 100-Ft. Coil \$.37

22A12— 100-Ft. Spool \$.394 2A 8—1000-Ft. Spool \$.74

Replacement Wire for Test Prods



Shielded Primary Wire

For use on battery WRAP CONDUCTOR leads, auto radio and other installations which must be shielded from

high tension system radiations. Stranded conductor, wrapped with cellophane, rubber wall, glazed cotwith ton lacquered braid and overall tinned copper shield. 2A131—Ft....4c; 100 Ft....\$3.31

Tinned Copper Shield



Forms perfect electrostatic and interference shield for wires. Very flexible. Expands to nearly double its original diameter, reducing length about 25%. Extensively used in auto radio installations. 2A134—13/64" dia. flat—Per Ft. 2c 2A135—%" dia. flat—Per Ft. . 4c 2.1136—33" dia. flat—Per Ft. . 9c



Shielded Low Cap. Cable

For auto antenna lead-in and other high impedance circuits where a low loss cable is best for good performance. Consists of size 20 stranded tinned cotton wrap, low capacity rubber rayon braid, tinned copper shield overall. Max. capacity between conductor and shield 33 mmf.

With Rubber Jacket Overall with Rubber Jacket Overall
as above with moisture proof rubber jacket over all. Type 8664.
2A133—Ft....6c; 100 Ft....\$4.65
Shielded Lead-In

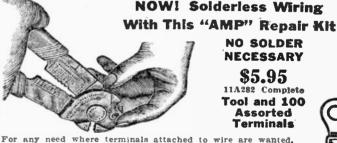


Size 16, stranded, tinned single conductor. Tinned copper mesh shield. For all shielded lead-in. 24137—Type 8206

Per Ft. 2½c; 100 Ft. \$2.10

Rubber Lead-In Wire
Size 18 with 7 strands tinned copper wire and thick rubber sheath.

Easy to strip and solder. 22A19—Type 8200, per 100 ft...80c 2A9 —Per 1000 ft. spool... \$6.06



NO SOLDER NECESSARY

\$5.95 11A282 Complete

Tool and 100 Assorted Terminals

For any need where terminals attached to wire are wanted, THIS ONE TOOL DOES ALL THE WORK, without any solder—or any special skill. Use it like a plier. It cuts and strips the wire and crimps it to the terminal in a professional-like manner. Easy to follow directions are given. The tool is also plenty useful for your wire strippping and cutting needs. 100 most popularly used terminals for wire sizes 22 to 10 come with tool in handy kit.

in handy kit.

Your Cost Complete... \$5.95



Fine for Inter-Com. and Public Address Hook-up, either indoors or outside. No. 19 solid; 2 and 3 con-No ductor twisted.



DRY BRAID INSIDE TYPE to. Cond. Ft. 100 Ft. 1000 2A139 2 3c \$2.25 \$ 2A140 3 4c 3.30 Weatherproof Braid Outside \$19.19 28.81 2A139 Ft. 100 Ft. 3c \$2.20 4c 3.25 Cond. Ft. 1000 Ft \$18.70 B

ENNA WIRE - INSULATORS - ACCESSORIE



Stranded or Solid Copper Wire For Aerials, Etc. Enameled or Tinned Note

STRANDED COPPER

Made of exceptionally fine copper free from impurities. No. 14 (7x22), 14 lbs. per 1000 ft., No. 16 (7x24), 8½ lbs. per 1000 ft.

14 Gauge 7x22 Stranded

Cat.	Feet	YOUR	COST
No.	Per Coil	Each	10 Lots
18A49 18A50 2A14—1000	75	.55	.53
18A50	100	.73	.70
2A14-1000) Ft. Spoo	1	· \$6.87

16 Gauge 7x24 Stranded

18.151	75	.39	.37
18.152	100	.51	.49
18.A51 18.A52 2.A15—1000	Ft. Spool		\$5,31
	_		

Stranded Enameled Copper

12 GAUGE 7x20 STRANDED

Ideal for short wave and all wave antennas. Standard equipment in many of the popular kits.

2.A16-100 Ft. Coil\$1.66

10 12 14 16 18

SOLID BRIGHT TINNED

Illustrations are approximately exact sizes.

Presents a nice appearance when used as hook-up wire, or for coils in Transmitters, Receivers, etc. Excellent for permanent aerials. Extremely low loss when used in Rad-Frequency Circuits or Short

wav	ra Receiv	vers and	1 Transmi	ters.
Ge,	25 Ft.	Coils	100 Ft.	Coils
No.	No.	Ea.	No.	Ea.
18	18.136	.20	18A37	.45
16	18.138	.27	18A39	.71
14	18.140	.31	18A41	.89
12	18A42	.35	2A10	1.14
10	18.143	.44	2.111	1.48
		D ENA	MELED	
Ga.	25 Ft.	Colls	100 Ft.	Colls

No. 18A44 18A46 .30 18/45 .41 2A12 1.06 .59 2A13 1.77 type may be had in 18.147 Above either continuous length, over 100 Please so state in ordering.

Use No. and figure prices as shown above for 100 ft. coils, adding "C" to the stock number of whatever size you order.

BELDEN Quality Magnet Wire

Exact B-S gauge, best quality, uniform insulation. Continuous length on each spool. You are safe with Belden for any need.

72-LD. Spoots						
B	Bare Enamel Double Cotton					
Size	No.	Ea.	No.	Ea.		
16	19A601	\$.46	19A614	3.48		
18	19A602	.46	19A615	.50		
20	19.1603	.48	19A616	.53		
2.3	19A604	.48	19.1617	.57		
24	19A605	.49	19.1618	.60		
26	19A606	.54	19A619	.70		
28	19A607	.58	19.1620	.80		
30	19.4608	.62	19A621	.90		
	Put Ur	1/4-Lb.	Spools			
32	19A609	.37	19A622	.60		
34	19A610	.50	19A623	.75		
36	19.1611	.57	19.1624	.95		
38	19A612	.60				
40	19A613	.85	١			
The table at right tells the number						
of feet per pound to standard mag-						
Bet 1						

1/4-Lb. Spools Double Silk Covered

	20 1 22 1 24 1	19A626 19A627 19A628	35 28 19 39 30 18 42 32 19 45 34 19	No. Ea. 1A630 5.58 1A631 .70 1A632 .93 1A633 1.35 1A634 1.70
)	Size	Enamel	D.C.C.	D.S.C
1	19	49.88	49.09	
•	14	79.4	77.58	
)	16	126.1	122.1	125.6
)	18	200.8	190.8	199.2
)	20	319	297.6	314.5
)	22	507.6	469.5	500
	24	803	719	. 790
ì	26	1275	1116	1245
i	28	2024	1718	1957
i	30	3221	2591	3068
	32	5102	3861	4762
	34	18130	5405	7138
	36	2887	6711	10741
	38	20492	8425	16529
	40	34169	10000	22573

Turbo-Spaghetti-Flexible

Extremely Lasting Ideal All-Purpose Insulation



← 21A1000—1MM, Black or Yellow. Per Length . . . 10c 10 for 90c 21A1000-1MM. Black or Yellow. 21A1001-2MM, Per Length 12c 10 for \$1.10 21A1002-3MM, 21A1003—5MM, Black or Yellow, Per Length24c 10 for\$2.25 ← 21A1004—10MM, Black or Yellow. Per Longth51c 10 for\$4.95

Illustrations are exact diameters 42-inch lengths

Spaghetti, Assorted



A neat bundle of 20 pleces, each by long, varnished high grade tubing in assorted popular sizes.

Saturated Sleeving Resistor Size



Slow-burning type to fit over car-bon resistors to insulate them from the chassis, parts, etc. %" dia. Black, 30-inch lengths. 21A1005

YOUR COST, Each 19c Saturated Sleeving Kit

26—74" lengths of assorted sizes from 17 wire to %" I.D. An ideal assortment for the serviceman. A size for most any need.

19A653—Per Kit



20-Ft. Spools Varnished Tubing

For positive insula-tion of wire sizes 10 to 18. Average di-electric 5000 volts.

Heavily varnished yet flexible. Supplied on spools in 20 foot lengths. 19A651—Yellow. Choice per 20 ft. 85C

AERIAL KITS

Contents: 100 feet tinned aerial wire, 25 feet lead-in wire, an lightning arrestor, 2 nsulators, 1 ground approved antenna insulators, 1 ground clamp and 1 lead-in strip with clip on each end.

3A16. Special 98c Per Kit

Turn-Buckles



Eliminate Sagging Antonnas. Aircraft quality, brass barrels, high tensile strength steel forks and eyes. A surplus purchase permits prices below market.

19A654800-lb.	Em.	
19A655—1600-1b. 19A656—2100-1b.		
19A657—4600-1b.		

Antenna Equipment





"Grip Tite" Ground Clamp. Fits pipe up to 1%".

18A53—Ea... & 10 Lots, Ea... 7c "Nail-It" Knobs" Standard Type. 18A54—Ea... 4c Per 100... \$3.00 Aorial Insulator. Brown Porcelain.

Aerial Insulator. Brown Porcelain.

2\fomation Long, 1" Dia.

18A55—Ea... 4c Per 100...\$3.00

Screw Eye Insulators

18A65—3-inch. Ea. 6c 10 for 50c

18A67—7-inch. Ea. 7c 10 for 60c

Glass Aerial Insulators, 3" L.

Antenna Loop Replaces antenna

coil on most any type set. Good pick-up and selectivity No. 16A246. Special, Ea. ... 45c E.

ENAMELED COPPERWELD Antenna Wire

JOHNSON Enameled Copperweld Antenna Wire is the ideal material for any system where the wire must not stretch nor sag. The steed core provides almost three times the strength of ordinary copper wire, the copper coating provides low RF resistance, and the enamel prevents corrosion. Prices are per ft. Carried in bulk, it is available in any specified length. in any specified length.

Cat.	B&S Gauge	Feet Per Lb.	Price Per Ft.
2A160	10	34 1/9	3 c
2A161	12	54	2½c
281A2	14	85	2 c

V **Xmitting Insulators** Low - loss white glazed porcelain. All lengths 1" diameter. Ideal for amaor professional use. teur KHOK Stock No. Length Net Ea 23c 32c 48c 18A67 7 inch 2420 12 inch 2A21 20 inch

Low-loss Isolantite strain insulator. 1%" L. x %" dia. 30c

ANTENNA HANKS

Soft, flexible, insulated wire for indoor antenna, aerial hanks for small sets, etc.

17A290, 25-Foot Hank....17c 18A18, 100-Foot Coll.....50c 2A1, 1,000-Foot Spool...32.94



House Mast Antenna

Extends up to 12 ft.

Eliminates overhead wires. Easy to install. Mounts to install. Mounts
to vent pipe, roof,
cornice, window
frame, gable, etc.
4 section nickel
plated rod, extends 12 ft. Includes all attachcludes all attaching clamps, lead-in wire, lightning arrestor and ground wire. 38A21. List \$6.95.

YOUR COST, EA.

AMPHENOL Twin Transmission Line Lead



A new highly efficient, low-loss transmis-sion line, weather resistant and rugged in service. Twin-Lead carries signals from sion mervice. Two sion line, weather resistant and rugged in service. Twin-Lead carries signals from antenna to FM and Television receivers with minimum loss. 300 ohms, provides best match of impedance to FM receivers also recommended by RMA for television being most efficient over broadcast operation. This is the type so commonly used for construction of folded doublet antennas. 2A157, Per Ft. 3c 100 Ft.\$2.85

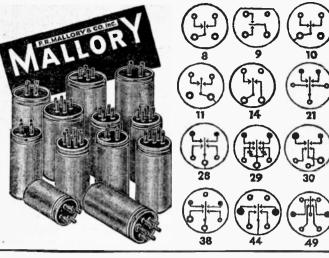
150 chms. For those who desire it for particular applications and experimental work, 2A158, Per Ft. 2½c \$2.37

75 ohms. For amateurs who are going to operate in very narrow bands of frequency or one particular frequency. Sultable for dipoles that have a nominal impedance of

....\$1.97

New 75 ohm TRANSMITTING TWIN-LEAD

Most popular for amateur transmitting antenna systems. Has a handling



THESE MALLORY VIBRATORS MEET 95% OF YOUR REPLACEMENT NEEDS

Listed here are the most popular of the new simplified line of Mallory replacement vibrators. Of these 12 basic types (marked *) will cover 90% of your replacement needs. Most popular base diagrams at left, others, together with complete data in Mallory Vibrator Guide FREE. Specify No. 19A26.

No.	Туре	Diag.	Each	No.	Туре	Diag.	Each
19A1	222	20	\$4.50	19A14	•716	30	\$4.06
19A2	9245	21	4.06	19A15	725 C	32	4.50
19A3	245 A	21	4.06	19A64	742	32	4.06
19A4	245C	28	4.06	19A65	743	38	4.06
19A5	*246	38	4.06	19A66	748	44	4.08
19A55	246A	38	4.06	19A16	825C	8	3.68
19A56	247	46	4.06	19A67	826C	8/	3.23
19A7	*248	44	4.06	19A17	839	8	2.82
19A8	•249	49	4.08	19A18	* 852	14	2.41
19A57	271	24	4.88	19A19	853	10	2.41
19A9	*273C	29	4.50	19A20	*854	ii	2.41
19A58	273D	31	4.50	19A21	*859	- 8	2.41
19A59	292	3	2.82	19.468	860	14	
19A10	•294	8	2.41	19A22	*870	14	2.41 2.41
19A60	298	61	3.23	19A23	901M	-8	
19A13	505P	8	2.03	19A69	952W	16	2.03
19A61	506P	36	3.23	19A70	953W	39	4.06
19A62	507P	10	2.03	19A71	954	39	4.06
19A63	514	30	4.06	19A24	• 1100	8	4.06 2.41

BATTERY CHARGERS, CONVERTERS and VIBRAPACKS

Mailory 6 and 12 Voit



Taper Type **Battery Charger**

With trouble - free with trouble - free dry disc rectifiers and thermal bi-metallic circuit breaker to protect the charger from improper connection battery; and from serious overloads.

matically provide a tapering charge; charging at maximum at start and decreasing as battery becomes fully charged. May also be used for other applications besides charging batteries, such as: electroplating, toy and model train operation, loud speaker fields, coin machines and other applications requiring low voltage DC. voltage DC.

Come equipped with line cord, battery cables and clips and universal clamp-on dash receptacle for easy connection to battery in car without its removal.

83A26. Type 3C for 6-volt batteries. Maximum charging rate, 4 amps, tapers to 2 amps.

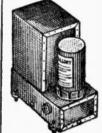
YOUR COST.

\$3A27. Type 5535B for 6-volt batteries. Max. charging rate, 6 amps, tapers to 4 amps. YOUR COST.

33A28. Type 125 for 12-volt batteries. Max. charging rate, 5 amps, tapers to 3½ amps. YOUR COST

EACH, COMPLETE\$17.65

Mallory "Vibrapack" Portable Power



Dependable and inexpensive plate voltage for portable and mobile equipment. The ideal plate voltage were electric power is not available. Delivers up to 300 volts at 100 M.A. of DC. Output variable in 4 steps of 25 volts each, controlled by switch connected to various transformer taps. Maximum efficiency is obtained for all load conditions. Small in size —easily mounted,

			-centry investigation,	
Stock		Input	Nominal	Your
No.	Туре	Volts	Output Voltage	Cost
33A29-	-VP551	6.3	125-150-175-200	\$10.88
33A30-	-VP552	6.3	225-250-275-300	13.23
33A31~	-VP553	6.3	125-150-175-200	11.47
	-VP554	6.3	225-250-275-300	13.82
33A33-	-VP555*	6.3	300	27.05
33A34-	-VP557*	6.3	400	27.05
33A35—	-VPG556	12.6	225-250-275-300	13.82
33A36-	-VPF558	32	225-250-275-300	14.41
33A37-	-VF223 \$	Single	Unit Filter	4.71
37-3-1-	FF4 FF	0	Offa14	41 feet

Models 551, 552 and G556 are self rectifying. Tube rectifiers supplied with all others. *High Output Type, VP555 supplies 20.0 ma.; VP557, 150 ma.

Mallory Filtered Vibrapack



Electronic "DC" to 110 Volt "AC" Converters

All types listed are supplied with filter to prevent radio inter-ference. Conservative-ly rated — built for long service.

-				
Stk.	Туре	DC Volts	Output	Your
No.	No.	Input	Ratings	Cost
33A39	307	6	110 AC 100 Watts	23.52
83A40	507	12	110 AC 150 Watts	23.52
33A41	102		110 AC 100 Watts	20.58
33A42	204	110	110 AC 150 Watts	22.64
33A43	262	110	110 AC 250 Watts	59 99

110 Voit AC to 6 Voit DC "A" **Battery** Eliminator



For demonstrating Auto and Farm

Auto and Farm
Radio sets on regular 110 volt AC
eircuits. Eliminates messy and
uncertain oon ditions of storage
battery upkeep.
Employs full-wave dry-disc rectifier. Noiseless
interference free operation. Fully automatic,
fool-proof, and built for long service. Equipped
with ON-OFF switch, PILOT LIGHT Indicator,
10 ampere fuse, rubber feet. 6 ft. cord and with ON-OFF switch, PILOT LIGHT Indicator, 10 ampere fuse, rubber feet, 6 ft. cord and plug. Black wrinkle finish metal cabinet measures 7%x7%x5½". Output 6.3 V. at 6.5 Amps. YOUR COST

PORTO-POWERS CONVERT BATTERY SETS to ELECTRIC POWER in a few MINUTES

Model "H" Converts 4, 5 or 6 Tube 1½ Volt Set to HUM FREE 110 V. AC Operation



NOTE THESE OUTSTANDING **FEATURES**

Two-section filter, composed of three very high capacity condensers and two oversized iron core chokes in the "A" supply; and two high capacity con-densers and an oversized choke in the "B" supply positively blocks out

*Universal socket for battery plugs.

Fits 99% of portables.

Booster tap. When the "A" goes down on 4 or 5-tube sets, shifting the tap adds rectifier life,

**Circuit designed for optimum regulation and line voltage changes.

**Provides—'A" 1.5 V. at 200 M. A., 1.35 V. at 250 M. A.—1.55 V. at 200 M. A., 135 V. at 350 M. A.—"B" 90 V. at 13 M. A., 101 V. at 8.5 M. A.

**Stock No. 33A22. Size 2½"x4½"x6½".



MALLORY Ultra-Compact Rectifiers

" dia., and %" over-all height including terminals. B4R. Replacement in Porta-Power, Electro and Only %" dia., and %"
Type 1B4R. Replacen
similar 1½ volt units.

mittent DC amps., 5.
No. 14A632, Net Each \$1.41



PORTO POWER Model "P" For 98% of ALL 6-Volt **BATTERY RADIOS**

Solves problem of electrifying 98% of all 6 Voit Battery Sets! Separate Source of Power to both Vibrator and tube filaments, eliminating vibrator disturbance and assuring peak performance at all times. Economical to operate—much cheaper than batteries. Quickly and easily installed by anyone familiar with radio. Crackle finish metal case measures 6½33%25½". Provides two separate sources of 6 voits pure DC at 1½ amps each or Complete with full instructions,

3 amps if connected in parallel. Complete with full instructions Stock No. 33A23 Your **\$14.26** Price ..\$24,25 Cost, Each ...

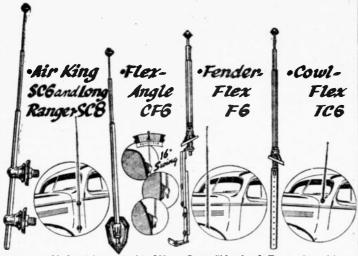


Model 2606 EL

Wodel 2606 EL
VIBRATOR POWER SUPPLY
Input: 6 V. DC at 8 amps, Output 300 V. DC
at 100 MA and power output up to 30 watts.
Size only 4 ½ x 4 ½ x 5 ½ ", weighs 5 lbs. Ideal for
supplying plate and grid voltages, in receivers,
transmitters, etc., and has many applications
for P A and test equipment as well. Completely filtered, the output is H U M - FREE.
Model 2606 is ideal for stationary, mobile or
portable communications applications. portable communications applications, Stock List Your

No. 31A30 Price ...\$24.95 Cost... \$14.67

* Wourd "HI-O" AERIALS FLUID TYPE ANTI-RATTLE CONSTRUCTION SILVER TO SILVER CONTACTS *



Air King Model SC6, 3 SECTION 66 Inch Side Cowl Type. Stanchions of Ceramic with Chrome trim. Tubing of lustrous Chrome over Admiralty brass. Features "E-Z" installation and includes bayonet adaptor and conversion kit for torpedo bodies. New positive shielding eliminates use of pre-war shield cans. Comes with new "Poly" 26 in. Hi-q Loss detachable lead.

No. 38A31, List Price \$4.95. Net Each.....

No. 38A35, List Price \$5.95. Net Each
DISPLAY BOARD with Popular Models

SC6, SC8, CF6, and TC6 mounted on attractive display board, which is FREE—You Pay Only for the mounted FOUR AERIALS. \$12.94

WARD Model SC1 3 Section 66 Inch Side Cowl Type. De-

signed to meet price competition. Com-plete with pre-war shield cans and new shield ded "Poly" lead.

List Price\$4.75 No. 38A36 \$2.79

IRC Universal Suppressors



Type MCB, designed to meet either Spark Plug or Distributor terminals and as such, is a most useful universal unit.

No. 12A400. Net 18c Type MC has terminals no

and is insertable by means of screw For either Distributor or cable by

Auto Radio Suppressors



Wire spring permits mounting in any position and makes a connec-tion that won't shake loose. Cable ends mount by cutting ignition wire for a secure screw connection. Standard 10,000 ohm resistance for all around use.

17A247. For Spark Plng. . 15c Each 17A248. For Distributor. ...17c

GENERATOR FILTER For Auto Radio



threads. For either Distributor or Spark Plug.

No. 12A401, Net Each 18C

Metal encased condensers for auto radio, etc. .5 mfd. 29c

ANTENNA HARDWARE For Auto Aerials
A handy kit of hardware, etc., for use with all makes of aerials having
21/64" diameter rods. Kit consists of two each, bakelite insulators,
rubber pads, eyebofts, spider washers, shoulder bushings and one each
shield cap and set of two flat washers and four nuts.

A Very Useful Kit. No. 11A169, Per Kit

WICO AFRIALS



Side Cowl (Left)
Highly efficient, smartly designed with stanchions to conform with body lines of latest cars. Improved antirattle slide construction prevents electrical noises. Lowrattle slide construction pre-vents electrical noises. Low-loss lead - in. Gleamingly chromed on Admiralty brass. Long Distance, 4 Section 100" Extension. 100° Extension.
38A32P, Net Ea.
Streamlined, 3 Section 66°
Extension.
38A33P. Net Ea.
32.62 Fender (Right)

Weather-proof, noiseless mounting on fender of any car with large wheel wells. Anti-rattle construction. Extends from 22½" to 56". Low-loss lead-in, electrically matched to radio circuit. Gleamingly chromed on

brass. No. 38A34P. Your Cost, Ea. . . \$5.15

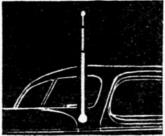




DUOFLEX

Two-way adjustable feature permits change of position to blend with streamlining of car. Adaptable to any car, regardless of body contour. Anti-rattle slide construction, 3 sections, extends to 66". Single stanchion mount, easy to install. Low-loss lead-in matches radio circuit.

No. 38A27P. Your Cost, Each\$3.50

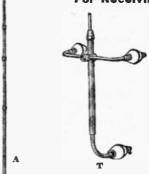


TOP COWL

Weatherproof, noiseless mounting on top of cowl of any car. Antirattle slide construction, 3 sections; 56" extended, 22" collapsed. Low-loss lead-in matched to radio circuit. Gleaming chrome plating on Admiralty brass. A plating on Admiralty very popular model.

No. 38A35P. Your Cost, Each \$3.50

PREMAX Police Car Antenna For Receiving and Sending



Type A solid steel rod, joined se-Type A solid steel rod, joined securely and permanently into a single graduated length which provides high flexibility, minimum wind resistance and indefinite life, 001" cadmium plate finish gives adequate protection against corrosion in all ordinary atmosphere. Will withstand stress of most any obstruction. Where ordinary antennas bend or break, these merely lex and return to original position. nas bend or break, these merely flex and return to original position.

Rod is priced separately. Order base preferred from illustrations shown. Type A rod is supplied in 96" length and can be cut for desired frequency. 38.122, 96" Type A rod. \$2.28

Type T Mounting, attaches to trunk or car body. Lower support is solid brass rod securely joined





to 12" brass tube carrying antenna. Upper support is 24" brass rod and has adjustable lock permitting proper fitting to contour of car. Insulators are high tension, white glazed ceramic 1½" high. Antenna tube provides max. 10" adjustment in antenna height. All metal parts in antenna height. All heavily cadmium plated.

38A24.

Net Ea.

Type L Mounting, Is similar to type K in adjusting feature. Has 6" spacing between insulators, giving extra base support. Net Ea.\$8.21 38A25.

Screw Drivers-Socket Wrenches, etc.

"Amberyl" Shock and Breakproof Screwdrivers Square Blades 1/2", 1/4" or 3/16" Dia.



Amberyl is a tough plastic that will neither chip, break or crack. It is non-absorbent and a non-conductor of electricity. The blades are of high carbon tool steel and precisely heat treated throughout. Here is real quality all around and not to be confused with cheap tools. Handles on '4" blades are 2\%" long x \%" dia., on \frac{1}{16}" blades, handles are 3\%" long x \%" dia., on \frac{1}{16}" blades handles are 3\%" long x \%" dia. Add handle lengths to blade lengths for over-all length of screwdriver.

	OI SCL6#	driver.					
Blade	1/8"	Dia.	3,0	Dia.	1/4"	Dia.	
Lgth.	Bl	ade	jä1a	Blade		Blade	
	No.	Ea.	No.	Ea.	No.	Ea.	
3"	11A85	39c	11A88	50c			
4"	11A86	42c	11A89	53c	11A92	70c	
6"	11A87	53c	11A90	60 c	11.A93	79c	
8"			11A91	65c	11A94	82c	
11A95-	-Stubby	type,	4" dia.	x 1" lo	ng		
blade.	Net Ea.					.60c	
	Phillip	s Tv	e Sci	rewdr	ivers		
Wit	h Round	Blade	s and A	mberv	Handl	Pall.	
CA1-	63t *		T				

Lumbs Tabe Sciemotiaets					
With	Round	Blades	and	Amberyl Hand	les.
Stock		O'all			Net
No.	Blade	Lgth.	No.	Screws	Ea.
11A96	~ 18 x3 ″	5"	1	Up to 4	\$.56
l1A97	%×4%"	734"	2	6 to 9	.63
11A98	18 x 6 "	10"	8	10 to 16	.83
11A99	%x8 "	12"	4	18 & Up	1.16

Set of 5 Screwdrivers

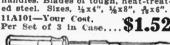


Shock-proof, break-proof amberyl handles. 5000 volt insulation. Sizes: fix8" Sq. bit, ½x6" round, fix6" round. fix6" round. fix6" round. fix8" with pocket clip, ½x4" stubby. Set of 5 deluxe lifetime

11A100. Per Set of 5\$2.63



Long, slim, narrow bits, Amberyl 6,000 voit insulating break-proof handles. Blades of tough, heat-treat-

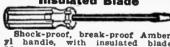




Stock No. 11A110 11A111 4 % " 7 % " 13 % " \$.33 10" Little

2 Shorty Chrome Vanadium hand forged Chrome vanadium nand rorged blade, Amberyl sure-grip, shock and break-proof handle. 4" overall — #x1" blade. Just right for accurate adjustments in close quarters.

YOUR COST, Each 53c **Insulated Blade**



Shock-proof, break-proof Amber-yl handle, with insulated blade. Ideal for making adjustments without danger of shorting.

11A114—Size ¼"x6". Ea.48c 11A115—Size ¼"x8". Ea.66c All-Insulated Screwdriver

Amberyl all insulated break and shock-proof screwdriver. ½"x6" all-insulated hand forged vanadium ½" bit. With pocket clip. Ideal for making live adjustments without danger of shorting.



For Cross Slot Screws One Size Fits All Sizes

nead cross slot screws from the smallest to the largest. ¼" round blade in amberyl handle, over-all length 8 ¼". Fits all Reed & Prince and other recessed head cross slot screws

Thin Blade for Set Screws



Size 82 x2" 83 x3" 83 x4" Small Pocket Sizes

Amberyl handle with pocket clip.

For Phillips Type Screws
Amberyl handle with pocket clip,
Blade 38x1%" with No. 1 point for
Phillips type screws No. 4 or small-Over-all length 31/2". ...49c 11A107-Net Ea.

Phillips Offset Screwdriver



Finest alloy ished points. alloy steel, carefully fin-

ished points.

11A108, with Nos. 1 and 2 points for up to No. 9 screws......42c

11A109, with Nos. 2 and 3 points For No. 5 to No. 16 screws.42c

Neutralizing Tool Kit





"Spintite" Bench Set of 7

each 10 " t o 1/3 " Spintites as listed below handy stand. Affords quick 88lection

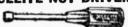
11A117—Complete Set. YOUR COST, Each ... 11A118-Bench Stand only, Ea. 88c

Individual "Spintites"

Use like a screwdriver. Built with a thin walled hexagon socket on end. Hollow shanks, socket reaches

down c					
Stock	Hex.	Your	Stock	Hex.	Your
No.	Size	Cost	No.		Cost
11A119		.38	11A124		.50
11A120		.38	11A125		.50
11A121		.38	11A126		.91
11A122		.38	11A127	5/8"	.91
11A123	%"	.38			

XCELITE NUT DRIVERS



Sturdy and accurate wrenches with sockets extra deep to handle 2 nuts at once. Handles of genuine xcelite. 5000 volt shockproof. All sizes 6"

Stock	Nnt		Stock		
No.	Size			Size	Cost
11A128	18"		11A133		.44
11A129	7 n	.44	11A134	%"	.44
11A130	1/4"	.44	11A135	18"	.57
11A131	33"	.44	11A136	1/2 "	.57
11A132	16"	.44			_

11A295, Stand for above wrenches Set of 7 of above 3" to %" with \$3.31

3 double end wrenches in leather case. Sizes ¼", %". 16", ½" and odd sizes.

Insulated Spin Hex Nut Driver

long. %" ne... ollow shaft. At-shock proof %" diameter, 6" long. % socket with long hollow shat tached pocket clips. Shock and break proof, 11A139. Net Each 69c

1/4" Insulated Hex Wrench

Black Fenolite. Inside hexed for 1/4" nuts. Hexed all thru so when 4" nuts. Hexed all thru so when worn or broken merely saw off and you have a new wrench. 24c 11A155—8" long. Each... 20c

Adjustable Neut. Tool

No metal parts. Extension screw-driver on end, Hex socket on other. Tough bone-fibre, shock proof. Long ideal for crowded spaces,

Extends 6" to 11". 11A152. Each

Duplex Alignment Metal Tip Screw Driver

Low inductance metal tip on both ends, made of "Genflex" material. One end is $\frac{1}{3}$ " and other is turned down to $\frac{1}{3}$ " diameter for small holes. Strong, durable, completely

insulated. .44c

Socket Wrenches



Leatherette Roll Set

Neat leatherette case contains 3 screwdriver bits, 1 ream awl. 7 Spintites 15" to ½" and universal chuck handle. 11A140, Complete. Net ea. \$4.88

Electrolytic Nut Wrench



For easy removal and tightening of these fragile nuts without damage. Drawn steel socket, 2" deep. Amberyl handle. Length 7" overall. Metal part, nickel finish. 11A141. For 1" nuts. 11A142. For 1\%" nuts.

Hollow Shaft Nut Driver



Full length hollow shaft. Tool steel, 5,000 volts shock-proof handle. Fits right over volume control shaft or other protruding bolts and atuba

Depth Nut Lgth. No.

Alignment Tool Set \$0.57 .57 .86 .69 6" 11A145 .72 .82 .95 11A147 11A149

5 Tools in One

when closed, is fountain pen size with pocket clip. Has ½" and ½" and ½" nut wrenches, small blade screwdriver, and a full size screwdriver. Made of finest bone-fibre. 11A150—YOUR COST... 88C
4 Tools in One, identical to above except less full size screwdriver attachment.

11A151—Each59c

With metal tips. Same as above but with metal ends for longer wear. 11A156—Per Set 80C

Pocket Alignment Kit



Contains 6" long metal tip insulated low inductance screwdriver, 7" in sulated no-metal alignment' screwdriver, combination screw nib and driver for use on RCA Sets and a com-bination alligator and %" metal hex. wrench, all in leatherette case. A most handy, all-purpose alignment kit. No. 11A231.

plete Kit ... \$1.76

U.H.F. Aligning Tool



Made from pure Polystyrene - ne capacity effect upon critical cir-

Soldering Irons Solder other handy tools

"DRAKE" —Quality, Yet Low in Price

100 Watt IRON with %" Tip. Type 325. Ideal for general radio work. Highest quality Nichrome wire. Highest quality Nichrome wire wound on amber mica. Complete with 6 ft. cord, rubber plug and stand.

11A233. Net, Each\$2.76

The Popular "400" for Tight Spots and Delicate Work, 60 watts with 1/4" tip—only 3" long, weight only 8 os., yet will stand the "gaff" for even industrial use. Magic cup stand packed with iron. \$2.91

Special 125 Watt "EXTRA HOT". Type 326. Special heavy service element, haffle fins keep handle cool. favorite with service men.

11A240. \$3.23 Net, Each

HEAT CONTROL Controls heat of iron to to for instant

\$2.94

11A284. With Stand "AMERICAN BEAUTY" IRONS



Vour Cost, Each \$5.88
11A242. Element \$2.76
11A243. Tip \$50 WATT, Model \$76.
A smaller "Anierican Beauty" A smaller "American Beauty" for lighter work and tight places. Is " tip. 29 20

To regulate heat of irons used at long intervals. Has adjustable thermostat. Made of durable plastic. Complete ready to use on 110 V. AC. 11A246, Each....

SOLDERING PENCIL

For those delicate jobs and hard-to-reach places. Weighs only 3.6 ozs. Over-all length 7". Draws 17 watts. Note the wide choice of tips—one for every need. They screw in handle like a lamp.

Soldering Penell, less tip. 11A247. Your Cost, Each 11A247. Your Cost, Each...
(1) %" Standard Copper tip **78c** (2) %" Chissi tip inade 78C (3) %" dis. pencil tip made 78C of Elkaloy A. 11A250
(4) Brass tip for plastics 78c marking, 11A251 (5) Extra hot tip made of

screws in place of tip and you have a neat service light. 86 Lamp for light in tight places. 16A168



KESTER Rosin or Acid Core Solder

Put up in 1 lb. or 5 lb. spools and 3½ oz. pkgs. Acid CHOICE

Put Rosin Core 11A260 11A257 1 lb. .80 3.79 11A258 11A261 3 1/2 OZ.

KESTER Thin Core Solder. Rosin Core, Diameter 18 11A263, 1 lb. 83c 11A264, 6 lbs. ^{3c} \$3.95 BURNLEY Soldering Paste. 10C

KESTER Plain Wire Solder. "40-60" Finest Grade. 11.1268, 4 oz. **20**c



DRAKE Type "316"

100 Waits—%" Tip. Low Price! Highest quality nichrome wire in porcelain element. With 6 ft. cord, rubber plug and stand. \$1.73

DRAKE Type "315"

60 Watts-%" Tip. A Value!

Non-Stick Iren Tip Compound.
Prevents tips from borning into
soldering iron. Saves tip and iron.
11A288. Per 2 oz. bottle21c



Handy 6-foot rolling rule with push button return. Steel case. 31c nos. 4, 6, 8 and 10 screws.

Solder Fast With This TRIGGER CONTROLLED "Flash" Soldering Gun

Streamlined Perfect Balance Non-Tiring Natural Gun Grip. Heats to soldering temperature in a few seconds following pressure on trigger. Heat is kept on and controlled (High or Low) as desired by trigger pressure. Ideal to work with in cramped spaces. Supplied with tr cramped or amall work with in cramped or small spaces. Supplied with transformer for 110 V., A. C. operation or by disconnecting transformer can be used where there is no electric current by connecting the soldering gun to an ordinary 6-Volt storage battery. Comes with ½" standard copper tip. Shipped ready to use. Net Each, Complete

Pull the Trigger, Start to Solder Within 5 Seconds

11A224. Extra tip with carbon element



100 watt, 115 Volts 60 cycle Weller 100 watt, 115 Volts 60 cycle Weller trunsformer type Speed Irom. Release trigger and circuit breaks automatically. Solder in t i g ht places, around corners—inexpensive wire tip can be bent to shape desired—you see what you solder—stays tinned, will not burn. Perfectly balanced, easy to handle plastic case—stays cool.

No. 20A102, No. 20A102, With 2 tipe, Ea. \$12.69 No. 20A103, Extra tipe, Ea. 6c

Vernier Caliper 1001 Uses Every Day

Made of cold rolled steel, graduations
deeply etched of h' and h'' permit close readings. Inside jaws offset and may be used for scribing
circles or dividers. 5-inch capacity.
Vernier reading and depth gauge.

YOUR COST, Rack 98c



For accurately transferring angles For accurately transferring angles, setting of bevels, etc., graduated from 0 to 189° in opposite direc-tions. Made to std. protractor di-mensions. Head 3%x2", arm 8"

11A197. Net Ea. 98c

KEY HOLE SAW

Very Handy, cuts wood or metal. metal.
No. 11A301, Net Ba. 35C
No. 11A302, Extra Blades, Ea. 18c

Handy Spin-Tite Set



Contains Chuck-Type Handle with Ream-awl, 3 Screw Drivers, 7 Spin-tites, %" to 4", insulated neutral-izing Alignment Wrench, a pair of diagonal pliers and a pair of side-cutting long nose pliers, all in a Leatherette Roll. ctte Roll. Complete, Only.. \$8.19

No. 11A149. Set as above except less the 2 pair pliers and alignment wrench. Comes in 24 22 Leatherette Roll ...

XCELITE SET OF



7 NUT DRIVERS

18. 33. 14. 32. 18. 32 and %". Sturdy, accurate, deep enough to handle 2 nuts at once. 5000-Volt shock-proof bandles. Set of 7 with metal bench stand. \$3.31 Complete

Colored Handle Set



Electric **Drill Arbor** FOR ATTACII-MENTS NOT OVER 4" DIAM.

Enables using cutting wheels, buffers, etc. with regular drill. Fits 14" chuck or hrushes. Electric drill.

11A223. Your Cost. Ea. ABBOR ACCESSORIES
11A285—4x½" Emery grind Wheel, Each ^{cn}....55с

Hand and Breast Drills

(A) Hand Drill, Steel Drill. frame, cut frame, 3-jaw c u t gears. 3 - jaw case hardened chuck holds 0-% " round shanks. Length 11". 11". 11A192. Net Ea.

\$1.59

(B) Breast (A) (B)
Drill. 3-jawed case hardened steel chuck holds up to 1/2" round shan steel frame.
33A17. Net Each ... round shanks. Cut gear

UNIVERSAL HACK SAW



16A250 49c Extra Blades 10c

Hox Kev

11A270

Handy Tools for Service or all purpose needs

CIRCLE CUTTERS—A Type for Every Need







For cutting round holes in sheet steel, brass, aluminum, bakelite, hard rabber, wood, plastics, and other materials. Drill acts as center pilot, keeping cutter in constant alignment. Cross bar and cutting bits are easily adjusted. May be used in slow speed drill press or hand brace. Cutting bits are of high speed steel with exception of C.

holes 1" to 5 %" diameter. 11A181. Round Shank Choice Ea.

11A182, Square Shank. \$1.95 Type 4 (not filus.) like "A" but smaller. Cuts holes %" to 4". Has comb. rd. or sq. shank.

11A188. Net Ea.\$1,30 12A1501. Extra Cutter for types 4 or 5 listed above. Ea.300

**A" HEAVY DUTY Type 5. Cuts "B" Type 1. Cuts holes 1" to 4" holes 1" to 5½" diameter.

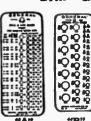
114121. Round Shank Choice Ea. comb. shank. For medium work. 11A186. Like type 1 except Less beading cutter\$1.15 12A1500. Extra cutters for

"C" JUNIOR. Cuts holes %" to 2½" for light work.

11A187. Net Ea.800

_	Greenfield Reamers
	"A", T-Handle type for holes in all kinds of
	material. Tapers ½" to ½" \$1.16
	11A188. Each
_	"B", Bit shank type to ream all kinds of
	thin metal. Tapers A" to H". Drop forged
	steel, tempered. \$1.45
	11A189. Each
	"C", Large burring type. For holes 4" to
	14". Has bit shank.
The state of the s	14". Has bit shank. 11A190. Each
	11A191. As above for holes \$4.35
	¼" to 2"

Drill Gauges



tempered steel, Clear numerals, ac-curate. "A", drill and wire gauge. Index for machine screw taps. 11A193 980

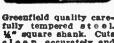
"B", jobbers' drill gauge.

Multi-Use Rule and Gauge



Combines a 4" rule with \$2nd and \$4th scale, a drill point gauge; a square, a bevel protractor, a circle divider, center finder, and tap drill table. Made of stainless steel with drill gauge. leather case. 11A194 98c 11A196, Net Ea.

Machine Screw Taps



fully tempered steel. K" square shank. Cuts clesp, accurately and

Stock	Size	YOUR
No.	Thread	COST
12A 1503	4/36	33 0
13A1594	6/32	300
12A1505	8/82	30 0
12A1506	- 10/24	33c
12A1507	10/82	33 0
13A1508	1/4/20	<u>45c</u>

Stock Dia. Lgth. Net Ins. O'all Ea. 1/16 21/4 150 12A1509 5/64 2% 150 3/82 2% 150 12A1510 12A1511 7/64 2% 150 1/8 8 160 12A1512 12A1514 9/64 8% 160 12A1515 5/82 8% 170 12A1516 11/64 8% 200 3/16 3½ 200 12A1517 12A1518 13/64 3% 200 12A1519 7/82 8% 230 12A1520 15/64 8% 230

Twist Drills

Inspection Lite

Light where
you want it
110V. AC
or DC. Just
the light for Service Work in the field. Lights up those hard - to - see corners in Chassis or Refrigerators, also handy as

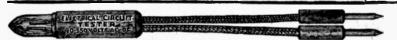
a holder when color-ing diai light bulbs. Dip bulb in coloring and job is done. Each

The New FLEX-LITE

260



12A1521 1/4 4



Adjustable Circle Cutter



Cuts Up to 8 Inch Hole, Hex shank fits either hand or electric drill press. Removable centering drill for using any size pilot, %" square cutting bar holds \(\frac{1}{12} \)" speed bit. ... \$3.88

11A184. Each 12A1502, Extra Cutter35c

Greeniee Chassis Punches



Driven by Screw
Action.
Quick and simple. Quick and simple.
Cutting done by
TWO-POINT punch
driven by %" diam.
square head cap
screw, supported by accurate die.
ja" guide hole required at desired
location. Merely turn screw with

ctal is cut through. 11A299

Until metal is cut through.

Size Ea. No. Size Ea.

%" 1.94 11A215 1 1 2 2.25

%" 1.94 11A202 1 1 2.25

%" 1.94 11A203 1 2 2.25

1" 2.11 11A204 1 2 2.25

1 2 2.5 11A205 1 2 2.36

1 2 2.5 11A222 2 2 2 2 5.58 11A198 11A199 11A201 11A800 11A200

Square Hole Punch

Punch
Permits the cutting of
any odd shape hole
(square, rect., hex., oblong, etc.) on any size
panel or chassis. Will
cut up to 14 gauge
thickness of any metal. A hammer the only other tool necessar

11A206. YOUR COST \$8.82



Rivet and Eyelet Punch Set

For rivets or eyelets of most used sizes. Tools most used sizes. Tools of hardened steel, base cast iron, hex. sldes to hold in vise. Price includes assortment of eyelets and rivets.

11A207. Eyelet Setting Tool. Only... 53C



Speedex Wire Stripper

Strips stranded or solid Strips stranded or solid wire, all types, easy and fast. Merely press the handles and the job is done. Clean working without dam-age to wire. Works on ends or any place along wire. Pocket sign wire. Pocket size.

11A212. For sizes 10 to 18 wire \$3.53 14 to 24 wire \$3.53



WALSCO Staple Driver

Makes wire, cable and other installations easy and fast even in out-of-way places inaccessible to hammer, single stroke of hand drives staple home even to brick, etc. Holds 24 staples.

11A216, Driver and box of 250 \$4.17 staples 11A217.

250 staples **Handy Test Lite**

Handy for countless needs. No. 11A84. Special, Ea.



Kraeuter Pliers

11A218. 6" Diagonals. \$1.80

11A219. Slender nose side cutting milled jaws, semi-flat point. 6" over \$1.76

11A81, as above 7" over \$0.12 7" over **\$2.12**



This Acro Chassis Cradle Speeds Work

Designed especially for testing and repair of radios, s mall motors, meters and other such devices. Made of cadmium plated steel, and white metal, and consists of the supporting legs and locking clamps that hold the work in a vise-like grip. It adjusts to any position by finger-tip control and is equipped with an automatic stop. Will speed up work, reduce breakage, and increase accuracy. crease accuracy. 11A226. Each \$4.95



Extra Clamps For sub panels and other flat pieces. Enables use of cradle for reel. 11A227. Per Pair \$2.50

Radio Chassis Guarda

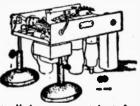


Answer to the Service man's Problem

Fits any chassis. Easy and fact to apply. Makes chassis easy to work on in any position. Every shop should have 3 or 4 pairs.

YOUR COST, Per Pair. \$1.32

Chassis Jacks



Use it to prop up set on beach. Adjustable to fit any set or condi-tion. Made of metal, much superior wood types. 97c

Adjustable Hack Saw



Made by MILLERS FALLS. Adjustable for 8" to 12" blades, 4 I tions. Sturdy construction. B. composition pistol grip handle, 11A209. With 10" Blade.

11A209. With YOUR COST, BLADES—Made of special tungsten steel 3," wide, EXTRA BLADESanalysis

analysis tungsten with milled teeth.

11A210—10". Ea. 10c; Doz.
11A211—12". Ea. 11c; Dos.



Handy Tools for Service or all purpose needs



in steel box

Professional Alignment Kit

30 Alignment and

Neutralizing Tools in a handy leather-ette roll type case.

\$11.73

Handy Alignment Kit

No. 15A2928. As above except

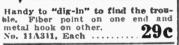
No. 15A2027.

Set, Each



Complete enough to take care of most sets, In a handy roll type Case. No. 15A2029, Per Kit....\$3.97

G. C. Test Probe





Attach to Any Soldering Iron

Cools and sets soldering by dipping brush in coolant of water or alcohol. Also can be used for flux or paste. Just like having a third hand when soldering.

No. 11A310. Your Cost. Each. 21c

TWEEZERS for Soldering and General Use



6" Long common soldering tweezers, plain steel. No. 11A806, Each21c

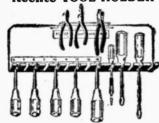
Long, curved smooth point

Plastic Radio Pliers



Weighs only 1½ ozs., a handy pocket pliers—and because it's shockproof and non-magnetic—it can be used on apparatus while in operation. 6000-V. breakdown, heat realstance 240 to 300°. Tensile strength of material, 6,000 lbs. per so. in.

Xcelite TOOL HOLDER



drivers, screw Made of heavy with durable Holds and etc. drivers th durable Can be atgauge sheet steet, with durable green lacquer finish. Can be attached to wall or bench.
No. 11A294, Your Cost. Ea.

47c



Jeweler's Screw **Driver Set**

6 sizes, #9 to #5, each with hexagon swivel head. Removhead. Remo. are firmly held threaded chuck, elimi-sh. 3" long x

nating any back lash. ¼" dia - total lerblade, approx. 3%". length, including No. 11A309. Per Set of SIX

Handy Scriber



Knurled steel handle with chuck that holds needle point and retracts into handle when not in use. 45c 11A271. Complete. Each... 10C 11A272. Extra Points15c

Reversible Blade **Pocket Screw Driver**



Handy for fine work. Made of heavy knurled steel toblog with hex head. Blades are tempered and polished and will not turn in chuck. Body dia., ¼", blade length 2½". No. 11A804.

Each No. 11A305, Extra Blades, Ea. 15c

4-Way Offset Screw Driver



4 different positions for hard to get at or tight screws where extra levat or tight screws where extra leverage is necessary. Blades of special hardened Chisel Steel. Overall length 51/4". Blades 1/4" wide. 45c

Folding Pocket MAGNIFIER



Handy for vest pocket or tool kit. 1%-inch dia-lens of 2% Power in moulded non-inflammable frame which folds into stiff leather case to protect

COMBINATION SOUARE and MITRE

Well constructed of Heavy Gauge Steel. Flanges on both sides of welded cross beam permits quick squaring and mitering in either right or left-hand positions. 10-inch easy reading graduations on both sides, Rust resisting finish.

12" STEEL RULE

Companyman spranger

Mechanics' Stiff Tempered 12" steel rule, 1 inch wide. One side calibrated in Quick Beading 32's and 64's, other in 8's and 16's.

No. 11A303. Your Cost, Each 98c

"TOM THUMB" Hack Saw



Handy for cutting metal or those out-of-the-way places. No. 11Λ297, Each25C No. 11A298, Extra Blades, Ea. 10c

DIAL PULLEYS



8 assorted idler dial pulleys, several sizes included. eral sizes included. 24c

SPRING DIVIDER

Well halanoed of round well maigneed of round stock, swage tapered. Equipped with tem-pered stiff spring, as-suring uniform tension and easy operating screw and solid nut.

No. 11A321. \$1.43

COMPRESSION SPRING **Assortment**

Used on dials, push button tuners, phono motors, and etc.

No. 17.11010, Asst. of 20.....240

Ventilating Plug



For amplifiers, racks transmitters, etc. Just snap in a 1" hole.

No. 12A402, Per Env. of FOUR 24C

FIVE 25-Foot Spools Most Popular Dial Cable and Wall Rack

Handy metal rack hangs on wall. Has ruler on rack to measure length of cable desired. Contains 25-foot apool each of 42-strand Phosphor Bronze cable. Heavy Linen, Light Linen, Special Thin Linen and Special Thin Phosphor Bronze.

"SCOTCH" CELLULOSE TAPE



IS RACK AGAIN

2592 Inches to Roil Wide

\$1.08 11A279 3.422. Dispenser ...

The Original "Scotch" Tape sticks to anything. Ideal for general insulation, repairing torn cones, anchoring coll Ideal for general insulation, repairing torn cones, anchoring coils, wires, etc., and of course for wrapping packages and other mending and sealing needs. A few rolls of Scotch tape and the handy dispenser will become the most haudy utility you have.

1296 Inches to Roll

\$0.60 .76

Ea. \$1.39

"SCOTCH" Insulating Tape

MAKES THEM LOOK LIKE NEW



Electrical Cords use other Appliances. Sticks instantly without moistening. Combines neat appearance with tested perform-

No. 18A371, Per Roll25C No. 18A373, Display of 12 rolls, each of Brown and Ivory

SCOTCH TAPE



1296 inches %" "Scotch"
tape with
handy plastic dispenser.

89c Tape to refill. 60c 6 lots 54c



UTILITY DISPENSER

369 inches %" Scotch tape with dispenser. 18A373, Bach...250 18A379, Display of 12 units\$2.25

7 BURSTEIN-APPLEBEE CO. – KANSAS CITY, MO.

OPULAR RADIO BOOKS for STUDY or REFERENCE





Terman's Radio Engineering \$18 Pages 6x9, 475 Dinstrations omprehensive treatment cover

A comprehensive treatment covering all phases of radio communication. Thoroughly revised and enlarged, includes a new chapter on television, extended material on diode detectors, distortion, modulation, power ampliers, wave propagation, etc., as well as material on filter systems, universal amplification curves analysis of directional beautication.

Terman's Measurements in Radio Engineering

400 Pages 6x9, 208 Illustrations
Discusses the measuring problems commonly
encountered by the radio engineers. Gives attention to the principles involved in the design and construction of laboratory equipment, covering the principles of radio measurements and measuring equipment, presenting procedure for number of typical experiments. -Your Cost, Each\$4.50

Terman's Radio Eng. Handbook

Designed primarily for reference use, this radio engineering handbook is one of the most complete in the field, offering a wealth of technical information in a comprehensive organisation of references covering virtually all the engineering literature in English. Up-to-date and authoritative in all respects, the handbook deals with electronics and vacuum tubes, wave guides, cavity resonators, klystron and other microwave tubes, radio aids to navigation, oscillators, wide-band antennas, and handreds of other topics of interest to the radio engineer. radio engineer -Your Cost, Each \$7.00

Henny's Radio Eng. Handbook

Third Edition, 945 pages. Brings to the radio engineering profession its own handbook, comparable in all ways to the standard handbooks available in other fields of engineering. Contains 22 concise, fact filled sections—every subject treated by a specialist—offers a great store of constantly needed reference material in all fields and aspects of radio engineering—arranged in concise, easy-to-getat form. Covers everything from electric and magnetic circuits to such radio applications as material in an engineering—arranged in concise, valy engineering—arranged in concise, valy and at form. Covers everything from electric and magnetic circuits to such radio applications as facsimile, with emphasis on facsimile, with emphasis on pretelevision and facsimile, with emphasis on data valuable to the practical designer, presented in a profusion of tables, charts, equations, formulas and diagrams.

Electrical Drafting

How To Draw the clear, accurate circuit diagrams and wiring plans in electrical work. 140 pages 5½x8½."

No. 16A117, Your Cost, Each......\$1.50

"RADAR"

By John F. Rider, for students, hobbyists and No. 16A150—Your Cost, Each...... 98°

Muliman and Seely's Electronics

Co-ordinating the physical theory of electronics and the theory of operation of electronic devices, this book presents a well-rounded explanation of electronic principles together with their application to many problems in electrical engineering and physics. Includes much material of present day commercial importance. 721 pages, 6x9, 373 illustrations. 16A80-

UHF Techniques

By Brainerd, Koehler, Reich, Woodruff An sasy to understand, up to date book U. H. F. 16A81-Your Cost, Each...... \$4.50

Laboratory Manual in Radio

Fundamental Principles and Practices May be used with any standard text book, provides experiments on the soldering iron. a.f. oscillator, wave forms and the oscilloscope, vacuum tube operation, r.f. oscillator, Ohm s





Aircraft Radio and Elec. Equip. By H. K. Morgan of T.W.A. 874 619 Pages

A book especially prepared for actual use of maintenance and flight mechanics, airline inspectors, transport pilots and students. Fully describes equipment simply and clearly for a complete understanding and ability to operate it. Explains developments now in progress. Profusely illustrated with photos, diagrams, charts and schematics of aircraft wiring and radio installation. 16A83—Each \$4.50

Principles of Aeronautical Radio Engineering

Practical Radio Communication

Math for Radio and Communication By George F. Maedel, Chief Instructor, N. Y. School, R. C. A. Institutes. To master the technicalities of radio—to read engineering literature intelligently—you must have the mathematical groundwork covered by these absorbing books prepared for home study. bsorbing books prepared for nume states book 1 (814 pp.) covers the algebra, arith-

metic and geometry. Book 2 (329 pp.) covers the advanced algebra, trigonometry, and complex numbers necessary to read technical books and articles of radio.

Albert's Electrical Fundamentals of Communication

By Arthur L. Albert. Presents the electrical fundamentals upon which communication, including telegraphy, telephony and radio is based. 554 pages, 6x9, 359 illustrations. Written in 1942. -Your Cost, Each \$4.00

The Inductance Authority

By Edward M. Shiepe, B.S., M.E.E.
The Only Book Of Its Kind In the World.
Entirely dispenses with any and all computation for the constructions of solenoid coils for
tuning with variable or fixed condensers of
any capacity, covering from ultra frequencies
to the hordering of radio frequence. tuning with variable or fixed condensers of any capacity, covering from ultra frequencies to the borderline of radio frequencies. All one has to do is to read the charts. Accuracy to 1 per cent may be attained. It is the first time that any system dispensing with calculations and correction factors has been presented. Contains all the necessary information to give the final word on coil construction to servicemen engaged in replacement work, experimenters, engineers, students, teachers, etc. 16A73— 16A73-

Hoag's Basic Radio

Hoag's Basic nauto
Designed for the student with only a limited
background in physics and mathematics. Pre-

Technical Handbook-Lang

For solving problems in shop or factory. Includes, in part: Use of Slide Rule; Logarithmic and Trigonometric Tables; Reference Tables on Materials of Industry; English Metric version; Squares and Square Roots, Cubes Cube Roots; Methods of Solving Problems. Conversion: Squares





American Electrician's Handbook By Terrell Croft, Revised 5th Edition. 1600 Pages

Covers fundamentals, generators, motors, outside distribution, interior wiring, transformers, and electric lighting. Full description, definitions and methods. Fully describes upto-date applications and codes. Covers 1935
National Electric Code, World famous among contractors, linemen, and general electricians

Standard Handbook for Electrical

Engineers—By Archer E. Knowlton
7th Edition. 2303 6x9 illustrated pages.
Leatherold Binding. Completely revised.
Greatly enlarged. Thorough, compliste, and dependable manual covering every phase of upto-date electrical engineering. 28 sections; required 4 years to complete. The world's leading electrical reference. Anyone actively en-

Mathematics for Electricians

Kuehn's Second Edition Kuchn's Second Edition
Combines practical electrical problems with
the explanation of the principles used in solving them. Gives the student a workable knowledge of eigebra, trigonometry, use of the slide
rule, working of formulas, problems in ratio
and proportion, vectors, etc. Several new chapters on A.C. problems have been added, also
176 worked out illustrative examples and 1934
Dractice problems. 254 pages 74 the tractors practice problems. 254 pages, 74 illustrations 16A93—

Microwave Transmission

By J. C. Slater

For those interested in the problems of trensmission through hollow pipes and coaxial lines. Presents the developments in an understandable manner with a discussion of the use of Maxwell's equation as a means of handling the problems of transmission line

Hund's Frequency Modulation

Presents an engineering text on frequency modulation covering basic principles and the design of commercial apparatus. The practical applications that are described follow closely good present day engineering practice. Your Cost, Each\$4.50

Hund's High Freq. Measurements

Useful tables, data and illustrations pre-sented in a manner elementary enough to meet the needs of anyone interested in carryhigh frequency measurements and research work. \$5.50

Television: The Electronics of Image Transmission

Guide to Cathode Ray Patterns

By Merwyn Bly. A brief but important book r technicians, laboratory workers, and stu-ents in radio. Consists of sketches and capdents in radio.

Fundamentals of Vacuum Tubes

Fundamentals of Vacuum lunes
Second Edition, by Eastman. Discusses at
length the principal types of tubes — high
vacuum, mercury vapor, photo tubes, etc. Contains an extended discussion of pentode ampliftiers, both A.F. and R.F.; an enlarged treatment of the characteristic curves of pentodes,
tetrodes, and beam tubes, 583 pages, 623, 455

(Illustrations illustrations.

SELECTED PUBLICATIONS for the SERVICE MAN













Ghirardi Service Books

Latest Revised Editions.

MODERN RADIO SERVICING. late test equipment, trouble shooting and servicing methods for all types of sets, data on noise and interference elimination, and antenna systems, auto radio, cathode ray, aligning, all wave, high fidelity, etc. Gives "tricks" of the servicing trade. 1,300 pages.

TROUBLE SHOOTER'S BOOK. Everyone engaged in Radio Service needs this book. Over 700 pages of condensed tabulated data on thousands of sets. More than 3,300 "case histories." I. F. peak and alignment data. Auto radio installation and servicing, P.A., Recording, etc. Dozens of charts on tubes.

COMBINATION OFFER. When both the above are purchased sp.50



Electrolytic Capacitors

Probably no Radio - Elec-tronic component is more important than the Elecimportant than the Elec-trolytic Capacitor and here Alexander M. Georglev, who has devoted more than 15 years to their re-search and development, gives a complete, practical treatise on the theory, contreatise on the theory, construction, behavior, characteristics, selection, etc., of the various types employed in radio electronic and industrial equipment. Your Cost, Each \$3.00

RCA-VICTOR SERVICE DATA



In Volumes I and II are the notes the practical Serviceman needs to repair the radio receiver, radio-phono-graph combination and phonograph models of RCA-Victor from 1923 to 1942, inclusive. Every Serviceman should have Serviceman should have both volumes. Hand-somely bound in red deluxe vellum book covering. Vol. I has 880 pages. Vol. II 816 pages. 33A11—Vol. I covers 1923 to 1937, inc. 33A12—Vol. II covers 1938 to 1942, inc.

Your Cost, Either \$6.00

OTHER POPULAR SERVICE BOOKS Radio Service Trade Kinks

A practical book based on shirt-sleeve experience of a practical man. Compiled from his successful operation of several radio service stores, he presents clearly and concisely, methods for servicing and repairing all kinds of radios. Servicemen will find complete details on what to look for when a radio ceases to function, how to look for the cause and how to put it in working condition. 269 pages, 7x10, illustrated, spiral bound.

16.A20, EACH

Principles and Practices of Radio Servicing

Hicks. 300 pages, 212 illustrations, H. J. cloth bound. Gives essentials of theory and technique that clarify radio troubles and help-make quick repairs. Written in self study make quick repairs. Written in self study style. A very popular service book. \$4.00

RIDER MANUALS AND TEXT BOOKS

RIDER MANUALS I TO V are no longer available, but replaced with a new abridged manual of 2,000 pages which covers all essential data from previous volumes I to V. \$17.15 for late 14.70 for -Vol XIII, for late 1941 and ALTERNATING CURRENTS IN RECEIVERS. Basic functions of AC in receivers; resonance, coupling, induction, phase relations, sine ways, 16A27, 80 pages, illus. Hard cover. \$1.22 RESONANCE AND ALIGNMENT. Complete and concise explanation of all types of resonance and alignment procedures, when repair-16A28, 96 illus. pages. Hard cover. \$1.22 DC VOLTAGE DISTRIBUTION. Tells the how why of DC distribution to the in a receiver. 16A20, 96 pages, illus. Hard cover.. \$1.22 AUTOMATIC VOLUME CONTROL. Full details of AVC systems, also volume expanders, time delay, and noise suppression. \$1.22 VACUUM TUBE VOLTMETERS, Explains principles underlying functioning of various VT voltmeters and suggests practical applications. 16A31, 160 illustrated pages\$2.45 THE METER AT WORK. Tells how meters work, how to select them for various needs, how to expand their ranges, etc. \$1.96 SERVICING SUPERHETS. Complete detailed and diagrammed information on superhet serv-

AUTOMATIC FREQUENCY CONTROL SY TEMS. All about it—from simplest AFC cl cuit to most complicated push-pull control. 16A34, 144 illustrated SERVICING RECEIVERS BY RESISTANCE MEASUREMENT. Tells how to service radios by efficient point-to-point resistance measurements. Helps make use of resistance service data. Simplifies service methods. \$1.96 ALIGNING PHILCO RECEIVERS. Complete data on Philco sets. Gives procedure, IF peaks. 16A36, Vol. I gives sets 136 pages SERVICING BY SIGNAL TRACING. Uses the signal as a basis for a diagnosis of all receiver problems. Assures accurate results. \$3.92 THE OSCILLATOR AT WORK. Help to get most out of an oscillator. Fully discusses all types of oscillators—how they work and whers to use. 16A40, 256 pages, 167 illustrations ... \$2.45 CATHODE RAY TUBE AT WORK. A review of the theory and operation of cathode ray equipment. Photos illustrate images produced in operation. 16.41, 338 pages, 450 illustrations... \$3.92 A-C CHARTS. Contains 146 two-color charts from 10 cycles to 100 megacycles. For comrom 10 cycles to 100 megacycles. For com-puting frequency, inductance, capacitance, re-sistance, conductance, susceptance, reactance, impedance, admittance, phase angle and reso-nance, in series and parallel circuits. Accurate to 1 part in 500. Ideal for students, instruc-tors etc. tors, etc. 16A42, 160, 9 % x12" pages. 16A4z, 160, 9 1/2 x12" pages. \$7.35 AUTOMATIC RECORD CHANGERS AND RE-CORDERS. Complete service information on popular makes. Has drawings and diagrams. 16A43,



16A2:0-1946, Vol. 6 Newest manual covers diagrams and service instructions on practically all Post-War 1946 radio sets. 192 pag=3s of circuits parts list, \$2.00 16A1—1942, Vol. 5— 204 pages on 1942 Sets \$2.00 \$2.00 Includes POPULAR OF THE SERIES AND BECORDERS. Contains full instructions and diagrams for adjusting and repairing most popular automatic record players, manual record players, wireless oscillators, records and combinations.

pages \$1.50 Practical Radio Mathematics

Includes both arithmetic and elementary algebra as applied to radio and electronics. East to understand. A good reference book of 3

SUPREME Diagrams and Manuals comprehensive collection of the most

needed circuit A comprehensive collection of the most needed circuit diagrams and servicing information covering most popular models. Contain service hints, alignment data, IF peaks, parts lists, etc. In many cases factory instructions are included with the diagrams. Page size 8½x11°. Compiled by M. N. Beitman, serviceman, author, teacher,

RADIO SERVICING COURSE BOOK. RADIO SERVICING COURSE ROOK, Learn short cuts, extra profit ideas, all about the use of test equipment, etc. Gives information on signal tracing, television, visual alignment, P.A., photo cells, AVC, how to use an oscilloscope, what is feedback, resonance action and every other fact you must know to be an expert in your work. It is an exact reprint of the original \$39.00 Rudio Technical Institute Course. tute Course. \$2.50 SIMPLIFIED RADIO SERVICING BY COM-PARISON METHOD. Repair radios by min-utes instead of hours. A different comparison technique that tells you how to do expert work without test equipment or with only a voitohm-meter. Covers new and old sets. 112 pages, over 1000 practical service hints, 16 large trou-ble-shooting blue prints. Charts for circuit analyses. 114 tests using a 5c resistor. \$1.50

HOW TO MODERNIZE RADIOS. Tells how

to improve audio circuits, modernize cabineta, add new features, etc. Practical job sheets, schematics and photos make the work easy.

16A15—Large 8½x11"

REPAIRING WITH SUBSTITUTE PARTS. Tells what substitutions may be inade—what parts may be omitted—how to alter circuits to fit available components. A handy aid 25c

B.A. stocks Hll popular Radio Books















A Complete Radio Education in Ghirardi's Famous "Radio Physics Course"

Radio's leading school and home study text book. A remarkably complete course in radio, television and sound. Tells it in an easy to understand way. Gives all the essential facts about radio, from the simple fundamentals to the most intricate applications. Includes valuable and complete information on both servicing and experimentation. both servicing and experimentation, with hundreds of helpful illustrations which alone are worth the price of the book. It's the last word in a right book for any Radio Beginner, Student, Serviceman, Ex-perimenter or Amateur — that's why it's endorsed and used by more technical schools than any other book printed.

16A46--Radio Physics Course, Latest Edition. 972 pages. \$5.00

Elements of Radio By Marcus and Horton

A-to-Z of basic radio communications in a few short weeks—without any previous instruction, without wasting time on non-essentials, without previous training in math or physics, without outside help. Features include: 535 working diagrams and illustrations.: step-by-step directions for actually building experimental radio sets . . . brush-up and review questions at the end of each section ...
non-technical explanations through (700 pages.) Handbook style.

16A47-Net, Each

Cooke's Mathematics for Electricians and Radiomen

By Nelson M. Cooke, Chief Radio
By Nelson M. Cooke, Chief Radio
Electrician, U. S. Navy
Now you can learn to use mathematics as a tool in solving everyday radio and electrical problems,
Here is a complete home-study
textbook, thorough, careful and
painstaking in its explanations, detalled in its illustrations. This book
has one dominant aim: To furnish
the electrician and radio man with has one dominant aim: To furnish the electrician and radio man with a sound mathematical foundation and to show him how to apply this knowledge to the solution of practical problems most frequently encountered in actual practice. It gives you 600 illustrative problems worked out in detail, and with more than 3000 problems for prac-tice with the answers to check by. 16A48. 604 pages 6x9. YOUR COST.

.....**\$4.50**

Timbe's **Elements of Electricity**

Elements of Electricity
Third Edition, 569 pages, 470
illustrations, 5% x8% cloth cover.
Clear, logical, concise, simple,
pedagogically sound, complete in
its treatment of the fundamental
data with which the technical student must be familiar. Contents:
Ohm's Law, Electrical Power and
Energy, Concerning Wire, Measurements of Resistance, Magnets and
Magnetism, The Magnetic Circuit,
The Generator, The Operation of
D.C. Generators, Electric Motors,
Batteries and Electrochemical Action, Induction, Capacitance, A.C. Batteries and Electrochemics, A.C. tion, Induction, Capacitance, A.C. Vacuum Tubes and Gaseous Con-FOUR COST, Each \$3.25

Fundamentals of Radio

By 6 Distinguished Radio Experts Edited by William L. Everitt, Ph.D. "With this one volume alone, men with no previous radio experience or knowledge can . . . obtain a thorough grounding in radio principles. Anyone master-ing the contents should possess all the requirements of radio men and technicians.'

With OVER 300 WORKING DIA-With OVER 300 WORKING DIAGRAMS and step-by-step instruc-tion by six of the country's great-est radio experts, covers everything you need to know about basic radio communications. Helps you outsiley outself at the country of the

radio communications. Helps you qualify quickly at home, for the unprecedented opportunities in military, commercial, industrial, broadčasting, aviation or policeradio. (400 pages.) Handbook style. Complete 1-volume course.

Net, Each Sterling's Radio Manual

New 3rd Edition. Used as text by many radio training classes. Offers practical outline of radio Offers practical outline of radio from fundamentals to modern engineering. Covers broadcasting, aviation radio, marine and police radio. Includes FCC Rules governing Radio Operators and International "q" list of abbreviations used in Radio Communications. Illustrated, 1120 pages. \$6.00 16A51, Each

Terman's **Fundamentals of Radio**

Presents the basic principles of dio communication in a form radio communication in a form suitable for use in an introductory radio course. Covers the theory of tuned circuits and the basic prop-erties of tubes and their applica-tion, receivers, transmitters, wave propagation, antennas, sound and television. 458- pages, 6x9, 278 il-lustrations. lustrations.

16A52. YOUR COST, \$4.00

Experimental Electronics

By Muller, Garman and Droz. Detailed directions for all experiments in electronics, including dia-grams and methods for testing and checking circuits; practical appli-cations of electronic principles: cations of electronic principles; many heretofore unpublished methods and techniques, in 12 chapters, the authors cover principles, uses and applications of electron tubes, other than in communications, with 60 actual experiments described in detail. Fundamentals of electric measurements and the definitions necessary for understanding electronic circuits are thoroughly reviewed. (325 pages.)

PRACTICAL RADIO and **ELECTRONICS COURSE** In 3 Volumes only \$3.95

This is the first and only set of books dealing with EVERY phase of Radio and Electronics, Among the 53 lessons you will find material on television, FM, U.H.F., facsimile, ignition, X-rays, radio servicing, welding, transmitters and every other topic related to electronics.

tronics.

The books are intended for home-study. The lessons are well home-study. The lessons are well illustrated and easy to follow. Special comments placed adjacent to the text material explain the more difficult parts, offer suggestions, give references and in general take the place of a teacher. of 3 Volumes ..

Understanding Radio By Watson, Welch and Eby

601, 5½x8" pages, 406 illustrations. A simple, clear explanatory text with ample illustrations and many or experimental equipment, basic radio circuits and Covers basic radio circuits and principles and gradually leads into a thorough unfolding of present day receivers, aerials, and equip-ment

16A54. NET, EACH \$2.80

Manley's Radio and **Electronic Dictionary**

Cloth bound, 6x9", 550 illustrations.

More than 3800 definitions of technical words and terms used in all branches of radio, including a viation, navigation, industrial, photo-electricity photo-cell applica-tions, sound pictures, public address, television, telephotography, electric-ity and magnetism. Numerous illusity and magnetism. Numerous trations to clarify definitions.

YOUR NET, EACH.... \$2.50

Caverly's A Primer of Electronics

For all concerned with the manufacture, application or operation of household or industrial devices based on the science of electronics. passed on the science of electronics.

Presents in an extremely clear and simple manner what such readers need to know about electronic tubes and how they are applied in working devices. 235 pages 5x7%", 125 illustrations. 16A102. Your Cost, Ea... \$2.25

Preisman's **Graphical Constructions** for Vacuum Tube Circuits

Treats nonlinear circuits problems, particularly vacuum tube circuits, from the graphical point of view. Recent advances are taken into account in the treatment of many topics, such as balanced amplifiers, detectors, and inverse feedback. 237 pages, 5½x8¼", 125 illustrations.

Your Cost, Each \$3.00

Cockrell's Industrial **Electronic Control**

A guide to the understanding of Electronic control circuits for in-dustrial uses. Written especially for the practical man in industry, for the practical man in industry, giving him a working knowledge of electronic control as a background for intelligent selling, installing and servicing of electronic equipment. Written in simple language, it describes the fundamentals of electron tube operation and the hesis corteal electron. and the basic control circuits. Illustrated in all types of industry. 247 pages, 5 ½ x8 ½", 175 illustra-16A101. Your Cost, Each \$2.75

Bond's **Radio Direction Finders**

A text and reference for those in-terested in design or theory of di-ryction finders for aircraft, ship-board or fixed station use. Covers recent advances such as use of u.h.f., Adcock systems, etc. 281 16A13. Your Cost, Each \$3.50

7th Ed. Nilson & Hornung Radio Op. Ques. & Ans. 415 Pages, 5x7½", Cloth Bound.

The radio enthusiast who plans to go up for an operator's license will find this book a practical in-vestment. Gives 1297 questions typical of all classes of radio operator examinations WITH COR-RECT ANSWERS. One of the finest books now available on this phase of radio. 16A56, YOUR COST ... \$3.25

Radio Code Manual By Arthur H. Nilson

Besides instructions and Besides instructions and practice material on code sending and receiving the book also works in much helpful material on regulations the operator must be familiar with, construction of code practice apparatus, radio telephone operator's permit, etc. 174 pages in special wire binding, permitting the pages to lie flat. the pages to lie flat. 16A57, YOUR COST, EACH \$2.75



1700 Answers to Your Hardest **Problems** 1178 Illustrations

1000 Pages 130 Tables 105 Graphs GET THE ANSWERS NOW

Here, in one big volume, you'll find all the time-saving answers to your all the time-raving answers to your radio problems. . and time saved is MONEY EARNED. Written in easily understood language, yet accurate enough for an engineer. Completely revised and cross indexed for quick reference, this handy reference book for your tough jobs covers radio transmission and reception, public address systems, television, photocells and data on their important parts. It's a book you'll always use. a book you'll always use. \$6.00

Henney's Principles of Radio New Fifth Edition

Revised to include material on such important topics as wave guides, velocity modulation, tubes, freimportant topics as wave guides, velocity modulation, tubes, frequency modulation, kleptrons, ultra high frequency techniques and apparatus. Emphasis is placed on recent developments and future methods. As in former editions, the book is written for the reader with little background in solutions. book is written for the reader with little background in radio, and the language is clear and non-technical. Problems are included to show the application of the principles explained. 542 pages, 5 % x7 %". 16A65.

Your Cost, Each

RCA Publications

Receiving Tube Manual
Receiving tube characteristics—
Technical Dope, base diagrams, 16A66 ..,...

Designers' Handbook
For the set designer but of value
to all engineers, servicemen and
students, 365 pages.
16A67. EACH \$1.00 **Transmitting Tube Manual**

74 pages of tube circuits and data on transmitting and special purpose tubes, including U.H.F. Also transmitter design. 16A68, NET EACH

BURSTEIN-APPLEBEE CO. – KANSAS CITY, MO.

Books and Devices for Amateurs & Servicemen-



Radio Amateur Handbook

LATEST EDITION 16A58

\$1.25

Popular ARRL Books

HINTS AND KINKS. Hundreds of the best ideas from other amateurs, short-cuts, etc. An aid to service-

HOW TO BECOME A RADIO AMATEUR. Covers fundamentals, code, construction of transmitters, receivers, etc.

16462
LEARNING THE CODE. Both scading and receiving. Ideal for home study, especially for those who do not have access to a code machine. Contains data on high-speed operation and typewriter copy; also describes code instruction table with practice oscillator.

16A63, 25c
EACH 25c
ANTENNA HANDBOOK. Explains antenna designs, construction, theory of radiation, etc. 16A114. Each 50c
ARRL LOG BOOK Each 35c
16A115, Three for 31.00

Slide Rules-Books



10" LOW PRICE Professional Rule
Well made of seasoned wood with
white lacquer finish. No rough
edges, fine calibrations. Has new
frameless precision indicator—100%
visibility. A. B., C. D., C1 and K
scales on front—S, L. T on back of
slide. Contact hairline index on
back insures accurate reading of
"Trig" scales. Comes in leatherette

No. 16A18. Each 98C
Beginners' 10" Maniphase rule with

Silde Rule Instructions. A 24-page booklet of practical problems, conversion factors, etc. 7C

Stide Rule Practice. 32 pages of practical slide rule instructions as they apply to every-day problems. Gives 300 examples and answers.

U. H. F. Radio Clearly and Simply Explained

By Milton S. Kiver.

Takes the mystery out of UHF Radio. By simple steps, in plain English, it proceeds from ordinary radio circuits to a thorough understanding of the principles and applications of ultra - high - frequency radio. You'il be amazed at how easy it is to understand and to remember.

member.
Covers Magnetron Oscillator, The Klystron,
Transmission lines at
the UHFs, Wave
Guides, Cavity Resonators, UHF Antennas,
Transmission Wave Propa-

UHF Measurements, Wave Propagation—each explained thoroughly and from the practical, usable standpoint.

Hundreds of illustrations show every detail, and aid in the annaxing clarity of the book. Questions on salient points and chapter sumaries fix the knowledge in your mind.

16A64. Your Cost, Ea... 33.25

Introduction to Microwaves

By Simon Ramo, Besearch Eng., General Electric Co.

This book brings in simple, non-mathematical terms — through physical pictures and conceptions—a description of all microwave phenomena. It provides the general rules that apply to the activity of microwaves, pointing out the similarities and difference between microwaves and low-frequency waves. It covers transit time electronics, velocity modulation, radiation, transmission lines, resonant cavities, wave guides, etc. 164.72.

Your Cost, Each \$2.00

Ohms Law Calculator



Answers any Ohm's Law problem with one setting. Finds volts, amps, and watts. Resistance range 0 to 10 megohms. Has scales on both sides. Simple to operate. 10c

Shure Reactance Slide Rule

Solves problems in resonant frequency, capacitive and inductive reactance, dissipation factor, and coil "q" in one setting of the slide.

Mallory Encyclopedia

5th and latest edition. Contains data on over 27,000 standard sets. Gives IF peaks, volume control data, vibrators, tubes, circuits, condensers, part numbers, etc.

16.126. Over 450 Pages \$1.25

Color Code Guide For Resistors



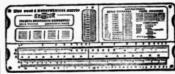
Indispensable by all who work with resistors. Made of durable material. Easy to use. 15c

Jensen Technical Monographs



Published by the makers of famed Jensen speakers in the interest of improved sound reproduction. Upto-date in factual information, replete with useful charts, graphs and tables, they supply a world of data heretofore unobtainable to guide in the selection, installation and operation of loud speakers. A series of 4 are now available. As others are released, BA will have them.

Stancor Slide Rule



Has 8 Additional Tables.

Developed to meet the demand by electronic designers and technicians for a calculator that includes constantly used tables. Has all the values of regular slide rule plus 8 mathematical tables. Made of durable stock with a transparent plastic indicator.

No. 16A109. Each 98c

Inside the Vacuum Tube

By John F. Rider.



A new approach to the subject. Easy to read and understand with animated illustrations, anaglyphs, etc. Discusses Diodes, Tetrodes, Pentodes, etc. Expiains clearly load lines, plate and

grid characteristic curves, and many other things you need to know about tubes.

16A108. \$4.41



BACK AGAINI Radio Amateur Call Book 16A111. \$1.50

Amateurs — whose addresses have changed since 1941—should mail new address to the 'Call Book Publishers. Address Charles O. Stimpson, 608 S. Dearborn St., Chicago, 111.

LATEST EDITION THE FAMOUS

Radio Handbook

No. 16A113. \$2.50

Howard W. SAMS RADIO "PHOTOFACT" Service



SAVES up to 50% in SERVIC-ING TIME on NEW MODEL RADIOS

Each Folio contains 30 to 50 Folders that covers new sets that hit the market the previous several months, Volume 1 starts with sets made for several months since Jan. 1st, 1946—Volume 2 covers sets made the next several months and so on.

All information is compiled by experts from actual examinations of models themselves and tell you by data and pictures—everything you want to know about them—every part is listed and numbered, every servicing short-cut and installation fact is fully set down. Each Folder has 2 to 12 clear photos of the chassis—a keyed reference alignment procedure—complete voltage and resistance analysis—complete stage gain measurement data—plus a schematic diagram, AND THE COST for each Folio CONTAINING 30 to 50
FOLDERS is ONLY. \$1.50

The following FOLIOS are avail-

The following FOLIOS are able as we go to press.
FOLIO #1 Stk. No. 16A250
FOLIO #2 Stk. No. 16A251
FOLIO #3 Stk. No. 16A252
FOLIO #3 Stk. No. 16A252
FOLIO #4 Stk. No. 16A253
FOLIO #5 Stk. No. 16A255
FOLIO #6 Stk. No. 16A255
FOLIO #7 Stk. No. 16A256
FOLIO #8 Stk. No. 16A256
FOLIO #8 Stk. No. 16A258
FOLIO #10 Stk. No. 16A258

CHOICE S1.50

We will have them ALL as re-

PHOTOFACT BINDER

Made specially for the Photefact Folders listed above by Remington-Rand. Beautiful rugged — strong, lies perfectly flat no matter how FULL it is, expands 2¼" to 4½" as sheets are added. Holds 1000 sheets.

MALLORY Technical Manual

392 pages of simply written data that bridges the gap between theory and practice. Presented for easy application (to every day problems) with the latest technical information for Servicemen, Engineers, Amateurs and experimenters. 8½x11" hard cloth covers with permanent sewed binding. \$1.96

Radio Service Standard Rate Book

44 Page book containing vital, non-technical data, designed for Radio Service Dealers as a guide in determining standard prices for his work, also a convenient guide for ordering replacement parts. Gives stop-by-step general servicing procedure. Has cross-reference of most popular type vibrators. Every Serviceman should have one.

16A17. \$1.00

Code Keys * SENDERS * and Oscillators

CODE PRACTICE SET



COMPLETE ONLY endy to Use. No. 5A145 Consist of a top quality key and a Bignal high frequency adjustable buzzer mounted on a bakelite bas equipped with binding posts ready for quick and simple connection to the 4½ V. battery included. It's complete ready to use, Nothing the 4½ V. complete realise to Buy.

Code Practice Oscillator



OPERATES FROM 110 Volte AC er DC. Plenty of Volume from Quality Midget Speaker, Complete with tube, high grade key, cord Quality Midget Speaker, compared with tube, high grade key, cord and plug — ready to operate — NOTHING ELSE TO BUY. \$8.95

MICROPHONE UNIT



QUICKLY any radio or amplified record player to a PA System, or hous caster. Consist of quality

with built-in carbon mike, to-talk'' swit on mike, with built-in "press-alk" switch, and transformer battery unit completely wired. Simple connecting instructions fur nished. Complete ready to use.
NOTHING ELSE TO BUY. \$5.95

Speed-X Professional



Semi-Automatic 🕻 High Speed Key

Heavy steel base, non-slip rubber feet. Perfectly aligned free acting bearings. %" coin silver contacts. Adjustable double finger pad-dles. With shorting switch. 6%x3%" steel base, black wrinkle fin-

ish 17A11, Model 500, Ea. \$10.29 17A12, Model 501. Chrome plated base, 1/4" \$14.70 contacts



ICA DeLuxe Signa-tone. Code Practice Set. Keying

Monitor. Speaker Built In An audio oscillator with 3 output frequencies and variable volume control. Produces signal like that of commercial CW station. For use as (1) Code Practice Set—with facilities for keys and phones multiple code instruction; (2) Keying Monitor-will follow at all speeds; (3) Modulation Sig-nal—for adjusting the modulation level of a transmitter; (4) Signal Tracer—locates defects when fed -locates defects into audio stage of amplifier. With tube and built-in speaker. 7½"x 4½"x4". For 110 volts AC or DC. 4 1/4 "x4" 17A14,**\$11.7**6

Signal R68 Practice Set



Designed for those who want a well made instrument to learn the code. Set consists of a key and high frequency buzzer mounted on a mahogany finished wood base equipped with binding posts. The code is printed on a plate and fastened to the base between the key buzzer. Buzzer is adjustable, 17A5. YOUR COST\$3.06

Speed-X Code Practice

Туре

M-110

4 Ohm.

Consists of a constant frequency adjustable buzzer and a standard hand key with 1/4" silver contacts, all on brown bakelite base 4x6". Your Cost\$2.65

Signal High Freq. Buzzer



Adjustable with standard resistance of 2 ohms. Finish of black crystalized lacquer.
17A7, Type
R60. Each . . \$1.06

Signal Telegraph Instruments



Sounder and Key

On private and short lines learners will find this instrument easy to handle. Clear, distinct tone. Bar frame and key base, black enamel, bridge is brass, sounding bar is aluminum with steel sounder plate. Key lever nicket plated. Sounder Key lever nickel plated. Sounder and key mounted on mahogany finish wood base.

17A8. NET, Each\$4.50

Sounder Only-For Use With Any Key

Correctly designed for tone quality and instant action. All adjust-Correctly designed for tone quality and instant action. All adjustments simple and accurate. Bar frame is black enamel, aluminum sounding bar, brass bridge, and steel sounder plate. Mounted on mahogany finished wood base with binding posts.

17A9. \$3.00 17A10 \$3.15

LINGUAPHONE **Code Lesson Records**

For International Morse Code.



Learn code this easy way at your own convenience. Slow or fast on your phono as you progress. Operates on any phono or rec-

ord player.
Includes text book and 5 double faced 10" discs in album. \$8.82

Extra Key Knobs

12A1. Navy type knohs, Ea...18c 12A2. Staudard knobs, Ea....12c 12A3. Paddle for high speed

G. L. Automatic Tape Sender Model



Compact, easy to operate and highly accurate. Blank tape is spaced

and punched, then run thru the sender at speeds from 10 to 60 words per minute. For 110-120 V. A. C. with cord and plug 5x5x3". Supplied with 5 rolls of blank tape. \$16.50

17A16, 1000 ft. roll tape ... \$1.00

Model "S" Deluxe compact automatic tape motor providing variable speed

from 4 to 60 words per minute. Only 3 controls; motor switch, contact switch and speed control. Terminals for osc. or buzzer. With 10 rolls double perforated tape (20 practice lessons) 5 %x4 %x6".



"Champion" Vibroplex

"Original" Vibroplex

For all types of communications work where speed and perfect Morse are essential. Single lever, Two pairs of contact points; one

Has all features of model above at a low price. Black crystal finat a low price. Black crystal finish, metal base with parts in bright

THE BEST IN HEAD PHONES



TRIMM "FEATHERWEIGHTS" World famous as a quality head-set. Weighs only 4½ oz. 5 ft. moisture-proof, wear-resisting cord and adjustable nickel plated steel head band. Bakelite shell and cap. Magnet of highest quality 36% co-balt steel alloy. Pole pieces of fin-set magnetic iron. Collegeneestless est magnetic iron. Coils especially impregnated. A custom built phone

throughout. 17A20. 4 4000 ohm for general pur-... \$6.37 Per Pair

17A21. 24000 ohm for short wave
work, amateurs,
etc. Pair

TRIMM "B42". Especially developed for Army and Navy and now
available to all. Quality built,
bakelite cap and shell, concealed
terminals, adjustable headband. A
truly high grade pair of 2000 ohm
phones. Per Pair

\$4.80 A22. Per Pair 34.6 TRIMM "PROFESSIONALS". TRIMM "PROFESSIONALS".
Forged magnet of chrome steel,
impregnated coils, 5 ft. moistureproof, wear-resisting cord, entirely
concealed terminals. Fabric covered wire headband. Bakelite cap
and shells.

22.94

Pair \$2.94 3. 4000 ohms, Pair 32. TRIMM "DEPENDABLE" Quality at moderate price. Bake-lite caps and shells. Extra heavy bar chrome steel magnets forged to assure strength. 5 ft. tinsel cord, fabric covered wire headband.

17A24. 2000 ohms. weighs only six ounces complete with two units. 4½ ft. cord and metal headband.

17A25. Double Headset-2000 ohms \$1.62

resistance 17A26. Single Headset-1900 ohms D.C. resistance.. 97c
Carrying Case

For Keys, etc. Exactly fit Vibre-plex. Plush lined case, finished in black morocco. Reinforced covers. Flexible leather handle. Has lock and key. Inside dime L., 3%" W., 4%" high. dimensions 17A36. Each

i½x6". ish, metal base with pa finish. 17A19, Each

BATTITIES D BRANDES SUPERIOR. A favorite for years, Ruggedly built, outside terminal type, with metal cases for years. Ruggedly built, outside terminal type, with metal cases and bakelite caps. Diaphragm diameter 21/2". Has double colls, two in each receiver; adjustable flexible metal split headband. 41/2 ft. cord. Magnets of high retentive ity are 4" square. Resistance 2000 ohms per pair. 17A27. Per Pair\$2.03

BRANDES ADMIRAL. Similar to above, but with terminals inside case. Have metal cases, bakelite caps, double coil magnets. Sturdy and light weight. and light weight. 17A28. 2800 ohms \$2.13

CANNON BALL "DIXIE". A good quality phone at a low price. Cases are metal with bakelite caps. Diaphragm diameter 2½". Double coils, two in each unit: magnets of heavy bar magnet steel %" square 4½ ft. cords.

17A29. 2000 ohm. Pair. \$1.73

BRUSH CRYSTAL PHONES. Type high impedance, response 60 to 000 cycles. Light in weight, 6 10,000 cycles. Light in weight, 6 oz., very sensitive to weak signals. Ideal for measuring work, etc. Ideal for measuring work, etc. Molded plastic case, shaped for maximum comfort. 17A30. Double Headset.

\$7.06 Pair 17A31. Single with cord

Headphone Cords

Copper tinsel inner conductor covered with closely woven cotton braid. Single cord 4 feet, double

17A32. Single cord, pin tips one end, spade tips, other.. 29c 17A33. Double cord. tips on both ends 39c 17A84. Double cord tips on 39c one end, spade lugs other..

Rubber Phone Cushions



Designed for comfort and to fit most any make of head phone. Widely used by airlines. 17A35. Per Pair.. 65C

·Devices in popular Demand·

Battery Power Supply



Operates any 1,4 Volt 4, 5 or 6 tube battery radio source. Supplies A B voltages

from a sintile storage battery, eliminating the
twe of expensive dry cell batteries.
Very low battery drain, will opcrate a 4-tube set for weeks. Excritent for use at farm, summer
cratage or camp, in automobile,
motor boat, etc.
Frimary 6 value IM: 2000.

Primary 6 No. 31A29. \$9.90 Blach

Battery Cable Plugs



A B C

-2 prong, %" centers for t "A" (Eveready 746 etc.)

12A164, Each -5 prong plug for standard 224 "C" batteries (Eveready 768

Kit of 50 Assorted Plugs
Includes above and other popular No. 18A24. 50 Asst. Plugs \$2.93

Fluorescent Lighting Radio Noise Suppressor



Approved Underwriters Lab.

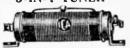
Designed especially to suppress voices caused by Finorescent Lamps. One of the most frequenttr needed suppressors now with the is needed suppressors new with the general acceptance of Pisorescent Lighting. Also may be used for currecting interference caused by electrically operated machines and appliances. After installed, requires no further attention. No. 19A72. Net Each



Radio Noise Suppressor

For electric razors and small appliances, Plugs in light socket ahead of appliance used.

No. 19A73, 94c Each 3-IN-1 TUNER



As an Antonna Tuner, it increases signal strength of weak stations. As a Wave Trap, it separates in-terfering stations and improves se-lectivity. As an Aerial Eliminator, it makes out-door aerials unnecessary. Easy to install.
No. 17A205. Your Cost, Ea. 59C



Telegraph Apparatus Co. OSCILLATONE and KEYS Designed by Ted McElroy, the World's Champion

Radio Telegrapher

Here is the last word in code practice Oscillatomes. Tone frequency variable from 600 to 1500 cycles. Volume controllable from 0 to TULL ON. "PM" DYNAMIC speaker may be disconnected during headphone operation if desired. Up to 300 head phones may be used. Absolutely safe. Operates on 116 V. AC or DC. Uses 117N7GT tube. Gray crackle finish

No. 31A31, Model M8719, Net Ea.

Professional Speed Key



sending is Rivthmical Morse 2 real pleasure with this key. Has heavy metal base with non-slip rubber feet. All other parts finrubber foet. All other parts in-stated in highly polished chrome. Fully adjustable, with silver con-tact points. Gives mothing but top notch performance, reason-ably priced. Base size 4"x6 ½".

Nn. 17A141. Model CP519.

\$9.00



Finest commercial or a mateur "bag" available. Highly polished chrome base and superstructure. Precision designed to give the utmost in clean cut speed keying. Has Selected bine steel springs for uniform performance. Fully adjustable, with silver contacts. Base size 4"x6" with non-slip

Base size 4"x6 ½".

Not Ea. \$8.25 | No. 17A142, Model \$11.25

MIKES for HOME ENTERTAINMENT



CRYSTAL DETECTORS and ACCESSORIES











(B) No. 17A44, Open Type Crystal Detector. Universal joint on swivel



Little Wonder Crystal Set

Small in size.

tions within 25 miles when used hones.

"Supertone" Crystal Set

A well constructed set present-ing an unusual value for the price. Reception price. Reception is clear, easy to tune and with the special giass enclosed crystal

TRIMM HEADPHONE BARGAIN

hight weight (5 ex.). Two units with fabric covered wire headband with apring lock adjusting clamps. Chrome steel magnets, 5 ft. standard cord. Impedance 800 chuns, matches practically all Navy gear. \$12.50 List Price Value. No. 17A413, Special Per Set.

AERIAL WIRE 100 foot coil. Co made of copper and 3 of monel. A very

good value. No. 3A86. Per Coll....

SPRAGUE Interference **Filters**

New filter units designed for in-stallations at the noise source. Small self-contained and easily ap-piled to any electrical device within their current and voltage ratings.
iF types. For con-



veit AC or DC, and are provided wire leads

leads.

5. A filter for all small motor er-10. A filter for all small motor operated devices, mixers, fans, vacuum cleaners, etc. Length 2 % ".

Dia, 1".

Dia, 1".

No. 19A75. Net Each... \$1.11

IF-21. Dual type for use across brushes of fractional horsepower motors, also across line terminals motors with can grounded to tor frame. Length 218", Dia. 1". motor fram No. 19A76. Net Each

IF-11. Dual high capacity filter for IF-11. Dual high capacity filter for use on large motors over 1 horse-power and up to 228 V. AC or DC. Also used on high current arcing or sparking devices such as projections of wallong atc. Length 5%" tors, arc-welders, etc. Length 5% Dia. 1%".

or open tors, are-welders, etc. Length of the bia. 1%".

No. 19A77. Net Each ... \$2.56

IF-SL For use across make and break contacts, such as thermostats, circuit breakers, door-bella, breakers, treuth therefore, the breakers of the breakers. Dia. 1º

No. 19A78. Net Each 66C IF-37. Especially designed for use on single fluorescent lamps. Also effective on make-and-break governor-type motors, such as those used on adding machines and type-Length 2 7 ". Dia. 1

No. 19A79.

SPRAGUE FILTEROLS





For series connection to power line with casing grounded to the frame of the offending device. For very severe interference it may be neces, sary to install a Filterol in each side of the power line, though one unit usually is sufficient. Filterols are provided with mounting tabs or flanges and two solder-on screw terminals. All mre safely insulated for at least 115 volt AC or DC. Selection of types 1, 2 and 3 should be based entirely on current rating. Type 4 incorporates a Sprague Hy-pass Capacitor and provides exceptionally high attenuation at frequencies above 5 MC and is effective up to 150 MC or more. Type 4 is rated at 220 Volt AC or DC. Stock Filterol Over-All Net No. Type Amps Size

HEAVY DUTY Appliance Filter



Recommended for use where severe noise is where severe nencountered and encountered and a portable filter is desired. Plugs in light socket ahead of appliance. Has provision for ground lead when needed.

No. 19A74. Not Each \$6.35

Rubber Phone Cushion



Made of molded Sponge It ubber of the most comfortable design. Fits 2" dia. earphone, over-all dia. 84".
No. 3ASZ.
For Pakr35C

RECEIVING and TRANSMITTING VARIABLE CONDENSERS

"MC" MIDGETS



Cadmium-plated soldered brass plates; Isolantite insulation; heavy aluminum ends; single-hole mount; .0246" gap; .0226" plates; %" shaft, can be ganged; sliver plated Beryllium wiper; 500-volt

Stock	Mfr's.	Max.	Min.	NET
No.	Туре	Mmf.	Mmf.	EACH
17A58*	MC-20-8	20	5.5	\$1.53
17A59*	MC-35-S	35	6.0	1.59
17A60#	MC-50-8	50	6.5	1.68
17A78	MC-50-M	50	6.3	1.68
17A61*	MC-75-8	80	8.0	1.80
17A62	MC-75-M	80	7.3	1.80
17A63*	MC-100-8	100	8.3	1.95
17A64	MC-100-M	100	7.5	1.95
17A66	MC-140-M	140	9.0	2.10
17A65*	MC-140-8	140	10.0	2.10
17A67	MC-200-M	200	10.3	2.28
17A68	MC-250-M	260	12.0	2.49
17A69	MC-325-M	320	13.5	2.80

Semi-circular plates. All others are Midline.
DOUBLE-SPACED MIDGETS

Lat Worst	ate power.	Air-gap	.0710".	
17 A70	MC-20-MX	20	6.5	\$1.68
17A71*	MC-20-8X	20	6.8	1.68
17A72*	MC-35-8X	32	8.5	1.80
17A78	MC-35-MX	32	7.8	1.80
17A74*	MC-50-8X	50	11.5	1.95
17A75	MC-50-MX	50	10.5	1.95
17A76*	MC-100-8X	100	16.5	2.43

*Semi-circular plates. All others are Midline.



"APC" MICROS

High quality air-dielectric condensers; compact in size. Particularly adaptable to S.W. Isolantite base, Air gap .015". Will fit 1½" dia. coil forms. Screwdriver adjustment.

Stock	Mfr's.	Max.	Min.	NET
No.	Туре	Mmf.	Mmf.	EACH
17.A79	APC-25	25	8.0	\$0.90
17A80	APC-50	50	3.9	1.05
17A81	APC-75	75	4.5	1.17
17A89	APC-100	100	5.6	1.32
17A83	APC-140	140	6.5	1.56



"HF" MICROS

Very efficient in tuning or trimming critical high frequency circuits. Heavily platy circuits. Heavily palates. Isolantite insula-Equipped with special front bearing. *Doution. Equipped wide front bear ble-spaced units.

17A84	HF-15	17.5	2.8	\$0.96
17A85	HF-35	85	8.2	1.11
17A80	11 F-50	50	3.7	1.17
17A87	HF-100	100	5.8	1.47
17A88	HF-140	140	6.2	1.68
17A89	*HF-15-X	15	8.6	1.17
17A90	*HR-30-X	30	5.2	1.32
	OTTETAL DI		· DOG	

		- MARCHEOL	
No.	Туре	Cap. Per Sec.	NET
17A91	HFD-50	50	\$2.49
17 A9 2	HFJ)-100	100	2.85
17A93	HFD-140	140	3.12
17A94	*HFD-15-X		2.37
17A95	*HFD-30-X	28.5	2.64



BUD MIDGETS

Single bearing type; wiping spring contact on rotor, mounts in 78" hole. Electro-soldered m 18" hole. Electro-soldered plates; ceramic insulated. Semi-circular plates. Double spaced units, 060" air-gap, others .024".

Min. Max.

No.	Plates	Mmf.	Mmf.	EACE
7A51	8	3	15	\$0.74
7A52	6 '	4	33	.79
7A53	7	5	50	.85
7A54	14	7	100	1.03
7A55	19	8	140	1.12
	DOU	BLE SPA	CED	
7A56	11	5	35	1.12
7A57	15	7	50	1.18

Midget Trimmer Condenser



For antenna, interstage and tracking applications. Range 2 to 36 mmfd. Base made of ceramic.

No. 17A77. Net Ea... 18C

BUD 50-Watt Plug-In Coils



The finest in air-inductors. Uniform windings supported by acetate strips and firmly anchored to ceramic 5-prong plug-in base which fits standard tube socket. The Variable link coils have the link and tap at center of coil. Three types from which to choose.

Center	End	Vari.		Cap. YOUR
Link	Link	Link	Band	Mmf. COST
17A151	17A156	17A161	80M	75 \$1.32
17A152	17A157	17A162	4034	50 1.32
17A153	17A 158	17A163	20 M	33 1.32
17A154	17A 159	17A164	10M	≥ 28° 1.29
17A155	17A160		5 M	18 1.06
*28 mmi	d. for var	riable link	coil.	

Bud Air-Wound Transmitting Coils ADJUSTABLE AND





Winding of enameled copper wire, mounting and plug bars of steatite. Colls are self supporting but rigidly held in place by fire-resistant locking strips. All units are center tapped. Variable link type is so arranged it may be controlled from the panel by means of an extension shaft if required. Capacity given is total required to tune to resonance at low frequency end of band.

NOTE: Fixed link types have link complete with coil. Variable link types are listed with link and base complete and separate from inductance coil. Distance between outside plug centers: 150w., 3½"; 500w., 5"; 1kw., 7½".

150 WATT							
Fixed Link	1	AdJus	table L	lnk			
	et BAND	Stock	Cap.	Net			
No. Mmfd. E	a.	No.	Mmfd.	Ea.			
17A294 68 \$3.	12 80	17A299	78 🛸	2.62			
17A295 36 2.	82 40	17A300		2.29			
17A296 27 2	44 20	17A301		2.00			
17A705 27 2.	44 15	17A706		2.00			
	97 10	17A302		1.94			
	ase	17A302		base			
	71						
IO. ROOVE. Ea.	4 4 [ssem-			
	1			2.79			
	500 WATT						
17A322 69 3.	56 80	17A332	70 ;	3.12			
	18 40	17A333	36	2.62			
	79 20	17A334		2.44			
10.4.000	221 11	10 4 000	0.0	2 7 7			

17A707	23	2.82	10	117A708	25	2.44
17A325		2.68	10	17A335	21	2.15
17A326,	Mtg.			17.A315.	Mtg.	base
for abov	70 ·	88		and Li	nk s	tssem-
				bly		3.85
		ONE	KILOW	ATT		
17A327	73	7.26	80	17A316	65	6.06
17A328	37	6.73	40	17A317	37	5.64
17A329	33	6.23	20	17A318	33	5.23
17A709	30	6.23	15	17A710	30	5.17
17A330		5.67	10	17A319	25	4.35
17A331,	Mtg.	base		17A320.	Mtg.	
for abo		1.41		and lin		ssem-
				bly		5.44



Trimmer Condensers

...5.44

Irimmer Condensers
DVAL CERAMIC, mica compression type with steatite bases
impregnated with a silicon fluid
and heat treated to protect
against moisture. Plates of
Phosphor Bronze and Spring
ed. Standard 1% square,

				ALC IIS DOGGEO.
				Pt41c
15A 1515,	185-120	nımf.	3	Pt44c
15A1516,	200-170	mmf.	3	Pt44c
				Pt47c

MILLEN **Neutralizing Condenser** Capacity range 0.7-4.3, very compact. Use ultra low loss quartz Q as a dielec-

No. 17A703, Your Cost Each.... 90C

GL6 Neutralizing Condenser
For use with beam type tubes in transmitters. Has two 1" disc plates. Ceramic stand-off insulator, crow foot base.
Shpg. wt., 4 oz.
17A96
\$1.06

National NC800 Neut. Condenser
Disc type for high voltage. Micrometer adjustment with lock nut. Low-loss Isolantite insulation. Three-hole mtg, bracket, For type 800 and similar tubes, 17A98, Each\$1.92

BUD Transmitting Condensers



Ideally sulted for low and medium power transmit-ters, Feature electro-sol-dered plate assemblies, as-suring correct plate spac-ing, over-all rigidity and light weight. Panel space only 2%"x2%". Plates are brass, rounded edges, l assemblies are cadmium plated. For panel or chassis mtg. Especially chassis mtg. Especially suitable for multi - band applications.

Stock No.	Mfr's, Type	Max. Mmf.	Min. Mmf.	Air Gap	NET EACH
17A127	1525	50	4	.051"	\$2.15
17A128	1526	100	6	.051"	2.32
17A129	1529	340	15	.051"	4.28
17A130	1530	25	4	.078"	2.12
17A131	1531	35	4	.078"	2.20
17A132	1532	55	6	.078"	2.47
17A133	1533	80	7	.078"	2.62
17A134	1534	110	9	.0785	3.00
17A135	1535	150	12	.078"	3.62
17A136	1540	5.5	9	.144"	3.00
17A137	1541	80	12	.144"	3.44
17A138	1542	105	15	.144"	4.00
17A139	1545	5.5	10	.176"	3.85
17A140	1547	100	17	.176"	5.12

Dual Section X'mitting Condensers

Tie rods are insulated at both ends with steatite, otherwise like above single section condensers. Capacities are per section.

17A308	1551A	50	5	.0514°	\$4,70
17A309	1553A	100	7	.051"	5.73
17A310	1569A	200	10	. 05 1"	7.00
17A311	1571A	35	6	.078"	5.38
17A312	1561A	110	10	.0781	7.00
17A313	1566A	18	16	.175"	5.88
17A314	1567A	40	11	.175"	7.06

NATIONAL



TYPE TMS

Precision type condensers for low-power stages of transmitters. Air-gaps: .026" for TMS types, .065" for TMSA. *Low C condensers are rated at 2000 V. Peak; others are 1000 V. Peak;

Stock	Mfr's.	Max.	Min.	NET
No.	Type	Mmf.	Mmf.	EACH
17A101	TMS-100	100	9.5	\$1.76
17A102	TMS-150	150	11	1.92
17A103	TMS-250	250	13.5	2.11
17A104	TMS-300	300	15	2.56
17A 105	TMS-50D	50-50	6-6	2.72
17A106	TMS-100D	100-100	7-7	3.20
17A 107	TMSA-35	*35	8	2.11
17A 108	TMSA-50	*50	11	2.30
17A 109	TMSA-50D	*50-50	1014-10%	
			10 14 -10 1/4	2.81

TYPE TMC MODERATE POWER



For use in power stages For use in power stages of transmitters where peak voltage does not exceed 3000 V. Extremely rigid frame. Full Isolantite insulation. Plates have buffed edges; airgap is .077". *Dual stator.

Stock	Mfrs.	Max.	Min.	Net
No.	Type	Mmf.	Mmf.	EACH
17A110	TMC-50	50	10	\$2.81
17A111	TMC-100	100	18	3.20
17A112	TMC-150	150	17	3.67
17A113	TMC-250	250	28	4.22
17A114	TMC-300	300	25	4.63
17A115	TMC-50D	•50-50	9-9	4.63
17A116	TMC-100D	*100-100	11-11	5.27
17A117	TMC-200D	*200-200	1814-1814	7.03

National "UMC" Ultra Midget



For every ultra H.F. use. Isolantite insulation. Rear shaft extension.

17A118	15	mmf.	\$.89
			1.06
17A121	75	mmf.	1,21

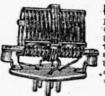
NC600 Neutralizing Condenser



Small neutralizing condenser for use with 6L6's and similar beam power output tubes. Capacity adjustable by means of a thumb screw from .5 to 6 mmfd. Isolantite insulation. Shpg.

-YOUR COST EACH

Coils and Crystals for Your New Ham Rig



B & W Juniors 75 Watt Rating

Fitthed with standard 5-prong steatite base. Companet, ragged, may be used in the oscillator, buffer or final stage with input power up to 350 watts and plade wolfages up to 350. Any type may be used in capacity coupled circuits by ornitring connections to the links. Steatite or equivalent sectors should be used. *Cap. to resonance on Low-Freq. end of band.

	a Pa		Type JEL End Link	Type JCL Cent. L	Type JUL Var. L
Band		Munfal.	Cat. No.	Cat. No.	Oat. No.
Б		15	17A711	17A718	17A715
10		22	17A615	17A619	17A623
15		22	17A712	17A714	17A716
20		34	17A616	17A620	17.A624
4-0		47	17A617	17A621	17A625
80		60	17A618	17A622	17A696
Your	Cost, Any	Above-Net	Each		\$1.38



B & W "BAND HOPPER" Type 2A

Provides a compact panel controlled unit to use for intenstage coupling between two beam power tubes or between beam power tubes and triedes. Covers 80, 40, 20, 15 and 10 meter bands. capacitor is recommended for use E: Actual condenser cap. will be mmed, tuning capacitor is recommended for use with it. NOTE: Actual condenser cap. will be sum of the tube output and the wiring capacities,

generally between 5 and 20 mmrd. No. 17A627. Your Cost, Net Each



B & W COILS For Up to 150 Watts Input

and stentite base plug in jack mounting. The variable link type is

usually good for stages variable loading is desirable and may be ed for matching impedance of 72 ohms. adjusted for matching impedance of 72 ohms. Couplings can be adjusted from the panel for optimum results.



End L	ink—With	out Tap Typ	pe BEL
	Cap.	Stock No. 17A628	Not
Band	Munful.	No.	Ea.
10	21	17A628	\$2.41
15	21	17A717	2.48
20	33	17A717 17A629 17A600 17A601	2.48
40	36	17A 000	2,83
8.0	36	17A601	3.16
CLL	ink—4lt.	Panued Tsin	BCL
10	20	12A602 17A716 17A603 17A601	\$2.41
15	21	17A716	2.48
20	34	17A603	2.48
40	87	17A604	2.83
80	39	17/4605	3.16
Wor 1	Unk-Ct.	Tapped Typ	e BVL
10	14	17A606 17A719 17A607 17A608	\$1,93
15	28	17A719	2.00
20	25	17A667	2.00
40	29	17A608	2.28
80	46	17A609	2.61
		jack bar	
bly fo	r type E	EL and E	CL in-
		sembly and	
		type BVL	
tors .			\$3.44
For	r Up to 5	00 Watts 1	nput

37A720

2.96

			_	
Var. Link	-Ct. I	apped	Type	TVL
10	17	17A68	31	\$2.90
15	2.2	17.472	21	2.28
20	2.2	17A6	22	2,28
40	29	17A68	13	2.61
80	39	17A62	34	2,96
17A635. 3	teatite	fack:	bar a	ssem-
bly for T				
17A610, B				
ing link f				
For Up				
Ct. Link-				
T. Link-	C 1 44	Palacer n	A P.C. 1	TACARA

10	20	17.4	637	\$5.85
15	20	17.5	722	6.54
20	20	17.5	638	6.54
40	20	17.4	639	6.88
80	24	174	1640	7.56
Yar. Link	-Ct.	Tappe	d Type	HOVL
10	16	17A	1641	\$4.48
15	16	17/4	728	5.16
20	18	17A	1642	5.16
4.0	33	17A	4643	5.50
80	41	174	644	8.19
17A645,	Jack	Bar	a.sse mb	ly for
type HD				
17A650, 3	Base	assenit	ly and	swing-
img link				
tors				



Adjust-A-Volt

21

Easy to control rheostat type voltage reg relator and transformer combination for portuble and mil around needs. Voltage adjustment provided by means of a self-lubricating naving contact which taps turns of the winding. Output is independent turns of the winding. Only of is independent of load. Very ruggedly constructed, well rentifated and made for 50/60 cycle op-eration. Provides smooth control of rolt-age to regulate AC lines, power, heat, light and speed devices. Control on panel calibrated scale.

Stock	Imput	Output	Max.	Price
Ne.	Velts	Yolts	Vn.	Kach
31A43	115	9-14 9	8500	\$17.15
31.148	115	D-140	1500	35.77
31A44	239	0-140	8600	22.05

ISOLATION TYPE

Made similar to above, but have isolated primaries. Husky cores and windings, control plus fuse protection generates continuous Used in any application requiring 70 to 140 volts. smooth continuous central



AMPHENOL COIL FORMS

Made from 912A Poly-strene, the losses are strene, practically zero. Coils wound on these forms are superior to air wound Coils soils because dirt can not get between windings and lower "q" of Coit. and

1½" dia. x 2½" long Piug-in Type
12A201 4 Prong Ea. 38c
12A202 5 Prong Ea. 39c
12A203 6 Prong Ea. 43c
¾" dia. Miniature Piug-in Type
Easy to drill holes where wanted for end of winding. 12A204 6 Prong 12A205 6 Prong

Miniature forms, %" dia. x 1\cdots' leng, for mounting directly on wave band switch, tuning condenser or chams. Has hele in center

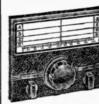
MILLEN Panel Marking Kit



Kit consists of Ktt consists of decalcomania of 1/6" block letters and special solution for casy transfer to smooth or wrinkle finish panels or chassis. Ample supply of every conceivable word or marking.

17A701, Per Kit

MILLEN Panel Dial



combination panel dial. Drive ratio 3/1. Escutcheon size Holes may be add two small controls as illustrated. Escutcheon

removes with-out disturbing dial mechanism, for easy scale calibration. \$7.50



MILLEN Ceramic Crystal Holder

MILLEN IF Transformers



Do Luxe type as and in Millen factory built equipment. Feature heavy moided ond terminal boards, steatite coil forms, rigidly located "down leads", etc. The large size heavy wall extruded aluminum shield

truded aluminum shield cana high Q condensers and coils result in the over-all Q of all result in the over-all we obtain transformers being extremely high for their particular type. BFO Units contain the grid condenser and grid leak inside the shield.

AIR TRIMMED IRON CORE 17A692 1600 Interstage \$4.50 17A693 1600 Diode 4.50 17A694 1600 BFO AIR CORE 4.50

PREMEABILITY TUNED
17A696 456 Interstage
17A697 456 BFO

MILLEN Tunable Coil Form



Standard ootal mica - fline
Hakelite, polystyrene '4" dia.

"I form, heavy coll form, heavy aluminum shield, tuning slug cy type, suitable for use up to 35 mc. Adjusting thru center hole

screw protrudes thru center hole of standard octal socket. 17A699, With Iron Core ...\$1.85 17A699. Less Iron Core ...\$1.50

MILLEN QUARTZ "Q"



Sheet size 3x8x.1". 17A700 Euch

MILLEN Quartz Q Coll Dope

Crystal Holder Socket



Made of ultra low-loss Amphenol "912A" Polystyrene with phosphor bronze silver plated contacts. Contacts

may be removed and the body used as a two-hole feed thru bushing.

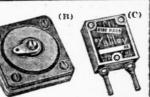
CRYSTAL HOLDER ADAPTERS

For Hams with pre-war rigs who wish to use without any changes. Body of low-loss plastic. No. 17A728, Adapter for any 4" No. 17A crystal to any %" spacing ... 35c crystal No. 17A738, Adaptor for any %" crystal to any %" spacing... 35c

BLILEY







(A) AX2, Manufactured specifically for Amsieur use. All important features developed through production of countless crystals for military use are reflected in this new model. Acid-etched to prevent aging, housed in moisture resistant phenolic case: stainless steel electrodes, plates, springs and coulact pins. Accuracy to .002%; temperature stability to .02%, holder pin spacing, ½". Specify frequency desired. Plus or minus 5 KC. Size 1½" W., ½" D., ½" H. 17A1001 3,500-4,000 KC. Your Cest 17A1002 7,000-7,425 KC. Net Each 17A1002 14,000-14,850 KC. Net Each 22-80 17A1002 14,000-14,850 KC. Net Each 33,95 (B) Type SMC-109. Dual frequency erystal provides 100 KC or 1000 KC, source, for use in frequency standards. The 1000 KC frequency is correct within 5% and the 100 KC, can be adjusted to zero best. Ideal for alignment of radio receivers. Size 1%x1%x23". 17A1003, Your Cost Each 38.75 (C) Crystals for broadcast, marine, police and aircraft service can be supplied on special order to the factory. Types for 3105 KC, operation in private aircraft are available immediately. Write us for literature and price quotations stating your requirements.

BLILEY CRYSTAL HANDBOOK
Thirty-five pages handbook explaining completely frequency control (A) AX2, Manufactured specifically for Amateur use. All important

Stand Off INSULATORS and fittings



Have many applications in transmitter and antenna installations. Type 55 is Alsimag 196; others are white glaze porcelain. Types 50, 51, 83 and 55 have nickeled brass rod and nuts.

8tk. No.	Туре	Fig.	Hgt.	Dia,	Panel Hole	NET
12A243	50	D	11/4"	% "	3/9"	16c
12A244	51	D	18"	1%"	36 "	24 c
12A245	53	D	1%"	1%"	1%"	38c
12A246	53	В	1%"	2.1/2"	1%"	18 0
12A247	54	A	4 "	81/4"	2 % "	410
12A248	5.5	C	% "	% "	- 3/4 "	15c
12A304.	Mtg.	Flange	for T	уре 63	(B)	21c
12A305.	Mtg.	Flange	for T	ype 54	(A)	41c

STAND-OFF INSULATORS white



es 65, 66, 67 have Cadmium steel bases. after Type No., indicates Jack Type.

8tk. No.	Туре	Fig.	Body Hgt.	Hard- ware	NET
12A249	20	A	1 % "	10-32	9 c
12A250	20J	В	14"	74J	12c
12A251	23	A	1 "	8-32	7c
12A253	22J	В	1 "	74J	110
12A254	60	C	436"	% -20	44 c
12.A255	62	C	2 % "	14-20	29c
12A256	65	D	1%"	10-32	150
12A257	65J	D	1%"	74J	18c
12A258	66	D	214."	¾ -20	29c
12A259	66J	D	2%"	76J	38c
12A260	67	D	4 1/4 "	14-20	47c
12A261	67J	· D	4 % "	76J	58c

THRU-PANEL TYPE

Of white glazed porcelain. Have bigh mechanical strength and long e path. Flat mounting cushion washers. "J" cates jack type insulator.



A.	1	B)		C D		
8tk. No.	Туре	Fle.	Top Hgt.	Panel Hole	Hard- ware	NET
12A262	40	A	1 1/4 "	1,6"	10-32	180
12A263	40J	B	1%"	1/3" 10" 10 "	74J	24c
12A264	42	A	% "	17 "	10-32	18c
12A265	42J	В	% "	76 "	74J	21c
12A266	44	A	% **	16 " 16 "	6-32	14c
12A267	45	C	1 % "	**	10-32	24 o
12A268	45J	C	1%"	30 "	74J	29c
12A269	46	D	2 3/4 "	% "	14-20	47c
12A270	47	D	41/6"	1 18 "	14-20	71c
Work of	1 4300 0	homo	duam tak	ad with	hond me	

Each of the above furnished with hardware for panels up to $\frac{1}{2}$ " thick. Longer rods for the larger types are shown below.

ULTRA-STEATITE CONES

Made of high grade, white glaze, low absorption steatite, which is far superior electrically at high frequencies. Threads are tapped directly into the ceramic. Furnished with machine screws and brass washers top and bottom and with cushion washers. One hole mounting.

Cat.		Specifications					
No.	Type	Hgt.	Top	Bot.	Thrd.	Ea.	
12A271	600	5%	16	5%	6-32	12c	
12A272	501	1	17	%	8-32	18c	
12A274	502	1 1/4	⅓	1	8-32	32c	
12A276	503	2	%	1	10-32	44c	
12A277	504	8	%	1 1/4	10-32	73c	

THREADED BRASS RODS (4")

Nickel plated with 20 threads to the inch. 12A279—14x20 brass rod. 8" long. Ea....24c 12A230—14x20 brass rod. 10" long. Ea....27c

JOHNSON PLUGS AND JACKS



Nickel silver springs and nickel-plated brass screw machine parts with accurate threads and milled nuts. Studs extend full length for added support. Types 77, 77A plugs are 300" dia., and fit jacks 77. 77A plugs are .300" dia., and fit jacks 76, 76A. 75, 75C plugs are .170" dia., and fit

77 77 77A 76 76A	Stk. No. 12A1071 12A1072 12A1073 12A1074	Price 15 c 18 c 16 c 18 c	Type 75 75C 74	8tk. No. 12A1075 12A1076 12A1077	Price 7c 7o 6c
10.7	14/41014	186			

Spring Sleeve Type Johnson Jacks and Plugs INSULATED BANANA PLUGS

Black or Red Plastic Handle. 12A1078—1%" long, fits type 74 Jack. Ea, 12A1079—1%" long, fits 76, 76A Jack. Ea, 12.1079—1 %" long, fits 76, 76A jack. Ea. 27c Have max. current-carrying capacity, minimum resistance, great mechanical strength and snug fit. Wiping action of spring on insertion insures good electrical contact. Tension is maintained by phosphor bronze "spring sleeves." Type 71 plug, ½" dia., fits type 70 jack. Types 73, 73A plugs, %" dia., fit type 72 jack. All are nickel plated.

	ckel plate	d.			
Type	Stk. No.	Price	Туре	Stk. No.	Price
70	12A 1080	27c	73	12A1083	76
72	12A1081	18c	73 A	12A1084	90
71	12.11082	11c			-

AMPHENOL STAND-OFFS



Ultra-low-loss, Formed from Amphenol "912-A" pure polynol "912-A" pure poly-For indoor or outdoor styrene. use. Non-hygroscopic.
Will not break when dropped or

subjected to hard blows as do ceramics or glass. Type "A" has insulation \(\frac{\pi}{n} \) in diameter. Type "B" has insulation \(\frac{\pi}{n} \) in in the subject of Type "B" has insulation 1/2" in diameter. Wire is held in place by screw or solder-lug. Brass insert in top of insulator has "V" shaped slots so that wire can be securely clamped in place.

(B)	12A281-1	%	W	L.						۰			٠.					.36	6	
	12A2822		W															43		
	12A2832			L,		٠	۰		٠									· 78	C	
(A)	12A284-4	3% °		L								٠,	٠.					. 96	C	
(A)	12A285-6	99	L.												_	. (4	1 0	Ř	

"LUCITE" Transparent Insulators

Have extremely low losses at radio frequencies, are water clear with highly polished surfaces. FEED THRU TYPE

Ideal for bringing high freq. leads thru chassis, panel or shield. The 4" have 6-32 hdwe., the 4", 10-32.

Stock			Mtg.	You
No.	Diam.	Lgth.	Hole	Con
12A286	3/4 **	1/4 "	A "	220
12A287	1/4 "	34.10	Ã"	250
12A288	1/4 "	1%"	76 "	296
12A289	a/, #	2 "	X."	500
12A290	34.**	21/2"	1 w	590
	STAND		YPE	-

Pillar type. Single-hole base mounting with n.p. brass hdwe, for attaching wire or parts. The ideal for HF and RF.

No.	Hgt.	Dlam.	Hdwe.	Cos
12A291	1 1/4 "	3,6 "	6-32	21c
12A292	2 3/4 "	1/4" 1/4"	6-32	32c
12A293	2 1/4 "	% "	10-32	410
12A294	4.14 "	34. **	10-32	59c
12A295	6 1/4 "	34.10	10-32	820
"LUCITE	** IFEE IF	DER S	PREAD	ERS

Furnished with locking screws to clamp wire in place. All are %" clamp wire in place. All are dia., drilled for No. 12 to 18 wire. dia., drilled for No. 12 to 18 wire,
12A296—2" spacing ... 21c
12A297—4" spacing ... 27c
12A298—5" spacing ... 29c
12A299—6" spacing ... 32c
LUCITE 12" RODS

To make ur-own bushings, supports, coil forms,

insulators, etc.

12A300, %" dia. 32c | 12A301, %" dia. 38c

12A302, %" dia. 68c | 12A303, %" d. \$1.15

Amphenol "912" Polystyrene Sheets, Rods, Tubing, Strips "A" and 912 "B" are water-clear for

912 "A" and 912 "B" are water-clear trans-parent insulating materials made famous for radio use by amphenol in parts modded to shape and in rod sheet and tubing for customparts, especially for UHF work.



912 A SHEETS									
Thick-	Size	7	let	Siz	ð	Net			
ness	4"x4"	E	ach	4"x8	y"	Each			
16 "	12A208		12e	17A7	53	16c			
ñ."	12A210	1	l4c	17A7	54	20c			
%"	12A209	1	16e	17A7	55	24c			
16"	12A211	1	19e	17A7	56	29e			
1/4"	12A212		25c	17A7	57	89e			
~	912 T	UB1N	G 12"	LONG					
912 "A"		Net	912 "	B''		Net			
h" Wall	O.D.	Ea.	1/8" V	Vall	O.D.	Ea.			
17A742	34 "	07e	12A2	13	1 1/2"	\$1.41			
17A743	% "	11c	12A2	14	1%"	1.68			
17A744	1/4 "	14c	12A2	15 .	2 "	1.88			
17A745	% "	22o	12A2	16	21/4"	2.21			
17A746	1"	81c	12A2	17	2 1/2 "	2.53			
	912	RODS	3 12" L	ONG					
191	2 "A"			912	"B"				
No.	Dla,	Net	No.		Dia.	Net			
17A747	1/4 W	\$.08	12A2	18	% "	\$.26			
17A748	% "	.17	12A2		1/4"	.44			
17A749	1/4"	.31	12A2		- % "	.68			
17A752	%"	.48	12A2		34 "	.94			
17A750	% "	.68	12A2		36 "	1.26			
17A751	1"	1.26	12A2	23	1"	1.68			
	12" LO		2 "B"	STRIF					
Wldth	h″ Thi	ck	1/4" Th		3"	Thick			
Strip		Vet	No.	Net	No.				
34."	12A224								
3/2 "	12A225		12A229		12A23				
34"	12A226		12A230		12A23				
1 "	12A227	31c	12A231	38c	12A23	15 46e			
	912 CE	MENT	COIL	DOP	E C				

Actually fuses parts together instead of merely

giuing them.					
12A236-2 oz.	bottle.	Your (Cost	9	.29
12A206-4 oz.					
5A132Quart					
12A237-2 oz.	Thinner	. You	Cost		.15
17A736-4 oz.	Thinner	. Your	r Cost		.21
5A143-Quart	Thinner	. Your	Cost		.47

Ceramic Stand-Off Insulators



Have 6/32" threads in each end. I deal for coils, conmounting

densers, etc.

12.4241—½" dia. x 1½" long. Ea.... 170

12.4242—½" dia. x 3½" long. Ea.... 240



R 0 Made in from Amphenol 912 "A" Polystyrene, the losses are practi-cally zero. Coils wound on these forms are superior to air wound coils because dirt cannot get be-

tween windings and lower ''q' of coil. Liquid "912" Coil Dope impregnate wound To impres

Amphenol Coil Forms

"A"— $1\frac{1}{4}$ " dia. \times $2\frac{1}{4}$ " long plug-in forms. 12A201—4 prong..36c 12A202—5 prong..39c 12A203—6 prong..43c "B"—%" dia, miniature plug-in type. Easy to drill hole where wanted for end of winding.

12A204—5 prong..28c 12A205—6 prong..28c "C" - Miniature form for mtg. directly on wave band switch, tuning condenser or chassis. Has raised hole in center of base for self-A206— 4 oz. bottle.. 38c tapping screw. 12A200. Each. 11°

TUNING EYE ASSEMBLY



No. 17A762. Net Each

For adapting "Magic Eye" tubes to sets, test equipment and apparatus. Includes tube socket. 22" ca-

Incidesocket, 22 bet, bronze

MAGIC EYE ESCUTCHEONS Hood type, large size for mounting over panel or cabinet hole. Bronze finished. 17A761. For Single Eye Tube. Ea.... 180
l vision type. For use with octal bases. Bronze Finished. tubes.21c

Racks-Chassis-Calints-Panels-Accessories

Amplifier Foundation Cabinets

Top-neith quality "Professional" type amplifier chases units with pleasing rounded top corners—raised screen openings in tops, Leaves ventilators in sides and ends provide ample ventilation. Units "A" and "B" have beautiful Chrome plated "Air-Gate" ventilators with red atriped chrome moidings and handles to nastch. Marine Grey Elippie Pinish on all units.







UNIT "A" — De Luxe Amplifier Foundation Chassis; all units are 9" fier Unit. Chassis Amplifier Foundation Chassis; all units are 9" fier Unit. Chassis bottoms to be Luxe "Commercial" appearance to custom built squipment.

No. Size Net, Ea. 5421 4 54x19" \$3.89 Net. Ea. 5434 5 5x12" 4.80 Net. Ea. 5A35 3x12" 4.80 Net. Ea. 5A35 19x17" 4.85 5A35 19x17" 5.70 5A41 19x17" 55.46 5A44 7x17" 3.24 5A35 19x17" 5.70 5A41 19x17" 6.60 5A46 19x17" 3.69

"Hi-Quality" Metal Chassis Bases



Solidly constructed 1-piece steel chausis base receivers, transmitters, amplifiers, etc.—folded over on the bottom (except the 2 smallest sizes) for ad-ditional strength. All sizes from 54"x10" drilled for attaching bottom plates.

	CHASSIS	BASES	Net 1	Bottom	Net
Size, Inches	Cadmiam No.	Blk. No.	Each	Plates No.	Ea-oh.
4%x8%x1%"	5A50	5.151	\$.68		
5 x9 1/4 x 1 1/4 "	5.A50	5A53	.66		
8 x914x3"	-5A54	\$A55	.87	5A101	390
6 % x 10x2"	5/1.56	5A57	,93 \	5A192	450
5 x13x8"	5A58	5/1.50	1.05	5A103	48e
7x7x2"	5A00	5A61	.84	5A104	480
7x9x2"	5A-62	5A63	.90	+5A195	48c
7x11x2"	5A-04	5A65	.90	5A106	540
7x12x3"	5A66	5.A67	1.17	5A107	570
7x13x2"-	5A68	5 A:69	1.06	5A108	570
7x15x3**	5A70	5A71	1.39	5A109	630
7x17x3"	5A72	5.473	1.39	5A110	66o
8x12x3"	5A74	5A75	1.29	5A111	66o
8x17x3"	5A76	5A77	1.47	5A112	69 a
10x12x8"	6A60	5A81	1.41	5A114	690
10x14x3"	5A89	5A83	1.47	5A115	75c
10x17x3"	5A84	5A85	1.32	5A116	840
10x23x3"*	5.886	5A87	1.98	5A117	\$1.06
11x17x3"*	6A88	5:189	1.98	5A118	84c
12x17x3"	5A90	5A91	1.98	5A119	90e
13x17x8″→-	5A90	5A93	2.49	5.A120	\$1.08
10x17x4"	5A94	5.195	2.10	5A115	64o
19-17-A"	5.4.06	5497	2 82	EA120	1.08

(NOTE:--*Denotes 15 gauge steel. All others 20 gauge.)

HEAVY STEEL CABINET



Spot welded cerners. Finished in black wrinkle enamel.

SE	re		YOUR
L	D.	H.	COST
4"	2"	4"	\$0.78
4"	2"	5"	.84
.6"	6"	6"	.93
9″ .	5"	6"	1.50
10"	8"	7"	1.89
10"		10"	2.31
12"	11"	2"	2.49
	1. 4" 4" 5" 9"	4" 2" 4" 2" 6" 6" 9" 5" 10" 8"	1. D. H. 4" 2" 4" 4" 2" 6" 8" 6" 6" 9" 5" 6" 10" 8" 7"

PORTABLE STEEL CABINET



etc.					-	
Cat.	_				Net	
No.	H.	W.	D.	Wt.	En.	
5A13	12"	7%"	7"		\$2.31	
5A13	15"	750	7"	11 lbs.	2.70	

HINGE LID CABINET



auto body steel. Finished in black wrinkle enamel

			tequire
Cat.	Size	YOUR	Chassi
No.	L. D. H.	COST	No.
SA1	9"x 5"x6"	\$2.40	5A51
A2	10"x 8"x7"	3.00	5A6
A3	12"x 8"x7"	3.45	5A-95
5.14	12"x11"k8"	4.11	
A5	14"x 8"x7"	3.66	5A68
5A6	18"x12"x9"	5.16	5A5

DE LUXE UTILITY CABINETS



Cat.	Sixe	YOUR	Chassis
No.	H. W. D	. COST	No.
5A30	8"x10"x 8		
5A81	8"x12"x 8		5A48
5A32	8"x14"x 8		
5A33	12"x20"x12	" 7.2 0	5A59

Portable Metal Speaker Cabinet



Modern streamline design with ample baffle area to provide exceptional reproduction with the average dynamic apeaker. Rounded corners with attractive metal grille and convenient handle for carrying. Very desirable for portable public address speakers and for extension speakers, laws, garden or playsremads. Supplied less speaker.

E STINICE	-	her's Programme.	Dubbuten	Tone of	
Stook			Hole	Speaker	
No.		Dimension	Size	Size	COST
5A127		10"x10"x6"	4%"	6"	33.00
5A128		12"×13"×7"	61/2"	8"	3.59
5A129		16"x16"x8"	11 "	12"	6.32
-				@all	Dock



BUD DeLuxe Streamlined **Professional** Relay and Cabinet Racks



For commercial or amateur transmitters, P. A. Systems and other Electronic equipment. Very attrac-tive modern design, featuring rounded vertical front corners and handsome red-striped, chrome trim handsome red-striped, chrome trim top and bottom. Ruggedly con-structed from 16 gauge (½") cold rolled steel, all joints electrically welded. Panel mounting supports are recessed so no edges are ex-posed and are accurately punched for either W. E. or Amateur

Notched Panels. Floor Models have rear doors hung on loose-joint hinges, held securely in place by snap catches. An in-terlocking switch bracket is interiocking switch bracket is mi-cluded with each cabinet. Fur-nished in grey crackle finish and shipped K. D. with all necessary hardware for assembly. Inside depth 16", width overall 22".

Stock	Overall	Panel	
No.		Space	Each
38A1			\$29.40
28A2		42 "	35.52
38A3		61 1/4 "	43.81
38A4			50.72
	Models ha		
	on top, with		
	ge sizes ha		
doors	in addition	n. Furn	ished in
grey	crackle en	amel fini	sh com-
	y set up. 1		
metal	feet to avo	id scratch	ing table

Stock	Overall	Panel	Net
No.	Height	Space	Each
38A5	10 % "	8 ¾ "	\$10.14
38A6	14 / "	134"	12.35
88A7	16 📳 "	14 "	14.88
28A8	1976"	1756"	16.43
38.19	28 1 "	26 34 "	18.93
38A10	36 }} "	35 "	21.14



Rack **Panels** For cabinets and racks having standard amateur spacings 1 % " m multiples. Made

uniform slot-" steel; 19" wide; and finish. Black or Grey

e-could com				
wrinkle.				
GREY	BLACK			NET.
Cat. No.	Cat. No.	Size	Wt.	EACH
5A21G	5A21	1 % "	2 5	88.
5A22G	5A22	3 1/4 "	3	.75
5A23G	5A23	5 ½ "	4	.87
5A24G	5A24	7 "	5	.93
5A25G	5A25	8 3/4 "	7	1.17
5A26G	5A26	101/2"	8	1.32
5A27G	5.1.27	12 1/4 "	9	1.62
5A28G	5A26	14 "	19	1.86
5A29G	5A20	15%"	12	2.18

CHASSIS MOUNTING BRACKETS Fit on 17" relay rack chassis for panels 7" high and over. 5A98. For 11" base. Pair ...\$1.12
5A99. For 8" base. Per Pair ...73

Small Raci

An inexpensive rack handy for a variety of uses. Made to accommodate two pan-els, one 10½" and one 8½" high and 18½" wide

one 8%" high and 18%" wide. Supplied with cabinet, will take chassis up to 8%" deep x 15" wide. Rear has hinged door with locking device. Overail size 21%" high, 18" wide and 18" deep Black crackled steel Black crackled steel. No. 38A11.

No. 38A11. YOUR COST, Ea. ... \$13.82



Streamlined Multi-Purpose Cabinets

For the many uses in making up various Electronic equipment. Grey crackle enamel

4%" high x 3%" overal depth.
5A121. 3%" wide. Net Ea. \$1.35
5A122. 7%" wide. Net Ea. \$1.35



DeLuxe **Meter Cases** Steel, finished in Marine Gray Rip-ple Enamet. Rounded top. Red striped chrome band, Size 44"

4 % wide, 4 ½ high. \$1.35 5A138hole. Not Ea. 5A124—217 meter Net Ea. \$1.35



Midget Speaker Cases

Ideal for 2" and 3" speakers. Size 4"x4"x 4%", finished in black crackle.

5A125. For 2" Speakers \$1.12 5A126. For 3" Speakers \$1.12



1/16" Thick Steel

Panels

BLACK RIPPLE FINISH

Cat.	Not
No. Sixe	Each
A13 '7"x10"	48c
A16 7"x14"	63 c
A17 7"x18"	84c
A18 8"x14"	72c
8"x18"	84c

ALUMINUM PANELS

248T, Hard Aluminum, easy ork, drills clean, machines work.

MICARTA Plastic Panels Fine quality linen base, color than panels handy for many needs, it thick, easy to work. Irregular sizes is the reason for Such Low Prices. They are otherwise perfect.
12" L. by 2%" to 3%" W. 12"

31/2" W. 25c .. 10c

Regnires

R. F. CHOKES - RECEIVING COILS, FORMS. ACCESSORIES



Type OHX Midget RF Choke

wound pies on Isolantite core 1%"x%". Inductance 2.1 m.b., D. C. resistance 35 ohms, rated at 125 ma.

Type CH500. For high power rigs working in 10, 20, 40, 80, 160 meter bands. Six pies on Isolantite core bands. Six pies on Isolanus.

carry 500 ma. continuous. Inductance 2.5 mh. D. C. resistance 8.0 ohms. For parallel feed. Effective 20.000 kc. 21 05 from 1500 to 80,000 kc. \$1.05

Meissner De Luxe R.F. Chokes



AIR CORE (INSUIRIDED)

	COMME (CTANAMA	
12A184	5.5 MH	Ea. 370
12A185	10.0 MH	Ea. 45c
12A 186	16.0 MH	Ea. 49c
12A187	30.0 MH	Ea. 54c
12A188	80.0 MH	Ea. 65c

Hammarlund Coil Forms Rugged low loss forms of XP-53. Ribbed for air spacing, with flange grips Have shelf inmounting padside for ding condenser 3%". Natural

amber color.

12A194 4 prong 333C 12A196. 39c 6 prong

ICA Small Ribbed Coil Forms.



Amber color bakelite, 1%" dia., 2%" high, with molded ribs for low-loss winding and special rim on top. Rim has recess for in-

serting labels. 12A197—4 P. 12A198—5 P. 12A199—6 P. Choice 24c

MORRIS Coil Winder



Pays for Itself

Factory Accuracy

Winds honey combs, spiderwebs, solenoids, etc., in various widths, diameters and gauges of wire. Recorder and pointer show number of Net Ea. \$4.95



RUD Ribbed Plug in Coil Kit

Set of Four 4-prong coils covering 11-210 meters on ribbed natural color bakelite coil forms. Space windings. Wave range printed on each coil. Tune with 140 mmfd. condenser. Windings include tickler and grid input. Four prongs, two windings.

17A291.

Your Cost Per Set \$1.71

Katra colls for above Kit, Wave range 185-360, 4 prongs, 2 windings. 17A291 17A292.

Your Cost, Each 02 Wave range 350-565, 4 prongs windings. 17A293. Your Cost, Each. 82c



National Chokes

Type R100 RF Choke. Ideal for high freq. circuits. Widely used in receivers and low power stages of transmitters. Has continuous 4-section universal winding on Isolantite form. Distributed capacity is only 1 mmf. 2½ mh., 125 ma., 50 ohm. D. C. inductance. 12A189. Each

Type R100U. As a bove but on small stand-off insulator for vertical mounting: has pigtail tercal cal mounting; has pigtail TA. sistance, 12A191. Each35c

21/2 and 5 2½ and 5
Meter Midget
R.F. Chokes R.F. Chokes



An efficient choke for U.H.F. re-ceivers and transmitters. Rated 5.4 Micro-hy and 1000 MA DC. Rated 12.A 193. ...29c NET, EACH



Johnson Sockets Porcelain base, positive spring contacts with screw and solder - lug

terminals.

12A174. Type 209 with spacing between shell and contacts for high voltage rectifiers, etc. For 4-prong UX base

dual phosphor bronze contact springs 94c

8

JOHNSON Miniature Sockets and Shields

Designed for use with the 9000

series and minia-ture series tubes, including 184, 185, 174, etc. Con-tacts are Phosphor Bronze, heavily silver plated and are self-aligning. Designed to permit a minimum amount of capacity between contacts. Exceptionally low-loss construction. Type 267.

12A566. Net Ea..... 29c

Steatite base with metal mtg. ring extending upward to form a shield.
No. 12A567. Net Each.....

44c 2778 — Miniature socket shield base only.
No. 12A568, Net Each.. 9C Shield for 277B or 2778.

JOHNSON 275 Socket



For Eimae type 4-125A and 4-250A tube, Steatite in-sulation, Contacts cadmium plated reinforced cadmium

cadmium plated
All metal parts
k and mtg. holes steel springs, All meta, counter sunk and mtg. holes bossed to permit panel mtg. without shorting. square, with 5 prong. 2 27 %" mtg. holes square, with 21/2" centers. 12A571. Your Cost. Each \$1.03



Type CIR **National Sockets**

Low - loss Isolantite with 2 metal standand six tion metal flange

for univ	ersal mou	nting.	
No.	Prongs	No.	Prongs
12A166	4	12A169	7L
12A167	5	12A170	78
12A168		12A171	3 octal
Net Ea.		,	27c



Eleven Contact socket of steatite. Has 1½" pen circle to accept magnal 11-prong bases as on many cathode ray and television tubes. Has octal style locating keyway. Mounts in 1½" hole.

No. 12A572. Complete With Bing. Net Each..... 71C

MEISSNER COILS

"Plastic" Replacement I. F. Coils



Air Core Type-Minimum space with max-im um performance! Only 14," square and 1%" square and high —

ble tuned—immune to temperature, vibration, or humidity effects.

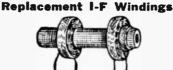
Input Interstage Output No. 16A202 No. 16A203 175 kc. 456 kc 16A201 16A205 16A206 16A204 Any of the above, YOUR NET COST, EACH... 82C
Ferrocart "Plastic" I-F's
IRON CORE Input-Output I-F's.

Same SMALL SIZE as air core type above with unusually HIGH GAIN and superior selectivity curves for improving performance of compact and auto sets having only a single 1-F stage. Not recommended for 2-I-F stage. Nos

Input No. 16A207 Output NET No. EA. 16A208 \$1.22 456 kc

Standard I.F. Coils
Popular for general replacement
needs. All are double-tuned with ceramic trimbase mica-dielectric mers. Windings of high grade Litz wire are fully impregnated. Black crackle finish can 1%" square, 3%" Input Interstage Ontput

FREQ. No. No. 16A209 16A210 16A213 175 kc 456 kc 16A212 16A211 Choice, Each



For repairing "midget" receivers. %" diameter x 1%" long; wound on wood dowels—coupling adjusted by sliding primary coil. "Standard" aliding primary coil. "Standard" types for Input, Interstage, or Output; center-tapped for full wave diode circuits.

Cat.

NET

FREQ. Type 8—175 ke Stand. No. EA. 16A236-49c 16A237--456 kc Stand. -175 ke C.T. -456 ke, C.T. 16A238—175 ko 65c

Slip-Over Primaries



Easy and economical replacement for burnedreplacement for purious out primaries on all types of R.F. and antenna colls. High Impedance windings. Sizes below are for outside

dia. of old coil. Cat. No. For For O.D. Coll NET EA. 25c 21c 21c 21c 14c 16A240 36" 34" 16A243

Universal Adjustable Coils

Permit EXACT duplica-tion of defective R.F.; Ant.; or Osc. coils in the broad-cast band of ANY receiver! Inductance variable over over wide range for 'tracking' -screw driver adjustment for

exact matching of inductance of old coil. Osc. Coll adjustable for I.F. frequencles from 175 to 586 k.c.—may be used in either "cut plate" tuning condenser, or padded circuits. Shields 1%" square x 2½" circuits. Shields 1%" square x 2½"
Shielded Unshielded

Antenna Oscillator R. F. Ch

"Gerracart"

Iron Core I-F's HIGH Ferrocart HIGH "Q" Ferrocart powdered iron core provides increased selectivity and gain for many "commercial" receivers with only a single stage I-F channel. Compact (only 1%" square and 3½" high); double with ceramic base, micact rimmers, with windings

tuned with dielectric trimmers, with windings of impregnated Litz wire. R.M.A. color coded leads.

Input Interstage Output

FREQ. No. 16A214 No. No. 16A216 175 kc 456 kc 16A198 16A199 16A200 Any of the above. \$1.63 Your Net Cost, Each

Your Net Cost, Each ... Phono-Osc. Coll
For easy building of
EITHER "Wireless" or
"Direct Connected"
Phono. Osc. unit for record
playing through radiosets.
Compact coil (1%" sq. and
3½" high). installs in
either radio or record
player. Knob adjusts for
clear frequency in B.C.
band. With instructions.
16A217. \$1.63 16A217.

Net, Ea. .. B.F.O. COIL



16A218. Each DI-41
DISCRIMINATOR TRANSFORMER Specially designed for operation at 4.3 mc., between the limiter and discriminator tubes in the FM. circuit. Color coded leads; mica dielectric trimmers. Can 1%"x3".

16A220. \$2.04 Each

"Cartwheel" I.F.

1-piece, molded plastie trimmer base, 456 ke. dual trimmer unit only 1%" x 1 ½" x 1½" high. Output or Input I. F. replacement for AC-DC sets.



16A233 16A238

Dowel Type Primary

To replace burned out primaries in high impedance maries in high impedance antenna coils. Universal wound on ½" dia. x ½" long dowels, moisture protected. Inductance 1700 uh. 16A234: Each Zo Majestic Replacement

Exact duplicate of original. Collonly, no can or trimmer. Used in 2nd I.F. No. 10253 or 11014 of Maj. Mod. 460.

Standard Ant. & R. F. Coils Air-core, designed to cover broad-cast band with a 365 mmfd, tuning condenser. Have high impedance primaries wound with Litz wire.

primaries wound with Litz wire. Impregnated against moisture. Shielded type in non-magnetic cans 1%" dia. x 2½" high.
Unshielded Shlelded 16A221 57c ANT. 16A222 73c 16A223 57c RF. 16A224 73c AS6 KC OSCILLATOR COILS

MEISSNER Manual

A Handy "How to Build" m mantuning condenser, or padded to the property of the condenser, or padded to the condens

Electrical Supplies for Household and Repair Needs

Motor Repair Brush Kit **Outdoor Floodlight Bracket**



Repairs All Small Motors Pleces, Carbon brushes, wicks; for most household fractional horsepower motors wacum cleaners, washers,

No. 29A25; Complete No. 29A25; Complete \$3.45 No. 20A99; En. \$1
Kit. NET EACH \$3.45 6 @ Each



WEATHER-PROOF Cadmium plated OUTLET-BOX type brack-et for ANY Re-flector, Projector, or Heat lamp Adjustable to direct beam of light in ANY direction. May direction.

be fastened di-rect to 4" outlet box, or by acrews to any surface. All steel; bakelite socket. Base 4%" dia. Wt. 1½ lbs.

No. 20A99; En. \$1.47;

"FIX-ALL" 50-PIECE APPLIANCE REPAIR KIT

Profit-making "MUST" for Profit-making "MUST" for EVERY REPAIR SHOP! Terminal parts for most ANY MAKE of electric iron; no "dead" items! In-

for, he dean items. Indexed compartment box
for QUICK location of needed parts—ALL PARTS may be replenished
as needed from fishing below. Wt. 1% lbs.
Stock No. 20A24; "FIX-ALL" IRON REPAIR KIT; Net Ea. \$3.45



TERMINAL PLUGS FOR IRONS AND APPLIANCES









		So	00	
"A"	"B"	"C"	"1	D''
":-SWITCH TYPE		PLUG; for	Appliances	and ir
tock No. 20A29; Switch at Each 29c: 10 @ E				2 (

6c "B":—Genuine "C-H" SCREWLESS PLUG; black molded, no screws Steek No. 20A82; "C-H" PLUG. 8teck No. 20A82; "C-H" PLUG.
Not Each 14c; 10 @ Each 12c "C":-Standard size HEAVY DUTY BAKELITE PLUG. Stock No. 20A83; Heavy Duty Ping; Net Bach 10c; 10 @ Each... "D":-COFFEE-MAKER and SMALL APPLIANCE PLUG, Fits "3 1b." Stock No. 29A118; 3-lb. IRON PLUG; Not Each 90; 10 @ Each... 8C

Approved Appliance-Extension-Repair Cords



"A": No. 20A1; DE LUXE 10,000 CYCLE CORD SET for ALL standard Electric Irons and Appliances—7 ft. LONG!......Ea. 88c; 5 @ Ea. 78c "A": No. 20A2; 3.000 CYCLE IRON CORD SET.....Ea, 60c; 5 @ Ea, 55c "C": No. 20A4; 6 ft. Cord Set for "SCHICK" and "KNAPP-MONARCH" "D": No. 20A113: Brown Bubber parallel complete extension cord set; 12 FT. LONG; with 3-outlet "TRIO-TAP"En. 55e; 5 @ En. 50c soft RUBBER attachment plug cap Ea. 73c; 5 @ Ea. 67c "H": No. 20.12; VACUUM CLEANER REPAIR CORD; made of 20 FT. of FLEXIBLE #18 "SV" cord; rubber plug cap.... Fa. 99c; 5 @ Fa. 92c

APPROVED ELECTRICAL CORDS IN BULK









"A": U/L APPROVED HEATER CORD; 10,000 CYCLE #18 conductors with abrasion resistant, close woven outer braid, very flexible! No. 2A80 25 FT. for \$1.25; 100 FT. for \$4.25; 250 FT. for \$7.95 "B": U/L APPROVED #18 S. J. RUBBER COVERED SUPER-SERV-

... 25 FT. for \$1.15; 100 FT. for \$3.75: 250 FT. for \$7.75 "POSJ" #18 Rubber parallel U/L APPROVED LAMP CORD; BROWN

.25 FT. for 60e; 100 FT. for \$2.15; 500 FT. for \$9.15 "D": NEW PLASTIC COVERED PARALLEL LAMP CORD IN COLORS White, Brown or Black; flame resistant, does not harden with age! No. 2A29............25 FT. for 60c; 108 FT. for \$2.15; 500 FT. for \$9.15

Switches-Cord Connectors-Push Buttons Stanles









P. TOGGLE SURFACE SWITCH; Bakelite "C": No. 20A90; 2-PIECE CORD CONNECTOR... Ea. 21c; 10 @ Ea. 18c "D": No. 20A123; 1%" Square Push Button Ea. 11c; 10 @ Ea. 9c "F": No. 20A95; INSULATED STAPLES; 100 to Box..... Per Box 15e

Iron and Heater Elements-Approved Fuses and Tape



"A":—"Buse" Clear Window Plug Fuses; packed 5 to handy carton. No. 20A54/6-Amp.; No. 20A55/10-Amp.; No. 20A56/15-Amp.
No. 20A55/20-Amp.; No. 20A56/25-Amp.; No. 20A58/30-Amp.
CHOICE OF ABOVE......Ctm. of 5 fuses, 25c; 20 ctms. for \$4.45 "B":-60 Amp. Cart. Fuses; No. 20A64 Ea. 15c; 10 for \$1,25 "C":-FRICTION TAPE, 1/2 1b. roll; No. 20A65....NET PER ROLL 35c "D":-RUBBER TAPE, 1/2 lb. roll; No. 20.166.... NET PER ROLL 45c "F":- "FITSALL" Genuine Nickel-Chrome IRON ELEMENT; for ALL 6-lb. irons using mica type element. Stock No. 20A36; "FITSALL" ELEMENT Ea. 66c; 10 @ Ea. 58c "G":--800-Watt Nickel-Chrome Wire Replacement Element; A" dla celled wire type for TOASTERS and small appliances.
Stock No. 20A111; TOASTER ELEMENT.......Ea. 17c; 10 @ Ea. 15c "G":-600-Watt Nickel-Chrome Wire Replacement Element, J2" dia. celled wire type for HOT PLATES.

coiled wire type for HOT PLATES.

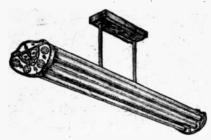
Stock No. 29A119; HOT PLATE ELEMENT.....Ea. 22c; 10 @ Ea. 19c Attachment Plug Caps--Bases--Multiple Current Taps

"A":-No. 28A28; Bakelite Handle Cap..............Ea. 8c; 25 @ Ea. 7c "B";-No. 26A91; Rubber Handle Cap...................Ea. 9c; 25 @ Ea. 8c "C":-No. 20A29; FLAT Bakellte Handle Cap...... En. 8c; 25 @ Eu. 7c "D":-No. 20A27; Brown Bakelite Pony Cap......Ea. 7c; 25 @ Ea. 6c



"A":-No. 20A84; PULL CHAIN CURRENT TAP .. Ea. 25c; 10 @ Ea. 22c "B";-No. 20A85; 3-WAY CURRENT TAP..... Ea. 16c; 10 @ Ea. 14c "C":-No. 20A121; ANGLE TWO-WAY SOCKET ... Ea. 16c; 10 @ Ea. 16c "D":-No. 20A92; PLUG-IN "TRIO TAP" Ea. 120; 10 @ Ea. 10c "E":-No. 20A122; CORD TYPE "TRIO TAP".. Ea. 11c; 10 @ Ea. 9c "F";-No. 20A80; BASE-BOARD CURRENT TAP. Ea. 16c; 10 @ Ea. 11c

Quality Fluorescent Lighting Equipment



New 1947 Royal DeLuxe **Fluorescent Lighting Units**

The ultimate in fluorescent lighting beaaty at NEW LOW PRICES! Top light output with NEW BEAUTY!

CAST GLASS END PIECES sciutillate with sparkle from

with sparkle from fluorescent tubes. FULL EFFICIENCY!

USE WHEREVER BEAUTIFUL AND EFFICIENT LIGHTING IS DESIRABLE—STORES of all kinds—OFFICES—SCHOOLS—AUTO DISPLAY ROOMS. Reflector surfaces of baked white enamel have 88% reflecting factor. CAST GLASS ENDS with high-lighted rosettes and design ADD BEAUTY—glow softly when fixture is "on". Available in 15" drop pendant or close-up ceiling types for 40-watt, 48-inch lamps or 20-watt, 24-inch lamps, 40-watt type is 49" long; 20-watt, 25" long. Pendant type illustrated. Top quality throughout, Underwriter's Approved components. All 40-watt fixtures are power factor corrected. Completely wired, ready and EASY TO HANG. Complete with Lamps

Compic			and EAST IO MA.	NG. Comi	Nete with Lamps
Stock N	o.	Lamps	Type of Fixture	Net Ea.	6 @ Each
30 A55		4-20 Watt	Ceiling Type	\$17.82	
30A56		4-20 Watt	36" Pendant	18.82	
31A205		2-40 Watt	Ceiling Type		
31A204		2-40 Watt	36" Pendant	17.82	
81A203		4-40 Watt	Ceiling Type	18.82	
31A202				29.85	
		4-40 Watt	36" Pendant	30.85	28.50
	(All	the above m	ay be assorted to o	bt ain quantity	prices.)

HI-EFFICIENCY "PLUG-IN" FLUORESCENT UNITS

The "Double Forty"

★ HANGS IN ANY POSITION

"PLUGS-IN" ANY OUTLET * UNDERWRITER'S

APPROVED

Repeals 200 to 300 watts of old style incandescent lighting. NEW DEBIGN ALL STEEL unit; reflector is engineered for rugged durability
and high efficiency lighting; is finished in hard-baked white enamel;
complies with E. T. L. reflectivity requirements. Starter switches on
side of wiring channel for EASY replacement when necessary. InSTANT-LATCH releases reflector from chassis by quarter turn of
atch; permits access to ballasts and wiring if necessary. Rigidly reinforced socket mountings hold lamps and sockets always "in line".
HIGH POWER FACTOR ballasts, stroboscopic corrected. Exterior of
unit finished in pleasing gray enamel. Size, 7" high, 13%" wide, 50"
long. Shipping weight, with lamps, 38 lbs. COMPLETE with 6 ft. cord
and plug, not attached.

Stock No. "DOUBLE FORTY UNIT" Net \$17.85 6@ \$15.99 APPROVED

"Double-Twenty" Plug-In Unit Hang Anywhere in a "Jiffy"

No Installation Cost
Gives MORE LIGHT
than 100-watt incandescent. Approved components throughout.
White synthetic enam-

white synthetic enamel finished reflector shaped to spread light over wide area. Easy to hang with chains, wire, or cord-cord; plugs into any outlet. Size 25½" long, 9½" wide, 5½" s¼ iha

No. 30A60—"Double Twenty" Industrial Unit.

Complete With Lamps, NET EACH \$8.28 6 @ EA.......

New "Strip-Lite" Units

15-20-30 OR 40 WATT TYPES

Ideal for modernizing lighting in almost ANY location. EASY TO INSTAIL. either singly, or end-understand types use lamps 1½" in diameter, allowing combinations for any length of "In-Line" lighting! MAY BE USED AS WALL BRACKETS by turning fixture "on end". WIDELY USED in STORES and SHOWROOMS, over WORK BENCHES; and for WINDOW and SHOW CASE lighting, or in basements. All sizes are made of HEAVY GAUGE STEEL with reflecting surfaces of hard-bake, high reflectivity, WHITE ENAMEL. Cord and plug listed below may be quickly wired to these valts to convert ANY of them to "PLUG-IN" types that may be used INSTANTLY wherever an electric outlet is available! UNDERWRITER'S APPROVED ballasts and wiring components used throughout. DIMENSIONS: all units 2½" long x 2" high; LENGTHS are 19½" for 15 watt, wt. 5 lbs.; 25½" for 20 watt, wt. 6 lbs.; 37½" for 30 watt, wt. 8 lbs.; and 49½" for 40 watt, wt. 10 lbs. ALL UNITS LISTED are wired complete ready to install.

Stock No. "Strip-Lite" Type NET EA. LOTS OF 6 EA. \$1A15 For 15-watt, 18" lamp \$4.08 \$1A16 For 20-watt, 24" lamp \$4.71 \$4.33 \$1A206 For 30-watt, 36" lamp \$6.55 \$6.53 \$1A207 For 40-watt, 48" lamp \$6.55 \$6.53 \$1A207 For 40-watt, 48" lamp \$7.53 \$1A207

For 40-watt, 48" lamp 7.53
20A120. 6-FOOT, #18 RUBBER COVERED CORD & PLUG. NET EA.

PRICES FOR FILTORESCENT FIXTURES listed on this page LESS LAMPS. DEDUCT from prices shown, the following amounts PER LAMP:—480 for each 15-watt lamp; 58e for each 20-watt lamp; 58e for each 30-watt lamp; 78e for each 40-watt lamp.

"STARLIGHT" Pluorescent BED LAMP





For comfortable and safe "reading in bed."

HAS NO EQUAL for REAL reading comfort—

cool, eye-saving FLUORESCENT light rays
are directed at exactly the RIGHT angle and
concentrated to give ABUNDANT LIGHT on
reading surface, without shining throughout
the entire room. Fluorescent light is GLARE—

LESS LIGHT—far cooler than ordinary light—

shadowless and restful! Pleasing STREAM—

line design with body of lamp in ElTHER

rich Walnut Grain or Ivory plastic—blends
perfectly into the contours of ANY bed—

rubber covered hook-over brackets won't

scratch the finest finish. 8-WATT type T-5 fluorescent lamp is only
12" long and %" dlameter—yet EQUALS old style incandescent lamps
of 40 or more watts. Sturdy metal back prevents breakage and provides mounting for handy PUSH SWITCH, Over-all size, 15" long, 2"

high, extends 3" out from bed. Wt. 2 lbs. Complete with 7½'c cord,

plug, AND 8-WATT LAMP.

Walnut

Ivory

List, Net QE QO 12 @ DE 400

Ivory No. 32A216 Net \$5.83 Ea. \$5.43 List, No. 32A215 (NOTE: Above BED LAMPS may be assorted for quantity price.)

DE LUXE "DOUBLE-TWENTY"



"Fitter Adapter" type — Instantly installed to ANY 4-inch standard shade holder; no wring of any kind to do!
"Permanent mounting type—for easy

"Permanent mounting type—for easy installation DIRECT to outlet box or wires in ceiling of room; canopy of fixture covers wire connections and outlet box. "SOFT-GLOW" CAST GLASS END PIECES "dress up" fixture—give off subdued light when fixture is lighted—LEND BEAUTY to ANY ROOM whether Kitchen, Bedroom, Den, Hall, Dining Room, or OFFICE! Quality construction throughout—U/L APPROVED components, heavy steel body, baked snow-white enamel for maximum light output. TWO 20-WATT LAMPS will FLOOD the average kitchen or other room with shadowless light. Size, 24½" long, 6" wide, 4½" high. COMPLETE WITH LAMPS, List Price, \$14.87. Price, \$14.37.

DE LUXE ADAPTER TYPE UNIT
Y With Lamps, \$7.54 6@ \$7.11 No. 30A57; for ANY 4-inch shade holder

DE LUXE CEILING TYPE UNIT
rmanent With Lamps, \$7.54 6@ \$7.11 No. 30A116; for permanent With Lamps installation to ANY outlet... Net Ea.....



"STREAMLINER" - Hinged

"STREAMLINER" — Hinged End adapter unit for two 20 - WATT LAMPS, INSTALLS INSTANTLY to ANY 4-inch shade holder; merely plug into old lamp socket and it's ready to go! SELF-LOCKING in shade holder; HINGED METAL ENDS turn "up" to allow re-lamping without removing end pieces; starter switch sockets in ends of unit. U/L APPROVED component parts, heavy metal hody finished in "Liquid Plastic" white enamel, List Price, WITH LAMPS, \$9,91. heavy metal body finished ...
rice, WITH LAMPS, \$9.91.
No. 30A58;
With Lamps, Fa.

With Lamps, Fa.

With Lamps, Fa.

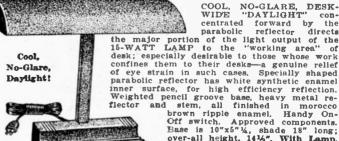
Stock No. 30A58; "STREAMLINER"

Super Value 2-20 Watt "Plug-In" ADAPTER UNIT



A new unit in a design engineered for MAXIMUM LIGHT OUTPUT! Easy to install to any 4" shade holder, no wiring required. Anchored lamp holders maintain spacing so lamps can't fall out! U/L approved components; heavy steel body 25"x6"x3'½"; SUPER-WHITE baked enamel finish; 6'½" connect-WITH LAMPS, \$9.91.

SUPER LIGHT DAYLIGHT DESK LAMP



centrated forward by the parabolic reflector directs of the light centrated forward by the parabolic reflector directs the major portion of the light output of the 15-WATT LAMP to the "working area" of desk; especially desirable to those whose work confines them to their desks—a genuine relief of eye strain in such cases. Specially shaped parabolic reflector has white synthetic enamel inner surface, for high efficiency reflection. Weighted pencil groove base, heavy metal reflector and stem, all finished in morocco brown ripple enamel. Handy On-Off switch. Approved components. Base is 10"x5", shade 18" long; over-all height, 14½". With Lamp. Stk. No. 36A76.

Stk. No. 30A76. Ea. \$6.23; 6 @ EA....\$5.87

Sylvania Fluorescent-Germicidal Incandescent Lamps

"Daylight" and "3500° White" Fluorescent Lamps All prices include Federal Excise Tax.

Stk. No. Stk. No. Watts Type Price Each Each	24 @
	Each
20A676 20A677 6 T- 5 \$0.81 \$0.73 \$0.62 \$	0.58
20A678 80A679 8 T- 6 .91 .80 .70	.66
20A678	.66 ,58
20A682 20A683 15 T-8 .67 .61 .52	.48
20A684 20A685 15 T-12 .81)	
20A686 20A687 20 T-12 .81 .73 .62	.58
34A1 34A2 80 T-8 81 • 13 • 02	a U
\$4A3 34A4 40 T-12 1.08 .98 .83	.78
34A6 34A7 100 T-17 2.47 2.24 1.89	1.78

"SYLVANIA" GERMICIDAL LAMPS

NOT designed or suitable for lighting, these lamps emit ULTRA-VIO-LET RAYS for killing airborne or surface germs; the BEST for use and replacement in ANY type or make of Germicidal Fixture; or will operate in ANY fluorescent fixture designed for 15 or 30-watt lamps. CARE must be taken to protect eyes and skin from continuous direct exposure to these lamps! Average life is 2500 hours on-off use, or 4000 hours continuous use. Type "A" Germicidal Lamps emit ONLY Ultra-Violet rays. Type "B" Germicidal Lamps emit MAXIMUM Ultra-Violet rays, PLUS small amounts of Ozone Gas, developed from oxygen in the air; to clear air of smoke or foul odors.

Stock	Lamp	Lamp	Lamp	List	Net	6 @	24 @
No.	Туре	Watts	Size	Price	Ea.	Ea.	Ea.
84A9	"A"	15	18"-T8	\$4.50	\$8.82	\$3.48	\$3.15
84A10	"A"	30	36"-T8	6.75	5.74	5,06	4.78
84A11	"B"	15	18"-T8	4.50	3.82	3.48	3.15
84A12	"A"	30	36"-T8	6.75	5,74	5.06	4.73



"Sylvania" Infra-Red "Heat Lamps" "Sylvania" infra-Red "Heat Lamps"

NEW, General purpose, INFRA - RED HEAT

LAMP—screws into ANY ordinary lamp socket—

to provide INSTANT, PENETRATING HEAT for treatment of sprains, aches and pains; heat small rooms, dry paint, thaw frosen pipes, warm cold motors, heat brooders, dry films, clothes, etc. Type R-40; 250 watts, 120 volts.

No. List, Net \$1.06 12@ \$.88

Outdoor Reflector Lamps

PAR-88 Weatherproof Spot or Floodiamp for OUTDOOR USE. 150-WATT. Built - in silvered reflector; skirted standard s.cr base, 120 volt, BCTOW Type Spot

20A697



Your Choice NET, EA. 12 @ EA. \$1:36 49c

I.E.S. 3-Light Lamps

Used in thousands of E.S. "Better Sight" Lamps in homes and offices, 3-contact Mogul bases; 120 volt. Inside frosted. List 69c Inc.

> No. 20A699 (100-200-300)

Not, Ea. 24 for

\$10.23



"Sylvania" HOUSE LAMPS New "Handy-5" Package

New "Handy-5" Package
5 LAMPS OF A SIZE IN "EGG
CRATE" PACKAGE — revolutionises lamp sales, eliminates breakage, each lamp in in divid u al
"nest"; "HANDY 5" keeps lamps
safe until used!
No. 20A689; 25-Watt, 120-Velt.
No. 29A690; 40-Watt, 120-Velt.
No. 20A691; 60-Watt, 120-Velt.

49c 12 Pkgs. 46c % Pkgs. 44c @ Each

"SYLVANIA" 10-15-75-100-150-200 WATT LAMPS; Packed 6 to carton.

	All lamps 120	voit; all Prices	merune	Excise Inx.	
Stock	LAMP	List	6 Lamps		120 Lamps
No.	Watts Finish	Price Ea.	FOR	FOR	FOR
20A692	10 Clear	15c	\$.73	\$ 6.90	\$12.96
20.4693	15 Inside Fr.	12c	.59	5.55	10.44
20.1116	75 Inside Fr.	16c	.78	7.35	13.80
20A694	100 Inside Fr.	16c	.78	7.35	13.80
20A 695	150 Inside Fr.	22c	1.08	10.90	
20 A 696	200 Inside Fr.	29c	1,42	13.54	
201117	200 Clear	29c	1.42	12.54	

"Sylvania" "COP-4" and "Mirastat" Starter Switches

"COP-4" Starter Switch WITH RE-SET BUTTON.
all 40-watt lamps; eliminates "flashing" by cut
out dead lamps—saves ballasts! by cutting all 40-watt lan Net Ea. 10 @ Ea. 50 @ Ea. No.

59c **52c** 45c

"MRASTAT" Starter Switches; re-start lamps on current interruption by exclusive, built-in TIMING DE-VICE. Will operate on DC current.

at" Type For Lamp Net, Ea. 10 @ Ea. 50 @ Ea.

16 or 20 watt 33 c 29 c 25 c

100 Watt T-17 660 580 540 Cat. No. "Mirastat" 20A68

Popular "Nu-Tone" DOOR CHIMES









"A"

"B"

List \$3.95: NET

ALL 2-DOOR MODELS-1 tone for front and 1 for rear door

ALL 3-DOOR MODELS—I tone for front and 1 for rear door—perate on EITHER 8 dry cells or on AC with 10-volt transformer, listed below. EVERY MODEL is "Tops" in quality and sales appeal! "A"—NuTone "LEADER"; Streamline, stunning CHROME Louvre and trim strips over gleaming, baked white enamel finish. Easy to install in restricted spaces, size only \$\%\"x4\%\"x2\%\".

Stock No. 33A201; "NuTone LEADER" Chime,

"B"—Nu-Tone COMMANDER; Rich, lustrous WHITE PLASTIC with CHROME TUBES sounds two rich, vibrant tones for front door, 1 tone for rear door, Size, 7%" wide, 6%" high, 2%" deep; wt. 2½ lbs.

Stock No. "NuTone" COMMANDER 2-DOOR

WINGTON COMMANDER 2-DOOR

Not QA 17 Not \$4.17 33A202 CHROME & PLASTIC CHIME, List \$5.95.

"C"—Nu-Tone DELUXE; Gorgeous short-tube beauty in glistening white enamel with CHROME tubes and trim; ideal for hallway, kitchen or breakfast nook. Steel body with brass, chrome plated resonant tubes sound 2 chime notes for front and 1 for rear door. Size, 12%" high, 6%" wide, 2%" deep. Wt. 8 lbs.

Stock No. "NuTone" DE LUXE 2-DOOR WHITE Net \$4.87

"D"—NuTone MT. VERNON; Elegant, Colonial 2-door HAMMERED BRASS chime with matching brass tubes; 2 stately tones for front and 1 tone for rear door. A real beauty for most any location. Size, 11½" high, 7½" wide, 3½" deep. Wt. 3 lbs.

Stock No. "NuTone" MOUNT VERNON

HAMMERED BRASS CHIME TIME TO SEE \$ 57

"Nutone" MOUNT VERNON Net HAMMERED BRASS CHIME. List \$7.95... Ea. \$5.57

Sessions ELECTRIC CLOCKS









ern"

"SESSIONS" SELF-STARTING ELECTRIC CLOCKS are the "last word" "SESSIONS" SELF-STARTING ELECTRIC CLOCKS are the "last word" in modern styling, accuracy and lasting performance. Federal Excise Tax of 20% on the LIST PRICE applies on ALL Electric Clocks and MUST be collected by the Retailer and remitted to the Government. WE DO NOT COLLECT THE TAX! "A":—Model 386K; White Plastic wall clock has 5" square dial and convenient bottom set knob. Size, 7"x7"/±". List \$4.70.

Stock No. 38A223; MODEL 386K. Ea. \$3.26 & \$2.96

"B":—Model 339K; White Plastic case "TEAPOT" Kitchen Wall Clock; 4" banded dial; bottom set knob. Size, 8\%" wide, 7" high. List \$4.95. Net \$3.33 6 6 2 \$3.12

Stock No. 33A205; MODEL 339K "C":—Model 451D; Ivory Plastic Desk or Bedroom Clock, has 3\%" banded Metal Dial. Size, 7\%" wide, 4\%" high. List \$4.60.

Net \$3.20 6 Ea. \$2.90

"D":—Model 438W; 14-INCH METAL DIAL WALL CLOCK with black and gilt lacquered numerals. Time set knob. BLACK PLASTIC CASE 17" in diameter. A fine clock for Office or Business. List Price, \$13.65.

Stock No. 33A224; MODEL 438W ... Ea. \$8.99 & Ea. \$8.18

"Sessions" Electric Desk Clock



"Marine" and popular New design case with SELF
STARTING electric time
movement. Large, 4-inch
METAL DIAL with outline, METAL DIAL with outline, easy-to-read numerals; sweep second hand. Polished BRASS spindles and rich MAHOG-ANY finish case — a FINE DESK CLOCK and popular for many other locations in homes. Size 6%" wide, 7%" high.

Stock No. 33A214. "SESSIONS" Model 456D Desk Clock. List Price, \$10.20.. Ea. \$6.74 Ea. \$6.13

FLYER—If you have CHANGEL YOUR ADDRESS—PLEASE "drop us a line", giving us BOTH your old and new addresses to insure your receiving ALL "B-A" CATALOGS AND BARGAIN FLYERS. Thank You: DON'T MISS A SINGLE "B-A" CATALOG

Door Chime Transformer



thermal enternal thermal cut-out prevents burnout. Reduces 110 V AC to 10 voits.

No. 20A71. Each. \$1.50

Sensational **WIRE BARGAINS!**



For lead-in wire it can't be excelled. Also ideal for telephone, intercom, etc., needs. Single conductor, consist of 7 tinned wires (3 Copper, 4 Steel) equal to size 16, rubber covered with over-all covering of weatherproof saturated cotton braid. Hy" O. D., flexible and unusually strong. Made under most rigid specs for Army Field Wire, the cost was many times the ridiculous price we show. A huge B-A Surplus Purchase brings it to B-A Surplus Purchase brings it to

you. No. Per 450 Ft. Coil...... \$1.95 No. 4A502, S3.45
Per 900 Ft. Coil S3.45
All BRAND-NEW in Original Factory put up coil and tags. 3 Conductor

As above except 3 twisted conductors like standard telephone wire. Ideal for outdoor or indoor telephone and intercom wire needs. Per 555 Ft. Coil \$5.95

2 MFD. 1000 V. D.C. Oil Filled Condenser C D Type TLA



In hermetically 🙈 a led round aluminum can size
115"24"5". Standard inverted mtg. with threaded neck thru %" hole.
One terminal is well in-Sulated, the other being the can itself, Often used to replace up to 8 mfd, electrolytics in amplifiers, etc. Regular List Prica Value \$4.00.

No. 18A890, Limited Quantity.
Special Ea.95C

4 MFD. 600 V. D.C. Oil Filled Condenser

In round aluminum can like above, Standard quality make, Often used to replace up to 16 mfd. electro-lytics. Regular List Price Value No. 18A891. Special Each... 95C

5 MFD. 600 Volt Oil Filled Condenser



Hermetically sealed in rectangular metal cans with stand-off insulators for flash protection. Metal can size 4%"x1%"x1".

No. 18A366. Special Each ... 95c

6 or 12 VOLT G. E. DYNAMOTOR



Designed for 12 V. D.C. input, 550 volts D.C. output at 85 ma. Continuous duty. Converts to 6 volt input, quickly and simply, with the instructions included. The output is then 250 volts at 85 ma—can be loaded up to 100 ma with only 10 volt drop, Will operate a receiver as large as the Halliersfters S-40 or any mobile gear within these ratings. A G.E. product, well engineered, runs quietly with little vibration. Brand New in Original Factory Cartons. No. 3A88. Regularly about \$50. Spec. Ea. \$7.95

Feature Values, in SELECTED SURPLUS

Here and on the following pages are many unusual values . . . BUY THEM WITH CONFIDENCE . . . with

assurance that from B-A . . . even the at ridiculously LOW PRICES . . . you will get BRAND-NEW, TOP QUALITY GOODS.

Within the "mountains" of war surplus materials on the market, bear in mind that much of it is "war weary," having been "kicked" around subject to weather, rough handling, etc.; other of it has been used and then again, there are gobs of it that are Army and Navy rejects there are gobs of it that are Army and Navy rejects, etc., etc.

B-A Purchases are made Only from those portions that were declared surplus while still in the makers' hands . . . and therefore still new, clean, in the best of condition . . . perfect in every respect. Our prices, therefore, on surplus, may not always be the lowest BUT on surplus, may not always be the lowest . YOU CAN "BANK" on it . . . the items w YOU CAN "BANK" on it . . . the items will be right . . . A BIGGER BARGAIN . . . quality considered.

Exact Replacement for "GE" Portables WILLARD 2 VOLT STORAGE BATTERY

AT RIDICULOUS LOW PRICE AT RIDICULOUS LOW PRICE Finest quality, long life storage battery encased in attractive Clear Plastic Spill-Proof Case. Much in demand as exact replacement for Model #530 "GE" Portable Radio. Has ball float charge in dicator and well marked terminals with screw type connections. Rating 20 AH. Gangs nicely for other voltages in multiples of 2' volts. Shipped dry. Uses standard battery electrolyte, available everywhere. Size 3½x3½"x 5½" high. Every one BRAND NEW in individual factory cartons. Large in individual factory cartons. Large surplus purchase makes possible our CRAZY LOW PRICE.
No. 5A142. Model 20-2. While They Last, Each... \$3.95



6 Volt OVAL AUTO SPEAKER



61/2" x 9" x 4" deep, exact replacement for a number of General Motors Auto Radios as well as others. No. 14A640. Special Each

DIAL CABLE
Shur grip. 25 ft. hank, medium
size braided silk.
18A889, Special Ea......39C

OUTPUT TRANSFORMER



2000 ohm pri to couple one tube of following types to 3 or 4 ohm voice coil: 25L6, 35L6, 50L6, 50A5, 70L7. 2" mounting ter x 1 1/4" high

18A888. 68c Special Each

WESTON 0-500 D.C. Milliammeter

Milliammeter

Model 301 standard 3-inch
round panel type. Every one
Brand New, of course, and
packed in Original MoistureProof Cartons. List Price \$3.00.

17A418. Lim. Quan.
\$3.95

0-150 AC VOLTMETER Made by Hickock to Army-Navy spec. Mounts in 2%" hole, has spec. Mo-14" flange. %" flange, 17A415, Special Each \$2.75

\$300 Dynamotor Power Supply for \$13.95

Continuous Duty Rating 500 Volts at 160 Mils DC From Any 6 or 12 Voit Battery

Assembled on shock mounted base which houses solenoid relays, 1 high and 2 low voltage circuit breakers, DC and RF filters, and many other high quality parts. Can be safely loaded beyond 160 MA on intermittent service. Ideally suited for operation of portable areasmitters, public ad-

ly suited for operation of portable mobile transmitters, public address systems and marine transmitters. Input 6 Volte at 21 amps. or 12 V. at 11 amps. or 12 V. at 11 amps. Comes complete with battery cables. BRAND-NEW in ORIGINAL CRATES. Wt. approx. 83 lbs. Made by A Leading Dynamotor Manufacturer at a Government cost of \$300.00, Stock No. 1A50. Type PE 103.

NOW WHILE THEY LAST, SPECIAL EACH. \$13.95

SAVE! On FINEST GRADE INSULATED RESISTORS

Standard RMA Color Coded, well known quality brands. In ohmages ONLY as listed.

02477	an inten.				
25	Watt	1 . 1	Watt		
Ohms	Stk. No.	Ohms	Stk. No.		
68 150	18A892	47	18A907		
150	18.A.893	47 68	18A90¢		
18,0 560	18A894	100	18A909		
		390	18A910		
1500		1000	18A911		
2200	18A897	1500	18A912.		
2500	18A898	2000	18A913		
3600	18.A899	2200	18A914		
9100	18A900	3000	18A915		
15,000		4700	18A916		
25,000		6800	18A917		
51,000	18.4903	10,000	18A918		
	18A904	20,000	18A919		
2.2 Meg.		22,000	· 18A920		
4.7 Meg.		27,000	18A921		
⅓ W a	tt. Any	33,000	18A92P		
size as	listed.	56,000	18 A928		
Per Pkg		68,000	18A924		
of 10	∴ 25c	100,000			
	- 1	120,000			
	, Any Size	150,000	18A927		
as liste		250,000			
Per Pkg	250	470,000			
of 10		1 Meg.	18A93 0		
Also so	ald in Bull	ı—Mini	num Lote		
of 100 each value.					
7/2 Watt Per 100 Only ♥ 4. UU					
1 Watt size. Per 100 Only \$3.00					
Givo Resistance and Stock Numbers					
From List Above.					

Kenyon Swinging Choke 4-24 Hv at 400 Wa

Maximum 10.000 V. Insulation 50 ohm DC

A Bargain

Resistance Designed for commercial continuous service. Fully enclosed, with ceramic terminals. Over-all size ceramic terminals. 10"x6½"x6". Wt. 3 Wt. 3114 lbs.

\$10.95

JOHNSON Type F Dual Variable



270 Mmfd. Max., 13 Min., 33 plates per section .045" spacing. Features .032" heavy aluminum plates rounded and buffed, %" aluminum tierods, ultra steatite insulation, stator mounted above to reduce capacity to ground, heavy phosphor bronze centact springs, center contact, chassis or panel mounting. %" shaft extends 1½" at front, %" in rear for ganging or rear drive. Panel space required only 2½" wide x 2" high x 7½" long. Panel space required only $2\frac{1}{16}$ " wide x 2" high x $7\frac{1}{12}$ " long. No. 18A510, \$10.00 Liast. Limited Quan. Spec. Ea.

Momentary Type C H Toggle Switches BARGAIN PRICED



Flush mounting plates attached. Rated at 5 amps, 125 volt AC., 85 amps at 24 volts. (A) Normally off, In "ON" position

with lever held down, spring return to "OFF" when released. to "ON" when released.
No. 18A27. Special Each.

Your Money Cando Triple Duty HERE!



Bakelite Knob

1½" black bakelite knob with 2½" dia. flange, brase bushed for ½" shaft.
No. 184523.
Special Each 20c

No. 18A520. Identical to above except 1" dia, knob and 1\%" dia. flange. Each15c



Tapered Knob

Black bakelite, 1%" dia. at top, 2%" at base, Brass bushed for %" shaft, with set

No. 18A521. Special Each	25c
No. 18A522, like above, 1%"	dia, at
top, 2" at base for \(\frac{8}{18}\)" shaft. Special Each \(\ldots\)	15c
anare obecass meen	



E'ZEE Grip **Bakelite Knob** 14" dia. at base. Metal bushed. For shaft.

17A279. 15c Spec. Ea. 18A5z4, as 18A524, as above except round tapered knob. 10c



Bakelite Knob

1" dia., black.
For 4" shaft
with set screw.
18A222.
Spec., Ea. 15C



Indicator Knob

Marked 1 to 9. Black bakelite 1¼" dia. Has metal hub for two set screws. For ¼" shaft.

Special, Each 12c



All Purpose **Bakelite Knob**

1%" dia.. for %" shafts. Brass bushed



Pointer Knob

Moulded black, fits 4," shaft. Metal bushed with two Allen set screws. A sturdy, good looking knob.

11/2" Dla. Ea. 10c

No. 18A281. 1½" Dia. Ea.10c No. 18A282, 2½" Dia. Ea.20c



Pointer Knobs

Black bakelite, 14" long. For 4" shaft, Go well with plates listed helow.

18A173. Spec., Ea.8c



Diai Plates

0-100, 270°; made of heavy etched brass with real chromium highlights and background. Dia. 1%". 10c

10,000 Ohm, 10 Watt OHMITE "Brown Devil" RESISTORS

This popular resistor needs no introduction and will be recognized by all who use resistors ONE OUTSTANDING VALas UE.

No. 18A884. Pkg. of THREE....49C

LIGHT PANEL



At Ridiculously Low Prices

Bulbs accessible from front on all models shown. Fig. 1 uses 110 Volt type 86 lamp (Fig. 9), all others use any regular T3%

110 Voit type 86 lamp (Fig. 9). all others miniature bayonet base single contact bulb.

1—110 V., fully enclosed, porcelain and brass nickel plated.

Underwriters approved. For single 1" hole mounting, any thickness panel. Over-all length 2½". Lens 1" dia, Uses Fig. 9 Lamp illustrated.

18A181. Clear Lens.

18A181. Clear Lens.

Choice, Ea, (less bulb) 50 C
2—Variable 1ight intensity is possible by means of swivel in Jewel holder. Adjustable to a variety of panel thickness, extends 1%" behind panel, Has ½" plain red jewel.

18A527. Special Ea. ... 45 C 45c 18A527. Special Ea. S—A very popular type. Supplied with two fibre washers to adjust to various panel thickness up to ¼". Extends 1½" behind panel. Has ½" plain red jewel.

benind panel. Has ½" plain red jewel.

18A528. Special Ea...... 25C

4—Requires only %" panel hole.

Extends back 1½". Lens assembly removable at front and so arranged that brillance of light coming thru lens can be

varied.
18A182, Green Lens.
18A183, Red Lens.
18A886, Amber Lens.
18A886, Amber Lens.
25C

5—Full view type. Plastic hood gives visibility from all sides.
Suitable for Neon NE51 bulb or standard T3½ miniature bayonet base S. C. lamp. For various panel thickness up to %". Very compact, fully enclosed bulb.
Stock No. 18A529, Your Cost Only

6—An especially attractive as-sembly fully enclosing the bulb. Vesy compact yet suitable for panels up to ¼" thick. Has ½" red jewel. Holder on swivel to allow variation of fight inten-17A281, Real Buy, Only 25c

7—Made of bakelite, mounts on front of panel with screws and extends back 2". Faceted red lens pulls forward on springs and swings out of place for front removal of bulb. 18A193, Special, Net Ea. 35C

8—Mounts on front of panel with screws. Extends back thru panel 1½". Bulb removable from front under opai glass hood. Comes complete with 14 V.G.E. 1488 bulb in which place any miniature 8.C. bayonet bace bulb can be used. 25 C



(1) For bulbs. B miniature bayonet S.C. Bakelite socket with bracket for mounting in any position.

(2) For miniature screw base bulbs. Has 14" bracket with clip for mounting in any position. 10c 18A187, Each

HANDY ASSORTMENT **Pilot Light Sockets**

10 Assorted various types pilot light sockets. 45c 18A188



24 and 28 V. Bulbs S.C. Miniature Bayonet Base

Ridiculous LOW PRICE

Type 1818, 24 V., .17 Amp. 18A194. Per Box of 10.... 45C Type 1819, 28 V., .17 Amp. 45c



21/2 and 5 Meter R F **Plate** Chokes

13.84 uh D.O. ohms 1.64. Size 1% %". Wound with 110 turns 33SS on steatite form.

tanned. .25c 18A562, Special Eta.

Ohmite Parasitic P300 SUPPRESSOR



Designed to prevent nn-wanted ultra High frequency parasitic os-cillations

which occur in the plate and grid leads of push pull cir-cults. The parasitic are summer without loss of driving power. P300 is a noninductive vitreous—enameled resistor combined with a choke into one small integral unit, only 1%" long x %" dia. A \$1.50 List Value.

Midget RF Chokes

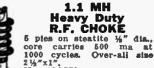


A, 2.5 mh.; 50 ohms D. C. resistance, 125 ma. capacity. Mounts with wire leads or steatite etand-18A129. Special, Ea. 15C



Heavy Duty RF Choke 65c

rigs working in 20 For hi-power 49, 80 and 160 meter bands. pies on Isolantite core carry ma., continuous. Inductance CRITY 500 ma., continuous. Inductance 2.5 mh., D. C. res. 8 ohms. For paraltel feed. Effective from 1,500 39,000 kc. Priced at a deep from usual. 18A180. Special, Ea. 65c



No. 18.4550.

SPECIAL EACH .. 45C



10 MH R.F. Choke General Purpose Use.

Wound on 1-piece ceramic dowel and base. Over-all size 1" dia., %"

nigh. 18A553, Special Each **25**C

1.5 MH RF Choke 21 Ohme, 125 MA. Wound on impregnated wood dowel fastened to 1" dia. hakelite to

wood dowel fastened te
1" dia. bakelite terminal plate, with solder
lugs. Mounts with 6-32
screws, Very compact.
Over-all size "" high, 1%" dia.
Thoroughly impregnated against

18A554, SPECIAL EA. 12c



Midget RF Chokes

Wound on %"x1" bakelite core, threaded for \$-32 screw mounting. Coil 15" dia. Theroughly immounting. Coil far dia. Theroughly impregnated against molsture, Ideal for High Frequen-

cy use. 18A555 CHOICE 75 nh200 uh250 uh 18A556 EACH 18A557 10c .500 uh 18A558 18A558500 un **LUU** 18A559, 1 MH RF Choke, construction like above,



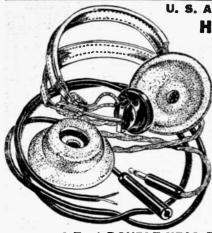
10 MH RF

Choke

Wound on Alsimag
Ceramic form 1½"
tong x ½" dia. coil
dia., ½", 95 ohm
DC resistance, 125
ma, A Real Buy

on a quality RF choke. Value. 18A593. Special Each65C on a quality RF choke. 18A560, While They Last, Ea. 30C

War Surpluspriced without regard to regular Value



U. S. ARMY SIGNAL CORPS **HEAD PHONES**

> Highly sensitive-8000 ohms impedance. Bi-polar magnets with finest quality bakelite shell and cap. Head band fully adjustable, leather covered spring steel. Cord connects from one side completely out of the way. Rubber removable ear cushions of most comfortable design. Supplied complete with desupplied complete with detachable rubber covered cord 5½ feet long. Comparable to finest quality Professional Phones selling up to \$12.50. BRAND NEW, in original carton,

No. 17A37, Special, \$2.49 While They Last ...

6 Foot DOUBLE HEAD PHONE CORD

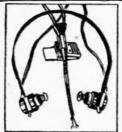
Top quality standard double head phone cord 6 feet long. Has tips to quickly insert into above and similar type phones with standard phone tips at loose end.

No. 18A888, EACH

41C

Type HS 30 HEADSET

Sensitivity of these phones is comparable to commercial Head Phones of Low Impedance type. Constructed similar to commercial hearing aid receivers. Mounted on a comfortable light metal band, easily shaped to fit the contour of the head. 120 ohms impedance plus or minus 6% at 400 cycles. D.C. resistance 80 ohms. Ear-fitting rubber cushions the receiver buttons proper Cord is V sistance so onms. Ear-lifting rubber cusnions fit on the receiver buttons proper. Cord is Y shaped 2 conductor flexible rubber with a clothing clip at the Y junction. An extra pair of ear cushions are included. Offered at a very small fraction of Gov't. cost. \$1.95



HIGH IMPEDANCE Type HS 30 HEADSET

As above, with matching transformer that makes it a high impedance phone of 8000 ohms. Comes complete with 6 ft, extension cord and plugs. \$2.95



U. S. ARMY SIGNAL CORPS THROAT **MICROPHONE**

To be worn around neck. Consist of two carbon mike buttons in molded rubber throat pieces. Designed especially to pick up speech and exclude outside noise. Can be used with any low gain amplifier. Requires 50 to 100 ohm mike transformer and any 4½-volt battery. Current drain 100 ma. Has many possibilities for PA, Amateur and Experimental amplications. Experimental applications.

PRICED AT A MERE FRACTION OF ITS PRODUCTION COST. Supplied complete as shown. 95c

17A39. SPECIAL EACH EVERY ONE BRAND NEW



and Switch Assembly

For use with throat mike listed above. 18A885, 95c

ARBON MIKE BUTTON



As used ln above throat mike. Picks up noise or speech up noise or speech from any vibrating surface. A swell gad-get for those interested in experi-

menting with detectophones, contact mikes and similar applications, 17A40, AT THE RIDICULOUS

25C EACH PRICE OF . 10 WATT "KOOLOHM"



Wire Wound 1 ohm. Tinned wire leads. No. 18A931.

KEY BARGAIN!



A top quality (\$5.00 List Value) Code practice key, priced at a fraction of original cost. Mounted on triple X bakelite base, ½" thick, 4½" long and 3" wide. Binding post and contacts insulated with bakelite washers. Fully adjustable, well balanced operating lever. All tension and adjusting screws are knurled. Has positive contact shorting spring. Contacts are of high grade tungsten securely fastened to eliminate any chance of becoming loose in operation. Ideal for keying amateur transmitters.

mitters.
No. 17A88, Every One BRAND
NEW in Original Factory
Cartons. Special Each 95C

TRANSFORMERS and Chokes BARGAIN PRICED

Secured from A&N contract termination, ALL BRAND NEW and built, for service under most adverse conditions.



Filament Transformer. Primary input 110 Volta 60 cycle. Secondary 5 Volt C.T. at 10 amps or primary input 220-240 Volts, secondary 10 Volts C.T. at 10 amps, 2000 Volt insulation with heavy duty solder terminals. Fully encased in greyenameled heavy metal case 4% x3% x5" with mounting holes tapped for standard screws.

Filament Transformer. Primary input 200, 220 or 240 Volts, 60 cycles. Secondaries 5 Volts at 3 amps, 2.5 Volts at 10 amps. Secondary terminals on insulated bushings for high Voltage uses, Fully encased in grey enameled heavy metal case 34, "x3\\\ "x4\\ " with mounting holes tapped for standard machine screws.

3A73, SPECIAL EACH.



with threaded mounting studs. \$3.95

Power Transformer. Frequency 400 to 2600 C.P.8. Primary 80 or 115 Volts. Secondaries; 916 Volts C.T. at 500 M.A., 5 Volts at 4 amps, 8 Volts at 2 amps, Fully encased in black enameled heavy metal case 33 "x44" "x54", with standard thread-ed mounting studs.

ed mounting studs.

3.476, SPECIAL EACH
Power Transformer. Frequency 50-70 cycles, Primary 115 or 230 Volts. Secondaries 6.8 Volts at 9 amps, 6.3 Volts at 2.5 amps, 5 Volts at 3 amps, 766 Volts C.T. at 155 M.A. All terminals on high Voltage bushings. Fully enclosed in black enameled heavy metal case 476 "x576" "with threaded mounting studs.

A Real husky job and a BUY.

3.477, SPECIAL EACH
D.C. resistance 82 ohms. 2000 Volt insulation Fully enclosed grey enamel heavy metal case 1876 "x44" with mounting holes tapped for standard screws. Hat third terminal with which to ground core.

No. 3.43, SPECIAL EACH
Filter Choke. 10 Hy at 100 M.A. D.C. resistance 225 ohms.

No. 3A78, SPECIAL EACH

Filter Choke. 10 Hy at 100 M.A. D.C. resistance 225 ohms. 2000

Volt insulation. Fully enclosed grey enamel metal case 3"x3"x3"s"

with three terminals, the third to ground core.

3A79, SPECIAL EACH

Filter Choke. 3 Hy at 380 M.A. D. C. resistance 40 ohms. Fully enclosed in enamel case at 2\%"x3\%""x4\%".

SA80, SPECIAL EACH

SA80, SPECIAL EACH

Polyment Transformer Balanced 500 ohms.

Line Input Transformer. Balanced 500 ohm primary to single grid. Has 8 terminals with split primary and single secondary. Diagram included with each unit. Fully enclosed grey enamel metal case 2\frac{1}{4}"x2\frac{1}{2}"x3" with mounting holes tapped for standard screws. 2 1/4 "x 2 1/2 "x No. 3A81,

No. 3A81,

SPECIAL EACH

Push Pull Input. 5000 ohm primary at 40 M.A., 10,000 ohm C.T

secondary at 20 M.A. Ideal for driver transformer. Fully enclosed
grey enamel metal case 2½"x2½"x3" with mounting holes tapped
for standard screws.

SA82, SPECIAL EACH

Class B Input, Primary 3200 ohm C.T. at 160 M.A. to Class B grids.

Designed for Class B 810's, etc. Has 10 terminals for which diagram
is included. Fully enclosed in grey enameled metal case 3%"x3%"x

4½" with mounting holes tapped for standard machine screws.

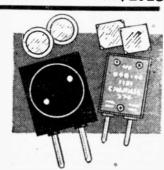
3A83.

...\$2.95 P.P. Interstage. P.P. Triodes to P.P. Beam Power Tubes, enclosed in grey enamel metal case 2½"x2¾"x3½".
3A84, SPECIAL EACH Fully \$1.45

AMATEUR CRYSTAL KIT

AMMATEUR CRYSIAL AIT

Kit contains 3 Crystal Blanks of approx. 50 to 10 KC. below fundamental frequency of 7,000 KC, but can be ground to 7,000 KC. or over (with abrasive included) to any desired frequency within the amateur band. The fundamental frequency can be doubled and redoubled to become operative at 14 MC. or 28 MC. or up. Also included are 2 Holders complete with both regular electrodes or up. Also included are 2 Holders complete with both regular electrodes and springs and 2 Additional Sets of electrodes and 1 Bag of abrasive for grinding crystals to desired frequency. Instructions are included in kit. Stock No. 17A305, SPECIAL EACH





AMS!! Here are Happy Hunting Grounds



Consist of a single button, 200 ohm carbon mike mount-ed in a telephone desk stand with a handy "Push to handy "Push to talk" button mounted in the stand for thumb control. The mike requires 200 ohm impedance mike transformer. Complete with 6 ft. of rubber - covered flexible cord and a

two-circuit plug. Finished in black baked enamel. Extremely rugged construction throughout. Ideal for baked enamel. police radio stations, industrial call systems and "Hams". \$5.95

U. S. ARMY SIGNAL CORPS CARBON MIKE



Button Carbon Mike. Has Single press to talk switch in rubber-covered flexible cord 4½ ft, long, complete with standard 3-circuit plug. plote with standard 3-circuit plug-Has separable plug-in cord between switch and mike. Can be used with any low gain amplifier. Requires 50 to 100 ohm mike transformer and any 4½ V. battery. Current drain 100 MA. Ideal for mobile transmitters, also has many possi-bilities for PA. Amateur and Ex-perimental applications. No. 17A419, SPECIAL EA. 31.95 Every One Brand New....



SANGAMO **Heavy Duty** Mica Capacitors

Type F 2, 5000 Volts, Bakelite encased. Cap. Mfd. List Price Stk. No. \$14.30 Ea. Now! While 18A600 0002 18A601 .0004 They Last Your Choice .0005 0008 18A603 18A604 \$1.95

BARGAINS in Oil Filled Hi-Voltage CONDENSERS Ceramic insulators.



.004

Hermetican, metal cans, 10 MFD-1000 VOLTS, C-D "DYKANOL". Size 111 "x312" mount-

Size 1th "x3ft" mounting a rea. Over all height 5 ft".
No. 17A268 \$2.95

A MFD—1000 VOLTS, G-E "PY-BANOL". Size 1ft "x24" mounting area. Over-all height 5 ft". ing area. C \$1.95

make. Size No. 18A367,

NO. 18A30', SPECIAL EACH\$2.45
10 MFD. — 600 VOLTS, quality make. Size 4%"x8\"x1\",

make. Size 4%"x3%"x1%".

No. 18A234.

SPECIAL EACH\$1.95

5 MFD.—600 VOLTS, quality make.

Size 4%"x14"x1".

No. 18A366, SPEC. EA. 95C

2 MFD.—600 VOLTS, quality make.

Size 2%"x14"x1".

No. 18A214, SPEC. EA. 95C

SENSATIONAL VALUES in TRANSMITTING TUBES

From government contract terminations, every one BRAND NEW in ORIGINAL CARTONS and JAN inspected.

TYPE \$29R, Push Pull Beam Power Amplifier, 226 watt input at 200 MC. Very efficient at high frequencies.

No. 20A666, Reg. Price \$14.75. No. 20A668, Reg. Price \$14.76.

\$4.95

SPECIAL EACH

TYPE 931A. Electron multiplier photo tube. Amplifies up to 1,000,000 times in a 9-stage multiplier action. An experimental tube with fascinating possibilities.

No. 20A661, Reg. Price 39.25.

SPECIAL EACH

TYPE 872A. Half Wave Mercury Vapor Rectifier. Fil. 5 Volts at 7.5 amps. Average current 1.25 amps.

No. 20A662, Reg. Price \$7.50.

SPECIAL EACH

TYPE 832A. Push Pull Beam Power Amplifier.

Proven V.H.F. performance at low cost, 26 watts input at 200 MC.

No. 20A663, Reg. Price \$10.60.

\$5.95 No. 20A663, Reg. Price \$10.60.

SPECIAL EACH
TYPE 810. R F Power Amplifier or Modulator.
620 watt input, 30 MC operation with full ratings. Graphite anode. 620 watt input. 30 MC operation with full ratings.

No. 20A664, Reg. Price \$17.00.

SPECIAL EACH

TYPE 1616. High Vacuum Rectifier Half Wave. 2.5 V. filament, plate current .13 amp.

No. 20A665, Reg. Price \$5.76.

SPECIAL EACH

TYPE 3SA. High Frequency Triode, 3 K W input maximum. R F Power amplifier and oscillator.

No. 83A50, Reg. Price \$45.00.

SPECIAL EACH

TYPE 35TG. High Freq. General Purpose Triode. 50 watts plate dissipation—5 Volts filament at 4 amps. Satisfactory oscillator or over amplifier. dissipation—6 Volts filament at 4 amps. Satisfactory of State of S SPECIAL EACH
TYPE 807. Beam Power Amplifier, Low Cost 75 watt input allpurpose amplifier and oscillator.
No. 204868, Reg. Price \$2.30.
SPECIAL EACH
\$1.50

The Finest in Headphones at RIDICULOUS LOW PRICE



TYPE P 33, THE CHOICE OF THE AIR CORPS. Re-ceivers "Solid - Built" for permanent precision ad-justment. Best quality Al-nico magnets. Colls. imnico magnets. Colls im-pregnated to resist moispregnated to resist mois-ture. Extremely sensitive. Moided black bakelite case. Has 2000 ohm resistance, 8000 oydes, light weight re-movable Sponge Rubber ear cushions ventilated by air holes—extremely com-fortable to wear for long hours. Concealed terminals. Headband of stainless steel wire covered with genuine leather. Adjustable patleather. Adjustable pat-ented check controls ear-

named below. EVERY ONE BRAND NEW-PERFECT. No. 5A134, Limited Quantity \$2.95

METER, PANEL and indicator Lamp Assembly Consist of Gruen high quadity 3%-inch meter with 0 to 10 scale and

\$3.95



1 mfd. 600 Volt Oil Filled **Bathtub Type Condenser**

ARMY HAND Type CARBON MIKE



200 ohm sin-gle button, Complete with 6 foot rubbercovered flexible cord and type PL 68 two - circuit plug. Has press to talk switch. Made by Shure for U. S. Army Signal Corps at a cost several times our price. Ideal for radio transmitters, mobile, P. A. cali systems, etc.

Guaranteed BRAND One Every (NEW in sealed cartons.
No. 18A368, At Only..... ^{\$195}

CRYSTAL MIKE

Well knows make. Freq. re-sponse 30-5000 CPS; good base response. High output; 53 db. Complete with 7 ft. cable. Base is removable. An outstanding BUY.

No. 29A878. At Only

R. F. Ammeter BARGAIN



4 Amperes, 2% accuracy scale, 2.19" diam. body. Has internal thermocouple G. E. type D W 52 List Price

\$19.75

No. 20A840.

As above 5 amp "GE" 3" square RF Ammeter. No. 17A416. Spec. Ea.....



PRECISION Wire Wound Resistors

Accurate within 1%.
Shallcross AKRAOHM Type 190, 1 watt wound on
ceramic, size ½x1" with tinned ceramic, s wire leads.

Ghms Cat. No. 18A858 CHOICE 1.01 2.11 2.58 4.13 EACH 18A860 35c



18ASS

OHMITE 10,000 Ohm 10 Watt Red Devil RESISTORA

No. 18A884, PACKAGE of THREE.



2 MFD. 600 VOLT Oil Filled CONDENSER

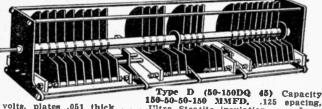
Hermetically sealed in rectangular metal can size 2%"x1%"x1" with solder lug terminals.

Bargains YOU MAY NEVER SEE AGAIN— Every item TOP quality · Brand NEW

BIG BUYS

IN VARIABLE CONDENSERS

JOHNSON 4-SECTION VARIABLE



150-50-50-150 MMFD.

No. 3A40, SPECIAL EACH

JOHNSON DUAL 304 MMFD.

Type E (300 ED 20) Capacity 304
nmfd. max., 15 mmfd. min., each 29
plate section. .045" spacing — 2000
Volts. .032" plates rounded and buffed
—heavy 4," frame rods—Ultra Steatite insulation—phosphor bronze contact springs — and stators mounted
rear. Panel space 2%" wide x 23," high x 7½" deep.

70. 18A509. Special Each

above to reduce capacity to Price Special Each Stock No. 18A509.

JOHNSON DUAL 207 MMFD. Type F (200FD20) Capacity 207 mmfd, max., 13 mmfd. min. each 33 plate section. .045" spacing—2000 volt. Type F with the same features as type E listed above. Panel space 2½" wide x 2½" high x 8" deep. LIST PRICE OVER \$10.00.

Stock No. 18A510, SPECIAL EACH

JOHNSON 150 MMFD.



Type II (1501115) 150 mmfd. max., min. .020" plates, compact vet y min. .020" plates, compact yet very rugged. Panel space 1½" square x 2½" deep. ½" shaft, ½" long. 31 plates .030 spacing, REG-ULAR LIST PRICE \$3.00.

Stock No. 18A505. Special, Ea. 65C

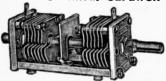
JOHNSON 250 MMFD. Type H (250H15) 250 mmfd, max., 11 mln., 51 plate, 3'4" deep, otherwise like above. REG, LIST PRICE OVER \$4.00.

No. 18A506. SPECIAL EA. \$1.45 440 MMFD. VARIABLE

Panel space 2" A REAL BUY. square, A REAL BUY. No. 18A507, SPEC. EA... \$1.95

DUAL 170 MMFD. CERAMIC INSULATED, 170 mmfd. each section. 2" square x 5" long. 14" shaft, %" long. AN OUT-STANDING VALUE. No. 18A508, SPEC. EA... \$2.45

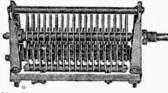
Dual 75 Mmfd, Cardwell



Type EU75AD Cardwell "Trim-Air" -Capacity 75 mmfd, max., 2.7 min. er section. Isolantite end plates, 20" aluminum plates, other hardvare and shaft of nickel brass, Has ware and shaft of nickel brass, Has \(\frac{4}{3} \) shaft with rear extension for coupling. Has removable intersection shield on .020 air gap size 1\(\frac{4}{3} \) square, 3\(\frac{1}{3} \) send 10ng. List Frice Over 18A503, Special Each ... \$1.45

MILLEN 150 MMFD.

High Quality Transmitting Condenser



Single section 150 mmfd. 15". Heavy gauge rounded and pol-ished plates. Adjustable tension contact on rotor. Ridged frame decontact on rotor. Ridged frame design permits single hole mtg. or it may be supported by insulators at each corner. Insulation is an isolantite bar. This is a top quality condenser for medium power at a price you can afford to pay. Size 2%x3½x4%" long, with %" shaft 1½" long. long. 16" long. 18A869, At Only \$2.45

MIDGET VARIABLE



CERAMIC INSULATED AIR PAD-ORMANIU INSULATED AIR FAD-DEE condensers adaptable for a wide variety of uses. Fig. A has screw driver slot adjustment and Fig. B has ½" shaft, various lengths. All are of finest quality, all brown beands and nriced at a well known brands and priced at a

1146110	m or tuent	original said	le.
Cap. Mmfd.	Type A Num.	Type B Num.	Your Cost
150	17A177	18A880	65c
100	18A512	*******	55c
75	17A178	17A182	45c
50	18A513	17A183	40c
40	17A179	17A184	35c
20	17A181	***************************************	250

FLEXIBLE Condenser Couplings

PRICED FAR BELOW REGULAR PRICE









All of the finest quality, well kno hub. ALL ARE FOR 4" SHAFTS. well known makes with 2 set screws in each

1. Heavy duty ceramic insulated.

1. Yeavy duty ceramic insulated.

1. Heavy duty department i 18A500, Special Ea. 30c



Finest Makes Midgets at Low Prices

Insulated With Isolantite.

11 plate. max. 100, min. 20 mmfd. &" shaft, ½" long. 17A189. Special, Each 95C 7 plate, max. 70, min, 20 mmfd. shaft, %" long. shaft, %" long. 17A190. Special, Each 75C 4 plate, max. 40, min. 17 mmfd. shaft. 4%" long. 17A191. Special, Each 50C 2 plate, 4" shaft, 4%" long. 17A192. Special, Each 40C

COMPLETELY INSULATED Variable



5 plates 15 mmfd. %" shaft and 11" end plates made of Bakelite. Can be mounted in any position.

No. 17A203. SPEC. EA. \$1.25

Johnson TN750 Neutralizing Condenser

Consc...

Plates are aluminum cups supported on an ultra steatite frame cast aluminum cast aluminum for for the cast aluminum for th with cast aluminum nitg. brackets. For plate voltage up to 23,000 V., plate modulated. 12.3 mmfd. max., 3.0 min., \$4 argap. 17A201. 8pecial..... \$1.95

LOOK! TEN 100 Mmfd. AIR PADDERS FOR ONLY\$2.45

You get an assembly of TEN 100 mmfd. Ceramic Insulated and silver plated finest qualand silver plated threst quartity, brand-new padder condensers. They are wired together, but it is a simple matter to dismount them and you get TEN BRAND-NEW 100 MMFD. CONDENSERS.

No. 18A511. No. 18A511. Complete Assembly, \$2.45



DUAL CERAMIC TRIMMER

.0001 to 0009 each section,

18A514, Special Each

15c

CERAMIC TRIMMER

Rotary Type, 110 to 10 mmfd, List Price

No. 18A515, 35c Special Each

NATIONAL





No. 18A525. special Each

Precision Vernier **Dials**

234" Dia. Black etched calibra-tions and numerals chrome | ground. flanged hack-Large lite knob, brase

amin'n •

VERNIER DIAL MARKERS

Allows logging to one tenth of one dial division. Easy to mount on any type panel.

SHAFT LOCK



Instantly converts any plain '4" shaft Volume Control, Con-denser. etc., from denser, etc., from "plain" to "shaft locked type". Easy to mount in place of regular mounting nut.

Brass N.P. No. 12A1496, SPEC. EA.... 10C



DIAL LOCK

Easy to mount in single hole. Positive action, does not alter dial setting.

No. 18A526, 25c



trazy LOW PRICES ON Volume Conferely !

SOLAR—"Domino" Bakelite Molded Paper Capacitors



Molded in Bakelite, Meet Under-writers' requirements for units in a non-combustible case for use as a line by-pass — in instruments, electric fuel pumps and many industrial applications.

Eve	ery One	B	argair	Pr	lced.	
Cap.	•		Stock		Spec	ial
Mfd.	Volts		No.		Eac	h
.2	200		18A6	0\$	- 11	5 C
.05	400		18A6	21	11	2 c
.1	400		18A6	22	- 11	3 C
.25	400		18A6	25	- 10	Be
.5	200		18A6	24	2	50
.01	1000		18A6			Bc
Mics	mold .	05	Mfd.	400	Volts	
18A626,					0	-
Special	Froh					C

BIG SAVINGS in High Voltage MICA





Every one factory marked for rat-ing. Most celebrated makes, many specially prepared with salt spray test, high capacity stability with respect to temperature change. Buy Them Now for Fature Needs. 1200 D.C. Test Volts 10% Tol.

Stock		Cap.		Special
No.		Mfd.		Each
18A115		.002		5 .30
18A116		.01		_ ,60
2500	D.C.	Test Volts	10%	Tol.
18A614		.00026		.35
18A117		.01		.95
18A118		.02		1.45
18A 119		.005_	-0-4	_ ,60
	D.C.	Test Volts	10%	
18A 120		.00005		.35
18A613		.00025		.45
18A121		.005		.95
18A616		.01		1.25

Bargains in Small Micas

Every One of Recognized make and quality in standard size with factory marked ratings.

Stock	Cap.	
No.	Mfd.	
18A133	.00005	Choice Each
18A184	.0001	10c
18A135	.00015 }	
18A136	.00025	Per 100
18A137	.0005	\$8.00
18A138	.00075]	\$0.UU
18.1139	.006]	Choice
18A618	.003	Each
18.A140	.002	15c
18A611	.0015	196
18A619	.001];	
18A617	.02	Each. 170
18A229	01 }	Each. 11



21/2 Ohm Variable 25-Watt Resistor

Vitreous enamel, wire wound, size 2 %" L. x %" dis. 15c 18A144, With Slider, Ea.,



6 1/2 Ohm 50 Watt Flat

Resistor wound, mount with lngs or machine screws. Size 14x4

A BARGAIN FEST in Volume Controls Standard quality makes, shafts are exclusive of the threaded bushings.





*Are Wire Wound Controls

Stock		ont	rol	Shaft	Your
No.		Di	am.	Lgth	. Cost
18A635	1,000	1	**	5/8"	19c
17A238	1,200	1	199	16"	12c
17A239	1.800	1	.**	16"	13c
18A636	2,000	1	**	56 "	19c
18A637	5,000	1	41	1/4 "	15c
18A638	5,000	1	"	1/2 "	19c
18A639	5,000	1	21	78"	190
18A640	5,000	11	6"	18"	23c
18A641	10,000	1	**	5% "	23c
18A642	10,000	1	**	1 1/4"	25c
18A643	20,000	1		3 "	25c

Control Shaft Your Stock No. 18A644 235c slot 123c c slot 123c c c slot 2235c c c 235c c c 235c c c 235c c 2 20,000 18A645 17A245 25,000 50,000 1%" 18ARAR 50.000 18A647 18A648 50,000 18A649 50,000 1%" 18A650 50,000 18A651 18A661 50,000 100,000 1%" 18A653 200,000 200,000 18A655 18A656 18A657 250,000 250,000 18A658 250,000 250,000 11/2" 18A660 250,000 17A241 250,000 500,000 18A662 18A668 700.000 18A665 1 Meg.

DUAL CONTROLS

18A669	500,000	1	*	5/8"	35c
18A770	500,000	1	**	1/2"	35 c
18A771	1 Meg.	13	\$"	%"	40 c

ASSORTMENT of **18 Controls** \$2.95

Only Assorted from those above and others.
Money's Worth
SURE ENUFF. No. 18A772, \$2.95 of 18

BUY NOW for future needs-Such Values Can't Last Long.

Ohmite 500 Ohm, 25 Watt RHEOSTAT-POTENTIOMETER Rated at .222 Amps.

Wire wound on porcelain with vitreous enamel coating. Dissipates heat rapidly. Copper graphite contacts. Single hole mounting for panels up to %" thick, with %" shaft '\(\frac{1}{2} \) long.

No. 18A774, SPECIAL EACH



Power Rheostat 25 Ohm Tower kneedstat 23 Unim
40 Watt Wire Wound, 1,25-0.48 Max. Amps. Metal
encased, 1\%" dia. x 1\%" deep, Single hole mtg. for
panels up to \(\frac{1}{5}6" \) thick, \(\lambda'' \) shaft \(\frac{7}{6} " \) long. Well
known make, offered at far below regular price. 18A170.



SPECIAL EACH

An all - metal unit with die cast aluminum case. Heat is with die cast aluminum case. Heat is uniformly distributed throughout the element, regardless of percentage of element actually used. Dissipates heat rapidly. Screwdriver type adjustment. Single hole mtg. for panels up to 15° thick. List Price Value \$4.50.

While They Last, Each.... 95c

WIRE WOUND Resistor Assortment



Mostly 10 Watt, a few 5 watt fixed and adjustable wire wound resistors handy for service and other needs. All quality makes in good usable capacities. 18A801, Asst. of TEN 95C

Bargain Assortment Paper Tubulars



assortment tubular Condensers, 400 and 600-voit in good useable capacities.— All first quality standard makes. Usual price up to 20c each. 18A20S.

25 Assorted only ..

A HOT! VALUE



Mica Condenser Asst.

TEN, assorted top quality makes, including high voltage transmitting types, One or two in the assortment at regular prices would cot as much as the assortment of Ten. No. 18A633, 95c Per Asst.



8 Mfd. 450 Volt Dry Electrolytic

Rectangular cardboard container .. 25c 1%x4%x1", with lugs, 17A229, Special Each

Cornell Dubilier .1 Mfd. CONDENSER



metal case paper condenser. 400 D.C. Volt working Peak Voltage

No. 18A876, Special Each

SIZZLING VALUES in DRY ELECTROLYTIC Tubular Condensers



Popular Capacities Standard quality fully guaranteed, cardboard en-cased and waxed dry elec-trolytics, tinned or insulated wire leads.

Mfd., 450 Volt—%x2". 04 separate sections. 17A234, Special Each 49c 17A225, Special Each 10 Mfd., 450 Volt—% x2". 20-20 Mfd., 150 Volt-%x2%" 33c 17A231, Special Each 16 Mfd., 450 Volt—%x2%". 49c 40-20 Mfd., 150 Volt-%x8". 18A632, Special Each59C 20 Mfd., 150 Volt-%x2%"



18A630.

15 x 15 Mfd. at 450 Volts Plus 40 Mfd. 25 Volt MALLORY F P Dry Electrolytic Condenser

1x3" with 15x15 Mfd. compact 1x3" terminals. lug at 450 volts plus 40 Mfd. In metal 1%x2%" can, with

10x10x10x20 450V, 350V, 50V, 25V. 4 Sections Can Type Dry **ELECTROLYTIC** Condenser

Special Each 69c No. 18A631, Special Each... 55c

Take Times, Check every item FOR TERRIFIC VALUES

46 Volt DC Relay



Advance Type 975-B-3B, 3 Pole, center contact S.P.D.T.—outer contacts S.T. Normally open. 40 volt D.C. Res., 1000 ohms coil, 10 amp. 115 volt contacts. Area required for mounting 2%" x 1%". Ideal for many industrial applications. Worth twice the price asked. \$1.65

6.3 Volt DC Relay



D.P.D.T., heavy duty silver contacts, micarta insulation, re-Over all size 2% "x1%" x1%".

No. 18A544.



Relay Contact Assemblies

:10c

Composed of standard jack leaves with silver contacts. Triple Pole Double Throw, over all length 21/4", stack thickness 1".

No. 18A545, Special Ea... 15C
Break Two, Make One Contact Break Two, Make One Contact Stack %" thick.

No. 18A546, Special Ea.

Break One, Make One Contact Stack %" thick.

Relay Coils

No. 18A547, Special Ea. ...





40 volt D.C. 1000 ohms. 18A548, SPECIAL EACH . . 25C 115 Volt, 60 cycle. 18A549. SPECIAL EACH.

Eicor Motor



Only \$1.95 24 volts D.C. at .35 amps, 1,500 RPM. amps, 1,500 RPM.
continuous. Has ½"
shaft %" long from
which extends a 1½"x
¼" shaft slightly eccentric. Motor housing size 2%" dia. x
2%" long. Offered at
a mere fraction of its

\$1.95 Special 17A272.

DYNAMOTORS



WEBSTER Input 27.9 V., amps 1.28. Output 224V., at .070 amps, 4400 R. P. M. continuous Has mounting

holes but no mtg. bracket, over all 3.142, Special Each \$6.95 EICOR:—Input 13.5 at 12.2 amps. Output 300 V. at 200 ma. 7" long, 4" dia, 6000 RPM.

.\$9.95 duty. Conve



12 Volt **Heavy Duty** Soleneid Relays

\$6.00 Value Only 45c

Originally made for air craft start ers, in army planes and designed for high current 200 amps and over. S.P.S.T. Normally open, dou-

ble break. Coil can be Die oreak.
Coil can be easily removed on which is nearly ½ lb. of No. 26 bare enameled wire—worth almost the price we ask for the entire assembly.

SPECIAL EACH45C



Sensitive PLATE RELAY

for only 50C

Adjustable S.P.D.T. Contacts, 6800 ohm coil. Army surplus gives you finest of quality at this ridiculous price.

18A543, Special Ea. 50C

D.P.D.T. 24 Volt Relay 800 ohm coll, its appearance iden-tical to above, offered at a small fraction of its original cost.

18A191, While They Last, Ea......35C



Bakelite Encased 50 Amp 24 V. Relay

product of G.E. S.P.S.T. N lly open Double Break 24 mally open Double Compact, handy to mount any-18A190, Ridiculous Price of 40c



24 V. DC Relay D.P.D.T.

230 ohm coil. Very compact. Over all size 1%"x1%"x1%".

No. 18 \ 538. ... **45c** Special Each

Special Each
6.3 Volt AC Relay
8.P.D.T. Can be converted to D.P.D.T. by removal of one wire. Extremely compact, over all size 2"x
1\%"x1\%". With pure silver con-1%"x1%". With pure silver con-tacts and handy mounting brackets.

SAVE ON Wire Wound Resistors



Well known makes-5% tolerance with wire leads or lugs.

Ohms V	Fatts	Size	Cat. No.	Price
15*	10	4x1%"	18A102	15c
3,000	10	4x1%"	18A215	15c
3,000	10	₹x2 "	18A216	15c
4,000	10	%x3 1/4"	18A 103	15c
15,000	10	%x2 "	18A217	15c
10,000	20	₹ x2 "	18A218	20c
25*	50	%x4 "	18A792	30c
300	50	禄x4%"	18A219	40c
100,000*	50	%x4 "	18A791	35c
#3714-00W	- 02	- bolom	others or	

32 V. D.C. Relay



Leach model 1024 D.P.S.T. normally open contacts, 675 ohm coil. Over all size 2%" x 1½" x 81Ze

18A540. A Bargain at

LEACH 12 V. D.C. RELAY
Type 1015, S.P.D.T., 95 ohm coil.
Mounted on bakelite base 14/x 2%", over all height 14". 95c

ADVANCE 60 V. DC Relay



D.P.S.T Normally open 10 amp con-1500 ohm

coil. Normally Operating on 40 M.A. it is

ideal for underload or remote control applications. Mounted on micarta base 314" x 214", over all height 14".

18A542, A Real Buy at . \$1.45

Selinium Full Wave RECTIFIER



Dry disc type, for up to 60 volts at 150 MA.

1oA868. \$1.95 Each ...



A Bargain In Semi-Midget Variables

17A202.. 65C

plates, 50 mmfd., ceramic in-lated. Over-all size 1%"x1%". nulated



RUD Type MC 1855 100 Mmfd. Midget Variable

Semi - Circular -Double Bearing. Semi-Circular — Double Braining, Steathte insulated 100 numfd. max., 7 min., air gap .024", 14 plates. Can be single hole or chassis mtd. Has ½" shaft ½" long, over all size of condenser behind panel 2"x

No. 18A804. Special Each .. 95c

165 mmfd CARDWELL Type X Variable



165 mmfd. max.. 22 min., 19 plate .084" air gap. 'Extends 4" deep behind panel, 3 k" wide. Has 14" shaft ½" long from bushing. Heavy aluminum rounded plates; frames aluminum rounded plates; frames and tie rods nickeled brass; ball thrust type rotor bearing, phosphor bronze rotor contact and GE Mycalex insulation.

No. 18.4853.

Priced Less Than HALF \$1.95

CARDWELL Type MP26GS

35 mmfd., 7 plate .070 air gap. Extends 2" behind panel, 3" wide. Has 4" shaft &" long.
No. 18A882, Special Ea. \$1.65

456 KC - IF TRANSFORMER

Square aluminum can. 1 14 x 1 14 x 2 1/4" Universal input.

18A878. Spec. Ea. 50C As above,

Universal Output. 18A879. Spec. Ea. 50c

456 KC Iron Core Mica Tuned Midget IF



1%" high, 13" square, with wire leads at bottom inwire leads at bottom in-stead of lugs as on illus-tration a bove. Designed for output to diode load, but can be easily convert-ed for any standard IF

Per Set of TWO... 95C

1.7 to 30 MC at 150 MA R F CHOKE



Well known make coil of enameled silk covered wire impregnated with RF lacquer and wound on steatite core, Length 14".

No. 18A867, Special Each

.....25c

'A' Battery Choke



Heavy current low inductive choke, such as used in auto radios, etc. (A) %" dia. x 2%" long. 19.11076, Special Ea. 15c (B) 1" dia. x %" long. 19A1077, Special Ea. 15c

FINEST QUALITY, Mica Condensers at RIDICULOUS PRICES



.00025 mfd, 2500 test volts. 18A614 ... 35 C volts. 18A118. \$1.45 .005 mfd, 5000

.. 95c volts. 18A121 .01 mfd. 5000 test volts. \$1.25 18A615 .001 mfd. 5000 test volts.

2-Conductor Connectors



Consists of 2-hole receptacle and 2-prong plug. Widely used on rec-ord changers, phono motors or any-where where a separable 2-contact connection is desired. Made of moulded bakelite, female part with wire leads already attached.

No. 18A106. With 6"



Antenna Loop Replaces antenna coil most any type set. Good pick-up and selectivity.

Special Each 45c



KLIXON 24 Volt Circuit Breaker 18A197-500

PRICES UP ? Not Here!! SEE FOR?

Wire at Give Away Prices Size 14 Cable Cable

Single conductor. For use on motors and other power needs. For up to 600 volts, Size 14. sists of 41 strands of .010 with cotton wrap and 2/64 varnish cambric wrap. Black cotton braid overall. O.D., 250. 23.95 For up to 3000 volts. Same as above except with 7/64 varnish cambric wrap. O.D., %".
2A25. Per 500 Ft. Coil \$4.95

7MM-IGNITION Cable

No. 4 Shielded Wire



ANJC48 specs, stranded tinned conductor insulated with vinylite and cotton with over-all tinned copper shield. Ideal for high amperage such as aircraft, etc. 2A156, Special Per 100 Ft. \$8.00

Shielded Hook-Up Wire

Size 20 Stranded tinned conductors, rubber and cotton covered with tinned copper shield and cover-all No. 3A94, Per 50 Ft. Coil.... 95 C

Rotor Lead Wire A STATE OF THE STA

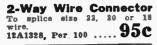
Consists of very fine strands of copper wire braided together to copper wire braided together to make for extreme flexibility. 45c



Tinned Copper Shield

Expands to nearly double its original width, reducing length about 25%. 18A100. 36" dia. 50 Ft. Coil 65c

18A101. 7." dia. \$1.25 50 Ft. Coils ... \$1



Stranded Wire Plain Rubber Covered



The Popular Flexible Kind You Can't Buy Too Much

Every one who uses wire always needs lots of this type. Handy for ground, lead - in, hook - up and many other needs. In these days of wire scarcity and high prices this is a real opportunity

Size 22 8A90 130 Ft. 50c	1000	\$4.50
	Feet	φ π.υ υ
8ixe 20 8A91 100 Ft. 60C	1000 Feet	\$5.50
8ize 18 3A92 100 Ft. 70C	1000 Feet	\$6.50
8A98 100 Ft. 80C	1000 Feet	\$7.50

TWISTED PAIR

Two conductors of size 22 stranded, rubber covered, tinned. Ideal for bell wire, intercoms, etc. \$1.10

PLASTIC Insulating TUBING at CRAZY LOW PRICES



A high grade synthetic tubing for a wide variety of insulating needs. Extremely flexible and resistant to abrasion. High disletoric strength, Resistant to cold and heat.

Cat.	Size B&S Gauge	Apprex,	Length Per Pkg.	Price
3A45	18	.042	100 ft.	.95
3A46	15	.059	100 ft.	1.25
3A47	11	.095	25 ft.	.45
SA 48	10	.106	25 ft.	.50
SA49	9	.118	25 ft.	.55
3A50	7	.148	25 ft.	.65
3A51	6	.166	50 ft.	.95
3A52	As above	Per 300 ft.	coil	3.95
3A53	4	.208	26 ft.	.85
8A54		.234	25 ft.	.95
3A55	As above	Per 150 ft.	coil	3.95
3A56	2	.275	800 ft.	4.95
3A58		.854	800 ft.	4.95
3A59		.875	25 ft.	.25
3A61		.626	25 ft.	1.45
3A57	* * * *	.133	250 ft.	2.95

No. 3A62, ASSORTMENT of 59 feet various sizes and lengths, Per Assortment

85c

1000 High Wire for Only \$5.95

Feet Grade

The Biggest Buy in Wire we have offered. Consist of sizes ever offered. Consist of sizes az to 16, both solid and stranded, with various types of insulation. Ideal for hook-up, lead-in and all-pur-pose needs. Supplied in bundles of 10-100 foot coils.

No. 3A37. Per Lot of 1000 Feet ... \$5.95 500 Foot Assortment contains some of above and other popular types. 2A28.
Per 500 Foot Lot..... \$3.25

200 Foot Assertment, contains short lengths as well as 25 foot coils various type wire suitable for all needs. 8A28, Per 200 Foot Lot.. \$1.25

HIGH VOLTAGE Hook-Up Wire



Sixe 20 stranded tinned conductor with extra heavy

3A64.

Per 100 Ft. Coll 55C Size 18, extra flexible with heavy rubber wall. Voltage break down at 60 cycles, 10,000 volts. Red or No. 2A93. Per Foot

Lugs and Terminal Asst.



100 Assorted lugs and terminals illustrated. all-purpose กลอดีส 19A1069 Per **Asst.**

65c

A HOT VALUE on No. 14 Two Conductor Shielded Wire.



Low Loss Hi-Frequency Coaxial Cable Type RGSU



nappusance 57 ohms, Capacitance per ft, 28 mmfd. Consist of 7 strands No. 21 bare copper wire encased in .235 OD Polyethylene dielectric, with Vinyl outer cover-ing .405 OD over braided copper shield. Made to Jan-C-17 A.N.

specs. 2A163, Per Ft. 10c ering. Consists of 7 strands No. 22 bare copper wire encased in Copa-lene with over-all copper braided

Coax Cable Connectors





For single conductor solid type. Low loss, mica filled bakelite and polystyrene insulation. All surfaces

silver plated. 18A806, Chassis Type, 18A806, Cable Type. Choice Each

Heavy Duty Terminal Strip

22 Terminals on Bakelite base 71/4 1%"x%", with 10-32 brass screws and nuts and heavy lugs.

Cable Connectors





Receptacle mounts directly to equipment or thru panel. Has external thread to which locking ring of male portion threads and provides a locked connection. Priced in sets, male and female. 2-wire type requires %" hole and 2-wire requires %" hole when used thru panel. thru panel.

18A178. 2 Wire. Per Set, Male and Female.. 45c 18A179. 2 Wire, Per Set, Male and Female.. 55C 18A820, 4 Wire. Per Set. Male and Female.. 60c

CABLE CLAMPS



Heavy gauge steel, cad. plated. Fits cable Dia. as Listed.

Over-Cat. Cable AII Dia. Length No. 12A 1304 19A 1070 Dis. Length 20
04 4" 4" 25c \$
70 4" 14" 25c
03 4" 1" 25c
Bakelite Cable Clamps \$1.05 1.05 1.05 12A1303 元" 1¼" **29**c %" 1¼" **40**c 19A1071 1.25 19A1072

Cable Clamp Assortment

assorted cable clamps, includ ing some of above and other useful sizes. 19A1078, Per Assortment... 45C



Barrier Type Terminal **Bakelite**

Size 24"x14"x%" with 8-82 Binder head screws. 18A821, Type 2-142, Ea.... 15c

Bakelite Strip Asst.



25 Pieces odds and ends of bakelite. So handy in any shop for making your own terminals or various insulating needs.
No. 18A825, Per Asst......25C

Terminal Strip Asst.
25 assorted terminal strips with lugs attached. Always needed in radio work

No. 18A9, Per Asst. 35c Leminated **Bakelite**



Glossy Jet Black. Select quality.

Extra Thick Bakelite

6x10x13", glossy black both sides. Finest quality Bakelite panel for any job that requires extra thick-...65c 17A253. Special Each 35c

.004 MFD. AEROVOX Mica Condenser



With lug terminals for general radio applications. 65C No. 15A667, Special Ea.

STOP Look READ Theills galore in our low price QUALITY items



TYPE 400 JONES PLUGS and SOCKETS For Voltages Up to 110 V. at 10 Amps

12 Contacts Plug and Socket.
Type P412CCT plug with cable
clamp on top COMPLETE with
\$4128B socket with shallow brackfor flush mounting.



\$1.45 **50c** oracket for riush mounting.

18A811, Special Each

10 Contact Socket only, Type S410SB bracket for flush mounting.

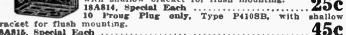
18A812, Special Each with shallow

6 CONTACT Plug and Socket



Type 8406CCE socket with cable clamp in end COMPLETE with P406SB Plug with shallow bracket for flush mounting.

18A813,
Complete Assembly, Ea... 65c
6 Prong Plug only, Type P406SB
with shallow bracket for flush mounting.
18A814, Special Each
10 Proug Plug only, Type P410SB, with



Big Savings on Sockets

tube such as 866 and etc., with greater spacing than usual between shell and contact for

18A828. Special Each 45C

7 Prong Ceramic

Wafer Socket

Steatite Sockets

With slotted mounting plate to

18A833, 8 Prg. less mtg. plate 14c 18A864, 8 Prong mounted in steel, nickel shell for below surface

mounting. Can be easily disassembled. Special Each22c

ount on 1½" to 1½" centers.
18A831, 4 Prong Choice
18A832, 8 Prong Each.... 19C

high voltage rectifiers, etc. REAL VALUE.

6

50 Watt, Type 211. For all 4

prong base, 50 watt tubes.

18A826. 59c Spec. Ea. 59c

Type 209, For standard base

Type 247, For 829, 832, etc. tubes.

18A829, Spec. Ea. 65c

Ceramic

Acorn

Socket

Spec. 25c

Bakelite

Socket

18A830,

flush mounting. **40c** 18A816, Special Each

Type 500 JONES **Plugs and Sockets** For 5000 Volts



at 25 Amps Per Contact, Type
S506CE Socket
with cap COMPLETE with type
P506SB plug and shallow bracket.

No. 18A817, Complete Assembly \$3.45 6 Contact, Type S506SB Socket with shallow Student sharket.

Spec. Ea. 95C 6 Contact. Type P506SB Plug with shallow bracket.

18A819. Spec. \$1.25





chrome ailver contacts, ceramic insulated.

Plus type P101—%" sleeve.

No. 18A802 101. %" sleeve. 25c No. 18A808, Special Each.



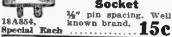
Rubber Shock Mounts

1%" square, "" hole for mounting units against vibration against vibration.

%" rubber each side of plate. .. **15c** .18c20c

center







Octal ○ 8 Prong Mica Filled ತ್ರಿ

ଷ

Bakelite Loctal Socket 18A851, Special Each 5c With mtg. ring 1½" centers. 7c

Closed Circuit Midget Jack



Fits All Standard Phone Plugs.

18A83819c Special Each

Signal Corps Microphone Jack

Type JK33A designed for the following plugs. Western Electric Signal Corpe Nos.

No. 109 and Signal PL46, PL68 and PL168. and Signal Corps 18A839, Special Each 12c

Midget Phone Jack

Open circuit. Mounts in %" hole in panel up to ¼" thick. Ground connection third lug forms part of frame.

Fits standard plugs.
No. 18A840, Special Each .. 12c

Western Electric Jacks



Type 246E, welded frame, 3 way, nickeled silver sleeve to fit W. E. No. 109 plug or Signal Corps PL46, PL68 and PL168 plugs.

18A171 Give Away Price, Each.... 15C

Type PL 55 Phone Plug



Fits All Standard Jacks

Designed for war needs, so you get a phone plug that can "take it" at a ridiculous price. Internal insulamolded, outer shell with ample accommodation for cordage. Withstands breakdown of 1000 V. Over all length 215".

No. 17A262, Special Each25c

PL 55 Plug and Cord DO (100)

PL55 phone plug with 40-inch rubber, spiral wound long wearing cord attached. 17A263. Special, Each 45c

Heavy Duty Phone Cords Spiral wound, flexible, rubber eov-

ered as used by army. 17A264. Per 6-foot length ... 25c

PL68 Mike Plug and Cord PL68, 3 contact plug with 6 ft. 3 conductor rubber covered mike cord attached. Used on many types of Army mikes.

18A841, Special Each45C PL68 MIKE PLUG. 18A666, Plog Only, Ea..... 25c

6 Foot Mike Cords

\$ Conductor spiral wound rubber cover mike cords only as on above 18A842, Special Each 25c

JK26 Jack With Cord



JK26 Jack, fits PL54 plug as used on army aircraft head phones, etc. Supplied with 48" rubber covered cord already attached, making them ideal to extend cord length



17A258. S.P.D.T. Locking Type 350 18A847. D.P.D.T. Non-Locking 350



5 Pole S.T.

Only

35c



Bargains In Jacks

Single Cir., Fll. Control, 25c 17A260. Special, Each 3-way microphone jack plus S.P.S.T. switching action, norm. open. 50c

Popular Flat Phone Plug



1 15" dia., 14" thick. Eliminates objection of protruding regu-lar types. Cord tipe held tightly

29c 18A844, Special Each.

Push-Button Switch



H and H Normally D.P.S.T. Mounts in Panel up to 1/2" thick.

45c

No. 18A874, Special Each

S.P.S.T. Norm. Open



Push button switch. rush button switch, mounts in panel up to 76" thick. Finest quality.
No. 184875. 35C

Bargains in SMALL MICAS



.003 mfd. No. 18A618. Choice .005 mfd. No. 18A872. Each 15C

Sensational Values in Wire Wound Resistors



6000 ohms, No. 18A573. 10000 ohms, No. 18A574, 18A775, Special Each ...

BULB REMOVER



10c No. 18A873, Special Each.

STAND OFF INSULATOR
Ceramic insulator with ½"
hole for wire or for nits,
coils, condensers, etc. Other
end is tapped for 8/32 machine screw. ½" square,
18A1688, 1 ½" high, Che.
19A1089, 1" high, Es. 5C

Vibrator BARGAIN!

Well known quality make re-leased from government Sur-plus. BRAND NEW — PER-FECT.



Non-Sync. 4 Contacts 4 Prongs Fits Many Popular Anto Radios

19A25. Special, Each. \$1.42

Zondensers * Priced as low as 1th of regular price!



Oll Filled High Voltage Condensers AT A FRACTION of REGULAR VALUE

Every one Brand-New. Known Brands with Coramie pillar terminals, in hermetically scaled rectangular metal cases. Ratings and voltages are exact as marked on each unit by the maker. Built to rigid A & N Specs. Buy Now, for Future Needs—they can't spoil—you will pay up to 5 times these prices when present surplus stocks are gone.

Wkg.		Stock	Price
Volts	Size	No.	Ea.
1000	2% x1% x1 "	17A169	3 .95
600	2%x1%x1 "	18A214	.95
1000	4 x1%x1 "	17A170	1.45
1500	3%x2%x1¼"	18A233	1.95
2000	4 x3%x1¼"	17A178	2.45
1000	4%x2%x1%"	18A226	1.95
1500	4%x3%x1%*	18A227	2.45
600	4%x1%x1 "	18A366	.95
1000	4%x3%x1%"	18A367	2.45
2000	4%x3%x3%"	3A43	3.95
1000	4%x3%x1%"	17A268	2.95
6000	4%x8%x1%"	3A27	.95
	Volts 1000 600 1000 1500 2000 1000 1500 600 1000 2000 1000	Volts Size 1000 2 % x1 % x1 " 600 2 % x1 % x1 " 1000 4 x1 % x1 " 1500 3 % x2 % x1 ¼ " 2000 4 x3 % x1 ¼ " 1600 4 % x2 ½ x1 ½ " 1500 4 % x3 % x1 ¼ " 1500 4 % x3 % x1 ¼ " 1000 4 % x3 % x1 ¼ "	Volts Size No. 1000 2 % x 1 % x 1 " 17 A169 600 2 % x 1 % x 1 " 18A214 1000 4 x 1 % x 1 " 17A179 1500 3 % x 2 % x 1 ¼ " 18A283 2000 4 % 3 % x 1 ¼ " 18A226 1500 4 % x 2 ½ x 1 ½ " 18A226 1500 4 % x 3 % x 1 ¼ " 18A226 1500 4 % x 3 % x 1 ¼ " 18A366 1000 4 % x 3 % x 1 ¼ " 18A366 1000 4 % x 3 % x 3 ½ x 3 % " 3A43 2000 4 % x 3 ½ x 3 % " 3A43 1000 4 % x 3 ½ x 3 % " 1 ¼ " 18A26

above are can size and do not include the additional height of the pillar terminals.

Mfd. 600 Volt D.C. Wkg. Oll Filled Condensers In Round Can

10

4½" high x 2" dia., her-metically sealed metal can with flat lug ter-minals. A TERRIFIC BARGAIN. No. 18A584, \$1.45



2 Mfd. 600 V D.C. Oil Filled Condenser

In round Aluminum can 1%x3%" stand-ard size for inverted mounting. Ideal for amplifiers, etc. A REAL BARGAIN.

18A594 \$1.25 No. 18A594 EACH....



8 Mfd. 1000 Volt DC Wkg. Oil Filled Condenser

4%x8%x1%" her-metically sealed can with flat lug terminals What A BUY!

No, 18A852, **\$1.**95

Condenser Brackets



units 15c 18A586, For 1%" wide x 1" thick units100
(B) Strap Type, to fit standard square or rectangular condensers
4%" to 4%" high.
Mounts over top or bottom edge and fastens with and fastens with 10-32 threaded

bolt. 18A587. 2° wide 100 18A588, 2%** 18A589, for "dia. tubular wide 100



Locking Clamps

Plated Steel Band with integral with integral lock-ing device and mounting bracket. For holding tubes and other cylindrical com-ponents securely in place. The universal bracket makes it adapt-able for many applications. 18A590, for 1%" dia.

or 1%" dia. components. Ea. 10c 01, for 2%" dia. devices. Vo. 18A591, for 2% Has two mtg. brackets. Special Each

Big Values In Oil Filled Capacitors





"Bath Tub" Type

Hermetically sealed in metal containers. With solder lugs and mtg. tainers. With solder lugs and mtg. bkts. Top quality, we'll known brands. Priced at Fractions of Cest. 3x3 mfd., 100 vols—double section. 2 mfd. each sec. Size 2% **x1\% **x1*.
No. 18A112. Special, Ea.250
1 mfd., 400 velt, 2*x1\% **x\%''.
No. 18A206. Special, Ea.450 2"x1%"x1".



Rectangular Can Oil Filled

Hermetically sealed metal containers, sealed terminals. Very compact. .5x.5 mfd., 400 volt, dual

	18A200
18A210.	.5x.5 mfd., 250 V30c
18A211.	.5 mfd., 600 V
18A224.	.25 mfd., 400 V40c
18A212.	1 mfd., 400 V50c
18A881.	3 mfd., 600 V
18A213.	025 mfd 1000 V TRA



3X.1 Mfd. 600 Volts Oil Filled Condenser

Only Each 10c

Hermetically sealed metal case. Height case. I

over all 2%x2%" wide bracket x %" thick. 3 bracket x 1/2 thick. 3 sections. 1 Mfd. each section at 600 Volt. D.C. No. 18A592, 10c



.1 Mfd. 350 Volt al container 18A109,

Special 15c All Items on This Page Are Surplus and Subject to Prior Sale, Don't Wait — 15C Rush Your Order Today.

5 Mfd. 600 Volt Oil Filled Tubular



Quality make, oil impregnated or tubular, completely insulat-Size 1%"x1" with tinned wire leads. A condenser that will take punishment — yet offered at less than the price of ordinary paper ubulars. 29с 18A595



.25 Mfd. 350 Volt Oil Filled Tubular

Condenser and with tinned wire leads and lugs as 18A110. seafed in **20c** illustrated. Each



.2 Mfd. 2,000 Volt G.E. Pyranol 95C Capacitator. .

In cylindrical metal cas 2 % "x1 1/3". Equipped wit porcelain stand off in poroelain stand off in-sulator, A quality ca-pacitor for high voltage 17A274. Spec. Ea. 95C

Oil Impregnated



.5 Mfd. **Bath Tub** Type

660 volts DC working, Hermetically scaled in tin coated metal shell. Vegetable oil and cerese wax filled. Size 1%x1x%". List value, \$1.30.

18A108. 35CLots..... 30C



.1 Mfd. Tubular Condenser

.1 mfd., 600 volts DC working. (1500 volt flash test, DC.) Tin-ned wire leads are internally inpregnated, wax filled. Size 1½x %". List value, 90c, 18A107

18A107 Spec. Ea. 25c Lots ... 20c



Ignition **Filters**

.5 Mfd., 50 V. D. C., metal encased, size 2" L. x %" Dia. 18A145. Special Es. IUC
.5 Mfd., 199 V. D. C., identical to above except with 6" wire lead. Special, Ea.

SOLAR Type X B 1000 Volt MICA



Rectangular low loss Bakelite with

tinned	wire lead	B.	
Oat.	Cap.		Special
No.	Mfd.	Size	Each
18A827	.01	1%x 1x2"	45c
18A628	.02	1% x 1x %"	450
18A612	.005	1%x%x%"	200

Sangamo .005 Mica.



No. 17A287 Special

Type G 1 SANGAMO Mica Capacitors AT CRAZY LOW PRICES



6000 Peak Wkg. Volts 5% Tol.

Anyone who has need for this type of condenser knows what they are, Up to \$31.90 list value units are

PLICOR	SIA TOW SIE	1 44.90.	
They	won't last	long 80	HURRY!
Cap.	Cat.	List	Special
Mſd.	No.	Value	Each
.0004	18A596	\$29.70	65.95
.0006	18A597	29.70	5.95
.001	18A598	29.70	5.95
.004	18A599	31.90	6.95
.0002	10.000 V	It Kamada	

No. 18A619. Special Each. \$4.95

SANGAMO MICAS **Bakelite Encased**



.001 .004

F1-3000 Volt F2-5000 Volt F3-8000 Volt 5% Tolerance

LOW! LOW! PRICES

Cap.		Cat.	
Mfd.	Туре	No.	
.0001	F1	18A128	
.0002	3000	18A128	Choice
.0003	Volts	18A124	Each
.095	List	18A837	_
.601]	Price	18A126	\$1.45
.002	\$9.90	18A230	⊕T• ∡6
.0002]	T2	18A600	Ohalaa
.0004	5000	18A601	Choice
.0005 }	Volts	18A602	Each
.0008	Last	18A603	A

Price 18A604 \$1.95 18A606 .004 8000V. 18A607 Type F3 List Up .001—F3, 6000 V., 18A607 \$3.95 \$36.85 \$2.95 18A608, Each



.002 Mfd. 12,500 Volt DC SOLAR "XA" 3.5 Amps. 15000 KC

8%x2%x porcelain case, size mounting centers 81/4 18A609, Special Each\$2.95

Cornell-Dubilier



.002 5000 Volts MICA No. 18A616 Special 45c

SANGAMO .005



..35c Special Each Ceramic Capacitors



18A629.



18A141, Erie 15 mmfd.-plus-minus 1.5 mmfd. 18A142, Erie 10 mmfd.—plus-minus 1 mmfd. **5c** Choice Each Centralab, 500 mmfd., 21/2 % tol. 18A143, Special Each 10C

Resistors AT PRICES YOU CAN STOCK UP FOR YEARS TO COME!

Ceramic Insulated CARBON RESISTORS



2 WATT, Size ½"x1½"
Tolerance within 20%. RMA
color coded. In all popular capacities, up to 20 Meg. State
size wanted.

Watt Es. 6c 100 Lots 9c 18.4786. Per Assistance of the assortments listed. ۱ 1 12A655 100 100 I



BARGAIN Assortment

Contains all most popular caassorted, 50 each 1/2 and 1 **\$1.9**5 18A74. Per Asst.

WIRE WOUND RESISTORS, Ferrule Type PRICED FOR QUICK SALE!



Top quality makes, vitreous enameled. These present no problem in mounting with the wide selection of holders listed below—and a distinct advantage when a replacement is necessary—merely pull out the old and slip in the new as you would a cartridge fuse. Lengths given are over-all, including ferrule.

BARGAIN Assortment

Ferrule Resistors
Includes 10 Resistors from above
or other size ferrule type. Ideal
for experiments, etc. 18A98.

Per Asst. of 1095C

	QUIC	N SALE	. 1	
	Ohms	3 Watt	Cat. No.	Price
	125	Ax2 "	18A76	10c
		10 Watt		
	125	7 × 3 1/4 "	18A77	12c
	1600	% x3 1/4"	18A78	12 c
	3000	9 - 0 //	18A576	12c
	8150	-&±3 ″	18A79	12c
	7.5	%×3%″	18A80	15c
	15	% ±3 ½ "	18A81	15c
	16000	18 x 3 1/6"	18A85	15c
		25 Watt		
	315	12×4 1/2"	18A571	30c
4	400	₩x4%″	18A572	30c
,	400	₩×5 % "	18 A86	30c
-	1000	₩x4 1/2"	18 A87	30c
n	1000	₩×6 % ″	18A583	30 c
D	6000	₩±5 %"	18A578	30c
9-	8000	提出4%"	18A88	30 c
-	10,000	13x6 16"	18A574	30c
ŧ	16,000	13×41/3"	18A89	30c
u	55,000	提出4 %"	18A582	30 c
8		100 Watt		
`-	800	1% = 7%"	18A577	35c
_	2000	1%=7%"	18A578	35c
1	10,000	1%×7%"	18A579	35c
н		200 Watt		
н	25	1%×9}}"	18A90	30c
н	160	1 % x9 }}"	18A581	30 c
1	40,000	1 % = 9 社 "	18A91	50c
н	60,000	1% =9 te"	18A92	50c
1	Buy N	ow for Fut	ure Needs.	Such
Ł	Values	Can't Last	Long, at	These
J	LOW,	LOW BAR	GAIN PRI	CES.

Clips for Ferrule Resistors or Cartridge Type Fuses



12A1324—Cad. plated for 16" dia. ...Ea, 5C ferrules or fuses. Ea. 5c ferrules or fuses. Ea. 6c

Cad, plated clip for 12" dia. ferrule resistors or fuses mounted to high x %" square. Ceramic insulator threaded for easy mtg. high x %" square. Ceramic insulate Stock No. 18A793, Special Each ... 10c



Fuse or Resistor Mounting



FUSE Clips

HIGH VOLTAGE 11/2 Amp. 2500 Volt Fuse

No. 18A94. Black bakelite base, 3\% "x1\frac{1}{2}", height 1\%", with berylium copper clips for \frac{1}{2}" dia. x \\
2\%" long fuees or \\
6\cong 18A95. Bakelite base 3\%"x\%", \\
height 1\%", with spring bronze \\
1\%" dia. x \\
2\%" long fuees or \\
1\%", with spring bronze \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\
1\% \\

No. 12A1322—Phosphor bronze N.P. clips for ¼" dia. fuses such as 1c 3AG, No. 12A1323-dia. fuses suc Berylium copper clips for 11"

Type 4 AG Fuses



Glass enclosed, \$\frac{1}{2}\tilde{\pi}\ dia. \tilde{x} 1\frac{1}{2}\tilde{\pi}\ long. Designed for use where there is considerable vibration such as in aircraft, etc. Being only \$\frac{1}{2}\tilde{\pi}\ larger in dia, than the 3 AG type, they can usually be used to replace the

18A778 18A779 18A780	2 Amp 3 Amp 5 Amp	Box @4	.95
18A781	10 Amp	Each	Бc
18A782	15 Amp	Each	5c
18A788	20 Amp	Each	5c
18.A784	30 Amp	Each	бc

Assortment of 100 4 AG Fuses. mixed lot of above sizes

18 A 785. \$1.95 Per Asst. of 100 \$1.90 18A787, 2 Amp, Type 3 AG Fuse Special Per Box

20 Amp. 250 Volt FUSES 250 volt, standard cartridge fuses, 2" long x ½" dia., Chase-Shawmut No. 2008. 18A177. Per Box of 10..... 50C



Fuse Extractor Post For 3 or 4 AG Fuses, Mounts on panels up to 1/2" thick, 1/2" mtg. hole, extends behind panel 11/4". Fuse easily replaced from front of panel by screw type finger grip knob. 18A788,
Special Each 15C

Tapped Resistor



Vitreous enameled wife wound with Vitrous enameled wife would will be a separate sections, 100 ohms at 7 watts and 750 ohms at 6 watts, tapped at 350 ohms.

17A275. Special, Each 50C

No. 18A803, Tapped at 23, 23, 7500 and 3000 ohms. 3000 ohm tap rated at 100 watts. Over-all size 1 1/6" x 64" mounted on brackets 21/4" high. A Real Bny.

Big SAVINGS on **Famous** CLAROSTAT "Greenohm" WIRE WOUND RESISTORS



Due to the exclusive Charostat in-organic Cement Coating, these re-sistors can be given the toughest assignments. Many are in use in the finest of assemblies, 100,000 Ohm, 50 Watt

200,000 Ohm, 200 Watt "x10 1/4" 18A795, Special Ea. 95c

Adjustable WIRE WOUND CLAROSTAT "Greenohm"



Like the fixed types above, except for bared sections of the winding contacted at any ohmage by the adjustable slider band, which can be locked at the required resistance by merely tightening with a screw-

driver. 75 Ohm, 50 Watt Size % "x414 18A796, Special Ea. 50€ 10,000 Ohm, 200 Watt Size 1%"x10%". 18A797. Special Ea.

200,000 Ohm, 200 Watt Size 1%"x10%". 18A798, Special Ea.\$1.45



25 Watt Wire Wound RESISTOR Vitreons enameled, size %" x 2". With lugs. 18A799, Special Ea. 25c



50 Ohm 3 Watt Carbon Resistor

4000 Ohm

Size %" x 2". With tinned wird

Wire Wound Resistors at Fractions of Regular Value



100,000 Ohm. 100 Watt No. 18A789, Special Ea. . 65C 10,000 Ohm, 200 Watt

No. 18A790, Special Ea... 65C

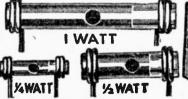
Well known quality makes, vitreous enameled, with lugs as

100,000 Ohm, 50 Watt Size %"x4". No. 18A791, Special Ea... 35C 300 Ohm, 50 Watt

Size | 3 x 4 ½ ". No. 18A219 ..40c Special Each 25 Ohm, 50 Watt Size % "x4"

No. 18A792, Special Ea.... 30C

Standard Non-Insulated Carbon Resistors



ACTUAL SIZE

Tolerance within 20%. RMA Color Coded. In all popular capacities. State sizes wanted.

No. 100 Lots Ea. Watt Ea. % 3c 100 Lots 21/2 C 12 A 651 4c 12A652 100 Lots 3 1/2 C Бc 100 Lots 41/2 C



Burgain Assortments.

watt and 50—¼ watt, 25—¼ wat and 50—¼ watt.) \$1.45
18A71, Box of 100.....\$1.45
200 assorted. Good sizes in ¼, ½
1 and 2 watt.
18A73, Box of 200....\$2.45
FREE. Handy Color Code Chart with each of the assortment listed.

STOP Look READ . Theills galore in our low price QUALITY items

Vitreous Enameled Wire Wound Resistors



Rugged-dependable-accurate. wound over a special ceramic tube, then covered with superior vitreous enamel. For every purpose—none

10 WATT

10 watt, \$\frac{1}{16}x\frac{1}{2}x1\lambda''. Pig tail leads anchored to lug ends. In popular changes 5 to 40,000 chms. Specify sizes,

5 WATT

5 watt, ¼x½x1¼".

In popular ohmages 5 to 5,000 12A658. Each 29c Specify sizes.

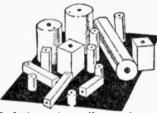


Stand-Off Insulators

Ceramic insulators, Tapped each end for standard machine screws. 19A 1054, 84" die

	x 1/3 "	long.	Ea	อต
9A1027,	%" d	la. x		120
long.	Ea.			TOC
dia. x	1 1/4"	long.		150
A1058,	Each			TOC

25 Insulator Assortment



Ideal for mtg. coils, condensers, etc. Finest grade Steatite, Alsimag and Porcelain. A variety of sizes square and round, tapped for various size machine screws, also included are several sizes of Steatite bushings. 19A978, Per Asst. of 25 50c



Ceramic Squares

Look! at This Bargain



PIECES 95c 500 HARDWARE Contains quite a wide screws nuts, washers, wide variety of shers, grommets and miscellaneous radio and general purpose hardware and fittings. A very handy collection to have around for anyone who does tinkering or repairing of any nature. No. 3.466. Per Asst. of 500 pleces..... 95c

Handy Brackets



18A104. Bracket. various needs. Special 5c Each

18A105. Bracket. verse Special Ea.

"SWEEP UP" Assortment



An odd lot conglomeration densers, resistors and miscellaneous odd parts as used in factory production line. The stuff looks a litodd parts as used in factory profor variable end
plates and other
insulating needs,
2%" sq. 4" thick.
19A1075.
Special Ea. 15C

odd parts as used in factory production line. The stuff looks a little "ruff" but all of it is useable and the price is cheap so you
will get your money's worth. (Approx. 50 pcs.)
No. 3A71, "Sweep Up" Asst. 50C

Shock Mounts at Give-Away Prices



hole, mtg. surface at top 1%" dia. .196" corner holes on 118" centers

8рес. **Еа.** ... **15**С 18A836.

Baffles



assorted pieces, backs, cabinet fles, grilles, and mis-cellaneous handy items.

8A18. Per asst. 35c

Drawer Pulis

Furnished complete with mtg. hdwe.

(1) Plastic Handle 19A1084, Each (2) Antique finish. 18A16. Each (3) Antique finish. 10c

KIT OF 10 MOLDED PAPER CONDENSERS

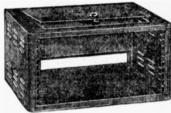


Bakelite molded wax impregnated paper condensers with pig tail leads. Standard R M A Color Coded. Excellent dependable substitutes for mica or paper tubular condensers. KIT OF 10 POPULAE CAPACITIES AND VOLTAGES.

Heavy Steel Cabinets

Heavy steel, rounded corners, hinged lid and louvre sides. Black Crackle Enamel finish. For transmitters, P A systems and other mitters, P A systems and other electronic equipment. Takes standard relay rack panel size 8 % x19". Over all size 15" deep, 10" high and 22" wide. A BEAL BUY. \$4.95

As above except square corners. Sides and back louvre. Takes panel size 10 % "x19". Over all size 13 % "deep, 10 %" high and 19 ½" wide. A REAL VALUE. No. 30A113, Special Each



\$3.50

Metal Speaker Cabinet



Portable metal speaker cabinet with Biack Crackle Enamel finish. Very Biack Crackle Enamel desirable for permanent or portable public address speakers and extension speakers. For 8" speaker, 11" wide, 11" high and 7" deep. Hole size 6 1/2". No. 5A140, At Only \$3.59

Tuning Slug



Iron core tuning slug breaded shaft 14" long. 19A1078. 1" with 6-32 threaded shaft 11/4" long. Has screwdriver slot for tuning. Special

BRASS TERMINAL LUGS



(1) Best quality brass tinned lugs available for all types of radio and repair work.
No. Type Lgth. Hole Each Per 100

19A1079 19A1080 1 1 1 8 8 -10 20 \$1.25 2 1 1 8 8 -10 30 2.00 3 1 8 10 10 .50 4 1 8 8-10 10 .75 19A1082

Cable-Condenser Clamp

Handy Clamp for cables condensers up to %" or condensers up to dia. 12A1398. Per Doz...10C

DIAL LOCK

Rotation of knob depresses finger which firmly clamps dial without imparting any rotary motion. 18A526, Spec. Ea... 25c

Padder Condensers Air





Duty Sending Key frame of

Heavy

silver contacts, solid bakelite, phosphor bronze key lever, spring steel lever spring, brass hardware, 17A414, A Terrific Value. 69C

4" P M SPEAKER



Army Sig-nal Corps type LS-7 speaker complete with transformer and 4 ft. cord with PL 68 plug attached

case 5"55"x314" deep, with screw clamp type mtg. bracket. Ideal as an extension speaker. A Real VALUE. VALUE. No. 5A41, SPECIAL EA. \$3.45

Lead-In Bushings



1%" dia x 4%" over all length with 1" hole. 8A68.

2½" dia.x 6¼" over all length with

Lead-In Bowl 1%" hole. For lead-in purposes at high

voltages, 18A175. Each. 5C Steatite



Stand-Off Insulator Has nickel plated cap

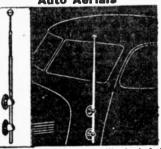
and base with %x1% insulation. No. 19A1074. .. 15c Special Ea. BUD



Type MC 1855 100 MMFD Midget Variable Semi-Circular - Double Bearing.

Steatite insulated 100 mmfd. max., 7 min., alr gap .024", 14 plate. Can be single hole or chassis mtd. Has %" shart %" long, over all size of condenser behind panel 2"x1%".
No. 18A804. Special Each

BARGAINS in SIDE COWL **Auto Aerials**

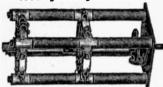


Popular cowl type, as illustrated, 3 Section telescopic, extends to 62 inches. Supplied with Low Loss Lead. List Price Ea, \$4.95. Sold Lead. List Price Ea. \$ only in multiples of five.

Per Pkg. of FIVE ... \$10.95 38A29, As above except extends to 96 inches. 96 inches. Per Pkg. of FIVE ... \$12.95

SWITCHES are always staple ...

2 Pole 6 Point **Heavy Duty Ceramic**



6%" tong, 2%" square, %" shaft. Silver contacts. No. 18A162, Special Ea. \$1.95

11 Contact Ceramic



Wafer type with silver contacts and silver multileaf contact arm. %" shaft %" long with bushing for panele up to %" thick. 95C

2 Gang, 8 Pole, 3 Position



Band change rotary switch, short-ing type. Mtg. depth behind panel 1 inch. 2" shaft, 7s" threaded mtg. No. 18A163, Each 35c

2 Gang, 5 Pole, 3 Position



Band change rotary switch, shorting type. Mtg. depth behind panel 3 inch. 2" split knurled shaft, \$\int_6\text{w}\rightarrow\$ nreaded snank.
No. 18A164, Special Each... 35C shank.



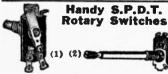
SECTION POSITION CIRCUITS

3

Mtg. depth behind panel 2". Has %" long threaded shank plus %" long %" shaft. No. 18A167, Special Each... 35C

Ceramic Gang Switch

8 Cir., 2 Pos., 4 Sect. The two center sects. are 2 cir., 2 pos. Front sect. is 3 cir., 2 pos. Rear sect. is 1 cir., 2 pos. The two rear sections are individually shielded. Over-all length 10" Can be easily disassembled and converted to a variety of combinations. of combinations. No. 17A428. Special Each... 50C



(1) Compact, S.P.D.T. wafer type, with 16" threaded shank 4" long plus 14" long 4" shaft. plus %" long %" shaft.

No. 18A534. Special Each.

10C
(2) S.P.D.T. With off position, shorting type. 2%" split knurled shaft, %" threaded shank.

No. 18A166, Special Each... 18C 3 Circuit Normally Open, Locking Type



Quality Lever Switch, Extends 31/2" behind Panel. Mtg. plate 1"x2". Bakelite handle.

18A532 18A532, Special Each 95C S.P.D.T. Spring Return with lever in one position, S.P.D.T. Locking with lever in other position.



Handy Slide Switch

Completes 4 isolated circuits each of two positions. Double break contacts. Thumb screw break contacts. Thumb screw locks it either position. Has bake-lite insulation throughout, A high grade switch with many possible 17A273. Special, Each.... 38C



Push Button Switch

Single circuit, normally open. Bake-17A276. Special, Each 15C lite button.



Heavy Duty On-Off Switch

Rated 70 amps at 24 volts, bakelite case 2"x1½"x¾". Front plate, metal tapped for 6-32 screws. Toggle extends 34". 95c



Spring Return Push Switch

Normally open, .75 amps at 125 V., .25 amps. at 250 V. Bakelite housing extends 1" behind panel. Single hole mounting for panels up to %" thick. A truly high grade

switch. No. 18A535, SPECIAL EACH 35c



S. Pole Norm. Open

Leaf type actuator switch. 45c



Roller Type **Leaf Switch**

Graphite roller, fotates on pin. Acro type RO-20M normally open, pressure 4 to 5 oz. 17A255, Special Each 40C Type RD-2M, Double Throw, pres-...40c sure 4 to 5 oz. 17A256, Special Each 50c



ACRO Leaf Switch Type XD47L, Long Travel Double

Throw. No. 184536, Special Each... 65C



Rotary Switch H & H off-on. 3 A., 250 V. %" shank with shaft for key operation. tion. 17A278. Each .. 15C



Bat Handle C H Toggle Switches

S.P.D.T. Has shank for panel thickness up to %

No. 18A551, Special Each. 45C D.P.S.T., otherwise identical to above. No. 18A552, Special Each... 35C



C-H Toggle Switch

S.P.S.T., On-Off has special finger lever. 8tk. No. 18A34.

...35c Each



24 Volt Relay Coil resistance 500 ohms. Requires 50 Mils at 24 V. DC to operate. Consist of 2 S.P.D.T. and 2 S.P.S.T.

sist of 2 S.P.D.T. and 2 S.P.S.T. circuits, the S.P.S.T. circuits are norm open. All circuits can be hooked individually or combined for D.P. operation. Horizontal or vertical mtg. Size 4"x1¾"x1". 18A563.

While They Last, Ea.....95C 24 VOLT RELAY

Coil like above, 2250 ohms resistance. Requires 7½ MA at 24 V. D.C. to operate attached leaf contact arrangement to break two, make one, three isolated circuits. 18A564, Each95c

Tyolt Relay

Coil resistance .7 ohms. Requires
1.3 amps at .9 V. D.C. to operate.
Coil can be rewound to make a
very sensitive relay with any desired operating characteristic. Contact arrangement, make one, break
one, two isolated circuits. One pair
of contacts heavy enough to carry
several amps. Over all size 4"x
1¼"x1¼".

Q5.0 18A575, Each 95c

MICRO-**SWITCHES**





Type YZR31 (at left) pin plunger normally open, operating pressure

7 to 8½ oz. No. 18A168, Special, Each. Type BZ2RQIT (at right) push-button plunger type. Single hole panel mounting. Normally Open 65c

C-H. Plunger Switch



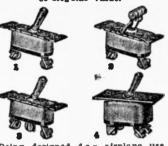
Normally Open. with pressure on plunger, in "off" position when released—the ideal safety switch for cabinets housing high voltage.

No. 17A257, Special Each



...65c Slide

C-H Heavy Duty Toggle Switches Priced at One-Half and Less of Regular Value.



Being designed for airplane use, they are very rugged and of finest materials. Positive snap action and positive contact even under extreme positive contact even under extreme vibration or shock. All electrical connections are silver to silver. Flush mount; plates are *2" x 2½". mtg. hole centers 1½", holes ¼" all 1½" x 2½" on figs. 1, 2, 3 and 1½" x 2½ s on figs. 4. Single pole type rating is 35 amp. 24V; 5 amp. 125 V. AC. Double pole type rating 20 to 30 amp, 125V. AC. Switches marked with * have luminous lens in end toggle, giving a wide range of visibility.

*8.P.S.T., Momentary On-Off Type 8211-B6B. (Fig. 1.) 8tk. No. 18A26, Each 25c S.P.S.T., ON-Momentary Off (2) Type 8216B15. 8tk. No. 18A27, Each 25C S.P.S.T., Off-Momentary On (2) Type 8219B20. 1ype 8219B20. 8tk. No. 18A28, Each 25C *S.P.D.T., On-Center Off-On (8)
Type 8200B9A. 8tk. No. 18A29 35C *S.P.D.T., Momentary On-Off-Momentary On (8) D.P.S.T., Off-Mom. On. (4). 65c Stk. No. 18A81 D.P.D.T., Momentary On-Off-Momentary On (4). Type 8712C11. 8tk. No. 18A32......75c



Switch Guard For use with a bove switches. Marked starter. 18A35, Ea. . . 150

Giant Plug and Jack Set



Plug 13" long — Jack is 3" and fits %" hole. Complete as shown. Per Pr. ... 25c

No. 18A843, As above, JACK ONLY 10c

BARGAINS in Type BT Metalized IRC Resistors



Type BT1-1 Watt. Size 14"x4". In Ohmages Only as follows.

1500 22,000 100,000 Spec. 2000 30,000 250,000 Each. Each. 2000 30,000 1 Meg. Per \$6.00 5000 No. 12A660, (Specify Ohmage) Type BW 2 Watt 5000

| Spec. | Ea. | Spec. | Spec. | Ea. | Spec. | Spec. | Ea. | Spec. | Sp

Turnbuckle For SAGGING AERIALS, Etc.



Brass barrel, high tensile strength steel fork and eye. No. 19A656, Spec. Es. 25e

A Aeriala, Auto	79
A Alligator Clina	41
Anikator Olipa	-91
Alignment Tools41, 50,	68
Ammeters 25	71
A liet of a management of a	12
Ampilitiers3, 4,	b
Analyzera 18 to	24
A = 4 = = = A = = = A A A A A A A A A A	7.4
Antenna Acces, 44, 47, 49, 59,	14
Ruffles Speaker 5	17
75 11 of the control amount of	2.5
Ballast Tubes	.35
Barcain Pages 68 to	81
Datasias & Diseas 17 50 60	01
Datteries & Pluga17, 59, 58,	OI:
Battery Chargers	.35
Dalla Dil Dalas	0.5
Beits, Dial Drives	.35
Bed Lamps	.66
Di-di-m Desta 44	70
Dinding Fosts44,	10
Blank Records	.13
Pasks Manuals 54 to	E7
DOOKS, MANUALS	91
Boom Stands, Microphone	8
- 011 1 5 15 00	=0
Cabinets	79
Cable Dial 25 52	68
0-11 1 3371 40 40 00	55
Cables and Wires46, 47, 68,	19
Call Systems 6.	- 7
Consular Conce	177
Carrying Cases	17
Cartridges, Phono Pick-up	.15
Changin Baron	69
Chassis Dases	-00
Chemicals, Service Aids	.45
Chi Flo-tai- Door	87
Chimes Electric, Door	-01
Chokes28, 29, 64, 68 to	74
Cada Denetica Cota E9 E0 C4	77.1
Code Practice Sets 38, 59, 54,	4.4
Coils. All Types60, 61.	64
Call Flance Acces 59 61 69	C 4
Coli Forms, Acces,	04
Communications Receivers83.	84
Condensors 91 81 69 to	77
Condensers31, 01, 08 to	11
Condensers, Variable60, 72,	79
Candonian Testen 21 29	9.4
Condenser rester21, 23,	24
Connectors, Cable38, 39,	75
Cantrolo Walsons 25 26 27	72
Controls, volume20, 20, 21,	10
Converters48.	83
Canda Floatnical	65
Cords, Electrical	
Cords, Phono	76
Courling Shoth	76
A Aerials, Auto Alligator Clips Alignment Tools Alignment Tubes Baffles, Speaker Seaker Bargain Pages Bages Ballast Tubes Bargain Pages Belty Ballast Tubes Belts, Dlal Drives Bed Lamps Binding Posts Belts, Dlal Drives Bed Lamps Binding Posts Books, Manuals Books, Manuals Books, Manuals Books, Manuals Books, Manuals Books, Manuals Cables Cable, Dial Books Cable, Dial Books Call Systems Cartridges, Phono Pick-up Chassis Bases Chemicals, Service Aids Chimes Electric, Door Chokes Books Code Practice Sets Books Chimes Electric, Door Chokes Books Code Practice Sets Books	76 72
Couplings, Shaft 34, Crystals and Kits 59, 61,	76 72 70
Couplings, Shaft 59, 61,	76 72 70 61
Couplings, Shaft 34, Crystals and Kits 59, 61,	76 72 70 61
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 69, Diagrams, Radio	76 72 70 61 .57
Couplings, Shaft 34, Crystals and Kits 59, 61, D Dietectors, Crystal 59, Diagrams, Radio 24, 61, 69	76 72 70 61 .57
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio 34, 61, 69,	76 72 70 61 .57
Couplings, Shaft 34, Crystals and Kits 59, 61, Dielectors, Crystal 59, Diagrams, Radio 5, Dials 34, 61, 69, Dial Cable 35, 58,	76 72 70 61 .57 72 68
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Dials Radio Dial Cable 34, 61, 69, Dies Recording	76 72 70 61 .57 72 68
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording	76 72 70 61 -57 72 68 -13
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Dials Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units	76 72 70 61 .57 72 68 .13
Couplings, Shaft 34, Crystals and Kits 59, 61, Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units Dynamotors 68	76 72 70 61 .57 72 68 .13 -18
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68,	76 72 70 61 -57 72 68 -18 -18
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery	76 72 70 61 .57 72 68 .13 .18 74 .48
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio 59, Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording 59, Driver Units 59, Dynamotors 68, Eliminators, Battery, Electrical Sundries	76 72 70 61 -57 72 68 -13 -18 74 -48
Couplings, Shaft 34, Crystals and Kits 59, 61, Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters Notes	76 72 70 61 -57 72 68 -18 -18 -74 -48
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59,	76 72 70 61 57 72 68 13 18 48 65 77
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio. Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fluorescent Lighting 67,	76 72 70 61 .57 72 68 .13 .18 74 .48 .65 77 68
Couplings, Shaft 34, Crystals and Kits 59, 61, Detectors, Crystal 59, Diagrams, Radio 59, Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fluorescent Lighting 67, Friction Tape 45.	76 72 70 61 -57 72 68 -18 -18 -48 -65 768 65
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fruction Tape 45,	76 72 70 61 57 72 68 13 18 48 65 77 68 65
Cords, Fronce. 38, Crystals and Kits. 59, 61, Detectors, Crystal. 59, 61, Diagrams, Radio. 59, Dials. 34, 61, 69, Dials. 35, 53, Discs, Recording. 35, 53, Discs, Recording. 35, 53, Discs, Recording. 35, 68, Eliminators, Battery. Electrical Sundries. Filters, Noise. 49, 59, Fluorescent Lighting. 67, Friction Tape. 45, Fuses & Mountings. 33, 65, Fuses & Mountings. 33, 65,	76 72 70 61 .57 72 68 .13 .18 .44 .48 .65 77 68 67 78
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio 59, Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording 59, Driver Units 59, Eliminators, Battery 68, Eliminators, Battery 68, Filters, Noise 49, 59, Frictiou Tape 45, Friese & Mountings 33, 65,	76 72 70 61 -57 72 68 -18 -18 -18 -77 68 -65 77 68 -65 78
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries 49, 59, Filters, Noise 49, 59, Friction Tape 45, Fuses & Mountings 33, 65, C Germiddal Lamps	76 72 70 61 .57 72 68 .13 .18 .48 .65 77 68 65 77
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Dials 34, 61, 69, Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, Germicidal Lamps Grid Caps 43,	76 72 70 61 -57 72 68 -18 -18 -74 -48 -65 77 68 -67 74
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fruction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps G Grid Capa 43, Grommets 43,	76 72 70 61 .57 72 68 .18 .48 .65 77 68 .65 78 .67 44 44
Couplings, Shaft 34, Crystals and Kits 59, 61, Detectors, Crystal 59, Diagrams, Radio 59, Dials 34, 61, 69, Dials 35, 53, Discs, Recording 57, Driver Units 59, Dynamotors 68, Eliminators, Battery 59, Filters, Noise 49, 59, Filters, Noise 49, 59, Frictiou Tape 45, Fuses & Mountings 33, 65, Germicidal Lamps 33, 65, Grommets 43, Grommets 43,	76 72 70 61 -57 68 -18 -18 -76 65 77 68 65 77 44 44 44
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio 59, Dials 34, 61, 69, Dials 34, 61, 69, Dials 35, 53, Discs, Recording 59, Driver Units 59, Dynamotors 68, Eliminators, Battery 68, Eliminators, Battery 59, Filters, Noise 49, 59, Frictiou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps 43, Grommets 43, H Hardware 40 to 44, 75,	76 72 70 61 57 72 68 18 48 65 76 68 67 44 44 47 9
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio. Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries 49, 59, Filters, Noise 49, 59, Frictiou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps G Grid Capa 43, H Hardware 40 to 44, 75, Hardware 40 to 44, 75, Hardware 58, 70.	76 72 70 61 -57 68 -18 -18 -74 -48 -65 77 68 -67 44 44 79
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Friction Tape 45, Fuses & Mountings 33, 65, Germicidal Lamps Grid Capa 43, Grommets 43, Hardware 40 to 44, 75, Headphones 58, 70,	76 72 70 61 .57 68 .18 .18 .44 .65 .77 68 .67 44 47 71 767
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries F Filters, Noise 49, 59, Fruorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps G Germicidal Lamps G Grommets 43, H Hardware 40 to 44, 75, Headphones 58, 70, Heat Lamps	76 72 70 61 .57 68 .18 .48 .65 77 68 65 78 .44 44 79 71
Couplings, Shaft 34, Crystals and Kits 59, 61, Detectors, Crystal 59, Dials 34, 61, 69, Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fruction Tape 45, Fruses & Mountings 33, 65, Germicidal Lamps Grid Caps, 43, Grommets 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62,	76 72 70 61 .57 68 .18 .48 .65 76 65 78 44 44 79 71 .67
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fruction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps G Germicidal Lamps G Germicidal Lamps G Germicidal Lamps Hardware 40 to 44, 75, Head Lamps Hardware 40 to 44, 75, Head Lamps Insulators 43, 44, 47, 62, Linns Elec Soldering	76 72 61 57 68 13 14 48 65 76 66 77 67 44 47 71 71 71
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio. Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording 35, 58, Driver Units 59, Driver Units 68, Eliminators, Battery 68, Eliminators, Battery 68, Eliminators, Battery 68, Filters, Noise 49, 59, Fruorescent Lighting 67, Frictiou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps 43, Grommets 43, H Hardware 40 to 44, 75, Heat Lamps 10, Heat Lamps 10, Insulators 43, 44, 47, 62, Irons, Elec., Soldering	76 72 70 61 57 72 68 18 48 67 76 67 71 67 71 67 71 67
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystal 59, Diagrams, Radio. Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fructiou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grommets 43, H Hardware 40 to 44, 75, Head Lamps 58, 70, Heat Lamps 18, 70, Heat Lamps 18, 44, 47, 62, Irons, Elec., Soldering 19, 170 Elements, Repair Kits	76 72 70 61 57 68 18 18 48 65 77 68 67 44 47 71 67 79 51
Couplings, Shaft 34, Crystals and Kits 59, 61, D Detectors, Crystals 59, Diagrams, Radio Dials 34, 61, 69, Dial Cable 35, 58, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fruorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, Germicidal Lamps Germicidal Lamps Grommets 43, Hardware 40 to 44, 75, Headphones 58, 70, Heat Lamps 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Later-Com. Systems 6.	76 72 70 61 57 61 61 72 61 63 74 65 77 66 67 77 67 71 67 71 67 71 67 71 67 71 67 71 71 71 71 71 71 71 71 71 71 71 71 71
Couplings, Shaft 34, Crystals and Kits 59, 61, Dietectors, Crystal 59, Diagrams, Radio Dials 34, 61, 69, Dials 34, 61, 69, Dials 68, Disacs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fructou Tape 45, Fruses & Mountings 33, 65, Germicidal Lamps Germicidal Lamps Germicidal Lamps Grid Capa 43, Hardware 40 to 44, 75, Headphones 58, 70, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6,	76 72 70 61 57 61 61 62 63 63 64 65 77 68 66 77 67 67 67 67 67 67 67 67 67 67 67
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fructou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grommets 43, Hardware 40 to 44, 75, Head Lamps 58, 70, Heat Lamps 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	70 61 .57 72 68 13 -18 -44 .48 -65 768 65 77 79 -51 .65 7
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fructou Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grommets 43, Hardware 40 to 44, 75, Head Lamps 58, 70, Heat Lamps 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,	70 61 .57 72 68 13 -18 -44 .48 -65 768 65 77 79 -51 .65 7
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Fiuorescent Lighting 67, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps 43, Hardware 40 to 44, 75, Heat Lamps Insulators 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78
Crystals and Kita 59, 61, D Detectors, Crystal 69, Diagrams, Radio Dials 34, 61, 69, Dials 35, 53, Discs, Recording Driver Units Dynamotors 68, Eliminators, Battery Electrical Sundries Filters, Noise 49, 59, Friction Tape 45, Fuses & Mountings 33, 65, G Germicidal Lamps Grid Caps, 43, Grommets 43, Hardware 40 to 44, 75, Headphones 58, 70, Heat Lamps Insulators, 43, 44, 47, 62, Irons, Elec., Soldering Iron Elements, Repair Kits Inter-Com. Systems 6, Jacks & Plugs 38, 40, 76,	70 61 .57 72 68 .18 .48 .67 768 .67 768 .67 77 79 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 .65 78 78 78 78 78 78 78 78 78 78 78 78 78

Meters, Panel 25, Mica Condensers 31, 71 to Microphones 10, 11, 70, Microphone Standa 8, Motors, Phono Multimeters 18 to Name Plates 34, Needles, Phono Oscillators, Code 58, Oscillators, Phono Oscillators, Fest 18 to Oscilloscopes 19 to P Panels 63, Panel Lamps, Neon Phono Amplifiers Phono Drives Phone Tips & Plugs 38, 40, Pick-ups, Phono Pick-up Cartridges	71
Mica Condensers 31, 71 to	77
Microphone Standa 8.	11
Motors, Phono	.16
Multimeters 18 to	24
Name Plates 34, Needles, Phono	13
Oscillators, Code58,	59
Oscillators, Phono	.16
Oscilloscopes 19 to	24
Panels 68.	71
Panel Lamps, Neon	.33
Phono Amplifiers	5
Phono Drives	35
Phone Tips & Plugs 38, 40,	76
Pick-ups, Phono	.14
Pilot Lamps 29 69	71
Plugs, Electrical	.65
Plugs, Radio 38 to 40,	76
Polystyrene	.62 40
Pocket Testers 20.	22
Public Address Equip 8 to 9,	17
R Records	.18
Record Changer Mixer Type	22
Record Players 3, 5, 16,	22
Recording Equip12, 13,	15
Reculiers 35, 48,	20
Relay Racks, Panels	.63
Resistors32, 68 to	80
S Service Manuals	45
Set Testera 18, 19, 20,	24
Scotch Tape	.58
Signal Tracers 20, 21,	65
Sockets, Pilot	69
Sockets, Radio33, 38, 39, 64,	76
Solder & Soldering Irons	.51 5
Spachetti, Tubing	75
Speakers8, 9,	79
Suppressors, Auto49,	77
Terminal String 38, 40.	75
Test Leads, Prods	.41
Test Lights 41,	52
Tools 46 50 to 58	81
Transformers 28, 29, 70,	74
Transcription Equip. 5, 12,	15
Transmitting Equip47, 60, 61,	79
Trumpets Public Address	. 8
Tubes, Receiving 30, 85,	82
Tube Sockets39, 64,	76
Tube Testers 18 to	24 75
Tubular Condensers 31, 73,	77
Turntables 12,	16
V Vacuum Tube Volt-	91
Vibrapacks	.48
Vibrators48,	68
Volt Meters	25
"Vomax"	21
Wire & Cable_46, 47, 65, 68	,75
Phono Amplitiers Phonographs, Elec	

Our Terms

Our terms: Cash with order or C.O.D. eliminates expensive book-keeping and collection costs—enabling us to pass on lower prices and maintain better service. Full remittance with your order simremittance with your order sim-plifies very much its handling, assuring you more prompt ship-ments and saves you extra C.O.D. collection costs. We ship C.O.D. if you wish (except special merchandise). A 25% deposit should be included with each C.O.D. or-der. On small orders (under \$5.00) remittance in full should

be included.

It is safest to remit by postoffice It is safest to remit by postoffice or express money order, bank draft or check. Checks properly signed may be sent in blank for us to fill in amount after shipping. Avoid sending coin or currency, but if necessary, be sure to register your letter.

Government, State and Industrial

purchase orders are handled on the usual payment terms apply-ing to such institutions.

Our Prices

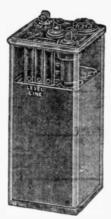
Because of this catalog being complied for the Trade only, "Trade" Net Prices are shown. only. Full trade discount as well as all cash discounts have already been deducted. The prices given are deducted. The prices given are Net Costs—you know at a glance what each item costs you. In the event of declines, you will re-ceive the lower prices, even though our catalog shows a higher price.

Prices, of course, also subject to advance without notice. Such advances will be only in accordance to advances from our suppliers.

Where price advance is small, your order will not be held, but explanation made on the billing, Should it be large we will write you before shipping so you can make additional remittance by return mail or instruct us in ac-cordance with your wishes. All prices are net F.O.B. Kansas City, prices are net F.U.B. Anneas C. Mo., unless otherwise indicated.

Last Minute Specials

Willard 2 Volt Compact Rechargeable



Storage Battery in PLASTIC CASE

RIDICULOUS LOW PRICE

Its compactness, only 2%" square x 6" high—
(about the size of the ordinary #6 dry cell)
make it applicable for a wide range of uses
where battery power is needed, particularly in
portable units, it is standard equipment in some
portable radios. 2 volts, 24 A H, gangs nicely
for other voltages in multiples of 2 volts, has
handy screw type connections at top.
Its nest transparent plastic case gives visibility
to the ball float charge indicator and electrolyte
level line—making for an attractive, small wet
storage battery that will be in keeping with the
finest of companion apparatus.

Our ridiculously low price is made possible be-

Our ridiculously low price is made possible be-Our ridiculously low price is made possible because of a quantity purchase from army surplus. Every one is brand new in original factory container. There is no deterioration to these batteries while dry-so buy all you can while available at such a low price. Shipped dry in individual cartons with bottle electrolyte for each in separate container. Shipping weight battery and electrolyte 4½ lbs. Can't be shipped via parcel post.

parcel post.
Willard Type ERH-25-2,
Stock No. 5A133. SPECIAL EACH ..\$2.95

Type 27-2, like above, size 2½"x2%"x5½" high, 2 Volt, 27 A H Willard plastic case, rechargeable battery—AN EXACT REPLACEMENT FOR G. E. PORTABLE RADIOS made prewar and also other make sets. Shipped dry with electrolyte in separate container. \$4.45

NOTE: Because of postal regulations not permitting shipment of acid-these batteries can be shipped via Express or Freight only.

Set of Four Handy Screwdrivers

only 99c

While a Limited Stock Lasts.



Unbreakable Plastic Handles with quality steel bits, each one a handy

quality steel bits, each one a handy size. Always needed. (1) Round ¼" dia. x 8" long bit. (2) Square ¼" dia. x 4½" long bit. (3) Square ¼" dia. x 4½" long bit. (4) Square ¼" dia. x 3½" long bit. Stk. No. 18A565. Per Asst. of 4. Only..... 99c

"Wiss" Forged Steel **Trimming Shears**



A handy piece in every tool kit. "Just It" for trimming wire insulation, light metal or even snipping small gauge wire. 5" over all with quality spring in handle. Usually priced twice what we ask.

No. 11A61. While They Last \$1.29



The name assures you of the finest quality forged steel—Many is the time you have need for a quality small needle nose plier of this type. Especially designed for professional use. 4½" over all and ordinarily priced much highes. Order yourse priced much higher. Order yours Today.

Today. Stk. No. 11A40. While They Last, Each....99C

KRAEUTER



Round Nose Pliers, A handy plier for shaping wire, metal and all around radio work. Made of Forged steel with polished head and blued finished handles. No tool kit should be without a pair. Over all length 6".

No. 11A15. Special Each



Bargain Wrench Set Contains a socket wrench

for use with

standard brace, to fit
" square nuts. PLUS Five Hex
ey Wrenches for Allen Screws,

18A570, Complete Set 6 Pcs. . 25c



Veeder-Root Trip Cyclometers Bargain Priced

Only.... \$1.95

Registers 0000 to 9999 in steps of 1/10 revolution, in other words, 10 numerals register for each complete revolution of the cam. Attractive Chrome housing size 1%x %x%". Cam is 1%" long.

No. 18A566. Special Each\$1.95



Worm and Gears At a Low **Price**

Bronze Boston gear, 20 teeth, Used in combination with worm illus-trated for 20 to 1 ratio speed re-duction. Ideal for making your own tuning assemblies, etc.

No. 18A567 gear fits ¼" shaft. No. 18A568 gear fits ¼" shaft.

No. 18A569 worm fits 1 shaft. Your Choice,

TRANSMITTING and SPECIAL PURPOSE TUBES

"RCA" "RCA" Mfr.'s Type Net Each Mfr.'s Type Net Each Stk No. Sitk No. \$ 1.25 20A 700 20A674 0A2 0A3/VR75 20A701 20A732 9.25 1.20 20A 753 826 0A4-G 0C3/VR105 0D3/VR150 12.50 829-B 20A 702 1.20 20A 755 20A703 1,20 20A756 830-B 10.00 20A628 832-A 10.60 20A 283 IC21 2.20 45.00 12.00 20 A 736 2D21 1.80 32A244 833-A. 5.10 32A245 32A246 838 2E24 12.00 20A624 2 F.26 4.00 866-A /866 20A737 2V3G 2.75 20A757 1.75 7.50 1.80 20A758 872-A/872 20A739 2X2/879 20A740 20A741 20A742 2.50 20 A 788 2X2-A 1.80 1.70 1.05 884 1.80 4.90 20 4 625 3E22 6.85 20A728 954 3.10 20A711 5R4-GY 1.30 20A724 955 6AK5 20A631 5.55 20A658 957 4.90 20A659 5.45 20A632 20A634 32A238 203-A 12.00 959 82A239 32A240 211 579-B 12.00 20 A 630 991 3.50 2.30 20A760 32A241 629 5.50 1625 4.25 20 4 635 1654 4.00 20A743 32A242 803 21.00 20A744 2051 1.70 20A746 805 10.00 2.30 3.50 32A247 8000 13.25 7.00 20A627 20A629 8005 809 20A748 20A749 12.50 20A726 9001 3.50 2.15 9000 811 2.70 3.50 20A728 20A750 812 20A 729 20A 730 14.50 9004 2.15 14.00 814 20A 752 6.25 20A731 9006

"RCA" TRANSMITTING TUBE MANUAL-74 pages of tube

"TAYLOR"

"EIMAC"

Stk No.	Mfr.'s Type	Net Each	Stk No.	Mfr.'s Type	Net Each
20A761	T-20	\$ 2.75	1 20A189	3C24/24G	\$ 6.00
20A762	TZ-20	2.75	20A670	25 T	6.00
20A672	T-21	1.95	20A671	35T	7.00
20.4669	TB-35	10.00	20A 190	35 TG	8.00
20A763	T-40	3.95	32A251	100TH	15.00
20A764	TZ-40	3.95	33A46	100TL	15.00
20A765	T-55	6.50	33A49	250TH	27.50
20.4766	203-A	12.00	32A248	250TL	27.50
32A250	HD-203A	14.50	83A47	4-125A	25.00
20A767	866JR	1.25	33A48	4-250A	36.00
20A768	866A	1.75	32A249	KY-21A	10.00

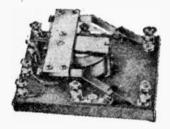
FREE-TAYLOR TUBE MANUAL listing tubes for all amateur, commercial and industrial service. Stock No. 20A769. teur, commercial and industrial service.

RAYTHEON RK-4D32

A beam tetrode carrying full rating to 60 mc. Plate dis, 50 W. Requires about 1 W. of drive. Rated at 200 W. max. input at only 750 V. Typical operation allows 125 W. input at 600 V. Has 6.3 V. filament. No neutralization needed, making it well suited for band ment. No

D.P.D.T. Antenna Relay

Auto Elec. Mfg. Type R51



For any RF or power circuit requiring a high quality well insulated relay. Contacts are \(\frac{1}{4} \) pure silver. Base plate and contact carrying bar are mycalex. Operates quietly on 110 V. AC. Size over-all \(\frac{1}{4} \) "2. Yet \(\frac{1}{4} \) "3. Wet \(\frac{1}{4} \) "3. Ntk. No. 17A731. Net Ea. \$4.70

New! Raytheon RK-61

RADIO CONTROL TUBE. small 3 element thyratron of great interest among radio experimenters, amateurs and mod-el airplane enthusiasts in applications requiring extreme economy of space, weight and bat-tery drain. Size ½"x118" approx. With one RK-61 it is possible to construct a simple receiver that will operate a relay to control a motor or other devices. Receiver sensitivity will be equal to that obtained by using 2 or 3 tubes of conventional type. See Oct., 1946, issue of Model Airplane News for circuit.

No. 20A188. RK-61. Net Each

hallicrafters TRANSMITTING EQUIPMENT



HT-9TRANSMITTER

POWER OUTPUT **75 WATTS PHONE** 100 WATTS CW CRYSTAL CONTROLLED

> Covers 80, 75, 40, 20 and 10 Meter Amateur Bands SELF-CONTAINED

The ideal medium power transmitter with maximum flexibility and convenience. Five individual plug-in tuning units and 5 crystals (one for each band) may be accommodated in the exciter section simultaneously. Band switching is accomplished easily by a front panel switch and by changing one coil in the final amplifier. Exciter units are pretuned. Has three panel meters, RF output matches any resistive load

tuned. Has three panel meters, RF output matches any resistive load from 10 to 600 ohms.

Uses 14 Tubes; 61.6 crystal osc, (used above 8 mc. only), 6L6 crystal osc, or doubler, 814 RF amp., 6SJ7 and 6J5 speech amp., 4—6L6 PP parallel modulator, 2—523 rect., 80 rect., 2—866 rect.

Cabinet is steel, finished in gray wrinkle enamel and provided with heavy rubber mtg. feet. Top and sides have ventilated openings and lid is equipped with interlock switch to remove high voltages when cabinet is open. Cabinet size 29½", 12½", 20½". Wt. 120 lbs. Operates on 105-125 V. 50/60 cy. AC. Normally draws 400 W.

HT-9 Transmitter with Tubes

Yoor

\$250.00

\$250.00 H1-9 Transmitter with Tubes
Less Colls and Crystals,
Stock No. 30A142.
Stock No. 30A143. Complete Set of Coils for
80, 75, 40, 20 and 10 Meter Bands. Per Set.....



NEW!

CW TRANSMITTER CRYSTAL CONTROLLED Covers 80, 40, 20, 11 and 10 Meter Bands
For the "Ham" who wants a modest start or who does not have space for larger equipment. Completely self-contained. Has antenna matching network and adjustable link for coupling to any antenna or higher power final amplifier. Has connections for an external modulator. Uses plug-in coils. Pilot light tuning indicator may be removed easily for plugging in a MA meter. Requires 7 mc crystal for full output at highest frequency. Socket at rear permits operation on 6 V. DC. for filaments and 400 V. at 135 ma. for plate-when 105-125 V. 50/60 cy. AC. is not available. Tubes are: 6V6G7 crystal osc., 807 final amp., and 5Z3 rect. Cabinet matches styling of New Hallicrafters Receivers. Size over-all 12%"x7%"x8%". Approx Weight 25 lbs.
HT-17 Transmitter with Tubes
Less Coils and Crystals.
Stock No. 30A144.

HY-17 transmitter with Tubes
Less Coils and Crystals,
Stock No. 30A144.
Stock No. 30A145. Complete Set of Coils for
80, 40, 20, 11 and 10 Meter Bands, Per Set......



NEW! VARIABLE OSCILLATOR

Band Switching-Ganged Tuning 5 BANDS VFO or Crystal OUTPUT 2½ WATTS

Another welcome addition to the Hallicrafters line—and to any Ham Shack As easy to shift to a new frequency as a modern receiver!

Employs a 6BA6 tube in an E.C. oscillator circuit, plate and screen regulation, temperature compensation and a full vision accurately calibrated dial. Tuned circuits of osc. and 6V6GT multiplier-amp. are ganged. Coils are permanently installed. Built-in power supply uses VR-106, VR-150 and a 5Y3GT rect. Has front panel switch for selection of 3 nlug-in crystals and jack for keying both osc. and amp. For operation on 105-125 V. 50/60 cy. AC. Cabinet matches the New Hallicrafters Receivers.

crafters Receivers. HT-18 With Tubes Less Crystals. Stock No. 30A146. Cost, Each

HALLICRAFTERS CN-1 CONVERTER To make Pre-War FM Sets work in New FM Bands

Now any FM receiver with tuning range of 42 to 50 mc can be operated on 88 to 108 mc. Converter transforms receiver into a double superhet. Very small, 6"x4"x4", and will mount inside most sets. All tuning is done with the regular receiver dial. Has a 4-position switch to permit normal reception or operation on any one of the new FM ringes. An attractive conversion chart is provided for easy location of new bands. Uses only one tube. Very simple to install—no soldering or alterations required.

Supplied complete with universal mounting bracket and a power take-off plug and cable

CN-1 Converter. Your Stock No. 31A18. Cost

hallicrafters **COMMUNICATIONS-RECEIVERS**



Model S-38

For All Who Want the FINEST Receiver Available at a Low Price....

A truly competent communications ceiver, styled in the post-war Halli-crafters pattern and incorporating many of the features found only in the more expensive sets.

Frequency range of 540 KC to 32 MC covered in 4 bands. Front panel controls all plainly marked for Tuning and Bandspread. Beat Oscillator, Band Selector, and Volume plus switches for Noise limiter, Speaker or Phones, Standby, AM/CW and power. The AM/CW switch turns on Automatic Volume Control in AM position, besides shifting from broadcast to code reception. A PM Speaker is mounted inside cabinet. Tip jacks for phones, and terminals for a doublet or single wire antenna are at the rear.

are at the rear. Cabinet is steel finished in satin black. Panel markings are light gray and switch knobs red. Over-all size 12%" long by 7%" high by 8%" deep. Complete with six tubes. 1—12SA7, 1—12SK7, 2—12SQ7, 1—35L6GT, 1—35L5GT. For operation on 105 to 125 Volts AC or DC; also 220 to 250 Volts AC or DC with line cord listed below.

Model 8-38, Stock No. 30A89. Complete With Tubes \$47.50

Stock No. 17A740, 220 Volt Adapter Line Cord. Net Ea.

Model S-40A

FUNCTION and BEAUTY Combined. 540 kc to 43 mc.

great communications receiver handsomely designed, expertly en-gineered and tailor made for hams. Has many circuit refinements never before available in this price class.



Has many circuit refinements never before available in this price class.

Tuning range: 540 KC to 43 MC in 4 bands. Electrical bandspread and inertia flywheel tuning plus wide vision glareless dials, accurately calibrated, make this receiver easy to handle in crowded bands. Its many outstanding features make it especially well suited for the serious short wave listener who also wants a standard broadcast receiver that the whole family can use. Normal positions of all controls for standard broadcast reception are marked in red.

Special Features: Permeability adjusted "Micro-Set" inductances in the RF section, automatic noise limiter, temperature compensated RF oscillator, beat frequency oscillator, separate RF and AF gain controls, three-position tone control, rubber shock mounted PM speaker inside cabinet, and socket for connecting external "S" meter. Front panel controls for MAIN and BANDSPREAD TUNING, RF SENSITIVITY (includes "S" meter on/off switch), BAND SELECTOR, VOLUME, AVC ON/OFF, CW/AM. NOISE LIMITER ON/OFF, TONE AC OFF, PITCH CONTROL and STANDBY-RECEIVE. Uses 9 tubes—6SG7 RF, 6SA7 converter. 2—6SK7 1Fs, 6SQ7 2nd det.—first audio, 6F6G audio output, 6H6 AVC—noise limiter, 6J5GT BFO, 80 rectifier.

The cabinet is steel, very attractively finished in rich satin black. The entire top section swings open on a piano hinge. The chassis and panel can be removed as a unit without disconnecting any controls. External trim is satin chrome, dials are light green, lettering is in light grey and red. Over-all size 18½" long, 9" high, 11" deep. For operation on 105 to 125 Voits, 50 to 60 cycle AC. Special plug in rear allows operation on 6 V. battery and vibrapack furnishing 70 Ma. at 270 voits.

Model 840 With Tubes, Stock No. 30A91.

Your Cost,

SM-40 "S" METER

A calibrated signal strength meter with indirectly illuminated scale marked in "S" and DB units above S-9. Matches S40 receiver and is equipped with cable to plug in socket at rear of receiver. Over-all size 5 %" wide, 4" high, 4 1/2" deep.

SM-40 Meter. Stock No. 17A741. Your Cost,



Model S-41G

The Skyrider Junior

An Outstanding Value, 6-tube AC-DC superhetero-dyne communications receiver covering short wave and standard broadcast from 550 KC to 30 MC

in 3 bands.

Main tuning dial is calibrated in megacycles. Main tuning dial is calibrated in megacycles. Has separate bandspread tuning dial (electrical bandspread), beat oscillator for code reception, automatic noise limiter, standby switch, band switch, volume control and power switch and connections for doublet or single wire antenna. Pin tip jacks at rear for headphones and a switch on front panel permits easy change from speaker to phones. Very compact with PM speaker mounted inside the steel cabinet. Size 11 \(\frac{1}{2}'' \) long, \(\frac{8}{1}'' \) high. \(\frac{8}{1}'' \) deep. Finished in crystalline gray with maroon dial and black knobs. Complete with tubes. \(2-12\SQ7_1 \) 1-12\SQ7_1 1-12\SQ7_ Has separate bandspread

Model S41G Receiver. Stock No. 30 493.

Stock No. 17A740. 220 Volt Adapter Line Cord. Net \$2.00

Vour Cost.
Complete With Tubes.......\$36.75

Model SX-42

Continuous Frequency Coverage 540 kc to 110 mc AM-FM-CW

Combines in one superbly en-gineered unit a top - flight standard and VHF communi-cations receiver; standard broadcast, short wave and FM broadcast receiver and a high fidelity phonograph amplifier.

The tremendous frequency range is made possible by a new "split stator" tuning system and the use of dual intermediate frequency transformers. Reception of amplitude modulated and CW telegraph signals is provided throughout the entire range. In addition, a discriminator and two limiter stages permit reception of FM signals on 27 to 110 megacycles. The audio system is essentially flat from 60 to 15000 cycles and has an undistorted output of eight watts.

All controls are arranged for maximum convenience and simplicity of operation. Main tuning has precision vernier scale. Other front panel controls are Band Spread Tuning, Band Selector, Volume and AC Switch, AVC Noise Limiter, Receive/Standby, Selectivity, Tone, Sensitivity, Crystal Phasing, selector for Phono, FM or AM and CW Pitch. Freedom from "drift" and maximum stability are provided by temperature compensation and a VR-150 voltage regulator. The crystal filter provides six different degrees of selectivity up to 30 MC. The carrier level meter performs as a tuning meter on the FM band through automatic switching. matic switching.

External connections: Are provided on rear of chassis for a single wire or doublet antenna (300 ohm line except standard broadcast), output terminals to match 500 or 5000 ohm speaker, phono input, and socket for external power supply and remote standby switch.

The Panel and chassis are assembled as a unit and can be removed from the steel cabinet for servicing or relay rack mounting. Panel is finished in deep gray, cabinet top is satin chrome and swings open on piano hinge. Lettering is light gray, red and green; remainder of cabinet satin black. Dials are light green, indirectly illuminated. Overall dimensions 20" wide, 10 ½" high, 18" deep. Weight, receiver only

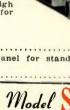
Uses 15 tubes; 2—6AG5 RF amplifiers, 7F8 converter, 6SG7 1st IF amp., 6SK7 2nd IF amp., 6H6 AM rectifier and noise limiter, 7H7 1st FM limiter amp., 7R7 2nd FM limiter amp., 6H6 FM discriminator, 6SL7 audio inverter, 2—6V6 audio output, 7A4 BFO and FM tuning meter amp., VR-150 voltage regulator, 5U4G rectifier.

For operation on 105 to 125 V 50/60 cycle AC or batteries supplying 5 amps at 6 V DC and 160 MA at 270 V.

Model SX-42 Receiver with tubes, less speaker, Stock No. 30A139. Your Cost, Each

R-42 SPEAKERS

This is the first speaker of its size to offer the splendid advantages of the base reflex principle. Designed as a companion piece to the SX42 receiver but it may be used with any other receiver having a 500 ohm output. Speaker dia. 8". Has two-position switch on front panel for communication or high fidelity reception. Terminals at rear for 500/600 ohm line.



Model S-36A

VHF AM/FM/CW

Designed for maximum perform-Designed for maximum performance on very high frequencies ranging from 27.8 to 143 MC. continuous in 3 bands. Incorporates a new three-watt audio system with a response curve which is essentially flat from 40 to 15,000 cycles. Designed for service in any climate.

Controls: RF Gain, AVC ON/OFF, Band Switch, Antenna, Senselectivity and Power ON/OFF, Tone, ANL ON/OFF, Tuni Control, Meter Adjustment, BFO ON/OFF, AM/FM, AF Gain. Antenna, Send-Receive,

External Connections: Terminals for single wire or doublet antennas. 500, 600 and 5000 ohm terminals for speaker. Socket on rear of chassis permits operation from external power source.

mounted on heavy steel chassis in black wrinkle enameled steel cabinet. 19½" W, 9½" H, 15" D. Weight 90 lbs.

Fifteen Tubes: 956 RF amp., 954 converter, 955 HF osc. 6AC7 1st IF amp., 6AB7 2nd IF amp., 6SK7 3rd IF amp., 6H6 AM det. and ANL, 6AC7 FM limiter, 6H6 discriminator, 6SL7GT audio amp. and phase inverter. VR-150 voltage regulator. 2—6V6GT power audio amp., 5U4G rectifier, 6J5 BF osc.

Operates from 105 to 125 or 210 to 250 Volt 50/60 cycles AC or battery supplying 4.5 amps at 6 volts and 145 MA at 270 volts.

Model S-36A Receiver With Tubes, Less Speaker, Stock No. 30A48. Your Cost, Each



Choice Communication's Receivers



RME-45

CAL-O-MATIC TUNING

10 Tubes-6 Bands Continuous Coverage 550KC-33MC

RME's latest, featuring Cal-O-Matic tuning, regulated oscillator power supply voltages, an impre

automatic noise limiter, 5-step crystal selectivity, a calibrated "S" meter and efficient loctal type tubes. Cal-O-Matic tuning is a full mechanical system with absolutely no back lash, real band spread, allarge illuminated full vision main and bandspread dials directly callbrated in frequency. Knobs are arranged for two-speed fast and fine tuning.

tuning.
Other panel controls are TONE and SWITCH, RF GAIN and AVC
SWITCH, BAND SELECTOR, BFO PITCH, AUDIO GAIN and ANL
SWITCH, CRYSTAL SELECTIVITY and PHASING, SEND-RECEIVE
SWITCH, and HEADPHONE JACK. At rear of chassis are speaker
plug, "S" meter adjustment and terminals for single wire or doublet
antenna and relay control or break in. Operates on 115 V. AC. 60 cy.
Tube line up, 7B7 RF, 7J7 Det and Osc, 2—7B7 IF, 7B6 Det and BFO,
7A6 ANL, 7C7 Audio, 7C5 Output, 80 Rect and VR-150 Regulator.
Cabinet is steel, gray with black trim, size 10% "x22% "x12". PM speaker supplied to match. Shipping weight 65 lbs.

RME-45 With Tubes and Speaker, Stock No. 30A53-2,

Your Cost

Your Cost \$198.70



NEW! RME-84

Continuous Coverage 540KC-44MC RF Amplification Built-In Rubber Cush-ioned Speaker—Noise Limiter—Portability

RME-84. Built to rigid RME standards, low in price.

Dials are of mechanical band spread type similar to RME 45 but with single speed tuning. Other panel controls include switches for AC, ANL, BFO, Band Selector, AVC, Standby and controls for RF Gain, AF Gain, Tone and BFO Pitch. Headphone jack is on front panel, terminals for single wire or doublet antenna and plug for external power source on rear of chassis. Streamlined cabinet is two-tone gray 18° L, 9%" H, 9%" D, Top is hinged. Weight 28 lbs.

Tubes used: 7B7 RF, 787 Det and RF Osc., 2—7B7 IF's, 7K7 Det and Audio, 7K7 BFO and ANL, 6G6G Audio Output, and 5Y3GT Rect. Very economical, portable operation is possible as the set requires only 8 V. at 1.5 amp and 135 V. at 22 MA when 115 V. 60 cycle is not available.

RME-84, With Tubes.

Your Cost, Net Each

DB-20 Preselector

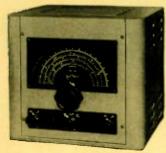


For added sensitivity, image rejection and gain when used with any communications receiver. Range 550 KC to 33MC. Built-in power supply. Tubes are 2—6K7 and 1—80. Cabinet matches current RME receivers in every detail. Operates on 115 V. 60 cycle AC.

DB-20 Preselector, With Tubes.

Stk. No. 31A54 Net Ea. \$68.20 Stk. No. 31A53 Net Ea. \$86.50

VHF-152 Converter



For 2, 6 and 10 meters—to be used with your present communications receiver. Provides high order of stability and reception on higher frequencies. Uses miniature tubes, 6AK5 RF amp and Mixer, 6AU6 Det. and 6J6 Osc. Built-in 110 V. AC power supply uses 5Y3GT Rect. and VR150 Regulator. VHF-152 Couverter,

With Tubes

NATIONAL NC-2-40D



12 TUBES — 490KC to 30MC — AMATEUR BANDSPREAD — RF STAGE — CRYSTAL FILTER — ANL — BFO — AVC — TONE CONTROL — FULL VISION DIAL — STABILIZED OSCILLATOR—SLIDING COIL BANDSWITCH—"S" DB METER

CILLATOR—SLIDING COIL BANDSWITCH—"S" DB METER Every feature the Amateur needs is found in this New Receiver. Has special expanded amateur ranges in addition to general coverage coils. RF & IF coils wound on Polystyrene. Other critical components isolantite insulated. Signal-to-image ratio better than 30 db at 10 meters. High signal-to-noise ratio. Has six-step wide range crystal filter, series valve noise limiter with front panel threshold control, front panel jacks for headphone and phono pick-up, sockets for 8000 ohm speaker and external power, and single wire or doublet antenna connections at rear. Tubes 65K7 RF, 6K8 1st Det, 6J5 HF Osc, 6K7 1st IF, 65K7 2nd IF, 6SL7 2nd Det-Limiter, 65J7 AVC, 65J7 BFO, 6SN7 1st Audio—Limiter, 2—6V6 PP 8 Watt Audio, 5Y3 Rect. Cabinet is two-tone gray with chrome trim. Size 19½", 10%", 15½". Wt. 65 lbs. Operates on 115 or 230 V. 60 cy. AC.

NC-2-40D, With Tubes, Less Speaker.

Stock No. 30A51. Your Cost.

Stock No. 30A51. Your Cost ..

Stock No. 30A52. Matching 10" PM Speaker

HAMMARLUND



HQ-129X. A New Receiver which has already won popular acclaim from Amateur operators and listeners. Covers 540 KC to 31 MC in 6 bands. Has New Tuning System with 310° bandspread and calibrated main tuning and bandspread dials, calibrated "S" meter, six step Hammarlund patented crystal filter, AVC on RF and 2 IF stages, series noise limiter and regulated HF osc. voltages. 11 tubes: 6SS7 RF, 6K8 converter, 3—6SS7 IF, 6H6 2nd Det-AVC-ANL, 6SNTGT AF- "S" Meter, 6SJT BFO, 6V6GT Audio, 5Y4G Rect. and VR-105 Reg. In two-tone gray metal cabinet. Size 11"x20\%"x13\%" Wt. 47 lbs. Operates on 115 V. 60 cy. AC. Complete with tubes and 10" PM speaker in matching Cabinet. A New Receiver which IQ-129X. As already

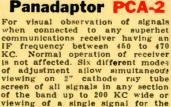
er in matching Cabinet.

8tock No. 30A54-2. Your \$173.25 Stock You No. 30A106-3. Cost



SPO-400X SUPER-PRO. An improved version of the famous 18-tube Super-Pro. Five continuous bands 546 KC to 30 MC. Dial shutters cover all tuning ranges except one in use. Has amateur bandspread, 3 stage variable IF, 6 position Hammarlund patented crystal filter, AVC on 2 RF and 2 IF stages, improved noise limiter, calibrated "S" meter and high quality PP audio. Output for 500 ohm speaker or headphones. Power supply is separate to assure hum free operation. Set designed for operation under most adverse conditions of humidity and temperature. Receiver can be removed from two-tone gray metal cabinet for standard rack mtg. Complete with tubes and matching speaker. Operates on 105 to 120 V. 60 cy. AC.

Your



For visual observation of signals when connected to any superhet communications receiver having an IF frequency between 450 to 470 KC. Normal operation of receiver is not affected. Six different modes of adjustment allow simultaneous viewing on 2" cathode ray tube screen of all signals in any section of the band up to 200 KC wide or viewing of a single signal for the purpose of selecting QRM free spots and observation of signal characteristics of other stations as well as your own. Enables detection of interfering CW key clicks, noise, phone splatter, carrier shift, distortion, modulation per cent and frequency shift. Provides instantaneous "S" meter for CW and phone. Has headphone jack for audible check of same range being viewed. Cabinet is metal, gray wrinkled finish. Size 11"x3\% "x6\%". Wt. 16 lbs. Supplied with 10 tubes and coaxial cable for connection to receiver converter tube plate pin. Operates on 116 V. AC 50-60 Cy. for connection V. AC 50-60 Cy.

Panadaptor PCA-2.

Your

