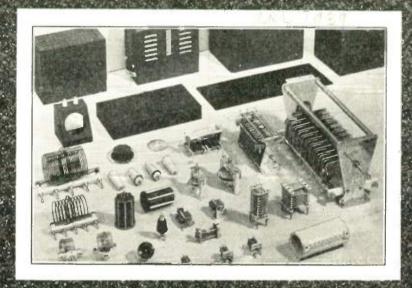


# RADIO PARTS



General Catalog



BUD RADIO, INC.

CLEVELAND, OHIO

# AIR GAP-VOLTAGE RELATIONS FOR CONDENSERS

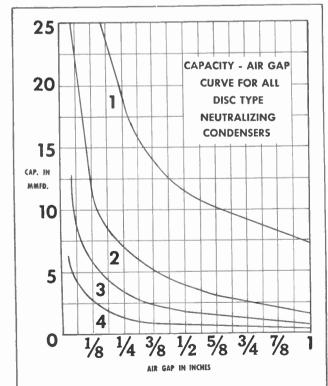
Air Gap Inches	Maximum D. C. Voltage Unmodulated	Maximum D. C. Voltage Modulated	Maximum Peak Voltage
.017	250	200	750
. 024	350	250	1,000
. 034	500	400	1,500
. 037	525	425	1,600
.051	700	500	2,000
.060	800	600	2,500
.070	1,000	750	3,000
.078	1,200	900	3,600
.095	1,350	1,000	4,000
. 100	1,400	1,050	4,200
. 130	1,600	1,200	4,900
. 136	1,700	1,250	5,000
. 144	1,750	1,300	5,200
. 175	2,000	1,500	5,900
. 200	2,100	1,600	6,300
. 238	2,300	1,800	7,100
. 250	2,500	1,850	7,400
.300	2,800	2,100	8,300
. 375	3,200	2,400	9,700
. 500	4,000	3,000	12,000
.750	6,000	4,500	18,000
1.000	8,000	6,000	24,000

This listing includes voltage ratings for all the various Air Gap spacings utilized in BUD condensers. Ratings for other spacings may be readily determined by interpolation.

# NUMBER OF FEET IN ½ POUND SPOOL OF MAGNET WIRE

Wire Size	Single Cotton Covered	Double Cotton Covered	Enameled	Double Silk Covered
14	36	35	40	
16	62	61	63	62
18	99	97	100	99
20	155	152	160	157
22	245	239	253	248
24	384	370	402	390
26	605	570	640	611
28	940	870	1,015	955
30	1,445	1,285	1,610	1,480
32	2,220	1,955	2,560	2,270
34	3,310	2,735	4,080	3,425
36	5,000	3,655	6,425	5,100
38	6,950	5,450	10,250	7,550

For  $\frac{1}{4}$  pound spools, divide above figures by 2 and for  $\frac{1}{1}g$  pound spools, divide by 4.



CURVE 1: - FOR NO. NC - 1002

CURVE 2: - FOR NOS. NC - 893, NC - 1001

CURVE 3: - FOR NOS. NC - 853, NC - 897, NC - 1000

CURVE 4: - FOR NOS. NC - 852, NC - 890

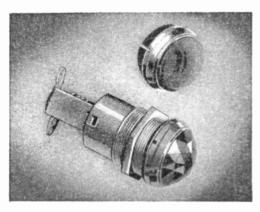
## R. M. A. COLOR CODE FOR RESISTORS & FIXED CONDENSERS

For Re	esistor	nit: — Ohm		
Body Colo	)r	End Color		Dot Color
For Co	ondens	icro-microfarad		
First Do	t	Second I	Oot	Third Dot
Black	0	Black	0	
Brown	1	Brown	1	Brown 0
Red	2	Red	2	Red 00
Orange	3	Orange	3	Orange 000
Yellow	4	Yellow	4	Yellow 0000
Green	5	Green	5	Green 00000
Blue	6	Blue	6	Blue 000000
Purple	7	Purple	7	Purple 0000000
Grey	8	Grey	8	Grey 00000000
White	9	White	9	White 000000000

Note: In determining the capacity of a condenser from its color code, the dots are read from left to right with the condenser held so that the Trademark is in a normal reading position.

## - JEWELED - LIGHT - ASSEMBLIES





JL 1698 - 1699

## One Inch Jeweled Light Assembly

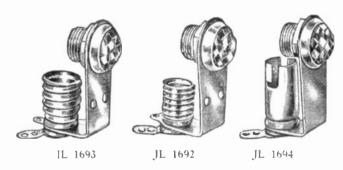
- Requires single one inch hole for mounting.
- Provides instant access to bulb from front of panel.
- Uses Mazda So BULB, Removable from front.
- Jewel Holder highly polished Chrome plated Brass.
- Facetted or Smooth-Faced Jewels.
- COLORS OPTIONAL, Red, Green, Amber, Blue, OPAL and Crystal jewels.
- Ideal for Radio and Electric Panel Switchboards, Amplifiers, Laboratory Equipment, Signal Devices.
- Mounting Bracket Depth, 2 inches.

Packed One to a Box

NOTE: Specify Color of Jewel

Cat. No.	Type Socket	Jewel	List Price	Your Cost
JL 1698 F	Candelabra 110 volt	Facetted	\$1.00	\$ .60 ea.
IL 1098 S	Candelabra 110 volt	Smooth	1.00	.60 ea.
IL 1099 F	Miniature Screw	Facetted	1.00	.60 ea.
IL 1699 S	Miniature Screw	Smooth	1.00	.60 ea.
IL 1699 F B	Miniature Bayonet	Facetted	1.00	.60 ea.
IL 1099 S B	Miniature Bayonet	Smooth	1.00	.60 ea.

## 12 Inch Jeweled Light Assembly



#### Vertical Mounting

Iwo lugs insulated from mounting bracket. Jewels 12 dia. Shank 7-16" dia. Fits into 7-16" panel hole. Provided with lock nut. Nickel Brass finish. For use with all voltage miniature and candelabra bulbs. Mounting Bracket Depth 15-16".

Packed 5 to a carton

COLORS OPTIONAL Red Green, Amber Blue Op.1 Crystal. NOTE: Specify Color of Jewel.

Cat. No.	Type Socket		Jewel		List Price		Your Cost
IL 1692 F	Miniature	Facetted					\$ .15
IL 1692 S	Miniature		Smooth		25		.15
IL 1693 F	Cand. 110 volt	1	Facetted		.30	_	.18
IL 1693 S	CanJ. 110 volt	1	Smooth		3()		.18
IL 1694 F	Min. Bayonet	1	Facetted	,	.30	-	.18
IL 1094 S	Min. Bayonet		Smooth		, 3()		.18

## Jewel Holders







JL 1696 F

JL 1697 3<sub>4</sub> Jewel

JL 1696 S 12" Jewel

Red, Green, Amber, Blue, Opal and crystal.

Fit Panels Up To 14" Thick.
Packed 10 to a Box
NOTE Specify Color of Jewel

Cat. No.	Jewel	Size	List	Price	Your Cost
JL 1696 F	Facetted	12"	1 \$	15	\$ .09
JL 1090 5	Smooth	12"		.15	.()9
IL 1090 F	Facetted	34		40	.24
IL 1091 F	Facetted	1		85	.51

## 34" Jeweled Assembly

For 110 Volt Candelabra Balbs

Highly Chrome Polished Jewel Holder

Requires 11" Hole for Mounting

NOTE: Specity Color of Jewel.

Available in Red, Green, Amber Blue Opal or Crystal Mounting Bracket Depth 1177





## ITEM INDEX



Article	Page	Article	Page	Article	Page	Article	Page
-A-	•	Connectors, Jack	26	Mica Trimmer C		-s-	
Adapters, Analyzer		Polarize	d 26	Microphone, Ada		Screws, Relay Rack	
Stand		Cords, Head Phone	31	Car	bon Gran. 21	Shaft Extensions	
Testing	29	Copper Wire	30	Jack	26	Shaft Couplers	27
Air-Wound Coils	9	Couplings, Shaft	27		let 34	Shaft Reducers	
Alignment Tools	31, 33	Couplers, Flexible	27	Plug	gs 26	Shielded Chokes	17
Aluminum Channels	12	Crystal Holders	24	Rin	gs 20	Shields, Box	14
Aluminum Panels	12	Crystal Holder Mou	intings 24	Spri	ngs 21	Coil	30
Amplifier Foundations		Crystal-Lac	32	Star	ds 20	Interstage	
Amplifier Foundations		_D_		Midget Variable	Condnsrs. 6, 7	Tube	
Streamline	13	Desk Stands		Mounting Strips	32	Sloping Panel Cabinets	s14
Amplifiers, R. F	2	Dial Indicators	20	_N		Sockets, Photo Cell	
Analyzer Adapters	29	Dial Plates	21 22			Tube	
Analyzer Plugs		Dial Flates	21, 22	Name Plates	22	Trans. Tube	
Angles		Dials		Neutralizing Cor	id., Disc. 8, 9	Soldering Lugs	27
Antenna Eliminator	33	Dollies, Cabinet Rac	K 18	Neutralizing Con	nd., Plate 4, 7	Soldering Iron Tips	
Auto Link Control	9	E_		Neutralizing Too	ols31, 33	Solderless Plugs	
		Eliminator, Antenna	33	Noise Eliminator	s 33	Speaker Cords	
-B		_ Noise	33	-0		Speaker Cabinets	
Banana Plugs and Jac	:ks 26	Extension Shaft	27	Outlets, Radio C		Spring Clips	
Bearings, Panel	27	— F —		Off-Set Screw D		Stands, Microphone	
Binding Posts	33	Feed-Thru Insulator	s 28	Oscilloscope Cab	inets 14	Stat-Air Condensers	
Bottom Plates	19	Feet, Rubber	22			Stand-Off Insulators	
Box Shields	14	Filter, Power Line	33	P		Streamline Cabinets	
Brackets, Mounting	18, 32	Fixed Air Condenses	re 9	Padder Condense		Switches, Interlock	
		Flexible Couplings	27	Paint, Crystal-Lac	32	Power	
			21	Panels, Aluminum	12		
Cabinets, Metal 13,	14,15, 16	-G		Masonite	12, 17	Rotary	
Meter		Grid Clips	25	Metal	12, 17	Toggle	47
Oscilloscope	14	—H—			17	T	
Rack Dollies	18	Holders, Crystal	24	Rack	17	Test Adapters	29
Relay Rack	13, 15, 16	—1—		Panel Bearings	27	Test Leads	
Streamline .	13, 14	Insulated Grid Cap	25	Phone Cords	31	Test Prods	32
Sloping Pan-	el 14	Insulated Mtg. Strip	3.2	Phone Plugs	26	Tip Jacks	32
Speaker	15	Insulated Test Tools	31	Phone Tips		Tips, Soldering Iron	
Trim	18	Insulated Tip Jacks	3.2	Plates, Dial	21, 22	Toggle Switches	24
Caps, Tube	25	Insulators, Bar	28	Plates, Name	22	Tools, Alignment	
Carbon Granules	21		28	Plugs, Analyzer .		Transmitting, Coils	9
Carrying Cases	15		28		26	Coil Form	ns 10
C. T. Resistors	33		28	Chassis	25	Chokes	
Chassis, Bases	18,19	Trans Ar	nt 33		iant 26	Cabnts. 13	
Bottom Plates	19	Wall Lead	l·In 33		26	Condsrs	
Heavy Duty	19	Interlock Switch	24	Phone	26	Dials	
Mounting Brac	kets 18	Interstage Shields	17	Solderless .	32	Sockets	
Removable To	p 19	— I —		Transmittin	g 26	Trim, Cabinet Rack	
Supporting Ar	gles 18	Jacks, Connectors	26	Plug-In-Coils, Rec	eiver 11	Trimmer Condensers	10, 22
Plugs	25	Minnanhan		For	ms 10	Tube Clips	25
Chokes, Metal Core	12	Microphone		Tra	nsmitting 9	Tube Shields	
Receiver	11, 12	Nameplates		Power Switches .	24	Tube Sockets	
Transmitting	11	Plugs		R -			
U. H. F	11. 12	Transmitting .		Racks, Cabinets .		—U—	
Coil Accessories	10	Tip				U. H. F. Chokes	11, 12
Coil Forms, Bakelite		— K —		Panals		U. H. F. Transmitting	
Ceramic T	rans. 10	Kits, R. F. Amplifie		Sectional		Condensers	3, 5, 7
Coils, Receiver	11	Adapter	29	Stroomline	Cabinet 13	_ V _	
Coils, Transmitting	9	Coil	11	Receiver Coils	Cabinet 13		21 22
Coil Shields	30	Knobs	23	Receiver Cabinets		Vernier Dials	
Condensers. Fixed, Air	8	— L —		Receiver Chokes	11 12	Voltage Regulators	33
Balancing	8	Leads, Test	31	Rolan Roales	11, 12	— W —	
Midget	6 7	Lugs, Soldering	27	Relay Racks		Wafer Sockets	25
Neutrlzng	4. 7. 8 0	— M —	<i>2</i> /	R. F. Amplifier K		Wall Lead-In	
Padder	2 10		10 18	R. F. Chokes	11, 12	Washers	
Trans		Masonite Panels		Radio Outlets	34	Wire, Copper	
Trimming	י, ד, י, ס	Metal Cabinets 13.		Resistors, C. T	33	Wrenches, Neut.	
U.H.F. Tr	10	Metal Panels	12, 17	Rings, Microphor	e 20		UL
		Meter Cases Meter Panels	14	Rotary Switches	24	-z-	
mitting				Rotary Switch Pl		Zepp Aerial Insulator	

TERMS 2% discount for payment as follows: All billings dated from the 1st to the 15th inclusive must be paid on the 25th of the same month. All billings dated from the 16th to the 31st inclusive must be paid on the 10th of the following month. All bills not discounted must be paid thirty days after date of billing, and if not paid, we reserve the right to charge interest at the rate of 6%. Unless Credit has been established with us a 25% deposit must accompany all C.O.D. orders.

DELIVERY: All shipments are made F.O.B. our Factory.

PRICES: All prices and quotations are subject to change without notice. We reserve the right to accept or reject terms or prices contained in any order or contract received at our Cleveland, Ohio, office. All agreements are contingent upon strikes, accidents, and other causes beyond our control. The minimum billing for any order will be \$2.00 NET.

DEDUCTIONS: No deduction is allowable until a credit memorandum has been issued by us. All claims must be made within 48 hours of receipt of goods.

RETURNED GOODS AND CLAIMS: Merchandise must not be returned without our written permission, and then transportation charges must be prepaid. If any goods are returned due to no fault of ours and the goods are in a saleable condition, we will deduct a service charge of at least 10% from our credit memorandum.

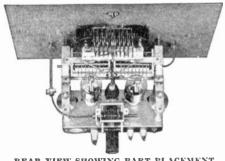
TRADE CUSTOMS: Our material is carefully inspected and packed with the utmost care, and after we receive the Transportation Company's receipt for same in good order, our liability for damage and delay ceases. We will exchange for new goods any device found to have left our factory in an imperfect condition, but we assume no other liability.

Page 1

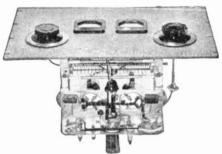


## R. F. AMPLIFIER KITS

## 500 WATT RADIO-FREQUENCY AMPLIFIER KITS







REAR VIEW SHOWING PART PLACEMENT

FRONT PANEL VIEW

UNDER SIDE SHOWING WIRING

A number of unusual features not previously found in the ordinary push-pull Radio-frequency Amplifier have been incorporated in this series of kits giving the amateur for the first time a really different "final" of high efficiency having an entirely new type layout and design. By utilizing the "semi-skeleton" style of construction, all closed metallic loops in the entire structure are eliminated, preventing any possibility of circuit losses or parasitics due to circulating currents.

Great care has been taken to make these amplifiers perfectly symmetrical for both parts and wiring, assuring accurate circuit balance and maximum efficiency in operation. The safety of the operator has also been considered, as no parts carrying either D.C. or R.F. are brought out on the panel.

Any of the popular low and medium power triode tubes such as TZ-40s, HK-54s, 809s, 35-Ts, HY-51s, etc., can be utilized in these amplifiers. The kits themselves are conservatively rated at a maximum of 1750 volts and 500 watts input plate modulated but operate with equal efficiency at inputs as low

Kits are supplied with all drilled and formed sheet metal parts, drilled Masonite relay rack panel Black Crackled, con-

PARTS LIST FOR BPA-500 KIT

Quantity				
1	7710	Semi-Chassis		
2	7709	Panel Brackets		
2	7714	Coil Bar Brackets		
1	JC-1576	Dual Junior Condenser		
1	JC-1532	Junior Condenser		
2	NC-1000	Neut. Condensers		
2	S-954	4 Prong Sockets		
2	S-955	5 Prong Sockets		
3	I-435	Feed-thru Ins.		
1	I-300	Standoff Ins.		
4	I-7568	Ceramic Rods		
1	I-436	Feed-thru Ins.		
2	D-1734	Dials		
1	AM-1356	Coil Jack Bar		
1	530s	Panel Bearing		
1	520	Flexible Shaft		
1	SE-1049	1/4" Coupling		
1	FS-863	Flexible Shaft Coupler		
1	J-1325	Jack		
1	CH-569	R. F. Choke		
1	R.766	C. T. Resistor		
2	TC-490	Plate Clips		
4	Assorted	Nameplates		
1	1594BPA	Rack Panel		
3		.001 Mica Condensers		

Assorted Hardware, Wire, Etc.

densers, resistor, insulators, wire, hardware, etc., and are complete except for coils, tubes, and meters. Detailed instructions, photographs, and schematic diagram accompany each kit making

construction and wiring very simple.

The BPA-500 kit is designed for operation on 40, 20, 10, and 5 meters, while the BPA-500-LF kit is designed for operation on 160, 80, 40, and 20 meters. Kit BPA-500s includes only sheet metal parts and fittings together with drilled panel.

The VCL series of coils listed on Page 9 are intended for use the base of the page 10 meters. in the plate circuit of this amplifier, while the OCL series of coils listed on the same page are intended for use in the grid

BPA-500 Kit Complete—(Less Meters, Tubes and Coils) List Price.....\$40.00 Your Cost \$24.00 BPA-500-LF Kit Complete-(Less Meters, Tubes, and Coils) List Price \$42.50 Your Cost \$25.50 BPA-500s Foundation Kit-(Including Drilled Panel. Semi-chassis, and Brackets). List Price.....\$6.00 Your Cost \$3.60

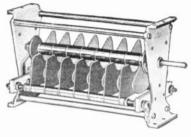
PARTS LIST

FOR BPA-500-LF KIT						
Quantity	Cat. No.	Description				
1	7710	Semi-Chassis				
2	7709	Panel Brackets				
2	7714	Coil Bar Brackets				
1	JC-1569	Dual Junior Condenser				
1	JC-1526	Junior Condenser				
2	NC-1000	Neut. Condensers				
2	S-954	4 Prong Sockets				
2	S-955	5 Prong Sockets				
3	I-435	Feed-thru Ins.				
1	I-300	Standoff Ins.				
8	I-7568	Ceramic Rods				
1	I-436	Feed-thru Ins.				
2	D-1734	Dials				
1	AM-1356	Coil Jack Bar				
1	530s	Panel Bearing				
1	531s	Panel Bearing				
1	FS-863	Flexible Shaft Coupler				
1	FS-862	Flexible Shaft Coupler				
1	J-1325	Jack				
1	CH-569	R. F. Choke				
1	R-766	C. T. Resistor				
2	TC-490	Plate Clips				
4	Assorted	Nameplates				
1	1594BPA	Rack Panel				
3		.001 Mica Condensers				
1		.001-5000 volt M. C.				

Assorted Hardware, Wire, Etc.

## CONDENSERS, Giant, Master U. H. F.





## GIANT TRANSMITTING CONDENSERS

Builders of high power radio-frequency transmitting equipment will find this latest addition to the BUD line of variable condensers the perfect solution to their tuning capacity requirements. No effort has been spared in making this line the finest obtainable from both the material and design standpoints.

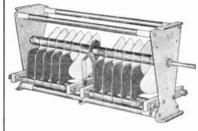
The frames of these capacitors consist of two ½" thick aluminum end pieces joined with dural tie rods. The plates are stamped from ½" aluminum, highly polished, with edges perfectly rounded. Plates are separated by accurately machined dural spacers assuring a constant air gap throughout the entire length of the condenser. The stator insulation used on these units is Alsimag 196 which assures a minimum of losses even at ultra-high frequencies.

A special feature of note is the heavy laminated springs which ride on large washers at each end of the rotor. Thru this means, positive rotor contact with an absolute minimum of resistance is guaranteed at all times. Overall height of these capacitors is 834'' and width is 61/2''. Formed brackets on top and bottom of the end pieces provide a convenient means of mounting these units and also permit the associated inductance to be mounted directly on the condenser. The rotor shaft extends 25/8'' at the front, and a 11/8'' extension is also provided at the rear of the unit. This shaft is 3/8'' in diameter. Accurate cone bearings permit correct tension adjustment and assure smooth operation thru the entire rotation.

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	No. of Plates	Air Gap	Total Length Excluding Shaft	List Price	Your Cost
GC-1800	195	24	15	.250"	91/4"	\$32.00	\$19.20
GC-1801	345	32	27	.250"	13 "	45.00	27.00
GC-1802	530	48	41	.250"	173/8"	62.50	37.50
GC-1803	55	19	7	.500"	81/4"	25.00	15.00
GC-1804	95	25	15	.500"	113/8"	37.50	22.50
GC-1805	150	33	21	.500"	16 "	43.50	26.10
GC-1806	255	52	35	.500"	24 "	62.00	37.20
GC-1807	50	22	9	.750"	111/4"	29.00	17.40
GC-1808	75	27	13	.750"	141/2"	35.00	21.00
GC-1809	110	40	19	.750"	193/8"	42.50	25.50
GC-1810	160	50	29	.750"	275/8"	58.50	35.10
GC-1811	55	30	11	1.000"	151/2"	35.00	21.00
GC-1812	85	40	17	1.000"	213/4"	45.00	27.00
GC-1813	105	45	23	1.000"	281/8"	55.00	33.00

## BUD CONDENSER CLASSIFICATIONS

Туре	Overall Height	Overall Width	Plate Diameter	Air Gap Spacings	Shaft Diameter
Giant	83/4"	61/2"	61/2"	.250" to 1.000"	3/8"
Master	47/8"	33/4"	31/4"	.070" to 375"	14"
Junior	2 18"	23/4"	21/4"	.051" to .175"	1/4"
Midget	17/8"	21/8"	11/2"	.024" to .095"	1/4"
Tiny Mite	11/2"	11/4"	3/4"	.017" to .073"	1/4"



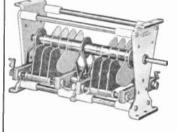
# DUAL SECTION GIANT CONDENSERS

The design and construction of these capacitors is almost identical to the single Giant Condensers. However, on these units the rotor connection is made through a positive wiping contact at the center of the rotor rod permitting perfect symmetry of the circuit to be obtained. To eliminate closed loops in the frame of the condenser, the tie rods on all numbers are insulated with Alsimag 196 thereby particularly adapting these condensers to high and ultra-high frequency applications.

Cat. No.	Max. Cap. per Sec. mmfd.	per Sec.	No. Plates per Sec.	Air Gap Per Sec.	Total Length Excluding Shaft	List Price	Your Cost
GC-1815	110	15	9	.250"	117/s"	\$43.50	\$26.10
GC-1816	215	23	17	.250"	167/8"	61.50	36.90
GC-1817	320	30	2.5	.250"	213/8"	78.00	46.80
GC-1818	55	18	7	.500"	147/8"	42.00	25.20
GC-1819	80	22	11	.500"	193/8"	52.50	31.50
GC-1820	110	2.5	15	.500"	237/8"	62.50	37.50
GC-1821	30	15	5	.750"	141/2"	38.00	22.80
GC-1822	52	20	9	.750"	21 "	50.00	30.00
GC-1823	70	25	13	.750"	271/2"	57.50	34.50
GC-1824	35	18	7	1.000"	20%"	47.50	28.50

Note 1:—When used in regular split-stator circuits, the effective capacities of the condensers are half the above values and the air gap ratings are doubled.

Note 2:-We are equipped to make up these condensers in special capacities and spacings, other than those listed above, on order.



## MASTER U. H. F. TRANSMITTING CONDENSER

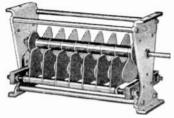
This series offers the last word in tuning capacitors for frequencies above 14 megacycles. While the general style of construction is identical to the other Master units, all tie rods in this series are insulated at both ends by heavy ceramic pillars thus completely eliminating all closed metallic loops in the condenser frame. This feature together with the center rotor contact eliminates the majority of difficulties encountered in ultra-high frequency equipment due to parasitics, circulating currents, and neutralizing trouble.

Cat. No.	Max. Cap. Per Sec. mmfd.	Min. Cap. Per Sec. mmfd.	No. Plates Per Sec.	Air Gap	Length Behind Panel	List Price	Your
BC-1635	25	7	5	.200"	73/8"	\$15.50	\$ 9.30
BC-1636	3.5	11	7	.200"	83/8"	17.00	10.20
BC-1637	50	13	11	.200"	107"	18.50	11.10
BC-1638	75	16	15	.200"	12 18"	20.00	12.00

Note: When used in regular split-stator circuits, the effective capacities of the condensers are half the above values and the air gap ratings are doubled.



## **CONDENSERS, Master, Junior Neut.**



# MASTER TRANSMITTING CONDENSERS

This series of unusually fine transmitting condensers is intended for use in medium high power transmitting equipment. These units contain a great number of unusual refinements to make them mechanically and electrically efficient.

Each condenser is built with  $\frac{1}{8}$ " thick aluminum end pieces connected by four  $\frac{5}{18}$ " diameter tie rods. End pieces have formed brackets on top and bottom to facilitate mounting and to enable the associated tuning inductance to be attached directly to the condenser itself. The insulation used in these condensers is Mycalex—one of the finest known R. F. insulating materials.

The rotor and stator assemblies consist of heavy polished aluminum plates with perfectly rounded edges, separated by accurately machined spacers. This construction assures accurate spacing along the entire length of the condenser and, together with the heavy end plates and tie rods, makes an unusually rigid

The cone bearings assure smooth running of the rotor with correct tension. Two heavy laminated wiping springs on each end of the condenser assure positive rotor contact. All units have standard  $\frac{1}{4}$ " shaft with rear extension. Overall width of condenser is  $3\frac{3}{4}$ ". Overall height is  $4\frac{7}{8}$ ".

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	No. Plates	Air Gap	Length Behind Panel	List Price	Your Cost
BC-1600	40	7	5	.100"	33/4"	\$6.75	\$4.05
BC-1601	55	8	7	.100"	4 "	7.40	4.44
BC-1602	70	9	9	.100"	416"	8.00	4.80
BC-1603	100	13	13	.100"	415"	8.35	5.01
BC-1604	150	17	17	.100"	55/8"	8.75	5.25
BC-1605	250	22	29	.100"	73/8"	10.00	6.00
BC-1606	340	27	39	.100"	978"	12.00	7.20
BC-1607	2.5	10	5	.200"	41/8"	7.50	4.50
BC-1608	35	11	7	.200"	45/8"	8.00	4.80
BC-1609	50	13	11	.200"	55/8"	8.50	5.10
BC-1610	75	16	15	.200"	65/8"	9.00	5.40
BC-1611	100	20	21	.200"	81/8"	9.50	5.70
BC-1612	145	35	29	.200"	101/8"	11.50	6.90
BC-1613	35	14	9	.300"	518"	8.50	5.10
BC-1614	55	18	15	.300"	8 "	10.00	6.00
BC-1615	75	21	21	.300"	101/8"	11.50	6.90
BC-1616	100	28	29	.300"	127/8"	12.50	7.50
BC-1617	30	15	9	.375"	61/2"	9.00	5.40
BC-1618	50	22	15	.375"	916"	10.50	6.30
BC-1619	75	28	25	.375"	131/4"	12.50	7.50

#### CAPACITY CALCULATION for Air Dielectric Condensers

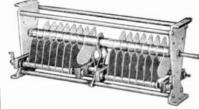
Formula:—C == 0.2244 x A x (P-1)

Where:-C = Capacity in micro-microfarads.

A = Maximum area common to two adjacent plates in square inches.

P = Number of Plates.

T = Air Gap spacing between two adjacent plates in inches.



# DUAL SECTION MASTER CONDENSERS

In addition to the single-section Master Condensers, this series of dual section units is available for the numerous transmitting applications requiring a split capacity. Construction is identical to the single condensers except for the rotor contact which is made at the center of the rod rather than at the ends. This permits a more perfect circuit balance to be obtained. Each stator section is securely anchored at all four corners.

Cat. No.	Max. Cap. Per Sec. mmfd.	Min. Cap. I Per Sec. mmfd	No. Plates Per Sec.	Air Gap	Length Behind Panel	List Price	Your Cost
BC-1620	80	9	7	.070"	63/8"	\$10.00	\$6.00
BC-1621	100	10	9	.070"	67/8"	11.00	6.60
BC-1622	150	12	13	.070"	77/8"	12.00	7.20
BC-1623	250	1.5	21	.070"	93/4"	15.00	9.00
BC-1624	40	10	5	.100"	61/4"	10.00	6.00
BC-1625	55	8	7	.100"	63/4"	10.50	6.30
BC-1626	70	9	9	.100"	73/8"	11.50	6.90
BC-1627	100	13	13	.100"	85/8"	12.50	7.50
BC-1628	150	17	17	.100"	93/4"	14.00	8.40
BC-1629	200	20	23	.100"	115/8"	15.00	9.00
BC-1630	35	12	7	.200"	83/8"	11.50	6.90
BC-1631	50	13	11	.200"	103/8"	13.50	8.10
BC-1632	75	16	15	.200"	121/4"	15.00	9.00
BC-1633	100	20	21	.200"	151/8"	16.00	9.60
BC-1634	50	15	13	.300"	135/8"	15.50	9.30

Note: When used in regular split-stator circuits, the effective capacities of the condensers are half the above values and the air gap ratings are doubled.



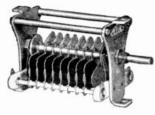
# JUNIOR NEUTRALIZING CONDENSERS

In this group can be found a condenser to neutralize the majority of tubes on the market today. Included also in this group are the adjustable plate units. The rotor plates of these two condensers are threaded on the rotor rod so that any desired air gap may be secured by simply locking the rotor plates at the desired setting. The capacity is then adjusted in the usual manner. General construction is identical to the other Junior condensers listed on the following page. Units may be mounted on panel or chassis.

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
JC-1518	5	2	.238"	3	1 1 8 "	\$2.75	\$1.65
JC-1519	9	3	.238"	5	118"	3.25	1.95
JC-1520	15	5	.238"	8	21/2"	3.50	2.10
JC-1521	33	4	.078"	7	1 16"	2.50	1.50
JC-1522	3 to 10	2	Adj.	2	11/2"	3.25	1.95
JC-1523	5 to 20	4	Adj.	3	113"	4.00	2.40

## **CONDENSERS**, Junior





# JUNIOR TRANSMITTING CONDENSERS

The demand for a medium size condenser to handle all low and medium power transmitter applications is admirably satisfied by this Junior size condenser. Occupying a panel space of only 3" x  $2\frac{7}{8}$ ", it readily lends itself to all circuit layouts within its power range.

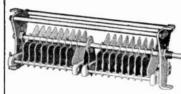
These units feature the special Bud Electro-soldered construction which assures perfect spacing, rigid assemblies, and light weight. Stator insulation is Alsimag 196, and each end piece has formed brackets on top and bottom permitting mounting in any position and allowing associated tuning inductance to be affixed directly on the condenser frame. Units may also be panel mounted.

The edges of the brass rotor and stator plates are rounded, and all parts of the condenser are finished in an attractive cadmium plating. A recent improvement in the bearings assure perfectly smooth and even rotation. In addition, heavy contact springs on each end of the condenser provide positive rotor connections at all times.

The low minimum capacities of these units make them especially suitable for multi-band applications where a high maximum-to-minimum capacity ratio is desirable.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd.	Air Gap	Plates per sec.	Length Behind Panel	List Price	Your Cost
JC-1525	50	4	.051"	7	21/2"	\$2.50	\$1.50
IC-1526		6	.051"	13	27/8"	2.75	1.65
JC-1527	145	7	.051"	19	3 5 "	3.25	1.95
JC-1528	250	11	.051"	33	415"	4.00	2.40
JC-1529	340	15	.051"	43	5 13 "	5.00	3.00
JC-1530	25	4	.078"	5	2 18"	2.45	1.47
JC-1531	35	4	.078"	7	25/8"	2.50	1.50
JC 1532	55	6	.078"	11	3 "	2.85	1.71
JC-1533		7	.078"	15	3 7 8 "	3.00	1.80
JC-1534	110	9	.078"	21	416"	3.50	2.10
JC-1535	150	12	.078"	29	47/8"	4.25	2.55
JC-1536	190	15	.078"	37	55/8"	5.25	3.15
JC-1537	245	17	.078"	47	618"	6.25	3.75
JC-1538	20	5	.144"	7	3 "	2.75	1.65
JC-1539	40	7	.144"	13	3 15"	3.00	1.80
JC-1540	5.5	9	.144"	17	45/8"	3.50	2.10
JC-1541	80	12	.144"	25	515"	4.00	2.40
JC-1542	105	15	.144"	33	71/4"	4.65	2.79
JC-1543	18	5	.175"	7	318"	3.00	1.80
JC-1544	40	9	.175"	15	41/2"	4.00	2.40
JC-1545	55	10	1.175"	19	5 18"	4.50	2.70
JC-1546	85	16	.175"	31	8 "	5.00	3.00
JC-1547	100	17	1.175"	37	91/4"	6.00	3.60

NOTE:—We are equipped to make all the styles of Variable and Fixed Air Dielectric Condensers listed in this catalogue in special capacities and spacings for manufacturers to their specifications. Submit specifications for quotation.

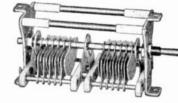


## JUNIOR DUAL TRANSMITTING CONDENSERS

This series augments the regular line of single section Junior condensers and is intended for the numerous applications where balanced tuning is necessary. On all these units the rotor connection is made at the center of the rotor rod permitting a perfect circuit balance to be obtained. General construction, insulation, etc., identical to single section units.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd.	Air Gap	Plates per sec.	Length Behind Panel	List Price	Your Cost
JC-1550	20	3	.051"	3	31/2"	\$3.50	\$2.10
JC-1551	50	5	.051"	7	418"	4.25	2.55
JC-1552	70	5	.051"	9	43/8"	5.00	3.00
JC-1553	100	6	.051"	13	5 "	5.50	3.30
JC-1554	145	7	.051"	19	57/s"	6.50	3.90
JC-1555	200	9	.051"	25	63/4"	7.25	4.35
JC-1556	250	11	.051"	33	715"	8.50	5.10
JC-1557	25	4	.078"	5	416"	4.25	2.55
JC-1558	3.5	4	.078"	7	4 7 "	4.50	2.70
JC-1559	55	6	.078"	11	51/4"	5.00	3.00
JC-1560	80	7	.078"	15	616"	5.75	3.45
JC-1561	110	9	.078"	21	778"	6.25	3.75
JC-1562	150	11	.078"	29	815"	7.50	4.50
JC-1563	20	5	.144"	7	5 18"	5.00	3.00
JC-1564	40	7	.144"	13	71/8"	5.50	3.30
JC-1565	55	9	.144"	17	8 7 7 "	5.85	3.51
JC-1566	18	5	.175"	7	55/8"	5.50	3.30
JC-1567	40	9	.175"	15	83/4"	6.25	3.75

Note: When used in regular split-stator circuits, the effective capacities of the condensers are half the above values, and the air gap ratings are doubled.



# JUNIOR DUAL ULTRA-HIGH FREQUENCY CONDENSERS

Representing the very finest in high and ultra high frequency tuning capacitors, these units combine all the desirable features necessary for efficient operation on frequencies above 14 megacycles. While made along the same general style of the other Junior condensers, the plate thickness has been increased to .040" on all but No. JC-1569 for additional ruggedness, and tie rods are insulated at both ends with one inch ceramic insulators to prevent the existence of inductive loops in the condenser frame itself. Rotor contact is made at the center of the rod.

By utilizing these units in ultra-high frequency circuits, many difficulties in neutralization and troubles due to parasitics, etc., will be eliminated.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd.	Air Gap	Plates per sec.	Length Behind Panel	List Price	Your Cost
JC-1569	200	9	.051"	25	63/4"	\$9.00	\$5.40
JC-1570	25	4	.070"	5	418"	5.00	3.00
JC-1571	35	4	.070"	7	47 "	6.00	3.60
JC-1572	55	6	.070"	11	51/4"	7.00	4.20
JC-1573	80	7	.070"	15	618"	8.00	4.80
JC 1574	20	5	.136"	7	5 18"	6.75	4.05
JC-1575	40	7	.136"	13	71/8"	7.50	4.50
JC-1576	5.5	9	.136"	17	818"	8.50	5.10

Note: When used in regular split-stator circuits, the effective capacities of the condensers are half the above values, and the air gap ratings are doubled.



## **CONDENSERS**, Midget



# DOUBLE BEARING MIDGET CONDENSERS

The most popular of all tuning condensers is this well-known line of Midget condensers for all receiver and general purpose applications. In addition to being very efficient electrically, these units are finished in a bright cadmium plating presenting a very pleasing appearance.

The plates and rods of both rotors and stators are made of hard drawn brass and are assembled by the BUD Electro-soldered process which assures perfect plate spacing and sturdy construction. Rotor plate diameter is 1/2", and the plate design is the mid-line frequency type. A special double spring contact assures noiseless operation on all frequencies. Insulation is Alsimag 196. Condensers may be either chassis or single hole panel mounted.

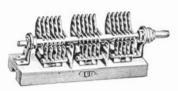
The double and triple spaced units are ideally suited for use in many exerter and low-power transmitter applications.

#### SINGLE SPACING

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
MC-926	15	3	.034"	3	1 18"	\$1.15	\$ .69
MC-900	20	3	.024"	3	1 16"	1.20	.72
MC-902	3.5	4	.024"	5	118"	1.25	.75
MC-903	50	5	.024"	7	13/4"	1.35	.81
MC-904	80	6	.024"	11	1 18"	1.60	.96
MC-905	100	6	.024"	14	218"	1.85	1.11
MC-906	140	7	.024"	19	25"	2.00	1.20
TMC-907	150	77	.024"	21	23/8"	2.20	1.32
MC-908	200	9	.024"	27	218"	2.40	1.44
MC-909	250	10	.024"	33	2 18"	2.50	1.50
MC-910	3.25	12	.024"	43	3 1 1 1	3.00	1.80

#### DOUBLE AND TRIPLE SPACING

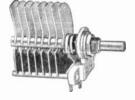
MC-565	1.5	4	.060"	5	13/4"	\$1,50	\$ .90
MC-897	3.5	6	.060"	11	21/4"	1.55	.93
MC-898	50	7	.060"	15	25/8"	2.00	1.20
MC-899	75	8	.060"	23	375"	2.60	1.56
MC-941	100	10	.060"	31	37/8"	3.00	1.80
MC-965	35	9	.095"	15	3 "	2.00	1.20
MC-966	50	11	.095"	23	416"	2.50	1.50
MC-967	75	14	.095"	33	51/8"	3.00	1.80



# TRIPLE GANG MIDGET CONDENSERS

To fill the need for a tuning condenser suitable for superheterodyne receivers having an R. F. stage, gang-tuned exciters, etc., these Three Gang Midget Condensers have been designed. Like the Double Gang units, these condensers are mounted on a ceramic base, and a shield plate is provided between the stator sections. Either base or panel mounting may be used.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd.	Air Gap	Plates per Sec.	Length Behind Panel	List Price	Your Cost
MC-886	20	5	.060"	6	51/4"	\$3.95	\$2.37
MC-887	35	6	.060"	11	51/4"	4.25	2.55
MC-888	100	6	.024"	14	51/4"	4.50	2.70
MC-889	140	7	.024"	19	51/4"	4.75	2.85



# SINGLE BEARING MIDGET CONDENSERS

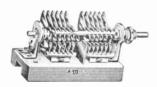
While the construction and finish of these units is similar to the Double Bearing style, they have only a front bearing. Positive rotor contact is made through the wiping spring contact on this bearing which also assures smooth rotation. These small capacitors are desirable where economy and space are prime factors.

#### SINGLE SPACING

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	Air Gap		Length Behind Panel	List Price	Your Cost
MC-324	10	2	.024"	1 2	34"	\$ .85	\$ .51
MC-328	15	3	.034"	3	3 4"	.85	.51
MC-323	20	3	.024"	3	3/4"	.85	.51
MC-322	3.5	4	.024"	5	7/8"	.95	.57
MC-148	50	5	.024"	7	13"	1.05	.63
MC-901	80	6	.024"	11	11/8"	1.20	.72
MC-321	100	6	.024"	14	1 15"	1.25	.75
MC-396	140	7	.024"	19	11/2"	1.35	.81
MC-320	150	7	.024"	21	1 16"	1.50	.90

#### DOUBLE SPACING

MC-327	6	2	.060"	2	3/4"	.85	.51
MC-311	1.5	4	.060"	5	1 "	1.00	.60
MC-319	35	6	.060"	11	11/2"	1.25	.75
MC-312	50	7	.060"	15	113"	1.40	.84



# DOUBLE GANG MIDGET CONDENSERS

These condensers have been designed primarily for use as the tuning medium in short wave receivers and low power transmitters and in certain types of industrial test equipment.

The plate construction and finish are identical to the other Midget condensers, but the entire unit is mounted on a sturdy glazed ceramic base. This type of base permits the condenser to be mounted directly to the metal chassis and still leave the rotor and stators thoroughly insulated. Panel mounting is also provided for. A plate which can be grounded is placed between the two stator sections for shielding. As in the other Midget condensers, the plate diameter is  $1\frac{1}{2}$ ", and the plates are designed for midline tuning.

The larger spaced units permit the use of higher voltages in the circuits with which they are associated.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd.	Air Gap	Plates per Sec.	Length Behind Panel	List Price	Your Cost
MC-911	100	6	.024"	14	35/8"	\$3.00	\$1.80
MC-912	140	7	.024"	19	35/8"	3.50	2.10
MC-913	35	5	.060"	11	35/8"	3.00	1.80
MC-942	20	4	.060"	6	35/8"	3.00	1.80
MC-329	3.5	9	.095"	15	51/4"	3.50	2.10
MC-330	50	7	.060"	15	51/4"	3.50	2.10
MC-331	75	8	.060"	23	51/4"	3.95	2.37

Table showing Voltage-to-Air Gap relations, on back of FRONT cover.

## **CONDENSERS, Midget, Tiny Mite, Neut.**

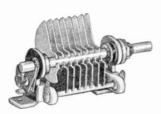




## BAND SPREAD MIDGET CONDENSERS

For Frequency Meters, Monitors, and certain other instrument and receiver applications, these condensers are perfectly suited. Each unit consists of two separately tuned sections constructed in such a manner that by locking the band-set section at the proper capacity with the set screw provided, the band-spread section may he made to spread any desired band over the full 180° rotation. General construction is identical to the other types of Midget condensers.

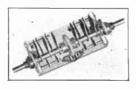
Cat. No.		Max. Cap. Band-spread Section mmfd.	Length Behind Panel	List Price	Your Cost
MC-894	100	20	3 "	\$3.00	\$1.80
MC-895	100	50	31/8"	3.25	1.95
MC-896	100	80	31/2"	3.50	2.10



## MIDGET NEUTRALIZING CONDENSERS

Where space is a prime factor or where panel control of the neutralizing capacity is desirable, this series of Midget condensers will be welcome. The insulation, assembly, and finish of these units is identical to the other Double Bearing Midgets with the exception that a rotor locking screw is provided for permanently setting the capacity at any desired value.

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd,	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
MC-567	6	3	.200"	5	23/8"	\$1.40	\$ .84
MC-564	10	3.5	.130"	5	21/8"	1.50	.90
MC-565	15	4	.060"	5	13/4"	1.50	.90
MC-566	35	7	.095"	15	31/8"	2.00	1.20



## DUAL MIDGET NEUTRALIZING CONDENSERS

Here is a condenser that permits the simultaneous neutralization of both tubes in a push-pull circuit with one control. The unit consists of two separate Midget sections ganged together by an Alsimag flexible coupler and mounted on a glazed ceramic base. Rotor may be rotated from either end, and a rotor locking device is also provided. These condensers may be panel mounted from either end, or base mounted.

Cat. No.	Max. Cap. per sec. mmfd.	Min. Cap. per sec. mmfd,	Air Gap	Plates per Sec.	Length Behind Panel	List Price	Your Cost
MC-927	8	3	.128"	5	41/8"	\$3.85	\$2.31
MC-928	15	3	.060"	5	41/8"	3.85	2.31



# TINY MITE TUNING CONDENSERS

This new series of condensers has been designed for applications where space or weight are limiting factors and for efficient tuning of ultra-high frequency circuits. Among the outstanding features of these units are their rigid construction, close fitting bearings, positive rotor contact and their excellent insulation (Alsimag 196). Rotor and stator assemblies are made up of brass plates and rods electrically soldered into a solid unit and bright cadmium plated. A rear shaft extension is provided for ganging two or more units. Each unit may be mounted in any one of three ways without additional hardware—namely (1) single hole panel mount; (2) insulated panel mount and (3) insulated base mount. Panel mounting space required is  $1\frac{1}{2}$ " x  $1\frac{1}{4}$ ".

Cat. No.	Max. Cap. mmfd.	Min, Cap, mmfd.	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
LC-1640	8	2.5	.017"	3	1 "	\$ .85	\$ .51
LC-1641	13	3	.017"	5	1 "	.95	.57
LC-1642	2.5	4	.017"	9	11/8"	1.10	.66
LC-1643	3.5	5	.017"	13	15"	1.25	.75
LC-1644	50	6	.017"	19	11/2"	1.35	.81
LC-1645	75	7	.017"	29	110"	1.50	.90
LC-1646	100	9	.017"	37	21/8"	1.65	.99
LC-1647*	140	12	.017"	51	3 "	2.10	1.26
LC-1648	10	4	.037"	7	11/4"	1.00	.60
LC-1649	15	5	.037"	11	11/2"	1.25	.75
LC-1650	25	5.5	.037"	17	13/4"	1.50	.90
LC-1651	35	6	.037"	21	118"	1.75	1.05
LC-1652*	50	8	.037"	35	3 18"	2.00	1.20
LC-1653	6	3.5	.073"	5	11/4"	1.15	.69
LC-1654	15	5.5	.073"	15	21/8"	1.40	.84
LC 1655*	25	9	.073"	27	35/8"	1.85	1.11

\* Indicates DOUBLE BEARING type.



# TINY MITE DUAL CONDENSERS

The construction of these units is similar to the regular Tiny Mite Tuning Condensers. The two end pieces are held together firmly with insulated tie rods, and a separate round plate on the rotor rod is provided to shield the two stator sections.

Cat. No.	Max. Cap. per sec. mmfd.	Min, Cap, per sec, mmfd.	Air Gap	Plates per Sec.	Length Behind Panel	List Price	Your Cost
LC-1660	15	3	.017"	5	2 3 2 "	\$2.00	\$1.20
LC-1661	25	4	.017"	9	2 1 6 "	2.20	1.32
LC-1662	50	6	.017"	19	310"	2.50	1.50
LC-1663	100	9	.017"	37	4 16"	2.75	1.65
LC-1664	10	4	.037"	7	2 18"	2.25	1.35
LC-1665	15	5	.037"	11	213"	2.50	1.50
LC-1666	25	5.5	.037"	17	31/2"	2.75	1.65
LC-1667	35	6	.037	21	37/8"	3.00	1.80

Table showing Voltage-to-Air Gap relations, on back of FRONT cover.



## CONDENSERS, Tiny Mite, Stat-Air, Neut.



## TINY MITE AIR PADDERS

For applications requiring a constant padder capacity under all temperature and humidity conditions, these units are per-

fectly suited. They lend themselves readily to I. F. transformer applications, fixed tuned circuits for exciters, ganged coil padding, and plug-in coil padding, as they will fit inside standard 1½" diameter forms (Bud Nos. CF-125, CF-126, and CF-310). Insulation and assembly similar to Tiny Mite Tuning Condensers. Each unit may be adjusted in capacity by either a small screw driver or suitable hex. wrench.

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
LC-1680	15	3	.017"	5	7/8"	\$1.00	\$.60
LC-1681	2.5	4	.017"	9	118"	1.10	.66
LC-1682	50	6	.017"	19	13/8"	1.25	.75
LC-1683	75	7	.017"	29	13/4"	1.40	.84
LC-1684	100	9	.017"	37	17/8"	1.60	.96



Each of these units is constructed with a common rotor and pair of stator sections. By revolving the rotor, the capacity with one

stator section is decreased as the capacity with the other stator is increased. These condensers are ideally suited for certain crystal filter phasing applications and can also be used in a number of ways in various calibration and measuring instruments. Insulation and construction are identical to Tiny Mite Tuning Condensers.

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	Air Gap	No. of Plates	Length Behind Panel	List Price	Your Cost
LC 1670	13	3	.017"	5	7/8"	\$1.50	\$.90
LC-1671	25	5	.017"	9	1 "	1.75	1.05
LC-1672	50	6	.017"	19	13/8"	2.00	1.20
LC-1673	75	7	.017"	29	13/4"	2.25	1.35
LC-1674	100	9	.017"	37	2 "	2.50	1.50

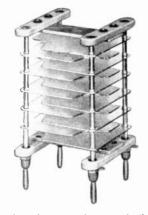


## UNIVERSAL NEUTRALIZING CONDENSERS

This line of condensers will fill practically every neutralizing requirement that modern circuits impose. Due to the special type construction of these units, it is possible to mount them in any desired position which will make

the most efficient layout. In addition to this feature, the two pillar construction (Alsimag 196 insulation) makes the unit unusually sturdy and eliminates any possibility of capacity variation due to vibration. The movable plate is adjusted by means of the threaded shaft to which it is attached, and it is permanently locked in any position by the locking nut provided. All metal parts are of aluminum, and the plates have a beautiful spun finish and perfectly rounded edges. The curves on the inside of the front cover give capacity versus air gap relations for these condensers.

Cat. No.	Plate Dia.	Overall Size	List Price	Your Cost
NC-1000	1-27/32"	31/2 x 31/2"	\$2.75	\$1.65
NC-1001	218"	$4\frac{1}{2} \times 3\frac{1}{2}''$	4.00	2.40
NC-1002	43/4"	$6\frac{3}{4} \times 4\frac{1}{4}''$	5,50	3.30



## STAT-AIR CONDENSERS

It is extremely difficult to design a radio-frequency amplifier to cover any large frequency range and maintain a proper L/C ratio due to variable condenser limitations. By paralleling the proper unit in this series with the tuning condenser, this difficulty is easily overcome.

These units are constructed with Electro-soldered brass plate assembles finished in bright cadmium plating. The plate sections are insulated with Alsimag 196 bars, and the entire unit is provided with

four banana plugs to facilitate plug-in mounting.

#### **JUNIOR TYPE**

Cat. No.	Cap.	Air Gap	Mtg. Area	List Price	Your Cost
FA-777	25 mmfd.	.144"	11/4"x11/2"	\$3.00	\$1.80
FA-780	50 mmfd.	.144"	11/4"x11/2"	3.50	2.10
FA-781	100 mmfd.	.144"	11/4"x11/2"	4.50	2.70
FA-782	100 mmfd.	.078"	11/4"x11/2"	3.75	2.25
FA-783	150 mmfd.	.078"	11/4"x11/2"	4.50	2.70

#### SENIOR TYPE

Cat. No.	Cap.	Air Gap	Mtg. Area	List Price	Your Cost
FA-778	25 mmfd.	.238"	2"x21/4"	\$3.50	\$2.10
FA-784	50 mmfd.	.238"	2"x21/4"	4.00	2.40
FA-785	100 mmfd.	100"	2"x21/4"	4.00	2.40
FA-786	100 mmfd.	.238"	2"x2!4"	5.00	3.00
FA-787	150 mmfd.	.100"	2"x21/4"	4.75	2.85

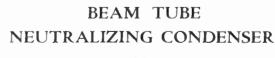


# FEED-THRU NEUTRALIZING CONDENSERS

In circuits utilizing tubes with the grid lead terminating in the base, this style of neutralizing condenser is particularly well suited. Only one hole is required for mounting these condensers, and the threaded brass rod holding the condenser in place also brings the connection to the bottom plate through the chassis thus shortening and simplifying

wiring. Plates are made of aluminum with attractive spun finish and run perfectly true. The close fitting threads make very accurate adjustments possible, and the knurled locking nut permits permanent settings to be made. Insulation is Alsimag 196.

Cat. No.	Mounting Hole Diam.	Plate Diam.	Height Above Chassis	List Price	Your Cost
NC-852	3/8"	1"	17/8"	\$1.00	\$ .60
NC-853	1/2"	1-27/32"	31/8"	2.50	1.50



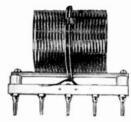
The increased use of beam type tubes in transmitters makes this item particularly welcome. It is constructed with two 1" disc plates made variable through the accurately threaded rod. Knurled nut is furnished

through the accurately threaded rod. Knurled nut is furnished for positive locking, and heavy soldering terminals are provided. Insulation used is ceramic.

Your Cost
\$ .60

## COILS, Transmitter CONDENSERS, Neut.





## 500 WATT AIR-WOUND COILS

This line of coils is intended for radio-frequency stages operating from 5 to 160 meters with inputs up to 500 watts. All coils are heavy enough to insure freedom from heating losses when operated within their ratings, and turns are carefully cemented to fire

resistant plastic locking strips. The heavy mounting bar is Alsimag 196, and all hardware parts are brass. A fixed link at the center of the winding is provided on all coils, but end linked coils can be supplied on special order.

Special care has been taken in the design of these coils to insure proper L/C ratio for phone operation. The distance between outside plug centers is 5", and all coils in this series fit the Bud No. AM-1356 mounting base.

Cat. No.	Band	Capacity *	Coil Diam.	List Price	Your Cost
VCL-160	160 Meters	90 mmfd.	37/8"	\$4.50	\$2.70
VCL-80	80 Meters	69 mmfd.	3"	4.00	2.40
VCL-40	40 Meters	26 mmfd.	25/8"	3.50	2,10
VCL-20	20 Meters	23 mmfd.	25/8"	3.25	1.95
VCL-10	10 Meters	21 mmfd.	25/8"	3.00	1.80
VCL-5	5 Meters	14 mmfd.	21/2"	2.75	1.65
AM-1356	Mounting Ba	se for Above	Coils	1.10	.66

Denotes total capacity required to tune to resonance at the low frequency end of the band,



## **AUTO LINK CONTROL**

The Auto Link Control provides electrical control of link coupling in five definite steps and eliminates the necessity of mechanically controlled link coils. In cases

where control of the link circuit is necessary, this unit overcomes the several disadvantages so objectionable in any mechanical means of moving the link coil itself to change coupling.

This device consists of a Ceramic tap switch and inductance and is permanently connected in the link line. The various taps on the switch insert varying amounts of inductance in the link line, and this has the same effect as de-coupling the link itself from the coil. Thus, loading by the antenna is controllable directly from the panel with safety and ease. Plate power should be momentarily shut off while coupling adjustments are being made.

The Auto Link Control is intended to be used with the OCL, OEL, and VCL series of coils, but may also be used with all other coils of similar ratings and may be inserted in any type of link line.

Cat. No.	List Price	Your Cost
ALV-1	\$3.00	\$1.80



# DISC NEUTRALIZING CONDENSERS

These condensers are ideally suited for neutralizing the majority of the low "C" tubes available at present. Plates are

highly polished 1/8" thick aluminum with spun finish and have perfectly rounded edges. The mounting pillars are of Alsimag 196, and the whole assembly is mounted on a sturdy aluminum casting. The threaded shafts are slotted for screw driver adjustment, and the plates can be locked at any desired setting. The curve on the back of the front cover gives Voltage-to-Air Gap relations for these units. Distance between mounting holes is 3/4".

Cat. No.	Plate Diam.	List Price	Your Cost
NC-892	1-27/32"	\$2.50	\$1.50
NC-893	2-13/16"	3.75	2.25



# OSCILLATOR AND BUFFER COILS

This new innovation in small Air-wound Coils offers the transmitter constructor unusually efficient inductances for all stages with inputs of 50 watts or less tuning from 5 to 160 meters. The glazed ceramic mounting base has been designed to keep the coil a reasonable distance from the chassis when used in sockets mounted

directly on the chassis, and its design also permits easy removal without disturbing the winding. All windings are securely cemented in place on acetate locking strips. Coils fit standard 5 prong tube sockets.

OCL coils have link at center with main winding center tapped. OEL coils have link at one end and are NOT center tapped.

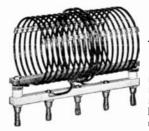
#### CENTER LINKED AND TAPPED

Cat. No.	Band	Capacity*	List Price	Your Cost
OCL-160	160 Meters	90 mmfd.	\$1.50	\$ .90
OCL-80	80 Meters	75 mmfd.	1.50	.90
OCL-40	40 Meters	50 mmfd.	1.50	.90
OCL-20	20 Meters	33 mmfd.	1.50	.90
OCL-10	10 Meters	28 mmfd.	1.50	.90
OCL-5	5 Meters	18 mmfd.	1.25	.75

#### END LINKED NO TAP

OEL-160	160 Meters	90 mmfd.	\$1.50	\$ .90
OEL-80	80 Meters	75 mmfd.	1.50	.90
OEL-40	40 Meters	50 mmfd.	1.50	.90
OEL-20	20 Meters	33 mmfd.	1.50	.90
OEL-10	10 Meters	28 mmfd.	1.50	.90
OEL-5	5 Meters	18 mmfd.	1.25	.75

<sup>\*</sup> Denotes total capacity required to tune to resonance at the low frequency end of the band.



## KILOWATT AIR-WOUND COILS

Coils in this series are intended for radio-frequency stages operating from 5 to 160 meters with inputs from 500 to 1000 watts. Sufficiently large conductors have been utilized in this line to assure freedom from abnormal heating when used proper-

ly within their rating. Construction and insulation of these coils is very similar to the 500 Watt series of inductances. All coils come with a fixed link at the center and are center tapped. Care has also been taken to assure proper L/C ratio on the phone bands so that modulation will be linear. The distance between outside plug centers is  $7\frac{1}{2}$ ", and all coils in this group fit the Bud No. AM-1354 mounting base.

Cat. No.	Band	Capacity*	List Price	Your Cost
MCL·160	160 Meters	86 mmfd.	\$9.50	\$5.70
MCL-80	80 Meters	73 mmfd.	8.25	4.95
MCL-40	40 Meters	37 mmfd.	7.50	4.50
MCL-20	20 Meters	33 mmfd.	7.00	4.20
MCL-10	10 Meters	24 mmfd.	6.50	3.90
MCL-5	5 Meters	18 mmfd.	6.00	3.60
AM-1354	Mounting Base	or above coils	1.75	1.05

<sup>\*</sup> Denotes total capacity required to tune to resonance at the low frequency end of the band.



## MICA CONDENSERS, COIL FORMS, Accessories

# MICA TRIMMER CONDENSERS

The usual padder and trimmer applications in radio receivers can be nicely handled by one or more of the units listed below. Each unit is built on a ceramic base, insulation is mica, and all capacities have an

unusually wide range for this type of condenser. Double units are primarily for I. F. transformers and similar uses.

#### SINGLE TRIMMERS

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	List Price	Your Cost
MT-825	80	7	\$.30	\$.18
MT-826	180	27	.35	.21
MT-827	325	58	.40	.24
MT-828	420	94	.45	.27

#### **DOUBLE TRIMMERS**

Cat. No.	Max. Cap. mmfd.	Min. Cap. mmfd.	List Price	Your Cost
MT-829	80	7	\$.55	\$.33
MT 830	180	27	.65	.39
MT-831	325	58	.75	.45
MT-832	420	94	.85	.51



# COIL MOUNTING ACCESSORIES

For those who prefer to wind their own coils or have special inductance requirements. All ceramic parts are Alsimag 196 and all hardware parts are bright nickel-plated brass.

The distances between outside hole centers are  $7\frac{1}{2}$ " for the K. W. Bars and 5" for the 500 Watt Bars. Additional holes are provided in each bar for link leads and center tap. Jack bars have two additional mounting holes.

Nos. AM-1357 to AM-1360 are ceramic bars only less all hardware.

No. AM-1361 is a ceramic bushing 7/16" diameter x 7/16" long with center hole clearing 10-32 screw.

No. AM-1363 is an Acetate mounting strip  $5V_2''$  long x  $V_2''$  wide x  $V_8''$  thick.

No. AM-1364 is an Acetate locking strip 20" long x 5/16" wide x 1/16" thick.

No. AM-1299 is the 5 prong ceramic mounting base used on the Oscillator and Buffer coils and comes with necessary hardware.

Cat. No.	I t e m	List Price	Your Cost
AM-1353	1 KW Plug Bar Assembly	\$2.00	\$1.20
AM-1354	1 KW Jack Bar Assembly	1.75	1.05
AM-1355	500 Watt Plug Bar Assembly	1.25	.75
AM-1356	500 Watt Jack Bar Assembly	1.10	.66
AM-1357	1 KW Ceramic Plug Bar ONLY	.75	.45
AM-1358	1 KW Ceramic Jack Bar ONLY	1.00	.60
AM-1359	500 Watt Ceramic Plug Bar ONLY	.60	.36
AM-1360	500 Watt Ceramic Jack Bar ONLY	.75	.45
AM-1361	Ceramic Bushings	.06	.036
AM-1363	Acetate Mounting Strips	.15	.09
AM-1364		.20	.12
AM-1299	Osc. and Buffer Coil Base	.75	.45

### PLUG-IN COIL FORMS



Three sizes are available in these Plug-in Coil Forms to suit all usual requirements. These units will be found unbeatable as the forms for plug-in coils in receivers, oscillators, exciters, monitors, etc., where good form factor and high efficiency are essential.

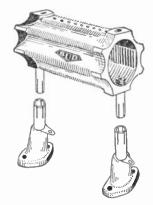
The material used is a special natural color bakelite having a very low loss factor. Eight ribs are molded on the walls of each form to hold the winding away from the form itself and give the coil higher efficiency. Each form has a molded flange at the top to aid in removing the coil

from its socket, and the pins fit standard tube sockets.

All 11/2" forms have a shoulder on the inside suitable for mounting a regular Tiny Mite Padder condenser in the coil.

Cat. No.	Prongs	Diameter	Winding Space	List Price	Your Cost
CF-1221*	4	21/4"	31/4"	\$ .90	\$.54
CF-1222*	5	21/4"	31/4"	.95	.57
CF-1223*	6	21/4"	31/4"	1.00	.60
CF- 734	4	21/4"	31/4"	.65	.39
CF 735	5	21/4"	31/4"	.70	.42
CF- 736	6	21/4"	31/4"	.75	.45
CF- 125	4	11/2"	21/2"	.35	.21
CF- 126	5	11/2"	21/2"	.35	.21
CF- 310	6	11/2"	21/2"	.40	.24
CF- 594	4	11/4"	21/8"	.25	.15
CF- 595	5	11/4"	21/8"	.30	.18
CF- 596	6	11/4"	21/8"	.30	.18

\* Denotes threaded 12 turns per inch over entire winding space length.



## CERAMIC TRANSMITTER TANK COIL FORMS

The three sizes of Ceramic Forms here listed will cover the inductance requirements for the 20, 40, 80, and 160 meter amateur bands. Made from low loss porcelain, these glazed forms make an ideal winding base for transmitting tank coils.

All forms are grooved for No. 10 wire or smaller and have suffi-

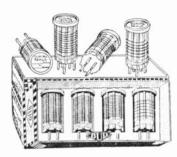
cient holes for easy wire termination and mounting. Nos. CF-383 and CF-384 are recommended for the 20 and 40 meter bands, Nos. CF-376 and CF-377 for the 80 meter band, and Nos. CF-393 and CF-394 for the 160 meter band.

Cat. No.	Total Turns	Winding Space	Outside Dia.	Overall Length	Mounting Centers	List Price	Your Cost
CF-383	24	4"	21/2"	5 "	43/8"	\$1.25	\$ .75
CF-384*	24	4"	21/2"	5 "	43/8"	2.25	1.35
CF-376	32	5"	3 "	6 "	53/8"	1.75	1.05
CF-377*	32	5"	3 "	6 "	53/8"	2.75	1.65
CF-393	48	6"	4 "	71/4"	67/8"	2.25	1.35
CF-394*	48	6"	4 "	71/4"	67/8"	3.25	1.95

\* Denotes Tank Form supplied with plug-in mounting supports as illustrated.

#### COILS, Kits **CHOKES, Trans., Pie-wound**





## SUPER-**HETERODYNE** COIL KITS

These kits fill the need for an accurately designed set of Low Loss plug-in coils to be used in the R. F., Detector, and Oscillator stages of short wave superheterodyne receivers. The oscillator coils are

designed to track at an I. F. frequency of 465 kc. All coils in this series are wound on standard 11/4" ribbed bakelite plug-in forms, and each winding is designed for the highest possible "Q". Coils are wound to cover their specified tuning range with a 140 mmfd tuning condenser.

Cat. No.	Туре	No. Coils	Prongs	No. Windings	Wave Range Meters	List Price	Your Cost
CK-397	Osc.	4	5	2	13-200	05.50	d2 20
CR-397	Det.	4	4	2	13-200	\$5.50	\$3.30
CK-395	R.F.	4	4	2	13-200	2.75	1.65
CK-398	Det.	1	4	2	185-360		- 05
CK-398	Osc.	1	5	2	185-360	1.75	1.05
CK-399	Det.	1	4	2	350-560	1 75	1.05
CIC 377	Osc.	1	5	2	350-560	1.//	1.00



## **SENIOR COIL KITS**

All coils in these kits are primarily intended for use in the various types of autodyne and T.

R. F. sets being built by home constructors. All coils are wound on regular Senior ribbed bakelite coil forms 11/2" diameter and are carefully designed for the greatest possible efficiency. These inductances are wound to cover their specified tuning range with a 140 mmfd tuning condenser, and identification discs on top of each unit show wave band covered.

Nos. CK-222, CK-223, CK-224, and CK-361 are used in tickler type regenerative detectors with antenna coupled through a trimmer condenser. This series may also be used in R. F. and preselector stages.

No. CK-916 is intended to be used in regenerative detectors utilizing a tapped grid coil in an electron-coupled circuit.

No. CK-917 is identical to No. CK-916 with the exception that four additional matched coils are included to be used in an R. F. stage preceding the detector.

Nos. CK-362, CK-918, CK-960 and CK-961 are used in tickler type regenerative detectors where antenna coupling is accomplished through the additional winding provided.

Cat. No.	No. Coils	Prongs	No. Windings	Wave Range	List Price	Your Cost
CK-222	4	4	2	16-200	\$2.75	\$1.65
CK-916	4	5	2*	16-200	3.30	1.98
CK-918	4	6	3	16-200	3.50	2.10
OVER 4 R	4 R.F.	4	2	16-200	6.00	2.00
CK-917	4 DET.	- 5	2*	16-200	6.00	3.60
CK-361	1	4	2	7-17	1.00	.60
CK-224	1	4	2	185-360	.90	.54
CK-223	1	- 4	2	350-565	.90	.54
CK-362	1	6	3	7-17	1.25	.75
CK-960	1	6	3	185-360	1.10	.66
CK-961	1	6	3	350-565	1.10	.66



## **JUNIOR** COIL KITS

These coils are constructed identical to the Superheterodyne Coils but are intended for uses as follows:-

Nos. CK-354, CK-365, CK-357, and CK-358 are used in tickler type regenerative detectors with antenna coupled through a trimmer condenser and also in

F. and Preselector stages. Nos. CK-356, CK-366, CK-359 and CK-360 are used in tickler type regenerative detectors where antenna coupling is accomplished through the additional winding provided.

Cat. No.	No. Coils	Prongs	No. Windings	Wave Range	List Price	Your Cost
CK-354	4	4	2	11-210	\$2.00	\$1.20
CK-365	1	4	2	7-17	.90	.54
CK-357	1	4	2	185-360	.80	.48
CK-358	1	4	2	350-565	.80	.48
CK-356	4	6	3	11-210	2.90	1.74
CK-366	1	6	3	7-17	1.00	.60
CK-359	1	6	3	185-360	1.00	.60
CK-360	1	6	3	350-565	1.00	.60



## TRANSMITTING **CHOKES**

This series of three heavy duty R. F. Transmitting Chokes is especially intended for use in high power transmitter plate circuits. Each choke is wound on a re" Alsimag rod and is provided with heavy connection lugs and a convenient mounting foot. Nos. CH-568 and CH-569 are intended to be

used on 10, 20, 40, 80, and 160 meter bands and consist of a series of five graduated pies wound in a continuous winding. Care has been taken in the design of these chokes to prevent any of the pies from being resonant on an amateur band and to keep the distributed capacity at a minimum.

No. CH-570 is a special single layer choke intended for 21/2 and 5 meter bands. It is also suitable for use as a filament choke in certain types of ultra-high frequency oscillator and amplifier circuits provided that the D. C. current does not exceed 4 amperes. Overall height of units is 31/4".

Cat. No. Inductance	Current Capacity	D. C. Resistance	List Price	Your Cost
CH-568 2.2 MH	1 Amp.	5 ohms	\$1.75	\$1.05
CH-569 4.3 MH	600 M.A.	12 ohms	1.50	.90
CH-570 15 yH	4 Amps.	.2 ohm	1.00	.60



## PIE-WOUND R. F. **CHOKES**

Being both convenient and efficient, this well-known line of Pie-Wound Chokes fill a wide variety of uses in radio receivers and transmitters. Each unit is a continuous winding of silk covered enameled copper wire, and the pies constituting this winding are wound on a 1/4" diameter Ceramic core. The convenient strap leads permit these chokes to be readily utilized in all the conventional ways.

No. CH-876 is a heavy duty choke intended for transmitter plate circuits, etc., where higher currents are present.

Cat. No.	Inductance in M. H.	D. C. Resistance	Current Capacity	List Price	Your Cost
CH-920	2.5	45 ohms	125 ma	\$ .45	\$ .27
CH-922	5.5	60 ohms	125 ma	.60	.36
CH-923	8.0	72 ohms	100 ma	.75	.45
CH-924	10.0	78 ohms	100 ma	.85	.51
CH-876	2.5	16 ohms	250 ma	.85	.51



## PANELS; CHOKES, Lattice Wound, Metal Core



# R. F. CHOKES

For all general purpose applications requiring a high quality choke at a reasonable price, this line finds wide acceptance. Each choke is wound from silk covered enameled copper wire on a white ceramic bobbin. Leads are terminated on two convenient soldering lugs. Chokes can be readily mounted with a 6-32 screw through the center of the form, and each winding is thoroughly impregnated against moisture. The wide range of sizes fills practically every choke requirement in standard radio circuits.

Cat. No.	Ind.	D.C. Res.	Current	List	Your
	(M.H.)	(ohms)	(M.A.)	Price	Cost
CH-1212	2.5	28	125	\$.35	\$.21
CH-1213	5.4	36	125	.40	.24
CH-1214	7.5	46	125	.45	.27
CH-1215	8.	60	125	.45	.27
CH-1216	10.	65	125	.50	.30
CH-1217	16.	84	125	.55	.33
CH-1218	30.	190	100	.60	.36
CH-1219	60.	279	90	.75	.45
CH-1220	80.	332	80	.80	.48



## METAL CORE R. F. CHOKES

The efficiency of any circuit requiring an R. F. choke will be definitely improved by utilizing one of these chokes with a finely divided moulded metallic core. The improved "Q" possible with this construction results from the D. C. resistance of these chokes being 40 to 50% less for a given inductance than for regular air-core types. Thus, the D. C. voltage drop through the choke is considerably less, yet the choking action is equally as good. Windings are made with silk covered enameled wire terminating on convenient soldering lugs, and the chokes are mounted in small square shield cans measuring 1½" x 1½" x 1½".

Cat. No.	Ind. (M.H.)	D.C. Res. (ohms)	Current (M.A.)	List Price	Your Cost
CH-1277	1.5	11.5	125	\$ .85	\$ .51
CH-1278	2.5	16.	125	.85	.51
CH-1279	3.4	19.5	125	.90	.54
CH-1280	5.5	27.5	125	.90	.54
CH-1281	8.	36.	125	1.00	.60
CH-1282	10.	42.5	125	1.00	.60
CH-1283	16.	53.	125	1.15	.69
CH-1284	30.	82.	100	1.15	.69
CH-1285	60.	131.	100	1.30	.78
CH-1286	80.	163.	90	1.45	.87
CH-1287	125.	221.	90	1.80	1.08
CH- 294	Shield Ca			.20	.12



## ULTRA-HIGH FREQUENCY R. F. CHOKE

Builders of ultra-high frequency receivers and transmitters will find many applications for this popular R. F. choke.

The single layer winding is placed on a ceramic rod and terminated with convenient strap leads at each end. Data:—Inductance, 5.7 microhenries: Resistance, 1.4 ohms: Current Capacity, 750 ma.

Cat. No.	List Price	Your Cost
CH-925	\$ .25	\$ .15



# METAL PANELS

For general experimental and construction applications, this line of  $\frac{1}{16}$ " steel panels fills all usual requirements. Finished on both sides in fine grain, durable Black Crackle enamel.

Cat. No.	Width	Length	Shipping Weight	List Price	Your Cost
PS-1200	7"	8"	1 lb.	\$ .45	\$.27
PS-1201	7"	10"	1 lb.	.55	.33
PS-1202	7"	12"	2 lbs.	.65	.39
PS-1203	7"	14"	2 lbs.	.75	.45
PS-1204	8	14	2 lbs.	.80	.48
PS-1205	8"	16"	2 lbs.	.90	.54
PS-1187	8"	18"	3 lbs.	1.00	.60
PS-1188	8"	19"	3 lbs.	1.15	.69
PS- 700	9"	15"	3 lbs.	.95	.57

## MASONITE PANELS

This line is intended for all uses requiring an insulated panel that is easily worked. Made from 3" thick Tempered Masonite and finished in baked Black Crackle enamel.

Cat. No.	Width	Length	Shipping Weight	List Price	Your Cost
PM-607	7"	10"	1 lb.	\$ .65	\$.39
PM-608	7"	12"	1 lb.	.75	.45
PM-609	7"	14"	1 lb.	.85	.51
PM-610	8"	12"	1 lb.	.85	.51
PM-611	8"	14"	2 lbs.	.95	.57
PM-612	8"	16"	2 lbs.	1.10	.66
PM-613	9"	15"	2 lbs.	1.15	.69

## **ALUMINUM PANELS**

These panels are intended for applications requiring non-magnetic shielding. While cut from 16 gauge pure aluminum stock, these panels are easily drilled and come in their own bright natural finish.

Cat. No.	Width	Length	Shipping Weight	List Price	Your Cost
PA-984	7"	10"	1 lb.	\$ .85	\$ .51
PA-985	7"	12"	1 lb.	1.10	.66
PA-986	7"	14"	1 lb.	1.30	.78
PA-987	7"	16"	1 lb.	1.50	.90
PA-988	7"	18"	1 lb.	1.70	1.02
PA-989	7"	19"	1 lb.	1.80	1.08
PA-990	7~	21"	1 lb.	2.00	1.20
PA-991	7"	24"	1 lb.	2.25	1.35
PA-992	7"	30"	2 lbs.	2.75	1.65



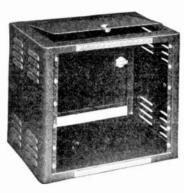
## ALUMINUM CHANNELS

In constructing skeleton R. F. Amplifiers and driver stages these channels will find numerous applications. They are also useful in mounting and supporting portions of standard layouts. Made of the Aluminum—easily drilled and cut to size.

Cat. No.	Width	Height	Length	List Price	Your Cost
AC-259	1 "	3/8"	12"	\$ .35	\$ .21
AC-260	11/5"	3/8"	12"	.40	.24
AC-261	2 "	3/8"	12"	.50	.30

## CABINETS, Streamline





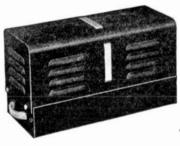
## STREAMLINE GENERAL CABINET RACKS

Builders of amateur and commercial transmitters and similar apparatus requiring one or more chassis and panel units will find this series of modernistic cabinets one of the most handsome lines avail-

able. Both front vertical corners are attractively rounded and are so formed that the panels fit flush with the front of the cabinet. All sizes of these cabinets have recessed hinged top covers with a nickel plated catch, and the three large sizes have hinged rear doors in addition, making all shelves readily accessible.

Each cabinet is 1434" deep and 22" wide and has a decorative strip of chromium trim across the top and bottom. Sides are louvred for ventilation, and the rear cover is terminated 2" above the bottom to permit the various switching, keying, and A. C. leads to be brought out. Drilling fits both Western Electric and Amateur notched 19" rack panels. Each cabinet is made from heavy steel, welded together, and shipped completely assembled. All numbers in this line are available in either Black or Grey Crackle enamel. Black will be supplied unless Grey is specified.

Cat. No.	Panel Space	Overall Height	List Price	Your Cost
CR-1741	834"	1034"	\$12.50	\$ 7.50
CR-1742	121/4"	1414"	15,00	9.00
CR-1743	171/2"	191 2"	20.00	12.00
CR-1744	261/4"	2814"	22.50	13.50
CR-1745	35 "	37 "	25,00	15.00



## STREAMLINE AMPLIFIER FOUNDATIONS

The genuine beauty of these new Amplifier Foundations can only be appreciated after they have been seen. Intended to house public address amplifiers, speech amplifiers, and similar apparatus, these units make available a

handsome appearance heretofore not available for such apparatus. Each of these foundations consists of a standard chassis on which is mounted a removable cover held on by chromium plated knurled screws. This cover has the front and rear horizontal corners rounded, and the sides and ends are attractively louvred for ventilation. The top of this cover has two rounded oblong holes which are covered with a modernistic grill.

To add the finished touch to this line, all these foundations are fitted with chromium trim strips placed at the center of the covers' tops and sides and with sturdy chromium plated carrying handles on each end of the chassis. All chassis are 3" high, and the overall height of all units is 9". This line of foundations is available in either Black or Grey crackle finish at no additional charge. Black will be supplied unless Grey is specified.

Bottom plates to fit these foundations can be found listed on Page 19.

Cat. No.	Chassis Width	Chassis Depth	List Price	Your Cost
CA-1750	10"	5"	\$4,00	\$2.40
CA-1751	12"	7"	4.75	2.85
CA-1752	17"	7"	5.75	3.45
CA-1753	17"	10"	6,50	3.90



## STREAMLINE RECEIVER CABINETS

The latest design development in housings for receivers, instruments, etc., is this new line of metal cabinets. Their distinctive features are the rounded front vertical corners and the recessed

hinged tops. These two factors make a unit built in one of these cabinets very modern in appearance, and all parts are completely accessible. The panel of each cabinet is removable and fits flush with the rounded corners. The rear of the cabinet is stopped 2" above the bottom allowing all necessary leads to the chassis to be readily brought out without drilling the cabinet itself. Both sides are louvred for ventilation, and the bottom of each cabinet has four embossed feet. These Black Crackled units are 8" high, 81,4" deep, and come complete with panels but less chassis. Suitable chassis may be found under the listing of Open End Chassis on Page 19.

Cat. No.	Panel Size	Overall Width	List Price	Your Cost
C-1746	8" x 10"	121/2"	\$3.75	\$2.25
C-1747	8" x 12"	141/5"	4.25	2.55
C-1748	8" x 14"	161/2"	4.75	2.85



## STREAMLINE PROFESSIONAL CABINET RACKS

Beyond any doubt this is one of the most handsome housings available to hold a completed transmitter or similar piece of apparatus, regardless of price. Its unusual attractiveness is attributed to the rounded corner construction of the rack, which lends an ultra-modern touch to its appearance. In addition, panels are recessed so that they will fall flush with the front of the cabinet leaving no edges protruding. An attractive piece of chromium trim is also placed across the top and bottom of these cabinets.

All three numbers of this line are constructed of heavy steel and will withstand the weight of any type of radio installation. Drilling is universal for 19" rack panels with either Western Electric or Amateur notching, and each cabinet is provided with a full length removable

hinged rear door. This rear door is held securely closed by two nickel plated snap catches, and provision is included for the installation of a No. SW-1270 interlock switch to function when this door is opened. Each number is available in either Black or Grey Crackle finish. Black will be supplied unless Grey is specified.

The inside depth clearance of these cabinets is 16" and the overall width is 22". Units are shipped knocked down but come complete with necessary hardware and are easily set up.

Note: Standard equipment for these racks is louvred sides but any rack may be had with either right or left or both sides plain without louvres for applications requiring several racks to be placed close together side by side. Either or both sides will be supplied plain at no additional charge if requested.

Cat. No.	Overail Height	Panel Space	Shipping Weight	List Price	Your Cost
CR-1771	47 "	42 "	100 lbs.	\$46.00	\$27.60
CR-1772	661/2"	611/4"	140 lbs.	54.00	32.40
CR-1773	82 "	77 "	165 lbs.	65.00	39.00

Note: Streamline Receiver Cabinets available in Grey Crackle finish at 15% additional.

Other items on this page finished in either Black or Grey Crackle enamel at no extra cost.



## CABINETS: METER CASES



## **OSCILLOSCOPE CABINETS**

The increased use of one, two, and three inch cathode-ray tubes in Television experimentation as well as in home-made oscilloscopes has made it desirable to introduce this line of modernistic Oscilloscope Cabinets. The gen-

eral construction of these items is very similar to the Streamline Receiver Cabinets listed on the previous page with the excep-

tion that there is no lid in the top.

The length of all three sizes of these cabinets is sufficient to allow mounting of the required power transformers at the rear of the chassis out of the field of the cathode-ray tube itself. All three cabinets in this series come complete with panel and chassis. The rear of the chassis is covered with a suitable piece of bakelite on which can be mounted binding posts for external connections to the instrument, and an opening of sufficient size is left in the rear of the cabinet to permit these external connections to be readily made. Finish is in Black Crackle enamel.

Cat. No.	Height	Width	Depth	Chassis Size	List Price	Your Cost
C-1754	7 "	8 "	71/2"	73/8"x43/4"x11/2"	\$6.00	\$3.60
C-1755	8 "	81/2"	11 "	107/8"x51/4"x2 "	7.00	4.20
C-1756	91/2"	91/2"	15 "	147/8"x61/4"x3 "	8.00	4.80



## **METAL** INSTRUMENT AND RECEIVER **CABINETS**

Recent revisions and improvements in the entire line of BUD cabinets has made this series of housings the finest available in

both appearance and utility. Each cabinet has an evenly recessed hinged cover with convenient finger lift, and the panel on the front of each cabinet is readily attached with self-tapping screws. Ample louvres are provided on each side for ventilation and all corners are reinforced and spot welded to assure ruggedness. Four embossed feet on bottom of each unit prevent scratching of table, etc., and all cabinets are finished in durable Black Crackle enamel. Prices include panel but do NOT include chassis. A suitable chassis for each cabinet will be found in the listing of Open End Chassis on Page 19.

Cat. No.	Height	Width	Depth	Shipping Weight	List Price	Your Cost
C- 973	7"	8"	71/2"	4 lbs.	\$2.75	\$1.65
C 993	7"	10"	6 "	5 lbs.	2.75	1.65
C- 994	7"	12"	71/2"	6 lbs.	3.25	1.95
C- 995	7"	14"	71/2"	7 lbs.	3.50	2.10
C- 999	7"	10"	8 "	7 lbs.	3.25	1.95
C-1190A	8"	16"	8 "	9 lbs.	5.90	3.54
C 975A	9"	15"	11 "	11 lbs.	6.45	3.87



## **BOX SHIELD**

For shielding power transformers and chokes and for protecting and covering vari-

ous other components in constructed units, this shield will find many uses. Top and sides are one piece steel; ends are cane stock to provide ventilation, and all seams are electrically welded. Flanges on bottom facilitate mounting. Finished in Black Crackle enamel.

Cat. No.	Height	Width	Depth	Shipping Weight	List Price	Your Cost
BS-1244	5"	71/2"	41/2"	2 lbs.	\$1.10	\$.66



## SLOPING PANEL CABINETS

These cabinets make excellent housings for such instruments as frequency meters, modulation indicators, field strength meters, and other laboratory or test equipment. The entire front

panel is removable so a chassis can be attached.

The vertical part of the panel is 21/4" high allowing sufficient room for mounting dial plates. The sloping part of the panel is 5" long. Rear panel is attractively punched for ventilation. Made from sheet steel Black Crackle finished. Chassis are purchased separately.

Cat. No.	Width	Depth	Height	List Price	Your Cost
C-1584	7"	71/4"	61/2"	\$3.25	\$1.95
C-1585	9"	71/4"	61/2"	3.75	2.25
C-1586	11"	71/4"	61/2"	4.25	2.55

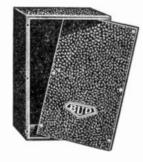


#### METER CASES

These metal meter cases have been designed to provide a convenient and safe means of making portable instruments out of any of the popular panel mounting 2" and 3" square and round meters. They are particularly suited for housing external "R" meters for receivers, plug-in

meters in transmitters, for conveniently holding instruments for laboratory use, and in addition, they make an ideal enclosure for 3" speakers. Cases are formed of Black Crackled steel with sloping fronts, and are furnished with two ceramic feed-thru insulators to accommodate external connections. Dimensions are 4" wide, 4" deep, and 41/2" high.

Cat. No.	Meter Hole	List Price	Your Cost
CM-1241	2 %	\$1.50	\$ .90
CM-1242	213"	1.50	.90



## METAL UTILITY **CABINETS**

The construction of this line of cabinets is identical to the Metal Carrying Cases with the exception that the handle is omitted. The large number of sizes available makes this line useful for all sorts of test equipment, monitors, frequency meters, etc. The line of Chassis Decks contains an appropriate size for each of these cabinets, with the exception of Nos. CU-883 and CU-728.

Cat. No.	Depth	Width	Height	Shipping Weight	List Price	Your Cost
CU- 883	2"	4"	4"	1 lb.	\$ .90	\$ .54
CU- 728	3"	5"	4"	2 lbs.	1.00	.60
CU-1098	6"	6"	6"	3 lbs.	1.15	.69
CU-1099	5"	6"	9"	3 lbs.	1.75	1.05
CU- 879	7"	8"	10"	5 1bs.	2.25	1.35
CU-1124	6"	7"	12"	5 lbs.	2.35	1.41
CU- 880	8"	10"	10"	7 lbs.	2.75	1.65
CU- 881	8"	11"	12"	8 lbs.	3.00	1.80
CU- 882	7"	9"	15"	9 lbs.	3.25	1.95

## **CABINETS, Sectional Cabinet Rack**





# METAL CARRYING CASES

Designed primarily for all types of small portable equipment, this line of Carrying Cases finds many uses in housing transceivers, field strength meters, oscilloscopes, test oscillators, etc. An easy-grip leather handle is riveted on the top and the removable front and rear panels are fastened to the case by means of self-tapping screws. The steel and

welded construction assures maximum strength at a minimum weight — very important for portable work. Finish is Black Crackle.

The line of Chassis Decks contains an appropriate size for each of these cabinets.

Cat. No.	Height	Width	Depth	Shipping Weight	List Price	Your Cost
CC-1096	12"	7 "	6"	5 lbs.	\$2.65	\$1.59
CC-1097	15"	73/4"	7"	7 lbs.	3.25	1.95
CC-1100	10"	10 "	7"	6 lbs.	3.00	1.80



## METAL SPEAKER CABINETS

In making permanent or portable public address installations this line of speaker cabinets will be found very useful. Construction is of heavy cold rolled steel and housing is completely enclosed with removable front and back covers. The back cover is louvred to prevent back pressure, and the round

opening on the front of the cabinet is covered with a metal cane perforated grill welded in place. A carrying handle is attached to each cabinet for portable purposes. Finished in Black Crackle enamel.

Cat. No.	Hole Size	Speaker Size	Cabinet Size	List Price	Your Cost
CS-471	43/4"	6"	9"x 9"x6"	\$3.75	\$2.25
CS-472	61/2"	8"	11"x11"x7"	4.60	2.76
CS-473	818"	10"	13"x13"x8"	6.00	3.60
CS-474	11 "	12"	15"x15"x8"	8.00	4.80



# AMPLIFIER FOUNDATIONS

Almost all types of speech and amplifier equipment are readily adapted to this very neat line of ventilated housings. Each unit

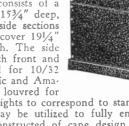
consists of a regular chassis on which is attached the shield cover. This shield cover has cane design sides and top and solid ends assuring strong construction and, at the same time, adequate protection and ventilation. Material used is cold rolled steel. Black Crackled, and all joints are spot welded.

Cat.	Height	Width 1	Depth	Chassis Height	Shipping Weight	List Price	Your Cost
CA-699	81/4"	91/2"	5 "	21/2"	4 lbs.	\$2.50	\$1.50
CA-112	81/4"	131/2"	5"	21/2"	5 lbs.	2.95	1.77
CA-1120	81/4"	17 "	7"	21/2"	7 lbs.	3.65	2.19
CA-112'	7 83/4"	17 "	10"	3 "	10 lbs.	4.50	2.70
CA-1128	8 83/4"	12 "	10"	3 "	8 lbs.	3.75	2.25

## SECTIONAL CABINET RELAY RACK

This different type of rack design permits the building of a cabinet rack to any required height between  $3\frac{1}{4}$ " and 6 feet in multiples of  $1\frac{3}{4}$ " thereby making it useful for all types of completed apparatus. The unit is simply constructed to accommodate present requirements, and additional sections may be added at any time as conditions necessitate.

The foundation of this rack consists of a ruggedly built base 20½" wide, 15¾" deep, and 2½" high (on which the side sections are mounted) and a formed top cover 19¼" wide, 14½" deep, and ½" high. The side wall sections are 14½" deep with front and back flanges drilled and tapped for 10/32 screws to fit both Western Electric and Amateur Type rack panels. Sides are louvred for



ample ventilation and made in heights to correspond to standard rack panels. Back dust covers may be utilized to fully enclose the cabinet. These covers are constructed of cane design steel with reinforced edges except Nos. SR-1313 and SR-1314 which are louvred sheet steel. All other parts are made of heavy gauge cold rolled steel and finished in durable Black Crackle enamel.

The side wall sections are sold and packed in pairs, and are supplied with mounting brackets and all necessary bolts, nuts, etc. The back dust covers are slotted to fit Amateur rack drilling.

#### TOP COVER AND BASE

Cat. No.	Depth	Width	Height	Part	Shipping Weight	List Price	Your Cost
SR-1300	153/4"	201/4"	21/2"	Base	16 lbs.	\$5.00	\$3.00
SR-1301	147"	191/4"	1/2"	Top	5 lbs.	2.75	1.65

#### SIDE WALL SECTIONS

Cat. No.	Height	Width	Shipping Weight	List Price	Your Cost
SR-1302	31/2"	141/2"	5 lbs.	\$ 2.25	\$ 1.35
SR-1303	51/4"	141/2"	6 lbs.	2.50	1.50
SR-1304	7 "	141/2"	7 lbs.	2.75	1.65
SR-1305	83/4"	141/2"	8 lbs.	3.30	1.98
SR-1306	101/2"	141/2"	9 lbs.	3.65	2.19
SR-1307	121/4"	141/2"	10 lbs.	4.40	2.64
SR-1308	14 "	141/2"	11 lbs.	4.65	2.79
SR-1309	153/4"	141/2"	12 lbs.	5.00	3.00
SR-1310	171/2"	141/2"	12 lbs.	5.50	3.30
SR-1311	191/4"	141/2"	14 lbs.	5.75	3.45
SR-1312	21 "	141/2"	16 lbs.	6.00	3.60

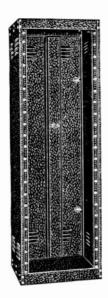
#### **DUST COVER BACK SECTIONS**

Cat. No.	Height	Length	Shipping Weight	List Price	Your Cost
SR-1313	31/2"	19"	2 lbs.	\$ .85	\$ .51
SR-1314	51/4"	19"	2 lbs.	1.00	.60
SR-1315	7 "	19"	3 lbs.	1.10	.66
SR-1316	83/4"	19"	3 lbs.	1.40	.84
SR-1317	101/2"	19"	4 lbs.	1.65	.99
SR-1318	121/4"	19"	4 lbs.	1.90	1.14
SR-1319	14 "	19"	5 lbs.	2.25	1.35
SR-1320	153/4"	19"	5 lbs.	2.50	1.50
SR-1321	171/2"	19"	5 lbs.	2.75	1.65
SR-1322	191/4"	19"	6 lbs.	3.00	1.80
SR-1323	21 "	19"	6 lbs.	3.30	1.98

Note: All items listed above available with Grey Crackle finish at 15% additional.



## RACKS, Cabinet, Relay



# PROFESSIONAL CABINET RACKS

A finished professional appearance will be added to any transmitter or other large unit when housed in one of these excellent Cabinet Racks. In addition, complete protection from damage and dust is provided to all equipment, and a No. SW-1270 interlock switch may be easily installed to prevent possible contact with the high voltage when adjustments are being made. Constructed from strong cold rolled steel, these cabinets may be used to house the heaviest type of radio equipment.

The removable rear door is provided with two nickel plated snap catches, and the panel mounting angles are made from 1/8" thick steel and securely welded in place to the cabinet sides. These angles are drilled and tapped for 10-32 screws, will accommodate both Amateur and West-

ern Electric type panels, and are so recessed that when the panels are mounted, their edges are not exposed. This latter feature adds materially to the beauty of the assembled unit. Finish is Black Crackle enamel. Inside depth clearance is 15½". Each cabinet comes complete with all necessary machine screws, nuts, and washers for assembling.

Note: Adequately louvred sides are standard equipment with all numbers in this series, but either one or both sides may be secured without louvres with any of these cabinets without additional charge for those applications where it is desirable to place several racks close together side by side.

Cat. No.	Height	Overall Width	Depth	Space	Shipping Weight		Your Cost
CR-874	47 "	21"	17"	42"	100 lbs.	\$37.50	\$22.50
CR-875	661/2"	21"	17"	611/4"	135 lbs.	44,50	26.70
-884	82 "	21"	17"	77"	165 lbs.	54.00	32.40

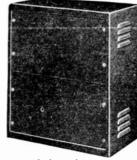


# GENERAL CABINET RACKS

For general amateur and commercial applications requiring a neat housing at a reasonable cost, this unusually fine line of General Cabinet Racks is especially desir-

able. Constructed from the same heavy welded steel as the larger cabinets, they provide a good looking, durable housing for innumerable types of radio units. Provisions for ventilation and drilling identical to the larger cabinets. Depth of each cabinet is sufficient to accommodate 13" chassis together with necessary inter-shelf connections. Hinged rear door with nickeled snap catch is on the three larger sizes of this line. Interlock switch bracket also included with these three sizes. Numbers in this line are shipped completely set up together with the necessary mounting screws and washers. Nos. CR-697 and CR-698 have solid top construction. All other sizes have hinged lid in top. Finished in Black Crackle Enamel.

Cat. No.		Overall Overall Width Depth		Shipping Weight	List Price	Your Cost
CR-694	9 "	191/8" 133/4"	83/4"	20 lbs.	\$ 8.00	\$ 4.80
CR-695	103/4"	191/8" 133/4"	101/2"	22 lbs.	10,00	6.00
		191/8" 141/2"				9.00
CR-697	261/2"	191/8" 141/2"	261/4"	42 lbs.	16.25	9.75
CR-698	351/4"	191/8" 141/2"	35 "	50 lbs.	19.00	11.40



## SMALL CABINET RACK

The long felt need for a small and inexpensive cabinet rack to house low power transmitters and similar apparatus is filled with the introduction of this new addition to the BUD line. This cabinet is constructed to accommodate two panels, one 10½" and one 8¾" high and 16½" wide, and will take chassis up to 8½" deep and 15" wide. The

rear of the cabinet is covered by a hinged door with an attractive locking device, and the sides are louvred for ventilation. The entire unit is formed from Black Crackled steel and is furnished complete with panels but LESS chassis. Overall size of the cabinet is 18" wide by 21½" high by 10" deep. Chassis Nos. CB-665 and CB-666 listed on Page 18 are intended for use with this cabinet.

Cat. No.	Shipping Weight	List Price	Your Cost
RC-1749	25 Ibs.	\$12.50	\$7.50



## STANDARD RELAY RACKS

Where a sturdy mounting for a number of panel and chassis units (such as in a transmitter, public address system, etc.) is desired allowing complete accessibility to all parts, this line of Relay Racks is indispensable. The one-eighth inch steel channels, three inches deep, are held together with angle cross pieces of the same material. The base design has been improved to incorporate a chassis-type bottom together with the usual side angles making the rack stronger and more stable.

These units are intended to accommodate standard 19 inch panels with either Western Electric or Amateur notching with heights in multi-

ples of 134". Holes are drilled and tapped for 10-32 thread. The finish of these racks is baked Black Crackle enamel, and they are shipped knocked down. Assembly is very easy, and all necessary nuts, bolts, and washers are included.

The No. RR-1265 rack is a professional heavy duty rack for

The No. RR-1265 rack is a professional heavy duty rack for all types of commercial installations. Uprights are heavy channel iron supported with a heavy 3/8" thick angle iron base. Finish and drilling same as above.

Cat. No.	Overall Height	Base Width	Base Depth	Panel Space	Shipping Welght	List Price	Your Cost
RR-1263	351/2"	20"					
RR-1264	701/2"	20"	22"	661/2"	45 lbs.	19.00	11.40
RR-1265	721/2"	20"			90 lbs.		



## MIDGET RELAY RACKS

These small relay racks are perfectly suited for table mounting of low and medium power transmitters, public address systems, receiver installations, test instruments, etc. Each rack is built around a heavy chassis on which the side uprights mount. This type construction permits the rack to successfully hold very large weights. Racks come knocked down but are complete with all necessary hardware and are easily assembled. Finish is Black Crackle enamel.

Cat, No.	Overall Height		Depth	Space	Shipping Weight	List Price	Your Cost	
RR-1248	24"	20"	12"	21"	15 lbs.	\$6.25	\$3.75	
RR/1249	31"	20"	12"	28"	20 lbs.	8.25	4.95	

Note: All items listed above available with Grey Crackle finish at 15% additional.

Page 16

## RACK PANELS, Meter, Door





#### **METER PANELS**

Both Masonite and Steel Meter Panels are made of same materials as regular rack panels. Each unit is 51/4" high, 19" wide, and available in either Black or Grey Crackle finish. Small holes fit all 2" square and round meters, and large holes fit all 3" square and round meters. In ordering metal panels, specify "A" for Amateur or "W" for Western Electric notching. Masonite panels available ONLY in Amateur notching. Black Crackle finish will be supplied unless Grey is specified. Shipping weight 4 pounds for metal panels.

Cat. No.	No. of Holes	Diam. of Holes	Material	List Price	Your Cost
PM-509	3	214"	Masonite	\$1.45	\$ .87
PM-510	4	21/4"	Masonite	1.65	.99
PM-511	3	213"	Masonite	1.45	.87
PM-512	4	218"	Masonite	1.65	.99
PS- 440	3	214"	Steel	1.65	.99
PS- 441	5	21.4"	Steel	2.45	1.47
PS- 442	3	213"	Steel	1.65	.99
PS- 443	5	213"	Steel	2.45	1.47



## METAL DOOR RACK PANELS

In many rack panel units it is very desirable to have component parts on the chassis (such as tubes, coils, etc.,) accessible from the front of the panel as in this manner, changes can be easily

and quickly made. To fill this need, panels Nos. PS-615 and PS-616 with a 12" x 534" hinged door were introduced. An opening of this size allows ample marginal room for mounting chassis support brackets and those controls which must be exposed at all times. A snap lock is provided to keep door closed. Panels Nos. PS-617 and PS-618 are made with same size cutout as above, but have slides on the rear of the panel for insertion of a No. OC-1351 Cane Panel Opening Cover listed below or piece of glass. These numbers are especially suited for applications where it is desirable to constantly watch the plates of the tubes and other parts of the circuit.

All the above numbers finished in either Black or Grey Crackle Enamel. Black Crackle supplied unless Grey specified. Available in Amateur notching only.

Cat. No.	Length	Width	Shpg. Wt.	Type	List Price	Your Cost
PS- 615	19 "	101/2"	9 lbs.	Door	\$3.90	\$2.34
PS- 616	19 "	121/4"	10 lbs.	Door	4.50	2.70
PS- 617	19 "	101/2"	5 lbs.	Cut-out	3.25	1.95
PS- 618	19 "	121/4"	7 lbs.	Cut-out	3.75	2.25
OC-1351	123/8"	61/8"	1 lb.	******	.80	.48



### **INTERSTAGE SHIELDS**

These shields find many uses on receiver and transmitter chassis for eliminating interstage coupling and isolating individual circuits. Construc-

tion is of 20 gauge Electro-zinc Plated steel, and formed angles on front and bottom facilitate mounting on either chassis or panel. Both angles punched with two mounting holes.

Cat. No.	Height	Depth	Shipping Weight	List Price	Your Cost
IS-1246	51/2"	7"	1 lb.	\$ .35	\$ .21
IS-1247	51/2"	10"	1 lb.	.45	.27
IS-1245	61/2"	10"	1 lb.	.50	.30



# STEEL RELAY RACK PANELS

Made of high grade steel  $\frac{1}{8}$ " thick, 19" long, and finished in beautiful baked Black or Grey Crackle enamel, these panels afford strong and rigid support for all types of relay rack units. Available in either Amateur notching (first notch  $\frac{1}{8}$ " from end) or Western Electric notching (first notch  $\frac{1}{4}$ " or  $\frac{1}{2}$ " from end). Indicate type wanted by using "A" after catalog number for Amateur or "W" for Western Electric. Black Crackle finish will be supplied unless Grey is specified.

Cat. No.	Height	Shipping Weight	List Price	Your Cost
PS-1250	13/4"	2 lbs.	\$ .75	\$ .45
PS-1251	313"	3 lbs.	.85	.51
PS-1252	51/4"	4 lbs.	1.05	.63
PS-1253	7 "	5 lbs.	1.10	.66
PS-1254	83/4"	7 lbs.	1.40	.84
PS-1255	101/5"	8 lbs.	1.70	1.02
PS-1256	1214"	9 lbs.	2.00	1.20
PS-1257	14 "	10 lbs.	2.30	1.38
PS-1258	153/4"	12 lbs.	2.60	1.56
PS-1259	171/2"	13 lbs.	2.90	1.74
PS-1260	191/4"	14 lbs.	3.10	1.86
PS-1261	21 "	15 lbs.	3.50	2.10

## MASONITE RELAY RACK PANELS

Where light, non-magnetic, insulated panels are desirable, this line, made of Tempered Masonite, may be utilized to a good advantage. While strong and tough, these panels are readily worked with ordinary wood-working tools. Panels are 1<sup>n</sup><sub>6</sub>" thick and 19" long, and are finished in beautiful and durable baked Black or Grey Crackle enamel. Available ONLY in Amateur notching. Black finish will be supplied unless Grey is specified.

Cat. No.	Height	List Price	Your Cost
PM-1588	13/4"	\$ .55	\$ .33
PM-1589	31/2"	.70	.42
PM-1590	51/4"	.95	.57
PM-1591	7 "	1.05	.63
PM-1592	83/4"	1.25	.75
PM-1593	101/5"	1.45	.87
PM-1594	121/4"	1.65	.99
PM-1595	14 "	1.85	1.11
PM-1596	153/4"	2.10	1.26
PM-1597	1715"	2.35	1.41
PM-1598	1914"	2.60	1.56
PM-1599	21"	2.85	1.71

#### **RELAY RACK SCREWS & WASHERS**

These machine screws are 5%" long and threaded 10-32. Made from steel with oval head and finished in nickel plate. The cup washers are steel and are nickel plated. Made to fit 10-32 machine screws with either oval or flat heads.

Cat. No.	Description	List Price	Your Cost
RS- 7140	Screw	\$.50 C	\$.30 C
RW-7161	Washer	.50 C	.30 C

Note: Panels listed above available in Grey Crackle finish at no extra charge. Other items 15% additional.



## RACK ACCESSORIES, CHASSIS



## CABINET RACK **DOLLIES**

To overcome the difficulty of moving heavy transmitters in racks around the ham shack for repairs, etc., these dollies have been introduced. Frames are formed of solid steel finished in Black Crackle. The ball bearing swivel casters have wheels made of a high grade hard rubber composition which will not scratch

Nos. RD-505 and RD-506 fit cabinets having bases measuring from 14" x 18" to 17" x 21" and are intended for the regular General and Professional Cabinet Racks.

Nos. RD-507 and RD-508 fit cabinets having bases measuring from 15" x 20" to 18" x 22½" and are intended for the Streamline General and Professional Cabinet Racks.

Cat. No.	Туре	Wheel Diam.	List Price	Your Cost
RD-505	Light Duty	11/2"	\$5.75	\$3.45
RD-506	Heavy Duty	2 "	8.75	5.25
RD-507	Light Duty	11/2"	6.75	4.05
RD-508	Heavy Duty	2 "	9.75	5.85

### CABINET RACK TRIM

A great improvement in the appearance of any piece of square corner rack and panel equipment is made possible through the use of this Cabinet Trim. This Trim screws on the side of the rack or cabinet and neatly covers the panel edges and mounting screws making any assembly appear more finished. Packed in pairs for right and left hand sides and finished in baked telephone black ename!.

Cat. No.	Length	Fits. Cab. No.	List Price	Your Cost
CT-1341	83/4"	CR-694	\$ .90	\$ .54
CT-1342	101/2"	CR-695	1.00	.60
CT-1343	171/2"	CR-696	1.25	.75
CT-1344	261/4"	CR-697	1.60	.96
CT-1345	35 "	CR-698	2.00	1.20
CT-1346	47 "	CR-874	2.75	1.65
CT-1347	661/2"	CR-875	3.50	2.10
CT-1350	83 "	CR-884	4.25	2.55



## CHASSIS MOUNTING **BRACKETS**

In applications where the panel alone has to support the entire weight of a constructed unit, these Mounting

Brackets are very essential to insure proper support of the chassis. Formed of heavy gauge Black Crackled steel. The one inch panel flange is cut away at the bottom to enable the chassis to be mounted flush against the panel.

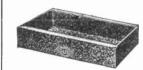
Cat. No.	Height	Depth of Bracket	Chassis Height	Shipping Weight	List Price	Your Cost
MB-458	6!/2"	8"	3"	2 lbs.	\$ .90	\$ .54
MB-448	61/2"	10"	3"	3 lbs.	1.25	.75
MB-459	61/2"	11"	3"	3 lbs.	1.40	.84
MB 449	61/2"	12"	3"	3 lbs.	1.55	.93
MB-460	61/2"	13"	3"	3 lbs.	1.65	.99
MB-450	81/2"	10"	4"	4 lbs.	1.75	1.05
MB-451	81/2"	13"	4"	5 lbs.	2.00	1.20



## TRIANGULAR MOUNTING BRACKETS

For panel and chassis assemblies where large weights are not involved, these Triangle Mounting Brackets make convenient supports. Constructed of heavy Black Crackled steel.

Cat. No.	Height	D	epth		Shipping Weight		List Price per pair		our
MB-1266	5"		5"	T	1 lb.	Т	\$ .70		\$ .42
MB-1267	7"		7"		2 lbs.		.90		.54
MB-1268	9"	1	9"	-	2 lbs.	1	1.10	1	.66



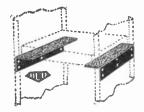
## STEEL CHASSIS BASES

These rugged steel chassis are made from one piece of heavy gauge steel,

and all corners are spot-welded. The sides are folded over on the bottom for additional strength, and this also permits bottom plates to be attached to the chassis if desired. These bases are furnished in either Black Crackle Enamel or Electro-zinc finish. Prices identical for either type. The line of bottom plates listed on Page 19 are for use with these chassis.

Black Crackle Cat. No.	Electro Zinc Plated Cat. No.	Chassis Size	Metal Ga.	Shipping Weight	List Price	Your
CB-644	CB-645	5"x912"x212"	20	2 lbs.	\$ .90	\$ .54
CB-788	CB-776	5"x9½"x1½"	20	2 lbs.	.75	. 45
CB-789	CB-1191	7"x7"x2"	20	2 lbs.	. 90	. 54
CB-790	CB-1192	7''x9''x2''	20	2 lbs.	1.00	. 60
CB-791	CB-1193	7"x11"x2"	20	2 lbs.	1.10	. 66
CB-646	CB-1194	7''x13''x2''	20	3 lbs.	1.20	.72
CB-647	CB-1198	5"x13½x 2½"	20	2 lbs.	1.10	. 66
CB-649	CB-1189	7''x15''x3''	20	3 lbs.	1.50	. 90
CB-665	CB-666	8½"x15"x3"	20	3 lbs.	1.60	. 96
CB-1068	CB-1066	4"x17"x3"	20	3 lbs.	1.25	.75
CB-648	CB-1199	7''x17''x2½''	20	4 lbs.	1.45	. 87
CB-650	CB-774	8"x17"x2"	20	4 lbs.	1.60	. 96
CB-651*	CB-775*	8"x17"x3"	20	5 lbs.	1.70	1.02
CB-652	CB-1195	10"x12"x3"	20	5 lbs.	1.60	. 96
CB-653	CB-779	10"x14"x3"	20	5 lbs.	1.70	1.02
CB-654*	CB-769*	10"x17"x2"	20	6 lbs.	1.70	1.02
CB-636*	CB-637*	10"x17"x3"	20	5 lbs.	1.50	.90
CB-655*	CB-1196*	10"x17"x3"	18	6 lbs.	1.80	1.08
CB-656	CB-1197	10"x23"x3"	18	7 lbs.	2.30	1.38
CB-657*	CB-770*	11''x17''x2''	18	5 lbs.	2.05	1.23
CB-658*	CB-771*	11''x17''x3''	18	6 lbs.	2.25	1.35
CB-663*	CB-661*	12''x17''x2''	18	5 lbs.	2.10	1.26
CB-664*	CB-662*	12"x17"x3"	18	6 lbs.	2.30	1.38
CB-659*	CB-772*	13"x17"x2"	18	6 lbs.	2.50	1.50
CB-660*	CB-773*	13"x17"x3"	18	6 lbs.	2.75	1.65
CB-640*	CB-641*	10"x17"x4"	18	7½ lbs.	2.40	1.44
CB-642*	CB-643*	13''x17''x4''	18	$8\frac{1}{2}$ lbs.	3.00	1.80
CB-623	CB-624	10"x17"x5"	18	81/6 lbs.	3.50	2.10
CB-625	CB-626	13''x17''x5''	18	9½ lbs.	4.00	2.40

\* Indicates Tchassis which are punched to accommodate Chassis Mounting Brackets listed on Page 17.



## **CHASSIS** SUPPORTING ANGLES

In a relay rack it is frequently desirable to have some support in addition to the panel for an unusually heavy panel and chassis unit. To fill this need, these Supporting Brackets may be screwed on the sides of a relay rack cabinet in such

a manner that the chassis may slide and rest on them in much the same way as a desk drawer does. These angles are 12" long and project 3" from each side of the cabinet affording ample support for a standard 17" width chassis. These brackets are sold in pairs, finished in durable Black Crackle Enamel, and come complete with necessary mounting hardware.

Cat. No.	Shipping Weig	ht	List Price	Your Cost
SA-1349	4 lbs.	1	\$1.50 pr.	\$.90 pr.

Note: Panels listed above available in Grey Crackle finish at no extra charge. Other items 15% additional.

## CHASSIS, BOTTOM PLATES





## REMOVABLE TOP CHASSIS

This new chassis design will be welcomed by amateurs and experimenters who desire to make periodic revisions

and changes in their equipment without wasting any more material than absolutely necessary. These chassis are so constructed that when a parts layout change is desirable, the old top is simply unscrewed and a new top is placed on the old frame. This makes, in effect, an entirely new chassis at less than half the cost of a complete chassis. The removable top feature also greatly simplifies the working of the chassis as all holes, cuts, etc., can be made in the flat top without interference from the sides.

#### **COMPLETE CHASSIS**

Black Crackle Cat. No.	Electro-Zinc Plated Cat. No.	Depth	Width	Height	List Price	Your Cost
CB-196	CB-193	10"	17"	3"	\$2.00	\$1.20
CB-197	CB-194	10"	17"	4"	2.70	1,62
CB-251	CB-210	13"	17"	3"	3.00	1.80
CB-252	CB-211	13"	17"	4"	3.75	2.25

### REPLACEMENT CHASSIS TOPS ONLY

RT-198	RT-195	10"	17"	 \$1.00	\$ .60
RT-253	RT-212	13"	17"	 1.25	.75



#### **BOTTOM PLATES**

Fit Amplifier Foundations and Standard Chassis

Bud Bottom Plates make excellent dust covers and protect all wiring and component parts under the chassis. Each plate has four formed bosses which prevent sharp edges from scratching the table top. These covers are especially necessary in shielding R. F. shelves from audio shelves in rack and panel constructed transmitters. Supplied in Black Crackle or Zinc Plated finishes to match the chassis lines.

Black Crackle Cat. No.	Electro- Zine Plated Cat. No.	Width	Length	Shipping Weight	List Price	Your Cost
BP- 680	BP- 667	5"	91/2"	1 lb.	\$ .45	\$.27
BP-536*		5"	10 "	1 lb.	.50	.30
BP- 681	BP 668	7"	7 "	1 lb.	.50	.30
3P- 682	BP 669	7"	9 "	1 lb.	.55	.33
BP- 683	BP- 670	7"	11 "	1 lb.	.65	.39
BP-537*		7"	12 "	1 lb.	.70	.42
BP- 684	BP- 671	7"	13 "	1 lb.	.70	.42
BP 685	BP- 672	5"	131/2"	1 lb.	.55	.33
BP- 516	BP- 513	7"	15 "	2 lbs.	.75	.45
BP-1069	BP-1067	4"	17 "	2 lbs.	.60	.36
BP-686*	BP- 673	7"	17 "	2 lbs.	.80	.48
BP- 687	BP- 674	8"	17 "	2 lbs.	.80	.48
3P- 688	BP- 675	10"	12 "	2 lbs.	.80	.48
BP- 517	BP- 514	10"	14 "	2 lbs.	.85	.51
BP-689*	BP- 676	10"	17 "	2 lbs.	1.00	.60
BP 690	BP- 677	11"	17 "	2 lbs.	1.10	.66
3P 691	BP- 678	12"	17 "	3 lbs.	1.20	.72
3P- 692	BP- 679	13"	17 -"	3 lbs.	1.25	.75
3P- 518	BP- 515	10"	23 "	3 lbs.	1.35	.81

\*Available in either Grey or Black Crackle finishes at no additional charge.



## HEAVY DUTY CHASSIS BASES

The construction of this line of bases is identical to the line of regular Steel Chassis Bases with the

regular Steel Chassis Bases with the exception that they are formed from heavy 1/8" steel and intended for applications requiring unusual sturdiness and where large weights are involved. All sizes are available in either Black Crackle or Electro-zine plated finishes and come complete with bottom plates and mounting screws.

Black Electro- Crackle Zinc Cat. Plated No. Cat. No.	Depth	Width	Height	Shipping Weight	List Price	Your Cost
CB-1757   CB-1764	8"	17"	2"	14 lbs.	\$2.70	\$1.62
CB-1758   CB-1765	8"	17"	3"	15 lbs.	3.00	1.80
CB-1759 CB-1766	11"	17"	2"	19 lbs.	3.00	1.80
CB-1760 CB-1767	11"	17"	3"	20 lbs.	3.25	1.95
CB-1761 CB-1768	13"	17"	2"	21 lbs.	3.50	2.10
CB-1762 CB-1769	13"	17"	3"	22 lbs.	3.85	2.31
CB-1763   CB-1770	13"	17"	4"	24 lbs.	4.25	2.55



## **OPEN END CHASSIS**

Primarily intended to be used with the various sizes and styles of BUD metal cabinets, these light

weight chassis are likewise ideal for any type of small built-up unit such as a record amplifier, code oscillator, etc. U-shaped construction is used with ends folded over 3/8" for additional strength. Finish is Electro-zinc plating.

Cat. No.	Depth	Width	Height	Fits Cab. No.	List Price	Your Cost
CB- 38	7 "	6 "	2 "	C-1584	\$ .60	\$.36
CB 30	5 "	7 "	11/2"	***************************************	.50	.30
CB- 41	7 "	7 "	11/2"	C-973	.65	.39
CB 39	7 "	8 "	2 "	C-1585	.70	.42
CB-996	51/2"	9 "	11/2"	C-993	.60	.36
CB-976	71/2"	9 "	11/2"	C-999, C-1746	.75	.45
CB- 40	7 "	10 "	2 "	C-1586	.75	.45
CB-997	7 "	11 "	11/2"	C-994, C-1747	.80	.48
CB-998	7 "	13 "	11/2"	C-995, C-1748	.95	.57
CB- 34	103/4"	14 "	2 "	C-975A	1.45	.87
CB- 35	73/4"	15 "	2 "	C-1190A	1.25	.75

#### CHASSIS DECKS

This line is intended for the Carrying Case and Utility Cabinet series of housings. Each unit is folded over 1½" on the front and ½" on the side and made from Zinc Plated steel. These decks are also useful for interstage shielding and supports in regular panel-and-chassis layouts.

Cat. No.	Width	Depth	Fits Cab. No.	Shpg. Wt.	List Price	Your Cost
CB-522	43/4"	51/2"	CU-1098	1 lb.	\$.45	\$.27
CB-523	43/4"	41/2"	CU-1099	1 lb.	.40	.24
CB-524	63/4"	61/2"	CU-879	1 lb.	.60	.36
CB-525	53/4"	51/2"	CU-1124, CC-1096	1 lb.	.50	.30
CB-526	83/4"	71/2"	CU-880	1 lb.	.70	.42
CB-527	93/4"	71/2"	CU-881	2 lbs.	.75	.45
CB-528	73/4"	61/2"	CU-882	1 lb.	.65	.39
CB- 36	61/2"	61/2"	CC-1097	1 lb.	.60	.36
CB- 37	83/4"	61/2"	CC-1100	1 lb.	.70	.42

Note:-All items listed above available with Grey Crackle finish at 15% additional.



## MICROPHONE STANDS



## DELUXE FLOOR STANDS

Applications requiring a heavy rugged stand of the highest quality will find this line of Floor Stands particularly suitable. They are constructed on an attractively finished, heavy cast 12" base of modernistic design. The stems are cut from heavy brass tubing finished in highly polished chromium, and height adjustments are positively held by the special chuck lock. The smooth friction action of the movable stems prevents sudden dropping of the microphone and assures noise-free action. Microphone cable may be run

through stand if desired.

No. MS-585—The two telescoping sections allow height to be adjusted from 36" to 68".

Top of stem threaded 5%-27 to accommodate crystal, velocity, and dynamic microphones. Net weight 12 lbs.

No. MS-823—Identical to No. MS-585 but includes 6" microphone ring with eight springs. Net weight 13 lbs.

No. MS-587—Similar to No. MS-585 but has three telescoping sections allowing height to be adjusted from 25" to 66". Net weight 12 lbs.

No. MS-592—Same as No. MS-587 but includes 6" microphone ring with eight springs. Net weight 13 lbs.

Cat. No.	List Price	Your Cost
MS-585	\$12.00	\$ 7.20
MS-823	14.00	8.40
MS-587	13.50	8.10
MS-592	15.50	9.30



## STUDIO FLOOR STANDS

The general construction of this line of stands is similar to the Deluxe line listed above with the exception that the base is a three leg casting having a spread of 17". The three feet are equipped with rubber pads to absorb shock and vibration and prevent scratching of floor. The positive acting chuck lock securely holds the adjustable stem at any desired setting.

No. MS-586—The two telescoping sections allow height to be adjusted from 35" to 67". Top of stem is threaded 3/8-27 to accommodate crystal, velocity, and dynamic microphones. Net weight

9½ lbs. No. MS-598—Identical to No. MS-586 but includes 6" microphone ring with eight springs.

Net weight 10½ lbs.
No. MS-583—Similar to No. MS-586 but has three telescoping sections allowing height to be adjusted from 24" to 65"

Not weight 9½ lbs.

No. MS-597—Same as No. MS-583 but includes 6" microphone ring with eight springs. Net weight 10½ lbs.

Cat. No.	List Price	Your Cost
MS-586	\$10.00	\$ 6.00
MS-598	12.00	7.20
MS-583	12.50	7.50
MS-597	14.00	8.40



#### **DESK STANDS**

No. MS-588 is a stand intended to be used with the various types of crystal, dynamic, and velocity microphones available. The base is a casting 5" in diameter, attractively finished. The stem is Chromium Plated brass tubing with 58-27 thread. Overall height without microphone is 6 inches.

No. MS-589 is similar in appearance and uses to No. MS-588 but is built on a heavy 6" cast base and has an overall height of 8 inches.

Cat. No.	Weight	List Price	Your Cost	
MS-588	2 lbs.	\$1.75	\$1.05	
MS-589	31/4 lbs.	2.25	1.35	
				=



## **IUNIOR FLOOR STANDS**

An unusual value in microphone stands is represented by these two numbers. The stems are made of highly polished chromium plated brass tubing in two sections, and the smooth acting chuck type locking device holds stand permanently at any setting and also assures noiseless height adjustments. The base of these stands is a heavy 10" modernistic casting, attractively finished. Height is adjustable from 36" to 66".

No. MS-584—Stem threaded 5/8-27 for usual crystal, velocity, and dynamic microphone. Net weight 81/2 lbs.

No. MS-840-Same as No. MS-584 but includes microphone ring and eight springs.

Cat. No.	List Price	Your Cost
MS-584	\$ 8.50	\$ 5.10
MS-840	10.00	6.00



## **ADJUSTABLE BANQUET STANDS**

Installations requiring the use of a microphone on a table, desk or pulpit will be able to utilize this line of stands to the best advantage. The cast metal base is 6" in diameter and attractively finished, and the two piece stem is made from brass tubing chromium plated. Microphone is held at the desired height by the thumb nut locking device on the

adjustable stem.
No. MS-590—Height 10" to 16". Stem threaded 5/6-27 for usual crystal, velocity, and dynamic microphones. Net weight 31/2 lbs. No. MS-803—Same as No. MS-590, but includes 6" micro-

phone ring and eight springs.

No. MS-591—Same as No. MS-590 only height adjustable from 13" to 22". Net weight 3½ lbs.

No. MS-802—Same as No. MS-591 but includes 6" micro-

phone ring and eight springs.

Cat. No.	List Price	Your Cost
MS-590	\$ 5.00	\$ 3.00
MS-803	6.50	3.90
MS-591	5.75	3.45
MS-802	7.25	4.35



## **DESK RING STANDS**

No. MS-817 is a modernistic desk stand consisting of an attractive octagonal ring mounted on a cast base. Entire unit is Black Crackled and furnished complete with springs. Overall height is 9 inches.

No. MS-818 is a ring stand consisting of a 6" diameter round ring mounted on a cast base and will accommodate a full size microphone. Stand comes complete with springs, is finished in Black Crackle enamel, and is 10" high.

No. MS-819 is identical to No. MS-818 except that the ring is joined to the base by means of a 3" piece of brass pipe making the overall height 13".

No. MS-820 is an Octagonal Microphone ring 53/8" in diameter. No. MS-801 is a Round Microphone ring 6" in diameter. Both the above two numbers come complete with springs and suspension loop.

Cat. No.	List Price	Your Cost
MS-817	\$ 2.25	\$ 1.35
MS-818	2.75	1.65
MS-819	3.35	2.01
MS-820	1.50	.90
MS-801	2.00	1.20

## DIALS, DIAL PLATES





## **ETCHED** DIAL PLATES

The raised polished markings on the black enameled background give this line of plates an unusually attractive appearance on all types of installations. The plate material is aluminum, and the center holes are 13/32" in diameter. The pointer and bar knobs listed on Page 33 are especially suited for indicators with these plates.

Cat. No.	Size	Arc	Calibrated	Marking	List Price	Your Cost
DP-1175,	3"	180°	0 to 100		\$.30	\$.18
DP-1176	3"	180°	100 to 0		.30	.18
DP-1177	2"	180°	0 to 100		.20	.12
DP-1178	2"	180°	100 to 0		.20	.12
DP-1179	2"	300°	0 to 100		.20	.12
DP-1224	2"	300°	0 to 100	Record	.20	.12
DP-1225	2"	300°	0 to 100	Microphone	.20	.12
DP-1226	2"	300°	0 to 100	Gain	.20	.12
DP-1227	2"	300°	0 to 100	Tone	.20	.12
DP-1228	2"		Arrow	Tone Control	.20	.12
DP-1229	2"		Arrow	Volume	.20	.12
DP-1273	2"	Marke	d 1 to 5 fc	or rotary switches	.20	.12



## MICROPHONE SPRINGS

These springs are made of finely tempered steel, cadmium plated, and come in two sizes.

Cat. No.	For Ring Size	List Price	Your Cost
SP-167	5"	\$.04 ea.	\$.024 ea.
SP-169	6"	.04 ea.	.024 ea.



## **MICROPHONE** STAND ADAPTERS

These adapters will fit any type BUD Microphone Stand and adapt it to fit any type and make of microphone.

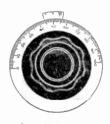
Cat. No.	Thread Female Male	List Price	Your Cost	
MA-755	1/4 Pipe to 5/8-27	\$.25	\$.15	
MA-756	1/4 Pipe to 1/2 Pipe	.35	.21	
MA-757	1/4 Pipe to 3/8 Pipe	.25	.15	
MA-758	1/4 Pipe to 1/8 Pipe	.20	.12	
MA-622	3/8-27 to 1/2" for RCA Mikes	.50	.30	



### CARBON GRANULES

Each vial of these granules contains enough carbon to repack four double button microphones. These highly sensitive granules are polished and have been acid treated to remove all traces of ash.

Cat. No.	List Price	Your Cost
CG-410	\$.75	\$.45



## **TUNING** DIALS



It will be noted that these dials are the last word in beauty and precision for all transmitter and instrument tuning requirements. The knobs are of a high quality bakelite, and the dial plates are made of heavy chromium plated brass having a circular spun finish. These plates run perfectly true with the shafts but are well insulated from them. Numerals and divisions are die-stamped for perfect accuracy and filled with black enamel.

All dials cover 180° arc.

The Nos. IN-723 and IN-725 indicators listed below enable

readings of one part in 1000 to be accurately made with these dials making them ideal for many types of precision instruments. All dials are supplied with attractive single line indicator.

## WITH FLUTED KNOBS (Illustrated left)

Cat. No.	Dial Div.	Diam.	List Price	Your Cost
D-1732	0-100	23,4"	\$1.45	\$ .87
D-1733	100-0	23/4"	1.45	.87
D-1734	0-100	4 "	2.30	1.38
D-1735	100-0	4 "	2.30	1.38

## WITH TAPERED KNOBS (Illustrated right)

Cat. No.	Dial Div.	Diam.	List Price	Your Cost
D-711	0-100	13/4"	\$1.00	\$ .60
D-712	100-0	13/4"	1.00	.60
D-713	0-100	23/4"	1.25	.75
D-714	100-0	23/4"	1.25	.75
D-715	0-100	4 "	1.85	1.11
D-716	100-0	4 "	1.85	1.11

#### INDICATORS ONLY

Cat. No.	Туре	List Price	Your Cost
IN- 723	Vernier Indicator for 23/4" Dials	\$ .30	\$ .18
IN- 725	Dials	.30	.18
IN-1736	Single Line Indicator	.10	.06



## RECTANGULAR DIAL PLATES

These plates are made from the same material and construction as the Etched Dial Plates but are intended to be used where a more "streamline" effect is desired. All plates are calibrated for 300° rotation and measure 113" by  $2\frac{1}{4}$ ".

Cat. No.	Marking	List Price	Your Cost
DP-978	Record	\$.20	\$.12
DP-979	Microphone	.20	.12
DP-980	Gain	.20	.12
DP-981	Tone	.20	.12
DP-982		.20	.12



## ROTARY SWITCH **PLATE**

This plate is designed for use with a smaller bar knob on rotary type power switches such as BUD No. SW-1070.

Cat. No.	Marking	List Price	Your Cost
DP-1230	OFF · ON	\$.10	\$.06





## NAMEPLATES, DIALS

## OSCILLATOR

### NAME PLATES

This line of attractive nameplates has recently been expanded to include a number of new uses especially suited to the radio amateur. Made of aluminum with polished letters on black enameled background. Plates are 3/8" by 1".

Cat. No.	Name	Cat. No.	Name
N-1130	Oscillator	N-1173	Crystal Osc. Plate
N-1131	Plate Volts	N-1174	Buffer Plate
N-1132	Microphone	N-1183	Buffer Grid
N-1133	Input	N-1184	Power Amp. Plate
N-1134	Monitor	N-1185	Power Amp. Grid
N-1135	D. C. Volts	N-1186	Screen Current
N-1136	Send	N-1231	Modulator Plate
N-1137	Selector	N-1232	Modulator Grid
N-1138	Buffer	N-1233	Microphone Current
N-1139	Crystal Osc.	N-1234	200 Ohm Input
N-1140	C. W. Phone	N-1235	200 Ohm Output
N-1141	200 Ohm	N-1236	500 Ohm Input
N-1142	500 Ohm	N-1237	500 Ohm Output
N-1143	Tone Control	N-1238	Radio
N-1144	Fil. Volts	N-1239	Record
N-1145	Rectifier	N-1240	Speaker
N-1146	Output	N-1700	5 Meters
N-1147	Freq. Meter	N-1701	10 Meters
N-1148	Beat Osc.	N-1702	20 Meters
N-1149	Receive	N-1703	40 Meters
N-1150	Send-Receive	N-1704	80 Meters
N-1151	Plate	N-1705	160 Meters
N-1152	Power Amp.	N-1706	Line
N-1153	Neutralizer	N-1707	Silencer
N-1154	Fader	N-1708	Xtal Filter
N-1155	Antenna	N-1709	Phasing
N-1156	Key	N-1710	Bandset
N-1157	A. C. Input	N-1711	Band Switch
N-1158	Transceiver	N-1712	Preselector
N-1159	A. C. Volts	N-1713	Regeneration
N-1160	Speech Amp.	N-1714	Volume
N-1161	Gain Control	N-1715	R. F. Gain
N-1162	Tritet Osc.	N-1716	A. F. Gain
N-1163	Grid	N-1717	E. C. Oscillator
N-1164	Modulator	N-1718	"R" Meter
N-1165	Doubler	N-1719	Phones
N-1166	Transmitter	N-1720	Exciter
N-1167	Amplifier	N-1721	Plate Current
N-1168	Plate Volt.	N-1722	Mod. Current
N-1169	Off-On	N-1723	Ant. Current
N-1170	Class "B"Mod.	N-1724	Xtal Current
N-1171	Grid Current	N-1725	Doubler Current
N-1172	Ground	N-1726	Buffer Current
	List Price		Your Cost
	\$.10 each		\$.06 each

#### RUBBER FEET

By utilizing these feet on metal cabinets, microphone stands, etc., the possibility of the apparatus scratching a polished surface is eliminated. Feet are 1" in diameter and 3/8" thick and made from high grade black rubber. Suitable screws, washers, and nuts for attaching the feet are furnished.

Cat. No.	List Price	Your Cost
F-7264.A	\$.05 ea.	\$.03 ea.

## BAKELITE VERNIER DIALS

In the construction of short wave receivers and similar apparatus in the home workshop, this line of dials is still unexcelled for tuning purposes.

Mounting is readily accomplished by the three small screws provided with the dial, and the mechanism contains no gears to strip or cause backlash. The numeral plate is available either plain or transparent and scales on all dials are universal reading 0 to 100 and 100 to 0.

Cat. No.	Size	Color	Туре	List Price	Your Cost
D-144B	3"	Black	Plain	\$ .75	\$.45
D-144W	3"	Walnut	Plain	.80	.48
D-102B	3"	Black	Transparent	.85	.51
D-102W	3"	Walnut	Transparent	.90	.54
D-103B	4"	Black	Plain	.90	.54
D-103W	4"	Walnut	Plain	1.00	.60
D-104B	4"	Black	Transparent	1.05	.63
D-104W	4"	Walnut	Transparent	1.10	.66



#### DIAL PLATES

Numerous uses will be found for these plates in making up special types of tuning and indicating equipment. These plates are the same as used on the series of Tuning Dials. Each plate has a handsome spun chromium finish, and numerals and divisions are die-stamped and filled with

black enamel. Pointer knobs listed on Page 33 are recommended to be used with this series.

Cat. No.	Size	Arc	Calibrated	List Price	Your Cost
DP-717	13/4"	180°	0 to 100	\$ .50	\$.30
DP-718	13/4"	180°	100 to 0	.50	.30
DP-719	23/4"	180°	0 to 100	.70	.42
DP-720	23/4"	180°	100 to 0	.70	.42
DP-721	4 "	180°	0 to 100	1.00	.60
DP-722	4 "	180°	100 to 0	1.00	.60
DP-561	3 "	325°	0 to 10	.50	.30
DP-562	3 "	255°	0 to 10	.50	.30



## JACK NAME PLATES

Intended for indication of input and output circuits which terminate at phone plug jacks. Made of aluminum with polished letters on black enameled background. Size:—11/8" outside diameter with 13/32" hole.

Cat. No.	Marking	List Price	Your Cost
DP-1180	Microphone	\$.15	\$.09
DP-1181	Phono Pick Up	.15	.09
DP-1182	Phones	.15	.09

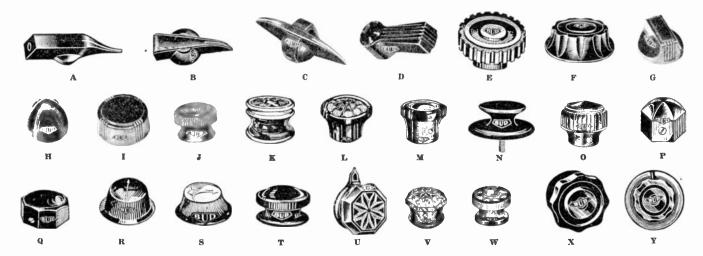


This condenser is primarily intended for antenna coupling, interstage coupling, and tracking applications. Size:—34" by 5/8". Maximum capacity is 36 mmfd. and minimum 2 mmfd.

Cat. No.	List Price	Your Cost
MT-833	\$.15	\$.09



## RADIO KNOBS



A large variety of Knobs is presented herewith for all types of equipment such as Receivers, Transmitters, Instruments, Etc. All knobs fit standard \(^{1}\alpha''\) shaft and come packed 5 to a box.

Cat. No.	Туре	Diam.	Height	Color	List Price	Your Cost
K-579	A	11/4"	5/8"	Black	\$.12	\$.072
K-580	A	11/4"	5/8"	Walnut	.15	. 09
K-174	A	11/4"	5/8"	Red	. 15	. 09
K-204	A	11/4"	5/8''	Green	.15	.09
K-581	A	21/4"	5/8"	Black	.15	.09
K-582	A	21/4"	5/8"	Walnut	. 18	.108
K-175	A	21/4"	5/8"	Red	.18	.108
K-205	A	21/4"	5/8"	Green	.18	.108
K-575	В	11/4"	5/8"	Black	.12	.072
K-576	В	11/4"	5/8"	Walnut	.15	.09
K-559	В	11/4"	5/8"	Red	.15	. 09
K-577	В	21/4"	5/8"	Black	. 15	. 09
K-578	В	21/4"	5/8"	Walnut	.18	.108
K-560	В	21/4"	5/8"	Red	. 18	.108
K-519	С	21/8"	5/8"	Black	.15	. 09
K-521	D	2''	5/8''	Walnut	.15	.09
K-805	E*	1"	17//	Black	.15	. 09
K-806	E*	13/8"	11/6′′	Black	.20	.12
K-807	Ē*	13/4"	7/8"	Black	. 25	.15
K-480	F*	11/8"	7/8"	Black	.35	.21
K-481	F*	13/4"	7/8''	Black	. 45	.27
K-482	F*	23/4"	7/8''	Black	. 55	. 33
K-182	G	1''	5/8"	Black	.12	.072
K-183	G	1''	5/8"	Walnut	.12	.072
K-180	H	3/4"	3/4"	Walnut	.10	. 06
K-181	H	7/8"	7/8"	Walnut	.12	.072
K-177	I	13/6	17''	Walnut	.10	. 06
K-178	I	1''	5/8"	Walnut	.12	.072
K-179	I	11/8"	5/8"	Walnut	.14	. 084
K-191	J	33''	37"	Walnut	.10	.06
K-192	J	15/6′′	39//	Walnut	. 12	. 072

Cat. No.	Туре	Diam.	Height	Color	List Price	Your Cost
K-141	K(W)	13/6"	13/6"	Brown	.25	.15
K-146	L	11/4"	3/4"	Walnut	.12	.072
K-1013	M	13/8"	5/011	Walnut	. 12	.072
K-1014	M	1''	5/8"	Walnut	. 10	. 06
K-730	N	15/8"	32"	Black	.25	. 15
K-750	0	3211	3/4"	Black	. 10	. 06
K-744	P	3/4"	31 "	Walnut	.12	. 072
K-745	P	3/4"	31//	Black	. 12	. 072
K-748	Q	13/6"	15//	Black	.10	.06
K-749	Q	15/6′′	17//	Black	.12	.072
K-751	Q	13/6′′	15//	Walnut	.10	. 06
K-752	$\tilde{\mathbb{Q}}$	15/6	17/	Walnut	.12	.072
K-746	Ř	11/8"	32"	Black	.12	.072
K-747	R	112''	35''	Black	.15	09
K-145	S	11/4"	5/8"	Walnut	. 10	.06
K-732	T(P)	15/6′′	32"	Black	.12	.072
K-733	T	15611	5/8"	Black	.12	.072
K-726	T	11/8"	31/	Black	.15	.09
K-563	U	7/8"	3/11	Black	.15	.09
K-1011	V	1''	3/4"	Walnut	. 15	. 09
K-1122	W	15/6	44"	Walnut	.12	.072
K-154	Χ*	118"	5/3/1	Black	.30	.18
K-155	X*	15/8"	3/4"	Black	.40	.24
K-156	X*	23/8"	7/8"	Black	. 50	.30
K-157	Y*	21/6"	7/8"	Black	.50	. 30
K-158	Y*	3''	1′′′ =	Black	. 65	. 39

NOTE: \* Have brass bushing inserts.

(W) Pressed Wood Knob. Matches knobs on RCA, GE, Westinghouse.

(P) With Pointer.



## KNOB ASSORTMENT

This assortment of 50 of the most popular knobs includes five each of the following: Nos. K-145, K-146, K-1013, K-1014, K-180, K-1011, K-177, K-1122, K-191, and K-183.

Cat. No.	List Price	Your Cost
K-258	\$5.65	\$3.39



## SPRING WIRE CLIPS

A convenient and positive solderless connection to a wire is readily made by utilizing these terminations. Any size wire up to No. 10 will be securely held. Made from spring brass with plain finish. Clips are  $\frac{3}{8}$ " wide and 1" long.

Cat. No.	List Price	Your Cost
WC-297	\$1.25 C	\$ .75 C



## CRYSTAL HOLDERS, SWITCHES



## **BAKELITE** CRYSTAL HOLDERS

Unmounted crystals between 500 and 4000 kc. can be readily utilized by mounting in one of these well designed holders. Both electrodes have been carefully lapped, and the large bottom

plate readily conducts heat away from crystal thereby aiding in holding frequency constant. Each holder will accommodate crystals up to 1-1/32" square and 0.25" thick, and a convenient thumb screw on top of holder permits the pressure to be properly adjusted on the crystal. Contacts are spaced 3/4" apart.

Cat. No.	Contacts	List Price	Your Cost
XH-763	Tube Prong	\$1.50	\$ .90
XH-762	Banana Plug	1.75	1.05



## **CERAMIC** CRYSTAL HOLDERS

A recent improvement in the construction of these holders now makes them an outstanding mounting for all types and frequencies of crystals between 500 and 7500 kc. A 1" round top plate is provided for crystals between 500 and 5000

kc., and a smaller top plate is also supplied for crystals between 5000 and 7500 kc. The holder has a glazed white ceramic body with attractive aluminum top cover making the entire unit 100% dustproof. Will hold crystals up to 1·1/32" square and 0.25" thick, and all electrodes are carefully lapped. Spacing between prongs is 3/4".

Cat. No.	Contacts	List Price	Your Cost
XH-754	Tube Prong	\$1.75	\$1.05
XH-764	Banana Plug	1.75	1.05

#### CRYSTAL HOLDER MOUNTINGS

No. XM-639 has two tube socket contacts mounted on a bakelite strip 3/8" x 21/2" to accommodate Nos. XH-763 and XH-754 holders. No. XM-765 has two banana plug jacks mounted on the same size bakelite strip to accommodate Nos. XH-762 and XH-764 holders

Cat. No.	Description	List Price	Your Cost
XM-639	For Tube Pins	\$.25	\$.15
XM-765	For Banana Plugs	.40	.24



## POWER SWITCHES

These two switches are designed for interrupting the heavy currents which are too great for ordinary switches. Both are the double pole single

throw type. East set of contacts is rated at 12 amps at 125 volts or 6 amps at 250 volts. By paralleling the contacts, making the switch single pole single throw, these ratings may be doubled. Made for BUD by H&H.

No. SW-1269 is a regular toggle type switch for all standard applications.

No. SW-1270 is a push-button type with both contacts normally in the open position. This switch is primarily intended as a safety switch to be used in an interlock connection on rack cabinets, etc., to interrupt the primary current whenever the door is opened.

No. SB-1348 is a bracket for holding No. SW-1270 switch in position in any rack cabinet.

Both switches are  $1\frac{3}{4}$ " long,  $\frac{3}{4}$ " wide, and  $\frac{3}{4}$ " high and have a threaded shank 15/32" in diameter and  $\frac{3}{16}$ " long.

Cat. No.	List Price	Your Cost
SW-1269	\$1.15	\$ .69
SW-1270	2.00	1.20
SB- 1348	.45	.27



### TOGGLE SWITCHES

These standard type toggle switches are the style so popular in all radio construction. Underwriter approved. Rated at 3 amps at 125 volts or 1 amp at 250

volts. Heavy soldering connections will not break off. Made for BUD by H&H. Available in nickel plated or bronze finishes. Nickel will be supplied unless bronze is specified. Packed 5 to a carton.

Cat. No.	Description	Shank Length	List Price	Your Cost
SW-1003	S. P. S. T.	7.7	\$ .40	\$ .24
SW-1004	S. P. S. T.	3/4"	.45	.27
SW-1005	S. P. D. T.	7 " 16	.55	.33
SW-1006	S. P. D. T.	3/4"	.60	.36
SW-1007	D. P. S. T.	7 "	.75	.45
SW-1008	D. P. S. T.	3/4"	.85	.51
SW-1009	D. P. D. T.	78 "	.95	.57
SW-1010	D. P. D. T.	3/4"	1.00	.60
SW-1077	Closes 3 circuits for R.C.A., etc.	1/4"	.70	.42
SW-1036	Toggle Swi "OFF-ON"		.04	.024



#### ROTARY SWITCHES

Used primarily where a rotary action with a knob is desired rather than the usual toggle action. Each switch is housed in plated steel case with bakelite insulation and is Underwriter approved. Ratings are

the same as for toggle switches. Made for BUD by H&H. Shaft length is 11/2'

Cat. No.	Description	Threaded Shank Length	Shaft Length Excluding Shank	List Price	Your Cost
SW- 499	S. P. S. T.	3/8"	11/8"	\$ .45	\$ .27
SW-1070	S. P. S. T.	1 "	11/2"	.55	.33
SW-1071	S. P. D. T.	3/8"	11/8"	.55	.33
SW-1072	S. P. D. T.	1 "	11/2"	.70	.42
SW-1073	D. P. S. T.	3/8"	11/8"	.85	.51
SW-1074	D. P. S. T.	1 "	11/2"	1.00	.60
SW-1075	D. P. D. T.	3/8"	11/8"	1.00	.60
SW-1076	D. P. D. T.	1 "	11/2"	1.15	.69

#### PUSH BUTTON SWITCH

Two circuit slow make and quick break momentary contact switch. One circuit is "ON" and the other is normally "OFF". Pushing the button reverses the position of the circuits. Same switch as used on a number of commercial test sets. Shank is long.

Cat. No.	List Price	Your Cost
SW-743	\$.70	\$.42



## **BAT-HANDLED** TOGGLE SWITCHES

This line of toggle switches is identical to the regular line of toggle switches listed at the top of the page with the exception that the handle is somewhat longer than the usual toggle switch handle and is shaped similar to a baseball bat. Available only in nickel plated finish with 18" shank. Packed 5 to a carton.

Cat. No.	Description	List Price	Your Cost
SW-1115	S. P. S. T.	\$.40	\$.24
SW-1118	S. P. D. T.	.55	.33
SW-1119	D. P. S. T.	.75	.45
SW-1120	D. P. D. T.	.95	.57

## SOCKETS, TUBE CLIPS





## CERAMIC TRANSMITTING TUBE SOCKETS

Where an efficient and sturdy mounting base is desired for the

larger types of transmitting tubes, these two Transmitting Tube Sockets are ideally suited. The base is a high grade glazed white ceramic on which are mounted the special close fitting nickel plated contacts and connection terminals. The design of the base is such that it can be easily mounted above or below a chassis.

No. S-226 accommodates all regular 4 prong tubes with standard "50 watt" bases. No. S-227 is for transmitting pentodes such as the 803, RK-28, etc.

Cat. No.	No. of Contacts	List Price	Your Cost
S-226	4	\$1.00	\$.60
S-227	5	1.50	.90



### MALE CHASSIS PLUGS

Power connections between two separate units may be readily made by mounting one of these plugs on one chassis, and a wafer socket to coincide on the other. In this manner unsightly wiring between units is eliminated. The hollow tube prongs are firmly riveted on sheet bakelite. Mounting hole centers 1-27/32'

Cat. No.	Prongs	List Price	Your Cost
CP-1030	4	\$.20	\$.12
CP-1031	5	.20	.12
CP-1032	6	.25	.15
CP-1033	7 Med.	.25	.15
CP-1034	7 Sm.	.25	.15



## MOLDED BAKELITE **SOCKETS**

These sockets are intended for all general purpose applications where a good rugged socket is required. Body of these sockets is an attractive molded

bakelite and springs are of genuine phosphor bronze. Mounting hole centers are 111" apart, and the round portion of the socket extends 178" above base. The first group listed below have contacts brought out on the side of the socket (as illustrated) and may be either breadboard or sub-panel mounted. The second group is intended for sub-panel mounting only.

## BREADBOARD OR SUB-PANEL MOUNTING

Cat. No.	Prongs	List Price	Your Cost
S-264	4	\$.30	\$.18
S-265	5	.30	.18
	6	.35	.21
S-267	7 Med.	.40	.24
	7 Sm.	.40	.24

#### SUB-PANEL MOUNTING ONLY

Cat. No.	Prongs	List Price	Your Cost
S-268	4	\$.25	\$.15
S-269	5	.25	.15
S-270	6	.30	.18
S-271	7 Med.	.30	.18
S-983	7 Sm.	.30	.18
S-1060	5.6.Sm.7 Comb.	.35	.21
S-1061	7 Comb.	.30	.18
S-1062	4-5-6 Comb.	.35	.21
S-1063	8 Octal	.35	.21



## **CERAMIC** TUBE SOCKETS

In applications requiring the very minimum of losses in tube and coil receptacles, this fine line of sockets lends itself perfectly. Each socket is constructed on a low loss glazed mold

of white ceramic and with connections having a large contact area and a positive spring action. The molded step at each mounting hole eliminates any possibility of contacts shorting to chassis. Each socket is 2½" long and 15%" wide with mounting centers 1.27/32" apart. Furnished with two mounting bushings and washers. Top grooved for easy tube insertion.

Cat. No.	Prongs	List Price	Your Cost
S-954	4	\$.40	\$.24
S-955	5	.40	.24
S-956	6	.45	.27
S-957	7 Sm.	.50	.30
S-958	7 Med.	.50	.30
S-959	8	.55	.33



## WAFER SOCKETS

Made from high grade sheet bakelite, these sockets have spring bronze contacts

cadmium plated making very positive contact to tube prongs. Supplied with either 1½" or 1-27/32" mounting hole centers. Specify type wanted. No. S-380 supplied only in 1-27/32" mounting and Nos. S-390 and S-389 only

Cat. No.	Prongs	List Price	Your Cost
S-113	4	\$.10	\$.06
S-114	5	.10	.06
S-363	6	.12	.072
S-1016	7 Sm.	.12	.072
S-380	7 Med.	.12	.072
S-390	8 Octal	.15	.09
S-389	8 Loctal	.15	.09



### PHOTO CELL SOCKET

These sockets fit types 921 and 922 photo-electric cells. The cathode contact is made in socket and anode connection is made through spring clip. The wafer type socket, made of laminated bakelite. has 1-1/16" mounting centers.

Cat. No.	Description	List Price	Your Cost
S-950	Socket	\$.15	\$.09
S-951	Anode Clip	.10	.06



### TUBE CLIPS

Uses to which these clips may be put are clearly listed below. Made of heavy gauge spring brass, cadmium plated.

Cat. No.	Type Tube	Std. Pkg.	List Price	Your Cost
TC-49()	Transmitting	10	\$ .08 ea.	\$.048 ea.
TC-1071	Glass	100	1.50 per C	.90 per C
TC-108	Metal	100	1.50 per C	.90 per C



#### DOUBLE GRID CLIP

This special clip permits cap connections to be made on both Octal and large cap tubes. Unit is well insulated by bakelite, and is convenient for replacing broken or worn out grid leads on tube testers, etc.

Cat. No.	Std. Pkg.	List Price	Your Cost
TC-487	10	\$.25 ea.	\$.15 ea.



## PLUGS, JACKS



## BANANA PLUGS AND JACKS

This hardware is intended for all purposes where it is desirable to make a coil, condenser, etc., easily removable. Plugs have heavy spring contacts which fit snugly into the jacks. No. PL-470 plug has 18" shank threaded 6-32 while No. PL-469 is tapped to accommodate a 6-32 screw. No. PJ-949 Jack fits into 1/4" hole. All types packed 25 to box.

Cat. No.	List Price	Your Cost
PL-470	\$.07	\$.042
PL-469	.08	.048
PJ-949	.06	.036



## GIANT PLUGS AND JACKS

Applications requiring a genuine heavy duty plug and jack having a large contact area will find this line indispensable. These are the same jacks and plugs used with BUD Kilowatt coils.



No. PL-962 plug is made from one piece spring brass with bright Nickel Plated finish. The deep cross-slotting provides a positive spring action and assures firm contact with the jack at all times. The top is hexagonal for wrench tightening. Overall length is  $1\frac{3}{10}$ ".

No. PJ-963 jack is also made from brass bright Nickel Plated. Each jack comes complete with nut and lug. Overall length is  $\frac{1}{8}$ " and jack fits in  $\frac{3}{8}$ " hole.

Cat. No.	List Price	Your Cost
PL-962	\$.20	\$.12
PJ- 963	.15	.09



## INSULATED GIANT PLUG

The need for a suitable heavy, insulated plug for terminating heavy single wire leads such as found on diathermy pads is nicely filled by this item. The unit consists of a No. PL-962 Giant Plug attached to a removable bakelite handle and equipped with a large soldering lug terminal. Overall length 27/8. Plugs into No. PJ-963 jack.

Cat. No.	List Price	Your Cost
PL-977	\$.55	\$.33



## MICROPHONE JACKS

These panel mounting jacks are desirable for control panels and similar applications where space is at a premium. Parts are accurately machined with nickel plated finish, and contacts are formed from spring brass. Each jack comes complete with insulated washers and will accommodate standard plugs.

Cat. No.	Contacts	List Price	Your Cost
J-1038	2	\$.30	\$.18
J-1058	3	.50	.30



## MIDGET JACK

The construction of this jack allows its use in applications having a limited space behind the panel. The spring brass contact assures a good connection. This open circuit jack comes with insulating washers and accommodates standard phone plugs.

Cat. No.	List Price	Your Cost
J-232	\$.30	\$.18



Although small in size, this is one of the finest lines of jacks available. The careful design and high quality materials used in these components assures dependable service for an indefinite time. Spring material used in these jacks is nickel silver which permits a permanent snap action and positive tension at all times. Circuit opening contacts are

made of pure silver and the laminated bakelite insulation prevents breakdown between springs at all ordinary voltages. Supplied with panel insulating washers.

Cat. No.	Туре	List Price	Your Cost
J-1324	Open Circuit	\$.35	\$.21
J-1325	Single Closed	.45	.27
J-1326	3 Circuit Microphone	.50	.30
J-1327	Double Closed	.60	.36



#### PHONE PLUGS

All the usual applications where plugs are needed such as for ear phones, microphones, meters, etc., can be nicely handled with this excellent line. Metal parts are machined from brass and nickel plated. Unshielded plugs have handles of black bakelite, and shielded types have very attractive brass handles bright nickel plated. Built to last indefinitely. Nos. FP-1057 and FP-284 are intended for circuits such as used with double button carbon microphones.

Cat. No.	Contacts	Handle	List Price	Your Cost
FP- 230	2	Bakelite	\$ .40	\$.24
FP- 282	2	Shielded	.65	.39
FP-1057	3	Bakelite	.75	.45
FP- 284	3	Shielded	1.10	.66



## JACK CONNECTORS

These connectors are primarily intended to be used on the end of an extension cable for speakers, earphones, microphones, etc. Handle construction identical to Phone Plugs. Contacts are made from spring brass, and jack fits all regular Phone Plugs.

Cat. No.	Contacts	Handle	List Price	Your Cost
JP-1039	2	Bakelite	\$ .50	\$.30
JP- 279	2	Shielded	.90	.54
JP-1059	3	Bakelite	.75	.45
JP- 283	3	Shielded	1.10	.66



#### POLARIZED CONNECTORS

Where it is desirable to make dual connections readily without reversing polarity, these Connectors may be used. They are especially desirable in certain types of line terminations and microphone connections. Metal cap for shielding is supplied with plug and measures 1" in diameter and 1" long.

Cat. No.	Description	Contacts	List Price	Your Cost
PC-461	Plug	2	\$.20	\$.12
PC-462	Jack	2	.15	.09
PC-463	Plug	3	.25	.15
PC-464	Jack	3	.20	.12

## SHAFT COUPLINGS, FITTINGS





## **FLEXIBLE SHAFT COUPLINGS**

In applications necessitating the mounting of condensers or potentiometers away from the panel and at unusual angles, these Flexible Shafts provide the ideal means of controlling such

components directly from the panel. Both lengths are remarkably free from back-lash and will turn at any angle up to 90°.

Nos. FS-859 and FS-860 have 1/4" bushings sweated to each end to fit either plain or insulated couplings. Nos. FS-862 and FS-863 have ceramic insulated couplings attached to each end to fit 1/4" shafts.

Cat. No.	Overall Length	List Price	Your Cost
FS-859	3 inches	\$ .35	\$.21
FS-860	6 inches	.50	.30
FS-862	4 inches	1.20	.72
FS-863	7 inches	1.35	.81



## **INSULATED** FLEXIBLE COUPLINGS

Tandem operation of two or more units is readily accomplished through the use of these couplers. Direct shaft alignment is not essential, and all couplers are made to fit 1/4" shafts.

Cat. No.	Dia. Size	Insulation	List Price	Your Cost
FC-845	1 "	Fibre	\$.30	\$.18
FC-855	11/2"	Bakelite	.35	.21
FC-795	110"	Ceramic	.45	.27



## HIGH VOLTAGE FLEXIBLE COUPLINGS

A new type spring construction permits a wide gap between shaft connections, complete freedom from back lash, and unusual flexibility in these couplings. These springs are riveted on glazed Alsimag discs  $1\frac{1}{2}$ " in diameter and  $\frac{1}{16}$ " thick, and the overall diameter of the finished coupling is 2". Coupling accommodates standard 1/4" shafts.

Cat. No.	Insulation	List Price	Your Cost
FC-614	Alsimag	\$.75	8.45
FC-619	Bakelite	.50	.30



## TRANSMITTER FLEXIBLE COUPLINGS

These connectors will withstand exceptionally high voltage and are recommended

for ganging of tuning units in R. F. or high potential circuits. The main body of these couplings is a glazed ceramic rod, and hubs are made to fit 1/4" shafts.

Cat. No.		Length	List Price	Your Cost
FC-740	1	134"	\$.65	\$.39
FC-741	1	31/4"	.80	.48



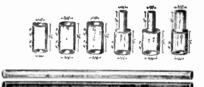
## PANEL BEARING **ASSEMBLIES**

Nos. PB-530 and PB-531 consist of a regular 1/4" shaft bearing with 6" and 3" piece of 1/4" brass rod inserted and held in place by appropriate washers to prevent shaft from shifting. These two numbers will be found very

useful in facilitating the panel control of condensers, potentiometers, etc., which must be mounted a distance from the panel. Bearing fits in 13/32" hole and on panels up to ½" thick. No. PB-532 is bearing only without shaft.

Cat. No.	Overall Length	List Price	Your Cost
PB-530	6"	\$.40	\$.24
PB-531	3"	.30	.18
PB-532	Bearing Only	.15	.09

## SHAFT COUPLINGS, REDUCERS AND EXTENSIONS



As indicated in the heading, these items are intended for connecting two shafts, changing diameter of shafts, or for increasing shaft lengths.

## NICKEL PLATED BRASS-5 to Box

Cat. No.	Description	List Price	Cost
SE-1049	1/4" Coupling	\$.15	\$.09
SE-1050	⅓8" Coupling	1 .15	.09
SE-1051	1/4" to 3/8" Coupling	.15	.09
SE-1052	1/4" Hole to 1/4" Shaft Reducer	.15	.09
SE-1053	3/8" Hole to 1/4" Shaft Reducer	.15	.09
SE-1054	1/4" Hole to 3/8" Shaft Reducer	.15	.09
SE-1056	1/4" by 6" Brass Shafting	.15	.09
SE- 796	1/4" by 12" Brass Shafting	.30	.18

#### INSULATED-5 to Box

Cat. No.	Description	List Price	Cost
SE-1206	1/4" Coupling	\$.15	\$.09
SE-1207	3/8" Coupling	.15	.09
SE-1208	1/4" to 3/8" Coupling	.15	.09
SE-1209	1/4" Hole to 1/4" Shaft Reducer	.15	.09
SE-1210	3/8" Hole to 1/4" Shaft Reducer	.15	.09
SE-1211	1/4" Hole to 3/8" Shaft Reducer	.15	.09
SE-1055	1/4" by 6" Fibre Shafting	.20	.12
SE- 797	1/4" by 12" Fibre Shafting	.40	.24

## SOLDERING LUGS

No. SL-159 is a flat lug 7/8" long and available with hole to fit either No. 4, 6, or 8 machine screws. Specify which size when

No. SL-109 is a spade lug made of heavier material and will fit up to a No. 10 screw. These lugs have the grip-type wire termination.

No. SL-106 is identical to No. SL-109 but is the eyelet type instead of the spade type.

Cat. No.	List Price	Your Cost
SL-159	\$1.00C	\$ .60C
SL-109	1.75C	1.05C
SL-106	1.10C	.66C



## INSULATORS

#### CONE STAND-OFF INSULATORS



All applications requiring insulated mountings and supports are readily accommodated by one of these various types and sizes of ceramic insulators. Each unit is made from high grade glazed porcelain having good mechanical strength. Nos. I-300 to I-303 are tapped at each end and are supplied with necessary hardware. Nos. I-304 to I-306 are supplied with No. PJ-949 Banana Plug Jack and accommodate standard banana and GR plugs.

#### REGULAR CONE INSULATORS

Cat. No.	Height	Top Dia.	Base Dia.	Thread	List Price	Your Cost
I-300	5/8"	7 " 16 "	5/8"	6-32	\$.10	\$.06
I-301	1 " +	1/2"	34"	8-32	.15	.09
I-302	1/2"	5/8"	1 "	10-32	.20	.12
I-303	23/4"	3/4"	11/4"	10-32	.25	.15

#### JACK TYPE CONE INSULATORS

Cat. No.	Height	Top Dia.	Base Dia.	Thread	List Price	Your Cost
I-304	1 "	1/2"	3/4"	8-32	\$.20	\$.12
I-305	11/2"	5/8"	1 "	10-32	.25	.15
I-306	23/4"	3/4"	11/4"	10-32	.35_	.21

#### CONE FEED-THRU INSULATORS



In bringing high voltage and R. F. leads through panels and chassis and for numerous other uses, this line of two-piece insulators will be found indispensable. Made of the same ceramic material as the Stand-Off Insulators.

Nos. I-435 to I-438 are supplied with threaded rod and necessary hardware, while Nos. I-453 to I-455 are supplied with No. PJ-949 jack top attached to appropriate threaded rod.

#### REGULAR CONE FEED-THRU INSULATORS

Cat. No.	Top Height	Bottom Height	Mounting Hole Dia.	List Price	Your Cost
I-435	5/8"	18"	11/32"	\$.12	\$.072
I-436	1 "	5 " 16	15/32"	.20	.12
1-437	11/2"	3/8"	9/16"	.25	.15
I-438	23/4"	3/8"	9/16"	.50	.30

#### IACK TYPE CONE FEED-THRU INSULATORS

Cat. No.	Top Height	Bottom Height	Mounting Hole Dia.	List Price	Your Cost
I-453	1 "	16"	15/32"	\$.25	\$.15
I-454	11/2"	3/8"	9/16"	.30	.18
I-455	23/4"	3/8"	9/16"	.55	.33



## PILLAR INSULATORS

The need for a firm support for high voltage leads such as those going to plates of rectifier tubes or large transmitting tubes is nicely filled by these two numbers.

Each unit consists of a heavy lug on top of a glazed Alsimag 196 rod  $\vec{\imath}_{6}^{T}$  in diameter with a convenient foot for mounting purposes. Fittings are nickel plated.

Cat. No.	Length	List Price	Your Cost
I-738	13/8"	\$.25	\$.15
I-739	21/8"	.35	.21



### **CERAMIC RODS**

These several convenient diameters and lengths are available in glazed Alsimag 196 rods. Both ends of all rods are tapped for standard machine screws, and will be found useful in mounting condensers, coils, and similar components.

Cat. No.	Length	Dia.	Tapped	List Price	Your Cost
1-7569	23/4"	5/8"	8-32	\$.50	\$.30
1-7568	1 "	5/8"	8-32	.35	.21
1-7507	1 "	15"	6-32	.15	.09
I-6715	1 "	17g"	6-32	.15	.09
I-6716	21/2"	175"	6-32	.25	.15
1-7758	13/8"	5/8"	10-32	.40	.24



## CERAMIC STAND-OFF INSULATORS



Apparatus requiring a rugged insulated mounting can be readily accommodated by one or more numbers in this series of white glazed insulators. All metal parts are nickel plated brass and the jack type insulators are designed for standard banana and GR plugs.

Cat. No.	Туре	Description	Base Size	Height		List Price	Your Cont
1-234	Beehive	Stand-off	2 " Dia.	2 "	10	\$.18	\$.108
I-933	Beehive	Jack Type	2 " Dia.	2 "	10	.22	.132
1-974	Senior	Stand-off	1 "x1½"	13/4"	20	.10	.06
I-932	Senior	Jack Type	$1 "x1 \frac{1}{2}"$	13/4"	20	.15	.09
I-930	Junior	Stand-off	$\frac{3}{4}$ "x1 $\frac{1}{8}$ "	11/2"	25	.08	.048
I-939	Junior	Jack Type	$\frac{3}{4}$ "x1 $\frac{1}{8}$ "	11/2"	25	.12	.072
I-931	Midget	Stand-off	1/2"x 7/8"	18"	50	.07	.042

## **BAR INSULATORS**

These insulators are the same as used on Bud Midget, Junior, Master, and Giant condensers. Many uses for these pieces will be found in special types of mountings, brackets, etc.

Cat. No.	Length	Width	Thick- ness	Material	List Price	Your Cost
1-6416	13/4"	3/8"	5/32"	Alsimag 196	\$.10	\$.06
1-7446	23/4"	1/2"	3/16"	Alsimag 196	.15	.09
1-7358	33/4"	5/8"	1/4"	Mycalex	1.00	.60
I-7739	63/4"	7/8"	3/8"	Alsimag 196	.75	.45

## ADAPTERS, ANALYZER CABLES





## OCTAL TUBE ADAPTERS

Any obsolete tube checker or analyzer may be brought up to date by utilizing one or more of the adapters listed here. This group permits testing of the majority of octal base tubes in the socket of a tube of similar characteristics but of an older series.

While primarily intended to be used as tube testing adapters, certain numbers of this series may be used with octal base tubes to modernize receivers, amplifiers, etc. The usual tube characteristic charts will indicate where this is possible.

Note:—Octal tube adapters for tubes other than those listed are available on special order.

Cat. No.	To Test	In Socket of	Dot	List Price	Your Cost
	1D5-G	32			
ì	1H4-G	30			
A-411	1 N5-G	32*	One Red	\$ .90	\$ .51
	5V4-G, 5W4, 5Y3-G, 5Z4	80	neu		
i	5T4	5 <b>Z</b> 3			
	1H6-G	1B5/25S		i	ĺ
i	1J6-G	19			
i	6F6, 6F6-G, 6K6-G, 6G6-G				
i	6L6, 6L6-G, 6V6, 6V6-G	- 42	One	.90	.51
ا  A-412		- 6C6	Blue	.00	
M-E1~	6K7, 6K7-G, 6L7, 6L7-G	_			
1	687. 687-G. 6U7-G	- 6D6			
	6Q7, 6Q7-G, 6R7, 6R7-G, 6T7-	G 75			
i	25A6, 25A6-G, 25L6, 25L6-G	43		1	
A-413	6N7,6N7-G, 6Z7-G	6A6	One Violet	1.00	.60
A-417		75	One Green	1	.54
	1A5-G. 1C5-G	33*	1	100	
A-418	1G5-G, 1F5-G	33			
1	6AC5-G, 6C5, 6C5-G.				
ŧ	6J5, 6J5-G, 6L5-G	76	One Brown	.90	.51
- 1	6X5, 6X5-G, 6ZY5-G	84			
A-420	6A8, 6A8-G, 6D8-G	6A7	One White	1.00	.60
A-422		75	One Yellov		
	1F7-G	1F6	Two	.90	
A-434	25Z6, 25Z6-G	25Z5	Red		
	5X4-G, 5Y4-G	80	Two Yellov	.90	.51

## ANALYZER PLUGS and ADAPTERS (SEVEN PRONG)



For replacement purposes or for modernizing obsolete types of test equipment. No. AN 869 is a molded bakelite small pin radius analyzer plug having a detachable handle and is equipped with dual grid studs which fit either glass or octal tubes. Plug base is only 11/8" dia. Lock-on feature holds associate adapter securely. No. AN-816 is same as above with 5 feet of 8 wire cable attached.

Cat. No.	List Price	Your Cost
AN-869	\$1.50	\$ .90
AN-816	2.75	1.65

#### SEVEN PRONG ANALYZER KIT

No. AN-815 consists of a No. AN-816 plug and 5 adapters as listed above.

Cat. No.	List Price	Your Cost
AN-815	\$5.75	\$3.45

### ANALYZER ADAPTERS

With lock-on stud to fit 7 prong analyzer plug.

Cat. No.	Cat. No. No. prongs on base		Your Cost	
A-1078L	4	\$ .75	\$ .45	
A-1079L	5	.75	.45	
A-1080L	6	.75	.45	
A-1081L	7 med.	.75	.45	
A-1085L	8 octal	1.00	.60	



## OCTAL ANALYZER KIT

Analyzers and testers which have gone out of date can be readily modernized by utilizing this kit. It also makes an ideal basis around which to design special analyzer apparatus. The kit consists of five adapters, a five foot 9 wire cable with analyzer plug and cable plug attached, and a suitable octal socket, as illustrated.

Cat. No.	List Price	Your Cost
AN-498	\$10.00	\$6.00



## OCTAL PLUGS AND CABLES

No. AN-491—Molded bakelite analyzer plug 11/8" in diameter and 31/2" long. The dual grid studs accommodate both types of tube caps, and the handle of the plug is readily detachable. A positive locking device is provided for holding associated adapters.

No. AN-497—Same construction as No. AN-491 but is 2" long and is supplied less grid studs.

No. AN-423—Consists of five feet of 9 wire cable with a No. AN-491 plug on one end and a No. AN-497 plug and grid stud lead on the other. This is the same cable used in the No. AN-498 kit.

No. AN-424—Similar to No. AN-423 except does not have No. AN-497 plug and grid stud lead on one end.

Cat. No.	List Price	Your Cost
AN-491	\$1.75	\$1.05
AN-497	.60	.36
AN-423	5 ()()	3.00
AN-424	4,00	2,40



## OCTAL ANALYZER ADAPTERS

This series of adapters is intended to be used with No. AN-491 plug and Nos. AN-423 and AN-424 cables for checking circuits other than

those terminated at an octal socket. Each adapter can be securely locked on the analyzer plug preventing it from remaining in socket when analyzer plug is removed. These adapters are identical to those in the No. AN-498 kit.

Cat. No.	No. prongs on base	List Price	Your Cost
A-492	4	\$1.00	\$.60
A-493	5	1.00	.60
A-494	6	1.00	.60
A-495	7 sm.	1.00	.60
A-496	7 med.	1.00	.60

## LOCTAL TUBE ADAPTER

This adapter permits checking of all Loctal based tubes in regular Octal socket in tube checkers. Designed for Model Nos. 500, 500A, 510, 600, 700, 800, 815, and 900 Precision Apparatus tube testers, but will work in many others.

Cat. No.	List Price	Your Cost
A-416	\$1.00	\$ .60





## COPPER WIRE, SHIELDS, Tube and Coil

### MAGNET WIRE

All this wire is made from the finest quality metal and insulations available. The table on back of the front cover gives number of feet per pound for various types and sizes of wire.



S.	C. CSingle	Co	otton	Covered
D.	C. CDouble	Co	tton	Covered
D.	S. C Dou	ble	Silk	Covered
E.			F	Enameled

#### PRICES FOR 1/2 LB. SPOOL

	s. c. c.		D. C. C. E. D. S.		D. C. C.		E.		S. C.
Size	List Price	Your Cost	List Price	Your Cost	List Price	Your Cost	List Price	Your Cost	
14	_	-	_		\$ .52	\$.31			
16	_		\$ .60	\$.36	.54	.32		_	
18	\$ .60	\$.36	.65	.39	.55	.33	\$1.05	\$ .63	
20	.64	.38	.72	.43	.56	.34	1.30	.78	
22	.72	.43	.85	.51	.58	.35	1.50	.90	
24	.85	.51	.97	.58	.62	.37	1.65	.99	
26	1.05	.63	1.15	.69	.73	.44	2.00	1.20	
28	1.15	.69	1.40	.84	.78	.47	2.25	1.35	
30	1.30	.78	1.65	.99	.88	.53	2.50	1.50	
32	_		2.10	1.26	.95	.57	3.40	2.04	
34	_	_	2.90	1.74	1.10	.66	4.50	2.70	
36	i		4.00	2.40	1.30	.78	6.80	4.08	
38				_	1,50	.90	9.50	5.70	

#### PRICES FOR 1/4 LB. SPOOL

	s. c. c.		D. C.	D. C. C. E.		E.		3. C.
Size	List Price	Your Cost	List Price	Your Cost	List Price	Your Cost	List Price	Your Cost
14			\$ .33	\$.20	\$ .28	\$.17	l —	_
16			.34	. 20	.29	.17		
18	\$ .35	\$.21	.36	.22	.30	.18	\$ .58	\$ .35
20	.38	.23	.40	.24	.32	.19	.67	.40
22	.43	.26	.44	.26	.34	.20	.77	.46
24	.48	.29	.50	.30	.36	.22	.85	.51
26	.60	.36	.62	.37	.42	.25	1.05	.63
28	.70	.42	73	.44	.44	.26	1.15	.69
30	.75	.45	.87	.52	.49	.29	1.30	.78
32		_	1.10	.66	.55	.33	1.75	1.05
34			1.55	.93	.60	.36	2.25	1.35
36	_		2.10	1.26	.70	.42	3.50	2.10
38					.80	.48	5,00	3.00

#### PRICES FOR 1/8 LB. SPOOL

	8. C. C.		D. C	D. C. C.		E.		D. S. C.	
Size	List Price	Your Cost	List Price	Your Cost	List Price	Your Cost	List Price	Your	
18	\$ .21	\$.13	\$ .22	\$.13	\$ .19	\$.11	\$ .35	\$ .21	
20	.23	.14	.25	.15	.21	.13	.40	.24	
22	.26	.16	.28	.17	.23	.14	.45	.27	
24	.29	.17	.32	.19	.25	.15	.50	.30	
26	.33	.20	.37	.22	.27	.16	.60	.36	
28	.37	.22	.43	.26	.30	.18	.65	.39	
30	.43	.26	.50	.30	.35	.21	.75	.45	
32		-	.65	.39	.40	.24	.95	.57	
34			.85	.51	.45	.27	1.30	.78	
36		-	1.15	.69	.50	.30	2.00	1.20	
38				i -[	.55	.33	2.75	1.65	



## GLOVE TYPE TUBE SHIELDS

When space is at a premium, this line is the ideal solution to tube shielding. Shield attaches directly action to tube shielding. rectly around tube and is ordinarily grounded by means of the clamp furnished with each unit. The grounding clip also included with each shield enables the shield to be grounded through the cathode pin should it be inconvenient to install the regular clamp.

Cat. No.	Description	List Price	Your Cost
SH-943	Fits ST 12 bulb tubes	\$.18	\$.11
SH-944	Fits ST 14 bulb tubes	.18	.11



#### THREE PIECE TUBE SHIELDS

The three piece construction of these shields greatly facilitates the insertion and removal of the associated tubes. The base mounts directly over the wafer socket on the chassis assuring a good ground for the shield. Overall height is  $4\frac{1}{2}$  and inside diameter is  $1\frac{19}{16}$ ".

Cat. No.	Material	Mounting Hole Centers	List Price	Your Cost
SH- 392	Aluminum	1-27/32"	\$.25	\$.15
SH-391	Aluminum	1-1/2 "	.25	.15
SH-1041	Tin Plate	1-1/2"	.20	.12
SH-1041-A	Tin Plate	1-27/32"	.20	.12



## UNIVERSAL TUBE SHIELDS

These items are intended for covering large diameter tubes and for all general tube shielding where space is not at a premium. Each unit is supplied with base and measures 4½" high and 2½" inside diameter. No. SH-292 may be readily cut to make a suitable shield for such tubes as RK-39, 807, etc.

Cat. No.	Material	Mounting Hole	List Price	Your Cost
SH- 292	Aluminum	1.27/32"	\$.25	\$.15
SH-1042	Tin Plate	1½" or 1-27/32"	.20	.12



#### ROUND SHIELD CAN

Perfect shielding is assured when using these aluminum cans around plug-in coils and other types of inductances. Each shield is supplied with mounting base and measures 3" in diameter and  $3\frac{1}{2}$ " high.

Cat. No.	List Price	Your Cost
SH-293	\$.40	\$.24



## SQUARE SHIELD CAN

This drawn Aluminum shield can is well suited to house special I. F. transformers, fixed tuned tanks in exciters, and other similar components requiring complete shielding. The can measures 2" by  $2\frac{1}{2}$ " by 5" high and comes complete with attached mounting bolts.

Cat. No.	List Price	Your Cost
SH-295	\$.40	\$.24

## SERVICE TOOLS, TEST LEADS





AT-254 to AT-256

## **INSULATED** ALIGNMENT **TOOLS**



AT-236, AT-237

Nos. AT-254 to AT-256 are hard fibre trimmer wrenches with hex broaching through the entire length. Ends can be easily cut off as they become frayed or broken from wear.

No. AT-235 is a  $1/4^{\prime\prime}$  diameter rod of a special tough fibre, beveled at each end to form screw driver blades.

Nos. AT-236 to AT-237 are combination tools consisting of No. AT-235 driver inserted in an extra-heavy fibre rod which is hex. broached the entire length. Tools may be held at any length between specified limits by set screw provided.

Cat. No.	Length	List Price	Your Cost
AT-254	51/2"	\$.25	\$.15
AT-255	8 "	.30	.18
AT-256	12 "	.40	.24
AT-235	7 "	.35	.21
AT-236	7 " to 10"	.65	.39
AT-237	11 " to 17"	.85	.51



## ALIGNMENT **TOOLS**





No. AT-286



No. AT-285 has a metal screw driver tip at one end and a metal alligator jaw at the other for hex, head and knurled nuts.

No. AT-286 has a hard fibre handle with metal screw driver at one end and convenient knob at the other.

No. AT-287 is identical to No. 286 but is less knob.

Cat. No.	List Price	Your Cost
AT-285	\$.45	\$.27
AT-286	.45	.27
AT-287	.35	.21



No. AT-118

4 IN 1 TOOL

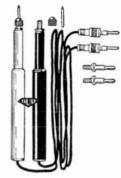




This handy alignment tool should be in the vest pocket of every service man. Consists of

(1) insulated screw driver, (2) Fin-type adjustment slot, (3) 15" hex. wrench, and (4) 1/4" hex. wrench. The other attachments listed adapt this tool for practically all receiver adjustments.

Cat. No.	Attachment for	List Price	Your Cost
AT-118	***************************************	\$.65	\$.39
AT-119C	Crosley	.25	.15
AT-119M	Majestic	.20	.12



## **DELUXE** TEST LEADS

Every desirable feature necessary in a test lead has been included in this set. The outstanding feature of these leads is, however, the special type prod handles which are furnished with two entirely different interchangeable tips. One set is the chuck type holding needle points and the other set fits in the two sizes of tube pin holes. Solderless tips are supplied on the other end of the leads. The wire is a special kinkless rubber covered type 60" long. and very durable. Handles and leads are color coded.

	ur Cost
TL-621 \$1.25	3 .75



## **MASTER** TEST LEADS

These leads have 4" polished plastic handles with solderless tips on one end, and small insulated tips of similar construction on the other. The special kinkless rubber covered leads 60" long are very durable, but may be readily replaced when necessary without soldering. Prod handles and wires are color coded.

Cat. No.	List Price	Your Cost
TL·186	\$1.10	\$ .66



## UTILITY TEST LEADS

All leads in this series are quite similar except for style of test prods. Wire is a special kinkless rubber covered type, very durable, and leads are 42" long. All three styles listed below are made with either Spade or Phone Tip terminals as designated by S or P following the part numbers.

Nos. TL-1841S and TL-1841P have handles utilizing a special taper point assuring a sharp prod at all

Nus. TL-184S and TL-184P have special chuck points holding removable needle tips for piercing through insulation and

Nos. TL-280S and TL-280P have general purpose solderless tips. This enables worn cords to be quickly replaced without

Cat. No.	Terminals	Points	List Price	Your Cost
TL-1841S	Spade	Taper	\$ .65	\$ .39
TL-1841P	Phone Tip	Taper	.65	.39
TL- 184S	Spade	Needle	.65	.39
TL- 184P	Phone Tip	Needle	.65	.39
TL- 280S	Spade	Solderless	.60	.36
TL- 280P	Phone Tip	Solderless	.60	.36



## SPEAKER AND EAR PHONE CORDS

These cords are made of kinkless stranded wire and covered by a double braid with interwoven tracers. Each cord is 5 feet long, and the set ends are terminated with phone tips. The other ends may be had with either phone tips or eyelets. No. SC 546 is for speaker or single earphone.

No. SC-547 is for regular dual earphone headset.

Cat. No.	Туре	List Price	Your Cost
SC-546 T	Tips	\$.40	\$.24
SC-546 E	Evelets	.40	.24
SC-547 T	Tips	.55	.33
SC-547 E	Evelets	.55	.33



## TIP JACKS AND PLUGS, MISC.



## SOLDERLESS PLUGS

These two plugs offer a convenient means for terminating leads to be inserted in standard tip jacks. Accurately machined from brass, Nickel Plated, they may be readily attached to a wire without soldering.

Cat. No.	Overall Lgth.	Std. Pkg.	List Price	Your Cost
PT-228	11/8"	50	\$.08 ea.	\$.048 ea.
PT-229	15/8"	50	.08 ea.	.048 ea.



## INSULATED PHONE TIP PLUGS AND JACKS



Nos. PT-188 to PT-190 Plugs are excellent for many types of cord terminations. They fit all standard tip jacks. Insulated phenol resin handle will not burn

will not burn.

No. PJ-837 Tip Jack will accommodate all standard insulated and regular phone tips. Mounts in ½" hole.

Both Plugs and Jacks available in either Red or Black.

Cat. No.	Length	List Price	Your Cost
PT-188	2 "	\$ .12	\$ .072
PT-189	23/8"	.15	.09
PT-190	11/2"	.12	.072
PJ-837	1 "	.12	.072



## PHONE TIPS AND JACKS



No. PT-231 Tips are made from accurately machined brass rod. They are 18" long and finished in nickel plate. Barrel accommodates up to No. 18 wire.

No. TJ-296 accommodates all standard phone tips. These jacks are made of nickel plated brass with positive contact springs, and fit in 1/4" diameter hole.

Cat. No.	Std. Pkg.	List Price	Your Cost
PT-231	100	\$2.00 per C	\$1.20 per C
TJ- 296	50	.08 ea.	.048 ea.



## TIP JACK ASSEMBLIES

Each of these units consists of non-removable tip jacks riveted to a bakelite mounting strip. Distance between mounting holes is 114".

Cat. No.	Marked	No. of Jacks	Std. Pkg.	List Price	Your Cost
TI-333S	Speaker	2	5 j	\$ .18	\$ .11
TI-333P	Phone	2	5	.18	.11
TJ-334	Microphone	3	5	.25	.15



## TEST PRODS

These solderless needle-point test prods are made of cast phenol resin. Tips screw into handle and overall length is 4". Specify either Red or Black.

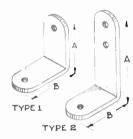
Cat. No.	List Price	Your Cost
TL-187	\$ .30	\$ .18



## INSULATED MOUNTING STRIPS

These strips find many uses in supporting resistors, condensers, etc., in circuit wiring.

Cat. No.	Lugs	List Price	Your Cost
TP-367	1	\$2.00 C	\$1.20 C
TP-368	2	3.00 C	1.80 C
TP-369	3	5.00 C	3.00 C
TP-370	4	6.00 C	3.60 C
TP-374	5	6.50 C	3,90 C
TP-375	6	7.00 C	4.20 C



# ANGLES AND BRACKETS

Many uses for these angles will suggest themselves in all types of radio transmitter and receiver construction. This line is made from 16" brass and bright nickel plated.

#### TYPE 1

Cat. No.	Dim. A	Dim. B	Width	List Price Per C	Your Cost Per C
AB-444	1/2"	1/2"	3/8"	\$1.50	\$ .90
AB-445	3/4"	3/4"	3/8"	2.50	1.50
AB-446	1 "	1 "	3/8"	3.00	1.80
AB-447	11/2"	11/2"	3/8"	4.00	2.40

## TYPE 2

Cat. No.	Dim. A	Dim. B	Width	List Price Per C	Your Cost Per C
AB-631	1 "	1/2"	3/8"	\$2.00	\$1.20
AB-632	11/2"	5/8"	3/8"	3.00	1.80
AB-633	2 "	5/8"	3/8"	4.50	2.70
AB-634	3 "	3/4"	3/8"	7.00	4.20
AB-635	4 "	3/4"	3/8"	9,00	5.40



## CRYSTAL-LAC

This real air-drying lacquer is applied with a soft brush and puts a beautiful crystalline finish on any metal part, such as panels, chassis, etc. Absolutely no baking necessary.

Cat. No.	Size	List Price	Your Cos
P-529	2 oz.	\$ .40	\$ .24
P-533	1/4 pt.	.70	.42
P-534	1/2 pt.	1.25	.75
P-535	1 pt.	2.25	1.35

## **MISCELLANEOUS**





## CENTER-TAPPED RESISTORS

These accurately center tapped resistors are intended for all circuits requiring balanced filament wiring. Each resistor has three wire leads, and the rating of 4 watts is more than adequate for all usual applications. Correct resistance required is determined by multiplying the filament voltage by 10.

Cat. No.	Resistance	List Price	Your Cost
R-846	6 ohms	\$.30	\$.18
R-847	10 ohms	.30	.18
R-848	15 ohms	.30	.18
R-849	20 ohms	.30	.18
R-850	40 ohms	.30	.18
R-851	60 ohms	.30	.18
R-766	100 ohms	.30	.18
R-767	200 ohms	.30	.18
R.768	400 ohms	.30	.18



## BINDING POST ASSEMBLIES

No. B-335 consists of two insulated-top push button binding posts mounted on a bakelite strip. Posts are marked "ANT" and "GND" and mounting hole centers are 116" apart.

No. B-336 consists of the binding posts alone. Available only with the above markings.

Cat. No.	Std. Pkg.	List Price	Your Cost
B-335	5	\$.35	\$.21
B-336	5	.15 ca.	.09 ea.



## OFF-SET SCREW DRIVERS

Servicemen and set builders will find this a necessary tool for tightening or adjusting screws in places not accessible to regular straight screw drivers. Made of hardened steel and cadmium plated.

Cat. No.	Length	List Price	Your Cost
AT-1116	23/4"	\$.15	\$.09
AT-1117	41/2"	.20	.12

#### SOLDERING IRON TIPS



These tips are made of a special copper base rod, and are tinned and ready for use. Made especially as replacements for American Beauty Irons, but will fit many others.

Cat. No.	Fits American Beauty No.		List Price	Your Cost
IT-371	S76	1	\$ .45	\$.27
IT-372	3138	ł	.45	.27
IT-373	3158		1.00	.60



## ZEPP AERIAL INSULATOR

By utilizing this insulator to terminate the feed-line at the antenna, the antenna feeders may be run any direction from the antenna and still remain taut and of equal length.

Cat. No.	List Price	Your Cost
I-219	\$.75	\$.45



#### WALL LEAD-IN

This Lead-In is used to facilitate bringing antennas or feeders

through a wall or window casing with case and safety. Unit consists of a 12" threaded brass rod insulated with heavy bakelite sleeving and two heavy ceramic insulators. Rod and insulation may be readily cut to any desired length.

Cat. No.	List Price	Your Cost
I-742	\$.70	\$.42



### ANTENNA ELIMINATOR

In apartments and other locations where it is difficult to put up an outside antenna this device may be used to the best advantage. Brown Bakelite case adequately protects the unit, and it is easily installed with two small screws. Size: 41/2" long. 25%" wide, and 1/8% thick.

Cat. No.	Std. Pkg.	List Price	Your Cost
A-100	12	\$1.50	\$.90



## AUTOMATIC LINE VOLTAGE CONTROL

An automatic line voltage regulator that maintains a constant potential, thereby eliminating tube burnouts and erratic operation caused by line surges.

Cat. No.	Std. Pkg.	List Price	Your Cost
218	12	\$.85 ea.	\$.51 ea.



## POWER LINE FILTER

This capacity type filter will eliminate noises caused by sparking commutators, thermostats, etc. For either A. C. or D. C.

Cat. No.	Description	List Price	Your Cost
914	Ground Terminal	\$1.50	\$ .90
915	No Ground Terminal	1.25	.75



## DELUXE POWER LINE FILTER

This filter eliminates man-made static caused by refrigerators, bells, motors, and other appliances. It is a capacity type filter with no danger of burn-outs. Housed in an all-bakelite case.

Cat. No.	List Price	Your Cost
403	\$2.85	\$1.71



## RADIO OUTLETS

## THE ANSWER TO RADIO OUTLET PROBLEMS

These three Receptacles can be made into any type of Radio Convenience Outlet desired, and fit the Standard Toggle and Duplex Plates.



Aerial and ground connections.

No. 151—Brown Bakelite List Price \$.60

No. 150—Ivory Bakelite List Price \$.70



Aerial, ground and electrical connections.

No. 351-List Price \$1.15



Speaker or head phone connections.

No. 152-List Price \$.60

### BUD OUTLET BOX



Made of Bakelite

BUD OUTLET BOX is the ideal unit for housing numerous radio and electrical specialties in compact form.

BUD OUTLET BOXES are used by many manufacturers for housing such items as Tone Controls, Short Wave Adapters, Tube Testing Adapters, etc. Size  $2\frac{7}{8}$ " x  $4\frac{5}{8}$ " x  $1\frac{1}{2}$ ".

No. 400-List Price \$.70

No. 401—Bakelite cover for above box.

List Price \$.25



Aerial and ground connections.

No. 136—Bakelite List Price \$.80 No. 1362—Brass List Price \$.80



Aerial, ground and two electrical connections

No. 241—Bakelite List Price \$1.50 No. 2412—Brass List Price \$1.50



Aerial, ground, speaker and electrical connections.

No. 353—Bakelite List Price \$2.75 No. 3532—Brass List Price \$2.75

## DOUBLET AERIAL OUTFIT

Made with two aerial and one ground connection. Mounted on single gang bakelite plate.

No. 153 List Price \$1.00





For isolating aerial and ground or speaker leads from power line in 2 gang boxes to comply with electrical

No. 7159-List Price \$.20



Aerial, ground and electrical connections.

No. 348—Bakelite List Price \$1.40 No. 3482—Brass

List Price \$1.40



Aerial, ground, electrical and speaker connections.

No. 349—Bakelite List Price \$2.25

No. 3492—Brass List Price \$2.25



Speaker or head phone connections.

No. 135—Bakelite List Price \$.80 No. 1352—Brass

List Price \$.80

9 3 3cm

Aerial, ground and speaker connections.

No. 238—Bakelite List Price \$1.65 No. 2382—Brass

List Price \$1.65



Two speakers or head phone connections.

No. 273—Bakelite List Price \$1.65 No. 2732—Brass

List Price \$1.65



Speaker and two electrical connections.

No. 242—Bakelite List Price \$1.50

No. 2422—Brass List Price \$1.50



Aerial, ground and electrical connections.

No. 185 List Price \$1.25



No. 601-B

Speaker or head phone connections.

No. 601 List Price \$.80



Speaker or head phone connections with volume control.

No. 176 List Price \$2.00



Two speakers or head phone connections.

No. 142 List Price \$1.50



Single Gang Plate containing microphone receptacle. Mounts flush on wall same as switch plate in your home. Plate is made of Bakelite.

Size of plate, 23/4" x 43/4".

No. 627—List Price \$2.50

No. 5073—Receptacle only.

List Price \$2.25

## NUMERICAL PRICE LIST and INDEX



Cat. No. List Page  ALV-1 —\$3.00—9 OCL-5 — 1.25—9 OEL-5 — 1.25—9 MCL-5 — 6.00—9 OCL-10 — 1.50—9 VCL-10 — 3.00—9 MCL-10 — 6.50—9 MCL-10 — 6.50—9 OCL-20 — 1.50—9	Cat. No. List Page CB-197 —\$2.70—19 RT-198 — 1.00—19 K-204 — .15—23 K-205 — .18—23 CB-210 — 3.00—19 CB-211 — 3.75—19 -218 — .85—33 I-219 — .75—33 CK-222 — 2.75—11	Cat. No.         List Page           TP-368         \$3,00C 32           TP-369         5,00C 32           TP-370         6,00C 32           TP-371         45-33           IT-372         45-33           IT-373         1,00-33           TP-374         6,50C 32           TP-375         7,00C 32           CF-376         1,75-10           CF-377         2,75-10	Cat. No.         List Page           BP-516         \$ .75-19           BP-517         .85-19           BP-518         1.35-19           BP-519         1.5-23           K-519         .15-23           K-521         .45-19           CB-522         .45-19           CB-523         .40-19           CB-524         .60-19           CB-525         .50-19           CB-526         .70-19	Cat. No. List Page  CB-653 —\$1.70—18  CB-654 — 1.70—18  CB-655 — 1.80—18  CB-656 — 2.30—18  CB-657 — 2.05—18  CB-658 — 2.25—18  CB-659 — 2.50—18  CB-660 — 2.75—18  CB-661 — 2.10—18  CB-662 — 2.30—18	Cat. No. List Page  CB-773 \$2.75-18  CB-774 1.60-18  CB-775 - 1.70-18  CB-77675-18  FA-777 3.00-8  FA-778 3.50-8  CB-779 1.70-18  FA-780 - 3.50-8  FA-781 4.50-8  FA-782 3.75-8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccccc} \text{CK-223} & - & .90 - 11 \\ \text{CK-224} & - & .90 - 11 \\ \text{S-226} & - & 1.00 - 25 \\ \text{S-227} & - & 1.50 - 25 \\ \text{PT-228} & - & .08 - 32 \\ \text{PT-229} & - & .08 - 32 \\ \text{FP-230} & - & .40 - 26 \\ \text{PT-231} & - & .200 \cdot 23 \\ \text{J-232} & - & .30 - 26 \\ \text{I-234} & - & .18 - 28 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccccc} \text{CB-527} & - & .75-19 \\ \text{CB-528} & - & .65-19 \\ \text{P-529} & - & .40-32 \\ \text{PB-530} & - & .40-27 \\ \text{PB-531} & - & .30-27 \\ \text{PB-532} & - & .15-27 \\ \text{P-533} & - & .70-32 \\ \text{P-534} & - & 1 . 25-32 \\ \text{P-535} & - & 2 .25-32 \\ \text{BP-536} & - & .50-19 \\ \end{array}$	$\begin{array}{c} \text{CB-663} & = 2.10 - 18 \\ \text{CB-664} & = 2.30 - 18 \\ \text{CB-665} & = 1.60 - 18 \\ \text{CB-666} & = 1.60 - 18 \\ \text{BP-667} & = 45 - 19 \\ \text{BP-669} & = .50 - 19 \\ \text{BP-669} & = .55 - 19 \\ \text{BP-671} & = .70 - 19 \\ \text{BP-672} & = .55 - 19 \\ \text{BP-672} & = .55 - 19 \\ \end{array}$	FA-783 — 4.50— 8 FA-784 — 4.00— 8 FA-785 — 4.00— 8 FA-786 — 5.00— 8 FA-787 — 4.75— 8 CB-788 — .75—18 CB-789 — .90—18 CB-790 — 1.00—18 CB-791 — 1.10—18 FC-795 — .45—27
$\begin{array}{ccccc} \text{CB-40} & - & .75 - 19 \\ \text{OCL-40} & - & 1.50 - 9 \\ \text{OEL-40} & - & 1.50 - 9 \\ \text{VCL-40} & - & 3.50 - 9 \\ \text{MCL-40} & - & 7.50 - 9 \\ \text{CB-41} & - & .65 - 19 \\ \text{OCL-80} & - & 1.50 - 9 \\ \text{OEL-80} & - & 1.50 - 9 \\ \text{MCL-80} & - & 4.00 - 9 \\ \text{MCL-80} & - & 8.25 - 9 \\ \end{array}$	AT-23535-31 AT-23665-31 AT-23785-31 -238 - 1.65-34 -241 - 1.50-34 -242 - 1.50-34 CB-251 - 3.00-19 CB-252 - 3.75-19 RT-253 - 1.25-19 AT-25425-31	$\begin{array}{c} \mathrm{MC\text{-}396} & -1.356 \\ \mathrm{CK\text{-}397} & -5.5011 \\ \mathrm{CK\text{-}398} & -1.7511 \\ \mathrm{CK\text{-}399} & -1.7511 \\ -400 & -7034 \\ -401 & -2534 \\ -403 & -2.8533 \\ \mathrm{CG\text{-}}410 & -7521 \\ \mathrm{A}\text{-}411 & -9029 \\ \mathrm{A}\text{-}412 & -9029 \end{array}$	BP-537 —70—19 SC-546 — .40—31 SC-547 — .55—31 K-559 — .15—23 K-560 — .18—23 DP-561 — .50—22 DP-562 — .50—22 K-563 — .15—23 MC-564 — 1.50—7 MC-565 — 1.50 7&6	BP-673 — 80—19 BP-674 — 80—19 BP-675 — 80—19 BP-676 — 100—19 BP-677 — 110—19 BP-678 — 120—19 BP-679 — 125—19 BP-680 — 45—19 BP-681 — 50—19 BP-682 — 55—19	$\begin{array}{llllllllllllllllllllllllllllllllllll$
A-100— 1.50—33 D-102B .85—22 D-102W .90—22 D-103B .90—22 D-103W 1.00—22 D-104W 1.10—22 D-104W 1.10—22 SL-106— 1.10C 27 TC-107— 1.50C 25 TC-108— 1.50C 25	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	A-413 — 1.00—29 A-416 — 1.00—29 A-417 — .90—29 A-418 — .90—29 A-420 — 1.00—29 A-422 — .90—29 AN-423 — 5.00—29 AN-424 — 4.00—29 A-434 — .90—29 I-435 — .12—28	$\begin{array}{c} \text{MC-566} & -2.00 - 7 \\ \text{MC-567} & -1.40 - 7 \\ \text{C11-568} & -1.75 - 11 \\ \text{C11-569} & -1.50 - 11 \\ \text{C11-570} & -1.00 - 11 \\ \text{K-575} & -1.2 - 23 \\ \text{K-576} & -15 - 23 \\ \text{K-577} & -15 - 23 \\ \text{K-578} & -18 - 23 \\ \text{K-579} & -12 - 23 \\ \end{array}$	BP-683 — .65—19 BP-684 — .70—19 BP-685 — .55—19 BP-686 — .80—19 BP-687 — .80—19 BP-689 — 1.00—19 BP-690 — 1.10—19 BP-691 — 1.20—19 BP-692 — 1.25—19	$\begin{array}{llllllllllllllllllllllllllllllllllll$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	I-436 — .20—28 I-437 — .25—28 I-438 — .50—28 PS-440 — I.65—17 PS-441 — 2.45—17 PS-442 — I.65—17 PS-443 — 2.45—17 AB-444 — I.50C 32 AB-445 — 2.50C 32 AB-446 — 3.00C 32	K-580 — .15—23 K-581 — .15—23 K-582 — .18—23 MS-583 —12.50—20 MS-584 — 8.50—20 MS-585 —12.00—20 MS-586 —10.00—20 MS-587 —13.50—20 MS-589 — 1.75—20 MS-589 — 2.25—20	CR-694 — 8.00—16 CR-695 —10.00—16 CR-696 —15.00—16 CR-697 —16.25—16 CR-698 —19.00—16 CA-699 — 2.50—15 PS-700 — 95—12 D-711 — 1.00—21 D-712 — 1.00—21 D-713 — 1.25—21	MT-830 — .65—10 MT-831 — .75—10 MT-832 — .85—10 MT-833 — .15—22 PJ-837 — .12—32 MS-840 —10.00—20 FC-845 — .30—27 R-846 — .30—3 R-847 — .30—3 R-848 — .30—3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AT-285 — .45—31 AT-286 — .45—31 AT-287 — .35—31 SII-292 — .25—30 SII-293 — .40—30 CH-294 — .20—12 SII-295 — .40—30 TJ-296 — .08—32 WC-297 — 1.25C 23 I-300 — .10—28	AB-447 — 4.00C 32 MB-448 — 1.25—18 MB-450 — 1.55—18 MB-450 — 1.75—18 MB-451 — 2.00—18 I-453 — .25—28 I-454 — .30—28 I-455 — .55—28 MB-458 — .90—18 MB-459 — 1.40—18	MS-590 — 5.00—20 MS-591 — 5.75—20 MS-592 — 15.50—20 CF-594 — .25—10 CF-595 — .30—10 CF-596 — .30—10 MS-597 — 14.00—20 MS-598 — 12.00—20 —601 — .80—34 PM-607 — .65—12	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	R-849 — .30—33 R-850 — .30—33 R-851 — .30—33 NC-852 — 1.00— 8 NC-853 — 2.50— 8 FC-855 — .35—27 FS-859 — .35—27 FS-860 — .50—27 FS-862 — 1.20—27 FS-863 — 1.35—27
$\begin{array}{c} -153 - 1.00 - 34 \\ K - 154 - 30 - 23 \\ K - 155 - 40 - 23 \\ K - 155 - 50 - 23 \\ K - 157 - 50 - 23 \\ K - 158 - 65 - 23 \\ K - 159 - 1.00C 27 \\ OCL - 160 - 1.50 - 9 \\ VCL - 160 - 4.50 - 9 \end{array}$	I-301 — .15—28 I-302 — .20—28 I-303 — .25—28 I-304 — .20—28 I-305 — .25—28 I-306 — .35—28 CF-310 — .40—10 MC-311 — 1.00— 6 MC-312 — 1.40— 6 MC-319 — 1.25— 6	$\begin{array}{ccccc} {\rm MB-460} & -1.65-18 \\ {\rm PC-461} &20-26 \\ {\rm PC-462} & -1.5-26 \\ {\rm PC-463} & -2.5-26 \\ {\rm PC-464} &20-26 \\ {\rm PL-469} &08-26 \\ {\rm PL-470} &07-26 \\ {\rm CS-471} & -3.75-15 \\ {\rm CS-472} & -4.60-15 \\ {\rm CS-473} & -6.00-15 \\ \end{array}$	PM-608 — .75—12 PM-609 — .85—12 PM-610 — .85—12 PM-611 — .95—12 PM-612 — 1.10—12 PM-613 — 1.15—12 FC-614 — .75—27 PS-615 — 3.90—17 PS-616 — 4.50—17 PS-617 — 3.25—17	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AN-869 — 1,50—29 CR-874 — 37,50—16 CR-875 — 44,50—16 CH-876 — ,85—11 CU-879 — 2,25—14 CU-880 — 2,75—14 CU-881 — 3,00—14 CU-882 — 3,25—14 CU-883 — ,90—14 CR-884 — 54,00—16
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MC-320 — 1.50 — 6 MC-321 — 1.25 — 6 MC-322 — .95 — 6 MC-323 — .85 — 6 MC-324 — .85 — 6 MC-327 — .85 — 6 MC-328 — .85 — 6 MC-329 — .3.50 — 6 MC-331 — 3.50 — 6 MC-331 — 3.95 — 6	CS-474 — 8.00—15 A-476 — 90—29 K-480 — 35—23 K-481 — 45—23 K-482 — .55—23 TC-487 — .25—25 TC-490 — .08—25 AN-491 — 1.75—29 A-492 — 1.00—29 A-493 — 1.00—29	PS-618 — 3.75—17 FC-619 — .50—27 TL-621 — 1.25—31 MA-622 — .50—21 CB-623 — 3.50—18 CB-624 — 3.50—18 CB-625 — 4.00—18 -627 — 2.50—34	I-739 — .35—28 FC-740 — .65—27 FC-741 — .80—27 1-742 — .70—33 SW-743 — .70—24 K-744 — .12—23 K-746 — .12—23 K-747 — .15—23	S-88540-25 MC-886 - 3.95 - 6 MC-887 - 4.25 - 6 MC-888 - 4.50 - 6 MC-889 - 4.75 - 6 MC-890 - 1.00 - 8 NC-892 - 2.50 - 9 NC-893 - 3.75 - 9 MC-894 - 3.00 - 7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TJ-333 — .18—32 TJ-334 — .25—32 B-335 — .35—33 B-336 — .15—33 -348 — 1,40—34 -349 — 2.25—34 -351 — 1,15—34 -353 — 2,75—34 CK-354 — 2,00—11 CK-356 — 2,90—11	$\begin{array}{c} A-494 & -1.00-29 \\ A-495 & -1.00-29 \\ A-496 & -1.00-29 \\ A-9407 & -60-29 \\ AN-498 & -10.00-29 \\ SW-499 & -45-24 \\ BPA-500 & -40.00-2 \\ BPA-500LF 42.50-2 \\ BPA-500S-6.00-2 \\ RD-505 & -5.75-18 \\ \end{array}$	AB-631 — 2.00C 32 AB-632 — 3.00C 32 AB-633 — 4.50C 32 AB-634 — 7.00C 32 AB-635 — 9.00C 32 CB-636 — 1.50—18 CB-637 — 1.50—18 XM-639 — 2.5—24 CB-640 — 2.40—18 CB-641 — 2.40—18 CB-642 — 3.00—18	$\begin{array}{cccccc} K-748 & - & 10-23 \\ K-749 & - & 12-23 \\ K-750 & - & 10-23 \\ K-751 & - & 10-23 \\ K-752 & - & 12-23 \\ XII-754 & - & 1.75-24 \\ MA-755 & - & 25-21 \\ MA-757 & - & 25-21 \\ MA-758 & - & 20-21 \\ XII-762 & - & 1.75-24 \\ \end{array}$	MC-895 — 3.25 — 7 MC-896 — 3.50 — 7 MC-897 — 1.55 — 6 MC-899 — 2.60 — 6 MC-909 — 1.20 — 6 MC-901 — 1.20 — 6 MC-902 — 1.25 — 6 MC-903 — 1.35 — 6 MC-904 — 1.60 — 6 MC-905 — 1.85 — 6
$\begin{array}{lll} {\rm TI} {\sim} 187 & - & .30 {\rightarrow} 32 \\ {\rm PT} & 188 & - & .12 {\rightarrow} 32 \\ {\rm PT} {\sim} 189 & - & .15 {\rightarrow} 32 \\ {\rm PT} {\sim} 190 & - & .12 {\rightarrow} 32 \\ {\rm K} {\sim} 191 & - & .10 {\rightarrow} 23 \\ {\rm K} {\sim} 192 & - & .12 {\rightarrow} 23 \\ {\rm CB} {\sim} 193 & - & 2.00 {\rightarrow} 19 \\ {\rm CB} {\sim} 194 & - & 2.70 {\rightarrow} 19 \\ {\rm CB} {\sim} 196 & - & 2.00 {\rightarrow} 19 \\ {\rm CB} {\sim} 196 & - & 2.00 {\rightarrow} 19 \\ \end{array}$	CK-357 — .80—11 CK-358 — .80—11 CK-359 — 1.00—11 CK-360 — 1.00—11 CK-361 — 1.00—11 CK-362 — 1.25—11 S-363 — .12—25 CK-365 — .90—11 CK-366 — 1.00—11 TP-387 — 2.00C 32	RD-506 — 8.75—18 RD 507 — 6.75—18 RD-508 — 9.75—18 PM-509 — 1.45—17 PM-510 — 1.65—17 PM-512 — 1.65—17 PM-512 — 1.65—17 RP-513 — .75—19 BP-514 — .85—19 BP-515 — 1.35—19	$\begin{array}{c} \mathrm{CB\text{-}643}  \  \   3.0018 \\ \mathrm{CB\text{-}644}  \  \   0018 \\ \mathrm{CB\text{-}645}  \  \   9018 \\ \mathrm{CB\text{-}646}  \  \   1.2018 \\ \mathrm{CB\text{-}646}  \  \   1.2018 \\ \mathrm{CB\text{-}648}  \  \   1.4518 \\ \mathrm{CB\text{-}649}  \  \   1.5018 \\ \mathrm{CB\text{-}650}  \  \   1.6018 \\ \mathrm{CB\text{-}651}  \  \   1.7018 \\ \mathrm{CB\text{-}652}  \  \   1.6018 \\ \end{array}$	$\begin{array}{c} {\rm XH-763}  - 1.50{-24} \\ {\rm XH-764}  - 1.75  - 24 \\ {\rm XH-765}  - 40{-24} \\ {\rm NI-766} 30{-33} \\ {\rm R-766} 30{-33} \\ {\rm R-767} 30{-33} \\ {\rm R-768} 30{-33} \\ {\rm CB-769}  - 1.70{-18} \\ {\rm CB-770}  - 2.05{-18} \\ {\rm CB-771}  - 2.25{-18} \\ {\rm CB-772}  - 2.50{-18} \\ \end{array}$	MC-906 — 2.00— 6 MC-907 — 2.20— 6 MC-908 — 2.40— 6 MC-909 — 2.50— 6 MC-910 — 3.00— 6 MC-911 — 3.00— 6 MC-912 — 3.50— 6 MC-913 — 3.00— 6 MC-914 — 1.50—33 —915 — 1.25—38



## **NUMERICAL PRICE LIST and INDEX**

				G 4 N TI 4 N	Con No. 2 Tinh Pro-
Cat. No. List Page  CK-916 — \$3.30—11  CK-917 — 6,00—11  CK-918 — 3,50—11  CH-920 — 45—11  CH-923 — 75—11  CH-923 — 75—11  CH-924 — 85—11  CH-925 — 25—12  MC-926 — 1,15—6  MC-927 — 3,85—7	$\begin{array}{llll} \textbf{Cat. No.} & \textbf{List Page} \\ \textbf{SE-1051} & \textbf{.} 15-27 \\ \textbf{SE-1052} & \textbf{.} 15-27 \\ \textbf{SE-1053} & \textbf{.} 15-27 \\ \textbf{SE-1053} & \textbf{.} 15-27 \\ \textbf{SE-1055} & \textbf{.} 20-27 \\ \textbf{SE-1055} & \textbf{.} 20-27 \\ \textbf{SE-1056} & \textbf{.} 15-27 \\ \textbf{FP-1057} & \textbf{.} 75-26 \\ \textbf{J-1058} & \textbf{.} 50-26 \\ \textbf{JP-1059} & \textbf{.} 75-26 \\ \textbf{S-1060} & \textbf{.} 35-25 \\ \end{array}$	Cat. No. List Page  CH-1216—\$ .50—12  CH-1217— .55—12  CH-1218— .60—12  CH-1219— .75—12  CH-1220— .80—12  CF-1221— .90—10  CF-1222— .95—10  CF-1223— 1 .00—10  DP-1224— .20—21  DP-1225— .20—21	Cat. No. List Page CT-1345—\$2.00—18 CT-1346—\$2.75—18 CT-1347—\$3.50—18 SB-1348—\$4.5—24 SA-1349—\$1.50—18 CT-1350—\$4.25—18 OC-1351—\$80—17 -1352—\$80—34 AM-1354—\$1.75 9& 10	Cat. No. List Page PM-1599—\$2.85—17 BC-1600—6.75—4 BC-1601—7.40—4 BC-1602—8.00—4 BC-1603—8.35—4 BC-1604—8.75—4 BC-1605—10.00—4 BC-1606—12.00—4 BC-1606—7.75—4 BC-1608—8.00—4	Cat. No. List Page  CR-1742-\$15.00—13  CR-1743-20 00—13  CR-1744—22.50—13  CR-1746— 3.75—13  C-1746— 3.75—13  C-1747— 4.25—13  C-1748— 4.75—13  RC-1749—12.50—16  CA-1750— 4.00—13  CA-1751— 4.75—13
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	S-1061— .30—25 S-1062— .35—25 S-1063— .35—25 CB-1066— 1.25—18 BP-1067— .60—19 CB-1068— 1.25—18 BP-1069— .60—19 SW-1070— .55—24 SW-1071— .55—24 SW-1072— .70—24	DP-1226— .20—21 DP-1227— .20—21 DP-1228— .20—21 DP-1228— .20—21 DP-1230— .10—21 N-1231 to N-1240— .10—22 CM-1241— 1.50—14 CM-1242— 1.50—14 BS-1244— 1.10—14	AM-1355— 1.25—10 AM-1356— 1.10 9& 10 AM-1357— .75—10 AM-1358— 1.00—10 AM-1359— .60—10 AM-1360— .75—10 AM-1361— .06—10 -1362— .80—34 AM-1363— .15—10	BC-1609— 8.50— 4 BC-1610— 9.00— 4 BC-1611— 9.50— 4 BC-1612—11.50— 4 BC-1613— 8.50— 4 BC-1614—10.00— 4 BC-1616—11.50— 4 BC-1616—12.50— 4 BC-1616—19.50— 4 BC-1618—10.50— 4	CA-1752— 5.75—13 CA-1753— 6.50—13 C-1754— 6.00—14 C-1755— 7.00—14 C-1756— 8.00—14 CB-1757— 2.70—19 CB-1758— 3.00—19 CB-1759— 3.00—19 CB-1760— 3.25—19 CB-1761— 3.50—19
$\begin{array}{ccccc} \text{PJ}-949 & & & 06-26\\ \text{S}-950 & & & 15-25\\ \text{S}-951 & & & 10-25\\ \text{S}-954 & & & 40-25\\ \text{S}-955 & & & 40-25\\ \text{S}-956 & & & 45-25\\ \text{S}-956 & & & 45-25\\ \text{S}-957 & & & 50-25\\ \text{S}-958 & & & 50-25\\ \text{S}-959 & & & 55-25\\ \text{C} \text{K}-960 & & & 1.10-11 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AM-136420-10 JC-1518 2.75 4 JC-1519 3.25 4 JC-1520 3.50 4 JC-1521 2.50 4 JC-1522 3.25 4 JC-1523 4.00 4 JC-1525 2.50 5 JC-1526 2.75 5 JC-1527 3.25 5	BC-1619—12.50—4 BC-1620—10.00—4 BC-1621—11.00—4 BC-1622—12.00—4 BC-1623—15.00—4 BC-1624—10.00—4 BC-1625—10.50—4 BC-1626—11.50—4 BC-1626—11.50—4 BC-1626—11.50—4	CB-1762— 3.85—19 CB-1763— 4.25—19 CB-1764— 2.70—19 CB-1766— 3.00—19 CB-1766— 3.25—19 CB-1768— 3.50—19 CB-1769— 3.85—19 CB-1770— 4.25—19 [CB-1771—46.00—13
$\begin{array}{ccccc} {\rm CK-961} & = 1.10-11 \\ {\rm PL-962} & = .20-26 \\ {\rm PJ-963} & = .15-26 \\ {\rm MC-965} & = 2.00-6 \\ {\rm MC-966} & = 2.50-6 \\ {\rm MC-907} & = 3.00-6 \\ {\rm C-973} & = 2.75-14 \\ {\rm I-974} & = .10-28 \\ {\rm C-975A} & = 6.45-14 \\ {\rm CB-976} & = .75-19 \\ \end{array}$	$\begin{array}{c} {\rm CC}\text{-}1096 2.6515 \\ {\rm CC}\text{-}1097 3.2515 \\ {\rm CU}\text{-}10981.1514 \\ {\rm CU}\text{-}10991.7514 \\ {\rm CC}100 3.0015 \\ {\rm SW}1115 4024 \\ {\rm AT}1116 1533 \\ {\rm AT}1117 2033 \\ {\rm SW}1118 5524 \\ {\rm SW}1119 .7524 \\ \end{array}$	PS-1255— 1.70—17 PS-1256— 2.00—17 PS-1257— 2.30—17 PS-1257— 2.30—17 PS-1259— 2.90—17 PS-1260— 3.10—17 PS-1261— 3.50—17 RR-1263—16.00—16 RR-1264—19.00—16 RR-1265—36.00—16	JC-1528— 4,00— 5 JC-1529— 5,00— 5 JC-1530— 2,45— 5 JC-1531— 2,50— 5 JC-1532— 2,85— 5 JC-1533— 3,00— 5 JC-1534— 3,50— 5 JC-1536— 5,25— 5 JC-1536— 5,25— 5 JC-1537— 6,25— 5	BC-1629—15, 00— 4 BC-1630—11, 50— 4 BC-1631—13, 50— 4 BC-1632—15, 00— 4 BC-1633—16, 00— 4 BC-1634—15, 50— 3 BC-1636—17, 00— 3 BC-1637—18, 50— 3 BC-1638—20, 00— 3	CR-1772—54.00—13 CR-1773—65.00—13 GC-1800—32.00—3 GC-1801—45.00—3 GC-1803—25.00—3 GC-1803—25.00—3 GC-1804—37.50—3 GC-1805—43.50—3 GC-1806—62.00—3
$\begin{array}{lll} PL-977&-&,55-26\\ DP-978&-&,20-21\\ DP-979&-&,20-21\\ DP-980&-&,20-21\\ DP-981&-&,20-21\\ DP-982&-&,20-21\\ S-983&-&,30-25\\ PA-984&-&,85-12\\ PA-985&-&,1,10-12\\ PA-986&-&1,30-12\\ \end{array}$	SW-1120— .95—24 K-1122— .12—23 CU-1124— 2.35—14 CA-1125— 2.95—15 CA-1126— 3.65—15 CA-1127— 4.50—15 CA-1128— 3.75—15 N-1130 to N-1174— .10—22 DP-1175— .30—21	MB-1266— .70—18 MB-1267— .90—18 MB-1268— 1.10—18 SW-1269— 1.15—24 SW-1270— 2.00—24 DP-1273— .20—21 CH-1277— .85—12 CH-1278— .85—12 CH-1279— .90—12 CH-1280— .90—12	JC-1538— 2 75— 5 JC-1539— 3 00— 5 JC-1540— 3 50— 5 JC-1541— 4 00— 5 JC-1542— 4 65— 5 JC-1543— 3 00— 5 JC-1544— 4 00— 5 JC-1545— 4 50— 5 JC-1546— 5 00— 5 JC-1546— 5 00— 5	$\begin{array}{ccccc} \text{LC-}1640 - & .85 - 7 \\ \text{LC-}1641 - & .95 - 7 \\ \text{LC-}1642 - & 1.10 - 7 \\ \text{LC-}1643 - & 1.25 - 7 \\ \text{LC-}1643 - & 1.35 - 7 \\ \text{LC-}1645 - & 1.50 - 7 \\ \text{LC-}1646 - & 1.65 - 7 \\ \text{LC-}1647 - & 2.10 - 7 \\ \text{LC-}1648 - & 1.00 - 7 \\ \text{LC-}1649 - & 1.25 - 7 \\ \end{array}$	GC-1808-35.00-3 GC-1809-42.50-3 GC-1810-58.50-3 GC-1811-35.00-3 GC-1812-45.00-3 GC-1813-55.00-3 GC-1815-43.50-3 GC-1816-61.50-3 GC-1816-61.50-3 GC-1818-42.00-3
$\begin{array}{c} \text{PA-987} & -1.50-12 \\ \text{PA-988} & -1.70-12 \\ \text{PA-989} & -1.80-12 \\ \text{PA-989} & -1.80-12 \\ \text{PA-990} & -2.00-12 \\ \text{PA-991} & -2.25-12 \\ \text{PA-992} & -2.75-12 \\ \text{C-993} & -2.75-14 \\ \text{C-994} & -3.25-14 \\ \text{C-995} & -3.50-14 \\ \text{CB-996} & -60-19 \\ \end{array}$	DP-1176 — .30—21 DP-1177 — .20—21 DP-1178 — .20—21 DP-1179 — .20—21 DP-1180 — .15—22 DP-1181 — .15—22 DP-1183 — .10—22 N-1183 — .10—22 N-1184 — .10—22 N-1185 — .10—22	CH-1281— 1.00—12 CH-1282— 1.00—12 CH-1283— 1.15—12 CH-1284— 1.15—12 CH-1286— 1.30—12 CH-1286— 1.45—12 CH-1287— 1.80—12 AM-1299— .75—10 SR-1300— 5.00—15 SR-1301— 2.75—15	$ \begin{array}{c} {\rm JC-1550} {\leftarrow} & 3.50 {\leftarrow} 5 \\ {\rm JC-1551} {\leftarrow} & 4.25 {\leftarrow} 5 \\ {\rm JC-1552} {\leftarrow} & 5.00 {\leftarrow} 5 \\ {\rm JC-1553} {\leftarrow} & 5.50 {\leftarrow} 5 \\ {\rm JC-1554} {\leftarrow} & 6.50 {\leftarrow} 5 \\ {\rm JC-1555} {\leftarrow} & 7.25 {\leftarrow} 5 \\ {\rm JC-1556} {\leftarrow} & 8.50 {\leftarrow} 5 \\ {\rm JC-1556} {\leftarrow} & 4.25 {\leftarrow} 5 \\ {\rm JC-1557} {\leftarrow} & 4.25 {\leftarrow} 5 \\ {\rm JC-15578} {\leftarrow} & 4.50 {\leftarrow} 5 \\ {\rm JC-1558} {\leftarrow} & 4.50 {\leftarrow} 5 \\ {\rm JC-1559} {\leftarrow} & 5.00 {\leftarrow} 5 \\ \end{array} $	$ \begin{array}{c} \text{LC-1650} \!$	GC-181952.503 GC-182062.503 GC-182138.003 GC-182250.003 GC-182357.503 GC-182447.503 TL-18416531 -23821.6534 -24121.5034
$\begin{array}{ccccc} \text{CB-997} & - & .80-19 \\ \text{CB-998} & - & .95-19 \\ \text{C-999} & - & 3 .25-14 \\ \text{NC-1000} & - & 2 .75-8 \\ \text{NC-1001} & - & 4 .00-8 \\ \text{NC-1001} & - & 5 .50-8 \\ \text{SW-1003} & - & 40-24 \\ \text{SW-1004} & - & 45-24 \\ \text{SW-1006} & - & .55-24 \\ \text{SW-1006} & - & .60-24 \\ \end{array}$	N-1186— .10—22 PS-1187— 1.00—12 PS-1188— 1.15—12 CB-1189— 1.50—18 C-1190A 5.90—14 CB-1191— .90—18 CB-1192— 1.00—18 CB-1193— 1.10—18	SR-1302— 2.25—15 SR-1303— 2.50—15 SR-1304— 2.75—15 SR-1305— 3.30—15 SR-1306— 3.65—15 SR-1307— 4.40—15 SR-1308— 4.65—15 SR-1309— 5.00—15 SR-1311— 5.75—15	$ \begin{array}{c} {\rm JC-15605.75-5} \\ {\rm JC-15616.25-5} \\ {\rm JC-15627.50-5} \\ {\rm JC-15635.00-5} \\ {\rm JC-15645.50-5} \\ {\rm JC-15645.50-5} \\ {\rm JC-15665.50-5} \\ {\rm JC-15665.50-5} \\ {\rm JC-15676.25-5} \\ {\rm JC-15699.00-5} \\ {\rm JC-15705.00-5} \\ \end{array} $	$\begin{array}{c} \text{LC-1664} &= 2.25 - 7 \\ \text{LC-1665} &= 2.50 - 7 \\ \text{LC-1666} &= 2.75 - 7 \\ \text{LC-1667} &= 3.00 - 7 \\ \text{LC-1670} &= 1.50 - 8 \\ \text{LC-1671} &= 1.75 - 8 \\ \text{LC-1672} &= 2.00 - 8 \\ \text{LC-1673} &= 2.25 - 8 \\ \text{LC-1674} &= 2.50 - 8 \\ \text{LC-1680} &= 1.00 - 8 \end{array}$	$\begin{array}{c} -2422 - 1.50 - 34 \\ -2732 - 1.65 - 34 \\ -3482 - 1.40 - 34 \\ -3492 - 2.25 - 34 \\ -3532 - 2.75 - 34 \\ -5073 - 2.25 - 34 \\ -5073 - 2.25 - 34 \\ 1-641610 - 28 \\ 1-671615 - 28 \\ 1-671625 - 28 \\ RS - 714050C 17 \\ \end{array}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CB-1195— 1, 60—18 CB-1196—1, 80—18 CB-1197— 2, 30—18 CB-1198—1, 10—18 CB-1198—1, 45—18 PS-1200— , 45—12 PS-1201— , 55—12 PS-1202— , 65—12 PS-1203— , 75—12 PS-1204— , 80—12 PS-1205— , 90—12	SR-1312— 6,00—15 SR-1313— ,85—15 SR-1314— 1,00—15 SR-1315— 1,10—15 SR-1316— 1,40—15 SR-1317— 1,65—15 SR-1318— 1,90—15 SR-1320— 2,25—15	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} LC-1681$	$\begin{array}{rrrrr} -7159 & . & .2034 \\ RW - 7161 & . & .50C 17 \\ F - 7264A & . & .0522 \\ I - 7358 & . & .10028 \\ I - 7446 & . & .1528 \\ I - 7507 & . & .1528 \\ I - 7568 & . & .3528 \\ I - 7569 & . & .5028 \\ I - 7759 & . & .7528 \\ I - 7758 & . & .4028 \\ \end{array}$
$\begin{array}{c} \mathrm{CP}\text{-}1032 - & .2525 \\ \mathrm{CP}\text{-}1033 - & .2525 \\ \mathrm{CP}\text{-}1034 - & .2525 \\ \mathrm{SW}\text{-}1036 - & .0424 \\ \mathrm{J}\text{-}1038 - & .3026 \\ \mathrm{JP}\text{-}1039 - & .5026 \\ \mathrm{SH}\text{-}1041 - & .2030 \\ \mathrm{SH}\text{-}1042 - & .2030 \\ \mathrm{SE}\text{-}1049 - & .1527 \\ \mathrm{SE}\text{-}1050 - & .1627 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SR-1321 = 2.75-15 SR-1322-3.30-15 SR-1323-3.30-15 J-1324-3.5-26 J-1325-45-26 J-1326-50-26 CT-1341-90-18 CT-1342-1.00-18 CT-1344-1.60-18	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	JL-1698— 1.00— JL-1699— 1.00— N-1700 to N-1726— .10—22 D-1732— 1.45—21 D-1733— 1.45—21 D-1734— 2.30—21 D-1735— 2.30—21 IN-1736— .10—21 CR-1741—12.50—13	

## **DECIMAL EQUIVALENTS**

Fract'ns of an Inch	Decimals of an Inch	Fract'ns of an Inch	Decimals of an Inch	Fract'ns of an Inch	Decimals of an Inch
1/64	.015625	11/32	.34375	11/16	.6875
1/32	.03125	23/64	. 359375	45/64	.703125
3/64	.046875	3/8	.375	23/32	.71875
1/16	. 0625	25/64	.390625	47/64	.734375
5/64	.078125	13/32	. 40625	3/4	.75
3/32	.09375	27/64	.421875	49/64	.765625
7/64	.109375	7/16	. 4375	25/32	.78125
1/8	. 125	29/64	. 453125	51/64	.796875
9/64	. 140625	15/32	. 46875	13/16	.8125
5/32	. 15625	31/64	. 484375	53/64	.828125
11/64	.171875	1/2	.5	27/32	.84375
3/16	. 1875	33/64	. 515625	55/64	.859375
13/64	. 203125	17/32	. 53125	7/8	.875
7/32	.21875	35/64	. 546875	57/64	.890625
15/64	. 234375	9/16	. 5625	29/32	. 90625
1/4	.25	37/64	.578125	59/64	.921875
17/64	. 265625	19/32	. 59375	15/16	. 9375
9/32	.28125	39/64	.609375	61/64	.953125
19/64	. 296875	5/8	. 625	31/32	.96875
5/16	.3125	41/64	. 640625	63/64	.984375
21/64	.328125	21/32	. 65625	1 inch	1.000000
	1	43/64	.671875		

## INTERNATIONAL MORSE CODE

A •-	1 •
В -•••	2 • •
C••	3 • • • — —
D -••	4 • • • • —
E •	5 • • • •
F • • •	6 - • • •
G•	7 — — • • •
H • • • •	8 — — • •
I • •	9 — — — •
J •	0
K -•-	
L •-••	Period • • • • •
M — —	Comma • — • — • —
N -•	Interrogation • • — — • •
O	Quotation Marks • - • • - •
P ••	Exclamation — — • • — —
0	Colon — — • • •
Ř •-•	Semicolon — • — • — •
S • • •	Parenthesis — • — — • —
Т —	Fraction Bar — • • — •
U • • —	Break — • • • —
V •••-	Error • • • • •
Q • - R • - • S • • • T - U • • - V • • - X - • - Y - •	End of Message • — • — •
$X - \cdot \cdot -$	End of Transmission • • • - • -
Y -•	Wait Sign • • • •
Z••	

## DRILL CHART FOR RADIO USE

Drill Number	Diameter Inches	Clears Screw	Correct for Tapping Steel or Brass*
2	. 221	12/24	
10	.193	10/32	
16	. 177		12/24
18	. 169	8/32	
21	. 159		10/32
25	.149		10/24
28	.140	6/32	
29	.136		8/32
33	.113	4/36	
35	.110		6/32
39	.100	3/48	
42	.093		4/36
45	.082		3/48

\* Note: — Use next size larger drill for tapping bakelite and similar composition materials.

The above listing is ONLY the drills most popular in radio construction.

## OHM'S LAW

E = IR

$$R = E$$

I = E

where:

R = resistance in OHMS

I = current in AMPERES

E = electro-motive force in VOLTS

## **POWER**

$$P \,=\, I^{\, \boldsymbol{2}} R$$

$$P = EI$$

 $P = E^2$ R

where:

P = power in WATTS I = current in AMPERES

R = resistance in OHMS

E = electro-motive force in VOLTS

#### **EXAMPLE**

Calculate the size and power rating of the cathode bias resistor for a type 6F6 tube.

Solution:

Grid bias volts = drop across cathode resistor = 16.5 volts (from tube table).

Average plate current = 34 Ma. = .034 Amp.

Average screen current = 6.5 Ma. = .0065 Amp.

$$R = \frac{E}{I} = \frac{16.5}{.034 + .0065} = \frac{16.5}{.0405} = 407 \text{ ohms} - \text{use } 400 \text{ ohms}$$

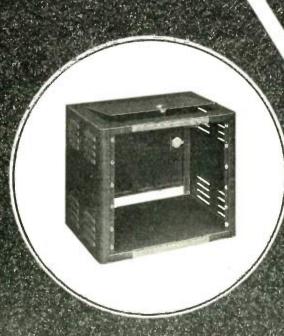
$$P = EI = 16.5 \text{ X} (.034 + .0065) = 16.5 \text{ X} .0405 = 0.668 \text{ watt}$$

Note: This is the actual power dissipated in the resistor. It is common practice to use a resistor having a rating of 4 to 6 times the dissipated power to handle surges, etc. JACKS
PLUGS
PANELS
CABINETS
SHAFT COUPLINGS
CHASSIS
BRACKETS

CONDENSERS

COIL FORMS

**RELAY RACKS** 



SPEAKER CASES
MIKE STANDS
NAME PLATES
INSULATORS
R. F. CHOKES
SWITCHES
SOCKETS
COILS
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KNOBS

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