



# ANTENNA CATALOG

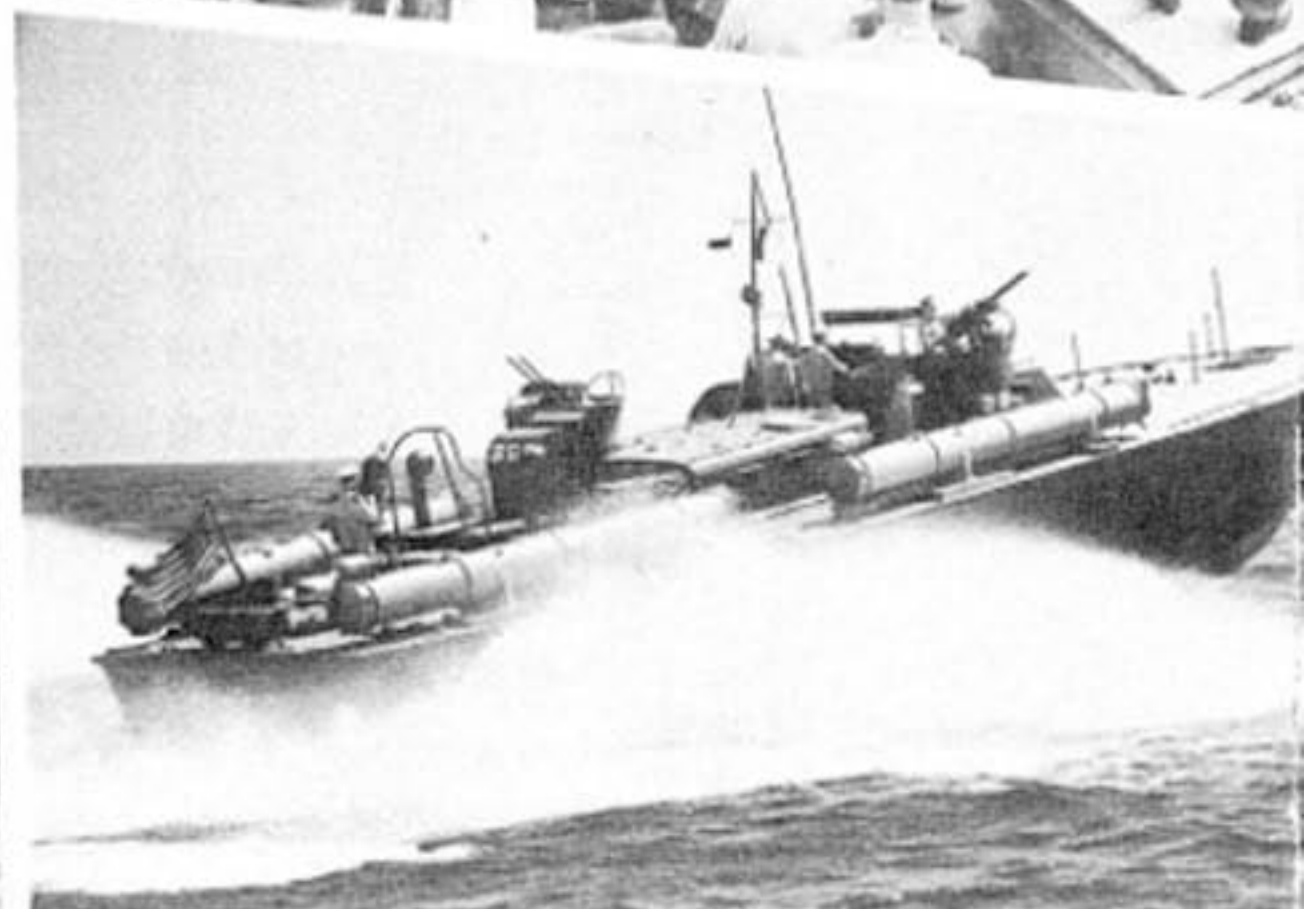
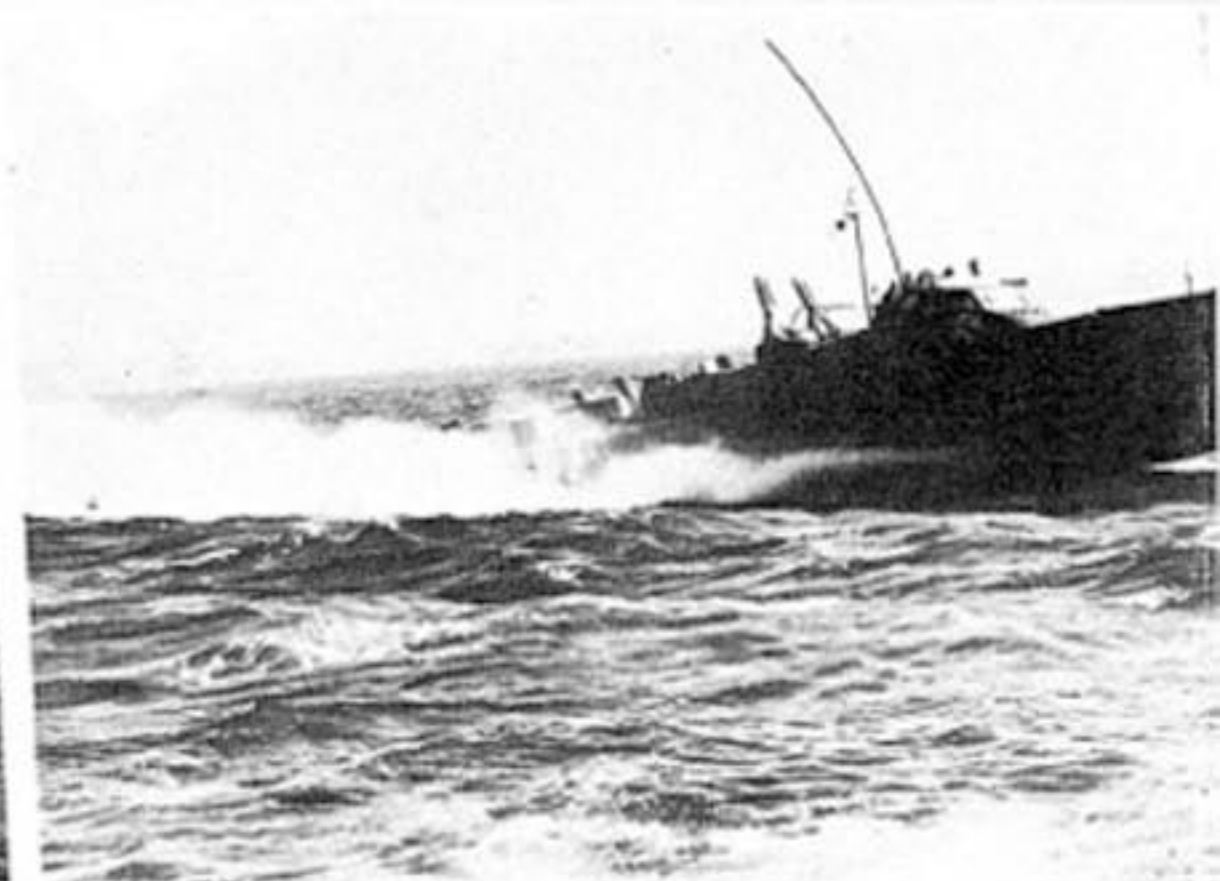
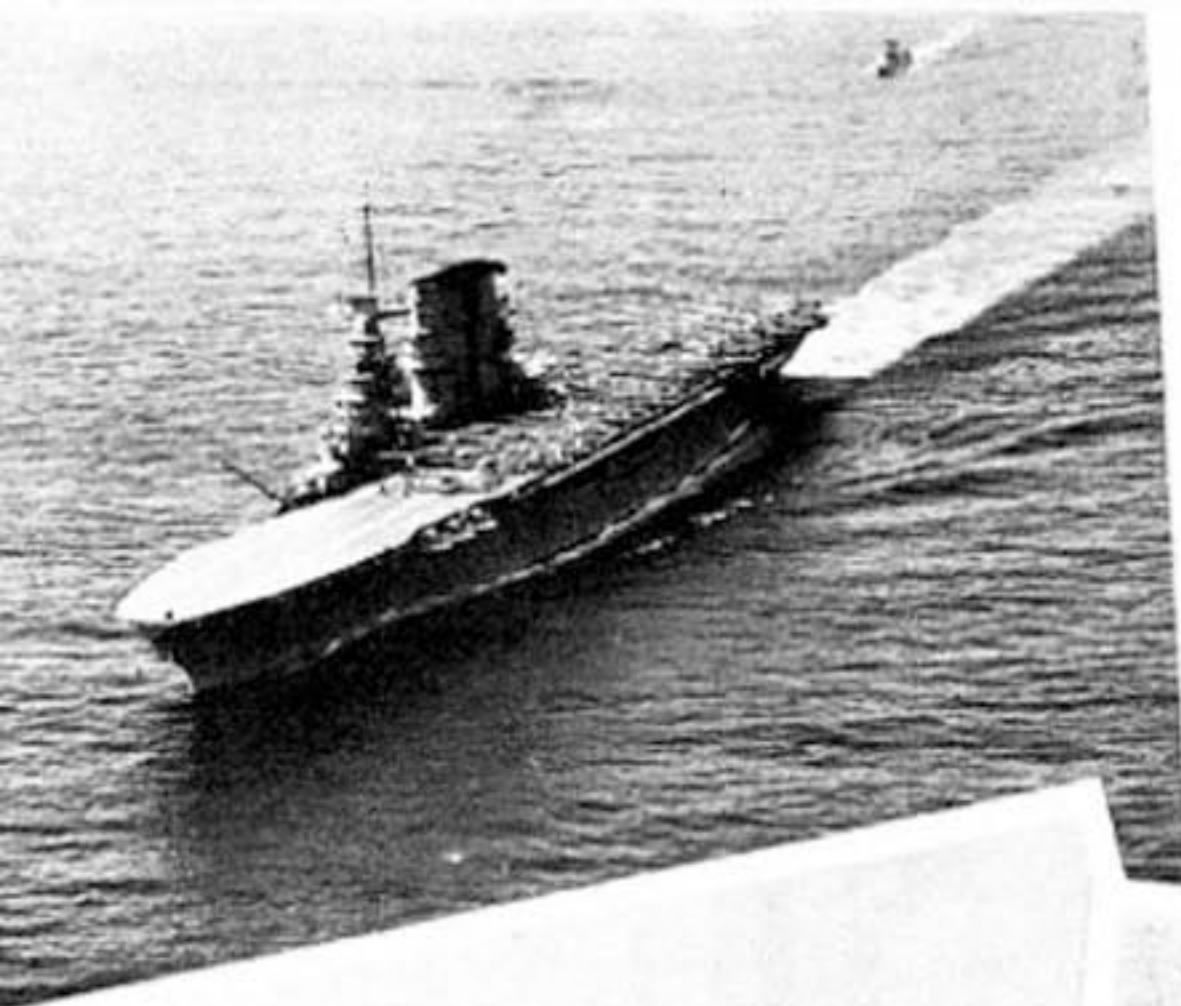
**NO. R-42**

**ALL PREMAX PRODUCTS**

are subject to changes in specifications, materials and finishes made necessary by wartime restrictions and material shortages. Such changes, however, will not affect the practical utility of the product.

**VERTICAL RADIATORS  
HORIZONTALS  
COMMERCIAL  
MARINE  
POLICE  
MOUNTINGS AND INSULATORS**

REPRINTED—1945



Center left and bottom right, Elexo Naval Division, Electric Boat Co.; balance, Official U. S. Navy Photos.

# STEEL ANTENNAS

Probably the most enviable reputation for dependable, efficient performance under the most severe conditions has been earned by Premax Tubular Steel Antennas which are in wide use for vertical radiators, home receiving antennas and countless commercial and public installations.

Premax Telescoping Steel Antennas are made of a high tensile, copper-nickel steel tubing, heavily plated in bright cadmium. They are not only highly resistant to corrosion but are extremely strong both in material and design.

Diameters and wall thicknesses have been engineered to provide ample strength against all ordinary stresses in the services to which they are adapted. While no positive guarantee can be offered against abnormal wind strains above 60 miles per hour, or extreme conditions encountered in heavy sleet storms and other unusual circumstances, many actual instances have been reported where Premax Telescoping Steel Antennas have weathered such punishment with perfect performance. Guying, while not generally considered necessary, is suggested as a reasonable precaution where possible.

Hundreds of amateur, public and commercial users are recommending Premax Telescoping Steel Antennas as dependable, low-cost equipment for a wide variety of radio services.

Premax Telescoping Steel Antennas are available in a range of sizes as shown below, for many different amateur and commercial services. All units are fully telescoping and adjustable between the maximum and minimum lengths shown. The locking device, illustrated on this page, is simple in operation, positive in action and provides a secure, efficient contact between sections.



Premax Adjustable Locking Clamp

### SPECIFICATIONS AND LIST PRICES

No.	Description	Extended Length	Collapsed Length	Base O. D.	Top O. D.	Base I. D.	Weight Each	List Each
112-M	2-section telescoping	11'8"	6'1"	.656"	.500"	.556"	4 lbs.	5.50
318-M	3-section telescoping	17'3"	6'2"	.875"	.500"	.775"	7 lbs.	8.00
224-M	4-section telescoping	22'9"	6'3"	1.063"	.500"	.963"	11 lbs.	11.00
130-M	5-section telescoping	28'3"	6'4"	1.250"	.500"	1.150"	15 lbs.	14.00
136-M	6-section telescoping	33'9"	6'5"	1.500"	.500"	1.400"	20 lbs.	17.00

(Prices do not include base mountings. See page 9)

### METHODS OF MOUNTING VERTICAL ANTENNAS

There are several commonly used methods of mounting Vertical Antennas, of which the most popular is with Premax Type 1 Heavy Duty Base. Lighter antennas up to about 18 feet in height can be satisfactorily mounted on the Type 2 Base. Type IX Base is similar to the Type 1 excepting that it has a socket instead of a post, and is generally used as footing insulators for towers or where the entire weight is downward. Type 6 is used where the connections are made through a flat roof or deck. In some instances, a wall bracket is desirable in order to secure proper location, and for this purpose the Wall Bracket WB-1 is used with a type 1 or 2 Base. Complete details of the various base mountings and insulators will be found on pages nine and ten.



136M Antenna on Type 1 Base



Type 1 Base



Type 2 Base



Type IX Base



Type 6 Base



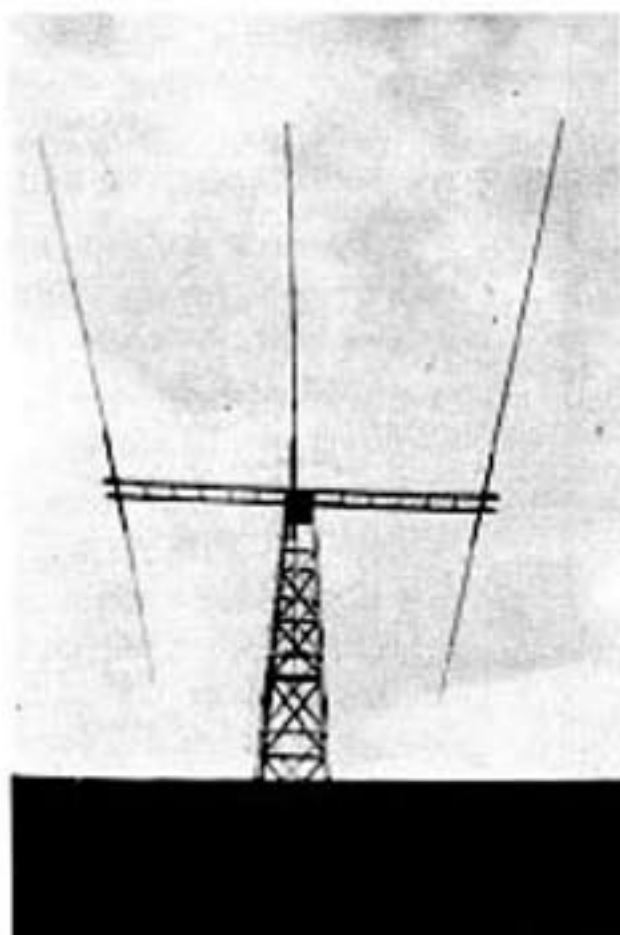
Wall Bracket WB-1 With Type 1 Base

# CORULITE ELEMENTS

For efficient performance in horizontal arrays and similar applications, the Premax Corulite Elements have a wide acceptance. These elements are exceptionally light in weight, yet provide the necessary extreme strength and rigidity so essential in the horizontal type of construction—and at a surprisingly low cost.

This Corulite type of steel tubing was developed by Premax in order to insure a metal structure which would possess unusual stiffness and strength in combination with light wall thickness and consequent low weight—all features essential in this type of array. Although many attempts have been made to imitate this construction, no other type has been able to equal Premax Corulite. A positive clamp, simple in its operation, insures rigid joints and perfect electrical contact between sections.

All Corulite Elements listed below (excepting No. 104-M) are fully telescoping and adjustable between the minimum and maximum lengths shown. These elements meet all requirements for the various 5, 10 and 20-meter arrays in general use, and will also be found ideal equipment for the experimenter on new combinations in the amateur, commercial, television or F. M. bands.



## SPECIFICATIONS AND LIST PRICES

No.	Description	Extended Length	Collapsed Length	Base O. D.	Top O. D.	Recommended For	Weight Per Pr.	List Pair
104-M	1-sec., non-adjustable	4'0"	4'0"	.625"	.625"	5-meter	1 lb.	3.00
108-M	2-sec., telescoping	8'2"	4'7"	.750"	.625"	10-meter	2 lbs.	6.00
113-M	3-sec., telescoping	12'4"	4'8"	.875"	.625"	Double Zepp	3½ lbs.	10.00
618-M	4-sec., telescoping	17'0"	5'3"	1.000"	.625"	20-meter	5½ lbs.	14.00

(Premax Corulite Elements sold only in pairs, complete with Premax "Hairpin" Tuning Bar)

(For Insulators and Mountings, see pages 9 and 10)

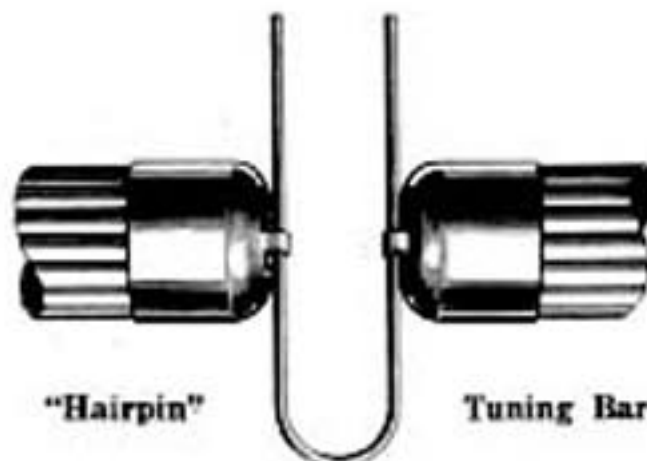
## PREMAX PROVIDES A SPECIAL "HAIRPIN" TUNING BAR

The performance of a definite antenna can, to a large extent, be improved or ruined by the adjustments. This difficulty is completely eliminated by the use of the Premax "Hairpin" Tuning Bar, illustrated below. This bar is inserted between the two halves of the element, and may be slid up or down so as to provide a variation in the overall length from tip to tip of the element without making any adjustment in the two halves of the element itself. In other words, the electrical length is measured from the outside end of one element through that portion of the "hairpin" that is in use to the outside end of the other half of the element.

By this method it is possible to have all of the elements set at a single physical length and the variation in their electrical length may be provided by the "hairpin." Similarly, the variation from one end of a given band to another may be obtained by a similar adjustment.



Locking Clamp



"Hairpin"

Tuning Bar

Unit Unit Unit Unit  
618-M 113-M, 108-M 104-M

# ALUMINUM ANTENNAS

Meeting every demand for light weight combined with corrosion resistance and adequate strength for the most exacting conditions, Premax Aluminum Antennas are in popular use for mobile installations, such as pick-up trucks, etc., where light weight, convenience in extending and collapsing and attractive appearance are important considerations. They are ideal for radio telephone use on fresh water craft or inland locations, as well as for commercial installations.

For commercial use, for police, fire, forestry, public utility and similar services, as well as for amateur installations or home receiving sets, Premax Aluminum Antennas are convenient, dependable, attractive and extremely reasonable in cost. The solid taper rod (No. AM-106) makes an ideal element for FM or television di-poles.

The tubing is special drawn bright finish seamless aluminum, with diameters, gauges and temper engineered to withstand wind velocities up to 60 miles per hour without failure or permanent damage. Guying is not essential under normal conditions, but is recommended as an extra precaution against unexpected stresses.

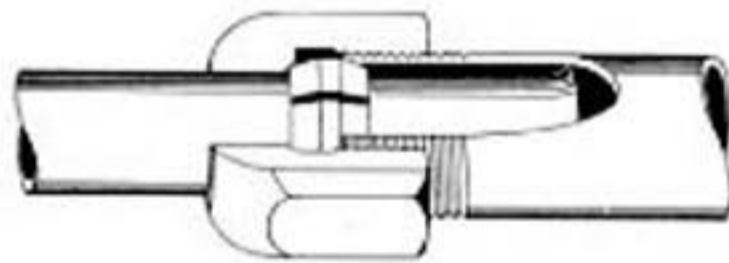
The locking device between sections is of the clutch type, comprising a specially formed hexagon cap nut, engaging a tapered split compression sleeve. This construction is simple in operation and provides an efficient, low-resistance contact between sections.

A group of six different units is available, all excepting the tapered top section (No. AM-106) being fully telescoping and adjustable between the minimum and maximum lengths shown.

## HEAVY DUTY NON-ADJUSTABLE MASTS

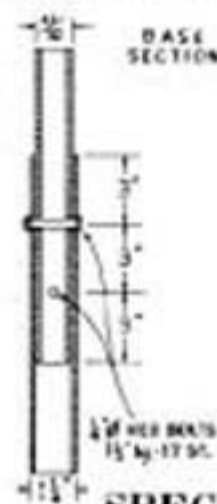
To meet demands from various commercial services, Premax has designed Special Duty Non-Adjustable Masts (illustrated at the right), which can be depended upon for enduring performance under the most extreme conditions. In either the 17½' or 35' lengths, this special aluminum alloy mast is designed to withstand wind velocities up to 100 M. P. H. The tubing is graduated in steps from a base diameter of 2" to a top of ½" on the 35' mast and a base diameter of 3½" to a top of ½" on the 17½' mast, and has a smooth, polished finish to resist corrosion or a collection of dirt. The joint on the 35' mast is ground to a fine fit for positive contact and maximum strength throughout.

Several masts of this type were in use without guying at W2USA on the Communications Building for the two years of the New York World's Fair and withstood extremely high gales and severe sleet storms with no evidence of damage in any respect.



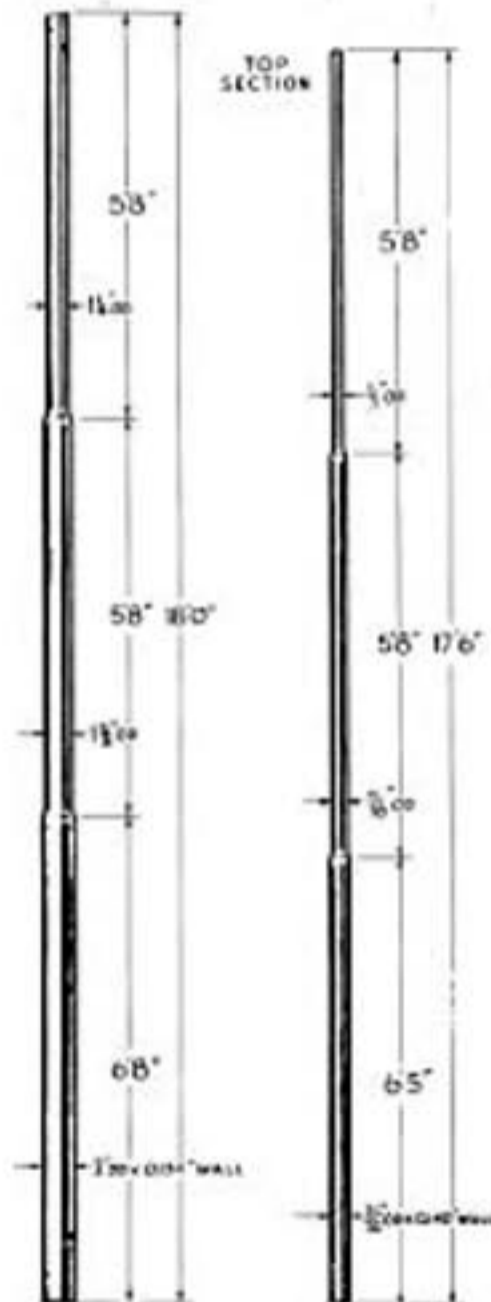
## LOCKING CLAMP FOR ALUMINUM MASTS

Sectional view of locking clamp shows its extreme simplicity and how a perfectly rigid contact is maintained without the use of set screws. Tightening of the hexagonal nut securely locks the sections and the flared end insures perfect alignment.



## SPECIAL HEAVY DUTY NON-ADJUSTABLE MAST

Special two-jointed mast No. AM-035 may be used as a 35' antenna, or the single section (No. AM-017) as a 17½' antenna. Detail of joint is shown at the left.



## SPECIFICATIONS AND LIST PRICES

No.	Description	Extended Length	Collapsed Length	Base O. D.	Top O. D.	Base I. D.	Weight Each	List Price
AM-106	1-pc. tapered rod	6'3"	6'3"	.313"	.125"	---	¼ lb.	\$ 5.00
AM-312	2-sec., telescoping	12'2 ½"	6'3"	.500"	.320"	.334"	1 ½ lbs.	10.00
AM-518	3-sec., telescoping	18' ½"	6'3"	.750"	.320"	.584"	3 lbs.	20.00
AM-124	4-sec., telescoping	23'8 ½"	6'3"	1.000"	.320"	.810"	5 lbs.	30.00
AM-230	5-sec., telescoping	29'2"	6'3"	1.312"	.320"	1.112"	7 ½ lbs.	45.00
AM-336	6-sec., telescoping	34'8"	6'3"	1.625"	.320"	1.425"	11 lbs.	60.00
AM-017	1-pc. tapered tube	17'6"	17'6"	.969"	.500"	.689"	5 ½ lbs.	40.00
AM-035	2-pc. jointed tube	34'9"	18'0"	2.000"	.500"	1.732"	19 lbs.	100.00

(For Base Insulators and Mountings see pages 9 and 10)

# MARINE MOUNTINGS

In marine mounting for antennas, the motion of the boat must be taken into consideration, in addition to the wind or storm stress. For this reason, marine mountings generally differ from regular commercial mountings in order to give the necessary support.

In addition to the base insulator, a supporting insulator higher up on the mast is generally employed. In some instances, the base mounting is omitted and two supporting insulators used.

On this page, six of the most popular designs used in mounting are illustrated and their component parts given.

FIG. 1 shows the use of Base Mounting Type 1 which is placed below decks, preferably on the bottom structure of the boat where it can be securely bolted. The antenna is run up through a Type 5D Deck Bushing which is so designed that it seals the hole cut in the deck or cabin roof and makes a water-tight job.

FIG. 2 shows the use of the Type 1 Mounting and a Type 3 Stand-Off Insulator fastened to the wall of the cabin or the boat mast and acting as a support. This is commonly used where the antenna is mounted on the deck alongside the cabin structure or mast.

FIG. 3 is a Special Navy Type mounting, in which four insulators support bronze mounting brackets which grip the antenna firmly at its base and also well up on the first section.

FIG. 4 shows another mounting in which the Base Insulator is omitted. Here two Type 4 Stand-Off Insulators are used in a manner similar to that employed in Fig. 3 excepting that they are anchored to the rail of the boat.

FIG. 5 shows a similar mounting employing the Type 3 Stand-Off Insulators which are fastened to the side of the cabin or any other flat surface.

FIG. 6 shows the Type 6 Base Insulator which was especially developed by Premax for Marine work. This is a heavy duty insulator and bolts firmly through an opening cut in the deck. A notable advantage of this type, in addition to its strength, is that the electrical connections are made below the deck from the bottom of the insulator. Special rubber gaskets are provided for the top and bottom flanges to insure water tightness. This Base Insulator is available in either galvanized iron or bronze.

Other methods of mounting will suggest themselves as one scans the pages of this catalog and notes the various types of insulators and mountings available.

Guying is always recommended for vertical antennas as a safeguard against unusual strains, although stand-off supports at some point above the base may eliminate guys. As a precaution against loss of antenna under extreme conditions, the antenna may be anchored to the deck or other base support by a safety link of chain or cable, broken by a strain insulator.



Fig. 1

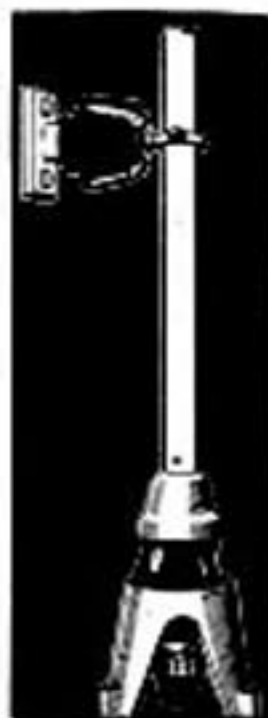


Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



# MONEL ANTENNAS

Outstanding for marine installations and those other commercial uses where high strength and unusual resistance to corrosion are prime considerations, Premax Monel Antennas have satisfactorily stood up under the most severe wind and shock strains, even when installed on the speedy boats of the navy and coast guard. Monel antennas have proven their ability to resist the action of sea air, salt spray and other corrosive agents.

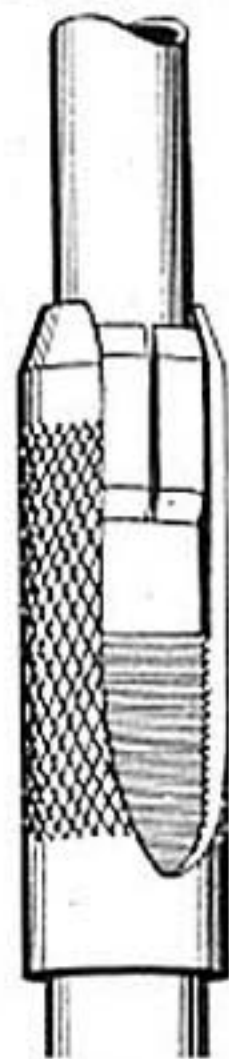
The monel masts are built up of multiple sections of hard-drawn monel tubing which is a product of Superior Tube Company of Norristown, Pa. They are fully telescoping and adjustable. Their rich, highly polished appearance conforms perfectly with the equipment of even the finest craft, yet their cost is not excessive for the more modest installations when their indefinite life and operating efficiency is considered.

Monel is without doubt the perfect material for radio antennas, far more resistant toward more corrosives than either the nickels or coppers which are used in the formulation of monel. It has both the corrosion resistance and mechanical properties which enable it to withstand weather conditions, low temperatures and sudden shocks without affecting its toughness.

Monel is stronger and tougher than common steels and its fatigue strength exceeds the limits of mild steel or all brasses and bronzes. This means freedom from internal structural failures, season cracking and other weaknesses, which, in ordinary metals, result in poor contacts, increased resistance or mechanical breakdowns. The endurance of monel is well shown by the fact that a monel roof on the Pennsylvania Terminal in New York City is still practically perfect after more than 25 years of exposure.

Rigid tests by both government and private shipbuilders have shown Premax Monel Antennas as the most dependable unit available for high efficiency and completely satisfactory service under the most exacting conditions.

Two types of Monel Antenna are offered, the MM which is standard for most installations and the USM which is a heavy duty antenna in 25-foot length only, developed especially for navy use. The MM type and the USM-525 are telescoping and fully adjustable within the maximum and minimum lengths shown. The USM-325 is a jointed non-adjustable antenna.



Details of Locking Clamp

## SPECIFICATIONS AND LIST PRICES

No.	Old No.	Description	Extended Length	Collapsed Length	Base O. D.	Top O. D.	Base I. D.	Weight Each	List Each
MM-313	MM-213	2-sec. telescoping	13'1"	6'9"	.625"	.489"	.555"	2 3/4 lbs.	\$ 65.00
MM-419	MM-119	3-sec. telescoping	19'1 1/2"	6'9"	.750"	.489"	.665"	5 lbs.	90.00
MM-425	MM-225	4-sec. telescoping	24'10 1/2"	6'9"	.875"	.489"	.777"	8 lbs.	120.00
MM-430	MM-330	5-sec. telescoping	30'0"	6'9"	1.063"	.489"	.935"	13 lbs.	150.00
MM-435	MM-335	5-sec. telescoping	35'0 1/2"	7'8"	1.063"	.489"	.935"	15 lbs.	160.00
USM-525	USM-225	4-sec. telescoping	25'0"	7'6"	1.063"	.625"	.932"	12 lbs.	145.00
USM-325		3-sec. jointed	25'0"	9'0"	1.312"	.750"	1.146"	30 lbs.	225.00

(For Base Mountings and Insulators see Pages 9 and 10)

# POLICE DESIGNS

Premax Police Antennas for police and commercial applications are of solid steel of extremely high carbon content, heat-treated and oil-tempered to carefully develop physical properties. Rods of varying diameters, cold-drawn to rigidly held tolerances, are joined securely and permanently into a single graduated length which provides high flexibility, minimum wind resistance and indefinite life. A cadmium plate finish of .001" minimum gives adequate protection against corrosion in all ordinary atmospheres, including marine or salt air exposures.

Where ordinary antennas bend or break under stress of striking tree branches, bridges, garage doors and similar obstructions, Premax Police Antennas merely flex under the stress and return immediately to normal position when the obstruction is passed. This eliminates the usual replacement costs and Premax Police Antennas may easily save their initial cost in a few months.

Premax Police Antennas are available with two styles of bases: Style A has a plain  $1\frac{1}{4}$ " end and fits Premax Mountings K, L, T, and NA. Style B has a  $7/16$ " threaded stud complete with hexagon nuts and lock washer and fits Premax Mountings G or N.

Due to the single piece construction, Premax Police Antenna Rods should be purchased in the nearest standard length for the desired frequency and then cut, if necessary, to the exact length required. Specific lengths can be supplied to order in reasonable quantities.

Premax Police Antenna Rods are also available in polished, hard-drawn Stainless Steel.

## ANTENNA RODS ONLY — LIST PRICES WITHOUT MOUNTINGS

Length	CADMIUM PLATED STEEL				STAINLESS STEEL			
	Style A No.	List Price	Style B No.	List Price	Style A No.	List Price	Style B No.	List Price
72"	AC-172	\$2.50	BC-172	\$3.25	AS-172	\$5.50	BS-172	\$6.25
78"	AC-178	2.75	BC-178	3.50	AS-178	6.00	BS-178	6.75
84"	AC-184	3.00	BC-184	3.75	AS-184	6.50	BS-184	7.25
90"	AC-190	3.25	BC-190	4.00	AS-190	7.00	BS-190	7.75
96"	AC-196	3.50	BC-196	4.25	AS-196	7.50	BS-196	8.25

## ANTENNA MOUNTINGS

**TYPE TA** for attaching Type A Rod to trunk or car body. Lower support is solid brass rod securely jointed to 12" brass tube carrying antenna. Upper support is 24" brass rod and has adjustable lock permitting proper fitting to contour of car. All insulators are high-tension, white-glazed ceramic cones  $1\frac{1}{4}$ " high. Antenna tube provides maximum 10" adjustment in antenna height. All metal parts heavily cadmium plated.

**TYPE N** Bumper Mount is of heavy gauge steel with  $1\frac{1}{4}$ " high tension cone insulators. Fits Style B Rod.

**TYPE NA** Adjustable Bumper Mount, otherwise similar to Type N but for Style A Rod.

**TYPE K** Adjustable Bumper Mount, similar in design to Type NA but with longer socket tube which permits 10" adjustment in height of Style A Rod.

**TYPE G** Grounded Bumper Mount for Style B Rod for use on grounded or shunt-fed systems.

**TYPE L** is similar to Type K in adjusting feature. Has 6" spacing between insulators giving extra base support. Fits Style A Rod.

**TYPE R** Universal Adjustable Mount. Fits Style A Rod. List, each, \$12.50.

### SPECIFICATIONS AND LIST PRICES OF MOUNTS

Type	Style	List Each
G	Style B	\$ 1.50
N	Style B	4.50
NA	Style A	5.50
K	Style A	8.50
L	Style A	10.00
TA	Style A	15.00
R	Style A	12.50



Type TA



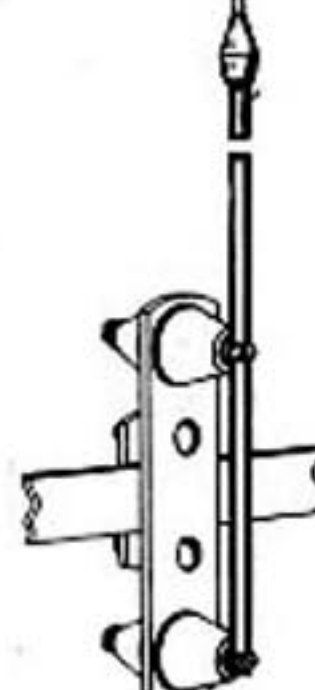
Type G



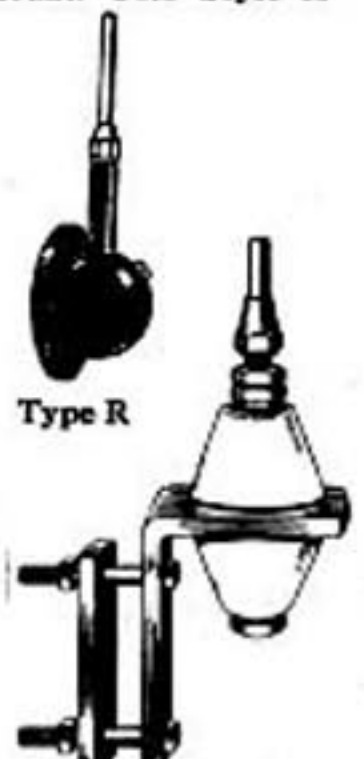
Type N



Type K



Type L



Type NA

Style A  
Style B



# BASES AND ACCESSORIES



Type 1

**BASE INSULATOR TYPE 1**—Heavy duty type, of heavy wet-process brown-glaze porcelain held in compression between hot galvanized malleable iron castings. A Lapp design with compression rating up to 10,000 pounds. Height to top of cone 7". Bolt circle 5 1/4". Weight 7 lbs. Complete with mounting bolts and nuts.

No.	Diameter Top Post	Fits Antennas	List Each
1P-24*	3/8"	518-M, MM-425	\$28.00
1P-24	1 1/16"	AM-124	28.00
1P-30	1 3/16"	224-M, MM-430, MM-435	28.00
1P-44*	1 1/2"	136-M	28.00
1P-45	1 1/16"	AM-336	28.00

\*—Can be used with adapters to fit other sizes of masts.



Type 2

**BASE INSULATOR TYPE 2**—Light design for up to 18' masts or longer lengths if guyed or supported with stand-off insulators. Brown glazed porcelain with galvanized malleable iron top post and base support cemented into insulator. Porcelain diameter 3 1/4". Height to top of porcelain 6". Flange diameter 3 1/4". Weight 4 pounds. Furnished complete with necessary mounting bolts and nuts.

No.	Diameter Top Post	Fits Antennas	List Each
2P-24*	3/8"	318-M, MM-425	\$5.50

\*—Can be used with adapters to fit other sizes of masts.



Adaptor

**ADAPTORS FOR BASE INSULATORS TYPES 1 AND 2**—Short lengths of cadmium plated steel tubing fitted with connection clamp to permit use of standard Type 1, 2 or 6 Base Insulators with other sizes of tubular masts.

No.	Used with Insulator No.	To Fit Antennas	Weight Each	List Each
A-20	1P-24, 2P-24, 6P-24	MM-318 or 3/8" I.D.	1/2 lb.	\$0.50
A-21	1P-24, 2P-24, 6P-24	112-M or 1/2" I.D.	1/2 lb.	0.50
A-24	1P-24, 2P-24, 6P-24	AM-518, MM-418, or 1/2" I.D.	1/2 lb.	0.50
A-40	1P-44, 6P-44	136-M or 1 1/4" I.D.	1/2 lb.	0.50
A-42	1P-44, 6P-44	AM-320, or 1 1/4" I.D.	1/2 lb.	0.50



Type 1-X

**BASE INSULATOR TYPE 1-X**—Same as Type 1 except top post is omitted and top cap tapped with 1/4" No. 16 thread. Used as footing insulator for square or triangular towers, which may be bolted to top cap by standard 1/4" 16 thread cap screw. Furnished with base bolts and nuts but without cap screw.

No. 1-X Galvanized Weight 7 lbs. List Price \$28.00



Type 6

**BASE INSULATOR TYPE 6**—For marine, mobile unit, tower platform, roof-top, etc. Simple to install, neat and compact. Lead-thru construction permits antenna connections below deck. General construction similar to Type 1. Flanges are 6" diameter with six bolt holes on 5" circle. Furnished with center stud and flange bolts for deck 1/2" to 3" thick. Total height above deck to base of post 4 1/2". Weight 11 1/2 lbs.

No.	Diameter Top Post	Fits Antenna	List Each Galvanized	List Each Bronze
6P-24*	3/8"	318-M, MM-425	\$25.00	\$45.00
6P-24	1 1/16"	AM-124	25.00	45.00
6P-30	1 3/16"	224-M, MM-430, MM-435	25.00	45.00
6P-44*	1 1/2"	136-M	25.00	45.00
6P-45	1 1/16"	AM-336	25.00	45.00

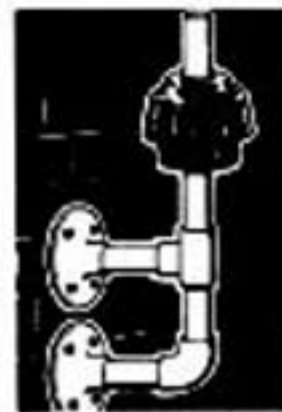
\*—Can be used with adapters to fit other sizes of masts.



Bushing

**DECK BUSHING**—Of brown-glazed porcelain cemented into hot galvanized malleable flange which bolts through rubber gasket to the deck or other surface. Provides additional support for antenna in lieu of guying.

No.	I.D.	Total Length	Above Deck	Flange Diameter	Weight Each	List Each
5D-24	3/8"	6"	3"	4"	2 lbs.	\$ 8.00
5D-40	1 1/8"	8"	4 1/2"	4 1/2"	3 1/2 lbs.	11.00
5D-56	1 1/2"	8 1/2"	4 1/2"	5 1/2"	4 1/2 lbs.	14.00



Wall Mount

**WALL MOUNT INSULATOR**—Firm, serviceable side mounting which fastens securely to wall or post. Brown-glaze porcelain insulator similar to Type 2. Metal parts hot galvanized malleable iron. Stand-off Insulator Type 3 or 4 suggested for use with this mounting.

No.	Post Diameter	Weight	List Each
2-WP	3/8"	5 lbs.	\$8.00



Wall Bracket

**WALL BRACKET**—A heavy steel bracket designed for mounting Vertical Radiators on side walls, parapets or posts. Drilled to fit Premax Type 1 and Type 2 Base Insulators. Cadmium plated. Stand-off Type 3 or 4 suggested for use with this mounting, in order to give additional support.

No.	Weight	List Each
WB-1	7 lbs.	\$4.50

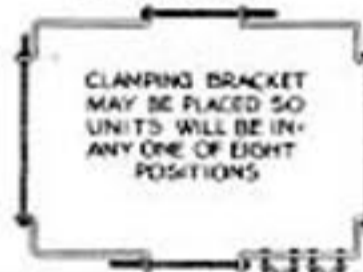
Insulator not included.



Parapet Support

**PARAPET SUPPORT**—For masts or radiators on fire walls or parapet. Stands strain from any direction. Fits parapet or wall up to 20 inches. Holds masts from 1/2" to 2" diameter. Also used with Hi-Q Antenna by addition of extra clamps No. PSC.

No.	Description	Weight	List Each
PS-18	Parapet Support	8 lbs.	\$5.00
PSC	Extra Clamps	1 lb.	1.00



Chimney Mounting Bracket

**CHIMNEY MOUNTING BRACKET**—A heavy steel, cadmium-plated bracket which fits all chimneys from 18" to 24" square, for Hi-Q or other verticals or masts. May be used on larger chimneys by addition of extra threaded rods No. CBF. Two brackets needed for each installation.

No.	Description	Weight	List Pair
CB-1	Chimney Bracket	14 lbs.	\$7.00
CBF	Extra 24" Rods	1 lb.	.50
CBX	4" Extension Bracket for Overhang Chimneys	2 lbs.	3.00



Adjustable Anchor

**ADJUSTABLE ANCHOR GUY**—A strong, simple anchor for use with guys or aerials. Of rust-proof steel with eyebolt and wing nut which makes tightening easy.

No.	Description	Weight	List Each
GA-1	Adjustable Anchor	1/2 lb.	\$0.15



Mounting Clip

**BRONZE MOUNTING CLIPS**—Formed bronze clips or clamps for mounting horizontal elements or vertical antennas on standard stand-off insulators. Also used for connecting feed wires and transmission lines to antenna or elements. 1/2" wide, cadmium plated.

No.	Description	List Price Pair
218-C	Fits 1" tube	\$0.20
418-C	Fits 1/2" tube	0.20



Guy Wire

**GALVANIZED GUY WIRE**—50-foot coils No. 16 Galvanized Steel Guy Wire; tough, non-stretching, annealed for handling. A very satisfactory low-cost guy wire.

No.	Description	Weight	List Price
G-50	50-foot coils	2 1/2 oz.	\$9.25

# INSULATORS & ACCESSORIES



Type 3

**TYPE 3 INSULATORS**—Heavy duty design for stand-off support of vertical antennas, etc., or for use in pairs as complete mounting of vertical or horizontal elements. Galvanized or brass fittings attached to threaded studs cemented in brown-glazed porcelain body. Porcelain 3" diameter. Height to top of porcelain 3". Weight 2 pounds each.

No.	Fits Tube O. D.	List Price Each	
		Galvanized	Polished Brass
2S-16	1/2"	\$3.00	\$ 7.50
2S-20	5/8"	5.00	7.50
2S-24	3/4"	5.00	7.50
2S-28	7/8"	5.00	7.50
2S-32	1"	5.00	8.00
2S-34	1 1/16"	5.00	8.00
2S-40	1 1/4"	5.00	9.00
2S-42	1 1/2"	5.00	9.00
2S-48	1 3/4"	5.00	10.00
2S-52	1 7/8"	5.00	10.00



Type 4

**TYPE 4 INSULATORS**—Similar in design to Type 3 but with double clamp. Top clamp sizes available in same range as Type 3. Bottom clamp made to fit all standard pipe sizes from 1/4" to 3". Available in galvanized or polished brass. Prices on request. State size of clamps desired, both top and bottom.



Type 7

**TYPE 7 INSULATORS**—A low-priced but substantial stand-off mounting with wide application. Galvanized malleable iron frame enclosing white porcelain split bushing. Height 6". Weight, each, 2 1/2 pounds.

No.	Fits Tube O. D.	List Price
7S-24	7/8"	2.00
7S-28	1"	2.00
7S-32	1 1/8"	2.00



Type 8

**INSULATED MOUNTING CLAMP TYPE 8**—A better than ordinary insulated mounting support for horizontal elements, verticals, etc., in many of the new arrays. Galvanized malleable iron frame with white porcelain split bushing. Overall width 3 1/2". Weight each 1 pound.

No.	Fits Tube O. D.	List Price
8C-24	7/8"	2.00
8C-28	1"	2.00
8C-32	1 1/8"	2.00

(Other sizes available to order)



Type 9

**INSULATED MOUNTING CLAMP TYPE 9**—A simple, more compact mounting for horizontal elements, verticals, etc., as suggested for Type 8. Gray iron galvanized frame with white porcelain split bushing. Height to center 2". Weight each 1 pound.

No.	Fits Tube O. D.	List Price
9C-24	7/8"	1.75
9C-28	1"	1.75
9C-32	1 1/8"	1.75



Insulator Anchor

**INSULATOR ANCHOR**—Offers a simple and practical method of supporting lead-ins, ground wires, etc., or anchoring guy wires. Made of formed steel with white porcelain insulator. Overall length about 6 inches.

No.	Description	Weight	List Each
1A-6	Insulator Anchor	10 ea.	\$0.15



Tension Insulator

**TENSION INSULATOR**—White porcelain insulator with stiff coil spring attached. Provides tension in light guy lines with adequate insulation. Weight 4 ounces.

No.	Description	List Each
TI-1	Tension Insulator	\$0.10



Insulator Bracket

No.	Description	List Each
IB-8	Insulator Bracket	\$0.10

**4-POSITION INSULATOR BRACKET**—Formed steel with porcelain knob insulator adjustable to four positions. Overall length 8 inches. Green enamel finish. A fine offset insulator. Weight 8 ounces.

## Give Your Antenna a Chance

**GIVE YOUR ANTENNA A CHANCE** against the weather. A few simple, protective measures will pay dividends in longer life and more dependable performance.

**STEEL RUSTS**, wood parts check and weaken, soldered and mechanical joints corrode when exposed to the alternate action of sun and rain, heat and cold. The most advanced methods of protection will not avail indefinitely.

**PREMAX ELEMENTS** are prepared in the most practical manner possible to provide basic protection against rust and corrosion while maintaining the necessary electrical and mechanical factors. The cadmium plating applied on steel units corresponds with U. S. Bureau of Standards specifications for exposures of one to five years or more under average climatic conditions. It must be remembered, however, that some atmospheres are considerably more severe in corrosive action than others. Sea air, for instance, commonly considered highly corrosive, is not nearly so injurious to most metals as industrial atmospheres where the high sulphur content

combines with moisture to form highly corrosive sulphuric acid.

Depending on your location, therefore, your antenna will be subject to greater or less corrosive action which will affect both its stability and its performance. A few simple precautions will do much to prolong its life.

- 1—Protect all electrical connections, such as clamp contacts, cable joints, etc., with a wrapping of tape or coating of weatherproof paint or cement. Keeping out moisture, keeps out corrosion.
- 2—Paint all wood parts thoroughly, preferably before assembly, using a vegetable base rather than a metal base paint.
- 3—After all adjustments are made, paint the entire beam, elements and all, with a good weatherproof paint or enamel. Then check it occasionally, especially in Spring and Fall, to halt any starting corrosion and put your antenna in shape for bad weather ahead.

An hour or so of prevention is worth a week or two wrestling with poor DX due to corroded, high resistance contacts.

# GROUND RODS

Premax Ground Rods are made of copper plated or cadmium plated steel or copper-headed with bright steel shaft, in  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ " diameters, and in 4', 5', 6' and 8' lengths. All rods have one end pointed for easy driving.

They are made in four styles as illustrated: Style D with spring clamp; Style G with screw clamp; Style P with securely attached pigtail wire; Style H with drilled hole.

## CADMIUM PLATED GROUND RODS

Size	Style D Spring Clamp	Style G Screw Clamp	Weight Per 100	List Per 100
4' x $\frac{3}{8}$ "	No. CD-4	No. CG-4	140 lbs.	\$45.00
5' x $\frac{3}{8}$ "	No. CD-5	No. CG-5	200 lbs.	\$60.00
6' x $\frac{3}{8}$ "	No. CD-6	No. CG-6	240 lbs.	70.00

## COPPER PLATED GROUND RODS

Size	Style D Spring Clamp	Style G Screw Clamp	Weight Per 100	List Per 100
4' x $\frac{3}{8}$ "	No. RD-4	No. RG-4	140 lbs.	\$45.00
5' x $\frac{3}{8}$ "	No. RD-5	No. RG-5	200 lbs.	\$60.00
6' x $\frac{3}{8}$ "	No. RD-6	No. RG-6	240 lbs.	70.00

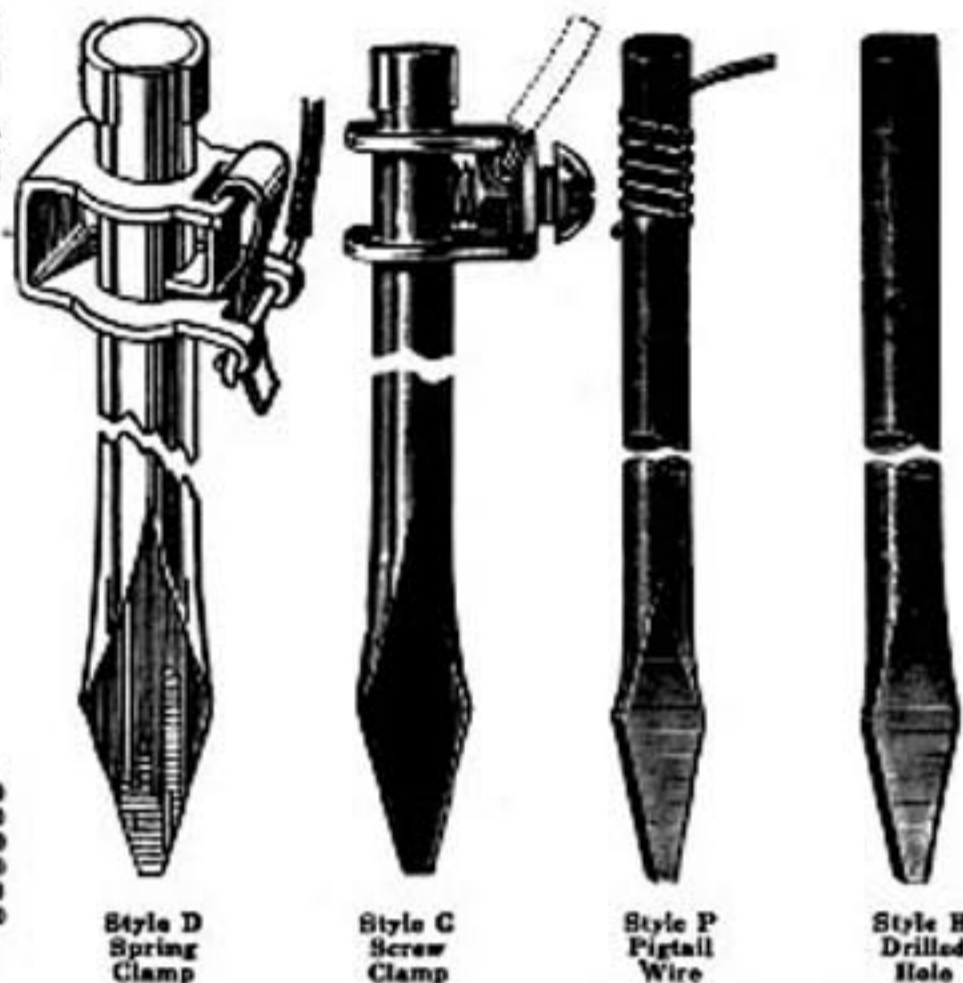
## COPPER HEADED GROUND RODS

Size	Style D Spring Clamp	Style G Screw Clamp	Weight Per 100	List Per 100
4' x $\frac{3}{8}$ "	No. SD-4	No. SG-4	140 lbs.	\$46.00

## HEAVY DUTY GROUND RODS

Size	Weight Per 100	Style G		Style H		Style P	
		No.	List	No.	List	No.	List
5' x $\frac{1}{2}$ "	340 lbs.	G-85	\$100.00	H-85	\$100.00	P-85	\$120.00
6' x $\frac{1}{2}$ "	400 lbs.	G-86	110.00	H-86	110.00	P-86	130.00
8' x $\frac{1}{2}$ "	540 lbs.	G-88	140.00	H-88	140.00	P-88	160.00
6' x $\frac{3}{4}$ "	625 lbs.			H-106	165.00	P-106	190.00
8' x $\frac{3}{4}$ "	830 lbs.			H-108	210.00	P-108	230.00
8' x $\frac{1}{2}$ "	1200 lbs.			H-128	300.00	P-128	325.00

Above prices per hundred and apply on either cadmium plated or copper plated rods. Please specify on order.



## PREMAX ALL-STEEL TELESCOPING VERTICAL ANTENNA

Here's a vertical antenna that can be erected anywhere—on the ground or roof-top! Requires small space! Does away with unsightly overhead wires! Easy to erect! Efficient! Enduring! Locate it in a spot farthest removed from local noise sources, and the only visible indication of the complete antenna is the tall, straight tubular steel mast, neatly finished and heavily cadmium plated for indefinite durability and efficiency.

Consists of four sections of smooth steel tubing, telescoping one within the other into a single 6' unit for handling and shipping. When extended for use, the mast is 24' high, each section being locked in position by the unique Premax locking clamp. The insulator is a heavy wood unit, attractively finished, and which also serves to mount the mast securely on the 5' steel ground post or roof mounting. Connections are made to the ground post and mast and carried underground or overhead to the receiving set.

Complete set consists of mast, ground post, insulator unit, and full instructions for erecting. Packed in individual shipping carton.

### SPECIFICATIONS AND LIST PRICES

No. VA-24-G (Illustrated at left) Premax Vertical Antenna Kit, ground type, including 4-section mast, ground post and base insulator. Weight 20 pounds.	LIST \$12.00
No. VA-24-R (Illustrated at right) Premax Vertical Antenna Kit, roof type, including 4-section mast, roof mounting and insulator. Weight 20 pounds.	LIST \$12.00

## TELESCOPING TUBULAR-STEEL MASTS

Premax Telescoping Steel Masts are built up of individual sections of tubular steel, telescoping one within the other. They can be firmly locked at any desired height, yet collapsed to a single 3½' unit for convenience in handling and erecting. All sections are uniform and interchangeable, permitting any mast to be converted into a longer length by the simple addition of another base section. All sections are finished in green baked enamel.

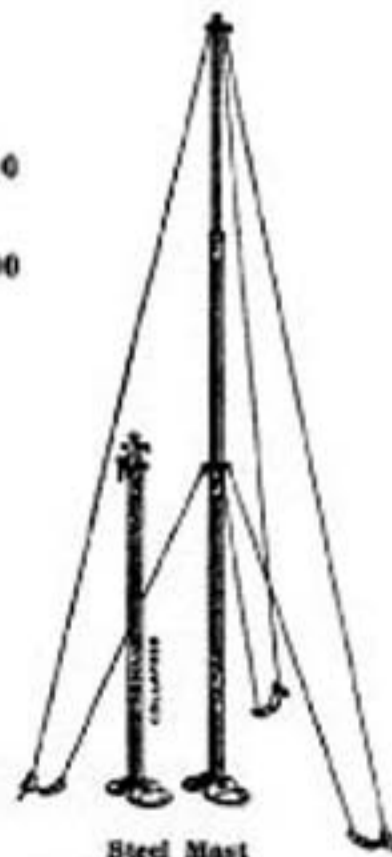
No. M-42—1-section mast; 3½'; weight 2 lbs.	LIST \$1.50
No. M-84—2-section mast; extends to 7'; weight 5 lbs.	LIST \$2.50
No. M-120—3-section mast; extends to 10'; weight 7 lbs.	LIST \$3.50
No. M-156—4-section mast; extends to 13'; weight 10 lbs.	LIST \$4.50



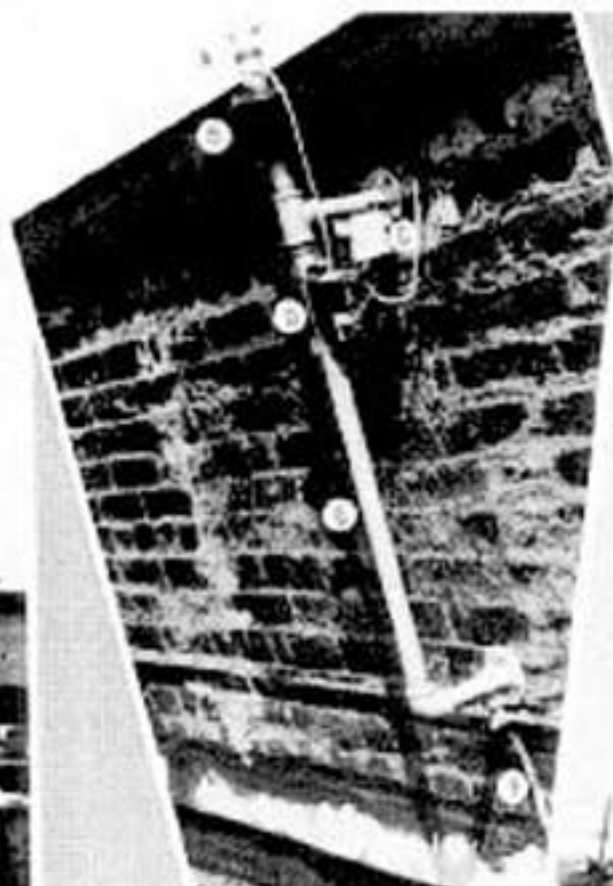
Vertical Antenna



Vertical Antenna Roof Type



Steel Mast



**SOME PREMAX**



**INSTALLATIONS**

