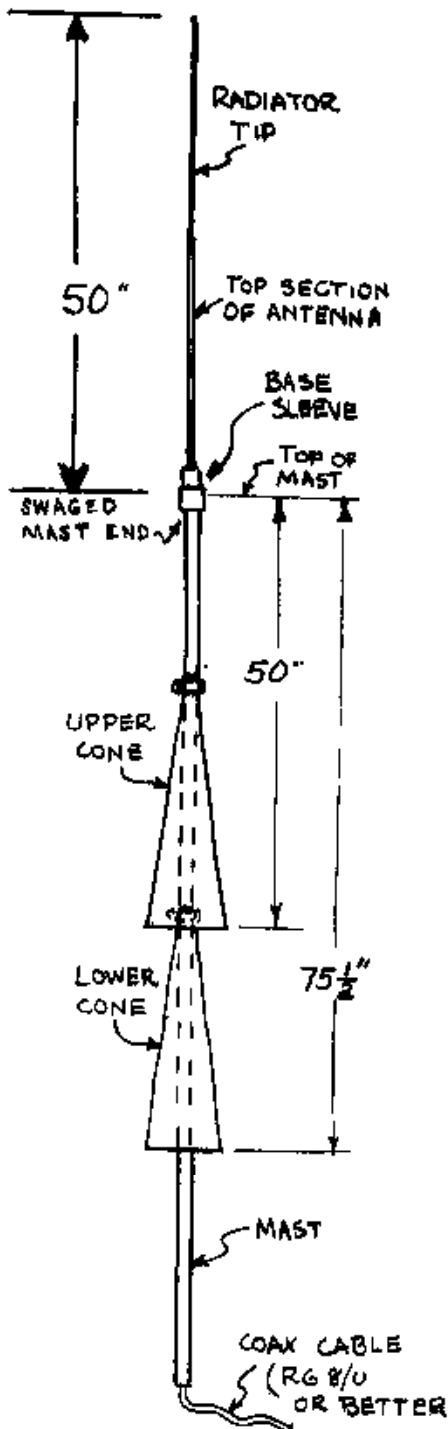


AEA ADVANCED ELECTRONIC APPLICATIONS, Inc.



ASSEMBLY DRAWING

ISOPOLE* 2 Meter

ASSEMBLY INSTRUCTIONS

Thank you for your interest in the new AEA ISOPOLE* 143-149 two meter vertically polarized base station antenna. The unique double-cone construction of this antenna truly represents a breakthrough in vertically polarized antenna design, providing essentially total isolation of the radiating elements from the feedline and supporting structure.

This antenna is pre-tuned at the factory and should require no field tuning as long as the assembly instructions are followed with reasonable care.

1. The AEA ISOPOLE* is designed to mount atop a length of standard TV mast with a nominal outside diameter of $1\frac{1}{4}$ inch (smaller diameter masts may also be used, such as standard "3/4 inch" pipe, with a nominal outside diameter of 1.05 inch). The maximum mast length is unlimited; however, the minimum length should not be much less than 8 feet to facilitate the attachment of the mast to any superstructure.
2. Slide the lower cone along the mast until the bottom lip of the cone is 75-1/2 inches from the top of the mast as shown in the assembly drawing. Be sure that the surface of the mast is clean and shiny where the cone is to be clamped. Secure the cone in this position with one of the two stainless steel hose clamps provided, holding the open end of the cone in a symmetrical position around the mast as the clamp is tightened.
3. Slide the second cone along the mast until the bottom lip is 50 inches from the top of the mast as shown in the assembly drawing. Note that the upper cone overlaps the clamp on the lower cone. Secure the upper cone with the second hose clamp, again having the open end of the cone in a symmetrical position around the mast as the clamp is tightened.

4. Pass the feedline cable, with PL-259 coax connector attached, through the mast from the bottom to the top.
5. Attach the PL-259 connector to the female coax connector recessed within the base sleeve. It is good practice to apply a generous coating of silicone grease to the threads of the connector before attachment. Tubes of silicone grease are available from most amateur radio supply houses.
6. See that the top 1-1/2 inch portion of the mast is clear of burrs and shiny; then seat the base sleeve firmly over the top of the mast and tighten the two set screws.
7. Slide the upper radiator tip rod into the upper radiator tube and hold with the small knee clamp. Use silicone grease in the joint to improve the sealing of the joint.

The antennas should be mounted so as to clear surrounding objects as much as possible. While a high location is most desirable, be sure to mount the antenna so that it will neither touch nor be able to fall into neighboring power wiring.