



# ANTENNA EXPERTS

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Model # AC9-150

136 – 174 MHz.

9 dBi. Gain

## FIBERGLASS COLLINEAR ANTENNA – INSTALLATION MANUAL

### NOTICE:

Installation, maintenance or dismantling of the antenna system requires qualified and experienced personnel. Antenna Experts antenna Installation instructions have been prepared and are meant for skilled personnel only.

Antenna Experts disclaims any liability or responsibility as a result of improper or unsafe installation practices.

### MATERIALS:

Following materials are used for the fabrication of Antennas and its accessories.

Support Pipe:	6063T6 Aluminum.
Radiating Elements:	Brass
Radome:	Fiberglass
Mounting Hardware:	All Stainless Steel.
Fasteners:	All Stainless Steel.
Connector:	Silver-plated brass body & Gold plated pin.
Insulator:	Nylon.

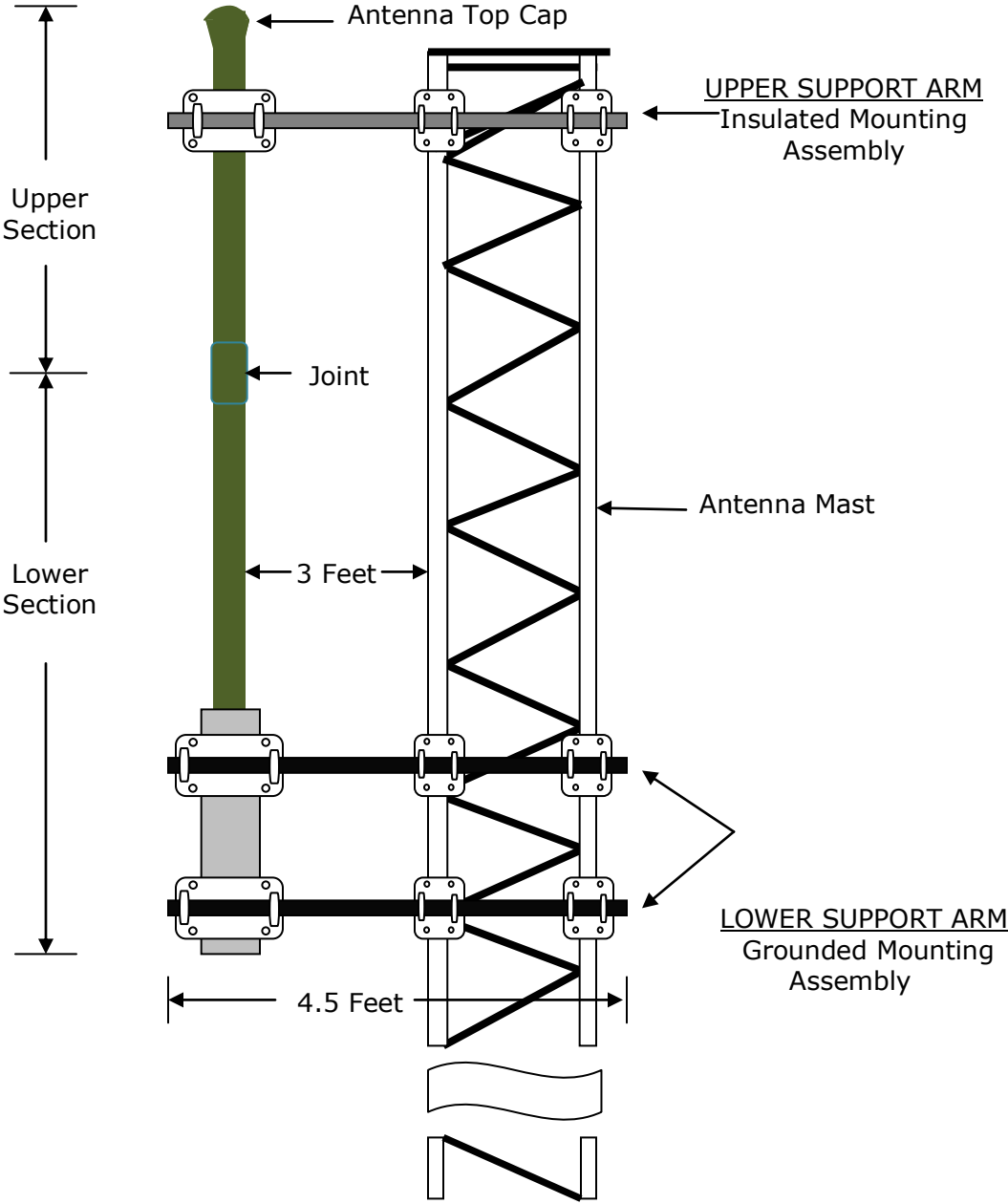
### PACKING LIST:

<u>Sl. No.</u>	<u>ITEM/DESCRIPTION</u>	<u>QUANTITY</u>
1.	Antenna Fiberglass Collinear in two (Upper and Lower) sections.	1 Each.
2.	LOWER SUPPORT - Grounded Mounting Assembly with 1.5 Inch diameter, 4.5 Feet long Aluminum Pipe fitted with Three crossover plate clamps set.	2 Nos.
3.	UPPER SUPPORT - Insulated Mounting Assembly with 1.5 Inch diameter, 4.5 Feet long Nylon Rod fitted with Three crossover plate clamps set.	1 Each.
4.	Installation Manual.	1 Each.
5.	Test Report.	1 Each.

### INSTALLATION INSTRUCTIONS:

1. The antenna is supplied in two sections for ease of handling and shipping.
2. Unpack the Collinear antenna and mounting hardware from the packing box and remove the plastic sleeve/tube from the fiberglass enclosure.
3. A serial number sticker is provided at the bottom of lower section and the top of upper section of each antenna. Before attempting to assemble an antenna, make sure that the lower and upper sections of the antenna bear the same serial number markings on both lower and upper sections of the antenna.

### Installation Diagram of AC9-150 Collinear Antenna



4. The TOP of lower sections of antenna having external threads and the bottom of upper section having internal threads. The external thread is protected with a white thread protecting nylon cap during handling and transit. Remove the WHITE CAP to prepare for antenna assembly.
5. For assembling the antenna, align the thread portion of upper and lower section of the antenna and tighten the joint to complete the antenna assembly.

6. Seal the fiberglass antenna joint against moisture ingress with a sealing tape.
7. The antenna is designed to mount the antenna on the side of a tower.
8. The side mounting assembly is designed for mounting the antenna on triangular tower having round leg of 1.5-2.0 Inches (38-52 mm) in diameter.
9. Three-crossover plate clamp sets are fixed on each Grounded Support Pipe and Three-crossover clamp set are fixed on Insulated Support Pipe for attachment of antenna to the tower.
10. Install the Collinear Antenna on the side of the tower, by using two Grounded Mounting Assembly and one Insulated Support Assembly, supplied with the antenna.
11. The Insulated Mounting Assembly is supplied to hold the antenna from the top. An insulated crossover clamp set is supplied with the antenna. Fix this insulated crossover clamp set on the top of fiberglass portion of the collinear antenna.
12. Take extreme care during Installation that the Collinear Antenna should be minimum 3 FEET away from tower.
13. When the installation of the antenna has been completed, it is necessary to ensure that the installation instructions have been followed in all aspects
14. Connect the antenna feeder cable to the N-Female connector (provided at the bottom) of the Collinear Antenna and secure it with cable ties.
15. Seal the connector against moisture ingress with a sealing tape.
16. Take VSWR reading by using through-line RF Power meter. The VSWR should never exceed 1:1.5.
17. Keep the record of VSWR measurements for future reference.
18. Tighten all nuts and bolts.