



# ANTENNA EXPERTS

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Model AY-420

410 - 430 MHz.

13 dBi. Gain

## TETRA BAND HIGH GAIN DIRECTIONAL YAGI ANTENNA – INSTALLATION MANUAL

### NOTICE:

Installation, maintenance or dismounting 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.

<u>Descriptions/Items</u>	<u>Materials</u>
Yagi Boom and Elements:	6063T6 Powder Coated Aluminum.
Mounting Hardware:	All Stainless Steel.
Fasteners:	All Stainless Steel.
Connector:	Silver Plated Brass body & Gold plated center pin.
Insulator:	TEFLON.
Housing:	NYLON.

### PACKING LIST:

<u>Sl. No.</u>	<u>Item/Description</u>	<u>Quantity</u>
1.	Yagi Antenna complete in assembled condition.	1 Each.
2.	Mounting Clamp complete with all accessories.	2 Nos.
3.	Installation Instructions.	1 Each.
4.	Test Report.	1 Each.

### INSTALLATION INSTRUCTIONS:

1. Unpack the Yagi antenna from the packing box.
2. Antenna is supplied completely in assembled condition. No assembly and field tuning is required for the antenna.
3. Mounting clamp is fitted on the boom of yagi antenna for vertical polarization, behind the reflector.
4. Plane of polarization, vertical to horizontal can be changed by rotating the mounting clamps through 90 degrees.
5. Antenna is suitable for mounting on 1.5"-2" (38-51mm) outer diameter tube. Install the Yagi antenna on suitable round pipe by using two "U" type bolts supplied with the antenna.
6. Connect the flexible RF coaxial cable like LMR-200 or CNT-200 to the N-female termination of yagi antenna and secure it with cable with cable ties.
7. Seal the connector against moisture ingress with a sealing tape.
8. Make sure that the frequency of the Transmitter / Receiver should be within the frequency band marked on the antenna. Do not operate the antenna other than the specified frequency band of the antenna.
9. Take VSWR reading by using through-line RF Power meter. The SWR should never exceed 1:1.5. Keep the record of VSWR measurements for future reference.
10. Carefully align the antenna in desired direction to obtain maximum signal strength.
11. When the installation of the antenna has been completed, it is necessary to ensure that the installation instructions have been followed in all aspects. Tighten all nuts and bolts.
12. Qualified, skilled personnel to verify proper installation and maintenance should inspect antenna system once a year.