



ANTENNA EXPERTS

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Model AQY-450 330 – 512 MHz. 17dBi Gain

INSTALLATION MANUAL – UHF QUAD YAGI ANTENNA

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.

Yagi Boom and Elements:	6063T6 Aluminum.
Stacking Pipes	6063T6 Aluminum.
Mounting Hardware:	All stainless steel.
Fasteners:	All Stainless Steel.
Connector:	Silver Plated Brass body & Gold plated pin.
Insulator:	TEFLON.
Housing:	NYLON

PACKING LIST:

<u>Sl. No.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
01.	Yagi Antenna complete in assemble condition.	4 Nos.
02.	Mounting Clamp Boom-to-Horizontal cross member (fixed on the Boom).	1 Each.
03.	Phasing Harness Cable complete with connectors.	1 Each.
04.	Horizontal cross member, 1.5 Inch O.D. Aluminum tube.	2 Nos.
05.	Mounting clamps for Horizontal cross member to Vertical Mast suitable for upto 2 Inch Outer Dia tube.	2 Nos.
06.	Cable ties for dressing the Phasing Harness Cable	15 Nos.
07.	Installation Instruction.	1 Each.
08.	Test Report.	1 Each.

INSTALLATION INSTRUCTIONS:

1. Unpack all the hardware of Quad Yagi Antenna from the packing box.
2. The mounting clamps for Boom-to-Horizontal cross member are fixed on the center of boom of each Yagi antenna. Initially these mounting clamps are fixed on the boom for Vertical Polarization.
3. Install all the four Yagi antenna at the end of both Horizontal cross members 1.5 Inch O.D., Aluminum tube, by using four Boom-to-Horizontal cross member mounting clamps (fixed on the boom). Take extreme care during installation that both Yagi antenna on each Horizontal cross member should face the same direction.
4. Assembled both the mounting clamps for Horizontal cross member-to-Vertical mast, in the center of each Horizontal cross member.
5. Install both set of Yagi antenna (Upper and Lower) on the 2 Inch O.D. Vertical mast (not provided), by using the Two Horizontal cross member-to- Vertical mast mounting clamps. Take extreme care during installation that all the Four Yagi antenna should face the same direction and the position of all the four Dipole Feed should face up-word.
6. The Vertical and Horizontal stacking distance each Yagi antenna should be same and equal to approximately 1.6 wavelengths.
7. Connect the N-Male Connectors of Phasing Harness Cable to the N-Female termination of each Yagi antenna and run it along the Boom, Horizontal cross member and than over the Vertical mast and secure with cable tie. Never allow it to run between the Antenna elements.
8. Connect the N-Female termination of the Phasing Harness Cable to the Transceiver cable.
9. Seal the all the connectors against moisture ingress with a sealing tape.
10. Take a SWR reading by using through-line RF Power meter. The SWR should never exceed 1:1.5.
11. Keep the record of SWR measurements for future reference.
12. Carefully align the antenna in desired direction to obtain maximum signal strength.
13. Tighten all nuts and bolts.