



ANTENNA EXPERTS

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SD9-450

406-512 MHz.

9 dBd. Omni Gain

OMNI-DIRECTIONAL STACKED DIPOLE ARRAY - 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.

Support pipe and Radiating Elements:	6063T6 Aluminum.
Mounting Hardware:	All stainless steel.
Fasteners:	All stainless steel.
Connector:	Silver-plated brass body & Gold plated pin.
Insulator:	TEFLON.

PACKING LIST:

<u>Sl. No.</u>	<u>ITEM/DESCRIPTION</u>	<u>QUANTITY</u>
1.	Folded Dipoles Complete with Phasing Harness Cable.	8 Nos.
2.	Aluminum Central Support Pipe 2 Inches Dia.	2 Nos.
3.	Dipole Holding Brackets (fitted on the support pipe)	8 Nos.
4.	Center Coupling to Join the support pipe (fixed on the support pipe).	1 Each.
5.	Mounting Clamps to Mount the Antenna on the Mast.	2 Nos.
6.	Allen Key to Tight the Dipole on the Dipole Holding Brackets.	1 Each.
7.	Installation Manual.	1 Each.
8.	Test Report.	1 Each.
9.	Cable Ties.	15 Nos.

INSTALLATION INSTRUCTIONS:

1. Unpack the dipoles, support pipes and mounting clamps from the packing box.
2. Assembled the central aluminum support pipe with the help of center coupling bracket by aligning a red sticker marked "ALIGN THIS ARROW"
3. On visual inspection of the dipoles and dipole holding brackets, the marked position of each dipoles (DIPOLE-1, DIPOLE-2, DIPOLE-3, DIPOLE-4, DIPOLE-5, DIPOLE6, DIPOLE-7 and DIPOLE-8) with corresponding position on dipole holding brackets can be seen.
4. Assemble the EIGHT dipoles on the mounting brackets with the help of Allen Key, as per marking on the dipoles, taking care to point red marks on the dipoles, always up. Also a sticker marked "THIS SIDE UP" is pasted on the each dipole. The arrow of all the EIGHT stickers must be facing upwards direction.
5. Dress the phasing harness cable along the length of aluminum pipe and secure it with supplied cable ties.
6. Install the Antenna on the Mast with the help of supplied Mounting Brackets.
7. Please note that to obtain 9 dBd. Omni directional radiation pattern, the EIGHT dipoles should be 90 degree apart to each other.
8. The vertical stacking distance between EIGHT dipoles is critical. It is factory adjusted to obtain maximum gain. No attempt should be made to alter the positions of the dipoles.
9. Connect the antenna feeder cable to the N-Female connector of the phasing harness cable and secure it with cable ties.
10. Seal the connector against moisture ingress with a sealing tape.
11. Take VSWR reading by using through-line RF Power meter. The VSWR should never increase 1:1.5.
12. Keep the record of VSWR measurements for future reference.
13. Tighten all nuts and bolts.