

# Operating Manual

# COMET ANTENNA

## Model: DS-150S

Wide Band Discone Antenna  
For: 25 ~ 1500MHz

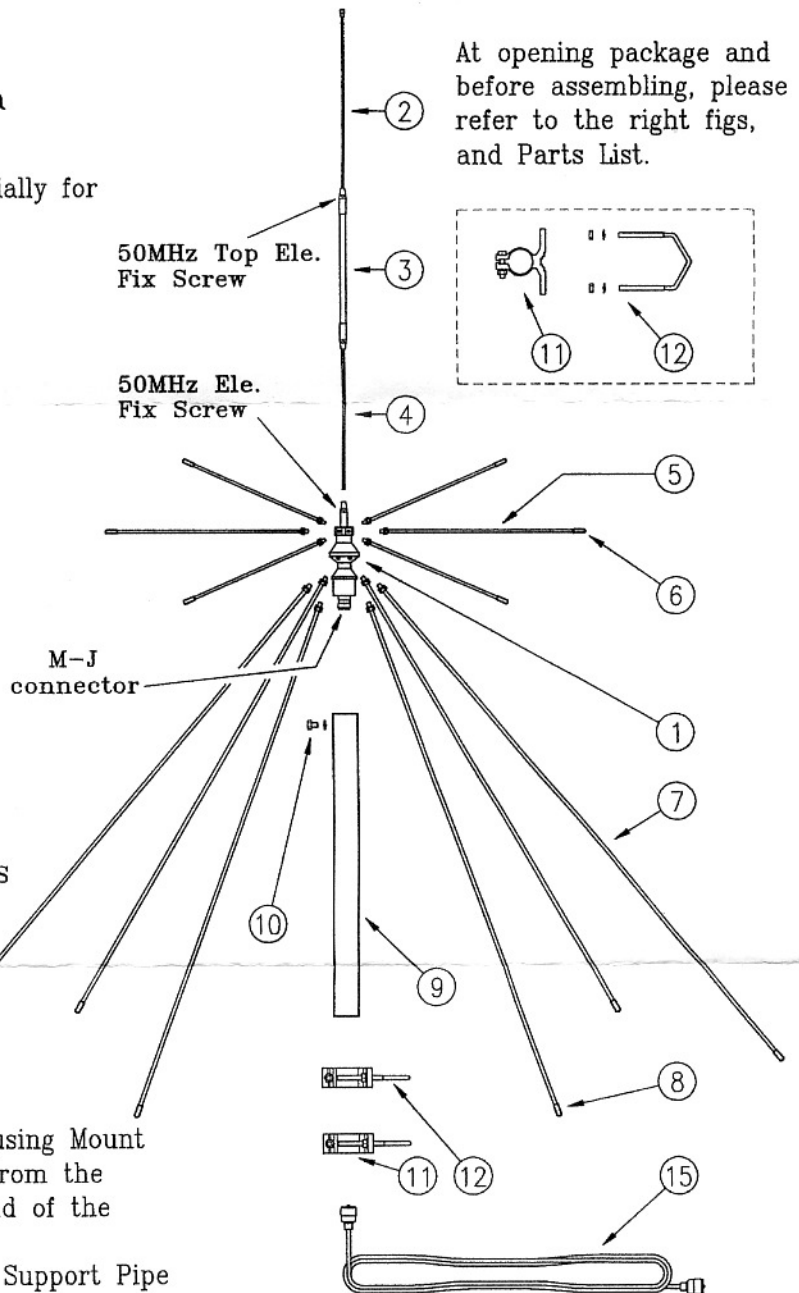
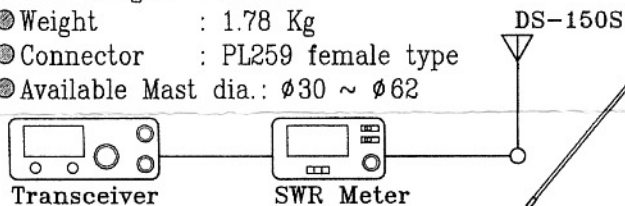
Please read through this Operation Manual initially for correct assembling and proper operation.

### Features:

- DS-150S is extremely wide band discone antenna, which allows TX operation at 50, 144, 430, 800, and 1200MHz bands.
- All hardwares are made of anti-corrosive stainless steel. Light weight and compactly designed discone for easy mounting.

### Specifications:

- RX Frequency : 25 to 1500MHz
- TX Frequency : 50, 144, 430, 800, 1200MHz
- Gain : 5.12 dBi
- Max. Power : 100 W
- Impedance : 50 ohms
- V.SWR : Less than 1.5  
(at center of TX-frequency)
- Max. Length : 1.43 m
- Weight : 1.78 Kg
- Connector : PL259 female type
- Available Mast dia.:  $\phi 30 \sim \phi 62$



At opening package and before assembling, please refer to the right figs, and Parts List.

### Assembling Works:

- 1) Please mount Support Pipe onto your Pole, using Mount Bracket Assembly and U-Bolt. The distance from the low-end of the Mount Bracket to the low-end of the Support Pipe is to be 3cm approximately.
- 2) Coax.cable(W/PL-259 connector) through the Support Pipe and assemble to the Power Feeding Section. Please cover the connector joint part by the Self-Melting Tape, prolonging twice as long, for complete water-proof.
- 3) Then, mount the Power Feeding Section on the Support Pipe, and assemble it with Hex Bolt and Sp.Washer.
- 4) Assemble 6 Disc Element(with Caps.) to the Power Feeding Section and lock them with Nuts tightly.
- 5) Please confirm again the tight-fastening of each screws, bolts and nuts.
- 6) Finally, assemble 6 Cone Elements(with Caps.) to the Power Feeding Section, and lock them with Nuts firmly.

### Parts List:

No.	Parts Name	Qty.
1	Power Feeding Section	1 pce.
2	50MHz Top Element	1 pce.
3	50MHz loading Coil	1 pce.
4	50MHz Lower Element	1 pce.
5	Disc Element W/Nut	6 set
6	Disc Cap	6 pce.
7	Cone Element W/Nut	6 set
8	Cone Cap	6 pce.
9	Support Pipe	1 pce.
10	Fix Bolt & Sp.Washer	1 set
11	Mount Bracket, Nut & Sp.Washer	2 set
12	U-Bolt, Nut & Sp.Washer	2 set
13	Self-Melting Tape	1 pce.
14	Hex. Wrench	1 pce.
15	Coax.Cable RG-58A/U 20m	1 set

### How to adjust 50MHz TX-Frequency:

Pre-set center frequency is 51.0MHz.

- 1) Connect Transceiver, SWR Meter and DS-150S.
- 2) Unfasten the Screw at 50MHz Top Element. Then, adjust length of the Top Element, watching SWR Meter. Lower frequency-longer, and higher-shorter.
- 3) Frequency change per each 1cm is 0.6MHz.
- 4) When much higher frequency is proposed, you can cut off the low-end of the Top Element.

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