

# Operating Manual

## Model: UHV-4

### Multi Band Mobile Antenna

For: 28MHz, 52.5MHz, 146MHz & 446MHz

Many thanks for your best choice of our products.

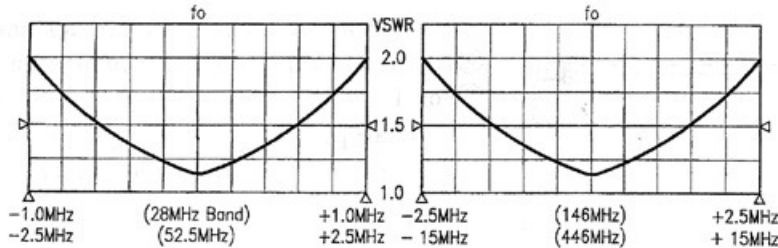
#### For your safety use:

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

At opening package and before assembling, please check all components are involved.

#### Specifications:

- Type : 28/50MHz  $1/4\lambda$  reduction  
146MHz  $1/2\lambda$ , 446MHz  $5/8\lambda \times 2$
- Gain : 2.15dBi(146MHz)/5.5dBi(446MHz)
- Max. Power : 120W/SSB(28MHz), 200W/SSB(50/146/446MHz)
- Impedance : 50  $\Omega$       ● V.SWR : Less than 1.5
- Connector : PL-259
- Max. Length : 1.34 m      ● Weight : 610 g



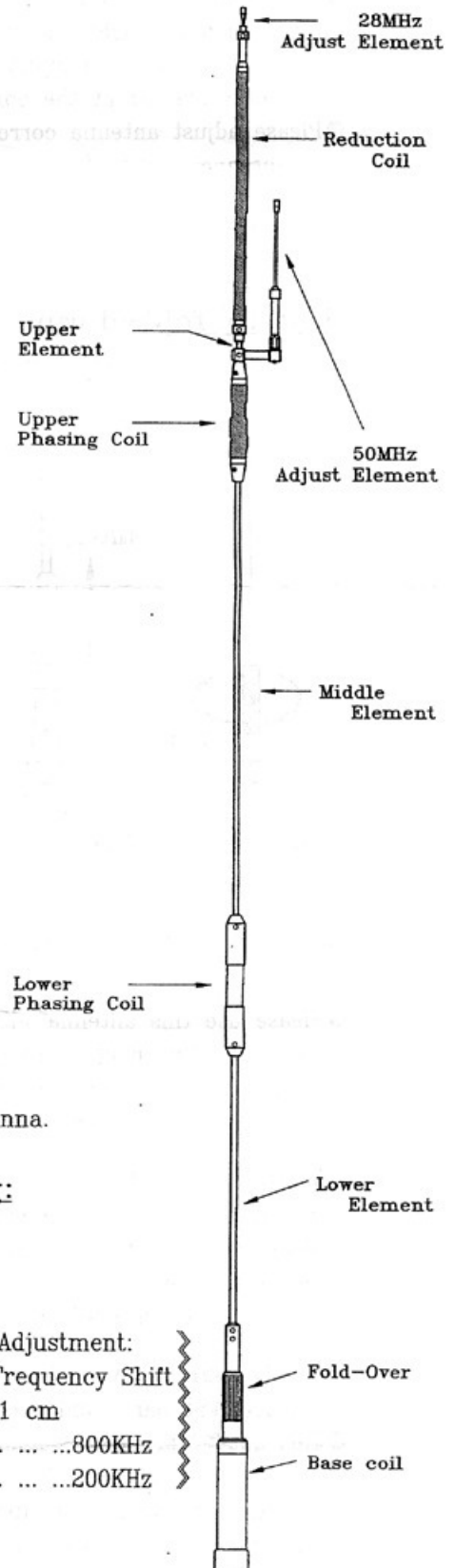
#### Features:

- The UHV-4 combines 28/50MHz capability in a single antenna. 1.5:1 SWR range is narrower than single band antennas.
- 6M and 10M SWR adjustments are independent of each other. 2M/70cm is pre-tuned and not adjustable.
- The fold-over hinge is convenient for entering garages, parking structures, drive-thru's etc... without the need to remove the antenna.

#### Note & Remarks on mounting and positioning:

- The UHV-4 requires an S0-239 mount connector.
- If using a magnetic mount, be sure it is strong enough to hold the UHV-4 antenna.
- Mount the UHV-4 away from other antennas or metal objects. Due to being a  $1/4$  wave on 10/6M, the UHV-4 requires a sufficient ground plane. If high SWR is noticed, reposition the antenna until good SWR is found.
- The UHV-4 has been designed for best performance when attached to a well grounded lip mount rather than a hole drilled in a roof/trunk.

Element Adjustment:  
 Approx. Frequency Shift  
 by each 1 cm  
 28MHz ... ..800KHz  
 50MHz ... ..200KHz



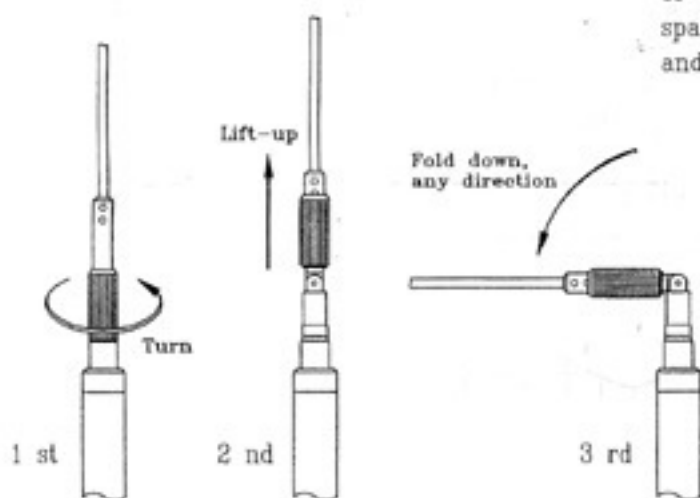
## Note & Remarks on handling and driving:

- Pay special attention not to stick eyes and body while dismounting of antenna or fold over/down of element.
- Do not touch antenna while transmitting as it become hot enough to burn your fingers.
- Please confirm tight fastening of connector and set screws of antenna. Loosening and falling off will lead to personal injury and property damagr.
- Do not drive car at the condition of loosened Fold-Over or fold-down of element.
- Please adjust antenna correctly. Irregular VSWR will lead to heat-up, break-down or power-down of antenna.

## How to adjust antenna:

- ① The 146/446MHz band isn't adjustable.
- ② Frequency control can be done by adjusting the length of each Adjust Elements, extending or cutting little by little. Please use standard spanner involved in the package for unfastening and fastening of fix screw of element.

## How to fold-down the antenna:



## How to use:

- ① Please confirm tight fastening of each set screws by using standard spanner.
- ② Tighten antenna on base connection.
- ③ For better transmission, set antenna at vertical-position as much as possible.
- ④ Please confirm VSWR while transmitting.

## Note & for operation:

- This antenna is for amateur radio operator, Do not use other than for the purpose of antenna.
- Please use this antenna within the standard and specifications described in this manual. Failure to this may cause heat up and break down of the unit.
- Whatever damage and the malfunction which is due to the repair and the reorganization at end-user itself occur, it doesn't take the responsibility.

### [Maintenance]

- ☆ If mal-function is occurred, stop operation and try to find the reason. If it is not settled, please contact the store/shop where you purchased the antenna or our Engineering Department.
- Before driving start, please check the VSWR is in correct position.
- Routinely, please confirm tight fastening of each Set Screws.

### [Customer Service]

- Replacement parts and accessories are available at our dealer and our factory.
- This quality product is manufactured under strict quality control. Please contact the store/shop for those damaged by transportation.
- For further information about assembling work and other technical matters, please contact to our Engineering Department.

COMET CO.,LTD.

4-18-2 TSUJI, MINAMI-KU, SAITAMA-SHI, SAITAMA, 336-0026 JAPAN

TEL:048-839-3131 FAX:048-839-3136

URL: <http://www.comet-ant.co.jp>