



## PHANTOM ELITE® ANTENNA

### Installation Instructions

#### CONGRATULATIONS ON YOUR PURCHASE OF THE PHANTOM ELITE® ANTENNA.

The Phantom Elite is a patented antenna product offered exclusively by TE and its affiliates. Like two antennas in one, the Elite features a wideband, no tune, field-diversity design providing the same benefits of the standard Phantom in a striking aerodynamic shape.

#### MOUNTING INSTRUCTIONS

For optimum performance, the mounting area must be free of metal obstructions within half electrical wavelength apart. This is approximately 12.8" at 450 MHz and 7" at 800 MHz. Any object within this range may detune the antenna.

The Phantom Elite has a unique shape that when installed correctly, has the distinct aerodynamic look of a vertical stabilizer on an aircraft. This shape has what is known as a leading edge (the more angled edge) and a trailing edge. For the best installed look, the leading edge should face towards the front of the vehicle. Because of this unidirectional design, we have developed a unique colletting action mounting system that allows for appropriate alignment of the antenna during installation.



## FOR GROUND PLANE OR METALLIC SURFACE ANTENNAS:

- Prepare an NMO style mount on a metallic surface of the vehicle. It is recommended to mount at or nearest the center of the surface away from other objects.
- Check your Phantom Elite® to be certain the antenna resonant frequency range and your radio are compatible.
- Install the Phantom Elite antenna by tightening it onto a threaded NMO style-mounting socket. A fair amount of torque is needed to fully tighten the antenna until a seal is obtained between the bottom o-ring and vehicle surface. To assist tightening the antenna to the mount, apply two small pieces of protective heat shrink tubing (Part no. "Sealtube3") to the jaws of a slip joint pliers (see illustration)
- After the antenna is fully tightened and sealed to the mount surface, rotate the antenna body to position it with the leading edge (the more angled edge) facing the front of the vehicle. O-ring and gasket seals are employed in the unique colletting design to provide a water seal. Take care to rotate clockwise only once to achieve the proper position. Excessive rotation may compromise the colletting action and seal of the antenna. When finished, inspect for a proper bottom o-ring seal. This will prevent water leaking into the mount and perhaps into the vehicle.  
NOTE: The molded plastic radome and brass collet nut are designed to remain intact for proper water seal. Do not disassemble the collet nut from the antenna radome.

## MODEL AND ORDERING INFORMATION

MODEL #	COLOR	DESCRIPTION
ETRA4503	White	450-470 MHz UHF 3 dB-MEG
ETRAB4503	Black	450-470 MHz UHF 3 dB-MEG
ETRA8063	White	806-866 MHz UHF 3 dB-MEG
ETRAB8063	Black	806-866 MHz UHF 3 dB-MEG

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