





# PHANTOM ELITE<sup>®</sup> ANTENNA Installation Instructions

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

The Elite is a patented antenna product offered exclusively by Laird Technologies 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 colleting 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 colleting design to provide a water seal. Take care to rotate clockwise only once to achieve the proper position. Excessive rotation may compromise the colleting 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 |

### **TE TECHNICAL SUPPORT CENTER**

| USA:              | +1 (800) 522-6752     |
|-------------------|-----------------------|
| Canada:           | +1 (905) 475-6222     |
| Mexico:           | +52 (0) 55-1106-0800  |
| Latin/S. America: | +54 (0) 11-4733-2200  |
| Germany:          | +49 (0) 6251-133-1999 |
| UK:               | +44 (0) 800-267666    |
| France:           | +33 (0) 1-3420-8686   |
| Netherlands:      | +31(0)73-6246-999     |
| China:            | +86 (0) 400-820-6015  |

### te.com

TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

©2021 TE Connectivity. All Rights Reserved.

12/21 Original

