

## Alpha Antenna

Model - ProMaster Gold edition

6-80 Meters

1 KW PEP SSB

Mobile/Base/Portable

Alpha ProMaster gold edition Antenna

**USER GUIDE** 



V1.1

**December**, 12 2013



Thank you for purchasing the Alpha ProMaster Antenna gold edition.

### **Technical Specifications**

- Configuration: Vertical or sloping configuration
- Frequency Coverage with antenna tuner: 3.5 to 55 MHz
- Power Rating: 1KW PEP SSB
- Height: Approximately 19 ½ Feet with tripod
- 4 Counterpoise wires: Approximately 15 Feet each



"Alpha Antenna uses antenna designs that are known to work!"

Installation Safety

WARNING: INSTALLATION OF THIS PRODUCT NEAR POWER LINES IS DANGEROUS! FOR YOUR SAFETY, FOLLOW THE ENCLOSED INSTALLATION DIRECTIONS. THOUGH THIS ANTENNA IS CONSTRUCTED OF INSULATED WIRE, PROPER CARE MUST BE TAKEN DURING INSTALLATION. INSTALLER ASSUMES ALL LIABILITY FOR PROPERTY AND LIFE SAFETY.

#### YOU, YOUR ANTENNA, AND SAFETY

Each year, hundreds of people are killed, mutilated, or receive severe and permanent injuries when attempting to install an antenna. In many of these cases, the victim was aware of the danger of electrocution, but did not take adequate steps to avoid the hazard. For your safety, and to help you achieve a good installation, please **READ** and **FOLLOW** the safety precautions below. **THEY MAY SAVE YOUR LIFE!** 

- 1. If you are installing an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE.
- 2. Select your installation site with safety, as well as performance, in mind. (Detailed information in Site Selection appears in a separate section of this booklet.) **REMEMBER:** ELECTRIC POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME THAT ANY OVERHEAD LINES CAN KILL YOU.
- 3. Call your electric power company. Tell them your plans and ask them to come take a look at your proposed installation. This is a small inconvenience, considering **YOUR LIFE IS AT STAKE.**
- 4. Plan your installation procedure carefully and completely *before* you begin. Successful raising of a mast or tower is largely a matter of coordination. Each person should be assigned a specific task, and should know what to do and when to do it. One person should be designated as the leader/coordinator of the operation to call out instructions and watch for signs of trouble.
- 5. When installing your antenna, **REMEMBER: DO NOT USE A METAL LADDER. DO NOT WORK ON A WET OR WINDY DAY. DO DRESS PROPERLY:** shoes with rubber soles and heels, rubber gloves, long sleeved shirt or jacket.
- 6. If the assembly starts to drop, get away from it and let it fall. Remember, the antenna, mast, cable and metal guy wires are all excellent conductors of electrical current. Even the slightest touch of any of these parts to a power line completes an electrical path through the antenna and the installer **THAT'S YOU!**
- 7. If ANY PART of the antenna system should come in contact with a power line, DON'T TOUCH IT OR TRY TO REMOVE IT YOURSELF. CALL YOUR LOCAL POWER COMPANY. They will remove it safely. If an accident should occur with the power lines, call for qualified emergency help IMMEDIATELY.

## **CANTENNA**

"Alpha Antenna uses antenna designs that are known to work!"

#### **Base/Field Antenna Installation**



Step 1 – On the tripod loosen the leg brace knob, extend the legs, and slightly tighten the leg brace knob

Step 2 – Mount tripod on a flat stable surface

Step 3 – Attach the mount to the top of the tripod

Step 4 – Secure the Alpha Match in the 3/8 inch hole on the mount with the included nut/washer

Step 5 – Fully extend the counterpoise wires, attach the Ring connectors onto the bolt located under the Alpha Match, & secure the wires/tripod with the included stakes

Step 6 – Assemble the MilStick whip & screw it into the top of the Alpha Match

Step 7 – Extend the mast and evenly reposition the counterpoise wires for maximum support

Step 8 – Attach your coax from your tuner to the SO-239 on the Alpha Match

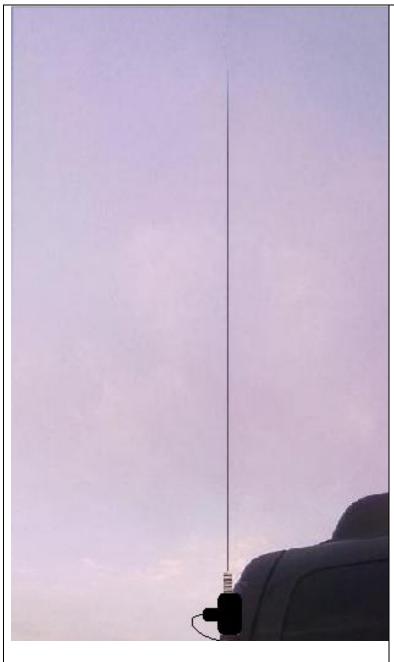
#### **Alternative Base/Field Installation**

The antenna can be deployed for 10-40 Meter ops with just the Mount, Alpha Match, Wire, & Whip. If the mount is attached to a non-metal object, like a tree, fiberglass mast, etc., then affix at least one 15 foot wire to the nut on the mount.

## **CANTENNA**

"Alpha Antenna uses antenna designs that are known to work!"

### **Mobile Antenna Installation**



Step 1 – Install your mount to a stable metal part of your vehicle. We recommend our stainless steel Alpha Antenna Jam Mount.

Step 2 – Ensure that the stainless steel whip is screwed into the stainless steel spring on the Alpha Match before cinching down screw on the whips ferrule.

Step 3 – Remove the extra stainless steel nut located at the bottom of the Alpha Match with your hand. Insert the 24x3/8 stud in the hole of the Alpha Antenna Jam Mount and replace the nut. Use two wrenches to ensure the bottom nut is tight & DO NOT twist the Alpha Match while tightening.

Step 4 – Attach your coax from your tuner to the SO-239 on the Alpha Match. Do not allow any coax to form a loop by crossing over itself as this may form a choke that can detune the antenna.



### **SWR Performance – Base/Field**

SWR Readings per Band		
SWR	BAND	
2.1:1	6 Meters	
1.8:1	10 Meters	
1.7:1	12 Meters	
1.6:1	15 Meters	
1.4:1	17 Meters	
1.3:1	20 Meters	
1.9:1	30 Meters	
1.9:1	40 Meters	
1.9:1	60 Meters	
2.5:1	80 Meters	

### **SWR Performance – Alternative Base/Field**

SWR Readings per Band when deployed at 6 ½ feet	
SWR	BAND
4.1:1	6 Meters
1.9:1	10 Meters
1.8:1	12 Meters
1.6:1	15 Meters
1.8:1	17 Meters
1.7:1	20 Meters
2.2:1	30 Meters
2.5:1	40 Meters
2.5:1	60 Meters
2.5:1	80 Meters

### **SWR Performance – Mobile**

SWR Readings per Band		
SWR	BAND	
1.4:1	6 Meters	
6.8:1	10 Meters	
6.7:1	12 Meters	
5.6:1	15 Meters	
4.4:1	17 Meters	
4.6:1	20 Meters	
4.5:1	30 Meters	
4.8:1	40 Meters	
5.7:1	60 Meters	
7.5:1	80 Meters	



## **Have Other Questions?**

If you have questions about your antenna, please feel free to contact us.

### **Support**

Email: support@alphaantenna.com

Phone: 1□888□482□3249 WEB: <u>www.alphaantenna.com</u>