

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

# Alpha Antenna

Model - Multiband tactical

6-160 Meters

(160 Meters enabled with optional 60 foot EMCOMM element)

500 Watts PEP

**USER GUIDE** 

V1.5

June 17, 2016

# **CANTENNA**

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#### Introduction

Thank you for purchasing the Alpha Multiband tactical Antenna, a complete 500 Watt PEP system for Military, Emergency Services, or restricted use environments.

The 500 watt Multiband tactical system is a multipurpose antenna from Alpha Antenna that includes a heavy duty Mil-Stick whip the solid state Alpha Match for trouble free operation, and adjustable Alpha Jaw Mount.

Alpha Antenna uses antenna designs that are known to work! Designed by Amateur Radio Operators at Alpha Antenna, in conjunction with a Certified Commercial Broadcast Engineer, the Alpha Multiband tactical Antenna uses the best antenna designs in one antenna system.

### **Technical Specifications**

• Weight: 3 pounds

Configuration: Vertical/Horizontal/NVIS

Power Rating: 500W PEP SSB

Height: Approximately 13 Feet

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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**.

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#### **Antenna Installation**

Step 1 – Install Alpha Jaw Mount on stable support,

Step 2 – Place the Ring Connector of the Counterpoise wire onto the bottom stainless steel bolt,

Step 3 – Place one washer onto the bottom bolt on the Alpha Match,

Step 4 – Place the bottom bolt of the Alpha Match (with the washer in Step 3 and the Ring Connector in Step 2) into the 3/8 hole on the Jaw Mount,

Step 5 – Place the second washer, and then the lock washer, onto the bottom stainless steel bolt on the Alpha Match,

Step 6 – Secure items in Steps 2 through 5 in place with the nut,

Step 7 – Deploy the Mil-Stick Whip and screw the Hex Nut onto the top bolt of the Alpha Match and,

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



**IMAGE 1** 

#### Hints and Kinks -

- A. If the Counterpoise Wire is not used, then a minimum length of 20 feet of coax should be used.
- B. Coax should not be allowed to coil upon itself, as this can form a choke balun that can detune the antenna.

## **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: www.alphaantenna.com