



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

## Alpha Antenna

Model - Non-MicroTune

10 – 30 Meters/15 – 40 Meters

20 Watts (30 Watts PEP)

**USER GUIDE**

**V1.3**

**June 5, 2014**

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## Introduction

The ultra high-performance (High Q) Alpha Micro-Tune Loop Antenna for 20 Watts continuous & 30 Watts PEP that offers coverage for 10, 12, 15, 17, 20, 30, & 40 Meters.

## Technical Specifications

- Weight: 3 pounds
- Configuration: Circular
- Frequency Coverage: 7 to 29.7 MHz
- Power Rating: 20 Watts continuous and 30 Watts PEP
- Height to top of Alpha Loop (if mounted on tripod):
  - Minimum; Approximately 6 Feet
  - Maximum; Approximately 9 ½ 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 A – Affix the small loop to the black Feed line Box with 4 of the supplied screws and nuts

Step 1 – Lay the antenna flat on the ground and accordion out the longest elements into two halves to form a circular pattern. HINT – One screw can be left in to hold 3 sections together when not in use. Next, affix and secure the supplied 3 screws and 3 nuts for each of these two halves (Notes – Extra nuts and screws are supplied. A trip to the hardware store may be required if you lose too many).

Step 2 – You should now have two separate halves of the larger loop. Now assemble the first and second halves to the longest of the straps on the grey Alpha Match and the black Feed line Box with the supplied screws.

Step 3 – Place tripod on a flat and stable surface

Step 4 – Install the top of mast mount on the tripod and tighten the four bolts

Step 5 – Remove one of the two nuts on the bottom of the grey Alpha Match, place it on the top of mast mount, and replace/secure it in place with the nut.

Step 6 – Attach your coax to the SO-239 on the black Feed line box

NOTE – High voltages are present when transmitting, no matter how much or little power is applied. Do not touch any part of the Alpha Loop while transmitting.

15 – 40 Meters: Assemble the large outer loop with three elements per side.

10 – 30 Meters: Assemble the large outer loop with one of the longer elements and one shorter element per side.

NOTE – The antenna is most efficient from 15 – 30 Meters when 40 Meters is enabled.

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## SWR Performance & Tuning

SWR can be continuously tuned to a match of less than 1.9:1 on any frequency from the 10 Meter through the 40 Meter band. Simply use the speaker on your radio and turn the knob on the Alpha Match till you hear the loudest noise level, then transmit with the lowest possible power while tuning till you see your SWR meter dip. Alternatively, you can use an antenna analyzer that is set to the frequency you are going to transmit on and turn the knob on the Alpha Loop till your SWR dips. When using the antenna analyzer, many have found that an A/B Switch with the rig on A and the analyzer on B makes it quick and easy to switch from analysis to transmit.



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### **Have Other Questions?**

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

### **Support**

Email: [support@alphaantenna.com](mailto:support@alphaantenna.com)

Phone: 1-888-482-3249

WEB: [www.alphaantenna.com](http://www.alphaantenna.com)

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## NOTES

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