# **CALPHA ANTENNA®**

## User Guide

## For

## Alpha Antenna – (34 foot) JPole Jr

## **Civilian Military Systems**

Manufactured by: Alpha Antenna 1.888.482.3249

Website: http://AlphaAntenna.com

User Guide Version 2.7

January 14, 2019

# **α ALPHA ANTENNA®**

#### Introduction

Thank you for your support of the Alpha Antenna line. We hope that you will enjoy using this product, as we continue to receive written testimonials from Amateur Radio Operators (Hams) on how easy the Alpha Antenna systems are to deploy, how well they work, and how each antenna system that is deployed has made each person's operating experiences positive and enduring.

The Alpha Antenna is a Civilian Military system that is easy to deploy, has acceptable SWRs, and is extremely durable. The antenna system is composed of building blocks that used to construct a large variety of deployable solutions. No supports are necessary to deploy the systems, however, several varieties of deployment options exists if natural supports are available. If space or privacy is a premium, the Alpha Antenna is deployable for covert operations. This antenna is so efficient that it is also deployable indoors, from a porch or balcony.

#### **Product Overview**

With proper deployment, the Alpha Antenna system is designed to operate continuously from 6 through 80 meters, with only the use of your wide-band (external) antenna tuner.

#### **Additional Product Details**

- / Antenna Weight: 1.5 pounds
- ) Antenna Configuration: Horizontal, or Sloper
- Maximum Frequency Coverage: 3.5 MHz to 54 MHz
- Maximum Power Rating: 250 Watts PEP SSB (100W CW or 50W Digital)
- / Length 34 feet

### Safety Tips

When installing or operating this antenna, please observe the following safety tips.

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

WARNING: INSTALLATION OR OPERATION 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.

1. If you are installing an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE.

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 Select your installation site with safety, as well as performance, in mind. REMEMBER: ELECTRIC POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME THAT ANY OVERHEAD LINES CAN KILL YOU.
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 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.

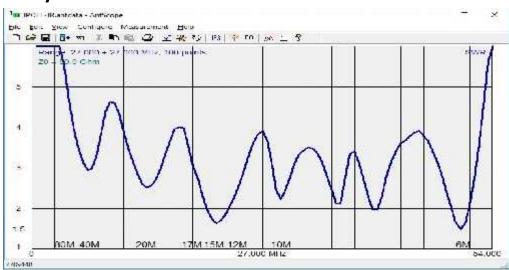
7. If ANY PART of the antenna system should come in contact with a power line, **DON'T TOUCH IT OR TRY TO REMOVE IT YOURSELF. CALL YOUR LOCAL POWER COMPANY.** They will remove it safely. If an accident should occur with the power lines, call for qualified emergency help.

### Antenna Parts List

The following parts are included with this antenna. Please contact our support line if you discover that parts are missing or damaged.

Item	Description	Qty.	Representation
1	Alpha Antenna JPole Jr	1	Image 1

### Analysis



### Support Contacts

If you have questions about your antenna, please feel free to email us at alphaantenna@gmail.com

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#### Antenna Installation

IMAGE 1

#### PLAN YOUR DEPLOYMENT



**IMAGE A** 

HALYARD BEND

There are 2 basic methods to installing the antenna. One enhances NVIS (Near Vertical Incident Sky wave) and the other DX (Long Distance) communications.

For NVIS deployments, install the antenna closer to the ground, at a minimum height of **6+ Feet** on either end.

For DX (Long Distance) deployments, install the antenna higher, at a height of 1/2 wavelength or higher for maximum results.

The most effective methods for deployment is to position the antenna so that it is horizontally and sloped, where the **Antenna Element** is placed at a height of **6+ Feet** and is deployed free from other obstructions per **Image B**.

Please refer to **Image B** when installing the antenna, where the **Balun** should be supported with a **Rope**, which can be run through both the **Balun's** eye-bolt and **Insulator 1** as represented in **Image C**. The other end of the **Antenna Element** should be supported at a height of **6+ Feet** using a **Rope** run through **Insulator 2**.

Next, attach your **Coax** to the **Balun** and note that the weight of the **Coax** can be supported (tied off and up) with the loose end of the **Rope** to your mast as is depicted in **Image C**. We suggest using a 'halyard bend' type knot (Ref. **Image A**) to tie the coax off to your mast.

Once the antenna is deployed, connect your equipment between the **Coax** and the **Ground Stake**.

