α ALPHA ANTENNA®

User Guide

For

Model – JPole Jr/Sr

Manufactured by:
Alpha Antenna

User Guide Version 3.0

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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.

Product Overview

With proper deployment, this Alpha Antenna will operate from 6 through 80 meters (JPole Jr) or 10-160 meters (JPole Sr) with the use of your external antenna tuner.

Additional Product Details

- Antenna Weight: Approximately 1.5 pounds
- Maximum Frequency Coverage: 3.5 MHz to 54 MHz (JPole Jr) or 1.8 MHz to 29.7MHz (JPole Sr)
- Maximum Power Rating: 250 PEP SSB, 125 CW, or 25 watts for digital modes
- Length 34 feet (JPole Jr) or 60 feet (JPole Sr)

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.
2. 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.
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. DRESS PROPERLY:** shoes with rubber soles & 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**.**

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

Antenna Parts List

Item	Description	Qty.	Representation
1	Alpha Antenna JPole (Jr or Sr)	1	Image 1

Deployment Configurations

Sloper Configuration Deployment as a Sloper configuration will DX into the greyline on 7.0-19MHz in either the morning or evening and evening NVIS propagation on 7.0MHz and lower frequencies, which will both occur in the direction of the slope. Proper deployment places the antenna at an angle that achieves a launch in the desired take off angle to the horizon.
Half Square Configuration Deployment as a Half Square configuration will provide evening NVIS coverage on 7.0MHz and lower frequencies, daytime NVIS coverage from 14MHz and higher frequencies, and DX from 7.0-19MHz during evening or daytime deployments. Proper deployment places 50% of the length of the antenna across the top and 25% on both legs, where the top is at a height equal the deployed length of each leg.
Horizontal Configuration Deployment in a Horizontal configuration will provide evening NVIS coverage on 7.0MHz and lower frequencies, daytime NVIS coverage from 14MHz and higher frequencies, and DX from 7.0-19MHz during evening or daytime deployments. Proper deployment to enhance NVIS places the element lower and with the horizontal configuration, which is parallel to the earth. In practice, to optimize NVIS (Near Vertical Incident Skywave) performance, deploy the antenna horizontally at a height of 1/8 wavelength on any given band for a 0–650 km (0–400 miles) coverage area. Where DX will occur into the greyline from 7.0-19MHz during evening or daytime deployments.
Inverted "V" Configuration Deployment as an Inverted "V" configuration will provide evening NVIS propagation on 7.0MHz and lower frequencies, daytime NVIS coverage from 14MHz and higher frequencies, and DX into the greyline from 7.0-19MHz during evening or daytime deployments. Proper deployment places 50% of either side of the element on each leg of the V, where there is no less than 120 degrees of separation between the two elements.
Inverted "L" Configuration Deployment as an Inverted "L" configuration will provide evening NVIS on 7.0MHz and lower frequencies, daytime NVIS coverage from 14MHz and higher frequencies. Proper deployment uses places 1/3 of the element vertically and 2/3 of the element horizontally at the top.
Upright "V" Configuration Deployment as an End-Fed Inverted "V" configuration will provide evening NVIS propagation on 7.0MHz and lower frequencies, NVIS on 7.0-19MHz during evening or daytime deployments, and DX into the greyline from 7.0-19MHz during evening or daytime deployments. Proper deployment places 50% of either side of the element on each leg of the V, where there is no less than 120 degrees of separation between the two elements.

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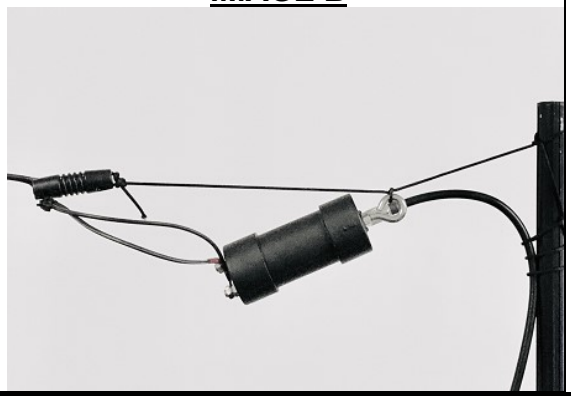
Deployment Configurations

IMAGE A

IMAGE B



PLAN YOUR DEPLOYMENT

Install the antenna using one of the Deployment Configurations in **Image C**.

Please refer to **Image B** as an example for how the **Balun** may be supported with a **Rope**, which can be run through both the **Balun's** eye-bolt and **Insulator** as represented in **Image B**. The other end of the **Antenna Element** can be secured with the second **Insulator**. Other securing points shown in **Image C** can be secured with a **Rope**.

Next, the Red terminal on the wire element attaches to the **shorter** Lug marked with Red on the Balun, and the Black terminal to the lug with a Black indicator.

Now 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 a **Rope** to your mast as is depicted in **Image B**. We suggest using a 'halyard bend' type knot to tie the antenna off to your mast.

IMAGE C