

User Guide

For

Alpha Antenna – ProMaster Jr

Civilian Military Systems

Manufactured by: Alpha Antenna 1.888.482.3249

Website: http://AlphaAntenna.com

User Guide Version 2.0

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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.

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.

Product Overview

With proper deployment, the Alpha Antenna system is designed to operate continuously from 6 through 40 meters, with only the use of a wide-band antenna tuner. It will accept up to 500 Watts (PEP) of transmitter power on SSB.

Additional Product Details

- Antenna Weight: 6 pounds
- Antenna Configuration:
 - Vertical Element: 1 Self-supporting 6 section telescopic vertical element
 - o Horizontal Elements: 1 Counterpoise
- Maximum Frequency Coverage: 7.0 MHz to 54 MHz
- Maximum Power Rating: 500 Watts PEP SSB

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

CANTENNA™

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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. 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 Installation

The ProMaster Jr is a permanent outdoor base camp antenna that brings you multi-band system performance into an extremely small footprint. All you need is an area that is 15 feet x 15 feet to optimally deploy the antenna or minimally 15 feet by 8 feet to deploy it in a smaller area.

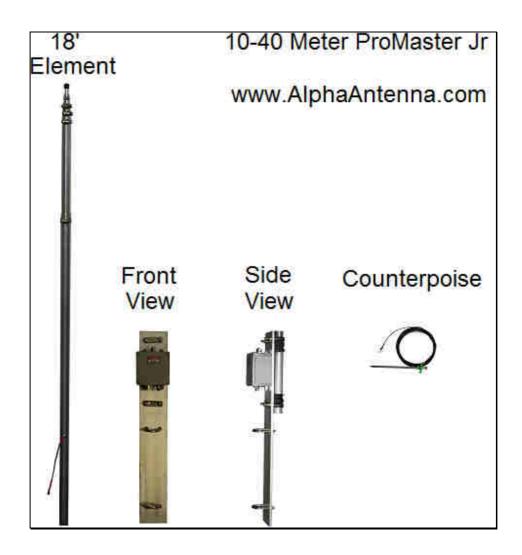
Simply mount the antenna 6 feet off the ground (or higher) on any conductive or non-conductive mast from your local hardware store, and follow the installation instructions in the manual.



Antenna Parts List

The following three items are included with the ProMaster Jr antenna system. Please contact our support line if you discover that parts are missing or damaged.

Item	Description	Qty.	Comment
1	Mounting hardware with Alpha Match	1	
2	Element	1	
3	Counterpoise	1	





The Deployed Antenna

The antenna systems should be placed in the most free and clear place on your property. This will give the takeoff angle the best change to propagate your signal in the most optimum manner possible.





"Civilian Military Systems"

Antenna Assembly

Step 1 – Prepare your installation with a) roof mount tripod, b) galvanized fence post placed 3-4 feet in ground, c) Steel tripod from Alpha Antenna, dL etc.

Step 2 – Lay the 6 tapered vertical antenna elements end to end flat on the ground. Insert each section into the next until each element passes the slit of the other by $\frac{1}{4}$ inch, and secure each section with a stainless steel clamp.



Step 3 – Place aluminum mounting plate hardware onto the supporting item in Step 1 & tighten the U-Bolts that are circled below.



Step 4 – Mount the vertical antenna element into the U-Bolts opposite of those used to mount the aluminum mounting plate. Here is where you will place the included rubber offsets circled around the vertical element and under the associated U-Bolts on the mounting plate that are circled below.



Step 5 – Attach 1 o-ring that has black shrink tube on its' Horizontal counterpoise wire element to the bottom bolt on the Alpha Match, as circled below.



Step 6 – Options to deploy horizontal counterpoise:

- a) Ground mounting Evenly space and extend the 5 horizontal wire elements, then drive the 5 stakes into ground.
- b) Raised/roof mounting Remove the stakes from the 5 horizontal wire elements and insert a rope into the hole on each of the green insulators to secure all wires.

Step 7 – Attach your coax to the SO-239 on the Alpha Match and feed it to your antenna tuner.



Here is how your primary connections for the antenna should look once assembled:



NOTE – Counterpoise are insulated from ground and should be deployed similarly to what a guy wire would look like. It should not be laying on the ground.



Support Contacts

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

Email: support@AlphaAntenna.com – Phone: 1-888-482-3249 – WEB: www.AlphaAntenna.com – Phone: www.alphaAntenna.com – WEB: www.alphaAntenna.com – Phone: <a href="mailto:www.alphaAntenna.co