

User Guide

For

Alpha Antenna – ProMaster

Manufactured by: Alpha Antenna 1.888.482.3249

Website: http://AlphaAntenna.com

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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, 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 Configuration:
 - o Vertical Element: 1 Self-supporting 6 section telescopic vertical element
 - o Horizontal Elements: 1 NVIS element
 - o Ground Wire: 1 ground wire with grounding stake
- Maximum Frequency Coverage: 3.5 MHz to 29.7 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 now

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.

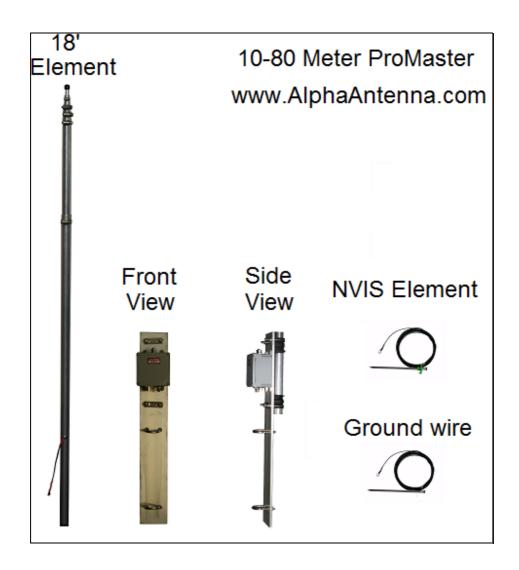
- 1. If you are installing an antenna for the first time, please, for your own safety as well as others, seek PROFESSIONAL ASSISTANCE.
- 2. Select your installation site with safety, as well as performance, in mind. **REMEMBER:** ELECTRIC POWER LINES AND PHONE LINES LOOK ALIKE. FOR YOUR SAFETY, ASSUME 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. 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 three items are included with the ProMaster 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	Vertical Element	1	
3	NVIS Element	1	
4	Ground wire	1	





Antenna Assembly

Step 1 – Prepare your mounting installation with a) galvanized 1 3/8" fence rail placed 3-4 feet in ground, d) Steel tripod from Alpha Antenna.

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 2 o-ring connectors that have red shrink tube to the top bolt on the Alpha Match, one is the 25 foot long NVIS element and the other is the feed wire for the vertical element.



Step 6 – Attach the 1 o-ring that has black shrink tube on the Ground wire to the bottom bolt on the Alpha Match, as circled below.



Step 7 – Mount the aluminum hardware with fully assembled vertical element onto the mounting installation that was prepared in Step 1, then drive the Ground wire's stake into the ground at least 4 inches.

Step 8 – Attach your coax to the SO-239 on the Alpha Match and feed it to your antenna tuner.

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Primary Connections

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



CANTENNA™

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 chance to propagate your signal in the most optimum manner possible. The slope of the NVIS element should be positioned towards the direction you want the primary lobe of your signal to propagate.





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