



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

Alpha Antenna

Model - ProMaster Sr

6-160 Meters

1.5 KW

USER GUIDE

V1.3

May 29, 2014



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Introduction

Thank you for purchasing the Alpha ProMaster Sr Antenna, a complete 6-160 Meter 1.5KW base antenna system.

The ProMaster Sr is a base camp antenna that brings you multi-band 24x7x365 base system performance into an extremely small footprint. All you need is an area that's 15 feet x 15 feet to optimally deploy the antenna or minimally 15 feet by 8 feet to deploy it in a smaller area. Perfect for Automatic Link Establishment (ALE).

Technical Specifications

- Weight: 6 pounds
- Configuration: Vertical
- Frequency Coverage: 1.8 to 54 MHz
- Power Rating: 1.5KW PEP
- Height: Approximately 19 Feet, including the mounting hardware
- 4 active elements & 1 Counter poise are approximately 8.5 to 19.5 Feet each



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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.

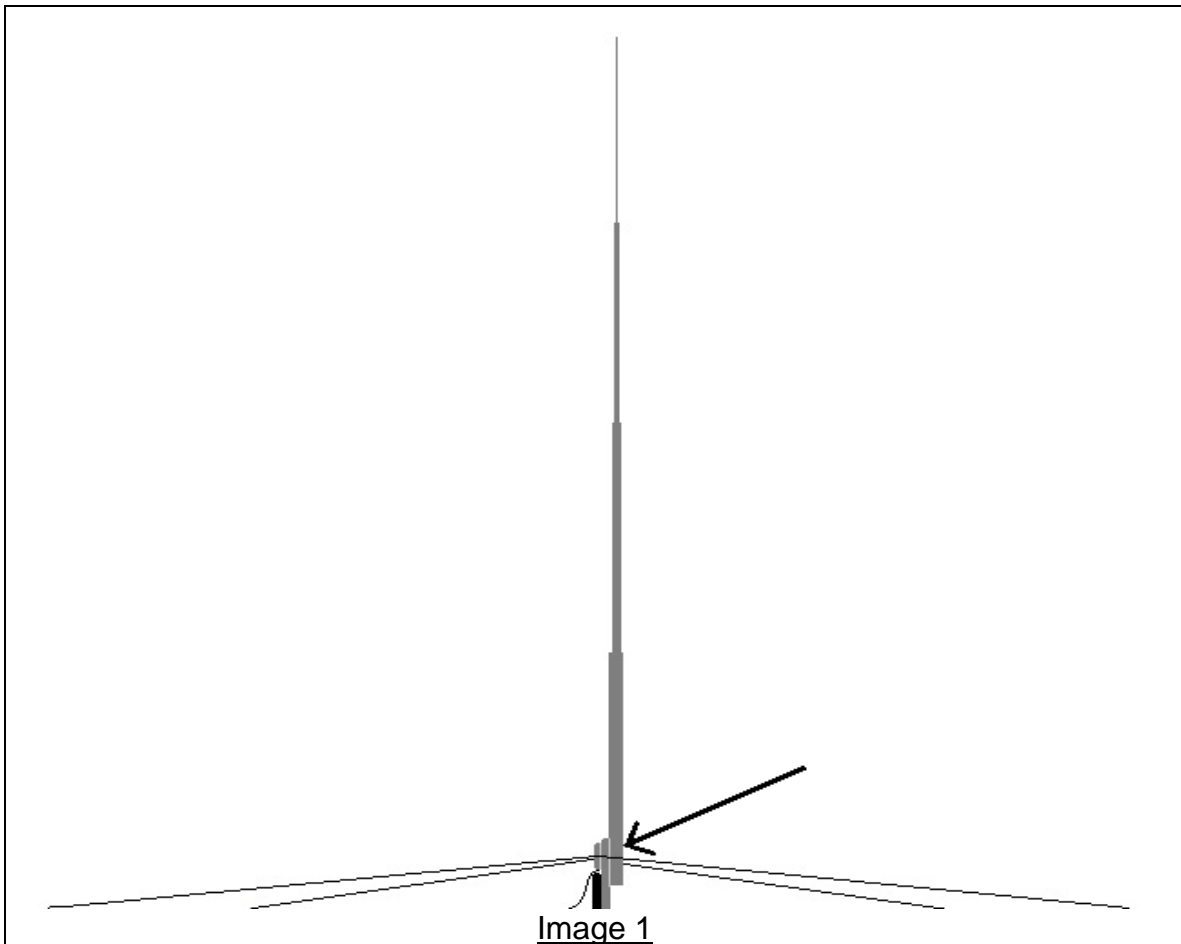
THEY MAY SAVE YOUR LIFE!

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 1 – Prepare your installation with a) roof mount tripod, b) 10 foot galvanized fence post placed 3-4 feet in ground, or c) tripod from AmateurRadioStore.com
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.

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Image 2

Follow Steps 3 and 4 per the Above Image 2

Step 3 – Place aluminum plate hardware on item in Step 1 & tighten the U-Bolts

Step 4 – Use included rubber offsets between vertical element & mounting plate.

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Image 3

Follow Steps 5 and 6 per the Above Image 3

Step 5 – Attach wire/o-ring on vertical element to top bolt on Alpha Match

Step 6 – a) Drive included stakes into ground or b) with the exception of the stake on the ground wire attached to the bottom of the Alpha Match, remove the 4 radiating element's stakes from their wires to insert a rope in the green insulators to secure all wires. The ground stake won't need additional grounding.

Attach your coax

Step 7 – Attach your coax to the SO-239 on the Alpha Match

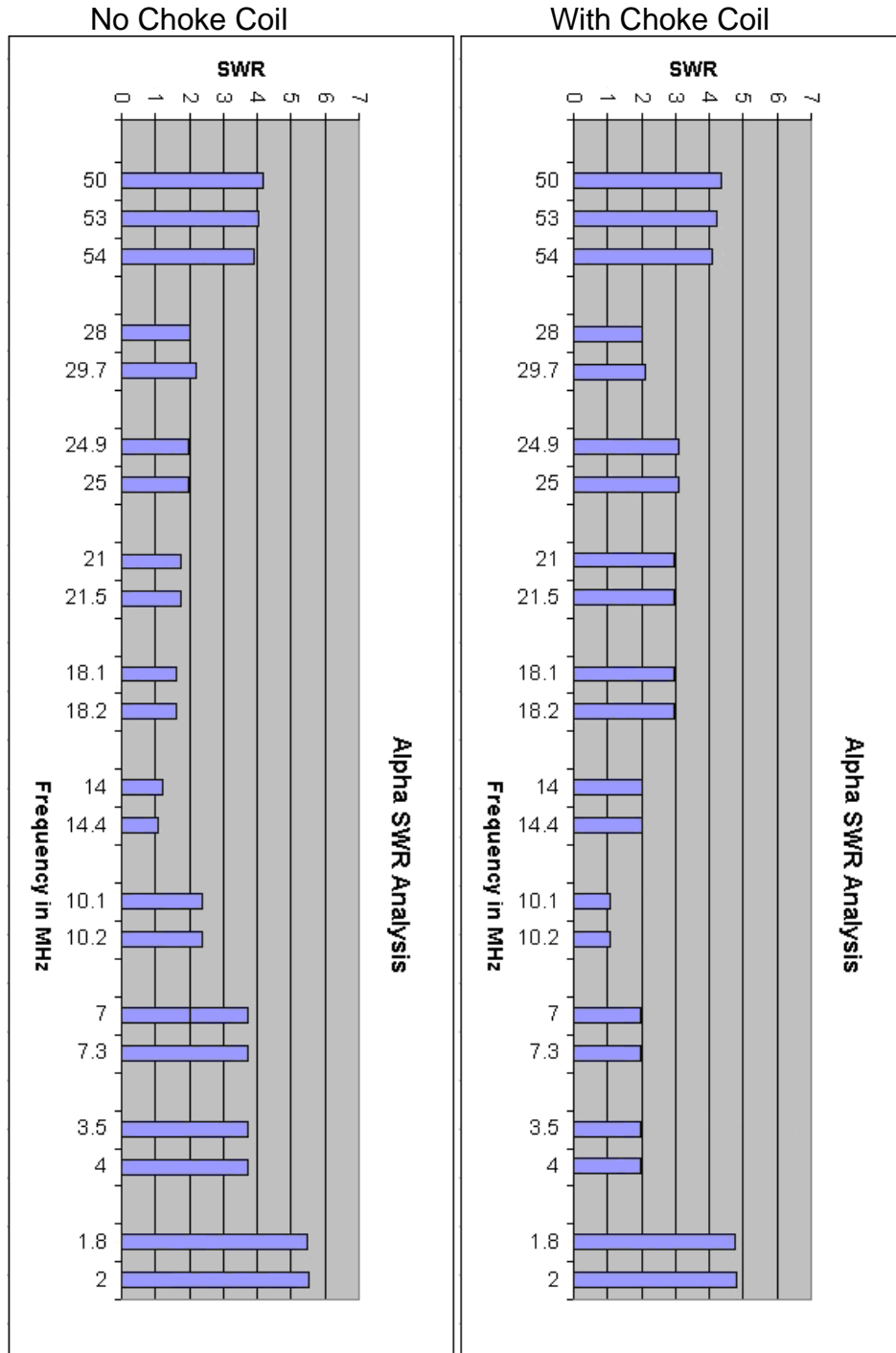
NOTE – The bolt/stake where the single ground wire attaches will not require additional Radials or Counterpoise wires.

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SWR Performance

SWRs are with the ProMaster Sr mounted at 6 ½ feet on 20 feet of RG-8x coax. Your SWRs may vary depending upon antenna location & variances in coax. A choke coil at the antenna lowers SWRs on the lower (nighttime) bands, while no choke lower SWRs on the higher (daytime) bands. Tuners will optimize SWRs.





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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

Phone: 1-888-482-3249

WEB: www.alphaantenna.com

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