



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

Alpha Antenna

Model - Sky

2 Meters XCV/440 MHz RCV

1 KW

Portable/Base/Mobile

For Satellite, Direct, or Repeater Use

USER GUIDE

V1.3

March 15, 2013



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Introduction

Thank you for purchasing the Alpha Sky Antenna, a complete 1KW satellite antenna system. The Alpha Sky Antenna system is designed to be used for Mobile, Portable Temporary Emergency Deployment, Field Operations, Apartment/Condo Residents, or HOA's.

The Alpha Sky Antenna System is a Circularly Polarized Omni directional antenna. The Alpha Sky Antenna makes for an excellent portable, base, or mobile antenna. The Alpha Sky Antenna system works for satellite communications plus repeater or non-repeater communications. The antenna system achieves and SWR of less than 1.5:1 on 2 Meters, as this is the band that transmission to satellite occurs. SWR is a little higher on 440MHz and this antenna should not be used to transmit on this band. The antenna system can be used without a duplexer directly into an HT or other rig. As you can see in the online videos, this antenna does not require a preamp to work the satellites.

Alpha Antenna uses antenna designs that are known to work! Designed by Amateur Radio Operators at Alpha Antenna, in conjunction with a Certified Commercial Broadcast Engineer, the Alpha Sky Antenna uses the best antenna designs in one antenna system.

Technical Specifications

- Weight: 5 pounds
- Configuration: Omni-directional & Circularly polarized
- Frequency Coverage: 140-148 MHz XCV & 420-450 MHz RCV
- Power Rating: 1KW
- Height: Approximately 13 Inches in circumference
 - EITHER
 - Magnet Mount adds 2 1/2 inches in height
 - We do not recommend driving with the antenna mounted on the mount
 - OR
 - Counter-poise system adds 2 feet. Tripod optional.

IMPORTANT! All components of the antenna system are designed to work together to keep SWR low. Use components separately at your own risk.



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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 Assembly & Installation



Step 1 – Assemble antenna with the included hex wrench. **Do not assemble over carpeted floors, outdoors, or where any surrounding surface might lose small parts. We are limited on extra parts to replace lost parts.

MAGMOUNT OPTION -
Step 2 – Install the Magnet or Lip mount on your vehicle or above another large metal surface so that low SWRs are maintained and more of the satellites signal can be reflected back towards the antenna.

MAGMOUNT OPTION -
Step 3 – Screw the Alpha Sky into the mount.

COUNTER-POISE OPTION - Step 2 – Mount the Alpha Sky Antenna sphere on the Counter-Poise System. Install your mount with 24x3/8 female adapter on your mast, tower, etc.

COUNTER-POISE OPTION - Step 2 – Screw the entire Alpha Antenna System onto your mount. We've mount options available for towers, masts, etc.





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SWR Performance

The SWR on the Alpha Sky Antenna system comes pre-set from the factory. Once you assemble your new antenna system, you will notice that it has no more than a 1.5:1 on 2 Meters, as this is the band that transmission to satellite occurs. SWR is a little higher on 440MHz and this antenna should not be used to transmit on this band.



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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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Notes:



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