



User Guide

For

Alpha Antenna – MOTO-SS

Civilian/Military Systems

Manufactured by:  
Alpha Antenna  
1.888.482.3249

Website: <http://AlphaAntenna.com>

User Guide Version 2.1

March 16, 2017



## 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.

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 MOTO 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: 1.5 pounds
- Antenna Configuration: Vertical
- Maximum Frequency Coverage: 7 MHz to 54 MHz
- Maximum Power Rating: 500 Watts PEP SSB (250 Watts CW)

## 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. 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 parts are included with this antenna. Please contact our support line if you discover that parts are missing or damaged.

Item	Description	Qty.	Comment
1	Alpha Match	1	
2	Ferrule	1	
3	Stainless Steel Spring	1	
4	Whip	1	

### SWR Readings per Band

SWR	BAND
1.4:1	6 Meters
6.8:1	10 Meters
6.7:1	12 Meters
5.6:1	15 Meters
4.4:1	17 Meters
4.6:1	20 Meters
4.5:1	30 Meters
4.8:1	40 Meters



## Antenna Installation

### 6-40 Meter Operations



Step 1 – Install your mount to a high stable metal part of your vehicle. We recommend our stainless steel Jam Mount.

Step 2 – Screw the Ferrule into the Stainless Steel Spring, Screw the Spring onto the Alpha Match, insert the Whip into the Ferrule and secure the screws around the Ferrule onto the Whip with your tools.

Step 3 – Insert the 24x3/8 stud in the hole of the Alpha Antenna Jam Mount. Use two wrenches to ensure the bottom nut is tight & DO NOT twist the Alpha Match while tightening.

Step 4 – Attach your coax from your external wide-band tuner to the SO-239 on the Alpha Match. Do not allow any coax to form a loop by crossing over itself as this may form a choke that can detune the antenna.

## Support Contacts

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

Email: [support@AlphaAntenna.com](mailto:support@AlphaAntenna.com) – Phone: 1-888-482-3249 – WEB: [www.AlphaAntenna.com](http://www.AlphaAntenna.com)