



User Guide

For

Alpha Antenna

Model: Multiband (Black Match)

Manufactured by:
Alpha Antenna
1.888.482.3249

Website: <http://AlphaAntenna.com>

Available from the:
AmateurRadioStore.com

Website: <https://amateurradiostore.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 persons operating experiences positive and enduring.

The Alpha Antenna is a system that is easy to deploy, has acceptable SWRs, and is extremely durable. The antenna system is composed of building blocks that are used to construct a large variety of deployable solutions. No supports are necessary to deploy the systems; however, several varieties of support options are included. If space or privacy is a premium, the Alpha Antenna is deployable for covert operations.

Product Overview

With proper deployment, the Alpha Antenna system does not need a tuner on many of the Amateur Radio bands, and is also designed to operate continuously from 6 through 160 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
- Tripod Weight: 1 pound
- Bag Weight: .6 pounds
- Antenna Configuration: Vertical, Horizontal, or Sloper
- Maximum Frequency Coverage: 1.8 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 Alpha Coaxial Loop 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	Tripod	1	
2	Alpha Match	1	
3	Mast adapter & Hex nut	1	
4	Jaw Mount	1	
5	Counterpoise	1	
6	NVIS element	1	
7	MilStick Whip	1	
8	EMCOMM Element	1	



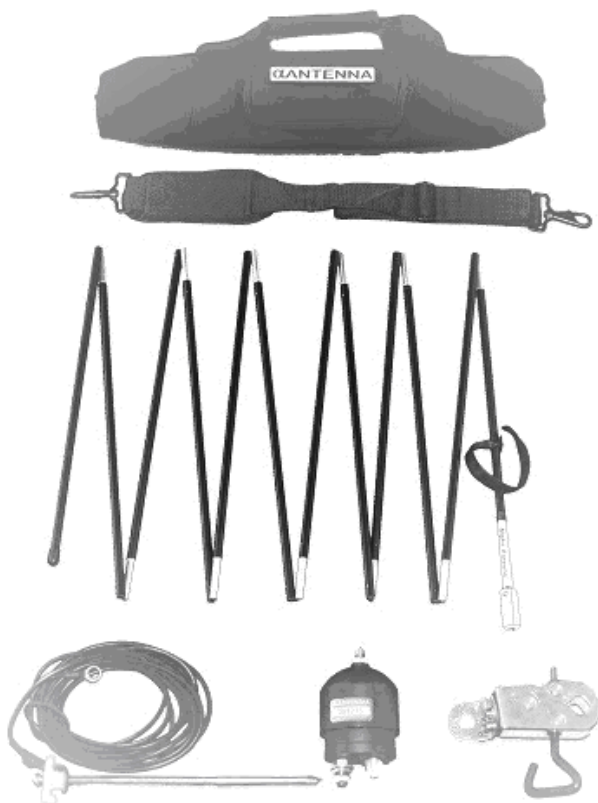
Jaw Mount Preparations

Please follow the steps listed below to assure proper operation of this antenna

6-80 Meter Operations

Pictured with 12 section 13-inch whips.

Optionally available, 6 section 26-inch whips



Step 1 – Install Alpha Jaw Mount on a stable support,

Step 2 – Place the Ring Connector of the Counterpoise wire onto the bottom stainless steel bolt of the Alpha Match,

Step 3 – If you have already installed the available 'Riser', screw the Alpha Match on to it, then skip to step 7, otherwise continue with step 3;

Step 3 – Place one washer onto the bottom bolt on the Alpha Match,

Step 4 – Place the bottom bolt of the Alpha Match (with the washer in Step 3 and the Ring Connector in Step 2) into the 3/8 hole on the Jaw Mount,

Step 5 – Place the second washer, and then the lock washer, onto the bottom stainless steel bolt on the Alpha Match,

Step 6 – Secure items in Steps 2 through 5 with the nut,

Step 7 – Deploy the Mil-Stick Whip and screw the whips Hex Nut onto the top bolt of the Alpha Match and,

Step 8 – Attach your coax to the SO-239 on the Alpha Match.

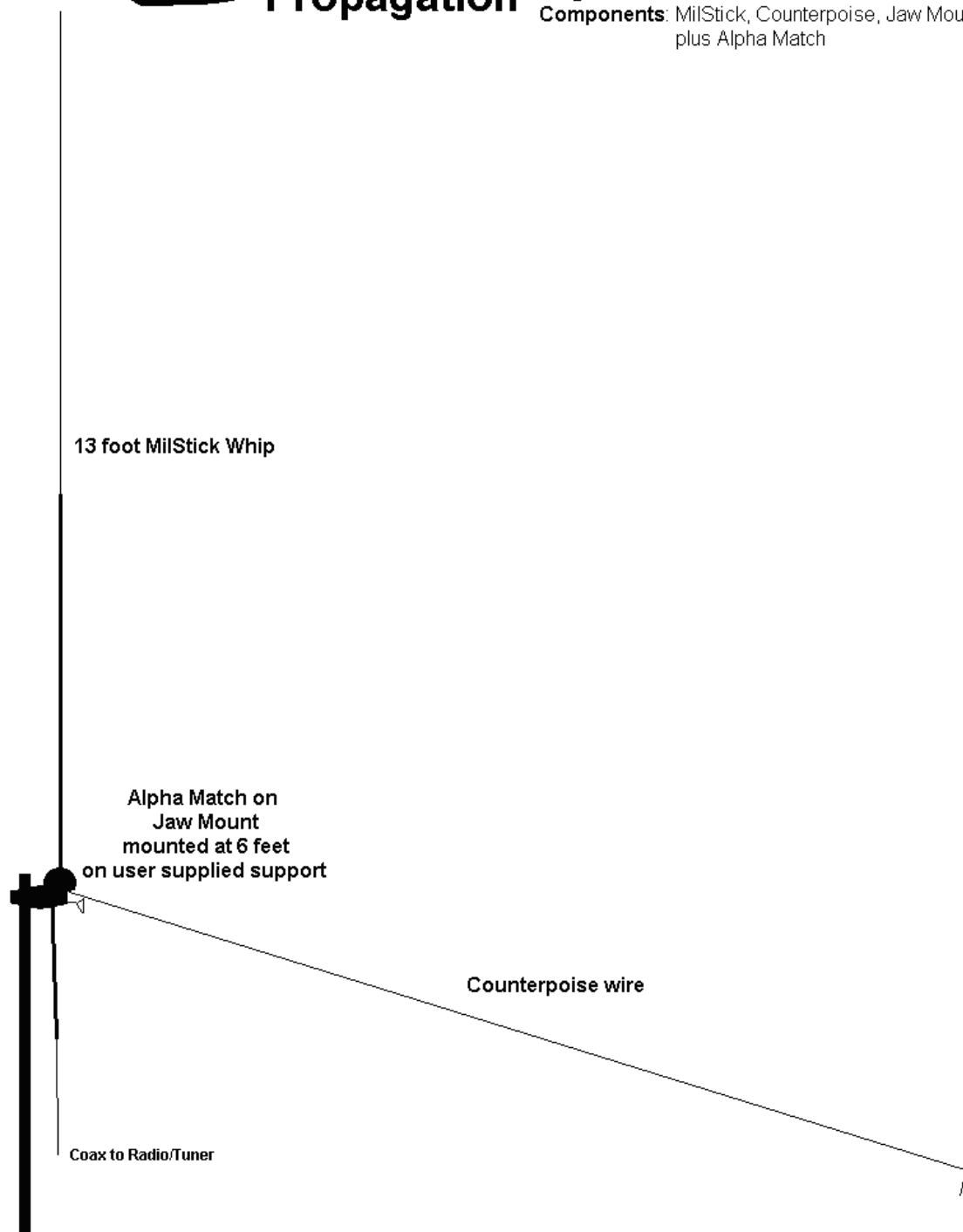
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Jaw Mount Deployment



Propagation


Purpose: DX/NVIS deployment
Length: Approximately 16 feet
Height: 13 feet
Components: MilStick, Counterpoise, Jaw Mount, plus Alpha Match





Tripod Preparations

The major components of the antenna, and their relative positions, are depicted in Figure 1.

<p><u>6-80 Meter Operations</u></p> 	<p>Step 1 – On the tripod, loosen the leg brace knob, extend the legs, and slightly tighten the leg brace knob</p> <p>Step 2 – Mount tripod on a flat stable surface</p> <p>Step 3 – Attach the mount to the top of the tripod</p> <p>Step 4 – For enhanced DX and optimum SWR readings, secure the tripod with your own guy ropes, without the use of any additional elements other than the MilStick.</p> <p>Step 5 – Screw the Alpha Match in place onto the Mast Adapter</p> <p>Step 6 – Assemble the MilStick whip & screw it into the top of the Alpha Match</p> <p>Step 7 – Extend the mast and evenly reposition the tripod so that the guying provides maximum support.</p> <p>Step 8 – Attach your coax from your tuner to the SO-239 on the Alpha Match</p> <p>NOTE – Optional deployment includes ring connectors from the EMCOMM being placed on the Top bolt and ring connectors from the NVIS & Counterpoise being placed on the Bottom bolt of the Alpha Match.</p>
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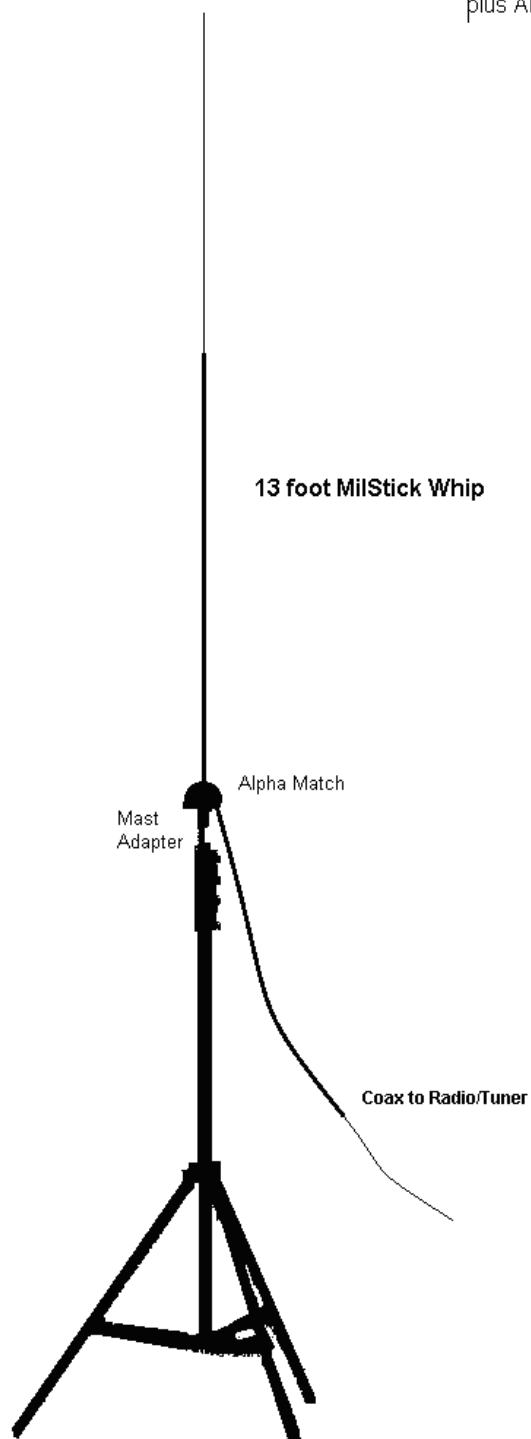
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Tripod Deployment (option 1)



Propagation

Purpose: Quick Mainly DX/NVIS deployment
Height: Approximately 19 feet
Components: MilStick, Tripod, Mast Adapter, plus Alpha Match



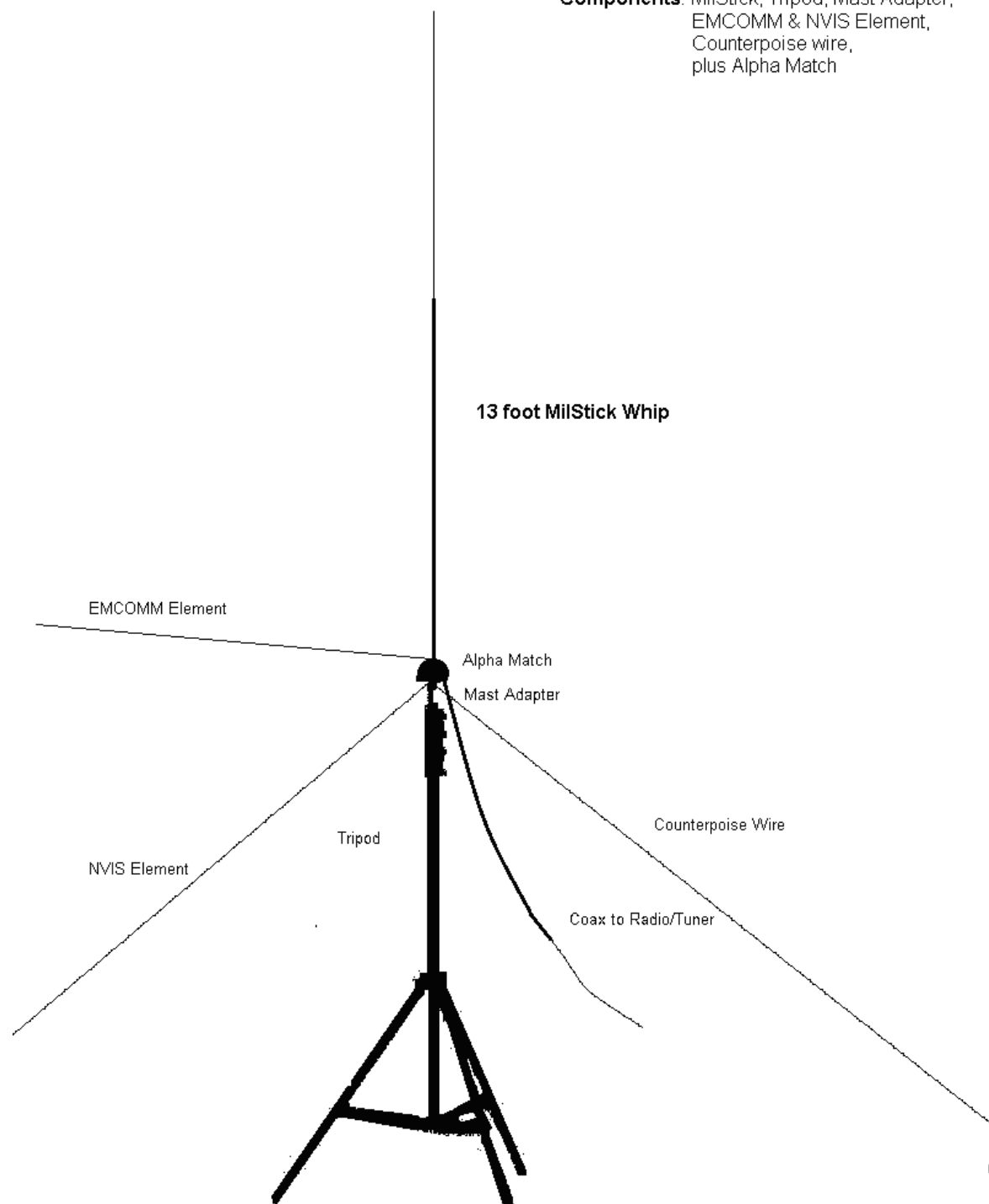
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Tripod Deployment (option 2)

Variable Propagation

- Based upon position of elements -

Purpose: Quick Mainly DX/NVIS deployment
Height: Approximately 19 feet
Length: Varies by element spread
Components: MilStick, Tripod, Mast Adapter, EMCOMM & NVIS Element, Counterpoise wire, plus Alpha Match



6-160 Meter Operations

EMCOMM Element



NVIS Element



Step 1 – Attach and secure the 3/8 ring connector on the EMCOMM element to the Top Bolt on the Alpha Match.

Step 2 – Mount the Alpha Match to the Jaw Mount as outlined on Page 5, in Steps 3 through 6. Optionally attach the NVIS Element as you would the Counterpoise as described on Page 5, in Step 2.

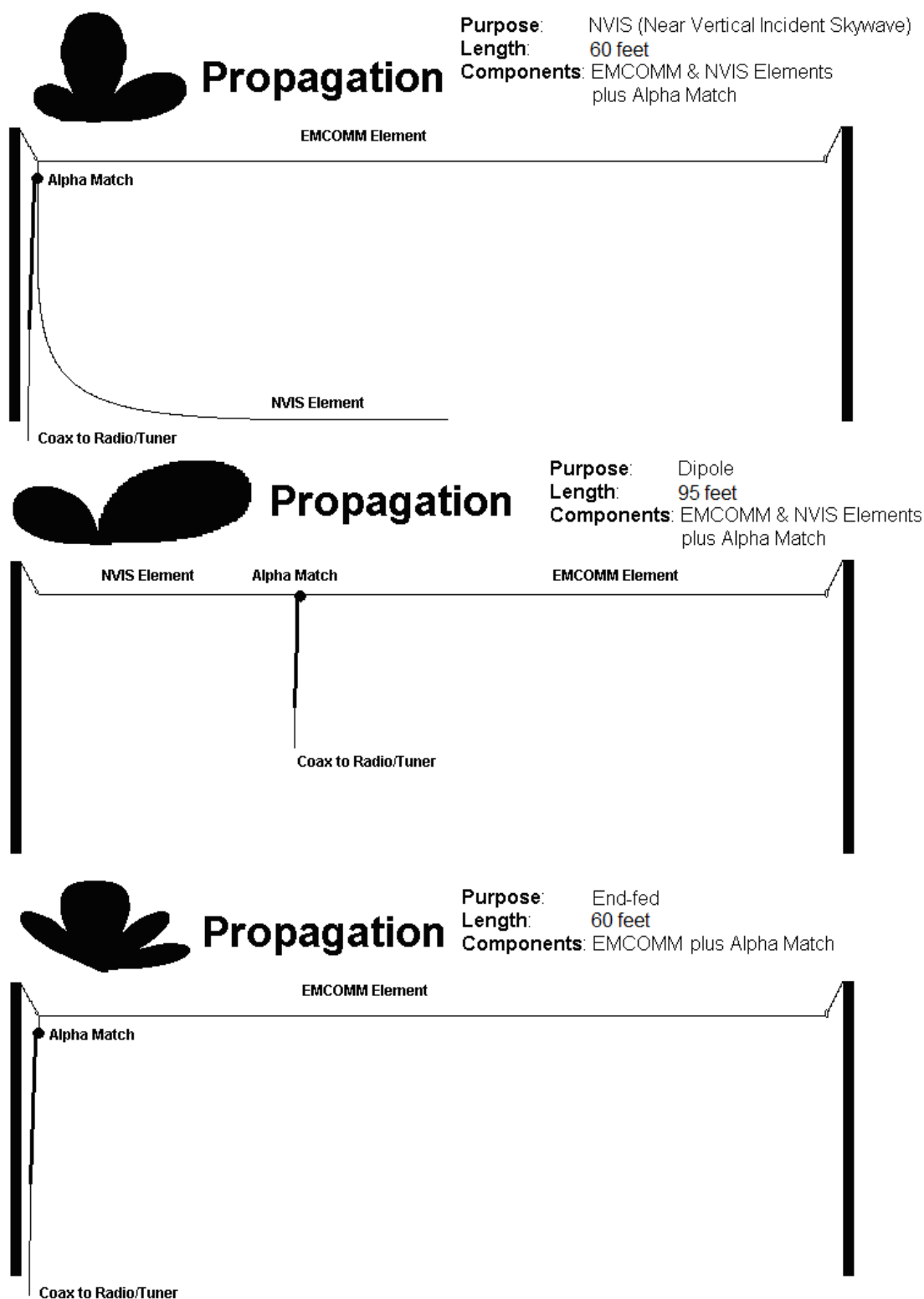
Step 3 – Securely mount the Jaw Mount at a height of 5 feet or higher to either a metallic or a non-metallic support. The Bottom Bolt on the Alpha Match does in fact run directly to the braided shield portion of the coax on the barrel of your coax. You can also attach additional Counterpoise to the Bottom Bolt to change performance.

Step 4 – Attach your coax from your tuner to the SO-239 on the Alpha Match.

NOTE – Increasing the slope of the antennas on Page 11p will enhance DX propagation.

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NVIS/Dipole/End-fed Deployment





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