

ALPHA ANTENNA

Alpha Antenna - AlphaLoop

Purpose

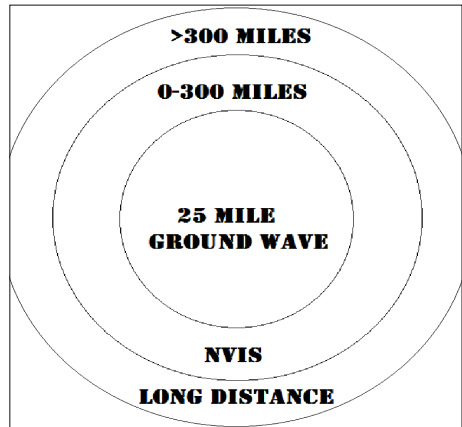
Alpha Antenna design's easy use systems for modern day challenges. As the first line of contact or last line of resort; Alpha Antenna is your small business manufacturer for Alpha Antenna systems.

Definition

Multiband System: A multipurpose antenna system, which can be positioned to launch your signal as circumstances require.

Purpose: Targeted Deployment for purpose driven missions.

Deployment Options: A) Tripod deployment, B) Mobile deployment, C) EMCOMM deployment, D) Tactical deployment.



Targeted Deployment



Contents

- Purpose
- Definition
- Assembly
- Components
- About the individual components
- The Company



Figure 1

ASSEMBLY

Step 1 Locate the Alpha Stick:

a) Extend the sections and take note of the hole on the bottom (Figure 1). This hole is where the screw on top of the grey Alpha Match box will attach.

Step 2 Locate the grey Alpha Match box: a) Place the screw from the top of the back support bracket on the grey Alpha Match box into the bottom hole on the Alpha Stick (Figure 2) and turn till it is secure (WARNING – Do Not Over-Tighten or you might strip the screw/nut). Note - There is a 1/4 - 20 threaded hole on the bottom of the support bracket that can be used to mount the antenna on an optional tripod.



Figure 2

Step 3 Locate the large Coaxial Loop element: a) Straighten this Alpha Coaxial Loop Element to form an approximate circle that is slightly larger than 3 feet in diameter. Take note of the approximate center for this run of coax. This is where the smaller Coaxial Loop element will be attached using the included Velcro ties.

Step 4 Locate the smaller Coaxial Loop element: a) Attach this coax with the supplied Velcro strap to the top and center of the large Coaxial Loop element. (Note – When the antenna is Vertical, the smaller Loop will be located inside the Outer (larger) Loop. When the antenna is inverted and deployed with the Carabiner as depicted for Optional Deployment (below), then the smaller Loop will be located outside the Outer (larger) Loop.

Step 5 Locate the Mount and Thumb Screw, mount the coax as depicted in Figure 3, and then secure the thumb screw till it is finger tight.

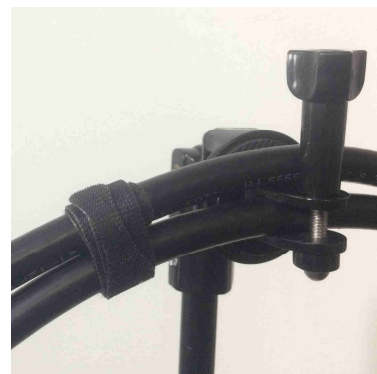


Figure 3

Step 6 a) Use the Top Clamp on the Alpha Stick to secure the Coaxial Loop Elements at their center by removing the securing screw, inserting the coax as depicted in Figure 4. b) Adjust the placement of the coaxial loops so that the larger element PL-259 ends are near the Alpha Match box. c) Attach the PL-259 connectors on the larger Coaxial Loop Element to the SO-239 connectors on the grey Alpha Match box per Figure 5.



Figure 4



Figure 5

Step 7 Connect your coaxial feed line to the SO239 on the T-Connector that is installed between the PL259s on the smaller Coaxial Loop element, then run that coax to your radio

Optional Deployment – Hang the antenna from the Carabineer per Figure 6, and move the inner smaller loop to the outside of the larger loop.



Figure 6

Components

Included:

- Outer Loop with Continuous frequency coverage from 7 to 29.7 MHz using crimped & soldered Silver Plated PL-259s, which is the same technique used to build MIL-SPEC connections for the U.S. Military
- Duffel Bag
- Alpha Stick
- Mount - Integrated mount with 3/8x24 & 1/4x20 threads
- Carabiner
- Silver plated SO-239s are milled & formed 100% in the U.S.A.
- Alpha Match enclosure - NEMA High-voltage box

About The Individual Components

Outer Loop: Constructed from LMR-400

Inner Loop: Shielded directly fed faraday loop that remains rigid to enable stable tuning and prevent SWR fluctuations.

Variable air capacitor: No RF conduction currents flow through the bearings of the rotor on the variable air capacitor that is constructed using dual gang split stators.

Connectors: All connectors are silver plated using the highest quality connectors available

Alpha Stick: Constructed primarily of aluminum, the Alpha Stick provides a collapsible support that easily deploys from a one piece.

Carabiner: For easy carry or hanging the antenna.

Housing: IP54 Rated enclosure protects all circuits

Duffel bag: Custom duffel bag holds all components with room left for gear .

The Company

In 2004 the founder of Alpha Antenna was hit head-on by a semi-truck. During Steven Deines' year long rehabilitation, a journey to give back began. In December of 2005, Productive Industries, LLC was formed, and the brand name Alpha (meaning beginning) was established.

For over 10 years, Steven has not accepted a salary from Productive Industries, LLC. Rather, all profits go towards charitable organizations, employee needs, and business expenses. Including paid leave specifically for the purpose to enable employees and their families to donate their time during business hours to charitable organizations.

Contact Us

Give us a call or email us for more information about our services and products

Alpha Antenna

112 East Commercial St.
Pleasant Hill, MO 64080

1 (888) 482-3249

support@alphaantenna.com

Visit us on the web at
www.AlphaAntenna.com