

# $\alpha$ ALPHA ANTENNA®

## Model – 100W Alpha Loop

Operating Manual, Version 6.4, July 17, 2020

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### Operation

The model 100W Alpha Loop is a 10-40M transmit/receive antenna. It is rated at 100W PEP SSB, 50W CW, or 10W digital. It also has the option of adding 40-80 meters with a rating of 20W PEP SSB, 10W CW, or 5W digital.



**10-40 Meters**



**40-80 Meters**

### Excess RF Exposure Warning

In the United States, the Federal Communications Commission has established guidelines for human exposure to Radio Frequency (RF) electromagnetic fields no matter what the antenna type. The commission's requirements are detailed in parts 1 & 2 of the FCC's rules and regulations {47 CFR, 1.1307(b), 1.1310, 22.1091, 2.1093}. It is the responsibility of the owner/operator of this device to follow all applicable warnings and precautions regarding human exposure to RF fields. Additional interference with other electrical devices can occur. Additional reference: <http://www.arrl.org/rf-exposure>

### Mic Gain settings







For all voice modes, adjust your equipment's Mic Gain so your meter does not peak when speaking, which will typically be a setting between 9 and 11. This will ensure you do not have a distorted voice transmission by keeping the antenna and equipment from being overdriven.

### Support

If you have questions about your antenna, please feel free to email us at [alphaantenna@gmail.com](mailto:alphaantenna@gmail.com)

# **ALPHA ANTENNA®**

## Setup

<p><b>A) Screw the tripod onto the bottom of the grey Alpha Match.</b></p>	
<p><b>B) Screw the center mast pole onto the top of the grey Alpha Match box.</b></p> <p>Install the rubber grommet over the pole.</p>	
<p><b>C) Locate the coax mounting clip. One has two slots and the other has one slot: Slide the clips onto the top of the center mast pole.</b></p> <p><b>Locate the 10-40M Coaxial Outer Loop</b>, which is shorter than the optional <u>Booster Cable</u>: Center and insert the large Coaxial Outer Loop snugly into the Top slot of the mount clip.</p> <p><b>Locate the Coaxial center feed Loop</b>: Insert the small Coaxial feed Loop snugly into the bottom slot of the Top black mount clip.</p>	
<p><b>D) Attach the PL259 connectors on the outer Coaxial loop to the grey box:</b> Attach the PL-259 connectors on the outer Coaxial Loop to the SO-239 connectors on the grey Alpha Match box. The loop should form an oval, which will match the shape of the inner loop.</p>	
<p><b>E) Attach your coax:</b> Connect your PL259 to the T-Connector on the small inner loop, and then run your coax to your equipment.</p>	
<p><b>F) Optional 40-80M Booster Cable:</b> The optional Booster cable enables 20W PEP SSB on 40/60/80M and is longer than the 10-40M loop. Move the inner loop to the bottom clip. The Booster cable installs in Series with the original 10-40M outer loop using the barrel connector to form a Double loop. The original outer loop is placed into the top slot of the top mount clip, while the booster cable is placed into the bottom slot of the same clip.</p> <p><b>NOTE – Space concentric outer loops 3/8” apart with 6 coax clips per photo on page 1.</b></p>	
<p><b>HF Tuning:</b> Start with <b>MINIMUM</b> power &amp; select your frequency, then turn the black knob on the grey Alpha Match till your rigs meter peaks with the loudest audible noise floor. Second, watch your SWR meter dip as you ‘Fine Tune’ the loop. NOTE 1 – There is a 30% friction clutch where the knob would normally have a hard stop. This enables the knob to keep turning without causing damage to the gears or variable air capacitor. NOTE 2 – It takes about 3 full turns of the black knob to fully cycle the variable air capacitor. The inner loop can also be moved to the clip with 1 opening, where a lower SWR might be achievable by sliding the Inner loop up or down the center support mast.</p>	