

α ALPHA ANTENNA®

Model – Hextenna

Operating Manual, Version 2.0, January 1, 2019

Operation

The Hextenna™ by Alpha Antenna® is a portable only full-sized resonant UHF/VHF/HF system, which is configurable as a HF Vertical (with user supplied counterpoise), UHF Vertical (without counterpoise), and HF/VHF Dipole. This is also user configurable as a 6-15M HF Delta Loop (with user supplied jumper wire between the tips of the dipole elements) or HF/VHF Yagi beam (by using multiple Hextenna™ systems).



Excess RF Exposure Warning

In the United States, the Federal Communications Commission has established guidelines for human exposure to Radio Frequency (RF) electromagnetic fields. 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 references: <http://www.arrl.org/rf-exposure>

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 – Video Tutorials: www.YouTube.com/AlphaAntenna

ALPHA ANTENNA®

Antenna Deployment

Step	Assembly Operation
1	Install the included mount on a secured 1 to 1 ¼ inch O.D. mast.
2	Install the Alpha Match hub on the included mount or optional HD-FMJ Tripod.
3	Screw each whip into the hub at the location for the antenna type being deployed.
4	Install any optional counterpoise if being used as a vertical.
5	Attach your coax to the built in SO-239 on the Alpha Match hub.
6	Use the included measuring tape to adjust the length of the whip(s) to closely match the lengths on the charts below.
7	Make any final adjustments to the whip(s) until the lowest SWR is achieved.

Approximate Dipole Element & lengths *30/40M optional with 18' add-on wire elements		
Band	Dipole Element 1	Dipole Element 2
30/40*	Telescopic element fully extended for 40M (or retracted about 7.5 feet for 30M) with add-on elements clipped to the tip of each telescopic element and pulled out to form an M-Shaped dipole. The wire element can be held straight by pushing the included stake into the ground or removing the stake and tying off either end with the included green insulators.	Telescopic element fully extended for 40M (or retracted about 7.5 feet for 30M) with add-on elements clipped to the tip of each telescopic element and pulled out to form an M-Shaped dipole. The wire element can be held straight by pushing the included stake into the ground or removing the stake and tying off either end with the included green insulators.
20	16 feet 11.5 inches	16 feet 11.5 inches
17	13 feet ¾ inch	13 feet ¾ inch
15	10 feet 11 ½ inches	10 feet 11 ½ inches
12	9 feet 6 inches	9 feet 6 inches
10	8 feet 3 ½ inches	8 feet 3 ½ inches
6	4 feet 8 inches	4 feet 8 inches
2	55.5 inches	55.5 inches

* 30/40 Meters is enabled with the optional add-on elements.

Approximate Vertical Element & Counterpoise Element length		
Band	Vertical Element	Length for each user supplied Counterpoise Element A minimum quantity of 4 (four) are recommended
20	13 feet 2 inches	18 feet 2 inches
17	9 feet 8 inches	14 feet 2 ⅜ inches
15	8 feet 7 ¾ inches	12 feet 1 ½ inches
12	7 feet 1 inches	10 feet 4 inches
10	6 feet	9 feet

Approximate Vertical Element & No Counterpoise Element length		
440 Mhz	2 feet 2 inches	No counterpoise recommended
220 MHz	3 feet 4.75 inches	No counterpoise recommended

By using the approximate Dipole lengths above, the Hextenna™ is configurable as a Delta Loop (with a user supplied jumper wire between the tips of the dipole elements) or as a Yagi (with multiple Hextenna™ systems) with the 1st as a driven element & a 2nd as a reflector with 5% added length.