

α ALPHA ANTENNA®

Model: Portable Resonant

Operating Manual, Version 1.1, June 25, 2020

Operation

The **Portable Resonant** system is a 220 440 HF antenna. This system contains the components necessary to deploy the antenna as a HF Vertical (with either the included counterpoise or 4 optional user supplied counterpoise) or 220/440MHz Vertical (without counterpoise).



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: alphaantenna@gmail.com - Phone: 1-888-482-3249

WEB: www.alphaantenna.com

Antenna Deployment

Step	Assembly Operation
1	Install the included mount on a secured 1 to 1 ¼ inch O.D. mast.
2	Adjust the length of the whip(s) to closely match the lengths on the charts below.
3	Install counterpoise if being used as a HF vertical.
4	Attach your coax to the built in SO-239 on the mount.
5	Screw the whip into the mount.
6	Make any adjustments to the counterpoise by rolling it out or back up if deployed for HF.
7	Make any final adjustments to the counterpoise & whip(s) until the lowest SWR is achieved.

Approximate Vertical Element & Counterpoise Element length		
Band	Vertical Element	One adjustable 31' Counterpoise Element is supplied. <i>* Length of 4 user supplied Counterpoise Elements</i>
20	13 feet 2 inches	18 feet 2 inches
17	9 feet 8 inches	14 feet 2 3/8 inches
15	8 feet 7 3/4 inches	12 feet 1 1/2 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