α Alpha Antenna

UV6 Guide

VHF UHF 6M Antenna

Site & Assembly

SITE: Prepare your deployment location & mast, then layout the antenna's components.

ASSEMBLY:

STEP 1 (Figure 1) – Tap the upper section till the set screw on the **Element Coupler** is exposed, Figure 1a. Slide the **Wire Element** from the bottom section of the antenna into the **Element Coupler** and tighten the set screw, Figure 1a.

STEP 2 (Figure 2) – Insert upper section of the antenna into lower section, till the **Female Gasket** coupler meets the **Male Gasket** coupler. Thread upper joint nut onto lower joint, taking great care not to cross thread these. Tighten, but do not overtighten the female and male gasket couplers.

STEP 3 (Figure 3) – a) Loosen (do not remove) the bolts on the **Support Brackets** and slide them over the **Mast Pipe**, then tighten the bolts (do not overtighten). **b**) Pass your Coax Cable through the bottom of the Mast Pipe and attach it to the antenna's **SO239**. c) Remove the Lock Washer & Bolt from the bottom section of the antenna. Then align the set hole on the Mast Pipe with the threaded hole at the base of the antenna and secure this with the Lock Washer & Bolt that was removed.

STEP 4 (Figure 4) – Install the current state of the antenna on your **Mast** with the **Mounting Hardware & U-bolts** by a) removing the nuts & washers from the U-Bolts, b) inserting the U-Bolts into the Mounting Hardware, **c**) sliding the U-Bolts over your mast, and d) securing the system in place by replacing and tightening (do not overtighten) the nuts and washers onto the threaded section of the U-Bolts.

STEP 5 (Figure 5) – Install the **3 Counterpoise** by screwing them in at the base of the antenna and secure them with the Lock Nuts.

STEP 6 (Figure 6) – With the antenna deployed at about 10-feet above the ground on a mast, make changes to the **Adjustable Counterpoise** by loosening/tightening the set screw, while extending/retracting it, till the best SWR on 6 meters is achieved by adjusting counterpoise's Inside Length "**A**" (inside the 'trap') and its' Rod Length "**B**" extending from the 'trap'.

NOTES

- Although no adjustments are possible on the 2 meter and 70 cm bands, a final check of the SWR should be taken once the antenna is deployed.
- Install a choke at the base of the antenna, by forming a one-turn 10-inch diameter coil using the coaxial cable. You may then zip tie or tape the coil to your mast.
- Adjustable Counterpoise may need to be trimmed at 'B' for perfect resonance on 6M.

Figure 1a

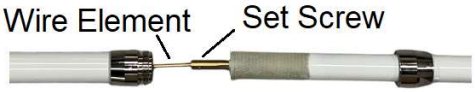

Figure 1b

Figure 2

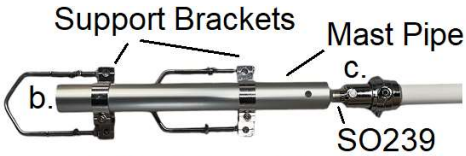

Figure 3

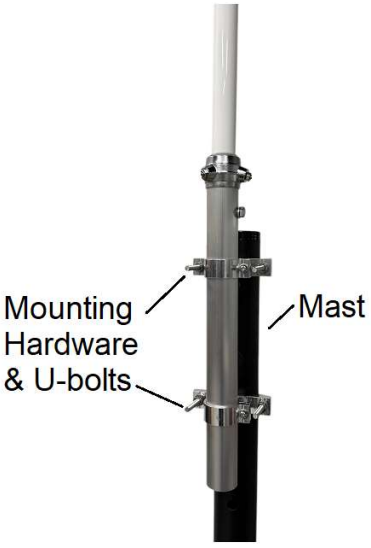

Figure 4

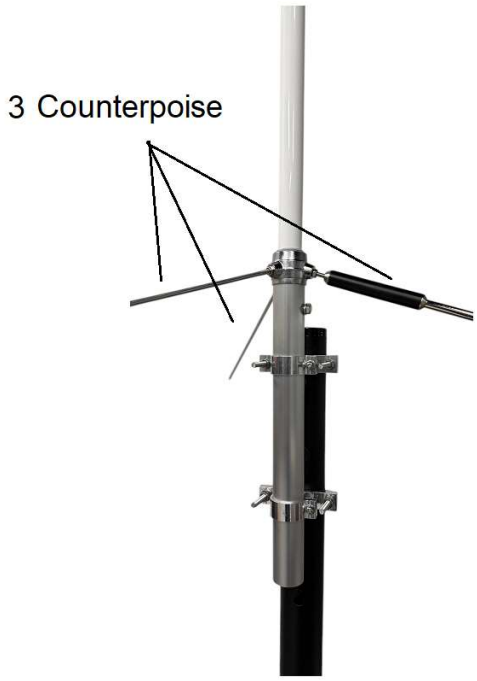

Figure 5

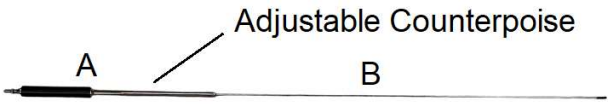

Figure 6

6 Meter Counterpoise Adjustment * **		
* Reference chart: some Installations may vary.		
**Tune for minimum SWR.		
Center Frequency	Inside Length "A"	Rod Length "B"
52 MHz	2 5/8"	23"
52.5 MHz	3 5/8"	22"
53 MHz	4 5/8"	21"
53.5 MHz	5 5/8"	20"