# Qik-Zepp

## (1/2 wL end fed antenna)

## Please read the instructions! You'll be glad you did!

www.qikzepp.com Tel 603-651-0427

### What's in the box?

Qty	Part	Qty	Part
1	12 Meter QZ-12 Matcher	1	#10 Nickel Plated Brass Thumb Nut
1	12M Antenna Wire 19'(un-tuned)	2	#10 Stainless Flat Washers
1	12M Tuning Slider Wire 10"	1	Shipping Box
1	End Insulator	1	QZ-12 Manual
1	#10 Stainless Lock Washer	2	Drip Dams (1 for drips, 1 for tuning slider)

## Safety first!

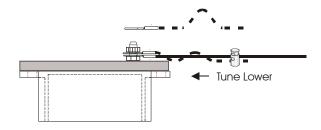
- \* Do not install over or around AC power lines or feeders, you could be killed or injured!
- \* Do not touch or allow others to touch the antenna while transmitting over 1 KV can be present!
- \* RF Exposure, follow the FCC OET Bulletin 65 and Amateur Radio Supplement B to OET Bulletin 65 guidelines. Best practice as usual, use the least amount of power needed.

### Tips & Advice

- -- This is a Single Band Antenna, DO NOT try to force it onto other bands!
- --Do NOT USE conductive guy lines to support it, and never tie directly to trees without using a pulley system!
- -- Deploy away from other antennas or metal if possible.

### **Putting it together:**

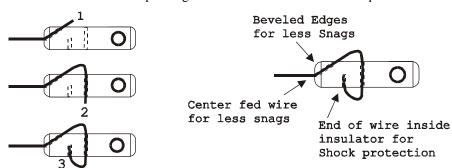
1. In the shipping box you will find the matching unit with a knurled thumb nut, and the antenna wire with tuning slider wire coupled together by a Drip Dam lock. Remove the thumb nut/flat washer/lock washer and put the antenna wire + slider wire ring terminals over the 10-32 stud. Put the lock washer>flat washer>thumb nut back on. Align the slide wire with the antenna wire (2 spiral twists of the slider wire around the antenna wire will help) and tighten thumb nut snug only.



2. Drip Dam(optional) Helps prevent water/rain from running down the antenna wire to the operating position. Squeeze and slide the non-conductive Drip Dam over the open wire end before final insulator install.



3. **Installing insulator**--thread wire thru per diagram below and it will self lock in place.



- 4. **Initial Tuning the antenna--** The Qik-Zepp's have a tunable sliding feature that allows the antenna to be tuned by about 80kHz once the antenna has been brought to resonance after the initial cutting back of the stock antenna wire. **Before** beginning the initial tuning make sure the 10" long tuning slider is in place as described in Step 1 of Putting the Antenna together. Initial tuning should be done with the coaxial cable that you will using, preferably connected an antenna analyzer or secondarily an SWR meter. The antennas out of the box are long(lower in frequency than they should be) so that the free end of the antenna may be cut back to raise the resonant frequency. Proceed slowly and methodically by positioning the antenna as you will most likely use it. Measure the antenna resonance first and clip off no more than one inch to begin tuning. If you are going to target a certain mode per a Band Plan then carefully trim the antenna to the middle of that span i.e.CW vs Phone. If using an SWR meter you will need to take several sample readings low/middle/high of your frequency of interest with each cut of the wire. If you trim a little too much don't panic, the slide tuner can compensate by moving about 80kHz. If you're finished tuning then thread the wire through the insulator per Step 3 which locks the wire in place and buries the exposed wire tip in the center of the insulator for additional shock protection.
- 5. **Field Tuning--** The resonance of antennas are affected by their surroundings and will shift as height, mounting, and proximity to metal do. The Qik-Zepp's have a slick tuning capability that allows one to raise and lower the resonance quickly to match most situations. When the antenna was Initially tuned by cutting the antenna wire, the slider wire should have been parallel to and closely coupled to the antenna wire. With the slider wire closely coupled, the antenna tends towards higher frequency. By compressing and releasing the Drip Dam lock, and moving the end of the slider wire back towards the matching unit a camel's hump will be created as seen at the top of Fig 1. This decouples the slider wire from the antenna wire and causes the resonant frequency to drop. From flat against the Antenna wire to the lock being much closer to the matching unit with a large Camel's hump is about 80kHz. If a higher frequency is needed, then you can return to Step 5 and re-cut for a little higher resonance, then allow the slider to bring the frequency back down to a sweet spot by making a Camel's hump. The convenience of the slider wire is that the wire is not floppy and will stay in a stable loop shape once positioned, making the tuning settings reasonably repeatable.

#### **SPECIFICATIONS**

Output Impedance: 50 Ohms Length: 19' un-tuned,  $\sim$ 18' 6" tuned

V.S.W.R. Bandwidth: 450KHz 1.5:1 Hardware: Stainless Steel & Nickle Plated Brass

Power Handling: 100W Connector: Silver/Gold/Teflon SO-239

Weight: 0.5 lbs Antenna & Slider wire: #18 black poly stranded

