

QRPGuys 40m-10m UnUnTenna



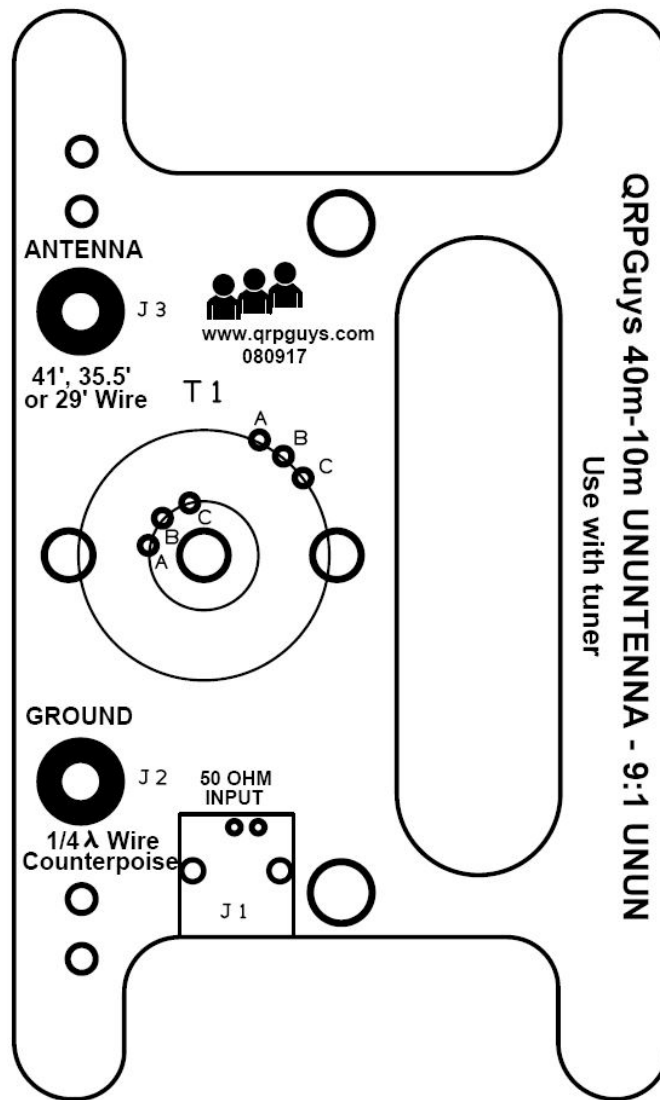
First, familiarize yourself with the parts and check for all the components. If a part is missing, please contact us and we will send one. To request a part, please use qrpguys.parts@gmail.com.

Please read all the instructions before starting the assembly.

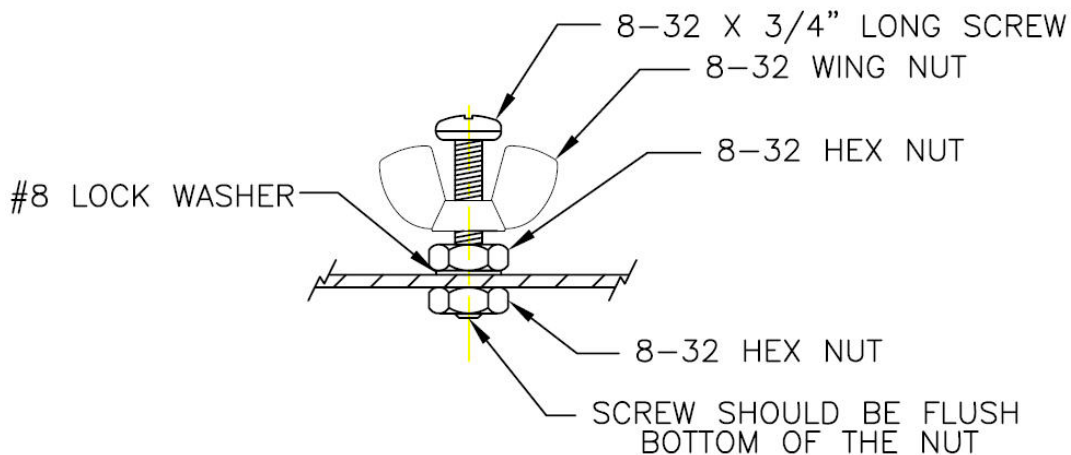
Parts List

- 1 – QRPGuys UnUnTenna pcb
- 1 – T1, T106-2 toroid core (red)
- 1 – 24" of 26AWG magnet wire (red)
- 1 – 24" of 26AWG magnet wire (yellow)
- 1 – 24" of 26AWG magnet wire (green)
- 1 - BNC PCB horizontal connector
- 2 – 8-32 x 3/4" L SS Phillips pan head screw
- 4 – 8-32 SS nut
- 2 – #8 internal tooth SS lock washer
- 2 – 8-32 SS wing nut
- 2 – nylon tie wrap

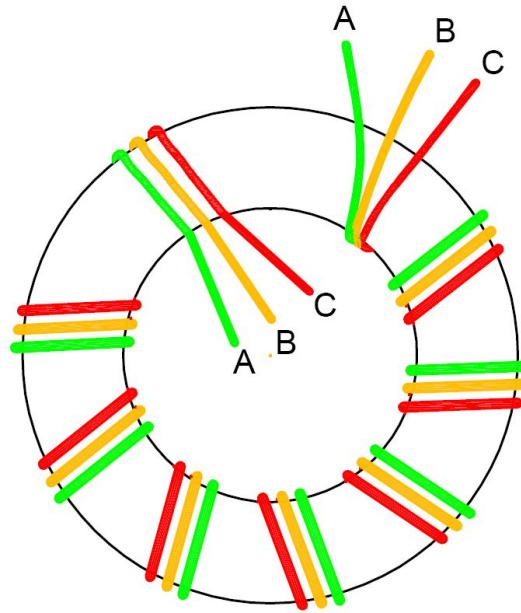
Refer to the graphic below and the PCB silk screening for the placement of the components.



- [] Install the horizontal BNC connector
- [] Install the hardware posts for the antenna and counterpoise wires on the top of the board, as shown in the figure below. The post screw should be flush with the outside of the securing nut on the bottom side.



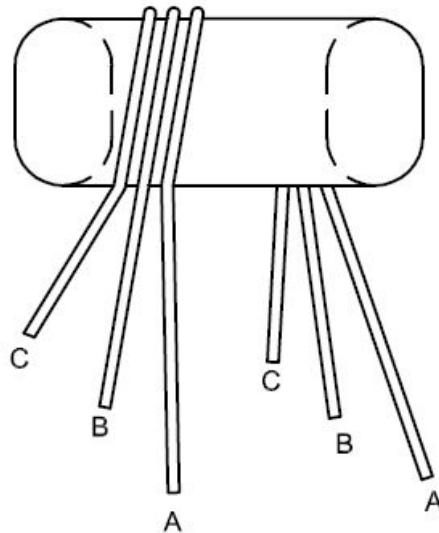
Next to install is T1 that must be wound as shown below.



If a winding does not end up as shown below or is not wound in the same direction as shown below, T1 will not align up with the pads on the pcb. Note that the ends of the windings must be over or under the core as shown.

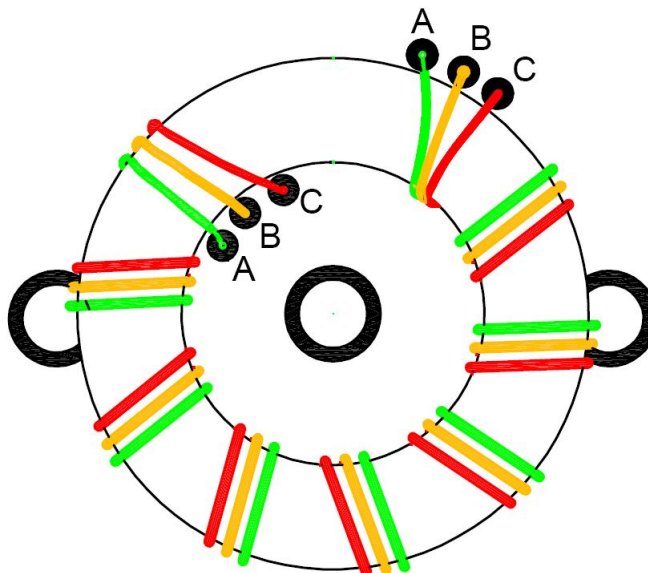
Wind a total of “nine” turns for each color. Remember every time a wire goes thru the center is one turn. You can wind the “B” winding then wind the other color on each side.

If we sent the same color wire for all three windings, wind each one separately, but trim the separate windings three different lengths for the A, B, and C windings. This will help keep the windings identified. If you get confused, use an ohm meter *before* installing to sort out the windings. See below...

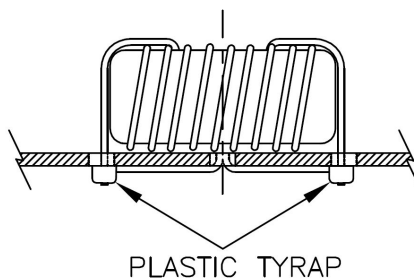


Bend the wires down and pre-tin the wire in preparation to soldering them to the board. Solder the toroid flush with the top of the board.

Shown below is how it should look when soldered into the board.



[] Retain T1 with the two nylon tie wraps as shown below.



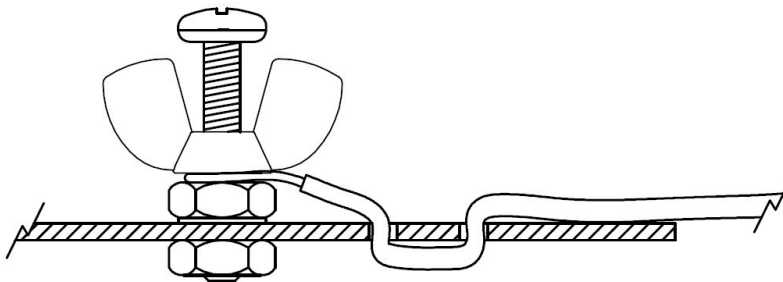
Using the antenna:

Use all the normal cautions throwing wires up in the air near power lines.

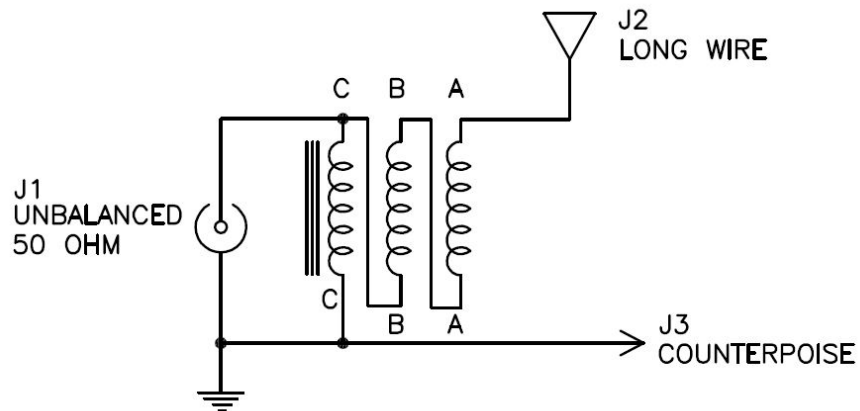
The QRPGuys UnAntenna covers 40m – 10m and must be used with a tuner. The builder supplies the wire for the driven element and counterpoise. You can use 20awg to 26awg depending what you have available for both wires. There is a BNC female connector for the input from your tuner. The autotuners in the Elecraft KX-2, KX-3, Icom IC-703, and our Multi Z Tuner work very well. You can use a 29', 35.5', or 41' long non-resonate length of antenna wire for the driven element for all bands. Position the wire as high as practical, either vertical or on an angle. The counterpoise can just be laid on the ground in a straight line. Theoretically the counterpoise can be 1/4 wavelength, but we have found the length of 35 feet works well on the ground for all the bands used. There are 1/4' diameter holes top and bottom to secure the pcb to whatever is handy. The antenna has optimum efficiency at 20m and will be an S unit less in performance at the 40m and 10m ends.

You can keep the wires attached to the device at all times using the built-in strain reliefs and winding the two element wires around the pcb for compact storage. *Hint: Use two different color wires and wind the main element and counterpoise separately.* This makes it easier to deploy next time.

Shown below is the strain relief routing for the antenna and counterpoise wires.



Schematic:



Notes:
