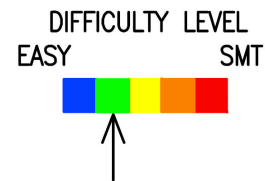
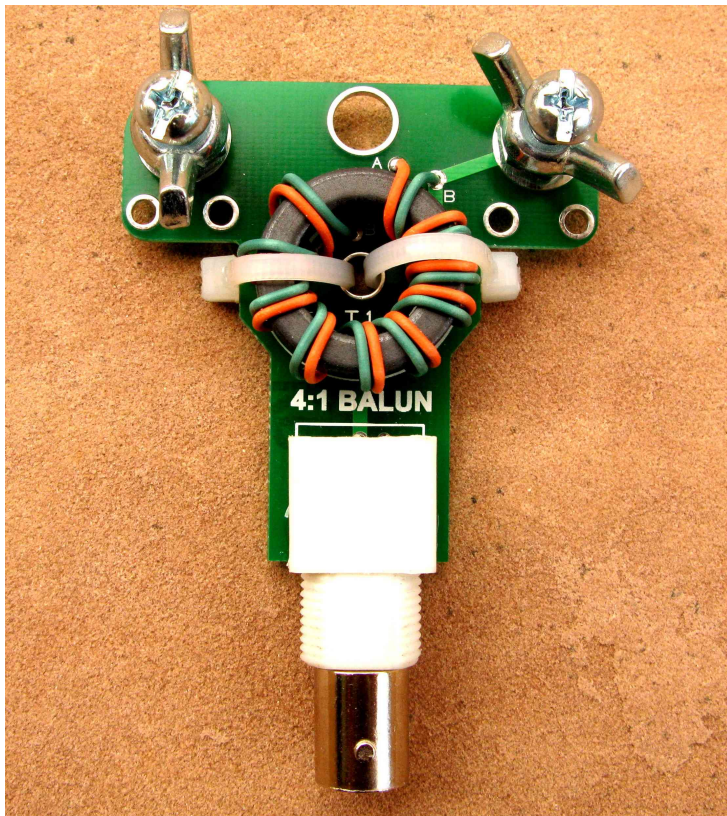


QRPGuys 4:1 Balun



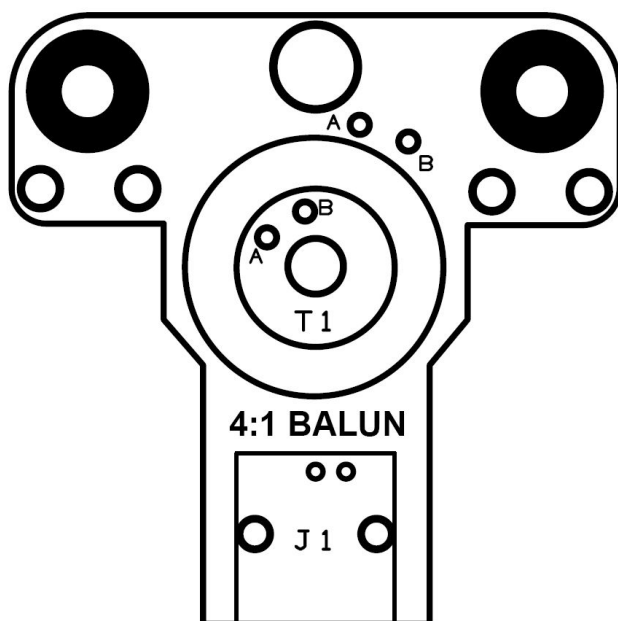
First, familiarize yourself with the parts and check for all the components. If a part is missing, please contact us and we will send one. To request a part use the [SUPPORT](#) button on any page and submit a ticket.

Please read all the instructions before starting the assembly.

Parts List

- 1 – QRPGuys 1:1 Balun pcb
- 1 – T1, FT82-43 toroid (black)
- 2 – 12" each of two different colors 24AWG solid wire
- 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

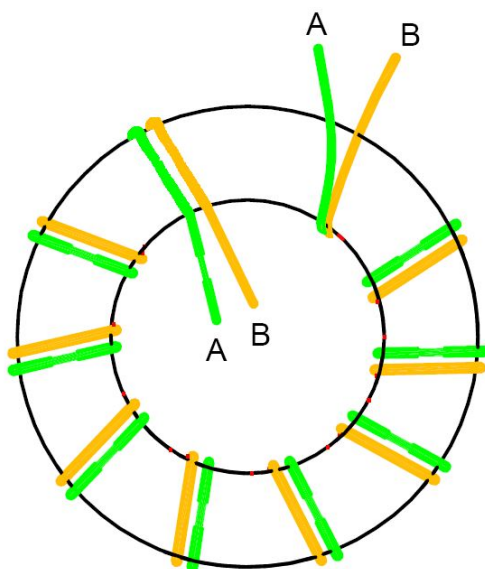
Refer to the graphic below and the PCB silk screening for the placement of the components.



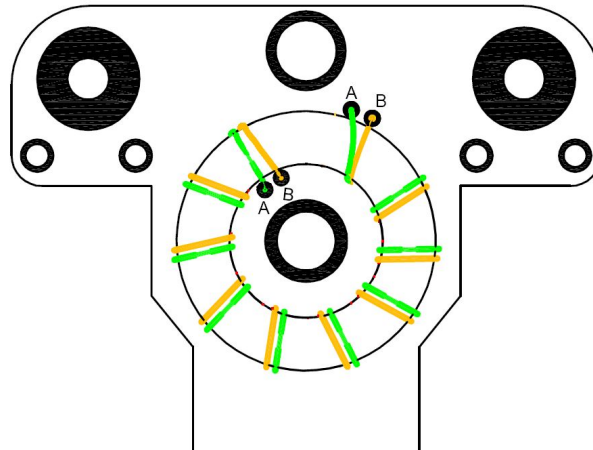
First to install is T1 that must be wound as shown below.

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. If the wires are crossed and don't line up with the holes, wind it again like the instructions.

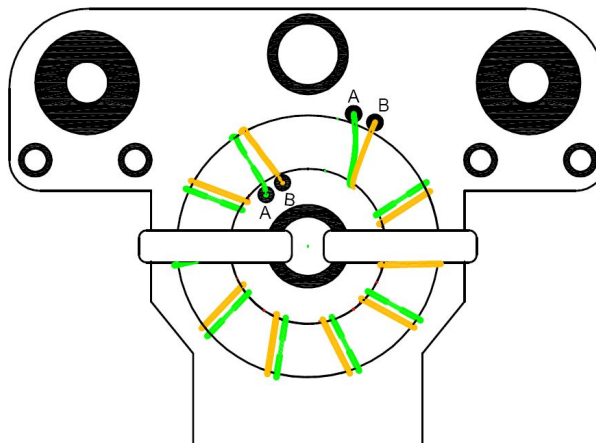
Wind a total of "ten" turns for each color. Space the turns evenly. Remember every time a wire goes thru the center is one turn. You can wind the "A" winding then wind the "B" color on left side. You will receive two different color wires.



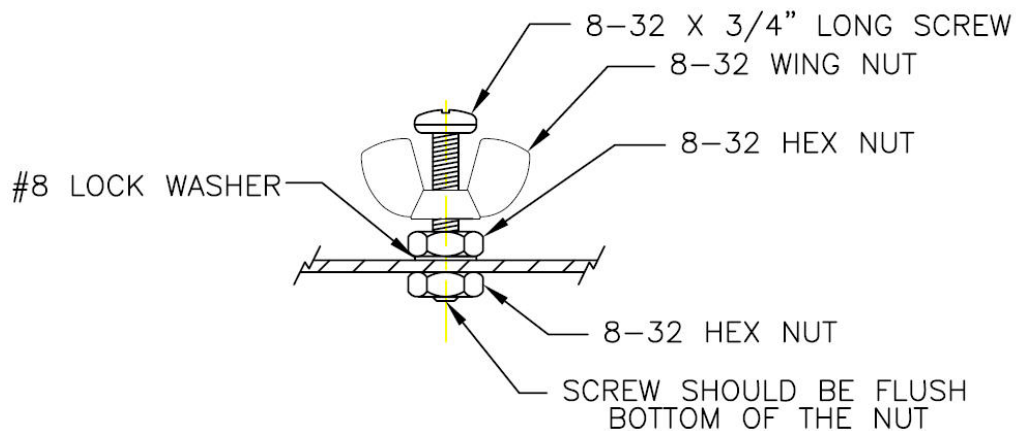
Bend the wires down and pre-tin the wire in preparation to soldering them to the board. Solder the toroid flush with the top of the board. Shown below is how it should look when soldered into the board.



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



- [] 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.

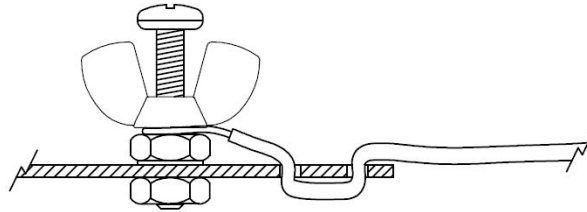


- [] Install the horizontal BNC connector

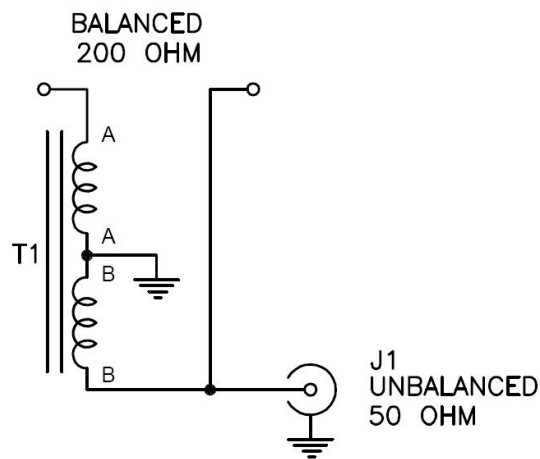
Using the balun:

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

The QRPGuys 4:1 Balun covers the HF bands and is good for at least 20 watts. There is a BNC female connector for the 50 ohm input from your radio or tuner. Route the wires through the smaller holes under the wingnuts and this will serve as strain reliefs.



Schematic:



Notes:
