



QRPGuys Electret Microphone kit



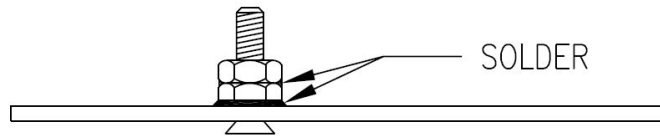
First, familiarize yourself with the parts and check for all the components. If a part is missing, please contact us and we will send one. To request a part, please use qrpguys.parts@gmail.com. Read all the instructions before proceeding.

Parts List

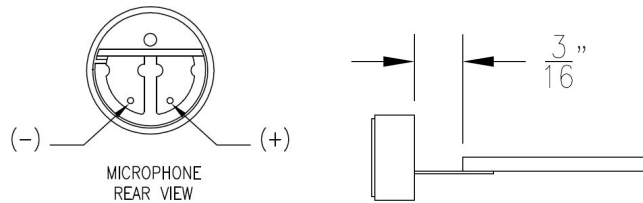
- 1 – QRPGuys electret microphone pcb
- 1 – electret microphone element
- 1 – C1, .001uF (1nf) MLCC cap
- 1 – S1, N.O. tactile switch
- 1 – J1, 3.5mm stereo pcb jack
- 1 – 4-40 x .375" long SS flat head screw
- 2 – 4-40 brass nut
- 1 – 3.25" long cpvc tube, .625 O.D.
- 2 – 5/8" I.D. Caplug vinyl cap

The tools you will need are a soldering iron with a small tip, solder, needle nose pliers, xacto knife, 3/16" drill, and side cutters. Assembly time is less than 1/2 hour.

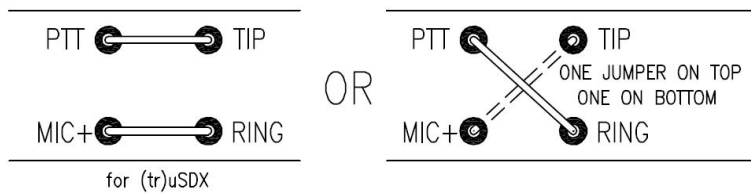
- [] Scrape or clean the 4-40 brass nuts with emery paper or an emery board so the brass will solder easily. Tighten the two 4-40 nuts as shown with the 4-40 SS flat head screw from the bottom of the pcb. Solder the two 4-40 nuts together, and to the top surface of the pcb. Remove and save the screw.



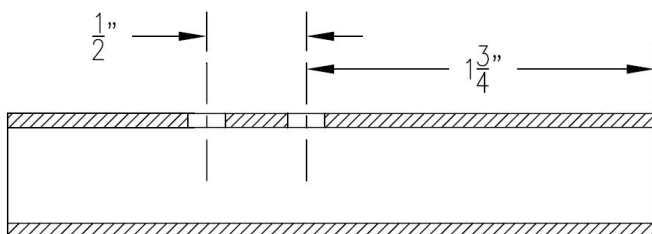
- [] Install the .001uF capacitor (marked 102) at C1. Clip flush on the bottom and save the clipped leads for later.
- [] Install the 3.5mm female jack where indicated on the top of the pcb.
- [] Install the electret microphone element. It is polarity dependant. Referencing the graphic below, solder to the **bottom** of the board with the wires laying flat, to the pads, observing the polarity marked on the board with the polarity of the device.



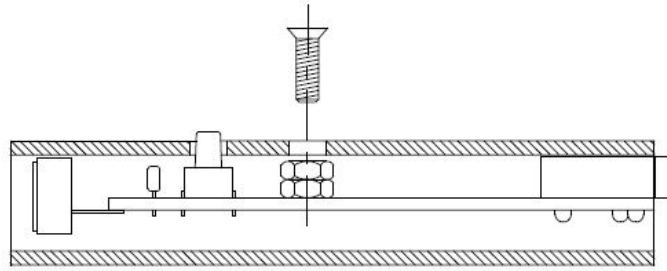
- [] Install the tactile switch on the top of the pcb
- [] The pcb can be set-up for the **tip** of the 3.5mm socket to be either the PTT or MIC, and the **ring** to PTT or MIC. Consult you manual to see which your radio needs, and jumper with two of the clipped capacitor leads using the picture below. If the jumpers are straight, as shown on the left, you can install them on the same side. If they cross, install one on the top and the other on the bottom. Check your choice by testing the microphone before installing it into the tube.



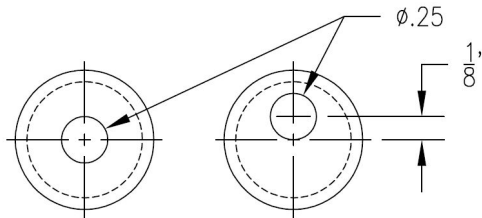
- [] Drill two $\varnothing 3/16$ " holes through one side of the cpvc tube with the dimensions shown below. Be careful not to drill the holes oversize, or the head of the screw will not retain the pcb, and a washer will be necessary.



- [] Slide the pcb in from the end and secure with the 4-40 flat head screw.



- [] The two vinyl caps need to have a hole in them and installed on each end. For the microphone end, a 1/4" hole in the center will do. The 3.5mm jack end, 1/4" hole also, but you will see the jack is off center and the cap will need to match the offset jack. Use an xacto knife to cut the vinyl. It is soft and will cut easily.



This completes the assembly. Connect the microphone to you transceiver with any commonly available 3.5mm stereo jumper. Only the PTT is switched so the microphone will work with VOX as well as PTT.

