

Modification to PSK Meter PCB rev 1.1 by VE3JBT

This minor modification adds a switch to the PSK meter so that switching between QRP and QRO settings can be done without disassembling the case to move the jumper.

The first step is to make sure the jumper block is removed from the header pins, or stowed so that the header pins are not shorted. If the shorting block is left in place, it will of course defeat the function of the switch.

Find a sub-miniature SPST toggle switch similar to the one shown in figure 1 below. I got mine from Radio Shack. If your RS store doesn't have it, check your favourite parts emporium for something similar.



Fig. 1

RS P/N 276-645A

My switch had a round flange at the base of the threaded part; I filed the flange off so the switch would lie flat on the PCB.

I also gently bent the leads 90 degrees so they would be close to the PCB allowing easier soldering. The result of these alterations to the switch can be seen in figure 2 below.

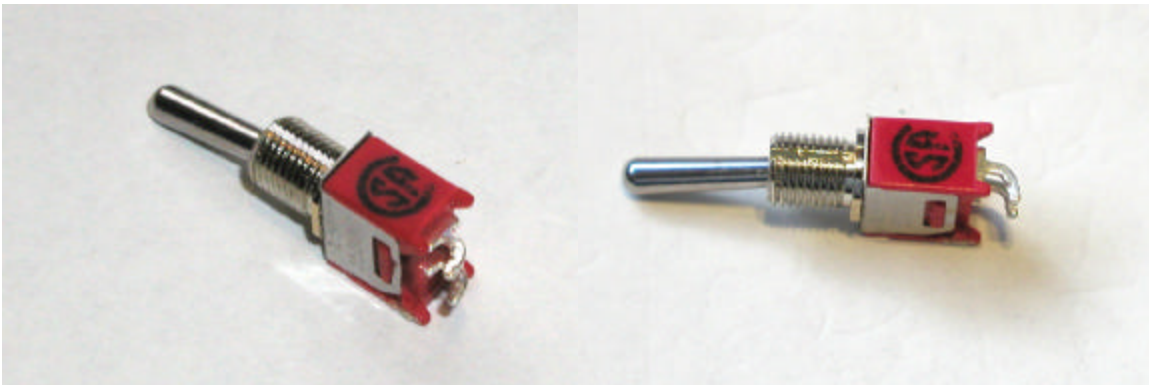


Fig. 2

The next step is to solder the switch to the wiring side of the PCB. Solder the bent switch leads to the short header pins that poke through the PCB near the BNC connector. To hold the switch in place, set the PCB in the case and sticky tape the switch down so that its leads are in close contact with the header pins. This set-up is shown in figure 3.



Fig. 3

After soldering, make sure the joints are shiny and there is adequate solder to provide a measure of strength to the switch mounting. Optionally you might wish to add a small blob of electronics grade silicone glue to further secure the switch. Check with an ohmmeter on the header pins and make sure the switch is functioning properly. Also make a note as to which side the toggle handle must be in order to short the header pins. This side should be labelled QRP.

The soldered in switch is shown in figures 4 and 5.

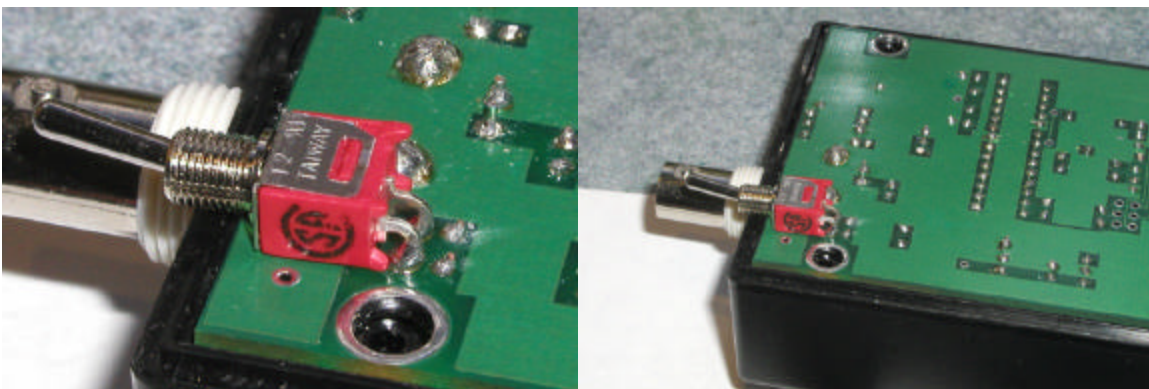


Fig.4

Fig. 5

Drill a hole in the lower half of the case for the threaded part of the switch. Make sure the hole is not too snug a fit or you will have difficulty getting the switch through the hole and installing the bottom half of the case. My switch had a

thread diameter of 4.75mm (3/16 in) so I drilled the hole 5.5 mm (7/32 in). See Figure 7 below.

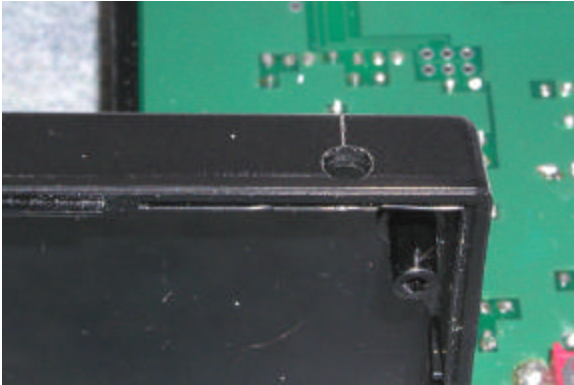


Fig. 7

Install the bottom half of the case by carefully working the switch through the hole. And gently push the front edges of the case into position so that they interlock properly and install the 4 case screws. I installed one of the hex nuts on the switch to give a more finished appearance. DO NOT over tighten the nut however, or you might break the solder connections. I made labels with a Brother P-touch labeller, which worked quite well, the finished unit is shown in Figure 8 below.



Fig. 8

P.S. If you solder the switch so that the handle end angles up from the board slightly, you can make your hole a little lower on the case than I did and get a better fit to the sloping face of the case bottom. You could avoid having to file the flat on the switch too. Oh well, we learn by doing eh?

That's it Happy PSK'ing

73

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