

Installing the TCXO in the QCX Classic

Since all three versions of the QCX have the same circuit there is no reason the TCXO cannot be added to any one of them to improve the frequency stability. I found the TCXO worked very well in the QCX mini and so I wanted to add it to my three QCX classics. Conferring with Hans, I learned that in fact I could do it but that I would need to fit it into the available space and have it held in place by the three connecting wires.

The TCXO has three well labeled eyelets: OUT, VDD, and GND. I soldered bare copper single strand wires to these three eyelets. The TCXO can fit down on top of where the crystal was and where IC1 is. Just be careful the bare wires do not contact any of the circuitry in that area, especially the Clk0 output. Or add some heatshrink if you like.

Desolder and remove the 27 MHz crystal (assuming it was installed). The OUT wire then gets soldered into the eyelet where the crystal was nearest the FREQ test point. The other two wires will be “tacked on” to existing parts. The VDD wire goes to D2 at the +5vdc end next to C41. The GND wire goes to the grounded side of any of the four capacitors C43 through C46. I found C45 on the side next to R17 to be the most convenient.

Remember to set the “8.5 Ref frq” to 25,000,000 in the Alignment menu!

