



Fig. 1

Fig. 1 shows the circuit of an improved manual tuner control for the IC718. The tuner connector shown should be self-explanatory. The PTT terminal is connected to the Send Control jack on the transceiver which is normally intended to key a power amplifier. My construction is on a small perf board attached to the Molex male connector and the PTT connection is a flying wire coming off the other end of the board with a phono plug at the end.

The circuit is basically an RS flip-flop that is set by the low pulse on START when you hit the tuner button and reset by the positive edge on PTT when tuning ends either manually by hitting the tuner button again or by the IC718 firmware after about 20 seconds. There is no waiting period required after manually ending the tuning cycle and keying the microphone never inadvertently starts tuning. The TUNE display always turns off when tuning ends.

Parts are uncritical and should be found in most junk boxes. Transistors may be 2N3904, 2N4401, 2N2222 or just about anything similar. Diode is shown as 1N4148 but any reasonable silicon switching diode will do. The schematic is shown "as built". I do not show any bypass capacitors; one across the 14V supply certainly won't hurt. Don't put a bypass on the KEY/START line or your transceiver will probably start tuning every time you turn it on, which is not good. I have had no glitches at all but I have little or no RF in the shack.

If the Send Control jack is used to key a PA, a little extra investigation is required to see if the two uses can coexist. For one thing, you probably don't want to key the PA when tuning. Which means that you want to key the PA when PTT is low AND KEY/START is high, requiring some additional logic.