

TR-7930 TONE MOD

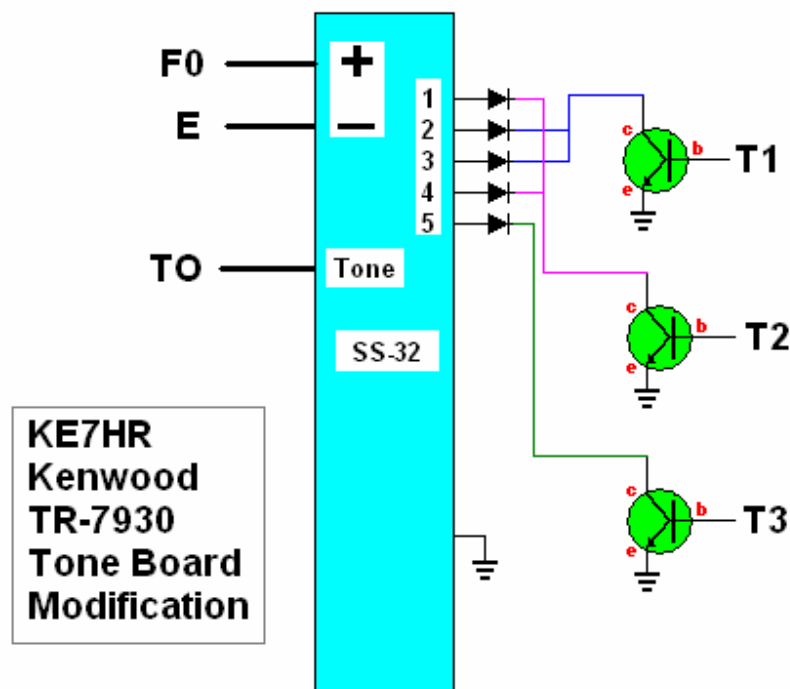
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The Kenwood TR-7930 (and TR-7950) had an optional sub-audible tone generator board that selected one of three different possible tones, which was not installed in the used radio I bought. Researching the tone generator, I found a “works alike” replacement for more than twice the price that I got the radio for. Digging through my junk box, I found an old Communications Specialists SS-32 tone generator. With some clip leads and another junk box connector that mated with the pins on the radio board, I set up a successful test.

The SS-32 has 5 DIP switches to set the output tone. By removing the DIP switch assembly and replacing it with switching diodes and three NPN general purpose transistors, I now had a three tone switcher, just like the original.

The 1N914 type switching diodes are run from the one side of the old switch pads to the collector of the transistor. The base of each transistor is switched by a voltage from the radio when the front panel tone control switches to the different tones. This causes the diodes to conduct to ground (emitter of the transistor), setting the tone output.

I mounted the transistors and diodes in the place where the DIP switch had been. The tone board was mounted to the inside of the radio frame with double sided foam tape.



Diodes: 1N914 Transistors: NPN General Purpose
Only one diode per pin shown - more may be needed per pin for tones desired.

