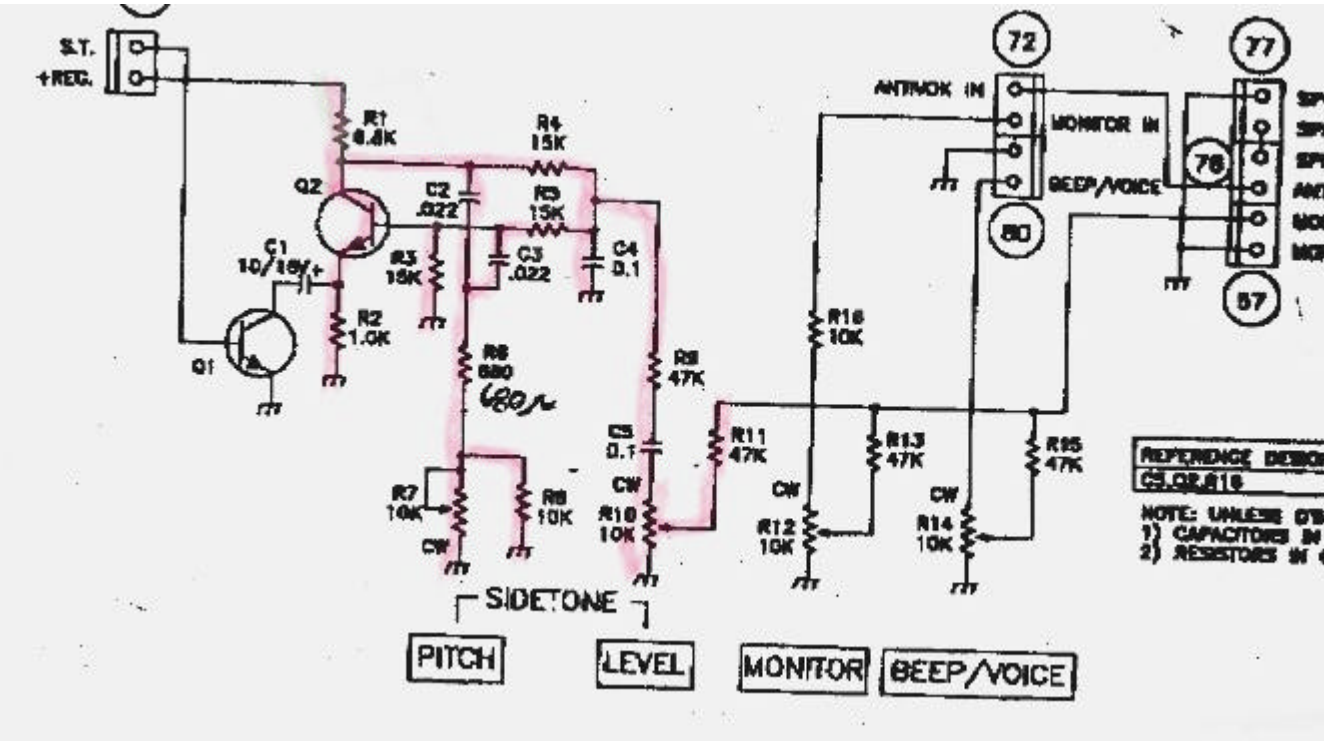
Sidetone for Omni V



The above shows the sidetone for an Omni V which produces a sine wave. I've outlined the Twin-T oscillator in red. The older TT rigs used the relaxation oscillator which produced a sawtooth wave. I don't have the diagram for the Corsair but most TT rigs including Triton, Argosy, Omni A/D, Corsair used the relaxation osc. The Delta 580, Paragon 1&2 and Omni V used this T oscillator. Q1 is likely already in the old circuit. The ST line is your T voltage and Q1 is simply a switch to ground the emitter of Q2 for keying the sidetone. Pitch and Level controls are probably the same value and can remain in the circuit.

I used the "ugly" method of construction i.e. I removed the FET transistor and a few parts from my old Omni C, cut the foil in a few places and haywired the parts as neatly as possible. I recommend doing this project in one setting otherwise your train of thought will derail. It wouldn't hurt to read up on the twin-T oscillator in the ARRL Handbook before starting. The only critical parts are C2, C3, R4 and R5. These should be balanced in value as shown. Variations in value will result in frequency changes.

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