

Compact FM Transmitter

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ABSTRACT

The compact FM transmitter is based around the use of two NPN transistors. The input to the transmitter can be through one of two microphones. The first microphone is an electret mic that is omnidirectional and because of this can pick up a lot of background noise. The second microphone is a throat mic that does not suffer from the same issues as it works by picking up the vibrations on the wearer's neck instead of vibrations in the air. The transmitter itself is built up from three main sections, a pre-amplifier that stops the microphone from being over driven, a tank circuit that produces the carrier wave and the frequency modulator that modulates the carrier wave with the audio signal.

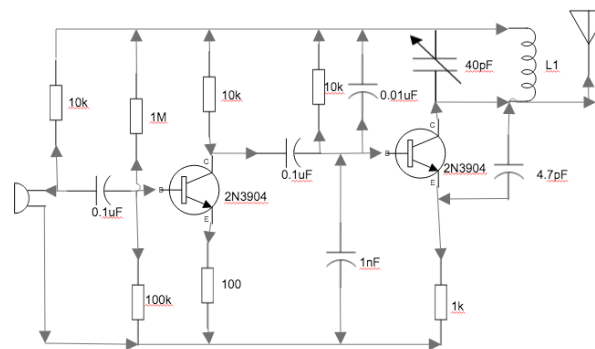


Figure 2. Transmitter circuit