

MULTITONE SIREN

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his multitone siren is useful for burglar alarms, reverse horns, etc. It produces five different audio tones and is much more earcatching than a single-tone siren.

The circuit is built around popular CMOS oscillator-cum-divider IC 4060

and small audio amplifier LM386. IC 4060 is used as the multitone generator. A $100\mu H$ inductor is used at the input of IC 4060. So it oscillates within the range of about 5MHz RF. IC 4060 itself divides RF signals into AF and ultrasonic ranges. Audio signals of different frequencies are available at pins 1, 2, 3, 13 and 15 of IC 4060 (IC1).



These multifrequency signals are mixed and fed to the audio amplifier built around IC LM386.

The output of IC2 is fed to the speaker through capacitor C9. If you want louder sound, use power amplifier TBA810 or TDA1010.

Only five outputs of IC1 are used here as the other five outputs (pins 4 through 7 and 14) produce ultrasonic signals, which are not audible.

Assemble the circuit on a general-purpose PCB and enclose in a suitable cabinet. Regulated 6V-12V (or a battery) can be used to power the circuit.

