

COMMERCIAL KILLER

FOR A CLOCK RADIO

Low-cost system cuts off the audio on cue from the listener and restores it after one minute

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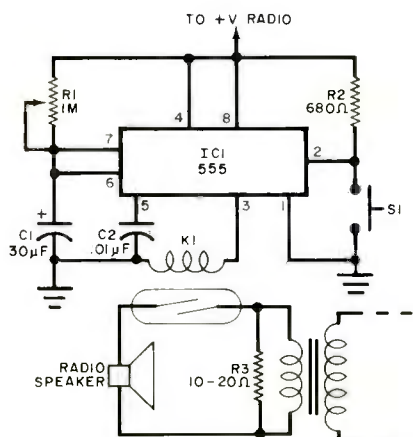
DID you ever wish you could eliminate radio commercials and TV commercial sound? My clock radio, tuned to the local news station, is set for 6:00 a.m. This means 5 minutes of news interspersed with 5 minutes of commercials, and I find few things worse than listening to soap or laxative jingles at that hour! Fortunately, most commercials are exactly one minute long—which makes them not too hard to silence.

Basically, the system cuts off the audio on cue from the listener and uses a one-minute delay circuit to restore it—presumably after the commercial is over. Figure 1 shows the schematic diagram of the system, which uses about \$3.00 worth of parts, depending upon the size and condition of your parts junkbox. Here's how it works: As soon as the commercial starts, push switch *S1* momentarily. This triggers *IC1*, a 555 IC timer chip, wired as a monostable. Triggering forces pin 3 of the IC high, operating relay *K1*, which pulls in, opening its normally closed contacts. These contacts, in series with the

loudspeaker, squelch the audio. After one minute (as set by *C1* and *R1*), pin 3 goes low releasing the relay and restoring the audio—just in time for resumption of the broadcast.

The circuit is easily wired, point-to-point on a 2" x 2" piece of perf board. Supply voltage (9 to 12 volts) is tapped from the radio or TV at any convenient point, and one speaker lead is placed in series with the relay contacts. It is recommended that a resistor be placed across the two leads that normally feed the speaker, as most power circuits do not like to be left unloaded. A 10- or 20-ohm resistor will do fine. Wrap the board with tape to protect the wiring and position it in a convenient space inside the receiver. The trigger wires can be brought out through the rear of the set, and connected to a pushbutton switch that can be placed at any convenient location.

Adding the "commercial killer" to my radio, has restored my sanity, and I'm able to face the morning shower, my wife, and the world with a smile. It may do as well for you. ♦



PARTS LIST

- C1—30- μ F, 15-V capacitor
- C2—0.01- μ F, disc capacitor
- IC1—555 timer
- K1—9-to-12-V, reed relay
- R1—1-M Ω trimpot
- R2—680 Ω , 1/2-W resistor
- R3—10-to-20 Ω , 1/2-W resistor
- S1—Momentary-contact pushbutton switch
- Misc.—Perf board, wire, solder, etc.

Fig. 1. Duration of silencer period is set by *R1* and *C1*.