

store and they all ran less than 140 mA coil current. Diode D2 is there to protect the output transistor from voltage spikes created by the magnetic field in the relay coil collapsing, and may be placed directly across the relay coil.

In practice, connect the positive lead of the timer to a circuit in the car that comes on only when the ignition is on, and ground the negative lead. I chose the power to the car's stereo radio. After the delay time, pin 3 of the 555 timer will go high turning on the

Table 1
Timing Resistor and Capacitor Values for About 6 Second Delay

C_A (μF)	R_A ($k\Omega$)
470	12
220	24
100	56
47	120
22	240
10	560
4.7	1200

can be adapted to any use where a simple delay on is required.

NPN transistor and sourcing the current to pull in the relay. I mounted the relay under the hood in a convenient spot near the battery so I can supply the radio directly from there. As soon as the ignition is turned off, power to the timer and relay are removed, shutting off the radio.

I have had one of these in my car for several years and have never had a problem with my radio. The timer

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