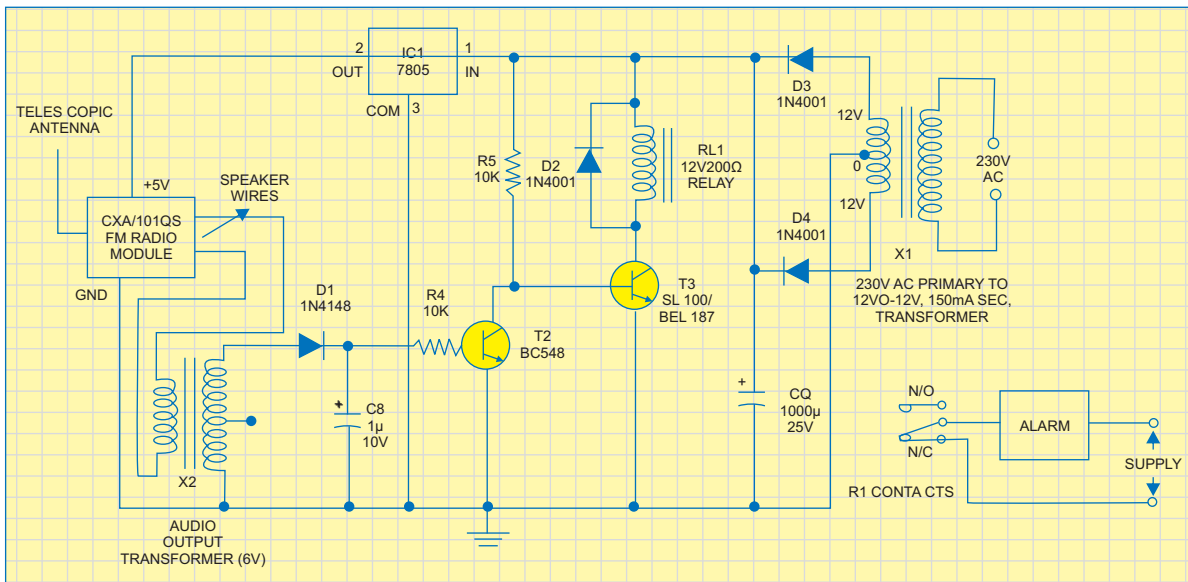
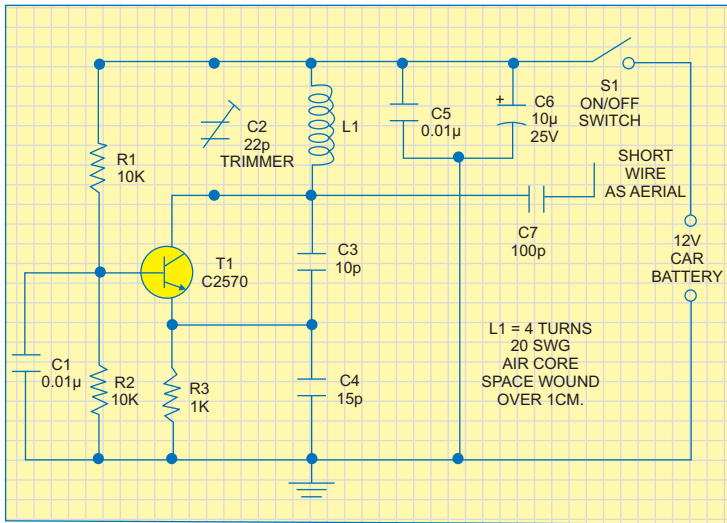




Car Anti Theft Wireless Alarm

This FM radio-controlled anti-theft alarm can be used with any vehicle having 6- to 12-volt DC supply system. The mini VHF, FM transmitter is fitted in the vehicle at night when it is parked in the car

porch or car park. The receiver unit with CXA1019, a single IC-based FM radio module, which is freely available in the market at reasonable rate, is kept inside. Receiver is tuned to the transmitter's frequency. When the transmitter is on and the signals are being received by FM radio receiver, no hissing noise is available at the output of receiver. Thus transistor T2 (BC548) does not conduct. This results in the relay driver transistor T3 getting its forward base bias via 10K resistor R5 and the relay gets energised. When an intruder tries to drive the car and takes it a few metres away from the car porch, the radio link between the car (transmitter) and alarm (receiver) is broken. As a result FM radio module generates hissing noise. Hissing AC signals are coupled to relay switching circuit via audio transformer. These AC signals are rectified and filtered by diode



[CIRCUIT IDEAS]

D1 and capacitor C8, and the resulting positive DC voltage provides a forward bias to transistor T2. Thus transistor T2 conducts, and it pulls the base of relay driver transistor T3 to ground level. The relay thus gets de-activated and the alarm connected via N/C contacts of relay is switched on. If, by chance,

the intruder finds out about the wireless alarm and disconnects the transmitter from battery, still remote alarm remains activated because in the absence of signal, the receiver continues to produce hissing noise at its output. So the burglar alarm is fool-proof and highly reliable.
