

Infrared Remote Control

August 98 Project : Infrared Remote Control:

This circuit will allow you to turn on any piece of equipment that operates on 115 volts ac. The receiver circuit is based on the Radio Shack infrared receiver module (MOD), part number 276-137. It is also available from some of the other sources listed on my Links page. The MOD accepts a 40kHz IR signal that is modulated at 4 kHz. When a signal is received the MOD will go low. The sensitivity of the MOD is set by different values for R1 and C1.

The values for R1 may need to be as high as 10,000 ohms and for C1 40µf. This will prevent the unit from turning on under normal lighting conditions. You will need to experiment with the values that work best for you. The output of the 4013 chip a flip flop toggles on and off with the reception of a IR pulse. The output of the 4013 turns on the MOC optical coupler which in turn switches on the triac and supplies power to the AC load.

