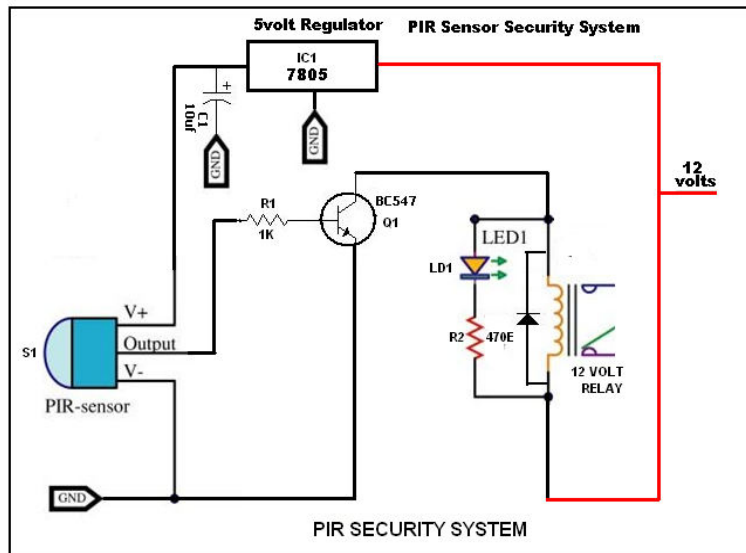


PIR SECURITY:



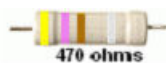
PIR security system is also known as passive Infrared sensor based security system. This sensor senses the movement of a moving human or a huge animal. When the sensor traces an intruder, it outputs a high logic value (5 Volts).The output value of this sensor is maintained for preset time duration by its modular circuit and it switches ON a relay switch to switch ON an alarm and a focus light to drive away the intruder.

This PIR sensor can detect an intruder even in the dark from a 20 feet distance. The working principle of this PIR sensor is based on the absorption of heat of the intruder, by the Infrared rays transmitted out of the PIR sensor. The sensed heat is detected by the sensor and converted to electrical signals which is further amplified and outputted as a 5volt logic value for a predefined delay period. The PIR sensor requires a 5 volt regulated power supply which is derived by IC-1 (LM 7805). This circuit as a whole is operated with a 12volt power supply. This type of security system can be used in banks, jewellerys, and cash boxes etc.

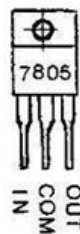
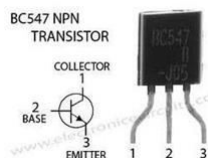
Components: R1 = 1k resistor, R2 = 470 ohms resistor, R3 = 1k Resistor, C1 = 10uf capacitor, Q1 = BC 547 NPN Transistor, LD1 = L E D, IC 1 = LM 555 (with base), Battery = 9volt, Battery snapper, Buzzer, PIR Sensor.



Brown Black Red



Yellow Violet Brown



PIR Sensor



Battery snapper



Relay Switch