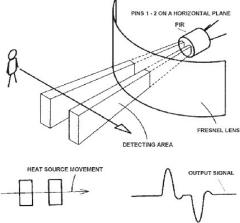
All objects with a temperature above absolute zero emit heat energy in the form of radiation. Usually this radiation is invisible to the human eye because it radiates at infrared wavelengths, but it can be detected by electronic devices designed for such a purpose.

The term *passive* in this instance refers to the fact that PIR devices do not generate or radiate any energy for detection purposes. They work entirely by detecting the energy given off by other objects. It is important to note that PIR sensors don't detect or measure "heat" parse, they actually detect the Infrared radiation which is different from but often associated/correlated with temperature

## PRODUCT DESCRIPTION:

Compact and complete, easy to use <u>Passive Infrared</u> (PIR) Sensor Module for human body detection. Incorporating a Fresnel lens and motion detection circuit, suitable for a wide range of supply voltages and with low current drain. High sensitivity and low noise. Output is a standard TTL active high output signal indicated by on board LED.

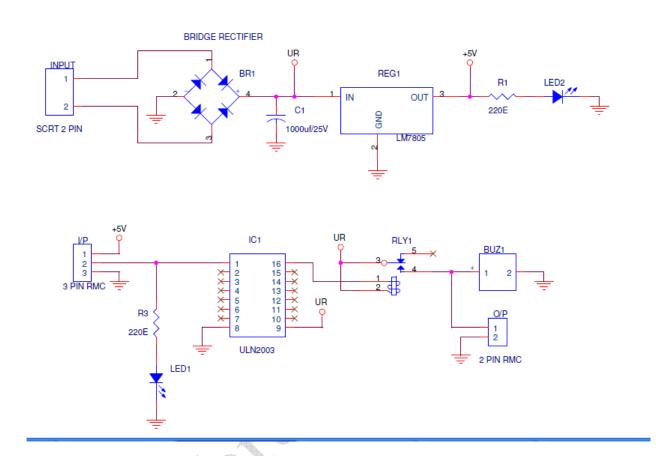
This mini project incorporates Regulated power supply unit, PIR sensor and Relay driver unit along with buzzer



Code: HB12

## **Circuit:**

## MOTION DETECTION ALARM USING PIR/HB12



This project about Motion Detector based on PIR sensor. When any moving object is detected around 180 degree of PIR sensor, an active high signal triggers the buzzer via Driver unit ULN2003 for the time period of 5 sec and start continuing sensing next motion. The whole circuit Requires Regulated +5 V DC source, supplied by Bridge rectifier, filter capacitor and 7805 regulator.



**Size:** 8.5 \* 5 cm

\*\*\*\*\* Caution Apply 12 AC via 12V Step down transformer