

# KC7783 (Kit 76) PIR MOVEMENT DETECTOR MODULE

A complete passive infra-red movement detector module on a PCB 25mm x 35mm (1" x 1.35"). The main components are a PCB-mounted fresnel lens, an RE200B PIR (passive infra-red) sensor from Nicera and a custom-made surface mount movement detector IC. Pulse width output and unit sensitivity have been fixed.

Only three connections need to be made: power and capturing the output signal. The output pulse is about 1 second long. It is up to the user to capture this signal and connect it to an alarm or other device. See the back of the PCB for connections: OUT, V+, GND. Supply voltage may be between 4V to 12VDC.

Note the unit should be allowed to warm-up for at least a minute after power is applied.

See my website for more specification sheets and data sheets on the RE200B and Fresnel sensors:

**<http://kitsrus.com/bits.html#k76>**

See also the 12V DC KC7786 PIR (K133) PIR Movement Module also shown on that website.

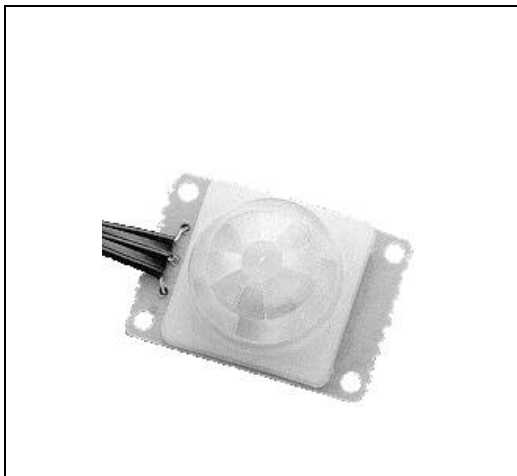
-----

## General

KC7783 is a pyroelectric sensor module which developed for human body detection. A PIR detector combined with a fresnel lens are mounted on a compact size PCB together with an analog IC, KC778B, and limited components to form the module. High level output of variable width is provided.

## Features

- Compact size (25 x 35 mm)
- Wide range of operation voltage 4-12V
- Special output pulse width can be requested
- TTL output can be directly connected to micro controller or logic device
- High sensitivity
- High RFI immunity
- Power up delay 25sec



## Electrical Specification

Operation Volage	4 - 12V
Operation Current	400 $\mu$ A at 5V
PIR Input Gain	68dB
Output Pulse Width	0.5 sec min
Operation Temperature	-20°C -50°C

## Note :

Due to the high sensitivity of PIR sensor device, it is not recommended to use the module in the following or similar condition.

- A) in rapid environmental changes
- B) in strong shock or vibration
- C) in a place where there are obstructing material (eg. glass) through which IR cannot pass within detection area.
- D) exposed to direct sun light
- E) exposed to direct wind from a heater or air conditioner.

## Lens Information

