

Item: SPD61

PIR Motion Detector Module

PIR Motion detector module is device can detect human movement by detecting Infrared ray emitted by human body. PIR Motion detector module will output a high /low level or open collector signal when detected human moving. Widely used on the Motion-activated lighting, Security System, automatic sensory device and more.

Specifications

Model No.	SPD61
Description	Passive Infrared Sensor Modules
Operating voltage	DC 5V~20V (DC 3V~5V is optional)
Static power loss	$\leq 50 \mu\text{A}$
Delay time	Default setting 10sec(0.5~300 Secs is optional) Can adjust delay time by an potentiometer
Detecting range	≤ 110 degrees cone angle, $\leq 5\sim 7\text{M}$ (0~5M is optional)
Triggers the way	continuous triggering, discontinuous triggering. (jumper)
Blockade time:	5s-60s adjustable(default setting: 0 seconds)
Output type	high / low level ,open collector is optional
light sensor	Depend on customer requirement
PCB Dimension	24*32 mm
Lens dimension	24mm

Explanation of some parameter

Delay time:

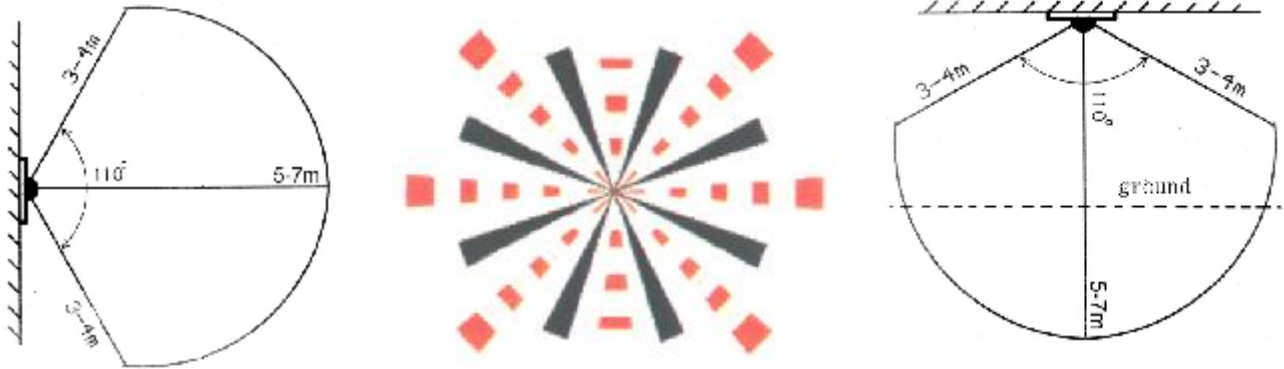
After detecting human being movement, the module will output a signal (triggering), delay time means the time of output last, from 0.5second-5minutes.

For example, if module used for lighting, the delay time is 20s, after detecting human movement the light will keep on lighting for 20s.

Blockade time:

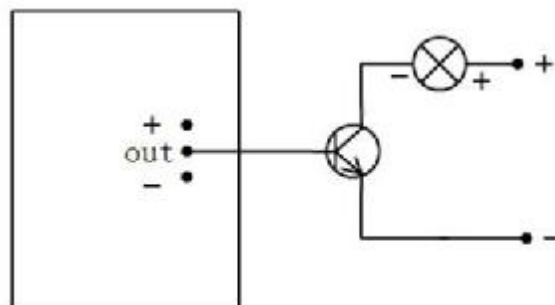
After delay time over, there will be a time period of blockade, in this period, any movement can not trigger the module, default setting is 0 sec.

Detect range

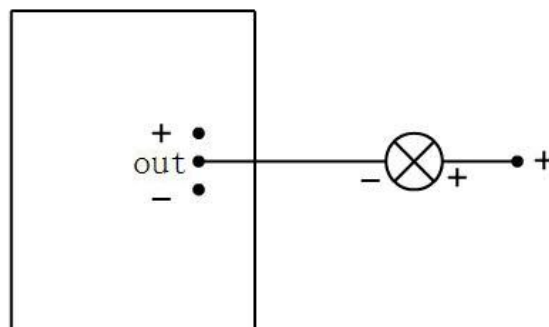


Typical Application

Output type: High/low level



Output type: open collector



Functions and Features

1. Automatic Induction: When people enter into the range of induction, it will output high level; when people leave, it will turn off high level and output low level with delay.(open collector output is optional)
2. Photoresistor control (it is optional, default setting: no):it will trigger only in the darkness.
3. Triggering in two ways:
 - A .Non-repeatable triggering mode: After the sensor output high level with a period delay, automatically turns to output low level.
 - B. repeatable triggering mode: After it outputs high level, during the delay period, if there is presence of people, it keeps on outputting high level until people leave, then turns to low level.
4. Output type can choose High/low level output (default setting) or open collector output.

Note

1. Don't exposed to direct sun light or lighting, big wind, near a heater or air condition.
2. Don't fix it at a place where there are obstructing material (eg. Glass, dense clothes) which Infrared cannot get through.
3. Don't fix it in strong shock or vibration environment.
4. The first time use the PIR Motion detector module, it need about one minutes initialization time, during this time, the signal triggered by the module not stable, after one minute, module will be normal.