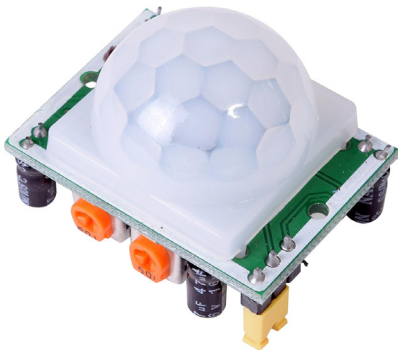# PIR Motion Detector Module   multicomp PRO

Description

287-18001 is based on infrared technology, automatic control module, using Germany imported LHI778 probe design, high sensitivity, high reliability, ultra-low-voltage operating mode, widely used in various auto-sensing electrical equipment, especially for battery-powered automatic controlled products.

Specifications

Voltage   : 5V - 20V
Power Consumption   : 65mA
TTL Output   : 3.3V, 0V
Delay Time   : 5 - 300S (Adjustable) Range (approximately 0.3Sec - 5Min)
Lock Time   : 0.2sec
Block Time   : 2.5S (Default) Can be made a range (0.xx to tens of seconds
Trigger Methods   : L - Disable Repeat Trigger, H - Enable Repeat Trigger
Sensing Range   : Within 7 meters, less than 120°
Angle Sensor   : <110° Cone Angle
Temperature   : -15°C ~ +70°C
Dimension   : 32 × 24mm
                          Distance between Screws: 28mm
                          M2, Lens Dimension: 23mm Diameter

Applications

Automatically sensing light for Floor, bathroom, basement, porch, warehouse, Garage, ventilator, alarm, etc.

Features

• Automatic Induction: To enter the sensing range of the output is high, the person leaves the sensing range of the auto-matic delay off high, output low.
• Photosensitive Control
  (optional, not factory-set): Can be set photosensitive control, day or light intensity without induction.
• Temperature compensation
  (optional, factory reset): In the summer when the ambient temperature rises to 30°C to 32°C, the detection distance is slightly shorter, temperature compensation can be used for performance compensation.
• Triggered in two ways: Jumper selectable
• Non-repeatable trigger: The sensor output high, the delay time is over, the output is automatically changed from high level to low level.
• Repeatable trigger: The sensor output high, the delay period, if there is human activity in its sensing range, the output will always remain high until the people left after the delay will be high level goes low (sensor module detects a time delay period will be automatically extended every human activity, and the starting point for the delay time to the last event of the time).

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Page <1>   03/04/23   V1.0

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- With induction blocking time
  (the default setting: 2.5s blocked time): Sensor module after each sensor output (high into low), followed by a blockade set period of time, during this time period sensor does not accept any sensor signal. This feature can be achieved sensor output time "and" blocking time "interval between the works can be applied to interval detection products. This function can inhibit a variety of interference in the process of load switching. (This time can be set at zero seconds – a few tens of seconds).
- Wide operating voltage range: Default voltage DC4.5V-20V.
- Micropower consumption: Static current <50μA, particularly suitable for battery-powered automatic control products
- Output High Signal: Easy to achieve docking with the various types of circuit.
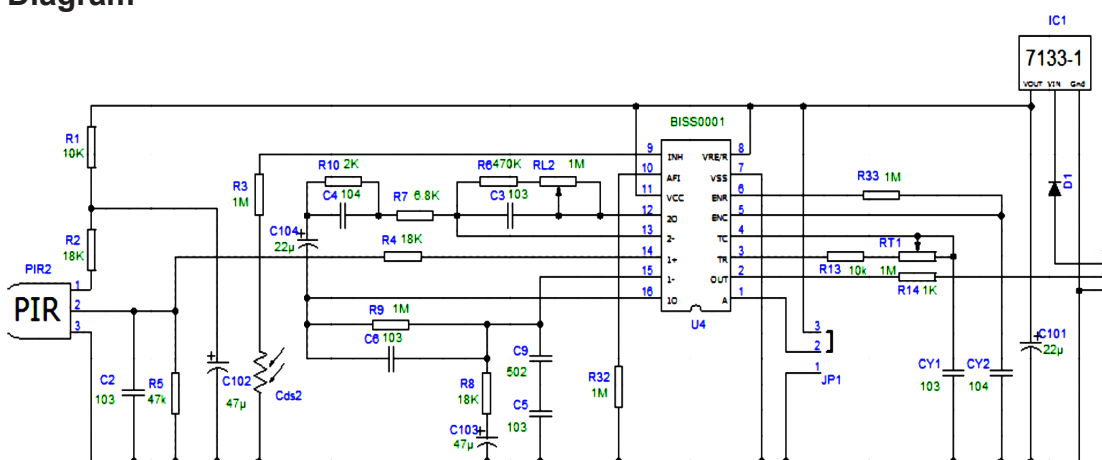
Adjustment

- Adjust the distance potentiometer clockwise rotation, increased sensing distance (about 7 meters), on the contrary, the sensing distance decreases (about 3 meters).
- Adjust the delay potentiometer clockwise rotation sensor the delay lengthened (300S), on the contrary, shorten the induction delay (5S).

Instructions for Use

- Sensor module is powered up after a minute, in this initialization time intervals during this module will output 0-3 times, and a minute later enters the standby state.
- Should try to avoid the lights and other sources of interference close direct module surface of the lens, in order to avoid the introduction of interference signal malfunction; environment should avoid the wind flow, the wind will cause interference on the sensor.
- Sensor module with dual probe, the probe window is rectangular, dual (A B) in both ends of the longitudinal direction

  So when the human body from left to right or right to left through the infrared spectrum to reach dual time, distance difference, the greater the difference, the more sensitive the sensor

  When the human body from the front to the probe or from top to bottom or from bottom to top on the direction travelled, double detects changes in the distance of less than infrared spectroscopy, no difference value the sensor insensitive or does not work

- The dual direction of sensor should be installed parallel as far as possible in inline with human movement. In order to increase the sensor angle range, the module using a circular lens also makes the probe surrounded induction, but the left and right sides still up and down in both directions sensing range, sensitivity, still need to try to install the above requirements.
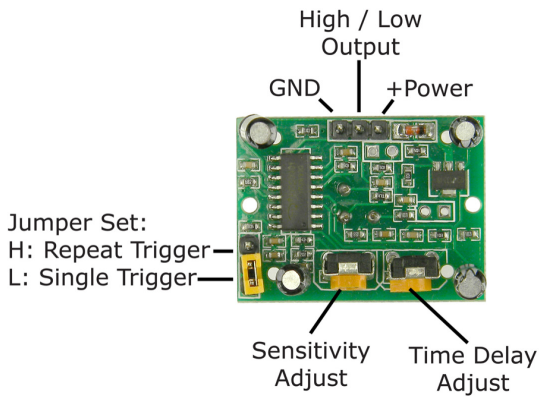
Diagram

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Page <2>   03/04/23   V1.0

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High / Low Output

GND | +Power

Jumper Set:
H: Repeat Trigger —
L: Single Trigger —

Sensitivity Adjust

Time Delay Adjust

Part Number Table

Description	Part Number
PIR Motion Detector Module, 7m, 5-20V, 120°	287-18001

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Page <3>   03/04/23   V1.0