

Specifications

Power source: 220-240VAC

Power frequency: 50Hz

Rated load: 500W Max.

(220VAC tungsten $\cos\phi=1$)

200W Max.

(220VAC fluorescent $\cos\phi=0.5$)

HF system: 5.8GHz CW radar, ISM band

Installation sit: Ceiling mounting, Wall installation

Transmission power: $<0.2\text{mW}$

Detection angle: 360° (Ceiling installation)

180° (wall installation)

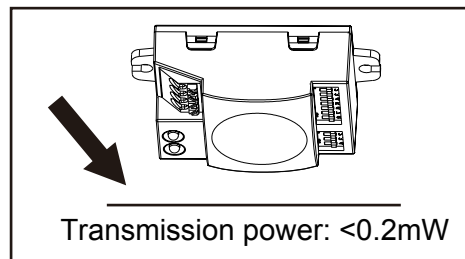
Detection range: 2-10m (radii.) (adjustable)

Time setting: 6sec/1min/5min/10min/20min (adjustable)

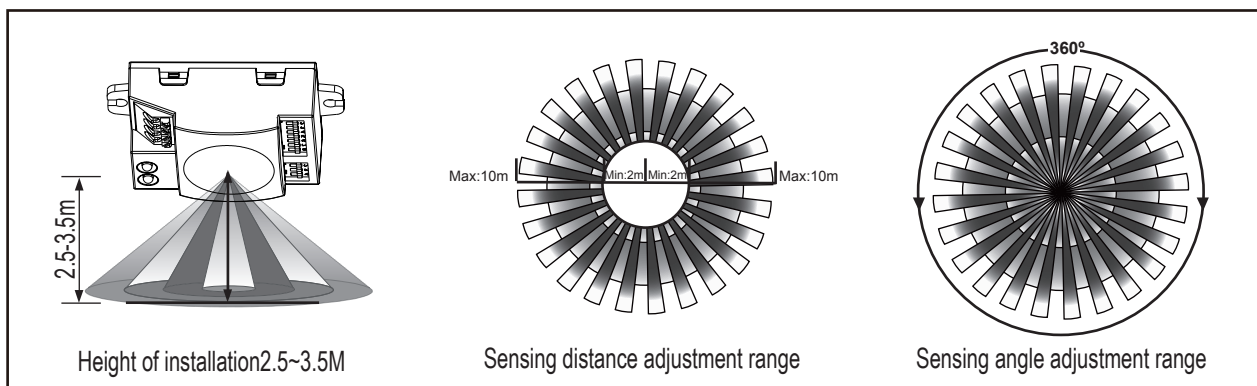
Light-control: $\leq 10\text{LUX}/25\text{LUX}/50\text{LUX}/150\text{LUX}/2000\text{LUX}$
(adjustable)

Standby power: Approx. 0.5W

Note: the high-frequency output of this sensor is $<0.2\text{mW}$ - that is just one 5000th of the transmission power of a mobile phone or the output of a microwave oven.



Sensor information

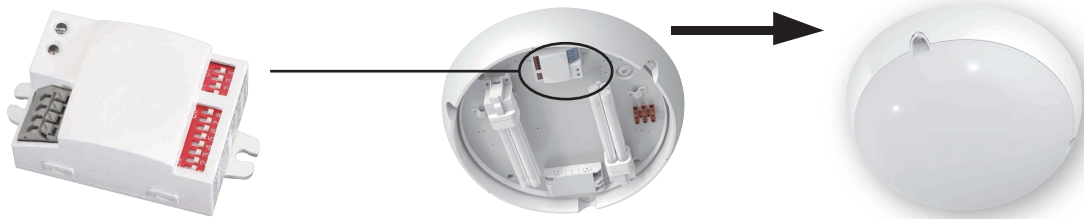


Utilizing field and introduction

PD-MV1001 is a moving object sensor that can detect range of 360° and its working frequency is 5.8G. The advantage of this product is stable working state (stable working temperature: $-15^{\circ}\text{C}\sim+70^{\circ}\text{C}$), PD-MV1001 adopts a microwave sensor (high-frequency output $<0.2\text{mW}$), so that it is safe and performs better than infrared sensor.

It can be installed inside of product that is made of glass and plastic because that these materials make little effect to microwave. Connect the product as shows below; you can change a common light to an automatic light.

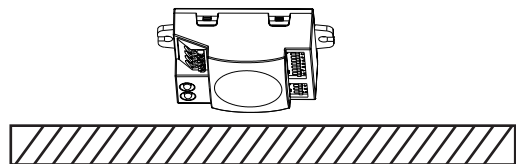
Utilized in ceiling light



This product can be utilized in more fields than the above examples. You can also install a PD-MV1001 in the ceiling directly to control an aisle. There is no problem.

Warning!

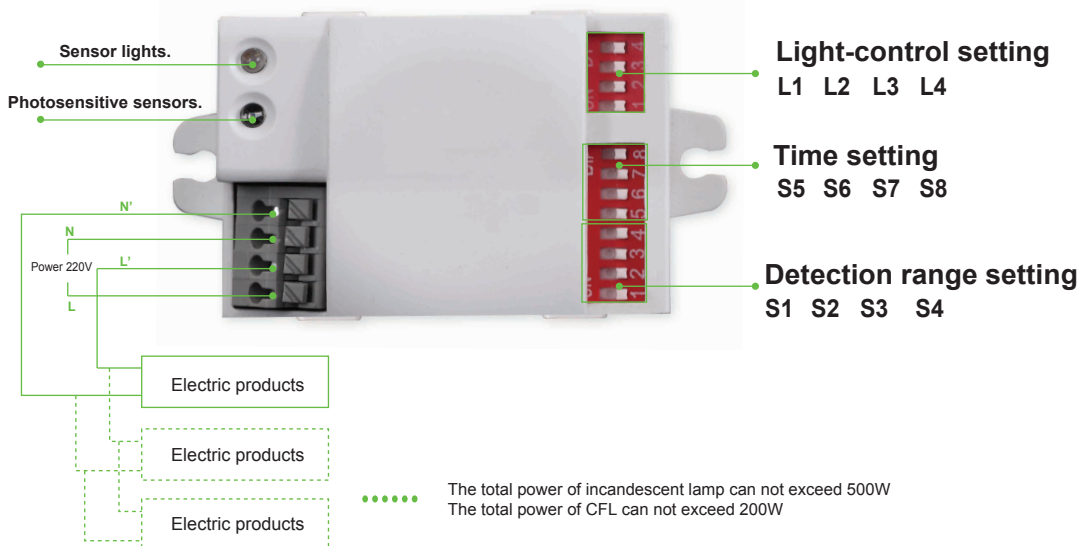
The product can not work normally if there is metal material behind the Installed place.



Non-metal material
when the sensor is installed inside the ceiling floor, the sensitivity to light will be invalid.

This product will be faithfully waiting for you. It will turn on the light automatically when you pass by, and turn off the light automatically when you leave off. You can set the closing delay time to meet your needs. For example, you may adjust the TIME sliding controller to select the delay time 6sec~20min when you think you will come back in 10mins. The TIME sliding controller is as follow (Keep away from the detecting zone after adjusting the testing time or that the detecting time will be inaccurate when any moving object is detected again by the product).

Parameter setting



Light-control setting L1 L2 L3 L4

The chosen light response threshold can be infinitely from approx. 10-2000lux, pull switch to the ON position as "1", pull switch to the OFF position as "0", switch location and detection range of the corresponding table is as follows:

| | | | |
|-----------|-----------|-----------|-----------|
| 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 |
| L1 | L2 | L3 | L4 |

| L1 | L2 | L3 | L4 | ILLUMINANCE |
|----|----|----|----|-------------|
| 0 | 0 | 0 | 0 | ≤10LUX |
| 0 | 0 | 0 | 1 | 25LUX |
| 0 | 0 | 1 | 0 | 50LUX |
| 0 | 1 | 0 | 0 | 150LUX |
| 1 | 0 | 0 | 0 | 2000LUX |

Detection range setting S1 S2 S3 S4

Detection range is the term used to describe the radii of the more or less circular detection zone produced on the ground after mounting the sensor light at a height of 2.5m, pull switch to the ON position as "1", pull switch to the OFF position as "0", switch location and detection range of the corresponding table is as follows:

| | | | |
|-----------|-----------|-----------|-----------|
| 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 |
| S1 | S2 | S3 | S4 |

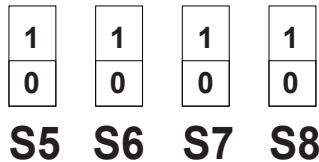
| S1 | S2 | S3 | S4 | DETECTION RANGE(radii.) |
|----|----|----|----|-------------------------|
| 0 | 0 | 0 | 0 | 2m |
| 0 | 0 | 0 | 1 | 4m |
| 0 | 0 | 1 | 0 | 6m |
| 0 | 1 | 0 | 0 | 8m |
| 1 | 0 | 0 | 0 | 10m |

Notice: when using this product, please adjust the sensitivity (detection range) to an appropriate value but the maximum to avoid the abnormal reaction caused by the easy detection of the wrong motion by the blowing leaves & curtains, small animals or the interference of power grid & electrical equipment. All the above mentioned will lead to the error reaction. When the product does not work normally, please try to lower the sensitivity appropriately, and then test it.

Friendly reminder: when installing two or more microwaves together, you are required to keep 4 meters one from another, otherwise the interference among them will lead to error reaction.

Time setting S5 S6 S7 S8

The light can be set to stay ON for any period of time between approx. 6sec and a maximum of 20min. Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test. Pull switch to the ON position as "1", pull switch to the OFF position as "0", switch location and detection range of the corresponding table is as follows:



| S5 | S6 | S7 | S8 | TIME |
|----|----|----|----|-------|
| 0 | 0 | 0 | 0 | 6sec |
| 0 | 0 | 0 | 1 | 1min |
| 0 | 0 | 1 | 0 | 5min |
| 0 | 1 | 0 | 0 | 10min |
| 1 | 0 | 0 | 0 | 20min |

It is mainly for the adjustment of the delay time from the moment the signal detected and light auto-on till the light auto-off. You can define the delay time to your practical need. But you'd better lower the delay time for the sake of energy saving, since the microwave sensor has the function of continuous sensing, that is, any movement detected before the delay time elapses will re-start the timer and the light will keep on only if there is human in the detection range.

Fault and the solution

| Fault | Failure cause | Solution |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------|
| The load fails to work. | Light-illumination is set incorrectly. | Adjust the setting of the load. |
| | The load is broken. | Change the load. |
| | The power is off. | Turn the power on. |
| The load works all the time. | There is a continuous signal in the region of the detection. | Check the settings of the detection area. |
| The load works when there is no motion signal detected. | The lamp isn't installed well so that sensor fails to detect reliable signals. | Re-adjust the installation place. |
| | Moving signal is detected by the sensor (movement behind the wall, the movement of small objects, etc.) | Check the settings of the detection area. |
| The load fails to work when there is motion signal detected. | The motion speed is too fast or the defined detection area is too small. | Check the settings of the detection area. |

Warning!

- Please confirm with professional installation.
- For safety purposes, please cut off power before installation and removal operations.
- Any losses caused by improper operation, the manufacturer does not undertake any responsibility.

We are committed to promoting the product quality and reliability, however, all the electronic components have certain probabilities to become ineffective, which will cause some troubles. When designing, we have paid attention to redundant designs and adopted safety quota to avoid any troubles.

This instruction, without our permission, should not be copied for any other purposes.

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