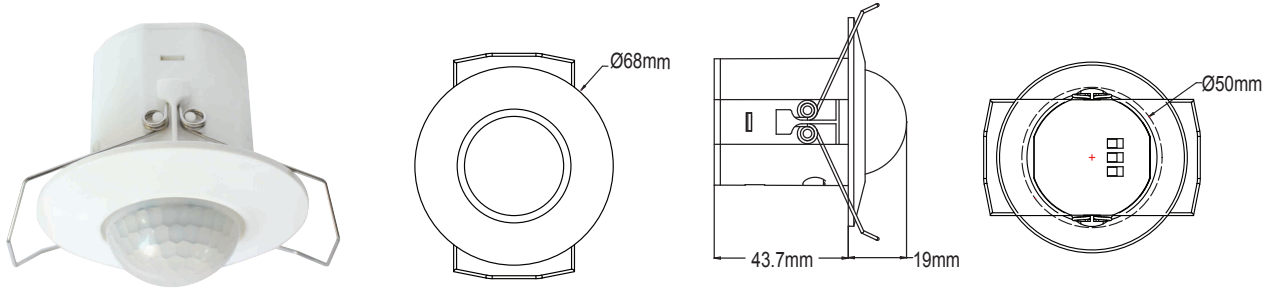


LX-PR-S15-Z Infrared Sensor Instruction



Summary

This product is an advanced digitally controlled infrared pyroelectric intelligent sensor product. It uses the MCU to accurately calculate the switch information, and accurately controls the relay to be turned on at the zero point of the sine wave, so that each load is turned on. At the zero point of the sine wave, the inrush current problem caused by the conventional control mode when the sine wave high voltage is turned on is avoided, especially the large current damage relay generated by the large-capacity capacitor under the impact of the high voltage under the load. Due to the diversification of current electrical loads, especially LED lamps, energy-saving lamps, and fluorescent lamps all have capacitors with different capacitances. This is a disaster for relays. Sometimes a 50W LED lamp can generate surge currents of 80 to 120A. The 10A ordinary relay can only withstand 3 times of the inrush current, and it is likely that the relay will be broken in a few days or several times. This is why the conventional sensor on the market has a short life and a small load current.

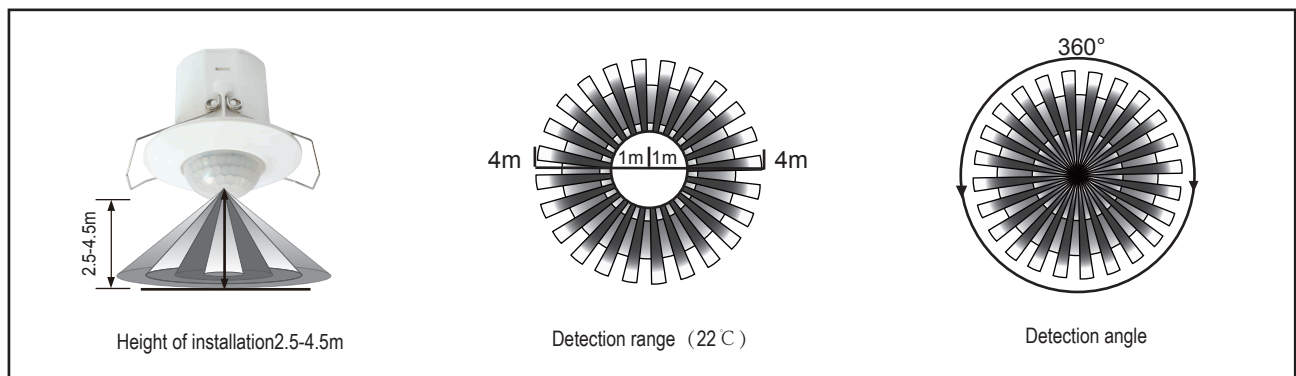
In order to overcome this problem, this product adopts advanced digital precision calculation to turn on the load when the sine wave is at zero potential, thus solving the load surge current problem, greatly enhancing the load capacity and prolonging the service life of the product. The latest control method of mass production sensor technology can easily control any load. It is a medium and high-end product. Although the cost is increased compared with the conventional version, the reliability and life of the product are greatly increased. This product is equal to choosing peace of mind, and choosing safety.

Specifications

Power source: 100-240VAC
Power frequency: 50/60Hz
All loads: 1200W Max.(220-240VAC)
800W Max.(100-130VAC)
Working temperature: -10°C~+40°C

Protection level: IP20, Class II
Time setting: 8sec to 12min (adjustable)
Detection angle: 360°
Detection range: 1-4m (radius) (adjustable)
Light control: 2-2000LUX (adjustable)

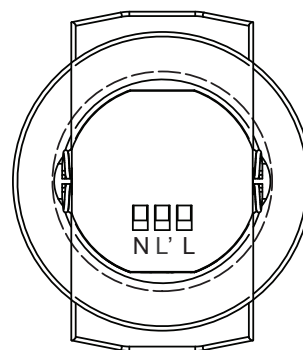
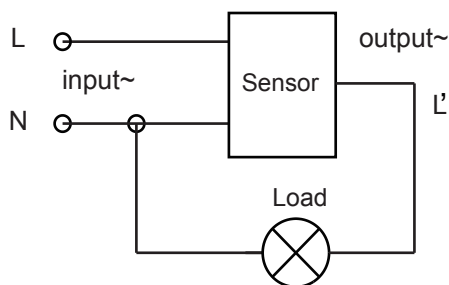
Sensor information



Applications

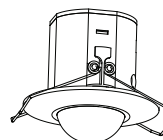
For example, the application in lightings, only if making connection as below shown can you change the common lightings into auto-sensing lightings.

Connect N, L with power;
Connect N', L with load.



You can install one or more inside the ceiling or floor to control the whole passageway.

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

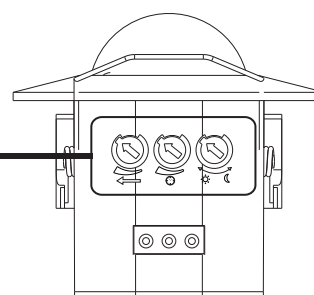
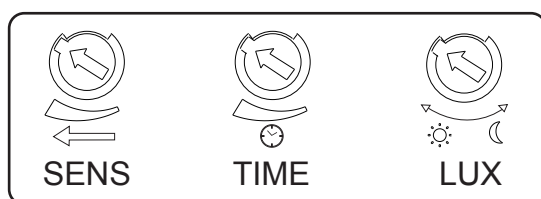


Nonmetals

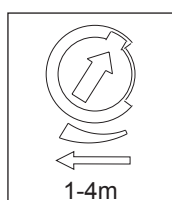
When installed inside the ceiling or floor, the sensor fails to distinguish the ambient light intensity automatically.

Setting manner one: potentiometer

It may take times to adjust values before they satisfy your need.



Detection range setting(sensitivity)



Detection range is the term used to escribe the radii of the roughly circle casting on the ground when installed at the height of 2.5 m. To turn the knob fully anti-clockwise is the minimum range, fully clockwise is the maximum.

Note: the above detection range is gained in the case of a person who is between 1.6m~1.7m tall with middle figure and moves at a speed of 1.0~1.5m/sec. if person's stature, figure and moving speed change, the detection range will also change.

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. Human movement will cause the sensor induction, so when you under the function testing, please leave the induction region and don't make movement to prevent the sensor continuous work.

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



It can be defined from 8 seconds(turn fully anti-clockwise) to 12minutes(turn fully clockwise). Any movement detected before this time elapses will re-start the timer. It is recommended to select the shortest time for adjusting the detection range and for performing the walk test.

NOTE:When the light be auto off,it will take 1 second before the sensor is ready to detect another movement,that is,only signal detected 1 seconds later can the light be auto-on.

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.

Light-control setting

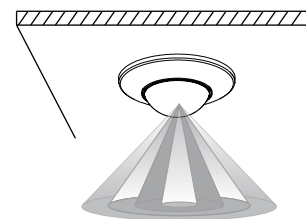
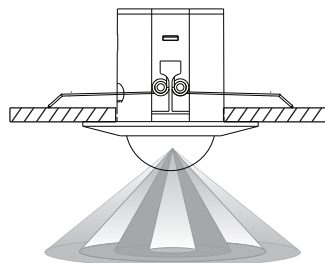
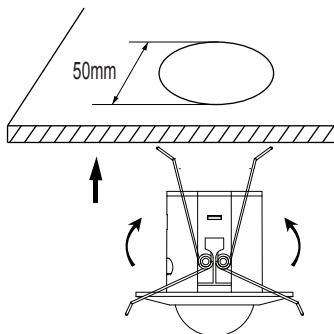


It can be defined in the range of 2~2000 LUX. To turn the knob fully anti-clockwise is about 2 lux,fully clockwise is about 2000 lux.When adjusting the detection zone and performing the walk test in daylight,you should turn the knob fully clockwise.

Note: please don't adjust the three functional knobs to excess. That is because the three functional knobs were connected to the components directly, there is a small stopper in each of the three components, when you adjust the knobs from start to end, the excessive turn will damage the stopper, and lead to the 360°non-stop turn around. The adjust range limit is 270°, please do pay attention to this.

Installation

- Switch off the power.
- Set threaded tubes into the power cord and control line.
- Connect the power and the load with the sensor according to the connection-line diagram.
- Turn the knobs to the ideal conditions
(Please define the settings as per the above SETTING MANNER ONE part mentioned.).



Warning!

The following situations will lead to error reaction.

- 1、 Being installed on the rocking object will lead to error reaction.
- 2、 The shaking curtain blown by wind will lead to error reaction. Please select the suitable place to install.
- 3、 Being installed where the traffic is busy will lead to error reaction.
- 4、 The sparks produced by some equipment nearby will lead to error reaction.

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.

This manual is the content of the product programming, we will not notify you separately. It is strictly forbidden to copy the contents of the instruction manual for any other purpose without the permission of the company.