LX-PR-M18Z 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.

Characters

- It can identify day and night automatically. And the working light can be chosen freely and make it work at night and not work in the day time.
- > Illuminated time can be adjusted according to the customer's desire.
- Mini shell (48mm*23mm*52mm)
- > Sense LED: when it detect sensing signal, the LED flash.

Specifications

Power source: 220-240VAC,50Hz/60Hz All loads: 1200W Max. Detection range: 7m Max(22°C) Time setting: 12sec-5min (adjustable) Detection angle: 120° Light-control: 10LUX~sunshine (adjustable) Working humidity: <93%RH Working temperature: -10~+40°C Power consumption: <1W Installation height: 1.5~2.5m

Function

LUX adjustment:

LUX refers to the illuminance of the environment. Adjusting the LUX adjustment knob allows you to choose which illuminance you want to get the sensor into the induction. Choose the habit that suits you. Some of the choices in the 20LUX solution are to be illuminated. Some choose 50LUX ambient illumination to be inductive lighting, and some choose to be inductive lighting at any time, as long as the LUX adjustment knob is adjusted to the maximum.

Time adjustment:

The time adjustment knob is used to adjust the time after the sensor senses the light, and the user can reasonably select the delay time after the induction.

Sensor Information





7m Detection range(22°C)



120° Detection Angle

Knob setting

①LUX: Adjust working light. Turn clockwise to increase it and turn anti-clockwise to decrease it. When turn to min, it will only work below the light-control about 10LUX, when turn to max, it can work any light-control.

②TIME: Adjust time setting of load work. Turn clockwise to increase it and turn anti-clockwise to decrease it. The time setting is about 5min when turn to max, and the time setting is about 12sec when turn to min .



ATTENTION: When use this product, please adjust the sensitivity to an appropriate position you need, please do not adjust the sensitivity to maximum, to avoid the product does not work normally caused by wrong motion.Because the sensitivity is too high easily detect the wrong motion by wind blowing leaves & curtains, small animals, and the wrong motion by interference of power grid & electrical equipment. All those lead the product does not work normally !

Connection-wire diagram

Connect the power and the load wire with the sensor according to connection-wire diagram;



Test

- > After installation, before switching on power turn the time anti-clockwise to min;
- > Switch on power, after 30sec the sensor enter stable working state;
- After the load turn off, sense it, the load should turn on, and under the condition that no continual sensing signal, the load should turn off within 12sec;
- When the light-control knob anti-clockwise set to the min, if you test the unit in the daytime, sense it, the load should not work. Cover the detection window with opaque object (simulate night light) and sense it, the load should turn on;
- If all are normal, according to your require you can turn the time knob to set the lighting time and turn the light-control knob to select working light.

Note:please don't adjust the two functional buttons to excess. That is because the two functional buttons were connected to the components directly, there is a small stopper in each of the two components, when you adjust the buttons 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.

- Electrician and experienced human can install it.
- \diamond The unrest objects can 't be regarded as the installation basis-face.
- ♦ There should be no hinder or unrest objects effecting detection in front of the detection window.
- ♦ Avoid installing it near temperature alteration zone, for example, air condition, central heater etc.
- Please don't open the case for your safety if you find the hitch after installation, you should contact the provider in time.

The factory intercalation:Light-control is max, Time setting is max.

Some problem and solution

1. The load don't work:

- > Check whether the connection of power and load is correct or not.
- Whether the load is good or not.
- Please check whether the working light set corresponds to ambient light or not.

2. The sensitivity is poor:

- Please check whether there is any hinder in front of the detection window that affect it to receive the signals or not.
- Please check whether the ambient temperature is too high or not.
- ➢ Please check whether the sense signal source is in the detection field or not.
- ➢ Please check whether the installation height accord with specification.
- > Whether the moving orientation is correct or not.

3. The sensor can't shut off the load automatically:

- Whether there is continual sense signal in the detection fields or not.
- Whether the delay-time is set to the longest or not.
- > Whether the power correspond to the instruction required.
- > Whether the temperature change obviously near the sensor (air conditioner, central heater etc).



- Please confirm with prefessional installation.
- Please cut off power supply before installation and removal operations.
- Make sure that you have cut off the power for safety purposes.
- Improper operation caused losses, the manufacturer does not undertake any responsibility.

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