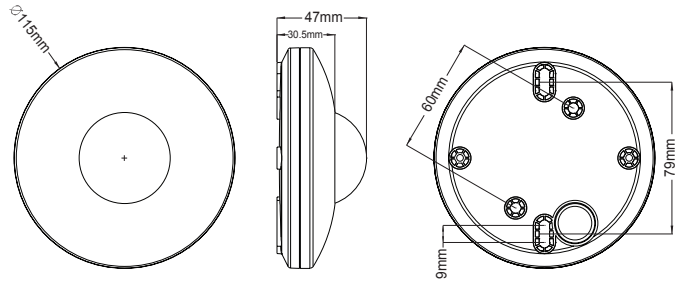# LX-PR-120D Infrared Sensor Instruction

Summary

It gathers automatism, convenient safe, saving-energy and practical functions. One detector inside compose a wide range detection field, it utilizes the infrared energy from human as control-signal source, it can start the load at once when one enters detection field. It can identify day and night automatically. It is easy to install and used widely.This is the most advanced PIR sensor so far, which is thin and digital. It adopts the digital intelligent pyroelectric infrared sensor to make the circuit performance more stable, the error operation less, the sensitivity higher, the fault rate lower, the standby power consumption weaker and the resolution to signals stronger.

Specifications

Power source: 220-240VAC,50Hz
Rated load: 800W Max.tungsten
          150W Max.fluorescent & LED
Time setting: 8±2sec~8±2min(adjustable)
Light-control: <10LUX~2000LUX(adjustable)
Detection angle: 360º (ceiling installation)
Sense motion speed: 0.6~1.5m/s

Detection range: 1-5m (radii.)(ceiling installation)(adjustable)
          10m Max. (wall installation)(adjustable)
Installation height: 2.5~3.5m(Ceiling installation)
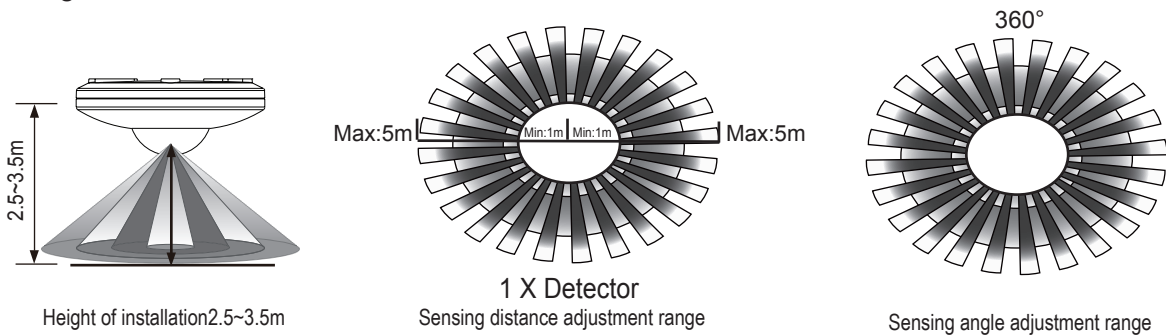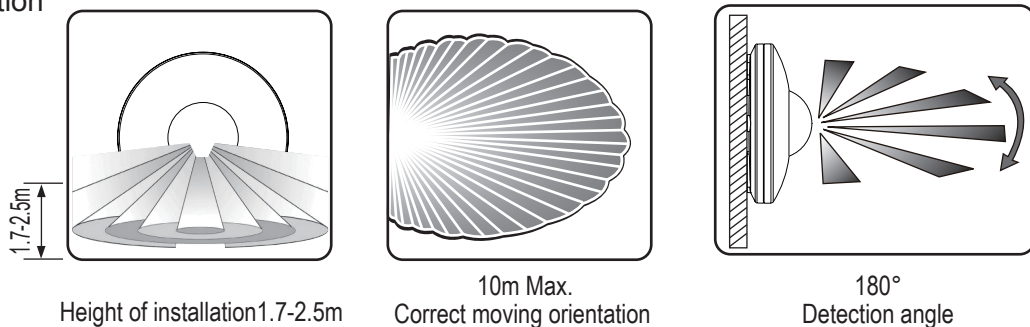   1.7~2.5m(Wall installation)
Working temperature: -10°C~+40°C
IP20

Sensor information

Ceiling installation

Height of installation2.5~3.5m

Max:5m   Min:1m Min:1m   Max:5m

1 X Detector
Sensing distance adjustment range

360°
Sensing angle adjustment range

Wall installation

Height of installation1.7-2.5m

10m Max.
Correct moving orientation

180°
Detection angle

Function

➤ Identify day and night automatically. Can adjust ambient light according to your desire: when turn to SUN (max), it will work in the daytime and at night.When turn to MOON (min), it will only work under less than 10LUX circumstance. As for Adjustment, please refer to testing way.
➤ Detection distance can be set according to installation position and detection field.
➤ Time-delay is added continually: when it receives the second induction signal after the first inductor, it will compute time once more on the rest of the first time-delay basic. (Set time)
➤ Time-delay adjustment: it can be set according to your desire. The minimum is 8±2sec; the maximum is 8±2min.

Setting manner :potentiometer

It may take times to adjust values before they satisfy your need.
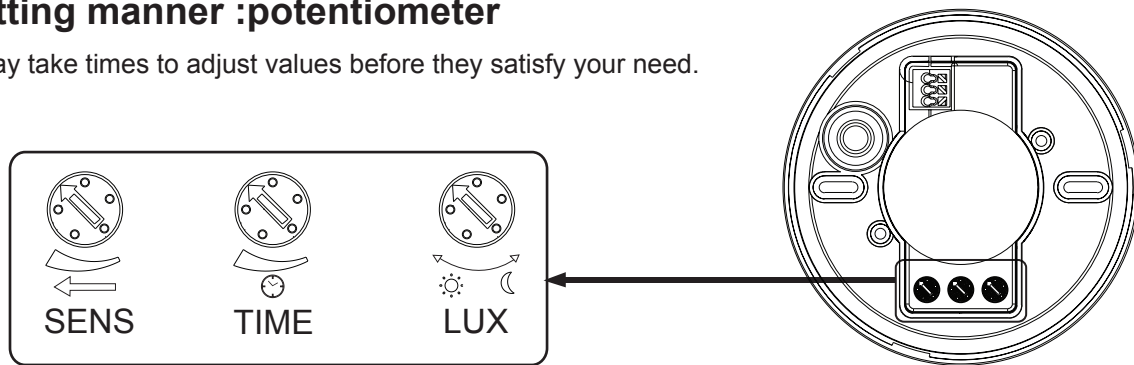
(1)Detection range setting(sensitivity)
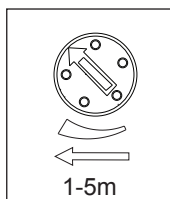
Adjust detection range. Turn clockwise to increase it and turn anti-clockwise to decrease it. It is 1m when turn to mini, and it is 5m when turn to max.

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 ! When the product does not work normally, please try to lower the sensitivity appropriately, and then test it.

(2)Time setting

Adjust time setting of load work. Turn clockwise to increase it and turn anti-clockwise to decrease it. The time setting is about 8±2min when turn to max, and the time setting is about 8±2sec when turn to min .

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.

(3)Light-control setting

<10-2000LUX

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

Connection-wire diagram

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

Load type

CFL Energy-saving lamp

Security alarming system

Pure resistive load
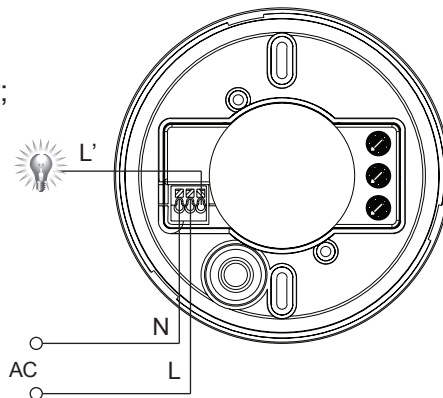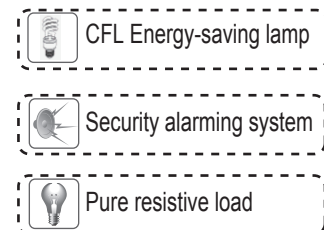
Installation instruction

(1)Before installing switch off power;
(2)Rotate top cover anti-clockwise and take off it, tighten off the screws fixing bottom cover;
(3)Install the bottom cover on selected position with screw(like①);
(4)According to the connection-wire diagram connect the power wire and load wire into the connection line column in sensor;
(5)Button top cover on sensor and rotate it tighten clockwise（like②）, the installing finished.
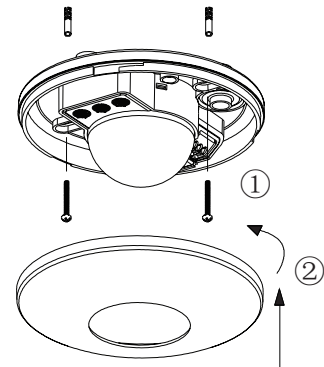
Test

1. Turn LUX knob clockwise to the maximum (SUN). Turn time knob anti-clockwise to the minimum.Turn sensor knob clockwise to the maximum.
2. Power connected, the load controlled will start working and stop working 8±2 seconds later when there is no continual signal detected.
3. Once detected, the load works and the indicator on and stops working 8±2 seconds later when there is no continual signal detected.And if signal detected 4 seconds later, the load should start working and the indicator on and stop working 8±2 seconds later when there is no continual signal detected.
4. Turns LUX knob anti-clockwise to the minimum. If it is tested under the circumstance above 10LUX, load should not work after induction load stop working; but if you cover the detection window with opaque objects (towel etc), the load works. Under the condition of no induction signals, the load should stop working within 8±2 sec.

Note

➢ Should be installed by electrician or experienced man.

➢ Avoid installing it on the unrest objects.

➢ There shouldn't be hindrance and moving object in front of the detection window effecting detection.

➢ Avoid installing it near air temperature alteration zones such as air condition, central heating, etc.

➢ Considering your safety, please don't open the cover when you find the hitch after installation.

➢ If there is difference between product and instruction, please refer to product mainly.

Some problem and solved way

➢ The load don't work:
   a. Please check the power and load connect is correct.
   b. Check if the load is good.
   c. Check if the show lamp accelerates its speed after detecting.
   d. Check if the working light corresponds to the light-control.

➢ The sensitivity is poor:
   a. Please check if there is hinder in front of the detection window to effect receiving the signals.
   b. Please check if the ambient temperature is too high.
   c. Please check if the signals source is in the detection fields.
   d. Please check if the installation height corresponds to the height showed in the instruction.
   e. Please check if the moving orientation is correct.

➢ The sensor can't shut the load automatically:
   a. Check if there are continual signals in the detection fields.
   b. Check if the time setting is set to the longest.
   c. Check if the power corresponds to the instruction.
   d. Check if the temperature change obviously nears the sensor, such as air condition or central heating etc.

⚠ Warning!

● **Please confirm with prefessional 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.
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