

PIR1

Infrared Motion Sensor



Instructions

This ceiling recessed PIR sensor utilizes a good sensitivity detector and integrated circuit for energy-saving, safety and practical functionality. It utilizes infrared technology to detect movement of the human body and will switch on the load once someone enters the detection field. It has an inbuilt photocell to detect between day and nighttime operation.

SPECIFICATION:

Power Source: 220-240V/AC

Power Frequency: 50/60Hz

Time Delay: Min.10sec±3sec

Max.15min±2min

Rated Load: Max.1200W

300W

Installation Height: 2.2-4m

Detection Range: 360°

Detection Distance: 6m max(<24°C)

Ambient Light: <3-2000LUX (adjustable)

Working Temperature: -20~+40°C

Working Humidity: <93%RH

Power Consumption: approx 0.5W

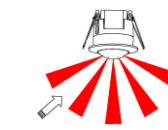
Detection Moving Speed: 0.6-1.5m/s

FUNCTION:

- Can identify day and night: The installer can adjust the switching point at different ambient light levels. It can operate in both day and night when the dial is set to the "sun" position (max). It can work at night only when the dial is set towards the "3" position (min). As for the adjustment pattern, please refer to the testing pattern.
- Time-Delay is extended continually: During periods of continued occupancy, the sensor will restart the time delay with each detection of movement.



Good sensitivity

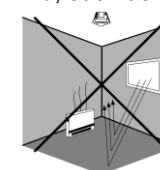
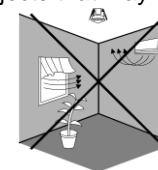
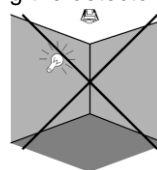


Poor sensitivity

INSTALLATION ADVICE:

As the detector responds to changes in temperature, avoid the following situations:

- Avoid pointing the detector towards objects with highly reflective surfaces, such as mirrors etc.
- Avoid mounting the detector near heat sources, such as heating vents, air conditioning units, lights etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.



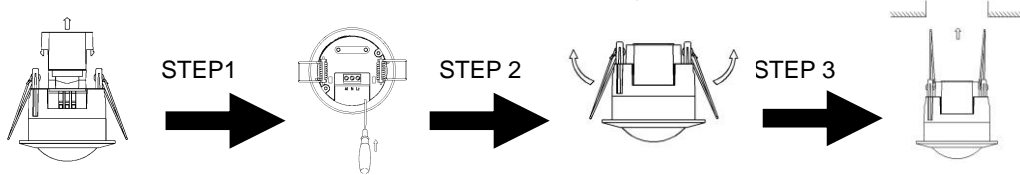
CONNECTION:



WARNING

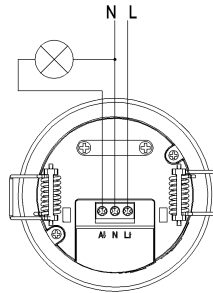
- Must be installed by a competent person.
- Disconnect power source.
- Cover or shield any adjacent live components.
- Ensure device cannot be switched on.
- Check power supply is disconnected.

- Remove the transparent vinyl cover on the top of the sensor.
- Loosen the screws in the terminal, and then connect the power to terminal according to wiring diagram.
- Install the transparent vinyl cover back onto the sensor.
- Fold the metal spring of the sensor upwards, until they are in “I” position with sensor, and then place the sensor into the hole in the ceiling. Release the spring to fix the sensor into position.
- Turn on the power and then test the sensor functionality.

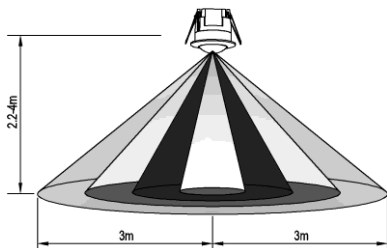


WIRING DIAGRAM:

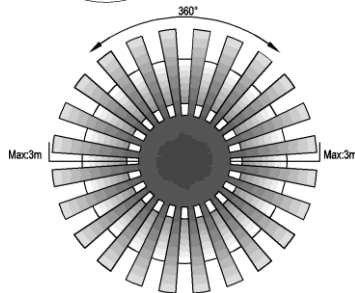
(See the right image)



SENSOR INFORMATION:



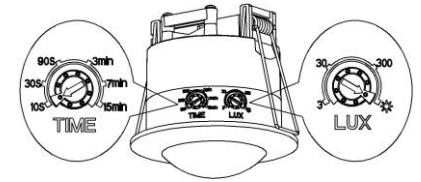
Height of installation: 2.2-4m



Detection Distance: Max.6m

TEST:

- Turn the TIME knob anti-clockwise to the minimum (10s). Turn the LUX knob clockwise to the maximum (sun).
- Switch on the power; the sensor and its connected lamp will have no signal at the beginning. After a 30sec warm-up period, the sensor will be operational. If the sensor detects movement, the load will turn on. When no further movement is detected, the load should switch off within $10\text{sec} \pm 3\text{sec}$.
- Turn LUX knob anti-clockwise to the minimum (3). If the ambient light is more than 3LUX, the sensor will switch the load off. If the ambient light is less than 3LUX (darkness), the sensor will switch on the load. With no occupancy detected, the sensor will stop working within $10\text{sec} \pm 3\text{sec}$.



Note: when testing in daylight, please turn LUX knob to  (SUN) position, otherwise the sensor may not work!

TROUBLESHOOTING:

- The load does not switch on:
 - a. Check the power and the load.
 - b. Please check if the load is operational.
 - c. Please check the light level setting.
- The sensitivity is poor:
 - a. Please check if the sensor is obstructed from detecting movement.
 - b. Please check if the ambient temperature is too high.
 - c. Please check if the movement is in the detection field.
 - d. Please check if the installation height corresponds to the height required in the instruction.
- The sensor does not shut off the load automatically:
 - a. Please check if there is continual movement in the detection field.
 - b. Please check if the time delay is set to the maximum duration
 - c. Please check if the wiring corresponds to the instruction.