MAJOR TECH PIR46 360 Degree Long Range Infrared Motion Sensor Instruction Manual

MAJOR TECH PIR46 360 Degree Long Range Infrared Motion Sensor

Contents

Introduction

The PIR46 includes a sensitivity detector and an integrated circuit to save energy and offer practical functions. The sensor has a wide detection range and is designed to automatically turn lights on when motion and body heat is detected. The sensor uses infrared energy from humans as a control-signal source; the load is activated as soon as one enters the detection field. It includes a day/night sensor to easily identify between day and night, and is easy to install.

Specifications

Function	Range
Voltage	220 – 240V AC
Power Frequency	50/60Hz
Ambient Light	<3 – 2000Lux Adjustable
Time Delay	Min: 10 Second ±3 Second / Max: 15 Minutes ±2 Minutes
Rated Load	2000W (Incandescent) / 1000W (LED / CFL)
Detection Range	360°
Detection Distance	30m Max (<24°C)
Detection Motion Speed	0.6 to 1.5m/s
Working Temperature	-20°C to 40°C
Working Humidity	<93%RH
Power Consumption	0.5W approx.
Installation Height	2.2m to 4m

Function

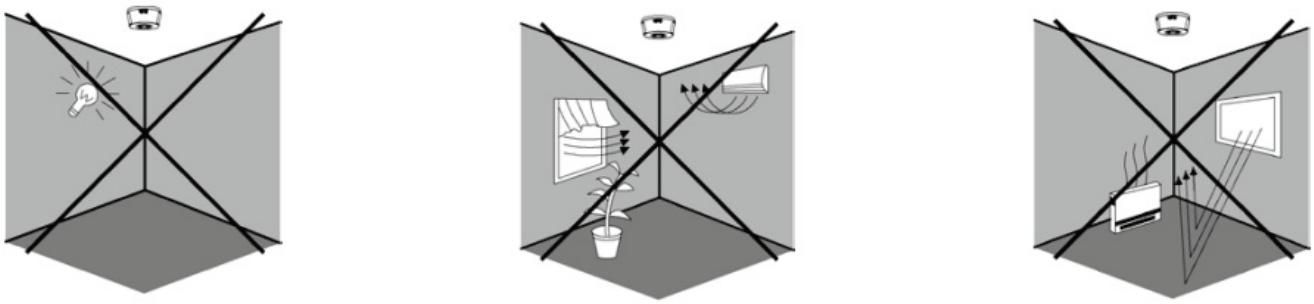
- Can identify day and night: The consumer can adjust working state in different ambient light. It can work in the day time and at night when it is adjusted on the “sun” position (max). It can work in the ambient light less than 3LUX when it is adjusted on the “3” position (min). As for the adjustment pattern, please refer to the testing

pattern.

- Time-Delay is added continually: When the sensor receives the second induction signal within the first induction period, the timing will restart from the beginning.

Installation Advice

- 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, light etc.
- Avoid pointing the detector towards objects that may move in the wind, such as curtains, tall plants etc.



Connection

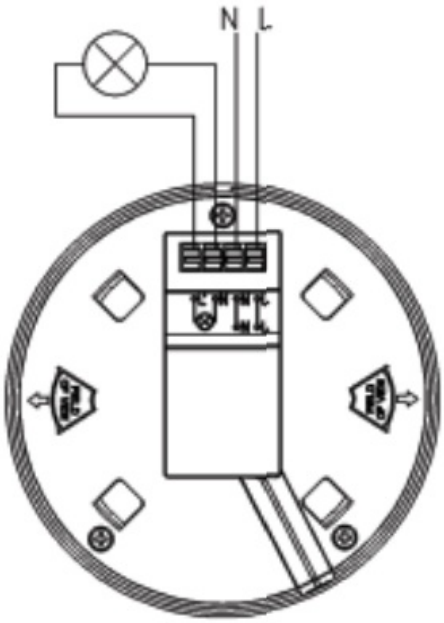
 **WARNING: Danger of Death Through Electrical Shock!**

- Must be installed by professional electrician.
- Disconnect power source.
- Cover or shied any adjacent live components.
- Ensure device cannot be switched on.
- Check power supply is disconnected.

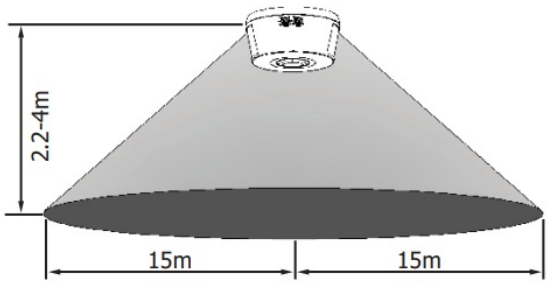
1. Unscrew fixing bracket by rotating anti-clockwise from base of the sensor.
2. Insert the power cable into the slot provided.
3. Connect the power cable into the terminal block as per the wiring diagram.
4. Identify the ideal field of view and use fixing bracket mounting holes to ensure correct alignment for motion sensor.
5. Drill holes and screw the fixing bracket to the marked location.

6. Reconnect the sensor to the fixing bracket by rotating clockwise.
7. Once installation is complete, turn on the power to test.

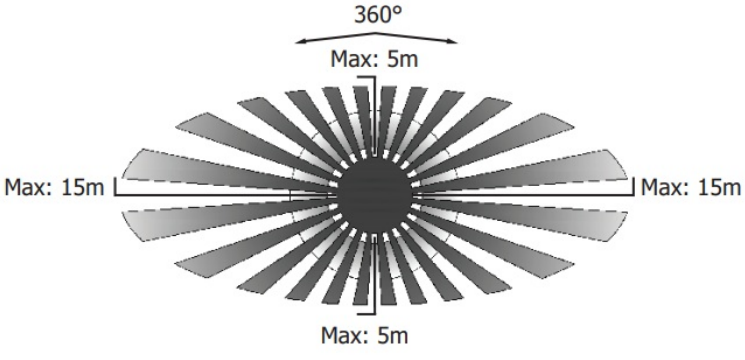
Wiring Diagram



Sensor Information



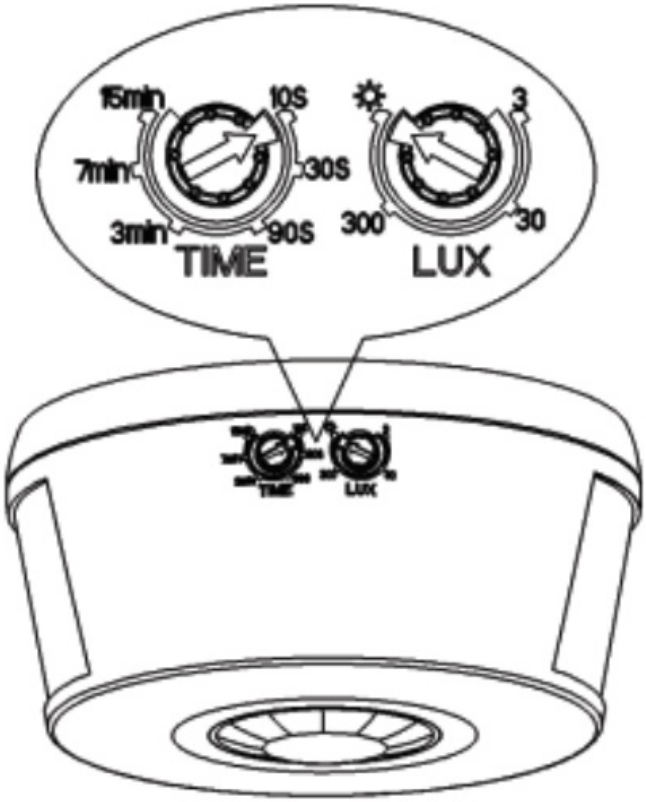
Height of Installation: 2.2 to 4m



Detection Distance: 30m (max)

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 will require 30 seconds to warm up. Once the sensor receives the initial induction signal, the lamp will turn on. If no other induction signal is received within the time duration set, the lamp will turn off within 10 seconds ±3sec.
- Turn the LUX knob anti-clockwise on the minimum (3). If the ambient light is more than 3 LUX, the sensor is not able to function. If the ambient light is less than 3 LUX (dark), the sensor will work.



Note: when testing in daylight, please turn LUX knob to the ☼ (SUN) position, otherwise the sensor lamp will not work! If the lamp is more than 60W, the distance between lamp and sensor must be at least 60cm apart.

Problems and Solutions

The load does not work:

- Ensure the connection to the power source and load is correct.
- Check if the load is in working order.
- Check if the sensor settings corresponds with the ambient light conditions.

The sensitivity is poor:

- Check if there is any hindrance in front of the detector which may affect the reception of signals.
- Check that the ambient temperature is below 40°C.
- Confirm the installation height is between 2.2 and 4 meters.
- Check if the sensor field of view is aiming in the correct direction.

The sensor can not shut off the load automatically:

- Check if there is an interference in the detection field.
- Check if the time delay is set to your required setting.
- Confirm that the power supply is between 220V and 240V AC.

Customer Service

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Documents / Resources

	MAJOR TECH PIR46 360 Degree Long Range Infrared Motion Sensor [pdf] Instruction Manual PIR46 360 Degree Long Range Infrared Motion Sensor, PIR46, 360 Degree Long Range Infrared Motion Sensor, Infrared Motion Sensor, Motion Sensor

References

- Major Tech - Innovation I Quality I Excellence
- Home - Major Tech Australia