

# Wall or Ceiling Mount Motion Sensor 10100 User Manual



**10100**

## General

The 10100 is a wall or ceiling mount motion sensor using PIR technology. This sensor is ideal for small offices, corridors and parking bays.

If, after reviewing this guide, you require additional information or assistance please contact Eco Heat Equipment at [info@ecoheat.co.za](mailto:info@ecoheat.co.za), +27 (0)861 999 887, or [www.ecoheat.co.za](http://www.ecoheat.co.za).

## Technical Specifications

- Voltage: 230 – 240V/AC
- Frequency: 50Hz
- Load: Incandescent: 1 000W  
Fluorescent: 400W  
CFL: 600W
- Detection Range: Ceiling mount: 360 ° 9m  
Wall mount: 180 ° 8m
- Light level: 2 – 2 000 LUX
- Time setting: 10 seconds – 35 minutes
- Installation height: Ceiling: 2.8m  
Wall: 1 – 2m

## Safety

Any incorrect use or installation procedure not recommended by the manufacturer may cause fire, electrical shock or injury to persons.

## Box Contents

- Your box should contain the following items:
- Sensor (including mounting box)

## Installation Instructions

**WARNING: ALL WIRING MUST BE DONE IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES AND STANDARDS.**

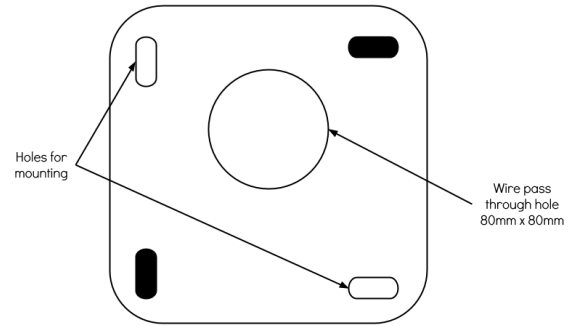
Note: motion sensors respond to rapid changes in temperature so care should be taken not to mount the device near a climate control source (i.e. heaters or air conditioners). Hot or cold draughts will seem like body motion to the sensor and will trigger the device. Recommended distance from climate control devices is 2m.

1. Turn power off at circuit breaker or fuse
2. Remove mounting box from back of sensor
3. Affix mounting box to wall or ceiling
4. Pass wires through hole in mounting box
3. Connect sensor to wires as per diagram
4. Reattach sensor to mounting box
5. Restore power at circuit breaker or fuse

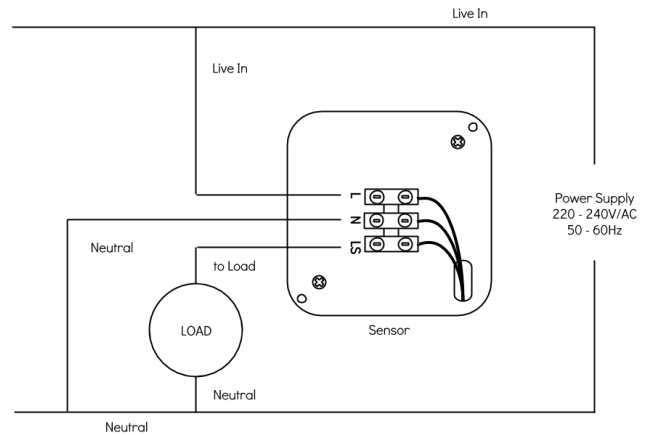
## Sensor calibration:

Note: The sensor will calibrate for up to 10 minutes after it has been connected for the first time. Ensure that there is no motion within the sensor's range during this period. This is only necessary during installation or when the mains supply is disconnected.

## Mounting box diagram



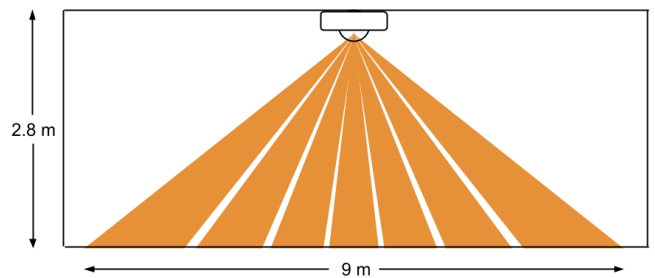
## Installation wire diagram



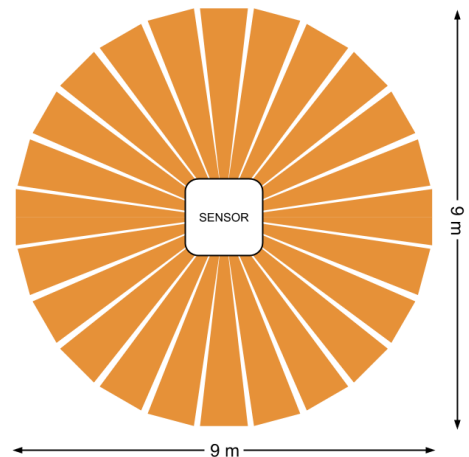
## Operation and Field of View

The motion sensor detects motion within its coverage area of 64m<sup>2</sup> (ceiling mount) and 25m<sup>2</sup> (wall mount) and controls the associated lighting connected to the sensor. The passive infra red (PIR) sensor is sensitive to the heat emitted by the human body. In order to trigger the sensor the source of heat must move from one zone of detection to another. The device is most effective in sensing motion across its field of view and less effective sensing motion towards or away from its field of view.

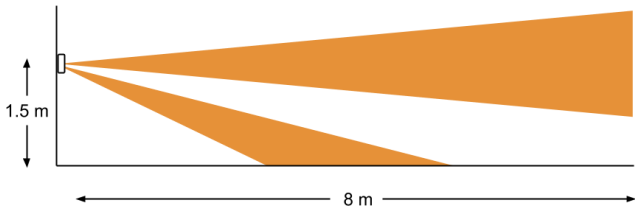
## Ceiling mount sensor detection range from side: large motion



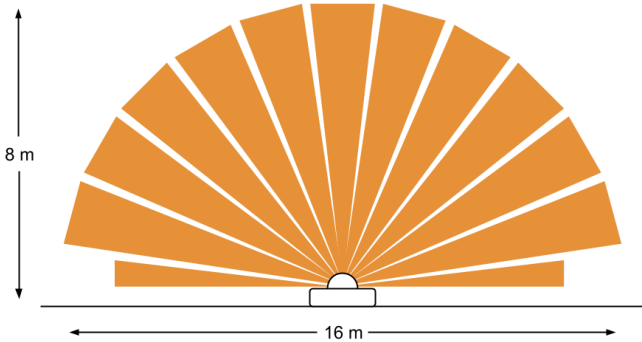
## Ceiling mount sensor detection range from top: large motion



**Wall mount sensor detection range from side: large motion**



**Wall mount sensor detection range from top: large motion**



**Motion Sensor Settings and Adjustments**

The motion sensor is a Passive Infra Red (PIR) type electronic occupancy detector, which in turn switches the lights when connected to the motion sensor. There are two adjustments that can be made to influence the operation of the motion sensor:

1. TIME: time delay after motion/sound until shut off
2. LUX/LIGHT: level of ambient light sensitivity

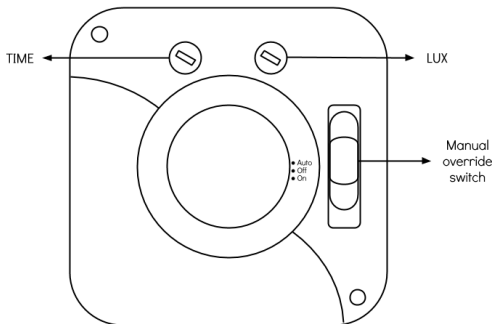
The two adjustment settings are as follows:

- Time setting range: 10sec to 35min
- Lux (light) sensitivity: 2 to 2 000 LUX

**Manual Override**

For manual control, the 10100 motion sensor features a convenient manual override switch. If the switch is set to AUTO, the motion sensor will be active. Setting the switch to OFF will turn the lights off and ON will turn the lights on.

**Motion Sensor Adjustments**



The motion sensor's settings can be adjusted as follows:

**Step 1 – Adjust the TIME setting to minimum**

Turn the TIME control fully anti-clockwise to set to the 10sec testing setting.

**Step 2 – Adjust the LUX/LIGHT (ambient light) setting**

With the LUX/LIGHT control turned fully anti-clockwise, gently cover the sensor (lens) until the light turns off (approximately 10sec). Uncover the sensor (lens) and adjust the LUX/LIGHT control until the light comes on.

If the LUX/LIGHT control is set to maximum (fully clockwise), the lights will turn ON whenever the room is occupied, even in full daylight.

If the LUX/LIGHT control is set to minimum (fully anti-clockwise), the lights will only turn ON when the room is occupied AND is receiving low natural light.

**Step 3 – Adjust the TIME setting**

Turn the TIME control clockwise until the required delay is reached. Min = 10sec, max = 35min.

Factory time out is pre set to 10 seconds.

NOTE: All the time intervals are within approximately 10 seconds of the stated time out interval.

**WARNING:**

Controlling a load in excess of the specified ratings will damage the unit and lights and could pose risk of fire and electric shock.

**WARNING:**

Do not install this unit to control a power socket.

**OTHER CAUTIONS:**

Disconnect power when working on electrical outlets or components. Do not push on the surface of the lens.

The 10100 motion sensor is intended to replace a standard wall mounted light switch.

**Cleaning**

Carefully wipe sensor with a soft damp cloth. Do not apply pressure to the lens.

**Recycling**

Please recycle all packaging material that came with the motion sensor.

**Trouble Shooting**

Malfunction	Possible Cause	Remedy
The unit will not switch "on"	a. No mains power b. No movement is detected (in detection zone) c. Wrong LUX/LIGHT level setting d. Electrical circuitry faulty e. Electrical Installation not done correctly f. Unit may be faulty	a. Check mains power is on b. Move towards the unit (in detection zone) c. Adjust setting on the LUX/LIGHT settings d. Refer to the 'Electrical Installation' section to ensure correct installation e. Have a certified electrician disconnect and test the unit f. Contact Eco Heat Equipment
Unit stays "on" permanently	g. Continuous movement in detection zone h. The sensor is not mounted correctly for reliable operation i. Wrong LUX/LIGHT level setting j. Time setting control is set too far k. Unit may be faulty	a. Adjust setting on the LUX/LIGHT settings b. Adjust the time setting control c. Contact Eco Heat Equipment

**Warranty**

The sensor has a three (3) year warranty after the date of the original purchase. Please keep your original receipt, as this will be required for any claims under this warranty. The warranty is a strictly carry in policy. (The sensor/s must be returned to Eco Heat offices for a claim to be processed).

The warranty does not cover:

- damage from misuse,
- neglect or abuse,
- products that have been modified in any way,
- shipping and handling cost associated with the product,
- damage resulting from accidents, lightning, fire, water, power surges, natural disasters and/or incorrect installation

For more information, view the Return/Refund Policy at [ecoheat.co.za/terms.php](http://ecoheat.co.za/terms.php).

Due to minor improvements in design or otherwise, the product you purchase may differ from the one shown in this leaflet. For more information or advice on this or any other Eco Heat Equipment products, visit [www.ecoheat.co.za](http://www.ecoheat.co.za) or phone +27 (0)861 999 887.

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