# Passive Infrared (PIR) High Bay Motion Sensor SK808 **User Manual**



**SK808** 

### General

The SK808 PIR motion sensor is ideal for high bay applications, such as warehouses and factories. The sensor has an extruding screw that can easily be installed directly onto a light fixture.

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

### **Technical Specifications**

- Voltage: 220 240V/AC
- . Frequency: 50/60Hz
- Load: Incandescent: 1 000W
- Fluorescent: 600W .
- Detection Range: 360 ° 1 8m radius Light level: 10 1 000 LUX
- Time setting: 10 seconds 30 minutes
- . Installation height: 4 - 12m max

### Safety

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

# **Box Contents** Sensor

Your box should contain the following items:

#### 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. Connect wires as per diagram
- 3. Sensor can be secured onto light fitting
- Restore power at circuit breaker or fuse

#### Sensor calibration:

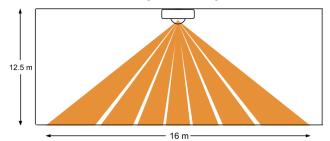
Note: Allow up to 1 minute for the motion sensor to recalibrate after it has been connected for the very first time. This is only necessary during installation or when the mains supply is disconnected.

# Red/Live In Red/Live Ir σ Power Supply Brown/to Load 220 - 240V/AC σ 50 - 60Hz Œ LOAD Sensor Black/Neutral Neutral Neutral

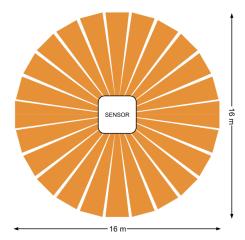
#### **Operation and Field of View**

The motion sensor detects motion within its coverage area 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.

Sensor detection range from side: large motion



#### 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 three adjustments that can be made to influence the operation of the motion sensor:

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

The three adjustments settings are as follows: Detection range:

Time setting range: Lux (light) sensitivity: 1m to 8m 10sec to 30min 10 to 2 000 LUX

#### Installation wire diagram

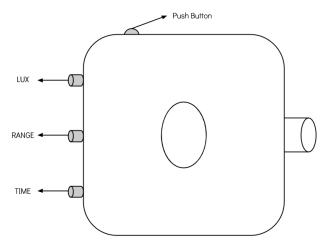
#### Manual Override

For manual control, the SK808 motion sensor features a convenient push button switch.

If the lights are OFF, pressing the button will turn the lights ON for as long as the room is occupied. The lights will turn OFF once the room is vacant, after the delayed OFF time expires.

If the lights are ON, pressing the button will turn the lights OFF and keep them OFF even if the room is occupied. This feature is particular useful for presentations or when the automatic motion sensor settings need to be overridden. The lights can be turned back ON by simply pressing the button. The sensor will return to normal operation.

## 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 setting to maximum

Turn the LUX/LIGHT fully clockwise to set to maximum (sensor functioning in all lighting conditions).

### Step 3 – Adjust the RANGE setting

Turn the RANGE control fully anti-clockwise. Move away from the sensor until the LED stops blinking. This will be the maximum detection range. To lengthen the range, turn the control clockwise until the desired distance is reached. (1m – 8m maximum)

# <u>Step 4 – Adjust the TIME setting</u>

Turn the TIME control clockwise until the required delay is reached.

- / = 10sec (testing)
- 1 = 10mins
- 2 = 20mins 3 = 30mins

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.

## 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**

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

#### 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 has to 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.

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 or phone +27 (0)861 999 887.

Indemnity: The Author, and supplier, shall not be held liable for any loss, injury or damage, of whatsoever nature, whether consequential or not, either contractual sustained to, or caused by, or which may arise through the use of any comments, suggestions, circuitry, services or equipment offered for purchase. The User, indemnifies the author and supplier, and agrees not to hold him/her responsible for any damages, losses and/or liabilities (including legal costs on a scale as between attorney and user) arising from, or through the use of circuit diagrams, equipment and services, whether such circuit diagrams, equipment and services were used with the consent of the User or not. All risks attached to the use of shall be deemed to have passed onto the User, once having purchased such equipment from the author or supplier.

