

INSTALLATION INSTRUCTIONS

SMART SENSE 360° SENSOR Flush Mount PIR Sensor LHT0142

Thank you for purchasing the Simx Lighting Smart Sense 360° Sensor. This product is suitable for sheltered exterior locations. It requires a 230V AC power supply to operate and should be installed by a registered electrician. Please read this manual before installation and retain for future reference.

TECHNICAL SPECIFICATIONS

Power Source	220 - 240V ~ 50 Hz
Detection Range	3 metre radius max, 360°
Time on adjustment	5 secs - 15mins
Dusk Control	Yes
Manual Override	Yes
Dusk level adjustment	Day to night or night only operation
Standby Power	<1W (sensor head only)
Maximum switchable load	2000W Incandescent 500W Fluorescent 110W LED
Protection Rating	IP44
Safety	Class II
Mounting	Ceiling
Recess cut-out size	Ø75mm
Warranty	3 Years



! IMPORTANT

This product is suitable for use only with a supply voltage of 220-240V AC 50Hz.

All electrical work must be carried out in accordance with local and national electrical codes as applicable. We strongly recommend that this light fitting is installed by a registered electrician.

Always switch power off prior to installation. A means of mains power isolation must be installed in the circuit for the purpose of safe access for any internal cleaning, recalibration, or maintenance.

This light fitting is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Young children should be supervised to ensure that they do not play with the appliance.

Any changes or modifications made or attempted to this product, without the prior written approval of the manufacturer, will void any and all stated warranties.

BEFORE YOU START

Please read all the instructions prior to installation.

An internal switch should be installed to switch the power to the unit ON & OFF. This allows the sensor to be easily switched off when not required or for maintenance purposes and allows it to be conveniently brought into manual override.

To achieve best results, please consider the following points:

The motion detector has a number of detection zones (see Fig. 1 detailing detection range and direction). A moving human body needs to cross/enter one of these zones to activate the sensor. The best all-round coverage is achieved with the unit mounted at the optimum height of 2.5m.

To avoid false triggering, the sensor should be directed away from heat sources such as barbecues, air con, flue vents etc.

Do not aim towards reflective surfaces such as smooth white walls, swimming pools, etc.

Before selecting a place to install your Eco Spot Select, note that movement across the scan area is more effective than movement directly toward or away from the sensor. (Fig. 2)

INSTALLATION

We strongly recommend this light fitting is installed by a registered electrician

Switch off the power supply before commencing any electrical work.

To remove the wiring cover, depress the catch on the side and lift it clear of the twin locators opposite the catch (see Fig. 3).

Mark the center of the 75mm diameter mounting surface. Drill a pilot hole to take the center shaft of a hole cutter, then cut the required hole.


Care should be taken to avoid drilling or cutting into concealed electrical wiring/plumbing.

WIRING

Standard connection (Fig. 4).

The factory fitted "bridge" wire must not be removed.

Connect the 3 or 4 core mains supply cable to the terminal block on the unit as follows

NEUTRAL (Blue)	N
EARTH (Green/Yellow)	
LIVE (Brown)	L

Connect the fourth core (lighting live) of the four core cable (if used) to the L1 terminal block or the second 3 core cable (from the lighting) to L1 (brown), N (blue) and E (Green/Yellow).

SWITCHED LIVE	L1
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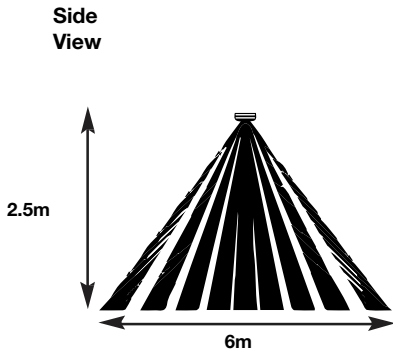
Switching DC loads or loads which use a different phase or voltage supply from AC mains (Fig. 5).

Remove the factory fitted bridge wire.

Connect the 3 core mains supply cable to the terminal block on the unit as follows

NEUTRAL (Blue)	N
EARTH (Green/Yellow)	
LIVE (Brown)	L

Fig. 1



Top View

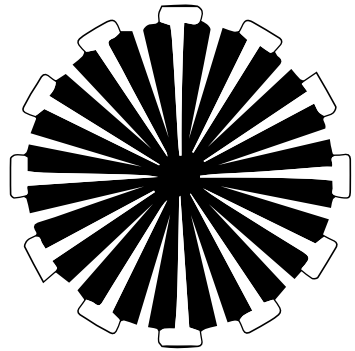


Fig. 2

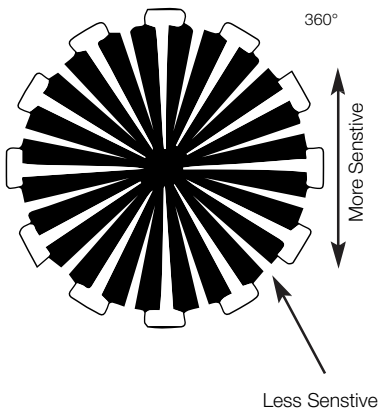
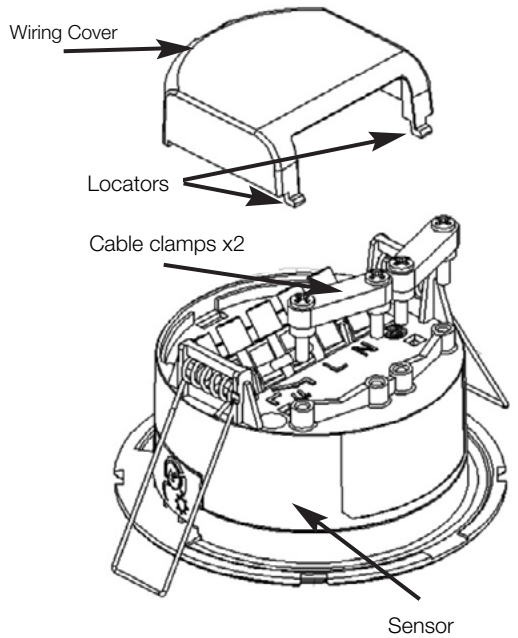


Fig. 3



WIRING DIAGRAMS

Fig. 4

- 3 core cable may be used
- There is no external junction box
- A bridge is provided, pre-wired to bridge across live supply from AC mains to the output load via the contacts

Factory fitted bridge wire intact

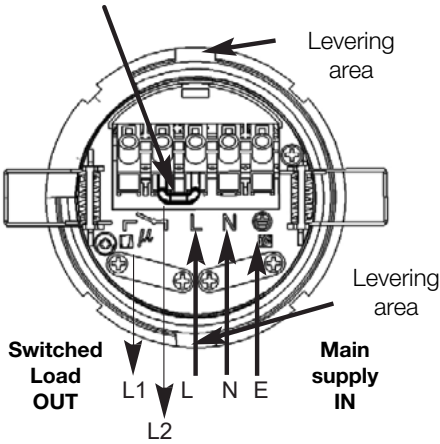
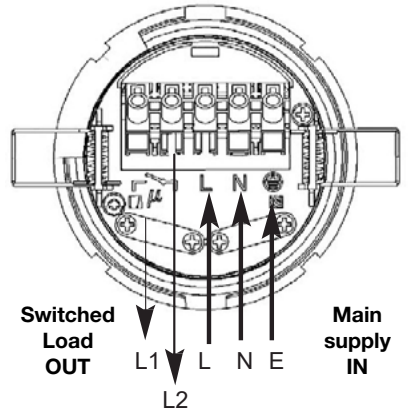


Fig. 5

- The L1 / L2 terminals are used to control a DC load or if the load uses a different phase or voltage supply from the AC mains in.
- Factory fitted bridge must be removed to isolated L1 & L2 terminals from AC mains in.

Factory fitted bridge wire REMOVED

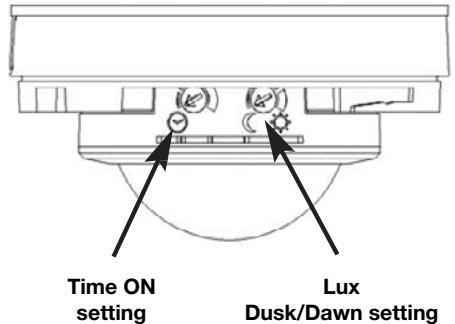


When wiring is complete, set the two adjustment controls on the side of the unit (Fig. 6) to the following position:

TIME - Fully anti-clockwise (min. time).

DUSK - Fully clockwise (daylight).

Fig. 6

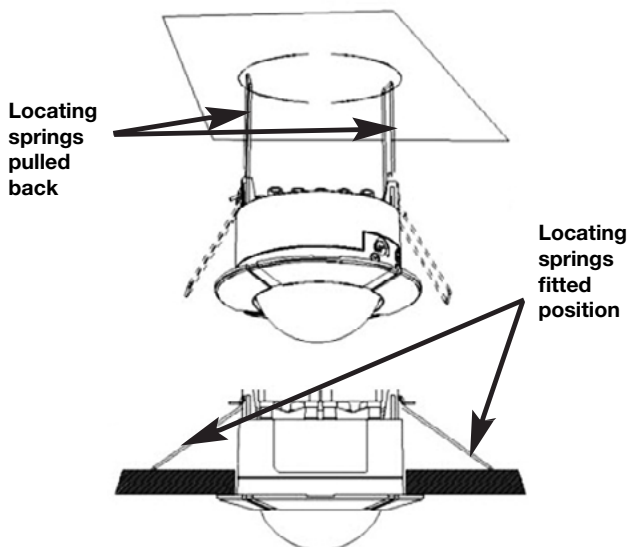


Push back the locating spring (Fig. 7) and feed the unit into the ceiling void via the 75mm hole. The locating spring will now fold back and hold the unit in place.

It is recommended to keep the top of the sensor clear of any insulation material. Ensure cables are not pinched in fitting the unit.

Reconnect mains power. Test circuit and setup PIR settings.

Fig. 7



OPERATION AND TESTING

Walk Testing Procedure

Set the two adjustment controls on the underside of the unit (Fig. 6) to the following positions:

TIME - Fully anti-clockwise (min. time).

DUSK - Fully clockwise (daylight).

The unit will now operate during daytime as well as at night, illuminating the lamp for approx. 5 seconds each time. This allows testing to be carried out to establish whether the sensor is covering the required area.

The lamp will immediately illuminate as the unit goes through its "warm-up" period. After approximately 1 - 2 minutes the lamp will extinguish. Try to remain outside the detection area during the warm-up period.

Walk around the sensor to establish the detection area. The sensor will detect within an approximately six metres diameter circle from the centre of the sensor location with 2.5m ceiling height.

As you cross a detection "zone" the lamp will illuminate. Now, stand still until the lamp extinguishes (this should take approx. 5 seconds).

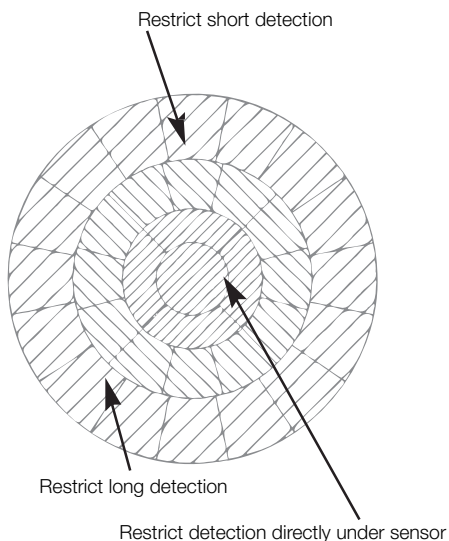
Start moving again. As you cross each "zone" the lamp will illuminate.

Repeat the above, walking at various distances and angles to the unit. This will help you to establish the detection pattern and discover any unwanted detection areas.

Masking The Sensor Lens

To reduce the sensor coverage, preventing detection in unwanted areas, mask the sensor lens using the lens mask sticker supplied (Fig. 8). For your information, the centre section of the lens covers short range detection, and the outer edge of the lens covers long range detection. Mask the sensor to suit your installation.

Fig. 8



Setting Up For Automatic Operation

When walk tests are complete, the unit can be switched to automatic operation :

To access the controls use a knife or thin flat blade screwdriver to gently level (see Diagram E) the unit clear of the ceiling. Hold in position against the spring pressure while making adjustment.

The TIME setting controls how long the unit remains illuminated following activation & after all motion ceases. The minimum time (fully anti-clockwise) is approx. 5 seconds, whilst the maximum time (fully clockwise) is approx. 15 minutes. Set the control to the desired setting between these limits.

The DUSK control determines the level of darkness required for the unit to start operating. The setting is best achieved by the procedure below:

Set the DUSK control knob fully anti-clockwise. The unit will now start operating at dusk.

If you require the light to activate earlier, wait until the ambient light level reaches the level of darkness at which you wish the lamp to become operative, SLOWLY (a small step at a time) rotate the control in a clockwise direction until a point is reached where the lamp illuminates in response to a hand moving below the unit. Leave the control set at this point.

At this position, the unit should become operative at approximately the same level of darkness each evening. Observe the operation of the unit. If the unit is starting to operate too early (i.e. when it is quite light), adjust the control slightly anti-clockwise. If the unit starts to operate too late (i.e. dusk), adjust the control slightly clockwise.

Continue to adjust until the unit operates as desired.

Once the unit is set up as desired, ease the unit back into position under spring pressure.

MANUAL OVERRIDE MODE

The light can be switched on for longer time periods by use of the Manual Override Mode. This can be activated at night by using the isolation switch.

Switch the isolation switch twice (OFF/ON, OFF/ON) within 2 seconds. The unit will now illuminate continuously until dawn or until it is switched back into Detection Mode.

To return to Detection Mode, switch the isolation switch off and then back on again within 1 second.

PRODUCT COMPLIANCES

Product complies with

This product conforms to relevant AZ/NZS standards.

MANUFACTURERS EXTENDED WARRANTY

This product is guaranteed by SIMX Ltd and Ventair Pty Ltd for 36 MONTHS from the date of purchase against faulty materials or workmanship which affects its designed ability to detect or switch. During this period if the product has a defect of this nature it will be repaired or replaced free of charge by SIMX with the same item, or a similar one of higher specification. ON CONDITION THAT:

The buyer returns it to the seller from whom it was bought, freight paid.

The product has been bought by the user i.e. a receipt/sales invoice is produced as proof of purchase.

The product has not been misused or handled carelessly, installed in anyway contrary to the installation instructions, or installed in any unusually exposed or harsh environmental conditions.

This guarantee excludes liability for discolouration of paint or plastic, or any user replaceable parts. It does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage.

Our Goods come with guarantees that cannot be excluded under the Australian and New Zealand Consumer Law.

You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the Goods repaired or replaced if the Goods fail to be of acceptable quality and the failure does not amount to a major failure.



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