simx LHT0142 Smart Sense 360 Degree Sensor Flush Mount Pir Sensor Instruction Manual

Contents

Simx LHT0142 Smart Sense 360 Degree Sensor Flush Mount Pir Sensor

Product Information
Installation Instructions: Please refer to the Installation instructions provided in the user manual for proper installation of the product.

Technical Specifications

- **Power Source:** The product requires a power source for operation.
- **Detection Range:** The product has a specified range within which it can detect certain parameters or movements.
- **Time on adjustment:** The product allows adjustment of the duration it stays on after detection.
- **Dusk Control:** The product has a feature that controls its operation based on the level of ambient light.
- **Manual Override:** The product can be manually controlled to override its automatic functions.
- **Dusk level adjustment:** The product enables adjustment of the threshold at which it responds to changes in ambient light.
- **Standby Power:** The product consumes a certain amount of power when not in active operation.
- **Maximum switchable load:** The product has a defined maximum load it can switch on or off.
- **Protection Rating:** The product is rated for a specific level of protection against various environmental factors.
- **Safety:** The product complies with safety standards and regulations.
- **Mounting:** The product should be mounted securely according to the provided instructions.
- **Recess cut-out size:** The product requires a specific cut-out size for installation.
- **Warranty:** The product comes with a warranty, details of which are mentioned in the user manual.

Product Usage Instructions
Follow the below instructions for using the product:

1. Ensure that the product is properly installed according to the provided installation instructions.
2. Connect the product to an appropriate power source.
3. Adjust the time on setting to determine how long the product stays on after detection.
4. If desired, enable the dusk control feature to allow the product to operate based on the level of ambient light.
5. Use the manual override option to manually control the product's functions if needed.
6. Adjust the dusk level setting to specify the threshold at which the product responds to changes in ambient light.
7. Take note of the standby power consumption when the product is not actively operating.

8. Ensure that the load being switched by the product does not exceed the specified maximum switchable load.
9. Consider the protection rating of the product and its suitability for installation in specific environmental conditions.
10. Adhere to safety guidelines and regulations while using and installing the product.
11. Mount the product securely according to the provided instructions.
12. Make sure to provide the necessary recess cut-out as specified for proper installation.
13. Refer to the warranty information in the user manual for details regarding warranty coverage and duration.

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 it for future reference.

IMPORTANT

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 it for future reference. 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 be installed by a registered electrician.

Always switch the 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 the 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 the 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) NEARTH (Green/Yellow)

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

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 cables (from the lighting) to L1 (brown), N (blue), and E (Green/Yellow).

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

SWITCHED LIVE L1
Switching DC loads or loads that 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)

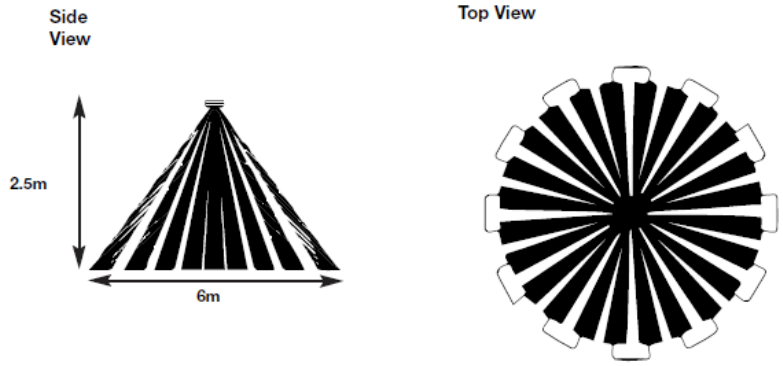


Fig. 2

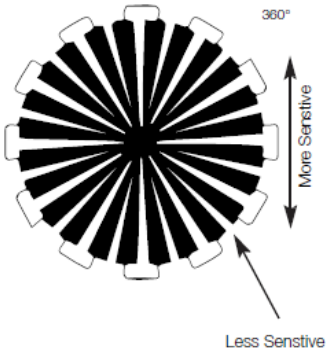
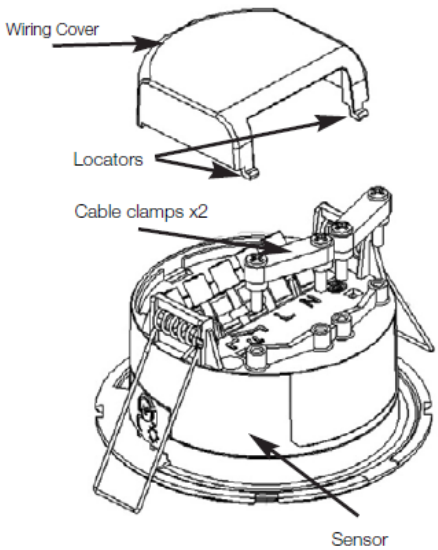
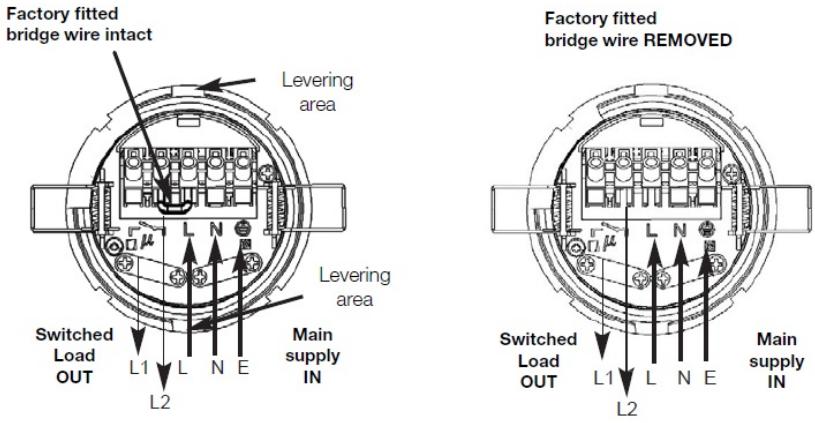


Fig. 3



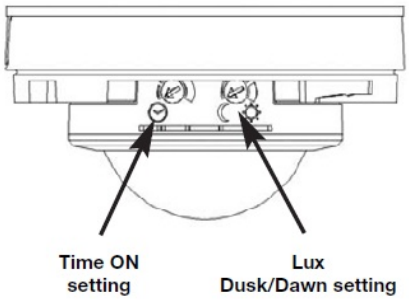
WIRING DIAGRAMS

- 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
- 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.
- Factory-fitted bridge must be removed to isolate L1 & L2 terminals from AC mains.

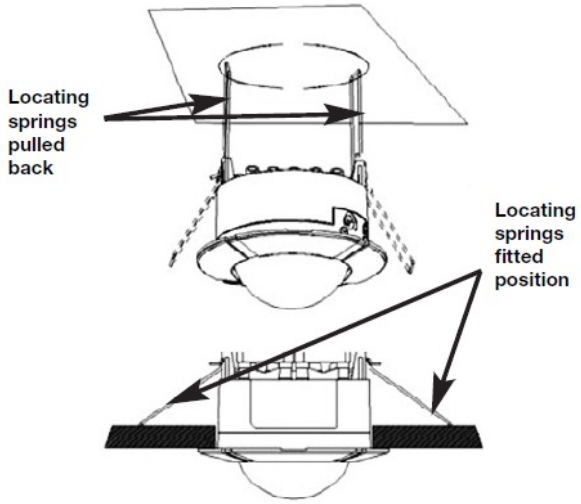


When wiring is complete, set the two adjustment controls on the side of the unit (Fig. 6) to the following position:

- TIME – Fully anti-clockwise (min. time).
- DUSK – Fully clockwise (daylight).



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 set PIR settings



OPERATION AND TESTING

Walk Testing Procedure

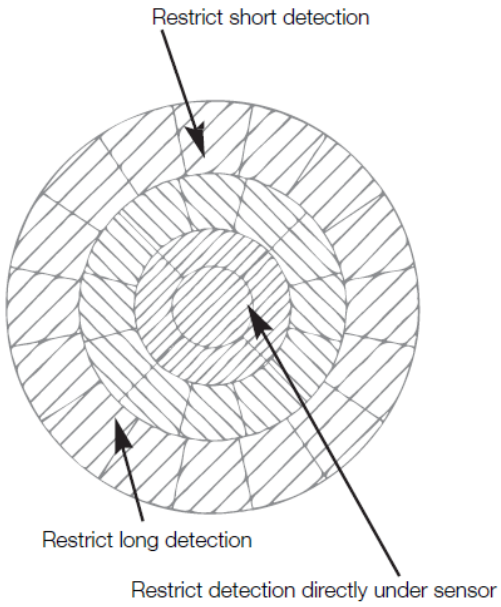
Set the two adjustment controls on the underside of the unit (Fig. 6) to the following positions: TIME – Fully anti-clockwise (min. time).

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-meter diameter circle from the center of the sensor location with a 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, and prevent detection in unwanted areas, mask the sensor lens using the lens mask sticker supplied (Fig. 8). For your information, the center section of the lens covers short-range detection and the outer edge of the lens covers a long-range range. Mask the sensor to suit your installation.



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 adjustments. 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
The 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, and freight is 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 any way contrary to the installation instructions, or installed in any unusually exposed or harsh environmental conditions. This guarantee excludes liability for discoloration 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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Documents / Resources

	simx LHT0142 Smart Sense 360 Degree Sensor Flush Mount Pir Sensor [pdf] Instruction Manual LHT0142 Smart Sense 360 Degree Sensor Flush Mount Pir Sensor, LHT0142, Smart Sense 360 Degree Sensor Flush Mount Pir Sensor, Sensor Flush Mount Pir Sensor, Mount Pir Sensor, Pir Sensor, Sensor

References

- Simx - Home Ventilation, Lighting, Commercial Ventilation Distributors | Simx New Zealand
- Ventair Australia - Heating & Ventilation Solutions for Sale - Ventair