

TROUBLESHOOTING

PROBLEM	SOLUTION
Lamp stays ON all the time at night.	Cover PIR lens with a thick cloth. If the light turns out, check detection area for heat or reflective source. If the light stays on, check wiring. Check that the unit is not set to manual override.
PIR keeps activating for no reason/at random	Reset unit. Leave for a maximum of 5 minutes. If light activates, check area for false activation from heat or reflective source.
PIR sensor will not operate at all.	Check that the power is switched ON at the circuit breaker/ internal wall switch. Turn OFF the power to the unit and check the wiring connections.
The PIR sensor will not operate at night.	Check the lamp. If the lamp has failed, replace. Ensure that the lamp is seated correctly in the lampholder. Note: sensor will not detect through glass.
Unit activates during the day	The level of ambient light in the area may be too bright to allow operation at the current DUSK setting. At night, adjust the DUSK control slowly clockwise until the lamp illuminates.
Detection range varies from day to day	Unit may be poorly located. Check "Before you start" section for tips. PIR sensors are influenced by weather changes and are more effective in colder ambient temperatures. You may need to make seasonal adjustments to the sensor aiming to ensure trouble-free operation all year round.

PRODUCT COMPLIANCES

Smart Sense PIR sensors comply with all applicable standards.

MANUFACTURERS EXTENDED WARRANTY

This product is guaranteed by SIMX Ltd and Ventair Pty Ltd for 3 years from the date of purchase against faulty materials or workmanship which affects its designed ability to operate. 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 (ie. 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 discolouration and/or delamination of paint or plastic, or any user serviceable 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 either Australian, or 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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Specifications are subject to change without notice

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INSTALLATION INSTRUCTIONS



SMART SENSE SINGLE PIR SENSOR LHT0119 BLACK / LHT0120 WHITE

Thank you for purchasing the Simx Lighting Smart Sense PIR sensor.

This product is suitable for all 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 AC
Max Rated Load	2000W incandescent
<i>(for connected light fittings)</i>	500W fluorescent
	400W LED (PF≥0.9) & 250W LED (PF<0.9)
Detection Range	Up to 12m
Detection Angle	180°
Time On Adjustment	5 sec - 15 min
Dusk Level Adjustment	Day & night or night only operation
IP Rating	IP55
Safety	Class II
Mounting	Under eaves or wall mount
Housing	UV-stabilised polycarbonate
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 sensor 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 cleaning, recalibration, or maintenance.

This sensor 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 product.

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.

- The Smart Sense PIR sensor should be wired to its own switch. Do not interconnect with other sensor types on the same switch. Do not install during wet weather.
- Lighting loads connected directly must not exceed maximum listed in Technical Specifications
- To achieve best results, please consider the following points:
- If you intend to use this product with compact fluorescent energy saving lamps, we suggest the TIME setting is set to a minimum of 3 minutes.
- Before selecting a place to install your Smart Sense PIR sensor, note that movement across the scan area is more effective than movement directly toward or away from the sensor. The best all-round coverage is achieved with the unit mounted 2.5 metres above the ground.
- To avoid false triggering, direct the sensor away from heat sources such as barbecues, air con, flue vents etc or reflective surfaces such as smooth white walls, swimming pools, etc. This sensor may operate abnormally in extreme weather conditions. This is not a fault and should resume normal operation when weather settles.
- To reduce the risk of light pollution, install and position any lights controlled by this sensor carefully to ensure that the light emitted does not encroach onto neighbouring properties.

INSTALLATION

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

- Switch off the power supply before commencing any electrical work.
- 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 for activating manual override.
- Unscrew the wiring box fixing screw (Fig. 1). This screw is captive, do not fully remove, remove the rear cover.
- Using the wiring box as a template, mark the position of the fitting holes. (Fig. 2) Drill the holes. Care should be taken to avoid drilling or screwing into concealed electrical wiring/plumbing. Insert the wall plugs if required for solid walls.
- Pierce the power cable entry grommet on the wiring box and slowly draw the power cable through the entry hole. A 3-core round flexible cable of 1.0 - 1.5mm² gauge is recommended.
- Attach the mounting plate to the wall using screws provided. Do not overtighten the mounting screws.
- This unit features an installation aid. Simply hang the sensor onto the wall plate by use of the clip arrangement on bottom edge of wall plate (fig 3). This leaves your hands free to install the incoming cables with ease. Connect the incoming and outgoing cables as follows shown in (fig 4)
- Reattach and screw securely the cover to the base. Ensure cables are not pinched in closing the unit.
- Reconnect mains power. Test circuit and setup PIR settings (see configuration section).

Fig. 1

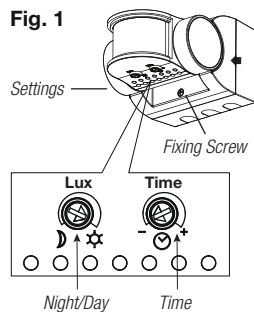


Fig. 2

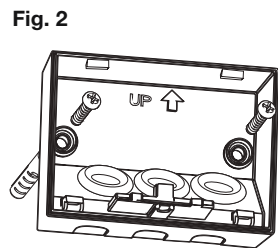


Fig. 3 Hang main body on wiring box for easier wiring

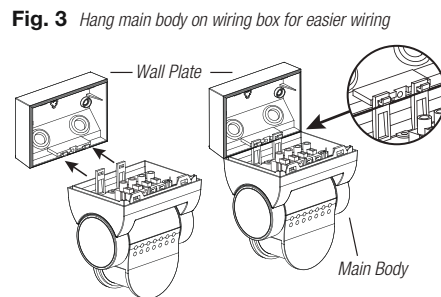


Fig. 4

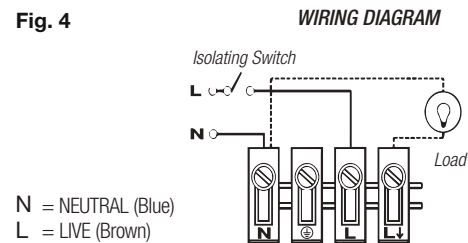
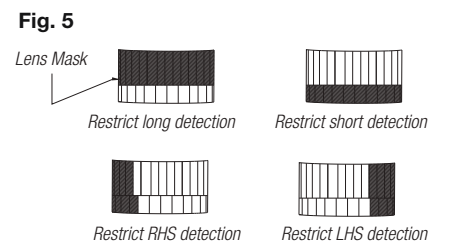


Fig. 5



CONFIGURATION

WALK TESTING PROCEDURE

Adjust the sensor to point in the desired direction. Set the adjustment controls on the underside of the unit to the following to enable daytime operation for walk testing:

LUX - Fully clockwise

TIME - Fully anti-clockwise

The lamp will switch on for a "warm-up" period for 1 minute. Remain outside the detection area during the warm-up period. Walk across the detection area approx 5 metres from the unit. As you cross a detection "zone" the lamp will illuminate. Stand still until the lamp extinguishes (approx. 5 secs) then 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. If the detection area is too small for your requirements, angle the sensor head up to increase the coverage distance. Angling the head downwards will reduce the range should a smaller coverage area be required.

MASKING THE SENSOR LENS

To restrict the sensor coverage, preventing detection in unwanted areas, mask the sensor lens using the masks (included in kit). For your information, the top section of the lens covers long range detection, the bottom covers short range. Cut lens mask to suit, and bend mask outwards when fitting so it clicks in securely (Fig. 5).

SETTING UP FOR AUTOMATIC OPERATION

The TIME setting controls how long the lighting 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 LUX control determines the level of darkness required for the unit to start operating. To operate the sensor in lighter conditions, adjust the LUX control clockwise. To operate the sensor in darker conditions, adjust the dusk control anti-clockwise. Wait for at least 1 minute between adjustments.

An easy way to set the sensor to your desired light level is to set the dusk control fully anti-clockwise, then wait until the ambient light level reaches the level of darkness at which you wish the lamp to become operative. The unit may trigger when the dusk control is adjusted, it will settle into normal sensing mode after 1 minute of inactivity. SLOWLY rotate the control in a clockwise direction until a point is reached where the lamp illuminates. Leave the control set at this point.

MANUAL OVERRIDE MODE

The light can be switched on for longer periods by use of the Manual Override mode. This can be activated at night by using the internal wall switch or circuit breaker. Switch the internal wall switch/circuit breaker once (off/on) within 1.5 seconds. The unit will now illuminate continuously for 6 hours and will then revert back into Auto mode. Alternatively manually flick the internal wall switch/circuit breaker once (off/on) within 1.5 seconds, then the unit will return to Auto mode.