INSTALLATION INSTRUCTIONS

Simx Lighting

SMART SENSE PRO

LHT1205 - Black
LHT1206 - White

Thank you for purchasing the Simx Lighting Smart Sense Pro.
It requires a 220V-240 AC power supply to operate and should be installed by a registered electrician.
Please read this manual before installation and retain for future reference.

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 product 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.

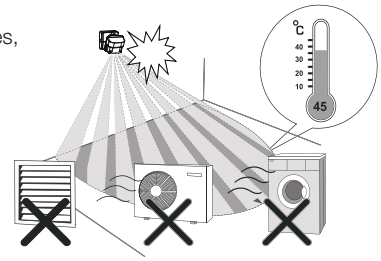
TECHNICAL SPECIFICATIONS

Power Source	220-240V AC 50Hz
Max Rated Load	2000W Incandescent 400W LED (PF >0.9)
Detection Range	Up to 12m
PIR Detection Angle	180º
Time On Adjustment	2 sec - 15 min
Dusk Level Adjustment	Day & night or night only operation
IP Rating	IP55
IK Rating	IK07
Safety	Class II
Mounting	Under eaves or wall mount
Installation Height	Typical 2.5m, max 3.5m
Construction	UV-stabilised polycarbonate
Operating Temperature	-20°C to + 50°C
Warranty	3 years

INSTALLATION ADVICE

Since the motion detector reacts to variations in temperature; avoid the following situations:

- Do not aim motion detectors at objects with highly-reflective surfaces, like swimming pools, mirrors,etc..
- Do not install motion detectors near heat sources such as heating outlets, air conditioning systems, dryer vents, lighting fixtures, etc.
- Do not aim the motion detector at objects that move in the wind, such as tree limbs or bushes, large plants, etc...

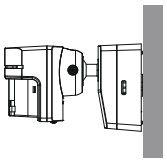


MOUNTING LOCATION

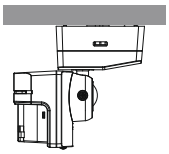
Determine the mounting location - Wall or Ceiling mount.

Recommended installation height is 2.5m above ground.

Wall mount



Ceiling mount



INSTALLATION

Remove the wiring box cover by unscrewing the retaining screw (Diagram 1), and with a flat head screwdriver gently push down and ease out (Diagram 2).

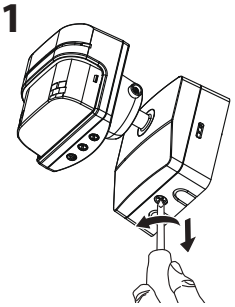
Mark and drill fitting holes (Diagram 3). Insert the rawl plugs into the holes.

PIERCE & PASS THE CABLE(S) THROUGH THE GROMMET(S) BEFORE PROCEEDING.

Fix the mounting plate on the wall, ensuring not to over-tighten the screws to avoid potential damage.

When utilizing a power screwdriver, set to the lowest torque setting.

1



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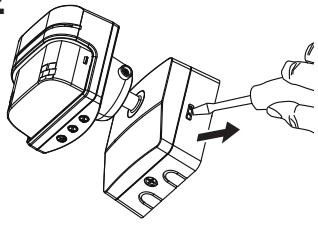

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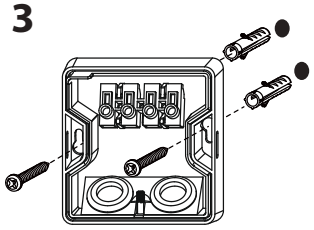
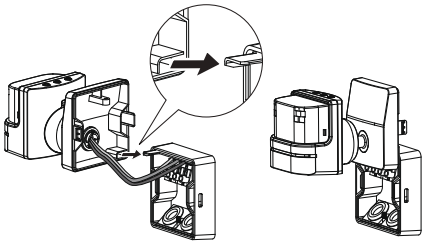


Note:
To make the installation process easier, clip the sensor body and wall plate together for hands-free install.

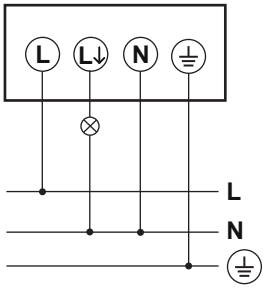


INSTALLATION INSTRUCTIONS

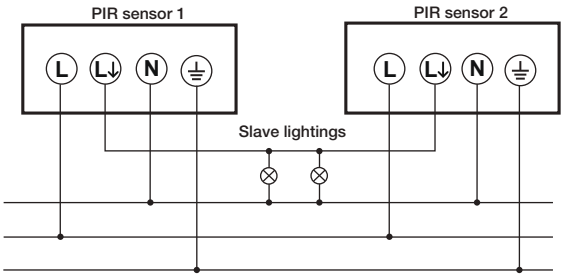
CONNECTION

The unit is suitable for connection to a 220-240V AC 50Hz electricity supply.

It is suggested that 3-core round flexible cable of max. 2.5mm^2 gauge is used. An isolating 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.



Detector/light units can be connected in parallel, with a maximum of 8 units.



NOTE: when connecting parallel sensors, the slave lighting load must not exceed the maximum rated load of **one** sensor.

The PIR sensor head can be rotated (Diagram 4).

Point the PIR sensor head straight to optimize the detection range.

After a long period of usage, the PIR sensor head ball join may be loosen, tighten the screw to fix the PIR sensor head position (Diagram 5). Use tightening force of approximate 5Nm.

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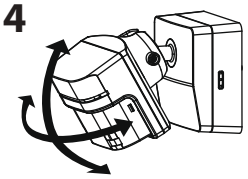


5

Sensor head tilt: 30°, pan: +/- 30°

OPERATION AND TESTING

Time

The timer can be set to 2 seconds – 15 minutes and Pulse mode.
Position 2 seconds is suitable as a test setting. Turn the control knob clockwise to increase the delay time. Set the control to the desired setting between these limits.

D-MODE

In position D, the movement sensor is disabled, and the light load will switch ON automatically at dusk. The load will turn OFF again at dawn, effectively providing an option for all-night operation.

PULSE MODE

In the Pulse Mode, the load will be 1 second ON, followed by 9 seconds OFF. The Pulse Mode enhances versatility of the sensor by enabling integration with external timer switches. Triggering a signal upon detection to activate various devices connected to the external timer switch, such as lighting, garage doors, and HVAC system, offering a comprehensive solution for customized automation in residential and commercial settings.

Lux

The light controller determines at what level of darkness the light switches on automatically. Turn the potentiometer clockwise to increase the LUX value. The lowest value is 5 LUX, the highest value is 1000 LUX (daylight). The Dusk adjustment knob is indicated by the “Moon” and “Sun” symbols.

DUSK LEARN

If you turn the knob to the EYE setting, it will use whatever the current light level is as the active switching point from now onward. This may provide a more accurate and customised setting for the user.

Walk Test Procedure

To start walk test, set the Time indicator to “2s” and Lux indicator to “Sun”.

The unit will now operate during daytime as well as at night, illuminating the lamp for approx. 2 seconds each time. This allows testing to be carried out to establish the best position for the sensor. The lamp will immediately illuminate as the unit goes through its "warm-up" period. After approximately 45 seconds the lamp will extinguish. Try to 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. Now stand still until the lamp extinguishes (this should take approx. 2 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 establish the detection coverage.

Tilting the sensor head up will increase the detection distance and tilting the sensor head down will reduce that distance (approx. 3mtr per 10deg of tilt).

Masking the lens (see over page) will block all detection from specific angles or distances (over boundaries, roads, heat sources)

When walk tests are completed, adjust TIME and LUX settings to suit the user.

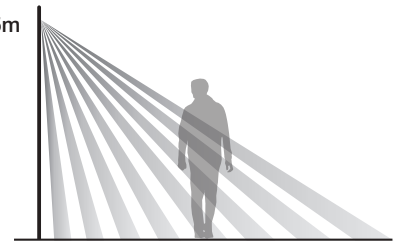
Manual Override Mode

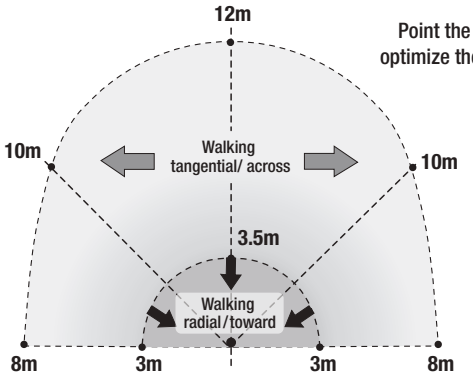
Initiate Manual Override Mode by swiftly toggling the connected light switch OFF and ON within 2 seconds. This can be done at any time, keeping the lights on for up to 6 hours. To exit manual override, repeat the switch action within 2 seconds or after 6 hours of continuous illumination, returning the unit to auto mode.

INSTALLATION INSTRUCTIONS

DETECTION RANGE

Optimum installation height **2.5m**
Range (2m - 3.5m)

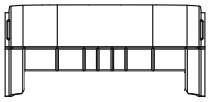




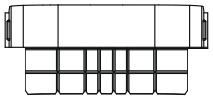
MASKING THE SENSOR LENS

To restrict the sensor coverage, preventing detection in unwanted areas, mask the sensor lens using the mask provided.
For your information, the top section of the lens covers long range detection, the bottom covers short range.
Similarly the left and right lens sections cover the left and right detection areas respectively.

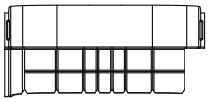
Lens masking examples



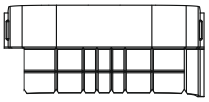
Restrict long, RHS and LHS detection



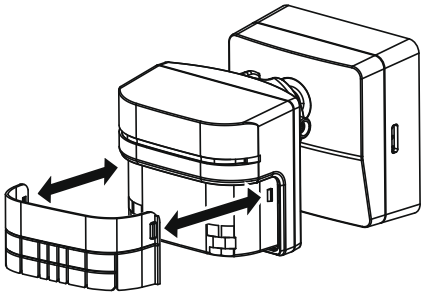
Restrict front detection



Restrict front and RHS detection



Restrict front and LHS detection



TROUBLESHOOTING

Lamp stays ON all the time at night.
The unit may be suffering from false activation. Cover the sensor lens completely with a thick cloth. This will prevent the sensor from "seeing" anything. If the unit now switches off after the set time duration and does not re-activate, this indicates that the problem was caused by false activation. The problem may be solved by slightly adjusting the direction/angle of the sensor head. Sensor may be set to D-mode, readjust the time dial accordingly.

Sensor keeps activating for no reason / at random.
You may not be allowing the unit time to complete it's warm-up period. Stand well out of the detection range and wait (the warm-up period should never exceed 2 minutes). Occasionally, winds may activate the sensor. Sometimes passages between buildings etc. can cause a "wind tunnel" effect. Ensure the unit is not positioned so as to allow detection of cars/people using public thoroughfares adjacent to your property.

Sensor will not operate at all.
Check that the power is switched ON at the wall switch. Turn OFF the power to the unit and check the wiring connections as per the diagram. Ensure no connections are loose. Check the lamp. If the lamp has failed, replace. Ensure that the lamp is seated correctly in the lampholder.

Sensor will not operate at night.
The level of ambient light in the area may be too bright to allow operation at the current Lux setting. During the hours of darkness, adjust the Lux control slowly clockwise until the lamp illuminates.

Unit activates during the daytime
The level of ambient light in the area may be too dark for the current Lux setting. During daylight, adjust the Lux control slightly anti-clockwise. When the lamp load extinguishes, enter the detection area. If the sensor still activates, the setting is still too high. Repeat the above procedure until the Sensor does not activate when you enter the detection area.

Sensor coverage is poor/ sporadic
Unit may be poorly located. Re-locate the unit.

Detection range varies from day to day
Sensors are influenced by climatic conditions. The colder the ambient temperature, the more effective the sensor will be. You may need to make seasonal adjustments to the sensor head position to ensure trouble-free operation all year round.

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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