

INSTALLATION INSTRUCTIONS

DECOSENSE 360° SENSOR **Dual Mount PIR Sensor** **LHT2142**

Thank you for purchasing the Simx Lighting DecoSense 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	Max 8 metres diameter, 360°
Time on adjustment	2 secs - 30mins
Pulse Mode	Yes
Manual Override	Yes
Daylight Switch Mode	Yes
Standby Power	Max 0.5W
Maximum Switchable Load	2000W Incandescent 400W LED (PF>0.9)
Parallel Connection	Max 8 units
Protection Rating	IP44
Safety	Class II
Operating Temperature	-5°C to +40°C
Mounting	Recess or Surface Mount to 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 to allow 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 turn 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, consider the following for optimal results:

The motion detector has a number of detection zones. A moving human body needs to cross one of these zones to activate the sensor. Optimal detection performance is achieved when the unit is installed at a mounting height of 3.0 metres.

To avoid false triggering, the sensor should be directed away from heat sources such as heaters, air con, flue vents etc. Maintain a minimum separation distance of 3.0 metres from Wi-Fi routers to prevent RF interference to either device.

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

Before selecting an installation location, note that movement across the detection zone is more effective than movement directly toward or away from the sensor. (Fig. 2)

INSTALLATION

We strongly recommend this sensor is installed by a registered electrician

Switch off the power supply before commencing any electrical work.

Housing assembly for recessing or surface mounting is shown in Fig. 1.

For recessing, the cutout diameter is Ø75mm. Alternatively for surface mounting, use the surface mount base as a template for drilling the mounting and power cable holes.

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

Keep the top of the sensor clear of any insulation material.

WIRING

Standard connection

Connect the main supply cable to the terminal block in accordance with the diagram in Fig 3.

Maximum cable size: 1.5mm². No external junction box is required.

Secure cables to the recess housing lid using the supplied cable ties.

A maximum of 8x DECOSENSE PIR can be wired in parallel to extend detection coverage. Switching capacity remains the same as for a single sensor.

When wiring is complete, adjust the two control dials on the side of the unit (Fig. 4) as required:

The setting options are explained under OPERATION section.

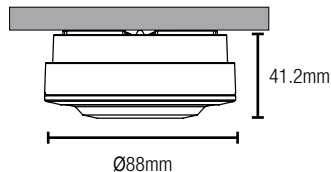
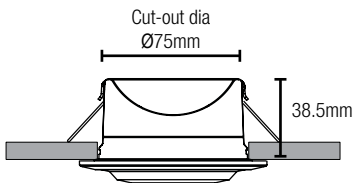
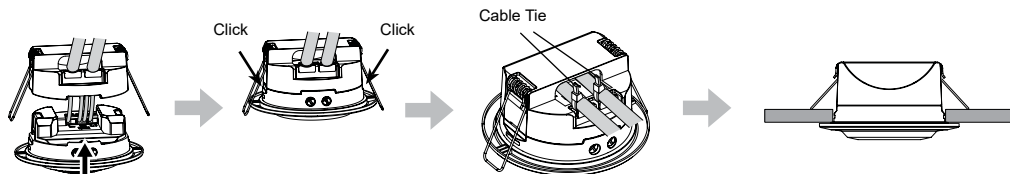
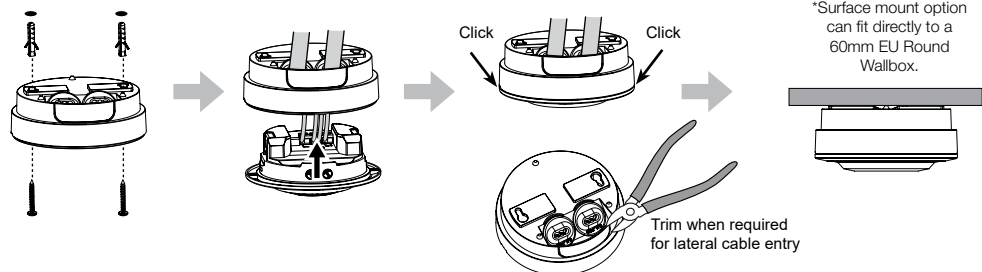
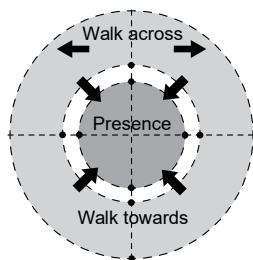
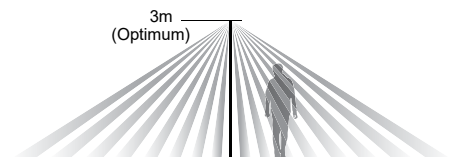
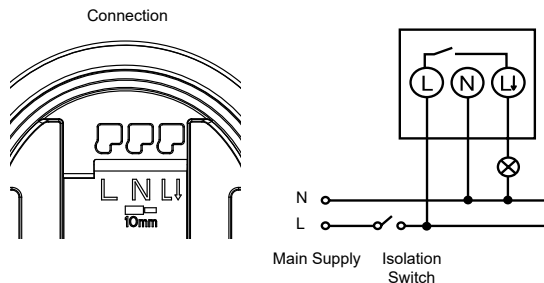
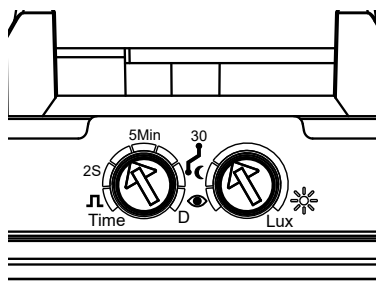


Fig. 1**Recess Mount****Surface Mount****Fig. 2****Detection Range**

- Walk across: Ø8m
- Walk towards: Ø4m
- Presence: Ø3m

Mounting Height**WIRING DIAGRAMS****Fig. 3****Fig. 4**

OPERATION

SETTING UP FOR OPERATION

To access the controls, use a thin blade screwdriver to gently lever the unit clear of the ceiling. Hold in position against the spring tension while making adjustments.

Factory default settings: 100 lux / 5 minutes.

LUX Settings

The LUX setting determines the level of ambient light below which the unit will start to operate.

Setting the LUX dial to ☀️ means the sensor will detect and switch both day and night. Setting the LUX dial to the 🌙 means the sensor will detect and switch only at night.

Adjust the LUX dial to select the desired ambient light level for switching (Fig 4).

DUSK LEARN

Alternatively, on the LUX dial is a 👁️ for even more accurate setup. Wait until the ambient light level reaches the level where you would like the sensor to become operative. Turn the LUX dial to the 👁️ setting to set the trigger point to that light level. The sensor has now learnt to become operative from that same light level every day.

To readjust the DUSK LEARN setting, turn the LUX dial out of 👁️, wait until the light switches off, then reset to 👁️ when the new ambient light level is reached.

TIME Settings

The TIME setting controls how long the lights remain illuminated following the last detected movement. Each new movement detection will restart the countdown.

The TIME Dial (Fig 4) shows estimated time indicators of 2sec (Test), 5mins, and 30mins as a guide. Setting halfway between 5mins and 30mins indicators will provide an approximate 15-mins runtime. Adjust the TIME dial to select the desired TIME on setting.

DAYLIGHT SWITCH

If you wish to operate this sensor purely as a dusk to dawn sensor, turn the TIME dial to the [D] setting. This disables PIR operation and the sensor will only switch the lighting on automatically according to the LUX setting. Lighting will switch off again when the LUX setting is exceeded.

Please note if you are using this function, the sensor needs to be located so it clearly measures changes in natural light levels. Otherwise lights may stay on continuously or flash intermittently due to inadequate light detection.

PULSE Mode

In position **⏏** on the TIME dial, 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. It triggers a signal upon detection to activate 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.

MANUAL OVERRIDE Mode

The lighting can be switched on for longer time periods by use of the Manual Override Mode regardless of existing Time/Lux settings. This can be activated any time by using the isolation switch (wall switch).

Switch the isolation switch once (OFF/ON) within 2 seconds. The connected load will remain continuously active for 6 hours, after which the sensor will revert to Auto Mode.

To return to Auto Mode sooner, manually toggle the isolation switch again (OFF/ON) within 2 seconds.

Once the sensor is setup as desired, ease the unit back into position under spring tension or click the sensor head into the surface mount base depending on the mounting method used.

PRODUCT COMPLIANCES

This product complies to all applicable standards for construction, electrical safety and EMC/RFI suppression.

MANUFACTURERS EXTENDED WARRANTY

This product is guaranteed by SIMX 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 or fading of plastic.

This product does not have 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 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.



Distributed in New Zealand by Simx Ltd

Ph: +64 9 259 1660 | Technical Support Ph: +64 9 259 1662

e: sales@simx.co.nz | www.simx.co.nz

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