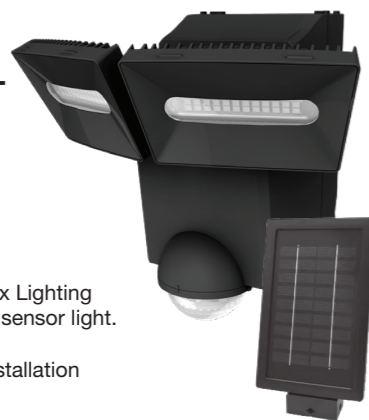


INSTALLATION INSTRUCTIONS



ULTRABRIGHT SOLAR SENSOR LIGHT WITH SOLAR PANEL LHT1184



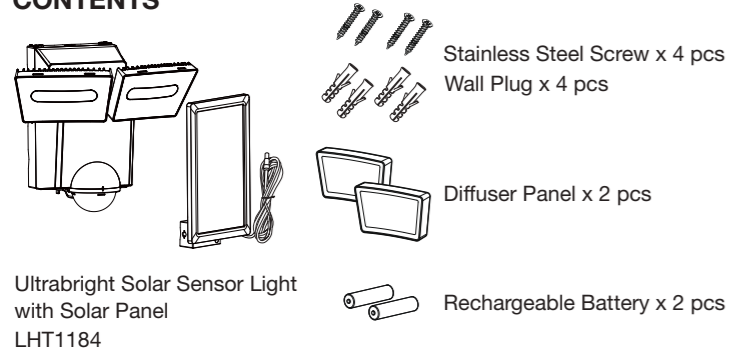
Thank you for purchasing the Simx Lighting Ultrabright battery operated solar sensor light.

Please read this manual before installation and retain for future reference.

TECHNICAL SPECIFICATIONS

Detection Range	10 ± 2m
Detection Angle	180 degrees
PIR Aiming Adjustment	Pan only, left or right 90°
Time Setting	OFF, 1M, 5M, XTEN, ECO (refer Operation section)
Light ON Setting	DUSK LEARN default 0-20 lux (refer Operation section)
Luminous Flux	1250 lumens +/-10% on Li-ion 630 lumens +/-10% on Alkaline
CCT & CRI	5000K Neutral White, CRI ≥80
Light Head Aiming	Tilt down 40°, Tilt up 65°, Pan out 65°, Pan in 20°
Power Input	2x 18650 Li-ion batteries (included) 4x Alkaline 'D' cell batteries 1.5V (not included)
Backup Battery Life	@ 30s average use of 5 activations per day, up to 9 months
Solar Panel	9V 2W, 220mA with 5 metre cable
Working Temperature	0°C to +45°C
Mounting	Ceiling or Wall mountable
Ingress Protection	IP44
Construction	UV-stabilised Polycarbonate

CONTENTS



You will require:
Tools/Equipment needed for installation



Battery Caution & Disposal Information:

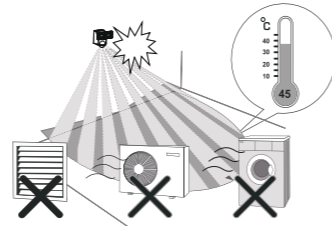
- Do not mix old and new batteries.
- Do not mix Alkaline, Standard (Carbon-Zinc) or Rechargeable (Ni-Cad, NiMH, or Lithium) batteries.
- When replacing Li-ion batteries, make sure all belong to the same brand and model. Specifications: INR18650-2200mAh 3.7V, button top.
- Do not dispose of batteries in fire.
- Batteries should be recycled or disposed of as per local guidelines.

INSTALLATION - SENSOR LIGHT

Installation Advice:

Since motion detectors react to variations in temperature; avoid the following situations:

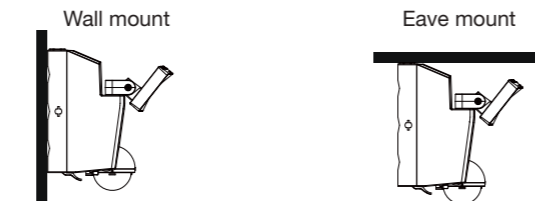
- Do not aim motion detectors at objects with highly-reflective surfaces, like swimming pools, mirrors, etc.
- Do not install motion detectors near heat sources such as heating outlets, air conditioning systems, dryer vents, lighting fixtures, etc.
- Do not aim the motion detector at objects that move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



Mounting Location

This light fitting is rated to IP44, this means that it is suitable in areas that may receive light rainfall. Please ensure the desired location does not exceed the rating.

Recommended installation height is 1.8 - 3.0m above ground.



Special Note: Care and consideration should be taken when the unit is located close to property boundaries, to avoid unnecessary spill light or glare to neighbours, and to avoid unwanted activation from passing pedestrians or vehicles.

Note:

There are 3 options of battery usage.

i) 18650 Li-ion battery only

The product would work at its full brightness and on-time.

ii) Alkaline battery only

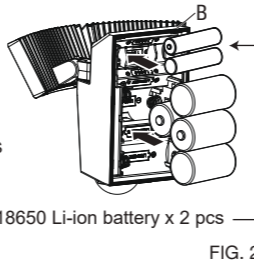
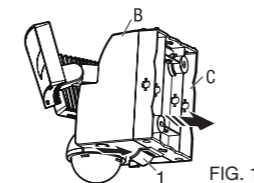
In the Alkaline battery working mode, no charging is required. However, the light brightness is 50% lower than when using Li-ion battery to conserve battery life.

iii) 18650 Li-ion battery and Alkaline battery

In this combination, the main power supply is from Li-ion battery and the alkaline battery is for backup.

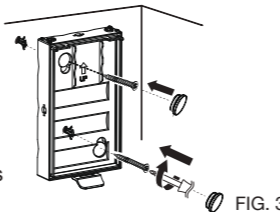
Pre-install

- Gently pull the bottom tab (1) of the wall mounting plate (C) away from the light body (B). FIG. 1
- Turn the function mode selector to "0". Install rechargeable 18650 Li-ion batteries (included). Optional: for back-up batteries, install 4 x Alkaline "D" 1.5V batteries (not included) into the battery compartment. Make sure the polarity (+ & -) of the batteries is correct as shown in the battery compartment. FIG. 2



OPTION 1 - WALL MOUNT

- Remove the two rubber gaskets, and ensure the mounting plate is level & the UP arrow is correctly orientated, then mark hole locations.
- If mounting to a wood surface, you can install the mounting screws through the mounting plate and into the wood. You can also drill 2 pilot holes into the wood with a 3mm drill bit and then install the screws. Reinstall the 2 rubber gaskets to keep the unit weatherproof. FIG. 3

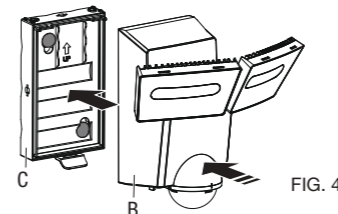


If mounting to wall board or brick, drill 2 pilot holes with a 6mm drill bit. Insert the wall plugs into the holes and attach the mounting plate to the wall with the screws. Reinstall the 2 rubber gaskets to keep the unit weatherproof. FIG. 3

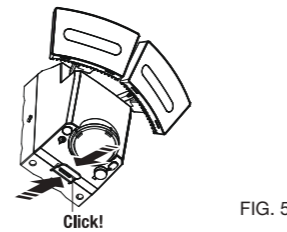
INSTALLATION - SENSOR LIGHT

OPTION 1 - WALL MOUNT

- Attach the light fixture to the mounting plate. FIG. 4

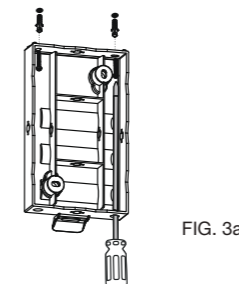


- Press the unit on the bottom to the mounting plate. You should hear a "Click" sound. This indicates that the device is securely attached to the mounting plate. FIG. 5

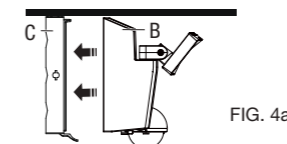


OPTION 2 - EAVE MOUNT

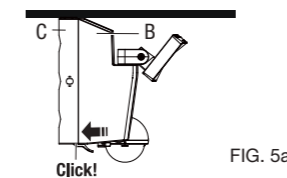
- Place the mounting plate against the ceiling. Mark the hole locations. Drill suitable holes and insert the wall plugs. Fix the mounting plate to the ceiling using the two mounting screws with a very long Phillips-head screwdriver. FIG. 3a



- Attach the light fixture (B) to the mounting plate (C). Support the back-plate from behind with one hand and push the light onto the back-plate with the other hand. FIG. 4a



- Press the unit on the bottom to the mounting plate. You should hear a "Click" sound. This indicates that the device is securely attached to the mounting plate. FIG. 5a

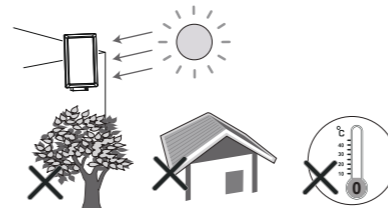


INSTALLATION - SOLAR PANEL

Installation Advice:

Since the solar panel reacts to sunlight, avoid the following situations:

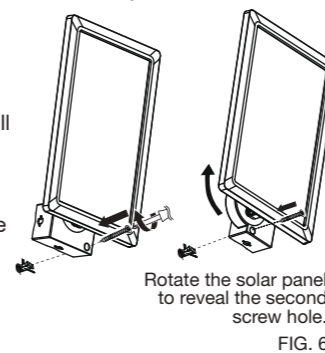
- Do not install near large tree, under the roof, etc., where the solar panel isn't fully in direct sunlight.
- Install the solar panel, so it is directly facing the sunlight. Best practice is to aim panel at the sun at 10 am.



Caution

Solar panel is unable to charge the rechargeable battery under temperature 0°C. This is the device's automatic protection circuitry.

If mounting to a wood surface, you can install the mounting screws through the mounting plate and into the wood. You can also drill 2 pilot holes into the wood with a 3mm drill bit and then install the screws. FIG. 6

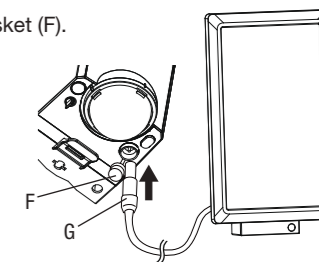


If mounting to wall board or brick, drill 2 pilot holes with a 6mm drill bit. Insert the wall plugs into the holes and attach the mounting plate to the wall with the screws. FIG. 6

INSTALLATION - SOLAR PANEL

Connecting Solar Panel to LED Lights to recharge 18650 Li-ion battery

Open the front cover of the rubber gasket (F). Plug in the solar panel connector (G).



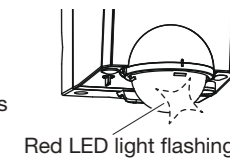
Connect the solar input jack to LHT1184 to charge the Li-ion battery.

Solar charging time

The rechargeable batteries will need 3-7 days to get fully charged in direct sunlight. For initial charging, user should set to "0" first.

Weak battery power indicator

During the night when the sensor picks-up motion, the red LED light will flash. This indicates that the battery power is weak and it is time to replace alkaline batteries, or recharge Li-ion batteries.



i) 18650 Li-ion battery only

Charge the Li-ion battery with solar panel.

Caution:

When replacing Li-ion batteries, do not mix old and new batteries. Make sure battery type is INR18650-2200mAh 3.7V, button top.

ii) Alkaline battery only

Replace with new alkaline batteries.

Caution:

Do not mix old and new batteries. To avoid alkaline battery leakage, replace batteries every 2 years.

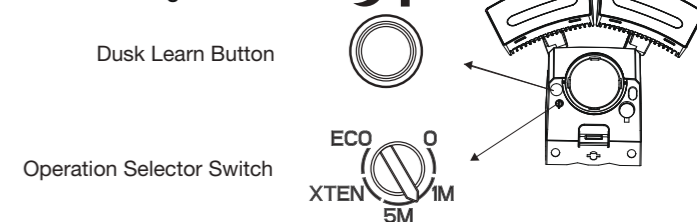
iii) 18650 Li-ion battery and Alkaline battery

Li-ion battery is the main power supply and alkaline battery is the back-up power supply. Recharge the Li-ion batteries, or replace alkaline batteries when battery power is low.

OPERATION

The motion sensor light will take about 30-45 seconds to warm up. The PIR sensor will enter into the standby mode when the warm up is completed. The LED light will turn on when motion is detected at night. The default factory setting is 0-10 lux, you can adjust the level by using Dusk Learn button.

Control Settings



Operation Selector Switch	Normal power supply Light on time (Li-ion battery)	Back up power supply Light on time (Alkaline battery)
0	OFF and charging only	OFF
1M	100% Brightness for 1 minute	50% Brightness for 30 seconds
5M	100% Brightness for 5 minutes	50% Brightness for 3 minutes
XTEN	100% Brightness for 1 minute & 20% brightness for 4 minutes	50% Brightness for 30 seconds & 10% brightness for 2 minutes
ECO	70% Brightness for 1 minute	35% Brightness for 15 seconds

OPERATION

Control Settings

DUSK LEARN

Your motion sensor light is factory preset to only work after dusk. For most people, this will be the best setting and you will not need to make any adjustments.

However, if desired, you can set your own "dusk" level; this will determine how dark it needs to be before the motion sensor works.

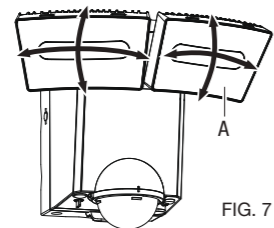
Make sure the control knob is not in "0" position. If you would like your sensor light(s) to come on at a different level of darkness, for example when it is a little lighter outside, then simply push the Dusk Learn button and it will remember the current light level and become active at this light level from now on. When you push the button, the light(s) will blink once to confirm the dusk level has been set.

Default factory setting is 0~20 lux.

To return the default factory setting, press the Dusk Learn button twice within 2 seconds; the light(s) will blink twice to indicate that you have returned to default factory setting.

Lamp Head Adjustment

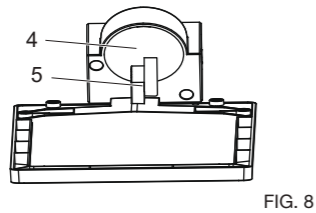
Each lamp head (A) can be tilted down by 40° and upward by 65°. It can be panned out 65° and panned in 20°. FIG. 7



Solar Panel Adjustment

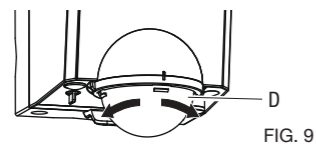
Hinge (4) can pan the solar panel left and right.

Hinge (5) can tilt the solar panel up and down. FIG. 8



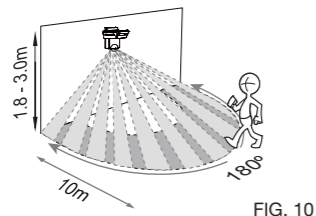
Motion Detection Adjustment

The sensor detects 180°, providing wall to wall coverage. It can also be adjusted more to one side or the other if desired, by rotating the sensor ± 90° (D). FIG. 9



Detection Range

The maximum detection range is approximately 10m in a 180° detection area. FIG. 10



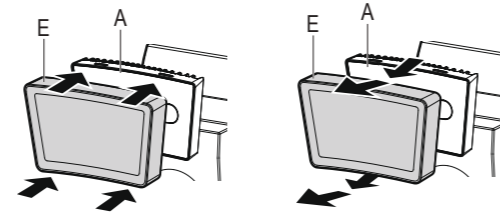
Note:

The brightness is not always 100% and 50%. It will change depending on temperature and battery condition. The product will achieve optimal results when the rechargeable batteries are fully charged or using new alkaline batteries. As with all solar and battery products, this will function best in warmer temperatures.

OPERATION

Using The Diffuser Panel

If you want to reduce glare, attach a diffuser panel to each lamp head as shown below. To remove the diffuser panels (E), first hold the diffuser panel from the front. Next, gently lift the top of the diffuser panel from its back edge with your fingernail while gently pulling up and forward to remove the diffuser panel from the lamp head (A).



PIR LENS MASKING

The PIR lens mask supplied can be used when needed for restricting detection angles of the PIR (Fig 11). Removing the smallest centre segment provides a 20° detection area, while removing the largest centre segments provides maximum 140° angle. The mask clips into place. Remove one segment at a time, aim, and check in walk test mode. Continue removing segments until correct coverage is achieved. The purpose of the lens mask is to block out areas not desired for detection. Apply to PIR lens as required for your location.

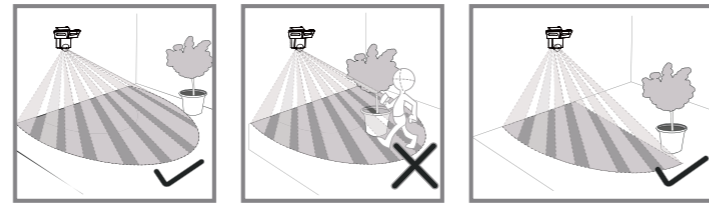


FIG. 11

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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