



Ensure your solar panel is South facing or as near as possible



Clean your solar panel from time to time USER GUIDE



Do **NOT** place your solar panel in shaded areas.



Please read these instructions carefully before installing your light.

Before you begin installation please take great care to ensure the surfaces you intend to mount the light and panel on are sturdy enough to take their weight. Failure to install your Guardian Solar Security Light correctly could result in human or animal injury, damage to your property and damage to your light. If you are at all unsure please contact your retailer or a professional tradesperson for advice. Always take great care when installing your Guardian Solar Security Light, particularly in high places.

How Does It Work?

The Guardian has a powerful 2.5W solar panel that charges a high capacity rechargeable battery during the day. At night the charge stored in the battery powers the Guardian enabling it to light when it detects motion.

Installing the Guardian Solar Panel

Before installing your Guardian Security Light please consider the location of your light and solar panel before you start making alterations to your property. Before installing your Guardian solar panel you'll need to consider the best place for it to receive the most amount of sunlight. There is 5m of cable attached to the solar panel so the distance between your intended light and solar panel location must not exceed this. Position the solar panel in a south, south-east or south-west facing location that is not obstructed by buildings, fences, trees, sheds, bushes or the shadows that these create. It is possible to position your solar panel facing east or west, but north facing locations should be avoided. Please note that a poor solar panel location will drastically reduce the performance of your Guardian Solar Security Light. Please remember that the light will not charge if the solar panel is inside behind glass or under artificial light.

The Guardian solar panel can be mounted on either a horizontal surface, such as a shed or garage roof, or a vertical surface such as a wall. Once you have decided on your solar panel location, hold your solar panel in place and mark the four holes. Prepare the holes and screw your solar panel into place using the supplied screws and screw plugs.

Installing the Guardian Light

It might be easier remove the light from the bracket in order to install it, but this isn't always necessary. To remove the Guardian from its bracket simply unscrew the bolts that secure the bracket to the light. When you are ready to install the light position the Guardian in your desired location and mark the two holes in the mounting bracket. Place the light to one side, drill your two marks and secure mount using the supplied screws and screw plugs. If you removed the light from the bracket you can now reattach it.

Connecting your Guardian Light to the Solar Panel

Simply connect the solar panel cable to the cable coming from the underside of the Guardian Solar Security Light and fully tighten the valve.

Operating Instructions

Now your Guardian is installed turn it on by pressing the switch on the back of the light. The Guardian will charge during the day and activate automatically at night when it detects motion. At dawn the Guardian will enter standby mode and recharge throughout the day. If the Guardian is turned off it will still charge during the day, but it will not activate after dark.

The Guardian motion sensor does not have any user adjustable settings. The detection range is set to 10m with a 180 degree detection angle, but this can vary depending on location, positioning of the sensor and other external factors such as temperature and humidity. The light will illuminate for 35 seconds each time it detects motion.

Troubleshooting

Please ensure that there are no nearby light sources shining on the solar panel or PIR sensor after dark. These could be bright indoor or outdoor lights from your property or your neighbours property, or streetlights. These can confuse the light and prevent it from operating.

If you are unsure, disconnect the solar panel from the light, remove the light from its bracket and take the light inside and test it in a dark room indoors (leave the solar panel outside).

If you are encountering problems with your Guardian it is more than likely something you can resolve yourself. A Guardian that has its solar panel in a poor location will struggle to work consistently if activated too frequently, but that doesn't mean there is a fault with the product. Please remember that your Guardian will come with some charge and will likely work for a few days even if the solar panel is poorly located. Please try the troubleshooting tips below before contacting your retailer.

Recharge Procedure

- 1. Double check the location of your solar panel to ensure it is as South facing as possible and in a clear location.
- 2. Turn the Guardian off at the switch on the back of the light and leave it to recharge for 3-5 days ensuring 1 sunny day has passed.
- 3. After 3-5 days return to the Guardian and turn it back on at the switch.
- 5. If your light still does not illuminate after dark please contact your retailer.

Accessing the Battery

The Guardian uses a single Lithium-Ion 18650 rechargeable battery which is easily accessible. To access the battery, disconnect the solar panel from the light, remove the light from its bracket and take it indoors. Place the light face down on a table and unscrew the 4 screws on the back of the light and carefully remove the back plate. You can now carefully remove the battery from its cradle.

Recharging the Battery

It is better to try to recharge the battery using solar power, but it is possible to charge the battery in a compatible mains powered charger. Having accessed and removed the battery, charge it in a mains powered charger that is **specifically designed to charge 18650 Lithium-Ion batteries**. Please follow the instructions that came with your charger when charging the battery. When inserting the battery back into the light, please ensure you insert the battery the correct way so that the positive end of the battery corresponds with the positive end of the battery cradle.

Replacing the Battery

The battery in your light should last for at least 2 years so you should not need to replace the battery before that time. After around 2 years you may notice that the light is not holding charge as well as it did and this will be the time to replace the battery. Please ensure that you replace the battery with a 3.7v Lithium-Ion 18650 rechargeable battery. You can select a battery with a higher capacity (higher mAh rating) if you prefer, but do not do go below 2000mAh. Please ensure you insert the new battery the correct way so that the positive end of the battery corresponds with the positive end of the battery cradle. Your replacement battery may not come with much charge so leave the light switched off for 3-5 days before turning it on or fully charge it using a compatible mains powered battery charger.

The battery in the Guardian is designed to charge using the supplied solar panel only or in a mains powered charger that is specifically designed to charge 18650 Lithium-Ion batteries! Never attempt to use any other type of solar panel or mains charger to charge the battery in this device! Doing could be extremely hazardous and may result in a battery explosion or fire.

Water Ingress

The Guardian offers a high level of protection against water ingress, but this protection is not unlimited. The Guardian must be mounted to a vertical surface using its bracket. If your light is resting on the ground or on a surface where water can accumulate, it is likely that water will get into the light over time which will result in malfunction. Please also ensure that you fully tighten the screw that connects the motion sensor to the light body once you are happy with the angle of the motion sensor. **Please be advised that water ingress resulting from improper use or installation is not covered by your warranty.**

Maintenance

Clean the surface of the solar panel and light lens with a soft, slightly moistened cloth. Do not use corrosive cleansing agents or chemical solutions as these may damage surfaces and impair operation. Keep the solar panel free of dirt, debris and snow.

Safety Instructions

The Solar Centre assumes no liability for any damage resulting from the use of this product, nor do we assume liability for any damage to property or personal injury caused by improper use or failure to observe these instructions.

Unauthorised conversion and/or modification of the unit may be dangerous and will invalidate your warranty. To avoid damage to sight, do not look directly at the light source. This device is not a toy and should be kept out of reach of children. Do not submerge the device in water or expose it to extreme temperatures (less than -25°C or higher than 50°C).

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