

## TROUBLESHOOTING

### SOLAR LIGHTS WON'T TURN ON WHEN IT IS LIGHT!

Solar lights turn on automatically at night and off automatically when it is light. If you want to test your solar light but you are outside during the day, or in a lit room, you will need to trick the solar panel into thinking it is dark by covering the solar panel completely.

### REALITY CHECK...

The Leaf has been designed to work year-round in the UK using solar power alone so long as it is in a good enough location to charge, and so long as the weather isn't too dull for too long. We use a simple formula based on how much power the solar panel can produce each day versus how much power the LEDs consume after dark. We then factor in the average amount of sun hours in the UK (not much) and an average customer solar panel location. Sadly, there are two things we cannot control:

1. The weather
2. Where the customer decides to position their light.

There will be dull periods in every year where even the best positioned and best performing lights will struggle, so if you are looking for a product that will light up all night, every night, no matter where the panel is placed and no matter what the weather does, then solar lights are probably not the ideal solution to your lighting needs.

### LOCATION, LOCATION, LOCATION!

We can't control where the customer decides to position their light, but you can! Solar panels positioned in a clear south-facing locations always perform best, but we know that is not always desirable even if it is achievable which is why we have added USB charging, Power-saving, and an extra battery bay to the Leaf. Most people buy a solar light to light a specific location and that location might not be a textbook solar-friendly location. So long as the solar panel gets reasonable direct sunlight throughout the day you will get a reasonable performance in Autumn, Spring and Summer. If you are looking for reasonably consistent winter performance, you will need an unshaded south-facing spot and/or be prepared to USB charge.

### THE BOTTOM LINE

We have been selling and designing solar lights for 17 years now and in our experience solar lights that work occasionally are hardly ever faulty! That may seem like we're stating the obvious, but it is also true. Lights that only work for half an hour after dark or lights that only turn on occasionally are just struggling to get enough charge 99% of the time. To test this, turn the light off for three to five days (ensuring at least one sunny day has passed) and then turn it back on and see how long it works for that night- or USB charge it if you can.

Another thing to look out for is nearby lighting. Light coming from another outdoor light or even light coming from inside a house can be enough to stop a solar light from turning on automatically. You can test that by completely covering the solar panel to see if it turns on.

Ultimately, if your light doesn't work after a few sunny days in a completely unshaded spot, or after a full USB charge and you have tested for nearby light interference, you may very well have a rare fault so please do contact your retailer or contact us on the details below.

SOLARCENTRE  
44-46 COLDHARBOUR LANE  
HARPENDEN  
HERTFORDSHIRE  
AL5 4UN  
WWW.SOLARCENTRE.CO.UK



# LAPLAND

## MINI LEAF MANUAL



POWERED BY  
LEAF

### USER GUIDE

Please read these instructions carefully before you begin.

### HOW THE LEAF WORKS

Leaf is one of the most advanced solar panel systems currently available for home solar light set-ups. During the day the sun's rays are absorbed by the Leaf's solar panel which charges the 18650 Lithium-ion battery. After dark, the battery provides power for the light. Leaf has been designed to work year-round using solar power alone, but you can also fully charge Leaf's battery (or batteries) quickly and easily by using the supplied USB-C cable (see 'USB Charging' below)

### BEFORE YOU BEGIN

Although not essential, we thoroughly recommend fully charging your Leaf battery via USB before enjoying your light for the first time. If you do not have access to a USB charging device, such as a computer or a USB wall plug adapter, we advise installing your lights and leaving them to charge outside for 3 days prior to first use. During this initial charge up period, please ensure that your Leaf panel is switched off (see diagram below).

### LEAF LAYOUT

#### 1. BATTERY BAYS

Your Leaf panel comes supplied with a single 18650 battery, but you can add one more battery to double your total charge capacity.

#### 2. POWER SWITCH

Pressing the switch towards I will switch the lights on. Pressing the switch towards O will turn them off completely, but they will still charge.

#### 3. LIGHT CONNECTOR

Connect your 5-pin connector at the end of the Lapland USB Solar Star Light cable to your Leaf Solar panel.



#### 4. BALL JOINT SOCKET

The socket for your ball joint which attaches snugly to your stake or wall/deck mount

#### 5. USB CHARGING PORT

Use the supplied USB-C lead to speed charge your Leaf battery (or batteries) by plugging it into the USB port on your computer, or by using a USB wall plug adaptor. **Do not leave your Leaf unattended when it is charging by USB.**

#### 6. MODE BUTTON

Pressing this button will change the settings between full brightness mode, and powersaving mode. In powersaving, the lights will function at 50% capacity, increasing the runtime.

#### 7. USB CHARGE INDICATORS

The charge indicator lights let you know exactly how much charge the Leaf battery has.

## USB CHARGING

See diagram on previous page. To USB charge the battery simply unscrew the cap on the underside of the Leaf, insert the smaller end of the supplied USB-C cable into the USB charging port and the large end into a USB wall plug adapter or a USB port on your computer. Please note that your computer needs to be powered on during USB charging. The Leaf has 5 charge indicator lights which let you know how much charge the Leaf has. Charging times may vary, but typically takes around 4 hours with a single battery installed. N.B. Please do NOT leave your Leaf panel unattended while it is charging and disconnect the Leaf once you reach 100% charge.

## ADDITIONAL BATTERIES

Your Leaf comes with a single 18650 Lithium-ion battery installed, but has an additional battery bay available. This spare bay gives you the option to add one more battery which will double the total charging capacity of the unit. Please ensure that any additional batteries used match the mAh rating of the battery supplied. You can upgrade all the batteries to a higher mAh so long as all of the batteries used have the same mAh rating. We recommend fully charging the unit by USB when new batteries are added.

## SETTING UP YOUR LEAF PANEL

### POSITIONING YOUR SOLAR PANEL

Before positioning your Leaf solar panel please think very carefully about the location you intend to put it in. Your Leaf can be charged quickly via USB so it can work in locations that get little to no sunlight, but a good solar panel location will mean you will hardly ever need to rely on USB charging. Leaf panels that are mounted higher up in south, south-east or south-west facing locations will always perform best. Always try to avoid north-facing or shaded areas that are obstructed by buildings, trees, fences, sheds, bushes, or the shadows those may create.

### STAKE MOUNTING YOUR SOLAR PANEL

Before attempting to push the stake into the ground, please ensure that the Leaf panel is not attached and that the ground is not too hard. Never try to install the stake by pushing down onto the solar panel. **Any damage caused to your Leaf as a result of attempting to drive it into hard ground will be obvious to your retailer and it is not covered by your warranty.** If the ground is too hard, pour water on the desired area to soften the ground and make a hole using a strong metal object before driving your stake into that hole. Once the stake is securely in place, gently slot the Leaf onto it and use the ball socket to tilt the solar panel into place.

### WALL, FENCE, OR DECK MOUNTING YOUR SOLAR PANEL

Attach the wall mount to your wall, fence, or decking, using the supplied screws and rawl plugs. Once your wall mount is in place, attach the Leaf to the mount and use the ball socket to tilt the solar panel into place.

### TILT

Your Leaf solar panel can be tilted vertically and horizontally to achieve the perfect angle to catch sun. To make adjustments, loosen the ball socket, make your adjustment, and re-tighten to secure the light in your desired position.

### CONNECTING YOUR LIGHTS TO THE SOLAR PANEL

Once your Leaf is installed, and your lights are in place, connect the light cable to the Leaf via the 5-pin connector. Once the connector is in place, fully tighten the valve to secure the connection.

## OPERATING INSTRUCTIONS

The Leaf is fully automatic so once turned on your lights will come on automatically at night and turn off automatically after 7 hours (unless you turn them off at the switch beforehand). To turn your solar lights on, simply unscrew the cap on the underside of the leaf and press the switch towards I for on, or O for off.

## **POWERSAVING MODE**

Powersaving mode is a good option if you don't have a great solar panel location available, or you aren't able to USB charge. Some users might select Powersaving mode simply because they prefer a slightly dimmer light. In Powersaving mode, the Leaf will use half the amount of power as it does in Standard (full brightness) mode. To select Powersaving mode, simply press the mode button once (from Standard).

## **WATER INGRESS**

The Leaf screw cap offers an exceptionally high level of protection against water ingress, but this protection is not unlimited. Once your Leaf is set up and you have adjusted any settings, always ensure that the screw cap and cable connector have been fully tightened to avoid any potential water ingress. Please ensure that your Leaf solar panel is correctly installed using either the ground stake or wall mount and not left lying on the ground or anywhere else where water may be able to accumulate. Failure to follow this guidance will invalidate your warranty.

## **REPLACING THE BATTERY**

The supplied 18650 3.7V rechargeable lithium ion battery is designed to work for at least a year before it needs replacing. If you are experiencing issues within the first year of using your lights, it is unlikely that replacing the battery will resolve the problem (please see troubleshooting). When it is time to replace your battery, remove the screw cap from the underside of the solar panel, locate the battery compartment and remove the battery. Please dispose of the dead battery responsibly and in accordance with your local waste disposal guidelines.