

### Warning

1. Keep the Fold Up Solar Panel away from fire to ensure damage and injury do not occur.
2. Any severe shock or impact may result in damage and will invalidate the warranty.
3. It is forbidden to dismantle the Fold Up Solar Panel except by Solar Technology personnel or agents appointed by Solar Technology. Any sign of tampering will result in the warranty being invalidated.

### Warranty

The Fold Up Solar Panel is supplied with a 24 month warranty. Should a failure occur during this time, Solar Technology International Ltd will repair or replace any faulty part/s, at its discretion upon a copy of the proof of purchase being provided. Solar Technology International Ltd does not accept liability for any 3rd party damage how so ever caused or any costs associated with the return of faulty products.

To make a warranty claim please telephone Solar Technology International Ltd on +44 (0) 1684 774000 or [support@solartechnology.co.uk](mailto:support@solartechnology.co.uk)

These warranty conditions in no way affect your statutory rights.

A full set of Solar Technology International Ltd terms and conditions are available on request.

### Solar Technology International Ltd

We are manufacturers of some of the world's most advanced solar energy products including; solar gadget chargers, solar panels, solar lighting kits, solar power stations, solar garden lights, solar toys and we additionally provide comprehensive solar training courses. To find out more please visit [www.solartechnology.co.uk](http://www.solartechnology.co.uk)

If you have any questions about this product or regarding these instructions please contact the Solar Technology International Technical HelpLine on +44 (0) 1684 774000

or email us at [support@solartechnology.co.uk](mailto:support@solartechnology.co.uk)

or alternatively please write to:  
**Support, Solar Technology International Ltd,**  
Unit 4, Station Drive, Bredon, Nr. Tewkesbury,  
Glos. GL20 7HH, UK



# User Manual

## PORTABLE SOLAR POWER Foldup Solar Panel 4Watt 12Volt



Congratulations on selecting this high quality 12V battery solar charger. Used in the correct way it will deliver many years of trouble free operation.

Model: PS4001

## How does it work

When exposed to daylight the solar cell instantly begins to generate a voltage. The Foldup Solar Panel will work in all daylight conditions and is fully weather resistant.

## Positioning

This will be determined by the cable length from panel to battery. But wherever possible place the panel ideally at 35 to 65 degrees, facing South. The Foldup Solar Panel will still work if positioned behind glass or perspex and even if facing North, although in such circumstances the power delivery will be reduced.

## Protection against battery drain

The Foldup Solar Panel has a built in blocking diode fitted which prevents battery drain during night time. Therefore, the panel can be left attached long term.

**NOTE** – there is no fuse connected to this system, therefore care must be taken not to pinch, cut or damage the integrity of the supplied cables, as a short circuit may occur.

## Performance

The Foldup Solar Panel will deliver current to a 12V battery. It is rated at 4W, which means in ideal conditions, the panel will generate 4 watts of power per hour. This is a perfect amount of power to prevent a large battery going flat, even in winter.

**NOTE** – if the intention is to use the panel with a battery lower in capacity than 30Ah then we would recommend either purchasing the Solar Technology International STS01204, 4Ah charge controller which prevents the battery getting overcharged and therefore damaged by a solar panel, or paying close attention to a battery's condition and when 95% fully charged detach the panel from the battery.

Charge controllers and solar panel test meters can be purchased from your retailer or through [www.solartechology.co.uk](http://www.solartechology.co.uk).

## Connection

Decide whether the connection to the battery will be by an in-car, 12V socket using the cable and mating plug (A) supplied, or direct to a battery's terminals using the supplied cable and crocodile clips (B). Then connect the selected cable to the battery.

**NOTE** – if using the in-car 12V plug, make certain that power can be delivered even if, for example, a car's ignition keys have been removed. If in doubt use the crocodile clips.

Open the panel by gently pulling back on the button on the top of the carry handle. This will release the catch holding the two halves together. Open the panel and pull out both support legs at the rear of each panel. Position the panel in the optimum position. In the lower right corner of the Foldup Solar Panel, you will see the word **Output**. Remove the rubber protection cap (C) to expose a socket. Now take the pin end of the selected cable that is connected to the battery and carefully insert into the Output Socket.

**NOTE** – although the voltage is relatively low, we would still recommend that the plastic insulation around the pin is handled, rather than the metal pin itself.

If the pin has been inserted to the panel correctly and if the other end has been connected to a battery that can receive power, then the Charging Indicator (D) will glow green. This now confirms that the Foldup Solar Panel is delivering power to the battery.

## Supplied in this package

- 1 x 4W solar panel with built-in stand and carrying handle
- 1 x 1.2m cable with 12V plug attached
- 1 x 2.5m cable with crocodile clips attached
- User manual



## SPECIFICATIONS

### Size:

(Closed) 237 x 229 x 34mm  
(Open) 445 x 237 x 17mm

**Weight:** 890g

**Part number:** PS4001

## Frequently Asked Questions

1. **Will the panel be damaged if left outside all year?**
  - No – the panel is fully weather resistant. However, most batteries are not. Therefore always ensure the battery is dry and undercover.
2. **How can the crocodile clip cable be routed from an engine bay into the driver's cabin, where the panel is located?**
  - You can safely close a bonnet lid and car door on the cable. However, it is vital that the area that will be clamped onto the cable is checked for sharp edges. It is a good idea to close the bonnet or door once and to reopen again to inspect the cable for any signs of significant damage.  
Always check the cable for damage before use.
3. **The cable and in-car 12V plug are attached to the panel and the in-car socket correctly, but the Charging Indicator (D) is not illuminated.**
  - This will be because, as you find in some makes of car and truck, when the ignition key is removed, the battery is effectively disconnected from the system. In this case the crocodile clip cable will need to be used to attach to the battery directly.
4. **Can the Foldup Solar Panel damage my battery by overcharging?**
  - If the battery is 30Ah or above the panel will not, in any circumstances overcharge the battery. If lower than 30Ah, a 4Ah charge controller should be purchased from your retailer or [www.solartechology.co.uk](http://www.solartechology.co.uk).  
**NOTE:** most car batteries are 70Ah or above.
5. **Will the panel drain a battery when it's dark?**
  - No, a built in reverse feed diode prevents this occurring.