

When the Foldup Solar Panel is connected to a battery the red 'Sun' LED will start to flash. This is indicating that the management system in the Foldup Solar Panel is checking the battery status before it starts to charge it. If the battery is ready to receive a charge the 'Sun' LED will change to a constant light after a short while and the green LED's in the 'Battery' illustration will indicate the approximate level of charge in the battery. If the battery is already fully charged the 'Sun' light will continue to flash and so will all four of the green LED's in the 'Battery' illustration. In this instance the solar panel can be safely left connected to the battery as its output will be automatically switched to trickle mode and thus cannot overcharge the battery.

LED Notes

1. 'Sun' LED is off – the light is not sufficiently strong enough to allow charging to commence – ensure the Foldup Solar Panel is outside and directed towards the sun.
2. 'Battery' illustration LED 1 has a slow flash – indicates the battery is in a very discharged condition – continue to leave the Foldup Solar Panel connected until the battery is fully charged.

Joining Multiple Foldup Solar Panel systems

It is possible to join multiple Foldup Solar Panel systems to charge the same battery or a bank of batteries. Please email support@solartechnology.co.uk or call (44) 01684 774000 for a free technical information sheet called 'Creating a Solar Array'

Care and Maintenance

The Foldup Solar Panel is designed for outside use but some of the components used in the manufacture of the support stand will deteriorate if care is not taken. Therefore, after use please ensure the Foldup Solar Panel is dried and allowed to 'air' for a day or two. Once completely dry, extend both legs of the stand and spray WD40 or similar onto the legs. Close the Foldup Solar Panel and store in its carry bag.

Warranty

This product is supplied with a 10 year warranty against product defect. In addition the solar cells have a performance warranty of 20 years, that being that by year 20 the cell output will be no less than 80% of its new value. In other words, whilst we recognise that over time performance from our solar cells will reduce, this product will not reduce by any more than 20% over 20 years.

In the event of a warranty claim please contact **Solar Technology International Ltd, Units 4–6 Station Drive, Bredon, Gloucestershire GL20 7HH UK – Tel (44) 01684 774000 – Email support@solartechnology.co.uk**

All warranty claims will be fully repaired or replaced at our expense including the cost or return postage but the cost to ship the faulty item to us must be borne by the customer. All warranty work can only be completed with a valid proof of purchase.

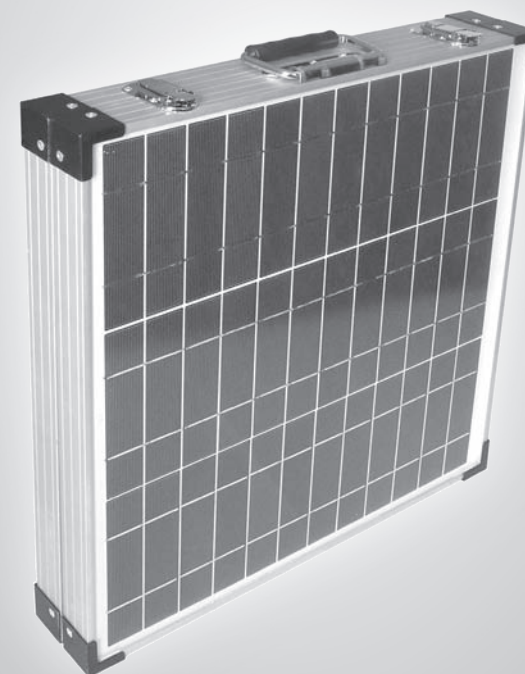
This warranty is transferable to new future owners but only when the original proof of purchase can be provided.



User Manual

Portable Foldup Solar Panel

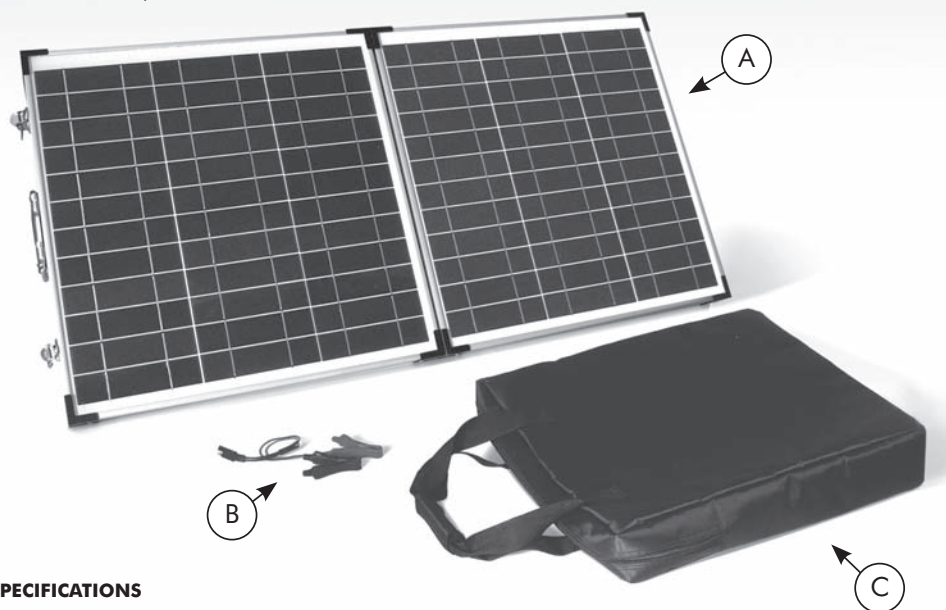
40wp / 60wp / 90wp



Models STFP40 / STFP60 / STFP90

IMPORTANT: PLEASE READ BEFORE FIRST USE

STFP60 Foldup Solar Panel shown below



SPECIFICATIONS

Part numbers: STFP40 / STFP60 / STFP90

Weight: STFP40 7Kg / STFP60 8.5Kg / STFP90 11.5Kg

Size (Closed): STFP40 353 x 500 x 76mm / STFP60 500 x 500 x 76mm / STFP90 700 x 500 x 76mm

Contents

STFP40

- 1 x 40wp Portable Foldup Solar Panel with integrated stand, charge controller and cable (A)
- 1 x Extension cable with Crocodile Clips (B)
- 1 x Carry Bag (C)
- 2 x Ring Terminals (not shown)

STFP60

- 1 x 60wp Portable Foldup Solar Panel with integrated stand, charge controller and cable (A)
- 1 x Extension cable with Crocodile Clips (B)
- 1 x Carry Bag (C)
- 2 x Ring Terminals (not shown)

STFP90

- 1 x 90wp Portable Foldup Solar Panel with integrated stand, charge controller and cable (A)
- 1 x Extension cable with Crocodile Clips (B)
- 1 x Carry Bag (C)
- 2 x Ring Terminals (not shown)

Opening and setting up the Foldup Solar Panel

Unclip the two buckles either side of the carry handle and carefully open both sides of the Foldup Solar Panel taking care not to over stress the hinges.

Depending on the ground you may wish to either position the Foldup Solar Panel with its solar cell facing down or on its edge so the charge controller is uppermost.



On the two outer edges on the frame of each solar panel you will see a stand leg that can be released by turning a brass knurled thumb screw in an anti clockwise direction. Once the leg can be easily moved, pull it outward and then re-tighten the thumb screw once the desired angle has been reached. Repeat this for both sides ensuring each leg is at the same angle.

Tips on solar performance

If the legs are positioned at their maximum adjustment the angle is ideal for UK / European use for Spring, Summer and Autumn. If you intend to use the Foldup Solar Panel in the Winter the angle of the solar panel should be steeper. What you are trying to achieve is a right angle strike from where the sun is to the solar cell surface.

Solar production will always be at its best during the hours of 10am and 3pm so ensure the Foldup Solar Panel is facing South during this period.

Connecting the Foldup Solar Panel to a Battery

Remove the cable bundle from the bag on the back of the Foldup Solar Panel and run this to a point close to the battery. Now connect the crocodile extension cable to the battery. This extension can be left permanently fixed to a battery or it may be preferred to cut the clips from the cable and replace with ring terminals so a more secure battery connection can be formed. Ensure the correct battery polarity is observed. We use DC cable which is colour coded Red for Positive (+) and Black for Negative (-). Once the extension cable is securely attached to the battery connect it to the Foldup Solar Panel cable, which is keyed ensuring it cannot be connected in the wrong polarity. The connector joining the Foldup Solar Panel cable to the extension cable is fully water resistant so can be positioned in wet grass etc – but do ensure it is never submerged in liquid.



Charge Controller

The Foldup Solar Panel has an integrated charge controller and its job is to ensure the Foldup Solar Panel does not overcharge the battery and to prevent reverse current drain during heavily over cast conditions or at night.



Charge Controller continued overleaf