

SunWorks

SB0 Solar Charge Controller Specification

Operating Voltage	6.5 to 17	Volts (12V nominal)
Solar Current	5.5	Amps max
Battery types	Gel and liquid	Lead acid
Dimensions	90w55h40d	mm
Weight	100	g
Display	LED	Charge available
Self consumption	2	mA
Energy Loss at full current	< 0.6	Watts
Maximum solar voltage	35	Volts
Regulation type	Series	
Operating temperature	-10 to +50	Deg Celsius
Storage temperature	-20 to +60	Deg Celsius
Humidity	5 to 95	%
Case Material	Recyclable plastic, black or light grey	
Protection	IP55	
Connection type	Screw terminal blocks	
Wire type	2.5	mm multi-strand
Wire length, battery	2	meters, typical
Wire length, solar panel	8	meters, typical
Fixing	Wall mounted. Fixed with two screws	

Solar Charge Controller specially designed for Mobile Homes, Yachts and Narrowboats.

Essential protection from battery overcharging.

Rear cable entry for hidden wiring.

Very low energy loss for efficient operation and cool running.

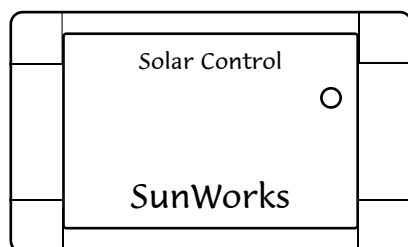
LED shows charge available.

Fully automatic operation.

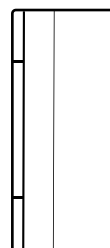
No setting up routine.

High reliability.

Small size.



Available in black or light grey



Cables enter from the back, allowing wiring to be hidden inside a cupboard or wardrobe, or behind a bulkhead.



SunWorks
1, Place de l'Eglise
17160 Louzignac
France

Tel: 00 33 546 58 66 17
Email: sales@sunworks.co.uk
www.sunworks.co.uk

SB0 Photovoltaic Charge Controller

For 12 Volt systems. 5.5 amps max.

Installation and Operating Instructions

SunWorks

OPERATION:

The SB0 is fully automatic in operation and requires no setting-up procedure.

The LED lights when there is sufficient sunlight to start charging the battery, and stays lit until the sunlight falls to a level where charging can longer take place, for example during very cloudy weather or at night-time.

The controller is designed to provide a single level charge to 14.0V.

There are no adjustments to make. Your battery will be safely charged from the solar panel and the internal circuitry will ensure that overcharging does not take place.

DISCONNECTION:

Cover the solar panels and remove the battery fuse before disconnecting the charge controller.

Reconnection must be carried out in accordance with the installation instructions.

GUARANTEE:

This product is guaranteed against faulty materials or workmanship for 2 years from the date of purchase. This does not affect your statutory rights.

Please return the unit, together with proof of purchase to:

SunWorks

1 Place de l'Eglise
17160 Louzignac
France

Tel: 00 33 546 58 66 17

Email: sales@sunworks.co.uk

INSTALLATION:

1. Please read through all the instructions before commencing installation.
2. Position the controller on a vertical, non-flammable, solid dry surface. This is usually on the side of a cupboard or bulkhead. Ideally the battery cables should be less than 2m in length. If these cables are longer, performance will be reduced slightly. Battery cables should run directly to the battery.

The cables to the solar panels can be longer than 2m but must run uninterrupted to the solar panels.

Ensure that there is at least 100mm of clear space all around the controller. Fixing is by two holes through the back of the controller. The wires are passed through the large hole in the back of the controller, and attach to the internal connection block.

3. Holding the base of the unit in place, mark the position of the two fixing holes and the position of the cable hole. Drill two 2.5mm holes for the fixing screws and a 14mm hole for the cables. Attach the controller using two suitable screws.

4. Cables between the solar panel, battery and controller must be 1.5mm sq. multi-stranded, and must be supported at intervals of 300mm. A 10 amp fuse must be fitted in the battery positive cable. Before connecting the controller, cover the solar panel and remove the fuse. Strip the cable back 10mm and secure in the terminal block as per the diagram below.

If in doubt please consult a qualified electrician.

5. When replacing the lid ensure that the cables pass directly from the terminal block to the exit hole, and that no cables are trapped. Fit the four corner inserts.

6. Fit the battery fuse, and uncover the solar panel.

CONNECTIONS:

