



User's and Installer's Manual

Portable Solar Home System

PSHS 7



User Instructions

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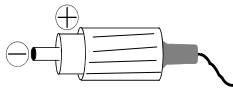
12 Volt / 7 Ah CE



Controls and functions:

- (1) On/Off switch
- (2) SOC display
- (3) Charge readout
- (4) Module inlet
- (5) 12Volt outlets
- (6) 3Volt / 6Volt / 9Volt outlet
- (7) 3Volt / 6Volt / 9Volt control switch
- (8) Shoulder strap
- (9) Wall mounting device (rear)
- (10) 12Volt connecting cable with cigarette lighter socket
- (11) 3Volt/ 6Volt / 9Volt connecting cable with
- (12) Wander plug and socket
- (13) Plug for module and 12Volt load cable

Polarity and cable cross-sections of cinch plugs:



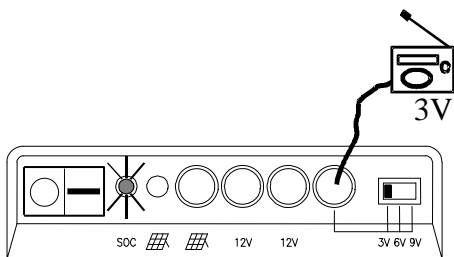
	1A	2A
1m	0.5mm ²	0.5mm ²
5m	0.75mm ²	1.5mm ²
10m	1.5mm ²	2.5mm ²

The plugs are colour-referenced to the sockets on the device:

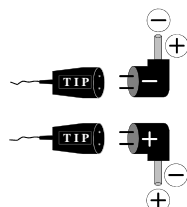
- Yellow connection: module inlet
- White connection: 12 Volt outlets
- Red connection: 3V/6V/9V outlet

Connection to the 3V/6V/9V outlet:

At first choose the correct voltage with the slide switch on the right hand side. After that you can connect the consumer on the 3,6,9 Volt outlet

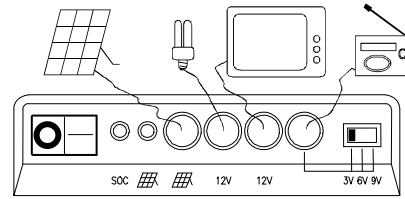


Polarity of 3V/6V/9V charge over plug and socket:



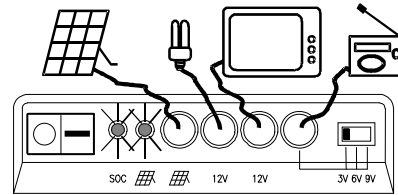
Displays and controls:

The On-Off switch '0-1' on the left is used to set the following operating modes:



'0' position:

In this position the device is switched off. It should be selected if the instrument is not in use for several days to avoid self discharge.



'1' position:

In this position the charging function and all outlets are activated. The SOC LED (SOC = State Of Charge) shows the charge status of the battery. Its colour changes from green to red and vice versa depending on the battery voltage level. When the LED is green, the battery is charged, when it is red it is empty. When the SOC LED is red (about 30% charged), the device switches off all consumer loads to protect the battery from total discharge. After a total discharge the consumer outlets be reconnected when the voltage reaches about 12.5V.

In the event of a short circuit or overvoltage (>3A) at the 12Volt outlet the SOC LED glows red and the consumer outlets switch off. When this faulty status is eliminated, the consumer outlets automatically switch on again after about 5 seconds, if the battery voltage indicates more than 12.5V.

The yellow module LED glows steadily when charging voltage is flowing. When it starts to flash, the end of battery charge voltage is reached and the charge controller interrupts charging.

Technical specifications (at 25°C):

Proposed solar module	3 to 20Wp
Battery capacity	7Ah (C20)
Rated voltage	12V
Number of 12V outlets	2
Number of 3/6/9V outlets	1
Number of module inlets	1
Max. module current	2A
Max. current at 12V outlets	2A
Max. current at 3/6/9V outlet	3V:200mA; 6V:300mA; 9V:500mA
Self consumption	3mA
Boost charging	14.4V
Float charging	13.7V
Reconnection voltage	12.5V
Disconnection voltage	11V to 11.4V
Permissible ambient temperature	0 to 40°C
Dimensions	79x185x208mm
Weight	3.2kg
Temperature compensation	-4mV/K/cell

The device is short circuit proof at all inlets and outlets and the outlets also have overload protection. The battery connection is polarity protected.

The battery must be changed by a qualified electrical engineer. Only sealed AGMs or gel batteries may be used.

