



Manual

EN

Solar Fountain
Mobile Phone Charger

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1. SAFETY INSTRUCTIONS

In general

Please read the documentation supplied with this product first, so that you are familiar with the safety signs and directions before using the product.

This product is designed and tested in accordance with international standards. The equipment should be used for the designated application only.

WARNING: DANGER OF ELECTRICAL SHOCK

The product is used in combination with a permanent energy source (battery). Even if the equipment is switched off, a dangerous electrical voltage can occur at the input and/or output terminals. Always switch the AC power off and disconnect the battery before performing maintenance.

The product contains no internal user-serviceable parts. Do not remove the front panel and do not put the product into operation unless all panels are fitted. All maintenance should be performed by qualified personnel.

Never use the product at sites where gas or dust explosions could occur. Refer to the specifications provided by the manufacturer of the battery to ensure that the battery is suitable for use with this product. The battery manufacturer's safety instructions should always be observed.

Installation

Read the installation instructions before commencing installation activities.

Ensure that the equipment is used under the correct operating conditions. Never operate it in a wet or dusty environment. Ensure that there is always sufficient free space around the product for ventilation, and that ventilation openings are not blocked. Install the product in a heatproof environment. Ensure therefore that there are no chemicals, plastic parts, curtains or other textiles, etc. in the immediate vicinity of the equipment.

Transport and storage

On storage or transport of the product, ensure that the mains supply and battery leads are disconnected.

No liability can be accepted for damage in transit if the equipment is not transported in its original packaging.

Store the product in a dry environment; the storage temperature should range from -20°C to 60°C .

Refer to the battery manufacturer's manual for information on transport, storage, charging, recharging and disposal of the battery.

2. DESCRIPTION

2.1 In general

The Solar Mobile Phone Charger is a 10 amp 12V battery charge controller with built-in inverter and car battery. The unit is fully protected against over temperature, over current, reverse battery and reverse PV connections. When used with an maximal 100W solar panel it allows use of the full 10 amp capability without worrying about overload from excessive current, voltage or amp-hour based load control.

Fully automatic temperature compensation of charge voltage is built in to improve charge control and battery performance. The battery temperature sensor is built for long term reliability.

The Solar Mobile Phone Charger can charge 20 mobile phones at the same time.



3. Operation

3.1 “On/Off Switch”

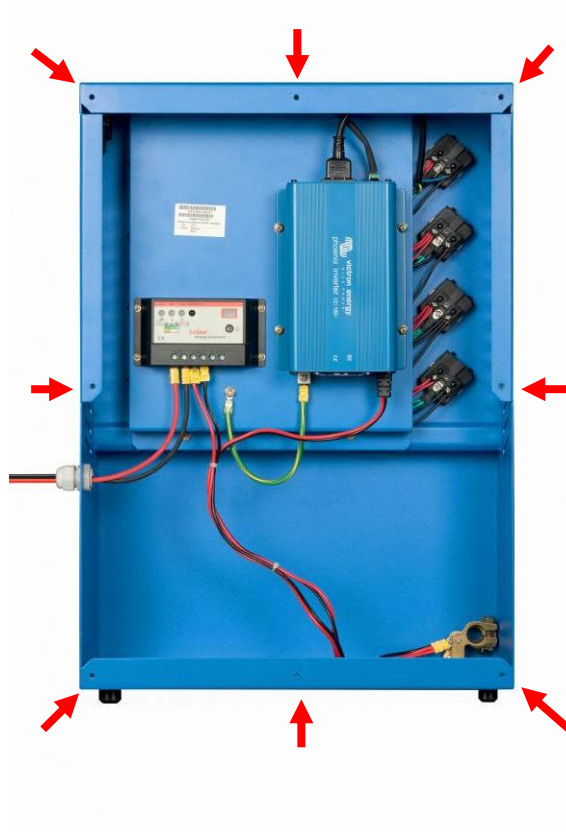
To enable charging the Mobile Phone, the switch must be “ON”.
Switch “OFF” when there are no Mobile Phones connected.



4. Installation

4.1 Remove the cover plate at the back side

Remove the 8 screws from the back side.



4.2 Installing the battery

Procedure

To install the battery, follow the procedure below:



To prevent short circuiting of the battery, an isolated box wrench should be used.

- Place the car battery inside at the bottom of the cabinet.
- Connect the battery cables + (red) and - (black) to the battery.
- Tighten the nuts well for minimal contact resistance.

4.3 Connecting solar panel cables

Connect the solar panel cables + (red) and - (black) to the solar charger



4.4 Reassemble the cover plate at the back side

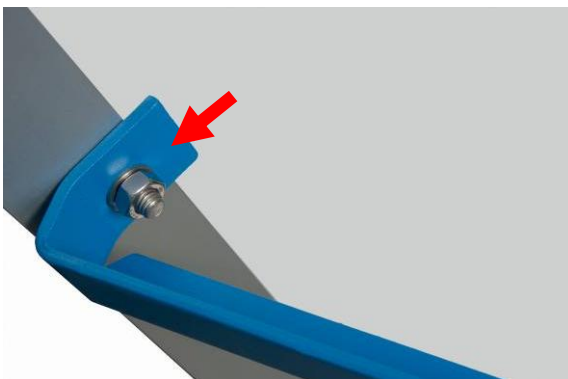
Tighten the 8 screws at the back side to close the cabinet (4.1).

4.5 Installing the solar panel

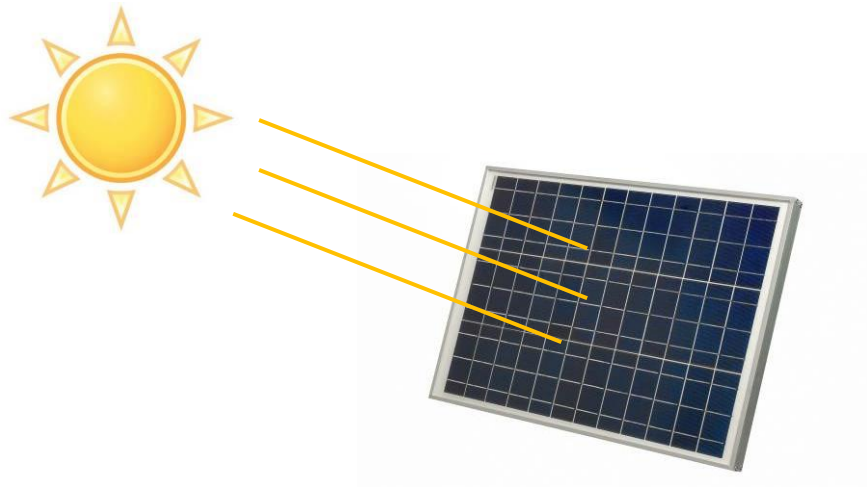
Procedure

To install the solar panel, follow the procedure below:

- Assemble the two metal brackets to the solar panel.



- Place the solar panel in the sun.

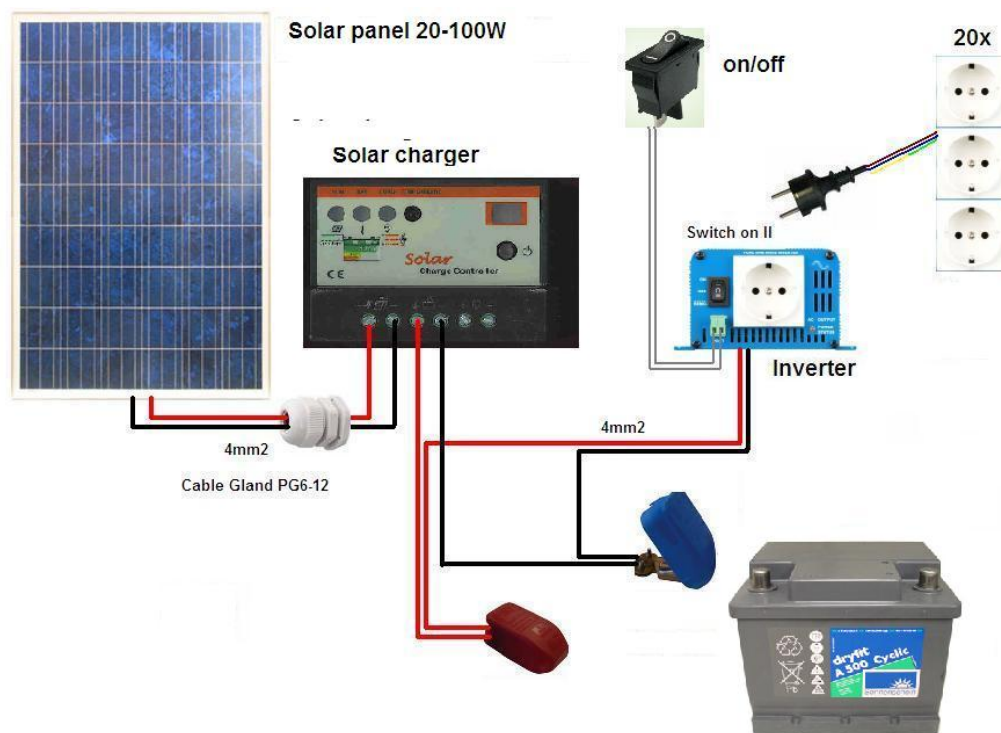


4.6 Ready to use.

You can charge your mobile phones. Plug in the adapter of the mobile phone and lay the mobile phone on the tray.



5. Schematic diagram



6. Error indications

With the procedures below, most errors can be quickly identified. If an error cannot be resolved, please refer to your Victron Energy supplier.

No output voltage 230V:

- Check if switch inside on the inverter is on position II [remote]
- Check if the outside switch is on position I [on]
- Check if battery is connected inside
- Check if battery is charged

Causes for an empty battery:

- Check if solar panel to the solar charger is correctly connected
- Check if solar panel is in the sunlight

7. Technical specifications

Solar Fountain – Mobile Phone Charger	
Output Voltage	230Vac
Output Power	180W
Number of outputs	20 Places for phone adapters
Load current	0.8 Amp
Solar Input voltage range	18-22Vdc
Max. PV open circuit array voltage	55Vdc
Solar Panel	40W/22Vdc
Max power Solar Panel	100W/22Vdc
Typical idle consumption	500mA/inverter on 6mA/inverter off
Type of charging	4-stages
Bulk Float charge	14.4Vdc/13.6Vdc
Over discharge disconnection	Yes inverter switch off at 10.5Vdc
Over discharge reconnection	Yes
Temperature compensation	-30mV/°C/12V
Lead acid battery settings	Yes
Ambient temperature	0°C -40°C (full load)
Protection category	IP22
Battery temperature sensor	Local temperature sensor
Wire size to Solar Panel	4mm ²
Weights Solar Fountain	17kg
Dimension (H x W x D) Solar Fountain	620 x 425 x 185mm
Weights Solar Panel	5kg
Dimension (H x W x D) solar panel	510 x 710 x 35mm
Cooling	Natural cooling/Inverter fan cooling

Victron Energy **Blue Power**

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