7 AMP SOLAR CHARGE CONTROLLER

User's Manual

7 Amp Solar Charge Controller
Maintain 12V batteries in a fully charged state

Specifications
Cut-in Voltage: 13Volts
Cut-Out Voltage: 14.2 Volts
Max. Load: 105 Watts/ 7 Amps

Installation
Connect to Battery:
Attach the Solar Charge Controller positive (+) wire to the positive (+) battery terminal. Then connect the Solar Charge Controller negative (-) wire to the negative (-) battery terminal. WARNING: The alligator clips MUST be placed on to the battery in the aforementioned order—wrong connections may cause sparking or explosion.

Connect to Solar Panel:

Option 1
Strip the solar panel wires. Connect positive (+) wire from the solar panel to the positive (+) of the charge controller and the negative (-) wire from the solar panel to the negative (-) of the charge controller. Ensure the connections are secure.
Option 2
Some panels may include a quick connect for use with the Solar Charge Controller. If included, connect positive to positive and negative to negative of charge controller. Ensure connections are secure.

Operation:
The Green "Charged" light indicates a full-charged battery. When the battery reaches 14.2 V, the Solar Charge Controller will cut out voltage thereby ensuring no overcharging. The yellow "Charging" light indicates a battery that is being charged. When the battery reaches 13 V, the Battery Charge Controller will cut-in and begin charging.

NOTES
- The Solar Charge Controller should be placed within 5 feet of the battery in a dry well ventilated area.
- This Solar Charge Controller can support up to 105 watts of solar power. It is not advisable to use with greater wattage.
- All connections should be in parallel to ensure a 12 Volt system.
- It is normal for both lights to flicker on and off during normal operation. The Battery Charge Controller should be placed within 5' of the battery in a dry, well-ventilated area. This Battery Charge Controller can support up to 105 W and up to 7 A of array current. All connections should be parallel to ensure 12 V system (positive to positive and negative to negative).

FAQ
How many panels can I connect to my 7 Amp Solar Charge Controller?
        You can connect up to 105 Watts of Solar Power to the 7 Amp Solar Charge Controller. Panels should be connected in parallel – positive to positive, negative to negative.

When will the Charged Indication light (green) light up?
        The charged indication green light will light up when the battery voltage reaches 14.2 Volts and the SCC will prevent the solar panels from overcharging the battery. It is normal for the SCC LED to light on and off as the battery voltage cuts in and out.

GENERAL TESTING PROTOCOL
Always test outdoors under optimal sunlight

Test Solar Panel for Voltage
Connect Voltmeter to the panel separately from the charge controller and observe Open Voltage. Open Voltage can range from 16 Volts to 24 Volts.

Test Connection to Charge Controller for Voltage.
Reconnect solar panel, and connect to charge controller as per instructions. Measure the Open Circuit Voltage at the battery side of the charge controller. Open circuit voltage should read 5-10% lower than without charge controller. Open circuit measurement will read between 15 and 23.5.

Connect charge controller to battery
First, disconnect solar panels and connect charge controller to battery. Always connect charge controller to battery first and remove last. Observe polarity – positive to positive and negative to negative.

Reconnect Solar Panels to Charge Controller
If battery voltage is 14.2 or higher, the GREEN light should be on. If battery voltage is between 13 and 14.2, the YELLOW LED should be on. If battery voltage is 13 or lower, the YELLOW LED should be on.

If all testing results within the above indicated ranges, solar system is in acceptable range. If Voltage readings indicate lower ranges, repeat above connections and retest. Finally, it is common to have 12V Battery issues such as dead cells or non-rechargeable battery problems.

Warranty
This product is covered by a 1 year limited warranty. Sunforce Products Inc warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from date of purchase

To obtain warranty service please contact Sunforce Products for further instruction, at 1-888-478-6435 or email info@sunforceproducts.com. Proof of purchase including date, and an explanation of complaint is required for warranty service.

For more information or technical support
Pour plus d'information ou support technique

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