

Solar Power Charge and Output Controller User Manual

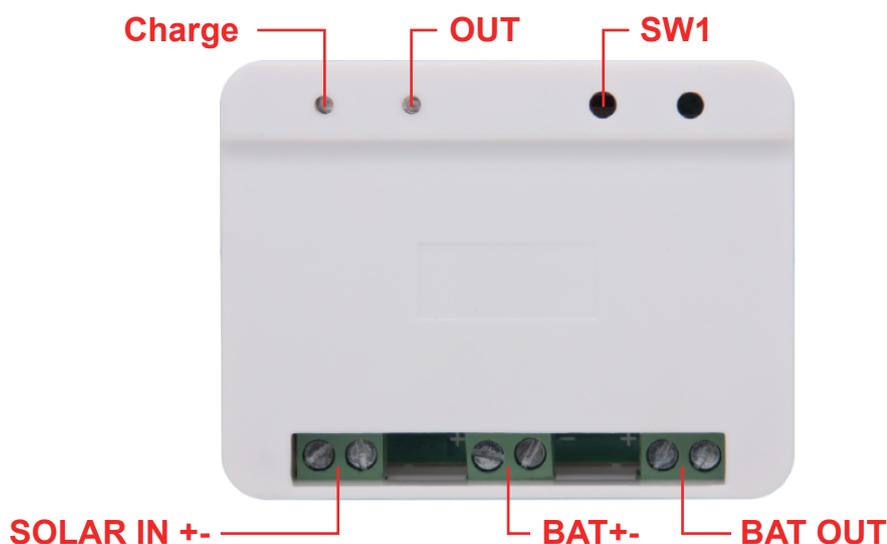
Model: JJ-JS-SM18-SOLAR

Specifications

Product type	Solar power charge and output controller
Solar panel	15 - 50V/2A (must be matched with the voltage of the battery)
Static current	<1mA
Battery type	Lead-acid battery (12V/ 24V)
Discharge cutoff voltage	10.8V/21.6V
Discharge recovery voltage	12.5V/25V
Charging starting voltage	13.5V/27V
Charging complete conditions	Battery voltage reaches to 14.4V or 28.8V
Rated output current	10A

Note: The controller automatically adapts to 12V or 24V batteries according to the battery voltage.

Product Overview



Indicator Description

LED 1: The red light will light up when charging.

LED 2: The blue light is always on when the output is normal; it flashes once every second when the output is overloaded.

Port Description

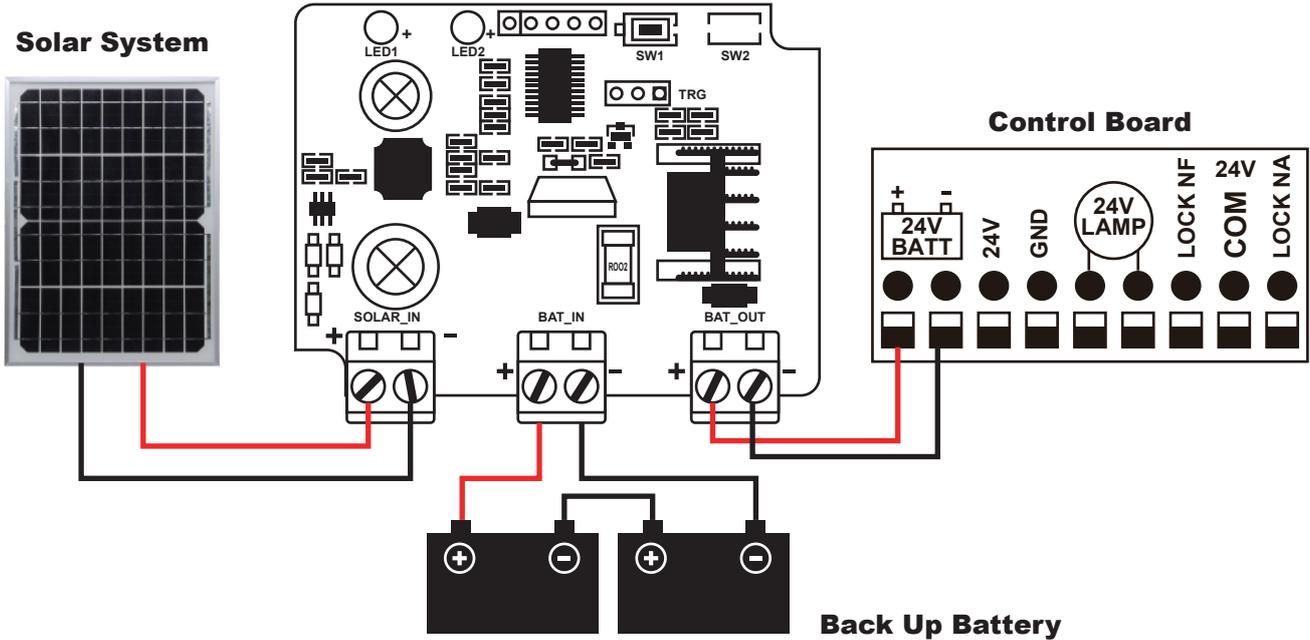
SOLAR_IN: used to connect with the solar panel, and pay attention to distinguish the positive and negative poles.

BAT_IN: used to connect with the battery, and pay attention to distinguish the positive and negative poles.

BAT_OUT: used to output the power from the battery, and pay attention to distinguish the positive and negative poles.

Note: Don't short the BAT_OUT port when the battery is outputting the power.

Operation Instruction



Step 1. Connect with the battery first, then connect with the solar panel, and finally connect with the device to supply the power.

When there is sufficient sunlight, the red light lights up, indicating that the solar panel is charging the battery. When the battery voltage reaches the set voltage (14.4/28.8V), charging will automatically stop; when the battery voltage drops to (13.5/27V), charging will automatically start.

Step 2. If the blue light is on, the BAT_OUT port has normal output voltage and the device can work normally. When the battery voltage drops to (10.8/21.6V), the output will automatically stop. The output will not resume until the battery voltage is charged to exceed (12.5/25V).

Step 3. When the system detects that the output load is too high, it automatically stops output, the blue LED flashes slowly, and resumes output after 10 seconds.

Factory Voltage Calibration

(completed by the factory, no operation required by the user)

1. Adjust the adjustable power supply voltage to the standard 12.0V and connect it to the BAT_IIN interface. Do not connect other interfaces.
2. Press and hold the SW1 button for 3 seconds until the red light lights up, and the calibration is completed.