

Solar Power System

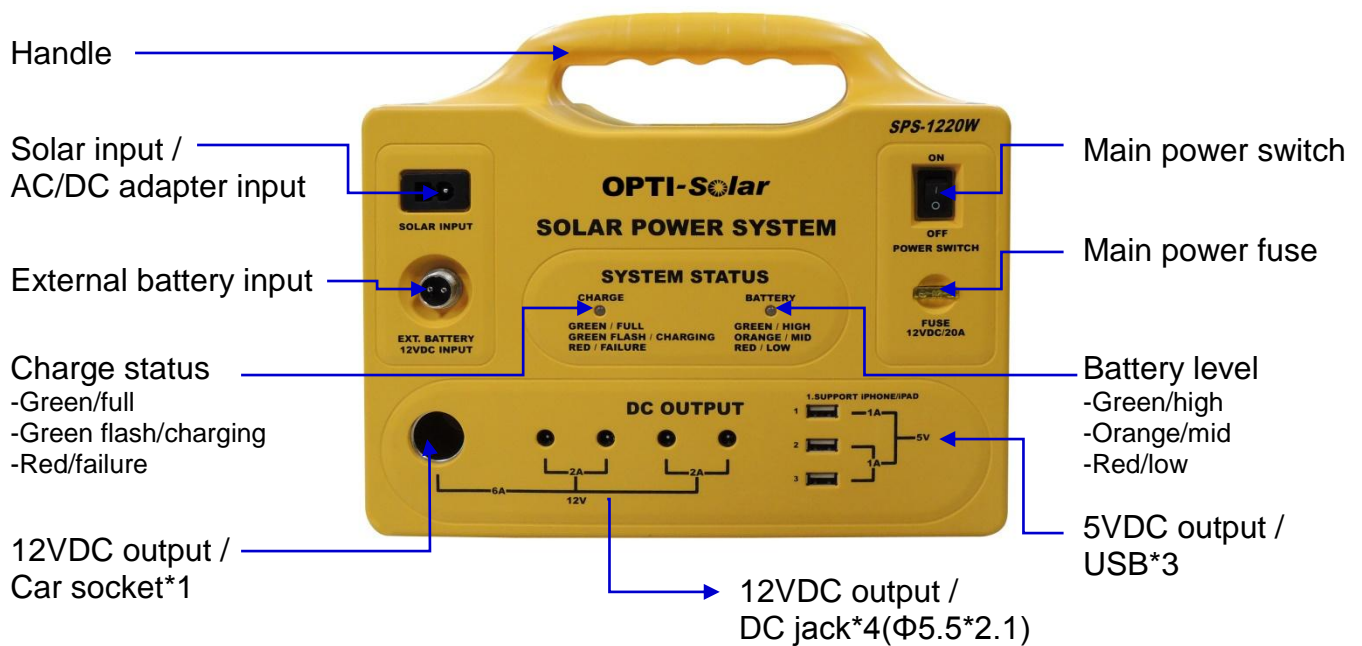
User Manual



System introduction

The point of the Solar Power System is to replace home power. It is also useful in situations such as: emergencies (rescue and disaster support), no power facilities, camping and travel, etc.

Appearance



System components

Standard

- Solar panels 17.4 VDC (Including a power cord)
- DC input LED bulb kits (Including LED bulbs, power cords, E27 lamp holders)
- Main power fuse
- USB booster and power cord and mobile phone charging adapter kits (Mini-USB, Micro-USB, iPhone; other types in option).

Option

- AC/DC adapter, output 19.0 Vdc
- Portable rechargeable lamps (Include: charging power cord)
- DC/AC inverter
- External battery with power cord

System setup

- Default setting of the solar power system:
 - Main power switch: off
 - Main power fuse: open (Accessories parts)
- Insert the main power fuse
- Turn the main power switch on
- Connect the solar panel

System status

- Battery level LED indicator
 - Green - The battery power is full
 - Orange - The battery power is mid
 - Red - The battery power is low
 - Red flash - Indicates that the battery will enter a low power protection (The light flashes red 15 seconds and the system automatically shuts down)
 - LED is not lighting - The system will fail or won't start at all.

>< Before using the solar power system, please make sure the battery is full.

>< After switching on this solar power system, please keep the battery charging

>< The solar power system is running and the battery level LED indicator lights steadily red:

Charge the battery

IF necessary, reduce the load or turn off some of the connected loads

>< The solar power system is running and the battery level LED indicator flashes red light:

After 15 seconds flashing, the system will automatically shut down

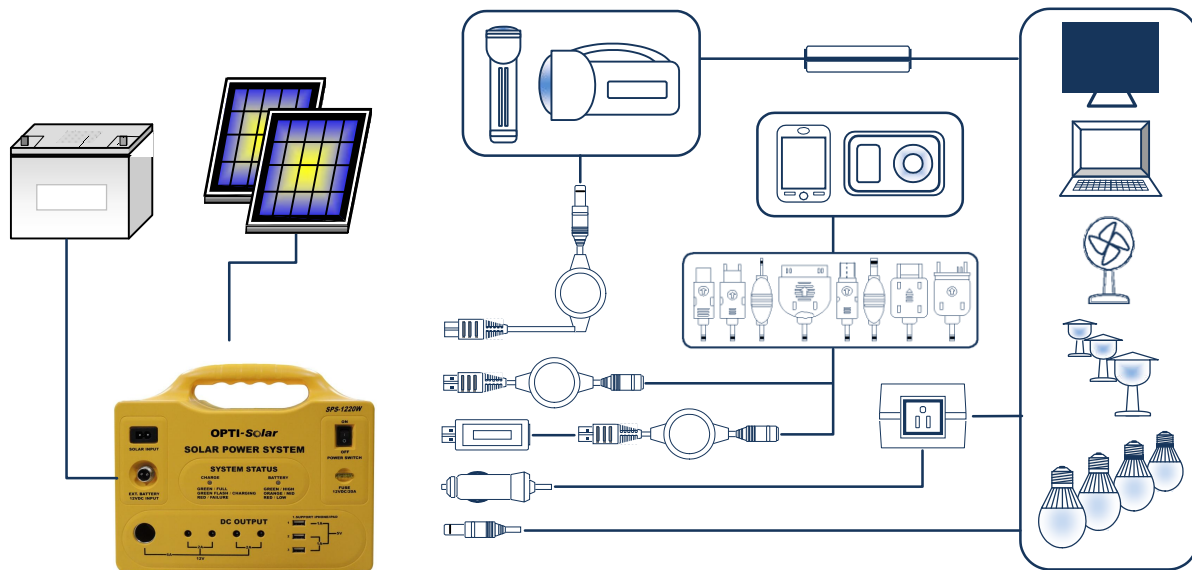
Disconnect all the loads and charge the system

When the LED indicator lights at least orange (mid of battery level), you can restart the system and connecte the loads.

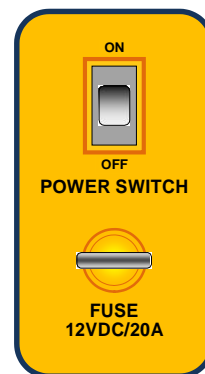
>< If the solar power system is stored over a long period, please supply power to the system during 15 days. If unused for long periods of this solar power system, please fully charged and keep the 15 days fully charged once

- Charge status LED indicator
 - Green - Indicates that the battery is fully charged
 - Green flash - Indicates that the battery is charging
 - Red - Indicates that the solar power input voltage is too high (The system automatically cuts off the load)
 - LED are not lighting - Indicates that the solar panel is no connected or the solar power input voltage is too low

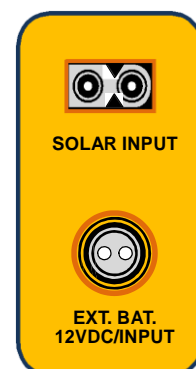
System application



- Main power switch
 - Main power and system working control
 - Main power surge buffer
- Main power fuse
 - Auto fuse 12 VDC/20A
 - If unused for long periods, please remove the fuse



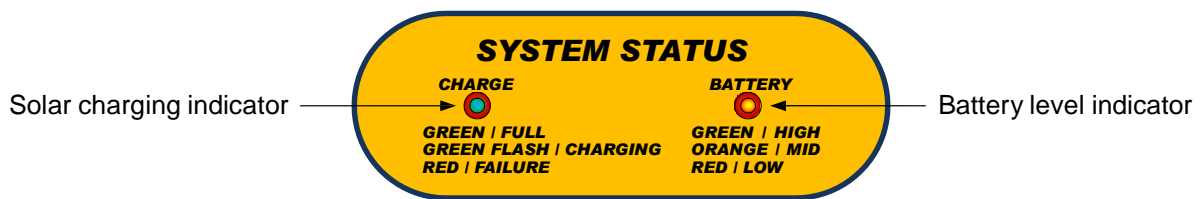
- Solar input
 - Solar panels and AC/DC adapter input port
 - Rated power input: 16~23 VDC / 90W (MAX)
 - Supports the solar panels (option) expansion
 - Includes an overvoltage and reverse polarity protection
- External battery input
 - Support an additional battery in Parallel, and can simultaneously charge and discharge
 - External battery specifications: 12VDC / 20 Ah (MAX)
 - Includes an overvoltage and reverse polarity protection



- >< Before connecting to the external battery, please turn off the main power switch and remove the main power fuse
- >< After connecting, please restart the solar power system.

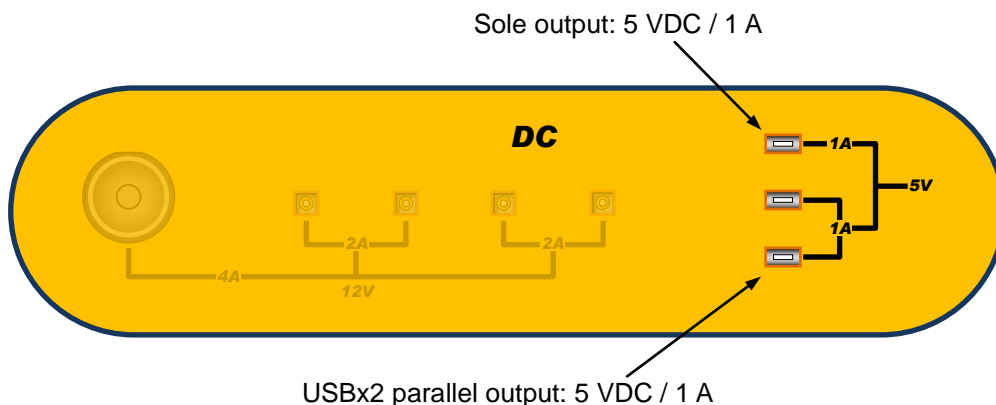
● **System status**

- Indicates the battery power level and solar charging working status
- Battery level indicator
 - Green - The battery power is full
 - Orange - The battery power is mid
 - Red - The battery power is low
 - Red flash - Indicates that the system will trigger the low battery Protection (The light flashes red 15 seconds and the system automatically shuts down)
 - LED is not lighting - The system will fail or won't start at all.
- Solar charging indicator
 - Green - Indicates that the battery is fully charged
 - Green flash - Indicates that the battery is charging
 - Red - Indicates that the solar power input voltage is too high
 - LED is not lighting - Indicates that the solar panel is no connected or the solar power input voltage is too low.



● **USB output port*3: 5 VDC**

- Support USB charging or load to use
- Sole output: 5 VDC / 1 A
Mobile phone charging
- Other relatively high-power use
- USB*2 parallel output: 5 VDC / 1 A
-General USB output, support USB charging or load use

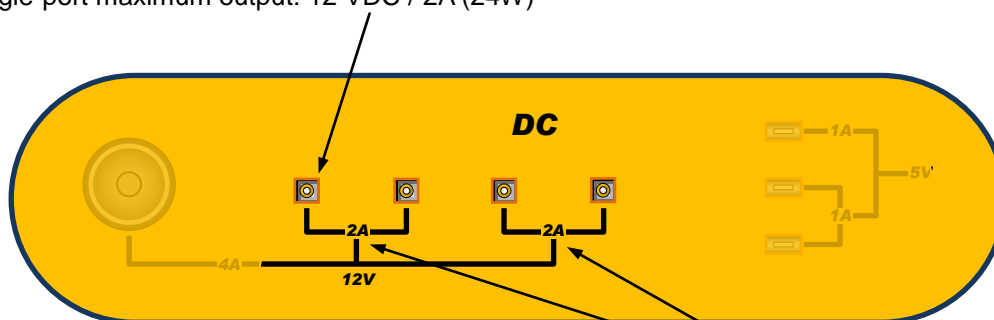


- USB booster and conversion kits in option. Supports different types of loads
- Includes an overload and reverse polarity protection

● DC jackx4 (5.5*2.1) output: 12 VDC

- Output divided into two loops, each circuit provide power 12 VDC / 2A (24W)
- Support the device charging or loading to use
- Single-port maximum output 12 VDC / 2A (24W)
- General use as lighting, radio, notebook, fan, media etc., or a small electrical charge
- Includes overload and reverse polarity protection

Single-port maximum output: 12 VDC / 2A (24W)

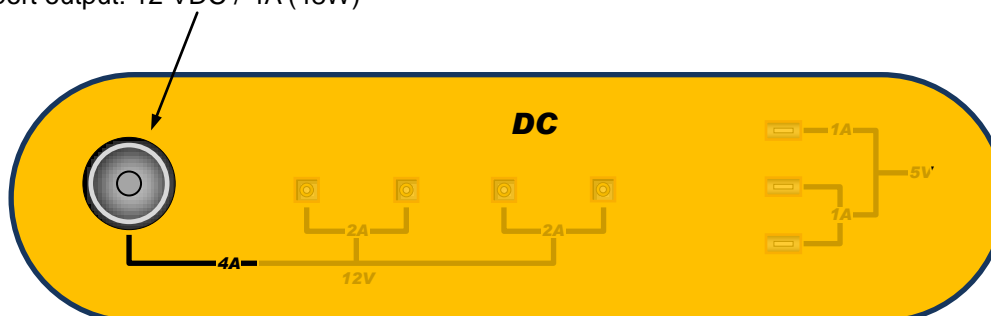


Each circuit provides 12 VDC / 2A (24W)

● Car socket output*1: 12 VDC

- Single-port output 12 VDC / 4A (48W)
- Support the device charging or loading to use
- DC to AC inverter in option, for AC power supply
- Includes an overload and reverse polarity protection

Single-port output: 12 VDC / 4A (48W)



Use characteristics

- Portable design for easy carrying.
- Ideal solar / AC power adapter.
- Low power and high efficiency.
- System status indication.
- System safety protection.
- Loading devices plug and play.
- Easy to set up and Maintenance.
- Support solar panels (option) and battery (option) expansion.

Cautions

- Before using the solar power system, please ensure that the battery is full.
Otherwise, it should be fully charged.
- After the start of this solar power system, please keep the battery charging.
- If unused for long periods, please fully charged and keep the 15 days fully charged once.
- Before connecting to the external battery, please turn off the main power switch and remove the main power fuse.
- After connection, please restart the solar power system.
- The solar power system must not be placed on its side or upside down.
- The solar power system must not be placed on wet, dirty, high temperature or long sunshine places .
- The solar power system is not waterproof design.
- **If the solar power system is stored over a long period, turn the main switch off.**

Abnormal situation and maintenance

- When the solar power system is abnormal, please turn off the power switch and then restart.
- If after 3 times it still doesn't start, please contact the vendor or service station.