

suaoki

PS5B Portable Power Supply

User Manual

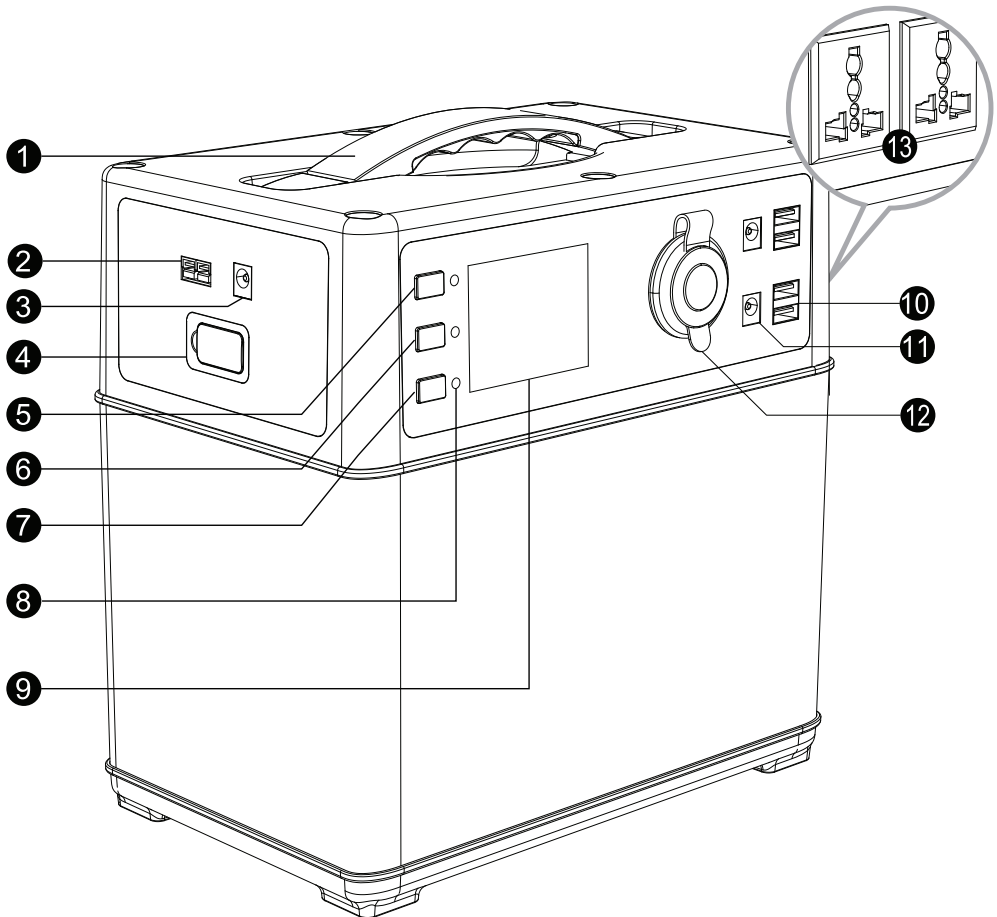
Friendly tips:

Thank you for choosing SUAOKI. Please read this user manual carefully before using the product. (Photos are for reference only)

Introduction

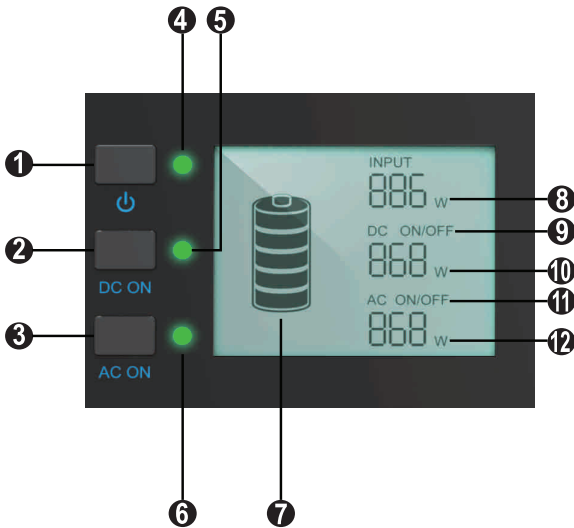
This product is designed to keep you powered while you're outdoors and off the grid. With its massive 400 watt-hours battery capacity, you can keep your laptops, mobile phones, television, and other electronics up and running for hours. Whether you're climbing a mountain, living in your van while you travel the world, or camping in the open, the PS5B we always keep your gadgets and appliances powered.

Get to know your portable power supply



- 1.Handle
- 2.Solar Charging Port
- 3.Adapter Charging Port
- 4.Jumping Port For 12V Vehicles
- 5.Master Power Button(ON/OFF)
- 6.DC Power Button(ON/OFF)
- 7.AC Power Button(ON/OFF)

- 8.Power ON/OFF Indicators
- 9.LCD Display
- 10.USB Output Port
- 11.DC 12V Output Port
- 12.Car Cigarette Lighter Socket
- 13.AC Output Port



1. Master Power Button(ON/OFF)
2. DC Power Button(ON/OFF)
3. AC Power Button(ON/OFF)
4. Master Power ON/OFF Indicator
5. DC Power ON/OFF Indicator
6. AC Power ON/OFF Indicator
7. Battery Capacity
8. Charging Power
9. DC Output State(ON/OFF)
10. DC Output Power
11. AC Output State(ON/OFF)
12. AC Output Power

Package Content

- 1 x PS5B Portable Power Supply
- 1 x AC Wall charger
- 1 x Car charger
- 1 x Solar charging cable
- 1 x Jump starter battery clamp
- 1 x User manual

Charge Your Portable Power Supply

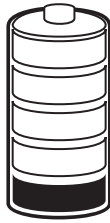
Before using or storing the PS5B portable power supply, please charge it to maximum capacity.

Note: NEVER charge it with solar panels and a wall charger at the same time.

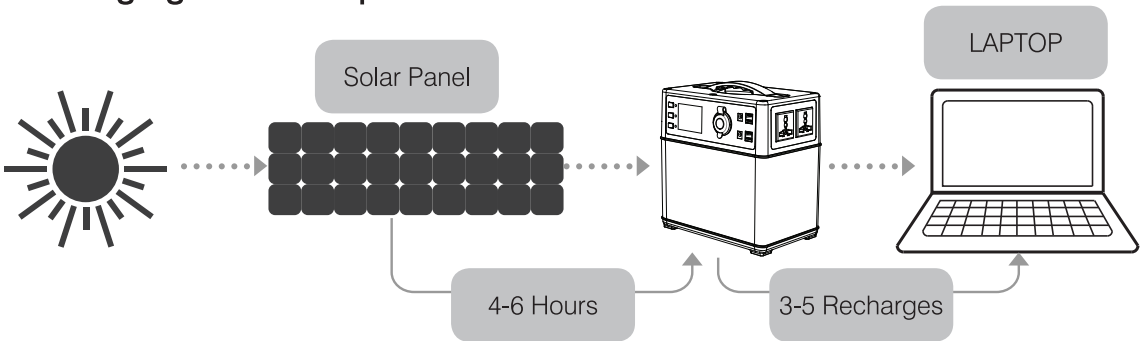
■ LCD Battery Display

The LCD Battery Display indicates the current battery charge status. There are 5 segments of the battery, approximating 20%, 40%, 60%, 80%, and 100% capacity. As you start draining power from the PS5B, the battery segments will start to disappear one by one from the LCD display; the remaining battery segments will indicate the remaining battery power. When charging it, you will notice a battery segment blinking with 1-second interval; this indicates the current charging status, and the real-time digits under the INPUT section on the display show the real-time charging power input. Once it is fully charged, all the battery segments will remain solidly lit.

Charge it when there is only a battery segment!

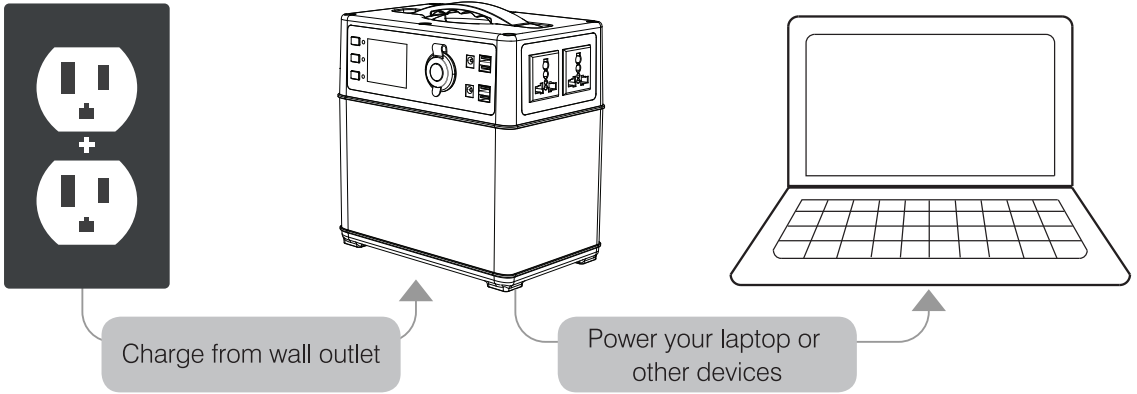


■ Charging with solar panel



1. Power up the PS5B portable power supply by pressing the master power button for 2 seconds.
2. Place your solar panel (We recommend SUAOKI 60W/100W portable solar panels) where it can get the most direct sunlight.
3. Connect the solar panel with the solar charging cable, and insert the Anderson plug of the cable into the solar charging port on the left side of the PS5B portable power supply. The current charging state can be known from the LCD display.
4. You can chain multiple solar panels together to increase the solar recharging speed. The PS5B can accommodate input of up to 120W from solar panels. The open-circuit voltage of the solar panel(s) should be from 14V to 40V.
5. Owing to the built-in advanced system control circuit module, the PS5B will stop charging when the battery is full.

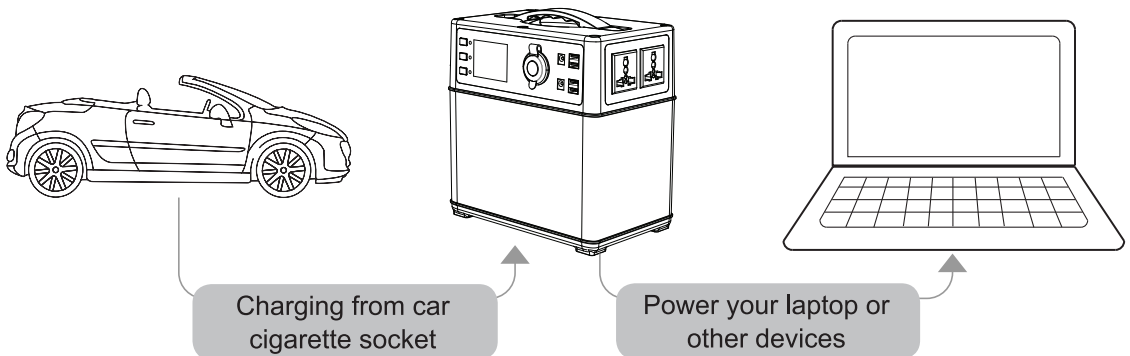
■ Charging with AC adapter



Power up the portable power supply by pressing the master power button for 2 seconds. Plug the adapter into a wall outlet, and then attach the other side of the adapter to the input port of the PS5B portable power supply; you can check the charging status from the LCD display. It will take around 8 to 10 hours to completely charge the portable power supply with the adapter. Owing to its advanced built-in control circuit module, it will automatically stop charging once the battery is fully charged.

The adapter comes in two pieces; connect the two pieces by plugging the cable into the box.

■ Charging with a car charger



It's a good choice to charge the PS5B while you drive. Power up the portable power supply by press master power button for 2 seconds. Plug one end of the car charger to your portable power supply, and the other end to car cigarette lighter socket. You can check the charging state from the LCD display.

Note: The Car cigarette socket of a 12V vehicle can't charge this portable power supply completely, however, a vehicle with a 24V battery system can. Please only charge the PS5B from your car cigarette socket when the engine is running.

Using your portable power supply

■What to power with the portable power supply

USB: Smartphones, MP3 players, digital cameras, tablets, e-readers etc.

DC 12V Output Ports: Dual ports for LED lamps, DC fans and more

Cigarette Lighter Socket: In-car appliances e.g. fridges, food warmers, vacuum cleaners and more.

AC Output Port: Electrical appliances (power rate under 300-Watts), such as Televisions, Laptops, Cooker etc.

■How to use

1. Press the master power button for 2 seconds to turn on the portable power supply. The power indicator and LCD will be lit up.
2. Press the DC power button under the master button for 2 seconds to power up the DC outlets, or press the AC power button (under the DC power button) for 2 seconds to power up the AC outlets. (When not using certain ports, please make sure to turn them off to conserve power)
3. Connect your device to the portable power supply.
4. The numbers on the LCD screen indicate the real-time power your devices are getting from the PS5B portable power supply.
5. Press the AC power button, DC power button, or master power button for 2 seconds to shut down the AC output, DC output or main power supply respectively.
6. When the master power button is on, while the DC and AC power is off, the main power supply will shut down automatically after 10 minutes if no activity is detected. You need to press the master button for 2 seconds again to restart it.
7. This PS5B portable power supply will shut itself down when the battery capacity is below 10%.
8. Always remember to turn off the product when not in use.
9. If possible, keep your portable power supply fully charged before any planned long-term non-usage time period.

■Best-usage strategy

When charging other devices with the portable power supply, take note of the LCD

display screen. If you plug in devices that drain high power (e.g. a refrigerator), then faster battery drains may not get exactly 400watt hour of power. On the other hand, if you're charging devices that draw power slowly (e.g. a small TV), you will get closer to 400wh from the portable power supply. If you're experiencing shorter runtimes, you may need to check the device's power requirements, refer to the trouble-shooting section discussed below, or contact us at support@suaoki.com.

■ Cold Weather Usage

Cold temperatures (below freezing) can impact the battery capacity of this portable power supply.

If you are living in sub-zero conditions, you can drain power from it. NEVER charge it in the sub-zero conditions, which will damage the lithium-ion battery permanently.

Low Temperature Charging Protection: In the sub-zero conditions, the portable power supply would stop charging automatically. It will begin charging again when the temperature is over 5°C.

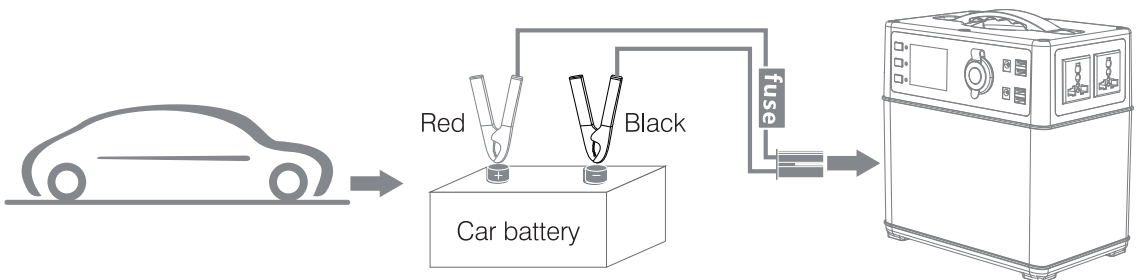
Low Temperature Discharging Protection: In environments where temperature goes below -20°C, the PS5B would automatically stop the AC and DC output, and then shut itself down within 15 seconds. It will resume normal output when the temperatures rise above -15°C

■ Storage and Downtime Maintenance

Failure to maintain your portable power supply by the mentioned guidelines can result in battery damages which will void the product warranty.

1. Please charge your portable power supply before storage and fully recharge it once every 3 months. Store it in a dry and cool place.
2. If the main power supply shuts down automatically because of low battery (<10%), please recharge it within 2 months, otherwise, the battery capacity won't recover after two months.

■ Jump Start a car



1. Make sure the gas engine displacement of the vehicle is not more than 4L.
2. Make sure the power of the PS5B is over 60% (four battery segments on the LCD display).
3. Make sure the alligator clamps are not broken.

Steps:

1. Plug the intelligent battery clamps into the jumping port of the portable power supply. If green and red lights are turned on simultaneously, the connection is successful.
2. Connect the positive and the negative terminals of the alligator clamps to the positive and the negative terminals of the battery (Red to +, black to -). If the green light is on, then you can start your car. However, if green and red lights are turned on simultaneously, then first you please turn on the headlamp of the vehicle or the air-fan (this will activate the clamps).
3. Turn the key to start your car.
4. Disconnect the clamps from the battery terminals, and the jumping port of your portable power supply.

The first step and the second step can be exchanged. Only when the indicator light of the clamps turns to green, then you can start your car.

!Notice

1. Before starting your car, make sure the red and black clips are clamped tightly to the battery terminals of your car, keep the two clips with enough safety distance to prevent the two from any contact. Notice that engines vibration after the car starts.
2. It is strictly prohibited to connect the red and black clip directly, as it may cause accidents.
3. Please keep away from the engine when starting the car to avoid any physical injury that may be caused by the engine's movements.
4. Please remove the product from the battery within 30 seconds after engine has been successfully jumped, as it might damage the portable power supply if kept connected for longer time periods.
5. Please check the battery capacity before every each jump start try. Make sure the power is over 60% (four battery segments lit on the LCD display).
6. People who are not familiar with this product (especially children) are strictly prohibited to use it.

Technical Specifications

Battery Capacity	400Wh	
Input	AC Adapter	14V~40V(Standard:72W/29.4V)
	Car Charger	12/24V
	Solar Panel	10A(Max)/14V~40V
Output	AC Output	□110V-60Hz □220V-50Hz
	Starting Outlet Voltage	12V/600A(Peak)
	USB Output	5V/4×3.5A(Max)
	DC Output	12V/3A
	Cigarette Lighter Socket	12V/120W
Operation Environment	Charge	0~45°C
	Discharge	-10~60°C
	Humidness	10%~90%

Frequently Asked Questions

■What type of battery is in the PS5B?

A Lithium-ion battery. It is much smaller and lighter in weight than the normal SLA battery, and also has much more cycles than that of a conventional SLA or AGM battery. It can last longer if you don't drain them completely.

■How do you know if your portable power supply is charged?

To check the charging/battery status of your portable power supply, please refer to the LCD display. When lit up, you will see a battery outline with five segments, indicating the current battery level. You can turn on the battery display by pressing the master power button. It is OK to use your PS5B even when it's not fully charged.

■How do you know if your device will work with a certain product?

First, you need to determine the amount of power your device requires. This may require some research on your own. Examine the user guide for your device, and this should give you enough information on power needs.

Second, you will need to check the capacity for the individual output ports on the PS5B. For example, the AC port is monitored by an inverter that allows for 300W of continuous power. This means if your device is pulling more than 300W for an extended period of time, then the PS5B portable power supply will not be compatible with and will shut down.

■ Depth Of Discharge(DOD)

To prolong the battery life, we have set the DOD at 80% for this portable power supply. This means only 80% of 400Wh can be discharged.

■ Here are some common devices and their watt-hour requirements:

Smartphone (2~4Wh) 100+ Recharges

Tablet (25~42Wh) 10+ Recharges

Laptop (50Wh) 8+ Hrs

Desktop computer (100W) 4 Hrs

Mini fridge (30~60W) 6~12 Hrs

30'' LCD TV (98~156W) 2~4 Hrs

Vacuum cleaner (200~300W) 1~2 Hrs

Blender/Processor (200~300W) 1~2Hrs

It is advised to do some research on the power consumption of your devices that you want to run on the PS5B so that you have a good estimate on how much power you need and how long can the portable power supply work for.

Troubleshooting

If your device cannot be charged with this portable power supply, follow these steps:

1. Make sure the Master Power Button is turned on.
2. Ensure the output port is turned on. The green LED light indicating its state should be lit up.
3. Check the battery capacity display. If it's at 20% or below, you need to charge the portable power supply first.
4. Verify your device is compatible with the PS5B. All the output ports have their own max power capacity, please check them as well.

If you are still experiencing trouble with this product, and reading some error messages on the LCD display, please read the following troubleshooting chart for help. If the problem still exists, please contact us at support@suaoki.com.

Error Code	Failure Cause	Troubleshooting
E01	System over-temperature protection	Decrease the ambient temperature below 45°C. The Output will start again once the product cools down
E02	Battery Over Voltage Protection	Disconnect the charger and restart it
E03	Battery Damage Protection	Contact us
E04	1 st Battery String Over-Voltage	Disconnect the charger and restart it
E05	2 nd Battery String Over-Voltage	Disconnect the charger and restart it
E06	3 rd Battery String Over-Voltage	Disconnect the charger and restart it
E07	1 st Battery String Low Voltage	Recharge the battery and restart the product after being fully charged
E08	2 nd Battery String Low Voltage	Recharge the battery and restart the product after being fully charged
E09	3 rd Battery String Low Voltage	Recharge the battery and restart the product after being fully charged
E10	Low Temperature Discharging Protection	Increase the ambient temperature above -20°C. The output will start again once warmer temperatures are reached.
E11	Battery Low Voltage Protection	Recharge the battery and restart the product after being fully charged
E12	Inverter Over Current Protection	Check if the AC output is overloaded or short-circuited
E13	Inverter Over Load Protection	Check if the AC output is overloaded
E14	Inverter Short-circuit Protection	Check if the AC output is overloaded or short-circuited
E15	Inverter Over Voltage Protection	Check the inverter's output voltage. Try restarting the product.
E16	Charging Over Voltage Protection	Check if the input voltage exceeds the maximum input voltage.
E17	Low Temperature Charging Protection	Check if the ambient temperature is lower than 0°C. Avoid using it in ambient temperatures below 0°C.
E18	12V Cigarette Lighter Socket Over Current Protection	Check if the output port is overloaded or short-circuited
E19	12V Cigarette Lighter Socket Over Load Protection	Check if the output port is overloaded
E20	12V DC Output Over Current Protection	Check if the output port is overloaded or short-circuited
E21	12V DC Output Over Load Protection	Check if the output port is overloaded
E22	USB1 Output Over Current Protection	Check if the output port is overloaded or short-circuited
E23	USB2 Output Over Current Protection	Check if the output port is overloaded or short-circuited

Warranty

The Suaoki portable power supply is covered by the SUAOKI warranty for 12 months from the date of purchase. Please email us at support@suaoki.com with your order number for technical assistance and warranty claims.

Contact Us

Website: www.suaoki.com

E-mail: support@Suaoki.com

We strive to offer exceptional customer support. If you are having any problems with SUAOKI products, please do not hesitate to contact us, from your valued feedback we always improve the products and customer's experience.

Web: www.Suaoki.com

E-mail: support@suaoki.com



MADE IN CHINA