

USER GUIDE

PS2000

PORTABLE POWER STATION



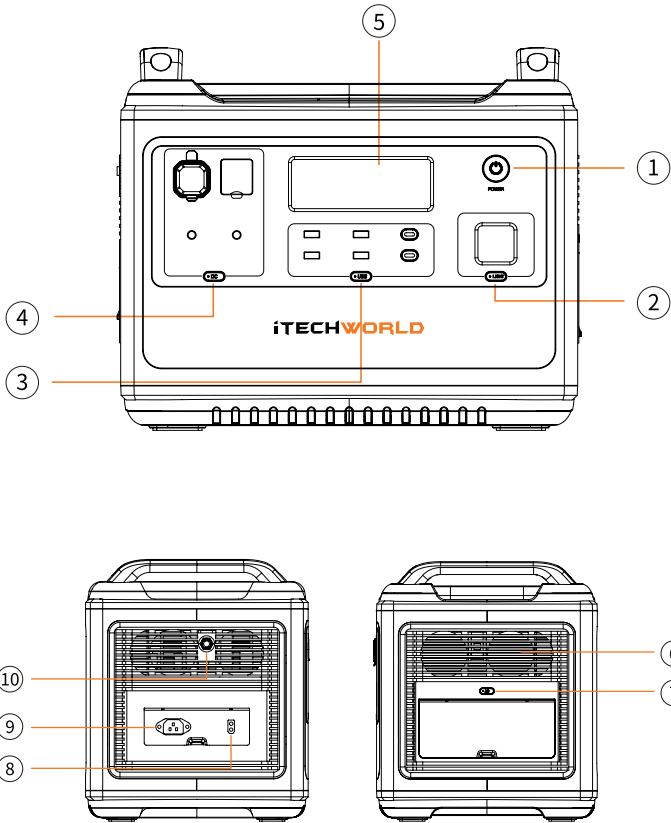
iTECHWORLD
THE POWER EXPERT



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PRODUCT OVERVIEW



Accessory List


XT90 to 50A Anderson

AC Charger

Car Charger

User Manual

Cable Storage Bag

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MAIN POWER CONTROL
- ②

LIGHT CONTROL
- ③

USB CONTROL
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DC CONTROL
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LCD DISPLAY
- ⑥

AIR INTAKE/OUTLET
- ⑦

AC 240V OUTPUT BUTTON
- ⑧

XT-90 INPUT PORT
- ⑨

AC 240V INPUT PORT
- ⑩

OVERLOAD PROTECTION

BUTTON FUNCTIONS

POWER CONTROL BUTTON:

This is the master power button, a long press to turn on and a long press to turn off the unit (hold the button until the screen turns on/off). When not in use, please turn the unit off.

USB CONTROL BUTTON:

Make sure the power station is on before pressing the USB control button.
Operation: short press to turn on/off.

		
USB x 2	USB x 2	USB-C x 2
5V/2.4A	QC3.0	100W

LED LIGHT CONTROL BUTTON:

Short press to turn on and change the light mode between solid/SOS/flash.
Long press to turn off the light while on any mode.

DC CONTROL BUTTON:

Make sure the power button is on before pressing the DC control button.
Operation: short press to turn on/off.

		
DC Output x 2	Cig Output x 1	XT60 x 1
12V/3A	12V10A	12V/25A

LCD SCREEN DISPLAY:

Informative LCD display presents the remaining power and use data. The LCD display will enter sleep mode after 30 seconds of inactivity and wake up when inputting charge or when any button is pressed. The device will remain active and won't enter sleep mode if it is either charging or discharging.

AIR INTAKE/OUTLET (BUILT-IN COOLING FAN):

The PS2000 utilises an internal cooling fan to ensure it operates within the appropriate temperature range. When the PS2000 experiences a high output/ input load, it automatically turns on the fan. The fan may turn on intermittently to keep the internal temperatures within the operating range. Please ensure you do not block or cover the channel.

WARNING:

Maintain a space of 30cm away from the side suction and exhaust ports to ensure proper heat dissipation.

AC 240V OUTPUT BUTTON:

To activate the AC output function, simply press the AC button. Keep in mind that AC output frequency and voltage may vary depending on your location. If you need to adjust these settings, follow these steps:

1. Press and hold the AC button for 3 seconds to enter the frequency switching mode. You'll notice that the 50Hz or 60Hz icon will start flashing on the display.
2. Give the AC button a short press again to select between 50Hz or 60Hz. Wait until the flashing icon stops and displays your chosen frequency (either 50Hz or 60Hz), which indicates a successful switch.
3. To adjust the voltage, quickly press the AC button 10 times. This will allow you to cycle through available voltage options.

By following these steps, you can easily customise the AC output frequency and voltage to suit your specific needs.

XT90 PORT (SOLAR/CAR INPUT):

Use the included XT90 to 50A Anderson adapter to connect your solar panel. The maximum input of the solar panel is 500W and the maximum voltage is 50V (do not exceed 50V).

AC INPUT:

Use the included wall socket to get 1100W fast charging, which can fully charge the PS2000 from 0 to 100% in 2 hours.

1. The PS2000 should be charged directly by the wall socket, please do not use extension cords.
2. Do not use the same socket to connect other devices to when charging the PS2000. When a socket in a general household exceeds a certain wattage, the safety circuit breaker will activate.

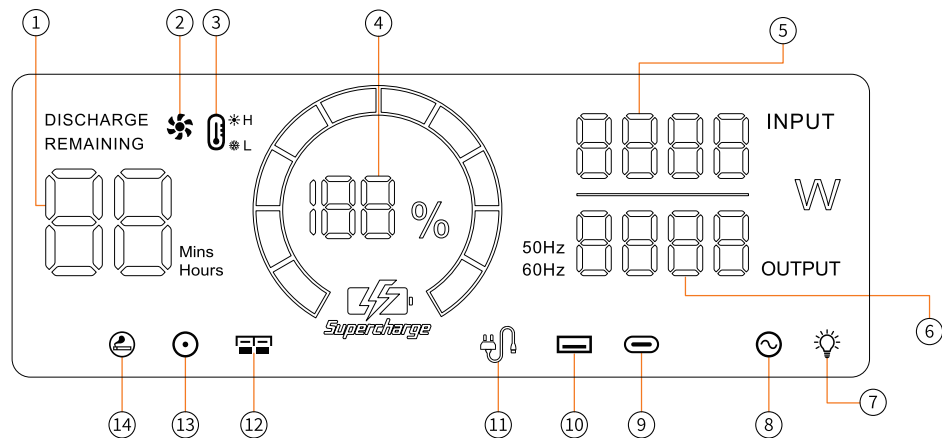
OVERLOAD PROTECTION:

To safeguard the power station from potential damage resulting from excessive AC input current due to lightning or grid fluctuations, the overload protector is designed to activate and disconnect the AC input in such situations.

If the overload protector has been triggered, and you need to restore the AC input, please follow these instructions:

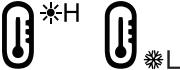
1. First, ensure that the PS2000 is turned off, and unplug all connected devices and ports from it.
2. Confirm that all connected ports are in their standard, normal state.
3. Now, you can turn on the PS2000.
4. Locate and press the overload protection button. This action will re-engage the AC line and restore the AC input.

LCD FEATURES:



- | | |
|----------------------------|-----------------------------------|
| ① REMAINING DISCHARGE TIME | ⑧ AC OUTPUT STATUS |
| ② FAN STATUS | ⑨ USB-C OUTPUT STATUS |
| ③ HIGH/LOW TEMPERATURE | ⑩ USB OUTPUT STATUS |
| ④ BATTERY LEVEL INDICATOR | ⑪ AC CHARGING STATUS |
| ⑤ TOTAL INPUT POWER | ⑫ XT90 INPUT STATUS |
| ⑥ TOTAL OUTPUT POWER | ⑬ DC OUTPUT STATUS |
| ⑦ LED LIGHT STATUS | ⑭ CIGARETTE LIGHTER OUTPUT STATUS |

FAULT RESOLUTION

Status	Explanation	Resolution
 Above icon flashes and buzzes	The output exceeds the standard and it's short-circuited.	1 - Begin by removing the output device. 2 - Next, check whether the overload protector is activated. If it's activated, follow these sub-steps: press the overload protection button, after that, press the AC output button. 3 - If the overload protector has not been activated, proceed as follows: directly press the AC output button to restore the output function.
 The temperature warning icon flashes and buzzes	The PS2000 has surpassed the recommended temperature limit.	Remove all loads, disconnect the power source from this product, and wait for the unit to cool down to an appropriate temperature before proceeding (between -10°C~40°C).
 Charging unavailable	Bad wire connection.	Verify the connection status of the power line and the power supply to ensure they are properly connected.

UPS MODE:

The PS2000 has a bypass function, which means power will not pass through the battery; it will be taken directly from the AC output.

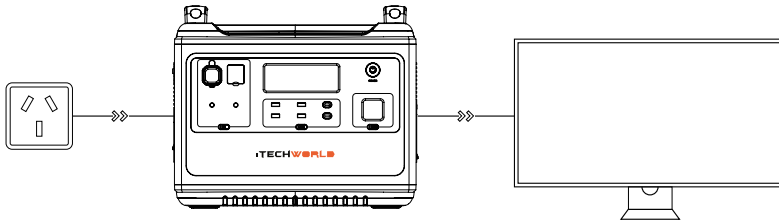
In this mode, the power source is the power grid, when there is an emergency power outage, the power source will switch to the battery within 10ms and protect the connected appliance.

UPS CONNECTIONS:

As shown in the figure below, connect the PS2000 between the wall socket and the electrical appliances, ensuring the power of the PS2000 is ON. When you turn on the electrical appliances, power will be taken directly from the grid.

In this state, when the power grid is cut off, it will automatically switch to the PS2000 internal battery to supply power.

- In UPS mode, the maximum power output is 2000W.
- In UPS mode, if the AC output exceeds 2000W, the AC overload symbol will illuminate.



AC CHARGER CHARGING:

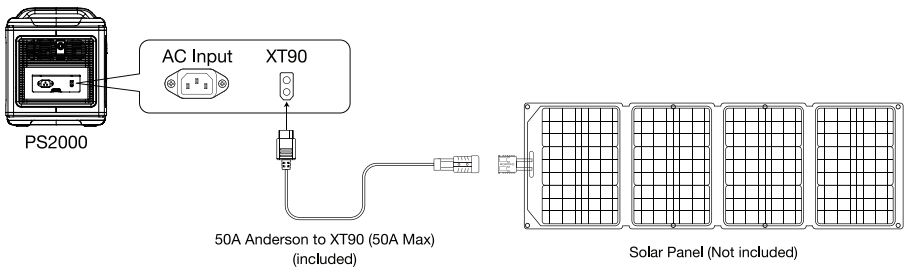
Use the AC charger provided to charge this unit. It will only require 2 hours to fully charge the PS2000.



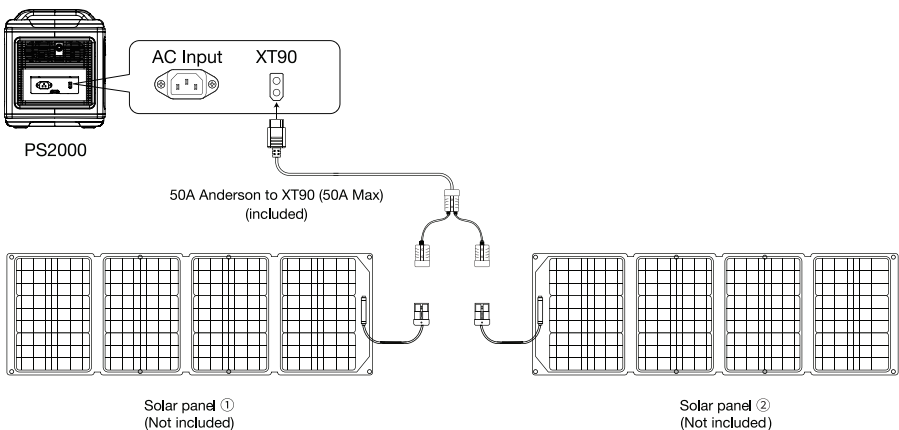
SOLAR PANEL CHARGING:

1. Do not charge the PS2000 via a solar panel that has a voltage exceeding 50V.
2. Supports 500W max solar input (solar panels not included), the charging time depends on the solar panel input.
3. To ensure proper operation, please verify that there is no regulator in the line. You will need to input unregulated solar power into the PS2000 as it already contains a built-in regulator.

Connecting Pattern ①

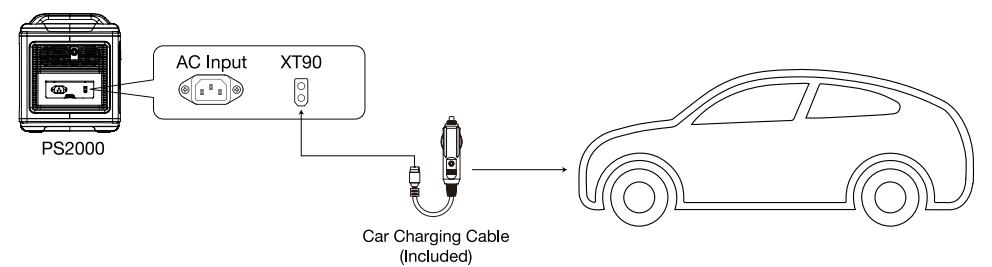


Connecting Pattern ②



CAR/VEHICLE CHARGING:

It's important to use the car charger that was provided with the unit for charging. Car chargers usually provide lower power outputs, typically around 90-120 watts. As a result, charging times may be extended. If you require a quicker charge, it is recommended to use the AC adapter that came with the device. The AC adapter provides higher power output and is better suited for fast charging.



GENERAL SPECIFICATIONS:

Model name	PS2000
Dimensions	392*279*323mm
Weight	22.3Kg
MPPT Input	11.5V-50V 500W Max
AC output	50/60Hz (frequency switch available), rated at 2000W Pure Sine Wave. Built in overload and short circuit protection.
USB output	2 x 5V/2.4A
USB QC3.0 output	3 x 18W
USB-C output	2 x 100W
XT-60 output	12V/25A
Cigarette lighter output	12V/10A
Power off current	<500uA
Operating temperature	-10~40°C
Environment humidity	≤90%RH
Cycle life	>3500 times

BATTERY SPECIFICATIONS:

Battery type	LiFePO4
Single cell rated voltage	3.2V
Single cell rated capacity	20Ah
Battery pack rated voltage	51.2V
Battery pack output voltage	43.2V-57.6V
Battery pack rated capacity	2048Wh

SAFETY PRECAUTIONS

For safe operation and optimal performance, the PS2000 Portable Power Station must be operated correctly. Please carefully read, understand, and follow all instructions and guidelines in this user guide. Failure to follow these instructions may result in damage to the unit, property, death, or serious injury.

Disclaimer: While iTechworld has taken every precaution to ensure the accuracy of the contents of this user guide, iTechworld assumes no responsibility for any errors or omissions.

Furthermore, all specifications and functionality may change at any time without notice.

It is best to view our website for the most up-to date information.

WARNING:

People with physical disabilities, visual, sensory, or mental impairments(including children) should not use this device. Children should be supervised to ensure they do not play with the power station.

DANGER:

Do not disassemble or modify the power station; doing so will result in your warranty being void, it may result in a risk of electrical shock, fire, death, or serious injury.

EXPLOSION HAZARD:

Do not use the power station in an environment where flammable fumes or gases are present (such as gas bottles, petrol engines, or lead-acid battery compartments).

WARNING:

Avoid using the power station in extreme temperatures, high humidity, direct sunlight, and near fire.

WARNING:

Please use the wires recommended in this user guide; otherwise, it may result in damage to the power station, a risk of electrical shock, fire, death, or serious injury.

WARNING:

Do not drop the power station.

WARNING:

When not using the power station, turn off the power and unplug the power cord.

WARNING:

Do not use the power station and its accessories to connect equipment if there is a defect.

DANGER:

Never smoke or allow a spark or flame in the vicinity of the power station. This may cause the battery to explode.

LIMITATIONS OF USE:

Do not use in connection with life support systems or other medical equipment or devices.

LONG TERM STORAGE:

For long-term storage, discharge the power from full to empty once every three months, and then recharge it to 75%. Ensure the power is turned off completely.



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Whether you're an avid camper, 4WD enthusiast, freedom seeker or camper, we've got your power needs covered. Escape the grid without compromise, minimise your downtime and travel with comfort with our large range of leading products at great prices.

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