

2000Wh Portable Power Station

User Manual

Please read this manual before use and follow its guidance. Keep this manual for future reference.

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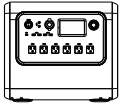
Safety instructions

Please observe the following instructions to ensure safe usage:

- 01 Do not alter or disassemble this product.
- 02 Do not move during charging or using it, because the vibration and impact during moving will lead to poor contact of output interface.
- 03 In case of fire, use dry powder fire extinguishers for this product. Do not use water fire extinguisher, which may cause electric shock.
- 04 Close supervision is required when using this product near children.
- 05 Please confirm the rated specification of your load, and do not use it beyond the specification.
- 06 Do not place the product near heat sources, such as electric furnace and heaters.
- 07 Not permitted on aircrafts because the battery capacity exceeds 100Wh.
- 08 Do not touch the product or the plug-in points if your hands are wet.
- 09 Check the product and accessories prior to every use. Do not use if it is damaged or broken.
- 10 Please unplug the AC adapter from the wall outlet immediately in case of lightning stroke, which may cause heating, fire and other accidents.
- 11 Use original charger and cables.

1. Packing list

What`s In The Box



①

Power Station



②

AC-DC Adapter



③

Solar charging cable
(MC4 to XT90)



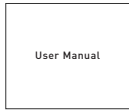
④

Car Charging Cable
(Car Plug to XT90)



⑤

XT90 to Aviation
Plug (input)



⑥

User Manual



⑦

Warranty Card

Optional



⑧

12V/25A Plug to
XT60 Cable(Output)



⑨

XT60 to Anderson
Plug (Output)



⑩

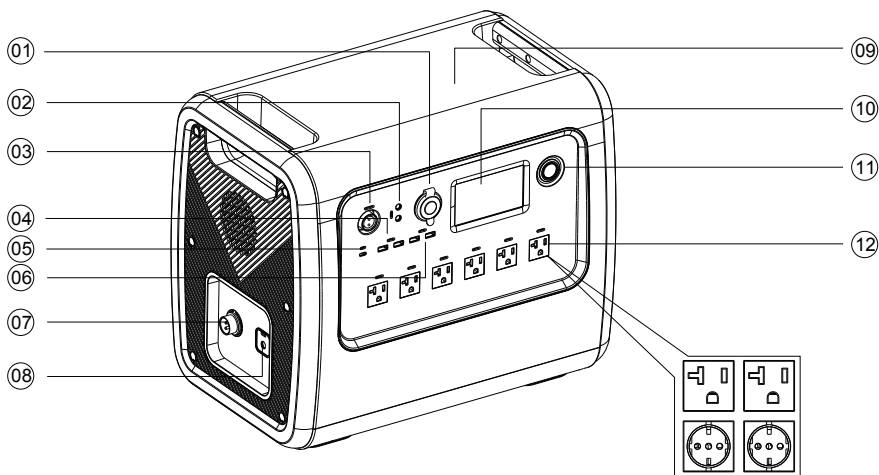
Lead-acid Battery
Clamps to XT90 (Input)



⑪

Female DC7909 to XT90
(For 2nd Adapter Input)

2. Function introduction



01 DC 12V/10A cigarette lighter port

02 DC 12V/10A output x 2pcs

03 DC 12V/25A output

04 USB-A 18W output x 2pcs

05 USB-C 100W output

06 USB-A 5V/3A output x 2pcs

07 PV/Car input port

08 Adapter input port

09 Wireless charging 15W x 2pcs

10 Touchable interaction LCD display

11 Power button

12 US AC output x 6 pcs
(EU/UK AC output x 4pcs)

Abbreviation Explain:

DC/AC = Direct Current / Alternating Current

BMS = Battery Management System

PV = PhotoVoltaic (Solar power)

CS = Charging State

3. Startup and shutdown operation

(1) Start up: short press the power button, the indicator light is on, and the machine is in standby mode.

(2) Shutdown: press and hold the power button for more than 2 seconds, and the indicator light will be off and the machine shut off.

The LED indicator lamp status warning	
BMS Over current or short circuit protection	Turn off after the indicator light flashes
BMS Startup timeout	The indicator light flashes and not shut down
Normal startup	The indicator light on
Normal shutdown	The indicator light off

(3) DC power switch and AC power switch are integrated in the interaction LCD screen(Figure 1),press“DC ON/OFF”button and “AC ON/OFF”button on the screen to turn on/off the DC /AC output.

4. How to use the touch screen

Interaction LCD screen(Information Vision) supports below functions:

(1) Real time display of voltage, current, power, temperature and state of charge and discharge.

(2) The user can adjust the output voltage, frequency, charging mode, power consumption mode and time information according to the setting column.

(3) Support energy-saving, and enable Super ECO mode to save more than 30% of useless energy loss.

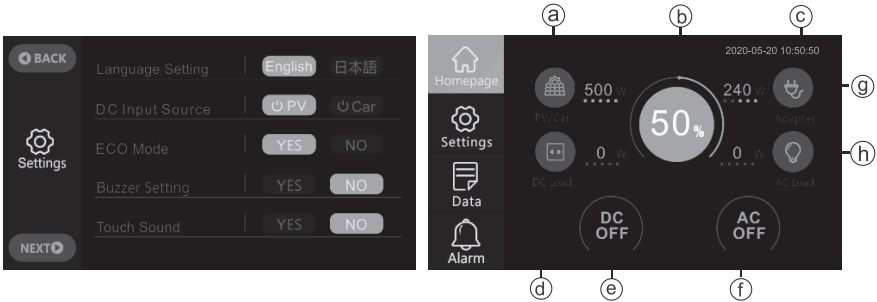
(4) Support users to view fault information, historical fault information, software version independently.

5. The operation steps of touch screen

Warm tip:

- The touchable LCD screen is a resistance screen. we recommend to press the touch button by fingernail lightly until it "beeps".
- In order to maximize the lifespan of the LCD screen, please avoid direct sunlight on it.

(1) When press the power button,it will enter the main interface of the LCD display screen:



- a.PV/Car charging display
- b.BMS Info
- c.Date/Time
- d.DC load Info

- e.DC ON/OFF Switch
- f.AC ON/OFF Switch
- g.Adapter charging display
- h.AC load Info

(2) Click the settings button in the main interface (Figure 2) to enter the setting interface as follows (Figure 3) :

Warm tip: Please enter the setting interface to set the date and time according to the local time zone, and check the output voltage, frequency and other parameters for the first time.

The default:

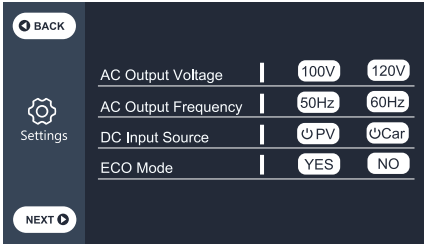
- JP output: 100V/50Hz
- US output: 120V/60Hz
- EU output: 230V/50Hz
- UK output: 230V/50Hz
- DC Input Source: PV (solar)
- ECO Mode: NO

Press "Next" button to enter language and date setting as below (Figure 3) :

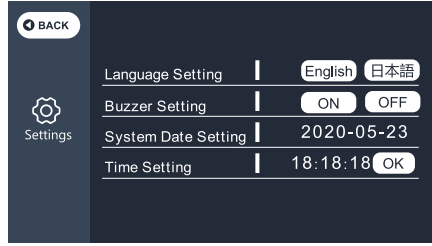
- Language: Japanese, English
- Date and time: 2000-00-00、 00: 00: 00

Please set the "Date and time" at least once every 2 weeks.

Press to configure it.



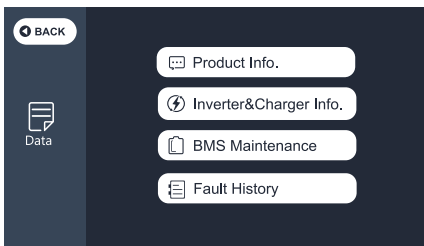
(Figure 2)



(Figure 3)

(3) Return to the main interface (Figure 1), click the “Data” button to enter the page (Figure 4) :

- Click the “Product Info” button, you can view the product model, control software version, monitoring software version, BMS monitoring software version and display software version in turn;
- Click the “ Inverter & Charger Info” button, you can view the PV / Car operation and the adapter operation status ,DC out operation and AC out operation in turn, which can also be accessed directly from the shortcut key on the main interface;
- Click the “BMS Maintenance” button, you can view the operation information of BMS, and this part can also be accessed directly from the shortcut key in the main interface;
- Click the “Fault History” button, you can view all the fault information generated by the machine. All the fault codes recorded here. According to the fault codes, return to the main interface and click the fault button to view the corresponding fault information. Fault History is retained up to 10 years if not manually cleared.



(Figure 4)

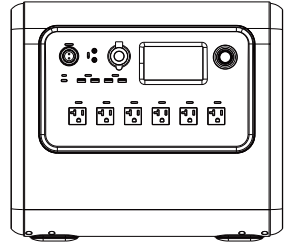
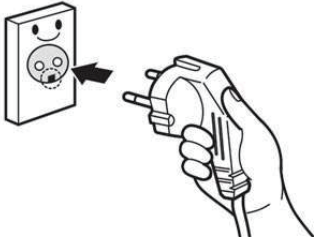
(4) Return to the main interface and click the fault button (Figure 1) to view the current fault information: the fault button will display orange if there is a fault, click to enter the corresponding fault information, then the gray light will turn into orange.

6. Charging the product

There are five ways to charge:

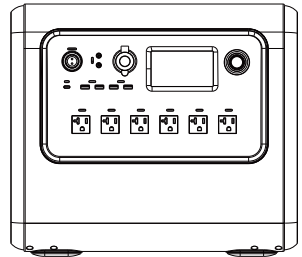
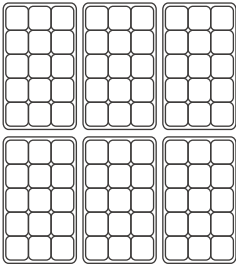
(1) Charging mode 1: From AC Wall outlet

- Press the main power button to start charging after connecting the product to the AC wall outlet, the charging will automatically stop when it reaches 100%.



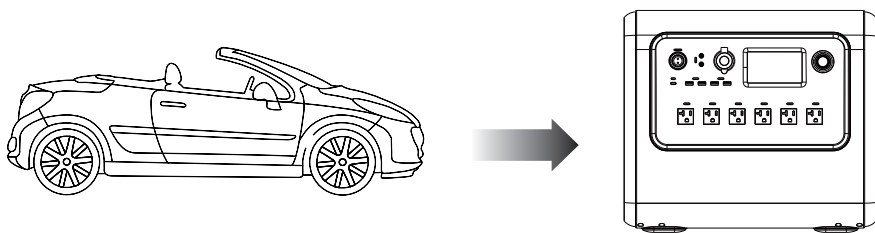
(2) Charging mode 2: From the solar panels

- Choose the solar panel with working voltage DC 35V-150V.
- Connect the solar panel to the product via solar charging cable included.
- Plug and play charging: it will start charging automatically after connecting the solar panel to the product even it is off status.
- Max. current of the solar is 12A.



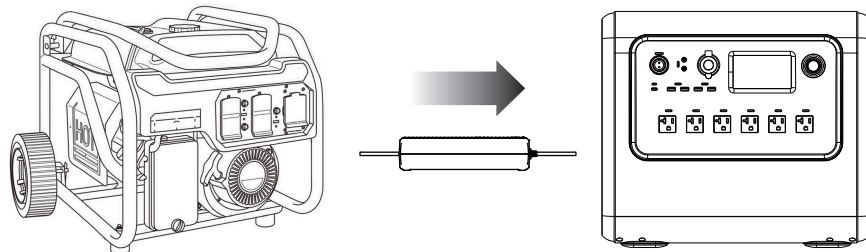
(3) Charging mode 3: From the car lighter port

- Press the power button and connect it to the cigarette lighter port through the car charging cable.
- Enter the setting interface as shown in (Figure2) through the display screen to set DC input source to car mode; The product can be charged with 8.2A maximum current.



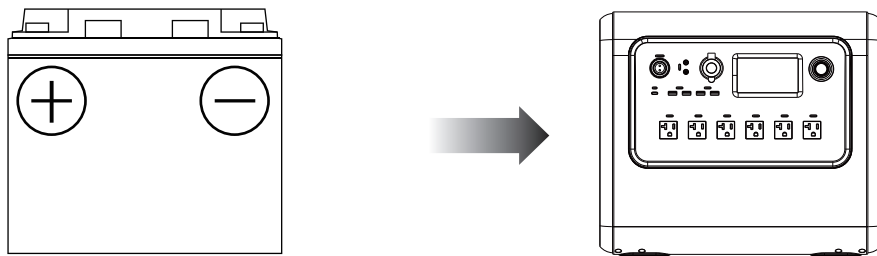
(4) Charging Mode 4: From a generator (gasoline, propane or diesel)

- Connect the AC adapter input to the generator and the output port to the AC charging port of the machine.
- Press the power button, the product will be charged, the charging will automatically stop when it reaches 100%.



(5) Charging mode 5: from lead acid battery

- Connect to the positive and negative poles of the battery through the provided solar charging cable (pay attention to distinguish the positive and negative poles of the battery, the red head is the positive pole, and the black head is the negative pole) .
- Enter the setting interface as shown in (Figure 2) through the display screen to set DC input source to “car mode” .The product can be used for car charging mode, with the maximum current of 8.2A. The product has the function of anti over discharge for lead-acid battery.



7. Discharging

(1) Turn on 12V / 25A, 12V / 3A, cigarette lighter port, USB and type C output: first, press the power button, then enter the main interface through the touch screen, click the DC ON/OFF button and confirm, Turn off these output, and also click the DC on / off button and confirm.

(2) Turn on AC output: first, press the power button, then enter the main interface through the touch screen, click the AC ON/ OFF button and confirm. Turn off these AC output ports, and also click the AC ON/ OFF button and confirm.

8. Application scenario

(1) Outdoor: Car equipment: car fridge, car vacuum cleaner and other car equipment; Camping equipment: garden electric tools (power tools such as blowers, lawn mowers, electric drills, electric saws), BBQ grills, LED lights, etc.

(2) Indoor: Refrigerator, kitchen devices such as kettle, toaster, blender, coffee maker, rice cooker, laptops, phones, lighting, etc.

9. Examples of loads

(1) 12V / 25A, 12V / 3A, cigarette lighter port, USB and type C output port are suitable for most products in the market, but some products may trigger overcurrent protection if there is a large current impact at the moment of starting.

(2) The power of electrical products used for AC output should be less than 2000W.

According to the different electrical products, when the rated power is less than 2000W, some air conditioners, motors and other devices that need instantaneous high current when starting may trigger overcurrent when the ratio of peak value of rated current exceeds 3:1. At this time, we recommended that you select the electrical appliances with lower power rate.

(3) When the output is overload, over-current or short circuit, the product will turn off the corresponding output, and then it will automatically start twice (at an interval of 20s). If there is still an overload, over-current or short circuit alarm, the output will be locked, and it needs to be manually troubleshooting and then restart. If the output stops repeatedly after restart, please stop using it immediately (only after troubleshooting) or contact the seller or maintenance agent for help.

(4) When the battery power is discharged to 0%, the DC and AC output will automatically turn off. Only when the battery power is charged to more than 5%, the DC and AC output can be turned on, which is to protect the battery and enhance its cycle life.

(5) This machine supports charging and discharging simultaneously.

10. Estimation of operating time

Smartphone 175-200Times 10W	LED Light Bulb Around 75-85hrs 20W	Television Around 20-22hrs 75W
Electronic Tools Around 19-20hrs 80W	Refrigerator Around 17-19hrs 90W	Slow Cooker Around 8-9hrs 200W





$2000\text{Wh} \times \text{DOD} \times \eta \div (\text{load } W) = \text{charging time (unit: h)}$






Note: DOD is the battery discharge depth, η is the local inverter efficiency,

DOD=90%, η =88%。









11. Specification

General Specs





			
Rated Output power	Typical Capacity	Battery Type	Net Weight
2000Wh,50VDC,40Ah 2000W<load<2500W,2min; 2500W<load,immediately	2000Wh	Lithium-ion Battery	About 27.5KG/60.6lbs (The weight may subject to slightly change without notice)

				
Dimensions	Charging Temperature	Discharge Temperature	Working Humidity	Working Noise
440x296x387.5mm (17.3X11.6X15.3 inches)	0-40°C 32-104 F	-20-40°C -4-104 F	10%-90%	≤54dB

Output Specs

							
AC	USB-A x2	USB-A x2	USB-C x1	Cigarette Lighter x1	5521 x2	RV x1	Wireless Charging Pad x2
100-120VAC x6 220-240VAC x4 2000W	5-12VDC, 3A,36W Total	5VDC,3A 15W Total	5-15VDC,3A 20VDC,5A	12VDC, 10A Total	12VDC,25A	5-15W	

Input Specs

			
AC-DC Adapter	Solar Charging	Car Charging	Battery Charging
58.8VDC,8A	35V-150V/12A	12-30V/8.2A	

12. Storage and maintenance instructions

- (1) Please fully charge the machine before storing it.
- (2) Turn off all power buttons.
- (3) To preserve the battery lifespan, please use and recharge at least once every 6 months.
- (4) Ensure proper ventilation while in use or store and keep away from any combustible materials or gases. Do not stack anything on top of the unit in storage or in use. Inadequate ventilation and/or improper storing may cause damage to the unit.
- (5) Avoid exposing the product to rain or using the product in humid environment.
- (6) Use and store the product in a clean and dry environment.
- (7) Keep this product away from children and pet.
- (8) Wring the cloth with water and wipe it clean In case of dirt.

13. Declaration

- Some changes may be made to the appearance and specifications without prior notice due to the improvement of the product.
- Our company shall not be liable for any damage caused by force majeure such as fire, typhoon, flood, earthquake or the user's intentional negligence, misuse or other abnormal conditions.
- No compensation shall be made for the failure of non standard connector/accessories.
- Our company will not bear all responsibilities if the damage is caused by not operating the product according to the use method in the operation manual.
- This product is not suitable for use on the relevant equipment or machines involving personal safety, such as atomic energy devices, aerospace devices, transportation devices, medical devices, etc., or the equipment or machines that must be highly reliable in electricity. If we use this product on the above-mentioned equipment or machine, we will not be responsible for personal accident, fire accident or wrong action of the machine and equipment caused by the failure of this product.

14. Common faults and troubleshooting

If this product is unable to charge or power other equipment, please check according to the following steps.

- (1) Ensure that the power button is on and the power button light is always on(green).
- (2) Make sure the DC ON / OFF button and AC ON / OFF button are on.

(3) Check whether the left of battery capacity is more than 5%. If the left of battery capacity is less than 5%, please charge as soon as possible.

(4) Ensure that the load equipment meets the power limit of the product, that is, the load power is within the maximum input range of each output interface;

If the above steps still do not solve the problem, please contact the seller for help.

15. FAQ(Frequently Asked Questions)

1 The adapter (power brick) got hot when I charge it, is that alright?

A It's totally normal for the adapter gets warm, because of the heat produced in circuit during charging.

2 Why the unit shutdown automatically with my appliance connecting?

A The“ECO MODE”(press then hold for 4s to launch) is set to shut down the unit when the AC output of the unit is lower than 50W in 4 hours for power saving.

3 What cause the cooling fan not to launch?

A With the excellent heat dissipation design, cooling fan will only launch when the total loads exceeds 30% of the rated output.

4 Can I charge and discharge the power station simultaneously?

A Yes, it is supported but not recommended in order to protect the lifespan of battery

5 How to claim the warranty?

A Please refer to the warranty card or the official website for further warranty policy.

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