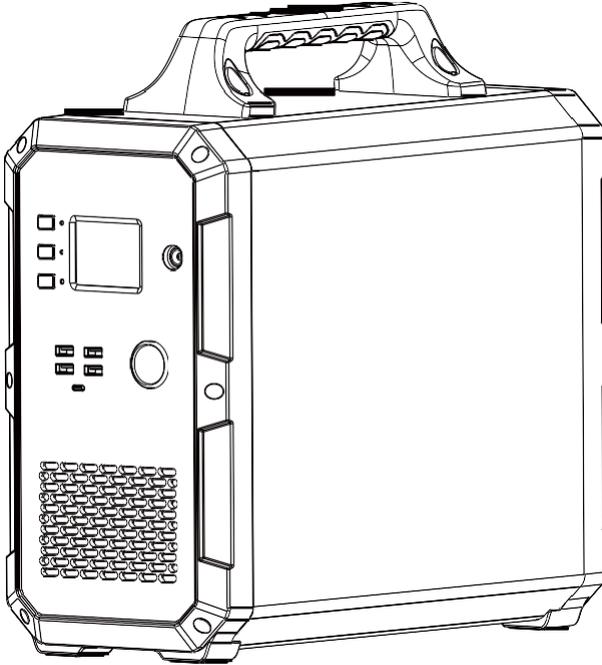


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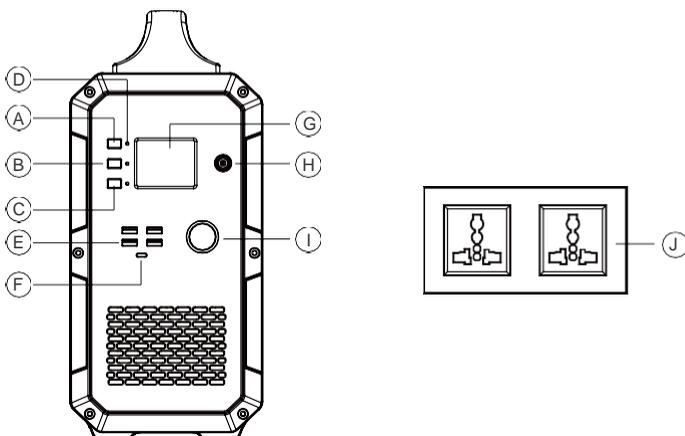
1500Wh Portable Solar Generator User Manual

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

Product Overview



A. Master power button

C. AC power button

E. 5V-USB output ports

G. Display screen

I. 12V cigarette lighter socket

K. AC220-240V output European standard socket

L. AC220-240V output Universal socket

Universal socket

B. DC power button

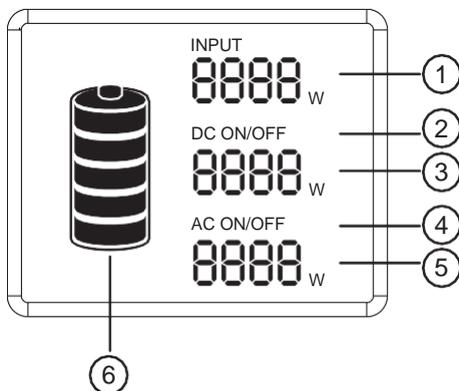
D. LED indicator lamps

F. Type-C PD output port

H. AC charger/PV input port

J. AC outlet

LCD Display



1. Charging power
2. DC ON/OFF status
3. DC output power
4. AC ON/OFF status
5. AC output power
6. Battery status indicator

Note:

1. If the product malfunctions, error codes will be displayed on screen.
2. When the product is powered on, but not in use, the product would switch off by itself after 60seconds of inactivity.
3. When the product is powered on and the AC/DC output is turned on, the backlight would turn off by itself after a period of inactivity. To turn on the backlight again, press any button.

Safety warning

1. Please read all the safety warnings before use and keep the manual. Warranty does not cover damage caused by failure to follow instructions.
2. Please note the warning labels and operate accordingly.
3. Avoid exposing the product to rain or using the product in a humid environment.
4. Do not install the product near heat sources, such as electric furnace and heaters.
5. Place and store the product in a well-ventilated place.
6. Wipe the product clean with a dry cloth.
7. In case of fire, use dry powder fire extinguishers for this product. Do not use waterfire extinguisher, which may cause electric shock.
8. Please do not alter or disassemble this product.

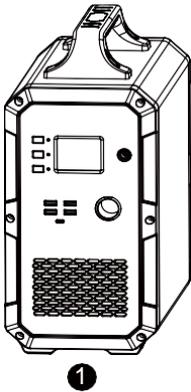
Storage and maintenance

1. Operating and storage environment may influence product life and the reliability of performance. Thus, remember to:
 - (1) Place the product in a dry and well- ventilated area with mild temperature (suitable temperature:0°C -45°C, suitable relative humidity 10% ~ 90%)
 - (2) Place the product in a safe area where it will not be shaken or fall.
 - (3) Keep the product away from corrosive and combustible material.
2. The product will turn off itself when the battery voltage is very low, If this happens, you need to charge the battery within 2-3months.
3. If you are not going to use it for a long time, please charge it fully before storage and then charge it at least once every month. Store the product in a dry environment.
4. Please fully charge the product before storage and charge it at least once every 3 months.

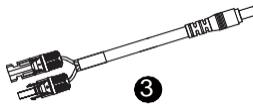
Unboxing

Before opening the parcel, please check if the parcel is damaged. If the product is damaged during delivery or if any items went missing upon arrival, please contact our Customer service to get it resolved. You should receive the following items:

No.	Item	Quantity
1	Portable solar power generator	1
2	AC wall charger (Including AC input charging cable)	1
3	PV solar charge cable(7909 to MC4)	1
4	User manual	1
5	Warranty card	1



picture is only for reference, pls take the product as the standard



Operational guidance

Attention:

1. The operating environment should meet the requirements specified in this manual.
2. Make sure that the air inlet/outlet is not blocked.
3. Please power off the product if you are not going to use it.
4. Please fully charge the product if you are going to keep it idle for a long period.

How to use the product?

Turn on/off the product

1. Turn on the product: Press and hold the master power button about 2 seconds to turn on the product. The LED indicator light and the display screen will light up.
2. Turn off the product: Press and hold the master power button about 2 seconds to turn off the product. The display screen and the LED indicator light would turn off.

AC/DC output

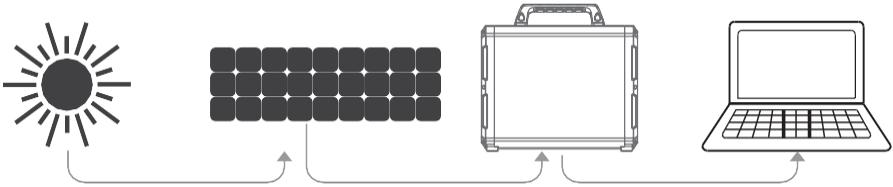
Note: Check to make sure the product is turned on. Otherwise, you cannot turn on the AC/ DC output.

1. Turn on AC/DC output: Press and hold the AC/DC power button to turn on the product. The corresponding LED indicator light would light up and the display screen would show “AC ON/DC ON”.
2. Turn off AC/DC output: Press and hold the AC/DC power button to turn off the product. The LED indicator light would turn off and the display screen would show “AC OFF/ DC OFF”.

How to charge the product?

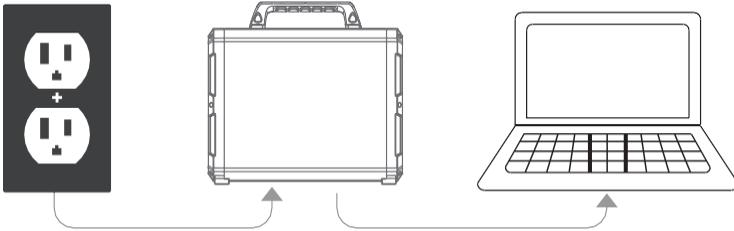
Charge with solar power

To charge the product, insert the solar charging cable (or AC adapter) into the input port of the product. The display screen would light up and the charging power would be displayed. The product will not turn on by itself when being charged. If the product is previously turned off, it will remain turned off unless you manually turn it on.



Charge with AC power

Insert one end of the adapter into the wall outlet and insert the other end into the input port of the product. The product will start charging and you can monitor the battery status by checking the battery icon on the LCD screen. The product comes with an built-in advanced control circuit. When the battery is fully charged, it will stop charging itself automatically.



Cold Weather

Cold weather can influence battery capacity. In sub-zero temperature ($<0^{\circ}\text{C}$), you may be able to discharge the product, but you should not charge it. Otherwise, the battery could get damaged.

Low temperature charging protection: When the product is charged at a temperature below 0°C , it will shut off and stop charging automatically. The product will reboot and start charging itself when the temperature rises to above 10°C .

Low temperature discharging protection: If the product is discharged at a temperature below -20°C , it will turn off automatically. The product will reboot and resume output when the temperature rises to above -10°C .

FAQ

Q1: How to check the charging status?

The battery icon indicates the battery level of this product. The battery level is displayed in 5 segments. When the battery is being charged, the icon will start flashing. When the battery is fully charged, the icon would stop flashing and all 5 segments will be filled.

Q2: Can this product be used to charge my electronic devices?

You need to check the power at each output port. For example, the power at AC output port is provided by the built-in inverter of the product, whose maximum continuous output power is 1000W. This means that it is only suitable for electronic devices whose required power is no more than 1000W.

Intelligent Cooling Control

Cooling fan will start working automatically when the following conditions are met:

1. The load of inverter exceeds 400w.
2. The load of 5v-USB output port exceeds 10w.
3. The load of Type C-PD output port exceeds 30w
4. The load of 12V cigarette lighter socket exceeds 50w.
5. The charging power of attached appliances exceeds 100W.

The generator intelligence system will adjust the PV input or AC output power based on the temperature of the outer case temperature, to keep the outer case at a touchable temperature.

Note: Do not use the machine when the cooling fan is broken.

Frequency Setting

When the product is powered on, turn on the DC output and keep the AC output turned off. Press and hold both to select output frequency of inverter. Press and hold both DC and AC power button to exit frequency setting mode. Restart the machine.

Trouble shooting and technical specification

Error codes	Cause	Solution
E001	Over-voltage protection (battery pack)	Stop charging and start discharging.
E002	Under-voltage protection (battery pack)	Please charge the product as soon as possible. Restart the machine once it is fully charged.

E003	Battery failure	Restart and charge the machine.
E004	Over-temperature protection when discharging the battery.	Wait for a while for it to cool down and then restart the machine.
E005	Under-temperature protection when discharging the battery.	Wait for a while for it to heat up and then restart the machine.
E006	Over-temperature protection when charging the battery.	Wait for a while for it to cool down and then restart the machine.
E007	Under-temperature protection when charging the battery.	Wait for a while for it to heat up and then restart the machine.
E008	Under-voltage protection for the 1st cell.	Please charge the product as soon as possible and re- start it when fully charged.
E009	Under-voltage protection for the 2nd cell.	
E010	Under-voltage protection for the 3rd cell.	
E011	Under-voltage protection for the 4th cell.	
E012	Busbar fault of inverter due to under-voltage.	Turn off the machine and restart it.
E013	Over-load protection of the inverter.	Check if the output port of inverter is overloaded. Turn off and on the AC output to recover.
E014	Output port of the inverter is short circuited.	Check if the output port of inverter is short-circuited. Turn off and on the AC output to recover.
E015	The heat sink of the inverter is overheated.	Wait for it to cool down and then restart the machine.
E016	The temperature of the heat sink is not detected.	Insert the NTC and restart the machine.
E017	Over-voltage protection (PV input).	Disconnect the solar charging cable and then restart the machine.
E018	Over-voltage protection (PV output)	Disconnect the solar charging cable, re- start the machine and then re-insert the solar charging cable.
E019	Over-temperature protection of heat sink for PV module	The heat sink for PV module overheats. Wait for it to cool down and then charge it.

E020	The temperature of the heat sink for PV module is not detected.	Restart the machine.
E021	Charging protection of battery protection board	Wait for the temperature to return to an acceptable temperature and then start charging.
E022	Battery protection	Disconnect the solar charging cable and restart the machine.
E023	Over-power protection (system)	Check if the total output power is overloaded. Restart the machine.
If you have tried the above solutions, but the problem persists then contact the customer service team.		

ATTENTION!

If you cannot find the solution for your problem in the chart above, please provide the following information to our customer service team:

1. About the product

- (1) Serial number
- (2) Model
- (3) Displayed information on the screen
- (4) Description of your problem
- (5) Have you experienced the problem earlier?
- (6) Under what circumstance does the problem occur?

2. About the solar panel (not included)

- (1) Manufacturer and model of the solar panel
- (2) Output voltage of the solar panel
- (3) Output power of the solar panel
- (4) MPPT output voltage of the solar panel
- (5) MPPT output current of the solar panel
- (6) The number of solar panels and how do you connect the panels

Specifications

Battery Capacity		1500Wh (US&JP)	1500Wh (RoW)
Output Specifications			
Inverter Output	Continuous Output Power	1000W	1000W
	Continuous Output Voltage	100-120Vac	220-240Vac
	Rated Frequency	50/60Hz	50Hz
	Power Factor	1	1
	THDV@0.7R (load)	<5%	<5%
	Over-load protection	1000W ≤Load<1200W @2Min;1200W≤Load @ 1s;	1000W ≤Load<1200W @2Min;1200W≤Load @ 1s;
	Power Loss (No Load & Turned-off)	<20W	<20W
	Max Efficiency (>70% Load)	88%	90%
12V/9A Cigarette Lighter Output	Continuous Output Voltage	12.2V(±1V)	12.2V(±1V)
	Continuous Output Current	9A(±0.3A)	9A(±0.3A)
5V USB Output	Output Voltage Range	5V±0.3V	5V±0.3V
	Max Output Current	3A	3A
	Note: The maximum output of a single USB port is 3A. The maximum output of 2 USB ports is 3A((top and down) .		
Type C-PD Output	Supported Fast Charge	PD Protocol	PD Protocol
	Output Voltage Range	5-20V (5V by default)	5-20V (5V by default)
	Continuous Output Voltage/Current	(5V/9V/12V/15V)3A(±0.3A), 20V/2,25A(±0.2A)	(5V/9V/12V/15V)3A(±0.3A), 20V/2,25A(±0.2A)
Input Specification			
AC Adapter Charger		42V/160W	42V/160W
PV Max Input Power		500W	500W
PV Input Voltage Range		16-60Vdc	16-60Vdc
PV Max Input Current		10A	10A
MPTT Efficiency		99.5%	99.5%
Max Efficiency		>88%	>88%
Solar Charging Mode		MPPT	MPPT

Battery Specification	
1500Wh,LG Li-ion battery cell, ,4S3P,101351mAh/14.8V(equivalent to 405405mAh 3.7V),	
General	
IP Rating	IP 21
Operating Environ- ment	Relative Humidity: 10%-90%
	Operating Temperature: 0-40°C
Dimensions	371.5*165.4*364.7mm(14.6*6.5*14.4inch)
Net Weight	17.2 KG(37.9lb)
<p>Note:</p> <p>When the total output power exceeds 1000W, the DC output will be directly shut down.</p> <p>When the load is less than 30W, the output power would not be displayed.</p> <p>When a high-power appliance is attached to the product, the displayed output power and the actual output power could be different by up to 30W.</p>	

