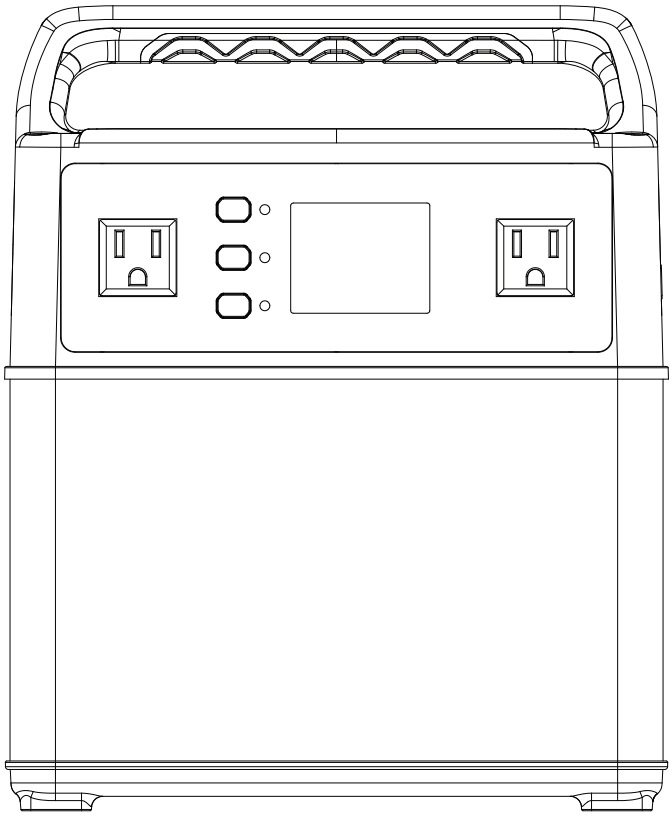
Portable Solar Power Generator (PPS)

User Manual



Thank you for using our product!

Please strictly follow all warnings and instructions on this manual and the unit. Make sure to take good care of this manual.

Do not operate until you have read all the safety and operation instructions.

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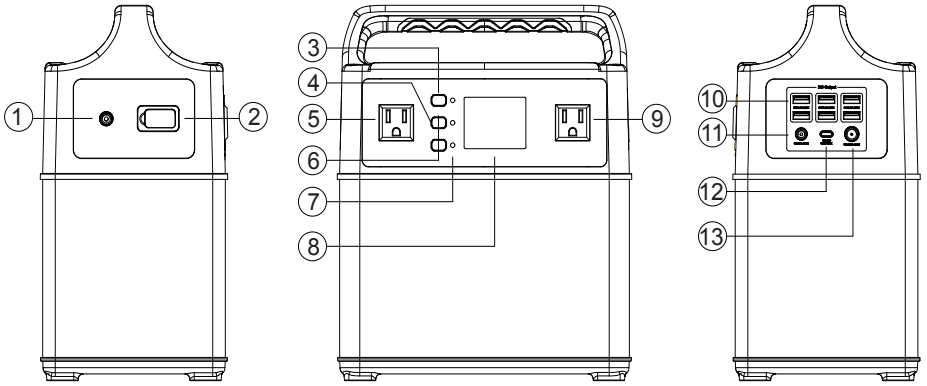
Product Overview



1. PV/Adapter Charging port
2. CAR Jump Starter Port
3. Main power On/Off Button
4. DC Power On/Off Button
5. AC Outputs
6. AC Power On/Off Button
7. Power On/Off Indicator Lights
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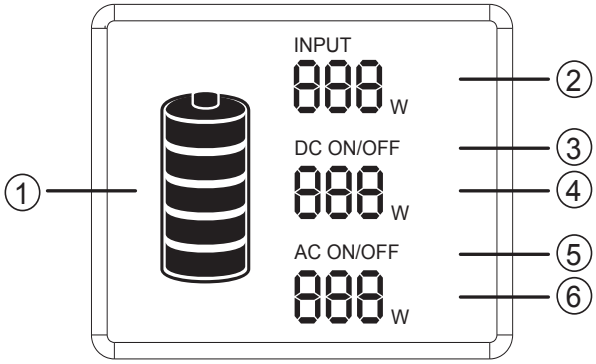
LCD DISPLAY



1. Battery Level
2. Input Charging Power
3. DC ON/OFF
4. DC Output Power
5. AC ON/OFF
6. AC Output Power

LCD battery symbol and failure code

The LCD Battery Display indicates the Battery level. There are 5 segments of the battery, approximately 20%-40%-60%-80%-100% capacity. During using, segments will disappear from the display. When charging your PPS, you will notice a battery segment blink at 1 second interval, which indicates the current charge status and the number under INPUT shows the real-time charging power. Once it is fully charged, all battery segments will be lit and remain solid.

When the product breaks down, the fault code is displayed at the input or output power display, such as "E01"

Note: Charge your PPS when there is only one battery segment!

Safety Instructions

Safety Caution

1. Before using this product, please read the "safety instructions" carefully to ensure correct and safe use. And please keep the instructions carefully, if the equipment is damaged due to failure to operate as described in this manual, the company has the right not to guarantee the quality.
2. Operate as required.
3. Avoid using the product in direct sunlight, rain or wet environment.
4. This product can not be used near the heat source area, or there are electric heating furnace, heat furnace and other similar equipments.
5. When placing this product, keep a safe distance around it to ensure ventilation
6. When cleaning, please use dry articles for wiping
7. In the fire, please use dry powder fire extinguisher correctly. There is a danger of electric shock if you use a liquid fire extinguisher
8. When using, please do not touch other parts inside the cabinet except the terminal.
9. If this product needs maintenance, please contact us.
10. Operating temperature r: 0°C-40°C; Operating humidity: 5% - 90%.

11. Charging plug must be connected to charging socket. Don't connect charging plug to discharging socket.

Use in low temperature environment

Cold weather can influence battery capacity. In sub-zero temperature (<0°C), you may be able to discharge the product, but you should not charge it. Otherwise, the battery of the product would be greatly damaged and the capacity may not even be recovered.

1. Low temperature charging protection

When the product is charged at a temperature below 0°C, it will shut off and stop charging itself automatically. The product will reboot and start charging itself when the temperature rise to above 5°C .

2. Low temperature discharging protection

If the product is discharged at a temperature of -20°C, it will turn off output in 15 seconds. The product will reboot and turn on output when the temperature rise to above -15°C.

Storage and maintenance

1.Please fully charge the product before storage and charge it at least once every 3 months.

2.Store this product in a cool, dry and well-ventilated area. Storage temperature:0°C-40°C.

3.Failure to use, store and maintain the product according to the instruction would void the warranty.

Note:

1. The using environment must meet our requirements;
2. Ensure the product is placed in a well-ventilated environment

Operation Guidance

How to use this product

1. Press the main power button for 2 seconds to turn on the product, then

the power indicator and LCD screen will be lit up. When the main power switch key is turned on, the product can be charged and the AC/DC key can be turned on.

2. After the main power button is turned on, you must turn on the AC/DC key when using this product to power your device. Press the AC/DC button for 2 seconds to open the corresponding AC/DC output. Then you will find the corresponding LED green indicator next to AC/DC button will be lit up. After 15 seconds of use, the backlight of the display screen is closed and any key is pressed to activate the display screen.

3. If the main power button is turned on, and the AC and DC switch button is not turned on, then the product will be automatically shut down after 10 minutes without charging.

4. To save battery power, turn off the product when you are not going to use it for a long time. Press the AC/DC button for 2 seconds to close the corresponding AC/DC output. Long press the main power button for 2 seconds to shut down, then AC and DC have no output, and the display screen and indicator lights are off. The product cannot be charged when it is off.

Note:

1. Please turn off the product when you don't use it;

2.Please fully charge the product if you are going to leave it idle for a long period.

How to charge this product ?

Note: Please charge the product before use; Turn on the product before charging.

There are 3 ways to charge the product, using AC adapter, solar charging cable or car charger. First, you need to determine the input source and select a charger accordingly. Then, connect the charger to the input port of the product and it will be charged. When the product is being charged, the LCD battery would flash on the LCD screen. When the product is fully charged, the LCD battery would stop flashing.

A. Charge with Solar Charging Cable

Place your solar panel somewhere that it can receive direct sunlight and

abundant sunshine.

The solar panel open-circuit voltage should be 14-40v.The maximum charging power of this product is 125W.

Connect the solar panel and the product using solar charging cable. Make sure that the solar charging cable is correctly connected and forming a solid contact with the input port of the product.

This product is built-in advanced system control circuit module. When the battery is full charged, it will stop charging automatically.

B. Charge with AC Adapter

Please use the AC charger equipped with this product to charge. You can know the charging status of this product through the LCD screen. This product is built-in advanced system control circuit module. When the battery is full charged, the product will stop charging automatically.

C. Charge with Car Charger

Please use the original car charger. Insert one end of the car charger to the car cigarette lighter and insert the other end to the input port of the product. The LCD battery will blink to indicate that the product is being charged normally.

Note: A car with 12V starting battery can't charge this PPS fully, but a car with 24V battery can charge it fully. You'd better start the car when you charge this PPS.

How to Jump-Start a Car

Precautions before jump-starting a car:

1.Make sure the engine displacement of the vehicle (or other motor vessels, here take a car for example) is no more than 4L.

2. Make sure the PPS power is over 60% (four battery segments on).

3. Make sure the clamps on jump-start cable is not broken.

Steps:

1. Clamp the red clip to car battery positive pole and the black clip to the battery negative pole.

2. Plug the other end of jump-start cable into your PPS.

3. Turn the key to start your car as normal.

4. After starting, remove the cable from this product first, then remove red and black clip.

FAQ(Frequently Asked Questions)

Q1.How do I know if my PPS is charged?

To check the charging state of your portable power supply, refer to the LCD Battery Display. When lit up, you will see a battery outline with five segments, indicating the current charge 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.

Q2. How do I know if my device will work with the PPS?

First, you'll need to determine the amount of power your device requires. This may require some research in your side, a good Google search or examining the user guide of your device should be enough.

Second, you will need to check the capacity for the individual output ports. For example, the AC port is monitored by an inverter that allows Max.300W of continuous output power. This means if your device needs to work over 300W power for a long time, the PPS's inverter will shut off automatically.

Q3.What's Depth of Discharge(DOD)

To extend the service life and storage time, the DOD is set around 90%, which is 90% of 400wh, to keep the battery from damage due to over discharge. Then the product real working time is calculated as : Working time =400wh*0.9÷P (P: Power of connected electrical devices)

Unpacking

Before opening the package, please check if the packaging is damaged. After unpacking, please check if product appearance is damaged or any part is missing. If so, please contact us.

PPS accessories are as follows.

No.	Item	Quantity
A	Portable Power Supply	1
B	AC wall charger	1

C	Car charging cable	1
D	Solar charging cable	1
E	12V/10A output to car charging cable	1
F	Type-C to type-C cable	1
G	Car jump-starting cable	1
H	User Manual	1
I	Warranty card	1

Technical specification

Model		EB40(JP&UL)	EB40(EU)
Battery			
Battery Material		Lithium-ion Rechargeable Cell	
Battery model		Samsung INR18650-29E	
Battery rated voltage		11.1V(3S14P)	
Battery capacity		400Wh(36Ah*11.1V)	
Output			
AC output	Continuous Output Power (Max.)	300W	300W
	Peak output	600W	600W
	Rated output voltage	110Vac	230Vac
	Rated frequency	50/60Hz	50/60Hz
	Power factor	1	1
	Overload	100-150%@2min; >150%@10S	100-150%@2min; >150%@10S
	Self-consumption (No load)	<5W	<10W
	Max efficiency (>70% load)	88%	88%
12V/10A output port(8mm)	Output voltage	12.6	12.6
	Rated output current	10A	10A
	Overload protection power	>140W	>140W

12V/5A output port(7909)	Output voltage range	10~12.6V	10~12.6V
	Rated output power	60W	60W
	Overload protection power	>65W	>65W
Type-C output port	Communication protocol type	QC3.0	QC3.0
	Output voltage range	3.6~12V(default 5V)	3.6~12V(default 5V)
	Rated output current	5V/2.5A, 9V/2A, 12V/1.5A	5V/2.5A, 9V/2A, 12V/1.5A
	Overload protection current	>3A	>3A
USB output ports(6pcs)	Output voltage	5V	5V
	Max output current	3.5A	3.5A
PV charge			
Max. PV charge power		126W	126W
PV input voltage range		12.6~40Vdc	12.6~40Vdc
voltage range		15-40Vdc	15-40Vdc
Max. input voltage		40Vdc	40Vdc
Max. input current		10A	10A
MPPT efficiency		99.50%	99.50%
Max. efficiency		>96%	>96%
Solar power charge type		MPPT	MPPT
Main Unit			
Working environment		relative humidity: 10%-90% (without condensation) Relative temperature: 0-40°C	
		Relative temperature: 0-40°C	

Trouble Shooting

This product has been fully tested prior to shipping. If you meet any difficulty during operation of the generator, read this manual carefully.

If any failure occurs, please refer to this trouble shooting form. If still can't solve, please contact our customer service. During a call, please provide us with the following information: Serial NO.,describe details what error is happening, input and output information.

Error code	Cause	Solution
E01	Over Temperature Protection	1, Check the ambient temperature if higher than 40°C. Output will start again if the generator cools down.
E02	Battery Over Voltage Protection	Disconnect the charger and restart it;
E03	Battery Damage Protection	Please contact customer service.
E04	1st Battery String Over-Voltage	Disconnect the charger and restart it
E05	2nd Battery String Over-Voltage	Disconnect the charger and restart it
E06	3rd Battery String Over-Voltage	Disconnect the charger and restart it;
E07	1st Battery String Low Voltage	Charge the unit in time, restart it after fully charged
E08	2nd Battery String Low Voltage	Charge the unit in time, restart it after fully charged
E09	3rd Battery String Low Voltage	Charge the unit in time, restart it after fully charged
E10	Discharge low temperature protection	Check the ambient temperature whether it's lower than -20°C
E11	Battery Low Voltage Protection	Charge the unit in time, restart it after fully charged;

E12	Inverter Over Current Protection	Check if the AC output overload or short circuit
E13	Inverter Over Load Protection	Check if the AC output overload
E14	Inverter Short-Circuit Protection	Check if the AC output overload or short circuit
E16	Charging Over Voltage protection	Check if the input voltage excess the max input voltage
E19	12V6A Output Over Current Protection	Check if the 12V/6A output overload or short circuit
E20	12V6A over load protection	Check the if the 12V6A is over load
E21	12V10A Output Over Current Protection	Check if the 12V10A output overload or short circuit
E22	12V10A overload protection	Check if the 12V10A output overload
E23	5V1 Over Current Protection	Check if the output overload or short circuit
E24	5V2 Over Current Protection	Check if the output overload or short circuit
E25	Battery over temperature protection	Check if the environment temperature is higher than 40℃ . Generator will recover to normal work after it cools down.

Contact us

Should you have any technical questions, please contact your distributor.
With following information:
Purchase date
Model
Error code
Details refer to the warranty card.
Please tell the distributor or us the details of the failure and process
Thank you for your support