

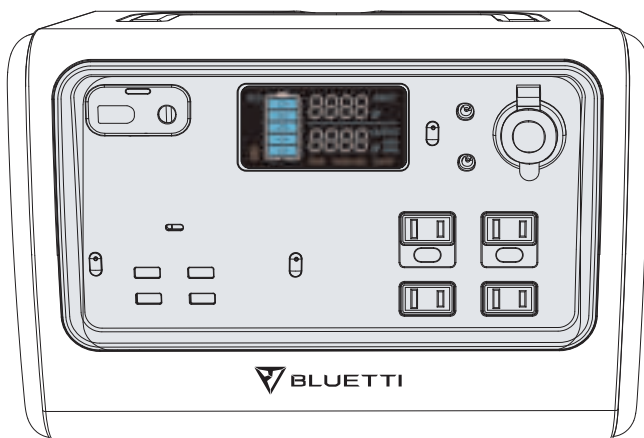
EB55

Portable Power Station

User Manual v2.0

Please Read This Manual Before Use And Follow Its Guidance.
Keep This Manual For Future Reference.





Thank You!

Thank you for making BLUETTI a part of your family.

From the very beginning, BLUETTI has tried to stay true to a sustainable future through green energy storage solutions for both indoor and outdoor use while delivering an exceptional eco-friendly experience for our homes and our world. That's why BLUETTI makes its presence in 70+ countries and is trusted by millions of customers across the globe.

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1. Safety Instructions

Read this manual for instructions on the proper use and safety information for the unit. Follow the warnings and instructions marked on the unit and its accessories.

Pay attention to the "Instruction", "Caution", "Warning" and "Danger" symbols in this manual, and follow the instructions carefully to avoid injury or damage.

The Safety Requirements provided herein are for illustrative purposes that include but are not limited to those listed in this manual. Actual operation shall comply with all applicable safety standards.

If you have any questions, feel free to contact BLUETTI support or your local BLUETTI dealers.

1.1. General Safety

- Always operate or store the unit in the conditions specified in this manual.
- The installation and ambient conditions must comply with the regulations in the relevant international, national or regional standards.
- Unauthorized disassembly, alteration of the equipment or modification of the software code is not allowed.

BLUETTI shall not be liable for the following circumstances:

- Equipment damage caused by force majeure, such as earthquake, fire, storm, flood, mudslide, etc.
- Damage or loss during transportation.
- Damage caused by storage conditions that do not meet the requirements specified in this manual.
- Damage to the hardware or data of the equipment due to customer negligence, improper operation or intentional damage.
- Damage to the system caused by a third party or the customer, including handling and installation that does not meet the requirements specified in this manual.
- This product is not suitable for providing electrical service for equipment and machines that are highly dependent on the reliability of electrical power supply and that involve personal safety, such as atomic energy, aviation, medical, etc. Poweroak will not be held responsible for any personal safety accidents, fire accidents, equipment failures, etc. caused by using this product to supply power to the above equipment and machines.
- Damage caused by adjustment, alteration or removal of identification marks.

To avoid danger, please regulate the operation in the following manner:

- Do not install, use and maintain the unit in adverse weather conditions such as lightning, rain, snow and strong breezes (including but not limited to handling and operating the unit, plugging and unplugging signal connections to outdoor facilities, working at height, outdoor installations, etc.).

- Always turn off the power source before starting any electrical work.
- Do not clean the unit with water.
- Do not disassemble, modify, tamper with or repair the unit on your own.
- Regularly inspect the unit and its accessories for damage or deterioration.
- Use a tester to check for the presence of dangerous voltage before touching any conductor or terminal.
- If the unit's shell is cracked during transportation or use, do not use it and contact BLUETTI support or your local BLUETTI dealers.
- Use a dry powder extinguisher if the unit catches fire.
- In case of fire, EVACUATE the building or affected area immediately, activate the closest FIRE ALARM system and CALL 9-1-1 or your local emergency phone number.
- Use genuine cables and accessories provided by BLUETTI.
- Keep the unit away from heat sources or high temperatures, and do not expose it to direct sunlight.
- Do not store the unit with flammable liquids, gases, or explosive materials.
- Make sure the area where you are using the unit is well ventilated and spacious.
- Do not block or cover the vents of the unit as this may cause irreversible damage to it.
- Use the unit for its intended purpose and avoid stacking objects on top of it during storage or use.
- Do not move the unit during operation as the vibrations and shocks associated with movement may cause damage to the internal hardware.
- In case of malfunction, turn off the unit immediately and contact BLUETTI support or your local BLUETTI dealers if this manual cannot adequately explain the malfunction to you.
- Do not place the unit on an unstable or inclined surface.
- Do not insert foreign objects into any port and vent of the unit.
- Keep away from children and pets.

Legal and Regulatory Requirements

- The transportation, wiring and maintenance shall comply with all applicable laws, regulations and standards.
- User-provided materials and tools required shall meet the requirements specified in applicable laws, regulations and relevant standards.

1.2.Handling

Use mechanical assistance as needed (e.g. trolleys and adjustable height workbenches).

Recommended number of people based on the weight of product

Weight	Number of people
<18kg	1
18kg~32kg	2
32kg~55kg	3
>55kg	4 or a cart

1.3. Storage and usage

- When not using the unit for over 3 months, charge it to 40% to 60% SoC to keep it in optimal condition.
- Before storing the unit, power it off and remove all electrical connections from it.
- Store the unit in a cool and dry place. The ideal temperature range is 10°C to 30°C. The unit can be safely charged and discharged at temperatures of -20°C to 40°C. However, it's NOT recommended to store the unit in harsh temperatures for extended periods of time.
- Fully cycle the unit every 6 months to maintain the battery's health.

If the SoC drops to 0 (during operation or upon startup), take the following actions to safely restart the unit:



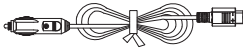
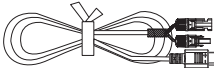



- 1)Shut down immediately.
- 2)Charging within 48 hours.
- 3)Battery should be kept at an ambient temperature of 5°C to 35°C for 24 hours before charging.

It is recommended to charge the unit via an AC source. If charging via solar energy, ensure that your solar system provides an output of more than 100W.

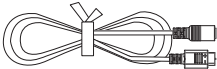
BLUETTI shall not be liable for any equipment damage caused by the violation of above instructions.

2. What's In The Box

Standard Packaging

Item	Picture	Qty.
Portable Power Station		1
AC Adapter (94.5in/240cm)		1
Car Charging Cable (28in/72cm, XT60 to Cigarette lighter port)		1
Solar Charging Cable (59in/150cm. XT60 to MC4)		1
User Manual		1
Warranty Card		1
Quality Certificate		1

Optional

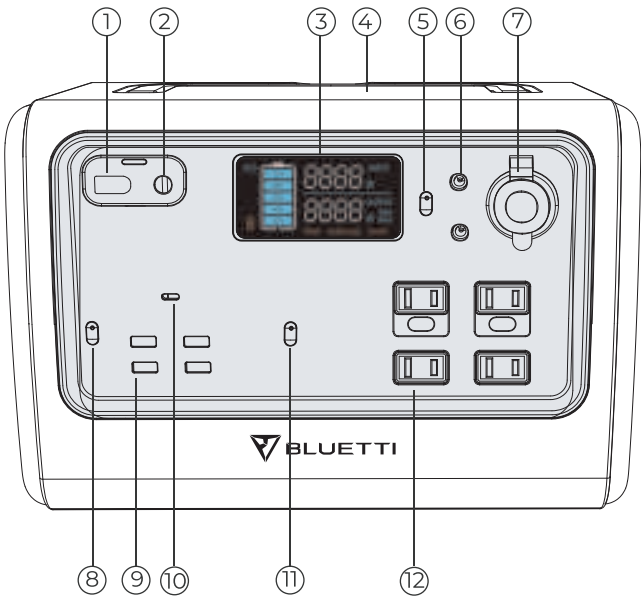
Item	Picture
DC7909-XT60 Female Cable (20in/50cm. DC7909 to XT60)	

* The optional accessories are not included in standard packaging and can be purchased separately at <https://www.bluettipower.com/>

Note: All measurements are for reference only.
Package details are subject to change without prior notice.

3. Product Overview

3.1 Diagram



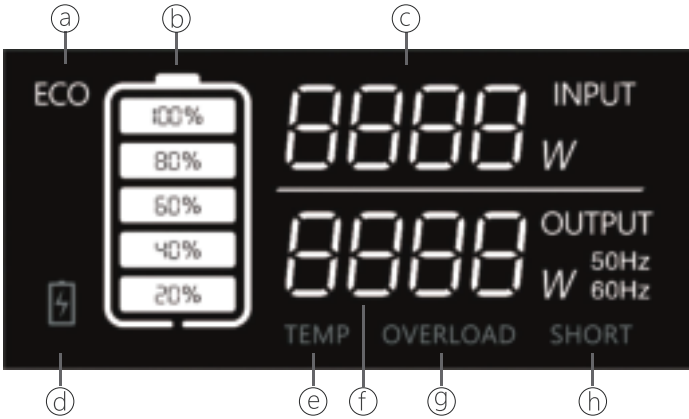
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|--------------------------|---------------------------|
| 1. DC Input | 7. Cigarette Lighter Port |
| 2. Adapter Input | 8. DC Power Button |
| 3. LCD Screen | 9. USB-A Port |
| 4. Wireless Charging Pad | 10. USB-C Port |
| 5. DC 12V Power Button | 11. AC Power Button |
| 6. DC5521 Port | 12. AC Output |

3.2 Specifications

EB55		
General		
Battery Capacity	537Wh	
Cell Type	LiFePO4	
Dimensions (L*W*H)	10.94*7.87*7.79IN/278*200*198MM	
Weight	16.5LB/7.5KG	
Discharging Temperature	-4°F-104°F/-20°C-40°C	
Charging Temperature	32°F-104°F/0°C-40°C	
Storage Temperature	-4°F-113°F/-20°C -45°C (Optimal: 68-86°F/20-30°C)	
Working Humidity	10%-90%	
AC Output		
Power	700W	
Surge	1400W	
Voltage	100-120VAC	
Frequency	50/60Hz	
DC Output		
Cigarette Lighter Port *1	Voltage	12VDC
	Current	10A (Cigarette Lighter and DC5521 10A total)
DC5521 *2	Voltage	12VDC
	Current	10A (DC5521 and Cigarette Lighter 10A total)
USB-A *4	Voltage	5VDC
	Current	3A
USB-C PD3.0 *1	Power	100W Max.
Wireless Charging *1	Power	5/7.5/10/15W
Adapter Input		
Power	200W Max.	
Voltage	25-28VDC	
Current	10A Max.	
PV/Car/Dual Charging		
Power	200W Max.	
Voltage	DC 12V-28V	
Current	8A Max.	
Car Charging	98W@12V; 196W@24V	
Adapter + PV Dual Charging	400W Max. (200W for Both Adapter and PV)	
Dual Adapter Charging	400W Max. (Extra adapter needed)	

4. Operation

4.1 LCD Screen



- a: ECO Mode
- b: Battery Level
- c: Input Power
- d: Low-battery Alert
- e: Temperature Anomaly Alert
- f: Output Power
- g: Overload Alert
- h: Short-circuit Alert

4.2 Powering On/Off

Powering on: Press the AC/DC/DC 12V Power Button to start up corresponding output.

Green light(on the button)	ON
LCD Display	ON*

* The LCD screen is on for 30-60 seconds. Please enable at least one of these ports (AC/DC/DC 12V) if you want the display to stay on longer.

Note: Please turn on the DC power to enable the wireless charging.

Powering off: Press and hold power buttons to shut down corresponding output.

Green light(on the button)	OFF
LCD Display	OFF

4.3 Mode

Setting Mode: When the AC power is off, press AC and DC power buttons simultaneously and the frequency indicator flashes.

ECO Mode¹: Under 'Setting Mode', press the DC power button to turn it on/off.

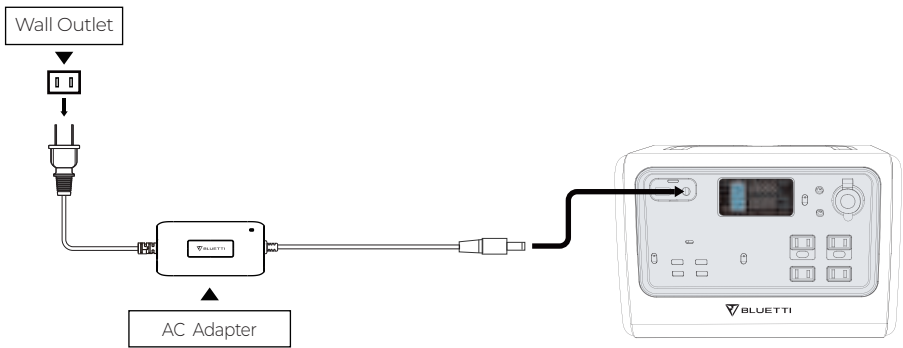
4.4 Setting

AC Frequency²: Under 'Setting Mode', press the AC power button to switch.

4.4 Charging

4.4.1.AC Charging

Simply plug the EB55 into a standard wall outlet and start charging.



¹ In this mode, the AC/DC output will automatically turn off after 4-hour low($\leq 10W$ for AC, $\leq 1W$ for DC) or no load to save power.

² AC Frequency: The number of alternating cycles per second in an AC sine wave. The utility frequency in US is usually 60Hz.

4.4.2.PV Charging

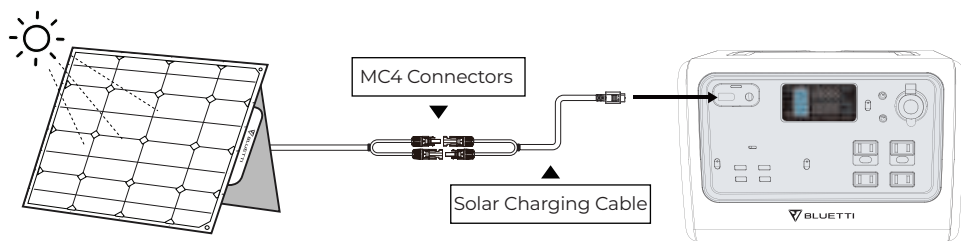
Connect the solar panels (in series or parallel) to EB55 via the solar charging cable.

Note: Please make sure your solar panels comply with:

OCV³: 12-28V Vmp⁴: 12-28V Input Power: 200W Max

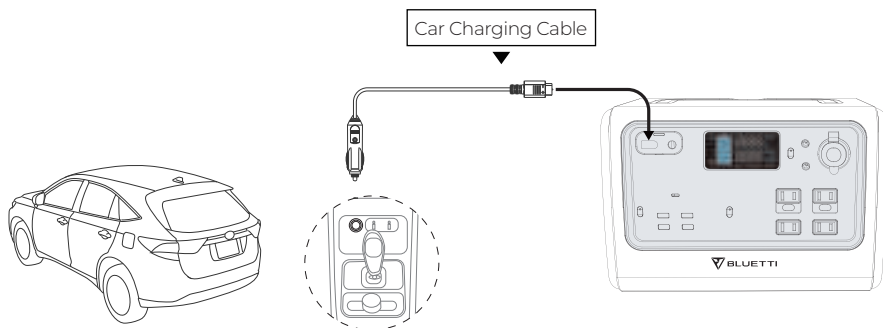
Eg. Use one BLUETTI PV200 solar panel to charge the unit.

BLUETTI PV200: Voc=26.1V Vmp=20.5V Current= 9.7A Max.



4.4.3.Car Charging

Connect the EB55 directly to the vehicle plug-in cigarette lighter port via the car charging cable.

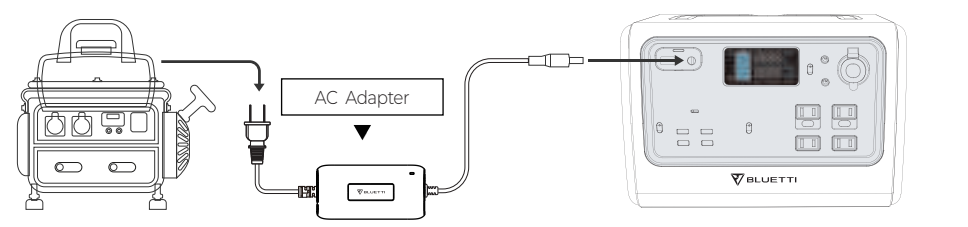


³OCV: Open circuit voltage, also for Voc. The maximum voltage that the solar panel can produce with no load on it.

⁴Vmp: Voltage at maximum power. The voltage available when the panel is operating at its peak performance output.

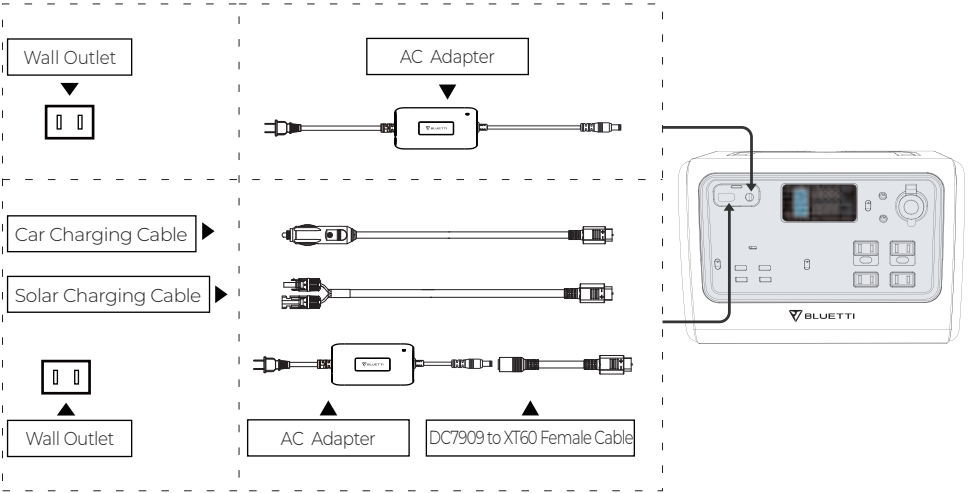
4.4.4. Generator Charging

Connect the AC adapter input plug to the generator while the output plug goes to the adapter charging port of EB55.




4.4.5. Dual Charging

EB55 also supports dual charging (e.g. Adapter + PV Charging and Dual Adapter Charging⁵).




⁵An extra adapter (200W AC Adapter + DC7909-XT60 Female Cable) is needed for Dual Adapter Charging.

5. Discharging



Phone
40-50 Times
10Wh




LED Light
20-30Hrs
20W




Television
5-6Hrs
75W



Power Tools
5-6Hrs
80W



Refrigerator
4-5Hrs
90W



Slow Cooker
2-3Hrs
200W

$537\text{Wh} \times \text{DoD} \times \eta \div (\text{load power}) = \text{charging time (estimated)}$

Note: DoD refers to the Depth of Discharge, η is the local inverter efficiency. DoD=90%, η =90%.

DoD may vary depending on ambient-operating temperature and discharge rate.

Load power and charging time are measured in Watt and Hour.

6. Appendix

6.1 FAQs (Frequently Asked Questions)

Q: How do I know whether my devices will work well with this product?

A: Please evaluate the total constant load of your appliances. If it doesn't exceed the Max. output power of EB55, you can use this power station to charge.

Q: Can I use third-party solar panels to charge this product?

A: Yes, you can. As long as the specs of solar panels you're using fall in the range below:

OCV & Vmp: 12-28V

Input Power: 200W Max.

With the same power connector (MC4)

DO NOT mix different types of solar panels.

Q: How can I charge this EB55 by dual adapter charging?

A: An extra adapter (200W AC Adapter + DC7909-XT60 Female Cable) is needed to connect to the DC input port.

Q: Is there a button to turn on/off the wireless charging?

A: Yes. Press the DC Power Button to enable the wireless charging.

Q: Can it charge and discharge at the same time?

A: Yes. It supports pass-through charging. EB55 comes with the premium LiFePO₄ battery and proprietary Battery Management System to ensure that it can charge and discharge at the same time.

6.2 Technical Support

Should you require any further assistance, please do not hesitate to contact BLUETTI service team.

6.3 FCC Warning

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference
- 2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1) Reorient or relocate the receiving antenna.
- 2) Increase the separation between the equipment and receiver.
- 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4) Consult the dealer or an experienced radio/TV technician for help.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For more information, please visit:

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Just Power On