B300KPortable Power Station

User Manual V1.0

Inspect the packaging for damage before use.

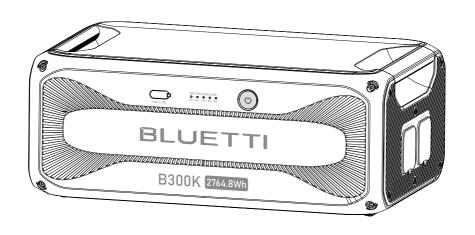
Perform a charge cycle before first use.

Scan the QR code for the BLUETTI app.

Register for warranty at https://www.bluettipower.com/







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 while delivering an exceptional eco-friendly experience for our homes and our world.

That's why BLUETTI makes its presence in 100+ countries and is trusted by millions of customers across the globe.



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If you have any questions or concerns about this manual, please contact BLUETTI support for further assistance.

Shenzhen PowerOak Newener Co., Ltd.

latest version from BLUETTI official website.

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About the Manual

Introduction

This manual provides information on the functionality, basic operation and safety instructions of the B300K portable power station. Please read and understand all instructions in this manual before use.

Target Audience

- Technical support engineer
- End-user

Contents

1	Safety Information ·	06
2	Packing List · · · · · · · · · · · · · · · · · · ·	08
3	Get to Know Your B300K ·····	09
4	Use Your B300K ·····	10
	Power On/Off ·	10
	Connect to B300K and Power Station ·	10
	Charge Up ·····	13
	Control and Monitor · · · · · · · · · · · · · · · · · · ·	13
5	Indicators Status ·····	14
6	Maintenance and Care ·····	14
7	Specifications ·····	15
8	Troubleshooting ·····	16
Αŗ	ppx. 1 FAQ (Frequently Asked Questions)	17

1. Safety Information

General Safety

WARNING - When using the product, basic precautions should always be followed to prevent the risk of fire, electric shock, or injury to persons:

- Read all the instructions before using the product.
- Use and store the product in a cool, dry place with good ventilation.
- Keep it away from flammable liquids, gases, explosives and corrosive substances.
- Do not expose it to high temperatures or heat sources like sunlight, fire, transformers, and heaters.
- Do not insert fingers or foreign objects into the product's ports.
- Do not use damaged or modified product to prevent electric shock, injury, etc.
- · Operate the product only with undamaged plugs and cables.
- Do not move the product during use to avoid internal hardware damage from vibration and collision
- Handle the product with care to prevent drops, violent impacts, or tilting.
- Place the product on a stable platform.
- Keep the product out of reach of children and pets.
- Avoid submerging or cleaning the product with liquids.
- Power off the product before any servicing to reduce the risk of electric shock.
- Only professionals should handle leaks or defects seek their assistance as needed.

Battery Safety

- Use the battery within the specified temperature range.
- Do not disassemble, modify, or damage the battery to prevent leakage, overheating, or fire.
- · Keep the positive and negative battery terminals from touching each other or metal objects.
- Avoid welding or grinding near batteries to prevent fire from sparks or arcs.
- Do not drop metal tools onto the battery to prevent sparks or short circuits.
- Lithium-ion batteries pose fire risks, so be aware of these hazards:
 - a. Thermal runaway can release flammable and harmful gases such as CO and HF.
 - Vapors from burning batteries may irritate the eyes, skin, and throat.
 - b. The concentration of these gases could lead to deflagration and explosion.
 - c. The battery electrolyte is flammable, toxic, and volatile.
- If a battery leaks chemicals or emits odors, don't approach it contact professionals for safe disposal. They'll need proper protective gear.
- Do not touch a battery that's been submerged in water, to avoid electric shocks. Discard soaked batteries through proper recycling channels.

- Electrolyte is corrosive and can cause irritation and chemical burns. If you come into direct contact with battery electrolyte:
- a. Inhalation of Vapors: Evacuate the contaminated area, get fresh air immediately, and seek medical attention.
- b. Eye Contact: Immediately flush eyes with water for at least 15 minutes, do not rub eyes, and seek medical attention immediately.
- c. Skin Contact: Immediately wash the infected area with soap and water and seek medical attention immediately.
- d. Ingestion: Seek medical attention immediately.
- Follow local guidelines for proper battery disposal; never burn, crush, or discard them improperly.

Personal Precautions

- When working near batteries, wear eye and clothing protection.
- Avoid smoking, sparks, or flames near the battery or engine.
- In abusive conditions, liquid may eject. If contact occurs, flush with water; seek medical help if liquid contacts eyes.

SAVE THESE INSTRUCTIONS

2. Packing List



B300K Portable Power Station



P090A Battery Expansion Cable (31.49in / 800mm)



Documentation

The following accessories may not be included. Please purchase optional accessories at https://de.bluettipower.eu/

Optional Accessories



P090D to P150D Battery Expansion Cable (31.49in / 800mm)

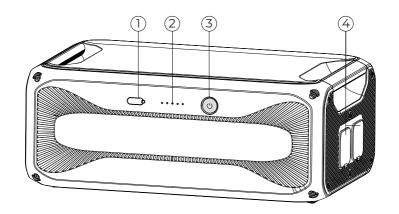
Note:

Battery Expansion Cables:

Connect the B300K to AC300, AC200MAX, AC200L, or other B300K units with the P090A battery expansion cable. Use the P090D to P150D cable to connect to AC500.

3. Get to Know Your B300K

The B300K can be used with AC300, AC500, AC200MAX, and AC200L as a 2764.8Wh expansion pack.



- ① USB-A Port
- ② LED Indicators*

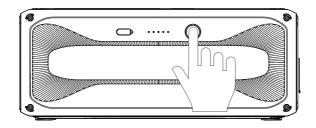
- ③ Power Button**
- 4 Battery Expansion Ports

^{*} Indicate battery level and operation status.

^{**} Button light indicates operation status with LED indicators. Refer to Chapter 5 (Indicators Status) and Chapter 8 (Troubleshooting) for details.

4. Use Your B300K

Power On/Off



Power On

- 1. Long press the power button.
- 2. When the button lights up, the B300K is on standby.
- 3. The LED indicators show the battery level.

Power Off

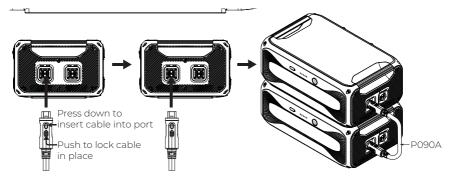
- 1. Long press the power button.
- 2. The button light and indicators turn off.

Note: Connected to a power station, the B300K automatically turns on when the combo charges with AC power or solar panels.

Connect to B300K and Power Station

Connecting to B300K Battery

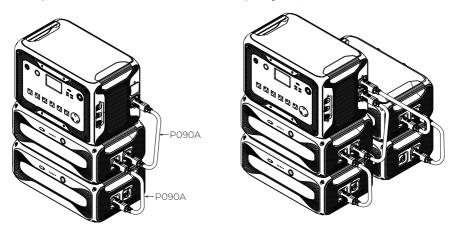
Use the P090A battery expansion cable to interconnect the B300K units.



*Be sure to LOCK the connection.

Connecting to AC300

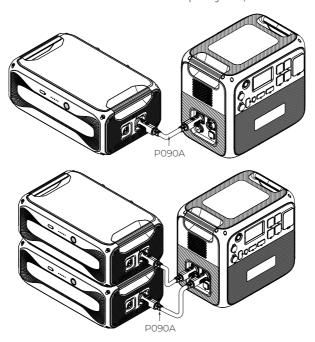
Connect up to 4 B300K units for a maximum capacity of 11,059.2Wh.



Note: The AC300 can work with B300K and B300 expansion batteries simultaneously using P090A battery expansion cables.

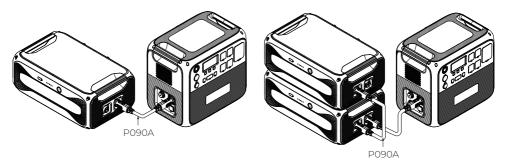
Connecting to AC200MAX

Connect up to 2 B300K units for a maximum capacity of 5,529.6Wh.



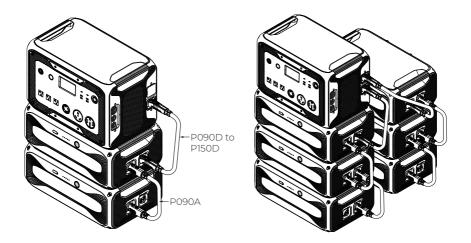
Connecting to AC200L

Connect up to 2 B300K units for a maximum capacity of 5,529.6Wh.



Connecting to AC500

Connect up to 6 B300K units for a maximum capacity of 16,588.8Wh.

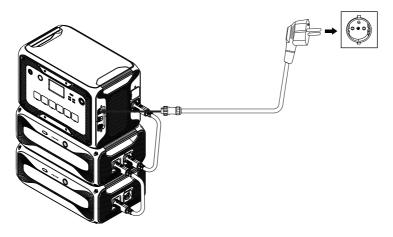


Note: The AC500 can work with B300K, B300S and B300 expansion batteries simultaneously. To connect them:

Connection	Cable Required	
AC500 to B300S	P150D battery expansion cable	
AC500 to B300K/B300	P090D to P150D battery expansion cable	
B300K/B300 to B300S	P090D to P150D battery expansion cable	
B300K to B300	P090A battery expansion cable	

Charge Up

Connect the B300K to a power station for charging. It charges from 5% to 80% in about 45 minutes when connected to AC300 or AC500.



Note: Recommended charging temperature: 15°C to 30°C (59°F to 86°F)

Control and Monitor

Connect the B300K to a power station, and check the battery level and upgrade it using the BLUETTI app. For more details, please refer to your power station's app user guide.

5. Indicators Status

Indicator	Status	Description	
	Steady green	Normal operation	
	Flashes 4 times per second	Malfunction	
Power Button	Flashes once every 1.5 seconds	Upgrading	
	Off	Shutdown	
	Flashes twice, pause for 4 seconds, and repeat	The battery expansion cable is not locked.	
LEDs	 Each lit indicator represents 20% SoC. All indicators remain steady when fully charged and go off when fully discharged. Flashing indicators show the charging progress. 		

6. Maintenance and Care

- When the SoC drops to 1% without any power input, power off the unit promptly to prevent overdischarge.
- Before storing, charge it to 60%-80% SoC and fully cycle every 6 months to maintain battery health.
- For long-term storage over 6 months, charge it to 40%-60% SoC and fully cycle every 3 months.
- Safe storage temperature: -20°C to 40°C (-4°F to 104°F). For storage over a month, aim for a range of -20°C to 25°C (-4°F to 77°F). Perform a cycle charge before reuse.
- · Avoid extended storage periods as it can impact the battery's performance and lifespan.
- Use a dry and soft towel to clean the battery's exterior.

7. Specifications

General				
Model	B300K			
Battery Capacity	2,764.8Wh (51.2V, 54Ah)			
Battery Type	LFP			
Net Weight	Approx. 29.5kg (65.04lbs)			
Dimensions (L × W × H)	525 × 327 × 209mm (20.67 × 12.87 × 8.23in)			
Charging Temperature	0°C to 40°C (32°F to 104°F)			
Discharging Temperature	-20°C to 40°C (-4°F to 104°F)			
Storage Temperature	Up to 1 month: -20°C to 40°C (-4°F to 104°F) Up to 6 months: -20°C to 25°C (-4°F to 77°F)			
Working Humidity	5% to 95%RH			
Charging Current	60A Max. (Current may decrease outside specified temperatures)			
Discharging Current	70A Max.			
2 × Expansion Port	58.4VDC Max., 90A Max.			
	DC Output			
USB-A	12W Max., 5V / 2.4A			

8. Troubleshooting

When the B300K malfunctions, the LEDs may flash or turn off in various combinations. For soft errors, restart the unit. For hardware issues, contact BLUETTI support for repair or replacement. See the table below for details.

Indicators S	tatus	Description					
Soft Errors							
※ ● ●	• •	Low voltage					
• # •	• •	High/low temperature					
* * •	• •	Pre-charge failure					
• • ‡	• •	Short circuit					
<u></u>	• •	Address allocation mix-up					
• ‡ ‡	• •	Charging/discharging overcurrent					
* * *	• •	Overdischarging protection					
Hardware Failures							
• • •	☼ •	NTC fault					
☆ • •	☆ •	Cell fault					
• ‡ •	☼ •	Voltage reference fault (3.3V)					
	☼ •	AFE fault					
• • ‡	☼ •	Current zero point error					
☆ • ☆	☼ •	Battery cell disconnect					
• ‡ ‡	☼ •	Charging MOS fault					
* * *	☼ •	Discharging MOS fault					
• • •	• 🌣	Cell voltage difference fault					
☆ • •	• \$	Current detection error					

Appx. 1 FAQ (Frequently Asked Questions)

- Q1: How to claim warranty?
- A: Please refer to the warranty card.
- Q2: How to upgrade the B300K?
- **A:** Connect the B300K to the power station and upgrade it via the BLUETTI app in Settings > Firmware Upgrade. Follow in-app instructions.
- Q3: Can it charge and discharge at the same time?
- A: Yes, the B300K supports pass-through charging.
- Q4: Why doesn't the B300K drain all its power?
- **A:** The B300K reserves some energy to avoid overdischarging and protect the battery's lifespan.
- Q5: Can I leave the battery uncharged after fully discharging?
- A: No, charge promptly after use to prevent damage. Keep the battery in the environment of at least 10°C (50°F) for at least 12 hours beforehand.