

# Balco Transfer Hub

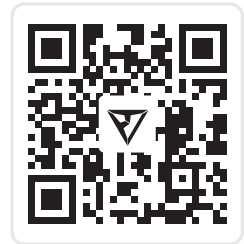
## Smart Grid-Tied Controller

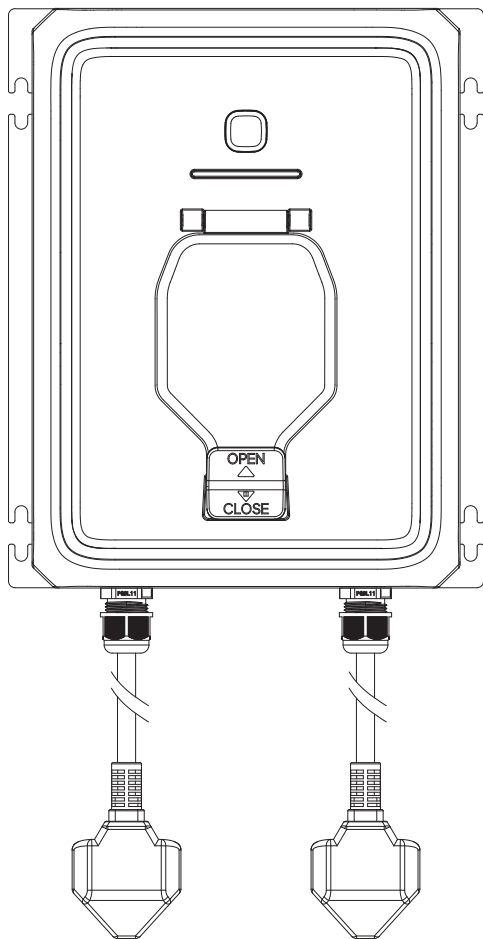
### User Manual v1.0

- Important Instructions

For optimal performance, update your unit to the latest firmware before first use.

- Read and understand this manual before use and keep it handy for future reference.





## Legal Information

Copyright © 2026 Shenzhen PowerOak Newener Co., Ltd. All rights reserved.

No reproduction or transmission of any part of this document is permitted without the prior written consent of Shenzhen PowerOak Newener Co., Ltd.

### Notice

BLUETTI's products and services are subject to the terms and conditions agreed upon during purchase. Some aspects described in this manual may not be available under your purchase contract. Unless otherwise specified in the contract, BLUETTI makes no express or implied representations or warranties regarding the contents of this manual. BLUETTI should assume no liability for the failures, damages, or injuries resulting from force majeure, repair attempts by unqualified personnel, or improper installation and operation.

The contents of this manual are subject to change without notice. Please obtain the latest version from BLUETTI official website.

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

### Shenzhen PowerOak Newener Co., Ltd.

F19, BLD No.1, Kaidaer, Tongsha RD No.168, Xili street, Nanshan, Shenzhen, China

Website: <https://www.bluettipower.com/>

# Contents

1	Safety Information	05
1.1	Important Guidelines	05
1.2	Important Safety Instructions	05
1.3	Operation Guidelines	06
1.4	Label Description	06
2	Packing List	07
3	Get to Know Your Balco Transfer Hub	08
3.1	Dimensions	09
3.2	Overview	10
3.3	Status Indicator	11
4	Install Your Balco Transfer Hub	11
4.1	Installation Requirements	11
4.2	Wall Mounting	12
4.3	Connection	13
5	Applications	15
6	BLUETTI App	15
6.1	Binding	15
6.2	Energy Insights	16
6.3	Working Modes	16
6.4	AI Mode	19
7	Specifications	20
8	Troubleshooting	21
	FAQs (Frequently Asked Questions)	22
	Appendix	23

# 1. Safety Information

Before using this product, please read the manual carefully and follow all safety instructions. Pay close attention to the **Warnings, Attentions, Cautions, Notes**, and other safety labels in the manual and on the product itself. If you have any questions or encounter a situation not addressed in this manual, please contact us. Improper use or unauthorized operation may result in damage or injury, which is not covered by the warranty.

## 1.1 Important Guidelines

**For optimal performance and safety, please follow these essential guidelines:**

- Read all instructions and warnings for the Balco Transfer Hub and any connected BLUETTI or compatible third-party portable power stations.
- Always operate and store the product in the conditions specified in this manual.
- Ensure the product is used in compliance with all relevant standards and regulations.

**BLUETTI is not liable for the following situations or any resulting consequences:**

- Damage caused by natural disasters, including earthquakes, fires, floods, storms, or mudslides.
- Damage that occurs during customer-handled transportation.
- Issues caused by improper storage or use outside the conditions specified in this manual.
- Damage caused by customer negligence, misuse, or intentional harm.
- Damage caused by third-party actions, including improper handling, usage, or installation not in line with this manual.
- Damage or issues caused by unauthorized adjustments, modifications, or removal of product labels.
- Accidents or safety concerns arising from using the product in critical applications, such as nuclear, aviation, or medical fields, where high reliability is essential for personal safety or operation.

## 1.2 Important Safety Instructions

**Save these instructions – This manual contains important safety instructions.**





- **CAUTION** – Risk of electric shock. Connect only to properly grounded outlets.
- **WARNING** – Suitable for mounting on concrete or other non-combustible surfaces only.
- **WARNING** – For continued protection against risk of fire, replace only with same type and rating of fuse.
- **WARNING** – Disconnect all sources of supply before servicing.

- Do not clean the product with water.
- Keep the product away from heat sources and high temperatures.
- Never use the product near open flames, explosive gases, or in environments with smoke, vapors, or other hazardous conditions.
- Do not store or use the product in environments with salt fog or high humidity.
- Do not insert fingers or foreign objects into the product's ports.
- Do not contact with any metal tools or objects while the product is in operation.
- Always keep the product completely dry during use.
- Store and use the product in a cool, dry place with good ventilation.
- Do not open or modify the product yourself. Only qualified personnel should perform repairs or replace parts using BLUETTI-approved components and cables to prevent the risk of fire, electric shock, or other personal injury.
- Stop using the product immediately in case of malfunction.
- Regularly inspect the product and its accessories for damage or deterioration. If the product's shell is cracked, do not use it and contact BLUETTI support or your local BLUETTI dealers.
- Keep the product out of reach of children and pets.

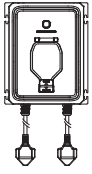
### 1.3 Operation Guidelines

- Securely tighten all screws.
- Do not confuse the AC input with the grid-tied output.
- Connect the cables as described in [Section 4.3](#).

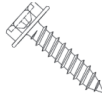
### 1.4 Label Description

Label	Name	Description
	Discharge delay	There is still residual voltage after the equipment is powered off. Wait 30 minutes for complete discharge before performing maintenance.
	Electrical shock warning	High voltage is present during operation. Only qualified and authorized personnel should handle this equipment.
	Warning	Hazards may occur during operation. Take necessary precautions.
	Read manual	Read the manual carefully before operating the equipment.

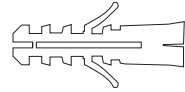
## 2. Packing List



Balco Transfer Hub  
Smart Grid-Tied Controller



Self-Tapping Screw  
×4



Expansion Bolt  
×4



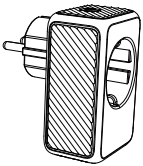
Quick Start Guide



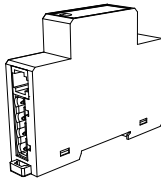
Warranty Card

## Other Accessories

You can purchase optional accessories below at <https://www.bluettipower.com>



S1 Smart Plug

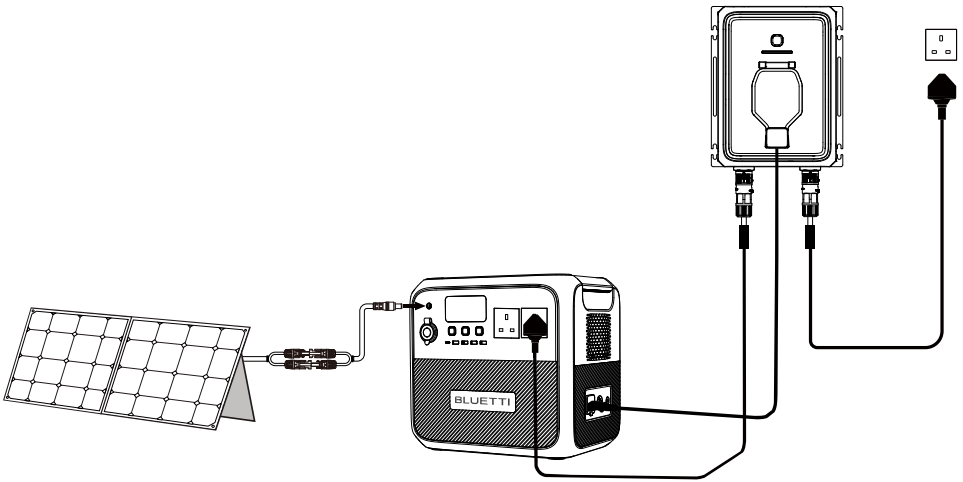


S Meter Smart Meter

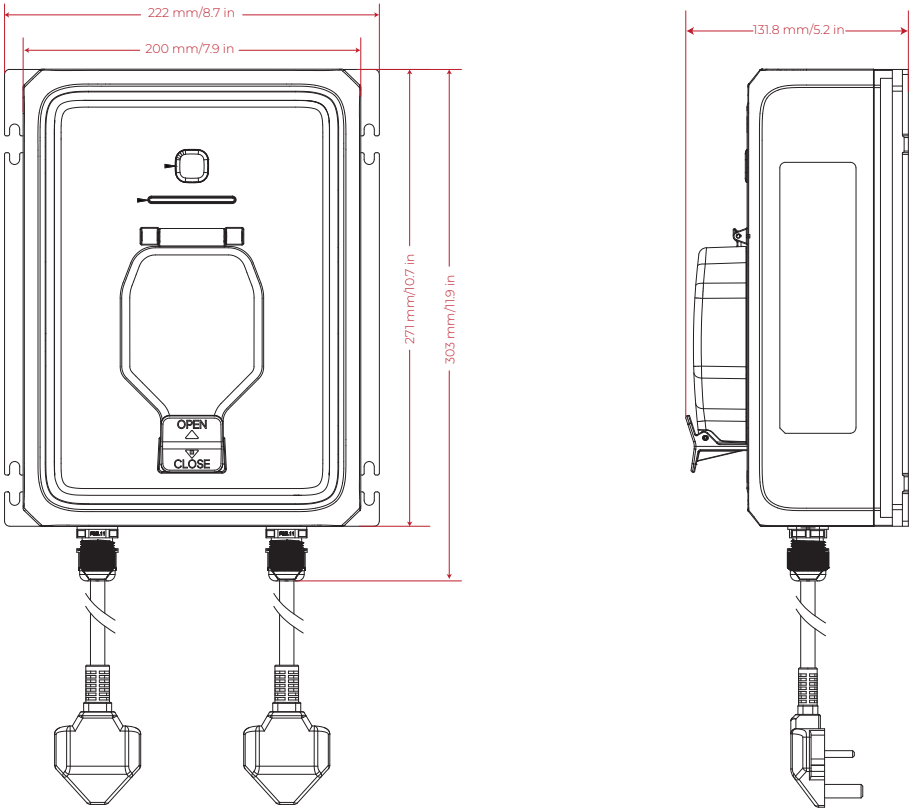
### 3. Get to Know Your Balco Transfer Hub

The Balco Transfer Hub is a smart grid-tied controller designed to connect portable power stations to a home power system. It is compatible with BLUETTI models such as AC180, Elite 200 V2, and Elite 100 V2, as well as other portable power stations with an AC output of 1,000 W or higher.

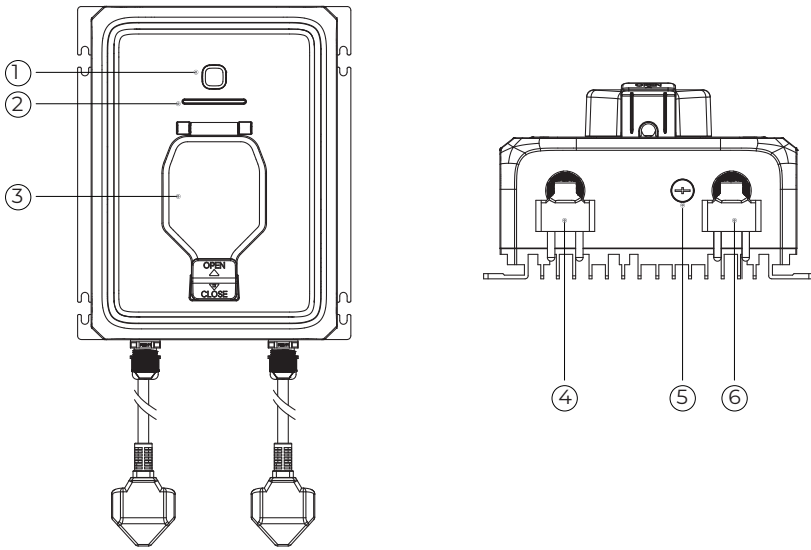
The unit feeds up to 800 W of power into the grid. With bypass charging on, it can charge the portable power station using up to 2,300 W of grid bypass power.



### 3.1 Dimensions



## 3.2 Overview



- ① Bypass Charging Switch\*
- ② Status Indicator
- ③ Charging Socket\*\*

- ④ AC Input\*\*
- ⑤ 15 A Replaceable Fuse
- ⑥ Grid-Tied Output\*\*

\*Press and hold for 3 seconds to turn bypass charging on or off. The indicator lights up when enabled and turns off when disabled.

\*\*Decisive voltage classifications are DVC-C level.

### 3.3 Status Indicator

Indicator	Status
Steady white	Powered on, not connected to a portable power station
Breathing white	Connected to a portable power station
Steady green	Feeding power to the grid (connected to a third-party portable power station)
Breathing blue	Bypass charging
Steady blue	Feeding power to the grid (connected to a BLUETTI portable power station)
Scrolling blue	Firmware update
Steady red	System fault
Steady orange	Warning

**Notes:**

- Output depends on the number of green bars displayed:  
1 bar: 1–200 W      2 bars: 200–400 W  
3 bars: 400–750 W    4 bars: 750–800 W
- The indicator shows the battery level of the connected portable power station using four blue bars, each representing 25% SoC. While feeding power to the grid, the first bar flashes when the battery drops below 5% SoC.
- Check error codes in the BLUETTI app.

## 4. Install Your Balco Transfer Hub

**Attention:**

- Insufficient heat dissipation may reduce performance or trigger overheat protection.
- Power OFF the portable power station and disconnect all cables before installation.
- Do not use the unit if any cable is damaged. Contact qualified personnel for replacement.
- If a fault occurs during installation, contact BLUETTI Support for assistance.

### 4.1 Installation Requirements

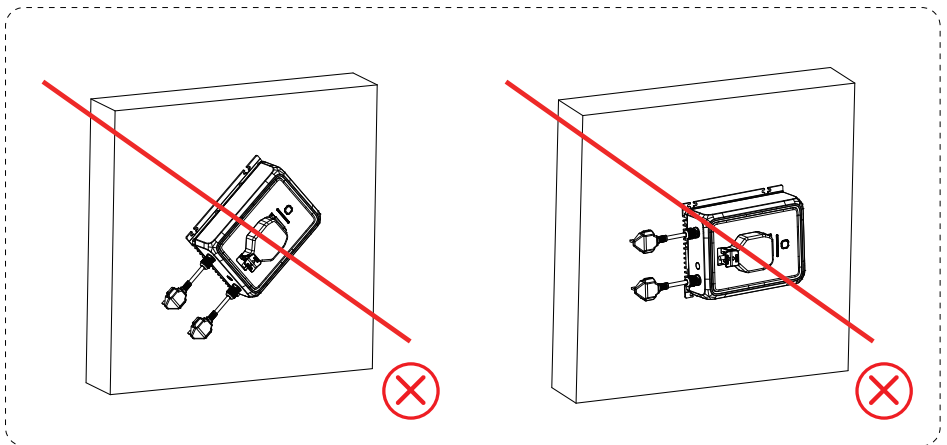
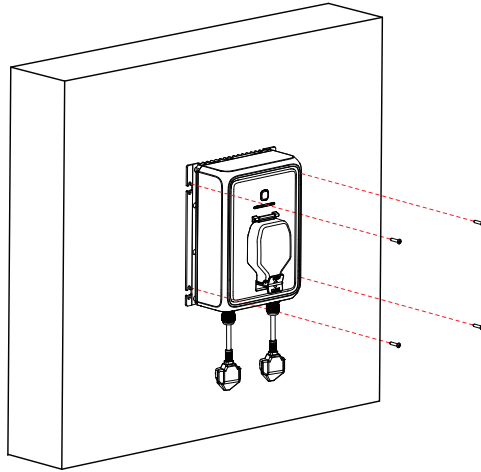
- The unit is IP54 rated. Place it in a well-ventilated area and keep hands away from the bottom shell during operation.
- Operating / Storage Temperature: -20°C to 45°C (-4°F to 113°F)
- Operating Humidity: 10% to 90%
- Working Altitude: < 2,000 m (6,562 ft)

## 4.2 Wall Mounting

**Step 1:** Determine a suitable mounting position on the wall and drill four pilot holes.

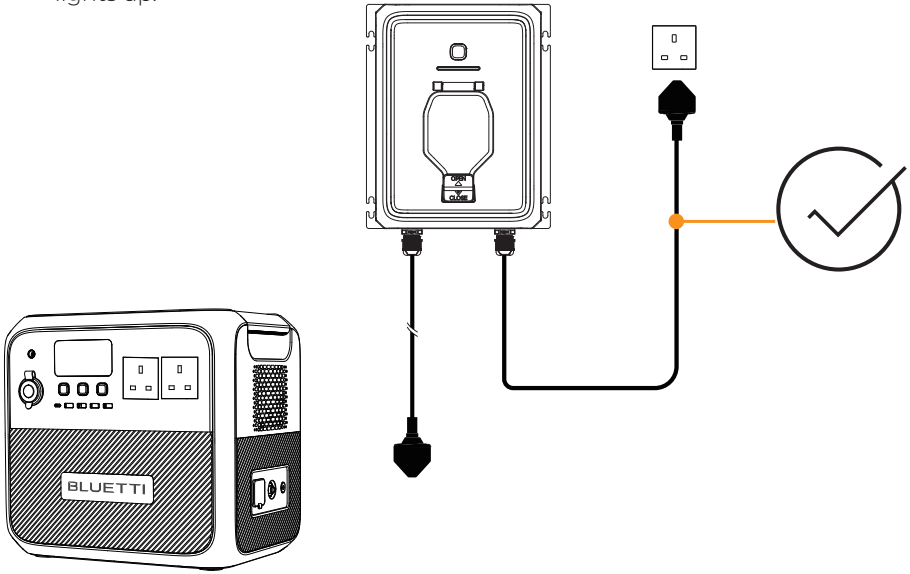
**Step 2:** Align the unit with the four drilled holes.

**Step 3:** Secure the unit with four self-tapping screws.

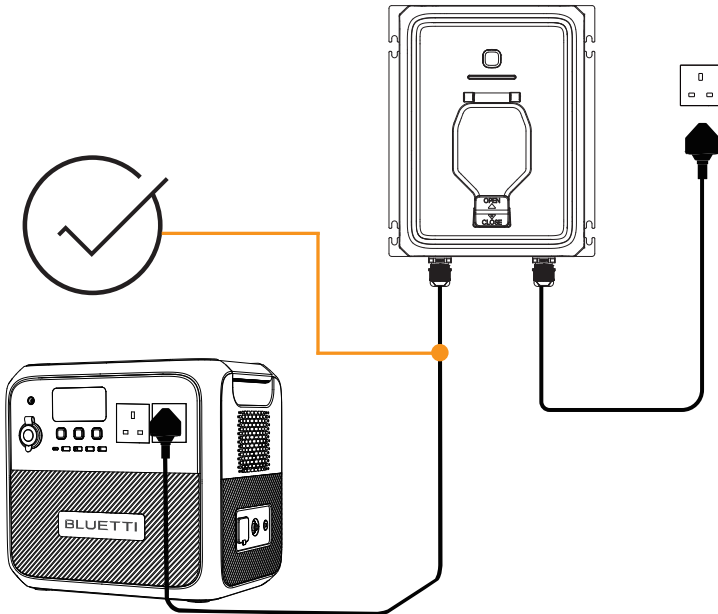


### 4.3 Connection

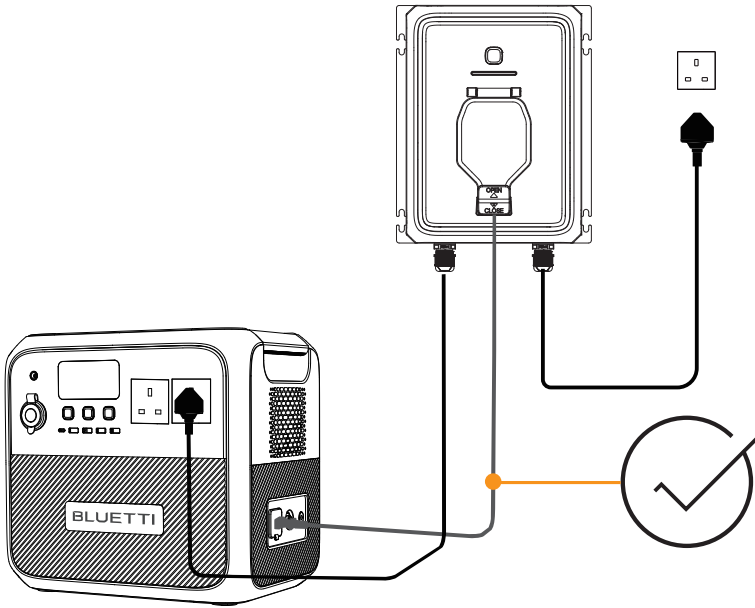
**Step 1:** Plug the cable labeled **Grid Power Port** into a wall outlet until the indicator lights up.



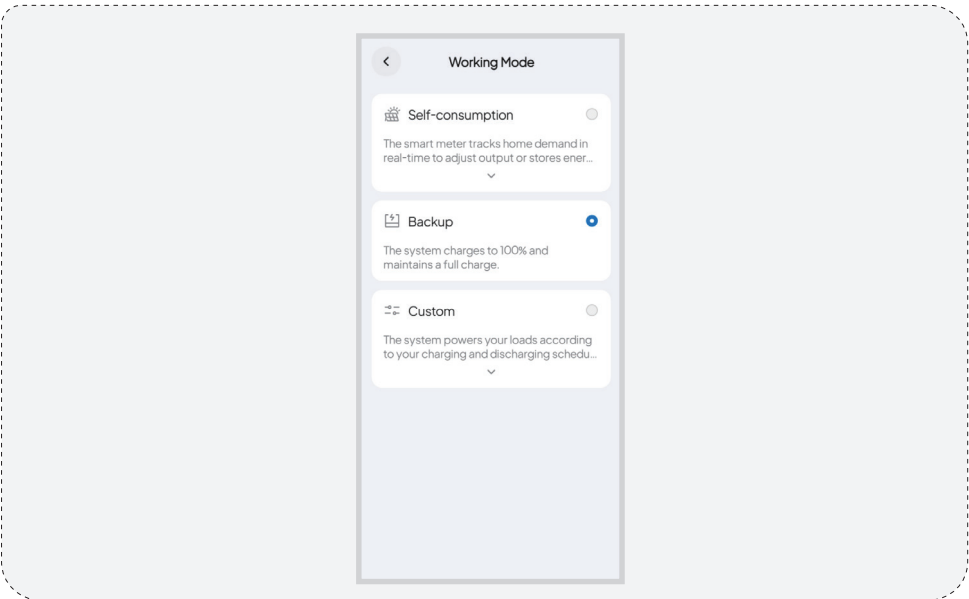
**Step 2:** Connect the cable labeled **Power Station Port** to the portable power station's AC outlet.



**Step 3:** Connect the portable power station's AC input to the Balco Transfer Hub's Charging Socket using the AC charging cable.



**Step 4:** Set a **Working Mode** in the BLUETTI app. Check [Section 6.3](#) for details.



## 5. Applications

When connected to a BLUETTI portable power station, the Balco Transfer Hub supports the following features.

Feature	Description
① AI-EMS Strategy	Optimizes charging and discharging based on solar forecasts, time-of-use pricing, weather, and household energy usage to reduce electricity costs.
② AC Charging	Charges the portable power station via AC with up to 2,300 W.
③ AC Output Priority	When the portable power station powers loads while feeding the grid, the Balco Transfer Hub prioritizes the connected loads and reduces or pauses grid output if total output exceeds the station's limit.
④ Smart App Control	After pairing in the BLUETTI app, remotely turn the portable power station on or off, check the battery level (SoC), or set SoC limits.

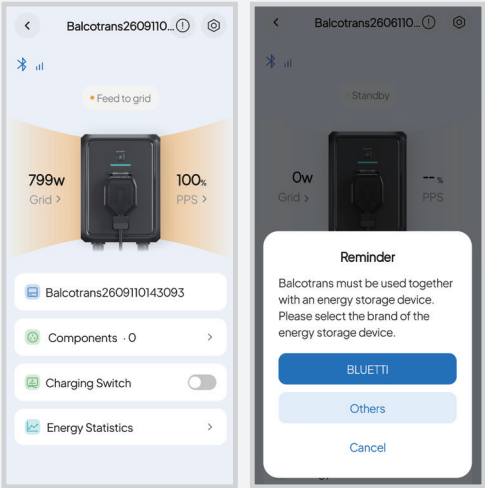
**Note:** When a BLUETTI portable power station is connected to the grid, check its display for grid-tied status.

## 6. BLUETTI App

### 6.1 Binding

Bind your Balco Transfer Hub to the BLUETTI app first and then pair with your portable power station.

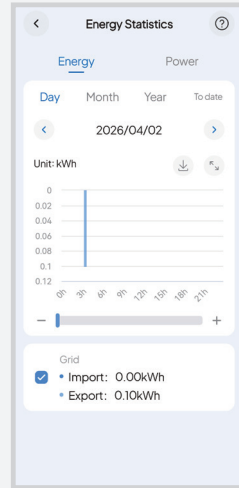
Make sure your phone is on a stable Wi-Fi connection for control and accurate monitoring.



## 6.2 Energy Insights

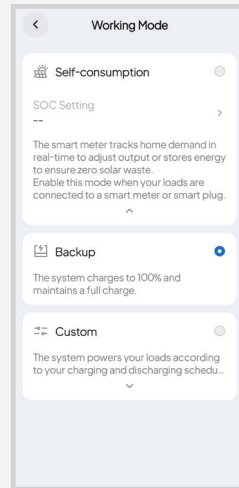
**Energy Statistics:** Check cumulative input and output energy by day, month, or year.

**Daily Power Profile:** View 24-hour input and output power.



## 6.3 Working Modes

Select a **Working Mode** to manage your system.



### 6.3.1 Self-consumption

The system uses real-time data from the smart meter to match your home's energy demand. Excess solar energy is stored for later use or exported to the grid to maximize solar utilization.

- **SoC Setting:** Set the minimum State of Charge (SoC). The system stops discharging at this level to reserve backup power for outages.

**Note:** Use this mode when your loads are connected to a smart meter or smart plug.

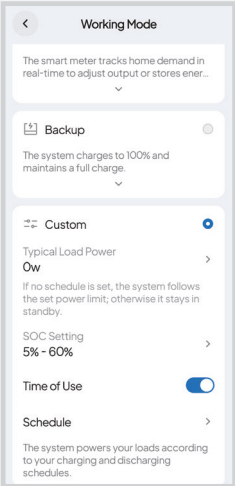
### 6.3.2 Backup

The system charges to 100% and maintains a full charge to ensure backup power during grid outages or instability.

**Note:** If **Extreme Weather Alert** is enabled, the system automatically switches to Backup mode when an alert is triggered.

### 6.3.3 Custom

Create a schedule for charging and discharging based on electricity rates, usage habits, or solar generation.



The screenshot shows the 'Working Mode' settings screen. It lists four modes: 'Backup' (described as charging to 100% and maintaining a full charge), 'Custom' (described as following a set power limit or standby if no schedule is set), 'Time of Use' (with a toggle switch), and 'Schedule' (described as powering loads according to charging and discharging schedules). The 'Custom' mode is currently selected.

- **Typical Load Power**

When **Time of Use** is off, the system discharges at the set power limit. If set to 0 W, it remains idle.

When enabled, the system discharges based on the combined output of typical load power and scheduled discharge power.

- **SoC Setting\***

Set the maximum and minimum battery levels. Charging stops at the maximum SoC to prevent overcharging, and discharging stops at the minimum SoC to reserve backup power.

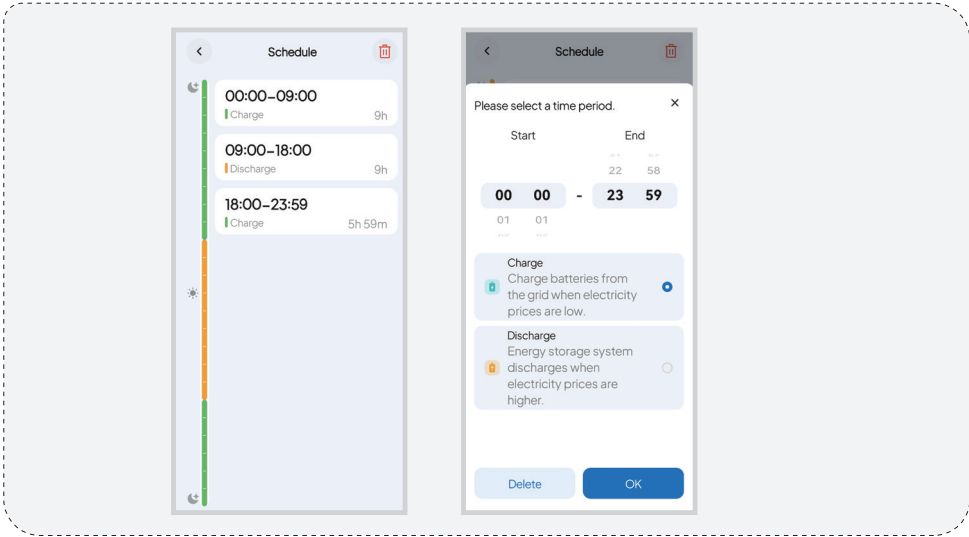
- **Time of Use**

Enable to run the system according to your schedule.

- **Schedule**

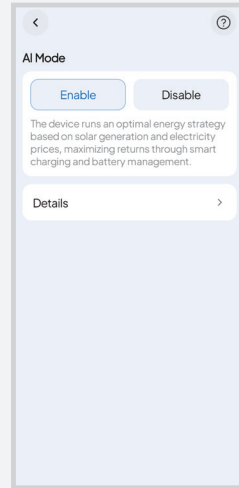
Set time periods for charging and discharging to reduce electricity costs and optimize energy use.

\*Only available on BLUETTI models.



## 6.4 AI Mode

In this mode, the system automatically optimizes energy use by forecasting solar generation, household demand, and electricity prices. It adjusts charging and discharging in real time to improve efficiency, reduce costs, and ensure reliable power—no manual setup required.



### **Notes:**

- To get started, enable location access, set your device location, and connect a smart meter or smart plug.
- Only available on BLUETTI models.

## 7. Specifications

Model	Balco Transfer Hub
Dimensions (L × W × H)	271 × 222 × 131.8 mm/10.67 × 8.74 × 5.19 in
Weight	4.0 kg/8.82 lbs
Operating Temperature	-20°C to 45°C/-4°F to 113°F
Operating Humidity	10% to 90%
Storage Temperature	-20°C to 45°C/-4°F to 113°F
Noise Level	50 dB Max.
Operating Altitude	< 2,000 m/6,562 ft
Protection Rating	IP54
AC Input	850 W Max., 230 V/3.7 A
Grid-Tied Output	800 W Max., 230 V/3.5 A
Charging Socket	2,300 W Max., 230 V/10 A

## 8. Troubleshooting

Error Code	Description	Solutions
E001	Inverter overload	<ul style="list-style-type: none"> <li>• Check grid power or device power usage.</li> <li>• Reduce load if too high.</li> </ul>
E002	Overtemperature	<ul style="list-style-type: none"> <li>• Wait 10 minutes for the unit to cool and restart.</li> </ul>
E003	AC output/bypass short circuit	<ul style="list-style-type: none"> <li>• Check the unit's grid-tied output port and charging socket for foreign objects or damage.</li> <li>• Inspect cables for damage.</li> </ul>
E113	Grid overvoltage	<ul style="list-style-type: none"> <li>• Verify the home grid is within the unit's operating range.</li> <li>• Contact utility company if necessary.</li> </ul>
E114	Grid undervoltage	
E115	Grid overfrequency	<ul style="list-style-type: none"> <li>• Verify the home grid frequency.</li> <li>• Contact utility company if necessary.</li> </ul>
E116	Grid underfrequency	
E122	Input overvoltage	<ul style="list-style-type: none"> <li>• Check the portable power station's AC outlet and the unit's AC input port for foreign objects or damage.</li> <li>• Inspect cables for damage.</li> </ul>
E123	Input undervoltage	
E124	Input overfrequency	
E125	Input underfrequency	
Others	/	<ul style="list-style-type: none"> <li>• Please contact BLUETTI support for assistance.</li> </ul>

## FAQs (Frequently Asked Questions)

**Q1: Can I check the status of a connected BLUETTI potable power station on the Balco Transfer Hub?**

**A:** Yes. The unit's indicator shows the device status (see [Section 3.3](#)). After pairing in the BLUETTI app, you can view the battery level, charge/discharge status, and other details.

**Q2: Where can I install the Balco Transfer Hub?**

**A:** The Balco Transfer Hub is rated IP54, providing protection against limited dust ingress and water splashes from any direction. You can install it outdoors in sheltered locations, such as balconies or semi-covered areas.

Do not expose the unit to heavy rain, water jets, or standing water.

**Q3: What safety features does the Balco Transfer Hub have?**

**A:** The unit protects against overcurrent, short circuits, overvoltage, and undervoltage and includes a 15 A fuse that must be replaced by a qualified professional.

**Q4: How should I maintain the Balco Transfer Hub?**

**A:** To keep the unit in good condition:

- a. Check and tighten all screws regularly.
- b. Keep the unit clean, dry, and free of dust.
- c. Ensure proper ventilation to avoid overheating.

# Appendix

## Update Firmware via BLUETTI App

Keeping firmware updated is IMPORTANT for optimal performance. For detailed instructions, refer to the app user manual in the app. This manual uses the Elite 200 V2 upgrade as an example.

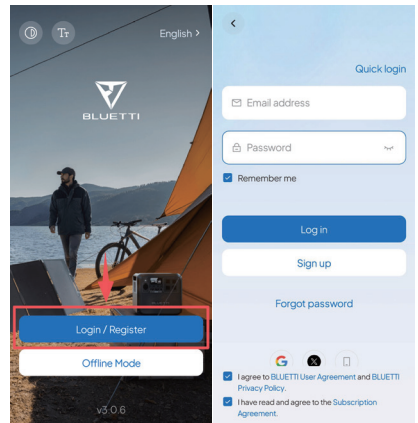
### 1. Download the BLUETTI app

Scan the QR code or search for “BLUETTI” in the App Store or Google Play to download the app.



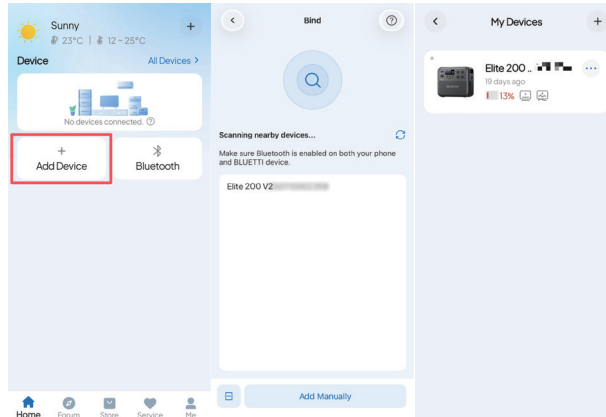
### 2. Log in or sign up

Log in with a BLUETTI account. If there is no account, create one by following the on-screen instructions.



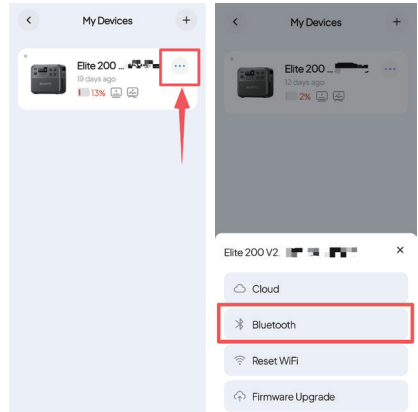
### 3. Bind the unit

- Tap Add Device directly or access All Devices > Add Device to start the process.
- Select the unit from the available device list, or choose Add Manually and enter the unit's serial number (SN).
- Alternatively, tap Scan on the Home page or in Add Device page to bind via QR code.



#### 4. Connect via Bluetooth

On the My Devices page, tap the unit and select **Bluetooth** as the connection method.

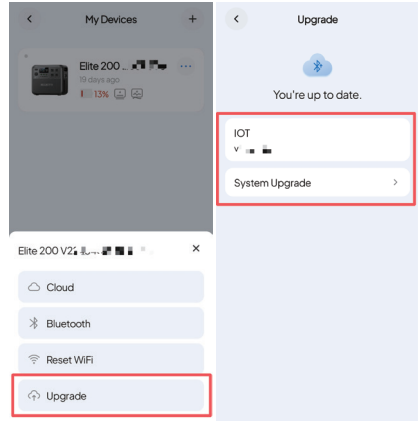


#### 5. Check for Firmware Updates

Tap **Upgrade** to access the Upgrade page. The app will check for the latest firmware version available for the unit.

#### 6. Download and Install the Update

If a new firmware update is available, tap **Upgrade** and follow the on-screen instructions.



#### Notes:

- Ensure the unit remains powered on and connected during the update.
- Keep your phone and the unit close together (recommended range: 5 m/16.4 ft).
- Do not exit app until done.

# Need help? We're here for you!

Customer Service (UK)

☎ +44 8000472906 (Mon–Fri: 08:00–12:00, 13:00–17:00)

✉ [sale-uk@bluettipower.com](mailto:sale-uk@bluettipower.com)



Community

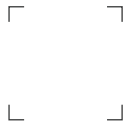


**POWEROAK ENERGY UK CO., LTD**

Unit 2, North Gate, Bolsover Business Park, Woodhouse Lane,  
Chesterfield, England, S44 6BD



**BLUETTI**



## **Certificate**

Inspector: \_\_\_\_\_

QC: \_\_\_\_\_

ALWAYS SHARE EXCELLENCE