

EP2000

Energy Storage System

APP User Manual

V1.0



BLUETTI

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

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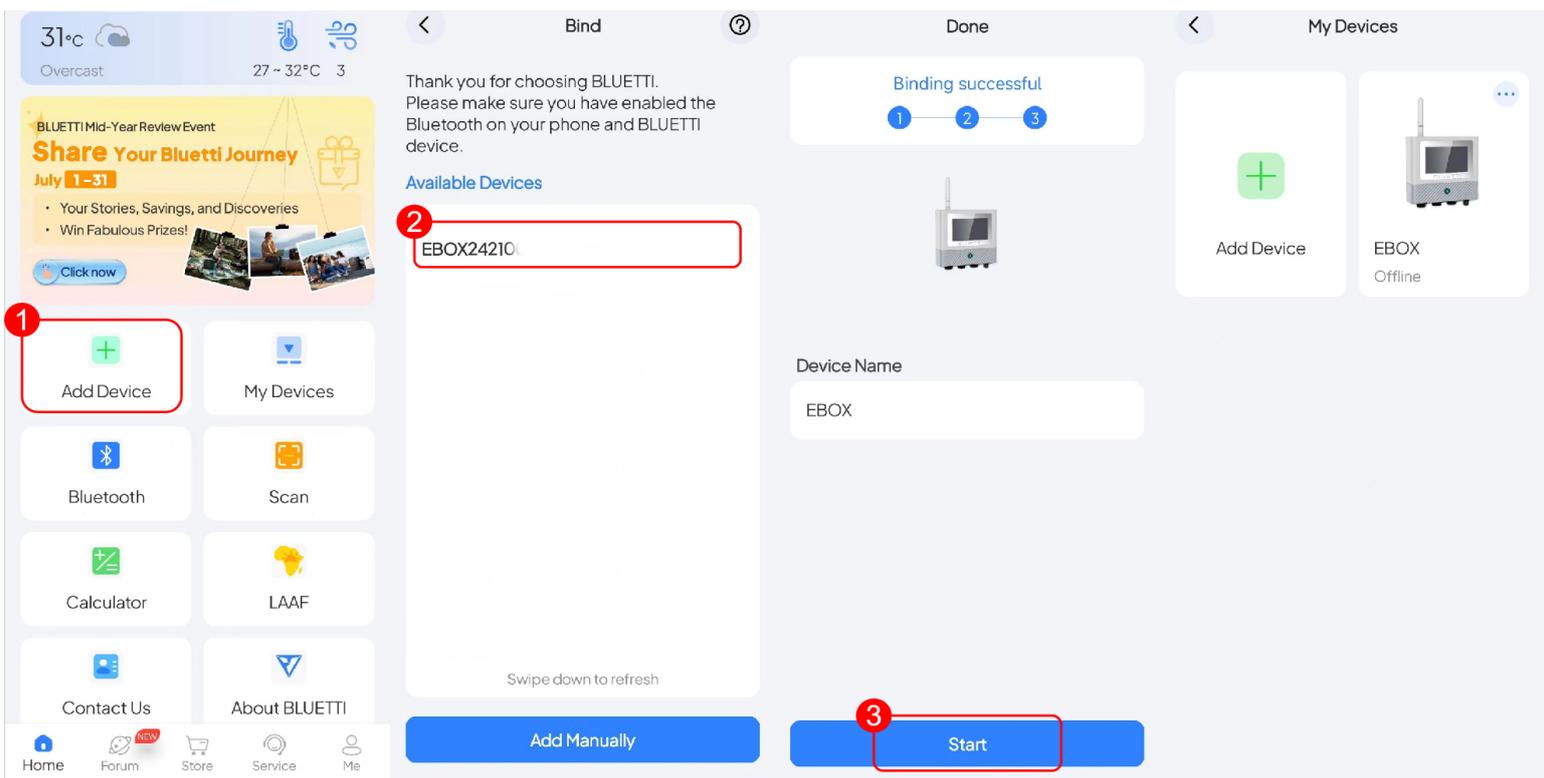
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1. Binding

1.1. Bluetooth

1. Tap **Add Device** on the Home page.
2. On the **Bind** page, select your device from the **Available Devices** list, and tap **Start** to complete the binding.
3. You can view the bound devices on the **My Devices** page.

Note: Make sure you've enabled Bluetooth and location service (e.g. GPS) on your phone. If you can't find your device, get closer and **Swipe down to refresh** the list (recommended range: 5m).

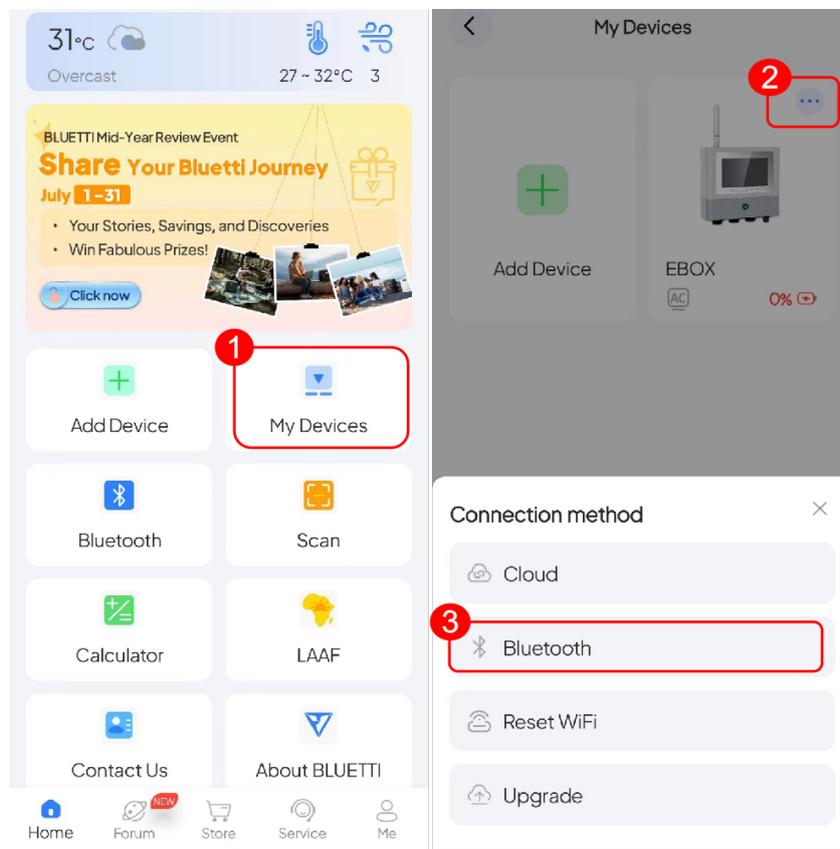


2. Connection

2.1. Connect to the device

Note: Make sure your device is powered on with Bluetooth enabled, and you've enabled Bluetooth and location service (e.g. GPS) on your phone. For a stable connection, keep your phone and device close together (recommended range: 5m). If you can't find your device, get closer and **Swipe down to refresh** the list.

1. Tap **My Devices** on the Home page.
2. Tap **⋮** in the upper right corner of the device you want to connect.
3. Tap **Bluetooth** to connect.
4. You'll be directed to the operation status page upon successful connection.



2.2. Cloud Connection

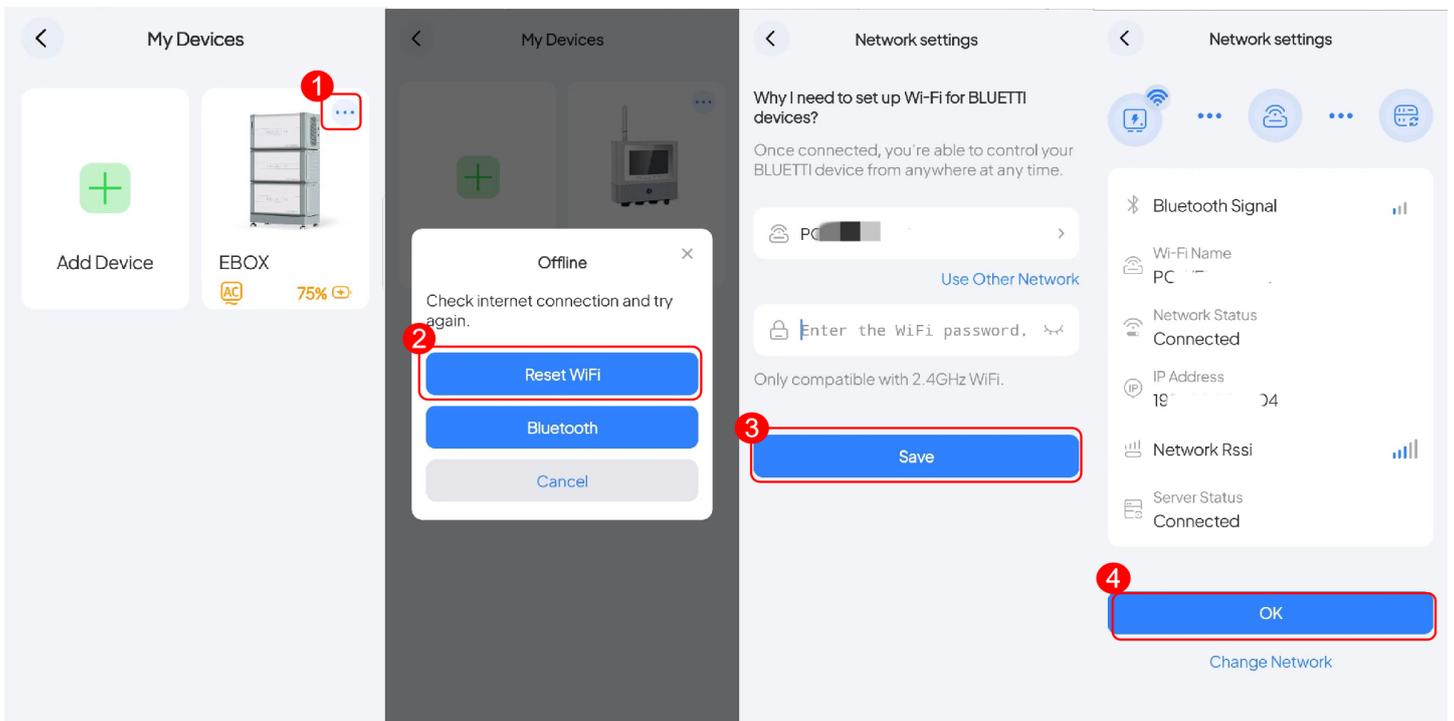
To get started, you need to configure the network first.

Note:

- Place your device within the range of an available WiFi network. Also, double-check that your mobile device has a strong and stable network signal.
- The BLUETTI products support **2.4GHz** WiFi only.

If you need to change to another WiFi network, please follow the steps below:

1. Go to the **My Devices** page and tap **⋮** in the upper right corner of the device you want to connect.
2. Tap **Reconfigure WiFi**.
3. Fill in the related network information and **SAVE** it.

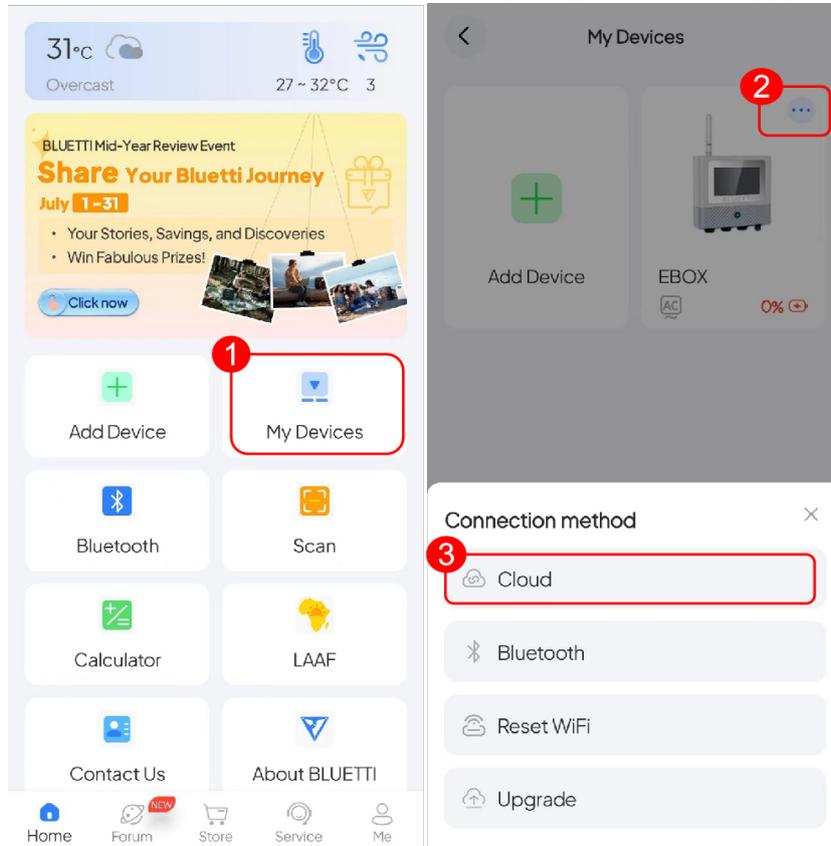


2.3. Connect to the device

Once the app is connected to the device via WiFi, you can manage your device from anywhere at any time, as long as your mobile phone has internet access and your device maintains a stable WiFi connection.

1. Go to the **My Devices** page, and tap  in the upper right corner of the device you want to connect.
2. Tap **Cloud** to connect.
3. The app will jump to the operation status page when the connection is successful.

Note: If you've set the default connection mode as Cloud, you can also establish a WiFi connection by directly tapping on the device image.

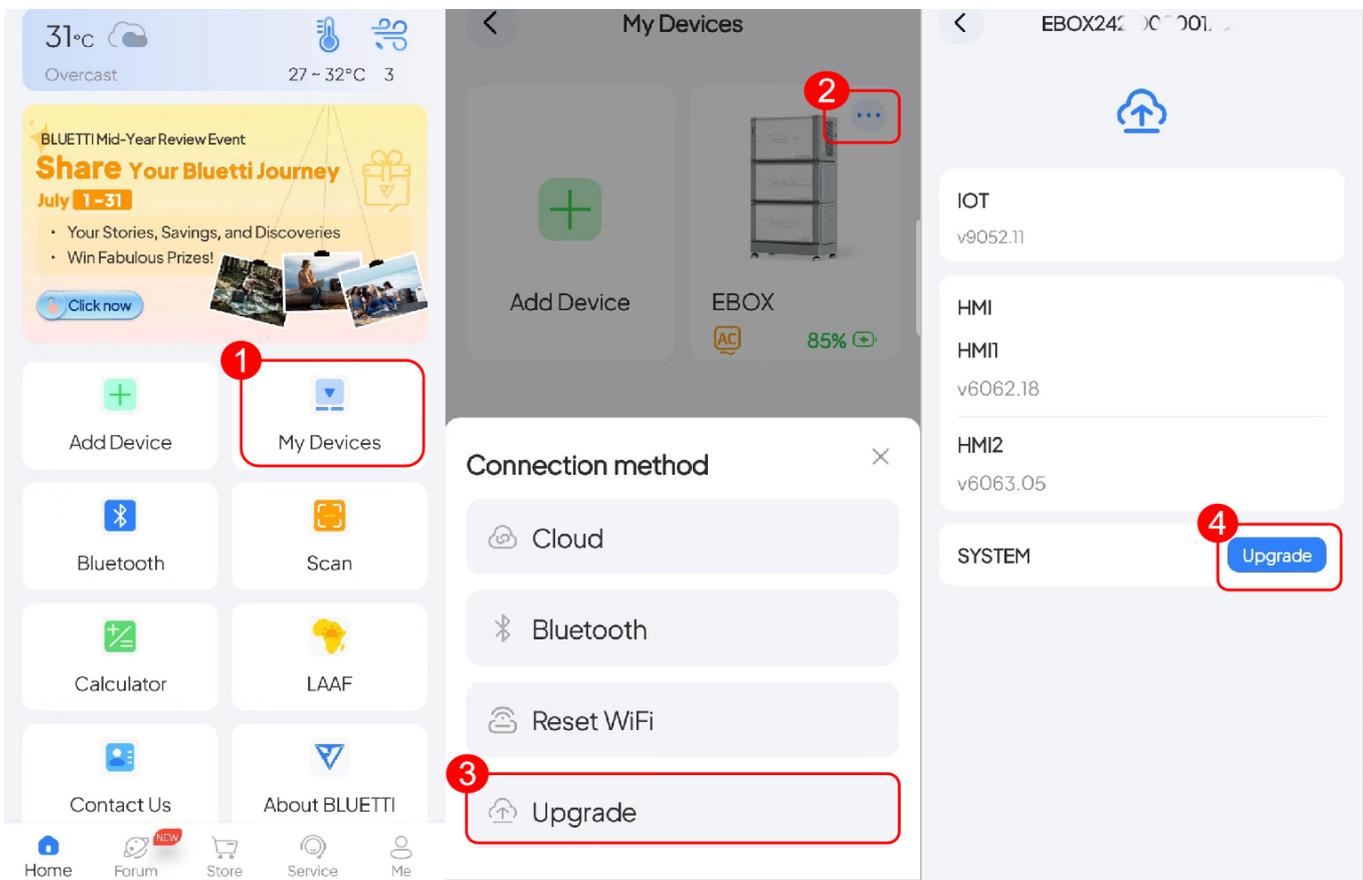


2.4. Firmware Upgrade

Note:

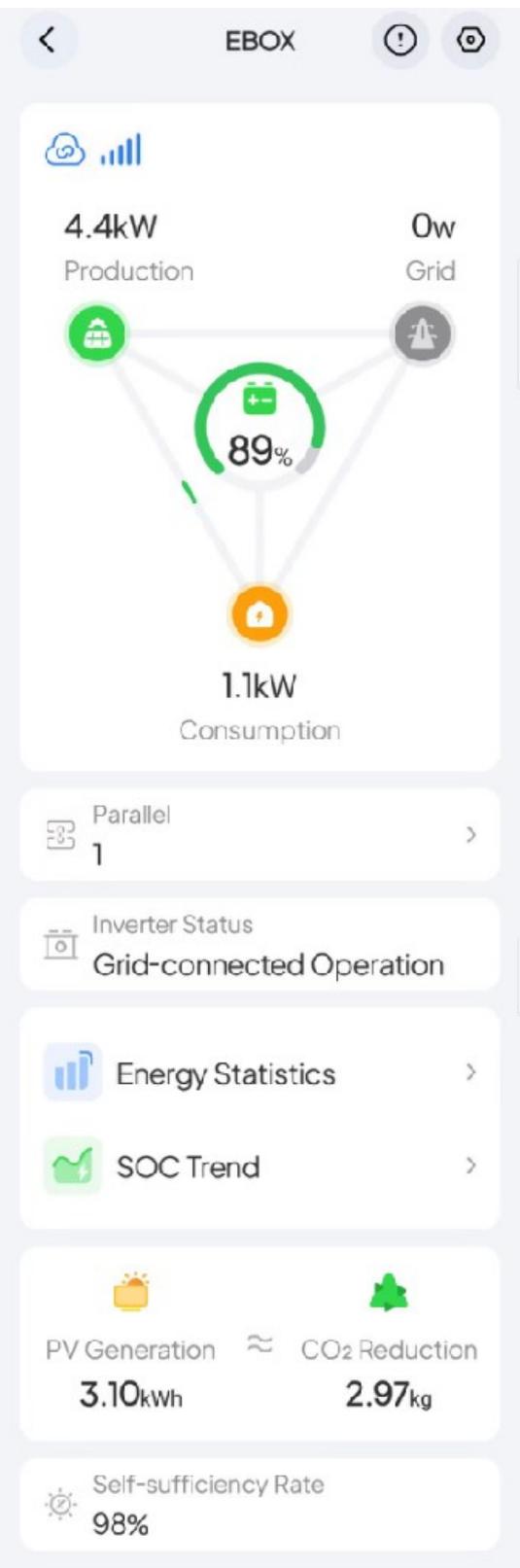
- Only available when you connect to the EP2000 ESS via Bluetooth.
- For a stable connection, keep your phone and EP2000 ESS close together (recommended range: 5m).
- During the upgrade, you cannot perform charging, discharging, or any other operations.

1. Tap **My Devices** on the app's **Home** page.
2. Tap **⋮** in the upper right corner of the device you want to upgrade on the **My Devices** page.
3. Tap **Upgrade**.
4. The App will jump to the **Firmware Upgrade** page.
5. Select the upgrade option.



3. Real-time Monitoring

3.1. Operation Status



①

Tap to check the current alarm(s) and alarm history.

②

Tap to check and change system settings, like System Switch, Working Modes, Device Sharing, Advanced Settings, etc.

③ /

Bluetooth / WiFi connection successful.

④ Energy Flow Status

Please refer to **Energy Flow Status** for details.

⑤ Energy Statistics

Tap to view the energy data by day, month, year, or up to the current date.

⑦ PV Generation & CO₂ Reduction

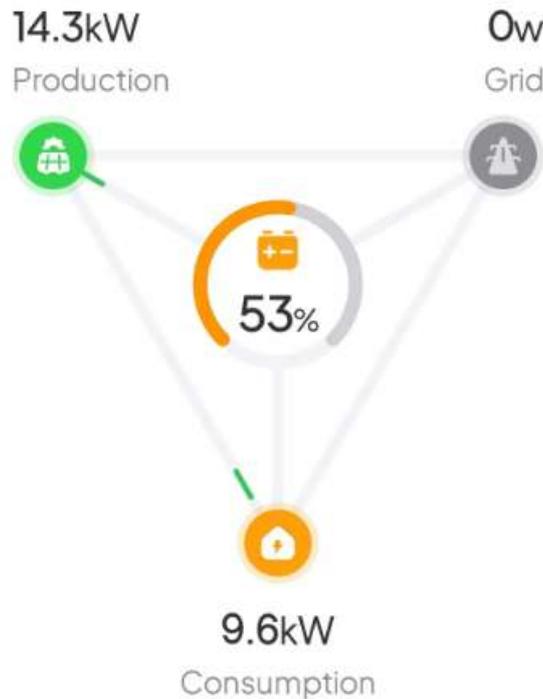
Check out the total solar energy generated and carbon emissions saved by the EP2000 ESS over time.

⑧ Self-sufficiency Rate

A measurement that assesses the EP2000 ESS's ability to meet energy needs without relying on the grid.

3.2. Energy Flow Status

The animation gives you a simple way to understand how energy is flowing.



53% SoC (State of Charge). It indicates the remaining battery level.

 PV generation. It shows how much power the EP2000 ESS is drawing from your rooftop solar or solar panel(s). Tap to view more details.

 Grid charging or feeding. It shows how much power the EP2000 ESS is drawing from or feeding back into the grid. Tap to view more details.

 Load consumption. It shows how much power is supplying to your household appliance. Tap to view more details.

3.3. Energy Statistics

It allows you to view the PV Generation, Grid Consumption, Feed to Grid, and Load Consumption by day, month, year, or up to now.

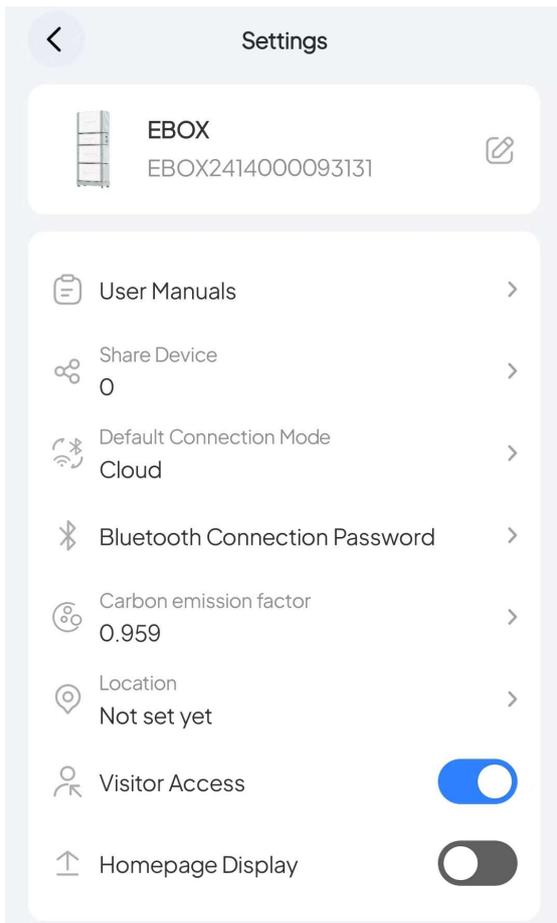


1. Tap to view data by Day, Month, Year, and To date.
2. Tap  or  to go back or forth between time periods. If you want to view  data for a specific time, click on the calendar icon and select your desired date.
3. Tap  to zoom in on the chart to view it full screen.
4. Tap on the chart to view detailed data for a specific time.
5. Swipe left or right on the chart to view the data for a specific timestamp.
6. Tap  to download data.

4. Device Management

4.1. Basic Settings

After connecting the device, on the operation status page, tap  to access the **Setting** page.

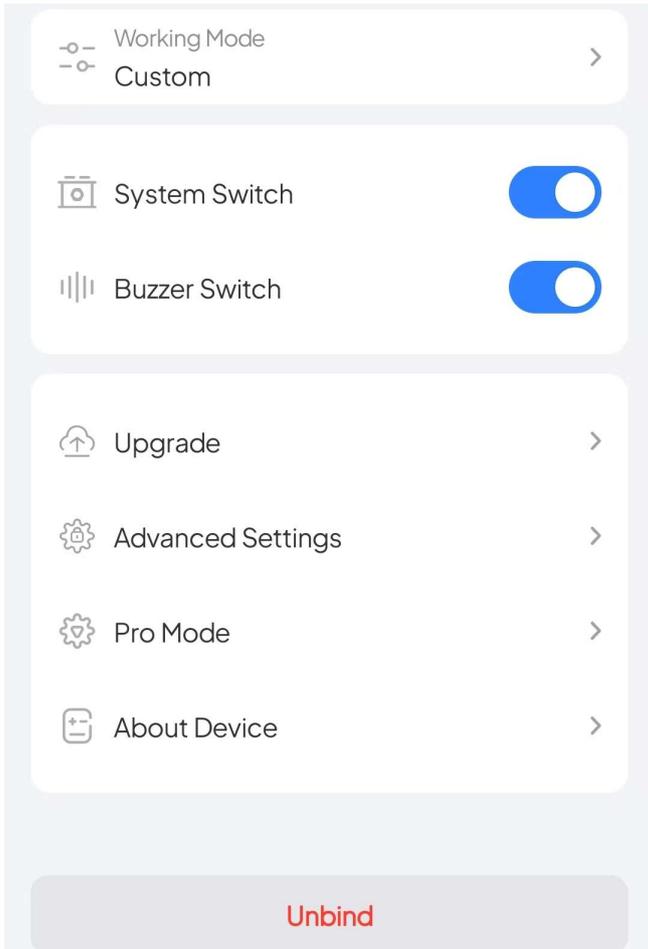


- **Device Name:** Tap  to modify.
- **User Manuals:** Product related information
- **Share Device:** Tap to share your EP2000 ESS.
- **Default Connection Mode:** To modify the device's default connection mode. Once saved, whenever you tap on the device image on the **My Devices** page, it'll automatically connect using the chosen mode.
- **Bluetooth Connection Password:** Set a 6-digit password for Bluetooth connections with other mobile devices.
- **Carbon emission factor:** To calculate your reduced carbon emission.

Note: Reduced carbon emission (kg) = Solar power generation (kWh) × Carbon emission factor.

- **Location:**Product Positioning
- **Visitor Access:** Limit the scope of Bluetooth direct connection.

Permissions
- **Homepage Display:** Once enabled, the device will show up on the App's Home page. Tap the device image to connect seamlessly and quickly.

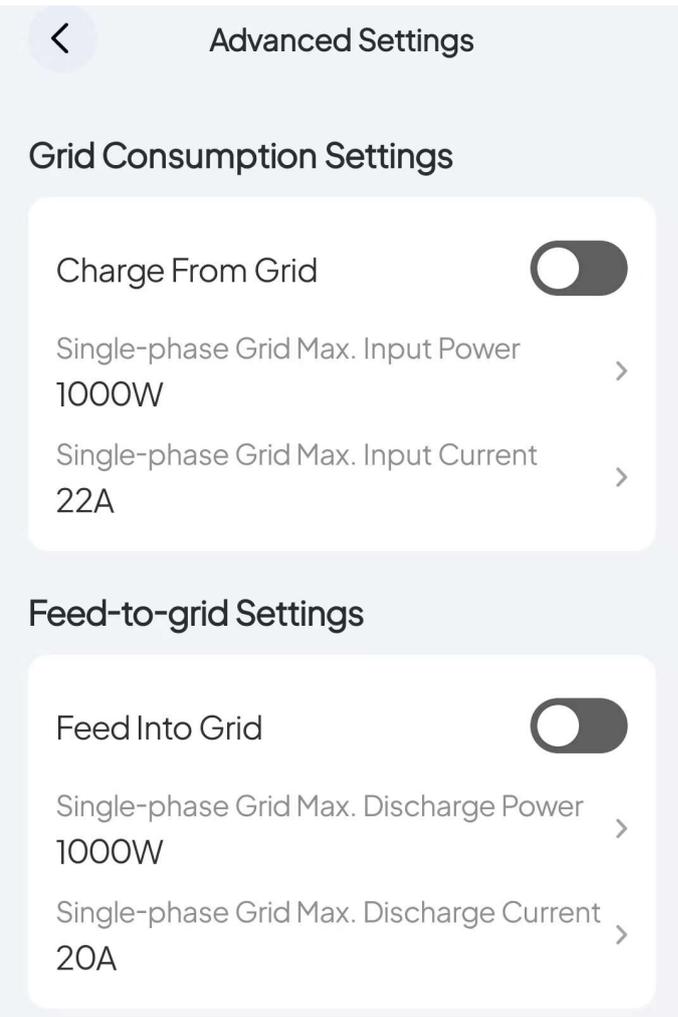


- **Working Mode:** Tap to set the working modes.
- **System Switch:** The main switch of the EP2000 ESS. Keep it on if you want the EP2000 ESS to charge and discharge. If it's off, the system is in standby mode with no input or output.
Note: If you're connecting cables or not using the system, turn the System Switch off.
- **Buzzer Switch:** Enable to sound an alarm when the device encounters hardware faults.

- **Upgrade:** Tap to check the firmware versions or perform upgrades.
Note: If you're connected via WiFi, you can only view firmware version details. **To upgrade, please connect via Bluetooth instead.**
- **Advanced Settings:** To check and change more settings.
- **Pro Mode:** More settings can be unlocked in expert mode, and you need to apply for this permission from BLUETTI.
- **About Device:** The information about EP2000 ESS and other related devices.
- **Unbind:** Tap to unbind your BLUETTI account with the EP2000 ESS.

4.2. Advanced Settings

Grid Consumption Settings



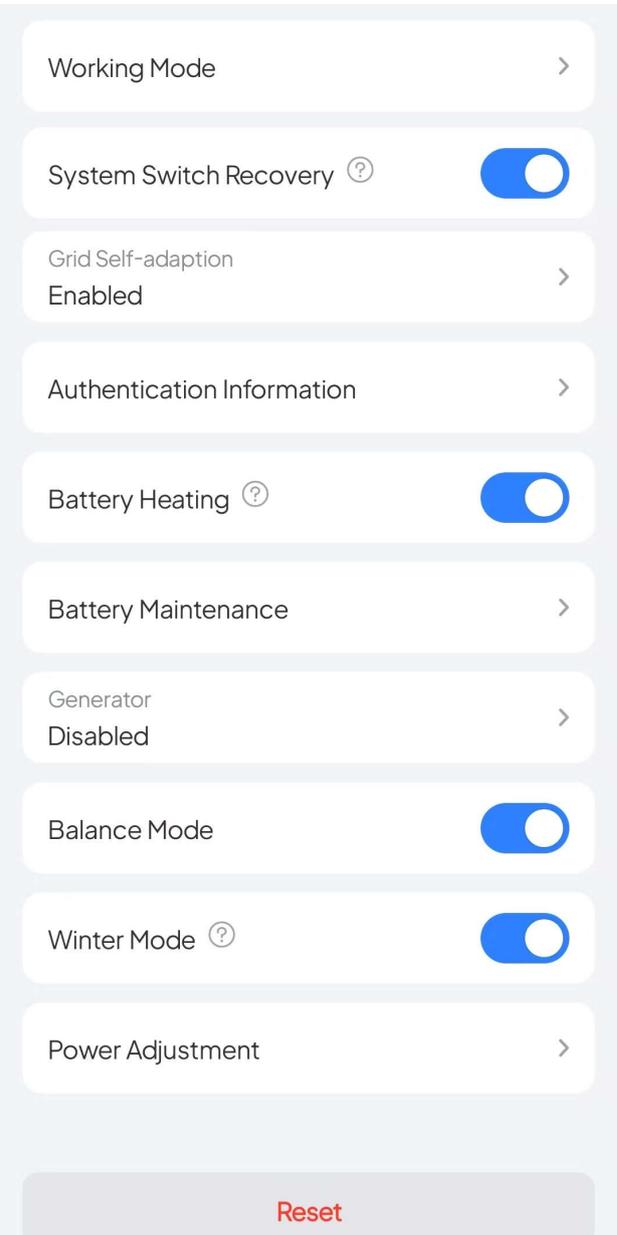
- **Charge From Grid:** To enable the EP2000 ESS to charge from the grid.
- **Single-phase Grid Max. Input Power:** Limits the maximum power that each phase of the EP2000 ESS can draw from the grid or a generator.
Note: The EP2000 ESS can draw up to three times the specified power from the grid or a generator.
- **Single-phase Grid Max. Input Current:** Limits the maximum current that the EP2000 ESS can draw from the grid or a generator.

Feed-to-grid Settings

- **Feed Into Grid:** To enable the EP2000 ESS to feed into the grid.
- **Single-phase Grid Max. Discharge Power:** Limits the maximum power that each phase of the EP2000 ESS can feed into the grid. The EP2000 ESS can feed up to three times the specified power into the grid.
Note: Certified installers and advanced users can modify, while others only have view access.
- **Single-phase Grid Max. Discharge Current:** Limits the maximum current that the EP2000 ESS can feed into the grid.

Note: Certified installers and advanced users can modify, while others only have

view access.



- **Working Mode:** To configure four operating modes. Here you can enable custom mode
- **System Switch Recovery:** To save the system switch status and restore it on restart.
- **Grid Self-adaption:** Enable it when the EP2000 ESS connects to an unstable grid with voltage fluctuations, low voltage, high voltage, etc. When enabled, the charging power will gradually increase when charging from the grid to minimize the impact on the grid.
- **Battery Heating:** If the temperature falls below 3°C (37.4°F) during charging, turn on this switch. When enabled, it will draw power from the grid.
- **Battery Maintenance:** Perform at least every

6 months for optimal performance and longer lifespan.

- **Generator:** Switch on for generator charging.
- **Balance Mode:** Enable the switch. When the machine is running, if the total load of the machine or the AC coupling exceeds the maximum power of a single phase, the three-phase average output power or absorbed power can be used.
- **Winter Mode**

1. This mode helps prevent deep battery discharge in low-sunlight winters.
 2. When enabled, the unit monitors battery level off-grid. If the battery falls below the SOC low value (20%), it will stop powering the load.
 3. Adjust the SOC low value in the Working Modes section.
- **Power Adjustment:**When matching the load, adjust the output power more accurately and try to avoid feeding or taking power from the grid.

4.3. Working Modes

The EP2000 ESS offers four operating modes to accommodate various energy plans. You can choose the one that best suits your home power supply configuration.

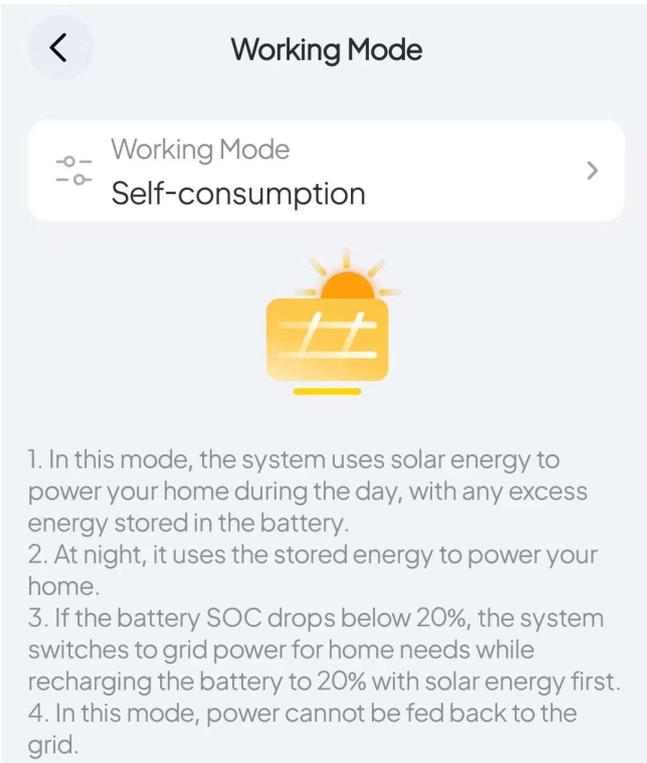
Backup

The EP2000 ESS acts as a backup power source, ideal for areas with unreliable grids. It prioritizes battery charging from solar and grid power, and when fully charged, allows the grid to power loads directly. In the event of a grid failure, the EP2000 ESS seamlessly takes over, ensuring continuous operation. Notably, in this mode, power cannot be fed back to the grid.



Self-consumption

This mode is ideal for regions with abundant solar resources and a stable power grid. The EP2000 ESS prioritizes solar energy to power your home and stores any excess in the battery. During the day, solar energy powers your home and charges the battery. At night, the stored energy is used to supply power. If the battery's SOC drops below 20%, the system switches to grid power while recharging the battery to 20% using solar energy. Notably, in this mode, power cannot be fed back to the grid.



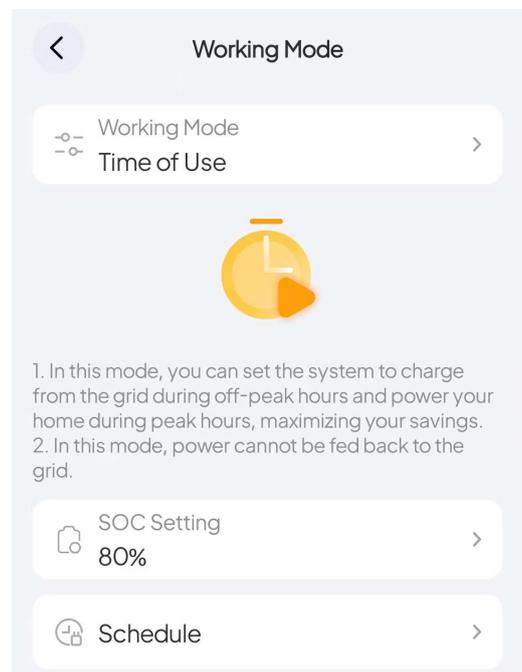
Time of Use

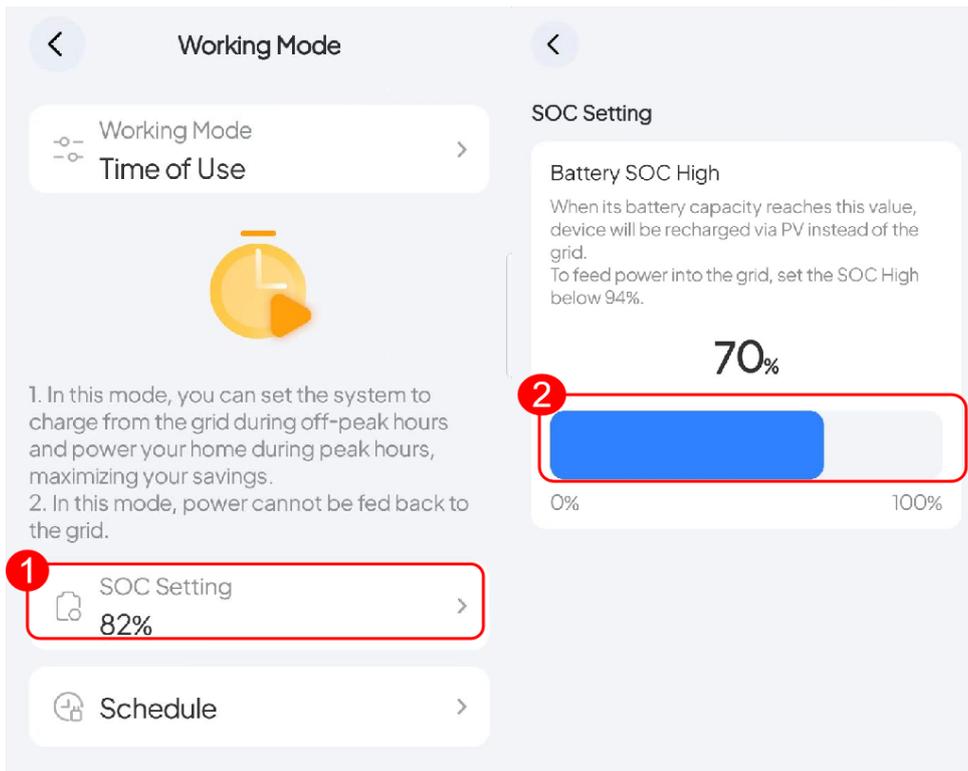
During peak electricity pricing, the EP2000 ESS provides power to household appliances, while during off-peak times when electricity rates are lowest, it draws power from the grid to charge the battery.

In this mode, you can set SoC High value and specific charge/discharge schedule to optimize cost savings.

1. SoC Setting

The EP2000 ESS will stop charging from the grid when the battery level reaches the configured SoC and seamlessly switch to solar charging for the remaining capacity.





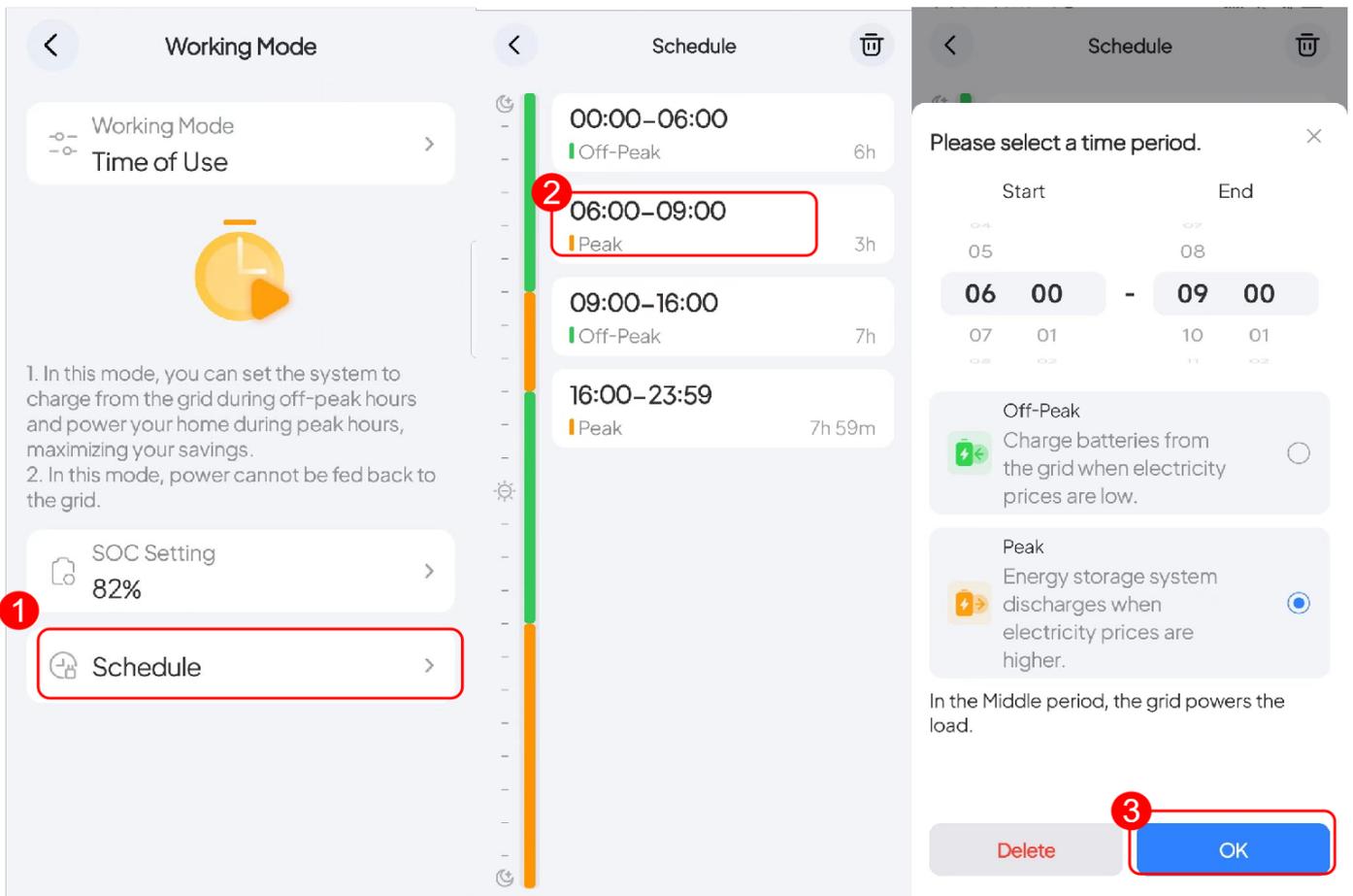
2. Schedule

- a. Tap **Schedule**.
- b. Tap **OK** in the **Attention** pop-up.
- c. Specify a period, and set it as an **Off-peak** or **Peak** period.

Off-Peak: Schedule the EP2000 ESS to charge during off-peak hours when electricity costs are lower.

Peak: Schedule the EP2000 ESS to discharge during peak hours when electricity costs are higher.

Middle: In the Middle period, the grid powers the load.



Custom

In this mode, you can customize settings to suit your needs.

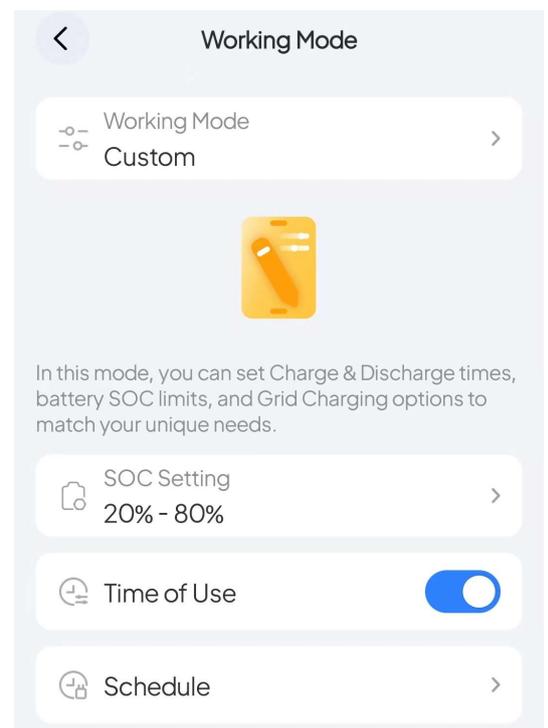
Note:

In the Setting > Advanced Settings > Working Mode menu, you can select Custom modes.

In this mode, you can set battery SoC limits, and enable charge/discharge schedules, as well as grid charging and feeding.

SoC Setting

Tap SoC Setting, then slide the bars to set your desired SoC values.



SoC Low: The EP2000 ESS will stop supplying power from the battery to your appliances once the battery level drops below this value.

SoC High: The system will stop charging from the grid when the battery level reaches the value, and seamlessly switch to solar charging for the remaining capacity.

Time of Use

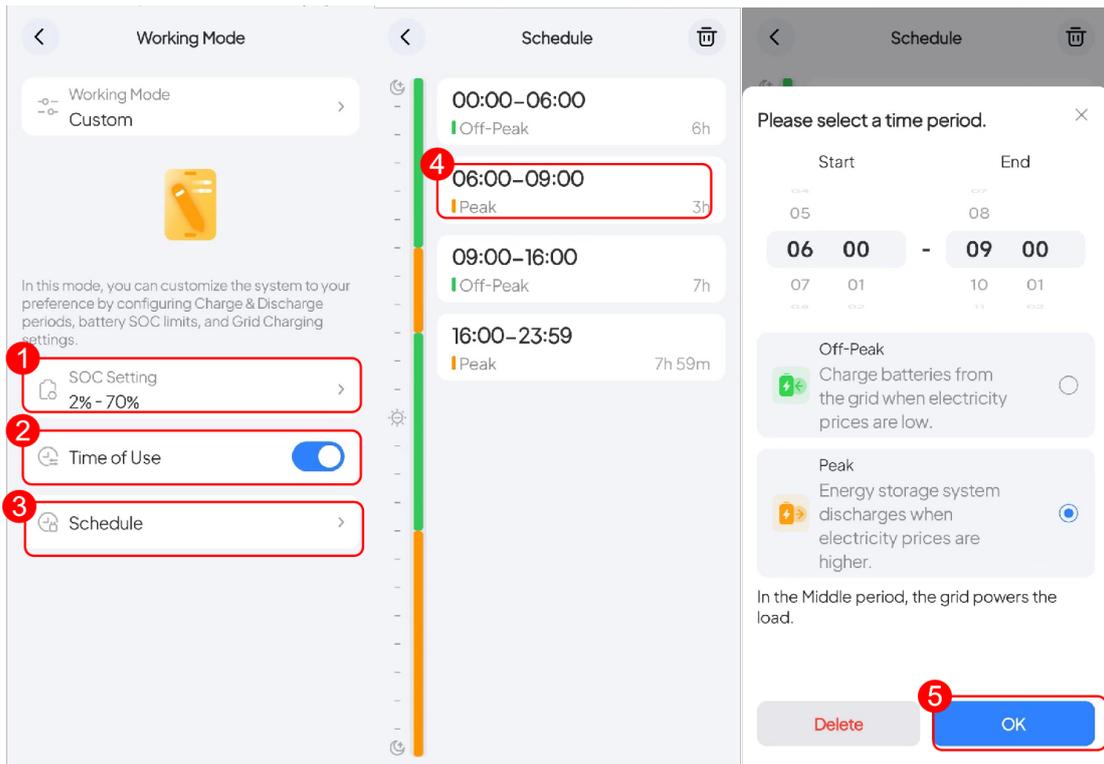
Enable the Manage Charge/Discharge Time function. Please enable it before setting a charge/discharge schedule.

With this switch turned off, the EP2000 ESS follows the charging/discharging strategy defined for the Middle period.

Schedule

You can set up to 6 time periods in order, with the earliest as the first and the latest as the last.

1. Turn on the **Time of Use** switch.
2. Tap **Schedule**.
3. Tap **OK** in the **Attention** pop-up.
4. Specify a period, and set it as an **Off-peak** or **Peak** period.



Charging/Discharging Strategy Based on Time Period

Period	Charging/Discharging Strategy
Off-peak	<p>The EP2000 ESS charges its batteries from both the grid and solar, giving priority to solar energy.</p> <p>Note:</p> <ul style="list-style-type: none"> With the Charge From Grid switch turned off, the batteries get charged exclusively from solar energy. Any surplus solar energy is used to fully charge the batteries. In DC-coupling mode, solar energy is used to charge the batteries first.
Peak	<ul style="list-style-type: none"> When the Feed Into Grid switch is off, the EP2000 ESS powers the load with solar and battery energy, with priority given to solar. Any surplus solar energy is used to fully charge the batteries. When the Feed into Grid switch is on, the EP2000 ESS powers the loads with solar and battery energy, giving priority to solar. It can deliver its maximum AC power output to meet load requirements, and any surplus energy generated within this system is fed back to the grid. Solar energy priority: Load > Grid > Battery.

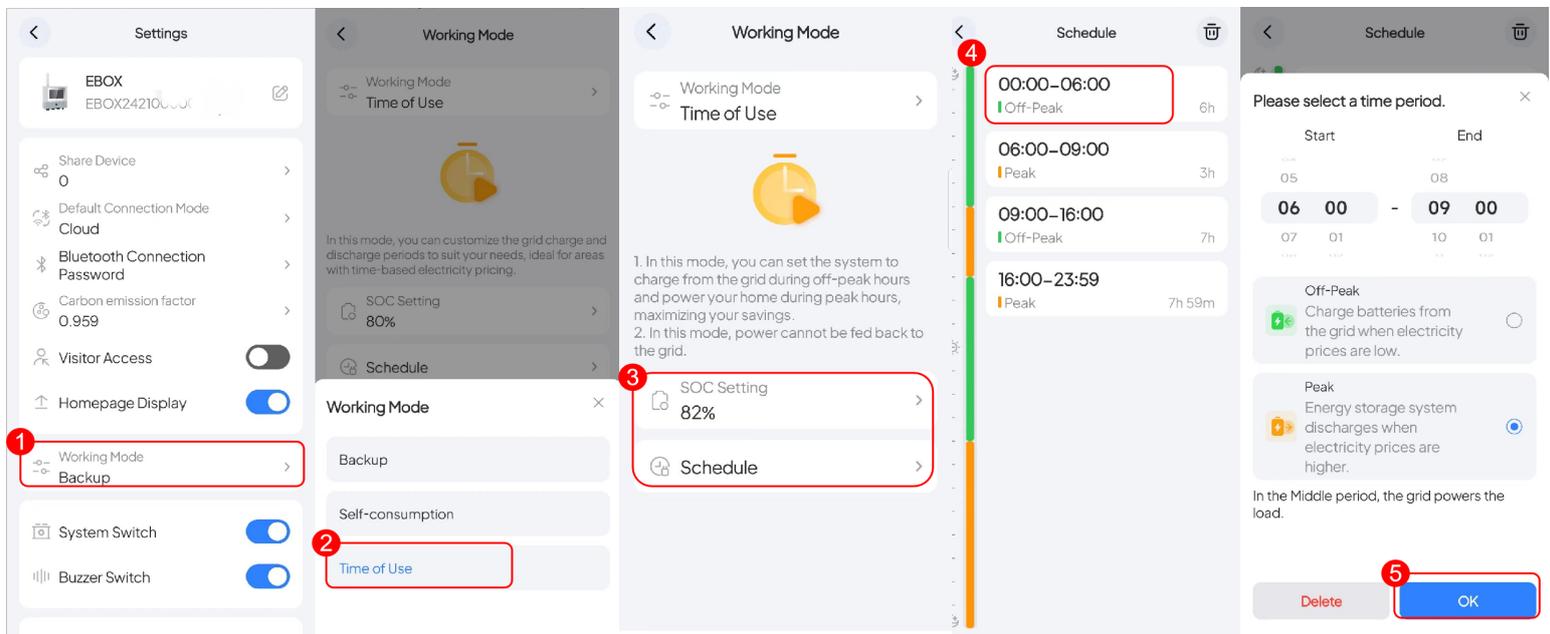
Middle	<p>Note: With the Time of Use switch turned off, the EP2000 ESS follows the charging/discharging strategies below.</p> <p>The EP2000 ESS powers the load with solar and battery energy, with priority given to solar.</p> <p>Solar energy priority is as follows:</p> <p>Feed Into Grid Switch On: Load > Battery > Grid</p> <p>Feed Into Grid Switch Off: Load > Battery</p>
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5. Practices

Note: Disable the **System Switch** before setting working modes.

5.1. Charge via Grid

1. Tap **Working Mode** on the Setting page.
2. Select **Time of Use**, and tap **OK**.
3. Set **SOC**
4. Tap **Schedule**. Specify a period, and set it as an **Off-Peak** period.

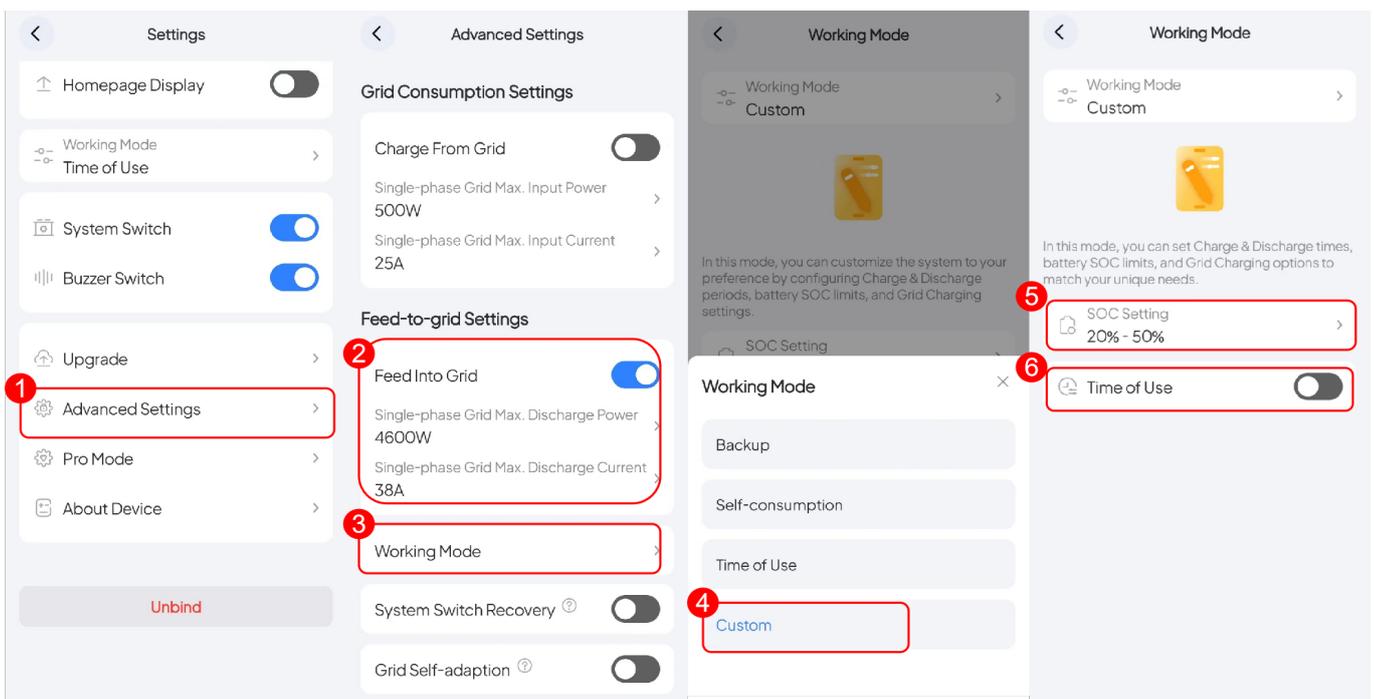


5.2. Feed The Excess Solar To The Grid

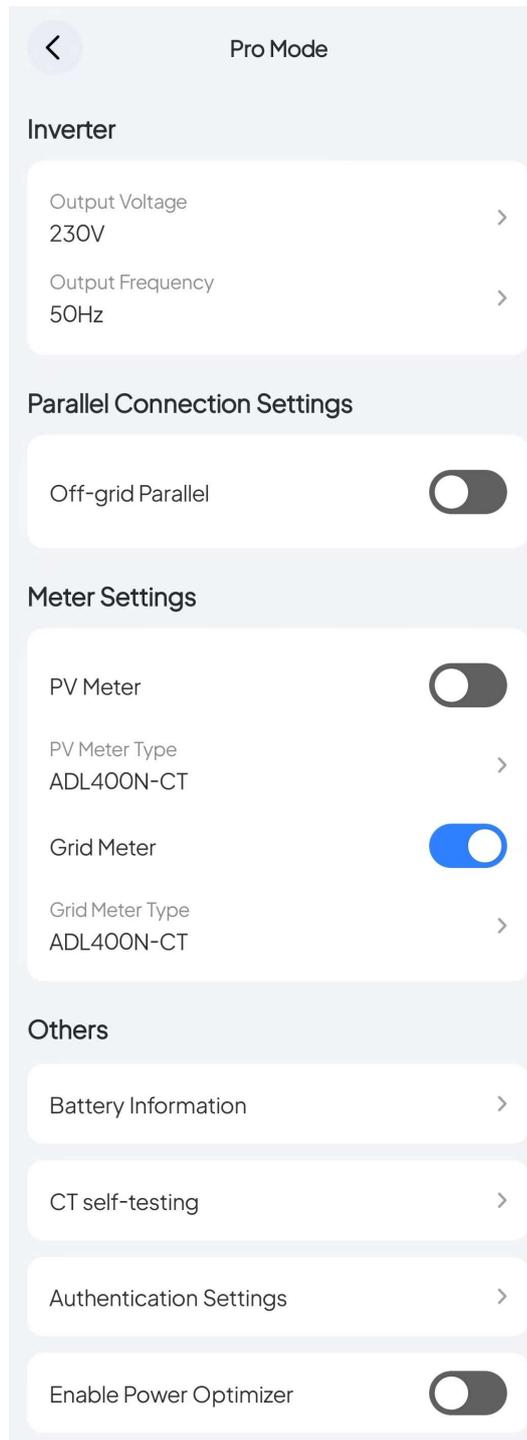
1. Go to the **Advanced Settings** page,
2. Turn on the **Feed Into Grid** switch.
3. Setting **Single-phase Grid Max. Discharge Power/Current**:
4. Tap **Working Mode**.
5. Select **Custom**, and tap **OK**.
6. Setting battery SoC limits.

Note: SoC High must be less than 95%.

7. Turn off the **Time of Use** switch.



6. Pro Mode



Note: Only advanced users and authorized installers have permission to view and adjust parameters in this mode.

Item	Description
Energy Storage System Settings	<ul style="list-style-type: none"> ● Output Voltage: The output voltage of the EP2000 ESS. ● Output Frequency: The output frequency of the EP2000 ESS (50Hz or 60Hz).
Parallel Connection Settings	<ul style="list-style-type: none"> ● Off-grid Parallel: Activate to operate in off-grid parallel mode.
Meter Settings	<ul style="list-style-type: none"> ● Meter Switch: Enable to record microinverter parameters, including current, voltage, and power. ● Meter Type: Select electric meter type based on the connected model.
Battery Information	Tap to view battery information.
CT self-testing	<p>Note:</p> <ul style="list-style-type: none"> ● Do not conduct the test under load, as it may affect the test results. ● Conduct the test in grid-connected conditions. ● Perform the test during the initial installation of the EP2000 ESS; refer to the EP2000 ESS Installation Manual for guidance. <p>With this feature on, the system can detect and automatically adjust or prompt for any abnormal CT wiring.</p>
Authentication Settings	Configure parameters like over/under voltage, over/under frequency, and grid reconnection according to local regulations.
Automatic Transfer	Use the specified accessories provided by BLUETTI. Please refer to the EP2000 ESS Installation Manual for details.
Enable Microinverter	Enable it before activating the connected microinverter.

7. Advanced User Application

1. Register an Account: Before using the app's advanced features, you must first register an account.

2. Apply for Advanced User Status: After registering, apply to become an advanced user by following this link:

<https://h5.bluettipower.com/app/apply-vip/index.html>

Note: This link is solely for applying and approving advanced user permissions. For corporate installers, please follow the BLUETTI STAR process. This involves submitting the required qualifications. Upon review and approval, you will automatically receive installer role permissions.