EP800
Energy Storage System
BLUETTI App User Manual
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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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1. Introduction

To effectively keep track of and control your EP800 Energy Storage System, begin by downloading and installing the user-friendly BLUETTI App. Once installed, connect the App to your device. For step-by-step instructions on how to register, log in, configure your network, and connect your device, simply refer to the BLUETTI App User Manual. This manual is designed to help you easily monitor, manage, and perform various operations for your EP800 ESS.

2. Real-time Monitoring

The App provides you with important details like the current battery level, energy flow status, and other key metrics, allowing you to monitor and track the performance of your EP800 ESS effectively. Additionally, in case of any malfunctions or alarms, you can view real-time alerts so that you can take immediate action to deal with any issues in a timely manner.

2.1 Operation Status

Connect the App to your EP800 ESS via Bluetooth or WiFi, and you’ll be directed to the operation status page.

- Tap to check the current alarm(s) and alarm history.
- Tap to check and change system settings, like System Switch, Working Mode, Device Sharing, Advanced Settings, etc.
- Bluetooth / WiFi connection successful.
- Energy Flow Status
Please refer to Energy Flow Status for details.
- Energy Statistics
Tap to view the energy data by day, month, year, or up to the current date. Please refer to Energy Statistics for details.
- Inverter Status
Please refer to Inverter Status for details.
- PV Generation & CO₂ Reduction
Check out the total solar energy generated and carbon emissions saved by the EP800 ESS over time.
2.2 Energy Flow Status

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

- **Off**: The system switch is turned off or forced off due to a serious failure.
- **Off-grid Operation**: The System Switch is turned on and the system operates independently without relying on the electrical grid. The inverter converts the DC power from the battery and solar system into AC power for home use.
- **Grid-connected Operation**: The System Switch is turned on and the system is connected to the grid. In this case, the system and loads can draw power from the grid and the solar system. However, the system can’t export any excess generated power back to the grid.

2.3 Inverter Status

It shows how the EP800 inverter is operating.

- **Off**: The system switch is turned off or forced off due to a serious failure.
- **Off-grid Operation**: The System Switch is turned on and the system operates independently without relying on the electrical grid. The inverter converts the DC power from the battery and solar system into AC power for home use.
- **Grid-connected Operation**: The System Switch is turned on and the system is connected to the grid. In this case, the system and loads can draw power from the grid and the solar system.
2.4 Energy Statistics

It allows you to view the PV Generation, Grid Consumption, 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 📅 and select your desired date.
3. Check the boxes to display relevant data, uncheck to hide.
4. Tap 📊 to zoom in on the chart to view it full screen.
5. Tap on the chart to view detailed data for a specific time.
6. Swipe left or right on the chart to view the data for a specific timestamp.

3. Device Management

3.1 Basic Settings

On the operation status page, tap 🔄 to access the Setting page. You can optimize your power usage by customizing various settings, including the Charge/Discharge schedule, State of Charge (SoC) limits, and other relevant configurations.
• **Device Name**: Tap 📊 to modify.

• **User Manuals**: Tap to get EP800 User Manuals

• **Network settings**: To configure the WiFi network. Please refer to the "Cloud Connection" chapter in the **BLUETTI App User Manual** for details.

  **Note**: This feature is only available when you connect to the EP800 ESS via Bluetooth.

• **Share Device**: Tap to share your EP800 ESS.

• **Default Connection Mode**: To modify the device’s default connection mode. Once saved, whenever you tap on the device image on My Device page, it’ll automatically connect using the chosen mode.

  **Note**: The App is programmed to use the Cloud as the default connection mode.

• **Carbon emission factor**: To calculate your reduced carbon emission.

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

• **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 EP800 ESS. Keep it on if you want the EP800 ESS to charge and discharge. If it’s off, the system has no input or output and will automatically shut down.

  **Note**: If you’re connecting cables or not using the system, turn the System Switch off.

• **Buzzer Switch**: To sound an alarm when the device encounters hardware faults.

• **Firmware Upgrade**: Go to the Firmware Upgrade page and tap Start to upgrade. Once the upgrade is completed, it’ll prompt that You’re up to date.

  **Note**: This feature is only available when you connect to the EP800 ESS via Bluetooth.

• **Advanced Settings**: To check and change more settings.

• **About Device**: The information about EP800 ESS and other related devices.

• **Unbind**: Tap to unbind your BLUETTI account with the EP800 ESS.
### 3.2 Working Modes

The EP800 ESS offers three operating modes to accommodate various energy plans. You can choose the one that best suits your home power supply configuration.

**Backup**

In this mode, the EP800 ESS acts as a reliable home backup power source that only kicks in when the grid fails. It prioritizes charging its batteries from solar energy over the grid, making it an eco-friendly and sustainable choice for your home energy needs. With ample energy reserves, it provides a seamless power supply, perfect for areas with unreliable grids.

**Self-consumption**

In this mode, the EP800 ESS prioritizes the direct consumption of solar energy to meet immediate household energy needs. Any surplus solar energy generated during the day is intelligently stored in the battery for usage during peak hours or in the event of a power outage. With such a strategy, the EP800 ESS ensures an efficient and reliable power supply, reducing reliance on the grid and promoting energy independence.

**Time of Use**

This mode is suitable for areas with fluctuating electricity prices based on time-of-use. During peak electricity pricing, the EP800 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.

You can set State of Charge (SoC) limits and specific charging and discharging schedules to optimize cost savings.

1. **SoC Setting**

The EP800 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. Manage Charge/Discharge Time

**Off-Peak**: Schedule the EP800 ESS to charge during off-peak hours when electricity costs are lower.

**Peak**: Schedule the EP800 ESS to supply your appliances during peak hours when electricity costs are higher.

**Custom**

The BLUETTI App doesn’t allow users to set up a Custom Mode. Please contact BLUETTI customer service for assistance. You can switch from your current Custom Mode to other modes, but you can’t switch back.

### 3.3 Advanced Settings

**Grid Consumption Settings**

- **Charge From Grid**: To enable the EP800 ESS to charge from the grid.
  
  **Note**: It’s enabled by default.

- **Single-phase Grid Max. Input Power**: The maximum power that each phase of the EP800 ESS can draw from the grid.

- **Single-phase Grid Max. Input Current**: The maximum current that each phase of the EP800 ESS can draw from the grid.

**Others**

- **System Switch Recovery**: To save the system switch status and restore it on restart.
  
  **Note**: This switch is disabled by default.

- **Grid Self-adaption**: To provide a stable and continuous grid charging.
  
  **Note**: This switch is disabled by default.
4. Practices

Before setting the working mode, please turn off the System Switch.

4.1 Charge via Grid

Go to the Advanced Settings page and turn on Charge From Grid.

**Note:** If you need to set the charging schedule, please follow the steps below:


b. Select Time of Use, and tap OK.

c. Tap Manage Charge/Discharge Time.

d. Select OK in the Attention pop-up.

e. Specify a period, and set it as an Off-Peak period.

f. On the Setting page, after turning on the System Switch, it takes 10 seconds to take effect.

4.2 Time of Use

The EP800 ESS features peak-load shifting technology to help you avoid high electricity prices - it stores massive energy during the day or off-peak hours, and supplies it to your house during peak hours.

1. Go to the Advanced Settings page and turn on the Charge From Grid.
2. Schedule EP800 ESS to charge during off-peak hours and discharge during peak hours.
   a. Tap **Working Mode** on the **Setting** page.
   b. Select **Time of Use**, and tap **OK**.
   c. Tap **Manage Charge/Discharge Time**.
   d. Select **OK** in the **Attention** pop-up.

4.3 Self-consumption (Prioritize PV)
Switch on the PV switch of EP800 inverter and check for a successful solar input. Turn on the System Switch on the Setting page to enable the system to utilize solar energy whenever sunlight is available. Furthermore, you have the option to decrease your reliance on the power grid.

   a. On the **Setting** page, tap **Working Mode**.
   b. Select **Self-consumption**, and tap **OK**.
   c. On the **Setting** page, after turning on the **System Switch**, it takes 10 seconds to take effect.
4.4 Backup Power
The EP800 ESS can be used as a backup power supply for emergencies, especially ideal for areas with unreliable power grid.

a. On the **Advanced Setting** page, turn on **Charge From Grid**.
b. On the **Setting** page, tap **Working Mode**.
c. Select **Backup**, and tap **OK**.
d. On the **Setting** page, after turning on the **System Switch**, it takes 10 seconds to take effect.

4.5 Charging Using Generator
a. On the **Advanced Setting** page, turn on **Charge From Grid**.
b. Set the **Single-phase Grid Max. Input Power** and **Current**. It’s recommended to set the input power to 2,000W and the input current to a range of 15A-20A.
c. Turn on **Grid Self-adaption**.
d. On the **Setting** page, after turning on the **System Switch**, it takes 10 seconds to take effect.
4.6 Device Control in Offline Mode

If you haven’t registered your EP800 ESS yet, open the App and tap ✖️ OFFLINE MODE to connect directly. Select it (name starts with EP800) from the Available Devices list on the Offline Mode page. 

Note: If you can’t find your EP800 ESS, get closer and Click to refresh the list.

If you’ve already logged in, tap Bluetooth on the Home page. Select your EP800 ESS from the Available Devices list on the Bluetooth page. After a successful connection, you can check and change the settings by consulting the Device Management pages.

4.7 Device Sharing

2. Tap ⬆️ in the upper right corner of the operation status page.
3. Tap Share Device, and the App will jump to the BLUETTI Share page.
4. Tap Yes to generate a QR code.

Note: The generated QR code will be valid for 10 minutes. You can share the EP800 ESS with up to 5 accounts at the same time.