BLUETTI AC200L

BLUETTI AC200L Solar Generator User Manual

Model: AC200L

1. Introduction

The BLUETTI AC200L is a versatile and powerful portable power station designed to provide reliable electricity for various applications, including home backup, RV adventures, camping, and emergency situations. Featuring a 2,048Wh LiFePO4 battery, it offers a robust power supply that can be expanded up to 8,192Wh with additional battery packs. With a 2,400W AC output (3,600W Power Lifting) and multiple output ports, including a 30A RV outlet, the AC200L is engineered for efficiency and convenience.

2. Safety Guidelines

- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Keep the unit away from heat sources, direct sunlight, and flammable materials.
- Ensure proper ventilation during use to prevent overheating.
- Do not expose the unit to water or other liquids. Store in a dry, well-ventilated area.
- Keep out of reach of children and pets.
- Use only BLUETTI-approved accessories and charging cables.

3. Package Contents

Upon unboxing your BLUETTI AC200L, please verify that all the following items are included:

- BLUETTI Solar Generator AC200L Unit

- AC Charging Cable

- Solar/Car Charging Cable

- XT90-Aviation Cable

- User Manual

4. PRODUCT OVERVIEW

The BLUETTI AC200L is designed with user-friendly interfaces and robust construction. Below is an overview of the unit's main components and features.

Figure 4.1: Front view of the BLUETTI AC200L showing the display, AC outlets, DC output, and USB ports.

4.1. Key Features and Ports

- **2,048Wh LiFePO4 Battery:** Provides long-lasting and safe power.

- **2,400W AC Output (3,600W Power Lifting):** Capable of powering most home appliances.

- **30A RV Port:** Dedicated output for recreational vehicles.

- **USB-C (100W PD) & USB-A Ports:** For charging various electronic devices.

- **12V/8A & 48V/8A DC Ports:** Versatile DC outputs for different needs.

- **Intuitive LCD Display:** Shows real-time power input/output, battery status, and more.

- **Expandable Capacity:** Connects with B300K, B210, B300, or B230 expansion batteries to increase total capacity up to 8,192Wh.
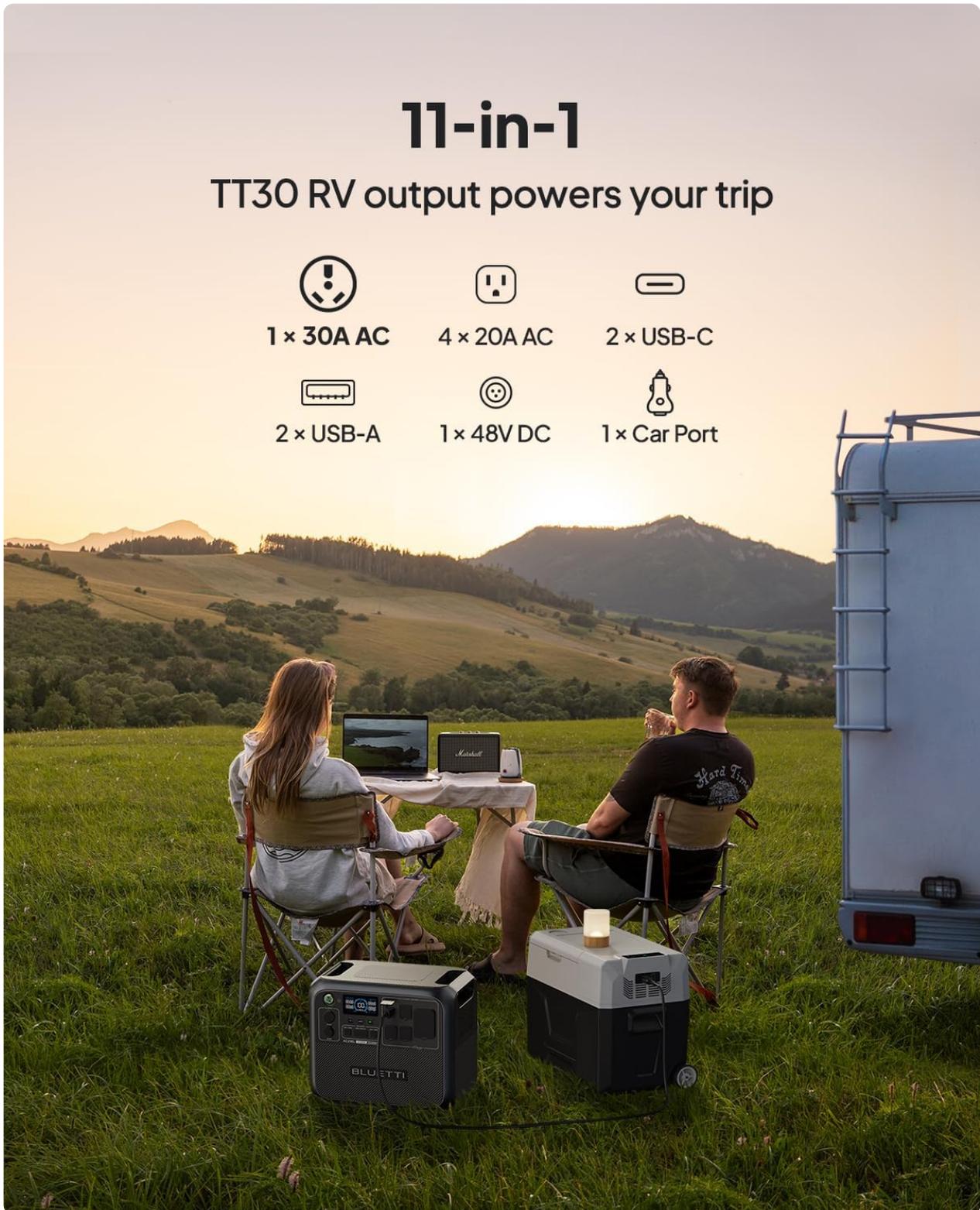

Figure 4.2: Illustration of the 11-in-1 output options available on the AC200L, including AC, USB-C, USB-A, 48V DC, and Car Port.

Figure 4.3: The AC200L powering various home appliances, demonstrating its 2048Wh capacity and 2400W output.

5. SETUP AND INITIAL USE

5.1. Unpacking and Inspection

Carefully remove the AC200L from its packaging. Inspect the unit for any signs of damage during transit. If any damage is found, contact customer support immediately.

5.2. Initial Charging

It is recommended to fully charge the AC200L before its first use. The unit supports multiple charging methods:

- **AC Charging:** Connect the AC charging cable to the unit's AC input port and then to a standard wall outlet. The AC200L supports a max 2400W AC input, allowing 0-80% charge in approximately 45 minutes.

- **Solar Charging:** Connect compatible solar panels (up to 1200W input) to the unit using the provided solar charging cable. Optimal charging time is 1.7-2.2 hours for a full charge under ideal sunlight conditions.

- **Car Charging:** Use the car charging cable to charge the unit from your vehicle's 12V or 24V cigarette lighter port.

2400W AC Input

Redefining the 2kWh products' charging speed

2400W AC Charging	1200W PV Charging	560W Charger 1	2400W AC+PV	2400W Generator

0% ⚡ 45 Mins 80%

* Optional 20A plug to achieve 2400W.
* Charger 1 sold separately.

Figure 5.1: The AC200L being charged via AC input, highlighting its fast charging capability to 80% in 45 minutes.

Figure 5.2: The AC200L connected to multiple solar panels for supercharged solar charging, achieving 80% in 90 minutes under ideal conditions.

5.3. Connecting Expansion Batteries

The AC200L's capacity can be significantly expanded by connecting external battery packs. It supports up to two B300K (2764Wh each), two B210 (2150Wh each), two B300 (3072Wh each), or one B230 (2048Wh each) battery. Connect the expansion battery using the appropriate cable (e.g., P090D-M28 battery expansion cable, sold separately).

Figure 5.3: The AC200L shown with various expansion battery configurations, boosting total capacity up to 7577Wh with 2x B300K or 6348Wh with 2x B210.

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Video 5.1: Official BLUETTI video demonstrating the BLUETTI Portable Power Station AC200L with the B300K expansion battery, showcasing its modularity and increased power capacity.

6. OPERATING INSTRUCTIONS

6.1. Powering On/Off

To power on the AC200L, press and hold the main power button until the display illuminates. To power off, press and hold the power button again until the display turns off.

6.2. Using AC Outputs

Press the AC power button on the control panel to enable the AC outlets. Plug your devices into the 20A AC outlets or the 30A RV port. The AC200L can deliver up to 2400W continuous power, with a Power Lifting capability of 3600W for resistive loads.

6.3. Using DC Outputs

Press the DC power button to enable the DC output ports. This includes the 12V/8A car port, 12V/8A DC output, and the 48V/8A DC port. For RV battery charging via the 48V DC port, a D40 voltage regulator (sold separately) is required.

6.4. Using USB Outputs

The USB-A and USB-C (100W PD) ports are always active when the unit is powered on. Simply connect your USB-compatible devices for charging.

6.5. BLUETTI App Control

Download the official BLUETTI App from your smartphone's app store. The app allows for real-time monitoring of the AC200L's status, remote control of output ports, parameter configuration, and firmware updates via Wi-Fi or Bluetooth connection.

7. MAINTENANCE AND STORAGE

7.1. General Maintenance

- Regularly check the unit for any physical damage or loose connections.
- Keep the ventilation openings clear of dust and debris.
- Clean the exterior with a soft, dry cloth. Do not use harsh chemicals or abrasive materials.

7.2. Battery Care and Storage

The AC200L uses a durable LiFePO4 battery, designed for over 3000 life cycles to 80% capacity. For optimal battery longevity:

LiFePO₄ Battery
Safe and durable, 6X longer life*

Life Cycles
3000+

* Capacity remains at 80% of original capacity after 3000 cycles, 6-8 times longer than conventional batteries.

Figure 7.1: Internal view of the AC200L highlighting the LiFePO4 battery cells, known for their safety and durability.

- Store the unit in a cool, dry place, away from direct sunlight and extreme temperatures.
- For long-term storage, charge the unit to approximately 50-80% every 3-6 months.
- Avoid fully discharging the battery frequently, as this can reduce its lifespan.

8. TROUBLESHOOTING

8.1. Unit Not Turning On

- Ensure the battery is not completely depleted. Connect to a power source and attempt to charge.

- Press and hold the power button for at least 3-5 seconds.

- If the issue persists, contact BLUETTI customer support.

8.2. No Output from Ports

- Verify that the specific output (AC or DC) is enabled via its respective button on the control panel.

- Check if the device you are trying to power is within the unit's wattage limits.

- Ensure cables are securely connected.

- Check the display for any error codes or warnings.

8.3. Slow Charging

- For AC charging, ensure you are using the original BLUETTI AC charging cable and a suitable wall outlet.

- For solar charging, ensure solar panels are correctly oriented towards the sun and free from obstructions. Check panel wattage and voltage compatibility.

- Environmental temperature can affect charging speed; extreme temperatures may slow down the process.

9. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	BLUETTI
Model Name	AC200L
Battery Type	LiFePO4
Capacity	2048 Watt-hours (Wh)
Expandable Capacity	Up to 8192Wh (with external batteries)
AC Output Power	2400W (Running), 3600W (Starting/Power Lifting)
AC Output Voltage	120 Volts (AC)
AC Output Frequency	50 Hz
RV Output	30 Amps
Max AC Input	2400W
Max Solar Input	1200W
USB-C Output	100W Power Delivery (PD)

Feature	Specification
DC Output Ports	12V/8A, 48V/8A
Total Power Outlets	13
Item Weight	61.4 pounds
Product Dimensions	3.94"L x 3.94"W x 3.94"H
Recommended Uses	Home Backup, RV, Camping

10. WARRANTY AND SUPPORT

10.1. Warranty Information

The BLUETTI AC200L comes with a standard manufacturer's warranty. Please refer to the warranty card included in your package or visit the official BLUETTI website for detailed warranty terms and conditions. Extended protection plans may also be available for purchase.

10.2. Customer Support

For technical assistance, troubleshooting, or any inquiries regarding your BLUETTI AC200L, please contact BLUETTI customer support through their official website or the contact information provided in your product documentation. You can also find additional resources and FAQs on the BLUETTI support page.
For the official User Manual in PDF format, please refer to the following linkBLUETTI AC200L User Manual (PDF)