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> EBL 2400W Portable Power Station and 2x200W Solar Panel User Manual

EBL Acc2400

EBL 2400W Portable Power Station (Acc2400) and 2x200W Solar Panel User Manual

Model: Acc2400 | Brand: EBL

1. INTRODUCTION

Thank you for choosing the EBL 2400W Portable Power Station with 2x200W Solar Panels. This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your power station and solar panels. Please read this manual thoroughly before use and retain it for future reference.



Image 1.1: The EBL 2400W Portable Power Station, a robust power solution for various needs.

The EBL 2400W Portable Power Station is equipped with a 1843.2Wh LiFePO4 battery, offering a substantial 2400W output to power a wide range of devices. Coupled with two 200W solar panels, it provides a versatile and sustainable energy solution for RV trips, camping, home emergencies, and professional use.

2. SAFETY INSTRUCTIONS

- Do not disassemble, repair, or modify the unit or solar panels. Improper assembly may cause fire, explosion, or injury.
- Do not place the unit or solar panels near fire or expose them to high temperatures.
- Do not use or store the unit or solar panels in bathrooms or areas exposed to water or rain.
- Do not use damaged power cables or solar panel cables.
- Keep the unit and solar panels away from children and pets.
- Ensure proper ventilation during use and charging to prevent overheating.
- Handle the unit with care; avoid dropping or subjecting it to strong impacts.

- Dispose of the product according to local regulations.

3. PACKAGE CONTENTS

Please check that all components are present and undamaged upon receipt:

- EBL 2400W Portable Power Station (Acc2400)
- 2 x EBL 200W Foldable Solar Panels
- AC Charging Cable
- Car Charging Cable
- Solar Charging Cable (MC4 to DC/Anderson/XT60/Aviation connector)
- User Manual

4. PRODUCT OVERVIEW

4.1. EBL 2400W Portable Power Station



Image 4.1: Front view of the power station highlighting various input and output ports.

The power station features a comprehensive array of ports and a clear LCD display for monitoring status.

- **AC Output:** 4 x 2400W AC ports for household appliances.
- **USB-A Output:** 2 x QC18W USB-A ports for fast charging compatible devices.
- **USB-C Output:** 2 x PD100W USB-C ports for high-speed charging laptops and other USB-C devices.
- **DC Output:** 2 x DC ports for various DC-powered devices.
- **Car Port:** 1 x 12V car socket.
- **Wireless Charging:** Integrated wireless charging pad on top for compatible smartphones.
- **LCD Display:** Shows battery level, input/output wattage, and remaining runtime.
- **Input Ports:** Dedicated ports for AC, solar, and car charging.

4.2. EBL 200W Foldable Solar Panel

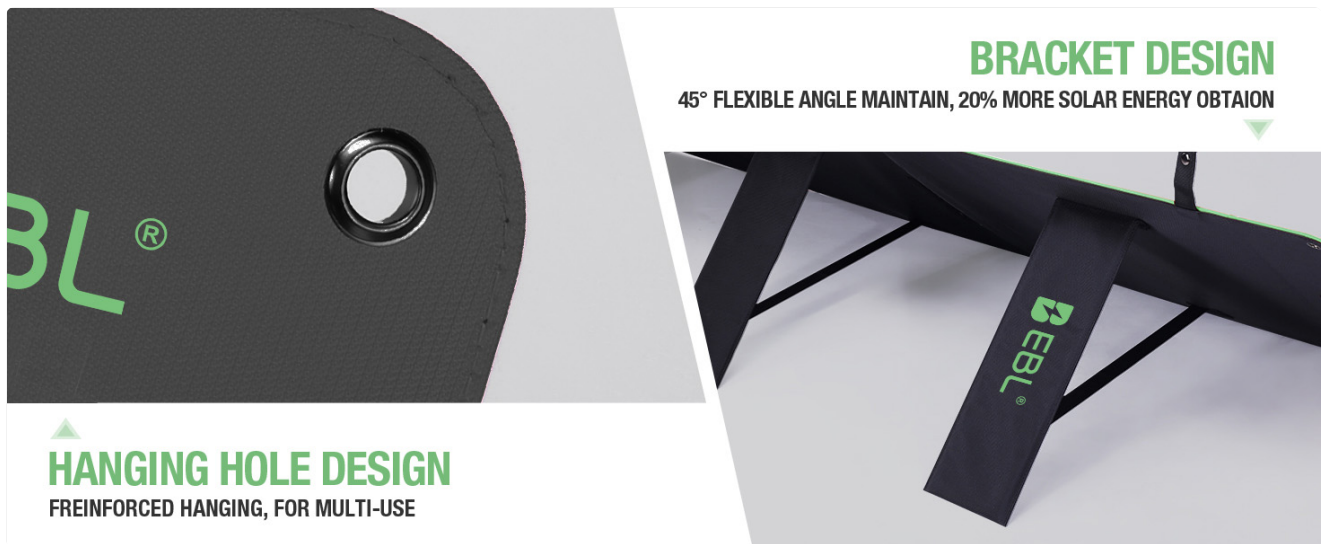


Image 4.2: Key features of the EBL 200W Foldable Solar Panel.

- **Monocrystalline Cells:** High conversion efficiency up to 23.5%.
- **Adjustable Kickstands:** Allows for optimal angle positioning towards the sun.
- **Built-in Cable Bag:** Convenient storage for charging cables and adapters.
- **Strong Handle:** For easy portability.
- **Durable Construction:** ETFE film provides wear protection and IP65 waterproof rating.

5. SETUP

5.1. Initial Charging of the Power Station

Before first use, fully charge the power station. This can be done via an AC wall outlet, solar panels, or a car charger.

- **AC Charging:** Connect the AC charging cable to the power station's AC input port and then to a wall outlet. The LCD display will indicate charging status. The unit can be fully charged in approximately 1.6-2 hours.



Image 5.1: The power station connected to an AC wall outlet for fast charging.

5.2. Connecting Solar Panels

To charge the power station using solar energy:

1. Unfold the solar panels and position them in direct sunlight. Adjust the kickstands for optimal angle.
2. Connect the solar charging cable (MC4 connectors) from the solar panels to the solar input port on the power station.
3. For increased charging speed, two 200W solar panels can be connected in series or parallel. Refer to the diagram below for connection methods.



Image 5.2: Illustration of series and parallel connections for solar panels. Series connection adds voltage, parallel connection adds current.

The power station will automatically detect the solar input and begin charging. The LCD display will show the input wattage.

6. OPERATING THE POWER STATION

To turn on the power station, press and hold the main power button. The LCD display will illuminate.

6.1. Using AC Outputs

Press the AC power button to activate the AC outlets. Plug your devices into the AC ports. Ensure the total wattage of connected devices does not exceed 2400W.



Image 6.1: The power station providing power to various household appliances.

6.2. Using DC, USB-A, and USB-C Outputs

Press the DC/USB power button to activate these outputs. Connect your devices to the appropriate ports. The power station can charge up to 12 devices simultaneously.

- **USB-C PD100W:** Ideal for fast charging laptops, tablets, and modern smartphones.
- **USB-A QC18W:** Suitable for quick charging compatible smartphones and other USB devices.
- **DC Ports & Car Port:** For 12V devices such as mini-fridges, car vacuums, or other compatible equipment.

6.3. Wireless Charging

Place your Qi-compatible device on the wireless charging pad located on top of the power station. Ensure the device is centered for optimal charging. The wireless charging supports up to 10W output.

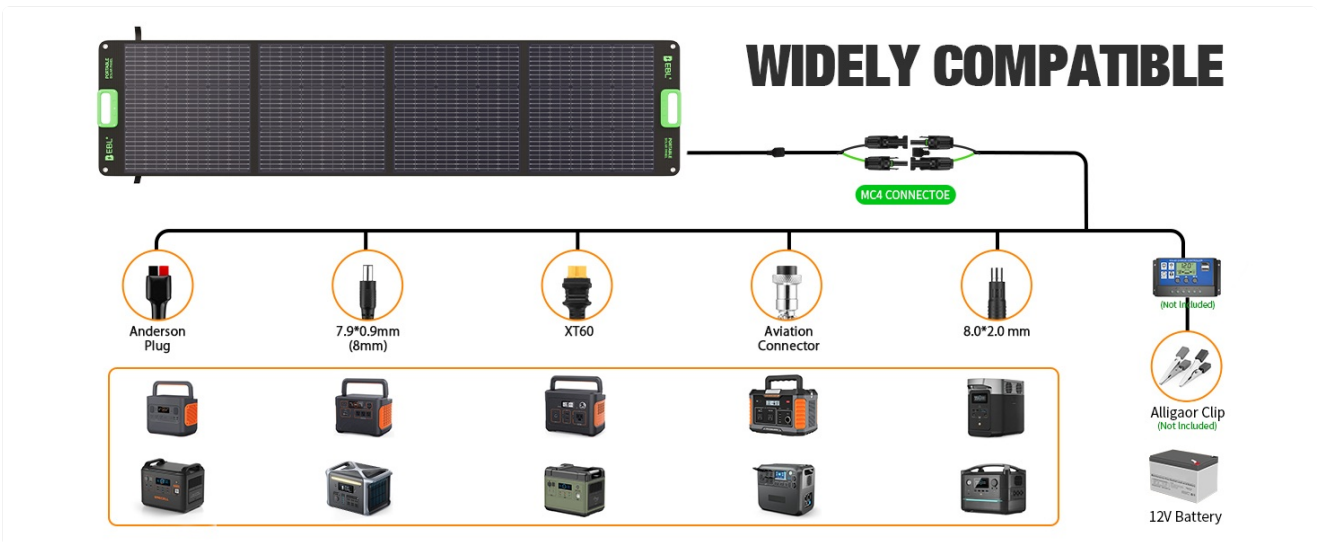


Image 6.2: A smartphone charging wirelessly on the power station's integrated pad.

7. CHARGING METHODS

The EBL 2400W Portable Power Station offers multiple recharging options:

- **AC Wall Outlet:** Fully charges in 1.6-2 hours.
- **Solar Panels:** Supports up to 800W max solar input. Can fully charge in approximately 3 hours on a sunny day with optimal panel setup.

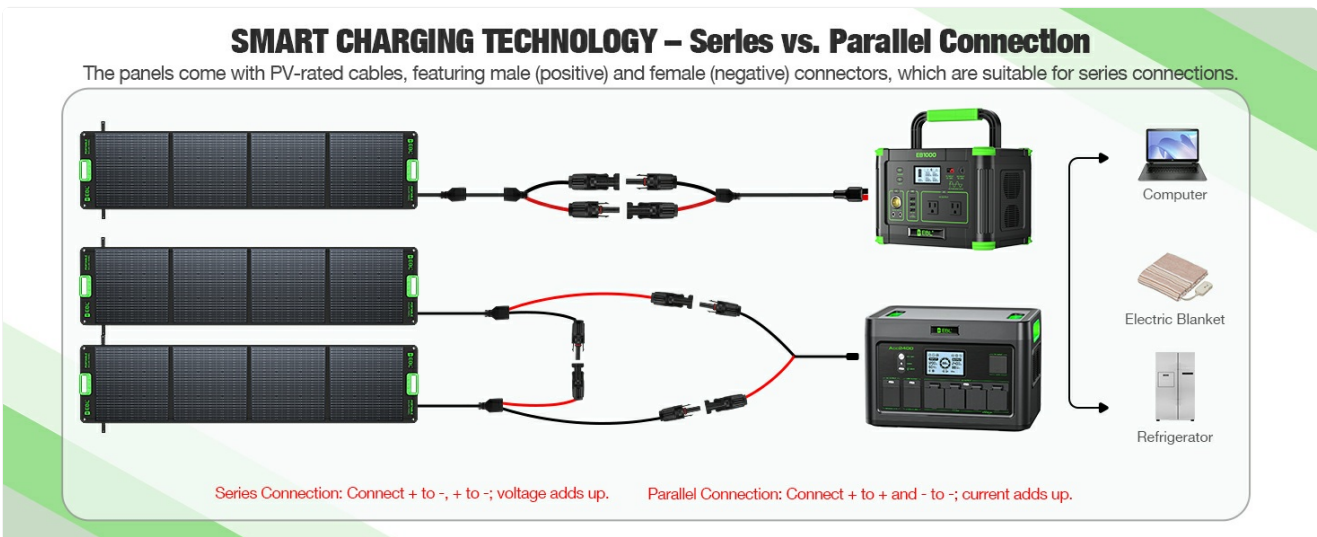


Image 7.1: The power station being recharged by solar panels during outdoor use.

- **AC + Solar Dual Charging:** Combine AC and solar input for the fastest recharge, achieving full charge in about 1.8 hours (1200W Max input).
- **Car Charger:** Connect the car charging cable to your vehicle's 12V/24V cigarette lighter socket.



Image 7.2: Convenient car charging for the power station while on the road.

8. MAINTENANCE

- **Storage:** Store the power station and solar panels in a cool, dry place away from direct sunlight and moisture. For long-term storage, charge the power station to 50-80% every 3-6 months to prolong battery life.
- **Cleaning:** Use a soft, dry cloth to clean the exterior of the power station. For solar panels, gently wipe the surface with a damp cloth to remove dust or debris. Do not use harsh chemicals or abrasive materials.
- **Temperature:** Avoid exposing the unit to extreme temperatures. Optimal operating temperature is between 0°C to 40°C (32°F to 104°F).
- **Inspection:** Regularly inspect cables and connectors for any signs of wear or damage. Replace if necessary.

9. TROUBLESHOOTING

Problem	Possible Cause	Solution
Power station not turning on	Battery is depleted; Power button not pressed correctly.	Charge the power station; Press and hold the power button for 3 seconds.
No output from AC/DC/USB ports	Output port not activated; Overload protection; Device not compatible.	Press the respective output button; Reduce connected load; Check device compatibility.
Solar panels not charging	Insufficient sunlight; Incorrect connection; Damaged cable/panel.	Reposition panels for direct sunlight; Verify cable connections; Inspect for damage.
Overload warning on display	Connected devices exceed 2400W.	Disconnect some devices to reduce the load.

10. SPECIFICATIONS

Feature	Specification
Brand	EBL
Model Name	Acc2400
Battery Type	LiFePO4
Capacity	1843.2Wh
AC Output	2400W (Rated)
USB-A Output	2 x QC18W
USB-C Output	2 x PD100W
DC Output	2 ports
Car Port	1 port
Wireless Charging	10W
AC Charging Time	1.6-2 hours (0-100%)
Solar Input (Max)	800W
Solar Panel Wattage	2 x 200W
Solar Panel Efficiency	Up to 23.5%
Item Weight (Power Station)	55 Pounds
Item Dimensions (L x W x H)	15"L x 21"W x 15"H

11. WARRANTY AND SUPPORT

The EBL 2400W Portable Power Station and 2x200W Solar Panel come with a **2-Year Manufacturer Warranty**. For warranty claims, technical support, or any inquiries, please contact EBL customer service.

You can visit the official EBL store for more information and support: [EBL Official Store](#)

12. PRODUCT VIDEO

Video 12.1: An official overview of the EBL 2400W Portable Power Station, demonstrating its features and capabilities.