PAXCESS Rockman 500W

PAXCESS Rockman 500W Portable Power Station User Manual

Model: Rockman 500W

1. PRODUCT OVERVIEW

The PAXCESS Rockman 500W Portable Power Station is a versatile and reliable power source designed for various applications, including outdoor activities, emergency backup, and off-grid living. It features a high-capacity 519Wh (140400mAh) lithium battery, capable of delivering up to 500W of continuous power with a pure sine wave AC output. Equipped with an advanced MPPT controller, it optimizes solar charging efficiency. The unit offers multiple output options, including 110V AC outlets, 12V regulated DC ports, USB-A (QC 3.0), and USB-C Power Delivery (PD) for fast charging of a wide range of devices.

519Wh Large Capacity

Smartphones	Laptops	Mini fridge 45W	32" TVs 75W
63+	**8+**	**11+**	**5+**
2000mAh	56wh	about hours	hours

Image: The PAXCESS Rockman 500W Portable Power Station connected to a laptop, drone, and camera, demonstrating its multi-device charging capability.

Key Features:

- **High Capacity:** 519Wh / 140400mAh lithium-ion battery.
- **Powerful Output:** 500W continuous AC output (110V Pure Sine Wave) with 750W surge capability.
- **Multiple Ports:** Includes AC outlets, 12V DC ports, USB-A (QC 3.0), and USB-C PD.
- **Efficient Solar Charging:** Built-in MPPT (Maximum Power Point Tracking) controller for optimized solar input.
- **Regulated 12V DC Output:** Provides stable power for sensitive 12V devices like car refrigerators.

- **Compact and Portable:** Weighs approximately 10.4 lbs with dimensions of 11.8 x 7.9 x 7.6 inches.
- **Smart LCD Display:** Shows real-time input/output wattage and battery charge status.

Image: The PAXCESS Rockman 500W Portable Power Station, highlighting its 519Wh capacity and 500W output, presented as an outdoor power solution.

2. SAFETY INSTRUCTIONS

Read and understand all safety instructions before operating the PAXCESS Rockman 500W Portable Power Station. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Do not disassemble, repair, or modify the unit. Incorrect reassembly may cause fire or electric shock.
- Do not expose the unit to fire or high temperatures (above 60°C / 140°F).
- Do not use or store the unit in bathrooms or areas exposed to water or rain.
- Do not use or store the unit in direct sunlight or in hot environments, such as inside a car in summer.
- Keep the unit away from children and pets.
- Do not drop, strike, or subject the unit to strong impacts.
- Ensure proper ventilation during use and charging. Do not cover the unit.
- Avoid connecting high-power appliances that exceed the unit's 500W output limit. Overloading will trigger protection mode.
- The AC adapter may become warm during charging. Ensure it is placed in a well-ventilated area and not covered.
- Do not use the AC output ports while the unit is simultaneously charging via the AC wall outlet. USB/TYPE-C/DC output ports are generally workable during charging, but AC output is not.

Image: Icons indicating appliances that should not be connected to the power station due to high power consumption, including toasters, hair dryers, microwaves, kettles, blenders, and coffee makers.

3. SETUP

Initial Charging:

Before first use, fully charge the power station. This ensures optimal battery performance and calibration of the battery management system.

1. Connect the provided AC adapter to the DC input port on the power station.
2. Plug the AC adapter into a standard wall outlet.
3. The LCD display will show charging status. Charge until the battery indicator shows 100%.

Connecting Devices:

Ensure the power station is adequately charged before connecting your devices. Verify that your device's power requirements do not exceed the power station's output limits.

- For AC devices, plug them into the 110V AC outlets.
- For DC devices, use the 12V DC ports or the car outlet.
- For USB devices, use the USB-A (QC 3.0) or USB-C PD ports.

4. OPERATING INSTRUCTIONS

Turning On/Off:

- To turn on the unit, press and hold the main power button until the LCD screen illuminates.
- To turn off the unit, press and hold the main power button until the LCD screen turns off.
- To activate specific output sections (AC, DC, USB), press their respective power buttons.

Using Output Ports:

Image: The PAXCESS Rockman 500W Portable Power Station simultaneously charging multiple devices, including a laptop, phone, and camera, demonstrating its maximum 600W output capability across various ports.

- **AC Output (110V/500W):** Press the AC power button to enable the two 110V pure sine wave AC outlets. These are suitable for sensitive electronics like laptops and CPAP machines. Ensure the total wattage of connected devices does not exceed 500W.
- **DC Output (12V/5A, 12V/10A Car Outlet):** Press the DC power button to activate the 12V regulated DC ports and the car outlet. These provide stable voltage for devices such as mini-fridges or car accessories.

- **USB Output (USB-A QC 3.0, USB-C PD):** The USB ports are typically active when the unit is on. Use the USB-A ports for Quick Charge 3.0 compatible devices and the USB-C PD port for devices supporting Power Delivery.
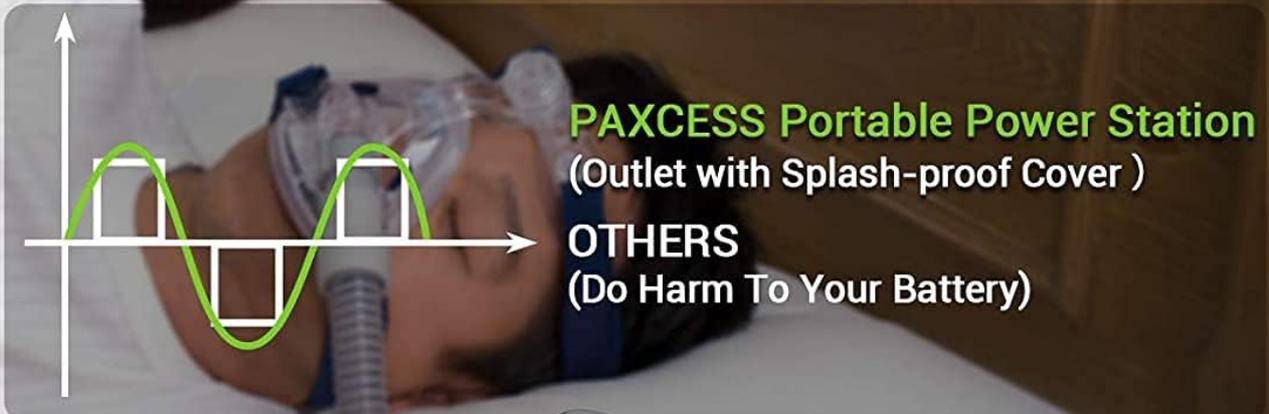

Image: The PAXCESS Portable Power Station connected to a CPAP machine, illustrating its pure sine wave output which is safe for sensitive electronics and medical devices.

Charging the Power Station:

The Rockman 500W can be recharged using multiple methods:

6 Ways Of Recharging

☀ Solar Panel **6-7** Hrs	Wall Outlet **7.5-9** Hrs
12V Car Charger **9.5-10** Hrs	USB-C PD Port **10-11** Hrs
Wall Outlet + USB-C PD **5.5-6.5** Hrs	Solar + USB-C PD **4.5-5.5** Hrs

Image: A visual guide illustrating six different methods to recharge the PAXCESS Rockman 500W, including solar panel, wall outlet, 12V car charger, USB-C PD port, and combinations thereof, with estimated charging times.

- **Wall Outlet:** Use the included AC adapter. Charging time: 7.5-9 hours.
- **Solar Panel:** Connect a compatible solar panel (e.g., 120W) to the DC input port. The built-in MPPT controller optimizes charging. Charging time (120W solar): 6-7 hours.

- **12V Car Charger:** Use the car charger cable to charge from your vehicle's 12V outlet. Charging time: 9.5-10.5 hours.
- **USB-C PD Port:** Use a USB-C PD charger. Charging time: 10-11 hours.
- **Combined Charging:** For faster charging, combine methods:
  - Wall Outlet + USB-C PD: 5.5-6.5 hours.
  - Solar + USB-C PD: 4.5-5.5 hours.

Image: The PAXCESS Rockman 500W Portable Power Station connected to a foldable solar panel, demonstrating its fast solar recharging capability with a built-in MPPT controller.

LCD Display:

Image: A detailed view of the smart LCD display on the PAXCESS Rockman 500W, showing real-time input wattage, output wattage, and battery percentage.

The LCD display provides essential information:

- **Battery Level Indicator:** Shows the remaining battery charge percentage.
- **Input Wattage:** Displays the power being drawn into the unit during charging.
- **Output Wattage:** Shows the power being consumed by connected devices.
- **Status Icons:** Indicates active output ports (AC, DC, USB) and warning indicators.

5. MAINTENANCE

Storage:

- Store the power station in a cool, dry place, away from direct sunlight and extreme temperatures.
- For long-term storage, recharge the unit to 50-80% every 3-6 months to preserve battery health.
- Avoid storing the unit completely discharged for extended periods.

Cleaning:

- Use a dry, soft cloth to wipe the exterior of the unit.
- Do not use abrasive cleaners or solvents.
- Ensure all ports are free of dust and debris.

6. TROUBLESHOOTING

Unit Not Turning On/Charging:

- Ensure the power button is pressed and held for a few seconds.
- Verify that the charging cable and adapter are securely connected to both the unit and the power source.
- Try a different wall outlet or charging method (e.g., car charger, solar panel) to rule out a faulty power source.
- If the unit has been stored for a long time, it might require a prolonged charge to reactivate.

AC Output Shuts Off Prematurely:

- The unit is designed to shut off AC output when the battery reaches approximately 10% charge to protect the battery. This is normal operation.
- Ensure the total wattage of connected AC devices does not exceed 500W. Overloading will trigger protection and shut off the AC output.
- Some devices, especially those with motors or compressors, may have a high startup (surge) wattage. Ensure the surge wattage is within the unit's 750W limit.

Lower Than Expected Capacity/Run Time:

- The actual usable capacity can be affected by power conversion efficiency, especially for AC output. Expect some energy loss during conversion.
- Devices with heating elements (e.g., CPAP humidifiers/heaters) consume significantly more power. Disabling these features can extend run time.
- Ensure the unit is fully charged before testing run times.
- Environmental factors like extreme cold can reduce battery performance.

AC Adapter Gets Hot During Charging:

- It is normal for the AC adapter to become warm during operation. However, if it becomes excessively hot to the touch, ensure it is in a well-ventilated area and not covered. Discontinue use if it remains excessively hot and contact support.

7. SPECIFICATIONS

Feature	Specification
Model	Rockman 500W

Feature	Specification
Battery Capacity	519Wh (140400mAh)
Battery Type	Lithium-Ion
AC Output	110V Pure Sine Wave, 500W (750W Surge)
DC Output	2 x 12V/5A, 1 x 12V/10A Car Port (Regulated)
USB-A Output	2 x USB-A (QC 3.0, 18W Max)
USB-C Output/Input	1 x USB-C PD (30W Max)
DC Input (Charging)	12-24V (for AC Adapter, Solar Panel, Car Charger)
Solar Charging	MPPT Controller Built-in
Weight	10.4 lbs (4.7 kg)
Dimensions (L x W x H)	11.8 x 7.9 x 7.6 inches (30 x 20 x 19.3 cm)
Operating Temperature	0°C to 40°C (32°F to 104°F)
Recharge Time (Approx.)	Wall Outlet: 7.5-9 hrs 120W Solar Panel: 6-7 hrs 12V Car Charger: 9.5-10.5 hrs USB-C PD: 10-11 hrs Wall Outlet + USB-C PD: 5.5-6.5 hrs Solar + USB-C PD: 4.5-5.5 hrs

8. WARRANTY AND SUPPORT

PAXCESS products are designed for reliability and performance. For warranty information, product support, or technical assistance, please contact PAXCESS customer service.

- **Customer Service:** Refer to the contact information provided with your product packaging or visit the official PAXCESS website.
- **Online Resources:** Additional FAQs and support documents may be available on the PAXCESS brand store: PAXCESS Store on Amazon.