

ETREPOW LT20PEU12

ETREPOW 2000W 12V Pure Sine Voltage Converter Instruction Manual

Model: LT20PEU12

1. INTRODUCTION

Thank you for choosing the ETREPOW 2000W 12V Pure Sine Voltage Converter. This device is designed to convert 12V DC battery power into 220V/230V AC household power, providing a clean and stable pure sine wave output suitable for sensitive electronic equipment. It features an LCD display, a wireless remote control, and multiple protection mechanisms to ensure safe and reliable operation. This manual provides essential information for the proper installation, operation, and maintenance of your voltage converter.



Image 1.1: The ETREPOW 2000W 12V Pure Sine Voltage Converter, showing the main unit, battery cables, wireless remote control, and spare fuses.

2. SAFETY INSTRUCTIONS

Please read and understand all safety instructions before operating the converter. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Ventilation:** Ensure adequate ventilation around the converter. Do not block ventilation openings.
- **Environment:** Operate the converter in a dry, well-ventilated area, away from direct sunlight, heat sources, flammable materials, and moisture.
- **Connections:** Always connect the converter to a 12V DC power source. Ensure correct polarity (+ to + and - to -). Incorrect connections can damage the unit and void the warranty.
- **Grounding:** The converter must be properly grounded. Connect the grounding terminal to a suitable earth ground.
- **Load Capacity:** Do not exceed the rated continuous power output of 2000W. Overloading can cause damage and trigger protection features.
- **Maintenance:** Do not attempt to open or service the converter yourself. Refer all servicing to qualified personnel.
- **Children:** Keep the converter out of reach of children.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- ETREPOW 2000W 12V Pure Sine Voltage Converter
- Battery connection cables (red for positive, black for negative)
- Wireless remote control
- Spare fuses
- Instruction Manual (English)

4. PRODUCT OVERVIEW

4.1 Front and Rear Panels



Image 4.1: Detailed view of the converter's front and rear panels, highlighting connection points and controls.

The front panel includes:

- **Ground Terminal:** For safety grounding.

- **USB Port:** 5V 2.1A output for charging USB devices.
- **ON/OFF Switch:** Main power switch for the inverter.
- **Power Indicator:** LED light indicating power status.
- **AC Outlets (x2):** Standard EU 220V/230V AC sockets.

The rear panel includes:

- **Cooling Fans:** Intelligent fans that activate when the internal temperature exceeds 45°C.
- **Negative Terminal (-):** Black terminal for connecting to the negative terminal of the 12V battery.
- **Positive Terminal (+):** Red terminal for connecting to the positive terminal of the 12V battery.

4.2 LCD Display



Image 4.2: Close-up of the LCD display, showing various operational parameters.

The LCD display provides real-time information about the converter's operation:

- **DC Input Voltage:** Displays the voltage from the 12V battery.
- **Frequency:** Shows the output AC frequency (50 Hz).
- **AC Output Voltage:** Displays the converted AC voltage (220V/230V).

- **Load Operating Power:** Indicates the current power consumption of connected devices in Watts.
- **Battery Level:** Graphic representation of the battery charge status.

5. SETUP AND INSTALLATION

Follow these steps for safe and proper installation:

1. **Placement:** Choose a dry, cool, and well-ventilated location for the converter. Ensure it is away from direct sunlight, heat, and moisture.
2. **Grounding:** Connect the grounding terminal on the front panel of the converter to a reliable earth ground using a suitable wire.
3. **Battery Connection:**
 - Ensure the converter's ON/OFF switch is in the "OFF" position.
 - Connect the red battery cable to the positive (+) terminal of the 12V battery and the positive (+) terminal on the converter.
 - Connect the black battery cable to the negative (-) terminal of the 12V battery and the negative (-) terminal on the converter.
 - Ensure all connections are tight and secure to prevent loose connections and sparking.
4. **Remote Control Setup:** The wireless remote control is pre-paired. Ensure the inverter switch is in the "OFF" mode when initially using the remote control to power on the unit.



Image 5.1: Example setup showing the inverter connected to a solar panel and battery for off-grid power solutions.

6. OPERATING INSTRUCTIONS

6.1 Powering On/Off

- **To Power On:** After ensuring all connections are secure, press the ON/OFF switch on the converter or the power button on the wireless remote control. The LCD display will illuminate, and the power indicator LED will turn on.
- **To Power Off:** Press the ON/OFF switch on the converter or the power button on the wireless remote control. The LCD display will turn off, and the power indicator LED will extinguish.

6.2 Connecting Devices

Once the converter is powered on, you can connect your AC and USB devices:

- **AC Devices:** Plug your 220V/230V AC appliances into the AC outlets on the front panel. Ensure the total power consumption does not exceed 2000W.
- **USB Devices:** Connect your USB-powered devices to the 5V 2.1A USB port for charging.

The pure sine wave output ensures compatibility and safe operation for sensitive electronics such as laptops, smartphones, and other household appliances like refrigerators and washing machines.

Remote control

The remote wireless remote control is one-key switch, which is more convenient to use, allowing you to control your inverter at any time



Image 6.1: The wireless remote control allows convenient power management from a distance.

6.3 Understanding LCD Readings

Monitor the LCD display for real-time operational status. Pay attention to the DC Input Voltage to ensure your battery is adequately charged, and the Load Operating Power to avoid overloading the converter.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your converter.

- **Cleaning:** Periodically clean the exterior of the converter with a dry, soft cloth. Do not use liquid cleaners or solvents. Ensure ventilation openings are free from dust and debris.
- **Connections:** Regularly check battery and grounding connections for tightness. Loose connections can cause overheating and power loss.
- **Fuse Replacement:** The converter is equipped with interchangeable fuses. If a fuse blows, replace it with a fuse of the same type and rating (spare fuses are included). Refer to the specifications for fuse details. Always disconnect the battery before replacing fuses.
- **Storage:** If storing the converter for an extended period, disconnect it from the battery and store it in a

cool, dry place.

8. TROUBLESHOOTING

This section addresses common issues you might encounter. If the problem persists, contact customer support.

Problem	Possible Cause	Solution
No power output	Converter is off; Loose battery connections; Low battery voltage; Blown fuse	Turn on converter; Check and tighten connections; Recharge or replace battery; Replace fuse
Overload alarm/shutdown	Connected load exceeds 2000W continuous power	Reduce the total load by disconnecting some appliances. Ensure starting current of motors is considered.
Overheating shutdown	Poor ventilation; Excessive ambient temperature; Prolonged high load	Ensure clear ventilation paths; Move converter to a cooler environment; Reduce load.
Low voltage alarm/shutdown	Battery voltage is too low	Recharge the 12V battery.
High voltage alarm/shutdown	Input DC voltage is too high	Check battery voltage; ensure correct 12V battery is used.

9. SPECIFICATIONS

Feature	Specification
Brand	ETREPOW
Model	LT20PEU12
Input Voltage	12 Volts DC
Output Voltage	230 Volts AC
Continuous Power	2000 Watts
Peak Power	4000 Watts
Output Waveform	Pure Sine Wave
Frequency	50 Hz
Display Type	LCD
USB Output	5V 2.1A

Feature	Specification
Recommended Battery Capacity	120 Amp Hours (minimum)
Product Dimensions	42.7 x 16.6 x 8.9 cm
Product Weight	4.45 kg
Included Components	Converter, Cables, Remote Control, Manual, Fuses
Certifications	CE, ISO, RoHS

10. WARRANTY AND SUPPORT

ETREPOW provides a free one-year replacement warranty for this product. We are committed to ensuring your satisfaction and offer friendly 24-hour customer service. If you have any questions regarding the operation, performance, or any other aspect of your ETREPOW 2000W 12V Pure Sine Voltage Converter, please do not hesitate to contact our support team. Please refer to your purchase documentation for specific contact details.