



Manuals.plus /

› LUYUAN /

› LUYUAN 24V 4000W/8000W Power Inverter User Manual

LUYUAN 24V-220V-4000W-8000W

LUYUAN 24V 4000W/8000W Power Inverter User Manual

Model: 24V-220V-4000W-8000W | Brand: LUYUAN

1. INTRODUCTION

Thank you for choosing the LUYUAN 24V 4000W/8000W Power Inverter. This device converts 24V DC battery power to 220V-240V AC household power, enabling you to operate various electronic devices on the go. It features a continuous power output of 4000W and a peak power of 8000W, making it suitable for caravans, RVs, boats, and solar power systems. Please read this manual thoroughly before use to ensure safe and optimal operation.

2. WHAT'S IN THE BOX

- 1x LUYUAN 24V 4000W/8000W Power Inverter
- 2x Power Cables (25mm², 50cm solid copper)
- 1x Wireless Remote Control
- 1x User Manual
- Fuses

GET POWER WHEN YOU NEED IT



Work Outfield



Camping



Picnic



Emergency



Recreation



Power Failure



Image: The LVYUAN 24V 4000W/8000W Power Inverter shown with its included accessories, including power cables and a remote control.

3. SAFETY INSTRUCTIONS

Always follow these safety guidelines to prevent injury or damage to the inverter and connected devices:

- Ensure the inverter is connected to a 24V DC power source only.
- Do not connect the inverter to an AC power source.
- Keep the inverter away from water, moisture, and flammable materials.
- Ensure adequate ventilation around the inverter to prevent overheating.
- Do not open the inverter casing; refer servicing to qualified personnel.
- Always connect the battery cables with correct polarity (red to positive, black to negative).
- Disconnect the inverter from the battery before performing any maintenance or cleaning.

4. PRODUCT FEATURES

- **High Power Output:** Provides 4000W continuous power and 8000W peak power from 24V DC to 220V

AC. Conversion efficiency is greater than 90%.

- **Versatile Compatibility:** Equipped with 2 EU (220V-240V) outlets for various appliances and 1x 5V 3.1A USB port for charging smartphones, tablets, and laptops.
- **LCD Display:** Real-time monitoring of input voltage, output voltage, and operational status.
- **Wireless Remote Control:** Allows convenient ON/OFF control from a distance. (Note: Remote control requires a 12V 23A battery, not included).
- **Advanced Safety Features:** Includes soft start, undervoltage protection, overvoltage protection, and overheating protection.
- **Durable Construction:** Aluminum casing designed for high temperature resistance and environmental durability.

LCD DISPLAY

- 1 Battery Capacity
- 2 Battery Voltage
- 3 Output Frequency
- 4 Output Voltage
- 5 Load Capacity



FULL SMART PROTECTION



Image: Close-up of the inverter's LCD display, illustrating indicators for battery capacity, battery voltage, output frequency, output voltage, and load capacity.



Image: The white wireless remote control with ON and OFF buttons, used to operate the inverter remotely.

5. SETUP

1. **Placement:** Choose a dry, well-ventilated area for the inverter. Ensure it is not exposed to direct sunlight or heat sources.
2. **Battery Connection:**
 - Connect the red power cable to the positive (+) terminal of your 24V battery and the positive (+) terminal of the inverter.
 - Connect the black power cable to the negative (-) terminal of your 24V battery and the negative (-) terminal of the inverter.
 - Ensure all connections are tight and secure to prevent arcing or overheating.
3. **Remote Control Connection (Optional):** If using the wireless remote, ensure the inverter's main switch is set to "REMOTE".



Image: The rear panel of the inverter, highlighting the positive and negative battery terminals and the dual cooling fans.

6. OPERATING INSTRUCTIONS

1. **Power On:** After securing all connections, switch the inverter's main power button to the "ON" position. The LCD display will illuminate, showing input and output values.
2. **Using the Remote Control:** If the inverter's main switch is set to "REMOTE", use the wireless remote control's ON/OFF buttons to activate or deactivate the inverter.
3. **Connecting Appliances:** Plug your 220V-240V AC appliances into the EU outlets or USB devices into the USB port. Ensure the total power consumption does not exceed 4000W continuously.
4. **Monitoring:** Regularly check the LCD display for input voltage, output voltage, and any error codes.
5. **Power Off:** Before disconnecting any appliances or the inverter from the battery, switch the inverter to the "OFF" position.

Video: Demonstration of the inverter's pure sine wave output and its ability to power an induction cooktop to fry an egg, showcasing its stable power delivery for sensitive appliances.

7. MAINTENANCE

- **Cleaning:** Periodically clean the exterior of the inverter with a dry cloth. Ensure the cooling fan vents are free from dust and debris.
- **Connections:** Regularly check all electrical connections for tightness and corrosion.

- **Storage:** When not in use for extended periods, store the inverter in a cool, dry place.

8. TROUBLESHOOTING

If you encounter issues, refer to the LCD display for error codes and consult the table below:

Error Code	Description	Possible Solution
E-1	Low Voltage Protection	Recharge or replace the battery. Check battery connections.
E-2	High Voltage Protection	Check battery voltage; ensure it does not exceed 30V for a 24V system.
E-3	Over Temperature Protection	Allow the inverter to cool down. Ensure proper ventilation and clear fan vents. Reduce load.
E-4	Overload Protection	Reduce the connected load. Ensure total power consumption is within the inverter's continuous rating.
E-5	Short Circuit Protection	Check for short circuits in connected appliances or wiring.
E-6	Restart Required	Turn the inverter off, wait a few minutes, then turn it back on.



Image: Visual representation of the inverter's LCD screen displaying various error codes and their corresponding protection types.

9. SPECIFICATIONS

- **Brand:** LVYUAN
- **Model Number:** 24V-220V-4000W-8000W
- **Input Voltage:** 24 Volts DC
- **Output Voltage:** 220-240 Volts AC
- **Continuous Power:** 4000 Watts
- **Peak Power:** 8000 Watts
- **Output Waveform:** Pure Sine Wave
- **Conversion Efficiency:** > 90%
- **USB Output:** 5V 3.1A
- **Number of AC Outlets:** 2 (EU type)

- **Dimensions:** 52L x 18W x 14H centimeters
- **Item Weight:** 5.8 KG
- **Power Source:** Battery Powered

10. WARRANTY AND SUPPORT

This LVYUAN Power Inverter comes with a **1-Year Warranty** against manufacturer defects. For technical support or warranty claims, please contact LVYUAN customer service through your retailer or the official brand website. Please retain your proof of purchase for warranty validation.