

LANDERPOW LANDERPOW-24V-3000W-PSW

LANDERPOW 24V-3000W Pure Sine Wave Inverter Instruction Manual

Model: LANDERPOW-24V-3000W-PSW

INTRODUCTION

Welcome to your LANDERPOW 24V-3000W Pure Sine Wave Inverter. This manual provides essential information for safe and efficient operation, ensuring you get the most out of your power solution for RVs, trucks, solar setups, homes, and off-grid applications.

IMPORTANT SAFETY INSTRUCTIONS

Please read and understand all safety instructions before installation and operation to prevent injury or damage to the inverter.

- Always read all instructions and cautions in this manual before installation and use.
- This product contains no user-serviceable parts. Do not attempt to disassemble or repair the inverter.
- The inverter is designed for a 24V DC input. Connecting to batteries with a different voltage (e.g., 12V or 48V) will cause permanent damage and void the warranty.
- Always disconnect all AC and DC connections before carrying out maintenance or servicing the product.
- Consult your battery manufacturer's information to ensure compatibility and proper usage.
- Never use the product in areas with a risk of gas or dust explosions.
- The DC input cable should be fused and fitted with a circuit breaker.
- Install the product in a well-ventilated, cool, and dry environment. Ensure adequate space (at least 10 inches / 25cm) for wiring and ventilation.
- Securely mount the inverter. Horizontal mounting is preferred for optimum cooling. Avoid placing the inverter vertically on a surface that could block fan openings.
- After installation, check all wiring connections for tightness to avoid overheating and ensure proper

operation.

PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1x LANDERPOW 24V-3000 Watt Pure Sine Wave Inverter
- 2x 1AWG Battery Cables (2FT)
- 1x Ground Cable (1.65FT)
- 1x Remote Controller (15FT)
- 1x Professional User Manual



Image: The LANDERPOW 24V-3000W Pure Sine Wave Inverter and its included accessories, neatly laid out.

Video: An overview of the LANDERPOW Pure Sine Wave Inverter and its components, demonstrating the unboxing and initial setup.

PRODUCT FEATURES

The LANDERPOW 24V-3000W Pure Sine Wave Inverter is engineered with advanced features for reliable

and versatile power delivery:

- **High Power Output:** Provides 3000W continuous clean DC to AC power with a 6000W surge capability, ensuring efficient operation for various appliances.
- **Pure Sine Wave Technology:** Delivers grid-quality AC power, protecting sensitive electronics from damage and eliminating hum or flicker.
- **Versatile Connectivity:** Equipped with 3 AC outlets, a hardwired terminal for high-current appliances, a 5V/3.1A USB port, and a 30W USB-C port for fast device charging.
- **Enhanced Safety Cables:** Includes two 1AWG/2FT high-quality thickened pure copper battery cables for efficient power transfer and safety.
- **Smart Remote Control:** Features a 15ft wired remote controller with an LED screen to monitor battery levels, output, and error states in real-time.
- **Comprehensive Protection:** Built-in safeguards against undervoltage, overvoltage, overload, overheating, short circuit, and reverse connection.
- **Durable Design:** Constructed with a rugged, heat-dissipating full metal shell for long-term durability and reliability in various environments.



Image: The inverter connected to a 24V battery, highlighting its compatibility with multiple battery chemistries.

Pure Sine Wave | Conversion >90% Efficiency No Annoying Hum — Perfected Output

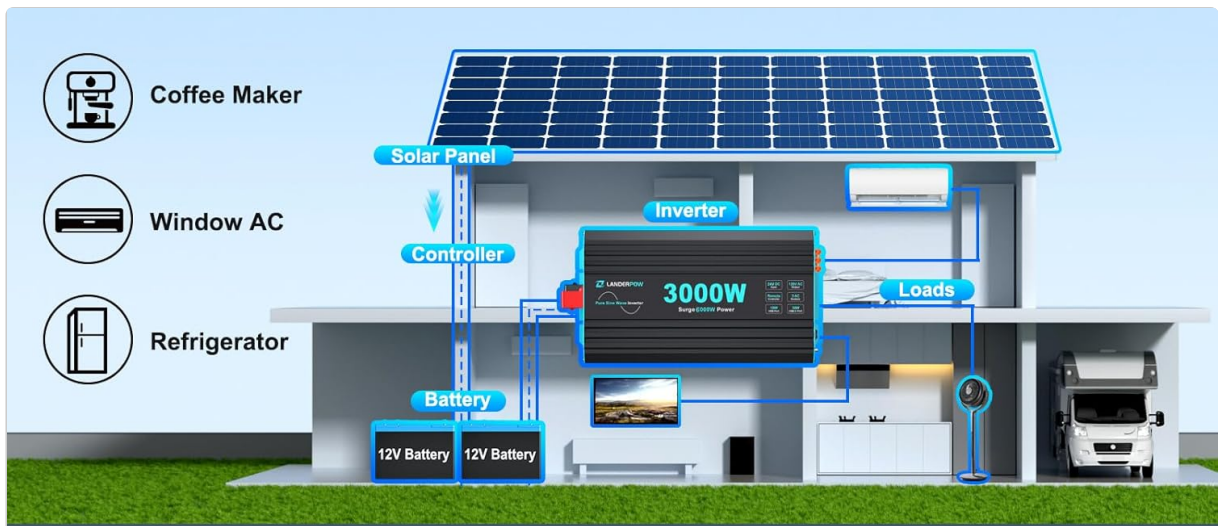


100%
Equipment Service Life

100%
Fully Applicable



Image: Visual comparison of pure sine wave output versus modified sine wave, demonstrating the inverter's clean power delivery for various appliances.



RV & Home Backup Power — Support for 99% Devices Battery & Solar System No Burden



Image: The inverter integrated into RV and home solar systems, powering common household appliances.

Power More, Charge Warp-Speed

OURS:

- 3 AC Sockets
- 30W PD USB-C
- 5V/3.1A USB-A

VS

Others:

- Only 2 AC Sockets
- 18W PD USB-C
- 5V/2.0A USB-A



Image: A visual representation of the inverter's multiple AC and USB charging ports, emphasizing its versatility.

3000W Continuous Power 6000W Surge Power for 2s

Surge Power

6000W



**Professional AC Hardwired
Output Terminal**

Image: The inverter's continuous and surge power capabilities, along with its hardwired terminal for heavy loads.

**Whisper Fan • Boosted Efficiency • Auto-Start/Stop —
Intelligent Cooling Fans**



Image: An internal view of the inverter's intelligent cooling system, highlighting its quiet and efficient operation.



**LED Display • 15.00ft Cable • Instant Readouts —
Inverter Real-time Status at Your Command**

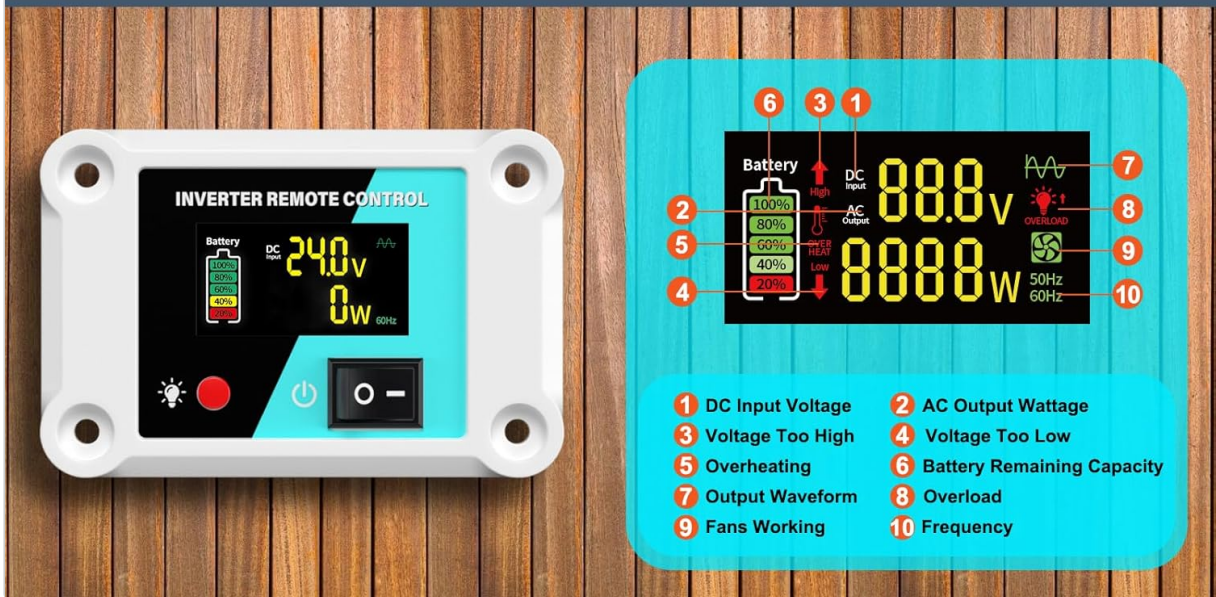


Image: Close-up of the remote control's LED screen, detailing the various real-time monitoring features.

SETUP AND INSTALLATION

Follow these steps to properly set up and install your LANDERPOW Pure Sine Wave Inverter:

1. **Choosing a Location:** Select a well-ventilated, cool, and dry area for installation. Ensure at least 10 inches (25cm) of clearance around the inverter for proper airflow and wiring. Avoid direct sunlight, high temperatures, and moisture.
2. **Battery Connection:**
 - Position the inverter as close to the 24V battery bank as possible to minimize cable voltage loss.
 - Ensure the inverter's ON/OFF switch is in the **OFF** position before connecting any cables.
 - Connect the **red positive (+)** battery cable to the inverter's positive terminal and then to the battery's positive terminal.
 - Connect the **black negative (-)** battery cable to the inverter's negative terminal and then to the battery's negative terminal.
 - Tighten all connections securely to prevent loose contacts and overheating.
3. **Grounding:** Connect the included ground cable to the inverter's ground terminal and to a suitable

earth ground point (e.g., vehicle chassis, ground rod).

4. **Remote Control Connection:** Plug the 15ft wired remote controller into the designated "REMOTE" port on the inverter.
5. **Power On:** Once all connections are secure, switch the inverter's ON/OFF switch to the "ON" position. The remote control's LED screen will illuminate, displaying real-time operational status.

Video: A demonstration of connecting the inverter to a battery and powering it on, including the remote control setup.
(Note: While the video may show a 12V battery, the connection principles apply to the 24V model.)

OPERATING INSTRUCTIONS

Once your inverter is installed and powered on, follow these guidelines for operation:

1. **Connecting AC Appliances:** Ensure the inverter is ON. Plug your AC appliances into the three standard AC outlets. For high-current electrical tools or appliances, utilize the hardwired AC terminal.
2. **USB Charging:** Use the 5V/3.1A USB port or the 30W USB-C port to fast-charge your smartphones, tablets, and other compatible devices.
3. **Real-time Monitoring:** The 15ft wired remote control features an LED screen that displays real-time information such as DC input voltage, AC output wattage, battery remaining capacity, and frequency. This allows for timely battery swaps and power management.
4. **One-Touch Control:** The remote control includes a one-touch button for convenient shutdown and restart of the inverter.

Video: Demonstrates the inverter powering various household appliances like coffee machines, hair dryers, and circular saws, showcasing its capability for heavy startups.

Video: Shows the LED screen of the remote control in action, displaying real-time power metrics and battery status.

Video: Illustrates the inverter powering electrically sensitive equipment, highlighting its pure sine wave output for safe operation.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your inverter:

- **Cleaning:** Keep the inverter's exterior clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Ventilation:** Periodically check that the cooling fans and ventilation openings are not blocked. Ensure proper airflow to prevent overheating.
- **Connection Checks:** Regularly inspect all electrical connections, including battery cables, ground wire, and AC output connections, to ensure they remain tight and free from corrosion.
- **Storage:** When not in use for extended periods, store the inverter in a cool, dry, and well-ventilated location.

TROUBLESHOOTING COMMON ISSUES

If you encounter any issues with your inverter, refer to the table below for potential solutions:

Error Code/Status	Potential Issue	Solutions
Fault 2 (Alarm beeps)	Input voltage is below $21.0 \pm 0.5V$ (for 24V system)	Keep input voltage above $21.0 \pm 0.5V$
Fault 3 (Red LED lit)	Input voltage is above $30.0 \pm 0.5V$ (for 24V system)	Keep input voltage below $30.0 \pm 0.5V$
Fault 4 (Red LED lit)	Overload protection	Reduce the load power
Fault 7 (Red LED lit)	The temperature is above $113^{\circ}F$ ($45^{\circ}C$)	1. Cool down the inverter to $113^{\circ}F$ ($45^{\circ}C$). 2. Check for adequate venting. 3. Reduce the load on inverter.
Fault 8 (Red LED lit)	Short circuit	Disconnect and check the load, make sure the load is correct, reconnect and then restart the inverter.
No output voltage	Switch off	Turn on the switch of inverter or remote control.
Poor connections with the battery	Loose or corroded battery terminals	Make sure the connection is tight and clean.

TECHNICAL SPECIFICATIONS

Specification	Value
Brand	LANDERPOW
Model Name	LANDERPOW-24V-3000W-PSW
Continuous Wattage	3000 watts
Peak Output Power	6000 watts
Input Voltage	24 Volts (DC)
Output Voltage	120 Volts (AC)
Electrical Output Waveform	Pure Sine Wave
Conversion Efficiency	> 91%
AC Outlets	3
USB-C Output	30W
USB Output	5V 3.1A

Specification	Value
Remote Control Cable Length	15ft
Battery Cables	2x 1AWG/2FT
Ground Cable	1x 1.65FT
Item Dimensions L x W x H	11.89"L x 6.97"W x 3.35"H
Item Weight	7.45 Pounds
Safety Certifications	UL, FCC

WARRANTY AND CUSTOMER SUPPORT

Your LANDERPOW 24V-3000W Pure Sine Wave Inverter is backed by an Extra Long 3-Year Total Coverage, which includes:

- 1-Year No-hassle Replacement
- 2-Year Extended Support

Should you have any questions, require technical assistance, or need to claim warranty support, please contact our professional customer service team via email. We are committed to providing a response within 12 hours.



Image: A customer service representative ready to assist with inquiries.