

VOLFVERT 12V-2500W

VOLFVERT 12V-2500W Pure Sine Wave Power Inverter User Manual

Model: 12V-2500W

1. INTRODUCTION

Thank you for choosing the VOLFVERT 12V-2500W Pure Sine Wave Power Inverter. This device is designed to convert 12V DC battery power into stable 110V/120V AC electricity, suitable for powering a wide range of electronic devices and appliances. Its pure sine wave output ensures compatibility with sensitive electronics, while multiple protection features guarantee safe and reliable operation. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. PRODUCT FEATURES

- **Advanced Pure Sine Wave Technology:** Delivers 2500W continuous power and 5000W peak power, converting 12V DC to 110V/120V AC. High conversion efficiency (>90%) and low no-load loss optimize energy usage.
- **Versatile Power Outlets:** Equipped with three AC outlets (each providing up to 2200W max), two 2.4A USB ports, and one Type-C port, accommodating various devices simultaneously.
- **Wireless Remote Control:** Allows convenient operation of the inverter from a distance.
- **Clear LCD Display:** Provides real-time information and warning indications, enabling users to identify operational status and protection alerts easily.
- **Enhanced Durability and Cooling:** Features intelligent temperature control, a built-in ultra-silent thermo-activated cooling fan, and aviation-grade aluminum housing for efficient heat dissipation and extended inverter life.
- **Comprehensive Safety Protections:** Includes safeguards against over-heating, short circuits, under-voltage, over-voltage, over-load, and reverse connection. Sound alerts and automatic restart functions ensure continuous safe operation.

3. WHAT'S IN THE BOX

The package for your VOLFVERT 12V-2500W Pure Sine Wave Power Inverter includes the following items:

- 1x VOLFVERT 2500W Pure Sine Wave Inverter
- 1x User Manual
- 2x Battery Cables (1x Red for positive, 1x Black for negative)
- 1x Wireless Remote Controller
- 4x Spare Fuses
- 1x Wrench
- 1x Earth Wire

PACKING LIST



fuse/wrench



earth wire



battery cables



wireless remote

Image: Detailed view of the VOLFVERT 2500W Pure Sine Wave Power Inverter and its included accessories, such as battery cables, wireless remote, fuses, wrench, and earth wire.

4. SAFETY INFORMATION

Please observe the following safety precautions to prevent injury and damage to the inverter or connected devices:

- **Ventilation:** Ensure adequate ventilation around the inverter. Do not block cooling vents.
- **Environment:** Install the inverter in a dry, cool, and well-ventilated area, away from direct sunlight, heat sources, flammable materials, and moisture.

- **Voltage Compatibility:** Connect the inverter only to a 12V DC power source. Connecting to a different voltage (e.g., 24V or 48V) will damage the inverter.
- **Polarity:** Always connect the battery cables with correct polarity (Red to Positive, Black to Negative). Reverse polarity will cause severe damage.
- **Grounding:** Properly ground the inverter using the provided earth wire to prevent electrical shock.
- **Load Capacity:** Do not exceed the inverter's continuous power rating (2500W) or peak power rating (5000W). Overloading can cause damage and trigger protection features.
- **Maintenance:** Regularly check all connections for tightness and inspect cables for damage.
- **Children:** Keep the inverter out of reach of children.

5. SETUP

Follow these steps for safe and proper installation of your power inverter:

1. **Choose a Location:** Select a secure, dry, cool, and well-ventilated location for the inverter. Ensure there is sufficient space around the unit for airflow.
2. **Connect Battery Cables:**
 - Connect the **red** battery cable to the **positive (+)** terminal of the inverter and then to the **positive (+)** terminal of your 12V DC battery.
 - Connect the **black** battery cable to the **negative (-)** terminal of the inverter and then to the **negative (-)** terminal of your 12V DC battery.
 - Ensure all connections are tight and secure to prevent arcing and overheating.
3. **Grounding:** Connect the provided earth wire from the inverter's grounding terminal to a proper earth ground (e.g., vehicle chassis, ground rod).
4. **Remote Control (Optional):** If using the wired remote control, plug its cable into the designated 'REMOTE' port on the inverter. For the wireless remote, ensure the insulating paper is removed from the battery compartment before use.



Smooth
Continuous



Ultral
Silent



Superior
Cooling



Compact
Size

MAIN PARTS

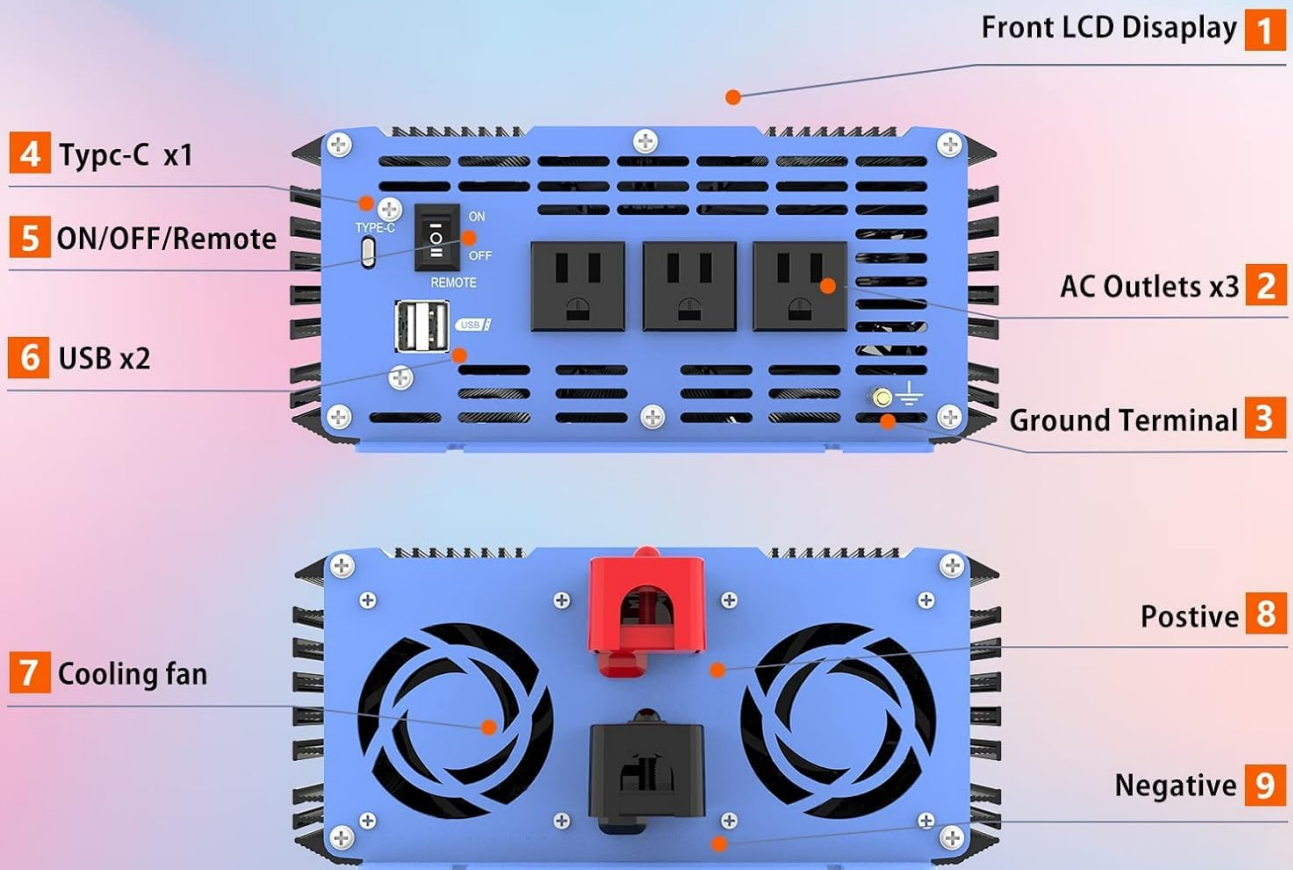


Image: Overview of the inverter's main components and connection points.

6. OPERATING INSTRUCTIONS

To operate your VOLFVERT 12V-2500W Pure Sine Wave Power Inverter:

- Power On:** After ensuring all connections are secure, press the ON/OFF switch on the inverter or the wireless remote control to turn on the unit. The LCD display will illuminate.
- Monitor LCD Display:** The LCD display provides critical information:
 - Input Voltage (VDC):** Shows the current DC voltage from your battery.
 - Output Voltage (VAC):** Displays the AC output voltage (110V/120V).
 - Load Wattage (W):** Indicates the power consumption of connected devices.
 - Battery Output Level:** Visual representation of battery charge.
 - Frequency (Hz):** Shows the AC output frequency (60Hz).
 - Warning Indicators:** Alerts for under-voltage, over-voltage, overload, short-circuit, and over-temperature.

3. **Connect Devices:** Plug your AC appliances into the three AC outlets. For USB-powered devices, use the dual USB ports or the Type-C port. Ensure the total power consumption does not exceed 2500W.
4. **Power Off:** When finished, first disconnect all appliances from the inverter, then press the ON/OFF switch on the inverter or remote to turn off the unit.



Image: The LCD display provides clear indications of operational status and warnings.

WIRELESS REMOTE CONTROL

Anytime, Anywhere, More convenient



- Rectangular ergonomics design
- Indicator will light up red when ON/OFF button was pressed

Image: The wireless remote control offers convenient operation.

7. MAINTENANCE

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

- **Cleaning:** Keep the inverter clean and free from dust and debris. Use a dry cloth to wipe the exterior. Do not use liquid cleaners.
- **Ventilation:** Ensure cooling vents are unobstructed. Periodically check for dust buildup in the fan area and clean if necessary.
- **Connections:** Regularly inspect battery cable connections for tightness and corrosion. Tighten any loose connections and clean corroded terminals.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

8. TROUBLESHOOTING

If you encounter issues with your inverter, refer to the LCD display warnings and the following common troubleshooting steps:

Problem	Possible Cause	Solution
Inverter does not turn on	Loose battery connections Low battery voltage Blown fuse Incorrect polarity	Check and tighten battery connections Charge or replace battery Check and replace fuses (use spare fuses) Verify correct positive/negative connections
No AC output	Inverter in protection mode (overload, over-temp, etc.) Faulty appliance	Check LCD for warning codes; reduce load or allow to cool Test with a different appliance
Overload warning	Connected load exceeds 2500W	Disconnect some appliances to reduce total wattage
Over-temperature warning	Poor ventilation Excessive ambient temperature Prolonged high load	Ensure clear airflow around inverter Move inverter to a cooler location Reduce load and allow to cool
Under-voltage warning	Battery voltage too low	Charge or replace battery
Over-voltage warning	Input voltage too high	Check battery charging system; ensure input is 12V DC

9. SPECIFICATIONS

Detailed technical specifications for the VOLFVERT 12V-2500W Pure Sine Wave Power Inverter:

- **Model Name:** 2500W
- **Continuous Power:** 2500 Watts
- **Peak Power:** 5000 Watts
- **Input Voltage:** 12V DC
- **Output Voltage:** 110V / 120V AC
- **Output Frequency:** 60Hz
- **Output Waveform:** Pure Sine Wave
- **Conversion Efficiency:** >90%
- **AC Outlets:** 3 (each max 2200W)
- **USB Ports:** 2 x 2.4A
- **Type-C Port:** 1
- **Cooling:** Intelligent Temperature Control Fan
- **Protection Features:** Over-Heating, Short Circuit, Under-Voltage, Over-Voltage, Over-Load, Reverse Connect
- **Item Weight:** 10.65 pounds
- **Package Dimensions:** 15.79 x 10.31 x 6.54 inches
- **Recommended Uses:** Boat, Camping, Home, Laptop, RV, Small electronics, Tablet, Travel

PURE SINE WAVE TECHNOLOGY

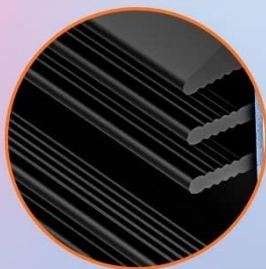
2500W
CONTINUOUS

5000W
PEAK

- Smooth, Continuous Power
- Ultra-Silent Operation
- Optimum Heat Dissipation



Powerful Built-in Heat Sink & Cooling Fan



Sturdy & Thick Aluminum Housing



High Frequency Transformers



High Performance Capacitors



High Inductive Loads

Image: Key features of the Pure Sine Wave Technology and robust construction.

10. WARRANTY AND SUPPORT

VOLFVERT offers a **24-month warranty** for this Pure Sine Wave Power Inverter. This warranty covers manufacturing defects and ensures your product performs as expected under normal use conditions. For any questions, technical assistance, or warranty claims, please contact VOLFVERT customer service via email. Our dedicated support team is available 24/7 to assist you. Please refer to the contact information provided with your purchase or on the official VOLFVERT website for the most up-to-date support details.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question