

WZRELB SEVC2000W48VRC

WZRELB 2000W 48V Pure Sine Wave Inverter User Manual

Model: SEVC2000W48VRC

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your WZRELB 2000W Pure Sine Wave Inverter. This device converts 48V DC battery power into 110V/120V AC household power, suitable for various applications including home, RV, truck, and camping use. It features a 2000W continuous power output with a 4000W surge capability, an LED display, and a remote controller.



Figure 1.1: WZRELB 2000W Pure Sine Wave Inverter in use, demonstrating its application in an outdoor setting.

2. SAFETY INFORMATION

Read all safety instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Proper Ventilation:** Ensure the inverter is installed in a well-ventilated area to prevent overheating.
- **Correct Voltage:** Connect the inverter only to a 48V DC power source. Connecting to an incorrect voltage can damage the inverter and connected devices.
- **Avoid Water:** Do not expose the inverter to water, rain, or moisture.
- **Grounding:** Always ensure the inverter is properly grounded. Refer to the 'Ground Line Connection' section for details.
- **High Temperature:** The inverter housing can become hot during operation. Do not touch the housing while the inverter is on.
- **Overload Protection:** Do not exceed the inverter's rated continuous power of 2000W.
- **Children and Pets:** Keep the inverter out of reach of children and pets.



Figure 2.1: The inverter includes multiple protection features such as short circuit, overload, over current, under voltage, over voltage, reverse polarity, and over-temperature protection.

3. PRODUCT FEATURES

The WZRELB 2000W Pure Sine Wave Inverter is designed with advanced features for reliable power conversion:

- **Pure Sine Wave Output:** Provides clean and stable AC power, ideal for sensitive electronics like TVs, laptops, phones, and CPAP machines. Conversion efficiency is greater than 90%.
- **Powerful Output:** Delivers 2000W continuous power (4000W surge) from 48V DC to 110V/120V AC. Features four 120VAC outlets with 16.67Amp maximum capacity.
- **DC LED Display:** Real-time monitoring of DC input voltage for clear power usage tracking.
- **Remote Controller:** Allows convenient remote operation, enhancing usability in off-grid systems, RVs, trucks, or during power outages.
- **Multi-Protection:** Comprehensive protection against overheating, overloading, under-voltage, over-voltage, and short circuits.
- **Soft Starter Design:** Gradually increases AC voltage to reduce surge current impact, extending appliance lifespan.
- **Efficient Cooling System:** Features an all-aluminum housing for all-round heat dissipation and an integrated cooling fan to maximize high-temperature operating range.

Ideal For Sensitive Loads

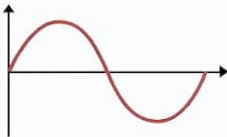
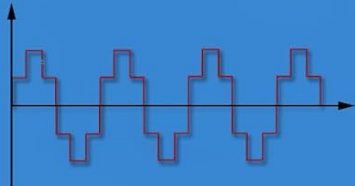
		
	PURE SINE WAVE	Modified sine wave inverter
Type		
Conversion Efficiency	>90%	<80%
THD	<3%	20%
Compatibility Device	>99%	Very few electrical appliances

Figure 3.1: Pure Sine Wave inverters offer higher conversion efficiency, lower Total Harmonic Distortion (THD), and broader device compatibility compared to modified sine wave inverters.

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Video 3.1: Demonstration of the WZRELB 2000W Pure Sine Wave Inverter's capabilities and features.

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Video 3.2: Overview of the WZRELB Pure Sine Wave Inverter, highlighting its stable, safe, and efficient operation.

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Video 3.3: General demonstration of a Pure Sine Wave Inverter, showcasing its application with various electrical appliances.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your inverter:

1. **Mounting:** Choose a dry, well-ventilated location away from direct sunlight and heat sources. The inverter can be mounted horizontally or vertically.
2. **Battery Connection:** Connect the inverter to a 48V DC battery bank. Ensure correct polarity: red terminal to positive (+), black terminal to negative (-). Use appropriate gauge cables for the power rating.
3. **Grounding:** Connect the inverter's ground terminal to a reliable earth ground.
4. **Remote Controller Connection:** Plug the remote controller cable into the designated port on the inverter.

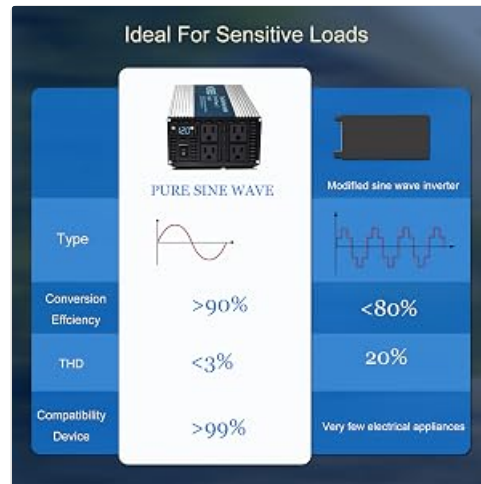


Figure 4.1: Illustration of the ground line connection for the inverter, essential for safety.



Figure 4.2: Proper connection of positive (red) and negative (black) cables to the inverter's DC input terminals.

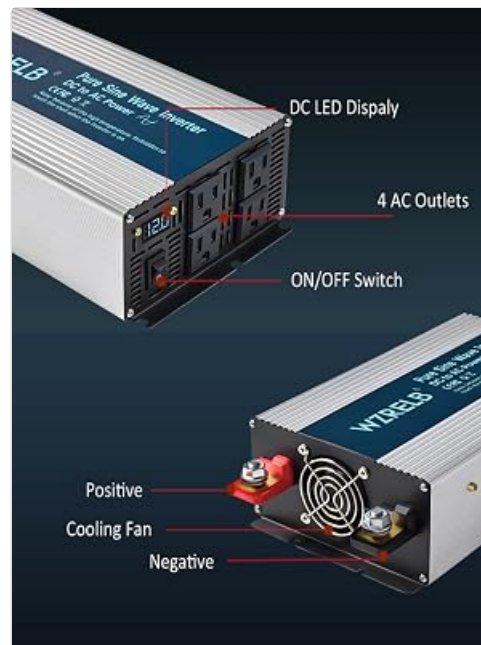


Figure 4.3: The inverter is compatible with Lithium, Lead-acid, AGM, and Gel battery types, and can be easily installed.

5. OPERATING INSTRUCTIONS

1. **Power On:** After all connections are secure, press the ON/OFF switch on the inverter or use the remote controller to turn the unit on. The LED display will illuminate, showing the DC input voltage.
2. **Connect AC Devices:** Plug your 110V/120V AC appliances into the inverter's AC outlets. Ensure the total wattage of connected devices does not exceed 2000W.
3. **Monitor Display:** The LED display provides real-time DC voltage readings, allowing you to monitor your battery status.
4. **Remote Control:** The remote controller allows you to turn the inverter ON or OFF from a distance (up to 100ft indoors, 150ft in open areas). Note that the remote only functions when the inverter's main switch is in the ON position.
5. **Power Off:** To turn off the inverter, press the ON/OFF switch or use the remote controller. Disconnect AC devices before prolonged storage.



Figure 5.1: The LED display provides a clear, real-time reading of the DC input voltage.

Remote Switch

100ft in room with walls and doors

150ft in open area



Battery is not included, recommend 23A 12V Alkaline Battery

The remote only functions when the inverter switch is turned ON



Figure 5.2: The remote switch allows convenient control of the inverter from a distance. A 23A 12V Alkaline Battery (not included) is recommended for the remote.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity 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:** Periodically check that the cooling fan and ventilation openings are not obstructed.
- **Connections:** Regularly inspect all electrical connections (battery cables, AC plugs) for tightness and corrosion. Tighten any loose connections.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

All-aluminum Body

Maximizes the inverter's operating temperature range



Figure 6.1: The all-aluminum body and cooling fan contribute to efficient heat dissipation, crucial for inverter longevity.

7. TROUBLESHOOTING

If you encounter issues with your inverter, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power output	Inverter OFF; Low battery voltage; Loose connections; Blown fuse	Turn inverter ON; Recharge battery; Check and tighten all connections; Replace fuse if necessary
Overload alarm	Connected load exceeds 2000W	Reduce the total wattage of connected appliances

Problem	Possible Cause	Solution
Over-temperature alarm	Poor ventilation; Excessive load; High ambient temperature	Ensure adequate ventilation; Reduce load; Move inverter to a cooler environment
Low voltage alarm	Battery voltage too low	Recharge or replace the battery
Remote not working	Inverter main switch OFF; Remote battery dead; Out of range	Ensure inverter main switch is ON; Replace remote battery; Operate within specified range

8. SPECIFICATIONS

Feature	Specification
Brand	WZRELB
Model Name	SEVC2000W48VRC
Wattage (Continuous)	2000 watts
Peak Output Power	4000 watts
Input Voltage	48 volts DC
Output Voltage	110V / 120V AC
Electrical Output Waveform	Pure Sine Wave
Frequency	60 hertz
Conversion Efficiency	>90%
Display Type	LED
Item Dimensions (L x W x H)	11.3" x 5.6" x 2.84"
Item Weight	4.5 pounds
Manufacturer	Yueqing Reliable Electric co.,ltd

Portable Power Inverter

Easily move to different vehicles with quick connect



Weight: 4.5 LB

Figure 8.1: Physical dimensions and weight of the WZRELB 2000W Pure Sine Wave Inverter.

9. WARRANTY INFORMATION

The WZRELB 2000W Pure Sine Wave Inverter comes with a **1-Year Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, abuse, unauthorized modifications, or improper installation.

10. CUSTOMER SUPPORT

For technical assistance, warranty claims, or any questions regarding your WZRELB Pure Sine Wave Inverter, please contact the manufacturer or your retailer. Refer to the product packaging or the official WZRELB website for contact details.

Manufacturer: Yueqing Reliable Electric co.,Ltd

For more information, visit the [WZRELB Store on Amazon](#).

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.

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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