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› [WZRELB 1000W 48V 120V Pure Sine Wave Power Inverter User Manual](#)

WZRELB RBP-100048

WZRELB 1000W 48V 120V Pure Sine Wave Power Inverter User Manual

Model: RBP-100048

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation of your WZRELB 1000W 48V 120V Pure Sine Wave Power Inverter. Please read this manual thoroughly before installation and use to ensure proper function and to prevent damage to the unit or connected devices.

Product Overview

The WZRELB 1000W Pure Sine Wave Power Inverter is designed to convert 48V DC power from batteries into 120V AC power, suitable for a wide range of household appliances and sensitive electronics. It provides 1000 Watts of continuous power and 2000 Watts of instantaneous peak power, featuring dual US outlets and LED displays for monitoring DC and AC voltages.



Figure 1: Front and rear view of the WZRELB 1000W 48V Pure Sine Wave Power Inverter, showcasing its compact design and various ports.

2. SAFETY PRECAUTIONS

Adhering to these safety guidelines is crucial for safe operation and to prevent damage or injury.

- **Do not connect the inverter directly to grid power.** This unit is designed for DC battery input only.
- **Ensure correct polarity.** Reverse connection of positive and negative terminals is strictly forbidden and will damage the inverter.
- **Avoid overloading the inverter.** If connecting inductive loads (e.g., motors, refrigerators), select an inverter with a continuous power rating 3-7 times higher than the appliance's wattage. For refrigerators, a 10 times higher power inverter is recommended due to high startup current.
- **Proper power-up sequence:** Always turn off the load first, then turn off the inverter. When powering on, turn on the inverter first, then turn on your loads. This ensures stable output, especially with the soft start function.
- **Monitor indicator lights:** A flashing red light indicates that the input voltage is slightly high.
- **Use provided cables:** Always use the standard battery cables supplied with the inverter to ensure full output capacity.
- **Internal Fuses:** The inverter has built-in fuses for safety. Spare fuses are included in the package.
- **Cooling:** The intelligent cooling fan activates when the internal temperature exceeds 66 degrees Celsius to prevent

overheating. Ensure adequate ventilation around the unit.

3. PRODUCT COMPONENTS AND FEATURES

Familiarize yourself with the various parts and indicators of your WZRELB power inverter.

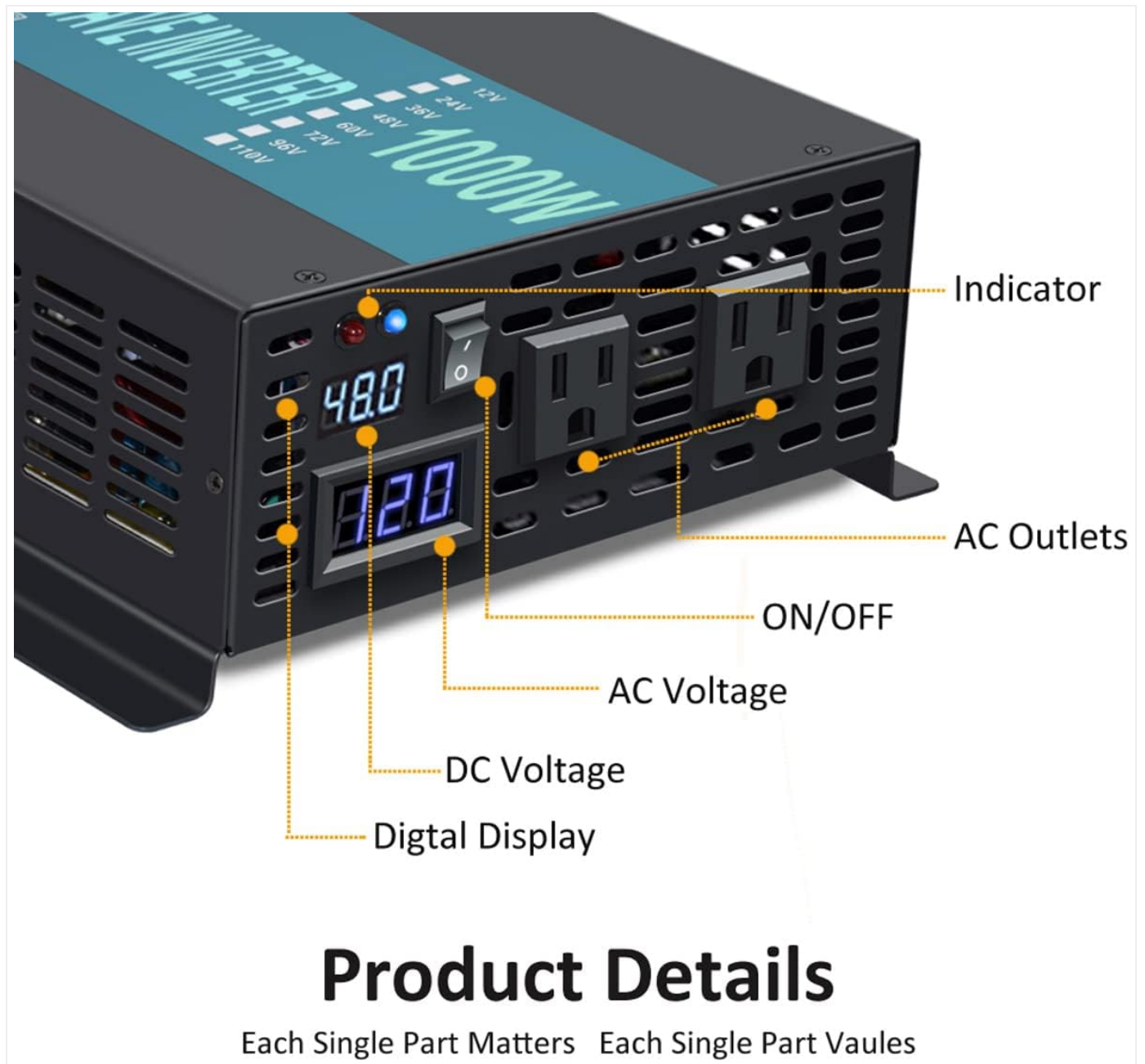


Figure 2: Front panel details showing the Indicator light, ON/OFF switch, AC Outlets, DC Voltage Digital Display, and AC Voltage Digital Display.

Indicator: Provides status feedback (e.g., power on, fault).

ON/OFF Switch: Controls the power to the inverter.

AC Outlets: Dual US standard outlets for connecting AC devices.

DC Voltage Digital Display: Shows the current DC input voltage from the battery.

AC Voltage Digital Display: Shows the current AC output voltage.

WIDELY APPLICATIONS



Hook up to your **24v** battery bank

Off Grid Only- Perfect for home ,RV travel ,camping



TV



CPAP machine



Drone



Printer



Laptop/Pad/Phone

Figure 3: The inverter's dual US standard outlets, capable of providing stable and full AC output for various devices.

4. SETUP AND INSTALLATION

Follow these steps to properly set up your WZRELB power inverter.

1. **Choose a suitable location:** Place the inverter in a dry, well-ventilated area, away from direct sunlight, heat sources, and flammable materials. Ensure there is enough space around the unit for proper airflow, especially for the cooling fans.
2. **Prepare the battery:** Ensure your 48V battery bank is fully charged and capable of providing the necessary current for your applications.
3. **Connect the battery cables:**
 - Connect the **red (positive)** battery cable to the **positive (+) terminal** on the inverter.
 - Connect the **black (negative)** battery cable to the **negative (-) terminal** on the inverter.
 - Ensure connections are tight and secure to prevent arcing and power loss.

Dual US standard Outlets 8.3A Max

Ture Pure Sine Wave , ensure the stable and full AC output



Figure 4: Proper connection of the red (positive) and black (negative) battery cables to the inverter terminals.

4. **Grounding:** For safety, ensure the inverter is properly grounded. Consult local electrical codes for grounding requirements.

5. OPERATING INSTRUCTIONS

Follow these steps to operate your WZRELB power inverter safely and effectively.

1. **Power On:** Once battery cables are securely connected, press the ON/OFF switch on the inverter's front panel. The indicator light should illuminate, and the digital displays will show the DC input voltage and AC output voltage.
2. **Connect Appliances:** Plug your AC appliances into the dual US outlets on the inverter.
3. **Power On Appliances:** Turn on your appliances one by one. Start with the highest wattage appliance if you are connecting multiple devices.
4. **Monitor Displays:** Observe the DC and AC voltage displays to ensure stable operation.
5. **Power Off:** When finished, first turn off all connected appliances, then press the ON/OFF switch on the inverter to power it down.

Applications

This inverter is ideal for various applications, including home use, RV travel, and camping, especially for off-grid power needs. It can power devices such as TVs, CPAP machines, drones, printers, laptops, and mobile phones.

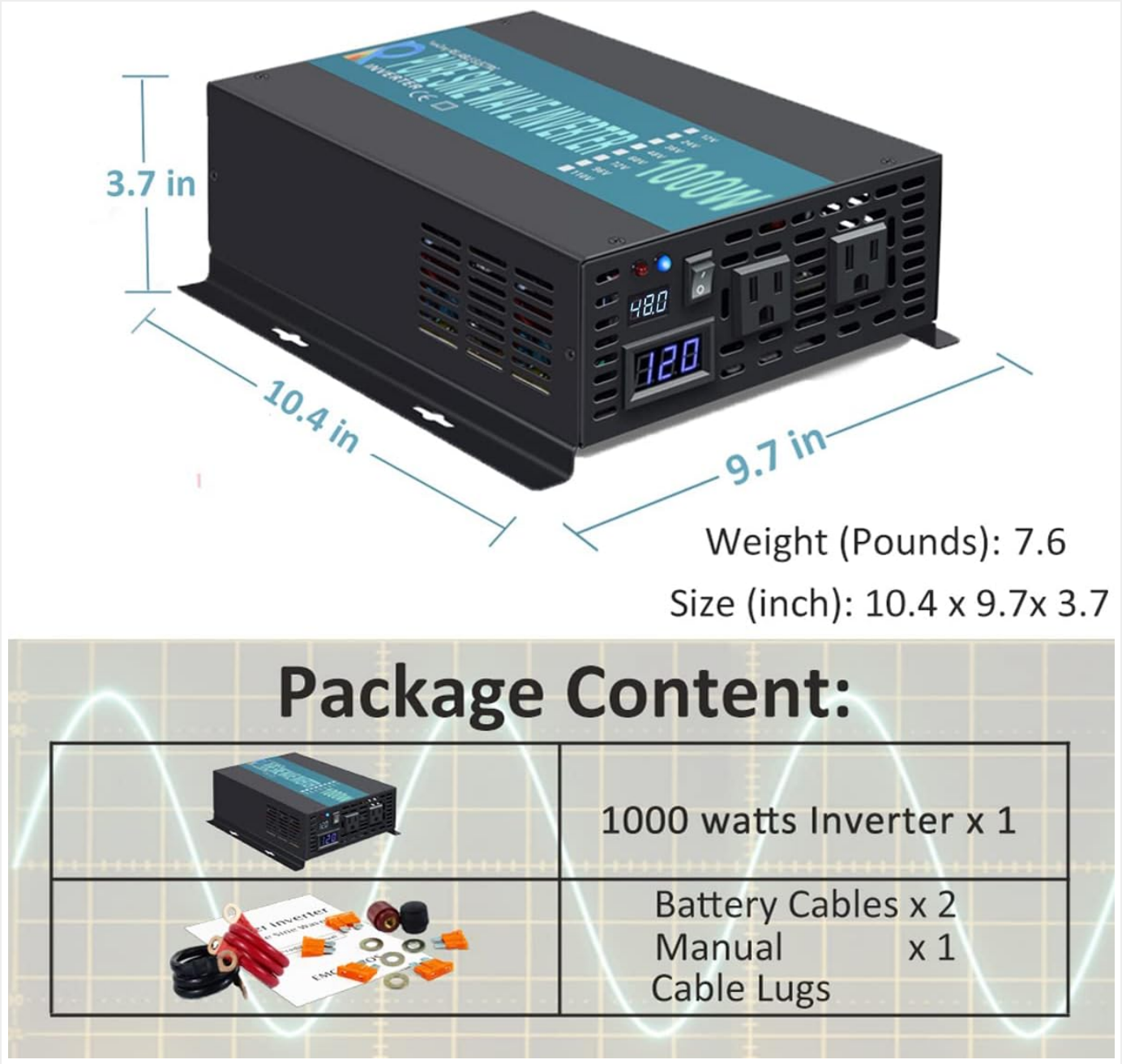


Figure 5: The inverter's compact dimensions (10.4 x 9.7 x 3.7 inches) and weight (7.6 pounds), making it suitable for portable applications. Also shows package contents.

6. SPECIFICATIONS

Feature	Detail
Model Name	RBP-100048
Continuous Power	1000 Watts
Peak Power	2000 Watts
DC Input Voltage	48V

Feature	Detail
DC Input Range	42V - 60V
AC Output Voltage	120V
AC Output Frequency	60Hz
Efficiency	85% - 90%
AC Outlets	Dual US Type
Low Voltage Alarm	43V - 45V
Low Voltage Shut Down	41V - 43V
Over Voltage Shut Down	61.2V
Cooling Method	Intelligent Cooling Fan (activates > 50°C)
Product Dimensions	11.7 x 9.7 x 3.7 inches
Item Weight	7.2 pounds
Power Source	Battery Powered
Recommended Uses	Home, RV travel, Camping

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your inverter.

Problem	Possible Cause	Solution
Inverter not powering on	Loose battery connections, low battery voltage, faulty ON/OFF switch.	Check battery cable connections for tightness. Verify battery voltage is within the 42V-60V operating range. Ensure the ON/OFF switch is fully engaged.
No AC output	Overload, short circuit, low/high input voltage, inverter fault.	Reduce the load. Check for short circuits in connected appliances. Verify input voltage. If the inverter has shut off due to overload, disconnect the load and manually recover by cycling the power.
Flashing Red Light	Input voltage is slightly high.	Monitor the DC input voltage. Ensure it remains within the safe operating range (42V-60V). If it consistently exceeds this, check your battery charging system.
Cooling fan not running	Normal operation (temperature below 50°C), fan malfunction.	The fan only runs when the internal temperature exceeds 50°C. If the inverter is hot and the fan is not running, contact customer support.
Reduced output power	Insufficient battery cable gauge, long cables, low battery charge.	Ensure you are using the provided standard battery cables. Shorter, thicker cables can improve performance. Recharge your battery.

8. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your inverter.

- **Keep Clean:** Periodically clean the exterior of the inverter with a soft, dry cloth. Ensure ventilation openings are free from dust and debris.
- **Check Connections:** Regularly inspect battery cable connections to ensure they remain tight and free from corrosion.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

9. WARRANTY AND SUPPORT

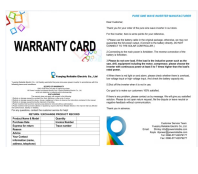

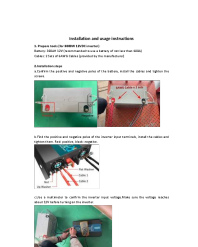
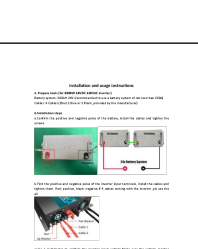
WZRELB provides an 18-month warranty for this product. For technical support, warranty claims, or any inquiries, please contact WZRELB customer service. Refer to the product packaging or the official WZRELB website for contact information.



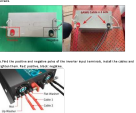

You can also visit the [WZRELB Store on Amazon](#) for more information and support resources.



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Related Documents - RBP-100048

	<p>WZRELB 7000W Split Phase Pure Sine Wave Inverter - 48V DC to 120V/240V AC</p> <p>Detailed overview of the WZRELB 7000W Split Phase Pure Sine Wave Inverter, featuring 48V DC input, 120V/240V AC output, 4 AC outlets, AC hardwire terminal, and high efficiency up to 91.6%. Ideal for automotive and off-grid applications.</p>
	<p>WZRELB U5 Series Pure Sine Wave Inverter (1000W-5000W) - Enhanced Performance</p> <p>Explore the WZRELB U5 Series Pure Sine Wave Inverters, available from 1000W to 5000W. These inverters offer superior performance and reliability, featuring an extra-thick 2.0mm PCB for enhanced load handling and durability.</p>
	<p>WZRELB 3000W 12VDC Inverter Installation and Usage Guide</p> <p>A concise guide for installing and using the WZRELB 3000W 12VDC Pure Sine Wave Inverter, including important notes on battery connection, cable specifications, and appliance load compatibility.</p>
	<p>WZRELB 3000W 24V Pure Sine Wave Inverter Installation and Usage Guide</p> <p>Comprehensive installation and usage instructions for the WZRELB 3000W 24VDC to 120VAC pure sine wave power inverter. Covers tool preparation, step-by-step connection, and essential safety notes.</p>

<div><p>Installation and usage instructions</p><p>1. Preparation for 2500W 12VDC inverter Before 12V DC connection, be sure to disconnect the battery (24V) and 12V DC power source (24V/12V).</p><p>2. Installation a. Connect the inverter and negative poles of the battery. b. Connect the positive poles of the battery. c. Connect the positive poles of the battery. d. Connect the positive poles of the battery.</p><p>3. Safety a. Do not touch the inverter or battery terminals. b. Do not touch the inverter or battery terminals. c. Do not touch the inverter or battery terminals. d. Do not touch the inverter or battery terminals.</p></div>	<p>WZRELB 2500W Pure Sine Wave 12VDC Power Inverter Installation and Usage Guide</p> <p>Step-by-step installation and usage instructions for the WZRELB 2500W Pure Sine Wave Power Inverter (12VDC input). Includes preparation, connection, safety notes, and load management tips.</p>
<div><p>Installation and usage instructions</p><p>1. Preparation for 3000W 12VDC inverter Before 12V DC connection, be sure to disconnect the battery (24V) and 12V DC power source (24V/12V).</p><p>2. Installation a. Connect the inverter and negative poles of the battery. b. Connect the positive poles of the battery. c. Connect the positive poles of the battery. d. Connect the positive poles of the battery.</p><p>3. Safety a. Do not touch the inverter or battery terminals. b. Do not touch the inverter or battery terminals. c. Do not touch the inverter or battery terminals. d. Do not touch the inverter or battery terminals.</p></div>	<p>WZRELB 3000W 12VDC Inverter Installation and Usage Guide</p> <p>A concise guide for installing and using the WZRELB 3000W 12VDC Pure Sine Wave Inverter, including important notes on battery connection, cable specifications, and appliance load compatibility.</p>