

## WZRELB SEFB1800W48V

# WZRELB 1800W Pure Sine Wave Inverter User Manual

Model: SEFB1800W48V

## INTRODUCTION

Thank you for choosing the WZRELB 1800W Pure Sine Wave Inverter. This device is designed to convert 48V DC power from batteries into stable 110V/120V AC power, suitable for a wide range of sensitive electronic appliances. Its robust design and comprehensive protection features make it ideal for off-grid applications, RVs, trucks, camping, and home backup power.

## SAFETY INSTRUCTIONS

**WARNING: Failure to follow these safety instructions may result in injury or damage to the inverter or connected devices.**

- Ensure proper ventilation around the inverter to prevent overheating.
- Do not expose the inverter to water, rain, or excessive moisture.
- Avoid touching the inverter's casing during operation, as it may become hot.
- Connect the inverter only to a 48V DC power source. Connecting to other voltages may cause damage.
- Always connect the battery cables with correct polarity (positive to positive, negative to negative). Reverse polarity can cause severe damage.
- Ensure all connections are tight and secure to prevent arcing and overheating.
- Do not disassemble or modify the inverter. Refer all servicing to qualified personnel.
- Keep children away from the inverter and its connections.

## PACKAGE CONTENTS

- WZRELB 1800W Pure Sine Wave Inverter (Model SEFB1800W48V)
- DC Input Cables (Red for Positive, Black for Negative)
- User Manual

## PRODUCT FEATURES

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- **Pure Sine Wave Output:** Provides stable 1800W continuous true pure sine wave AC output (3600W peak) at 60Hz, suitable for sensitive electronics.
- **LED Display:** Digital LED display shows input voltage for easy monitoring of the inverter's status.
- **Soft Starter Design:** Built-in soft starter reduces inrush current impact, protecting appliances and extending their lifespan.
- **Compact & Portable:** Dimensions of 11.3 x 5.6 x 2.8 inches and a light weight of 4.5 lbs make it easy to transport and install.
- **All-Aluminum Shell:** Provides efficient heat dissipation for reliable operation in various temperature conditions.
- **Multiple Protections:** Includes short circuit, overcurrent, overvoltage, undervoltage, overload, reverse polarity, and over-temperature protection.

## SETUP & INSTALLATION

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Follow these steps for safe and effective installation of your WZRELB Pure Sine Wave Inverter:

1. **Choose a Location:** Select a dry, well-ventilated area away from direct sunlight, heat sources, and flammable materials. Ensure sufficient space for air circulation around the cooling fan.
2. **Prepare the Battery:** Ensure your battery bank is a 48V DC system and is fully charged.
3. **Connect DC Input Cables:**
  - Connect the **red** (positive) cable to the positive (+) terminal of the inverter.
  - Connect the **black** (negative) cable to the negative (-) terminal of the inverter.
  - Connect the other end of the **red** cable to the positive (+) terminal of your 48V battery bank.
  - Connect the other end of the **black** cable to the negative (-) terminal of your 48V battery bank.
  - Ensure all connections are tight and secure.
4. **Mounting (Optional):** The inverter can be mounted to a flat surface using appropriate screws. Ensure the mounting surface is sturdy enough to support the inverter's weight.

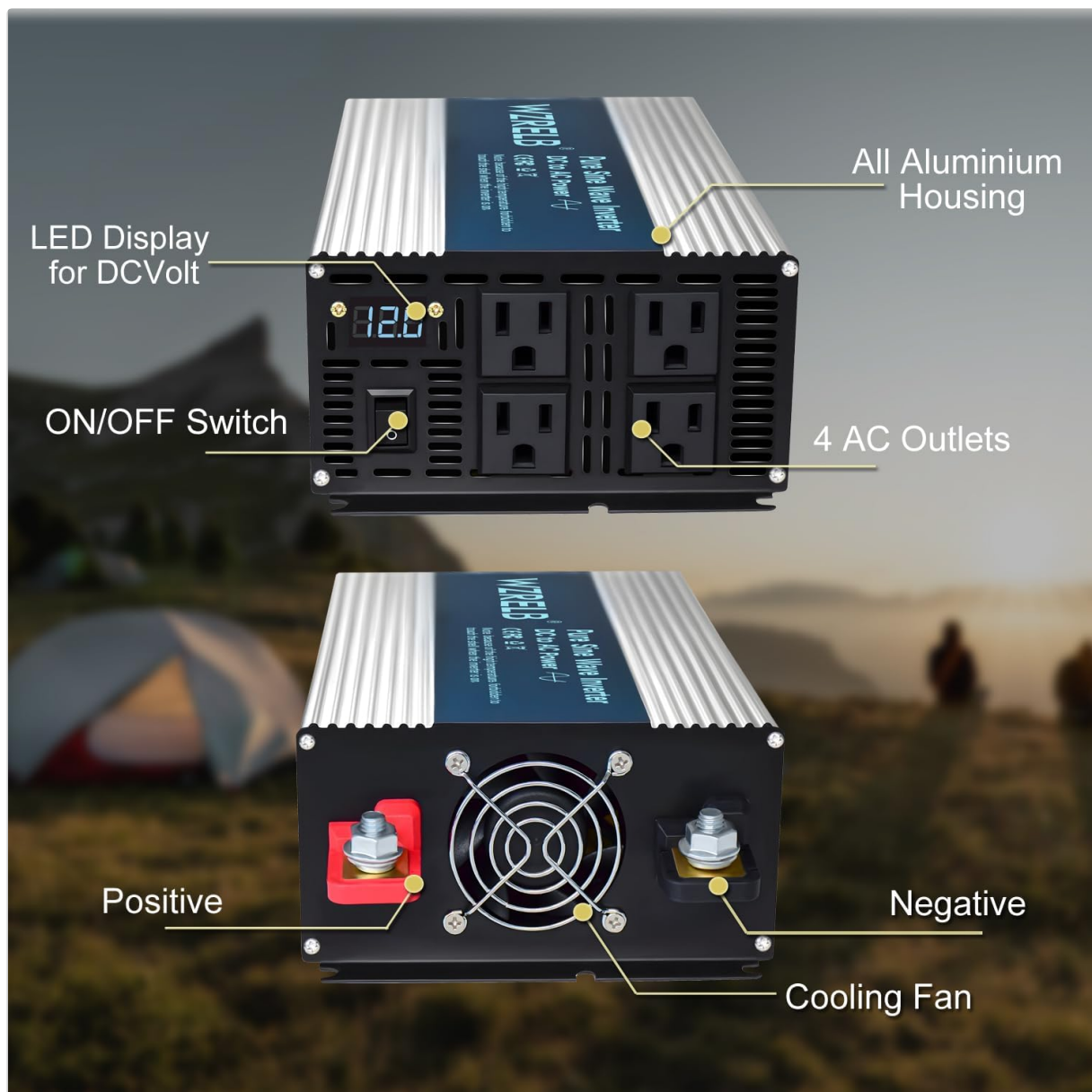


Figure 1: Detailed view of the inverter's front panel, showing the LED display, ON/OFF switch, and four AC outlets. The rear panel displays the positive and negative terminals and the cooling fan.

Video 1: This video provides an overview of the WZRELB Pure Sine Wave Inverter, demonstrating its features and applications.

## OPERATING INSTRUCTIONS

To operate your WZRELB Pure Sine Wave Inverter:

1. **Power On:** Once the DC input cables are securely connected, switch the ON/OFF button on the inverter to the 'ON' position. The LED display will illuminate, showing the input DC voltage.
2. **Connect AC Devices:** Plug your 110V/120V AC appliances into the four AC outlets on the front panel of the inverter. Ensure the total wattage of connected devices does not exceed the inverter's continuous power rating of 1800W.
3. **Monitor Performance:** Observe the LED display for input voltage readings. The inverter's cooling fan will activate automatically when necessary to maintain optimal operating temperature.
4. **Power Off:** When finished using the inverter, first switch off all connected AC devices, then switch the inverter's ON/OFF button to the 'OFF' position.

# Ideal For Sensitive Appliances

## Pure Sine Wave & Less power Consumption



Figure 2: The WZRELB 1800W Pure Sine Wave Inverter provides stable power for sensitive electronics, shown here charging a smartphone in an outdoor environment.

Video 2: This video demonstrates the installation and usage of a pure sine wave inverter, showcasing its ability to power various household appliances.

## MAINTENANCE

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

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Ensure the cooling fan vents are free from dust and debris to maintain proper airflow.
- **Connection Check:** Regularly inspect all electrical connections (DC input and AC output) for tightness and signs of 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.

## TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No power output	Inverter is off; loose battery connections; low battery voltage; blown fuse.	Turn on the inverter; check and tighten battery connections; charge or replace battery; check and replace internal fuses (if accessible and safe).
Overload alarm	Connected devices exceed 1800W continuous rating.	Reduce the total wattage of connected devices.
Over-temperature alarm	Poor ventilation; excessive load; high ambient temperature.	Improve ventilation; reduce load; allow inverter to cool down.
Low voltage alarm	Battery voltage is too low.	Charge or replace the battery.
No pure sine wave output	Internal fault.	Contact customer support for assistance.

## SPECIFICATIONS

Feature	Specification
Model	SEFB1800W48V
Continuous Power	1800W
Peak Power	3600W
DC Input Voltage	48V DC
AC Output Voltage	110V / 120V AC
Output Frequency	60Hz
Output Waveform	Pure Sine Wave
AC Outlets	4 (15 Amp Max)
Dimensions (L x W x H)	11.3 x 5.6 x 2.8 inches
Item Weight	4.5 lbs (5.4 lbs shipping)
Protection Features	Short Circuit, Overcurrent, Overvoltage, Undervoltage, Overload, Reverse Polarity, Over-temperature
Cooling	Intelligent Cooling Fan, All-aluminum shell

## WARRANTY & SUPPORT

WZRELB products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the contact details provided with your purchase or visit the official WZRELB website. Please have your model number (SEFB1800W48V) and purchase date ready

when contacting support.