

FONOBO 2500W/3000W

FONOBO 2500W/3000W Pure Sine Wave Power Inverter User Manual

Model: 2500W/3000W | Brand: FONOBO

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your FONOBO Pure Sine Wave Power Inverter. This device converts DC power from a 24V or 48V source into stable AC power (110V or 220V), suitable for a wide range of electronic devices and appliances. Please read these instructions thoroughly before installation and use.

2. SAFETY INFORMATION

Your FONOBO power inverter is designed with multiple safety features to ensure reliable operation. Adhering to these guidelines is crucial for preventing damage to the unit and connected devices, and for ensuring user safety.

2.1 Built-in Protection Functions:

- **Reverse Polarity Protection:** Prevents damage from incorrect battery terminal connection.
- **Low Input Voltage Protection:** Shuts down the inverter if the DC input voltage drops too low, protecting your battery.
- **High Input Voltage Protection:** Protects the inverter from excessive DC input voltage.
- **Over-Current Protection:** Safeguards against excessive current draw.
- **Short Circuit Protection:** Automatically disconnects power in case of a short circuit.
- **Over Temperature Protection:** Activates cooling fan and shuts down if internal temperature exceeds safe limits.
- **Overload Protection:** Prevents damage when connected devices draw more power than the inverter's rated capacity.
- **Internal Fuses:** Additional protection against electrical surges.

2.2 General Safety Precautions:

- Ensure proper ventilation around the inverter to prevent overheating.
- Do not expose the inverter to water, rain, or excessive moisture.

- Avoid operating the inverter in environments with flammable gases or liquids.
- Connect the inverter only to DC power sources within the specified voltage range (24V or 48V).
- Always ensure the total rated power of connected AC devices does not exceed the inverter's continuous output power (2500W or 3000W).
- Keep children away from the inverter during operation.

3. PRODUCT OVERVIEW AND COMPONENTS

The FONOBO Pure Sine Wave Power Inverter features a robust aluminum alloy housing and intuitive controls. Familiarize yourself with the key components:



Figure 1: Front and Rear Panel Components of the FONOBO Power Inverter. This image highlights the aluminum shell, AC receptacles, LED voltage display, ON/OFF switch, power indicator light, fault indicator light, positive and negative DC terminals, and cooling fans.

3.1 Key Components:

- **Aluminum Alloy Shell:** Provides durability and aids in heat dissipation.

- **AC Receptacles:** Two standard AC outlets for connecting your devices.
- **LED Voltage Display:** Shows input DC voltage and output AC voltage.
- **ON/OFF Switch:** Controls the power to the inverter.
- **Power Indicator Light (Green):** Illuminates when the inverter is operating normally.
- **Fault Indicator Light (Red):** Illuminates when a protection function is activated.
- **Positive DC Terminal (Red):** Connects to the positive terminal of your DC power source.
- **Negative DC Terminal (Black):** Connects to the negative terminal of your DC power source.
- **Cooling Fan:** Automatically activates to dissipate heat and prevent overheating.

4. SETUP AND INSTALLATION

Follow these steps carefully to set up your FONOBO 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 adequate space around the unit for airflow.
2. **Prepare the DC Power Source:** Ensure your DC power source (e.g., 24V or 48V battery bank) is fully charged and capable of providing the necessary current.
3. **Connect DC Cables:**
 - Connect the **red** DC cable to the **positive (+)** terminal of the inverter and the **positive (+)** terminal of your battery.
 - Connect the **black** DC cable to the **negative (-)** terminal of the inverter and the **negative (-)** terminal of your battery.
 - Ensure all connections are tight and secure to prevent loose connections and sparking.
4. **Verify Connections:** Double-check all DC connections for correct polarity before proceeding.
5. **Initial Power On:** With no AC devices connected, switch the inverter's ON/OFF button to the "ON" position. The green power indicator light should illuminate, and the LED display should show the input DC voltage.
6. **Connect AC Devices:** Once the inverter is powered on and operating normally, plug your AC devices into the AC receptacles. Ensure the total power consumption does not exceed the inverter's rated continuous output.

Important: Always connect the inverter to the battery first, then turn on the inverter, and finally connect your AC loads. When disconnecting, reverse the order: disconnect AC loads, turn off the inverter, then disconnect from the battery.

5. OPERATING INSTRUCTIONS

Operating your FONOBO inverter is straightforward once properly installed:

- **Powering On:** After connecting to a DC source, press the ON/OFF switch. The LED display will show the input DC voltage and then the output AC voltage. The green indicator light confirms normal operation.
- **Connecting Loads:** Plug your AC appliances into the inverter's AC outlets. Ensure the combined wattage of all connected appliances does not exceed the inverter's continuous power rating (2500W or 3000W).
- **Monitoring:** Observe the LED display for voltage readings. If the red fault indicator light illuminates, refer to the Troubleshooting section.
- **Powering Off:** First, disconnect all AC appliances. Then, switch the inverter's ON/OFF button to the "OFF" position. Finally, disconnect the DC cables from the battery.

5.1 Understanding Pure Sine Wave Output:

This inverter produces a pure sine wave output, which is identical to the power supplied by your utility company. This makes it suitable for sensitive electronics such as laptops, medical equipment (e.g., CPAP machines), and appliances

with motors, ensuring they operate efficiently and without damage.



Figure 2: Examples of applications for the FONOBO Pure Sine Wave Power Inverter, including powering medical devices, recreational vehicles, and outdoor equipment.

6. MAINTENANCE

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

- **Keep Clean:** Periodically wipe the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners.
- **Ensure Ventilation:** Regularly check that the cooling fan vents are clear of dust and debris. Blocked vents can lead to overheating.
- **Check Connections:** Periodically inspect DC cable connections to ensure they remain tight and free from corrosion.
- **Storage:** If storing the inverter for an extended period, ensure it is clean, dry, and stored in a cool, well-ventilated area.

7. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Inverter does not turn on.	◦ Loose DC connections. ◦ Low battery voltage. ◦ Incorrect polarity. ◦ Blown internal fuse.	◦ Check and tighten DC cable connections. ◦ Recharge or replace the battery. ◦ Verify correct positive (+) and negative (-) connections. ◦ Contact customer support for fuse replacement.
Red fault light illuminates.	◦ Overload (too many devices). ◦ Over-temperature. ◦ Short circuit in connected device. ◦ Input voltage too high/low.	◦ Reduce connected load. ◦ Ensure adequate ventilation; allow inverter to cool. ◦ Disconnect all AC devices and test them individually. ◦ Check battery voltage.
No AC output.	◦ Inverter not turned on. ◦ Fault condition (red light). ◦ AC device faulty.	◦ Ensure ON/OFF switch is in "ON" position. ◦ Refer to "Red fault light illuminates" solutions. ◦ Test AC device with another power source.

If problems persist after attempting these solutions, please contact FONOBO customer support.

8. SPECIFICATIONS

Brand	FONOBO
Model Name	2500W/3000W
Input Voltage	DC 24V / 48V
Output Voltage	AC 110V / 220V
Output Frequency	50Hz (for 220V) / 60Hz (for 110V)
Output Waveform	Pure Sine Wave (<3% THD)
Continuous Power	2500W / 3000W (depending on model variant)
Peak Power	5000W / 6000W (depending on model variant)
Maximum AC Current per Socket	8.33 Ampere
Dimensions (Approx.)	12.99 x 7.87 x 6.3 inches
Item Weight	11 pounds
Recommended Uses	Camping, Car, Home, RV

9. WARRANTY AND CUSTOMER SUPPORT

FONOBO is committed to customer satisfaction. For any questions, technical assistance, or warranty claims, please

contact our support team.

- **Customer Service:** Please contact us via Amazon email or visit our official website. Our support team is available to assist you.
- **Warranty Information:** Specific warranty details may vary. Please refer to the product packaging or contact customer support for comprehensive warranty terms.

We recommend retaining your purchase receipt for warranty purposes.

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