

## MWXNE 4000W-24V

# MWXNE 4000W Pure Sine Wave Power Inverter User Manual

Model: 4000W-24V

## 1. INTRODUCTION

Thank you for choosing the MWXNE 4000W Pure Sine Wave Power Inverter. This device converts 24V DC battery power into 110V/120V AC household power, suitable for various applications including home backup, RVs, and off-grid systems. This manual provides essential information for safe installation, operation, maintenance, and troubleshooting.

The inverter features two AC outlets, two 18W USB-A ports, one 24W USB-A port, and one 60W USB-C (Type-C) PD port, allowing for simultaneous charging of multiple devices. It utilizes advanced pure sine wave technology, providing stable AC output comparable to grid power. It offers up to 94.2% conversion efficiency, minimizing power loss and ensuring quiet, efficient operation.

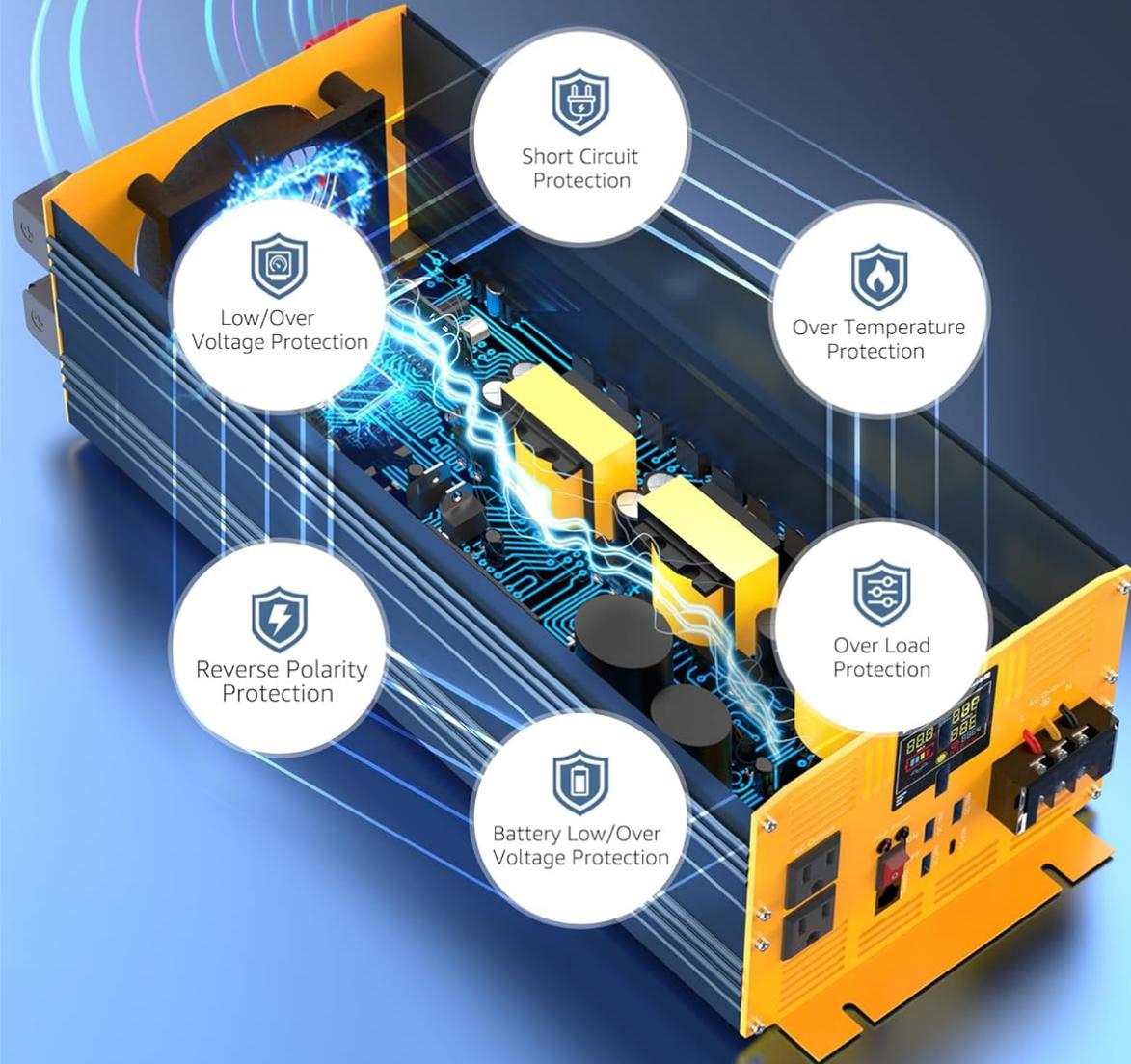
## 2. IMPORTANT SAFETY INSTRUCTIONS

Please read and understand all safety instructions before installing or operating the inverter. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure proper grounding. Do not open the inverter casing; there are no user-serviceable parts inside.
- **Ventilation:** Install the inverter in a well-ventilated area to prevent overheating. Do not block ventilation openings.
- **Environment:** Avoid exposure to water, rain, snow, spray, or excessive dust. Do not operate in areas with flammable fumes or gases.
- **Battery Connection:** Connect the inverter only to a 24V DC power source. Ensure correct polarity (+ to + and - to -) to prevent damage.
- **Load Capacity:** Do not exceed the inverter's rated continuous power output of 4000W. Overloading can cause damage and fire hazards.
- **Children:** Keep the inverter out of reach of children.

# Safety Guarantee System

Fully protection for your devices



**Figure 2.1:** The inverter incorporates multiple safety features, including short circuit, overload, low/over voltage, battery low/over voltage, over temperature, and reverse polarity protection.

### 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1x MWXNE 4000W Pure Sine Wave Inverter
- 1x User Manual
- 2x Battery Cables (Red and Black)
- 1x Wireless Remote Controller
- 1x Wired Remote Controller with 16.2 ft cable
- Several Fuses

- 1x Spanner
- 1x Earth Wire



**Figure 3.1:** Contents of the MWXNE 4000W Pure Sine Wave Inverter package, including the inverter, remote controls, cables, and accessories.

#### 4. PRODUCT OVERVIEW

The MWXNE 4000W Pure Sine Wave Inverter is designed for reliable power conversion. Familiarize yourself with its components and features.

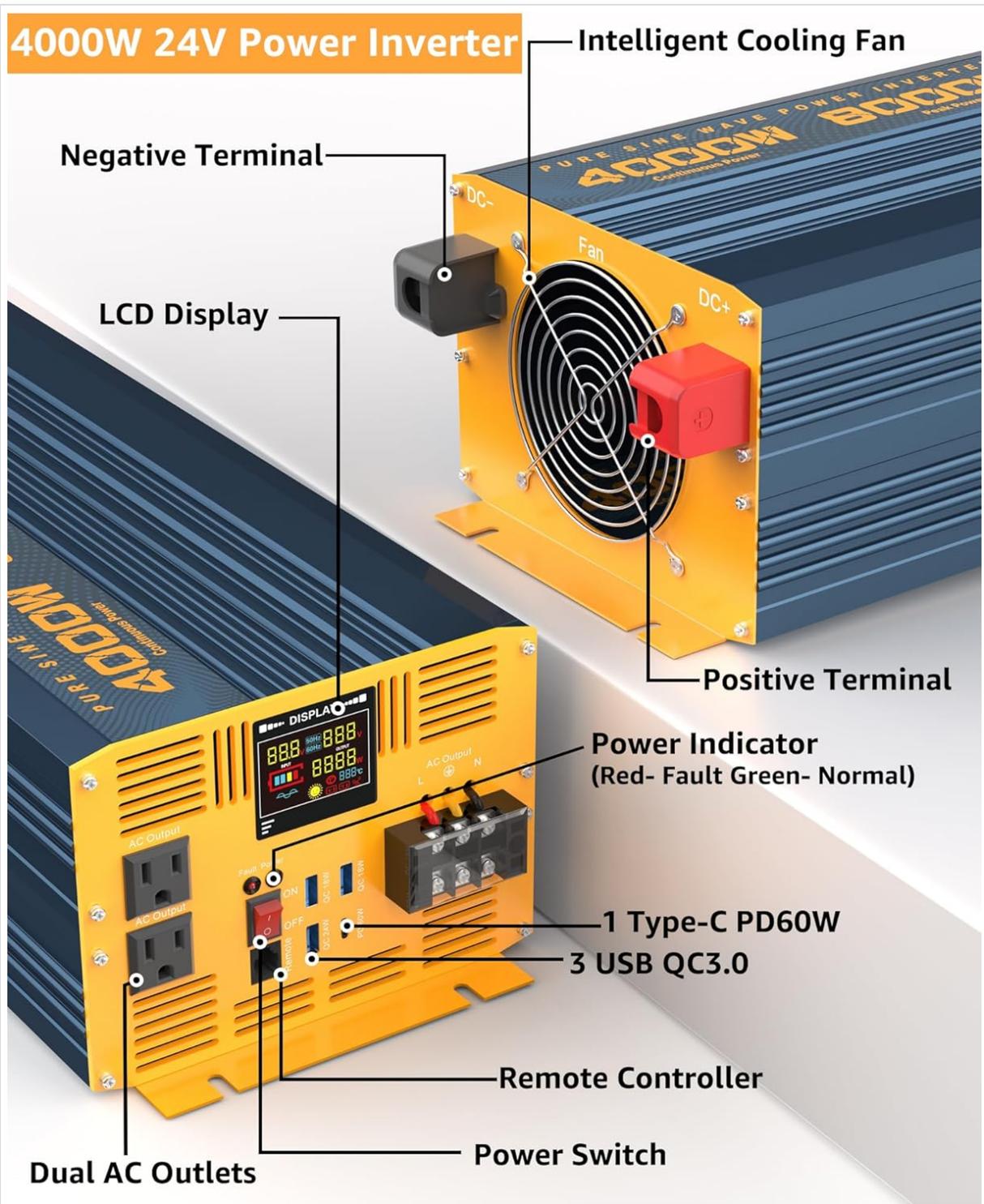


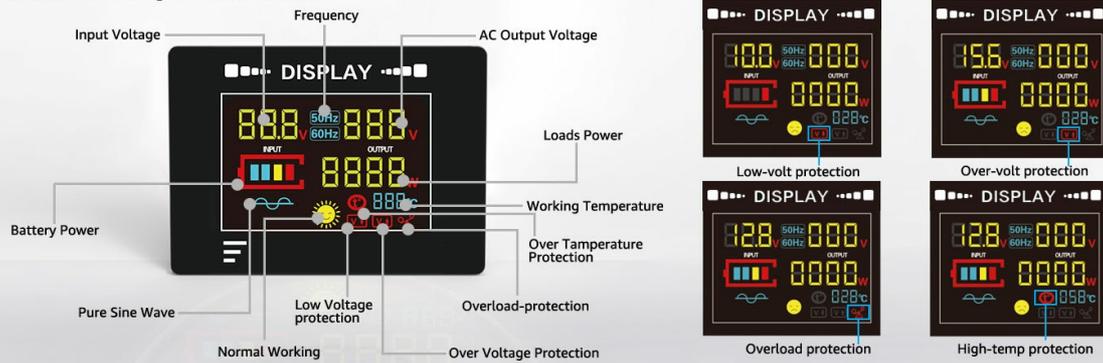
Figure 4.1: Front and rear panel overview of the 4000W 24V Power Inverter, highlighting the LCD display, AC outlets, USB ports, power switch, remote controller port, and battery terminals.

#### 4.1. LCD Display

An integrated LCD screen displays real-time operational data such as input/output voltage, frequency, power consumption, and protection status, providing clear alerts for any issues.

## COLOR LCD DISPLAY

Real-time Monitoring of Inverter Status



**Figure 4.2:** The color LCD display provides real-time monitoring of input voltage, AC output voltage, frequency, loads power, working temperature, battery power, and various protection statuses (low-volt, over-volt, overload, high-temp).

### 4.2. Intelligent Cooling Fan

The inverter features an intelligent cooling fan system that operates based on internal temperature and load, ensuring efficient heat dissipation and quiet operation.



**Figure 4.3:** The intelligent cooling fan system ensures quiet, efficient, and smart temperature management for optimal inverter performance.

## 5. SETUP AND INSTALLATION

Proper installation is crucial for the inverter's performance and safety. Ensure all connections are secure and correct.

### 5.1. Connecting to a Battery System

1. Ensure the inverter's power switch is in the OFF position.
2. Connect the red battery cable to the positive (+) terminal of the 24V DC battery and the positive (+) terminal on the inverter.
3. Connect the black battery cable to the negative (-) terminal of the 24V DC battery and the negative (-) terminal on the inverter.
4. Connect the earth wire from the inverter's grounding terminal to a suitable ground point.
5. Ensure all connections are tight and secure.



**Figure 5.1:** Connection options for the inverter. Option 1 shows integration with a solar panel and charge controller. Option 2 illustrates a simple direct connection to a battery for powering household appliances.

## 6. OPERATION

Once properly installed, the inverter can power a wide range of AC devices.

### 6.1. Powering On/Off

1. After connecting the battery, switch the inverter's main power switch to the ON position. The LCD display will illuminate.
2. Plug your AC devices into the inverter's AC outlets.
3. To turn off, first disconnect all AC loads, then switch the inverter's main power switch to OFF.

### 6.2. USB Charging

The inverter provides multiple USB ports for charging mobile devices:

- Two 18W USB-A ports
- One 24W USB-A port (QC3.0)
- One 60W USB-C PD port

Connect your USB-compatible devices directly to these ports for fast charging.



**Figure 6.1:** The inverter providing power to a camera and charging a smartphone via its USB ports.

### 6.3. Typical Applications

The compact design of the inverter makes it suitable for various applications, including long car trips,

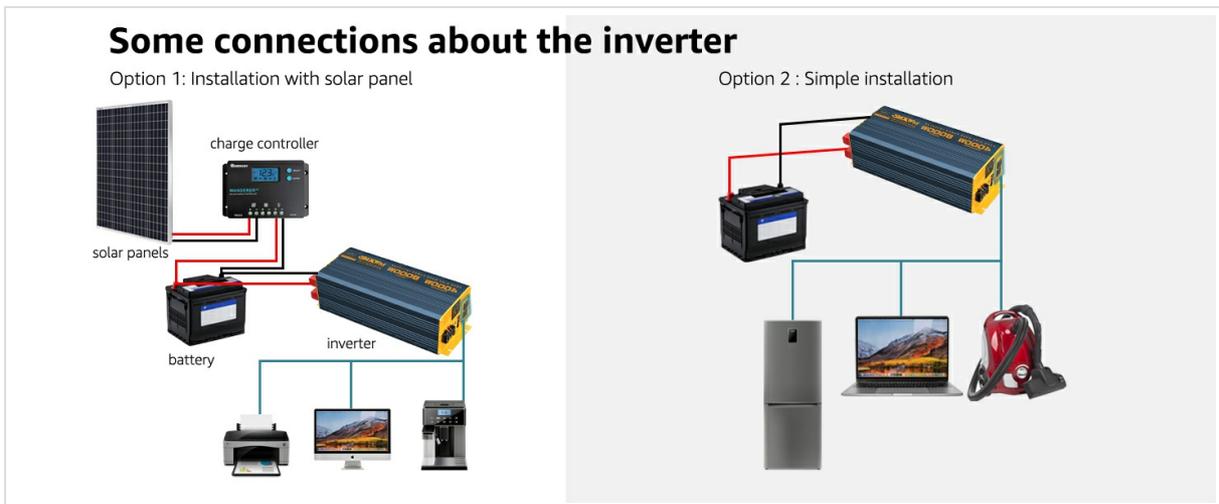
family vacations, and camping. It can power a range of electronic devices such as CPAP machines, cameras, nebulizers, televisions, DVD players, and small appliances like mini-fridges.

**Note: The maximum operating wattage may not exceed 4000Watts with this unit**

**Figure 6.2:** The inverter is versatile for powering devices in RVs, during camping, for drones/cameras, TVs, CPAP machines, coffee makers, microwaves, and refrigerators. Note: The maximum operating wattage should not exceed 4000 Watts.



**Figure 6.3:** The inverter powering a laptop and TV during RV travel. Common device wattages are listed: Laptop (70W), TV (50W), Microwave (700W), Coffee Maker (1300W), Hair Dryer (600W), Air Conditioner (1500W).



**Figure 6.4:** The inverter powering an electric chainsaw for outdoor work. Common tool wattages are listed: Electric Chainsaw (1500W), Electric Drill (800W), Cutting Machine (1500W), Circular Saw (1000W).



**Figure 6.5:** The inverter providing power for a portable grill during a family camping trip. Common item wattages are listed: Electric Grill (1000W), Portable Freezer (45W), Fan (75W), Electric Kettle (800W), Projector (100W), Audio System (40W).

## 7. REMOTE CONTROL

The inverter includes both wired and wireless remote controls. The wireless remote allows for convenient operation from a distance, while the wired remote provides direct control with a backlit display for monitoring status.

## 7.1. Wired Remote Control

Connect the wired remote control cable to the designated port on the inverter. The wired remote allows you to turn the inverter on/off and monitor its status from a convenient location up to 16.2 feet away.



Figure 7.1: The wired remote control connected to the inverter, allowing for easy monitoring and control from a distance of 16.2 feet.

## 7.2. Wireless Remote Control

The wireless remote control provides the flexibility to operate the inverter from a greater distance (up to 1km in open areas). Ensure the inverter's main sine power switch is in the ON position for the wireless remote to function.



Figure 7.2: The wireless remote control offers convenient on/off functionality for the inverter from a distance, ideal for outdoor or remote setups.

## 8. MAINTENANCE

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

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the cooling vents are free from dust and debris. Use compressed air to clear any blockages if necessary.
- **Connections:** Regularly check all electrical connections (battery cables, grounding wire) to ensure they are 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. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Inverter does not turn on	Loose battery connections; Low battery voltage; Blown fuse; Inverter switch off.	Check battery cable connections; Recharge or replace battery; Check and replace fuses; Ensure inverter switch is ON.
No AC output	Overload protection activated; Overheating; Low/High input voltage; Device not properly plugged in.	Reduce load; Allow inverter to cool down; Check battery voltage; Ensure device is fully plugged into AC outlet.
LCD display shows incorrect readings or freezes	Temporary software glitch; Sensor anomaly.	Turn the inverter off, wait a few seconds, then turn it back on. If the issue persists, contact customer support.
F10 Error (specific to 48V models, but general over-voltage warning)	Input voltage exceeds inverter's acceptable range (e.g., battery overcharged).	Check battery charging system (e.g., solar charge controller settings) to ensure battery voltage remains within the inverter's specified operating range.
Cooling fan is noisy or cycles frequently	High internal temperature due to heavy load or poor ventilation.	Ensure adequate ventilation around the inverter. Reduce the load if possible. This behavior can be normal under heavy use.

## 10. SPECIFICATIONS

Technical specifications for the MWXNE 4000W Pure Sine Wave Power Inverter (Model: 4000W-24V).

Feature	Detail
Model	4000W-24V
Continuous Power	4000 Watts
Input Voltage	DC 24V
Output Voltage	AC 110V / 120V
Output Waveform	Pure Sine Wave
Conversion Efficiency	Up to 94.2%
AC Outlets	2
USB-A Ports	2 x 18W, 1 x 24W (QC3.0)
USB-C Port	1 x 60W (PD)
Product Dimensions	4.1 x 15.2 x 6.7 inches

Feature	Detail
Item Weight	26.9 pounds
Safety Certifications	FCC, CE, ROHS, PSE

## 11. WARRANTY AND SUPPORT

This product comes with a 24-month warranty from the date of purchase. For warranty claims or technical assistance, please contact MWXNE customer service.

**Customer Service:** Please refer to the contact information provided in your purchase documentation or visit the official MWXNE store on Amazon for support options: [MWXNE Amazon Store](#).