XWJNE

XWJNE Pure Sine Wave Inverter 3000 Watt User Manual

Model: 12V 3000w

1. Introduction

This manual provides detailed instructions for the safe and efficient operation of your XWJNE 3000 Watt Pure Sine Wave Power Inverter. This inverter converts 12V DC power to 110V/120V AC power, suitable for various applications including RVs, camping, boats, and outdoor use. It delivers a true rated 3000 watts of continuous power and 6000 watts of peak power.

Figure 1.1: XWJNE 3000 Watt Pure Sine Wave Power Inverter and included accessories.

Video 1.1: Product introduction and instructions for use, demonstrating key features and basic operation.

2. Safety Information

The XWJNE Pure Sine Wave Inverter is designed with multiple safety features to protect both the device and connected appliances. Always adhere to safety guidelines during installation and operation.

2.1 Multi-Protection Features

- **Low/Over-Voltage Protection:** Safeguards against input voltage fluctuations.
- **Overheating Protection:** Automatically activates cooling fans and shuts down if internal temperature exceeds 50°C.
- **Overload Protection:** Prevents damage from excessive power draw.
- **Reverse Polarity Protection:** Protects against incorrect battery terminal connections.
- **Short Circuit Protection:** Automatically cuts power in case of a short circuit.
- **Low/Overcharge Protection:** Ensures battery health and longevity.
- **Load Shock Protection:** Provides stability for connected devices.

Figure 2.1: Overview of the 7 integrated safety protection functions.

3. Product Overview

Familiarize yourself with the components and interfaces of your XWJNE inverter.

3.1 Front Panel

- **AC Outlets:** Two 110V/120V AC output sockets for standard appliances.
- **LED Display:** Provides real-time information on input/output voltage, battery capacity, and protection status.
- **Fault Indicator:** Red light indicates an error or fault condition.
- **Power Indicator:** Green light indicates normal operation.
- **Power Switch:** Main ON/OFF switch for the inverter.
- **Remote Control Interface:** Port for connecting the external remote control.
- **USB Ports:** Two 5V DC USB output ports for charging mobile devices.
- **Earth Wire Terminal:** Connection point for grounding the inverter.

3.2 Rear Panel

- **Positive Terminal (DC+):** Red terminal for connecting the positive battery cable.
- **Negative Terminal (DC-):** Black terminal for connecting the negative battery cable.
- **Cooling Fans:** Dual high-efficiency cooling fans for temperature regulation.

Figure 3.1: Labeled diagram of the inverter's front and rear panels.

Figure 3.2: Detailed product function area with indicators and ports.

4. Setup

Proper setup is crucial for safe and efficient operation. Ensure all connections are secure before powering on the inverter.

4.1 What's Included

Your XWJNE 3000W Power Inverter package includes:

- 1 x 3000W Power Inverter
- 2 x Car Battery Cables (red for positive, black for negative)
- 1 x Remote Controller (with 16.4ft cable)
- 1 x Wrench
- 1 x User Manual
- Additional Fuses
- Ground Wire

Figure 4.1: Items included in the product box.

4.2 Connecting the Inverter

1. **Connect Battery Cables:** Attach the red battery cable to the positive (+) terminal of your 12V

battery and the red DC+ terminal on the inverter. Attach the black battery cable to the negative (-) terminal of your 12V battery and the black DC- terminal on the inverter. Ensure connections are tight using the provided plastic knobs and wrench. *Always connect positive first, then negative.*

2. **Grounding:** Connect the provided ground wire to the grounding point on the inverter (small nut near the USB port) and to a suitable metal ground point (e.g., vehicle chassis or earth rod). This provides extra protection, especially for higher voltage applications.
3. **Remote Control (Optional):** Plug the remote control cable into the 'Remote' port on the inverter's front panel. This allows for convenient ON/OFF control from a distance.

Video 4.1: Demonstration of connecting the inverter to a battery and its components.

Figure 4.2: How the power inverter works within a typical setup.

5. Operating Instructions

5.1 Powering On/Off

Once connected, turn on the inverter using the main power switch on the front panel or the remote control. The 'Power' indicator light will illuminate when the unit is operational.

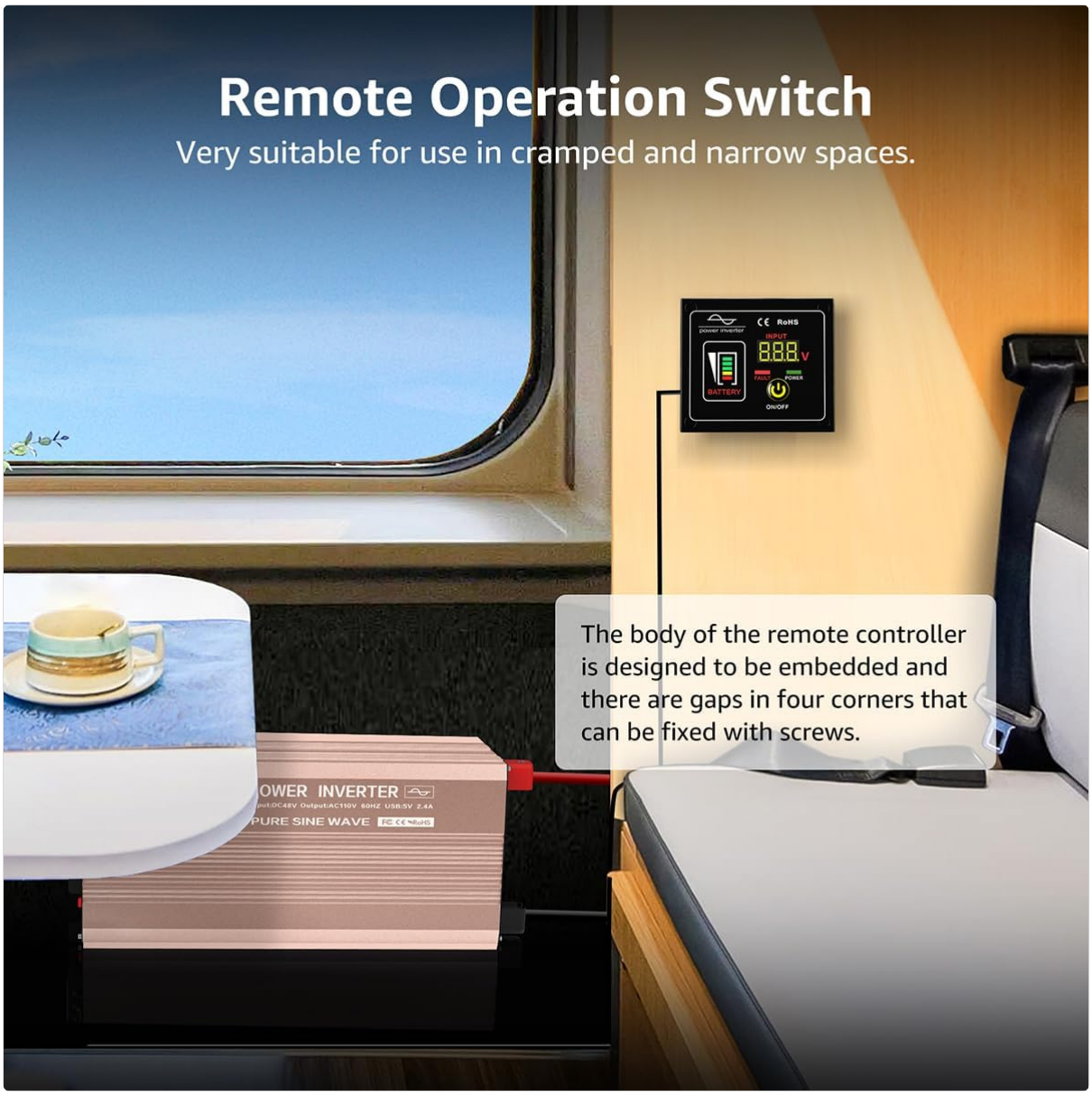

Figure 5.1: Remote control for convenient operation.

5.2 LED Display Information

The integrated LCD display provides critical operational data:

- **Input Voltage (V):** Displays the current DC voltage from the battery.
- **Output Voltage (V):** Shows the AC output voltage (110V/120V).
- **Battery Capacity:** Indicates the remaining battery charge level.
- **Load Indicator:** Shows the current power draw from connected devices.
- **Protection Indicators:** Icons for various protection modes (e.g., low voltage, overload).

5.3 Pure Sine Wave Advantage

This inverter produces a pure sine wave output, which is identical to household AC power. This ensures compatibility and safe operation for sensitive electronics, unlike modified sine wave inverters.

Figure 5.2: Comparison of pure sine wave and modified sine wave inverter characteristics.

6. Applications

The XWJNE 3000 Watt Pure Sine Wave Inverter is versatile and suitable for a wide range of applications where reliable AC power is needed from a 12V DC source.

6.1 Compatible Battery Inputs and Product Outputs

This inverter is designed to adapt to multiple battery types (GEL, AGM, SLD, FLD, LI) and can power various AC appliances up to 3000W continuous load, such as laptops, microwaves, TVs, refrigerators, coffee makers, and lights.

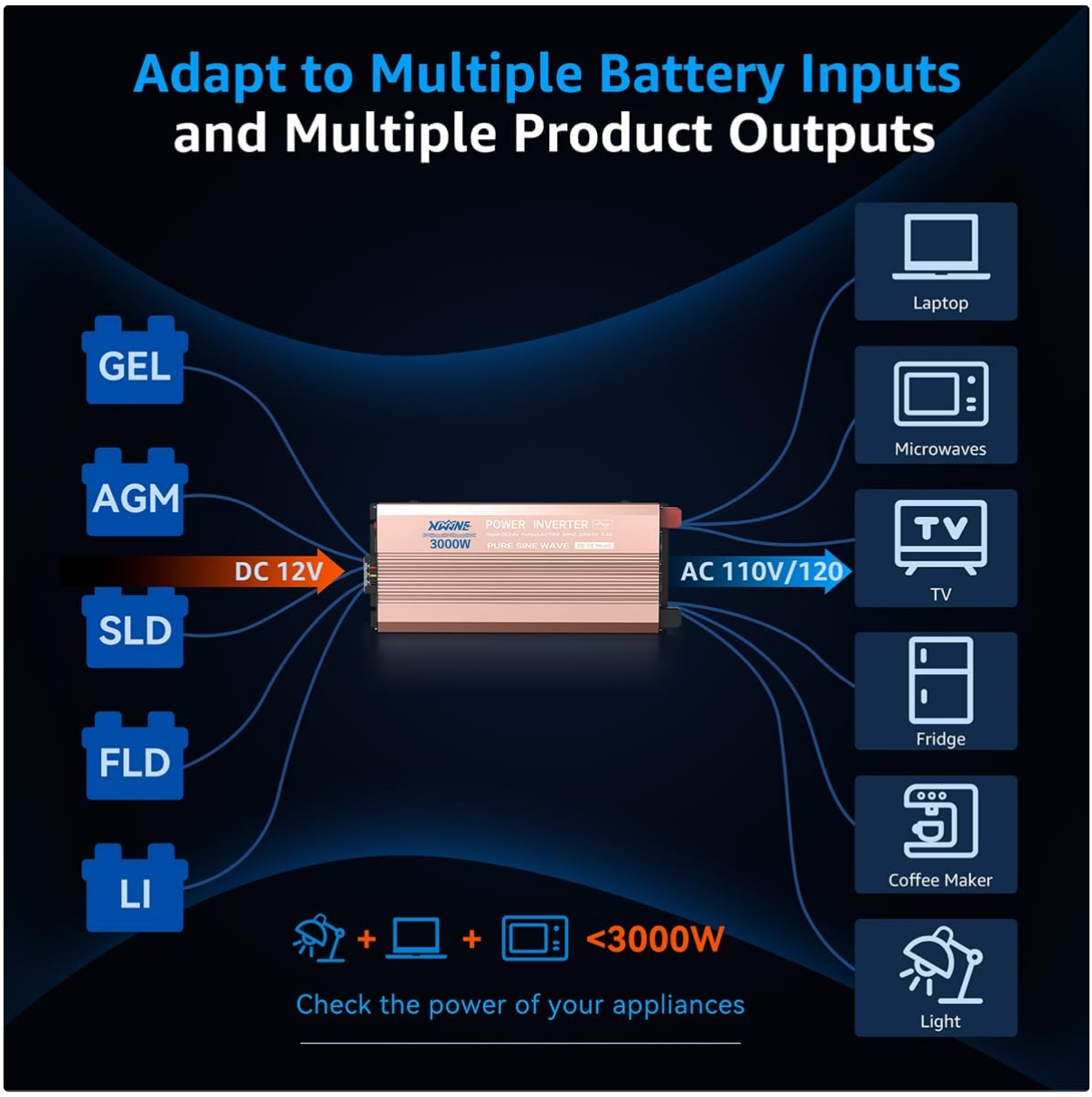

Figure 6.1: Adaptability to various battery inputs and product outputs.

6.2 Ideal Use Cases

Perfect for:

- Power outages and emergencies
- Hurricanes and natural disasters
- Vacations and road trips
- Camping and outdoor activities
- RVs and trucks
- Homes and remote workplaces
- Boats and marine applications

Figure 6.2: Ideal scenarios for using the XWJNE inverter.

Figure 6.3: Diverse applications for the XWJNE inverter.

7. Maintenance

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

7.1 Cooling Fans

The inverter features two high-efficiency cooling fans. These fans will automatically activate when the internal temperature exceeds 50°C or when the load is more than halfway, providing essential over-temperature protection. Ensure the fan vents are clear of obstructions for proper airflow.

Figure 7.1: Dual high-efficiency cooling fans.

7.2 Cleaning

Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents. Ensure the unit is powered off and disconnected from the battery before cleaning.

8. Troubleshooting

If the 'Fault' indicator light illuminates, the inverter has detected an issue and may shut down automatically to prevent damage. Refer to the LED display for specific error codes or indicators.

Common Issues and Solutions:

- **No Power Output / Fault Light On:**
    - Check battery connections for tightness and correct polarity.
    - Verify battery voltage is within the acceptable range (12V DC).
    - Reduce the load on the inverter; it may be overloaded.
    - Ensure proper ventilation and that cooling fans are not obstructed.

- Check for short circuits in connected appliances or wiring.
- Inspect fuses (extra fuses are provided).

- **Low Output Voltage:**
  - Check battery charge level; recharge if low.
  - Ensure battery cables are of adequate gauge and length for the load.

- **Overheating:**
  - Ensure adequate ventilation around the inverter.
  - Reduce the load to allow the unit to cool down.

If issues persist after attempting these solutions, contact XWJNE customer support for further assistance.

9. Specifications

Feature	Specification
Brand	XWJNE
Model Name	XWJNE
Continuous Power	3000 Watts
Peak Power	6000 Watts
Input Voltage	12V DC
Output Voltage	110V/120V AC
Output Waveform	Pure Sine Wave
Efficiency	Up to 94.2%
AC Outlets	3 (2x US standard, 1x universal/European compatible)
USB Ports	2 (5V DC)
Display Type	LCD
Cooling	Dual Intelligent Temperature Control Fans
Dimensions (L x W x H)	57.8 x 26 x 14.6 cm (approx. 18.9 x 7.87 x 3.35 inches)
Weight	7.92 kg (approx. 17.42 lbs)

10. Warranty and Support

XWJNE products are designed for reliability and performance. For warranty information, product support,

or technical assistance, please refer to the contact details provided in the included user manual or visit the official XWJNE store on Amazon. Keep your purchase receipt for warranty claims.

Online Support: Visit the XWJNE Store on Amazon