

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

> [JARXIOKE](#) /

> [JARXIOKE 3000W Pure Sine Wave Power Inverter \(Model TM-12V-3000\) User Manual](#)

JARXIOKE TM-12V-3000

JARXIOKE 3000W Pure Sine Wave Power Inverter

Model: TM-12V-3000

[Introduction](#) [Safety Instructions](#) [Package Contents](#) [Product Overview](#) [Setup & Installation](#) [Operation](#) [Maintenance](#) [Troubleshooting](#) [Specifications](#) [Warranty & Support](#)

1. INTRODUCTION

Thank you for choosing the JARXIOKE 3000W Pure Sine Wave Power Inverter. This device converts 12V DC battery power into 110V/120V AC household power, suitable for a wide range of applications including home use, RVs, and off-grid solar systems. This manual provides essential information for safe installation, operation, and maintenance of your inverter.

Please read this manual thoroughly before using the inverter to ensure proper function and safety. Keep this manual for future reference.

2. IMPORTANT SAFETY INSTRUCTIONS

Failure to follow these instructions may result in serious injury, property damage, or death. Always exercise extreme caution when working with electrical systems.

- **Proper Installation:** Ensure all connections are secure and correctly polarized. Incorrect wiring, especially reverse polarity, can cause severe damage to the inverter and connected devices, and poses a fire risk.
- **Ventilation:** Install the inverter in a well-ventilated area. Do not block the cooling fans or vents. Overheating can lead to reduced performance or failure.
- **Environment:** Avoid installing the inverter in areas exposed to direct sunlight, heat sources, moisture, or flammable materials.
- **Battery Compatibility:** This inverter is designed for 12V DC battery systems. Do not connect it to 24V or other voltage systems unless specified for a different model.
- **Load Capacity:** Do not exceed the inverter's continuous power rating of 3000W. Overloading can cause the inverter to shut down or be damaged. Pay attention to surge power requirements of appliances.
- **Grounding:** Ensure the inverter is properly grounded according to local electrical codes.

- **Fuse Protection:** Always use appropriate external fuse protection on the DC input side to protect against overcurrent.
- **Children and Pets:** Keep the inverter and all electrical connections out of reach of children and pets.
- **Emergency Procedures:** In case of smoke, unusual odors, or fire, immediately disconnect the power source and evacuate the area.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- JARXIOKE 3000W Pure Sine Wave Power Inverter
- Remote Control Unit
- Remote Control Cable
- Battery Connection Cables (Red and Black)
- User Manual (This document)



Figure 3.1: Inverter, remote control, and battery cables included in the package.

4. PRODUCT OVERVIEW

The JARXIOKE 3000W Pure Sine Wave Power Inverter features a robust design for reliable power conversion. Key components and features are detailed below:



Figure 4.1: Front and rear view of the inverter with labeled components.

4.1 Front Panel Features

- **LCD Display:** Shows real-time input voltage (DC) and output voltage (AC).
- **AC Outlets (x3):** Standard 110V/120V AC outlets for connecting appliances.
- **USB Port (3.1A):** For charging USB-powered devices.
- **Power Switch:** Main ON/OFF switch for the inverter.
- **Remote Control Port:** Connects the wired remote control unit.
- **Indicator Light:** Displays operational status (Green for Normal, Red for Fault).

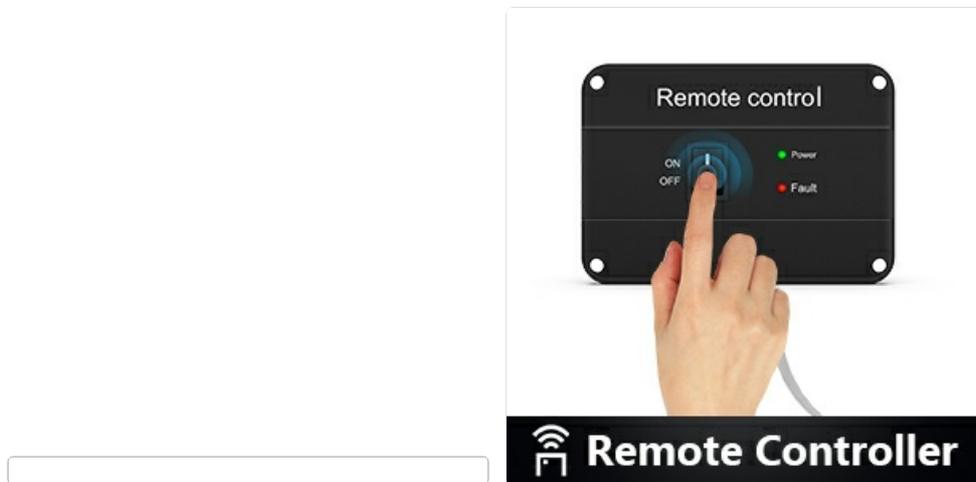


Figure 4.2: Details of the LCD display and remote control unit.

4.2 Rear Panel Features

- **Positive Terminal (Red):** Connects to the positive terminal of the 12V DC battery.
- **Negative Terminal (Black):** Connects to the negative terminal of the 12V DC battery.
- **Smart Cooling Fans (x2):** Automatically activate to dissipate heat and prevent overheating.



Figure 4.3: Detail of the inverter's intelligent cooling fans.

5. SETUP & INSTALLATION

Proper installation is critical for the safe and efficient operation of your inverter. Follow these steps carefully:

5.1 Choosing an Installation Location

- Mount the inverter on a flat, stable surface.
- Ensure adequate ventilation around the inverter. Do not obstruct the cooling fans.
- Keep the inverter away from direct sunlight, heat sources, water, and flammable materials.
- The inverter should be as close as possible to the battery bank to minimize cable length and voltage drop.

5.2 Connecting to a 12V DC Battery

WARNING: Before making any connections, ensure the inverter's power switch is in the OFF position and no AC loads are connected.

1. Identify the positive (red) and negative (black) terminals on both the inverter and your 12V DC battery.
2. Connect the **red** battery cable to the **positive (+)** terminal of the inverter. Secure tightly.
3. Connect the other end of the **red** battery cable to the **positive (+)** terminal of your 12V DC battery. Secure tightly.
4. Connect the **black** battery cable to the **negative (-)** terminal of the inverter. Secure tightly.
5. Connect the other end of the **black** battery cable to the **negative (-)** terminal of your 12V DC battery. Secure tightly.
6. Ensure all connections are firm to prevent loose contacts, which can cause overheating and potential fire hazards.



Figure 5.1: Inverter dimensions and battery cable connection details.

5.3 Connecting the Remote Control

Plug the remote control cable into the designated remote control port on the front panel of the inverter. The remote allows you to turn the inverter ON/OFF from a distance.

5.4 Solar System Integration (Optional)

For off-grid solar systems, connect the inverter to a 12V deep cycle battery bank, which is charged by solar panels via a charge controller. Ensure the charge controller is properly configured for your battery type and

solar panel array.



Figure 5.2: Example of inverter integration into a solar power system.

6. OPERATING INSTRUCTIONS

6.1 Turning the Inverter ON/OFF

1. Ensure all DC connections are secure.
2. Press the main power switch on the inverter's front panel to the "ON" position, or use the remote control switch.
3. The LCD display will illuminate, showing the input DC voltage and output AC voltage. The indicator light should be green.
4. To turn off, press the main power switch or remote control switch to the "OFF" position.

6.2 Connecting AC Appliances

Once the inverter is on and operating normally (green indicator light), you can connect your AC appliances to the 110V/120V AC outlets.

- Always check the wattage requirements of your appliances. The total continuous wattage of all connected appliances must not exceed 3000W.

- For appliances with motors (e.g., refrigerators, power tools), consider their surge power requirements, which can be significantly higher than their continuous running wattage. The inverter has a 6000W peak power capacity.
- Plug appliances directly into the AC outlets on the inverter.
- For USB charging, connect your device to the 3.1A USB port.

Heavy Duty

Convert DC 12V to AC 110/120V(±3%) Run all appliances under 3000W



Figure 6.1: Examples of appliances that can be powered by the inverter.

6.3 Understanding Pure Sine Wave Output

This inverter produces a pure sine wave output, which is identical to the AC power supplied by your utility company. This makes it suitable for sensitive electronics, medical equipment (like CPAP machines), and appliances with motors, ensuring they run smoothly and efficiently without damage.

7. 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 liquids or abrasive cleaners.

- **Ventilation:** Ensure the cooling vents and fans are free from dust and debris. Blocked vents can lead to overheating.
- **Connections:** Regularly check all DC and AC connections to ensure they are tight and free from corrosion. Loose connections can cause voltage drops and overheating.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

8. TROUBLESHOOTING

If your inverter is not functioning correctly, refer to the following table for common issues and solutions:

Problem	Possible Cause	Solution
No output voltage / Inverter not turning on	Inverter switch OFF Low battery voltage Loose battery connections Blown fuse (external or internal)	Turn inverter switch ON. Recharge or replace battery. Check and tighten all battery cable connections. Inspect and replace fuses if necessary (consult professional for internal fuses).
Inverter shuts down frequently	Overload Overheating Low battery voltage	Reduce connected load. Ensure proper ventilation; clear fan vents. Recharge battery.
Red Fault Indicator is ON	Overload Overheating Input over/under voltage Short circuit	Refer to solutions above for specific fault conditions. Disconnect loads, turn off inverter, wait a few minutes, then restart.
Appliances not working correctly	Appliance power exceeds inverter capacity Appliance malfunction	Check appliance wattage. Test appliance with a standard AC outlet.

9. SPECIFICATIONS

Feature	Detail
Model	TM-12V-3000
Continuous Power	3000W
Peak Power	6000W
DC Input Voltage	12V DC

Feature	Detail
AC Output Voltage	110V - 120V AC
Output Frequency	60Hz
Output Waveform	Pure Sine Wave
Conversion Efficiency	>90%
USB Output	5V DC, 3.1A
Protection Features	Overvoltage, Low Voltage, Overload, Short Circuit, Overheat, Reverse Polarity (Fuse), Automatic Restart, Leakage Protection
Dimensions (L x W x H)	11.02 x 5.5 x 7.08 inches (280 x 140 x 180 mm)
Item Weight	11.99 pounds

10. WARRANTY & SUPPORT

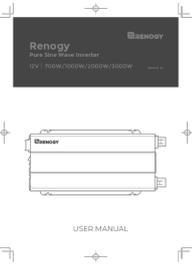
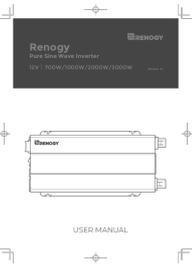
JARXIOKE provides a 24-month maintenance period for this product. For technical support, warranty claims, or any questions regarding your inverter, please contact JARXIOKE customer service through the retailer where the product was purchased.

Product liability is assumed by AIG.

© 2023 JARXIOKE. All rights reserved.

Related Documents - TM-12V-3000

	<p>JARXIOKE Inverter Model Differences: JXK Series</p> <p>Overview of model differences for JARXIOKE JXK series inverters, including models JXK-4000W, JXK-2500W, JXK-1500W, JXK-2000W, JXK-3000W, and JXK-5000W. All models share the same circuit and RF module.</p>
---	--

<p>POWER INVERTER</p> <p>PURE SINE WAVE</p> <p>12V 3000W 4000W</p> 	<p>VOLFVERT Pure Sine Wave Power Inverter User Manual 3000W & 4000W</p> <p>Comprehensive user manual for the VOLFVERT Pure Sine Wave Power Inverter (3000W and 4000W models). Covers features, safety instructions, installation, operation, troubleshooting, and specifications.</p>
	<p>Renogy 12V Pure Sine Wave Inverter User Manual: 700W, 1000W, 2000W, 3000W</p> <p>Comprehensive user manual for Renogy 12V Pure Sine Wave Inverters (700W, 1000W, 2000W, 3000W). Covers installation, operation, safety, specifications, and troubleshooting for off-grid power systems.</p>
	<p>Renogy Pure Sine Wave Inverter User Manual</p> <p>User manual for Renogy 12V Pure Sine Wave Inverters (700W, 1000W, 2000W, 3000W). Covers safety, installation, operation, troubleshooting, dimensions, and specifications.</p>
<p>BATTERY POWER INVERTERS</p> <p>700W / 1000W / 2000W / 3000W</p> 	<p>Renogy 12V Pure Sine Wave Power Inverter Manual</p> <p>Comprehensive manual for Renogy 12V Pure Sine Wave Power Inverters (700W, 1000W, 2000W, 3000W), covering safety instructions, installation, operation, troubleshooting, and specifications for off-grid and mobile power applications.</p>
	<p>Renogy 12V Pure Sine Wave Inverter Core Series - Technical Specifications and Features</p> <p>Explore the Renogy 12V Pure Sine Wave Inverter Core Series, featuring efficient power conversion, quiet operation, and advanced safety features. Ideal for off-grid systems. Includes technical specifications for RIV1210PU-126, RIV1220PU-126, and RIV1230PU-126 models.</p>