JARXIOKE 3000W+RC

JARXIOKE 12V 220V Pure Sine Wave Inverter 3000W/6000W with LCD Remote Control - User Manual

Model: 3000W+RC

1. Introduction

Thank you for choosing the JARXIOKE 12V 220V Pure Sine Wave Inverter. This device is designed to convert 12V DC power from your battery into stable 220V AC power, suitable for various household appliances and sensitive electronics. It features a continuous power output of 3000W and a peak power of 6000W, ensuring reliable performance for your power needs in vehicles, camping, outdoor activities, and emergency situations.

This manual provides essential information for the safe installation, operation, and maintenance of your inverter. Please read it thoroughly before use and retain it for future reference.

Image 1.1: JARXIOKE 3000W Pure Sine Wave Inverter with included accessories.

2. Important Safety Instructions

Failure to follow these safety instructions may result in serious injury or damage to the inverter and connected equipment. Always exercise caution when working with electrical devices.

- **Ventilation:** Ensure adequate ventilation around the inverter. Do not block ventilation openings.
- **Environment:** Install the inverter in a dry, cool, and well-ventilated area, away from direct sunlight, heat sources, flammable materials, and moisture.
- **Battery Connection:** Connect the inverter directly to a 12V battery. Ensure correct polarity (+ to + and - to -) to prevent damage.
- **Grounding:** The inverter must be properly grounded. Connect the grounding terminal to an appropriate ground point.
- **Load Capacity:** Do not exceed the inverter's continuous power rating (3000W) or peak power rating (6000W). Overloading can cause damage and fire hazards.
- **Maintenance:** Do not attempt to open or repair the inverter yourself. Refer all servicing to qualified personnel.
- **Children:** Keep the inverter out of reach of children.

3. Package Contents

Verify that all items are present in the package:

- 1 x JARXIOKE 12V 220V 3000W Pure Sine Wave Inverter
- 1 x LCD Remote Control
- 2 x Battery Cables (Red for positive, Black for negative)
- 1 x User Manual

4. Product Features

The JARXIOKE Pure Sine Wave Inverter offers advanced features for reliable power conversion:

- **Pure Sine Wave Output:** Provides clean and stable AC power, suitable for sensitive electronics, reducing noise and ensuring efficient operation.
- **High Conversion Efficiency:** Achieves over 90% conversion efficiency, minimizing energy loss.
- **Adjustable Input Voltage:** Features an adjustable input voltage function (9.5V-11V) for compatibility with various battery types, protecting battery health and extending lifespan.
- **Multiple Output Ports:** Equipped with 2 EU standard AC outlets, 1 USB-A port (5V/3.1A), and 1 Type-C port (30W) for versatile charging options.
- **LCD Remote Control:** Allows real-time monitoring of the inverter's status and convenient operation from a distance.
- **Comprehensive Protection:** Includes multiple safety features such as low-voltage protection, high-voltage protection, overheat protection, over-current protection, short-circuit protection, and overload protection.
- **Smart Cooling Fan:** An intelligent fan operates automatically based on load power and temperature to dissipate heat and reduce operational noise.

Image 4.1: Inverter's multi-protection system for device and user safety.

5. Component Identification

Familiarize yourself with the various components of your JARXIOKE inverter:

Image 5.1: Front and rear panel components of the inverter.

- **Front Panel:**
  - 230V AC Output Sockets (x2)
  - USB-A Port (5V/3.1A)
  - Type-C Port (30W)
  - ON/OFF Switch
  - Fault Indicator Light
  - Power Indicator Light
  - Remote Control Port (RJ45)
  - Adjustable Low Voltage Shutdown Switches (1 & 2)
- **Rear Panel:**
  - Positive Battery Terminal (Red)
  - Negative Battery Terminal (Black)
  - Smart Cooling Fans

- Grounding Terminal
- Hardwire AC Output Terminal (L, N, PE)

Image 5.2: LCD Remote Control display.

The LCD Remote Control displays real-time information including battery capacity, DC input voltage, AC output voltage, and current power consumption. It also indicates fault conditions like overload or overheating.

6. Setup and Installation

Follow these steps for proper installation of your inverter:

6.1 Mounting the Inverter

Choose a secure, dry, and well-ventilated location for mounting the inverter. Ensure there is sufficient space around the unit for airflow.

Video 6.1: Visual guide for inverter installation and operation.

6.2 Battery Connection

1. Ensure the inverter's ON/OFF switch is in the OFF position.
2. Connect the red battery cable to the positive (+) terminal of the 12V battery.
3. Connect the other end of the red cable to the positive (BAT+) terminal on the inverter.
4. Connect the black battery cable to the negative (-) terminal of the 12V battery.
5. Connect the other end of the black cable to the negative (BAT-) terminal on the inverter.
6. Ensure all connections are tight and secure. Loose connections can cause overheating and damage.

6.3 Grounding

Connect the grounding terminal on the inverter to a suitable ground point (e.g., vehicle chassis, earth ground) using a thick gauge wire.

6.4 Adjustable Input Voltage Setting

The inverter features adjustable low voltage shutdown settings to protect various battery types. Use the DIP switches (1 and 2) on the front panel to select the appropriate setting for your battery:

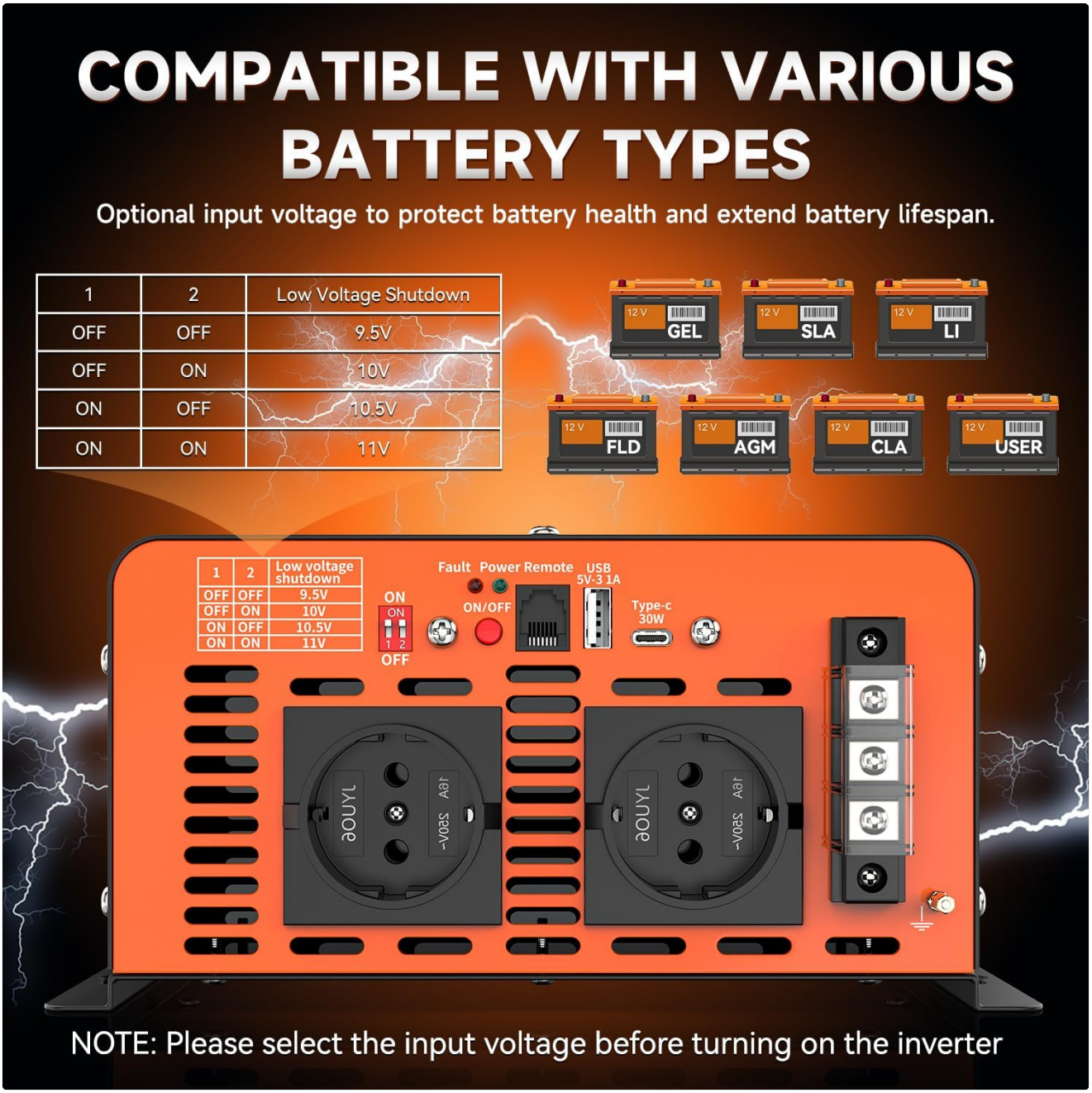


Image 6.1: DIP switch settings for low voltage shutdown.

Low Voltage Shutdown Settings

Switch 1	Switch 2	Low Voltage Shutdown
OFF	OFF	9.5V
OFF	ON	10V
ON	OFF	10.5V
ON	ON	11V

Note: Please select the input voltage setting before turning on the inverter.

7. Operating Instructions

7.1 Powering On/Off

1. After ensuring all connections are secure and the correct low voltage shutdown is set, press the ON/OFF switch on the inverter or the remote control.
2. The power indicator light will illuminate, and the LCD screen on the remote control will display operational data.
3. To turn off the inverter, press the ON/OFF switch again.

7.2 Connecting Appliances

Plug your 220V AC appliances into the EU sockets. For USB-powered devices, use the USB-A or Type-C ports. Ensure the total power consumption of connected devices does not exceed 3000W continuously.

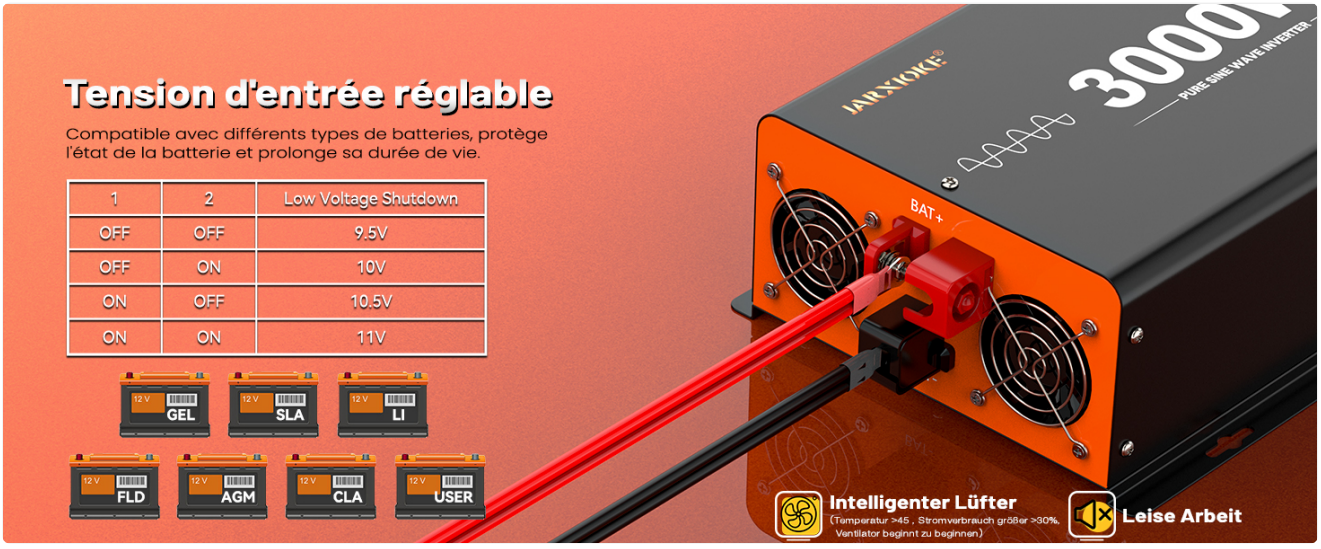


Image 7.1: Examples of devices compatible with the inverter.

7.3 Using the LCD Remote Control

The wired LCD remote control allows you to monitor the inverter's status and control it from a convenient location. Connect the remote control cable to the RJ45 port on the inverter's front panel.

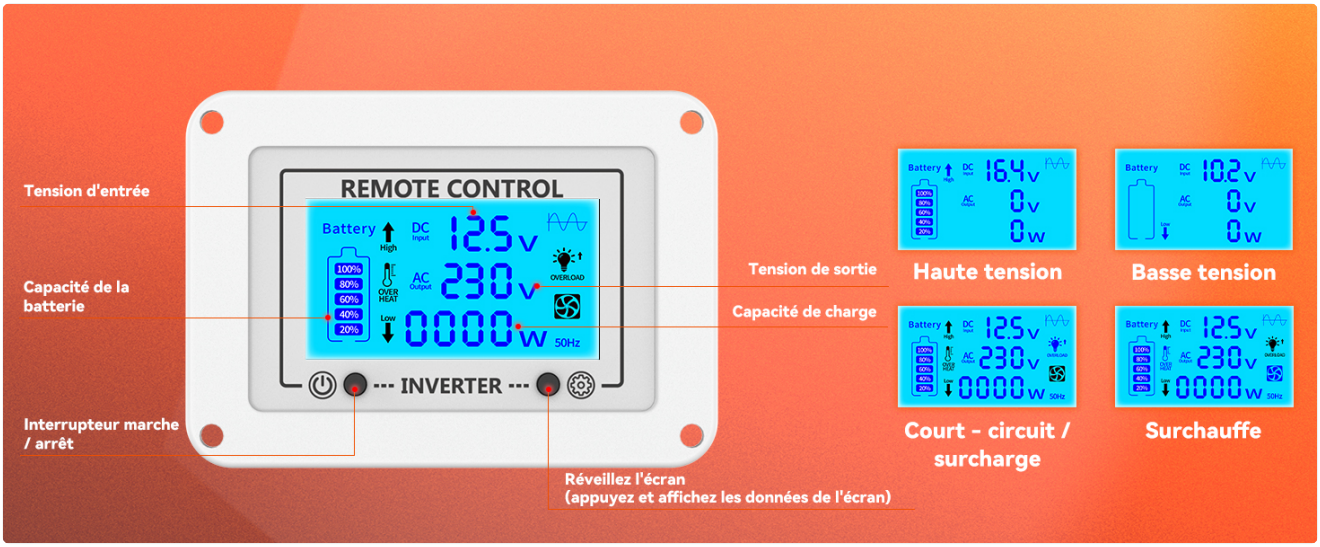


Image 7.2: Detailed view of the LCD remote control display.

The screen displays:

- Battery Capacity
- DC Input Voltage
- AC Output Voltage
- Current Load (Watts)
- Frequency (50Hz)
- Error indicators (e.g., Overload, Overheat, High/Low Voltage)

8. Maintenance

Regular maintenance ensures optimal performance and longevity of your inverter:

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Ensure ventilation openings are free from dust and debris. Do not use liquid cleaners.
- **Connections:** Regularly check battery and grounding connections for tightness. Loose connections can lead to power loss or overheating.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.
- **Battery Care:** Ensure your 12V battery is well-maintained and charged according to its manufacturer's guidelines.

9. Troubleshooting

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

Troubleshooting Guide

Problem	Possible Cause	Solution
No power output	Inverter OFF, loose battery connection, low battery voltage, blown fuse	Turn ON inverter, check battery cables, charge battery, check/replace fuses (if accessible and safe)
Overload alarm/shutdown	Connected load exceeds inverter's capacity	Reduce the load by disconnecting some appliances. Restart the inverter.

Problem	Possible Cause	Solution
Overheat alarm/shutdown	Poor ventilation, high ambient temperature, excessive load	Ensure proper ventilation, move to a cooler environment, reduce load. Allow inverter to cool down before restarting.
Low voltage alarm/shutdown	Battery voltage too low	Charge the battery. Check battery health.
High voltage alarm/shutdown	Input voltage too high	Verify battery voltage is within the 12V range. Disconnect immediately if voltage is incorrect.

If the problem persists after attempting these solutions, please contact customer support.

10. Specifications

JARXIOKE 3000W Pure Sine Wave Inverter (Model: 3000W+RC)

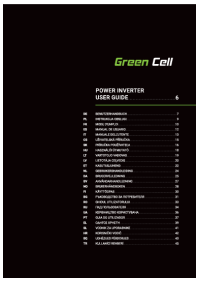
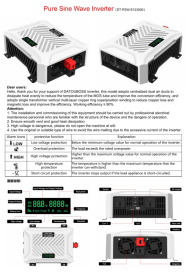
Feature	Specification
Brand	JARXIOKE
Model Name	JARXIOKE
Continuous Power	3000W
Peak Power	6000W
Input Voltage	12 Volts DC
Output Voltage	220V AC
Output Waveform	Pure Sine Wave
Conversion Efficiency	> 90%
AC Outlets	2 (EU Standard)
USB-A Output	5V / 3.1A
Type-C Output	30W
Dimensions (L x W x H)	36.3 cm x 10.5 cm x 20 cm
Color	Black
Power Source	Battery Powered, Solar Powered (with compatible solar charge controller)
Recommended Uses	Vehicle, Truck, Outdoor, Boat, Camping, Travel, Car, Power Outage

11. Warranty and Support

The JARXIOKE 12V 220V Pure Sine Wave Inverter comes with a 2-Year Limited Warranty. For warranty claims or technical support, please contact the seller or JARXIOKE customer service. Please have your purchase receipt and product model number ready when contacting support.

For any questions or assistance, please refer to the contact information provided with your purchase or visit the official JARXIOKE website.

Related Documents - 3000W+RC

	[JARXIOKE Inverter Model Differences: JXK Series] 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.
	[Green Cell Power Inverter Manual - Pure Sine Wave DC to AC Converters] Detailed manual for Green Cell pure sine wave power inverters. Covers specifications, features, safety guidelines, and operational instructions for various models including 12V and 24V DC to 230V AC converters.
	[President ALCA POWER Voltage Converters - Pure Sine Wave and Modified Sine Wave] Discover the President ALCA POWER range of voltage converters, including Pure Sine Wave and Modified Sine Wave models. Available in 12/220V and 24/220V, with power outputs from 150W to 3000W. Detailed specifications and product references provided.
	[VOLFVERT Pure Sine Wave Power Inverter User Manual | 3000W & 4000W] Comprehensive user manual for the VOLFVERT Pure Sine Wave Power Inverter (3000W and 4000W models). Covers features, safety instructions, installation, operation, troubleshooting, and specifications.
	[KAUWOX Pure Sine Wave Inverter User Manual & Specifications] Comprehensive user manual and technical specifications for the KAUWOX Pure Sine Wave Inverter. Learn about product features, applications, installation, wiring, safety precautions, troubleshooting, and warranty.
	[DATOUBOSS DT-PSW-E123000 Pure Sine Wave Inverter - Specifications and Manual] Detailed specifications, features, and troubleshooting guide for the DATOUBOSS DT-PSW-E123000 Pure Sine Wave Inverter. Learn about its power output, voltage range, protection functions, and common issues.