OLTEANP OLTEANP

OLTEANP 4000W Pure Sine Wave Power Inverter User Manual

Model: OLTEANP | Brand: OLTEANP

1. Introduction

This manual provides essential information for the safe and efficient operation of your OLTEANP 4000W Pure Sine Wave Power Inverter. Please read all instructions carefully before installation and use. Retain this manual for future reference.

1.1 Safety Precautions

- Ensure proper ventilation around the inverter to prevent overheating.
- Do not expose the inverter to water, rain, or excessive moisture.
- Connect the inverter only to a 12V DC power source.
- Always connect the grounding wire to a proper earth ground.
- Avoid connecting loads that exceed the inverter's continuous power rating of 4000W.
- The inverter features a professional spark-free protection circuit. However, always ensure correct power connections to prevent short circuits and potential hazards.
- Keep children away from the inverter and its connections.

2. Product Overview

The OLTEANP 4000W Pure Sine Wave Power Inverter converts 12V DC battery power to 230V AC household power. It is designed for various applications, including RV camping, travel, and mobile power needs. Key features include:

- **Pure Sine Wave Output:** Provides stable, grid-like power suitable for sensitive electronics, preventing buzzing and ensuring smooth operation.
- **High Power Capacity:** Offers 4000W continuous power and 8000W peak power.
- **Adjustable Input Voltage:** Features an updated adjustable input voltage function (9.5V-11V) for compatibility with various battery types, including lithium batteries, to optimize battery health and lifespan.
- **LCD Remote Control:** Allows monitoring of inverter operating status, troubleshooting, and easy adjustment of parameters from a distance. Displays battery status, input/output voltage, power, and error codes.
- **Multiple Output Ports:** Equipped with two 230V AC outlets, one 5V/3.1A USB port, and one 30W Type-C port for

charging and powering various devices.

- **Comprehensive Protection:** Includes high voltage, overload, high temperature, low voltage, and short circuit protection.

Figure 2.1: OLTEANP 4000W Inverter and LCD Remote Control. The remote displays battery charge, input/output voltage, power, and error indicators for easy monitoring and troubleshooting.

3. Setup

3.1 Unpacking and Inspection

Carefully remove the inverter and all accessories from the packaging. Inspect for any damage during transit. The package should include the inverter unit, battery cables, LCD remote control, and a small wrench.

Figure 3.1: Inverter Dimensions and Included Accessories. The image shows the inverter's measurements (18.30in x 7.91in x 4.44in) and accessories including 80cm battery cables, remote control, and a wrench.

3.2 Mounting the Inverter

Choose a dry, well-ventilated location for mounting the inverter. Ensure there is sufficient space around the unit for airflow, especially near the cooling fans. Mount the inverter securely using appropriate fasteners.

3.3 Connecting to a 12V DC Battery

1. Ensure the inverter is switched OFF.
2. Connect the **red** battery cable to the **positive (+)** terminal of the inverter and the **positive (+)** terminal of the 12V battery.
3. Connect the **black** battery cable to the **negative (-)** terminal of the inverter and the **negative (-)** terminal of the 12V battery.
4. Ensure all connections are tight and secure to prevent loose contacts and sparks.

3.4 Grounding the Inverter

For safety, the inverter must be properly grounded. Connect a grounding wire from the inverter's grounding terminal to a reliable earth ground point (e.g., vehicle chassis, dedicated ground rod).

3.5 Connecting the LCD Remote Control

Plug the remote control cable into the designated remote control port on the inverter. This allows for convenient monitoring and control.

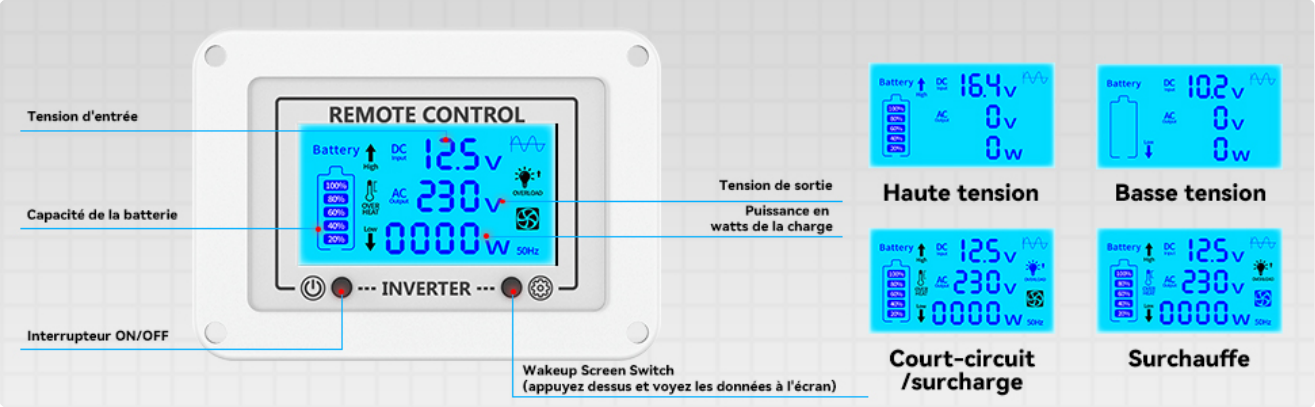

Figure 3.2: Inverter Connection Ports. This image highlights the two 230V AC output sockets, 3.1A USB port, 30W Type-C port, positive and negative battery terminals, intelligent cooling fans, and the grounding wire connection.

3.6 Adjusting Input Voltage (Low Voltage Shutdown)

The inverter features an adjustable low voltage shutdown threshold to protect your battery. **This adjustment must be made when the inverter is OFF.**

1. Locate the input voltage selection switches on the inverter.
2. Refer to the table below and the image to select the appropriate low voltage shutdown setting for your battery type (e.g., Lithium, GEL, SLA).
3. Use a small tool to set the switches to the desired position.

Figure 3.3: Selectable Input Voltage Settings. This diagram illustrates the switch settings (1 and 2) for different low voltage shutdown thresholds (9.5V, 10V, 10.5V, 11V) and lists compatible battery types.

Table 3.1: Low Voltage Shutdown Settings

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

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

4. Operating Instructions

4.1 Powering On/Off

1. After all connections are secure, switch the inverter's main ON/OFF switch to the 'ON' position.
2. The LCD remote control will illuminate, displaying current operating parameters.
3. To turn off the inverter, switch the main ON/OFF switch to the 'OFF' position.

4.2 Monitoring with the LCD Remote Control

The LCD remote control provides real-time information about the inverter's status:

- **Battery Capacity:** Indicates the remaining charge of your 12V battery.
- **DC Input Voltage:** Shows the current voltage from your battery.
- **AC Output Voltage:** Displays the 230V AC output voltage.
- **Power in Watts:** Shows the current power consumption of connected devices.
- **Error Indicators:** Flashing symbols will alert you to issues such as high voltage, low voltage, overload, short circuit, or overheat.

4.3 Connecting AC and USB Devices

Once the inverter is powered on, you can connect your devices:

- Plug 230V AC appliances into the two AC outlets.
- Connect USB-powered devices to the 5V/3.1A USB port.
- Connect Type-C compatible devices to the 30W Type-C port.
- Ensure the total power draw of all connected devices does not exceed 4000W.

Figure 4.1: Pure Sine Wave Output Advantage. This image illustrates the smooth, grid-like current waveform produced by the OLTEANP pure sine wave inverter, ideal for sensitive electronics, contrasting with the choppy output of modified sine wave inverters.

5. Maintenance

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

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Ensure the cooling fan vents are free from dust and debris to maintain proper airflow.
- **Connection Checks:** Regularly inspect all electrical connections (battery terminals, grounding wire, AC outlets) to ensure they are tight and free from corrosion.
- **Battery Health:** Monitor your battery's health and charge level. The adjustable input voltage feature helps protect your battery, but proper battery maintenance is crucial.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

6. Troubleshooting

The LCD remote control provides valuable diagnostic information. Refer to the flashing symbols on the screen to identify and resolve common issues.

Table 6.1: Troubleshooting Guide

Symptom/LCD Indicator	Possible Cause	Solution
No power output / Inverter not turning on	Loose battery connections, discharged battery, faulty ON/OFF switch.	Check battery cable connections. Recharge or replace battery. Ensure ON/OFF switch is fully engaged.

Symptom/LCD Indicator	Possible Cause	Solution
"Overload" indicator flashing	Connected load exceeds 4000W continuous power.	Reduce the total power of connected appliances. Disconnect high-power devices.
"Overheat" indicator flashing	Inverter is too hot due to poor ventilation or excessive load.	Ensure adequate ventilation around the inverter. Reduce load. Allow inverter to cool down. Clean fan vents.
"Low Voltage" indicator flashing	Battery voltage is below the set low voltage shutdown threshold.	Recharge the 12V battery. Check battery health. Verify the adjustable input voltage setting is appropriate for your battery type.
"High Voltage" indicator flashing	Input voltage from battery is too high.	Check battery charging system. Ensure battery voltage does not exceed 15V.
"Short Circuit" indicator flashing	Short circuit detected in the output.	Disconnect all AC/USB/Type-C devices. Inspect cables and devices for damage. Reconnect one by one to identify the faulty device.

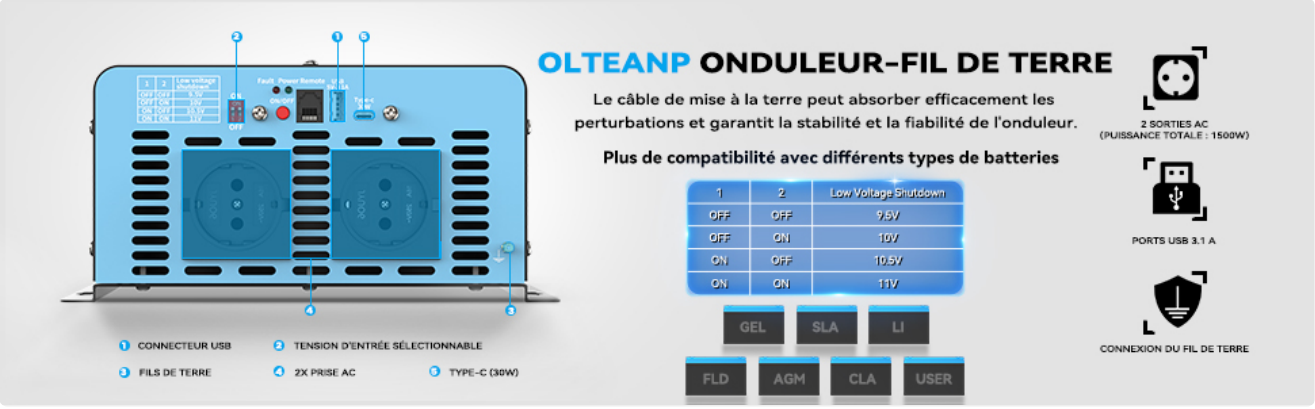

Figure 6.1: Multifunctional Safety Protection. This image highlights the intelligent chip and various protections: high voltage, overload, high temperature, low voltage, and short circuit protection, which are crucial for troubleshooting.

7. Specifications

Feature	Specification
Brand	OLTEANP
Model Number	OLTEANP
Continuous Power	4000 Watts
Peak Power	8000 Watts
Input Voltage	12V DC
Output Voltage	230V AC
Output Waveform	Pure Sine Wave
AC Outlets	2
USB Port	1 x 5V/3.1A

Feature	Specification
Type-C Port	1 x 30W
Adjustable Low Voltage Shutdown	9.5V, 10V, 10.5V, 11V (selectable)
Item Weight	7.5 Kilograms
Dimensions (L x W x H)	465mm x 201mm x 113mm (18.30in x 7.91in x 4.44in)
ASIN	B0CWNZKBSG

8. Warranty and Support

8.1 Warranty Information

Specific warranty details are typically provided with your purchase documentation. Please refer to the warranty card or contact your retailer for information regarding the warranty period and terms.

8.2 Customer Support

If you encounter any issues not covered in this manual or require further assistance, please contact OLTEANP customer support through your purchase platform or the official brand website. Provide your product model number (OLTEANP) and ASIN (B0CWNZKBSG) when seeking support.