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› NOVOPAL Pure Sine Wave Inverter 1000W 12V with Remote Control and LCD Display User Manual

novopal LCD 1000W 12V

NOVOPAL Pure Sine Wave Inverter 1000W 12V User Manual

Model: LCD 1000W 12V

1. INTRODUCTION

Thank you for choosing the NOVOPAL Pure Sine Wave Inverter. This device converts 12V DC power from your battery into 220V/230V AC power, suitable for various electronic appliances. This manual provides essential information for safe operation, installation, and maintenance of your inverter.

2. SAFETY INSTRUCTIONS

- Read all instructions before operating the inverter.
- Keep the inverter away from water, moisture, and flammable materials.
- Ensure proper ventilation around the inverter to prevent overheating.
- Do not open the inverter casing. There are no user-serviceable parts inside.
- Connect the inverter only to a 12V DC power source.
- Always connect the ground wire before connecting power cables.
- Disconnect the battery before performing any maintenance or cleaning.
- Avoid connecting appliances that exceed the inverter's continuous power rating.

3. PACKAGE CONTENTS

The NOVOPAL Pure Sine Wave Inverter package includes the following items:

- 1x NOVOPAL 1000W Pure Sine Wave Inverter (12V to 220V/230V)
- 1x Wired Remote Control (5-meter cable)
- 1x Set of Battery Connection Cables (Red for positive, Black for negative)

- 1x GND Earth Ground Cable
- 1x User Manual
- Spare Fuses (quantity may vary)
- Small Wrench for terminal connections

NOVOPAL 1000W Pure Sine Wave Inverter



Image: NOVOPAL 1000W Pure Sine Wave Inverter with remote control, battery cables, and other accessories.

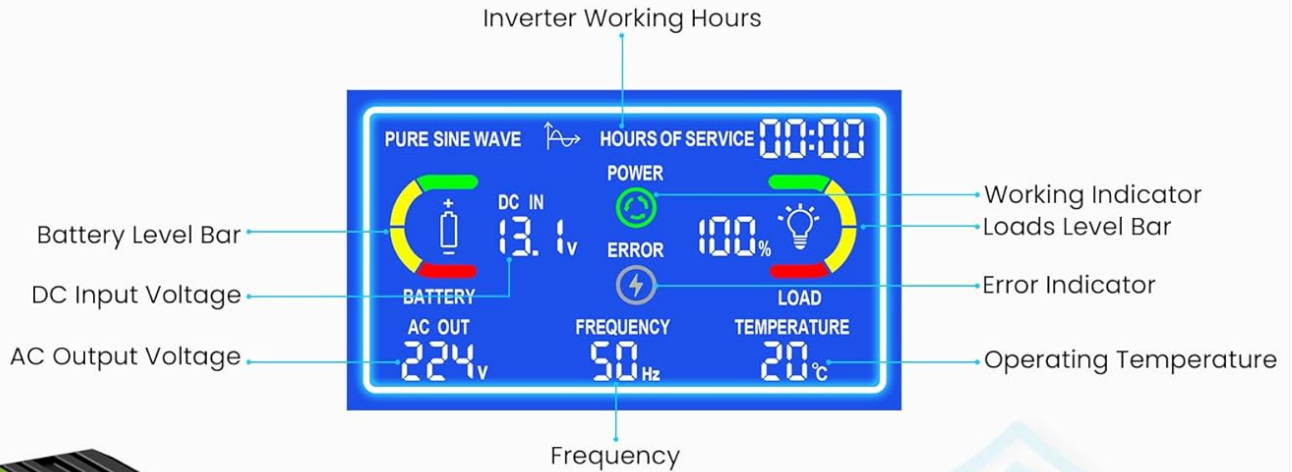
4. PRODUCT OVERVIEW

4.1. Key Features

- **Pure Sine Wave Output:** Provides stable and clean power, suitable for sensitive electronics.
- **High Continuous Power:** 1000W continuous power with 2000W peak surge capability.
- **LCD Display:** Real-time monitoring of input voltage, output voltage, frequency, load level, temperature, and battery status.
- **Wired Remote Control:** Allows convenient power control from a distance of up to 5 meters.
- **Multiple Protection Functions:** Includes overload, over-voltage, under-voltage, over-current, over-temperature, and short-circuit protection.
- **Intelligent Cooling Fan:** Activates automatically based on internal temperature and load, ensuring optimal performance and reducing noise.
- **Dual AC Outlets & USB Port:** Two standard AC outlets and a 2.4A USB port for versatile charging.

4.2. Components and Display

SMART LCD DISPLAY



Multi-Protection

- Over-voltage protection
- Undervoltage protection
- Overload protection
- Over-current protection
- Over temperature protection
- Short circuit protection

Image: The inverter's smart LCD display provides real-time information on DC input voltage, AC output voltage, battery level, frequency, load level, operating temperature, and error indicators.



Image: The inverter features multi-protection against over-voltage, undervoltage, overload, over-current, over-temperature, and short circuits.

Intelligent & Silent Cooling Fan

Internal temperature $>45^{\circ}\text{C}$ or inverter power $>40\%$, fan starts to work
Internal temperature $<45^{\circ}\text{C}$ or inverter power $<30\%$, fan stops working

-20°C

Min



40°C

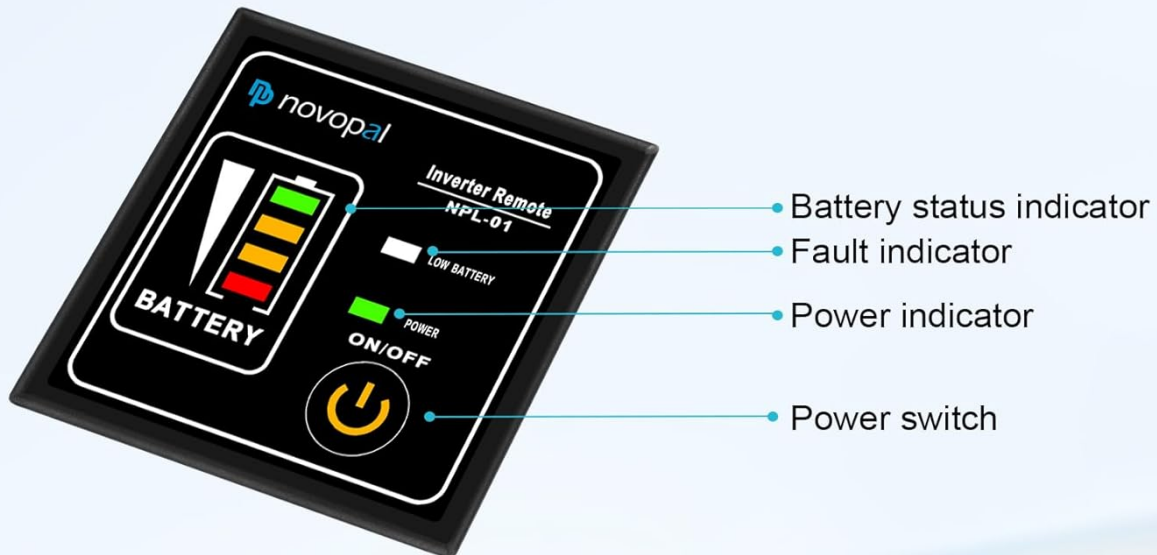
Max



Image: The intelligent cooling fan operates based on internal temperature and inverter power, ensuring efficient heat dissipation.

REMOTE CONTROL

You can mount it in a more convenient location and turn it on and off remotely. 5m long cable ends in an RJ45 plug.



Note:

When connecting the remote control, switch the inverter's power off first.

Image: The remote control unit allows convenient power management from a distance, featuring battery status, fault indicator, and power switch.

5. SETUP

5.1. Connecting to the Battery

Follow these steps to safely connect your inverter to a 12V battery:

1. Ensure the inverter is turned off and all appliances are disconnected.
2. Connect the black negative (-) cable to the negative terminal of the inverter. Tighten securely with the provided wrench.
3. Connect the red positive (+) cable to the positive terminal of the inverter. Tighten securely.
4. Connect the other end of the black negative (-) cable to the negative terminal of your 12V battery. Tighten securely.
5. Connect the other end of the red positive (+) cable to the positive terminal of your 12V battery. Tighten securely.

6. Connect the GND Earth Ground Cable to the inverter's ground terminal and to a suitable ground point (e.g., vehicle chassis or earth rod).



Image: Visual guide for connecting the inverter to a battery, showing positive and negative terminals.

5.2. Connecting the Remote Control

The wired remote control allows you to power the inverter on/off from a convenient location.

1. Ensure the inverter's main power switch is in the "OFF" position.
2. Locate the RJ45 port labeled "REMOTE" on the inverter.
3. Connect one end of the remote control cable to this port.
4. Connect the other end of the cable to the remote control unit.



Image: Illustration of connecting the 5-meter remote control to the inverter for convenient operation.

6. OPERATING INSTRUCTIONS

6.1. Powering On/Off

- To power on the inverter, press the "ON/OFF" button on the remote control or the main power switch on the inverter. The LCD display will illuminate, and the "Power" indicator on the remote will turn green.
- To power off the inverter, press the "ON/OFF" button on the remote control or the main power switch on the inverter. The LCD display will turn off, and the "Power" indicator will extinguish.

6.2. Connecting AC Appliances

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

1. Plug your appliance into one of the AC outlets on the inverter.
2. Ensure the appliance's power consumption does not exceed the inverter's continuous power rating (1000W).
3. For sensitive electronics, the pure sine wave output ensures safe and stable operation.

MULTIPURPOSE

Household Appliances, Power Tools, Emergency Equipments,
TV, etc up to 1000 watt



Image: The inverter is suitable for a wide range of applications including household appliances, power tools, and emergency equipment up to 1000 watts.

Effortless RV Appliance Power

2000W MAX



Note: The peak power of inductive loads can reach 5~7 times the starting power rating

Image: The inverter provides power for RV appliances such as printers (150W), laptops (150W), drones (300W), and angle grinders (400W).

6.3. USB Charging

The inverter includes a 2.4A USB port for charging compatible devices.

1. Connect your USB device to the USB port on the inverter.
2. The inverter does not need to be powered on for the USB port to function if it's connected to a battery.

7. MAINTENANCE

- Keep the inverter clean and free from dust and debris. Use a dry cloth for cleaning.
- Ensure all connections are tight and free from corrosion. Periodically check battery terminals and inverter connections.
- Verify that the ventilation openings are not blocked to allow proper airflow.
- Store the inverter in a cool, dry place when not in use.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power output / Inverter not turning on	<ul style="list-style-type: none"> ◦ Loose battery connections ◦ Low battery voltage ◦ Blown fuse ◦ Inverter's main switch is OFF 	<ul style="list-style-type: none"> ◦ Check and tighten all battery cable connections. ◦ Recharge or replace the battery. ◦ Check and replace internal fuses (consult professional if unsure). ◦ Ensure the main switch is ON.
Overload alarm / Inverter shuts down	<ul style="list-style-type: none"> ◦ Connected appliance exceeds inverter's power rating. ◦ Appliance has a high starting surge. 	<ul style="list-style-type: none"> ◦ Reduce the load by disconnecting some appliances. ◦ Use appliances within the inverter's continuous power limit. ◦ Consider a higher wattage inverter for high surge loads.
Over-temperature alarm	<ul style="list-style-type: none"> ◦ Poor ventilation ◦ High ambient temperature ◦ Excessive load 	<ul style="list-style-type: none"> ◦ Ensure adequate airflow around the inverter. ◦ Move the inverter to a cooler environment. ◦ Reduce the connected load.
Low battery alarm	<ul style="list-style-type: none"> ◦ Battery voltage is too low. 	<ul style="list-style-type: none"> ◦ Recharge the battery immediately. ◦ Disconnect appliances to prevent deep discharge.

9. SPECIFICATIONS

Feature	Detail
Brand	NOVOPAL
Model Name	Inversor de Corriente LCD 1000W 12V
Input Voltage	12 Volts DC
Output Voltage	220V/230V AC
Continuous Power	1000 Watts
Peak Power	2000 Watts
Output Waveform	Pure Sine Wave
USB Output	5V 2.4A
Recommended Battery Capacity	120AH (for 1000W)
Product Dimensions	30.5L x 11W x 16.5H centimeters
Power Source	Solar and Battery Powered
Recommended Uses	Office, Home, Vehicle



Image: Dimensions of the NOVOPAL 1000W Pure Sine Wave Inverter.



Image: Table illustrating recommended battery capacities for different inverter power ratings.

10. WARRANTY AND SUPPORT

The NOVOPAL Pure Sine Wave Inverter comes with a **1 Year Warranty Against Manufacturer Defects**. For technical support, warranty claims, or any questions regarding your product, please contact NOVOPAL customer service through your purchase platform or the official NOVOPAL website.

Please retain your proof of purchase for warranty purposes.