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› Luminous NXG 1450e Solar Inverter User Manual

Luminous NXG 1450

Luminous NXG 1450e Solar Inverter User Manual

Model: NXG 1450

1. INTRODUCTION

The Luminous NXG 1450e Solar Inverter is an advanced 1100VA pure sine wave inverter designed to provide reliable power backup for homes, offices, and shops. Featuring ISOT Technology and Intelligent Load Sharing, this inverter optimizes solar and grid power utilization for maximum efficiency and energy savings. Its LCD display provides real-time operational status and settings.



Figure 1: Front view of the Luminous NXG 1450e Solar Inverter, showing the display and control buttons.

2. SAFETY PRECAUTIONS

- Ensure proper ventilation around the inverter.
- Do not expose the inverter to water or excessive moisture.
- Keep children and unauthorized personnel away from the unit.
- Always disconnect power before performing any maintenance or connections.
- Consult a qualified electrician for installation and complex wiring.

3. SETUP AND INSTALLATION

Follow these steps for proper installation of your Luminous NXG 1450e Solar Inverter:

1. **Placement:** Choose a cool, dry, and well-ventilated area. Ensure the inverter is placed on a stable, flat surface.
2. **Battery Connection:** Connect the battery cables to the inverter's battery terminals. Ensure correct polarity (red to positive, black to negative). Tighten connections securely.
3. **Solar Panel Connection:** Connect the solar panel cables to the designated solar input terminals on the inverter. Observe correct polarity.
4. **AC Input Connection:** Plug the inverter's AC input cable into a grounded wall outlet.
5. **AC Output Connection:** Connect your home or office appliances to the AC output sockets of the inverter.

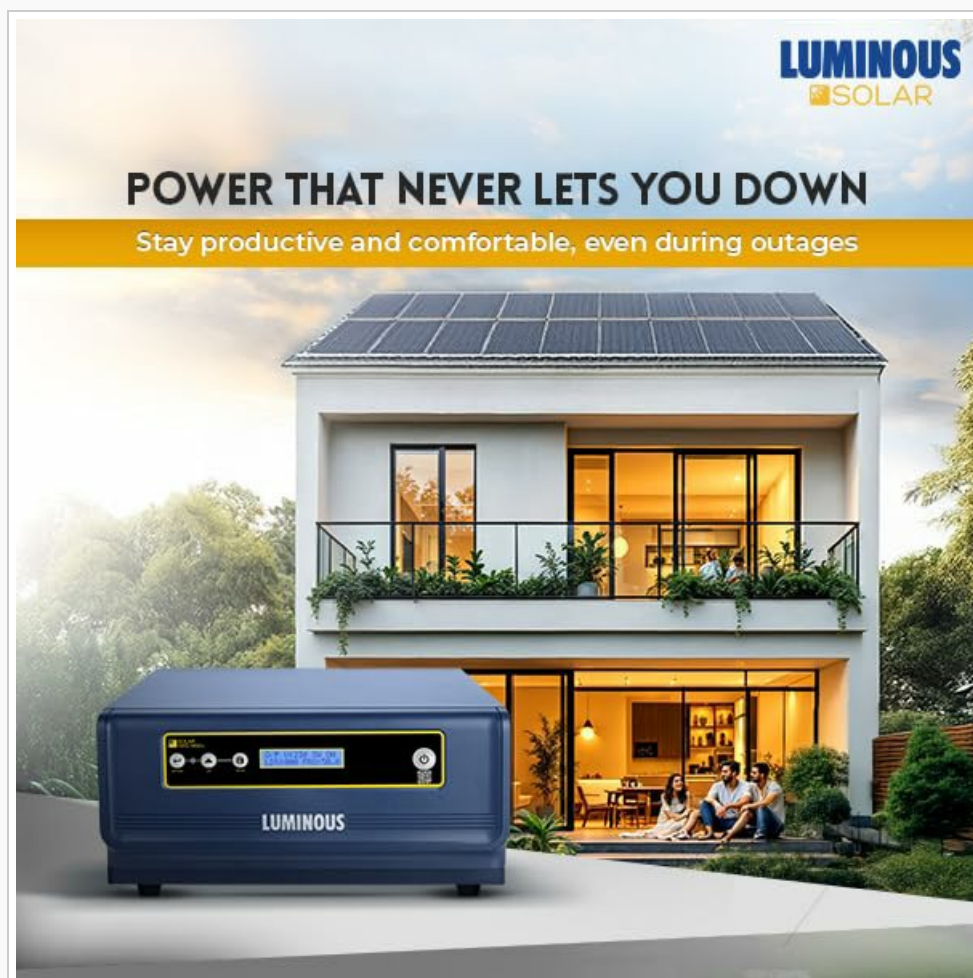


Figure 2: Rear panel connections for battery, solar, and AC input/output.

4. OPERATING INSTRUCTIONS

The Luminous NXG 1450e features an intuitive LCD display and control buttons for easy operation.

4.1. Control Panel Overview



Figure 3: LCD display and control buttons.

- **LCD Display:** Shows real-time information such as Solar status, PV power, cumulative kWh, system settings, battery voltage, input/output voltage, load percentage, and frequency.
- **ENTER Button:** Used to confirm selections or enter sub-menus.
- **UP Button:** Used to navigate through menu options or increase values.
- **SAVE Button:** Used to save changes made in settings.
- **Power Button:** Turns the inverter ON/OFF.

4.2. Power Saving Modes

The inverter offers three user-settable power saving modes to optimize energy consumption:

- **Solar Only Mode:** Prioritizes solar power. Ideal for areas with low power cuts.
- **Solar + Grid Mode:** Uses solar power primarily, supplementing with grid power when solar is insufficient. Suitable for moderate power cut areas.
- **Grid + Solar Mode:** Prioritizes grid power, using solar power as a backup or to charge batteries. Best for high power cut areas.



Figure 4: ISOT Technology for Intelligent Load Sharing.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your inverter.

- **Cleaning:** Periodically clean the inverter's exterior with a dry cloth. Ensure ventilation openings are free from dust and debris.
- **Battery Check:** For lead-acid batteries, check electrolyte levels regularly and top up with distilled water if necessary. Keep battery terminals clean and free from corrosion.
- **Connection Check:** Inspect all electrical connections (battery, solar, AC) for tightness and signs of wear or damage.
- **Environment:** Ensure the inverter remains in a cool, dry, and well-ventilated environment.

6. TROUBLESHOOTING

Refer to the table below for common issues and their solutions.

Problem	Possible Cause	Solution
Inverter not turning ON	Disconnected battery, low battery voltage, faulty power switch.	Check battery connections, charge battery, ensure power switch is ON.
No AC output	Overload, short circuit, inverter fault.	Reduce load, check for short circuits in appliances, restart inverter.
Low backup time	Battery degradation, excessive load, insufficient charging.	Check battery health, reduce load, ensure proper solar/grid charging.
Solar charging not active	Shaded solar panels, faulty solar panel connection, low sunlight.	Clear panel obstructions, check solar connections, wait for adequate sunlight.

7. SPECIFICATIONS

Key technical specifications for the Luminous NXG 1450e Solar Inverter:

- **Model:** NXG 1450
- **Wattage:** 1000 Watts
- **VA Rating:** 1100VA
- **Output Type:** Pure Sine Wave
- **Battery Capacity (Recommended):** Up to 300 Amp Hours

- **Charge Controller:** 60A (Built-in)
- **Power Source:** Solar and Battery Powered
- **Item Weight:** 14 kg 600 g
- **Item Dimensions (LxWxH):** 32 x 27.5 x 15 Centimeters
- **Recommended Uses:** Home, Office
- **Technology:** ISOT (Intelligent Solar Optimization Technology)

8. WARRANTY AND SUPPORT

The Luminous NXG 1450e Solar Inverter comes with a **36-month warranty** from the date of purchase, providing long-term assurance and support for your solar power needs.

For technical assistance, service requests, or warranty claims, please contact Luminous customer support through their official website or authorized service centers. Keep your purchase receipt and product serial number handy for faster service.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

What are the high-cut and low-cut charging voltages for the Luminous NXG 1450e solar inverter?

The provided manual for the Luminous NXG 1450e does not explicitly list the exact numerical values for the high-cut (overcharge protection) and low-cut (deep discharge protection) voltages. However, these values are typically

standardized for...

[Read full answer](#)

What does the 'Protection batt signal sence fail' error message mean on the Luminous NXG 1450 display, and how can I fix it?

The error message "Protection batt signal sence fail" (Battery Signal Sense Fail) on your Luminous NXG 1450 indicates that the inverter's control logic is unable to accurately detect or communicate with the battery's voltage...

[Read full answer](#)

What does the 'Protection batt signal fall' error message mean on the Luminous NXG 1450 display, and how can I fix it?

The error message "Protection batt signal fall" (often interpreted as Battery Signal Fail or Battery Voltage Fall) on your Luminous NXG 1450 indicates that the inverter has detected a critical issue with the battery...

[Read full answer](#)

Why does my Luminous NXG 1450e solar inverter sometimes switch to battery backup mode even when the main grid power is still available?

The Luminous NXG 1450e is designed with ISOT (Intelligent Solar Optimization Technology), which prioritizes solar energy over grid power to save on electricity bills. This behavior is often a normal part of its operation...

[Read full answer](#)