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› Luminous NXG+1450 Solar Home Solution User Manual

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Luminous NXG+1450 Solar Home Solution User Manual

Model: NXG+1450 Hybrid Inverter, LPTT12150H 150Ah Tall Tubular Battery, 170W Polycrystalline Solar Panels

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Luminous Solar Home Solution. This comprehensive system includes a Luminous NXG+1450 Hybrid Inverter, a LPTT12150H 150Ah Tall Tubular Battery, and two 170W Polycrystalline Solar Panels. Please read this manual thoroughly before using the product.



Image 1.1: Overview of the Luminous Solar Home Solution components.

2. SAFETY INFORMATION

- **Electrical Hazard:** Installation and maintenance should only be performed by qualified personnel. High voltages are present.
- **Battery Safety:** Batteries contain corrosive acid. Wear protective gear (gloves, eye protection) during handling. Do not short-circuit battery terminals.
- **Solar Panel Handling:** Solar panels can generate electricity even in low light. Cover panels with opaque material during installation to prevent electric shock.
- **Ventilation:** Ensure adequate ventilation around the inverter and battery to prevent overheating and accumulation of gases.
- **Grounding:** All components must be properly grounded according to local electrical codes.
- **Water Exposure:** Keep the inverter and battery away from water and excessive moisture.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon receipt:

- 1 x Luminous NXG+1450 Hybrid Inverter
- 1 x Luminous LPTT12150H 150Ah Tall Tubular Battery
- 2 x Luminous 170W Polycrystalline Solar Panels
- User Manual (this document)
- Warranty Card
- Necessary connection cables and accessories (may vary by package)

4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your solar system. It is recommended that installation be performed by a certified technician.

4.1 Site Selection

- **Inverter & Battery:** Choose a cool, dry, well-ventilated area, away from direct sunlight and flammable materials. Ensure sufficient clearance for air circulation.
- **Solar Panels:** Install panels on a rooftop or ground mount with optimal sun exposure throughout the day, free from shading. The 170W Polycrystalline panels are designed for rooftop installations.

4.2 Component Connection Overview

The system connects the solar panels to the inverter, the battery to the inverter, and the inverter to your home's electrical loads and grid supply.

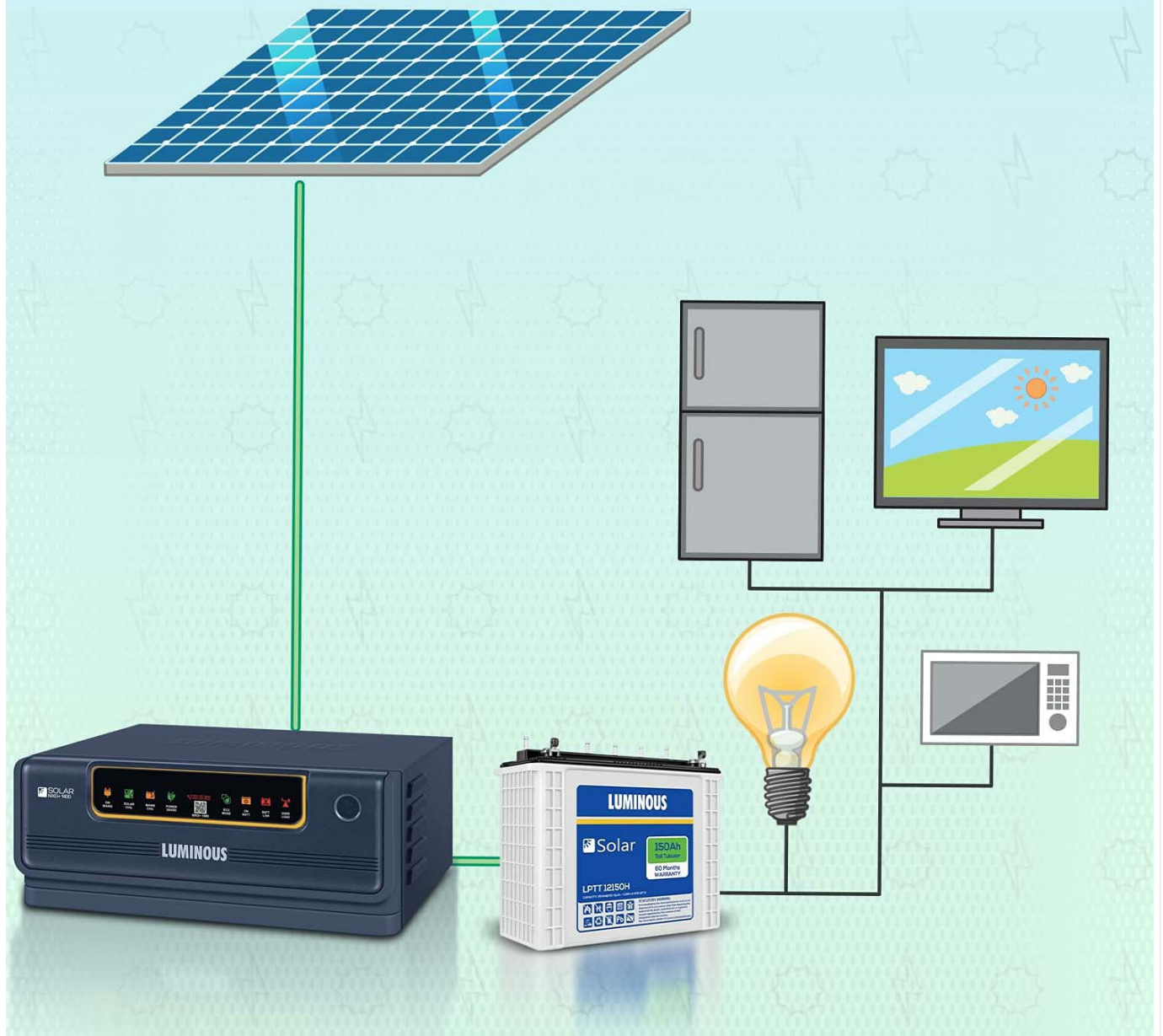


Image 4.1: System connection diagram for the Luminous Solar Home Solution.

4.3 Installation Steps (Simplified)

1. **Mount Solar Panels:** Securely mount the two 170W Polycrystalline solar panels on the chosen location, ensuring proper tilt and orientation for maximum sunlight exposure.
2. **Connect Solar Panels to Inverter:** Connect the solar panel output cables to the designated solar input terminals on the Luminous NXG+1450 Hybrid Inverter. Ensure correct polarity.
3. **Connect Battery to Inverter:** Connect the LPTT12150H 150Ah Tall Tubular Battery to the battery terminals on the inverter. Observe correct positive (+) and negative (-) connections.
4. **Connect Inverter to Grid:** Connect the inverter's AC input to your main electrical grid supply.
5. **Connect Inverter to Loads:** Connect your household appliances and electrical loads to the inverter's AC output.
6. **Grounding:** Ensure all components, especially the inverter and solar panel frames, are properly grounded.
7. **Initial Power-Up:** After all connections are secure and verified, switch on the battery breaker, then the solar breaker (if applicable), and finally the inverter. Follow the inverter's specific power-up sequence.

5. OPERATING INSTRUCTIONS

Your Luminous Solar Home Solution is designed for automatic operation, prioritizing solar power to reduce electricity bills.

5.1 Hybrid Operation

- The NXG+1450 Hybrid Inverter intelligently manages power flow from solar panels, battery, and grid.
- During daylight hours, solar energy powers your home and charges the battery. Any excess solar power can be fed back to the grid (if configured and allowed by local regulations).
- When solar power is insufficient or at night, the inverter draws power from the battery.
- If the battery charge is low, the system automatically switches to grid power to ensure continuous supply and recharge the battery.
- This system is designed to save approximately 3-4 units of electricity per day by maximizing solar utilization.

5.2 Inverter Display and Indicators

Familiarize yourself with the inverter's front panel indicators for system status:

- **Solar Charging Indicator:** Illuminates when solar panels are actively charging the battery.
- **Mains On Indicator:** Shows when grid power is available and connected.
- **Battery Charging Indicator:** Indicates battery charging status (from solar or grid).
- **Inverter On Indicator:** Confirms the inverter is active and supplying power.
- **Overload Indicator:** Warns of excessive load connected to the inverter.
- **Battery Low Indicator:** Alerts when battery charge is critically low.

SOLAR HOME SOLUTION



Image 5.1: Luminous Solar Home Solution integrated into a home setting.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your Luminous Solar Home Solution. This system is designed to be reliable and maintenance-friendly.

6.1 Solar Panels

- **Cleaning:** Periodically clean the surface of the solar panels to remove dust, dirt, and debris. Use a soft cloth and water. Avoid abrasive cleaners or harsh brushes.
- **Inspection:** Regularly inspect panels for any physical damage, cracks, or loose connections. Ensure no new shading sources have appeared.
- The 170W Polycrystalline panels are durable and weather-resistant.

160W Polycrystalline Module

Designed For High Performance

Excellent Low-light Performance

Built with high quality glass and solar cell surface coating for performance in low-light conditions

Resilience to Extreme Weather

Robust waterproof, corrosion and torsion resistant design offers protection against wind and snow

PID Resistance Technology

Designed to eliminate power loss owing to stray currents

Advance EVA Encapsulation

Designed with multi layer EVA (ethyl vinyl acetate) encapsulation for better module protection

Best in Class Efficiency

Innovative cell technology ensures optimum solar power generation providing high value for money



Image 6.1: Luminous 170W Polycrystalline Solar Module features.

6.2 Battery (LPTT12150H 150Ah Tall Tubular)

- **Water Level Check:** For tubular batteries, regularly check the electrolyte level and top up with distilled water if necessary. Do not overfill.
- **Terminal Cleaning:** Keep battery terminals clean and free from corrosion. Apply petroleum jelly to terminals to prevent corrosion.
- **Ventilation:** Ensure the battery area is well-ventilated to dissipate any gases produced during charging.

6.3 Inverter (NXG+1450 Hybrid)

- **Dust Removal:** Keep the inverter's ventilation openings clear of dust and obstructions. Use a soft brush or compressed air to clean.
- **Connection Check:** Periodically check all electrical connections for tightness and signs of wear or damage.

7. TROUBLESHOOTING

This section addresses common issues you might encounter. For problems not listed here, contact Luminous customer support.

Problem	Possible Cause	Solution
No power output from inverter	Inverter off, low battery, overload, tripped breaker	Check inverter switch, verify battery charge, reduce load, reset breakers.
Battery not charging	No solar input, grid power off, faulty connections, battery issue	Check solar panel connections, verify grid supply, inspect battery terminals, consult technician.
Solar panels not generating power	Shading, dirty panels, faulty connections, panel damage	Remove shading, clean panels, check wiring, inspect for physical damage.
Overload indicator on	Too many appliances connected	Disconnect some appliances to reduce the load below the inverter's capacity.

8. SPECIFICATIONS

Key technical specifications for the Luminous Solar Home Solution components:

8.1 Luminous NXG+1450 Hybrid Inverter

- **Model Number:** Luminous NXG1400 (as per specifications, note: product title uses NXG+1450)
- **Type:** Hybrid Solar Inverter
- **Product Dimensions:** 148L x 67W x 50H Centimeters (This dimension seems to be for the overall product, not just the inverter. Please refer to specific inverter documentation for exact dimensions.)
- **Item Weight:** 92 Kilograms (This weight is for the entire combo. Refer to individual product sheets for specific component weights.)

8.2 Luminous LPTT12150H 150Ah Tall Tubular Battery

- **Capacity:** 150 Ah
- **Type:** Tall Tubular Battery

8.3 Luminous 170W Polycrystalline Solar Panel

- **Maximum Power:** 170 Watts per panel
- **Material:** Polycrystalline Silicon
- **Efficiency:** 15-20%
- **Connector Type:** USB (This is likely an error in the source data, solar panels typically use MC4 connectors. Please verify with product documentation.)

9. WARRANTY

Luminous provides the following warranty for the components of this solar home solution:

- **Inverter:** 24 months warranty
- **Battery:** 60 months warranty
- **Solar Panels:** 25 years warranty (performance warranty)

Please retain your purchase receipt and warranty card for any claims. The warranty covers manufacturing defects under normal operating conditions. Refer to the specific warranty card included with your product for full terms and conditions.

10. SUPPORT AND CONTACT INFORMATION

For technical assistance, service requests, or further inquiries, please contact Luminous customer support:

- **Website:** Visit the official Luminous India website for support resources, FAQs, and service center locations.
- **Customer Service:** Refer to your warranty card or the Luminous website for the most current customer service contact numbers and email addresses.

When contacting support, please have your product model numbers (NXG+1450, LPTT12150H) and purchase details readily available.

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.

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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

Details

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