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## Luminous Eco\_Watt\_Neo\_1050

# Luminous Eco Watt Neo 1050 Square Wave Inverter 900VA/12V User Manual

Model: Eco Watt Neo 1050

## 1. PRODUCT OVERVIEW

The Luminous Eco Watt Neo 1050 is a 900VA/12V Square Wave Inverter designed to provide reliable power backup for homes, offices, and shops. It supports a single 12V inverter battery and features efficient power conversion technology.



Image 1.1: Front view of the Luminous Eco Watt Neo 1050 Inverter, highlighting its design for simplified power and maximized performance.

### Key Features:

- **VA Rating:** 900VA, providing sufficient power for essential appliances.
- **Battery Support:** Designed for a single 12V inverter battery.

- **Waveform:** Square Wave output for efficient power backup.
- **Durability:** Constructed with high-quality components for long-lasting performance.
- **Warranty:** 36-month warranty for extended assurance.



Image 1.2: Overview of key features including Modified Square Wave Technology and Faster Battery Charging.

## 2. SAFETY INSTRUCTIONS

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Read all instructions carefully before installation and operation. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Ensure proper ventilation around the inverter.
- Do not expose the inverter to rain, moisture, or direct sunlight.
- Keep away from flammable materials and gases.
- Ensure all connections are tight and secure to prevent sparking.
- Only qualified personnel should perform installation and maintenance.
- Do not open the inverter casing; there are no user-serviceable parts inside.

## 3. PACKAGE CONTENTS

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Verify that all items are present in the package:

- 1 x Luminous Eco Watt Neo 1050 Inverter Unit
- User Manual (this document)

## 4. SETUP AND INSTALLATION

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Follow these steps for safe and correct installation of your inverter:

1. **Placement:** Choose a dry, well-ventilated area away from direct sunlight, heat sources, and moisture. Ensure sufficient

clearance around the unit for airflow.

2. **Battery Connection:** Connect the 12V inverter battery to the inverter terminals. Ensure correct polarity: red cable to positive (+) terminal and black cable to negative (-) terminal. Secure connections tightly.
3. **Mains Input:** Plug the inverter's input power cord into a properly grounded wall outlet.
4. **Load Connection:** Connect your appliances to the output sockets of the inverter. Do not overload the inverter beyond its rated capacity (756 Watts).
5. **Initial Power On:** Once all connections are secure, switch on the inverter using the power button. Observe the indicator lights for normal operation.



Image 4.1: Front panel with operational indicators.

## 5. OPERATING INSTRUCTIONS

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The Eco Watt Neo 1050 operates automatically to provide uninterrupted power.

### Indicator Lights:

- **MAINS:** Illuminates when grid power is available and the inverter is charging the battery.
- **CHARGING:** Indicates that the battery is currently being charged.
- **ECO:** Indicates the inverter is operating in ECO mode, which prioritizes energy efficiency.
- **UPS:** Illuminates when the inverter is providing power from the battery (during a power cut).
- **LOW BATT:** Flashes or illuminates when the battery charge is low, indicating it needs recharging.
- **OVERLOAD:** Illuminates when the connected load exceeds the inverter's capacity.

### Normal Operation:

- When grid power is present, the inverter charges the battery and passes mains power to the connected appliances. The MAINS and CHARGING indicators will be active.
- Upon a power failure, the inverter automatically switches to battery power, and the UPS indicator will illuminate. This transition is typically very fast to prevent appliance disruption.
- When grid power resumes, the inverter switches back to mains power, and resumes charging the battery.

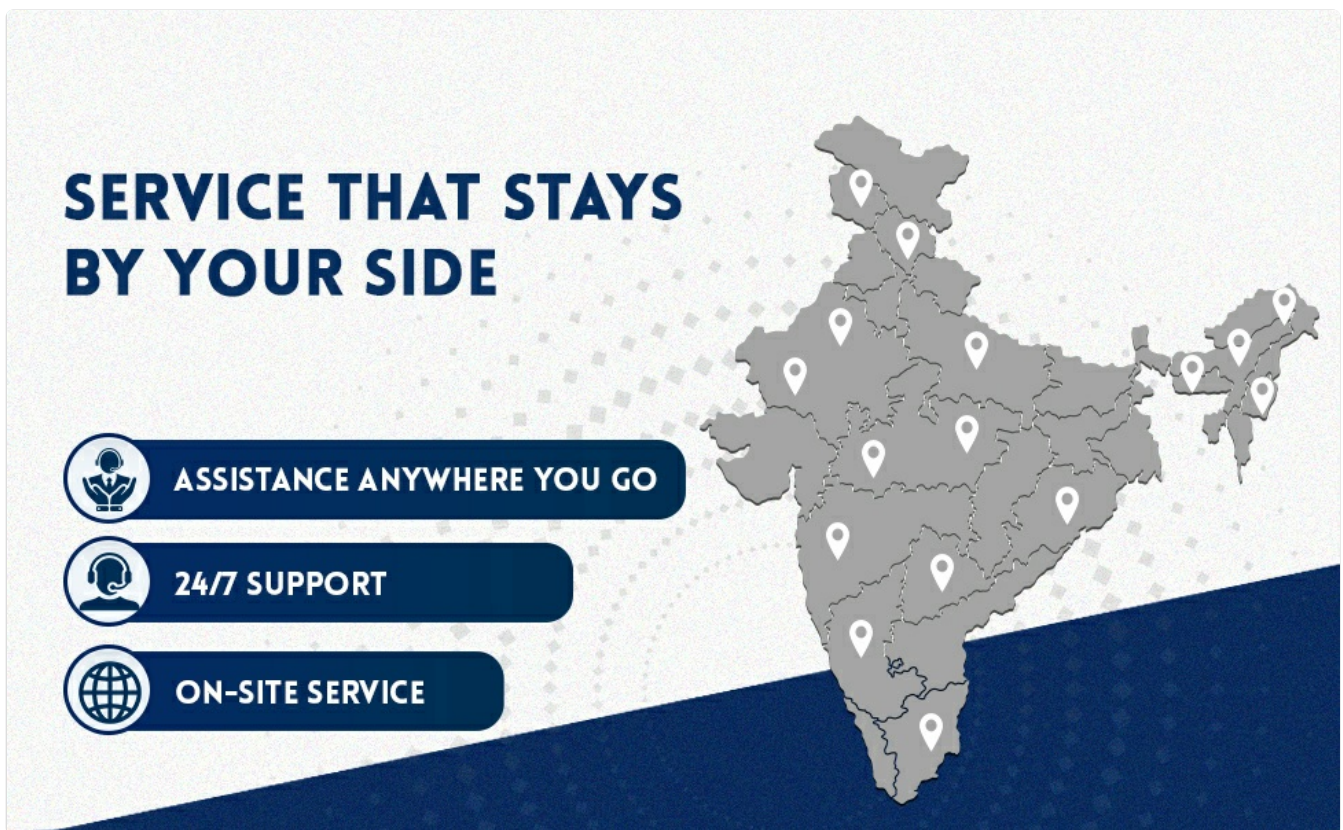


Image 5.1: The inverter is designed for versatile and fast power delivery.

## 6. MAINTENANCE

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

- **Cleaning:** Keep the inverter unit clean and free from dust. Use a dry cloth to wipe the exterior. Do not use liquid cleaners.
- **Ventilation:** Ensure that the ventilation openings are not blocked to prevent overheating.
- **Battery Check:** Periodically check the battery terminals for corrosion. Clean them if necessary and ensure connections are tight. For flooded batteries, check electrolyte levels regularly and top up with distilled water as needed.
- **Load Management:** Avoid consistently overloading the inverter. Distribute loads evenly or reduce non-essential appliances during power cuts.

## 7. TROUBLESHOOTING

Refer to the following table for common issues and their solutions:

Problem	Possible Cause	Solution
Inverter not turning on	Loose battery connections, discharged battery, no mains input.	Check battery terminals, ensure battery is charged, verify mains power supply.
OVERLOAD indicator active	Too many appliances connected.	Reduce the number of connected appliances.
LOW BATT indicator active	Battery is low on charge.	Allow the battery to charge when mains power is available. Reduce load if on battery power.
No power output during power cut	Battery not connected, battery fully discharged, inverter fault.	Check battery connections, ensure battery is charged. If problem persists, contact customer support.
Inverter making unusual noise	Internal component issue, fan obstruction.	Ensure ventilation is clear. If noise persists, contact customer support.

## 8. SPECIFICATIONS

Detailed technical specifications for the Luminous Eco Watt Neo 1050 Inverter:

Feature	Detail
Model Name	Eco Watt Neo 1050
VA Rating	900VA
Wattage	756 Watts
Battery Voltage	12V (Single Battery Support)
Wave Type	Square Wave
Item Weight	9 kg 160 g
Item Dimensions (LxWxH)	27.5 x 26.2 x 12.4 Centimeters
Manufacturer	Luminous Power Technologies Pvt. Ltd.
Country of Origin	India

### Usage Guidelines:

The following table provides a general guide for inverter and battery selection based on typical household appliance usage:

## BUYING GUIDE FOR HOME INVERTER & BATTERY

PURPOSES	APPLIANCES TYPE	BACK UP TIME	INVERTER VA	BATTERY Ah
1-2 BHK	3 Fans, 3 Tube-light, 3 LED, 1 TV, 1 Laptop + Wi-Fi Router	2-3 hours	600-800 VA	100-150 Ah
2-3 BHK	5 Fans, 5 Tube-light, 5 LED, 1 TV, 1 Laptop + Wi-Fi Router	2-3 hours	800-1000 VA	100-150 Ah
2-3 BHK	5 Fans, 5 Tube-light, 5 LED, 1 TV, 1 Laptop + Wi-Fi Router	4-5 hours	600-800 VA	150-220 Ah
3-4 BHK	9 Fans, 9 Tube-light, 9 LED, 2 TV, 2 Laptop + Wi-Fi Router	3-4 hours	1000-1500 VA	150-220 Ah

Image 8.1: Appliance and backup time recommendations.

## 9. WARRANTY AND SUPPORT

Your Luminous Eco Watt Neo 1050 Inverter comes with a **36-month warranty** from the date of purchase, covering manufacturing defects. For warranty claims or technical assistance, please contact Luminous customer support.

### Customer Support:

- **Manufacturer:** Luminous Power Technologies Pvt. Ltd.
- **Address:** Village Dev Nagar, PO Gagret, Teh Amb Distt. Una, Himachal Pradesh - 177201, India
- For service requests, please refer to the contact information provided with your product packaging or visit the official Luminous website.