

Luminous Eco Volt Neo 1550

Luminous Eco Volt Neo 1550 Pure Sine Wave Inverter User Manual

Model: Eco Volt Neo 1550 | Brand: Luminous

1. INTRODUCTION

The Luminous Eco Volt Neo 1550 is a pure sine wave inverter designed to provide reliable power backup for homes, offices, and shops. It delivers clean and stable power, making it suitable for sensitive electronic devices. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your inverter.

2. SAFETY INSTRUCTIONS

- **Read all instructions:** Before installing or operating the inverter, carefully read and understand all safety and operating instructions.
- **Qualified personnel:** Installation and servicing should only be performed by qualified personnel.
- **Ventilation:** Ensure adequate ventilation around the inverter to prevent overheating. Do not block ventilation openings.
- **Avoid moisture:** Do not expose the inverter to rain, water, or excessive moisture.
- **Proper grounding:** The inverter must be properly grounded to prevent electrical shock.
- **Battery safety:** Batteries contain corrosive acid. Wear protective eyewear and gloves when handling batteries. Ensure proper battery connections (positive to positive, negative to negative).
- **Flammable materials:** Keep flammable materials away from the inverter and batteries.
- **Emergency shutdown:** Familiarize yourself with the emergency shutdown procedure for the inverter and your electrical system.

3. PRODUCT OVERVIEW

The Luminous Eco Volt Neo 1550 is a 1400VA/12V pure sine wave inverter with a peak load capacity of 1176W. It is

designed for high performance and easy installation.

Key Features:

- Pure sine wave output for sensitive electronics.
- 1400VA/12V rating with 1176W peak load capacity.
- Supports various loads including CFL, tube light, ceiling fan, bulb, LED TV, and refrigerator.
- Wide battery compatibility: 12V batteries from 80Ah to 220Ah (flat plate, tubular).
- Energy-efficient design to reduce electricity consumption.
- Low harmonic distortion for noiseless operation.

Components:



Figure 3.1: Front view of the Luminous Eco Volt Neo 1550 Inverter. This image shows the overall design and front panel layout of the inverter unit.



Figure 3.2: Close-up of the front panel. This image highlights the LED indicators for Mains, Charging, ECO mode, UPS mode, Low Battery, and Overload, along with the power button.

LUMINOUS

ENGINEERED FOR POWER, BUILT WITH EFFICIENCY



Figure 3.3: Rear view of the inverter. This image displays the battery connection terminals (positive and negative), AC input/output sockets, and cooling fan.

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MORE POWER, MORE EFFICIENCY, MORE PRODUCTIVITY



**PURE SINE
WAVE**



**EXPRESS BATTERY
CHARGING STARTS
FROM 95V**



**SAFE FOR
APPLIANCES**



**RELIABLE
LONG-LASTING
PERFORMANCE**



Figure 3.4: Key features graphic. This image visually represents the core benefits of the inverter, including Pure Sine Wave technology, fast charging, appliance safety, and reliable performance.

Product Overview Video:

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Video 3.1: This video demonstrates a Luminous inverter (Eco Watt+ 750 model), showcasing its front panel indicators and rear connection ports. It provides a general overview of Luminous inverter operation and setup, which is applicable to the Eco Volt Neo 1550 model.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your Luminous Eco Volt Neo 1550 inverter:

1. **Unpacking:** Carefully remove the inverter from its packaging. Inspect for any damage during transit.
2. **Placement:** Place the inverter in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure it is on a stable, flat surface.
3. **Battery Connection:**

- Connect the **red** cable from the inverter to the **positive (+)** terminal of the 12V battery.
 - Connect the **black** cable from the inverter to the **negative (-)** terminal of the 12V battery.
 - Ensure connections are tight and secure to prevent sparking or overheating.
4. **Mains Input Connection:** Plug the inverter's mains input cord into a properly grounded wall socket.
 5. **Load Connection:** Connect your appliances to the output sockets on the rear of the inverter. Do not overload the inverter beyond its rated capacity.
 6. **Initial Power On:** Press the power button on the front panel to turn on the inverter. Observe the LED indicators for proper functioning.



Figure 4.1: Inverter in a home environment. This image illustrates a typical setup of the inverter providing power in a residential setting, highlighting its compact design.

5. OPERATING INSTRUCTIONS

The Eco Volt Neo 1550 features intuitive controls and indicators for easy operation.

Front Panel Indicators:

- **Mains:** Indicates when the inverter is receiving power from the main utility supply.
- **Charging:** Illuminates when the battery is being charged.
- **ECO:** Indicates the inverter is operating in ECO mode, which prioritizes energy efficiency.
- **UPS:** Indicates the inverter is operating in UPS mode, providing stable power for sensitive appliances.
- **Low Batt:** Warns when the battery charge is low and requires recharging.
- **Overload:** Indicates that the connected load exceeds the inverter's capacity.

Operating Modes:

- **ECO Mode:** This mode is ideal for areas with stable power supply and less frequent power cuts. It optimizes energy consumption.
- **UPS Mode:** Recommended for sensitive electronic devices like computers, laptops, and smart TVs. In this mode, the inverter provides a continuous and stable power supply, switching to battery backup instantly during power fluctuations or outages.

To switch between ECO and UPS modes, refer to the specific instructions in your product's detailed manual or consult Luminous customer support.

6. MAINTENANCE

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

- **Keep clean:** Regularly clean the inverter's exterior with a dry cloth. Ensure ventilation openings are free from dust and debris.
- **Check connections:** Periodically inspect battery terminals and other connections for corrosion or looseness. Clean corroded terminals and tighten loose connections.
- **Battery water level (for flooded batteries):** If using flooded lead-acid batteries, check the electrolyte level regularly and top up with distilled water if necessary.
- **Avoid overloading:** Do not connect appliances that exceed the inverter's rated capacity.
- **Professional servicing:** For any internal issues or complex repairs, contact authorized Luminous service personnel.

7. TROUBLESHOOTING

Here are some common issues and their potential solutions:

Problem	Possible Cause	Solution
Inverter not turning on	No mains power, loose battery connections, discharged battery.	Check mains supply, ensure battery cables are securely connected, charge the battery.
Overload indicator on	Too many appliances connected.	Reduce the number of connected appliances.
Low Battery indicator on	Battery needs charging.	Allow the inverter to charge the battery from the mains supply.
No output power	Inverter off, tripped circuit breaker, internal fault.	Turn on the inverter, check/reset circuit breaker, contact service if fault persists.

If the problem persists after attempting these solutions, please contact Luminous customer support.

8. SPECIFICATIONS

Detailed technical specifications for the Luminous Eco Volt Neo 1550 Inverter:

Feature	Value
Brand	Luminous
Model Name	Eco Volt Neo 1550 (Volt+1550)
Recommended Uses	Home, Office
Power Source	Battery Powered
Wattage	1176 Watts
Battery Capacity	Supports 80Ah to 220Ah (12V)
Voltage	12 Volts
Electrical Output Waveform	Pure Sine Wave
Frequency	50 Hz
Item Dimensions (L x W x H)	28L x 20W x 14H Centimeters
Item Weight	18 Kilograms
Color	Blue
Country of Origin	India

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

Figure 8.1: Inverter and Battery Buying Guide. This table helps users understand suitable inverter and battery capacities based on their home size and appliance usage.

9. WARRANTY AND SUPPORT

Your Luminous Eco Volt Neo 1550 Inverter comes with a comprehensive warranty and dedicated support.

- **Warranty Period:** The product is covered by a 36-month warranty from the date of purchase. Please retain your purchase receipt for warranty claims.
- **Customer Support:** For technical assistance, installation queries, or warranty service, please contact Luminous customer support. Refer to the contact information provided in your product packaging or on the official Luminous website.
- **On-Site Service:** Luminous offers on-site service in many regions. Check with customer support for availability in your area.

