

Giandel PS-1500SAR

GIANDEL Pure Sine Wave Power Inverter 1500W (Model PS-1500SAR)

User Manual

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your GIANDEL Pure Sine Wave Power Inverter 1500W, Model PS-1500SAR. This device converts 12V DC battery power into 120V AC household power, suitable for various applications including RVs, trucks, boats, and emergency power needs. Please read this manual thoroughly before installation and use.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in injury or damage to the inverter or connected devices.

- Connect the inverter only to a 12V battery with a minimum capacity of 200 Ah using the provided cables. Ensure all connections are secure.
- Do not exceed the inverter's rated continuous power output of 1500 Watts. Overload protection activates between 1501-1650 Watts.
- Do not leave the power inverter in the ON position when your vehicle's engine is off to prevent battery drain.
- Always disconnect the positive battery terminal before performing any wiring or maintenance on the inverter.
- Install the inverter in a cool, dry, and well-ventilated environment. Avoid direct sunlight and moisture.
- Do not use the inverter with appliances that draw more wattage than the inverter can provide, as this may cause damage to both the inverter and the appliance.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1x GIANDEL 1500 Watt Pure Sine Wave Power Inverter (Model PS-1500SAR)
- 2x Battery Cables (one black, one red)
- 1x Remote Controller with 15ft cable
- 1x User Manual

4. PRODUCT FEATURES AND OVERVIEW



Figure 4.1: GIANDEL 1500W Pure Sine Wave Power Inverter, showing the main unit, remote control, and included battery cables.

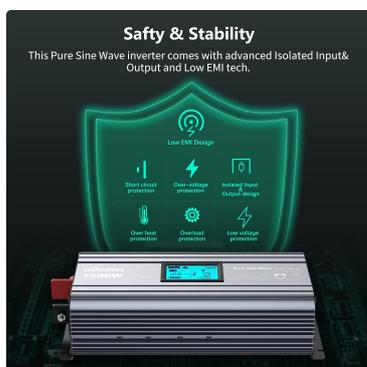


Figure 4.2: Overview of the inverter's safety and stability features, including Low EMI design, short circuit protection, over-voltage protection, isolated input & output design, over-heat protection, overload protection, and low voltage protection.



Figure 4.3: The included remote control unit, featuring a battery level indicator, fault indicator, power indicator, and an On/Off switch. It connects via a 15-foot RJ10 cable.

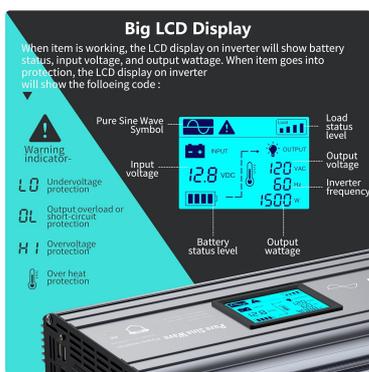


Figure 4.4: The large LCD display provides real-time information including input voltage (VDC), output voltage (VAC), frequency (Hz), output wattage (W), battery status level, and various warning indicators for protection modes.



Figure 4.5: Detailed view of the inverter's connections and features, including three AC sockets, two USB 2.4A ports, remote controller port, earth wire terminal, inverter switch, power indicator, LCD display, intelligent cooling fans, and DC 12V input terminals.

Materials & Size
Durable Aluminum Alloy Materials



Figure 4.6: Physical dimensions of the inverter (17.5in L x 8in W x 3.3in H) and remote control, along with specifications for the included 2 AWG, 2-foot battery cables.

5. SPECIFICATIONS

Feature	Specification
Model	PS-1500SAR
Continuous Power	1500 Watts
Overload Protection	1501-1650 Watts
Output Waveform	Pure Sine Wave
Total Harmonic Distortion (ITHD)	< 3%
Input Voltage Range	9.8-16VDC
Output Voltage	120 Vac \pm 10%
Output Frequency	60 Hz
Efficiency	Up to 90%
AC Outlets	3x Standard AC Outlets
USB Ports	2x 2.4A USB Ports
LCD Display	Input voltage, load power, protection modes
Remote Controller	Included, with 15ft cable
Cooling Fan	Intelligent, automatic operation
Over-temperature Protection	Activates around 149°F (65°C)
Over-voltage Shutdown	16V \pm 0.5VDC
Under-voltage Alarm	9.8V \pm 0.5VDC
Under-voltage Shutdown	9.5V \pm 0.5VDC

Feature	Specification
Dimensions (L x W x H)	17.9 x 8.07 x 3.78 inches (45.5 x 20.5 x 9.6 cm)
Weight	13.27 pounds (6.02 kg)

6. SETUP AND INSTALLATION

6.1 Choosing a Location

Select a location that is:

- Dry and protected from water splashes.
- Cool and well-ventilated. Avoid direct sunlight or heat sources.
- Secure, to prevent accidental movement or damage.
- Accessible for connections and monitoring the LCD display.

6.2 Connecting to a Battery

The inverter requires a 12V DC power source, typically a deep-cycle battery. A minimum battery capacity of 200 Ah is recommended for optimal performance.

1. Ensure the inverter is switched OFF.
2. Disconnect the positive terminal of your battery before proceeding with wiring.
3. Connect the red battery cable to the positive (+) terminal of the inverter and then to the positive (+) terminal of the 12V battery.
4. Connect the black battery cable to the negative (-) terminal of the inverter and then to the negative (-) terminal of the 12V battery.
5. Ensure all connections are tight and secure to prevent voltage drops and overheating.
6. Connect the remote controller cable to the designated RJ10 port on the inverter.
7. Optionally, connect an earth wire to the earth terminal on the inverter for additional safety.

Get Power when you need it



Picnic
Camping
Emergencies
Yacht
Work Outfield
Truck








12V DC connections

Warning:

① This is a 12V inverter, make sure the battery is 12V and fully charged while using.

② Multi protection functions like Low input voltage, over-load, over-heat will trigger beeping and shutdown to protect inverter.

Installation:

Follow the guide and set the inverter up with no effort.



Figure 6.1: Proper connection of battery cables to the inverter terminals, illustrating the sequence of cable, flat washer, up washer, and nut for secure attachment.

Important: The included cables are designed for the inverter's capacity. For longer runs or specific high-current applications, consult an expert for appropriate cable gauge selection.

7. OPERATION

7.1 Powering On the Inverter

1. After ensuring all connections are secure, reconnect the positive battery terminal.
2. Press the power switch on the inverter or the remote controller to turn the unit ON.
3. The LCD display will illuminate, showing the input voltage, output voltage, frequency, and battery status.

7.2 Connecting AC Devices

- Plug your AC devices into the three AC outlets on the inverter.
- For USB charging, connect devices to the two 2.4A USB ports.
- Monitor the LCD display for real-time load wattage. Ensure the total wattage of connected devices does not exceed 1500 Watts.

7.3 Cooling Fan Operation

The intelligent cooling fan will activate automatically when the internal temperature reaches approximately 104°F (40°C) or when the load power exceeds 40% of the rated power (600W). This ensures optimal operating temperature and extends the inverter's lifespan.

8. MAINTENANCE

- Regularly check all cable connections to ensure they remain tight and free from corrosion.
- Keep the inverter clean and free from dust and debris, especially around the cooling vents.
- Store the inverter in a cool, dry place when not in use.
- Ensure adequate ventilation around the inverter during operation to prevent overheating.

9. TROUBLESHOOTING

The LCD display provides warning indicators for various protection modes. Refer to the display for specific error codes:

- **LO (Undervoltage Protection):** The input voltage is too low (below 9.8VDC alarm, 9.5VDC shutdown). Recharge or replace the battery.
- **OL (Output Overload or Short-circuit Protection):** The connected load exceeds the inverter's

capacity or there is a short circuit. Disconnect some appliances or check for short circuits.

- **HI (Overvoltage Protection):** The input voltage is too high (above 16VDC shutdown). Check the battery charging system.
- **Over Heat Protection:** The inverter's internal temperature is too high (around 149°F / 65°C). Allow the inverter to cool down, ensure proper ventilation, and reduce the load.

If the issue persists after addressing the indicated problem, contact customer support.

10. WARRANTY AND SUPPORT

The GIANDEL Pure Sine Wave Power Inverter 1500W comes with an **18-month warranty** from the date of purchase. This warranty covers manufacturing defects under normal use.

For technical assistance, warranty claims, or any questions regarding your product, please refer to the contact information provided in your purchase documentation or visit the official GIANDEL website.

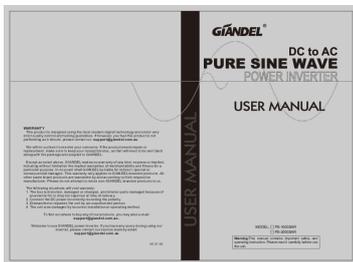
GIANDEL products are covered by product liability insurance through AIG company, ensuring reliability and customer confidence.

Related Documents - PS-1500SAR

	<p>How to Ground an Inverter Safely and Effectively</p> <p>Essential guide on grounding power inverters for safety and optimal performance. Covers various installation scenarios including indoor, outdoor, and vehicle use, with important warnings.</p>
	<p>GIANDEL 1200W Pure Sine Wave Power Inverter User Manual</p> <p>User manual for the GIANDEL 1200W Pure Sine Wave Power Inverter (Model PS-1200JCR), covering features, safety guidelines, installation, usage instructions, operational principles, and troubleshooting tips.</p>
	<p>GIANDEL PS-5000QAR Pure Sine Wave Power Inverter User Manual</p> <p>This user manual provides comprehensive instructions for the GIANDEL PS-5000QAR Pure Sine Wave Power Inverter, covering its introduction, safety precautions, parts list, installation, battery connection, AC appliance connection, features, protections, troubleshooting, and warranty information.</p>
	<p>Giandel Inverter Quick Knowledge and Troubleshooting Guide</p> <p>A concise guide from Giandel covering essential information on correctly connecting your inverter and troubleshooting common issues, including output voltage, overload, and temperature problems.</p>

	<p>GIANDEL PS-2200KAR Pure Sine Wave Power Inverter User Manual</p> <p>Comprehensive user manual for the GIANDEL PS-2200KAR Pure Sine Wave Power Inverter. Covers specifications, installation, operation, safety guidelines, protection features, troubleshooting, and warranty information for reliable DC to AC power conversion.</p>
	<p>GIANDEL PS-1000PDR 1000W Pure Sine Wave Inverter User Manual</p> <p>This user manual provides essential safety, installation, and operating instructions for the GIANDEL PS-1000PDR 1000W Pure Sine Wave Inverter. Learn how to safely use and maintain your power inverter for various applications.</p>

Documents - Giandel – PS-1500SAR



[\[pdf\]](#) Warranty

PS 1500 2000SAR 21 3 cdr Administrator GIANDEL Official Home Page 91m4 N0ceML m media amazon images I |||

WARRANTY This product is designed using the most modern digital technology and under very strict qua ... ng our inverter, please contact our service team by email: support giandel.com.au V0.21.03 MODEL: **PS-1500SAR** PS-2000SAR Warning:This manual contains important safety and operating instruction. Plea...

lang:en score:33 filesize: 805.14 K page_count: 6 document date: 2021-10-05