Redodo 2000w

Redodo 2000W Pure Sine Wave Inverter

Model: 2000W
Brand: Redodo

1. Introduction and Overview

The Redodo 2000W Pure Sine Wave Inverter is designed to efficiently convert 12V DC power from your battery into stable 120V AC power, suitable for a wide range of electronic devices and home appliances. With a continuous output of 2000W and a peak surge power of 4000W, this inverter ensures reliable and low-interference power output, with a distortion rate of less than 4%. It is an ideal solution for vehicles, RVs, homes, and outdoor activities.

This inverter features a real-time LCD monitor for easy operational status tracking, multiple protection systems for safe use, and flexible installation options.

2. Product Features

- **Reliable Power Efficiency:** Converts 12V DC to 120V AC with 2000W continuous power and 4000W peak surge. Provides stable, low-interference pure sine wave output (≤ 4% distortion).
- **Real-Time LCD Monitor:** Displays battery voltage, remaining capacity, DC input voltage, AC output voltage, output power, and load ratio. Includes over-voltage, low-voltage, high temperature, and overload indications for easy troubleshooting.
- **Easy Installation:** Accepts battery voltage from 10.0V to 15.5V DC, compatible with various battery types, especially Redodo 12V LiFePO4 batteries. Can be installed vertically or horizontally.
- **Versatile Use:** Operates within a temperature range of -20 °C to 40 °C. Suitable for camping, traveling, off-grid setups, RVs, and indoor equipment.
- **Multi-Protection System:** Includes low voltage protection, overheating protection, overvoltage protection, overload protection, and short circuit protection.
- **Connectivity:** Equipped with 4 AC power sockets, Type-C/USB interface, and a remote controller port.

3. Setup and Installation

Before installation, ensure the inverter is placed in a well-ventilated area, away from direct sunlight, heat sources, and flammable materials. The inverter can be mounted vertically or horizontally.

3.1 Physical Installation

Use the provided 4 mounting screws and plastic anchors to secure the inverter in your desired location. Ensure sufficient space around the unit for proper airflow and cooling.

Figure 3.1: Inverter dimensions and recommended horizontal installation. Dimensions are 354mm length, 100mm width, and 188mm height.

3.2 Battery Connection

Connect the inverter to a 12V DC battery bank. Use the provided 2*(2*8AWG) 1.97FT Battery to Inverter M8 ring terminal cables. Always connect the positive (+) cable (red) first, then the negative (-) cable (black). Ensure all connections are tight to prevent overheating and ensure optimal performance.

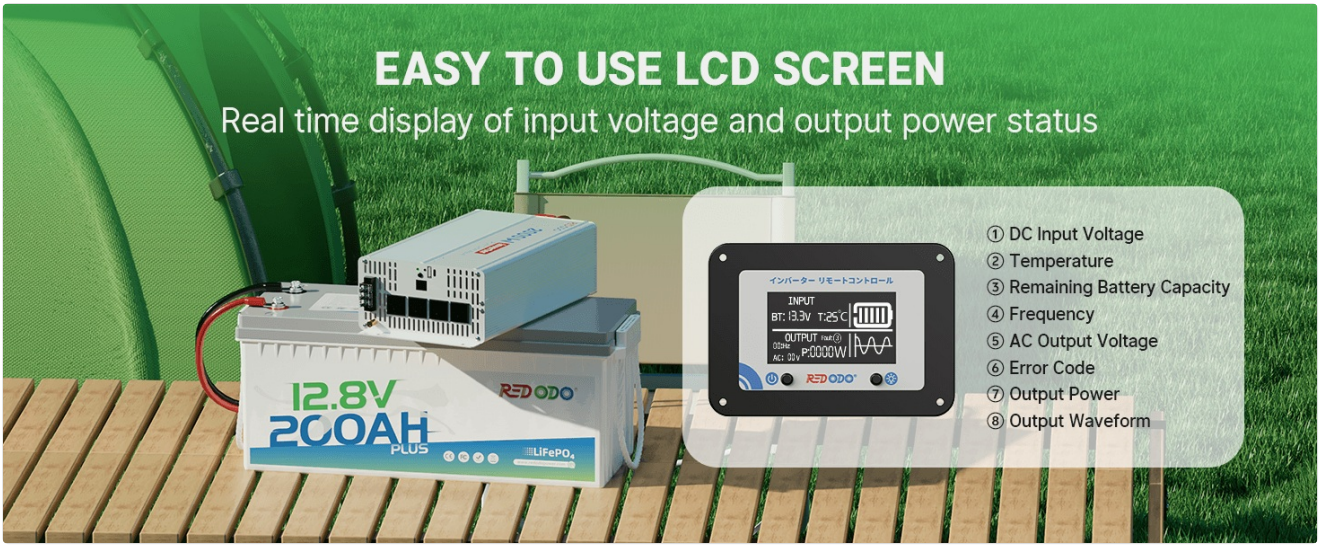

Figure 3.2: Diagram showing the connection of the Redodo inverter within a battery system, including solar panels and a charge controller.

3.3 Remote Controller Connection

The remote controller allows for convenient monitoring and control of the inverter from a distance. Connect the remote cable to the designated remote port on the inverter.

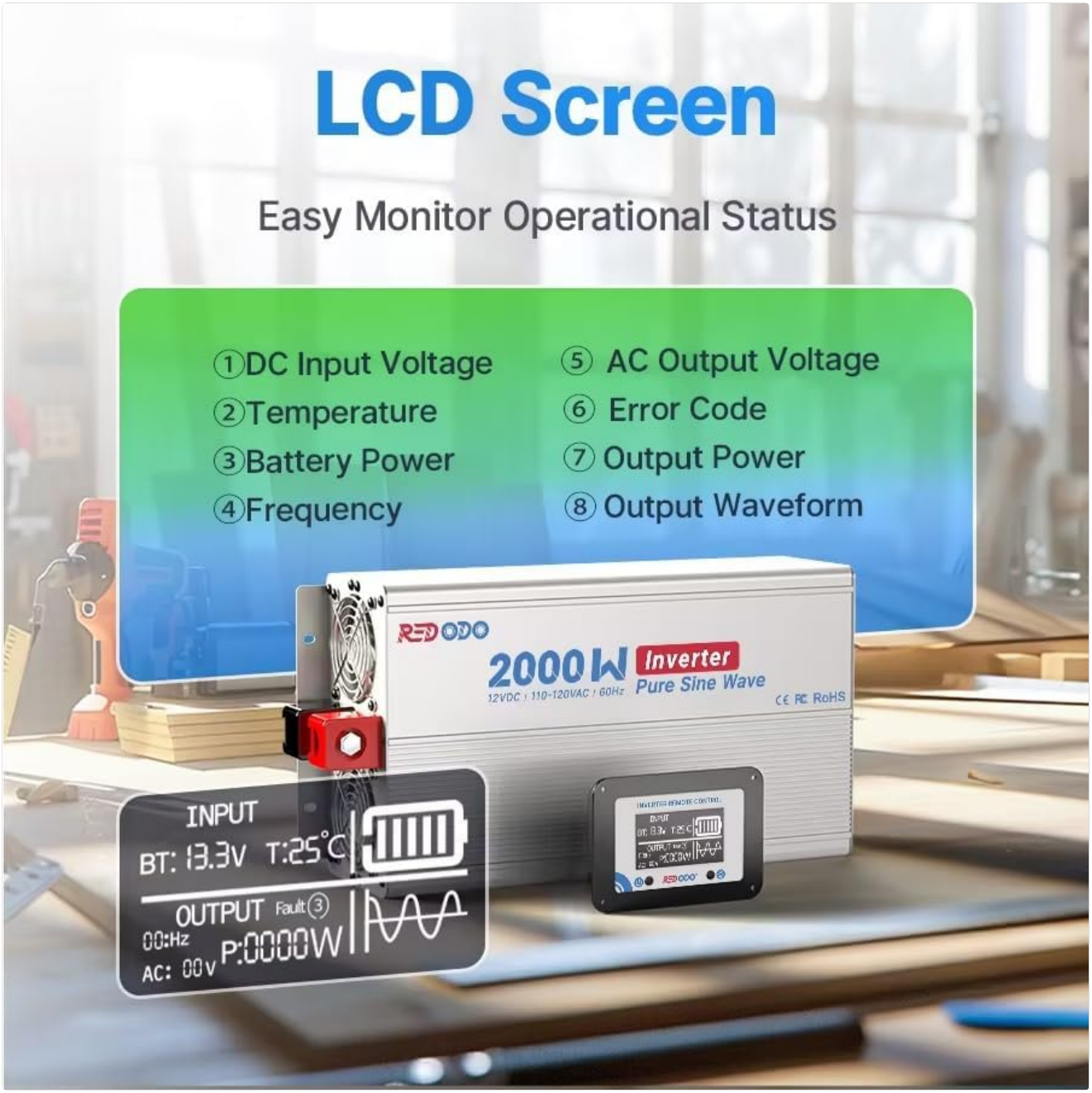

Figure 3.3: Close-up of the inverter's LCD screen and the remote controller, showing various status indicators.

4. Operating Instructions

4.1 Powering On/Off

Once all connections are secure, press the ON/OFF switch on the inverter or the remote controller to power on the unit. The LCD screen will illuminate, displaying operational data. To power off, press the ON/OFF switch again.

4.2 Monitoring Operational Status

The LCD screen provides real-time information:

- **DC Input Voltage:** Current voltage from the battery.
- **Temperature:** Internal temperature of the inverter.
- **Battery Power:** Remaining capacity of the battery bank.
- **Frequency:** Output AC frequency (60Hz).
- **AC Output Voltage:** Voltage supplied to AC appliances (120V).

- **Output Power:** Current power consumption by connected devices.
- **Load Ratio:** Percentage of maximum load being used.
- **Error Code:** Displays specific codes for protection events (e.g., low voltage, high temperature, overload).

Figure 4.1: The LCD screen interface showing real-time input voltage and output power status, along with various indicators.

4.3 Connecting AC Appliances

Plug your 120V AC appliances into the 4 AC outlets on the inverter. Ensure the total continuous wattage of your appliances does not exceed 2000W to prevent overloading.

Figure 4.2: Examples of household appliances that can be powered by the Redodo 2000W inverter, including microwave oven, coffee machine, fridge, hair dryer, and kettle.

5. Maintenance

To ensure the longevity and optimal performance of your Redodo 2000W Pure Sine Wave Inverter, regular maintenance is recommended:

- **Keep Clean:** Periodically clean the exterior of the inverter and ensure the cooling vents are free from dust and debris.
- **Check Connections:** Regularly inspect all DC and AC connections to ensure they are tight and free from corrosion.
- **Ventilation:** Always ensure the inverter has adequate ventilation to prevent overheating. The efficient cooling system with dual fans helps maintain stable temperatures.
- **Storage:** If storing the inverter for an extended period, disconnect it from the battery and store it in a cool, dry place.

Figure 5.1: Illustration of the inverter's efficient cooling system with dual fans, designed to maintain stable temperatures between -20°C and 40°C.

6. Troubleshooting

The inverter is equipped with a multi-protection system that will indicate issues via the LCD screen. Refer to the screen for specific error codes.

- **Low Voltage Protection:** If the battery voltage drops too low, the inverter will shut down to protect the battery. Recharge or replace the battery.
- **Overheating Protection:** If the internal temperature exceeds safe limits, the inverter will shut down. Ensure proper ventilation and reduce load.
- **Overvoltage Protection:** If the input voltage is too high, the inverter will shut down. Verify battery voltage.
- **Overload Protection:** If the connected load exceeds the inverter's capacity, it will shut down. Reduce the connected load.
- **Short Circuit Protection:** In case of a short circuit in the output, the inverter will shut down. Disconnect all loads and check for faults.

Figure 6.1: Visual representation of the inverter's multi-protection features, including low voltage, overheating, overvoltage, overload, and short circuit protection.

7. Specifications

Specification	Value
Product Dimensions	12.68 x 3.93 x 7.42 inches
Item Weight	12.07 pounds
Item Model Number	2000w
Brand	Redodo
Manufacturer	Redodo
Recommended Uses For Product	Home
Power Source	Solar and Battery Powered

Specification	Value
Wattage	2000 watts
Battery Capacity	100 Amp Hours

8. Warranty and Support

Redodo provides considerate, user-oriented service and technical support. For any issues or inquiries, please contact Redodo customer service. A team of knowledgeable tech staff is ready to help you tackle all problems and provide support within 24 hours.

Protection plans are available for purchase separately:

- 2-Year Protection Plan
- 3-Year Protection Plan
- Complete Protect: One plan covers all eligible past and future purchases.