EDECOA DPM20

EDECOA 2000 Watt Power Inverter User Manual

Model: DPM20 | Brand: EDECOA

Introduction

This manual provides detailed instructions for the safe and efficient operation of your EDECOA 2000 Watt Power Inverter. This 12V 2000W modified sine wave power inverter is designed to convert DC 12V power from your vehicle's battery or a solar system into AC 110V/120V household power. It is ideally suited for various applications including journeys, camping, tents, boat trips, and working remotely where grid electricity is unavailable. Please read this manual thoroughly before use to ensure proper installation and to maximize the lifespan of your device.

What's in the Box

Upon opening your EDECOA 2000W Power Inverter package, you should find the following components:

- 1 x EDECOA 2000W Power Inverter
- 1 x ET-RC Remote Controller Set
- 1 x Set of Battery Cables (Red and Black)
- 1 x Accessory Bag (containing small parts like fuses)
- 1 x User Manual (this document)

Image: All components included in the EDECOA 2000W Power Inverter package.

Key Features

The EDECOA 2000 Watt Power Inverter is equipped with advanced features to ensure reliable and safe power conversion:

- **High Power Output:** Provides 2000 Watts of continuous power and a peak power of 4000 Watts (for less than 10ms), suitable for a wide range of appliances.
- **Multiple AC Outlets:** Features 2 standard US AC outlets for connecting your devices.
- **Upgraded Remote Controller (ET-RC):** Humanized design LCD display allows monitoring of battery capacity, load level, temperature, fan status, frequency, DC input voltage, AC output voltage, and protection indications. Includes dual USB ports (5V 2.1A each) for charging mobile devices.
- **Multi-Protection System:** Incorporates Automatic Voltage Regulation (AVR), Intelligent Power Management (IPM), and Intelligent Fan Control (IFC) for enhanced safety and efficiency.
- **Pre-tested Quality:** Every unit undergoes rigorous testing before shipment to ensure optimal performance and reliability upon arrival.

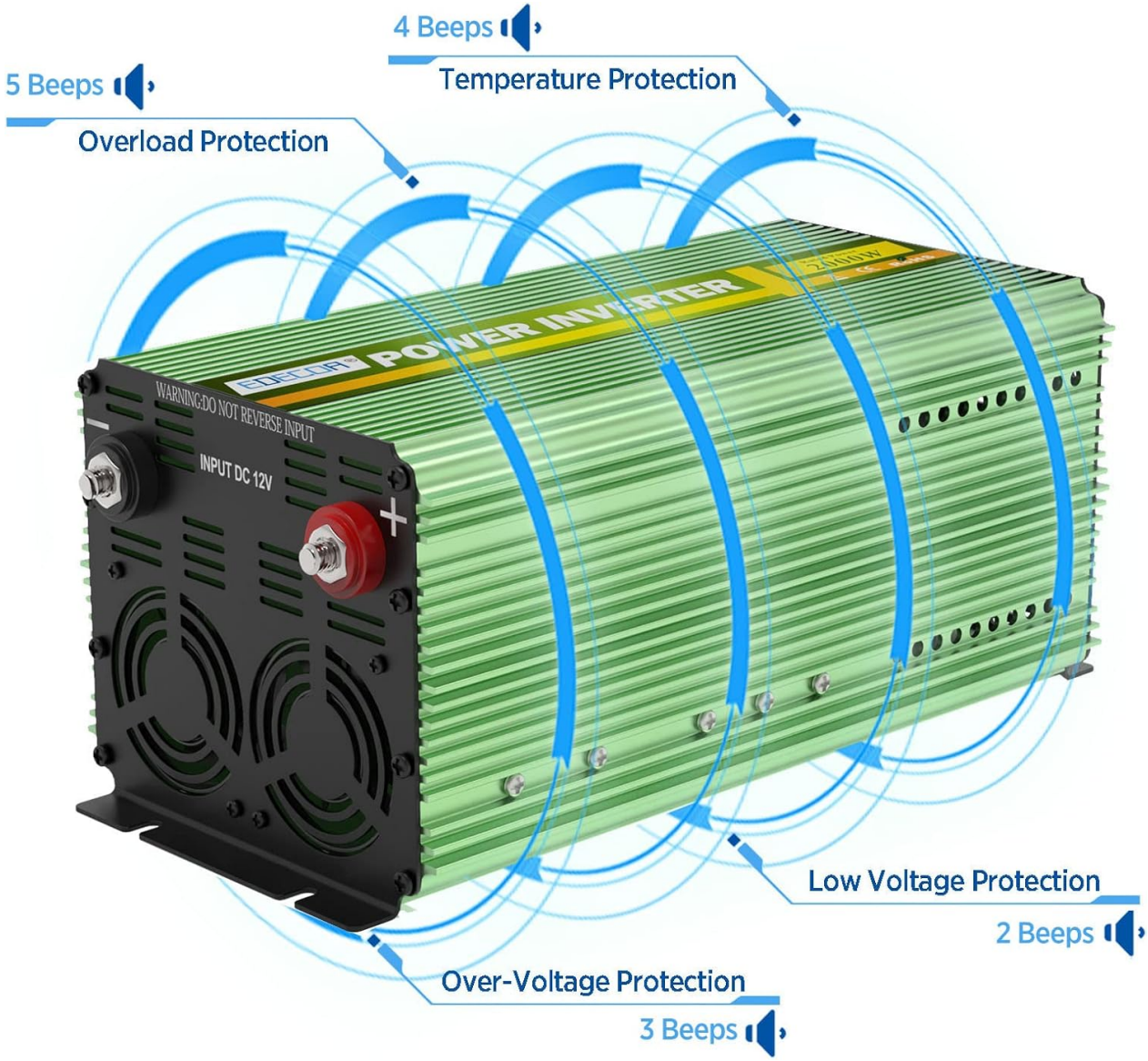

Image: Overview of the inverter's comprehensive protection features.

Setup

Connecting the Inverter

Follow these steps to properly connect your EDECOA Power Inverter:

1. Ensure the inverter's power switch is in the "OFF" position.
2. Connect the red battery cable to the positive (+) terminal of the inverter and the positive (+) terminal of your 12V battery. Ensure a secure connection.
3. Connect the black battery cable to the negative (-) terminal of the inverter and the negative (-) terminal of your 12V battery. Ensure a secure connection.
4. If using the ET-RC remote controller, plug its RJ45 cable into the "ET-RC Remote" port on the inverter.
5. Place the inverter in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure proper air circulation around the cooling fans.

Image: Detailed view of the inverter's connection points.

Operating Instructions

Using the Remote Controller (ET-RC)

The ET-RC remote controller provides convenient monitoring and control of your inverter:

1. After connecting the ET-RC cable to the inverter, the LCD display on the remote will activate.
2. The display shows real-time information such as DC input voltage, AC output voltage, frequency, battery capacity, load level, temperature, and fan status.
3. Use the power button on the remote to turn the inverter ON or OFF remotely.
4. The dual USB ports (5V 2.1A) on the remote can be used to charge compatible USB devices.
5. Observe any protection indications on the LCD, such as overload or low voltage warnings.

Image: Close-up of the ET-RC remote controller's display and functions.

Image: The inverter and remote controller in a typical usage scenario.

Safety Precautions

To ensure safe operation and prevent damage to the inverter or connected devices, please adhere to the following safety guidelines:

- Do not connect the inverter to AC distribution wiring.
- Ensure proper ventilation around the inverter to prevent overheating.
- Keep the inverter away from water, moisture, and flammable materials.
- Do not open the inverter casing. There are no user-serviceable parts inside.
- Always connect the inverter to a 12V DC power source. Connecting to a higher voltage will damage the unit.
- Ensure the total power consumption of connected devices does not exceed the inverter's continuous power rating.
- Disconnect the inverter from the power source when not in use or during maintenance.

Maintenance

Regular maintenance helps ensure the longevity and optimal performance of your inverter:

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the cooling vents and fans are free from dust and debris. Blocked vents can lead to overheating.
- **Connections:** Regularly check all cable connections to ensure they are tight and secure. Loose connections can cause power loss or overheating.
- **Storage:** When storing the inverter for extended periods, ensure it is disconnected from the battery and stored in a cool, dry place.

Image: The inverter's dual cooling fans and aluminum casing for efficient heat dissipation.

Troubleshooting

If you encounter issues with your EDECOA Power Inverter, refer to the table below for common problems and their solutions:

Problem	Possible Cause	Solution
No power output	Inverter switch OFF; Loose battery connections; Low battery voltage; Overload protection activated.	Turn switch ON; Check and tighten connections; Recharge battery; Reduce load.
Overload alarm/shutdown	Connected load exceeds inverter capacity.	Reduce the total wattage of connected devices.
Over-temperature alarm/shutdown	Poor ventilation; High ambient temperature; Blocked cooling fans.	Ensure adequate ventilation; Move inverter to cooler area; Clear fan obstructions.
Low battery voltage alarm/shutdown	Battery voltage is too low.	Recharge or replace the 12V battery.
Fan not running	Inverter is not under sufficient load or temperature to activate fan.	This is normal operation; fan activates when needed for cooling.

Specifications

Feature	Specification
Model Name	DPM20
Wattage	2000 Watts (Continuous) / 4000 Watts (Peak)
Power Source	Battery Powered (DC 12V)
Output AC Voltage	110V / 120V
Output Waveform	Modified Sine Wave
Product Dimensions	11 x 5.91 x 4.9 inches
Item Weight	7.48 pounds
Manufacturer	Dong Guan Shi Chang Tian Electrical Technology Co., Ltd
Recommended Uses	Home, Office, Vehicle

Warranty & Support

EDECOA products are manufactured to high-quality standards and are tested before shipment. For any warranty claims, technical support, or inquiries regarding your EDECOA 2000 Watt Power Inverter, please refer to the contact information provided on the product packaging or the official EDECOA website. Keep your purchase receipt as proof of purchase for warranty purposes.