

EDECOA 1200W/12V

EDECOA Pure Sine Wave Inverter User Manual

Model: 1200W/12V

1. INTRODUCTION

Thank you for choosing the EDECOA 1200W 12V Pure Sine Wave Power Inverter. This device is designed to convert 12V DC power from your battery into clean, stable 110V AC power, suitable for a wide range of electronic devices and appliances. Its pure sine wave output ensures compatibility with sensitive electronics, making it ideal for RVs, cars, boats, and household backup power. Please read this manual thoroughly before operation to ensure safe and optimal performance.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the inverter and connected devices:

- **Ventilation:** Ensure adequate ventilation around the inverter. Do not block ventilation openings.
- **Environment:** Do not expose the inverter to rain, moisture, direct sunlight, or extreme temperatures. Keep it away from flammable materials.
- **Connections:** Ensure all connections are tight and correct. Loose connections can cause overheating and damage.
- **Grounding:** The inverter must be properly grounded.
- **Overload:** Do not exceed the inverter's rated continuous power output (1200W) or surge power (2400W).
- **Battery Voltage:** Connect the inverter only to a 12V DC power source. Connecting to a different voltage will damage the unit.
- **Maintenance:** Do not attempt to disassemble or modify the inverter. Refer all servicing to qualified personnel.



The EDECOA inverter incorporates multiple protection mechanisms to ensure safe operation, including safeguards against over-voltage, low-voltage, overload, output short circuit, and over-temperature. An intelligent alarm system will notify you of protection issues.

3. PACKAGE CONTENTS

Please check the package for the following items:

- 1 x EDECOA 1200W Pure Sine Wave Inverter
- 1 x Pair of Battery Cables (Red for Positive, Black for Negative)
- 1 x EDRC Remote Controller Set
- 1 x Accessory Bag
- 1 x User Manual (this document)

4. PRODUCT OVERVIEW

Familiarize yourself with the components of your EDECOA inverter:



The EDECOA 1200W Pure Sine Wave Inverter, shown with its EDRC remote control. The inverter provides multiple output ports and a clear LED display for status monitoring.



Detailed view of the inverter's front panel, indicating the location of AC outlets, USB and Type-C charging ports, LED status indicators, and the digital display.

Key Features:

- **Pure Sine Wave Output:** Provides clean and stable power, safe for sensitive electronics. THD (Total Harmonic Distortion) is less than 3%.
- **High Efficiency:** Up to 92% conversion efficiency.
- **Multiple Outputs:** Features 2 standard AC outlets, 1 USB-A port (24W max), and 1 Type-C port (27W max) for versatile charging.
- **LCD Display:** Shows real-time battery voltage, output voltage, and error codes for easy monitoring.
- **Remote Control (EDRC):** Allows convenient ON/OFF switching and battery capacity monitoring from a distance.
- **Advanced Protection:** Built-in safeguards against over-voltage, low-voltage, overload, output short circuit, and over-temperature.
- **Intelligent Fan Control:** Ensures efficient cooling and quiet operation.

5. SETUP

Follow these steps for proper installation and setup of your inverter:

1. **Choose a Location:** Select a dry, well-ventilated area away from direct sunlight, heat sources, and flammable materials. Ensure sufficient space around the inverter for airflow.
2. **Mounting (Optional):** The inverter can be mounted using the integrated mounting brackets. Secure it firmly to a stable surface.
3. **Battery Connection:**
 - Ensure the inverter is OFF before connecting to the battery.
 - Connect the RED battery cable to the inverter's positive (+) terminal and then to the battery's positive (+) terminal.
 - Connect the BLACK battery cable to the inverter's negative (-) terminal and then to the battery's negative (-) terminal.
 - Ensure all connections are tight to prevent voltage drops and overheating.
4. **Grounding:** Connect the inverter's grounding terminal to a proper earth ground.
5. **Remote Control Connection:** Plug the EDRC remote controller cable into the 'REMOTE' port on the inverter.



The EDECOA inverter is compatible with a range of 12V battery types, including AGM, GEL, FLD (Flooded), and Lithium-ion batteries.

6. OPERATING INSTRUCTIONS

Once the inverter is set up, follow these steps to operate it:

1. **Power On:** Turn on the inverter using the ON/OFF switch on the unit or the EDRC remote controller. The LCD display will illuminate, showing battery voltage and output voltage.
2. **Connect Devices:** Plug your AC appliances into the AC outlets. For USB-powered devices, use the USB-A or Type-C ports.
3. **Monitor Load:** Keep an eye on the total wattage of connected devices to ensure it does not exceed the inverter's continuous output (1200W). For inductive loads or devices with high startup current, ensure the surge power (2400W) is sufficient.
4. **Power Off:** When finished, turn off the inverter using the ON/OFF switch or remote controller. Disconnect appliances before prolonged storage.

Understanding the Display and Remote:

- **LCD Display:** Shows input DC voltage (battery), output AC voltage, and various error codes if a protection event occurs.
- **EDRC Remote Controller:** Allows you to switch the inverter ON/OFF and monitor the battery capacity from a convenient location.

7. MAINTENANCE

Regular maintenance ensures the longevity and reliable performance of your inverter:

- **Cleanliness:** Keep the inverter clean and free from dust and debris. Use a dry cloth for cleaning. Do not use liquid cleaners.
- **Ventilation:** Periodically check that the ventilation openings are clear and not obstructed.
- **Connections:** Regularly inspect battery cables and other connections for tightness. Loose connections can cause resistance and heat buildup.
- **Storage:** If storing the inverter for an extended period, ensure it is turned off and disconnected from the battery. Store in a cool, dry place.
- **Battery Health:** Maintain your 12V battery according to its manufacturer's guidelines. A healthy battery is crucial for inverter performance.

8. TROUBLESHOOTING

If you encounter issues with your EDECOA inverter, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Inverter does not turn on	No battery connection; Low battery voltage; Blown fuse	Check battery cables and connections; Charge or replace battery; Check and replace internal fuses (if accessible and safe)
No AC output	Overload; Over-temperature; Low/High input voltage; Short circuit	Reduce load; Allow inverter to cool; Check battery voltage; Disconnect faulty appliance
Alarm sounds	Low battery voltage; Overload; Over-temperature; Other protection activated	Check LCD display for error code; Address the specific issue (e.g., charge battery, reduce load, allow cooling)
Connected appliance not working correctly	Appliance power exceeds inverter capacity; Appliance incompatible with pure sine wave	Check appliance wattage; Ensure appliance is suitable for pure sine wave power (most are, but some older or specialized devices might not be)

If the problem persists after attempting these solutions, please contact EDECOA customer support for assistance.

9. SPECIFICATIONS

Detailed technical specifications for the EDECOA 1200W 12V Pure Sine Wave Inverter:

Parameter	Value
Model	1200W/12V
Continuous Power	1200 Watts
Surge Power	2400 Watts
Input DC Voltage	12V DC
Output AC Voltage	110V AC
Output Waveform	Pure Sine Wave (THD < 3%)
Efficiency	Up to 92%
AC Outlets	2
USB-A Port	1 (24W max)
Type-C Port	1 (27W max)
Product Dimensions	11.81 x 7.76 x 3.15 inches
Item Weight	6.82 pounds
Power Source	Solar and Battery Powered
Recommended Uses	Vehicle (RV, Car, Boat), Household



Physical dimensions of the inverter, emphasizing its compact size and efficient cooling system.

10. WARRANTY AND SUPPORT

EDECOA products are designed for reliability and performance. For warranty information or technical support, please refer to the warranty card included in your package or visit the official EDECOA website. Please have your product model and purchase date ready when contacting support.

Manufacturer: Dong Guan Shi Chang Tian Electrical Technology Co., Ltd

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[EDECOA EM-302A Hybrid Inverter Installation and User Manual](#)

Comprehensive guide for the EDECOA EM-302A hybrid inverter, covering installation, configuration, operation modes, LCD screen interpretation, error codes, and technical specifications. Learn how to optimize your solar energy system with this off-grid inverter.



[Manuale di Installazione e Uso Inverter EDECOA](#)

Guida completa all'installazione, funzionamento e sicurezza degli inverter EDECOA. Include schemi di collegamento, specifiche tecniche e consigli per l'uso di modelli come Sinemate, Sincore, Sincore Pro e Corebase.



[EDECOA EM-302A Hybrid Inverter User Manual and Installation Guide](#)

Comprehensive guide for the EDECOA EM-302A hybrid inverter, covering installation, configuration, LCD screen operation, error codes, troubleshooting, and technical specifications. Learn how to set up and manage your solar power system.



[EDECOA EM-352A User Manual and Specifications](#)

Official user manual for the EDECOA EM-352A, detailing its features, specifications, operation, safety guidelines, and troubleshooting for optimal performance. Includes technical data and usage instructions.



[EDECOA Hybrid-Wechselrichter: Installation, Konfiguration und Fehlerbehebung](#)

Umfassende Anleitung für den EDECOA Hybrid-Wechselrichter (Modell EM-302A 3000W). Erfahren Sie mehr über Installation, Konfiguration, verschiedene Betriebsmodi und Fehlerbehebung für Ihre Solaranlage.



[EDECOA 4000W Hybrid Inverter User Manual - Installation, Configuration, and Troubleshooting](#)

Comprehensive user manual for the EDECOA 4000W hybrid inverter. Covers installation, detailed configuration options, LCD screen functions, error codes, troubleshooting, and technical specifications for optimal solar energy management.

