

COTEK SE200-248

COTEK SE200-248 Pure Sine Wave Inverter User Manual

Model: SE200-248 | Brand: COTEK

INTRODUCTION

This manual provides essential information for the safe and efficient operation of the COTEK SE200-248 Pure Sine Wave Inverter. Please read thoroughly before installation and use to ensure optimal performance and longevity of your device. The COTEK SE200-248 is a compact and efficient 200W pure sine wave inverter designed to convert 48VDC power from batteries into stable 230VAC power, suitable for sensitive electronic equipment. It features a standard SCHUKO outlet for convenient connection of AC devices.



Figure 1: COTEK SE200-248 Pure Sine Wave Inverter.

SAFETY INFORMATION

Important Safety Instructions: Always follow these guidelines to prevent injury or damage to the inverter and connected devices.

- Read all instructions carefully before operating the inverter.
- Do not expose the inverter to rain, moisture, or extreme temperatures. Operate within specified environmental conditions.
- Ensure proper ventilation around the inverter to prevent overheating. Do not block air vents.
- Connect the inverter only to a DC power source within the specified voltage range (48VDC nominal). Incorrect voltage can cause damage.
- Do not open the inverter casing. There are no user-serviceable parts inside. Refer all servicing to qualified personnel.

- Always disconnect the DC power source before performing any maintenance, cleaning, or moving the inverter.
- Ensure the inverter is properly grounded before operation.

SETUP AND INSTALLATION

Proper installation is crucial for the performance, efficiency, and safety of your inverter.

1. Choosing a Location

Select a cool, dry, and well-ventilated area for installation. Avoid direct sunlight, heat sources, and areas with excessive dust, moisture, or corrosive fumes. Ensure sufficient clearance (at least 6 inches) around the inverter for proper airflow and cooling.

2. DC Input Connection

Connect the DC input cables to the inverter's terminals. Ensure correct polarity: positive (+) to the red terminal and negative (-) to the black terminal. Use appropriately sized cables to minimize voltage drop and ensure efficient power transfer. Secure all connections tightly.



Figure 2: Rear view of the COTЕК SE200-248 inverter, showing DC input terminals and cooling fan.

3. Grounding

Connect the chassis ground terminal of the inverter to a reliable earth ground. This is essential for safety and to prevent electrical shock. Use a dedicated ground wire of appropriate gauge.

4. AC Output Connection

The inverter features a SCHUKO outlet for AC output. Plug your AC devices directly into this outlet. Ensure the total power consumption of all connected devices does not exceed the inverter's rated output of 200W. Overloading the inverter can cause it to shut down or be damaged.



Figure 3: Front view of the COTEK SE200-248 inverter, showing the SCHUKO AC outlet and controls.

OPERATING INSTRUCTIONS

Powering On/Off

1. Ensure all DC and AC connections are secure before powering on.
2. To turn on the inverter, flip the power switch to the "ON" position. The status indicator light will illuminate, indicating normal operation.
3. To turn off the inverter, flip the power switch to the "OFF" position. Disconnect AC loads before powering off for best practice.

Remote Control (Optional)

The inverter supports an optional remote ON/OFF control via the green terminal block. Connect a compatible remote switch or control system to this terminal. Refer to the remote control's specific instructions for connection and operation details.

Output Frequency and Power Saving Mode

The output frequency (50Hz or 60Hz) and power saving mode can be selected using the DIP switches located on the front panel. Consult the detailed specifications or the inverter's label for specific switch configurations to match your regional requirements or power saving preferences.

MAINTENANCE

The COTEK SE200-248 inverter is designed for minimal maintenance. Regular checks will ensure its continued reliable operation.

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners, solvents, or abrasive materials, as these can damage the casing or internal components.
- **Ventilation:** Ensure the ventilation openings and cooling fan (if present) are clear of dust and debris. Blocked vents can lead to overheating and reduced performance. Use compressed air to clear dust if necessary.
- **Connections:** Regularly check all electrical connections (DC input, AC output, and ground) to ensure they are tight and free from corrosion. Loose connections can cause power loss or overheating.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your inverter.

Problem	Possible Cause	Solution
Inverter not turning on	No DC input power; Low battery voltage; Blown DC input fuse; Loose connections.	Check battery connections and voltage (must be within specified range); Replace fuse if necessary (ensure correct rating); Tighten all electrical connections.
No AC output / Inverter shuts down	Overload condition; Over-temperature; Short circuit on AC output; Low input voltage.	Reduce the total power consumption of connected AC devices; Allow inverter to cool down in a well-ventilated area; Check for short circuits in connected devices or wiring; Recharge or replace battery.

Problem	Possible Cause	Solution
Fan running constantly or loudly	High internal temperature; Heavy load.	Ensure adequate ventilation around the inverter; Reduce the connected load if possible. This is often normal operation under load.

SPECIFICATIONS

Detailed technical specifications for the COTEK SE200-248 Pure Sine Wave Inverter:

- Model:** COTEK SE200-248
- Output Power:** 200W Continuous Pure Sine Wave
- Input Voltage:** 48VDC (Operating range: 40VDC to 60VDC)
- Output Voltage:** 230VAC
- Output Frequency:** 50Hz / 60Hz (Selectable via DIP switch)
- Output Waveform:** Pure Sine Wave
- Operating Temperature:** -20°C to 60°C (-4°F to 140°F)
- Dimensions:** Approximately 7 x 6 x 3 inches (17.8 x 15.2 x 7.6 cm)
- Weight:** Approximately 4 pounds (1.8 kg)
- Protections:** Input Reverse Polarity (Fuse), Input Under Voltage, Input Over Voltage, Output Short Circuit, Output Overload, Over Temperature
- Certifications:** CE, FCC, E13 approved

WARRANTY INFORMATION

For detailed warranty terms and conditions, please refer to the warranty card included with your product packaging or visit the official COTEK website. Keep your original purchase receipt as proof of purchase for any warranty claims.

CUSTOMER SUPPORT

- If you encounter any issues or have questions not covered in this manual, please contact COTEK customer support for assistance.
- Website:** www.cotek.com.tw
 - Email:** support@cotek.com

