

POTEK 5000W-MSW

POTEK 5000W Power Inverter Instruction Manual

MODEL: 5000W-MSW

Important Safety Instructions

Please read and understand all safety instructions before installing or operating the POTEK 5000W Power Inverter. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Keep the inverter away from water, moisture, and flammable materials.
- Ensure proper ventilation around the inverter to prevent overheating.
- Do not open the inverter casing. There are no user-serviceable parts inside.
- Connect the inverter only to a 12V DC power source.
- Always connect the ground wire properly to prevent electric shock.
- Disconnect the positive battery terminal before performing any wiring to the inverter.
- Avoid direct sunlight exposure; keep the inverter in a cool environment.
- Do not leave the power inverter in the ON position while your car is off to prevent battery drain.

Product Overview

The POTEK 5000W Power Inverter converts 12V DC battery power to 110V AC household power, providing a reliable power source for various electronic devices.

Features

- Provides 5000 watts continuous power, 10000 watts surge power.
- Equipped with 4 AC outlets and 2 USB ports (DC 5V/2A).
- Multi-protection features: overload, overheat, low voltage, high voltage, and short circuit.
- Intelligent cooling fan operates silently when the heatsink temperature is below 104°F (40°C), conserving battery power.
- Modified sine wave output.

Components

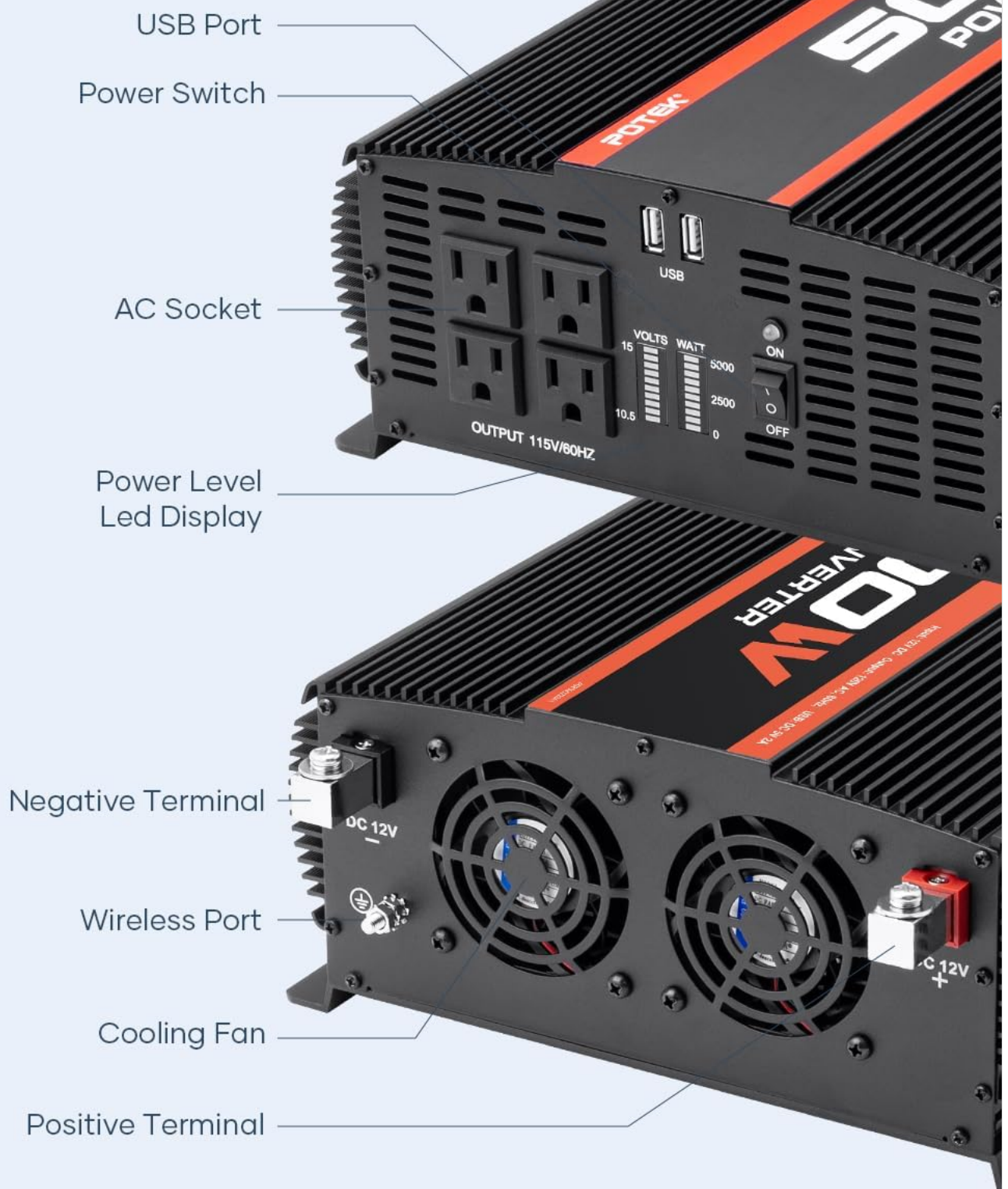


Image: Front and rear view of the POTEK 5000W Power Inverter, highlighting AC outlets, USB ports, power switch, LED display, cooling fans, and battery terminals.

The inverter features 4 standard AC outlets and 2 USB ports on the front panel for connecting your devices. The rear panel includes terminals for connecting to a 12V DC battery, along with cooling fans to regulate internal temperature.

Setup and Installation

What's in the Box

- 1x POTEK 5000W Power Inverter
- 6x Car Battery Cables (3 red, 3 black, 3.28 ft each)
- 1x User Manual

Accessories and Sizes



Battery cables
39.3 in 6 AWG



Ground wire
39.3 in 16 AWG

Image: Dimensions of the POTEK 5000W Power Inverter and included battery cables and ground wire.

Connecting the Inverter

1. Ensure the inverter's power switch is in the OFF position.
2. Connect the red (positive) battery cables to the positive (+) terminal on the inverter and the positive (+) terminal on your 12V DC battery.
3. Connect the black (negative) battery cables to the negative (-) terminal on the inverter and the negative (-) terminal on your 12V DC battery.
4. Connect the green ground wire to the ground terminal on the inverter and to a suitable ground point (e.g., vehicle chassis or earth ground).
5. Ensure all connections are tight and secure to minimize resistance and prevent overheating.

WIDE COMPATIBILITY

It ensures a stable power supply for sensitive electronic devices like computers and TVs.



Phone & Pad



Laptop



Electric saw



Water pump



Lamp



Drone



Small Fan



Led lights

Image: Proper connection of the POTEK 5000W Power Inverter to a 12V DC battery with red (positive), black (negative), and green (ground) cables.

A tight connection between the ring terminal of the input cable and the battery terminal creates a larger contact area, which significantly reduces resistance, leading to lower operating temperatures and enhanced safety.

Mounting

The inverter features mounting tabs on its corners, allowing it to be securely fastened to a flat surface in a vehicle,

trailer, or other suitable location. Ensure the mounting location provides adequate ventilation and is protected from direct sunlight and moisture.

Operating Instructions

Turning On/Off

- After all connections are secure, switch the inverter's power button to the ON position. A green indicator light will illuminate, confirming the inverter is active.
- To turn off, switch the power button to the OFF position.

Connecting Devices

- Plug your AC-powered devices into the 110V AC outlets.
- Plug your USB-powered devices into the 5V/2A USB ports.
- Ensure the total wattage of all connected devices does not exceed the inverter's continuous power rating of 5000W.

Intelligent Cooling Fan

The inverter is equipped with an intelligent cooling fan system. The fans will operate silently when the internal temperature is below 104°F (40°C) and will increase speed as the temperature rises to maintain optimal operating conditions. This design helps conserve battery power during lighter loads.

Maintenance

- Regularly check all cable connections for tightness and corrosion. Clean terminals as needed.
- Keep the inverter's ventilation openings clear of dust and debris to ensure efficient cooling.
- Store the inverter in a cool, dry place when not in use.
- If the inverter will not be used for an extended period, disconnect it from the battery.

Troubleshooting

The POTEK 5000W Power Inverter includes multiple protection features to safeguard itself and your devices. If the inverter stops functioning, check for the following:

SAFETY GUARANTEED

Fully protected system keep your devices safety!

Low-Voltage
Protection

Over-Voltage
Protection

Over-Load
Protection

Short-Circuit
Protection

Over-Temperature
Protection

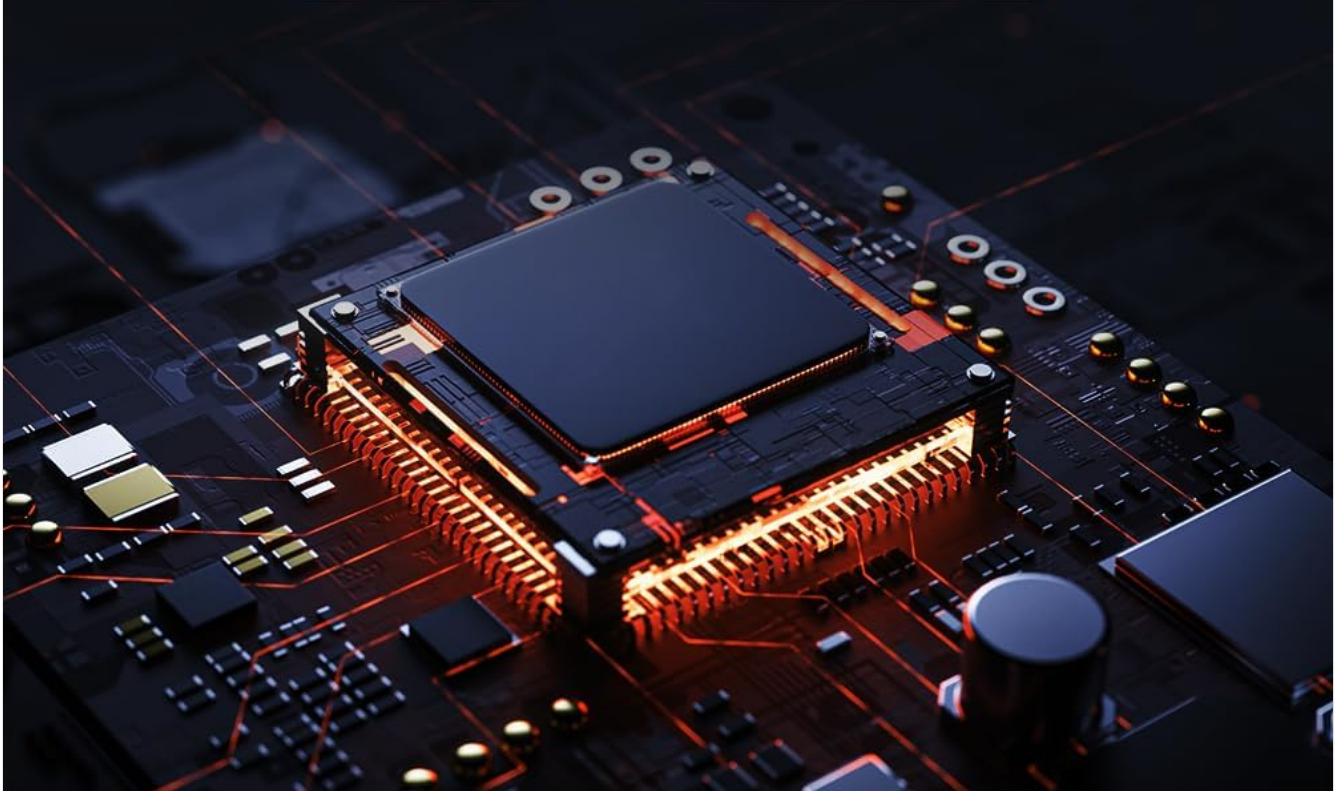


Image: Diagram illustrating the multiple safety protections of the POTEK 5000W Power Inverter, including low-voltage, over-voltage, overload, short-circuit, and over-temperature protection.

- **Overload Protection:** If the total power draw of connected devices exceeds 5000W (continuous) or 10000W (surge), the inverter will shut down. Reduce the load and restart the inverter.
- **Overheat Protection:** If the internal temperature becomes too high, the inverter will shut down. Allow it to cool down in a well-ventilated area before restarting. Ensure cooling fans are not obstructed.
- **Low Voltage Protection:** If the input DC voltage drops too low (e.g., due to a depleted battery), the inverter will

shut down to protect the battery. Recharge or replace the battery.

- **High Voltage Protection:** If the input DC voltage exceeds safe limits, the inverter will shut down. Verify the input voltage from your power source.
- **Short Circuit Protection:** In the event of a short circuit in the output, the inverter will shut down. Disconnect all devices, check for faults, and restart.

If the issue persists after checking these points, please contact customer service.

Specifications

Brand	POTEK
Model	POTEK 5000W
Continuous Power	5000W
Peak Power	10000W
Input Voltage	12.8-13.2V DC
Output Voltage	110-125V AC
Output Wave	Modified Sine Wave
USB Output	DC 5V/2A (2 ports)
AC Outlets	4
Item Weight	22.5 pounds
Product Dimensions	18.7 x 10.4 x 4.6 inches

Warranty and Support

POTEK offers customer service for their products. For warranty information, technical support, or service inquiries, please refer to the contact details provided in your product packaging or visit the official POTEK website. Keep your purchase receipt for warranty claims.