

Ampeak Ampeak 2000W

Ampeak 2000W Inverter Instruction Manual

Model: Ampeak 2000W

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1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation of your Ampeak 2000W Modified Sine Wave Power Inverter. Please read this manual thoroughly before using the product and retain it for future reference. The Ampeak 2000W Inverter converts 12V DC power from your vehicle battery into 110V AC household power, suitable for a wide range of electronic devices and small appliances. It features enhanced safety measures, high conversion efficiency, and multiple output ports for versatile use.

Efficiency Champion

89.37% High conversion efficiency delivering cost-effective power solution

Other inverter actual belt full load is only 80%

Input
2000W

Other Brand

Output
1600W

VS

Input
2000W



Output
1787W

Real Measurement



$$\begin{aligned} & (\text{input power} / \text{output power}) * 100\% \\ & = (110.9 * 18.81) / (11.01 * 212) * 100\% \\ & = (2086.029 / 2334.12) * 100\% \end{aligned}$$

=89.37%

Image: Ampeak 2000W Inverter with included anti-spark cables. This image shows the front view of the inverter, highlighting its compact design and the robust battery connection cables.

2. SETUP

Proper setup is crucial for safe and optimal performance. Follow these steps to connect your Ampeak 2000W Inverter:

1. **Preparation:** Ensure your vehicle engine is off and the inverter's power switch is in the "OFF" position. Gather all necessary components, including the inverter, battery cables, and any tools required for secure connections.
2. **Battery Connection:**
 - Connect the **red** positive (+) cable to the **red** positive (+) terminal on the inverter.
 - Connect the **black** negative (-) cable to the **black** negative (-) terminal on the inverter.
 - Ensure all connections are tight and secure. The inverter cables feature anti-spark terminals and waterproof slipcovers for enhanced safety.
3. **Connect to 12V Battery:**
 - Connect the other end of the **red** positive (+) cable to the **red** positive (+) terminal of your 12V vehicle battery.
 - Connect the other end of the **black** negative (-) cable to the **black** negative (-) terminal of your 12V vehicle battery.
 - Double-check all connections for polarity and tightness to prevent sparks or damage.
4. **Remote Control (Optional):** If using the remote control, plug its cable into the designated "REMOTE" port on the inverter.



Figure: Close-up view of the anti-spark terminals and waterproof slipcovers on the Ampeak inverter cables, demonstrating the safety features during connection.



Figure: Illustration of the 4AWG 2FT battery cables included with the Ampeak 2000W Inverter, highlighting their robust construction and temperature resistance.

Setup Video Guide

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Video: Unboxing and first look of the Ampeak 2000W Power Inverter. This video provides a visual guide to the initial unboxing and components of the inverter.

3. OPERATING INSTRUCTIONS

Once the inverter is securely connected to a 12V power source, you can begin operating it:

1. **Power On:** Flip the "ON/OFF" switch on the inverter to the "ON" position. If using the remote control, use the "ON" button on the remote.
2. **Monitor LED Display:** The inverter features an LED display that shows its working status, including input voltage, output voltage, and power consumption. This helps ensure devices receive optimal power.
3. **Connect Devices:** Plug your 110V AC devices into the 3 AC outlets. You can also use the Dual 5V/3.1A USB ports for charging compatible USB devices.
4. **Power Output:** The inverter provides 2000W continuous power and 4000W peak power. Ensure the total power consumption of your connected devices does not exceed the inverter's continuous power rating.
5. **Quiet Operation:** The inverter operates quietly at 52 dB. The intelligent temperature-controlled fan will run when the internal temperature exceeds 122°F (50°C) to maintain optimal operating temperature.
6. **Power Off:** When finished, turn off all connected devices, then switch the inverter's "ON/OFF" button to "OFF" (or use the remote control).



Figure: The LED display on the Ampeak 2000W Inverter, illustrating how it shows normal working status, high load mode, and error warnings for easy monitoring.



Figure: A comparison showing the Ampeak 2000W Inverter's 89.37% conversion efficiency against other brands, demonstrating its energy-saving capability.

Operating Video Guides

Your browser does not support the video tag.

Video: Ampeak Power Inverters -- Understanding the Basics! This video explains the fundamental principles of power inverters and their use.

Your browser does not support the video tag.

Video: Ampeak 2000W Inverter - Power Your Devices Safely! This video demonstrates how to safely power various devices using the Ampeak 2000W Inverter.

4. MAINTENANCE

To ensure the longevity and reliable performance of your Ampeak 2000W Inverter, follow these maintenance guidelines:

- **Keep Clean and Dry:** Regularly wipe down the inverter with a dry cloth to remove dust and debris. Ensure the inverter is kept in a dry environment, away from moisture and direct water exposure, especially given its waterproof cable features.
- **Ventilation:** Ensure the inverter's fan vents are clear of obstructions to allow for proper airflow and prevent overheating. The intelligent temperature-controlled fan is designed to activate when needed.
- **Cable Inspection:** Periodically inspect the battery cables for any signs of wear, damage, or corrosion. Replace damaged cables immediately to maintain safe operation.
- **Storage:** When not in use for extended periods, disconnect the inverter from the battery and store it in a cool, dry place.



Figure: The Ampeak 2000W Inverter demonstrating its waterproof cable feature, providing peace of mind for outdoor use.

5. TROUBLESHOOTING

The Ampeak 2000W Inverter is equipped with 11 built-in safety protections to ensure safe and reliable operation. If you encounter an issue, the LED display may show an error code. Refer to the table below for common issues and their solutions:



Figure: Visual representation of the 11 built-in safety protection programs, including low voltage, over voltage, overload, overcurrent, short circuit, and overheating protection.

Common Error Codes and Solutions

Error Code	Description	Possible Cause	Solution
LUP	Low Voltage Protection	Battery voltage is too low.	Recharge or replace the 12V battery.
OUP	Overvoltage Protection	Input voltage exceeds safe limits.	Check battery voltage; ensure it's within 12V DC range.

Error Code	Description	Possible Cause	Solution
OLP	Overload Protection	Connected devices draw too much power.	Reduce the load by disconnecting some devices.
OCP	Overcurrent Protection	Excessive current draw.	Check for short circuits in connected devices or cables.
OPP	Output Short Circuit	Short circuit detected at AC output.	Disconnect all AC devices and inspect for short circuits.
OHP	Overheating Protection	Inverter internal temperature is too high.	Ensure proper ventilation; reduce load; allow to cool.

6. SPECIFICATIONS

Feature	Detail
Model Number	Ampeak 2000W
Continuous Power	2000W
Peak Power	4000W
Input Voltage	12 Volts (DC)
Output Voltage	110 Volts (AC)
Conversion Efficiency	89.37%
AC Outlets	3 (each supporting 2000W, efficiency considered)
USB Ports	Dual 5V/3.1A
Battery Cables	2 feet of 4AWG with Anti-Spark, Waterproof Slipcovers
Noise Level	52 dB
Dimensions (Package)	14.57 x 9.41 x 5.47 inches
Item Weight	8.71 pounds

7. WARRANTY AND SUPPORT

Ampeak is committed to providing high-quality products and excellent customer service.

- **Return Policy:** Enjoy a worry-free purchase with a 30-day no-questions-asked return policy.
- **Customer Service:** The product includes 18-month customer service (excluding human damage). For any inquiries or support needs, please contact Ampeak customer service.