

[Manuals.plus](#) /

› [Nature Power](#) /

› Nature Power 400-Watt Modified Sine Wave Inverter User Manual

Nature Power 38204

Nature Power 400-Watt Modified Sine Wave Inverter User Manual

Model: 38204

INTRODUCTION

The Nature Power 400-Watt Modified Sine Wave Inverter is designed to convert 12-Volt DC power from a vehicle battery or other 12V DC source into 120-Volt AC household power. This inverter is ideal for recharging devices on the go and for individuals with mobile lifestyles, providing 400-Watt continuous power and 800-Watt peak surge power. Its compact and portable design makes it suitable for powering laptops, small televisions, lights, fans, radios, and other small appliances.

Key features include:

- Provides 400-Watt of continuous power and 800W surge capacity.
- Converts 12-Volt DC power to 120-Volt AC (household) power for use in cars, trucks, boats, or RVs.
- Automatic shutoff protection against overload, short-circuit, and high/low temperature battery conditions.
- Certified to be compliant with safety standards and ETL listed.

SAFETY INFORMATION

Please read and understand all safety instructions before operating the inverter. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Warning:** Do not operate or install the inverter on or above combustible surfaces.
- **Warning:** Reverse polarity will damage the unit. Ensure correct positive (+) and negative (-) connections.
- **Caution:** The output of this inverter is a modified sine wave. It has a total harmonic distortion of 46% and a maximum single harmonic of 30%. It is not suitable for use with all types of loads, especially sensitive electronics or devices requiring a pure sine wave.
- Ensure adequate ventilation around the inverter during operation to prevent overheating.
- Do not expose the inverter to water, rain, or excessive moisture.
- Keep out of reach of children.

PRODUCT COMPONENTS



Figure 1: Overall view of the Nature Power 400-Watt Inverter, including the main unit, battery clamp cables (red for positive, black for negative), and a cigarette lighter adapter for smaller loads.



Figure 2: Front panel of the inverter showing two 120V AC outlets, a power ON/OFF switch, a green POWER indicator LED, and a red FAULT indicator LED. The output is rated at 120 VAC, 60 Hz.



Figure 3: Rear panel of the inverter featuring the DC input terminals (red for positive, black for negative), a cooling fan, and the model number (38204). An ETL certification mark is also visible.

SETUP AND CONNECTION

1. **Prepare the Inverter:** Ensure the inverter's power switch is in the "OFF" (0) position before making any connections.
2. **Choose Power Source:**
 - **For direct battery connection (recommended for full 400W output):** Connect the red positive (+) battery clamp cable to the red positive (+) terminal on the inverter. Connect the black negative (-) battery clamp cable to the black negative (-) terminal on the inverter. Then, connect the red clamp to the positive (+) terminal of your 12V battery and the black clamp to the negative (-) terminal of your 12V battery. Ensure connections are secure.
 - **For cigarette lighter connection (for loads up to 150W):** Insert the cigarette lighter adapter into the 12V DC outlet of your vehicle. Connect the adapter's plug to the inverter's DC input.
3. **Ventilation:** Place the inverter in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure the cooling fan is not obstructed.
4. **Connect Appliances:** Once the inverter is connected to the 12V DC source, you can plug your 120V AC appliances into the inverter's AC outlets. Ensure the total wattage of your appliances does not exceed the inverter's continuous power rating (400W).

OPERATING INSTRUCTIONS

1. **Power On:** After all connections are made and appliances are plugged in, switch the inverter's power switch to the "ON" (I) position. The green POWER indicator LED on the front panel should illuminate.
2. **Monitor Load:** The inverter can power devices such as laptops, small televisions, lights, fans, and radios. Avoid connecting high-power appliances like microwaves, refrigerators, or power tools that exceed the 400W continuous

rating.

3. **Automatic Protection:** The inverter features built-in protection that will automatically shut off the unit under certain conditions:
- **Overload:** If the connected load exceeds 400W.
 - **Short-Circuit:** If a short circuit is detected in the output.
 - **High Temperature:** If the internal temperature becomes too high.
 - **Low Battery Voltage:** If the input 12V battery voltage drops too low.
 - **High Battery Voltage:** If the input 12V battery voltage rises too high.

When a protection mode is activated, the red FAULT indicator LED may illuminate, and the inverter will shut down. Disconnect the load, turn off the inverter, and resolve the issue before restarting.

4. **Power Off:** When finished using the inverter, switch the power switch to the "OFF" (0) position. Disconnect appliances first, then disconnect the inverter from the 12V DC power source.

MAINTENANCE

To ensure optimal performance and longevity of your Nature Power Inverter, follow these maintenance guidelines:

- **Cleaning:** Periodically clean the exterior of the inverter with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Ventilation:** Regularly check that the cooling fan and ventilation openings are free from dust, dirt, and obstructions. Blocked vents can lead to overheating.
- **Connections:** Ensure all electrical connections (battery clamps, terminals) are clean, tight, and free from corrosion. Loose connections can cause power loss or overheating.
- **Storage:** When not in use for extended periods, store the inverter in a cool, dry place, away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No output power, POWER LED off.	Inverter switch is OFF; Poor connection to 12V source; Low battery voltage; Blown fuse in vehicle (if using cigarette lighter).	Turn inverter switch ON; Check and secure all connections; Recharge or replace 12V battery; Check and replace vehicle fuse if necessary.
No output power, FAULT LED on.	Overload; Short circuit; Over-temperature; Battery voltage too high/low.	Reduce connected load; Check for short circuits in wiring/appliances; Allow inverter to cool down; Check 12V battery voltage and charge level.
Inverter shuts down frequently.	Connected load is too high; Insufficient ventilation; Weak 12V battery.	Reduce total wattage of connected appliances; Ensure inverter is in a well-ventilated area; Check 12V battery health and charge.
Appliances not working correctly (e.g., buzzing, not starting).	Appliance requires pure sine wave; Inverter output is modified sine wave.	Some sensitive electronics or motors may not operate correctly with a modified sine wave inverter. Consider a pure sine wave inverter for such devices.

SPECIFICATIONS

Feature	Detail
Model Number	38204
Continuous Power	400 Watts
Peak Surge Power	800 Watts
Input Voltage	12V DC
Output Voltage	120V AC
Output Frequency	60 Hz
Output Waveform	Modified Sine Wave
Product Dimensions	6 x 4 x 2 inches
Item Weight	1.6 pounds
Manufacturer	RDK Products
Certifications	ETL Listed

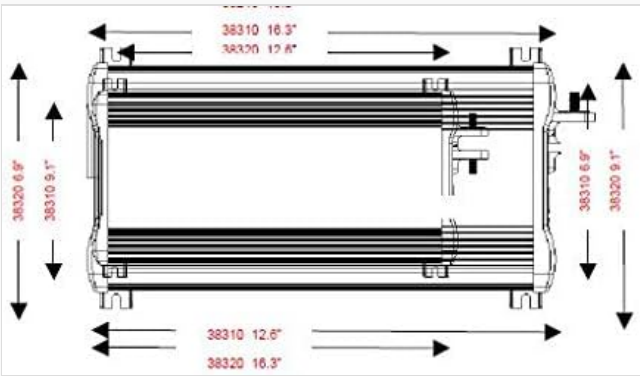


Figure 4: Dimensional drawing providing approximate measurements of the inverter unit.

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided with your product packaging or visit the official Nature Power website. Keep your purchase receipt as proof of purchase for any warranty claims. You can also find more information and support resources on the manufacturer's website www.naturepowerproducts.com. For product inquiries, you may also contact the manufacturer at 1-800-588-0590, as indicated on the product packaging.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B00AZOTJRQ>

More documents and user manuals: **<https://manuals.plus/>**