

BYGD 200W Power Inverter

BYGD 200W Car Power Inverter User Manual

1. INTRODUCTION

The BYGD 200W Car Power Inverter converts 12V DC power from your vehicle's cigarette lighter socket to 110V AC household power. It provides multiple charging options for electronic devices, making it suitable for use in cars, trucks, or during travel. This inverter offers a continuous output of 200W and a peak power of 400W.

Key features include two US standard AC outlets, four 2.4A USB charging ports, one Type-C port, and an additional DC cigarette lighter socket. The device is designed for portability and durability, featuring a robust ABS fireproof material construction and an intelligent cooling system.

2. SETUP

To set up your BYGD 200W Car Power Inverter, follow these steps:

1. Ensure your vehicle's engine is running to provide stable power to the inverter.
2. Insert the cigarette lighter plug of the inverter firmly into your vehicle's 12V DC cigarette lighter socket.
3. Confirm the inverter's power indicator light illuminates, indicating it is receiving power.



Figure 1: BYGD 200W Car Power Inverter showing labeled ports and the cigarette lighter plug for connection.

3. OPERATING INSTRUCTIONS

Once the inverter is connected and powered on, you can begin using its various output ports:

- **AC Outlets:** The inverter features two US standard 110V AC outlets. Plug your devices directly into these outlets. Ensure the total wattage of connected AC devices does not exceed 200W continuously or 400W peak.
- **USB Ports:** Four 2.4A USB ports are available for charging smartphones, tablets, and other USB-powered devices.
- **Type-C Port:** One Type-C port is included for compatible devices, offering quick charging capabilities.
- **DC Cigarette Lighter Socket:** An additional 12V DC cigarette lighter socket is provided, allowing you to connect other 12V accessories.
- **ON/OFF Switch:** Use the integrated ON/OFF switch to control the power output of the inverter.

BYGD

200W POWER INVERTER

- 1* Type C 3.0 18W Quick Charge
- 1* cigarette lighter port
- 2* AC Sockets
- 4* USB (2.4A)



Figure 2: The BYGD 200W Car Power Inverter connected and in use, demonstrating its multiple charging ports.

Product Overview Video

Your browser does not support the video tag.

Video 1: An official overview of the BYGD Power Inverter, demonstrating its features and basic operation.

4. SAFETY FEATURES AND PROTECTION

The BYGD Car Power Inverter incorporates a multi-protection system to safeguard both the device and your connected electronics:

- **Over Voltage Protection:** Prevents damage from excessively high input voltage.
- **Low Voltage Protection:** Shuts down the inverter if the input voltage drops too low, protecting your vehicle's battery.
- **Overload Protection:** Automatically turns off the inverter if the connected load exceeds its rated capacity.
- **Short Circuit Protection:** Guards against damage from short circuits in the output.
- **Over Heat Protection:** The built-in intelligent silent automatic control cooling fan dissipates heat, and the inverter will shut down if temperatures become too high. The fan runs faster when output power exceeds 70W.
- **Over Charge Protection:** Protects devices from excessive charging.
- **Reverse Connection Protection:** Prevents damage from incorrect battery terminal connections.

6 Protection



Over temperature protection



Short circuit protection



Overload protection



Low voltage protection



High voltage protection



Reverse connection protection



Figure 3: Visual representation of the inverter's six protection features.

200W 12V~110V Inverter Smart Cooling Fan

- system makes the car power inverter very silent when operating, and the fan runs faster when the device gets warmer or output power exceeds 70W.



Fan cooling



Convection design,
two-way heat dissipation

Figure 4: Illustration of the smart cooling fan and convection design for heat dissipation.

5. COMPATIBLE DEVICES AND POWER LIMITS

The inverter is designed to power a wide range of electronic devices. Always check the wattage requirements of your device to ensure it does not exceed the inverter's 200W continuous power limit.

- **Suitable Devices:** Laptops, tablets, cell phones, breast pumps, CPAP machines, nebulizers, game consoles, e-readers, TVs, DVD players, lights, and air compressors.
- **Devices NOT to Exceed 200W:** Avoid connecting high-power appliances such as microwaves, coffee makers, or hair dryers, as these typically exceed the 200W limit and can cause the inverter to shut down due to overload protection.

Wide Compatible



Figure 5: Examples of compatible devices and a warning not to exceed 200W.

6. SPECIFICATIONS

Feature	Specification
Product Dimensions	9.7 x 2.6 x 2.2 inches
Item Weight	1 pound
Model Number	200W Power Inverter
Power Source	DC to AC
Wattage	200 watts (Continuous), 400 watts (Peak)
Input Voltage	12V DC
Output Voltage	110V AC

USB Output	4 x 2.4A USB ports
Type-C Output	1 x Type-C port
DC Outlet	1 x Cigarette Lighter Socket

7. TROUBLESHOOTING

If you encounter issues with your BYGD 200W Car Power Inverter, consider the following:

- **No Power Output:**

- Check if the inverter's cigarette lighter plug is securely inserted into the vehicle's socket.
- Ensure the vehicle's engine is running to provide sufficient power.
- Verify the inverter's ON/OFF switch is in the 'ON' position.
- Check the vehicle's fuse for the cigarette lighter socket.

- **Inverter Shuts Down:**

- **Overload:** The total wattage of connected devices may exceed 200W. Disconnect some devices and restart the inverter.
- **Overheating:** The inverter may have overheated. Allow it to cool down in a well-ventilated area. Ensure the cooling fan is not obstructed.
- **Low/High Input Voltage:** The inverter will shut down if the vehicle's battery voltage is too low (e.g., below 10V) or too high (e.g., above 16V) to protect the battery and inverter. Check your vehicle's battery status.

- **Device Not Charging:**

- Ensure the device is properly connected to the AC outlet, USB port, or Type-C port.
- Check if the device's charging cable is functional.
- Verify the device's power requirements are within the inverter's capabilities.

8. WARRANTY AND SUPPORT

BYGD provides an 18-month warranty for this product. For any inquiries or assistance, please contact BYGD customer service. Support is available 24 hours a day, 7 days a week.