

## Gravity G12BD1

# Gravity Audio G12BD1 12-inch 1000W Powered Subwoofer Enclosure Instruction Manual

Model: G12BD1

## 1. INTRODUCTION

Thank you for purchasing the Gravity Audio G12BD1 12-inch 1000W Powered Subwoofer Enclosure. This manual provides essential information for the proper installation, operation, and maintenance of your new subwoofer. To ensure optimal performance and safety, please read this manual thoroughly before attempting to install or use the product. Keep this manual for future reference.

## 2. SAFETY INFORMATION

Observe the following safety precautions to prevent injury or damage to the product and vehicle:

- **Electrical Safety:** Always disconnect the vehicle's negative battery terminal before beginning any electrical work. Ensure all wiring is correctly routed and secured to prevent pinching or damage. Use appropriate gauge wiring for power and ground connections.
- **Installation Environment:** Install the subwoofer in a dry, well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure the enclosure is securely mounted to prevent movement during vehicle operation.
- **Hearing Protection:** Prolonged exposure to high sound pressure levels can cause permanent hearing damage. Operate the subwoofer at comfortable listening levels.
- **Professional Installation:** If you are unsure about any aspect of the installation, it is recommended to seek assistance from a qualified professional car audio installer.

## 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Gravity Audio G12BD1 Powered Subwoofer Enclosure

## 4. SETUP AND INSTALLATION

Proper installation is crucial for the performance and longevity of your subwoofer. The G12BD1 is designed for universal fit in vehicles, typically in the trunk or a large cargo area.

### 4.1. Placement Considerations

Consider the available space in your vehicle. The dimensions of the enclosure are approximately 13"D x 14"W x 14"H. Ensure there is adequate clearance for air circulation around the amplifier section.



Figure 1: Gravity Audio G12BD1 Subwoofer with approximate dimensions (13"D x 14"W x 14"H).

### 4.2. Wiring Connections

The G12BD1 features an integrated amplifier, simplifying the wiring process. You will need to connect power, ground, a remote turn-on signal, and an audio input signal.



Figure 2: Rear control panel of the G12BD1, showing power, ground, remote, and audio input terminals.

1. **Power Connection (+12V):** Connect a heavy-gauge power cable (e.g., 8-gauge or 4-gauge, depending on total system power) directly from the vehicle's positive battery terminal to the +12V terminal on the subwoofer's amplifier. Install an in-line fuse holder (with an appropriately rated fuse) within 18 inches of the battery.
2. **Ground Connection (GND):** Connect a heavy-gauge ground cable from the GND terminal on the amplifier to a clean, unpainted metal surface on the vehicle's chassis. Ensure a solid, low-resistance connection.
3. **Remote Turn-On (REM):** Connect a remote turn-on wire from your head unit's remote output (typically a blue/white wire) to the REM terminal on the amplifier. This signal turns the amplifier on and off with your head unit.
4. **Audio Input:**



- **RCA Low-Level Input:** If your head unit has RCA pre-outs, connect RCA cables from the head unit's subwoofer or rear pre-outs to the RCA input jacks on the G12BD1 amplifier.
- **High-Level Speaker Input:** If your head unit does not have RCA pre-outs, use the high-level speaker inputs. Connect the speaker wires from your head unit's rear speaker outputs to the high-level input terminals on the amplifier.

After all connections are made, double-check them for polarity and security before reconnecting the vehicle's negative battery terminal.



Figure 3: Side view of the G12BD1, highlighting the integrated amplifier and connection panel.

## 5. OPERATING INSTRUCTIONS

Once installed, you can adjust the subwoofer's settings for optimal sound performance.

### 5.1. Control Panel Adjustments

Refer to Figure 2 for the location of these controls:

- **GAIN:** This control matches the output level of your head unit to the input sensitivity of the subwoofer amplifier. Start with the gain set to minimum. Gradually increase it until you hear distortion, then back it off slightly. Do not use the gain control as a volume knob.
- **BASS BOOST:** This control allows you to increase the bass output at a specific frequency. Use sparingly to avoid distortion and potential damage to the subwoofer.
- **LPF (Low Pass Filter):** This control sets the upper frequency limit for the subwoofer. Frequencies above this setting will be filtered out. A common starting point is between 80Hz and 120Hz. Adjust to blend smoothly with your main speakers.

## 5.2. Initial Power-Up

After all connections are secure and settings are initially adjusted:

1. Turn on your vehicle's ignition and head unit.
2. The power indicator on the subwoofer amplifier should illuminate.
3. Play some music with a good bass range.
4. Carefully adjust the GAIN, BASS BOOST, and LPF controls to achieve balanced and clear bass output without distortion.

## 6. MAINTENANCE

Regular maintenance ensures the longevity and performance of your subwoofer.

- **Cleaning:** Use a soft, dry cloth to wipe down the enclosure and amplifier. Avoid using harsh chemicals or abrasive cleaners.
- **Inspection:** Periodically check all wiring connections for tightness and signs of wear or corrosion. Ensure the enclosure remains securely mounted.
- **Ventilation:** Ensure the amplifier's heat sink is not obstructed to allow for proper cooling.

## 7. TROUBLESHOOTING

If you experience issues with your G12BD1 subwoofer, consult the following table before contacting support.

Problem	Possible Cause	Solution
No power / Amplifier not turning on	<ul style="list-style-type: none"><li>• Blown fuse</li><li>• Loose or incorrect power/ground/remote connection</li><li>• Faulty remote turn-on signal</li></ul>	<ul style="list-style-type: none"><li>• Check and replace fuse if necessary.</li><li>• Verify all power, ground, and remote connections are secure and correctly wired. Ensure ground connection is to a clean metal surface.</li><li>• Test remote wire for +12V when head unit is on.</li></ul>

Problem	Possible Cause	Solution
No sound from subwoofer	<ul style="list-style-type: none"><li>• No audio input signal</li><li>• Gain set too low</li><li>• LPF set too low or too high</li><li>• Head unit settings incorrect</li></ul>	<ul style="list-style-type: none"><li>• Check RCA or high-level input connections. Ensure head unit is sending an audio signal.</li><li>• Increase the GAIN control gradually.</li><li>• Adjust LPF to an appropriate range (e.g., 80-120Hz).</li><li>• Verify head unit's subwoofer output or speaker settings.</li></ul>
Distorted sound	<ul style="list-style-type: none"><li>• Gain set too high</li><li>• Bass Boost set too high</li><li>• Poor quality audio source</li></ul>	<ul style="list-style-type: none"><li>• Decrease the GAIN control.</li><li>• Reduce the BASS BOOST setting.</li><li>• Try a different audio source to rule out source issues.</li></ul>
Humming or buzzing noise	<ul style="list-style-type: none"><li>• Ground loop issue</li><li>• Poor quality RCA cables</li></ul>	<ul style="list-style-type: none"><li>• Ensure ground connection is solid and to a clean chassis point. Try a different ground point.</li><li>• Use shielded RCA cables.</li></ul>

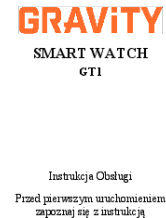


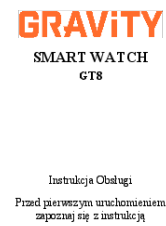

## 8. SPECIFICATIONS

Feature	Specification
Model Name	Powered Car Subwoofer
Speaker Type	Subwoofer, Woofer
Subwoofer Diameter	12 Inches
Impedance	4 Ohm
Speaker Maximum Output Power	1000 Watts
Product Dimensions (D x W x H)	13"D x 14"W x 14"H
Item Weight	37 pounds
Connectivity Technology	Wired
Warranty Type	1 year

## 9. WARRANTY AND SUPPORT

The Gravity Audio G12BD1 comes with a 1-year warranty. For warranty claims or technical support, please contact the retailer where the product was purchased or the manufacturer directly. Keep your proof of purchase for warranty validation.

Related Documents - G12BD1

 <p><b>GRAVITY</b> SMART WATCH GT1</p> <p>Instrukcja Obsługi Przed pierwszym uruchomieniem zapoznaj się z instrukcją</p>	<p><a href="#">Gravity GT1 Smartwatch User Manual</a></p> <p>Comprehensive user manual for the Gravity GT1 smartwatch. This guide covers initial setup, charging, pairing with your smartphone, navigating features, and basic troubleshooting.</p>
 <p><b>GRAVITY</b></p> <p>Eye Massager Masseur oculaire Masajeador de ojos</p> <p>Soothe facial tension instantly with the Gravity Eye Massager. Advanced vibration technology for tension release. Active heat therapy to soothe and relax your muscles.</p>	<p><a href="#">Gravity Eye Massager: Features, Specs, Getting Started &amp; Safety Guide</a></p> <p>Comprehensive guide to the Gravity Eye Massager. Learn about its features, technical specifications, how to get started, troubleshooting tips, and essential safety information for optimal use.</p>
 <p><b>SPEAKER STAND</b></p> <p><b>Gravity</b></p> <p>Technical specifications, safety instructions, and warranty information for the Gravity SP 3202 studio monitor speaker stand.</p>	<p><a href="#">Gravity SP 3202 Studio Monitor Speaker Stand: Safety, Features, and Specifications</a></p> <p>Comprehensive guide for the Gravity SP 3202 studio monitor speaker stand, covering safety instructions, features, detailed specifications, warranty information, and proper disposal. Includes textual descriptions of visual elements.</p>
 <p><b>GRAVITY</b> SMART WATCH GT8</p> <p>Instrukcja Obsługi Przed pierwszym uruchomieniem zapoznaj się z instrukcją</p>	<p><a href="#">Gravity GT8 Smart Watch User Manual   Features, Setup &amp; Guide</a></p> <p>Comprehensive user manual for the Gravity GT8 Smart Watch. Learn about its features, GPS, health tracking, connectivity, setup, and operation. Get the most out of your GT8 smartwatch.</p>
 <p><b>Gravity</b></p> <p>RECURRING CATALOGUE</p>	<p><a href="#">Gravity Premium Stands Catalogue - Microphone, Speaker, Lighting &amp; More</a></p> <p>Discover the Gravity range of premium stands and accessories for audio, lighting, and musical instruments. This catalogue features microphone stands, speaker stands, lighting stands, keyboard stands, guitar stands, and multimedia equipment, all designed and engineered in Germany by the Adam Hall Group.</p>



PCB Information Top,Location 2025-05-29  
DRI0056-V1.0.0-1.6mm-2 Layer-22x30mm  
Top SolderMask:Black Bottom SolderMask:Black  
Top Silkscreen:White Bottom Silkscreen:White

[DRI0056 Linear Motor Driver PCB Layout Information](#)

Detailed PCB layout diagram and specifications for the DRI0056 Linear Motor Driver by Gravity. Includes dimensions, layer count, solder mask, silkscreen colors, and component placement overview. Features I2C interface and gravity sensor.