

Hifonics BG-4000.1D

Hifonics BG-4000.1D Brutus Gamma Monoblock Amplifier Instruction Manual

Model: BG-4000.1D | Brand: Hifonics

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1. PRODUCT OVERVIEW

The Hifonics BG-4000.1D Brutus Gamma Monoblock Amplifier is a Super D Class car audio amplifier designed to deliver powerful sound to subwoofers. It features a robust aluminum construction for efficient cooling and minimal distortion, along with advanced control capabilities for precise audio tuning.

HIFONICS

BRUTUS GAMMA

Amplifier

BG-4000.1D

POWER
FROM THE
GODS



MAXIMUM



4000

WATTS

AMP POWER



AMP BASS
BOOST

0-10dB



AMP FREQUENCY
RESPONSE

10Hz-500kHz



AMP TOTAL
CHANNELS

1

Image 1: Front view of the Hifonics BG-4000.1D Brutus Gamma Monoblock Amplifier, showcasing its sleek design and Hifonics branding.

This amplifier is engineered for high performance, providing up to 4000 watts at 1 ohm, 2200 watts at 2 ohms, and 1100 watts at 4 ohms. It includes a wired bass remote for convenient control and features Ultra-Fi MOSFET output device technology for powerful and clear sound reproduction.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in fire, electric shock, injury, or damage to the product or vehicle.

- Always disconnect the vehicle's battery before performing any electrical work.
- Ensure proper grounding of the amplifier to the vehicle chassis.
- Use appropriate gauge wiring for power, ground, and speaker connections to prevent overheating and damage.

- Install the amplifier in a well-ventilated area to prevent overheating. Avoid mounting in enclosed spaces without adequate airflow.
- Protect all wiring from sharp edges and moving parts.
- Do not expose the amplifier to moisture or extreme temperatures.
- Seek professional installation if you are unsure about any part of the setup process.

3. SETUP AND INSTALLATION

3.1 Mounting the Amplifier

Select a mounting location that provides adequate ventilation and is protected from moisture. The amplifier's aluminum heat sink is designed for efficient cooling, but proper airflow is still essential. Secure the amplifier firmly to a solid surface using appropriate hardware.



Image 2: Side view of the amplifier, illustrating its compact dimensions (L) 21.94" x (W) 11.81" x (H) 4.06" and built-in bass control.

3.2 Wiring Connections

All connections should be made with the vehicle's battery disconnected. Use high-quality, appropriate gauge wiring for all connections.



Image 3: Rear panel of the amplifier showing power, ground, remote, and speaker output terminals. Note the illuminated power and protect indicators.

Power and Ground Connections:

- **+12V (Power):** Connect to the positive terminal of the vehicle's battery via an appropriate fuse or circuit breaker (not included).
- **GND (Ground):** Connect to a clean, unpainted metal surface of the vehicle chassis. Ensure a solid, low-resistance connection.
- **REM (Remote):** Connect to the remote turn-on output of your head unit.



Image 4: Close-up view of the secure molded connection terminals for power, ground, remote, and speaker outputs, designed for high-temperature and impact resistance.

Speaker Output Connections:

- Connect your subwoofer(s) to the "MONO OUTPUT" terminals. Ensure correct polarity (+ to + and - to -).
- The amplifier supports mono operation and is stable down to 1 ohm.

RCA Input Connections:

- Connect the RCA input cables from your head unit's subwoofer output to the amplifier's "INPUT" RCA jacks.



Image 5: Close-up of the amplifier's control panel, including RCA inputs, gain, low-pass filter, subsonic filter, phase, and bass boost adjustments.

3.3 Initial Power-Up

After all connections are secure, reconnect the vehicle's battery. The power indicator LED on the amplifier's end panel should illuminate, indicating proper operation. If the protect LED illuminates, refer to the troubleshooting section.

4. OPERATING INSTRUCTIONS

4.1 Adjusting Controls

The BG-4000.1D amplifier features several adjustable controls to fine-tune your audio output:

- **GAIN:** Adjusts the input sensitivity to match the output of your head unit. Start with the gain at minimum and slowly increase until desired volume is achieved without distortion.
- **LPF (Low-Pass Filter):** Controls the upper frequency limit for the subwoofer. Typically set between 40Hz and 180Hz to ensure only low frequencies are sent to the subwoofer.
- **SUBSONIC:** Filters out extremely low frequencies that are inaudible and can damage subwoofers. Typically set between 10Hz and 40Hz.
- **PHASE:** Adjusts the phase of the subwoofer output (0° or 180°) to optimize bass response with other speakers in the vehicle.
- **BASS BOOST:** Provides an adjustable bass enhancement (0dB to 12dB) at a specific frequency. Use sparingly to avoid distortion.

4.2 Wired Bass Remote

The included wired bass remote allows for convenient adjustment of the subwoofer output level from the driver's seat. Connect the remote to the dedicated port on the amplifier's control panel.

4.3 LED Indicators

- **PWR (Power) LED:** Illuminates green when the amplifier is powered on and operating normally.
- **PRT (Protect) LED:** Illuminates red when the amplifier detects a fault (e.g., overheating, short circuit, low voltage). If this LED lights up, turn off the audio system and investigate the cause.

For optimal performance, refer to the detailed instructions in the full product manual for specific settings and tuning recommendations.

5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the amplifier's exterior. Do not use harsh chemicals or abrasive cleaners.
- **Ventilation:** Periodically check that the amplifier's heat sink fins are free from dust and debris to ensure proper cooling.
- **Connections:** Ensure all power, ground, and speaker connections remain tight and free from corrosion.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No Power (Power LED off)	Blown fuse, loose power/ground/remote wire, no remote signal.	Check fuse, verify all connections are secure, ensure head unit is sending a remote signal.
Protect LED is on	Overheating, short circuit in speaker wiring, low impedance load.	Allow amplifier to cool, check speaker wiring for shorts, verify speaker impedance is within amplifier's limits.
No Sound Output	Loose RCA cables, incorrect gain setting, speaker wires disconnected.	Check RCA connections, adjust gain, verify speaker wire connections.
Distorted Sound	Gain set too high, improper LPF/Subsonic settings, poor quality audio source.	Reduce gain, adjust LPF/Subsonic filters, use a higher quality audio source.

7. SPECIFICATIONS

Feature	Detail
Model	BG-4000.1D
Brand	Hifonics
Amplifier Class	Super D Class
Number of Channels	1 (Monoblock)
Output Power (1 Ohm)	1 channel x 4,000 watts

Feature	Detail
Output Power (2 Ohms)	1 channel x 2,200 watts
Output Power (4 Ohms)	1 channel x 1,100 watts
Voltage	12 Volts (DC)
Maximum Supply Voltage	12 Volts (DC)
Mounting Type	Car Mount
Material	Aluminum
Item Weight	13.52 pounds
Special Features	Wired Bass Remote, Variable Electronic Crossover, Electronic Equalizer, Ultra-Fi MOSFET Output Technology, Overload & Speaker Short Protection

7.1 Product Video

Your browser does not support the video tag.

Video 1: Official Hifonics video showcasing the Brutus Gamma BG Amplifier series, highlighting its features and design.

8. WARRANTY & SUPPORT

8.1 Warranty Information

This Hifonics product is covered by a manufacturer's warranty. Please refer to the warranty card included with your product for specific terms, conditions, and duration. Keep your proof of purchase for warranty claims.

8.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Hifonics customer support. Visit the official Hifonics website for the most up-to-date contact information and support resources.

[Visit the Hifonics Store on Amazon](#)