

Hifonics ZG-600.4

Hifonics Zeus ZG-600.4 600W 4-Channel Class AB Car Amplifier Instruction Manual

Model: ZG-600.4 | Brand: Hifonics

INTRODUCTION

The Hifonics Zeus ZG-600.4 is a 4-channel Class AB amplifier designed to deliver up to 600 watts of power for your car's audio system. It features a Simpatico Coil Design (SPC) with a dual-coil PWM MOSFET power supply for efficient operation and minimal heat generation. The amplifier utilizes Ultra-Fi output devices and an aluminum heatsink for superior thermal management. It offers both RCA and high-level inputs for flexible installation and can operate in 4-channel or bridged mono mode. Angled connection types facilitate clean wire management.



Image: Top view of the Hifonics Zeus ZG-600.4 amplifier, showcasing its sleek design.

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and safety. It is recommended that installation be performed by a qualified professional.

1. Mounting the Amplifier

- Choose a secure, well-ventilated location in your vehicle, away from moisture and direct heat.
- Ensure adequate space around the amplifier for air circulation, especially around the aluminum heatsink.

- Mount the amplifier firmly using appropriate hardware to prevent movement during vehicle operation.

2. Power Connections

- Connect the main power cable directly to the vehicle's battery, ensuring an inline fuse is installed within 18 inches of the battery.
- Connect the ground cable to a clean, unpainted metal surface on the vehicle chassis, ensuring a solid electrical connection.
- Connect the remote turn-on wire from your head unit to the amplifier's remote input.
- The amplifier operates with a 6 Volt input voltage.

3. Audio Input Connections

The ZG-600.4 offers both RCA (low-level) and high-level inputs for compatibility with various head units.

- **RCA Inputs:** Use high-quality RCA cables to connect the head unit's pre-amp outputs to the amplifier's CH1/CH2 and CH3/CH4 RCA inputs.
- **High-Level Inputs:** If your head unit lacks RCA outputs, use the high-level inputs. Connect the speaker wires from your head unit to the amplifier's high-level input terminals.

4. Speaker Output Connections

- Connect your speakers to the amplifier's speaker output terminals. Ensure correct polarity (+ to + and - to -).
- The amplifier can be configured for 4-channel stereo or bridged mono operation. Refer to the "Operating Instructions" section for mode selection.



Image: Rear panel of the Hifonics Zeus ZG-600.4 amplifier, detailing the input, output, and control sections.

OPERATING INSTRUCTIONS

The Hifonics Zeus ZG-600.4 amplifier offers various controls to fine-tune your audio system.

1. Power On/Off

- The amplifier will power on automatically when the remote turn-on signal is received from your head unit.
- A power indicator light will illuminate when the amplifier is operational.

2. Level (Gain) Adjustment

- The "LEVEL" knobs adjust the input sensitivity (gain) for each channel pair (CH1/CH2 and CH3/CH4).
- Set the gain to match the output voltage of your head unit. Start with the gain at minimum and slowly increase it until the desired volume is achieved without distortion.
- *Note:* Setting the gain too high can lead to distorted sound and potential damage to speakers or the amplifier.

3. Crossover Settings (X-OVER)

The amplifier features adjustable crossovers to direct specific frequency ranges to your speakers.

- **MODE Switch:** Select between 2CH (2-channel), 4CH (4-channel), or MONO (bridged mono) operation.
- **HIGH PASS (HPF):** Filters out frequencies below the set point. Useful for full-range speakers to prevent them from playing low bass.
- **LOW PASS (LPF):** Filters out frequencies above the set point. Useful for subwoofers.

- **FULL:** Bypasses the crossover, allowing full-range audio.
- **X-OVER FREQUENCY:** Adjusts the cutoff frequency for the high-pass or low-pass filter.
- *Note:* Some users have reported issues with the built-in hi-pass filter. External filters may be considered if optimal performance is not achieved.

4. Bass EQ / Subsonic Filter

- **BASS EQ:** Provides a bass boost at a specific frequency. Use sparingly to avoid distortion.
- **SUBSONIC:** Filters out extremely low, inaudible frequencies that can waste amplifier power and damage subwoofers.



Image: Close-up of the Hifonics Zeus logo on the amplifier's brushed metal casing.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Hifonics Zeus amplifier.

- **Cleaning:** Periodically wipe the amplifier's exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners. Ensure ventilation fins are free from dust and debris to maintain proper cooling.
- **Connection Checks:** Regularly inspect all power, ground, remote, and audio connections. Ensure they are secure and free from corrosion. Loose connections can lead to poor performance or damage.
- **Ventilation:** Confirm that the amplifier's mounting location allows for adequate airflow. Blocked vents can lead to overheating and activation of protection circuits.
- **Fuse Inspection:** Check the inline fuse on the power cable periodically. If the amplifier fails to power on, inspect this fuse first. Always replace with a fuse of the correct amperage.

TROUBLESHOOTING

This section addresses common issues you might encounter with your Hifonics Zeus ZG-600.4 amplifier.

Problem	Possible Cause	Solution
Amplifier does not power on.	No power, poor ground, faulty remote turn-on, blown fuse.	Check power and ground connections. Verify remote turn-on signal. Inspect and replace fuses if necessary.
Amplifier goes into protection mode.	Overheating, short circuit in speaker wiring, impedance mismatch, low voltage.	Ensure proper ventilation. Check speaker wiring for shorts. Verify speaker impedance. Check vehicle's battery voltage. Allow amplifier to cool down.
No sound or distorted sound.	Incorrect gain setting, loose audio connections, faulty RCA cables, incorrect crossover settings, damaged speakers.	Adjust gain properly. Check all RCA and speaker connections. Verify crossover settings (HPF/LPF). Test speakers with another source if possible.
Signal dropouts or noise.	Poor quality cables, ground loop, faulty unit.	Use shielded RCA cables. Ensure proper grounding. If issues persist, the unit may be faulty and require professional inspection.
Gain/adjustment dials are loose or stripped.	Manufacturing defect or wear.	Contact Hifonics customer support or your retailer for assistance. This may require repair or replacement.
Built-in hi-pass filter not effective.	Unit characteristic or specific setup incompatibility.	Consider using external hi-pass filters (e.g., RCA hi-pass filters) if precise frequency control is needed.

SPECIFICATIONS

Feature	Detail
Model Name	HIFZG6004 (ZG-600.4)
Item Model Number	600 Watt 4 Channel
Brand	Hifonics
Speaker Maximum Output Power	600 Watts
Number Of Circuits	4
Audio Output Mode	Mono (also supports Stereo)
Input Voltage	6 Volts
Frequency Response	40 Hz
Signal-to-Noise Ratio	0.5 dB
Connectivity Technology	Wired
Mounting Type	Car Mount

Feature	Detail
Material	Metal
Color	Silver
Product Dimensions	1"D x 1"W x 1"H
Item Weight	6.18 pounds
Is Waterproof	False
Included Components	Product, Manual
UPC	806576231189

WARRANTY INFORMATION

The Hifonics Zeus ZG-600.4 amplifier comes with a **Limited Warranty**. Specific terms and conditions of the warranty, including duration and coverage details, are typically provided with the product packaging or can be found on the official Hifonics website.

Please retain your proof of purchase for any warranty claims. For detailed warranty information or to initiate a claim, refer to the documentation included with your product or contact Hifonics customer support directly.

CUSTOMER SUPPORT

For further assistance, technical support, or inquiries regarding your Hifonics Zeus ZG-600.4 amplifier, please utilize the following resources:

- **Official Website:** Visit the [Hifonics Store](#) for product information, FAQs, and support contact details.
- **Included Manual:** Refer to the physical manual included in the product packaging for additional diagrams and specific instructions.
- **Authorized Dealers:** Contact the retailer from whom you purchased the product for local support and service.