

QSC GX5

QSC GX5 500-Watt Power Amplifier Instruction Manual

Model: GX5

1. INTRODUCTION

The QSC GX5 Stereo Power Amplifier is designed for professional audio applications, offering robust performance and portability. This manual provides essential information for the proper setup, operation, and maintenance of your GX5 amplifier to ensure optimal performance and longevity.



Figure 1: Front view of the QSC GX5 Power Amplifier, showcasing its rack-mountable design and front panel controls.

2. KEY FEATURES

- **Power Output:** Delivers 500 watts per channel into 8 ohms, and 700 watts per channel into 4 ohms, optimized for popular speaker systems.
- **Class H Design:** Utilizes a Class H system for efficient power delivery, nearly doubling power in a compact size.
- **GuardRail Protection:** Automatically protects the amplifier and connected loudspeakers from damage due to temperature rise or overdrive without shutting down.
- **Integrated Crossover:** Features a built-in subwoofer/satellite crossover (100 Hz) to optimize performance with

subwoofers and full-range speakers.

- **Flexible Inputs:** Equipped with XLR, 1/4-inch balanced, and phono inputs for broad compatibility with various audio sources.
- **Versatile Outputs:** Includes Speakon - 1/4-inch (TS) combo outputs (accepts 2-pole or 4-pole, connects 2 poles only) and binding posts for diverse speaker wiring systems.
- **Front Panel Controls:** Detented gain controls for precise sensitivity setting and matching, along with LED indicators for Power, Signal, and Clipping status.
- **Compact Design:** Minimum depth chassis designed to fit into compact, inexpensive racks.

3. SETUP

Proper setup is crucial for the safe and efficient operation of your QSC GX5 amplifier. Follow these steps carefully:

3.1 Unpacking and Placement

1. Carefully remove the amplifier from its packaging. Retain all packaging materials for future transport or storage.
2. Place the amplifier in a well-ventilated area. Ensure adequate airflow around the unit to prevent overheating. Avoid placing it near heat sources or in direct sunlight.
3. The GX5 is designed for rack mounting. Secure it in a standard 19-inch equipment rack using appropriate rack screws.

3.2 Connecting Audio Inputs

The rear panel of the GX5 offers various input options for connecting your audio source (e.g., mixer, preamplifier).



Figure 2: Rear panel of the QSC GX5, showing input and output connections, and mode switches.

- Connect your audio source to the **Channel 1** and **Channel 2** inputs using XLR, 1/4-inch balanced, or phono (RCA) cables. Ensure secure connections.
- For stereo operation, connect the left channel of your source to Channel 1 and the right channel to Channel 2.

3.3 Connecting Loudspeakers

The GX5 provides versatile output options for connecting your loudspeakers:

- **Speakon / 1/4-inch (TS) Combo Outputs:** Use Speakon connectors for secure, high-power connections. These outputs also accept 1/4-inch TS plugs.
- **Binding Posts:** For other speaker wiring systems, use the binding posts. Ensure correct polarity (+ to + and - to -).
- Connect your loudspeakers to the corresponding Channel 1 and Channel 2 outputs. Verify that the impedance of your speakers matches the amplifier's capabilities (4 ohms or 8 ohms).

3.4 Power Connection

1. Ensure the amplifier's power switch on the front panel is in the OFF position.
2. Connect the supplied AC power cord to the AC INLET on the rear panel of the amplifier and then to a grounded AC power outlet.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

- To power on, press the **POWER ON** switch on the front panel. The Power LED will illuminate.
- To power off, press the **POWER ON** switch again.

4.2 Adjusting Gain Controls

- Use the detented **GAIN CONTROLS** on the front panel for Channel 1 and Channel 2 to adjust the input sensitivity.
- Start with the gain controls set to their minimum position (fully counter-clockwise) before playing audio.
- Gradually increase the gain until the desired volume level is achieved without the Clip LED illuminating frequently.

4.3 Understanding LED Indicators

- **Power LED:** Indicates the amplifier is powered on.
- **Signal LED:** Illuminates when an audio signal is present at the input.
- **Clip LED:** Illuminates when the output signal is clipping (distorting). Reduce the input level or gain if this LED lights up frequently.

4.4 Using the Subwoofer/Satellite Crossover

The GX5 features a built-in crossover for optimized speaker performance:

- Locate the **CROSSOVER** switch on the rear panel.
- In **FULL RANGE** mode, the amplifier outputs the full audio spectrum to both channels.
- In **SUB/SAT** mode, Channel 1 outputs frequencies from 20 Hz to 100 Hz (for subwoofers), and Channel 2 outputs frequencies from 100 Hz to 20 kHz (for full-range speakers). Adjust front panel gain controls to balance subwoofer and top box levels.

5. MAINTENANCE

- **Cleaning:** Regularly clean the exterior of the amplifier with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure ventilation grilles are free from dust and debris.
- **Ventilation:** Always ensure proper ventilation. Do not block the air vents on the front or rear panels.
- **Power Cord:** Inspect the power cord periodically for any damage. If damaged, replace it with an authorized QSC replacement part.

6. TROUBLESHOOTING

If you encounter issues with your QSC GX5 amplifier, refer to the following common troubleshooting steps:

- **No Power:**

- Check if the power cord is securely connected to both the amplifier and the AC outlet.
- Verify that the AC outlet is functional.
- Ensure the front panel power switch is pressed to the ON position.

- **No Sound:**

- Confirm that the audio source is active and sending a signal.
- Check all input and output cable connections for security and correct polarity.
- Ensure the amplifier's gain controls are not set to minimum.
- Verify that the speakers are properly connected and functional.

- **Distorted Sound (Clip LED frequently on):**

- Reduce the input level from your audio source.
- Lower the gain controls on the amplifier.
- Ensure the speaker impedance is within the amplifier's specified range.

- **Overheating (GuardRail activation):**

- Ensure adequate ventilation around the amplifier. Clear any obstructions from the air vents.
- Reduce the operating volume or allow the amplifier to cool down.

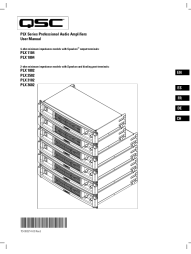
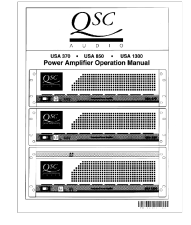
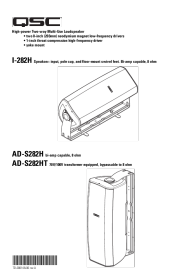
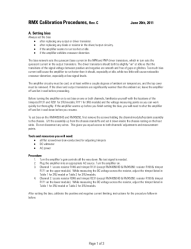

7. SPECIFICATIONS

Specification	Value
Brand	QSC
Model	GX5
Output Power (8 Ohms)	500 Watts per channel
Output Power (4 Ohms)	700 Watts per channel
Number of Channels	2
Signal to Noise (20 Hz - 20 kHz)	100 dB
Voltage	230 Volts
Item Weight	32 pounds
Product Dimensions (L x W x H)	14 x 19 x 4 inches
Mounting Type	Surface Mount (Rack Mountable)
Crossover Frequency	100 Hz (Subwoofer/Satellite mode)
Compliance	UL, CE, RoHS/WEEE Compliant

8. WARRANTY AND SUPPORT

The QSC GX5 Power Amplifier comes with a standard 3-year warranty, which can be extended to 6 years upon product registration on the QSC website. For technical support, service, or warranty claims, please contact QSC customer service or visit their official website for detailed contact information and resources.

Related Documents - GX5

	<p>QSC PLX Series Professional Audio Amplifiers User Manual - High-Performance Power Amplification</p> <p>Explore the QSC PLX Series Professional Audio Amplifiers User Manual. Learn about high-performance power amplification, detailed specifications, safety precautions, and operational guidance for models PLX 1104, 1804, 1802, 2502, 3102, and 3602.</p>
	<p>QSC USA Series Power Amplifier Operation Manual</p> <p>Comprehensive operation manual for the QSC USA 370, USA 850, and USA 1300 power amplifiers, covering installation, operation, troubleshooting, and technical specifications. Includes safety precautions and warranty information.</p>
	<p>QSC I-282H, AD-S282H, AD-S282HT Loudspeaker User Manual</p> <p>Comprehensive user manual for QSC's I-282H, AD-S282H, and AD-S282HT multi-use, weather-resistant loudspeakers, covering features, installation, specifications, and operation.</p>
	<p>QSC RMX Series Amplifier Calibration Procedures Guide</p> <p>Comprehensive guide detailing the calibration procedures for QSC RMX series audio amplifiers, including setting bias and positive/negative current limits for models RMX850, RMX1450, RMX1850HD, RMX2450, RMX4050HD, and RMX5050.</p>
	<p>QSC KC12: Manuale d'uso e Guida all'Installazione</p> <p>Manuale completo per il sistema di diffusione a colonna attivo QSC KC12, che copre installazione, funzionamento, caratteristiche, specifiche tecniche e risoluzione dei problemi.</p>



DSP-3
Digital Signal Processor
Amplifier Accessory Hardware Manual



[QSC DSP-3 Digital Signal Processor Hardware Manual](#)

Comprehensive hardware manual for the QSC DSP-3 Digital Signal Processor, detailing installation, features, specifications, and troubleshooting for professional audio systems.