



# **Professional Power Amplifiers**

**GX3 | GX5** 



GX Series amplifiers are ideal for professional entertainers who require maximum performance and portability on a limited budget. QSC designers, headed by Pat Quilter, have optimized output and appearance while reducing raw material cost and weight. It's all here - dramatic styling, easy hookup and adjustments, excellent audio quality and QSC reliability.

GX amplifiers deliver just the right amount of power to the most popular speakers used by entertainers. Most loudspeaker manufacturers recommend an amplifier with power output equal to the speaker's "Program (Music) Power" rating or two times (2x) the "Continuous (RMS) Power" rating.

The GX3 is ideal for speakers in the 300 watt (Program) range, while the GX5 provides full performance for 500 watt (Program) speakers. Both models supply maximum possible power to 4 ohm and 8 ohm loads. Owners of popular 4 ohm loudspeakers (dual-woofer, two-way models and many subwoofers) will find the 700 watt (4 ohm) power of the GX5 an ideal match.

### **Technical Notes**

The GX3 uses the latest evolution of the QSC Grounded Collector output system, for optimum cooling of the critical power transistors. A true Class B biasing system combines maximum thermal efficiency with excellent audio performance.

The GX5 uses a Class H system, based on key elements of the PLX Series, almost doubling power in the same size and weight. QSC design expertise allows the output devices to shift from low-power to high-power rails in less than a millionth of a second, ensuring that the output power is always right where it needs to be without excess loss.

Both amplifiers use premium toroidal power transformers for reliable "mid-weight" performance. A variable-speed fan moves air crosswise through the amplifier, drawing cool air in over the power transformer, through the fan, and then over the heat sink. This keeps the transformer cool and allows a full size heat sink to fit in a down-sized chassis. As always, the amplifiers are fully protected from the usual hazards of the trade, ensuring stable performance and long life.

## GuardRail™

GuardRail protection delivers full peak power while preventing detrimental overloads. During excessive clipping, or extreme overheating, GuardRail reduces gain just enough to preserve the integrity of the music, protect the speakers and keep the audience excited, without unprofessional distortion levels or shutdowns.

# Subwoofer/Satellite Crossover

A subwoofer reduces strain on the full-range speaker, allowing it to play louder, or letting a smaller speaker do the same job. The GX Series supports this mode with a Crossover switch that splits the full-range input entering Ch 1, sending 20 Hz -100 Hz to the sub (Ch 1) and 100 Hz - 20 kHz to the top box (Ch 2). The front panel gain controls balance the sub and top box, while GuardRail optimizes peak power into the sub and top individually, for greater musical impact and dynamic range.

#### **Features**

- Power levels matched to the most popular speakers used by entertainers
- · Optimized for maximum real-world headroom into  $4\Omega$  and  $8\Omega$  speaker systems
- Inputs: XLR, 1/4" TRS and phono input connectors for compatibility with any source
- Outputs: Speakon<sup>®</sup> combo accepts, 1/4" (TS) plugs or Speakon 2-pole and 4-pole plugs (connects 2 poles only). Binding posts support all other speaker wiring systems.
- · Minimum depth chassis (10.1"/257 mm) fits in compact, inexpensive effects racks
- Lightweight less than 26 lbs (12.5 kg)
- Detented gain controls for precise setting and matching of sensitivity
- GuardRail™ automatically protects the amplifier and loudspeakers from damage due to temperature rise or overdrive without shutting down the show
- · Front panel LEDs monitor Power, Signal and Clipping
- Subwoofer/Satellite crossover built-in

## Choose the right GX amp for your speakers

Model	
GX3	For 8Ω speakers: 250 W - 350 W (program)*
GX5	For 8Ω speakers: 400 W - 600 W (program)**

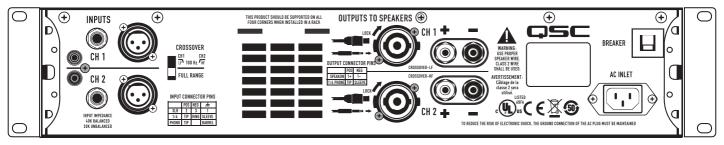
<sup>\*</sup> For  $4\Omega$  speakers: 350 W - 500 W (program) \*\* For  $4\Omega$  speakers: 550 W - 900 W (program)

# **GX Series**

# **Preliminary Specifications**

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	GX3	GX5
Stereo Mode		
$8\Omega$ / both channels driven / 1 kHz*	300 W	500 W
$8\Omega$ / single channel driven / 1 kHz*	350 W	600 W
$4\Omega$ / both channels driven / 1 kHz*	425 W	700 W
$4\Omega$ / single channel driven / 1 kHz*	500 W	850 W
Distortion (typical)		
20 Hz - 20 kHz: 1 dB below rated power	$8\Omega$ : less than 0.05% / $4\Omega$ : less than 0.1%	
Signal to Noise (20 Hz - 20 kHz)	100 dB	
Input Sensitivity	1.2 Vrms	
Voltage Gain (8Ω)	32.2 dB	34.4 dB
Output Circuitry	Class B	2-tier Class H
Power Requirements (1/8 power, pink noise at $4\Omega$ , 120 V)	6.3A	6A
Frequency Response	20 Hz - 20 kHz, +0, 1 dB	
Dynamic Headroom (4Ω)	2 dB	
Damping Factor	100	
Input Impedance (Ω)	Greater than 20k (balanced)	
Maximum Input Level	+24 dB (16 Vrms)	
Input Connectors (each channel)	3-pin XLR and 1/4" TRS, balanced, parallel	
	Phono, unbalanced	
Output Connectors (each channel)	Speakon®, 1/4", Binding Posts	
Amplifier and Load Protection	Short circuit, open circuit, thermal, RF protection	
•	Load protected against DC faults	
Front Panel Controls and Indicators	Gain controls, 21 detents	
	Red Clip LEDs, proportional, 0.1% THD threshold	
	Green Signal LEDs, threshold -35 dB	
	Blue Power LED, AC on	
Rear Panel Controls	Full Range/Crossover switch	
	100 Hz, 3rd order LP (sub), 2nd order HP (top)	
Dimensions (HWD)	3.5" (2RU) x 19" x 10.1" (89 mm x 483 mm x 257 mm)	
Weight - Shipping / Net	30 (13.5 kg) / 25 lbs (11.5 kg)	31 (14 kg) / 26 lbs (12 kg)
Agency Approvals	UL, CE, RoHS/WEEE compliant	-
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<sup>\*</sup> At onset of clipping



Inputs Crossover Outputs to Speakers

XLR, 1/4" TRS and phono input connectors for compatibility with any source

Subwoofer/Satellite crossover built-in

Speakon® combo output connector accepts 1/4" or Speakon 2 wire connectors

Binding post output for compatibility with any loudspeaker wiring scheme

All specifications are subject to change without notice.

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