GX Series

Professional Power Amplifiers

GX3 | GX5 | GX7

GX Series amplifiers are ideal for professional entertainers who require maximum performance and portability on a limited budget. The hallmarks of the QSC brand – professional audio quality, meticulous engineering, precision manufacturing and long-term reliability - are all intrinsic to GX. Add contemporary styling, multiple input/output options, light weight, and advanced protection circuitry, and the GX Series clearly represents real value – something everyone can use.

GX amplifiers deliver just the right amount of power to the most popular speakers used by entertainers. Typically, loudspeaker manufacturers recommend an amplifier with power output equal to the speaker's "Program (Music) Power" rating or two times (2 x) 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. The GX7 outputs 725 watts into an 8 ohm load. Owners of popular 4 ohm loudspeakers (such as dual-woofer, two-way models) will find the 700 watt (4 ohm) power of the GX5 an ideal match while the GX7 1000 watts will very capably power many of today's popular subwoofers or two typical 8 ohm speakers per channel.

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 PL Series, (PLX, PL3, CX, DCA) 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.

The **GX7** adds the road-proven PowerLight supply to the Class H output section, for more overall output power and additional weight savings. The result is one of the highest power-to-weight ratios in the industry. A low-noise variable-speed fan with rear-to-front airflow keeps amplifiers and racks cool.

As always, GX Series 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. 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 4Ω and 8Ω speaker systems
- Inputs: XLR, 1/4" TRS and phono input connectors for compatibility with any source
- Outputs: Speakon® 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 – GX3 and GX5 less than 26 lbs (12.5 kg). GX7 only 15.5 lbs (7 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

** 230V 16.5 lbs (7.5 kg)*

Choose the right GX amp for your speakers

Model	
GX3	For 8Ω speakers: 250 W – 350 W (program)[a]
GX5	For 8Ω speakers: 400 W – 600 W (program)[b]
GX7	For 8Ω speakers: 650 W – 800 W (program)[c]

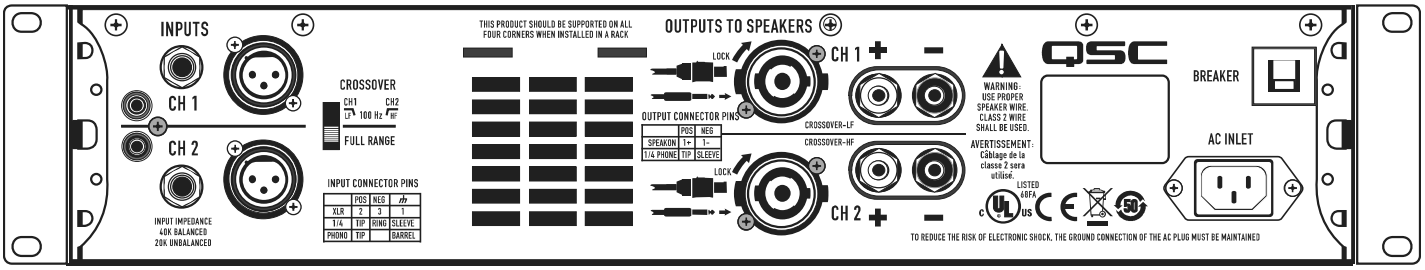
a) For 4Ω speakers: 350 W – 500 W (program)
b) For 4Ω speakers: 550 W – 900 W (program)
c) For 4Ω speakers: 900 W – 1250 W (program)

GX Series

Preliminary Specifications

	GX3	GX5	GX7	GX7 (230V Only)
Stereo Mode - Watts per channel				
8Ω / both channels driven / 1 kHz*	300 W	500 W	725 W	
8Ω / single channel driven / 1 kHz*	350 W	600 W	800 W	
4Ω / both channels driven / 1 kHz*	425 W	700 W	1000 W	
4Ω / single channel driven / 1 kHz*	500 W	850 W	1200 W	
Distortion (typical)				
1 kHz: 1 dB below rated power	8Ω: less than 0.02% / 4Ω: less than 0.05%			
Signal to Noise (20 Hz – 20 kHz)	100 dB			
Input Sensitivity	1.2 Vrms			
Voltage Gain (8Ω)	32.2 dB	34.4 dB	36.1 dB	
Output Circuitry	Class B	2-tier Class H	2-tier Class H	
Power Requirements (1/8 power, pink noise at 4Ω, 120V)	6.3 A	6 A	10.1 A	
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" (2 RU) x 19" x 10.1" (89 mm x 483 mm x 257 mm)			
Weight - Net	27 lb (12.1 kg)	28 lb (12.6 kg)	15.5 lbs (7 kg)	16.5 lbs (7.5 kg)
Weight - Shipping	31 lb (14.1 kg)	32 lb (14.6 kg)	20.5 (9.3 kg)	21.5 (9.75 kg)
Agency Approvals	UL, CE, RoHS/WEEE compliant			

** At onset of clipping*



Inputs

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

Crossover

Subwoofer/Satellite crossover built-in

Outputs to Speakers

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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