CX 8-channel

PROFESSIONAL POWER AMPLIFIER

Preliminary Specifications

Designed for permanently installed sound systems where rackspace is at a premium, QSC's CX108V and CX168 provide unprecedented levels of channel density for multi-channel amplifiers. The CX108V and CX168 provide 100 watts/ch. @ 70 volts and 90 watts/ch. @ 8 ohms respectively. With both models, each pair of channels may be bridged to configure these amplifiers as 4-, 5-, 6-, or 7-channel units. Like the entire CX Series, the 8-channel models feature DataPorts for remote amplifier management or signal processing, incorporate QSC's legendary PowerWave™ technology, and deliver our unmatched reputation for quality and reliability.

POWERWAVE™ QSC's PowerWave™ technology takes your audio to an entirely new level. Delivering tighter bass and clean, transparent highs, PowerWave also cuts waste heat, boosts reliability, and eliminates unwanted noise and hum. PowerWave is a revolutionary switching power supply technology that provides ample current to the audio power circuitry by charging the supply rails over 200,000 times per second through an ultra-low noise impedance circuit. Unlike amplifiers that use conventional supplies, the audio signal is never starved prematurely and remains crisp and clean.

CX 8-CHANNEL AMPLIFIERS

Model	70V*	8Ω	4Ω*
CX108V	8x100W	–	–
CX168	–	8x90W	8x130W

20 Hz–20 kHz, .05% THD, all channels driven
*20 Hz–20 kHz, 0.1% THD, all channels driven

CX 8-Channel Features

- 100 watts per channel at 70 volts (CX108V)
- 90 watts per channel at 8 ohms and 130 watts per channel at 4 ohms (CX168)
- Compact size — only two rack spaces and 14" deep for reduced rack space
- Channel pairs bridgeable for maximum flexibility
- Exclusive PowerWave™ switch-mode power supply technology for high performance and compact size
- Active Inrush Limiting eliminates AC inrush current, removing the need for expensive power sequencers
- Four HD15 DataPorts (one per channel pair) for QSControl computer control or QSC's signal processing accessories
- Custom integrated gain control security cover for tamper-proof installations
- 1-dB recessed detented gain controls for fast and accurate settings
- Detachable Euro-style input and output connectors
- DIP switch control for clip limiters, high-pass filters, bridge-mono and parallel operation
- Selectable high-pass filters protect speakers and prevent speaker transformer saturation with minimal effect on program material (50 Hz or 75 Hz; CX108V) (33 Hz or 70 Hz; CX168)
- Comprehensive front panel indicators including signal, clip, bridge-mono and parallel-input LEDs
- Fully protected — including DC, infrasonic and ultrasonic, thermal overload and short circuit protection
- High-performance Class AB+B complementary bipolar output circuitry
- Light weight — only 21 pounds (9.5 kg) for easier racking and shipping
- 3-year warranty plus optional 3-year extended service contract

QSC™

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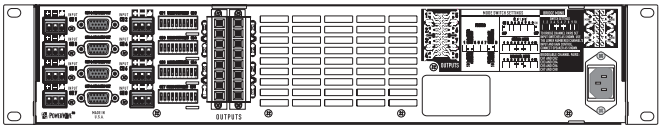
SPECIFICATIONS	CX168		CX108V
Stereo Mode (all channels driven)	**Continuous Average Output Power Per Channel**		
8 ohms 0.05% THD 20 Hz–20 kHz	90 Watts		—
4 ohms 0.1% THD 20 Hz–20 kHz	130 Watts		—
Midband Ratings	**All Channels Driven**	**Single Channel**	
8 ohms 0.1% THD 1 kHz	100 Watts	120 Watts	—
4 ohms 0.1% THD 1 kHz	140 Watts	180 Watts	—
70V 0.2% THD 20 Hz–20 kHz	—		100 Watts
Bridge Mono Mode	**Bridge-Mono Mode Operation**		
16 ohms 0.1%THD 20 Hz–20 kHz	180 Watts		—
8 ohms 0.1% THD 20 Hz–20 kHz	260 Watts		—
140V 0.2% THD 20 Hz–20 kHz	—		200 Watts
Noise (20 Hz–20 kHz)	-107 dB		-107 dB
Input Sensitivity (for full-rated output power)	1.35 Vrms @ 8 ohms		1.41 Vrms @ 70V
Voltage Gain	20x (26 dB)		50x (35 dB)
Input Clipping	6 Vrms (+18 dB)		6 Vrms (+18 dB)
Output Circuitry	Class AB+B		Class AB+B
Frequency Response	20 Hz–20 kHz, ± 0.2 dB 8 Hz–50 kHz, +0/-3 dB		20 Hz–20 kHz, ± 0.1 dB 8 Hz–60 kHz, +0/-3 dB
Damping Factor	Greater than 200 (5 kHz and below)		Greater than 500 (5 kHz and below)
Input Impedance	6 kΩ unbalanced, 22 kΩ balanced		6 kΩ unbalanced, 22 kΩ balanced
All models	**All models**		
Distortion (SMPTE-IM)	Less than 0.02%		
Distortion (typical)			
20 Hz–20 kHz: 10 dB below rated power	Less than 0.05% THD		
1.0 kHz and below: full rated power	Less than 0.02% THD		
Connectors	Input: 3-pin Euro-style detachable terminal blocks, (one per channel) DataPort: HD-15 Connector, (Ch 1+2, 3+4, 5+6, 7+8) Output: Two 8-pin Euro-style detachable terminal blocks		
Cooling	Variable speed fan, rear-to-front airflow through tunnel heat sink		
Controls	Front: AC switch, Ch 1, 2, 3, 4, 5, 6, 7 & 8 gain knobs Rear: DIP switches for Ch.1–Ch.8, clip limiter on/off, LF filter on/off, LF filter freq select 33 or 70 Hz for CX168, LF filter freq select 50 or 75 Hz for CX108V, inputs parallel or stereo; bridge mode		
Indicators	PWR-ON: Green LED SIGNAL-35dB: Green LED (1 per channel) CLIP: Red LED (1 per channel)		PARALLEL INPUTS: Orange LED (1 per ch. pair) BRIDGED: Yellow LED (1 per ch. pair)
Amplifier Protection	Full short circuit, open circuit, thermal, ultrasonic, and RF protection; Stable into reactive or mismatched loads		
Load Protection	On/off muting; Individual channel DC fault blocking		
Dimensions	19" (48.3 cm) rack mounting, 3.5"(8.9 cm) tall (2 rack spaces), 14" (35.6 cm) deep (from front mounting rails)		
Weight	21 lb (9.5 kg) net, 27 lbs (12.3 kg) shipping		
Power Requirements	100, 120, 230 VAC, 50-60 Hz (configured at factory)		

120V CURRENT CONSUMPTION		CX168	CX108V
Multiply currents by 0.5 for 230V units.	Idle	0.6 A	0.6 A
1/8 Average Power* (typical of program material at maximum unclipped power) *Pink noise	8 ohms	6.2 A	–
	4 ohms	9.2 A	–
	70V	–	6 A
1/3 Average Power* (typical of program material with severe clipping) *Pink noise	8 ohms	9.2 A	–
	4 ohms	14.2 A	–
	70V	–	9 A



Specifications subject to change without notice.

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