CX 8-channel
Professional Power Amplifiers

CX168 | CX108V

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 per channel at 70 volts and 90 watts per channel at 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 PowerLight™ technology, and deliver our unmatched reputation for quality and reliability.

QSC's PowerLight technology takes your audio to an entirely new level. Delivering tighter bass and clean, transparent highs, PowerLight also cuts waste heat, boosts reliability, and eliminates unwanted noise and hum. PowerLight 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

		Watts per channel	
Model	70V*	8Ω	4Ω**
CX168	–	8 x 90	8 x 130
CX108V	8 x 100	–	–

20 Hz – 20 kHz, 0.05%THD
** 20 Hz – 20 kHz, 0.2%THD*
***20 Hz – 20 kHz, 0.1%THD*

Features

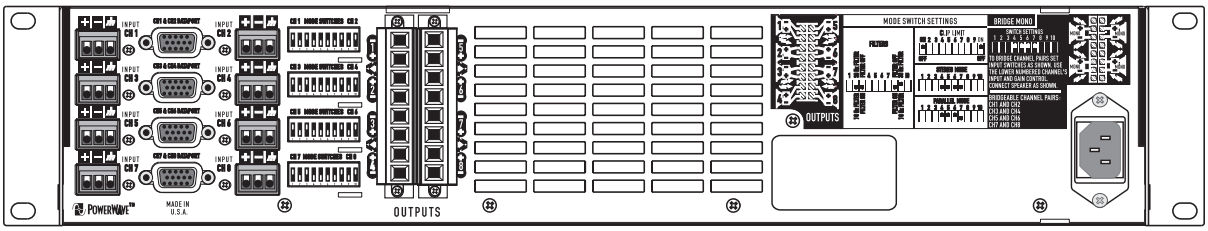
- 100 watts per channel at 70 volts (CX108V)
- 90 watts per channel at 8 ohms and 130 watts per channel at 4 ohms (CX168)
- Compact size — only two rack spaces and 14" deep for reduced rack space
- Channel pairs bridgeable for maximum flexibility
- Exclusive PowerLight switch-mode power supply technology 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
- Lightweight — only 21 pounds (9.5 kg) for easier racking and shipping
- 3-year warranty plus optional 3-year extended service contract

CX 8-Channel

Specifications

		CX168		CX108V
Stereo Mode (all channels driven)		Continuous average output power per channel		
8Ω / 20 Hz – 20 kHz / 0.05% THD		90 W		–
4Ω / 20 Hz – 20 kHz / 0.1% THD		130 W		–
Midband Ratings		All channels driven	Single channel	
8Ω / 1 kHz / 0.1% THD		100 W	120 W	–
4Ω / 1 kHz / 0.1% THD		140 W	180 W	–
70V / 20 Hz – 20 kHz / 0.2% THD		–		100 W
Bridge-Mono Mode		Bridge-mono mode operation		
16Ω / 20 Hz – 20 kHz / 0.1% THD		180 W		–
8Ω / 20 Hz – 20 kHz / 0.1% THD		260 W		
140V / 20 Hz – 20 kHz / 0.2% THD		–		200 W
Signal to Noise (20 Hz – 20 kHz)		-107 dB		-100 dB
Input Sensitivity		1.35 Vrms at 8Ω		1.26 Vrms at 70V
Voltage Gain		20x (26 dB)		56x (35 dB)
Input Clipping		6 Vrms (+18 dBu)		6 Vrms (+18 dBu)
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, + 0.4 dB | 8 Hz – 70 kHz, +0/-3 dB
Damping Factor		> 200 (5 kHz and below)		> 500 (5 kHz and below)
Input Impedance		6k ohms unbalanced, 22k ohms balanced		6k ohms unbalanced, 22k ohms balanced
Distortion (SMPTE-IM)		< 0.02%		
Distortion (typical)				
20 Hz – 20 kHz: 10 dB below rated power		< 0.1% THD		
1.0 kHz and below: full rated power		< 0.03% THD		
Cooling		Variable-speed fan / rear-to-front air flow through tunnel heat sink		
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		
Controls		Front: AC switch, Ch. 1, 2, 3, 4, 5, 6, 7 & 8 gain knobs Rear: DIP switches for Ch. 1 - 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		Power-On: Green LED / Parallel inputs: Orange LED (1 per channel pair) / Signal -35 dB: Green LED (1 per channel) Bridged: Yellow LED (1 per channel pair) / Clip: Red LED (1 per channel)		
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 (HWD)		3.5" (8.9 cm) 2 RU x 19" (48.3 cm) rack mounting x 14" (35.6 cm) from front mounting rails		
Weight - Net / Shipping		21 lb (9.5 kg) / 27 lb (12.3 kg)		
Power Requirements		100, 120, 230 VAC, 50 – 60 Hz (configured at factory)		
120V Current Consumption*	Idle	0.6 A		0.6A
1/8 power pink noise (typical of program material at maximum unclipped power)	8Ω	6.2 A		–
	4Ω	9.2 A		–
	70V	–		6.3 A
1/3 power pink noise (typical of program material with severe clipping)	8Ω	9.2 A		–
	4Ω	14.2 A		–
	70V	–		9.4 A

** Multiply currents by 0.5 for 230V units*



Specifications subject to change without notice.

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