

## **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 multichannel 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<sup>™</sup> 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**

Model	70V*	00	
	700	8Ω	4Ω**
CX168	-	8 x 90	8 x 130
CX108V	8 x 100	-	-

## 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

	CX168		CX108V		
Stereo Mode (all channels driven)	Со	ntinuous average output power per cha	nnel		
8Ω / 20 Hz – 20 kHz / 0.05% TH	D 90 W		_		
4Ω / 20 Hz – 20 kHz / 0.1% THD	130 W		-		
Midband Ratings	All channels drive	en 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% THE	) –		100 W		
Bridge-Mono Mode		Bridge-mono mode operation			
16Ω / 20 Hz – 20 kHz / 0.1% THE	D 180 W		_		
8Ω / 20 Hz – 20 kHz / 0.1% THD	260 W				
140V / 20 Hz – 20 kHz / 0.2% TH	D –		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		> 500 (5 kHz and below)		
Input Impedance	,	iced, 22k ohms balanced	6k ohms unbalanced, 22k ohms balanced		
Distortion (SMPTE-IM)		<0.02%			
Distortion (typical)	0.0270				
20 Hz – 20 kHz: 10 dB below rate	d power < 0.1% THD				
1.0 kHz and below: full rated pow	1				
Cooling		Variable-speed fan / rear-to-front air flow through tunnel heat sink			
Connectors	· · · · · · · · · · · · · · · · · · ·	-style detachable terminal blocks (one p			
		DataPort: HD-15 connector (Ch. 1+2, 3+4, 5+6, 7+8)			
		n Euro-style detachable terminal blocks			
Controls		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			
	•	t 50 or 75 Hz for CX108V, inputs paralle	· · · · · · · · · · · · · · · · · · ·		
Indicators		Power-On: Green LED / Parallel inputs: Orange LED (1 per channel pair) / Signal -35 dB: Green LED (1 per channel)			
Anna lifian Daata stian		ED (1 per channel pair) / Clip: Red LED			
Amplifier Protection		Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into reactive or mismatched loads			
Load Protection	, O,	dividual channel DC fault blocking	(75.6 ··· ) ( ··· · ( ··· ··· ··· · · · · · ·		
Dimensions (HWD)	· /	2U x 19" (48.3 cm) rack mounting x 14"	(35.6 cm) from front mounting rails		
Weight - Net / Shipping	0,1	21 lb (9.5 kg) / 27 lb (12.3 kg)			
Power Requirements		C, 50 – 60 Hz (configured at factory)	0.04		
	dle 0.6 A		0.6A		
(typical of program material at	Ω 6.2 A		-		
maximum unclipped power) 4	Ω 9.2 A		-		
7	OV –		6.3 A		
	<b>a a a b</b>		_		
1/3 power pink noise 8			=		
(typical of program material with severe clipping)	<u>Ω 9.2 A</u> Ω 14.2 A 0V –		-		

\* Multiply currents by 0.5 for 230V units



Specifications subject to change without notice.

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