

CX254 | CX404 CX204V

KEY FEATURES

- Three models that range in power from 170 W to 450 W per channel
- Compact size all models only 2 RU and 14" deep for reduced rack cost and floor space
- Channels 1+2 and 3+4 are bridgeable for maximum flexibility
- Active Inrush Limiting eliminates AC inrush current, removing the need for expensive power sequencers
- DataPort connections enable remote control and monitoring of amplifier functions via Q-SYS™
- Custom integrated security cover for tamperproof installations
- Variable speed fan for low noise
- 1 dB detented gain controls for fast and accurate gain settings
- Detachable Euro-style input connectors
- DIP switch control for clip limiters, high-pass filters, bridge-mono and parallel operation
- Exclusive PowerLight switch-mode power supply technology for high performance and compact size
- Selectable high-pass filters protect speakers and prevent speaker transformer saturation with minimal effect on program material (33 Hz or 75 Hz on CX254 and CX404, 50 Hz or 75 Hz on CX204V)
- Comprehensive front panel indicators including signal, clip, protect and QSC's exclusive bridgemono and parallel input LEDs
- Barrier strip output connector
- Comprehensive protection circuitry including DC, infrasonic, thermal overload and short circuit protection
- High-performance Class AB+B complementary bipolar output circuitry
- Lightweight all models only 21 lb (9.5 kg) for easier racking and shipping
- 3-year warranty plus optional 3-year extended service contract



CX 4 Series

Professional four-channel power amplifiers

The four-channel CX Series are designed for installation applications requiring premium sound quality and high output. Recognized by sound contractors worldwide for their reliability, CX Series amplifiers feature PowerLight™ power supply technology reducing weight, eliminating AC mains hum and improving audio quality.

The highly efficient power supply also draws less power and produces less heat resulting in added energy savings. CX Series amplifiers also feature advanced amplifier control and monitoring via the Q-SYS Ecosystem.

CX Series 4-Channel Specifications

See Node (all channels driven) Continuous overprer proponen processor 8 O 7 20 Hz - 20 Hz / 20 Mz / 20 Mz 1 (20 Mz 1 Hz) 250 W - 4 O 7 20 Hz - 20 Hz / 20 Mz 1 (20 Mz 1 Hz) 2 C W (20 Mz 1 Hz) (1 Hz) - 7 O V / 20 Hz - 20 Hz / 20 SS THD 4 S W (20 Mz 1 Hz) (1 Hz) 20 Mz 20 Wz 20 W		CX254	CX404	CX204V		
4 Ω / 20 Hz − 20 Mz + 0.05% THD 450 W -	Stereo Mode (all channels driven)	Continuous aver	age output power per channel			
2 Ω / 1 kHz / 1%THD 450 W	8 Ω / 20 Hz – 20 kHz / 0.05% THD	170 W	250 W	-		
70 V / 20 Hz - 20 Mtz / 0.05% THD	4 Ω / 20 Hz – 20 kHz / 0.05% THD	250 W	400 W (0.1% THD, 1 kHz)	-		
70 V / 1 kHz / 0.05% THD	2Ω/1 kHZ/1% THD	450 W	-	-		
Bridge-Mono Mode Service Mono Mode Service Mode Service Mono Mode Service Mono Mode Service Mono Mode Service Mono Mode Service	70 V / 20 Hz – 20 kHz / 0.05% THD	-	-	200 W		
Bridge-Mono Mode 16 Ω / 20 Hz − 20 kHz / 0.1% THD 340 W 500 W − <t< th=""><th>70 V / 1 kHz / 0.05% THD</th><th>-</th><th>-</th><th>220 W</th></t<>	70 V / 1 kHz / 0.05% THD	-	-	220 W		
Io Ω / 20 Hz - 20 kHz / 0.1% THD 340 W 500 W - 8 Ω / 20 Hz - 20 kHz / 0.1% THD 500 W 800 W (0.1% THD, 1 kHz) - 4 Ω / 1 kHz / 1% THD 900 W - - 140 V / 1 kHz / 1% THD - 400 W 140 V / 1 kHz / 1% THD - 400 W 140 V / 1 kHz / 1% THD - 600 W Noise (20 Hz - 20 kHz) 106 dB 105 dB 160 V 1 kHz / 1% THD - 600 W Noise (20 Hz - 20 kHz) 106 dB 105 dB 160 MS 122 Vms 122 Vms 126 Vms 160 MS 105 dB 105 dB 160 MS 104 Vms (+22 dBu) 105 Vms (+22 dBu) 160 MS 105 Vms (+22 dBu) 10 Vms (+22 dBu) 160 MS 40.01% <0.01% 160 MS 40.01% <0.01% 170 VHz 20 Ms (+22 dBu) 10 Vms (+22 dBu) 180 MS 40.01% <0.02% 180 MS 20 MS <0.02% 190 MS 40.01% <0.01% 10	70 V / 1 kHz / 1% THD	-	-	300 W		
8 0 / 20 Hz − 20 Hz	Bridge-Mono Mode					
4 Ω / 1 kHz / 1% THD 900 W	16 Ω / 20 Hz – 20 kHz / 0.1% THD	340 W	500 W	-		
140 V / 20 Hz − 20 Hz / 0.1% ThD	8 Ω / 20 Hz – 20 kHz / 0.1% THD	500 W	800 W (0.1% THD, 1 kHz)			
140 V / 1 kHz / 0.05% HD	4Ω/1 kHz/1% THD	900 W	-	-		
140 V / 1 kHz / 1% ThD - 106 dB - 106 dB - 105	140 V / 20 Hz – 20 kHz / 0.1% THD	-	-	400 W		
Noise (20Hz - 20kHz) -106 dB -106 dB -106 dB -105 dB<	140 V / 1 kHz / 0.05% THD	-	-	440 W		
Input Sensitivity 1.22 Vrms 1.22 Vrms 1.26 Vrms Gain 29 dB at 8 Ω 31 dB at 8 Ω 35 dB at 70.7 V Input Clipping 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) Output Circuitry Class AB+B Class AB+B Class AB+B Distortion (SMPTE-IM) <0.01% <0.01% <0.02% Distortion (typical) <0.01% THD <0.02% 1.0 kHz and below: full rated power <0.01% THD <0.01% THD <0.01% THD Frequency Response 20 Hz - 20 kHz, ±0.02 dB 8 Hz - 50 kHz, ±0/-3 dB <0.01% THD <0.	140 V / 1 kHz / 1% THD	-	-	600 W		
Gain 29 dB at 8 Ω 31 dB at 8 Ω 35 dB at 70.7 V Input Clipping 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) Output Circuitry Class AB+B Class AB+B Class AB+B Class AB+B Class AB+B Distortion (SMPTE-IM) < 0.01% < 0.01% < 0.02% Distortion (typical) Verification (typical) Verification (Verylocal) Verylocal (Verylocal) Ve	Noise (20Hz - 20kHz)	-106 dB	-106dB	-105 dB		
Input Clipping 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) 10 Vrms (+22 dBu) Output Circuitry Class AB+B Class AB+B Class AB+B Distortion (SMPTE-IM) < 0.01% < 0.02% Distortion (typical) Use of the properties of the prope	Input Sensitivity	1.22 Vrms	1.22 Vrms	1.26 Vrms		
Output Gircuitry Class AB+B Class AB+B Class AB+B Distortion (SMPTE-IM) <0.01% <0.02% Distortion (typical) <0.01% <0.02% Distortion (typical) 20 Hz - 20 kHz: 10 dB below rated power <0.01% THD	Gain	29 dB at 8 Ω	31 dB at 8 Ω	35 dB at 70.7 V		
Distortion (SMPTE-IM) <0.01%	Input Clipping	10 Vrms (+22 dBu)	10 Vrms (+22dBu)	10 Vrms (+22 dBu)		
Distortion (typical) 20 Hz − 20 kHz: 10 dB below rated power <0.01% THD	Output Circuitry	Class AB+B	Class AB+B	Class AB+B		
20 Hz – 20 kHz: 10 dB below rated power	Distortion (SMPTE-IM)	<0.01%	<0.01%	<0.02%		
1.0 kHz and below: full rated power Co.01% THD	Distortion (typical)					
Frequency Response20 Hz - 20 kHz, ±0.02 dB8 Hz - 50 kHz, ±0/-3 dBDamping Factor>500 (1 kHz and below)Input Impedance6 k Ω unbalanced, 12 k Ω balancedCoolingVariable-speed fan/rear-to-front air flow through tunnel heat sinkConnectorsInput: 3 position Euro style detachable barrier block, Ch 1, 2, 3 & 4 Dataport: HD-15 Connector, Ch 1+2, Ch 3+4ControlsFront: AC switch, Ch 1, 2, 3 & 4 gain knobs Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge modeIndicatorsParallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED / Signal-35 dB: Green LED (1 per channel)Amplifier ProtectionFull short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loadsLoad ProtectionOn / off muting, DC-fault power supply shutdownDimensions (HWD)3.5 x 19 x 14 in (89 x 483 x 356 mm)Weight - Net21 lb (9.5 kg)21 lb (9.5 kg)21 lb (9.5 kg)Weight - Shipping27 lb (12.3 kg)27 lb (12.3 kg)27 lb (12.3 kg)	20 Hz – 20 kHz: 10 dB below rated power	<0.01% THD		-		
Damping Factor>500 (1 kHz and below)Input Impedance6 k Ω unbalanced, 12 k Ω balancedCoolingVariable-speed fan/rear-to-front air flow through tunnel heat sinkConnectorsInput: 3 position Euro style detachable barrier block, Ch 1, 2, 3 & 4 Dataport: HD-15 Connector, Ch 1+2, Ch 3+4ControlsFront: AC switch, Ch 1, 2, 3 & 4 gain knobs Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge modeIndicatorsParallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED Clip-Prot: Red LED / Level - 10 dB: Green LED / Level-20 dB: Green LED / Signal-35 dB: Green LED (1 per channnel)Amplifier ProtectionFull short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loadsLoad ProtectionOn / off muting, DC-fault power supply shutdownDimensions (HWD)3.5 x 19 x 14 in (89 x 483 x 356 mm)Weight - Net21 lb (9.5 kg)21 lb (9.5 kg)21 lb (9.5 kg)Weight - Shipping27 lb (12.3 kg)27 lb (12.3 kg)27 lb (12.3 kg)	1.0 kHz and below: full rated power	<0.01% THD				
Input Impedance6 k Ω unbalanced, 12 k Ω balancedCoolingVariable-speed fan/rear-to-front air flow through tunnel heat sinkConnectorsInput: 3 position Euro style detachable barrier block, Ch 1, 2, 3 & 4 Dataport: HD-15 Connector, Ch 1+2, Ch 3+4ControlsFront: AC switch, Ch 1, 2, 3 & 4 gain knobs Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge modeIndicatorsParallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED Clip-Prot: Red LED / Level - 10 dB: Green LED / Level-20 dB: Green LED / Signal-35 dB: Green LED (1 per channnel)Amplifier ProtectionFull short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loadsLoad ProtectionOn / off muting, DC-fault power supply shutdownDimensions (HWD)3.5 x 19 x 14 in (89 x 483 x 356 mm)Weight - Net21 lb (9.5 kg)21 lb (9.5 kg)21 lb (9.5 kg)Weight - Shipping27 lb (12.3 kg)27 lb (12.3 kg)27 lb (12.3 kg)	Frequency Response	20 Hz - 20 kHz, ±0.02 dB	8 Hz - 50 kHz, +0/-3 dB			
CoolingVariable-speed fan/rear-to-front air flow through tunnel heat sinkConnectorsInput: 3 position Euro style detachable barrier block, Ch 1, 2, 3 & 4 Dataport: HD-15 Connector, Ch 1+2, Ch 3+4ControlsFront: AC switch, Ch 1, 2, 3 & 4 gain knobs Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge modeIndicatorsParallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED Clip-Prot: Red LED / Level - 10 dB: Green LED / Level-20 dB: Green LED / Signal-35 dB: Green LED (1 per channnel)Amplifier ProtectionFull short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loadsLoad ProtectionOn / off muting, DC-fault power supply shutdownDimensions (HWD)3.5 x 19 x 14 in (89 x 483 x 356 mm)Weight - Net21 lb (9.5 kg)21 lb (9.5 kg)21 lb (9.5 kg)Weight - Shipping27 lb (12.3 kg)27 lb (12.3 kg)27 lb (12.3 kg)	Damping Factor	>500 (1 kHz and below)				
Connectors Input: 3 position Euro style detachable barrier block, Ch 1, 2, 3 & 4 Dataport: HD-15 Connector, Ch 1+2, Ch 3+4 Output: 6 position barrier strip with dual channel and bridge mono connectors, Ch 1+2, Ch 3+4 Controls Front: AC switch, Ch 1, 2, 3 & 4 gain knobs Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge mode Indicators Parallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED Clip-Prot: Red LED / Level - 10 dB: Green LED / Level-20 dB: Green LED / Signal-35 dB: Green LED (1 per channnel) Amplifier Protection Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loads Load Protection On / off muting, DC-fault power supply shutdown Dimensions (HWD) 3.5 x 19 x 14 in (89 x 483 x 356 mm) Weight - Net 21 lb (9.5 kg) 21 lb (9.5 kg) 21 lb (9.5 kg) 27 lb (12.3 kg) 27 lb (12.3 kg)	Input Impedance	$^{-}$ 6 k Ω unbalanced, 12 k Ω balanced				
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Rear: DIP switch for Ch 1, 2, 3 & 4, clip limiter on/off, LF filter on/off, LF filter freq select 33 Hz or 75 Hz CX254 and CX 404: 50 Hz or 75 Hz CX204 V: inputs parallel or stereo, bridge mode Indicators Parallel inputs: Yellow LED / Bridged: Yellow LED / Power-on: Green LED Clip-Prot: Red LED / Level - 10 dB: Green LED / Level-20 dB: Green LED / Signal-35 dB: Green LED (1 per channnel) Amplifier Protection Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into relative or mismatched loads Load Protection On / off muting, DC-fault power supply shutdown Dimensions (HWD) 3.5 x 19 x 14 in (89 x 483 x 356 mm) Weight - Net 21 lb (9.5 kg) 21 lb (9.5 kg) 21 lb (9.5 kg) 27 lb (12.3 kg) 27 lb (12.3 kg)	Connectors					
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Weight - Net 21 lb (9.5 kg) 21 lb (9.5 kg) 21 lb (9.5 kg) Weight - Shipping 27 lb (12.3 kg) 27 lb (12.3 kg) 27 lb (12.3 kg)	Load Protection	On / off muting, DC-fault power supply shutdown				
Weight - Shipping 27 lb (12.3 kg) 27 lb (12.3 kg) 27 lb (12.3 kg)	Dimensions (HWD)	3.5 x 19 x 14 in (89 x 483 x 356 mm)				
	Weight - Net	21 lb (9.5 kg)	21 lb (9.5 kg)	21 lb (9.5 kg)		
Power Requirements 100, 120, 230 VAC, 50 - 60 Hz (configured at factory)	Weight - Shipping	27 lb (12.3 kg)	27 lb (12.3 kg)	27 lb (12.3 kg)		
	Power Requirements	100, 120, 230 VAC, 50 - 60 Hz (configured at factory)				

CX Series 4-Channel Specifications

		CX254	CX404	CX204V
120 V Current Consumption*				
1/8 power pink noise (typical of program material at maximum unclipped power)	Idle	0.7 A	0.7 A	0.8 A
	8 Ω	5.8 A	8.1 A	-
	4 Ω	9.2 A	12.4 A	-
	2 Ω	14.3 A	NR	-
	70 V	-	-	8.3 A
1/3 power pink noise (typical of program material at maximum unclipped power)	8 Ω	8.8 A	12.2 A	-
	4 Ω	14.2 A	19.3 A	-
	2 Ω	21.7 A	NR	-
	70 V	-	-	12.7 A
140 V / 20 Hz – 20 kHz / 0.1% THD		-	-	400 W
140 V / 1 kHz / 0.05% THD		-	-	440 W
140 V / 1 kHz / 1% THD		-	-	600 W
Watts Per Channel	70 V	-	-	200
	8 Ω	170	250	-
	4 Ω	250	400**	-
	2 Ω	450*	-	-

^{*} Multiply currents by 0.5 for 230 V units
NR* = Not Recommended due to excessive current draw
20 Hz - 20 kHz, 0.05% THD
* 1 kHz, 1% THD
** 1 kHz, 0.1% THD

CX-254



