

I/O Cards	Mic/Line Input Card CIML4	High-Performance Mic/Line Input Card CIML4-HP	Line Output Card COL4	DataPort Output Card CODP4
Description	Four channels of microphone/line-level analog audio input with 48V phantom power	Four channels of microphone / line-level analog audio input with 48V phantom power and high performance pre-amplifiers and A/D converters	Four channels of balanced, line-level analog output	Four audio output channels (2 DataPorts) for connection to DataPort equipped QSC amplifiers
Performance				
Dynamic Range Unweighted	> 105 dB	> 112 dB	> 112 dB	> 114 dB
Dynamic Range A-weighted	> 108 dB	> 115 dB	> 115 dB	> 117 dB
Distortion 20 Hz – 20 kHz +4 dBu (nominal input)	< 0.009% THD+N	< 0.004% THD+N	–	–
Distortion 20 Hz – 20 kHz 2 dB below clip (max)	< 0.08% THD+N	< 0.06% THD+N	< 0.004% THD+N	< 0.004% THD+N
Crosstalk 20 Hz – 20 kHz				
Inter-channel (max)	> 100 dB	> 110 dB	> 100 dB	> 95 dB
Inter-channel (typ)	> 110 dB	> 110 dB	> 110 dB	> 100 dB
Intra-channel (max)	> 100 dB	> 110 dB	> 100 dB	> 100 dB
Intra-channel (typ)	> 110 dB	> 110 dB	> 110 dB	> 110 dB
Frequency Response 20 Hz – 20 kHz (max)	± 0.5 dB	± 0.5 dB	± 0.5 dB	± 0.5 dB
Frequency Response 20 Hz – 20 kHz (typ)	± 0.2 dB	± 0.2 dB	± 0.2 dB	± 0.2 dB
Input Impedance				
Balanced (nominal)	10 k ohms	10 k ohms	–	–
Unbalanced (nominal)	10 k ohms	10 k ohms	–	–
Common Mode Rejection 20 Hz – 20 kHz (max)	> 45 dB	> 45 dB	–	–
Common Mode Rejection 20 Hz – 20 kHz (typ)	> 50 dB	> 50 dB	–	–
Max Input Level	0.125, 2.25, 8.70, 17.35 Vrms -16, 10, 21, 27 dBu -18.2, 7.04, 18.8, 24.78 dBv (4 selections)	1.23 to 17.35 Vrms -56 to 27 dBu -58.2 to 24.8 dBv (continuously variable)	–	–
Mute	Infinite attenuation (via digital mute)	Infinite attenuation (via digital mute)	Infinite attenuation (via electro-mechanical relays)	Infinite attenuation (via electro-mechanical relays)
Audio Converters				
Analog to Digital Conversion (ADCs)	24-bit delta-sigma at 48 or 96 kHz sample rate	24-bit delta-sigma at 48 or 96 kHz sample rate	–	–
Digital to Analog Conversion (DACs)	–	–	24-bit delta-sigma at 48 or 96 kHz sample rate	24-bit delta-sigma at 48 or 96 kHz sample rate
Group Delay	< 13 FS (≈ 271 μs) at 48 kHz	< 13 FS (≈ 271 μs) at 48 kHz	< 10 FS (≈ 196 μs) at 48 kHz	< 13 FS (≈ 271 μs) at 48 kHz
Connectors	Four 3-terminal Euro-style detachable terminal blocks	Four 3-terminal Euro-style detachable terminal blocks	Four 3-terminal Euro-style detachable terminal blocks	Two 15-pin HD15 connectors
User-configurable Options (software enabled)				
Phantom Power	+48 V phantom power (meets IEC 1938 [1996] spec)	+48 V phantom power (meets IEC 1938 [1996] spec)	–	–
Output Trim				
Vrms (max)	–	–	8.7 V	–
dBu (max)	–	–	21 dBu	–
dBv (max)	–	–	18.8 dBv	–
Amplifier Standby	–	–	–	Set or clear amplifier in standby mode
Mute	–	–	–	Set or clear individual channel mutes
Enable Meters	–	–	–	Enable data collection of meters for each channel
Audio Output Levels	–	–	–	Adjust individual audio channel levels
Amplifier Model Support	–	–	–	CX, PowerLight™ 3 Series, DCA, and legacy V1 models

I/O Cards	AES-3 Input/Output Card CAES4	CobraNet Bridge Card CCN32
Description	Four input and four output channels of AES-3 digital audio	Up to 32 input and 32 output channels of CobraNet digital audio
Frequency Response	± 0.2 dB	± 0.2 dB
Mute	Infinite attenuation (via digital mute)	Infinite attenuation (via digital mute)
Group Delay	37 Samples (0.760 ms actual) with Sample Rate Converter enabled	Selectable: 64 Samples (2.687 ms actual) 128 Samples (4.020 ms actual) 256 Samples (6.686 ms actual)
I/O Capacity	4x4	Selectable: 4x4 8x8 16x16 32x32 (in Core only)
Bundle Packing	—	0 to 8 channels
Network Transmitters	—	4
Network Receivers	—	4
Management	—	CobraNet management via SNMP
Connectors	Four 3-terminal Euro-style detachable terminal blocks	Dual RJ-45



Mic/Line Analog Input Card



High-Performance Mic/Line Analog Input Card



Analog Line Output Card



DataPort Output Card



AES-3 Digital Input/Output Card



CobraNet™ Digital Input/Output Card



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