

Nexia® VC Videoconference DSP



Nexia VC is a digital signal processor with 8 wide-band AEC mic/line inputs, 2 standard mic/line inputs, 4 mic/line outputs, and a codec interface. Intended for a variety of videoconferencing applications, Nexia VC uses Biamp's Sona™ AEC technology for more natural sound and full-duplex transmission of speech. Nexia VC includes a broad selection of audio components, routing options, and signal processing. The internal system design is completely user definable via PC software, and can be controlled via daVinci™ software screens, RS-232 control systems, and a variety of optional remote controls. Multi-unit Nexia systems can be created utilizing Ethernet and NexLink digital audio linking.

FEATURES

- 8 wide-band AEC balanced mic/line inputs
- 2 standard balanced mic/line inputs
- 4 balanced mic/line outputs
- Codec interface with balanced line input & output
- Ethernet port for software configuration/control
- Serial port for third-party RS-232 remote control
- NexLink ports for multi-unit system designs
- Nexia software for Windows® XP Professional/Vista
- Pre-configured I/O with definable processing
- RoHS compliance and AES grounding practices
- CE marked and UL/C-UL listed
- Covered by Biamp Systems' 5-year warranty

- · Ability to select, view, and calibrate:
 - o Mixers: standard, automatic, matrix, combiners
 - o Equalizers: graphic parametric, feedback
 - o Filters: HPF, LPF, high shelf, low shelf, all-pass
 - Crossovers: 2-Way, 3-Way and 4-Way
 - Dynamics: leveler, comp/limiter, ducker, ANC
 - ∘ Routers: 2x1 ~ 32x32
 - ∘ Delays: 0 ~ 2000ms
 - o Controls: levels, presets, logic, RS-232, etc.
 - Meters: signal present, peak, RMS
 - o Generators: tone, pink-noise, white-noise
 - o Diagnostics: transfer function

ARCHITECTS & ENGINEERS SPECIFICATION

The videoconference DSP shall provide eight wide-band Sona™ AEC balanced mic/line inputs, two standard balanced mic/line inputs, four balanced mic/line outputs, and codec audio input/output on plug-in barrier-strip connectors. Inputs and outputs shall be analog, with internal 24-bit A/D & D/A converters operating at a sample rate of 48kHz. All internal processing shall be digital (DSP). NexLink connections shall allow sharing of digital audio within multi-unit systems

Software shall be provided for creating/connecting DSP system components within each hardware unit. Available system components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers, dynamics/gain controls, routers, delays, remote controls, meters, generators, and diagnostics. Ethernet communications shall be utilized for software control and configuration. After initial programming, processors may be controlled via dedicated software screens, third-party RS-232 control systems, and/or optional remote control devices. Software shall operate on a PC computer, with network card installed, running Windows® XP Professional/Vista. The videoconference DSP shall be CE marked, UL listed, and shall incorporate AES48-2005 Grounding & EMC practices. The videoconference DSP shall be compliant with EU Directive 2002/95/EC, the RoHS directive. Warranty shall be five years.

The videoconference DSP shall be Nexia VC.



Nexia VC SPECIFICATIONS

Frequency Response (20Hz-20kHz @ +4dBu):	+0/-0.4dB	Phantom Power:	+48 VDC (7mA/input)
THD+N (20Hz-20kHz @ 4dBu): line level mic level	< 0.006% < 0.05%	Cross Talk (channel to channel @ 1kHz): line level mic level	< -80dB < -75dB
Equivalent Input Noise (20Hz-20kHz, 66dB Gain, 150Ω):	-125dBu	Full Scale Output Level (six selections):	-31dBu ~ +24dBu
Dynamic Range (20Hz~20kHz, 0dB):	> 105dB	Tail Length:	up to 300ms
Maximum Gain (input channels):	66dB	Convergence:	up to 100dB/sec
Maximum Input (mic/line):	+24dBu	Maximum Output (balanced):	+24dBu
Input Impedance (balanced): mic/line inputs codec	8kΩ 15kΩ	Output Impedance (balanced):	200Ω
Input Gain Range (variable trim):	0dB ~ +66dB	Sampling Rate:	48kHz
mic/line inputs codec	OdB ~ +18dB	A/D - D/A Converters:	24-bit
Overall Dimensions:		Compliance:	
Height: Width: Depth:	1.75 inches (45 mm) 19.0 inches (483 mm) 11.15 inches (283 mm)	AES48-2005 Grounding and EMC practices EU Directive 2002/95/EC,	
Power Consumption (100-240VAC 50/60Hz):	65W	RoHS Directive CE marked	
Weight:	8.6 lbs (3.9 kg)		UL / C-UL listed

Nexia VC REAR PANEL DIAGRAM



Nexia VC BLOCK DIAGRAM

