

DATA SHEET

NEXIA® SP

DSP SPEAKER PROCESSOR



Nexia SP is a digital signal processor with 4 line inputs and 8 independent mix outputs. Intended for speaker processing applications requiring line inputs feeding a larger number of discrete outputs, Nexia SP 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/or a variety of optional remote control devices. Multi-unit Nexia systems can be created utilizing Ethernet and NexLink digital audio linking.

FEATURES

- 4 balanced line inputs on plug-in barrier strips
- 8 balanced outputs on plug-in barrier strips
- Ethernet port for software configuration/control
- Serial port for third-party RS-232 remote control
- Remote control bus for dedicated control panels
- NexLink ports for multi-unit system designs
- Nexia software for Windows®
- Pre-configured I/O with definable processing
- Mix, route, combine, EQ, delay, control, etc.
- CE marked, UL listed and RoHS compliant
- Covered by Biamp Systems' 5-year warranty
- Ability to select, view, and calibrate:
 - Mixers: standard, automatic, matrix, combiners
 - Equalizers: graphic parametric, feedback
 - 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
 - Controls: levels, presets, logic, RS-232, etc.
 - Meters: signal present, peak, RMS
 - Generators: tone, pink-noise, white-noise
 - Diagnostics: transfer function

ARCHITECTS & ENGINEERS SPECIFICATION

The DSP speaker processor shall provide four balanced line inputs and eight balanced line outputs 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®. The DSP speaker processor shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The DSP speaker processor shall be Nexia SP.

NEXIA SP SPECIFICATIONS

Frequency Response (20Hz-20kHz @ +4dBu):	+0/-0.4dB	Cross Talk (channel to channel @ 1kHz):	< -80dB
THD+N (20Hz-20kHz @ +4dBu):	< 0.007%	Power Consumption (100-240VAC 50/60Hz):	65W
Dynamic Range (20Hz-20kHz, 0dB):	> 105dB	Overall Dimensions:	
Input Impedance (balanced):	15kΩ	Height:	1.75 inches (44 mm)
Maximum Input:	+24dBu	Width:	19.0 inches (483 mm)
Maximum Gain:	18dB	Depth:	11.2 inches (283 mm)
Input Gain Range (variable):	0 - 18dB	Weight:	8.6 lbs (3.9 kg)
Output Impedance (balanced):	200Ω	Sampling Rate:	48kHz
Maximum Output:	+24dBu	A/D - D/A Converters:	24-bit
Full Scale Output Level (five selections):	0dBu ~ +24dBu	Compliance:	CE marked (Europe) UL listed (USA & Canada) RoHS Directive (Europe)

NEXIA SP BACK PANEL

