



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® 2000/XP Professional
- pre-configured I/O with definable processing
- mix, route, combine, EQ, delay, control, etc.
- **RoHS** compliance and **AES** grounding practices
- **CE** marked and **UL** listed
- covered by Biamp Systems' five-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 ~ 2000 ms
 - 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.

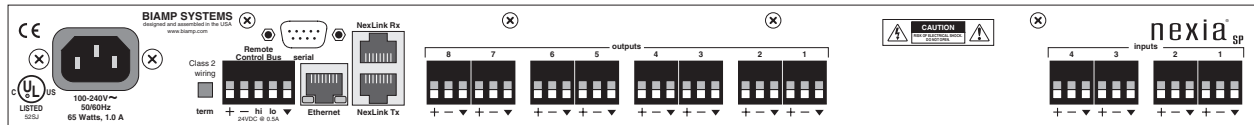
Software shall be provided for creating/connecting DSP system components within each hardware unit. Available system components shall include (but not be limited to) various forms of: mixers, equalizers, filters, crossovers, dynamics/gain controls, routers, delays, remote controls, meters, generators, 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® 2000/XP Professional. The DSP speaker processor shall be CE marked, UL listed, and shall incorporate AES48-2005 Grounding & EMC practices. The DSP speaker processor shall be compliant with EU Directive 2002/95/EC, the RoHS directive. Warranty shall be 5 years.

The DSP speaker processor shall be Nexia® SP.

Nexia® SP SPECIFICATIONS

Frequency Response (20Hz-20kHz @ +4dBu):	+0/-0.4dB	Full Scale Output Level (five selections):	0dBu ~ +24dBu
THD +N (20Hz-20kHz @ +4dBu):	< 0.007%	Sampling Rate:	48kHz
Dynamic Range (20Hz-20kHz, 0dB):	> 105dB	A/D - D/A Converters:	24-bit
Maximum Gain (line input to line output):	18dB	Power Consumption:	65 watts
Crosstalk (channel-to-channel @ 1kHz):	< -80dB	Dimensions:	height width depth
Input Impedance (balanced):	15k ohms		1.75 inches (45mm) 19 inches (483mm) 11.15 inches (283mm)
Maximum Input (balanced):	+24dBu	Weight:	8.6 lbs. (3.9kg)
Input Gain Range (variable):	0dB ~ +18dB	Compliance:	AES48-2005 Grounding & EMC practices EU Directive 2002/95/EC, RoHS directive CE marked UL listed
Output Impedance (balanced):	200 ohms		
Maximum Output (balanced):	+24dBu		

Nexia SP REAR PANEL DIAGRAM



Nexia BLOCK DIAGRAM

