

# DATA SHEET

## NEXIA® TC

### TELECONFERENCE DSP



Nexia TC is a digital signal processor with 8 wide-band AEC mic/line inputs, 2 standard mic/line inputs, 4 mic/line outputs, and a telephone interface. Intended for a variety of teleconferencing applications, Nexia TC uses Biamp's Sona™ AEC technology for more natural sound and full-duplex transmission of speech. Nexia TC 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
  - Telephone interface with line & set connections
  - 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®
  - Pre-configured I/O with definable processing
  - CE marked, UL listed and RoHS compliant
  - Covered by Biamp Systems' 5-year warranty
- Ability to select, view, and calibrate:
    - Mixers, Equalizers, Filters, Crossovers, Dynamics, Routers, Delays, Controls, Meters, Generators, Diagnostics
  - Telephone Interface capabilities include:
    - Initiation of outgoing calls
    - Detection and answering of incoming calls
    - Line echo cancellation
    - TouchTone™ decoding
    - Caller ID reception
    - Call progress detection
    - Line intrusion detection
    - Continuous line status and fault monitoring

## ARCHITECTS & ENGINEERS SPECIFICATION

The teleconference DSP shall provide eight wide-band Sona™ AEC balanced mic/line inputs, two standard balanced mic/line inputs, and four balanced mic/line outputs on plug-in barrier-strip connectors. A telephone interface shall be provided on a pair of RJ-11 jacks. 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 teleconference DSP shall be CE marked, UL listed, and shall be compliant with the RoHS directive. Warranty shall be five years. The teleconference DSP shall be Nexia TC.

## NEXIA TC SPECIFICATIONS

<b>Frequency Response</b> (20Hz-20kHz @ +4dBu):	+0/-0.4dB	<b>Phantom Power:</b>	+48 VDC (7mA/input)
<b>THD+N (20Hz-20kHz @ +4dBu):</b>		<b>Cross Talk (channel to channel @ 1kHz):</b>	
<b>Line level:</b>	< 0.006%	<b>Line level:</b>	< -80dB
<b>Mic level:</b>	< 0.05%	<b>Mic level:</b>	< -75dB
<b>EIN (20Hz-20kHz, 66dB Gain, 150Ω):</b>	-125dBu	<b>Power Consumption</b> (100-240VAC 50/60Hz):	65W
<b>Dynamic Range (20Hz-20kHz, 0dB):</b>	> 105dB	<b>Overall Dimensions:</b>	
<b>Tail Length:</b>	up to 300ms	<b>Height:</b>	1.75 inches (44 mm)
<b>Convergence:</b>	up to 100dB/sec	<b>Width:</b>	19.0 inches (483 mm)
<b>Input Impedance (balanced):</b>	8kΩ	<b>Depth:</b>	11.2 inches (283 mm)
<b>Maximum Input:</b>	+24dBu	<b>Weight:</b>	8.6 lbs (3.9 kg)
<b>Maximum Gain:</b>	66dB	<b>Sampling Rate:</b>	48kHz
<b>Input Gain Range (variable):</b>	0 - 66dB	<b>A/D - D/A Converters:</b>	24-bit
<b>Output Impedance (balanced):</b>	200Ω	<b>Compliance:</b>	
<b>Maximum Output:</b>	+24dBu		CE marked (Europe)
<b>Full Scale Output Level (six selections):</b>	-31dBu ~ +24dBu		UL listed (USA & Canada)
			RoHS Directive (Europe)
<b>Telephone Interface:</b>			
<b>Ringer Equivalency Number:</b>	0.0dB		
<b>Dynamic Range:</b>	67dBu		
<b>Frequency Response:</b>	250Hz - 3.4kHz		
<b>THD:</b>	< 0.3%		
<b>Transhybrid Response:</b>	30dB		

## NEXIA TC BACK PANEL

