

NORRD

NEXUS N8D w/USB - 4x4 DSP with Dante. 4x4 Analog 4x4 Dante 2x2 USB | N8D



Compact Dante DSP for flexible audio integration

Despite its compact half-rack format (215 × 162 × 44 mm), the N8D runs the same ADI SHARC 21489 processing platform as the larger NEXUS models — 24-bit/48 kHz, 113 dB dynamic range, THD+N below –95 dB, and under 3 ms system delay. Four balanced analog inputs with +48 V phantom power handle condenser microphones directly, while four Dante channels provide networked audio connectivity for integration into larger AV-over-IP infrastructures where sources and destinations are distributed across multiple rooms or floors.

The core DSP runs without compromise on the channel count. Full-duplex AEC ensures natural two-way conversation without half-duplex switching artifacts, while per-channel ANS reduces mechanical background noise without degrading speech. Each input has its own independent adaptive feedback suppression — important even in small rooms where microphone-to-speaker distances are short and gain-before-feedback is a constant concern. The gain sharing auto mixer keeps the noise floor low by managing open microphone gating, and AGC normalizes level variations between participants so the far end of a video call hears consistent audio regardless of who is speaking or how far they sit from the microphone.

The USB-C sound card interface operates as a full DSP participant on both input and output. When a room PC or laptop connects for a Teams or Zoom session, the conference audio enters the same mixing matrix and processing chain as analog and Dante sources — EQ, routing, and ducking apply identically. This single-box approach eliminates external USB sound cards and simplifies the cable path between the UC device and the room system. Gain across the four analog inputs is adjustable from 0 to 48 dB in 6 dB steps, providing adequate range for typical conferencing sources.

Eight independent presets allow quick switching between room modes — for instance, a four-person huddle configuration versus an all-hands using Dante sources from a divisible room next door. Channel linking and grouping support stereo playback or paired microphone zones. Control is available over RS-232, UDP, and TCP for integration with control systems, and software-programmable wall panels give end users simple access to volume and preset recall. Powered by PoE or DC 12 V, the N8D installs cleanly under tables, in furniture cavities, or wall-mounted — no mains power run required if a PoE switch is available.

KEY FEATURES

- 4 balanced analog I/O + 4 Dante I/O channels with +48 V phantom power
- Full-duplex AEC and ANS on every channel
- Per-channel adaptive feedback suppression (NHS)
- Gain sharing auto mixer and automatic gain control
- USB-C sound card with full DSP processing on input and output
- 8 independent presets with channel linking and grouping
- RS-232, UDP and TCP control with iOS/Windows software
- Software-programmable wall panels (2 types)
- PoE or DC 12 V powered — compact half-rack format (215 × 162 × 44 mm)

GENERAL	
Product Name	NEXUS N8D
Description	4N 32D Digital Audio Processor (Dante)
Dante Support	Yes
PROCESSING	
Processor	ADI SHARC 21489
Sampling Rate	48 kHz
Bit Depth	24-bit
System Delay	< 3 ms
AUDIO PERFORMANCE	
Frequency Response	±0.5 dB (20 Hz – 20 kHz)
Maximum Input Level	+18 dBu
THD+N	< –95 dB @ 17 dBu
Input Dynamic Range	113 dB
Output Dynamic Range	113 dB
Channel Isolation @ 1 kHz	108 dB
Input Impedance (balanced)	5.4 kΩ
Output Impedance (balanced)	600 Ω
I/O	
Analog Inputs	4
Analog Outputs	4
Dante Inputs	4
Dante Outputs	4
Input Gain Range	0 – 48 dB (6 dB steps)
Phantom Power	+48 V / 10 mA max
USB-C Audio	Dual-channel USB sound card
DSP FEATURES	
Adaptive Echo Cancellation (AEC)	Yes
Active Noise Suppression (ANS)	Yes
Automatic Gain Control (AGC)	Yes
Ambient Noise Compensator (ANC)	No
Auto Mixer (gain sharing)	Yes
Noise-free Howling Suppression (NHS)	Yes
Audio Ducking	No
Presets	8
CONTROL	
RS-232	Yes
UDP	Yes (configurable port)
Ethernet	Yes
Wall Panel Support	2 types (software programmable)
Software Compatibility	iOS, Windows
NETWORK	
Protocol	Dante
Dante Channels	4x4
POWER	
Power Supply	DC 12 V or PoE 48 V
PoE Support	Yes
DC Input	12 V
PHYSICAL	
Dimensions (W × D × H)	215 × 162 × 44 mm
Form Factor	Half-rack / desktop
Shipping Weight	2 kg