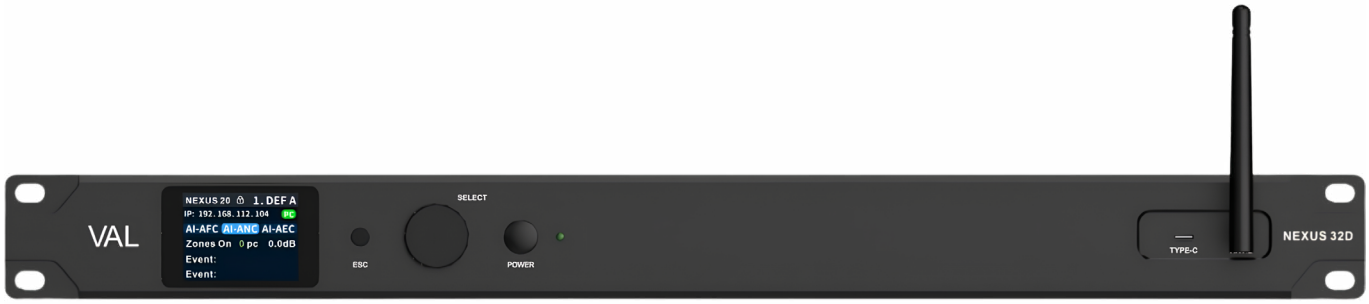
# NEXUS 32D

**8×8 ANALOG I/O • 32×32 DANTE • USB-C • BLUETOOTH**

VAL audio

Die Liebe zur Musik




## OVERVIEW

Built on the VAL NEXUS platform, NEXUS 32D is a high-performance 32×32 professional DSP processor for installed audio and conferencing systems. It combines 8×8 balanced analog I/O with 32×32 Dante network audio I/O, USB-C audio, Bluetooth and VAL NEXUS Control in a compact 1U chassis. Its 32×32 DSP architecture provides flexible matrix routing and comprehensive processing including EQ, delay, crossover, compression and limiting, alongside AI-AFC, AI-ANC and AI-AEC processing, 12-zone control with 3-source ducking and camera tracking support.

## KEY FEATURES

### Balanced Analog I/O

Professional balanced 8×8 analog inputs and outputs.

### 32×32 DSP Processing

High-capacity internal DSP with 32×32 matrix routing.

### 32×32 Dante Audio

Integrated 32×32 Dante network audio I/O.

Dante

### USB-C Audio

USB-C audio interface for computer audio connectivity.

### Bluetooth Audio

Integrated Bluetooth stereo audio input.

### Advanced Processing

HPF/LPF/PEQ, dynamic EQ, delay, crossover and dynamics.

### AI Audio Functions

AI-AFC/ANC and AI-AEC/AFC processing functions.

### Camera Tracking

Camera tracking control support for conferencing and meeting-room applications.

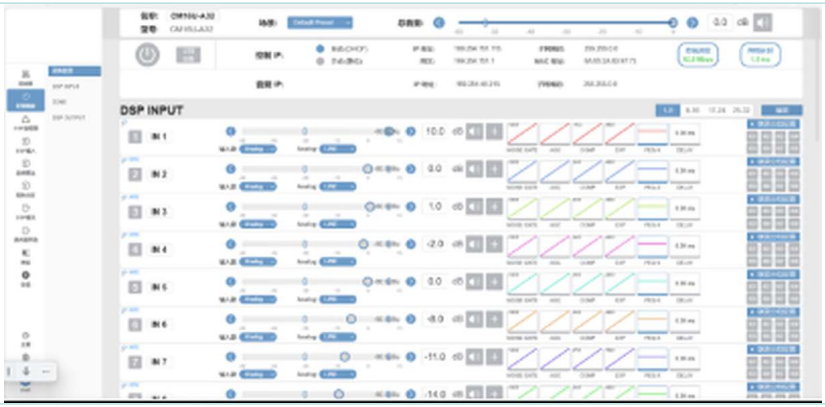
### VAL NEXUS Control

Ethernet-based browser control and monitoring.

## APPLICATIONS

| | |
|---|---|
| **Conference & Meeting** | Flexible routing, Dante/USB/Bluetooth program audio, camera tracking and system processing. |
| **Hospitality** | Distributed audio, zone management and source control. |
| **Education & Institutional AV** | Centralized DSP processing for speech, program and paging. |
| **Retail & Commercial** | Multi-zone background music, announcements and control. |
| **Fixed-Installation PA** | High-capacity matrix processing for installed sound systems. |

## VAL NEXUS CONTROL



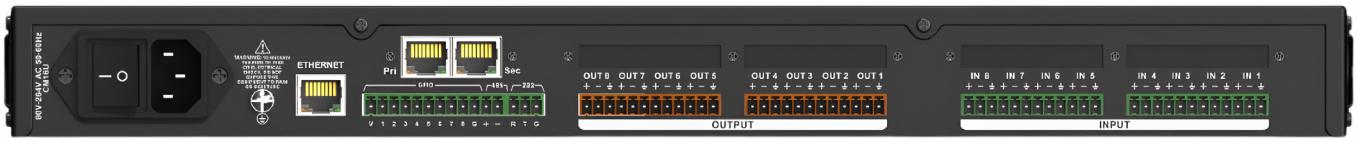

**Browser-Based DSP Control**
VAL NEXUS Control provides browser-based setup, routing, processing and real-time system management via Ethernet.

# NEXUS 32D

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## SYSTEM INTEGRATION

- Full 32×32 matrix mixing and routing for flexible system design.
- EQ, delay, crossover, dynamics and limiting for comprehensive system processing.
- VAL NEXUS Control via Ethernet for setup, configuration and real-time management.
- USB-C and Bluetooth provide convenient program-audio connectivity.
- 32×32 Dante I/O enables networked audio integration across compatible Dante systems.
- Camera tracking control can be integrated into conferencing and meeting-room workflows.

**VAL NEXUS PLATFORM • VAL NEXUS Control • Ethernet-based setup, configuration and real-time management**

## TECHNICAL SPECIFICATIONS

| PARAMETER | SPECIFICATION |
|---|---|
| **Analog I/O** | 8 × 8 balanced analog I/O |
| **Dante I/O** | 32 Tx × 32 Rx, integrated Dante network audio |
| **DSP architecture** | 32 × 32 internal DSP processing capability |
| **Sample rate** | 48 kHz |
| **DSP word length** | 32-bit DSP processing |
| **Matrix routing** | 32 × 32 |
| **USB digital audio** | 2 Tx × 2 Rx |
| **USB interface** | USB-C audio interface |
| **Bluetooth** | 2 Rx / stereo audio |
| **AI processing** | AI-AFC / ANC / AEC; AI-ANC / AFC / AEC |
| **EQ / filtering** | HPF / LPF / PEQ; Dynamic EQ |
| **Dynamics** | Compressor / Limiter |
| **Zone control** | 12 zones with 3-source ducking |
| **Speaker presets** | Analog output available |
| **Network control** | TCP/IP via RJ45 |
| **Control ports** | RS232 / RS485 / GPIO |
| **Maximum input level** | +18 dBu |
| **Power supply** | AC 100–240 V, 50/60 Hz |
| **Rack format** | 1U rack mount |
| **Processor** | ADI SHARC 21569 1 GHz + ARM quad-core processor 1.3 GHz |
| **AD / DA** | 48 kHz, 24-bit; system delay: 3 ms |
| **Input-Z** | 7.5 kΩ |
| **Output-Z** | 78 Ω |
| **Frequency response** | 20 Hz–20 kHz (±0.5 dB) / Line; 20 Hz–20 kHz (±0.8 dB) / Mic |
| **THD+N** | –96 dB / Line; –90 dB / Mic |
| **SNR** | 114 dB / Line; 105 dB / Mic |