# DSP48
## Loudspeaker Management System
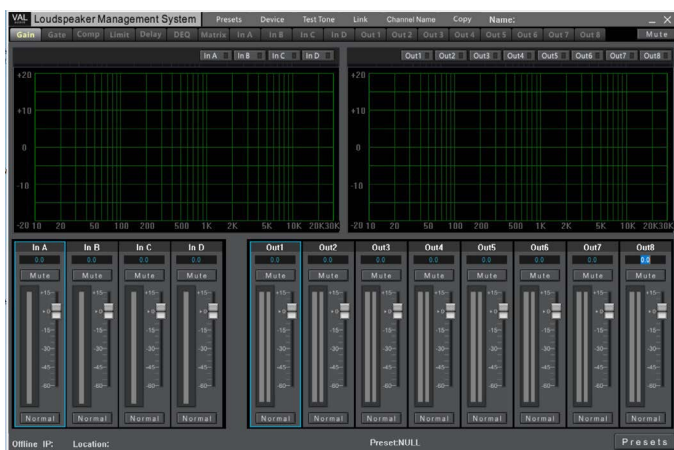
**VAL** audio

Die Liebe zur Musik



## OVERVIEW

VAL audio DSP48 is a cutting-edge networkable loudspeaker management system designed for premium performance and versatility. Equipped with a high-end SHARC DSP and an expanded processing capacity, the DSP48 ensures precise audio management for both complex installations and demanding touring applications.

The system features an intuitive, user-friendly interface, which can be accessed directly from the unit or through the powerful VAL DSP Control Software. Seamlessly integrated with other VAL audio products - including speakers, amplifiers, and microphones - the DSP48 provides superior sound quality, enhanced by custom presets and advanced control features.

Whether you're handling a large-scale project or a live performance, the DSP48 offers unmatched reliability, flexibility, and ease of use, making it the perfect solution for professional audio processing management.

## VAL AUDIO CONTROL SOFTWARE



## KEY FEATURES

- Premium 4 In x 8 Out Networkable Loudspeaker Management System

- Powered by the ADI SHARC 21489 400MHz 32/40-bit floating-point DSP with a 96KHz sampling rate for pristine sound quality

- Uses ELNA electrolytic capacitors and other renowned audio components to deliver a rich, warm sound experience

- Input Processing Features: Dynamic EQ, Delay, Gain control, Noise gate, High-Pass Filter (HPF) & Low-Pass Filter (LPF), 10 customizable filters per input channel

- Output Processing Features: Comprehensive routing options, Delay and gain controls, HPF and LPF filters (up to 48dB/octave), 10 filters, including PEQ, Shelving, Allpass, and Bandpass, Advanced Peak Stop Limiter and Compressors (adjustable threshold, attack, release, and ratio)

- Integrated signal generator supporting sine, white noise, and noise-splitting functions for testing purposes

- Complete matrix routing for seamless input and output control

- User-friendly VAL DSP Control software for precise audio management (Windows compatible)

- Channel linking and copy functions for effortless setup and configuration

- Full port RF protection ensuring safe and reliable operation under various conditions

- Versatile connectivity with Ethernet, USB, RS232, RS485, and GPIO ports, with open protocol support for third-party integration

# DSP48
## Loudspeaker Management System

**VAL**audio

*Die Liebe zur Musik*



| SPECIFICATIONS | |
|---|---|
| Input / Output | 4 in x 8 out |
| THD + Noise | <0.0025% |
| S/N | >112dBA (A-Weighted) |
| Frequency Response | +/-0.5dB (20Hz~20kHz) |
| AD & DA Converters | 24bit-96kHz |
| Max Input/Output Level | +20dB |
| Parametric Equalization | Input 10-band, Output 10-band |
| Filter Type | PEQ / Low-Shelf / Hi-Shelf / ALL PASS |
| Crossover Section HPF/LPF | Butterworth 6/12/18/24/36/48dB per octave<br>Bessel 6/12/18/24/36/48dB per octave<br>Linkwitz-Riley 12/24/36/48dB per octave |
| Mini fixed Delay | <2ms |
| Delay | Input and Output Delay up to 1000ms |
| Power | ~220V / 50 Hz |
| Power Consumption | <20W |
| Device Presets | User Presets: 23 |
| Dimension (WxDxH) | 481mm x 268mm x 45mm |
| Net Weight | 3.6 Kg |