

BA-DB44

Digital Audio Processor

4 × 4 Analog · Dante 4 × 4 · USB-C · PoE



Front Panel



32-bit Float
DSP



4 In / 4 Out
Analog



Dante
4 × 4



AFC / AEC / ANS
Auto Mixer



USB-C
Sound Card



PoE
or DC 12 V

Description

The BA-DB44 is a compact digital audio processor with 4 analog inputs and 4 analog outputs, 4 × 4 Dante network channels and a USB-C sound card. It pairs high-performance A/D and D/A converters with a 32-bit floating-point DSP at 24-bit / 48 kHz for high-quality sound, full matrix mixing and easy-to-use control software. Powered by PoE or DC 12 V, it suits meeting rooms, video conferencing, places of worship, conference centres and public sound reinforcement systems.

Key Features

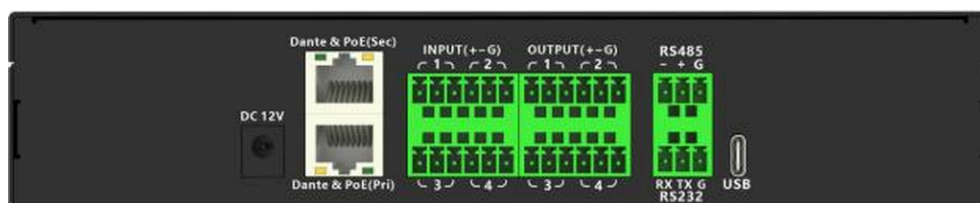
- ✓ Compact digital audio processor with 4 analog inputs and 4 analog outputs.
- ✓ High-performance 32-bit floating-point DSP with all-digital processing.
- ✓ High-performance A/D and D/A converters, 24-bit / 48 kHz sampling.
- ✓ Dante network audio: 4 inputs and 4 outputs.
- ✓ Built-in AFC (feedback cancellation), AEC (echo cancellation), ANS (noise suppression) and automatic mixing.
- ✓ Comprehensive matrix mixing.
- ✓ Input channel processing: preamp, expander, compressor, auto gain, 5-band parametric EQ and ducker.
- ✓ Output channel processing: delay, crossover, limiter, 31-band graphic EQ.
- ✓ Per-channel phase and mute switches, plus 48 V phantom power on inputs.
- ✓ USB-C sound card for playback and recording.
- ✓ PoE powered (802.3af/at) or DC 12 V.
- ✓ RS232, RS485 and Ethernet control, with real-time management of one or many devices.
- ✓ 8 scene presets, with backup to external storage; all software built into the device, so no CD is needed.



Specifications

Model	BA-DB44
Analog Inputs / Outputs	4 balanced/line inputs, 4 balanced/line outputs
Dante Channels	4 inputs, 4 outputs
USB-C Sound Card	1
RS232 / RS485 Interfaces	1 / 1
RJ45 Interfaces	2 (Dante & PoE, primary / secondary)
Sample Rate / Bit Depth	48 kHz / 24-bit
Phantom Power	48 V
Frequency Response	20 Hz – 20 kHz, ± 0.15 dB
THD+N	$\leq 0.003\%$ @ 1 kHz, 4 dBu
A/D Dynamic Range (A-wtd)	120 dB
D/A Dynamic Range (A-wtd)	114 dB
Input Impedance (Balanced)	20 k Ω
Output Impedance (Balanced)	100 Ω
Channel Isolation	100 dB @ 1 kHz, 4 dBu
S/N Ratio	107 dB
Max. Input / Output Level	18 dBu / 18 dBu
Background Noise	-89 dBu
Power Supply	DC 12 V or PoE (802.3af/at)
Power Consumption	< 15 W
Operating Temperature	-10 – 40 °C
Operating Humidity	10% – 90%, non-condensing
Dimensions (W x D x H)	216 x 190.5 x 44 mm
Net Weight	0.8 kg

Rear Panel



Tender Specification

The digital audio processor shall be a compact half-rack unit with a 32-bit floating-point DSP and 24-bit / 48 kHz A/D and D/A converters. It shall provide 4 balanced analog inputs, 4 balanced analog outputs, 4 x 4 Dante network channels and a USB-C sound card, with 48 V phantom power. Processing shall include matrix mixing, automatic mixing, AFC, AEC and ANS. Each input shall have an expander, compressor, auto gain, ducker and 5-band parametric EQ, and each output shall have delay, crossover, limiter and 31-band graphic EQ. Frequency response shall be 20 Hz – 20 kHz (± 0.15 dB), with THD+N $\leq 0.003\%$ and S/N ratio of 107 dB. Control shall be via Ethernet, RS232 and RS485, with 8 scene presets. It shall be powered by PoE (802.3af/at) or DC 12 V, consume less than 15 W, measure 216 x 190.5 x 44 mm and weigh 0.8 kg.