

DSP / Matrix Processor

Model List

- DMX 88D | DSP Matrix 8 Input 8 Output DANTE
- DMX 1616D | DSP Matrix 16 Input 16 Output DANTE

Product Introduction

The DMX 88D and DMX 1616D are premium Digital Signal Processor (DSP) Matrix models featuring integrated DANTE audio networking, ideal for advanced, large-scale audio installations requiring seamless network audio distribution. The DMX 88D provides 8 analog input and 8 output channels, while the DMX 1616D offers 16 input and 16 output channels, both supporting reliable audio over IP.

Powered by the high-performance ADI SHARC 21489 processor delivering 400 MIPS and 1.6 GFLOPS, both models operate at 48 kHz with dynamic ranges of 110 dB (input) and 112 dB (output), ensuring pristine sound with ultra-low distortion (THD+N < -94 dB at 17 dBu). The DANTE interface guarantees lossless, low-latency transmission across multiple devices on standard IP networks.

Advanced features include Acoustic Echo Cancellation (AEC), Automatic Feedback Control (AFC), noise suppression (ANS), and a 12-band British parametric EQ with five filter types for precise tuning. Automatic Gain Control (AGC) and Automatic Noise Control (ANC) further enhance clarity and consistency in any environment. Both models support simultaneous online operation of up to 8 devices and include a built-in USB sound card for seamless integration with ZOOM, Google Meet, Microsoft Teams, Skype, Tencent Meeting, and DingTalk. Users can manage up to 30 devices from a single interface, with comprehensive control via RS232, RS485, and UDP protocols. With DANTE network integration and powerful DSP performance, the DMX 88D and DMX 1616D are ideal for conference rooms, auditoriums, and distributed audio systems, delivering superior sound quality, scalability, and versatility for modern AV environments.

Key Features

- DMX 88D: 8 analog and 8 Dante I/O channels; DMX 1616D: 16 analog and 16 Dante I/O channels.
- ADI SHARC 21489 processor with 48 kHz sampling rate and 40-bit floating-point arithmetic.
- Integrated Dante interface for lossless, low-latency audio transmission over standard IP networks.
- Built-in USB sound card for integration with conferencing software like ZOOM and Microsoft Teams.
- Advanced processing: Acoustic Echo Cancellation (AEC), Automatic Feedback Control (AFC), and noise suppression (ANS).
- 12-band parametric EQ with five filter types plus AGC and ANC for signal clarity.
- Input gain adjustable from 0 to 48 dBu in 3 dBu increments with +48V phantom power.
- Dynamic range of 110 dB (input) and 112 dB (output) with THD+N < -94 dB.
- Supports simultaneous online operation of 8 devices and management of up to 30 devices.
- Control via RS232, RS485, and UDP protocols in a 1U rack-mountable design.



DMX 88D



DMX 1616D



Software Included

Technical Specification

	DMX 88D	DMX 1616D
Processor	ADI SHARC 21489	ADI SHARC 21489 x2
Sampling Rate	48kHz, 24bit	48kHz, 24bit
DSP Floating-Point Arithmetic Engine	40bit	40bit
Analog Input Channels	8 balanced	16 balanced
Analog Output Channels	8 balanced	16 balanced
Dante Input Channels	8	16
Dante Output Channels	8	16
GPID	8	8
Input Gain	0/3/6/9/12/15/18/21/24/27/30/33/36/39/42/45/48 dBu	0/3/6/9/12/15/18/21/24/27/30/33/36/39/42/45/48 dBu
Phantom Power Supply	+48V/10mA max	+48V/10mA max
Frequency Response	(20~20kHz): ± 0.3 dB	(20~20kHz): ± 0.3 dB
Maximum Level	+18dBu	+18dBu
THD+N	-94dB @17dBu	-94dB @17dBu
Input Dynamic Range	110dB	110dB
Output Dynamic Range	112dB	112dB
Channel Isolation	@1kHz: -108dB	@1kHz: -108dB
Input Impedance (Balanced)	5.4K Ω	5.4K Ω
Output Impedance (Balanced)	600 Ω	600 Ω
System Delay	<3ms	<6ms
Working Power Supply	AC110~240V, 50Hz/60Hz	AC110~240V, 50Hz/60Hz
Dimensions (W x D x H)	482 x 260 x 45mm	482 x 260 x 45mm
Shipping Weight	4KG	4KG