

Model List

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

Product Introduction

The DMX 88 and DMX 1616 are cutting-edge Digital Signal Processor (DSP) Matrix models built for professional-grade audio control and performance in diverse applications. The DMX 88 offers 8 analog input and 8 output channels, while the DMX 1616 expands this to 16 input and 16 output channels. Both models feature the powerful ADI SHARC 21489 processor, delivering 400 MIPS and 1.6 GFLOPS of processing power for smooth, accurate audio handling.

Operating at 48 kHz with an input dynamic range of 110 dB and output of 112 dB, these models ensure pristine sound with ultra-low distortion (THD+N < -94 dB at 17 dBu). Designed with flexibility in mind, they feature configurable processing modules and support simultaneous online operation of up to 8 devices. A built-in USB sound card enables seamless video conferencing with platforms such as ZOOM, Google Meet, Microsoft Teams, Skype, Tencent Meeting, and DingTalk. Key features include Acoustic Echo Cancellation (AEC), Automatic Feedback Control (AFC), noise suppression (ANS), and customizable 12-band parametric EQ with five filter options. Both models also include Automatic Gain Control (AGC) and Automatic Noise Control (ANC) for optimal clarity in challenging environments. Users can manage up to 30 devices from a single interface via RS232, RS485, and UDP protocols. Ideal for conference rooms, auditoriums, and large-scale applications, the DMX 88 and DMX 1616 deliver superior performance, control, and versatility.

Key Features

- DMX 88: 8 balanced input and 8 balanced output channels; DMX 1616: 16 balanced input and 16 balanced output channels.
- ADI SHARC 21489 processor with 48 kHz sampling rate and 40-bit floating-point arithmetic.
- Built-in USB sound card for integration with conferencing software like ZOOM and Microsoft Teams.
- Features Acoustic Echo Cancellation (AEC), Automatic Feedback Control (AFC), and noise suppression (ANS).
- 12-band parametric EQ with five filter options 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.
- System delay under 3ms with frequency response of 20Hz–20kHz ± 0.3 dB.



DMX 88



DMX 1616



Software Included

Technical Specification

	DMX 88	DMX 1616
Processor	ADI SHARC 21489	ADI SHARC 21489
Sampling Rate	48kHz, 24bit	48kHz, 24bit
DSP Floating-Point Arithmetic Engine	40bit	40bit
Input Channels	8 balanced	16 balanced
Output Channels	8 balanced	16 balanced
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	<3ms
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