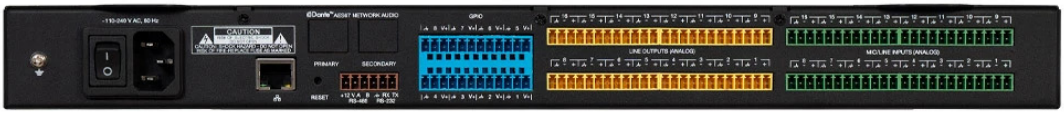
SISTEMAS Y CONTROL / SISTEMAS DE ZONAS / DIGITAL

NMX-1616

16 X 16 AUDIO MATRIX WITH DSP, 8 GPIOS



Dante · DSP · USB · CAMERA TRACKING · 8xGPIO · LOW BANDWIDTH · LOW LATENCY · RACKABLE 1U · SCALABLE INSTALLATIONS · CUSTOMISED CONFIGURATION · UDP

- Great versatility, perfect for installations of any size. Distributed audio and conference systems.
- Configurable DSP in inputs and outputs.
- Echo Cancellation (AEC), Feedback Cancellation (AFC), Noise Suppression (ANS) and Automatic Gain Control (AGC) algorithms.
- Modular configuration software for PC. Customisable user interface and App for Android and iOS touch screens.
- Configurable GPIO and PTZ camera tracking control.

+ Info:
https://fonestar.com/NMX-1616

ESPECIALLY RECOMMENDED IN:

Sports facilities

Hotels

All sectors

DESCRIPTION

16 x 16 audio matrix with DSP and 8 GPIO. The NMX-1616 is an audio matrix with a digital signal processor (DSP) that offers a complete and versatile solution for handling and processing audio signals. With this matrix, sound systems can be configured with simple end-user control. It has powerful audio signal processing tools to match and enhance the signal to any venue or application, and get the best results for sound diffusion. It gives the installer the possibility to configure sound systems with multiple inputs and outputs. And gives the user an easy way to control the sound. It is based on an ADI SHARC 21489 architecture, with 40 floating point bits and a high processing power (400 MIPS, 1600 MFLOPS). It has 16 analogue inputs and 16 analogue outputs. In addition, it features a USB sound card input and output channel for PC playback and recording or use with video calling software. One of the outstanding features of the NMX-1616 audio matrix is its signal processing algorithms. The main ones include: Echo Cancellation (AEC) for video conferences. Feedback Cancellation (AFC) allows flexible placement of microphones and speakers, improving speech amplification and delivering audio where it is needed. Noise Suppression (ANS) effectively eliminates static noise other than speech. Automatic Gain Control (AGC) ensures that the inputs have an optimal level. In addition to other functions such as auto mix and priority control, it also has processing on signal dynamics such as parametric filters, graphic filters, noise gate, expander, compressor, delays, crossover and limiter. Each channel has a volume control that can operate independently or link two channels together to form a stereo channel. The assignment matrix allows inputs to be assigned to outputs with independent volume on each assignment. Achieving to select a different mix for each output. Up to 16 scenes that can be loaded and memory function with auto-save of the parameters selected in the last session. 8 GPIO ports to control actions on the matrix or other devices. For conference system applications, PTZ camera control is available for discussion monitoring. The matrix is equipped with powerful modular configuration software. You can configure each input channel with 5 different processing modules and each output channel with 4 processing modules. The processing algorithms are highly parameterised. It allows for great flexibility in configuration and customisation to provide a solution for each installation, such as audio distribution, conference systems, etc. The configuration software can manage several matrices to form a complex system. With the software it is possible to create customised control panels to run on touch screens, tablets or smartphones (Android and iOS). Where only the functions required for each user can be displayed. The matrix can be connected via an Ethernet port. It has UDP, RS-232 and RS-485 connectivity, and a communication protocol for integration with other control systems. Thanks to its flexibility, it can be used for voice applications such as conference systems or video call rooms and in music systems in restaurants, hotels, shopping centres, etc.

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TECHNICAL CHARACTERISTICS

FEATURES	Audio matrix with DSP, ADI SHARC 21489 architecture 16 analogue inputs (Microphone / selectable 48V line with Phantom). 16 analogue outputs. USB sound card input and output channel. Algorithms: Echo Cancellation (AEC), Feedback Cancellation (AFC), Noise Suppression (ANS), Automatic Gain Control (AGC). Signal processing with 5 modules per input channel including expander, compressor, noise gate, automatic gain control (AGC), priority, parametric filter, graphic filter, priority, acoustic feedback cancellation (AFC) and delay. And 4 modules for each output channel between crossover, parametric filter, graphic filter, delay and limiter. Two-channel stereo linking, Auto Mixing, Echo Cancellation (AEC), Noise Suppression (ANS), Matrix Volume Assignment, 8 GPIOs, 16 scenes, PTZ camera tracking control. Ethernet connection and RS-232, RS-485 control port. UDP, RS-232 and RS-485 protocol. Configuration software and modular user interface with App for touch screens.
INPUTS	16 balanced lines with gain selection in 3 dB steps: 0 dB to -48 dB. Signal level: 24 mV RMS (-30 dBu) ~ 6.15 V RMS (+18 dBu) 5.4K Ohm. 110 dB dynamic range. Euroblock connector Selectable phantom power 48 V (10 mA max.) 1 x LAN port for local area network connection, RJ-45 1 x RS-232 port, euroblock 1 x RS-485 port, euroblock
OUTPUTS	16 balanced lines. Signal level: max. 6.15 V RMS (+18 dBu) 600 Ohm. 112 dB dynamic range. Euroblock connector
CONTROLS	Modular PC control software (input/output routing, DSP functions, equalisation, noise gates, compressor, gain controls, etc.) App for customised user control interface. UDP, RS-232 and RS-485 protocol for integration with other systems. RS-232 and RS-485 for PTZ camera tracking control.
DIGITAL AUDIO	48 KHz, 24 bits
LATENCY	<3 ms
RESPONSE	20-20,000 Hz ±0.3 dB
DISTORTION	THD+N harmonic: <0.002% @4dBu
S/N RATIO	112 dB
POWER SUPPLY	100-240 V AC, 50-60 Hz, 40 W
DIMENSIONS	482 x 44 x 268 mm depth. 1 U 19" rack
WEIGHT	3 kg
OPTIONAL	NMX-WP: Wall control unit TAB-10-16: 10" Android touch screen

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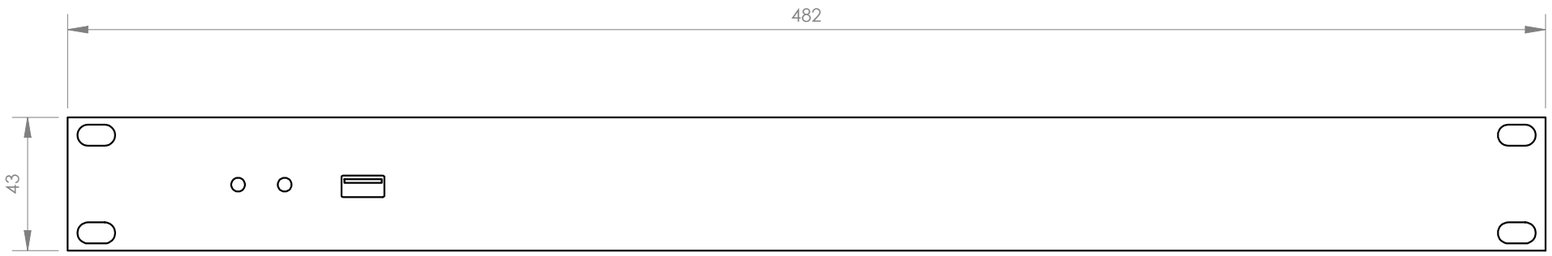

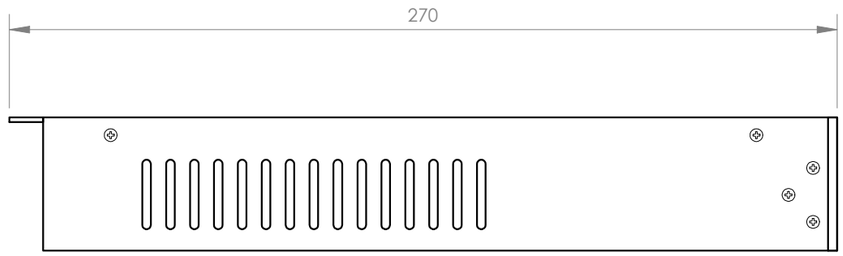

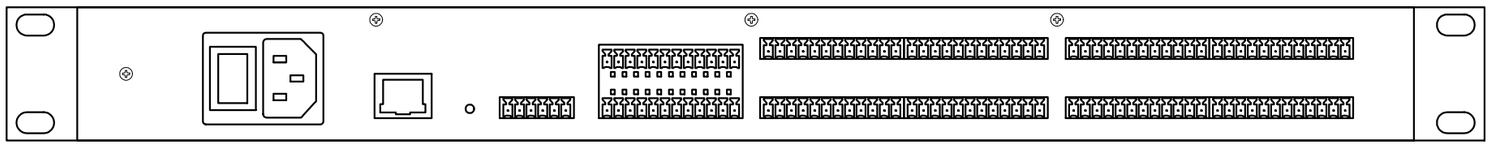

FONESTAR	Model	Description	Units	Scale
	NMX-1616	16 X 16 AUDIO MATRIX WITH DSP	mm	1:2