TECH LIBRARY A&E Specification



The unit shall be a 1U rack-mountable 8x8 digital audio matrix processor designed for audio installations. It shall feature 8 analogue inputs and 8 analogue outputs, all electronically balanced and utilizing Phoenix-type 3-pin connectors.

Each input shall include the following processing: Gain control from -30dB to +15dB in 0.1dB steps; 8-band parametric EQ with selectable filter types (parametric, low shelf, high shelf, notch, band-pass); 2 bands of dynamic EQ; high-pass filter up to 24dB/octave; compressor; delay of up to 1.3 seconds in 10.4µs steps.

Each output shall include the following processing: Gain control from -30dB to +15dB in 0.1dB steps; 16-band parametric EQ with selectable filter types; high-pass and low-pass filters up to 48dB/octave; delay of up to 1.3 seconds in 10.4μ s steps; two-stage PXL limiters for loudspeaker protection.

The processor shall include a full matrix mixer, allowing routing of any input to any output channel.

The processor shall be controllable via D-Net software for PC, Mac, and iPad over Ethernet or Wi-Fi. It shall support third-party control systems such as Crestron™ through a simple Ethernet control protocol.

The processor shall include 4 general purpose input (GPI) ports. One of these shall be configurable for connection to normally open or normally closed fire alarm triggers to mute all channels for EVAC purposes. All four inputs shall be configurable for local memory recalls.

The processor shall be capable of storage of up to 100 presets, with selective recall options for input, matrix, and output sections.

Networkable, PoE-enabled remote controllers shall be available to complement the unit, including wall plate controllers in both US and EU formats, and iPhone virtual remote control with the configuration stored within the unit and not on the phone for additional security.

The processor shall operate at a 96kHz sample rate and provide a latency of 0.427ms (analogue in to analogue out). The processor shall have a frequency response from 12Hz - 32kHz (± 0.2 dB) and a dynamic range greater than 119dB ('A' weighted, analogue in - analogue out).

The unit shall have an integrated power supply accepting AC mains voltages of 90-250VAC, 50/60Hz, 20W max via an earthed 3-pin switched IEC male connector mounted on the rear chassis.

The unit shall be the NST Audio VMX88L.