

# TECH LIBRARY

## A&E Specification

ID48X



The unit shall be a 1U rack-mountable 4x8 digital audio matrix processor designed for audio installations. It shall feature 4 inputs and 8 outputs, all electronically balanced and utilizing XLR-type 3-pin connectors. It shall support both analogue and AES/EBU inputs and outputs, switchable in channel pairs.

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); 3 bands of dynamic EQ; 28-band graphic 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 10.4µs steps; two-stage PXL limiters for loudspeaker protection. FIR support shall also be included up to 2048 total taps with delay compensation.

The processor shall include a full matrix mixer, allowing routing of inputs to any output channel. A free routing mode with pre-configured crossover set-ups shall also be included.

The processor shall be controllable via D-Net software for PC, Mac, and iPad over Ethernet or Wi-Fi. It shall also feature front panel remote access using a USB-C connection with bridging onto the Ethernet network. It shall support third-party control systems such as Crestron™ through a simple Ethernet control protocol.

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 system 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 ( $\pm 0.2$ 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 ID48X.