

# DX4.0

## Networked System Controller



### Features

- Four input channels and eight output channels loudspeaker processor and matrix
- Analogue, AES3 and Dante™ digital audio inputs
- High performance 96kHz DSP
- Remote control and monitoring over Ethernet via Martin Audio VU-NET software
- FIR optimisation for Martin Audio's O-Line
- VX limiting gives a passive enclosure the same protection as a fully active unit
- Comprehensive suite of EQ's, delays and all pass filters
- Global mains operation 100-240V, 50-60Hz

### Applications

- Loudspeaker system digital controller
- Front-of-house matrix to feed Dante digital audio to iKON amplifiers powering Martin Audio loudspeaker systems
- Use with Martin Audio O-Line for FIR Optimisation
- Use with Martin Audio U-Hub to feed digital audio and network to an MLA Series array/subwoofer array via a single cable

The Martin Audio DX4.0 is an advanced loudspeaker controller and system matrix with four input and eight output channels.

Class-leading sonic performance is achieved by state-of-the-art audio converters and DSP algorithms, with a 96kHz sampling frequency delivering a nominally flat response beyond 40kHz.

Connected via Ethernet, system remote control and monitoring is done via Martin Audio's VU-NET proprietary software application, while a front panel interface gives local control of features.

Four analogue/AES3 inputs and eight analogue/AES outputs are available, with AES3 inputs and outputs selected in pairs. Dante™ digital audio networking is also provided for digital audio distribution and control, with automatic fall back to analogue or AES3. By converting analogue or AES audio to Dante, the DX4.0 provides 'on-ramp' entry to digital audio networking.

The DX4.0 features a sophisticated loudspeaker limiter suite which incorporates peak, RMS and excursion limiting, as well as multiband limiting for passive two-way systems. High-pass filtering, three shelving filters and six parametric filters are provided for each input channel, with crossover filters, two shelving filters and eight parametric filters on each output channel.

The DX4.0 supports FIR filters for use with optimisation of Martin Audio's O-Line and can also be used with Martin Audio's U-Hub to feed digital audio and network to an MLA Series array/subwoofer array via a single cable.

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### Technical Specifications

#### General

TYPE	4 input/8 output digital loudspeaker processor
OPERATING TEMPERATURE	0 to 45°C
HUMIDITY RANGE	0 to 80% RH (non-condensing)

#### Audio Performance

INPUT IMPEDANCE	>10kΩ balanced
OUTPUT IMPEDANCE	<100Ω balanced
MAX INPUT LEVEL	+20dBu
MAX OUTPUT LEVEL	+18dBu into 600Ω
FREQUENCY RESPONSE	10Hz - 40kHz
INPUT DYNAMIC RANGE	>120dBa typ.
OUTPUT DYNAMIC RANGE	>118dBa typ.
TOTAL HARMONIC DISTORTION	<0.008% typ. 20Hz-20kHz

#### Digital Signal Processing

SAMPLE RATE	96kHz
AES3 INPUT SAMPLE RATE	28kHz – 108kHz
AES3 OUTPUT SAMPLE RATE	96kHz

#### Power Supply

AC OPERATING RANGE	100-240V +/-10%
POWER CONSUMPTION	30W

#### Control and Monitoring

PROTOCOL	Ethernet
CONTROL APPLICATION	Martin Audio VU-NET™

#### Connectors

AUDIO INPUT	4 x 3 pin female XLR for analogue or AES3 pairs
AUDIO OUTPUT	8 x 3 pin male XLR for analogue or AES3 pairs
ETHERNET	1 x shielded RJ45
DANTE™ NETWORK	2 x shielded RJ45, primary and secondary
AUX PORT	Phoenix connector for contact closure
MAINS POWER	3 pin IEC

#### Physical

DIMENSIONS	(W) 482mm x (H) 1U/44mm x (D) 184mm
	(W) 19in x (H) 1U/1.75in x (D) 7.2in
WEIGHT	2.7kg (6lbs)

