

MIMO4040DN

DIGITAL MATRIXES

Digital Matrix with Dante™ Interface



PRODUCT OVERVIEW

MIMO4040DN is a digital matrix with native processing of 40 inputs and 40 outputs (8 analogue inputs, 8 analogue outputs, 32 Dante™/AES67 digital inputs and 32 Dante™/AES67 digital outputs). Incorporating audio over IP technology, MIMO4040DN allows signal transmission using a Local Ethernet network, suppressing cabling distance limitations. It features accessories from WPNET Series connected by Ethernet interface and PoE DC supply ready. This ensures flexible and efficient installations. MIMO4040DN is also capable of executing EclerNet projects embedded into its processor and electronics engine, acting as a UCP (User Control Panels) server within an EclerNet devices network.

KEY FEATURES

- 40 inputs x 40 outputs digital audio native matrix, with
- Analogue inputs / outputs and Dante™ support with 32 input channels and 32 output channels:
 - 8 MIC / LINE analogue audio inputs
 - 8 LINE analogue audio outputs
 - 32 Dante™/AES67 digital input channels
 - 32 Dante™/AES67 digital output channels
- 8 GPI ports
- 8 GPO ports
- 2 Dante™ interfaces (primary and secondary), available for configuration of redundant Dante™ networks
- 1 Ethernet programming and control interface (EclerNet, UCP, TP-NET and WPNET series control panels)
- 1 serial control port, RS-232 (TP-NET)
- Embedded project manager and server of the project's integrated UCP panels
- Connection of all peripherals directly via EtherNet network, and without local wiring (remote controls WPNET series, PAGNETDN paging station, WP22DN wall panel Dante™/AES67 interface, etc.)

APPLICATIONS

- Commercial
- Hospitality
- Education
- Corporate
- Sports and wellness

ACCESSORIES & COMPATIBLE DEVICES

- WPNET4KV
- WPNET8K
- WPNETEX
- WP22DN
- WPNETTOUCH
- PAGNETDN



WPNETTOUCH

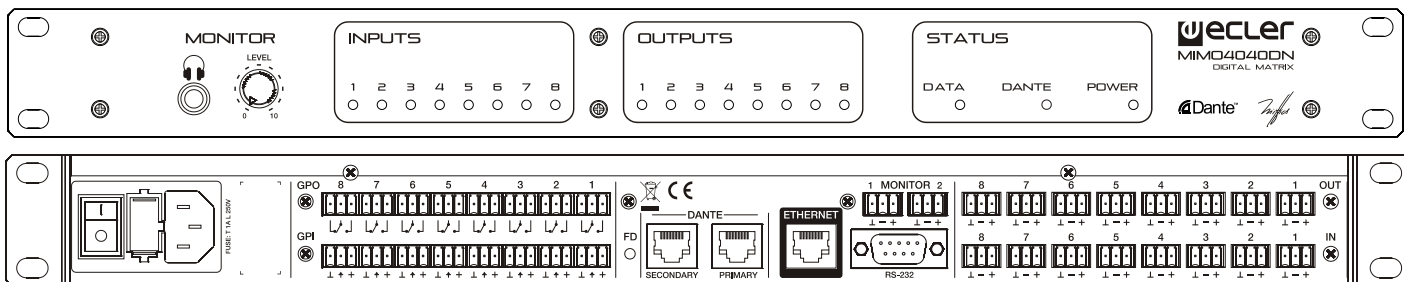


PAGNETDN



WPNET4KV

MECHANICAL DIAGRAMS



TECHNICAL SPECIFICATIONS

MIMO4040DN	
DSP	
CPU	Quad core 64bits 1GHz
Sampling rate	48 kHz
Latency analog IN to analog OUT	<4.3 ms.
Converters	
Resolution	24 bit, AKM
Dynamic range	AD:110dB, DA: 115dB
Analogue	
8 Input / Output	Terminal block (Symmetrical)
2 monitor output	Terminal block (Symmetrical)
Headphones connector	Jack ¼
Analogue input headroom	+27dBV = +30dBu
Max. output level	+18dBV = +21dBu
Input sensitivity @0dBV out	from -50dBV to +10dBV in 0.5dB steps
Input impedance	Balanced, >4kΩ
Phantom power	+42VDC, 5mA max. software switched
Headphones	>200mW/200Ω
Frequency response (-3dB)	5Hz to 24kHz
Flatness	better than ±0.1dB
THD+Noise @ 1kHz, 0dBV input (line)	<0.004%
THD+Noise @ 1kHz, -40dBV input (mic.)	<0.008%
Output Noise floor FFT (20Hz - 20kHz)	better than 115dB
Interchannel crosstalk (20Hz - 20kHz)	better than 90dB (100dB typ.)
Channel Leakage (20Hz - 20kHz)	better than 100dB (115dB typ.)
CMRR 20Hz- 20kHz	65dB typ.
Dante™/AES67 Audio interface	
Dante/AES67 Network Tx / Rx channels	32 / 32
Latency	1 / 2 / 5 ms (selectable)
Connector	1xRJ45 primary, 1xRJ45 secondary
Cable length between devices	100m CAT5e/CAT6

Processing	
Input level (x40)	Range: from Off to 0 dB Mute: Yes Signal Polarity reverse: Yes Metering: VU+clip pre & post fader
Output level (x40)	Range: from Off to 0 dB Mute: Yes Solo: Yes Signal Polarity reverse: Yes Metering: VU+clip pre & post fader
Output gain (x40)	Range: from 0 to +6 dB
Input delay (x40)	from 0 to 1000 ms. Units: sec/ms/m/cm.
Output delay (x40)	from 0 to 1000 ms. Units: sec/ms/m/cm.
Parametric EQ types (4max/input - 8max/output)	Bypass / On-Off all channels Param Eq. Freq: 20Hz-20kHz; Gain: -60/+12 dB Q: 0.3 to 200 Low & High Shelf 6/12 dB/oct Low & High Pass 6/12 dB/oct All Pass 1/2 order
High & Low pass output X-over filters (x40)	Bypass On-Off Butterworth in 6/12/18/24 dB/oct Bessel in 12/18/24 dB/oct Linkwitz-Riley in 12/24 dB/oct
Input noise gate (x40)	Bypass On-Off Threshold: from -80 dBV to +18 dBV Depth: 0 dB to 80 dB Attack time: from 0,1 ms. to 500 ms. Hold time: from 10 ms. to 3000 ms. Release time: from 10 ms. to 1000 ms.
Input compressor / limiter (x40)	Bypass On-Off Threshold: from -36 dBV to +18 dBV Knee: hard / soft Ratio: inf:1 (limiter) Attack time: from 0,1 ms. to 500 ms. Release time: from 10 ms. to 1000 ms. Make up gain: from 0 to +10 dB
Input Frequency Shifter (x40) (Feedback Loop Reducer) Output Limiter (x40)	Per input. ON / OFF function Bypass On-Off Threshold: from -36 dBV to +18 dBV Attack time: from 0,1 ms. to 500 ms. Release time: from 10 ms. to 1000 ms.
Built in Signal Generator	Sine: from 20 Hz to 20 kHz Polarity: from 20 Hz to 20 kHz White noise Pink noise
Stereo Linking	Adjacent input / output channels Linked processing

Mix Matrix	Matrix routing linked Size: 40x40 Analogue in/out 8x8 Dante/AES67 network in/out 32x32 Vol: Input, Output, Crosspoint Mute: Set/Clear individual, row, column, all Input /output Mono/stereo selector Meter: Input /output VU and clip
Pager (x10)	Input: IN1 to IN40 Priorities: 10 (1 max, 10 min) Depth: 0 dB to 80 dB Attack time: from 5 ms. to 2000 ms. Release time: from 50 ms. to 3000 ms. Chime Source: None, Melody 1, Melody 2 Chime Volume: from -12dB to 0dB
Mechanical	
Dimensions	482,6 x 44,0 x 266,5mm / 19.0"x 1.7" x 10,5"
Weight	3,25kg / 7.17 lb.
Power supply	
Mains	90-264VCA 47-63Hz
Power consumption	30VA
Miscellaneous	
Management Connectivity	Ethernet Base-Tx 10 /100Mb, 1GB Auto X-Over CAT5e or better
GPI	8, from 0 to 12VDC or TTL level
GPO	8, 3 poles isolated relay; 1A, 48VDC max.
Aux. Power Supply for Remotes & GPI	+12VDC, 1.2A max. (short circuit protected)
Time and date retention (battery)	> 3 months
Programming and control application	
EclerNet Manager	From v5.00



All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

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