

XDIP

BASE DEVICE // DIGITAL-AUDIO

NEXUS Dante interface

THE DANTE INTERFACE FOR NEXUS BASE DEVICES

THE XDIP CARD ESTABLISHES THE CONNECTION BETWEEN DANTE AND NEXUS NETWORKS. WITH FOUR ETHERNET PORTS, IT OPERATES AS A SWITCH AND SUPPORTS REDUNDANT DANTE CONNECTIONS.



The XDIP card is the perfect solution for integrating the proprietary Dante audio network into the NEXUS world. With up to 64 input and output channels, it is perfect for integrating DAWs for recording and playback applications or external, Dante-enabled audio devices for additional I/Os. A sample rate converter allows for operating both networks with different sample rates. Preferably, the XDIP card provides the very accurate NEXUS clock to the Dante network as a master. Of course, the NEXUS system can also use the clock of the Dante network as a sync source. For full flexibility, each input and output can be controlled with its own digital gain and allows the XCPU's signal tone generator to be switched on so that all settings can be made within the NEXUS world if no Dante signals are available.

The first two RJ45 ports can be configured as primary and secondary to be active in two redundant networks. XDIP cards are suitable for recording, playback or virtual soundchecks. Combining multiple XDIP cards within a NEXUS network is easily possible.

Dante interface to the NEXUS network

Dante is the Audio-over-IP (AoIP) format of the Australian company Audinate, that can realize real-time audio streams in Ethernet networks. The XDIP board is the interface between NEXUS and Dante.

Use of the Gigabit Switch

The four Ethernet ports act switch to connect more network devices and/or support redundant Dante network cabling (primary/secondary).

Sample rate conversion

For asynchronous operation of NEXUS and Dante networks, the XDIP provides sample rate converters on all inputs and outputs. The output-side converters are synchronized by the incoming Dante signal so that sampling rate and word clock are corresponding with the Dante signal.

Using Dante as a clock master for NEXUS

The clock of the Dante network can be used to synchronize the NEXUS system.

Relocking and stabilization of the Dante clock

The XDIP uses its own special hardware PLL to stabilize the Dante network clock in case of using it as NEXUS clock source. Nonetheless, users should consider using the SRCs instead when encountering clock stability problems.

CONNECTIONS

XDIP_05	1 x 4TE		
RJ45	4 x	Dante	Bidirectional



TECHNICAL DATA

Dante

Data formats	Dante Audio-over-IP technology (using Audinate Brooklyn II module)
Channels	64 bidirectional at 44,1/48 kHz 32 bidirectional at 88,2/96 kHz 16 bidirectional at 176,4/192 kHz
Sample rates	44,1/48 kHz, 88,2/96 kHz when using synchronous connections 44,1...192 kHz when using SRCs
Amplitude resolution	16 Bit 20 Bit 24 Bit 32 Bit
Latency	Adjustable for the network; $\geq 0,43$ ms
Configuration	Input gain and phase Sample-rate converters Ethernet switch

Interfaces

Data rate	100/1000 Mbit
Cable length	Max. 100 m, CAT5e or better

Sample rate converter

Amplitude resolution	24 Bit
Conversion range	32...192 kHz
Distortion (THD+N)	130 dB (typical)
Latency	1,2 ms (typical)

Operation conditions

Temperature range	0 °C to +50 °C
Humidity	Max. 90 %, non-condensing

Storage conditions

Temperature range	-35 °C to +70 °C
Humidity	Max. 90 %, non-condensing

Power supply

Voltage	+4,75...5,25 V
Current	Max. 850 mA (SRCs switched on)

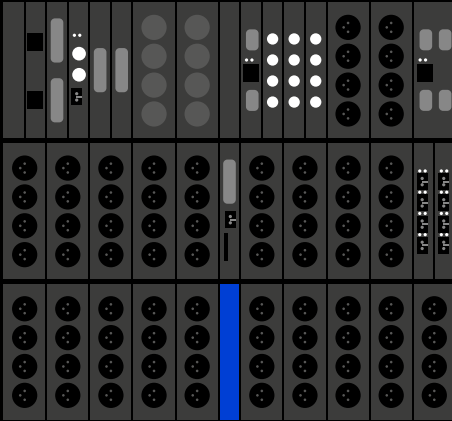
Mechanical data

Weight	0,24 kg
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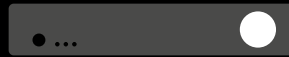
NEXUS // NETWORKED AUDIO MATRIX

NOW, IT'S TIME FOR YOU TO DEFINE YOUR SYSTEM'S FUTURE.

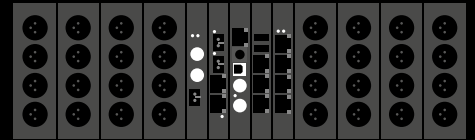
Every installation is unique, requiring a system that aligns perfectly with its specific requirements. Our commitment to customised solutions ensures that each scenario receives the ideal system configuration. Are you looking for a modular design that offers flexibility and seamless expansion? Or do you prefer the stability and simplicity of a fixed system? Perhaps a combination of both, blending flexibility with permanence, will best meet your needs. Would you like to continue using your proprietary system or network via IP? NEXUS supports both options, keeping you always up-to-date with maximum freedom and performance. With STAGETEC, our NEXUS networked audio matrix systems will serve as the reliable heartbeat of your installation.



NEXUS modular



NEXUS compact



NEXUS 4split

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