

English

HXETR

High channel
AES/EBU-Input/output card

STAGETEC

AUDIO. VIDEO. IP.
SIGNALMANAGEMENT

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The AES/EBU input-output cards with high packing density for large channel numbers in tight spaces

The small size while having a high number of AES3 inputs and outputs makes the HXETR cards ideal for applications where many external devices have to be connected to a NEXUS system via AES/EBU signals in the confined spaces. 8 inputs and 8 outputs together add up to 32 audio channels.

HXETR boards are the most efficient solution for exchanging large quantities of digital audio signals with a NEXUS system. Due to their enormous packing density, these efficient I/O boards are particularly suitable for fixed installations in which many AES3 signals have to be managed. With eight input and eight output interfaces each card can receive 16 audio channels and send 16 channels. Digital level controls are integrated for each input channel so that signals can be adjusted in level immediately as they enter the NEXUS system. All inputs are equipped with a self-sufficient sampling rate converter, which can be used to adjust externally different clock rates to the inputs on the NEXUS system clock. It can also be synchronized to any input. Although one card occupies only 4DU width, but manages a total of 32 audio channels. While the version with Sub-D connectors is ideally suited for the production of insusceptible, firmly screwed, rack-internal cabling, the RJ45 version is particularly suitable for achieving significant savings in domestic installations: Using simple CAT5 cables, any electrician can remove connection panels from the base units very cost-effectively. Expensive 110 Ohm cables can be avoided due to the unique circuit design.

Available as variants with Sub-D or RJ45 connections

This module can optionally be supplied with different front panels, the electrical conversion remains the same. The Sub-D variant is available, which is suitable for permanently wired installations. With the RJ45 variant, four AES3 channels are each connected to one socket and enable fast and cost-effective cable laying with conventional Cat5 cables (or better). For signal sources that are to be connected locally via XLR connectors, the RJ45-ADP adapter circuit board, which converts RJ45 back to XLR, is available as an option.

High-density card with 8 AES3 inputs and 8 AES3 outputs

This board offers high channel density, meeting a high demand for required inputs, especially in situations requiring portability or low weight.

Support of S/P-DIF signals

Since the professional AES/EBU signal and the consumer format S/PDIF differ only in the electrical level, the HXETR cards offer the possibility to select the type of input or output in the settings. In this way, both formats can be received and transmitted.

Adjustable digital gain in the inputs and outputs

For input signals with a level too low, the level can be digitally amplified by 20 dB. A reduction is also possible. A switchable limiter protects against clipping.

Sampling rate converter in all inputs

The sample rate converters in the inputs can be switched on manually or operated in auto mode; the board automatically detects whether the incoming frequency corresponds to the NEXUS system clock. A sampling rate of 44.1/48 kHz; 88.2/96 kHz or 176.4/192 kHz can be set for each output. In addition, the outputs can also be synchronized to the paired input of the same module.

Transparent transmission of additional data in the AES3 data stream

The NEXUS network is able to transparently transmit an AES3 data stream including meta data. If no data is available in transparent mode, NEXUS internal data is output. If additional data is transmitted on only one channel, it is transmitted to the other channel.

CONNECTIONS			
Variant: D-Sub	1 x 4DU		
D-Sub 25 Socked female	2x	AES/EBU, S/PDIF	Input
Variant: RJ45	1 x 4DU		
RJ45	4x	AES/EBU, S/PDIF	Input
Variant: D-Sub	1 x 4DU		
D-Sub 25 Socked female	2x	AES/EBU, S/PDIF	Output
Variant: RJ45	1 x 4Du		
RJ45	4x	AES/EBU, S/PDIF	Output

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TECHNICAL SPECIFICATIONS	
Formats	
Audio data	AES/EBU professional and consumer formats compliant with AES3-1992r (1997), IEC60958, EIAJCP-1201, and AES11-1997
Non-audio	The card transparently passes non-audio data through.
Audio data	24-bit (with or without SRC)
Ancillary data	Evaluation and transparent passthrough of AES/EBU ancillary data (CUVZ)
Audio Data	
Channels	8 stereo inputs, 8 stereo outputs (i. e. 16 mono channels)
Sample rates	NEXUS system clock (44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz); 32...192 kHz with sample-rate converters enabled
Latency	2 samples (sender); 7 samples (receiver)
Configuration	
	Sample-rate converter on each input Gain (mute...+20 dB) and phase inversion per input Gain (mute...+20 dB) per output
Inputs	
Diff. input sensitivity	150 mV (min.)
Impedance	110 ohm
Recommended cable length	100 m (max.)
Outputs	
Diff. output voltage	3,3 V
Impedance	110 ohm
Recommended cable length	100 m (max.)
Sample Rate Converter	
	Input converters, separately engaged
Distortion factor (THD+N)	-130 dB (typ.), -115 dB (max.)
Latency	1.2 ms @ 48 kHz (SRC output frequency) 0.6 ms @ 96 kHz (SRC output frequency)
Sample rates	32...192 kHz
Operation Conditions	
Temperature range	0° C to +50° C
Max humidity	max. 90 %, non-condensing
Storage Conditions	
Temperature range	-35° C to +70° C
Max humidity	max. 90 %, non-condensing
Power Supply	
Voltage	typ. +5 V
Current	380 mA at 48 kHz, sample rate converter off 500 mA at 48 kHz, sample rate converter on 600 mA at 96 kHz, sample rate converter on 700 mA at 192 kHz, sample rate converter on
Mechanical Data	
Weight	0,25 kg

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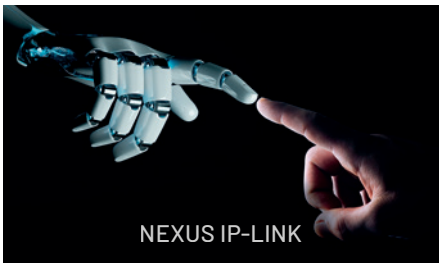
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