

HXAD

BASE DEVICE // ANALOG-AUDIO

NEXUS high channel-count ADC

THE HIGH-DENSITY INPUT CARD FOR STEREO LINE SIGNALS

UP TO +15 DBU

HXAD NEXUS CARDS OFFER EIGHT ANALOG STEREO LINE INPUTS (16 AUDIO CHANNELS). VERSIONS WITH D-SUB OR RJ45 CONNECTORS ARE AVAILABLE, WHICH ARE PARTICULARLY SUITABLE FOR APPLICATIONS THAT REQUIRE SMALL SIZES WITH HIGH AUDIO QUALITY AT THE SAME TIME.



The HXAD card is the best way to feed larger amounts of stereo signals into a NEXUS system when space is limited. The 24-Bit A/D converter can digitize 16 signals with typical line levels. This analog input board also features STAGETECs innovative circuit design with minimal converter errors and transformer isolated input stages. The dynamic range of 112 db (A) and the extremely low distortion factor of only 0,001 % at 15 dBu allow a faithful reproduction of any typical analog signal. The unbeatable amplitude frequency response of +/-0,05 dB at 20 Hz - 20 kHz and the high aliasing suppression underline the outstanding quality known from STAGETEC products. With its galvanic isolation in pairs, the high-density input card allows efficient, high-quality connection of stereophonic sources to a NEXUS network.

To keep the packing density in systems as high as possible, this 16-channel card is only available with D-sub or RJ45 connections in 4 HP width. The use of cards with RJ45 sockets makes it possible, especially in fixed installations, to have common CAT5 cables laid as an inexpensive alternative to expensive, shielded audio cables. STAGETECs extraordinary inputs ensure that the signal quality does not suffer as a result.

“Stereo version” of the outstanding XAD+ converter card

With a dynamic range of 112 dB and a maximum input level of 15 dBu, this NEXUS board is a space-saving replacement for XAD+ when it comes to stereo-phonics signals.

High-density card with 16 audio channels for large numbers of inputs in confined spaces

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



Version with transformers in each input channel even with high channel density

Despite the compact circuit design, each channel is transformer isolated. The input pairs (1/2, 3/4, etc.) share a common ground potential, since the module is intended for the connection of stereo and multi-channel devices. STAGETECs transformer-insulated inputs have significant advantages over conventional circuits: They are insensitive to magnetic fields and have a lower distortion factor, especially at high and low levels and at low frequencies. They also offer high symmetry, galvanic isolation and a lower input capacitance.

“Ground Lift” disconnectable ground connection

The connection to the common ground can be cancelled separately for each input pair (1/2, 3/4, etc.). This is done via DIP switches, which prevent the connection of the screen line to the internal analog ground.

Tenders under high cost pressure

Tenders can often be tight with the budget, but you don't want to forego quality. The HXAD input card comes with 16 high-quality line level converters in just one card, which saves space in the NEXUS base unit and also the cost of a second input card. For an effective balance of space, price and channel capacity, the HXAD card, of course in the usual STAGETEC quality. The slim 4HP wide design with D-Sub or RJ45 jacks takes up little space, in contrast to the XAD+ card in XLR design which has eight times the width required to accommodate the same number of channels. The main difference to the XAD+ card is the common mass of the channel pairs and the double number of inputs.

CONNECTIONS

Variant: D-Sub		1 x 4 DU	
D-Sub	2 x	Line level	Input
25 socked female			
Variant: RJ45		1 x 4 DU	
RJ45	4 x	Line level	Input



TECHNICAL DATA

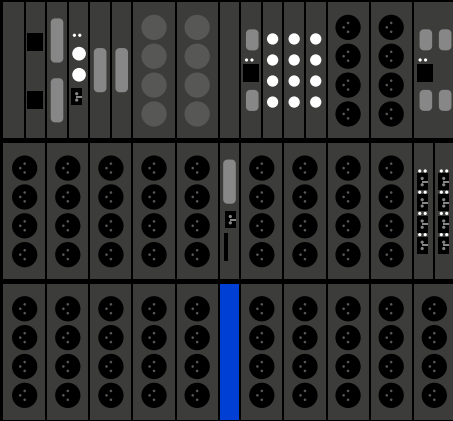
Configuration, available separately for each channel

	Test-tone generation phase inversion
A/D conversion	
Type	Delta sigma converter
Resolution	24 Bit, 128 x oversampling
Audio data	
Input level	Max. 15 dBu
Dielectric strength	Signal wire enclosure: < ± 200 V (DC) (common-mode signal) Signal wire signal wire: < 20 V (AC) (dielectric strength RMS) Shield enclosure: < 48 V (DC)
Frequency response	20...20,000 Hz (+0,0 dB, -0,1 dB)
Input impedance	> 10 k Ω
Input impedance CMR	120 dB, < 100 Hz typical 100 dB, 1 kHz typical 70 dB, 15 kHz typical
Gain	-20...+20 dB, digitally adjustable
Distortion factor (THD+N)	0,001 %, 15 dBu typical < 0,002 % at 1 kHz granted 0,01 %, -15...+15 dBu typical < 0,02 % granted < 0,3 % at -60 dBFS, 20...20,000 Hz
Dynamic range	112 dB (A), 0 dBFS = 15 dBu typical
Idle channel noise	-109 dBFS (CCIR-RMS) typical
Modulation noise	-110 dBFS CCIR RMS typical (noise at signal presence)
Crosstalk attenuation	> 110 dB (20...20.000 Hz)
HF resistance	HF-demodulation resistant according to IRT standards (IRT-Pflichtenheft 3/5) and European standards
Sample rates	44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz
Latency	0,33 ms, 48 kHz 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	+4,9...5,2 V
Current	500 mA
Mechanical data	
Weight	0,25 kg

NEXUS // NETWORKED AUDIO MATRIX

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

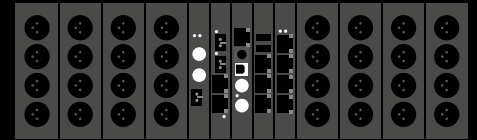
Every installation is unique, requiring a system that aligns perfectly with its specific requirements. Our commitment to customised solutions ensures that each scenario receives the ideal system configuration. Are you looking for a modular design that offers flexibility and seamless expansion? Or do 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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