

English

XTI

Data transfer card

AUDIO. VIDEO. IP.
SIGNALMANAGEMENT

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I/O card for transparent serial control signals in the NEXUS network

The XTI cards offer serial interfaces in the NEXUS system, whose data is transparently transmitted independently of audio signals. Remote devices can be connected via the network and even between different ports and cards via the matrix. Furthermore, in conjunction with other card types such as HDSDI or Dolby cards, it is possible to access their serial data from anywhere within the NEXUS network. MIDI and LTC can be linked to the Stage Tec mixing consoles via XTI boards.

XTI transmission cards allow external serial data to be forwarded and distributed over the NEXUS network. Similar to the routing of audio signals, these data connections can even be switched back and forth between different devices via the matrix. In addition to this transparent handling of data connections, i.e. independent of the NEXUS system, there are a large number of interesting, combined applications. This allows the serial data of other NEXUS boards to be sent to and accessed from any XTI boards in the system. The other way around is of course also possible. This function for transmitting metadata to the XSDI/XHDI video embedder/deembedder boards or the XDED/XDEE Dolby-E encoder/decoder boards is of particular interest. Other applications include Stage Tec's mixing consoles that process MIDI and Longitudinal Time Code (LTC). These signals can be fed into the network via XTI cards, forwarded and transferred directly to the console. A special feature is the transmission of a control signal via a MADI connection. The data of an XTI port can be embedded in a MADI audio channel and thus transferred beyond a single NEXUS system .XTI cards are available in two designs: with two serial ports with 4 HP width and with four ports on 8 HP. To cover a wide range of applications, the XTI board transmits the common control protocols such as RS232/422/485, MIDI, DMX or the synchronous format LTC. In many installation applications, the possibility of using different electrical interfaces on both sides of a connection is of great interest as long as the connected devices use the same protocol. XTI cards can also be used as format converters for serial interfaces.

Galvanic isolation of inputs and outputs
The interfaces of the XTI are galvanically isolated.

Level adjustment when converting different signals
The levels of signals are adapted, for example, when converting an RS 232 into an RS 422 signal.

Bidirectional transparent transmission
Data streams coming from one XTI board can be routed over a virtual cable to any other board on the NEXUS network.

Machine control via MMC
The MIDI Machine Control (MMC) is a widely used and easy-to-use solution to synchronize different devices to the same timeline, as required when working with DAWs or other playback systems , and the XTI card allows the MIDI protocol to be routed and distributed across the entire NEXUS network. With functions such as Play, Stop and Locate, a device control with common hardware and software can be set up very quickly by sending transport and control messages.

Distribute lighting control with NEXUS
The XTI makes additional cabling work for lighting installations unnecessary: instead of one or more electrical cables, the lines of the NEXUS audio and control network are used without any further effort. With the help of the transparent transmission module, DMX control data can be fed into a base unit at any point, output and, thanks to fiber optic technology, protected against interference on its way to its destination. To save space and leave the interfaces open for the configuration of different formats, the connections of the XTI card are designed as 15-pin D-Sub sockets and can of course guarantee an effortless connection with a pre-assembled adapter cable.

CONNECTIONS			
Variant: 4 Ports	1 x 8TE		
D-Sub 9 Socked female	4x	RS 232, RS 422, RS 485, MIDI, DMX, LTC	Output
Variant: 2 Ports	1 x 4TE		
D-Sub 9 Socked female	2x	RS 232, RS 422, RS 485, MIDI, DMX, LTC	Output

TECHNICAL SPECIFICATIONS	
Characteristics	
Data formats	RS 232, RS 422, MIDI, DMX, LTC etc.
I/O ports	4 ports (standard version); 2 ports (4-HP version)
Data rate	125 kBaud (max.) 250 kBaud (max., in double-speed mode)
Jitter	1 µs (typ.); 0.5 µs (typ., in double-speed mode)
Latency	< 10 ms (depends on the overall system)
RS 232 format	
Output voltage	5 V (min.) on RL = 3 kilohm
Input voltage	–25 V (min.)...+25 V (max.); ±12 V (typ.)
Input impedance	5 kilohm (typ.)
Cable length	10 m (max., recommended)
RS 422/485 and RS 485/CAS formats	
Diff. output voltage	2 V (min.) on RL = 100 ohm (3.1 V typ.)
Input voltage	–7 V (min.)...+12 V (max.)
Input impedance	120 or 5000 ohm (jumper-configurable)
Cable length	100 m (max., recommended) @ Zo = 110 ohm (±20 %)
MIDI format	
Output voltage	4.5 V (typ.) at 5 mA (max.)
Input voltage	–10 V (min.)...+10 V (max.)
Input current ON	5 mA (typ.), 15 mA (max.)
Input current OFF	.25 mA (max.)
LTC format	
Output voltage	1.5 VPP (typ.) on RL = 1 kilohm
Input voltage	0.5 V (min.)...5 V (max.)
Input impedance	10 kOhm
Operation conditions	
Temperature range	0 °C bis +50 °C
max humidity	max. 90 %, non-condensing
Storage conditions	
Temperature range	–35 °C bis +70 °C
max humidity	max. 90 %, non-condensing
Power supply	
Voltage	+4,75...5,25 V
Currrent	
Mechanical data	
Weight	0,28 kg

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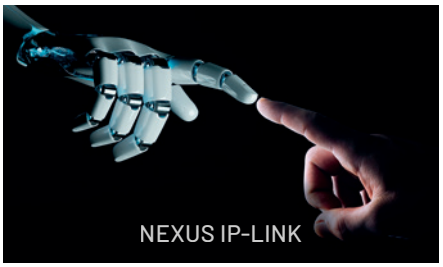
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