NEXUS

NEXUS COMPACT TRUEMATCH

NEXUS

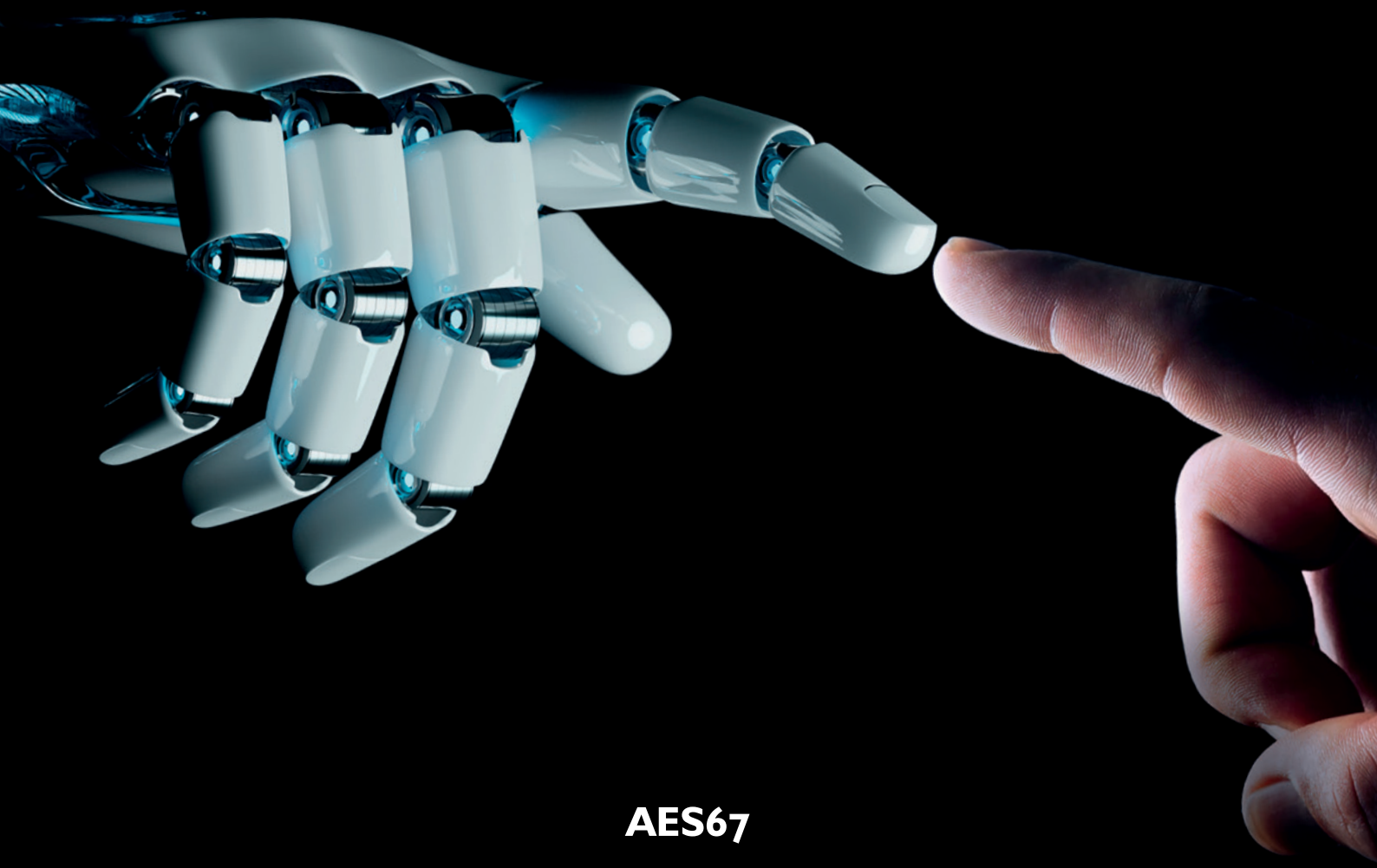
IP made reliable

STAGETEC

AUDIO. VIDEO. IP.
SIGNALMANAGEMENT

STAGETEC.COM

English



AES67

Dante SPOKEN HERE

EMBER+

NMOS

RAVENNA

SMPTE:2022-7

SMPTE:2110

NEXUS

NEXUS COMPACT TRUEMATCH

NEXUS

So much more than an audio router

In countless installations around the world, a NEXUS system is the core component for networking, routing and processing audio, control and ancillary data. Countless installations, ranging from studio routers to control room routers to complete networks in broadcast centres, prove the system's flexibility.

The NEXUS also excels in ultra-low latency, reliability and versatility in the centres of smaller installations, including portable transmission systems with high-end stage boxes, as well as in mid-sized installations in OB vehicles or sound reinforcement systems.

In addition the system provides:

- A/D and D/A conversion
- Audio conversion
- Audio processing
- Video embedding and de-embedding
- Custom DSP configuration
- Multichannel metering
- EBU R128-compliant loudness metering
- Flexible intercom applications
- Tunnelling of serial non-audio data
- Control of third-party systems
- User-programmable internal logic and control functions

NEXUS

HYBRID IP

Unmatched performance for any application

As a proprietary system compatible with all popular formats and standards, NEXUS offers unparalleled performance. It supports analogue formats such as MIC or Line I/O as well as digital formats such as AES3, MADI and AoIP via Dante, Ravenna, AES67, SMPTE2021-30/31. In addition, the NEXUS also routes non-audio formats such as GPI/O, MIDI, TC and serial data across the network. It not only excels in audio quality, but is also amazingly reliable, integrable and scalable.

The idea

A NEXUS network consists of separate base devices that are placed wherever you want to pass audio, control and other signals to and from the network. All base devices are connected to each other via digital links, which are floating fibre optic cables. Each base device acts as an autonomous local router. In this way, a NEXUS network provides distributed intelligence, including decentralised control and crosspoint information.

Customisable

Each base device has an individual configuration with all interfaces and modules needed on site. The base device network allows routing of any sources to any destination, regardless of I/O formats and their physical location on the network. This eliminates the need for complex and costly format conversions.

TDM and IP

Internally, Time-Division Multiplexing (TDM) with dynamic time slot allocation ensures ultra-fast signal transmission within just a few samples.
Normally, you operate the NEXUS via a graphical user interface running on a configuration computer. The computer can be connected to any base device on the network via ethernet, USB or serial connections. You can save all settings and operate the whole audio network from any place where a control interface is installed.

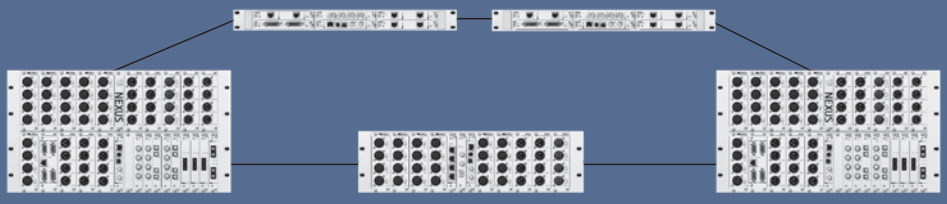
Redundant

Secure operation is a key feature of NEXUS: Each base unit has a dedicated CPU - a setup that reliably prevents the entire system from failing in the event of a failure. In addition, you can optionally use redundant power supplies and optical links to ensure secure operation.
The NEXUS Star is a star router designed for large networks and therefore offers a redundant processor and routing card. In addition, the STAR can also be configured with redundant MADI ports.
In the event of a power supply, optical link or MADI failure, the system silently and inaudibly switches to the required backup component. Ring , star and mixed topologies also enable re-routing of the transmitted signal.

Network topologies: Stand alone to massive - all in sync

NEXUS in standalone use
- Reference converter
- Recording interface
- Format converter, splitter

NEXUS in a campus environment
- Decentralised distribution
- Individual topologies possible
- Campus networking



Basic components

NEXUS base devices come in various sizes. They all feature a 19" mainframe with a processor card, a backplane and optical-interface cards. All Base Devices are separately configured with audio interfaces, DSPs, and other interface cards as per customer specifications.

Status messages
In the event of a failure, the system's internal watchdog triggers an alarm. All problems are displayed on the graphical user interface. Interface cards are hot-swappable, meaning you can replace them during system operation without affecting other components or signal flow.

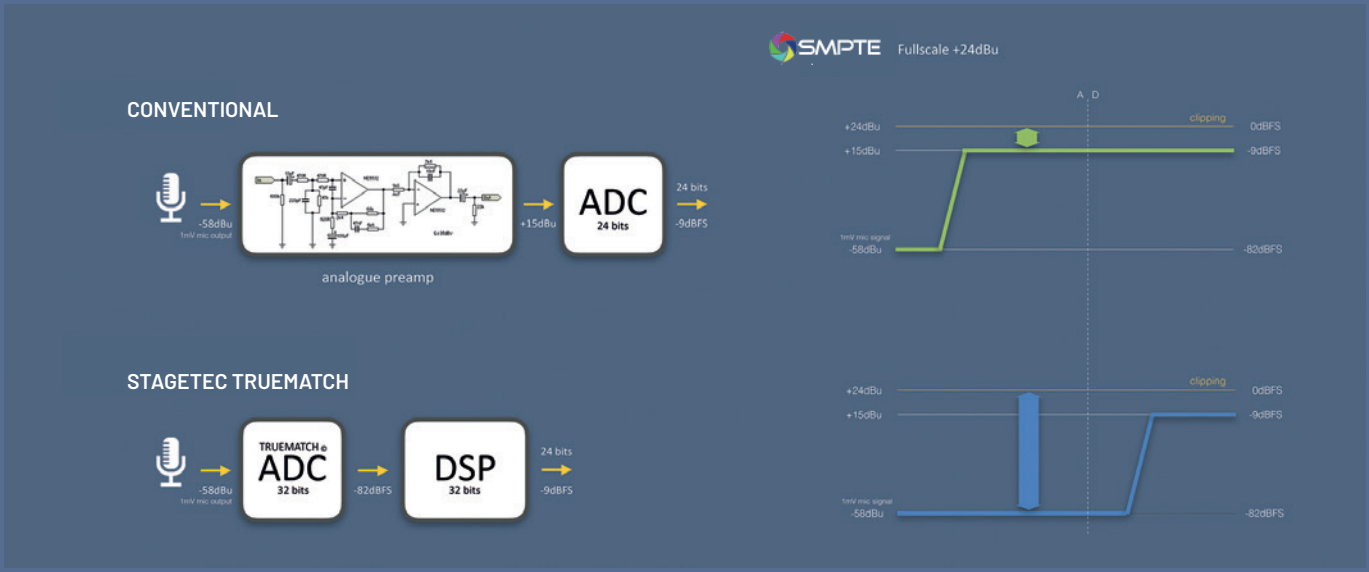
Operation and monitoring
Many third-party controllers support the NEXUS control protocol. This allows NEXUS networks to integrate seamlessly with global router or studio controllers in almost any configuration, and also supports SNMP management. In general, you can control NEXUS via IP, GPIO, USB or serial interfaces.

IP support
NEXUS supports various IP-based technologies, from multi-channel audio transmission via Dante or AES67 to a variety of control methods. However, for internal real-time routing, the system uses a separate ultra-fast high-performance TDM bus. The universal XACI control interface with Ethernet ports has built-in switch, which handles complex tasks that would otherwise require the use of external server hardware. IP is also used to integrate the NEXUS SNMP agent into the global SNMP scheme for system monitoring, and IP can be transparently tunnelled through NEXUS.

Customised switching
The integrated native programming environment allows you to define logical switching operations ranging from simple tally signal forwarding to full reconfiguration of studio and controller complexes (including emergency switching). The integrated documentation makes all logical operations on the system completely transparent.

158dB dynamic range and no analogue gain stage

Our TrueMatch microphone input is the best known exclusive STAGETEC technology. Since the late 90's, our TrueMatch mic preamp is still the reference for recording because it features a 32-bit A/D and no analog preamp stage that usually causes noise, distortion, coloration, hum and other audio artefacts. If the ubiquitous 24-bit AD converter were used without an analog preamp stage, only 8 to 10 bits would be used when a microphone is connected directly, resulting in a very high noise floor or small dynamic range. Using a TrueMatch 32-bit A/D results in an impressive dynamic range of +158dB(@24dBu), leaving the competition (with typical 118dB @+24dBu) far behind. Competition with conventional mic preamps put the gain stage before ADC and has a typical 9dB headroom (fullscale +24 dBu) at nominal level (+15dBu), yielding only an average 118dBA dynamic range. The TrueMatch 32-bit converter ADC converts to microphone level (-58dBu).



Gain to nominal level is in the digital domain and exceeds 154dBA dynamic range and huge headroom. The gain stage used to bring a microphone signal to unity or program level is performed in DSP in the digital domain. Since the input can handle signals up to +24dBu without clipping, separate line inputs are not required. All microphone inputs can be digitally split 4 ways, with each console having independent control.

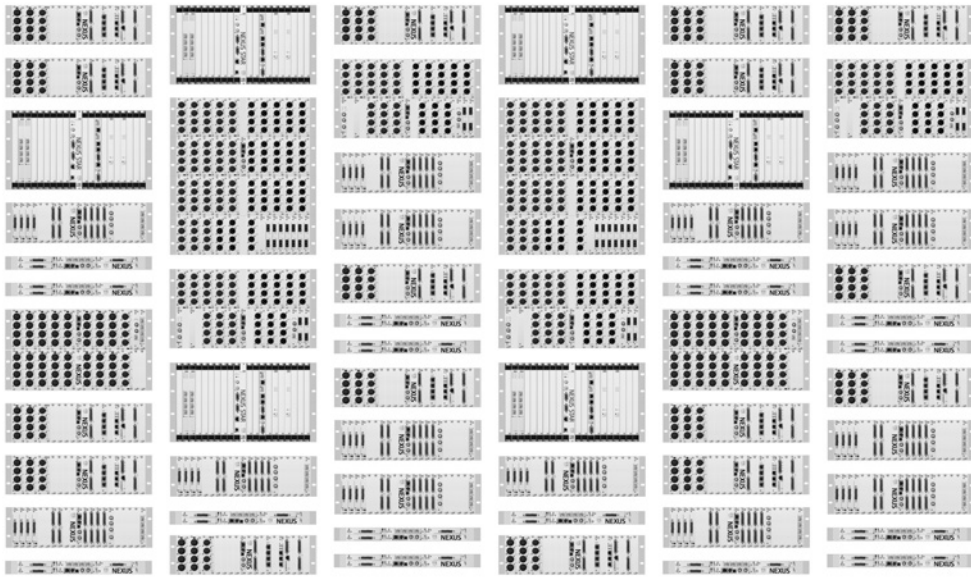
DECENTRALISED ROUTER

LARGEST CAPACITY

NEXUS network or configuration can contain up to 63 nodes or base devices or edge points. Since each base device has 256 inputs and 256 outputs or 4096 x 4096 in the case of NEXUS Star. Additionally an XRT is a special router card with a capacity of 8448 x 8448. The network or complete matrix can be built up to 65,536 x 65,536 addressable inputs and the same number of outputs. The user interface can manage up to 72 million cross points, all stored with system-wide parameters in each of the base devices CPU.

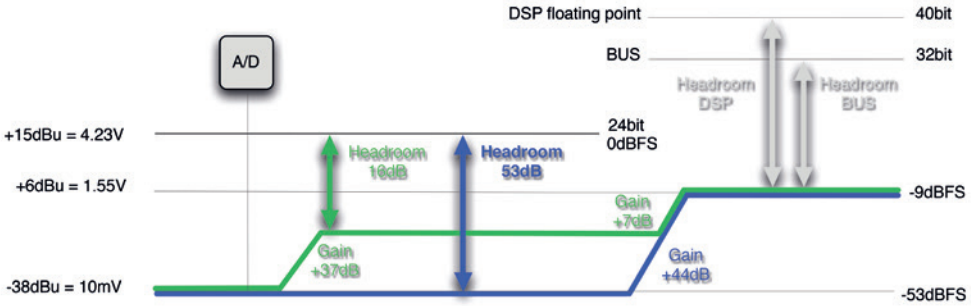
NEXUS is a non centralised matrix with dynamic routing. The NEXUS network can be set up in a ring/star (mixed) configuration. Up to 2048 channels with 6Gbit/s bandwidth can be transported per fiber. When transmitting in ST2110 format, up to 256 channels and 32 streams per port are transmitted.
The NEXUS nodes can be interconnected via TCP/IP Layer 3 switches and correspond to the ST2110 format. When using NEXUS-IP link, the nodes can operate in an IP environment. One of the highlights of this is that NEXUS is hybrid. NEXUS can operate traditionally, fully IP or hybrid. This gives customers the ability to plan the transition to IP in a gradual, budget-friendly manner. NEXUS offers the best of both worlds. If traditional TDM fiber is a proprietary format with no latency and IP is an open format with potential latency issues, then NEXUS gives you the choice depending on your application. Just a simple example: If for a live and/or music broadcast application, latency is a priority, while for transmission/distribution/communication an open IP format is needed, then NEXUS is the right way for you.

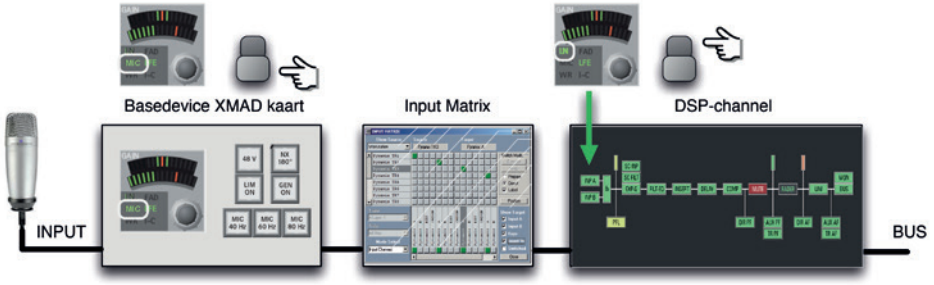
- **Up to 63 nodes**
- **65536 x 65536 addressable I/O**
- **72 million cross points**
- **Up to 2048 ch / fiber**
- **Up to 256 ch / stream**



A real world comparison

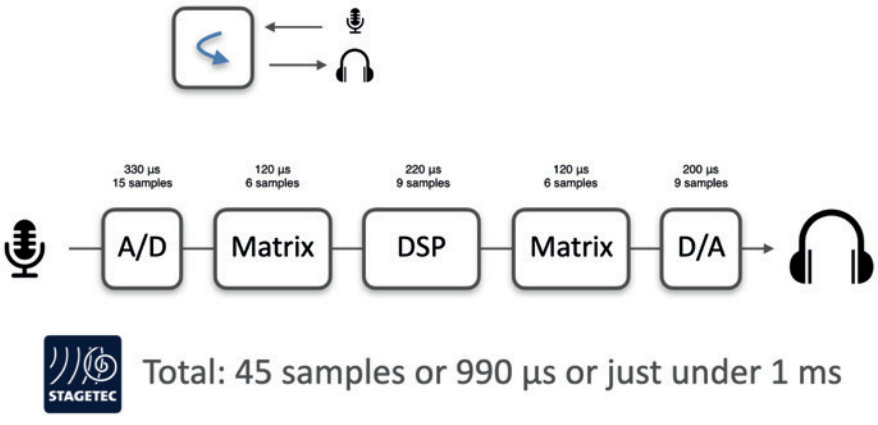
A microphone outputs in this example 10mV. With a classic analog gain stage (green line) and a setting of 37dB we get to -16dBFS. When a commentator starts to scream = +20dB you get 4 dB of clipping. Or a snare drum hits results in much harder clipping.
So when using a TrueMatch there is no analog gain stage. The 10mV ends up as -53dBFS or 53 dB of headroom before clipping. The gain is done in the digital domain. As a result no clipping and 1:1 microphone signal transfer without colouring and the maximum of headroom.





Shortest system latency

Latency is important in live transmission. A simple example just a microphone and headphones as used for a commentator or voice talent. When the delay between microphone and his voice in the headphones goes beyond 6-8ms you get complaints.
This getting mor important if the signal goes back and forth in the system. Also when IP is involved and adding its own latency. With the STAGETEC under 1ms one has some spare before the voice talent throws his headphones in your direction.



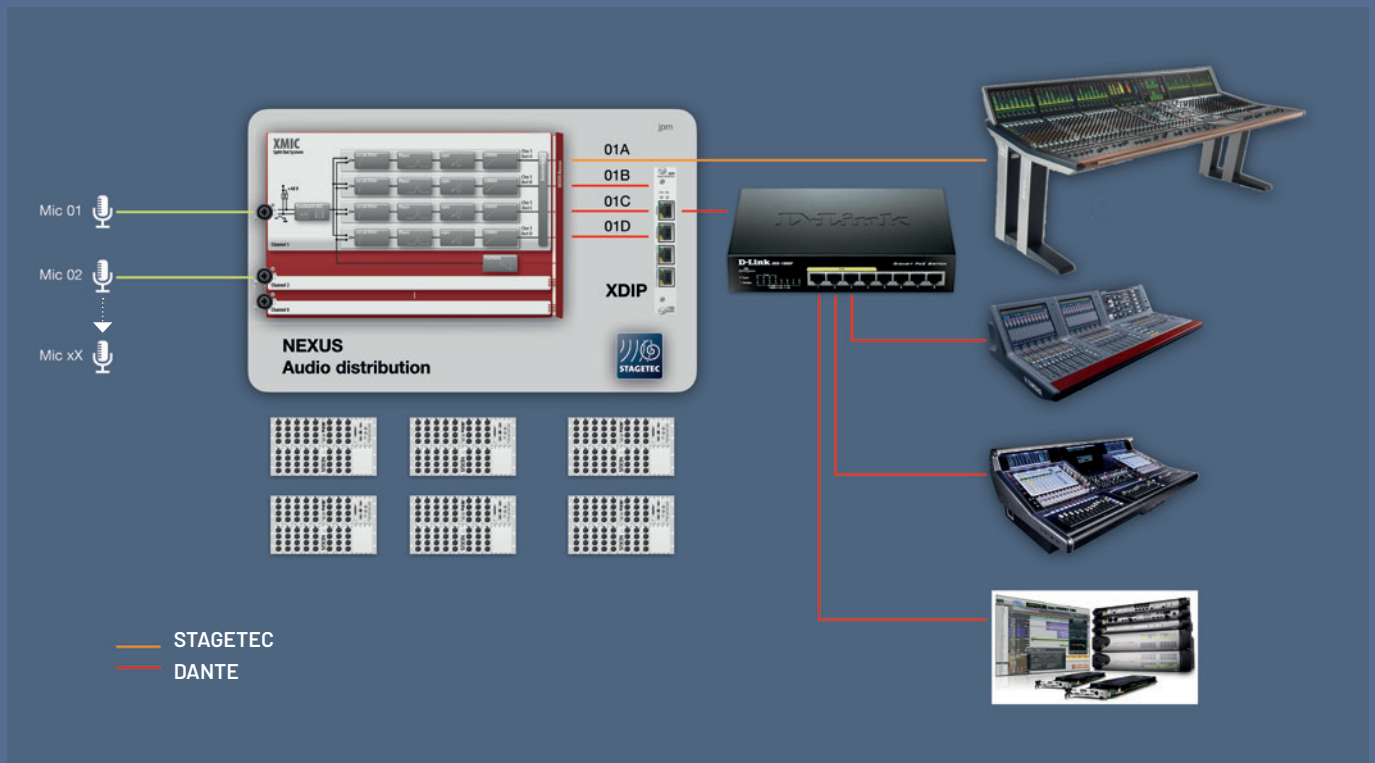
INDEPENDENT CONTROL

MICROPHONE SPLITTER FUNCTION

Thanks to its innovative and sophisticated circuit design, the XMIC+ board features transformer-isolated balanced inputs that avoid the drawbacks of conventional circuit designs. Since they are completely floating (when phantom power is disabled), they can be used as balanced or unbalanced inputs.

The XMIC+ board can be used either in the conventional way with a single output or with up to four independent outputs per microphone input, using the splitter function.
The splitter function is only available on NEXUS systems running Matrix 5 software or higher. The NEXUS system is configured so that each user sees and accesses only one of the four splitter outputs. Each splitter output is controlled completely independently (gain, phase, lo-cut, limiter); the other outputs are not affected. For phantom power (DIN EN 61938, IEC 1938, DIN 45596 [obsolete]), the software uses an „OR" function. Thus, microphones are only supplied with phantom power if at least one user has activated this function. Signals treated differently can be sent to each of the independent split outputs.

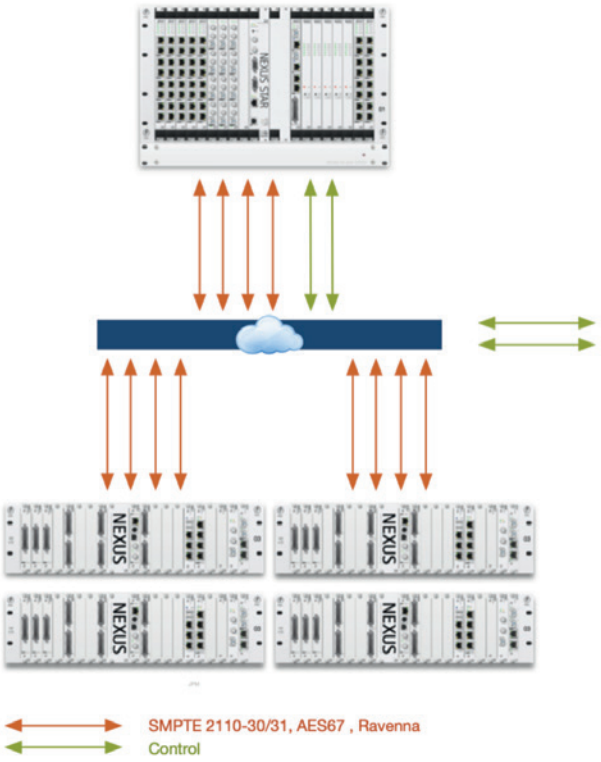
The unique NEXUS 4-split microphone preamplifiers provide the ability to eliminate the need for external equipment. Combined with the use of AoIP, and/or MADI, this increases reliability and simplifies setup.
Note that the STAGETEC TrueMatch microphone preamplifier has no analog gain stage as it uses a 32-bit AD converter, a technology still unmatched in the industry.



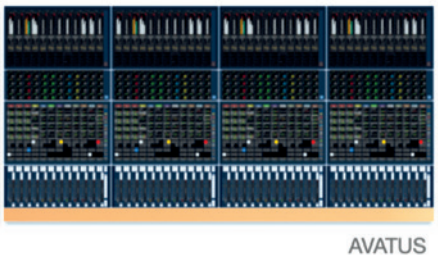
HYBRID SOLUTION

PLAN YOUR OWN TRANSITION

Sure we can do full IP

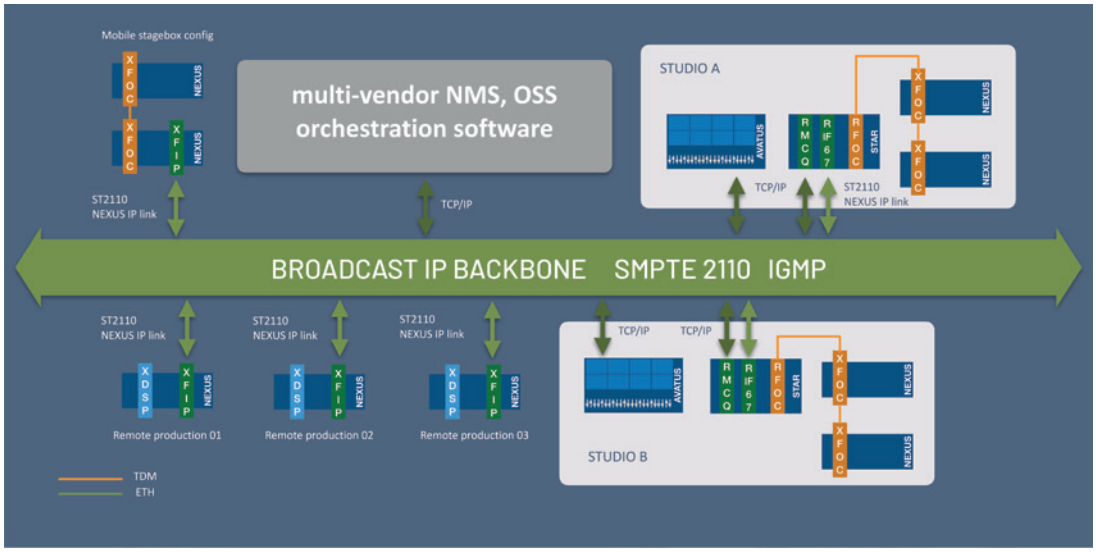


- NEXUS IP solution with dynamic routing and redundancy
- Native logic GPIO configurability inc AoIP functionality
- Fewer IP connections & IO cards needed as DSP within frame
- When external controller (VSM) fails, system still full functional
- Console remotely controlable through RAS protocol and NEXUS UDO protocol is known by all industry controllers
- SMPTE 2022-7 network redundnacy
- SNMP monitoring NEXUS over IP network



- Max dyn range mic preamp 150 dB
- Full digital split with EmBER+ and RIO control
- Audio & control combined in 2110-31 streams (AES3 transparant)
- Fewer physical IP connections and IP addresses needed
- All frames WAN capable e.g. remote production

But also hybrid

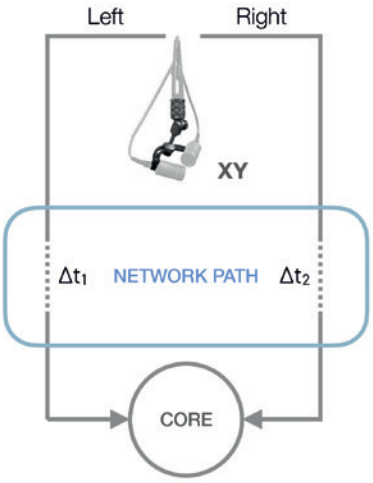


While the datacenter already can be in use, several production areas can still work in a different (legacy) format.

When minimum latency is a priority then NEXUS hybrid is your last resort.

Transport of channels within single sample accuracy

When arriving at the mixer processing core all signals have to arrive within single sample accuracy, in order to omit phasing, comb-filter effect and other artefacts affecting coincident and semi-coincident sources. From the moment the latency between 2 coincident channels (XY microphone, CD output, ...) goes beyond 1-2-3 samples, then phasing and comb-filtering starts tc be audible and gets worse. Competition all have this phenomenon. Not so important in sports but very audible in music production or where sources are coincident or semi-coincident. In a stereomix the point sources are more diffuse or less detailed.



Sample accurate = single source points

Channel timing difference = diffuse sound

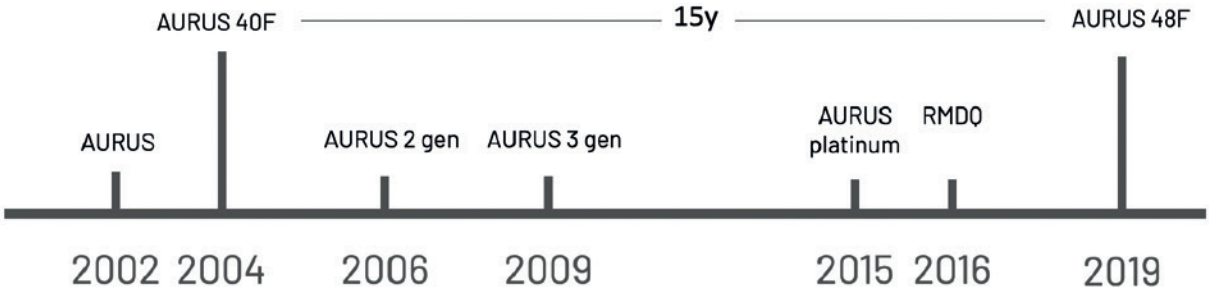
$\Delta t_1 - \Delta t_2 \geq$ 1 sample = phasing, comb filtering, ...

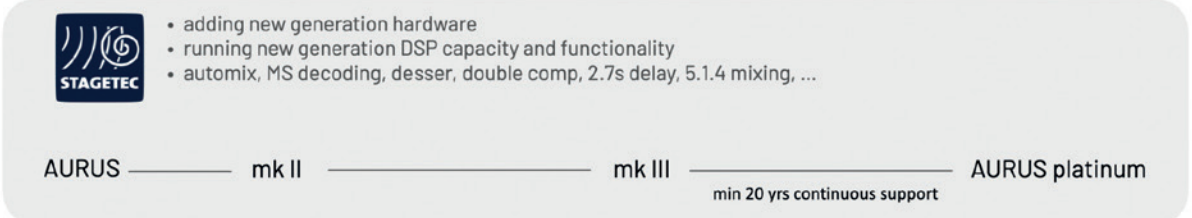
Provides intergeneration compatibility

STAGETEC provides support form systems beyond 10 years of use. As an example, AURUS console is now in its 4th generation. However an AURUS from 2004 can still be upgraded with the newer generation of DSP core. Adding all actual features as AUTOMIX, MS -decoding, De-sser, double compression, 2.7s channel delay, 5.1.4 and other immersive mixing up to 22.2.

Regarding hardware, for example the console panels or cassettes can be hot-swapped between generations without function loss. The same counts for NEXUS hardware I/O boards.

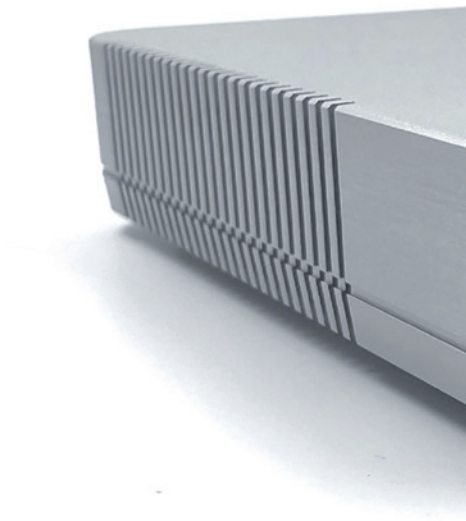
A microphone board from late nineties can still be used in new frames.
Our direct competitor only maintains a 5 year cycle, after which the older generation hardware is discontinued for service and upgrades. When you have a long term planning, STAGETEC is your better choice.





NEXUS COMPACT

COMPACT STAGEBOX AND MIXER



Media consumption habits are changing rapidly, and we believe that technology must also keep pace with fast-changing user behaviour. Get the latest AoIP integration for your NEXUS now and bring your system up to the current state of the art.

NEXUS product line

A new NEXUS line of products heads off with the introduction of the NEXUS compact or NXC-T.

The same state of the art audio quality as traditional NEXUS and outstanding reliability.

Overview NXC-T

The compact housing (1/2 size of a 1U 19" rack) converts baseband and analog signals into IP audio standards as AES67/Dante/Ravenna/ST 2110 - 30/31. Uses open standards and protocols. Has fixed I/O configurations in order to be cost effective. Operates via a web browser based user interface and has DSP on board to be considered as a small mixer.

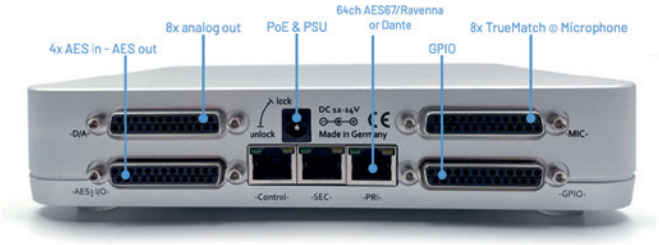
User interface

A web-browser can be used to control the NXC-T. Just putting the IP address or URL in any browser on a tablet or laptop operating in the same domain wil visualise a comprehensive user interface. Giving access to all parameters of the I/O resources, as storing snapshots and configuring the GPIO's.

Features NXC-T

The NXC-T or NEXUS compact is equipped with a fixed amount of I/O resources, some GPIO's for external control and an audio-over-IP interface.

- 8x TrueMatch Microphone inputs with 4-split
- 4x AES3 stereo in
- 4x AES3 stereo out
- 8x analog out
- Stereo headphone
- 64x DANTE or AES67 I/O
- 8x GPI / 5x GPO (in pairs usable as encoders)



Basic DSP functionality will be available:

- Mix delay matrix
- In/Out channels with EQ / DYN's / DLY

The NXC-T or NEXUS compact can also be considered as a small mixer.

Reliability

With PoE (power-over-ethernet) and external power supply, the network reliability is extended with SMPTE 2202 – 7 seamless protection switching as required in a contemporary SMPTE 2110 workflow.

Standards/protocols

- EmBER+
- NMOS IS-04/05
- SMPTE 2110 - 30
- SMPTE 2110 - 31
- SMPTE 2202 - 7
- STAGENET

Application areas

- Reference converter for recording studios
- Compact stagebox easily connected to an existing network in DANTE or AES67 format
- Connecting microphone arrays on-camera for immersive sound pickup and transport over IP
- Small workstations I/O for low latency mixing
- Reference monitoring with GPI source select
- On-site mixing for remote productions to mix the local sources with IFBs without delay
- Commentary box for sports or e-games

TrueMatch

Highest available audio quality, still unmatched in the industry, with a normally unattainable dynamic range of 158dB. Maintaining the STAGETEC tradition of reference audio in a new range of products.

STAGETEC IP

NEXUS has embraced IP with the introduction of Dante. Later on, AES67 and SMPTE 2110 were added to our roadmap. Since 2018 our consoles connect over IP to the core. Making it possible for a full IP STAGETEC solution. Keeping the hybrid option open for backwards compatibility and your peace of mind for a budget friendly upgrade.

MIXING CONSOLE

RANGE

AVATUS S

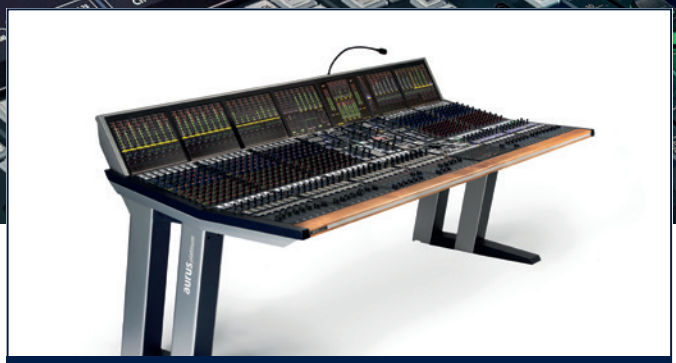
The flagship choice

- Distributed remote console
- Touch-based workflow – full IP

AURATUS

The compact digital console

- Extensive surface for small productions
- Intuitive, fast, and safe operation



AURUS

The Direct Access console

- Supreme tactile operation
- Ultrafast workflow

CRESCENDO

The compact Direct Access console

- Tactile workflow
- For productions with limited space

ON AIR FLEX

The individual broadcast solution

- Scalable radio console
- IP-based surface

stagenet

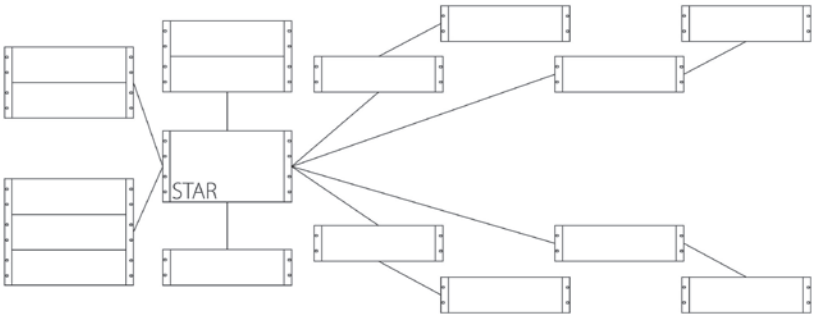
STAGENET.COM

IP made simple

STAGENET is a new and easy-to-use control software via an intuitive web interface to manage and monitor audio/video signals in IT networks based on open standards. It has been developed as a team effort by five industry leaders, initiated by STAGETEC.

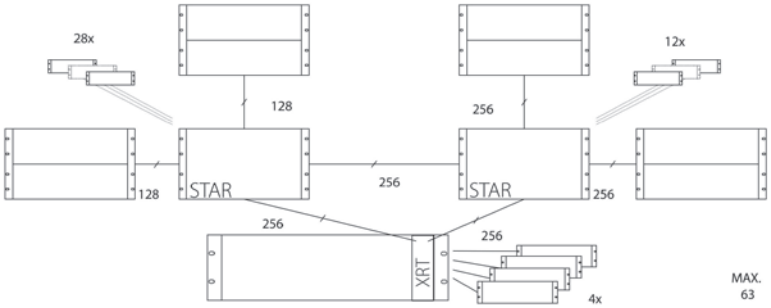
Find out more on YouTube:

ARISTA matrox MERGING AUDIO FOR THE NETWORKING AGE simplexity STAGETEC



NEXUS as a centralized component
- Production studios
- OB trucks
- Mixing console integration
- Capacity-optimized
- Fleet concept

NEXUS in a massive environment
- Topology blocks like star cluster, ring cluster, XRT cluster, daisy chain
- Networks up to 63 base devices



NEXUS STAR ROUTER SPECIFICATIONS		TDM: 256 TIMESLOTS (48 KHZ), 128 TIMESLOTS (96 KHZ)	
X19-3RU	NEXUS base device, 1 active row	3U, 420mm in depth	20 free slots receiving audio, controller, sync, and optical interface cards Routing technology: TDM bus
X19-6RU-01 X19-6RU-10 X19-6RU-11	with passive top row (optional) with passive bottom row (optional) NEXUS Base Device, 2 active rows	6U in total 6U in total 6U, 420mm in depth	Optional: additional passive row for detached XLR panels 40 free slots receiving audio, controller, sync, and optical interface cards
X19-9RU-011 X19-9RU-110 X19-9RU-111	with passive top row (optional) with passive bottom row (optional) NEXUS base device, 3 active rows	9U in total 9U in total 9U, 420mm in depth	Routing technology: TDM bus Optional: additional passive row for detached XLR panels 60 free slots receiving audio, controller, sync, and optical interface cards
X19-12RU-0111 X19-12RU-1110 X19-12RU-0110	with passive top row (optional) with passive bottom row (optional) with passive top and bottom rows (optional)	12U in total 12U in total 12U in total	Optional: additional passive row for detached XLR panels
X19-15RU-01110	with passive top and bottom rows (optional)	15U in total	Routing technology: TDM bus
X19-1RU	NEXUS base device (compact)	1U, 440mm in depth	5 free slots receiving audio, controller, sync, and optical interface cards Routing technology: TDM bus
R19-6RU	NEXUS STAR router base device	6U, 410mm in depth	16 (8L, 8R) free slots for audio and optical interface cards, 2 free slots for the RCX controller card (optional, redundant), 1 free slot for the RSYNC sync card Routing technology: 4096 : 4096 matrix

SYSTEM CARDS FOR X19 BASE DEVICES		
XCPU	Base device CPU	Base-Device and bus management, system-control interfaces (IP, USB, RS232), clock generation and conditioning, external word-clock-sync input, network-synced wordclock output
XFOC	Optical interface for the NEXUS	4 SFP ports (interface modules for various fibre types), NEXUS in-sync networking (audio, clock, and control data), up to 256 bi-directional audio channels (@48 KHz); built-in matrix (separate from the TDM bus – requires Rev. 8 or later)
XRT	High-performance optical interface with built-in routing matrix	High-performance optical-interface card with built-in 8448:8448 router (@48 KHz), 12 optical ports handling 512 or 2048 audio channels each High-speed network bypassing the TDM bus
XSYNC	Video-sync card	Supports external internet tunnelling by SFP modules sync formats including TriLevel and Blackburst

SYSTEM CARDS FOR R19 STAR ROUTERS		
RCX	Base device CPU for STAR routers	Base-Device and bus management, system-control interfaces (IP, USB, RS232), clock generation and conditioning, external word-clock-sync input, network-synced wordclock output, 4000:4000 routing matrix (@48 KHz)
RFOC	Optical interface for the NEXUS	4 SFP ports (interface modules for various fibre types), NEXUS in-sync networking (audio, clock, and control data), up to 256 bi-directional audio channels (@48 KHz)
RSYNC	Video-sync card	Supports external sync formats including TriLevel and Blackburst

OPERATION AND MONITORING			
XCI	-4 HP -8 HP	NEXUS control interface 2 serial ports 4 serial ports	Multifunctional control interface, configurable ports (MIDI, Yamaha AD8HR, machine control); internal miniSD card supporting the NEXUS status-load feature, IP-control interface (configured using the GUI), SNMP
XACI		NEXUS advanced control interface	Control interface incorporating an embedded PC module and an audio-bus interface, 2 USB ports, 3 Ethernet ports; use cases: EmBER+; FLEX-console proxy hosting (more use cases planned)
XRI	Rev 05	NEXUS relay interface	24 optocoupler inputs, 24 semiconductor-relay outputs (AC/DC), internal/external supply, common pin or isolated pairs, programmable functions using NEXUS Logic Control

FIBRE SPECIFICATIONS			Examples – other SFP module types (e.g. CWDM / DWDM) available on request
SFPM	FO-01	SFP module for XFOC/RFOC	LC duplex, 1310 nm, SM: 10 km, MM: 500 m (default)
	FO-04	SFP module for XFOC/RFOC	LC duplex, 1310 nm, SM: 20 km
	FO-08 A/B	SFP module for XFOC/RFOC	LC simplex, 1310 nm / 1550 nm WDM , SM: up to 10 km
	MF-01	SFP module for XMF/RMF (MADI)	LC duplex, 1310 nm, MM: 2 km (default)
	MF-02	SFP module for XMF/RMF (MADI)	LC duplex, 1310 nm, SM: 10 km
	HD-02	SFP module for XHDI (HD-SDI)	LC duplex, 1310 nm, SM: 30 km (SD), 20 km (HD)

OPTICAL MULTIPLEXER FOR DUPLEX LINKS			Transparent transmission, cascadable units
OMUX	-LC -LCT (1) ... (4)	1:4 optical multiplexer, re-clocking (optional), 1–4 units inside a 19" 1U mainframe	Stand-alone unit, internal plus redundant power supplies, auto (priority-controlled) or GPI-controlled operation; can be reconfigured as unidirectional in-parallel router (for example, for MADI)
XMUX	-LC -LCT	1:4 optical multiplexer, re-clocking (optional), 1 plug-in card	Plug-in card for NEXUS X19 Base Devices, auto (priority-controlled) operation; can be reconfigured as unidirectional in-parallel router (for example, for MADI)

BUILT-IN PROCESSING			
XDSP	Rev. 06	DSP card for NEXUS X19 base device 2 processors (Sharc 21469)	Custom configuration using freely routable processor modules (faders, EQs, filters, dynamics, delays, summers, IFBs, downmix, mix-minus matrix, crossover, M/S decoder, de-esser, and many more); capacity (@48kHz): 2 × 1000 summing points, 20 min. audio delay
		DSP configuration per customer specifications	Custom solutions such as single-destination auto-crossfade, etc. available on request
ISO-STEM	-L	ISOSTEM Upmix 5.1 (dongle)	Plug-in for use with *one* processor of a XDSP Rev06 card

TRANSPARENT TUNNELLING			
XTI		Serial-data transport interface	Supports transparent transmission of serial data (MIDI, RS 232, RS 422, RS 485, DMX, LTC, Dolby metadata) through the NEXUS network, 2 or 4 duplex ports, separately routed transmission in each direction, allows both parallel routing and point-to-point links
	-4 HP	2 serial ports	
	-8 HP	4 serial ports	

HIGH-QUALITY ANALOG RANGE			Fullscale [0..24 dBu]
XMIC+	-X, -D, -R	8-channel microphone converter	32-bit TrueMatch A/D converter, 158 dB(A) dynamics at 24dBu, no analogue preamplification required, ultralow latency, exceptional pulse fidelity, phantom power, auto-mute when connecting/disconnecting powered microphones, DI-box functionality, galvanically transformer-isolated channels; Software option: active 1:4 splitter per input converter, with gain, subsonic filter, and limiter for each splitter output
XAD+	-X, -D, -R	8-channel analogue line-input converte	24-bit TrueMatch A/D converter, 133 dB(A) dynamics at 24 dBu, galvanically transformer-isolated channels
XDA+	-X, -D, -R	8-channel analogue line-output converter	24-bit TrueMatch D/A converter, 131dB(A) dynamics at 24 dBu, galvanically transformer-isolated outputs

Legend

-X	with XLR ports	-R	RJ45 version	-B	BNC version
-D	D-sub port	-O	OptoXLR version	-BLC	BNC + LC version

AES STANDARD RANGE			
XETR	-X, -B	4 AES/EBU input ports and 4 AES/EBU output ports	Combo unit featuring 4 AES digital 2-channel inputs and 4 AES digital 2-channel outputs, with I/O SRCs

COMPACT RANGE			High component density, maximum cost efficiency, minimum power consumption
HXAD	-D, -R	8 line inputs (2-channel)	24-bit TrueMatch A/D converter, 112 dB(A) dynamics at 15 dBu, galvanically isolated channel pairs
HXDA	-D, -R	8 line outputs (2-channel)	24-bit TrueMatch D/A converter, 120 dB(A) dynamics at 15 dBu, galvanically isolated channel pairs
HXETR	-D, -R	8 AES/EBU input ports and 8 AES/EBU output ports	Combo unit featuring 8 AES digital 2-channel inputs with SRCs and 8 AES digital 2-channel outputs without SRCs

MULTICHANNEL FORMATS			
XDIP		Dante AoIP-interface	Audio-over-IP duplex interface, 64 inputs and 64 outputs (@48kHz); SRCs; 1 Audinate DANTE Brooklyn II; AES67; stabilised clock regeneration, 4x switch supporting primary/secondary cabling
XMF	-BLC SRC	Single MADI port for NEXUS X19 base devices	64 inputs, 64 outputs (@48kHz) per port, BNC port, SFP slot, SFP module (optional). SRC option: 2 × 32 channels (64 in or 64 out or 32 in/32 out)
RMF	BLC	4 MADI ports for NEXUS R19 Star routers	64 inputs, 64 outputs (@48kHz) per port, BNC port, SFP slot, SFP module (optional)
RIF67		MADI & AoIP-interface	Audio-over-IP interface for NEXUS Star router; supports AES67 and Ravenna; equipped with up to 4 AES67 I/O modules by DirectOut; each module has 2 ethernet ports; the board provides 256 inputs and 256 outputs, up to 128 streams; one single or 4 separated IP-networks can be supplied; 8 RJ45 ports, 2 ports for each AES67 I/O module; sample-accurate synchronisation
XFIP		Fiber & IP interface	Fiber and Audio-over-IP interface; equipped with AES67 I/O module by DirectOut; supports AES67 and Ravenna; 256 inputs and 256 outputs in a maximum of 32 streams, supports redundant audio transmission as per SMPTE 2022-7

EMBEDDED AUDIO			
XHDI	-B, -B/LC, -B, -LC	Combo unit with 16-channel HD-SDI embedder and 16-channel HD-SDI de-embedder	Processes the embedded audio of a serial video stream compliant with SMPTE 259M (SD), SMPTE 292M (HD), or SMPTE 424M/425M (3G). The de-embedder extracts 16 channels while the embedder embeds 16 channels. Embed mode (Emb, Replace, Clr, Byp) selectable per group SMPTE 2020 compliant metadata embedder/de-embedder. Video delay, I/O SRCs (optional)

For more information,

please contact us for an appointment

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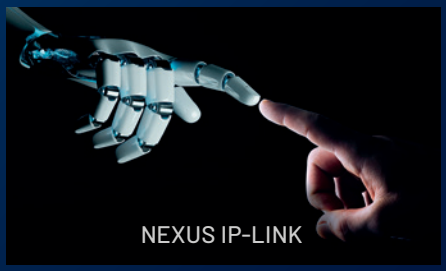

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STAGETEC.COM

STAGETEC GmbH
Tabbertstraße 10-11
12459 Berlin, Germany

+49 30 63 99 02-0
+49 30 63 99 02-32
sales@stagetec.com