



AVATUS

The Distributed Remote Console



A U D I O E X C E L L E N C E

AVATUS

The Distributed Remote Console

AVATUS is the future in audio consoles. This innovative concept makes full use of the benefits offered by IP technology. The console controller provides TCP/IP connectivity for integration into a network. The surface consists of one large or several smaller modules. This design allows, for example, for separate installation of the metering displays. The system supports remote network connections and even browser-based mixing that requires no specific hardware. With AVATUS, all hardware modules are created equal. Every touchscreen gives full access to all configuration settings and central desk functions. - The ultimately flexible and limitless concept!

The console integrates seamlessly into a NEXUS audio network that offers virtually unlimited audio-I/O resources in all common formats. The built-in macro controller allows for easy integration of external systems in any environment and for smooth day-to-day operations.

Stage Tec has made quality a matter of principle. AVATUS is just one example.

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Operating Concept

- Highest flexibility; all functions available in every module
- Context-based operation using touchscreens
- Smooth-action encoders and faders maintain the analogue feel
- Efficient operation thanks to intuitive workflows
- Obvious function assignments defined by clear color coding
- Unconfined support for operation by multiple engineers
- Supports simultaneous control from any browser

Encoders

- Encoder and fader panels internally form one IP module per bay
- Dual concentric encoders are touch-sensitive
- Upper encoder offers an additional push-button
- Encoders derive function from context per channel or per bay
- Dual LED arc displays allow fast, precise adjustments
- Ultra-fast refresh rate constantly displays actual values
- Multicolored LED backlight always indicates selected function

- Frames available in sizes from 1 to 8 bays
- 12 faders per panel allow up to 96 faders per console
- Consoles available as desktop or standing versions
- Every console built according to user specifications
- Flat "theater version" to be had with lower display only
- Modules and bays may be split into separate units
- Units can be distributed to different locations

- Console designed as a TCP/IP-based control surface
- Every surface module receives a dedicated IP address
- Network connects all modules, even when located remotely
- Small units can be powered by PoE
- Connections through the internet are supported
- Surface-controller and DSP-boards hosted in NEXUS Star Router
- Controller has built-in webserver for browser-based operation
- Console supports access to all audio I/Os on the NEXUS network
- Concept is fully integrated with NEXUS Logic Control for complex control of external systems



Faders

- Configuration supports free assignment of channels, groups, or sum buses to each fader strip
- Colored LED backlight clearly indicates currently mapped function
- Smooth-action motorized faders are touch-sensitive for instant feedback
- Industry-grade keys provide direct access to critical channel functions
- Additional 11 panel keys expose layer settings and global tasks
- Several LEDs and a level indicator give permanent insight on channel status

Touchscreens

- Super-coated 21" anti-glare displays for hours of relaxed work
- Premium, slim-seam mounting for maximum use of space
- Each screen can access all functions
- Typical usage: meters at the top, console operation at the bottom
- Top screen is optional or can be ordered as a separate unit
- Screen-based workflow for easy overview at all times
- Console settings and higher-level functions always available on every screen
- Fast, easy, and error-free operation through large touch buttons
- Intuitive workflows with swipe and on-screen editing

AVATUS Specifications

Specifications NEXUS Star Router

Build	19" module frame, 6 RU
Dimensions	265 mm x 482 mm x 410 mm (H x W x D, approx., without ports and handles)
Slots	21, w. 14 DSP-card slots
Latency	< 1.5 ms @ 48 kHz/s < 1 ms @ 96 kHz/s (incl. A/D and D/A conversion on the NEXUS network)
DSP cards	1 to 7 per console
Power-supply units	110–240 V, 50–60 Hz, 30 A each, single-phase, phase redundancy supported
Redundancy options	Power supplies, matrix, controller cards, DSP (user-configurable), optical links on the NEXUS network, links to the console
Cards	Hot-swap-enabled, fully operable 2–3 seconds after installation

Audio and Console Performance

Channel strips with 2 inputs (A/B)	Panels each have 12 operating strips (12–96 strips in total per console)
Summing buses	Up to 128 freely programmable buses (dependent upon number of DSP cards and configured channels)
Input channels	Approx. 800 (dependent upon number of DSP cards and configured buses)
Algorithms	40-bit floating-point, minimum latency, all channels summed with single-sample accuracy, identical latency across all DSP channels guaranteed
Sample rates	44.1, 48, 88.2, 96 kHz
Interfaces	All audio I/Os on the NEXUS network – access to all GPIOs, serial, and Ethernet links
Microphone and line A/D converters	TrueMatch®, 32-bit resolution, 158 dB(A) dynamics
Line A/D converters	TrueMatch®, 32-bit resolution, 135 dB(A) dynamics
D/A converters	24-bit resolution, 131 dB(A) dynamics
GPIO card in the console	Optional component: GPIO feat. 16 optocoupler inputs plus 16 semiconductor-relay outputs (max.) on 25-pin D-Sub port, common-potential or floating-pair configurations supported, input and output filters for noise suppression
Star Router connectivity	Optical LC and RJ45 Ethernet (optional redundancy) LC duplex ports: 1 Gbps over 50/125-µm fiber, 800 meters range

Dimensions	12-fader console	24-fader console	36-fader console	48-fader console	60-fader console	72-fader console
Number of panels	1	2	3	4	5	6
Operating depth (approx.)	700 mm					
Depth (total)	913 mm					
Console height	424 mm					
Height incl. legs	1.066 mm					
Width (incl. standard side panels)	593 mm	1.095 mm	1.597 mm	2.099 mm	2.601 mm	3.103 mm



It has been the passion for audio and a prophetic vision of what could be made possible with the upcoming digital technologies which made us establish Stage Tec in 1993: Thirteen experienced engineers set out to develop the first fully digital audio systems; one thing firmly in mind. - Quality.

The wisely thought-out integration of audio routing, powerful control features, and versatile mixing desks has convinced international pro users right from the start. Nowadays, many leading theaters and broadcasting centers around the world would not go without a Stage Tec system.



Our History

In 1993, we founded Stage Tec as a German limited liability company to design and produce digital audio crossbars and audio mixing consoles. Since then, we have ever again set new standards through continuous innovation. Our success story started with the NEXUS digital routing system and CANTUS, Stage Tec's first large-scale audio console. Since then, we have broadened our product portfolio with the AVATUS, AURUS platinum, CRESCENDO platinum, AURATUS, and ON AIR flex mixing systems. Today, Stage Tec offers the right system for any use case and size.

Highest Standards

We have committed to the highest standards. To satisfy this aspiration every day, only the best qualified engineers with

many years of experience develop and manufacture our products. This is to ensure our systems offer maximum quality and meet our customers' individual requirements.

Customer Focus

Interaction with our customers is key to us: We have kept in touch closely over many years to learn and understand the needs of users in each market segment in detail. From the beginning, it has been both a challenge and highly rewarding to familiarize with their demands and expectations and to translate these into new and exciting products. Many intelligent software functions, tailored to the use in theater, broadcast, recording, or live applications, have arisen from the ideas of our customers. This customer focus is a cornerstone of Stage Tec's

international recognition as a pro-audio manufacturer and we are deeply thankful to our friends and partners for many years of innovating companionship.

An Undisputed Forerunner

Thanks to our vision and experience, we have always enjoyed the reputation of pioneering in digital audio throughout the years. Stage Tec products are the ultimate systems available in the pro-audio marketplace – and will remain to be so in the future!

Supported by:



on the basis of a decision by the German Bundestag

Stage Tec mixing consoles: A global reference!*



*This map shows the locations of selected reference installations. All in all, more than 500 Stage Tec mixing consoles have been delivered and installed so far.

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