Setting new standards for audio mixing power and system redundancy

The Vista X is an advanced digital mixing solution that combines exceptional flexibility with pristine audio quality. Drawing upon nearly 70 years of experience in cutting-edge, industry-proven broadcast equipment, the Vista X provides unparalleled reliability alongside exemplary new features. The high-quality desk is paired with a modular DSP core and I/O system, making the Vista X a perfect solution for complex live broadcasts, musical theatre performances, and on-the-road productions. Designed and engineered in Regensdorf, Switzerland, and manufactured in the Pecs, Hungary, the Vista X provides users with a one-of-a-kind audio mixing experience.

The Vista X is a high-quality digital mixer with a modern, intuitive control surface for broadcast production, live sound, and performance venues. Using top-of-the-line materials and faders, the Vista X feels similar to an analogue desk—smooth, fluid, and neutral. For fast and easy operation, the control surface offers two PFL busses, automation controls, custom monitoring buttons, channel-processing buttons on every strip, and a lock feature on every bay. The Vista X is available in 32, 42, 52, 62, and 72-fader versions, so you can select the size and options that fit your specific needs.
In today’s world of high-pressure live performances and broadcasts, system redundancy is of the utmost importance. The Vista X is equipped with Quad Star technology, which utilizes four processors to achieve unprecedented levels of redundancy in the control surface. Two completely independent DSP cores run in parallel with instant change over. The Quad Star technology alongside fully redundant power supplies, Ethernet switches, communications interfaces, AC connectors, and fans, makes the Vista X a highly reliable digital mixing console solution for critical live production applications.
The Vista X incorporates Studer’s unique Vistronics user interface, which ensures quick and easy console operation. Vistronics streamlines the mixing process, allowing sound engineers to quickly adapt during live, high-pressure productions.

When controls are separated from the audio parameter display, operators must constantly gather information from the display, decipher it, and adjust controls accordingly. This causes mental fatigue, increases the likelihood of errors, and can slow down the overall mixing process. The patented Vistronics interface includes integrated rotary controls and buttons within flat-screen displays, bringing together visualization and operation.

Responsive and intuitive, Vistronics provides expanded parameters and increases the control capabilities of each channel without requiring dedicated console surface space. Both the controls and the displays dynamically change depending on the current function. Simply touch the desired function, gain access to all available controls, and use the rotary knobs to adjust the values. There are no submenus, so every parameter is just one button away.
Vistonics Features

• Color-Coded Controls: Easily identify functions by color (dynamics controls are displayed in green, equalizer controls in red, and panorama controls in yellow)

• Vistonics Icons: Quickly identify a function, its state, and its approximate value by glancing at the self-explanatory icons (levels are displayed as bar graphs, time settings as clocks, frequencies as radio dials, etc.)

• Copy and Paste: The console is equipped with dedicated copy/paste keys for each audio function, including pass filters, EQ, dynamics, panorama, and delay

• Unique Output Control: Utilize the rotaries to make small balance changes without having to access the input faders

• Scrolling: Quickly and intuitively access additional channel sections

• Ganging: Group together multiple channel strips, so you can quickly apply functions to them all at once

• Graphic EQ: Access BSS graphic equalizers for input channels, groups, masters, and auxiliaries
FaderGlow™
Illuminated Channel Management

FaderGlow allows you to assign colors to channels for effortless channel layout and management. Designate one of eight freely assignable colors to important channels, such as the presenter or main talent. When illuminated, these channels can be found instantaneously, even when mixing on a different layer.

FaderGlow also allows you to assign colors to an entire channel group. For example, you can quickly distinguish the band or the string section when grouped and color-coded. Colors can be conveniently assigned to channels using the Strip Setup, and multiple operators can build different color setups on the same console.

With FaderGlow, quickly identify important sources, dramatically improve reaction time, and reduce the stress that often accompanies live productions.
Retaining clear audio during live, unscripted, multi-microphone events can be very challenging. Talk shows, game shows, and discussion panels often suffer from microphone spill, background noise, comb-filter effects, and decreased intelligibility. As each active microphone is added to the mix, the overall sound quality begins to deteriorate. This environment adds stress to operators as they must constantly adjust faders in an attempt to keep up with multiple microphones, and this often results in audible fade-ins of participants who speak expectantly, quick changes to the overall noise level, and other noticeable errors.

VistaMix automates and expedites this process, ensuring intelligibility and a clear, consistent sound. Removing human intervention, VistaMix can simultaneously increase gain for talking mics and reduce gain for all others while keeping the total gain at a constant level. Each source channel has a “WEIGHT/CAL” control, allowing the desk operator to add volume to any individual who needs to be more audible, such as the main presenter or a panelist with a soft voice. The weight control may also be used during a show to adjust the relative balance dynamically. VistaMix mirrors the capabilities of a highly skilled operator, but does so at lightning speed so you can rest assured that the live mix will be clean, clear, and free of spill and ambience.
Comprehensive Metering
A Better View Means a Better Mix

The Vista X control surface provides comprehensive metering in a clear, comprehensible format. The meterbridge displays a bargraph meter for every channel from mono to 5.1 surround, relaying precise information about the audio signal as well as the channel status.

The Vista X includes a sophisticated, built-in, high-class loudness meter that utilizes ITU, ATSC, and EBU recommendations in both stereo and surround. Additionally, it provides a history display of the last 50 seconds of audio with clear information about signal loss or overload.

Key Metering Features
- Presents eye-catching indication of overload dB value
- Includes correlation display on stereo channel meters
- Accommodates user-defined assignments, including busses
- Shows recent signal history with overload indication
- Reveals any anomalies in surround sound channel signals
Surround Sound
Impressive Results Every Time

When few or no sources of multi-channel sound elements are available, operators must attempt to create a surround mix out of multiple mono sources. Using conventional amplitude panning to create surround mix takes a lot of time and effort, and the results are often disappointing.

Studer’s unique Virtual Surround Panning (VSP) allows operators to take mono sources and create a realistic 5.1 sound field modelled around a few simple parameters. With VSP, mono sources can be positioned within a two channel as well as multichannel environment to produce highly convincing surround panorama.

VSP creates directional imaging by adding phase and frequency spectrum information to amplitude panning. Operators can easily position a source within a sound field and achieve a surround mix by generating the appropriate directionality and time delays on all speakers. Furthermore, operators can choose between different microphone simulation modes, selecting which characteristics of each mono source is added to the surround image.

With Virtual Surround Panning, even the most complex surround production will result in an impressive, high-quality mix.
Infinity Core

Maximum power. Minimum space.

Big productions demand a lot of processing muscle. The Studer Infinity Core delivers an unprecedented 1000+ audio channels with superb quality and more than 8,000 inputs and outputs—all in a compact footprint.

As technology advances, productions require more and more processing power. The Infinity Core steps up to the challenge by offering a flexible, future-ready backend audio signal processing solution. By processing more than 1000 audio channels in a CPU-based board, the Infinity Core provides a scalable system, faster development of new signal processing designs, and huge channel counts.

The Infinity Core is a reliable solution with a sophisticated redundancy mechanism. By running two Cores in parallel in master and slave modes, it provides a fail-over switching mechanism without the slightest audible disturbance. With extra failsafe systems and increased redundancy protection, the Infinity Core offers full system redundancy without a single point of failure.

In combination with Studer’s A-Link interface, Infinity Core solutions enable the use of significantly higher bandwidth, including a higher number of channel counts between I/O system and Infinity Core. Furthermore, the use of CPU-based processors suggests exciting possibilities for scaling up to even larger channel counts and for running third-party algorithms.
Infinity Core Features:

- Offers scalable audio signal processing
- Eliminates the need to redesign processing cards with new DSP- or FPGA-chip generation
- Allows the addition of new processing functions and extension of the system, so it can grow with the needs of the customers
- Available in 6 versions: Infinity Core 300/600/1000; Compact Infinity Core 300/600; Compact CoreLink Card
With increasing demands for higher channel counts, the D23m delivers. By leveraging Studer’s A-Link interface and Infinity Core technology, the D23m is a powerful I/O system that offers an enhanced channel count architecture. D23m serves as a scalable, modular I/O frame, providing cost-effective inputs and outputs with maximum flexibility—all while maintaining the well-known Studer sound quality.

D23m is fully compatible to D21 systems already in the field. All existing D21m I/O cards are fully compatible and can be used in the new D23m frame, protecting your existing investments and offering a cost effective solution. Mix and match I/O modules for a tailor-made system that addresses your unique requirements.

The D23m can host up to 12 I/O cards with a total of 1,536 inputs and 1,536 outputs. When used as a small stand-alone router, the D23m frame provides a huge I/O matrix of 3,072 x 3,072 inputs and outputs. The D23m I/O system comes with two A-Link ports and two hot swappable power supplies (including secondary regulators) for secure, redundant operation. Status displays on the front panel indicate the status of the frame and installed cards.

The audio between the mixing console or router system and the D23m frame connects via the A-Link interface. The A-Link HD card hosts a powerful processor to operate all required patching and may be used as the sync master to the system, or it may be slaved to a variety of external synchronization signals.
The D23m is a robust I/O system capable of handling whatever the future may bring. It can be fitted with a variety of I/O cards, including but not limited to:

- Dante I/O card
- AoIP Card (AES67/Ravenna/AVB, 256 Input & Output channels—duplex)
- Quad MADI card (256 Input & Output channels)
- Dual MADI card (128 Input & Output channels)
- AVoIP SMPTE 2022-6/7 card (6 x 3G / 8 x HD streams incl. 16 audio channels per stream)
- 4-ch microphone input card
- 8-ch line input card
- 8-ch line output card
- 16-ch in/16-ch out AES/EBU card (balance or unbalanced)
- 16-ch in/16-ch out AES/EBU card with input SRCs (balance or unbalanced)
- 16-ch in/16-ch out AES/EBU card with input and output SRCs (balance or unbalanced)
- Dual ADAT input and output card (16-ch in/16-ch out)
- Dual TDIF input and output card (16-ch in/16-ch out)
- 3G SDI input card (de-embedder for 8 or 16 input channels)
- 3G SDI input/output card (de-embedder/embedder for 8 inputs and outputs)

- CobraNet® I/O card (32 input and output channels)
- Aviom A-Net® output card (16 output channels)
- Ethersound® I/O card (up to 64 input and output channels, selectable in groups of 8, plus 8 GPIO control signals)
- GPIO cards with open-collector or relay outputs (16 inputs, 16 outputs)
Compact Stagebox

The Compact Stagebox adds a cost-effective expansion option, offering a high density of I/O connections in only 4U of rack space. The modular unit is fully configurable, and comes with a standard configuration of 32 mic/line inputs and 16 line outputs. It is possible to equip the Compact Stagebox with additional cards, including AES I/O, Dante, and more.

The Compact Stagebox connects to the host console via Cat5/7 or optical-fibre MADI, and it shares the same redundant MADI cable capability. The unit comes complete with twin redundant power supplies, and full LED status monitoring. An 8-channel GPIO interface is also included.
With Vista FX, you have the option to integrate multiple Lexicon PCM96 reverb and effects units with the console, all of which can be controlled directly from the Vistronics user interface. Utilizing state-of-the-art Lexicon surround effects, Vista FX is completely integrated into the console snapshot system. Hundreds of presets are available and up to 16 parameters can be adjusted for every effect. Vista FX offers a selection of reverb or effect categories, including halls, plates, chambers, rooms, environments, chorus/flanger, delay, resonance, reverse, pitch shift, and pitch effects.

**Vista FX Features**
- Connects to an AES I/O card in the D23m or D21m
- Can add up to six Lexicon PCM96 surround effects devices
- Processes up to 24 mono, 12 stereo, or six surround-sound signals
- Offers the ability to copy/paste parameters between channels
Vista Compact Remote Bay

The Vista Compact Remote Bay is a secondary desk that works in parallel with the console. It may also be used as a stand-alone controller for the Infinity Core should the control surface not be available. The Vista Compact Remote provides full control and monitoring via 12 high-quality motorized faders, 40 channel rotary controls, a touch pad, and a slide-in keyboard.

The 19” touch screen can be folded down, protecting both screen and control hardware during transport and considerably reducing the unit’s size. All navigation and control buttons available with the Virtual Vista application can be operated via the touch screen, instead of using a track ball or a mouse. Thus, operators can easily access the most important physical control elements, such as faders, rotary controls, mute, and PFL keys. A GUI mirrors all monitoring controls of a real Vista desk. For talkback, a gooseneck mic can be plugged into an XLR socket on the face plate.
Automation and Third-Party Integration

Seamless Integration

Studer’s AutoTouch Plus dynamic automation system allows the most complex automation tasks to be carried out within a clear and logical workflow while EMBER support provides seamless integration with broadcast and newsroom automation systems. EMBER integration allows broadcasters to expand news casting capabilities without adding overheads in newsroom operations.

Vista X interfaces with all major DAW systems and many DAW functions can be directly controlled on the console. Simple configuration screens within the Vista X system allow the operator to enable the DAW control interface, then mix and match DAW channels alongside Vista channels. Innovative Vista operating concepts such as Strip Setup and Ganging bring DAW integration to a new level and greatly enhance the production workflow.
Dimensions

- 32 Faders 1426mm
- 42 Faders 1811mm
- 52 Faders 2196mm
- 62 Faders 2581mm
- 72 Faders 2966mm