STUDER

Guest 1   Guests   Band

Aux in 2   Aux in 3

-3.5 dB   -4.8 dB

1.8 dB

Pfl Off   Pfl Off   Pfl Off

Matrix 4   Matrix 5   Matrix 6

14.6 dB   -4.6 dB   -8.4 dB   -6.0 dB

Pfl Off   Pfl Off

**Digital Live
Production
Console**

VISTA 8

STUDER

Studer Vista 8

VISTA 8
DIGITAL MIXING SYSTEM

Acclaimed Vistonics® User Interface

Revolutionary and unique Output Control

Stunning Metering

Static and Dynamic Automation

Proven reliability – peace of mind

Resilient system – specifically designed for broadcast
and Live Production

Pushing the Limits of Ergonomic Design

The Studer Vista 8 Digital Live Production Console represents another leap in ergonomic design and operational ease.

The Studer Vista 8 is a digital mixing system for live production and broadcasting applications that reaches far beyond the limitations of existing designs. Following on from the enormously successful Vista 6 and Vista 7, the Vista 8 also includes the worldwide acclaimed Vistonics User Interface, but this time has extended the concept to provide unmatched output metering and control and a host of other groundbreaking features.

The Studer Vista 8 is quite simply easier to operate than an analogue console and a joy to work with. Within minutes, engineers will quickly find their way among the numerous exciting new features. Operation of the console is unmatched in intuitiveness and simplicity. Operators in live transmission and production will work with full confidence since the user interface reduces the risk for human errors to an absolute minimum.

The Studer Vista 8 fits the requirements of any live production and broadcasting environment. The mixer's flexibility, reliability and quality sound are based on Studer's well-proven and acclaimed digital technology.

# Vistonics® - the Key to Efficient Console Operation

The Studer Vista 8 incorporates the unique Vistonics® user interface which ensures quick and easy console operation – the key to trouble-free live productions.

In high pressure live situations sound engineers depend on a mixing console which allows a fluent working process. Furthermore, a facility with numerous engineers and freelancers or one which is open to external production teams must provide an easy-to-learn mixing console.

Control of the digital mixing console is therefore a major issue. Today's practice of arranging controls around or below a TFT flat screen display has obvious ergonomic limitations. Audio parameters are displayed on the screen but their relevant controls are located elsewhere. Operators must therefore go through a mental translating process countless times throughout the day which makes live production fatiguing and the working process prone to errors, especially in high pressure situations.

This is where the unique Vistonics® (pat. pend.) operating concept of the Studer Vista 8 comes in. It includes the patented technology for integrating rotary controls and buttons within a flat screen display to finally bring visualization and operation into immediate proximity.

Vistonics allows colour and shape of controls to be varied according to good ergonomic practice. A given audio function is always associated with the same colour and a parameter is always associated with the same icon displaying values graphically - just as or even more intuitive than an analog console.
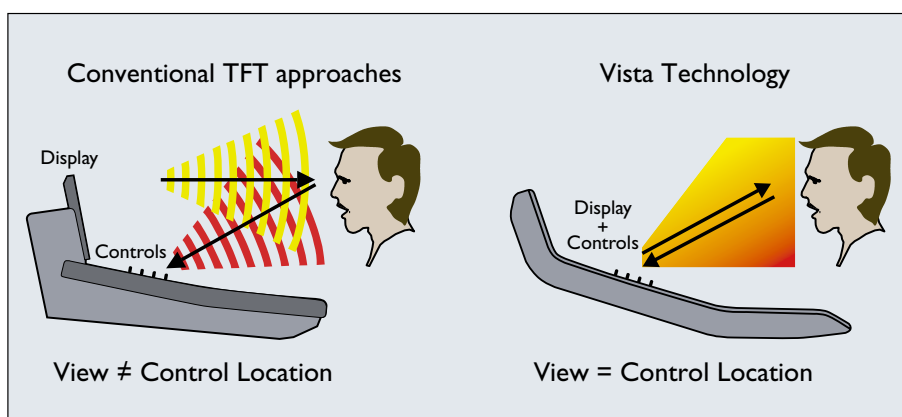
Channel controls on the Studer Vista 8 consist of a TFT screen with buttons and rotary controls mounted on it with a touch-screen area immediately below. Other channel specific controls such as the fader, mute, on/off buttons, etc., are arranged above and below the screen to provide an instant and perfect overview, rapid familiarization and confident operation. The Studer Vista 8 is the only live production mixer which tells you exactly what it's about to do.

Conventional TFT approaches

Display

Controls

View ≠ Control Location

Vista Technology

Display + Controls

View = Control Location

Channel Bay

The operating desk consists of one Control Bay (see page 8) as well as between two and seven Channel Bays incorporating 22 to 72 physical faders on the console. Each Channel Bay accommodates 10 faders (100 mm), the unique Vistonics graphical operating unit, additional assignable rotary encoders at the top of the channels, as well as additional buttons and controls. Each channel includes a high resolution dual colour bar graph meter with additional gain reduction display for the compressor/limiter and expander/gate at the same time.


Stunning high contrast dual colour meters.

Overview

Every channel displays its settings of dynamics (green), equalizer (red) and panorama (yellow) in the Vistonics touch area allowing instant overview of the entire console. By pressing one button on the Global View area, the four Vistonics rotary controls on each channel change their function throughout the console, displaying the four most important parameters of the chosen audio function. Global View buttons can be found on each Channel Bay, permitting access from wherever the operator is sitting.
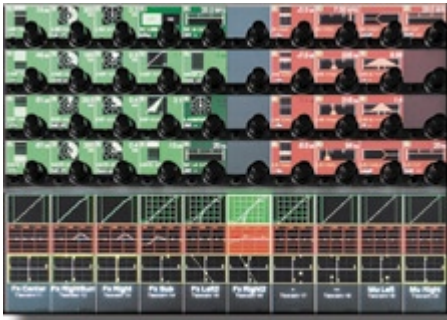

Global view keys.
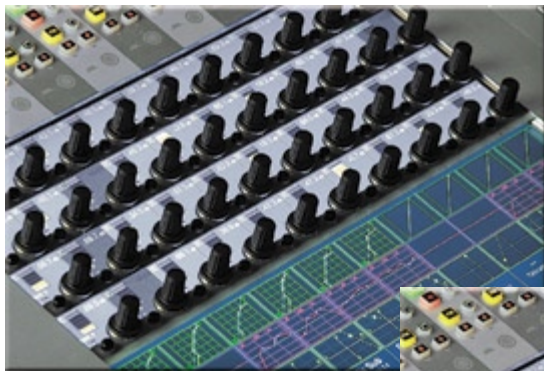
Vistonics®: Operation

A simple touch on the desired function of the chosen channel opens up the complete function onto Vistonics®. The operator can immediately adjust values and close the selected view afterwards.

Functions have their dedicated colour: equalizers and filters are red on Vistonics® as well as on all related buttons. The same applies to the dynamics (green) and the panorama (yellow).

By touching, for example, the equalizer and the dynamics on the same channel, they both will open up onto Vistonics® with their complete set of functions. The operator can immediately and easily adjust one function in relation to the other by adjusting, for example, the equalizer and the compressor simultaneously.
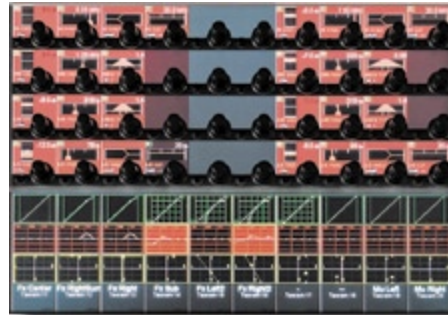
By simply turning the rotary, the chosen value can be adjusted and the changing value is immediately displayed, graphically and numerically. Vistonics® has icons which have been carefully designed to represent a logical readout for each individual function: levels are displayed as bar graphs, time settings as circles, frequencies as frequency graphs, to mention but a few. This allows easy recognition of the function itself as well as its state and approximate value - without the need to actually read the word and numerical values display.
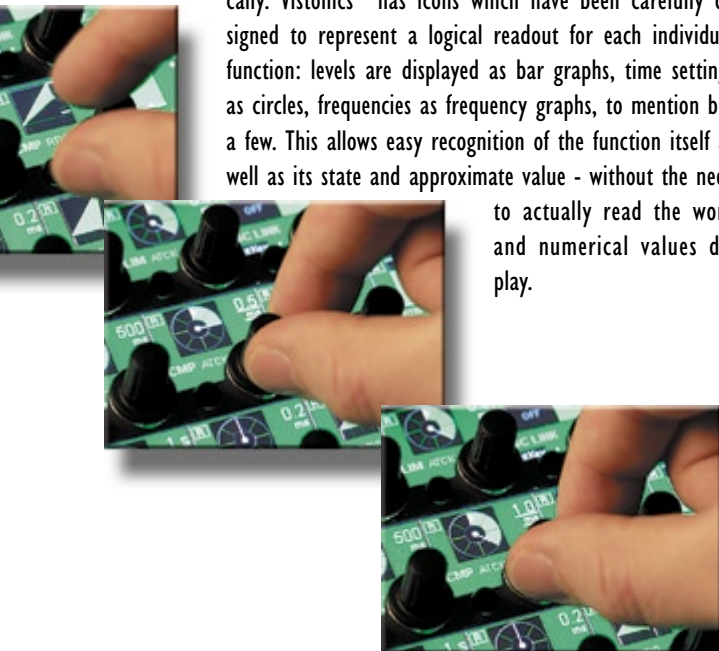
Pressing the physical button next to the rotary on the Vistonics® activates the displayed switch function. The status is indicated by "On" or "Off" in the readout as well as by the brighter colour of the display which is visible even from a distance.

Operation of the Studer Vista 8 resembles that of an analog console but is even more intuitive. Established ergonomic practice blends with modern technology to increase operating comfort and ensure trouble free operation in live environments.

The Studer Vista 8 is **The Return of the Human Interface.**

Consistent Operation throughout the Console

No efforts have been spared to improve and simplify the operation of the Studer Vista 8. Vistonics® is part of a comprehensive and unique operating concept, enhanced by the clear philosophy of a few simple rules which can be combined and remain unchanged throughout the console.

Touch'n'Access

The Vistonics patented technology for integrating rotary controls and buttons within a flat screen display brings visualization and operation into immediate proximity. The operator touches the desired function overview and is given immediate access to all available controls (see pages 4 to 6). There are no sub menus - every parameter is just one button-press away; an essential feature in live situations.

Fast Copy/Paste and Half-Lit Keys

The console incorporates dedicated copy/paste keys for each audio function including EQ, dynamics, panorama and delay. A simple button-press in the original channel and another in the target channel copies the settings across. Copy/Paste is guided up by the half-lit buttons: if one button has been pressed and the desk is awaiting a second button-press, all available target buttons illuminate at half brightness until one of them has been selected. Also, complete channels can be cloned to one or many target channels. Setting up the Studer Vista 8 for a production becomes a quick and easy task. Preparation time is reduced considerably.

Scrolling / Layers

DSP channels not visible on the physical desk are accessed by scrolling the channels available in the DSP core. The channel order is freely assignable: channels can be grouped or even shown repeatedly on the surface. This ensures physical orientation on the desk so that the operator is always clearly informed as to what is happening. In addition, each fader can individually be flipped to a second layer for fast and immediate access to emergency channels such as backup microphones. Uniquely, all second layer channel labels, each with a small real time meter can be shown on the channel strip as well as the current layer channel label.

Label and metering for the second layer.

Momentary/Latching Activation of all Buttons

The console recognizes and senses the button-push duration and responds accordingly. The buttons therefore act momentarily or latchingly depending on how they were pressed (pressed-and-held or briefly tapped). In addition to Talkback, PFL, EQ on/off, etc., the functions affected include those accessed by the touch-screen - such as viewing of an audio function - as well as the monitoring source selectors. This is extremely intuitive and dramatically reduces the number of thought processes in normal console operation freeing the mind for the job at hand — the audio.

Ganging

The ganging function in the mixer allows the operator to quickly apply functions to multiple channel strips because channels within the gang act as one. This can be used, for example, for Mute, Faders, Copy/Paste, Bus assign and much more to increase speed and comfort in operation. Creating a gang over the console makes the set-up quick and easy.

Your Live Production – Totally under Control

The ease of operation in the Channel Bays is replicated in the Control Bay with a unique and intuitive concept of output channel operation.

The acclaimed Vistonics® operational concept is based on the fundamental principle of 'where you look is where you control', as in the familiar channel strip operation previously enjoyed by operators using analogue consoles. For Vista 8 the challenge was to extend the concept even further.

Unique Output Control

The usual basis for console design is input channel control and here Vistonics® provides fast and intuitive operation with unequalled visual overview. The control requirements for outputs differ from those for inputs in several important ways. Excellent metering and fast adjustment of the output channel levels themselves is essential. But it is often the contributing channels to the master that is important to the user. Usually level control of the contributing channels is handled via the input channel strips. The Studer Vista 8 offers a unique and revolutionary operational concept for controlling outputs.

The Control Bay houses a Vistonics® screen with 40 rotaries and switches and 12 faders, 10 of which line up with the Vistonics® rotaries as in the Channel Bays. Any channel can be assigned to these faders but they are most useful for output channels such as VCA Masters or Group masters. In fact, the 10 faders have a separate navigation system to the fader bays. This navigation is made up of 4 banks.

The rotaries on the Vistonics® screen can be thought of as an additional 40 faders with 40 real time meters. On these 40 rotaries, up to 40 master faders can be represented with direct access to level control of the master. As each rotary level control is immediately adjacent to its associated meter, which includes headroom and overload indication, the operator's reaction is completely intuitive — 'where you look is where you control!'

The most revolutionary and unique use of the rotaries is to call up all of the level controls of the contributing channels of any of the masters displayed on the faders below. A 'Contribution' button above each fader provides reverse bus interrogation, 'pulling' all of the faders of the contributing channels to the rotaries above with channel name and of course real time meter. The user can even assign further channels to the masters from the Vistonics® screen directly. This reverse way of working is unique to the Studer Vista 8 and offers the user incredible speed of operation for making small balance changes without having to go to input faders.

In addition to the 12 faders and the Vistonics® screen, the Control Bay houses all general and global con-

trols as well as a set of 8 freely assignable high resolution dual colour bar graph meters including a dual dynamics read out. Each one of the meters can independently be switched to display monitored sources, PFL and Solo. A wide range of optional third party and Studer meters can be fitted into the meter section instead of the standard meters, and four 190 mm DIN-style cassette spaces are also available for individual meters, machine control, third party intercom etc. A single motorised joystick is an option for Surround Panning and VSP operations. The operation principle in the Control Bay as well as the whole console is "one control per function" - no paging and no hidden functions. This provides instant overview as well as immediate access to critical controls to make operation quick and safe.


Immediate access of up to 40 master faders with real time meters.

The Vista 8 Control Bay

Graphic Controller

The Graphic Controller (GC) provides the operator with quick and easy access to a vast array of console functions and facilities which need only occasional operation, e.g. project and system management, snapshot management, router control and assignment. The GC's large TFT flat panel colour display which is mounted externally is used mainly to display information during normal operation. The Strip Setup window displays all available channels with their labels, including Mute and Level Present/Clipping information. Channels can be freely arranged on the physical surface by drag and drop on the GC making console preparation an easy task. Snapshot and Cue list functionality are also displayed in the GC Window.
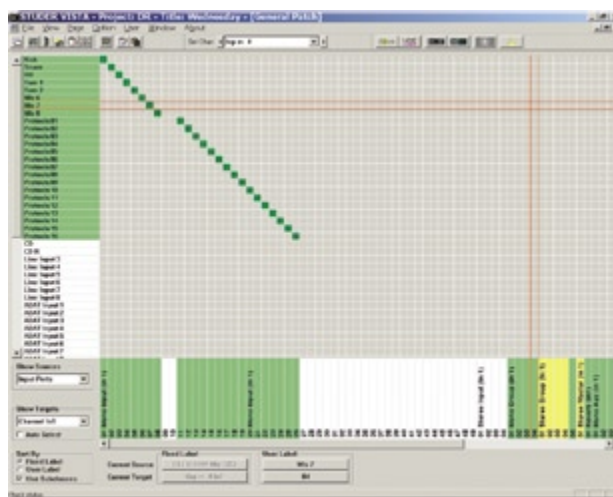
Routing page of the GC.

Input and Output Routing

Integral within the DSP core of the mixer is an extensive routing matrix, providing complete easy-to-patch facilities that eliminate the need for an outboard patch bay or front-end router. In an OB truck, the intergrated routing matrix can be used as the audio distribution backbone thus making expensive and large solutions obsolete. Any signal, inputs, direct outs, insert sends and bus outs may be routed in any combination to any console channel, insert return or physical output of the Studer Vista 8 system - with sample rate conversion if necessary. The whole patching of external equipment and sources can be done with one simple button-press. This results in reduced set-up time and tremendous flexibility.

The router may also be externally controlled via the Probel protocol with label import to offer true audio follow video functionality in a broadcast environment.

Monitoring and Talkback

Control room monitoring supports standards from LR, LCR to LCRS and 5.1 (optionally Dolby EX). The monitor source selector provides access to a large number of sources which can be accessed either directly via the push-buttons or via a pop-up menu on the GC. Two studio areas can be fed independently with the required monitoring sources. An extensive talkback system is provided on the Vista 8 with dedicated TB buttons on each channel strip in addition to a global switch in the control bay. 24 GPIs and 16 GPOs are available as an option for controlling external equipment and signalisation.

Dedicated functionality for Broadcast and Live Production

In addition to the standard functionality, the input channels provide several broadcast and live production specific features. Dedicated controls for extensive snapshot filtering and sorting are available to deal with the most complex live productions. Dedicated buttons for talkback (e.g. to Direct Out, N-1 etc.) and for user programmable functions provide more flexibility and ease during live operation. Dedicated Matrix busses can be configured which suits the fixed install application but can also offer a fast and easy method of handling complex head phone feeds in a broadcast environment. 16 dedicated Mute Groups are also available. The Vista Remote Bay, incorporating 10 or 20 faders can be ordered in addition. This allows operation of all the channel functions of the Vista 8 up to a distance of 400 m from the main console.

Discrete console lighting housed at the top of the meterbridge is available as an option – perfect for fixed install live applications.

Stress Free Outside Source Management

In the last few minutes before the studio goes on-air or the show starts, stress is at it's highest and many things are happening at once. Clear and fast console operation is essential. Problems with outside sources and reporters often induce a high stress factor; setting up the correct return feeds and talkback on-air needs to be as simple as possible. In some cases the n-1 feed may not be what the outside source wants to hear while waiting to go on-air. The Vista 8 offers a dedicated switch per channel that automatically sends the outside source and alternative signal to the n-1 whilst the outside source is not on-air. When the outside source is put out on-air (fader opened), the correct n-1 feed is automatically switched to the outside source without the user having to disable the switch manually. In addition, any number of outside sources are able to talk off line together in a conference mode (MPX), with the outside source automatically removed from the conference and sent the correct n-1 feed when put on-air. Outside sources

Control Bay faders.

Perfect Tools for Surround Production

Studer's unique Virtual Surround Panning (VSP) fits the Studer Vista 8 console perfectly. It allows the operator to create a realistic 5.1 sound field modelled around a few simple parameters.

Studer's VSP system, unique to the Vista series consoles and the D950 M2, provides the operator with creative possibilities unavailable with any other console. With VSP's time delay panning and created reflections, even the most complex surround production will result in a quality mix which is second to none. With VSP, mono sources can be positioned to produce highly convincing surround sound without employing time-consuming and often unsatisfactory external processing.

With few or no sources of multi-channel sound elements available, operators must attempt to create surround from purely mono sources using delays and reverb devices. Thus, the creation of an impressive and satisfying surround mix takes much time and effort, and the results are often disappointing.

Virtual Surround Panning simulates a defined acoustic space and positions the sound source within this space using the channel pan control. Surround impression is guaranteed by generating early reflections with the appropriate directionality and time delays on all speakers.

These reflections, which are absent with normal panning, are the key to localizing the mono source within the surround field. VSP also gives better directional imaging by adding phase and frequency spectrum information to the existing amplitude difference between channels, if the operator wishes to do so. In addition, VSP may provide late reverberation to the panned signal. Up to eight reverberation systems can also be utilized even stand alone, adding another unique feature to the Studer Vista 8.

The results - which must be heard to be believed - are very impressive and offer an enhanced experience in surround sound unachievable with any other console system.

Visual information and operation of Virtual Surround Panning
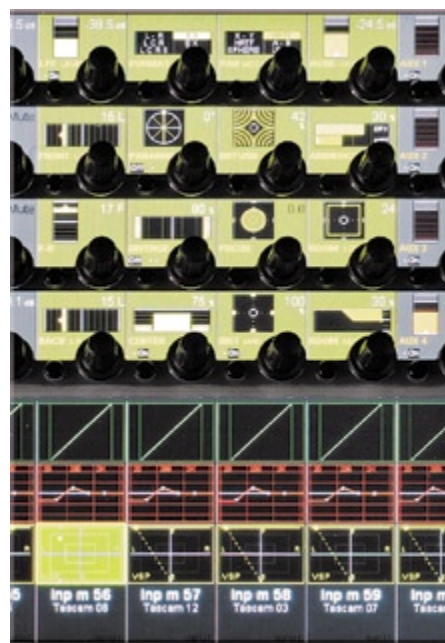
STUDER VSP
VIRTUAL SURROUND PANNING

Single motorized and touch-sensitive joystick (option) in the Control Bay

Proven Reliability for Live Transmission

The unparalleled operating concept of the Studer Vista 8 is completed by Studer's renowned technology incorporating an excellent reliability record.

The design and implementation of the Studer Vista 8 provides a high level of reliability and remarkable resilience in operation.

Redundancy

With any live desk, redundancy is an essential feature to ensure constant 24/7 operation.

The redundancy concept includes all parts of the Vista 8. Redundant Power supplies are available throughout all parts of the system, including a UPS option for the control surface. The DSP core can be equipped with a redundant DSP card that takes over the audio signals in the case a DSP card fails — with no audible effect and no interruption to the operator. The faulty card may be replaced during operation (hot-plugged) with no interference whatsoever on the mixer and the audio signal. Redundant MADI inputs/outputs is also available as an option.

Peace of Mind - Redundant Control System

The control system is fitted with a Raid 0 Disk array and redundant power supplies as standard for peace of mind. As an option, the Vista 8 also

offers full redundancy for the Control System. This means that in the unlikely event of a control system problem, the user can switch to the redundant system and — most importantly — return to the desk settings in use previously. Backups of mixer settings can also be copied on the system CDR or on a memory stick via the USB port on the front panel. The redundant control system offers true 100 % redundancy and peace of mind to both operators and technical managers alike.

Redundant Control System switch.

Maintenance

The channel bay as well as the control bay fold up for quick and easy maintenance. A real time System Surveyor with log file is provided as part of the GC to firstly act as a confidence check for the operator and secondly, to assist with maintenance and fault finding.

All connections to the operating desk can be accessed from the front which becomes essential for installations in places with limited space, such as an OB truck.
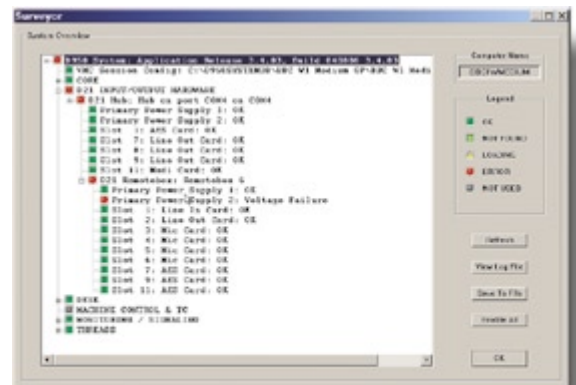

System Surveyor

Studer Original Equipment - Made in Switzerland

In the world of professional audio, the Studer name has always been associated with quality and reliability, together with advanced technology, innovation and premium sound.

For over 50 years Studer's commitment to continuous investment in R&D has been rewarded with its maintained position as a world leader in audio technology as well as the award of numerous technology patents. More importantly, this dedication to investment in research gives Studer's engineering and design teams an unmatched knowledge base from which to develop the innovative and often unique products which customers value so highly.

Whether the requirements are for technical proposals, ergonomics solutions, new operational paradigms, innovative installation ideas or future-proof planning, Studer can provide them. Everything you need is here - developed and manufactured in Switzerland.
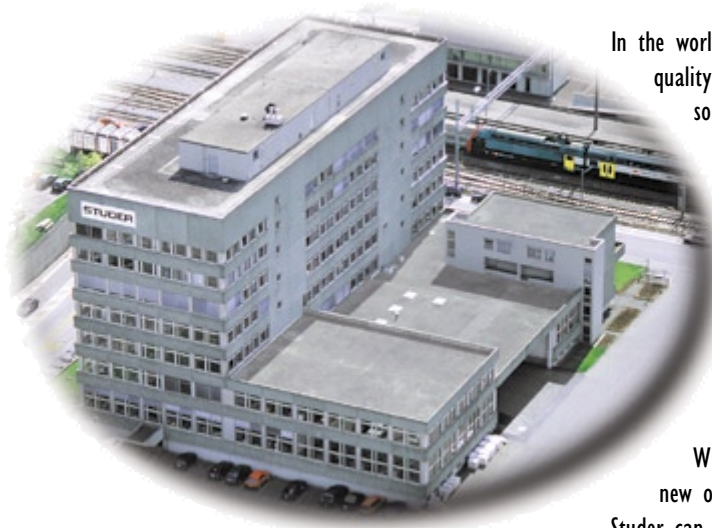
Technical Data

The console consists of one Control Bay as well as between two and six Channel Bays incorporating 22, 32, 42, 52, 62 or 72 faders.
The optional Empty Bay adds another 395 mm (15.55") to the total width. The Empty Bay can be ordered with or without 15" TFT flat screen display.
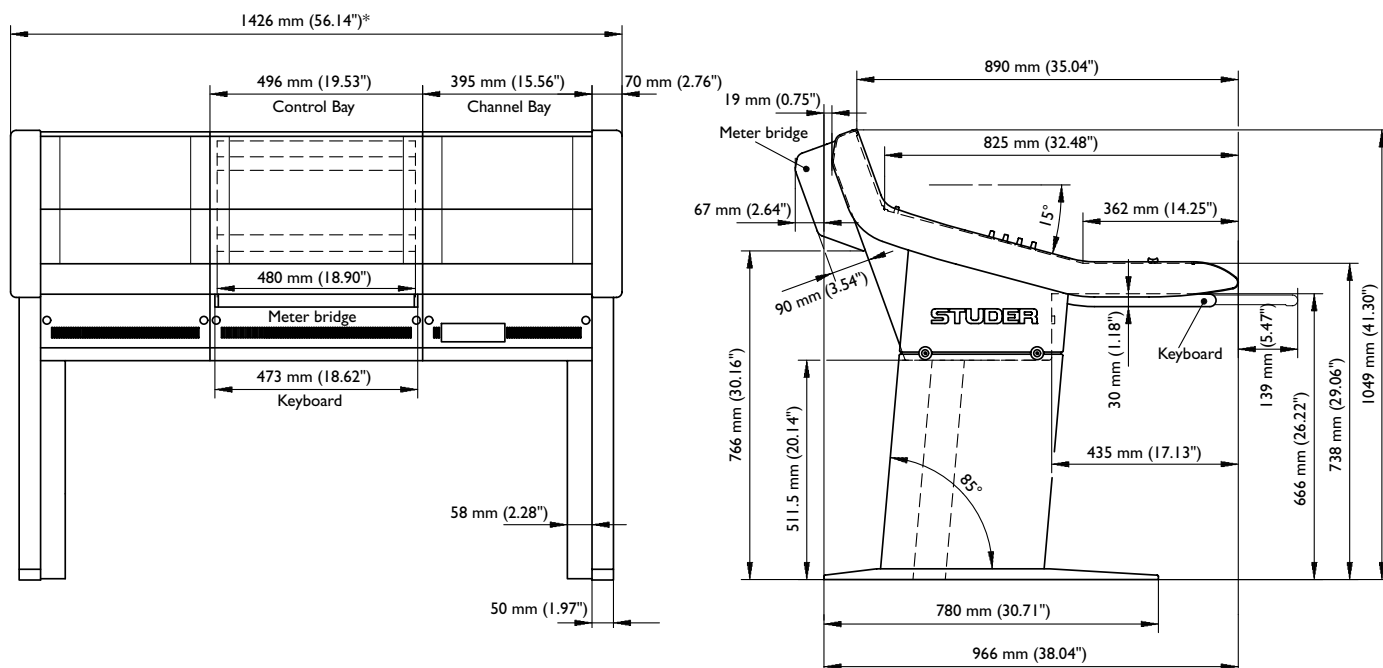
| Total Faders	32	42	52	62	72
Console width in mm*	1426	1821	2216	2611	3006
Console width in inches*	56.14	71.69	87.24	102.79	118.35

* = Total width including Control Bay, Channel Bays and side panels

Studer Vista 8 I/O Frames

The Vista 8 uses the Studer D21m I/O system which provides a flexible and expandable high density 24-bit 96 KHz capable audio interface and also acts as an I/O hub for the Vista DSP Core. Remote Stageboxes may be connected via this hub using MADI fibre connections, enabling large numbers of microphone sources in either studios or OB locations to be connected to the console. The D21m 3U stagebox can accommodate up to 48 mic inputs with splits and may be shared between multiple consoles.

An example of a customised stagebox
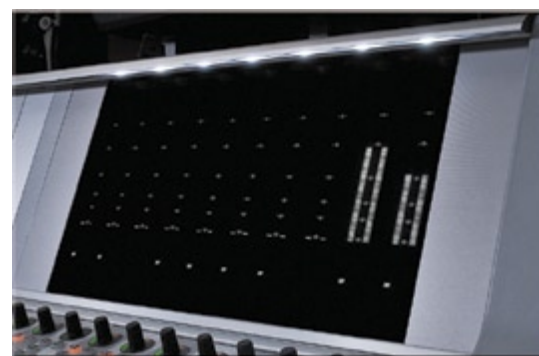
Optional illumination bar above the meter bridge, especially useful in dark environments like OB-vans or live applications.

Example of a custom panel with the integration of an intercom station.

Optional programmable button array.

Studer Vista 8 Monitoring Frame

The monitoring rack includes Stereo, LCR, LCRS and 5.1 monitoring for the control room as standard.

Main features:
- 3 separate speaker group outputs (up to Dolby EX as option)
- 2 independent Studio Monitoring Outputs available
  talkback to 2 external locations
- producer talkback microphone support
- digital TB to core internal channels
- separate PFL / Talkback speaker output

MasterSync Generator

As a standard the Vista 8 console can be synchronised via any AES/EBU signal. As an option, the Studer MasterSync Generator allows the console to be synchronised to any other format such as black burst video, wordclock etc.

Studer MasterSync generator

Studer Vista 8 DSP-Core Configuration

The DSP core of the Studer Vista 8 builds on Studer's well-proven digital technology. It incorporates an excellent reliability record and inspires a high degree of confidence enjoyed by the numerous users operating systems in mission-critical applications. The DSP core uses parallel processing architecture with integrated floating point circuitry and an internal word length of 40 bits. No overloads will ever occur within the console, since floating point architecture is even used in the summing busses. The system can be used in 48 kHz or 96 kHz mode.

The more DSP cards that have been fitted in the core, the more DSP power will become available.
The core sizes below give an example of possible configurations.

Small – 5 DSP cards, 96 D21 Inputs and Outputs:
e.g. a 48 channel stereo mixer or a 34 to 42 channel surround mixer

Medium – 16 DSP cards, 192 D21 Inputs and Outputs:
e.g. a 128 channel stereo mixer or a 82 to 104 channel surround mixer

All the above mentioned core types include aux, master etc. The available number of channels in a surround system depends on the chosen channel type (Standard or with Virtual Surround Panning VSP).

Studer Vista 8 DSP core.

Configuration Editor

With the optional Configuration Editing Software the functionality of the console configurations can be altered. This includes the processing within the channels, interconnections and the number of busses. Extensive import functions allow the user to adapt existing configurations to meet changing needs.
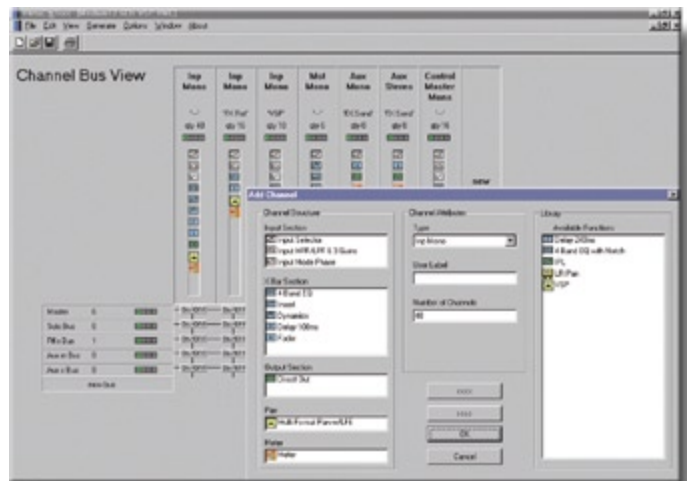
Configuration Editor

STUDER

professional audio equipment

H A Harman International Company

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