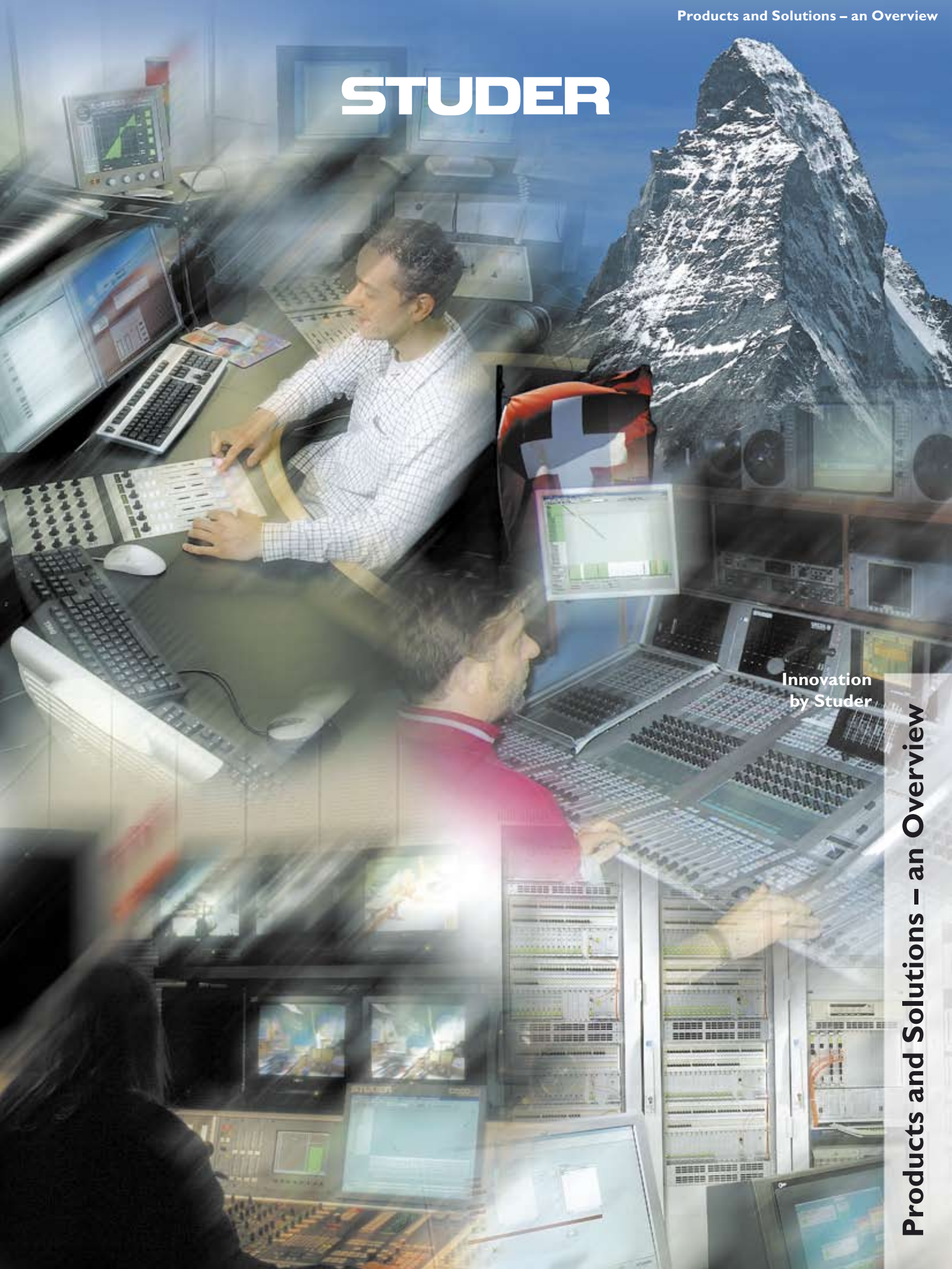


# STUDER



Innovation  
by Studer

Products and Solutions – an Overview





D950 M2 – OB Van, RSR Lausanne (Switzerland)



Vista 7 – Advantage Audio, Burbank (USA)

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Vista 8 – Copenhagen Opera House, Copenhagen (Denmark)



OnAir 2000M2 – Shanghai Media Group, Shanghai (China)

# **Pioneering the future of the audio industry**

**At Studer, our philosophy is to continually strive for perfection through innovative design, Swiss engineering and in-built quality. The net result of this approach is we provide our customers in Radio and TV broadcasting, as well as live installed sound industries with new and feature-enriched products. We have realised this goal through listening to you, our customers, and implementing your ideas, be they features, software or engineering based – along with a few of our own of course! Through this approach we have been able to provide you with the ultimate tools to reach new levels of excellence when producing programmes and shows.**

**Studer's long and successful history is founded on customer service. We have never lost sight of this fact and realise that it is an important part of the Studer package when choosing to buy a Studer product. As such we are committed to continuing our traditions of combining excellent Swiss craftsmanship, well-engineered innovation and intuitive ideas, while always keeping the customer benefits as our main objective.**

**The constant evolution of ergonomic user-interface technologies, combined with leading edge digital signal processing, has resulted in the most efficient and groundbreaking innovation, namely the "Vista" series of digital mixing desks. By focussing on the human aspects of operation, a product has been created that is not only intuitive, efficient and reliable but also a pleasure to use.**

**As digital audio information technology develops it has enabled a higher degree of system integration. In broadcasting, the digital mixing console is no longer seen as a standalone product but as an ergonomic point of access to digital audio data in a fully integrated digital audio system. Today the OnAir 3000 and "SCore" platforms provide the basis of the most flexible and networkable systems for a fully digital broadcast chain.**

**Innovation goes on. At Studer, we are dedicated to bringing you the benefits of our evolutionary and innovative process delivering you new, exciting and outstanding products. With many more to come!**







# OnAir consoles

With the OnAir series, Studer offers the widest range of digital on-air and production consoles on the market. The experience of thousands of installations throughout the world and Studer's well-known expertise and craftsmanship have led to a complete range of the most flexible and easy to operate on-air desks for small applications up to the most demanding and complex infrastructure systems.



## OnAir 3000: Ultimate Flexibility in Specification

The control surface of this third generation Studer digital on-air mixing console, the OnAir 3000, is a logical evolutionary step based on extensive experience gained in hundreds of installations throughout the world. It combines the philosophies of the well-proven OnAir 2000 and OnAir 1000 control surfaces and uses the most modern software and hardware architecture allowing the greatest possible flexibility to configure the system and fulfil every conceivable user requirement. The Studer OnAir 3000 is ideally suited for medium to large and complex radio and TV broadcast and production applications, and inherently includes a most modern audio networking architecture.

The OnAir 3000Net, an optional variation of the OnAir 3000, migrates the desk from a stand-alone operation to an open and networked component of the overall infrastructure of a broadcast centre. By interconnecting several Studer SCore, (control and audio), the local and decentralised audio resources in each SCore – be they sources or output busses – can be shared by the other SCore in the network. This means that a user working on, for example, SCore A can access the microphone which may be physically in another location and connected, for instance, to SCore B, route it on a fader on his desk surface and use it as if it was connected virtually to his SCore.

Brochure 10.26.5500

OnAir 3000 Modulo in custom table

The digital Studer OnAir 3000 Modulo is based on a completely modular desk with a wide range of compact and elegant control surface modules. Layout options range from a highly comprehensive engineer-operated continuity console with up to 48 faders to a single 3-fader panel for DJ and newsroom use or even a PC-operated system with no physical controls.



Part of the desk may also be detached and mounted for example in a news studio either as a tabletop unit or in the Modulo version as a drop-in module in studio furniture.

## Touch'n'Action

The operating concept of the Studer OnAir 3000 incorporates the same patented "Touch'n'Action" philosophy as the highly successful Studer OnAir 2000, using colour screens. The "Touch'n'Action" concept offers immediate access to parameter settings, vital in all live situations, and an instant overview of all channel parameters at a glance permitting for a clean and uncluttered surface design. Together with the flexible user access this makes for an ideal tool for easy and stress-free operation up to complex and demanding applications.



The Studer OnAir 3000 is based on the Compact SCore, a completely new DSP engine developed by Studer. The Compact SCore uses the same digital audio algorithms as the Studer Vista family, thus guaranteeing renowned Studer sound quality to the highest level. Signal interfacing is performed by the D21m I/O system used also in the Vista and D950 M2 large frame consoles.



OnAir 3000 fixed frame version

For fast and simple operation, the digital Studer OnAir 3000 is also available in a fixed frame tabletop version providing an ideal solution for quick installation, whether it's in a fixed studio operation or a mobile environment. The frame incorporates the same hardware modules and function blocks as the Studer OnAir 3000 Modulo version, allowing users to choose any required combinations according to their individual applications.



OnAir 3000 Modulo – Newsbeat Studios, BBC London (UK)

## Editor Module



This module comprises an extended three fader option including a subset of the monitoring and talk-back functionality and includes buttons specifically designed to assign the rotary function. The module includes eight freely configurable buttons each for monitoring source selection and talk-back destinations, four configurable buttons for rotary functions like input routing, gain etc, and volume control for headphone and loudspeaker levels. This provides a stand-alone environment particularly useful for an editor or journalist.

Typically up to four Editor Modules may be connected to a stand-alone SCore for an editorial or production office. The journalist or editor may connect the recording device with interviews to the SCore via a D21m stage box, then edit on an editor workstation and finally mix it using the three faders. The SCore and Net options provide access to all configured audio sources in the OnAir 3000 environment.

## Monitoring Module with Timer Extension

From V2.1 every fader channel has a separate stop-watch displayed in the label field of the Fader Screen. Timings are presented to the host or producer by the technician via this extended Studio Monitoring Module, adjacent to the stop-watch display is an additional local stop-watch and time of day display.



## Fader Screen module

The 12" colour touch screens display an array of information including: input settings, equaliser and dynamics values, AUX send levels, N-X contribution, input, output and insert routings, bus and group assigns, Pan/Bal and channel label, all in real time and all with real values.

The Fader Screen is also available in multi-functional format with additional DVI input and is switch-able between standard channel display and any external video source (600x800). This can be used to integrate with the Studer Call Management System (CMS) or, for example, display news or say a football match for live transmission.



## Compact Module

The OnAir 3000 surface is also available in a Compact version for less demanding applications or where space is at a premium. The fader modules can be housed in a similar table top as the Monitoring and Talk Back Module and can be combined with a Modulo Main Screen forming a complete desk. All modules are connected via Cat 5 cable to the distribution box.



## OnAir 2000M2: Refreshingly Simple to Use



The Studer OnAir 2000M2 is a modular digital mixing console for medium to large on-air and production applications. Its flexible concept allows you to adapt it to your precise requirements.

The number of fader channels can be chosen from between 6 and 24 channels in units of 6, while analog or digital input and output modules can be selected according to your specific signal sources. The Studer OnAir 2000M2 is very simple to use thanks to the patented "Touch'n'Action" operating concept. The operator can concentrate on the specific task, making a great radio program using only the minimum of controls on

the console surface. Comprehensive monitoring and talkback facilities enable integration within large systems comprising several studios and control rooms. The Studer

OnAir 2000M2 is also ready for operation with radio automation systems like the Studer DigiMedia for fully unattended or semi-automatic operation. It is available in two physical versions, either as a fixed frame desktop unit for easy installation or as the Studer OnAir 2000M2 Modulo in a modular version to be integrated into specific studio furniture.

Brochure 10.26.5052



OnAir 2000M2 Modulo in custom table



OnAir 2000M2 – Radio Monte Carlo, Paris (France)

## OnAir 1000: A Class of its Own

The Studer OnAir 1000 digital mixing console sets new standards for professional broadcasting, it makes accessing the new world of digital signal processing a pleasure. The Studer OnAir 1000 is based on the operating principles and many of the components of the Studer OnAir 2000M2. The simple yet comprehensive operational philosophy offers features and functionality unprecedented in its class, with a large graphical user interface which offers access to all levels of operation. Different modes can be set whereby only the key operating elements for routine operation are provided on the work surface — handy and convenient for day-to-day tasks. The Studer OnAir 1000 is ready for integration with radio automation systems, like the Studer DigiMedia for fully unattended or semi-automatic operation. The Studer OnAir 1000 is the ideal solution for small to medium on-air and production applications or as a complement to the Studer OnAir 2000M2. Brochure 10.26.4082



OnAir 1000 – Radio Bucharest (Romania)



OnAir 1000 – FM Fukui, Fukui (Japan)

## OnAir 500: The small Studer

The Studer OnAir 500 digital mixing console enables even more broadcasters to enjoy Studer's renowned digital audio quality and reliability, elegant styling and intuitive operational features. The OnAir 500 is perfect for smaller radio stations looking for an easy upgrade route from analog to digital, for new broadcasters setting up an all-digital infrastructure from scratch and for established broadcast centres requiring occasional spare capacity for special programs and outside broadcasts. The compact size and simple control layout of the Studer OnAir 500 are reassuring for first-time users and the logical menu systems provide swift and easy access to all the console's features. The Studer OnAir 500 is available either in a 6 fader tabletop version or as OnAir 500 Modulo in a 6 or 12-fader modular version for integration into specific studio furniture or an OB-vehicle. Brochure 10.26.5380

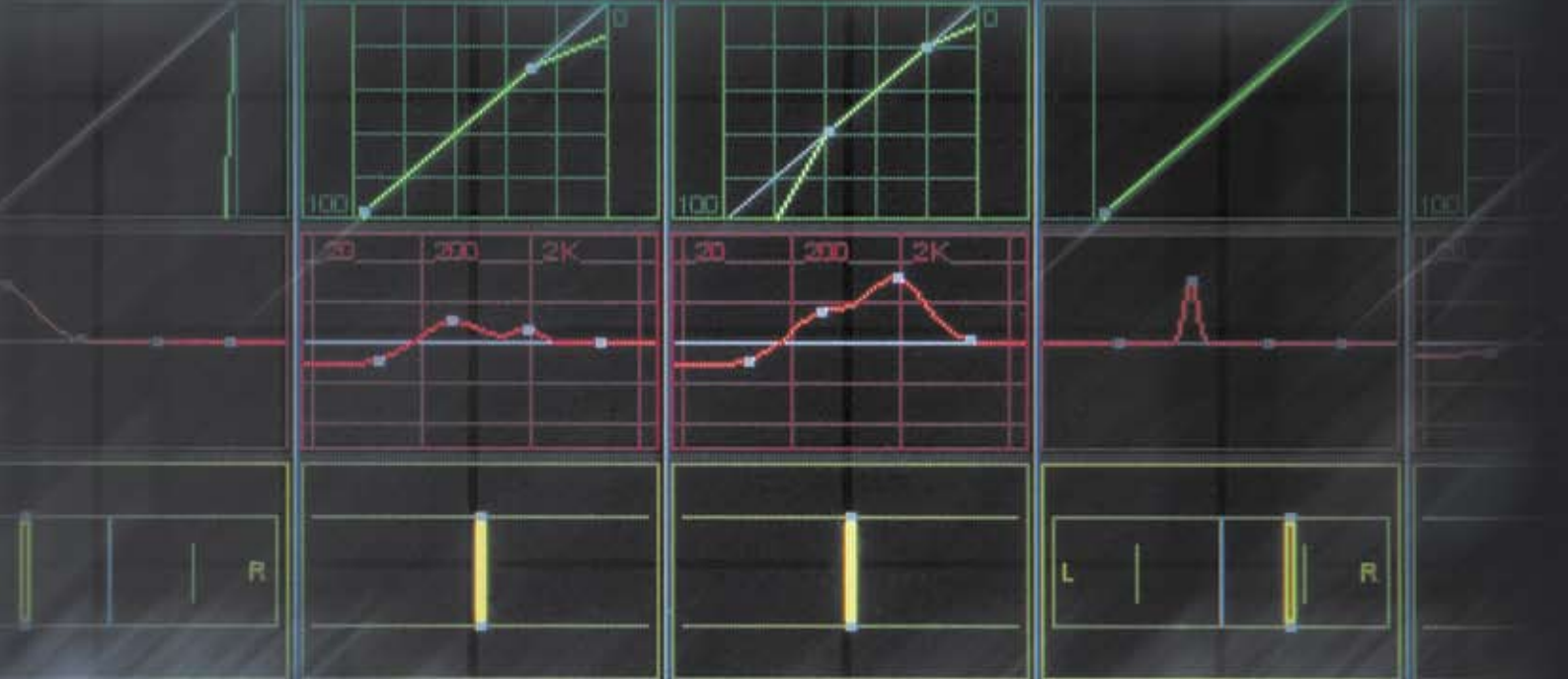


OnAir 500 – Antenne Niederrhein (Germany)



OnAir 500 Modulo in custom table





Audience 2

**Guest 1**  
Lexicon

**Guest 2**  
Audience

**Audience 1**  
Matrix 2

Pr  
0





# Broadcast, Production and Live consoles

Studer is traditionally famous for its large-frame broadcast and production consoles delivering the finest audio quality. By introducing the most advanced user-interface architectures and the most modern DSP technology Studer continues to take quantum leaps forward in this sector of the audio industry.



## Digital Mixing Consoles

### Vista 8: Pushing the Limits of Ergonomic Design

By introducing the revolutionary Vistonics® user-interface technology, Studer has set new standards in digital mixing console operation. Unparalleled in ergonomics and ease of operation it combines intuitiveness by graphical representation of complex parameters via coloured symbols together with localized control where the parameters are actually displayed. This patented and award winning technology in conjunction with thorough market research has led to a range of unique products – the Vista Series of digital mixing systems. These fantastic tools give sound engineers the absolute freedom to turn their creativity in masterpieces or keep calm in hectic live situations. More than that, getting familiar with and finally mastering the high technology of a modern digital mixing console becomes easy and is also fun.



The Studer Vista 8 is a digital mixing system for live, production and broadcasting applications that reaches out far beyond the limitations of existing designs. The Vista 8 also provides the globally acclaimed Vistonics user-interface in the control section for unmatched output metering and control, plus a host of other groundbreaking features.

The Studer Vista 8 is quite simply easier to operate than any analog or digital console and a joy to work with. Within minutes, engineers quickly find their way round the numerous exciting features. Operation of the console is unmatched in intuitiveness and simplicity. Operators in live events and production can work with complete confidence since the user-interface reduces the risk of human error to an absolute minimum.

The latest V3.5 software includes facilities for Cue List management, faster snapshot editing and audio-follows-video capability. It also allows integration with Harman's HiQnet networking system.

Brochure 10.26.5530

### Vistonics

The Vistonics user-interface technology includes rotary controls and switches mounted directly within a high-resolution flat-screen display to finally bring visualization and operation into the immediate proximity of operation. The colour and shape of the symbols are varied according to the best ergonomic practices. Any given audio function is always associated with the same color and a parameter is always associated with the same icon graphically displaying the values. Extensively researched and well-proven ergonomic practices are blended with the most advanced control technology to increase operator comfort and ensure reliable operation.



The DSP core of the Studer Vista 8 builds on Studer's well-proven digital technology. It boasts an excellent reliability record and inspires a high degree of confidence enjoyed by the numerous and growing worldwide user base operating mission-critical applications. Optional full redundancy of the DSP cards, the I/O cards and the control system in the desk guarantee the highest possible level of reliability throughout the whole system.

## Vista 7: Room for Creativity

Optimized for production and post-production work, the Studer Vista 7 offers extensive static and dynamic automation features. Studer's AutoTouch Plus Dynamic Automation exceeds the most stringent operating requirements. Its functionality permits the most complex automation tasks to be carried out within a clear and logical workflow, whereas for basic automation tasks a straightforward and simple operation mode has been included. In both cases the unique and detailed automation status and read-back of information is displayed on-line on the Vistronics screen.

The Vista 7 supports several third party machine control systems as a standard. Optionally, dedicated transport control buttons and a jog/shuttle wheel for multi machine control, track arming, etc. are integrated in the surface.

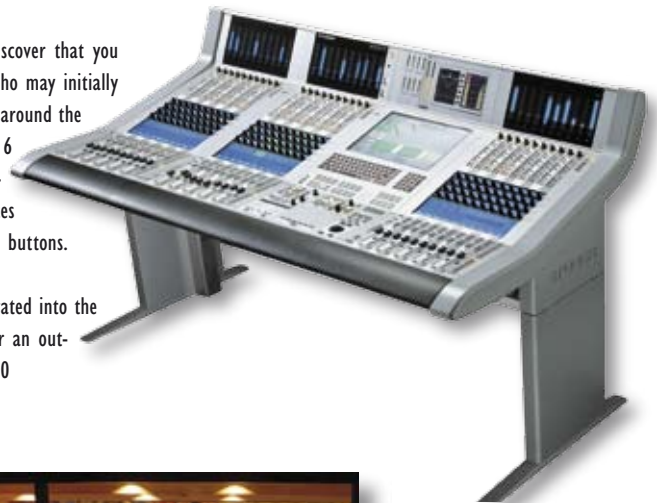


Like all Vista Series consoles, the Studer Vista 7 includes VSP, Studer's unique Virtual Surround Panning audio processing to create realistic 5.1 sound modelling. Brochure 10.26.5102

## Vista 6: Live broadcasting with Vistronics®

When familiarizing yourself with the Studer Vista 6, you will soon discover that you already know how to operate this console. Even freelance engineers who may initially be unfamiliar with the operating techniques will quickly find their way around the extensive functionality. Along with Vistronics technology, the Studer Vista 6 offers all the relevant broadcast features you will need, like comprehensive monitoring and talkback facilities, a large number of external sources inputs, support of two separate studios and an array of customizable buttons.

Common across all Vista consoles, an extensive routing matrix is integrated into the DSP core providing easy-to-patch facilities that eliminate the need for an out-board patch bay or external front-end router. Brochure 10.26.5390



Vista 7 – Det Norske Teater Norway, Oslo (Norway)



Vista 8 – Palace of Arts, Budapest (Hungary)



Vista 7 – VCF OB Van, Paris (France)

## Vista Remote Bay

All Vista consoles offer the possibility to connect external Remote Bays (detached fader bays), in standalone housings that can be located in an auditorium or an arena up to 400 m from the desk allowing mixing directly "on site". Flyer Remote Bay 10.26.5261





## D950 M2: Traditional Surface Technology

The traditional surface technology of the Studer D950 M2 offers the highest flexibility when it comes to customization, e.g. in a narrow compartment of an OB vehicle. The high granularity of the surface permits engineering of the desk modules within given room restrictions. The Studer D950 M2 is a well-proven standard in many fixed and mobile installations worldwide and relies on the same DSP and core technology as the Studer Vista series.

Brochure 10.26.5090



D950 M2 – ZDF OB Van, Mainz (Germany)



D950 M2 – BBC Maida Vale, London (UK)



D950 M2 – Turner Studios, Atlanta (USA)

## Analog Mixing Consoles

### 928: Concentrated Functionality

Rarely does an analogue mixing console offer such a concentration of functions in such a small space. The Studer 928 provides a wealth of features and facilities with no compromise on Studer's traditional quality at an excellent price/performance ratio. Built in 30 mm modules, the low current-draw design means ventilation is not necessary making this analogue mixer extremely versatile and a preferred choice for OB van installations and live TV applications throughout the world.

Brochure 10.26.3840



928 – France 3 OB Van, Nancy (France)



# Systems/Solutions



Studer offers a wide variety of infrastructure-related products from large and complex routing systems, computer-assisted playout systems, and audio interface systems to individual audio function blocks like tone generator modules or master clock generators.

## Route 5000: Maximization of Studio Resources

The Studer Route 5000 offers all the user benefits of a flexible digital routing system as well as the cost advantages of fibre-optic links. Its easy configuration saves studio time and resources, and the modular architecture of the hardware and the control software allows upgrading at any time. The Studer Route 5000 is based on the same DSP core and audio interfaces used in the Vista and D950 consoles and uses TDM switching technology. Control of the audio matrix is provided by the CS-Range software running on Ethernet client/server PC architecture with additional controller panels for dedicated local source and target switching. The CS-Range control software provides switching and status display of all sources and targets including channel processing and monitoring, off-line preparation of settings and salvos and time-scheduling of switching either for single events or regular event series.

Small router installations can be implemented by the Route 56, based on the same I/O system as the Route 5000, and the CS-56 control software. A maximum of 56 x 56 signals can be routed real time or automatically.

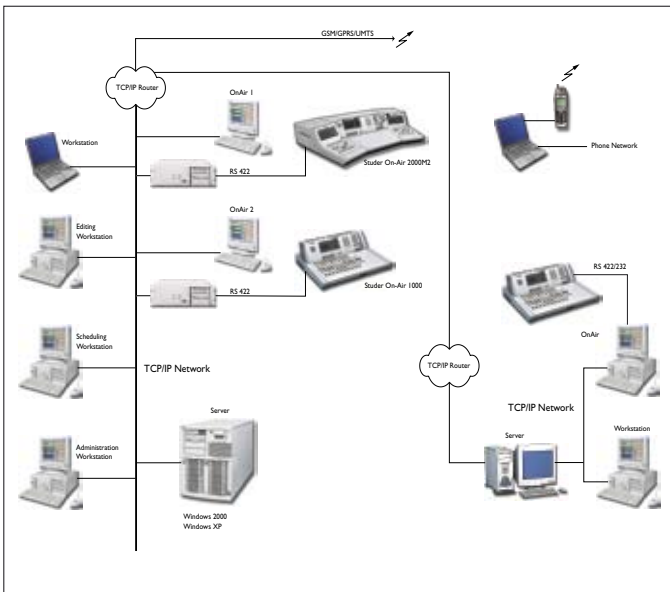
Brochure 10.26.4061



Route 5000/53 — Master Control Room of Sudan National Radio and TV, Kartoum (Sudan)



Route 5000/53 — Master Control Room of MediaCorp, Singapore



## DigiMedia: The Smart Broadcast Solution

For Computer Assisted Broadcasting Studer offers a complete range of software tools including playout systems for unattended operation or semi-automated use, database management, audio editing and multi-media applications. Studer's DigiMedia broadcast solution allows complete system integration from small applications with one playout station and one editing station to large multi-user and multi-studio environments. Seamless integration of third-party editors and news management systems is possible.

Brochure 10.26.3970





## D2Im I/O System

The connection of D2Im frames located close to the DSP core is provided over CAT5 cables. Such frames may also act as hub to remote stageboxes. This connection is made using standard MADI format. It also transmits all necessary control signals for the remote IO frames (e.g. microphone preamplifier control) without sacrificing any of the 64 audio channels. Product Information 10.26.5610



## DI9m I/O System

The DI9m offers a wide variety of different audio I/O cards as front-end to the Performa DSP core. Compact IU systems up to large routing installations can be configured, as well as decentralized systems interconnected via MADI fibre links. Brochure 10.26.3441

## D2I MasterSync

The Studer D2I MasterSync combines precise master clock generation with clock distribution capabilities, an essential part of a larger digital audio installation. The generator can be synchronized by external video, AES/EBU or Wordclock signals, or use its accurate internal reference to generate clock rates at six different frequencies between 44.1 kHz and 92 kHz. The built-in distribution amplifiers supply six Wordclock and up to 16 AES/EBU outputs as reference signals. Two D2I MasterSync generators may be connected together in order to provide full redundancy on maximizing operational security.



## D2I MultiFeed

The Studer D2I MultiFeed provides digital clock and AES/EBU signal distribution with similar features to the D2I MasterSync but without the clock generation. The 16 AES/EBU outputs can be used individually (in groups of four) for AES/EBU signal distribution.



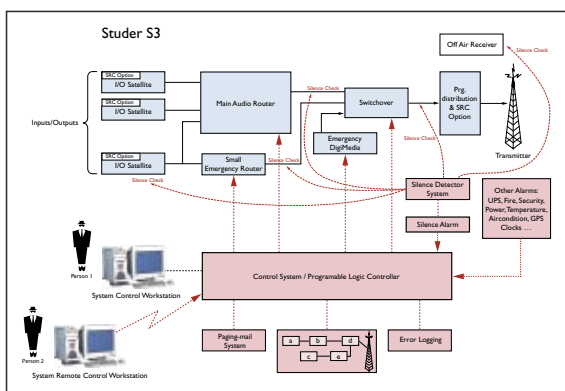
## CMS – Call Management System

At the heart of the system is the CMS server that can handle the entire gamut of telecommunications formats, from analogue POTS circuits, through ISDN, to the latest voice-over-IP technology. The system's main job is to automatically manage and distribute calls to clients used by reporters and operators working in studios and editorial offices. There is unified messaging support for voicemail, faxmail and SMS. Brochure 10.26.5760



## Tel Hybrid

Studer provides analog and digital telephone hybrid units providing bi-directional interfaces between the mixing console and the standard telephone line. They handle telephone-to-studio line switching and signal processing to remove line echoes in auto or manual mode, while compensating for level fluctuations. Brochure 10.23.2422 / 10.23.1250



## S3 Surveillance System

The Studer Surveillance System S3 is based on Programmable Logic Controller (PLC) technology and consists of a microprocessor, I/O modules and a graphical user interface which can be integrated into a network or be operated standalone. Its aim in the broadcast environment is to minimize on-air downtime and assist users in maintenance and fault finding. It constantly monitors various sensor signals like silence detectors or temperature alarms, and generates alarm messages either on the display, via network, to a pager or a mobile phone. Brochure 10.26.5110



# Studer - Your Partner



For many, the name Studer carries with it a worldwide reputation for quality and reliability. To others, the name suggests high technology and innovation. To many more, the Studer name is synonymous with providing solutions – in Radio, Television, Live venues and Post Production – in the form of dedicated products or complete tailor-made systems.

For over 50 years, Studer's commitment to continuous investment in research and development has maintained our position as a world leader in both analog and digital technology. This has resulted in the award of more than 20 technology patents but more importantly, it gives Studer the engineering and design skills to turn these technologies into innovative and often unique products that our customers want to use.

If you are looking for technical solutions, ergonomic with our experience in assembling complete systems, we also know about the smaller things that make the products work together as a system, in both the analog and digital domains.



OnAir 2000 – RSR, OnAir Espace, Lausanne (Switzerland)



OnAir 2000 – Radio Cesky Rozhlas Praha, Prague (Czech Republic)

## System solutions

Studer not only delivers dedicated products and system components but we also support you in designing complete system solutions like a complete broadcast house. We are happy to offer our experience for entire projects and discuss the best possible solutions for you.

## Service and Support

We at Studer know that reliability is of paramount importance to our customers. Therefore Studer offers worldwide service and support for its products. Studer also offers operator training and service courses on-site or at the factory.







Vista 8 – OB Van, Primevision, Copenhagen (Denmark)



Vista 8 – All Mobile Video, New York (USA)

# STUDER



Vista 8 and OnAir 3000 – BBC TCI, London (UK)



Vista 8 – Oriental Arts Centre, Shanghai (China)



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