Soundcraft

Vi1™

DIGITAL LIVE SOUND CONSOLE

Vi SERIES™

The world's best-loved digital live sound console is now more accessible than ever.

Soundcraft Vi Series consoles have revolutionised the process of live sound digital mixing through the combination of exceptional sound quality and a refreshingly intuitive operating interface. With the advent of Vistonics™, engineers were finally freed from the complex 'mental mapping' that had been demanded

of them up until then and could now, quite literally, see the full power and versatility of digital mixing open up before them. Not surprisingly, Vi Series consoles have gone on to provide the mixing solution on major tours and big festivals the world over. And now comes the Soundcraft Vi1™ – a mixer that makes the world's best-loved digital live sound console more accessible than ever.

The Soundcraft® ViSi remote iPad® app

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Mixes the show
without maxing the budget.

The affordable Vi1 may be the baby of Soundcraft's Vi Series digital live sound console range, but it's fully grown up when it comes to features. The 16 input fader control surface delivers simultaneous mixing of 64 mono inputs (channels may be paired for stereo) into 24 mono busses plus

LRC – enough capacity to handle all but the very largest shows. And, thanks to the Widescreen Vistonics™ touchscreen, all the parameters of 16 channels are simultaneously displayed and instantly accessible, with the other channels just a click away. All 24 busses can be switched Group or

Aux, and Mono/Stereo (maximum of 12 if stereo), and up to 8 busses can be put into matrix mode. The Vi1 features 8 output/VCA faders with LR and C master faders, 4 fixed and 5 user-configurable input layers, 8 VCA groups and 4 Mute groups. Legendary Vi audio quality is ensured by

the same 40-bit floating point DSP running the same algorithms as the larger consoles in the Vi family – indeed anyone who has used another Vi console will find the Vi1 instantly familiar. Effects come courtesy of our colleagues at Lexicon, with graphic EQs from industry leaders BSS Audio.

Factor in powerful automation, copy/paste and offline editing facilities, a comprehensive range of I/O and stagebox options and redundant power supplies as standard, and it's easy to see that while the Vi1 won't max out your budget, it's more than capable of mixing your show.

Vistonics™ + FaderGlow™ = Intuitive Digital Mixing

At the heart of any Soundcraft Vi Series digital live sound console lies Vistonics™ – the revolutionary touchscreen interface that locates the rotary encoders directly onto the display. Adjusting a parameter (eg EQ) from the same location at which it's data is being displayed removes the burden of complex mental mapping from the operator, streamlining workflow and greatly enhancing the creative process. The Vi1 features a 'widescreen' Vistonics implementation, with 2 rows of 16 rotary encoders providing simultaneous access to 16 input channels.

Just touching the screen is all it takes to access channel functions including routing, input gain, digital gain trim, delay, high and low pass filters, 4-band fully parametric EQ, compressor, limiter, gate, de-esser and pan, with immediate access to a sophisticated visual status display and straightforward controls.

In addition, a dedicated area of the Widescreen Vistonics interface is provided for output processing control, along with a complete meter overview display for all inputs and outputs. Another dedicated area displays the snapshot cuelist, as well as access to the menu system and display of diagnostics information.

Working in conjunction with Vistonics to deliver the ultimate operator experience, Soundcraft FaderGlow™ illuminates the fader track in colours that integrate with the Vistonics display, alerting the user to the current operational status – VCA groups, graphic EQ, Matrix outputs, soloed bus contributor, etc.

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Soundcraft
by HARMAN

EQ

The four-band fully parametric EQ is graphically displayed with the settings for boost/cut, frequency and Q (bandwidth), with the main screen showing the composite EQ curve. Frequency is displayed in a similar style to a radio tuner scale for easy assimilation, and the HF and LF bands can be switched to shelving EQ.

DYNAMICS

The dynamics section controls a Noise Gate with attack, hold and release, and a key facility with filtering. The Gate can be replaced with a De-Esser function. Working in series with the Gate, the full-function Compressor maps gain reduction metering onto the LED meter in the fader area, with full control of threshold, ratio and release with an independent Limiter section and overall gain makeup.

PAN

This section of the channel strip controls the Pan, Insert and Direct out functions, with assignable LR and C, or LCR panning modes. Inserts can be switched pre or post EQ/dynamics, with the Direct output send assignable to pre-filters, pre-EQ/dynamics, post EQ/dynamics and post-fade points.

JUST TOUCH THE SCREEN TO 'OPEN UP' THE FUNCTION

Touching the chosen function area on the Widescreen Vistonics™ channel strip opens up the corresponding control panel in the lower area, with that area being highlighted to easily identify which part of the channel strip is active.

OUTPUT BUSSES

An area of the channel strip allow access to routing and control of the output busses. The ALL BUSSES mode allows assignment of each of the busses as an Aux, Group, or Matrix output (maximum of 8 Matrix busses possible), with additional stereo pairing controls if busses are required as stereo sends.

Subsequently within each channel strip setup, busses can be switched on or off with level control, or switched pre or post fader.

SNAPSHOTS

Sophisticated Cue List management allows changes to be applied to multiple Cues and recall scope to be set per snapshot. Snapshot recalls can use crossfades to smoothly transition from one setting to the next.

LAYERS

User-configurable fader layers allow an enginer to map out his own channels on any 5 user layers so that a combination of different inputs can be placed on one 16-fader layer. This allows, for example, the main vocalist mics to be programmed to appear in the same location on every layer, so they are always accessible, or bringing other essential channels closer to a central operating position.

HiQnet®

HiQnet is Harman's command and control communication protocol, and allows integration of the Vi1 console with other Harman Pro equipment such as AKG wireless microphones, Crown amplifiers and JBL powered loudspeakers. The most important use for HiQnet is to allow the Soundcraft® ViSi Remote iPad® app to control the console, but other features include the VM2 microphone monitoring functionality and the ability to display error/warning messages from any device on the network.

Touch and control. Welcome to hands-on digital mixing.

The Vi1's Vistonics channel strip display functions both as a permanent overview of all the current settings for 16 channels, and as the access point for immediate hands-on control of any of those settings. Simply touching the screen in one of the vertically stacked touch zones immediately opens out that part of the strip onto a row of rotary encoders mounted directly beneath the display, allowing immediate, tactile, analogue-style control. The colour-coded context-sensitive graphics around the knobs make it abundantly clear which type of function is being adjusted, and a clear white highlight is a constant reminder of which channel is being controlled.

The acclaimed Soundcraft Vi Series operating system dramatically reduces set up time and protects every critical setting in the event of power failure. The Copy/Paste function allows the settings of any channel, bus, FX section or processing element to be copied and pasted, and blocks or individual parameters within a channel are easily selected for copying using the Vistonics touchscreen. Advanced Library functionality allows a user to select any set of parameters in use on the desk, which can be transferred to any Vi console they have to work on, independently of the Show Files which already allow entire desk settings to be exported.

The Vi1 is also packed with powerful automation features including a sophisticated Cue List Management suite with Apply Changes function and a tight integration of Harman's HiQnet Venue Recall function, HiQnet device error reporting and sophisticated snapshot filtering.

LEXICON FX
Simple touch selection of reverb type accompanies full parameter control on the rotary encoders. FX may be patched into inputs, channel inserts or aux busses.

Simply choose from a selection of reverbs, delays or pitch-shifting effects.
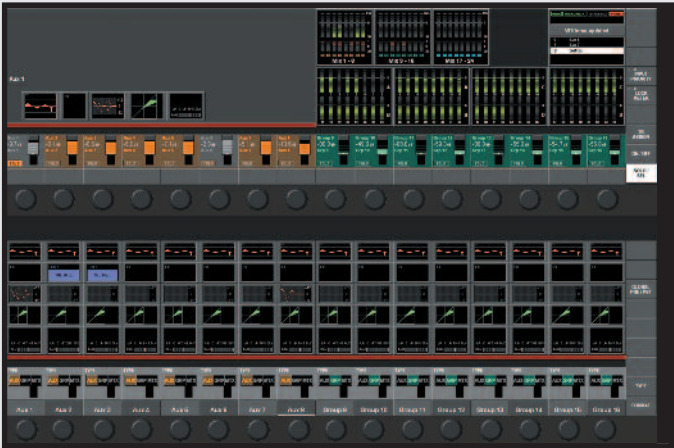
GRAPHIC EQ
Select the output bus and turn on the Graphic EQ to add 30 bands of BSS graphic to that bus. All 24 busses plus the LR+C busses can use graphics at the same time, there is no need to share.
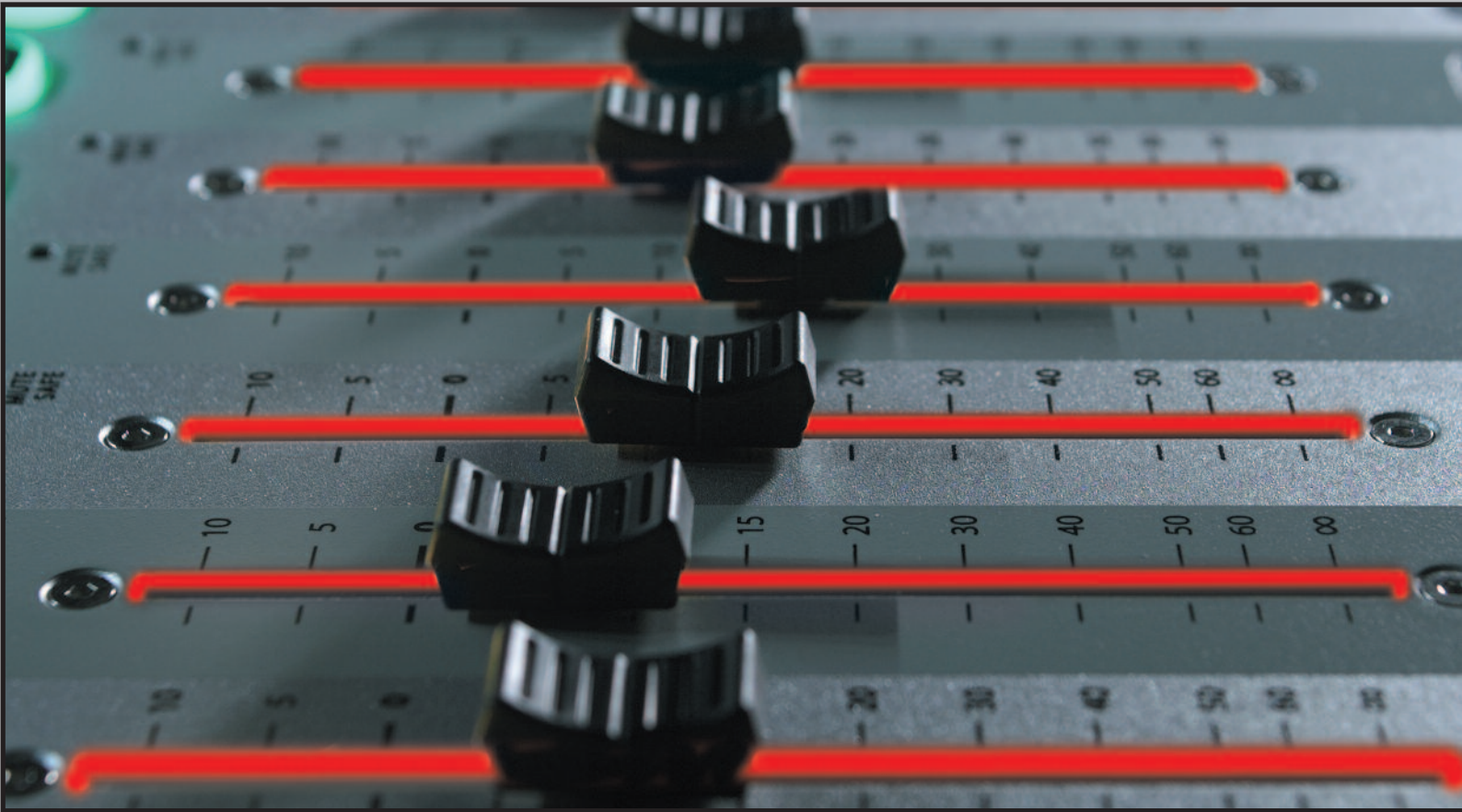
lexicon

BSS AUDIO

FX by Lexicon®. Graphic EQ by BSS Audio®.

No wonder some engineers claim that Vi is the only console they would consider using without any additional outboard processing equipment.

The Vi1 harnesses world-renowned Lexicon and BSS technology to deliver powerful built-in FX, dynamics processing and Graphic EQ. The Vistonics™ II interface provides the perfect vehicle for displaying and editing effects parameters, and 4 independent stereo Lexicon multi-effects units each provide 14 reverbs, 7 delays and 8 pitch shifting effects, patchable to input channels, aux outputs and channel inserts. Controlling the BSS third-octave Graphic EQ is similarly straightforward. Simply bringing up the output channel strip and touching the Graphic EQ button immediately assigns console faders to control Graphic EQ, with FaderGlow lighting the way. Master output graphic and parametric equalisers can be linked for easier LR or LCR EQ adjustments, whilst on stereo input channels, the Pan and Gain controls are individually adjustable on left and right. No wonder some engineers claim that the Vi Series is the only console they would consider using without any additional outboard processing equipment.

Remote control for your digital console.

Radio mic status monitoring, directly from the console.

Soundcraft® ViSi REMOTE

VIRTUAL Vi™ **VM²**

Shows the wireless mic status directly on the relevant channel strip. VM² displays battery life, RF status and mute status.

Simply touch the input section to see more detail.

VM² is available on all Soundcraft Vi Series consoles in V4.5 software, including Vi1, Vi2, Vi4 and Vi6.

Compatible AKG Wireless mic systems are WMS 4000, WMS 4500 and DMS 700 (optional HUB 4000Q HiQnet Ethernet interface required).

HiQnet®
by **HARMAN**

Vi1 operation is significantly enhanced by Soundcraft® ViSi Remote, the Apple® iPad® app that lets you:

· Optimise the front of house mix from anywhere in the room
· Adjust monitor levels while standing next to the artist
· Use multiple iPad® devices on one console so artists can mix their own monitors
· Use to extend the fader count of an existing control surface
· Use in standalone mode for familiarisation with console functions or training
· Control a network of consoles (e.g. FOH and Monitor, Vi Series or Soundcraft®Si Compact)

iPad® is a registered trademark of Apple Inc.

The Soundcraft ViSi system is simple to setup, using Harman's proprietary HiQnet network. Consoles attached to the network are automatically discovered so there is no need to manually enter IP or MAC addresses.

Functions controlled:
· Input faders, mutes and solos
· Bus, master LR and VCA master faders, mutes and solos
· Monitor and headphones output levels
· Graphic EQs on all bus outs
· Aux send levels to each bus from all channels (monitor mixes)
· Matrix contribution level to each matrix bus

With Virtual Vi, engineers can set up shows offline on a PC, and load them into the console via a USB memory drive.

Show files may be transferred between other Vi Consoles and the Vi1 (maximum channel counts will vary between consoles of course).

Virtual Vi is also a great training aid and allows engineers to get familiar with a Vi1 before ever stepping up to a console.

Virtual Vi editing software can be downloaded at www.soundcraft.com

You know what it's like. The radio mics check out fine on the RF Tech's laptop, but that's before the talent walks onto the stage. Reception black spots, drained batteries, accidental mutes – anything can happen once the show gets underway.

Thankfully, Soundcraft and AKG are here to make the FOH engineer's life easier. Now you can monitor the status of any HiQnet-compatible AKG radio mic directly from the

Vi1 console surface, courtesy of VM² (Vistonics Microphone Monitoring). With realtime visual displays of battery life, RF status, mic muting and internal clipping, you'll be able to see a problem long before you hear it, right there on the relevant channel strip – with expanded information instantly available just by touching the Vistonics™ screen.

AKG
by **HARMAN**

64 channels. 1 cable. Thank you MADI.
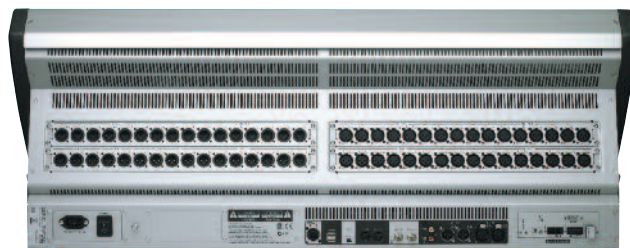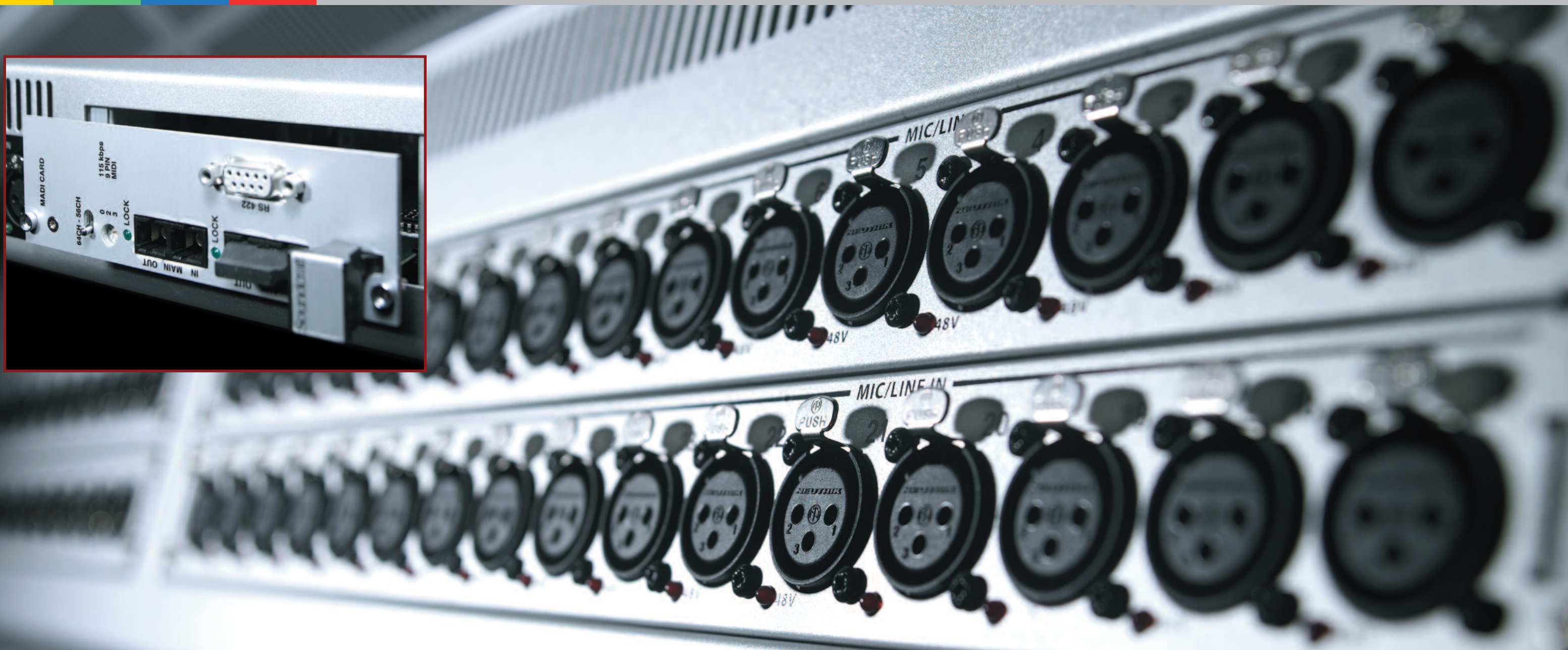
The Vi1 rear panel features 32 mic/line inputs, plus AES (4 channels) and SPDIF (2 channels) digital inputs. A Studer D21m system-based double card slot accommodates a range of I/O options including AES and MADI, which can be used to connect an optional Compact Stagebox or standard 64 channel Vi Series Stagebox, with all inputs and outputs fully patchable from the Vi1 control surface.

Twenty seven line outputs (24 busses + LRC) are located on the rear panel, along with monitor A and B outputs, and AES (4 channels) and SPDIF (2 channels) digital outputs.
Including the internal FX returns, the total input count is an incredible 110 sources, available to patch to the 64 mixing channels.

Custom configurable Stageboxes.
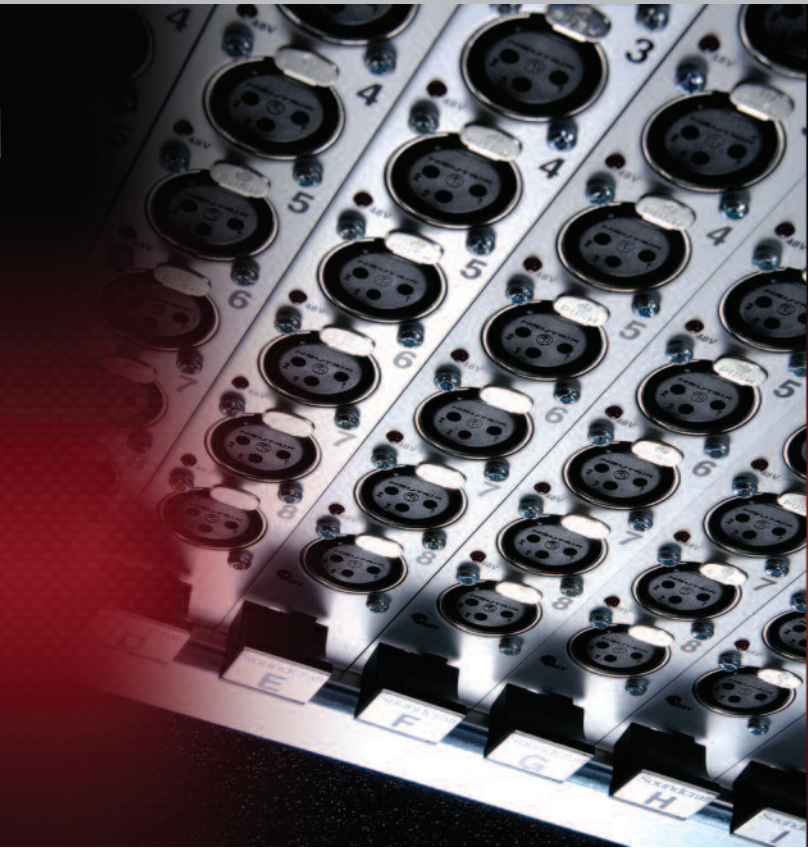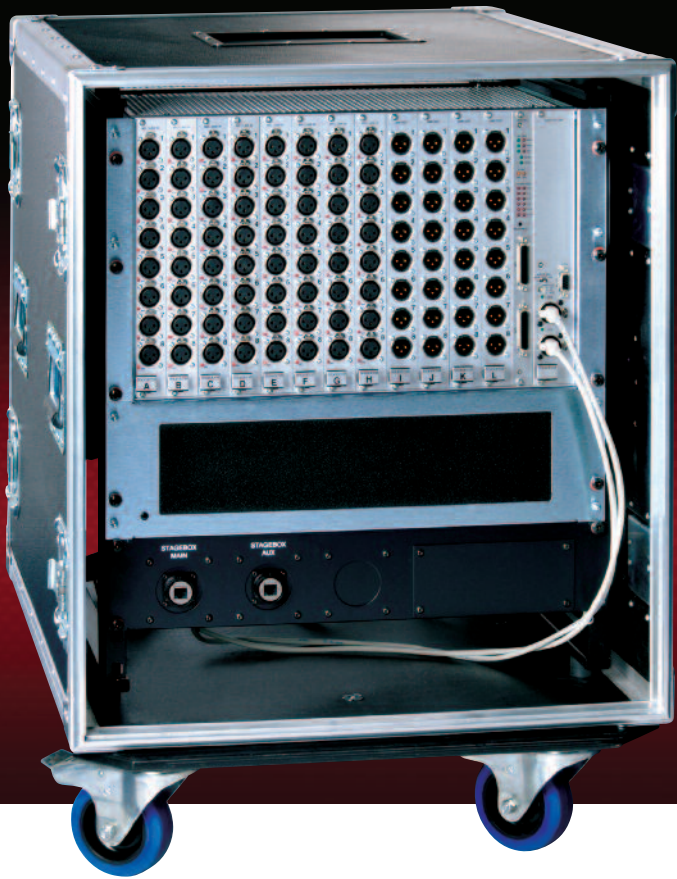
Cat5 or fibre-optic cables provide a convenient, highly robust connection between the Vi1 and Soundcraft Vi Series™ stageboxes.

A comprehensive provision of inputs and outputs can be patched to any channel input, direct output, bus output or insert point as required. The standard Vi stagebox houses 64 analogue mic/line inputs and up to 32 analogue line outputs, with 48V phantom power and a 100Hz HPF before the A-D converters. Mic amp gain can be controlled remotely from the control surface. Optional AES/EBU inputs and outputs are available for the stagebox in sections of 8.

Other optional I/O cards available for the stagebox include CobraNet®, Aviom A-NET® 16V, and EtherSound (latter available from Digigram distributors).

There are 8 GPIO contact closure inputs and outputs on the stagebox.

Alongside the standard stagebox, the Compact Stagebox adds a cost-effective expansion option to the Vi1, offering a high density of I/O connections in only 4U of rack space. The modular unit is fully configurable but is offered with a standard configuration of 32 mic/line inputs, 8 line outputs, 8 channels of AES/EBU outputs and 2 expansion slots

for standard Studer D21m I/O cards. (The D21m is the I/O architecture for Studer as well as Soundcraft digital mixing systems and allows connection to most popular digital formats - see opposite page).

It is possible to equip the Compact Stagebox with an additional 16 mic/line input XLR module instead of the output module, providing 48 inputs. In this case, analogue or AES outputs can still be obtained on D-Type connectors via D21m cards fitted to the expansion slots.

As well as the flexibility of the D21m option card interface, the Compact Stagebox also uses the same Mic/line I/O modules as found in the Vi1 console, and as a result it is possible to move or share modules between console and stagebox, should a different configuration of I/O be required on either the Vi1 or the Stagebox. For example, the 8 line out/AES output card from the Stagebox could be fitted to the Vi1 console in place of a 16ch line output card. Alternatively, the mic input modules can be replaced with output modules if large numbers of outputs are required.

The Compact Stagebox is connected to the host console using either Cat-5 or Optical-fibre MADI, the same way as the larger 64 Mic/line Vi6 Stagebox is

hooked up, and shares the same redundant MADI cable capability. Cat5 Version: E947.350000 Optical version: E947.351000

The unit comes complete with twin redundant power supplies, thermostatically-controlled fan cooling and full LED status monitoring. An 8ch GPIO interface is also provided.

Interface cards

Riedel Rocknet
Digigram EtherSound
Aviom A-NET® 16V
CobraNet™
MADI
ADAT
Dolby E
SDI
AES/EBU

Technical Specifications.

FREQUENCY RESPONSE
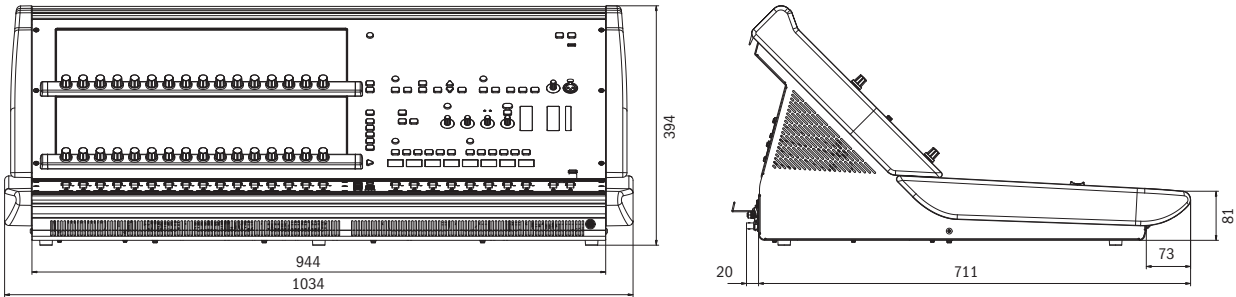Stagebox Mic input to Line output . . . . +0/-1dB, 20Hz-20kHz
AES/EBU In to AES/EBU Out . . . . +0/-0.2dB, 20Hz-20kHz

T.H.D. & NOISE
Mic In (min gain) to Local Line Out, 22Hz-22kHz . . . . <0.003% @ 1kHz
Mic In (max gain) to Local Line Out, 22Hz-22kHz . . . . <0.020% @ 1kHz
Mic Input E.I.N (22Hz-22kHz bandwidth, unweighted . . . . <-125dBu (150Ω source)
Residual Noise, local Line output; no inputs routed, Mix fader @0dB . . . . -91dBu
CMRR, Mic input . . . . 80dB @ 1kHz
Sampling Frequency 48kHz
Latency, Mic Input to Line output . . . . < 2ms @48kHz
DSP resolution . . . . 40-bit floating point
Internal clock accuracy . . . . < +/-50ppm
Internal clock jitter . . . . < +/-12ns
External Sync . . . . BNC Wordclock
Input & Output Levels   Mic Inputs . . . . +23dBu max
                               Line Outputs . . . . +22dBu max
                               Nominal Operating Level . . . . +4dBu (-18dBFS)
Input & Output Impedances   Mic Inputs . . . . >6kΩ
                               Line Outputs . . . . <75Ω
                               AES/EBU Outputs 110Ω
Oscillator   . . . . 20Hz to 20kHz/Pink/White Noise, variable level
Stagebox HP Filter . . . . 80Hz fixed, 12dB per octave
Channel HP filter . . . . 20Hz-600Hz, 18dB per octave
Channel LP filter . . . . 1kHz-20kHz, 18dB per octave
EQ (Inputs and bus Outputs) . . . . HF: 20Hz-20kHz, +/-18dB, Q= 0.3-8.7 or shelving
                                                                                                                           Hi-Mid: 20Hz-20kHz, +/-18dB, Q=0.3-8.7
                                                                                                                           Lo-Mid: 20Hz-20kHz, +/-18dB, Q=0.3-8.7
                                                                                                                           LF: 20Hz-20kHz, +/-18dB, Q= 0.3-8.7 or shelving
Metering . . . . Internal 11-segment LED bargraphs plus 4-segment gain reduction meters for all inputs and Outputs.
                                                                                                                           Peak hold variable from 0-2s.
Mains Voltage operating range . . . . 90-264V, 47-63Hz, autoranging
Mains Power Consumption 100W
Operating Temperature Range . . . . 0°C – 45°C (32°F – 113°F)
Relative Humidity . . . . 0% – 90%, non-condensing Ta=40°C (104°F)
Storage Temperature Range . . . . -20°C – 60°C (-4°F – 140°F)

944
1034
394
20
711
73
81

June 2012.

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