Soundcraft

Vi SERIES ™

DIGITAL LIVE SOUND CONSOLES

Soundcraft
Vi2 ™
DIGITAL LIVE SOUND CONSOLE

Soundcraft
Vi4 ™
DIGITAL LIVE SOUND CONSOLE

Soundcraft
Vi6 ™
DIGITAL LIVE SOUND CONSOLE

Soundcraft Vi6™

Beyond intuitive.

Direct access to all functions with maximum information and visibility at all times.

A unique integration of touch screens and encoders eliminating complex and fatiguing mental mapping.

A compact operating surface with a perfectly optimised control density.

A pristine audio path with highly acclaimed mic preamplifiers gives possibly the cleanest sound of any digital console available today.

The time has come to forget the console and focus on the creativity.

The time has come for Soundcraft Vi Series™ digital live sound consoles.

Vi SERIES™

Soundcraft **Vi2™** DIGITAL LIVE SOUND CONSOLE

Soundcraft **Vi4™** DIGITAL LIVE SOUND CONSOLE

Soundcraft **Vi6™** DIGITAL LIVE SOUND CONSOLE

Thirty years in the making.

The Soundcraft Vi4™ packs all the powerful Vi functions and features into a smaller footprint console and, when space is at an absolute premium, the Vi2 can handle up to 96 inputs from an ultra-compact, 8-input fader control surface.

Soundcraft Vi2™
DIGITAL LIVE SOUND CONSOLE

Soundcraft Vi4™
DIGITAL LIVE SOUND CONSOLE

	Vi2	Vi4	Vi6
Input Faders	8	24	32
Mix Channels	96	72	96
Output Busses	35	35	35

With more than 30 years in the business, no-one knows more about live sound mixing than Soundcraft. In our opinion, there's simply no point in presenting the live sound engineer with the undeniable power and flexibility of digital audio technology if all that power is locked away in an ill-conceived and inaccessible mixer that

confuses the operator and impedes workflow. That's why our digital live sound consoles put the engineer at the heart of the process, just like our analogue mixers do. The product of a development team that combines unrivalled Soundcraft live sound know-how with the impressive digital audio expertise of our sister company Studer,

the Soundcraft Vi6™, Vi4™ and Vi2™ are third generation digital live sound consoles which abandon the layering and central assignability concepts of other designs in favour of a system that's altogether more intuitive.

Say goodbye to the learning curve. Say hello to Soundcraft Vi Series™ digital live sound consoles.

The Soundcraft Vi system consists of three elements: the compact, space-saving control surface, the local rack containing the SCore Live processing engine and a stagebox which connects conveniently to the local rack via Cat5 or Cat7 cable, with fibre optic interfacing available as an option.

The 32 fader Soundcraft Vi6 control surface delivers simultaneous mixing of 96 mono inputs into 35 outputs, with 24 insert send/return pairs assignable to any of the input or output channels.

Up to 5 stageboxes can be connected to create a digital patchbay from which the engineer can select available inputs.

All input channels can have direct outputs in addition to their internal routing to 32 Group/Aux/Matrix busses, and the main LCR and LR busses.

Pristine sound quality is assured by a combination of Soundcraft ultra-low noise mic amp designs and Studer advanced 40-bit floating point digital audio processing.

And complete security is assured by diagnostics of the separate control surface, local rack and stagebox power supplies from the mixing position, with the facility to add second redundant supplies to each.

With a competitive price tag and compatibility with the groundbreaking Harman HiQnet™ communications protocol, the Soundcraft Vi2, Vi4 and Vi6 are the flagship consoles in what is fast becoming a full range of high performance Soundcraft digital live sound mixers.
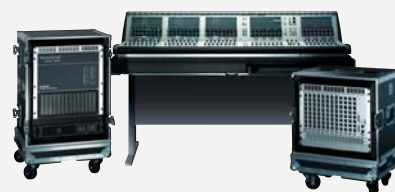
Vistonics™ II. Free yourself from mental mapping.

Vi SERIES™

At the heart of the Soundcraft Vi control surface lies the patented Vistonics™ II system. Obviating the ergonomic limitations of arranging controls around or adjacent to a flat TFT screen, Vistonics II builds the rotary encoders and switches right onto the touch screen. With the visual information and operational controls combined in one area, the burden of complex mental mapping is removed from the operator, streamlining workflow and enhancing the creative process.

Each Vistonics II interface controls eight input channels, and comprises a touch screen with 16 rotary encoders and 16 switches.

A simple touch of 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 Vistonics II interface is provided for output processing control, and also functions as a complete meter overview display for all inputs and outputs, as a snapshot cue list display, and as a display for diagnostics information.
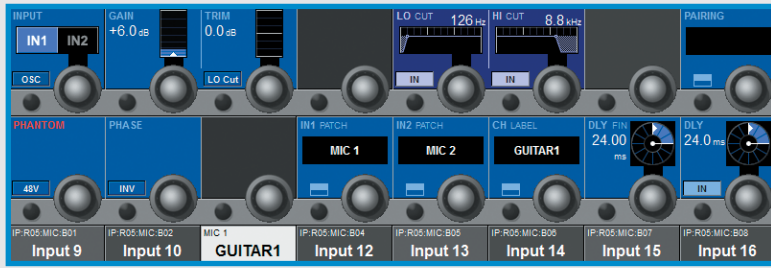
The blue input stage and routing screen allows adjustment of input delay, mic gain, digital trim, high and low-pass filter frequency, channel patching, channel naming and stereo pairing.
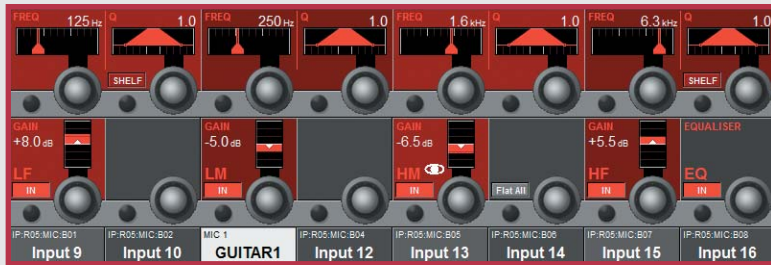
The four-band fully parametric EQ is graphically displayed with the settings for boost/cut, frequency and Q (bandwidth), with the main screen showing the composite EQ curve. Frequency is displayed in a similar style to a radio tuner scale for easy assimilation, and the HF and LF bands can be switched to shelving EQ.
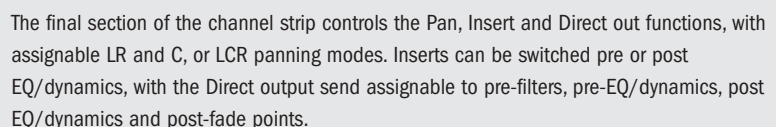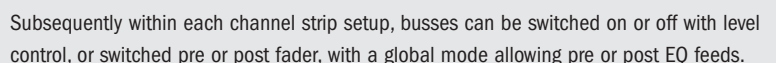

The dynamics section controls a Noise Gate with attack, hold and release, and a key facility with filtering. The Gate can be replaced with a De-Esser function. Working in series with the Gate, the full-function Compressor maps gain reduction metering onto the LED meter in the fader area, with full control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

Touching the chosen function area on the Vistonics™ II 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.

The 16 switches and rotary encoders change function according to the mode selected. This real 'where you look is where you control' philosophy makes operation of a Soundcraft Vi Series™ console highly intuitive.

Touch and control. Digital live sound mixing the way it should be.

Vi SERIES™

Two areas of the channel strip allow access to routing and control of the output busses, arranged in two banks. The ALL BUSSES mode allows assignment of each of the busses as an Aux, Group, or Matrix output (maximum of 16 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, with a global mode allowing pre or post EQ feeds.

The final 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.

The key to the intuitive operation of the Soundcraft Vi consoles is the Vistonics II channel strip display that functions both as a permanent overview of all the current settings for 8 channels per screen, and as the access point for immediate hands-on control of any of those settings. Simply touching the screen in one of the six vertically stacked touch zones immediately opens out that part of the strip onto the 16 real knobs and switches mounted directly on the lower part of 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. Touching the screen again is all it takes to move to another area of the channel strip, or to close down the control area.

HiQnet™ integration allows the simple creation of Cue Lists from console snapshots, MIDI events and HiQnet Venue Recall commands, which can be used to trigger changes in amplifier levels, loudspeaker processing EQ and routing across an entire HiQnet system. Compatibility with the HiQnet protocol also enables the console to receive and display system diagnostic messages from other devices on the HiQnet network.

Soundcraft FaderGlow™. Lighting the way to a perfect mix.
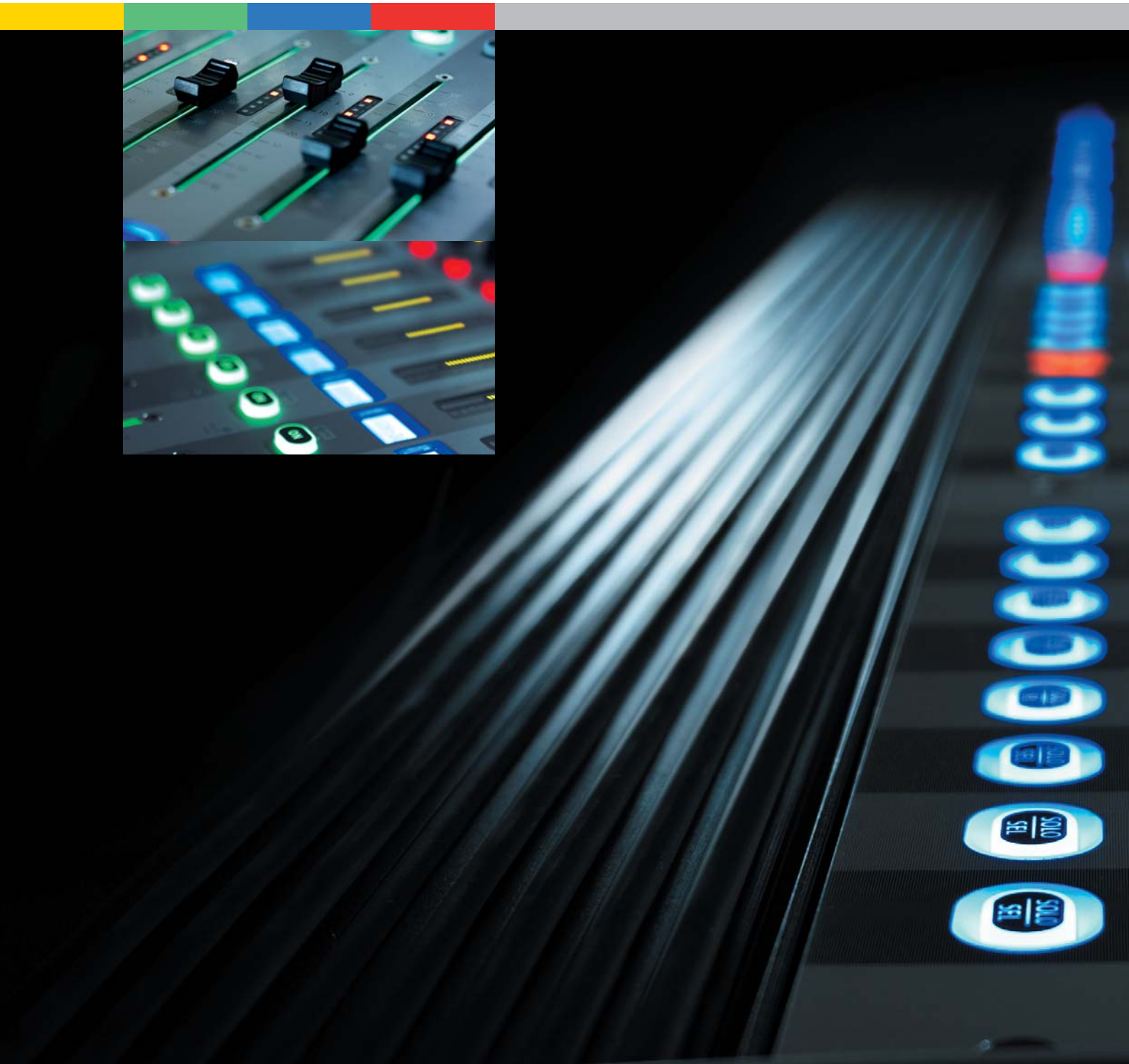
Assignable faders are an inevitable part of digital mixing. But assignability can quickly lead to confusion. That's why we developed Soundcraft FaderGlow™ for the Soundcraft Vi Series™ – a clever yet simple idea to illuminate the fader track in colours that integrate with those of Vistonics™ II to show, at a glance, what function a fader is controlling at any given time.

Within the output section of the console, the bank of 8 faders can be assigned to provide master control of matrix outputs, VCA groups and graphic EQ control. Soundcraft FaderGlow applies cyan, blue and red illumination respectively to the fader track, enabling the operator to see the different output types immediately – even before reading the text labels which also exist for each fader.

When controlling inputs, no illumination is applied to the motorised faders. But when the Aux, Group or Matrix bus master is soloed with the Follow Solo function switched on, the fader becomes a 'contributor' for the soloed bus, lighting up in orange, green or blue accordingly. Furthermore, custom fader pages can be created to contain, for instance, 10 drum faders grouped on a single VCA master, which would glow in blue.

Operating in conjunction with Vistonics II, Soundcraft FaderGlow helps the console achieve previously unattainable levels of intuitive operational control.

# Software control. Rapid configuration and powerful automation.

COPY/PASTE CHANNEL, BUS AND FX SETTINGS

Dedicated Copy and Paste buttons on the surface allow the settings of any channel, bus or FX section to be copied and pasted, dramatically cutting down the set up time.

COPY/PASTE PROCESSING ELEMENTS

Operators can drill down to copy and paste even single processing elements, and the last paste operation can always be quickly reversed with an UNDO function.
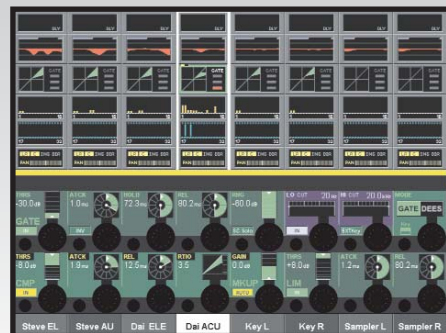
SELECT FROM A LIBRARY OF SETTINGS

Along with a useful library of EQ and Dynamics settings, operators can store their own settings in the console or to a USB memory stick, making initial set up and transition between shows even easier.
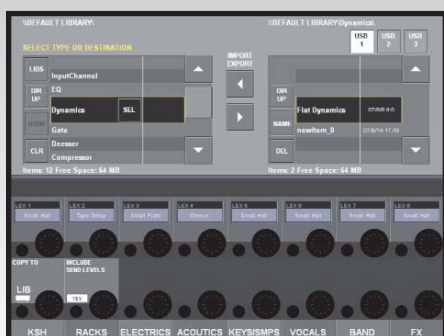
ADVANCED EVENTS INTEGRATION INCLUDING MIDI, GPIO AND HiQnet.

The acclaimed Soundcraft Vi Series operating system is designed to dramatically reduce set up time and protect every critical setting with enhanced data security 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 to any number of other channels, saving set up time and helping eliminate errors.

The last paste operation can be quickly reversed with an UNDO function. Blocks or individual parameters within a channel are selected for copying via touch screen selection on the same intuitive

Vistonics™ II screens that are used for audio control functions. Advanced Library functionality allows a user to select any set of parameters in use on the desk, for example a single channel EQ setting or a group of channels set up for a drum kit, to be stored in the internal library and recalled at will. These libraries can be exported to, or imported from, a USB memory stick, allowing users to build up their own portable channel and processing libraries that can easily be transferred to any Vi console they have to work on. This is done independently of the Show Files which already allow entire desk settings to be exported. Within the software are a number of useful

libraries of EQ and Dynamics settings to suit common applications.

In the event of mains power to the surface being interrupted during a show, the auto-backup system ensures that the last settings of the desk will be retained and restored automatically when power is restored, meaning no changes to the audio - or the set up.

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.

Vi Series consoles are packed with powerful automation features which place the operator in total control of the show.

A sophisticated Cue List Management suite includes an Apply Changes function, where parameter changes can be applied to multiple snapshots, and cues can trigger or be triggered by MIDI or GPIO events, including MIDI Timecode. Harman's HiQnet Venue Recall function is tightly integrated within the Cue List.

Theatre users will welcome sophisticated snapshot filtering. In addition to a conventional Isolate function where a channel may be isolated from snapshot recall, it's also possible to apply high-granularity recall filtering both globally and on each snapshot, right down to parameter level – for example, a Pan setting or an individual Aux send.

Also important in theatre applications is the facility for snapshot recalls to use crossfades to smoothly transition from one setting to the next. A new snapshot preview mode allows the engineer to check in advance what settings are about to be recalled, and also allows editing of other cues without affecting the audio.

Vi SERIES™

Very special FX.

The Vistonics™ II interface provides the perfect vehicle for displaying and editing effects parameters.

The Soundcraft Vi Series™ Processor Card plugs into the local rack to add world-renowned Lexicon and BSS processing to the Soundcraft Vi digital mixing platform.

The Soundcraft Vi Series™ Processor Card adds world-renowned Lexicon and BSS processing to the Soundcraft Vi digital mixing platform. Simply plugging in the single, high-powered card to the local rack adds on-board BSS third-octave Graphic Equalisation to every bus output, in addition to 8 independent stereo Lexicon multi-effects units – each providing 14 reverbs, 7 delays and 8 pitch shifting effects, patchable to input channels, aux outputs and channel inserts.

The Vistonics™ II interface provides the perfect vehicle for displaying and editing effects parameters.

Controlling the Graphic EQ is similarly straightforward. Simply bringing up the output channel strip and touching the Graphic EQ button immediately assigns the first 30 faders on the console to Graphic EQ. 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.

With the advent of the Soundcraft Vi Series Processor card, the most intuitive digital live sound mixer in the world gains some of the most powerful processing in the business. No wonder engineers are claiming this is probably the only console they would consider using without any additional outboard processing equipment.
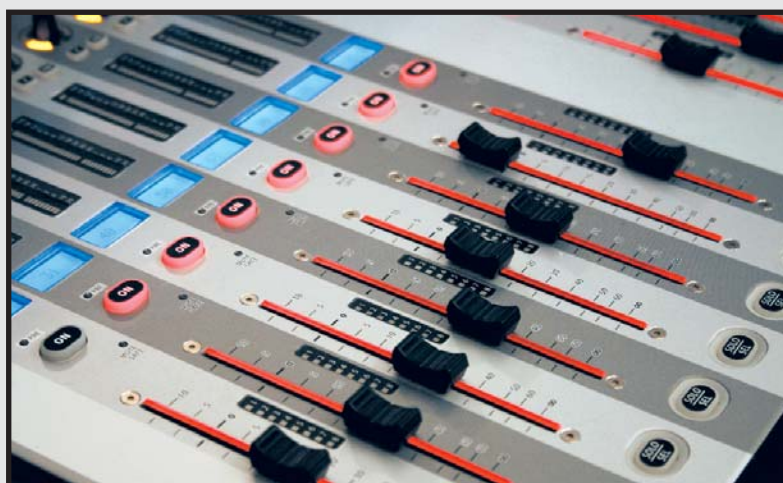
Bringing up the output channel strip and touching the Graphic EQ button immediately assigns the first 30 faders on the console to Graphic EQ, with the Soundcraft FaderGlow™ changing to red, indicating that the console is no longer in channel fader mode.

All 30 bands can be 'condensed' onto 8 faders, to save operating space and allow access to input channels while working on output EQ. The original 'full width' GEQ mode is still available if required. The cut or boost values of the GEQ bands are also now displayed above each fader as they are adjusted.

Another important feature is that the 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.

Communicating with the outside world.

A series of optional interface cards, designed to fit either the local rack or stagebox, enable Vi Series™ consoles to directly interface with a wide range of other systems and audio networks using industry standard protocols.
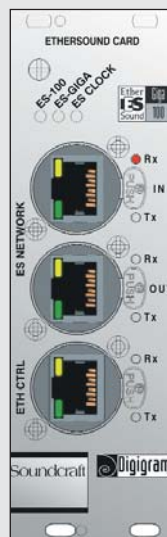
EtherSound

The **Digigram EtherSound** card allows up to 128 channels of audio (64 inputs/64 outputs) to be connected to the rack via a single Cat5 connection.
A second Cat5 connection allows daisy chaining or full redundancy capability, ensuring the network remains uninterrupted should a cable be broken.

Available in both stagebox and local rack versions. This card is only available via Digigram's distribution network.

A·NET

The **Soundcraft A-NET® 16V** card provides direct digital connection on a single Cat5e cable from the Aux or Group outputs into an Aviom® A-NET® Pro16™ Series Personal Mixer (compatible with A-16II and A-16R). The Pro16 System enables musicians on stage to be fed with up to 16 subgroups of instruments or vocals which they can then mix to their own taste using their own on-stage controller. The card includes a switchable test tone and stereo pair linking via DIP switches.

Available in both stagebox and local rack versions.

CobraNet™

The **CobraNet™ card** allows up to 32 channels of input or output signals (or a combination of both) to be received by or sent from console onto a CobraNet™ network. The card must be used as the Conductor for the network. By default, the card is configured for 32 outputs.

Available in both stagebox and local rack versions.
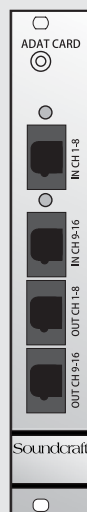
ADAT

The **ADAT** card provides two optical eight-channel ADAT inputs and outputs, with selectable 44.1/48/88.2/96 kHz operation. Optical inputs and outputs are provided on Toslink connectors and can be used to record to, for example, an Alesis HD-24 hard disk recorder or other device with ADAT inputs and outputs, and receive playback audio. In 96kHz operation, the number of channels is limited to eight, i.e. four per I/O.

DOLBY E

The **Dolby E** card decodes the audio channels from a Dolby E or Dolby Digital stream and allows them to be patched into separate inputs on the console for mixing. Each card provides two full decoder sections, and can dramatically save external hardware cost, space and weight.
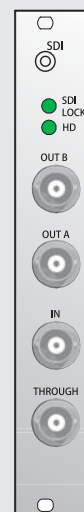
SDI

The **SDI** card can de-embed up to 16 audio channels from an SDI (Serial Digital Interface) stream, and re-embed them back on to the stream for onward transmission in a broadcast environment, saving high costs of external units and, of course, weight. These channels may be patched in to any input as usual.

Vi SERIES™

Optocore DD2FE network interface

MADI

In addition to the optional card choices, an optical **MADI interface** is fitted as standard, allowing direct connection to a Pro Tools HD™ recording system via a third party converter box or any MADI compatible device (eg SSL XLogic Delta-Link). Along with the ADAT card, the MADI card offers a simple recording solution for the Vi Series. Additional MADI cards may be fitted by exchanging with other I/O cards, in order to connect additional stageboxes or other MADI equipment.

AES/EBU

Each stagebox analogue input card (8 inputs) can be replaced by an optional **AES/EBU** input card which holds 4 pairs of AES/EBU inputs, with built-in Sample Rate Convertors.

Similarly, each analogue output card (8 outputs) can be replaced by an optional AES/EBU output card which holds 4 pairs of AES/EBU outputs.

Using a MADI connection on the Vi Series local and stage racks, the Optocore DD2FE interface allows not only the connection of up to 128 channels of audio onto the Optocore network, but also the Vi Series is able to remotely control the microphone preamplifiers in either its own stagebox or the Optocore LX4AP stagebox, giving an additional degree of flexibility and allowing multiple consoles and stageboxes to be interconnected with full redundancy.

Soundcraft Vi6
Front of House

Optocore Redundant Ring

Optical MADI

Soundcraft Local Rack

DD2FE **ID1**

Optocore
Stagebox
Stage 2
LX4AP
ID4

Optocable
Redundant Loop

DD2FE **ID2**

DD2FE **ID3**

Soundcraft
Local Rack

Soundcraft
Stagebox
Stage 1

Soundcraft Vi4
Monitors
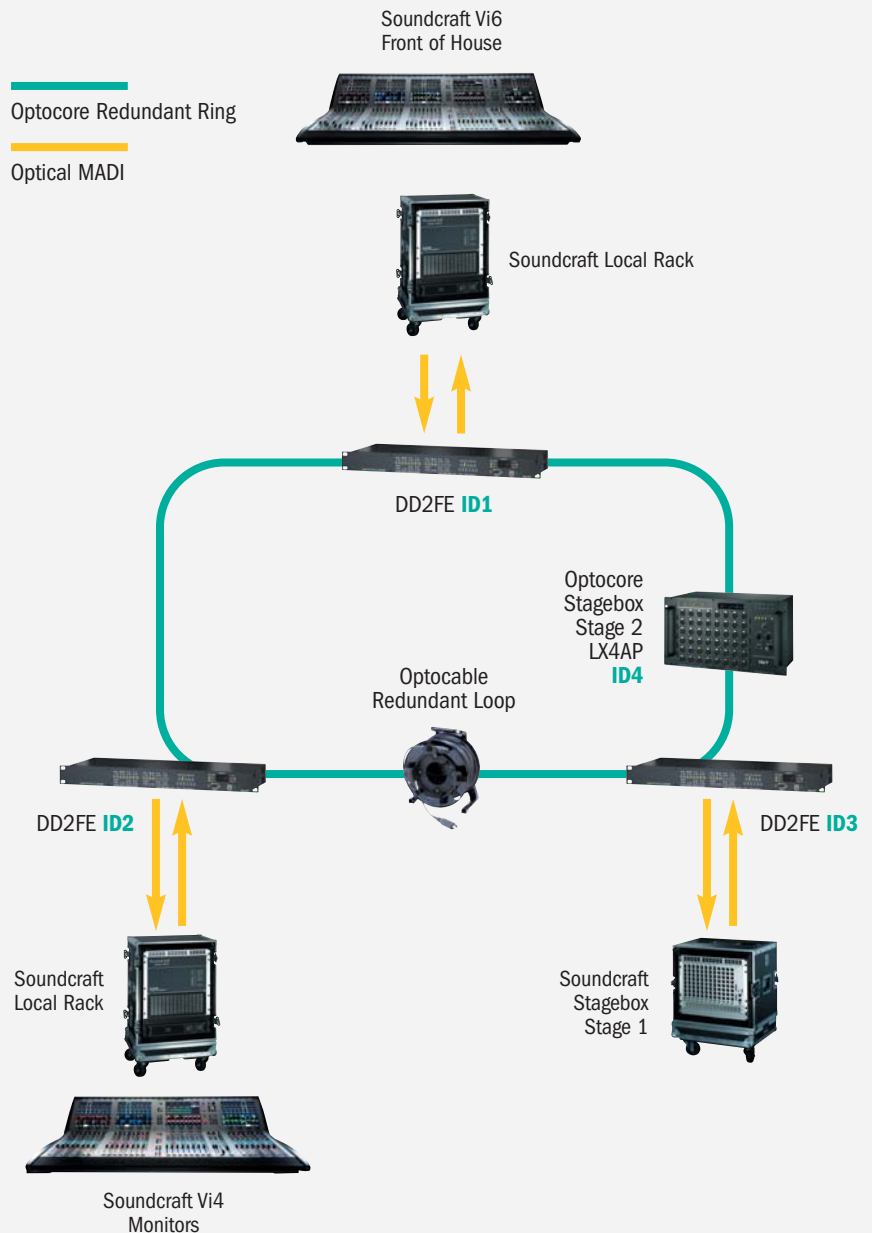
A better user experience through better ergonomic design.

VIRTUAL Vi™

Virtual Vi editing software can be downloaded at soundcraftdigital.com

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

Vi SERIES™

User configurable layers place channels and outputs within easy reach of the operator.

Vistonics™ II and Soundcraft FaderGlow™ are just part of what makes Soundcraft Vi Series™ digital consoles such intuitive and creative tools. By optimising the density of faders and controls on the operating surface, the live sound engineer is able to reach all critical areas of the console comfortably from a central point, without straining or leaning over.

The angle of the touch screens has been carefully chosen to ensure that the engineer can always view display data clearly during the show. The brightness and contrast of the displays, and the illumination of the control surface itself, are designed to minimise strain on the eye.

User-configurable fader layers allow an engineer to map out his own channels on any of 3 user layers so that a combination of different inputs can be placed on one 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. The 5 main output fader layers can also be customised, meaning, for example, that 8 stereo aux masters can be used on one layer for instant access to multiple in-ear sends, or VCA masters assigned alongside aux masters.

And Virtual Vi editing software allows engineers to set up shows offline on a PC, and load them into the console via a USB memory drive.

Only by paying such close attention to the integration of mechanical and operational design has Soundcraft created a digital live sound console that truly enhances the operator experience, resulting in unimpeded workflow and a more creative mix.

Vi SERIES™

All the right connections.

Cat5 or Cat7 cables with Amphenol RJF connectors provide a convenient, highly robust connection between the Soundcraft Vi Series™ stageboxes and local rack.

Flexible, reel-mounted Cat5 cabling enables the mixing position to be located up to 100 metres from the stage, while Cat7 increases that distance by 30 metres in fixed installations.

And in larger venues and installations, an optional Fibre Optic interface allows a run of up to 1.5 kilometres between the stagebox and the local rack.

A comprehensive provision of inputs and outputs can be patched to any channel input, direct output, bus output or insert point as required.

The stagebox houses 64 analogue mic/line inputs and 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.

The local rack has 16 analogue line inputs, 3 analogue mic/line inputs, a talkback mic input (mounted on the control surface) and 8 pairs of AES/EBU inputs. Outputs include 16 analogue line, 8 pairs of AES/EBU, 3 LCR local monitor A line, 2 LR local monitor B line and TB line.

Up to 5 stageboxes can be connected to create a digital patchbay, where the operator can select the 64 or 96 inputs to the console from a selection of inputs available on any of the connected stageboxes.

64 channel MADI I/O via optical SC connectors is fitted as standard and can be replaced by optional CobraNET™ or Soundcraft A-NET 16V cards.

There are 16 GPIO contact closure inputs and outputs on the local rack, and 8 inputs and outputs on the stagebox.

With connectors almost entirely absent from its rear panel, the control surface does however feature 1 MIDI input and 2 MIDI outputs.

Vi SERIES™

System hardware diagram.

Stagebox

**64 Analogue
Mic/Line Inputs**

*Optional card with 4
pairs of AES/EBU inputs
RS2446 (replaces 8
Mic/Line inputs)*

**35 Analogue
Line Outputs**

*Optional card with 4
pairs of AES/EBU outputs
RS2447 (replaces 8
Line outputs)*

**8 GPIO Contact
Closures**

64 Channel MADI I/O

**Redundant
64 Channel MADI I/O
connection**

Local Rack

**16 Analogue Line
Inputs**

*See card options on
page 8: 3 (LCR) local*

16 Analogue Line Outputs

8 pairs of AES/EBU Outputs

**3 (LCR) local monitor A
Analogue Line Outputs**

**2 (LR) local monitor B
Analogue Line Outputs**

Talkback Line Output

16 GPIO Contact Closures

Cat5 Data Link

Phones & TB Audio

Console Surface

Multiple stageboxes.

Console Surface

Vi consoles support up to 5 stageboxes. This means that a digital patchbay can be created, where the engineer can select the 64/96 inputs to a Vi6/Vi2 (or 48/72 on a Vi4) from a selection of inputs available on any of the connected stageboxes. So, for example, with two stageboxes connected there are 128 inputs to select from, with three there would be 172, and so on, up to a limit of 192 channels, which is the combined maximum of local plus stagebox inputs.

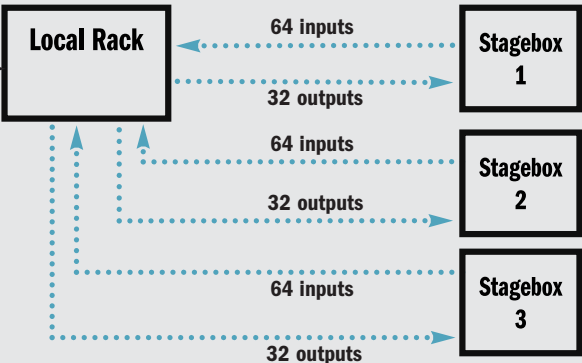(Note that if more than 2 stageboxes are required, additional MADI cards must be fitted to the Local Rack, which will result in a different configuration to that shown on the facing page).

Cable specifications

Cat5e:

Maximum 100m (330 feet) using Evolution XPC Heavy Duty Tactical CAT5e, terminated with Amphenol RJF connectors.

Suitable 100m cable mounted on a lightweight drum is available from Soundcraft, part number RZ2746.

These cables are not included with the standard console and must be ordered separately.

Two 5m patch cables are supplied with each console as standard.

Cat7:

Maximum 130m (422 feet) using AMP Netconnect 57893 PiMF cable.

Note: This cable is solid core and only suitable for fixed installations, not for touring use.

Not available from Soundcraft.

Optical Multimode Fibre:

Maximum distance 1500m (4875 feet) using continuous run of 50/125 multimode fibre, terminated with Fibrecast™ expanded beam connectors.

Suitable cable is available from Soundcraft on a lightweight drum in the following lengths:

5m	RZ2709
50m	RZ2714
150m	RZ2702
200m	RZ2701

Note: One of the above cables must be ordered if the optical stagebox link is requested.

Single Mode Fibre:

Maximum distance 10km

Note: Special Optical MADI card is required, please contact Soundcraft for delivery time.

Flightcases.
Soundcraft Vi6 shown.

467mm/18.4"

1823mm/71.8" (Vi6) 1528mm/66.1" (Vi4)

938mm/36.9"

467mm/18.4"

28mm/1.1"

762mm/30"

148mm/5.82"
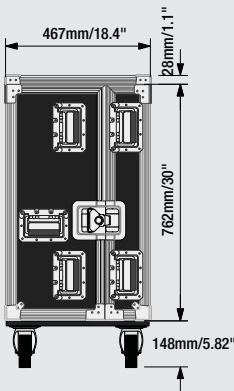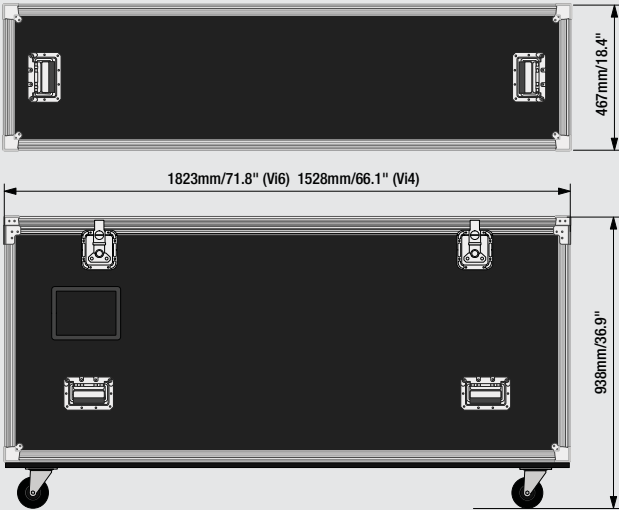
	Part No.
Control Surface, Soundcraft Vi6	BH10.947401
Control Surface, Soundcraft Vi4	BH10.947400
Control Surface, Soundcraft Vi2	BH10.947405

568mm/22.3"

28mm/1.1" 754mm/29.6" 28mm/1.1"

780mm/30.7"

635mm/25"

145mm/5.7"
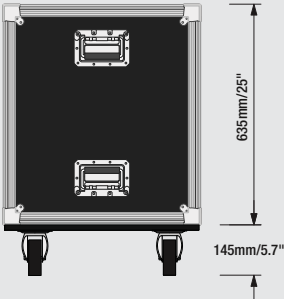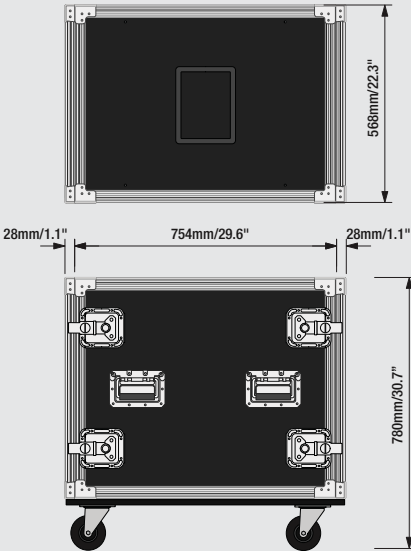
	Part No.
Local Rack/Stagebox	BH10.947402

Weight when cased

Control Surface, Soundcraft Vi6	167kg/367lbs
Control Surface, Soundcraft Vi4	133kg/292lbs
Control Surface, Soundcraft Vi2	81kg/180lbs
Local Rack/ Stagebox	50kg/110lbs

Control Surface Dimensions.

Soundcraft Vi2
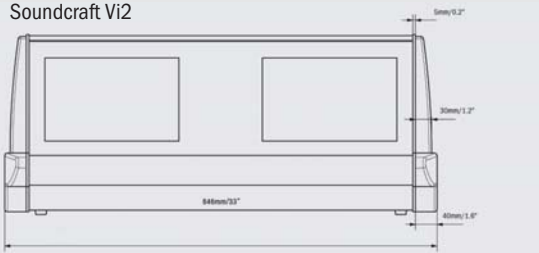
Soundcraft Vi4
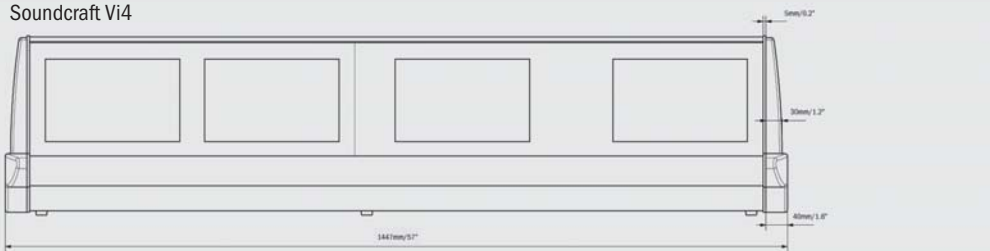
Soundcraft Vi6
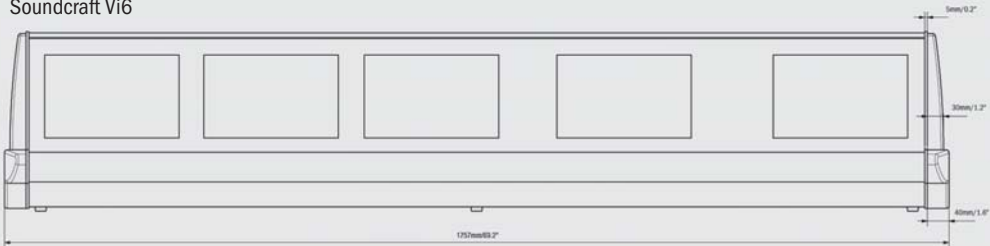
Soundcraft Vi2/Vi4/Vi6
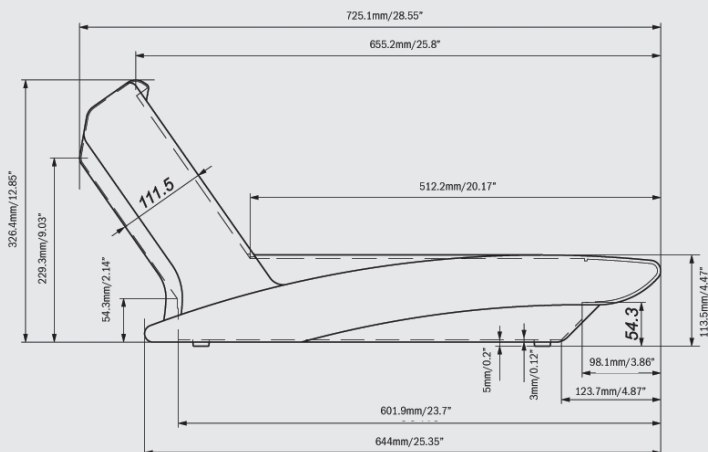
Script Tray

An optional Script Tray is available for use on the Vi2, Vi4 and Vi6 control surface. Part No. A947.006000

Vi SERIES™

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

Stagebox Mic In (min gain) to Local Line Out, 22Hz-22kHz. . . . . <0.003% @ 1kHz

Stagebox Mic In (max gain) to Local Line Out, 22Hz-22kHz . . . . <0.020% @ 1kHz

Local Line In to Line Out, 22Hz-22kHz. . . . . <0.003% @ 1kHz

Mic Input E.I.N (22Hz-22kHz bandwidth, unweighted . . . . <-126dBu (150Ω source)

Residual Noise, Stagebox line output; no inputs routed, Mix fader @0dB . . . . -91dBu

CMRR, Stagebox Mic input . . . . 80dB @ 1kHz

Sampling Frequency 48kHz

Latency, Stagebox Mic Input to Local Line output. . . . . < 2ms @48kHz

AES/EBU Input Sample Rate . . . . 32–108kHz (with SRC enabled)

DSP resolution . . . . 40-bit floating point

Internal clock accuracy . . . . < +/-50ppm

Internal clock jitter . . . . < +/-5ns

External Sync . . . . BNC Wordclock, AES/EBU sync in, Video sync in

Input & Output Levels	Mic Inputs . . . . +28dBu max
	Line Inputs. . . . . +22dBu max
	Line Outputs . . . . +22dBu max
	Nominal Operating Level . . . . 0dBu (-18dBFS)
Input & Output Impedances	Mic Inputs 2k7Ω
	All other analogue Inputs . . . . >10kΩ
	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 20-segment LED bargraphs plus 9-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 . . . . Control Surface: 155W (165W with redundant option)

Local Rack: 140W (150W with redundant option)

Stagebox: 140W (150W with redundant option)

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)