Soundcraft® Si EXPRESSION

Typical Specifications

Frequency Response

Mic input to Line output .... +0/-1dB, 20Hz – 20kHz
Stereo input to master output .... +0.5/-0.5dB, 20Hz – 20kHz

T.H.D. & Noise (10Hz - 22kHz)

Mic In (min gain) to Bus output .... 0.006% @ 1kHz
Mic In (max gain) to Bus output .... 0.008% @ 1kHz
Stereo input to master output .... 0.005% @ 1kHz

Mic Input E.I.N.

22Hz-22kHz bandwidth, unweighted .... <-126dBu (150 Ohm source)

Residual Noise

Master output; no inputs routed, Mix fader @ 0dB .... <-88dBu

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

Sampling Frequency 48kHz

Convertor Resolution .... 24 bit

Latency

Mic Input to Bus output .... < 1ms @ 48kHz

DSP Resolution .... 40-bit floating point

Internal Clock

Accuracy .... < +/- 50ppm
Jitter .... < +/- 5ns

Input & Output Levels

Mic Inputs .... +26dBu max
Stereo Inputs / Returns .... +22dBu max
Bus Outputs .... +22dBu max
Nominal Operating Level .... 0dBu (-22dBFS)

Input & Output Impedances

Mic Inputs .... 6.8 kOhms
All other analogue Inputs .... >10 kOhms
Line Outputs .... <75 Ohms

Oscillator .... 20Hz to 20kHz Sine/Pink Noise, variable level

Filters

High Pass Filters .... 22Hz - 1kHz

EQ (Inputs and Bus Outputs)

HF .... 800Hz-20kHz, +/-15dB shelving
Hi-Mid .... 22Hz-20kHz, +/-15dB, Q=0.3-6.0
Lo-Mid .... 22Hz-20kHz, +/-15dB, Q=0.3-6.0
LF .... 22Hz-500Hz, +/-15dB shelving

Metering

7x 8 segment meters for selected channel/bus, masters & monitors
Each fader strip offers 4 segment level plus gain reduction & Gate Closed status

Mains Voltage Operating Range .... 90-264V, 47-63Hz, autoranging

Mains Power Consumption 200W

Temperature/Humidity Range

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)

Weights and Dimensions (net)

Si Expression 1
Dimensions (WxDxH) ....482mm/19" x 520mm/20.5" x 168mm/6.6"
Width with rack ears removed .... 445mm/17.5"
Weight 11.8kg (26lbs)

Si Expression 2
Dimensions (WxDxH) ....716mm/28.2" x 520mm/20.5" x 168mm/6.6"
Weight 15.5kg (34lbs)

Si Expression 3
Dimensions (WxDxH) ....928mm/36.5" x 520mm/20.5" x 168mm/6.6"
Weight 19.2kg (42lbs)

Powerful, intuitive digital live sound mixing with Lexicon® FX, signal processing from BSS®, dbx® and Studer®, and ViSi remote control.

Soundcraft® by HARMAN

Soundcraft® Si EXPRESSION

Powerful, intuitive digital live sound mixing with Lexicon® FX, signal processing from BSS®, dbx® and Studer®, and ViSi* remote control.

*iPad® required

40 years of Soundcraft live sound heritage delivers pristine sound quality, a feature-packed control surface, flexible I/O options and an intuitive operator experience.

20 AUX BUSSES 14 MIXES	ASSIGNABLE FADER LAYERS	UP TO 66 CHANNELS TO MIX	4 FX BUSSES	D.O.G.S DIRECT OUTPUT GAIN STABALISATION	COPY & PASTE	8 MATRIX BUSSES 4 MIXES	lexicon 4 LEXICON FX	BSS AUDIO 31 BSS GEQ PROCESSORS	STUDER SIGNAL PROCESSING	dbx DYNAMIC PROCESSING	HiQnet ENABLED	4 MUTE GROUPS	ViSi REMOTE REMOTE CONTROL APP

After 40 years mixing live sound for many of the biggest bands in the business, acclaimed British console manufacturer Soundcraft has applied all its knowledge and expertise to developing a digital mixer of exceptional performance – at a refreshingly affordable price. Available in a range of frame sizes including a 19" rackmount version, Si Expression delivers powerful digital live sound mixing along with legendary Soundcraft sound quality, with intuitive, 'analogue-style' control.

Only Soundcraft FaderGlow™ lights your way to a better mix
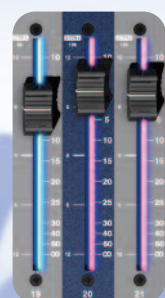
An acclaimed Soundcraft innovation direct from our tour sound Vi Series console, FaderGlow illuminates the fader track in different colours to provide at-a-glance fader status information – Aux sends, FX sends, Graphic EQ, etc.

Global mode encoders for a hands-on mix

Global mode encoders provide instant access to Gain, Pan and Filter, keeping vital controls at your fingertips at all times, without the need to select or assign channels first; and when mixing to a stereo bus like in-ears these become your channel to mix pan controls!

More faders means simultaneous access to more channels reducing the need for layer swaps to almost zero!

A full complement of input faders provides instant access to almost every possible channel of your mix and, with Soundcraft's unique tOTEM™ one-touch mixing system, you probably won't even need to change layers to access all inputs, bus masters and FX returns.

Freely assignable faders

The facility to assign faders freely across all layers makes mixing so much more comfortable, shrink stereo channels to a single fader and have your key channels on the same faders regardless of which fader layer is active.

Colour touchscreen makes mixing easy

Si Expression frees the operator to mix naturally. A colour touchscreen interface means no messing with frustrating navigation pads, while one-control-per-function architecture gets you straight to the mix with no pre-selection mapping.

More mixing capacity

Si Expression is big on mixing capacity, with all 3 models providing a massive 66 inputs to mix and, unlike other low cost digital live sound mixers, all channels offer full dynamics, EQ and routing.

Got a complicated monitor set up or using in-ears? No problem. Si Expression gives you 35 busses to mix to, and there's no shortage of I/O either, with 16 line outputs as standard even on the smallest model, plus line inputs and AES I/O.

Stunning Lexicon FX

We called upon our friends at Lexicon to empower Si Expression with stunning digital effects. Each of the 4 separate FX processors has a dedicated FX bus so there's no need to assign a bus to an FX and set it up – it just works!

Graphic EQ on every bus

Powerful dynamics processing comes from BSS and dbx, with instant access always available to all dynamics parameters and EQ bands. Graphic EQ is standard on every bus, all of the time, without the need to assign it. And best of all, it doesn't 'eat into' your FX processing power.

D.O.G.S: A mixer's best friend

Another important innovation is the D.O.G.S (Direct Output Gain Stabalisation) system, which compensates for any gain adjustment when two consoles are sharing the same source such as a mic on stage, maintaining original system gain between mic in and direct out, ensuring that the mix balance on the second (slave) console is not destroyed.

But most of all, it's about the sound

But all the mixing power in the world is useless without great sound. That's why we gave Si Expression ultra-transparent, high-headroom, recallable mic preamps with digital control straight from our Vi1 console, and DSP performance from the advanced audio labs of Soundcraft Studer.
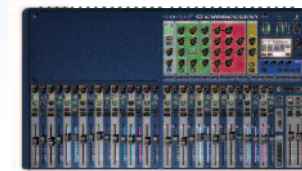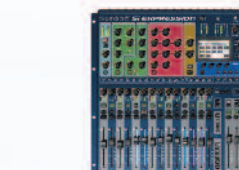
The Si Expression is available in 16 (rackmount), 24 and 32 channel frame sizes

Soundcraft®
Si EXPRESSION

64x64 option card slot
For multiple I/O formats, and interfacing to personal monitoring systems, DAWs etc. (see over).
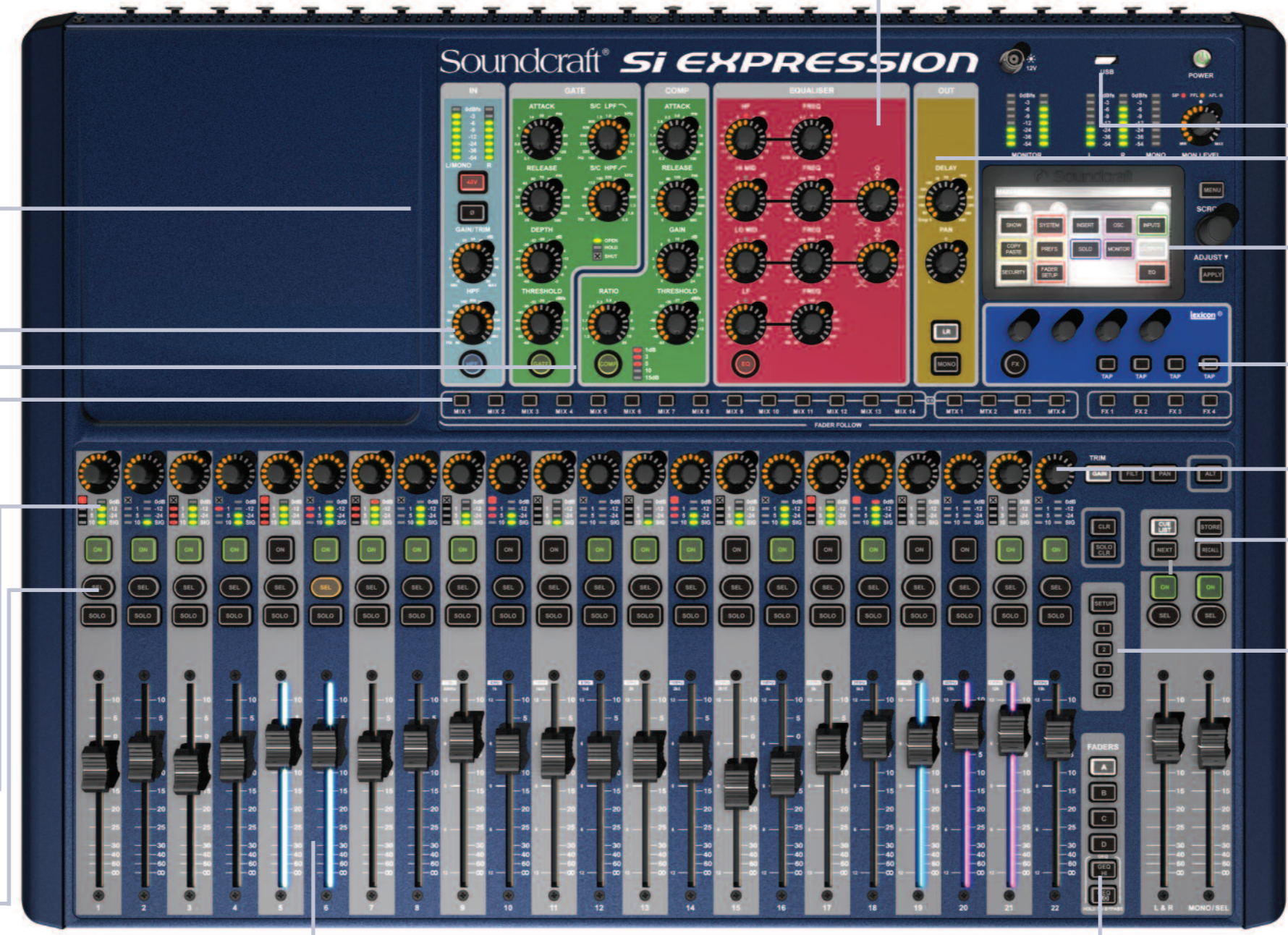
MADI

Aviom A-Net®

CobraNet™

AES/EBU D-Type

BLU link

RockNet®

tOTEM™ The one-touch easy mix
One key and one way to do any kind of mix – makes it easy to learn and get consistent results.

Vi1 Mic Preamps
The mic preamps on the Si Expression follow in the Soundcraft tradition of exemplary performance, winning worldwide acclaim for transparency, high headroom and overload characteristics. These preamps use precision digital control from the Soundcraft Vi1 console, part of the industry-leading Vi Series range.

EQ Section
Four EQ bands offer high and low shelf, variable Q and a range of 22Hz to 20KHz to complement the GEQ and high pass filters to cover all EQ requirements.

ACS (Assignable Channel Strip)
The ACS is your full channel control section, with instant access to all input parameters, compressor and gate controls, all EQ band controls, and panning options. Just select the channel, and everything is right at your fingertips.

USB
Desk settings and snapshots can be stored for later recall onto a USB memory stick through this USB port.

Out Section
The Out section contains a Delay control (again for all inputs and outputs), and a Pan control, plus Stereo and Mono mix assignment.

Input Section
The Input section has 8-segment stereo metering, controls for phantom power and polarity reverse, gain/trim adjustment and frequency setting for the high pass filter.

Colour Touch Screen
Used primarily for setup, show control and naming, the colour touch screen is secondary to mixing. Here, you can assign inserts, patch channels and setup monitoring, etc.

Dynamics Section
The Dynamics section has controls for the gate and compressor which feature on every channel, with compressors also available on all busses providing full control over side-chain filters, thresholds, attack, release, gain, depth and ratio.

Copy & Paste
Selective Copy & Paste allows all or part of a selected channel or bus to be copied and pasted elsewhere.

Lexicon® FX
Four integral Lexicon stereo effects engines provide more than 20 preset effects, which are controlled via rotary encoders and the touch screen. The effects returns are independent of the channel inputs and, unlike some other consoles in this class, users may adjust all the parameters of the active FX patch.

Mix Switches
Provides instant access to any bus mix, and sets up the console for mixing straight to the chosen bus. See tOTEM section.

Global Encoders
Each channel has a multifunction rotary encoder, which acts in Gain, High Pass Filter Adjustment or pan modes when engaged by the corresponding master switch and when mixing to a stereo bus like in-ears these become your channel to mix pan controls!

Meters
Metering is provided for every active channel or mix, showing level, gain reduction and gate closed.

Snapshot Control
The Si Expression incorporates a simple cue/snapshot system. Over 1000 cues may be stored and recalled from the dedicated cue control buttons.

Select
Touch Select to bring a channel to the ACS for adjustment of gains, EQ, dynamics, pan and delay.

Soundcraft FaderGlow™
Developed for Soundcraft's high-end touring Vi Series consoles, FaderGlow illuminates the fader according to the current operating mode. Yellow shows pre-fade Aux sends, green for post-fade sends, cyan for FX sends, red for GEQ, etc., and the real beauty is that it works in exactly the same way for Aux Matrix or FX sends! The Follow (sends on faders) method allows you to control send levels and on/off directly via the faders and associated ON keys.

GEQ
Selecting GEQ brings the graphic equaliser onto the input faders, each fader controlling one frequency. The natural feel of a centre-detent is reproduced nicely by the Si Expression. GEQ LO selects the lower half of the EQ from 31Hz to 630Hz, GEQ HI the upper half from 800Hz to 16kHz, each fader being labelled and scaled accordingly. There is a GEQ on every AUX, MATRIX and MASTER bus.

Mute Groups
Four mute groups allow you to mute groups of channels as one, with a single press of the mute master.

User Configurable Fader Layers
User configurable fader layers allow inputs and outputs to be reassigned anywhere on any fader layer, for rapid access.

Soundcraft® ViSi CONNECT

Any one of a range of Soundcraft ViSi Connect option cards can be fitted into the 64x64 option card slot on the rear panel, enabling Si Expression mixers to be configured specifically for applications including the use of personal monitoring systems, multichannel DAW recording, or connection to audio networks such as CobraNet® and RockNet. Option cards are also available for connection to a range of ViSi Connect stageboxes, offering users a choice of I/O capacity.

Optional I/O cards provide access to personal monitor systems, audio networks, stageboxes, DAW recording and more.

MONITORING

Installing the optional BLU link card enables connection to dbx PMC Personal Monitor Controllers, allowing performers to set up and control their own monitor mixes.

In-ear monitors   Headphones   Wedge monitors

DAW RECORDING

The optional Multi Digital card enables connection to remote mic preamps and digital audio workstations.

Remote mic preamps

Digital Audio Workstation

AUDIO NETWORKING

CobraNet®

Installing the optional CobraNet card enables connection to CobraNet digital audio networks.

RIEDEL RocketNet

Installing the optional Riedel RockNet card enables connection to RockNet digital audio networks.

STAGEBOXES

Optional MADI cards enable connection to a range of Soundcraft ViSi Connect stageboxes (see below).

Mini Stagebox 32

Mini Stagebox 16

Soundcraft® ViSi REMOTE
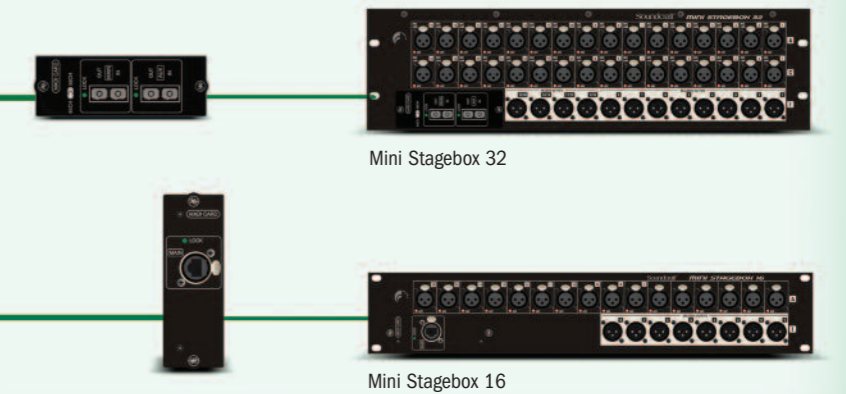
Advanced live sound mixing where you need it most

The ViSi Remote iPad® app allows remote control of console features from anywhere in the venue, even enabling musicians to mix their own monitors on stage from multiple iPads.
iPad® is a registered trademark of Apple Inc.

- Optimise the front of house mix from anywhere in the room
- Adjust monitor levels while standing next to the artist
- Control input, aux and output levels and graphic EQ settings
- Use in standalone mode for familiarisation with console functions
- Control a network of Soundcraft digital consoles from one iPad® app
- Use multiple iPads on the same console, so several artists can control their own monitor mixes
- Console and audio unaffected by wireless dropouts or interference
- Auto discovery of consoles on network - no manual address entry needed
- Connects to consoles via Harman's HiQnet® network