Technical Data

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. and Noise
Mic Input (Min Gain) to Bus Output ..... 0.006% @ 1kHz
Mic Input (Max Gain) to Bus Output ..... 0.008% @ 1kHz
Residual noise, Master Output, no inputs routed, mix fader @0dB ..... <-88dBu
Mic Input E.I.N. (maximum gain) ..... -126dBu (150Ω source)
Mix noise, masters at unity ..... < -86dBu
1 input to mix at unity gain ..... -84dBu
CMRR mic @1kHz (max gain) ..... -80dBu

Crosstalk (@ 1kHz)
Channel ON attenuation ..... <120dB
Channel Fader attenuation ..... <120dB
Mic – Mic ..... -100dB @ 1kHz, -85dB @ 10kHz
Line – Line ..... -100dB @ 1kHz, -85dB @ 10kHz

Input Gain
Mic Gain ..... -5dB – 58dB integrated pad design 1dB steps
Line Trim ..... -10dB - +16dB

EQ
HI MID & LO MID ..... 22Hz – 20kHz, +/-15dB Q 6-0.3
Shelf (HF) ..... 800Hz – 20kHz, +/-15dB
Shelf (LF) ..... 20Hz – 500Hz, +/-15dB
HPF ..... 40Hz – 1kHz
GEQ ..... 31Hz – 16kHz 1/3 octave

Delay
User adjustable delay ..... 1 sample – 500ms

Digital I/O
Converter resolution 24-bit
DSP resolution ..... 40-bit floating point

Latency
Mic In to Line Out ..... <0.8 ms
Analogue in to AES out ..... <0.6 ms
AES in to Line Out ..... <0.8 ms
AES in to AES out ..... <0.5 ms
Stagebox Mic In to Stagebox ..... <0.9 ms

Input & Output Levels
Mic Input ..... +22dBu max
Line Input ..... +22dBu max
Mix Output ..... +21.5dBu max
Headphones (@150Ω) ..... 300mW (recommended impedance 32 to 200Ω)

Input & Output Impedances
Mic Input 2kΩ
Line Input ..... >10kΩ
AES Input 110Ω
Outputs ..... 150Ω (balanced), 75Ω (unbalanced)
Word Clock used as Output 50Ω
Word Clock used as Input 4k7Ω
AES Output 110Ω

Lamp Output
12v DC ..... 100mA max (per socket)

Power
Consumption (typical) ..... <130w Si Expression 3
AC Input voltage range ..... 88-264VAC auto sensing
AC Frequency range 47-63Hz

Operating Conditions
Operating Temperature Range ..... 5°C to 45°C
Humidity ..... 0%-90%, non condensing Ta=40°C (104°F)
Storage Temperature Range ..... -20°C to 60°C (-4°F to 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)

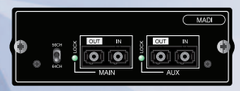
Si Expression 2
Dimensions (WxDxH) .....716mm/28.2" x 520mm/20.5" x 168mm/6.6"
Weight 15.5kg (34lbs)

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

Soundcraft® ViSi CONNECT

Si Expression consoles feature a 64x64 expansion card slot on the rear panel. A full range of ViSi Connect expansion cards is available for multiple I/O formats. Soundcraft is committed to the continued development of the ViSi Connect expansion card range, developing new cards as new network protocols become available.

I/O Expansion Cards



Optical MADI

Dual Cat5 MADI

CobraNet™

Aviom A-Net®

AES/EBU

AES/EBU D-Type

BLU link


RockNet®

Multi Digital Card

Dante™

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Soundcraft® by HARMAN

Soundcraft®

Si EXPRESSION™

DIGITAL LIVE SOUND CONSOLE

Powered by

lexicon DIGITAL FX
BSS by HARMAN GRAPHIC EQS
dbx by HARMAN DYNAMICS
STUDER by HARMAN ADVANCED DSP

Soundcraft® by HARMAN

Power mixing made easy

Beyond Analogue Control

FaderGlow™, One-Knob-One-Function and tOTEM

Most digital mixers claim to offer 'analogue-style' control. Si Expression goes beyond analogue. Combining One-Knob-One-Function control with Soundcraft's unique FaderGlow™ feature and tOTEM system for sends on faders, Soundcraft combines analogue workflow with digital flexibility. FaderGlow illuminates the fader track in different colours to provide at-a-glance status information on precisely what the fader is controlling– aux sends, FX sends or even the graphic EQ that's available on every bus. And 4 assignable fader layers means you can configure the mix exactly how you want it.

Assignable Fader Layers

FOH
Want your FX send right next to your lead vocal or snare? No problem.

Monitors
Now you can put your monitor masters next to the channels they affect.

Dual Purpose
Split the console surface for simultaneous FOH and monitor mixing.

You choose.
Si Expression is all about letting you mix your own way.

Colour touchscreen

Everything you need for easy patching, fader setup, show set-up, FX, and security. But with the One-Knob-One-Function layout of the Si Expression, you'll find the screen is rarely needed with the Si Expression's intuitive analogue-console-like workflow.

Quality Soundcraft Sound

Lots of mixer companies claim to have great 'British sound'. Soundcraft is British sound. Started in London more than 40 years ago and still designed and engineered in the UK, Soundcraft defined the term 'British sound' in live sound mixing consoles. Soundcraft Co-Founder Graham Blythe's acclaimed microphone preamps and 'British' equaliser still adorn the Si Expression with signature Soundcraft sound today.

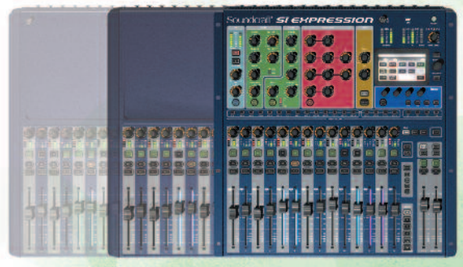
Massive Mix Power

Tons of I/O for stage and console

It's hard to believe that a console this small can pack in so much mixing power. All 3 Si Expression models give you a massive 66 inputs to mix and 35 busses, with all channels offering a full compliment of dynamics, EQ and flexible routing. And unlike other compact digital mixers, adding stageboxes (see over) adds to the I/O capacity without reducing it at the console.

Choose from 3 frame sizes

The features are identical – just pick the fader and local mic preamp count you need. The rack-mountable Si Expression 1 gives you 16 of each, while the Si Expression 2 and 3 deliver 24 and 32 faders and mic preamps respectively.



392 Rack Units

of big-name DSP - built in

lexicon · BSS by HARMAN · dbx by HARMAN · STUDER by HARMAN

Si Expression isn't just packed with DSP power. It's packed with DSP power from industry leading names in FX, dynamics, EQ and digital audio.

97	97	66	97	31	4
PEQs	COMPRESSORS	NOISE GATES	TIME DELAYS	GEQs	MONO - STEREO FX PROCESSORS

Soundcraft®
Si EXPRESSION™
DIGITAL LIVE SOUND CONSOLE

No other compact digital mixer gives you all these essential features

Soundcraft GB MIC PRES	66 INPUTS TO MIX	20 AUX BUSSES 6 STEREO	4 STEREO MATRICES	lexicon 4 STEREO LEXICON EFFECTS	MOTORISED FADERS	ASSIGNABLE FADER LAYERS	FADER GLOW	Soundcraft Vi Si REMOTE ENABLED	D.O.G.S ENABLED	HiQnet ENABLED	MULTI-TRACK RECORDING ENABLED

One Mixer Does it All

Perform

Si Expression doesn't just look good on paper. It performs brilliantly out there in the real world. Connect a Mini Stagebox 32 and get 32 analogue inputs, 8 analogue line outputs and 4 pairs of AES outputs on stage. The Mini Stagebox 16 provides 16 analogue inputs and 8 line outputs making a 16 x 8 I/O expansion. And unlike some digital mixers, connecting Soundcraft stageboxes adds genuine I/O capacity to the Si Expression without reducing I/O count from the mixer.

The 3U Mini Stagebox 32 and 2U Mini Stagebox 16 come with interface cards included.

Soundcraft® ViSi CONNECT

Connect to stageboxes and personal monitor systems, record live to a DAW or link to an audio network.

(See back page for a full list of ViSi Connect expansion cards)

Record

Just add a Multi Digital card from the ViSi Connect range and you're ready to make multitrack recordings direct to any digital audio workstation. Send 40 inputs and 40 outputs to and from your DAW for recording and playback to an Si Expression.

Multi Digital Expansion Card

Soundcraft® Si EXPRESSION™
DIGITAL LIVE SOUND CONSOLE

Monitor

The Si Expression makes mixing to monitors simple thanks to tOTEM™ (the one-touch easy mixing system). tOTEM™ provides instant access to your monitor mix busses by putting monitor sends on the motorised faders. Mixing to a monitor is as simple as pushing up a fader. For FOH and Monitor applications, the unique D.O.G.S (Dynamic Output Gain Stabilisation) system compensates for any gain adjustment when two consoles are sharing the same source, maintaining original system levels between mic in and direct out.

And ViSi Connect expansion cards make it easy to connect to personal monitoring systems such as dbx's PMC 16. It all makes for a more powerful and easy monitor desk solution.

BLU link Expansion card

Aviom A-Net® Expansion card

Mix Remote

Mix FOH from anywhere in the venue.
Mix monitors from the stage.

Soundcraft® ViSi REMOTE

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 iPad® devices.

Network

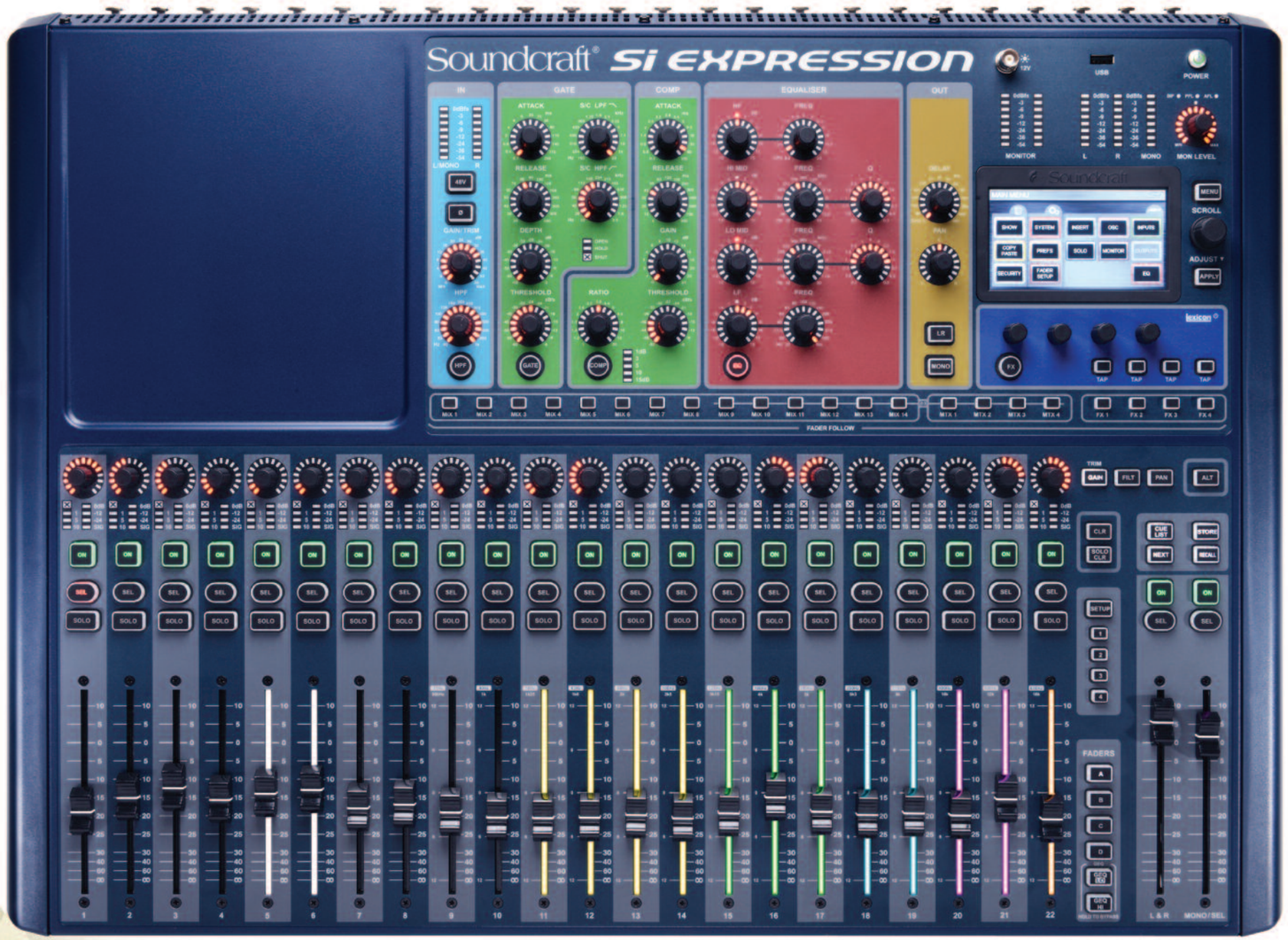
Si Expression integrates seamlessly at the heart of a sophisticated audio installation, with a full range of ViSi Connect expansion cards (see back page) available for the most popular network protocols.

RIEDEL RockNet
AVIOM A-Net
CobraNet®
BLU link
Dante™

iPad® is a registered trademark of Apple Inc.

Connectivity & Control

Soundcraft® Si EXPRESSION™
DIGITAL LIVE SOUND CONSOLE



Connectivity

- 16/24/32 recallable GB mic inputs with locking connectors and phantom power indicators
- 16 XLR analogue line outputs
- 4 Balanced 1/4" Jack mono line inputs
- AES In and out
- Word Clock
- MIDI In and Out
- HiQnet Ethernet port for HiQnet system integration and ViSi Remote System
- 64x64 ViSi Connect expansion slot (see back page)

Input Section

- 8 LED Input Meter
- 48v Phantom power switch
- Polarity reverse switch
- Input Gain/Trim Adjustment
- Variable High Pass Filter
- HPF engage switch

Gate

- Dedicated encoders for Attack, Release, Depth, Threshold and Sidechain Filters
- Gate open, hold and close status LED indicators
- Gate engage switch

Compression

- Dedicated encoders for Attack, Release, Gain, threshold and Ratio controls
- Compressor on every bus
- 5 Segment LED gain reduction indicator
- Compressor engage switch

4 Band British EQ

- Sweepable LF and HF shelf bands
- Fully parametric Hi Mid and Low Mid EQ bands
- EQ engage switch

Output Section

- Channel delay for time alignment on input and output bus, displayed as time or distance
- Variable time delay per channel or Bus (0-500ms)
- Pan control
- LR switch for assigning/un-assigning channels and busses to the L/R output
- Mono switch for routing to mono output (centre speaker, sub bass channel, etc.)

Lexicon Effects Section

- 4 integral Lexicon stereo effects engines
- 29 effect presets per engine with hall, plate and room reverbs, plus delays, modulations and pitch
- Up to 12 parameters for each preset accessed by touchscreen dialogue and 4 surface encoders
- Dedicated Tap tempo switches

The One Touch Easy Mixing Keys

- Dedicated tOTEM Keys for all 14 mix busses, 4 Matrix busses and 4 FX engines
- Mix to any of the mix busses by simply tapping a tOTEM key and pushing up the faders
- FaderGlow™ for visual colour feedback on what the faders are currently mixing: Yellow- Pre-fader Bus, Green- Post-Fader Bus, Blue- FX bus, Orange- Matrices

Global Mode Encoders and Channel Meters

- Instant access to important settings such as input gain/trim, High pass filter settings and Pan controls - adjust these features globally across all channels using dedicated global encoders
- 4 segment LED Input meter, 3 segment LED Gain reduction meter and Gate closed indicator across all channels on the surface

Surface Controls & Global Metering

- FaderGlow™ illuminates the fader track for at-a-glance display of current fader function: White- Linked channels, Pink- Stereo Inputs, Red- Graphic EQ
- 4 mute groups for muting groups of channels as one
- Snapshot control – 1000 cues can be stored and recalled from dedicated cue control buttons
- USB port for saving/loading shows and snapshots with USB memory sticks
- Colour touchscreen for patching, routing, show set-up and security settings
- 8 LED input and output meters (monitor L/R, master L/R, mono)
- Headphone output
- 12V lamp connector