Technical Data

Frequency Response		
T.H.D. and Noise Mic Input (Min Gain) to Bus Output 0.006% @ 1kH Residual noise, Master Output, no inputs routed, mix fader @0d8 -88dB Mic Input ELIN (maximum gain) -126dBu (150Ω source Mix noise, masters at unity -86dBu 1 input to mix at unity gain -84dBu 1 input to mix at unity gain -80dBu 1 input to mix at unity gain -100dB	Mic Input to Line Output+0/-1dB, 2	
Residual noise, Master Output, no inputs routed, mix fader @OdB 88dBi Mic Input E.I.N. (maximum gain) 126dBu (150Ω source Mix noise, masters at unity 86dBi 1 input to mix at unity gain . 84dBi CMRR mic @IkHz (max gain) . 8-8dBi CMRR mic @IkHz (max gain) . 120df Mic - Mic . 1-100dB @1 IkHz, -85dB @1 10kH Line - Line . 1-100dB @1 IkHz, -85dB @1 10kH Line - Line . 1-10dB @1 IkHz, -85dB @1 10kH Line - Line . 1-10dB = 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 14dB = 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 14dB = 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line - Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line . 1-10dB - 1 IkHz . 8-8dB @1 10kH Line . 1-10dB - 1 IkHz . 1-10dB	T.H.D. and Noise Mic Input (Min Gain) to Bus Output	006% @ 1kHz
Linput to mix at unity gain	Residual noise, Master Output, no inputs routed, mix fader @0dB Mic Input E.I.N. (maximum gain)	\ldots <-88dBu 50 Ω source)
Channel Fader attenuation	1 input to mix at unity gain	84dBu
Mic Mic Mic Mikz A5dB @ 10kH	Channel ON attenuation	<120dE
Mic Gain	Mic - Mic -100dB @ 1kHz, -8 Line - Line -100dB @ 1kHz, -8	5dB @ 10kHz
HI MID & LO MID Shelf (HF) Shelf (HF) Shelf (LF) 20Hz - 20Htz, +/-15dB Q 6-0.5 Shelf (LF) 20Hz - 50OHz, +/-15dE HPF 40Hz - 1kH GEQ 31Hz - 16kHz 1/3 octaw Delay User adjustable delay 1 sample - 500ms Digital I/O Converter resolution 24-bi DSP resolution 40-bit floating poin Latency Mic In to Line Out Analogue in to AES out AES in to Line Out AES in to Line Out AES in to Line Out AES out Stagebox Mic In to Stagebox Input & Output Levels Mic Input Line Input +22dBu ma Mix Output Headphones (@150Ω) 300mW (recommended impedance 32 to 200Ω Input & Output Impedances Mic Input Line Input 40thut Impedances Mic Input Line Input 50C Word Clock used as Output Vord Clock used as Output Lamp Output 12ν DC 100mA max (per socket Power Consumption (typical) AC Input voltage range AC Frequency range AC Frequency range AC Frequency range AC Input voltage range AC Input voltage range AC Input voltage range AC Input woltage range AC Input woltage range AC Input voltage range AC Input voltage range AC Input voltage range AC Input woltage range AC Input voltage range AC Input voltage range AC Input woltage range AC Input voltage range AC Input woltage range AC Input woltage range AC Input voltage range AC Input volta	Mic Gain5dB – 58dB integrated pad designated	
Shelf (HF) 800Hz - 20kHz, +/-15dit Shelf (LF) 20Hz - 500Hz, +/-15dit HPF 40Hz - 1kH GEQ 31Hz - 16kHz 1/3 octaw Delay User adjustable delay 1 sample - 500ms Digital I/O 24-bit Converter resolution 24-bit DSP resolution 40-bit filoating poin Latency Mic In to Line Out 40-bit filoating poin AES in to AES out 40-bit filoating poin AES in to Line Out 40-bit filoating poin AES in to AES out 40-bit filoating poin AES in to Line Out 40-bit filoating poin AES output 422dBu max Headphones (@150Ω) 300mW (recommended impedance 32 to 200Ω Input & Output Impedances Mic Input 42-bit 42-bit Mic Input 42-bit 42-bit AES Input 110Ω Outputs 150Ω (balanced), 75Ω (unbalanced word Clock used as Output 110Ω AES Input 110Ω AES Input 110Ω AES Output 110Ω Lamp Output 110Ω Lamp Output 110Ω AC Input voltage range 88-264VAC auto sensing AC Frequency range 88-264VAC auto sensing AC Frequency range 47-63H Operating Conditions Operating Conditions 20%-90%, non condensing Ta-40°C (104°F Storage Temperature Range 47-63H Operating Temperature Range 5°C to 45°C to 60°C (-4°F to 140°F Weight 11-8kg (26lbs 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 3 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		.5dB Q 6-0.3
Delay 1 sample - 500ms	Shelf (HF) 800Hz - 20Hz Shelf (LF) 20Hz - 500	kHz, +/-15dE)Hz, +/-15dE
Digital I/O Converter resolution 24-bit DSP resolution 40-bit floating poin	GEQ	Iz 1/3 octave
DSP resolution		
Mic In to Line Out	DSP resolution	floating poin
AES in to AES out Stagebox Mic In to Stagebox Input & Output Levels Mic Input	Mic In to Line Out Analogue in to AES out	<0.6 ms
Input & Output Levels	AES in to AES out	< 0.5 ms
Line Input	Innut & Outnut Levels	
Input & Output Impedances	Line Input	+22dBu max 21.5dBu max
Line Input	Input & Output Impedances	
Outputs 150Ω (balanced), 75Ω (unbalanced Word Clock used as Output 50Ω Word Clock used as Input 4k7Ω AES Output 110Ω Lamp Output 12v DC 12v DC 100mA max (per socket Power Consumption (typical) <130w Si Expression 3		
Word Clock used as Input AES Output	AES Input	\dots 110 Ω
12v DC	Word Clock used as Input	4k7Ω
Consumption (typical)		(per socket
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)	Consumption (typical)	auto sensing
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	Operating Conditions Operating Temperature Range	5°C to 45°C
Si Expression 1	Storage Temperature Range20°C to 60°C (-4	°F to 140°F
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		
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	Dimensions (WxDxH)	45mm/17.5'
Si Expression 3 Dimensions (WxDxH)928mm/36.5" x 520mm/20.5" x 168mm/6.6	Dimensions (WxDxH)716mm/28.2" x 520mm/20.5" x :	
	Si Expression 3 Dimensions (WxDxH)928mm/36.5" x 520mm/20.5" x 3	168mm/6.6'

Soundcraft® **Visiconnect**

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













AES/EBU

AES/EBU D-Type









Multi Digital Card

Dante™

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Powered











Beyond Analogue Control

Power mixing made easy

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

the mix exactly how you want it.



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

Assignable Fader Layers

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



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.

392 Rack Units of big-name DSP - built in









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.

















Quality Soundcraft Sou

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.

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 rackmountable Si Expression 1 gives you 16 of each, while the Si Expression 2 and 3 deliver 24 and 32 faders and mic preamps respectively.

Soundcraft[®] Si EXPRESSION

DIGITAL LIVE SOUND CONSOLE

No other compact digital mixer gives you all these essential features



























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.



One Mixer Does it All

Soundcraft[®] **VISICONNECT** **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 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.



Mix Remote

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

Soundcraft

The ViSi Remote iPad® app allows remote control of console features from anywhere in the VISI RENOTE venue, even enabling musicians to mix their own monitors on stage from multiple iPad® devices.





CobraNet



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.

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 contro
- 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.)

Connectivity & Control







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-aglance 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