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Soundcraft®
by HARMAN

Soundcraft®
Si PERFORMER
DIGITAL LIVE SOUND CONSOLE WITH DMX



The world's first digital live sound mixer with DMX integration

Live Sound. Enlightened.
It's All About the Performer.

On the strength of its audio mixing facilities alone, the Soundcraft® Si Performer is a remarkable live sound mixer. Combining legendary Soundcraft sound quality with intuitive, analogue-style operation, Si Performer delivers built-in Lexicon FX, sophisticated 4-band fully parametric EQ and full dynamics processing, a comprehensive range of output options, flexible routing and grouping and remote iPad® control among a feature list that just won't be beaten.

But Si Performer is even more special than that. The unique integration of a DMX512 port and lighting control interface into an intuitive control surface that enables sound and lighting fader functions to be combined in layers, delivers comprehensive show control in a single, compact package.

The possibilities are endless. From theatre productions to gigging bands and music venues, houses of worship to live productions and corporate AV events, any 'single-operator' application event in which sophisticated digital audio mixing is a pre-requisite can now be enhanced with integrated lighting control.

Advanced functions on the Si Performer include freely assignable fader layers, allowing inputs, busses and DMX controls to be reassigned anywhere on any fader layer. Now an engineer can put the inputs and returns where he or she will most want to access them.

Another important innovation is the D.O.G.S. (Direct Output Gain Stabilisation) 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.

Selective Copy & Paste allows all or part of a selected channel or bus to be copied and pasted elsewhere, with the ability to copy and paste individual bus or matrix mixes and copy/paste FX presets between Lexicon processors.

The security mode prevents unauthorised access to key functions. In addition to 'total lockdown', security can be tailored for different operator access levels - for example locking out house EQ and processing for guest engineers whilst, allowing access for in-house operators.

True LCR panning mode enhances the stereo and mono master busses to provide clear performing arts-style image placement and clarity.

Si Performer. Welcome to live sound, enlightened.



2 frame sizes are available: Si Performer 2 with 24 mic and 8 line inputs, and Si Performer 3 with 32 mic and 8 line inputs.

Advanced live sound mixing where you need it most

Si Performer builds upon the established Si Compact range of digital live sound mixers, providing almost twice as much DSP power and increased functionality, with an input capacity of 80 inputs to mix; the Si Performer 2 with 24 mic and 8 line inputs, and the Si Performer 3 with 32 mic and 8 line inputs, both with 4 stereo return channels.

Two option card slots allows I/O expansion via any of the Soundcraft stageboxes and option cards from the Soundcraft® ViSi Connect range, allowing patching up to 80 inputs to mix, or from CobraNet®, AVIOM® or AES inputs via the appropriate cards.

With legendary Soundcraft sound quality at its core, the Si Performer packs in an astonishing range of features, making it the most powerful digital live sound mixer in its class.

And that power is accessible from anywhere in the venue, via the Soundcraft ViSi Remote iPad® app. ViSi allows remote control of multiple consoles from the Soundcraft Vi1, Vi Series, Si Compact and now Si Performer ranges on a single iPad, or allows multiple iPads to control a single console, allowing performers to mix their own monitors on stage.



Soundcraft®
ViSi
 REMOTE

20
 AUX
 BUSSES

Maximum Bus flexibility

Switchable Pre/Post fader per channel, per bus, and configurable as a combination of mono and stereo mixes, delivers maximum flexibility for wedge and in-ear monitoring as well as FX sends.

D.O.G.S
 DIRECT
 OUTPUT GAIN
 STABILISATION

Keep your balance

Another Soundcraft first, compensating for gain adjustment when 2 consoles are sharing the same source to maintain the mix balance on the slave console.

4
 FX
 BUSSES

Sophisticated FX routing

4 FX busses unleash the full potential of powerful, built-in Lexicon® effects.

4
 lexicon
 FX

Stunning built-in effects

Nobody does it better. 4 built-in digital stereo FX engines come courtesy of our friends at Lexicon®.

8
 MATRIX
 BUSSES

Create different mixes for different zones

Theatre sound operators will welcome the facility to setup 4 different stereo mixes for different zones of the venue, eg. under balconies or delays.

ViSi
 REMOTE
 CONTROL APP

Mixing where you need it most

Tweak the mix from anywhere in the venue and even mix your monitors on-stage, using the Soundcraft® ViSi Remote iPad® app.

**FADER
 GLOW™**

Light your way to intuitive mixing

Fader tracks illuminate in different colours to give an instant visual indication of their status, eg. Stereo inputs, Graphic EQ, Channel to Aux Bus or even DMX modes!

BSS AUDIO
 31 BSS
 GRAPHIC EQs

220 rack units of processing, built-in

28-band BSS graphic EQs on all bus outputs are provided in addition to standard gates, compressors and delays on all inputs, compressors and delays on all outputs.

UP TO 80
 CHANNELS
 TO MIX

Massive mix capacity

Supplement local I/O with stagebox feeds to get a massive 80 inputs to mix.

8
 VCA
 GROUPS

Group channels on a single fader

Assign the overall gain control of groups of channels (eg. drums, horn section, etc.) to a single fader.

4 Band
 FULLY
 PARAMETRIC EQ

Precision sonic surgery

Fully-parametric four-band EQ with switchable Bell/Shelf modes on the HF and LF sections are standard on all input channels and outputs.

8
 MUTE
 GROUPS

Simultaneous muting of selected channels

Create groups of channels (eg. drums, horn section, etc.) for instant simultaneous muting.

**ASSIGNABLE
 FADER LAYERS**

The right mix at your fingertips

Assign any combination of audio and lighting fader functions to layers, providing rapid-access show control.

**LIGHTING
 CONTROL**

Control the show from a single surface

For the first time, an advanced digital live sound mixer combines core lighting control to deliver show control from a single surface.

**COPY &
 PASTE**

When you need to set-up in a hurry

The facility to copy and paste some or all channel parameters is invaluable in a hurry.

**LCR
 PANNING**

LCR Panning

The three master busses can be put into true LCR mode, feeding, for example centre clusters in performing arts systems.

**SNAPSHOT
 AUTOMATION**

Snapshot Automation

Comprehensive snapshot memories can store both audio and DMX settings, allowing sound & light cues to be synchronously recalled, and even triggered via MIDI.

Sound. Meet lighting and more.

Soundcraft®
SI PERFORMER
DIGITAL LIVE SOUND CONSOLE WITH DMX



In small theatres, music venues, houses of worship, corporate events and colleges, there are often applications in which a single operator is required to handle all the sound and lighting requirements.

Adding DMX integration to the Si Performer means that a single control surface can now

be used to control several functions, saving space and access time.

Si Performer's DMX functions are provided as 4 presets on the ALT fader banks, and each preset bank has a master control.

Using faders, the Si Performer 3 can send DMX messages to 30 DMX addresses (22 on

Performer 2), providing fader control over intensity or other functions as the external device allows.

Taking the example of an LED par can, the R, G and B channels can be controlled on three faders, with an overall intensity master control for all channels on that layer.

Once set-up, DMX settings are easily stored as part of the overall console snapshot, so that both audio and lighting cues may be recalled in sync using a single button press.

DMX settings may also be isolated, allowing manual override of masters and slaves.

Cross-fades can be set between DMX addresses or scene changes, with fade time adjustable through the touch screen.

Soundcraft® **SI PERFORMER** DIGITAL LIVE SOUND CONSOLE WITH DMX

Total show control from a single compact surface

The Si Performer integrates live sound mixing and stage lighting control with legendary Soundcraft sound quality and a full complement of professional digital mixing features – all in a small footprint, and all at an affordable price.

And with the Si Performer, all that power and flexibility is accessible within an intuitive, 'analogue-style' user experience that always puts you in control.

Encoders

Each channel has a multifunction rotary encoder, which acts in one of the following modes when engaged by the corresponding master switch:
Gain: controls channel gain or trim.
Filt: adjusts the frequency of the high-pass filter
Pan: adjusts the signal in the stereo mix. When sending channels to a stereo bus, this acts as a Pan to Bus control.

Meters

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

Channel displays

A custom colour backlit LCD display shows channel name or mode, e.g. Vocal, MTX, MIX3, DMX1.



Select

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

User Configurable Fader Layers

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

Vi1 Mic Preamps

The mic preamps on the Si Performer 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.



EMMA Yotta

At the heart of the Si Performer is the EMMA Yotta processor/DSP, our fastest and most powerful EMMA DSP engine yet. You'll never run out of DSP, even if you have all the FX running, graphic EQs on all outputs, delays on inputs and dynamics on inputs and outputs.



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.

Accessories Tray

Handy for many items including the optional accessories kit, including magnetic notes pad and wipe-off marker.

Mix Switches

Provides instant access to any bus mix, and sets up the console for mixing straight to the chosen bus. See TOTEM section (right).

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.

EQ Section

A fully-parametric four-band EQ section is provided on every channel and on every bus output, with selective bell or shelf settings on the HF and LF sections.

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.



Soundcraft FaderGlow™

Developed for Soundcraft's acclaimed 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, white for DMX channels, etc. The Follow (sends on faders) method allows you to control send levels directly via the faders, such as Aux sends, Matrix sends, FX sends.

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 Performer. 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

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

TOTEM™

The one-touch easy mix

Si Performer features TOTEM™, a super-easy way to get mixing. Depending on which busses you have selected, (for example FX bus 1) one touch of a TOTEM button will:

- Clear all current Solos
- Put input faders into sends on faders mode, lighting FaderGlow accordingly
- Place the FX return onto the MONO/Sel fader*
- Solo the FX Return channel
- Assign the central control section to FX return*

*If mixing to AUX or MTX this is the bus master

USB

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

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.

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 parameters of the FX and store their own presets for later use.

Snapshot Control

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

VCA Groups

The 8 VCA groups offer a new level of control to the input channels and may double as additional mute groups if needed.

Security Mode

Prevents unauthorised access to key functions. In addition to 'total lockdown', security can be tailored for different 'operator access' levels.

Flexible connectivity



Card Options



MADI (Optical card shown)

The MADI I/O card can establish a 64-channel MADI input and output link to a remote device such as stage rack, another console or Broadcast feed to an OB.

Optical inputs and outputs are provided on SC connectors available in multi-mode or single mode, with the auxiliary interface available as a redundant link. A Cat5 version of the card is also available.

AVIOM A-NET® 16

This card allows the desk to digitally feed an Aviom A-Net® Pro-16 chain.

With this standard, 16 mono signals can be fed to any number of Aviom personal mixers (such as the A-16 II), connected in a daisy chain configuration. The A-Net® card will be the start of the chain and provide the audio and synchronization data to the chain. DIP switches on the front panel allow grouping two adjacent channels to one stereo channel, and generating a test tone.

CobraNet®

This card allows sending and receiving of up to 32 audio channels to/from a CobraNet® network. DIP switches on the card allow setting the number of input or output channels seen by the console.

By default, the module is configured to be the conductor (synchronization master) and can be configured using the free CobraNet Discovery application to match your requirements.

AES/EBU - Option 1

A D-Type connector based AES/EBU input/output card with 4 pairs of inputs/outputs (8-in/8-out). A separate BNC connector for wordclock output is provided.

AES/EBU - Option 2

An XLR-based card with 2 pairs of AES/EBU inputs and outputs (4-in/4-out).



Optional Accessories

The optional accessories kit includes a magnetic notes pad, wipe-off marker, lanyard, console lamp(s) and dust cover.

Stageboxes

The Si Performer may be coupled with any of the Soundcraft stageboxes from the Soundcraft® ViSi Connect range, including the Vi Stagebox and the Compact Stagebox.

The Soundcraft Compact Stagebox offers 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 and 8 line outputs, 8 channels of AES/EBU outputs or 16 line outputs.

The unit has 2 expansion slots for standard Soundcraft Studer D21m I/O cards, and dual PSUs. The D21m is the I/O architecture

for Studer as well as Soundcraft Vi digital mixing systems and allows connection to most popular digital formats, including CobraNet®, AVIOM A-Net®16, EtherSound, ADAT and RockNet. A MADI card can also be fitted to the expansion slots for recording.

Stageboxes are connected to the host console using either Cat-5 or Optical-fibre MADI.

Compact Stagebox



Si Performer Technical 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

Converter 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 +23dBu max

Stereo Inputs / Returns +22dBu max

Bus Outputs +22dBu max

Nominal Operating Level 0dBu (-22dBFS)

Input & Output Impedances

Mic Inputs 2 kOhms

All other analogue Inputs >10 kOhms

Line Outputs <75 Ohms

Oscillator

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

Filters

Channel HP Filter 22Hz-1kHz, 18dB per octave

EQ (Inputs and Bus Outputs)

HF 22Hz-20kHz, +/-15dB, Q=0.3-6.0, bell or shelving

Hi-Mid 22Hz-20kHz, +/-15dB, Q=0.3-6.0

Lo-Mid 22Hz-20kHz, +/-15dB, Q=0.3-6.0

LF 22Hz-20kHz, +/-15dB, Q=0.3-6.0, bell or 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)

Dimensions

Si Performer 2 (H x W x D) 170mm x 730mm x 536mm/6.7" x 28.75" x 21.2"

Si Performer 3 (H x W x D) 170mm x 940mm x 536mm/6.7" x 37" x 21.2"

Weights

Si Performer 2 17kg/37lbs net

Si Performer 3 21.5kg/47.5lbs net