Soundcraft®

by HARMAN

Si COMPACT

DIGITAL LIVE SOUND CONSOLE

User Guide

IMPORTANT

Please read this manual carefully before using your mixer for the first time.

This equipment complies with the EMC directive 2004/108/EC and LVD 2006/95/EC

This product is approved to safety standards
IEC 60065:2005 +A1:2005
EN60065:2006 +A1:2006 + A1:2008
UL60065 7th Edition
CAN/CSA-E60065-03 +A1:2006

And EMC standards
EN55103-1: 2009 (E2)
EN55103-2: 2009 (E2)

Warning: Any modification or changes made to this device, unless explicitly approved by Harman, will invalidate the authorisation of this device. Operation of an unauthorised device is prohibited under Section 302 of the Communications act of 1934, as amended, and Subpart 1 of Part 2 of Chapter 47 of the Code of Federal Regulations.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

* Reorient or relocate the receiving antenna
* Increase the separation between the equipment and the receiver
* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
* Consult the dealer or an experienced radio/TV technician for help

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IMPORTANT SAFETY INSTRUCTIONS

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of a polarised or grounding type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.



Use only with the cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



NOTE: It is recommended that all maintenance and service on the product should be carried out by Soundcraft or its authorised agents. Soundcraft cannot accept any liability whatsoever for any loss or damage caused by service, maintenance or repair by unauthorised personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not expose the apparatus to dripping or splashing and do not place objects filled with liquids, such as vases, on the apparatus.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, table cloths, curtains etc.

THIS APPARATUS MUST BE EARTHED. Under no circumstances should the safety earth be disconnected from the mains lead.

The mains supply disconnect device is the mains plug. It must remain accessible so as to be readily operable when the apparatus is in use.

If any part of the mains cord set is damaged, the complete cord set should be replaced. The following information is for reference only.
The wires in the mains lead are coloured in accordance with the following code:

Earth (Ground): Green and Yellow (US - Green/Yellow)
Neutral: Blue (US - White)
Live (Hot): Brown (US - Black)

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol. ⏚

The wire which is coloured Blue must be connected to the terminal in the plug which is marked with the letter N

The wire which is coloured Brown must be connected to the terminal in the plug which is marked with the letter L

Ensure that these colour codes are followed carefully in the event of the plug being changed

This unit is capable of operating over a range of mains voltages as marked on the rear panel.



NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.
Cet appareil numérique de la Classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

FOR YOUR OWN SAFETY AND TO AVOID INVALIDATION OF THE WARRANTY PLEASE READ THIS SECTION CAREFULLY.

SAFETY SYMBOL GUIDE

For your own safety and to avoid invalidation of the warranty all text marked with these symbols should be read carefully.

WARNINGS



The lightning flash with arrowhead symbol, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTIONS



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

NOTES



Contain important information and useful tips on the operation of your equipment.

HEADPHONES SAFETY WARNING



Contain important information and useful tips on headphone outputs and monitoring levels.

INTRODUCTION

Thank you for purchasing a Soundcraft Si Compact mixer. The Soundcraft Si Compact series is an incredibly versatile but simple to use digital console optimized for live sound environments or other situations where fast and clear access to any control or parameter is needed. Along with many new technologies and features, the Si Compact borrows much from its larger predecessors the Si 1, 2 & 3 consoles and Soundcraft Vi series ensuring high reliability, fantastic audio quality and a mature and comprehensive feature set.

Some of the technologies employed by the Si Compact include Mic amps from the Vi1, classic Soundcraft EQ modeling, Lexicon® FX processors, BSS® Graphic EQ and dynamics processors developed with world leaders in this field DBX®. The Si Compact series hardware and software systems have been designed to make mixing as simple as possible and we believe you will find this one of the quickest consoles to learn.

Owning a Soundcraft console brings you the expertise and support of one of the industry's leading manufacturers, and the results of over three decades of supporting some of the biggest names in the business. Our knowledge has been attained through working in close contact with leading professionals and institutes to bring you products designed to get the best possible results from your mixing.

Built to the highest standards using quality components and surface mount technology, the Soundcraft Si Compact is designed to be as easy to use as possible. We have spent years researching the most efficient methods of control for two key reasons:

1) Engineers, musicians, writers and programmers all need to have very few interruptions to the creative process; our products have been designed to be almost transparent, allowing this process to breathe.
2) Whether performing or recording, time is a very expensive and rare commodity. Our products have a user interface which is recognized by millions to be the industry standard because of its efficiency.

The sonic qualities of our products are exemplary and some of the same designs used on our most expensive consoles are employed in the Si Compact, bringing you the great Soundcraft quality in a small format console without compromise.

You will also be glad to know you have a one year warranty with your product from the date of purchase. The Soundcraft Si Compact has been designed using the latest high-end software based engineering packages. Every console from Soundcraft has been proven to stand up to all the stress and rigours of modern day mixing environments.

The entire Soundcraft Si Compact range is manufactured using some of the most advanced techniques in the world, from high density surface mount PCB technology, to computer aided test equipment able to measure signals well outside the range of normal hearing. As each console passes through to be quality checked before packing, there is also a human listening station. Something we have learnt over the years is that the human touch counts and only by using people can we ensure that the product meets the high demands of the user.



NOTE: The packaging, in which your console arrived, forms part of the product and must be retained for future use.

Si COMPACT KEY FEATURES

The SI COMPACT series includes many unique technological and operational qualities which include:

- MIC amps from the renowned Vi series
- Soundcraft parametric EQ on all inputs and outputs
- Fader Glow™ illumination on all faders
- BSS Graphic EQ on all bus and matrix outputs
- Independent Centre/Mono bus
- Quad Lexicon FX processors
- tOTEM™ (The One Touch Easy Mix) system that instantly sets the console surface as you need it to create mixes quickly and easily
- Lamp Outputs
- Dedicated Stereo Line inputs
- Native AES inputs & outputs
- 64x64 channel option card slot fully compatible with existing Si series consoles & cards
- HiQNet compatibility
- Ultra hard-wearing polycarbonate covered control surface resists wear & tear
- Four Insert Send/Return loops (24 & 32 fader versions)
- No layering of controls on the channel, all the controls are available all of the time
- Colour touch screen interface
- Mute Groups

ADVICE FOR THOSE WHO PUSH THE BOUNDARIES



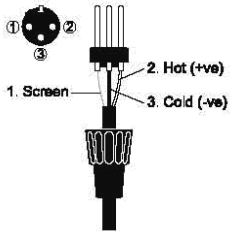
Although your new console will not output any sound until you feed it signals, it has the capability to produce sounds which, when monitored through an amplifier or headphones, can damage hearing over time.

Please take care when working with your audio – if you are manipulating controls which you don't understand (which we all do when we are learning), make sure your monitors are turned down. Remember that your ears are the most important tool of your trade, look after them, and they will look after you.

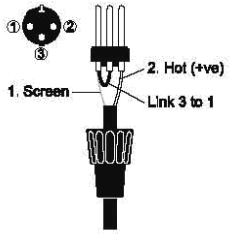
Most importantly – don't be afraid to experiment to find out how each parameter affects the sound – this will extend your creativity and help you to get the best from your mixer and the most respect from your artists and audience.



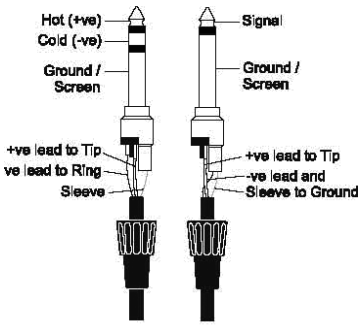
Balanced Mic XLR



Unbalanced Mic XLR



3 pole jack 2 pole jack
Balanced Unbalanced



WIRING UP

Mic Input

The MIC input accepts XLR-type connectors and is designed to suit a wide range of BALANCED or UNBALANCED signals, whether from delicate vocals requiring the best low-noise performance to drum kits to high level line sources.



DO NOT use UNBALANCED sources with the phantom power switched on. The voltage on pins 2 & 3 of the XLR connector may cause serious damage. BALANCED dynamic mics may normally be used with phantom power switched on (contact your microphone manufacturer for guidance)

Stereo Line Inputs

Accepts 3-pole 6.35mm (1/4") jacks, or 2-pole mono jacks which will automatically ground the 'cold' input. Use these for input for sources such as keyboards, drum machines, synths, CD players etc.

The input is BALANCED for low noise and immunity from interference, but you can use UNBALANCED sources by wiring up the jacks as shown, although you should then keep cable lengths as short as possible to minimize interference pick-up on the cable.



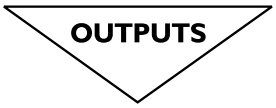
NOTE: The ring must be grounded if the source is unbalanced

Insert Returns

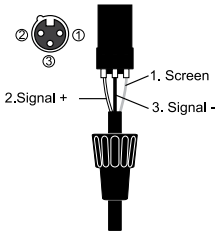
Accepts 3-pole 6.35mm (1/4") jacks, or 2-pole mono jacks which will automatically ground the 'cold' input. Use this when utilizing the Insert Send & Return functions to allow insertion of special effect or dynamic processors.

AES Input:

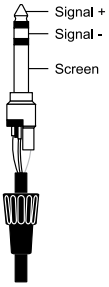
This is a balanced 2-channel digital input using a single XLR wires as per the balanced mic inputs. Although it is possible to use standard balanced audio cable with AES signals it is recommended to use AES cable which has the correct 110R impedance.



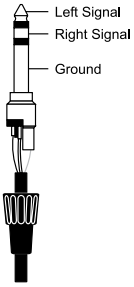
Line Outputs



Aux Outputs
Group Outputs



Headphones



Line Outputs

The 16 Line outputs are wired as shown and are fully balanced allowing long cable runs to other equipment. If connecting to un-balanced destinations the Signal – (cold) pin should be grounded.

AES Output:

This is a balanced 2-channel digital output using a single XLR wired as per the balanced line outputs. Although it is possible to use standard balanced audio cable with AES signals it is recommended to use AES cable which has the correct 110R impedance.

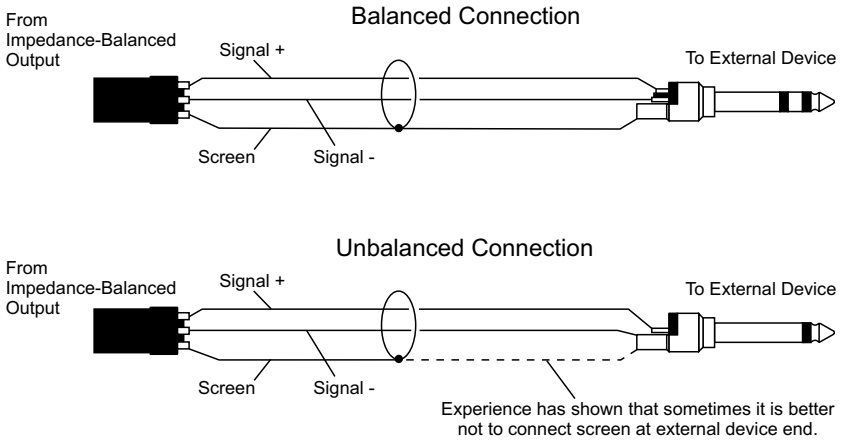
Insert Sends

Accepts 3-pole 6.35mm (1/4") jacks, or 2-pole mono jacks which will automatically ground the 'cold' output. The connector is wired as shown.

Use this when utilizing the Insert Send & Return functions to allow insertion of special effect or dynamic processors.

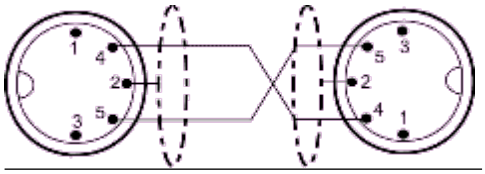
Headphones

The PHONES output is a 3-pole 6.35mm (1/4") jack, wired as a stereo output as shown, ideally for headphones of 32Ω or greater; 8Ω headphones are not recommended. The headphone socket is found under the front edge, close to fader 1.



MIDI IN & OUT

This is a standard 5-pin 1800 DIN connector conforming to the MIDI standard as shown.



Word Clock

75ohm BNC coaxial connector used to lock the Si Compact to other digital equipment.

HiQNet

Standard 100MB/s RJ45 connector used to connect the Si Compact to a LAN.

Polarity (Phase)

You will probably be familiar with the concept of polarity in electrical signals and this is of particular importance to balanced audio signals. Just as a balanced signal is highly effective at cancelling out unwanted interference, so two microphones picking up the same signal can cancel out, or cause serious degradation of the signal if one of the cables has the +ve and -ve wires reversed. This phase reversal can be a real problem when microphones are close together and you should therefore always take care to connect pins correctly when wiring audio cables.

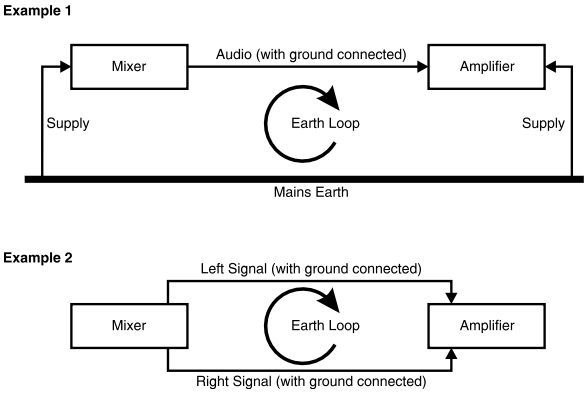
Grounding and Shielding

For optimum performance use balanced connections where possible and ensure that all signals are referenced to a solid, noise-free earthing point and that all signal cables have their screens connected to ground. In some unusual circumstances, to avoid earth or ground 'loops' ensure cable screens and other signal earths are connected to ground only at their source and not at both ends.

If the use of unbalanced connections is unavoidable, you can minimise noise by following these wiring guidelines:

- On INPUTS, unbalance at the source and use a twin screened cable as though it were balanced.
- On OUTPUTS, connect the signal to the +ve output pin, and the ground of the output device to -ve. If a twin screened cable is used, connect the screen only at the mixer end.
- Avoid running audio cables or placing audio equipment close to thyristor dimmer units or power cables.
- Noise immunity is improved significantly by the use of low impedance sources, such as good quality professional microphones or the outputs from most modern audio equipment. Avoid cheaper high impedance microphones, which may suffer from interference over long cable runs, even with well-made cables.

Grounding and shielding is still seen as a black art, and the suggestions above are only guidelines. If your system still hums, an earth/ground loop is the most likely cause. Two examples of how an earth loop can occur are shown below.

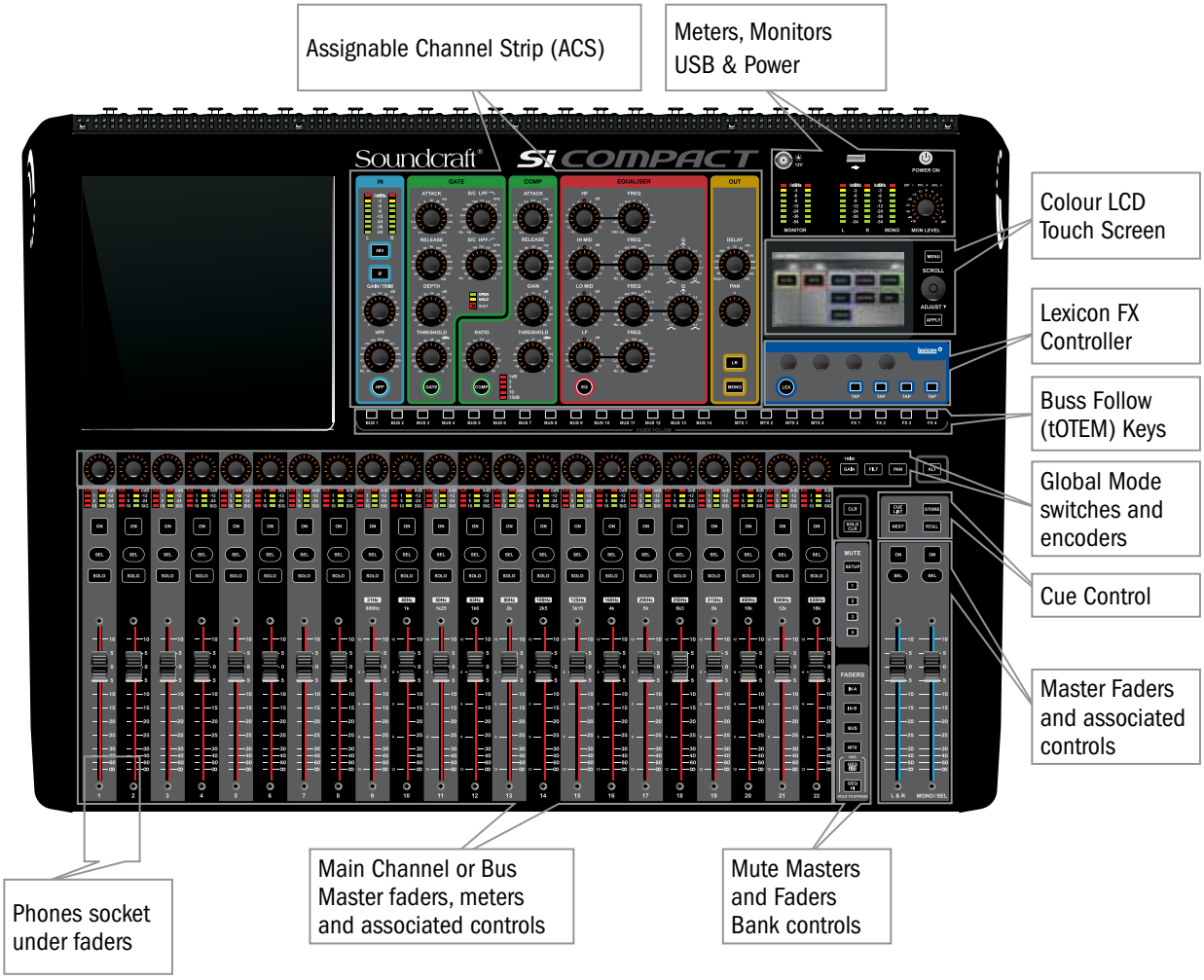


Warning!
Under NO circumstances must the AC power mains earth be disconnected from the mains lead.

Si Compact Control Surface and Connector Overview

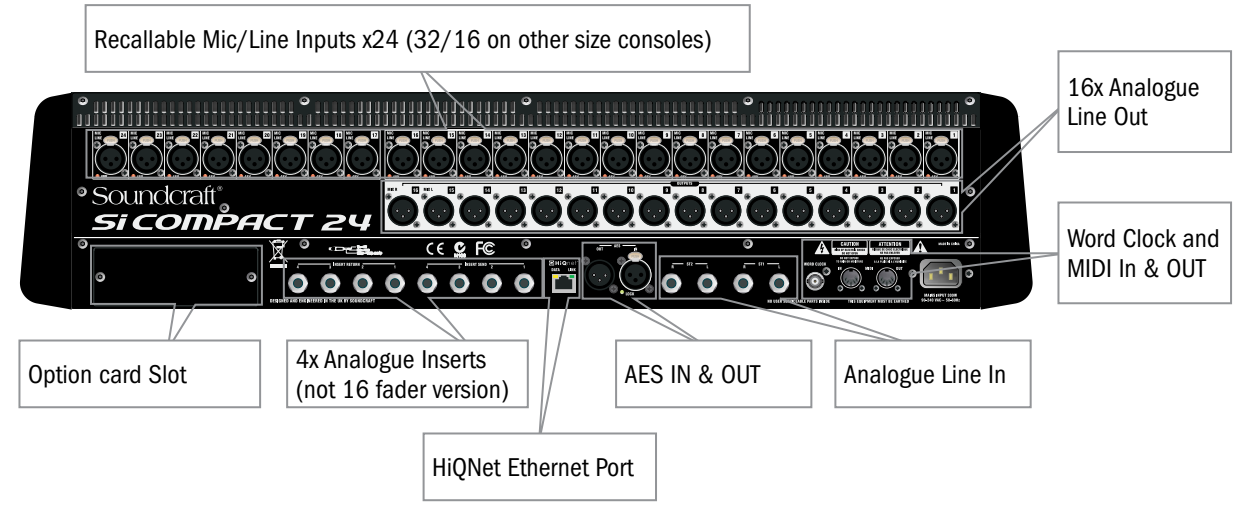
Si Compact Front Panel

Si Compact 24 fader shown:



Si Compact Rear Panel

Si Compact 24 fader shown:



Assignable Channel Strip (ACS)

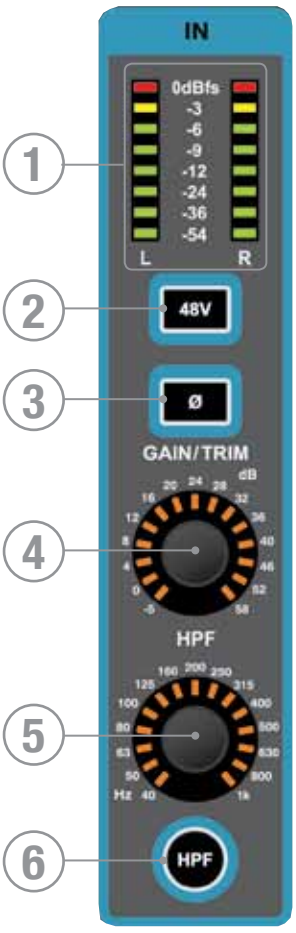
The Assignable Channel Strip (ACS) follows the currently SELected channel or bus and provides almost all of the controls relating to the selected channel or bus; it is broken down in to small colour coded sections making it easy to identify control groups and functions at a glance.



Unlike any other console in this class, there is a dedicated control for each function therefore no 'overlaying' of controls is needed and each control has a dedicated label and scale just as you would have found on an analogue mixer *1. Any encoders or functions that are not available/appropriate for a given mode will be un-lit and have no function. Although the control surface has values marked against the encoders the absolute value of any encoder will be shown on the touch screen provided by the Function Focus feature.

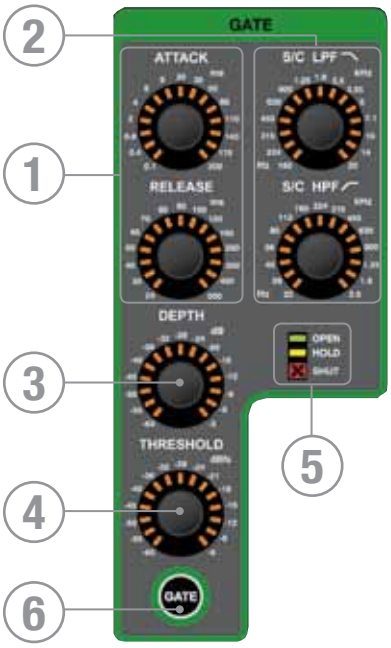
*1 *The GAIN/TRIM encoder on the ACS functions as GAIN control when controlling a mic amp and TRIM for a LINE source whenever the ACS is selected to an input*

INPUT/OUTPUT SECTION



1. Meter: indicates the level in the channel or bus; if the source is MONO only the left meter will indicate signal.
2. 48v key: toggles 48v Phantom Power ON/OFF if the SELected channel is connected to a MIC input; illuminates when 48v is ON. Pressing and holding the key will activate INTERROGATE mode for this function.
3. PHASE key: toggles the phase of the channel or bus illuminates when PHASE is reversed. Pressing and holding the key will activate INTERROGATE mode for this function.
4. GAIN: indicates and adjusts one of three parameters depending upon the current active mode:
   MIC GAIN – If SELected to an input patched to a MIC input.
   LINE TRIM – If SELected to an input patched to a LINE input, AES input or similar.
5. HPF (High Pass Filter): indicates & adjusts the frequency of the HPF (inputs only). Has no effect until the 'HPF' filter is switched IN.
6. HPF key: toggles the High Pass Filter as IN or OUT; illuminates when HPF is IN. Press the key to toggle the filter IN/OUT. Pressing and holding the key will activate INTERROGATE mode for this function.

GATE SECTION

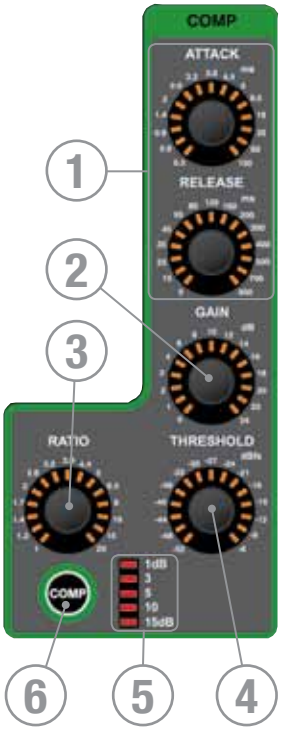


1. GATE ATTACK & RELEASE: indicates and adjusts the Attack and Release Times of the Noise Gate.
2. GATE SC HPF/LPF: indicates & adjusts the High Pass and Low Pass filters of the gate side chain to allow more accurate gating of signals.
3. GATE DEPTH: indicates and adjusts how many dB of attenuation the gate will apply when it is closed.
4. GATE THRESHOLD: indicates and adjusts the threshold of the Noise Gate opening/closing.
5. OPEN/HOLD/CLOSED indicators: indicate the operation of the gate:
   OPEN = gate is passing signal and audio is above the threshold
   HOLD = gate is passing signal but audio is below the threshold, the gate will close soon
   CLOSED = gate is NOT passing signal, audio is below the threshold
6. GATE key: toggles the GATE IN or OUT. Pressing and holding the key will activate INTERROGATE mode for this function.

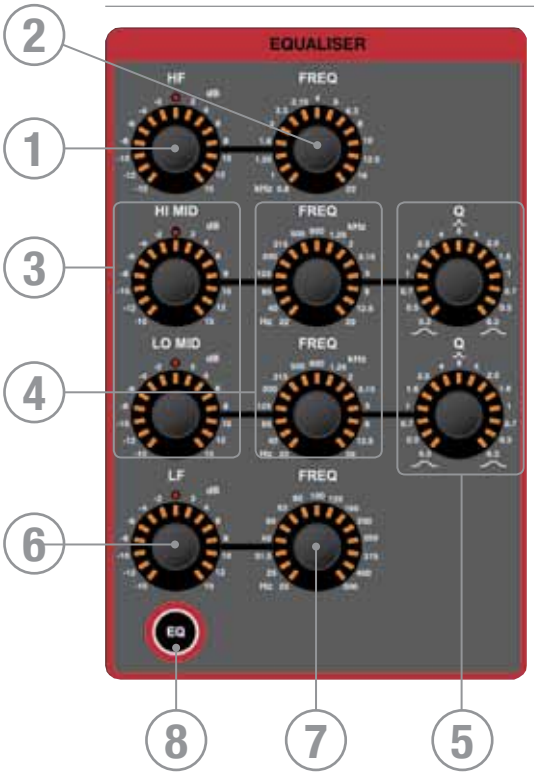
NOTE: Gate function is not available on output buses.

COMPRESSOR SECTION:

1. COMPRESSOR ATTACK & RELEASE: indicates and adjusts the Attack and Release Times of the Compressor.
2. COMPRESSOR GAIN: indicates and adjusts the gain of the compressor, is used to 'make-up' gain lost through compression of the signal.
3. COMPRESSOR RATIO: indicates and adjusts the compression ratio within the compressor.
4. COMPRESSOR THRESHOLD: indicates and adjusts the threshold of the compressor.
5. GAIN REDUCTION INDICATOR: indicates the amount of dB attenuation applied by the compressor.
6. COMP key: toggles the compressor IN or OUT. Pressing and holding the key will activate INTERROGATE mode for this function.



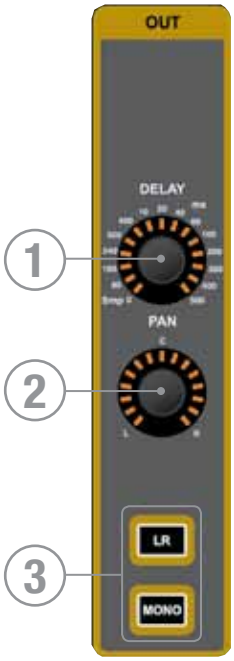
PARAMETRIC EQ SECTION



1. HF GAIN: indicates and adjusts the dB gain or cut of the High Frequency shelf filters.
2. HF FREQuency: indicates and adjusts the frequency at which the High Frequency shelf filters operate.
3. Hi MID & LO MID GAIN: indicates and adjusts the dB gain or cut of the Mid Frequency bell filters.
4. Hi MID & LO MID FREQuency: indicates and adjusts the frequency at which the Mid Frequency bell filters operate.
5. Hi MID & LO MID 'Q': indicates and adjusts the width of the Mid Frequency bell filters.
6. LF GAIN: indicates and adjusts the dB gain or cut of the Low Frequency shelf filters.
7. LF FREQuency: indicates and adjusts the frequency at which the Low Frequency shelf filters operate.
8. EQ key: toggles the EQ IN or OUT. Pressing and holding the key will activate INTERROGATE mode for this function.

OUT SECTION:

1. DELAY: indicates and adjusts the delay applied to the channel or bus; turn to '0' (fully CCW) to turn the delay off.
2. PAN: indicates and adjusts the PAN (or BALANCE for stereo sources) of the channel or bus routing to the main LR bus.
3. LR & MONO keys: toggles the routing of the channel or bus to the main LR and MONO buses. Pressing and holding these keys will activate INTERROGATE mode for the function.



INTERROGATE

The Si Compact offers a quick and convenient method for checking and changing the status of any given switch function in the ACS across many channels, this is known as 'interrogate'.

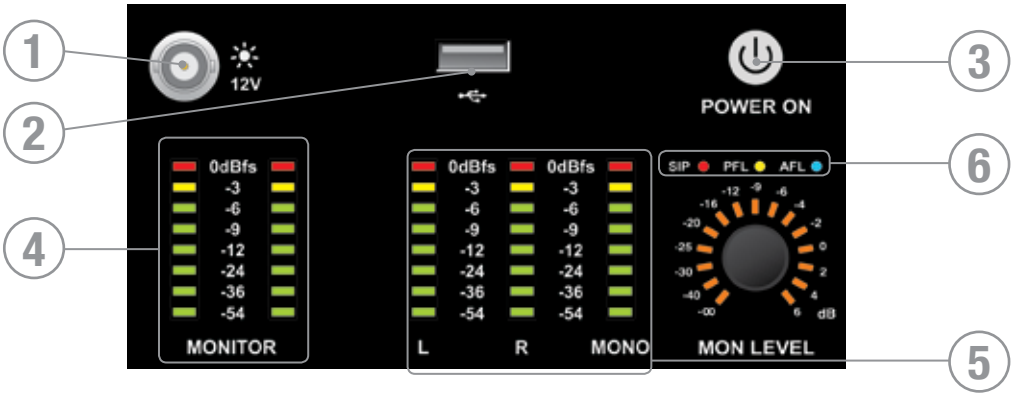
Example #1 – To check the status of the LR routing switch from Inputs to the main LR bus:

1. While in fader bank IN A or IN B press and hold the LR routing key.
2. The SELect keys on any channels routed to LR will light.
3. While keeping the LR key pressed you may toggle the status of the LR routing on any channels by pressing the SELect keys of the channels you wish to include/exclude from the routing.



NOTE: When entering interrogate mode the status of the switch you press and hold is not changed.

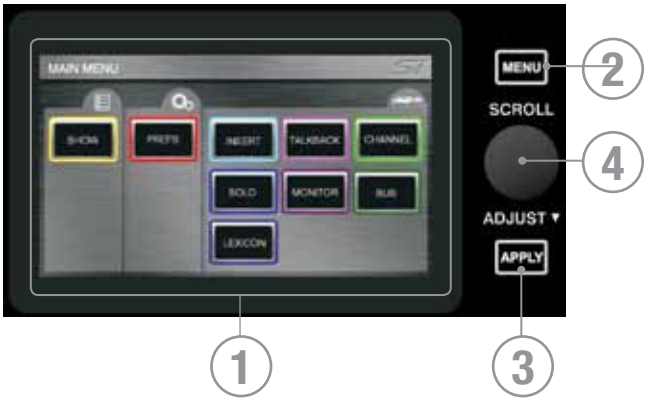
POWER METERS AND MONITORS



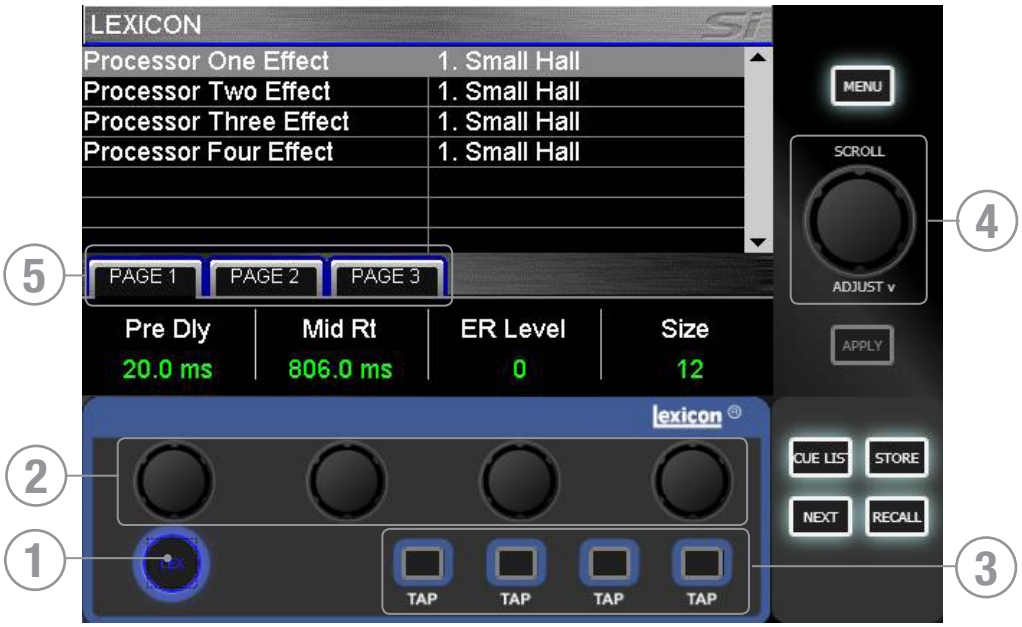
1. 12V LAMP OUT: Connector for LED or similar console light; maximum total load 100 mA per socket.
2. USB: Insert USB key for loading and backup of shows, software updates and similar.
3. POWER: Toggles console power ON/OFF. To prevent accidental shut-down a 2-stage shut-down procedure is required:
   Press & Hold the POWER ON key for ~2 seconds, the power light will flash orange.
   Confirm shutdown by pressing the POWER ON key again whilst the light is flashing.
   If the confirmation is not received within ~5 seconds the POWER ON key will revert to solid green and the shutdown procedure is cancelled.
4. MONITOR meters: Indicate the level in the engineers monitor system; this is normally the LR signal but may be PFL/AFL, or other signal as set in the MONITOR system menus.
5. L, R and MONO meters: Full-time uninterrupted monitoring of the main Left, Right and MONO buses.
6. SIP, PFL & AFL indicators: Illuminates to show the current mode or active state of the SOLO system.

TOUCH SCREEN ENCODERS AND BUTTONS

1. TOUCH SCREEN: colour touch screen interface.
2. MENU key: Press when lit to return to the MAIN MENU page.
3. APPLY key: Press when lit to 'APPLY' a change such as re-naming a cue, channel, show or similar.
4. SCROLL/ADJUST encoder: Rotate to scroll up/down lists, press to select or activate a highlighted function.



LEXICON™ INTERFACE



1. LEXicon key: press to open the Lexicon menu pages.
2. Lexicon encoders (x4): used to adjust the parameters within an effect. The encoders are context dependent upon what is shown on the touch screen at any given time.
3. TAP keys (x4): used to set the tempo of any of the patch using delays/measures; the keys flash with the set tempo.
4. SCROLL/ADJUST encoder: used to navigate between processors, pressing the encoder allows a different patch to be selected from the 29 available patches:

   Reverb Patches: 14 types

   Delays: 7 types

   Effects: 8 types including Chorus, Flanger, Phaser and Rotary
5. PAGE TABS: used to navigate through parameters available in the selected patch; tabs 2 and 3 are greyed out as appropriate if there are no parameters on those tabs.

tOTEM™ (THE ONE TOUCH EASY MIX) KEYS



These keys place the console into 'MIX' mode allowing quick & easy mixing from Channels to Buses, Channels to FX or Buses to Matrix. Pressing any key triggers a sequence of events that re-configure the control surface and console monitoring system to the optimum layout for the desired/required function.

Aux Buses 1:14

- Clears all current SOLOs.
- Sets fader bank to IN A (if not currently on IN A or IN B bank).
- Puts input faders into 'sends on faders' mode lighting fader glow according to the PRE or POST setting of the bus.
- Places BUS MASTER for selected bus on the MONO fader.
- SOLOs the selected bus.
- Selects the ACS to the appropriate Aux bus.

FX Buses 1:4

- Clears all current SOLOs.
- Sets fader bank to IN A (if not currently on IN A or IN B bank).
- Puts faders into 'sends on faders' mode lighting fader glow accordingly.
- Places FX Return of fader for selected bus on the MONO fader.
- SOLOs the appropriate FX Return channel.
- Selects the ACS to the appropriate FX Return channel.



NOTE: This function may only be enabled if an FX processor is patched to a Stereo Return channel; this is achieved from the PATCH function in the inputs window.

Matrix Buses 1:4

- Clears all current SOLOs.
- Puts faders into BUS mode if not currently already selected.
- Puts faders into 'sends on faders' mode lighting fader glow accordingly.
- Places MATRIX MASTER for selected bus for selected bus on the MONO fader.
- SOLOs the selected bus.
- Selects the ACS to the appropriate Matrix bus.



NOTE: Use ALT + MTX to have MONO and LR faders send to the selected matrix MONO, L & R meters.

GLOBAL MODE ENCODERS AND FUNCTIONS



The Global Mode encoders offer control of a key parameter across all channels or buses currently active on the surface:

1. GLOBAL 'GAIN/TRIM' key: press to make all the encoders function as the input GAIN (or TRIM for LINE & DIGITAL sources) for all the channels on the currently active input fader layer.

   NOTE: This key has no function in BUS or MATRIX modes.

2. GLOBAL 'FILT' key: press to make all the encoders function as the input HPF for all the channels on the currently active input fader layer.

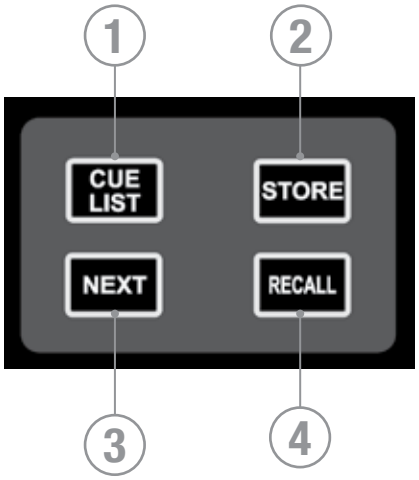
   NOTE: This key has no function in BUS or MATRIX modes.

3. GLOBAL 'PAN' key: press to make all the encoders function as the PAN for all the channels or buses on the channels on the currently active input or bus fader layer.

   NOTE: This key has no function in MATRIX mode.

   NOTE: when mixing to a stereo bus using the tOTEM follow keys the global encoders will switch to PAN mode and shall act as the PAN or BALANCE control from the channels to the bus.

CUE CONTROL — see also CUE LIST



1. CUE LIST key: press when lit to bring the CUE LIST menu to the touch screen.

2. STORE key: press to STORE a new cue at the end of the use list.

   NOTE: Pressing and Holding ALT, then pressing STORE will insert a new cue after the current cue.

   NOTE: Cues are stored with the default name 'Unnamed Snapshot n' where 'n' is a count of how many cues exist rather than its position in the cue list.

3. NEXT key: press the NEXT key when lit to recall the next (current cue number +1) cue.

   NOTE: Pressing and Holding ALT, then pressing NEXT will recall the cue numerically prior to the current cue (current cue number -1)

4. RECALL key: Press the RECALL key when lit to recall again the currently active cue OR if the CUE LIST is open the cue that is highlighted.

   NOTE: If the CUE LIST is open you may scroll to any cue and press the SCROLL/ADJUST encoder to instantly recall it.

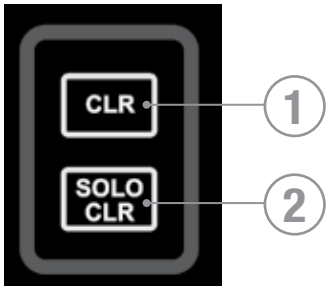
   NOTE: For more information on the Cue List and Snapshot Control see also CUE LIST.

ALT KEY



ALT is a modifier key used by the following functions:
COPY & PASTE
CLR (CLeaR function)
CUE CONTROL
MIXING to MATRIX BUSES
Refer to these sections for detail on the operation and use.

CLR & SOLO CLR KEYS – see also CLEAR



1. CLR key: used to reset channels, buses or groups of parameters to their factory defaults as follows:
   - CLR + channel or bus SELect will reset all audio parameters within that channel or bus. to the factory defaults.
   - CLR + function key within the ACS (such as EQ, GATE or COMP) will reset all assocaited parameters of the selected channel or bus to the factory defaults.
   - CLR + GEQ HI or LO will reset all bands in an active GEQ to 0dB
   - CLR+ MUTE 'n' will clear all channel or bus assignments to Mute Group 'n'
   - CLR+ tOTEM follow key will reset all contributions and ON status from channels or buses to the BUS/MTX/FX'n' back to the factory defaults.



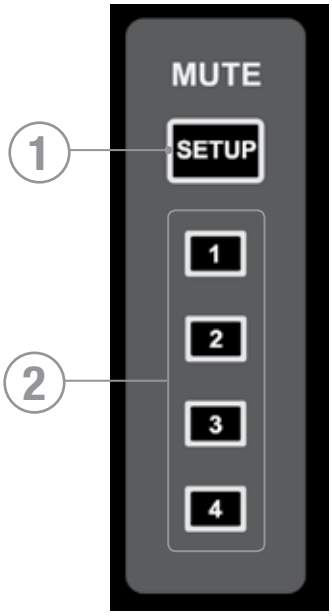
NOTE: The reset refers only to the main audio parameters and does not affect functions such as SOLO, bus type, names patching and mute assignment.



CAUTION: ALT+ CLR+ function key within the ACS (such as EQ, GATE or COMP) will reset all associated parameters on all channels to the factory defaults.

2. SOLO CLR: Pressing this key when lit will clear all active PFL or AFL selections.

MUTE SET-UP & MUTE MASTER KEYS



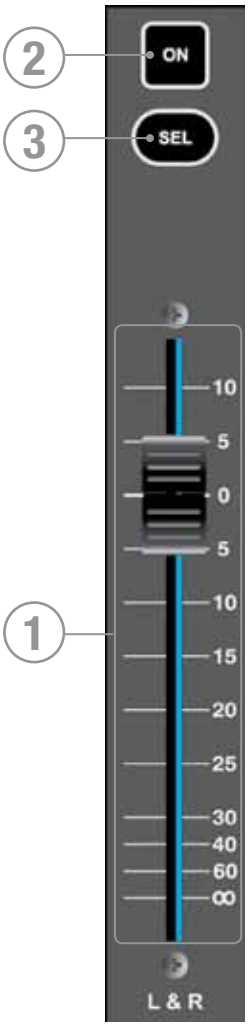
1. MUTE SETUP key: pressing this key to toggle in/out of Mute Group Setup mode; the SETUP key has no function on its own and requires the selection of one of the MUTE MASTERS (1-4) to indicate which of the four mute groups you are going to SETUP.
2. MUTE MASTERS 1-4: when used while MUTE SETUP is active the keys allow setting of the Mute Groups to the channels, when not in MUTE SETUP the keys act as the Mute Group Masters.

SETTING MUTE GROUPS:

1. Press the SETUP key then one of the MUTE keys (1-4); SELect keys will light if any of the channels or buses on the surface is assigned (a client) to the selected mute group.
2. Add or remove clients by pressing the SELect keys on the channel(s) you wish to include in the mute group.
3. Additional mute groups may be set at the same time by changing to a different MUTE MASTER.
4. To exit the setup process press the SETUP key.

NOTE: During MUTE SETUP the ON/OFF (MUTE) state of any channels is not affected. When not in MUTE SETUP mode the keys 1-4 act as the MUTE MASTERS, pressing any of the keys will MUTE (turn off) any channels within the mute group.

NOTE: A channel may be a member of more than one mute group, in this situation the MUTE Masters operate in a logical 'OR' manner.



MASTER LR FADER AND ASSOCIATED KEYS

1. MASTER LR fader: sets the overall level of the main Left & Right bus out.
2. MASTER LR ON key: toggles the main LR bus ON/OFF.
3. MASTER SELect key: assigns (SELects) the ACS to the main Left & Right buses.

NOTE: If using ALT+ MTX'n' LR fader operates as contribution of LR bus to Matrix 'n'.

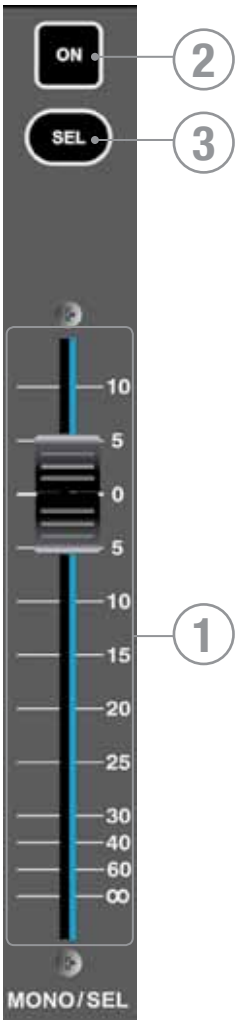
NOTE: If using ALT+ MTX'n' LR ON key operates as send ON/OFF for contribution of LR bus to Matrix 'n'.

MONO/SEL FADER AND ASSOCIATED KEYS

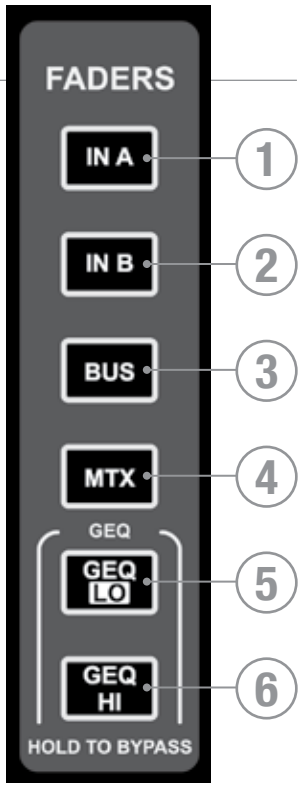
1. MONO/SEL fader: sets the overall level of the MONO bus out unless a FADER FOLLOW is active; in this event fader may act as one of the following:
   - FADER FOLLOW 1-14 or MTX1-4 active - Fader is the master level for BUS 'n'.
   - FX FOLLOW 1-4 active - Fader is the channel level of FX Return channel 'n'

   NOTE: If using ALT+ MTX'n' MONO fader operates as contribution of MONO bus to Matrix 'n'
2. MONO ON key: Toggles the MONO bus ON/OFF unless a FADER FOLLOW is active; in this event the key may act as one of the following:
   - FADER FOLLOW 1-14 or MTX1-4 active – ON is the master ON/OFF for Bus 'n'.
   - FADER FOLLOW FX1-4 active – ON is the ON/OFF for FX Return channel 'n'

   NOTE: If using ALT+ MTX'n' MONO ON key operates as send ON/OFF for contribution of MONO bus to Matrix 'n'
3. MONO SELect key: Assigns (SELects) the ACS Channel to the MONO bus unless a FADER FOLLOW is active, in this event the key may act as one of the following:
   - FADER FOLLOW 1-14 or MTX1-4 active – SELects Bus 'n' to the ACS.
   - FADER FOLLOW FX1-4 active – SELects associated FX Return channel 'x' to the ACS.



FADER LAYER KEYS



Fader Layer Keys change the function of the faders to the LEFT of the Master faders:

1. INA: Input Layer 'A', nominaly all MONO inputs to the system.
2. INB: Input Later 'B', nominaly all STEREO inputs to the system.
3. BUS: All Aux Bus Masters in the system.
4. MTX: All Matrix Masters in the system.
5. GEQ LO: The lower half of the GEQ.
6. GEQ HI: The uper half of the GEQ.

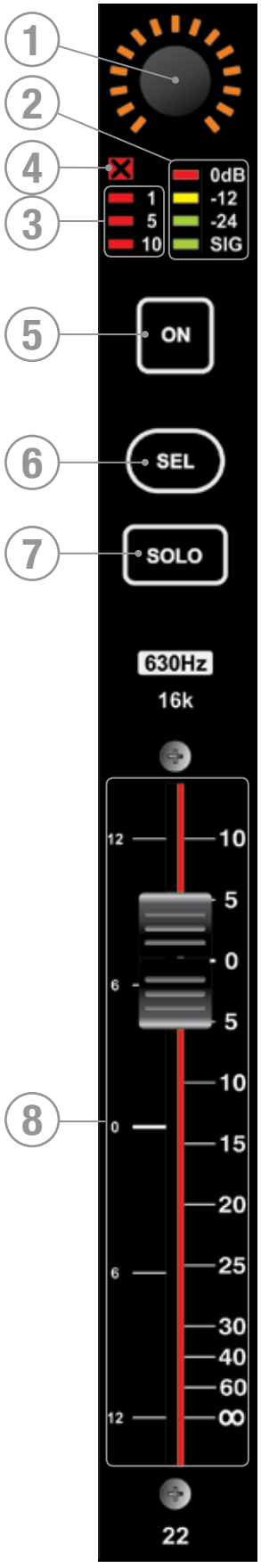
NOTE: The GEQ pages are only available when in BUS or MTX mode, when the LR or MONO master is SELected or when FOLLOWing a bus.

FADER GLOW™

The Fader Glow™ system illuminates the fader slot when the function of the fader is anything other than 'a mono input channel level control' according to the following list:

White:	Channel faders linked.
Yellow:	Faders in BUS mode, bus type is PRE FADE or faders in FOLLOW mode to a PRE FADE aux bus.
Green:	Faders in BUS mode, bus type is POST FADE or faders in FOLLOW mode to a POST FADE aux bus.
Orange:	Faders in matrix master OR faders in FOLLOW mode to a MATRIX bus.
Red:	Faders in GEQ mode.
Cyan:	A channel assigned as an FX Return or faders in FX follow mode.
Magenta:	Channel Faders assigned to Stereo channels.

CHANNEL FADERS AND ASSOCIATED KEYS & DISPLAYS



1. Global Mode Encoder & Display – See GLOBAL MODE for more detail on this function.
2. Level Meter: Input level to the channel or Bus Master level when in BUS or MTX modes.
3. Gain Reduction Meter: Indicates gain reduction in the channel or bus.
4. Gate Closed Indicator: Indicates the noise gate is CLOSED on the channel; has no function in any other mode.
5. ON Key: Function varies according to mode/ setting of fader layers:
   - Input, Bus or Matrix: toggles the channel or bus ON/OFF.
   - Follow Mode: Toggles the send from channel/bus 'n' to bus 'x' ON/OFF.
   - GEQ Mode: Resets the GEQ band gain to 0dB.
6. SEL Key: Selects the channel or bus to the ACS.
7. SOLO Key: Will SOLO the channel or bus; actual mode will depend upon the settings in the SOLO menu and status of other SOLO functions within the system. See SOLO MENU for more information on the solo system operation.
8. Fader: Function varies according to mode/setting of fader layers:
   - Input: sets the post fade level within the channel
   - Bus or Matrix: sets the bus output level
   - Follow Mode: sets the level from channel/bus 'n' to bus 'x'
   - GEQ Mode: sets the GEQ band gain.

NOTE: The Fader Glow function and 'pattern' on the faders will assist in guiding you as to the function of the fader. See Fader Layers and Fader Glow for more information.

GEQ



The Si Compact features a 28 band Graphic EQ on every bus on each and every Aux, Matrix, and Master Buses; having a GEQ on every bus means there is no need to 'patch' the GEQ, just enable it when required with no risk of running out of DSP!

The GEQ function is available when in BUS or MTX mode, when the LR or MONO master is SELected or when FOLLOWing a bus, at all other times the GEQ keys will have no function.

1. Press either the GEQ HI or LO keys to open the GEQ across the 14 faders immediately left of the FADER BANK keys.
2. Toggle between GEQ HI & LO with the appropriate key. The frequency bands for HI and LO are printed above each fader whilst the scale on the left hand side of the fader slot indicates the dB of cut or boost applied. The 'Function Focus' display on the LCD can be used for an exact indication of the band gain.
3. To exit the GEQ press the lit GEQ HI{LO} key, any of the FOLLOW keys or INA, INB, BUS or MTX keys.



NOTE: Whilst in BUS or MTX modes it is possible to swap between the GEQ on different buses with the GEQ open by pressing another SELect key.

NOTE: To BYPASS the GEQ press both the GEQ HI and LO keys together and both GEQ keys will light, to exit BYPASS press either one of the GEQ keys.

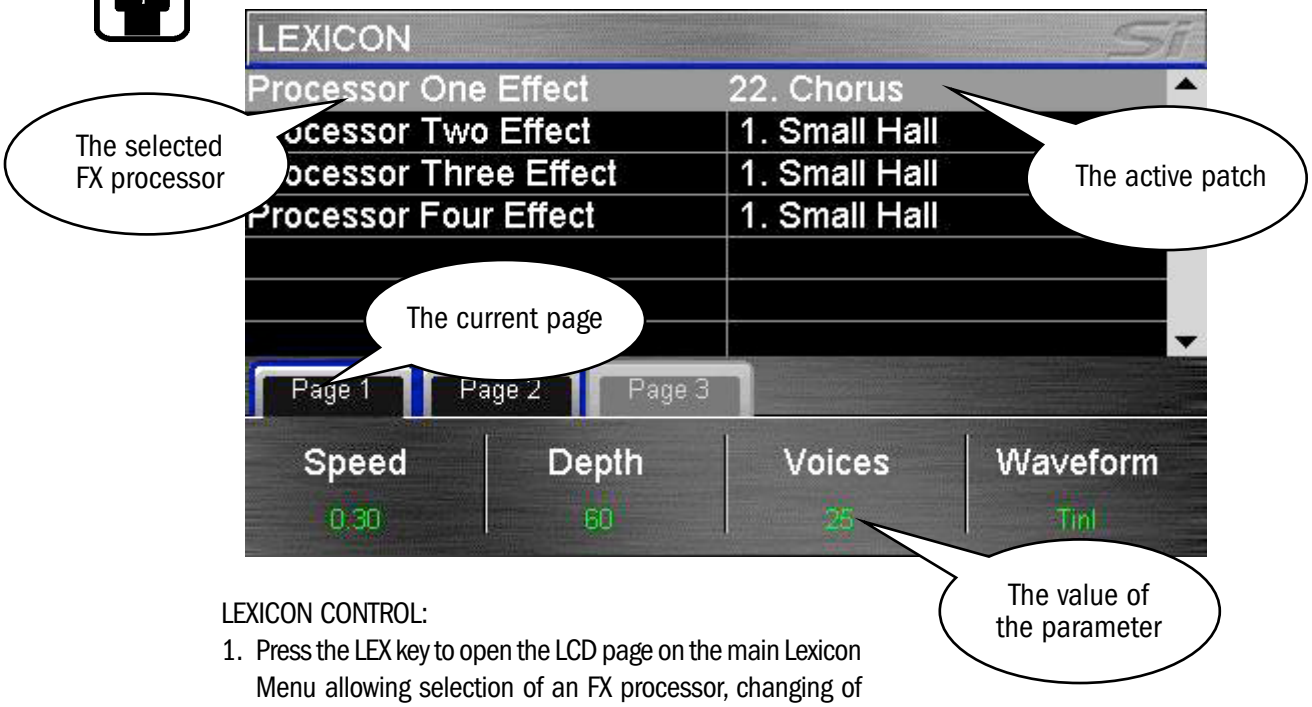
NOTE: To easily reset any band back to 0dB press the associated lit red ON key.

NOTE: To reset all bands of the active GEQ press CLR together with either of the GEQ keys.

LEXICON™ FX

The Si Compact features four amazing Lexicon FX processors, each processor has it's own dedicated bus and up to four stereo input channels may be assigned as the FX Returns;

NOTE: by default FX1 and FX2 are not assigned to an FX Return channel so will not function.



LEXICON CONTROL:

1. Press the LEX key to open the LCD page on the main Lexicon Menu allowing selection of an FX processor, changing of patch type and adjustment of parameters within the patch.

NOTE: If one of the FX Follow modes (1-4) were active the Lexicon control will 'land' on that FX processor when you open the FX page.

2. Press the SCROLL/ADJUST encoder to select an alternate patch type from the drop-down list.
3. Parameters for the active FX Process & Path are shown above each of the four encoders directly below the screen, these are used to adjsut the parameters values in real time
4. In the event there are more than four parameters on the current patch use the PAGE tabs to access the additional parameters

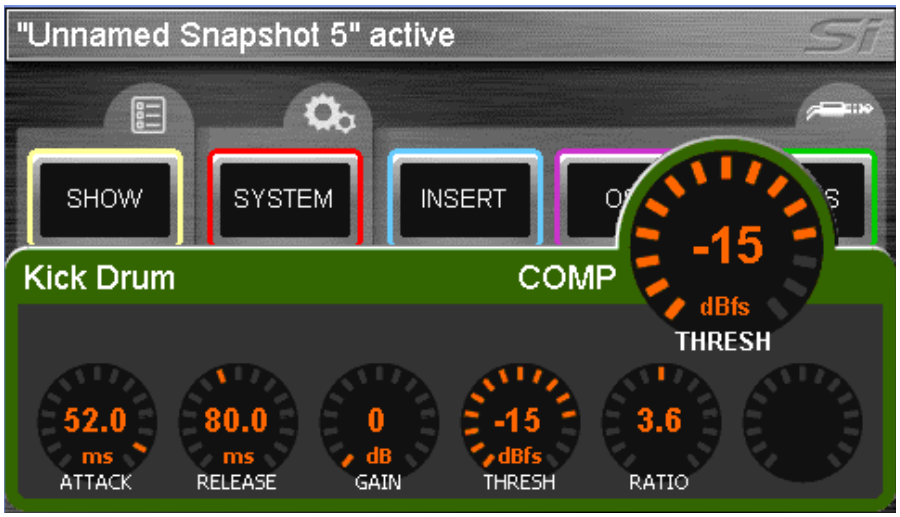
NOTE: If the chosen effect type has a TEMPO functtion the associated TAP key on the surface can be used to set the measure; the key will flash in-time with the set tempo.

NOTE: If an FX processor has no stereo channel assigned as a return then it is not possible to mix to the associated FX bus. See tOTEM and Patching for further details.

FUNCTION FOCUS

Function Focus is a unique feature to the Soundcraft Si Compact series allowing pinpoint adjustment of any controls and settings; whenever any active control on the surface is adjusted the appropriate Function Focus window opens on the LCD detailing the control you are adjusting, it's name, and absolute value. Additionaly the function focus will show you information about other associated controls and the name of the channel you are adjusting.

The 'Function Focus' operates for most logical groups of controls. The screen shot below shows the compressor: on channel named 'Kick Drum'; the control being adjusted is the largest of the roundels (THRESHold), whilst all controls within the group are indicated in the smaller roundels at the bottom of the screen.

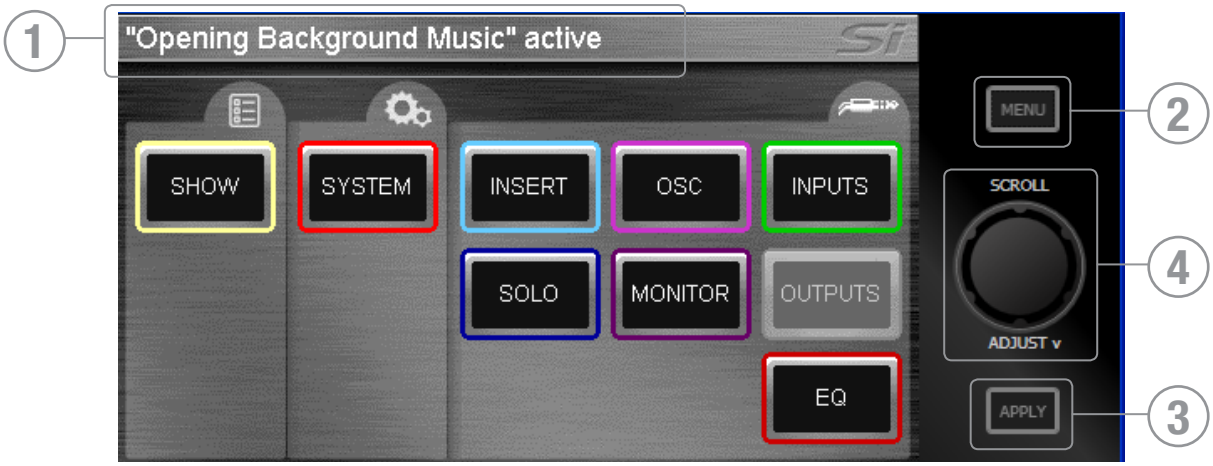


SCREENS

The Soundcraft Si Compact has such a versatile control surface that the colour touch screen is never required for mixing and is employed only for editing parameters like naming, channel setup and patching.

Typical main MENU screen & associated controls:

1. Title Bar – Name of the active cue on the console.
2. MENU key: Return to main menu page, lit when on any page other than MENU.
3. APPLY key: Press when lit to confirm a change to name or similar.
4. SCROLL/ADJUST: Press to access editing of a parameter or confirm a list view selection, scroll to edit a parameter.



SHOW MENU

IMPORT: Import a show from USB key, this will over-write the current show and all settings on the console.



A warning dialogue allows the action to be aborted.



NOTE: When using the Off-Line Editor importing a show opens a typical Windows 'Open File' window.

NEW SHOW: Deletes all current cues on the console; patching, naming and audio settings remain unchanged allowing a new show to retain known good references such as system EQ settings.
A warning dialogue allows the action to be aborted.



EXPORT: Allows the current active show to be exported to the USB drive. The system displays the QWERTY keyboard allowing the show name to be edited.

NOTE: When using the Off-Line Editor importing a show opens a typical windows 'Save File' window.

NOTE: PRESS APPLY key to confirm the name change.



EDIT SHOW – Show Name: Allows renaming of the show currently active on the console; scroll to highlight 'Show Name' then press the encoder to display the QWERTY keyboard.

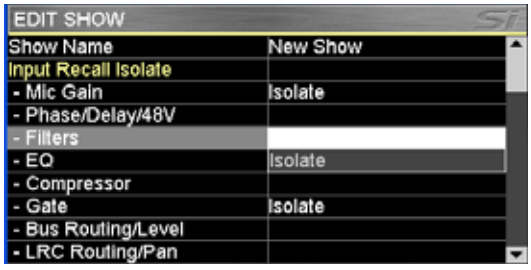
NOTE: PRESS APPLY key to confirm the name change.



EDIT SHOW – Global Recall Isolate: Prevents the automation recalling isolated parameters (or groups of parameters) when a cue is replayed; scroll to the desired list item, press the encoder and select Isolate.

Parameters are logically grouped as:

- Input Recall Isolate
- Bus Recall Isolate
- Matrix Recall Isolate
- Output GEQ Isolate
- Patching Recall Isolate
- Lexicon Recall Isolate



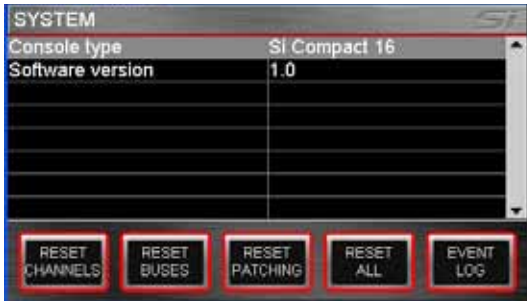
NOTE: When storing a cue all audio parameters are stored regardless of any ISO to be 'isolated' from the automation.

RESET I/O: Clears the console database records of any option cards or external I/O systems that may have been attached to the console and forces a 're-discovery' of any installed option cards or connected I/O system such as a Soundcraft Compact Stagebox; see I/O Discovery for further details.



SYSTEM MENU

Home screen displays general information about the console and software version. Also available on the system menu are SET DATE & TIME (not shown), highlight these list item to edit values.



RESET CHANNELS: Resets all Input Channel audio parameters, channel name and channel type(MONO/LINKED) to factory default.

NOTE: Patching is excluded from Reset Channels

RESET BUSES: Resets all Bus 1-14 audio parameters, bus name and bus type(MONO/STEREO) to factory default.

NOTE: Patching is excluded from Reset Buses

RESET PATCHING: Resets all system patching to factory default.

RESET ALL: Resets all parameters including names and patches to factory default.



NOTE: With all RESET menus a confirm dialogue is provided allowing the action to be cancelled.

INSERT MENU (Not 16 input)

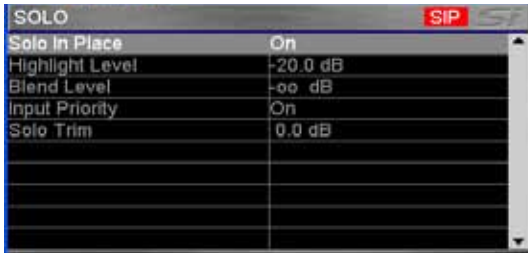
The INSERT menu allows assignment of the four insert loops to any channel or bus. Insert assignment is driven via the active SELect key; depending upon the active SELect clicking on an insert will open a list view offering options for placement of the insert within the signal path, options include PRE EQ, POST EQ and POST FADE.



NOTE: When making a patch to a linked channel, stereo channel or stereo bus inserts are assigned as an odd/even pair.

NOTE: Once assigned an insert is always 'IN', it cannot be bypassed.

SOLO MENU & SOLO SYSTEMS



Home screen displays all SOLO options available on the system. Si Compact uses intelligent automatic SOLOing to provide the best source for any given task or SOLO key operation; indicators above the monitor volume encoder indicate the current state of the SOLO system; the normal operation is as follows:

- Single input SOLO – PFL
- 2 or more input SOLOs – AFL
- Any output active – AFL

Solo keys are normally 'latching', temporary activation of any SOLO key is available by 'press & hold', this method of operation causes the held key to be automatically cancelled when it is released.

SOLO IN PLACE: Enables Solo In Place for input channels, status is indicated on the MENU bar and with the SIP indicator lights.

NOTE: Whilst SIP is active other SOLO menu items may not be adjusted.

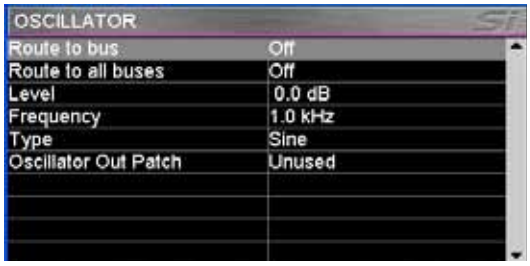
SOLO HIGHLIGHT: When 2 or more input SOLOs are active it is possible to 'highlight' an individual channel by pressing and holding one of the active input SOLO keys, this has the effect of attenuating contribution of other solo'd channels to the solo and monitor system. The 'Highlight Level' (level of attenuation) is changed using the SCROLL/ADJUST encoder.

BLEND LEVEL: Sets the attenuation level of the primary monitor source whist a PFL or AFL is active; the default setting is -∞ (- infinity) resulting in complete mute of the normal monitor source, this setting is changed using the SCROLL/ADJUST encoder to allow background monitoring of the primary monitor source whist PFL or AFL is active.

INPUT PRIORITY: When On (default) allows input solos to temporarily override an output AFL allowing monitor and control of contributions to a mix, if all active SOLOs are cleared the system reverts to monitoring the active output AFL solos. When set to Off any input SOLO will cancel any output SOLOs and vice versa. Status is changed with the SCROLL/ADJUST encoder.

SOLO TRIM: Offers +/-10dB of trim to the level of the SOLO bus to the monitor system independent of the main monitor level control, this setting is changed using the SCROLL/ADJUST encoder.

OSC MENU



Home screen displays all settings and parameters concerned with the oscillator function.

ROUTE TO BUS: Enables routing of the oscillator to individual buses; the actual routing to any given bus is enabled/disabled by the BUS and MATRIX SOLO keys.

ROUTE TO ALL BUSES: Enables routing of the oscillator to all buses.

NOTE: It is not possible to route directly to LR and MONO buses, for this function route the oscillator to a bus then use the LR and MONO routing keys of that bus to route the osciallator as required.

NOTE: Oscillator settings default to Off following a power cycle.

LEVEL: Indicates level of the oscillator to any buses or output patch; the setting is changed using the SCROLL/ADJUST encoder.

FREQUENCY: Indicates frequency of the oscillator for Sine type; the setting is changed using the SCROLL/ADJUST encoder.

TYPE: Indicates the oscillator signal type; the setting is changed between Sine and Pink using the SCROLL/ADJUST encoder.

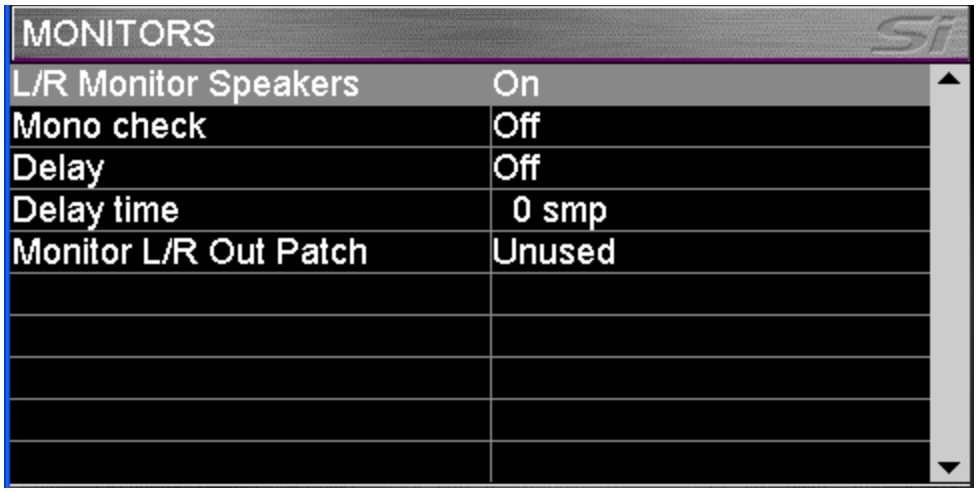
OSCILLATOR OUT PATCH: Indicates patch point if any, assigned to the oscillator, by default there is no output patched. Use the SCROLL/ADJUST encoder to highlight the item and select a patch.

NOTE: Oscillator is always active when patched regardless of any other oscillator settings.

NOTE: Only Oscillator patches are stored per cue.

MONITOR MENU

The MONITOR menu provides information to all parameters and functions concerning the monitor system and outputs.



L/R monitor Speakers: Enables or disables the Monitor Out patch.

Mono Check: Creates a mono sum of the signal in the monitors.

Delay: Enables or disables the output delay to the monitor output patch.

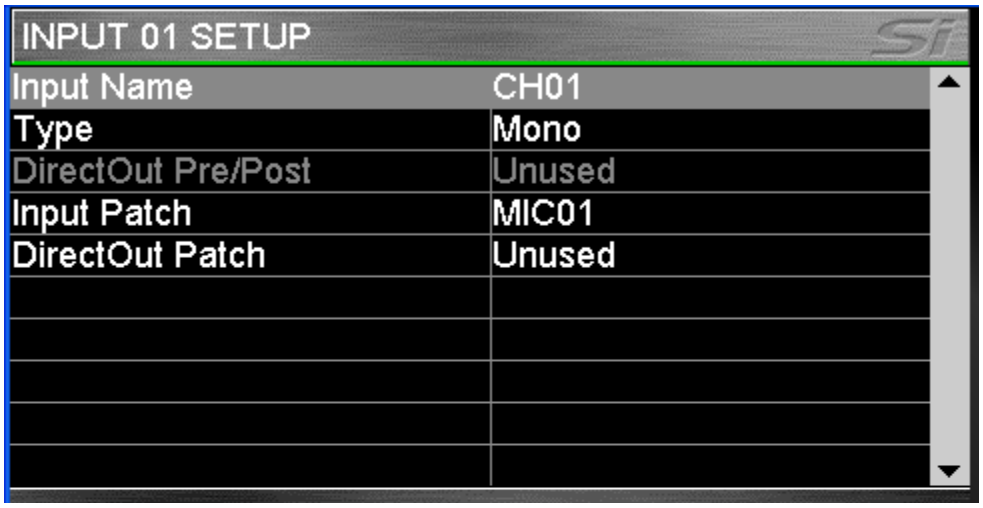
Delay Time: Adjusts the delay time applied to the monitor outputs.

Monitor L/R Out Patch: Allows the stereo monitor signal to be patched to any of the system outputs in addition to the monitor signal being routed to the headphones; see PATCHING for details of the system patching functionality.

INPUTS MENU

The INPUTS menu provides information to all parameters and functions concerning system inputs.

NOTE: The INPUTS button is greyed-out and not accessible unless an input channel is SELected.



Input Name: The name of the currently SELected input; press the SCROLL/ADJUST encoder to access the QWERTY keyboard to edit the name.

Type: Sets the channel as either Mono or Linked

NOTE: Channels may be lined as an odd/even pair.

Direct Out Pre/Post: Allows the pick-up point of the direct out to be set as either pre or post high pass filter.

NOTE: Has no function and is not available unless a Direct Out patch is active.

Input Patch: Displays the source patched to the channel; see PATCHING for details of the system patching functionality.

Direct Out Patch: Displays the destination patch of the channel direct out function; see PATCHING for details of the system patching functionality.

OUTPUTS MENU

The OUTPUTS menu provides information to all parameters and functions concerning system buses and outputs.

NOTE: The OUTPUTS button is greyed-out and not accessible unless a bus is SELected.



Bus Name: The name of the currently SELected bus; press the SCROLL/ADJUST encoder to access the QWERTY keyboard to edit the name.

Bus Width*: Sets the bus as either Mono or Stereo.

NOTE: Buses may be lined as an odd/even pair.

Bus Pre/Post*: Sets the bus type as either Pre fader (FaderGlow of sends and bus master is yellow) or post fader {(FaderGlow of sends and bus master is green).

Pre Fader Source*: Allows the pre fader send from the channels to be either Pre or Post the input channel EQ.

Patch 01 and Patch 02: Displays the destinations(s) patched to the bus; see PATCHING for details of the system patching functionality.

* *Not applicable to LR, MONO or Matrix.*

CLEAR

The CLEAR facility allows channels, buses or logical groups of channels to be reset to their factory defaults. The operation is instigated by holding the CLEAR key while pressing one of the following keys:

HPF – Sets HPF OFF and sets Filter value to Factory Default

Gate – Sets GATE OFF and sets Gate values to Factory Default

Comp – Sets COMP OFF and sets Comp values to Factory Default

EQ – Sets EQ ON and sets EQ values to Factory Default

LR – Sets LR routing ON, PAN/BAL to centre, delay to 0mS and all GrAux sends to Factory Default

MONO – Sets MONO routing ON, PAN/BAL to centre, delay to 0mS and all GrAux sends to Factory Default

SELect – Sets all channel audio parameters on SELected channel to Factory Default



NOTE: Patching and naming is NOT included in resetting a channel.

GLOBAL GAIN – On current layer sets all input gains on to factory default for selected source type, +5db for mic sources, 0db trim for line sources

GLOBAL FILT – On current layer sets all HPF OFF and sets all filter values to factory default

GLOBAL PAN – On current layer sets all PAN or BAL controls to centre

MUTE MASTER 1–4 – Clears ALL clients assigned to MUTE GROUP 'n'

BUS 1–14 – Sets sends from all channels to bus 'n' to Factory Defaults

MTX 1–4 – Sets sends from all buses to MTX 'n' to Factory Defaults

FX 1–4 – Sets sends from all channel to FX 'n' to Factory Defaults

GEQ HI or LO – Sets all GEQ bands to 0db for SELected bus



NOTE: Not all functions are present in all modes e.g. Buses have no HPF function, in these events the action has no function.

PATCHING AND FADER LAYERS

The fader layers on Si Compact are arranged in a simple and logical form, by default the fader layers are as follows:

- IN A: all MONO channels (16ch: 1-14, 24ch: 1-22, 32ch 1-30)
- IN B: all STEREO channels (16ch: 15-24, 24ch: 23-32, 32ch 31-40)
- BUS: all Aux Buses (1-14)
- MTX: all Matrix Buses (1-4)

The Fader Glow system is indicates the type of channel, bus or function that is associated with any given fader on the surface.

The patching system on Si Compact is very flexible and allows almost any physical input to be patched to any logical channel; the default patches on the Si Compact are as follows:

Si COMPACT 16 FADER INPUT PATCHING & LAYERS:

- Mic In 1-14 > Channels 1-14 > Fader Layer IN A faders 1-14
- Mic In 15-16[*1] > Channels 15-16 > Fader Layer IN B faders 1-2
- Ste FX Returns 1-2 > Channels 17-20 > Fader Layer IN B faders 3-4
- Ste IN 1-2 > Channels 21-24 > Fader Layer IN B faders 5-6

Si COMPACT 24 FADER INPUT PATCHING & LAYERS:

- Mic In 1-22 > Channels 1-22 > Fader Layer IN A faders 1-22
- Mic In 23-24[*1] > Channels 23-24 > Fader Layer IN B faders 1-2
- Ste IN 1-2 > Channels 25-28 > Fader Layer IN B faders 3-4
- Ste FX Returns 3-4 > Channels 29-32 > Fader Layer IN B faders 5-6

Si COMPACT 32 FADER INPUT PATCHING & LAYERS:

- Mic In 1-30 > Channels 1-30 > Fader Layer IN A faders 1-30
- Mic In 31-32[*1] > Channels 31-32 > Fader Layer IN B faders 1-2
- Ste IN 1-2 > Channels 33-36 > Fader Layer IN B faders 3-4
- Ste FX Returns 1-2 > Channels 37-40 > Fader Layer IN B faders 5-6

[*1] *Channels are set-up as a 'Linked Pair'*

Si COMPACT OUTPUT PATCHING & LAYERS:

As all Si Compact models offer the same level of output processing and number of physical output all models have the same Output Layers & Patching system:

- Buses 1-14 > Fader Layer BUS faders 1-14 > Analogue Line Out 1-14
- MTX 1-4 > Fader Layer MTX faders 1-4 > Not Assigned.
- Main L&R > Master LR Fader > Analogue Line Out 15-16
- MONO > MONO/SEL Fader > Not assigned.



NOTE: Any 'unused' faders and associated switches, meters and encoders are unlit and have no function.

NOTE: Patching can be set or changed from the INPUT or OUTPUT menu as appropriate.

PATCHING

The patching system on the Si console allows almost any source to feed any channel and any bus to feed any output; the following functionality is available:

- **Input Patch** – Source for an input channel, selected from the INPUTS menu
- **Direct Out Patch** – Destination for a channel direct out, selected from the INPUTS menu
- **Bus Patch (x2)** – Destination for a bus out, selected from the OUTPUTS menu
- **Oscillator Patch** – Destination for a oscillator out, selected from the OSC menu
- **Monitor Patch** – Destination for a monitor line out, selected from the MONITOR menu

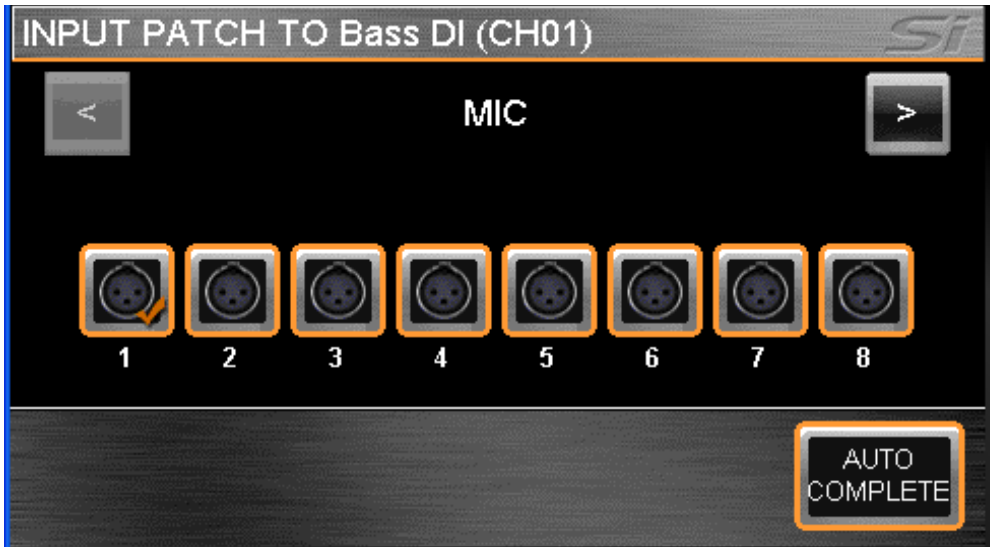
Once the PATCH window opens you can quickly change the patching of other channels or buses simply by SELecting an alternative input or bus.

NOTE: Patch changes are stored per cue, having made any patch changes the cue must be stored or updated to make the change permanent.

NOTE: The system will only show option cards if fitted, if the show was created on a console with an expansion card fitted or if the show was created with an option card in the offline editor Virtiual Si.

Setting or Changing the Input Patch

The INPUT PATCH screen shows the current input patch with an orange 'tick' (in this case MIC Input 1, to channel name Bass DI which is channel 1 on the console).To change to another source simply touch the icon or browse alternative sources using the SCROLL/ADJUST encoder or left/right (< >) arrows on the touch screen.



To have the system automatically patch multiple channels press the AUTO COMPETE button; this will increment the input by 1 and patch by 1 until a logical group of patches is complete.

To leave the PATCH set-up press MENU, CUE LIST or LEX.

NOTE: The system will display a warning requiring confirmation before the AUTO re-patch happens.

NOTE: Any single input may be used a maximum of four times, in the event you attempt to use a single source more than this a warning will be displayed.

NOTE: If the chosen input source for a channel is LINE type (e.g AES or MADI) the GAIN control will default to TRIM and the 48v switch will be unlit and have no function.

NOTE: It is only possible to patch LINE sources to the four stereo channels.

NOTE: Stereo patching always happens as odd/even pairs.

NOTE: If an FX processor has no stereo channel assigned as a return then it is not possible to mix to the associated FX bus. See tOTEM for further details.

Setting or Changing the Direct Out Patch

The DIRect OUT PATCH screen shows the current direct output patch with an orange 'tick' other outputs that are in use have a gray 'tick' whilst unused patches have no 'tick' (in this case from channel name Bass DI which is channel 1 on the console to analogue output 1). To change to another destination simply touch the icon or browse alternative destinations using the SCROLL/ ADJUST encoder or left/right (< >) arrows on the touch screen.



NOTE: The system will provide a warning if you attempt to use a patch that is already in use allowing you to either continue or abort the action.

To have the system automatically patch multiple channels press the AUTO COMPETE button; this will increment the input by 1 and patch by 1 until a logical group of patches is complete.

To leave the PATCH set-up press MENU, CUE LIST or LEX

Setting or Changing the Bus or Master Output Patch

The OUTPUT PATCH1(/PATCH2) screen shows the current bus output patch with an orange 'tick'; other outputs that are in use have a gray 'tick' whilst unused patches have no 'tick' (in this case from bus name Lead Vocal which is bus 9 on the console to analogue output 9). To change to another destination simply touch the icon or browse alternative destinations using the SCROLL/ADJUST encoder or left/right (< >) arrows on the touch screen.



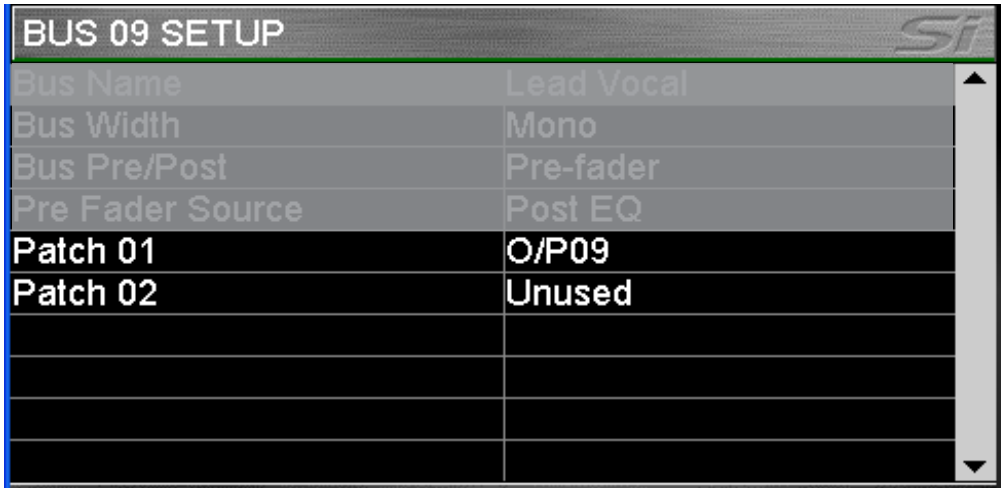
NOTE: The system will provide a warning if you attempt to use a patch that is already in use allowing you to either continue or abort the action.

To have the system automatically patch multiple buses press the AUTO COMPETE button; this will increment the input by 1 and patch by 1 until a logical group of patches is complete.

To leave the PATCH set-up press MENU, CUE LIST or LEX.

NOTE: The L & R buses will always patch as an odd/even pair.

NOTE: There are two patch destinations for all bus outputs, the patch being made will depend upon which 'Patch' you selected to enter the patching pages, either Patch 01 or Patch 02.



Setting Oscillator and Monitor Patches

It is possible to change other output patches in the system from within the appropriate MENU:

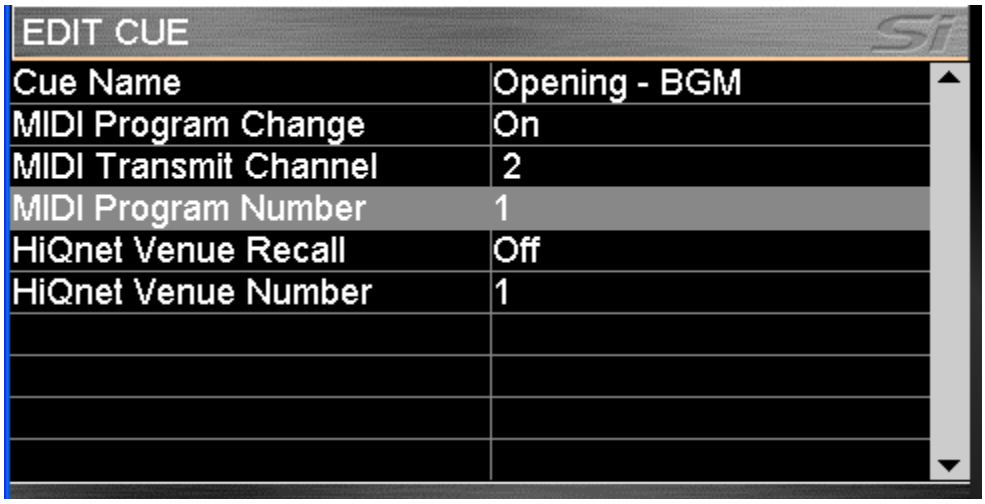
OSC	Oscillator re-patching is initiated from the OSC menu; the method is as for bus output patches however the oscillator may only be patched to only one destination.
MONITOR OUT	It is possible to assign additional line outputs for the monitor L and R from the MONITOR menu; the method is similar as for bus output patches however the monitor left and right will be patched together as a stereo pair and only one 'paired' destination is allowed.

Patching Replay Filtering

It is possible to isolate patching changes from the automation for the EDIT SHOW menu to prevent the automation for changing system patching when a cue is recalled. To isolate an item scroll to the desired list item, press the encoder and select Isolate.

MIDI

As part of the cue replay function Si Compact can send MIDI messages when a cue is replayed to trigger events in other systems. Set-up for the MIDI function is from within the CUE LIST, scroll to the cue in which you wish the MIDI event to happen and press the EDIT CUE button:

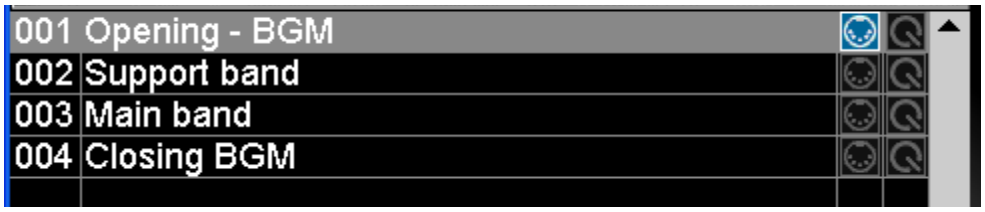


MIDI Program Change – Set On or Off to enable or disable sending of MIDI messages when the cue is replayed.

MIDI Transmit Channel – Sets which MIDi channel the Program Number message is sent on; range 1-16.

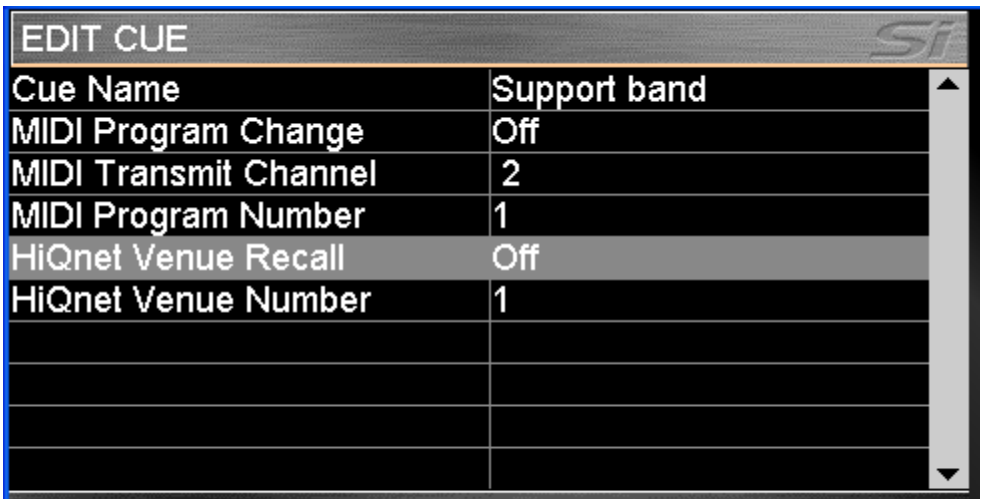
MIDI Program Number – Sets the MIDI Program Number that is set; range is 1-127.

NOTE: If MIDI Program Change is set On, the MIDI icon in the Cue List view will be lit blue.



HiQNet™

As part of the cue replay function Si Compact can send HiQnet messages when a cue is replayed to trigger events in a HiQnet system. Set-up for the HiQnet function is from within the CUE LIST, scroll to the cue in which you wish the HiQnet event to happen and press the EDIT CUE button:



HiQnet Venue Recall – Set On or Off to enable or disable sending of HiQnet Venue Recall preset messages when the cue is replayed.

HiQnet Venue Number – Sets the HiQnet Venue Number that is sent; range is 1- 65535.

NOTE: If HiQnet Venue Recall is set On, the HiQnet icon in the Cue List view will be lit orange.



NOTE: DHCP is enabled on the Si series consoles negating the need to set an IP address.

To learn more about the Harman HiQnet system visit http://hiqnet.harmanpro.com/

OPTION CARD SLOT

The Si Compact features a 64 in x 64 out expansion slot compatible with all Si option cards. For a detailed description of the cards and theory of operation for the option slot please refer to the Si Option Card User Manual available from www.soundcraft.com

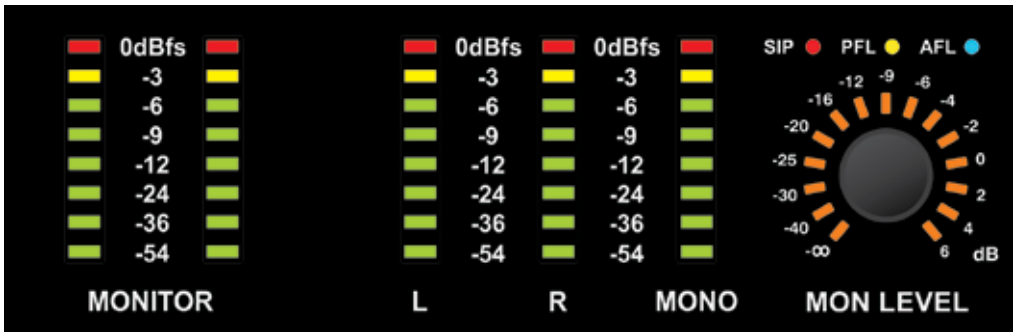
HEADPHONE OUT & MONITORING

The Si Compact features a comprehensive monitoring system. The active monitor signal is always available on the headphone output (located below the armrest near fader 1) with level controlled by the Monitor Level encoder but can also be patched in parallel to other outputs on the console, see PATCHING.

The monitor signal nominally follows the main LR signal but a number of sources can be selected from the MONITOR page on the touch screen.

The stereo MONITOR meters provide a visual indication of the overall level in the monitor system.

The selected monitor source is always over-ridden by any active AFL or PFL signal, the presence of such is indicated by illumination of the PFL or AFL lights and the illumination of the SOLO CLEAR key.



SOFTWARE UPDATES

The Si Compact software is updated via the USB port on the front panel. Details and special instructions for any release will be included with the software release package however the 'normal' procedure is listed below for reference:

1. Unzip the files to a USB key in the root directory, you should have two files:
   Compact.bin
   info.xml
2. Switch the console off using the PWR ON/OFF' button.
3. Press and hold 'SYSTEM ON/OFF' button for approx 5 seconds, a SOFTWARE UPDATE screen shall appear.
4. Insert your USB stick and then press the 'MENU' button.
5. Select the INFO.XML file using the adjust encoder, the 'LOAD' button at the bottom right of the touch screen window will appear when a valid selection is made.
6. Press the 'LOAD' button. Software will begin loading.
7. Wait until both progress bars have reached 100%, and the 'tick' symbol has appeared to the right of each progress bar, before removing the USB stick.

It is advised to perform a Factory Reset as described below.

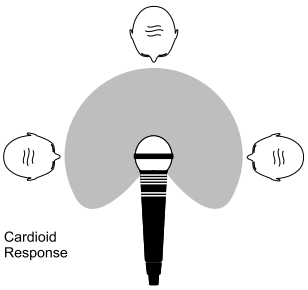
RESET TO FACTORY DEFAULT

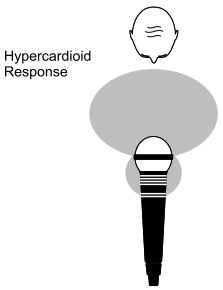


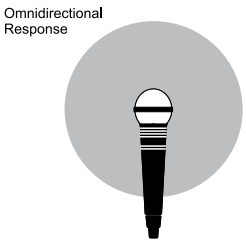
The following procedure will restore the console back to the factory defaults. **NOTE: All settings cues and shows will be lost.**

1. Starting with the console off, hold the POWER key for ~5 seconds until the console starts
2. Press the LR, MONO and FX1 keys together, this opens the update page.
3. Press the CLEAR SD CARD button on the touch screen.
4. Restart the console.

USING YOUR Si COMPACT CONSOLE







The final output from your sound system can only ever be as good as the weakest link in the chain, and especially important is the quality of the source signal because this is the starting point of the chain. Just as you need to become familiar with the control functions of your mixer, so you must recognise the importance of correct choice of inputs, microphone placement and input channel settings. However, no amount of careful setting up can take account of the spontaneity and unpredictability of live performance. The mixer must be set up to provide "spare" control range to compensate for changing microphone position and the absorption effect of a large audience (different acoustic characteristics from soundcheck to show).

MICROPHONE PLACEMENT

Careful microphone placement and the choice of a suitable type of microphone for the job is one of the essentials of successful sound reinforcement. The diagrams on the left show the different pick-up patterns for the most common types of microphone. Cardioid microphones are most sensitive to sound coming from in front, and hypercardioid microphones offer even greater directivity, with a small amount of pickup behind the microphone. These types are ideal for recording vocalists or instruments, where rejection of unwanted sounds and elimination of feedback is important. The aim should be to place the microphone as close as physically possible to the source, to cut out unwanted surrounding sounds, allow a lower gain setting on the mixer and avoid feedback. Also a well chosen and well placed microphone should not need any appreciable equalisation.

There are no exact rules, let your ears be the judge. In the end, the position that gives the desired effect is the correct position!

INITIAL SETUP

Once you have connected up your system (see the sections on connection and wiring earlier in this manual for guidance) you are ready to set initial positions for the controls on your mixer.

Set up individual input channel as follows:

- Connect your sources (microphone, keyboard etc.) to the required inputs.

WARNING: Phantom powered mics should be connected before the +48V is switched on. Ensure the PA system is OFF when switching phantom power on or off.

- Set Master faders at 0, input faders at 0, and set power amplifier levels to about 70%.
- Provide a typical performance level signal and press the PFL button on the first channel, monitoring the level on the bargraph meters.
- Adjust the input gain until the meter display is in the amber section, with occasional peaks to the first red LED at a typical maximum source level. This allows sufficient headroom to accommodate peaks and establishes the maximum level for normal operation (but see note below).
- Repeat this procedure on other channels as required. As more channels are added to the mix, the meters may move into the red section. Adjust the overall level using the Master Faders if necessary.
- Listen carefully for the characteristic sound of "feedback". If you cannot achieve satisfactory input level setting without feedback, check microphone and speaker placement and repeat the exercise. If feedback persists, it may be necessary to use a Graphic Equaliser to reduce the system response at particular resonant frequencies.

Note:

The initial settings should only be regarded as a starting point for your mix. It is important to remember that many factors affect the sound during a live performance, for instance the size of the audience!

You are now ready to start building the mix and this should be done progressively, listening carefully for each component in the mix and watching the meters for any hint of overload. If this occurs, back off the appropriate Channel Fader slightly until the level is out of the red segments, or adjust the Master Faders.

Remember that the mixer is a mixer, not an amplifier. Increasing the overall level is the job of the amplifier, and if it is impossible to provide adequate level, it is probable that the amplifier is too small for the application. Choose your amplifier carefully, and do not try to compensate for lack of power by using the mixer to increase output level.

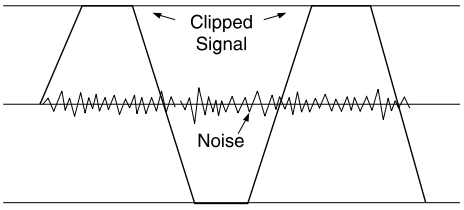
Note:

The level of any source signal in the final output is affected by many factors, principally the Input Gain control, Channel Fader and Mix Faders. You should try to use only as much microphone gain as required to achieve a good balance between signals, with the faders set as described above.

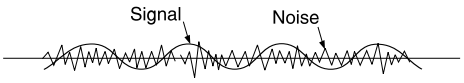
If the input gain is set too high, the channel fader will need to be pulled down too far in compensation to leave enough travel for successful mixing and there is a greater risk of feedback because small fader movements will have a very significant effect on output level. Also there will be a chance of distortion as the signal overloads the channel and causes clipping.

If the gain is set too low, you will not find enough gain on the faders to bring the signal up to an adequate level, and backgound hiss will be more noticeable.

This is illustrated below:



If the signal level is too high, clipping distortion may occur.



If the signal level is too low it may be masked by the noise.

MIXING TO MAIN LR BUSES

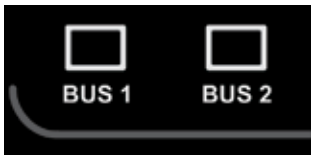
To create a simple mix to the Main LR outputs:

1. Connect your inputs to the Mic/Line inputs on the console.
2. Connect the PA to Analogue Outputs 15 & 16.
3. Connect headphones to the socket under the armrest.
4. Adjust the gain to achieve a 'good' level on each channel, as a guide the -12dB indicator should be on most of the time with only the most occasional 'flickering' of the 0dB led.
5. To control any individual channel bring it to the ACS by pressing the SEL key, and to hear it in your headphones press the associated SOLO key and turn up the monitor volume control.
6. Raise the master fader to ~0dB.
7. Raise the channel faders and balance your mix.
8. To control the processing of the main mix press the SELect key above the main LR fader to assign the ACS to the main LR bus.
   a) You may now open the GEQ for the main LR bus by pressing either the GEQ HI or LO key, close the GEQ by pressing the lit HI/LO key again.

NOTE: This assumes you are starting from a factory default state. To reset the console completely see 'Factory Reset'

MIXING TO AUX BUSES

To create a simple mix to Pre Fade Aux 1:



1. Connect a monitor to Analogue Outputs 1
2. Press the BUS1 follow key; notice the input faders have changed colour & position as they are now your sends from the input channels TO Aux Bus 1. Also note the SEL key over the SEL/MONO fader is lit and the fader glow has changed colour to Yellow, this is now Bus 1 Master fader
3. Raise the Mono/SEL fader to ~0dB
4. Raise the channel faders and balance your mix, note that the Si Compact has already SOLO'd the bus for you enabling you to hear it without the need to press any other keys...
5. To control the processing of the Aux Mix use the controls on the ACS.
   a) You may now open the GEQ for the Aux bus by pressing either the GEQ HI or LO key, close the GEQ by pressing the lit HI/LO key again.

NOTE: By default buses 11-14 are set POST fade for 'more typical' application as a sub-group, this can be changed in the OUTPUTS menu.

NOTE: Assumes you have first created a main LR mix as described.

MIXING TO FX BUSES

To create a simple mix to FX Processor 3:



NOTE: This function may only be enabled if an FX processor is patched to a Stereo Return channel; this is achieved from the PATCH function in the inputs window.

1. Press the FX3 follow key; notice the input faders have changed colour & position as they are now your sends from the input channels TO FX Processor 3 whilst the ON keys are now the routing ON/OFF from the channel to the FX bus. Also note the SEL key over the SEL/MONO fader is lit and the fader glow has changed colour to Cyan, this is now FX Return Channel 1 fader.
2. Raise the channel faders and balance your mix, note that the Si Compact has already SOLO'd the FX Return for you enabling you to hear it without the need to press any other keys...
3. To change the FX Process or adjust parameters press the LEX key to automatically open the LCD on the correct FX processor (FX 3)
4. Use the four encoders below the screen to adjust parameters of the active FX and use the SCROLL/ADJUST encoder to the right of the screen to change patch type.
5. To control the processing of the FX Return use the controls on the ACS
6. Raise the Mono/SEL fader to bring the FX Return into the main mix

NOTE: Assumes you have created a main LR mix and Aux Mix as described.

MIXING TO MATRIX BUSES

To create a simple mix to Matrix Bus 1:



1. Press the MTX1 follow key, notice the faders have changed to BUS mode and have changed colour as they are now your sends from the buses to Matrix Out 1 whilst the ON keys are now the routing ON/OFF from the buses to the Matrix. Also note the SEL key over the SEL/MONO fader is lit and the fader glow is changed orange, this is now the MTX1 Master fader.
2. Raise fader #1 (Aux 1) and the Main LR fader to create your mix, note that the Si Compact has already SOLO'd Matrix 1 for you enabling you to hear it without the need to press any other keys..
3. To control the processing of the Matrix use the controls on the ACS
   a) You may now open the GEQ for the main Matrix bus by pressing either the GEQ HI or LO key, close the GEQ by pressing the lit HI/LO key again.

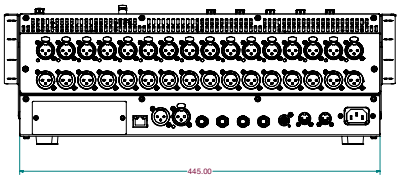
NOTE: Use ALT + MTX to have MONO and LR faders send to the selected matrix.

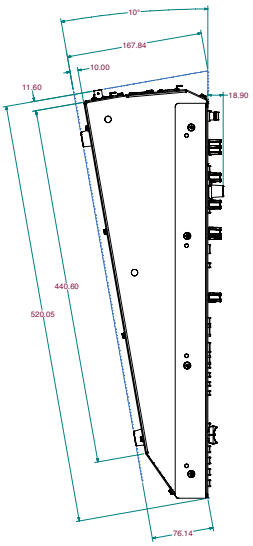
NOTE: Assumes you have created a main LR mix and Aux Mix as described.

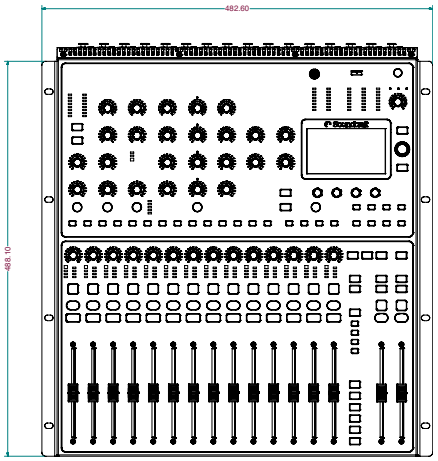
WEIGHTS & DIMENSIONS

	Height	Width	Depth	Weight
Si Compact 16:				
Gross (in carton)	250mm (9.8")	538mm (21.2")	635mm (25.0")	14.1kg (31.0lbs)
Net	169mm (6.7")	483mm (19.0")	520mm (20.5")	11.0kg (24.2lbs)
Si Compact 24:				
Gross (in carton)	250mm (9.8")	810mm (31.9")	635mm (25")	19.5kg (43.1lbs)
Net	169mm (6.7")	716mm (28.2")	520mm (20.5")	15.5kg (34.1lbs)
Si Compact 32:				
Gross (in carton)	250mm (9.8")	1022mm (40.2")	635mm (25.0")	25.1kg (55.2lbs)
Net	169mm (6.7")	928mm (36.5")	520mm (20.5")	21.0kg (46.2lbs)

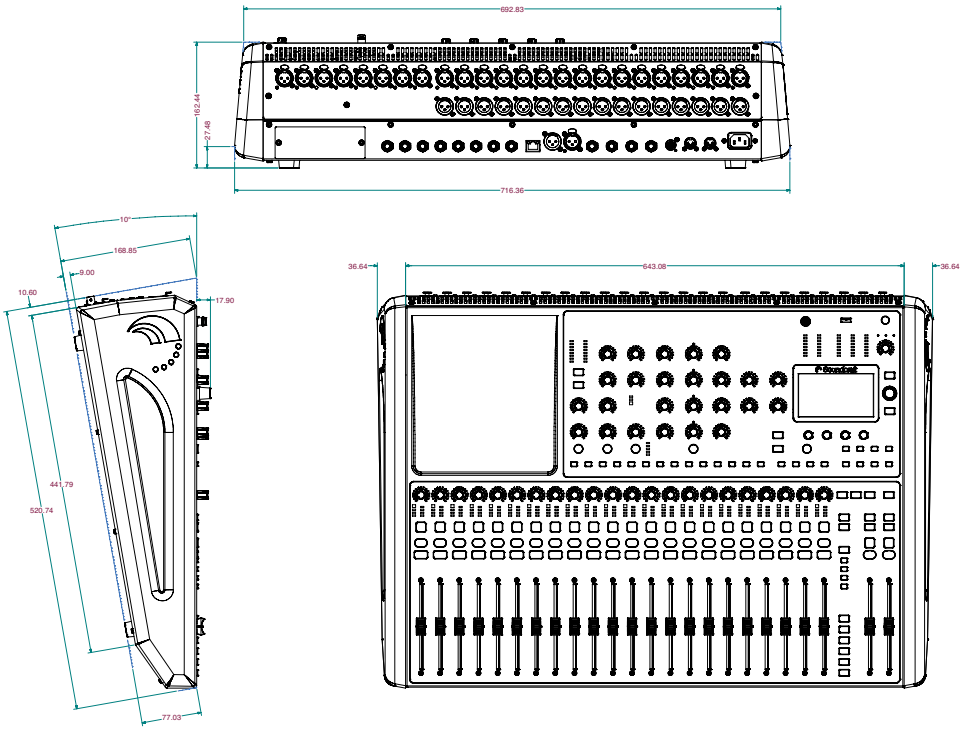
Si Compact 16



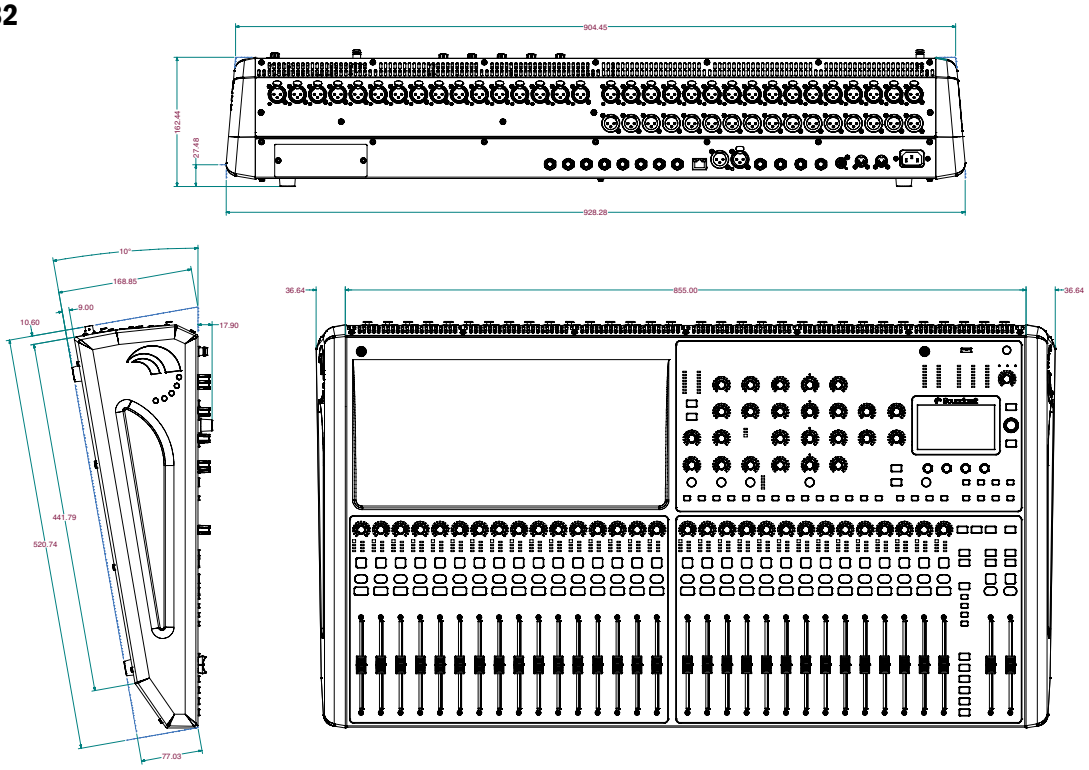




Si Compact 24



Si Compact 32



Si Compact Typical Specifications

Frequency Response	
Mic / Line Input to any Output	+/-1.5dB, 20Hz – 20kHz
T.H.D.	
Mic Sensitivity -30dBu, +14dBu @ Mix output	< 0.01% @ 1kHz
Noise	
Mic Input E.I.N. (maximum gain)	-126.5dBu (150Ω source)
AUX, Mix and Masters (@ 0dB, faders down)	< -82dBu
Crosstalk (@ 1kHz)	
Channel Mute	> 90dB
AUX Send Pots Offness	> 82dB
EQ (Mono inputs)	
HF	12kHz, +/-15dB
MF (swept)	150Hz – 3.5kHz, +/-15dB
LF	80Hz, +/-15dB
Q (MF)	1.5
EQ (Stereo inputs)	
HF	12kHz, +/-15dB
MF	720Hz, +/-15dB
LF	80Hz, +/-15dB
Q (MF)	0.8
Power Consumption	Less than 40W
Operating Conditions	
Temperature Range	5°C to 40°C
Input & Output Levels	
Mic Input	+15dBu max
Line Input	+30dBu max
Stereo Input	+30dBu max
Mix Output	+20dBu max
Headphones (@150Ω) (recommended impedance 32 to 200Ω)	300mW
Input & Output Impedances	
Mic Input	2kΩ
Line Input	10kΩ
Stereo Input	45kΩ
Outputs	150Ω (balanced), 75Ω (unbalanced)

E & OE.
Soundcraft reserves the right to change specifications without notice.

GLOSSARY

AFL	After-fade listen: a function that allows the operator to monitor the post-fade signal in a channel independently of the main mix.
AUXiliary send	An output from the console comprising a mix of signals from channels derived independently of the main stereo mix.
Balance	The relative levels of the left and right channels of a stereo signal.
Balanced	A method of audio connection which 'balances' the wanted signal between two wires, these wires also have a screen which carries no signal. Any interference is picked up equally by the two wires, which results in cancellation of the unwanted signal. In this guide, the term can refer to various circuit architectures. Connection details are given in relevant sections.
Clipping	The onset of severe distortion in the signal path, usually caused by the peak signal voltage being limited by the circuit's power supply voltage.
Compressor	Dynamic audio process used to 'squash' the amplitude of the signal effectively reducing the level of this highest audio peaks
DAT	Digital Audio Tape, a cassette-based digital recording format.
dB (decibel)	A ratio of two voltages or signal levels, expressed by the equation dB=20Log10 (V1/V2). Adding the suffix 'u' denotes the ratio is relative to 0.775V RMS.
DI(direct injection)/ DI Box	The practice of connecting an electric musical instrument directly to the input of the mixing console, rather than to an amplifier and loudspeaker which is covered by a microphone feeding the console.
Equaliser	A device that allows the boosting or cutting of selected bands of frequencies in the signal path.
Fader	A linear control providing level adjustment.
Feedback	The 'howling' sound caused by bringing a microphone too close to a loudspeaker driven from its amplified signal.
Foldback	A feed sent back to the artistes via loudspeakers or headphones to enable them to monitor the sounds they are producing.
Frequency response	The variation in gain of a device with frequency.
Gain	The amount of amplication in level of the signal.
Headroom	The available signal range above the nominal level before clipping occurs.
Impedance balancing	A technique used on unbalanced outputs to minimise the effect of hum and interference when connecting to external balanced inputs.
Insert	A break point in the signal path to allow the connection of external devices, for instance signal processors or other mixers at line level signals. Nominal levels can be anywhere between 0dBu to +6dBu, usually coming from a low impedance source.
Pan (pot)	Abbreviation of 'panorama': controls the levels sent to left and right outputs.
Peaking	The point at which a signal rises to its maximum instantaneous level, before falling back down again. It can also describe an equaliser response curve affecting only a band of frequencies, (like on a graphic equaliser), "peaking" at the centre of that band.
Peak LED	A visual indication of the signal peaking just before the onset of clipping, which will distort the signal.

PFL	Pre-fade listen: a function that allows the operator to monitor the pre-fade signal in a channel independently of the main mix.
Phase	A term used to describe the relationship of two audio signals. In-phase signals reinforce each other, out-of-phase signals result in cancellation. Phase is a measurement of relative displacement between two waves of identical frequency.
Polarity	A term used to describe the orientation of the positive and negative poles of an audio connection. Normally connections are made with positive to positive, negative to negative. If this is reversed, the result will be out-of-phase signals (see 'phase' above).
Post-fade	The point in the signal path after a fader and therefore affected by the fader position.
Pre-fade	The point in the signal path before a fader, and therefore unaffected by the fader position.
Ratio	The amount by which a compressor squashes a signal when compressing expressed as a ratio. 1:1 means no compression (1db input level increase to the compressor = 1db ouput level increase from the compressor) 12:1 (12dB input level increase to the compressor = 1db ouput level increase from the compressor)
Rolloff	A fall in gain at the extremes of the frequency response.
Shelving	An equaliser response affecting all frequencies above or below the break frequency i.e. a highpass or lowpass derived response.
Solo	An almost generic term used to describe PFL or AFL functions.
Spill	Acoustic interference from other sources.
Threshold	Limit above which a process will start, usually used in relation to dynamic processors such as compressors or gates to set the level at which compression will start or the gate will open
Transient	A momentary rise in the signal level.
Unbalanced	A method of audio connection which uses a single wire and the cable screen as the signal return. This method does not provide the noise immunity of a balanced input (see above).
+48V	The phantom power supply, available at the channel mic inputs, for condenser microphones and active DI boxes.

WARRANTY

1 Soundcraft is a trading division of Harman International Industries Ltd .
End User means the person who first puts the equipment into regular operation.
Dealer means the person other than Soundcraft (if any) from whom the End User purchased the Equipment, provided such a person is authorised for this purpose by Soundcraft or its accredited Distributor. Equipment means the equipment supplied with this manual.

2 If within the period of twelve months from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or replace the defective components. Any components replaced will become the property of Soundcraft.

3 Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft) and postage must be prepaid.

4 This warranty shall only be valid if:
a) the Equipment has been properly installed in accordance with instructions contained in Soundcraft's manual; and
b) the End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and
c) no persons other than authorised representatives of Soundcraft or the Dealer have effected any replacement of parts maintenance adjustments or repairs to the Equipment; and
d) the End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance with Soundcraft's recommendations.

5 Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning or humidity control.

6 The benefit of this Warranty may not be assigned by the End User.

7 End Users who are consumers should note their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.



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