VENUE | S6L System Guide

and VENUE | Software 5.0

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Product features, specifications, system requirements, and availability are subject to change without notice.

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Safety Compliance

Safety Statement: (M/N: S6L24, S6L32, and Stage 64)

This equipment has been tested to comply with USA and Canadian safety certifi- cation in accordance with the specifications of UL Standards: UL 60065 7th Ed., 2013-07-24, CAN/CSA C22.2 No. 60065-03, 1st Ed, +A1:2006 +A2:2012, EN 60065:2002 + A1:2006 + A11:2008 +A2:2010 +A12:2011, IEC 60065:2001 + A1:2005 + A2:2010.

Avid Technology Inc., has been authorized to apply the appropriate NRTL mark on its compliant equipment.

Safety Statement: (M/N: E6L)

This equipment has been tested to comply with USA and Canadian safety certifi- cation in accordance with the specifications of UL Standards: UL 60950-1 2nd edition, CAN/CSA C22.2 No. 60950-1-07; 2nd edition, EN 60950-1:2006 /A12:2011, IEC 60950-1:2005 /A1:2009 2nd edition.

Avid Technology Inc., has been authorized to apply the appropriate NRTL mark on its compliant equipment.

Power Safety Input Rating

S6L24: AC~100-240V, 50-60Hz, 4.0A per inlet

S6L32: AC~100-240V, 50-60Hz, 5.0A per inlet

E6L: AC~100-240V, 50-60Hz, 5.0A per inlet

Stage 64: AC~100-240V, 50-60Hz, 3.65A per inlet

Warning

Important Safety Instructions for E6L

1) User should make sure that all the thumb screws are secured by a tool.

2) The E6L system can hold the following cards:

- (3) AVB Cards
- (4) HDX Cards
- (8) DIMMs of RAM.
- User should not install any additional cards.

User should not install additional cards.

Important Safety Instructions

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this equipment near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufac- turer's instructions.

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

10) Protect power cords from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.

11) Only use attachments/accessories specified by the manufacturer.

12) For products that are not rack-mountable: Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.

13) Unplug this equipment during lightning storms or when unused for long periods of time.

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

15) For products that are a Mains powered device:

The equipment shall not be exposed to dripping or splashing and no objects filled with liquids (such as vases) shall be placed on the equipment.

Warning! To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polar- ized 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 pro- vided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

16) For products containing a lithium battery:

Warning! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

17) For products with a power switch:

It should remain accessible after installation.

18) The equipment shall be used at a maximum ambient temperature of 40° C and maximum altitude of 2000m.

19) This unit may not ship with a power supply cord set. A qualified person must provide for use with this unit, an appropriate, approved power supply cord set which is in compliance with the end use country requirements and has a minimum cross-sectional area of 1.0mm^2.

20) For products with more than one power cord:

CAUTION: This unit has more than one power supply cord. Disconnect two power supply cords before servicing to avoid electrical shock.

ATTENTION: Cet appareil comporte plus d'un cordon d'alimentation. Afin de prévenir les chocs électriques, débrancher les deux cordons d'alimentation avant de faire le dépannage.

21) For products with an operator-accessible fuse:

CAUTION: For continued protection against risk of fire, replace only with same type and rating of fuse.

ATTENTION: Pour ne pas compromettre la protection contre les risques d'in- cendie, remplacer par un fusible de même type et de même caractéristiques nom- inales.

22) For products with Fiber optics:

Warning! Fiber optic equipment can emit laser or infrared light that can injure your eyes. Never look into an optical fiber or connector port. Always assume that fiber optic cables are connected to a light source.

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Part I: Overview

Introduction to the VENUE | S6L System

Welcome to the VENUE | S6L digital live mixing system from Avid®. The S6L system includes the VENUE | S6L control surface, the VENUE | E6L engine, and up to three VENUE | Stage 64 I/O racks, providing a modular, scalable, and high-fidelity live mixing solution using ultra-reliable and low-latency Ethernet AVB audio network connections.

The S6L control surface features high-resolution touch screens and channel displays, providing unmatched visual feedback and tactile control. The S6L system also uses the same intuitive and powerful VENUE software used by all other systems in the Avid live systems family, providing Show file portability between Avid live systems, direct Pro Tools® connectivity and interoperability, and support for AAX DSP plug-ins from Avid and our many development partners.

S6L System Features

S6L System Processing

- Up to 192 input processing channels, each with built-in High- and Low-Pass Filters, Dynamics and 4-band fully parametric EQ processors
- Up to 123 output processing channels, each with a built-in Compressor/Limiter and 7-band fully parametric EQ
- 32 assignable 31-band Graphic EQs
- Up to 99 mix busses total (96 mix busses plus Main L-R, C/Mono), up to 24 mono stereo-linkable Matrixes, and up to 32 VCAs
- Up to 200 plug-in rack slots for VENUE-compatible 64-bit AAX DSP plug-ins

S6L System Recording and Playback Features

- 128 channels of recording and playback (64 in x 64 out) with a compatible Pro Tools system, including true Virtual Soundcheck capability
- VENUE Link, providing Pro Tools and VENUE interoperability and interconnection, including Pro Tools Transport control from the S6L control surface
- Dual MADI splits of Stage inputs on a per Stage 64 basis

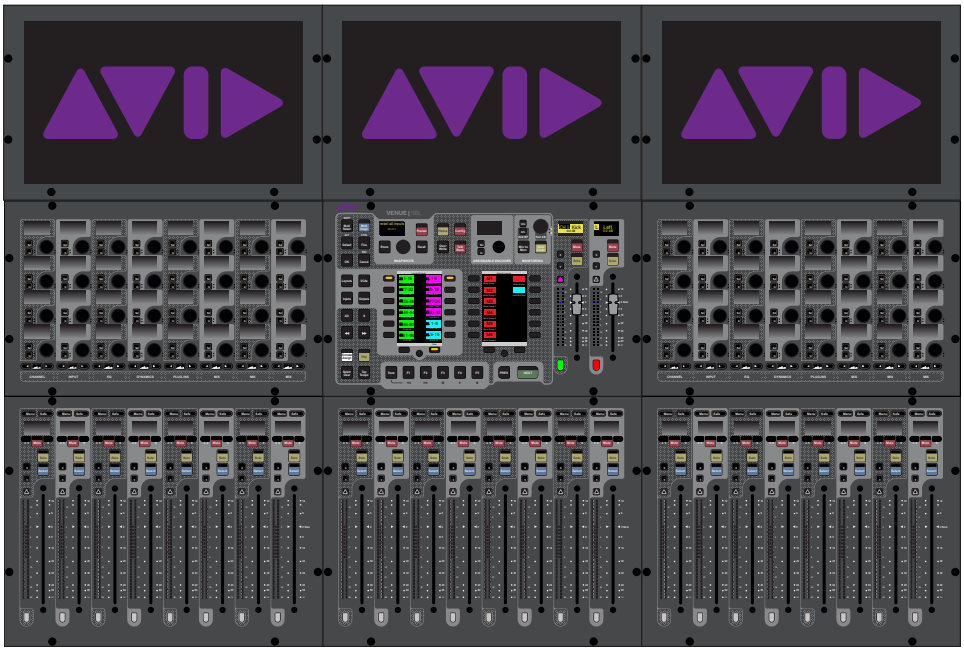
For complete system requirements and a list of qualified computers, operating systems, and third-party devices, visit **www.avid.com/S6Lsupport.**

S6L Control Surface Features

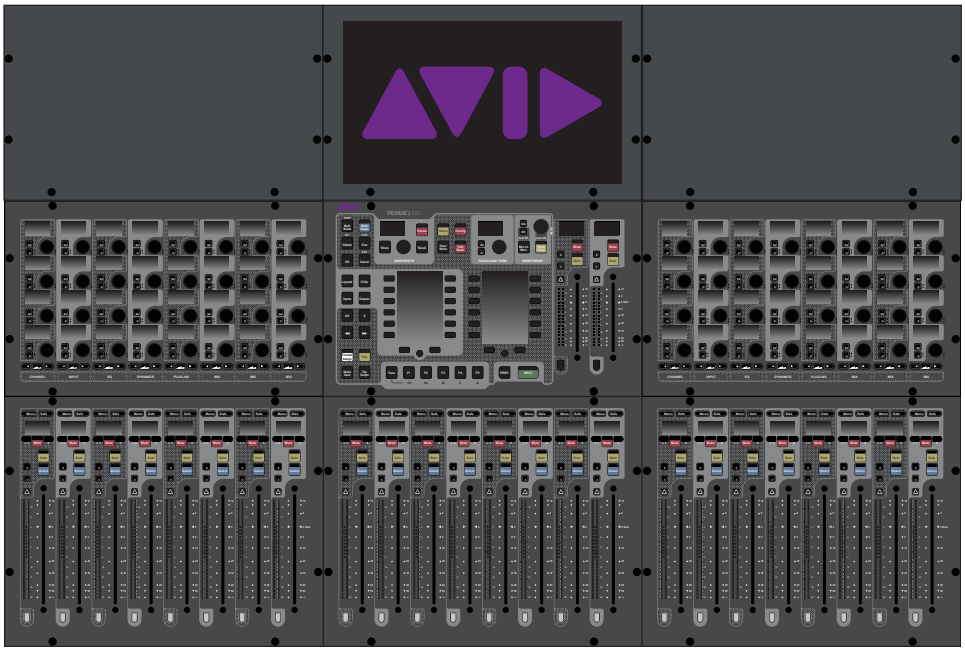
The S6L control surface provides system controls, mix position audio I/O, and control and utility connections. The S6L control surface is available in three models, the S6L-32D, the S6L-24D, and the S6L-24, and provide the following features and capabilities:

	S6L-32D	S6L-24D	S6L-24
Integrated Touch Screens	1 Master Touch Screen, 3 Channel Touch Modules	1 Master Touch Screen, 2 Channel Touch Modules	1 Master Touch Screen (expandable to 2 Channel Touch Modules)
Faders	32 channel strips + 2	24 channel strips + 2	24 channel strips + 2
Channel Knob Modules (CKM)	3 CKMs, each with 32 color-coded encoders, 32 high-resolution displays, and tri-color indicators	2 CKMs, each with 32 color-coded encoders, 32 high-resolution displays, and tri-color indicators	2 CKMs, each with 32 color-coded encoders, 32 high-resolution displays, and tri-color indicators
Master Live Module	2 TFT displays with Soft Keys; Touch and Turn assignable encoder; 2 assignable faders; monitoring, layout and snapshot controls; transport controls and function buttons		
Metering	30-segment meters per channel, with pre- and post-fade metering options; Nominal indicator, Expander/Gate status and Compressor/Limiter gain reduction meters		
Analog inputs	8 XLR mic/line inputs with 48V and signal present LEDs		
Analog outputs	8 XLR outputs with mute and signal present LEDs		
Digital inputs	4 pairs of XLR stereo AES/EBU (8 channels total)		
Digital outputs	4 pairs of XLR stereo AES/EBU (8 channels total)		
Headphone outputs	2 independent 1/4-inch TRS stereo headphone jacks		
Ancillary I/O	DVI-D video out, 4 USB 2.0 (2 rear, 1 front, 1 internal), ECx Ethernet port for wired/wireless remote control, GPIO (8 in/8 out), 2 footswitch, Linear Time Code input, MIDI I/O		
AVB Audio Network ports	4, 2 x etherCON (copper) and 2 x SFP (fiber optic)		
Power supply	2 (1+1) redundant, internal hot-swappable PSUs		

VENUE | S6L-32D



VENUE | S6L-24D

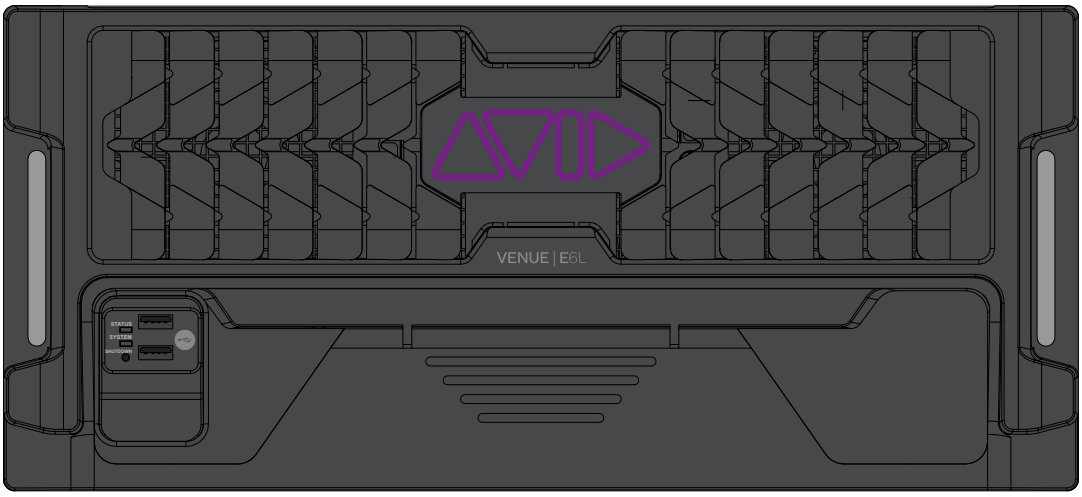


VENUE | S6L-24

E6L Engine Features

The E6L engine provides the real-time processing engine for input and output channels, and Pro Tools | HDX DSP processing card(s) for AAX DSP plug-ins. The E6L engine also provides connections for synchronization, control and utility in a 5U rack-mountable enclosure. The E6L engine is available in two models, the E6L-192 and the E6L-144, and provide the following features and capabilites:

	E6L-192	E6L-144
Sample rates	96 kHz	96 kHz
Input channels	192	144
Input processing (per channel)	HPF, LPF, 4-band PEQ, Expander/Gate, Compressor/Limiter, Delay, 4 plug-in inserts, hardware insert	
Mix busses	96 + L-R, C/Mono	64 + L-R, C/Mono
Output processing (per channel)	7-band PEQ, Compressor/Limiter, Delay, 4 plug-in inserts, hardware inserts	
Matrix	24 x 24	16 x 16
VCAs	32	24
Monitor busses	2 stereo, each with independent control and routing	
Graphic EQs (31-band)	32	
Plug-in support	1 x Pro Tools | HDX DSP card, expandable to up to two HDX cards	
Plug-in slots	200	128
Pro Tools Recording/Playback	Record/play back up to 128 audio tracks via Ethernet AVB	
AVB Audio Network Ports	2, each selectable as etherCON (copper) or SFP (fiber optic)	
Word Clock I/O	Input and Output, BNC, 75 Ohm coaxial	
USB ports	4 USB 2.0 ports (2 front, 2 back)	
Power supply	3 (2+1) redundant, internal hot-swappable PSUs	
Rack spaces	5U	



VENUE E6L

Stage 64 I/O Rack Features

Stage 64 provides remote stage I/O for S6L systems in a 10U rack-mountable enclosure. The S6L system supports redundant audio network connections to up to three Stage 64 I/O racks. Audio network connections are made using supported copper Ethernet cables and/or fiber-optic cables (see **Audio Network Connections**).

I/O Rack	Stage 64
Maximum I/O	64 input channels, 32 output channels
I/O card slots	12 (8 for input cards, 4 for output cards)
Sample rates	96 kHz
AVB Audio Network Ports	2, each selectable as etherCON (copper) or SFP (fiber optic)
Maximum cable length	Copper: 100 meters (328 feet); Fiber: 500 meters (1,640.4 feet)
MADI Outs	2 BNC; digital split output of Stage 64 inputs; supports 64 channel MADI formats
Headphone confidence monitor	1/4-inch TRS stereo headphone jack with volume control; display for channel selection
Word Clock Out	BNC, 75 Ohm coaxial
Power supply	Dual redundant internal PSUs
Rack spaces	10U

Stage 64 I/O Rack front panel (48 x 8 configuration shown)

What's Included

S6L Control Surface

Each S6L control surface includes the following items:

- S6L control surface
- Two (2) IEC auto-locking AC power cords
- Dust cover
- Microfiber cloth (for cleaning touch screens)
- One (1) 2.5 mm hex ball-end screwdriver (fits the hex screws used on the S6L control surface)
- Documentation, including a Welcome Letter, a Warranty Card, a Health and Safety Guide, a Registration card, and a VENUE Tech Support card (for obtaining tech support for your system)
- S6L Control Surface Software and Plug-Ins Pack
- Pro Tools software package

VENUE | S6L Control Surface Software & Plug-Ins Pack

The S6L Control Surface Software and Plug-Ins pack includes the following:

S6L Control Surface Restore USB Drive Contains VENUE System Restore software, which is used to install and reinstall (for maintenance and troubleshooting purposes) VENUE System Software on the S6L control surface. Keep this drive with the system at all times.

⚠ *Do not use this drive for anything other than VENUE System Restore software. Do not use this drive to store VENUE Show files, audio files, or any other data or software, including VENUE software updates.*

iLok 2 USB Smart Key Stores your S6L plug-in licenses. To run the plug-ins on your system, this iLok containing the licenses for the plug-ins must be connected to your S6L control surface.

VENUE | S6L Activation Card Contains codes and instructions required in order to activate your S6L control surface. The activation process deposits the following software into your Avid account:

- Latest System Restore software for the S6L control surface and E6L engine
- S6L plug-ins
- ECx Ethernet Control host and client software (for remote control of your S6L system)
- User guides

The activation process also deposits the following iLok licenses into your iLok account:

- S6L plug-in licenses
- Live Sound Production Toolkit license

⚠ *A separate USB flash drive (not provided) is required to store software installers and documentation. Do not use the included VENUE System Restore USB Drive.*

For more information on the activation process for your system software, go to www.avid.com/activationcard and select S6L system.

Pro Tools Software and the Live Sound Production Toolkit

Pro Tools software is included with your purchase, and is activated and downloaded separately from the S6L system software and plug-ins. The Live Sound Production Toolkit is an iLok license that enables up to 64 channels of I/O between your S6L system and your Pro Tools computer.

An iLok 2 is also included in the Pro Tools package to store your Pro Tools and Live Sound Production Toolkit licenses. It is recommended to not store S6L system plug-in licenses and Pro Tools licenses on the same iLok. You can, however, use the same iLok account to manage all iLok licenses.

E6L Engine

Each E6L engine includes the following:

- E6L engine
- E6L engine rack rails and installation guide (for installing E6L into an enclosure)
- Rack screws
- Two (2) IEC auto-locking AC power cords
- *Health and Safety Guide*
- Warranty claims card
- VENUE | E6L Engine Restore Software Pack

VENUE | E6L Engine Restore Software Pack

E6L Engine Restore Drive Use this USB drive to store E6L Engine System Restore software, and to initially install system software on your E6L. After initial installation, keep this drive with your E6L engine at all time for system maintenance and troubleshooting.

Do not use this drive for anything other than E6L System Restore software. Do not use this drive to store VENUE Show files, audio files, or any other data or software, including VENUE software updates.

VENUE | E6L Activation Card Contains codes and instructions required in order to activate your E6L control surface.

Stage 64

Each Stage 64 I/O rack includes the following:

- Stage 64 I/O rack with 6 SRI-192 Analog Input cards and 1 SRO-192 Analog Output card
- Stage 64 rack ears and installation guide, for installing Stage 64 into an enclosure
- Two (2) IEC auto-locking AC power cord
- *Health and Safety Guide*
- Warranty claims card
- VENUE | Stage 64 Activation Card, for activating your Stage 64

Additional Required Items

The following required items must be purchased separately:

- For audio network connections, Ethernet copper or fiber-optic cables (for more information, see **Audio Network Connections**)
- Free-standing DVI-D compatible Full HD display with 1920 x 1080 minimum resolution (21.5-inch or greater touch display recommended), a DVI-D cable, and a USB cable (for enabling the touch screen function on the monitor)

⚠ *Avid recommends you use a qualified monitor with your S6L system. Visit* **www.avid.com/S6Lsupport** *for a list of supported devices.*

⚠ *If you are using a non-qualified monitor, do not use a USB-powered monitor with your S6L system.*

- Windows-compatible USB keyboard
- USB 2.0 flash drive(s) for storing Show files, software, installers, and documentation

Optional Items

The following items are optional, and must be purchased separately:

- Shielded Cat 5e (350 MHz) or better Ethernet cable for connections to Pro Tools
- Standard Cat 5e or better Ethernet cable for ECx Ethernet Control connections
- Headphones with 1/4-inch connector
- Footswitch with 1/4-inch connector
- BNC cables for word clock connections to/from external digital devices
- DB25 (25-pin) cable(s) for connecting to GPI devices
- Thunderbolt-to-Gigabit Ethernet adapter for connecting to the Thunderbolt port of a qualified Pro Tools computer
- Windows-compatible USB mouse, for navigating external display if a touch monitor is not being used

Operational Requirements

Temperature and Ventilation

S6L system devices should be operated away from heat sources and with adequate ventilation.

Hardware monitoring and automatic warnings are provided for temperature, power and other factors. For more information, see **Hardware Monitoring Window**.

Storage

S6L system devices should be stored and transported at temperatures not lower than 0 degrees F (–18 degrees C) and not exceeding 140 degrees F (60 degrees C).

Operation

S6L system devices should be operated at temperatures not lower than 40 degrees F (4 degrees C) and not exceeding 104 degrees F (40 degrees C).

During operation, the left and right end caps on the back of the S6L control surface, the front and back of the E6L engine, and the fans on the back of the Stage 64 should be exposed to ambient air. Do not block the ventilation holes on any S6L system component.

Do not operate in direct sunlight or at extreme ambient temperatures.

Water and Moisture

S6L system devices should be operated away from sources of direct moisture and should be kept clear of liquids that might spill into the units. If condensation is present on the unit, leave the unit to dry in ambient air for at least one hour before powering the unit on.

Storage humidity range	5% to 95%, non-condensing
Operating humidity range	20% to 80%, non-condensing

Cleaning and Maintenance

- Use a dry cloth to clean the surfaces of the S6L components. Do not apply any cleaning solutions, spray cleaners, or abrasives to the surfaces of the components.
- Use a microfiber cloth (included with the S6L control surface) to clean the touch screens. Do not apply any cleaning solutions, spray cleaners, or abrasives.

Cabling Requirements

Power Connections

Power connections on all S6L system devices are auto voltage-selecting (100 to 240V nominal, 90-260V maximal, 50–60 Hz).

Make sure your power source is correctly rated for the number of units you are connecting. A surge-protected power source (not included) is highly recommended.

Audio Network Connections

Primary and redundant audio network connections between the S6L control surface, the E6L engine, and any Stage 64 I/O racks can be made using copper or fiber cables, as follows:

Copper Requires shielded Cat 5e (350 MHz) or better Ethernet cable with Neutrik etherCON connectors, supporting maximum distances of 100 meters.

Fiber Requires single- or multi-mode OM3 or better fiber-optic 50/125 cable with duplex LC connectors, and two qualified SFP transceiver modules per connection.

Pro Tools Connections

Shielded Cat 5e (350 MHz) or better Ethernet cable with RJ-45 connectors is required for the AVB audio connections to Pro Tools.

ECx Ethernet Control Connections

Standard Cat 5e Ethernet cable with RJ-45 connectors are supported for ECx remote control connections to a client computer or wireless/wired router.

System Requirements and Compatibility

Avid can only assure compatibility and provide support for hardware and software it has tested and approved. For complete system requirements and a list of qualified computers, operating systems, hard drives, and third-party devices, visit:

www.avid.com/S6Lsupport

Resources

The Avid website (**www.avid.com**) is your best online source for information to help you get the most out of your Avid system. The following are just a few of the services and features available.

Account Activation and Product Registration

Activate your product to access downloads in your Avid account (or create an account if you don't have one). Register your purchase online, download software, updates, documentation, and other resources.

https://www.avid.com/US/account

Support and Downloads

Contact Avid Customer Success (technical support); download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Knowledge Base or join the worldwide Avid user community on the User Conference.

https://www.avid.com/US/Support/index.html

For S6L system-specific support, visit:

www.avid.com/S6Lsupport

Training and Education

Study on your own using courses available online, find out how you can learn in a classroom setting at an Avid-certified training center, or view a webinar. For example, check out the live sound webinars hosted by Robert Scovill:

https://www.avid.com/US/resources/live-sound-webinar-registration

Products and Developers

Learn about Avid products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

https://www.avid.com/US/Products/index.html

Activation

You must activate each S6L system component using the Activation Card included in each component's shipping package. Activating your product lets you receive the following:

- VENUE system software and plug-ins
- Technical support
- Software update and upgrade notices
- Hardware warranty information

Conventions Used in This Guide

All of our guides use the following conventions to indicate touch screen gestures and key commands:

Convention	Action
Touch	Touch an element on-screen briefly and immediately release your finger. Used to activate a function or toggle a parameter value.
Swipe	Touch an area on-screen and drag left/right/up/down. Used to scroll elements, where available.
Touch, Hold, and Drag/Slide	On the external VENUE software screen, touch and hold a parameter, then slide your finger to adjust parameters on-screen, or to drag elements.
Touch-and-Hold	On the external VENUE software screen, touching an element on-screen and holding your finger there lets you access pop-up menu option, where available.
Double-Tap	Quickly tap an on-screen element such as a name field to edit its name
Options > System	On the external VENUE software screen, touch Options, then touch the System tab to display the System page.
Shift-touch/Ctrl-touch/Alt-touch	On the external VENUE software screen, press and hold Shift (or other keyboard modifier) on the keyboard, then touch an on-screen parameter.

The names of selectable on-screen elements that contain text are displayed in a different font.

The names of physical switches on the S6L control surface are in displayed **in bold text**.

The following symbols are used to highlight important information:

User Tips are helpful hints for getting the most from your system.

Important Notices include information that could affect your data or the performance of your system.

Shortcuts show you useful keyboard or mouse shortcuts.

Cross References point to related sections in this guide and other VENUE guides.

When Using a Mouse with S6L

For the best experience, Avid recommends you use qualified external monitors with touchscreen capabilities for accessing the external VENUE software screen. When discussing on-screen selections, “touch” is used. If you are using a mouse to control the external VENUE software screen, “touch” is synonymous with “click,” “touch-and-hold” is synonymous with “right-click,” “double-tap” is synonymous with “double-click” and “touch, hold and slide” is synonymous with “click-and-drag.”

How to Use this PDF Guide

This PDF provides the following useful features:

- The Bookmarks on the left serve as a continuously visible table of contents. Click on a subject heading to jump to that page.
- Click a + symbol to expand that heading to show subheadings. Click the – symbol to collapse a subheading.
- The Table of Contents provides active links to their pages. Select the hand cursor, allow it to hover over the heading until it turns into a finger. Then click to locate to that subject and page.
- All cross references in **blue** are active links. Click to follow the reference.
- Select Find from the Edit menu to search for a subject.
- When viewing this PDF on an iPad, it is recommended that you open the file using iBooks to take advantage of active links within the document. When viewing the PDF in Safari, touch the screen, then touch Open in “iBooks”

S6L Control Surface Overview

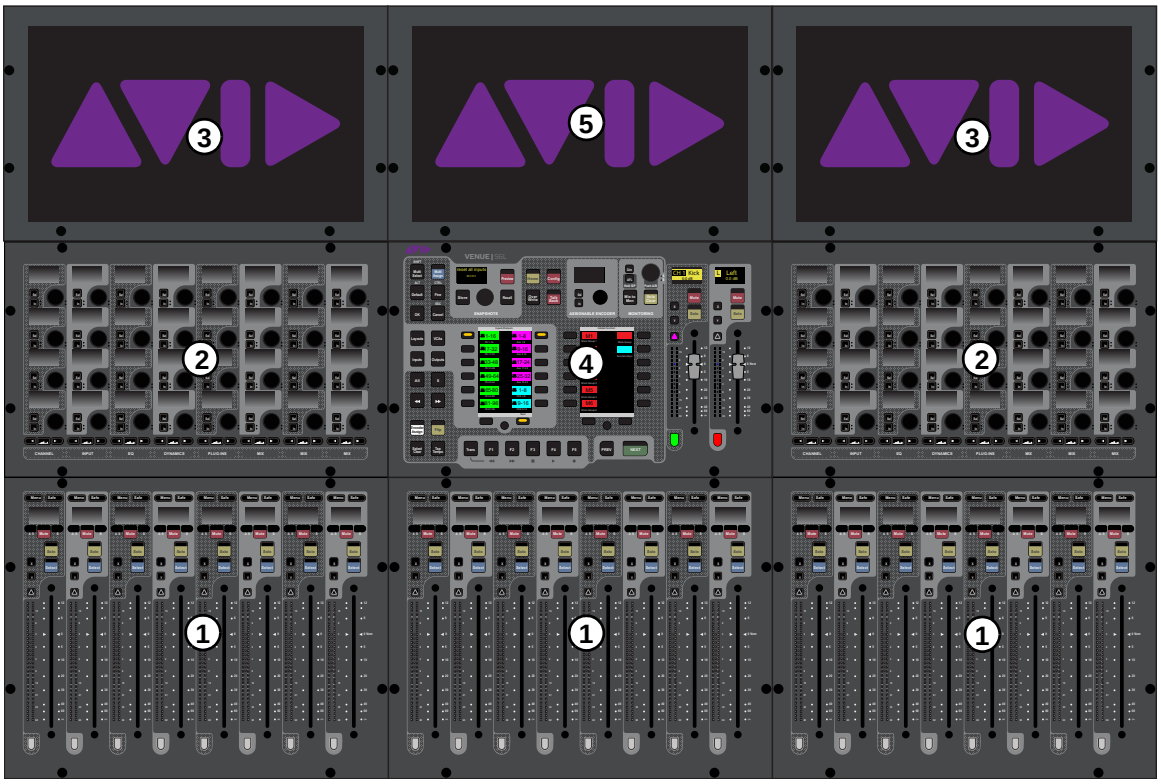
The section provides an overview of S6L control surface controls, and front and back panel audio, control, and power connections.

S6L Control Surface Top Panel Overview

The S6L control surface is available in three models, S6L-32D, S6L-24D, and S6L-24. The available controls are common across all models, and only vary in quantity between models.

S6L is oriented vertically. Each fader bank (except the fader bank under the Master Live Module) is operationally associated with the Channel Knob Module and the Channel Touch Module (if present) above it. All three operate in unison: bank channels to a fader bank, select a banked channel, adjust that channel's parameters on the associated Channel Knob Module, and view the banked channels' parameters on the associated Channel Touch Module. You can also select a channel from a Channel Touch Module and adjust its parameters on the associated Channel Knob Module.

The Master Live Module, in the center of the control surface, provides control over global system parameters such as channel banking, snapshots and monitoring. The Master Touch Screen, above the Master Live Module, provides access to all system channels (via Universe view), and to parameters for the currently Attentioned channel (via Channel view).



S6L top panel (S6L-24D shown)

1 – Fader Banks

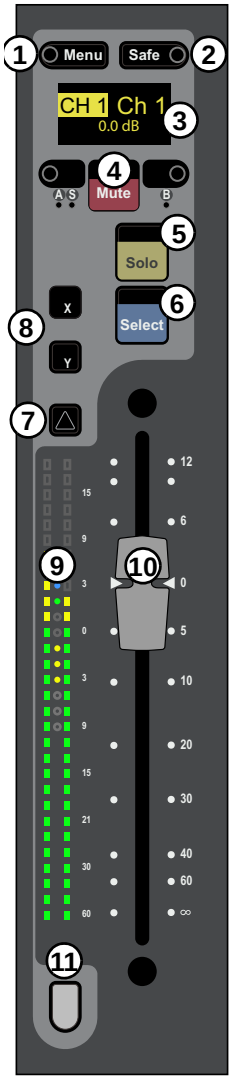
2 – Channel Knob Modules (CKM)

3 – Channel Touch Module (CTM)

4 – Master Live Module (MLM)

5 – Master Touch Screen (MTS)

Fader Banks



Each fader bank provides eight channel strips to control input or output channels, depending on the type of channels banked to the faders. Each channel strip provides the following controls and indicators:

1 – Channel Menu

2 – Channel Safe

3 – Channel Display

4 – Mute

5 – Solo

6 – Select

7 – Attention

8 – X and Y Switches

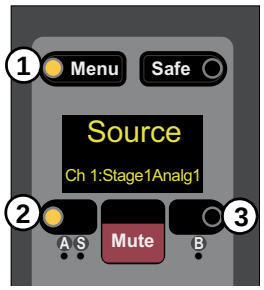
9 – Channel and Gain Reduction Meters

10 – Fader

11 – Channel Color Switch

Channel Menu

The Channel Menu provides several pages of parameters that apply to the banked channel. The **Menu** switch (“1” in the figure below) enables the Channel Menu, which is shown in the channel display. The Left and Right Menu switches (2 and 3 in the figure below) toggle the currently displayed Channel Menu parameter.



S6L Channel Menu

To use the Channel Menu:

1. Press **Menu** so it lights. The first page of the Channel Menu appears in the channel display.
2. Press **Menu** again to cycle through the available pages of Channel Menu options.
3. To toggle the parameter currently shown in the channel display, press the Left and Right Menu switches, as available. Each Menu switch has an LED that lights when the associated parameter is enabled.

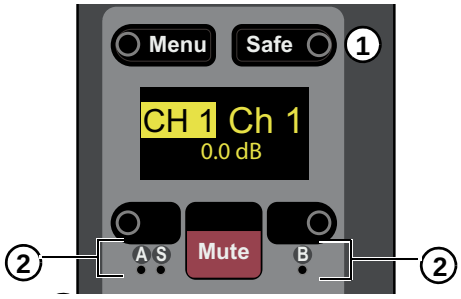
   The following table provides a description of each Channel Menu page and the function of the Left and Right Menu switches for each page:

Channel Menu Page	Parameter	Left Menu Switch	Right Menu Switch
Source/Destination	For an input channel, show and toggle channel source. For an output channel, show channel destination.	For input channels, enables the hardware input patched to the channel in the Patchbay as the source	For input channels, enables the corresponding Pro Tools Virtual Soundcheck input as the source for the channel
Monitor	Show and route channel Solo to Monitor bus A and/or B.	Routes the channel Solo to Monitor Bus A*	Routes the channel’s Solo to Monitor Bus B*
Safe Mode	Engage a Safe mode not targeted as the global safe mode.	Engages Safe (automation, solo or bank)	Engages Safe (automation, solo or bank)

** By default, channel Solo is routed to Monitor bus A. When Monitor A and B are selected, the channel is assigned to both Monitor busses, both Menu switch LEDs are lit and “Mon A+B” appears in the Channel Menu Monitor page. For more information, see* **Routing Channels to the Monitor Busses**.

Channel Safe

Each channel strip provides a dedicated Channel Safe switch that lets you Automation, Solo (input channels only), or Bank Safe the currently banked channel. The Safe mode engaged by the Channel Safe switch is defined globally for input and output channels in the Channel Safe Switches section of the Options > Interaction page of the external screen, (see **Interaction** for more information).



S6L Channel Menu controls

The channel strip provides the following Channel Safe controls and indicators:

1 – Safe

The **Safe** switch toggles safe on the channel.

2 – Safe LEDs

These LEDs light to indicate channel safe status, as follows:

- When **A** lights green, Automation Safe is enabled.
- When **S** lights yellow, Solo Safe is enabled.
- When **B** lights green, Bank Safe is enabled.

You can also safe channels using the Channel Knob Modules (CKM) and the Channel Menu. For more information see **Managing Snapshots**, **Bank Safing Channels** *and* **Solo Safing Channels**.

Channel Display

The channel display shows information for the currently banked channel such as the channel number and/or name and the current level in dB for the banked channel. The Channel, or a Channel Menu page if **Menu** is engaged.

Mute

Mute *explicitly mutes* the channel, removing the channel's audio signal from any post-mute audio path, including L-R, C/Mono busses, Groups, post-fader Direct Outs, and any post fader Aux sends, and lights solid red when engaged.

A channel can be implicitly muted, for example, when it is muted as part of a Mute Group or VCA. See **Muting and Mute Groups** *for more information. When a channel is implicitly muted, the Mute switch flashes red. Pressing* **Mute** *when a channel is implicitly muted toggles the channel into or out of mute.*

Solo

Solo sends the channel's audio signal to the Monitor busses (when in AFL or PFL solo mode) or mutes all un-soloed input channels (when in SIP solo mode). The S6L system provides two discrete Monitor busses, which can be configured to feed either or both headphone outputs, and any number of system hardware outputs. See **Soloing and the Monitor Busses** for more information.

Select

Select selects a channel *locally*, targeting the channel for processing using the 32 encoders on the associated Channel Knob Module (CKM)–the bank of 32 encoders above the fader bank from which you selected the channel. From the CKM you can access channel processing functions such as EQ and dynamics via Channel Control mode (see **Channel Control Mode** for more information).

Select also highlights that channel on the associated Channel Touch Module (CTM)–the screen in line with the fader bank from which you selected the channel. You can select multiple channels for batch processing (Multi Select). You can also deselect a channel, which enables Channel Strip mode on the associated CKM (see **Channel Strip Mode** for more information).

Selecting a channel banked to the fader bank below the Master Live Module targets the channel to the rightmost CKM and CTM.

Attention

Attention attentions a channel *globally*, targeting the channel to the Master Touch Screen (MTS) and by default to Flex Channel A on the Master Live Module (see **Flex Channels** for more information). Attention lets you focus on an important channel on the MTS and a Flex Channel, keeping it visible and accessible at all times, while still allowing you to select other channels from the fader banks (using **Select**) and adjust their parameters on their respective CKMs and CTMs.

Attention also targets the respective channel on the external screen, from which you can view and adjust the attentioned channel's parameters. You can also select multiple channels using **Attention** and apply an action to all selected channels at once, such as applying a high-pass filter to multiple channels at the same time (Multi-Select).

You can also attention channels by touching a channel tile on Master Touch Screen (MTS). See **Master Touch Screen (MTS)** *for more information.*

For more information on selecting and attentioning channels, see **Selecting Channels**.

X and Y Switches

The X and Y switches provide convenient single-switch controls for the associated channel's built-in dynamics processors, as follows:

X Toggles Expander/Gate on/off. Its LED lights when the Exp/Gate is on. This applies to input channels only.

X Toggles Compressor/Limiter on/off. Its LED lights when the Comp/Lim is on.

Channel and Gain Reduction Meters

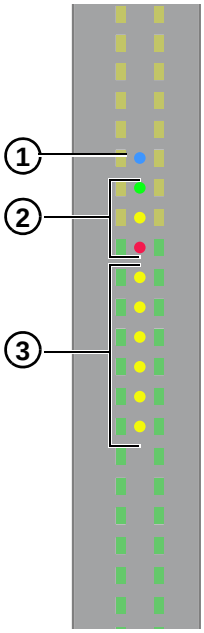
Each channel strip features dual 30-segment signal level meters and a dedicated 10-segment dynamics meter.

Channel Level Meter

For mono channels, only the left meter shows level. For stereo channels, both meters show signal level. The pickoff point for the input and output channel meters is set on the Options > Interaction page. See **Metering** for information.

Dynamics Meter

The channel dynamics meter, located between the two channel level meters, show gate activity, gain reduction, and also provides a 0 dB indicator.



1 – 0 dB Indicator

The 0 dB indicator LED lights blue when the respective fader is at 0 dB, and remains lit even when Flip to Faders and/or GEQ on Faders are enabled. VCA contribution also affects the state of the 0 dB indicator.

2 – Gate Meter

The gate meter provides indication of the corresponding channel's built-in expander/gate via three LEDs, which light to indicate gate activity as follows:

LED	LED Color	Expander Status	Gate Status
1 (Top)	Green	0 dB gain reduction	Gate Open & Hold
2	Yellow	3 dB gain reduction	Gate Released
3 (Bottom)	Red	>21 dB gain reduction	Gate Closed
No LED illuminated		Not in circuit	

3 – Gain Reduction Meter

The gain reduction meter provides indication of gain reduction applied by the channel's built-in compressor/limiter via six LEDs, and light to indicate comp/lim activity as follows:

LED	LED Color	LED illuminates at...	LED at full brightness at...
1 (top)	Yellow	>0 dB gain reduction	1.5 dB gain reduction
2	Yellow	>1.5 dB gain reduction	3 dB gain reduction
3	Yellow	>3 dB gain reduction	6 dB gain reduction
4	Yellow	>6 dB gain reduction	9 dB gain reduction
5	Yellow	>9 dB gain reduction	15 dB gain reduction
6 (bottom)	Yellow	>15 dB gain reduction	21 dB gain reduction
No LED illuminated		Not in circuit	

Fader

The fader controls the output level for the currently banked input or output channel. When Flip to Faders is active, the fader controls the send level of the parameter currently flipped to faders (see **Flip** for more information).

You can set a preference so that touching a fader automatically attentions that channel. See **Channel Selection** *for more information.*

Channel Color Switch

This switch lights in the color as defined in the external VENUE software (see **Color-Coding Channels from the External Screen**) and/or from the Master Touch Screen (see **Color-Coding Channel from the MTS**).

Channel Knob Modules (CKM)

Each Channel Knob Module provides channel parameter control via 32 dual-function encoders that provide switch and rotary functions. Each CKM is associated to the bank of eight faders below it, and the Channel Touch Module above it (if present). The CKM operates in one of the following modes: Channel Strip mode or Channel Control mode.

1 – Encoder Display

The encoder display shows the parameter that is currently spilled to the encoder and the actual value of the parameter (such as dB level for gain or frequency of an EQ frequency band). The display also shows a “virtual” encoder, which shows the position of the encoder relative to the parameter value. For gain parameters, the virtual encoder surround fills in to indicate level. For bus assign parameters, the encoder surround fills in completely when the corresponding channel is assigned, and is empty (black) when the channel is unassigned.

2 – Sel

Sel assigns a secondary parameter to the corresponding encoder, or toggles a secondary function of the current parameter, where available.

3 – In

In toggles an individual parameter on/off, where available. For example, when EQ is assigned to the CKM, pressing the **In** switch for the knob controlling Lo band gain toggles that filter in/out. The switch lights when the parameter is enabled (in).

4 – Encoder

Rotating the encoder adjusts the currently assigned parameter, as shown in the encoder display. For certain parameters, pressing the encoder toggles the parameter on/off (such as the Hi Gain parameter when EQ is assigned). Encoders are color-coded by function. See **Encoder Color Coding** for more information.

5 – Channel Control Function Switch

The Channel Control Function switch assigns a group of parameters for the currently selected channel to the 32 encoders on the CKM. See **Channel Control Functions** for more information.

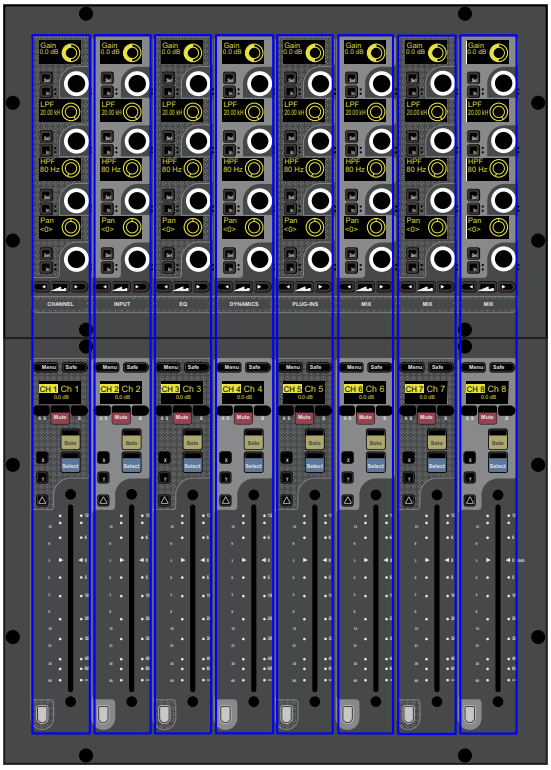
6 – Parameter Bank Switches

The Left and Right Parameter Bank switches let you assign the next or previous page of parameters to the encoders, and are available in both Channel Strip and Channel Control modes. A switch lights when there is a previous or next page of parameters to access.

Channel Strip Mode

When no channels are selected from the corresponding fader bank, the CKM operates in Channel Strip mode. In Channel Strip mode, parameters are assigned to the CKM's encoders in a *vertical* orientation. Each column of four knobs corresponds to the channel currently banked to the channel strip below it, and adjusting any knob in the row applies to that channel.

Channel Strip mode provides a selection of parameters from the different channel processing functions across five pages, accessed using the Parameter Bank switches, as shown in the following two tables:



Channel Strip mode input channel parameters per page

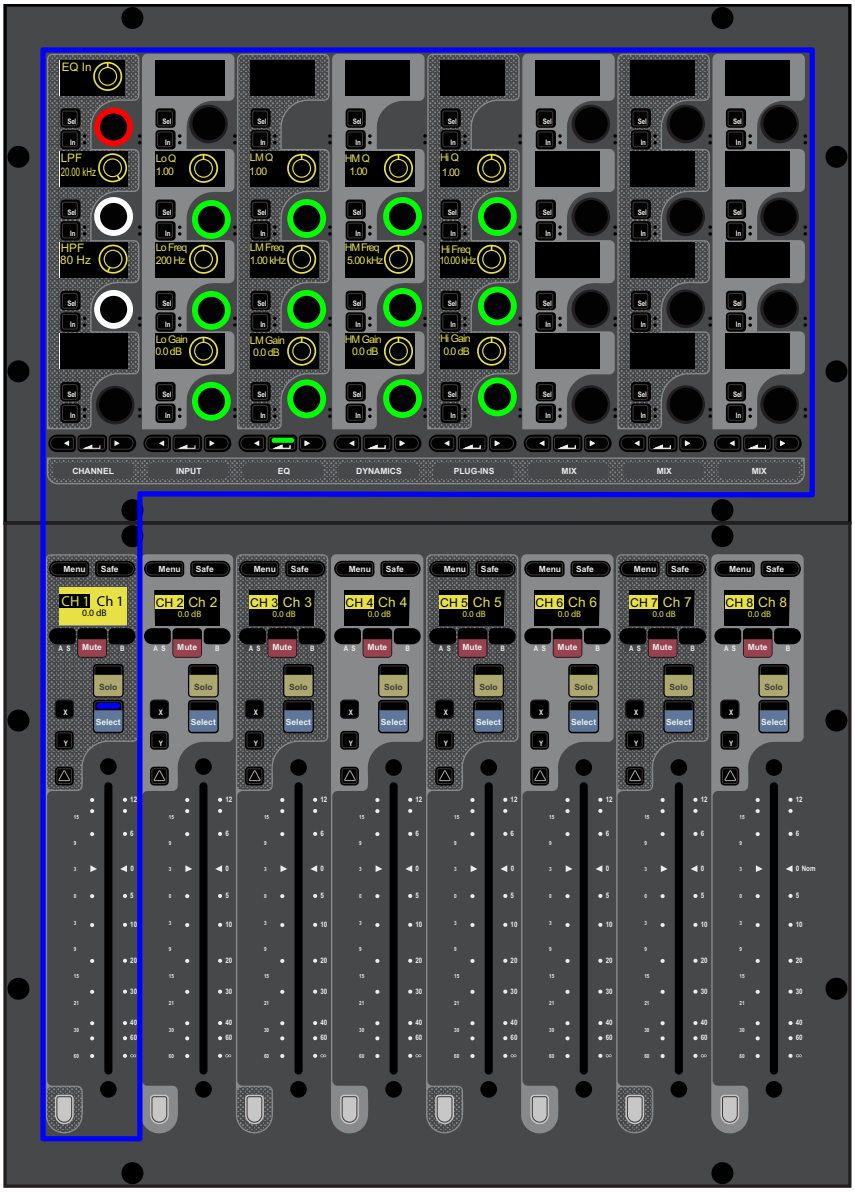
CKM Encoder	Page 1	Page 2	Page 3	Page 4	Page 5 (Default)
1 (top)	Gain	EQ Hi Gain	Comp Threshold	Gate Threshold	Aux 1
2	LPF	EQ Hi Mid Gain	Comp Ratio	Gate Attack	Aux 2
3	HPF	EQ Lo Mid Gain	Comp Knee	Gate Release	Aux 3
4 (bottom)	Pan (Bal/Width for stereo channels)	EQ Lo Gain	Comp Gain	Gate Range	Aux 4

Channel Strip mode output channel parameters per page

CKM Encoder	Page 1	Page 2	Page 3	Page 4
1 (top)	Polarity	EQ Lo Mid 2 Gain	n/a	Comp Threshold
2	Delay	EQ Lo Mid 1 Gain	EQ Hi Gain	Comp Ratio
3	Direct Out	EQ Lo 2 Gain	EQ Hi Mid 2 Gain	Comp Knee
4 (bottom)	Pan (Bal/Width for stereo channels)	EQ Lo 1 Gain	EQ Hi Mid 1 Gain	Comp Gain

Channel Control Mode

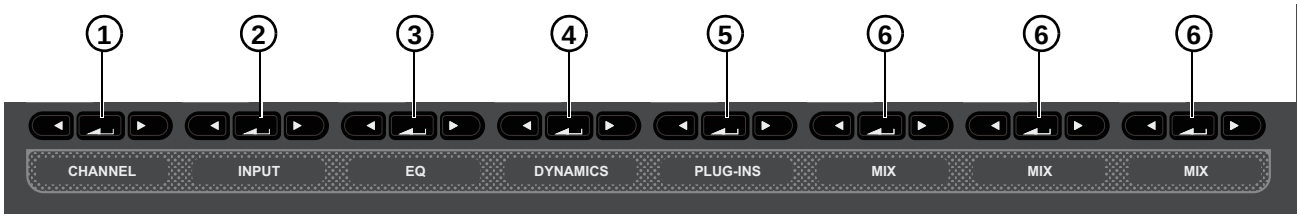
Selecting a channel banked to a fader bank (or touching a parameter touch zone on a Channel Touch Module) enables Channel Control mode on the associated CKM. Channel Control mode provides comprehensive control over parameters such as EQ, Dynamics, plug-ins, and Aux Sends for the currently selected channel. You can also create a custom set of controls for access to 32 assignable parameters. See **Adjusting Channel Parameters** for more information.



S6L in EQ Channel Control mode (input channel EQ parameters shown)

Channel Control Functions

The Channel Control Function switches assign groups of parameters for the currently selected channel to the 32 encoders on the CKM.



CKM Channel Control Function Switches

The labels below each switch indicate the type of parameters assigned to the CKM, as follows:

1 – CHANNEL

CHANNEL spills a variety of channel parameters such as input, EQ, and Dynamics parameters to the CKM, providing a default set of utility parameters for the selected channel. You can also customize the parameters **CHANNEL** spills to the encoders. See **Using the CHANNEL Function** for more information.

2 – INPUT

INPUTS spills parameters such as gain, LPF, HPF, pad, pan, phantom power (48V), polarity, channel delay, channel safes, Direct Out level, input source toggle, and Mains bus assign controls to the CKM. The available parameters depend on the type of channel selected.

3 – EQ

For input channels, **EQ** spills the built-in 4-band EQ plus high- and low-pass filters to the CKM. For output channels, **EQ** spills built-in 7-band EQ plus high- and low-pass filters to the CKM. If a graphic EQ (GEQ) is inserted on an output channel, pressing a lit Parameter Bank switch spills GEQ parameter to the encoders.

4 – DYNAMICS

DYNAMICS spills the built-in Expander/Gate (input channels only) and Compressor/Limiter to the CKM.

5 – PLUG-INS

PLUG-INS assigns four Plug-In Selectors to the leftmost column of encoders, each of which corresponds to one of the four channel Inserts slots. Pressing a Plug-In Selector spills the parameters for that plug-in to the rest of the encoders on the CKM.

6 – MIX

The three **MIX** switches spill Aux, Group, or Matrix Mixer controls to the associated CKM. The type and number of Aux/Group-related parameters the **MIX** switches assign to the CKM is determined by the global Mix Bus configuration as set on the Options > System page (see **System Configuration** for more information).

The **MIX** switches spill the following parameters to the CKM, depending on the type of channel selected:

Aux Sends When you select an input channel, the **MIX** switches spill Aux sends and/or Group bus assignment controls to the CKM. You can assign the channel to Auxes/Groups, and adjust Aux send levels. Each **MIX** switch spills Aux Sends in sets of 32 channels, as available. Groups are always accessed via **MIX** switch three (the rightmost **MIX** switch).

Members When you select a Mains output, an Aux output, a Group output, or a VCA, the **MIX** switches spills the *member* channels (the channels assigned to that bus or VCA) to the CKM, from which you can adjust the contributing levels of the member channels to the selected bus or VCA. Each **MIX** switch spills members in sets of 32 channels, as available.

Matrix Mixers When you select a Matrix Mixer output, pressing any **MIX** switch assigns the available Matrix Mixer input controls to the CKM, letting you turn Matrix Mixer inputs on/off and adjust Matrix Mixer input levels.

Encoder Color Coding

CKM encoders light in colors according to their function or parameter in all encoder modes, as follows:

Function	Color	Parameter	Color
Channel	Parameters light in the color of the function of which each parameter is a member	Group Assign	Orange*
Input	White	Mains L-R Assign	White (Red when In)
EQ	Green	Center/Mono Assign	White (Red when In)
Comp/Lim	Blue	Processor In/Out	Red
Exp/Gate	Yellow	Plug-In Select	Red
Aux Sends/Matrix Inputs	Purple*		

** If you change the color of an Aux or Group output channel, the individual encoders for thatt output channel lights in the assigned color.*

Channel Touch Module (CTM)

The S6L-32D provides three Channel Touch Modules (CTM), and the S6L-24D provides two CTMs. Each CTM is located above a CKM, and is functionally associated with that CKM and the fader bank below it. The CTM provides a local view of the channels banked to the associated fader bank. Using the CTM's touch capabilities, you can select channel functions and spill those parameters to the associated CKM. The CTM provides two views, Meters view and Channel view.

Meters View

Meters view displays parameters for each channel vertically, like a "virtual channel strip." Each strip is composed of parameter touch zones that show the status of certain parameters for the associated channel. Parameters in each touch zone are lit when that parameter is on, and dimmed when off.

Touching a parameter touch zone simultaneously locally selects the corresponding channel *and* assigns the touch zone's parameters to the associated CKM in Channel Control mode. The active zone is indicated by an orange border. Touching an active zone de-selects the corresponding channel. Each virtual channel strip provides the following parameter touch zones:

1 – Meters

This zone shows the associated channel's channel number and name, and level and gain reduction for the channel. Touching this zone changes the view on the CTM to a Channel view of the currently selected channel.

2 – Input

This zone shows a selection of input or output channel parameters. Touching this zone mirrors the function of the **INPUT** Channel Control Function switch

3 – EQ

This zone shows the current EQ curve applied to the channel. Touching this zone mirrors the function of the **EQ** Channel Control Function switch.

4 – Dynamics

This zone shows a composite dynamics graph for the channel. Touching this zone mirrors the function of the **DYNAMICS** Channel Control Function switch.

5 – Plug-Ins

This zone shows the channel's Inserts slots, and any plug-ins inserted in those slots. Touching this zone mirrors the function of the **PLUG-INS** Channel Control Function switch.

6 – Aux Sends/Members/Matrix Mixer Inputs

This zone shows the following, depending on the type of channel banked to the corresponding channel strip:

Aux Sends For input channels, this zone shows the channel's Aux Sends in sets of 32. Each send is represented by a thermometer-style meter showing individual send level and on/off status (lit is on). Touching this zone assigns the set of Aux sends indicated in the display (1–32, 33–64, 65–96, as available) to the associated CKM.

Members This zone shows Aux output, Group output, Mains output, or VCA members (channels assigned to that bus or VCA), their send levels, and on/off status in sets of 32. Touching this zone assigns the set of members indicated in the display (1–32, 33–64, 65–96, as available) to the CKM.

Matrix Mixers For Matrix Mixers, this zone shows Matrix Mixer members (channels assigned to that Matrix Mixer), their input levels, and on/off status. Touching this zone assigns the available Matrix Mixer input controls for the selected Matrix Mixer to the CKM.

Channel View (CTM)

Touching the Meters in Meters views automatically selects that channel and replaces Meters view with Channel view. Channel view provides a complete view of the selected channel's parameters. Parameters in each touch zone are lit when that parameter is on, and dimmed when off. As in Meters view, touching a touch zone assigns its associated parameters to the associated CKM in Channel Control mode. Channel view also provides eight channel tiles, which you can touch to select, providing an uninterrupted on-screen workflow.

CTM Channel view (input channel shown)

1 – Input

This zone shows level and gain reduction meters, as well as a selection of other input parameters. Touching this zone assigns the same parameters to the CKM as the **CHANNEL** Channel Control Function switch.

2 – EQ

This zone shows the current EQ curve applied to the channel by the built-in channel EQ, and its on/off state. For output channels with a graphic EQ inserted, the current GEQ curve is also shown. Touching this zone mirrors the function of the **EQ** Channel Control Function switch.

3 – Dynamics

This zone shows a composite dynamics graph for the channel, and the dynamics processor(s) on/off state(s). Touching this zone mirrors the function of the **DYNAMICS** Channel Control Function switch.

4 – Plug-Ins

This zone shows the channel's Inserts slots, and any plug-ins inserted in those slots, as well as the status of the channel's hardware insert. Touching this zone mirrors the function of the **PLUG-INS** Channel Control Function switch.

5 – Aux Sends/Members/Matrix Mixer

This zone provides an expanded version of the Aux Sends/Members/Matrix Mixer touch zone available in the Meters view. Three touch zones are provided, mirroring the function of the three **MIX** Channel Control Function switches.

6 – Channel Tiles

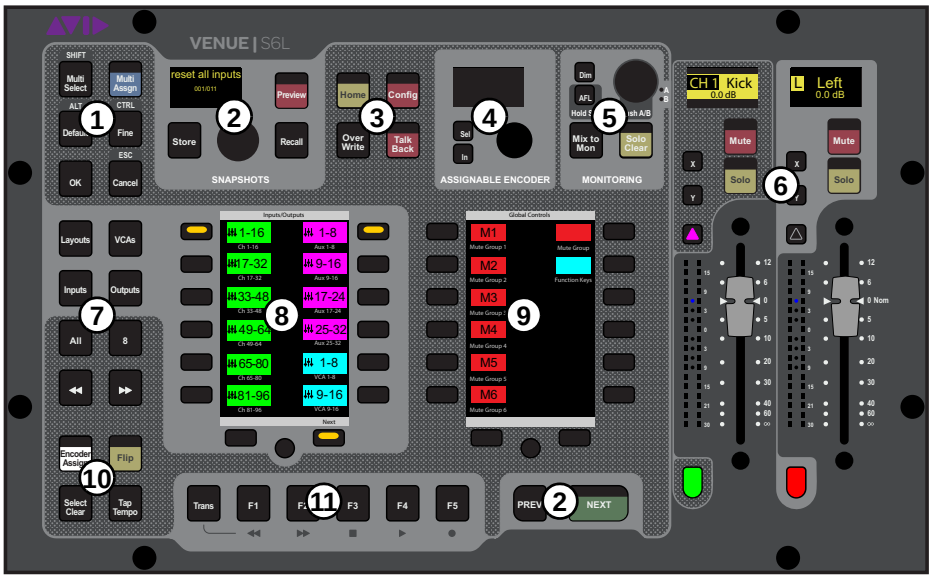
Channel view shows eight channel tiles at a time, mirroring the channels banked to the corresponding fader bank. Each channel tile shows the channel number and name. Touching a channel tile selects that channel, and targets that channel for processing, mirroring the function of the channel strip **Select** switch. When you select a channel, the channel tile is bordered in orange.

7 – Back Button

This button returns the CTM to Meters view.

Master Live Module (MLM)

The Master Live Module is the “center section” of your S6L control surface, providing system-wide controls including fader banking controls, snapshot control, transport control for playback and recording, monitoring, Mute Groups, Function switches, and more. The MLM also provides unique features such as two assignable Flex Faders, and two banks of Soft Keys, each featuring a display and associated Soft Keys and navigation switches.



Master Live Module (MLM)

The MLM provides the following controls and indicators:

1 – Global Modifiers

2 – Snapshot Controls

3 – System Functions

4 – Assignable Encoder

5 – Monitoring Section

6 – Flex Channels

7 – Fader Banking Controls

8 – Left Soft Keys

9 – Right Soft Keys

10 – CKM Control Switches

11 – Transport/Function Switches

Global Modifiers

Multi-Select (Shift)

Multi-Select lets you select or attention multiple channels, and then apply an action to all selected/attentioned channels for batch routing and assignment. For more information see **Selecting/Attentioning Multiple Channels (Multi-Select)**. You can also use Multi-Select to select multiple consecutive items in the Snapshots list.

To Multi-Select on the external screen, press the Shift key on the keyboard and select the items on-screen.

Multi-Assign

Multi-Assign Lets you quickly assign multiple input channels to a selected bus or VCA. See **Assigning Channels Using Multi-Assign**.

Default (Alt)

Default provides a quick way to reset a control to its default setting (or "zero" the setting), such as resetting a fader to 0 dB.

To reset a fader to 0 dB:

- Hold **Default** and do any of the following on the channel strip for the channel you want to reset:
  - Touch the fader.
  - Press **Select** or **Attention**.

To reset a single parameter:

- Hold **Default** and press the encoder for the parameter you want to reset, where applicable.

To reset all parameters of a built-in channel EQ, Expander/Gate, or Compressor/Limiter processor:

- Hold Default and do the following:
  - Press the EQ In encoder to reset the EQ.
  - Press the E/G In encoder to reset the Expander/Gate.
  - Press the C/L In encoder to reset the built-in Compressor/Limiter.

To reset an Aux send to 0 dB and turn the send off:

- Hold **Default** and press the encoder for the Aux send you want to reset.

To reset a parameter on the external screen, press the Alt key on the keyboard and select the parameter on-screen.

Fine (Ctrl)

Fine lets you adjust controls (except for faders) on the console or on-screen with maximum resolution. For example, if by default a control adjusts a parameter in units of 1 dB, the Fine switch allows adjustment in units of 0.1 dB.

You can also use **Fine** to select multiple non-consecutive items in the Snapshots list.

To adjust a control with fine resolution:

- Press and hold **Fine** while moving a control. The display associated with the adjusted control will show the values change at the corresponding resolution.

To adjust a control with fine resolution on the external screen, press Ctrl on the keyboard and adjust the parameter on-screen.

Momentary and Latching Modes

Fine supports momentary and latching operation.

Momentary In momentary mode, **Fine** stays in effect for as long as you hold down that modifier switch.

Latching In latching mode, **Fine** stays in effect until you explicitly clear its active state.

To use Fine in momentary mode:

1. Press and hold **Fine**.
2. Adjust a channel, parameter, or processor.
3. Release **Fine**.

To use Fine in latching mode:

1. Double-press **Fine**. The switch LED lights.
2. Select or adjust one or more channels, parameters, or processors.
3. Press **Fine** again to exit latching mode.

OK

OK confirms the current operation, such as confirming assignments made in Multi-Select mode, or dismisses dialogs such as the Waiting for Device dialog.

Cancel (Esc)

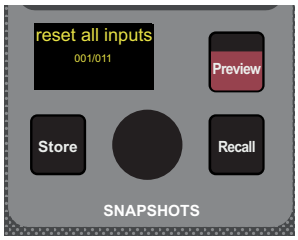
Cancel exits the current operation, such as exiting Multi-Select mod. Holding cancel also unlocks the system if it has been locked.

Snapshot Controls

The S6L control surface provides Snapshot controls in two locations on the MLM: in the Snapshots section and the Prev/Next switches, below the right-hand MLM display. For more information on using Snapshots, see **Snapshots**.

Snapshots Section

You can target (select), store, recall, and preview snapshots using the controls in this section.



Snapshots section

Select Encoder and Displays Turning the select encoder scrolls through and selects the targeted snapshot in the Snapshots list. The displays show the number and name of the currently targeted snapshot.

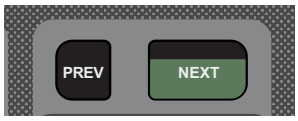
Store Saves the current state of all console parameters in the targeted snapshot. This switch mirrors the Store button on the Snapshots page.

Recall Loads the targeted snapshot. This switch mirrors the Recall button on the Snapshots page.

Preview Enables Snapshot Preview mode, and mirrors the Preview button on the Snapshots page. Preview mode lets you recall, store and edit snapshots without affecting the current mix. See **Preview Mode** for more information.

Prev/Next Switches

These switches instantly recall the previous or next snapshot in the Snapshots list. The switches are lit when there is a previous or next snapshot to recall.



Prev/Next Snapshot switches

System Functions

The switches in this section provide control over a variety of system-wide functions.

System Function switches

Home

Home lets you quickly return the control surface and all screens to their default states and view, but does not reset any parameters, as follows:

- Channel 1 is attentioned
- Channels are banked to the default split banking mode (where inputs are banked to outside fader banks and outputs are banked to the center fader bank, under the MLM),
- All channels are deselected and all CKMs revert to Channel Strip mode
- All CTMs show Meters view
- The MTS shows the Universe > Inputs view
- The external screen shows the Inputs page
- The Flex Channels are reset to their default assignments (attentioned channel and Mains)

Config

Config toggles the system between Config and Show modes. Use Config mode when configuring your system (for example, when changing Bus configurations). Use Show mode during performances. For more information see **Enabling Config Mode**. **Config** lights when Config mode is enabled.

Over Write

Over Write lets you quickly overwrite the currently loaded Show file with the system's current settings. For more information on working with Show files, see **Overwriting (Updating) a Show File**.

⚠ *Overwrite replaces the currently loaded Show file with your current system settings. If you do not want to overwrite the currently loaded Show file, you must create a new Show file and save it. See* **Creating Shows** *for more information.*

Talkback

Talkback turns the Talkback circuit on, and operates in momentary (press-and-hold) and latching (double-press) modes.

Talkback is routed using the Options > Misc page of the external screen. See **Talkback** *for more information.*

Assignable Encoder

This encoder and associated display are reserved for future use.

Monitoring Section

The S6L system provides two discrete Monitor busses (Monitor bus A and B). The Monitoring section provide controls for the currently targeted Monitor bus.

Monitoring section

Monitoring Encoder

The monitoring encoder lets you target a Monitor bus for control and provides level control for the targeted Monitor bus, as follows:

◆ Push the encoder to toggle the controls in the Monitor section between Monitor bus A and B. The A or B LED lights to indicate the currently targeted Monitor bus.

◆ Rotate the encoder to adjust the level for the targeted Monitor bus.

Dim

This button is reserved for future use.

AFL/Hold SIP

◆ **AFL** enables after-fader-listen (AFL) mode on the currently targeted Monitor bus.

◆ Pressing and holding **AFL** temporarily engages solo-in-place (SIP) mode.

⚠ *SIP mode interrupts audio on the Main bus. Do not engage SIP during a performance.*

Mix to Monitors

Sends the Main mix signal to the targeted Monitor bus. When enabled (lit), the Main mix is present in the headphones (or other device connected to a hardware output to which the Monitor bus is routed) whenever channels are not soloed.

Solo Clear

Solo Clear Flashes when one or more channels are soloed, and does the following when pressed:

- A single press clears any solos on the currently targeted monitor bus.
- A double press clears all soloed channels.

Flex Channels

Two Flex Channels provide access to channels irrespective of the active fader layout or bank. You can configure the Flex Channels in the Fader Configuration section of the Options > Interaction page of the external screen. See **Fader Configuration** information on customizing the Flex Channels.

By default, enabling a channel's **Attention** switch assigns that channel to Flex Channel 1 left), and a single fader controlling Mains Left and Right is assigned to Flex Channel 2 (right).

Each Flex Channel provides the following features:

Display Shows the channel number and name of the currently assigned channel.

Mute Mutes the currently assigned channel, and follows global Mute settings.

Solo Solos the currently assigned channel, and follows global Solo settings.

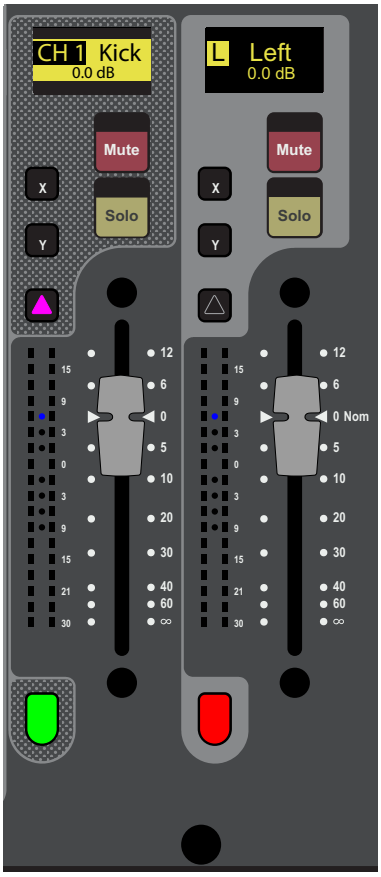
X and Y Switches Mirror the functionality of the attentioned channel's **X** and **Y** switches.

Attention Mirrors the functionality of the **Attention** switch on the channel strips.

Fader Adjusts the level for the currently assigned channel.

Channel and Dynamics Meters Show the channel level and gain reduction for the assigned channel via 18-segment and 4-segment LED ladders, respectively.

Channel Color Switch Mirrors the function of the Channel Color switch for the currently assigned channel, and lights according to the channel's assigned color-coding.



Flex Channels 1 (left) and 2 (right) showing default assignments

Latching a Channel to a Flex Channel

When a Flex Channel is set to the Attentioned Channel option, you can "latch" the attentioned channel to the respective Flex Channel. When you latch a channel to a Flex Channel, attentioning another channel or banking to other channels does not change the assignment of the Flex Channel, letting you keep constant control over your most important channel.

To latch a channel to the Flex Channel from the control surface:

- Double-press the channel strip **Attention** switch for the channel you want to latch to the Flex Channel.

To latch a channel to the Flex Channel from the external screen:

1. Go to the Inputs or Outputs page.
2. Touch and hold (right-click) a fader strip.
3. Choose Latch <"channel name/"number>.

To unlatch the Flex Channel:

- Double-press the latched channel's **Attention** switch. Pressing Attention on another channel now assigns that channel to the Flex Channel.

  – or –

- From the external screen, touch and hold he latched channel and choose Unlatch <"channel name/"number>.

Fader Banking Controls

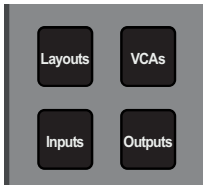
S6L lets you bank channels to faders in a variety of ways. By default, channels are banked to S6L faders in a "split" banking configuration. Input channels are banked sequentially to the fader banks below CKMs and CTMs, and output channels are banked to the fader bank below the MLM. The Left Soft Keys display shows pre-defined banks of channels, which you can bank to faders using the associated Soft Keys.

The two groups of switches in this section, the Fader Bank Mode switches and the Horizontal Banking switches, provide an alternate banking mode that let you bank only the selected channel types to all the faders on the control surface, then nudge them left or right.

See **Banking Channels on the S6L Control Surface** *or more information.*

Fader Bank Mode Switches

The Fader Bank Mode switches (**Layouts**, **VCAs**, **Inputs**, and **Outputs)** enable Fader Bank Mode, which banks only those respective channel types to all the faders of the control surface (except Flex Channels). The Left Soft Keys display shows banks of channels containing only the types of channels provided by the selected channel type, which you can select by pressing a corresponding Soft Key. Deselecting the active Fader Banking Mode switch returns the faders to the most recent split banking configuration.



Fader Banking Mode switches

Each switch lets you bank only the following channel types to the faders using the associated Soft Keys:

Layouts Banks a custom fader configuration ("Layout") to all faders on the S6L control surface. See **User Layouts** for more information on creating and using Layouts.

VCAs Banks only VCAs to all faders.

Inputs Banks only input channels to all faders.

Outputs Banks only output channels to all faders.

Horizontal Banking Switches

These switches provide horizontal banking of channels ("nudging"), and are available only when you have enabled one of the Fader Banking Mode switches.

Fader Banking Navigation switches

<<, >> Nudges channels to the left or right by one channel.

All When **All** is enabled, the **<<** and **>>** switches move all channels 24 or 32 channels to the right or left, depending on your control surface. For example, if input channels 1–24 are banked to all faders on an S6L-24D, pressing **>>** when **All** is enabled banks input channels 25–48 to the faders.

8 When **8** is enabled, the **<<** and **>>** switches move all channels eight channels (one bank) to the right or left. For example, if input channels 1–24 are banked to all faders on an S6L-24D, pressing **>>** when **8** is enabled banks input channels 9-16 to the left fader bank, input channels 17–24 to the center bank, and channels 25–32 to the right bank.

Left Soft Keys

Fader Banking Controls

The Left Soft Keys provide access to pre-defined fader bank layouts, as well as custom layouts. The display shows the available fader bank layouts across multiple pages. Pressing a corresponding Soft Key banks the channels indicated in the display to the faders. The available fader layouts vary depending on whether or not a Fader Banking Mode switch is enabled.

Right Soft Keys

Mute Groups and Functions

The Right Soft Keys provide access to Mute Groups and programmable Functions. Pressing a corresponding Soft Key enables that Mute Group or Function.

Mute Groups

The S6L system provides 24 Mute Groups, which let you mute groups of channels with the press of a single Soft Key. Add channels to Mute Groups using the Mutes Channel Type button on the Master Touch Screen (MTS).

See **Muting and Mute Groups** *for more information.*

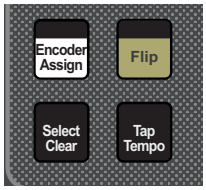
Functions

Customizable Functions let you control a wide range of console parameters with the press of a Soft Key. Assign actions to Functions using events, available on the Events tab (Media > Events) of the external VENUE software screen.

See **Events** *for more information.*

CKM Control Switches

These switches primarily control functions associated with the CKMs.



CKM control switches

Encoder Assign

This encoder is reserved for future use.

Flip

Flip to Faders

Flip enables Flip to Faders mode on the control surface for input channels. Flip to Faders lets you flip any Channel Strip mode parameter to the faders on the control surface, temporarily replacing the channel level control with the currently targeted parameter. See **Flipping Parameters to Faders (Flip to Faders Mode)**.

You can also flip Aux sends to faders using Sends on Faders mode. When Sends on Faders is enabled, soloing an Aux output assigns Aux Send level controls for the soloed Aux output to the faders. See **Adjusting Aux Sends on Faders (Sends on Faders Mode)**.

Select Clear

Clears all selected channels and returns all CKMs to Channel Strip mode.

Tap Tempo

Sets the system tempo for use as a beat clock for delay and echo plug-ins that support Tempo Sync. The switch blinks in time with the system tempo. For more information see **Tap Tempo for Plug-ins**.

Transport/Function Switches

These dual-function switches provide dedicated switches to control the Pro Tools Transport, as well as programmable function switches that you can use to control a wide range of system parameters using events (see **Events** for more information).

You must enable VENUE Link on your S6L system and in Pro Tools to use the transport controls. See **Enabling VENUE Link** *for more information.*

Transport controls

The following switches are provided:

Trans Toggles the F1–F5 switches between control of events and the Pro Tools Transport.

When unlit, by default the switches target pages on the external screen, as follows:

F1 Targets the Inputs page.

F2 Targets the Outputs page.

F3 Targets the Snapshots page.

F4 Targets the Plug-Ins page.

F5 Targets the Media page.

When lit, Pro Tools Transport controls are active, and provide the following functionality:

F1 Locates to the cursor to previous marker in the Pro Tools timeline.

F2 Locates to the cursor to next marker in the Pro Tools timeline.

F3 Stops the Pro Tools Transport.

F4 Initiates playback in the Pro Tools Transport.

F5 Arms the Pro Tools transport *and* initiates recording.

Master Touch Screen (MTS)

All S6L control surface models feature a Master Touch Screen (MTS). Located above the Master Live Module, the MTS provides a global view of S6L system channels, and can also provide a targeted view of the currently attentioned channel. Using the touch capabilities of the MTS, you can also perform channel actions such as attentioning, soloing and muting channels irrespective of the active fader layout or bank, as well as assign channels to custom fader layouts.

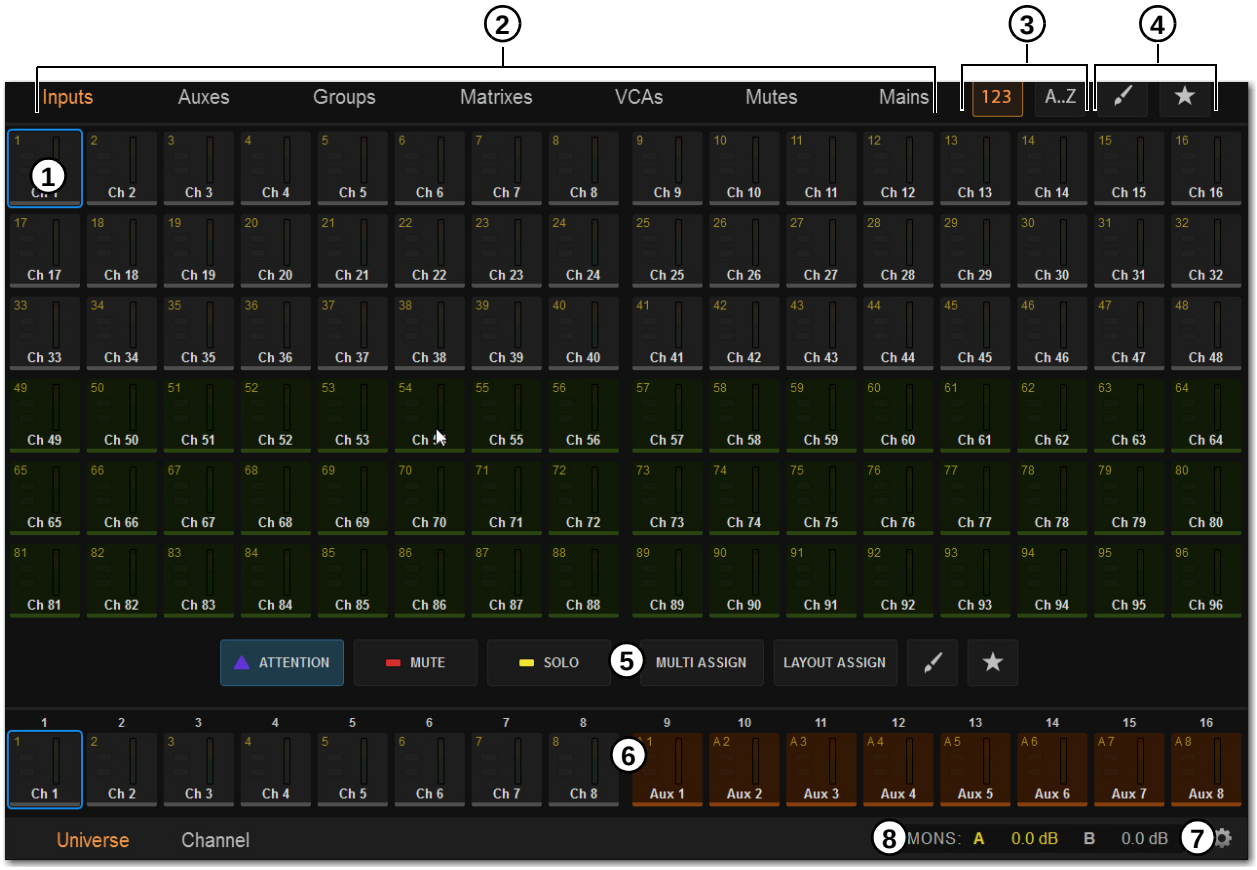
The MTS provides two views, the Universe view and the Channel view.

Universe View

Universe view displays a bank of up to 96 *channel tiles* at a time in six rows of 16 channels each. You can navigate to additional channel tiles by swiping vertically. You can attention tracks, and enable or disable solo and mute from the Universe view, as well as target different channel types to the screen. Universe view also lets you “favorite” channels and sort channels that appear on the screen by number, name, color, and favorite status.

To access Universe view:

- Tap Universe at the bottom of the MTS so it lights orange.



MTS Channel view

Basics of Using the MTS Universe

- Touch a Channel Type button (2) to show those channels on the MTS.
- Touch a Channel Tile Function button (5) so it lights to activate that function for the Channel Tiles (1).
- Touch a Channel Tile (1) to Attention, Mute, or Solo that channel, depending on the active Channel Tile Function button.
- Touch a Channel Tile Filter button (3) to order channels numerically by channel number, or alphabetically by channel name.

The Universe view provides the following on-screen elements.

1 – Channel Tile

Each channel on your system has a corresponding channel tile in the MTS Universe. Each channel tile shows the channel's number and name, as well as its current attention, mute solo, and favorite status. A level meter is also provided.

- Touching a channel tile engages the currently selected track function for that track, as determined by the Track Function buttons.
- Double-tapping a channel tile targets that channel in the MTS Channel view.
- To access more channel tiles than are shown, swipe vertically on the MTS. Depending on the channel type selected, more channels may or may not be available.

2 – Channel Type Buttons

Touching one of these buttons shows only the channel tiles for the selected channel type. Only one of these buttons can be selected at a time, and lights orange when active.

3 – Channel Tile Sort By Buttons

These buttons sort the channel tiles in the MTS Universe. One of these buttons is active at all times. Touching one of these buttons sorts channels as follows:

123 When enabled, orders channel tiles by number.

A...Z When enabled, orders channel tiles alphabetically.

4 – Channel Tile Filters

These buttons filter the channels tiles shown in the MTS. Touching one of these buttons so it lights sorts the channel tiles in the MTS Universe as follows:

Channel Color Filter (Brush) When enabled, shows channel tiles according to the color selected in the pop-up. Channels have default color-codings, which you can change. For more information see **Color-Coding Channel from the MTS**.

You can also color-code channels in the external VENUE software (see **Color-Coding Channels from the External Screen***).*

Favorites Filter (Star) When enabled, shows only the channel tiles you have designated as favorites using the Star (Favorite Assign) Track Function button.

5 – Channel Tile Function Buttons

Channel Tile Function buttons determine what happens when you touch a track tile. When you select a Channel Tile Function button, touching a track tile engages the selected function for that track, as follows:

Attention Mirrors the function of the channel strip **Attention** switch.

Mute Mirrors the function of the channel strip **Mute** switch.

Solo Mirrors the function of the channel strip **Solo** switch, and adheres to global Solo settings as defined in the Options > Busses page of the external screen.

Multi-Assign Mirrors the functionality of the Multi-Assign switch on the MLM and in the external screen.

Layout Assign Lets you assign channels to a custom fader bank configuration called a "Layout." See **User Layouts** for more information on creating and using Layouts.

Channel Color Assign (Brush) Lets you color code channels directly from the MTS. See **Color-Coding Channel from the MTS**.

Favorites Assign (Star) Lets you designate one or more channels as favorites, which you can then filter in the MTS Universe view using the Favorite (Star icon) Channel Filter button.

To favorite a channel:

1. Tap the Favorite Assign (Star icon) Track Function button on the MTS so it lights.
2. Tap any channel tiles you want to favorite. A star appears in each channel tile that is designated as a favorite.
3. When finished, touch the Favorite Assign button again so it is unlit, or touch another Function Assign button.

To show only favorite channel tiles in the MTS:

1. Assign the desired channels to the channel tiles by touching a Channel Type button.
2. Tap the Favorite (Star icon) Channel Tile Filter button.

6 – Universe Scroller

The Universe Scroller shows channel tiles for the channels currently banked to the S6L channel strips. Swipe horizontally to view additional channels.

7 – Control Surface Configuration (Gear Icon)

This icon provides access to the Control Surface Configuration page. Only access this page for troubleshooting purposes. For more information see **Troubleshooting**.

8 – Mons A and B Level Indicators

These indicators show the Monitoring output levels of Monitor Bus A and Monitor Bus B, and change when the Monitoring encoder is adjusted, depending on the Monitor bus currently targeted by the Monitoring encoder.

Color-Coding Channel from the MTS

You can color-code channels in the MTS Universe view, then sort channel tiles by color.

You can also color-code channels from the external screen. See **Color-Coding Channels from the External Screen** *for more information.*

To color-code a channel from the MTS:

1. Tap Universe.
2. Tap the Brush Track Function button so it lights.
3. Tap the desired color in the pop-up.
4. Assign the desired channels to the channel tiles by touching a Channel Type button.
5. Tap the channel tiles you want to color code in the selected color.
6. When finished color-coding, touch the Brush Track Function button so it is unlit.

   The color coding is reflected in the MTS channel tiles; on the CTM for the color-coded channels; on the Channel Color switch; on the CKM encoders for Aux Sends, Matrix input controls, Group assignment controls, and Mains assignment control; and on the fader strips and the Aux Sends section on the external screen.

To show only the channel tiles that share a color-coding:

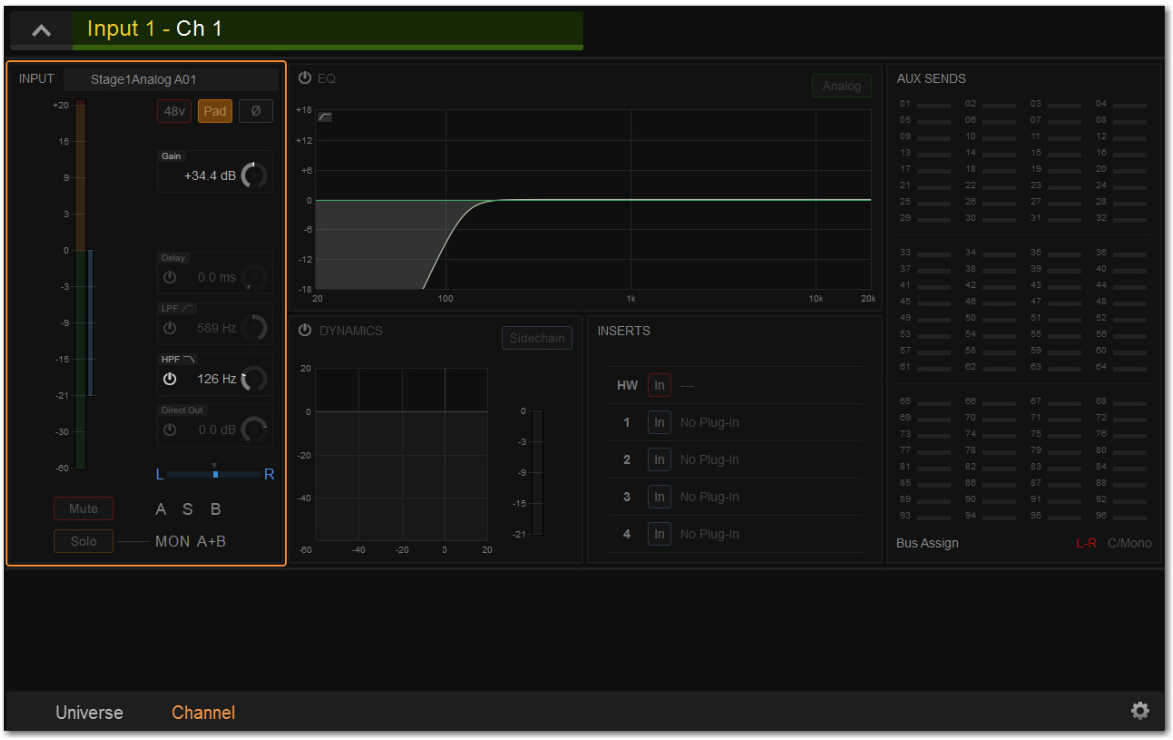
1. Assign the desired channels to the channel tiles by touching a Channel Type button.
2. Tap the Brush Channel Tile Filter button.
3. Tap the desired color in the pop-up.
4. To remove the color-code filter, touch the Brush Channel Tile Filter button so it is unlit.

Channel View (MTS)

MTS Channel view provides a detailed view of the attentioned channel's parameters, and provides the same on-screen elements as the Channel view on the CTM. The MTS channel view provides visual feedback for the attentioned channel's parameters, and, unlike the CTM Channel view, provides no touch zones for parameter control.

To access Channel view:

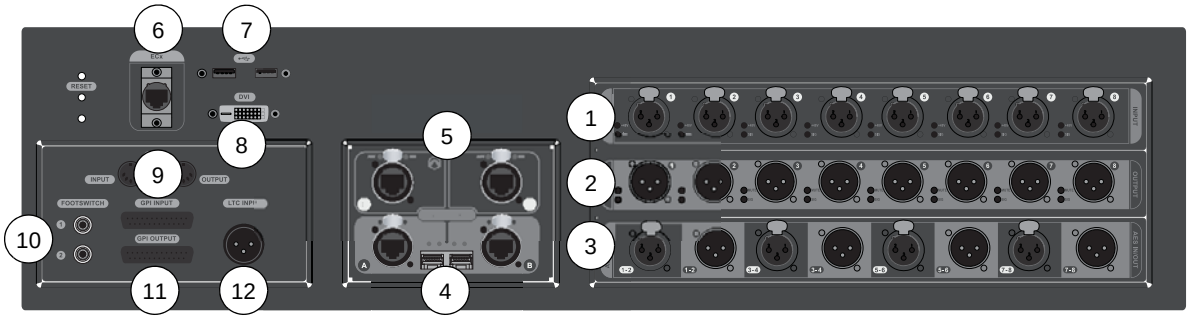
- Tap Channel at the bottom of the MTS so it lights orange.



MTS Channel view

S6L Control Surface Connections

The S6L-32D, S6L-24D, and S6L-24 all have the same audio and control connections.



S6L control surface back panel

Back Panel Connections

S6L control surface audio I/O is assigned to VENUE system channels using the Patchbay, under the Local tab.

- To assign inputs, see **Patching Input Sources to Input Channels**.
- To assign outputs, see **Patching Output Channels to Hardware Outputs**.

1 – Analog Mic/Line Inputs 1–8 (8 XLR Connectors)

Each input features signal present and 48V phantom power LEDs, which light when a signal is present and 48V is applied, respectively.

2 – Analog Outputs 1–8 (8 XLR Connectors)

Each output features an LED that lights when a signal is present on the output, and a mute LED indicator that lights when the output is muted. Outputs auto-mute when the system is powered on.

You can mute all the outputs on the S6L control surface at once from the Devices page of the external VENUE software screen. See **Muting Stage 64 and S6L Control Surface Outputs**

3 – AES Digital I/O (4 x stereo inputs, 4 x stereo outputs)

Inputs feature Sample Rate Conversion, which converts the sample rate to the current sample rate of the system. See **Synchronizing with Word Clock**

4 – Network A and B
(Two RJ-45 etherCON copper, and two SFP module-compatible fiber-optic)

The S6L control surface provides two connections for the AVB audio network. Each connection provides an RJ-45 with etherCON connector for copper connections and an SFP module-compatible fiber-optic port for fiber-optic connections, as follows:

Port A Connects to port **B** on the Master 1 Network card (bottom Network card) of the E6L engine.

Port B Connects to port **A** on the last Stage 64 in a redundant ring configuration, providing the redundant audio network connection for the Ring Network 1.

Only one type of connection (copper or fiber-optic) can be active at a time for each port. If both copper Ethernet and fiber-optic cables are connected to both ports, the fiber-optic port takes precedence over the RJ45 port.

For more information on audio network connections, see **Making S6L Network Connections**.

5 – Network Ports C and D
(Two RJ-45 Ports with etherCON Connectors)

These ports provide AVB audio network connections to system components, as follows:

Port C (Pro Tools) Connect to a compatible Pro Tools system (or other DAW) using a supported audio network cable for integrated Pro Tools recording, playback and interoperability. This connection supports 64 channels of simultaneous recording and playback between S6L and Pro Tools. See **Pro Tools Recording and Playback** for more information.

Port D This port is reserved for future connectivity.

*Each Network port has Act and Sig LEDs to indicate network status. See.***Network Port Act and Sig LEDs** *for more information.*

6 – ECx Port

Connect a wireless router or a computer to this port to enable ECx remote control. This port does not provide AVB audio network connections. For more information see the *ECx Ethernet Control Guide.*

7 – USB Ports
(Two USB 2.0 ports)

Connect USB peripherals such as keyboards, bluetooth transmitters for wireless keyboards and mice, flash drives (for data transfer), and iLoks (for plug-in authorizations) to the ports.

8 – DVI-D Display Connector

Connect a DVI-D compatible Full HD display with 1920 x 1080 minimum resolution (21.5-inch or greater touch display recommended) to this port to view the external screen.

9 – MIDI In and Out Ports

Each MIDI port provides 16 channels of MIDI input and 16 channels of MIDI output to and from the system. You can send and receive snapshot MIDI messages, receive MIDI Time Code (MTC) from external devices, and send MTC to external devices. See **Synchronization** for more information.

10 – Footswitch Connectors 1–2
(2 1/4-inch TRS Connector)

Connect footswitches to these connectors. Footswitches can be normally open or normally closed, latching or momentary. Functions such as Tap Tempo for delay times are assigned to these connectors using events. See **Events** for more information.

11 – GPI Input and Output

S6L provides eight General Purpose Interface (GPI) inputs via a male 25-pin D-Sub connector, and eight GPI outputs via a female 25-pin D-Sub connector. Functions are assigned to GPI I/O using events (See **Events** for more information). You can use GPI I/O as follows:

GPI Inputs \Connect to compatible outputs of a variety of switching devices such as footswitches, momentary or latching push-button switches, or logic outputs of a larger show control system. Example applications of GPI inputs include remote toggling of a console function such as Talkback, muting a channel, or recalling a specific snapshot.

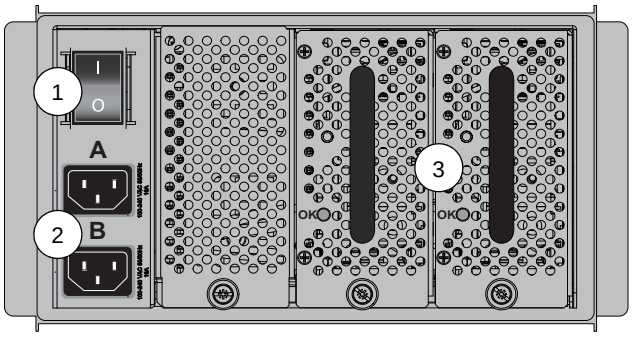
GPI Outputs Connect to compatible inputs found on a variety of external devices such as LEDs, small relays, power sequencers, and logic inputs on show control systems.

For more information on GPI I/O, including pin-out diagrams, see **GPI Port Reference**.

12 – Linear Time Code (LTC) Input

Connect a device that generates SMPTE Linear Time Code to this port to enable features such as automated recall of snapshots. The LTC input reads SMPTE LTC in either direction (forwards or backwards), and automatically detects 24, 25, 30 non-drop, and 30 drop-frame FPS. The S6L system's sample rate cannot be locked to LTC from this input.

S6L Control Surface Power Connections



S6L control surface back panel

S6L provides the following power connections, switches, and indicators:

1 – Power Switch

This switch powers S6L on and off, as follows:

On Applies power to the each PSU in the S6L and launches system software. S6L must be connected to a powered-up E6L engine for the system software to fully launch.

Off Powers down the control surface PSUs. VENUE software must be shut down properly from the Options > System page of the external screen before turning the power switch to off (0). See **Powering the System Up and Down**.

2 – AC Power Inlets A and B

Connect either one of these inlets to an AC power source to provide power to both PSUs. Connect each power inlet to a discrete power source for AC source redundancy.

3 – PSUs

All models of S6L control surfaces provide dual-redundant hot-swappable PSUs with automatic failover. Each PSU provides an **On** LED that lights green when the PSU is powered on and functioning properly.

⚠ *If the On LED does not light when the S6L is powered up, the PSU is faulty and may need to be replaced. For instructions on removing and replacing PSUs, see* **Replacing S6L and E6L PSUs**

S6L Front Panel Features

USB 2.0 Port

Connect USB peripherals such as keyboards, bluetooth transmitters for wireless keyboards and mice, flash drives (for data transfer), and iLoks (for plug-in authorizations) to this USB port.

Phones A (Left) and B (Right)

S6L control surface provide two discrete headphone outputs, Phones A (left) and Phones B (right), each with its own volume knob. The Monitor busses feed the Phones outputs, and you can assign the Monitor Bus (A or B) that feeds each Phones output on the Options > Busses page of the external screen.

Phones volume is controlled using the corresponding Phone volume knob, though the level sent to each Headphone output is in part determined by the overall level settings (such as Level Trim and Monitoring level) for the Monitor Bus that is feeding the particular Phones output. Monitor Bus A and B controls are provided in the Monitoring section of the MLM, and on the Options > Busses page of the external screen.

📄 *For more information on monitoring, see* **Soloing and the Monitor Busses**.

S6L Interior Secure USB Port

One USB 2.0 port is located within the S6L control surface to connect and securely protect an iLok Smart Key. Use this port to keep one “master” iLok and its plug-in assets with the console at all times, safe from damage or loss.

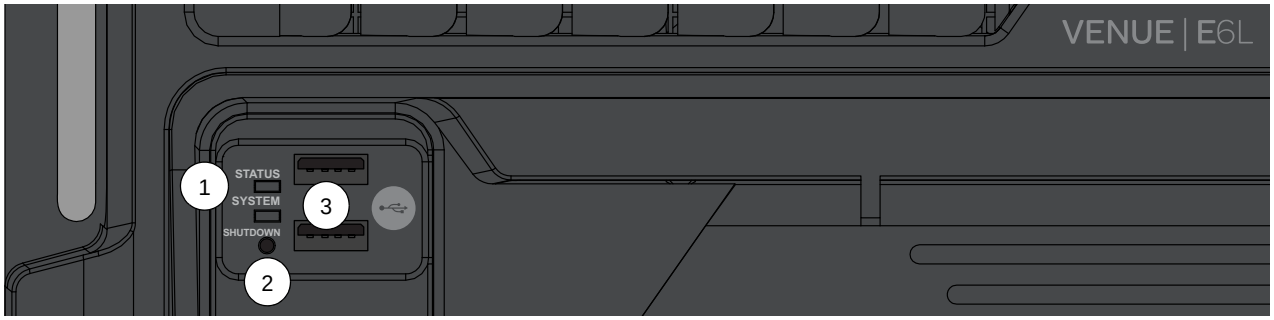
The back cover of the S6L must be removed to access the secure USB port. For instructions see **S6L Secure USB Port**.

E6L Engine Overview

The E6L engine provides the real-time processing engine for input and output channels, and Pro Tools | HDX DSP processing card(s) for AAX DSP plug-ins. The E6L engine also provides audio network, synchronization, and utility connections. All E6L engine models provide the same connection capabilities.

⚠ *While in use, the E6L engine must be oriented horizontally, with the bottom of the engine facing downwards.*

E6L Front Panel



E6L engine front panel

The front panel of the E6L engine provides the following controls, connections and indicators:

1 – Status and System LEDs

These LEDs indicate the current status of the E6L engine, as described in the following table.

Status and System LEDs

LED	Color	State	Description
Status	Green	Solid	All clear (no hardware alerts are detected).
	Amber	Solid	One or more hardware alerts are detected. Consult the VENUE software Options > Devices page for detailed info.
	Off (unlit)	n/a	E6L is powered off, or is initializing during startup.
System	Green	Solid	E6L is fully operational, and connected to the S6L control surface
	Amber	Solid	E6L processor has shut down; safe to power off E6L.
		Flashing	E6L processor is initializing.
	Off (unlit)	n/a	E6L is powered off, or is initializing during startup.

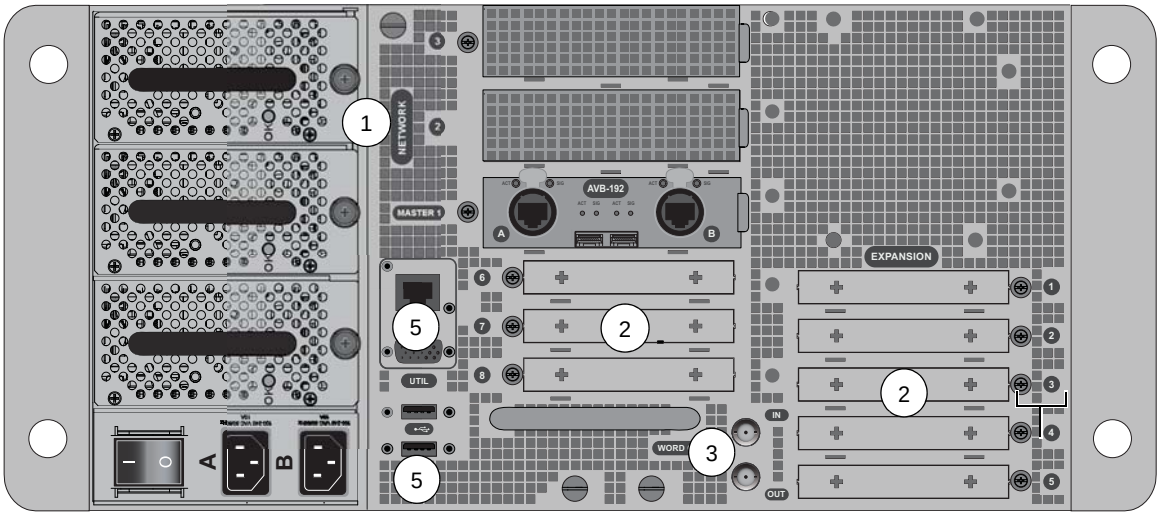
2 – Shutdown (Reset)

This button shuts down the software on the E6L engine. Only use this button to shut down the E6L if the engine has been disconnected from an S6L control surface and cannot be shut down via the Shut Down button on the Options > System page of the external VENUE software screen, or for troubleshooting purposes. See **E6L Engine Emergency Shutdown** for more information.

3 – USB

Use these ports for installing system software and for troubleshooting and maintenance only. See **Using the System Restore Software** for more information.

E6L Back Panel



E6L engine back panel

E6L Engine Audio, Control, and Synchronization Connections

The E6L engine provides the following back-panel connections:

1 – AVB-192 Network Card Slots

These slots contain AVB-192 Network cards. Each AVB-192 card provides two AVB audio network connections (**A** and **B**), each of which provides an RJ-45 with etherCON connector for copper connections and an SFP module-compatible fiber-optic port for fiber-optic connections. Only one connection type (copper or fiber-optic) can be active for each AVB audio network connection.

Master 1 The AVB-192 Network card installed in this slot is the "master" AVB Network card in an S6L system, and as such, must always be connected to the S6L control surface via port **B**. Port **A** on this card provides Ring 1 audio network connections to Stage 64 I/O racks.

2 This slot is reserved for future use.

3 This slot is reserved for future use.

Only one type of connection (copper or fiber-optic) can be active at a time for each port. If both copper Ethernet and fiber-optic cables are connected to both ports, the fiber-optic port takes precedence over the RJ45 port.

For more information on audio network connections, see **Making S6L Network Connections**.

2 – Expansion Card Slots

These slots are reserved for future use.

3 – Word Clock In and Out
(Two 75 Ohm Coaxial BNC Connectors)

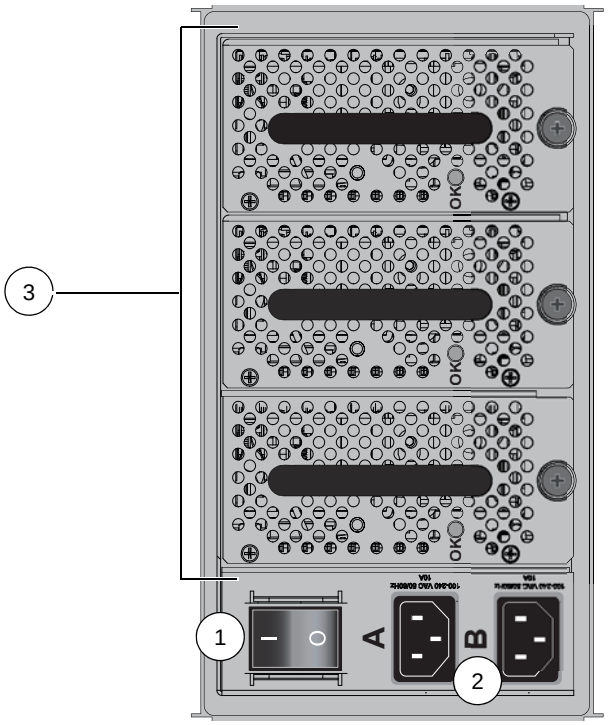
These ports let you connect to the word clock ports of external digital devices to sync all digital devices in your system.

See **Synchronizing with Word Clock** *for more information.*

5 – Utility
(One RJ-45 port, one VGA display port, and two USB 2.0 ports)

Use these ports for installing system software and for troubleshooting and maintenance only. See **Using the System Restore Software** for more information.

E6L Engine Power Connections



E6L engine PSUs

E6L provides the following power connections, switches, and indicators:

1 – Power Switch

This switch powers the E6L engine on and off, as follows:

On Applies power to all three PSUs in the E6L and launches system software.

Off Powers down the E6L's PSUs. VENUE software must be shut down properly from the Options > System page of the external VENUE software screen before powering down the PSUs. See **Powering the System Up and Down**.

⚠ *Do not power off the E6L engine until the Status LED is unlit and the System LED lights amber.*

2 – A and B AC Inlets

Connect either one of these inlets to an AC power source to provide power to all three PSUs. Connect each power inlet to a discrete power source for AC source redundancy.

3 – PSUs

All models of E6L engines provide three hot-swappable PSUs with automatic failover. Two PSUs are required to run the E6L engine, and the third is a redundant PSU. Each PSU provides an **On** LED that lights green when the PSU is powered on and functioning properly.

⚠ *If the On LED does not light when the E6L is powered on, the PSU is faulty and may need to be replaced. For instructions on removing and replacing PSUs, see* **Replacing S6L and E6L PSUs**.

Stage 64 I/O Rack Overview

The Stage 64 I/O rack provides stage I/O for the S6L system. The Stage 64 is modular, and can be configured with a variety of I/O cards. Stage 64 supports up to eight input cards and four output cards, for a total of up to 64 inputs and up to 32 outputs (analog or digital).

Stage 64 also provides features such as the Stage 64 Menu with programmable options and a corresponding display, MADI outputs, word clock output, as well as a built-in confidence monitor with level control.

Stage 64 I/O Card Features and Capabilities

You can install variety of analog and digital I/O cards in Stage 64. You can purchase a pre-configured Stage 64 and modify card configurations, or purchase an empty Stage 64 and configure your rack as desired. For instructions on installing I/O cards in the Stage 64, see the *Stage 64 I/O Card Installation Guide.*

SRI-192 Analog Input Card

- Eight channels of analog mic/line inputs via XLR-3 female connectors
- +48V phantom power, 20 dB pad, and phase reverse (all selectable per channel via the control surface and VENUE software)
- Signal and phantom power LEDs for each channel
- 24-bit A/D conversion, up to 192 kHz sample rate

DSI-192 Digital Input Card

- Eight channels of digital inputs via four two-channel AES/EBU XLR3-female connectors or a single ADAT TOSLINK optical connector
- Automatic sample rate conversion (SRC) and detection on input; manually defeatable for lowest possible input latency
- SRC and Lock status LEDs for both AES and ADAT connections
- Word clock output for synchronizing external digital devices

See **Working with DSI-192 Digital Inputs** *for information on working with DSI ADAT and SRC functionality.*

SRO-192 Analog Output Card

- Eight channels of analog line outputs via male XLR-3 connectors
- Automatic muting for system protection
- Signal and Mute LEDs for each channel
- 24-bit D/A conversion

DSO-192 Digital Output Card

- Eight channels of digital outputs via four two-channel AES/EBU XLR3-male connectors and/or a single ADAT TOSLINK optical connector
- Simultaneous output to both AES/EBU outputs and ADAT optical output
- Automatic muting for system protection
- Signal and Mute LEDs for each AES/EBU channel pair

Stage 64 Front Panel

The front panel of the Stage 64 provides I/O card slots for I/O cards, and the Stage 64 Controller.

Stage 64 front panel (48 x 8 configuration shown

I/O Card Slots

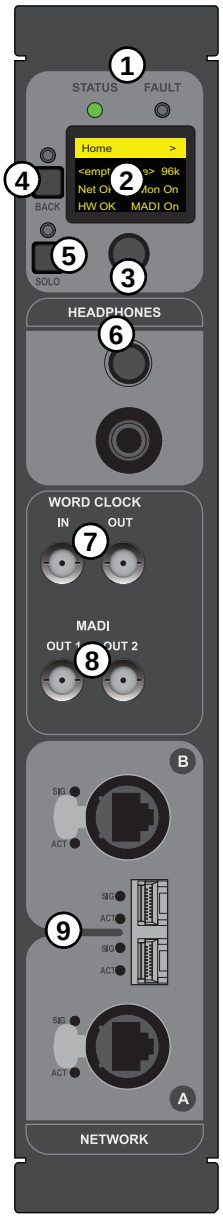
1 – Slots A–H (Input Cards)

Install up to eight of any combination of SRI-192 and DSI-192 input cards in these slots.

2 – Slots J–M (Output Cards)

Install up to four of any combination of SRO-192 and DSO-192 output cards in these slots.

Stage 64 Controller



All Stage 64 I/O racks include a Controller. The Controller provides the following features:

1 – Status and Fault LEDs

These LEDs provide the following indications:

STATUS Indicates the current status of the audio network connection to the Stage 64 Network ports.

FAULT Indicates the current status of the Stage 64 hardware, such as fan and internal temperature.

See **S6L System Components LED Codes** *for more information on LED codes.*

2 – Stage 64 Controller Display

This display shows the current settings of the Stage 64 (via the HOME page), and provides access to various pages of Stage 64 parameters. For more information see **Stage 64 Controller Display**.

3 – Display Selector

This knob lets you navigate through the pages and change the configurable settings provided in the display.

4 – Back

This button lets you back out of the pages and sub-pages provided in the display.

5 – Solo

This switch sends the channel selected in the Controller Menu to the Stage 64 Headphones output.

6 – Headphones

This section provides a 1/4-inch stereo jack and a level control to monitor Stage 64 input and output channel signals. For more information see **Using the Stage 64 Confidence Monitor**.

7 – Word Clock In and Out
(Two 75 Ohm Coaxial BNC Connectors)

The Word Clock Out port provides S6L system word clock output to sync external digital devices to the S6L system.

The Word Clock In port is not functional.

S6L system digital inputs also provide sample rate conversion (SRC) for synchronizing digital inputs. See **Synchronizing Digital Audio Inputs (SRC)** *for more information.*

8 – MADI Outs 1 and 2
(Two 75 Ohm Coaxial BNC Connectors)

MADI Outs 1–2 provide fixed one-for-one digital splits of up to 64 inputs from the Stage 64. For more information, see **Using Stage 64 MADI Outs**.

9 – Network A and B
(Two RJ-45 Ports with etherCON Connectors and two SFP module-compatible fiber-optic ports)

Stage 64 provides two connections (Network A and B) to connect Stage 64 to other S6L system components. Each connection provides an RJ-45 with etherCON connector for copper connections, and an SFP module-compatible fiber-optic port for fiber-optic connections, Each port provides either a copper connection (via an RJ-45 port) or a fiber-optic connection (via the SFP fiber-optic port).

Only one type of connection can be active at a time for each port. If both copper Ethernet and fiber-optic cables are connected to both ports, the fiber-optic port takes precedence over the RJ45 port.

Making Stage 64 Connections

Connecting and Assigning Stage 64

Physically connect Stage 64 I/O racks to the AVB-192 cards in the E6L engine, and connect input sources and output destinations to the I/O installed in your Stage 64 I/O racks. Once connected and powered on, assign Stage 64 I/O racks in the Options > Devices page of the external VENUE software screen to available Stage slots. See **Configuring a Basic System** for more information.

Patching Stage 64 I/O

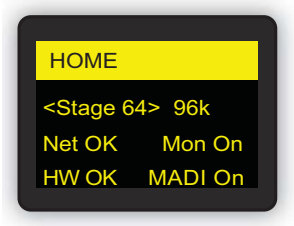
Once you have assigned Stage 64 I/O racks to Stage slots, you can then patch Stage 64 I/O to VENUE system channels under the Stage 1–3 tabs in the VENUE Patchbay.

- To patch Stage inputs to VENUE system channels, see **Patching Input Sources to Input Channels**.
- To patch outputs, see **Patching Output Channels to Hardware Outputs**.

Stage 64 Controller Display

The Stage 64 Controller display provides various pages that let you view and adjust Stage 64 parameters. The HOME page provides an overview of the current status of various Stage 64 parameters. The main MENU provides access to the MONITOR, SETTINGS, MUTE, and STATUS menus, from which you can access various Stage 64 parameters, including the built-in confidence monitor for monitoring individual Stage 64 inputs and outputs.

Stage 64 Controller Display HOME Page



Controller Menu HOME page

The HOME page provides an overview of the current status of the Stage 64, as follows:

Name Shows the name given to the Stage 64. You can name the Stage 64 from the Options > Devices page of the external VENUE software screen, or from the Controller Menu Settings page.

Net OK/ERR Shows the current status of the audio network connection to the Stage 64 Network ports. OK mirrors a lit-green **STATUS** LED, and ERR mirrors a lit-red **STATUS** LED.

HW OK/ERR Shows the current status of the Stage 64 hardware. OK mirrors a lit-green **STATUS** LED, and ERR mirrors a lit-red **STATUS** LED.

Sample Rate Shows the current S6L system sample rate.

Mon On/Off Shows the current on/off status of the built-in Confidence Monitor.

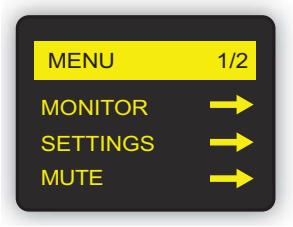
MADI On/Off Shows the current on/off status of the Stage 64 MADI Outs.

Controller Main MENU

The main MENU lets you access the MONITOR, SETTINGS, and MUTE menus (via page 1), and the STATUS menu (via page 2).

To access the MENU page 1 (MENU 1/2):

- From the HOME page, press the Display Selector.



Main MENU page 1

Controller MONITOR Menu

The MONITOR menu lets you target a Stage 64 input or output channel for monitoring using the Headphones output on the Stage 64. See **Using Stage 64 MADI Outs** for more information.

Using the Stage 64 Confidence Monitor

You can monitor signals from individual Stage 64 inputs and outputs using the Stage 64 Headphones output. Use this to troubleshoot individual inputs and outputs connected to the Stage 64.

To use the Stage 64 Confidence Monitor:

1. Connect a pair of headphones to the Headphones output on Stage 64.
2. From the HOME page, press the Display Selector.
3. Select MENU 1/2 so it is highlighted, and press the Display Selector.
4. Rotate the encoder so MONITOR is highlighted, then press the Display Selector. The first input of the input card installed in slot A is shown in the display (A1-01), where A1 denotes card slot A connector 1, and 01 denotes the VENUE system channel that hardware input or output is assigned to. If the channel is assigned in the VENUE Patchbay, the name of the channel appears underneath.

Monitor screen showing the first input of the input card in slot A

5. Rotate the Display Selector to scroll through the I/O card slots until you locate the desired channel.
6. Press SOLO so it lights, then adjust the volume using the Headphone level control, located above the Headphones output.
7. To disable the Headphone output, press SOLO so it is unlit.

Controller SETTINGS Menu

The SETTINGS menu provides two pages (SETTINGS 1/2 and SETTINGS 2/2) of configurable Stage 64 parameters, including MADI Out and confidence monitor settings. You can also name and reset the Stage 64.

To access the SETTINGS menu:

1. From the HOME page, press the Display Selector.
2. Select MENU 1/2 so it is highlighted, and press the Display Selector.
3. Rotate the encoder so SETTINGS is highlighted, then press the Display Selector. The first SETTINGS page is shown (SETTINGS 1/2).

The Settings menu provides the following parameters:

SETTINGS menu parameters

SETTINGS Menu Page	SETTINGS Menu Options	Parameters	Description
Page 1 (1/2)	NETWORK	n/a (only adjust when instructed to do so by Avid customer support)	View Stage 64 DHCP setting, and MAC and IP addresses
	MADI SPLIT	SPLIT ON/OFF	Toggle Stage 64 MADI Outs on/off
	MONITOR	MONITOR ON/OFF	Toggle confidence monitor on/off (default is ON)
Page 2 (2/2)	DEVICE	NAME	Change the name of the Stage 64
		RESET	Resets the Stage 64 to default settings

⚠ *Changing any NETWORK settings on the SETTINGS menu may render your Stage 64 incapable of connecting to other S6L system components. Only adjust these settings when troubleshooting with Avid customer support.*

Naming the Stage 64

You can also name the Stage 64 on the Options > Devices page of the external VENUE software screen. See **Devices** *for more information.*

To name the Stage 64 from the Stage 64:

1. With SETTINGS 1/2 highlighted, press the Display Selector to access the second SETTINGS page (SETTINGS 2/2).
2. Rotate the Display Selector so DEVICE is highlighted, then press the Display Selector.
3. Rotate the Display Selector so the field under NAME is highlighted, then press the Display Selector. The cursor under the first character appears.
4. Do any of the following to enter characters (up to a 32 character maximum)
   - Rotate Display Selector to cycle through the available characters.
   - Press the Display Selector to enter the selected character and move the cursor to the next position.
   - Press and hold the Display Selector to move the cursor to the previous position.
5. When you have finished entering a name, press **BACK** once.
6. Do either of the following:
   - To apply the new name, scroll the Display Selector to highlight APPLY, then press the Display Selector.
   - To cancel, scroll to highlight CANCEL then press the Display Selector.

To reset the Stage 64 from the Stage 64:

1 With SETTINGS 1/2 highlighted, press the Display Selector to access the second SETTINGS page (SETTINGS 2/2).

2 Rotate the Display Selector so DEVICE is highlighted, then press the Display Selector.

3 Rotate the Display Selector so RESET is highlighted, then press the Display Selector.

Controller MUTE Menu

The MUTE menu lets you mute all the outputs on Stage 64.

To mute/unmute Stage 64 outputs from the Stage 64.

1 From the HOME page, press the Display Selector.

2 Rotate the Display Selector so MUTE is highlighted.

3 Press the press the Display Selector. The MUTE menu is shown.

4 Rotate the Display Selector so MUTE ALL is highlighted. Press the Display Selector to toggle MUTE ALL on/off. The Mute LEDs on all output connectors in the Stage 64 light when they are muted.

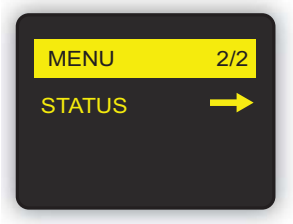
Controller STATUS Menu

The STATUS menu is accessed from the second page of the main MENU.

To access the STATUS menu:

1 From the HOME page, press the Display Selector. MENU 1/2, MONITOR, SETTINGS, and MUTE are shown in the display.

2 With MENU 1/2 highlighted, press the press the Display Selector to access the second MENU page (MENU 2/2).



Main MENU page 2

3 Rotate the Display Selector so that STATUS is highlighted, then press the knob. The STATUS menu is shown, and provides pages of options detailing the current status of the Stage 64, as follows:

STATUS menu parameters

STATUS Menu Pages	Parameter	Status	Description
NETWORK	STATUS	CONN	Valid communication exists between this Stage 64 and other S6L devices on the network
		ERR	No communication exists between this Stage 64 and other S6L devices on the network
	LINK SPEED	10	Current network speed is 10mbit/second
		100	Current network speed is 100mbit/second
		1000	Current network speed is 1000mbit/second
	PORT	COPPER	RJ45 Network port is the active audio network port
		OPTICAL	The fiber-optic Network port is the active audio network port

STATUS menu parameters

STATUS Menu Pages	Parameter	Status	Description
HW MONITOR	FAN SPEED	<n> RPM	Internal fan speed in revolutions per minute
	TEMP 1	<n> c	PSU 1 temperature in Celsius
	TEMP 2	<n> c	PSU 2 temperature Celsius
FIRMWARE	Board 1	Firmware Version	Current firmware version for AVB Network card
	Board 2	Firmware Version	Current firmware version for AVB Network card

Using Stage 64 MADI Outs

The two MADI Out connectors on the Stage 64 provide fixed one-for-one digital splits of up to 64 input channels from the corresponding Stage 64 at a 96 kHz sample rate, letting you connect an external MADI device such as a Pro Tools | HD MADI without needing to configure the VENUE software Patchbay. You can enable and disable the MADI Outs on a per Stage 64 basis.

Channel assignments for each Stage 64 MADI Out are as follows:

Sample Rate	MADI Out	Channel Assignments
96 kHz	Out 1	Stage 64 inputs 1–32
	Out 2	Stage 64 inputs 33–64

The pickoff point for MADI Outs splits is post-pad, post-analog gain, and pre-digital gain.

Configuring Stage 64 MADI Outs

You can toggle Stage 64 MADI Outs on/off from the Stage 64 Controller.

To configure Stage 64 MADI Outs from the Stage 64 Controller:

1. Press and hold **Back** to make sure the Stage 64 Controller Home page is shown in the display.
2. Press the Display Selector once, so page 1 of the Menu is shown in the display.
3. Rotate the Display Selector to the right so Settings is highlighted, then press the Menu Selector so the Settings menu is shown.
4. Rotate the Menu Selector to the right so MADI SPLIT is highlighted, then press the Menu Selector so the MADI Split menu is shown.
5. To toggle the MADI Outs on/off, do the following:
   - Rotate the Display Selector to the right so SPLIT is highlighted
   - Press the Display Selector so ON or OFF appears next to SPLIT.

Part II: Using S6L

Connecting and Configuring

The chapter describes how to get your system up and running by doing the following:

- Unpack and assemble the components
- Connect power and peripherals
- Connect your system
- Power up your system
- Confirm system components
- Enable Config mode
- Set up the system for the first time
- Configure Mains and Mix busses
- Set the system clock
- Install other optional software or updates

Unpacking and Assembling System Components

When unpacking and assembling S6L system components, make sure at least two people are available at all times. Team lift all system components.

◆ Remove the S6L control surface from its shipping package, and place it on a table or other stable surface that leaves full access to its front and back panels.

◆ Remove the E6L engine from its shipping package, and place it at the mix position along with the S6L control surface. Place the E6L engine on a flat surface that leaves full access to its front and back panels.

You can install the E6L engine in an enclosure such as a road case. When doing so, use the E6L Engine Rack Supports, included in the E6L engine package, for increased stability. See the E6L Engine Rack Support Guide, included in the E6L engine shipping package, for installation instructions.

The E6L engine bezel ships loose in its shipping package. Attach it to the E6L engine chassis after you have installed the unit in an enclosure. For instructions, see the E6L Engine Rack Support Guide.

◆ Place any Stage 64 I/O racks on stage.

You can install the Stage 64 in an enclosure such as a road case. Rack ears for that purpose are included in the Stage 64 package, along with installation instructions.

◆ Keep cables and other included items organized, making sure to keep them with their associated component after unpacking.

Connecting Power

Make primary and, if desired, redundant, power connections to all S6L system components. For full AC power redundancy, connect each S6L system device to both a primary power source and a discrete secondary power source.

To connect power to the S6L control surface:

1. Connect an included IEC power cable from AC power inlet **A** on the back panel of the S6L control surface to your power source.
2. For fully redundant power connections, connect the other included IEC power cable from AC power inlet **B** on the back panel of the S6L control surface to a secondary power source.

To connect power to the E6L engine:

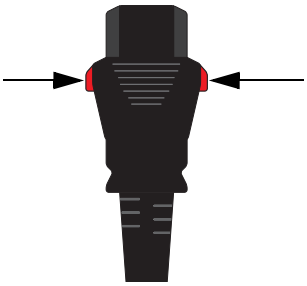
1. Connect the included IEC power cable from AC power inlet **A** on the back panel of the E6L engine to your power source.
2. For fully redundant power connections, connect the other included IEC power cable from AC power inlet **B** on the back panel of the E6L engine to a secondary power source.

To connect power to the Stage 64:

1. Connect the included IEC power cable from an AC power inlet on the back of Stage 64 to your power source.
2. For fully redundant power connections, connect the other included IEC power cable from the other AC power inlet on the back of the Stage 64 to a secondary power source.

Disconnecting the Included IEC Power Cables

The IEC power cables included with S6L system devices lock when connected to the AC power inlets of S6L system devices, and must be released when disconnecting.



To release an included IEC cable from an AC power inlet on an S6L system device:

- Simultaneously slide the two tabs on either side of the connector back, then pull the cable out of the power inlet.

Connecting a Monitor

A DVI connector is provided on the S6L control surface back panel to view the external screen.

VGA monitors are not compatible with the S6L control surface. Only connect a VGA monitor to the VGA port on your E6L engine when you are restoring or updating your system software. Make sure the VGA monitor is not connected to the E6L engine when powering up your S6L system.

To connect a monitor:

1. Connect a DVI-D-compatible monitor cable from the DVI port on the back panel of the S6L control surface to the DVI port on your monitor.
2. If the monitor has a touchscreen function, enable it by connecting a USB cable from one of the USB ports on the back of the S6L control surface to the USB port on the monitor.

Connecting a USB Keyboard

The S6L control surface provides four USB 2.0 ports (two on the front and two on the back) to connect a USB keyboard.

To connect a USB keyboard:

- Connect the keyboard to a USB ports on the front or back of the S6L control surface.

You can also connect a USB mouse or trackball to the S6L control surface for navigating the external screen.

Making S6L Network Connections

After connecting power and peripherals, make audio network connections between system components. You can also make connections to Pro Tools, and to a router or client computer for remote control of your S6L system using ECx Ethernet Control.

⚠ *If you are setting up your S6L system for the first time, before connecting system components make sure to install the latest System Restore software on your S6L control surface and E6L engine. Instructions for installing System Restore software are provided in the S6L Software Installation Guide, also available as a PDF in your Avid account.*

S6L Network Connections Overview

The S6L system has two discrete networks, the AVB audio network and the ECx Ethernet Control network. The AVB audio network connects all S6L system components and Pro Tools. The ECx network connects a client computer or other device (directly or via network equipment) to S6L to enable remote control of your system.

AVB Audio Network Connections

Direct connections are required for all AVB audio network connections between S6L system components, and between the S6L control surface and Pro Tools.

⚠ *Do not connect network equipment such as routers, hubs or switches to any S6L system Network ports.*

S6L System Components

You can connect S6L system components together using either supported copper or fiber-optic audio network cables. You can mix cable types within a system, but only one (copper or fiber-optic) can be used per audio network connection type. For example, you can connect the S6L control surface to the local E6L engine using supported copper cables, then connect to a Stage 64 I/O rack with fiber-optic.

Pro Tools Recording/Playback Connections

You can connect to a Pro Tools computer (or other DAW) from Network port **C** on the S6L control surface using supported copper audio network cables. For more information on installing and using Pro Tools, see **Pro Tools Recording and Playback.**

⚠ *Make sure to use the required cables to make audio network connections between S6L system components and to Pro Tools. See* **Cabling Requirements** *for more information.*

ECx Ethernet Control Connections

You can connect a network router, hub, switch, or a client computer directly to the ECx port on the S6L control surface control your S6L system remotely using a computer or tablet. ECx host and client software must be installed to enable ECx. For more information on installing and using ECx, see the *ECx Ethernet Control Guide.*

Supported Audio Network Configurations

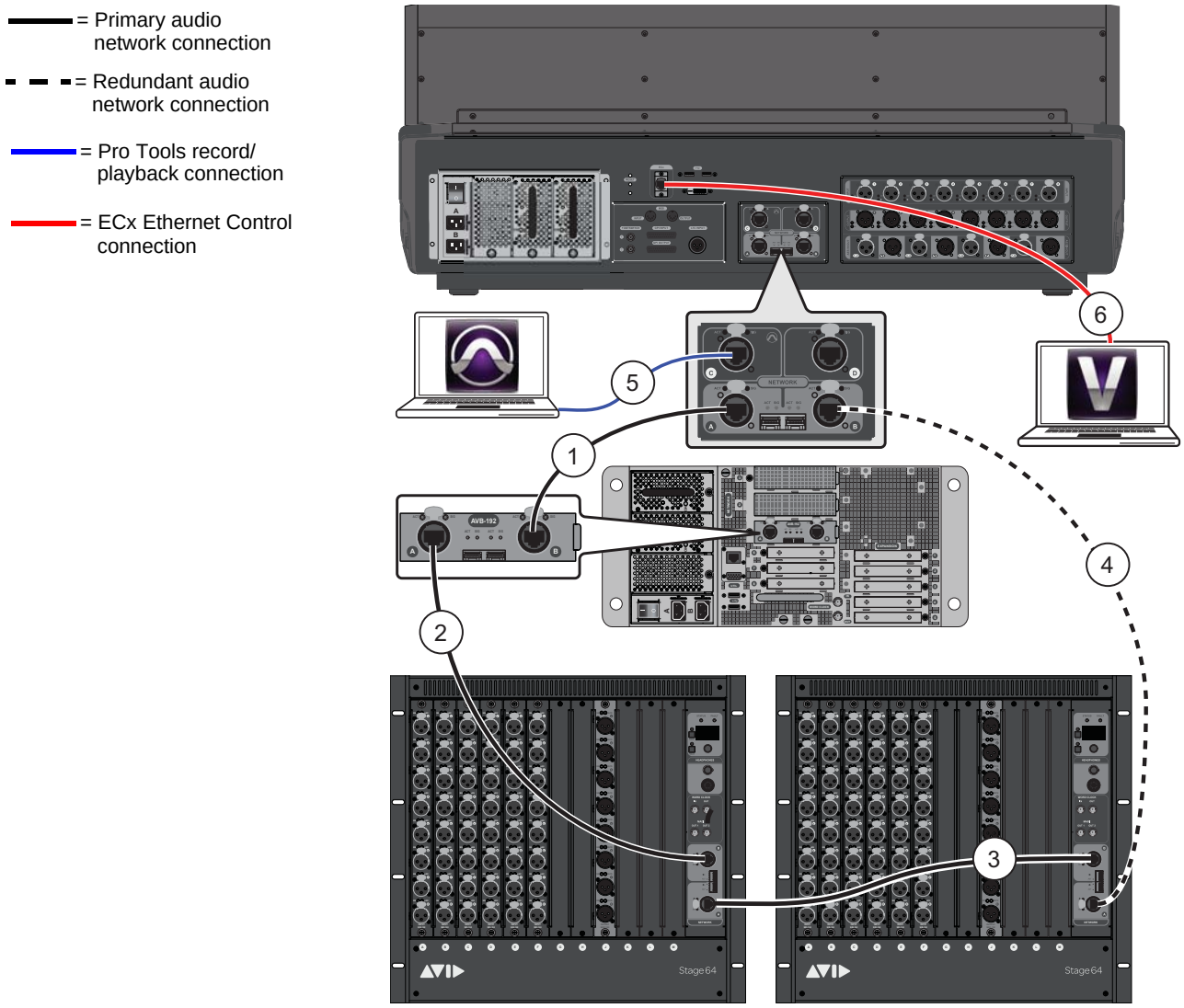
Redundant Ring Network

A redundant ring network supports the following hardware configurations:

- One S6L control surface, one E6L Engine, and one Stage 64 with a maximum of eight input cards (SRI-192 and/or DSI-192) and four output cards (SRO-192 or DSO-192), providing a total of 64 inputs and 32 outputs from the Stage 64.
- One S6L control surface, one E6L Engine, and two Stage 64 I/O racks with a maximum of six input cards (SRI-192 and/or DSI-192) and four output cards (SRO-192 or DSO-192) per rack, providing a total of 96 inputs and 64 outputs.

Connecting a Redundant Ring Network

This section describes how to connect a redundant ring network.



An S6L system connected in a redundant ring network (two 48-input Stage 64s shown)

To connect a redundant ring network:

1. Connect an Ethernet cable from Network port **A** on the back of the S6L control surface to Network port **B** on the E6L engine.
2. Connect an Ethernet cable from Network port **A** on the E6L engine to Network port **B** on the first Stage 64.
3. If applicable, daisy-chain the first Stage 64 to the second Stage 64 by connecting an Ethernet cable from Network port **A** on the first Stage 64 to Network port **B** on the second Stage 64.
4. (Redundant) To make a redundant audio network connection, connect an Ethernet cable from Network port **A** on the last Stage 64 in the chain to Network port **B** on the S6L control surface.
5. (Optional) To connect to a qualified Pro Tools computer, connect a supported Ethernet cable from Network port **C** on the S6L control surface to an available Ethernet port on the computer (or to a Thunderbolt port using a Thunderbolt to Ethernet adapter).

⚠ *Do not connect network equipment such as routers, hubs and switches to any S6L system Network ports.*

6. (Optional) To connect to a router or computer for ECx Ethernet Control, connect a standard Ethernet cable from the port labeled **ECx** on the S6L control surface to the router or client computer.
7. Proceed to **Powering the System Up and Down**.

Powering the System Up and Down

After connecting your system components, power up your system. Make sure you have installed the S6L System Restore software and the E6L System Restore software on the respective devices.

⚠ *If you have not installed the System Restore software on your S6L control surface, on initial power-up S6L prompts you to shut down your system. Go to the Avid account linked to your S6L purchase to download the System Restore software and plug-in installers. Instructions for installing System Restore software are provided in the VENUE | S6L Software Installation Guide, available as a PDF in your Avid account.*

⚠ *Make sure no VGA monitor is connected to the E6L engine before powering up your S6L system.*

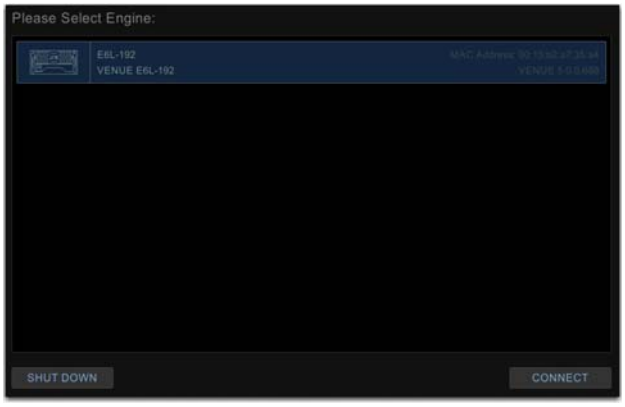
Power up the system in the following sequence:

1. If applicable, power on routers for use with ECx remote control.
2. Power on any connected computers for recording/playback.
3. Power on the connected video monitor.
4. Power on the E6L engine by pressing the power switch on the back to the on (1) position. On the front panel of the E6L engine, the front-panel LEDs light as follows:
   - Status LED lights green.
   - System LED flashes amber while the E6L engine initializes, then turns green when initialization is complete.
5. Power on the S6L control surface by pressing the power switch on the back panel to the on (1) position.

   The LEDs on each of the S6L's PSUs light green, and Avid logos appear on the Master Touch Screen (MTS), the Channel touch Modules (CTMs) (if present), and the external screen while the system initializes.

Avid logo on-screen

If you are powering up the system for the first time, or the S6L control surface is connected to a different E6L engine than it was previously connected to, the Engine Selection screen appears on the MTS when initialization is complete.



Please Select Engine Screen on the MTS

💡 *If the E6L engine has not fully initialized by the time the S6L control surface has initialized, "Waiting for the E6L Engine to start..." appears in the MTS until the E6L finishes initializing.*

6 To pair your E6L engine to your S6L control surface, in the Engine Selection screen on the MTS do the following:

- Select the connected E6L engine so it is highlighted in blue.

A selected E6L engine.

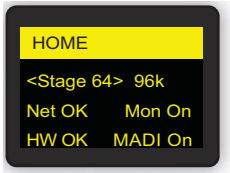
- Select Connect.

Connect button

The MTS indicates that the S6L control surface is waiting for the E6L engine to start. When the devices connect, Universe view appears on the MTS, Meters views appear on any CTMs, and the Inputs page appears on the external screen.

7 Power on the first Stage 64 by pressing the power switch to the On position for the PSU that is plugged into an AC power source. If both PSUs are connected for redundancy, power-on both PSUs. The power switch(es) lights green and the following occurs on the front panel of the Stage 64:

- The Status LED lights green.
- The AVID logo appears while the device initializes.
- When initialization is complete, the Controller Menu HOME page is shown.



Controller Menu HOME page

8 Power on any other Stage 64 I/O racks in the system.

9 Proceed to **Confirming System Components**.

Powering Down the System

Power down the system in the following sequence:

1 Turn off the audio monitoring system.

2 Turn off any connected computers for recording/playback.

3 Shut down your system by doing the following:

- Put the system into *Config* mode (see **Enabling Config Mode**).
- On the external VENUE software screen, go to the Options page and select the System tab.
- Select Shut Down.
- Select Shut Down again to confirm.

4 When the MTS and the external screen go black, power off the S6L control surface using the back-panel power switch.

5 On the front panel of the E6L engine, once the Status LED is *unlit* and the System LED is *lit amber* you can power off the E6L using the back-panel power switch.

6 Power off any connected Stage 64 I/O racks.

Confirming System Components

After connecting and powering up system components, you can confirm system components on the Options > Devices page of the VENUE software screen. The Devices page lets you view and configure your system's hardware devices. See

To confirm system components:

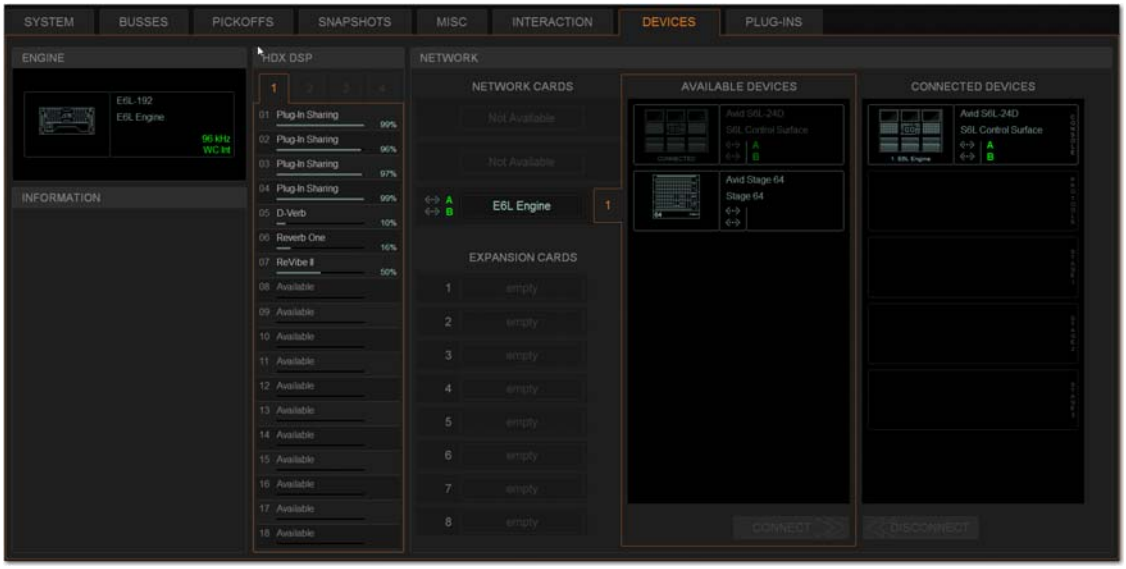
1 On the external screen, select the Options button.

Options button

2 Select the Devices tab.

Devices tab

All connected and powered on system components appear on the Devices page. The Devices page lets you connect and troubleshoot system components, view their status, and edit hardware settings. See **Devices** for more information.



Options > Devices tab

If any components do not appear, check all network connections between components, and make sure all components are powered on. For more information see **Troubleshooting**.

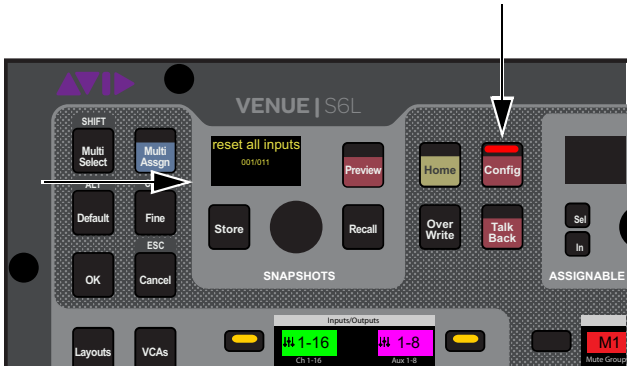
3 Proceed to **Enabling Config Mode**.

Enabling Config Mode

There are two main operating modes for the S6L system, *Config* mode and *Show* mode. Use Config mode to accomplish tasks such as setting up your system, configuring options, loading Show files, and installing software such as plug-ins and system updates. Use Show mode to mix your performance.

To enable Config mode, do one of the following:

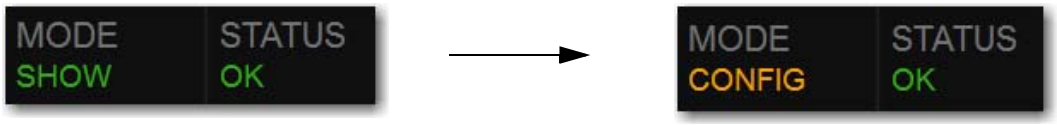
1 Press **Config** on the S6L control surface. The **Config** switch lights, and Config is indicated in the Mode box in the on-screen Status Bar.



Config switch on the S6L control surface (left) and the Mode box showing Config

– or –

- On-screen, double-tap the Mode box in the Status Bar, located in lower-right hand corner of the screen, so that Config is shown. The **Config** switch also lights.



Mode box showing Show mode enabled (left) and Config mode enabled (right)

2 Proceed to **Configuring a Basic System**.

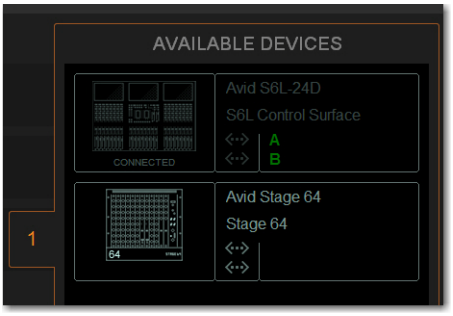
Configuring a Basic System

When you initially configure a basic system, you assign Stage 64 I/O racks to available Stage slots in the Options > Devices tab. Each Stage slot corresponds to a Stage hardware tab in the VENUE Patchbay.

You can reconfigure your system any time after the initial setup. See **Managing Connections**.

To configure your system for the first time:

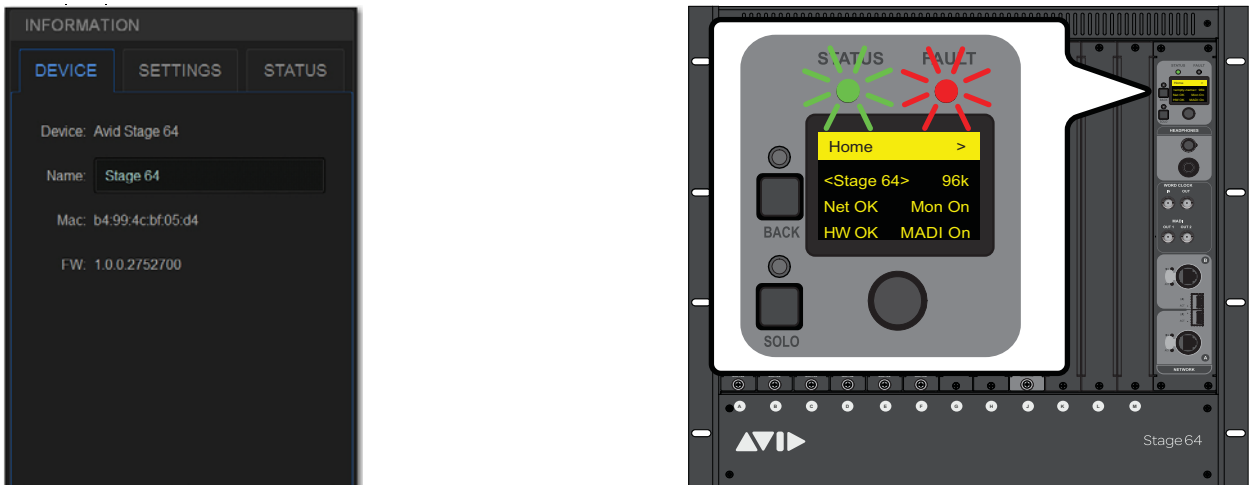
1. Make sure your system is in Config mode.
2. On the external screen, go to the Options > Devices page locate the Available Devices column. All connected and powered on Stage 64 I/O racks are shown in this column.



Unassigned Stage 64 I/O rack in the Available Devices column of the Options > Devices tab

If any connected Stage 64 boxes do not appear in the Unassigned section, check network and power connections.

3. In the Available Devices column, select the top-most Stage 64 so it is outlined in blue. The blue outline indicates that device is targeted in the Information area of the Devices page, and for connection.
4. In the Information area, select the Device tab so it is highlighted in blue.
5. Select the Identify button to latch it on. The Identify button on-screen flashes, and the Status and Fault LEDs on the front panel of the corresponding Stage 64 I/O rack flash.



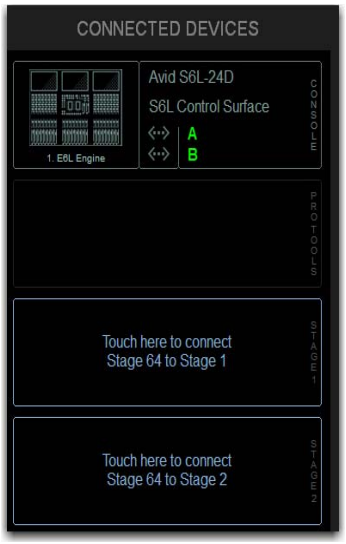
The Identify button (left) and flashing Status and Fault LEDs on the corresponding Stage 64 (right)

6. Select Identify again to turn it off.

7 Select the Connect button at the bottom of the Available Devices column.

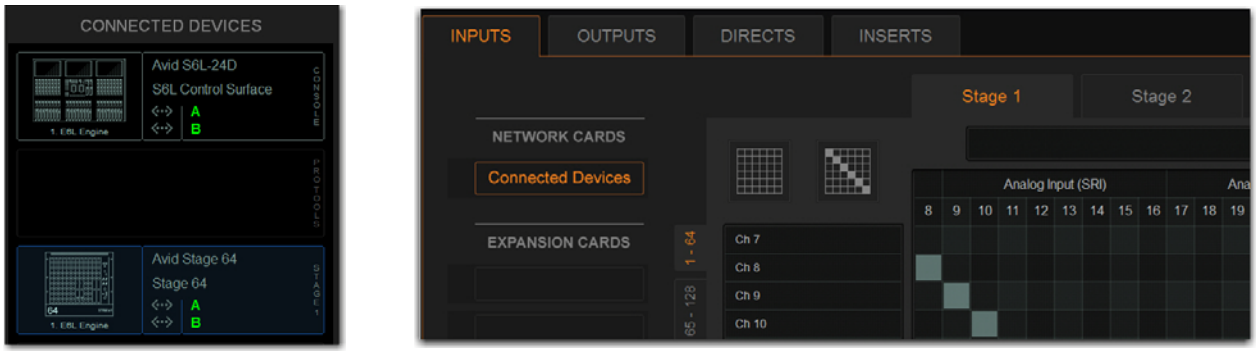
Available Devices Connect button

8 In the Connected Devices columns, select a flashing Stage slot to assign that Stage 64 to that Stage slot.



Flashing Stage slots in the Connected Devices column

The Stage slot is populated with the selected Stage 64, and the I/O on that Stage 64 is now available to be patched to system input and output channels in the VENUE Patchbay under the corresponding Stage 1, Stage 2, or Stage 3 hardware tab. For more information on using the Patchbay, see **Patchbay**.



A Stage 64 assigned to Stage slot 1 (left) and the VENUE Patchbay showing the I/O available to be patched under the Stage 1 tab (right)

Each S6L control surface and Stage 64 in the Connected Devices column features on-screen LEDs that indicate the status of the device's A and B Network ports. See **AVB Network Card Port A and B LEDs** *for more information.*

On initial power-on (or any time after installation of System Restore software), firmware updates of the Stage 64 begin just after assigning them. When firmware updates complete, you are prompted to restart the E6L control surface. Power-cycle the engine, the proceed with powering on the Stage 64s.

9 Assign any other available Stage 64 I/O racks.

You can reassign Stage 64 I/O racks at any time after initial set up. Depending on hardware combinations being used, you may be required to. See **How to Proceed** *for more information.*

10 Proceed to **Configuring Mains and Mix Busses**.

Managing Connections

After the initial setup, devices on the network can be named and renamed, reassigned, and removed.

Naming System Components

You can name the S6L control surface, the E6L engine, and any connected and assigned Stage 64 I/O racks. The device name is stored with the respective device, and stays with that device until it is changed. Names can be changed at any time. Though not required, naming components is highly recommended.

To name S6L system components:

1. In the Options > Devices tab of the external screen, select the component graphic so it is outlined in blue.
2. In the Information list, select the DEVICE tab.
3. Touch-and-hold (double-click) the field next to Name, then enter a unique name using the keyboard, then press Enter when finished.

Managing Stage 64 Connections

When power-cycling your system and/or reconnecting Stage 64 I/O racks to the same E6L engine, the original Stage 1–3 assignments are automatically recalled, regardless of the order in which Stage 64 I/O racks are connected. Depending on the hardware combinations being used, however, you may want or need to reconfigure system Stage I/O. You can reconfigure Stage I/O on the Options > Devices tab any time after the initial system set up and configuration. You can reassign connected Stage 64 I/O racks, remove Stage 64 I/O racks from the current configuration, and add new Stage 64 I/O racks to the current configuration.

Reassigning a Stage 64

You can reassign a Stage 64 to a different Stage 1–3 slot. For example, for a particular stage setup you may want to rearrange the order of Stage 64 I/O racks as they appear in the VENUE Patchbay.

To reassign a Stage 64:

1. Put the system into Config mode.
2. Go to Options > Devices.
3. Select a Stage 64 in the Connected Devices column, then select the Disconnect button.
   Then unassigned Stage 64 appears in the Available Devices column.
4. Assign Stage 64 I/O racks as necessary.

Removing a Stage 64

You can remove a Stage 64 from your configuration so that it does not appear in the Options > Device tab. Do this if you are removing a connected Stage 64 from your configuration, or if a Stage 64 from a previous configuration is not connected and you want to dismiss warning dialogs.

To remove a Stage 64 from the current configuration:

1. Put the system into Config mode.
2. Go to Options > Devices.
3. Do either of the following depending on the status of the Stage 16:
   - To remove a connected Stage 64, select the Stage 64 and choose Disconnect.
   - To remove a Stage 64 that is not connected (indicated by a greyed-out Stage 64 in the Connected Devices list), touch and hold (right-click) the greyed-out Stage 64 and choose Forget missing Stage device.

   The I/O for that Stage 64 is now greyed-out under the corresponding Stage 1–3 hardware tab in the Patchbay.

Configuring Mains and Mix Busses

After assigning Stage 64 I/O racks, you can configure the Mains bus and the Mix Busses on your system. Bus configurations are stored with the Show file, so when you load a different Show file the bus configuration may change if bus configurations in the newly loaded Show file differ from the previous bus configurations.

⚠ *Audio is interrupted when a System Configuration setting is applied. Do not change these settings during a performance.*

Configuring the Mains Bus

The Mains bus can be configured to operate as either of the following:

L–R plus Mono Pans signals between the left and right channels to the L–R bus, and sums signals to a separate mono bus.

L–C–R Pans signals across left, center and right channels. You can the amount of center-panned signal that is sent to the center output (see **Panning (Mains Center Divergence)).**

To configure the Mains bus:

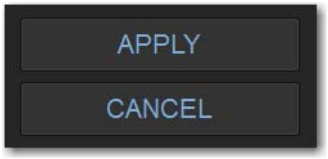
1. Put the system into Config mode.
2. On the external screen, go to Options > System.
3. Select Edit.

Options > System Edit button

4. In the Mains Bus section, select L-R plus Mono or L-C-R.

L-C-R selected as Mains bus configuration

5. Select Apply (or select Cancel to cancel the operation). The system restarts with the new Mains bus configuration



Apply and Cancel buttons.

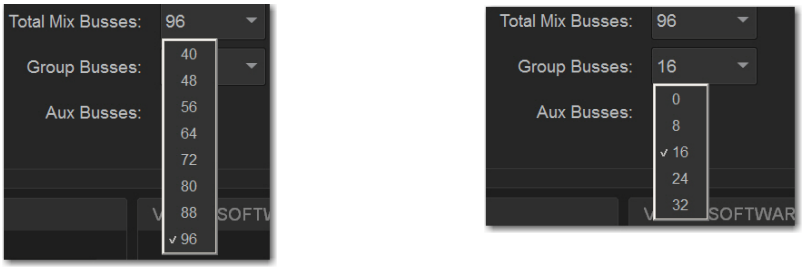
Configuring Mix Busses

You can choose the total number of Mix busses available on the system (up to the maximum available Mix busses), and you can configure the Mix busses to provide only Aux busses, or combinations of Aux and Group busses. Setting the number of Mix busses to only the number you need can reduce clutter on the various screens, but doing so has no effect on processing bandwidth.

⚠ *Graphic EQ and/or channel EQ settings may be lost when configuring Mix busses, so save any important EQ settings before re-configuring. See* **EQ Settings and Presets.**

To configure the Mix busses:

1. Put the system into Config mode.
2. On the external screen, go to Options > System.
3. Select Edit.
4. Do any of the following:
   - From the Total Mix Busses pop-up, chooses the total number of Mix busses you want your system to provide.
   - To include Groups in your configuration, from the Group Busses pop-up choose the number of Mix busses you want to designate as Groups.



Total Mix Busses pop-up menu (left), and the Group Busses pop-up (right)

5. Select Apply. The system restarts with the new bus configuration.

Data Cleared When Changing Bus Configurations

When the bus configuration is changed, settings for Groups are cleared (or set to default) from all current settings and from all stored snapshots.

Setting the System Clock

When you first set up an S6L system (or after a system update or restore), make sure the system clock time, date and time zone are set appropriately. System Clock is set on the Options page of the external VENUE software screen.

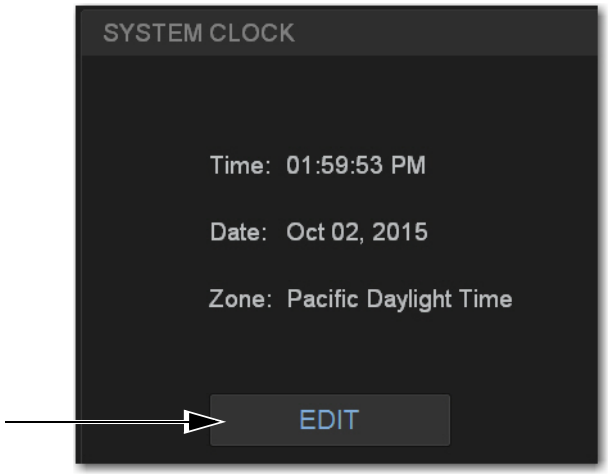
The system clock time can be shown in the Status bar for constant time-of-day display. For more information, see **System Clock**.

To set the System Clock:

1 On the external screen, select Options, then select the Misc tab.

2 In the System Clock section, select the Format pop-up menu to set the time format (12 Hour AM/PM or 24 Hour).

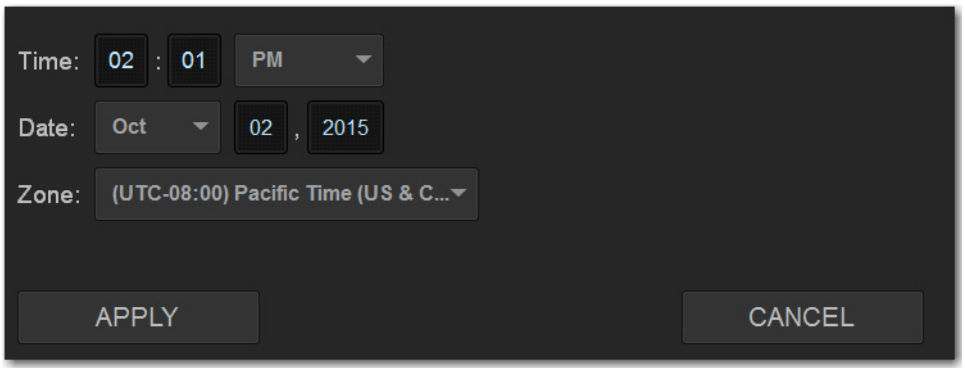
3 Select the Edit button in the System Clock section.



The System Clock Edit button

4 Select each available field and enter the appropriate data to set the time and date.

On touch screens, touch in a field and slide your finger up or down on the screen to change the value in the field.



Time, Date, and Zone settings

5 Select the Zone pop-up to choose the appropriate time zone.

6 Select Apply.

How to Proceed

After setting the system clock, proceed to any of the following sections of this guide:

- See **Installing Additional Software** for information on installing any additional software.
- To get started learning how to use the control surface, see any of the following:
  - **Banking Channels on the S6L Control Surface**
  - **Selecting and Attentioning Channels**
  - **Adjusting Channel Parameters**
- For overviews of the system components, see any of the following:
  - **S6L Control Surface Overview**
  - **E6L Engine Overview**
  - **Stage 64 I/O Rack Overview**
- To learn more about the external VENUE software screen, see **External VENUE Software Screen Overview**.

The S6L system comes pre-loaded with Demo show files, which offer preset system configurations for some of the most common mixing scenarios. See **Loading a Show** *for instructions on loading Show files.*

Installing Additional Software

After having unpacked, assembled, connected, and powered up your S6L system, you can manually install any additional software, as follows:

VENUE Software Update A VENUE software update may be available for your system. If an update is available, download and install it.

To check the version of your system software, on the external screen go to the Options > System tab.

Plug-Ins A core set of plug-ins are pre-installed on your system. Any additional plug-ins (such as the S6L plug-ins pack) must be activated and installed. See **Plug-Ins** for installation and operational information.

ECx Ethernet Control ECx Ethernet Control software must be installed on both your S6L system *and* your remote device. For instructions, see the *ECx Ethernet Control Guide* for more information.

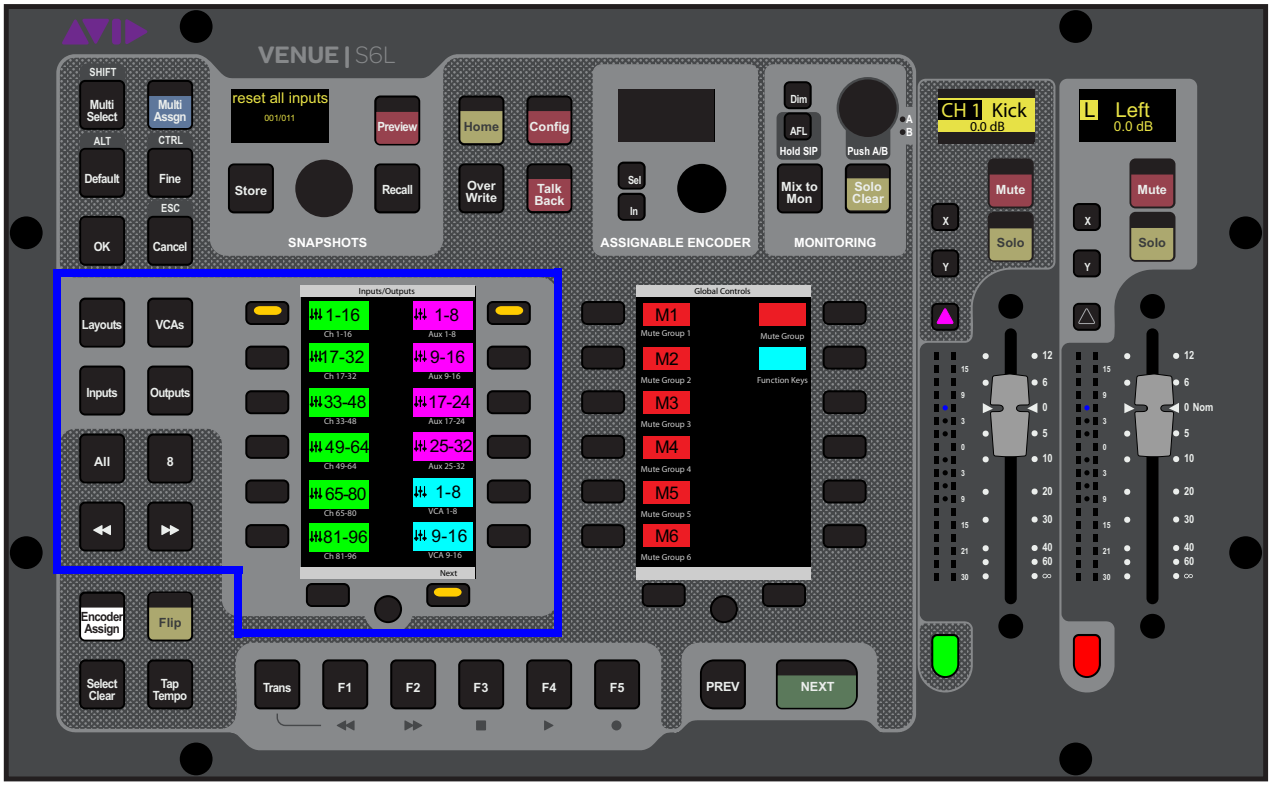
Banking Channels on the S6L Control Surface

This chapter covers banking system channels to the channel strips on the S6L control surface, creating and using custom fader layouts (User Layouts), and using Bank Safe.

Channel Banking Overview

The Master Live Module (MLM) provides channel *banking* controls to navigate to channels beyond the number of available physical channel strips. The banking controls on the S6L control surface let you:

- Bank a combination of input and output channels (see **Banking a Combination of Inputs and Outputs**)
- Bank only custom fader layouts, VCAs, input channels, or output channels (see **Banking Only User Layouts, VCAs, Inputs, or Outputs**)
- Create and recall custom fader layouts (see **User Layouts**)
- Bank Safe channels, letting you "lock" channels to a fader (see **Bank Safing Channels**)



Banking controls on the MLM

You can also bank channels to the on the external screen fader strips using on-screen tabs and buttons. See **Viewing Page and Tabs**. *Banking channels on the external screen is independent of control surface banking.*

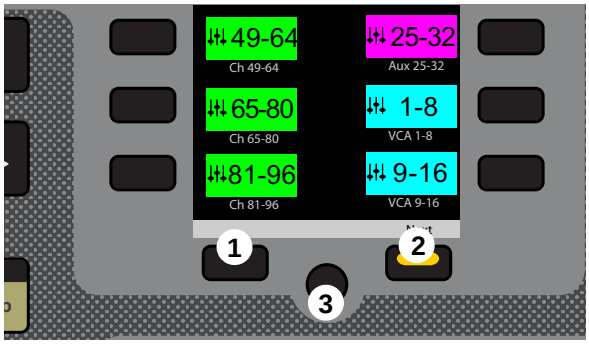
Banking a Combination of Inputs and Outputs

Split Banking Mode

Split Banking mode, the default banking mode for the S6L control surface, lets you bank a combination of input and output channels to the S6L channel strips using pre-defined banks of channels. Split Banking mode banks input channels sequentially to the faders below the Channel Knob Modules (CKMs), and banks output channels sequentially to the faders below the Master Live Module (MLM). The Left Soft Keys menu shows the pre-defined channel banks, which you bank to the faders using the corresponding Soft Keys. Multiple pages of channels banks are provided, which you can navigate using the Left Soft Keys display navigation switches.

Navigating the Left Soft Keys Display in Split Banking Mode

Split Banking mode provides multiple pages of channel banks you can choose to bank to the faders. The Previous and Next Page switches, and the Home switch let you navigate the available pages of channel banks.



Left Soft Keys display navigation switches

1 – Previous Switch

2 – Next Switch

3 – Home Switch

To access to the previous or next page of available channel configurations:

- Press a lit Previous or Next switch until you locate the channels you wish to access.
  The switches are lit when there is a previous or next page of channel configurations available.

To return to the first page of available channel configurations:

- Press the lit **HOME** switch.

Banking Inputs in Split Banking Mode

In Split Banking mode, input channels appear in the left-hand column of the Left Soft Keys display. The S6L-24/24D provides 16 input channels per bank. The S6L-32D provides 24 input channels per bank.

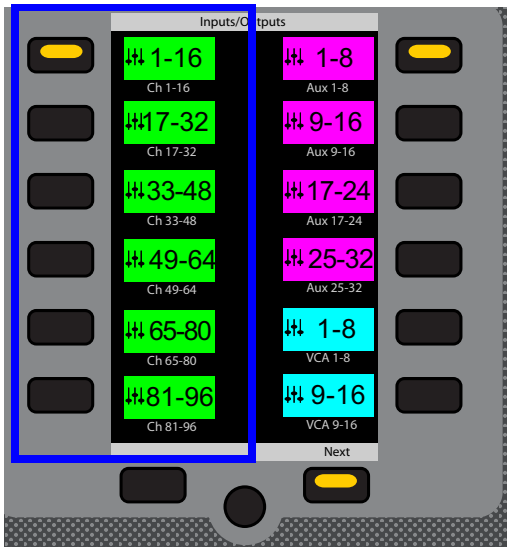
To bank input channels in Split Banking mode:

1 Make sure the Layouts, VCAs, Inputs, or Output Banking mode switches are not selected (unlit). If one is selected, press it so it is unlit.

2 In the left-hand column of the Left Soft Keys display, locate the input channels you want to bank to the faders.

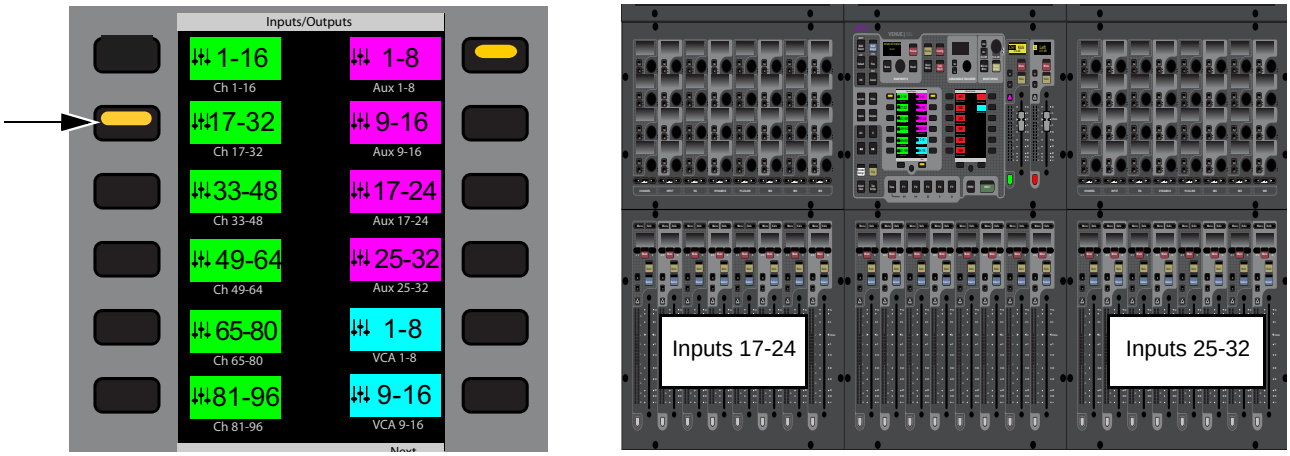
– or –

- Press the lit Next switch until you see the desired channel configuration in the display.



Left Soft Keys display showing the first page of Split Banking mode channel configurations, and a lit Next switch

3 Press the corresponding Soft Key so it lights. The selected set of input channels are banked to the faders below the CKMs.



The selected Soft Key (left) and how the selected configuration of channels is banked to faders of an S6L-24/24D (right)

Banking Outputs in Split Banking Mode

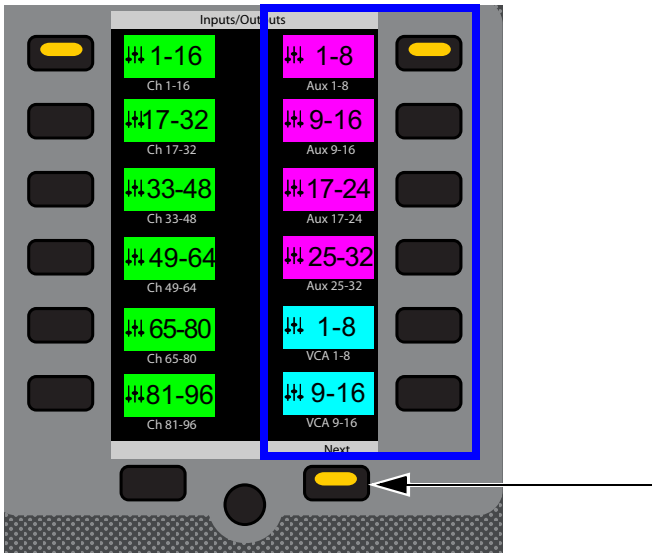
In Split Banking mode, outputs channels appear in the right-hand column of the Left Soft Keys display. All S6L control surface models provide eight output channels per bank. The type and number of Aux and Group output channels available for banking depend on the overall Mix Bus configuration as set in the Options > System page of the external screen.

To bank output channels in Split Banking mode:

1. Make sure the Layouts, VCAs, Inputs, or Output Banking mode switches are not selected (unlit). If one is selected, press it so it is unlit.
2. In the right-hand column of the Left Soft Keys display, locate the output channels you want to bank to the faders.

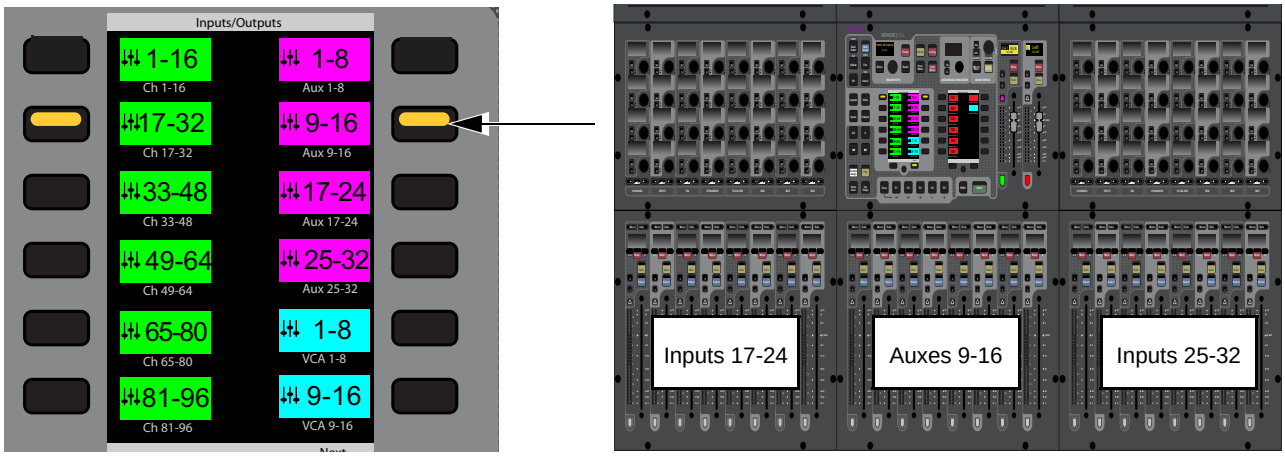
   – or –

- Press the lit Next switch until you see the desired channel configuration in the display.



Left Soft Keys display showing the first page of Split Banking mode channel configurations, and a lit Next switch

3. Press the corresponding Soft Key so it lights. The selected set of output channels are banked to the faders below the MLM.



The selected Soft Key (left) and how the selected channels are banked to faders of an S6L-24/24D (right)

Banking Only User Layouts, VCAs, Inputs, or Outputs

Fader Bank Mode

You can bank only certain types of channels to the faders using the Fader Bank Mode switches. Pressing a Fader Bank Mode switch banks only the selected type of channels to all faders on the control surface. The Left Soft Keys displays shows the available banks of channels, which you bank using the corresponding Soft Keys. You can also use the Horizontal Banking switches to nudge the currently banked channels.

To bank a User Layout in Fader Bank mode:

- Press **Layouts** so it lights.

  If you have not created your own custom User Layout, the default User Layout is banked to all faders on the control surface.

For instructions on creating your own User Layout, see **User Layouts**.

Fader Bank mode switches

To bank VCAs in Fader Bank mode:

1. Press the **VCA** Fader Bank mode switch so it lights.

   VCAs 1–24 (for the S6L-24/24D) or VCAs 1–32 (for the S6L-32D) are banked to all the faders on the control surface.

2. To bank VCAs 25–32 on the S6L-24/24D, press the corresponding Soft Key.

   – or –

- Use the Horizontal Banking switches to nudge channels left or right (see **Banking Horizontally (Nudging Channels)**.

If you navigate out of Fader Bank mode, the next time you enable Fader Bank mode the previous banking configuration will be recalled for the selected channel type.

To bank input channels in Fader Bank mode:

1. Press the **Inputs** Fader Bank Mode switch so it lights.

   Input channels 1–24 (for the S6L-24/24D) or 1–32 (for the S6L-32D) are banked to all the faders on the control surface.

2. In the Left Soft Keys display, locate the input channels you want to bank to the faders. Only input channels are shown in the display.

3. Press the corresponding Soft Key to bank the desired channels to all faders on the control surface.

   – or –

- Use the Horizontal Banking switches to nudge channels left or right.

To bank output channels in Fader Bank mode:

1. Press the **Outputs** Fader Bank Mode switch.

   Auxes 1–24 (for the S6L-24/24D) or 1–32 (for the S6L-32D) are banked to all the faders on the control surface.

2. In the Left Soft Keys display, locate the output channels you want to bank to the faders. Auxes, Groups when applicable, Matrixes, and Mains are shown in the display.

3. Press the corresponding Soft Key to bank the desired channels to all faders on the control surface.

   – or –

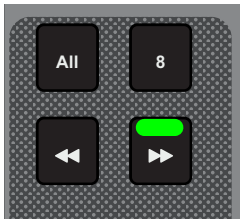
- Use the Horizontal Banking switches to nudge channels left or right.

To exit Fader Bank mode, do any of the following:

- Press a lit Fader Bank Mode switch. The last Split Banking mode channel configuration is restored to the faders.
- Press **Home.**

Banking Horizontally (Nudging Channels)

The Horizontal Banking switches, available when Fader Bank mode is enabled, let you sequentially nudge channels to the left or right one channel at a time, one fader bank (eight channels) at a time, or all fader banks (24 channels for S6L-24/24D, or 32 channels for S6L-32D) at a time. When Fader Bank mode is enabled, depending on the type of channels currently banked to the faders, the **<<** and/or **>>** switches light to indicate the direction in which you can nudge channels.



Horizontal Banking switches

To nudge channels to the left or right by one channel:

- Press a lit **<<** or **>>** switch. The Soft Keys LEDs for the active banks of channels flash to indicate that channels from both banks are contributing to the current banking configuration.

To nudge channels to the left or right one fader bank (eight channels):

1. Press the **8** switch so it lights.
2. Press a lit **<<** or **>>** switch. The Soft Keys LEDs for the active banks of channels flash to indicate that channels from both banks are contributing to the current banking configuration.

To nudge channels to the left or right 24 (for S6L-24/24D) or 32 (for S6L-32D) channels:

1. Press the **All** switch so it lights.
2. Press a lit **<<** or **>>** switch. The Soft Keys LED for the next or previous bank of channels lights to indicate that those channels are banked to the control surface's faders.

User Layouts

You can create a custom fader layout and save it as the User Layout, and then access those channels on the S6L channel strips using the **Layouts** switch. The User Layout can include any type of channel in any order of any format, up to the maximum of 24 channels for S6L-24/24D and 32 channels for the S6L-32D.

One User Layout is available for banking to the channel strips at any one time. However, you can create other User Layouts, and store each User Layout as a discrete preset file. You can then load the User Layout Preset so it is available for banking.

You can also store and recall one User Layout per snapshot, letting you bank a different User Layout when you recall another snapshot.

Assigning Channels to the User Layout

You can assign channels to the User Layout using the S6L control surface or the external screen. You can assign individual channels or multiple channels using Multi-Assign. Channels are arranged from left to right in the User Layout in the order in which they are assigned. You can then reorder them using drag-and-drop (see **Reordering Input Channels Using Drag and Drop**).

Clearing the User Layout

When you first launch an S6L system, or load a Demo Show file included with the system, the default User Layout is loaded. You may want to clear the default User Layout before creating your own.

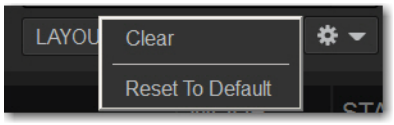
To clear the default User Layout

1 On the external screen, go to the Inputs or Outputs page and select the Layouts tab.

2 Tap-and-hold (right-click) any fader strip and select User Layout from the pop-up menu., and then choose Clear All Assignments.

– or –

- Select the Gear icon under the User Layout members list and choose Clear from the menu.



Layouts Gear icon menu

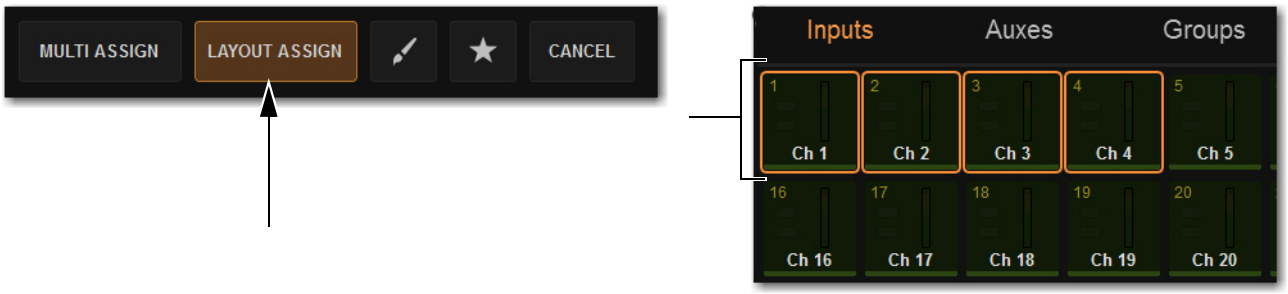
Using the S6L Control Surface

To assign channels to the User Layout using the S6L control surface:

1 On the MTS, touch Universe to show the Universe view.

2 Tap LAYOUT ASSIGN so it lights. The S6L system enters User Layout Assignment Mode. Channels currently assigned to the User Layout are indicated on the control surface as follows:

- Channel Tiles for the currently assigned channels are bordered in orange on the MTS.
- **Attention** switches for currently assigned channels flash.



Enabled Layout Assign button (left) and Channel Tiles showing channels currently assigned to the User Layout

3 Tap a Channel Type button (Inputs, Auxes, Groups, Matrixes, VCAs, or Mains) to show those channels on the MTS.

– or –

- Bank the desired channels to the channel strips.

4 Tap a channel tile. The channel tile is bordered in orange.

– or –

- Press a channel **Attention** switch. The Attention switch flashes.

5 Repeat to assign any other channels, navigating to other channel banks as necessary.

6 To remove a channel from the User Layout, do either of the following:

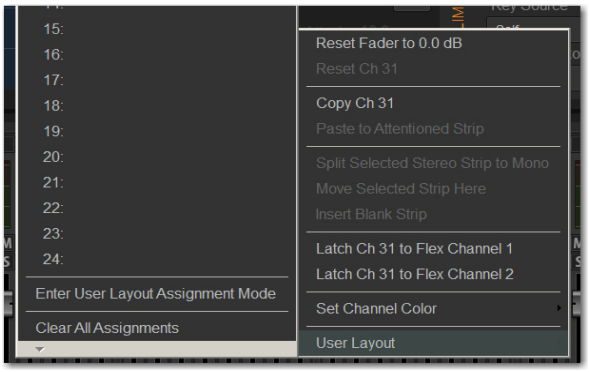
- Tap a Channel Tile that is bordered in orange so the orange border disappears.
- Press a channel **Attention** switch so it is no longer flashing.

7 Tap Layout Assign (or press **Multi-Assign** on the MLM) so it is unlit to exit User Layout Assignment mode. Your User Layout assignments are saved.

8 If desired, store the User Layout as a Preset. See **Working with User Layout Presets**.

To assign a channel to the User Layout using the external screen:

1. Depending on the type of channel you want to assign, go to the Inputs or Outputs page.
2. Touch and hold (right-click) a fader strip on-screen, and select User Layout from the pop-up menu.
3. In the User Layout sub-menu, choose the channel strip to which you want to assign the channel.

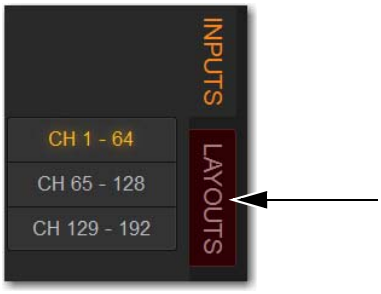


User Layout sub-menu

4. Repeat for any other channels you want to assign.
5. If desired, store the User Layout as a Preset. See **Working with User Layout Presets**.

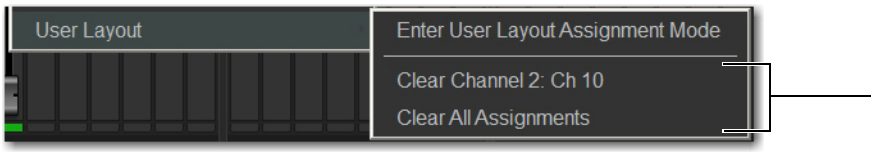
To remove channels from a User Layout using the external screen.

1. Go to the Inputs or Outputs page.
2. Select the Layouts tab.



External screen Layouts tab (right)

3. To remove a single channel from a User Layout:
   - Tap-and-hold (right-click) any fader strip and select User Layout from the pop-up menu.
   - Choose Clear Chanel <x>: <channel name>.



Clear User Layout Assignments menu items

4. To remove all channels from the current User Layout, do either of the following:
   - Tap-and-hold (right-click) any fader strip and select User Layout from the pop-up menu., and then choose Clear All Assignments.

   – or –

   - Select the Gear icon under the User Layout members list and choose Clear from the menu.

Resetting the User Layout to Default

To reset the User Layout to the default setting:

1. On the external screen, go to the Inputs or Outputs page and select the LAYOUTS tab.
2. Select the Gear icon under the User Layout members list and choose Reset to Default.

Banking the User Layout

You can bank the User Layout from the control surface or the external screen.

To bank the User Layout to the channel strips on the S6L control surface:

- On the control surface, press the **Layouts** switch.

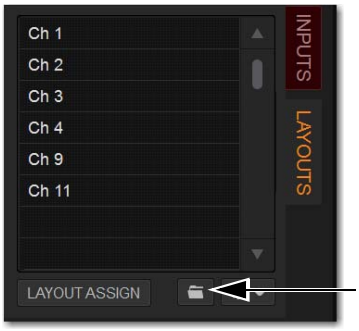
  The channels assigned to the current User Layout are banked to the channel strips. Any User Layout channel strips that have no channel assignments are blank. Any stereo channels are assigned to a single fader, as are the three Mains busses (see **Using Mains in a User Layout** for more information).

Working with User Layout Presets

You can store the current User Layout to disk as a preset file. One User Layout is stored to a preset file. You can then load a User Layout saved as a preset file. After you load a preset file, you can then bank the newly loaded User Layout.

To store a User Layout as a preset file:

1. Assign channels to the User Layout as desired.
2. On the external screen, go to the Inputs or Outputs page and select the LAYOUTS tab.
3. Below the User Layout Members list, select the Presets Folder icon on-screen to open the User Layouts Presets Folder.



User Layout Presets folder icon

4. Choose User Presets folder from the Folder pop-up menu at the top of the Presets window.

To store the current User Layout as a new preset:

- Select New and enter a name for the preset file. The current User Layout is stored as a User Layout preset.

To preview an existing preset:

- Select the preset name in the Presets window so it is highlighted. The selected User Layout is visible on the external screen Layouts tab, but is not yet loaded.

To load the currently selected preset:

- Press Enter on the keyboard or select the Close box in the Presets window title bar.

To immediately load a preset and close the Presets window:

- Double-tap the preset.

To cancel without loading the preset.

- Select Cancel.

Using Layouts in Snapshots

You can also store and recall one User Layout per snapshot, providing up to 999 User Layouts per Show file. As with other snapshot data types, the current User Layout and the associated parameters (mute, solo, etc.) are stored whenever you store a snapshot. Recalling a Snapshot with the LAYT Data Type button scoped recalls the User Layout stored in the snapshot (see **Recalling Snapshots** for more information).

Using Mains in a User Layout

When you assign Mains L-R + C/Mono to a User Layout, a single fader for all three Mains busses is assigned to the Layout regardless of the Mains busses' linked/unlinked state. When Mains are linked, adjusting the fader in the User Layout controls levels for the linked Mains busses. See **Using Mains in a User Layout** for more information.

Bank Safing Channels

Bank Safe lets you temporarily "lock" the location of key channels (such as a lead vocal or the Mains) on an S6L control surface channel strip. This lets you maintain immediate access to these key channels while working with channels on a different layer. When a channel is removed from Bank Safe, the channel that would normally appear in that fader location on the currently selected bank automatically re-appears.

You can Bank Safe channels using the Channel Safe switches, the Channel Knob Module (CKM) in Channel Control mode, or the Channel Menu. To Bank Safe channels using the Channel Safe switches, you must first enable Bank Safe mode.

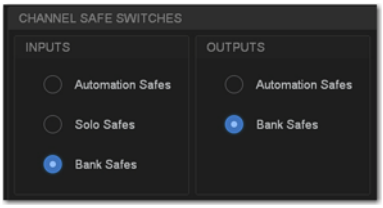
Bank Safing Using the Channel Safe Switches/Button

The Channel **Safe** switch on the S6L control surface and the Channel Safe button on the external software screen toggle Bank Safe for that channel when Bank Safe mode is enabled. Bank Safe Mode is enabled globally for input and output channels on the Options > Interaction page of the external screen.

To enable Bank Safe for the Channel Safe switches:

1 On the external screen, go to the Options > Interaction page.

2 In the Channel Safe Switches section, under Inputs and Outputs, select Bank Safes as desired.



Channel Safe Switch options in the Options > Interaction page

You can create an event that lets you cycle through the various Channel Safe switch modes, as well as suspend or disable Bank Safe (Disable Bank Switch). See **Creating Events**.

To Bank Safe channels using the Channel Safe switches:

1 Make sure you have enabled Bank Safe for the Channel Safe switches.

2 On the S6L control surface, do the following:

- Bank the desired channel to the faders.
- Press **Safe** for the channel you want Bank Safe.

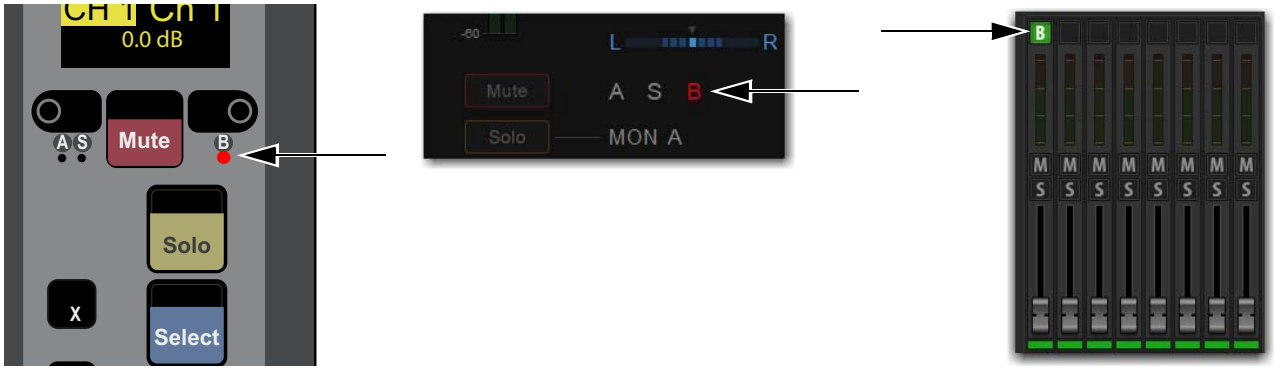
S6L Channel Safe switch engaged

3 On the external screen, do the following:

- Go to the Inputs or Outputs page, and navigate to the desired channel using the provided tabs and buttons.
- Select the Channel Safe switch for the desired channel, located at the top of each fader strip.

Bank Safe status for the channel is indicated as follows:

- On the control surface channel strip, the **B** LED lights red.
- In the Input section of the MTS and CTM Channel view for the channel, **B** lights red.
- On the external screen the Safe button flashes green and shows the letter B (A appears if the switch is acting as an Automation Safe, and S appears if it is acting as a Solo Safe).



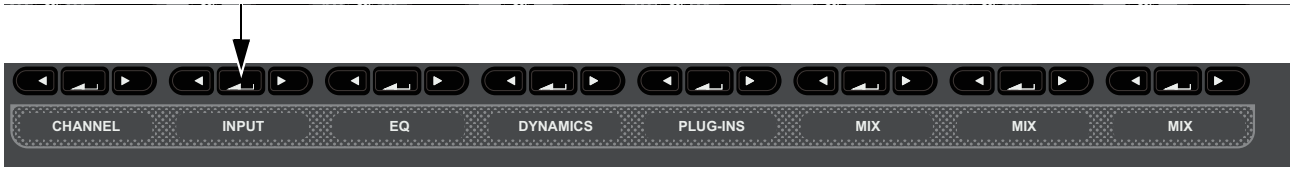
Indications that a channel is Bank Safed on the channel strip (left) the MTS/CTM Channel view (center) and on the external screen (right)

Bank Safing Using the Channel Knob Module (CKM)

You can Bank Safe a channel using the CKM in Channel Control mode. You can Bank Safe a channel using the CKM when a different Safe mode (such as Automation and/or Solo Safe) is enabled for the Channel Safe switches.

To Bank Safe a channel using the CKM:

1. Bank the desired channel to the faders.
2. Press the **Select** switch for the channel you want to Bank Safe so it lights, then press the **INPUT** Channel Control Function switch so it lights.



CKM Channel Control Function Switches

– or –

- Touch the channel's Input touch zone on the associated Channel Touch Module (CTM). Input parameters are assigned to the associated CKM.

Input touch zone on the CTM in Meters view (left) and in Channel view (right)

3 Locate the Bank Safe encoder, indicated by Bank Sf on the encoder display, and press the encoder.
The encoder **In** switch lights green, and the channel is Bank Safed.

Bank Safe parameter on a CKM encoder

Bank Safing Using the Channel Menu

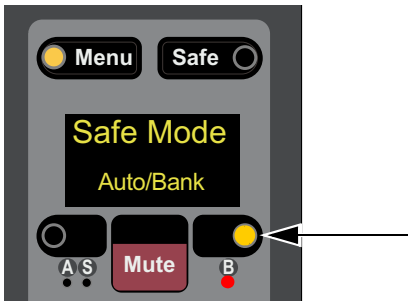
You can Bank Safe a channel using the Channel Menu when a different Safe mode (such as Automation and/or Solo Safe) is enabled for the Channel Safe switches.

To Bank Safe a channel using the Channel Menu:

1 Bank the desired channel to the faders.

2 Press the **Menu** switch for the channel you want to Bank Safe until Safe Mode appears in the channel display. The Safe modes enabled by the Left and Right Channel Menu switches are shown below Safe Mode.

3 Press the Right Channel Menu Switch so it lights to Bank Safe the channel. The **B** LED lights red.



Right Channel Menu switch engaged

Special Cases Affecting Bank Safe

Reordering/Moving Channels

Bank Safed channels shuffle accordingly when any operation is performed that results in a re-ordering of input channels, including the following:

- Inserting or Removing a Blank Strip
- Moving a strip
- Splitting a stereo strip(s)
- Opening a Show file that was saved on a VENUE system that used a different control surface layout than S6L.

Make Stereo

The Bank Safe status of the left channel is applied to the newly created stereo channel.

Split Stereo

The Bank Safe status of the stereo channel is applied to only to the left channel of the former pair.

Selecting and Attentioning Channels

On the S6L system, there are two ways to target channels for processing, assigning, and other channel functions: *selecting* and *attentioning* channels. Selecting a channel *locally* selects that channel, and targets it to the associated Channel Knob Module (CKM). Attentioning channels targets channels to the external VENUE software screen and the Master Touch Screen (MTS).

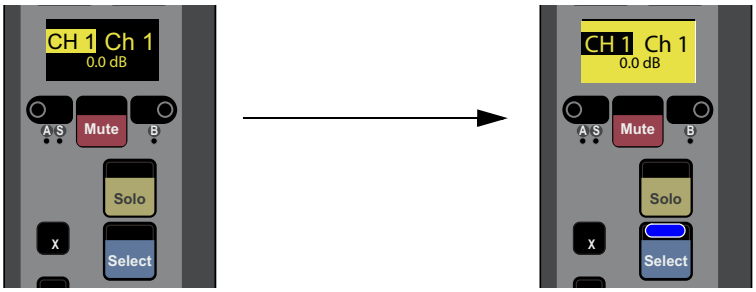
Selecting Channels

You can select channels using the channel strip **Select** switches, or using the associated Channel Touch Module (CTM) if available. Selecting a channel lets you adjust the channel's parameters using the associated CKM.

Selecting a Channel Using the Select Switch

To select a channel using the channel strip Select switch:

1. Bank to the desired channels.
2. Press **Select** on the corresponding channel strip so it lights. The background of the display also lights yellow to indicate that the channel is selected.



An unselected channel (left) and a selected channel (right

Depending on the fader bank from which you selected the channel, you can adjust the selected channel's parameters from an associated CKM as follows:

- Selecting a channel on a fader bank below a CKM enables Channel Control mode on that CKM, at shown in the following figure on the left (S6L-24D shown).
- Selecting a channel on the fader bank below the Master Live Module (MLM) enables Channel Control mode on the CKM to the *right* of the MLM, at shown in the following figure on the right (S6L-24D shown).

Selecting a channel below a CKM (left) and below the MLM (right)

Selecting a Channel From a CTM

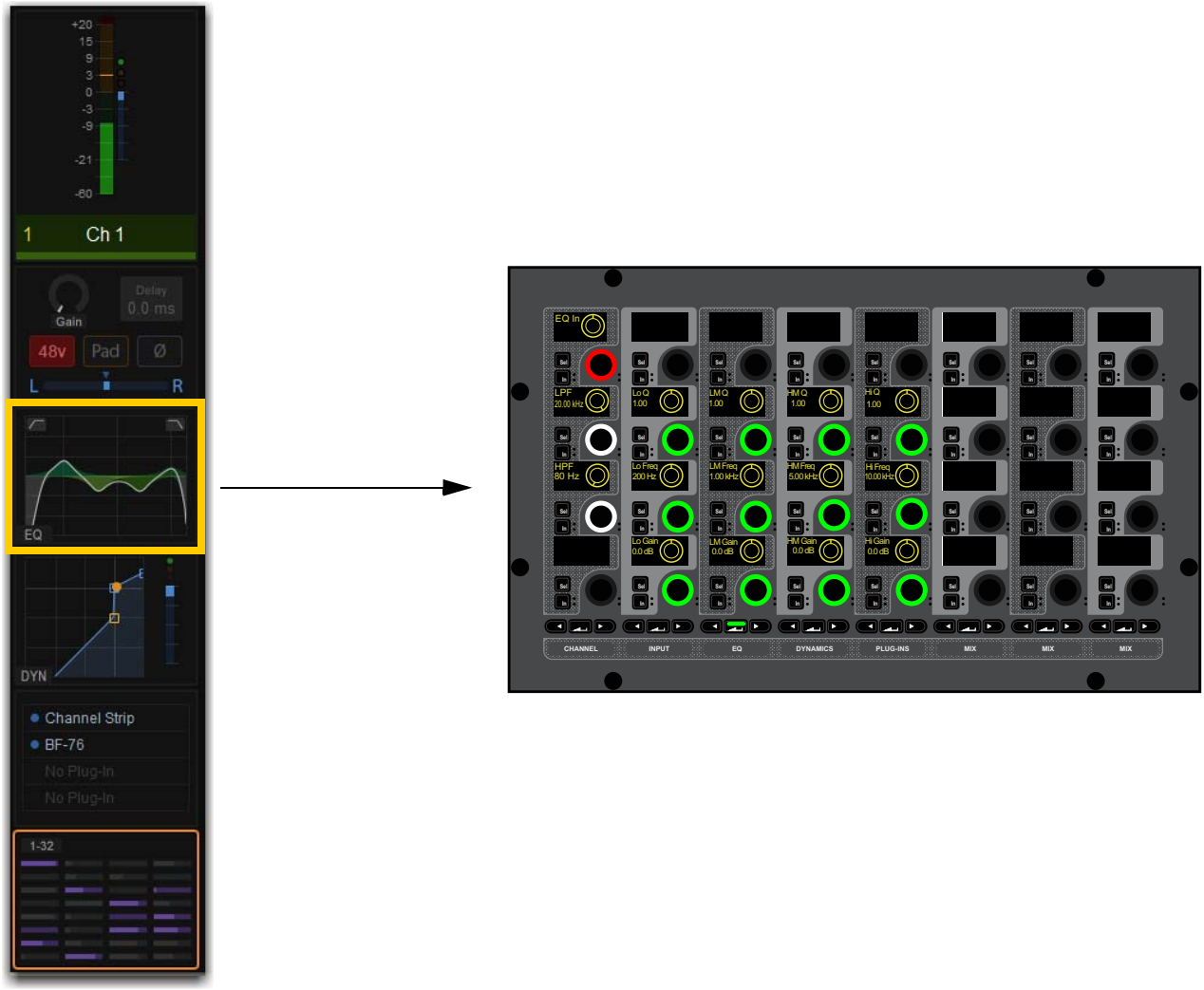
If your S6L control surface is equipped with CTMs, you can select channels from the CTM Meters view or Channel view.

To select a channel from a CTM:

1 Bank the desired channel to any fader bank except the fader bank under the MLM.

2 In Meters view, do any of the following:

- Touch the Input, EQ, Dynamics, Plug-Ins, or Mix touch zone for the channel you want to select. That channel is selected, the touch zone is bordered in orange on the CTM, and the parameters associated with the active touch zone are spilled to the associated CKM in Channel Control mode.



Selecting the EQ touch zone spills EQ parameters in Channel Control mode to the associated CKM in Channel Control mode.

– or –

- Touch the channel's Meter touch zone.

The CTM switches to Channel view. The Channel Tile for the currently selected channel is bordered in orange, and the parameters associated with the last active Channel Control function are spilled to the associated CKM in Channel Control mode.

To select a different channel in CTM Channel view:

- Touch a different Channel Tile at the bottom of the CTM. That channel is now selected, and the encoders on the CKM now target the selected channel.

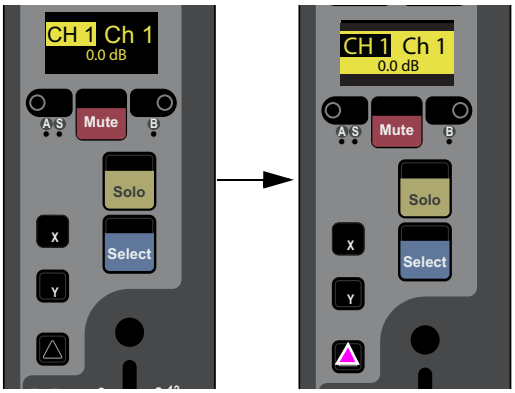
Attentioning Channels

You can attention a channel using the channel strip **Attention** switches, the Master Touch Screen (MTS), or the external screen. Attentioning a channel targets the channel to the external VENUE software screen, from which you can adjust channel parameters independently of selected channels. The MTS Channel view also tracks to the currently attentioned channel.

You can enable the Attention Follows Select preference (in the Channel Section of the Options > Interaction tab on the external screen) so that whenever you select a channel, the channel is also attentioned.

To attention a channel using the Attention switch:

1. Bank to the desired channels.
2. Press **Attention** on the corresponding channel strip so it lights. The channel display inverts (black text on a yellow background) with black borders above and below, distinguishing it from indication of channel Select.



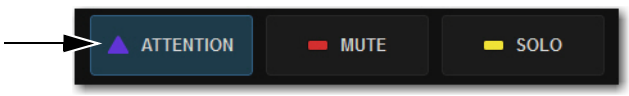
An unselected and unattentioned channel (left) and an attentioned channel (right

On the MTS, the channel tile is bordered in blue. On the external screen the fader lights blue.

Indications of attentioned channels in the MTS (left) and on the external screen (right)

To attention a channel using the MTS:

1. Touch Universe to show the Universe view.
2. Touch the appropriate Channel Type button (Inputs, Auxes, Groups, Matrixes, VCAs, or Mains) to show the channel you want to attention.
3. Touch the Attention Channel Tile Function button so it lights.



An enabled Attention Channel Tile Function button

4. Touch the channel tile. The channel tile is bordered in blue to indicate the channel is attentioned.

To view the attentioned channel in the MTS Channel view:

- Touch Channel. The currently attentioned channel's parameters are shown. When you attention another channel, its parameters are shown in the Channel view.

For information on working with external screen controls, including attentioning channels, see **Adjusting Channels on the External Screen**.

Selecting/Attentioning Multiple Channels (Multi-Select)

Multi-Select lets you select or attention multiple channels in order to apply an action to them in one step, such as adjusting multiple channel's High-Pass Filters, turning Aux sends on or off for multiple channels, or assigning multiple channels to a bus. You can multi-select channels using **Select** or **Attention**.

When you multi-select using **Select**, you can adjust parameters for all selected channels using the associated CKM. When you multi-select using **Attention**, you can adjust parameters for all attentioned channels using the controls on the external screen.

Mutli-Selecting Using Select

Multi-selecting using **Select** is "local"–only channels on the same fader bank can be multi-selected using **Select**.

To multi-select channels using the Select switch:

1. Bank to the desired channels.
2. Press and hold the **Multi-Select** switch at the top-left of the MLM.

Multi-Select switch

You can also use the Shift key on the keyboard to select multiple channels.

3. Press the **Select** switch on each channel you want to include in the selection.
4. Release the **Multi-Select** switch. The flashing **Multi-Select** switch flashes to indicate Multi–Select mode is enabled.
5. Press a Channel Control Function switch to target those parameters to the associated CKM encoders.
6. Adjust a parameter on the CKM. The operation is applied to all selected channels.
7. To exit Multi-Select mode, do any of the following:
   - Select an unselected channel on the same fader bank.
   - Bank to a different set of channels.

Mutli-Selecting Using Attention

Multi-selecting using **Attention** is “global”–any channels in the system regardless of its current banking status can be multi-selected using **Attention**.

For information on working with external screen controls, including attentioning channels, see **Attentioning Channels From the External Screen**.

To multi-select channels using Attention:

1 Press and hold the **Multi-Select** switch at the top-left of the MLM.

2 Press the **Attention** switches for any channels you want to include in the selection.

3 If necessary, bank to other channels as desired, and press their **Attention** switches to add to the multi-selection.

4 When finished multi-selecting channels, release the **Multi-Select** switch. The flashing **Multi-Select**, **OK** and **Cancel** switches, and the banner display at the lower left of the external screen flash to indicate Multi–Select mode is enabled.

Flashing OK and Cancel switches

5 Press other **Attention** switches as desired to add any other currently banked channels to the multi-selection.

6 To adjust parameters, do any of the following:

- If no channel is locally selected, adjust a parameter on the CKM in Channel Strip mode.
- Press the **Select** switch to enable Channel Control mode on the associated CKM, then press a Channel Control function switch to access the desired parameter(s).

Any adjustments are applied to all multi-selected channels.

7 To exit Multi-Select mode, do any of the following:

- Attention an un-attentioned channel.
- Press **Cancel.**
- Press **Multi-Select.**

Adjusting Channel Parameters

This chapter describes the following:

- **Assigning Channels to Outputs**
- **Adjusting Input Parameters on the Control Surface**
- **Adjusting Built-In Channel and Graphic EQ on the Control Surface**
- **Adjusting Built-In Dynamics on the Control Surface**
- **Adjusting Plug-Ins**
- **Using the CHANNEL Function**
- **Flipping Parameters to Faders (Flip to Faders Mode)**

You can also adjust many channel parameters using the external VENUE software screen. See **Adjusting Channels on the External Screen** *for more information.*

Configuring and Patching Channels

Before adjusting channels, make sure you have configured your Mains and Mix Busses, patched hardware I/O to input and output channels, and configured channels as desired (such as naming channels and making stereo channels). See the following for more information:

◆ Configure Mains and Mix Busses (Aux and Groups) on the System > Options page. See **Configuring Mains and Mix Busses**.

◆ Patch hardware I/O to input and output channels using the VENUE Patchbay. See **Patching Input Sources to Input Channels** for more information.

◆ Name channels, combine two mono channels into one stereo channel (make stereo), reorder input channels, and insert blank channel strips using the Inputs and Outputs pages of the external screen. See **Configuring Channels on the External Screen** for more information.

Assigning Channels to Outputs

You can assign channels to the Mains, Auxes, Groups and VCAs using Multi-Assign. You can assign channels the Mains and Groups using the CKMs in Channel Control mode.

For information on assigning input sources to Matrix Mixers, see **Assigning Input Sources to Matrix Mixers**.

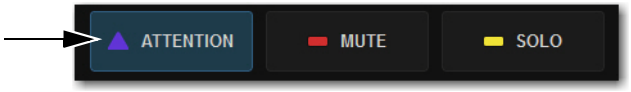
Assigning Channels Using Multi-Assign

Multi-Assign lets you assign multiple channels to a bus or VCA at once. Assigning channels using the MTS is the quickest and easiest way to assign channels.

To assign channels using Multi-Assign:

1 On the MTS, touch the Channel Type button for the output you want to target for the multi-assign (Auxes, Groups, VCAs, or Mains).

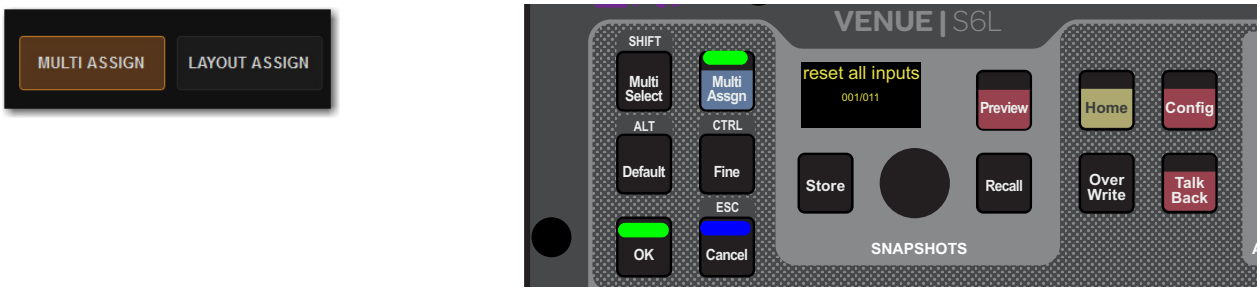
2 Touch Attention.



An enabled Attention Channel Tile Function button

3 Touch the channel tile for the output channel you want to target for the multi-assign so the channel tile is bordered in blue.

4 Touch Multi-Assign on the CTM, or press the **Multi-Assign** switch on the control surface MLM so they are lit.



Enabled Multi-Assign button on the MTS (left) and on the MLM (right)

5 On the MTS, touch Inputs, and then touch the channel tiles for the channels you want to assign so the channel tiles are bordered in orange.

– or –

- Bank the desired input channels to the faders and press their **Attention** switches.

6 To confirm the assignment and exit Multi-Assign mode, press the **OK** switch

7 To cancel the assignment, press the **Cancel** switch, or press the Esc key on your keyboard.

Assigning Channels to the Mains

You can assign input channels to the Mains using the CKM encoders in Channel Control mode and on the external screen:

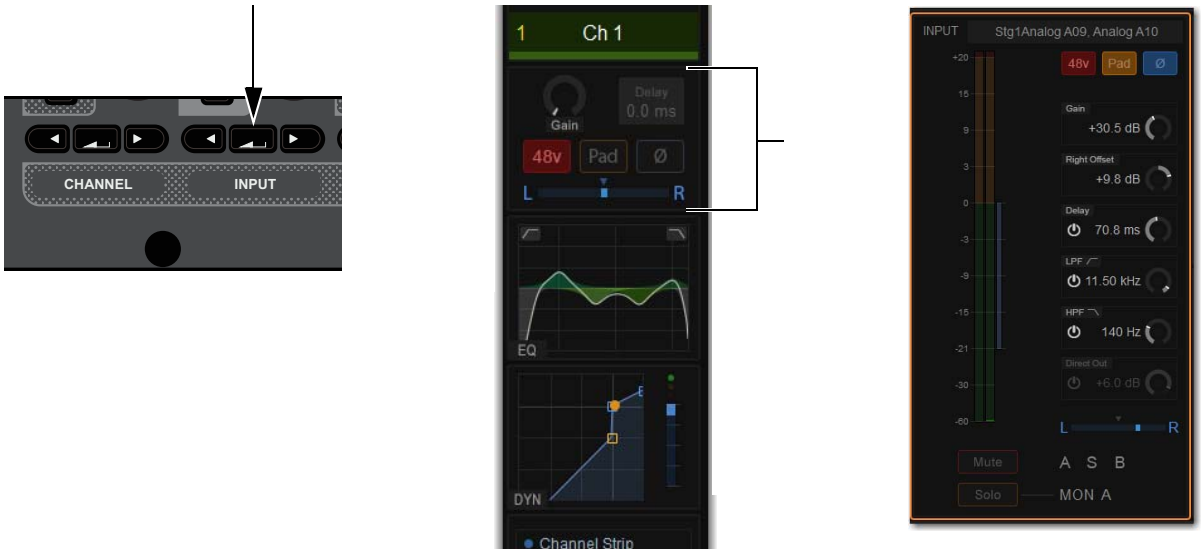
To assign input channels, Aux outputs, and Group outputs to Mains in Channel Control mode:

1 Select one or more channels you want to assign to the Mains busses.

2 On the associated CKM, press the **INPUT** Channel Control Function switch

– or –

- Touch the Input touch zone for the desired channel on the associated CTM in Meters or Channel view.



Input Channel Control Function switch (left), Input touch zone in Meters view (center), Input touch zone in Channel view (right)

3 Do any of the following:

- To assign the channel(s) to the Mains Left and Right, press the encoder under the display showing L-R Assign.
- To assign the channel(s) to the Mains Center/Mono, press the encoder under the display showing C-M Assign.

The encoder **In** switch lights, the virtual encoder surround on the display fills, and the encoder turns red.

Encoder and display showing a channel assigned to Mains L-R (left) and C/Mono (right)

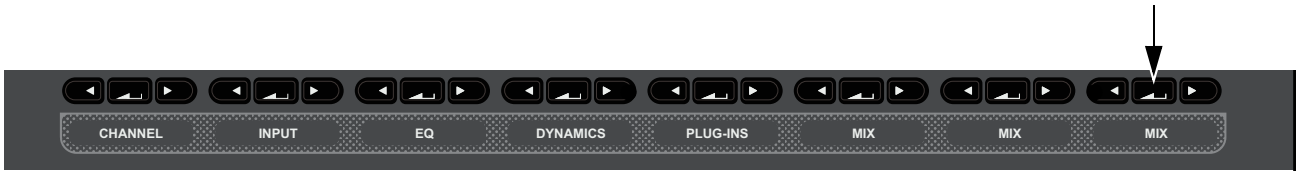
Assigning Input Channels to Groups

You can assign input channels to Groups using the CKM. The number of Group busses available, and which Mix Channel Control function switch lets you access them, depends on the overall Mix Bus configuration. To change the Mix Bus configuration, see **Configuring Mix Busses**.

To assign an input channel to a Group in Channel Control mode:

1 Select one or more channels.

2 On the associated CKM, press the rightmost **Mix** Channel Control Function switch. Group assigns are spilled to the encoders.



CKM Channel Control Function Switches

3 Press the orange encoder under the display showing the Group to which you want to assign the channel(s).

The encoder **In** switch lights, and the encoder surround in the display fills in to indicate the assignment.

On-screen, the corresponding bus indicators are lit in the Bus Assign sections of the MTS and CTM Channel views, and on the external screen Inputs page.

Encoder and display showing a channel assigned to Group 1 (left) and on-screen for the selected/attentioned channel (right)

Adjusting Input Parameters on the Control Surface

This section describes how to adjust top-of-channel parameters, which are the parameters you access when you press the **INPUT** Channel Control function switch or touch the Input touch zone on a CTM. You can also adjust some input parameters on the CKM encoders in Channel Strip mode.

You can also adjust input parameters on the external screen. See **Adjusting Channels on the External Screen**.

The parameters provided by the Input function depend on the type of channel that is currently selected, as follows:

Selected Channel Type	Available INPUT Parameters
Input Channels	Input Gain, 48 V, Pad, LPF, HPF, Pan, Balance*, Width*, Delay, Direct Out, Polarity, Right Offset*, Bank Safe, Solo Safe, Automation Safe, Input Source Toggle, L-R and C/Mono Assign
Auxes and Groups	Polarity, Delay, Direct Out, Pan, Balance*, Width*, Bank Safe, Automation Safe, L-R and C/Mono Assign
Matrixes	Polarity, Delay, Direct Out, Pan, Width*, Bank Safe, Automation Safe
Mains	Polarity, Delay, Direct Out, Pan, Bank Safe, Automation Safe

** These parameters are available only for stereo channels.*

Adjusting Input Gain

Input Channels Only

S6L system analog mic/line XLR inputs have a gain range from +10 dB to +60 dB. All system digital inputs (including AES digital inputs and inputs from Pro Tools) have a gain range from –20 dB to +18 dB. You can adjust gain in Channel Control and Channel Strip modes.

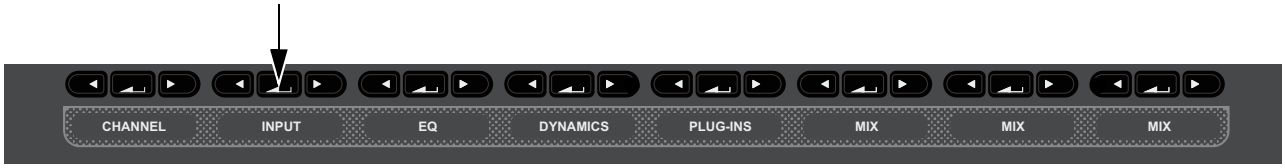
S6L systems also provide an automated Gain Guess feature for quick and easy gain setting.

If you repatch the hardware input different channel, gain, pad, and phantom power settings move with the hardware input.

To adjust channel input gain in Channel Control mode:

1 Bank to the desired input channels.

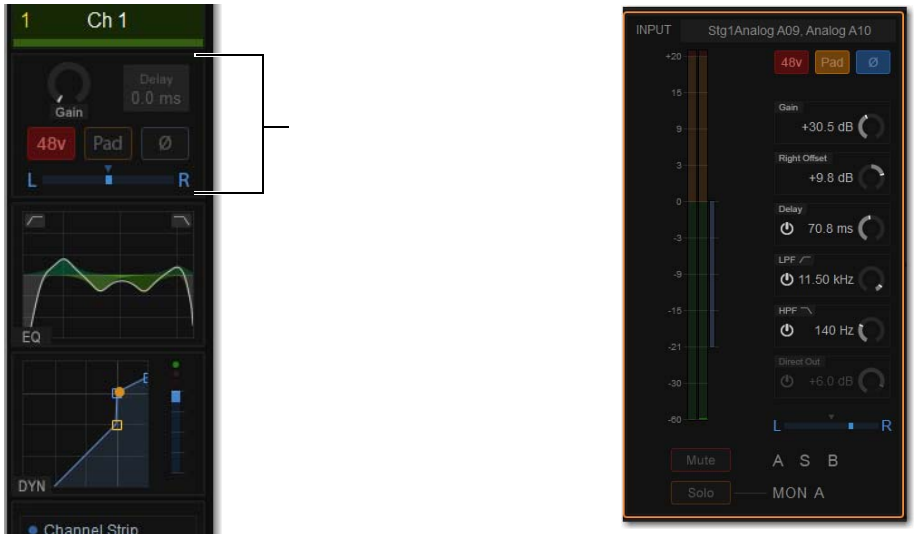
2 Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.



INPUT Channel Control Function switch

– or –

- Touch the Input touch zone for the desired channel on the associated CTM in Meters or Channel view.

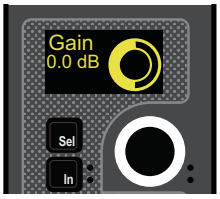


Input touch zone the CTM in Meters view (left) and in Channel view (right)

The **INPUT** switch lights, the Input touch zone is bordered in orange, and Input parameters are spilled to the CKM.

3 Locate the encoder display showing Gain, and rotate the corresponding encoder.

The gain value changes in the encoder displays, in the Inputs zone of the MTS and CTM Universe view, and in the Input section of the Inputs page for the channel on the external screen (if the selected channel is also attentioned).



Encoder display showing parameter and parameter value

To adjust channel input gain in Channel Strip mode:

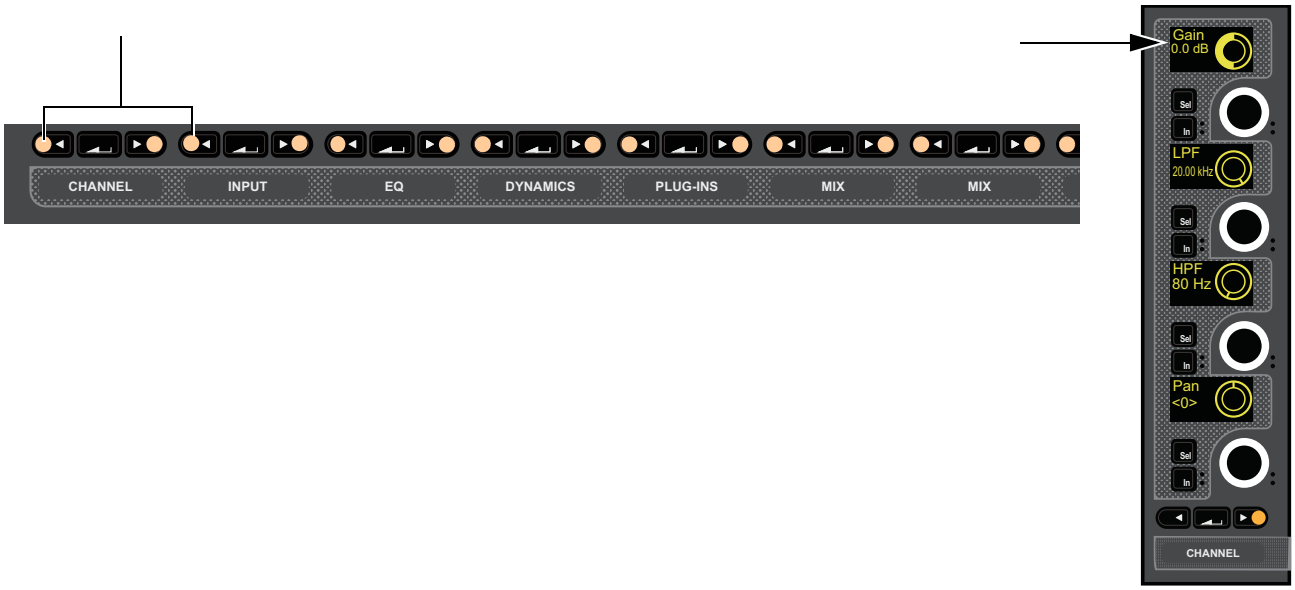
1 Bank to the desired input channels.

2 Do either of the following to enable Channel Strip mode:

- Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
- Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.

Select Clear on the MLM

3 If necessary, navigate to the first Channel Strip mode parameter bank by pressing the lit Left Parameter Bank switch until Gain appears in the top row encoder displays.



Lit Left Parameter Bank Switches (left) and the first page of Channel Strip parameters for input channels (right)

4 In the column for the channel you want to adjust, rotate the encoder under the display showing Gain The gain value in the display changes as you adjust the parameter.

Using Gain Guess

The automated Gain Guess function can be used to set a nominal level for a channel based on its incoming signal. When you enabled Gain Guess, the system samples the incoming signal and automatically sets the channel Input Gain and pad for a 0 dB reference. Gain Guess follows the current Meter mode (Peak or RMS). You can access Gain Guess on the external screen.

To engage Gain Guess:

1. On the external screen, go to the Inputs page.
2. Attention a channel.
3. Touch and hold the Guess button. The button flashes to indicate level sampling.

Gain Guess engaged

4. Release the button. Input Gain will be set so the incoming signal reaches 0 dB peak (if Peak mode is selected) or 0 dB RMS (if RMS mode is selected).

Setting Right Offset on Stereo Channels

On stereo input channels the Gain control affects both the left and right channels. The Right Offset feature lets you offset the gain of the right channel relative to the left channel by –20 dB to +20 dB, within the overall gain limits. You can adjust Right Offset in Channel Control and Channel Strip modes.

To adjust Right Offset in Channel Control mode:

1. Bank to the desired input channels.
2. Select a channel, and then press the **INPUT** Channel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input touch zone for the desired channel.
3. Rotate the encoder under the display showing R. Offset.

To adjust Right Offset in Channel Strip mode:

1. Bank the desired input channels.
2. Enable Channel Strip mode on the CKMs by doing either of the following:
   - Press a lit **Select** switch to enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. If necessary, navigate to the first Channel Strip mode parameter bank by pressing any lit Left Parameter Bank switches until Gain appears in the top row encoder displays.
4. In the column for the channel you want to adjust, press the encoder **Sel** switch under the display showing Gain. R. Offset is now shown in the display, and the encoder targets the Right Offset parameter.
5. Rotate the encoder under the display showing R. Offset to adjust the Right Offset. The gain value in the display changes as you adjust the parameter.

20 dB Pad

Analog Input Channels Only

You can apply a 20 dB pad to any analog input assigned to an input channel in Channel Control and Channel Strip modes.

To toggle a channel pad in/out in Channel Control mode:

1. Bank to the desired input channels.
2. Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input touch zone for the desired channel.
3. Press the encoder under the display showing Pad. The encoder surround in the display fills in and the encoder **In** LED lights green to indicate the Pad is engaged.

To toggle a channel pad in/out in Channel Strip mode:

1. Bank the desired input channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. If necessary, navigate to the first Channel Strip mode parameter bank by pressing the lit Left Parameter Bank switch until Gain appears in the top row encoder displays.
4. In the column for the channel you want to adjust, press the encoder **In** switch under the display showing Gain. The **In** LED lights green to indicate the Pad is in.

48 V (Phantom Power)

Input Channels Only

You can apply 48 V phantom power to any analog input assigned to an input channel in Channel Control mode.

To apply 48 V:

1. Bank to the desired input or output channels.
2. Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input touch zone for the desired channel.
3. Press the encoder under the display showing 48 V. The encoder surround in the display fills in and the encoder **In** LED lights green to indicate that 48 V is active on that channel.

Delay

You can apply up to 250 ms of delay to an input channel, or up to 500 ms of delay to an output channel (except VCAs) in Channel Control mode.

To delay to a channel:

1. Bank to the desired input channels.
2. Select a channel
3. Press the **INPUT C**hannel Control Function switch on the associated CKM.
4. Rotate the encoder under the display showing Delay.

Delay can be shown in milliseconds. feet, meters, or samples. See **Channel Delay Unit Display**.

Pan/Balance/Width

Pan adjusts channel pan (for mono channels) and stereo balance (for stereo channels). On stereo channels, width controls are also provided. You can adjust pan controls for input channels, Aux outputs and Group outputs in Channel Control and Channel Strip modes.

To adjust pan in Channel Control mode:

1. Bank to the desired input or output channels.
2. Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input touch zone for the desired channel.
3. Rotate the encoder under the display showing Pan (mono channel) to adjust pan, or Balance (stereo channels) to adjust balance.

To adjust pan in Channel Strip mode:

1. Bank the desired input channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. If necessary, navigate to the first Channel Strip mode parameter bank by pressing the lit Left Parameter Bank switch until Pan (or Balance for stereo channels) appears in the bottom row encoder displays.
4. In the column for the channel you want to adjust, rotate the encoder under the display showing Balance.

Stereo Width

Stereo Channels Only

Width adjusts the stereo image of stereo channels by controlling ganged pan positions of the left and right channels, in opposite directions. Width can be adjusted from full L–R, to mono, to full inversed R-L. You can adjust width controls for stereo channels only in Channel Control and Channel Strip modes.

To adjust width in Channel Control mode:

1. Bank to the desired input or output channels.
2. Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input touch zone for the desired channel.
3. Rotate the encoder under the display showing Width.

To adjust width in Channel Strip mode:

1. Bank the desired input channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. If necessary, navigate to the first Channel Strip mode parameter bank by pressing the lit Left Parameter Bank switch until Balance appears in the bottom row encoder displays.
4. In the column for the channel you want to adjust, under the display showing Balance press the encoder **Sel** switch. Width is shown in the display, and stereo width is now targeted to the encoder.
5. Rotate the encoder to adjust stereo width.

High- and Low-Pass Filters (HPF and LPF)

Input Channels Only

The S6L system provides built-in 4th-order full-spectrum high- and low-pass filters on each input channel. You can adjust HPF and LPF on the CKMs in Channel Control and Channel Strip mode using the Input or EQ functions.

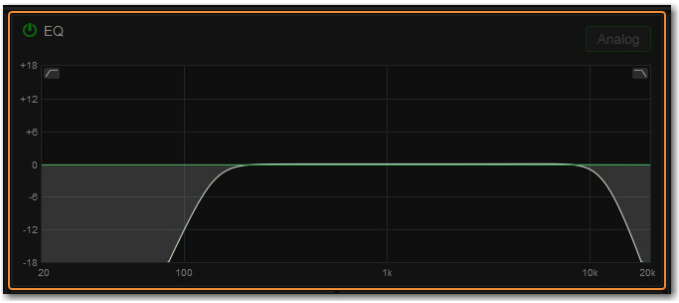
To adjust HPF and LPF in Channel Control mode:

1. Bank to the desired input channels.
2. Select a channel, and then press the **INPUT** or the **EQ** Channel Control Function switch on the associated CKM.

   – or –

   - On the associated CTM, touch the Input or EQ touch zone for the desired channel.
3. Press the encoders under the displays showing HPF (for the high-pass filter) and LPF (for the low-pass filter), as desired, to engage the filters on the channel. Each filter's corresponding encoder **In** switch lights to indicate that the filter is engaged.
4. Rotate encoders as follows:
   - Rotate the HPF encoder to the right to raise the filter's corner frequency from its default starting frequency of 80 Hz.
   - Rotate the LPF encoder to the left to lower the filter's corner frequency from its default starting frequency of 20 kHz

   Filtering is shown on-screen in the EQ section of the MTS and CTM Universe view, and in the EQ section of the Inputs page for the channel on the external screen (if the selected channel is also attentioned).



EQ section of the MTS Universe view showing high- and low-pass filtering on a channel

To adjust HPF and LPF in Channel Strip mode:

1. Bank the desired input channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. If necessary, navigate to the first Channel Strip mode parameter bank by pressing the lit Left Parameter Bank switch until HPF and LPF appear in the second and third row encoder displays.
4. Press the encoders under the displays showing HPF (for the high-pass filter) and LPF (for the low-pass filter), as desired, to engage the filters on the channel. Each filter's corresponding encoder **In** switch lights to indicate that the filter is engaged.
5. Rotate each filter's corresponding encoder to adjust the filter.

Polarity Invert
(Phase Reverse)

You can invert the polarity of input channels, Aux outputs, Group outputs, and the Mains. With stereo channels, only the left channel is inverted. With Mains, regardless of the linked state of the Mains busses, polarity is inverted on both the Left and Right busses, Polarity is inverted on the C/Mono bus independently of the Mains Left and Right.

To invert the polarity in Channel Control mode:

1 Bank to the desired input or output channels.

2 Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

– or –

- On the associated CTM, touch the Input touch zone for the desired channel.

3 Press the encoder below the display showing Polarity. The encoder surround in the display fills in and the encoder **In** LED lights green to indicate that the polarity is now inverted on that channel.

Direct Outs

You can turn on and adjust the level of Direct Outputs of input channels, Auxes, Groups, Matrixes, and Mains using the CKM in Channel Control mode. Channels are patched to hardware outputs or Pro Tools outputs using the Directs tab of the Patchbay on the external screen (See **Patching Direct Outputs**). You can also adjust Direct Outputs on the external screen Inputs and Output pages. Up to 12 dB of gain can be added to the Direct Output signal.

To adjust Direct Outs in Channel Control mode:

1 Bank the desired input or output channels.

2 Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM.

– or –

- On the associated CTM, touch the Input touch zone for the desired channel.

3 To turn on the channel's Direct Out, press the encoder under the display showing Dir Out. The encoder **In** LED lights green.

4 Rotate the encoder to adjust the Direct Out level of the channel.

Pro Tools Input Source Toggle (Virtual Soundcheck Input)
(Input Channels Only)

You can toggle the input source for the currently selected input channel between a Pro Tools Virtual Soundcheck input and the Stage input source for the channel, letting you toggle individual channels between Virtual Soundcheck and Stage mode. This parameter mirrors the function of the Source Channel Menu option, available on the channel strip.

You can also toggle input using the Channel Menu and the external screen. See **Using Virtual Soundcheck** *for more information,*

To toggle the input source for an input channel in Channel Control mode:

1 Bank the desired channel to the faders.

2 Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM so it lights.

– or –

- Touch the channel's Input touch zone on the associated Channel Touch Module (CTM).

3 Press the encoder under the display showing PT Input. The encoder **In** switch lights, and the encoder surround in the display fills in to indicate the Pro Tools Virtual Soundcheck input is now the input source for the selected channel.

Safe

You can toggle a selected input channel's Bank, Automation, and Solo Safe, and a selected output channel's Bank and Automation Safe from the CKM in Channel Control mode. These Safe controls are independent of the global Channel Safe Switches settings on the Options > Interactions page of the external screen.

To toggle a channel Safe:

1. Bank to the desired input or output channels to the faders.
2. Select a channel, and then press the **INPUT C**hannel Control Function switch on the associated CKM so it lights.

   – or –

   - Touch the channel's Input touch zone on the associated Channel Touch Module (CTM).
3. Locate the encoder showing the Safe you want to toggle, then press it. The encoder **In** switch lights, and the encoder surround in the display fills in to indicate the Safe is enabled.

   For example, to enable Bank Safe, press the encoder under the display showing Bank Sf on the encoder display.

   The encoder **In** switch lights green, and the channel is Bank Safed.

Bank Safe parameter on a CKM encoder

For more information on Bank Safe, see **Bank Safing Channels**.

For more information on Solo Safe, see **Solo Safing Channels**.

For more information on Automation Safe, see **Automation Safing Channels**.

Adjusting Built-In Channel and Graphic EQ on the Control Surface

Each input channel has a built-in 4-band EQ. Each output channel (except VCAs) has a built-in 7-band parametric EQ. You can choose between two EQ types on a per-channel basis: a full-spectrum digital EQ or an analog-modeled EQ. You can adjust channel EQ on the CKMs in Channel Control mode. You can also adjust channel EQ band gain in Channel Strip mode.

S6L systems also provide 32 built-in insertable graphic EQs (GEQ) for output channels. You can adjust Graphic EQs inserted on output channels using the CKMs in Channel Control mode.

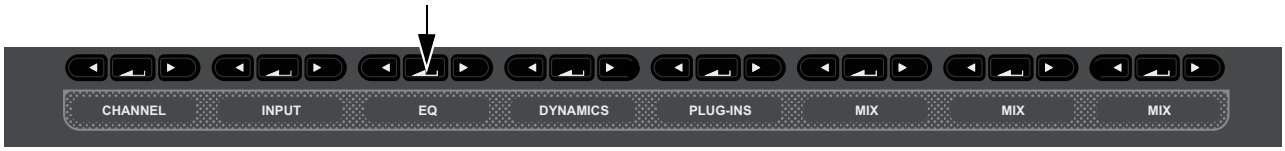
You can also adjust EQ using the external screen, as well as accomplish other tasks including toggling digital and analog EQ modes, copy and paste EQ settings between channels, and save and recall EQ presets. See **Working with EQ and Dynamics on the External Screen**.

Adjusting Built-In Channel EQ

To adjust built-in channel EQ in Channel Control mode:

1 Bank to the desired input or output channels.

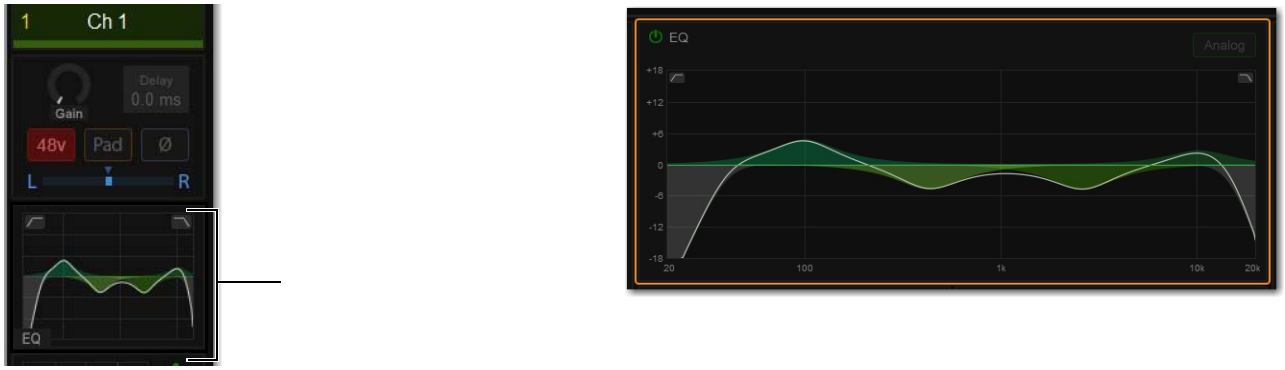
2 Select a channel, and then press the **EQ C**hannel Control Function switch on the associated CKM.



INPUT Channel Control Function switch (left) and the Input touch zone in the CTM Meters view (right)

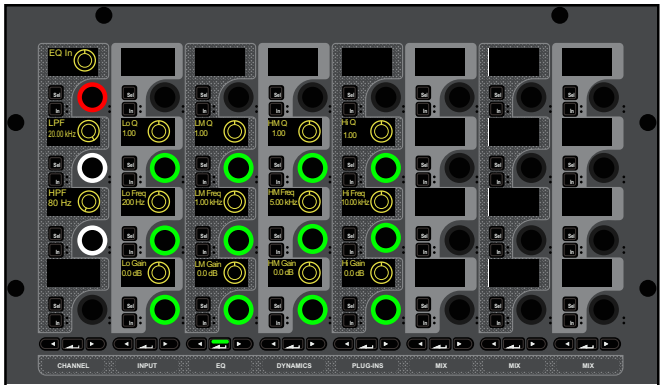
– or –

- Touch the EQ touch zone for the desired channel on the associated CTM in Meters or Channel view.



EQ touch zones on the CTM in Meters view (left) and in Channel view (right)

The **EQ** Channel Control Function switch lights, the EQ touch zone is bordered in orange, and EQ parameters are spilled to the associated CKM.



Built-in 4-band EQ parameters on the CKM

To toggle the processor in/out,

- Press the red encoder at the top left of the CKM, under the display showing EQ In.

  The encoder **In** switch lights, and the encoder surround in the display fills in to indicate the EQ is engaged.

To toggle individual EQ bands in/out:

- Press the encoder **In** switch below the display showing EQ band gain (the encoders along the bottom row of the CKM). An EQ band is in when the switch lights.

To adjust EQ bands:

1. To adjust EQ band gain, under the displays showing Lo Gain, LM Gain, and so on rotate the desired encoder.
2. To adjust EQ band frequency, under the displays showing Lo Freq, LM Freq, and so on rotate the desired encoder.
3. To adjust EQ band Q, under the displays showing Lo Freq, LM Freq, and so on rotate the desired encoder.
4. To toggle between Bell and Shelf filters for the Hi and Lo bands:
   - Press the encoder **In** switch below the display showing Hi Q to toggle Shelf on the Hi EQ band.
   - Press the encoder **In** below the display showing Lo Q (or Lo 1 Q for outputs) to toggle Shelf on the Lo 1 EQ band.

   Shelf is active when the encoder **In** switch lights.

For input channels, HPF and LPF parameters are also provided along with EQ parameters.

To adjust EQ band gain in Channel Strip mode:

1. Bank the desired input or output channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. Navigate to the EQ Channel Strip mode parameter bank by pressing lit Parameter Bank switches, as available, until the encoders appear green.

   EQ band gain parameters for input channels appear on the second page of Channel Strip mode parameters, and pages two and three for output channels:

Channel Strip mode EQ parameters available per channel type

Input Channels		Output Channels		
CKM Encoder	**Page 2**	**CKM Encoder**	**Page 2**	**Page 3**
1 (top)	EQ Hi Gain	1 (top)	EQ Lo Mid 2 Gain	n/a
2	EQ Hi Mid Gain	2	EQ Lo Mid 1 Gain	EQ Hi Gain
3	EQ Lo Mid Gain	3	EQ Lo 2 Gain	EQ Hi Mid 2 Gain
4 (bottom)	EQ Lo Gain	4 (bottom)	EQ Lo 1 Gain	EQ Hi Mid 1 Gain

Adjusting Built-In Graphic EQs

(Output Channels Only)

To access GEQ parameters on the CKM, you must first insert a GEQ on the channel on the Outputs page of the external screen. See **Built-In Graphic EQs**.

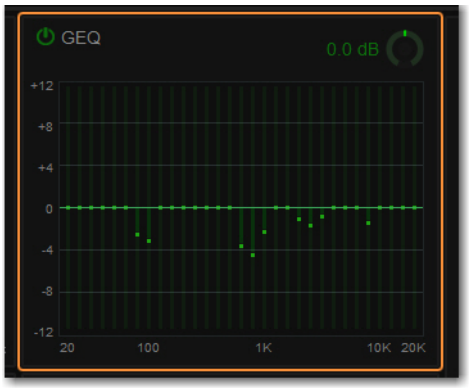
To adjust GEQ in Channel Control mode:

1 Bank to the desired channels.

2 Select a channel, and then press the **EQ C**hannel Control Function switch on the associated CKM.

– or –

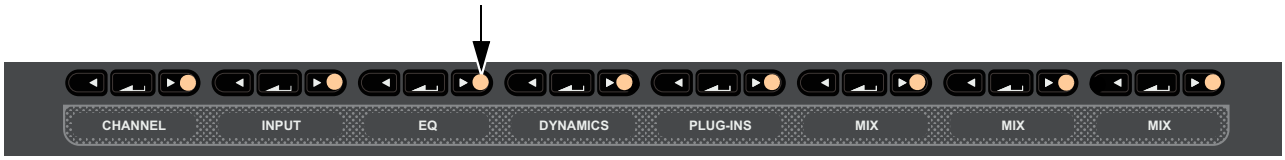
- Touch the GEQ touch zone for the desired channel on the associated CTM in Meters or Channel view.



GEQ touch zones in Channel view

The **EQ** Channel Control Function switch lights, the EQ touch zone is bordered in orange, and channel EQ parameters are spilled to the associated CKM.

3 Press any lit Right Parameter Bank Navigation switch.



Lit Right Parameter Bank switches

GEQ parameters are spilled to all 4 rows of CKM encoders. Each individual band gain is assigned to an encoder.

4 To enable the GEQ, press the red encoder under the display showing In/Gain.

5 To adjust the overall output of the GEQ, rotate the red encoder.

6 To adjust individual band gain, rotate the corresponding encoders.

Adjusting Built-In Dynamics on the Control Surface

All input and output channels provide a built-in Compressor Limiter (Comp/Lim), and input channels provide an Expander/Gate (Exp/Gate). Both built-in and most plug-in dynamics processors support sidechain processing.

For stereo channels, processor controls are linked and apply to both the left and right sides of the channel. For Mains L-R, processor controls are linked regardless of the Mains linked/unlinked state. Dynamics control for the C/Mono bus is always discrete.

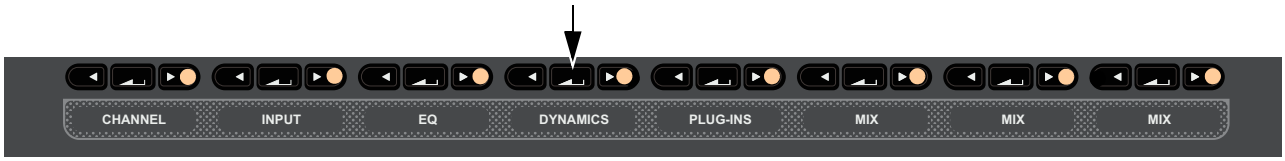
You can adjust built-in Dynamics in Channel Control and Channel Strip modes. You can also toggle built-in Dynamics processors in/out using the channel strip **X** and **Y** switches.

You can also adjust Dynamics, including the sidechain, using the external screen. See **Working with EQ and Dynamics on the External Screen**.

To adjust built-in Dynamics in Channel Control mode:

1 Bank the desired input or output channels.

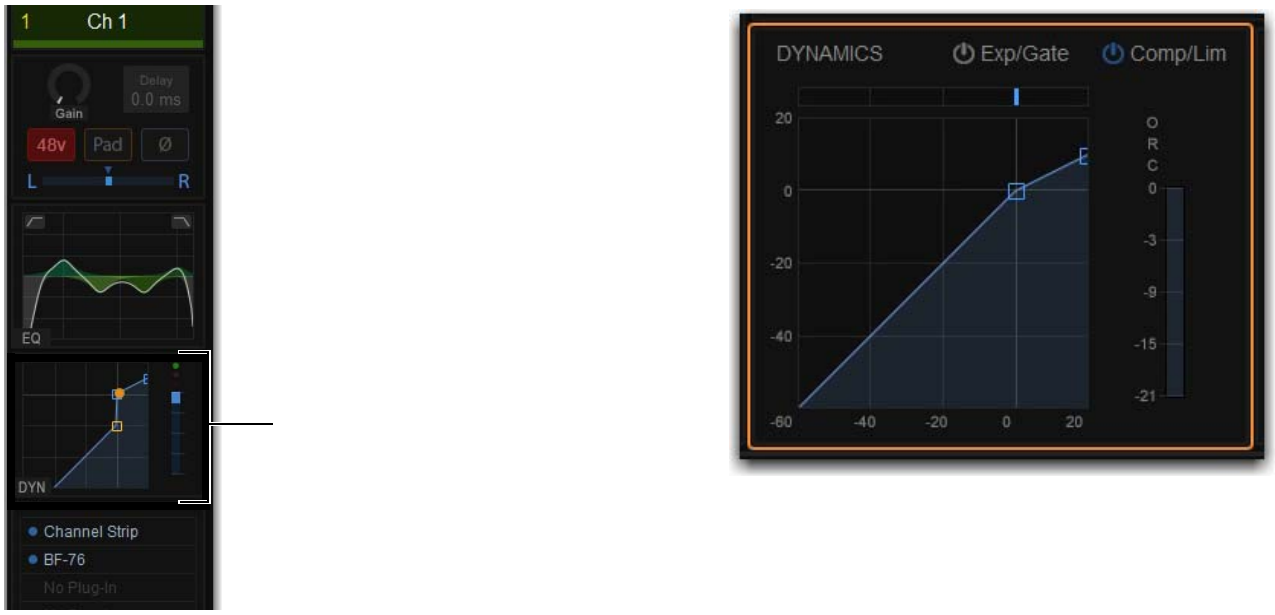
2 Select a channel, and then press the **DYNAMICS C**hannel Control Function switch on the associated CKM.



Dynamics Channel Control Function switch

– or –

- Touch the Dynamics touch zone for the desired channel on the associated CTM in Meters or Channel view.

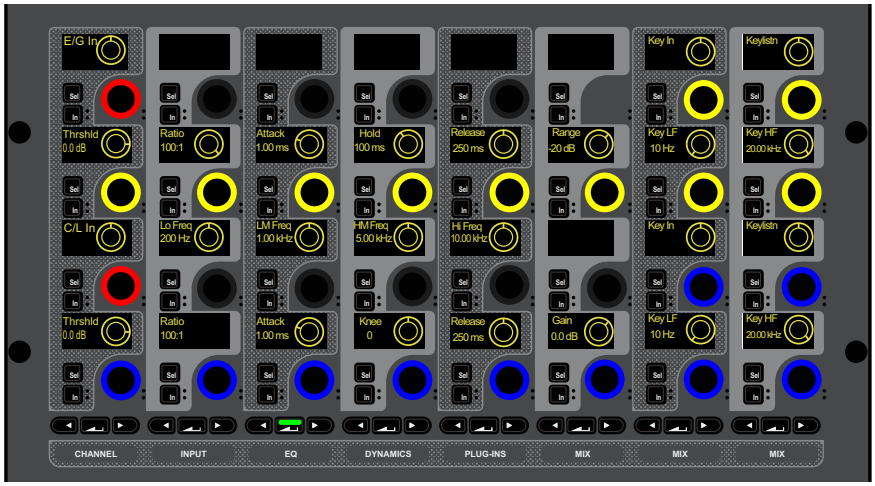


Dynamics touch zones on the CTM in Meters view (left) and in Channel view (right)

◆ The **DYNAMICS** Channel Control Function switch lights, the Dynamics touch zone is bordered in orange, and Dynamics parameters are spilled to the associated CKM.

◆ For input channels, Exp/Gate parameters are assigned to the top two rows of encoders, and Comp/Lim parameters are assigned to the bottom two rows.

◆ For output channels, Comp/Lim parameters are assigned to the bottom two rows.



Input channel Dynamics parameters on a CKM in Channel Control mode

3 To toggle Dynamics processors in/out, do any of the following:

- To toggle Exp/Gate, press the red encoder under the display showing E/G In. When engaged (in), the encoder **In** switch lights, and the encoder surround in the display fills in.
- To toggle Comp/Lim, press the red encoder under the display showing C/L In. When engaged (in), the encoder **In** switch lights, and the encoder surround in the display fills in.

4 To adjust parameters, rotate the encoder under the display showing the parameter you want to adjust.

Gain reduction and gate activity is indicated on the channel strip gain reduction meters and in the Inputs zone on the associated CTM. See **Dynamics Meter** for more information.

To toggle Dynamics in/out using the X and Y switches:

- Press a channel strip **X** switch to toggle the Exp/Gate for that channel. The switch lights when the processor is engaged (in).
- Press a channel strip **Y** switch to toggle the Comp/Lim for that channel. The switch lights when the processor is engaged (in).

Sidechain

Dynamics processors typically use the detected amplitude of their input signal to trigger gain reduction. This split-off signal is known as the sidechain. The built-in Comp/Lim and Exp/Gate feature sidechain circuits with external key and EQ filter capabilities.

With sidechain EQ filters, you can make dynamics processing more or less sensitive to certain frequencies. For example, you might configure the sidechain so that certain lower frequencies on a drum track trigger dynamics processing. You can engage and adjust sidechain EQ filters on the CKM under the **DYNAMICS** function.

With external key sidechain processing, dynamics processing is triggered using an external signal (such as another input) instead of the input signal. This external source is known as the *key input*. Key input is selected in the Sidechain section of the Inputs or Outputs page of the external screen (see **Selecting the External Key Sidechain Input**).

Engaging the Sidechain

The sidechain must be engaged to enable both external key and EQ filter sidechain processing for the selected channel. The Key In control can be toggled in or out of circuit using the CKMs in Channel Control mode.

To toggle the sidechain:

1. Bank to the desired input or output channels.
2. Select a channel, and then press the **DYNAMICS** Channel Control Function switch on the associated CKM.

   – or –

   - Touch the Dynamics touch zone for the desired channel on the associated CTM in Meters or Channel view.
3. Press the encoder under the display showing Key In. When engaged (in), the encoder **In** switch lights, and the encoder surround in the display fills in.

Using Sidechain EQ Filters

Both the Compressor/Limiter and the Expander/Gate sidechains provide two bands of EQ to band-limit the range of frequencies that trigger dynamics processing.

For frequency-dependent gating or compression, make sure the Key Source is set to Self. See **Selecting the External Key Sidechain Input**.

To activate a sidechain EQ filter in Channel Control mode:

1. Bank to the desired input or output channels.
2. Select a channel, and then press the **DYNAMICS C**hannel Control Function switch on the associated CKM.

   – or –

   - Touch the Dynamics touch zone for the desired channel on the associated CTM in Meters or Channel view.
3. Press the encoder under the display showing Key In. When engaged (in), the encoder **In** switch lights, and the encoder surround in the display fills in.
4. Press the Channel Control encoder under the display showing Key HF and/or Key LF.

To adjust a side-chain EQ filter:

- Turn the Key HF and/or Key LF encoders to adjust the frequency (each filter ranges from 10 Hz to 20 kHz). In the encoder displays, the current frequency value is displayed on-screen.

Key Listen

The Key Listen button toggles the key onto the Monitor bus, replacing the signal there. This happens regardless of whether the key is the channel signal or the external key, or whether it has been sidechain filtered. Key Listen always overrides all other soloed channels. Any soloed channels are suppressed until Key Listen is cleared. If additional channels are soloed while Key Listen is on, they will be added but suppressed. The Key Listen solo is also exclusive to itself; pressing Key Listen on a different processor or channel turns off the previous Key Listen and the new Key Listen takes over.

Key Listen on a dynamics plug-in does not route the signal to the Monitor bus, but to the plug-in output. Use caution when using the Key Listen with a plug-in dynamics processor.

To engage Key Listen:

- Press the encoder under the displays showing KeyListn. When engaged (in), the encoder **In** switch lights, and the encoder surround in the display fills in.

To disengage Key Listen:

- Press the encoder again so the encoder **In** switch is unlit. The Solo bus reverts to its previous signal (soloed channels, or none). You can also press **Solo Clear** once to turn off any currently engaged Key Listen button. Press **Solo Clear** a second time to clear channel solos, if any.

Adjusting Plug-Ins

You can adjust inserted plug-ins and bus-fed plug-ins using the CKMs.

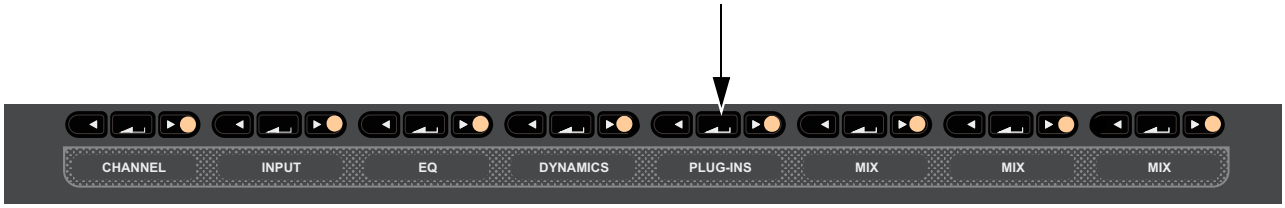
Adjusting Inserted Plug-Ins

You can adjust the parameters of up to four inserted plug-ins using the CKMs in Channel Control mode. To access inserted plug-in parameters on the CKM, one or more plug-ins must be inserted on the channel (see **Inserting Plug-Ins on Channels**).

You can also adjust plug-ins on the Plug-Ins page of the external screen. See **Adjusting Plug-Ins on the External Screen**.

To adjust plug-ins Channel Control mode:

1. Bank to the desired input or output channels.
2. Select a channel with one or more inserted, and the press the **Plug-Ins** Channel Control Function switch on the associated CKM.



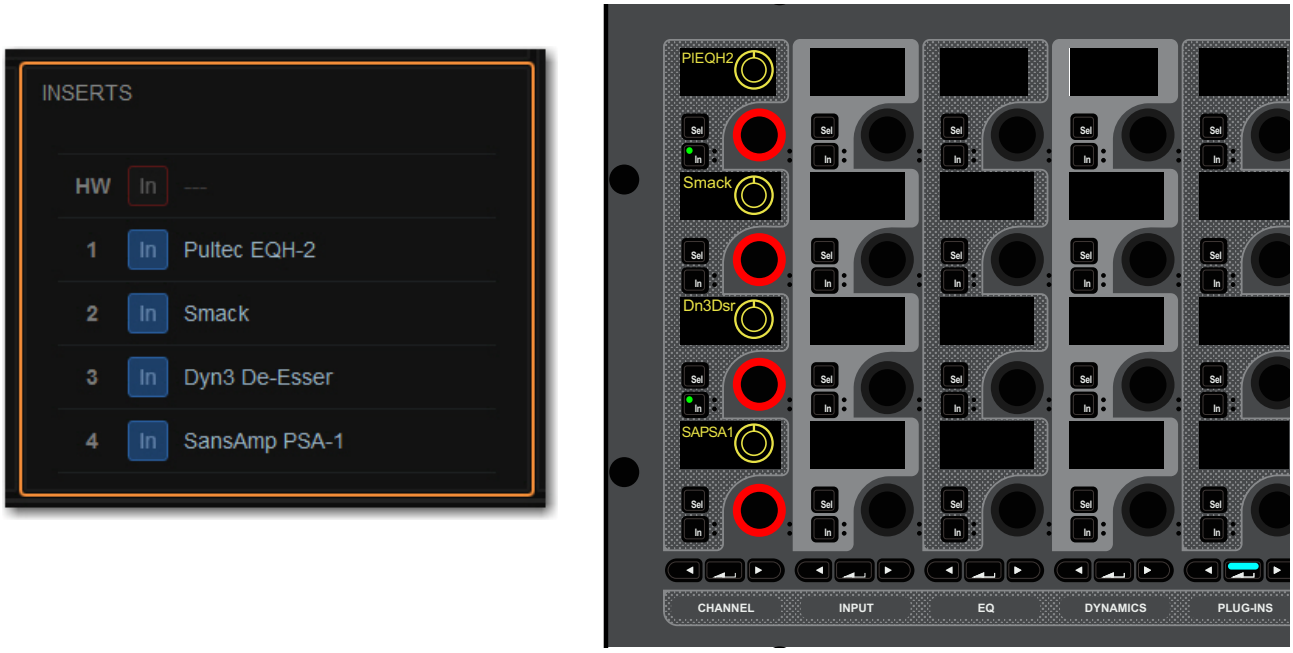
Plug-Ins Channel Control Function switch

– or –

- Touch the Plug-Ins touch zone for the desired channel on the associated CTM in Meters or Channel view.

The **PLUG-INS** Channel Control Function switch lights and the Plug-Ins touch zone is bordered in orange.

Red Plug-In Selectors are assigned to the leftmost encoders of each row of encoders on the associated CKM. Each Plug-In Selector corresponds to an Inserts slot 1–4 of the targeted channel, from top to bottom.



Inserts section on-screen with Inserted plug-ins (left) and corresponding Plug-In Selectors on a CKM in Channel Control mode (right)

3. To access a plug-ins parameters, press a red Plug-In Selector encoder under the display showing the name of the desired plug-in. The parameters for that plug-in are spilled to the encoders.

On-screen, the targeted plug-in is bordered in red in the Inserts section of the channel, and on the external screen Plug-Ins page.

To toggle an individual plug-in on/off

- Press the encoder **In** switch for the corresponding Plug-In Selector. The following control surface and on-screen elements indicate when a plug-in is engaged (in):
  - The encoder **In** switch lights.
  - On the CTM in Meters view and in the Channel Tiles in Channel view, in the Inserts zone a blue dot appears next to the plug-in.
  - On the MTS and the CTM in Meters view, in the Inserts zone the On indicator for the plug-in lights blue.

To access another plug-in inserted on the same channel:

- Press the corresponding red Plug-In selector encoder. The next time you access plug-ins on this channel, the parameters for the last targeted plug-in are automatically spilled to the CKM encoders

Adjusting Bus-Fed Plug-Ins (Effect Returns)

You can adjust bus-fed plug-ins on the CKMs in Channel Control mode. You can adjust the bus-fed plug-in's parameters, plus any plug-ins inserted on the return channel. To access bus-fed plug-in parameters on the CKM, one or more plug-ins must be routed to a channel (see **Routing Plug-Ins as Bus Processors (Effect Send/Return)**.

To adjust a bus-fed plug-in:

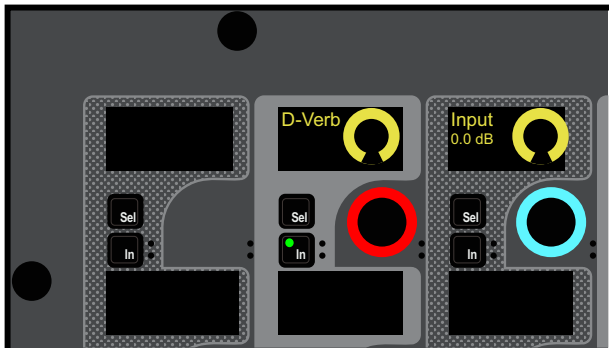
1. Bank the channel to which the output of the bus-fed plug-in is routed to the faders
2. Select that channel, and then press the **Plug-In** Channel Control Function switch on the associated CKM.

   – or –

   - Touch the Plug-Ins touch zone for the desired channel on the associated CTM in Meters or Channel view.

   The **PLUG-INS** Channel Control Function switch lights and the Plug-Ins touch zone is bordered in orange.

   A red Plug-In Selector is assigned to the second encoder of the top row of encoders on the associated CKM, and plug-in parameters are spilled to the rest of the encoders.



CKM with a bus-fed plug-in targeted to encoders

3. Adjust parameters as desired.

To toggle the bus-fed plug-in on/off:

- Press the encoder **In** switch for the corresponding Plug-In Selector.

To access plug-ins inserted on the return channel:

- Press the corresponding red Plug-In selector encoder in the leftmost column. The parameters for that plug-in are spilled to the encoders.

Using the CHANNEL Function

The **CHANNEL** Channel Control Function switch assigns a variety of channel parameters such as input, EQ, and Dynamics parameters to the CKM in Channel Control mode, providing a default set of utility parameters for the selected channel. You can customize this group of controls by assigning parameters to these encoders, up to a total of 32.

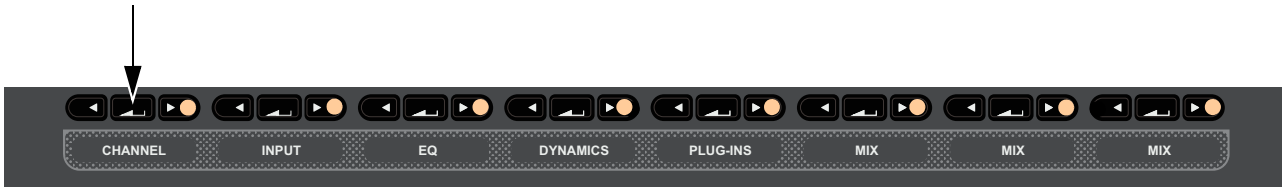
CHANNEL parameter encoder assignments are global, and apply to all channels. If an assigned parameter is not applicable for the selected channel type, that encoder is blank. Plug-In parameters are not available for custom parameter assignments. Custom assignments are saved with each Show file.

Accessing CHANNEL Parameters

To access the default CHANNEL parameters:

1 Bank to the desired input or output channels.

2 Select a channel, and then press the **CHANNEL C**hannel Control Function switch on the associated CKM. The default parameters are spilled to the CKM's encoders.



CHANNEL Channel Control Function switch

Assigning Custom CHANNEL Parameters

You can customize the parameters that are spilled to the 32 CKM encoders when you press the **CHANNEL** Channel Control Function switch. A custom assignment replaces any existing assignments on the selected encoder. To assign parameters, enable User Assignment mode on one CKM, then select the parameters you want to assign to **CHANNEL** using another CKM.

To enable User Assignment mode:

1 Select a channel on any fader bank.

2 Press and hold the **CHANNEL** Channel Control Function switch on the associated CKM.

The **CHANNEL** switch flashes to indicate that the CKM is in User Assignment mode.

The top-left encoder flashes red to indicate it is now the target for the custom assignment.

3 Press an encoder on the CKM that is in User Assignment mode to target that encoder for the custom assignment. That encoder now flashes.

4 On a CKM other than the one in User Assignment mode, do the following:

- Access the Channel Control function containing the parameter(s) you want to assign to **CHANNEL**.
- Touch the encoder for the parameter you want to assign.

That parameter is assigned to the targeted **CHANNEL** encoder.

The next encoder on the CKM in User Assignment mode flashes to indicate it is now the target for a custom assignments.

5 Repeat step 4 to assign other parameters to each targeted encoder.

6 When finished, press the flashing **OK** switch to confirm assignments and exit User Assignment mode.

– or –

- Press the flashing **Cancel** switch to cancel, leaving all assignments unchanged and exit User Assignment mode.

Clearing CHANNEL Assignments

You can clear individual Channel Control assignments, or all assignments, on the Inputs and Outputs pages of the external screen.

To clear User assignments:

1. On the external screen, go to the Input or Outputs page.
2. Tap-and-hold (right-click) a parameter.
3. To clear a single parameter, choose Clear <parameter name> from the Channel Control sub-menu.
4. To clear all parameters, do the following:
   - Choose Clear All Assignments.
   - Select Clear to confirm, or select Cancel to cancel and leave the User assignment unchanged.

Flipping Parameters to Faders (Flip to Faders Mode)

Input Channels Only

You can flip a row of input channel parameters provided in Channel Strip mode to the faders, temporarily replacing channel level control with control of the currently targeted parameter on the faders. You can enable Flip to Faders for input channels from any CKM mode.

To flip parameters to faders:

1. Bank to the desired input channels to the faders
2. Press **Flip** so it lights.
   The CKMs for all input channels enter Channel Strip mode.
   The flashing row of encoders indicates the parameter that is currently flipped to faders.

Flip switch enabled (left) and a channel display indicating that pan is flipped to faders (right)

3. Adjust the faders to change the parameter.
4. Touch an encoder in another row to flip that parameter to the faders.
   – or –
   - Press a lit Parameter Bank switch to navigate to another page of parameters, and then touch an encoder to flip its parameter to the faders.
5. To exit Flip to Faders, press **Flip** again so it is unlit, or press **Cancel**.
   When Flip to Faders is enabled again, the previously flipped row of encoders is flipped to the faders.

Working with Mains and VCAs

Working with Mains

You can adjust Mains on the S6L control surface using the Flex Channels, and you can bank Mains to the faders. You can also adjust Mains on the external screen. You can solo, mute, and attention Mains, as well as target Mains for a Multi-Assignment using the MTS.

By default, level and mute for all three Mains busses are linked You can unlink Mains for discrete level and mute control of each bus. See **Linking/Unlinking Mains**. In terms of channel processing, Mains L-R are always linked, and C/Mono is always processed independently of Mains L-R.

See **Assigning Channels to the Mains** *for instructions on assigning channels to VCAs.*

Adjusting Mains Using Flex Channels

By default, Mains L-R are assigned to Flex Channel 2. You also have the option of assigning C/Mono to a Flex Channel (see **Configuring Flex Channels**). When Mains L-R are linked, the Flex Channel controls both busses. When Mains L-R are unlinked, the Flex Channel controls the attentioned bus.

To adjust linked Mains L-R using a Flex Channel:

- To adjust Mains L-R output level, adjust the Flex Channel 2 fader.
- To mute Mains L-R, press the Flex Channel 2 **Mute** switch so it lights.
- To toggle the Mains L-R built-in Comp/Lim in/out, press the Flex Channel **Y** switch. Lit is in.

To adjust unlinked Mains L-R using a Flex Channel:

1. To attention one of the Mains L-R outputs, press the Flex Channel **Attention** switch until the Flex Channel display shows the desired Mains output.

Flex Channel display showing Mains L targeted to the Flex Channel

2. To adjust the level of the attentioned Mains, adjust the Flex Channel fader.
3. To mute the attentioned Mains, press the Flex Channel's **Mute** switch.

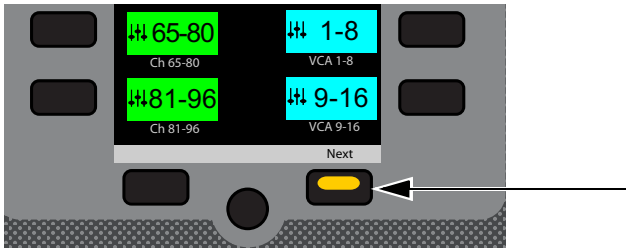
Adjusting Mains from the Faders

You can bank Mains to control surface faders in Split Banking mode and Outputs Fader Bank mode.

To bank Mains in Split Banking Mode:

1 De-select a Fader Bank mode switch if one is enabled to enter Split Banking mode.

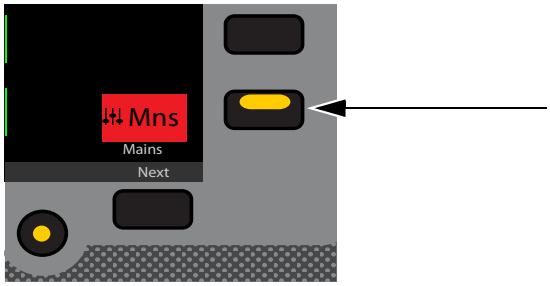
2 In the Left Soft Keys display, press the lit Next switch until you see Mains in the Soft Keys display



Lit Next switch

3 Press the Mains Soft Key so it lights.

Mains Left, Right and C/Mono are banked to the three leftmost faders on the center fader bank (under the MLM). You can access Mains output processing controls as for other banked channels (as described in **Adjusting Channel Parameters**).



Mains Soft Key

To bank Mains Fader Bank mode:

1 Press the **Outputs** Fader Bank mode switch.

2 In the Left Soft Keys display, Press the Mains Soft Key so it lights.

Mains Left, Right, and C/Mono are banked to the three leftmost faders on the control surface.

Using Mains in a User Layout

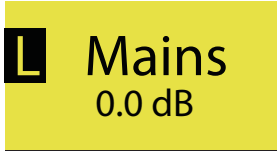
When you assign Mains L-R + C/Mono to a User Layout, a single fader for all three Mains outputs is assigned to the Layout regardless of the Mains' linked/unlinked state. When Mains are linked, adjusting the fader in the User Layout controls levels for the linked Mains busses. You can target each individual Mains outputs on the control surface using the Attention switch, or on-screen using the Mains Focus button.

To target an individual Mains in a User Layout:

1 Assign the Mains to a User Layout (see **Assigning Channels to the User Layout**).

2 Press the **Layouts** Fader Bank Mode switch. Mains L-R + C/Mono are assigned to a single fader.

3 To attention one of the Mains, press the channel strip **Attention** switch until the channel display shows the desired Mains output.



A channel display showing Mains L targeted to the fader

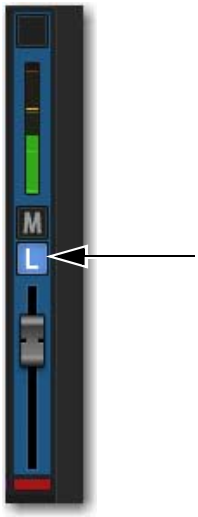
To target an individual Mains output on the external screen:

4 In the on-screen fader strip, select the Mains Focus button above the Mute button to cycle through each Mains channel.

To attention an individual Mains output on the external screen:

1 Assign the Mains to a User Layout and bank the User Layout

2 In the on-screen User Layout fader strip for the Mains, select the Mains Focus button to cycle through each Mains channel. The currently targeted Mains bus is indicated in the button (L, R, C/M).



Mains Focus button

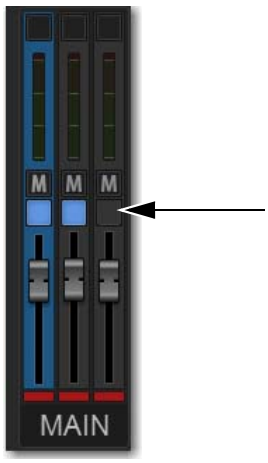
Linking/Unlinking Mains

By default, all three Main busses are linked in terms of level control and mute status. You can unlink any of the three Main busses for discrete control of level and mute.

Channel processing for the Mains Left-Right, such as built-in EQ, dynamics, and plug-ins, are always linked, regardless of its linked/unlinked status.

To unlink the Mains:

- In the Outputs page, select the on-screen channel Link boxes for the Left, Right, and/or C/Mono fader strips so they are unlit.



Fader strip link boxes

Working with VCAs

VCA controls emulate the operation of traditional Voltage Controlled Amplifiers (VCAs). Up to 32 VCAs are available. Any system channels can be assigned to VCAs.

VCAs control level of the assigned channels only. They do not act as a summing output bus.

VCAs remotely control the fader gain of each channel assigned to the VCA fader, but do not change the position of the faders on those channels. The accumulated gain of a channel assigned to one or more VCAs is limited to +12 dB.

See **Assigning Channels Using Multi-Assign** *for instructions on assigning channels to VCAs.*

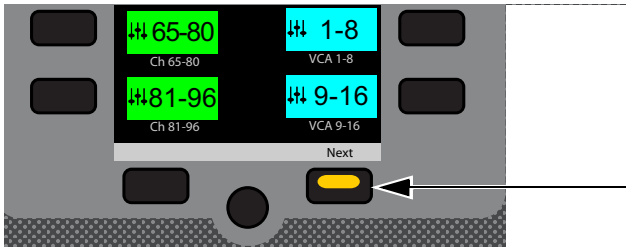
Banking VCAs

You can bank VCAs to control surface faders in Split Banking mode and VCAs Fader Bank mode.

To bank VCAs in Split Banking Mode:

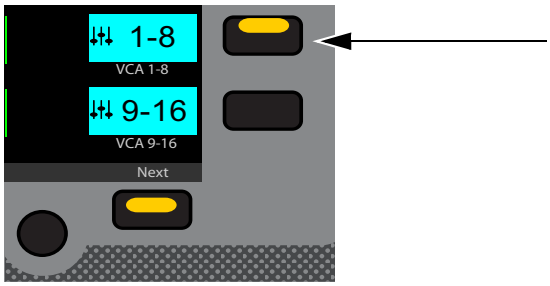
1 De-select a Fader Bank mode switch if one is enabled to enter Split Banking mode.

2 In the Left Soft Keys display, if necessary press the lit Next switch until you the VCAs you want to bank in the Soft Keys display



Lit Next switch

3 Press a VCAs Soft Key so it lights. The selected VCAs are banked to the faders on the center fader bank (under the MLM).



VCA 9-16 Soft Key

4 Do any of the following to adjust a VCA's parameter:

- Adjust the fader to adjust VCA level.
- Press the channel strip **Mute** switch to implicitly mute member channels.
- Press a channel strip **Solo** switch to solo the VCA.

For more information see **Explicit and Implicit Channel Mute with Mute Groups and VCAs**.

To bank VCAs in Fader Bank mode:

1 Press the **VCA** Fader Bank mode switch so it lights.
VCAs 1–24 (for the S6L-24/24D) or VCAs 1–32 (for the S6L-32D) are banked to all the faders on the control surface.

2 To bank VCAs 25–32 on the S6L-24/24D, press the corresponding Soft Key.

– or –

- Use the Horizontal Banking switches to nudge channels left or right, as desired (see **Banking Horizontally (Nudging Channels)**.

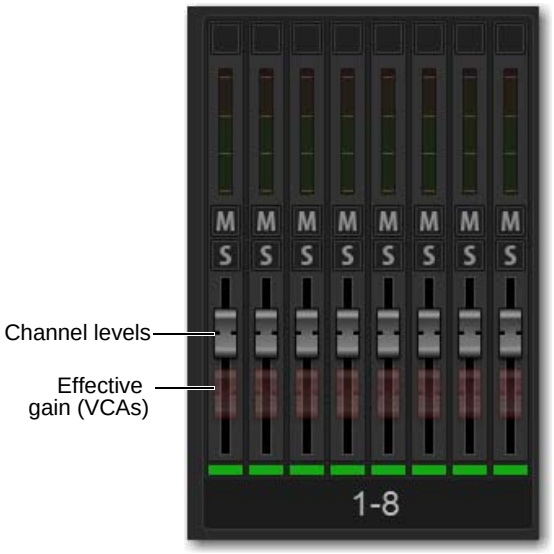
Channel Strips Show VCA Contribution

The *effective gain* of any channel is equal to the combination of its individual channel fader, plus any (all) VCA level changes that affect that channel.

Input and output channels display the net effect of VCA level (effective gain) on-screen. This lets you keep track of what all currently assigned VCAs are doing to channels and busses at all times.

On-Screen VCA Indication

VENUE displays effective gain as a second, red “ghost” fader caps below the faders of channels that are currently assigned to one or more VCAs.



VCA contribution shown in the on-screen fader displays

The opacity of the ghost caps vary with the actual VCA levels:

- Lighter caps indicate smaller amounts of VCA contribution.
- Brighter caps indicate larger amounts of VCA contribution.

Turning Channel VCA Indication On and Off

By default, channel VCA indication is on. You can turn off VCA indication on the Options > Interaction page of the external screen.

To turn channel VCA indication off or on:

1. On the external screen, go to Options > Interaction.
2. In the Fader Configuration section, select or de-select Show VCA Contribution as desired.

Working with Aux Sends

This chapter covers how to work with Aux Sends and covers the following:

- **Adjusting Stereo Sends in Channel Control Mode**
- **Adjusting Aux Sends in Channel Strip Mode**
- **Adjusting Aux Sends on Faders (Sends on Faders Mode)**
- **Adjusting Aux Sends on the External Screen**

Adjusting Aux Sends in Channel Control Mode

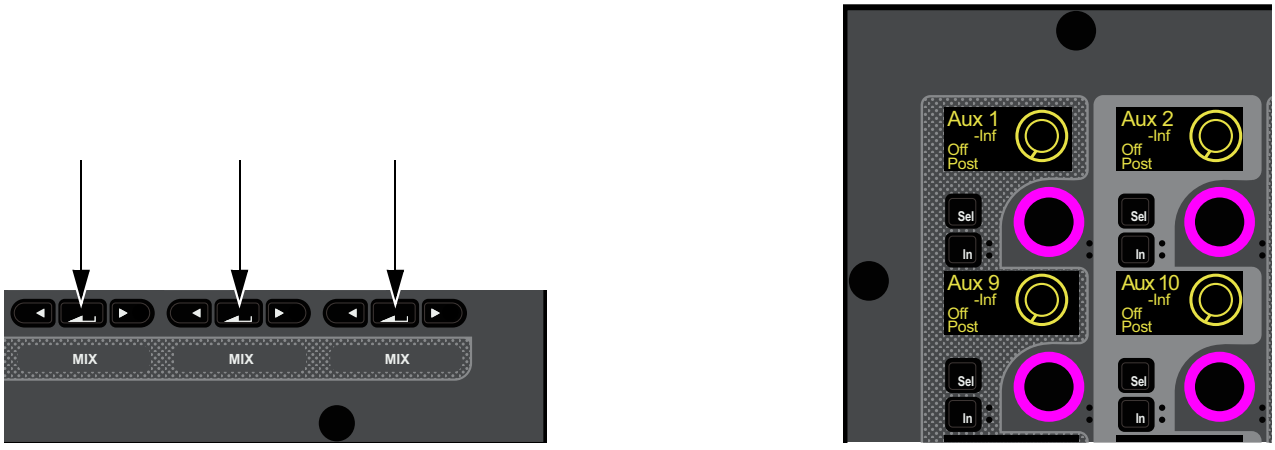
When accessing Aux Sends in Channel Control mode, the number of available Aux Sends, and the Mix switch or touch zone used to spill the sends to the CKM encoders, depends on the overall Mix Bus configuration. See **Configuring Mix Busses**.

In Channel Control mode, Aux Sends are spilled to CKM encoders sequentially from left to right, and top to bottom. After spilling Aux Sends, you can toggle the sends on/off, adjust send levels, and toggle sends pre-/post-fader. You can set the Aux send pre-fader pickoff point on a per-channel basis (see **Selecting Aux Pre-Fader Pickoff Points**.

You can also access Aux Sends 1–4 in Channel Strip mode (see **Adjusting Aux Sends in Channel Strip Mode**).

To spill Aux Sends using the MIX Channel Control Function switches:

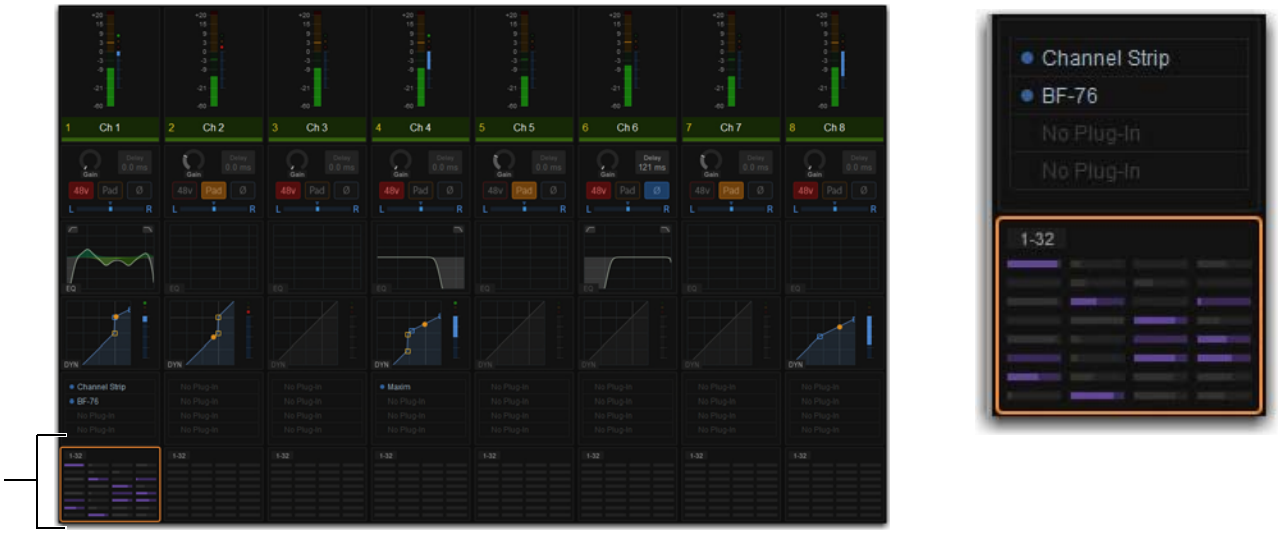
1. Bank the desired channels.
2. Select one or more channels.
3. Press a **MIX** switch to spill the following Aux Sends to the encoders on the associated CKM, as available:
   - The left **MIX** switch spills Aux Sends 1–32.
   - The center **MIX** switch spills Aux Sends 33–64.
   - The right **MIX** switch spills Aux Sends 65-96.



MIX Channel Control Function switches (left) and the Aux Sends 1–32 spilled to the encoders (top tow rows show, at right)

To spill Aux Sends using the CTM in Meters view:

- Touch the Aux Sends touch zone on the associated CTM. The Aux Sends that are spilled are indicated by the channel number range at the top of the touch zone.



CTM Meters view (left) and a closeup of the Aux Send touch zone

To spill Aux Sends using the CTM in Channel view:

1. If necessary, in Meters view touch the Meters for the channel you want to access in Channel view.
2. Touch one of the three Aux Sends touch zones in the Aux Sends section on the associated CTM. The active zone is bordered in red. Each zone spills the following Aux Sends to the CKM encoders, as available:
   - Zone 1 (topmost zone) spills Aux Sends 1–32.
   - Zone 2 (middle zone) spills Aux Sends 33–64.
   - Zone 3 (bottom zone) spills Aux Sends 65-96.

Aux Sends touch zones in CTM Channel view (80 Aux configuration shown)

To toggle an Aux Send on/off:

- Press the encoder under the display showing the Aux Send you want to adjust, such as Aux 1.

  On is shown in the encoder display when the send is on. Off is shown when the send is off. On-screen, the thermometer-style level indicator for each Aux Send lights when Aux Send is on, and is dimmed when off.

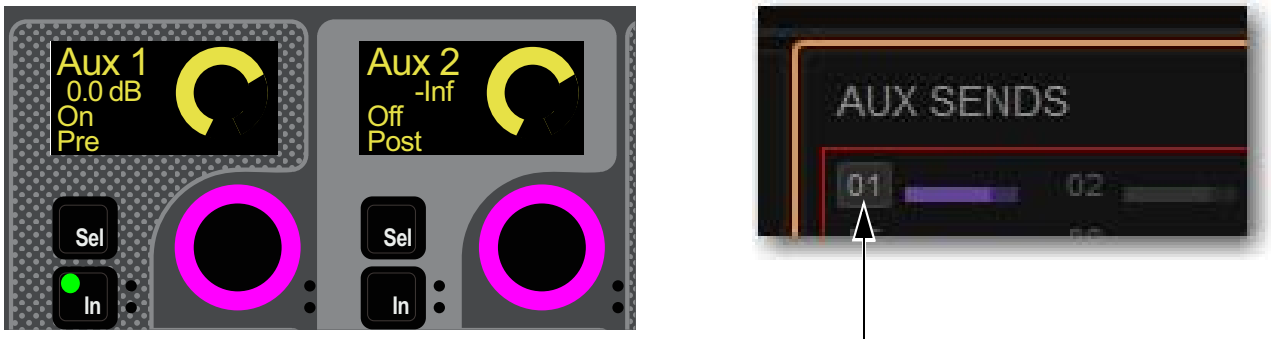
To adjust Aux Send level:

- Rotate the encoder under the display showing the desired Aux Send.

  Send level is shown in the corresponding encoder display. On-screen, thermometer-style level indicators in the Aux Sends zones show Aux Send level.

To toggle an Aux Send pre-/post-fader:

- Press the encoder **In** switch under the display showing the desired Aux Send. The following elements indicate that an Aux Send is pre-fader:
  - The corresponding encoder **In** switch lights.
  - Pre or Post is shown in the corresponding encoder display.
  - On-screen, a border appears around the channel numbers.



CKM encoders showing the various Aux Send states (left) and indication of a pre-fader Aux on the CTM (right)

Selecting Aux Pre-Fader Pickoff Points

Each Aux Send can be set as pre- or post-fader. You can specify the pre-fader pickoff point for Aux busses.

Pre-Fader pickoff points are set for each bus independently. If any busses are stereo, the pickoff point is set for the stereo pair. The following pre-fader pickoff points for Aux busses are available:

Pre-EQ Post-HPF/LPF and pre-EQ, Dynamics and Channel Inserts, pre-Mute, and pre-Fader. The Aux send is not affected by the channel mute.

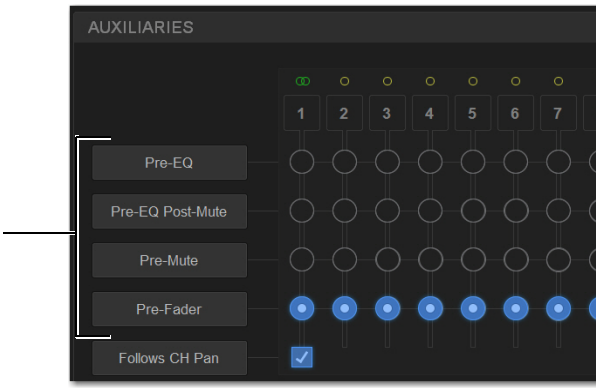
Pre-EQ Post-Mute Post-HPF/LPF and pre-EQ, Dynamics and Channel Inserts, post-Mute, and pre-Fader. The Aux send is affected by the channel mute.

Pre-Mute Post-HPF/LPF, post-EQ, Dynamics, and Channel Inserts, pre-Mute, and pre-Fader. The Aux send is not affected by the channel mute.

Pre-Fader Post-HPF/LPF, post-EQ, Dynamics, and Channel Inserts, post-Mute, and pre-Fader. The Aux send is affected by the channel mute.

To set the pre pickoff point for an Aux send:

1. On the external screen, go to Options > Busses.
2. Select an Aux Select Button button to access those Auxes in the grid.
3. In the Auxiliaries section, select the Pre-EQ, Pre-EQ Post Mute, Pre-Mute, or Pre-Fader button so it lights.



Aux bus pickoff points

Adjusting Stereo Sends in Channel Control Mode

You can combine any two Aux outputs into a single stereo Aux output using Make Stereo (see **Make Selected Mono Strips Stereo/Make Selected Stereo Strip Mono**). With stereo Auxes, you can pan send signals across the stereo pair, or panning can follow channel pan (enabled per-Aux on the Options > Busses page of the external software).

On CKM encoders, stereo Aux Send controls are combined into one encoder, which controls both level and pan.

When two Aux outputs are made stereo, no blank strips are created or inserted, and channels in the layout in that bank are shuffled to the left, including the corresponding Aux Sends.

To adjust a stereo Aux Send in Channel Control mode:

1. Bank to and select the desired channel.
2. Press the appropriate **MIX** Channel Control Function switch or CTM touch zone to access the desired stereo Aux Send.
   The stereo send is available on a single encoder.
3. To adjust stereo Aux Send level, rotate the encoder.
4. To adjust send pan, do the following:
   - Press the corresponding encoder **Sel** switch so it lights. Send pan is now targeted to the corresponding encoder, the color in the corresponding encoder display inverts, and P <Aux number/name> and pan value appears in the display.
   - Rotate the encoder to adjust send pan.

CKM encoder showing Aux Send pan targeted to the encoder

Adjusting Aux Sends in Channel Strip Mode

You can control Aux Sends 1–4 on the CKMs in Channel Strip Mode.

To adjust Aux Sends in Channel Strip mode:

1. Bank the desired input or output channels.
2. Do either of the following to enable Channel Strip mode:
   - Press a lit **Select** switch to de-select it and enable Channel Strip mode on the associated CKM.
   - Press **Select Clear** to de-select all channels on the control surface and enable Channel Strip mode on all CKMs.
3. Navigate to the Aux Send Channel Strip mode parameter bank by pressing lit Parameter Bank switches, as available, until the encoders appear purple.
   Aux Sends 1–4 appear on the fifth page of Channel Strip mode parameters.

To toggle an Aux Send on/off:

- Press the encoder under the display showing the Aux Send you want to adjust, such as Aux 1.
  On is shown in the encoder display when the send is on. Off is shown when the send is off.

To adjust Aux Send level:

- Rotate the encoder under the display showing the desired Aux Send.

To toggle an Aux Send pre-/post-fader:

- Press the encoder **In** switch under the display showing the desired Aux Send. The following control and on-screen elements indicate that an Aux Send is pre-fader:

To adjust stereo send pan:

1. Press the corresponding encoder **Sel** switch so it lights. Send pan is now targeted to the corresponding encoder and P <Aux number/name> and pan value appears in the corresponding encoder display.
2. Rotate the encoder to adjust send pan.

Adjusting Aux Sends on Faders (Sends on Faders Mode)

The S6L system provides a Sends on Faders mode to facilitate monitor mixing workflows. In Sends on Faders mode, soloing an Aux output simultaneously assigns its sends to the faders and routes the Aux output's signal to the Monitor bus. This lets you simultaneously monitor the Aux output mix and adjust its send levels using the faders with the press of a switch or the touch of on-screen button.

Sends on Faders mode only affects input channels. It does affect all input channels, however. If no input channels are banked when Sends on Faders is activated, all "hidden" input channels remain in Sends on Faders mode. When banking to other input channels, Sends on Fader mode remains enabled for the newly banked channels.

Associated CKMs remain unaffected in Sends on Faders mode, so all Channel Control or Channel Strip mode functions for the banked channels remain freely available.

You must enable Sends on Faders functionality on the Options > Busses page of the external screen.

Enabling Sends on Faders

Sends on Faders is enabled on each Monitor bus independently. Make sure to enable Sends on Faders on the Monitor bus that your input channels are currently routed to (assuming you want all input channels to be subject to Sends on Faders).

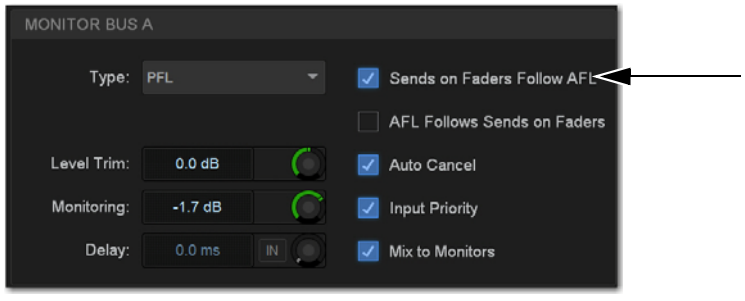
For example, you can route some of your input channels to Monitor bus A with Sends on Faders disabled, and route other channels to the other Monitor bus B with Sends on Faders *enabled*. You can then route each Monitor bus to a discrete hardware or headphone output.

For more information on configuring your Monitor busses, see **Configuring the Monitor Busses and Solo Options**.

If any input channels are targeted to *both* Monitor busses, then enabling Sends on Faders on either Monitor bus results in Sends on Faders behavior for that channel.

To enable Sends on Faders:

1. Go to the Options > Busses page of the external screen.
2. Under Monitor Bus A or Monitor Bus B, select Sends on Faders Follows AFL so it is checked.



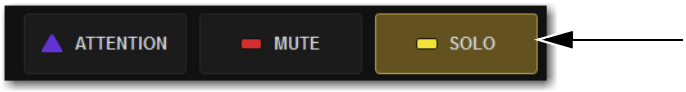
Sends on Faders enabled for Monitor Bus A

Accessing Aux Sends on Faders

After enabling Sends on Faders, you can access them by soloing an Aux output. You can activate Sends on Faders in Split Banking mode, and Inputs and Layouts Fader Bank mode. You can bank to other channels while in Sends on Faders mode, but you must stay within the current banking mode (Split Banking mode or Fader Banking mode) to remain in Sends on Faders mode. You can also access other sends for other Aux outputs while Sends on Faders is active.

To adjust Aux Sends on Faders:

1. Bank input channels to the faders in any fader banking mode, or bank a User Layout that includes input channels.
2. On the MTS, touch Universe, then touch Auxes to show Aux channel tiles.
3. Touch the Solo Channel Tile Function button so it lights.



Solo Channel Tile function switch

4. Tap the Channel Tile for the Aux output whose sends you want to adjust.
   The channel displays show SOF and the number or name of the Aux output.

A Channel Tile showing a soloed Aux (left) and a channel display indicating Sends on Faders mode (right

5. Adjust the faders to adjust send levels.

You can also solo Aux outputs from the channel strips when Auxes are banked to the center fader bank in Split Banking mode, using the Solo button for the Aux output on the Outputs page of the external screen, and from the external screen.

To access the sends of another Aux output:

- Solo another Aux output to spill those Aux Sends to the faders.

To exit Sends on Faders, do any of the following:

- Un-solo the currently soloed Aux output.
- On the MLM, press the flashing **Flip** switch.
- Enable or disable any Fader Bank mode switch (Layouts, VCAs, Inputs or Outputs).

Adjusting Stereo Sends in Send on Faders Mode

To adjust Aux Send pan in Sends on Faders mode, the fader bank from which you are adjusting pan must be in Channel Strip mod.

To adjust stereo sends in Sends on Faders mode:

1. Bank to the desired input channels.
2. Solo a stereo Aux output to enter Sends on Faders mode.
3. Press **Select Clear.**
   Aux Send pan for each banked channel is assigned to the bottom row of encoders in Channel Strip mode, and P <Aux number/name> appears in the encoder displays.

4. Rotate the to adjust send pan for the corresponding channel.
5. Press the send pan encoder **Sel** switch to toggle that send pre-/post fader.

Adjusting Aux Sends on the External Screen

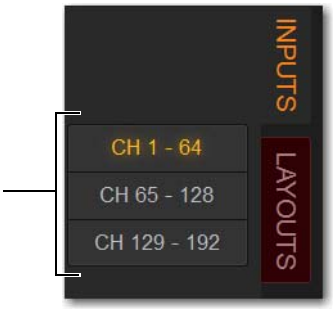
You can toggle individual sends on/off and pre-/post-fader, as well as view send level and pan (for stereo sends) for the attentioned channel on the Inputs page of the external software.

For more information on working with channels on the external screen, see **Adjusting Channels on the External Screen**.

To adjust Aux Sends on the external screen:

1 Go to the Inputs page.

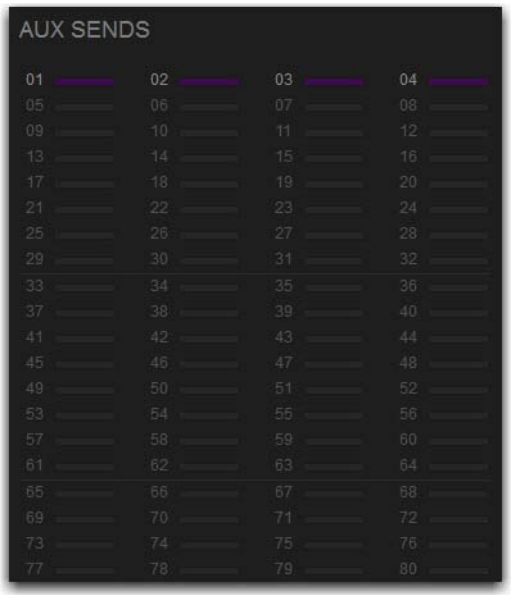
2 Select the Inputs tab, then select the bank of input channels you want to access using the Input Channel Type buttons.



Input Channel Type buttons

3 Attention an input channel.

4 To toggle an Aux Send on/off, select the thermometer-style indicator. When the indicator lights, the send is on. The indicator lights in the color assigned to that Aux output.



Inputs page Aux Sends section showing Auxes 1–4 enabled for the attentioned channel(s)

Classifying Auxes for Snapshots

You can classify Aux Sends as *monitor sends* (“Mon”) or as *effects sends* (“FX”) for the purposes of scoping and safing each type separately in snapshots. See **Classifying Aux Sends.**

Matrix Mixers

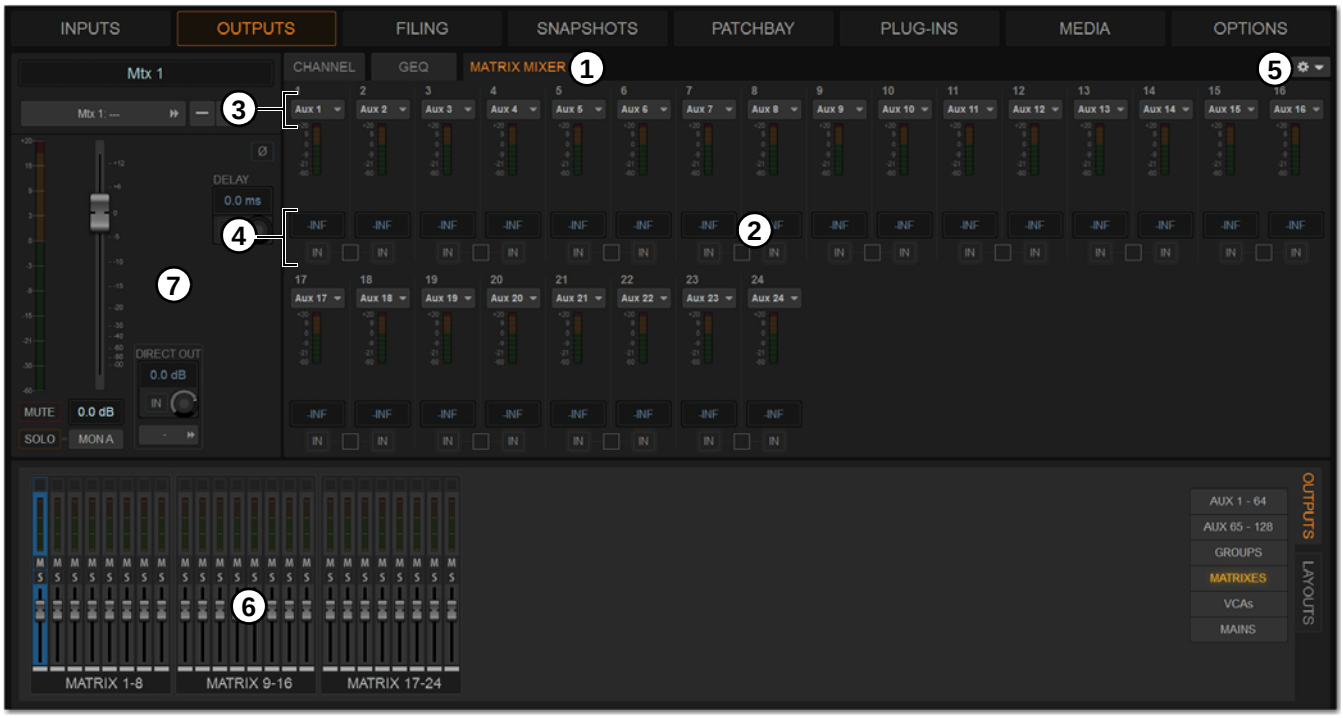
This chapter covers using the S6L system's Matrix Mixers, and includes the following topics:

- **Matrix Mixers Overview**
- **Assigning Input Sources to Matrix Mixers**
- **Adjusting Matrix Mixer Input Controls**
- **Delay Compensation with Matrix Mixers**
- **Adjusting Matrix Mixer Output Controls**
- **Snapshot Data and Parameters for Matrix Mixers**

Matrix Mixers Overview

The S6L system provides 16 (E6L-144) or 24 (E6L-192) mono Matrix Mixers for setting up alternate mixes, fill and delay feeds, and cue, monitor or press mixes.

Each of the available Matrix Mixers can receive up to 24 discrete input sources. Input sources can be any combination of input channels, Auxes, Groups or Mains busses. Each Matrix Mixer has a mono output, but you can combine two Matrix Mixers into one stereo Matrix output using the Make Stereo command (see **Make Selected Mono Strips Stereo/Make Selected Stereo Strip Mono**).



A Matrix Mixer on the Outputs page of the external screen

1 – Matrix Mixer Tab

2 – Matrix Inputs

3 – Matrix Input Source Selectors

4 – Matrix Input Controls

5 – Matrix Mixer Reset/Clear Selector

6 – Matrix Mixer Output Fader Strips

7 – Matrix Mixer Output Controls

Assigning Input Sources to Matrix Mixers

Each Matrix Mixer can receive up to 24 discrete input sources. You can assign any combination of input channels, Auxes, Groups or Mains busses Each Matrix Mixer has a mono output, but outputs can be linked to form a stereo pair. A variety of pickoff points are available when assigning Matrix input sources. Matrix input source assignments are made using the external screen.

Pickoffs for each input are selected when you select the input source. Matrix Mixers provide the following pickoff points for source channels:

Input Channels Top of channel, Insert Return, or Post-Fader

Output Channels Pre- or Post- Fader.

To assign input sources to a Matrix mixer:

1 On the external screen, go to the Outputs page.

2 Select the Outputs tab, then select the Matrixes Channel Type button.

Output Channel Type buttons

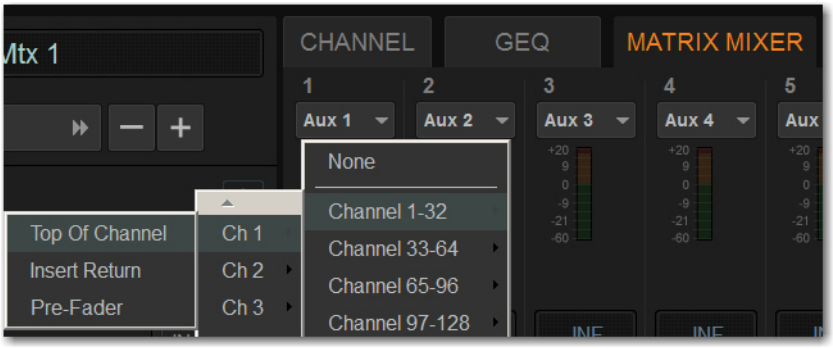
3 Attention the desired Matrix Mixer(s).

You can use Multi-Select to attention multiple Matrix Mixers and apply the same input source to all selected Matrixes.

4 Select the Input Source selector at the top of each Matrix channel

5 For each input source, choose the following:

- Choose the desired input source.
- Choose the desired channel.
- Choose from the available pickoff points.



Matrix Mixer input source menu showing input sources, channels, and pickoff points

Adjusting Matrix Mixer Input Controls

You can adjust Matrix Mixer input levels using the CKM in Channel Control mode, or the external screen.

Adjusting Matrix Mixer Input Level

To adjust Matrix Mixers input levels:

1 Bank Matrixes to the faders.

2 Select a banked Matrix.

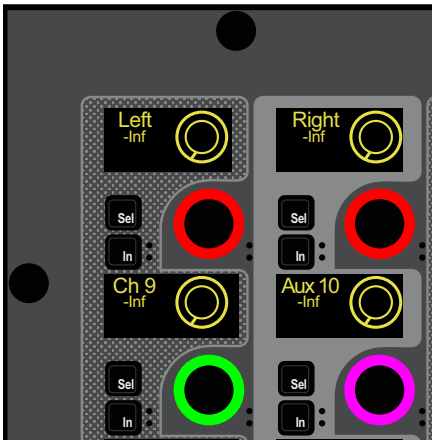
3 Press any **MIX** Channel Control Function switch on the associated CKM.

– or –

- Touch the Matrix Mixer touch zone on the associated CTM in Meters or Channel view.

Matrix Mixer touch zone on the CTM in Channel view

The selected Matrix Mixer's input controls are spilled to CKM encoders. The source for each Matrix Input is shown in the corresponding encoder display. The encoders for the different inputs are colored according to their global color-coding setting.



Matrix Mixer input sources on the CKM encoders

4 To toggle an input on/off, Press the encoder under the display showing the Matrix Mixer input you want to adjust.

The corresponding encoder **In** switch lights green when the input is on. On the CTM in Channel view, and the MTS in Meters and Channel views, thermometer-style level indicators light when the input is on, and is dimmed when off.

5 To adjust input level, rotate the encoder under the display showing the desired Aux Send.

Input level is shown in the corresponding encoder display, on the CTM in Channel view, and on the MTS in Meters and Channel views.

Matrix Mixer input levels shown on the CTM in Channel view

To enter an input levels on the external screen:

1. On the Matrix Mixer tab, touch the input level field.
2. Type in an amount using the keyboard, and then press Enter.

Entering a Matrix Mixer input level using a keyboard

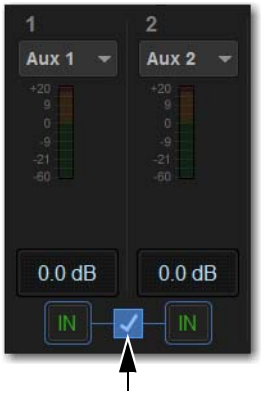
Linking and Unlinking Adjacent Matrix Inputs

Adjacent inputs to Matrix mixers can be linked or unlinked on a per input pair basis. Link status can be specified on a per Matrix basis (for example, inputs 1 and 2 can be linked for Matrix 1, but unlinked for Matrix 2). This gives you the ability to control inputs as either a stereo-linked pair or as independent mono inputs.

- When linked, level and source on/off controls are linked.
- When unlinked, discrete level and on/off controls affect each individual channel.

To link or unlink inputs to Matrix mixers:

1. On the external screen, go to the Outputs page.
2. Select the Outputs tab, then select the Matrixes Channel Type button.
3. Select the checkboxes below any adjacent inputs to link or unlink them. A check mark in the checkbox indicates a linked input source; an empty checkbox indicates unlinked sources.



Matrix link button

Matrix Mixer Input Pan

Matrix mixer input pan controls adjust the panning of each Matrix mixer input across the stereo outputs of a stereo Matrix Mixer.

To control Matrix send pan from the Global Control encoders:

1. Assign the Matrix mixer input source to Global Control for the stereo Matrix you want adjust.
2. Press the encoder **Sel** switch to assign send pan control to the encoder.
3. Adjust the encoder to adjust pan.
   - Rotate to the left to pan the input source to the left (odd-numbered) Matrix mixer.
   - Rotate to the right to pan the input source to the right (even-numbered) Matrix Mixer.

Resetting Matrix Mixer Input Paramters

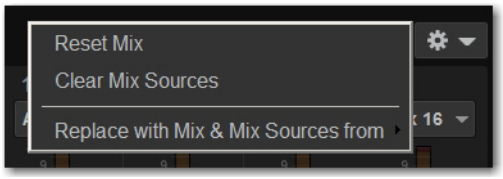
You can reset level, pan and stereo link settings for any matrix mixer. Input source assignments persist.

To reset a Matrix mixer parameter to its default value:

1. Attention one or more Matrix mixers you want to change.
2. Touch-and-hold (right-click) the encoder on-screen and choose Reset.

To reset all Matrix mixer parameters to their default values:

1. Attention one or more Matrix mixers you want to change.
2. Select the Matrix Mixer Reset/Clear Selector at the top right of the Matrix Mixer, and choose Reset Mix.



Matrix Mixer Reset/Clear menu

Clearing Matrix Mixer Input Assignments

You can clear mixer input assignments to quickly set all the input sources to None.

To clear Matrix input assignments:

1. Attention one or more Matrix mixers you want to change.
2. Select the Matrix Mixer Reset/Clear Selector and choose Clear Mix Sources.

Copying Matrix Mixer Input Settings

You can copy mixer settings from one Matrix mixer to another mixer of the same type. This lets you quickly duplicate monitor mixes or other signal feeds.

⚠ *Copying mixer settings overwrites all the settings on the destination mixer*.

To copy settings between mixers:

1. Attention the Matrix mixer that you want to be the destination of the copied settings so that it is displayed on-screen.
2. Select the Matrix Mixer Reset/Clear Selector and choose Replace With Mix and Mix Sources From.
3. Choose the Mtx (Matrix mixer) from the sub-menu whose settings you want to copy to the current Matrix Mixer.

Delay Compensation with Matrix Mixers

VENUE automatically compensates for the delay offsets that can arise when combining different signal paths within a Matrix mixer.

Additional Information about Delay Compensation

- The overall latency through a Matrix is determined by the path with the highest latency.
- All inputs within a Matrix mix are guaranteed to be phase accurate, but mixes are not necessarily aligned to each other. This ensures that all mixes are not penalized in the case of one or more exceptionally high-latency signal paths.
- Delay compensation only accounts for a channel's post-insert pickoff. Channels that feed User Inputs and Auxes (pre-insert) will not be fully compensated for.

Adjusting Matrix Mixer Output Controls

You can bank Matrix Mixer outputs to the S6L's faders and adjust level, solo, and mute using the channel strips. You can select Matrix Mixers to adjust built in EQ and dynamics using the encoders on the associated CKM in Channel Control mode.

Each Matrix Mixer features the same output processing capabilities as other output channels: a built-in 7-band parametric EQ, a built-in compressor/limiter, four plug-in slots (and one hardware insert slot), and the ability to insert a built in 31-band graphic EQ.

Accessing Matrix Mixer Output Processing on the External Screen.

You can adjust Matrix Mixer output parameters using the external screen.

To access Matrix Mixer processing parameters on the external screen:

1. On the external screen, go to the Outputs page.
2. Select the Outputs tab, then select the Matrixes Channel Type button.

Output Channel Type buttons

3. Attention the desired Matrix Mixer(s).
4. Select the CHANNEL tab to access built-in channel EQ and Comp/Lim
5. Select the GEQ tab to insert and adjust built-in GEQs. For more information see **Adjusting Channels on the External Screen**

Snapshot Data and Parameters for Matrix Mixers

Snapshots can store and recall all source assignments of each matrix mixer when the Matrix (“Mtx”) data type is scoped, as shown in the following table.

Table 1. Snapshot data types and parameters for Matrix mixers

Snapshot Data Type	Included Parameters (for Each Scoped Channel Strip)
MTX	Mixer Input Sources and pickoffs; Mixer Input level, Mixer Input on/off state and Mixer *Input* Link state

The Recall Safe tab of the Snapshots page provides two data “Mix” data types that let you discretely “safe” source and/or user input assignments to prevent them from being changed with a snapshot recall.

For complete information on VENUE snapshots, see **Snapshots.**

Muting and Mute Groups

Channels can be muted on the S6L system in two ways:

Explicitly Using the channel strip **Mute** switch on the control surface, from the MTS, or from the fader strips on the Inputs and Outputs pages of external screen. Mute switches light solid red when they are explicitly muted.

Implicitly As a member of a Mute Group or VCA, or when any other channel is soloed in SIP (Solo in Place) mode. Mute switches flash when they are implicitly muted.

This chapter shows how to do the following:

- Mute Individual Channels
- Use Mute Groups

Muting Individual Channels

Explicit Mute

You can mute individual channels using the channel strip **Mute** switch, from the MTS, or from the external screen. Muting individual channels always behaves in additive (latched) fashion. You can mute individual channels in any sequence, and they will remain muted until they are un-muted. Muting individual channels always mutes them *explicitly.*

Channel mute has the following characteristics, depending on the type of channel muted.

Input Channels Channel mute is pre-fader on input channels.

Output Channels Mute operation is post-fader on all types of Output busses.

Mains Only the linked Main busses are muted/unmuted. See **Linking/Unlinking Mains.**

VCAs When you mute a VCA, its member channels are muted. The VCA mute indicator lights solid red, and the member channel Mute indicators flash to show they are muted as part of a VCA.

To toggle mute on individual channels from the channel strip:

1 Bank to the desired channels.

2 Press the **Mute** switch.
Mute lights solid red to indicate the channel is muted.

To toggle mute on individual channels from the MTS:

1 Touch Universe to show the Universe view.

2 Touch a Channel Tile Type button (Inputs, Auxes Groups, Matrixes, VCAs or Mains) to access the desired channel(s) on the MTS.

3 Touch the Mute Channel Tile Function button.

Mute Channel Tile Function button

4 Touch a Channel Tile.

The Channel Tile is bordered in red and the Channel Tile Mute LED lights solid red to indicate the channel is muted.

A Channel Tile showing a muted input channel

To toggle mute on individual channels from the external screen:

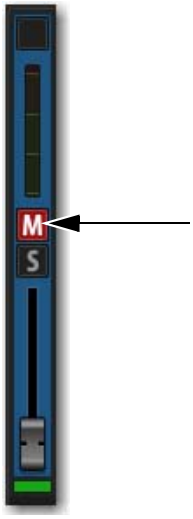
1 Go to the Inputs or Outputs page depending on the channel you want to mute.

2 Select a Channel Type button access those channels on the on-screen faders.

3 Select the Mute button on the desired channels' fader strip.

– or –

- Attention the desired channel to target that channel to the screen, and then select the MUTE button so it lights.



A fader strip on the external screen showing a muted channel

Mute Groups

Mute Groups let you mute and un-mute multiple channels simultaneously by pressing a single switch. Assign channels to Mute Groups on the control surface. Access Mute Groups using the Right Soft Keys screen on the MLM and the MTS.

Mute Groups only affect the status of channel Mute switches, and do not affect the on/off status of Aux Sends, output of the Talk-back/Oscillator section, or the routing of signals to the monitor outputs.

Assigning Channels to Mute Groups

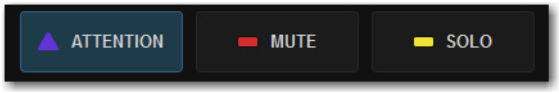
You can assign any types of channels to Mute Groups except VCAs. You can also assign a Channel to multiple Mute Groups.

To add or remove members of a Mute Group:

1 On the MTS, touch Mutes.

Mute Channel Tile Types button

2 Touch the Attention Channel Tile Function button.

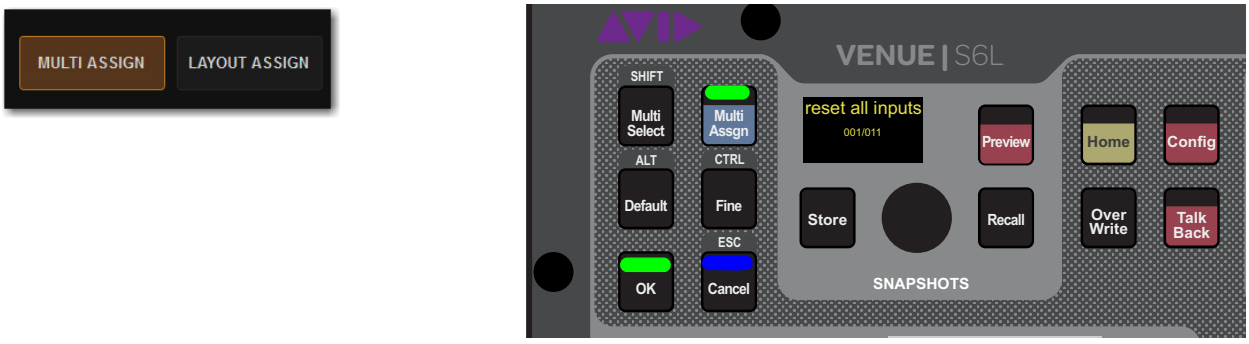


An enabled Attention Channel Tile Function button

3 Touch the Mute Group Channel Tile so it is bordered in blue (attentioned) to target that Mute Group for the assignments.

An enabled Attention Channel Tile Function button

4 Touch Multi-Assign on the MTS, or press the **Multi-Assign** switch on the MLM so they are lit.



Enabled Multi-Assign button on the MTS (left) and on the MLM (right)

5 To add or remove channels using the MTS:

- Touch a Channel Tile Type button (Inputs, Auxes Groups, Matrixes, or Mains) to access those channels on the MTS.
- Touch any Channel Tiles so it is bordered in orange to add them to the Mute Group.
- Touch a Channel Tile so the orange border disappears to remove that channel from the Mute Group.

Channel Tiles targeted for Mute Group assignment

6 To add/remove channels using the faders:

- Bank to the desired channels.
- Press any channel strip **Attention** switches to add them to the Mute Group. Selected **Attention** switches flash.
- Press a flashing Attention switch so it no longer flashes to remove it from the Mute Group.

7 To confirm the assignments and exit Multi-Assign mode on the MTS tap Multi-Assign so it is unlit, or press the flashing **OK** switch.

– or –

- To cancel the assignments and exit Multi-Assign mode, press the flashing **Cancel** switch

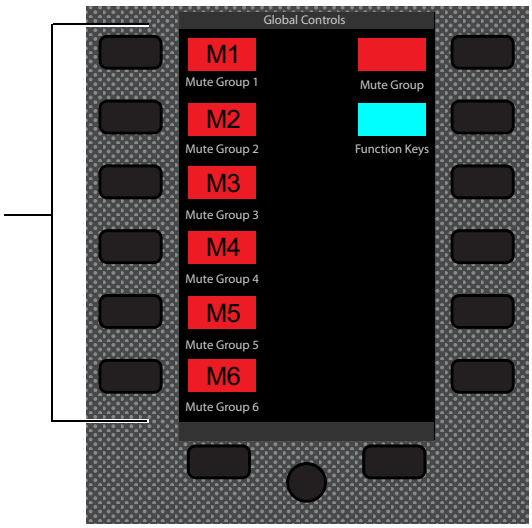
Using Mute Groups

You can activate Mute Groups using the Right Soft Keys on MLM, or using the MTS. Mute Groups 1–6 are available from the first page of the Right Soft Keys menu. Mute Groups 1–24 are available on the Mute Group sub-pages.

To activate Mute Groups 1–6 using the Right Soft Keys:

1 In the left-hand column of the Right Soft Keys display, locate any Mute Group 1–6 that you want to activate.

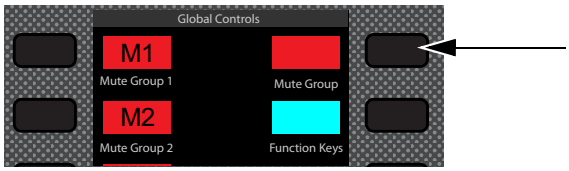
2 Press the corresponding Soft Key so it lights. The channels in that Mute Group are implicitly muted, and their Mute switches flash red.



Right Soft Keys main menu

To access all Mute Groups:

1 In the right-hand column of the Right Soft Keys display, locate Mute Group and press the corresponding Soft Key. Mute Groups 1–12 are shown in the display.

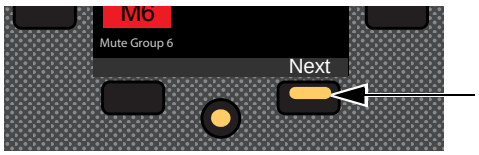


Mute Group Soft Key

2 Press any Soft Key to activate the corresponding Mute Group.

– or –

- Press the lit Next switch to access Mute Group 13–24, then press the corresponding Soft Key.

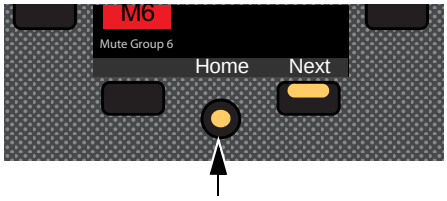


Next Page switch

The channels in that Mute Group are implicitly muted, and their Mute switches flash red.

To return to the first page of the Left Soft Keys menu:

- Press the lit HOME switch.



Home switch

Explicit and Implicit Channel Mute with Mute Groups and VCAs

Any input or output channel implicitly muted by a Mute Group or VCA can be explicitly *un*-muted, explicitly muted, and reset to its implicit mute state by repeatedly pressing a channel Mute switch. Explicitly unmuting or muting a channel in this way does not permanently remove that channel from the Mute Group or VCA.

This feature is useful to temporarily unmute a channel during a line check without having to release the entire Mute Group or VCA.

To cycle through the available Mute modes:

1 Activate a Mute Group, or mute a VCA. The **Mute** switches on all implicitly muted channels flash.

2 Press a flashing channel strip **Mute** switch to *explicitly un-mute* the channel. Its Mute switch is now unlit.

3 Press the same (now unlit) **Mute** switch again to *explicitly mute* the channel. The **Mute** switch is now lit solid.

4 Press the same Mute switch again to implicitly mute the channel and return it to being controlled by the active Mute Group or VCA. Its Mute switch resumes flashing.

Select multiple channels first to be able to toggle all their states at once. The Mute behavior may vary if some, but not all, of the selected channels are members of a Mute Group or VCA.

Snapshot Data and Parameters for Mute

Snapshots can store and recall mute status when the MUTE data type is scoped, as shown in the following table:

Table 2. Snapshot data types and parameters for Matrix mixers

Snapshot Data Type	Included Parameters (for Each Scoped Channel Strip)
MUTE	Explicitly muted channels, and channels implicitly muted via VCA mute.

Mute Group state and assignments cannot be stored nor recalled via Snapshots. Mute Group state and information is stored with the Show file.

For complete information on VENUE snapshots, see **Snapshots.**.

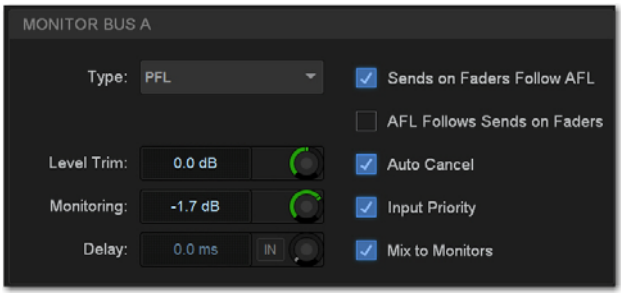
Soloing and the Monitor Busses

The S6L system provides two discrete, independently configurable Monitor busses, as well as two discrete headphone outputs, each of which is also independently configurable. You can route individual channels to either or both Monitor busses, and feed each Monitor bus to discrete hardware outputs and the headphone outputs.

This chapter shows how to configure the Monitor busses and soloing options on the S6L system, how to adjust the Monitor busses, how to solo channels, and how to use the headphone outputs.

Configuring the Monitor Busses and Solo Options

The S6L system provides two discrete Monitor busses. Each bus is independently configurable. You configure your Monitor busses using the Options > Busses page of the external screen.



Monitor Bus options on the Options > Busses page

Selecting a Solo Mode

Three Solo modes are offered for input channels: Pre-Fader Listen (PFL), After-Fader Listen (AFL) and Solo In Place (SIP). Outputs are always soloed in AFL mode. You can also toggle Solo modes using the AFL switch in the Monitoring section on the MLM.

To select a Solo mode:

1 On the external screen, go to the Options > Busses page.

2 Under Solo and Monitor Operation, select the Type pop-up menu and choose one the following Solo modes:

Pre-Fader Listen (PFL) PFL Solo mode sends the signal from explicitly soloed input channels to the Monitor bus. The signal is post-insert, pre-fader and pre-mute. Mono input signals are sent to both sides of the Solo bus, and the left and right sides of stereo input signals are sent to the corresponding sides of the Monitor bus. PFL is the default Solo mode.

After-Fader Listen (Stereo AFL) AFL Solo mode sends the signal from explicitly soloed channels and solo-safe inputs to the Monitor bus. Soloing of outputs is always AFL. In AFL Solo mode, both input and output signals are sent to the Monitor bus post-fader and post-pan/balance, and are always panned to stereo even if the Main busses are configured in L–C–R mode.

Solo In Place (SIP) SIP mode applies to input channels only. SIP sends the signal from the soloed channel(s) to the Mains busses, bypassing the Monitor bus. Signal is sent post-pan/balance. Show files do not open in SIP mode. If you save a Show file while in SIP, when you reopen the Show file, it will open in PFL Solo mode.

In SIP mode, the soled channel(s) is (are) sent directly to the Main busses. Use this feature only at soundcheck.

Sends on Faders Follow AFL

Sends on Faders Follow AFL is enabled, soling an Aux output simultaneously assigns its sends to the faders and routes the Aux output's signal to the Monitor bus (in AFL solo mode). Sends on Faders Follow AFL is enabled on each Monitor bus independently. When enabling Sends on Faders, make sure to enable it on the Monitor bus your input channels are currently routed to (assuming you want all input channels to be subject to Sends on Faders).

You can, for example, route some of your input channels to Monitor bus A with Sends on Faders disabled, and route other channels to the other Monitor bus B with Sends on Faders *enabled*. You can then route each Monitor bus to a discrete hardware or headphone output. If any input channels are targeted to *both* Monitor busses, then enabling Sends on Faders on either Monitor bus results in Sends on Faders behavior for that channel.

To enable Sends on Faders:

1 On the external screen, go to the Options > Busses page.

2 Under Monitor Bus A or Monitor Bus B, select Sends on Faders Follows AFL so it is checked.

For complete Sends on Faders workflow, see **Adjusting Aux Sends on Faders (Sends on Faders Mode)**.

AFL Follows Sends on Fader

When AFL Follows Sends on Faders is enabled, pressing **Flip** and then flipping an Aux Send to the faders solos the associated Aux output. This option only applies to flipping parameters to faders using Flip in Channel Strip mode. The AFL Follows Sends on Fader setting is stored and recalled with each Show file. By default, the option is off (not selected).

To set AFL to follow Aux encoder assignment:

1 Go to the Options > Busses page.

2 In the Solo and Monitor Operations section, select the AFL Follows Auxes option.

Auto Cancel and Input Priority

The Auto Cancel option determines whether Solo switches cancel other soloed channels or are additive (latching). The Input Priority option determines whether soloed inputs replace soloed outputs on the AFL/PFL Solo bus.

Auto Cancel On, Input Priority Off A solo cancels all other solos (inputs and outputs)

Auto Cancel On, Input Priority On An input solo cancels all other soloed inputs; an output solo cancels all other output solos; soloed inputs temporarily replace soloed outputs

Auto Cancel Off, Input Priority Off Solos are additive, and soloed inputs and outputs are heard together

Auto Cancel Off, Input Priority On Solos are additive, and soloed inputs temporarily replace soloed outputs.

Sending the Mains Mix to Monitors

This option sends the Mains mix signal to the selected Monitor bus. When enabled (lit), whenever channels are not soloed the Main mix is present in the Headphones output (Phones A or B) that the Monitor bus is routed to (or to near-field monitors when a hardware output is patched to the Monitor bus). This option mirrors the functionality of the **Mix to Monitors** switch.

To send the Main mix to the Monitor bus:

- Press **Mix to Mons** on the MLM on the S6L control surface.

  – or –

- Go to the Options > Busses page and select the Mix to Monitors option.

Monitor Output from an L-C-R Main Mix

The stereo Mix to Monitors signal is derived from the L–C–R Main mix by adding a –3 dB signal from the Center channel to the Left and Right monitor channels.

Monitor Output from an L–R+M Main Mix

In a L–R+M Main mix, only the Left and Right channels are heard in the Monitor bus.

Adjusting Monitor Busses

You can route and adjust Monitor bus levels using the S6L control surface or the external screen. You can apply a delay to each Monitor bus on the external screen.

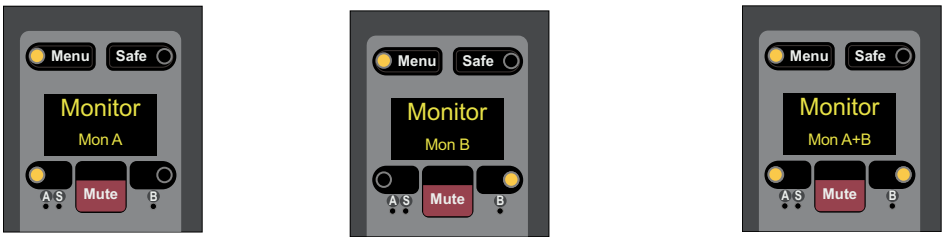
Routing Channels to the Monitor Busses

You can route any channel to either or both Monitor busses independently. You can route channels to Monitor busses using the channel strip Channel Menu and the external screen. By default, all channels are routed to Monitor Bus A. When you solo a channel, the soloed signal is sent to the Monitor bus

⚠ *When a channel is routed to both Monitor busses, any solo and monitoring options set on either bus affect the behavior of that channel when soloed.*

To route channels to the Monitor busses using the Channel Menu:

1. Bank the desired channels to the control surface's faders.
2. Press the channel strip **Menu** switch until Monitor appears in the channel display.
3. To route the channel to Monitor Bus B, press the Left Menu switch so it is unlit. The Right Menu switch lights. Mon B appears in the channel display, and on the CTM and MTS in Channel view.
4. To route the channel back to Monitor Bus A, press the Right Menu switch so it is unlit. The Right Menu switch lights. Mon A appears in the channel display, and on the CTM and MTS in Channel view.
5. To route channels to both Monitor busses, press the Left and Right Menu switches so they are both lit.
   Mon A+B appears in the channel display, and on the CTM and MTS in Channel view.



A channel display showing a channel routed to Monitor Bus A (Left) Bus B (center) and Busses A and B (right)

To route channels to the Monitor Busses on the external screen:

1. Navigate to the desired channel on the Inputs or Outputs page of the external screen.
2. Select the Mons A/B/A+B button to cycle through the three Monitor Bus routing options for the attentioned channel.

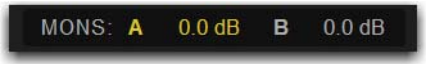
External screen showing a channel routed to Monitor Bus A (Left) Bus B (center) and Busses A and B (right)

Adjusting Monitor Bus Level

The Monitoring encoder MLM lets you target a Monitor bus for control and provides level control for the targeted Monitor bus.

To adjust the level of a Monitor bus on the control surface:

1. Push the encoder to target the encoder to Monitor bus A or B. The A or B LED lights to indicate the currently targeted Monitor bus.
2. Rotate the encoder to adjust the level for the targeted Monitor bus. Monitor bus levels are indicated on the Monitor Bar at the bottom of the MTS.



Monitor Bar

To adjust the level for the Monitor bus on the external screen:

1. Go to Options > Busses.
2. In the Solo and Monitor Operations section, adjust the Monitoring encoder.

Delaying a Monitor Bus

You can delay a Monitor bus to time-align it with the sound coming from the stage.

To adjust monitor bus delay:

1. On the external screen, go to Options > Busses.
2. Select the In button beneath the on-screen encoder to enable Delay for the desired Monitor bus.
3. Select the Delay encoder in the section and drag to adjust. When lit, the Delay setting is applied to the monitor output.

Routing the Monitor Bus to Outputs and Plug-Ins

The Monitor bus can be routed to hardware outputs and to bus-fed plug-ins.

Hardware Outputs For routing to hardware outputs, the Monitor (Solo) bus outputs are available in the Mains tab of the Patchbay > Outputs page. Monitor bus outputs are assignable to any number of physical outputs on the system. Use this capability to route monitor outputs to multiple cue stations (in-ear mix and wedge mix), to an outboard analyzer, to a listen wedge mix, or to near-field monitors.

Bus-Fed Plug-Ins For routing to bus-fed plug-ins, the Monitor bus appears as a choice in the plug-in routing selector. This lets you route the Monitor bus to a bus-fed stereo plug-in such as an onboard analyzer. Plug-ins can not be inserted on the Monitor bus.

Routing the Monitor Bus to Hardware Outputs

To route the Monitor bus to hardware outputs:

1. In the Patchbay, select the Outputs tab, then select the Mains tab.
2. Select a Hardware I/O tab to select the desired hardware output.
3. Select in the grid to assign the desired Monitor bus to the desired destination.

Solo In Place, when engaged, is simultaneously routed to the Main and Monitor busses.

Routing the Monitor Bus to Plug-Ins

To route Monitor output to a bus-fed plug-in:

1. On the external screen, go to the Plug-Ins page.
2. Make sure the desired stereo plug-in is installed and assigned to a rack slot.
3. Select the Plug-In Input selector at the top of the corresponding rack slot, and choose Bus Outs > Mains > Monitor - stereo.

Soloing Channels

Solo operation depends on the type of channel being soloed, and on any selected solo options. In all modes, a channel's **Solo** switch lights to indicate that the channel is soloed.

Input Channels Soloing an Input Channel sends signal to the Solo bus (when in PFL or AFL modes) or to the Mains bus (when in SIP mode). In SIP mode only, when a channel is soloed, all other channels that are not soloed or solo safe are implicitly muted. Implicit mutes are indicated by a flashing mute switch.

Output Busses Soloing an output channel sends signal to the AFL/PFL Solo bus. This applies to Groups, Auxes, and Matrixes. Outputs are always AFL. Stereo busses use true stereo AFL. When you solo a stereo bus, the two busses are heard as a stereo pair when soloed. Mono busses are heard as dual mono when soloed.

Momentary And Latching Switch Operation

Channel strip **Solo** switches can operate with either momentary or latching behavior.

To engage momentary solo on a channel:

- Hold the **Solo** switch for more than one second. Release the solo switch to un-solo the channel.

To latch solo on a channel:

- Press and release the **Solo** switch. Press the switch a second time to unsolo the channel.

Soloing Single Channels

You can solo channels from the channel strip, the MTS, and the external screen.

To solo a single channel from the channel strip:

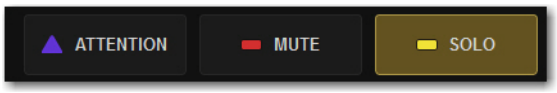
- Press a channel strip **Solo** switch so it lights. The solo switch latches on a momentary press.

  – or –

- Hold the channel **Solo** switch for more than one second for momentary solo. The channel will automatically unsolo when you release the switch.

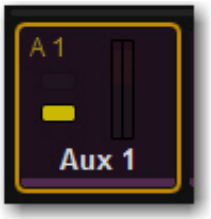
To toggle solo from the MTS:

1. Touch Universe to show the Universe view.
2. Touch the appropriate Channel Type button (Inputs, Auxes, Groups, Matrixes, VCAs, or Mains) to show the channel you want to solo.
3. Touch the SOLO Channel Tile Function button so it lights.



Solo Channel Tile Function button

4. Touch the a Channel Tile. The Channel Tile is bordered in yellow and the Channel Tile Mute LED lights solid yellow to indicate the channel is muted.



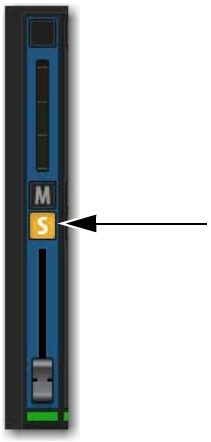
A Channel Tile showing a soloed Aux output

To toggle solo on a single channel from the external screen:

1. Go to the Inputs or Outputs page depending on the channel you want to solo.
2. Select a Channel Type button access those channels on the on-screen faders.
3. Select the Solo button on the desired channels' fader strip.

   – or –

- Attention the desired channel to target that channel to the screen, and then select the SOLO button so it lights.



A fader strip on the external screen showing a soloed channel

Soloing Multiple Channels

You can solo multiple channels using channel strip **Solo** switches.

To solo multiple channels:

1. Bank the desired channels to the faders.
2. Do one of the following:

- With the Auto Cancel option enabled, press the **Solo** switches on multiple channel strips simultaneously.

  – or –

- Hold **Multi-Select** and press the **Solo** switches on one or more channel strips.

  – or –

- With the Auto Cancel option disabled, press **Solo** switches on multiple channels in any sequence. The **Solo** switches latch on.

Toggling the Solo Status of Multiple Channels

To toggle the Solo status of multiple channels, do one of the following:

- With the Auto Cancel option enabled, hold the **Multi Select** switch while pressing the Solo switches on channels you want to toggle.

  – or –

- With the Auto Cancel option disabled, press Solo switches in any sequence. The Solo switches latch on and off.

Soloing VCAs

When you solo a VCA, its member channels are soloed. If the VCA members include a combination of input and output channels, their solo status follows any selected solo options.

Clearing Solos

To clear all soloed channels:

- Press the flashing **Solo Clear** switch to clear all soloed channels.

The Events list can be used to assign the Solo Clear function to a footswitch or any other available trigger.

Solo Bus Metering

When a channel or dynamics key input is sent to the Solo bus, its signal is metered on the Selected Channel meters, temporarily replacing the metering for any currently targeted channel.

Trimming Solo Bus Level

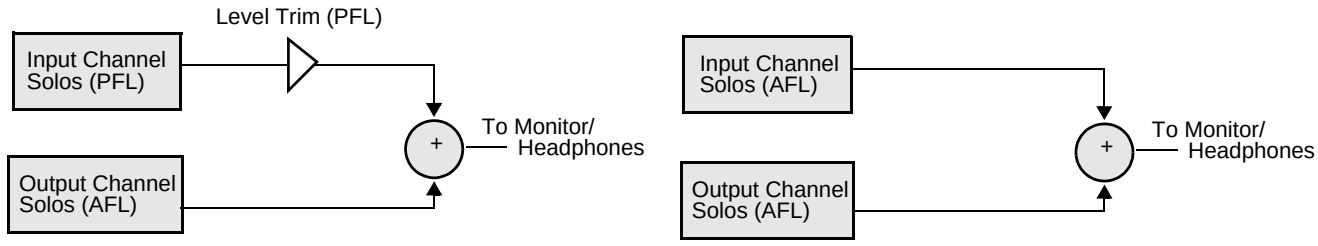
PFL Solo bus monitoring levels can be controlled by the on-screen Level Trim control in the Solo and Monitor Operations section. The trim amount is adjustable over a range of –20 dB to +20 dB.

PFL signals are frequently hotter than AFL signals. Because Level Trim only affects PFL signals, you can use Level Trim to balance PFL volume levels with AFL or Mix to Monitors volume levels, with a minimum of Monitoring level adjustment during a show.

To trim the Solo bus level:

1. Solo a channel.
2. Go to Options > Busses, and adjust the Level Trim setting in the Solo and Monitor Operations section.

The following diagrams show the signal flow for PFL and AFL modes.



Level Trim in PFL mode (left) and no Level Trim in AFL mode (right)

Solo Safing Channels

Solo Safing an input channel prevents that channel from being implicitly muted when any other channel is soloed. Solo safed channels are automatically added to any explicitly soloed channels. Solo Safe only applies to SIP and AFL solo modes. Solo safe status is ignored in PFL mode.

You can Solo Safe channels using the Channel Safe switches and on the external screen fader strips. You can also Solo Safe a channel using the CKM in Channel Control mode. Solo Safe mode is enabled on the Options > Interactions page.

To enable Solo Safe for the Channel Safe switches:

1. On the external screen, go to the Options > Interaction page.
2. In the Channel Safe Switches section, under Inputs and Outputs, select Solo Safes as desired.

You can create an event that lets you cycle through the various Channel Safe switch modes, as well as suspend or disable Bank Safe (Disable Bank Switch). See **Creating Events**.

To Solo Safe channels using the Channel Safe switches:

1 Make sure you have enabled Bank Safe for the Channel Safe switches.

2 On the S6L control surface, do the following:

- Bank the desired channel to the faders.
- Press **Safe** for the channel you want Solo Safe.

S6L Channel Safe switch engaged

3 On the external screen, do the following:

- Go to the Inputs or Outputs page, and navigate to the desired channel using the provided tabs and buttons.
- Select the Channel Safe switch for the desired channel, located at the top of each fader strip.

Solo Safe a channel using the CKM:

1 Bank the desired channel to the faders.

2 Select the to Automation Safe so it lights, and then press the **INPUT** Channel Control Function switch so it lights.

– or –

- Touch the channel's Input touch zone on the associated Channel Touch Module (CTM).

3 Locate the Solo Safe encoder, indicated by Solo Sf on the encoder display, and press the encoder.

The encoder **In** switch lights green, and the channel is Solo Safed.

Automation Safe parameter on a CKM encoder

Solo Safe status for the channel is indicated as follows:

- On the control surface channel strip, the **S** LED lights yellow.
- In the Input section of the MTS and CTM Channel view for the channel, **S** lights yellow.
- On the external screen the Safe button flashes green and shows the letter S (A appears if the switch is acting as an Automation Safe, and B appears if it is acting as a Bank Safe).

Indications that a channel is Solo Safed on the channel strip (left) the MTS/CTM Channel view (center) and on the external screen (right)

Using the Headphone Outputs

The front panel of the S6L control surface provides two discrete headphone outputs (Phones A and B).

Configuring the Headphones Outputs

You can choose the Monitor bus that you want feeding each headphone output.

To configure the headphone output:

1. On the external screen, go to the Options > Busses page.
2. In the Headphones section, located the Phones A and Phones B pop-up menus. Phones A corresponds to the left front-panel headphone jack, and Phones B corresponds to the right headphone jack.
3. Select a Phones pop-up menu, and choose one of the following:
   - To feed Monitor Bus A to the headphone output, choose Mons A.
   - To feed Monitor Bus B to the headphone output, choose Mons B.

Adjusting Headphone Level

Output level for each headphone output is controlled by its corresponding volume control located next to each headphone jack. The overall level of the Monitor bus feeding the headphone output also contributes to the headphone level.

To adjust Headphone level:

- Adjust the headphone volume control to adjust level as needed.

⚠ *The headphone volume control is post-Monitor bus level. If no signal is present on headphones, make sure the level for the Monitor bus is set properly.*

Part III: External VENUE Software Screen

External VENUE Software Screen Overview

You do not need the external VENUE software screen to mix a performance, as all essential mixing controls are provided on the S6L control surface. However, the external screen is essential when setting up and configuring the system before a performance.

Viewing Page and Tabs

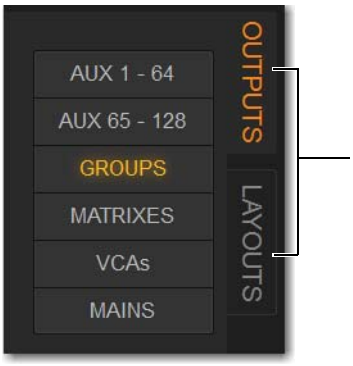
To view a page, do one of the following:

- Select the page name at the top of the screen so it lights orange

External screen Page names

To view a tab:

- For the Inputs and Outputs pages, select the tabs along the side of the fader section to access those types of channels.



Channel Tabs (left) and output channel processing (right)

- For the Filing, Snapshots, Patchbay, Media and Options pages, select a tab below the page names.

Filing page tabs

- For output channels, select a tab below the page name to access processing functions for the currently attentioned channel.

Output channel tabs, Matrix Mixer selected

Overview of Software Pages

The software screen provides the following pages and tabs.

Inputs and Outputs Pages

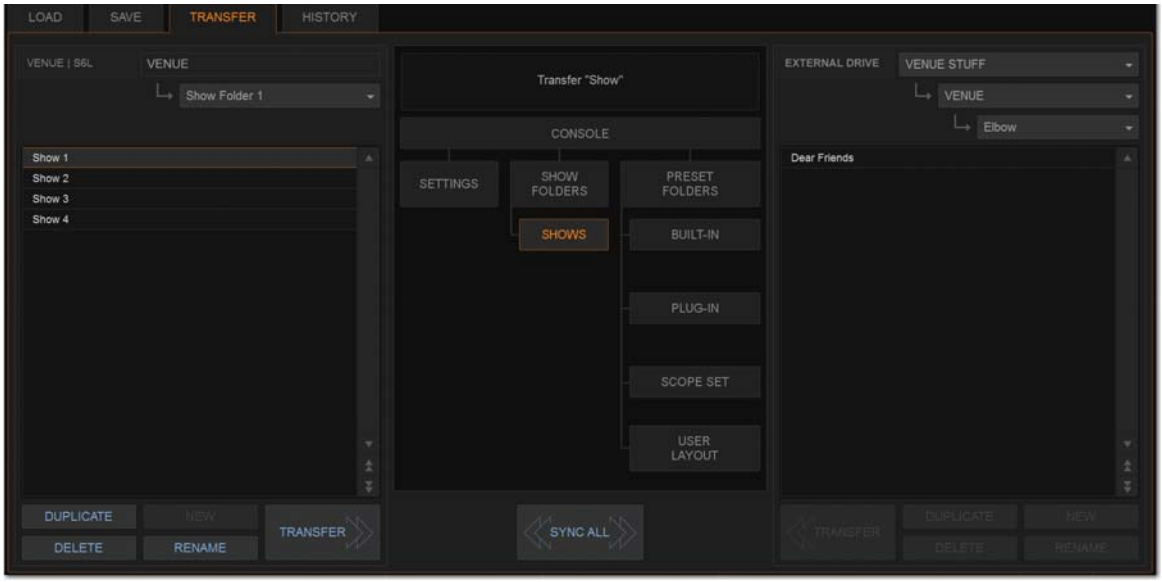
Select, name, configure, and adjust parameters for input and output channels.

Inputs page

See **Inputs and Outputs Pages.**

Filing

Load, save, and transfer shows and presets, and access the console History.

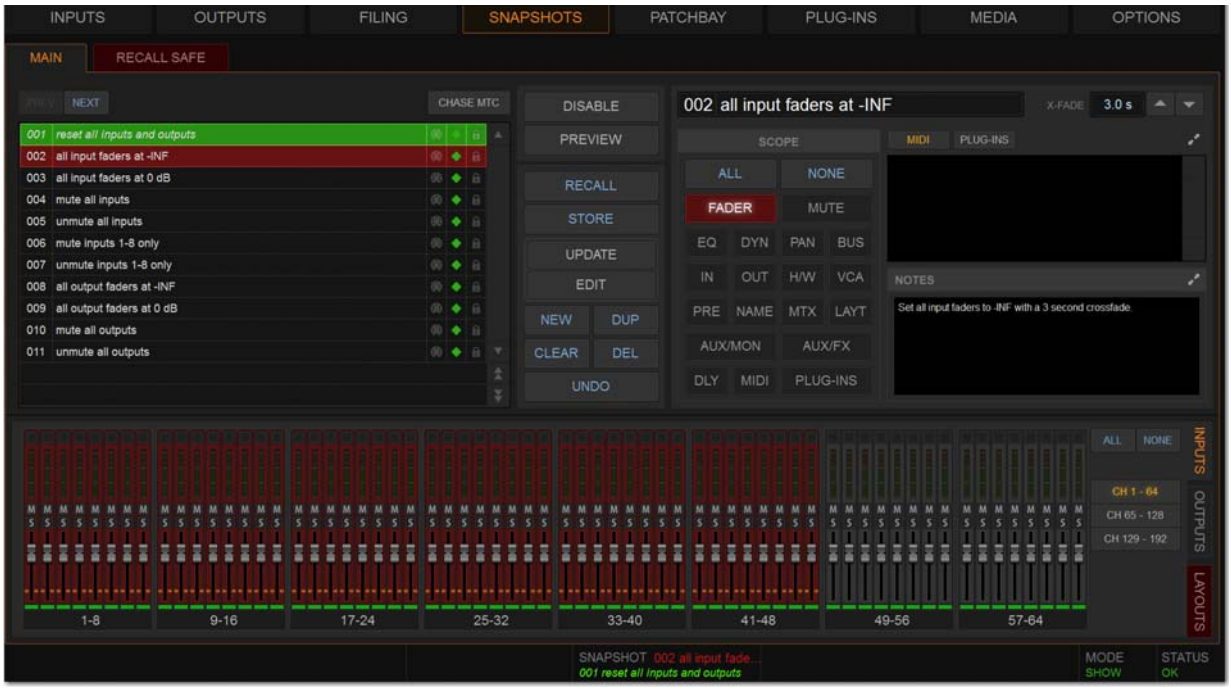


Filing page (Transfer tab)

See **Filing.**

Snapshots

Store and recall snapshots, and access the Recall Safe window.

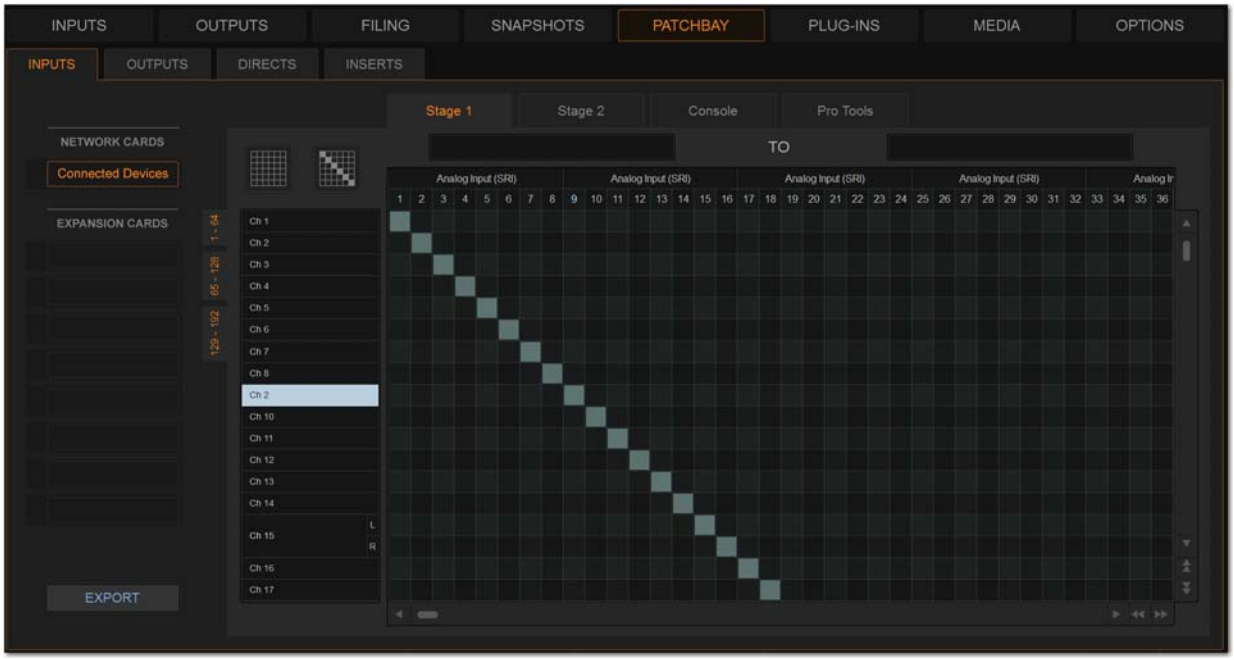


Snapshots page

See **Snapshots.**

Patchbay

Patch input and output channels to hardware inputs and outputs, and name channels.

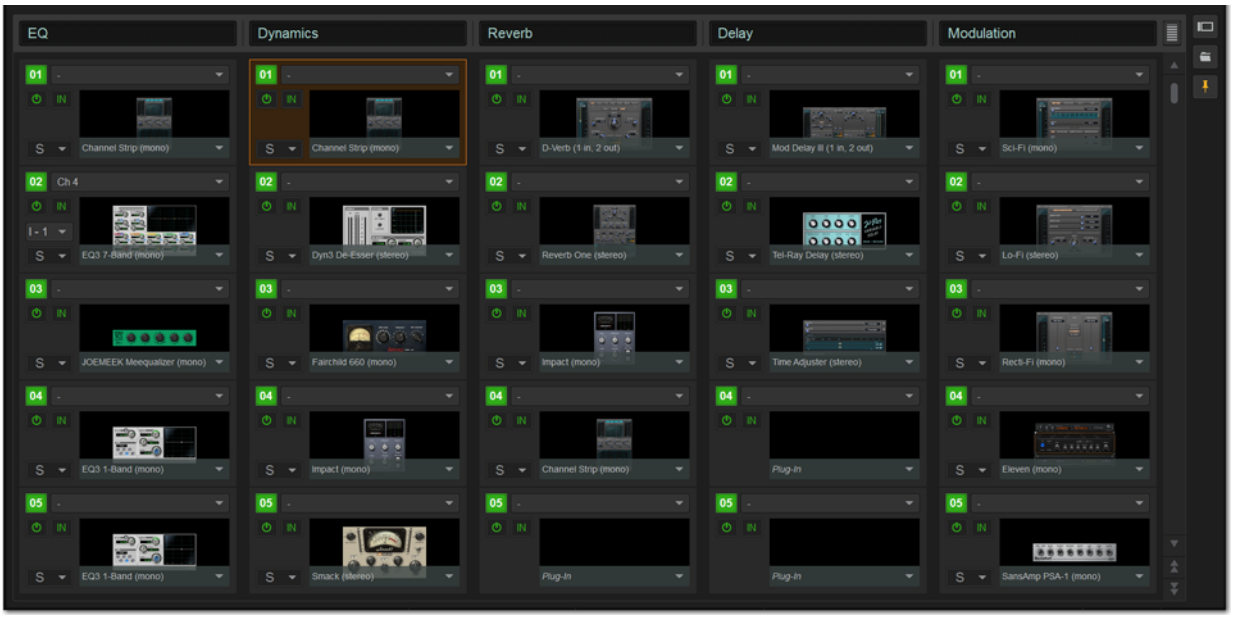


Patchbay page

See **Patchbay.**

Plug-Ins

Configure and arrange plug-in racks, and assign, patch/route, and manage plug-ins.

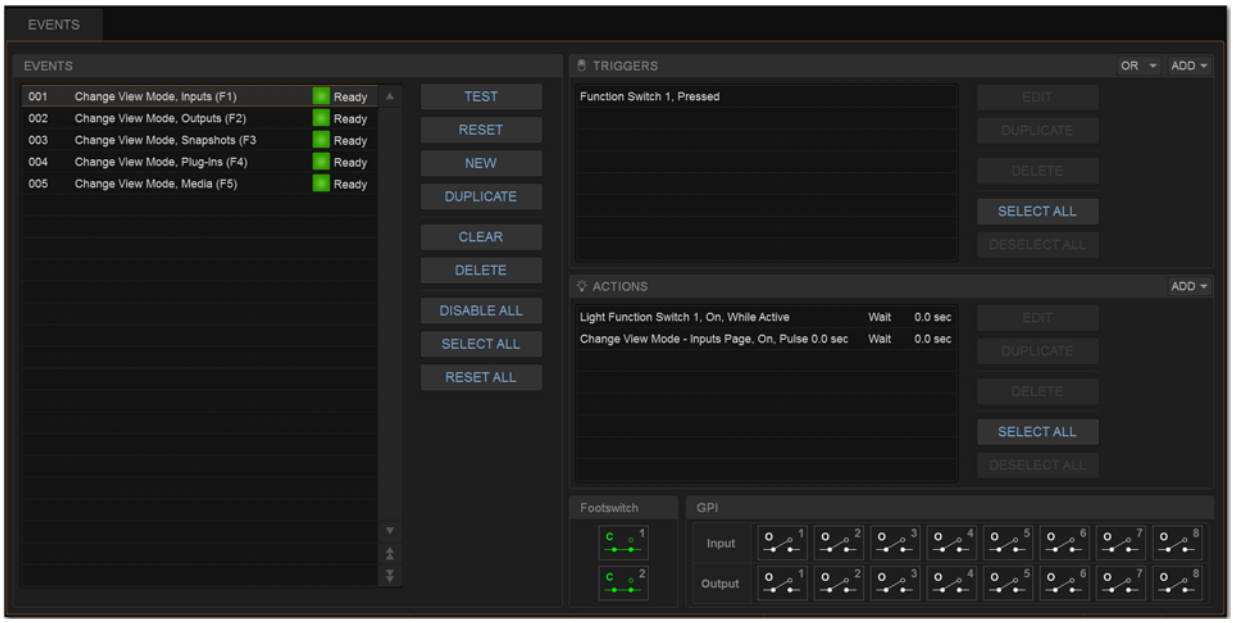


Plug-Ins page

See **Plug-Ins.**

Media

Configure events.

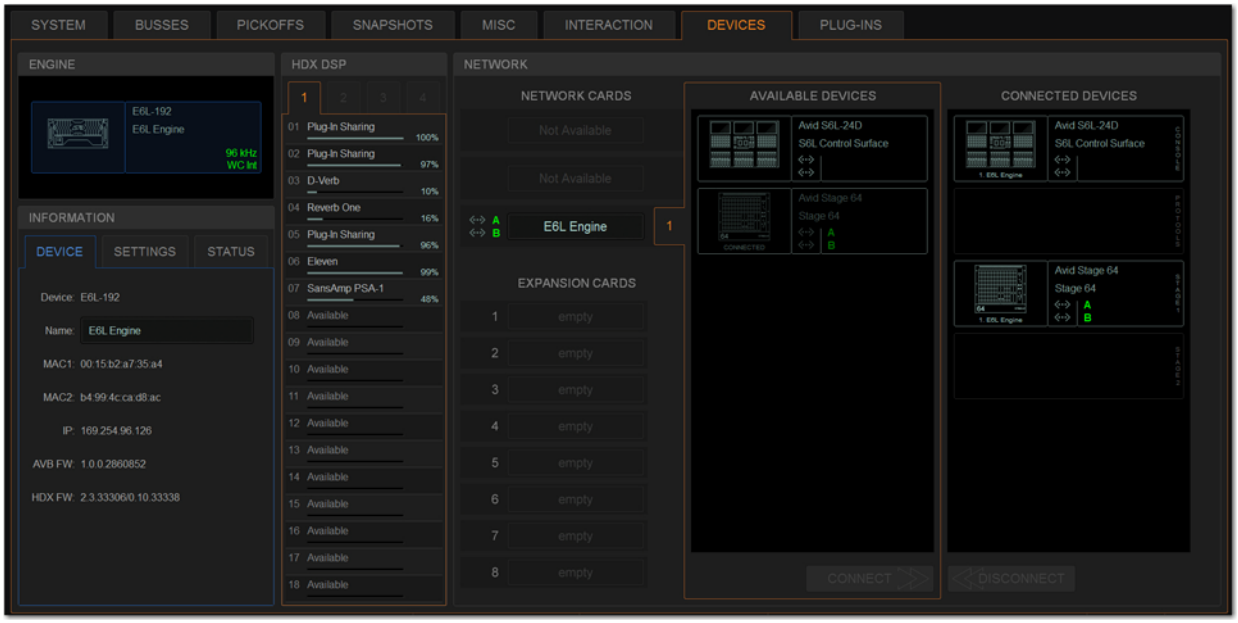


Media page (Events tab shown)

See **Events.**

Options

Configure system, routing and metering options, set interaction, hardware and general preferences, and install plug-ins.



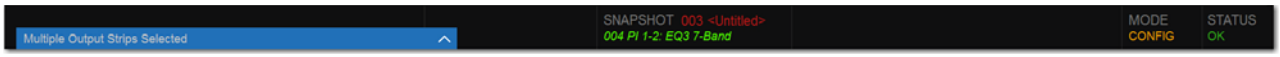
Options page (Devices tab shown)

See **Options.**

Banner Display

The external screen provides a banner display in the lower left corner. This display is provided to maintain line-of-sight mixing by showing the currently adjusted parameter (such as fader level or compression threshold) as you make changes to the parameter. The banner display also alerts you to certain operating conditions such as Multi-Select and Multi-Assign modes, as well as warning dialogs and system alerts.

The banner display also provides status messages, snapshot information, operating mode information, and system status.



Banner display (left) and Mode display (right)

Type Text Search

Type Text search lets you use the keyboard for fast navigation to a channel, or to quickly go to a specific snapshot or event. You can enter the first characters of a channel name or the absolute channel number to target that channel on the external screen, or in Channel Control (see also **Selecting Channels**.)

To search for and select a channel by name:

1. Go to the Inputs, Outputs, or Patchbay page.
2. Type the first few letters, channel number, or full name of the channel. For example, type “s” to go to the first channel beginning with the letter s (such as Snare).
3. Press the Tab key on your keyboard to cycle through and select any other channels beginning with that letter (such as *Snare Top*, *Snare Bottom*, or *Strings*).

To search for and select a list item by name (or number):

1. Go to the Snapshots page, Filing page, or the Events tab of the Options page. Or, select a Presets window (built-in Dynamics or EQ presets, Input Channel presets, or Scope Sets).
2. Type the first few letters or number of the desired item.
3. Press the Tab key on your keyboard to cycle through and select any other items that begin with the same letters.

Channel Numbers and Names

Channel numbers in VENUE are “absolute” channel numbers. Renaming changes the displayed name associated with each channel, but the absolute channel number remains fixed.

To search for and select a channel by absolute number:

- Type a number on the keyboard to select the corresponding channel.

Inputs and Outputs Pages

The Inputs and Outputs pages of the external VENUE software screen show channel data for the currently attentioned channel, including virtual fader strips for up to 64 channels at a time. You can control many different channel parameters from the Inputs and Outputs pages. You can also perform some channel configuration tasks from these pages such as reordering input channels using drag-and-drop, copying and pasting channel settings, inserting blank channel strip, and managing members of output channels.

Navigating the Inputs and Outputs Pages

To access the Inputs page:

1 Select the Inputs tab.

2 Press the **F1** Function switch in the MLM.

– or –

- Press the **F1** key on the keyboard.

To access the Outputs page:

1 Select the Outputs tab.

2 Press the **F2** Function switch in the MLM.

– or –

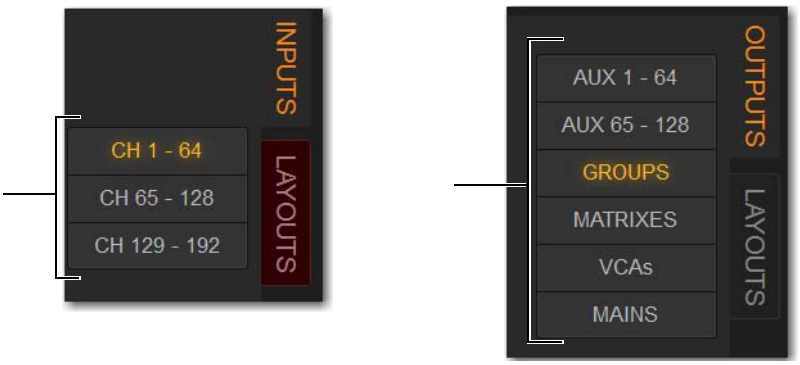
- Press the **F2** key on the keyboard.

To bank channels to the fader strips:

1 Go to the Inputs or Outputs page, depending on the type of channels you want to access.

2 Select the Inputs or Outputs tab, along the side of the fader strip section.

3 Using the Input Channel Bank buttons for inputs, or the Output Channel Type buttons for outputs, select the bank of input channels, or the type of output channels that you want to access.



Input Channel Bank buttons (left) and Output Channel Type buttons (right)

Adjusting Channels on the External Screen

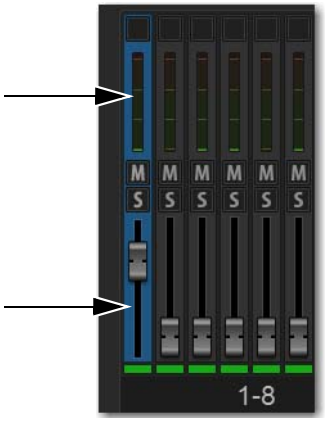
This section describes how to adjust channel parameters on the Inputs and Outputs pages of the external screen. Control over the parameters described here are common to input and output channels.

Attentioning Channels From the External Screen

When you attention channels from the external screen, the channels are also attentioned on the channel strips and on the MTS. By default, when you attention an input or output channel and the Inputs or Outputs page is shown on the external display, the attentioned channel's parameters are shown.

To attention a channel on-screen

- Touch anywhere in the on-screen fader strip, except on the fader, mute, solo or safe buttons.



Touch in the indicated areas to attention a channel from the external screen fader strips.

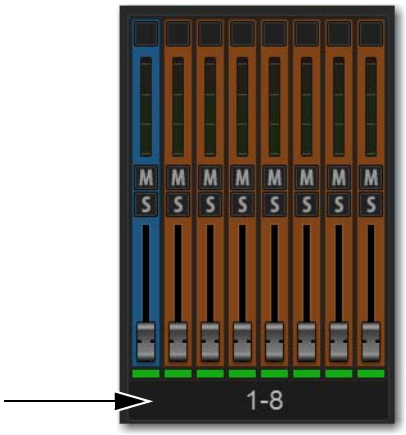
You can set a preference so that a channel is attentioned by touching the fader and/or soloing the channel. See **Channel Selection.**

To attention multiple channels on-screen:

- Press and hold the **Multi-Select** switch (or hold Shift on the keyboard) and touch the fader strips on-screen.

To select an 8-channel bank on-screen:

- Touch the bank name (such as 1–8 or Aux 1–8) below the on-screen fader strips to select all the channels in that bank. Hold Shift and touch to select additional banks or channels. One channel remains the attentioned channel, and lights blue.



Select the bank display to select multiple channels on-screen

To select all input channels or all output channels on-screen (Multi-Select):

- Double-tap any bank name below the on-screen fader strips in the Input or Outputs screen. One channel remains the attentioned channel, and lights blue.

To remove a channel from a selection:

- Control-touch (or **Fine**-touch) a highlighted channel.

To exit a Multi-Selection:

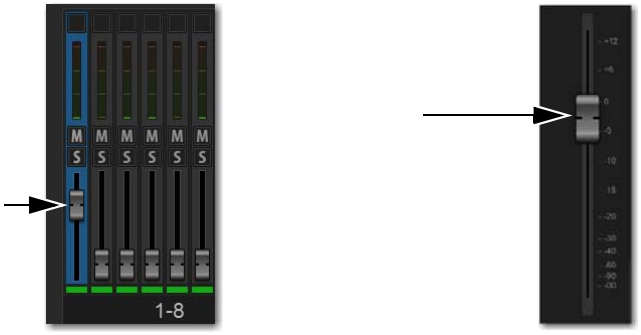
1. Press the **Cancel** switch on the MLM, or the Cancel button in the on-screen banner display.

Adjusting Faders on the External Screen

You can move on-screen faders independently or in ganged fashion.

To adjust a single fader on-screen, do one of the following:

- Touch, hold, and drag the fader of one of the attentioned channels.



Drag a fader on-screen to adjust channel level

To move multiple faders on-screen in ganged fashion:

1. Attention multiple channels on-screen.
2. Touch, hold, and drag the fader of one of the attentioned channels.

The faders on the selected channels will move in ganged fashion. Any offset between the faders is maintained until at least one of the faders is minimized (moved to –INF) or maximized (set to +12 dB).

To reset an entire channel to its default settings:

- On-screen, touch and hold (right-click) the on-screen fader and choose Reset Ch <n>.

Adjusting Encoders on the External Screen

You can adjust external screen rotary encoders by dragging the on-screen knob.

To adjust an on-screen encoder:

1. Touch an encoder so that it is highlighted.
2. Drag up to turn the encoder clockwise; drag down to turn the encoder counter-clockwise.

Adjusting Values on the External Screen

In addition to typing numeric values in text boxes, you can adjust parameter values and numeric option settings on-screen by dragging directly over the corresponding text box, and by entering values using the keyboard.

To adjust a value on-screen by dragging:

1. Select the text box to highlight the value.
2. Drag up to increase the value; drag down to decrease the value.

   – or –

- Type in a value using the keyboard, and press Enter.

Entering a parameter value on the external screen

Toggling Buttons on the External Screen

You can toggle on-screen buttons, such as input channel Pad and Bus Assign buttons by touching (selecting) the on-screen button.

To toggle an on-screen button:

- Touch the button to toggle that parameter on/off. The button lights when the parameter is on.

Resetting Channels and Parameters from the External Screen

You can reset a single parameter, and reset an entire strip (including its I/O hardware patching) to default settings from the external screen.

To reset an on-screen parameter to its default value, do one of the following:

- Touch-and-hold (right-click) the control and choose Reset <parameter> to <default value>.

To reset all parameters on a channel:

1. Enable Config mode.
2. Go to the Inputs or Outputs page.
3. Touch-and-hold (right-click) the fader strip and choose Reset <channel name/number>.

Working with EQ and Dynamics on the External Screen

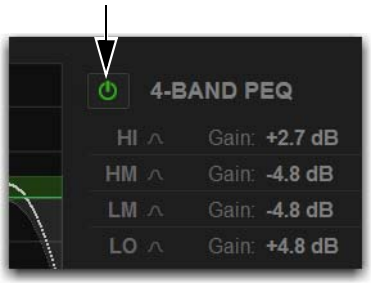
You can adjust built in channel EQ, Graphic EQs (GEQs), and Dynamics on the Inputs and Outputs pages for the attentioned channel. You can also insert GEQs on the Outputs page. Input Direct, for input channels only, lets you bypass all EQ and Dynamics.

Built-In Channel EQ

You can toggle EQ on/off, adjust frequency and gain for any available EQ band of the built-in EQ, toggle Analog and Digital EQ modes, and engage Input Direct.

To toggle EQ on/off:

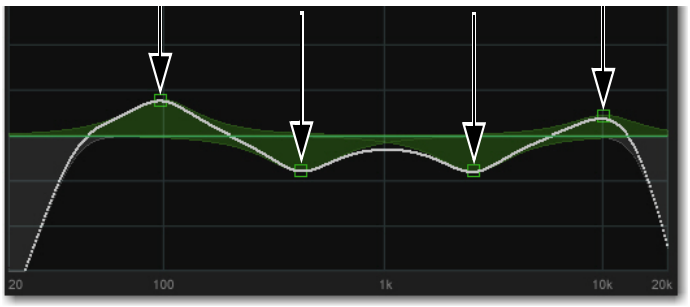
1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the EQ in/out button. The EQ is in when the button lights.



EQ in/out button

To adjust EQ on the screen using the Graph display:

1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the EQ in/out button to put the EQ in circuit.
3. Drag the handles in the on-screen EQ graph display for each EQ band (Lo, Lo-Mid, Hi-Mid, or Hi), as follows:
   - Drag a handle right or left to adjust EQ band frequency.
   - Drag a handle up or down to adjust EQ band gain.



Drag the handles in the EQ graph display to adjust EQ

Analog and Digital EQ Modes

The Analog button on the Inputs and Outputs pages of the external screen toggles the built-in EQ between digital mode and analog mode, on a per-channel basis, and is adjusted on-screen.

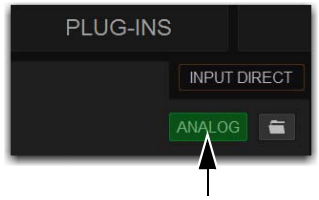
Digital Mode Provides a standard digital parametric EQ. Frequency range of 20 Hz to 20 kHz and gain range of +/–18 dB are available on all bands. Hi and Lo bands can be Bell (default) or Shelf. Digital Q is expressed in Q factor terms in the range 10 (left, a narrow band) to 0.1 (right, a wide band). Digital mode is the default EQ mode.

Analog Mode Provides an EQ with a response modeled on that of an analog console renowned for its EQ section. Frequency range is limited to match, and the outer bands provide shelving only. Analog Q is expressed in octaves of *bandwidth* in the range 0.1 (left, a tenth of an octave) to 2 (right, two octaves.)

The HPF and LPF does not change when the EQ is switched between Digital and Analog mode.

To toggle analog and digital EQ modes:

- Select the Analog button. Analog lights when the EQ is in analog mode, and is unlit when in digital mode.



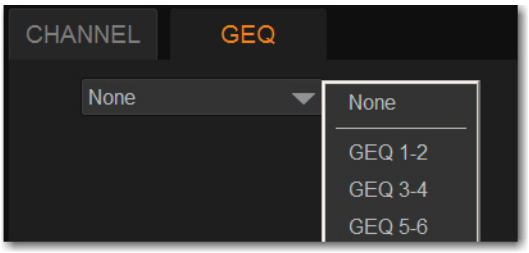
Analog/Digital EQ button (Analog enabled)

Built-In Graphic EQs

You can a built-in 31-band Graphic EQ on Mains, Groups, Auxes, and Matrixes. 32 Graphic EQs are available, and can be adjusted on the external screen.

To insert a Graphic EQ on an Output bus:

1. Go to the Outputs page and attention the output channel in which you want to insert the Graphic EQ.
2. Select the GEQ tab.
3. Select the Graphic EQ selector and choose an available mono or stereo Graphic EQ.



Selecting a Graphic EQ

The entire Graphic EQ is displayed on-screen.

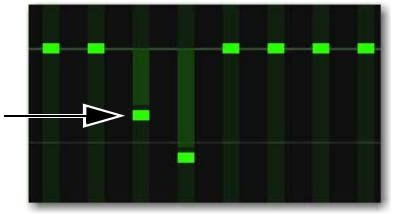
To toggle the GEQ in/out:

- Select the GEQ in/out button. GEQ is in when the button lights.

GEQ in/out button

To adjust GEQ on the external screen:

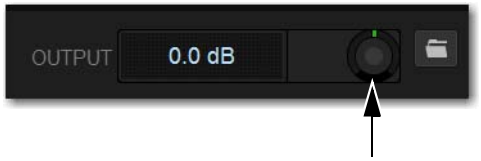
- Drag the GEQ band sliders up or down to adjust band gain.



GEQ sliders

To adjust GEQ overall output level:

- Drag the GEQ output level encoder, or select the level field and type in a value.



GEQ output level

Built-In Dynamics

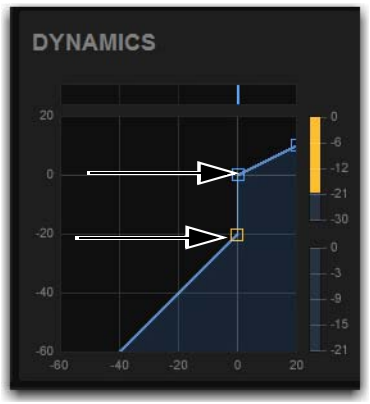
To toggle Dynamics on/off:

1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the Exp/Gate and/or Comp/Lim in/out buttons, as desired. The processor is in when the button lights.

Dynamics In/Out buttons

To adjust Dynamics on the screen using the Graph display:

1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the EQ in/out button to put the EQ in circuit.
3. Drag the handles in the on-screen Dynamics graph display as follows:
   - To adjust Comp/Lim threshold and ratio, drag the blue handles.
   - To adjust Exp/Gate threshold and ratio, drag the orange handles.



Comp/Lim handle (top, in blue) and Exp/Gate handle (bottom, in orange)

The Dynamics Graph does not support Fine adjust mode using the Fine switch.

Sidechain

You can engage a built-in Dynamics processor sidechain, select the external key sidechain input, and engage key listen using the external screen. For an overview of S6L system sidechain processing, see **Sidechain**.

Engaging the Sidechain

The sidechain must be engaged to enable both external key and EQ filter sidechain processing for the selected channel. The Key In control can be toggled in or out of circuit from Channel Control or on-screen.

To toggle the side-chain in or out of circuit from the Inputs or Outputs page:

- For Comp/Lim, select the COMP/LIM Sidechain tab, and then select the Key In button.
- For Exp/Gate, select the EXP/GATE Sidechain tab, and then select the Key In button.

Key In button

Selecting the External Key Sidechain Input

(Key Source)

The Key Source selectors lets you select the side-chain source for either dynamics processor and its pickoff point. You can use any of the following as the key source for the Comp/Lim and the Exp/Gate:

- Self
- Any input channel
- Any hardware input
- You can also specify the pickoff source for the key signal for input channels.

Choosing a Key Source

To select the key input for the sidechain:

1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the EXP/GATE Sidechain tab in the dynamics section to select the gate.
3. Select the Key Source selector and choose an available channel or bus.

To select a pickoff point for the key source signal:

- Select the Source Pickoff selector and choose one of the following pickoff sources for the selected key signal: Top of Channel, Insert Return or Pre-Fader.

Key Filters are engaged and adjusted using the CKM in Channel Control mode. See **Using Sidechain EQ Filters**.

Key Listen

The Key Listen button toggles the key onto the Solo bus, replacing the signal there. This happens regardless of whether the key is the channel signal or the external key, or whether it has been side-chain filtered.

Key Listen always overrides all other signals on the Solo bus. If soloed channels are already on the Solo bus, they are suppressed until Key Listen is cleared. If additional channels are soloed while Key Listen is on, they will be added but suppressed.

The Key Listen solo is also exclusive to itself; pressing Key Listen on a different processor or channel turns off the previous Key Listen and the new Key Listen takes over.

⚠ *Key Listen on a dynamics plug-in does not route the signal to the solo bus, but to the plug-in output. Use caution when using the Key Listen with a plug-in dynamics processor.*

To engage Key Listen:

- Select the Listen button in the on-screen Exp/Gate controls.

To disengage Key Listen:

- Select Listen again. The Solo bus reverts to its previous signal (soloed channels, or none). You can also press Solo Clear once to turn off any currently engaged Key Listen button. Press Solo Clear a second time to clear channel solos, if any.

Input Direct

Input Direct lets you completely bypass the built-in dynamics and EQ processing, and all inserts on input channels. This mode routes the input signal directly from the Top of Channel pickoff to the channel fader.

To bypass all processing on an input channel:

1. Go to the Inputs or Outputs page and attention the desired channel.
2. Select the Input Direct button in the EQ section. All built-in channel EQ and Dynamics are bypassed, and the button flashes to indicate Input Direct mode is active.

Input Direct button

Copying and Pasting Settings

Copying and Pasting Channel Settings

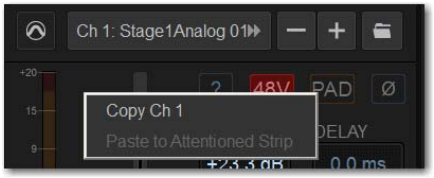
You can copy channel settings in their entirety from one channel and paste them to one or more channels from the Inputs and Outputs pages. Using the Events list, Copy and Paste can be assigned to any Function switch on the console. For more information, see **Events.**

You can also store and load settings as Input Channel Presets. For information, see **Input Channel Presets**.

To copy and paste channel settings on-screen:

1 Go to the Inputs or Outputs page and attention the channel whose parameters you want to copy.

2 Touch-and-hold (right-click) within the upper channel display and choose Copy.



Channel Copy/Paste pop-up menu

You do not need to select the channel before copying its settings on-screen.

3 Attention one or more destination channels. You can only paste to attentioned/multi-selected channels.

4 Touch-and-hold (right-click) on the lower fader strip on-screen, or on any non-control area of the destination channel, and choose Paste to Selected Strip(s). The status displays shows a message confirming the operation.

Parameters and Channel Types

Input channels can only be copied or pasted to other Input channels. Output channels can only be copied or pasted to other channels of the same type (such as Aux, Group, or Matrix). When pasting channel settings:

- Settings common to the source and destination channel are always pasted.
- Copied settings with no corresponding parameter in the destination channel are ignored.
- Settings in the destination channel with no corresponding parameters are left unchanged.

Copying and Pasting Mono and Stereo Channel Settings

You can copy a mono channel and paste its settings to one or more stereo channels. Mono settings are applied equally to the left and right channels of the stereo destination. The stereo destination channel retains its current balance and width settings.

You can also copy a stereo channel and paste its settings to one or more mono channels. The left channel settings of the stereo source are applied to the mono channel(s). The mono destination channel retains its current pan setting.

Settings Excluded from Copy and Paste

Input Channels The following Input channel parameters are not copied or pasted (the current settings of the destination channels are retained):

- Patchbay assignments, including Direct Outs
- Channel Name
- Hardware and software insert (plug-ins) assignments and in/out state.

Output Channels The following Output channel parameters are not copied or pasted (the current settings of the destination channels are retained):

- Patchbay assignments, including Direct Outs
- Channel Name
- Hardware and software insert (plug-in) assignments and in/out status
- GEQ settings
- Output membership (the assignment of channels to an Aux, Group VCA, or Matrix).

To copy GEQ settings, use the copy/paste GEQ shortcut or use GEQ Presets. Use the Replace with Mix (members) From command to replace output membership for an Aux, Group, VCA, or Matrix.

Copying and Pasting EQ Settings

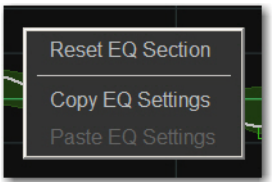
Built-in channel and Graphic EQ settings can be copied and pasted between channels. EQ presets can also be saved and loaded to archive and transfer settings.

To copy and paste an EQ setting:

1. Go to the Inputs or Outputs page and attention the channel whose parameters you want to copy.
2. Do one of the following:
   - To copy a channel EQ setting, touch-and-hold (right-click) the on-screen EQ section or EQ graph (not on an encoder) and choose Copy EQ Settings.

   – or –

   - To copy a Graphic EQ setting, touch-and-hold (right-click) the graphic EQ display (not on a fader) and choose Copy GEQ Settings.



EQ Reset/Copy/Paste pop-up menu

3. Attention one or more destination channels. You can only paste to attentioned/multi-selected channels.
4. Do one of the following:
   - To paste a channel EQ setting, touch-and-hold (right-click) in the new channel's EQ section or graph and choose Paste EQ Settings. All EQ settings, including HPF settings, are copied to the new channel.

   – or –

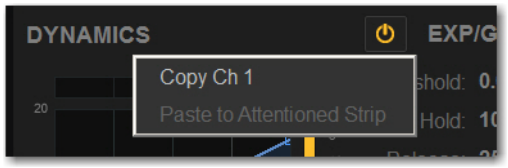
   - To paste a Graphic EQ setting, touch-and-hold (right-click) in the new channel's Graphic EQ section and choose Paste GEQ Settings.

Copying and Pasting Dynamics Settings

Built-in dynamics settings can be copied and pasted between channels.

To copy and paste dynamics settings:

1. Go to the Inputs or Outputs page and attention the channel whose parameters you want to copy.
2. Touch-and-hold (right-click) anywhere in the Comp/Lim or Exp/Gate (input channels only) areas of the on-screen dynamics section and choose Copy <channel number/name> Settings.



Dynamics Copy/Paste pop-up menu

3. Attention one or more destination channels. You can only paste to attentioned/multi-selected channels
4. Touch-and-hold (right-click) in the Comp/Lim or Exp/Gate areas of the on-screen dynamics section and choose Paste Comp/Lim Settings or Paste Exp/Gate Settings.

To copy and paste all of a channel's built-in dynamics settings:

1. Go to the Inputs or Outputs page and attention the channel whose parameters you want to copy.
2. Touch-and-hold (right-click) in the on-screen Dynamics Graph and choose Copy Dynamics Settings.
3. Attention one or more destination channels. You can only paste to attentioned/multi-selected channels
4. Touch-and-hold (right-click) in the on-screen Dynamics Graph of the new channel and choose Paste Dynamics Settings.

Configuring Channels on the External Screen

Naming Channels

You can name channels from the Inputs and Outputs pages. Channel names can be up to 32 characters in length. When displayed on the control surface, names are abbreviated to fit the display.

To change the name of a channel:

1. Go to the Inputs or Outputs page.
2. Attention the channel whose name you want to change.
3. Double-tap the channel name.

Changing the name of an Input Channel on the Inputs page

4. Type a new name and press Enter on the computer keyboard.

Make Selected Mono Strips Stereo/Make Selected Stereo Strip Mono

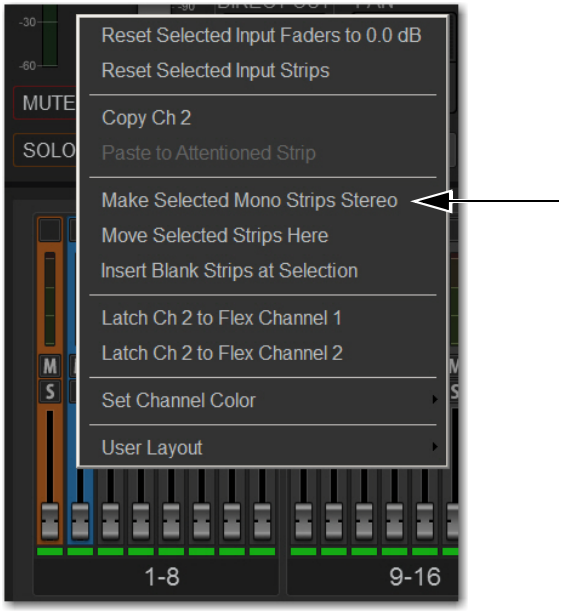
You can combine pairs of mono channels to make stereo channels, whose left and right sides are then controlled by a single channel strip on the S6L control surface and on the fader strips on the external screen. This can be useful for creating effects returns or play-back channels, for example. Input and output channels can be combined into stereo channels, except VCA and the Mains. You can also split stereo channels back into mono channels

To combine two mono input channels into a single stereo channel:

1 Put the system into Config mode.

2 Multi-Select two channels.

3 Touch-and-hold (right-click) either of the selected mono channels on-screen and choose Make Selected Mono Strips Stereo.

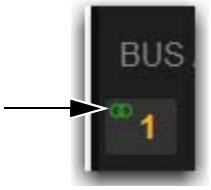


Two mono inputs about to be combined into one stereo channel

- Each selected channel is combined with the next-highest selected channel, even if the selected channels are not consecutive.
- For input channels, blank strips are created and inserted where necessary to maintain channel layout in that bank.
- For output channels, no blank strips are created or inserted, and channels in the layout in that bank are shuffled to the left, including the corresponding Aux Sends.
- Parameter values from the left most channel of each pair are applied to both channels
- The pan control becomes a Balance/Width control.
- Combined channels are shown in the Patchbay as left and right sides of the channel name. Mains and VCAs cannot be combined or split.

Stereo Input Channel on the Input tab of the Patchbay

- In the Options > Busses page for Stereo Auxes, and the Bus Assign section for stereo Groups, stereo status of a bus is indicated by two interlocking green circles.



To split a stereo channel into two mono channels:

1. Put the system into Config mode.
2. Attention the stereo channel you want to split.
3. Touch-and-hold (right-click) the attentioned channel and choose Split Selected Stereo Strip to Mono.

   The stereo channel is split, placing the channels next to each other on the control surface and in the Patchbay. Delete blank strips manually to maintain channel layout, if necessary.

Move Selected Strip

(Input Channels Only)

You can move a an attentioned input channel from its current position to a new location. When you move an input channel using Move Selected Strip, other channels are moved (and renumbered) lower or higher to accommodate the moved channel.

To move a Channel strip:

1. Put the system in Config mode.
2. Go to the Inputs and attention the channel whose parameters you want to move.
3. On-screen, touch-and-hold (right-click) on the destination strip (where you want to move the attentioned channel).
4. Choose Move Selected Strip Here from the pop-up menu. The channel strip is moved before the destination strip.

Snapshots cannot store and recall custom console channel positions.

You can also drag and drop channels. See **Reordering Input Channels Using Drag and Drop.**

Inserting Blank Strips

(Input Channels Only)

The Insert Blank Strip command lets you insert one or more blank (or “spacer”) strips anywhere among your input channels. In addition, blank strips are automatically inserted when you use the Make Stereo command to convert two mono input channels into a single stereo channel, preserving the channel layout.

Blank strips are strictly placeholders (no audio or any type or processing take place), and therefore consume no additional processing overhead or DSP resources. Use blank strips to create obvious divisions between groups of instruments, or to optimize the bank placement of inputs on the console. Blank strips are saved and loaded as part of the Show file.

Blank Strips on the Control Surface

A blank strip has no LCD channel name display, and all of its physical controls and indicators are inactive. Blank strip faders are set to the bottom (–inf) position and always revert to this position if moved.

Blank Strips On-Screen

On the MTS Universe view, blank strips appear as blank Channel Tiles. On the external screen, blank strips appear as a simple gray strip with no fader, buttons or meter. Insert and remove blank strips on the external screen.

Adding Blank Strips

Blank strips can be inserted manually, and are also created automatically when you use the Make Stereo command. You can also insert multiple blank strips.

To manually add a blank strip:

1. Enable Config mode.
2. Go to the Inputs or Outputs page.
3. Touch-and-hold (right-click) an input channel strip (or a blank strip) at the location where you want to insert a blank strip and choose Insert Blank Strip. For example, if you want to have a blank strip at channel strip 16, touch-and-hold (right-click) on channel 16.

Blank strip menu

All channels to the right of the insertion point are shuffled one position to the right.

To insert multiple blank strips:

1. Enable Config mode.
2. Create a multi-selection of channels.
3. Touch-and-hold (right-click) on one of the selected channels and choose Insert Blank Strips at Selection.

A blank strip is inserted in place of each selected channel strip, shifting all channels accordingly and maintaining the multi-selection.

Blank Strips When Using Make and Split Stereo

VENUE automatically creates blank strips when you use the Make Stereo command in order to preserve the current channel layout. Similarly, blank strips may be automatically removed when you use the Split Stereo command to revert a stereo strip to its two contributing mono channels.

Make Stereo A blank strip is automatically inserted at the location previously occupied by the right-side channel of the newly-formed stereo pair. There is no shuffling of the remaining input channels as a result of this operation.

Split Stereo The behavior when splitting a stereo strip into two mono strips is as follows:

- If a blank strip is located immediately adjacent to the (previously) stereo channel, the right channel of the stereo pair occupies this position and the blank strip is automatically removed. No other channels shuffle.
- If no blank strip is located immediately adjacent to the (previously) stereo channel, all channels to the right of the split point shuffle one position to the right and the right channel of the stereo pair is inserted.

Removing Blank Strips

To remove a blank strip:

- Touch-and-hold (right-click) the blank strip you wish to remove and choose Remove Blank Strip.

To remove all blank strips:

- Touch-and-hold (right-click) any blank strip and choose Remove All Blank Strips. Blank strips are removed and all channels to the right are shuffled to the left.

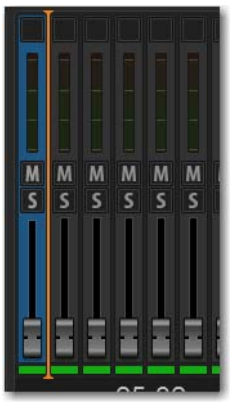
Reordering Input Channels Using Drag and Drop

You can reorder Input channels by dragging and dropping an input channel on-screen. You can reorder any channels in a User Layout, including output channels. When you reorder channels, the location of the channel changes on the control surface and on-screen. The original hardware input for the channel remains the same, and all other channel parameters are preserved.

To reorder an input channel:

1. Put the system into Config mode.
2. Go to either of the following pages on the external screen, depending on where you want to reorder channels:
   - To reorder input channels only, go to the Inputs page and select the Inputs tab.

   – or –
   - To reorder channels in a User Layout, go to the Inputs or Outputs page, and then select the Layouts tab.
3. Attention the channel you want to move.
4. Touch-and-hold the channel then drag it to the desired location., denoted by the orange line, then release your finger.



Reordering an Input channel using drag and drop

You can select and reorder multiple input channel strips. Shift-Touch multiple fader strips and drag them to the new location.

Channels can also be moved using the Move Selected Strip command. See **Move Selected Strip.**

Inserting Plug-Ins on Channels

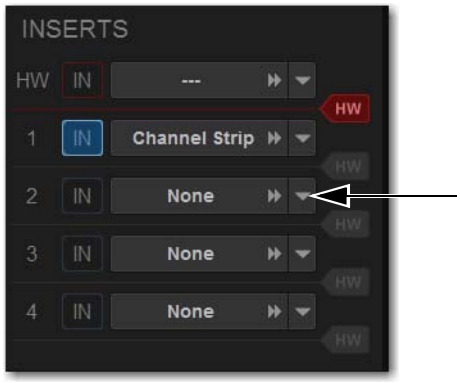
You can insert plug-ins on input and output channels directly from the Inputs or Outputs page, or from the Plug-In Rack.

You can also insert outboard hardware. See **Hardware Inserts.**

Four slots per channel are provided for plug-in inserts. Signal from the channel is routed to the inserts and returned to the same channel. You can assign plug-ins to specific channel insert points from the Plug-Ins screen or from the Input screen.

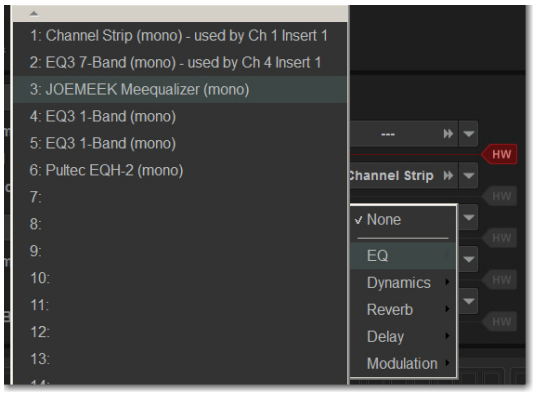
To insert a plug-in on a channel from the Inputs or Outputs page:

1. Go to the Inputs or Outputs page and attention the channel on which you want to insert a plug-in.
2. Select the first available Inserts slot selector.



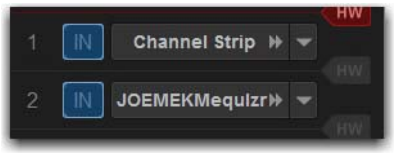
The Inserts selector

3. Choose an available plug-in from the plug-in rack sub-menus. All currently available plug-ins of a compatible mono/stereo format are listed in the sub-menus. Plug-Ins that are unavailable are listed in italics. Plug-Ins that are currently inserted on other channels are shown with their insert assignment.



Plug-in rack sub-menus

4. The plug-in appears in the Inserts list for that channel.

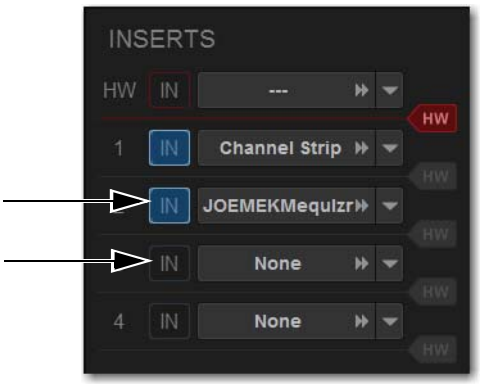


An assigned channel insert

5. To open the window for an inserted plug-in, select its name in the channel Inserts list.

To toggle a plug-in on/off (in/out of circuit):

1. Go to the Inputs or Outputs page and attention the channel you want to adjust.
2. Select the in/out button next to the desired plug-in to toggle it in/out of circuit. When the button LED lights, it indicates that the plug-in is in-circuit. When unlit, the plug-in is out-of-circuit (bypassed).



An engaged plug-in (top) and a disengaged plug-in (bottom)

Input Channel, EQ, and Dynamics Presets

You can use Presets to store and load input channel settings, built-in channel EQ and GEQ settings, and Dynamics settings from the Inputs and Outputs pages.

For information about managing Presets files and folders, see **Working with Presets.**

Input Channel Presets

You can store and load input channel configurations as Input Channel Presets. Input Channel Presets can be previewed, loaded and transferred just like other Preset files, letting you quickly configure channels from among a library of favorite setups.

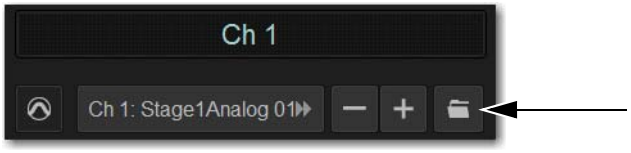
When an Input Channel is stored or recalled as a preset, all parameters are affected except the following:

- Patchbay assignments, including Direct Outs
- Hardware and software insert (plug-in) assignments and in/out state.

Choosing a channel preset automatically loads the saved settings into the attentioned channel. Depending on the stored settings this may dramatically change channel level and signal routing. Use caution when previewing Input Channel Presets with a live source.

To store a channel as an Input Channel Preset:

1. Adjust parameters as needed.
2. Go to the Inputs or Outputs page.
3. Attention the channel whose settings you want to save or load.
4. Under the channel name, select the Presets Folder icon to open the Input Channel Presets window.



Channel Presets icon in the Inputs page

5 Choose a Presets folder from the Folder pop-up menu.

You can create your own Presets folder from the Filing page so they show up in a Presets Folder pop-up menus. See **Creating Preset Folders.**

6 Select New, enter a name for the Preset, then select OK, or choose Cancel to exit the Presets folder without making changes.

Input Channel Presets window showing the Folder pop-up menu (top) and the New and OK buttons (bottom)

To preview and load a saved Channel Preset:

1 Navigate to the Inputs page for the desired channel. Channel Presets can only be loaded into a single channel at a time.

2 Select the Channel Presets icon to open the Presets window.

3 Choose a Presets folder from the Folder pop-up menu.

4 Do any of the following in the Presets window:

- To preview an existing preset, select its name in the Presets window so it is highlighted.
- To load the currently selected preset, select OK.
- To load a preset and close the Presets window, double-tap the preset.
- To cancel without changing settings, choose Cancel.

To rename, duplicate, overwrite or delete a Channel Preset:

- Touch-and-hold (right-click) the preset name in the Channel Preset window, and then choose Rename, Duplicate, Delete, or Overwrite.

Channel Compatibility and Input Channel Presets

The following describe how different types of channel data is handled when storing or loading Input Channel Presets:

Channel Names and Presets New presets automatically inherit the current Input Channel Name, or you can give them a custom name in the Presets window. The default channel number (such as “Ch 16") is used for the preset name if the channel has an empty (null) name.

Loading Mono to Stereo Mono settings are applied equally to the left and right channels of the stereo destination. The stereo destination channel retains its current balance and width settings.

Loading Stereo to Mono When loading a stereo preset into a mono Input Channel, the left channel settings in the stereo preset are applied to the mono destination channel. The mono destination channel retains its current pan setting.

Groups Group bus assignments are not applied if the settings in the preset do not match the current system Bus Configuration

Aux Sends Aux send level or pan settings for individual Aux sends are not applied if the stored mono/stereo state does not match the current mono/stereo state. For example, assume the stored preset has Aux 1–2 combined as a stereo channel, but the current system configuration has these Auxes as individual mono Auxes. When the preset is recalled Aux 1 and Aux 2 will retain their current settings (they will not be updated), while all other Auxes are updated to the preset settings.

Presets for Built-In Channel EQs, Graphic EQs, and Dynamics

You can save and load built-in channel EQ, GEQ, and Dynamics settings as Preset files. Preset files are stored in Preset Folders, and can be moved between systems and used with other Show files. Each processor has its own Presets folder in which settings are stored and from which they are loaded. GEQ settings can only be accessed from the Outputs page.

To save or load presets:

1 Adjust parameters as needed.

2 Go to the Inputs or Outputs page and attention the channel whose settings you want to save or load.

3 Depending on the processor settings you want to save, select the corresponding Presets folder icon to open the Presets window.

Dynamics Presets Folder icons (left) and the channel EQ Presets Folder icon (right)

4 Choose a Presets folder from the Folder pop-up menu.

You can create your own Presets folder from the Filing page, which then shows up in any Presets Folder pop-up menu. See **Creating Preset Folders.**

5 Do any of the following in the Presets window:

- To save the current settings as a new preset, choose New and enter a name for the preset file. All processor settings are saved to the preset.
- To preview an existing preset, select its name in the Presets window so it is highlighted.
- To load the currently selected preset, select OK.
- To load a preset and close the Presets window, double-tap the preset.
- To cancel without changing settings, choose Cancel.

Check the Factory Presets folder for pre-configured settings, where available.

To rename, duplicate, overwrite or delete a Preset:

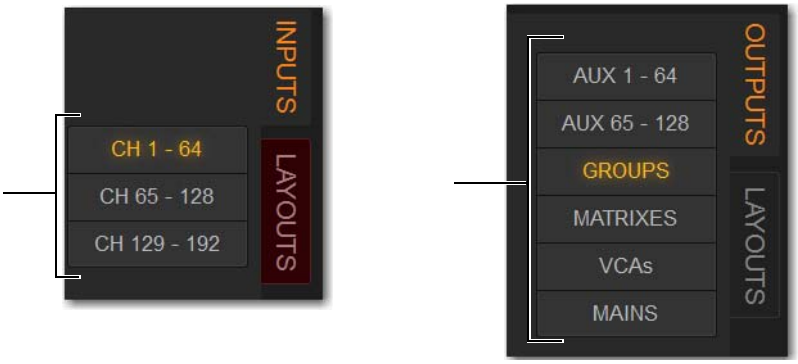
- Touch-and-hold (right-click) the preset name in the Channel Preset window, and then choose Rename, Duplicate, Delete, or Overwrite.

Assigning Channels to Busses and VCAs on the External Screen

You can assign channels to busses and VCAs on the external screen.

To assign channels to the Mains or Groups on the external screen:

1. Go to the Inputs or Outputs page, depending on the type of channels you want to assign.
2. Select the Inputs or Outputs tab.
3. Use the Input Channel Bank buttons or the Output Channel Type buttons to bank those channels to the fader strips.



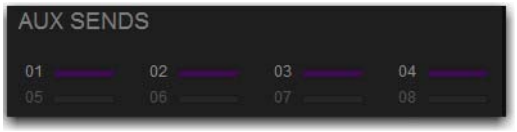
Input Channel Bank buttons (left) and Output Channel Type buttons (right)

4. Attention one or more channels.
5. In the Bus Assign section, do any of the following:
   - To assign to Mains Left-Right, select the L-R button so it lights.
   - To assign to the Center/Mono bus, select the C/Mono button so it lights.
   - To assign to a Group, select Groups 1–x, as available, so they light. A group with a single yellow ring is mono, and interlocking green rings is stereo.

Bus Assign section showing a channel assigned to Mains L-R, C/Mono, and Groups 1, 2, and 3

To assign channels to Aux busses on the external screen:

1. Go to the Inputs page.
2. Select the Inputs tab, then select the bank of input channels you want to access using the Input Channel Type buttons.
3. Attention an input channel.
4. In the Aux Sends section, select the thermometer-style indicator. When the indicator lights, the send is on. The indicator lights in the color assigned to that Aux output.



5. To toggle an Aux Send pre-/post-fader, select the Aux Send number. When set to pre-fader, a border appears around the Aux Send number.

Managing Output Channel Assignments (Members)

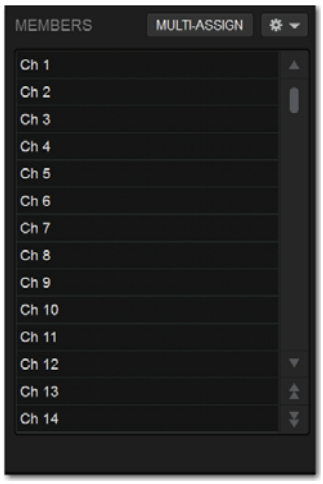
You can view, reset, clear and copy (duplicate) Mains, Aux, Group, Matrix, and VCA assignments (members) on the external screen.

Viewing Output Assignments

When an output channel is targeted on-screen, its members are shown in the Members list on the right side of the Outputs page.

To view input assignments to an output:

1. Go to the Outputs page.
2. Select the Output Channel Type tab to show those channels on the screen.
3. Attention the desired output channel. Channels assigned to the attentioned output channel are displayed in the Members list on the right side of the page.



Channel assignments shown in the Members list

To jump to any assigned input channel from the Outputs page:

- Select the name of the input channel in the Members list.

Removing and Resetting Assignments

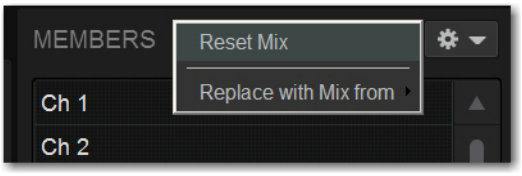
You can remove input assignments from an output on-screen.

To remove one input assignment from an output:

1. Attention the output channel you want to change so that its members are displayed on-screen.
2. In the Members list, touch-and-hold (right-click) the input assignment you want to remove and choose Unassign.

To remove all input assignments:

1. Attention the output channel you want to change so that its members are displayed on-screen.
2. Select the pop-up menu at the top of the Members list (gear icon), and choose Reset Mix (for busses) or Clear All Members (for VCAs).



Removing all input assignments from a bus

Copying Assignments Between Outputs

You can copy the current input assignments from one output to another of the same type. This lets you quickly duplicate monitor mixes.

Copying Aux bus assignments overwrites all the assignments on the destination Aux bus.

To copy input assignments between busses:

1. Attention the output channel to which you want to copy assignments.
2. Select the pop-up menu at the top of the Members list (gear icon), choose Replace With Mix From, and then from the list choose the bus whose assignments you want to copy to the currently attentioned bus.

Copying input assignments between Aux busses

Color-Coding Channels from the External Screen

You can color-code channels help identify key channels or groups of channels faster on the Inputs or Outputs page.

To set a channel color on the external screen:

1. Touch-and-hold (right-click) a fader strip on-screen, or select multiple channels and right-click any of the multi-selected faders.
2. From the pop-up, select Set Channel Color and choose one of the available color options.

The color coding is reflected in the MTS channel tiles; on the CTM for the color-coded channels; on the Channel Color switch; on the CKM encoders for Aux Sends, Matrix input controls, Group assignment controls, and Mains assignment control; and on the fader strips and the Aux Sends section on the external screen.

You can also color-code channels from the MTS. See **Color-Coding Channel from the MTS**.

Filing

Data can be stored, recalled and transferred between VENUE systems using the Filing page. There are three types of information files that can be managed separately, as follows:

Show Files These files are used to store, recall and transfer system settings, snapshots, and events.

Preset Files These files are used to store settings for input channels, built-in processors and plug-ins, User Layouts, and Recall Safe Scope Sets.

Console Setting Files These files are used to transfer or back up the current state of the S6L system.

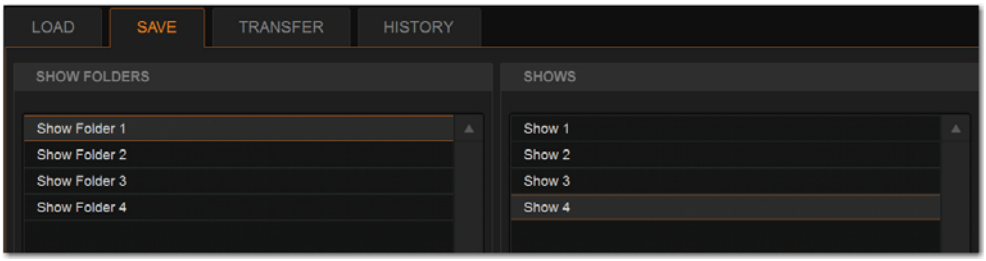
⚠ *The system does not need to be in Config mode to carry out many file management tasks. However, the system must be in Config mode to load Shows. This minimizes the chance of an accidental interruption of audio throughput.*

Creating Shows

A Show file contains all configuration, signal routing, mixer settings, plug-in information, snapshots, and other operational settings. Shows are grouped together in Show Folders.

Show Folders

Show Folders contain Show files. You can create and manage Show Folders from the Save tab of the Filing page.



Show Folders and Show files in the Save tab of the Filing page

Creating Show Folders

To create a new Show Folder:

1. Go to the Filing page and select the Save tab.
2. In the Show Folders column, select the New button.
3. Type a name for the Show Folder and press Enter.

SHIFT *You can also touch-and hold (right-click)) any folders and file names in the Filing page columns and choose the relevant command from the pop-up.*

Duplicating Show Folders

To duplicate a Show Folders:

1. In the Show Folders column, select a Show folder so it is highlighted.
2. Select the Duplicate button.

The folder and all of the Show files it contains are duplicated.

Renaming Show Folders

To rename a Show Folder:

1. In the Show Folders column, select a Show folder so it is highlighted.
2. Select the Rename button.
3. Type a new name for the Show folder and press Enter.

Deleting Show Folders

When you delete a Show Folder, all Show files contained in that folder are also deleted.

To delete a Show Folder:

1. In the Show Folders column, select a Show folder so it is highlighted.
2. Select the Delete button.

Show Files

Creating a Show File

When you create a new Show file, it captures the current state of the system. Show files are automatically saved when they are created.

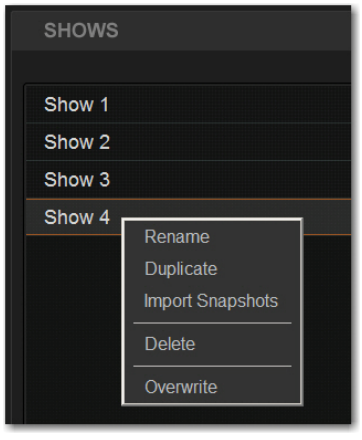
To create a new Show file:

1. Go to Filing > Save.
2. In the Show Folders column, select the Show folder where you want to save the Show.
3. In the Shows column, select the New button. The new Show file captures the current state of the system.
4. Type a name for the Show file and press Enter.
5. Double-tap in the Notes field for the Show and type any comments you want to save with the Show.

Information about the Show file is shown in the Info area of the Filing page.

Show files are automatically saved when they are created; no further action is required to save them.

Overwriting (Updating) a Show File



You can also update an existing Show file by overwriting it.

To update (overwrite) an existing Show file:

- In the Shows column, touch-and-hold (right-click) the Show file name you want to overwrite, and choose Overwrite from the pop-up menu. The current state of the system is saved to the selected Show file.

  – or –

- Press the **Over Write** switch on the MLM.

Duplicating Show Files

To duplicate a Show file:

- In the Shows column, touch-and-hold (right-click) the Show file name you want to overwrite, and choose Duplicate from the pop-up menu.

Renaming Show Files

To rename a Show file:

1. In the Shows column, select a Show file name so it is highlighted.
2. In the Shows column, select the Rename button.
3. Type a new name for the Show file and press Enter.

Deleting Show Files

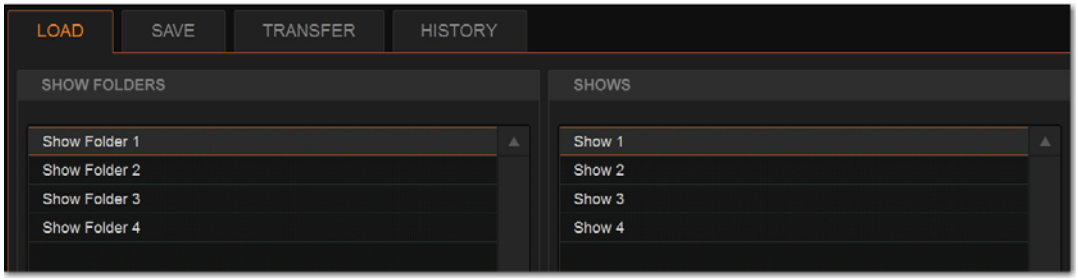
To delete a Show file:

1. In the Shows column, select a Show file name so it is highlighted.
2. In the Shows column, select the Delete button.

Loading a Show

You can load a Show file using the Load tab of the Filing page. Show files are stored locally on your system. Show files can be stored on USB drives, but must first be transferred to the system before loading (see **Transferring Settings, Shows and Presets**). The system must be in Config mode to load Shows.

⚠ *Loading a Show automatically replaces the current system settings with those of the loaded Show, and may interrupt audio throughput.*



Show Folders and Show files in the Load tab of the Filing page

To load a Show file:

1. Put the system into Config mode.
2. Go to the Filing page and select the Load tab.
3. In the Show Folders column, select a Show Folder name to select the folder. Any Show files in the folder are displayed in the Shows column.
4. In the Shows column, select a Show file name so it is highlighted.
5. Select the Load button. The system loads the new Show file, replacing the current system configuration, routing, and control settings with those contained in the new file.

System Configurations and Loading Shows

Show files include system configuration settings such as the type of control surface; the type of Engine and the number of HDX Mix Engines; and Mains and Mix (Aux/Group) Bus configurations.

- If a Show file includes the same system configuration settings as the current configuration, the configuration information appears in blue text in the Info area.
- If a Show file differs from the current configuration, but can be loaded on the system, the relevant configuration changes appear in orange text in the Info area.
- If a Show file differs from the current configuration and cannot be loaded on the system in its entirety, the configuration information appears in red text in the Info area.

Working with Presets

Preset files are used to store, recall and transfer factory or user-defined presets. Preset files are grouped in the following types of Preset Folders:

Built-in Channel EQ, 31-band Graphic EQ, Compressor/Limiter, Expander/Gate, and Input Channel Presets.

Plug-In Plug-ins Settings Files.

Scope Set Settings for Recall Safe configurations.

User Layout Custom User Layouts.

For information on saving, previewing and loading input channel and built-in dynamics and EQ presets, see **Input Channel, EQ, and Dynamics Presets**. *For plug-in settings, see* **Plug-In Presets and Snapshots.** *For Scope Sets, see* **Using Scope Sets.** *For User Layouts, see* **Working with User Layout Presets**.

Preset Folders

Preset Folders contain Preset files. Each of the built-in processors and each plug-in has its own Factory Defaults folder containing pre-defined Presets. A User Presets folder, for storing your Presets, is also provided.

You can create additional Preset Folders and store new Presets in them. These folders can then be transferred to a portable storage device for transfer to other VENUE systems.

Creating Preset Folders

To create a new Preset Folder:

1. Go to the Filing page and select the Transfer tab.
2. In the center column, select Preset Folders. A list of Preset Folders appears in the left column.
3. In the left column, select the New button.
4. Type a name for the Preset Folder and press Enter.

The new Preset Folder is available in the Preset window for each processor or plug-in.

You can also touch-and hold (right-click) any folders and filenames in the Filing page columns and choose the relevant command from the pop-up.

Preset Folder

Duplicating Preset Folders

To duplicate a Preset Folder:

1. In the left column, select a Preset Folder so it is highlighted.
2. Select the Duplicate button.

The folder and all of the Preset files it contains are duplicated.

Renaming Preset Folders

To rename a Preset Folder:

1. In the left column, select a Preset Folder name so it is highlighted.
2. Select the Rename button.

You can also touch-and-hold (right-click) a Preset Folder name and choose Rename, or double-click a Preset Folder name to rename the folder.

3. Type a new name for the Preset Folder and press Enter.

Deleting Preset Folders

When you delete a Preset Folder, all Presets contained in that folder are also deleted.

To delete a Preset Folder:

1 In the left column, select a Preset Folder name to select it.

2 Select the Delete button.

Preset Files

You can manage Preset files from the Transfer tab of the Filing page. You cannot create Preset files from the Filing page. Preset files are created from the Presets window of the channel, processor, or plug-in. Scope Sets are created using the Scope Sets window of the Snapshots page Recall Safe tab. User Layouts are created from the User tab of the Inputs or Outputs page.

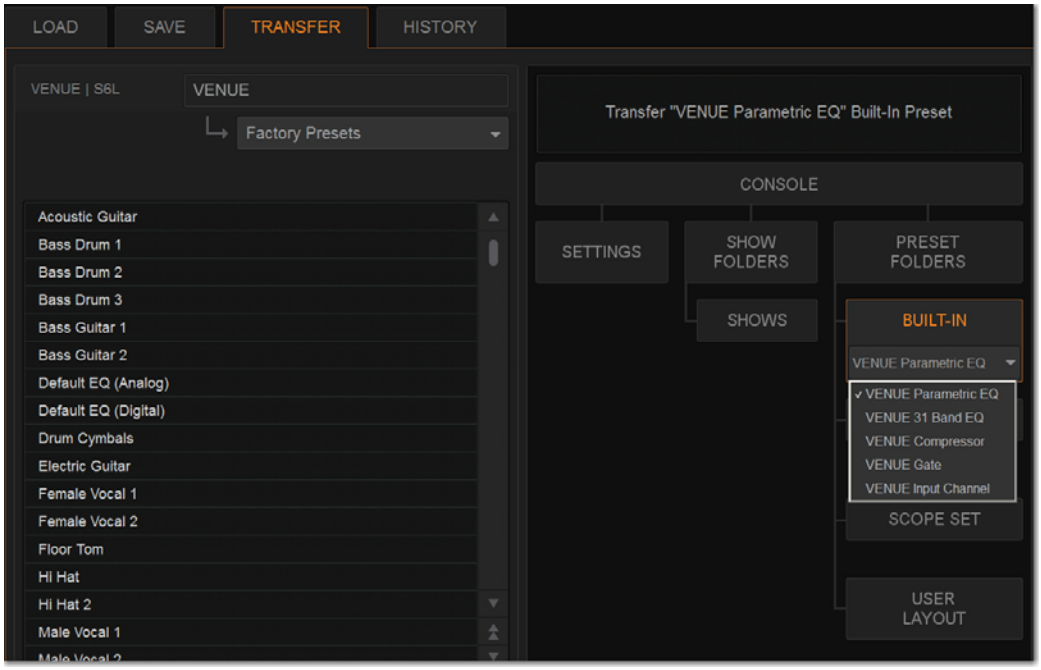
Duplicating Presets

To duplicate a Preset file:

1 Go to the Filing page and select the Transfer tab.

2 Select any of the following:

- Select Built-In or Plug-In then choose a processor or plug-in from the pop-up menu. The available Preset Folders for the processor or plug-in appear in a pop-up menu above the left column.
- Select Scope Set to select Scope Sets to transfer.
- Select User Layout to select User Layouts to transfer.

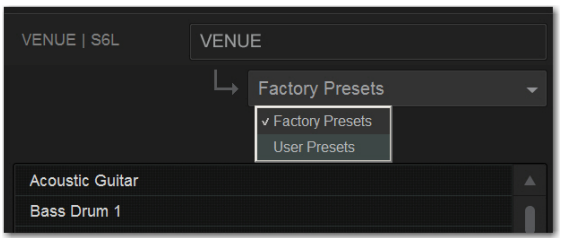


Built-In EQ in the Transfer tab of the Filing page

3 In the left column, choose a Preset Folder from the pop-up menu. Any Presets in the folder appear in the left column.

4 In the left column, select a Preset file name so it is highlighted.

5 Select the Duplicate button.



Renaming Presets

To rename a Preset file:

1. In the left column, select a Preset file name so it is highlighted.
2. Select the Rename button.
3. Type a new name for the Preset file and press Enter.

Deleting Presets

To delete a Preset file:

1. In the left column, select a Preset file name so it is highlighted.
2. Select the Delete button.

Transferring Settings, Shows and Presets

You can copy Console Settings, Shows, and Presets to and from a portable storage device (such as a USB flash drive) for backup, transfer from standalone software, and transfer between systems.

Console Settings are equivalent to an auto-saved Show file, and store the current state of the system. By transferring Console Settings, you can transfer the current state of the system without having to first create and name a Show file.

Settings, Shows and Presets cannot be loaded onto the destination system directly from the portable storage device, but must first be transferred to the system before loading. Transfer of Settings files, Show files, and Preset files is managed from the Transfer tab of the Filing page. The left column shows files on the system. The right column shows the contents of the portable storage device in the right column. Items are selected for transfer in the center.

To transfer Settings, Shows or Presets between your system and a portable storage device:

1. Go to the Filing page and select the Transfer tab.
2. Connect a portable storage device (such as a USB flash drive) to the S6L control surface. The device appears above the right column.
3. Do one of the following to select the type of data to transfer:
   - To transfer all data, select Console.
   - To transfer Console Settings, select Settings.
   - To transfer Show Folders, select Show Folders.
   - To transfer individual Shows, select Shows.
   - To transfer Preset Folders, select Preset Folders.
   - To transfer Presets for individual items, select Built-In or Plug-In and choose a built-in processor or plug-in, or Input Channel from the pop-up menu.
   - To transfer Scope Sets for Recall Safe, select Scope Sets
   - To transfer User Layouts, select User Layouts.

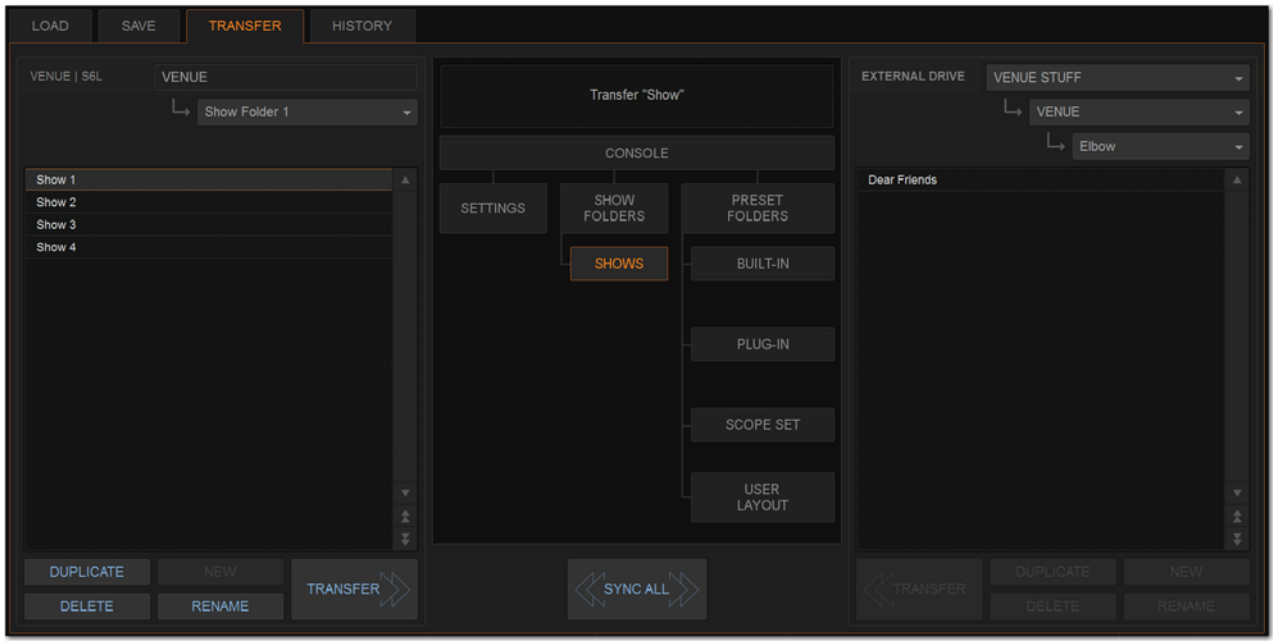
4 Do one of the following to select the items to transfer:

- In the left column, select the items you want to transfer to the portable storage device.

– or –

- In the right column, select the items you want to transfer from the portable storage device to your system.

⚠ *To transfer Console and Console Settings from an external device to your system, first enable Config mode.*



Preparing to transfer a Show file to a USB storage device

5 Select the Transfer button.

Large transfers may take time. Transfer status is shown by a progress bar. A transfer may be canceled by selecting Cancel.

⚠ *Canceled transfers may result in partial folder contents, which will have to be deleted manually.*

Synchronizing Settings, Shows and Presets

Instead of transferring data in one direction between the VENUE system and a portable storage device, you can synchronize all data in both columns of the Transfer tab in a single operation.

Synchronizing data causes new files to be copied and files with the same name but a more recent modification date/time to be automatically updated on both devices.

⚠ *When synchronizing data, the VENUE software replaces data files of the same name with the file that has the most recent date/time. Check to be sure that the system clock times and time zones are correctly set on the system and on the computer running the Standalone software when preparing data for synchronization.*

To synchronize Settings, Shows, or Presets between the VENUE system and a portable storage device:

1 Go to Filing > Transfer.

2 Connect a portable storage device (such as a USB flash drive) to a USB port on the S6L control surface. The device appears above the right column.

3 Do one of the following to select the type of data to synchronize:

- To synchronize all data, select the Console icon.
- To synchronize Console Settings, select the Settings icon.
- To synchronize Show Folders, select the Show Folders icon.
- To synchronize individual Shows, select the Show icon.
- To synchronize Preset Folders, select the Preset Folders icon.
- To synchronize Presets for individual items, select the Built-In icon or the Plug-In icon and choose a processor or plug-in from the pop-up menu.
- To synchronize Scope Sets for Recall Safe, select Scope Sets
- To synchronize User Layouts, select User Layouts.

4 From the pop-up menus above each column, choose the folders containing the elements you want to synchronize.

5 Select the Sync All button. The contents of the left and right columns are synchronized.

Undoing Changes Using the History Feature

The VENUE system automatically saves the current state of the system while you are working, allowing you to quickly return the system to a previous state.

The History feature uses Show files to capture the system state, and displays the files in the History tab.

Show Folders and Show files displayed in the History tab can only be loaded or deleted. They cannot be duplicated or renamed.

Show Folders in the History tab

There are two Show Folders in the History tab:

- The *Most Recent Changes* folder includes all auto-saved Show files for a ten-hour period.
- The *Previous Days* folder includes only the last auto-saved Show file for each day since the system was last cleared.

Show Files in the History tab

The auto-saved Show files displayed in the History tab are named according to the date and time of their creation, and cannot be renamed.

The Notes field for each auto-saved Show file includes a description of the conditions that caused the automatic save.

Several conditions cause the system to automatically save a new Show file in the History tab, as follows:

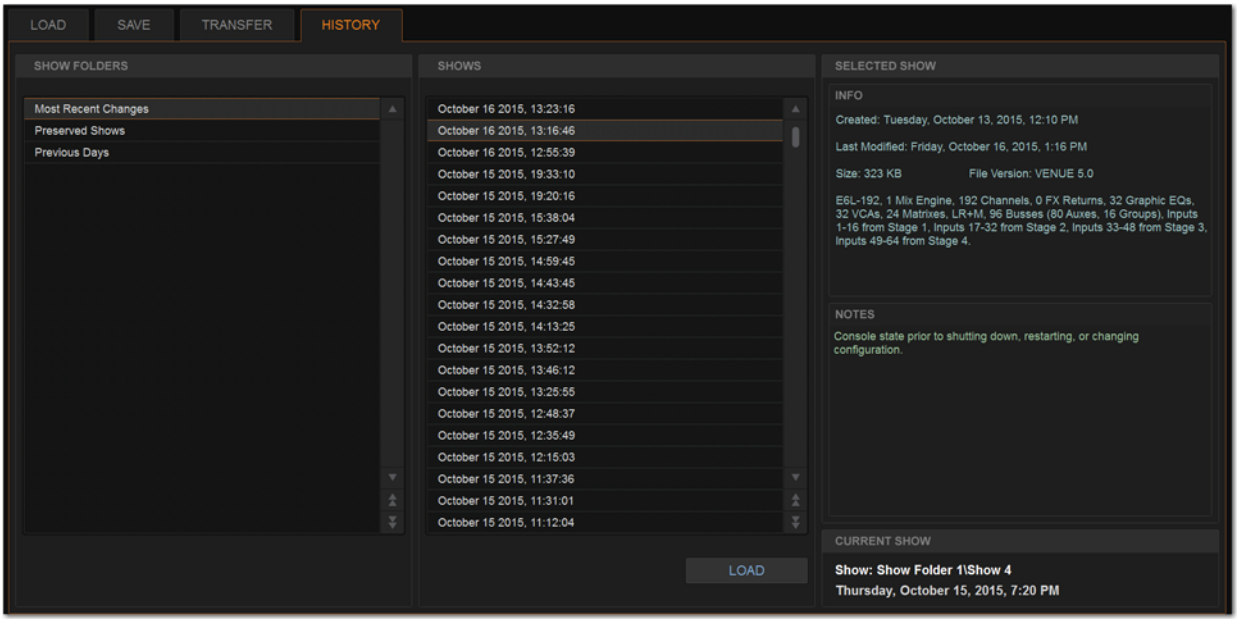
- In the course of normal work, a new Show file is automatically saved in the History tab approximately every ten minutes. Saves are less frequent when the system is idle.
- A new Show file is automatically saved just prior to a significant change in the system setup, including:
  - Change of system channel or bus configuration
  - Recall, storage, or modification of a Snapshot
  - Loading of Console Settings or a Show

Loading an Auto-Saved Show

To return the system to an earlier state at any time, you can load any of the auto-saved Show files displayed in the History tab.

To load an auto-saved Show file:

1. Go to the Filing page and select the History tab.
2. In the Show Folders column, select the Show Folder name to select the folder and display its contents in the Shows column.
3. In the Shows column, select the name for the Show you want load.



The History tab of the Filing page

4. Select the Load button.

The VENUE system loads the selected Show file, replacing the current system configuration, routing, and control settings with those contained in the selected file.

Snapshots

Snapshots let you flexibly store and recall a wide range of mixing parameters. Snapshots are commonly used to store the mixer setup and levels for individual scenes, songs or sound cues in a performance. Snapshots store information about channels and mix parameters, and you can use a variety of methods to edit, preview, and manage snapshot data.

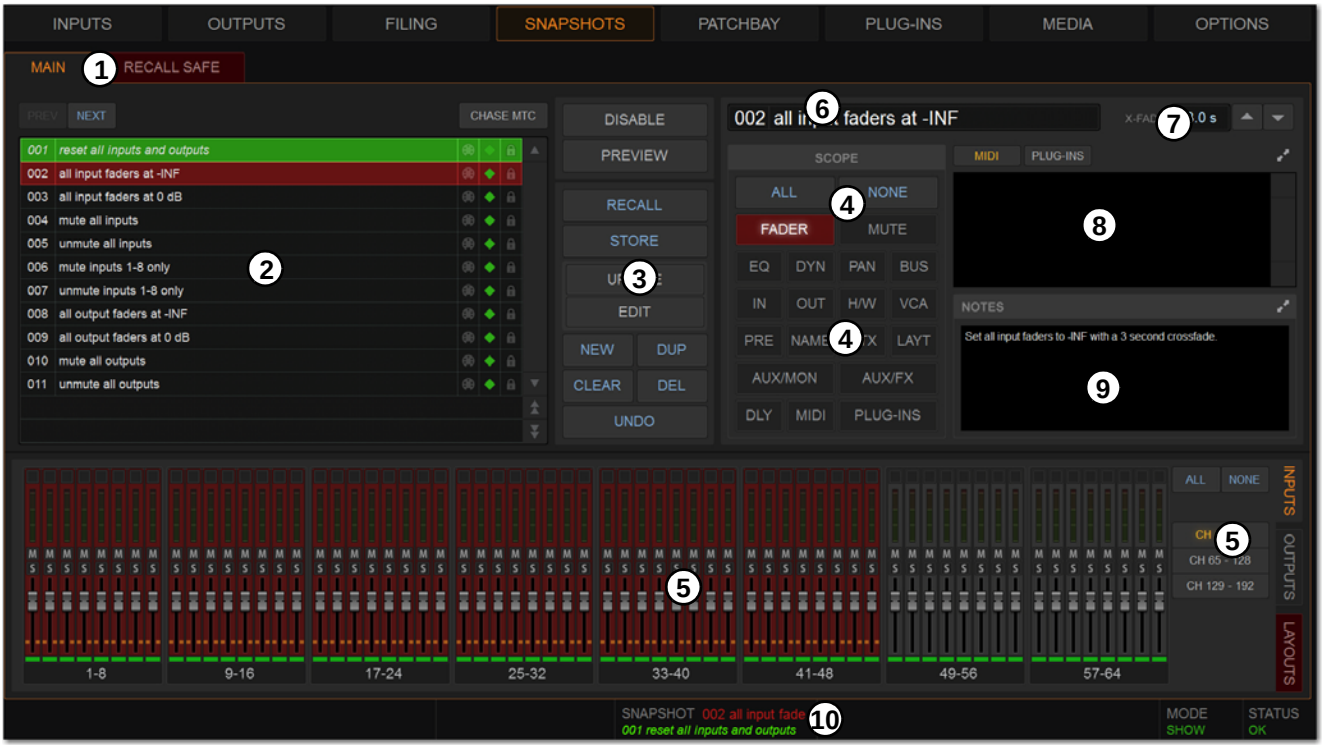
Snapshots are contained and stored as part of a Show file. A single Show file can contain up to 999 snapshots. Once stored, snapshots can be recalled manually or automatically (triggered by events or incoming time code). Snapshots are controlled from the on-screen Snapshots page.

This section covers the following topics:

- **Snapshots Page Overview**
- **Creating Snapshots**
- **Recalling Snapshots**
- **Managing Snapshots**
- **Making Changes to Snapshots**
- Using **Preview Mode**
- **Adding MIDI and Plug-In Data to Snapshots**
- Using **Recall Safe**
- **Automation Safing Channels**

Snapshots Page Overview

The Snapshots page provides controls for storing, recalling, and managing snapshots, providing a central location for setting up and replaying automated performances.



1 – Main and Recall Safe Tabs

2 – Snapshots List

3 – Snapshot Command Buttons

4 – Snapshot Scope Controls

5 – Channel Scope Controls

6 – Currently Targeted Snapshot Display

7 – Snapshot Crossfade Controls

8 – MIDI/Plug-Ins List

9 – Snapshot Notes

10 – Snapshot Status Display

Main and Recall Safe Tabs

The Snapshots page provides Main and Recall Safe tabs.

Main Provides the primary snapshot controls.

Recall Safe Provides a matrix of channel parameters that can be globally safed (or isolated) from Recall for all snapshots. See **Recall Safe**.

Snapshots List

Snapshots can be targeted, renamed, recalled, previewed, edited, locked, reordered, duplicated, searched, and deleted from the Snapshots list. Icons are provided showing the status of various snapshot attributes.

Snapshot Entries

Each entry in the Snapshots list has a number (001–999) and name.

Snapshot Entry Status Indication

Snapshot entries in the Snapshots list are highlighted in the following colors to indicate their statuses:

Green Indicates the currently recalled snapshot.

Red Indicates the currently targeted snapshot.

Yellow Indicates that the snapshot is both the currently recalled *and* the currently targeted snapshot.

Blue Indicates that the snapshot is part of a multi-selection.

Snapshot Attribute Icons

To the right of each snapshot number and name are icons indicating the status of the available snapshot attributes. Icons can be shown or hidden The following attributes have icons:

- Each snapshot provides a MIDI icon that lights if MIDI messages are included in the snapshot (See **Adding MIDI Data to Snapshots**.)
- If either the MIDI Read or Generate feature is enabled, each snapshot shows a time code value, trigger indicator, or send indicator. (See **Snapshot Time Code Display**.)
- If system Tempo has been enabled in Options > Misc, Tempo data can be shown for each snapshot instead of MIDI. Each snapshot shows the tempo value associated with each snapshot, along with a Tempo On/Off toggle icon. (See **Adding Tempo Data to Snapshots**.)

Both MIDI and Tempo are available parameters at all times. However, the Snapshots list can only display one or the other at a time.

- On systems connected to a compatible Pro Tools system with VENUE Link enabled, a snapshot can be configured to create a Marker in the Pro Tools recording when that snapshot is recalled. The diamond-shaped Markers icon toggles this feature on/off for each snapshot. (See **Creating a Pro Tools Marker from a Snapshot.**)
- Each snapshot provides a Lock icon that toggles the snapshot between Locked (write-protected) and Unlocked. See **Locking Snapshots**.

To show or hide snapshot attribute icons:

- Touch-and-hold any snapshot in the Snapshot list and select Show or Hide any of available attributes.

Recall Buttons

The Recall Previous (–) and Recall Next (+) buttons at the top of the Snapshots list cause the previous or next snapshot in the list to be targeted and recalled in one step.

Chase MTC/LTC

Enables or suspends automated recall of snapshots when either the MTC/LTC Read or MTC Generate option is enabled.

Blue Indicates that the snapshot is part of a multiple snapshot selection but not the last recalled or currently targeted snapshot. Recalled and Targeted snapshots can also be part of a multiple selection in the list. In this case, the sequence number is blue while the rest of the name is red, green or yellow.

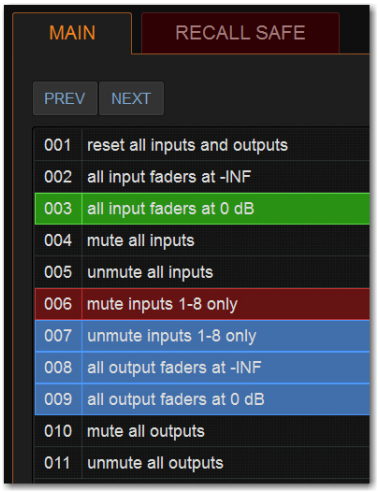
Snapshot Keyboard Shortcuts

When the Snapshots page is displayed, you can perform the following snapshot functions with these keyboard shortcuts:

Snapshot Function	Keyboard Shortcut
Target Next/Previous Snapshot	Up/Down Arrow keys
Target First Snapshot in List	Home key
Target Last Snapshot in List	End key
Target Snapshot at Top of Page	Page Up
Target Snapshot at Bottom of Page	Page Down
Select Multiple Consecutive Snapshots	Shift-select snapshots
Select Multiple Non-Consecutive Snapshots/Deselect any Snapshot	Ctrl-select snapshots
Select All Snapshots	Ctrl + A
Create New Snapshot	Ctrl + N
Recall Targeted Snapshot	Ctrl + R
Store Targeted Snapshot	Ctrl + S
Undo	Ctrl + U
Add or update MIDI/Plug-in data to snapshot	Touch-and-hold MIDI/Plug-ins entry

Selecting Snapshots

You can select single snapshots or multiple snapshots in order to target, recall, duplicate, edit, lock or delete them in the snapshots list.



Multiple items selected in the Snapshots list

To select multiple consecutive snapshots:

- Hold the Shift key and select the snapshot names in the Snapshots list.

To clear a selection of multiple consecutive snapshots:

- Select any snapshot name in the Snapshots list.

  – or –

- Rotate the encoder in the Snapshots section of the MLM.

To select or de-select non-consecutive snapshots:

- Hold the Ctrl key and select the snapshot names in the Snapshots list.

Snapshot Type Text Search

Type Text search lets you use the keyboard for fast navigation of the Snapshots list.

To search for and target a snapshot:

1 Go to the Snapshots page.

2 Do one of the following:

- Type the number of the snapshot.

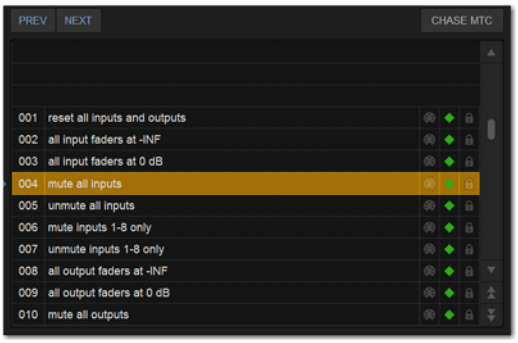
– or –

- Type the first letters of the snapshot name.

3 Press the Tab key on your keyboard to cycle through any snapshots that start with the same letter.

Centering the Snapshot List

The Options > Snapshots page provides a preference setting to always center the Snapshot list on the last recalled snapshot. This setting lets you always view the snapshots immediately above and below (prior to and following) the last recalled snapshot. This setting only affects the scroll position of items in the Snapshot list.



Snapshot list with Center Last Recalled Snapshot enabled

To center the Snapshot list on the last recalled snapshot:

1 Go to the Options > Snapshots page.

2 In the Snapshots General Preferences section, select the Center Last Recalled Snapshot setting.

Snapshot Command Buttons

Disable Temporarily disables all snapshot functions.

Preview An “offline” mode in which the system continues to process audio using its settings at the time Preview is invoked, letting you recall, edit and manage snapshots without affecting the current mix.

Recall Recalls the targeted snapshot, updating the system to reflect the status of all scoped data types and channels in the snapshot (subject to the current Recall Safe settings).

Store Stores the current state of the system in the targeted snapshot for all data types and channels, overwriting any existing data in the snapshot.

Update Lets you apply isolated changes to one or more snapshots at once (such as updating a channel EQ across all snapshots).

Edit Enables Edit mode. Lets you adjust parameters freely and apply those changes to one or more snapshots. Changes can be applied in Absolute or Relative fashion.

Undo Returns the system to its state before the last snapshot command.

New Creates a new snapshot that captures the current state of all data types and channels.

Duplicate Creates a copy of the selected snapshots.

Clear Clears the contents of the targeted snapshot, but retains any associated MTC information.

Delete Deletes the targeted snapshots.

Snapshot Scope Controls

When you create a snapshot, it captures the current state of *all* system settings. However, you can select which of these settings you want to be recalled when you recall a particular snapshot.

The selection of data types and channels that are recalled when you recall a snapshot is referred to as the *scope* of a snapshot. The Snapshot Data Type buttons and on-screen faders determine (and display) the data types are recalled for which channels.

The Recall Safe tab provides global control of automation safe status for parameters on individual channels.

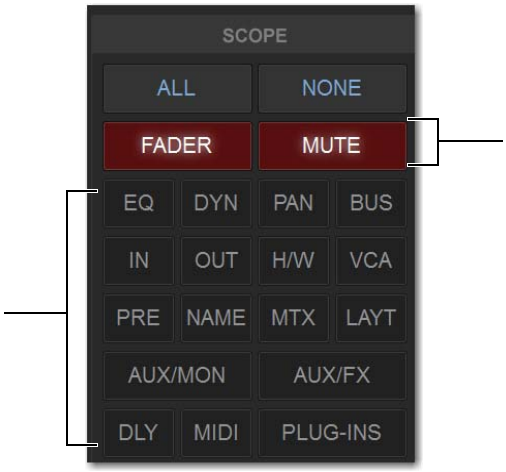
Scope States

Scoped Red display indicates that the data type or channel is currently scoped and will be affected by snapshot recall.

Not Scoped Gray display indicates that the data type or channel is not currently scoped and will not be affected by snapshot recall.

Data Type Scope Buttons

The Snapshot Data Type Scope buttons display scope status for the corresponding types of controls on the control surface. See Table 4 on page 221 for a complete list.



Data Type scope buttons showing scoped (top, lit red) and unscoped (bottom, unlit) controls

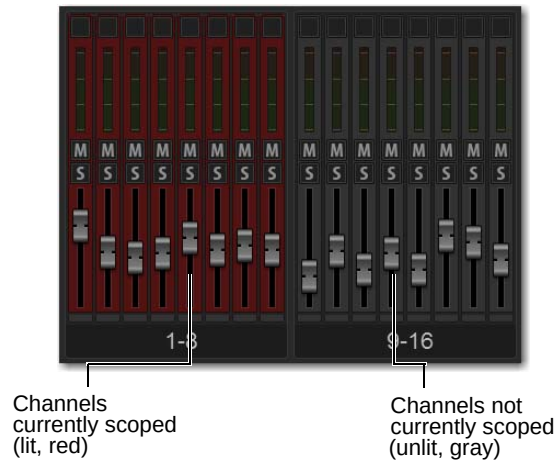
Data Type Scope Action Buttons

All Turns on the scope for all data types at once. This is equivalent to selecting all of the Data Type buttons so they lit red.

None Turns off the scope for all data types at once. This is equivalent to selecting all of the Data Type buttons so they are unlit.

Channel Scope Controls

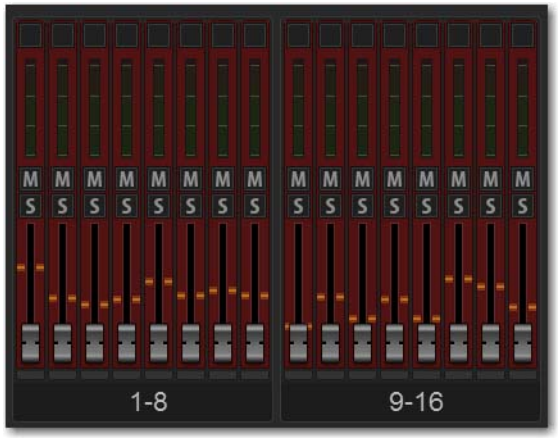
Channels are included or excluded from snapshots by selecting them on-screen in the Snapshot Channel Faders display. The Snapshot faders display the scope status of each channel, along with indication of the fader positions and mute states that will result by recalling the targeted snapshot.



Snapshot channel fader display showing different scope states

Channel Fader Position

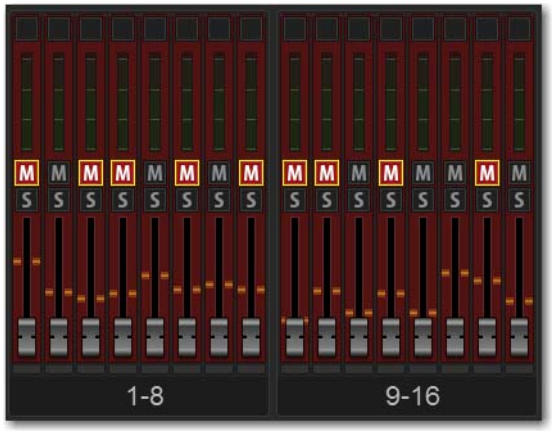
When you target a snapshot with scoped channels that have different fader positions from the current fader positions, the target fader positions are shown in bright red.



Snapshot channel fader display showing target fader positions

Channel Mute State

When you target a snapshot with scoped channels that have different mute states from the current mute states, the target mute buttons are outlined in yellow.



Snapshot channel fader display showing target mute states

Though the currently selected channel is displayed in the Snapshots page, keep in mind that you cannot target a different channel from this page. The currently selected (target) channel is indicated for visual reference only. To select and target a different channel, use the channel Select switches or the Channel Scroll buttons.

Channel Scope Action Buttons

All Turns on the scope for all channels displayed on the current tab (such as 1–64). Double-tapping the All button turns on the scope for all channels on the system.

None Selecting the None button turns off the scope for all channels on the current page. Double-tapping the None button turns off the scope for all channels on the system.

Snapshot Status Display

The Snapshot Status display shows the numbers and abbreviated names of the currently targeted snapshot (in red text) above the currently recalled snapshot (in green or yellow). Recalling the targeted snapshot makes it the currently recalled snapshot.

Next Snapshot (top) and Last Recalled snapshot (bottom) in the Status area

Creating Snapshots

Snapshots can be created at any time to store the current channel and parameter settings. You can create new snapshots manually in the Snapshots page, or by duplicating existing snapshots to build your mix as you work.

Use the first snapshot in a Show file to establish the basic settings for a performance. For subsequent snapshots, use the scope controls and Recall Safe settings to selectively recall only those controls that need to change between sections or songs, leaving other controls unaffected by snapshot recall.

Creating New Snapshots

When you create a snapshot, it captures the current state of all system settings. When recalling a snapshot, you can selectively recall parameters using the snapshot scope controls.

To create a new snapshot:

1. Set the parameters you want to store in the snapshot.
2. Select New. The new snapshot appears in the Snapshots list.

You can undo the New snapshot command at any time by pressing the Undo Snapshot Command button.

Plug-ins included in the scope of a snapshot

When you create a new snapshot it automatically inherits the channel and data type scope of the currently targeted snapshot.

Naming Snapshots

New snapshots are automatically numbered and appear as “<Untitled>” in the Snapshots list. Snapshots can be renamed at any time. You can undo snapshot naming operations.

To name a snapshot:

1. Do one of the following:
   - Double-tap the snapshot name in the Snapshots list or the current target name display.

   – or –

   - Touch-and-hold the snapshot name and choose Rename.
2. Type a name for the snapshot.
3. Press Enter on the keyboard or select another snapshot name.

Adding Notes to Snapshots

You can add notes to snapshots at any time. You do not need to store the snapshot to save the notes in the snapshot.

To add or edit comments for a snapshot:

1 Double-select the Notes header or select the Expand icon to expand the Notes field.

2 Double-select in the Notes field and enter text.

MIDI and plug-in data is not captured when a snapshot is created. This data is added to existing snapshots directly from the MIDI/Plug-Ins lists. See **Adding MIDI and Plug-In Data to Snapshots**.

Recalling Snapshots

To recall a snapshot, you target the snapshot, scope channels and parameters that are recalled when you recall the snapshot, then recall the snapshot.

You can also target and recall snapshots using the Snapshots Global Control Encoder. See **Snapshot Data Types and Parameters** *for more information.*

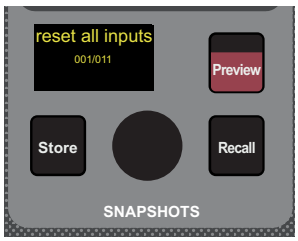
Targeting Snapshots

Targeting a snapshot lets you preview which data types and channels will be affected by that snapshot before recalling it. When a snapshot is targeted, the on-screen Data Type buttons and Channel Faders update to show the data types and channels enabled for recall by the snapshot.

Preview mode lets you take the system controls offline to recall and edit snapshots without affecting the current mix. See **Preview Mode**.

To target a snapshot, do any of the following:

- Rotate the encoder in the Snapshots section of the MLM so the targeted snapshot is shown in the Snapshot display.



Snapshots section of the MLM

- On the Snapshot page of the external screen, select the snapshot name in the Snapshot list.
- Type the number or name of the snapshot on the keyboard.
- Press the Home/End, Page Up/Page Down, and Up/Down Arrow keys on the keyboard to navigate the Snapshot list.

The targeted snapshot is shown in the Snapshot display on the MLM, highlighted in red in the external screen Snapshots list, and shown in red in the external screen Status display.

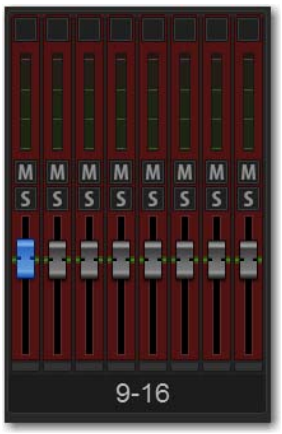
Scoping Channels and Parameters

When you create a snapshot, it captures the current state of all system settings. When recalling a snapshot, you can scope the channels you want affected (using the Channel Scope controls), and the parameters that are recalled (using the Data Type Scope buttons).

You can rescope snapshot data at any time. You do not need to store/overwrite a snapshot if you change the scope of a snapshot.

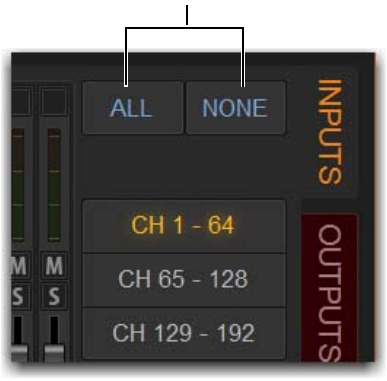
To scope channels for recall:

1. On the Snapshots page of the external screen, select the individual fader strips so that they is displayed in red.
2. To select channels in banks of eight, select the channel numbers at the bottom of the on-screen fader strips so the channels.



A bank of eight channels scoped for snapshot recall

3. To select all channels, select the ALL Channel Scope Action button.
4. To clear all channels from the scope, select the NONE Channel Scope Action button.



ALL and NONE Channel Scope Action buttons

5. The fader strips for scoped channels are highlighted in red.

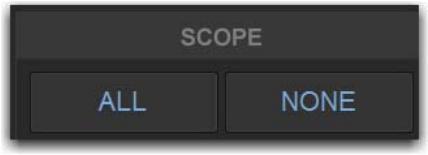
To scope parameters for recall:

1 For each parameter of the scoped channels you want affected when the snapshot is later recalled, select the corresponding Data Type button so that it is scoped (displayed in red).

Layouts included in the scope of a snapshot

2 To scope all parameters, select the ALL button.

3 To clear all data types from the scope, select the NONE button.



ALL/NONE Data Type Scope buttons

When you create a new snapshot it automatically inherits the channel and data type scope of the currently targeted snapshot.

Recalling Snapshots

You can do the following when recalling snapshots:

- Target and instantly recall successive snapshots (next or previous)
- Target first, then recall one or more snapshots
- Select multiple snapshots and recall them all sequentially
- Target snapshots, change Data Type or Channel Scope settings, then recall.

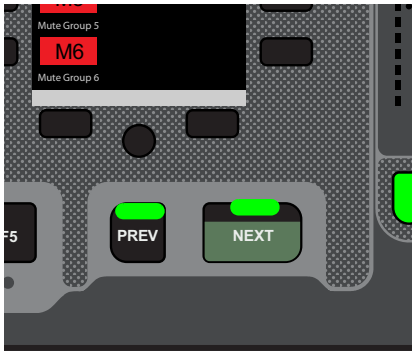
Undoing snapshot recall commands might cause audio to be interrupted. Use Undo with caution in performance.

Recalling Successive Snapshots Instantly

You can instantly recall successive snapshots in the Snapshots list using the S6L control surface or the external screen. This command references the currently recalled snapshot, not the targeted snapshot.

To instantly recall successive snapshots using the control surface:

- On the MLM, press the PREV or NEXT switch, under the Right Soft Keys. The switches are lit when a next and/or previous snapshot is available to recall.



Prev/Next Snapshot switches

To instantly recall successive snapshots on the external screen:

- Select the PREV or NEXT button at the top of the Snapshots list.

⚠ *The Snapshot Recall buttons combine target and recall actions in one step, causing the previous or next snapshot to be instantly active. These buttons cannot be used to preview snapshots before recalling them.*

Targeting Before Recalling Snapshots

You can target then recall a snapshot using the S6L control surface or the external screen.

To target and then recall a snapshot using the control surface:

1. Rotate the encoder in the Snapshots section of the MLM so the targeted snapshot is shown in the Snapshot display.
2. (Optional) Set the scope of the snapshot.

Snapshots section of the MLM

3. Press the lit **Recall** switch.

To target and then recall a snapshot using the external screen:

1. Select the snapshot name in the Snapshot list.
2. (Optional) Set the scope of the snapshot.
3. Select the Recall button on-screen.

💡 *Snapshot Recall can also be triggered by a footswitch or any number of other functions using events. For more information, see* **Events.**

Managing Snapshots

You can manage snapshots in the list by storing, locking, clearing, duplicating, deleting, or moving them.

Storing Snapshots

You can modify the contents of an existing snapshot, overwriting it with new settings, using the *Store* command. It is not necessary to recall a snapshot to store it. You can undo Store commands.

To store the current state of the system in an existing snapshot:

1. Set all parameters as you want them to be stored in the snapshot.
2. Select the snapshot in the Snapshot list.
3. Select the Store button on-screen.
4. Set the scope by doing the following:
   - For each parameter you want to be affected when the snapshot is recalled, select the corresponding Data Type button so that it is scoped (displayed in red).
   - For each channel you want affected when the snapshot is recalled, select the channel fader so that it is scoped (displayed in red).

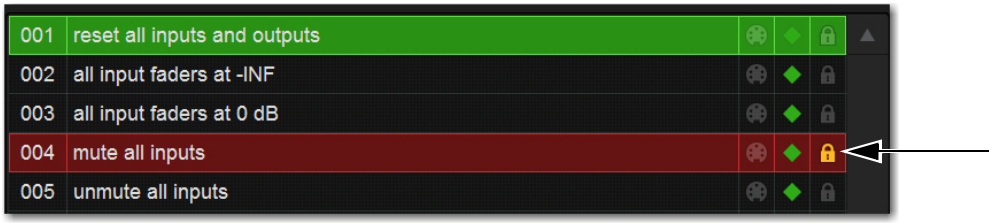
Locking Snapshots

Snapshots can be *locked* to prevent them from being accidentally altered, overwritten or deleted.

Locked snapshots can be selected, recalled, moved and duplicated. They cannot be overwritten, renamed, rescoped or otherwise changed. New and duplicated snapshots default to unlocked. Lock status can be changed at any time, including while in Preview mode.

To lock a snapshot:

1. Go to the Snapshots page and select the Main tab.
2. In the Snapshot list, select the padlock icon at the far right of the row for any item. The padlock icon illuminates to indicate the snapshot is now locked.



Snapshot lock controls

3. Select multiple snapshots using **Multi-Select** or the Shift key to lock or unlock multiple snapshots at once.

Once locked, operations that would otherwise affect the snapshot cause the Status display and channel LCDs and Snapshot LCD to temporarily show a message reminding you that the operation cannot be applied while the snapshot is locked.

To unlock a snapshot:

- Select the lit padlock icon in the row for that snapshot.

Undo and Locked Snapshots

You can undo locking or unlocking a snapshot. When toggling lock status for a selection of more than one snapshot, the entire operation creates a single undo point (it does not track and provide undo for each individual snapshot in the selection).

⚠ *Undo can revert snapshots to "unlocked" status. For example, if you change the scope of an unlocked snapshot, lock the snapshot and then use Undo, the snapshot is unlocked. Pressing Undo one more time will revert the snapshot to its original scope.*

Locking Snapshots and MIDI Record

When using the MIDI Record feature, all MIDI data captured up to the point a snapshot is locked is preserved. If the MIDI Record operation is still active at the time the snapshot is locked, record mode is exited, the REC button becomes unavailable for that snapshot, and subsequent incoming MIDI messages are not captured.

Available Operations with Locked Snapshots

The following table details which operations can or can not be performed on a locked snapshot.

Operation	Allowed while Locked	Disallowed while locked
Select/target snapshot	X	
Recall snapshot	X	
Duplicate snapshot	X	
Re-sequence in snapshot list by:		
• Dragging in snapshot list	X	
• Manually editing sequence number	X	
• Re-sorting by time code	X	
Overwrite (Store to locked snapshot)		X
Update changes		X
Apply Edit mode changes		X
Clear		X
Delete		X
Modify Scope		X
Add/Modify stored MIDI data		X
Add/Modify stored Plug-In data		X
Add/Modify stored Media date		X
Modify Notes		X
Modify X-Fade time		X
Modify Snapshot Name		X
Modify Time Code Location		X
Toggle Time Code Enable		X
Undo changes	X	

Clearing Snapshots

The contents of a snapshot can be cleared while keeping the snapshot in the Snapshot list and retaining its MTC information. This lets you maintain a placeholder that you can use later to store new data. You can undo Clear commands.

To clear the contents of a snapshot:

1. Select the snapshots you want to clear.
2. Select the Clear Snapshot Command button.
3. In the dialog box, select Clear to confirm. Cleared snapshots are renamed “<Untitled>.”

Duplicating Snapshots

Snapshots can be duplicated from the Snapshots list. You can undo Duplicate commands.

To duplicate snapshots:

1. Select the snapshots you want to duplicate.
2. Do one of the following:
   - Select Dup (Duplicate).

   – or –
   - Touch-and-hold the snapshot name and choose Duplicate.

A copy of each selected snapshot is placed after the selection, with a plus sign (+) appended to the original snapshot name.

If multiple snapshots are selected in the list, the new (duplicate) items are added below their original source snapshots.

Deleting Snapshots

Snapshots can be deleted from the Snapshots list. You can undo Delete commands.

To delete snapshots:

1. Select the snapshots you want to delete.
2. Do one of the following:
   - Select Del (Delete).

   – or –
   - Touch-and-hold the snapshot name and choose Delete. The snapshots are removed from the Snapshots list, and succeeding snapshots are renumbered.

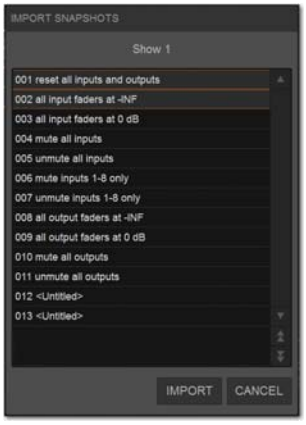
Moving Snapshots

Existing snapshots can be rearranged in the Snapshots list. When you move one or more snapshots, they are automatically renumbered in the list, but MTC values are left unchanged. You can undo a snapshot move.

To move one or more snapshots:

1. Select one or more events in the Snapshots list.
2. Touch any selected snapshots and drag them to a new location in the list. As you move items, a white line appears indicating the destination.
3. Release your finger to drop the snapshots at the desired location in the list. Snapshots that are moved will be adjacent regardless of their original locations relative to each other (whether adjacent or non-adjacent). Snapshots will be renumbered as necessary according to the new sequence of events.

Importing Snapshots



Snapshots from other Show files can be imported into the currently loaded Show file in the Filing > Load/Save tabs.

To import Snapshots:

1. Go to the Filing page and select the Load or Save tab.
2. Select the Show folder that contains the Show file from which you want to import snapshots.
3. In the Shows column, touch-and-hold the Show file from which you want to import snapshots, and choose Import from the pop-up menu.
4. In the Import Snapshots window, select one or more snapshots so they are highlighted in the list, and then select the Import button. The selected Snapshots are added to the Snapshots list of the currently loaded show.

Making Changes to Snapshots

There may be situations where you need to change specific parameters in existing snapshots while leaving other parameters unchanged.

For example, if a guitarist changes instruments in the middle of a tour it might be necessary to change levels and EQ on the guitar channel in all the snapshots in a show. Snapshots provides the following modes to accommodate these types of situations:

Edit Mode Lets you capture individual control changes while you mix, and apply those changes to one or more pre-existing snapshots as absolute or relative changes. For example, you could enter Edit mode the first time a guitarist uses a new guitar in rehearsal. When you are satisfied with your settings you can apply them (in absolute or relative fashion) to update other snapshots. See **Using Edit Mode**.

Update Mode Lets you update data in pre-existing snapshots after you've already made changes and decided you want to keep them. While Edit mode requires you to know ahead of time that you will be updating snapshots, Update mode lets you decide to update other snapshots with current settings after making adjustments to your mix. For example, if its the third consecutive night you've reached to increase gain on the DI channel for a new guitar, you could use Update mode to quickly take the gain increase you just made and apply it to other snapshots. See **Using Update Mode**.

Events-driven recall of snapshots is disabled while in Edit or Update mode. For more information, see **Events.**

Using Edit Mode

Edit mode is a powerful way to update specific parameters across multiple snapshots without overwriting any settings you want to preserve. By entering Edit mode before making adjustments, you can edit a single control or any number of controls, and your changes are tracked from the point Edit mode was entered.

The ability to edit a single control in Edit mode provides more selectivity than Update mode.

Absolute and Relative Edits

Changes can be applied to one or more selected snapshots as *absolute* or *relative* values. Any parameter can be edited in absolute fashion; all dB parameters can be edited in relative fashion.

Examples of Absolute and Relative Edits

Absolute Changing a fader level from 0 dB to –3 dB and applying that change as Absolute results in that fader being set identically to –3 dB in all selected snapshots.

Relative Changing a fader level from 0 to –3 dB and applying that change as Relative results in that fader being reduced by that amount in all selected snapshots, or 3 dB relative to the value previously stored in the snapshot(s). For example, a channel previously at –6 dB would be changed to –9 dB.

Making Relative Changes with Mixed Data Types

If a combination of dB and non-dB parameters (such as gain and EQ frequency) are edited and applied in relative fashion, the dB parameters are adjusted as relative (delta) changes and the non-dB are applied as absolute changes.

To update specific parameters in existing snapshots using Edit mode:

1 Go to the Snapshots page and select the Main tab.

2 Select the Edit button to enter Edit mode. The Edit button changes into two smaller flashing buttons: Abs, and Rel. The system begins tracking all changes while you make them.

Absolute (ABS) Relative (REL) Edit mode buttons

3 Adjust any combination of scopable parameters.

4 Select the snapshot(s) to which you want to apply your edits.

5 Select either of the flashing buttons Abs (for Absolute) or Rel (for Relative). You can cancel Edit mode by pressing the **Cancel** switch on the control surface, selecting the Cancel button on-screen, or by pressing the ESC key on your computer keyboard.

The selected snapshots are updated according to your changes and your choice of Absolute or Relative edit.

Using Update Mode

You can use the Update command to capture changes and apply them to existing snapshots. Update mode is most useful when you realize during the course of mixing that you want to capture your current settings to use in other snapshots. You can undo Update commands.

To update specific parameters in existing snapshots:

1 Make sure the channel is set as needed.

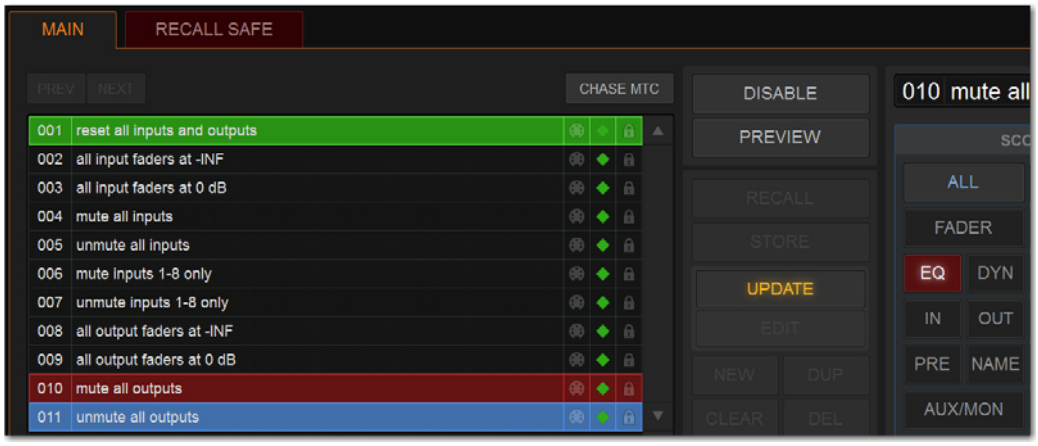
2 Select Update. The current data and channel scope is cleared.

3 Set the scope to reflect only those parameters you want to update by doing the following:

- For each parameter you want to update, select the corresponding Data Type button so that it is scoped (displayed in red).

– and –

- For each channel you want to update, select the channel so that it is scoped (displayed in red).



Updating an EQ setting for a channel

4 Select the snapshot or range of snapshots you want to update in the Snapshots list.

5 Select Update. The scoped parameters are updated in the selected snapshots.

Undoing Snapshot Commands

The Undo function returns the system to the state immediately before the last snapshot command. Undo is multi-level (up to 100), is available while in Preview mode and after performing an Edit or Update mode action.

⚠ *Undoing snapshot recall commands may cause audio to be interrupted. Use Undo with caution in performance.*

To undo a snapshot command:

- Select the Undo button in the Snapshot commands section.

⚠ *If the Undo button is dimmed, Undo is not available.*

Disabling Snapshots

You can temporarily disable the storage and recall of all snapshots. While snapshots are globally disabled, you can target snapshots in the Snapshots list to preview their properties, but you cannot recall them.

To disable all snapshots:

- Select the Disable button in the Snapshot commands section.

Suspend MTC Recall

To disable MTC or LTC recall of individual snapshots in the list:

1. Select the green Enable icon in the row for the desired snapshot so that it is unlit.
2. Select the Disable/Enable icon again to re-enable the snapshot.

Preview Mode

Preview mode lets you recall, store and edit snapshots without affecting the current mix.

When enabled, Preview mode takes the system offline from the live audio mix so you can “work ahead” during a rehearsal, performance or event to preview upcoming snapshots and edit them as needed. Any control that can be stored and recalled by snapshots is available while in Preview mode, and you can also modify the Snapshot list. Once you are done previewing or editing snapshots, you can store your changes to update the existing snapshots with your changes.

Using Preview Mode

The basic workflow for using Preview mode is as follows:

1 Make sure your active mix is set as desired, and make sure the rehearsal, event or performance has an upcoming opportunity for you to go offline.

2 Enter Preview mode by selecting the Preview button on the main Snapshots page. The word “PREVIEW” flashes in red across the screen for confirmation, as do all input and output channel strip displays.

Preview mode

3 Do any of the following:

Edit the Snapshots List Reorder snapshots in the list, if desired, by touching-holding-and dragging them. Changes to the order of items in the Snapshots list may affect the current active mix if the affected snapshots rely on MIDI or MTC triggering. (For more information, see **Changing Settings in Preview Mode**.)

Create a New Snapshot Adjust settings as desired and create a new snapshot by selecting New. (See **Creating New Snapshots**.)

Recall and Edit an Existing Snapshot Recall a snapshot to preview its settings and make any adjustments necessary, being sure to re-store the snapshot before exiting Preview mode. Storing a snapshot in Preview mode does not affect previously stored MIDI or Plug-in data (if any).

Edit Channel and Scope Settings Edit any channel settings, parameters, or scope associated with the snapshot being previewed. The Snapshots page displays the current snapshot name in italics to indicate that at least one parameter has been changed, and the Channel Faders show you the previous level for each channel in bright red. Scope Data Type buttons and Channel Scope functionality remain live and active at all times (in other words, changes made to these controls while in Preview mode will remain once Preview mode is exited).

Add and Edit MIDI, Plug-In Data To add MIDI, or plug-in data associated with the snapshot, select the Add button in the MIDI or Plug-Ins snapshot list, or select the options in the Media list. For more information, see **Adding Plug-In Data to Snapshots**.

4 To undo an action made while in Preview mode, select the Undo button on-screen. (For more information about Undo in Preview mode, see **Making Changes to Snapshots**.)

5 To update the currently previewed snapshot but remain in Preview mode, press or select Store.

6 Continue previewing and editing settings as needed (all snapshot functions are available in preview mode).

7 When you are finished and need to exit Preview mode, press **F1** (or select the on-screen Preview button).

⚠ *Exiting Preview mode without storing will discard the changes made while in Preview mode (Preview mode is cleared each time you exit). You must explicitly store changes to update the associated snapshots.*

Undo and Preview Mode

In Preview mode, you can Undo actions applied to the Snapshot List (such as Recall, Store, New and Duplicate) without affecting the online mix.

Multiple levels of Undo are available.

Changing Settings in Preview Mode

The system tracks any changes to settings or to the Snapshot list while in Preview mode, but only Snapshot list actions create an Undo point. Choosing Undo will undo the last action you took while in Preview mode, up to a maximum of 100 levels of Undo. Any changes made after the last Preview action are also undone (the Snapshot screen is returned to its exact state prior to the action that created the Undo point).

Changing the Snapshot List in Preview Mode

Changes made to the Snapshot list are automatically tracked and available for Undo, regardless of whether Preview mode is enabled or not. This includes any Recall of snapshots triggered by incoming MIDI or MTC while in Preview mode.

For example, if a MIDI Snapshot Recall occurs while you are in Preview mode, the online mix will be updated with that snapshot. Pressing Undo immediately after that Recall will undo that Snapshot recall and revert the online mix to its state prior to the Undo.

Consider turning off the Chase MTC option while in Preview mode to disable all MIDI recall of snapshots. In addition, you can always use the History feature to recover from any unexpected results.

Changing MIDI, Plug-In, and Media Data in Preview Mode

Changes made to MIDI, Plug-In, and Media data cannot be undone. For more information, see **Adding MIDI and Plug-In Data to Snapshots**.

Take advantage of Tool Tips in the banner display to confirm what action the Undo button will revert. See **Undoing Snapshot Commands**.

Available and Unavailable Functions in Preview Mode

In order to maintain essential mix indicators and controls while in Preview mode, not all functions are taken offline.

The following sections detail what is and what is not available during Preview mode.

Always Active

Certain essential mix functions remain live and active at all times, regardless of whether Preview mode is enabled. The following vital mix functions continue to affect or be affected by the adjustments made to settings:

- Metering
- AFL/PFL
- Dynamics Key Listen
- Monitoring level, Headphone level and Monitoring bus Delay
- Talkback, Osc and 2-Track
- Mute Groups (recall only)
- Recall Safe
- MIDI snapshot Recall, Chase MTC and Disable (Snapshots)
- Snapshot list and Recall Safe (deleting, adding, or editing snapshots are/will be reflected online and affect the mix)
- History (auto-save)

Recall Safe in Preview Mode

The Recall Safe settings are global, and are applied to filter snapshot data regardless of the current operating mode. For details on Recall Safe and other automation safe features, see **Recall Safe**.

Available and Editable in Preview Mode

Almost all system functions, such as selecting channels and banking faders, are available in Preview mode.

Only those controls that can be stored and recalled via snapshots are available for offline previewing and editing.

Not Available in Preview Mode

The only controls not available while in Preview mode are those controls which are not able to be stored or recalled via snapshots. In addition, Config mode options are unavailable in Preview mode.

Unavailable functions include the following:

- Make Stereo, or Split to Mono
- Move channels
- Input channel Gain Guess
- Input channel Input Direct switch
- Insert mode (plug-ins cannot be edited)
- Enabling or disabling sample rate conversion

These functions are neither available for offline access in Preview mode, nor do they remain active (online) while in Preview mode. To adjust any of the above settings, you must exit Preview mode.

Config Mode

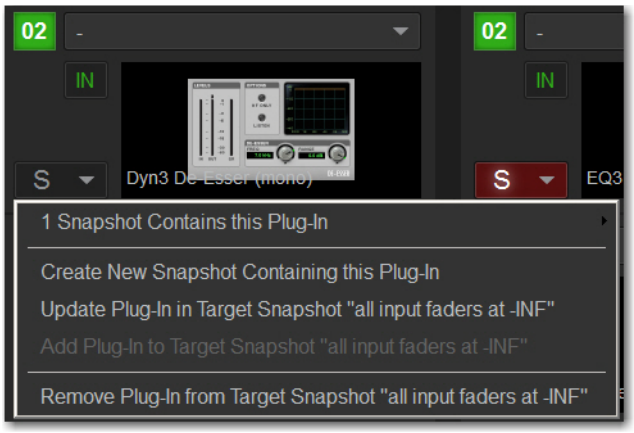
Config mode is not available while in Preview mode. Pressing the Config switch (or double-selecting the Config/Show mode icon on-screen) displays a dialog box in which you can choose to “Exit Preview” (return to online mix, in Config mode), or “OK” (remain in Preview mode).

The system automatically switches to Show mode if Config mode is active at the time Preview mode is entered.

Plug-Ins and MIDI Data in Preview Mode

In Preview mode, plug-ins and MIDI data operate in a similar way as when using the standalone software.

You must explicitly add or update plug-ins and MIDI data to update snapshots, whether or not Preview mode is enabled. You can do this from the main Snapshot page, or (for plug-ins) from the plug-in racks.



Updating plug-in data in an associated snapshot from the plug-in view

Plug-Ins in Preview Mode

Recalling a snapshot that contains plug-in data affects the offline (Preview) routing and bypass state of the plug-in only; the online plug-in parameter settings are not recalled, and the online mix is not affected.

The following plug-in functions are available offline in Preview mode:

- Plug-in routing can be changed
- Plug-in rack view can be changed
- Plug-ins can be added to a snapshot to capture its current online parameter settings and (Preview mode) routing

The following plug-in functions are not available while in Preview mode:

- Plug-ins cannot be added to or removed from rack slots
- Plug-in presets cannot be recalled or saved
- Plug-in parameters cannot be changed (you cannot open plug-in windows while in Preview mode)
- Plug-ins cannot be installed

For more information, see **Adding Plug-In Data to Snapshots**.

MIDI in Preview Mode

Incoming MIDI or MTC continues to trigger snapshot recall while in Preview mode. However, MIDI messages stored to snapshots are not sent out when a snapshot is recalled in Preview mode. For more information, see **Adding MIDI Data to Snapshots**.

MTC and Other Online Event Triggers

While in Preview mode, triggers that occur in the online state of the system are executed, including MTC-driven recall of snapshots. Triggers caused by changes to the offline (Preview) controls are ignored and do not cause events to occur. For more information, see **Events.**

Adding MIDI and Plug-In Data to Snapshots

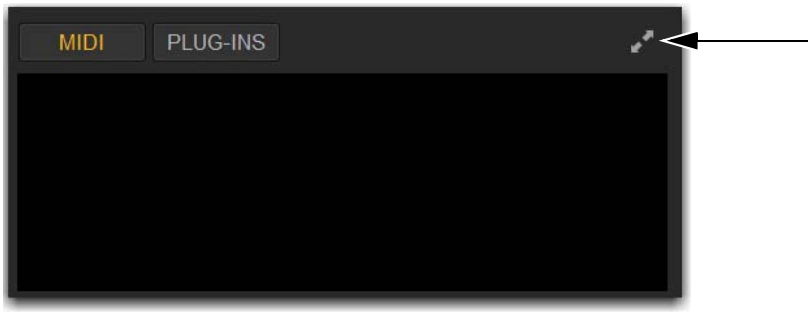
You can add MIDI and plug-in data are added to snapshots using the MIDI/Plug-In list. Open the list to add and edit data. You can expand the list for a larger view of list items.

To open the MIDI/Plug-Ins list:

- On the Snapshots page, select the MIDI or PLUG-INS button.

To expand the To open the MIDI/Plug-Ins list:

- Select the Expand button.



MIDI/Plug-Ins List Expand button

Adding MIDI Data to Snapshots

When the MIDI data type is scoped for a snapshot, any stored MIDI messages are sent when the snapshot is recalled.

The following MIDI messages are supported and available in the MIDI list:

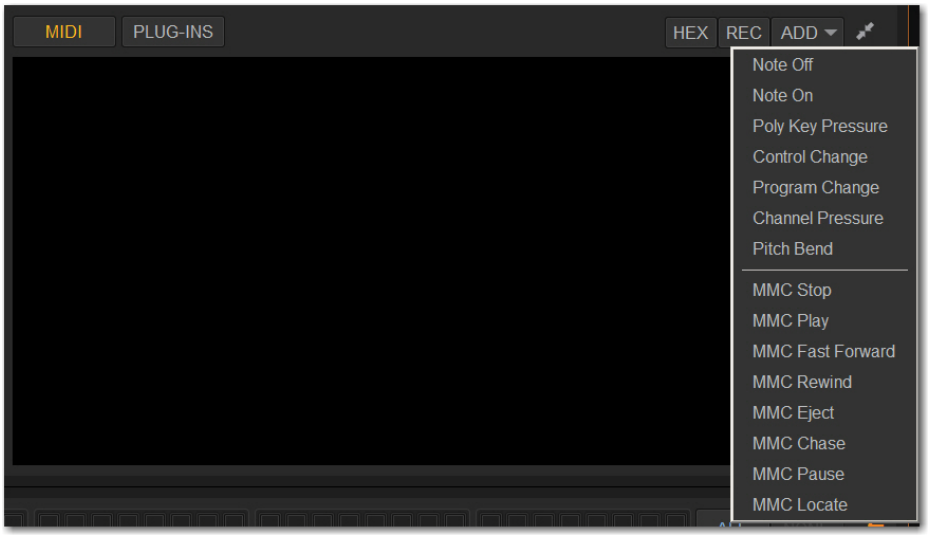
- Note Off
- Note On
- Poly Key Pressure
- Control Change
- Program Change
- Channel Pressure
- Pitch Bend
- MIDI Machine Control Stop
- MIDI Machine Control Play
- MIDI Machine Control Fast Forward
- MIDI Machine Control Rewind
- MIDI Machine Control Eject
- MIDI Machine Control Chase
- MIDI Machine Control Pause
- MIDI Machine Control Locate

When the MIDI data type is scoped for a snapshot, its MIDI messages are sent when the snapshot is recalled.

No MIDI message data is captured when a snapshot is first created. MIDI messages are added to existing snapshots directly from the MIDI pop-up menu. You can store up to 20 MIDI messages in each snapshot.

To add a MIDI message to a snapshot:

1. Target the snapshot you want to modify.
2. Select the Expand button.
3. Select Add and choose a message from the pop-up menu.



Snapshot MIDI pop-up menu

The MIDI lights in the Snapshots list for each snapshot that contains MIDI messages.

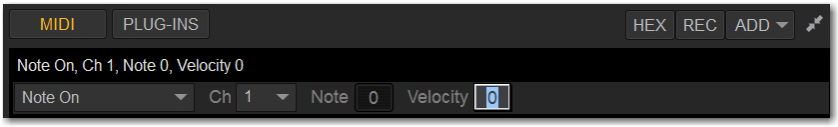
Lit and unlit MIDI icons in the Snapshots list

To record incoming MIDI data to a snapshot.

1. Select REC.
2. Send a supported MIDI command.
3. Select REC again when done.

To edit a MIDI message in the MIDI list:

1. Double-select the message text to display the pop-up menu bar for the message.



Editing a MIDI message in the snapshot MIDI list

2. Choose the message name and send channel or device ID from the pop-up menus.
3. Enter the message values in the text fields or drag up or down across the text field to change the values.
4. Select in the MIDI list area to dismiss the pop-up menu bar.

To remove a MIDI message from a snapshot:

- Touch-and-hold the MIDI message in the MIDI list and choose Delete.

Viewing MIDI Messages in Hexadecimal Format

You can toggle the view of MIDI messages in the MIDI list between hexadecimal and decimal formats.

To toggle the view format of the MIDI list:

- Select the Hex button in the MIDI/Plug-Ins list header.

Safing MIDI Message Output

You can temporarily disable output of embedded MIDI messages so that they are not sent when a snapshot is recalled, even when the MIDI data type is scoped.

MIDI output is automatically suspended while in Preview mode.

To safe MIDI message output on-screen:

1. Go to the Snapshots page and select the Recall Safe tab.
2. Select the MIDI global output Safe button above the parameter matrix so that it lights.

Adding Plug-In Data to Snapshots

When the Plug-In data type is scoped for a snapshot, plug-in routing, in/out state, and settings are recalled with the snapshot. (Adding or changing plug-in side-chain routing is not supported in snapshots.)

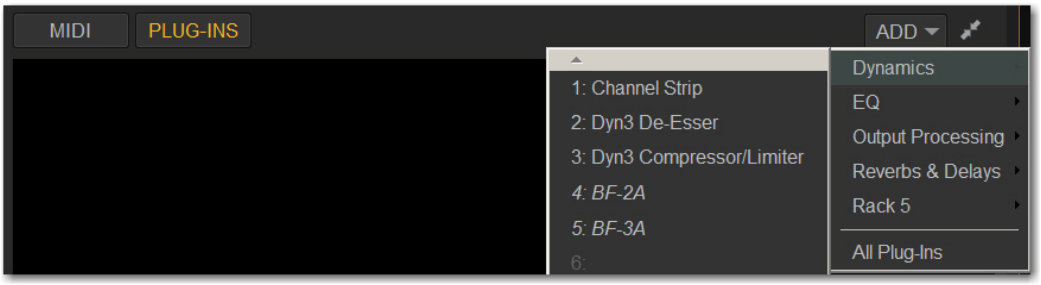
The Snapshots Plug-Ins list lets you select multiple plug-ins and add, remove and update them simultaneously across one or more snapshots. Multiple snapshots can be selected, and others can be added to or removed from the selection, at any time prior to adding, removing, or updating plug-ins and snapshots.

No Plug-In data is captured when a snapshot is first created. Plug-In data is added to existing snapshots from the Plug-Ins list or from the Plug-In rack.

Adding Plug-Ins to Snapshots

To add a plug-in to one or more snapshots from the Snapshots page:

1. Select one or more snapshots in the Snapshots list.
2. Select the Expand button in the MIDI/Plug-Ins list to expand the Plug-In list.
3. Select the ADD button within the Snapshot Plug-Ins list and select a plug-in (or All Plug-Ins) from the menu.



Snapshot Plug-In list

To add a plug-in to snapshots from the Plug-Ins page:

1. Select one or more snapshots in the Snapshots list.
2. Go to the Plug-Ins page.
3. Select the Snapshots menu for the plug-in to be added and choose Add This Plug-In To Selected Snapshots. The selected plug-in is added to the currently targeted snapshot, as well as all other snapshots within the multi-selection.

Snapshots within the multi-selection that already contained the plug-in being added are unaffected and preserve any previously stored settings.

Removing a Plug-In from Snapshots

To remove a plug-in from snapshots from the Snapshots page:

1. Select an individual snapshot, or create a multi-selection of snapshots in the Snapshots list.
2. Select the Snapshots Plug-Ins icon to show the Snapshots Plug-Ins list.
3. Touch-and-hold a plug-in within the plug-in list of the currently targeted snapshot and choose Remove This Plug-In From Selected Snapshots.

To remove a plug-in from snapshots from the Plug-Ins page:

1. Select one or more snapshots in the Snapshots list.
2. Go to the Plug-Ins page. All plug-ins that are associated with any of the currently selected snapshots are identifiable by a red Snapshot selector.
3. Select the red Snapshot selector for the plug-in to be removed and choose Remove This Plug-In From Selected Snapshots.

The selected plug-in is removed from the currently targeted snapshot, as well as all other snapshots within the multi-selection. Only snapshots within the multi-selection that contain the selected plug-in are affected.

Updating a Plug-In Across Snapshots

To update a plug-in across snapshots from the Snapshots page:

1. Select one or more snapshots in the Snapshots list.
2. Select one or more plug-ins (shift-select) within the plug-in list of the currently targeted snapshot

Snapshots plug-ins pop-up menu with multiple plug-ins selected in the Snapshots Plug-Ins list

3. Touch-and-hold the desired plug-in within the plug-in list and choose Update Plug-In In Selected Snapshots.

To update a plug-in across multiple snapshots from the Plug-Ins page:

1. Select one or more snapshots in the Snapshots list.
2. Go to the Plug-Ins page. All plug-ins that are associated with any of the currently selected snapshots are identifiable by a red Snapshot selector.
3. Select the Snapshot selector for the plug-in to be updated and choose Update This Plug-In In Selected Snapshots.

The selected plug-in is updated within the currently targeted snapshot, as well as all other snapshots within the multi-selection. Snapshots within the multi-selection that do not already contain the plug-in being added are unaffected.

Editing Plug-Ins

The Snapshot page provides two ways to quickly navigate to a plug-in to edit its routing assignment or parameters.

To edit a plug-in associated with a snapshot:

- Double-tap the item in the Snapshot Plug-Ins list. Or, in the Snapshots Plug-Ins list touch-and-hold a plug-in and choose Edit Plug-In.

Adding Tempo Data to Snapshots

The Snapshots list can be toggled to display Tempo, along with a Tempo On/Off indicator for each snapshot entry.

Storing a tempo with snapshots lets your system tempo change per song or scene. This lets you take full advantage of Tempo Sync (aka Tap Tempo) to synchronize delay and echo plug-ins. The System Tempo is set on the Options > Misc page. For details on configuring the system tempo and using it to synchronize plug-ins, see **Tap Tempo for Plug-ins**.

Displaying Tempo in the Snapshots List

To show Tempo in the Snapshots list:

- Touch-and-hold anywhere in the Snapshots list and choose Show Tempo.

  Tempo is displayed in BPM (beats per minute) or milliseconds, as set in the Options > Misc page.

To change the units for Tempo display:

1. Go to the Options > Misc page.
2. In the Tap Tempo section, select BPM or ms.

Assigning and Enabling a Tempo

Each snapshot can store a custom tempo value. You can manually enter a custom tempo, or use a shortcut to assign the current System Tempo.

You can use the Tempo Enable icon to enable or disable tempo recall when the associated snapshot is recalled.

To assign a Tempo value to a snapshot manually:

1. In the Snapshots list, double-tap the Tempo value you want to change, then do one of the following:
   - From the keyboard, type a new tempo value.

   – or –

   - Press the Up and Down Arrow keys to increase and decrease the selected value.
2. Press Enter or select another snapshot Tempo value to confirm the entry.

To assign the current System Tempo to a snapshot:

1. Make sure Tempo is shown in the Snapshots list.
2. Touch-and-hold and choose the Set Tempo to option, which will display the current System Tempo.

To toggle tempo on/off for each snapshot:

1. Make sure Tempo is shown in the Snapshots list (if not, touch-and-hold any item in the list and choose Show Tempo).
2. Select the Tempo icon. The icon lights when tempo is enabled.

The current tempo and a lit Tempo icon in the Snapshots list

Adding Pro Tools Markers Using Snapshots

With VENUE Link enabled, you can set individual snapshots to create a new Marker in the Pro Tools Timeline. While Pro Tools is recording, whenever that snapshot is recalled, a new Marker is created and named according to the recalled snapshot.

See **Creating a Pro Tools Marker from a Snapshot.**

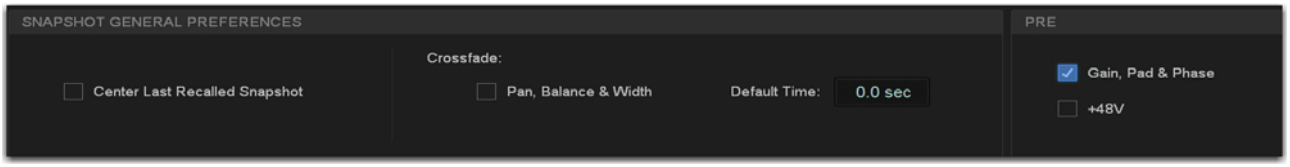
Displaying the Marker Icon

To show Markers in the Snapshots list:

- Touch-and-hold anywhere in the Snapshots list and choose Show Markers.

A lit Markers icon indicates that recalling that snapshot will create a new Marker in the Pro Tools timeline when Pro Tools is recording.

Snapshot Options



Snapshot options

Crossfade Time

You can set the X-fade (crossfade) time for the channel faders between snapshots from 0–99.9 seconds, in 0.1 second increments. This value determines the *fade time*, or the time it takes for the faders to move to their new positions when a snapshot is recalled.

All other controls are unaffected by the crossfade time, and are updated instantly when a snapshot is recalled. Each snapshot may be assigned its own crossfade time. In addition, crossfades will continue through a subsequent snapshot recall as long as the cross-fading channels are not scoped in the incoming snapshot.

Default Crossfade Time

The default crossfade time assigned to new snapshots can be set with this option, with a possible range of 0–99.9 seconds.

To set the Default Crossfade Time:

1. Go to the Options page and select the Snapshots tab.
2. Under Snapshot General Preferences, enter a value or drag in the text box and press Enter.

Crossfade Bypass

Snapshot crossfades can be up to 99.9 seconds. You can quickly bypass (cancel) a crossfade and immediately advance to the stored snapshot fader settings in order to speed up rehearsals, or whenever on-stage action moves faster than a programmed crossfade.

To bypass a snapshot crossfade:

- Recall the same snapshot at any point during the crossfade. Doing so recalls the entire contents of that snapshot, in addition to bypassing the crossfade. This is equivalent to recalling the snapshot with an effective crossfade time of 0 seconds. Any scoped parameters which were manually changed during the crossfade time will be reset to the values stored in the snapshot.

Special Cases for Crossfade Bypass

Incoming MIDI Commands

The snapshot crossfade is not bypassed if a MIDI Program Change message recalling the same snapshot is received during the crossfade.

MTC

The snapshot crossfade is not bypassed if a MTC trigger recalling the same snapshot occurs during the crossfade.

Multiple Simultaneous Crossfades

The crossfade can be bypassed for the most recently recalled snapshot only.

Preview Mode

If you enter Preview mode in between Recall commands, the offline (Preview mode) crossfade will be bypassed; the online crossfade will not.

Pre Settings

Snapshots can be used to recall the preamplifier settings on inputs for all scoped input channels. You can set any of the following Pre parameters to be recalled by the Pre data type button: Gain, Pad and Phase/polarity, +48V (Phantom Power), HPF corner frequency and in/out state.

To set the Pre parameters recalled by the Pre Data Type button:

1. Go to Options > Snapshots.
2. Under Pre, select the options you want to include. Selected items will be affected when the Pre data type is included in the scope of a snapshot.

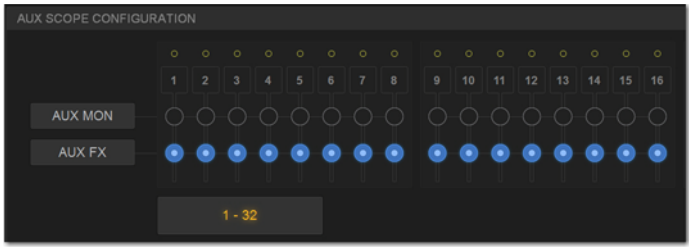
Classifying Aux Sends

You can classify Aux Sends as *monitor sends* (“Aux Mon”) or as *effects sends* (“Aux FX”), which lets you scope each type separately from the Snapshots tab of the Options page.

This option is only a means of organizing Aux Sends for snapshot control, and does not directly affect Aux bus operation.

To classify Aux Sends for snapshot scope:

1. Go to the Options page and select the Snapshots tab.
2. For each Aux Send bus or bus pair, select the Aux Mon or Aux FX buttons to classify it as a monitor send or effects send, respectively.



Classifying Aux Sends

Aux Pre/Post State

Select this option to include the pickoff point pre-fader or post-fader state of each Aux Send in snapshots.

Recall Safe

Recall Safe lets you select which parameters on which channels you want to be “safed” from snapshots. Recall Safe is global to all snapshots, can be turned on or off quickly, and provides preset capabilities in the form of Scope Sets. Scope Sets can be loaded and saved just like Presets for built-in EQ, dynamics, and plug-in settings. Current Recall Safe settings are stored with the Show file.

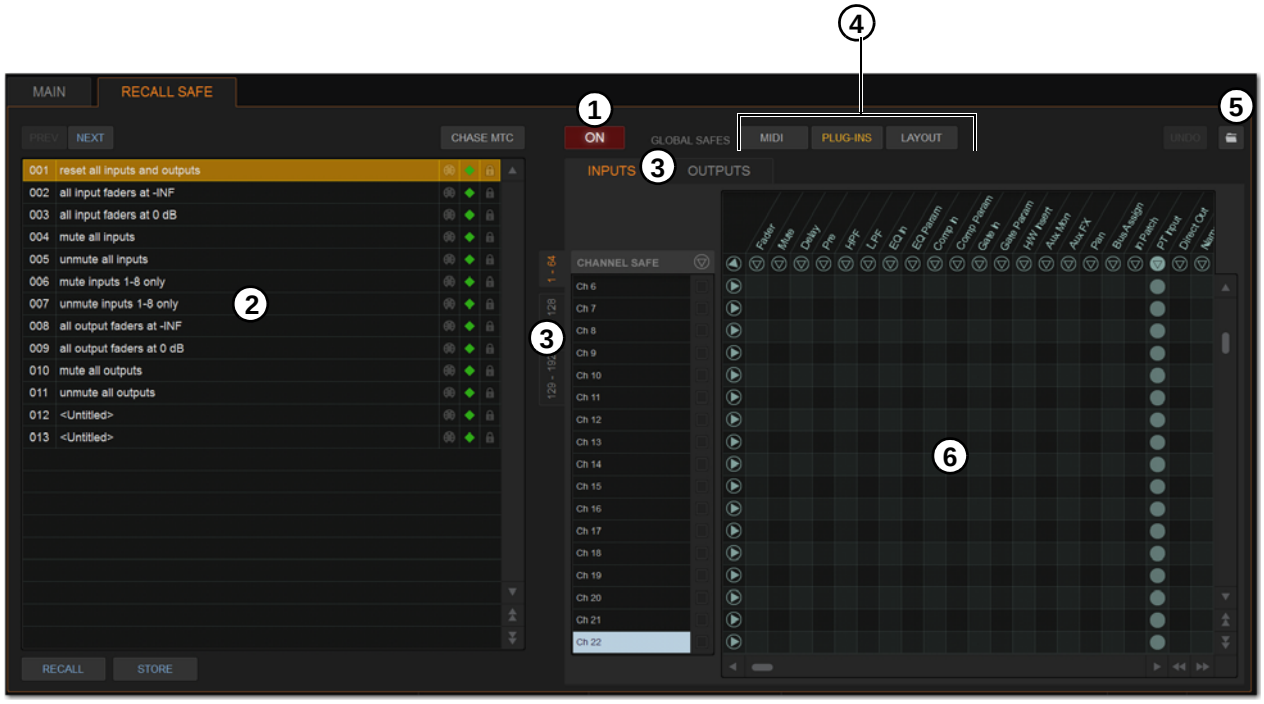
Individual channels can be safed from all effects of snapshot recall using channel Automations Safe. See **Managing Snapshots.**

To access Recall Safes:

1 On the external screen, go to the Snapshots page and select the Recall Safe tab. The Recall Safe tab is red when Recall Safe is on and in effect, and gray when Recall Safe is off or when nothing is safed.

Indication of active Recall Safe from the main Snapshots page

Recall Safe Displays and Controls



Displays and controls in the Recall Safe tab

1 – On

The master On button toggles the entire Recall Safe feature on or off globally. When lit (blue), Recall Safe is active. When dark, Recall Safe is suspended.

2 – Snapshot List, Recall and Store

The Snapshot list and its Recall and Store functions remain visible and available from the Recall Safe tab at all times.

3 – Channel and Channel Type Tabs

The Inputs and Outputs tabs at the top of the parameter matrix selects the channel type whose safe status you want to view or edit. Along the left side of the parameter matrix are the Channel Type tabs, which change depending on whether you are viewing Input or Output tabs.

4 – Global Safe for MIDI Output, Plug-Ins, and Media

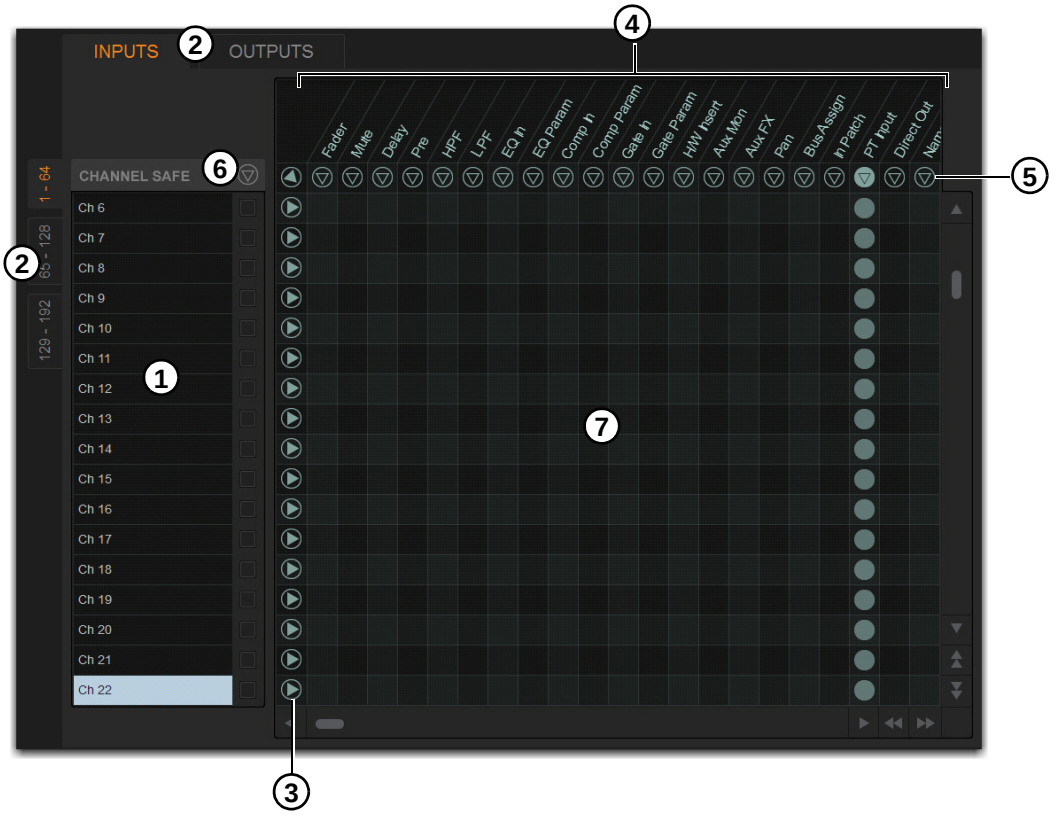
These checkboxes let you globally suspend recall of MIDI output, plug-in changes and/or Media page Transport commands. They are considered separate from the parameter matrix and do not follow the Recall Safe master On (or Off) status.

5 – Scope Sets

Scope Sets are presets for the Recall Safe tab that can be stored and loaded, just like plug-in, EQ and dynamics presets. Scope sets can be used as a template when creating new Shows, or used to change Recall Safe settings during a performance. Like other presets and settings files, Scope Sets can be transferred from the Filing page, making it easy to maintain and transfer Recall Safe configurations. For more information, see **Using Scope Sets**.

6 – Parameter Matrix

The parameter matrix is a scrollable grid in which you can safe parameters and channels. You can undo and redo parameter matrix operations.



Parameter matrix for Recall Safe

1 – Channels

2 – Channel Type Tabs

3 – Channel Icons

4 – Parameters

5 – Parameter Matrix Icons

6 – Channel Safe Button

7 – Grid

Parameters are represented in the columns of the parameter matrix; channels are listed along the left side in rows.

Selecting in the grid enables safe status for that parameter on that channel. Parameter and Channel grid icons provide shortcuts to quickly “safe all” parameters, and to safe entire channels. Selecting these icons lets you quickly toggle recall safe status for entire columns and rows. You can also use the master grid icon located in the upper left most corner to toggle the entire grid.

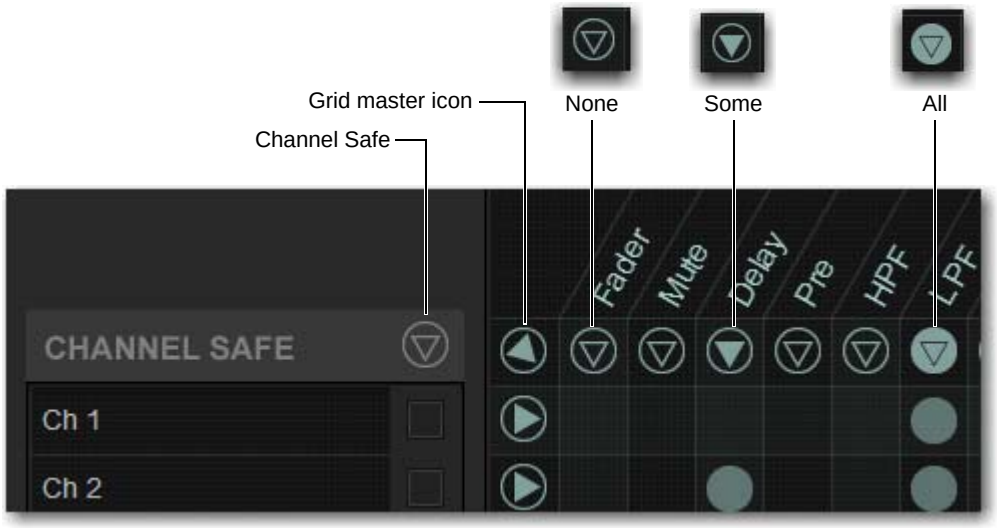
Parameter Matrix Icons

The display state of the Parameter and Channel grid icons indicate safe status for that column or row as follows:

None A dark Parameter or Channel grid icon indicates that no items in that column or row are safe enabled.

Some A dark triangle inside a lit blue circle indicates that at least one item in that column or row is safe enabled.

All A lit (white) triangle indicates that all items in that column or row are safe enabled.



Display states for grid icons in Recall Safe

Channel Safe Controls

The CHANNEL SAFE column acts as a global “all channel” setting or override, mirroring the Channel Safe switches and buttons (when in Channel Safe Switches act as Automation Safes mode).

Controls in the CHANNEL SAFE column are not part of the parameter matrix; they function *in addition to* the parameter matrix. As a result, you do not need to enable any CHANNEL SAFE settings to use the Recall Safe parameter matrix.

For more information, see **Managing Snapshots**.

Using Recall Safe

To access Recall Safe:

1 Go to the Snapshots page and select the Recall Safe tab.

2 Select a Channel Type tab to display the desired channels.

To safe individual parameters on specific channels:

- Select in the grid at the intersection of the appropriate parameter (column) and channel (row). A blue dot appears, indicating a parameter is safed.

Enabling recall safe for channel 1 fader

To safe multiple parameters or channels at a time:

- Touch and drag in a column, across a row, or at an angle.

To safe a parameter across all currently displayed channel types:

- Select the Parameter grid icon at the top of the appropriate column until the triangle is white.

To safe all parameters for a particular channel:

- Select the Channel grid icon in the ALL column for that channel (row).

To toggle the status of a parameter column or channel row:

- Select the appropriate Parameter or Channel grid icon repeatedly until it displays the desired status. For more information, see **6 – Parameter Matrix**.

To safe all parameters across all channels and clear any current settings:

- Select the triangular icon at the top of the ALL column.

You can undo or redo the last action taken in the parameter matrix.

Channel Safe

To automation safe an individual channel and retain all recall safe settings for that channel:

- Select in the CHANNEL SAFE column for the desired channels.

A channel (row) Channel Safe button does not need to be lit in order to Recall Safe individual parameters for that channel.

To automation safe all parameters across all channels and retain all current recall safe settings:

- Select the CHANNEL SAFE master icon at the top of the Channel Safe column.

The Channel Safe column mirrors the channel automation Safe controls. For more information, see **Managing Snapshots**.

MIDI

When engaged, this button prevents the MIDI data stored in the snapshot from being sent. This does not affect sending of Bank Select and Program Change commands with the Snapshots Send on Channel option (Options > Snapshots > MIDI).

To enable Recall Safe for MIDI Snapshot output:

- Select the MIDI Snapshot Output Safe button, located above the parameter matrix.

For more information, see **Adding MIDI Data to Snapshots**.

Plug-Ins

When engaged, this button prevents plug-in control settings, in-circuit state, and routing from being recalled.

To enable Recall Safe for plug-ins:

- Select the Plug-In Snapshot Safe button, located above the parameter matrix.

For more information, see **Adding Plug-In Data to Snapshots**.

Media

When engaged, this button prevents USB 2-track record and playback transport commands for from being recalled.

To enable Recall Safe for USB 2-track Transport controls:

- Select the Media Snapshot Safe button, located above the parameter matrix.

For more information, see **Adding Tempo Data to Snapshots**.

Matrix

Snapshots can store and recall all source assignments of each matrix mixer when the Matrix data types is scoped. In addition, all User Input assignments are stored, letting you reconfigure Matrix mixers and User Input assignments on a per snapshot basis, if desired.

The Recall Safe tab provides two data “Mix” data types that let you discretely “safe” source and/or user input assignments to prevent them from being changed with a snapshot recall.

The following table describes what can be stored and recalled in each snapshot when the Matrix data types is scoped.

Table 3. Snapshot data types and parameters for Matrix mixers

Snapshot Data Type	Included Parameters (for Each Scoped Channel Strip)
Matrix	Mixer Input Sources, User Input Assignments (global to all Matrixes), and pickoffs; Mixer Input level, Mixer Input on/off and Mixer Input Link

Using Scope Sets

The configuration of the Recall Safe tab can be stored as a Scope Set settings file. Scope Sets can be previewed, recalled and transferred just like plug-in, EQ and dynamics settings.

To store the current Recall Safe settings as a Scope Set:

1 Configure the Recall Safe tab as desired.

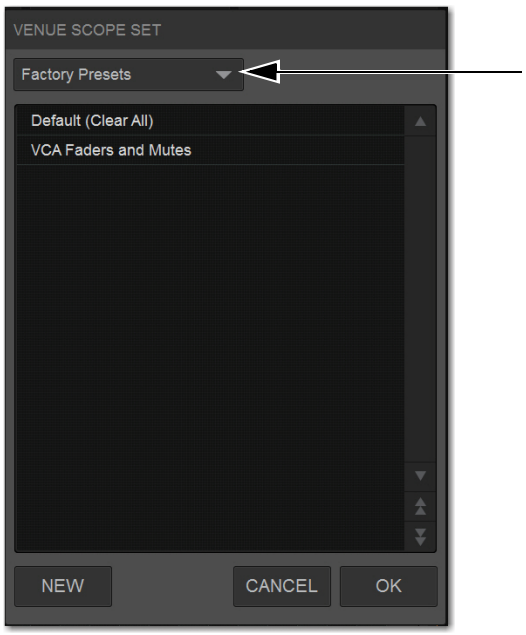
2 Select the Scope Sets icon (the folder icon located above and to the right of the parameter matrix).

3 Select New.

To preview and recall a saved Scope Set:

1 From the Recall Safe tab, select the Scope Set icon to display the Scope Set window.

2 If necessary, choose the appropriate Scope Sets folder by selecting it from the Folder selector.



Scope Sets Folder selector

3 Do any of the following:

- To preview an existing Scope Set, select its name in the Scope Sets window.
- To load the currently selected Scope Set, press Enter or select the Close box (X) in the Scope Sets window title bar.
- To cancel without changing Recall Safe settings, select Cancel.

See **Filing** *for complete information on transferring system data.*

Automation Safing Channels

Automation Safing a channel lets you suspend the effect of snapshots on all parameters of the channel. You can Automation Safe channels using the Channel Safe switches, the Channel Knob Module (CKM) in Channel Control mode, or the Channel Menu. To Automation Safe channels using the Channel Safe switches, you must first enable Automation Safe mode.

Automation Safing Using the Channel Safe Switches/Button

The Channel **Safe** switch on the S6L control surface and the Channel Safe button on the external software screen toggle Automation Safe for that channel when Automation Safe mode is enabled. Automation Safe Mode is enabled globally for input and output channels on the Options > Interaction page of the external screen.

To enable Automation Safe for the Channel Safe switches:

1 On the external screen, go to the Options > Interaction page.

2 In the Channel Safe Switches section, under Inputs and Outputs, select Automation Safes as desired.

You can create an event that lets you cycle through the various Channel Safe switch modes, as well as suspend or disable Automation Safe. See **Creating Events**.

To Automation Safe channels using the Channel Safe switches:

1 Make sure you have enabled Automation Safe for the Channel Safe switches.

2 On the S6L control surface, do the following:

- Bank the desired channel to the faders.
- Press **Safe** for the channel you want to Automation Safe.

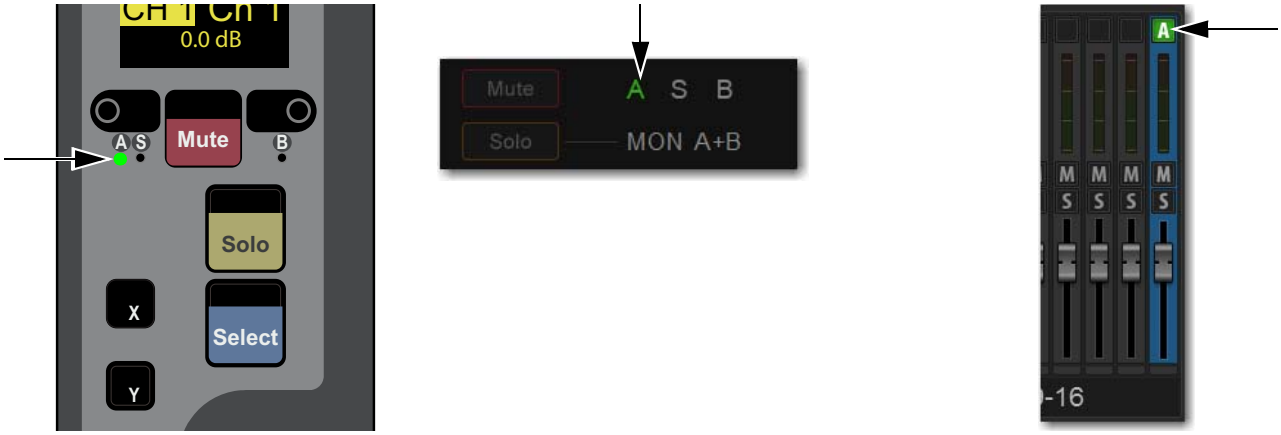
S6L Channel Safe switch engaged

3 On the external screen, do the following:

- Go to the Inputs or Outputs page, and navigate to the desired channel using the provided tabs and buttons.
- Select the Channel Safe switch for the desired channel, located at the top of each fader strip.

Automation Safe status for the channel is indicated as follows:

- On the control surface channel strip, the **A** LED lights green.
- In the Input section of the MTS and CTM Channel view for the channel, **A** lights green.
- On the external screen the Safe button flashes green and shows the letter B (A appears if the switch is acting as an Automation Safe, and S appears if it is acting as a Solo Safe).



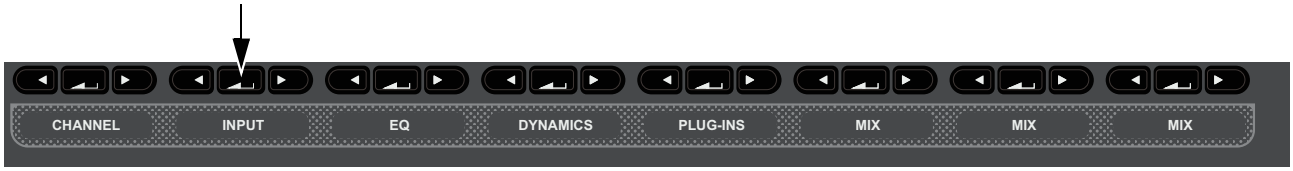
Indications that a channel is Automation Safed on the channel strip (left) the MTS/CTM Channel view (center) and on the external screen (right)

Automation Safing Using the Channel Knob Module (CKM)

To Automation Safe a channel using the CKM:

1 Bank the desired channel to the faders.

2 Press the **Select** switch for the channel you want to Automation Safe so it lights, then press the **INPUT** Channel Control Function switch so it lights.



CKM Channel Control Function Switches

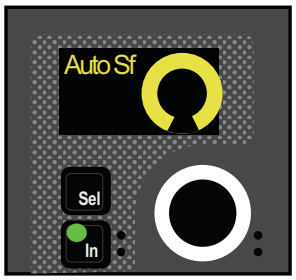
– or –

- Touch the channel's Input touch zone on the associated Channel Touch Module (CTM).

Input touch zone on the CTM in Meters view (left) and in Channel view (right)

Input parameters are assigned to the associated CKM.

3 Locate the Automation Safe encoder, indicated by Auto Sf on the encoder display, and press the encoder.
The encoder **In** switch lights green, and the channel is Automation Safed.



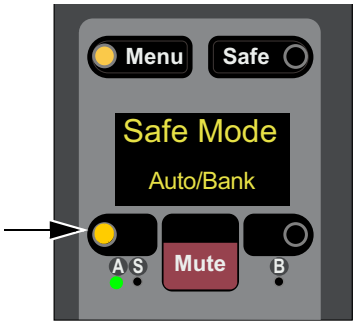
Automation Safe parameter on a CKM encoder

Automation Safing Using the Channel Menu

You can Automation Safe a channel using the Channel Menu when a different Safe mode (such as Bank and/or Solo Safe) is enabled for the Channel Safe switches.

To Automation Safe a channel using the Channel Menu:

1. Bank the desired channel to the faders.
2. Press the **Menu** switch for the channel you want to Automation Safe until Safe Mode appears in the channel display. The Safe modes enabled by the Left and Right Channel Menu switches are shown below Safe Mode.
3. Press the Left Channel Menu Switch so it lights to Automation Safe the channel. The **A** LED lights green.



Right Channel Menu switch engaged

Snapshot Data Types and Parameters

Table 4. Snapshot data types and parameters included in each data type

Snapshot Data Type	Included Parameters (for Each Scoped Channel Strip)
Fader	Main volume level
Mute	Mute state for explicitly muted channels, and channels muted via VCA mute (Mute Group state is not snapshottable)
EQ	EQ type selection (analog/digital); EQ in-circuit state; Band gain, freq, Q, bell/shelf selection (digital only), band on/off
Dyn	Compressor/Limiter in-circuit state; threshold, ratio, attack, release, knee, makeup gain Expander/Gate in-circuit state; threshold, ratio, attack, release, hold time, range, side-chain input
Pan	Channel pan or balance/width Pan or balance/width for each Group bus returning back to L–R
Bus	Group bus assignments, group bus mono/stereo-linked state (if mono groups) or dual-mono/true stereo state (if stereo groups), L–R bus assignment and C/M bus assignments for input strips and groups
In	Input routing for input channels.
Out	Main out assignments; direct out assignments, level, in-circuit state, & tap-off point (excluding VCAs)
H/W	Hardware Insert routing and in-circuit state (excluding VCAs)
VCA	VCA membership
Pre	Gain, pad, phase, phantom power, HPF corner frequency & in-circuit state
Name	Name for each strip
MTX	Mixer Input Sources, User Input Assignments, and pickoffs; Mixer Input level, Mixer Input on/off and Mixer Input Link state
LAYT	User Layout
Aux Mon	On/off, pre/post selection, level, and pan/balance for each Aux bus classified as a Monitor Aux
Aux FX	On/off, pre/post selection, level, and pan/balance for each Aux bus classified as an FX Aux
Dly	Channel delay time & in-circuit
MIDI	All MIDI messages that were added to the associated MIDI list for that snapshot.
Plug-Ins	Rack slot settings, in-circuit state, and I/O routing for each plug-in added to plug-ins list for that snapshot

Patchbay

The Patchbay is used to assign Input and Output Channels, Direct Outputs, and Inserts to hardware inputs and outputs. The Patchbay also provides the ability to name input and output channels and to export your patchlist.

Accessing the Patchbay

To show the Patchbay screen:

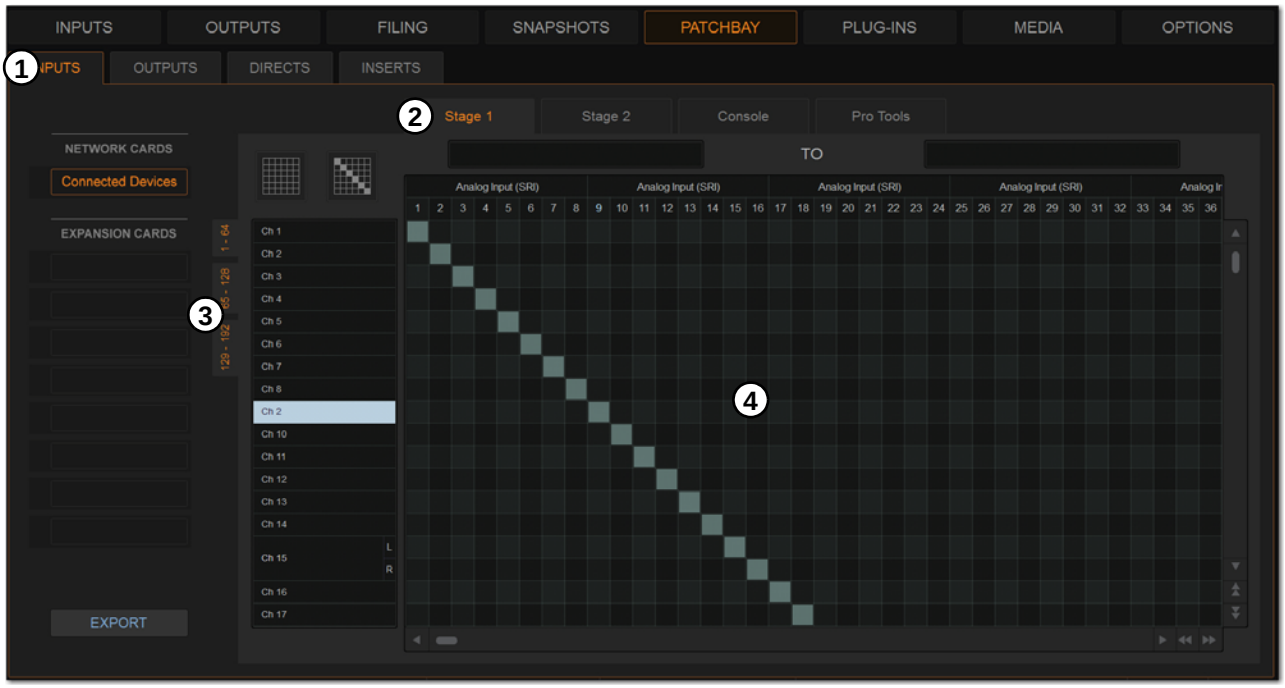
- Select the Patchbay button on the external screen.

To jump to the Patchbay from the Inputs and Outputs screens:

- Select the channel routing indicator, right below the channel name display. The screen automatically jumps to the corresponding Patchbay screen (whether an input, output, or bus).

Overview of the Patchbay

The Patchbay screen lets you patch hardware I/O to input and output channels. The Patchbay consists of the following sets of tabs and controls:



Patchbay page (Inputs tab shown)

1 – I/O Tabs

2 – Hardware Tabs

3 – Channel Type Tabs

4 – Patching Grid

I/O Tabs

Select these tabs to display and patch Inputs, Outputs, Directs (Direct Outputs), or Inserts. Other options in the Patchbay screen change to reflect the currently selected I/O tab.

The Inserts tab lets you patch hardware inserts on input and output channels. See **Hardware Inserts** *for more information.*

Hardware Tabs

Select these tabs to display the hardware inputs and outputs available for the current I/O and Channel Type. These tabs represent the physical inputs and outputs of the system, as follows:

Hardware Tabs	Hardware Inputs	Hardware Outputs
Stage	Stage 64 analog and digital inputs	Stage 64 analog and digital outputs
Console	S6L control surface analog and digital inputs, and the built-in oscillator.	S6L control surface analog and digital outputs
Pro Tools	Assignable Ethernet AVB Inputs from Pro Tools (see **Using Pro Tools Assignable I/O** for more information).	Assignable Ethernet AVB outputs to Pro Tools (see **Using Pro Tools Assignable I/O** for more information).

Available hardware inputs and outputs are based on channel type selection, system configuration and hardware device status. See **Unavailable I/O**.

Channel Type Tabs

Select these tabs to select and display specific types of channels, as available for the currently selected I/O. The following table shows the available Channel Types for the current I/O.

I/O Tab	Channel Types available
Inputs	Input channels
Outputs	Mains, MTX (Matrixes), Auxes, Groups
Directs	Input and Output Channels
Inserts	Input and output channels.

Patching Grid

The patching grid shows hardware I/O across the top, and system channels down the left side. The available channel tabs and choices are determined by the currently selected I/O tab and Channel type(s). The grid squares represent patch points between hardware I/O and VENUE mixing channels.

Navigating the Patching Grid

To scroll through the channel list (vertically):

- Select a channel name at the left of the patching grid, then press the Up or Down Arrow keys on the keyboard.

To scroll through the hardware I/O list (horizontally):

- Select a hardware I/O channel at the top of the patching grid, then press the Left or Right Arrow keys on the keyboard.

To scroll the patching grid, do one of the following:

- Select the up/down or left/right patching grid scroll arrows to move square by square.
- Select the up or down patching grid double arrows to move screen by screen.
- Touch and hold in the patching grid and drag in any direction.

Navigating to Channel Types

The Patchbay uses multiple tabs to access different hardware I/O and channel types in the patching grid. For example, the Outputs tab provides sub-tabs of output channel types for you to patch these different outputs independently.

Examples

To show output channels:

- Go to the Patchbay page and select the Outputs tab.

To show a specific type of output in the patching grid:

- In the Patchbay page, select the MAINS, MTX (Matrix), GRP, or AUX tabs. Press and hold Shift, then select multiple tabs to show multiple types at once.

To navigate to a different hardware source:

- Select the appropriate hardware tab across the top of the patching grid.

Visual Indicators and Displays

The Patchbay uses the following visual display conventions in all its tabs and pages.

Available I/O

When I/O is available for patching, the patching grid for the corresponding I/O lights.

Patched I/O

When a hardware connection is patched, its connection is dimmed in all Patchbay screens. This lets you see which hardware connections are in use without having to switch back and forth between Patchbay screens. You can also use the dimmed column number indicator to jump to the Patchbay page for the existing assignment (for more information, see **Shortcut for Locating Assignments**).

Unavailable I/O

The Patchbay displays hardware tabs for all possible configurations. For example, if your current configuration includes two Stage 64 I/O racks, three Stage tabs still appear in the Patchbay. Unavailable I/O for unconnected Stage 64 I/O racks and either unavailable and reserved Pro Tools I/O is indicated in the patching grid as follows:

Stage I/O Appears grayed out in the Patchbay under its corresponding hardware tab, and is italicized in all routing pop-up lists.

Pro Tools I/O When a Pro Tools computer is connected to the S6L control surface, system input channels with Stage inputs assigned to them are highlighted in purple under the Pro Tools hardware tabs in the Patchbay. This indicates that the Pro Tools I/O channels are reserved for use as direct digital splits to Pro Tools (outputs) or Virtual Soundcheck channels (inputs).

When a Pro Tools computer is not connected, all Pro Tools I/O is grayed out and unavailable in the Patchbay.

Patching Input Sources to Input Channels

You can patch inputs sources to input channels using the Patchbay on the external VENUE software screen.

Plug-in outputs can also be an input source. See **Routing Plug-Ins as Bus Processors (Effect Send/Return).**

The S6L system comes pre-loaded with Demo show files, which offer preset system configurations for some of the most common mixing scenarios, including pre-patched inputs. See **Loading a Show** *for instructions on loading Show files.*

To patch a single input source to an input channel:

1 On the external screen select Patchbay.

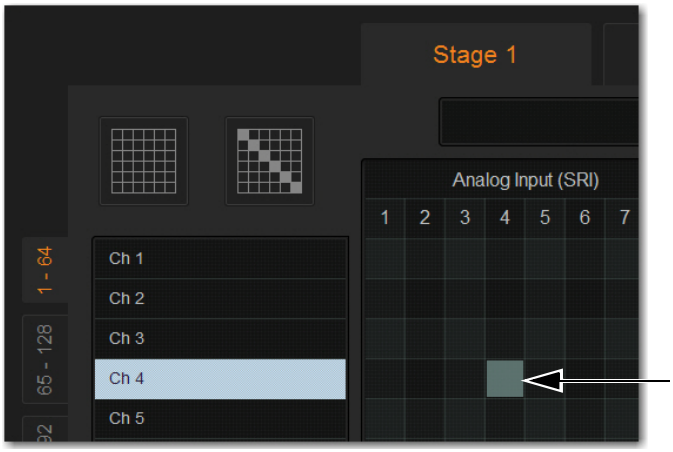
2 Select the Inputs tab.

3 To the left of the patching grid, select the range of input channels yo want to access in the patching grid.

Shift-touch any number of Channel Type and/or hardware tabs to select and display multiple tabs in the patching grid.

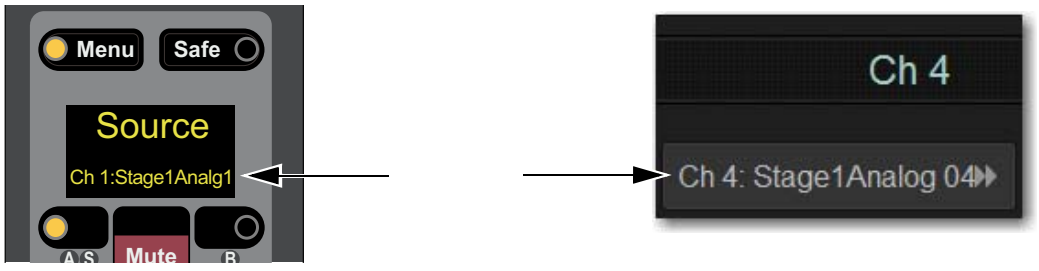
4 Along the top of the patching grid, select a hardware tab to display hardware input sources.

5 Touch in the row for the channel and in the column for the hardware source. Grid squares light when channels are patched.



A lit grid square showing a hardware input source patched to an input channel

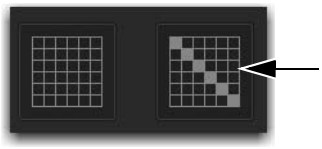
Channel source information is shown on-screen under the channel name on the external screen Inputs page, and on the MTS and CTM in Channel view. Channel source information is also shown on the control surface on the Channel Menu Source page in the channel display.



Channel Menu Source page (left) and Inputs page of the external screen (right)

To assign multiple channels in a single action, do either of the following:

- Touch, hold, and drag vertically, horizontally, or at an angle to assign multiple patch points in a single action.
- Select the Default Assignment button, and then select Assign in the confirmation dialog to assign all Stage inputs currently displayed in the channel grid to multiple consecutive input channels.



The Default Assignment button

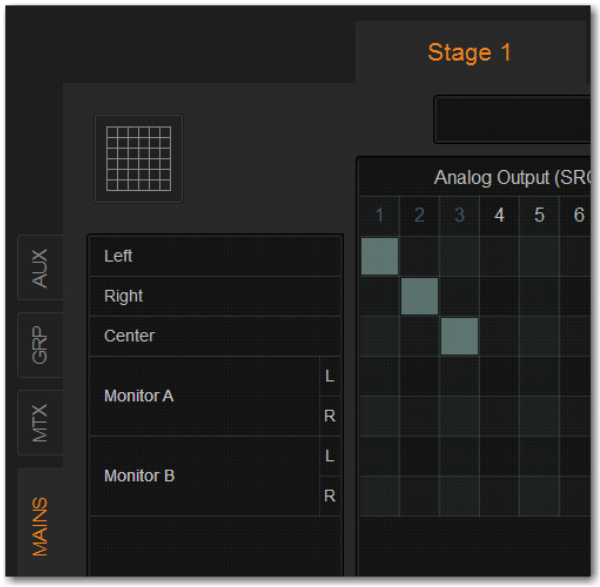
Patching Output Channels to Hardware Outputs

Mains, Auxes, Groups and Matrix Mixer outputs can be assigned to any hardware output on the system using the Patchbay. In the Patchbay, each S6L system component has a corresponding hardware tab that displays the available hardware output destinations, as follows:

Hardware Tabs	Component Hardware Outputs
Stage 1–3	Stage 64 analog and digital outputs
Console	S6L control surface analog and digital outputs
Pro Tools	Assignable Ethernet AVB outputs to Pro Tools (see **Using Pro Tools Assignable I/O** for more information).

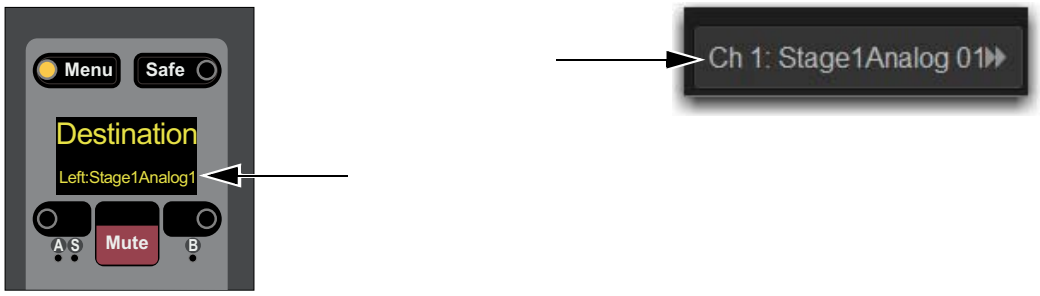
To assign an output channel to a hardware output from the Patchbay:

1. Go to the Patchbay and select the Outputs tab.
2. To the left of the channel grid, select the Mains, Mtx (Matrix), Grp (Groups), or Aux tab to display those output channels in the grid.
3. Along the top of the channel grid, select a hardware tab to display available hardware output destinations.
4. Touch in the row for the channel and in the column for the hardware destination. Grid squares light when channels are patched.



Mains patched to a Stage 64 hardware output

Channel destination information is shown on-screen under the channel name on the external screen Outputs page, and on the MTS and CTM in Channel view. Channel destination information is also shown on the control surface on the Channel Menu Destination page in the channel display.



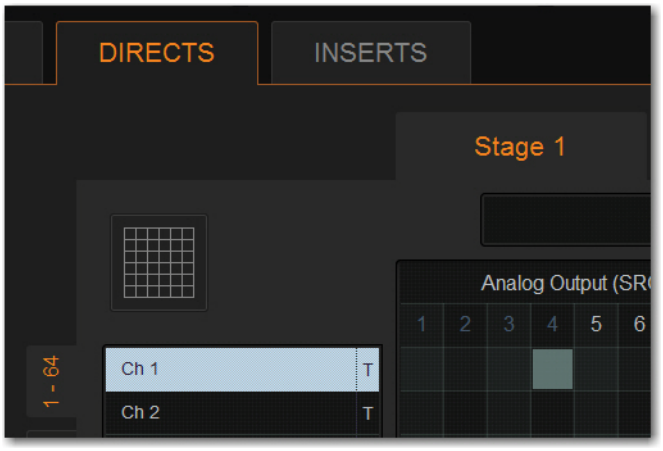
Channel Menu Source page (left) and Inputs page of the external screen (right)

Patching Direct Outputs

Direct Outputs of input channels, Auxes, Groups, Matrix Mixer, and Mains outputs can be assigned to any hardware output or Pro Tools output using the Patchbay Directs tab. Each hardware output destination may be fed by only one Direct Output signal (multiple Direct Output signals cannot be routed to a single output). You can choose the pickoff point for each channel's Direct Out.

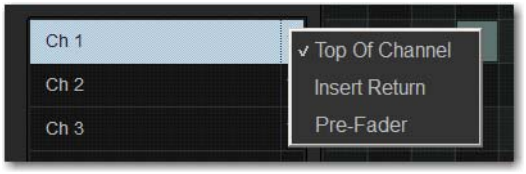
To assign a channel to a Direct Output:

1. Go to the Patchbay page and select the Directs tab.
2. To the left of the channel grid, select the Mains, Mtx (Matrix), Grp (Groups), or Aux tab to display those output channels in the grid.
3. Along the top of the channel grid, select a hardware tab to display available hardware output destinations.
4. Touch in the row for the channel and in the column for the hardware destination. Grid squares light when channels are patched.



Assigning a Direct Output in the Patchbay

5. Select the pickoff point for the Direct Output by selecting the letter to the right of the channel and choosing from the pop-up menu. See **Direct Output Pickoff Points.**



Selecting a Direct Output pickoff point in the Patchbay

Direct Output Pickoff Points

The “pickoff point” is the point in the signal path where the audio signal is picked off the main signal and sent to the Direct Output. The pickoff points for Direct Output signals are selected in the Directs tab of the Patchbay page. The following pickoff points are available for each type of channel or bus:

Pickoffs for Direct Outs

Channel Type	Available Pickoff Points
Input-channels	Top of channel Insert return Pre-or post-fader (configured globally)
Output channels	Top of bus Pre fader Post fader

Pickoff points for input channels are configured as pre-or post-fader globally.

Configuring Input Channel Pre-or Post-Fader Pickoff Points

Pickoff points for input channels are configured as pre-or post-fader globally.

To configure the Direct Output pickoff point for Inputs:

1. Go to the Options page and select the Pickoffs tab.
2. Under Input Channel Fader Pickoff Point, select Pre-Fader or Post-Fader.

Unpatching and Clearing Assignments

To unpatch a single channel in the Patchbay:

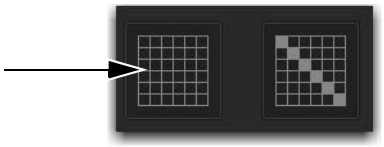
- Touch a lit square in the patching grid corresponding the channel you want to unpatch

To clear Patchbay Assignments:

1. Select the appropriate I/O tab, Channel Type tab, and Hardware tab.

   To clear all Input, Output, Direct, or Insert assignments, press and hold Shift, then select all Channel Type and Hardware tabs to select all pages.

2. In the top left corner of the patching grid, select the Clear Assignments button, and select Clear in the ensuing dialog. All Patchbay assignments for the selected Patchbay pages are cleared.



The Clear Assignment button

3. Repeat for other types of I/O as necessary.

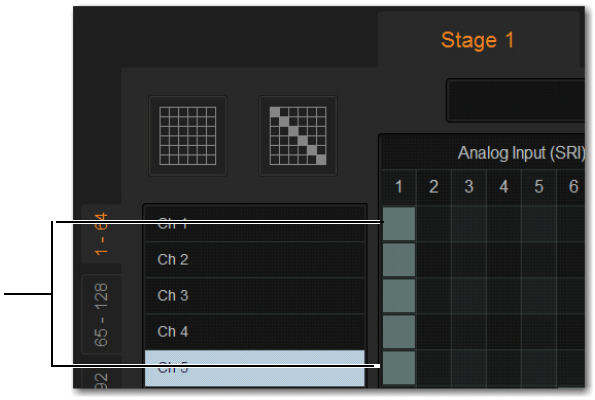
Multiple Input and Output Patching

A single hardware input source can be patched to multiple input channels in the Patchbay. An output bus can be patched to multiple hardware outputs.

⚠ *Multiple input sources cannot be assigned to a single input channel.*

To assign a hardware input source to multiple input channels:

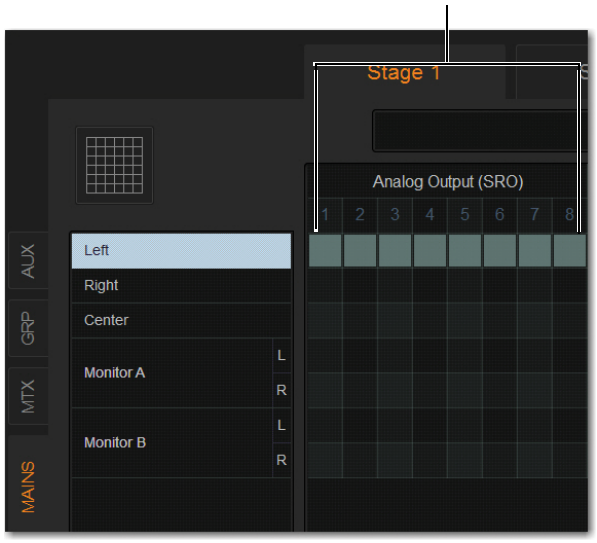
1. Go to the Patchbay page and select the Inputs tab.
2. Patch the input source for the first input channel.
3. Select additional grid squares in the same column to assign the source to additional channels so they are lit. The selected hardware input is patched to each of the assigned input channels.



A hardware input routed to multiple input channels

To patch an Output bus to multiple hardware outputs:

1. Go the appropriate Patchbay page and select the Output tab.
2. Patch assign the desired output channel to the first hardware output.
3. Select additional grid squares in the same row to assign the same output channel to additional hardware outputs. The selected output channel is assigned to all the assigned hardware outputs. An asterisk (*) appears at the end of the displayed destination to indicate the multiple routing.



Mains Left patched to multiple hardware outputs

Warning When Stealing Inputs or Outputs in the Patchbay

The Patchbay indicates hardware outputs that are already in use by dimming the column number for that physical output. In addition, a dialog is shown if the patch will steal a hardware input *or* output that is already in use, asking you to confirm or cancel the reassignment.

To confirm a reassignment, do one of the following:

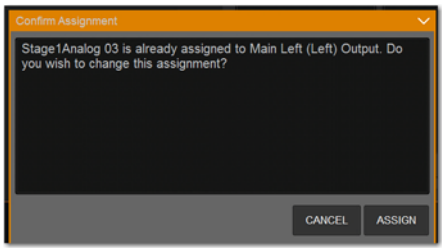
- Select Assign when prompted to confirm the reassignment.

  – or –

- Select again on the same patch point.

To cancel a reassignment, do either of the following:

- Select Cancel to leave the patchpoint unchanged.
- Select any other point in the grid (the Patchbay grid remains active, even when the Confirm Assignment dialog is open on-screen).



Warning when reassigning an output that is already in use

To suppress the reassignment warning dialog, hold Default (on the S6L control surface) or Alt (keyboard) while selecting in the patch grid to change the assignment.

Shortcut for Locating Assignments

Before reassigning in the Patchbay, you may want to double-check the existing assignment to the desired hardware output. This can be done quickly from within the Patchbay.

To identify the bus or channels currently assigned to a hardware output:

- Select any dimmed (already assigned) column number at the top of the Patchbay. The Outputs page containing the assignment is automatically revealed in the patching grid.

Naming Channels from the Patchbay

Channel names can be changed from the Patchbay. Channel names can be up to 32 characters in length. When shown in the displays on the S6L control surface, channel names are abbreviated to fit the displays.

To name or rename a channel from the Patchbay:

1. Double-tap the channel name at the top of the screen or in the column of the grid.
2. Type a new name and press Enter on the computer keyboard.

When naming channels from the columns of the grid, press Tab on the keyboard to go to the next channel; press and hold the Shift key and Tab to go to the previous channel.

Type Text Search

Type Text search lets you use the keyboard for fast navigation to a channel. You can enter the first characters of a channel name or the absolute channel number to target that channel.

To search for and select a channel:

1. Type the first few letters, full name, or channel number of the channel. For example, type “s” to go to the first channel beginning with the letter *s* (such as *Snare*).
2. Press the Tab key to cycle through and select any other channels beginning with that letter (such as *Snare Top*, *Snare Bottom*, or *Strings*).

Avoid giving channels names that begin with numbers different from the absolute channel number. When you type a number, VENUE navigates to absolute channel numbers regardless of the channel name.

Patch List Export

The Patchbay Export generates a patch list in an easily readable format.

To export Patchbay information:

1. Insert a USB storage device into any USB port on the S6L control surface.
2. Go to the Patchbay page and select the Export button.

Patchbay Export Information button

3. Do any of the following:
   - If you have more than one USB device connected, make sure the correct USB one is selected. If it is not, select Next Disk to cycle through until the correct one is selected.
   - Select Save to export info to the selected USB device.
   - Select Cancel to dismiss the dialog without exporting.
4. Select OK to confirm the export procedure. You can now remove the USB device and transfer the exported file to a personal computer for printing, formatting, and distribution.

When exporting a Patch list from the Standalone software, the generated HTML file is automatically opened using your default Internet browser (such as Internet Explorer, Mozilla Firefox or other).

Contents of Exported Patchbay Information

Exported Patchbay information is saved as an HTML file, and the file name includes the date and time of the export. Contents include the following:

VENUE Patch List

Show Name, file path, date and time of Show file.

Input and Output Patching (Stage, Console, and Pro Tools)

Stage I/O Hardware input and output numbers and the channel numbers or names are shown for each Stage 64 box.

Console I/O Hardware input/output types and numbers, and channel patch are shown.

Pro Tools I/O Pro Tools input and output channel numbers and channel patch are shown.

- Unavailable channels are labeled N/A.
- Direct outs are identified uniquely.

Plug-Ins

This chapter explains how to configure plug-ins before a performance, and how to use plug-ins during a performance. Plug-Ins can be inserted on all channels and bus outputs, or used as bus processors for effects such as reverb and delay.

S6L systems support 64-bit AAX DSP plug-ins only. For complete information on S6L-X-compatible plug-ins, visit the Avid website (www.avid.com).

Plug-Ins Quick Start

Before a performance, enable Config mode and do any of the following:

- Install plug-ins (see **Installing and Authorizing Plug-Ins**).
- Assign plug-ins to racks and rack slots (see **Plug-In Racks**).
- Assign plug-in input and output routing, including sidechain routing (see **Routing Plug-Ins**).
- View and adjust plug-ins from the S6L control surface or on-screen (see **Adjusting Plug-Ins on the External Screen**).
- Save and load plug-in settings as Presets, or with snapshots (see **Plug-In Presets and Snapshots**).

During a performance, do all of the following:

- Enable Show mode to “safe” (lock out) plug-in rack assignments and other plug-in rack operations that could interrupt a performance.
- Patch channels and busses to available plug-ins, re-assign plug-in routing, or re-assign existing side-chain routing.
- Adjust plug-in parameters from Channel Control, Global Control, or on-screen.
- Save and load plug-in settings as Presets, or within snapshots.

Using Config and Show Modes for Plug-Ins

The current system mode status (Config or Show mode) determines which plug-in functions are available.

Config mode is required to install plug-ins, assign them to rack slots, and to establish side-chain routing. When in Show mode, any operations that might interrupt audio throughput are locked out and unavailable.

Plug-In actions that interrupt audio require Config mode. For more information, see **Enabling Config Mode**.

Installing and Authorizing Plug-Ins

Plug-Ins are installed on your system using a USB drive. Plug-in installers are transferred to your USB drive, then installed on the S6L control surface

⚠ *Because installing plug-ins can interrupt audio throughput, always install plug-ins before a performance.*

Transferring Plug-In Installers to USB

To transfer plug-in installers to a USB drive:

1 Make sure there is enough free space on the USB drive to accommodate all the software.

2 Unzip the downloaded software by doing the following, depending on your computer platform:

Mac Double-click the ZIP file containing the software to unzip it.

Windows Right-click the ZIP file containing the software, select Extract All... from the pop-up menu, and in the ensuing dialog click Extract.

3 In the unzipped files, locate the “AAX Plug-Ins” folder.

4 Copy the entire “AAX Plug-Ins” folder to the top (root) level of the USB drive.

Installing Plug-Ins

To install a plug-in:

1 Put the system into Config mode.

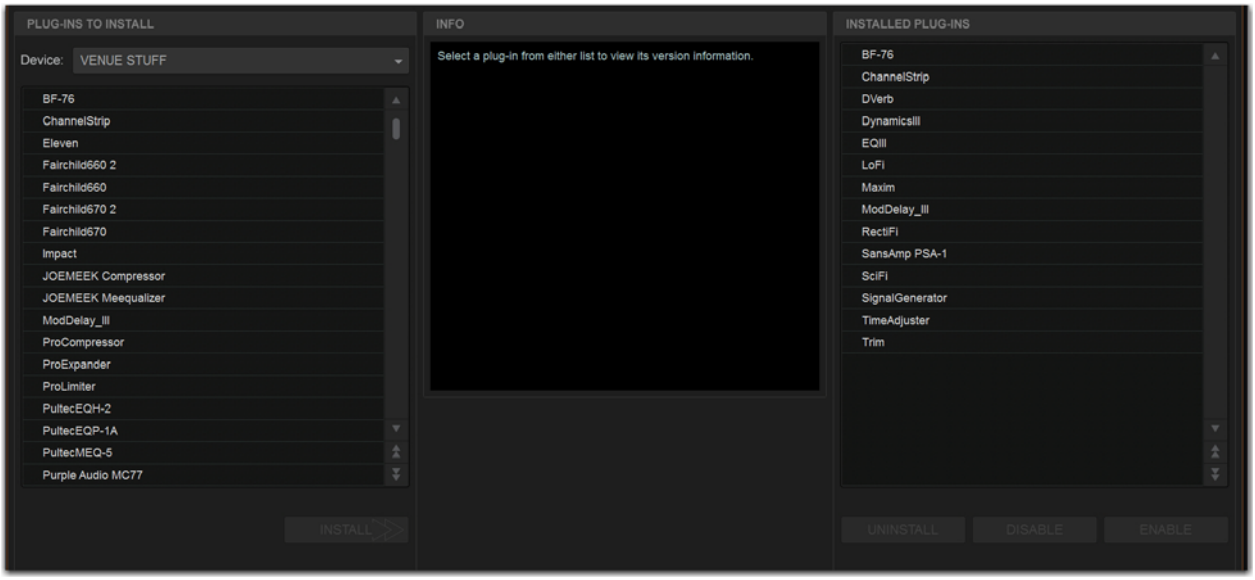
2 Insert the USB drive containing the plug-in installer(s) into an available USB port on the S6L control surface.

⚠ *Plug-Ins cannot be installed using the USB ports on the E6L engine.*

3 On the external VENUE software screen, go to the Options page and select the Plug-Ins tab. The following two lists are shown:

Plug-Ins to Install This list shows available plug-in installers. At the top of the list is the Device selector, which provides a pop-up menu of available media sources. Plug-In installers are stored locally after plug-in installation, and appear as available items when Previous Installs is selected from the Device selector. This lets you re-install plug-ins without the original plug-in installer.

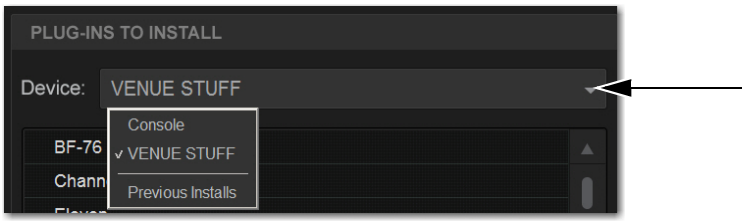
Installed Plug-Ins This list shows all plug-ins already installed on the system. The plug-ins shown in plain text are available to process audio. Plug-Ins listed in italics are disabled and unavailable (see **Enabling and Disabling Installed Plug-Ins**).



Options > Plug-Ins screen

4 In the Plug-Ins to Install list, select the device selector pop-up menu and do one of the following:

- Choose Previous Installs to access any plug-in installers after a system update.
- Choose Console to access all factory-installed plug-in installers after a system update or a full system restore.
- Choose an external storage device, as available, to access plug-in installers on drives connected to the S6L control surface.

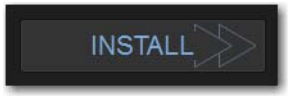


Device selector pop-up menu

5 Select a plug-in from the Plug-Ins to Install list on the left by doing any of the following:

- Select a single installer so it is highlighted.
- Shift-touch to select multiple consecutive installers.
- Control-touch to select or deselect installers one at a time.

6 Select Install to install the selected plug.



Plug-Ins Install button

7 When prompted, select Accept to accept the End User License Agreement (EULA) for the plug-in. The EULA for each plug-in installed must be during installation accepted.

Once installed, the plug-in appears in the Installed Plug-Ins list on the right.

8 Repeat as necessary to re-install all plug-ins needed on the system.

Uninstalling Plug-Ins

Uninstalling a plug-in removes the plug-in from the racks but the installer remains in the Previous Installs cache, making it easier to reinstall the plug-in at a later time without requiring the installer media.

The list of available plug-ins you see in VENUE software is updated automatically each time you load a Show file to keep plug-in lists and menus uncluttered (see **Automatically Removing Plug-ins During Show Load**.)

You can also remove or delete plug-ins and/or their installers manually. In order to completely remove and delete a plug-in and its installer, you must explicitly delete the plug-in, as described in the following sections.

Installing, uninstalling, and deleting plug-ins are not supported using the Standalone software.

To uninstall a plug-in from the system but leave its installer available:

1 Put the system in Config mode.

2 Go to Options > Plug-Ins.

3 Touch-and-hold (right-click) the specific plug-in name from the right-hand list and choose the Uninstall option for the selected plug-in.

Disable/Uninstall plug-in menu

To reinstall a removed plug-in:

1. Put the system in Config mode.
2. Go to Options > Plug-Ins.
3. Select the Device selector and choose Previous Installs from the menu.
4. Select the plug-in and choose Install. If the desired plug-in is not listed, it must be re-installed from a USB drive containing its installer.

Deleting Uninstalled Plug-Ins

Once a plug-in is uninstalled, its installer can be deleted from the system. (Plug-ins which are currently installed cannot be deleted).

To completely remove a plug-in and its installer:

1. Put the system in Config mode.
2. Go to Options > Plug-Ins.
3. Select Previous Installs from the Device selector.
4. Touch-and-hold (right-click) the plug-in name and choose the Delete option for the selected plug-ins. The plug-in is removed from the system, and the stored plug-in installer is removed from the Previous Installs list.

Installing Plug-Ins Manually

If a plug-in does not appear in the Plug-Ins to Install list, it may not have a fully compatible VENUE installer and must be manually installed. This is required the first time you install the plug-in, and whenever you need to re-install a plug-in (such as after using the System Restore software to update or reset the system).

A plug-in without a VENUE installer may still be compatible. Consult the plug-in manufacturer for compatibility information.

To install a plug-in manually:

1. Make sure all sound systems are shut down or muted.
2. Insert the USB storage device with the plug-in installer into a USB port on the S6L control surface.
3. Go to the Options page and select the System tab.
4. Hold the Ctrl key and select Shutdown. Follow thee on-screen directions to exit to the Desktop.
5. Copy the plug-in installer to the disk partition called User Data.
6. Launch the plug-in installer application and follow any on-screen directions. If prompted, do not restart the system from a plug-in installer. (Doing so will not harm the system, but will take longer, especially if you have multiple plug-ins to install manually.)
7. Quit the installer application and eject the installer disc.
8. Select the Return to VENUE shortcut on the desktop to re-launch the VENUE software.
9. Go to Options > Plug-Ins. Verify that the manually installed plug-in appears in the Console list of available plug-ins.

Authorizing Plug-Ins

A core set of plug-ins are installed on your system. These plug-ins do not require any authorization. Other plug-ins, such as the S6L plug-ins downloaded from your Avid account and paid plug-ins from Avid and our Development Partners, require authorization.

The S6L system supports iLok USB Smart Key authorization. Licenses that authorize the use of a plug-in are transfered from your iLok account to your iLok. This lets you take your iLok and your plug-in licenses anywhere, to use your plug-ins on any system.

After installing a plug-in, the system re-creates the list of available plug-ins. Whenever the racks initialize, the system checks for all installed plug-ins. If an iLok with a license for an installed plug-in is not connected to the S6L control surface, you will be prompted to try a demo version, or authorize the full version of the plug-in.

To authorize a plug-in:

1 When a plug-in authorization dialog appears, do one of the following:

- To try a demo of the plug-in, select Try, where available.

– or –

- To have the system recognize the required license on your iLok, select Authorize. Insert your iLok into any available USB port on the S6L control surface when prompted.

2 Follow the instructions on-screen to complete the software authorization process.

Enabling and Disabling Installed Plug-Ins

The Installed Plug-Ins list shows Disabled plug-ins in *italics*. Plug-Ins can be manually disabled and enabled to manage DSP resources, troubleshoot possible conflicts, and to manage plug-in availability.

To globally disable or enable a plug-in:

1 Select the plug-in name in the Installed Plug-Ins list, at the right of the Options > Plug-Ins page.

2 Touch-and-hold (right-click) the plug-in and select whether to disable or enable the selected plug-in. If assigned to any rack slots, the plug-in will be displayed as unavailable and inactive.

Automatically Removing Plug-ins During Show Load

Plug-ins are verified during the Show file load procedure to streamline plug-in lists and menus by automatically removing unused plug-ins (plug-ins that were once installed but subsequently uninstalled or disabled).

In addition, the plug-in lists can be reset manually using the Remove Unavailable Plug-ins command. Plug-ins which are not available and not in use in the rack are automatically filtered from all plug-in menu lists when the show file is subsequently stored. This filtered list is stored with the Show file.

Plug-ins which are not available but *are* in use will remain in the rack and display a warning icon indicating the plug-in isn't installed or is disabled. Such plug-ins appear as italicized entries in the plug-ins menu lists.

Manually Removing Unavailable Plug-ins from the Racks

Unavailable plug-ins can be easily removed from rack slots using the Remove Unavailable Plug-Ins command.

To manually remove unavailable plug-ins:

1 Put the system in Config mode. Make sure the plug-in rack is fully initialized (the Status indicator displays OK).

2 Select the Plug-In Selector in any rack slot and choose Remove Unavailable Plug-Ins. This menu item is only available when one or more unavailable plug-ins are present in the rack (indicated by a warning symbol in the rack slot).

3 Select Remove to confirm the operation, or select Cancel.

If you proceed with the removal:

- All unavailable plug-ins are removed from the plug-ins rack.
- The italicized entries for unavailable plug-ins are removed from all plug-in menu lists.
- All references to unavailable plug-ins are removed from the Insert Processing section of all affected channels, and the insert point plug-in is set to None.
- All references to unavailable plug-ins are removed from all snapshots.

The new, updated list of available plug-ins is subsequently saved to the Show file.

History File and Removing Plug-ins

A History file is written immediately before removing unavailable plug-ins from the rack, in order to provide a means of undoing the operation.

Plug-in Version Checker

VENUE software includes a comprehensive database of plug-in information, and this info can be used to greatly simplify the process of managing your VENUE plug-ins.

Use this feature to get version details and compatibility information for a plug-in prior to installing, or after it has been installed to help diagnose or troubleshoot plug-in performance.

Version checking also warns you when you are about to downgrade a plug-in (install an older version over a newer version).

In addition to using the plug-in version checker, also check the VENUE plug-in tabs on the Avid website (www.avid.com) for the most up to date information

To view plug-in version information:

1. Go to Options > Plug-Ins.
2. Select a plug-in from either list (Plug-Ins to Install, or Installed Plug-Ins).

Version information is not shown for a multi-selection. Select an individual plug-in to view its version information.

The Info pane displays details about the currently selected plug-in, including whether a newer version of the plug-in is available. If a new version is available, you can find out whether it is a recommended update or a critical update. The following dialogs appear if you choose to install older plug-ins:

- If you choose to install a plug-in for which there is a critical or recommended update, a dialog appears asking you to confirm the installation procedure.
- A similar dialog appears when attempting to replace an installed plug-in with an older version of the same plug-in. Follow the instructions on-screen to install anyway, or cancel.

Using System Info to View Plug-in Version Information

Plug-in version information is included in exported System Info data.

The Plug-in sections of the exported System Info file show critical and recommended updates, with links to sites to download or check for newer versions.

To use System Info for Plug-In Version Maintenance:

1. Insert a USB storage device into any available USB port on the S6L control surface engine.
2. Go to Options > System.
3. Select the Info button.
4. Do any of the following:
   - If you have more than one USB device connected, make sure the correct USB device is selected. If it is not, select Next Disk to cycle through each available disk until the correct one is selected.
   - Select Save to proceed and export system info to the selected USB device.
   - Select Cancel to dismiss the dialog without exporting.
5. Select OK to confirm the export procedure.
6. Remove the USB device. Transfer the exported file to a personal computer for printing, formatting, archiving or distribution.
7. If viewing the System Info document from a computer with Internet access, use the included links to check for plug-in updates.

Plug-In Racks

The Plug-Ins page provides five plug-in racks. Each of the racks has 10 slots into which you can load a plug-in. The four different racks can be viewed all at once, individually, and in varying zoom levels. You populate the racks by *assigning* plug-ins in rack slots.

Plug-In racks (1) and rack slots (2), Full view, with custom rack names shown

Naming Plug-In Racks

You can name and rename each rack as needed.

To rename a plug-in rack:

1 Double-tap the rack name to highlight it on-screen.

2 Type a new name and press Enter. To return a rack to its default name, leave the name blank and press Enter.

Plug-Ins can be placed in any rack slot. Use the different racks to organize processing functions such as Dynamics, Vocal FX, Reverb, or Group Inserts.

Rack Views

The Plug-Ins page can be displayed in Full or Zoom views. Either view can show a Collapsed view of 10 rack slots.

Full View

The default view of the rack screen is Full view, in which five racks are shown at a time. This screen provides access to all rack slot controls and shows an icon representing each assigned plug-in. This lets you quickly see what plug-ins are available, and adjust their routing.

Zoom View (Plug-In View Mode)

In Zoom view, a single rack remains on-screen to the left, and the rest of the screen displays the targeted plug-in.

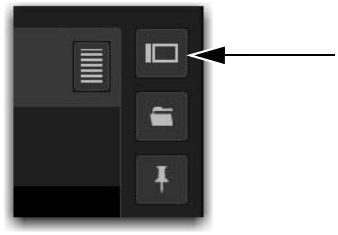
Zoom view, with a plug-in window open on-screen

To toggle Full or Zoom view modes, do one of the following:

- Select the View toggle switch (upper right corner of the rack).

  – or –

- Double-tap a plug-in icon in any rack view to open that plug-in window in Zoom view.



View toggle button

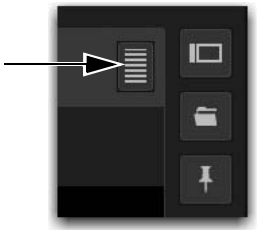
Collapsed View

You can collapse the plug-in racks so ten rack slots per row are shown in Full of Zoom view.

Full view, collapsed

To toggle between Expanded or Collapsed rack slot views:

- Select the Expand/Collapse button (upper right corner of the rack).

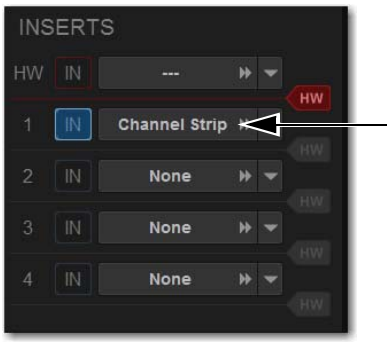


“Jump To” Plug-Ins

You can “jump to” a specific plug-in insert from the Input and Output pages to adjust it on-screen in the Zoom view of the Plug-In page.

To jump to a plug-in insert from the Inputs or Outputs screen:

1. Select a channel to display it in the Inputs or Outputs screen.
2. Select the plug-in name (or None if no plug-in is inserted in that slot) shown in the channel Inserts section.



Jumping to a plug-in on a channel insert

To jump to a bus-fed plug-in:

1. Bank to the input channel the plug-in output is assigned to, or bank to the output feeding the plug-in.
2. Attention the channel to display it in the Inputs or Outputs screen.
3. Select the routing displayed beneath the Channel Name.

Jumping to a plug-in on a bus

Plug-Ins Screens and Channel Selection

When jumping to a plug-in, display depends on the type of plug-in routing, as follows:

Channel Inserts If the Plug-Ins screen is in Zoom view while you attention a channel, the last attentioned plug-in for that channel is automatically targeted and displayed in the Plug-Ins screen.

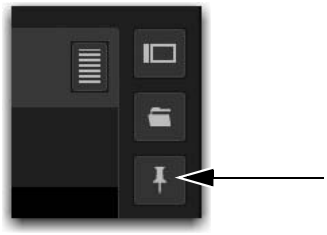
Bus-Fed Plug-Ins If no plug-ins are inserted on a channel (such as when returning a bus-fed plug-in to an input channel), the plug-in feeding that input channel is displayed.

Pinning a Plug-In View

You can decouple the plug-in view for consistent and constant access to a single plug-in on-screen, while still being able to select and adjust other plug-ins from the control surface. *Pinning* a plug-in view is useful any time you want to always display an important plug-in (such as an analysis plug-in or primary EQ).

To pin a plug-in view:

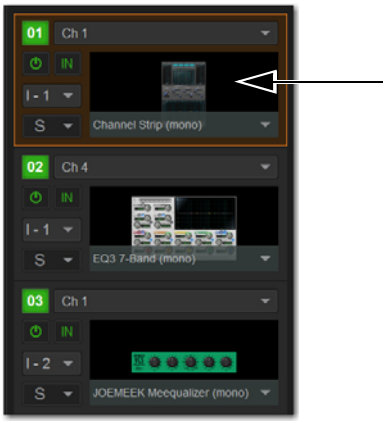
1. Bring the desired plug-in into the Zoom view (use the channel Select and Insert Mode switches, double-tap the desired plug-in from the rack, or jump to the plug-in from the Inputs or Outputs page).
2. Select the Push-Pin icon in the upper-right of the screen (the icon is located just to the left of the Presets and View Toggle icons.
   - When enabled, the Push-Pin icon appears lit. This indicates that the current plug-in will remain on-screen and will not lose focus, even if another channel is targeted.
   - When not enabled, the Push-Pin icon appears unlit. Plug-in view follows control surface selections.



Push-Pin icon

Identifying Rack Slots

In the plug-in racks, the slot of the targeted plug-in is bordered in orange.



Targeted plug-in in a rack

Display of Unavailable or Inactive Plug-Ins

It is possible for a plug-in to be displayed in a rack slot but be unavailable for channel and bus processing. This can occur in any of the following circumstances:

- There are not enough DSP resources available for the plug-in.
- The assigned plug-in is part of the show file but is not installed on the current system.
- The plug-in has been disabled manually.

To view DSP resource allocation, see **2 – HDX DSP**.

Unavailable Plug-Ins

When a plug-in cannot be used because of insufficient DSP resources, because it is disabled, or because it is not installed on the system, a warning icon is shown in front of the affected plug-in. The plug-in icon is grayed out, and the rack slot Power switch displays a yellow switch LED.

Indication of an unavailable plug-in

For more information, see **Installing and Authorizing Plug-Ins**.

Scope Indication in the Plug-Ins Page

The Plug-In Rack provides visual indication whenever a plug-in is scoped in the currently targeted snapshot. The Snapshot pop-up menu turns red whenever that plug-in is scoped by the currently targeted snapshot.

Indication of a scoped plug-in

For more information, see **Plug-In Presets and Snapshots**.

Rack Slots

Each rack provides ten plug-in slots. You can assign any installed plug-in to any available rack slot.

A rack slot and its controls, with an assigned plug-in shown

Rack Slot Controls

Each rack slot provides the following controls to select and manage plug-ins:

1 – Power (Config Mode Only)

Power turns the rack slot on or off. When off, the plug-in consumes no DSP.

2 – In/Out (Bypass)

The In/Out switch takes the rack slot in or out of circuit (bypasses the slot and any plug-in assigned to it).

3 – Input Selector

The Input selector displays a menu of input sources for a plug-in. Use this to designate the plug-in as a channel insert or a bus processor by choosing from the Inserts or Bus sub-menus. For more information, see **Routing Plug-Ins**.

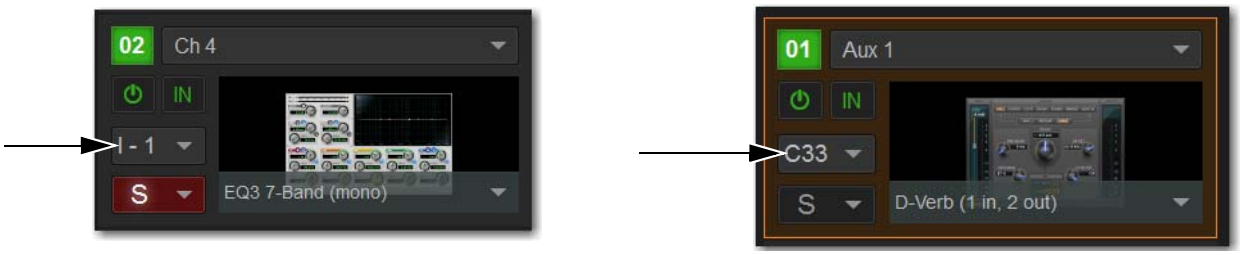
Once a plug-in has been routed, its input source is displayed in the Input area of each rack slot, as follows:

- If the plug-in is being used as an insert, the channel or bus name and number is shown, for example, *Kick (Ch 1)* or *Aux (1–2)*. The Channel Insert/Bus Output selector automatically switches to Channel Insert mode, showing the insert point occupied by the plug-in.
- If the plug-in is on a bus, the selected bus source is shown in the Input selector, for example, *Aux 1* or *Grp 1*. The Channel Insert/Bus Output selector can be used to assign the output routing of the plug-in to a channel or bus.

4 – Channel Insert or Output Selector

The Channel Insert/Output selector displays different choices depending on whether the plug-in is being used as a channel insert, or as a bus processor, as follows:

- If the plug-in is being used as a channel insert, the Channel Insert Selector shows the four insert points on that channel (1–4). The letter “I” is shown before the insert number (for example, I–1 indicates the current plug-in is inserted into the first insert position on its channel).
- If the plug-in is being used as a bus processor, the selector is an Output selector, used to select the destination for plug-in output,. When the plug-in is routed, the selector shows the channel to which the plug-in output is assigned.



A rack slot shown an inserted mono plug-in (left) and a stereo plug-in assigned as a bus processor (right)

5 – Plug-In Selector

The Plug-In selector displays a list of available plug-ins to load into that rack slot. Plug-Ins are arranged by process type (such as EQ, Dynamics, and Delay). For more information, see **Routing Plug-Ins**.

6 – Snapshots Menu

The Snapshots menu provides tools to manage snapshot-related plug-in features from within the Plug-Ins screen. Using the Snapshots menu, you can quickly check to see which existing snapshots refer to the current plug-in, as well as create, update, or remove snapshots.

Sidechain Selector

The Sidechain selector appears near the top of the Zoom view when you select a plug-in that supports side-chain or “key” input. In Config mode, the Sidechain selector lets you establish a side-chain routing to the plug-in. Once established, you can route and re-route side-chain signals in both Config and Show mode. For more information about side-chain signals, see **Sidechain Routing**.

Assigning Plug-Ins to Rack Slots

Before a plug-in can be used to process audio, it must be assigned to a rack slot. Once assigned, you can use the plug-in as a channel insert or bus processor.

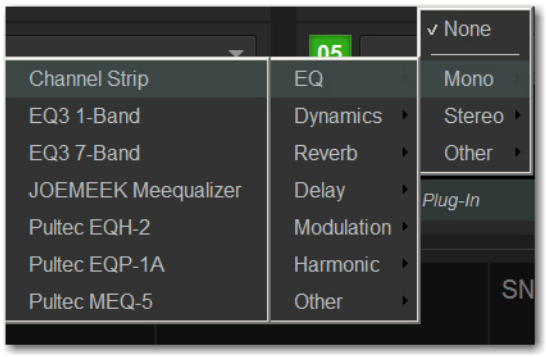
Before a plug-in can be assigned, it must be installed. See **Installing and Authorizing Plug-Ins**.

To assign a plug-in:

1. Put the system into Config mode.
2. Go to the Plug-Ins page.
3. Select the Plug-In Selector on an empty rack slot. (You can also use an already assigned rack slot to change a plug-in assignment.).

The Plug-In selector

4. Choose an available plug-in from the Plug-In selector sub-menus. Only plug-ins that are installed will be available.



Plug-In selector menus

If the plug-in is not installed or there are insufficient DSP resources available, the plug-in will appear as unavailable, or inactive.

Place the cursor over the plug-in to display a Tool Tip that explains why the plug-in is unavailable or inactive.

Plug-In Formats (Mono/Stereo)

Plug-Ins inserted on input channels must be symmetrical (in other words, mono in/out or stereo in/out). Plug-Ins on busses can be asymmetrical (mono-in/stereo or multichannel out).

Mono Can be used as inserts only in mono strips or mono Auxes, mono Groups, or Matrix busses or on the C/M bus.

Stereo Can be used as inserts in stereo strips, stereo-linked Auxes, and stereo Groups.

Other (Mono In/Stereo Out) Can be used on busses for delay, reverb, and similar processing.

Moving and Copying Plug-Ins
(Config Mode Only)

To move or copy a plug-in from the rack, drag the plug-in icon to a new rack slot. A pop-up menu appears offering three choices: Cancel, Copy Plug-In Here, or Move Plug-In Here.

Moving a Plug-In

When you move a plug-in from one rack slot to another, the plug-in type, in/out state, power on/off, current plug-in settings, and routing are maintained. In addition, all associated snapshots are updated to reflect the new rack position.

Copying a Plug-In

When you copy a plug-in to a new rack slot, the source plug-in type, in-circuit state, active state, and current plug-in settings are copied to the destination rack slot. However, the source plug-in routing is not copied. In addition, plug-in snapshots are not copied.

Overwriting An Existing Plug-In

When either moving or copying, if there is an existing plug-in located in the destination rack slot, that plug-in is deleted. When the plug-in located in the destination rack is deleted, any routing or references in existing snapshots to the deleted plug-in will be automatically cleared.

Activating and Deactiving Plug-Ins

To activate and deactivate a plug-in:

- Select the appropriate rack slot Power switch. When active, the Power switch lights green. When a plug-in is unavailable (and inactive), the Power switch lights yellow.

Rack slot power switch

Routing Plug-Ins

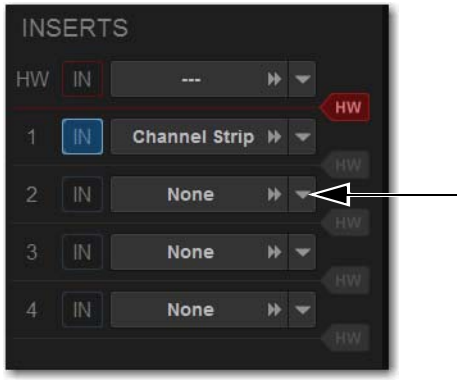
After a plug-in has been assigned to a rack slot, you can specify its routing. Plug-In routing determines whether the plug-in is used as a channel insert or as a bus processor.

Inserting Plug-Ins on Channels

Four slots per channel are provided for plug-in inserts. Signal from the channel is routed to the insert and returned to the same channel. You can assign plug-ins to specific channel insert points from the Plug-Ins screen or from the Input screen.

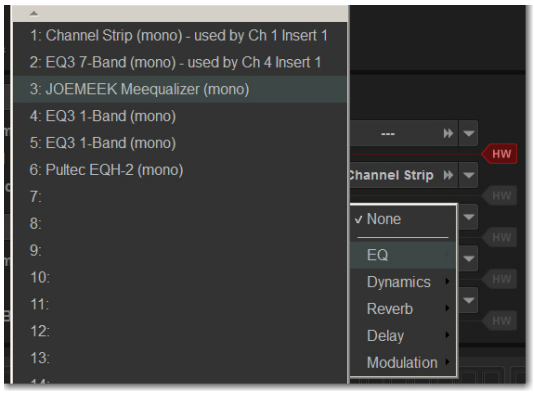
To insert a plug-in on a channel from the Inputs or Outputs page:

1. Go to the Inputs or Outputs page.
2. Select the first available Inserts slot selector.



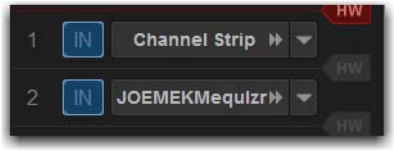
The Inserts selector

3. Choose an available plug-in from the rack sub-menus. All currently available plug-ins of a compatible mono/stereo format are listed in the sub-menus. Plug-Ins that are unavailable are listed in italics. Plug-Ins that are currently inserted on other channels are shown with their insert assignment.



Plug-in rack sub-menus

4. The plug-in appears in the Inserts list for that channel.



An assigned channel insert

5. To open the window for an inserted plug-in, select its name in the channel Inserts list.

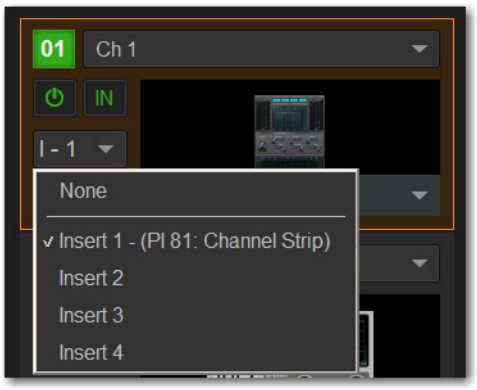
To insert a plug-in on a channel from the Plug-Ins page:

1 Make sure the plug-in is already assigned to a rack slot. (See **Assigning Plug-Ins to Rack Slots**.)

2 In the rack slot, select the Input selector and choose a channel from the Inserts sub-menus.

Inserts sub-menus

The rack slot automatically identifies and connects to the first available insert slot on the selected channel. The Channel Insert selector shows the current insert position. In the figure below, I-1 indicates the plug-in is in the first insert Inserts slot of channel 1.



Channel Insert menu

If no insert slots are available on the channel, the selector displays a question mark.

Routing Plug-Ins as Bus Processors (Effect Send/Return)

Plug-Ins can be used on busses for send-and-return processing with effects such as reverb and delay. A plug-in is configured for bus processing by assigning an Aux, Group, Matrix, Main, Monitor output, or a Direct Out as the plug-in input source, then assigning the output of the plug-in to an input channel, or to a hardware output, as follows:

- Return bus-fed plug-ins to an input channel to establish an effects send-and-return path.
- Route bus-fed plug-ins to a hardware output for specialized processing needs (such as feeding an external crossover).

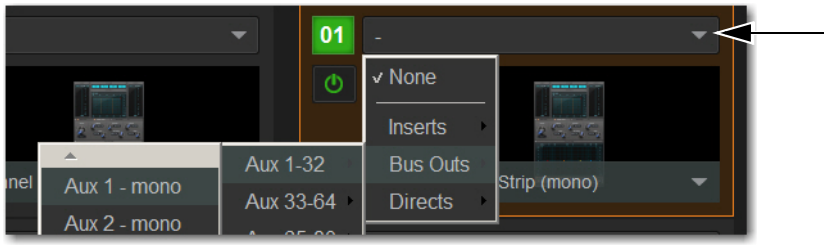
You assign plug-ins for bus processing from the Plug-Ins screen.

To use a plug-in as a bus processor:

1 Go to the Plug-Ins page.

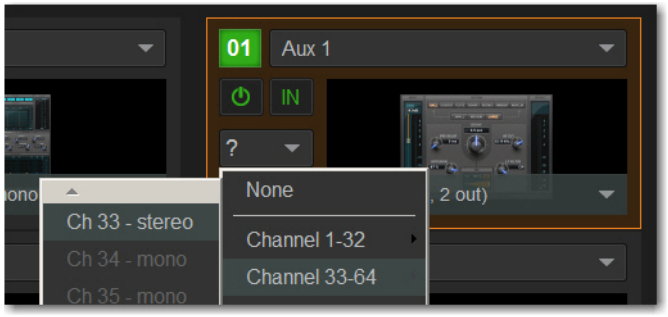
2 Make sure the plug-in is installed and assigned to a rack slot.

3 Select the Input selector at the top of the corresponding rack slot, choose Bus Outs, then choose the desired output bus from the sub-menus.



Input selector and sub-menus

4 Select the Plug-In Output selector and choose an input channel or a hardware output. Depending on the plug-in's output format (mono/stereo), available channels are lit (available for assignment) or unlit (unavailable for assignment) depending on their format.



Assigning plug-in output to an input channel

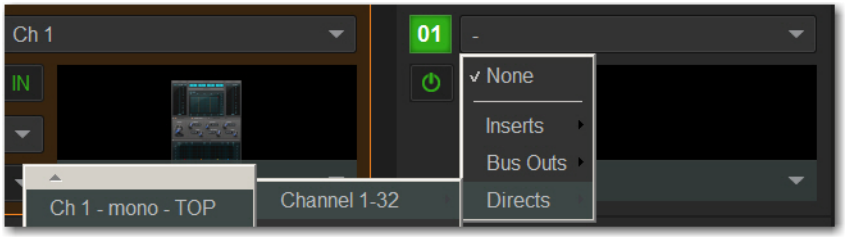
When routing a plug-in with a stereo output to an input channel, make sure the input channel is a stereo channel. See **Make Selected Mono Strips Stereo/Make Selected Stereo Strip Mono.**

When a bus-fed plug-in has both its input source and output assigned, it appears similar to the following in the rack:

An assigned bus-fed plug-in shown in the rack

Routing Channel Direct Outs to Plug-Ins

You can route the Direct Outs to plug-ins. This lets you directly feed plug-ins from individual channels to preserve Aux busses for other uses, with control over send level using the channel Direct Out level control.



Assigning a channel Direct Out as a plug-in input source in the Plug-Ins page

When a channel Direct Out is routed to a plug-in, it follows the pickoff setting for that specific Direct Out (as set in the Patchbay), and is applied in addition to any other assignment made for that Direct Out. This makes it possible to use a channel's Direct Out to route that channel to both a Pro Tools recording option and to a plug-in.

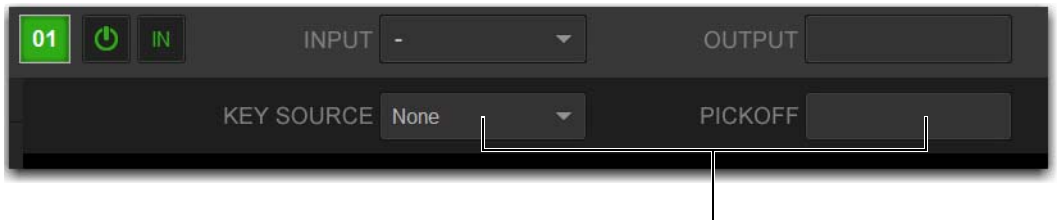
⚠ *If you do use a Direct Out to feed both a hardware output such as a Pro Tools recording option as well as a plug-in, be aware that any adjustments to that Direct Out affect both the output signal and the signal fed to the plug-in.*

Sidechain Routing

S6L supports sidechain (key) processing for plug-ins that support sidechain triggering. The Sidechain selectors appear across the top of the Plug-Ins page in Zoom view for the targeted plug-in.

To assign side-chain routing to a plug-in:

1. Target a plug-in that supports sidechain processing in Zoom view of the plug-in.
2. Choose the side-chain source signal from the Key Source pop-up menu.
3. Choose the pickoff point (tap) for the side-chain signal from the Source Pickoff pop-up menu.



Sidechain controls

⚠ *Side-chain routing is not stored in snapshots.*

Adjusting Plug-Ins on the External Screen

You can adjust plug-ins on the Plug-Ins page.

You can also adjust plug-ins using the CKMs in Channel Control mode. See **Adjusting Plug-Ins** *for more information.*

To adjust a plug-in on-screen:

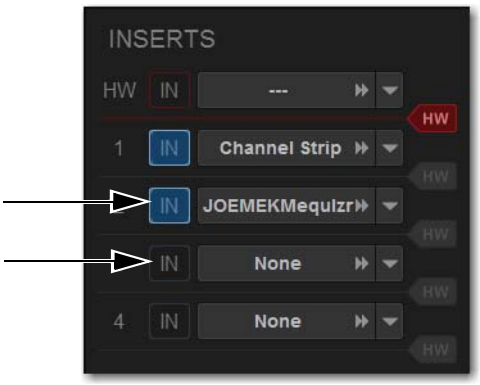
1. Attention a channel.
2. Go to the Plug-Ins page.
3. Double-tap a plug-in icon in any rack view to open that plug-in window in Zoom view.
4. Adjust the parameters for the plug-in appearing in the window as desired.

Bypassing Plug-Ins

Plug-Ins can be bypassed on-screen in the Inputs or Outputs page and from the Plug-Ins page.

To toggle a plug-in on/off (in/out of circuit):

1. Select the channel on which the plug-in is inserted.
2. Go to the Inputs page and select the in/out button next to the desired plug-in to toggle it in/out of circuit. When the button LED lights, it indicates that the plug-in is in-circuit. When unlit, the plug-in is out-of-circuit (bypassed).



An engaged plug-in (top) and a disengaged plug-in (bottom)

Plug-In Presets and Snapshots

You can save and load plug-in Presets files to import, export, and transfer plug-in settings files.

Snapshots can also be used to automate changes to plug-in routing and settings.

Presets can be applied to multiple Shows, while snapshots apply only to the Show file in which they are stored.

Plug-Ins and Presets

Presets are files that you can create to save, load, archive and transfer custom plug-in settings. You can then create your own Preset folders to organize Preset files. Preset folders and files can be transferred using the Filing page.

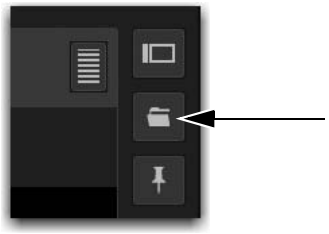
To create a custom Presets folder:

1. Go to the Filing page and select the Transfer tab.
2. Select the Preset Folders icon.
3. Select the New button at the left of the screen.
4. Do one of the following:
   - To leave the folder at its default name, press Enter.

   – or –
   - Type a new name and press Enter.

To save a Preset:

1. Adjust the plug-in parameters as desired.
2. On the Plug-Ins page, select the Presets icon.



Plug-In Presets icon

3. In the Presets window, select New.
4. Enter a custom name for the Preset.

To load a Preset into a plug-in:

1. Make sure the presets are already transferred and available on the current system. (Many plug-ins come with factory presets that will be installed along with the plug-in.)
2. Select the channel containing the plug-in, and target the desired plug-in.
3. Select the Presets icon in the Plug-Ins screen.
4. Select a preset name in the Presets list to preview it. With the Presets list displayed, do any of the following:
   - To scroll through the list, press Up or Down arrow keys on your computer keyboard.
   - To load a preset and close the Presets list, double-tap a name in the Presets list.
   - Select Cancel to close the Presets list without changing settings.

Plug-Ins in Snapshots

Snapshots can automate plug-in settings, including routing, and in/out state. (Side-chain routing is not supported in Snapshots.) Snapshots can also store and recall Tempo.

Snapshots do not store or recall Presets. Snapshots store plug-in settings as they were when the Snapshot was created or saved.

Each rack slot on the Plug-Ins page provides a Snapshot menu, with shortcuts for common snapshot-related tasks:

- Create a new snapshot
- Add one or more plug-ins to the MIDI/Plug-Ins list, and automatically re-scope the snapshot to include plug-ins.
- Remove plug-ins from one or more snapshots

Snapshots Containing this Plug-In Lists all currently loaded snapshots referencing the plug-in, in sequential order. Choose a snapshot to load it. (This menu option is useful for targeting snapshots while editing plug-in racks.)

Create New Snapshot Containing this Plug-In Adds a new snapshot to the snapshot list in which only plug-ins are scoped. This snapshot is inserted immediately after the currently targeted snapshot, which may not necessarily be the last snapshot. The snapshot is named to reflect the plug-in rack position, for example: “PI 1-1: Reverb One” is a Reverb One plug-in assigned to rack 1, slot 1.

Add (or Update) this Plug-In to Snapshot Adds a plug-in reference, with current settings, if the currently targeted snapshot does not already reference this plug-in. If the currently targeted snapshot already references this plug-in, the choice is Update (see next). If multiple snapshots are selected, this command changes to “Add Plug-In to Selected Snapshots” for batch-assignment.

Update this Plug-In in Snapshots Updates snapshots with current settings, if the currently targeted snapshot (or currently selected snapshots) already references this plug-in.

Remove this Plug-In in Snapshot Removes reference to this plug-in from the currently targeted snapshot, or from all currently selected snapshots.

See **Adding Plug-In Data to Snapshots.**

Tempo Settings in Snapshots

Each snapshot can store a custom tempo value. You can use the Tempo Enable icon to enable or disable tempo recall when the associated snapshot is recalled, letting you automate delay times in plug-ins that support Tempo Sync. See **Adding Tempo Data to Snapshots.**

Plug-In DSP Usage

Plug-Ins utilize DSP resources when they are assigned to a rack slot, and that rack slot is powered on. Each HDX DSP card installed in an E6L engine provides 18 DSPs for plug-in processing.

Plug-In availability is limited to available DSP resources. Certain plug-ins use more DSP resources than others. You may not be able to instantiate a plug-in if there are not enough DSP resources available. You can turn off unused plug-ins to reclaim their DSP by making them inactive, or by removing them from the system.

You can view plug-in DSP usage on the Options > Devices page.

To view plug-in DSP usage:

1. On the external screen, go to Options > Devices.
2. In the HDX DSP section, select a tab 1–4 to view currently active plug-ins and the DSPs they are allocated to on the corresponding HDX TDM Mix Engine card.

Plug-In Levels

Meter levels on the S6L system are displayed in dBVU, with 0 dBVU =+4dBu analog out = –20dBFS.

Internally, the S6L system provides up to 32-bit processing for built-in EQ, dynamics, and plug-ins, with level matching circuitry and logic ensuring maximum fidelity and sonic performance throughout the entire signal path. Due to variances in how plug-in metering is implemented by different manufacturers, performance may vary with regard to plug-in gain reduction meters and their relative levels.

When using side-chain routing, be aware of potential level differences between input channel pickoff points. For more information, see **Sidechain**.

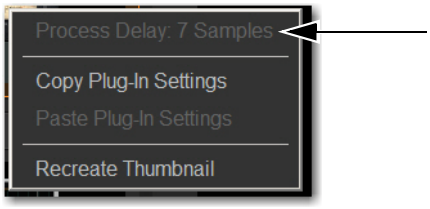
Plug-In Latency and Processing Delay

Plug-In latency includes processing delay of the plug-in itself plus routing delay, as follows:

- Instance delay: 2 samples per plug-in
- DSP routing delay: 3 samples

Viewing Plug-In Latency

Cumulative channel processing delay can be viewed by touching-and-holding (right-clicking) the Inserts area of the selected channel. The cumulative delay includes latency reported by all inserted plug-ins, signal routing and the known hardware insert delay, if applicable.



Cumulative process delay

Individual plug-In processing delay can be seen by touching-and-holding (right-clicking) the plug-in icon in the rack. Use the number reported when calculating latency for manual delay compensation.

Examples

If there is only one plug-in on a channel, the total delay will be the amount of plug-in latency + 2 + 3. (2 samples for the one plug-in instance, plus 3 samples for the DSP routing to the racks and back.)

If you have two plug-ins on a channel or bus, the delay will be plug-in #1 latency + 2 + plug-in #2 latency + 2 + 3. If plug-in #1 has 12 samples of latency, and plug-in #2 has 15, total latency will be 34 samples (12 + 2 + 15 + 2 + 3).

Initializing the Plug-In Racks

The racks are initialized (or re-initialized) whenever the system is first powered on, whenever the system is restarted, after installing a plug-in, and after disabling or re-enabling a plug-in.

While the racks are initializing, they are offline and do not process audio. Avoid performing any Filing or Transfer functions until the racks are finished initializing. Rack status is displayed on-screen in the banner display.

Tap Tempo for Plug-ins

Tap Tempo lets you quickly establish a system tempo to use as a beat clock for delay and echo plug-ins that support Tempo Sync.

The system tempo defaults to 120 BPM (beats per minute). You can set a custom tempo in a number of ways including by tapping a Function switch, Footswitch or other control as explained below. The system tempo is stored as a console setting within the Show file. Snapshots can also store and recall tempo.

Using Tap Tempo

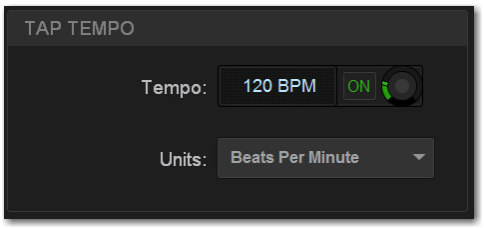
To use Tap Tempo, first enable the system tempo, create a Tap Tempo event, then enable tempo sync on the delay or echo plug-in.

Enable the System Tempo

To enable the System Tempo:

1 Go to Options > Misc and locate the Tap Tempo section.

2 Turn on global tempo sync for the system by selecting the On switch directly below the Tempo encoder so that it lights (on).



Tap Temp options

3 If desired, select the Units selector to choose Beats Per Minute (BPM) or Milliseconds as the units for displayed values.

Enable Plug-in Tempo Sync and Start Tapping

To enable tempo sync on the plug-in:

1 Navigate to a delay plug-in and enable its tempo sync button. Repeat for other delay plug-ins you want to sync.

Tempo Sync button in Mod Delay III

How the tempo sync button is labeled differs depending on the plug-in. See the documentation for the plug-in to located the tempo sync button.

2 Tap the assigned Tap Tempo trigger (Function switch or Footswitch) in time with the music. At least two taps are needed to set the tempo; additional taps can result in a more accurate tempo setting.

The delay time of all Tempo Sync-enabled plug-ins change to match the system tempo. While tapping, the calculated tempo is also shown in the Status area of the screen.

Tips for Using Tap Tempo

The plug-in Tempo Sync switch enables/disables that individual plug-in's delay value from following the system tempo. Use the individual plug-in Tempo Sync switches to sync one, some or all delay plug-ins.

Tempos can range from 20 BPM (3,000 ms) to 300 BPM (200 ms). Some delay plug-ins offer different time divisions (such as 1/8th, 16th, or dotted) that you can select for variations based on the system tempo. Check your delay plug-ins to see if they support Tempo Sync and subdivision settings (most, but not all, do).

Snapshots and Tempo Sync

If you need a specific delay time every time a certain snapshot is recalled, store Tempo with snapshots. For details, see **Adding Tempo Data to Snapshots**.

Events

This chapter introduces the Events tab, and explains how to use the Event list.

Introduction

An *event* consists of one or more *triggers*, which are configured to cause one or more *actions* to occur.

Events can be very simple, such as the press of a Function switch enabling a Mute Group, or the press of a connected footswitch triggering a Recall Next Snapshot. These are examples of a single *trigger* (a press of a Function switch or the press of a footswitch) causing a single *action* (enabling a Mute Group or Recall Next Snapshot).

Events can also be quite complex and involve multiple triggers and actions. For example, a single event can be defined so that moving a specific fader above and/or below a certain level sends a General Purpose output, recalls a specific snapshot *and* mutes one or more channels. Multiple triggers can be considered conditionally using the available logic operators AND, OR, and XOR.

Each event can have between 0 and 8 triggers, and each event can have between 0 and 8 actions. Up to 999 events can be created.

The Event list is easy to configure, and many pre-configured events are provided for Tap Tempo, next/previous snapshot, and other functions.

For more information on the default events and other examples, see **Default Settings, Templates and Examples**.

Terminology

Event A user-defined combination of one or more triggers and one or more actions. Each event serves as a type of software "macro" in which you establish a cause-and-effect relationship between one or more triggers and their results (actions).

Trigger A conditional check used to fire an event, such as the press of a Function switch.

Action A command, mode or other response resulting from an event being triggered.

GPI General Purpose Interface, also commonly known as a logic interface. The S6L control surface provides 2 GPI inputs and 2 GPI outputs.

Open GPI input or GPI output is floating, or at its reference voltage.

Closed GPI input or GPI output is closed.

Footswitch Footswitch ports are functionally identical to GPI inputs and share all of the same properties and behaviors.

Important Information about Snapshots and Events

Because events can trigger snapshot recalls, and because snapshot recalls can trigger other events, it is possible to create logic "feedback loops." For more information, see **Avoid Feedback Loops**.

The Events Tab

The Events tab of the Media page is the working area of the Event list system. Events are defined and managed using the Event list, along with the Triggers and Actions lists. The lists and commands available in these sections create a powerful, user-programmable environment. Footswitch and GPI status display are also shown on the Events tab.

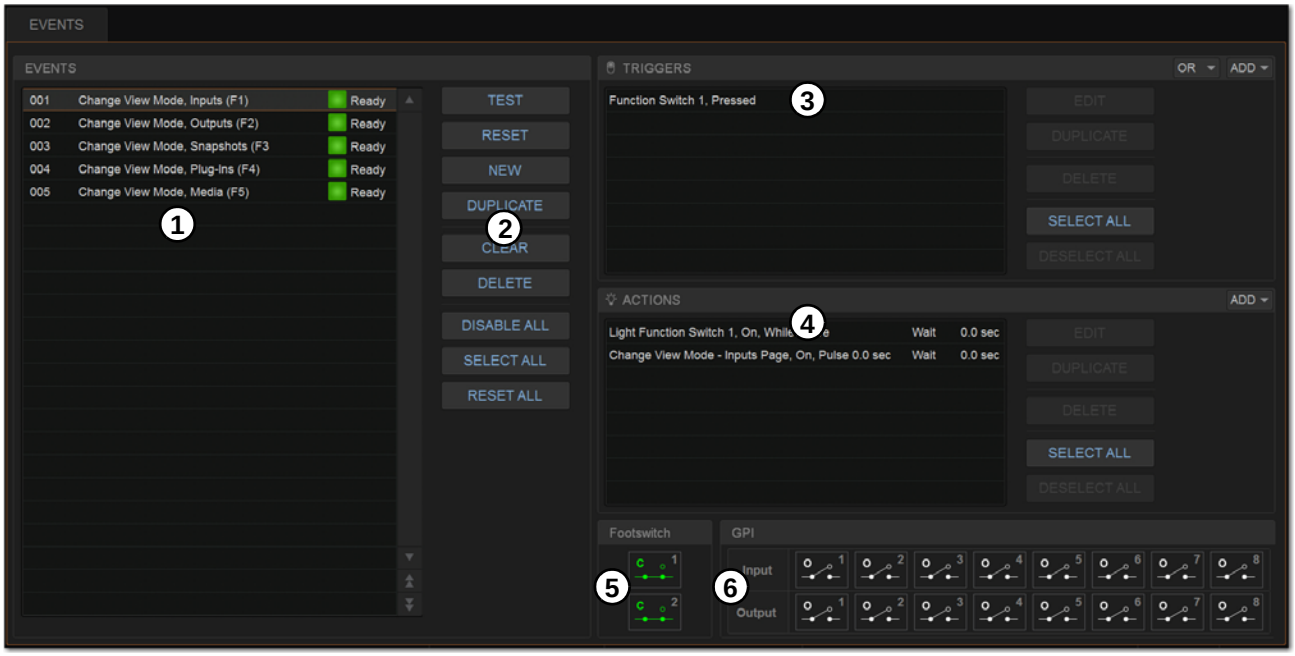


Figure 1. Events window (Options > Events)

1 – Event List

2 – Event List Commands

3 – Triggers

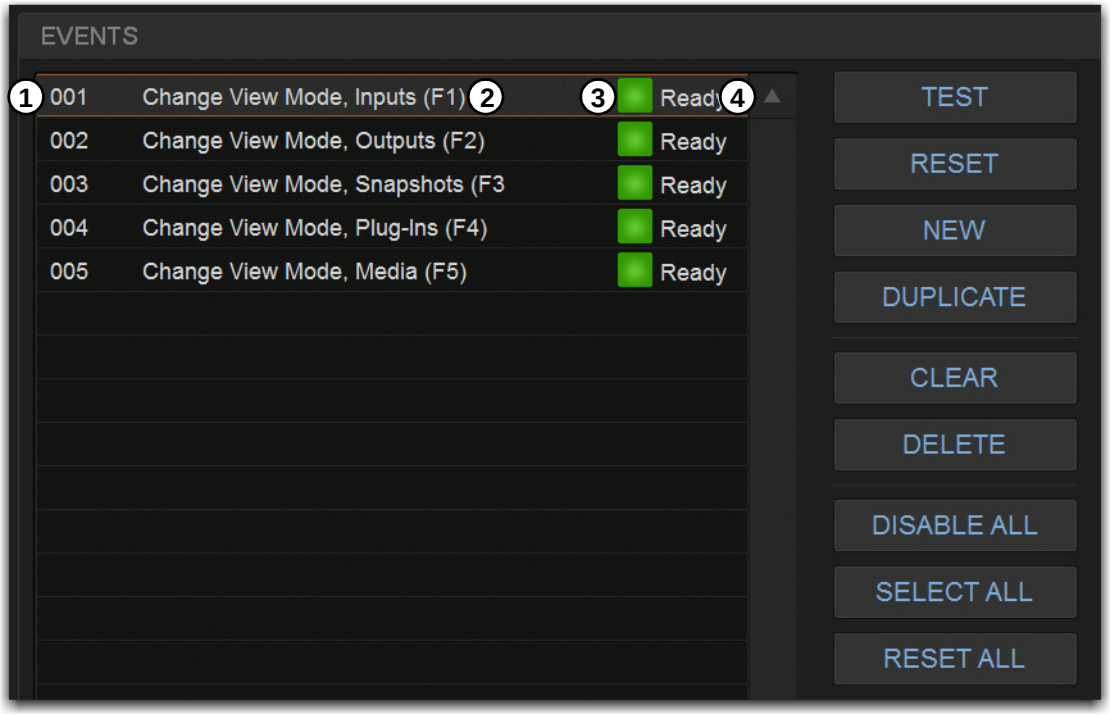
4 – Actions

5 – Footswitch Status Display

6 – GPI I/O Status Display

Event List

Each event is shown in its own row within the Event list. The list can be scrolled vertically when necessary.



Event list items, commands and displays

The Event list contains the following elements:

1 – Event Number

Each event has an associated three digit sequence number, 001 through 999. Events are automatically re-numbered if items are moved, added or removed.

2 – Event Name

Events can be given custom names, up to a maximum length of 31 characters.

3 – Event Enable Icon

Events can be enabled or disabled individually by selecting the green Enable indicator to toggle its status. All events can be disabled (suspended) and enabled using the global Disable button.

4 – Event Status

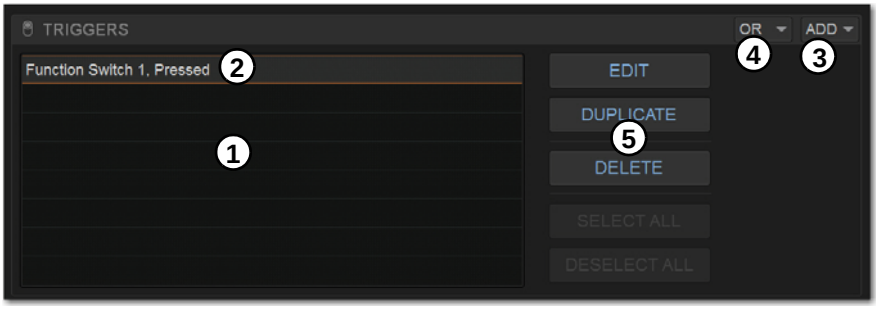
The Event Status column shows Active (currently in effect), Ready, Disabled (indicated by a dash) or Test state. For more information on the Status column, see **Resetting Events**.

Event List Commands

You can test, reset, create, duplicate, clear or delete events in the list. These commands apply to any selected (highlighted) events in the list, and can be performed using the these buttons or by touching-and-holding (right-clicking) list items. Multiple events can be selected to test, reset, duplicate, clear or delete them, but only one new event can be created at one time.

Triggers

The Triggers list shows the name and properties of each trigger defined for the currently selected event, as well as commands to create and manage triggers.



Triggers list

1 – Triggers List

Each event can have up to eight triggers in the list. Triggers are shown in rows in the Triggers list. Touch-and-hold (right-click) commands let you select, edit, duplicate and delete triggers.

2 – Type and Properties

Each row in the Triggers list shows the selected trigger type. Some types of triggers have editable properties such as a dB level on a specific channel, or open/closed state of a footswitch of GPI input. Choices vary depending on the trigger type, and not all triggers have editable properties.

3 – Add

The Add pop-up menu lets you create new triggers. Triggers are organized in the menu according to the type of input signal that initiates (or triggers) the event. Types of triggers include channel functions, footswitch/GPI inputs, snapshot recall, and other functions such as talkback.

4 – Logical Operators

Multiple triggers can be considered conditionally by applying a logical operator (AND, OR, XOR) to their properties.

Triggers and actions which are unavailable due to hardware configuration or other factors are shown as italicized in the Trigger (and Action) Add menus.

5 – Triggers List Command Buttons

You can edit, reset, duplicate, delete, and select/deselect all triggers in the list. These commands can be performed using the on-screen buttons or by touching-and-holding (right-clicking) list items. Multiple triggers can be selected for editing, but only one new trigger can be created at one time.

Actions

The Actions list shows the actions defined in the currently selected event, as well as commands to create and manage actions.

1 – Actions List

Each event can have up to eight actions in the Actions list. All actions occur when the event is fired. Touch-and-hold (right-click) commands let you select, edit, duplicate and delete actions.

2 – Type and Properties

Each row in the Actions list shows the selected action type. Some actions have editable state and behavior settings. Some actions have editable properties such as on, off or toggle state for Media transport actions, or open/closed state of a GPI output. Choices vary depending on the action type, and not all actions have editable properties.

3 – Add

The Add pop-up menu lets you create new actions. Actions are organized in the menu according to the type of function they affect, such as channel functions, snapshots, GPI Output and Tap Tempo.

4 – Wait

All actions have a Wait (delay) setting that can be applied to the action.

5 – Triggers List Command Buttons

You can edit, reset, duplicate, delete, and select/deselect all actions in the list. These commands can be performed using the on-screen buttons or by touching-and-holding (right-clicking) list items. Multiple actions can be selected for editing, but only one new trigger can be created at one time.

Footswitch Status Display

The Footswitch status display shows the present open or closed status of Footswitches connected to the Footswitch connectors on the S6L control surface. A Footswitch can be added as a trigger for an action in an event. Example uses of a Footswitch trigger includes Tap Tempo and snapshot recall. The Footswitch can be named.

GPI I/O Status Display

The GPI port on the back of the S6L control surface can be used to trigger events in VENUE from outboard equipment (GPI input), or can be used to send messages to trigger outboard equipment to perform one or more actions (GPI output).

The GPI status display shows the present open or closed status of the two GPI inputs and two GPI outputs. Each input and output can be named.

GPI Inputs GPI inputs can be added as a trigger for an action in an event. Example uses of GPI inputs includes remote snapshot recall and remote channel muting from an external control system or custom control panel.

GPI Outputs GPI outputs can be added as an action triggered by a selected trigger. Example uses of GPI output include the following:

- Sending a pulse to trigger samplers and playback devices
- Indicating when a microphone or channel is live by lighting an On Air or “tally” light
- Flashing or turning on a light when the system is in a particular mode (such as Solo In Place)
- Integrating with power sequencing devices for automated system turn-on

For GPI port wiring specifications, see **GPI Port Reference.**

Creating Events

The basic steps to create an event include the following:

- Add a new event in the Event list (see **Adding an Event**).
- Add and configure triggers for the event (see **Adding Triggers to an Event**).
- Add and configure actions for the event (see **Adding Actions to an Event**).

Several pre-defined (default) events are available immediately; others are available among the Demo Shows installed with the system software. For more information, see **Default Events**.

Adding an Event

To add a new event to the Event list:

1 Go to the Media page and select the Events tab.

2 Do any of the following:

- To create an empty, untitled new event, select the New Event Command button.

– or –

- To create a copy of a pre-existing event, select one or more events in the Event list and select the Duplicate button.

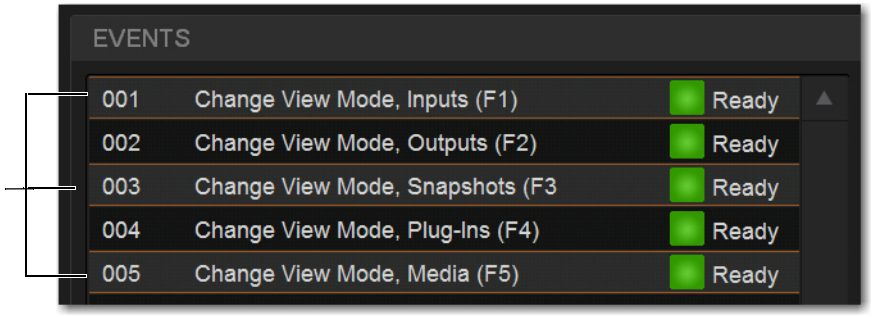
3 Double-tap the event name in the list, and enter a name for the event.

Selecting Events

Event list items can be selected, renamed, duplicated, deleted, cleared, enabled or disabled, tested and reset. Selected events are highlighted in the Event list.

To select one or more events, do any of the following:

- To select a single event, select its row in the Event list.
- To select all events, select the Select All button in the Event Commands section.
- To select multiple consecutive events, select the first desired event and then Shift-touch the last desired event. All events in between are selected.
- To select multiple non-consecutive events, or to de-select an individual event, Ctrl-touch its row in the Event list.



Multiple events selected in the Event list

To deselect or ore more events:

- Touch-and-hold (right-click) anywhere in the Event list and choose Deselect All.

Moving Events

Selected events can be dragged and dropped to new locations in the list. You can also manually edit the event number to re-sequence items.

To move one or more events:

1. Select one or more events in the Event list.
2. Touch any selected event and drag them to a new location in the list. As you move events, a white line appears indicating the destination.
3. Release your finger to drop the events at the desired location in the Event list. When moving multiple events, moved events will be adjacent regardless of their original locations relative to each other (whether adjacent or non-adjacent). events will be renumbered as necessary according to the new sequence of events.

To manually edit an event number:

- Double-tap the Event Number and enter a new three digit number to resequence the list accordingly.

Managing Events in the Event List

Once created, events in the list can be managed using on-screen buttons and touch-and-hold (right-click) commands to rename, duplicate, delete, clear, enable or disable them.

You can also use the Test and Reset commands to manually audition events for development and diagnostics. For more information, see **Testing Events**

Renaming an Event

To rename an event:

1. Double-tap the event name in the list.

   – or –

2. Touch-and-hold the event name, the select Rename from the menu.
3. Enter a new name.
4. Press Enter to confirm the new name.

Duplicating an Event

Duplicating an event can simplify Event list configuration when multiple, similar events need to be created, each with slightly different properties.

To duplicate an event:

1. Select one or more events in the Event list.
2. Select the Duplicate Event Command button on-screen. Or, tap-and-hold (right-click) a selected event and choose Duplicate.

Deleting and Clearing an Event

Deleting an event removes it permanently from the Event list. *Clearing* an event leaves the named event in the Event list but clears all associated triggers and actions.

To delete an event:

1. Select one or more events in the Event list.
2. Select the Delete Event Command button on-screen. Or, touch-and-hold (right-click) a selected event and choose Duplicate.
3. Select Delete in the Confirm Event Operation dialog to delete the event. Or select Cancel to cancel the operation.

To clear an event:

1. Select one or more events in the Event list.
2. Select the Clear Event Command button on-screen. Or, touch-and-hold (right-click) a selected event and choose Clear.
3. Select Clear in the Confirm Event Operation dialog to clear the event. Or select Cancel to cancel the operation.

Enabling and Disabling Events

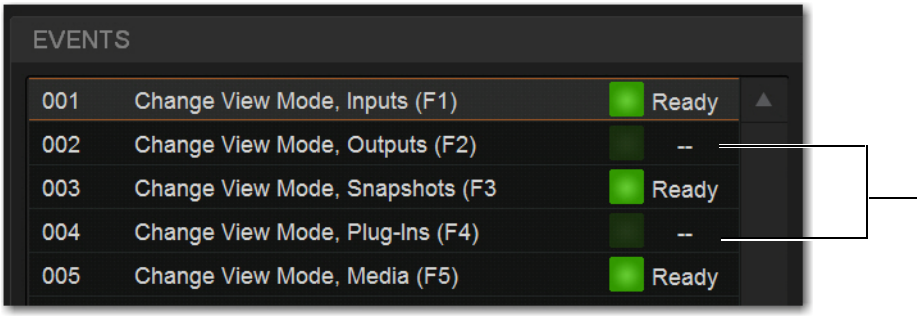
Events can be disabled to suspend their operation. An event can be selected and edited while it is disabled. You can toggle the enabled state of one or more events in the list by selecting the on-screen Enable icons in the Event list, or you can disable the Event list globally by selecting the master event Disable All button.

Disabling an event stops all timers (Wait/delay properties) associated with that event, preventing any pending (delayed) actions configured for While Active behavior from occurring. Disabling an active event does not automatically de-activate any associated actions configured for While Active behavior. Use the Reset command instead (see **Resetting Events**).

Disabling an event can be a useful troubleshooting tool, such as when an event has caused an action/trigger feedback loop and must be edited before being re-enabled.

To toggle the enable/disable status of an event in the list:

1. Select one or more events in the Event list.
2. Select the Event Enable icon for the selected event to toggle its state. Or, touch-and-hold (right-click) an item and choose Enable or Disable as appropriate. When the Enable icon lights (green) and "Ready" is shown in the Event Status column, the event is enabled. When the icon is unlit and a dash is shown the event is disabled.



Disabled events

To disable all events:

1. Select the Disable All Events Command button. The Disable All button lights, and all items in the Event list show a dash in the Status column.
2. To re-enable all events select the Disable All button again.

   All events are prevented from firing when the global Disable function is in effect. However, active events are not de-activated. Use Reset or Reset All for this (see **Resetting Events**). Individual event enable/disable status is preserved (events retain the current state of their Enable icons) and can be modified when globally disabling and enabling events using the master Disable button.

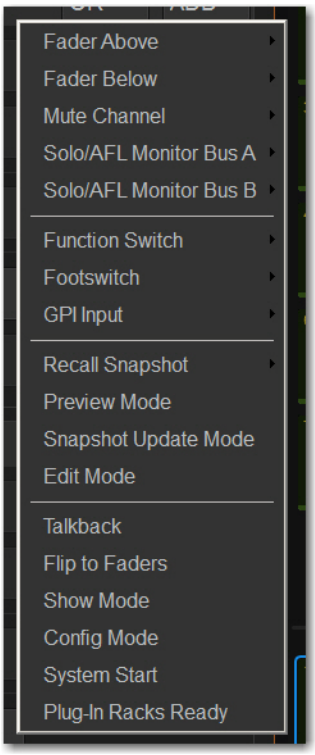
Creating Triggers

Each Event can have up to eight triggers. You create new triggers by selecting them from the Add pop-up menu. Once added, you can edit triggers and their properties to customize them.

Adding Triggers to an Event

To add a trigger:

1. Select an Event in the Event list, or create a new one. (For details, see **Selecting Events**, and **Creating Events**.)
2. Select the ADD button in the Triggers list, and then choose the trigger type from the pop-up menu. The chosen trigger type is added to the Trigger list for the currently selected Event, with its default properties.



Triggers menu

Trigger added to Triggers list

For a list of available trigger types, see **Trigger Types**.

Editing Trigger Type and Properties

To edit the trigger and its properties:

1. Double-tap the trigger row in the list. Or touch-and-hold (right-click) the action item and choose Edit.
2. Choose a new Trigger Type, or edit any of the available properties in the row for that trigger. Properties vary depending on the type of trigger selected (not all trigger types have editable properties).
3. Touch anywhere else

Logical Operators for Triggers

An individual trigger is considered to be “true” when the function described by its type and properties takes place, such as while a footswitch is actually pressed, or a fader is raised above its trigger threshold.

A trigger is considered to be “false” (or, not occurring) whenever its function and properties are not met, such as when a footswitch is not being pressed, or while a fader remains below its assigned trigger threshold.

When an Event includes multiple triggers, a logical operator (OR, AND, XOR) must be chosen from the Operators pop-up menu. (The default Operator is OR.)

The logical operator has no effect when the Triggers list includes only one item.

To choose a logical operator for the current Event:

1. Select the desired Event to display its assigned triggers.
2. Select the Operators pop-up menu (by default, this pop-up menu displays “OR”) and choose AND, OR, or XOR.

Only one logical operator is permitted per event, and this operator applies to all triggers within the event. It is not possible to use a mix of logical operators within an event. For examples of logical operator behaviors, see **Examples of Logical Operators**.

Managing Triggers in the Triggers List

Triggers in the list can be selected, edited, duplicated and deleted.

Selecting Triggers

Triggers can be selected using the same methods as used when selecting items in the Event list. For more information, see **Selecting Events**.

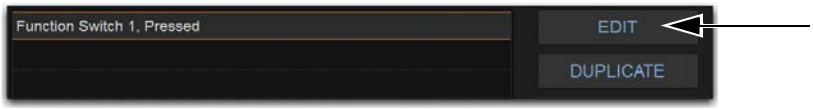
Editing Triggers

To edit a trigger:

1 Select the item in the Triggers list so it is highlighted, then select the Edit button.

– or –

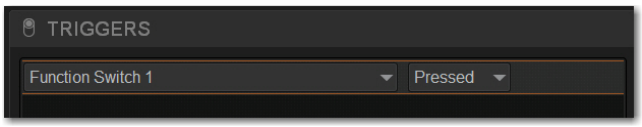
- Touch-and-hold the desired trigger, the select Edit from the menu.



The Trigger List Edit button

2 Do any of the following:

- To change the trigger type, select the Type pop-up menu and make a new selection from the Type menu.
- For Fader Above or Fader Below triggers, select the currently displayed dB value to highlight it, then type in a new value.
- For switches, buttons and other two-state functions, select the State pop-up menu and make a selection. Choices for State vary as appropriate for the trigger type, and will include Closed or Open, On or Off, and Pressed or Released.



Editing a trigger

3 To confirm your changes, press Enter or select anywhere else in the Events window.

Duplicating Triggers

To duplicate a trigger:

1 Select the item in the Triggers list so it is highlighted, then select the Duplicate button.

– or –

- Touch-and-hold the desired trigger, the select Duplicate from the menu.

Deleting Triggers

To delete a trigger:

1 Select one or more items in the Triggers list so it is highlighted, then select the Duplicate button.

– or –

2 Touch-and-hold the desired trigger, the select Duplicate from the menu.

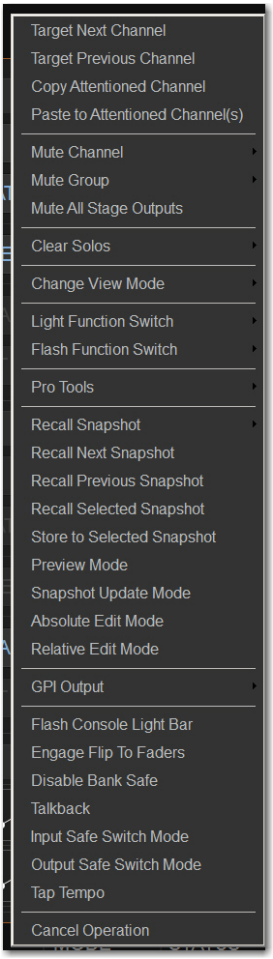
Creating Actions

Each event can have up to eight actions. You create new actions by selecting them from the Add pop-up menu. Once added, you can customize actions by editing their properties, as available.

Adding Actions to an Event

To add an action:

1. Select an event, or create a new one.
2. Select the ADD button in the Action list, and then choose an action type from the pop-up menu. The chosen action type, with its default settings, is added to the action list area.



Action pop-up menu

Action added to Action list

For a list of available actions, see **Action Types**.

Editing an Action Type and Properties

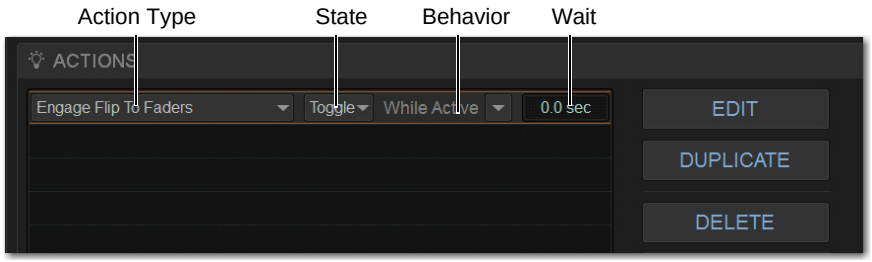
To edit an action:

1 Select an item in the Actions list so it is highlighted, then select the Edit button.

– or –

1 Touch-and-hold the desired trigger, the select Edit from the menu.

2 Select the displayed action Type and make a new selection.



Action properties pop-up selectors

Action State

To edit an action State for switches, buttons and other two-state functions:

- Select the State pop-up menu and make a selection. Choices for State vary as appropriate for the trigger type, and will include Closed or Open, On or Off, and Toggle.

Action Behavior

To edit action behavior:

- Select the Behavior pop-up menu and choose Latch or While Active, as appropriate:

Latch Fixes the behavior in its defined state (such as open or closed) until unlatched by another event or operation.

While Active Latches the behavior in its defined state as long the associated trigger is in effect (active, or “true”), such as unmuting a channel only while a footswitch is pressed and held.

Pulse and Duration (GPI Output only) Produces a single-shot pulse output. Duration range is 0.1 second (100 ms) to 1.0 second, in 0.1 second increments. The default duration is 0.3 seconds (300 ms).

To configure GPI output pulse and duration for an action:

1 Double-tap the action to edit it.

2 Select the Behavior pop-up and choose Pulse.

3 Enter a value for Pulse Duration.

4 To confirm you changes, press Enter or select anywhere else in the Events window.

Action Wait

All actions let you specify a Wait time of up to 100 seconds for the action to wait before firing. This can be useful for synchronizing the timing of multiple external devices, or to build timed sequences of actions.

To configure action Wait (Delay):

1 Double-tap the action to edit it.

2 Select the Wait value box to highlight it and enter the desired time.

Selecting Actions

Actions can be selected using the same methods as used when selecting items in the Event list. For more information, see **Selecting Events**.

Managing Actions in the Actions List

Actions can be moved, renamed, duplicated, and deleted, just as you can with triggers. For instructions on managing items in the Actions list, follow the instructions for triggers in **Managing Triggers in the Triggers List**.

Testing Events

An event can be manually triggered to test it, regardless of its current status or enabled/disabled state. Use this feature to verify action properties and confirm proper operation of devices connected to GPI output ports. When an event is in Test mode, it is effectively considered true until the event is manually reset. An event in test can be re-tested at any time by again pressing the Test button. You do not have to reset in-test events to re-test them. Incoming triggers are ignored when events are in Test mode. For example, if a footswitch event is being tested and you accidentally hit the footswitch at some point during the test, the event does not revert to Active the moment Test is canceled. Events always return to their ready state following a Reset. Events won't re-fire until the trigger logic re-asserts itself as true.

To test events:

1. Select one or more events in the Event list.
2. Select the Test button.
3. When you're satisfied the event is behaving correctly, select the Reset button.

Resetting Events

You can use the Reset features to quickly reset Active or in-Test events to "ready." You can also use the Reset All command (in the Events Commands buttons) to immediately reset all events in the list. The current status of each event is shown in the Status column in the Event list:

Status	Description
Active	Event is currently true (triggered)
Ready	Event is currently false (not triggered)
Disabled	Event is disabled and can not be triggered
Test	Event has been manually triggered

To reset an event:

1. Select one or more events in the Event list. (See **Selecting Events**.)
2. Select the Reset Event Command button.

To reset all events:

- Select the Reset All button.

When events are reset, the following rules are applied:

- Latching or pulsed actions which have already occurred are unaffected. For example, reset doesn't unlatch a previously latched function.
- All action delay timers (Wait) are immediately canceled.
- Actions configured for While Active behavior are immediately canceled.
- Events will not occur until the trigger logic again evaluates as true.

For example, let's say you have an event configured to close a GPI Output whenever Channel 3 is muted (its behavior property is While Active). Resetting the event opens the GPI Output, even though Channel 3 might still be muted. The event will re-trigger the next time the channel goes from an unmuted state to a muted state.

Snapshots and Events

Events can include snapshot functions among their triggers and actions.

Snapshots as Triggers

Events can be triggered by the following snapshot functions:

- Recall of specific snapshots
- Enabling of Snapshot modes (Preview, Update and Edit)

Snapshots as Actions

Event actions can include the following snapshot functions:

- Recall of a specific snapshot
- Recall the previous, next or selected snapshot.
- Initiate Store to Selected Snapshot commands (overwriting and updating snapshots)
- Enable different Snapshot modes (Preview, Update and Edit)

Snapshot Modes and Event Status

While in Update or Edit modes, events-driven snapshot recall is suspended.

While in Preview mode, triggers that occur in the online state of the system are executed, including MTC-driven recall of snapshots. Triggers caused by changes to the offline (Preview) controls are ignored and do not cause events to occur.

Avoid Feedback Loops

Because events can both affect and be affected by snapshots, it is possible for events to cause "feedback loops."

Be especially careful when Recall Previous or Next snapshot triggers and actions are combined with events that recall a specific snapshot, as shown in the following diagram.

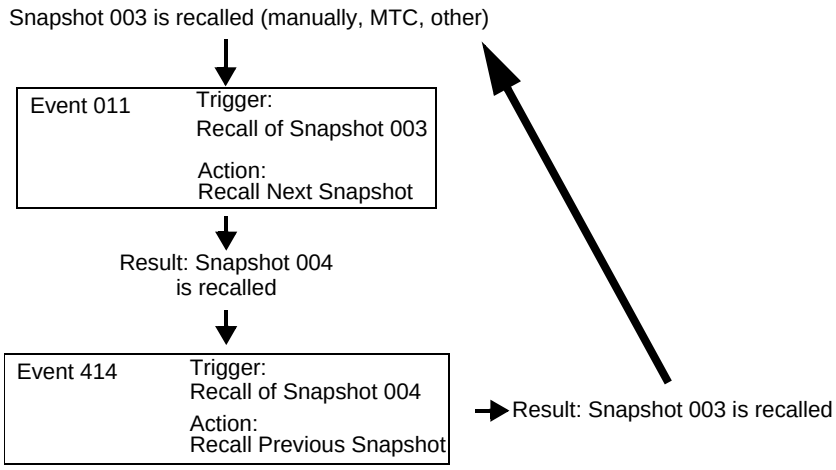


Diagram illustrating potential logic feedback loop between events and snapshots

The global event Disable and Reset All buttons can serve as "panic" buttons to temporarily suspend and/or reset all events, giving you a chance to diagnose the source of the problem. For more information, see **Resetting Events**.

Default Settings, Templates and Examples

Default Events

Each Demo Show file contains a set of default events that can be used as a starting point to build your own events. Some examples of the types of default events include the following:

Examples of default events

Default Event Type and Name	Triggers	Actions
Footswitch	Switch 1 (Footswitch 1) Closed	*undefined* (choose an action)
Preview Mode (F1)	Function Switch 1, Pressed	Preview Mode, Toggle, Latch
(Flash F1)	Preview Mode, On	Flash Function Switch 1, On, While Active
Variable Groups Mode (F2)	Function Switch 2, Pressed	Variable Groups Mode, Toggle, Latch
(Flash F2)	Variable Groups Mode, On	Flash Function Switch 2, On, While Active
Copy Channel (F3)	Function Switch 3, Pressed	Copy Selected Channel Light Function Switch 3, On, While Active
Paste to Selected Strip (F4)	Function Switch 4, Pressed	Paste to Selected Channel(s) Light Function Switch 4, On, While Active
Tap Tempo	Function Switch 8, Pressed	Tap to define system tempo for delay plug-ins that support Tempo Sync
Mute Group 1 (F9)	Function Switch 9, Pressed	Mute Group 1, Toggle, Latch Flash Function Switch 9, Toggle, Latch
Mute Group 2 (F10)	Function Switch 10, Pressed	Toggles Mute Group 2, Toggle, Latch Flash Function Switch 9, Toggle, Latch

Templates

The following table provides a listing of suggested event definitions. Use the techniques explained throughout this chapter to add one or more of the following events to establish your own set of events, triggers and actions.

Suggested event definitions for common functions

Event Name	Trigger Type	Trigger Properties		Action Type	Action Properties		Behavior
Talkback (Toggle)	Footswitch		Closed	Talkback		Toggle	Latch
Talkback (Momentary)	Footswitch		Closed	Talkback		On	While Active
Fader Start	Fader Above	Ch 1	-60 dB	GPI Output 1		Closed	Pulse (0.3 s)
Fader Stop	Fader Below	Ch 1	-inf dB	GPI Output 1		Closed	Pulse (0.3 s)
Fader Start/Stop	Fader Above	Ch 1	-60 dB	GPI Output 1		Closed	While Active
Mute Channel (Toggle)	Footswitch	1	Closed	Mute	Ch 1	Toggle	
Mute Group 1 (Toggle)	Function Switch	9	Pressed	Mute Group		Toggle	Latch
Toggle Input Safe Switch mode	Function Switch/		Pressed	Input Safe Switch Mode			
Tap Tempo	Function Switch		Pressed	Tap Tempo			
Show Media Page	Function Switch		Pressed	Change View Mode > Media Page			
USB Play Cued Track	Footswitch		Closed	Media > Play Cued Track			
Pro Tools Start Record	Function Switch		Pressed	Pro Tools > Record			

Using the Templates

To add any of the events listed in the table, do the following (using the first template, Talkback (Toggle) as an example):

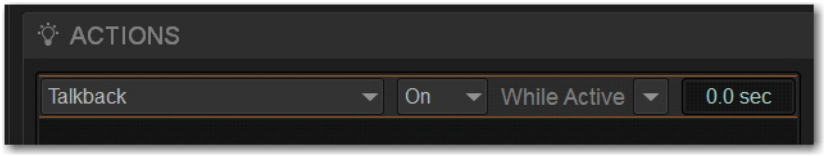
To use the templates:

1. Create a new event.
2. Edit the event name (for example, “Talkback (Toggle)” as shown in the table). For renaming instructions, see **Renaming an Event**.
3. Select the (Trigger) Add pop-up menu and choose Footswitch > Switch 1 (Footswitch 1). The Switch 1 trigger type is added, with a default State setting of Closed.
4. Select the (Action) Add pop-up menu and choose Talkback. The Talkback action is added. By default, the action State is Toggle, and the behavior is Latched. There is no Wait (delay before firing) needed for this action.

Switch 1 (Footswitch 1) is now configured to toggle Talkback On or Off each time the footswitch is pressed.

If you prefer momentary talkback, edit the event by doing the following.

1. Double-tap the Talkback action in the Actions list to access its editable properties.
2. Select the action State pop-up menu (it displays Toggle by default, or the current State setting) and select On.
3. Select the action Behavior pop-up menu and choose While Active. Together with the State setting (On), While Active establishes momentary control of the action; in this example, Footswitch 1 is now assigned to provide momentary Talkback control.



Talkback State and Behavior after editing

4. To quickly test the switch trigger, select the Test button, or press the Footswitch. Adjust the trigger State for your footswitch, as necessary, for its open/closed orientation. (For instructions, see **Editing Trigger Type and Properties**.)
5. After testing the trigger, select Reset to return the event to its Ready state.

Trigger Types

The following table lists the available trigger types and properties, along with a description of each.

Table 5. Trigger list, with default settings

Trigger Type	Property 1	Property 2	Description
Fader Above	Channel name/number	Fader level –inf to +12 dB (Default: –60 dB)	Fader moved above threshold level
Fader Below	Channel name/number	Fader level –inf to +12 dB (Default: –inf)	Fader moved below threshold level
Mute	Channel name/number	On (default) Off	Mute active/inactive
Solo/AFL Monitor Bus A	Any input, output, VCA, Solo In Place	On (default) Off	Solo/AFL active/inactive
Solo/AFL Monitor Bus A	Any input, output, VCA, Solo In Place	On (default) Off	Solo/AFL active/inactive
Function Switch	Function Switch 1–16	Pressed (default) Released	On button press (down) On button release (up)
Footswitch		Open Closed (default)	Footswitch input high Footswitch input low
GPI Input	GPI input 1	Open Closed (default)	GPI Input high GPI Input low
Recall Snapshot	Snapshot number and name		Event triggered by snapshot
Preview Mode		On (default) Off	Preview Mode active/inactive
Update Mode		On (default) Off	Update Mode active/inactive
Edit Mode		On (default) Off	Edit Mode active/inactive
Talkback		On (default) Off	Talkback active/inactive
Flip to Faders		On (default) Off	Flip to Faders active/inactive
Show Mode			Show Mode is active
Config Mode			Config Mode is active
System Start			System software initialized
Plug-In Rack Ready			Mirrors plug-ins rack Ready state

Action Types

The following table lists the available Action types and properties, along with a description of each.

Table 6. Action types

Action Type	Property	State	Behavior	Description
Target Next Channel				Selected Channel advances by one
Target Previous Channel				Selected Channel reverses by one
Copy Attentioned Channel				Channel copy operation
Paste to Attentioned Channel(s)				Channel paste operation
Mute Channel	Channel name/number	On Off Toggle (default)	Latch (default) While Active	Mute selected channel
Mute Group	Mute Group 1–8	On Off Toggle (default)	Latch (default) While Active	Toggle Mute group status
Mute All Stage Outputs		On Off Toggle (default)	Latch (default) While Active	Mutes all outputs of all assigned Stage 64 boxes
Clear Solos				Mirrors Solo Clear
Change View Mode	Software screen pages			Targets selected pages on-screen
Light Function Switch	Function Switch 1–16	On Off Toggle (default)	Latch While Active (default)	Lights Function switch
Flash Function Switch	Function Switch 1–16	On Off Toggle (default)	Latch While Active (default)	Flashes Function switch
Pro Tools				Transport controls for Pro Tools playback and recording
Stop				
Play				
Record				
Record Enable All VENUE Tracks				Tracks in Pro Tools with a VENUE I/O path are record armed (enabled).
Record Disable All VENUE Tracks				Tracks in Pro Tools with a VENUE I/O path are record dis-armed.
Recall Snapshot	Snapshot number and name			Recall specified snapshot
Recall Next Snapshot				Mirrors Snapshot Next button
Recall Previous Snapshot				Mirrors Snapshot Previous button
Recall Selected Snapshots				Mirrors Snapshot Recall button
Store to Selected Snapshot				Mirrors Snapshot Store button

Table 6. Action types

Action Type	Property	State	Behavior	Description
Preview Mode		On Off Toggle (default)	Latch While Active (default)	Activate/deactivate Preview Mode
Snapshot Update Mode		On Off Toggle		Update mode active while trigger is true
Absolute Edit Mode		On Off Toggle (default)		Enters Edit mode when trigger is true; exits via Absolute when trigger goes false
Relative Edit Mode		On Off Toggle (default)		Enters Edit mode when trigger is true; exits via Relative when trigger goes false
GPI Output	1–2	Open Closed (default) Toggle	Pulse, 0.3s (default) Latch While Active	Pulses or latches selected GPI Output
GEQ on Faders	• Toggle GEQ on Faders • GEQ 20–630 Hz • GEQ 800–20 kHz	 On, Off, Toggle On, Off, Toggle	 Latch While, Active Latch While, Active	Assigns Graphic EQ controls to the faders for the selected channel
Flash Console Light Bar				Flashes console lights
Engage Row Flip to Faders		On Off Toggle (default)	Latch While Active (default)	Mirrors the **Flip** switch
Disable Bank Safe		On Off Toggle (default)	Latch (default) While Active	Disables any currently Bank Safed channels
Talkback		On Off Toggle (default)	Latch (default) While Active	Toggles the Talkback output on/off
Input Safe Switch Mode				Cycles through Input Safe Switch modes
Output Safe Switch Mode				Cycles through Output Safe Switch modes
Tap Tempo				Sets the system tempo to synchronize delay plug-ins that support Tempo Sync
Cancel Operation				Mirrors Cancel switch (and Esc key on keyboard)

Examples of Logical Operators

Logical operators determine the precise state required in order for an event to occur as shown in the following tables:

OR At least one of the triggers must be true. The following table shows the effect of OR on events with multiple triggers. In the table, 0 indicates a false condition (not occurring) and 1 indicates a true condition (occurring).

When using OR, if one or more (but not all) of the triggers go false, the event logic is only acted on again when all triggers evaluate to false (result = 0).

Trigger A	Operator	Trigger B	Result
0	OR	0	0
0	OR	1	1
1	OR	0	1
1	OR	1	1

AND All triggers must be true. The following table shows the effect of AND on events with multiple triggers. In the table, 0 indicates a false condition (not occurring) and 1 indicates a true condition (occurring).

Trigger A	Operator	Trigger B	Result
0	AND	0	0
0	AND	1	0
1	AND	0	0
1	AND	1	1

XOR

At least one trigger, but not all, must be true. The following table shows the effect of XOR on events with multiple triggers. In the table, 0 indicates a false trigger condition (not occurring) and 1 indicates a true condition (occurring).

Trigger A	Operator	Trigger B	Result
0	XOR	0	0
0	XOR	1	1
1	XOR	0	1
1	XOR	1	0

Options

The Options page provides several tabs. Of these, the System and Devices tabs are where most system configuration settings and options are enabled and customized:

- The System tab provides the primary tools by which you configure mixing, routing, and processing options.
- The Devices tab provides status, diagnostics, and options for hardware components.

This chapter shows you how to manage the most important System and Devices settings, and describes the settings available in other Options screens.

Overview of Options

The Options page provides the following tabs:

- **System**
- **Busses**
- **Pickoffs**
- **Snapshots**
- **Misc**
- **Interaction**
- **Devices**
- **Plug-Ins**
- Plug-Ins (see **Installing and Authorizing Plug-Ins**)

System

From the System tab you can configure inputs, Main and Mix busses, reset and shut down your system, lock the system, and get system info.

Settings available in the System tab can only be edited while in Config mode.

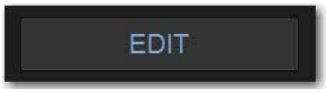
⚠ *Changing system settings may restart and/or interrupt audio.*

To change a system configuration option:

6 Put the system in Config mode.

7 Go to the Options page and select the System tab.

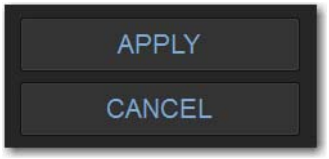
8 Select Edit.



9 Change a Mains Bus or Mix Bus Configuration, or enable or disable Virtual Soundcheck or Input mode.

💡 *Select the Cancel button to return to the previous setting.*

10 Select Apply to confirm and apply your new settings, or Cancel to cancel the operation.



11 Return to Show mode when you are finished editing settings.

System Configuration

In Show mode, the System Configuration section is display-only, showing the current allocation of system resources and bus settings.

In Config mode, you can edit system settings such as input channel configuration, bus configurations, and hardware I/O configurations.

Audio is interrupted when a System Configuration setting is applied. Do not change these settings during a performance.

System configuration settings are stored with Show files. See **System Configurations and Loading Shows** *for more information.*

Engine

This section shows the following information:

Internal Processing Shows the current sample rate of the S6L system.

HDX Mix Engines Shows the number of HDX TDM cards are installed in the currently paired E6L Engine.

DSPs for Plug-Ins Shows the amount of DSP available for plug-ins is pre-configured, and cannot be changed.

Processing

Input Channels Shows the maximum number of input processing channels available on your system, and is determined by the model of E6L engine your S6L control surface is currently paired with.

Matrixes Shows the number of available Matrix Mixers, and is determined by the model of E6L engine your S6L control surface is currently paired with.

VCAs Shows the number of available VCAs.

Mute Groups Shows the number of available Mute Groups (24).

Graphic EQs Shows the number of available Graphic EQs (32).

Virtual Soundcheck

This setting lets you globally choose between using Stage inputs or Pro Tools inputs as the source for your system input channels.

See **Pro Tools Recording and Playback** *for more information.*

Mains Bus Configuration

The Mains Bus settings let you choose the overall configuration for the Main busses.

For instructions, see **Configuring the Mains Bus**.

Mix Bus Configuration Settings

These options settings let you choose the overall Aux and Group bus configuration.

For instructions, see **Configuring Mix Busses**.

System Information Export

Info Button

The System Information Export feature lets you generate an HTML (text) document that details system hardware, software and currently loaded Show file configurations. This document can be read by any Internet browser, such as Internet Explorer, Mozilla Firefox, Safari, or Chrome.

The patch list can also be exported separately (for more information, see **Patch List Export***).*

The System Information document can be sent directly to production or rental companies to describe your exact system needs; alternately, the information can be re-formatted as desired by copying and pasting the data into a word processing or spreadsheet application.

To export VENUE System Information:

1. Insert a USB storage device into any available USB port on the S6L control surface.
2. Go to Options > System.
3. Select the Info button.
4. Do any of the following:
   - If you have more than one USB storage device connected, make sure the correct USB device is selected. If it is not, select Next Disk to cycle through each available disk until the correct one is selected.
   - Select Save to proceed and export system info to the selected USB disk.
   - Select *Cancel* to dismiss the dialog without exporting.
5. Select OK to confirm the export procedure.

You can now remove the USB device —from there, you can transfer the exported file to a personal computer for printing, formatting, archiving or distribution.

Lock

You can lock and hide surface and on-screen controls.

To engage System Lock:

1. Go to Option > Systems.
2. Select the Lock button in the System section.
3. In the dialog that appears, select Lock.

On-screen, an Unlock button appears in the lower right corner in front of a dimmed background image.

To unlock the system (disengage System Lock):

- Do either of the following:
  - Press and hold the **Cancel** switch on the S6L control surface for two seconds.

  – or –
  - Select Unlock in the lower right corner of the screen.

The Unlock button is hidden after a few seconds. Touch the mouse or keyboard to bring it back.

System Status while Locked

GPI All system GPI inputs and outputs are disabled while the system is locked.

Footswitches All Footswitch inputs are disabled while the system is locked.

Events All Event triggers and actions are disabled while the system is locked.

MIDI and Time Code

While the system is locked:

- Snapshots continue to be recalled via MTC/LTC, either internally or externally generated.
- The system continues to respond to snapshot changes via incoming MIDI program change commands if the Snapshots Respond option is selected on the Options > Snapshots page.
- The system continues to send MIDI program changes when a snapshot is recalled if the Snapshots Send option is selected on the Options > Snapshots page.
- The system continues to send MIDI messages stored within snapshots, provided the MIDI data type is scoped.

MTC/LTC can be disabled using the CHASE MTC/LTC button on the Snapshots page. Also, the sending and receiving of MIDI data can be turned off by deselecting the MIDI options on the Options > Snapshots page.

Update

The Update button is used to perform software updates on your system, and to install ECx Ethernet Control host software. Updates performed using the Update button are distinct from system restores and system updates using the System Restore software.

Troubleshooting

This section provides the following troubleshooting options:

Clear Console

The Clear Console button resets all parameters on all channels to their factory default settings.

Run System Test

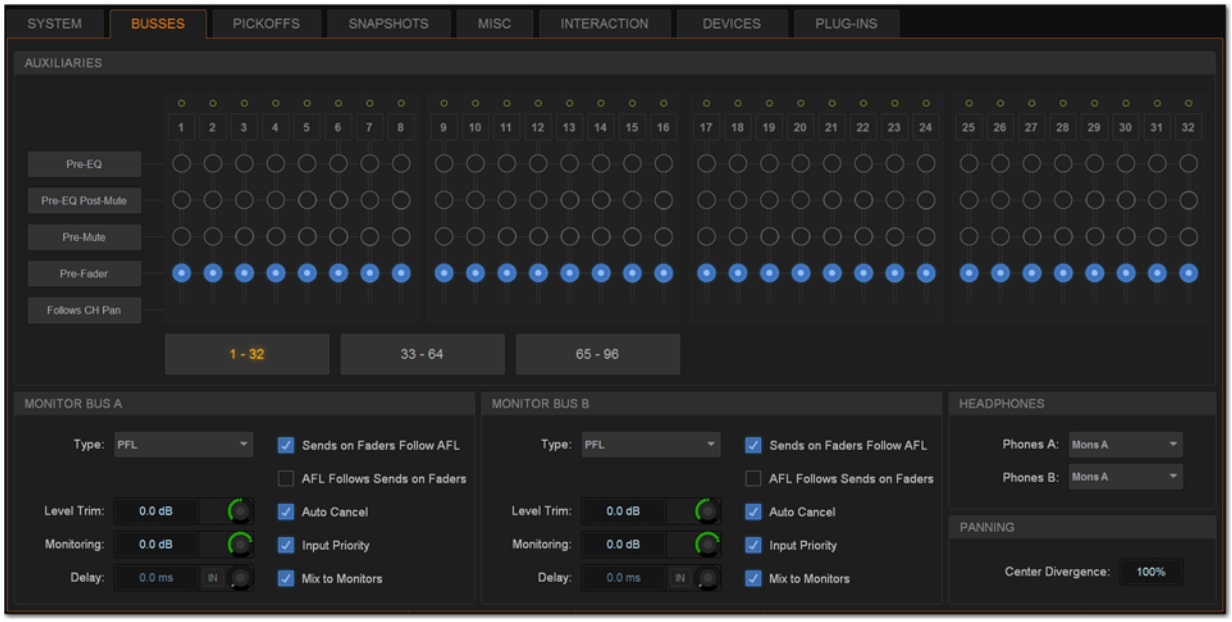
System Test is hardware diagnostics software for the system. Only use System Test at the request of a qualified VENUE technician to diagnose specific hardware problems.

VENUE Software

This shows the version of VENUE software currently installed on your S6L control surface.

Busses

The Busses tab lets you customize characteristics for the Aux, Solo, Matrix, and Main busses.



Busses tab of the Options tab

Auxiliaries

These options and indicators let you designate pickoff point of the Aux Sends feeding Aux outputs. Auxes are oriented vertically in columns, and the channel number of the Aux is shown at the top of the column.

Mono/Stereo Indicator Shows whether the Aux output is mono (single yellow circle) or stereo (interlocking green circles). Mono Auxes can be combined into stereo channels using the Make Stereo command (see **Make Selected Mono Strips Stereo/Make Selected Stereo Strip Mono**).

Pickoffs These options let you designate the pre-fader pickoff point feeding each bus. Choices include Pre-EQ, Pre-EQ Post-Mute, Pre-Mute, and Pre-Fader (post-mute).

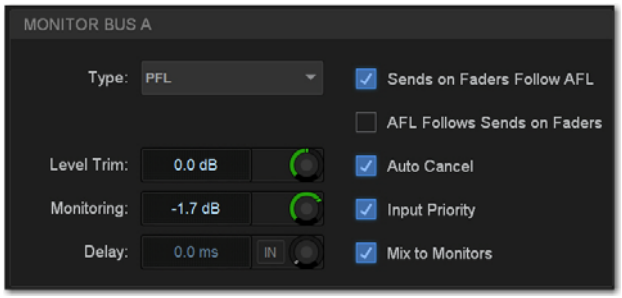
Aux Select Buttons These buttons let you access the pickoff options of the Aux outputs indicated on the button. Any Aux outputs currently unavailable are greyed out in the grid.

For more information on Aux/Variable Group pre-fader pickoff points, see **Selecting Aux Pre-Fader Pickoff Points.**

Follows Channel Pan Each channel can be panned independently within each stereo Aux, or configured to follow the channel pan by enabling the Follows Channel Pan option.

Solo and Monitor Operations

These settings customize Solo and Monitor bus mode and operation. See **Configuring the Monitor Busses and Solo Options** for more information.



Monitor bus options on the Options > Busses tab

Headphones

These settings let you set the Monitor bus that feeds each S6L control surface front-panel headphone output.

Panning (Mains Center Divergence)

When the Main busses are set to L–C–R (Left-Center-Right) mode, the Center Divergence setting determines the amount of center-panned signal sent to the center output.

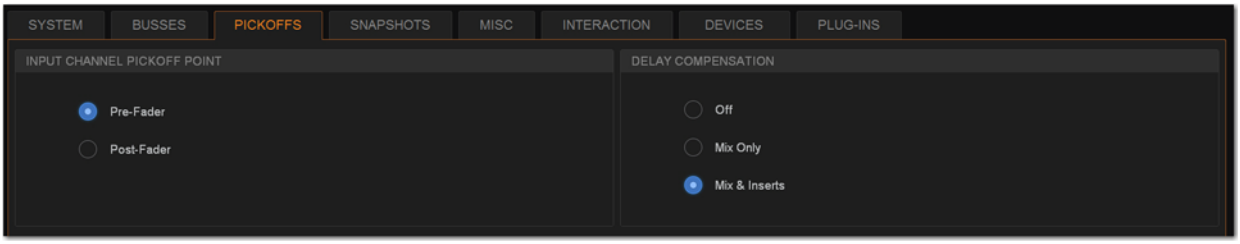
- When Center Divergence is set to 100%, a channel panned to center is sent to the center output only.
- When Center Divergence is set to 0%, a channel panned to center is sent equally to the left and right outputs only (phantom center).
- A Center Divergence setting between 0% and 100% sends a center-panned channel to the left, center, and right outputs with the center channel more prominent as the value increases towards 100%.

To set Center Divergence:

1. On the external screen, go to Options > Busses.
2. In the Panning section, select in the Center Divergence field and drag up/down to increase/decrease the value (or type in a new value).
3. Press Enter or Return on your keyboard to confirm the setting.

Pickoffs

The Pickoffs tab lets you control the bus pickoff point on input strips, as well as specify source and insert points for output busses. The Pickoffs tab also provides master control for Delay Compensation.



Pickoffs tab of the Options page

Delay Compensation

Three settings for Delay Compensation are provided, as follows:

Off No Delay Compensation is applied.

Mix Only VENUE automatically compensates for delays incurred by the use of plug-ins.

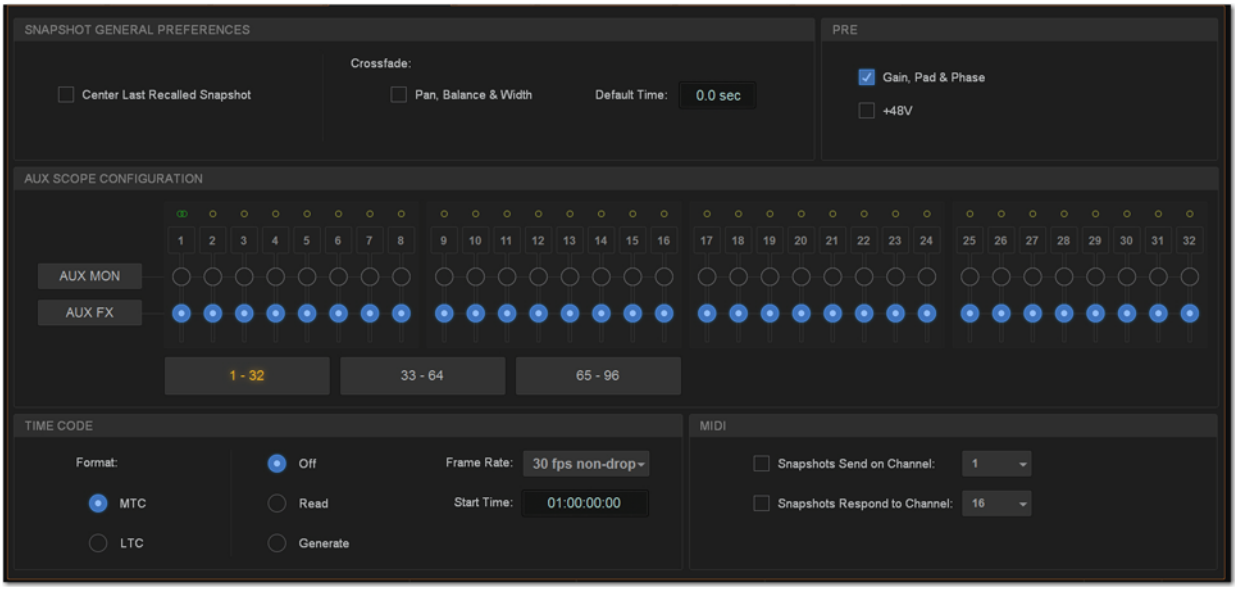
Mix and Inserts VENUE automatically compensates for delays incurred by the use of plug-ins.

Delay Compensation can be set in either Show or Config mode.

Snapshots

The Snapshots tab provides several snapshot preference settings to optimize snapshot operation.

For more information on using snapshots, see **Snapshots.**



Snapshots tab of the Options page

Snapshot General Preferences

The following settings are available in the Snapshots tab.

Center Last Recalled Snapshot Manages the display of the Snapshots list so that the last recalled snapshot is always centered vertically, letting you maintain display of adjacent snapshots in the list.

Default Crossfade Time Defines the length of time it takes to crossfade between fader levels when recalling snapshots. Maximum crossfade time is 99.9 seconds.

Crossfade Pan, Balance, and Width All Pan, Balance and Width parameters follow the default snapshot crossfade time.

PRE

The options in the PRE section let you specify which parameters are recalled with Snapshots whose scope includes Pre settings. Select to toggle whether recalled Input snapshot data includes the following:

- Gain, Pad, and Phase
- +48V (phantom power)

Delay is stored as a unique (discrete) data type for each channel.

Aux Scope Configuration

These settings let you classify individual Aux Sends (including linked bus pairs) as monitor sends (“Aux Mon”) or as effects sends (“Aux FX”) as they apply to the Snapshots Data Type Scope buttons.

This option is for organizing Aux Sends for snapshot control only, and does not directly affect Aux bus operation.

Time Code

The Time Code options let you choose the current time code format, operational modes, frame rate, and Start Time.

Format Choose between MTC and LTC for the current time code format. Only one time code format may be selected at a time.

Modes Available time code modes for MTC are Off, Read (slave), and Generate (master). Available time code modes for LTC are Off and Read (slave).

Frame Rate This option sets the frame rate that is used when generating MTC.

Start Time This option sets the start time that is used when generating MTC.

See **Synchronization** *for more information.*

MIDI

These settings designate the MIDI channel on which Snapshots send or receive MIDI Bank Select and Program Change information.

Snapshots Send on Channel This option sets snapshots to send Bank Select and Program Change commands on a selected MIDI channel. This provides a quick and easy way to send a MIDI command every time a snapshot is fired, without having to embed a MIDI program change within each snapshot.

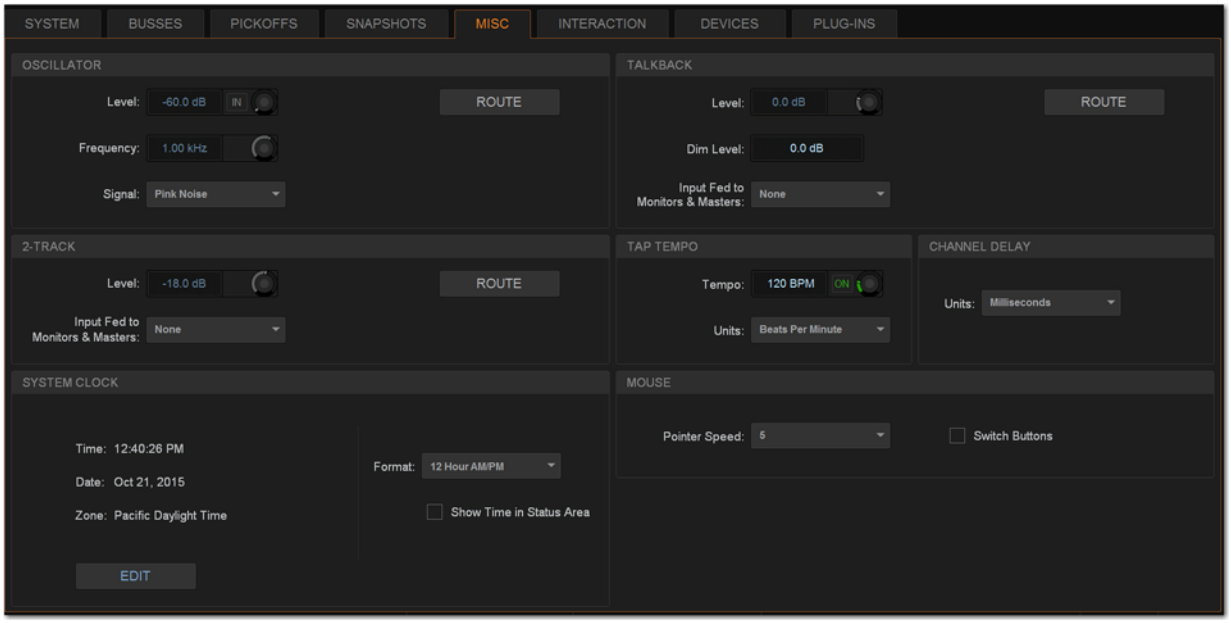
Snapshot Send on Channel does not need to be turned on in order to send other types of MIDI data that *are* embedded in snapshots, such as note on/off or MMC.

Snapshots Respond to Channel This option sets snapshots to respond to incoming Bank Select and Program Change commands on the selected MIDI channel.

See **Synchronization** *for more information.*

Misc

The Miscellaneous (Misc) tab provides utility and other settings.



Misc tab of the Options page

Oscillator

The Oscillator provides selectable signal type, frequency (for Variable Sine) and signal level, as well as a master on/off switch. The output of the Oscillator can patched to input channels using the Patchbay (see **Patching Input Sources to Input Channels**), and can be routed directly to output busses using Route to Attentioned mode.

Routing the Oscillator to Output Busses

To route the Oscillator to an output bus:

1. Go to the Options page and select the Misc tab.
2. In the Oscillator section, select the Route button. The switch flashes to indicate Route to Attentioned mode.
3. Go to the Outputs page and attention one or more output fader strips. The attentioned fader strips flash.
4. In the confirmation dialog that appears, select Route to confirm your assignment, or select Cancel to cancel without changing the current routing.

⚠ *Signals are routed to output busses post-mute and post fader.*

Configuring the Oscillator and Setting Level

The Oscillator is configured on-screen, and can be activating on-screen or from the Global Control encoders.

To configure the Oscillator:

1. Go to Options > Misc.
2. As a precaution, drag the on-screen Level encoder in the Oscillator section to set the Oscillator level to off before you go any further.

3 Select the Signal pop-up and select from the following signal types:
   - 100 Hz Sine
   - 1 kHz Sine
   - 10 kHz Sine
   - Variable Sine
   - Pink Noise
   - White Noise
4 If you select Variable Sine, you can set the sine wave frequency with the on-screen frequency control (directly to the right of the Signal pop-up).
5 Select the on-screen In button to activate the Oscillator.
6 Slowly drag the on-screen Level encoder to set the Oscillator level.

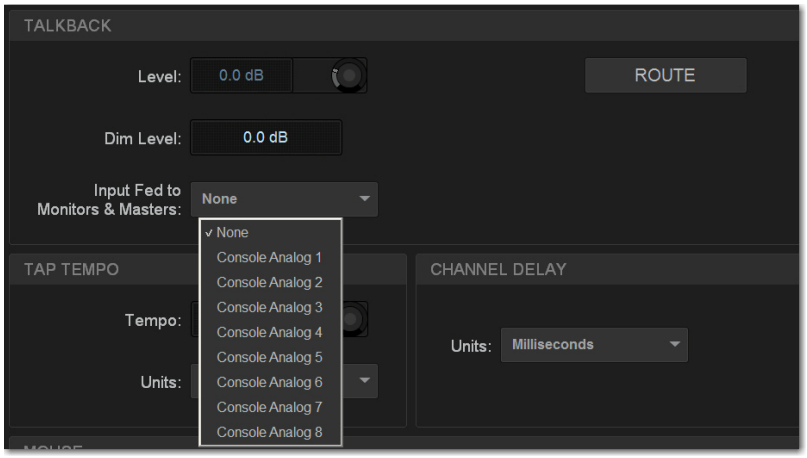
Talkback

You can route a single Console or Engine analog input directly into any output bus using the Talkback circuit. This allows you to send Talkback to outputs (such as Auxes feeding stage monitors) without having to use a system channel.

Routing Talkback to Output Busses

To route Talkback to an output bus:

1 Go to Options > Misc.
2 In the Talkback section, select the Input Fed to Monitors and Masters pop-up and choose a hardware input source.



Choosing a Talkback input

3 Select Route. The switch lights to indicate Route to Attentioned mode.
4 Go to the Outputs page and attention one or more output fader strips. The attentioned fader strips flash.
5 In the confirmation dialog that appears, select Route to confirm your assignment or select Cancel to cancel without changing the current routing.

⚠ *Signals are routed to output busses post-mute and post fader.*

Activating Talkback Input and Setting Level

Talkback can be adjusted on-screen or from the Global Control encoders.

To activate and set the level for Talkback input on-screen:

1. Go to Options > Misc.
2. Select the on-screen In button in the Talkback section to activate the Talkback input.
3. Drag the on-screen Level knob to set the Talkback level.

You can designate a footswitch, Function switch or other triggers to control Talkback. For more information, see **Events.**

Setting Talkback Dim Level

When Talkback is sent directly to an Output bus, the bus program material (minus the Talkback signal) is automatically reduced by the amount specified in the Dim Level setting.

To set the Talkback Dim Level:

1. Go to Options > Misc.
2. In the Talkback section, double-tap the Dim Level text box and enter a Dim Level value in the range –60 dB (maximum gain reduction) to 0 dB (no gain reduction).

2-Track Inputs

You can route a pair of Console or Engine analog or digital hardware inputs directly into output busses using the 2-Track inputs. This allows you to send audio to the selected outputs without using a system channel. Use this feature to perform tasks such as confirming system audio output.

Routing 2-Track to Output Busses

To route 2-Track inputs to output busses:

1. Go to Options > Misc.
2. In the 2-Track section, select the Input Fed to Monitors and Masters pop-up and choose a hardware input source.
3. Select Route. The switch flashes to indicate Route to Attentioned mode.
4. Go to the Outputs page and attention one or more output fader strips. The attentioned fader strips flash.
5. In the confirmation dialog that appears, select Route to confirm your assignment or select Cancel to cancel without changing the current routing.

Activating 2-Track Input and Setting Level

The 2-track input can be adjusted on-screen or from the Global Control encoders.

To activate and set level for the 2-Track inputs on-screen:

1. Go to Options > Misc.
2. In the 2-Track section, select the on-screen In button to activate the 2-track input.
3. Drag the on-screen Level knob to set the level.

Talkback, 2-Track and Oscillator States When Loading Shows

When you load a Show file, Talkback, 2-Track and Oscillator controls are set to off (deactivated), regardless of their state when the Show was last saved.

System Clock

This section lets you set the date and time for the system, as well as display preferences. See **Setting the System Clock** for instructions.

⚠ *Changing the system clock while using a timed iLok license (for a plug-in with a demo period, or for a plug-in rental) may expire the plug-in authorization.*

⚠ *The system clock setting can affect data synchronization with portable storage devices. See* **Synchronizing Settings, Shows and Presets**.

Show Time in Status Area

You can choose to show time of day in the lower right corner of the screen in the Status display area.

To show time of day in the Status area:

1. Go to Options > Misc.
2. In the System Clock section, enable the Show Time in Status Area option.
3. Choose a format for the displayed time: 12 hour (AM/PM) or 24 hour.

Time of day is shown whenever the status of the plug-in racks is OK; plug-in rack status messages (if any) temporarily replace time of day display to alert you to plug-in rack status.

Channel Delay Unit Display

This section lets you set the display units on all applicable input and output delay controls. This makes it possible to set the delay based on any of the following:

- delay time (in milliseconds)
- distance to the source (in feet or meters)
- number of samples of delay

Tap Tempo

This section lets you enable and adjust the settings for Tap Tempo. Tap Tempo lets you quickly establish a system tempo to use as a beat clock for delay and echo plug-ins that support Tempo Sync.

See **Tap Tempo for Plug-ins** *for more information.*

Mouse

Pointer Speed and Mouse L/R Settings

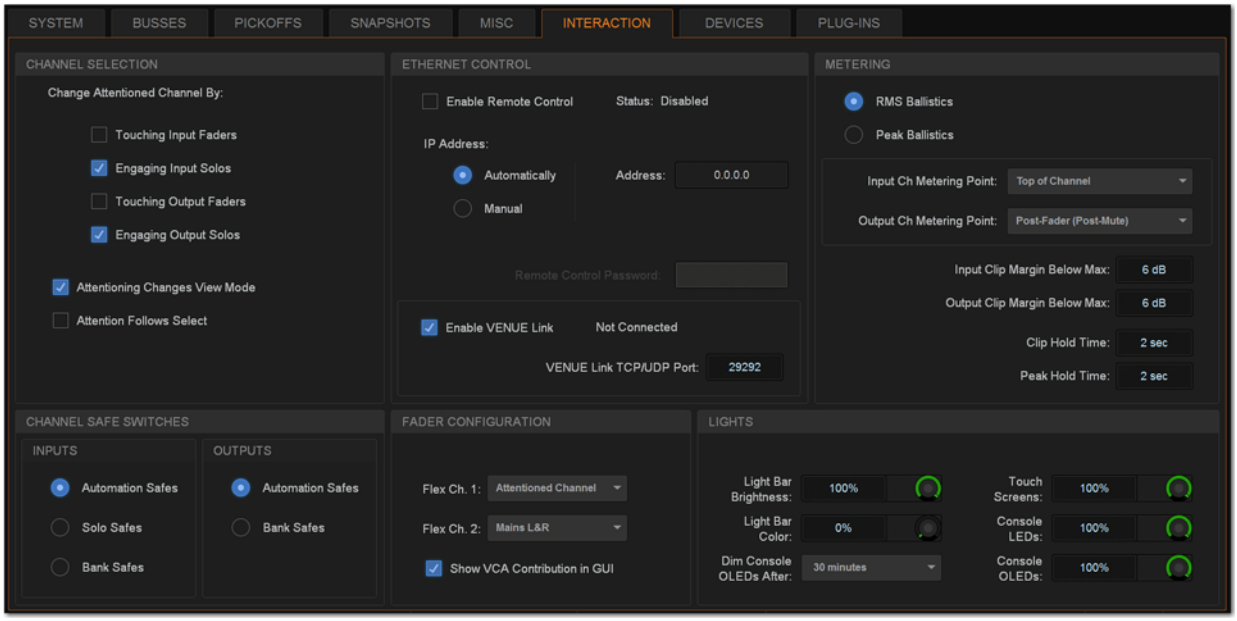
This section lets you customize the response speed for the trackball (or mouse) and on-screen cursor, and reverse the left/right assignment of the Trackball buttons, from the Options > Misc page.

To customize Pointer Speed:

1. Go to Options > Misc.
2. Do any of the following:
   - To adjust cursor speed, select the Pointer Speed pop-up menu and choose a higher value for faster response, or a lower value for a slower response.
   - To reverse the left/right assignment of the two Trackball buttons, select Switch Buttons.

Interaction

The Interaction tab lets you configure behaviors for attentioned and selected channels the Channel Safe Switches; light bar, OLED and touch screen brightness; Metering; Ethernet Control and VENUE Link network settings; and Flex Channels and VCA configuration.



Interaction tab of the Options page

Channel Selection

Options in this section determine how channels are attentioned on the external screen and the MTS.

To customize control surface and screen interaction:

1 Go to the Options page and select the Interaction tab.

2 Set the following Channel Selection options:

Change Attentioned Channel By Let you specify how a channel is attentioned on the external screen and the MTS. Select any or all of the following options:

- Touching Input Faders
- Engaging Input Solos
- Touching Output Faders
- Engaging Output Solos

Attentioning Changes View Mode When selected, updates the on-screen display to show the page for the currently attentioned channel. When this option is deselected, the on-screen display does not update when a channel is targeted.

Attention Follows Select When selected, any channel that is selected using the channel strip **Select** switch is also attentioned, and is the default setting. When deselected, select and attention are decoupled.

Ethernet Control

Ethernet Control settings let you configure the following:

ECx Network Settings These settings let you configure ECx Ethernet Control to remotely control of your system over a wired or wireless Ethernet network. See the *ECx Ethernet Control Guide* for more information.

VENUE Link Settings These settings let you configure VENUE Link to integrate a Pro Tools system with VENUE. See **Using VENUE Link.**

Metering

The following display options can be configured for meters. These options affect the 16 channel meters on the S6L control surface and on-screen.

Meter Ballistics

This option lets you choose RMS or Peak ballistics for the control surface and on-screen meters.

RMS Ballistics (Default) Meters follow the characteristics of a damped analog meter. In this mode, meter response and decay is slower than in Peak mode, providing an average reading of the metered signal. A single LED shows the peak level for the designated Peak Hold Time.

Peak Ballistics Meters follow the characteristics of a standard peak meter. In this mode, meter response is instantaneous, showing the true peak level of the metered signal.

You can set Pro Tools metering to mirror VENUE metering. See **Pro Tools Recording and Playback.**

Clipping Indication

VENUE meter clip indicators are proximity warnings that show when an input or output signal reaches or exceeds the configured Clip Margin.

Clipping can occur at several points throughout the signal chain. A clip at any one of these points is indicated by lighting the top LED red on the meter. For more information on the location of clip detect points, refer to Chapter 26, “Signal Flow Diagrams.”

Clip Margin Lets you configure the amount of headroom you want before clipping indication begins. Clip Margin is expressed as *dB below maximum* (where maximum is a peak level of +20 dB VU).

Clip Margin can be set within a range of 0 dB to 30 dB below maximum, and is configured separately for inputs and outputs.

To set the Clip Margin:

1 Go to Options > Interaction.

2 Under Meter, enter values for Input Clip Margin Below Max and Output Clip Margin Below Max.

3 Press Enter to confirm the setting.

Clip Hold Time

The Clip Hold Time determines how long a clip indication lasts after the last clipped signal. Clip Hold Time can be set within a range of 0–20 seconds.

To set the Clip Hold Time:

1 Go to Options > Interaction.

2 Under Meter, enter a value for the Clip Hold Time.

3 Press Enter to confirm the setting.

Metering Points

These options let you choose the point in the signal path where the signal is picked off for metering input and output channels.

Input Channels Metering Point Choose one of the following options to set the input channel metering point:

- Top of Channel
- Insert Return
- Post-Fader (Pre-Mute)

Output Channels Metering Point Choose one of the following options to set the output channel metering point:

- Top of Channel
- Post-Fader (Post-Mute)

Channel Safe Switches

These options set the global Safe Mode that is enabled when you press a Channel **Safe** switch on the control surface, or select the Channel Safe button on an external screen Input/Output page, and can be set to one of the following modes:

Automation Safes L lets you suspend the effect of snapshots on all parameters of the channel. See **Automation Safing Channels**.

Solo Safes (input Channels Only) Prevents that channel from being implicitly muted when any other channel is soloed. See **Soloing Channels.**

Bank Safes Temporarily “locks” the location of key channels (such as a lead vocal or the Mains) on an S6L control surface channel strip. See **Bank Safing Channels**

You can use Events to program a Function switch or other trigger to cycle through Input and Output Safe Switch modes. For more information see **Events.**

Fader Configuration

Configuring Flex Channels

The Flex Ch.1 and Flex Ch.2 pop-up menus let you configure the Flex Channels. The following options are provided for each Flex Channel:

Mains L&R Assigns the Mains L-R output to the Flex Channel, and is the default setting for Flex Channel 2. If the Mains L-R are unlinked, you can target each Mains L and R bus individually on the Flex Channel by pressing the **Attention** switch on the corresponding Flex Channel. The currently targeted Mains bus is indicated in the corresponding display. Solo is inoperable for Mains are assigned to the Flex Channel.

Mains C/Mono Assigns the C/Mono output to the Flex Channel. Solo is inoperable for Mains.

Monitor Bus A Assigns level control for Monitor Bus A to the Flex Channel. This can be useful for monitor mixing workflows.

Monitor Bus B Assigns level control for Monitor Bus B to the Flex Channel.

Attentioned Channels Assigns the currently attentioned channel to the Flex Channel, and is the default setting for Flex Channel 1. Double-pressing the channel strip **Attention** strip “latches” that channel to the Flex Channel, until is unlatched by another double press

Show VCA Contribution

This option lets you display a secondary, transparent fader cap on each on-screen fader strip that represents the effective channel gain (channel gain plus associated VCA gain, if any). For more information, see **Working with VCAs**.

Lights

Console and LED/Display settings let you adjust the brightness of the following items:

Lightbar Brightness Adjusts the brightness of the built-in lightbar.

Lightbar Color Adjusts the color of the built-in lightbar.

Dim Consoles OLEDs After Automatically dims the OLED displays on the control surface after the interval selected in the pop-up menu.

Touch any control on the control surface to undim the displays.

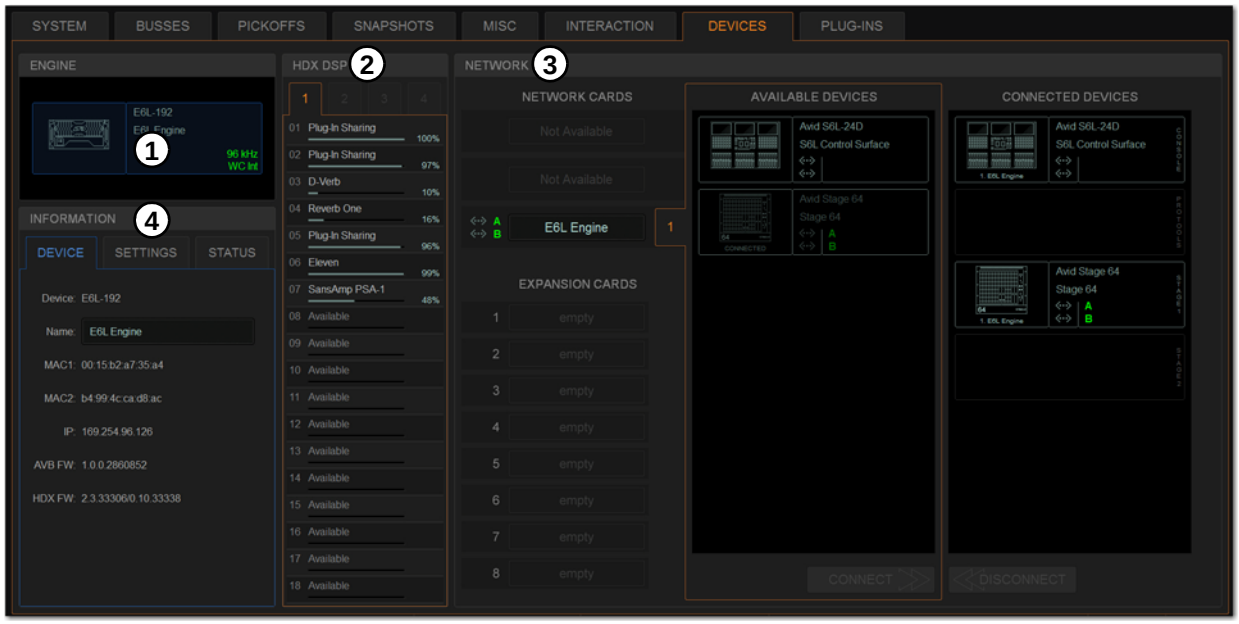
Touch Screens Adjusts the brightness of the MTS and any CTMs.

Consoles LEDs Adjusts the brightness of the switch and encoder LEDs on the control surface.

Consoles OLEDs Adjusts the brightness of the OLED displays on the control surface.

Devices

The Devices tab lets you view and edit system connections, edit hardware settings, provides troubleshooting and diagnostic options, and provides network information.



Devices tab of the Options page

1 – Engine

This es section shows the E6L engine that is currently paired to the S6L control surface. The current sample rate and word clock status (internal or external) is shown.

2 – HDX DSP

This section shows the DSP usage of the HDX TDM Mix Engine cards currently installed in the E6L engine.

To view a card's DSP usage:

- Select a card number 1–4 to view that card's DSP usage.

3 – Network

This section shows the various devices are currently connected to the AVB audio network, and cards currently installed in the E6L engine.

Network Cards

This section shows the three AVB-192 Network card slots in the E6L engine, and the AVB-192 Network cards that are currently installed in them. You can manage and view the devices that are connected to each card, and give each AVB-192 Network card a unique name.

To view and manage the devices connected to an AVB-192 Network card:

- Select a Network card. Devices available for connection are shown in the Connected Devices column, and currently connected devices are shown in the Connected Devices column.

To rename an AVB-192 Network card:

- Double-tap a Network card, then enter a name.

Available Devices

This section shows the devices that are available to be connected to the selected Network card. A device is dimmed if that device has already been assigned via another AVB-192 Network card in currently paired E6L engine. Available Stage 64 I/O boxes are assigned using the CONNECT button.

To connect a device:

1. Enable Config mode.
2. Select the Connect button at the bottom of the Available Devices column.
3. In the Connected Devices column, select a flashing Stage slot to assign that device to that Stage slot.

Connected Devices

This section shows the devices that are currently connected to the selected Network card in the Network Cards section. Assigned Stage 64 I/O boxes are unassigned using the DISCONNECT button.

To unassign (disconnect) a device:

1. Enable Config mode.
2. In the Connected Devices column, select the Stage 64 you want to unassign so it is outlined in blue.
3. Select the Disconnect button at the bottom of the Connected Devices column.

4 – Information

This section shows information for the device that is currently selected in the Devices page, as follows:

DEVICE Shows the device type, the assigned name (which can be changed), MAC address(es), IP address, and device firrmware versions (where applicable).

SETTINGS Shows device settings for the E6L engine and the Stage 64 as follows:

- For E6L, the current sample rate is shown.
- For Stage 64, the I/O cards currently installed in each I/O card slot is shown. You can also select the Stage 64's MADI Out sample rate (see **Configuring Stage 64 MADI Outs**), and enable DSI-192 card ADAT inputs (see **Enabling ADAT Inputs**).

Status Provides hardware monitoring information, such as internal temperature and voltage.

To rename a device:

1. Select a device on the Devices page.
2. Select the DEVICE tab.
3. Double-tap the Name field, and enter a new name.

Managing I/O from the Devices Page

You can identify connected Stage 64 I/O boxes and mute Stage 64 and S6L control surface outputs from the Devices page.

Identifying Stage 64 I/O Boxes

The Identify button on an on-screen Stage 64 icon lets you identify the physical Stage 64 that corresponds to that Stage 64.

To identify a connected Stage 64:

1. Select a Stage 64 on the Devices page.
2. Select the DEVICE tab.
3. Select the Identify button to latch the button on. The Identify button on-screen flashes, and the Power and Status LEDs on the front panel of the corresponding Stage 64 box flash.

Muting Stage 64 and S6L Control Surface Outputs

The Mute button on the Devices tab lets you mute all the outputs on connected Stage 64 I/O boxes or the S6L control surface.

To mute the outputs of a Stage 64 or S6L control surface:

1. Select a device on the Devices page.
2. Select the DEVICE tab.
3. Select MUTE. The Mute switch flashes while the outputs are muted, and the Mute LEDs on the Stage 64 or the S6L control surface light solid red.

AVB Network Card Port A and B LEDs

On-screen LEDs are provided on the Devices page to indicate the status of the physical A and B Network ports on each S6L system component (S6L control surface, E6L engine, and Stage 64 I/O boxes), as follows:

LED Color	Network Port Status
Green	The port is connected and has a valid connection to another device.
Amber	This port is connected and is part of a non-redundant daisy-chain.
Red flashing	The port has lost a connection with a device. When canceled via dialog box, it turns off.
Off	This port does not have a connection with a device. For example, it is a device at the end of a non-redundant daisy-chain.

Plug-Ins

The Plug-Ins tab of the Options page is used to install plug-ins on the system. The Plug-Ins tab is not available in the VENUE Standalone software.

See **Installing and Authorizing Plug-Ins.**

Part IV: Recording and Playback

Pro Tools Recording and Playback

The S6L system provides direct connection to a computer running Pro Tools software. No additional audio hardware is required to connect your S6L system to Pro Tools.

A single Ethernet connection lets you record multi-track Pro Tools sessions of performances using a variety of S6L system audio sources, including digital splits of your Stage inputs, channel Direct Outputs, and bus outputs. You can also play back multi-track audio from Pro Tools through your S6L system to integrate pre-recorded tracks with your live mix, or to monitor your Pro Tools recording on your S6L system.

By combining recording and playback features, you can perform a true Virtual Soundcheck: play back the tracks from a previous performance, adjust the mix, and have the changes remain when you switch back to your live mix.

When recording and playing back with Pro Tools, use VENUE Link to exchange data between systems to simplify and enhance live recording and playback workflows.

Pro Tools Recording and Playback Capabilities and Features

S6L and Pro Tools provide the following features:

- A direct digital connection (24-bit, 96 kHz Ethernet AVB audio) over a Cat 5e (350 MHz or higher required) Ethernet cable between your S6L system and a qualified computer running a compatible version of Pro Tools software
- Support for connection to the Ethernet port or Thunderbolt port (using an Ethernet-to-Thunderbolt adapter) on the Pro Tools computer
- Record up to 64 channels of S6L system audio and simultaneously play back up to 64 channels of Pro Tools audio through your S6L system
- An automatic one-for-one direct digital split of all assigned Stage input channels without needing to crosspatch or configure the VENUE software Patchbay
- Freely assignable Pro Tools I/O for recording output busses, submixes, Direct Outputs, and for playing back tracks from Pro Tools and monitoring a Pro Tools recording
- Fully-integrated Virtual Soundcheck, including the ability to toggle individual inputs between live Stage inputs and Pro Tools Virtual Soundcheck inputs
- Support for VENUE Link, providing S6L system and Pro Tools integration and interoperability

Pro Tools Compatibility

Avid can only assure compatibility and provide support for hardware and software it has tested and approved.

For complete system requirements and a list of qualified versions of Pro Tools software, computers, operating systems, hard drives, and third-party devices, visit:

www.avid.com/S6Lsupport

S6L and Pro Tools Overview

The Ethernet AVB connection between your S6L system and Pro Tools provides up to 64 channels of simultaneous Pro Tools I/O. This bi-directional AVB audio connection lets you send S6L system audio to Pro Tools for recording, and simultaneously receive audio from Pro Tools for playback. The S6L system provides several different types of Pro Tools I/O for recording and playback.

This connection also provides the VENUE Link communication link between systems.

⚠ *A direct connection between the S6L system and Pro Tools is required. Network equipment such as routers, hubs, and switches are not supported for S6L network connections to Pro Tools.*

Recording Outputs

The Ethernet AVB audio connection carries the following types of output signals from the S6L system to Pro Tools for recording:

Direct Digital Splits

Stage inputs assigned to S6L system input channels are automatically sent to Pro Tools as unprocessed direct digital splits. A Pro Tools session recorded using direct digital splits are an essential part of the Virtual Soundcheck workflow. See **Enabling Direct Digital Splits**.

Assignable Pro Tools Outputs

For any system input channels not assigned Stage inputs as their sources, assignable recording outputs are available, up to the maximum number of available Pro Tools I/O channels. Assignable outputs can be used to send the Main L/R mix, submixes from sources such as Matrix and Groups, the Direct Outs of S6L system I/O channels, and audience mics to Pro Tools.

Playback Inputs

The Ethernet AVB audio connection carries the following types of input signals to the S6L system from Pro Tools for playback:

Virtual Soundcheck Inputs

Any S6L input channel with a Stage input as its source is automatically assigned a corresponding Pro Tools Virtual Soundcheck input. The source for that S6L system input channel can then be toggled between its assigned Stage input and its corresponding Virtual Soundcheck input, either globally or individually. When Virtual Soundcheck inputs are active, you can make adjustments to your mix using pre-recorded Pro Tools tracks derived from direct digital splits of your Stage inputs. All changes carry over when you switch back to live Stage inputs. You can also choose to apply any Input Gain changes made to input channels when switching back to Stage inputs. See **Using Virtual Soundcheck.**

Assignable Pro Tools Inputs

For any system input channels not assigned Stage inputs as their sources, assignable Pro Tools inputs are available, up to the maximum number of available Pro Tools I/O channels. Assignable inputs can be used to monitor your Pro Tools recording on your S6L system, or to incorporate pre-recorded audio tracks into your live mix.

Pro Tools Input Mode

In Pro Tools Input mode, audio from Pro Tools is the main source of audio for your S6L system. Stage inputs on your S6L system are replaced with inputs from Pro Tools. Unlike Virtual Soundcheck mode, changes made to Input Gain settings while operating in Pro Tools Input mode cannot be applied when switching back to Stage inputs. See **Using Input Mode.**

VENUE Link

VENUE Link is a communication link between your S6L and Pro Tools systems. Using this link, you can transfer data between systems and control Pro Tools from the S6L control surface.

VENUE Link is an integral part of the Virtual Soundcheck workflow. Use features such as *Create Session from VENUE* to properly and quickly create a Virtual Soundcheck-compatible Pro Tools session.

No separate Ethernet connection for VENUE Link is required. See **Enabling VENUE Link** and **Using VENUE Link**.

Installing Pro Tools

Pro Tools software is provided with your S6L system. Before connecting your S6L system and Pro Tools, you must do the following:

- Activate, download, and install Pro Tools software on a separate computer
- Transfer the Live Sound Production Toolkit license to the Pro Tools iLok USB Smart Key (second generation iLok required)

Downloading and Installing Pro Tools

The Pro Tools software package, included with the S6L control surface, includes its own Activation Card and iLok. When you activate your copy of Pro Tools, the iLok license required to run Pro Tools on your computer is deposited in your iLok account. You can then transfer the Pro Tools license to the iLok included in the Pro Tools software package.

Follow the instructions in the Pro Tools software package to activate and download Pro Tools software and the iLok license. See the *Pro Tools Installation Guide*, included with your Pro Tools download, for information on installing and configuring Pro Tools.

Live Sound Production Toolkit

Your S6L system also includes an iLok license for the Live Sound Production Toolkit. The Live Sound Production Toolkit enables up to 64 channels of simultaneous I/O between your S6L and Pro Tools systems. The Live Sound Production Toolkit license is deposited in your iLok account when you activate your S6L system software and plug-ins.

Transfer the Live Sound Production Toolkit license to the iLok that contains the Pro Tools iLok license. Make sure this iLok is connected to your Pro Tools computer whenever you launch Pro Tools.

Up to 32 channels of simultaneous I/O are provided if no Live Sound Production Toolkit license is on the iLok.

To transfer the Live Sound Production Toolkit license to your iLok:

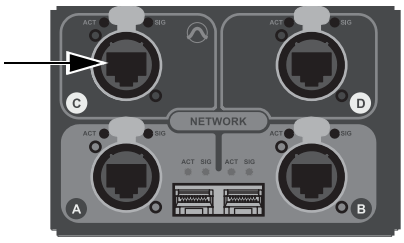
1. Locate the Pro Tools iLok and insert it into an available USB port on your computer.
2. If necessary, download and install the iLok License Manager, then launch it.
3. In the License Manager, select the Live Sound Production Toolkit license and drag it to the Pro Tools iLok.
4. Label this iLok so you can easily distinguish it from the iLok containing S6L plug-in licenses.

Connecting to Pro Tools

When you initially connect Pro Tools to your S6L system, you must first enable the connection on your Pro Tools computer, then configure Pro Tools. The next time you use the same Pro Tools computer with the same S6L system, the computer and the S6L system remember the connection, and will automatically connect without the need for configuring.

To connect Pro Tools and enable the connection on the Pro Tools Computer:

1. Make sure the iLok with the Pro Tools and Live Sound Production Toolkit licenses is connected your Pro Tools computer.
2. Connect a supported Ethernet cable from Network port **C** on the S6L control surface to an available Ethernet port on the computer (or to a Thunderbolt port using a Thunderbolt to Ethernet adapter).



Network port C on the S6L control surface

3. On the Pro Tools computer, go to Applications > Utilities> Audio MIDI Setup.

4 In Audio MIDI Setup, choose the Window menu, and then choose Show Network Device Browser.

Each currently connected and powered-on E6L in the network appears in the Device list as E6 Engine xxxx, where the last four characters in the name correspond to the last four characters of the connected E6L engine's MAC address.

5 Click the checkbox next to the desired E6L engine to enable that E6L on the Pro Tools computer.

Network Device Browser showing one E6L engine selected

6 Name your E6L engine on the Pro Tools computer as follows:

- From the Device list, select the E6L Engine that corresponds to your E6L so it is highlighted.
- Press Enter, then enter a name.
- Press Enter again to save the name.

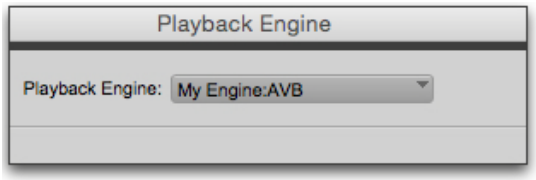
Naming the E6L in the Network Device Browser

To configure Pro Tools:

1 Launch Pro Tools, and if the Dashboard appears, click Cancel.

2 Choose Setup > Playback Engine to open the Playback Engine dialog.

3 From the Playback Engine pop-up, choose your E6L engine. The default name for the E6L is E6L Engine:AVB, unless you named it in the Audio MIDI Setup > Network Devices browser.



Playback Engine selector

4 Click OK to confirm and close the dialog.

For best performance, it is recommended to use a 1024 sample buffer size. Go to Setup > Playback Engine, and from the H/W Buffer Size pop-up choose 1024 Samples.

5 Choose Setup > IO then do the following:

- Click the Input tab and Click Default.
- Click the Output tab and Click Default.

Always reset the Pro Tools IO setup to Default when connecting a Pro Tools computer to the S6L system.

6 On the external VENUE software screen, go to the Options > Devices page. In the Connected Devices column, an icon representing the Pro Tools computer is shown to indicate that the connection to Pro Tools is active.

Make sure to enable VENUE Link to get the most out of your system. See **Enabling VENUE Link**.

Enabling Direct Digital Splits

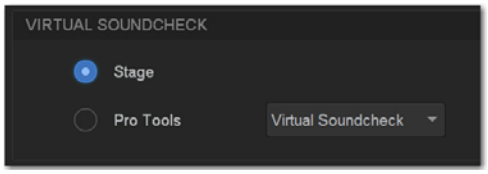
To send digital splits of S6L system Stage inputs to Pro Tools, the Stage inputs on your S6L system must simply be active. If necessary, enable them in VENUE (as described below).

The pickoff point for each Stage input split is post-analog input gain, but pre-digital trim and channel processing, including the channel HPF. Thus, the gain for any input channel sent to Pro Tools is dependent on the S6L system input gain setting for that Stage input channel.

Recordings of direct digital splits form the basis of the Virtual Soundcheck workflow, and are also useful for capturing unprocessed audio files of your Stage inputs for later mixdown and editing.

To enable Stage inputs:

1. Make sure the Stage inputs you are using are patched to the desired S6L system input channels in the Patchbay. See **Patching Input Sources to Input Channels** for more information.
2. Put your S6L system into Config mode.
3. On the external VENUE software screen, go to the Options > Devices and select the System tab.
4. In the Input Channel Source section, make sure Stage is selected.



Enabled Stage inputs in the System > Options page

5. If Stage is not selected, do the following:
   - Select Edit.
   - Select Stage.
   - Select Apply.

Signals from any Stage inputs assigned to S6L system input channels are sent to the connected Pro Tools computer as direct digital splits. The corresponding channels under the Pro Tools tab in the Patchbay are highlighted in purple to indicate they are in use as digital split outputs and as Virtual Soundcheck inputs.

Output Levels for Digital Splits

0 dB on S6L system input meters equals –20 dBFS. This 20 dB of mixer headroom helps prevent digital clipping and distortion in live program material. The S6L system does not provide independent gain control for the digital splits before they are split off to Pro Tools, so program material coming into the S6L system at 0 dB will be recorded into Pro Tools at –20 dBFS.

For gain control of S6L system outputs to Pro Tools, use Direct Outputs to route audio channels to Pro Tools assignable outputs, and adjust the gain on the Direct Output control for each channel.

VENUE Metering Options in Pro Tools

You can set the metering in Pro Tools to mirror the current Meter setting on your S6L system (see **Meter Ballistics**).

Track input meters and the master Output Meter in the Pro Tools Transport can be set to different meter scales.

To set Pro Tools metering to mirror S6L meter settings:

- In Pro Tools, right-Click any track meter and/or the master Output Meter and choose either of the following:

VENUE Peak This option mirrors with Peak Ballistics meter setting on your S6L system.

VENUE RMS This options mirrors the RMS Ballistics meter setting on your S6L system.

Using Virtual Soundcheck

When a Virtual Soundcheck input is enabled on an S6L system input channel, the source for the channel is switched from the assigned Stage input to the corresponding Virtual Soundcheck input from Pro Tools.

You can enable Virtual Soundcheck mode so that all Stage inputs are replaced with their corresponding Virtual Soundcheck inputs one-for-one. You can also toggle the source of an individual input channel between its Stage input source and its corresponding Virtual Soundcheck input.

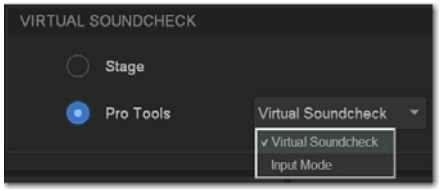
When returning to live Stage inputs, any adjustments made to input channel settings remain. You can also choose to apply or discard any changes made to Input Gain settings. Input Gain and other input channel PRE settings cannot be stored to Snapshots when Virtual Soundcheck inputs are active.

Enabling Virtual Soundcheck Mode

When you enable Virtual Soundcheck mode, all existing input channel settings (such as channel assignments, input and output processing settings, and routing) carry over to the Virtual Soundcheck inputs. The digital portion of the gain for each channel is preserved and applied to the incoming signals from Pro Tools, resulting in the same levels for both the Virtual Soundcheck inputs and their corresponding live Stage inputs.

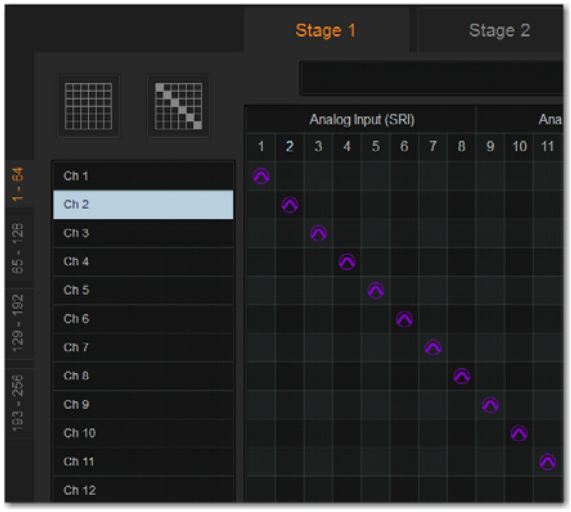
To enable Virtual Soundcheck inputs globally:

1. Put your S6L system into Config mode
2. In VENUE, go to Options > System.
3. Click Edit.
4. In the Input Channel Source section, select Pro Tools.
5. From the pop-up menu, choose Virtual Soundcheck.



Enabling Virtual Soundcheck inputs globally in the System > Options page

6. Click Apply. All S6L system input channels with Stage inputs assigned to them are replaced with their corresponding Virtual Soundcheck inputs from Pro Tools. Pro Tools icons appear in the Patchbay > Inputs tab patching grid for all assigned Stage inputs, indicating that input sources for the affected input channels are now Virtual Soundcheck inputs from Pro Tools.



Virtual Soundcheck Icons in the Patchbay

Returning to Stage Inputs

If you change any channel Input Gain settings while in Virtual Soundcheck mode, you have the option of applying or discarding the changes when you return to Stage inputs.

To return to Stage inputs globally

1. Put your S6L system into Config mode.
2. On the external screen, go to Options > System.
3. In the Input Channel Source section, Click Stage.
4. If any changes to gain have been made, the Apply Gain Change dialog appears. Click either of the following in the dialog as desired:

Apply Any gain changes made in Virtual Soundcheck mode are applied to the total Stage input gain on each channel.

Discard Any gain changes made in Virtual Soundcheck mode are discarded/ignored, and returns Stage input gain to its previous value on each channel.

Adjusting Gain When Switching Between Sources

The S6L system uses a hybrid analog/digital gain approach for analog Stage inputs. Input gain is adjusted in 1 dB analog steps, and 0.1 dB digital steps. When switching to a Virtual Soundcheck input, the digital component of the gain stage (up to +0.9 dB) is preserved, so the Virtual Soundcheck input plays back at the same level as its corresponding Stage input. As a result, input gain settings never vary across Virtual Soundcheck inputs by more than 0.9 dB.

For example, if you set the input gain for a channel to +30.5 dB, then switch to its Virtual Soundcheck input, +0.5 dB of gain is preserved and displayed in the Gain setting on-screen, resulting in the same apparent input level on that channel (because 0.5 dB of the 30.5 dB setting was digital gain as compared to analog gain).

While in Virtual Soundcheck mode, if you increase the gain on this channel by 6 dB (to a displayed setting of +6.5 dB), and then switch back to Stage mode, you can do one of the following:

- Apply the gain change, yielding a gain increase of 6 dB, or a final setting of +36.5 dB (30+6.5).

– or –

- Discard the gain change, leaving the original Stage input gain unchanged at +30.5 dB.

The Pad on a channel will automatically be activated or deactivated to compensate for large gain changes.

Toggling the Input Source of a Channel

You can toggle the input source of an individual input channel between the assigned Stage input and its corresponding Virtual Soundcheck input from Pro Tools. You can toggle the input source on S6L control surface using the CKM's in Channel Control mode and the Channel Menu, and on the external screen.

This can be useful if, for example, you have enabled Virtual Soundcheck inputs globally, and the singer arrives before the rest of the band to rehearse along with pre-recorded tracks from a previous performance.

You can toggle between input sources regardless of the global input source setting on the Options > System page.

To toggle the input source for an input channel in Channel Control mode:

1. Bank the desired channel to the faders.
2. Select the desired channel.
3. Press the **INPUT C**hannel Control Function switch on the associated CKM so it lights.

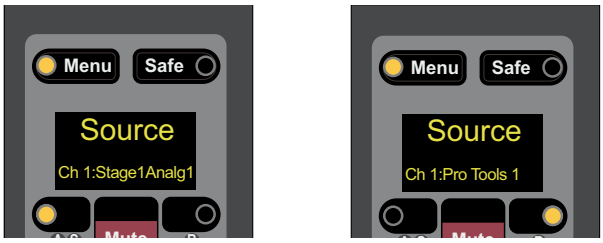
   – or –

- Touch the channel's Input touch zone on the associated Channel Touch Module (CTM).

4. Press the encoder under the display showing PT Input. The encoder **In** switch lights, and the encoder surround in the display fills in to indicate the Pro Tools Virtual Soundcheck input is now the input source for the selected channel.

To toggle the input source for an input channel using the Channel Menu:

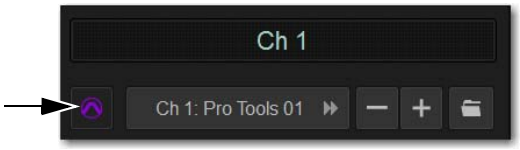
1. Bank the desired channels to the control surface's faders.
2. Press the desired channel's channel strip **Menu** switch until Source appears in the channel display.
3. To route the Stage input to the channel, press the Left Menu switch so it lights. The hardware source is shown in the channel display.
4. To route the Virtual Soundcheck input to the channel, press the Right Menu switch so it lights. The Pro Tools source channel is shown in the channel display.



A channel display showing a Stage input source (Left) and a Pro Tools input source (right)

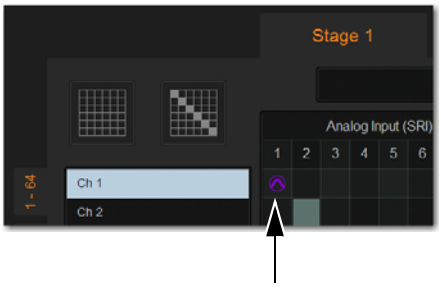
To toggle the input source for an input channel on the external screen:

1. Select an input channel that has a Stage input assigned to it.
2. From the on-screen Inputs page, Click the Virtual Soundcheck input button (indicated by a Pro Tools icon) in the Input section.



Virtual Soundcheck input button

The lit button indicates that the Virtual Soundcheck input is now the source for the channel. A Pro Tools icon appears in the Patchbay > Inputs tab patching grid for the affected channel only.



A single input channel with a Virtual Soundcheck input in the Patchbay > Inputs page

The same gain change rules apply when the source for an individual channel is toggled between sources.

Snapshot PRE Settings and Virtual Soundcheck Inputs

The PRE Data Type Scope button on the Snapshots page lets you recall the preamplifier settings on inputs for all scoped input channels. Go to the Options > Snapshots page to set the PRE parameters to be recalled by the PRE data type button.

The data in the table below shows which PRE setting can be stored and recalled with Snapshots when Virtual Soundcheck inputs are enabled.

PRE settings stored and recalled with Snapshots in Virtual Soundcheck mode

PRE Parameter	Recall	Store
Phase	Yes	Yes
Gain	No	No*
Phantom Power	No	No
Pad	No	No

** Gain changes made while in Virtual Soundcheck mode can not be stored to Snapshots, but can be applied back to the analog settings when switching back to Stage mode.*

Using Pro Tools Assignable I/O

Pro Tools Assignable I/O is available for any Stage inputs that are not assigned to S6L system input channels in the Patchbay. For example, if 32 Stage inputs are assigned to S6L system input channels, 32 Assignable Pro Tools output channels *and* 32 Assignable Pro Tools input channels are available, and can be used for simultaneous recording and playback if so desired.

To make sure Pro Tools Assignable I/O is available, in the Patchbay unpatch Stage inputs from any S6L system input channels that you are not using. See **Unpatching and Clearing Assignments.**

Using Assignable Outputs for Recording

You can patch input and output channel Direct Outs as well as Mains, Auxes, mono or stereo Groups, and Matrixes to Pro Tools assignable outputs for recording. Direct Outs let you record discrete channels from the pickoff point of your choice, with independent level control over each send to Pro Tools. Each S6L system input and output channel provides a Direct Out.

If you configure the Patchbay for Pro Tools playback as well as recording, be sure to check Pro Tools track outputs for any potential feedback loops before record-enabling tracks.

To route Direct Outs to Pro Tools:

1. On the external screen, go to the Patchbay page and select the Directs tab.
2. Select the tab at the left of the grid for the channel or output type you are routing.
3. Select the Pro Tools tab at the top right of the grid. Available Pro Tools outputs are dark grey; outputs reserved for use as digital splits are purple in the channel grid.
4. Touch in the channel grid to assign a channel or bus (listed on the left) to an available Pro Tools output channel (listed across the top).
5. Click the Pickoff column in the Patchbay to specify one of the following pickoff sources for each Direct Output:
   - Top of Channel/Mains/Aux/Group/Matrix (indicated by a “T”)
   - Insert Return
   - Pre-Fader (indicated by a lowercase “p”) or Post-Fader (indicated by an uppercase “P”)

The Pre-/Post-Fader Direct Output Input Channel Pickoff Point configured globally on the Options > Pickoffs page. See **Pickoffs** *for more information.*

6. Turn each channel’s Direct Out on and set the level (see **Direct Outs** for information).
7. Configure Pro Tools for recording.

Using Output Busses

You can record submixes (also called *stems*) by sending outputs such as Mains, Auxes, Groups, and Matrixes directly to Pro Tools. An output bus signal to Pro Tools is always post- fader, and therefore will reflect any processing occurring on the channels assigned to the bus or processing on the bus itself.

An output bus can be assigned to multiple output destinations.

To route a bus directly to Pro Tools for a recording:

1. On the external screen, go to the Patchbay page and select the Outputs tab.
2. Select the tab at the left of the grid for the output type you are routing.
3. Select the Pro Tools tab at the top right of the grid. Available Pro Tools outputs are dark grey; outputs reserved for use as digital splits are purple in the channel grid.
4. Touch in the channel grid to assign a channel or bus (listed on the left) to an available Pro Tools output channel (listed across the top).
5. Set the levels for the recording by adjusting the faders or Global Control encoders for the busses you are sending to Pro Tools
6. Configure Pro Tools for recording.

Using Assignable Inputs for Playback

You can route channels from Pro Tools to S6L system input channels for playback. You can use this feature to use pre-recorded click tracks or other material in a performance, mix down the Pro Tools session using your S6L system, or for monitoring the Pro Tools recording through your S6L system.

To route Pro Tools assignable inputs to input channels:

1. On the external screen, go to the Patchbay page and select the Inputs tab.
2. Select the tab at the left of the grid for the channels you want to route.
3. Select the Pro Tools tab at the top right of the grid. Available Pro Tools inputs are dark grey; inputs reserved for use as Virtual Soundcheck inputs are purple.
4. Touch in the channel grid to assign a the Pro Tools input (listed across the top) to an available input channel.
5. After patching, assign the Pro Tools assignable input as needed:
   - Assign to the main L/R bus to include Pro Tools audio in the main mix of a performance.
   - Assign to a Group, Aux, or Matrix for submixing and monitoring.

To avoid potential feedback loops, make sure no channels are simultaneously routing to and receiving from any record-enabled Pro Tools tracks.

Monitoring Pro Tools Recordings

You can monitor a Pro Tools recording through your S6L system while the performance and the recording are in progress. This procedure shows how to monitor a stereo mix from Pro Tools on a S6L system stereo input channel.

On the VENUE System

To monitor a Pro Tools Recording:

1. Patch Pro Tools assignable inputs as described above.

It is recommended that you use an odd-even pair of inputs (such as 19–20).

2. Make sure that the input channel is not assigned to an output bus such as the Mains or a Group.
3. To monitor the recording, press the Solo switch for the input channel.

To hear panning in Pro Tools, set your VENUE system solo mode to Stereo AFL.

On the Pro Tools System

To monitor a Pro Tools Recording:

1. Launch Pro Tools and, if necessary, create a session, and create and name tracks.
2. In your Pro Tools session, click any Track Output selector.

Output Path selector

3. From the menu, select Output and choose the output pair that corresponds to the Pro Tools inputs you patched in the VENUE Patchbay.
4. Assign all tracks in the session to the same output pair.

To auto-assign all tracks to the same output, hold down Option (Mac) or Alt (Windows) on your Pro Tools computer keyboard while assigning any track output.

5. While Pro Tools is recording, you can adjust Pro Tools faders and pan without affecting the recording.

Using Input Mode

When Input mode is enabled, Pro Tools (or another Ethernet AVB source) is the main source of audio signals for your S6L system. Audio channels from your external device appear one-for-one in place of Stage inputs in the VENUE Patchbay.

In Input mode, changes made to Input Gain cannot be applied to channels when switching back to Stage inputs. Additionally, input channel Gain can be stored in Snapshots in Input mode.

To enable Input mode:

1. Put your S6L system into Config mode.
2. On the external screen, go to Options > System.
3. Select Edit.
4. In the Virtual Soundcheck section, select Pro Tools.
5. From the pop-up menu, choose Input Mode.
6. Click Apply. All S6L system input channels with Stage inputs assigned to them are replaced by corresponding inputs from Pro Tools, and Pro Tools icons appears in the Patchbay Patching Grid for the affected channels.

Adjusting Input Gain in Input Mode

In Input mode, Input Gain is adjusted using the Gain encoders. Digital gain (-20 dB to +18 dB) is available for all inputs.

When switching from Stage mode to Input mode, the Input Gain settings when Input mode was last enabled are recalled. If Input mode has not been previously enabled, Input Gains are set to 0 dB.

When switching from Input mode to Stage mode, the Input Gain settings when Stage inputs were last enabled are recalled.

Snapshot PRE Settings in Input Mode

The PRE Data Type Scope button on the Snapshots page lets you recall the preamplifier settings on inputs for all scoped input channels. Go to the Options > Snapshots page to set the PRE parameters to be recalled by the PRE data type button.

The data in the table below shows which PRE setting can be stored with Snapshots created in Input mode.

PRE settings stored and recalled with Snapshots in Input mode

PRE Parameter	Recall	Store/Overwrite
HPF freq and state	Yes	Yes
Phase	Yes	Yes
Gain	Yes	Yes
Phantom Power	No	No
Pad	No	No

Enabling VENUE Link

VENUE Link must be enabled in VENUE and in Pro Tools. You can use and enable VENUE Link independently of AVB audio (for example, if you are recording to Pro Tools using a source from the S6L system other than Ethernet AVB audio, but you want to exchange data between systems using VENUE Link). However, a direct connection between the S6L system and Pro Tools is still required, and routers, hubs, and switches are not supported.

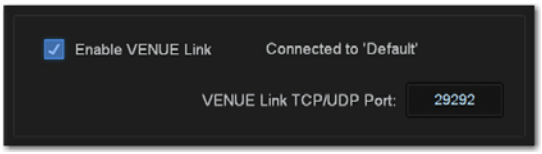
VENUE Link is required for controlling Pro Tools transport from the S6L control surface.

The VENUE Link connection and settings are separate from ECx Remote Control Network connections and settings. If you are running ECx, be sure to configure ECx separately.

Enabling VENUE Link In VENUE

To enable VENUE Link in VENUE:

1. Make sure the S6L and Pro Tools are connected as described in **Connecting to Pro Tools**.
2. On the external screen, go to the Options > Interaction page,
3. Select the Enable VENUE Link button in the Ethernet Control section so it is checked.



Enabling VENUE Link

4. Proceed to **Setting the Computer IP Address**.

Setting the Computer IP Address

Make sure your Pro Tools computer is set so it obtains an IP address automatically using DHCP.

To automatically set the IP address on your Mac:

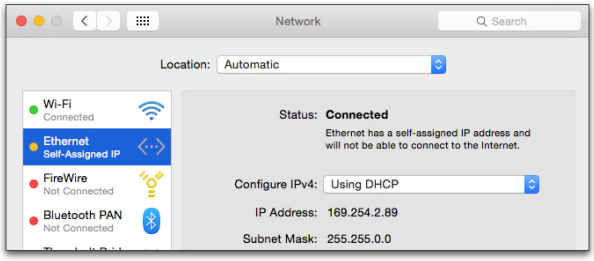
1 On your Pro Tools computer, go to System Preferences > Network.

2 Do one of the following:

- If you connected from a Network port on the S6L control surface to an Ethernet port on the computer, choose Ethernet from the network connections services list.
- If you connected from a Network port on the S6L control surface to a Thunderbolt port on the computer, choose Thunderbolt Ethernet from the list.

3 Choose Using DHCP from the Configure menu. An IP address is automatically assigned to the computer.

4 Click Apply.



Mac Network Settings screen showing an active network connection to the S6L system

Enabling VENUE Link in Pro Tools

To enable VENUE Link in Pro Tools:

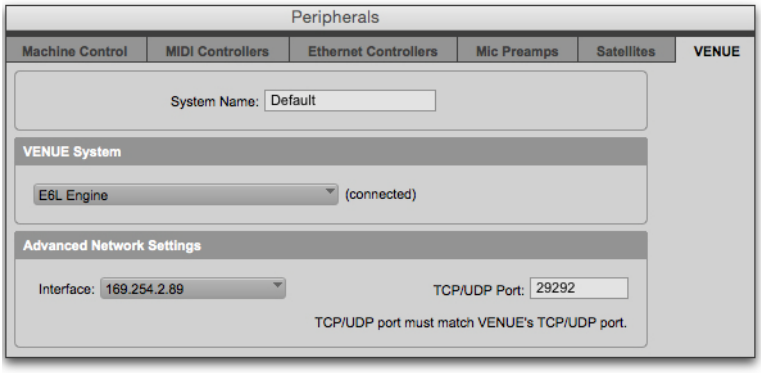
1 Launch Pro Tools if it is not already launched. If the Dashboard appears, click Cancel.

2 Choose Setup > Peripherals to open the Peripherals dialog, then Click the VENUE tab.

3 In the System Name box, enter a name for your Pro Tools system.

4 Choose your E6L engine from the VENUE System pop-up menu. When a connection is established, “connected” is displayed next to the name of the connected VENUE system.

If you named the E6L engine in the Options Devices page of the external VENUE software screen, it’s name appears here. If not, choose the IP address of the S6L system VENUE Link connection from the pop-up menu (such as 169.254.xx.xxx).

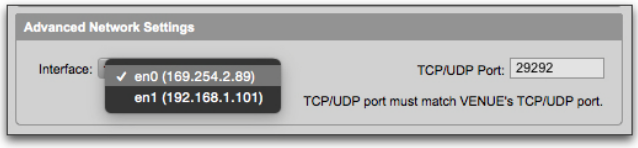


Choosing the S6L system from the VENUE System pop-up menu

Troubleshooting VENUE Link Connections

If you cannot establish VENUE Link between systems, try either or both of the following:

- In Pro Tools, choose Setup > Peripherals > VENUE. Make sure the IP address in the Interface pop-up under Advanced Network Settings begins with "169.254.xxx.xxx" and that it matches the IP address as shown in the IP Address field for the VENUE Link connection on your computer's System Preferences > Network window. If it does not match, click the Interface pop-up and choose that IP address.



Choosing an IP address from the Interface pop-up in Pro Tools

- Make sure the TCP/UDP port numbers, shown on the Options > Devices page in VENUE and the Peripherals > VENUE window in Pro Tools, match between Pro Tools and S6L. If they match and you are still having connection issues, choose a new number between 1024–65535 (except 5900), and then enter it into the TCP/UDP Port fields on both systems.

Using VENUE Link

Create a Session from VENUE

When you create a Pro Tools session from VENUE, tracks are automatically created, named, and given I/O assignments based on the currently loaded VENUE Show file. New audio tracks are created for *all* assigned input and output channels in the VENUE Patchbay.

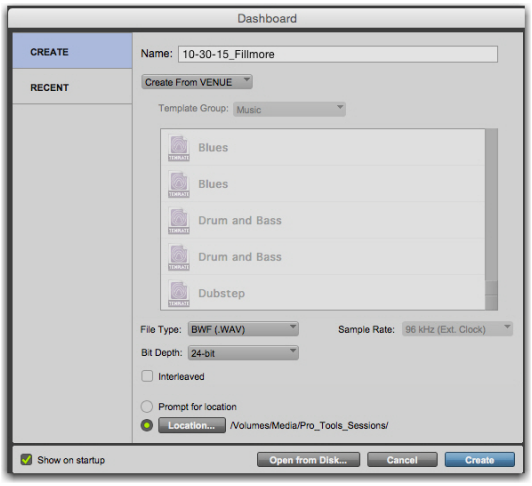
Creating a session from VENUE is part of the Virtual Soundcheck workflow. When you create a Pro Tools session from VENUE, you ensure that your Pro Tools track I/O assignments match your S6L system Patchbay assignments one-for-one.

To create a session from VENUE:

1. In VENUE, make sure you have loaded the Show file you want to use as the basis for your Pro Tools session.
2. Launch Pro Tools.
3. In the Dashboard, click the Create tab in the left pane of the window. The session is pre-named, according the name of the currently loaded Show file on your S6L system.

If the Dashboard does not appear, in Pro Tools, choose File > New Session *to open the Dashboard.*

4. From the pop up menu under the Name field, choose Create from VENUE.



Create Session from VENUE option in the Dashboard

5 Set session parameters such as Audio File Type and Bit Depth. Sample Rate is fixed at 96 kHz.

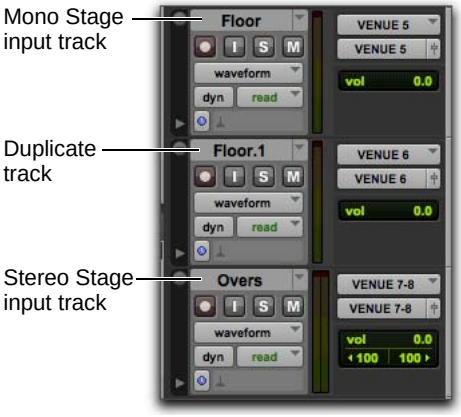
6 Click the Location button to specify a location on an external drive for the session folder (which contains the session .ptx file, audio files, and other session data).

7 Click Create.

Track Assignments in Pro Tools

New tracks appear in the Pro Tools Edit and Mix windows as follows, depending on the type of S6L system channel:

Direct Digital Splits In the new Pro Tools session, mono and stereo tracks are created for all S6L system mono and stereo input channels that have Stage inputs assigned to them. Tracks are named automatically based on their corresponding Stage input channel names. Duplicate track names are appended incrementally (such as ".1," and ".2,").



Stage input channel tracks in the Pro Tools Edit window

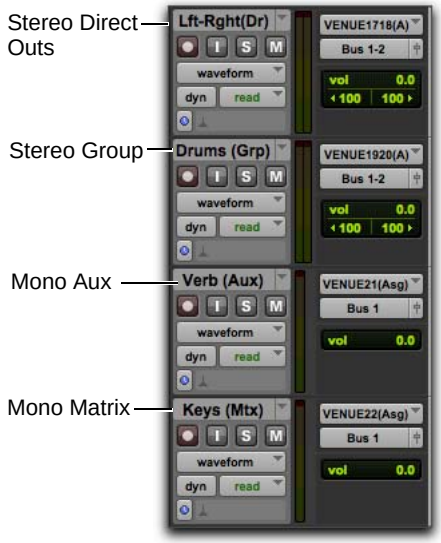
Track input and outputs are automatically assigned in Pro Tools, and are shown in the Track I/O selectors.

Track outputs follow input assignments one-for-one to facilitate Virtual Soundchecks. Track order (top to bottom in the Edit window and left to right in the Mix window) follows the channel order on your S6L system.

Track I/O selectors showing I/O assignments for digital splits

Tracks are created for any Stage input channels patched in the VENUE system Patchbay. To avoid creating tracks for unneeded inputs, go to Patchbay > Inputs in VENUE and deselect any unwanted Stage input channels (Click in the patching grid to unassign)

Assignable Outputs In the Pro Tools session, new mono and stereo tracks are created for any S6L system channels patched to Assignable outputs under the Pro Tools tab in the VENUE Patchbay patching grid. Tracks are named automatically based on their corresponding channel names in VENUE.



Imported assignable channel track names

Track names are appended with the corresponding output type as follows:

VENUE Channel Type	Track Name Appended With
Group	(Grp)
Aux	(Aux)
Matrix	(Mtx)
Mains	(Left-Right) (Center) (Mono)
Monitor	(Mon)
Direct Out	(Dir)
Plug-in output	(PI)

Track input and outputs are automatically assigned in Pro Tools, and are shown in the Track I/O selectors.

By default, all track output paths for Assignable outputs are assigned to Bus 1-2 in Pro Tools. This routing can be changed.

I/O assignments for Assignable outputs from S6L

Importing VENUE Channel Names as Track Names

You can import VENUE channel names as track names into an existing Pro Tools session. You can use this option in the following ways:

- If you have created a session from VENUE, but prior to recording you have changed the names of channels in VENUE, use this feature to update track names automatically.
- If you are working from an existing template that includes the VENUE channels plus a variety of other channels (such as effects returns), use this feature to update the VENUE-related track names without affecting the other non-VENUE tracks.

If you have added a channel to the currently loaded Show file that does not have a corresponding Pro Tools track, create a new track, set the input assignment, then choose Import > VENUE Channel Names as Track Names to import names.

To import VENUE channel names into an existing Pro Tools session:

1 Make sure your S6L system is in Stage mode.

2 In an existing Pro Tools session, from the File menu, choose Import > VENUE Channel Names as Track Names.

Track names are imported the same way as described above (see **Create a Session from VENUE**). However, I/O routing for all tracks do not change, and no new tracks are created.

When you create new sessions in Pro Tools, you can use pre-formatted VENUE session templates, or you can create your own template, which you can then use as the basis for new sessions. See the Pro Tools Reference Guide for information on using templates.

Creating a Pro Tools Marker from a Snapshot

With VENUE Link enabled, you can set individual snapshots to create a new Marker in the Pro Tools Timeline. While Pro Tools is recording, whenever that snapshot is recalled, a new Marker is created and named according to the recalled snapshot.

Once the marker is created, subsequent recalls of that snapshot can locate (cue) the Pro Tools playback cursor to the associated Marker while Pro Tools is playing back. In performance, this is a great way to precisely control Pro Tools playback for sound effects, beds, or backup material. For subsequent mixdown or for Virtual Soundcheck, you have a fully archived session in which you can quickly navigate to specific songs or cues.

In VENUE, you can enable or disable individual Snapshots from creating Pro Tools Markers. In Pro Tools, you can edit VENUE-generated Markers to rename them, move them to a different location in the Timeline, disable snapshot "chase," and re-associate a Marker with a different snapshot.

To create a Pro Tools marker from a VENUE snapshot:

1 On the external VENUE E software screen, go to the Snapshots page.

2 In the Snapshots list, select the Marker icon to enable that snapshot to create a Pro Tools Marker when that snapshot is recalled during recording.

If the Marker icon is not displayed, right-Click one of the Snapshots in the list and choose Unhide Marker.

Lit Marker icons in the Snapshots list

Shift-Click multiple Snapshots and toggle the Marker icon to enable or disable multiple consecutive Snapshots in the Snapshots list. Control-Click multiple Snapshots to select multiple non-consecutive Snapshots. Right-Click in the Snapshots list and choose Select All to select all Snapshots.

3 In Pro Tools, locate the Markers ruler. If you do not see it, choose View > Rulers > Markers.

4 Click the track's Record Enable button. The Record Enable button flashes when enabled, and lights solid when engaged.

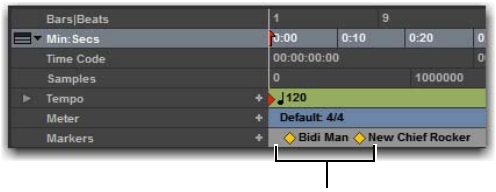
To record enable all tracks at once, Alt-Click (Windows) or Option-Click (Mac) one track Record Enable button.

5 In the Edit window toolbar, or in the Transport window (Window > Transport) click the Record button to arm the Transport.

6 In Pro Tools, press the Spacebar to start recording.

7 On your S6L system, recall a snapshot.

8 Recall any other Snapshots on your VENUE system as required. Markers appear in the Pro Tools Markers ruler for any recalled VENUE Snapshots, and are automatically named to match the corresponding VENUE snapshot.



Pro Tools Markers ruler showing snapshot-generated Markers

To locate to a Pro Tools marker when recalling a snapshot:

1 Make sure Pro Tools is launched and a session is loaded with Markers created from snapshots.

2 On the external VENUE software screen, go to the Snapshots page.

3 In the Snapshots list, do the following:

- Select a snapshot that is associated with a Pro Tools Marker so the snapshot is highlighted.
- Select its Marker icon so that it lights green.
- Select the Recall Snapshot Command button

If Pro Tools is playing back, playback continues when recalling any snapshot associated with a Pro Tools Marker.

Editing Markers Created from VENUE Snapshots

A Marker linked to a VENUE snapshot can be edited like any other Pro Tools Memory Location. You can rename Markers, and move Markers, disable snapshot "chase," and re-associate a Marker with a different VENUE snapshot.

For complete information on Memory Locations, see the Pro Tools Reference Guide.

To rename a Memory Location for a Marker:

1 In the Pro Tools Edit window, double-click the Marker in the Markers ruler to open the Edit Memory Locations dialog.

2 Enter the new name for the Memory Location, and Click OK.
The edited marker remains linked to the VENUE snapshot.

To move a VENUE snapshot-generated Marker:

- In the Markers ruler in Pro Tools, drag the Marker left or right.

If you move a VENUE snapshot in the Snapshot list, it will still remain linked to the associated Marker.

To disable locating to a VENUE snapshot-generated Marker:

1 In the Pro Tools Edit window, double-click the Marker in the Markers ruler to open the Edit Memory Locations dialog.

2 In the General Properties section, deselect VENUE Snapshot.

3 Click OK.
Recalling the VENUE snapshot does not locate the Pro Tools playback cursor to the disabled Marker. Re-selecting this option restores the locate functionality.

To associate a Marker with a different VENUE snapshot:

1 In the Edit window, double-Click the Marker in the Markers ruler to open the Edit Memory Locations dialog.

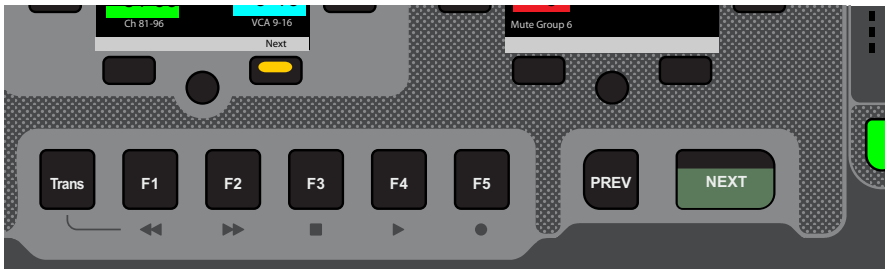
2 In the General Properties section, next to VENUE snapshot, choose a different VENUE snapshot from the pop-up menu.

3 Click OK. The selected VENUE snapshot locates the Pro Tools playback cursor to the edited Marker.

Controlling Pro Tools from the S6L Control Surface

You can control the Pro Tools Transport using the F1–F5 switches on the MLM of the S6L control surface.

You must enable VENUE Link on your S6L system and in Pro Tools to use the transport controls. See **Enabling VENUE Link** *for more information.*



Transport controls

To control the Pro Tools Transport using the F1–F5 switches:

1 Press the **Trans** switch so it lights.

2 Press any of the following **F1–F5** switches:

F1 Locates to the cursor to previous marker in the Pro Tools timeline.

F2 Locates to the cursor to next marker in the Pro Tools timeline.

F3 Stops the Pro Tools Transport.

F4 Initiates playback in the Pro Tools Transport.

F5 Arms the Pro Tools transport *and* initiates recording.

Part V: Reference

Synchronization

S6L provides a set of synchronization features that allow automation and remote control of snapshot and triggering of external devices when snapshots are recalled via SMPTE MIDI Time Code (MTC) or Linear Time Code (LTC).

S6L also provides the ability to sync with external devices via word clock, and to sync with external digital devices via sample rate conversion (SRC).

Automating Recall of Snapshots with Time Code

You can automate the recall of snapshots with MTC and LTC. The VENUE system can trigger snapshots with internally generated MTC, or it can read incoming MTC or LTC from an external source.

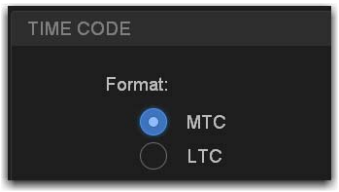
For instructions on the connections required for synchronization, see **Connecting and Configuring.**

Generating MIDI Time Code

You can set the VENUE system to generate MTC and automate the recall of snapshots based on MTC playback.

To generate MTC from the VENUE system:

1. On the external VENUE software screen, go to Options > Snapshots.
2. Enable Config mode.
3. Under Time Code, select MTC.



MTC selected as the Time Code Format

4. Select Generate. MTC generator (MTC GEN) controls appear at the bottom of the screen.

MIDI Time Code set to Generate (left) and the MTC generator controls (right)

5. Choose the MTC Frame Rate from the Frame Rate pop-up menu (24 fps, 25 fps, 30 fps drop, or 30 fps non-drop).
6. If you want MTC playback to start at a different time than the currently displayed time, enter a start time in the Start Time field, and press Enter.
7. Control MTC playback from the MTC generator controls by doing any of the following:
   - Start MTC playback by selecting the Play button.
   - Pause MTC playback by selecting the Pause button.
   - Stop MTC playback and reset to the Start Time by selecting the Stop button.

Slaving to External Time Code

The VENUE system can slave to external MTC or LTC and automate the recall of snapshots based on the incoming time code. VENUE automatically detects the frame rate of the incoming time code when enabled. The following frame rates are supported: 24 fps, 25 fps, 30 fps drop, or 30 fps non-drop.

To slave to external time code:

1 On the external software screen, go to Options > Snapshots.

2 Do one of the following:

- To slave to incoming MTC, under Time Code Format, select MTC.
- To slave to incoming LTC, under Time Code Format, select LTC

3 Select Read. A time code display appears at the bottom of the screen.

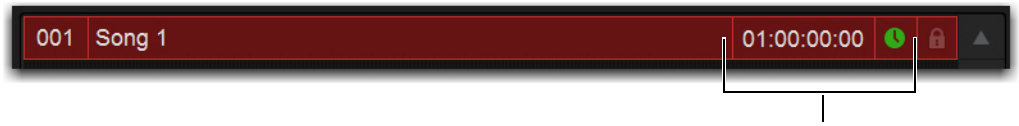
Time Code display (LTC shown)

The time code display indicates the following:

- When external time code is not present, the display shows a series of dashes.
- When external time code is present, the current time code value is shown in green.
- When time code is non-drop frame, HMSF separators are colons; when time code is drop frame, HMSF separators are semi-colons.

Snapshot Time Code Display

When the system is set to generate or read time code, the Snapshots list shows time code values and a green Recall Enable indicator for each snapshot entry.



Snapshots list showing time code values and indicators

Assigning Time Code Values to Snapshots

With the S6L system set to generate or read time code, you can assign time code values to snapshots by entering values manually, or by capturing time code playback values.

Manually Assigning Time Code Values to Snapshots

To manually assign an time code value to a snapshot:

1 In the Snapshots list, double tap the time code value you want to change.

2 Do one of the following:

- From the keyboard, type a new value.

– or –

- Press the Left and Right Arrow keys to move the cursor between number fields, and the Up and Down Arrow keys to increase and decrease the selected value.

3 Press Enter or select another snapshot time code value to accept the entry.

Capturing Time Code Values in Snapshots

To capture the current time code value in a new snapshot:

1 With the system in Read or Generate mode, start time code playback.

2 Do one of the following:

- During playback, select the New button.

– or –

- Pause playback at the time code value you want to capture, and select the New button.

A new snapshot appears with the time code value at the time of creation.

To capture the current time code value in an existing snapshot:

- Tap-and-hold (right click) the snapshot in the Snapshots list and choose Set Time Code To from the menu.

The time code value is updated to the currently displayed value.

Sorting Snapshots by Time Code Value

You can sort snapshots in the Snapshots list by time code value, so that they appear in chronological order.

When chasing to MTC, snapshots will always recall in chronological order, regardless of their order in the Snapshots list.

To sort snapshots by their assigned Time Code value:

- Tap-and-hold (right click) any snapshot in the Snapshots list and choose Re-Sort All By Time Code from the menu.

Enabling Snapshots for Automated Recall

With time code values assigned to snapshots, you can then enable individual snapshots for recall with time code playback.

To enable snapshots for automated recall with time code:

- Select the Time Code Recall Enable indicator on the right side of the Snapshots list. The indicator turns bright green to indicate that the snapshot is enabled for recall.

Chasing Time Code

With snapshots enabled for automated recall, the Chase function needs to be engaged to allow automated recall to occur. When MTC is selected the button appears as Chase MTC. When LTC is selected, the button appears as Chase LTC.

To initiate automated recall of snapshots:

1 Select the Chase MTC/LTC button so that it is highlighted.

2 Begin time code playback by starting the internal generator (if set to MTC Generate) or the external device (if set to Read).

When a recall-enabled snapshot's time code value is reached, the snapshot is recalled.

Snapshot modes can affect MTC recall. For more information, see **MTC and Other Online Event Triggers**.

The Chase MT/LTC button can be used to quickly take VENUE system offline from time code-triggered recall in performance in the event of a change in timing, such as a missed cue or dropped verse. You can then advance manually to an appropriate snapshot, and re-enable Chase MTC.

VENUE systems do not chase up to the current time code value. If you start playback in the middle of a snapshot sequence, any prior snapshots will need to be recalled manually to update the system before beginning time code playback. For more information, see **Recalling Snapshots**.

Remote Control of Snapshot Recall

The VENUE system can be set to recall snapshots in response to MIDI control messages sent from an external device such as an AV controller system. You can set the system to respond to control messages sent on any one of 16 available MIDI channels.

Snapshots are recalled when their snapshot number (1–999) is received in the form of MIDI Bank Select and Program Change messages. (See Table 7 on page 319.)

To enable recall of snapshots from an external device:

1. On the external software screen, go to Options > Snapshots.
2. Under MIDI, select the Snapshots Respond to Channel option, and choose the MIDI channel from the corresponding pop-up menu.

The system listens on the specified channel for Bank Select and Program Change messages.

The MIDI Snapshot Output Safe option (Options > Snapshots page) does not affect this option. You can only turn off this feature by de-selecting the "Snapshots Respond to Channel" option.

Table 7. MIDI Bank and Program Numbers for Snapshots

Bank	Program	Snapshot Number
0	0–127	001–128
1	0–127	129–256
2	0–127	257–384
3	0–127	385–512
4	0–127	513–640
5	0–127	641–768
6	0–127	769–896
7	0–103	897–999

VENUE software stores Bank Select messages, so it is not necessary to send a Bank Select message prior to every Program Change message. You only need to send a Bank Select message when you want to recall a snapshot in a different bank from the previous snapshot.

Triggering of External Devices on Snapshot Recall

The VENUE system can be set to send MIDI Bank and Program Change messages whenever a snapshot is recalled, to trigger external devices whose cues are related to snapshots. You can set the system to send on any one of 16 available MIDI channels.

MIDI output is automatically suspended while in Preview mode. For more information, see **Preview Mode**.

While it is possible to add Bank Select and Program Change messages to individual snapshots, this option lets you toggle messages on and off for all snapshots in one step. Using this option also ensures that the Bank Select and Program Change messages correspond to the snapshot number, even after snapshots are rearranged in the Snapshots list.

The Bank Select and Program Changes messages reflect the number (1–999) of the recalled snapshot. (See Table 7 on page 319.)

VENUE systems always send a Bank Select message before every Program Change message, even if the bank number has not changed from the previous snapshot.

To enable triggering of external devices when snapshots are recalled:

1. On the external software screen, go to Options > Snapshots.
2. Under MIDI, select the Snapshots Send on Channel option, and choose the MIDI channel from the corresponding pop-up menu.

The VENUE system sends a Bank Select and Program Change message on the specified channel whenever a snapshot is recalled.

The MIDI Snapshot Output Safe option (Options > Snapshots page) does not affect this option. You can only turn off this feature by de-selecting the "Snapshots Respond to Channel" option.

Sending MIDI Messages on Snapshot Recall

You can add up to 20 specific MIDI messages to each snapshot. These messages are sent whenever the snapshot is recalled. Sending of the messages is enabled with the MIDI scope control in the Snapshots window. For more information, see **Adding MIDI and Plug-In Data to Snapshots.**

Synchronizing with Word Clock

You can sync external digital devices to your S6L system, or you can sync your VENUE system to external digital devices such as a Master (or "house") clock, or to another digital console using word clock.

Syncing External Devices to S6L

To sync an external digital device to your VENUE system, do any of the following:

- Connect a coaxial cable from the Word Clock Out on the E6L engine back panel to the word clock input on the external device. Set the external device to sync to the word clock signal coming from the VENUE system.
- Connect a coaxial cable from the Word Clock Out on any Stage 64 in the system to the word clock input on the external device. Set the external device to sync to the word clock signal coming from the VENUE system.
- If your system includes a DSI-192 card, connect a coaxial cable from the Word Clock Out port on the card to the word clock input on the external device. Set the external device to sync to the word clock signal coming from the VENUE system.

To sync an external device to your system from a Stage 64, the Stage 64 must be connected to the Master 1 Network card in the E6L engine (the bottom Network card).

Syncing S6L to External Devices

The S6L system automatically syncs to external word clock when connected to an external device sending a valid word clock signal. If the external word clock signal is interrupted, the S6L system defaults back to its internal word clock.

To sync the S6L system to an external device:

1. Make sure the outgoing word clock rate of the external device is set to match your VENUE system word clock rate.
2. Connect a coaxial cable from the word clock out port on the external device to the Word Clock **In** port on the E6L engine. Indications that a valid word clock connection is recognized by the S6L system appear on the external screen as follows:
   - EXT is indicated in the Status box.
   - WC Ext also appears next to the graphic of the currently paired E6L engine on the external screen Options > Devices page.

Synchronizing Digital Audio Inputs (SRC)

The AES digital inputs on the S6L control surface and the DSI-192 card provide sample rate conversion on input, letting you connect a wide variety of digital sources without having to be concerned with synchronization and clock connections. Sample rate conversion does, however, induce processing delay to the incoming digital signal.

Sample Rate Conversion Latency

The following table illustrates the sample rate conversion processing delay at various sample rates.

External Sample Rate	SRC Process Delay
32 kHz	1.50 ms
44.1 kHz	1.09 ms
48 kHz	1.00 ms
88.2 kHz	0.848 ms
96 kHz	0.833 ms

Working with DSI-192 Digital Inputs

On systems that include a DSI-192 card, you can manually disable the SRC on AES input pairs, and you can designate the ADAT optical port on the card as the active input source on the card on the external screen.

Defeating SRC on a DSI-192 Inputs

You can manually disable SRC on each DSI-192 AES input, or on all ADAT inputs to ensure the lowest possible latency.

To disabled SRC on a DSI-192 AES channel pair:

1. On the external screen, go to the Inputs page.
2. Attention the channel whose source is the DSI-192 input for which you want to defeat SRC.
3. Select the SRC OFF button in the Inputs section so it lights. The same LED on the DSI card also lights to indicate that SRC is disabled.

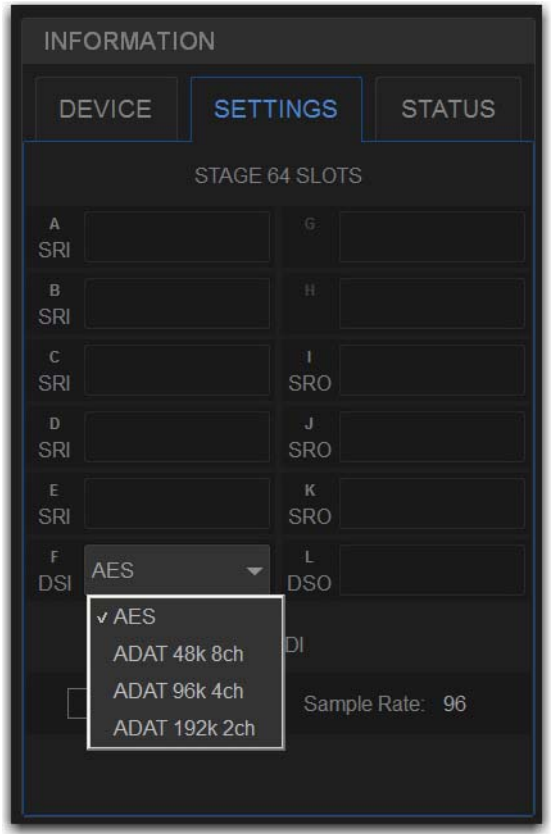
SRC Off button

Enabling ADAT Inputs

You can designate the ADAT optical port as the active input source on the card. When ADAT inputs are enabled, AES inputs are not operative. When SRC is enabled, at 48 kHz the ADAT inputs can receive eight channels of audio, 4 channels at 96 kHz, and two channels at 192 kHz.

To enable ADAT inputs:

1. On the external screen, go to the Devices page.
2. Put the system into Config mode.
3. In the Connected Devices column, select the Stage 64 in which the DSI-192 card is installed so it is highlighted in blue.
4. In the Information section, select the Settings tab.
5. Next to the DSI card, select the AES/ADAT pop-up menu, and choose one of the following options to enable ADAT inputs:
   - ADAT 48K 8 ch
   - ADAT 96K 4 ch
   - ADAT 192k 2 ch



DSI-192 card AES/ADAT pop-up menu

The ADAT source LED lights on the DSI-192 card. When the DSI-192 detects a valid ADAT signal, the Lock LED lights on the DSI-192 card.

Hardware Inserts

This chapter explains how you can connect external analog and digital hardware to the analog and digital I/O on the S6L control surface and the E6L engine for use as hardware inserts. Hardware inserts can be used for external processing on individual input channels, Mains, Groups, Auxes, and Matrixes. To use external hardware as inserts, you must do the following:

- Connect external hardware
- Assign hardware inserts to channels
- Activate the insert
- Set the hardware insert location

Connecting External Hardware

External hardware is made available to the system by connecting its inputs and outputs to input and output connectors on the S6L control surface or the E6L engine. Hardware inserts can then be inserted on channels similarly to inserting plug-ins.

To connect outboard gear for use as a hardware insert:

1. Connect the inputs of the external device to analog and/or digital output connectors 1–8 on the S6L control surface.
2. Connect the outputs of the external device to the corresponding input connectors on the S6L control surface. For example, signal taken from S6L control surface AES Digital outputs 1/2 must be returned to S6L control surface AES Digital input 1/2.

Digital inputs on the S6L control surface and on the DSI-192 card offer sample rate conversion. For more information, see **Synchronizing Digital Audio Inputs (SRC)**.

Assigning Hardware Inserts to Channels

You can assign hardware inserts directly from the Inputs or Outputs page, or from the Patchbay.

Input and output levels to and from devices assigned as hardware inserts are automatically set to 0 dB, and cannot be changed in VENUE. Set trims on the device itself.

To assign a hardware insert to a channel or bus:

1. On the external VENUE software screen, go to the Inputs or the Outputs page and attention the channel on which you want to insert the external device.
2. In the Inserts section, do one of the following:
   - Select the Hardware Insert pop-up menu and choose an insert destination directly from the menu. The name of the hardware insert destination appears in the on-screen Hardware Insert button.

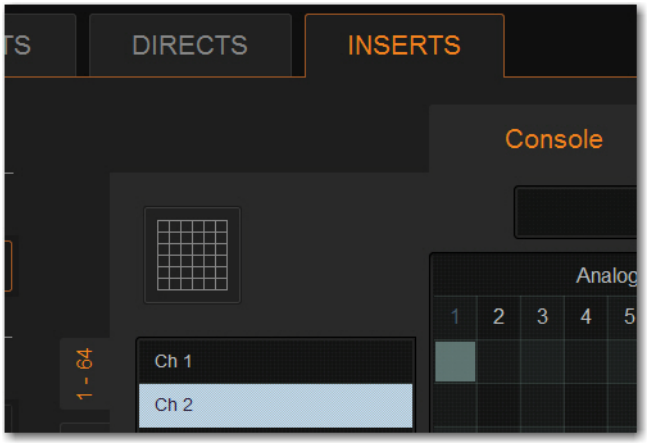
   – or –

   - Select the Hardware Insert button to “jump” to the Inserts tab of the Patchbay, and assign the insert from the Patchbay.

Hardware Insert pop-up (left), Hardware Insert button to jump to the Inserts tab (right)

To assign a hardware insert from the Patchbay:

1. On the external software screen, go to the Patchbay page and select the Inserts tab. The Console hardware tab is shown.
2. Click a tab along the left side of the grid to show the desired channel types in the grid. If you jumped to the Patchbay from the Inputs or Outputs page, the appropriate Channel Type tabs are automatically selected.
3. Touch in the channel grid to assign the hardware insert input/output (listed across the top) to the channel where you want to assign the insert (listed on the left).



Assigning a hardware insert on the Inserts tab of the Patchbay I

The Insert location is also displayed in the Hardware Insert pop-up in the Inserts section of the Inputs or Outputs page for the attentioned channel.

Reassigning Hardware Inserts

If a hardware input is currently assigned to an input channel and then reassigned as a hardware insert, the gain on that input is automatically set to 0 dB.

When reassigning a hardware input from an insert to an input channel, the gain setting for that channel is automatically set to +10 dB.

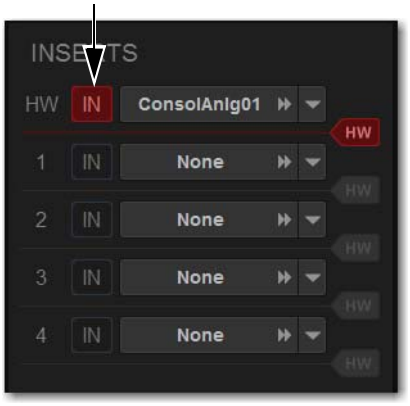
Activating and Bypassing Hardware Inserts

You can toggle hardware inserts in/out on-screen.

⚠ *Before activating a hardware insert, be sure that you have connected the external unit to your S6L system. If you activate the hardware insert and audio on that channel is not present, double-check your cabling to make sure it is connected correctly.*

To activate or bypass a hardware insert on-screen.

1. Go to the Inputs or Outputs page and select the channel where you want to activate or bypass the insert.
2. Click the In/Out button for the HW insert. The button lights when the insert is activated (in circuit).



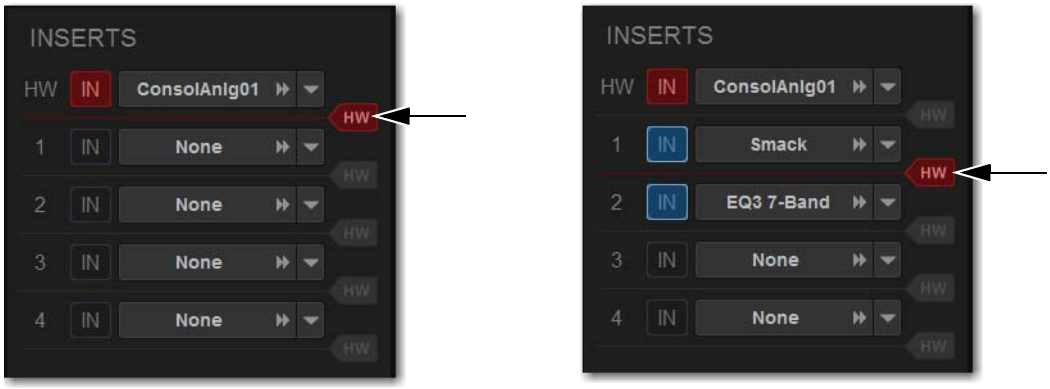
Activating a hardware insert

Setting the Hardware Insert Location

You can choose the location of the hardware insert in the signal path relative to the four plug-in inserts on a per-channel basis.

To set the hardware insert location:

1. Go to the Inputs or Outputs page and select the channel where you want to set the hardware insert location.
2. In the Inserts section, select the hardware insert indicator in one of the five available locations so that it lights red.



Hardware insert indicator showing the hardware insert before the first plug-in (left), and after the first plug-in (right)

GPI Port Reference

GPI Input Specifications

A 25-pin, male D-Sub connector provides a total of 8 General Purpose Interface (GPI) Inputs. GPI inputs have the following characteristics:

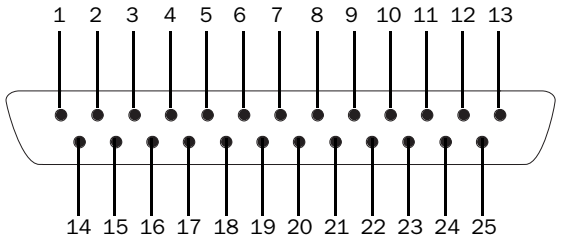
- Inputs are logic inputs with pull-ups. They may be driven by logic outputs or contact closure to ground.
- Input signal range is 0 to 5.5V. The inputs are ESD protected.
- Input signaling uses standard 5C CMOS logic levels: 1.5 V or less for a logic low. 3.5 V or greater for a logic high.
- Inputs are compatible with 5V TTL (e.g. 74LS series) and 5V CMOS (e.g. 74HC series)
- Inputs provide an internal 5K ohm pull-up to +5V.
- All Inputs are referenced to the same internal ground, which is connected to AC safety ground.

GPI Input Connector Pin Assignments

GPI Input Connector Pin Assignments (DB25 male)

Pin Number	Function	Comments
1	Input 1	Logic level (TTL, CMOS) input with pullup
2	Input 2	Logic level (TTL, CMOS) input with pullup
3	Input 3	Logic level (TTL, CMOS) input with pullup
4	Input 4	Logic level (TTL, CMOS) input with pullup
5	Input 5	Logic level (TTL, CMOS) input with pullup
6	Input 6	Logic level (TTL, CMOS) input with pullup
7	Input 7	Logic level (TTL, CMOS) input with pullup
8	Input 8	Logic level (TTL, CMOS) input with pullup
14, 15, 16, 17, 18, 19, 20, 21	Ground	All ground pins are connected together internally
9, 10, 11, 12, 13, 22, 23, 24, 25	Reserved	Do not use

Pinout for GPI Input Connector



Pinout for S6L DB25M GPI Input port (looking at back of console)

GPI Output Specifications

A 25-pin, female D-Sub connector provides a total of 8 General Purpose Interface (GPI) Outputs.

- Outputs are isolated, floating relay contacts (contact closure).
- Switched voltage is 200V max; 0.5A max.
- Switched voltage with respect to safety/chassis ground is 300V max.

⚠ *GPI Outputs can switch 500 mA maximum. This applies even to short term current surges. This limit can be exceeded when driving a capacitive or incandescent lamp load. An incandescent lamp may draw as much as ten times its steady state current when first turned on. Therefore such lamps are typically not appropriate loads for the GPI Outputs, and should instead be controlled by a secondary relay.*

GPI Output Power Specification

The GPI Output connector also provides +12VDC at up to 200 mA for powering external devices, such as relays or LEDs. The ground return that is provided is the S6L internal system ground, which is connected to AC safety ground.

GPI Output Ground Connections

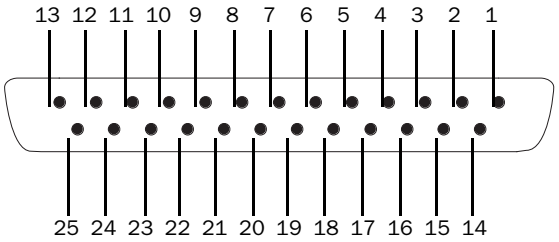
The GPI Outputs provided are isolated contact-closure style. Each GPI output is presented on a pair of pins. These two pins represent the two sides of a switch that can be opened and closed. If it is desired to drive a signal to ground, then one of the pins must be wired to ground, and the other to the signal to be controlled.

GPI Output Connector Pin Assignments

GPI Output Connector Pin Assignments (DB25 female)

Pin Number	Function	Comments
1, 14	Output 1	Floating contact closure output
2, 15	Output 2	Floating contact closure output
3, 16	Output 3	Floating contact closure output
4, 17	Output 4	Floating contact closure output
5, 18	Output 5	Floating contact closure output
6, 19	Output 6	Floating contact closure output
7, 20	Output 7	Floating contact closure output
8, 21	Output 8	Floating contact closure output
12, 13, 24, 25	+12V auxiliary power	Maximum total load 200 mA All +12V pins are connected together internally
9, 10, 22, 23	Ground for auxiliary power	All ground pins are connected together internally
11	Reserved	Do not use

DB25F Pinout



Pinout for S6L DB25F GPI Output port (looking at back of console)

GPI Wiring Diagrams

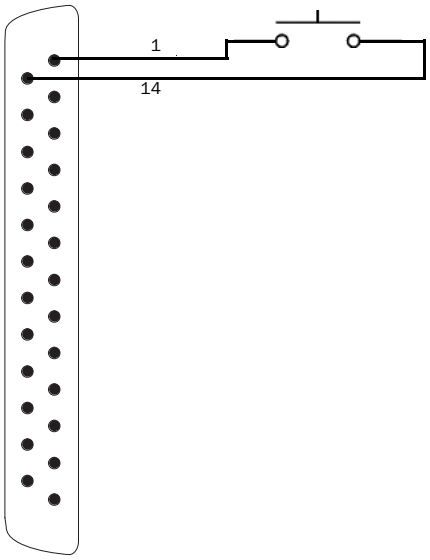
The following diagrams provide examples of GPI pinout and wiring for the common uses. All diagrams are shown from the rear (solder side) of the DB25 connector.

GPI Input Examples

The following diagrams provide simplified wiring examples for a customer-provided DB25 female connector, to attach to the male GPI In connector on the S6L control surface.

Wiring a Switch to Drive GPI

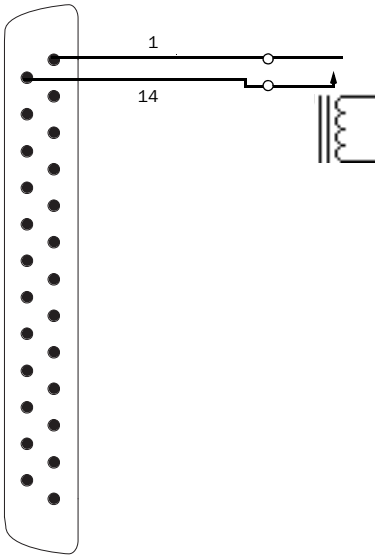
No ground reference is needed between systems.



DB25F connector

Wiring a Relay to Drive GPI

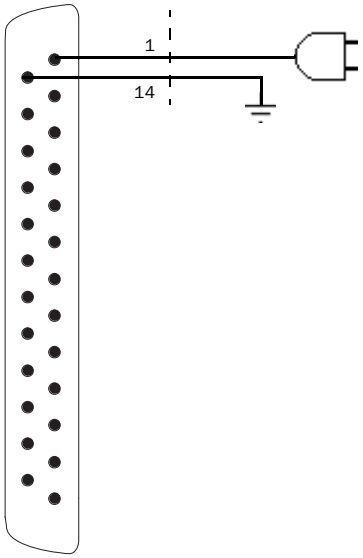
No ground reference is needed between systems.



DB25F connector

Wiring a Logic Signal to Drive GPI

Ground reference is required between systems



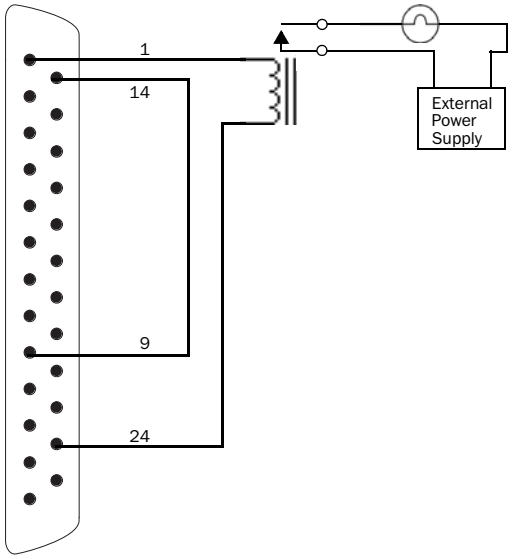
DB25F connector

GPI Output Examples

The following diagrams depict wiring examples for a customer-provided DB25 male connector, to connect to the female GPI Output connector on the S6L control surface.

GPI Output Driving a Relay to Illuminate a Light

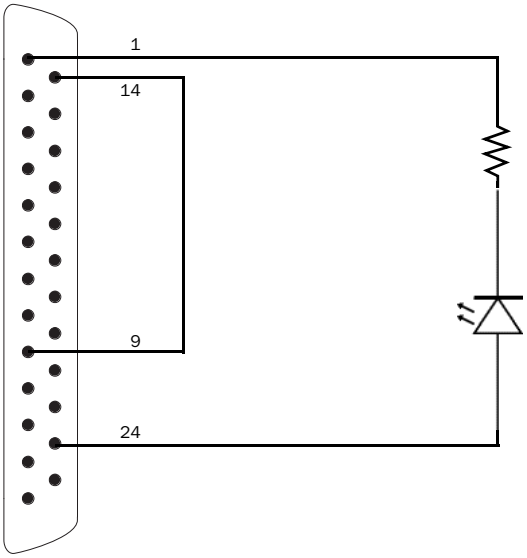
No ground reference is needed between systems.



DB25M connector

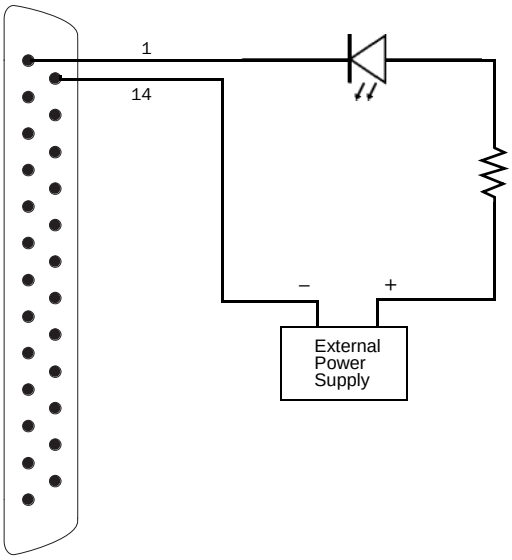
GPI Output Driving and Powering an LED

Connect one side of the relay to Ground.



DB25M connector

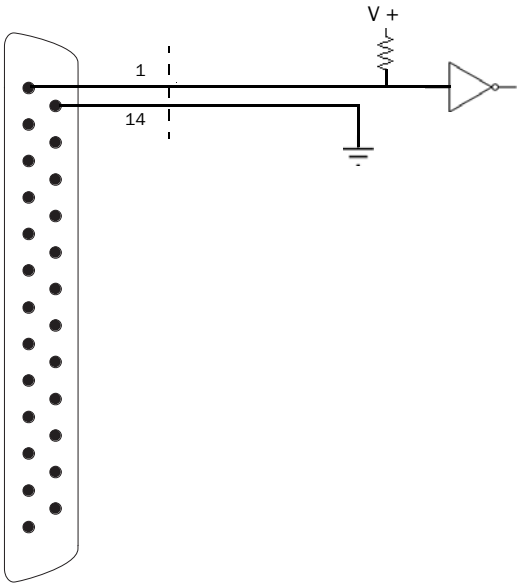
GPI Output Driving an Externally Powered LED



DB25M connector

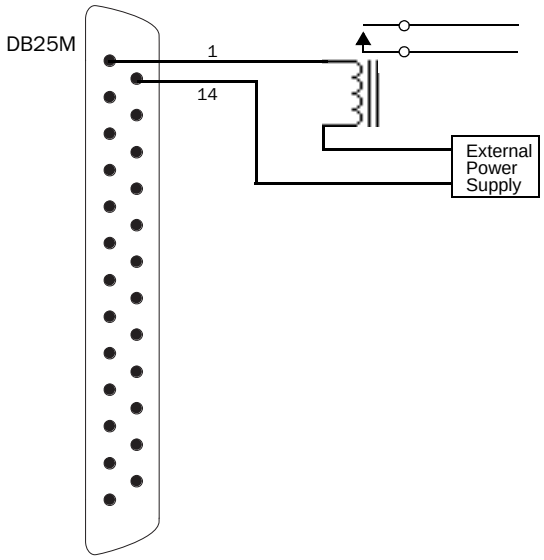
GPI Output Driving a Logic Input

Ground reference is required between systems.



DB25M connector

GPI Output Driving a Relay Using an External Power Supply



DB25M connector

Troubleshooting

This chapter provides troubleshooting and problem solving information. It includes a table of problems and solutions that provides answers to common questions, explains on-screen text messages, and refers you to specific sections later in this chapter or elsewhere in this guide for details and instructions.

Problem Solving

The following table provides descriptions of situations that may arise while operating a VENUE system and includes common questions, symptoms and error messages, along with possible solutions.

Table 8. Troubleshooting Errors and Messages

Symptom or Message	Possible Cause	Solution
Faders, Switches, Modules, Channels, and Devices		
Fader stuck	Fader path was blocked during startup calibration.	Reset the S6L control surface. See **Resetting Hardware Components**.
Control surface controls have stopped working	S6L control surface needs to be reset.	Reset the console. See **Resetting Hardware Components**. If possible, wait for a silent portion of a performance to avoid unexpected gain changes upon reset. For details. If software is frozen, power cycle the system.
	Bad or missing connection to the E6L engine.	Check to make sure the cable connecting the console to the E6L engine is properly connected and not damaged.
Fader Module, Channel Knob Module, Master Live Module has stopped working/lost connection	Network error	See **Restarting Your System.**
Channel Touch Module (CTM) offline (Please Configure Console message)	Network error	See **Resetting Channel Touch Modules (CTMs).**
Stage 64 I/O is not passing audio	Stage 64 needs to be reset.	See **Resetting Hardware Components**. Or, power-cycle the Stage 64
	Bad or missing connection to the E6L engine, to another Stage 64, or to power.	Check to make sure the audio network cable connecting the Stage 64 to the E6L engine (or, if daisy-chained, to the nearest Stage 64) is properly connected and not damaged. Check power to the Stage 64.
Cannot assign Stage 64	Config mode is not enabled.	Enable Config mode. See **Enabling Config Mode.**
S6L control surface /O is not passing audio	S6L control surface I/O needs to be reset.	See **Resetting Hardware Components**. Or, power-cycle the control surface.
Touch on external screen is reversed with MTS, or not operating at all	Touchscreens are not configured properly	See **Configuring S6L Master Touch Screen (MTS) and External Monitor.**
Previously connected device is unavailable and is grayed out in the Options > Devices page	The device is no longer present.	Touch-and-hold (right-click) the device graphic in the Options > Devices page and choose Forget <device> to dismiss warning dialogs.
	Bad or missing connection to the E6L engine.	Check to make sure the cable connecting the device to the is properly connected and not damaged, and that the device is powered on.

Table 8. Troubleshooting Errors and Messages

Symptom or Message	Possible Cause	Solution
Startup and Restarts		
Repeated failures	An incompatible plug-in, a corrupted data file or application software, or a hardware error.	Check to make sure you are using the most current versions of all your plug-ins (check with the manufacturers). If failures occur only when you try to use a certain plug-in, disable that plug-in and see if problems go away. Try re-installing plug-ins that are causing problems. Determine if a certain Show file causes the system to fail consistently. If so, delete that file and see if problems persist. For additional options, see **Restarting Your System**. Clear the console from the Options > System page and see if problems persist. If necessary, you can reinstall VENUE software by doing a System Update (see **Using the System Restore Software**). If you suspect problems with the system hard drive, or the system software, you can do a complete restore (see **Using the System Restore Software**). Power down all equipment and check all cards and cable connections and power supplies.
Plug-Ins		
The plug-in racks need to be reset	The plug-in racks have gone offline, and LOST is indicated in the Status box on-screen. The racks go offline after some conditions in which a plug-in or the DSP host failure causes significant problems.	Follow the instructions on-screen to reset the racks (see **Resetting the Plug-In Racks**).
One or more plug-ins are unavailable	A Show was loaded that references plug-ins which are unavailable on the current system.	Install the plug-ins, if available (see **Installing and Authorizing Plug-Ins**). Remove or replace the plug-ins in the Show, or load a different Show file.
	A plug-in is not fully compatible and is causing failures.	Check all plug-ins to make sure you are using the most recent versions. Go to Options > Plug-Ins and Click the plug-in to display the version number. Try disabling plug-ins one-by-one to see if doing so eliminates problems (see **Enabling and Disabling Installed Plug-Ins**).
Plug-in authorization dialogs appear every time the system starts or restarts	A plug-in is installed that needs to be authorized for demo or full use.	Click Quit to dismiss the authorization dialog and continue starting up (the plug-in will be unavailable). Click Try to use the plug-in for a limited time in Demo mode. Click Authorize if you are ready to authorize a plug-in using an iLok. (See **Installing and Authorizing Plug-Ins**.)
	A plug-in demo has expired.	Uninstall the plug-in listed in the authorization dialog (see **Uninstalling Plug-Ins**).

Table 8. Troubleshooting Errors and Messages

Symptom or Message	Possible Cause	Solution
Warning Dialogs		
One or More Devices Have Failed	Bad or missing connection	Check connections to other components.
	A device needs to be reset.	Reset the device. If unable to reset the device, power cycle the device.
Plug-In Racks Need Reset	The racks have gone offline because a plug-in has failed, or some circumstances have caused the DSP engines to require a reset.	Follow the instructions on-screen to reset the racks (see **Resetting the Plug-In Racks**).
Console Connection Error	Bad or missing connection	Check Network connections to the E6L engine.
	A unit needs to be reset.	Reset the device. If unable to reset the device, power cycle the device.
Date & Time Check	System clock needs to be reset.	Reset the system clock. See **Setting the System Clock.**
Sample Rate Conversion Alert SRC OFF LEDs flashing (Systems with DSI option only)	A sample rate mismatch or lack of clock has been detected at a digital input.	No immediate action required; automatic sample rate conversion maintains digital throughput, allowing you to check settings and connections between VENUE and external digital devices later. For more information on digital connections and synchronization, see **Synchronizing Digital Audio Inputs (SRC)**.
Hardware Monitor Alert	The system has detected a hardware component that is performing above or below its hardware specification.	Click HW Monitor to access the Hardware Monitor Window for the device. See **Resetting Hardware Components**.
A Device Has Been Lost	A Stage 64 has been disconnected or has lost power.	Check power and/or connection to the device. If the device is not present, right-Click the graphic of the corresponding Stage 64 and choose Forget IO Box Assignment.
Control Surface Module Lost	Network error	See **Restarting Your System.**
Redundant Connection Lost	If a primary and redundant audio connection has been made to the device, one of the connections has been lost.	Check the audio network connection to the device. If a redundant connection is not present, press OK to dismiss the dialog.
Engine Internal Switch Warning	Internal switch in the E6L engine has malfunctioned	Power-cycle the E6L engine
One or more Engine fans have stopped working	One or more fans inside the E6L engine have failed	When possible, check the internal fan connections.
2 fan blocks in the Engine have stopped working. Your Engine will now shutdown to prevent overheating.	All fans inside the E6L engine have failed.	The E6L engine will not operate unless at least one fan block is operational. When possible, check the internal fan connections, and replace the fans is necessary.
Unsupported HDX DSP configuration detected	HDX DSP card may be installed improperly	Make sure you have installed your HDX DSP card in the correct slot in the E6L engine. See the *HDX-192 DSP Installation Guide* for instructions on properly installing the HDX cards.
HDX DSP card requires update	The version of the firmware on an HDX DSP card in the E6L engine is incorrect	See **Updating HDX-192 DSP Card Firmware**.

Restarting Your System

If your VENUE system ever needs to be reset, restart the system

To restart the system:

1. On the external screen, go to the Options > System page.
2. Hold Default (Alt) and select Shut Down.

If restarting the system does not correct a problem, you may have to reset hardware components, identify and remove any incompatible plug-ins, or reinstall VENUE software using the System Restore software.

Additional Reset Options

Additional shortcuts are provided while restarting the system, which let you do the following:

- Back up the current show settings and clear the console. Use this option if you suspect an auto-saved setting has become corrupted. This lets you save your most recent settings and clear the console without having to do a full system restore.

  – or –

- Startup in Explorer, to be able to manually manage software components. Use this option to troubleshoot the system if problems arise early in the startup process and persist through repeated restarts.

Backup and Clear Console

To backup and clear the console at restart:

1. Start or restart the system.
2. Watch the screen closely during the startup process. As soon as the cursor becomes visible (and before the VENUE software logo screen appears) press and hold the C key on the computer keyboard. Continue to hold the C key (do not press it repeatedly).
3. A dialog appears that lets you choose to backup your auto-saved settings and clear the console, or to continue and load settings normally.

If you press the C key too early in the startup process, the USB keyboard is reset instead of calling the Backup and Clear dialog. If you do not see the backup and clear dialog, repeat the restart process and try again.

Startup in Explorer

To start up the system in Explorer (bypassing VENUE software):

1. Start or restart the system, as necessary.
2. Watch the screen closely during the startup process. As soon as the cursor becomes visible (and before the VENUE software logo screen appears) press and hold the E key on the computer keyboard. Continue to hold the E key (do not press it repeatedly) until you see the Explorer desktop.
3. From Explorer, you can manually find and delete suspect data files, plug-ins, or perform other file management tasks.

If you are unsure about how to troubleshoot a computer and its files, it is recommended that you contact VENUE customer service.

Resetting Hardware Components

Some hardware can be reset from external screen Options > Devices screen, or by power-cycling the component. It is recommended that you perform a reset if, for example, the Hardware Monitor Alert dialog appears for a specific device, if a connected device stops communicating with the rest of the system, or if the device is not passing audio signal via its I/O.

To reset system hardware:

1. Put the system in Config mode.
2. On the external screen, go to Options > Devices.
3. Tap-and-hold (right-click) one of the following displayed hardware components:
   - S6L control surface
   - Stage 64 I/O racks (must be in the Connected Devices column)
4. Choose Reset.

Resetting Channel Touch Modules (CTMs)

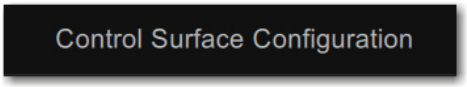
If a CTM unexpectedly goes offline, indicated by Meters or Channel view not appearing on a CTM or a “Please Configure Console” message appearing, you can reset it from the MTS Control Surface Configuration page.

To reset an offline CTM:

1. On the MTS, touch the Gear icon.

Gear icon

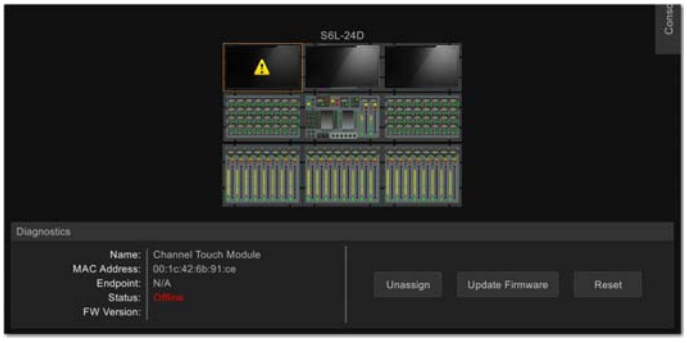
2. Touch the Control Surface Configuration button.



Control Surface Configuration button

The on-screen graphic show the status of the modules in your control surface

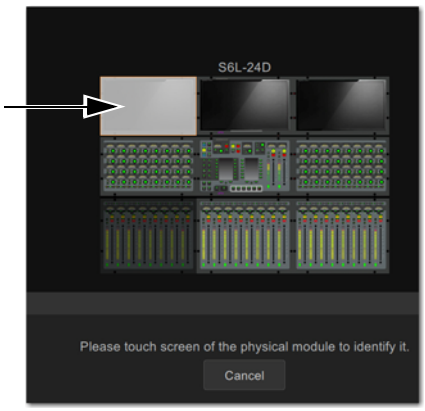
3. On the control surface graphic, tap the CTM that corresponds to the CTM that has gone offline, indicated by a warning icon. In the Diagnostics window below the control surface graphic, information about the CTM’s status appear.



Control Surface Configuration window showing and offline CTM

4. Touch the Unassign button to release the connection.

5 Touch Assign. The selected CTM flashes to indicate it is the module targeted for assignment.
If the wrong module is flashing, touch Cancel, touch the correct module so it is bordered in orange, and then touch Assign.



Control Surface Configuration window showing a CTM ready to be assigned

6 Touch the real CTM, which displays the message “Touch to Configure.”

Control Surface Configuration window showing a CTM ready to be assigned

When the CTM has been reconnected, the Meters view appears on-screen.

Offline or Unavailable Devices

The S6L system remembers the last hardware configuration used. If it doesn't find all units at the next startup, it displays those devices as grayed out in the Options > Devices page. Devices remain offline (and the system displays error messages alerting you to their absence) until either the devices are powered up and come online, or you tell the system to “forget” the offline devices.

Forget an offline device is that device is not currently a part of your configuration. If your device has failed or lost its connection, check audio network connections or power-cycle the device.

To forget offline devices:

1 On the external screen, go to the Options > Devices page.

2 Touch-and-hold (right-click) the missing device and choosing Forget.

Hardware Monitoring Window

The performance of hardware components, including internal temperatures, can be viewed and monitored using the Hardware Monitoring window.

Should a problem occur with any of the components in your system, the Hardware Monitoring window will provide information that will be useful in troubleshooting while in contact with VENUE customer service.

Accessing Hardware Monitoring

To access the Hardware Monitoring window, do any of the following:

- Press Ctrl+Shift+M at any time to open the Hardware Monitoring window.
- On the Options > Devices page of the external screen, select a system component so it is highlighted in blue, and then in the Information section choose Status.
- If the Hardware Monitoring Alert dialog appears on-screen, select OK in the dialog. The Hardware Monitoring Alert dialog for the problem device appears automatically and identifies the reading that is out of specification.

The Hardware Monitoring Alert window is only displayed once per device (should a problem ever be detected with that device).

E6L Engine Emergency Shutdown

If the E6L engine has been disconnected from the S6L control surface and cannot be shut down via the Shut Down button on the Options > System page of the external VENUE software screen, you can shut the engine down using the front-panel **Reset** button.

To perform an emergency shut down of the E6L engine:

- Press and hold the **Reset** button on the front panel of the E6L engine for at least 5 seconds.

  When the System LED goes dark and the Status LED lights amber, you can then power off the engine's PSUs.

Utility Mode

Each module on the S6L control surface (except CTMs) can be started up into a Utility mode that can be useful for troubleshooting purposes. Only use Utility mode at the request of a qualified Avid technician to diagnose specific hardware problems.

To enter Utility mode on the MLM:

- Press and hold the **Multi-Select** and **Multi-Assign** switches.

To enter Utility mode on a CFM:

- Press and hold the **Menu** and **Safe** switches on the leftmost channel strip.

To enter Utility mode on a CKM:

- Press and hold the encoder **Sel** switches on leftmost top-row encoders.

Resetting the Plug-In Racks

If the plug-in racks go offline they need to be reset to resume normal operation.

⚠ *Do not reset the racks until there is a long enough break in the performance that the rack can be fully rebuilt with no signal passing through. This is especially important when using crossover plug-ins or gain-attenuating plug-ins.*

The following conditions apply when plug-ins go offline:

- When offline, plug-ins on input channels and continue to pass and process audio using their settings at the time the racks went offline.
- Offline plug-ins on output channels and busses are muted.
- You will not be able to adjust plug-ins settings until the racks fully re-initialize.
- Once the racks begin to reinitialize, plug-ins are unavailable and do not process audio.
- During reinitialization, plug-ins are loaded into rack slots according to the last loaded Show file; plug-in racks are turned off (all assigned plug-ins are made inactive).
- When all plug-ins have loaded and the racks initialized, the system displays a dialog alerting you that the racks are ready to be brought back online (reactivated). This is provided as a final precaution against sudden changes to audio when plug-ins resume processing.

Shortly after you confirm that you want the racks brought back online, plug-ins resume processing audio and all parameters become available for editing.

To re-initialize (reset) the racks:

1. In the Plug-In Racks Reset dialog, Click Reset to begin the plug-in rack re-initialization.
2. In the Plug-In Racks are Ready dialog, Click Use Racks to confirm that you want the racks to be reset. Status is shown on-screen. After the process is complete, the console and all plug-ins are operational again.

Using the System Restore Software

Use the System Restore software for troubleshooting or maintenance purposes. The S6L control surface and the E6L engine each have their own unique System Restore image, which you must install on each device separately. S6L control surface and E6L engine must both be running the same versions of VENUE software in order for them to connect. An active Internet connection is required.

Check your Avid account for the latest version of the System Restore software. Always make sure to use the latest version of the System Restore software when restoring your software, and that you always keep a copy of the System Restore software on-hand for troubleshooting. To create System Restore USB drives, see the VENUE | S6L Software Installation Guide (available in your Avid account) for instructions on creating bootable USB drives for System Restore software.

Installing VENUE Software on E6L

To install VENUE software on the E6L engine:

1. Make sure your E6L engine is powered off, and is disconnected from all other S6L system components.
2. Connect the following to your E6L engine:
   - An included IEC power cable from AC power inlet **A** on the back panel of the E6L to your power source.
   - A USB keyboard and mouse to any USB ports on the E6L. E6L provides two USB ports on the front panel, and two on the back panel.
   - An Ethernet cable from your Internet source (router or modem) to the Ethernet (RJ-45) port on the back of the E6L.
   - A VGA-compatible monitor to the VGA port on the back of the E6L, and power on the monitor.
3. Insert the E6L Engine System Restore USB Drive software into an available USB port on the E6L.

⚠ *Make sure to use the E6L Engine System Restore USB Drive, not the S6L Control Surface System Restore USB Drive*

4 Power on your E6L using the back panel power switch, and then repeatedly press F10 on the keyboard until the “Welcome to Avid’s VENUE System Restore USB Drive” dialog appears on the connected monitor.

Some models of USB keyboards require repeated pressing of F10 (holding it down in between pressings) to register.

5 When prompted, do one of the following:

Update To update the system software while keeping any Show files and Preset files on the system, press “u” (lower-case). When the Update confirmation dialog appears, press Shift+U (upper-case) on your keyboard to proceed. Follow the on-screen instructions to begin installation.

– or –

Restore To fully restore the system (completely removing all files on the system), press “r” (lower-case). Or, press “P” (upper-case) to return to the previous screen. When the Restore confirmation dialog appears, press Shift+R on your keyboard to proceed. Follow the on-screen instructions to complete the System Restore operation.

6 When prompted, press “A” (upper-case) on the keyboard, and repeatedly press **F5** on the keyboard until the next screen appears on your monitor.

If you forget to press F5 (or start pressing too late), the next screen will not appear on the monitor. If this occurs, press the Reset button on the front panel of the E6L engine using a pen. When the Status LED is unlit, power off the E6L using the back panel power switch. Power the E6L back on, pressing F5 repeatedly.

7 Proceed to **Activating Windows and RTX on E6L**.

Activating Windows and RTX on E6L

After performing a system restore or system update on an E6L engine using the System Restore software, you must activate the Windows operating system from Microsoft and the RTX64 real time processing engine from Interval Zero. To activate Windows and RTX64, the E6L engine must be physically connected to an Internet source (Ethernet cable required; Wi-Fi not supported).

You must activate Windows and RTX64 immediately after restoring or updating using the E6L System Restore software. The E6L engine will be not connect to the S6L control surface until you activate the E6L.

Activating Windows on E6L

To activate Windows and RTX64 on your E6L engine:

1 Follow the on-screen instruction prompting you to close the dialog to show the Desktop.

2 Click OK to dismiss the on-screen dialog stating “The RTX64 Runtime is not licensed, or the license has expired.”
The Windows Desktop appears.

If the Desktop does not appear, press the WIN key (the key with the Windows logo), then click the Desktop tile to show the Desktop.

3 In the Networks panel, click No, do not share the network.

The Networks panel only appears when a valid network is detected. If it does not appear, make sure your network is active.

4 To activate Windows, do the following:

- On the Desktop, double-click Activate Windows.
- Follow the on-screen instructions to activate your copy of Windows.
  Windows Activation is complete when “Product activated successfully. Press any key to continue…” appears in the activation window on-screen.

5 Proceed to **Activating RTX64 on E6L**.

Activating RTX64 on E6L

To activate RTX64:

1 On the front-panel of the E6L engine, locate the RTX Activation sticker and write down the alphanumeric code that appears on the label. Keep this information close by, as you are required to enter this code when activating RTX.

⚠ *If you installed the E6L bezel on the front of the E6L engine, you must remove it to access the RTX Activation Key. For instructions, see the E6L Engine Rack Supports Installation Guide.*

2 On the Desktop, double-click RTX Activation.

3 In the RTX64 Activation and Configuration window, enter the alphanumeric code exactly as it appears on the RTX Activation Key label.

4 Click Activate.
RTX64 Activation is complete when "Activation succeeded" appears in the window.

5 Close the RTX64 Activation and Configuration window.

6 Double-click the Shut Down the System shortcut on-screen.

7 Wait until both front panel Status LED is unlit and the System LED is lit amber, then press the back panel power switch to the off (0) position.

8 Unplug the VGA monitor, the USB keyboard and mouse, and the Ethernet cable from the E6L Engine.

⚠ *You must unplug the VGA monitor, USB keyboard and mouse, and Ethernet cable before proceeding.*

9 If you updated or restored to a version of the E6L System Restore Software that is different than the one currently installed on the S6L control surface, or are trouble-shooting both devices, proceed to **Installing VENUE Software on S6L**.

Installing VENUE Software on S6L

To install VENUE software:

1 Make sure your S6L control surface is powered off.

2 Connect the following to your S6L control surface:

- An included IEC power cable from AC power inlet **A** on the back panel of the S6L to your power source.
- A USB keyboard and mouse to any USB ports on the S6L. S6L provides two USB ports on the front panel, and two on the back panel.
- The DVI monitor you are using with your S6L control surface to the DVI port on the back the S6L, and power on the monitor.
- If the monitor has a touchscreen function, a USB cable from one of the USB ports on the back of the S6L control surface to the USB port on the monitor.

3 Insert the S6L Control Surface System Restore USB Drive into an available USB port on S6L.

⚠ *Make sure to use the S6L Control Surface System Restore USB Drive, not the E6L Engine System Restore USB Drive.*

4 Power on your S6L control surface using the back panel power switch, then repeatedly press F10 on the keyboard until the "Welcome to Avid's VENUE System Restore USB Drive" dialog appears on the Master Touch Screen.

💡 *Some models of USB keyboards require repeated pressing of F10 (holding it down in between pressings) to register.*

5 When prompted, tap one of the following:

Update To update the system software while keeping any Show files and Preset files on the system, or press “u” on your keyboard.

– or –

Restore To fully restore the system (completely removing all files on the system), or press “r” on your keyboard.

– or –

Exit To exit the System Restore software installer, or press “e” on your keyboard.

6 In the next screen, tap one of the following:

Update To start the update, or press “t” on your keyboard.

– or –

Restore To start the restore, or press “s” on your keyboard.

– or –

Exit To exit the System Restore software installer, or press “e” on your keyboard.

7 After the S6L control surface restarts, proceed to the following:

- **Configuring S6L Master Touch Screen (MTS) and External Monitor**
- **Activating Windows on S6L**

Activating Windows on S6L

After performing a system restore or system update on and S6L control surface using the System Restore software, you must activate Windows on your S6L control surface. Windows is part of the VENUE software installation on your S6L control surface, and must be activated separately from VENUE software, and separately from the Windows activation on the E6L engine.

⚠ *Activate Windows after you have connected and powered on your system, as shown on the VENUE | S6L System Quick Setup. You have 30 days from the date of installation to activate the Windows on your S6L control surface.*

To activate Windows on your S6L control surface:

1 Connect an Ethernet cable from your Internet source (router or modem) to the ECx port on the back of your S6L control surface.

2 If necessary, power on your S6L system.

3 In the on-screen dialog prompting you to authorize Windows, tap Activate.

4 Follow the on-screen instructions to activate your copy of Windows.

Windows Activation is complete when “Product activated successfully. Press any key to continue..." appears in the activation window on-screen.

Reinstalling Plug-Ins

Plug-ins must be reinstalled after an update or a restore, as follows:

System Update After a system update, any previously installed plug-ins can be reinstalled immediately using the installers located on the system.

System Restore After a full system restore, factory-installed core plug-ins are reinstalled with the system software. Any other previously installed plug-ins from Avid or its Development Partners must be installed from an external USB storage device using the original installers.

See **Installing and Authorizing Plug-Ins.**

Updating Firmware

During an update or system restore, the system checks for new firmware. If newer firmware is found in the System Restore or Update software, it is automatically installed during system startup (FPGA only) and after system startup (all other devices). The progress of a firmware update is shown in the Options > Devices page for each device receiving the firmware update.

If an E6L engine is connected to an S6L or any Stage 64s with different versions of firmware than the E6L engine, the firmware on the S6L control surface and any connected Stage 64s is automatically updated to match the version of the firmware on the E6L.

Software Mismatch Between S6L and E6L

If an E6L and an S6L running different versions of VENUE software, the devices cannot connect, and the system shows a screen indicating that there is a software mismatch. Update the devices to the latest versions of the System Restore software to ensure proper operation.

Updating HDX-192 DSP Card Firmware

If you have installed an HDX-192 DSP card in your E6L engine, and on startup you encounter the message that the firmware needs to be updated, use this procedure to update the firmware on the HDX DSP card.

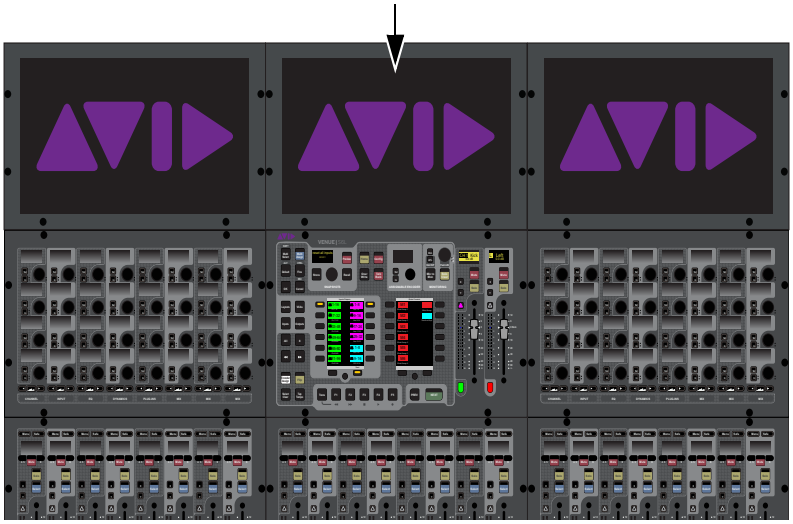
To update the firmware on your HDX-192 DSP card:

1. Shut down your system, and power off all components.
2. Connect a VGA monitor, and USB keyboard and mouse to your E6L engine.
3. Power on your E6L engine, and repeatedly press F5 on the keyboard while the engine starts up.
4. Close the window that appears on screen to show the Desktop.
5. Double-click the Update HDX Firmware icon on the Desktop.
6. Follow the on-screen instructions to update the firmware on your HDX card.

   When the firmware update completes, the E6L engine shuts down, indicated by the front-panel System LED going dark, and the Status LED lit amber.
7. After the E6L engine shuts down, make sure to disconnect the VGA monitor, and power-cycle your E6L engine.

Configuring S6L Master Touch Screen (MTS) and External Monitor

If you replace your monitor and touch is not responding correctly on your MTS and/or your external monitor, use the Touch Screen Assignment wizard to configure your touchscreens. This wizard only applies to the MTS and the external monitor.



MTS on an S6L-24D

To configure your screens:

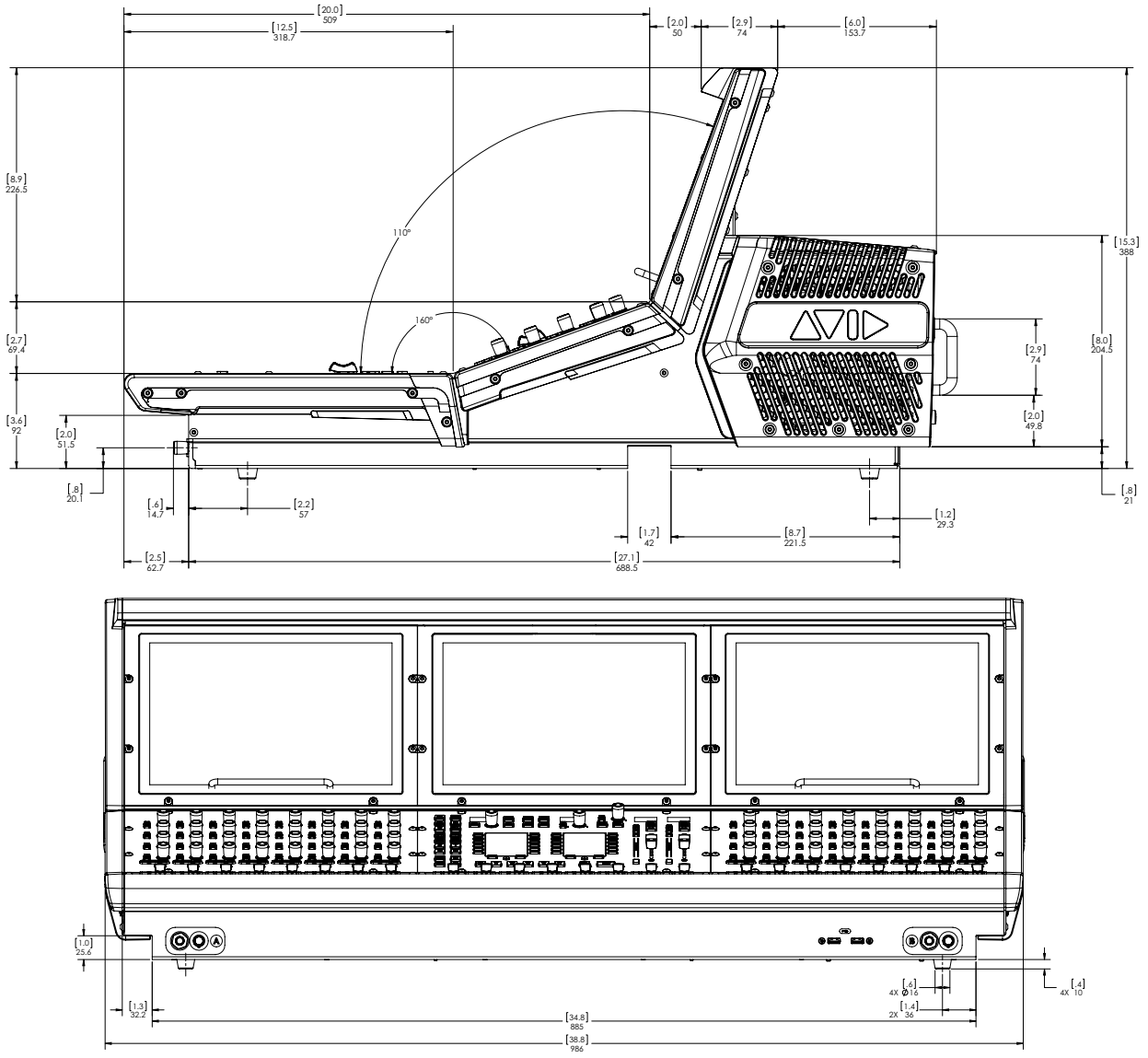
1. Make sure your DVI monitor is connected to your S6L control surface and is powered-on.
2. On the MTS, touch the Gear icon.
3. Touch General, then touch Touch screen assignment.
4. Follow the on-screen prompts to configure your touchscreens. If prompted to press Enter, then press the **Enter** key on your keyboard.

Part VI: Specifications

Mechanical Specifications

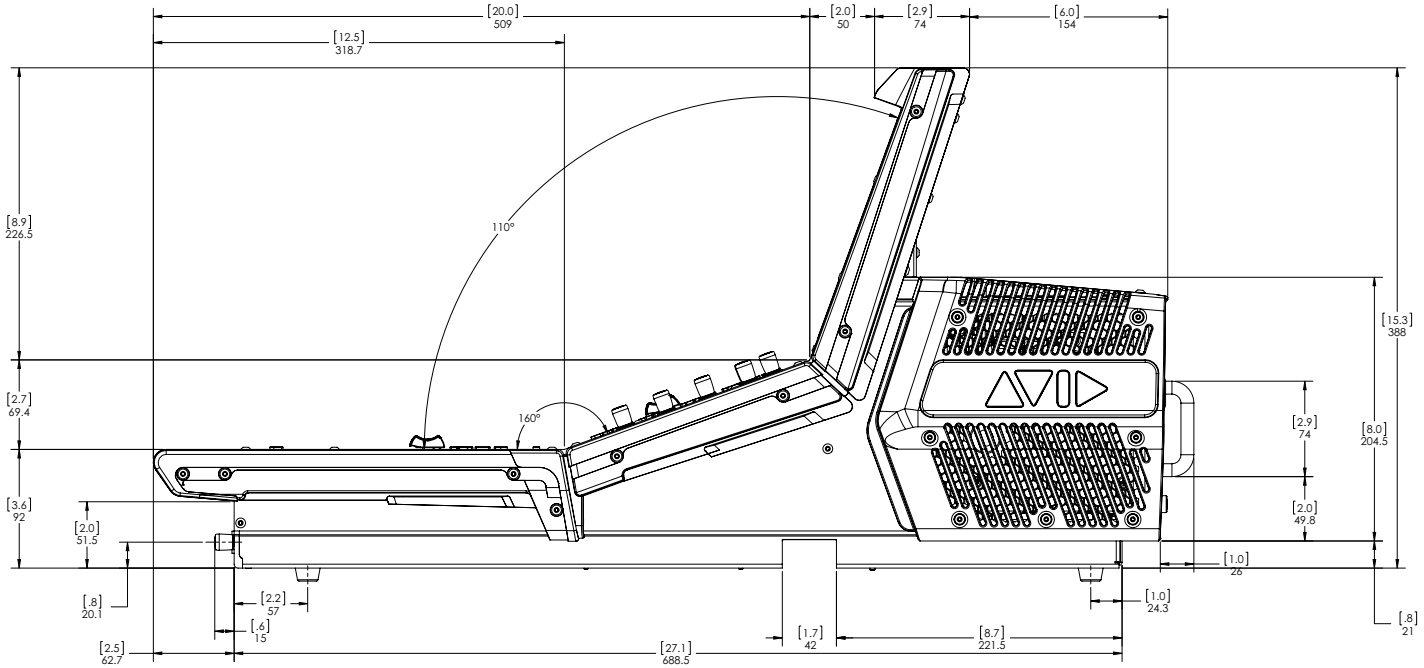
S6L-24/24D Control Surface

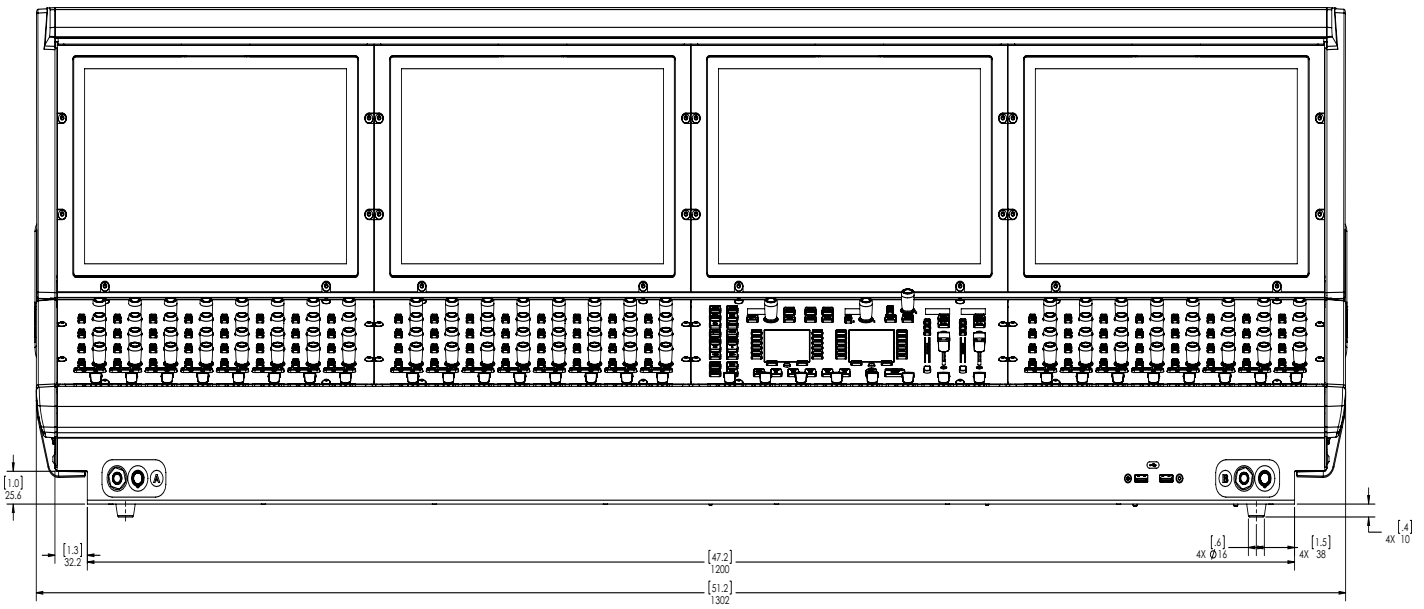
Parameter	Specification
Maximum Height, Front Maximum Height, Back	3.6 inches (92 mm) 15.3 inches (388 mm)
Maximum Width	38.8 inches (986 mm)
Maximum Depth	30.9 inches (786.5 mm)
Weight	119 lbs (54 kg)



S6L-32D Control Surface

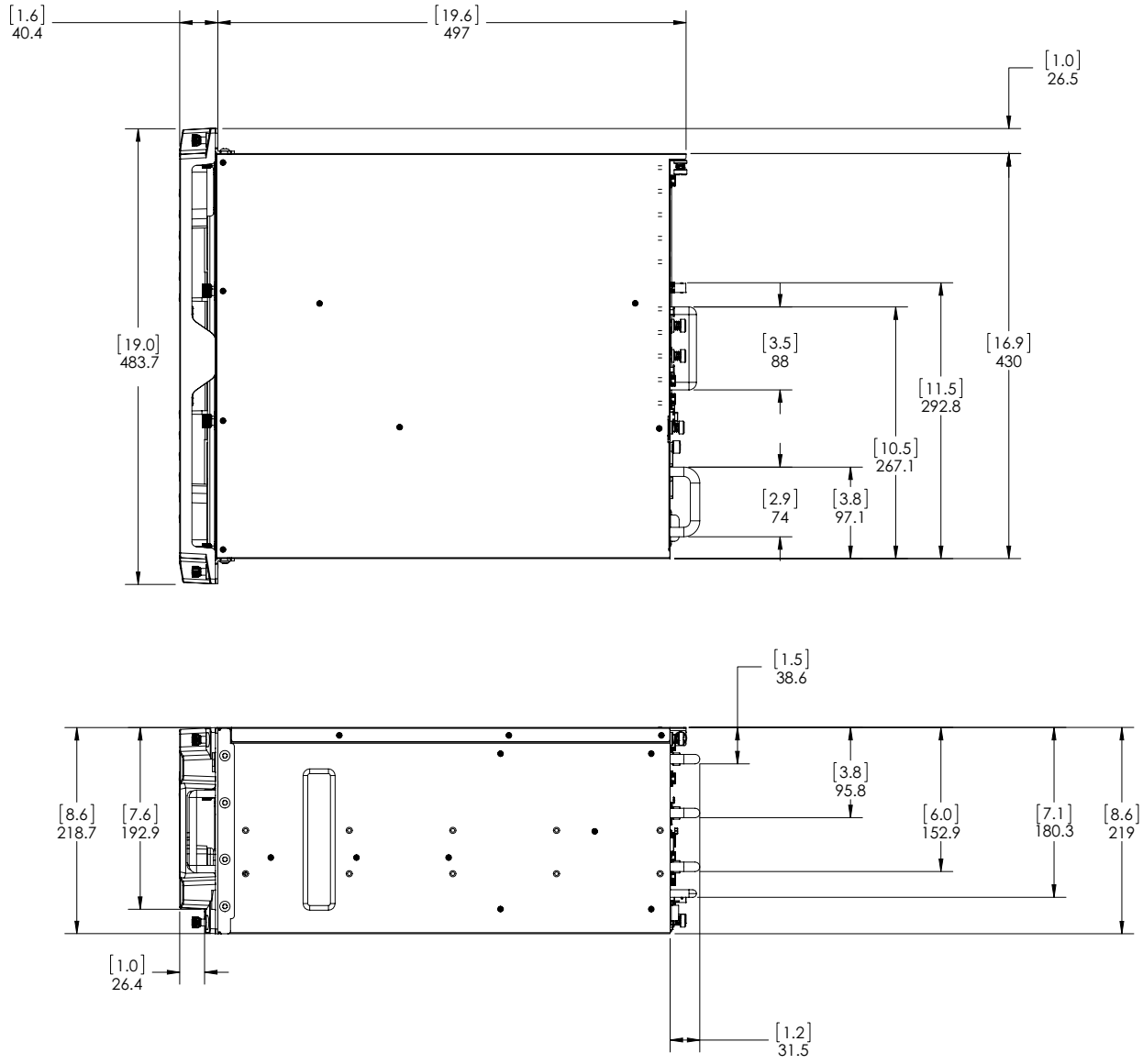
Parameter	Specification
Maximum Height, Front Maximum Height, Back	3.6 inches (92 mm) 15.3 inches (388 mm)
Maximum Width	51.2 inches (1302 mm)
Maximum Depth	30.9 inches (786.5 mm)
Weight	154.5 lbs (70 kg)



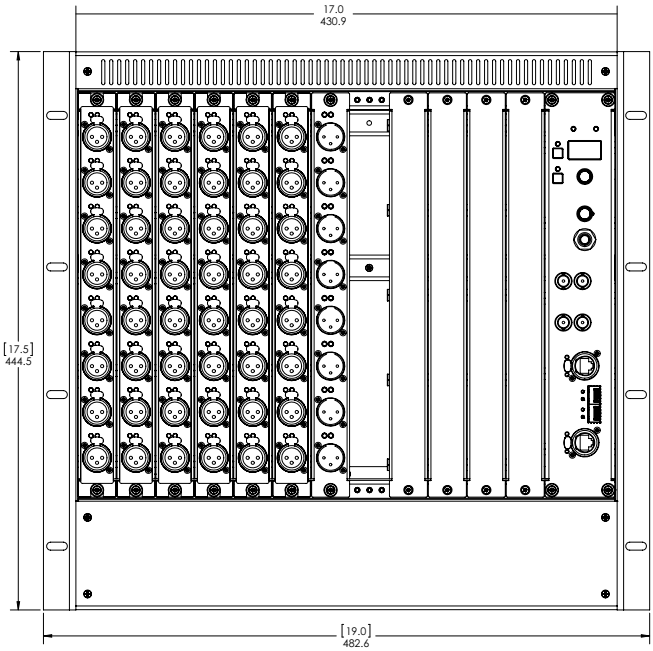


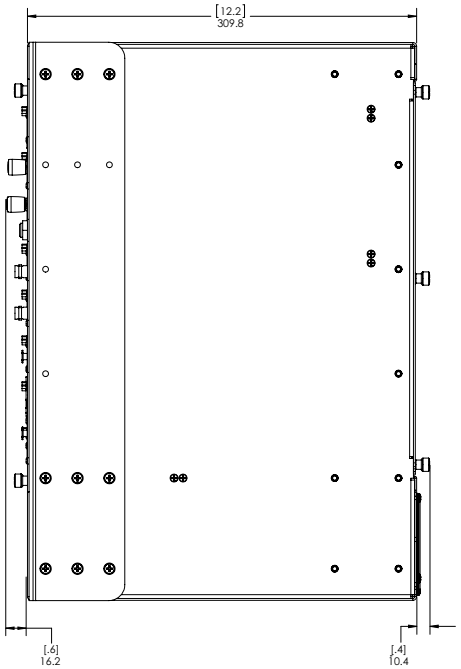
E6L Engine

Parameter	Specification
Maximum Height	8.6 inches (218.7 mm)
Rack Spaces	5U
Maximum Width	19 inches (483.7 mm)
Depth with Bezel Depth without Bezel	21.2 inches (537 mm) 19.6 inches (497 mm)
Weight	74 lbs (33.5 kg)



Parameter	Specification
Maximum Height	17.5 in (444.5 mm)
Rack Spaces	10U
Width with Rack Ears Width without Rack Ears	19 inches (483 mm) 17 inches (430.9 mm)
Maximum Depth	12.2 in (309.8 mm)
Weight	Empty: 46 lbs (20.8 kg); Full: 69 lbs (31.2 kg)





S6L System Components LED Codes

E6L Engine

The Status and System LEDs on the E6L engine front panel light to indicate the following:

E6L engine front panel Status and System LEDs

LED	Color	State	Description
Status	Green	Solid	All clear (no hardware alerts are detected).
	Amber	Solid	One or more hardware alerts are detected. Consult the VENUE software Options > Devices page for detailed info.
	Off (unlit)	n/a	E6L is powered off, or is initializing during startup.
System	Green	Solid	E6L is fully operational, and connected to the S6L control surface
	Amber	Solid	E6L processor has shut down; safe to power off E6L.
		Flashing	E6L processor is initializing.
	Off (unlit)	n/a	E6L is powered off, or is initializing during startup.

Stage 64

Power and fan faults are also communicated on-screen via a warning dialog box on the external VENUE software screen.

Status LED

The Status LED on the Stage 64 box light to indicate status as follows:

Stage 64 Status LED

LED Color	Description
Green solid	Initialization is complete and the device is ready to pass audio.
Yellow solid	The device is initializing. No audio passes during initialization.
Green flashing	A firmware update for the device is in progress. No audio passes during a firmware update.

Fault LED

The STATUS LED on the Stage 64 lights to indicate status as follows:

Stage 64 Fault LED

LED Color	Description
Yellow solid	A Stage 64 box fan failure. Power cycle the device.
Yellow flashing	A Stage 64 box power supply temperature alert. This may indicate that the device is over-heating. Power down the device and check that the device is properly ventilated.

Network Port Act and Sig LEDs

Each S6L control surface, E6L engine, and Stage 64 Network port has its own Activity (Act) and Signal (Sig) LEDs. Each device is ready for use when the Act and Sig LEDs are lit solid for each connected Network port.

Act LED The Act (activity) LED lights solid to indicate that AVB Ethernet traffic is currently active on the connected audio snake cable. If a redundant snake is connected, or if a Stage 64 is daisy-chained to another Stage 64, then ports A and B Act LEDs will be lit.

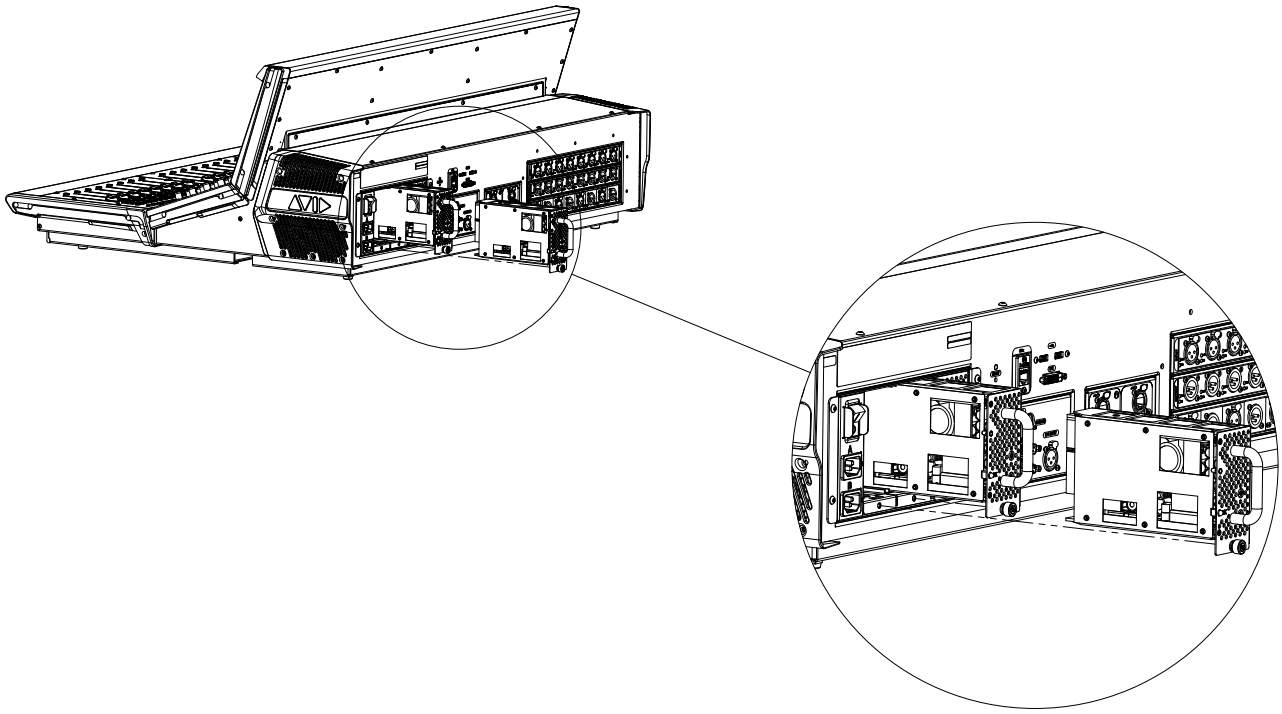
Sig LED The Sig (signal) LED lights solid to indicate that a valid communication connection exists between devices. If a redundant snake is connected, or if the Stage 64 is daisy chained to another Stage 64, then ports A and B Sig LEDs will be lit.

Replacing S6L and E6L PSUs

The S6L control surface and the E6L engine use the same model of hot-swappable PSUs, and the procedure for replacing a faulty PSU is the same for both units.

To replace an S6L or E6L PSU:

1. On the back panel of the S6L or E6L, locate the faulty PSU, indicated by a red or not-lit PSU ON LED
2. Locate the PSUs captive thumbscrew, and rotate counter-clockwise to loosen, using a #1 Phillips screwdriver if necessary.
3. Using the handle, slide the PSU out of the unit.



Removing PSUs from the S6L control surface

4. Slide the replacement PSU into the proper slot of the unit, and rotate the captive thumbscrew clockwise to tighten.

S6L Secure USB Port

The S6L control surface features a secure internal USB port to connect and securely protect an iLok Smart Key. Use this port to keep one “master” iLok and its plug-in assets with the S6L control surface at all times, safe from damage or loss. To access the port, the back cover of the S6L control surface must be removed. Only install the iLok after you have transferred plug-in licenses to your iLok. See **Installing and Authorizing Plug-Ins** for more information on handling plug-in licenses.

A 2.5 mm hex wrench is required to remove the back cover.

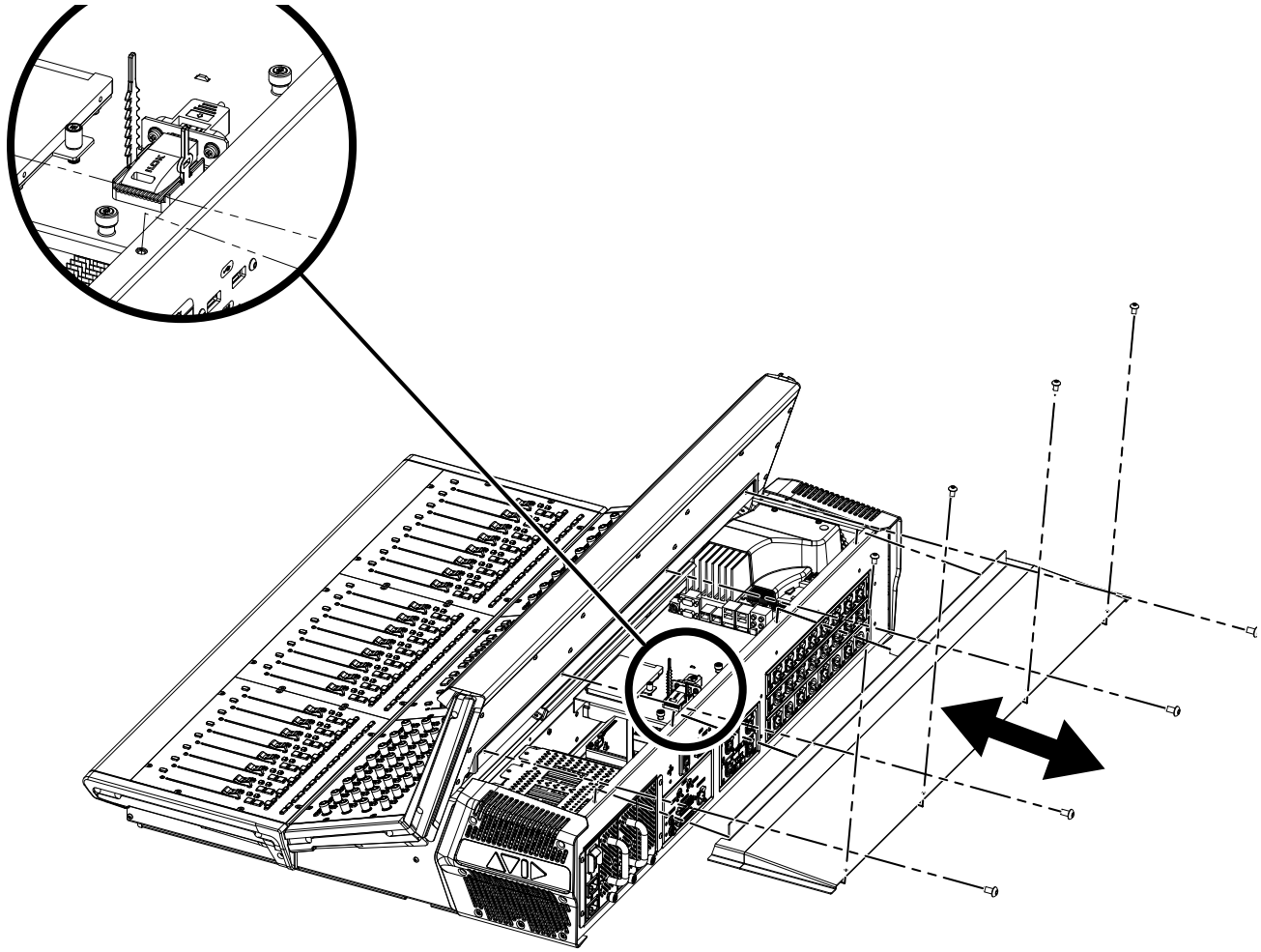


Figure 2. S6L control surface secure USB port

To access the secure USB port in the S6L control surface:

1. Power down and disconnect all cables from the S6L control surface.
2. Using a 2.5 mm hex wrench, remove the 8 screws that secure the back cover of the S6L control surface, as indicated in Figure 2, and set the screws aside.
3. Slide the panel away from the control surface, and set the panel aside.
4. Inside the control surface, locate the secure USB port and insert the iLok.
5. Secure the iLok with the built-in cable tie.
6. Replace the top panel, making sure the left and right edges of the top panel are under the top edges of the side cover (where the Avid logo appears) lips.
7. Reattach the eight screws removed earlier to secure the cover.

Audio Specifications

All specifications subject to change.

System Processing

Parameter	Value
Internal Sample Frequency	96 kHz
Internal Processing	Up to 64-bit floating point
Processing Delay	2.83 ms (Stage 64 analog input, through Mains L-R bus to Stage 64 analog output)

Analog Mic/Line Inputs

Parameter	S6L Control Surface Analog Inputs (XLR)	SRI-192 Analog Input Card
Connector	8 XLR-F	8 XLR-F
Sample rate	96 kHz	96 kHz
Phantom Power	+48V	+48V
Input Sensitivity	+14 dBu (+/-0.25 dB) @1 kHz, Pad Off +34 dBu (+/-0.25 dB) @1 kHz, Pad On	+14 dBu (+/-0.25 dB) @1 kHz, Pad Off, +34 dBu (+/-0.25 dB) @1 kHz, Pad On
Pad Depth	20 dB (+/- 0.25 dB), 1 kHz, 50 Ohm	20 dB (+/- 0.25 dB), 1 kHz, 50 Ohm
Gain Accuracy	±0.25 dB @ all gains	±0.25 dB @ all gains
Gain	+10 dB to +60 dB Pad Off -10 dB to +40 dB Pad On	+10 d B to +60 dB Pad Off, -10 dB to +40 dB Pad On
Input Impedance	~4 k Ohms	~4 k Ohms
Frequency Response	20 Hz - 20 kHz -0.2 dB @ all gains	20 Hz - 20 kHz ±0.1 dB @ all gains
THD+N	<0.0004% @+2 dBu, @1 kHz, @20 dB gain, 20 Hz-20 kHz filter, <0.0005% 20-20 kHz, @+10 dBu, @10 dB gain, 20 Hz-20 kHz filter	<0.0004% @+2 dBu, @1 kHz, @20 dB gain, 20 Hz-20 kHz filter, <0.0005% 20-20 kHz, @+10 dBu, @10 dB gain, 20 Hz-20 kHz filter
EIN	-127 dB, 150 Ohm source, 20 Hz - 20 kHz	-127 dB, 150 Ohm source, 20 Hz - 20 kHz
Converter Group Delay	12.6/Fs = 0.131 ms	12.6/Fs = 0.131 ms
Dynamic Range	>118 dB, A - weighted @ 1 kHz	>118 dB, A - weighted @ 1 kHz
CMRR	>60 dB @60 Hz >80 dB Typical, @100 Hz, 20 dB gain >70 dB Typical, 20 Hz-20 kHz, 20 dB gain	>60 dB @60 Hz >90 dB Typical, @100 Hz, 20 dB gain >80 dB Typical, 20 Hz-20 kHz, 20 dB gain
LEDs	Signal Present (green), +48V (red)	Signal Present (green), +48V (red)

Analog Line Outputs

Parameter	S6L Control Surface Analog Outputs (XLR)	SRO-192 Analog Output Card
Connector	(8) XLR-M	(8) XLR-M
Sample rate	96 kHz	96 kHz
Output Sensitivity	+24 dBu (+/-0.25 dB) @1 kHz, 100 k ohm	+24 dBu (+/-0.05 dB) @1 kHz, 100 K ohm
Gain Accuracy	±0.25 dB, 20-20 kHz, all gain settings	±0.25 dB, 20-20 kHz, all gain settings
Frequency Response	20-20 kHz, -0.15 dB	-0.1 dB, 20-20 kHz
THD+N	<0.0005% @1 kHz, -5 dBFS <0.0005%, 20-20 kHz, @-5 dBFS	<0.0006% @1 kHz, -5 dBFS <0.0008%, 20-20 kHz, @-3 dBFS
Converter Group Delay	7/Fs = 0.073 ms	7/Fs = 0.073 ms
Dynamic Range	>117.5 dB, A-weighted @1 kHz	>116 dB, A-weighted @1 kHz
Mute Depth	>125 dB @1 kHz, @-10 dBFS >115 dB 20-20 kHz, @-10 dBFS	>125 dB @1 kHz, @-10 dBFS >115 dB 20-20 kHz, @-10 dBFS
Output Impedance	100 Ohms Differential	100 Ohms Differential
Crosstalk	>120 dB @1 kHz, @-10 dBFS >100 dB 20-20 kHz, @-10 dBFS	>120 dB, @1 kHz, @-10 dBFS >100 dB, 20-20 kHz, @-10 dBFS
LEDs	Signal Present, Mute	Signal Present (green), Mute (red)

S6L Control Surface Digital I/O

Parameter	S6L Control Surface Digital Inputs	S6L Control Surface Digital Outputs
Connector	(4) XLR-F	(4) XLR-M
Format	AES 3 (AES/EBU)	AES 3 (AES/EBU)
Word Length	24-bit	24-bit
Termination	110 Ohms	110 Ohms
Max Cable Length	328 feet (100 meters)	328 feet (100 meters)
Supported Sample Rates	24 kHz to 210 kHz per input pair (SRC is always active)	96 kHz
Level	n/a	~3.6V pp maximum (i.e., +/- 1.8V)
Channel Status Info	n/a	Pro Audio 96 kHz, No Emphasis
Dithering	n/a	No
LEDs	n/a	Signal Present (green), Mute (red) per AES pairs

DSI-192 Digital Input Card

Parameter	AES Digital Inputs	ADAT Digital Inputs	Word Clock Out
Connector	(4) XLR-F	TOSLINK Optical	BNC-F
Format	AES 3 (AES/EBU)	ADAT, 8-channel @ 48 kHz, 4 channels @ 96 kHz, 2 channels @ 192 kHz (selectable within software)	Word Clock Out
Word Length	24-bit	24-bit	n/a
Termination	110 Ohms	110 Ohms	n/a
Max Cable Length	328 feet (100 meters)	n/a	n/a
Supported Sample Rates (with SRC)	24 kHz to 210 kHz per input pair (defeatable within software)	24 kHz - 210 kHz	n/a
Source Impedance	n/a	n/a	75 Ohm
Drive Level	n/a	n/a	2.5 pk-pk into 75 Ohm load
LEDs	Lock, SRC On	Lock, SRC On	n/a

DSO-192 Digital Output Card

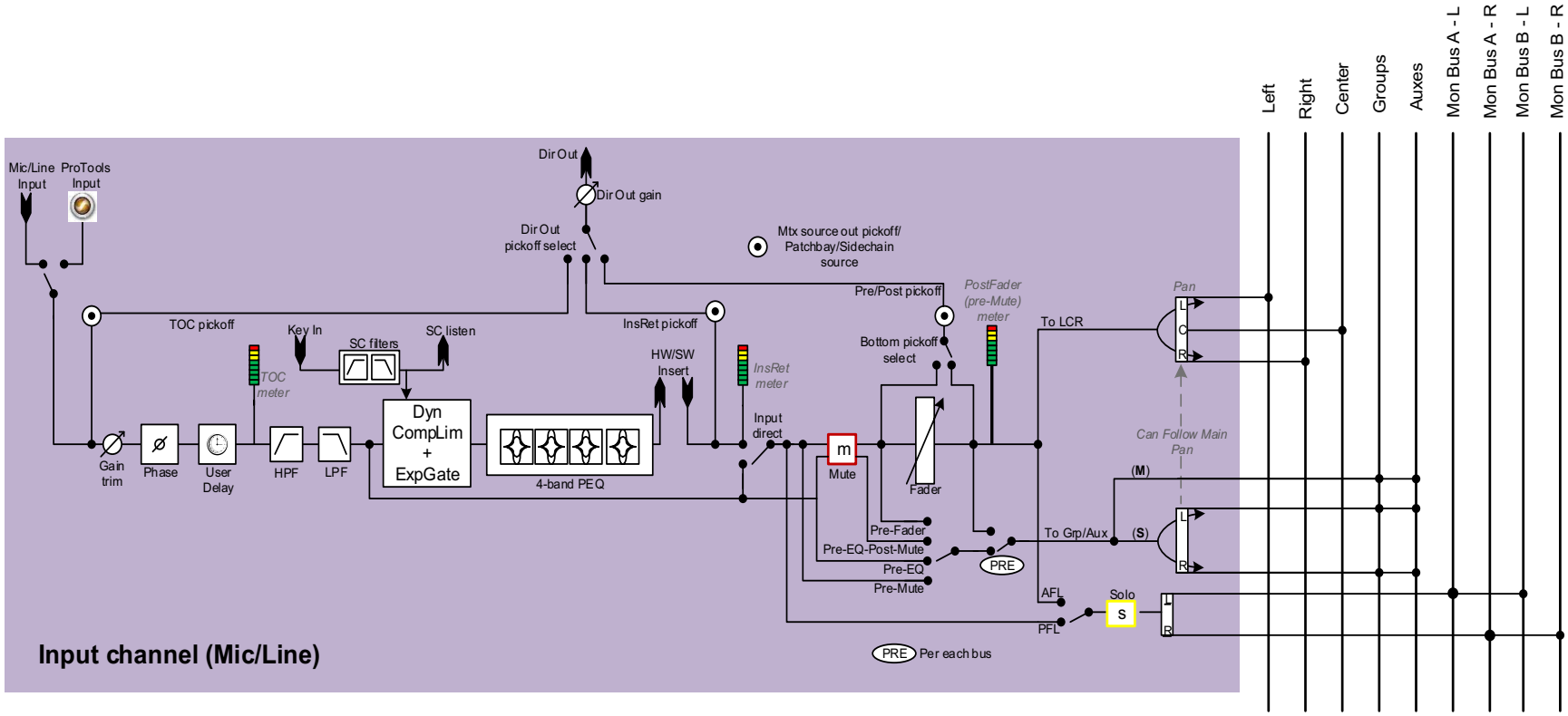
Parameter	AES Digital Outputs	ADAT Digital Outputs
Connector	(4) XLR-M	TOSLINK Optical
Format	AES 3 (AES/EBU)	ADAT, 8-channel @ 48 kHz, 4 channels @ 96 kHz, 2 channels @ 192 kHz
Word Length	24-bit	24-bit
Termination	110 Ohms	110 Ohms
Max Cable Length	328 feet (100 meters)	n/a
Supported Sample Rates	96 kHz	48 kHz SMUX, 96 kHz SMUX and 192 kHz SMUX (selectable within software)
LEDs	Lock, SRC On	Lock, SRC On
Impedance	110 Ohm	n/a
Level	~3.6 Vpp maximum (i.e., +/- 1.8V)n/a	n/a
Channel Status Info	Pro Audio 96 kHz, No Emphasis	n/a
Dithering	NO	No
LEDs	Signal Present (green), Mute (red) per AES pairs	Signal Present

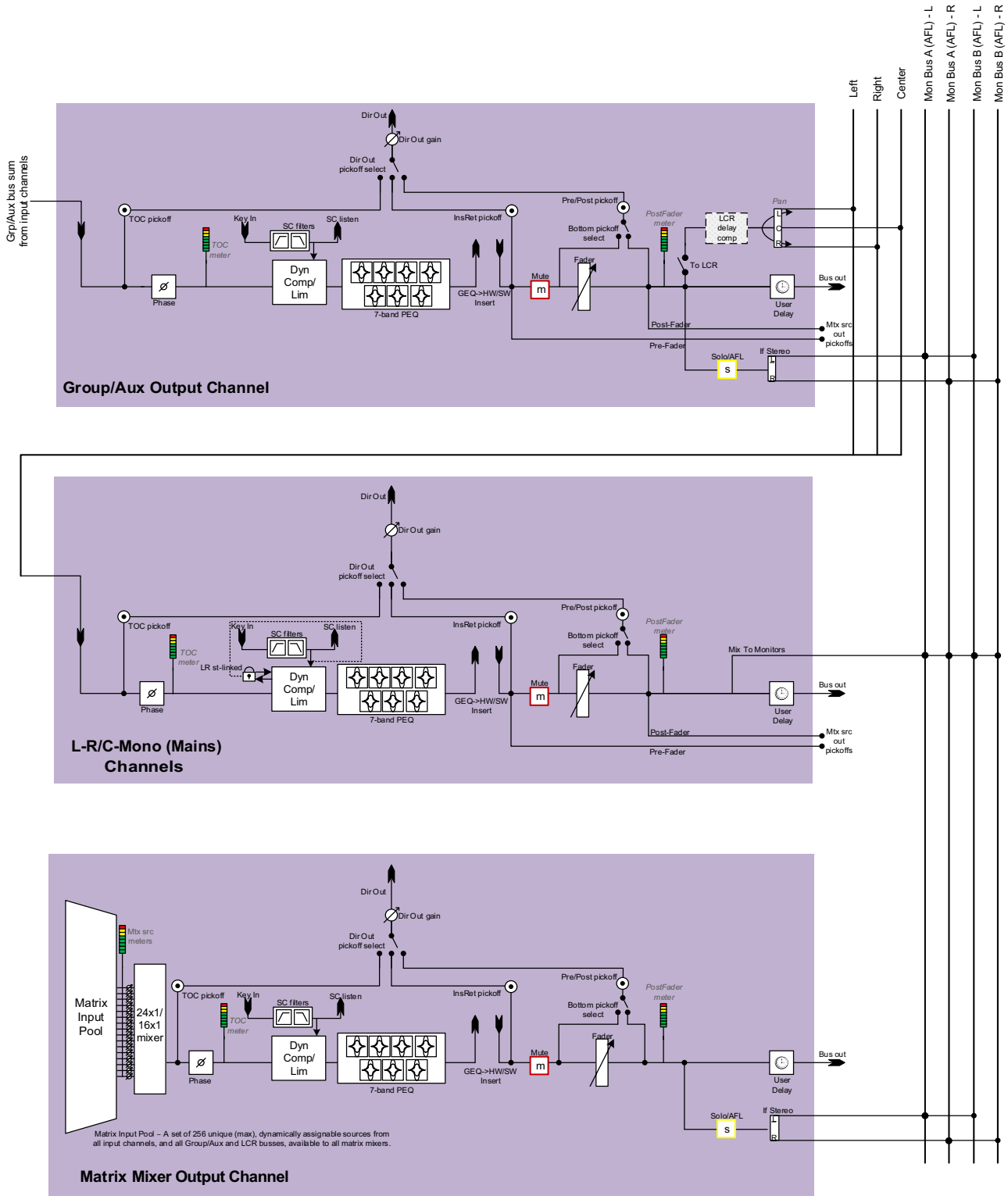
Headphone Outputs

Parameter	S6L Console Headphone Outputs	Stage 64 Headphone Output
Connector	(2) TRS-F	(1) TRS-F
Sample rate	48 kHz, 96 kHz, 192 kHz	48 kHz, 96 kHz, 192 kHz
Output Impedance	<3 Ohms	<3 Ohms
Max Output Power (rms)	>600 mW, 32 Ohm, 1 kHz, 1% THD, >190 mW, 300 Ohms, 1 kHz, 1% THD, >100 mW, 600 Ohms, 1 kHz, 1% THD	>750 mW, 32 Ohm, 1 kHz, 1% THD, >330 mW, 300 Ohms, 1 kHz, 1% THD, >190 mW, 600 Ohms, 1 kHz, 1% THD
Frequency Response	20-20 kHz, +/- 0.2 dB, -15 dBFS	20-20 kHz, +/- 0.1 dB, -15 dBFS
THD+N	<0.0007%, 1 kHz, -2 dBFS, >300 ohms, <0.0025%, 20-20 kHz, -5 dBFS, 300 ohms, 20 kHz filter, <0.0015%, 1 kHz, -5 dBFS, 32 ohms, <0.0025%, 20-20 kHz, -4 dBFS, 32 ohms, 20 kHz filter	<0.0005%, 1 kHz, 0 dBFS, >300 ohms, <0.0008%, 20-20 kHz, 0 dBFS, >300 ohms, 20 kHz filter, <0.0008%, 1 kHz, -4 dBFS, 32 ohms, <0.0015%, 20-20 kHz, -4 dBFS, 32 ohms, 20 kHz filter
Group Delay	7/Fs = 0.073 ms	7/Fs = 0.073 ms
Dynamic Range	>110 dB, 20-20 kHz, A-weighted	>110 dB, 20-20 kHz, A-weighted
Channel Separation	<-90 dB, 1 kHz, 600 Ohms	<-90 dB, 1 kHz, 600 Ohms

Signal Flow Diagrams

Input Channel Signal Flow




Grp/Aux bus sum from input channels
Dir Out
Dir Out gain
Dir Out pickoff select
TOC pickoff
Key In
SC filters
SC listen
InsRet pickoff
Pre/Post pickoff
PostFader meter
Pan
LCR delay comp
Bottom pickoff select
Fader
To LCR
Mute
Bus out
User Delay
Phase
TOC meter
Dyn Comp/ Lim
7-band PEQ
GEQ->HW/SW Insert
Post-Fader
Pre-Fader
Mtx src out pickoffs
Solo/AFL
If Stereo
Group/Aux Output Channel
Left
Right
Center
Mon Bus A (AFL) - L
Mon Bus A (AFL) - R
Mon Bus B (AFL) - L
Mon Bus B (AFL) - R
LR st-linked
Mix To Monitors
L-R/C-Mono (Mains) Channels
Mtx src meters
Matrix Input Pool
24x1/ 16x1 mixer
Matrix Input Pool – A set of 256 unique (max), dynamically assignable sources from all input channels, and all Group/Aux and LCR busses, available to all matrix mixers.
Matrix Mixer Output Channel

Part VII: Appendices

Avid Technology, Inc.

Important

(Model: S6L24, S6L32, E6L, and Stage 64)

Environmental Compliance

Disposal of Waste Equipment by Users in the European Union

This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

Proposition 65 Warning

This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

Perchlorate Notice

This product may contain a lithium coin battery. The State of California requires the following disclosure statement: “Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardous waste/perchlorate.”

Recycling Notice

EMC (Electromagnetic Compliance)

Avid declares that this product complies with the following standards regulating emissions and immunity:

- FCC Part 15 Class B
- EN 55022 Class B
- AS/NZS CISPR 22 Class B
- CISPR 22 Class B
- EN 55103-1, Class E2 and E3
- EN 55103-2, Class E2 and E3
- EN55024

FCC Compliance for United States

Communication Statement

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 and correct the interference by one or more of the following measures:

- Reorient or locate the receiving antenna.
- Increase the separation between the equipment and 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.

Any modifications to the unit, unless expressly approved by Avid, could void the user's authority to operate the equipment.

Australian Compliance

Canada ICES-003 Compliance

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le material brouilleur du Canada.

Korea Class B EMC Compliance

이 기기는 가정용 (B **급**) **전자파적합기기로서 주 로 가정에서 사용하는 것을 목적으로 하며 , 모 든 지역에서 사용할 수 있습니다** .

CE Compliance
(EMC, Safety and RoHS)

Avid is authorized to apply the CE (Conformite Europenne) mark on this compliant equipment thereby declaring conformity to EMC Directive 2004/108/EC, Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EC.

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