



What's New in VENUE | Software 7.0

for Avid[®] VENUE | S6L Systems

[Contents >](#)

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Guide Part Number 9329-66192-00 REV A 12/20

Safety Compliance

Safety Statement: (M/N: S6L16, S6L24(all), S6L32, S6L48, Local 16, Stage 16, Stage 32 and Stage 64)

This equipment has been tested to comply with USA and Canadian safety certification 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(all))

This equipment has been tested to comply with USA and Canadian safety certification 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

S6L16: AC~100-240V, 50-60Hz, 4.0A per inlet
S6L24(all): AC~100-240V, 50-60Hz, 4.0A per inlet
S6L32: AC~100-240V, 50-60Hz, 5.0A per inlet
S6L48: AC~100-240V, 50-60Hz, 5.0A per inlet
E6L(all): AC~100-240V, 50-60Hz, 5.0A per inlet
Local 16: AC~100-240V, 50-60Hz, 0.6A per inlet
Stage 16: AC~100-240V, 50-60Hz, 0.6A
Stage 32: AC~100-240V, 50-60Hz, 3.65A 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
 - (4) MADI-192 MADI Option Cards
 - (8) DIMMs of RAM.

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

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 1.0mm².

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'incendie, remplacer par un fusible de même type et de même caractéristiques nominales.

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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Introduction

Welcome to VENUE version 7.0 software for VENUE | S6L systems from Avid®. This guide describes the new features provided in this newest version of VENUE software.

Updating VENUE Software, Plug-Ins, and Firmware

VENUE version 7.0 software is available as a System Restore and as a Software Update.

- If you are updating a system running VENUE 6.2 or higher you can perform either a System Restore or a Software Update.
- If updating a system from VENUE 6.1.x or lower, VENUE 7.0 *must* be installed via a System Restore on the control surface.

Be sure to back up your Show files, Presets, and other data before installing new VENUE software. After performing a System Restore on the control surface, make sure to re-install your plug-ins.



Beginning in VENUE 6.2 all S6L-bundled plug-ins are automatically installed during System Restore. After performing a System Restore with VENUE 6.2 or later you should only need to manually re-install any additional 3rd party plug-ins.

For complete software installation instructions see the most recent edition of the *VENUE S6L Installation.pdf*, available for download from your Avid account.

Important Installation Note

For systems with WSG-HD Waves SoundGrid Option Card, [Important Installation Notes for VENUE 7.0](#).

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, cables, displays, other third-party devices, and versions of Pro Tools® software, visit: www.avid.com/S6Lsupport

Pro Tools and S6L

For complete Pro Tools compatibility, system requirements, and required optimizations for VENUE, visit:

[What are the System Requirements for Pro Tools with S6L?](#)

Important! Whenever you are recording or playing back to/from Pro Tools, do all of the following on the Pro Tools computer:

- Go to System Preferences > Network and disable Wi-Fi/Airport and Bluetooth (make sure Wi-Fi is completely Off).
- Go to System Preferences > Sharing and make sure Internet Sharing is off/disabled.

MADI-192 MADI Option Cards

If your system includes one or more MADI-192 MADI Option cards, see [Updating MADI Card Firmware](#).

WSG-HD

As of VENUE software version 6.2, Waves v10 or later is required (v9 is not supported with VENUE 6.2 or higher). If your system includes an Avid WSG-HD Waves SoundGrid Option card, update the S6L system to VENUE 7.0 first, then follow the [SoundGrid software update instructions](#) provided by Waves to install v10. See also [Important Installation Notes for VENUE 7.0](#).

VENUE Standalone Software

Be sure to manually uninstall any older versions of VENUE Standalone Software before installing VENUE Standalone v7.0.

Conventions Used in This Guide

All of our guides use the following conventions to indicate menu choices and key commands:

Convention	Action
Options > System	In the VENUE software, click Options to display the Options tab, then click the System tab.
File > Save	Choose Save from the File menu
Control+N	Hold down the Control key and press the N key
Control-click	Hold down the Control key and click the mouse button
Right-click	Click with the right mouse button

The names of Commands, Options, and Settings that appear on-screen are in a different font.

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.

Hardware Switches on Control Surfaces

The names of switches on the control surfaces are in bold (such as **Sel**). The Shift switch on the S6L is indicated by bold text, in all-caps (**SHIFT**) to distinguish it from references to the Shift key on your computer keyboard.

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 quickly create an account if you don't have one). Register your purchase online, download software, updates, documentation, and other resources.

<https://www.avid.com/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/products/venue-s6l-system/learn-and-support>

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:

<http://www.avid.com/live-sound-webinars>

Also check out our Live Sound blogs:

<http://www.avidblogs.com/livesound/>

Get started learning the ins and outs of S6L using the many [Avid Live Sound](#) videos on YouTube.

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/Products/index.html>

How to Use this PDF Guide

These are some useful features of this PDF:

- 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.

Part I: New Features

MLN-192 Milan Option Card

The MLN-192 Milan Option Card for E6L engines provides AVB connection to 3rd-party Milan-compliant devices.

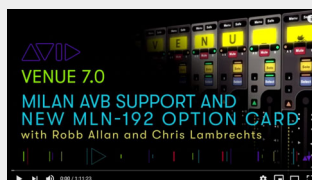


MLN-192 Milan Option Card

MILAN™ is a certified format of AVB that guarantees interoperability with other Milan-certified devices. The Milan format was created in conjunction with Avid, D&B, L-Acoustics, Meyer, and others as a sample accurate, plug-and-play network format. Features and capabilities of the MLN-192 Milan Option Card for Avid VENUE | S6L systems include:

- Transmits and receives 128 channels of audio over AVB-Milan at 96 kHz
- Supported with all E6L engines
- Facilitates audio signal distribution on an AVB network in multi-venue installations
- Provides connection to 3rd-party AVB devices to distribute audio over the Milan AVB network
- Allows S6L system-to-system routing (such as between front of house and monitors, or broadcast) of up to 128 channels
- When combined with S6L support for star network topologies, MLN-192 lets you create a distributed I/O model in theaters, houses of worship, and performance venues

To learn more, watch the [MILAN AVB Support](#) webinar.



System Requirements and Compatibility

You can install one MLN-192 card into any E6L engine. MLN-192 is compatible with other Milan-certified devices. For hardware installation instructions, see the *MLN-192 Milan Option Card Installation Guide*. Once installed, connect MLN-192 to other Milan-certified devices directly, or to a separate AVB-compatible switch (do *not* connect MLN-192 to any AVB switches that connect S6L I/O units in star configurations).

Compatibility and configuration with other devices is subject to the depth of integration of Milan by other manufacturers. Note also that Milan compatibility is per device (not all devices from a Milan manufacturer are Milan-compliant).

If connected to a switch, the Milan network must be isolated and on a separate network switch from the S6L AVB network. Use a dedicated separate switch for Milan and do not connect this switch to any other switches that are being used for S6L I/O units in a star configuration. To view, configure, and manage Milan audio, install a supported AVDECC software utility (such as [Hive](#)) on a compatible macOS or Windows computer, then connect the computer to a port on the MLN-192 card, or to a device on the Milan network.

 Because macOS computers are not Milan-compliant, MLN-192 does not support direct Pro Tools connections.

Using the MLN-192 Milan Option Card

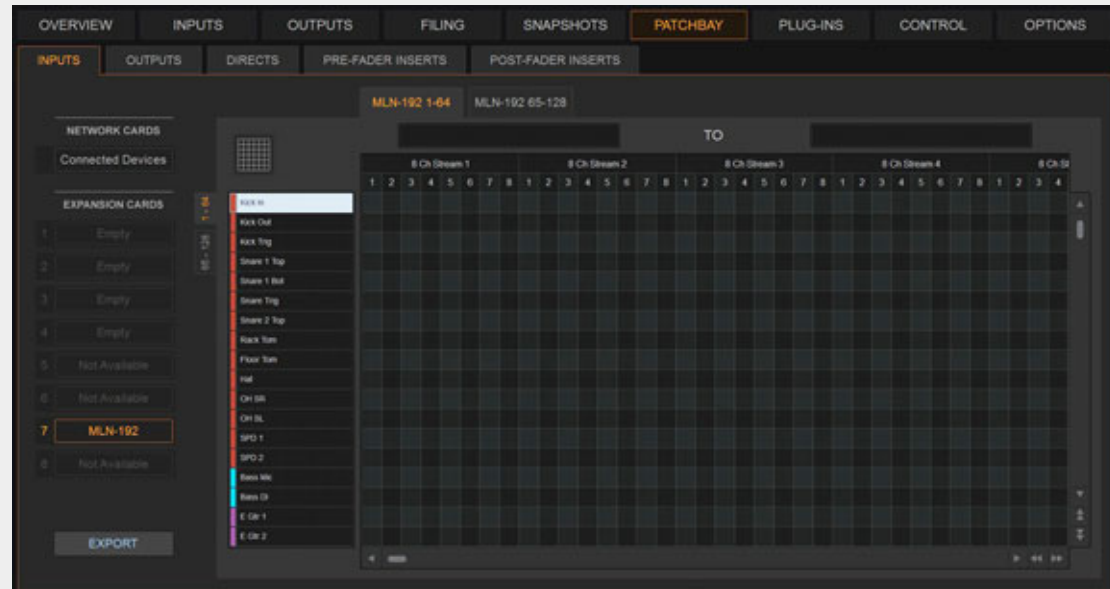
When installed in an E6L engine, the MLN-192 Milan Option Card appears in Options > Devices page as an Expansion Card.

Like other devices, selecting the MLN-192 card in **Options > Devices** provides information associated with the card in the **Information** and **Settings** tabs.

💡 *The displayed name of the MLN-192 card is derived from its name as seen in AVDECC software such as HIVE.*

MLN-192 in the Patchbay

The MLN-192 card appears in the Patchbay as an Expansion Card.



MLN-192 in the Patchbay (Inputs shown)

When selected, the MLN-192 grid is displayed showing 128 input paths and 128 output paths, split into 16 8-channel streams. Streams are labeled 8 Ch Stream 1, 8 Ch Stream 2, and so on.

External Controllers

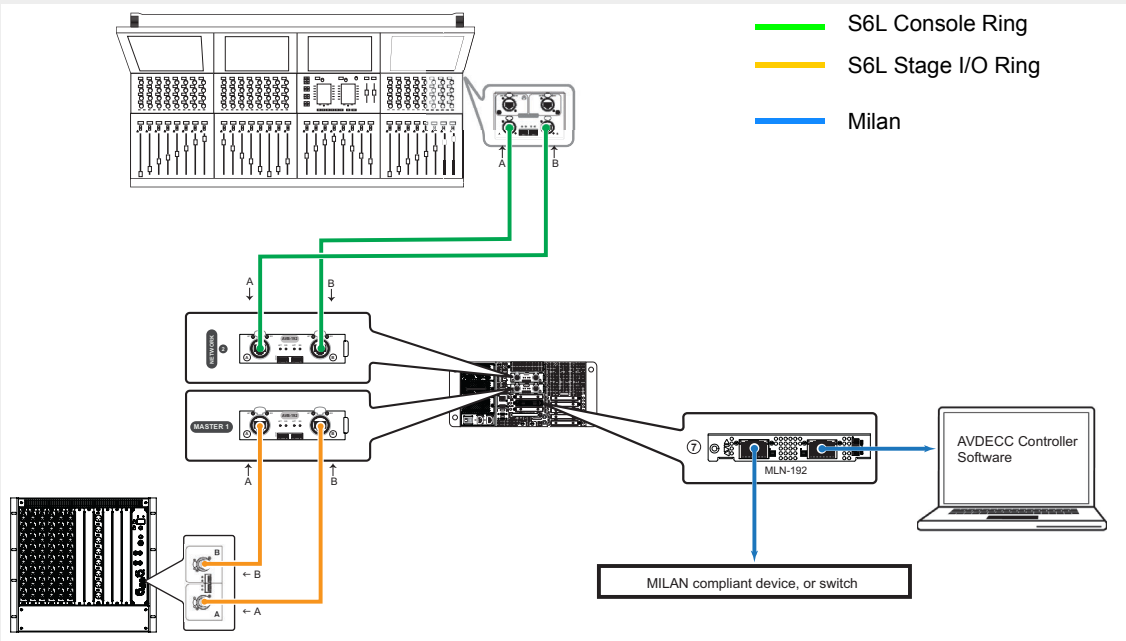
Compatible external controllers can switch any of the “listener” streams to 48 kHz.

 Note that the MLN-192 card is non-redundant.

Milan Configuration Examples

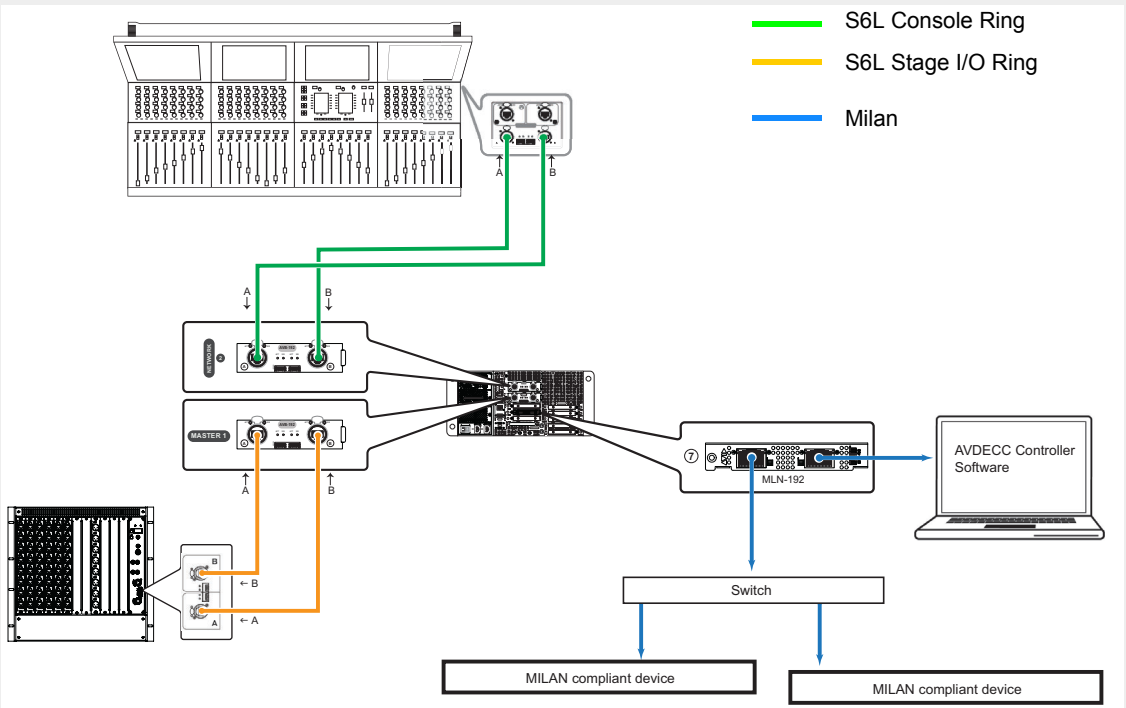
Here are a few example configurations.

Single S6L System: MLN-192 Connected Directly to Milan Devices

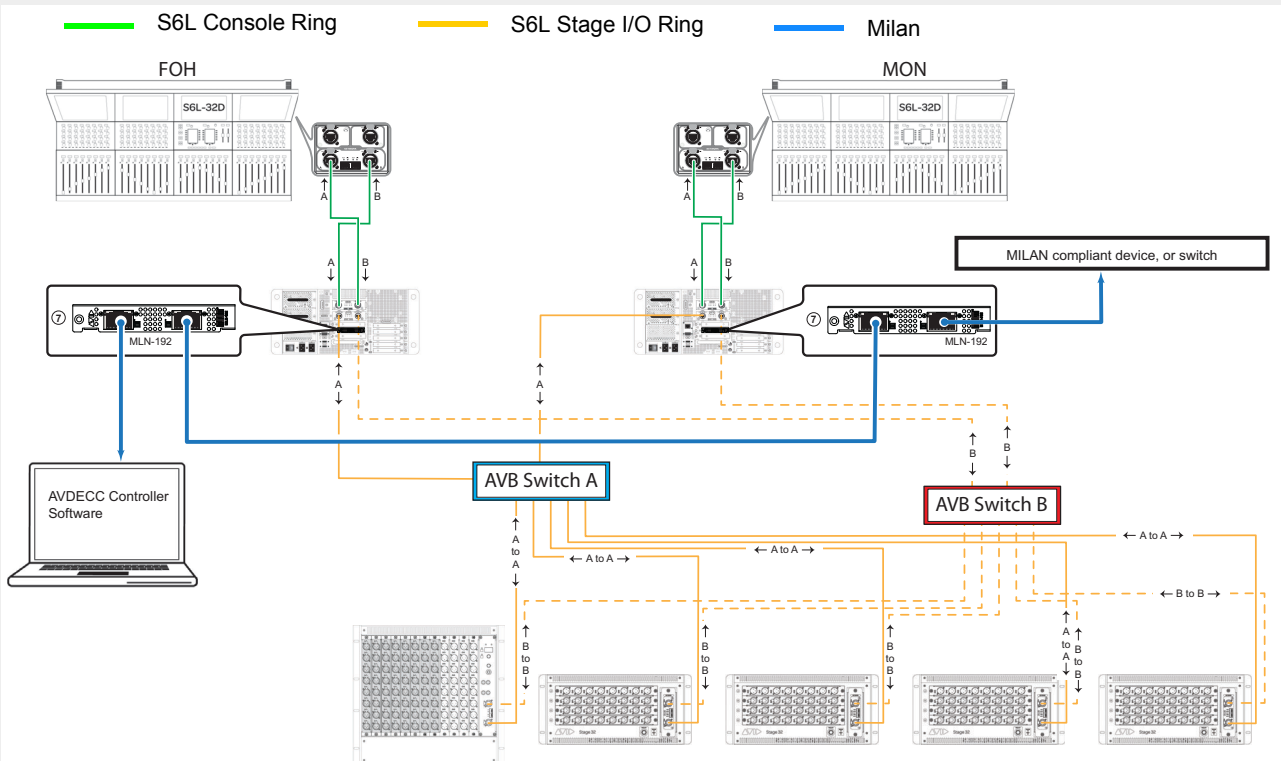


Single S6L System: MLN-192 to a Switch to Milan Devices

Connect the MLN-192 card to a switch, then connect other Milan devices to the switch.



Multiple S6L Systems: Redundant Star, MLN-192 to Milan Devices

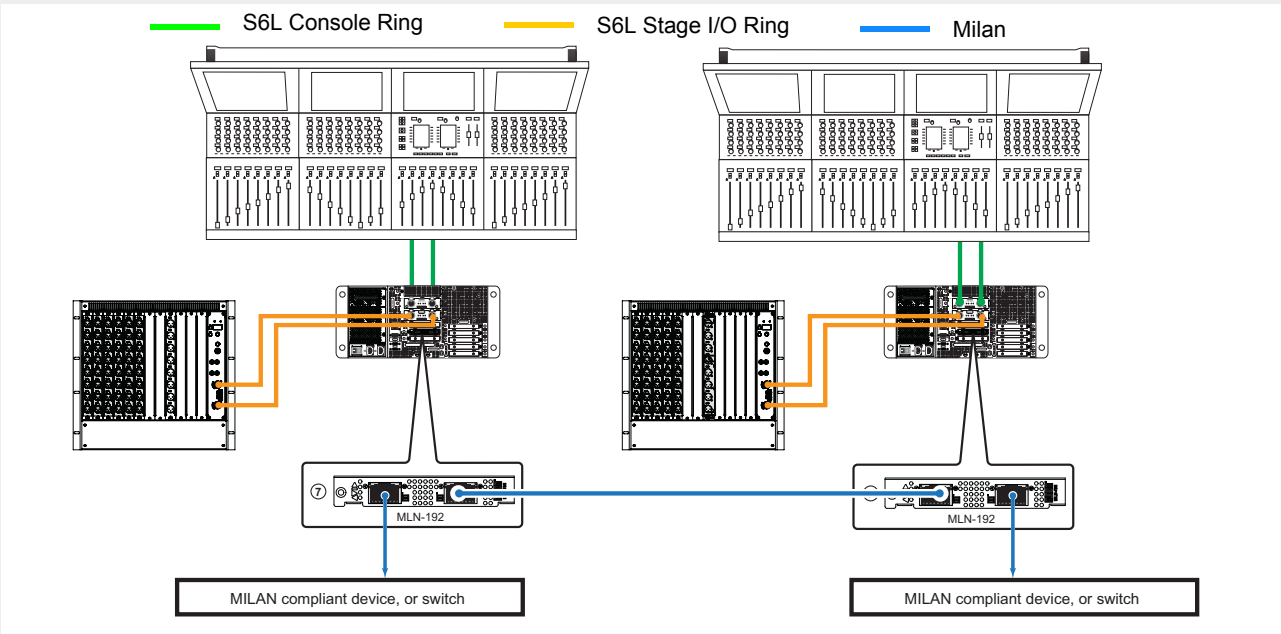


Two S6L systems, redundant star configuration, with MLN devices connected to MLN-192 cards, and Milan between each engine

If connected to a switch, the Milan network must be on a separate network switch from the S6L AVB network (the Milan network switch must *not* be connected to Stage/Engine AVB Network switch).

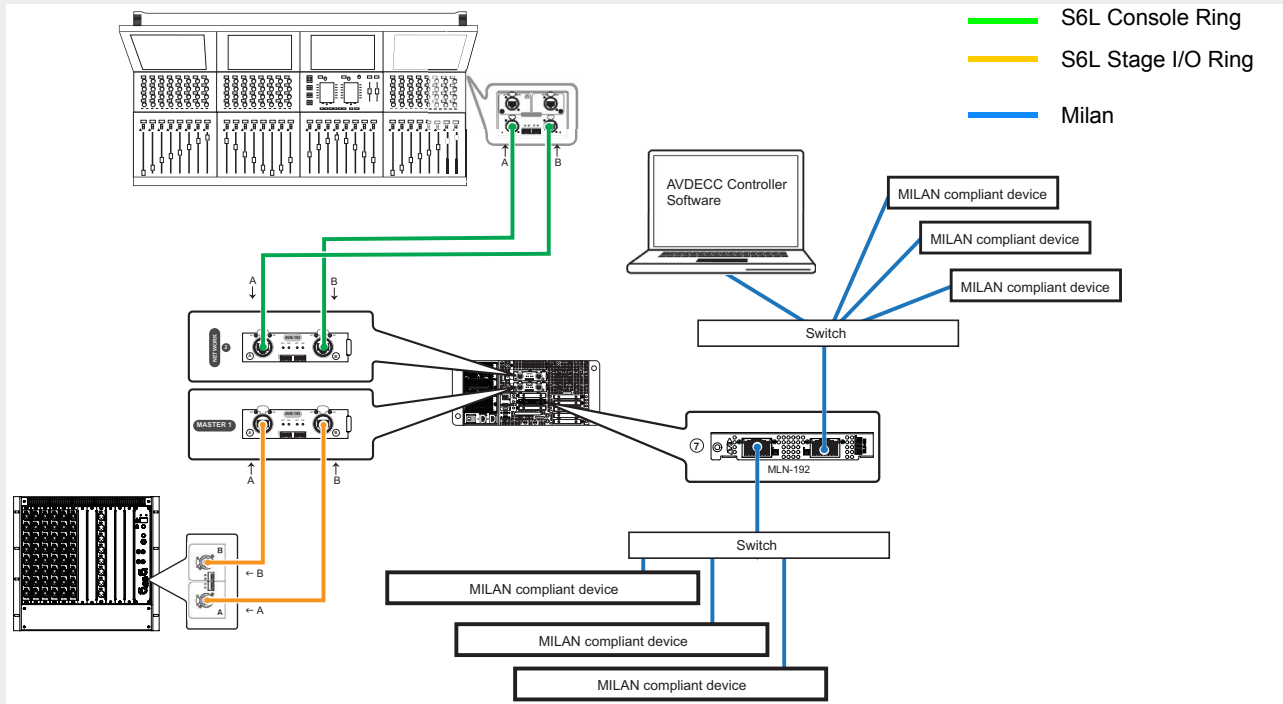
Milan Communication Between S6L Systems

When two or more E6L engines with MLN-192 cards are present, a single Ethernet cable between MLN-192 cards provides up to 128 channels of inter-S6L communication.

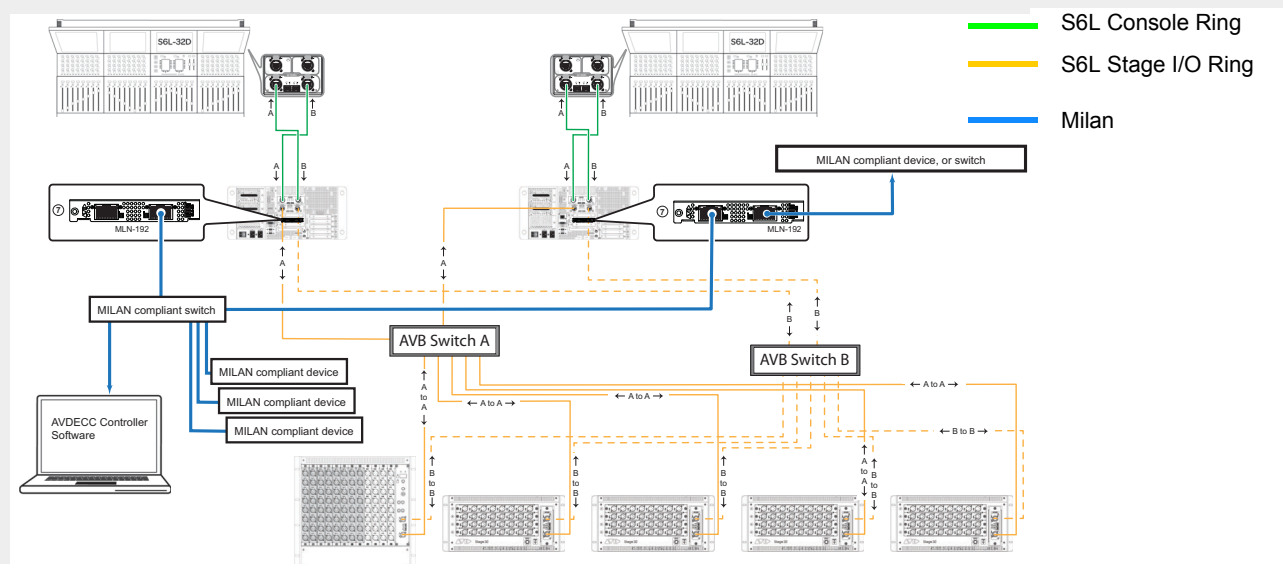


Milan Switch Connections

When the MLN-192 card is connected to a switch, many additional connection options become available. The previous diagrams show basic connections for one or more Milan devices, and to a computer for AVDECC controller software. The following diagram shows additional possibilities, such as the AVDECC computer connected to a switch:



The example connections shown above can also be used when multiple S6L systems are in use. S6L systems do not need to be connected for I/O Sharing, and can be configured in either a ring or star network. The following example diagram shows two S6L systems in a redundant star configuration, with each system's MLN-192 card connected to a single Milan-compliant switch. The switch is connected to Milan devices and a computer for AVDECC control.



Reminder: If connected to a switch, the Milan network must be on a separate network switch from the S6L AVB network (the Milan network switch must not be connected to Stage/Engine AVB Network switch).

New Features and Enhancements

VENUE software version 7.0 includes the following improvements and enhancements:

General

- [I/O Sharing with 3x S6L Systems with Luminex Switches](#)
- [Delay Compensation Enhancements for Time Alignment](#)
- [Media Record and Playback](#)

Plug-Ins and Channel Processing

- [Assign and Insert Plug-Ins \(“+”\)](#)
- [More Inserts per Channel \(Post-Fader Inserts\)](#)
- [400 Plug-In Slots on All Systems](#)
- [Parallel Mix Control on Built-In Channel EQ and Dynamics](#)
- [EQ PRE DYN](#)
- [HEAT on Input Channels](#)
- [Unlimited GEQ on Outputs](#)
- [HPF and LPF on Output Channels](#)
- [Matrix Mixer Input Polarity Switch](#)

Signal Routing

- [Bus-to-Bus Routing](#)
- [Make Stereo and Make Mono from the Control Surface](#)

Display

- [Big Meters View](#)
- [Channel Name Shown in Strips on External Screen](#)
- [New Groups Indication](#)
- [Mute and Solo Indication in Meters View](#)

Support and Resources

- [System ID and Serial Number in VENUE Software](#)
- [Help Page with Guides, Troubleshooting, and Other Resources](#)

Miscellaneous

- [Improved Engine Restore Procedure](#)
- [System Test](#)

I/O Sharing with 3x S6L Systems with Luminex Switches

VENUE 6.3 introduced support for Luminex switches to connect S6L Engines and Stage I/O units in a redundant star configuration, including configurations with two S6L systems connected for I/O Sharing. Beginning in VENUE 7.0 you can configure three S6L systems for I/O sharing using qualified Luminex switches. All I/O Sharing configurations fully support Avid True Gain.



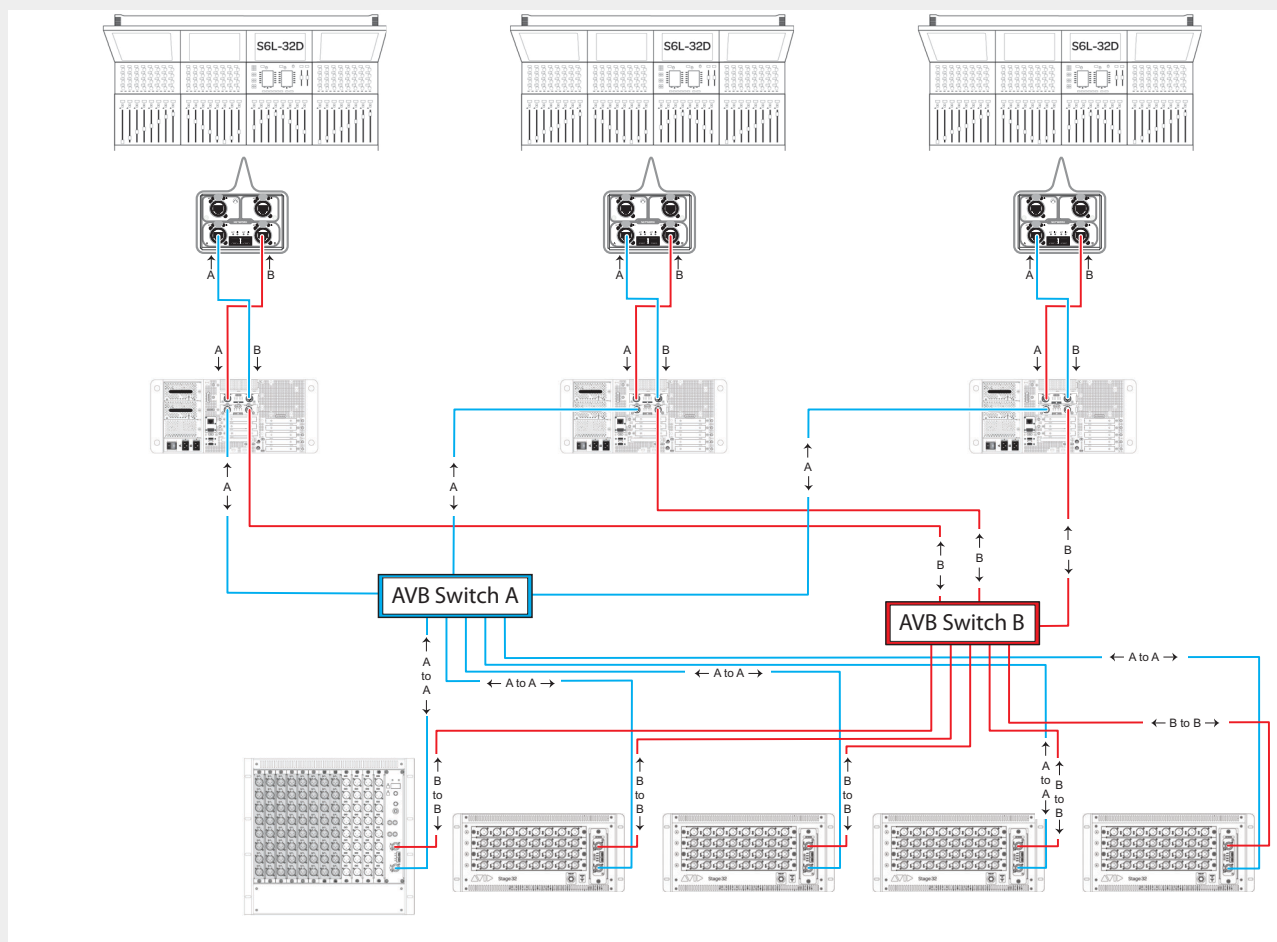
Three-system I/O Sharing requires qualified Luminex switches configured in a redundant star configuration. When configured in a redundant ring without Luminex switches, no more than two S6L systems can be connected for I/O Sharing.

For complete information on updating, configuring, and connecting Luminex switches, including important firmware information, see the *S6L Luminex Switch Configuration.pdf*, available for download from your Avid account and from our Knowledge Base along with all other S6L documentation: [S6L Documentation](#).

To learn more, watch the [3 Systems I/O Sharing](#) webinar to learn about it from VENUE Product Specialists.



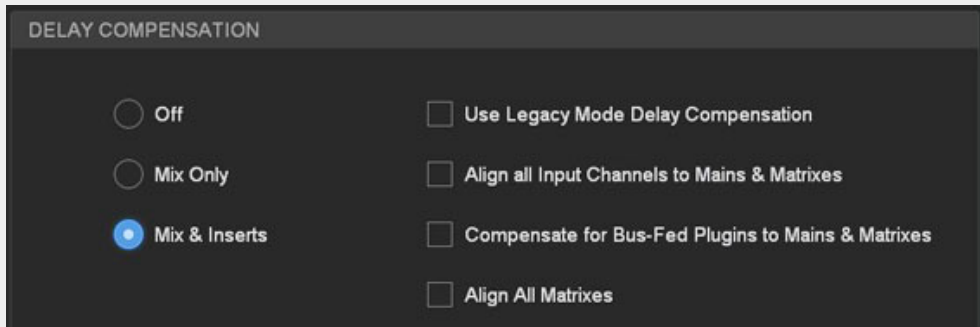
Three S6L I/O Sharing in Redundant Star Configuration



Three S6L systems in I/O Sharing configuration using Luminex switches in a star configuration, maximum IO

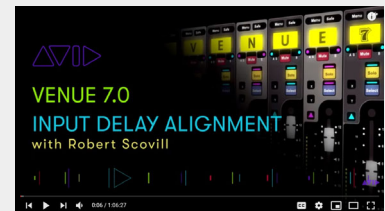
Delay Compensation Enhancements for Time Alignment

The settings for Automatic Delay Compensation (ADC) have been expanded to simplify aligning busses and Matrixes, and a new command is provided to let you align selected Input channels to compensate for any plug-ins inserted on those Inputs.



Delay Compensation settings in Options > Pickoffs

Watch the [Input Delay Alignment](#) webinar from VENUE Product Specialists.



Primary Settings

Off No Delay Compensation is applied.

Mix Only Compensation for routing-based latency is applied.

Mix & Inserts Compensation for latency due to routing, inserts, and plug-ins is applied.

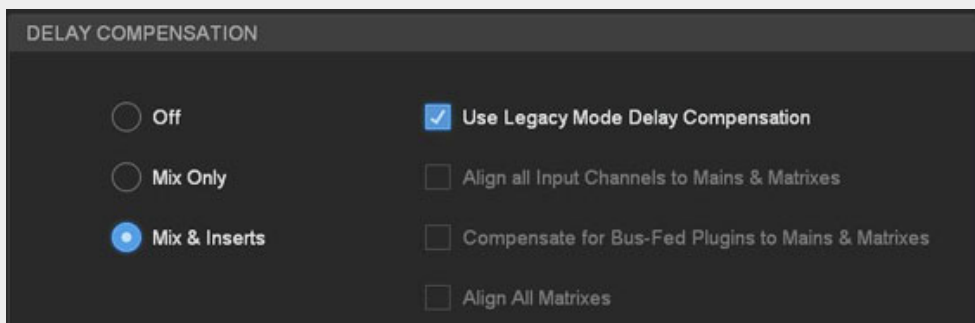
Delay Compensation can be set in either Show or Config mode.

Additional Settings

The Delay Compensation settings listed below provide additional options.

Use Legacy Mode Delay Compensation

- When enabled, Delay Compensation functions as in VENUE 6.3 and prior; a channel must also be routed to Mains in order for its parallel paths to be compensated. Legacy Show files retain their ADC settings, but a Clear Console Defaults to Off. Note that when Use Legacy Mode Delay Compensation is enabled, none of the additional Delay Compensation settings below it are available.



Delay Compensation settings, Use Legacy Mode enabled

- When disabled, the additional Delay Compensation settings become available. Even when no other Delay Compensation settings are enabled, disabling Use Legacy Mode Delay Compensation compensates for all *parallel paths*. (In VENUE 6.3 and prior, a routing workaround fondly known as “dummy channel” was required to apply delay compensation on parallel paths. This workaround is no longer required with VENUE 7.0 and later when Use Legacy Mode Delay Compensation is not enabled.)

Align All Input Channels to Mains & Matrixes

When enabled, aligns all Inputs Channel paths to Mains and Matrixes, including parallel paths, and compensates for routing and processing latency.

Example: Input 1 > Mains, Input 2 > plug-ins > Mains, Input 3 > plug-ins > Group 1 > Mains.

Result (when enabled): Inputs 1, 2, and 3 arrive at Mains in alignment with each other.



Align All Input Channels to Mains & Matrixes *does not compensate for any User Delay applied to Input channels.*

Compensate for Bus-Fed Plug-Ins to Mains & Matrixes

When enabled, aligns paths to compensate for channels that are fed by plug-ins which are fed from channels, such as when using reverb send and return routing. Enabling this setting also lets you apply effects such as saturation distortion type effects on sends without comb filtering that might otherwise be caused by routing and plug-in latency.

Example: Input 1 > Aux 1, Aux 1 > bus out to plug-in A, plug-in A > Input 2, Input 2 > Mains.

Result (when enabled): Input channels 1 and 2 arrive at Mains in alignment with each other.

Align All Matrixes

Aligns all Matrix Outputs. Align All Matrixes aligns all Matrix Output signals with one another.

Example: Mains > Matrix 1, Aux 16 (sub) > Matrix 2.

Result (when enabled): Both Matrix 1 and 2 outputs are aligned with each other, regardless of their different paths.

About Delay Compensation and Bus-to-Bus Routing

While bus-to-bus routing to Mains or Matrixes is compensated, there are some complex routing paths that are simply beyond the scope of automatic delay compensation (you can manually compensate by calculating latency and applying User Delay).

Example: Whenever Groups combine with other Groups, along with additional parallel paths beyond that merge, such as:

Group 1 > Group 2, Group 2 > Group 3, as well as Group 1 > Group 3.

Because User Delay on Groups *does* affect the Group to Group routing, you can manually add User Delay as needed.

Align Total Input Delay on Attentioned Channels

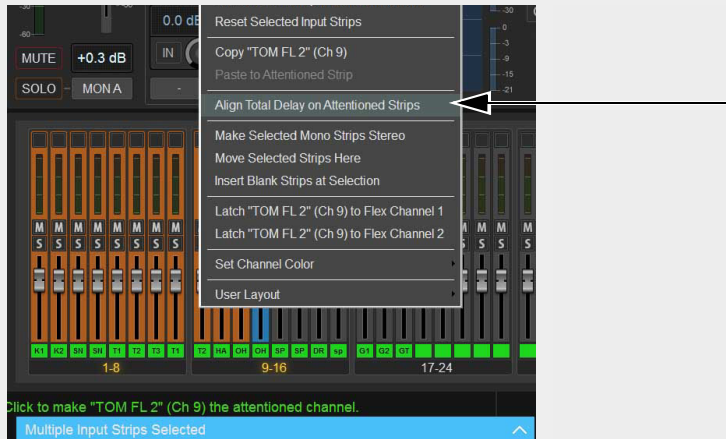
The previously described settings for Delay Compensation apply globally. You can instead align Input channels selectively using the Align Total Input Delay on Attentioned Channels command. Unlike the global Delay Compensation settings, the Align Total Input Delay on Attentioned Channels command adjusts Input channel Delay controls to align the selected channels.

Important!

- To avoid adding additional User Delay that will then have to also be compensated, do not use Align Total Input Delay on Attentioned Channels while Align All Inputs to Mains & Matrixes is enabled. The Align Total Input Delay on Attentioned Channels command should only be used when you need to align only a small number of inputs, but not *all* inputs.
- Note that Align Total Input Delay on Attentioned Channels is a “one-shot” command which only sets the channel delay value(s) once when the command is invoked. It does not automatically update the delay value(s) in real-time as done by the Primary and Additional Delay Compensation settings.

To selectively align Input channels:

- 1 Attention the channels you want to align.
- 2 Right-click on any attentioned channel and choose Align Total Input Delay on Attentioned Channels.
Delay is added to channels to align them with the channel that has the largest amount of plug-in induced latency.



Align Total Delay on Attentioned Strips command in right-click menu, while multiple Input channels are selected

You can easily A/B the effect of this setting.

To A/B the effect of the setting on versus off:

- 1 On the external screen, click the Delay IN button for any currently attentioned channel so it is unlit. Delay is disabled.
- 2 Click IN again to toggle the effect back on.

Delay Compensation with Matrix Mixers

VENUE automatically compensates for the delay offsets that can arise when combining different signal paths within a Matrix mixer. In addition:

- 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, and Matrix outputs can be aligned to each other by enabling the Align All Matrixes setting. 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.
- Any latency associated with Monitor buses is not included in the calculation of delay compensation for the corresponding Matrix.

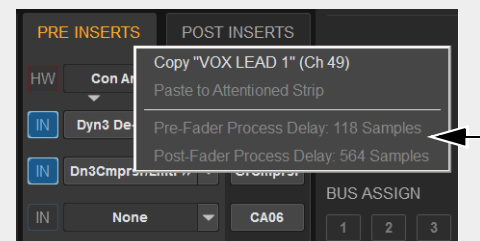
Plug-In Latency, Processing, and Routing Delay

Plug-In latency includes processing delay of the plug-in itself plus routing delay. Routing delay includes “instance” delay plus DSP routing (routing to and back from the Plug-In Racks), which totals 101 samples.

Viewing Plug-In Latency

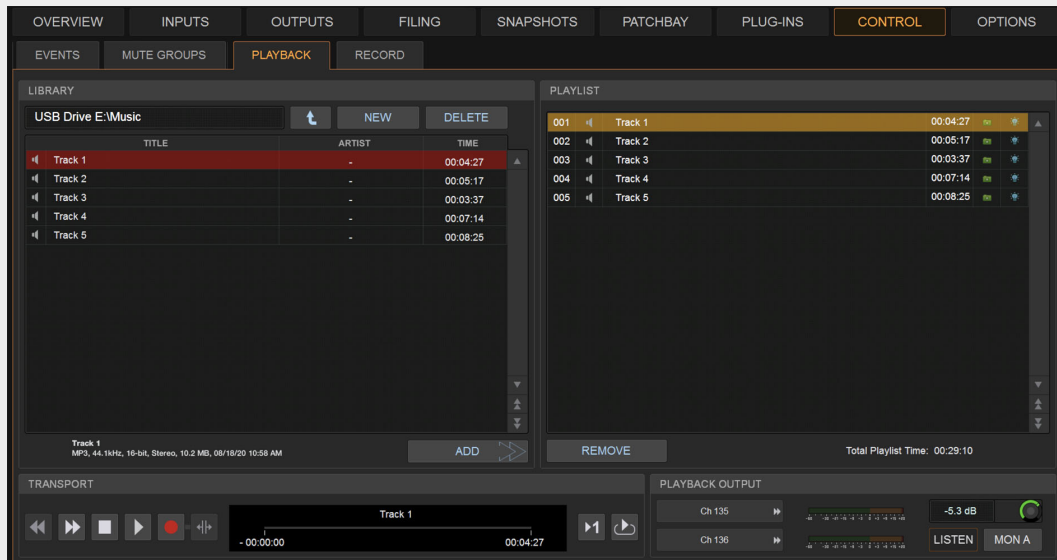
Cumulative channel processing delay can be viewed by touching-and-holding (right-clicking) the Inserts area of the selected channel. The cumulative pre-fader and post-fader delay includes latency reported by all inserted plug-ins, signal routing and the known hardware insert delay, if applicable.

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.



Media Record and Playback

S6L provides 2-track recording and playback to USB. For details, see [2-Track USB Recording and Playback](#).



Control > Playback

Assign and Insert Plug-Ins (“+”)

Beginning in VENUE 7.0, you can initiate rack slot assignment and plug-in insert assignment from the Inputs or Outputs page while in Config mode.

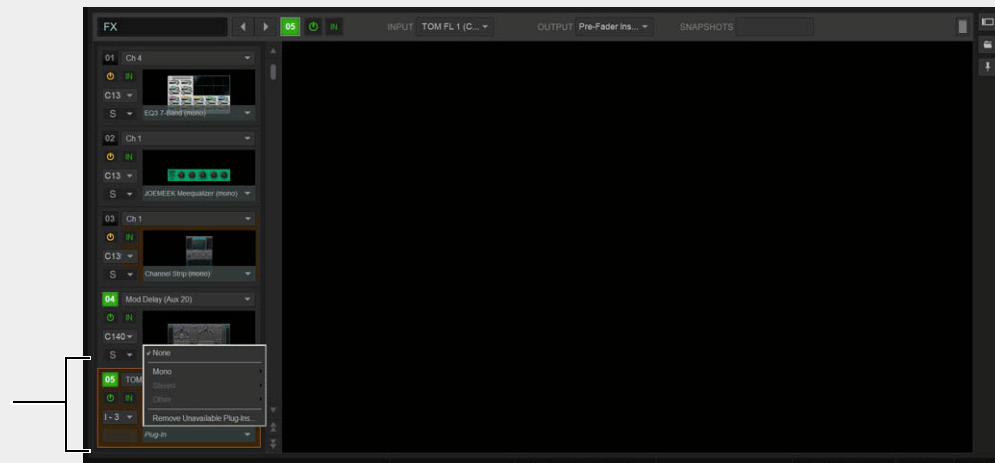
To assign and insert a pre- or post-fader plug-in:

- 1 Put the system into Config mode. In the Inputs and Outputs pages, a plus sign (+) is displayed in each plug-in Inserts slot.



Inserts slot “+”

- 2 Tap + in an Inserts slot. The Plug-Ins tab opens with the next available rack slot targeted, showing its Insert Selector menu.




Rack slot targeted

- 3 Choose an available plug-in from the targeted Plug-In selector sub-menus (or do so for a different rack slot, if desired).

More Inserts per Channel (Post-Fader Inserts)

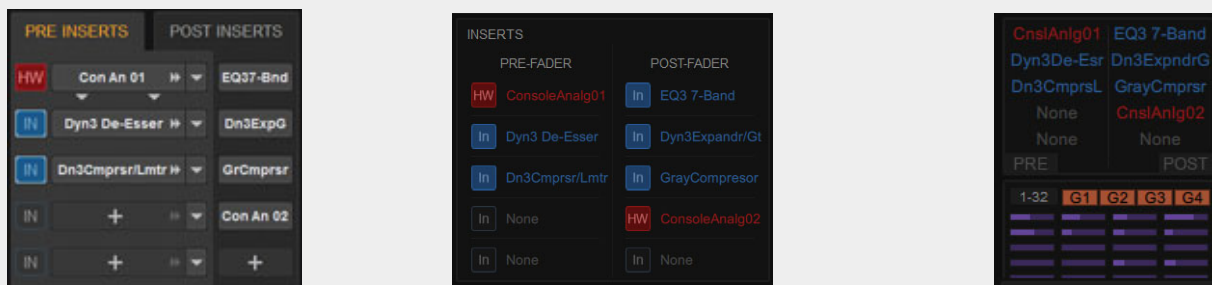
Beginning in VENUE 7.0 the number of available inserts per channel has been doubled with the addition of four *post-fader* Plug-In slots and one *post-fader* Hardware Insert slot.

Post-fader inserts enhance auto-mix workflows, and provide additional flexibility for gain staging and effects processing. Each input or output channel can now have up to eight plug-ins and up to two Hardware Inserts. If your system includes a WSG-HD Waves SoundGrid option, up to 64 Waves plug-ins could be inserted on a single channel (since up to eight Waves SoundGrid Rack plug-ins can be inserted, each hosting up to eight plug-ins).

 *The number of available pre- and post-fader inserts are fixed and cannot be changed.*

VENUE post-fader inserts are displayed in, and can be controlled from, the external screen in the **Inputs** and **Outputs** pages, and from the CKM in Plug-Ins mode. Post-fader inserts can also be selected in the Plug-Ins screen menus, and can be bypassed via Event Actions just like pre-fader inserts.

Pre- and Post-Fader Inserts views are displayed in Channel and Meters views on CTMs and the MTS, and are also supported in Snapshots. Pre- and Post-Fader Hardware Inserts views are available in the Patchbay,



Pre- and Post-fader Inserts tabs in the Inputs page (shown at left), CTM Channel view (center) and CTM Meters view (shown at right)

To access post-fader inserts on the external screen:

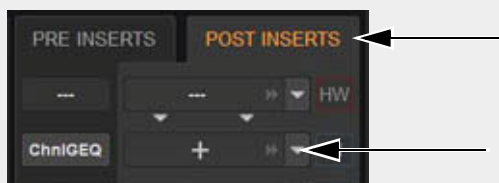
- From the Inputs or Outputs page, tap the sub-tab POST INSERTS.

Inserting Plug-Ins Post-Fader

Post-fader plug-ins are assigned just like pre-fader plug-ins. Before you can insert a pre- or post-fader plug-in on a channel, the plug-in must be assigned to a rack slot.

To insert a pre- or post-fader plug-in that is already assigned to a rack slot:

- 1 Put the system into Config mode.
- 2 From the Inputs or Outputs page, tap the sub-tab for PRE INSERTS or POST INSERTS.



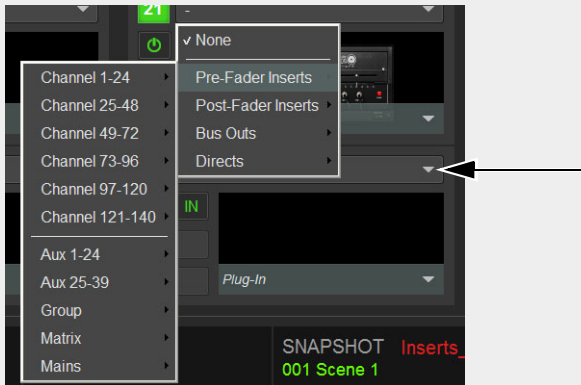
Post-fader Inserts tab in the Inputs page (top) and an Inserts slot selector (below)

- 3 Select an available post-fader Inserts slot selector.
- 4 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.

To insert a pre- or post-fader plug-in on a channel from the Plug-Ins page:

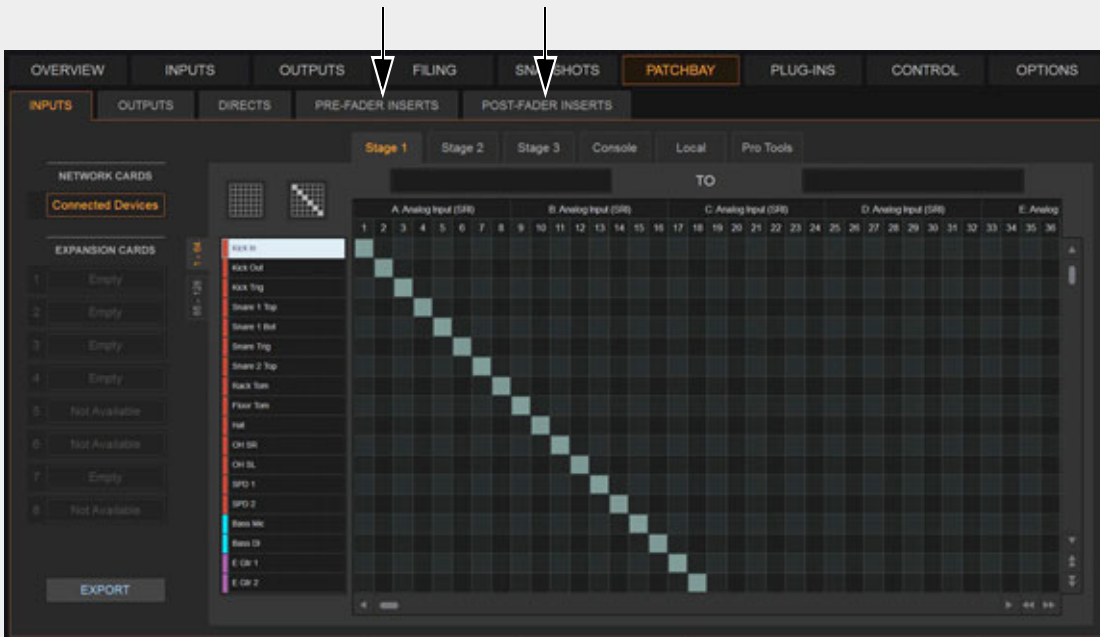
- 1 Make sure the plug-in is already assigned to a rack slot.
- 2 In the rack slot, select the Input selector and choose a channel or bus from the Pre-Fader Inserts or Post-Fader Inserts sub-menus.



Plug-in rack slot Input selector showing Pre-Fader Inserts and Post-Fader Inserts

Post-Fader HW Inserts in the Patchbay

In the Patchbay, separate sub-tabs are now provided for PRE-FADER and POST-FADER hardware insert patching.



Sub-tabs for Pre-Fader Inserts and Post-Fader Inserts

Snapshots and Post-Fader Inserts

Post-fader inserts (plug-ins and hardware inserts) are fully supported in snapshots and in the Recall Safe tab.

Show Files and Post-Fader Inserts

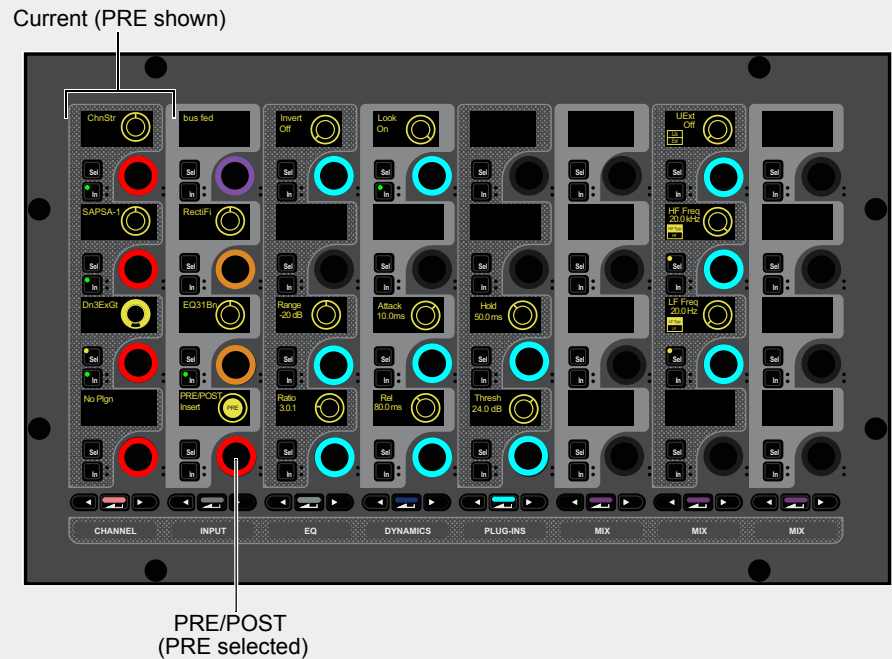
When Show files containing post-fader plug-ins are loaded on a system running an earlier version of VENUE software, post-fader plug-ins are left in the rack with saved settings but not routed.

When Show files containing a post-fader hardware insert are loaded on a system running an earlier version of VENUE software, that hardware insert is ignored.

CKM Plug-Ins Mode with Pre- and Post-Fader Inserts

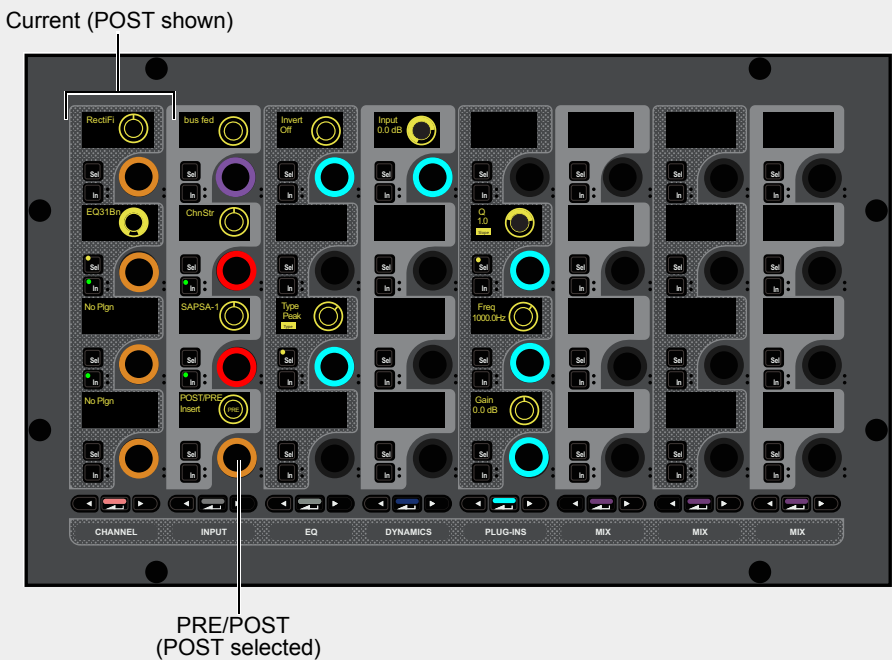
When CKMs are in Channel Control mode and **Plug-Ins** mode is enabled, the PRE/POST Insert encoder (column 2, row 4) toggles encoders in columns 1 and 2 between pre- or post-fader. All four plug-in slots for the currently selected pre- or post-fader insert type are shown in column 1, and plug-in slots 1 and 2 for the other type are shown in column 2.

For example, when PRE is enabled the PRE/POST Insert encoder lights red, pre-fader inserts 1–4 are shown in column 1 (far left), and post-fader inserts 1–2 are shown in column 2 (rows 2 and 3).



CKM showing pre-fader inserts

When PRE is not selected the PRE/POST Inserts encoder lights amber, post-fader inserts 1–4 are shown in column 1 (far left), and pre-fader inserts 1–2 are shown in column 2 (rows 2 and 3).



CKM showing post-fader inserts

Event Triggers and Actions for Post-Fader HW Inserts

In the Triggers menu, separate pre- and post-fader hardware insert In/Out commands are available in the Trigger properties. Add a Trigger for Control (Switch), then edit the properties once created.

Table 1. Event Triggers for Pre- and Post-Fader HW Inserts

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Switch)	Any Strip Any Channel Channel 1-n > Any Aux Aux 1-n > Any Group Group > Any Matrix Matrix > Any Mains Mains > VCA 1-n > (n/a)	Inserts >	Pre-Fader HW Insert In	On/Off	Toggling any pre-fader HW insert In/Out acti- vates the trigger
			Post-Fader HW Insert In		Toggling any post-fader HW insert In/Out activates the trigger

In the Actions menu, separate commands to toggle pre- and post-fader hardware insert In/Out commands are available in the Action properties. Add an Action for Set Control (Switch), then edit the properties once created.

Table 2. Event Actions for Pre- and Post-Fader HW Inserts

Menu	Property 1	Property 2	Property 3	State/Behavior	Description
Set Control (Switch) >	Triggered Strip Channel 1-n > Aux 1-n > Group 1-n > Matrix > Mains > VCA 1-n > (n/a)	Inserts >	Pre-Fader HW Insert In	<ul style="list-style-type: none"> On/Off/Toggle Latch / While Active Wait 	Toggles any pre-fader HW insert In/Out
			Post-Fader HW Insert In		Toggles any post-fader HW insert In/Out

400 Plug-In Slots on All Systems

Beginning in VENUE 7.0, 400 plug-in rack slots are provided on all engines and systems. Being able to use up to 400 plug-in slots supports the doubling of available insert slots per channel for post-fader inserts, allows easier integration of immersive plug-ins, and ensures that all plug-ins are accessible when a Show file is transferred to a different system (for example, when a Show file is saved from an E6L-192 and opened on a system with an E6L-144 or E6L-112).



The total number of plug-ins that can be used is determined by the available DSP on the HDX-192 DSP cards in the E6L engine.

Parallel Mix Control on Built-In Channel EQ and Dynamics

You can adjust the effect of built-in channel parametric EQ and Dynamics using their Mix controls for phase-aligned EQ and sample accurate parallel compression, expansion, and gating on every channel. EQ/Dyn Mix settings are stored and recalled in snapshots when EQ/Dyn are scoped, in EQ and Dyn presets, are saved in Show files, and are available in Event Continuous Control Triggers and Actions.

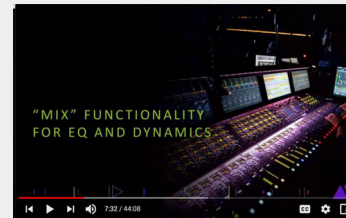
VENUE applies the current EQ Mix value by scaling the EQ band gains. The EQ Mix setting also provides the ability to apply that scaled gain value to the EQ gain (In) to maintain consistent levels. In the EQ graph shown on the external screen, the effect of EQ Mix is indicated by a white line. Dynamics Parallel Mix is applied as a parallel blend.

Examples

EQ Some instruments or performers might require a relatively extreme EQ setting to sit correctly in the mix while the whole band is playing. If that same instrument has a solo passage, however, less EQ might be desired. During the solo section, simply adjust the EQ Mix knob as needed, and/or use snapshots to automate its settings.

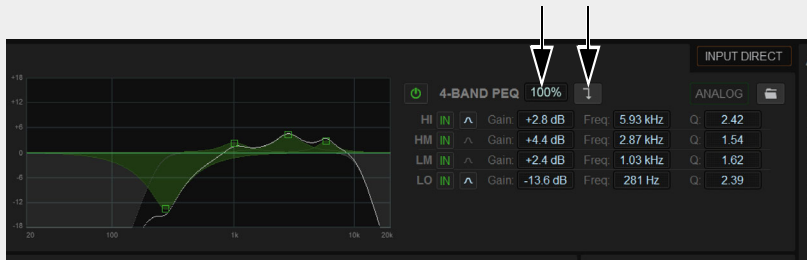
Dynamics When compressing, use the Mix control for sample accurate parallel compression without needing to bus and process on another channel. Similarly, you can achieve parallel gating and expansion for a “sonic enhancer” type of effect on lead vocals, lectern mics, and lavaliers, softening the effect of extreme gating.

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn more about this and other related features from VENUE Product Specialists.



Parallel Mix Control on Built-In EQ

On the external screen, Mix and Apply controls are shown at the top of the EQ section.



EQ Mix percentage, and Apply button

To adjust EQ Mix from the external screen:

- 1 Navigate to the channel you want to adjust.
- 2 In the EQ section, adjust the Mix control or double-click and type in a value.

To apply the Mix gain to the EQ gain:

- 1 Make sure the Mix value is anything other than 100 percent.
- 2 Tap the Apply icon.

The scaled gain is immediately applied to the EQ.

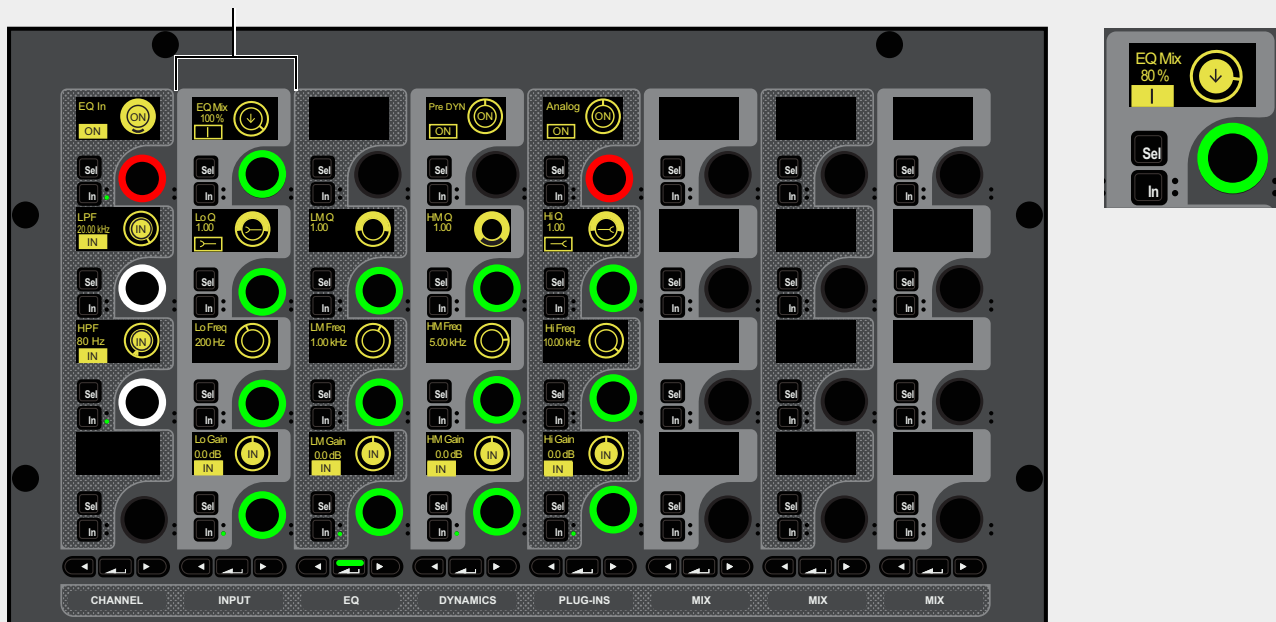
To adjust EQ Mix from the CKM:

- 1 Select the desired channel, then press the **EQ** function switch.
- 2 Rotate the Mix encoder to adjust EQ Mix Percentage.

To apply EQ Mix from the CKM:

- 1 Make sure the Mix value is anything other than 100 percent.
- 2 Press the Mix knob In switch.

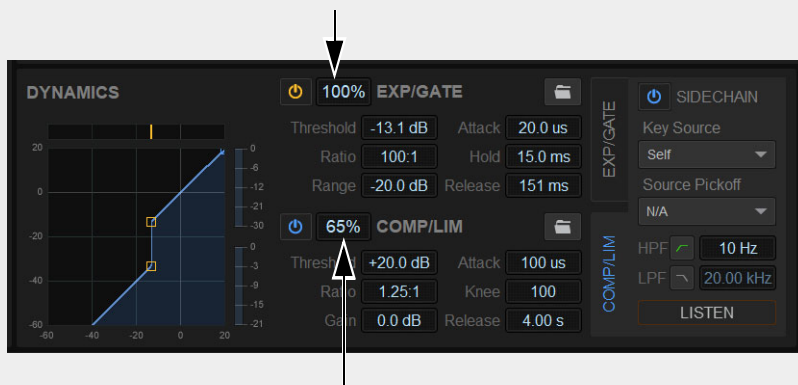
The scaled gain is immediately applied to the EQ.



EQ Mix controls on the CKM (100%, shown at left), and indication when less than 100% and can be Applied (shown at right)

Parallel Mix Control on Channel Dynamics

On the external screen, the Dynamics Mix controls are shown at the top of the Exp/Gate and Compressor sections.



Dynamics Mix percentage

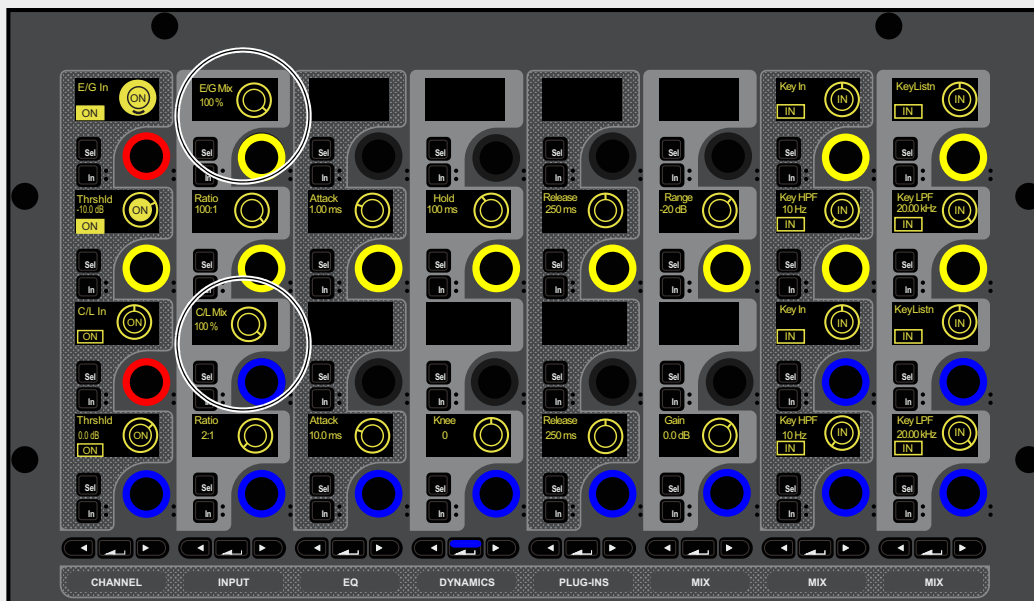
To adjust Dynamics Mix from the external screen:

- 1 Navigate to the channel you want to adjust.
- 2 In the Dynamics section, adjust the Mix control or double-click and type in a value.

To adjust Dyn Mix from the CKM:

- 1 Select the desired channel, then press the **Dyn** function switch.
- 2 Rotate the Mix encoder to adjust Exp/Gate or Comp/Lim Mix.

Exp/Gate Mix control is in row 1, column 2, and Comp/Lim Mix control is in row 3, column 2, as shown in the figure below.



Dynamics Mix controls on the CKM

Event Triggers and Actions for EQ and Dyn Mix

EQ and Dyn Mix are available as Event Triggers and Actions.

In the Triggers menu, the following new commands are available.

Table 3. Event Triggers for EQ and Dyn Mix

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Continuous) >	Any Strip Any Channel Channel 1-n > Any Aux Aux 1-n > Any Group Group > Any Matrix Matrix > Any Mains Mains >	EQ >	EQ Mix	Above Below	0 to 100%
		Dynamics >	Comp/Lim Mix / Exp/Gate Mix		

In the Actions menu, the following new commands are available.

Table 4. Event Actions for EQ and Dyn Mix

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Continuous) >	Triggered Strip Channel 1-n > Aux 1-n > Group 1-n > Matrix > Mains >	EQ >	EQ Mix	<ul style="list-style-type: none"> Absolute or Relative X-Fade (and variable shapes) Wait (0.0 sec. def.) 	
		Dynamics >	Comp/Lim Mix / Exp/Gate Mix		

EQ PRE DYN

You can select the order of built-in EQ/GEQ and Dynamics processing using the EQ PRE DYN button. When enabled (lit green) the built-in EQ processing (including GEQ) is pre-Dynamics. When disabled (unlit), built-in Dynamics is pre-EQ. You can control EQ PRE DYN from the external screen and from the CKM in EQ mode.



Inputs screen showing EQ PRE DYN button enabled/active (shown at left) and on a CKM in EQ mode (shown at right)

The EQ PRE DYN setting is saved to Show files. When loading Show files created on a system running VENUE software 5.0–through–6.3, the setting will be off to maintain processing order. When loading a Show file saved from VENUE 4.6 or earlier, the setting in that Show file will be maintained.

Enabling EQ PRE DYN adds 16 samples of processing latency to the signal.

Event Triggers and Actions for EQ PRE DYN

EQ PRE DYN settings are available as Event Triggers and Actions. In the Triggers menu, the following commands are available.

Table 5. Event Triggers for EQ PRE DYN

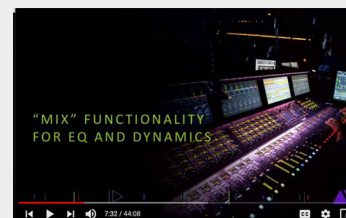
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Switch)	Any Strip Any Channel Channel 1-n > Any Aux Aux 1-n > Any Group Group > Any Matrix Matrix > Any Mains Mains >	EQ Pre Dyn		On/Off	

In the Actions menu, the following commands are available.

Table 6. Event Actions for EQ PRE DYN

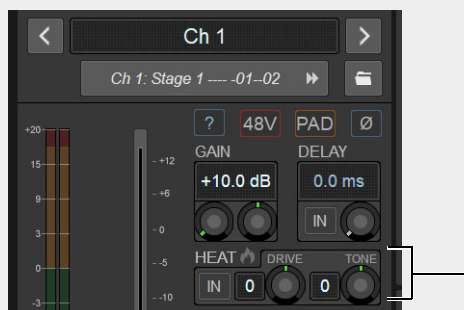
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Switch)	Triggered Strip Channel 1-n > Aux 1-n > Group 1-n > Matrix > Mains > VCA >	EQ Pre Dyn		<ul style="list-style-type: none"> On/Off/Toggle Latch / While Active Wait (0.0 sec. def.) 	

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn more about this and other related features from VENUE Product Specialists.



HEAT on Input Channels

HEAT (Harmonically Enhanced Algorithm Technology) adds “analog color” to VENUE S6L. HEAT can be applied to Input channels (only), emulating magnetic recording tape combined with harmonic coloration commonly experienced with analog mixing consoles. Use HEAT to open up your mixes with warm, analog-modeled saturation, with no added latency.



HEAT controls on the Inputs tab

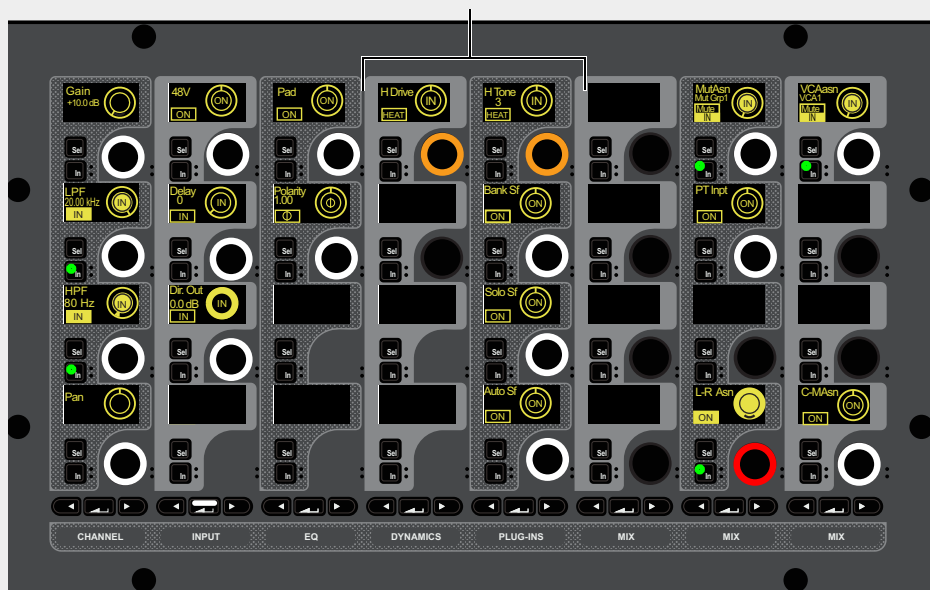
All HEAT settings can be stored and recalled via Snapshots using the PRE scope. HEAT is available on all Input channels, and provides Drive, Tone and In/Out controls that can be adjusted from the external screen or from the control surface.

To adjust HEAT from the external screen:

- 1 Navigate the external screen to an Input channel.
- 2 In the Input section, do the following:
 - Click to toggle HEAT IN (on/lit) or out (off/unlit).
 - Adjust Drive using the encoder or by entering a value (range is -5 to +5).
 - Adjust Tone using the encoder or by entering a value (range is 0 to +6).

To adjust HEAT from a CKM:

- 1 Bank the desired Input channel to a fader strip, then press **Select** to select that Input channel.
- 2 Press the CKM **Input** switch. HEAT Drive and Tone appear in row 1, columns 4 and 5 respectively.
 - To toggle HEAT in/out on that channel, press either the Drive or Tone encoder (or press either encoder's **In** switch).
 - To adjust a control, rotate its encoder.



HEAT controls on a CKM

About HEAT Drive and Tone

The following describe what the Drive and Tone controls in HEAT can do.

Drive

The Drive control introduces non-linear processing that emulates magnetic recording tape combined with harmonic information commonly found in analog gear.

Turning the Drive control counter-clockwise emulates tape-based non-linear distortion. As with tape, increasing the Drive control level by turning it counter-clockwise increases harmonic content by adding higher frequency odd harmonics (starting with the 3rd and 5th harmonics). HEAT also emulates the recording and reproduction equalizers of tape decks that further modifies the harmonic content. As a result, when turning the Drive control counter-clockwise, HEAT fattens up the bottom and mid-range of the processed audio and smooths high-frequency transients as you increase the processing.

Turning the Drive control clockwise has a more aggressive effect, adding an even harmonic series (commonly found in triode tube circuits) to the odd harmonic series. This can give the effect of prized tube microphones and other tube based analog gear.

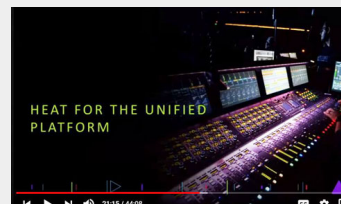
Note that the harmonic structure changes with signal level and the amount of processing being applied, just like it does with vacuum tubes in the analog world.

Tone

As with tape, there can be loss of high frequencies with respect to low frequencies if driven far enough, as the high frequencies start compressing sooner than the low frequencies. HEAT can compensate for these losses, adding more detail and some brightness too, depending on the program material and its level. Moving the Tone control away from its default position accentuates (clockwise) or de-accentuates (counter-clockwise) the amount of detail and brightness.

The effect of the Tone control is different, depending on the Drive control setting. The amount and character of the harmonic content is changed by this control, in a non-linear fashion, unlike what a tone control in an equalizer would do.

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn more about this and other related features from VENUE Product Specialists.



Event Triggers and Actions for HEAT

HEAT settings are available as Event Triggers and Actions.

In the Triggers menu, the following new commands are available for HEAT.

Table 7. Event Triggers for HEAT

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Continuous) >	Triggered Strip Channel 1-n > * HEAT only available on Input Channels	Input >	HEAT Drive	Above	-5 to +5
			HEAT Tone	Below	0 to +6
Control (Switch)			HEAT On	On/Off	

In the Actions menu, the following new commands are available for HEAT.

Table 8. Event Actions for HEAT

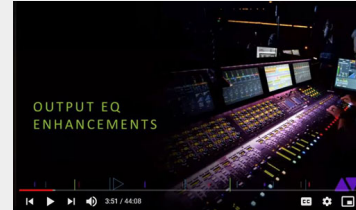
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Continuous) >	Triggered Strip Channel 1-n > * HEAT only available on Input Channels	Input >	HEAT Drive	<ul style="list-style-type: none">Absolute or RelativeX-Fade (and variable shapes)Wait (0.0 sec. def.)	
			HEAT Tone		
Set Control (Switch)			HEAT On	<ul style="list-style-type: none">On/Off/ToggleLatch / While ActiveWait (0.0 sec. def.)	

Unlimited GEQ on Outputs

VENUE software provides GEQs (graphic EQs) on all output busses including Auxes, Groups, Mains, and Matrix outputs. In previous versions of VENUE software there was a maximum of 32 GEQs available.

- When loading a Show file created in VENUE 6.3 or earlier, all previously assigned GEQs load exactly as they were stored, including snapshot and Event associations (if any).
- When loading a Show file created in VENUE 7.0 or later onto a system running VENUE 6.3 or earlier, GEQs will remain assigned when possible. If the number of active GEQs exceeds the number available on the 6.3-or-earlier system, GEQs will be assigned in the following order of priority: Auxes 1–16, Groups 1–8, Mains, Matrixes 1–8.
- When loading a Show file that was originally created in VENUE 6.3 or earlier, loaded on a VENUE 7.0 or later system, then transferred back to a system running VENUE 6.3 or earlier, the original order and assignment of GEQs is restored. Any additional GEQs added while the Show file was on the VENUE 7.0-or-later system are ignored.

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn more about this and other Output EQ features from VENUE Product Specialists.



Event Triggers and Actions for GEQ

GEQ In is available in the Event Triggers and Actions menus. In the Triggers menu, the following commands are available.

Table 9. Event Triggers for GEQ

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Switch)	Any Aux Aux 1-n > Any Group Group > Any Matrix Matrix > Any Mains Mains >	GEQ In		On/Off	

In the Actions menu, the following commands are available.

Table 10. Event Actions for GEQ In

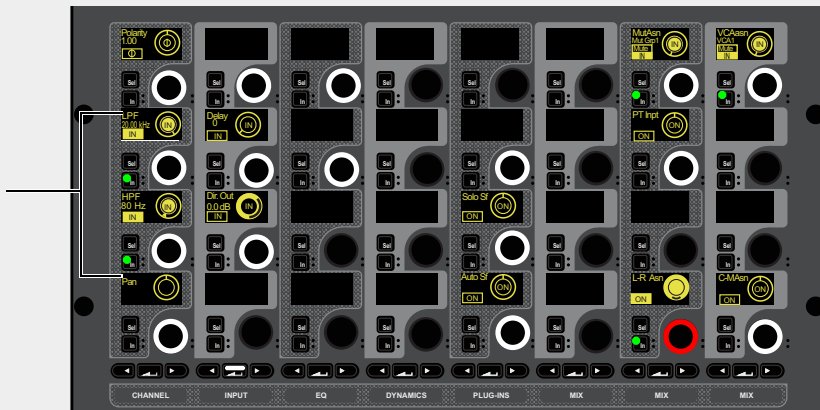
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Switch)	Aux 1-n > Group 1-n > Matrix > Mains > VCA >	GEQ In		<ul style="list-style-type: none">• On/Off/Toggle• Latch / While Active• Wait (0.0 sec. def.)	

HPF and LPF on Output Channels

HPF and LPF are available on Group, Aux, Matrix, and Mains Output channels. These controls are accessed from the same encoders and on-screen locations as on Input channels, are available as Event Triggers and Actions, and can also be Recall Safe'd.

To adjust HPF and LPF in Channel Control mode:

- 1 Bank to and select the desired input channels, then press the **INPUT** or the **EQ** Channel Control Function switch on the associated CKM. Or on the associated CTM (if any), touch the Input or EQ touch zone for the desired channel.
- 2 To engage the filters on the channel, press the encoders under the displays showing HPF (high-pass filter) and LPF (low-pass filter). Each filter's corresponding encoder **In** switch lights to indicate the filter is engaged, and IN lights in the display.
- 3 To adjust the frequency, rotate the HPF encoder to the right to raise the filter's corner frequency from its default of 20 Hz. Rotate the LPF encoder to the left to lower the filter's corner frequency from its default of 20 kHz.



LPF and HPF controls for an Aux output bus on a CKM in Channel Control > Input mode

Event Triggers and Actions for Output HPF and LPF

In the Triggers menu, the following new commands are available for HPF and LPF on Outputs.

Table 11. Event Triggers for HPF/LPF

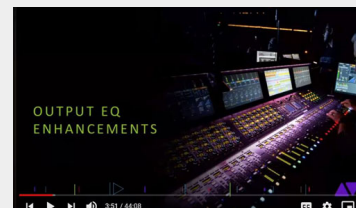
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Continuous) >	Any Aux, Aux 1-n > Any Group, Group > Any Matrix, Matrix > Any Mains, Mains >	Input >	HPF (freq.), LPF (freq.),	Above Below	

In the Actions menu, the following new commands are available for HPF and LPF on Outputs.

Table 12. Event Actions for HPF/LPF

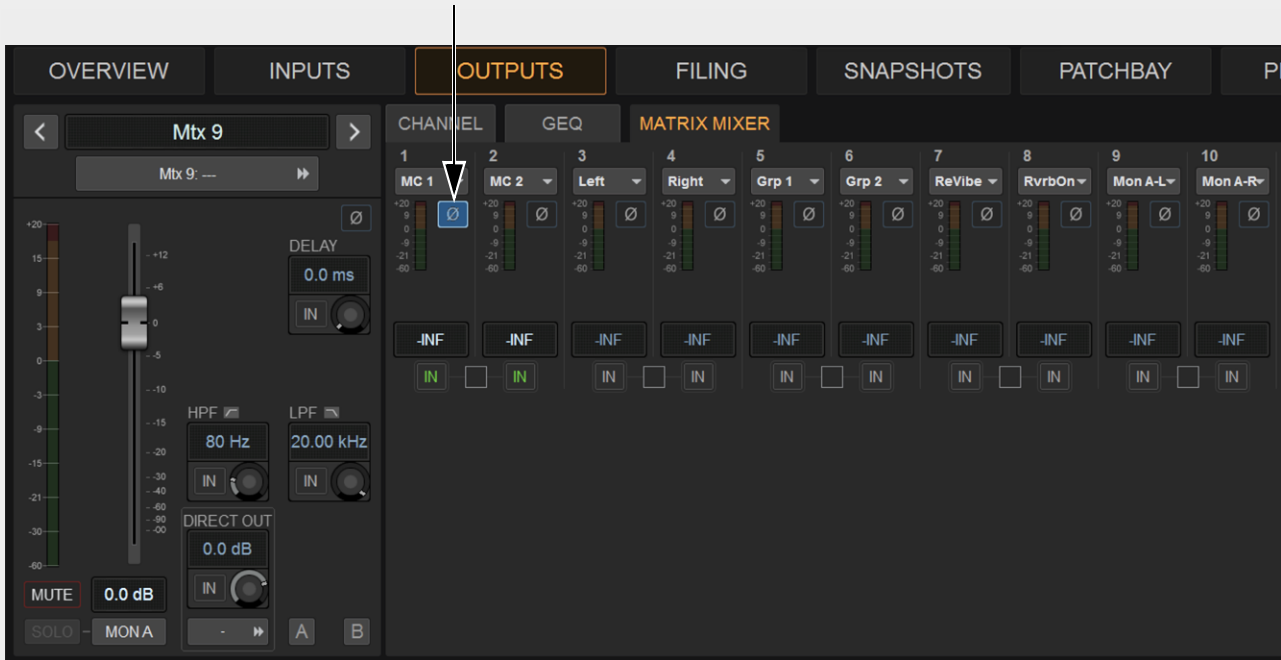
Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Continuous) >	Triggered Strip Aux 1-n > Group 1-n > Matrix > Mains >	Input >	HPF (freq.), LPF (freq.)	<ul style="list-style-type: none">• Absolute or Relative• X-Fade (and variable shapes)• Wait (0.0 sec. def.)	

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn more about this and other Output EQ features from VENUE Product Specialists.



Matrix Mixer Input Polarity Switch

Matrix Mixer inputs provide polarity control. This lets you set up “Mix Minus” by assigning Mains to a Matrix Mixer, and also assigning individual channels or groups to the same Matrix with the polarity inverted to remove that element from the mix.



Matrix Mixer view showing polarity inverted on input 1

Matrix input polarity is saved and loaded with Show files, and available as Event Triggers and Actions.

Event Triggers and Actions for Matrix Sends (Input) Polarity

Matrix Input Polarity settings are available as Event Triggers and Actions. In addition

In the Triggers menu, the following new commands are available for Matrix input polarity.

Table 13. Event Triggers for Matrix input polarity

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Control (Switch)	Matrix > Matrix 1-n	Input >	Polarity	On/Off	

In the Actions menu, the following new commands are available for Matrix input polarity (as well as Matrix Send In/Out and Link). Note that Actions for Matrix inputs parameters are classified as Matrix Send, and listed by number (not name).

Table 14. Event Actions for Matrix input polarity

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Set Control (Switch)	Matrix > Matrix 1-n	Matrix Sends >	Mtx Input 1-16 In	<ul style="list-style-type: none">On/Off/ToggleLatch / While ActiveWait (0.0 sec. def.)	
		Matrix Send Polarities >	Matrix Input 1-16 Polarity		
		Matrix Send Links >	Matrix Send 1-8 Link		

Bus-to-Bus Routing

Beginning in VENUE 7.0 any Aux or Group can be routed to any other Aux or Group. When routing Auxes to another Aux or to a Group, Aux send level control is provided (Groups do not have level control). The pickoff point for all bus-to-bus assignments is Bottom of Channel. VENUE software also includes automatic detection and prevention of any bus-to-bus routing assignments that would otherwise create a feedback loop.

Bus assignments can be made from the external screen (just like assigning Input Channels to busses), and from the control surface. Bus-to-bus assignment can also be included in Event Triggers and Actions.

Assigning a Bus to a Bus Using the External Screen

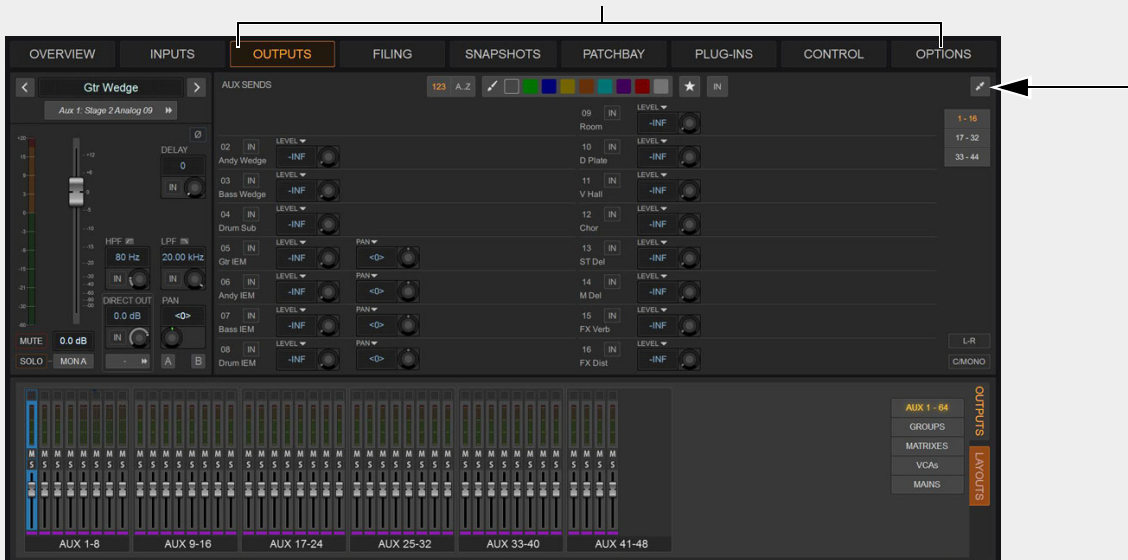
To assign a bus to a bus using the external screen:

- 1 Navigate the external screen to the Outputs page and select an Aux or Group. If necessary, select the BUSSES sub-tab located in the upper-right corner of the screen to display available busses.
- 2 To assign an Aux or Group to a Group, select the desired Group in the BUS ASSIGN area so they are lit.



Busses sub-tab showing an assignment to a Group

- 3 To assign an Aux or Group to an Aux, click the Expand icon. The expanded view is shown, and the Expand icon becomes a Collapse icon. To make an assignment, select the desired Aux IN switch to it lights.



Expand icon and Bus assignment (expanded) view for an Aux bus

Assigning a Bus to a Bus Using the Control Surface

Aux and Group channels can be assigned from CKMs using Channel Control.

To assign a bus to a bus from the control surface:

- 1 Bank the desired channels, then press **Select** to select one or more Auxes, or Groups.
- 2 Press a **MIX** switch to spill the following Aux Sends to the encoders on the associated CKM, as available:
 - The left **MIX** switch spills Auxes 1–32.
 - The center **MIX** switch spills Auxes 33–64.
 - The right **MIX** switch spills Auxes 65–96.
- 3 Press the **>** key below the enabled **MIX** switch until the encoders display the desired Aux buses.

To toggle a bus-to-bus assignment on/off:

- Press the encoder for the desired Send to enable it.
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 bus Send lights when that Send is on, and is dimmed when off.

To adjust Aux Send (only) level:

- Rotate the encoder under the display showing the desired 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:

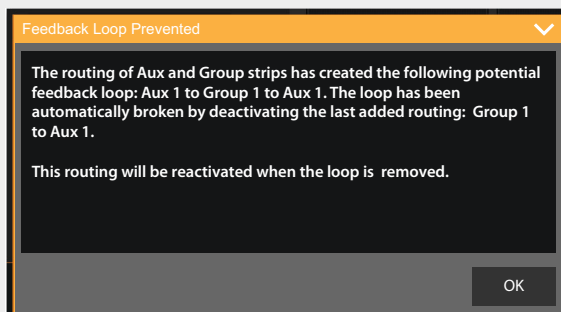
- Press the encoder **In** switch under the display showing the desired Aux Send. The following elements indicate that an Aux Send is pre-fader:
 - The corresponding encoder **In** switch lights.
 - **Pre** or **Post** is shown in the corresponding encoder display.
 - On-screen, a border appears around the channel numbers.

Auto-Mute Feedback Loops

VENUE automatically mutes busses when any bus assignment would create a feedback loop. For example, if Group 1 is routed to Group 2, and then Group 2 is routed back to Group 1 (explicitly or via a snapshot), the send bus routed back to Group 1 will be automatically muted and a dialog appears notifying you that a specific routing assignment has caused auto-mute to be engaged.

- When two or more assignments create potential feedback loops they will each be auto-muted.
- If more than 16 feedback loops are detected, *ALL* Aux and Groups routing to Auxes and Groups are auto-muted.

Changing routing to remove the feedback loop condition automatically reactivates that send bus.



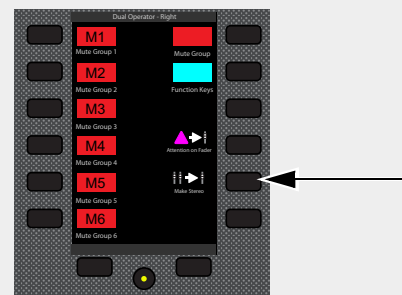
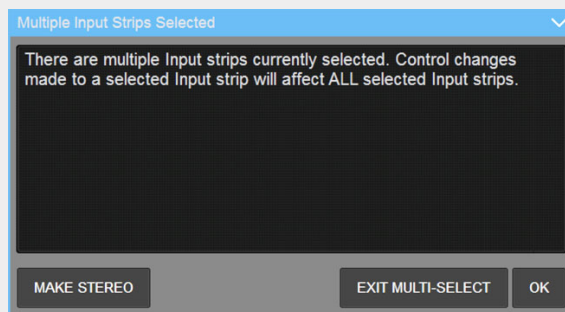
Feedback Loop Prevented message

Make Stereo and Make Mono from the Control Surface

You can make two mono channels into a stereo channel, and break a stereo channel out into two mono channels from the control surface. In previous versions of VENUE software, these operations could only be achieved from the external screen.

To make or break stereo from the control surface:

- 1 Enable Config mode.
- 2 Attention one or more channels by doing either of the following:
 - To multi-select channels using Attention switches, press and hold the **Attention** switch on the first channel you want to attention, then press **Attention** on each channel you want to include.
 - To multi-select channels using Multi-Select, press and hold the **Multi-Select** switch at the top-left of the MLM, then press the **Attention** switches for any channels you want to include in the selection.If necessary, bank to other channels as desired, and press their **Attention** switches to add to the multi-selection.
 - When finished multi-selecting channels, release the Multi-Select switch. The **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.
- 3 In the Multi-Select banner message, press **Make (or Break) Stereo**. Or, in the right bank of Soft Keys on the MLM, press the **Make/Break Stereo** key. (If the choice to Make (or Break) Stereo are not displayed, make sure you have enabled Config mode.)

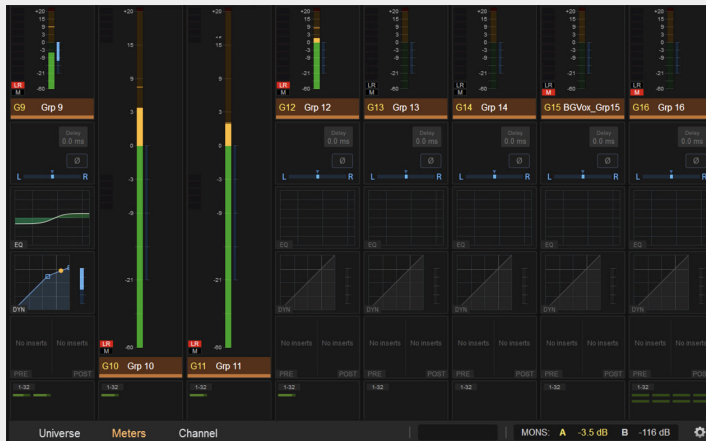


Make Stereo command in the Multi-Select banner (shown at left) and in the right bank of MLM Soft Keys (shown at right)

If all selected channels were stereo they are made mono, and if all channels were mono they are converted to stereo. If both mono and stereo channels were selected they are all made stereo.

Big Meters View

Meters on CTMs and the MTS can be displayed in Big Meters view. A simple swipe down on any meter in meters view gives you a large meter, perfect for output monitoring in broadcast applications.

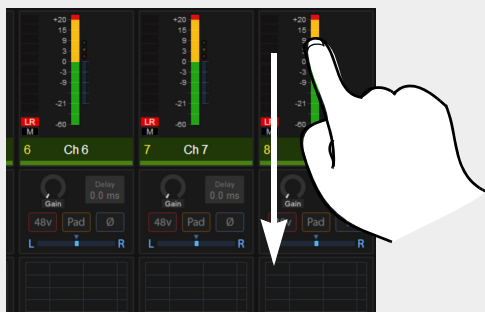


Big Meters view (channels 2 and 3)

Big Meters view provides essential channel information including number, name, color, and Groups and Mains assignment. Big Meters view persists when navigating away from and back to channels, and is also stored in Show files.

To put a channel into Big Meters view:

- 1 Bank the desired channel(s) to the surface, and make sure the channel is displayed in Meters view.
- 2 On the CTM or MTS, swipe down from the top of the desired meter strip.



Swiping down to display Big Meters view

- 3 To return the strip to normal Meters view, swipe up on its Large Meter.
- 4 While in Big Meters view, touching the meter enters Channel view (just like standard Meters view).

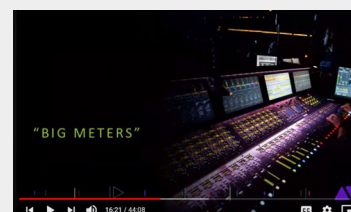
To change all meters:

- Hold **Default** and swipe a meter down (for Big Meters), or up (for standard Meters view).

To change meters on all channels of the same type (such as all Input or all Aux channels):

- Hold **Default** + **Fine** and swipe.

You can also watch the [VENUE 7.0 Processing Enhancements](#) webinar to learn how you can use this and other features from VENUE Product Specialists.



Event Actions for Big Meters

Big Meters are available as Event Actions. In the Actions menu, the following new commands are available.

Table 15. Event Actions for Big Meters

Menu	Property 1	Property 2	Property 3	State/Behavior	Description/Other
Big Meters >	All Strips Triggered Strip All Channel Strips Channel 1-n > All Aux Strips, Aux 1-n > All Group Strips, Group 1-n > All Matrix Strips, Matrix > All Mains Strips, Mains > All VCA Strips, VCA > 1-48	Show Big Meters for >		<ul style="list-style-type: none">On/Off/ToggleLatch / While ActiveWait (0.0 sec. def.)	

Channel Name Shown in Strips on External Screen

Abbreviated channel name are displayed on the color section of each strip on the external screen. This is especially helpful when dragging strips to change the channel order or Layouts.



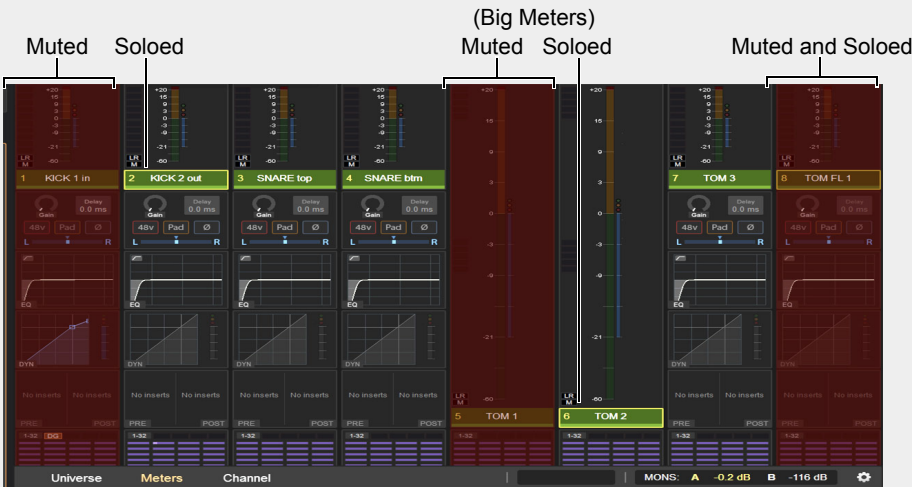
Channel names on strips

New Groups Indication

Custom names given to Groups are now indicated on-screen to make it easier to identify each Group. Whenever a Group has been given a custom name, its abbreviated name is shown and its Group Number is not shown. If the Group Name has not been customized, Group Number is shown.

Mute and Solo Indication in Meters View

The MTS and CTM Meters views indicate muted channels with a red overlay, and soloed channels with a yellow outline around channel name.



Indication of Mute and Solo in MTS and CTM Meters view

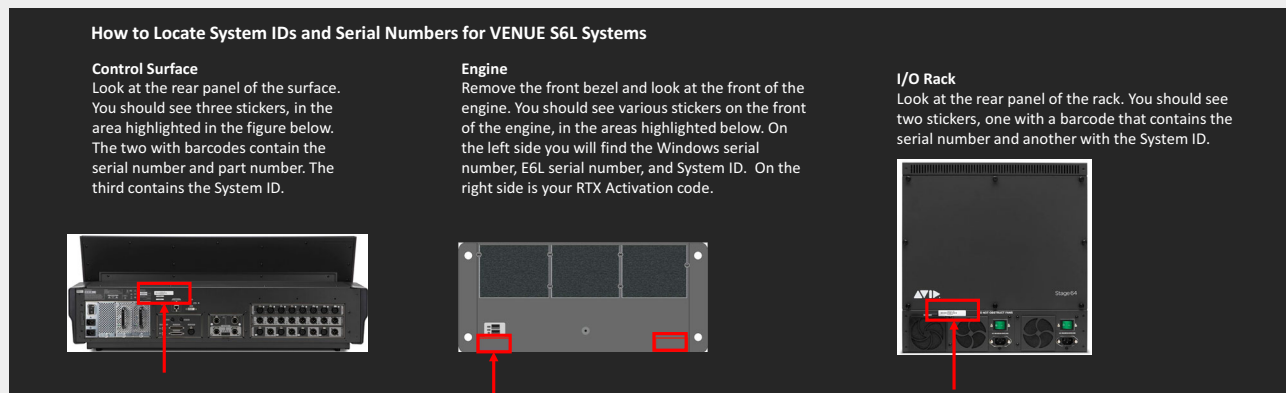
System ID and Serial Number in VENUE Software

Use the System ID and Serial Number fields in Options > Devices to enter and store the System ID and Serial Number for each S6L system component (control surface, engine, and I/O units). This can simplify the process of contacting Avid Customer Support should you ever need to do so.

Once entered and stored, the System ID and Serial Number are embedded with the individual unit and will be included in any Export System Info, and in VENUE log files.

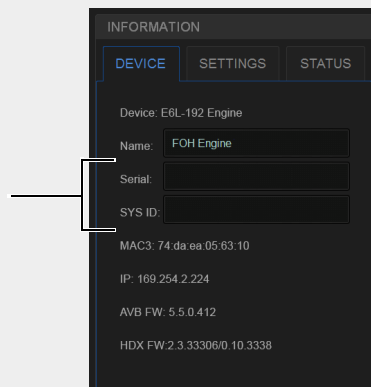
To enter System ID and Serial Numbers:

- 1 Locate and write down the System ID and Serial Number for each S6L system component (see the figure, below).



Location of System ID, Serial Numbers, and RTX Activation code.

- 2 Go to Options > Devices, and select a component (such as your E6L engine).
- 3 Enable Config mode by pressing the **Config** switch along the top of the MLM (or double-click the Mode indicator on the external screen so it says Config instead of Show).
- 4 In the Device Info section, enter the System ID and Serial Number into their fields.

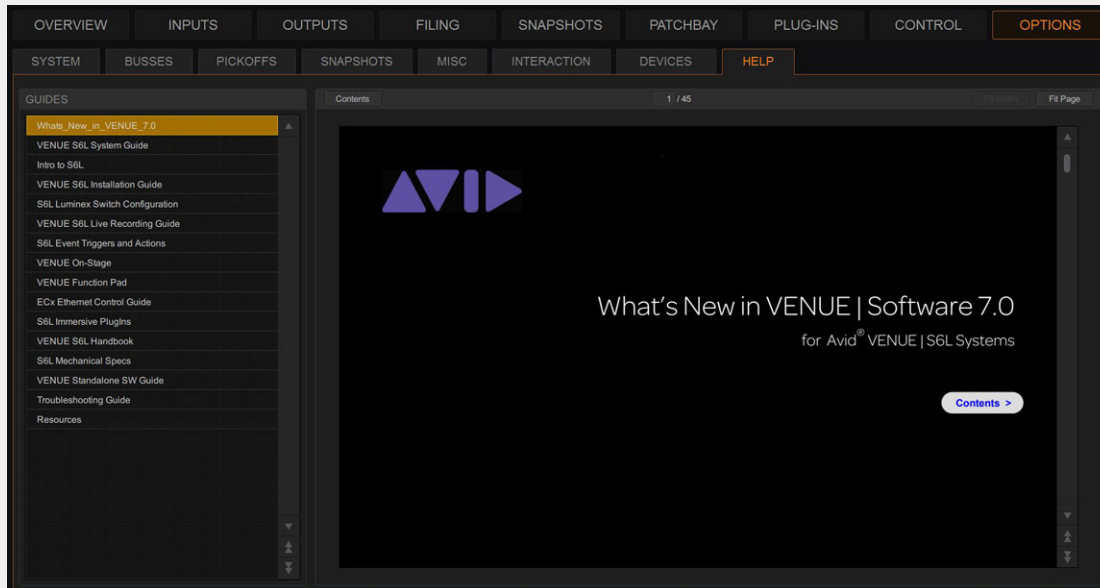


Serial number ("Serial") and System ID ("SYS ID") fields in Device Information

- 5 Repeat for other S6L system components.

Help Page with Guides, Troubleshooting, and Other Resources

The Help page on the external screen provides official S6L product documentation, Troubleshooting info, and other resources directly on the control surface. This makes it easier to find answers to questions about the setup and operation of your system. The Help page opens automatically the first time the system is started up after performing a System Restore or Software Update.



Options > Help

Here are some of the resources available:

What's New in VENUE New and improved features and fixes in the latest release of VENUE software for S6L systems.

Intro to S6L Introduction to S6L systems and VENUE software, with examples and links to tutorial videos.

VENUE S6L System Guide Comprehensive reference guide for all S6L systems.

VENUE S6L Handbook S6L systems, components, options, specifications, requirements, and resources.

Troubleshooting Information for troubleshooting and problem solving.

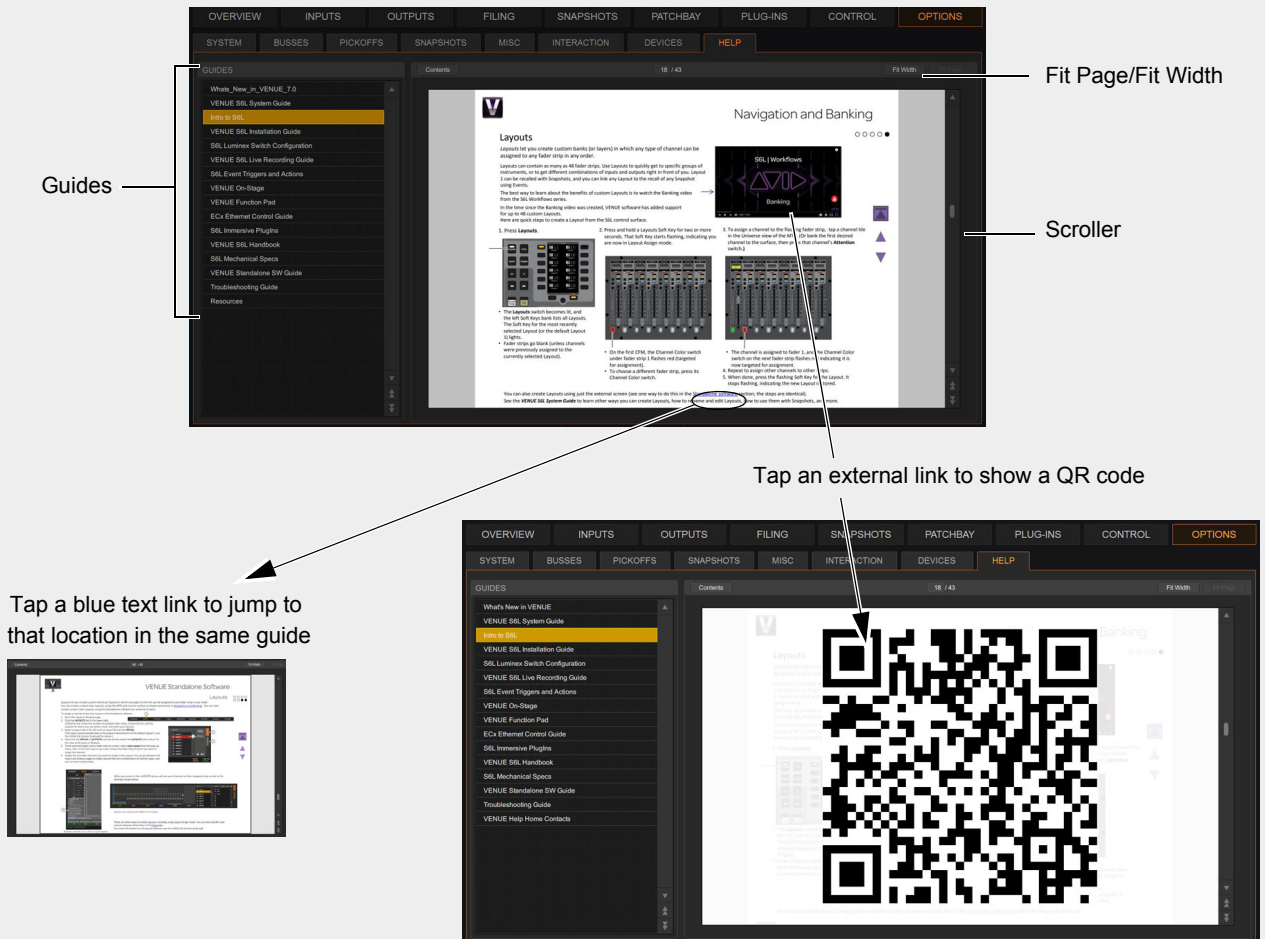
Resources Contact information for Avid support, and links to additional resources including video tutorials and documentation.

Using the Help Resources

Select a guide from the list at the left of the screen. To navigate within the currently shown guide, swipe the page or use the scroll bar along the right edge of the screen. Enable Fit Page or Fit Width to adjust the size of the displayed guide.

Within all guides, text links appear in **blue** text. In some guides (such as the *Intro to S6L* guide), images for videos are also links. Tap or click a link to follow it:

- Text links to other locations within the same guide take you to that location.
- Links to video or other resources on the internet display a QR code. Tap or click the link to display the code, then point your camera or tablet phone at the code and follow the displayed link to go to that resource. Tap anywhere outside the QR code to hide it.



Improved Engine Restore Procedure

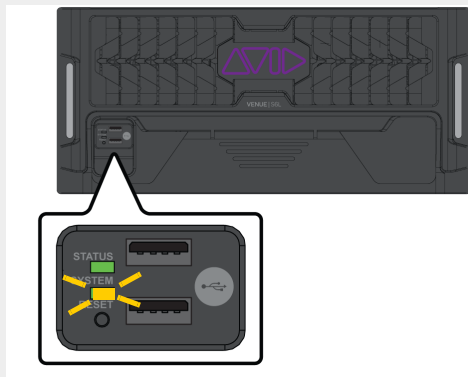
Performing a System Restore has been further simplified. For complete hardware and software installation instructions, see the *VENUE S6L Installation Guide.pdf*.



In previous versions of VENUE software, performing a manual System Restore on the E6L engine required disconnecting it from all other components, connecting a VGA monitor, USB keyboard and USB mouse, then booting it into “VGA” mode. While this method of manually performing a System Restore on the E6L engine is still supported, it is no longer required.

To perform a System Restore for VENUE 7.0 and later:

- 1 Connect a USB keyboard to a USB port on the E6L engine.
- 2 Insert the S6L Engine Restore USB drive into an available USB port on the E6L engine.
- 3 Power on the E6L engine and then repeatedly press F10 on your USB keyboard for approximately 30 seconds.
The E6L engine automatically begins the System Restore procedure. After the procedure is complete, the engine automatically restarts.
- 4 Wait until the LEDs on the front panel of the E6L engine light as follows before proceeding:
 - Status LED lights green.
 - The System LED begins to flash amber while the E6L is waiting to connect to the S6L control surface.

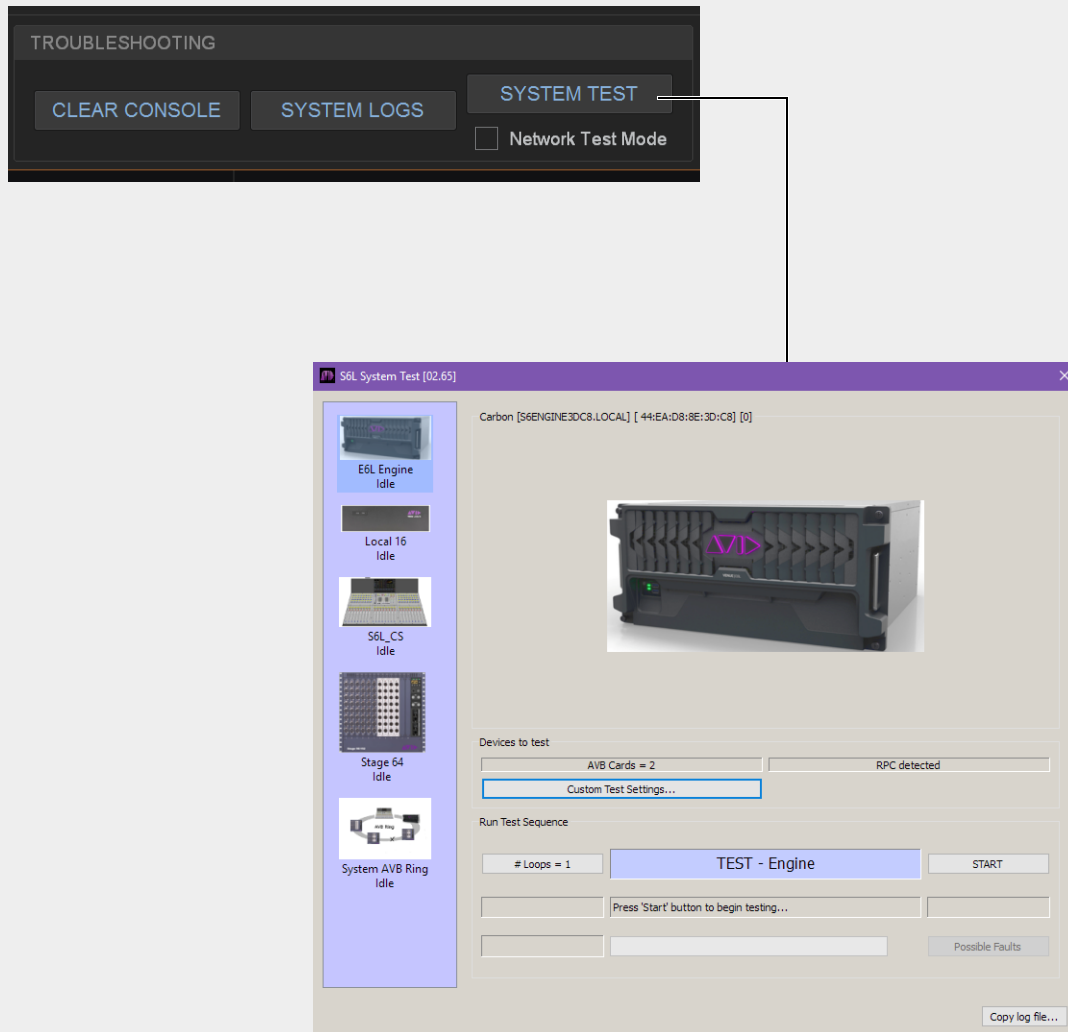


- 1 Connect a USB keyboard and mouse to USB ports on the S6L control surface.
- 2 Make sure the S6L control surface is connected to the Internet (connect an Ethernet cable from the ECx port on the back of the S6L control surface to a router or modem that is connected to the Internet; wireless connection is not supported).
- 3 Insert the S6L Console Restore USB drive into an available USB port on the S6L control surface.
- 4 Power on the S6L control surface and press F10 repeatedly until the next screen appears.
- 5 Follow the instructions on-screen to perform the System Restore on the control surface, and to do any of the following if prompted:
 - Connect to the Internet (if not already connected)
 - Activate Windows on the E6L engine
 - Activate RTX on the E6L engine (should only be required after a first-time installation)
 - Activate Windows on the S6L control surface
 - Synchronize the date and time on both the E6L engine and S6L control surface

System Test

Avid provides tools to diagnose the health of each hardware unit in your S6L system as well as any expansion cards.

- System Test can be initiated from the **Options > System** page and performed entirely from the S6L control surface.
- The *System Test* let you select S6L units and expansion cards to test, and you can loop the test several times.
- The AVB Ring test can simulate network traffic to test the performance of all network cards and cables.
- Test results can be saved to a text file for analysis by Avid Customer Support if necessary.



For complete instructions, see the *VENUE S6L System Guide.pdf*.

2-Track USB Recording and Playback

The S6L system provides built-in USB 2-track recording and playback, letting you record live performances to, and play back pre-recorded tracks from USB flash drives connected to the S6L control surface. Use these features to create basic stereo live recordings, and to play back stereo music tracks and/or sound effects during a production or performance.

The CONTROL page provides two tabs (PLAYBACK, and RECORD) with on-screen controls for USB 2-track recording and playback. Additionally, snapshots, events, Function switches, and a footswitch can be programmed to control recording and playback functions.



USB 2-track recording and playback is distinct from the S6L system's integrated multi-track Pro Tools recording and playback capabilities.

USB Flash Drive Requirements

USB 2.0 and higher flash drives are required for USB 2-track recording and playback, and must always be connected to the S6L control surface. Drives must be formatted to FAT or NTFS file systems.



The built-in USB record and playback engine does not support USB hard disk drives.

Multiple flash drives can be connected, up to the maximum number of available USB ports on the S6L control surface.

- Tracks from multiple connected USB drives can be added to a Playlist for playback.
- S6L system audio can only be recorded to one drive at a time.
- It is not possible to simultaneously record and playback 2-track audio to/from USB.

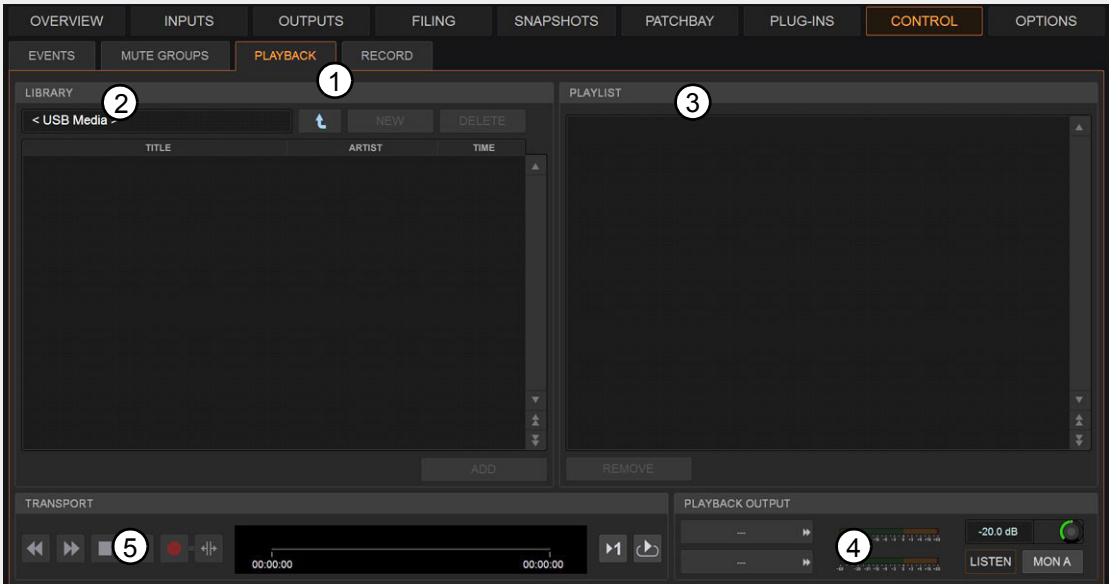


Remember that there is a secure USB port inside the S6L control surface. This port can be ideal for safely connecting a USB flash drive for 2-track recording or playback in theaters, worship environments, or whenever it is desired to make sure a USB flash drive cannot be damaged or removed. To access this port, remove the back cover from the S6L control surface (see the VENUE S6L System Guide.pdf for instructions).

CONTROL Page > Playback and Record Tabs

In addition to the Mute Groups and Events tabs, the CONTROL page also provides the PLAYBACK and RECORD tabs. 2-Track USB playback parameters are controlled on the PLAYBACK tab, and 2-track USB record parameters are controlled on the RE-
CORD tab. The 2-track USB Transport is shared between the two tabs.

PLAYBACK



Control > Playback tab

1 – Record and Playback Tabs


These tabs let you select the Record and Playback windows.

2 – Library

The Library lets you add tracks to the Playlist for playback. The Library list lets you navigate through connected USB drives, create and name folders on USB drives, and delete and rename files and folders. Icons next to each item in the list identify their media type (such as a USB drive, audio file, or folder). Other data for files such as the track length and file format are also provided.

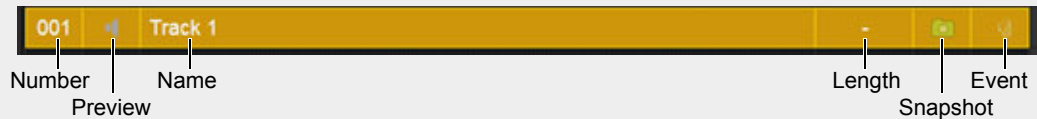
3 – Playlist

A Playlist is provided to manage USB 2-track playback. You can play back individual tracks in the Playlist, or play back the entire Playlist (in either Play Once or Repeat Playback mode). You can reorder, remove, and preview tracks in the Playlist, as well as add tracks to snapshots and events. Total Playlist time is also provided.

 The contents of the Playlist is stored as part of a Show file. If the USB device containing the audio source files for tracks in the Playlist is not connected, those tracks appear in italics and are unavailable for playback until the USB drive is reconnected.

Track Playlist Entries Each track in the Playlist has a number (001–999) and name. When Play All Tracks mode is enabled, tracks play in the order they appear in the Playlist. A total of 999 tracks can be added to the Playlist.

Playlist Track Snapshot and Event Icons Icons are provided for each track in the Playlist which let you add track playback commands to an existing or new snapshot or event. The icons are lit when the track is included in a snapshot or event.



A Track in the Playlist

4 – Playback Output Section

The Playback Output section provides Playback Output selectors (playback output signal routing control and indicators), stereo playback output level meters, a single stereo-linked output Level control, a Listen button (for monitoring the playback track), and a Monitor bus selector.

5 – Transport

See [Transport](#).

Selecting Tracks

Items in the Playlist, Library, and Target Record Folder list are selected on-screen. Selected items are color-coded to indicate their status. Keyboard shortcuts for selecting items are also provided.

To select a single track, file, or folder:

- Click the item.

To target multiple consecutive tracks, folders, or files:

- Shift-click the items.

To clear a selection of multiple consecutive tracks, folders, or files:

- Click any item in the Playlist, Library, or Target Record Folder list.

To select or de-select non-consecutive tracks:

- Ctrl-click the tracks in the Playlist.

Color-Coding in the Playlist, Library, and Target Record Folder List

Selected items in the Playlist, Library, and Target Record Folder list are color-coded to indicate their status as follows:

Yellow Yellow appears only in the Playlist, and indicates that the track is both currently cued for playback (or is currently playing back) and currently selected. Engaging Play in the Transport initiates playback of the track, and clicking Remove removes the track from the Playlist.

Red Red indicates the currently target track.

Green Green appears only in the Playlist, and indicates that the track is currently cued for playback (or is currently playing back). Engaging Play in the Transport initiates playback of the track.

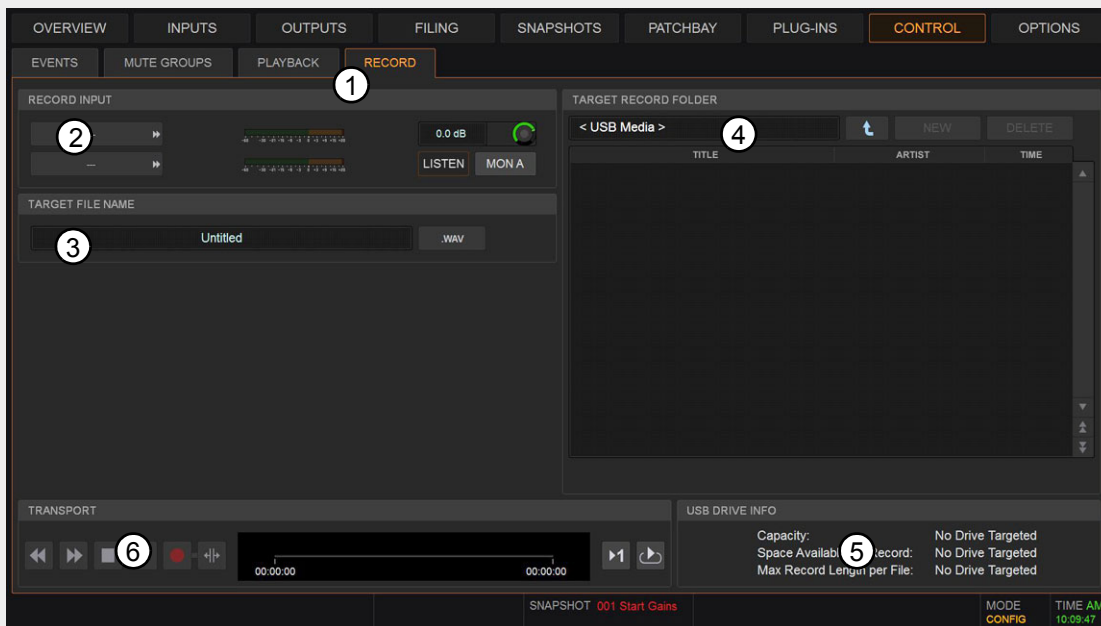
Blue Blue appears in all three lists, and indicates that the item is part of a multiple-item selection. Clicking Delete or Remove deletes or removes all selected items.

Keyboard Shortcuts in the Playlist, Library, and Target Record Folder List

When you click in the Playlist, Library, and Target Record Folder list, you can select items using the following keyboard shortcuts:

Function	Keyboard Shortcut
Select previous/next item	Up/Down Arrow keys
Select first item in list	Home key
Select last item in list	End key
Select item at top of list	Page Up
Select item at bottom of list	Page Down
Select multiple consecutive items	Shift-click tracks
Select multiple non-consecutive items/Deselect any	Ctrl-click tracks

RECORD



Control > Record tab

1 – Record and Playback Tabs

These tabs let you select the Record and Playback screens.

2 – Record Input Section

The Record Input section provides Record Input selectors (record input signal routing controls and indicators), stereo Record Input Level meters, a stereo-linked recording input Level encoder, a Listen button (for monitoring the recording), and a Monitor bus selector.

3 – Target File Name

The Target File Name section shows the name of the targeted recording, and lets you name the recording. Resulting audio files are 96 kHz 24-bit WAV files. File names are automatically appended with “.wav,” and can be edited before and during recording.

4 – Target Record Folder Section

The Target Record Folder section lets you choose the destination drive and/or folder for recordings. The Target Record Folder list lets you navigate through connected USB drives, create and name folders on USB drives, and delete and rename existing files and folders. Icons next to each item help identify the media type of that item (such as a USB drive, an audio file, or a folder).

5 – USB Drive Info

This section shows the capacity of and the space available for recording on the targeted drive, as well as the maximum possible record length for an individual file. Values are shown in hour:minutes:seconds and in bytes.

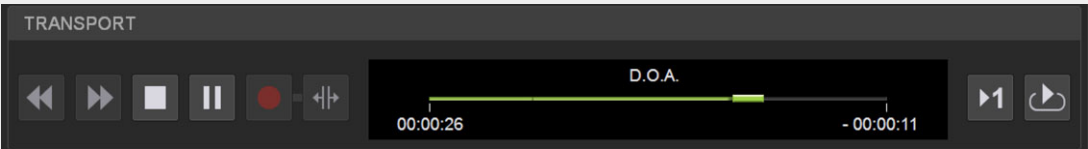
6 – Transport

See [Transport](#).

Transport

The Record and Playback tabs share the same Transport section, with Transport controls, display, and Playback Mode buttons.

Transport Controls



USB 2-Track Transport controls

The following transport controls are provided:

2-Track USB Transport buttons

	Previous Track When Play is not engaged, this button selects the previous track in the Playlist. When Play is engaged, this button immediately skips to and plays the previous track in the Playlist.
	Next Track When Play is not engaged, this button selects the next track in the Playlist. When Play is engaged, this button immediately skips to and plays the next track in the Playlist.
	Stop This button stops playback or recording.
	Play/Pause This button initiates playback of the cued track in the Playlist. When a track is playing back, pressing the button pauses playback or recording. This button also initiates recording when Record Arm is enabled.
	Record Arm This button toggles Record Arm on/off. The button flashes red when the transport is record-armed, and is lit solid when recording is in progress.
	Record Divide When a recording is in progress, pressing the Record Divide button ends the current recording, writes the audio file to disk, and begins the recording of a new audio file.

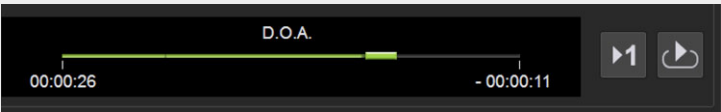
Transport controls are only available when media for that particular function is available.

Transport Display

The Transport display shows the following data for the currently playing track or in-progress recording:

- Name of the track or recording
- Time elapsed for the current track or recording
- Time remaining for a playback track; or for a recording the time remaining on the target drive

The Transport display also provides forward or backward shuttle by dragging the Playhead or clicking in the Timeline.



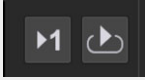
Playback page Transport display

Playback Mode Buttons

The Playback Mode buttons provide control over how the selected track or Playlist is played back. Options include the following:

Play One Track This button toggles between Play All Tracks and Play One Track modes. When unlit, all tracks in the Playlist play back in sequential order. Playback stops when the last track in the Playlist has completed. When lit (engaged), only the cued track in the Playlist plays back.

Repeat Playback This button toggles between Repeat Playback mode and Play Once mode. When unlit, the cued track (or the entire Playlist depending on the status of the Play One Track button) plays back once and stops. When lit (engaged), the cued track or the entire Playlist repeats playback.



Play Selected Track button (left) and Repeat Playback button (right)

Playing Back Audio from USB

The S6L system plays back WAV and MP3 files directly from connected USB flash drives. To play back tracks, you must first add tracks to the Playlist. You can then choose the play mode for tracks (to play all, play only one, or repeat) and set the playback level.

Playback Examples and Tips

- USB playback is a convenient way to have music playing before, during, and after an event. Copy all the desired audio files to a USB flash drive, add them to the VENUE USB Playlist, then set the Play Mode as desired. You can even integrate Public Service Announcements and similar (such as “Please Turn Off Your Phone”) and place them within the Playlist.
- For theater, USB playback can be used for sound effects and even music cues. Playback of specific tracks or an entire playlist can be added to snapshots for hands-free playback.
- For rehearsals and even some performances, USB playback can be a desirable alternative to using a full Pro Tools system to integrate music, sound effects, or even click/reference tracks.

Assigning USB Playback Outputs

You can route USB playback outputs to any input channels on your system. The Patchbay can be used to assign USB playback outputs to VENUE system input channels, and you can also assign USB playback outputs as Matrix Mixer inputs.

Assigning USB Playback Outputs Using the Patchbay

To assign USB playback outputs to system input channels:

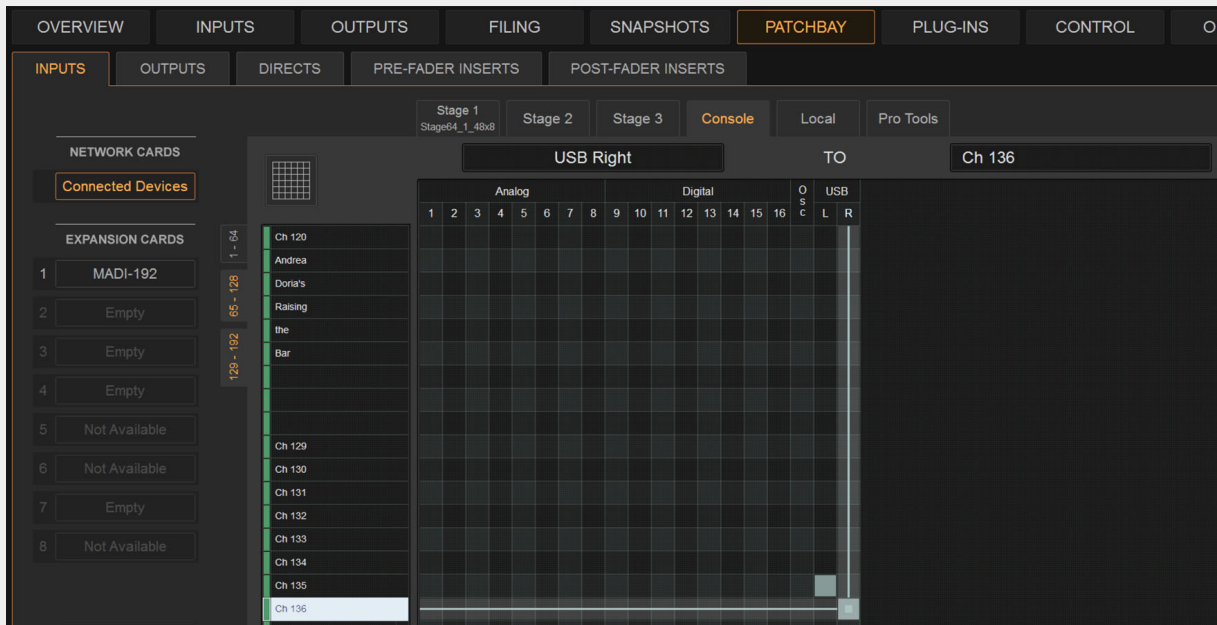
- 1 Go to the Patchbay page and click the Inputs tab.



You can also “jump” directly to the Patchbay > Inputs page from the Control > Playback window by clicking the Playback Output selectors in the Record Input section.

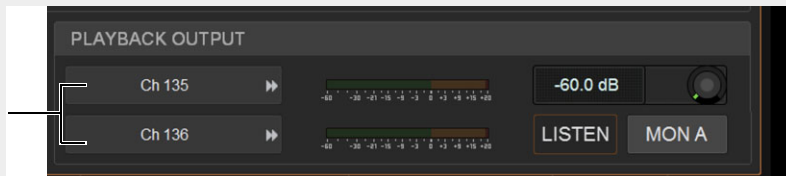
- 2 Click the Console hardware tab along the top of the channel grid.
- 3 To the left of the channel grid, click the tab to display the desired channels in the grid.

- Click in the channel grid to assign USB playback outputs (listed across the top under the USB column) to system Input Channels (listed on the left).



Assigning the USB playback outputs to Input channels

The assigned channels appear in the Playback Output selectors in the Playback tab.



Playback Output selectors in the Playback tab

Assigning USB Playback Outputs to Matrix Mixers

To assign USB playback outputs as Matrix Mixer inputs:

- Go to Outputs > Matrix.
- Click the Input Selector for any Matrix Mixer and choose the desired USB output.



Assigning USB Playback outputs as a Matrix Mixer input.

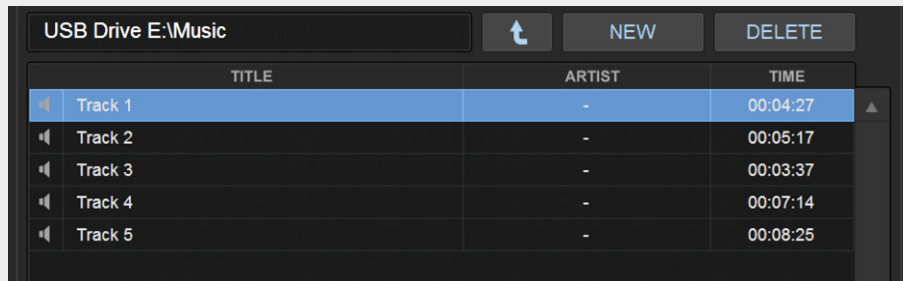
Adding Tracks to the Playlist

To add tracks to the Playlist:

- 1 Insert your USB drive(s) into a USB port on the S6L control surface.
- 2 Go to Control > Playback.
- 3 Locate the Library section. If one USB drive is connected, that drive appears in the window at the top of the section. The contents of that drive appears in the list below it. A speaker icon next indicates audio files that can be added to the Playlist.



You can preview an individual audio file by clicking the speaker icon in the Library or in the Playlist. Preview audio is sent to the selected Monitor bus (A, B, or A+B) and can be monitored using headphones connected to the Headphone Output for the corresponding Monitor bus or buses. Any other signals currently in the Monitor bus are overridden by Preview.



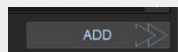
A drive and its contents

- 4 In the Library list, select one or more tracks.

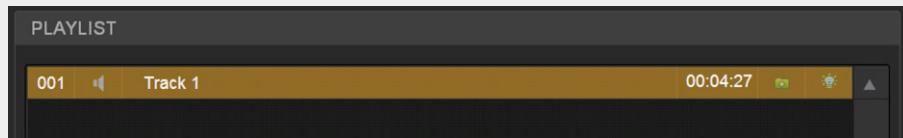


Shift-click to select multiple consecutive items in the list, and Control-click to select multiple non-consecutive items.

- 5 Click the Add button, or double-click the track. The selected track(s) appear in the Playlist.



Add to Playlist button



Tracks in the Playlist

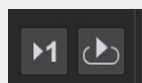
- 6 To remove a track from the Playlist, select it in the Playlist and click Remove.

Setting the Play Mode

After adding tracks to the Playlist, set the Play Mode. Play Mode can be set on-screen in the Transport. By default, Play Mode is set to play all tracks in the Playlist when playback is engaged.

To set the Play Mode on-screen, do any of the following:

- Click the Play One Track button so that it is lit to play only the cued track.
- To play all tracks in the Playlist in sequential order, make sure the Play One Track button is unlit.
- Click the Repeat Playback button so that it is lit to repeat playback of either the cued track or the Playlist.
- To play the track or the Playlist once, make sure the Repeat Playback button is unlit.

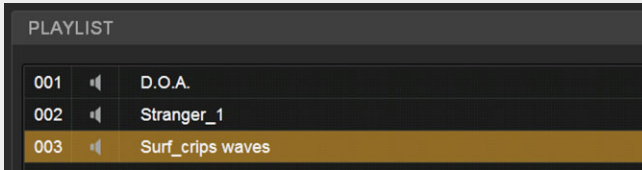


Enabled Play One Track button (left) and Repeat Playback button (right)

Engaging Playback

To engage playback:

- 1 Select a track in the Playlist so that is cued for playback. A track is cued for playback when it is highlighted in yellow or green.



A selected and cued track in the Playlist

- 2 Press the Play button in the Transport., or double-click the track in the Playlist.
- 3 To stop playback, press the Stop button in the Transport.

To adjust the playback level:

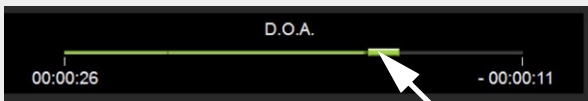
- On-screen, drag the Level encoder in the Playback Output section.
- Adjust the faders of the Input Channels that the USB playback outputs are assigned to as desired.

To skip to another track in the Playlist:

- To skip to the next track in the Playlist, click the Next button in the Transport, or press the Down arrow on your keyboard.
- To skip to the previous track in the Playlist, click the Previous button in the Transport, or press the Up arrow on your keyboard.

To shuttle forward or backward in the currently playing/paused track, do either of the following in the Transport display:

- Click anywhere in the timeline to move the Playhead to that position.
- Click and drag the Playhead to the left or right to shuttle backward or forward in the track.



Dragging the Playhead in the Transport display

Playback Listen

You can use the on-screen Playback Listen button to monitor the currently playing track. Playback Listen toggles the playback output onto the Monitor bus.

Playback Listen is always overridden by other signals on the Monitor bus, such as when Key Listen is engaged. Playback Listen defaults to Monitor Bus A but you can choose to use B, or A+B.

To designate a different Monitor bus:

- Click the MON A button (it changes to MON B). Click again to select MON A+B.

To monitor the Playback output:

- In the Playback Output section of the Playback tab, press the Listen button.

To disengage Playback Listen:

- Click Listen again.

Recording Audio to USB

To record audio to USB, you need to assign system channels to the USB recording inputs, target the destination drive (or folder) for the recording, and initiate the recording. Audio is recorded to the connected USB drive as 24-bit, 96 kHz WAV files.

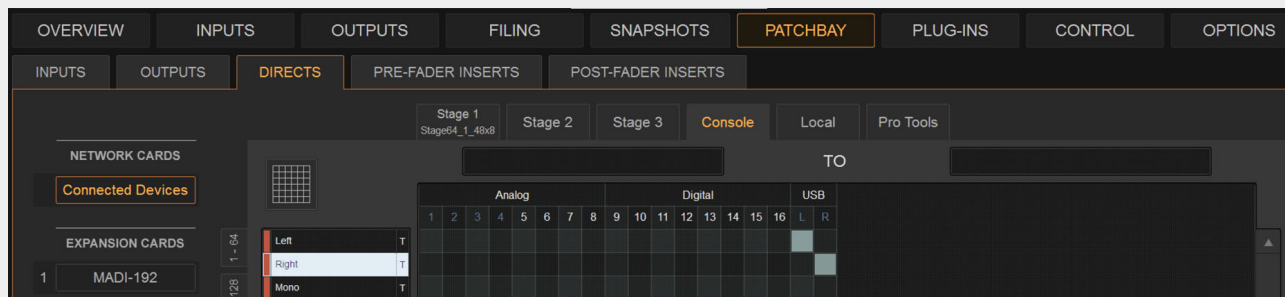
Assigning USB Recording Inputs

The Patchbay is used to assign channels to the USB recording inputs. You can route output busses directly to the USB recording inputs, or you can use input or output channel Direct Outputs.

 For more information on using Direct Outs, see the *VENUE S6L System Guide*.

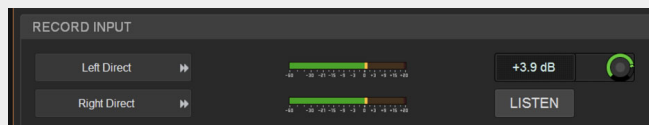
To assign channels to USB recording inputs:

- 1 Do either of the following:
 - Click the Record Input Source selectors in the Record Input section to “jump” directly to the Patchbay > Directs page.
 - Go to the Patchbay page and click the Outputs or the Directs tab.
- 2 Click the Console hardware tab along the top of the channel grid.
- 3 To the left of the channel grid, click the tab to display the desired channel type in the grid.
- 4 Click in the channel grid to assign channels or buses (listed on the left) to the USB recording inputs (listed across the top under the USB column).



Assigning the Main Left-Right Direct Outputs to the USB recording inputs, in the Patchbay

The assigned channels appear in the Record Input selectors in the Control > Record window.



Record Input sources in the Control > Record window

Record Routing Examples and Tips

- To make a 2-track recording of your mix (“board mix”), assign Mains L/R as the Record Input sources.
- To record your mix as it sounds in the room, set up a pair of microphones near your mix position. Connect them to a pair of Input channels, assign them to a pair of Input channels, then assign those Input channels as the Record Input sources and use their Direct Outs.

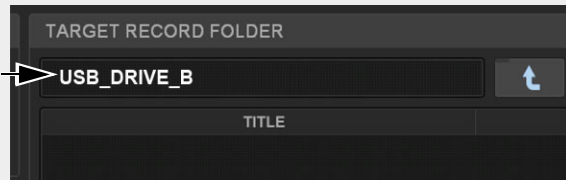
Targeting the Destination for the Recording

After assigning channels to the USB recording inputs, target the destination for the recording. Audio can be recorded to the top (root) level of connected USB drives, or you can create a folder or a sub-folder and target the recording to that folder.

To target the destination for the recording:

- 1 Insert your USB drive(s) into any USB port on the S6L control surface.
- 2 Go to the Control page and click the Record tab.

- 3 Locate the Target Record Folder section. If one USB drive is connected, that drive appears in the window at the top of the section. The contents of that drive appears in the list below it. When the drive is targeted, any subsequent recordings are saved to the top-level of the drive indicated in the top window.



A drive targeted in the Target Record Folder section

- 4 If two or more drives are connected to the S6L control surface, target the drive you want to record to by double-clicking the drive in the list.

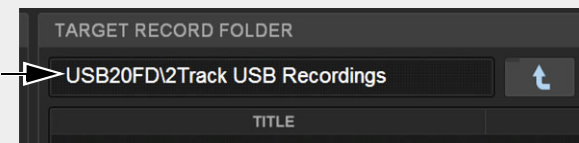
The selected drive appears in the in the window at the top of the section, and any subsequent recordings are saved to the top (root) level of the drive indicated in the top window.

Creating and Targeting a Folder for the Recording

You can create a folder on a drive and target it for the recording.

To create a folder and target it for recording:

- 1 Make sure the desired USB drive is targeted. If necessary, click the Up One Level button to return to the top-level of the drive.
- 2 Click the New button. A new folder appears in the list.
- 3 Type in a new name for the folder using your computer keyboard and press Enter.
- 4 Double-click the new folder. The full file path showing the targeted folder now appears in the window at the top of the Target Record Folder section. Any subsequent recordings will be saved to that folder.



An example folder (named "2Track USB Recordings") targeted in the Target Record Folder section



To navigate back to the top level of the drive, use the Up One Level button located next to the Target Record Folder window.

Naming a Recording

To name a recording:

- 1 Click in the Target File Name window, then type in a name for the recording.



An example file (named "20200928_Petaluma, CA") targeted in the Target Record Folder section

- 2 Press Enter.

Initiating a Recording

After targeting the record destination, set the record level and initiate the recording.

To set the record level:

- 1 If you are not using Direct Outputs, skip to step 3.
- 2 If you are using Direct Outputs, do the following for each channel assigned to the USB recording input:
 - Navigate to the Inputs or Outputs page for the channel(s) assigned to the USB record inputs.
 - On-screen, click the Direct Outs In button. Adjust the Direct Output level as necessary.



Channel Direct Output enabled (IN)

- 3 Go to Control > Record.
- 4 Click the Level control in the Record Input section to adjust the record input level. Make sure the input level is not clipping the record inputs. Clipping is indicated when red appears on the +15 dB mark in the Record Input Level meters. To listen to the record input signals, see [Record Listen](#).



As a general rule of thumb, try to set levels so that they peak within -15 dB to -9 dB on the Record Input Level meters. If you are using Direct Outputs, both the channel Direct Out level control and the Level control in the Control > Record window affect recording input levels.

To engage Record on-screen:

- 1 Go to Control > Record.
- 2 In the Transport section, click the Record Arm button to record arm the transport.



Record-arming the Transport

- 3 To start recording, press the Play button in the Transport. The Transport display shows the progress of the recording.

To stop recording:

- Press the Stop button in the Transport.

Record Listen

You can use the on-screen Record Listen button to monitor the recording input. Record Listen toggles the recording input onto the Monitor bus. Record does not have to be engaged to monitor the recording input.

Record Listen is always overridden by other signals on the Monitor bus, except Mix to Monitors. If any other channel is soloed, or Key Listen is engaged, Record Listen is always overridden. Record Listen defaults to Monitor Bus A but you can choose to use B, or A+B.

To designate a different Monitor bus:

- Click the MON A button (it changes to MON B). Click again to select MON A+B.

To monitor the recording input:

- In the Record Input section of the Record tab, click the Listen button. It flashes yellow when engaged.

To disengage Record Listen:

- Click Listen again.

Dividing a Recording

You can divide an in-progress recording to create a new audio file for the next song or cue, set, scene, or act during a performance. The previous recording is saved, and the new recording continues until the recording is stopped or the Record Divide button is clicked again.

To divide a recording:

- 1 While a recording is in progress, name the new file by clicking in the Target File Name window, typing in a new name, and pressing Enter.
- 2 Click the Record Divide button in the Transport.
The new file inherits the name from the previous file and is appended with a number, such as “Untitled-1,” and “Untitled-2.”

Automatic Record Divide

In addition to being able to manually divide a recording, recordings will also be divided automatically when the file size reaches the maximum allowed file size of 3.99G (approximately two hours). The newly created file is named inherits the name from the previous file and is appended with a number the same as when a recording is divided manually.

Managing USB Audio

You can manage tracks by reordering tracks in and removing tracks from the Playlist, previewing tracks, deleting and renaming files on connected USB drives, and removing all unavailable files.

Reordering Tracks in the Playlist

Tracks can be reordered in the Playlist at any time, including during playback. When you reorder one or more tracks, they are automatically renumbered in the list.

To move a track in the Playlist:

- 1 Select one or more tracks in the Playlist.
- 2 Do one of the following:
 - Drag the currently selected tracks to a new location in the Playlist.
 - Double-click the track number in the Playlist or the banner display, type in a new number, and press Enter on the keyboard.
 - Right-click (tap and hold) the time in the Playlist and choose an available Move command.

Removing Tracks from the Playlist

Tracks can be removed from the Playlist at any time (including during playback).

To remove a track from the Playlist:

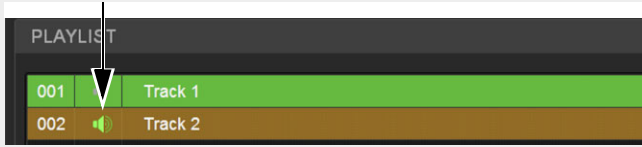
- 1 Select one or more tracks in the Playlist.
- 2 Click the Remove button. The selected tracks are removed from the Playlist and succeeding tracks are renumbered. Or right-click a selected item and choose Remove from Playlist.

Previewing Tracks

You can preview tracks in the Target Record Folder list of the **Record** window, and in the Playlist and the Library lists of the **Playback** window. When you preview a track, the signal is sent only to the Monitor bus. Use this feature to audition tracks in your headphones before playing them back through the sound system.

To audition a track:

- 1 In the Target Record Folder list, the Library list, or the Playlist, click the speaker icon next to the track; or right-click the item and choose **Preview**. That track is sent to the particular Monitor bus chosen on the Playback page.



Previewing a track in the Playlist

- 2 To stop preview, double-click the lit speaker icon.

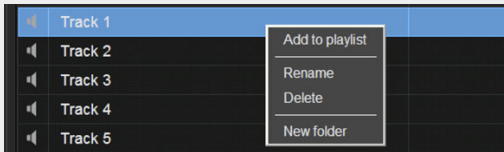
A *Initiating playback of a track interrupts preview. Also if a track is playing back you cannot preview.*

Renaming and Deleting Files and Tracks

You can rename and delete files and tracks in the Target Record Folder list of the **Record** window.

To rename and/or delete files from a connected USB drive:

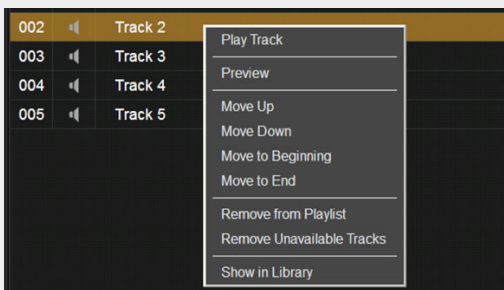
- 1 Right-click a file in the Target Record Folder list or the Library list.
- 2 Select **Rename** or **Delete** from the pop-up menu. You can also choose to add the track to the Playlist, or create a new Folder.



Track right-click menu in the Library list

Play, Preview, Move, Remove, and Show Commands in the Playlist Right-Click Menu

Right-clicking an item in the Playlist provides a menu with many Playlist management commands.



Track right-click menu in the Playlist

Play Track Plays the selected track.

Preview Auditions the selected track through the Monitor bus.

Move Up/Down/To Beginning/To End Moves the selected track.


Remove from Playlist Removes the selected track from the Playlist.

Remove Unavailable Tracks Removes any unavailable tracks (listed in italics).

Show in Library Shows the selected track in the library.

Using Snapshots to Trigger Transport Commands

You can add the track playback command to existing or new snapshots directly from the Playback window Playlist to initiate playback by recalling a snapshot. You can also use snapshots to initiate a recording and to stop the Transport. These commands must be added to already-existing snapshots on the Snapshots page.

 See the *VENUE S6L System Guide.pdf* for more information on creating and editing Snapshots.

Adding Track Playback to an Existing Snapshot

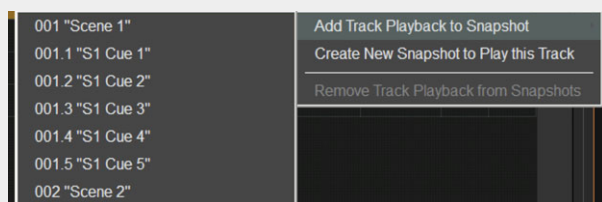
To add a track playback to an already-existing snapshot:

- 1 Go to Control > Playback.
- 2 In the Playlist, click the Snapshots icon corresponding to the track you want to add to a snapshot.



Snapshot icon in the Playlist

- 3 From the pop-up menu, choose Add Track Playback to Snapshot and choose the existing snapshot from sub-menu.



Adding to an existing snapshot

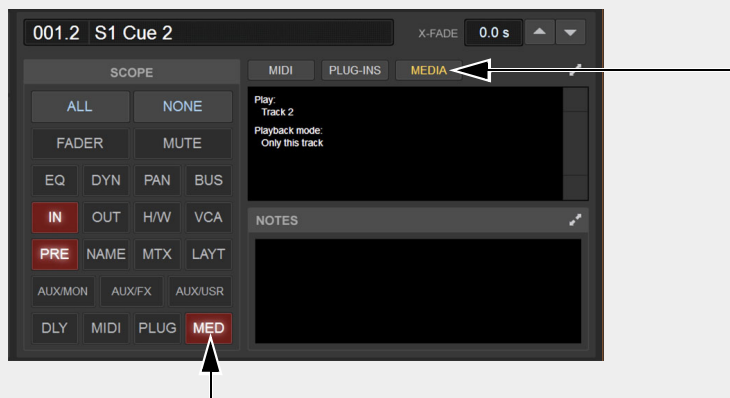
The Play track command for the chosen track is added to the snapshot, and the MED (Media) scope button is enabled.

 Any snapshot already containing a USB 2-track Transport command appears in italics in the pop-up sub-menu. If you want to change the Transport command on an existing snapshot, click Assign in the ensuing dialog to confirm the change.

You can edit the Play Mode for a track added to a snapshot on a per-snapshot basis using the Play Mode options in the Media list on the Snapshots page.

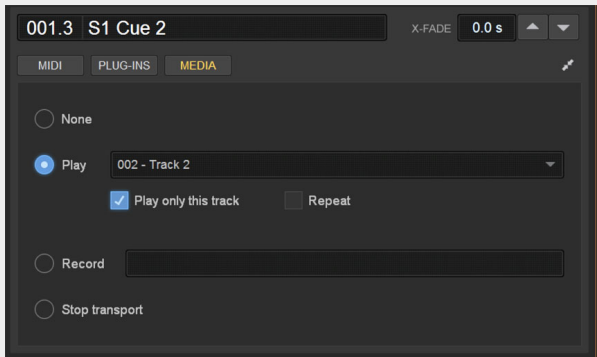
To edit Play Mode and other snapshot parameters:

- 1 Navigate to the Snapshots page.
- 2 Select the snapshot.
- 3 Click the MEDIA subtab to see a summary of 2-Track parameters associated with the snapshot.



Play Mode options in the Snapshots page Media list (at top) and MED Scope button (below)

4 Double-click the MEDIA sub-tab (or click the Zoom icon) to open the Play Mode options view and edit parameters.

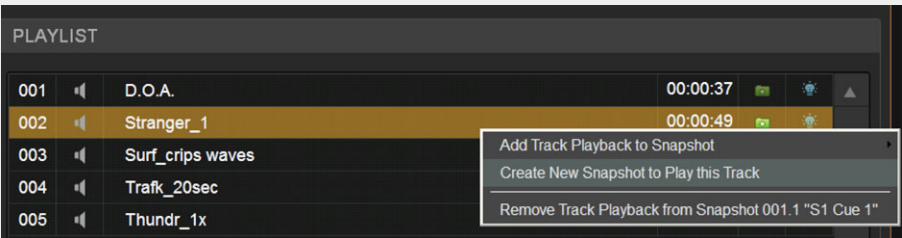


Play Mode options in the Snapshots page Media list

Creating a New Snapshot for Track Playback

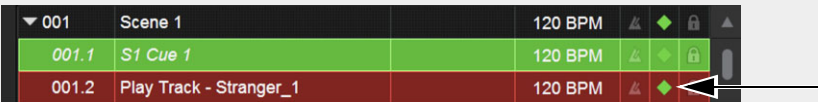
To create a new snapshot containing a track playback:

- 1 Go to Control > Playback.
- 2 In the Playlist, click the Snapshots icon for the track you want to add to a snapshot. The icon lights to show that a snapshot contains this track.
- 3 From the pop-up menu, choose Create New Snapshot to Play this Track.



Choosing an existing snapshot from the pop-up menu

In the Snapshots list on the Snapshots page, a new snapshot containing the Play track command is created and added after the currently selected snapshot in the Snapshots list.



Snapshots list containing the newly created snapshot

Using Events to Trigger USB Transport Commands

The following USB 2-track Transport actions can be triggered using events:

- Stop USB 2-track Transport
- Play a specific track in the Playlist
- Play the currently cued track in the Playlist
- Engage record in the USB 2-track transport
- Record divide the current recording

You add track playback directly from the Playlist or from the Events tab. All other Transport commands (such as Stop and Record) are added from the Events tab.

 See the *VENUE S6L System Guide.pdf* for more information on Events.

Adding Track Playback to an Event

You can add track playback to an existing event or create a new event with track playback directly from the Playlist.

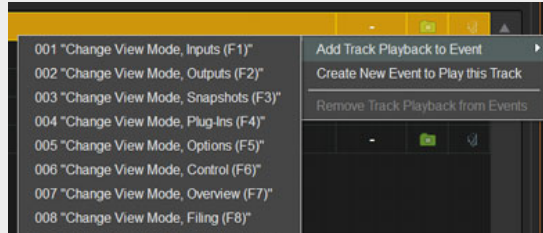
To add track playback to an existing event:

- 1 Go to Control > Playback.
- 2 In the Playlist, click the Event icon next to the track you want to trigger.



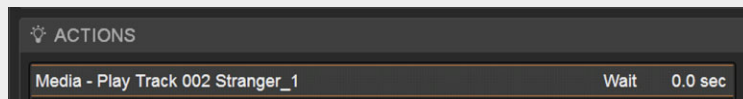
Event icon in the Playlist

- 3 Select Add Track Playback to Event and select the event from the list.



Adding a track to an existing event

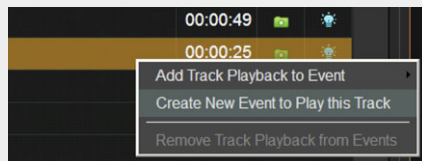
Track playback is added to the selected event, and the track playback command appears in the Events tab Actions list for the selected event. Engaging the trigger for that event triggers playback of the assigned track.



Play track command added to Events tab Actions list


To create a new event for track playback:

- 1 Go to Control > Playback.
- 2 In the Playlist, click the Event icon next to the track you want to trigger using an event.
- 3 Select Create New Event to Play this Track. The new event is created and added to the Events and Actions Lists on the Control > Events page. The new event and action are auto named Play Track - <track name>.



Creating a new event for track playback

- 4 Go to Control > Event and edit the name of the event if desired.
- 5 Make sure the event is selected (highlighted in blue), and click the ADD pop-up menu in the Triggers list to select a trigger type (such as a Function Switch). The selected trigger type is added to the Trigger list for the currently selected event, with its default properties.

 You can define event actions to be triggered by nearly any control on the surface, by snapshot recall, and more. See the *S6L Event Triggers and Actions.pdf* for a listing of all available triggers and actions. See the *VENUE S6L System Guide.pdf* for more information on creating and using Events.

To remove a track playback from an event.

- 1 In the Playlist, click the event icon next for the track you want edit.
- 2 Choose Remove Track Playback from Event <Event number> "<Event name>".

Part II: Release Notes

VENUE Software 7.0 Release Notes

This section describes the fixed and known issues in VENUE software version 7.0 for VENUE S6L systems. VENUE 7.0 is available as a System Restore and as a Software Update.



Check your [Avid Account](#) for any updates to this document.

If you are upgrading a system running VENUE software version 6.2 or later you can Update your system. If you are upgrading a system running VENUE software version 6.1.x or lower, you *must* install VENUE 7.0 as a System Restore.

For complete System Restore and software installation instructions see the *VENUE S6L Installation Guide.pdf*.



Mute or power down any speakers or headphones before installing VENUE software. After VENUE software is installed and all firmware updates are complete, power cycle each device in your system, including any computers you are using for recording or playing back AVB audio with your S6L system.



Backup all console data before installing new VENUE software.



Make sure to re-install any 3rd party plug-ins after installing new VENUE software. For best performance, make sure you are running the latest plug-in versions on your system. Find the latest S6L plug-ins installer in your Avid account.

Important Installation Notes for VENUE 7.0

External Screen Required for Software Installation Before performing a System Restore or Software Update be sure to connect your external screen to the S6L control surface. It is possible for the system to become stuck in an infinite restart loop after performing a System Restore or Software Update if there is no external screen connected.

For systems with WSG-HD Waves SoundGrid Option Card, be aware of the following:

At the time of this writing, Waves v11 is not qualified for use with S6L. Do not install Waves v11.

Previous Versions of Waves v10 Cannot Be Installed Onto S6L Systems Running VENUE 7.0

You must download and install the most recent version of Waves V10 (released on October 23, 2019) or newer.

Visit [Waves.com/downloads/venue](https://www.waves.com/downloads/venue)

VENUE 7.0 Restore Process Disables Waves Licenses Installed on the S6L Control Surface Hard Drive

If your system has any Waves licenses installed on the S6L control surface hard drive (instead of on a Waves USB drive) and you are upgrading from VENUE software version 6.1 or lower you *must* first transfer those licenses to a USB drive or to the license cloud *before* performing a System Restore to VENUE 7.0.

Failure to transfer control surface-resident licenses can result in those licenses being unavailable; should this occur, see [WSG-HD Waves SoundGrid](#) for the workaround. After the VENUE 7.0 System Restore is complete you can re-install Waves software and licenses.

“Restore Image Not Valid” or FreeDOS Boot Screen

If, during the System Restore procedure, an error message appears stating that the USB image is invalid or a FreeDOS boot screen appears, see [Restore Image Not Valid](#) in the list of Known Issues.

Waves V9 Compatibility

For VENUE software version 7.0, the most recent version of Waves v10 is required. Waves v9 is not supported with VENUE 7.0. However, if you must continue to use Waves v9, a special patch is required. See this article on our Knowledge Base:

[VENUE-6-2-and-Waves-V9-compatibility-and-workaround](#)

Issues Resolved in VENUE 7.0

Connectivity

- It was possible for redundant network connection indicators on the external screen to appear in yellow instead of green when using maximum supported length Cat5 cables with a Luminex GigaCore 10 switch (VSW-30759)
- It could take as long as 10 minutes or more for Stage 16 firmware to update, resulting in a low virtual memory condition on the S6L control surface (VSW-32574)
- When Luminex switches are connected to E6L engine(s) using fiber-optic cable, it was possible for communication to not re-establish automatically if both **A** and **B** fiber cables were disconnected and then re-connected (VSW-31511)

Note: Fix requires Luminex firmware v2.8.4 and later.

Events

- Channel Assignments (to VCA) Event Trigger could fail to be triggered by VCA Multi-Assign (VSW-32911)
- In the Event Actions menu, actions for Matrix Inputs (Sends) were mislabeled as outputs (VSW-32871)
- The Event Actions menu could incorrectly display selected choices (VSW-31686)
- While editing Event trigger properties for certain strip Assign switch triggers, it was possible for other properties to be reset (VSW-31764)
- While editing Event Actions for Set (Continuous) parameters, it was possible for available parameters to not persist when changing other properties, such as switching to a different strip (VSW-31750)
- After loading a Show file, it was possible for Events with Snapshot Recall triggers that were saved as **Active** be set to **Ready** (VSW-31488)
- It was possible for Events to incorrectly remain **Active** after being moved within the Events list (VSW-31184)
- It was possible for Aux Pan to not be available for Control (Continuous) > Any Aux when the first Aux had been Made Stereo (VSW-30473)

Plug-Ins

- EQ3 Bandpass Mode would not work by holding Shift + Start keys and clicking a Frequency point on-screen (VSW-11981)
- It was possible for the Pitch II Plug-in to fail to be installed along with other VENUE plug-ins (VSW-31117)

General

- When selecting a channel below the MLM, if no channel was present on the CFM below the target CKM it was possible to be unable to select functions (VSW-32119)
- In the Snapshots tab, it was possible for some Data types (such as Input strip Mains bus assignment, and User Delay) to fail to be cleared after clearing a snapshot (VSW-27123, VSW-27122)
- After loading a Show file it was possible for CKM OLEDs to be dark until navigating (**Select**) away and back to a channel (VSW-31751)
- While activating the control surface, it was possible for the manually entered Time to not be applied (VSW-31731)
- It was possible for the MTS screen to flicker at certain brightness settings (VSW-32784)
- It was possible under certain conditions for meter performance to lag slightly in CTM > Meters view (VSW-32858, VSW-32560)
- It was possible for the Engine CMOS Battery Needs to be Replaced to persist after manually powering off the E6L Engine and replacing the battery (VSW-304645)
- When the E6L engine is booted in very cold ambient temperatures, it is possible for the system to display a Hardware Monitoring Alert regarding the engine fans and HDX fans; these warnings are now suppressed for 15 minutes after startup as the engine warms up (VSW-13860)

Note: In some very cold environments the alerts may still occur after 15 minutes as the engine takes longer to warm up.

WSG-HD Waves SoundGrid

It was not possible to run WavesCentral while the ECx port on the S6L control surface was connected to the Internet without inadvertently triggering an update to an unsupported version of Waves Central. This issue was resolved in the most recent release of Waves v10.

DNT-192 Dante Option Card

- When a DNT-192 card using Dante Controller Software v4.1.1.2 was configured for 16-channel output, the Receive/Transmit patching matrix in Dante Controller might not respond and outputs 9–16 could initially produce distorted audio until the SRC setting was toggled on/off. This has been fixed with Dante Controller Software 4.2.3.1, available from Audinate (VSW-28259)

Issues Resolved in Previous Versions of VENUE Software

Issues Resolved in VENUE 6.3

- It was possible in certain conditions for a Plug-in Rack reset to occur when using Waves Soundgrid (VSW-29484)
- HW Monitoring for E6L engines in Options > Devices > Engine > Status could fail to display fan speed and voltages after some amount of time, and “No hardware monitoring information is available because the hardware monitoring device could not be accessed” appeared (VSW-29094)
- Gain Guess could fail to engage via touch on the external screen (VSW-15734)
- It was possible for the **Assignable** encoder display to fail to show a previously assigned parameter after enabling/disabling Osc and Talkback (VSW-30523)
- It was possible for Gain control to become unavailable from the external screen on stereo Input channels when either the left or right channel were not patched (VSW-30871)
- Type search by snapshot number in the Snapshots list could ignore Child snapshots if their Parent view was collapsed (VSW-30272)
- It was possible for only the left side of a stereo strip HW Insert patching to be stored in snapshots (VSW-31269)
- It was possible for the displayed System Clock Date (Options > Misc) to fail to refresh after date-altering changes to Time Zone (VSW-31193)
- It was possible that clicking on an Event icon in the Snapshot list could fail to display the resultant Event state properly (VSW-31006)
- In Dual Operator mode, it was not possible to assign parameters from the control surface using Encoder Assign User Assignment Mode (VSW-30531)
- It was possible for Matrix members to fail to be displayed on CKMs in Vertical mode (VSW-30521)
- Spilling an Aux and nudging to the right while Position Safe When Spilling was enabled could result in a spilled strip being duplicated (VSW-30048)
- It was possible for snapshots to incorrectly disable individual EQ bands (VSW-29201)

Issues Resolved in VENUE 6.2

- It was possible for the MTS to become unresponsive to touch and to display meters incorrectly (VSW-28314)
- In rare cases the MTS could display the external GUI screen after startup (VSW-29108)
- It was possible for IP address conflicts to prevent connection between the E6L engine and S6L control surface (VSW-28768)
- Faders can sometimes become unresponsive, or respond incorrectly (VSW-26549)
- Fader positions could fail to update while recalling Snapshots in Layout mode (VSW-25998)
- It was possible for CTM and MTS Channel view to display Output strip Patching destination as “Input” (VSW-28120)
- When feeding 2-Track inputs from control surface/local IO it was possible for the Left and Right channels to become reversed (VSW-28042)
- When either Monitor bus was set to SIP and a channel was soloed, that channel could function in SIP regardless of Monitor bus assignment (VSW-27516)
- It was possible for Output audio in Monitor Bus A to be affected when soloing an Input channel assigned to Monitor Bus A (VSW-26848)

- It was possible for plug-in licenses to not be recognized after initial installation (VSW-25583)
- (S6L-24C) While performing a System Restore, it was possible for the MTS to fail to respond to touch (VSW-26506)
- Network port indicators A/B on the **Options > Devices** page may be reversed from the actual physical connection (VSW-14020)
Network port indicators for the network ring are now labeled P (Primary) and R (Redundant).
- When assigning channels to a Layout it was possible for the external screen to fail to indicate the strip targeted for assignment (VSW-28758)

WSG-HD

 *Waves v10 is required for VENUE 6.3 (v9 is not compatible).*

Note: If your system includes a WSG-HD Waves SoundGrid Card, you must install the latest release of Waves v10 (released in October, 2019). Visit [Waves.com/downloads/VENUE](https://www.waves.com/downloads/VENUE) to download and install the latest version. The following issues are resolved in the most recent release of Waves v10:

- Loading presets from Waves Butch Vig Vocals plug-in can cause Plug-In Rack to reset (VSW-27678)
- In rare cases it was possible for audio to exhibit random audio artifacts (VSW-29630)
- It was possible to experience long plug-in scan and loading times with SoundGrid Rack for VENUE until licenses were re-synchronized with Waves Central (VSW-28997)
- It was possible for Waves plug-ins (such as Waves Tune Real-Time, X-FDBK) running in SoundGrid applications to not pass audio or cause SoundGrid server disconnection and reconnection.

Issues Resolved in VENUE 6.1

- In I/O Sharing configurations, it was possible for Word Clock output from the two systems to not always be in sync (VSW-27549)
- It was not possible to Attention a channel by touch (**Options > Interaction, Change Attentioned Channel by: Touching Input Faders**) while in Sends on Faders or Flip mode (VSW-26705)
- It was possible for Aux send level to be reset to -inf instead of zero when resetting the level from the control surface (VSW-26849)
- While Sends on Faders Follows AFL was enabled, it was possible for Sends on Faders mode to remain active after un-soloing an Aux from the Universe view (VSW-26853)
- On S6L-24C it was possible for CKM encoders assigned to Bank Safe to lose functionality if the parent channel was nudged to a different CFM (VSW-26854)
- It was possible for the **Overview** page to not immediately reflect changes to Channel Color (VSW-26884)
- Changing the Total Mix Busses setting in **Options > Devices**, or via loading a Show file, while Mains were banked to faders could result in a blank CFM (VSW-26841)
- It was possible for strips to react unpredictably after quickly Attentioning one strip, then the other, repeatedly (VSW-26772)
- It could become impossible to Solo a channel without also Attentioning it (VSW-27524)
- Deleting a custom name for a Mute Group would not revert the Mute Group to its default name (VSW-26455)
- It was possible for Events defined to toggle Bank Safe status to behave inconsistently if their properties included “While Active” (VSW-26512)
- Adjusting stereo strip Balance could cause some parameters icons to momentarily disappear from Meters view (VSW-26852)
- When viewing Matrix, VCA, or Mains in Meters view on a CTM, LR/M assignment would not always be shown (VSW-26437)
- When loading a Show file created on S3L-X or older systems, it was possible for Input channel Gain to fail to be restored correctly (VSW-27530)

WSG-HD

- As of VENUE software version 6.1, Waves V10 is qualified with S6L which fixes several issues that could occur with Waves v9. For a list of which issues may affect Waves v9) see [Known Issues in VENUE 7.0](#).

Standalone Software

- Warnings about User Layouts are displayed more consistently after switching between different console models (VSW-27450)

Known Issues in VENUE 7.0

The following issues are known to exist in VENUE software version 7.0:

- Performing a forced Reset of an E6L engine by holding down its front panel Reset switch while powering up can corrupt any MLN-192 or WSG-HD cards installed in that engine, resulting in the system becoming stuck in an infinite restart loop. Before performing a forced Reset of an E6L engine (which should only be performed with the guidance of Avid Customer Support), remove any MLN-192 and WSG-HD cards (VSW-33122)
- It is possible for the system to become stuck in an infinite restart loop after performing a System Restore with no external screen connected (VSW-30269)
Workaround: Connect an external screen with a supported resolution of 1920 x 1080.
- When using the new CKM Vertical mode while both Input and Output channels are banked to a CFM, it is possible for unexpected parameters to be displayed on the second “page” (VSW-30042)
- When banking the Right Zone while in Dual Operator mode, it is possible for previously banked strips to appear very briefly (less than 500ms) on the faders before the intended bank is displayed (VSW-30211)

Compatibility

Make sure your AVB-compatible Mac and other equipment is qualified to support 128 Channel AVB with Pro Tools. Also, be sure to do all the following on the Pro Tools computer:

- Go to System Preferences > Network, and turn off Wi-Fi/Airport, and Blue Tooth.
- Go to System Preferences > Sharing, and make sure to disable Internet Sharing.

For complete compatibility requirements and optimization guidelines, see [System Requirements for Pro Tools with S6L](#).

Startup, Configuration, and Update/System Restore

- **Important (System Restore Note):** On some system configurations, when performing a manual System Restore the E6L engine will perform an additional reboot which may not be immediately apparent after pressing “A” (upper-case, Shift + A) on the keyboard and while repeatedly pressing F5 on the keyboard (VSW-26825)
Workaround: Because of this possibility, continue pressing F5 until the next screen (Windows/RTX Activation dialog) appears on your VGA monitor. For more information, see the *VENUE S6L Installation Guide.pdf*.
- After performing a System Restore it is possible for the Touchscreen Assignments Wizard to fail to appear (VSW-31928)
Workaround: Use a mouse to connect to the engine, then configure the touchscreen when the Wizard appears.
- With some AVB-192 Network Cards it can appear that firmware is attempting to be updated multiple times (VSW-29204)
Workaround: Wait five or more minutes after the initial AVB card firmware update has begun then power-cycle the E6L engine.
- It is possible, though unlikely, to experience audio spikes during boot, reboot or restart of the S6L system. Be sure to mute all connected speakers before starting up, rebooting, or restarting (VSW-14414)
- Reboot the system(s) to resolve any of the following issues that you may experience during initial startup:
 - Vary rarely, the E6L engine may lose connection to the S6L control surface soon after initial boot. Upon the devices reconnecting, audio routing may be affected (VSW-14525)
 - When multiple systems are configured for IO Sharing, it is possible for audio to no longer pass from Stage 64s or the S6L control surface after rebooting the Media Clock Master E6L engine (VSW-15395)
- After adding or removing an AVB-192 card, it can take approximately 13 minutes to establish connection between the S6L control surface and E6L engine (VSW-15618)
Workaround: If your system has not connected after 5 minutes, power cycle the system and try again.
- If you use a DVI-to-HDMI cable to connect your external display, make sure the DVI cable is DVI-D 24+1 spec (VSW-26366)
- Event Actions for GPI Output that are triggered by System Start are not supported (VSW-30524)

I/O Sharing Configurations

- When multiple systems are configured for I/O Sharing and connected in a redundant star network, it is possible for the system to briefly lose redundancy when any system are powered on (VSW-30826)
To avoid this issue, be sure to power on all systems within one minute of each other.
- When three systems are configured for I/O Sharing and connected in a redundant star network and any of the systems rejoin the network (such as if it is power cycled or disconnected and reconnected) it is possible to experience very short (32 samples) artifacts or longer duration dropouts (VSW-33059, VSW-33319)
Recommended: Wait for a suitably long pause in the performance before reconnecting.
- When multiple systems are configured for I/O Sharing and PAD is enabled for the same input(s) on both systems, re-loading the same Show file (or loading a different Show file in which the same channel PADs are enabled) can result in unexpectedly lower gain on the channel(s) (VSW-28143)
Workarounds: Restart the slave S6L, re-apply PAD on the master S6L, or reload the Show file on the master S6L.
- When multiple systems are configured for I/O Sharing and ECx is enabled, self-assigned IP addressing on ECx can cause Slave Stage units to be unavailable (VSW-25168)
Work around: Connect ECx to a valid network with DHCP, or manually assign IP addresses to ECx and other devices on network.
- When multiple systems are configured for I/O Sharing and the Master system reboots, it is possible for Ring 1 and Stage unit status indication to be incorrect in Options > Devices on the Slave system (VSW-26302)
- When multiple systems are configured for I/O Sharing, it is possible for the Media Clock Master system to not re-establish Stage slot priority in certain power up conditions (VSW-19868)
Workaround: Clear Console or power cycle both the E6L engine and S6L control surface on one or both systems.
- When multiple systems are configured for I/O Sharing and a Clear Console is performed on the clock Master system, it is possible for +48V to be incorrectly indicated as active on the Slave system after Stage I/O units are reconnected to the Master (VSW-25508)

Pro Tools AVB

- E6L Entity not available in Audio MIDI Setup > Network Device Browser (VSW-29239)
Workaround: Disable SIP (System Integrity Protection) by doing the following:
 - 1 Restart your Mac, and before OS X starts up hold down Command-R and keep it held down until you see an Apple icon and a progress bar.
 - 2 Release both keys. This boots you into Recovery mode.
 - 3 From the Utilities menu, select Terminal.
 - 4 At the prompt, type exactly the following and then press Return: `csrutil disable`
Terminal should display a message that SIP was disabled.
 - 5 From the ? menu, select Restart.Note: You can re-enable SIP by following the above steps, but in step 4 type `csrutil enable` instead.
- When connected for redundant recording to two Mac Minis that are both connected using their internal Ethernet ports, it is possible for recording to fail (VSW-29001)
Workaround: Connect one Mac Mini using a USB-C to Thunderbolt 2 adapter along with a Thunderbolt (2)-to-Gigabit Ethernet adapter (not all USB-C to Ethernet adapters are AVB-compatible.)
- Connecting a second, redundant Pro Tools AVB computer to the S6L control surface interrupts in-progress recording on the primary Pro Tools AVB computer (VSW-30850)
Workaround: Connect both the primary and redundant Pro Tools AVB computers before recording.
- It is possible for VENUE to fail to indicate Pro Tools connectivity when changing the Pro Tools AVB format from 64 to 128 channels in AMS (Audio MIDI Setup). For example, the Pro Tools AVB icon may not appear in Options > Devices, or Pro Tools entities will not be colored purple in the Patchbay (VSW-30645)
Workaround: In AMS, toggle the E6 Engine off and then back on.
- It is possible for custom names of E6L engines that exceed 29 characters in length to be displayed as “Unknown System Name” in Pro Tools Setup > Peripherals > VENUE (VSW-26779)

Workaround: Rename engine using fewer than 29 characters.


- It is possible for Pro Tools AVB playback to experience clock drift or noise when the Pro Tools session has been configured for 32-bit audio. To minimize the chance of experiencing this issue, always record at 24-bit (VSW-19584)
- It is possible for inputs to remain assigned to Stage after enabling Virtual Soundcheck mode (VSW-15764)
Workaround: Enable Virtual Soundcheck mode a second time when enabling Virtual Soundcheck mode immediately after assigning Stage I/O units.
- After toggling between AVB128 and AVB64 (or vice versa) in AMS it is recommended to power cycle the E6L Engine (VSW-15833)
- It is possible for Pro Tools AVB to go offline for up to 10 seconds if redundant network connections are lost (VSW-19528)

VENUE Link

- Pro Tools 2019.10 (only) could crash when attempting to Create Session from VENUE or Import Track Names from VENUE (PT-256438)
- Workaround: Use Pro Tools 2019.12 or higher.
- VENUE Link: If Input strips within the range of 1 to 64 (for AVB64 mode) are patched to Stage 2 or Stage 3, Pro Tools might not create tracks for those Strips using Create Session from VENUE (VSW-18231)
Workaround: Manually create tracks and assign I/O in Pro Tools.
- When using VENUE Link with MADI connections to Pro Tools | HDX or Pro Tools | HD Native it is possible for the Create Session from VENUE command to fail (PT-224719)
Workaround: Using Pro Tools 12.8 or higher, in VENUE software go to Options > System and make sure the Virtual Soundcheck Input source is set to MADI (not AVB, or Both). Also, make sure that VENUE Link is connected to Network port C on the S6L control surface (not the ECx port).

WSG-HD Waves SoundGrid

The following issues are known to exist with Waves Soundgrid. In addition, please see the [Important Installation Notes for VENUE 7.0](#).

 *Waves v10 is required for VENUE 7.0 (v9 is not compatible). At the time of this writing, Waves v11 is not qualified for use with S6L. Do not install Waves v11.*

VENUE 7.0.x and Waves SoundGrid Licenses

If your system has any Waves licenses on the S6L control surface hard drive and you are upgrading from VENUE software version 6.1 or lower, you *must* first transfer those licenses to a USB drive or to the license cloud *before* performing a System Restore to VENUE 6.3.

Workaround: If you accidentally performed a System Restore to VENUE 7.0 without removing any Waves licenses on the S6L control surface hard drive, do the following:

- Perform a System Restore to VENUE 6.1.0 (do *NOT* use the Update option within the System Restore routine; you must perform a System Restore to downgrade a system).
- Transfer the control surface-resident Waves licenses to either a USB drive or to the license cloud.
- Perform a System Restore to VENUE 7.0.
- Re-install all Waves components, including licenses.

Restore Image Not Valid

- It is possible to encounter “The restore image on this USB drive is not valid” error or a FreeDOS screen when attempting to boot the S6L Control Surface from a System Restore USB drive by holding F10 at startup (VSW-28145)

This problem is caused by a boot device conflict that occurs when both the VENUE System Restore USB key and a Waves USB license key are connected. Note that this conflict only occurs when the Waves USB license key has been installed directly to certain USB ports *inside* the S6L Control Surface.

To workaround this issue:

- Remove the S6L Control Surface rear cover
- Unplug the Waves USB license key
- Power on the control surface while holding F10 on the USB keyboard to boot normally from the System Restore USB key
- Reconnect the Waves USB key when the System Restore is finished

Note: The Waves USB license key can be connected to the external USB ports to avoid this issue in the future, or see the note and photo about connecting the key internally in the following article on our Knowledge Base:

http://avid.force.com/pkb/articles/error_message/The-restore-image-on-this-USB-drive-is-not-valid-error-when-attempting-S6L-System-Restore

All Versions of Waves

- After inserting Waves SoundGrid plug-ins after a Sheps Omnichannel in the chainer, it is possible for encoder mappings to be corrupted for those later plug-ins (VSW-32804)
- When multiple S6L systems are configured in a redundant star network and connected using fiber, it is possible for WSG-HD I/O to not be available in SoundGrid Inventory after power cycling (VSW-31512)

Workaround:

- 1 Reset Network Port to “None.”
- 2 Power cycle the system.
- 3 Open SoundGrid Inventory.
- 4 Select LM network port.
- 5 Select Server.
- 6 Select Device.

- It is possible for Processing Delay information to not be correctly reported to S6L Automatic Delay Compensation (VSW-31180)
Workaround: In SoundGrid Inventory, change the Waves Server buffer value and then Save the Show file.

- Until further notice, do not use the PAZ Analyzer plug-in (VSW-29859)
- While the plug-in racks are loading, do not trigger any snapshots that include SoundGrid Rack in their scope. Doing so can interrupt loading and negatively affect individual plug-ins within SoundGrid Rack (VSW-24509)
- SoundGrid server(s) paired with one system in IO sharing will stay paired after network connections are moved to the WSG-HD card on the other S6L system, unless that server was removed via SoundGrid Inventory on the first system (VSW-23640)
- It is possible for the mouse to become unable to adjust parameters after opening the IR Folder via touch in the Waves PRS plug-in (VSW-27713)
- In redundant ring-based I/O Sharing configurations, if connections between S6L systems are lost (such as a redundant cable is removed or one of the S6L systems is shut down) it is possible for warnings to be displayed such as *Waves WSG-HD has been lost* and *Waves SoundGrid Server has been lost* (VSW-24790)

Workaround: Use a redundant star configuration, or run the control surface cable ring on one of the systems non-redundantly to avoid this behavior.

Waves v9

The following are known issues in Waves v9 only. These issues are fixed in Waves v10.

- Using and viewing Waves InPhase (sc) and InPhase Live (sc) plug-ins can cause the MTS to go blank and/or crash the S6L system. Please avoid use of these plug-ins in Waves v9 (VSW-26499)

- It is possible for incorrect parameter values to be recalled for Waves C6, H-EQ, and Q10 after recalling snapshots or loading Show files (VSW-26109, VSW-27678)
- It is possible for Waves Tune Real Time plug-in to cause the VENUE plug-in Rack reset when loading a Show (VSW-25728)
Workaround: Make sure that no SoundGrid Rack plug-ins containing Tune Real Time plug-ins are inserted in consecutive VENUE rack slots.
- When resetting a parameter on a Waves SoundGrid Rack plug-in using from the CKM/control surface, it is possible for the parameter to reset to the value stored in the current Show file instead of the default value defined in the plug-in (VSW-25712)
Workaround: Using your computer keyboard, Alt-click on the parameter.
- When saving a Waves plug-in Preset by clicking **Save** in the SoundGrid Rack menu bar, it is possible for a dialog to appear “The application is not responding. The program may respond again if you wait. Do you want to end this process?” (VSW-24210)
Workaround: Click End Process.

MLN-192 Milan Option Card

- In Options > Devices, the custom name field for MLN-192 cards is not currently supported.
Workaround: Enter a custom name for MLN-192 cards within an AVDECC controller such as HIVE.

Plug-Ins

- After adding three of the same plug-ins to rack slots (such as Avid Fairchild, or Smack!) one after the other, attempting to insert a 4th instance of that same plug-in can fail to load (VSW-31194)
Workaround: Insert any other plug-in of a similar type (such as Avid Pultec or Avid BF-3A), then the additional Avid Fairchild, Smack, or other.
- Ilok License Manager Clock Repair can fail to update when initiated from the S6L “Clock Needs Repair” alert (VSW-29700)
Workaround: Set the current time zone correctly in Options > Misc, connect internet to the ECx port, and click through the Clock Needs Repair dialog. This should resolve the issue. Alternatively, set the Time Zone correctly and then synchronize the iLok by removing it from the control surface and using the iLok License Manager application on a separate computer.
- Dyn3 Comp/Lim and Dyn3 Expander/Gate may cause the meters of all plug-ins to become sluggish (VSW-14044)
- In some circumstances, Pro Limiter in combination with Reverb One or Revibe can cause sluggish meters (VSW-14984)
- When Delay compensation is set to Mix & Inserts in Options > Pickoffs, inserts on Auxes will be compensated. This may cause phase issues with configurations and routing based on legacy (pre-S6L) systems (VSW-18300)
Workarounds: Turn off Mix & Inserts delay compensation (Options > Pickoffs), or remove plug-ins from affected Auxes, or manually delay affected Auxes.

Stage 64, Stage 32, Stage 16

- Disabling Sample Rate Conversion for ADAT or AES inputs is not currently supported (VSW-13499)
- Indication of the Lock status of digital inputs is provided on the Stage 64 only and not via the VENUE software (VSW-13498)
- Stage 64 output mutes trigger when the control surface reconnects after power failure (VSW-13518)
- Leaving slots empty between input cards on Stage 64 can result in loss of audio from cards in higher lettered slots (VSW-17409)
Workaround: Make sure all input cards are installed in consecutive, adjacent slots.
- PAD and Gain settings stored in a Show file may not be applied correctly after loading the Show file and then re-configuring Stage slots in the Connected Devices column of Options > Devices (VSW-31872)
Workaround: Re-configure Stage slots, then load the Show file.

ECx Ethernet Control

- Unsupported ECx connections can destabilize VENUE when connected to a large network (VSW-20684)

The ECx port on the S6L control surface is intended to be connected to a private network containing only S6L-compatible devices such as a laptop or tablet for remote control. Do not connect the **ECx** port directly to a LAN such as a corporate network which contains other types of devices. Doing so may disrupt the device discovery mechanisms used by some S6L components. In addition, when two systems are configured for I/O Sharing, self-assigned IP addressing on ECx can cause Slave Stage units to be unavailable, and/or to cause delays in the Plug-In Racks initializing. (VSW-23456)

Workaround: If you must connect ECx to a LAN (to, for example, access the Internet to activate the operating system on your S6L), connect a router with DHCP server capabilities between the **ECx** port and the LAN connection to isolate S6L from LAN traffic. If for some reason the **ECx** port was connected directly to a LAN, you must disconnect from the LAN and then restart the control surface before using the S6L system (to restart the control surface go to **Options > Devices**, hold down Alt+Shift and press SHUT DOWN).

General

- It is possible for the touch function to stop responding on the MTS or CTM if touched with more than 3 fingers simultaneously several times. This can occur after using a cloth to wipe down a screen. (VSW-33332)

Workaround: Power cycle the console to recover the touch function. (Only wipe down screens while the console is turned off.)

- Events: GPI Output Actions are not supported with Trigger of System Start (VSW-30524)
- Events triggered by Talkback On/Off fail to activate (VSW-33331)
- It is possible for some Stereo Groups, Mains, or Matrix right outputs to cease after certain actions (VSW-29064)
Workaround: Toggle a Hardware Insert on/off (or off/on) on the affected bus.
- MLN-192 sources may appear in menus such as Matrix Input when no MLN-192 card is installed (VSW-33249)
- Attention on Fader does not persist after spilling and unspilling an Aux in any non-Split banking mode (VSW-28119)
- It is possible for some fader strips to flash unexpectedly in the Universe view after entering Multi-Assign mode (VSW-26513)
- It is possible for Mix to Mon to be audible in a non-soloed Monitor bus in certain routing and VCA arrangements (VSW-30557)
- After loading a Show file transferred from a legacy VENUE system such as Profile or S3L-X, the default top row(s) of Channel control can appear empty (VSW-31647)

Workaround: Manually assign parameters to the upper row(s) using the CHANNEL Channel Control function.

Standalone Software

- Performance may be unreliable when using Parallels Windows 10 (VSW-28046)



Always un-install any older version of VENUE Standalone Software before installing a newer version.

- Dual Operator Mode cannot be enabled on Standalone Software (VSW-30552)

About System Test

- After clicking the X in the top right corner to close System Test, it is possible for the system to indicate “not responding” and for System Test to take up to 2 minutes before VENUE software is automatically relaunched (VSW-33207)

Workaround: Wait for System Test to close and for VENUE software to relaunch.

- Beginning in VENUE 5.5.1 the previously available Run System Test command was removed from the **Options > System** page. Beginning in VENUE 7.0, System Test is once again available in **Options > System**.



See the VENUE S6L System Guide.pdf for more information on System Test.

Updating MADI Card Firmware

If you have installed one or more MADI-192 MADI Option Cards 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 MADI card(s).

To update MADI-192 MADI Option Card firmware:

- 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 MADI Firmware icon on the Desktop.
- 6 Follow the on-screen instructions to update the firmware on your MADI-192 MADI Option Cards.
When the firmware update completes, the E6L engine shuts down (indicated by the front-panel System LED going dark, and the Status LED lighting amber).
- 7 After the E6L engine shuts down, do the following:
 - Disconnect power from the E6L and wait at least 30 seconds.
 - Make sure to disconnect the VGA monitor, mouse, and keyboard.
- 8 Power your system back on.



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Technical Support (USA)
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