



Pro Tools | S3 Guide

and EuControl 3.3 with Pro Tools 12.1

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

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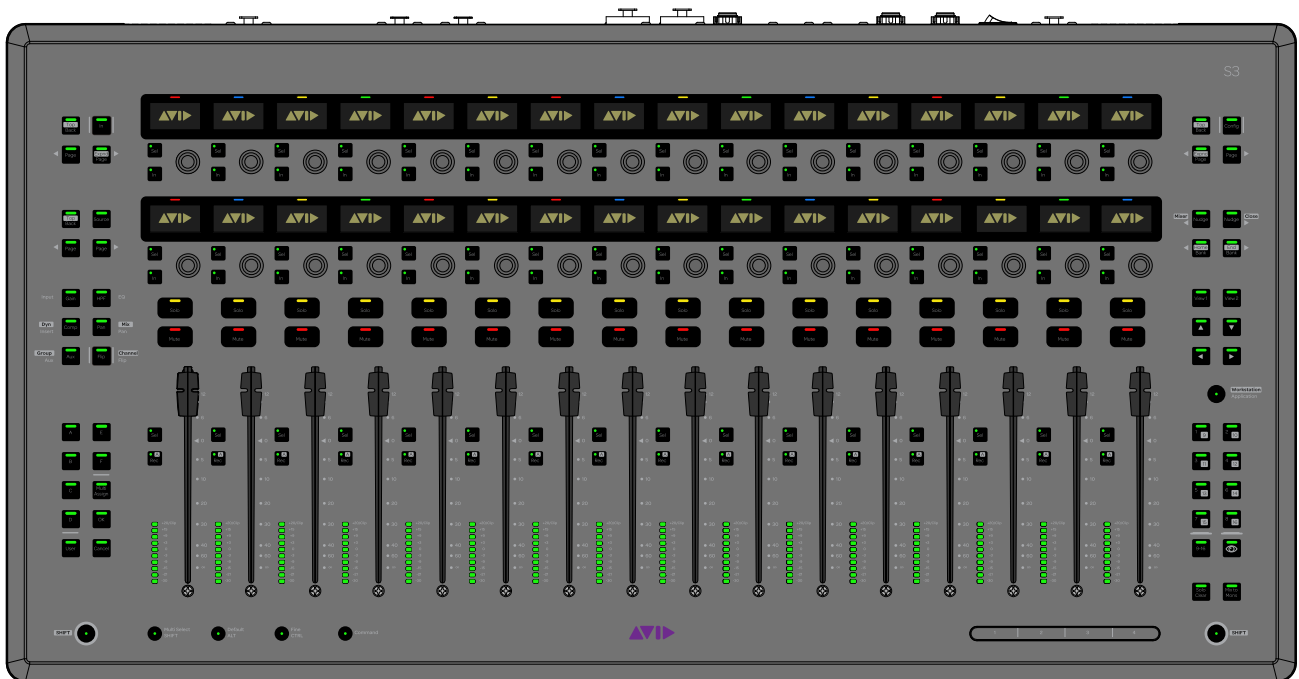
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Introduction

Welcome to the Pro Tools® | S3 studio controller and Ethernet AVB 4 in/6 out audio interface from Avid®. The S3 uses Avid's high-speed EUCON™ (Extended User Control) control protocol to enable fully integrated control of Pro Tools and other EU-CON-compatible audio and video applications via a 100 MB/s Ethernet connection. The same Ethernet connection also provides Ethernet AVB audio connections between the on-board audio I/O on the S3 and the workstation computer.

The S3, when connected to an E3 engine and up to four Stage 16 remote stage boxes, is also the central controller for the VENUE | S3L-X live digital mixing system.

 See the *VENUE | S3L-X System Guide* for more information.



EuControl Software

EuControl lets your workstation computer find, link, and communicate with the S3 via the EUCON protocol. EuControl also lets you set preferences for and customize the controls on your S3. EuControl software must be installed on the workstation computer before you can use the S3 with your application.

Ethernet AVB Audio

(AVB-compatible Mac Running OS X 10.9.x and Higher Required)

Ethernet AVB audio is a high-fidelity, low-latency Ethernet audio protocol used to connect the on-board audio I/O on S3 to your Core Audio- and AVB-compatible workstation computer. AVB audio must be enabled on the workstation computer before you can use the I/O on the S3 with your applications. See [S3 Audio I/O Connections](#) for more information.

What's Included

- S3 control surface
- Power supply with IEC cable
- Documentation pack, which includes the EuControl software Activation Card, S3 Welcome Letter, Health and Safety Guide and a warranty card



If you bought the S3 as part of a VENUE / S3L-X system, see the VENUE / S3L-X System Guide for information on what's included.

Additional Required Equipment

- Shielded Cat 5e (350 MHz) or better Ethernet Crossover cable(s)

Optional Equipment

- A standard Ethernet router or switch (for control surface functionality only)
- A qualified AVB-compatible Ethernet switch (for audio I/O and control surface functionality)

System Requirements and Compatibility

One S3 control surface can be used with EuControl Software at a time. One S3 can be used in conjunction with one Artist Transport at a time. Avid can only assure compatibility and provide support for hardware and software it has tested and approved. For compatibility information and other resources, visit:

www.avid.com/S3-Surface-Support

Registration

Review the enclosed Registration Information Card and follow the instructions on it to quickly register your purchase online. By registering, you become eligible to receive the following:

- Technical support information
- Software update and upgrade notices
- Hardware warranty information

About This Guide

This guide covers using the S3 control surface with Pro Tools and other EUCON-compatible applications.


Conventions Used in This Guide


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

Convention	Action
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.*

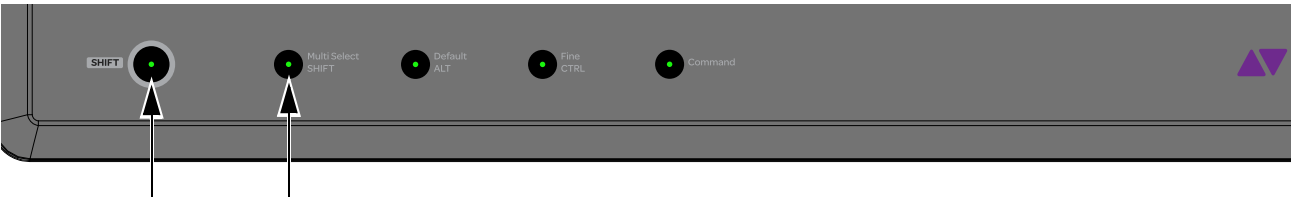
 *Important Notices include information that could affect your data or the performance of your system.*

 *Shortcuts show you useful keyboard or mouse shortcuts.*

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

Hardware Switches on S3 Control Surface

The names of switches on the S3 control surface are in bold, such as **Sel**. The two **Surface SHIFT** switches on the S3 are indicated by bold text, in all-caps to distinguish it from references to the **Multi Select/SHIFT** Global Modifier switch and the Shift key on your computer keyboard.



Surface SHIFT switch (left) and the Multi Select/SHIFT switch (right)

Accessing Secondary Functions Using Surface SHIFT

The **Surface SHIFT** switches on the S3 are used in conjunction with other switches to access a secondary layer of functions. The secondary functions of some switches are highlighted in gray above the primary function (such as **< Bank/Home**, where **Home** is the secondary function). Other switches have secondary functions that are not labeled on the surface. Read this guide to learn how to access all secondary functions.

The following terminology is used to describe **Surface SHIFT** functions.:

Example:

- “Press and hold the **Surface SHIFT** switch then press the **Bank/Home** switch”

is written as

- “Press **Surface SHIFT + Bank/Home**”

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 a + symbol to expand that heading to show subheadings. Click the – symbol to collapse a subheading. Click on a subject heading to jump to that page.
- 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.
- Any text entry in [blue](#) is an active link. Click on the link to go to that section.
- Select Find from the Edit menu to search for a subject.

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/US/account>

Support and Downloads

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

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

<http://euphonix.avid.com/artist/ux/euphonix/artist-support.html>

Products and Developers

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

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

Installation and Setup

This chapter shows how to get your S3 set up as a studio controller, and consists of the following steps:

- **Connecting S3**
- **Installing EuControl Software**
- **Enabling EUCON in Pro Tools**
- **Confirming EUCON**

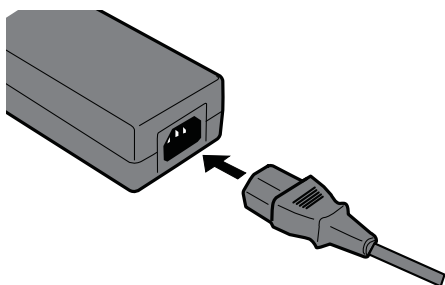
Connecting S3

First, connect your S3 directly to your workstation computer (the computer running Pro Tools or other DAW), or connect to a router that is then connected to your workstation computer, then power on S3.

⚠ *Standard routers and switches can be used if you are using the S3 only as a control surface. However, to use the built-in AVB audio I/O on the S3, the S3 must be connected directly to the computer or to an AVB-compatible Ethernet switch. Visit www.avid.com/compatibility for information on compatible peripherals.*

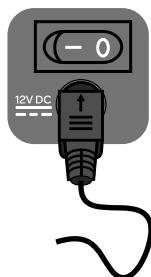
To connect your S3 to your workstation computer:

- 1 Connect the female end of the AC power cord into the power adapter and the male end into a power outlet. Make sure the AC power cord is pushed all the way into the adapter.



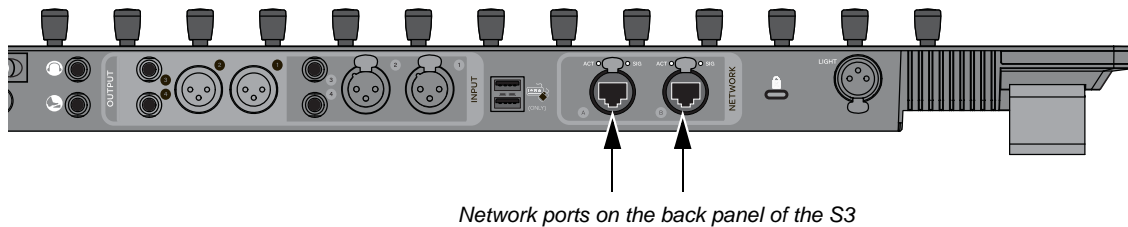
Connecting the AC power cable to the power adapter

- 2 Connect the DC output cable from the power adapter to the DC In jack on the back panel.





Connecting the DC power output cable to the DC In jack

- 3 Connect one end of an Ethernet Crossover cable into either of the Network ports on the back panel of the S3.

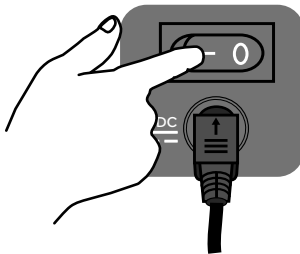


- 4 Connect the other end of the Ethernet cable to an available Ethernet port on your computer, or to the computer's Thunderbolt port using an Ethernet-to-Thunderbolt adapter.

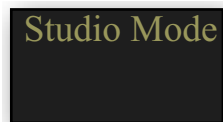
 An Ethernet-to-USB adapter may also be used, but audio I/O to and from the S3 is not supported.

 S3 cannot connect to your workstation computer using a wireless connection. A hard-wired network connection is required.


- 5 If you want to connect the S3 to a local area network, or to connect an Artist Transport, connect the Ethernet cable to an Ethernet router or switch, and make sure the router or switch is powered on before powering on the S3.
- 6 If you are connecting to a Mac with two Ethernet ports, we recommend you use Ethernet 1 rather than Ethernet 2. However, if you want to use Ethernet 2, do the following on your computer:
- On the workstation computer, go to **System Preferences > EUCON**.
 - Click the **Network Interface** pop-up menu and choose **Ethernet 2**.
- 7 Press the power switch on the back of the S3 to the “on” position. The faders jump and the LEDs blink during initialization.



- 8 When the S3 is finished initializing, confirm that the S3 is in Studio Mode, indicated by Studio Mode appearing in the 15th top-row encoder display.



Top-row encoders showing Studio Mode enabled

 If the S3's current mode does not appear in the two encoder displays after the S3 is powered on, the firmware on your S3 must be updated via VENUE Software 4.5 or higher. Connecting the S3 to an E3 engine with VENUE 4.5 or higher installed and powering on both devices automatically updates the firmware on the S3. See the *What's New in VENUE 4.5 Guide* for more information.

- 9 Do one of the following depending on the S3's current mode:
- If the S3 is in Studio Mode, proceed to [Installing EuControl Software](#).
 - If Live Mode is shown in the display instead of Studio Mode, proceed to [Toggling Studio and Live Modes](#).

Toggling Studio and Live Modes

The S3 operates in one of the two following modes:

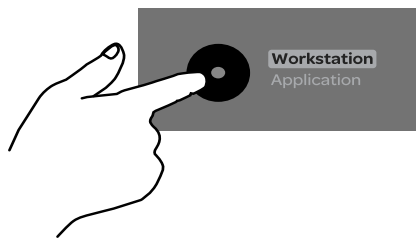
Studio Mode Lets you use the S3 with your workstation computer after EuControl software has been installed. If the S3 is in Studio Mode and is connected to an E3 engine (for use in an S3L live mixing system), the S3 will not be recognized by any E3 engines in the network.

Live Mode Lets you use the S3 with an E3 engine as part of an S3L live mixing system. If the S3 is in Live Mode and is connected to a workstation computer with EuControl software installed, the S3 will not be recognized by EuControl on the workstation computer.

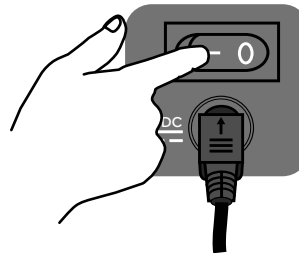
You can toggle the S3 between modes using the **Application/Workstation** switch.

To toggle between Live and Studio modes:

- 1 Power off your S3.
- 2 Press and hold the **Application/Workstation** switch, then press the power switch on the back of the S3 to the “on” position.



Press and hold the Application/Workstation switch...



...then press the S3 power switch to “On”

- 3 Keep holding the **Application/Workstation** switch until the two rightmost top row encoder displays (encoders 15 and 16) show Live Mode/Studio and OK, respectively.



Top-row encoder displays showing mode toggle controls

- 4 Press the encoder under the display showing Live Mode/Studio once, so that the desired mode appears above and in larger text than the other mode in the display.



Encoder display showing Studio Mode enabled

- 5 Press the encoder under the display showing OK. The S3 restarts automatically in the selected mode.

Installing EuControl Software

Next, install EuControl software on your workstation computer. An Internet connection is required to download EuControl.

To install EuControl software:

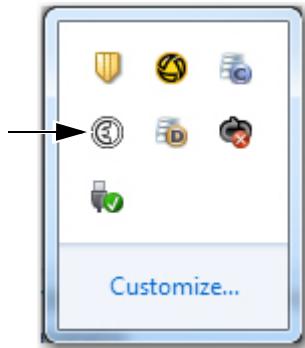
- 1 Visit www.avid.com/account and log into your Avid account (or create an account if you don't already have one) to download the EuControl installer for your workstation computer's platform (Mac or Windows).
- 2 When download is complete, locate the EuControl installer on your computer and double-click it to mount it (DMG on Mac) or uncompress it (ZIP for Windows).
- 3 In the resulting folder, locate and double-click the Install_EuControl file.
- 4 Follow the on-screen instructions to complete the installation.
- 5 When installation is complete, click Quit (Mac) or Finish (Windows). EuControl software on your computer launches automatically and is running when its icon appears:

Mac Wait up to 60 seconds. A lit EuControl icon in the menu bar indicates correct installation and your surface is attached in EuControl.



Lit EuControl icon in the Mac menu bar

Windows Wait up to 60 seconds. A lit EuControl icon appears in the system tray at the bottom of the screen. If you don't see the EuControl icon, it could be automatically hidden by Windows. Click on the small white arrow to show hidden icons.



Lit EuControl icon in the hidden icons view of the Windows system tray

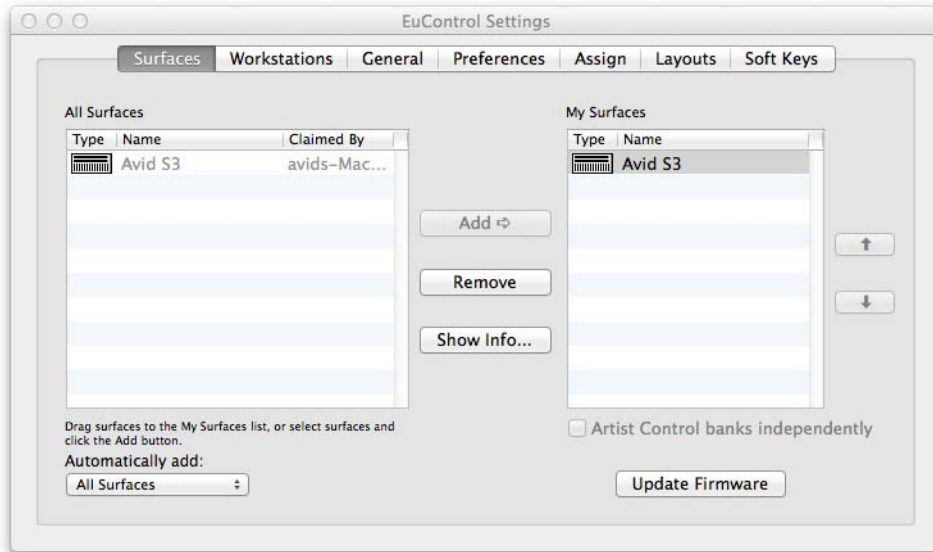
- 6 If the lit EuControl icon does not appear, do any of the following:
 - See [Add](#) to add S3 manually.
 - Click the EuControl icon in the menu bar (Mac) or right-click the choose Restart EUCON Applications (see [Restart EUCON Applications](#) for more information).
 - Shut down S3 and your computer, then turn them on (S3 first, then the workstation computer).
 - See www.avid.com/S3-Surface-Support for the most current troubleshooting information.
- 7 Proceed to [Updating S3 Firmware](#).

Updating S3 Firmware

After installing EuControl, make sure your S3 is running the latest firmware. The firmware is provided within EuControl, so an Internet connection is not required.

To update S3 firmware:

- 1 Click (Mac) or double-click (Windows) the EuControl icon and select EuControl Settings.
- 2 If necessary, click Surfaces to display the Surfaces tab.



Surfaces tab

- 3 Click Avid S3 in the My Surfaces list so it is highlighted.

💡 If S3 does not appear in the My Surfaces list, add it manually. See [Add](#).

- 4 Click Update Firmware. If the Update Firmware dialog shows a message that the surface is up to date, no further action is necessary.
- 5 If the firmware needs to be updated, follow the instructions in the Update Firmware dialog box to proceed, and make sure to observe the following guidelines when updating firmware:
 - Ensure that S3 is connected to a trustworthy power source.
 - Do not power off the S3 during the update or attempt to interrupt the update.

The status of the firmware update is shown on the S3 displays as well as in the EuControl dialog.

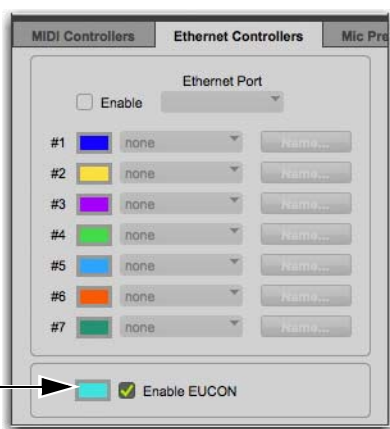
- 6 Click Done when the firmware update is complete, then proceed to [Enabling EUCON in Pro Tools](#).

Enabling EUCON in Pro Tools

When you first connect your S3, you must enable EUCON in Pro Tools, EUCON subsequently remains enabled in Pro Tools unless you disable it. To enable EUCON in other DAWs, see the documentation provided by the manufacturer.

To enable EuControl in Pro Tools:

- 1 Launch Pro Tools. If the Quick Start dialog appears, close it.
- 2 Choose **Setup > Peripherals**, and click the Ethernet Controllers tab.
- 3 Select **Enable EUCON**.



Enable EUCON check box

- 4 Click **OK**. You do not need to configure any other Ethernet Controllers settings. These settings do not apply to EUCON. Pro Tools scans your system until it identifies attached EUCON-compatible hardware. When Pro Tools finishes scanning your system, your controllers are ready to use with Pro Tools.
- 5 Proceed to [Confirming EUCON](#).

⚠ If you have recently updated from an earlier version of Pro Tools, go to [Optimizing EuControl After a Pro Tools Update](#).

Confirming EUCON

To confirm installation and communication:

- 1 Make sure you have enabled EUCON.
- 2 Open a session if one is not already open.
- 3 Verify that the channel strip displays above the bottom row of 16 encoders (the Channel Encoders) on the S3 show the track names for the first 16 tracks in the Pro Tools session.



Channel Encoder displays showing track names (first eight tracks shown)

- 4 In the Pro Tools Mix window, verify that the names of the tracks currently banked to the channel strips on S3 are highlighted with blue-green borders.



Pro Tools Mix window showing tracks currently banked to the S3 channel strips

- 5 Proceed to any of the following:
 - For instructions on using your S3 after initial installation, see [Powering-On Your System After Initial Setup](#).
 - To connect a second workstation computer, go to [Connecting a Second Workstation](#).
 - To connect a footswitch, go to [Connecting a Footswitch](#).

Powering-On Your System After Initial Setup

After the initial installation and setup, your system must be powered on in a specific order, as follows:

- 1 If connecting to a router, connect S3 to the router, connect the router to the workstation computer, and power on the router.
- 2 If connecting directly, connect S3 to the workstation computer.
- 3 Power on the S3.
- 4 Confirm that S3 is in Studio Mode. Enable Studio Mode if Studio Mode is not enabled (see [Toggling Studio and Live Modes](#)).
- 5 Once S3 is finished initializing, power on the workstation computer.



*If the S3 is not recognized by EuControl on your workstation computer (for example, because you powered S3 on after powering on the workstation computer), click the unlit EuControl icon in the menu bar (Mac) or System tray (Win) and choose **Restart EUCON Applications...** to relaunch EuControl and re-initiate the connection.*

Connecting a Second Workstation

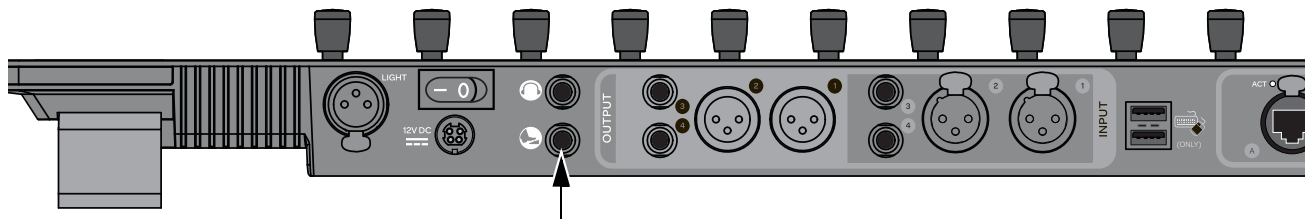
The S3 can control applications running on a second computer that is connected to the same network as the primary network, referred to in this guide as a *workstation*. If EuControl is running on the same workstation as all your audio/video applications you can skip these instructions.

To be able to control a second workstation:

- 1 Transfer the EuControl installer onto the second computer. After downloading, make sure the installer is mounted (DMG on Mac) or uncompressed (ZIP for Windows).
- 2 In the Extras folder, double-click the Install EuCon Workstation installer and follow the instructions to install the EuControl Workstation software.
- 3 When installation has finished, go to Spotlight (Mac) or Search (Windows), type “MC Client.”
- 4 Launch MC Client, and proceed to [Workstations](#) for information on attaching and detaching workstations.

Connecting a Footswitch

The S3 has a 1/4-inch footswitch input on the back panel, which can be used to punch in and out of recording in your DAW. See [Footswitch](#) for more information on configuring the footswitch.



Footswitch input on the back of S3

Optimizing EuControl After a Pro Tools Update

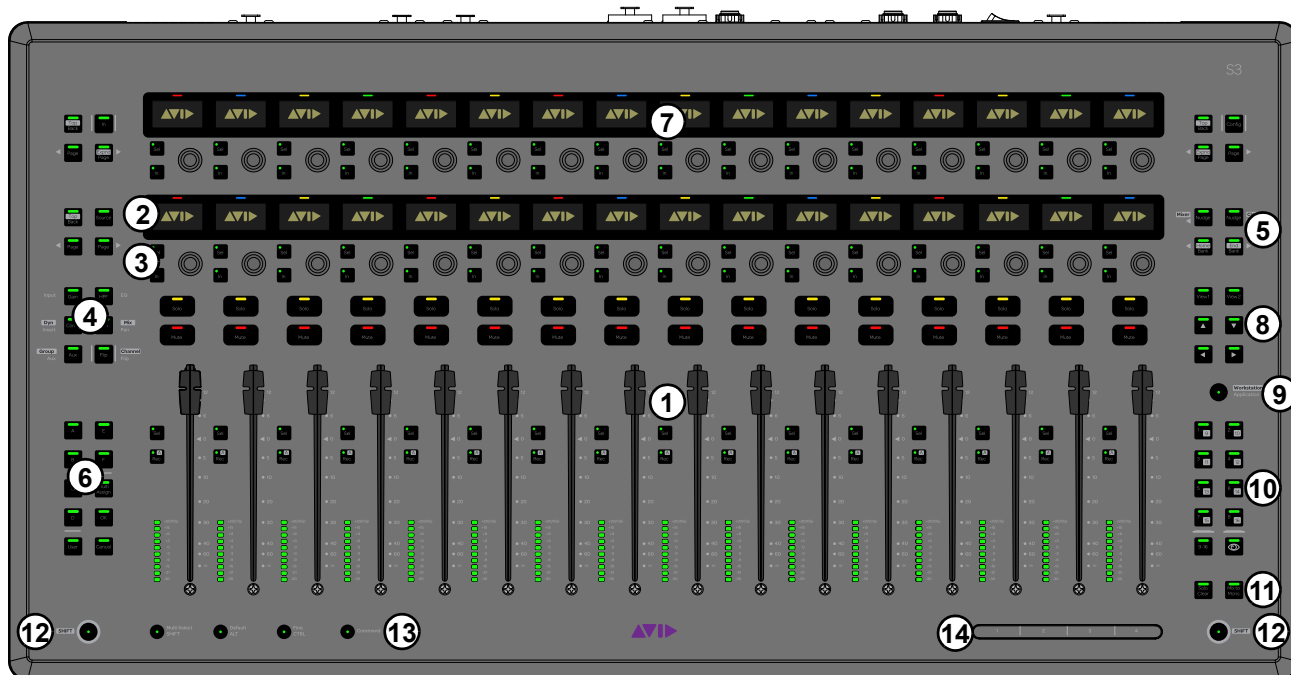
If you have recently updated Pro Tools (for example, from Pro Tools 11.3.1 to Pro Tools 12.x) and were using S3 or other Artist series devices with the previous version of Pro Tools, perform the tasks in this section to make sure you get the latest Appset functionality when using S3 with Pro Tools.

To optimize EuControl after an update:

- 1 On your computer, go to the following locations:
 - On Mac, go to: /Library/Application Support/Euphonix/UserSets/MC2User/MC_USER_SET_Root
 - On Windows, make sure “Show hidden files and folders” is enabled, and go to:
C:\Users\<enter your username here>\AppData\Roaming\Euphonix\UserSets\MC2User\MC_USER_SET_Root\
- 2 If an XML file is located in this folder, do one of the following:
 - If you did not modify the XML file, move the file to the Trash (Mac) or delete it (Windows).
 - If you modified XML file and want to retain the edits, move the file to a different location.
- 3 On your computer, go to the following locations:
 - On Mac, go to: /Library/Application Support/Euphonix/DYN_APPSETS
 - On Windows, make sure “Show hidden files and folders” is enabled, and go to:
C:\Users\<enter your username here>\AppData\Roaming\Euphonix\DYN_APPSETS
- 4 Locate the file called Pro Tools xxMac.xml, and move the file to the Trash (Mac) or delete it (Windows).
- 5 In Pro Tools, do the following:
 - Go to **Setup > Peripherals** and click the Ethernet Controllers tab.
 - Disable **Enable EUCON**.
 - Reenable **Enable EUCON**, making sure it is enabled before you close this window.

S3 Surface Controls Overview

This section provides an overview of the surface controls on the S3 when using S3 with EUCON-compatible applications. For specific S3 workflows, see [Using S3 with Pro Tools](#).



S3 top panel

- | | |
|---------------------------------------------------------|--------------------------------------------------------------|
| 1 – Channel Strips | 8 – View and Arrow Switches |
| 2 – Channel Strip Displays | 9 – Application/Workstation Switch |
| 3 – Assignable Channel Encoders | 10 – Right Control |
| 4 – Channel Encoder Assignment Switches | 11 – Solo Clear and Mix to Monitors Switches |
| 5 – Fader Banking Controls | 12 – Surface SHIFT |
| 6 – Left Control | 13 – Modifier Switches |
| 7 – Channel Control | 14 – Touchstrip |

Channel Strips

S3 provides 16 channel strips, each with a display, an Assignable Channel Encoder (each with its own encoder **Sel** and **In** switches), a **Solo** switch, a **Mute** switch, a 100mm motorized touch-sensitive fader, a channel select (**Sel**) switch, a record engage (**Rec**)/Automation Mode (**A**) switch, and a level meter.

Channel Strip Display

See [Channel Strip Displays](#).

Assignable Channel Encoder

See [Assignable Channel Encoders](#).

Solo

The **Solo** switch lights yellow when that track is soloed.

Mute

The track is muted (off) when the strip **Mute** switch is lit, and is on (unmuted) when not lit.

Fader

The fader controls the level for the track assigned to the channel strip, or the parameter assigned to the Channel Encoder if Flip to Faders is engaged. It is motorized so it reflects changes made in the application, such as automation. It is also touch sensitive, which some applications use for automation.

- ◆ When the **Select by Touch** General preference is selected in the EuControl Settings application (see [Select by Touch](#)), touching a fader selects that track in the application and attentions it on that strip. This is the same as pressing the fader **Sel** switch.
- ◆ Holding down the **Default/ALT** switch and touching a fader sets it to unity gain.

Channel Sel and Rec Switches

Each channel strip features a channel **Sel**, a channel **Rec** switch, and an automation mode switch (**A**), which operate as follows:

Sel Selects that track in the application, and *attentions* it for editing in the Channel Encoders when Channel Mode is enabled (see [Channel Encoder Modes](#)), and in Channel Control (see [Channel Control](#)). A line under the track name in a channel strip display indicates the track is attentioned.

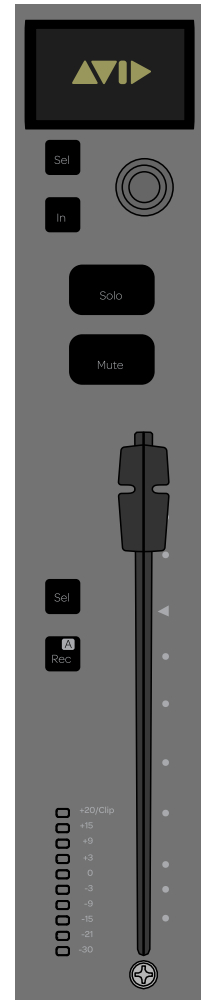
💡 *In Pro Tools and other applications, multiple tracks can be selected, but only one channel can be attentioned. In this case, the attentioned track is the last one selected.*

Rec Record-enables a track in the application.

- In Pro Tools, the **Rec** switch flashes red to indicate that track is enabled (armed) for recording, and is lit solid when recording is in progress.
- Pressing a lit **Rec** switch disables that track for recording.

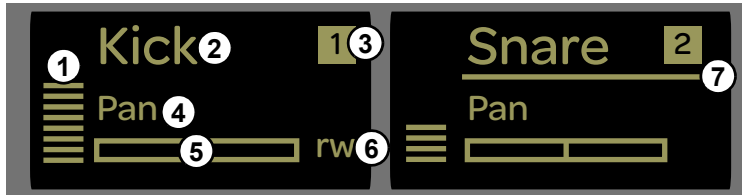
A (Surface SHIFT + Rec) Changes the automation mode for a track. The desired automation mode appears in the bottom right-hand corner of the channel strip display or on-screen.

💡 *You can also use the Function (F1–F16) switches to change track automation modes. See [Working with Automation](#).*



Channel Strip Displays

At the top of each channel strip is an Organic Light Emitting Diode (OLED) display. When S3 is first powered on, the Channel Encoders are in Normal Mode (see [Channel Encoder Modes](#)), and each display shows track information as follows:



Channel strip display in Normal Mode

1 – Meter Shows clip, peak, and normal values. It can show mono, stereo, or surround tracks.

2 – Track Name Shows the track name as it appears in the application. When a fader is touched, it shows the value of the fader. After releasing the fader it reverts to showing the track name.

3 – Track Number Shows the track number relative to its position in the application.

4 – Parameter Name Shows the name of the parameter currently assigned to the corresponding Channel Encoder. When an encoder is touched, it shows the value of the parameter. After releasing the encoder it reverts to showing the parameter name.

5 – Encoder Position Shows the relative setting of the control for the currently assigned parameter.

6 – Automation Mode Shows the track's current automation mode setting, as follows:

- blank = automation is off
- r = read
- w = write
- rw = read/write



For more information on working with automation on the S3, see [Working with Automation](#).

7 – Attention Indicator Indicates that the corresponding track is the attentioned track. Any parameters adjusted using the Channel Encoders in Channel Mode (see [Channel Encoder Modes](#)) and using Channel Control apply to the attentioned track (see [Channel Control](#)).

Display Sleep

To preserve display life, the channel displays enter sleep mode when not in use.

Assignable Channel Encoders

Each channel strip has one touch-sensitive, continuously rotating encoder for adjusting parameters as assigned by the Channel Encoder Assignment switches (see [Channel Encoder Assignment Switches](#)). Each encoder can also be pressed, which is typically used to access sub-menus. Each encoder also has corresponding **Sel** and **In** switches.

- A Channel Encoder **Sel** switch assigns a secondary function of the displayed parameter to the corresponding Channel Encoder. For example, engaging the **Sel** switch for an encoder controlling EQ frequency assigns Q (bandwidth) to that encoder.
- A Channel Encoder **In** switch toggles two-state parameters, such as turning an individual EQ Band on/off.

Channel Encoder Modes

The Channel Encoders operate in either Normal Mode or Channel Mode. The channel displays shows the current channel mode.

Normal Mode

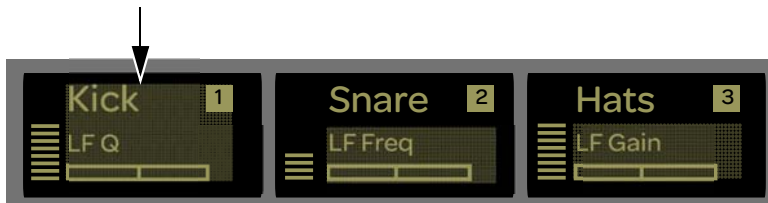
In Normal Mode, each Channel Encoder controls the same parameter for every track on the channel strips. A line appears under the attentioned track's name in the display.



Channel displays in Normal Mode, showing "Snare" as the attentioned track

Channel Mode

In Channel Mode, the 16 Channel Encoders control up to 16 different parameters for the attentioned track. In Channel Mode parameter names and value are highlight in each channel display. For the attentioned track, track name as well as parameter and value are highlighted.



Channel displays in Channel Mode, showing "Snare" as the attentioned track

Channel Mode is useful for editing EQs and plug-ins that have many parameters.

Basic Channel Encoder Use

When S3 is first powered on, the Channel Encoders are in Normal Mode and **Pan** is assigned to the Channel Encoders by default. Each Channel Encoder controls pan for its corresponding track on the strip.

To quickly access pan control on the Channel Encoders in Normal Mode:

- Press the **Pan** Channel Encoder Assignment switch.

To enable Channel Mode:

- 1 Press a Channel **Sel** switch to attention that track, then press **SHIFT + Flip**.
- 2 Press the desired channel Encoder Assignment switch
- 3 To exit Channel Mode, press **Shift + Flip** again.

💡 Pressing the EQ Channel Encoder Assign Switch automatically enables Channel Mode as well.

Channel Encoder Assignment Switches

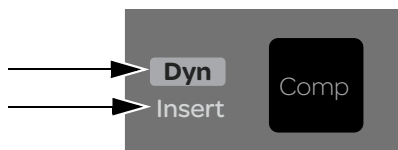
The Channel Encoder Assignment switches assign sets of adjustable parameters, called *Knob Sets*, to the Channel Encoders. A Knob Set is an array of controls used by EuControl-compatible applications to control plug-ins, EQs, dynamics, aux sends, and other processing functions using the controls on the S3. Some of these Knob Sets also have sub-menus.

One of the switches is always selected, and the associated parameters are assigned to the Channel Encoders until another Channel Encoder Assignment switch is pressed. When S3 is first powered on, **Pan** is selected by default.



Channel Encoder Assign switches

The labels *next* to each Channel Encoder Assignment switch indicate the parameters that can be assigned to the Channel Encoders. The text in white represents a switch's primary function, and the text in black represents a switch's secondary function. Secondary functions are accessed by pressing and holding the Surface **SHIFT** switch (see [Surface SHIFT](#)) then pressing the desired Channel Navigation switch.



Primary function (Insert) and the secondary function (Dyn)

! The text on the switch itself indicates the parameter that can be assigned to the Channel Encoders when using S3 as part on an S3L live system.

The following switches are provided:

Input Assigns hardware input parameters such as input routing, mic gains, phantom power, and other application-specific parameters to the Channel Encoders.



Use the Audio Control Encoders to control the S3's built-in I/O. See [S3 Audio I/O Connections](#) for more information.

Insert Assigns the top-level Insert Knob Set to the Channel Encoders. When **Insert** is pressed, in each channel display for all currently banked tracks the first insert slot (a) is shown, or a plug-in is shown if one is inserted. Pressing a Channel Encoder under the display showing the plug-in you want to adjust enables Channel Mode on the Channel Encoders, and the Knob Set for the selected plug-in is assigned to the 16 Channel Encoders for editing.



In the Insert Knob Set, parameters are mapped to the Channel Encoders according to the manufacturer's specifications. Parameter mapping can vary between plug-ins, even of the same type.

- ◆ Press the **Page >** Channel Encoder Navigation switch to access the next plug-in.
- ◆ Press the **Back** Channel Encoder Navigation Switch to return to the Channel Encoders to the top-level Inserts Knob Set. Or, you can simply press another Channel Encoder Assignment switch to navigate directly to another Knob Set.

Dyn Assigns the top-level Dynamics Knob Set to the Channel Encoders. Operation is similar to the Inserts Knob Set, except only the first inserted Dynamics plug-in on the channel is displayed and accessed.



In the Dyn Knob Set, parameter mappings to the Channel Encoders are standardized across dynamics plug-ins. For example, the threshold controls for two compressor plug-ins from different manufacturers appear on the same encoder.


Aux Assigns sends on the Channel Encoders.

- ◆ In Normal Mode, the first send is displayed, and pressing the **Page >** Channel Encoder Navigation switch assigns the next set of sends to the encoders.
- ◆ In Channel Mode, up to 16 sends for the currently selected channel can be accessed at once.

Group Displays the Group Knob Set to configure group or control group (VCA) membership.

- ◆ In Normal Mode, the first group is displayed, and pressing the **Page >** Channel Encoder Navigation switch displays the next group if applicable.
- ◆ In Channel Mode, up to 16 groups for the currently selected channel can be accessed at once.

EQ Assigns the top-level EQ Knob Set to the Channel Encoders. Operation is similar to the Inserts Knob Set, except only the first inserted EQ plug-in on the channel is displayed and accessed.

 *In the EQ Knob Set, parameter mappings to the Channel Encoders are standardized across EQ plug-ins. For example, high band gain controls for two EQ plug-ins from different manufacturers appear on the same encoder.*

Pan Displays the Pan Knob Set to configure stereo or surround panning. Pan controls are not available for tracks with mono or no output path assignments.

Mix (Surface SHIFT + Pan/Mix) Displays the Mix Knob Set to configure track output routing.

Flip Toggles what is currently assigned to the knobs (such as pan or send parameters) to the faders. A vertical double arrow appears in the channel strip display when the faders and knobs are flipped. Press **Flip** again to toggle the faders and knobs back to normal. You can use Flip mode with Aux sends, for example, to quickly set up headphone mixes using the faders.

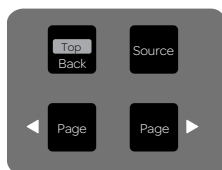


Flip indicator in OLED display

Channel (Surface SHIFT + Flip/Channel) Toggles the Channel Encoders between Normal Mode (unlit **Channel** switch) and Channel Mode (lit **Channel** switch). In Normal Mode, the attentioned track name is underlined to show which track's parameters will be expanded in Channel Mode.

Channel Encoder Navigation Switches

Since a Knob Set may have more parameters than encoders, use these switches to navigate through available parameters.



Channel Navigation Switches

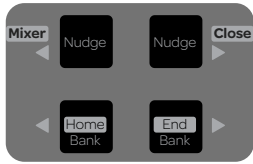
Back Returns to the previous Knob Set. Press **Back** repeatedly to back out of all sub-menus and display the top of the current Knob Set.

Source Shows the input sources for the currently banked channels in the channel strip displays.

< Page, Page > Assigns the previous or next set of parameters to the Channel Encoders. The switches light when there is a previous or next set to go to. For example, if Send A is assigned to the Channel Encoders, pressing **Page >** assigns Send B to the Channel Encoders.

Fader Banking Controls

Bank tracks to the channel strips using the **Bank** and **Nudge** switches. **Home** and **End** are shortcuts to the first and last banks, respectively.



Fader Navigation controls

Bank and Nudge

The **Bank** and **Nudge** switches change which tracks are assigned to the channel strips, as follows:

< Nudge Banks tracks one track to the left. If tracks 2–17 were banked to channel strips 1–16, tracks 1–16 are now banked to strips 1–16.

Nudge > Banks tracks one track to the right. If tracks 1–16 were banked to channel strips 1–16, tracks 2–17 are now banked to strips 1–16.

< Bank Banks 16 tracks to the left. If tracks 17–32 were banked to strips 1–16, tracks 1–16 are now banked to strips 1–16. Pressing the switch again does nothing because the first bank is already shown.

Bank > Banks 16 tracks to the right. If tracks 1–16 were banked to strips 1–16, tracks 17–32 are now banked to strips 1–16.

Mixer and Close

Not all applications support these switches.

Mixer (Surface SHIFT+ < Nudge/Mixer) Toggles Mix and Edit windows in Pro Tools.

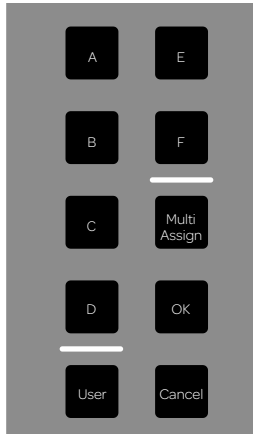
Close (SHIFT + Nudge >/Close) Closes any open window in the application.

Home and End

Home (Surface SHIFT + < Bank/Home) Banks tracks 1–16 to the channel strips.

End (Surface SHIFT + Bank >/End) Banks the last set of tracks to the strips.

Left Control



Left Control

Switches A–F

By default, these switches let you recall custom fader banks and layouts, as created and stored using the Layouts and Assign tabs of the EuControl Settings application. You can recall up to 12 custom fader layouts using switches **A–F**. **A–F** recall mixer layouts 1–6. The Shift layer (**Surface SHIFT + Bank A–F**) recalls layouts 7–12. See [Storing and Recalling Custom Layouts](#) for more information.

You can also customize these switches in EuControl. See [Soft Keys](#) for more information.

OK and Cancel Switches

Multi Assign Performs the Do to Selected command. For example, use this to create a send or insert a plug-in on all selected tracks. See [Assigning Sends](#) for an example.



Pressing and holding Surface SHIFT + Multi Assign performs the Do to All command. Use this to create a send or insert a plug-in on all tracks in the session.

OK Confirms and closes dialogs, and is the equivalent of pressing the Enter key on a computer keyboard.

Cancel Closes dialogs without making any changes, and is the equivalent of pressing the Escape key on a computer keyboard.

User Saves the current session.

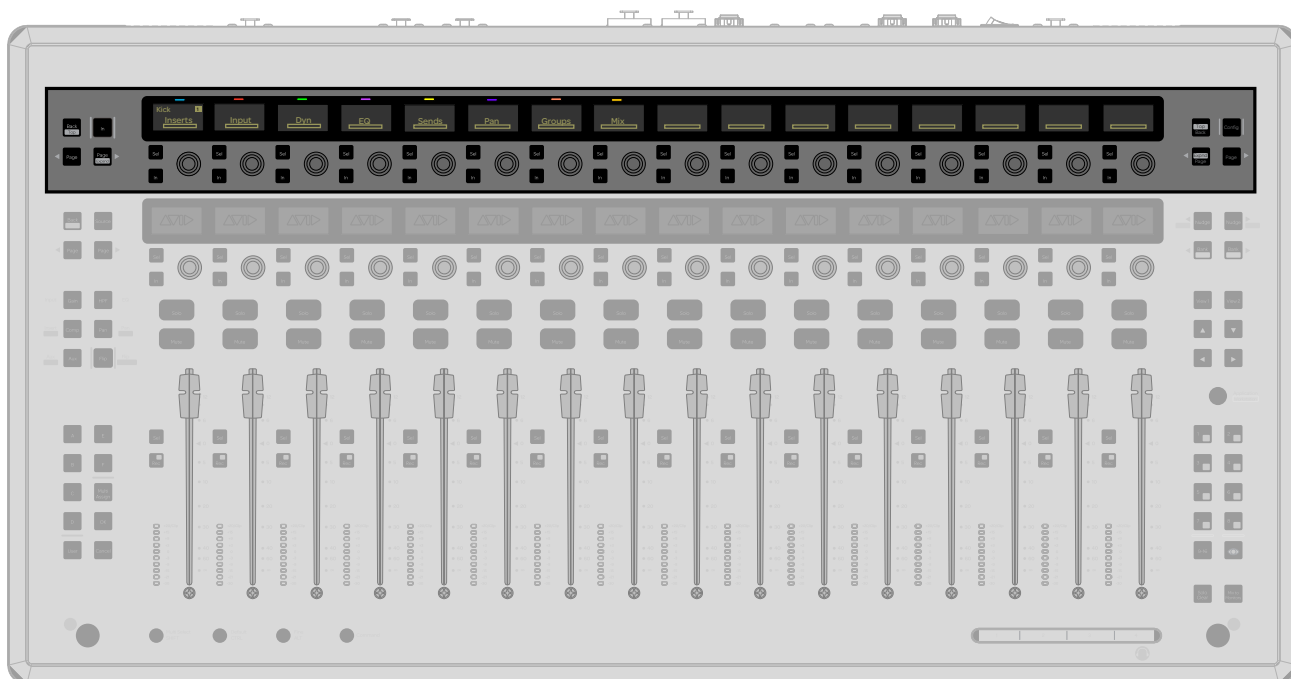
To save the current session:

- 1 Press **User**.
- 2 Press **User** again to confirm, or press **Cancel** to not save.

Channel Control

The top row of 16 encoders and associated navigation switches is called *Channel Control*. Channel Control lets you adjust a variety of parameters for the currently attentioned track. Channel Control and the bottom-row Channel Encoders operate independently, so you can adjust two sets of parameters for a single channel. You can also access controls for the S3's built-in I/O using Channel Control (see [S3 Audio I/O Connections](#) for more information).

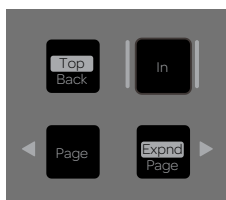
Each Channel Control Encoder features a corresponding display, a select (**Sel**) switch, an **In** switch, and a color-by-function LED. Four Channel Control Navigation switches are provided for navigating through parameters.



Channel Control showing the top-level Channel Control Knob Set (I/O controls are hidden)

Channel Control Navigation Switches (Left)

These switches let you navigate through the available pages of Channel Control parameters. An **In** (enable/bypass) switch is also provided.



Channel Control Navigation switches

The following switches are provided:

Back/Top Backs out of the currently assigned Knob Set.



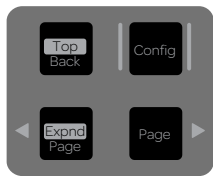
Surface SHIFT + Back/Top returns Channel Control to the top-level Channel Control Knob Set.

In Toggles in/out whatever is assigned to the Channel Control Encoders, such as sends and plug-ins. A lit switch indicates that the send or plug-in is in.

< Page, Page > Assigns the previous or next page of parameters. These switches light when there is a previous or next set to go to.

Channel Control Navigation Switches (Right)

These switches provide access to Config mode and the controls for the built-in I/O in Channel Control.



Config switch and I/O Controls

Config Enables *Config* mode on the Channel Control Encoders, letting you assign plug-ins to tracks, and assign track and send input and output paths. See [Routing Track Input/Output](#) and [Assigning Plug-Ins](#) for more information.

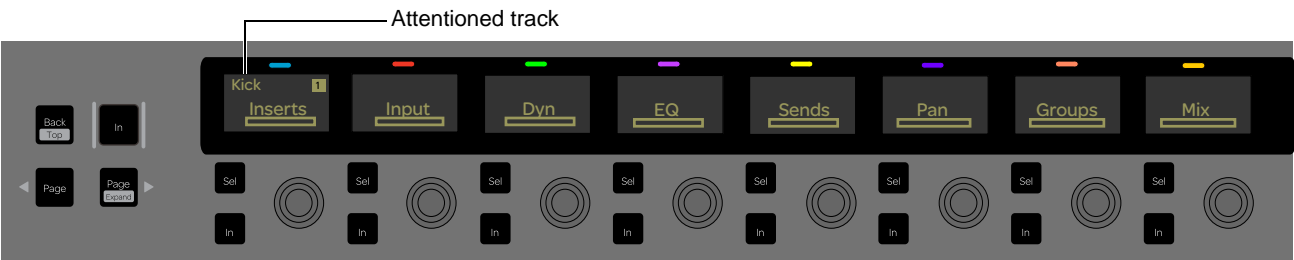
< Page, Page > Lets you show/hide the Audio Control (controls for the built-in I/O) on the Channel Control Encoders when pressed simultaneously. I/O controls are hidden by default. See [Accessing Audio Control on the S3](#) for more information.

Basic Channel Control Use

When S3 is first connected to a session in your DAW, the top-level Knob Set for the currently selected channel is shown in the Channel Control displays. The types of parameters that can be spilled to the Channel Control Encoders vary depending on the type of channel selected (audio track, instrument track, etc.).

To adjust parameters using Channel Control:

- 1 Select a track. If multiple channels are selected, the last selected track is the attentioned track, and is the targeted channel for any changes made in Channel Control. The name of the attentioned track and its track number is shown in the leftmost Channel Control display.



Channel Control top-level Knob Set, showing the attentioned track in the leftmost display

- 2 Press a Channel Control Encoder under the display showing the parameters you want to adjust. For example, to adjust an EQ plug-in inserted on the currently selected channel, press the Channel Control Encoder under the display showing EQ. The parameters are spilled across the top 16 encoders, and the LEDs light to reflect the currently assigned function.
- 3 To go to a different Knob Set, press the **Back** Channel Control Navigation switch to return to the top-level Knob Set, then press another Channel Control Encoder.

Channel Control LED Color-Coding

Channel Control LEDs are color-coded by function, as follows:

Channel Control Functions and Corresponding LED Colors

Function	Color	Function	Color
Insert	Turquoise (blue/green)	Sends	Yellow
Input	Red	Pan	Blue
Dyn	Green	Groups	Orange
EQ	Purple	Mix	Amber

View and Arrow Switches

By default, these switches provide recall of Memory Locations, and zoom controls. You can also customize these switches in EuControl. See [Soft Keys](#) for more information.



Window Navigation controls

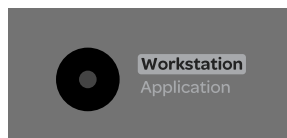
View 1 and View 2 Recall Memory Locations 1 and 2 respectively. If no Memory Locations exist, these switches do nothing.

▲ ▼ Adjust vertical zoom (track height) of all tracks in the Timeline display of the Edit window.

◀ ▶ Adjust horizontal zoom (zoom in/out) of all tracks in the Timeline display of the Edit window.

Application/Workstation Switch

This switch lets you cycle through the available applications and workstations.

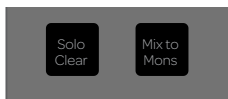


Application/Workstation switch

Application Toggles between the two most recently used open applications. Hold down **Application** and press **Bank >** to cycle through all open applications. Hold down the **Application** key and press **< Bank** to cycle through applications in the opposite direction.

Workstation (Surface SHIFT + Application/Workstation) Attaches the S3 to another workstation, where applicable. S3 can control applications running on a second computer, referred to in this guide as a workstation. You must first use EuControl to create a list of workstations that this key switches between. See [Workstations](#) for more information.

Solo Clear and Mix to Monitors Switches



Solo Clear and Mix to Monitors switches

These switches provide the following functions:

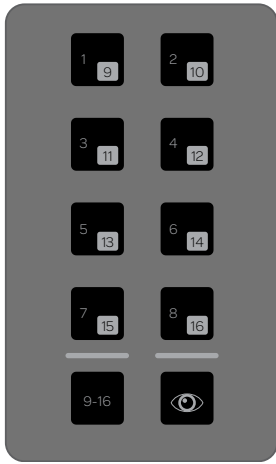
Solo Clear Clears any currently soloed channels.

Mix to Mons Is not currently implemented for DAW use.

Right Control

By default, switches **F1–F8 (F9–F16)** provide control over the automation mode for one or more selected tracks in two banks of switches. For more information on working with automation on the S3, see [Working with Automation](#).

You can also customize these switches in EuControl. See [Soft Keys](#) for more information.



Automation Controls

The following table shows the default function of each switch in this section.

Switch	Automation Function	Switch	Automation Function
F1	Write	F2	Read
F3	Touch	F4	Automation Off
F5	Latch	F6	Automation Match
F7	Trim	F8	Automation Window
F9	Preview	F10	Write to All/Selected
F11	Punch Preview	F12	Write to Start
F13	Capture	F14	Write to End
F15	Punch Capture	F16	Write to Next
9–16	Toggles switches between banks F1-F8 and F9-F16	Show Me (Eye Icon)	Opens EuControl Settings > Soft Keys > Right Control section

To set the automation mode on a single track:

- Press and hold the Function switch for the desired Automation Mode, then select a channel.

To set the automation mode on multiple tracks:

- 1 Select multiple channels.
- 2 Press and hold **Multi-Select/SHIFT+ ALT**, then press the switch for the desired Automation Mode.

The Function Switch LED lights whenever its respective automation mode is selected. In certain automation modes such as Write, the LED flashes.

Surface SHIFT

Some switches have secondary functions, highlighted in gray above the primary function (such as **< Bank/Home**, where **Home** is the secondary function). To access these secondary functions, use either of the two **Surface SHIFT** switches located at the lower-left and lower-right sides of the console surface. **SHIFT** can be engaged momentarily or latched on.



Surface SHIFT switch

To engage Surface SHIFT momentarily:

- Press and hold the **Surface SHIFT** switch.

To latch SHIFT on:

- ◆ Press and release either **Surface SHIFT** switch. **Surface SHIFT** is lit when engaged; press either **Surface SHIFT** switch to unlatch.

Modifier Switches

The Modifier switches provide frequently used shortcuts that can be applied to console actions and software screen interactions. In Pro Tools, these switches duplicate the function of the Pro Tools computer keyboard modifiers.



Global Modifier switches

Multi Select/SHIFT Duplicates the function of the Shift key on the computer keyboard.

Default/ALT Duplicates the function of the Option key (Mac) or the Alt key (Windows) on the computer keyboard.

Fine/CTRL Duplicates the function of the Control key (Mac) or the Windows key (or Start) on the computer keyboard.

Command Duplicates the function of the Command key (Mac) or the Control key (Windows) on the computer keyboard.

Touchstrip

By default, the four Touch strip Zones provide transport controls. You can also customize these switches in EuControl. See [Soft Keys](#) for more information.



Transport controls

To use the Transport:

- 1 Press and hold **Surface SHIFT**.
- 2 Press the following Zones for the various transport functions:
 - 1 (**Rewind**) Rewinds until released.
 - 2 (**Fast Forward**) Fast forwards until released.
 - 3 (**Play/Stop**) Engages play when the transport is stopped; stops the transport when play is engaged.
 - 4 (**Record Arm**) Arms the transport for recording.

Using S3 with Pro Tools

This section provides information on the latest Appset functionality when using S3 with the latest version of Pro Tools. If you have updated from a previous version of Pro Tools, see [Optimizing EuControl After a Pro Tools Update](#)

Track Basics

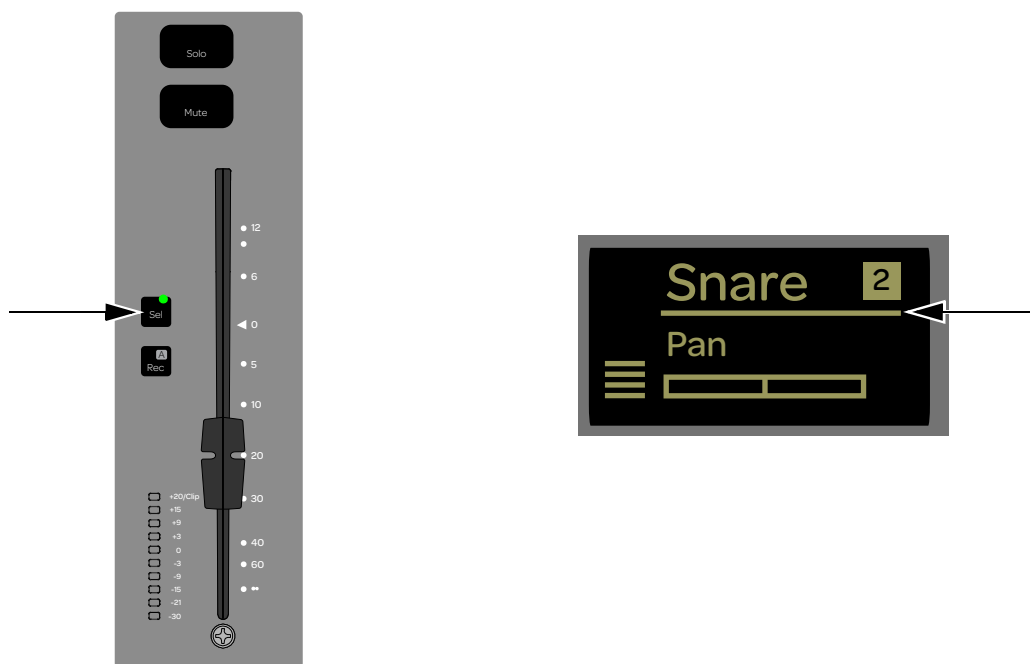
This section shows how to select, attention, and route tracks to outputs.

Selecting and Attentioning Tracks

You can select and attention tracks using channel **Sel** switches. You can use the Modifier switches to select multiple channels. When multiple channels are selected, the last selected track is the attentioned track.

To select a track:

- Press any channel **Sel** switch. The track is selected in Pro Tools, and that track is attentioned on the S3.



Channel Sel switch (left) and a channel display showing that the corresponding track is attentioned (right)

To select all tracks:

- Hold the **Default/ALT** Modifier switch and press any unlit channel **Sel** switch.

To deselect a track:

- Hold **Command** and press a lit channel **Sel** switch.

To deselect all selected tracks:

- Hold **Default/ALT** switch and press any lit channel **Sel** switch.

To select a range of tracks (multi-select):

- 1 Press the first track's channel **Sel** switch (usually the leftmost track you want to include in the selection).
- 2 Hold **Multi Select/SHIFT** and press **Sel** on the last (right-most) track. All tracks between the two are selected.

To select non-adjacent tracks (add to a selection):

- 1 Press the channel **Sel** switch to select any track.
- 2 Hold **Command** and press an unlit channel **Sel** switch.



Modifier switches

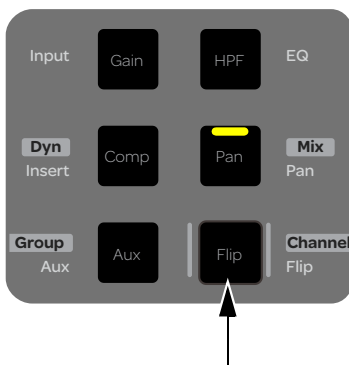
Adjusting Track Volume and Pan

To adjust track volume:

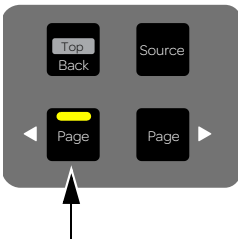
- Adjust the fader for that track.

To adjust track pan:

- 1 If unlit, press **Pan** so that it stays lit.



- 2 Rotate the encoder below the name of the track you want to pan. Stereo tracks default to left pan.
- 3 To adjust right side pan on stereo tracks, press the lit **Page >** Channel Encoder Navigation switch and rotate the encoder for the desired track. The display shows R Pan above stereo tracks and the **< Page** key lights.
- 4 To return to left side pan, press the lit **< Page** switch.



To reset pan to 0 (center):

- 1 If unlit, press **Pan** so that it stays lit.
- 2 Press the Channel Encoder below the name of the track you want to reset to center.



The standard Pro Tools modifier for parameter reset by holding Option (Mac) or Alt (Windows) can also be used to reset controls. For example, holding Option (Mac) or Alt (Windows) and touching a fader resets the fader to 0/unity.

Surround Panning on S3

Use the Channel Encoders or Channel Control to control multichannel pan parameters.

To pan in surround using the Channel Encoders:

- 1 Select a track assigned to a multichannel output path (such as a 5.1 or 7.1 output path).
- 2 Press **Pan**. The first Multichannel pan parameters such as Front Left/Right (for 5.1 outputs) appear on the Channel Encoders.
- 3 Press the lit **Page >** switch to show other available pan parameters.
- 4 Rotate an Encoder to adjust the selected parameter.
- 5 To reset a parameter to its default setting, press the Encoder for that parameter.

To pan in surround using Channel Control:

- 1 Select a track assigned to a multichannel output path (such as a 5.1 or 7.1 output path).
- 2 Press the Channel Control Encoder under the display showing **Pan**. Multichannel pan parameters appear across Channel Control.

Record Enabling Tracks

This section explains how to use track and deck record enable commands.

To record enable a track:

- Press the channel **Rec** switch. The switch flashes red.

To record enable additional tracks:

- Hold **SHIFT/Multi Select** and press additional channel **Rec** switches.



You can set Pro Tools Preferences for latching record enable, so you don't have to hold the Shift key to record enable additional tracks. For more information, see the Pro Tools Reference Guide.

To record enable all tracks:

- Hold **Alt** then press a channel **Rec** switch.

To use the Touchstrip to control the transport for recording:

- 1 Press **Surface SHIFT + Touch Strip Zone 4** to arm the transport. The Record icon in Pro Tools flashes red.
- 2 Press **Surface SHIFT + Touch Strip Zone 3** to commence recording.
- 3 To stop recording, press **Surface SHIFT + Touch Strip Zone 3** again.
- 4 To disarm the transport, press **Surface SHIFT + Touch Strip Zone 4**.

Flipping Encoder Parameters to Faders

S3 lets you “flip” parameters mapped to the Channel Encoders to the faders and the track level control to the Channel Encoder. The following example shows how to flip pan to faders. Flip also works with sends and plug-ins.

To flip sends to faders:

- 1 Select a track that has one or more sends assigned to it.
- 2 Press **Pan**.
- 3 Press **Flip**.
- 4 Adjust a fader to adjust pan for the corresponding track.
- 5 Adjust the Channel Encoder to adjust track level for the corresponding track.
- 6 Press **Flip** again to flip parameters back to the Channel Encoders.

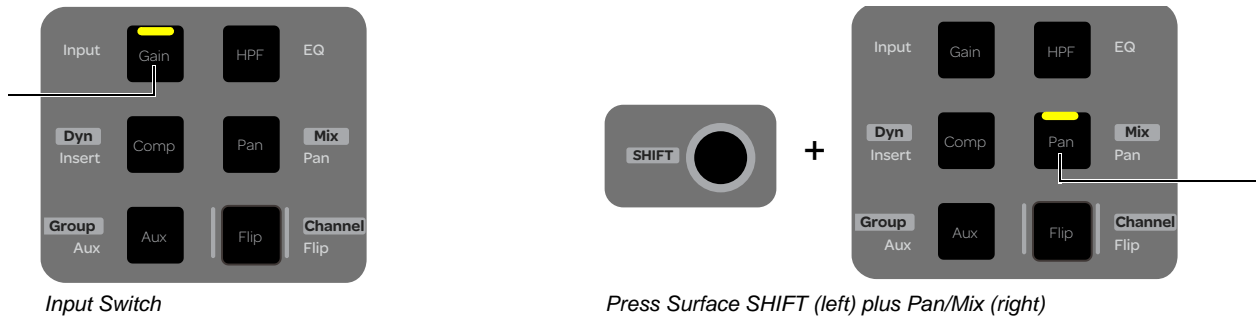
Routing Track Input/Output

You can route track I/O using the Channel Encoders or Channel Control.

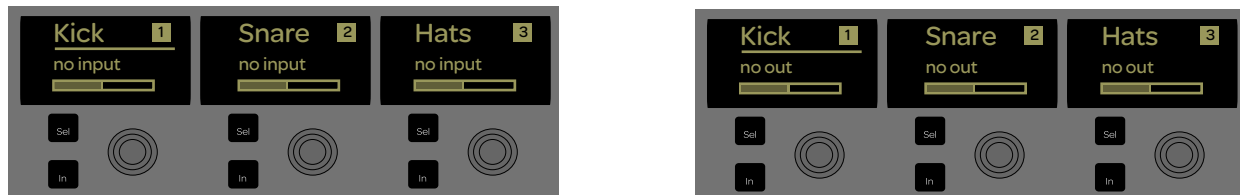
Using the Channel Encoders

To route track input or output using the Channel Encoders:

- 1 Select a track. If several tracks are selected, make sure the track you want to adjust is attentioned.
- 2 Do either of the following:
 - To assign track input, press **Input**.
 - To assign track output, press **Surface SHIFT + Pan/Mix**.

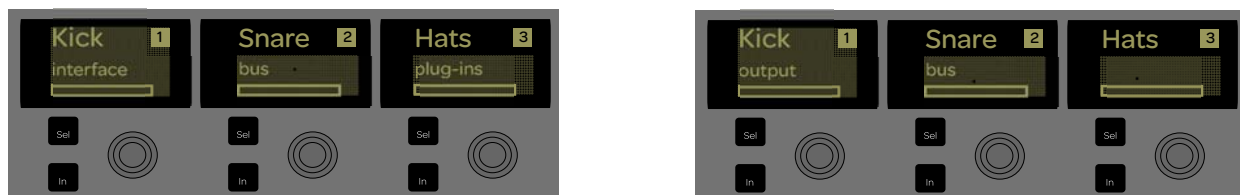


The channel displays show the current input or output assignments for the banked tracks.



Current input assignments (left) and output assignments (right) in the channel displays


- 3 Press the Channel Encoder for the track you want to assign. Channel Mode is enabled, and the leftmost channel displays show the available types of input sources (interface, bus, or plug-ins) or output destinations (output or bus) for the selected track.



Input types for the selected track in the channel displays

Output types for the selected track in the channel displays

- 4 Under the display showing the desired input or output type, rotate the corresponding Channel Encoder until the desired input or output appears in the display.
- 5 Press the corresponding Channel Encoder **In** switch to assign the selected input or output. A lit Channel Encoder **In** switch indicates assignment.
- 6 To reassign, rotate the Channel Encoder until the desired input or output appears and press the Channel Encoder In switch.
- 7 To exit assign mode, press **Surface SHIFT + Flip/Channel**.

 A track can be assigned to multiple outputs. See [Multiple Output Path Assignments](#).

Using Channel Control

To route track input or track output using Channel Control:

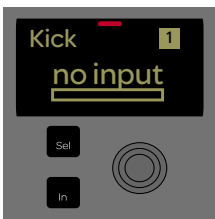
- 1 Select a track. If several tracks are selected, make sure the track you want to adjust is attentioned.
- 2 Make sure the top-level Channel Control Knob Set is displayed. Press the **Back** Channel Control Navigation switch until it is displayed.



Channel Control top-level Knob Set

- 3 Do either of the following:
 - To assign track input, press the Channel Control Encoder under the display showing **Input**.
 - To assign track output, press the Channel Control Encoder under the display showing **Mix**.

A Channel Control display shows the current input or output assignment for the selected track.



Channel Control display showing current input assignment (no input) for the attentioned track

- 4 Press the Channel Control Encoder under the display showing the current assignment. The leftmost Channel Control displays show the available types of input sources (interface, bus, or plug-ins) or output destinations (output or bus) for the selected track.



Channel Controls displays showing available input types

- 5 Rotate the Channel Control Encoder under the display until the desired input or output appears in the display.
- 6 Press the corresponding Channel Control Encoder **In** switch to assign the selected input or output. A lit Channel Encoder **In** switch indicates assignment.
- 7 To reassign, rotate the Channel Control Encoder until the desired input or output appears and press the Channel Encoder **In** switch.
- 8 To exit assign mode, press **Surface SHIFT + Flip/Channel**.



To assign a track to multiple outputs, see [Multiple Output Path Assignments](#).

Multiple Output Path Assignments

You can assign a Pro Tools track to multiple output paths.

To assign another track output:

- 1 Repeat the previous instructions to assign a track output using the Channel Encoders or Channel Control.
- 2 Rotate the encoder to select the desired output type.
- 3 Press the corresponding Channel Encoder **Sel** switch to assign the selected output. The new assignment is *added* to the current assignments, and is indicated by a lit Channel Encoder **Sel** switch. When a track has multiple output assignments, a plus (+) sign appears next to the current track output assignment in the channel display (after exiting the Input Knob Set) and on-screen.



Channel display showing a track with multiple output assignments

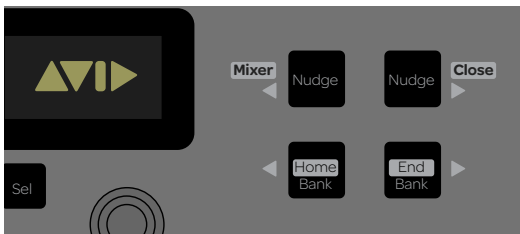
- 4 To clear all other assignments and assign the currently selected output, rotate the encoder to the desired output and press the encoder **In** switch.

Banking Tracks

Bank tracks to the channel strips using the **Bank**, **Nudge**, **Home**, and **End** switches. You can also bank tracks to channel strips using the Bank **A–F** switches by creating custom Layouts. p-o-[=

To bank tracks to fader strips:

- 1 Press the **Bank >** switch to bank the next set of 16 tracks. If tracks 1–16 were assigned to fader strips 1–16, tracks 17–24 are now assigned to the 16 fader strips.
- 2 Press the **Nudge >** switch to bank tracks one channel to right. If tracks 1–16 were assigned to fader strips 1–16, tracks 2–17 are now assigned to the 16 fader strips.



Nudge and Bank switches

- 3 Press **Home** (**Surface SHIFT + < Bank**) to restore tracks 1–16 to the channel strips.
- 4 Press **End** (**SHIFT + Bank >**) to bank the last set of tracks to the channel strips.

Storing and Recalling Custom Layouts

Layouts let you assign specific tracks to specific channel strips on the S3, and have those channel strips ignore banking and nudging (ensuring that the specific tracks remain available for as long as the Layout is active). You can store Layouts using the Assign and Layouts tabs of the EuControl Settings application. Once stored, you can then recall Layouts using the Bank switches **A–F**. Bank switches **A–F** correspond to Layouts 1–6 respectively. **Shift + A–F** correspond to Layouts 7–12 respectively. Layouts are saved with your Pro Tools session.

Creating a Default Layout

Before creating a custom Layout, we recommend saving one default “home” Layout so you can quickly return fader strips to standard banking.

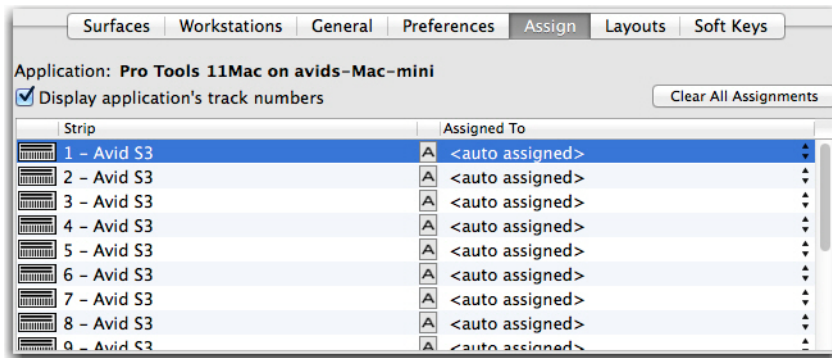
To create a “home” Layout and save it to Bank switch A:

- 1 Launch Pro Tools (or another application) and open your session.
- 2 Click the EuControl icon on the taskbar (Mac) or the System tray (Windows), and select EuControl Settings to open the EuControl Settings application.
- 3 Click the Assign tab and make sure Pro Tools (or your other targeted application) appears next to Application. The 16 S3 channel strips appear in the Strip column, and tracks assigned to each channel strip appear in the Assigned To column.



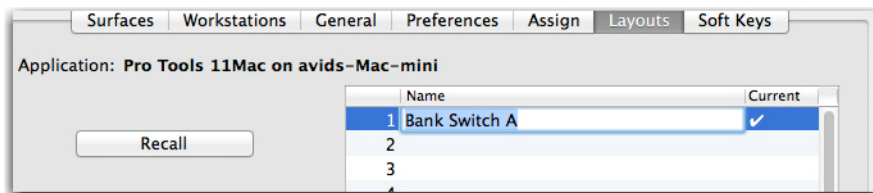
You can also press Surface SHIFT + a channel Sel switch to automatically open the Assign tab of EuControl Settings.

- 4 Make sure all strips say <auto assigned> in the Assigned To column. If any are not, click the displayed name in the Assigned To column and choose <auto assigned>.



Assign tab showing all Strips are auto-assigned

- 5 Click the Layouts tab, and double-click the first layout in the list, type in a name, then press Enter.



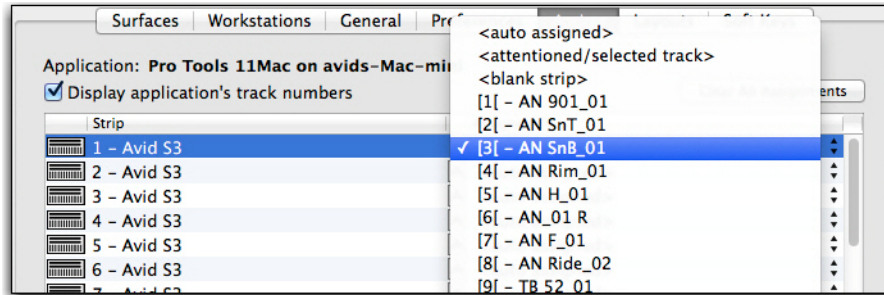
Enter a name for a Layout

- 6 Making sure row 1 is still highlighted, click Store. You can recall your “home” Layout by pressing Bank switch **A**.

Creating a Custom Layout

To create a custom Layout on Bank switch B:

- 1 Click the Layouts tab, double-click row 2, type in a name, and press Enter.
- 2 Be sure the Layout you have named is highlighted, then click the Assign tab.
- 3 Click in the Assigned To column and select a track from the pop-up to assign (lock) that track to the corresponding channel strip. Repeat for each available strip.



Assigning a track to a channel strip

- 4 Return to the Layouts tab and click Store. The Layout is saved with your Pro Tools session.
- 5 On the S3, press Bank switch **B** to recall the first custom Layout.

Layouts and Banking/Nudging

Once you recall a Layout, banking or nudging only moves focus by the number of available (<auto assigned>) channel strips. For example, if a Layout includes three tracks assigned to strips 1–3, pressing **Bank >** only banks one strip at a time (since only one fader, number 4, is <auto assigned> or “not locked” to a specific track). Note also that it is possible to end up with one track appearing on and being controllable by more than one strip. In this case, changes made to one strip are reflected in the other.

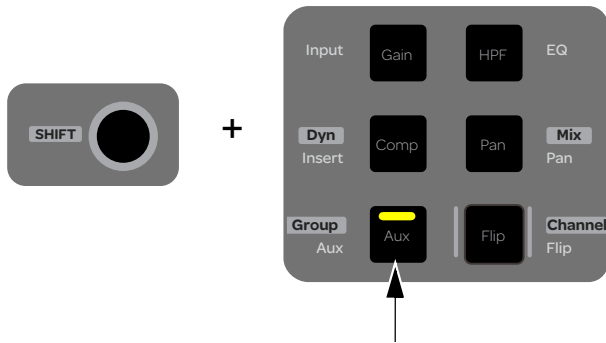
Working with Track Groups

You can add and remove tracks to Pro Tools track Groups, and suspend or enable Groups using the Channel Encoders or Channel Control on S3. Groups must be created in Pro Tools before they can be accessed and modified on the S3.

Using the Channel Encoders

To add or remove tracks from a Group using the Channel Encoders:

- 1 Press **Surface SHIFT + Aux/Group**.



The display shows <All> above each encoder (or the letter designation of the last edited group). All tracks are members of the <All> group by default.



- 2 Press the lit **Page >** Channel Encoder Navigation switch to show other available Groups across the display. As you navigate to other Groups, Channel Encoder **In** switches light to indicate track membership in the currently displayed Group.
- 3 To add a track to the currently displayed Group, press the Channel Encoder under the displayed Group name. The corresponding Channel Encoder **In** switch lights green showing that track is now a member of the currently displayed Group.
- 4 To remove a track from a Group, press the Channel Encoder again so that the Channel Encoder **In** switch is unlit.

To enable or suspend a track Group:

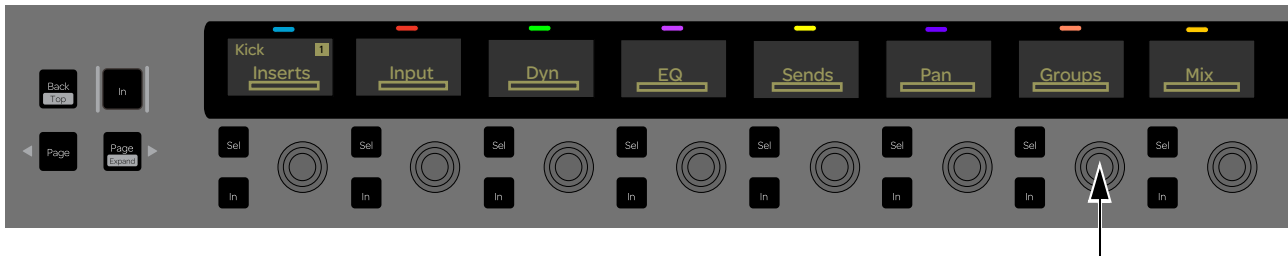
- 1 Press **Surface SHIFT + Aux/Group**. The display shows <All> in every fader display (or, the letter designation of the last edited group).
- 2 Press the lit **Page >** switches to show other available Groups across the display. As you navigate to other Groups, the Channel Encoder **Sel** switches (in the encoder row) light to indicate an active (enabled) Group.
- 3 To enable a Group, press any unlit Channel Encoder **Sel** switch so it is lit.
- 4 To suspend a Group, press any lit Channel Encoder **Sel** switch so it is unlit.

Using Channel Control

To work with track Groups using Channel Control:

- 1 Select a track, and make sure it is attentioned.
- 2 From the Channel Control top-level Knob Set, press the Channel Control Encoder under the display showing **Groups**. The Channel Control displays show the available Groups.

💡 If the top-level Channel Control Knob Set is not shown, press the **Back** Channel Control Navigation switch until it is shown.



- 3 To add the track to a Group, press the Channel Control Encoder under the display showing the desired Group so the corresponding Encoder **In** switch is lit.
 - To remove the track, press the Channel Control Encoder so the **In** switch is unlit.
- 4 To enable a Group, press any unlit Channel Control Encoder **Sel** switch so that it is lit.
 - To suspend a Group, press any lit Channel Encoder **Sel** switch.
- 5 To edit another track's Group properties without returning to the top-level Channel Control Knob Set, just select the channel.

Working with VCAs

VCA Spill lets you quickly access (*spill*) only those channels assigned to the selected VCA Master track to the S3 channel strips. S3 provides two VCA Spill modes, Single-Master mode and Multi-Master mode.

📖 *Mix groups are assigned to VCA Master tracks in Pro Tools. See Pro Tools Help for instructions on creating VCA Masters.*

Spilling VCAs in Single-Master Mode

In Single-Master mode, spilling a VCA Master track spills the VCA's member tracks and the VCA Master track to the channel strips.

To spill a VCA Master track in Single-Master mode:

- 1 Bank a VCA Master to the channel strips.
- 2 Double-press the **Sel** switch on a VCA Master track.

VCA members 1–15 are spilled to channels 1-15 on the control surface, and channel LEDs light solid dark green.

The VCA Master is assigned to channel 16 on the control surface, and the corresponding channel LED lights solid dark green.

The VCA Master remains on that channel strip while VCA Spill is active.
- 3 If the VCA has more than 15 members, do either of the followings:
 - Press **Bank >** or **< Bank** to access the next or previous bank of channels.
 - Press **Nudge >** or **< Nudge** to advance or return one track at a time.
- 4 To exit VCA Spill, double-press the **Sel** switch on VCA Master track (channel 16). The previous track assignments are restored to the channel strips.

– or –

 - Press a switch, such as a **Bank A–F** switch, that is assigned to recall a custom Layout.

Spilling VCAs in Multi-Master Mode

In Multi-Master mode, you can spill up to 12 member tracks of a selected VCA Master, while also spilling up to eight VCA Master tracks to the channel strips. This lets you have access to multiple VCA Masters and a selected VCA's member tracks simultaneously. EuControl provides a preference setting that lets you set the number of channel strips VCA member tracks are spilled to in Multi-Master mode (the VCA Spill Zone).

To set the size of the Multi-Master mode VCA Spill Zone:

- 1 Click the EuControl icon on the taskbar (Mac) or the System tray (Windows), and select **EuControl Settings** to open the EuControl Settings application.
- 2 Click **Preferences**, and under **VCA Spill Zone**, select one of the following:

Channel Strips 1–8 When selected, up to eight VCA Masters are assigned to S3 channel strips 9–16. Members of the selected VCA Master are spilled to channel strips 1–8 in banks of eight channels.

Channel Strips 1–12 When selected, up to four VCA Masters are assigned to S3 channel strips 13–16. Members of the selected VCA Master are spilled to channel strips 1–12 in banks of 12 channels.

To spill a VCA Master track in Multi-Master mode:

- 1 Press the **< Bank** and **Bank >** switches simultaneously.
Bank switch LEDs light green to indicate Multi-Mode is active.
Channel strips 1–8 or 1–12 show the first eight or 12 tracks of the current session, depending on the VCA Spill Zone preference setting.
Channel strips 9–16 or 13–16 show VCA Masters, depending on the VCA Spill Zone preference setting.
- 2 Double-press a VCA Master **Sel** switch.
VCA Members 1–8 or 1–12 are spilled to channels strips, and the channel LEDs on those channel strips light solid green.
VCA Masters remain on the channel strips, and the spilled VCA Master channel LED lights solid dark green.
- 3 To bank to the next or previous bank of the currently spilled VCA members, press **Bank >** or **< Bank**.
- 4 To access additional VCA Masters, press **Nudge >** or **< Nudge**.
- 5 To exit Multi-Master mode, press the **< Bank** and **Bank >** switches simultaneously. The previous track assignments are restored to the channel strips.
– or –
 - Press a switch, such as a **Bank A–F** switch, that is assigned to recall a custom Layout.

Recalling the Last Spilled VCA

You can quickly recall the last spilled VCA without having to bank through channels to find it.

To recall the last spilled VCA:

- 1 Press **< Nudge** and **Nudge >** simultaneously.
The last-spilled VCA and its member tracks are spilled to the S3 channels strips.
- 2 To exit VCA Spill, press **< Nudge** and **Nudge >** simultaneously. The previous track assignments are restored to the channel strips.
– or –
 - Double-press the **Sel** switch on the VCA Master track (channel 16).

Working with Plug-Ins

You can assign plug-ins to tracks using Channel Control, and adjust them using the Channel Encoders or Channel Control.

Assigning Plug-Ins

Assign plug-ins to tracks using Channel Control and the **Config** switch.

To assign a plug-in to a track using Channel Control:

- 1 Select a track, and make sure it is attentioned.
- 2 From the Channel Control top-level Knob Set, press the Inserts Channel Control Encoder.



The Channel Control displays now show the available Inserts slots. If no plug-in is inserted in a slot, the slot letter appears in lower-case (a, b, c, and so on) in the corresponding display. If a plug-in is inserted in a slot, the name of the plug-in is shown in the corresponding display. Plug-in names are abbreviated as necessary.



*If the top-level Channel Control Knob Set is not shown, press the **Back** Channel Control Navigation switch until it is shown.*

- 3 Press the **Config** switch so it is lit. CFG appears in each Channel Control display.



Insert slots a–c (left-to-right) in Config mode in Channel Control

- 4 Press the Channel Control Encoder under the display showing the Inserts slot you want to populate.
- 5 Press the Encoder under the display showing **Plug-In**.
- 6 Press the Encoder under the display showing the plug-in type you want to insert, such as EQ, Dynamics, or Reverb.



Choices shown on your system will vary depending on which plug-ins you have installed, and the Pro Tools setting that organizes plug-ins by Category or Manufacturer.

- 7 Press the Encoder under the display showing the desired plug-in to assign the plug-in.

Adjusting Plug-Ins

Plug-Ins can be accessed and adjusting using the Channel Encoders and Channel Control. You can also access only EQ plug-ins or only dynamics plug-ins. Plug-in parameter mapping to the Channel Encoders and the Channel Control Encoders depends on the selected Knob Set, as follows:

Inserts Knob Set In the Inserts Knob Set, parameters are mapped according to the manufacturer's specifications. Parameter mapping can vary between plug-ins, even of the same type.

EQ and Dyn Knob Sets In the EQ and Dyn Knob Sets, parameter mappings are standardized across types of plug-ins. For example, the threshold controls for two compressor plug-ins from different manufacturers appear on the same encoder.

Adjusting Plug-Ins Using the Channel Encoders

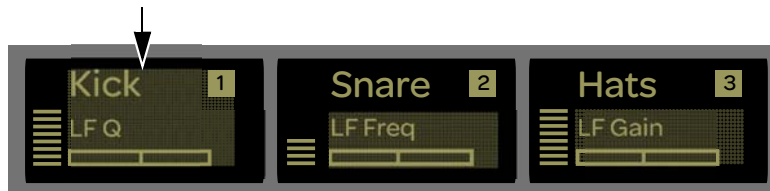
To adjust plug-ins on the Channel Encoders using the Inserts Knob Set:

- 1 Press **Insert**. Plug-ins assigned to first Inserts slots (a) for the currently banked channels are shown in the channel displays. If no plug-in is inserted in that slot for the corresponding track, the Inserts slot letter is shown.



Insert switch (left); Channel displays showing the first Inserts slots for tracks 1–3

- 2 Press the Channel Encoder under the display showing the plug-in you want to access. Channel mode is enabled on the Channel Encoders, and the parameters for the selected plug-in on the attentioned track are spilled across the 16 Channel Encoders.



Channel displays in Channel Mode showing EQ parameters, with the attentioned track at the left ("Kick")

- 3 Do any of the following to adjust parameters:
 - Rotate the Channel Encoder below the desired parameter to adjust its value.
 - Press the Channel Encoder **In** switch to toggle the corresponding parameter on/off, where applicable.
 - Press the Channel Encoder **Sel** switch to toggle a secondary parameter on the Channel Encoder, where applicable.
- 4 Press the lit **< Page >** Channel Encoder Navigation switches to access more parameters.
- 5 Press the **Back** Channel Encoder Navigation switch to exit that plug-in and Channel mode.
- 6 Press the lit **Page >** Channel Encoder Navigation switch to access the next Inserts slots.

To adjust an EQ plug-in on the Channel Encoders using the EQ Knob Set:

- 1 Select a track, and make sure it is attentioned.
- 2 Press **EQ**. Channel mode is enabled on the Channel Encoders, and the parameters for the first EQ plug-in on the attentioned track are spilled across the 16 Channel Encoders.
- 3 Press **Pan** to exit the plug-in and Channel mode.

To adjust a Dynamics plug-in on the Channel Encoders using the Dyn Knob Set:

- 1 Select a track, and make sure it is attentioned.
- 2 Press **SHIFT + Inserts/Dyn**. Channel mode is enabled on the Channel Encoders, and the parameters for the first dynamics plug-in on the attentioned track are spilled across the 16 Channel Encoders.
- 3 Press **Pan** to exit the plug-in and Channel mode.

Adjusting Plug-Ins Using Channel Control

To adjust plug-ins in Channel Control using the Inserts Knob Set:

- 1 Select a track and make sure it is attentioned.
- 2 Press the Channel Control Encoder under the display showing **Inserts**. The Channel Control displays show the plug-ins that are inserted on the attentioned track. If no plug-in is inserted in that slot, the Inserts slot letter is shown.

💡 If the top-level Channel Control Knob Set is not shown, press the **Back** Channel Control Navigation switch until it is shown.

- 3 Press the Channel Encoder under the display showing the plug-in you want to access. The parameters for that plug-in are spilled across the entire top row of 16 Channel Control Encoders.
- 4 Do any of the following to adjust parameters:
 - Rotate the Channel Control Encoder below the desired parameter to adjust its value.
 - Press the Channel Control Encoder **In** switch to toggle the corresponding parameter on/off, where applicable.
 - Press the Channel Control Encoder **Sel** switch to toggle a secondary parameter on the Channel Encoder, where applicable.
 - Press the **In** Channel Control Navigation switch to bypass the entire plug-in.
- 5 Press the lit **< Page >** Channel Control Encoder Navigation switches to access more parameters.
- 6 Press the **Back** Channel Control Encoder Navigation switch to exit that plug-in and return to the previous menu, or press **SHIFT + Back/Top** to return to the top-level Channel Control Knob Set.

To adjust an EQ plug-in using the Channel Control EQ Knob Set:

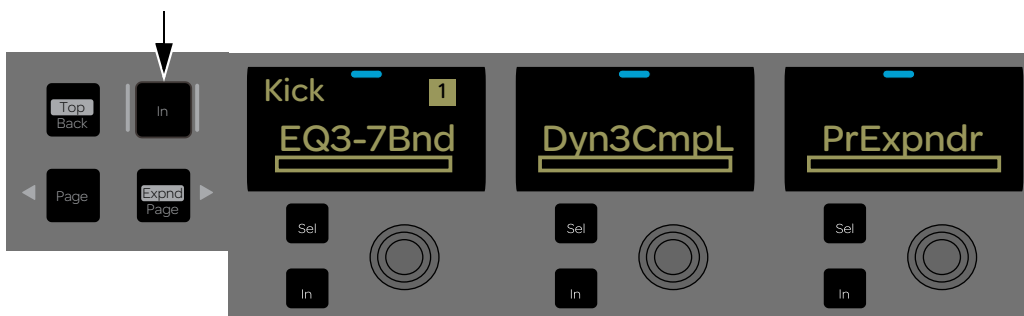
- 1 Press the Channel Control Encoder under the display showing **EQ**. The parameters for the first EQ plug-in are spilled across the entire top row of 16 Channel Control Encoders.
- 2 Press the lit **< Page >** Channel Control Encoder Navigation switches to access more parameters.
- 3 Press the **Back** Channel Control Encoder Navigation switch to exit that plug-in and return to the previous menu, or press **SHIFT + Back/Top** to return to the top-level Channel Control Knob Set.

To adjust a dynamics plug-in using the Channel Control Dyn Knob Set:

- 1 Press the Channel Control Encoder under the display showing **Dyn**. The parameters for the first dynamics plug-in are spilled across the entire top row of 16 Channel Control Encoders.
- 2 Press the lit **< Page >** Channel Control Encoder Navigation switches to access more parameters.
- 3 Press the **Back** Channel Control Encoder Navigation switch to exit that plug-in and return to the previous menu, or press **SHIFT + Back/Top** to return to the top-level Channel Control Knob Set.

To bypass all plug-ins on a track:

- 1 Select a track.
- 2 Press the Channel Control Encoder under the display showing **Inserts**.
- 3 Press the **In** Channel Control Navigation switch so it is unlit to bypass all the plug-ins for the selected track.



Channel Control Navigation In switch

Working with Sends

This section shows how you can assign and adjust Pro Tools sends.

Assigning Sends

Use Channel Control to assign sends. You can assign a send to multiple tracks at once using the **Multi Assign** switch (Do to Selected and Do to All).

To assign sends using Channel Control:

- 1 Select one or more tracks.
- 2 From the Channel Control top-level Knob Set, press the **Sends** Channel Control Encoder.

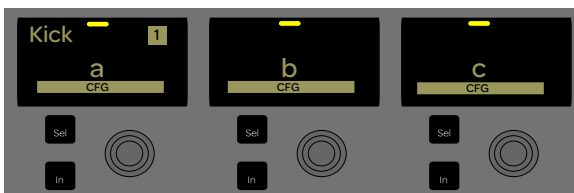


The Channel Control displays now show available Sends slots a–j.



If the top-level Channel Control Knob Set is not shown, press the Back Channel Control Navigation switch until it is shown.

- 3 Press **Config** so it is lit. CFG appears in the Channel Control displays.



Sends top-level Knob Set in Config mode

- 4 Press a Channel Control Encoder under the display showing the send you want to assign. The leftmost Channel Control Encoders now display the available send types (output or bus).



Available send types in Channel Control

- 5 Under the display showing the type of send you want to assign, rotate the Channel Control Encoder until the desired send appears in the display (such as **Bus1-2**).
- 6 To assign the same send to multiple selected tracks (Do to Selected), press **Multi Assign** so it is lit.
- 7 To assign the same send to all tracks in the session (Do to All), press and hold **Surface SHIFT + Multi Assign**.
- 8 Press the corresponding Channel Control Encoder **In** switch so it is lit to assign the send to the selected track(s).
- 9 Press **Config** so it is unlit to exit Config mode.

Adjusting Sends

You can access and adjust sends using the Channel Encoders or Channel Control.

To access a send using the Channel Encoders:

- 1 Bank to the desired track.
- 2 Press the **Aux** Channel Encoder Assign switch. Send assignments in slot **a** are displayed in the Channel Encoder displays for the currently banked channels.
- 3 To view other sends, press **Page >** until the desired sends are displayed (such as Bus 1–2).

To access sends using Channel Control:

- 1 Select a track.
- 2 From the top-level Channel Control Knob Set, press the Channel Control Encoder under the display showing **Sends**. The Channel Control displays show the send assignments for the send slots on that channel. If a send is not assigned in that slot for the selected track, the Sends slot letter is shown.

To adjust send level:

- Rotate the encoder under the display showing the send you want to adjust.

To mute the send:

- Press the encoder **In** switch under the display showing the send you want to mute. When muted, the **In** switch is unlit; when the send is on, the **In** switch is lit.

To mute all sends on a track:

- From the top-level Channel Control Knob Set, press the **In** switch under the displays showing **Sends**.

-or-

- With Sends spilled to the Channel Control Encoders, press the Channel Control Navigation **In** switch.

To toggle the send between pre- and post-fader:

- Press the encoder **Sel** switch under the display showing the send you want to adjust. When the send is post-fader, the **Sel** switch is unlit. When the send is pre-fader, the **Sel** switch is lit. Sends are post-fader by default.

To adjust send pan:

- 1 Press the encoder under the display showing the send you want to adjust. If the send is stereo, a single encoder will be mapped to send pan (usually encoder eight). If the send is three or more channels (such as LCR, or a 5.1 send), additional send pan parameters become available in the encoders (such as divergence, center percentage, and other multichannel pan parameters).
- 2 Rotate the appropriate encoder.

Muting/Unmuting Sends

You can mute/unmute individual sends using the Channel Encoders and Channel Control.

To mute/unmute a send:

- 1 Bank to the desired track.
- 2 Using the Channel Encoders, do the following:
 - Press **Aux**.
 - Use the **< Page** and **Page >** keys to navigate the displays until the desired send is shown.
- 3 Using Channel Control, do the following:
 - Select a track and make sure it is attentioned.
 - Press the Sends Channel Control encoder.
- 4 Hold the **Command + Control** Modifier switches and press the encoder **Sel** switch for the desired send.

Working with Automation

This section shows many of the ways you can control automation settings using the S3.

Selecting Track Automation Modes

You can select track Automation Modes using the channel strip **REC/AUTO** switches and the Function switches. The current Automation Mode is shown in the corresponding channel display on the S3, and on-screen.

Using the REC/AUTO Switches

REC/AUTO (Surface SHIFT + Rec) lets you cycle through the following automation modes:

To select the automation mode using the REC/AUTO switches:

- 1 Hold **Surface SHIFT + REC/AUTO** on a track.
- 2 Press **Surface SHIFT + REC/AUTO** again to cycle through the following automation modes
 - blank = automation is off
 - r = read
 - w = write
 - rw = read/write
- 3 To change the automation mode on all tracks, hold Option (Mac) or Alt (Windows) while pressing **SHIFT + REC/AUTO**.
- 4 To change the automation mode on all selected tracks, hold Option + Shift (Mac) or Alt + Shift (Windows) while pressing **SHIFT+REC/AUTO**.

Using the Function Switches

The following table shows the available automation modes on the Function switches.

Switch	Automation Function	Switch	Automation Function
F1	Write	F2	Read
F3	Touch	F4	Automation Off
F5	Latch	F6	Automation Match
F7	Trim	F8	Automation Window
F9	Preview	F10	Write to All/Selected
F11	Punch Preview	F12	Write to Start
F13	Capture	F14	Write to End
F15	Punch Capture	F16	Write to Next
9–16	Toggles switches between banks F1-F8 and F9-F16	Show Me (Eye Icon)	Opens EuControl Settings > Soft Keys > Right Control section

To select the Automation Mode using the Function switches:

- Press and hold the Function switch for the desired Automation Mode, then select a channel.

To select the automation mode on multiple tracks using the Function switches:

- 1 Select multiple channels.
- 2 Press and hold **Multi-Select/SHIFT+ ALT**, then press the switch for the desired Automation Mode.

The Function Switch LED lights whenever its respective automation mode is enabled. In certain automation modes (such as Write) the LED flashes.

Shortcuts to Display Automation Playlists

The following shortcuts let you quickly display the breakpoint automation playlist for a control by clicking it in combination with modifier keys on your computer keyboard.

Waveform View

To show the waveform for a track in the Edit window:

- Hold Control + Command (Mac) or Control + Start (Windows) and press the channel **Sel** switch.

Track Volume View

To show volume automation for a track in the Edit window:

- Hold Command + Control (Mac) or Control + Start (Windows) and touch the track fader.

Track Pan View

To show track pan automation in the Edit window:

- 1 Press **PAN** to assign pan to the Channel Encoders.
- 2 Hold Control + Command (Mac) or Ctrl + Start (Windows) and touch the Pan encoder on a track.

Send Level View

To show Send level automation in the Edit window:

- 1 Press **AUX** to assign sends to the Channel Encoders.
- 2 If necessary, press the **Page >** Channel Encoder Navigation switch until the desired Sends slot is displayed.
- 3 Hold Control + Command (Mac) or Ctrl + Start (Windows) and touch the Send encoder in the desired track.

Send Pan View

To show Send pan automation in the Edit window:

- 1 Press **AUX** to assign sends to the Channel Encoders.
- 2 If necessary, press the **Page >** Channel Encoder Navigation switch until the desired Sends slot is displayed.
- 3 Press the encoder for the desired send.
- 4 Hold Control + Command (Mac) or Ctrl + Start (Windows) and touch the Send pan encoder on a track.

Plug-In Automation

Plug-In Parameters can be enabled for automation from the S3.



Pro Tools provides a preference setting for newly inserted plug-ins to default to all parameters enabled for automation. Go to Pro Tools > Preferences > Mixing, and under Automation, select Plug-In Controls Default to Auto-Enabled.

Enabling All Plug-in Parameters for Automation

To enable all plug-in controls for automation on Artist Mix:

- 1 Press **INSERT**.
- 2 If necessary, press the **Page >** Channel Encoder Navigation switch until the desired Inserts slot is displayed.
- 3 Hold Control + Command + Option (Mac) or Control + Start + Alt (Windows) and press the Channel Encoder **In** switch under the display showing the plug-in for which you want to enable automation.

Enabling an Individual Plug-In Parameter for Automation

To enable automation for a plug-in parameter:

- 1 Press **INSERT**.
- 2 If necessary, press the **Page >** Channel Encoder Navigation switch until the desired Inserts slot is displayed, and press the Channel Encoder under the display showing the plug-in you want to access.
- 3 If necessary, press the **Page >** Channel Encoder Navigation switch until the desired parameter is displayed.
- 4 Hold Control + Command + Option (Mac) or Control + Start + Alt (Windows) and do one of the following:
 - For a continuous plug-in parameter such as a level control, touch the encoder for the desired parameter.
 - or –
 - For a switch-type parameter such as an In/Out switch, press the Channel Encoder **In** switch for the desired parameter.

Suspending the Faders

You can suspend the faders so they do not follow any underlying automation for quieter operation during editing or mixdown. This does not affect automation, it merely parks the faders so they do not move during playback.

To suspend the faders:

- Hold **Surface SHIFT** while pressing **Solo** on the first (leftmost) channel strip.
- Repeat to re-enable the faders.

S3 Audio I/O Connections

This chapter shows how to use the built-in audio I/O on the S3, including:


- [Enabling S3 Audio on the Workstation Computer](#)
- [S3 Audio Connections Overview](#)
- [Accessing Audio Control on the S3](#)
- [Connecting and Adjusting Inputs](#)
- [Connecting and Adjusting Outputs](#)
- [Connecting Hardware Inserts](#)
- [Connecting and Adjusting Headphones](#)
- [Saving S3 Monitor Settings](#)

Enabling S3 Audio on the Workstation Computer

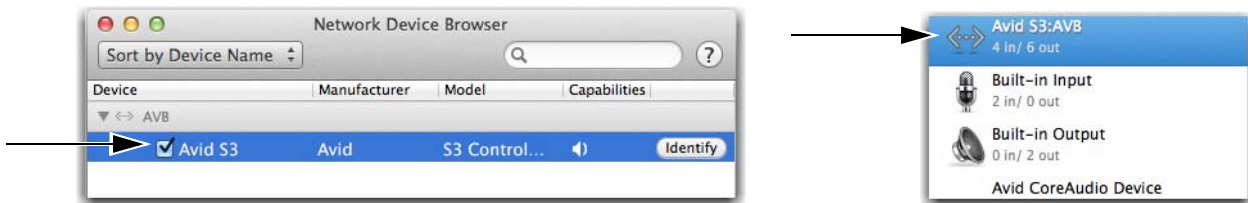
To use the audio I/O on your S3 with your workstation computer, you must first enable the audio connection on the workstation computer. This connection only needs to be enabled the first time you connect the S3 to a particular computer.

To enable S3 audio on your workstation computer:

- 1 Connect S3 to your workstation computer.
- 2 Power on S3, and make sure the S3 is in Studio mode.


 *Display number 15 on the top row of encoders on the S3 shows the current mode (“Studio” or “Live”) when the S3 is initializing after being powered on. See [Connecting a Second Workstation](#) for more information.*

- 3 Power on your workstation computer.
- 4 On your computer, go to Applications > Utilities > Audio MIDI Setup.
- 5 From the Window menu, choose Show Network Device Browser.
- 6 Click the checkbox next to Avid S3. If more than one device appears and both are checked, deselect the other device. Once checked, the S3 appears in the list of available audio devices in the Audio Devices Window of the Audio MIDI Setup.

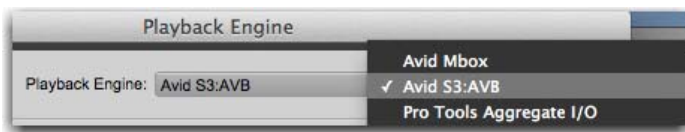


S3 Surface shown in the Network Device Browser (left) and the Audio Devices Window (right) of the Audio MIDI Setup

- 7 Launch Pro Tools, and from the Setup menu choose Playback Engine.

 *For other DAWs, see the documentation for the application to configure its I/O settings.*

- 8 From the Playback Engine pop-up, choose Avid S3:AVB.

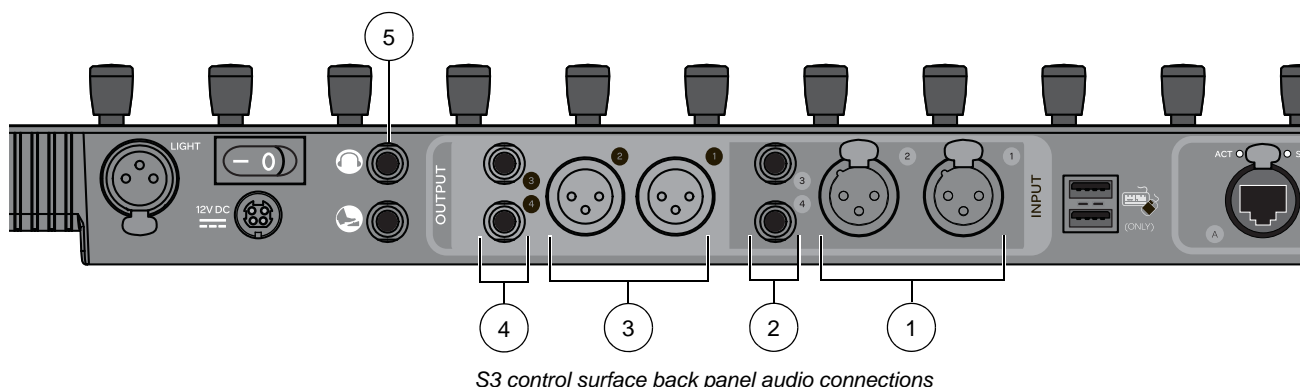


Choosing the S3 as the Playback Engine for Pro Tools

- 9 Choose Setup > IO Setup. Click Default on both the Input and Output tabs, then click OK to close IO Setup.

S3 Audio Connections Overview

S3 provides four channels of analog inputs to Pro Tools or other Core Audio-compatible applications that support sample rates of 48 kHz, and four channels of analog outputs for connecting monitors and other outboard audio devices.



1 – Inputs 1–2 (2 x XLR)

Inputs 1–2 are balanced microphone inputs, and are adjusted using the In 1 and In 2 Channel Control Encoders. Phantom power (48 Volts) and a 20 dB pad are provided on each input. Inputs 1–2 can be linked. See [Connecting and Adjusting Inputs](#) for more information.

2 – Inputs 3–4 (2 x 1/4-inch TRS)

Inputs 3–4 are line-level inputs that accept balanced TRS and unbalanced TS connections. Inputs 3–4 operate at a nominal level of +4 dBu, and are adjusted using the Line 3 and Line 4 Global Control Encoders. A 20 dB pad is provided on each input. Inputs 3–4 can be linked.

3 – Outputs 1–2 (2 x XLR)

MAIN

Outputs 1–2 are the main monitoring output pair for your audio/video application, and operate at a nominal level of +4 dBu. Controls for Outputs 1–2 are linked and are adjusted using the Main Channel Control Encoder. By default the monitor source for Outputs 1–2 are Out 1–2 from Pro Tools or other DAWs. Outputs 1–2 are active when Select is highlighted in the MAIN Channel Control Encoder display. See [Connecting and Adjusting Outputs](#) for more information.



The monitor source for the MAIN and ALT outputs can be changed using the Mon Prefs encoder. See [Changing the Monitor Source](#) for more information.

4 – Outputs 3–4 (2 x 1/4-inch TRS)

ALT

Outputs 3–4 are an alternate monitoring output pair and operate at a nominal level of +4 dBu. Outputs 3–4 accept balanced TRS and unbalanced TS connections. Outputs 3–4 are linked and are adjusted using the ALT Global Control Encoder. By default the monitor source for Outputs 1–2 are Out 1–2 from Pro Tools or other DAWs. Outputs 3–4 are active when Select is highlighted in the Alt Channel Control Encoder display. Track outputs can also be routed to Outputs 3–4 independently in Pro Tools.

5 – Headphone Output (1 x 1/4-inch Stereo TRS)

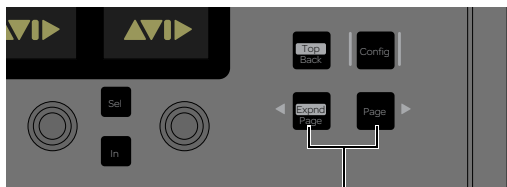
Headphone volume is adjusted using the volume wheel along the front edge of the S3. When the Mon to HP monitor preference is enabled, the headphone output mirrors Outputs 1–4 on the S3. Track outputs can also be routed to the Headphone output independently, and correspond to Out 5–6 in Pro Tools. See [Connecting and Adjusting Headphones](#) for more information.

Accessing Audio Control on the S3

Audio Control—the S3’s built-in I/O controls—are adjusted using Channel Control Encoders 9–16. Audio Control is hidden by default.

To access Audio Control:

- Simultaneously press the right-side **< Page** and **Page >** Channel Control Navigation switches.



Right-side < Page > switches

Controls for the built-in I/O are assigned to Channel Control Encoders 9–16.



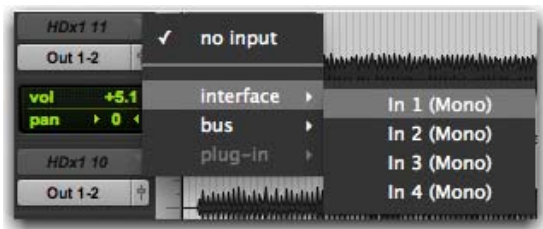
I/O controls in Channel Control

Connecting and Adjusting Inputs

You can adjust inputs using the Channel Control Encoders. You can also link Inputs 1–2 and 3–4 and control each pair using a single Encoder and associated switches.

To connect and route a mic or line input:

- 1 Connect a microphone to Inputs 1–2; connect a line-level device to Inputs 1–4.
- 2 In your audio/video application, assign S3 hardware inputs to the desired track(s). In Pro Tools, inputs on the S3 are called In 1–4 in the Input Path selector.



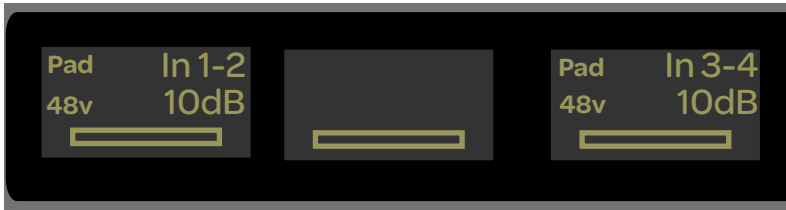
Choosing an S3 Input in Pro Tools

To adjust outputs:

- 1 If necessary, access Audio Control by simultaneously pressing the **< Page** and **Page >** Channel Control Navigation switches.
- 2 Do any of the following under the display showing the input you want to adjust:
 - To adjust input gain, rotate the encoder.
 - To engage the 20 dB pad, press the corresponding encoder **Sel** button so it is lit green. Pad is also highlighted in the corresponding display.
 - To engage 48v (phantom power) on Mic/Line Inputs 1–2, press the corresponding encoder **In** switch so it is lit red. 48v is also highlighted in the corresponding display.

To link and unlink input pairs:

- 1 To link input pairs 1–2 or 3–4, press and hold **Multi-Select/SHIFT**
- 2 Press the Encoder under the display showing In 1 or In 2 to link 1–2, or In 3 or In 4 to link 3–4.



Encoder displays showing linked Input controls

- 3 To unlink an input pair, press **Multi-Select/SHIFT** + the encoder under the display showing In 1-2 or In 3-4.

Connecting and Adjusting Outputs

You can toggle the monitor source between Outputs 1–2 (MAIN) and Outputs 3–4 (ALT), adjust the monitor level, and dim and mute (Cut) the outputs using the Channel Control Encoders. The default source for S3 Outputs 1–4 (and the Headphone output if MON to HP is selected) is Out 1–2. However, you can also assign tracks to S3 outputs independently.

You can also sum an output pair to mono and change the monitor source for the outputs.

To connect and route and outputs

- 1 Connect an audio destination such as audio monitors to Outputs 1–2 (Main) or Outputs 3–4 (Alt).
- 2 In your audio/video application, assign track outputs to the desired S3 hardware output(s). In the Pro Tools Output Path selector, Out 1–2 corresponds to S3 Outputs 1–2 (MAIN), Out 3–4 corresponds to S3 Outputs 3–4 (ALT), and Outs 5–6 correspond to the S3 Headphone output.



Choosing S3 Outputs in Pro Tools

To adjust outputs:

- 1 If necessary, access Audio Control by simultaneously pressing the **< Page** and **Page >** Channel Control Navigation switches.
- 2 To adjust an output pair, do any of the following under the display showing the output you want to adjust:
 - To make an output pair (Main or Alt) active, press the corresponding encoder **Sel** button so it is lit. **Select** is highlighted in the corresponding display, and the LED above the display is lit green for the currently selected output pair.
 - To toggle an output pair on/off, press the corresponding encoder **In** switch. The output pair is off (Cut) when the button is lit. **Cut** is highlighted in the corresponding display, and the LED above the display is flashes red.
 - To adjust the output level, rotate the encoder. The relative level in dB is indicated in the display.
 - To dim the output, press the encoder. **Dim** is shown in the display, and the LED above the display is lit orange.



To make both output pairs active, press **Multi Select/SHIFT** + **Encoder Sel** of the unselected pair. To make only one output pair active, press the desired output pair's **Sel** switch.

To sum an output to mono:

- 1 Press and hold **Multi-Select/SHIFT**.
- 2 Press the Encoder for the output pair you want to sum to mono. Mono appears in the corresponding display. Mono signals are sent equally to each physical output in the pair.
- 3 Repeat to return to stereo operation.

Changing the Monitor Source

You can change the monitor source for the outputs on the S3 using the Monitor Preferences (Mon Prefs) encoder.

To change the monitor source:

- 1 If necessary, access Audio Control.
- 2 Under the display showing Mon Prefs, press the encoder **Sel** switch to select an available monitor source as follows:

AVB 1–2 When AVB 1–2 is selected and appears in the display, Out 1-2 from Pro Tools and Core Audio are routed to Outputs 1–4 on the S3 (and the Headphone output if MON to HP is selected). This is the default monitor source setting for the S3.

In 1–2 When In 1–2 is selected and appears in the display, Inputs 1–2 on the S3 are routed to Outputs 1–4 on the S3 (and the Headphone output if MON to HP is selected). Use this to monitor an external source such as an audio interface or other playback device.

In 3–4 When In 3–4 is selected and appears in the display, Inputs 3–4 on the S3 are routed to Outputs 1–4 on the S3 (and the Headphone output if MON to HP is selected). Use this to monitor an external source such as an audio interface or other playback device.



Mon Prefs encoder and display

Connecting Hardware Inserts

Inputs 3–4 and Outputs 3–4 can be used to insert external hardware on tracks in your application. When inserting hardware, be sure to connect the device to matching inputs and outputs on S3. For example, to insert a mono device, connect the input of the device to Output 3 on S3, then connect the output of the device to Input 3 on S3.



In Pro Tools, inserts are defined in the IO Setup. Go to Setup > IO..., then click the Insert tab to define the session insert paths. See the Pro Tools Reference Guide for more information.

Connecting and Adjusting Headphones

Use the front panel Headphone volume control to control overall Headphone volume. By default the stereo Headphone output mirrors the other outputs on the S3, but this can be disabled.

To toggle Headphone output mirroring:

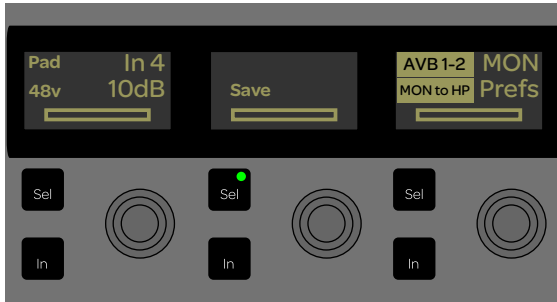
- 1 If necessary, assign I/O controls to Channel Control.
- 2 Under the display showing Mon Prefs, press the corresponding encoder **In** switch. When Mon to HP is unlit, the Headphone output no longer mirrors Outputs 1–4.

Saving S3 Monitor Settings

You can save the current monitor settings on your S3, including monitor preference settings, and MAIN (Outputs 1–2) and ALT (Outputs 1–2) settings.

To save the current monitor settings:

- 1 Make any desired adjustments to the monitor settings on the S3.
- 2 Under the display showing **Save** (the 13th Channel Control display), press the lit Encoder **Sel** switch.



Audio Control display showing Save

Saving Settings...appears in the display until saving is complete. Settings are saved until the next time you save.

Soft Keys

When using Pro Tools | S3 with Pro Tools and other selected DAWs, an Appset is installed providing default functionality for S3 surface controls. You can customize select switches on S3 using the Soft Key Editor provided in EuControl software.

Overview

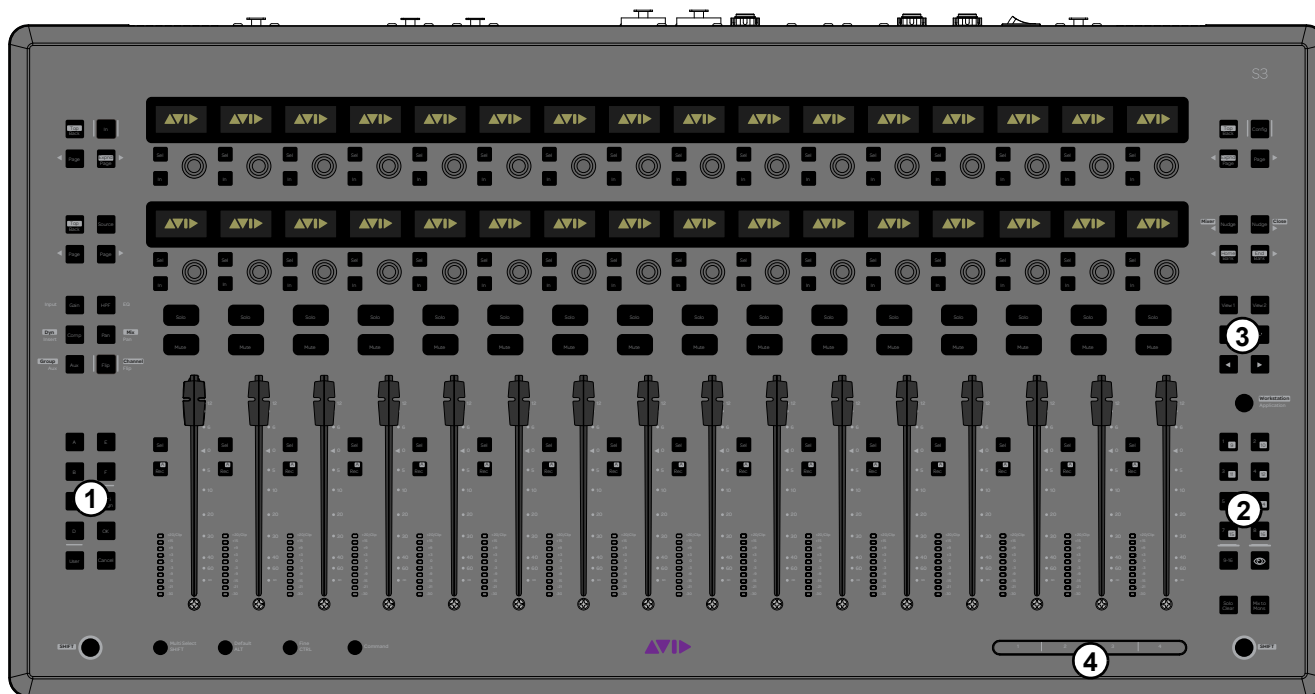
You can customize the functions of the switches in the following sections on the S3:

1 – Left Control

3 – View and Arrow Switches

2 – Right Control

4 – Touchstrip

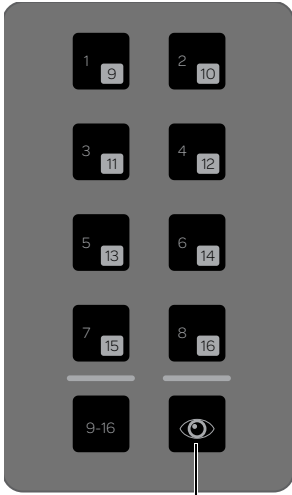


S3 top panel

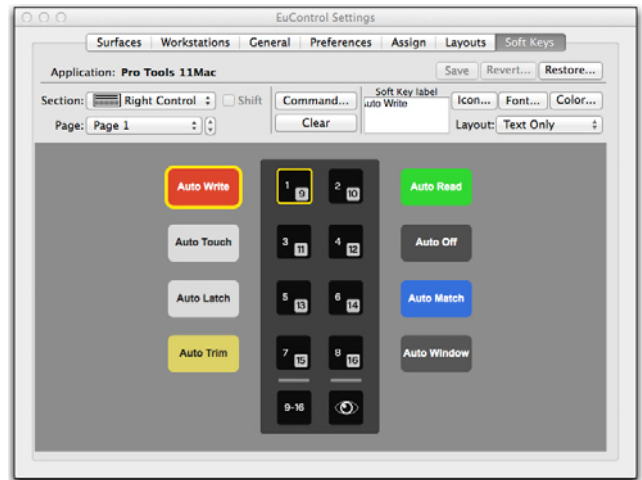
Viewing Soft Key Assignments in the Soft Key Editor

To view assignments in the **Soft Key Editor**:

- 1 Launch Pro Tools and confirm that EuControl is connected to the S3, indicated by a lit EuControl icon in the Menu Bar (Mac) or the System Tray (Windows).
- 2 On S3, press the **Show Me** switch. The Soft Keys currently assigned to the Right Control switches are shown on-screen.



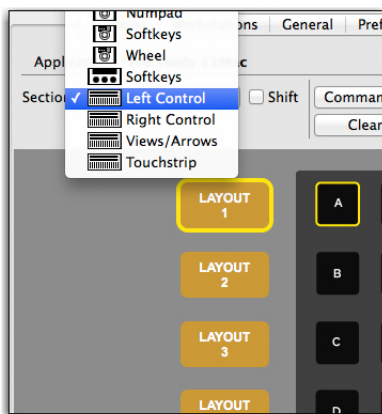
Show Me switch



Right Control Soft Key assignments

- 3 To view the second page of switches for the Right Control section, click the Page selector and choose Page 2 from the pop-up menu.
- 4 To view assignments for the other sections of switches, click the Section selector and choose one of the following:
 - Left Control
 - Views/Arrows
 - Touchstrip

 Other options such as Surface and Touchscreen are not applicable to S3.



Section selector pop-up menu

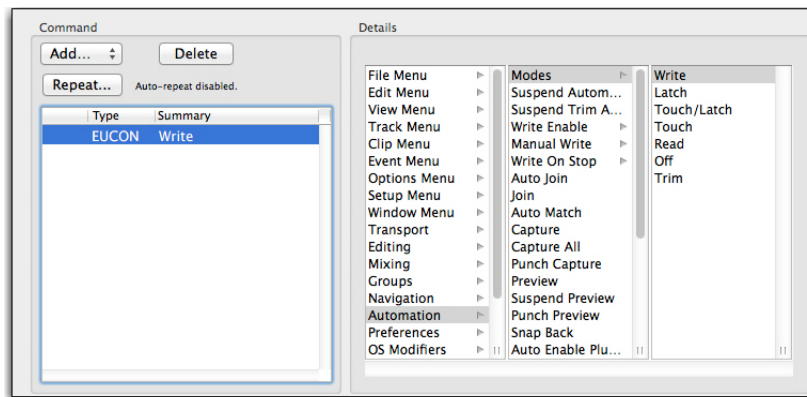
- 5 To view switches assigned to the Shift layer (functions accessed by pressing the **Surface SHIFT** switch plus the relevant switch) of the Left Control, Views/Arrow, or Touchstrip sections, click to enable the Shift checkbox.

Using the Soft Key Editor

The Soft Key Editor lets you reassign a switch from its default Soft Key assignment (if applicable), add a new command to an unassigned switch, revert (undo) all recent assignment, and restore to factory default assignments. You can also add a key command to a switch to invoke a keyboard shortcut.

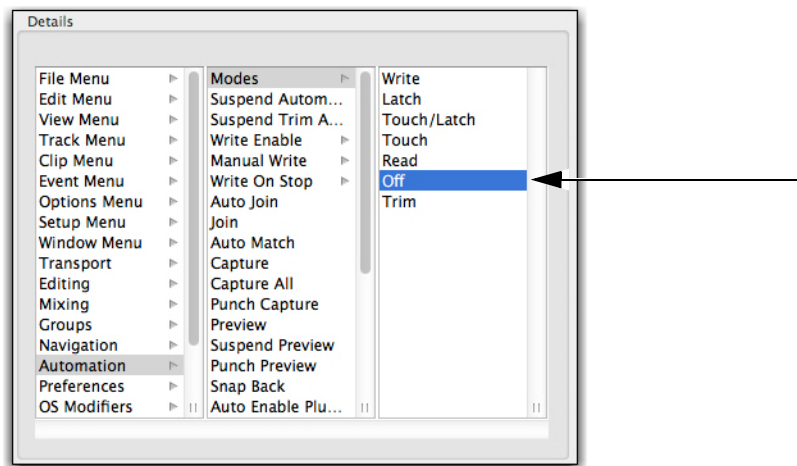
To reassign a Soft Key for Pro Tools:

- 1 Launch Pro Tools and confirm that EuControl is connected to the S3, indicated by a lit EuControl icon in the Menu Bar (Mac) or the System Tray (Windows).
- 2 Press the **Show Me** switch.
- 3 Click the Section selector and choose the section of switches containing the switch you want to reassign.
- 4 On-screen double-click the switch you want to reassign. The Soft Key Command Editor window opens, showing the switch's current assignment.



Soft Key Command Editor

- 5 To reassign the currently selected switch, click a different command. For example, click Off in the third (right-most) list in the Details area. You can also click to make a new selection in the first (left-most) or middle Details list (such as File Menu, Edit Menu, and so on) to access other choices, as available.



A new assignment shown in the Command Editor

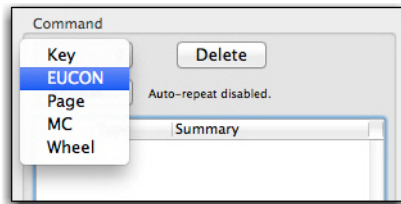
- 6 Close the Soft Key Command Editor and return to the EuControl Settings window.
- 7 If desired, click the Save button in the Soft Keys tab to save the assignments. The next time you launch EuControl, your custom assignments are recalled.



If you do not save assignments, EuControl software retains your assignments until you Quit (Mac) or Exit (Windows) the EuControl application. EuControl then recalls the default Appset the next time you launch EuControl.

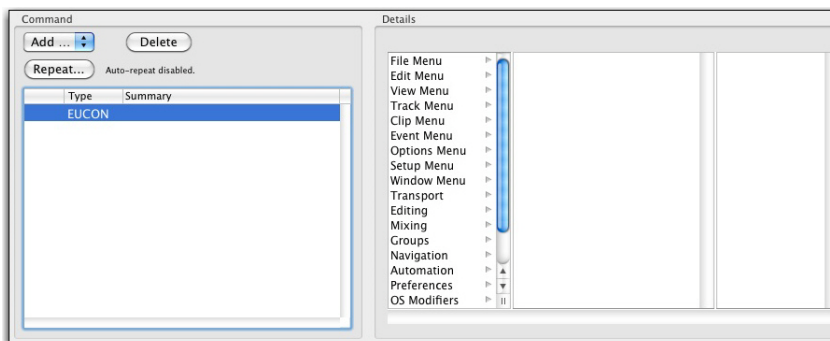
To add a new assignment:

- 1 Launch Pro Tools and confirm the EuControl is connected to the S3, indicated by a lit EuControl icon in the Menu Bar (Mac) or the System Tray (Windows).
- 2 Press the **Show Me** switch.
- 3 Click the Section selector and choose the section of switches containing the switch you want to assign.
- 4 On-screen, double-click the switch you want to assign. The Soft Key Command Editor window opens.
- 5 In the Command area, click Add and choose EUCON.



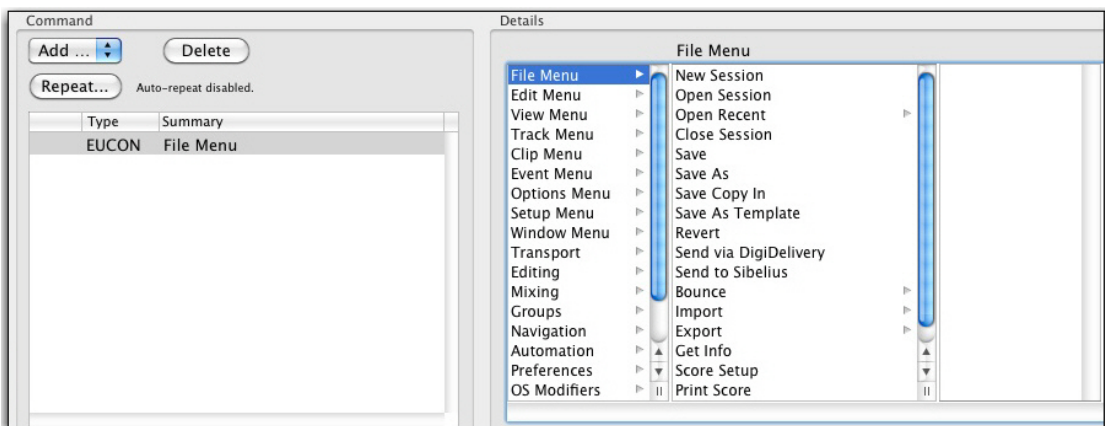
Adding a new EUCON command

After you add a EUCON command, choices appear in the Details area.



The Details area showing commands

- 6 Click an item in the left-most list (level 1) within the Details area to reveal associated commands in the middle column.



An item selected in Level 1 (the first column) of the Details area

- 7 Click a command to assign a command, or click an item with an arrow to reveal more commands in the third column and assign as necessary.
- 8 Close the Soft Key Command Editor and return to the EuControl Settings window.
- 9 If desired, click the Save button in the Soft Keys tab to save the assignments.

To revert (undo) all assignments since the last time you saved changes:

- Click the Revert button in the Soft Keys tab.

To restore assignments to their factory defaults:

- Click the Restore button in the Soft Keys tab.

Adding a Custom Key Command

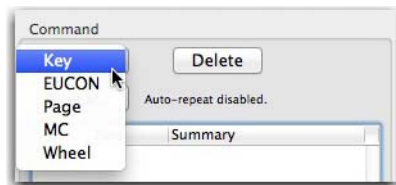
You can invoke a keyboard shortcut that has no predefined function in the EuControl using the Soft Key Editor. The following workflow shows how to assign the Pro Tools shortcut for halving the length of an Edit selection (Command + Control + Option + Shift + L on Mac, and Ctrl + Alt + Start + Shift + L on Windows) to a switch on the S3.



You can use the Pro Tools Shortcut Guide to find the relevant Pro Tools shortcuts for your operating system.

To assign a custom key command:

- 1 Launch Pro Tools and confirm EuControl is connected to the S3, indicated by a lit EuControl icon in the Menu Bar (Mac) or the System Tray (Windows).
- 2 Press the **Show Me** switch on S3.
- 3 Click the Section selector and choose the section of switches containing the switch you want to assign.
- 4 On-screen, double-click the switch you want to assign. The Soft Key Command Editor window opens.
- 5 In the Soft Key Editor, do the following:
 - If the switch already has an assignment, select the assignment in the Command list then press Delete.
 - Click Add and choose Key.



Choosing Key from the Add pop-up menu

- 6 In the Details area, select Control, Shift, Alt/Opt, and Win/Cmd, then enter “L” in the field below.



Details area of the Soft Key Command Editor



To insert special keyboard characters in the field such as a Function key or an arrow key, use the Insert Special menu.

- 7 Close the Soft Key Command Editor and return to the EuControl Settings window. Now, pressing the assigned switch halves the length of the current Edit selection in the Pro Tools Edit window.
- 8 If desired, do any of the following:
 - Click in the Soft Key Label field and enter a name for the Soft Key assignment.
 - Click the Save button in the Soft Keys tab to save the assignment.

EuControl Software

EuControl is launched automatically upon starting your computer and runs in the background. EuControl is responsible for finding, linking, and communicating with all Avid media controllers on the network.

Accessing EuControl Settings

To open the **EuControl Settings** window, do one of the following:

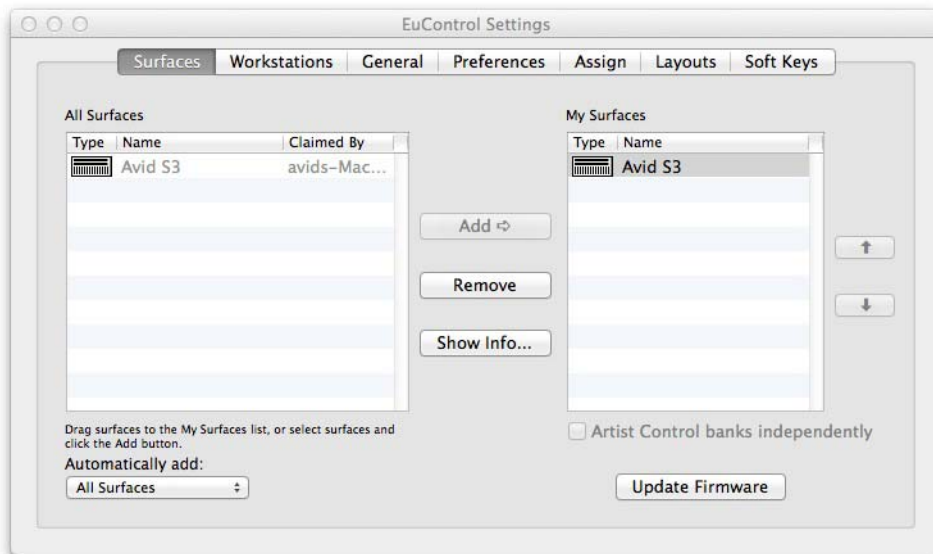
- On Mac, click the EuControl icon on the taskbar and select **EuControl Settings**.
- On Windows, double-click the EuControl icon in the system tray and select **EuControl Settings**. If you don't see the EuControl icon, it could be automatically hidden by Windows. Click on the small white arrow to show hidden icons, then double-click the EuControl icon.

Only one instance of EuControl can run on a workstation. However, multiple workstations on a single network can each run EuControl. Each EuControl-equipped workstation can connect one S3 on the network.

In this chapter, the tabs in the EuControl software are discussed in the order (left to right) as they appear at the top of the EuControl Settings dialog.

Surfaces

The Surfaces tab shows all EUCON controllers on your network and those connected to your instance of EuControl.



Surfaces tab

All Surfaces

All Surfaces shows all Avid media controllers on the network. A device shown in light gray is already connected either to your own or another instance of EuControl running on a different workstation. In both cases, it is not selectable.

My Surfaces

My Surfaces shows the media controllers connected to your instance of EuControl.

The top-to-bottom order corresponds to the left-to-right order of the surfaces, respectively. The leftmost surface is assigned to fader strip 1. Use the + and – buttons to reorder the list.

Each media controller can be renamed by double-clicking the existing name and typing a new name.



If you changed the name of the S3 in VENUE software, that name will appear in the My Surfaces list. Likewise, if you changed the name in the My Surfaces list, it will appear as such in VENUE software.

Add

Click Add to add the selected All Surfaces entry to My Surfaces. This connects the selected Avid media controller to your instance of EuControl. You can also click and drag an Avid media controller from All Surfaces to My Surfaces.

Add is disabled if all media controllers in All Surfaces are connected to any instance of EuControl.



One S3 and one Artist Transport can be added to My Surfaces and used simultaneously with Pro Tools or other EUCON-enabled DAWs.

Remove

Click Remove to remove the selected surface from My Surfaces and make it available to other instances of EuControl.

Remove is disabled if no surface is selected.

Automatically Add

The Automatically Add menu has two settings that control what happens to stored Surfaces between shutdown and startup.

All Surfaces (Default)

This setting is best used when you are the only person running EuControl in your home or studio. It provides an easy plug-and-play experience by automatically adding your All Surfaces list to your My Surfaces list so you never have to manually edit the My Surfaces list.

My Surfaces Only

This setting is useful in facilities where other EuControl users are on your network. When EuControl starts, only the surfaces from your My Surfaces list are added. Because a surface can only be claimed by one user at a time, this avoids claiming another user's surfaces.

Update Firmware

Each time a new version of EuControl is installed, it checks each media controller in your system to determine if any firmware updates are required. The firmware is embedded in EuControl so an Internet connection is not required.

Select each media controller in the My Surfaces list. Click Update Firmware to update their firmware. If a dialog displays a message that the firmware is up to date, no further action is necessary.

Follow the instructions in the EuControl dialog box.

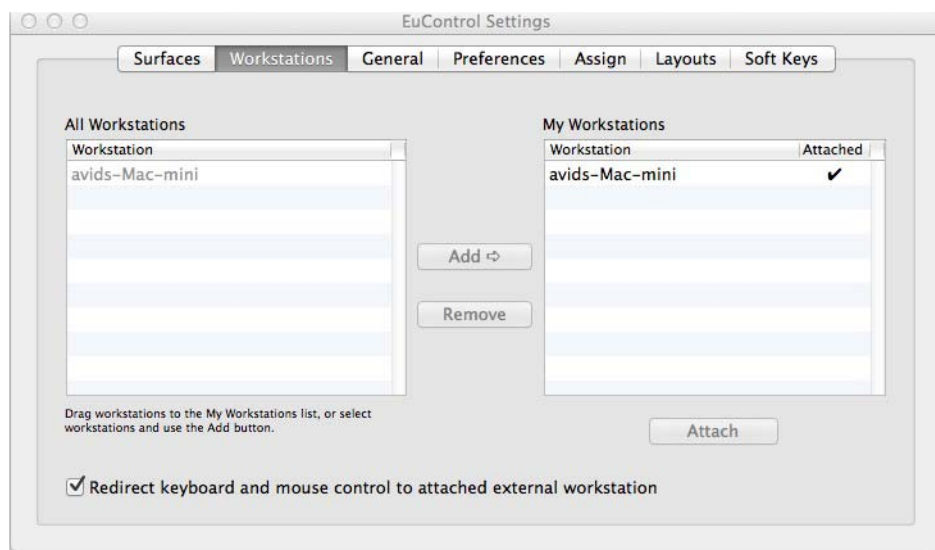
- The media controllers must be plugged into a working power source.
- Do not power off any media controllers during the update or attempt to interrupt the update.
- The status for each media controller being updated is displayed on that device as well as in the EuControl dialog.

Show Info

Select a media controller and click Show Info to display the name of the unit, and hardware and software information.

Workstations

A media controller can control applications running on a second computer, referred to in this guide as a *workstation*. The Workstations tab establishes the list of workstations that the **Workstation** switch cycles through. Any workstation running EuControl software can be in this list.



Workstations tab

All Workstations

All Workstations lists all EUCON-enabled workstations on the network. If the workstation is already in the My Workstations list, it is shown in gray and cannot be selected.

My Workstations

My Workstations lists the workstations that can be attached to by pressing the **Workstation** switch (**Surface SHIFT + Application/Workstation**).

It is possible to put a workstation in the My Workstations list that is already attached to another instance of EuControl running on another computer. It cannot be attached here until it is unattached from the other instance of EuControl. This allows multiple users to share workstations without having to frequently edit their My Workstation list.

Add

Click Add to add the selected workstation from the All Workstations list to the My Workstations list. If the workstation is already in the My Workstations list, it is grayed out and cannot be selected.

Remove

Click Remove to remove the selected workstation from the My Workstations list.

Attach/Detach

Select a workstation in the My Workstations list and click **Attach**. A check mark appears in the Attach column next to that workstation. This workstation is now communicating with the media controller(s) connected to your instance of EuControl.

If the selected workstation is already attached, the button displays **Detach**. Click it to detach the workstation.

Redirect Keyboard and Mouse Control to Attached External Workstation

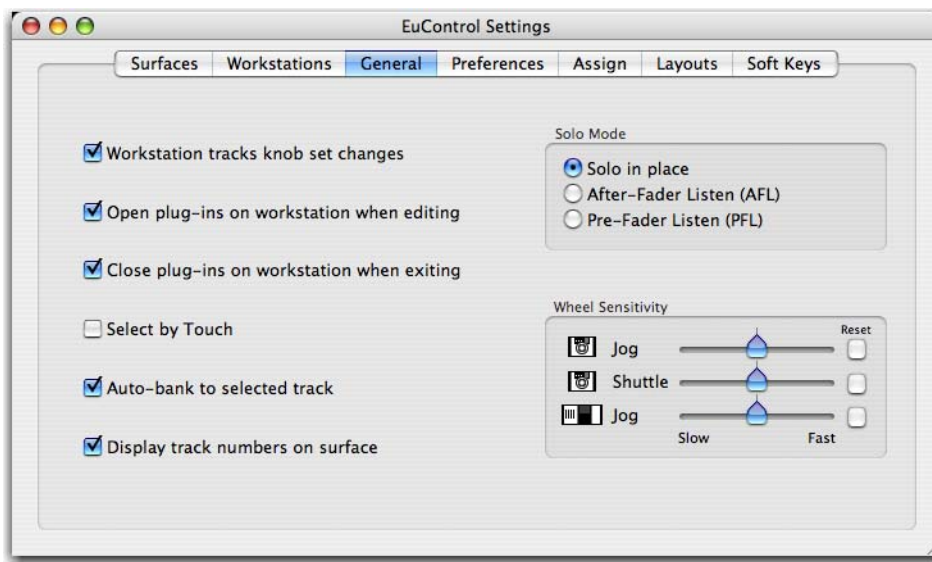
Your computer keyboard and mouse can control a second external workstation, if desired. Select this option before adding a workstation to the My Workstations list to redirect keyboard and mouse control to the attached workstation. Note that the keyboard and mouse will no longer control your primary workstation. If this option is not selected (default setting), your keyboard and mouse control your primary computer.

You can manually toggle control back and forth between your primary workstation and the attached external workstation by pressing Control + Option + \ (Mac) or Control+Alt+\ (Windows).

The Redirect Keyboard and Mouse Control to Attached External Workstation option must be checked *before* adding the workstation to the My Workstations list. If it is toggled ON after adding the workstation it will have no affect. Only workstations added with the option checked will respond.

General

The General tab lets you control how the S3 and application software work together.



General tab

Workstation Tracks Knob Set Changes

This command lets supported workstations follow selection of knob sets on S3.

Open Plug-ins on Workstation When Editing

This command lets supported workstations open plug-in windows on-screen when a plug-in is selected for editing on S3.

Close Plug-ins on Workstation When Exiting

This command lets supported workstations close plug-in windows on-screen when you press **BACK** or exit Inserts mode on an S3.

Select by Touch

This command lets supported workstations attention (focus) tracks on-screen when their fader is touched on the S3.

Auto-bank to Selected Track

When this is selected, S3 banks to tracks when the tracks are selected on-screen. The surface will auto-bank such that the selected track appears on the leftmost fader of the surface as long as the selected track is not currently visible on the surface.

Display Track Numbers on Surface

When this is selected, S3 shows track numbers as assigned by the current workstation (if supported) in the channel displays.

Solo Mode

These setting let you configure S3 for the following Solo modes as (if) available in the current workstation:

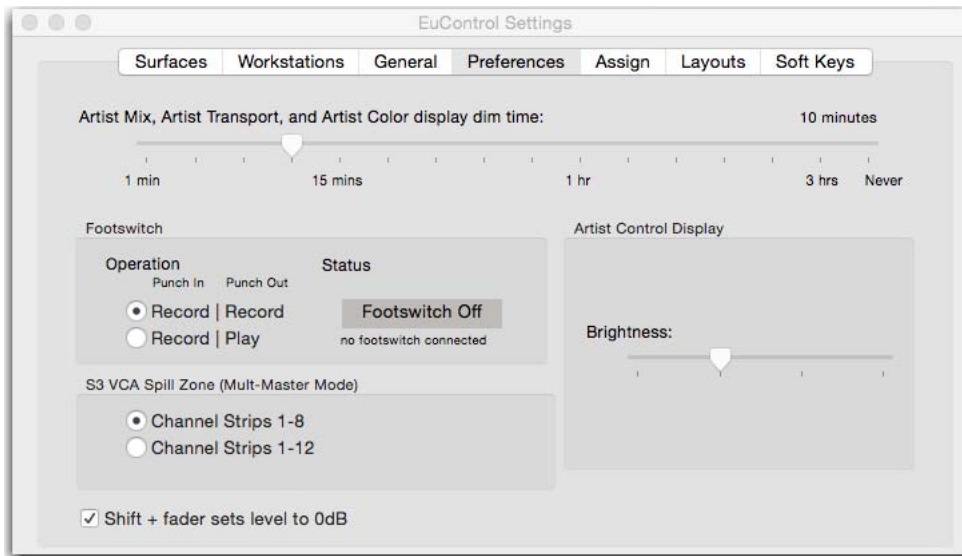
- Solo-in-Place
- After-Fader Listen (AFL)
- Pre-Fader Listen (PFL)

See the documentation for your specific workstation for details on Solo modes.

Wheel Sensitivity

These options are not applicable for S3.

Preferences



Preferences tab

Footswitch

You can connect a footswitch to S3 for hands-free punch in/out. Connect a footswitch to the 1/4-inch footswitch input on the back panel.

To configure the Footswitch in EuControl:

- In the Footswitch section of the Preferences tab, click to select the desired Punch In and Punch Out assignments:

Record | Record

When the application is rolling, pressing the footswitch once punches into recording on record enabled tracks. Pressing the footswitch again takes the track(s) out of record but does not stop the transport.

Record | Play

Pressing the footswitch once punches into recording on record enabled tracks. Pressing the footswitch again stops the record pass (your DAW may or may not automatically take the track out of record on stop; see the documentation for your application).

Status

Shows whether the footswitch state is currently on or off.

S3 VCA Spill Zone

(Pro Tools | S3 Only)

These options determine VCA Spill behavior in Multi-Master Mode, as follows:

Channel Strips 1–8 When selected, up to eight VCA Masters are assigned to S3 channel strips 9–16. Members of the selected VCA Master are spilled to channel strips 1–8 in banks of eight channels.

Channel Strips 1–12 When selected, up to four VCA members are assigned to S3 channel strips 13–16. Members of the selected VCA Master are spilled to channel strips 1–12 in banks of 12 channels.

Shift + Fader Sets Level to 0dB

When enabled, holding **SHIFT** and touching a fader sets the fader to 0dB. **Surface SHIFT**-lock does not apply (**Surface SHIFT** must be pressed).

Artist Control Display

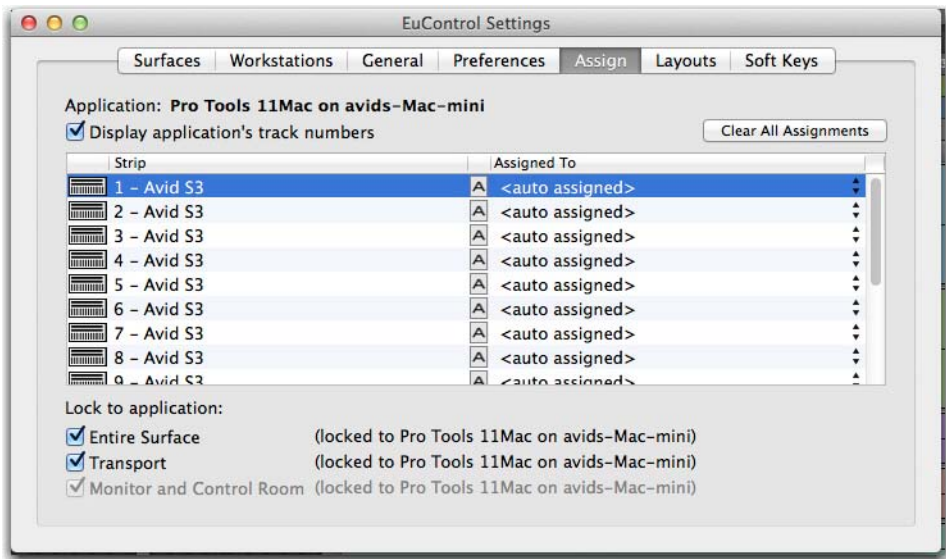
This feature does not apply to S3.

Display Screen Dim Time

This feature does not apply to S3.

Assign

The Assign tab manages how tracks are assigned to S3 channel strips. By default, tracks are automatically assigned in banks of 16.



Assign tab

Display Application's Track Numbers

Enabling this option lets EuControl display track numbers as assigned by the currently selected (in focus) application (if that application supports track numbers).

Clear All Assignments

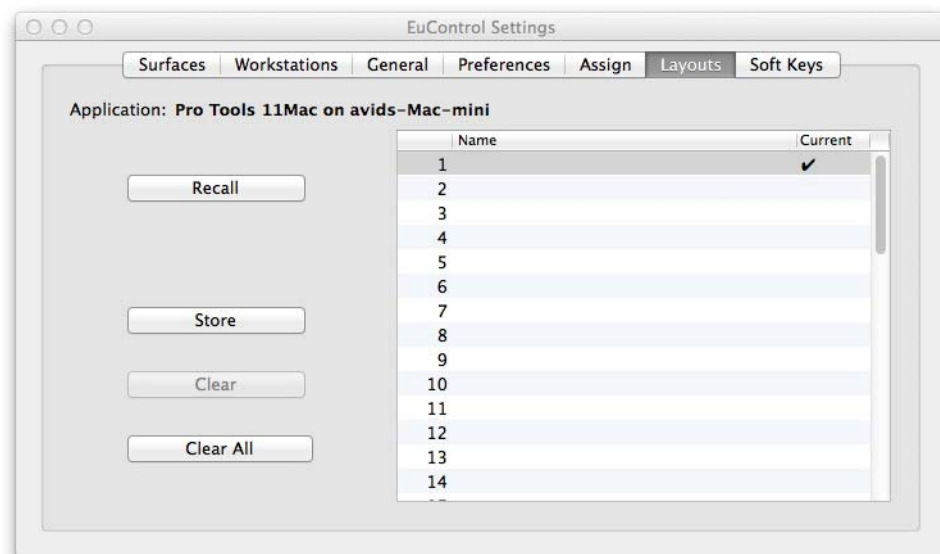
Clears all currently displayed assignments.

Lock to Application

This feature does not apply to S3.

Layouts

Use the Layouts tab to store and recall custom fader layouts. For example, you can use the Assign tab to assign tracks to specific S3 channel strips. You can then save those assignments as part of a fader layout on the Layouts tab, which you can then recall using the Bank **A–F** switches. See [Storing and Recalling Custom Layouts](#).



Layouts tab



Layouts are created and temporarily stored in EuControl as long as the current session or project is open. To be able to recall your layouts, be sure to save your session or project in your workstation application.

Soft Keys

This tab controls assignments and programming for the switches in the Left Control, Right Control, Views/Arrows, and Touchstrip sections. See [Soft Keys](#) for more information.

Restart EUCON Applications

If you are having trouble connecting your surface to your DAW, use the Restart EUCON Applications command.

To restart all EUCON applications (including EuControl software):

- On Mac, click the EuControl icon on the taskbar and select **Restart EUCON Applications**, then click **Yes**.
- On Windows, click the EuControl icon in the Task or System tray (Windows) and select **Restart EUCON Applications**, then click **Yes**. Unused icons will be shown in the Hidden icons view.

All EUCON applications are restarted, including EuControl.

Audio Specifications

All specifications subject to change.

S3 Control Surface Audio Specifications

S3 Analog Mic Inputs, Pad Disabled

Parameter	Conditions	Value			Units
		Min.	Typ.	Max.	
Phantom Power			48		Volts
Input Sensitivity	@ 997 Hz, Gain = 10 dB (min.)		+7.979		dBu
Equivalent Input Noise (EIN)	Gain = 60 dB, 150 Ω source impedance		-126.1		dB
Frequency Response	$V_{\text{INPUT}} = -12.035$ dBu, 20 Hz – 20 kHz relative to 1 kHz, Gain = 10 dB (min.)	-0.021	0	-0.236	dB
Dynamic Range Unweighted	150 Ω source impedance, Gain = 10 dB (min.)		-111.2		dB
Dynamic Range A weighted	150 Ω source impedance, Gain = 10 dB (min.)		-113.8		dB
THD+N Amp	@ 997Hz, Gain = 40 dB		0.0014		%
THD+N Freq	measured at -25.242 dBu, 20 Hz – 20 kHz, Gain = 40 dB	0.0007	0.0014	0.0045	%
Common Mode Rejection Ratio	$V_{\text{INPUT}} = -21.560$ dBu, 20 Hz – 20 kHz, Gain = 10 dB (min.)	-71.7	-80.8	-81.4	dB
Inter-channel Crosstalk	$V_{\text{INPUT}} = -12.150$ dBu, 20 Hz – 20 kHz, Gain = 10 dB (min)	-120.4	-109.6	-99.2	dB
Input Impedance	@1 kHz		3.5K		ohms

S3 Analog Mic Inputs, Pad Enabled

Parameter	Conditions	Value			Units
		Min.	Typ.	Max.	
Phantom Power			48		Volts
Input Sensitivity	@ 997Hz, Gain = 10 dB (min.)		+28.322		dBu
Frequency Response	V _{INPUT} = +8.225 dBu, 20 Hz – 20 kHz relative to 1 kHz, Gain = 10 dB (min.)	-0.016	0	-0.235	dB
Dynamic Range Unweighted	150 Ω source impedance, Gain = 10 dB (min.)		-111.2		dB
Dynamic Range A Weighted	150 Ω source impedance, Gain = 10 dB (min.)		-113.9		dB
THD+N Amp	@ 997 Hz, Gain = 40 dB		0.0018		%
THD+N Freq	measured at -3.808 dBu, 20 Hz – 20 kHz, Gain = 40 dB	0.0012	0.0018	0.0064	%
Common Mode Rejection Ratio	V _{INPUT} = -1.276 dBu, 20 Hz – 20 kHz, Gain = 20 dB	-59.3	-63.8	-63.9	dB
Inter-Channel Crosstalk	V _{INPUT} = +8.233 dBu, 20 Hz – 20 kHz, Gain = 10 dB (min.)	-122.1	-109.1	-98.2	dB
Input Impedance	@ 1 kHz		3.7k		ohms

S3 Analog Line Inputs

Parameter	Conditions	Value			Units
		Min.	Typ.	Max.	
Input Sensitivity	@ 997Hz, Gain = 10 dB (min.)		+18.471		dBu
Equivalent Input Noise (EIN)	Gain = 18 dB, 150 Ω source impedance		-93.9		dB
Frequency Response	V _{INPUT} = -1.520 dBu, 20 Hz – 20 kHz relative to 1 kHz, Gain = 10 dB (min.)	-0.018	0	-0.233	dB
Dynamic Range Unweighted	150 Ω source impedance, Gain = 10 dB (min.)		-110.4		dB
Dynamic Range A weighted	150 Ω source impedance, Gain = 10 dB (min.)		-113		dB
THD+N Amp	@ 997Hz, Gain = 40 dB		0.0010		%
THD+N Freq	measured at +12.193 dBu, 20 Hz – 20 kHz, Gain = 40 dB	0.0005	0.0010	0.0016	%
Common Mode Rejection Ratio	V _{INPUT} = -1.523 dBu, 20 Hz – 20 kHz, Gain = 0 dB	-64.4	-66.8	-67.0	dB
Inter-Channel Crosstalk	V _{INPUT} = -1.520 dBu, 20 Hz – 20 kHz, Gain = 0 dB (min.)	-117.8	-110.1	-98.3	dB
Input Impedance	@ 1 kHz		5.1k		ohms

S3 Analog Outputs

Parameter	Conditions	Value			Units
		Min.	Typ.	Max.	
Output Sensitivity	@ 997 Hz		+24.201		dBu
Output Impedance	@1 kHz		103.5		ohms
Residual Output Noise	20 Hz – 20 kHz		-88		dBu
Round Trip Latency	Console input to Console output		3.2		ms

S3 Headphone Output

Parameter	Conditions	Value			Units
		Min.	Typ.	Max.	
Output Impedance	@1 kHz		1		ohms
Output Sensitivity	32 Ω load @ 997 Hz, max output		+17.932		dBV
Max RMS Power Output	+20.157 dBu 32 ohm headphones +19 dBu 600 ohm headphones		1.940 163.1		mW

Appendix A: Compliance Information

Environmental Compliance

Disposal of Waste Equipment by Users in the European Union



This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

Proposition 65 Warning

⚠ *This product contains chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.*

Perchlorate Notice

This product may contain a lithium coin battery. The State of California requires the following disclosure statement: "Perchlorate Material – special handling may apply, See www.dtsc.ca.gov/hazardouswaste/perchlorate."

Recycling Notice



EMC (Electromagnetic Compliance)

This model Artist Mix complies with the following standards regulating interference and EMC:

- FCC Part 15 Class B
- EN 55022 Class B
- EN 55024 Class B
- AS/NZS CISPR 22 Class B
- CISPR 22 Class B

FCC Compliance for United States

Radio and Television Interference

Communication Statement

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

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

Any modifications to the unit, unless expressly approved by Avid, could void the user's authority to operate the equipment.

Australian Compliance



Canadian Compliance

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

CE Compliance

(EMC, Safety, and ROHS)



Avid is authorized to apply the CE (Conformite Européenne) mark on this compliant equipment thereby declaring conformity to EMC Directive 2004/108/EC, Low Voltage Directive 2006/95/EC and RoHS Directive 2011/65/EC..

Korean EMC Compliance

이 기기는 가정용 (B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Safety Compliance

Safety Statement

This equipment has been tested to comply with USA and Canadian safety certifications in accordance with the specifications of UL Standards: UL60950-1:2007, 2nd Edition and Canadian CAN/CSA C22.2 60950-1-07, 2nd Edition. Avid Inc. has been authorized to apply the appropriate UL and CUL mark on its compliant equipment.

Warning



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.
 - 9) 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.
 - 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.
- 16) For products containing a lithium battery:
CAUTION! Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
 - 17) For products with a power switch:
The main power switch is located on the back panel of S3. It should remain accessible after installation.
 - 18) The equipment shall be used at a maximum ambient temperature of 40° C.



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Mountain View, CA 94043 USA

Technical Support (USA)
Visit the Online Support Center at
www.avid.com/support

Product Information
For company and product information,
visit us on the web at www.avid.com