



Avid S4/S6 Guide

Software Version 2022.12



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Contents

Part	Introduction

Chapter	1. Introduction to Avid S6 and S4	1
	Modules.	2
	System Configurations	3
	System Requirements and Compatibility	5
	Activation and Registration.	5
	About This Guide	5
	Resources	6
Part II	Getting Started	
Chapter	2. First Time Setup	8
	Starting Up the System for the First Time	8
	Software Activation	9
	Logging in as Administrator and Updating Master Module Software	9
	Connecting S4/S6 to a Network	12
	Starting Up and Shutting Down the System	17
	Configuring S4/S6 the First Time	18
	Enabling EUCON Connectivity	26
	Control App Compatibility.	28
Part III	Touchscreen	
Chapter	3. Master Module Screens	30
Chapter	4. Home Screen.	31
	The Attention Track Editor	32
	Meter Scroller and Track Scroller	37
	Rename Tracks.	39
	Home Screen Options	39
Chapter	5. Tracks Screen	43
	Displaying Tracks	44
	Track Matrix Controls	44
	Track Scroller	46
	Track Selector Options	47
Chapter	6. Monitoring Screen	51
	Assigning Monitor Sources.	52
	Monitoring Screen Local Options.	54
	Enable EUCON Monitor	56

Chapter	7. Settings Screen	57
	Workstations	57
	Surface	58
	Soft Keys	58
	User and System Preferences	58
	About	59
Chapter	8. Soft Keys	60
	Overview of Soft Keys	60
	Importing and Exporting Soft Key Appsets	61
	Using Soft Keys	ô2
	Soft Keys Editor	ô5
	Creating Soft Keys	66
	Special Soft Key Functions	73
	Workstations, Layouts, and Tracks Soft Keys	78
	Soft Keys on the Master Post Module	79
	Soft Keys on Fader Modules and CSMs.	79
Chapter	9. Channel Strip Keys	30
	Using Channel Keys 8	30
	Customizing a Channel Key	31
	Channel Key Pages	32
	Import and Export Channel Keys 8	33
	Auto-Load Settings for Channel Strip Keys 8	34
	Channel Strip Keys Editor Screen	34
Chapter	10. Using the S4 Channel Strip Module	86
	F (A) and M (T) Switches	92
	Channel Keys and Automation) 3
Part IV	Using S4/S6	
Chapter	11. Common Tasks	95
	Nudging and Banking	95
	Pro Tools Folder Tracks	99
	Changing Display Module Views From the Surface	04
	Selecting Tracks	05
	Attentioning Tracks	07
	Accigning Track Input and Output	10
	Adjusting Track Deremeters	10
	Adjusting Track Parameters	12
		14
	Working with Track Groups 11 Des Table Operational University Operation (11, 117) 16	1/
	Pro Tools Commands Using the Track Color / Modifier Keys	18
Chapter	12. Recording	20
	Record Enabling Tracks	20
	Configuring Record Mode	22
	Soft Keys for Recording	22

Chapter 13. Using the Master Post Module	123
Master Post Module Top Panel	124
Assigning Tracks to MPM Strips	125
Track Monitoring and Recording	127
Linking and Locking Strips	128
Using the Speaker Controls	130
Using the Soft Keys	130
Chapter 14. Using Master Display Meter Modules	. 131
Chapter 15. Using Master Post Display Modules	136
Chapter 16. Editing	. 142
Editing from the Surface	. 142
Editing with the Wheel, Locate Switches, and Soft Keys	144
Chapter 17. Plug-ins and Sends	146
	146
	152
Senas	152
Chapter 18. Custom Knobs and Custom Faders	155
Chapter 19. Assignable Knob	160
Chapter 20. Automation and Mixing	. 163
F (A) and M (T) Switches	. 163
Channel Keys and Automation	. 163
Using Automation	. 164
Customizing Automation Mode Selection and Cycling	. 167
Mixing with VCAs	170
Chapter 21, Immersive and Surround Mixing	172
Surround Panning	172
Dolby Atmos	175
Chapter 22. Using the Master Joystick Module	. 183
Assigning Tracks to the Joysticks	184
Writing Automation with the Joysticks	186
Constraining the Joysticks to X or Y	187
Advanced Pan Parameters	188
Assigning Other Parameters to the Joysticks.	. 190
Joysticks and Layouts	. 191
MJM Features for Dolby Atmos	192
Chapter 23. Layouts	. 198
Accessing Layout Mode	. 198
Layout Screen Commands	. 199
- Virtual Strips	200
Creating Layouts	
	201
Recalling Layouts	201 207
Recalling Layouts	201 207 209

	Renaming, Rearranging, and Deleting Layouts in a Set.	209
	Saving and Loading Layout Sets (Titles)	210
Chapter	r 24. Swap Layers	213
Chapter	25. Spill Zones	216
	QuickStart for Using Spill Zones	216
	Configuring Spill Zones	217
	Spilling Layouts, Tracks, and Workstations	218
Chapter	26. Expand.	219
	Strip Expand	220
	Attention Expand Zones	224
Part V	Preferences	
Chapter	r 27. User Preferences	230
	Saving and Loading User Preferences.	230
	Surface	231
	Workstation	246
	Display Module	248
Chapter	r 28. System Preferences	251
	General	251
	Surface	253
	Workstation	255
Part VI	S4/S6 Modules	
Chapter	[•] 29. S4/S6 Master Modules	260
	Master Module	261
	Automation Module	269
	Master Joystick Module	273
	Master Post Module	274
Chapter	^r 30. Channel Modules	275
	Fader Module	275
	Process Module	279
	Knob Module	283
	Channel Strip Module	285
	Display Module	287
Part VII	Appendix	
Append	lix A. GPIO	293
	Advanced GPIO and Fader Glide	293
	Fader Start GPO	294
	Configuring GPIO	295
	Example GPIO Circuits	296

ndix B. EQ and DYN Parameters in Expand Mode 298	
ppendix C. Touchscreen Basics	99
ppendix D. Troubleshooting and Utility Mode	01
Diagnosing Module Status	01
Fader Calibration	01
LED Calibration and Brightness Control 30	02
Calibrating the Joysticks	04
Calibrating the Master Module Touchscreen	05
Gamma Correction for Display Modules 3	06
Utility Test Mode for Modules	07
Network Guidelines	80
Centralized Log File Collection	80
Temporarily Unclaiming a Module	08

Part I: Introduction

Chapter 1: Introduction to Avid | S6 and S4

Avid[™] S6 and S4 are modular, ergonomically designed control surfaces for Pro Tools[®] Software and EUCON[™]-compatible digital audio workstations (DAWs), and use the EUCON Ethernet protocol to provide fast, reliable data transmission.

S6 and S4 are tightly integrated with all EUCON-compatible DAWs, providing access to many key commands, menu items, and controls. The Master Module and Automation Module each have editable Soft Keys that offer single-switch access to automation, editing, session management, and other commands. Both control surfaces provide substantial visual feedback to let you quickly identify tracks and their functions. Each strip inherits its color from the audio application, and module controls light in different colors for each function. Display Modules can display high-resolution, multichannel colored meters, waveforms, automation data, and functions. You can also use the Avid Control app for iOS and Android simultaneously for additional control and display.



S6



S4

Modules

S6 and S4 systems can include the following modules (not all modules are supported on all systems, as noted):



Master Module

(All Systems)

This is the central hub for S6 and S4 operations. It uses a touchscreen and other controls to let you select, mute, solo, enable record and input, and edit track functions. All configurations must have one Master Module.

The Master Module displays the Home, Tracks, Monitoring, and Settings Screens, and provides knobs, switches, and a touchscreen that let you configure and manage your system, navigate through your session's tracks, create and store track Layouts, and perform many recording, monitoring, routing, and mixing tasks.

Automation Module (All Systems)

This module includes Transport Controls, Jog/Shuttle Wheel, Attention Track Fader, Soft Keys, Navigation, and other controls.

Display Module

(Optional for S6, S4 and S6 M10Plus Systems)

Each of its eight strips can display metering, editable waveforms, and other functions. Display Modules can also be configured as Master Meter Display Modules (MMM), or as Master Post Display Modules (MDM).

Knob Module

(S6, Optional for S4 Systems)

Each of its eight strips has four knob sections with displays. Knob Modules can also be configured as Attention Expand Zones.

Process Module (S6 Only)

Each of its eight strips has one knob section with a display, and multiple function switches.

Fader Module

(S6 Only)

Each of its eight strips has a motorized fader, meter, mute, solo, automation and other switches, an Attention key, and a display. One Fader Module can be configured as an Expand Fader zone.





Master Joystick Module (Optional for All Systems)

The optional Master Joystick Module provides two touch-sensitive joysticks, a central pan display, dedicated panning mode switches, and other displays and controls.

Master Post Module

(Optional for All Systems)

The optional Master Post Module provides monitor and punch paddles like a traditional PEC/DIR panel, along with other track controls, a monitoring section, and a bank of Soft Keys.

Channel Strip Module (S4 Only)

The Channel Strip Module provides a lower fader section, central function select section, and upper knob section.

System Configurations

S6 and S4 systems offer different capabilities, letting them be scaled for different installation sizes and requirements:

S6 M40 Built around the Master Module Universal (previously called the M40), are suitable for larger configurations up to 64 or more fader strips, are expandable, support up to eight connected workstations, and support Display Modules.

S6 M10 Plus Built around the Master Module M10 with M10 Plus License, are suitable for smaller configurations that desire Display Modules. S6 M10 Plus systems accommodate 8 to 24 fader strips per frame and can control up to two connected workstations.

S6 M10 Built around the Master Module M10, are suitable for smaller configurations, accommodating 8 to 24 fader strips per frame, and supporting up to two connected workstations. M10-based systems do not support Display Modules.

S4 Built around the Master Module Universal, are ideal for medium-sized configurations. S4 systems are available in 8–, 16–, and 24–fader pre-assembled frames with up to three Channel Strip Modules, and support Display Modules. S4 systems can control up to two connected workstations.

S6 systems are described by their processor (M10 or M40), the number of fader strips in the system, and the number of knobs per strip. For example, an M40 24-9 D system includes 24 fader strips, 9 knobs per strip, and Display Modules. S4 systems are described by their number of fader strips (8, 16, or 24) and frame width (3, 4, or 5). For example, an S4 16-4 includes 16 fader strips in a 4-foot wide frame.

S6 Surface Configurations

Modules can be arranged in many different ways. Figure 1 shows three arrangements for an S6 M10 16-5 configuration: Two Fader Modules (16 strips), two Process Modules (each providing 1 knob per strip), and two Knob Modules (each providing 4 knobs per strip), for a total 5 knobs per strip.



Figure 1. Three 16-strip S6 M10 arrangements with Master Modules to the left, in the center, and to the right of the Channel Modules

Figure 2 shows one possible arrangement for an S6 M40 32-9-D configuration: Four Fader Modules (32 strips), four Process Modules (1 knob per strip), eight Knob Modules (8 knobs per strip), and four Display Modules (D), for a total 9 knobs per strip.



Figure 2. 32-strip S6 M40 arrangement with Display Modules

S4 Surface Configurations

Figure 3 shows two possible arrangements of modules in an S4 system: Three Channel Strip Modules (24 strips), one each optional Master Joystick Module, Master Post Module, one (of up to 2) Attention Knob Module, and three Display Modules.





Figure 3. Two 24-strip S4 arrangements with optional Joystick, Post, and Attention modules and Display Modules

Frames and Hardware Options

(S6 Only)

S6 systems can be assembled as desktop systems or mounted onto a Leg Frame, and support any of the following hardware options:



Keyboard Tray

A tray that fits into the Bolster to provide a movable platform for a computer keyboard.

SpeakerDeck

A platform that can be assembled in short (shown) or tall configuration to place speakers.



Script Tray

A tray for scripts, notes, and cue sheets that rolls above Knob Modules.

VESA Mount

Consisting of a mounting post and adjustable VESA arm, the VESA Mount lets you mount a computer display and position it as close to the operator as desired.

Fill Panels

Standard Fill Panels (Large or Small) fill empty slots in a chassis. Additional Fill Panels are available for custom configurations, including the Frame Panel Large Center (for configurations in which the Master Module is in slot 1 above the Bolster), and the Mini Fill Panel (to put a Process, Knob, Master Joystick or similarly sized module in slot 1).



Producers Desk

The Producers Desk option consists of two chassis that include a special Inlay panel that spans both chassis. The inlay provides space for you to position computer displays and a keyboard. You can also add modules to either or both chassis of the Producers Desk.

Leg Frames, Leg Frame Extension, and Leg Frame Join Modules



Leg Frames provide a sturdy, ergonomic stand for S6 systems that are five or more chassis in width. Leg Frame systems include "L" in their name (such as S6 M40 32-9-D-L). The Leg Frame Extension is a single-chassis wide shelf that lets you expand a Leg Frame by one or two chassis. Leg Frame Join Modules let you attach two or more Leg Frames together to form a larger frame.

Instructions for installing a Keyboard Tray, SpeakerDeck, Script Tray, VESA Mount, Frame Panel Large Center, Mini Fill Panel, Leg Frame Extension and Leg Frame Join Module are included with the hardware option. Leg Frames options and Producers Desks are explained in the *S6 Installation Guide*.

System Requirements and Compatibility

S6 and S4 utilize the same EUCON software, which requires a compatible version of Pro Tools and is also compatible with other $EUCON^{TM}$ -aware applications. For a list of supported applications, system requirements, and other compatibility information, visit:

EUCON Compatibility

Activation and Registration

Activate your S4/S6 system software on-line as instructed later in this guide. You must use the System ID on the included *S6 System Software Activation Card* to activate and download all S4/S6 system software and documentation. You will also need to activate your S4/S6 software license after installing the software.

If you are upgrading a system, check your Avid account for the latest S4/S6 system software.

About This Guide

This guide provides an overview of S4/S6 features and functionality. For complete instructions on connecting and configuring your system, see the *S4/S6 Installation Guide*.

Conventions Used in This Guide

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

Convention	Action	
Settings > Surface	From the touchscreen Settings screen, navigate to the Surface page	
Control+N	Hold down the Control key and press the N key	
Control-click	Hold down the Control key and click the mouse button	

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

• The names of **physical controls** on the surface are shown in bold.

The following symbols are used to highlight important information:

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

A 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.

How to Use this PDF Guide

These are some useful features of this PDF:

- The Bookmarks on the left serve as a continuously visible table of contents. Click on a subject heading to jump to that page.
 - Click a + symbol to expand that heading to show subheadings. Click the symbol to collapse a subheading.
- The Table of Contents provides active links to their pages. Select the hand cursor, allow it to hover over the heading until it turns into a finger. Then click to locate to that subject and page.
- All cross references in **blue** are active links. Click to follow the reference.
- Use Acrobat shortcuts to navigate back to the previous view (Option+Left Arrow (Mac)/Alt+Left Arrow (Windows))
- · 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 S6 system. The following are just a few of the services and features available.

Account Activation, Product Registration, and License Activation

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. Activate your software license.

https://www.avid.com/account

Support and Downloads

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

For S6 support, troubleshooting, and downloads, visit: http://avid.force.com/pkb/articles/faq/Avid-S6-Support

For urgent S6 support, contact us using the Audio Annual Contract Support line for your geography listed here: http://www.avid.com/Support/Contact/audio-support

For all S4 and S6 documentation, visit: EUCON Product Guides

Training and Education

Study on your own using courses available online or find out how you can learn in a classroom setting at an Avid-certified training center.

Videos

You can find deep explorations of many S4/S6 topics and applications in the Coffee and Consoles series on YouTube.

Also check out the **S4 in Action** videos, **Avid Pro Tools | S6 Workflows** and original **Get Started Fast with S6** video tutorials, available on YouTube. Most of the videos are applicable to S4 as well as S6.

Products and Developers

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

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

News and Events

Get the latest news from Avid or sign up for a product demo.

Part II: Getting Started

Chapter 2: First Time Setup

S4 and S6 modules communicate with digital audio workstations over an IP Ethernet network. All modules and one or more workstations must connect to the supplied Ethernet switch.

Before connecting any workstations to S4/S6, you must do the following:

- Start up the system for the first time to confirm basic installation.
- Activate your Avid account for S4/S6 by logging into your Avid account (or creating a new one, if necessary).
- · Download and install the most recent Master Module software.
- Download (but do not yet install) the most recent S4/S6 Workstation software.
- Activate your Master Module software.
- Install Workstation software (Mac and/or Windows) on all workstations you plan to connect to S4/S6.
- Make Ethernet connections between your S4/S6 and workstations.
- Configure S4/S6.

For suggested network connections and configurations, download the EUCON Networking Guidelines.pdf (and all other S4/S6 documentation from the EUCON Product Guides article on our Knowledge Base.

Starting Up the System for the First Time

To start up the system for the first time:

- 1 Do the following:
 - S6: Make sure you have connected the S6 Power Strip to a UPS, power conditioner, or other switchable power source, then turn on power to S6 from the power device.
 - S4: Make sure you have connected S4 to a power source using one of the included IEC power cables, then turn on the S4 by
 putting its back panel Power switch to the On position.
- 2 When the system is fully started, if the touchscreen displays an End User License Agreement and the following message, you must install updated software before you can continue:

Welcome to your Avid Control Surface

A critical software update is available! Before continuing, please follow the instructions on the Software Activation card included in the front of the Installation Guide to activate your purchase on-line so that you can download and install important software updates before using your Control Surface.

- 3 Press (or tap) Logout.
- 4 Proceed to Software Activation.

Be sure to Activate your purchase using the included Activation card so you can receive your software license and software updates directly in your Avid account.

Software Activation

You must activate your S4/S6 to be able to download required Master Module software, as described below (and as described in this article on our Knowledge Base: http://avid.force.com/pkb/articles/how_to/S6-Activation-Card).

- 1 (Required) Use the System ID on the included S4/S6 System Software Activation Card to activate your Avid account for S4/S6:
 - Go to https://my.avid.com/products/Hardware/Console and log into your Avid Account (or create a new one, if necessary).
 - Enter the System ID from the S4/S6 System Software Activation Card (shown at right) included in the Master Module package.

Your System ID can be found on the *S4/S6 System Software Activation Card* included in the pouch of the *Installation Guide*. Activating deposits your software *Activation ID* number into your account, which you will use later to acquire your S4/S6 software license, as well as software downloads and documentation.

- 2 (Required) Acquire your S4/S6 Software License:
 - Make sure you are still logged into your Avid Master Account at https://my.avid.com.
 - Retrieve your Activation ID number (My Products and Subscriptions > Avid S6 M40/M10 Software and Support or Avid S4 Software and Support).
 - You will use this number later to activate your new software license.
 - Navigate to the My Products and Subscriptions page where software updates, Workstation software, documentation, and other resources are available. Download the latest versions of the S4/S6 Master Module Software, Workstation software (Mac or Windows), and documentation from your Avid account to your computer.
 - Insert a USB flash drive into an available USB port on your computer.

A Do not use the System Restore USB drive! Use a separate USB flash drive.

- If necessary, extract (decompress) the .ZIP file containing the Master Module software to unzip it.
- Copy the resulting file (.exe) to the top (root) level of your USB drive, then remove (eject) the USB drive.
- 3 (Optional) Register your hardware.

Follow the instructions on the Registration Information Card.

Logging in as Administrator and Updating Master Module Software

To install and update S6 Master Module software:

- 1 If you have not already done so, navigate the touchscreen to the Settings > About page and press Logout.
- 2 Select Administrator. When prompted enter the following default password: password
- 3 Click the File Explorer tile.
- 4 Plug the USB flash drive with the downloaded S4/S6 Master Module installer into one of the available USB ports on the back of the Master Module. The USB drive appears in the left hand column under Computer.
- 5 Tap on the USB flash drive to see the contents.
- 6 Launch (run) the S4S6MasterModuleInstall software from the flash drive by double-tapping on the icon. Follow the instructions on-screen. After the installer has completed you will be prompted to restart the system.
- 7 Tap Yes to restart the system immediately.
 - If after restarting the Software License Activation screen appears, proceed to Activating Your Software License.
 - If not, proceed to Installing S4/S6 Supporting Software.
- 8 Proceed to Activating Your Software License.



Activating Your Software License

Master Module software must be activated when prompted after installation or upgrade. If the Software License Activation screen appears, do the following to perform an Offline Activation. Offline activation requires a separate internet-connected computer and USB flash drive. You can use the same USB flash drive on which you copied the MasterModuleInstall software.



About Online Activation Online Activation should only be performed while in direct contact with Avid Customer Support.

Offline Activation

Make sure you have the System ID number and software Activation ID (from your S4/S6 product in your Avid account), a installed the new software, and restarted your system.

To activate Master Module software using offline activation:

1 After the system has restarted, the Software License Activation screen appears. Help text appears in the lower half of the screen.



Figure 4. S6 Software License Activation screen for offline activation

- 2 Make sure Offline is selected for the Activation Type. If not, tap the selector and choose Offline.
- 3 On a separate internet-connected computer go to http://www.avid.com/license to see the Software License Activation page.

SOFTWARE LICENSE ACTIVATION				
ACTIVATE YOUR AVID SOFTWARE PRODUCTS OR OPTIONAL FEATURE. Please enter the following information. * Required	ACTIVATE OPTIONAL FEATURES			
Activation ID*				
Device ID *				
Email Address				
Email is an optional field, however we recommend you provide an email so we can also send you the software license file. By hitting this button you understand that you are not able to go back and your activation will be used Submit	Continue			

Figure 5. Software License Activation page

- 4 Enter the following information, making sure to enter all characters and numbers correctly (fields are not case-sensitive):
 - Enter your Activation ID into the Activation ID field. Once entered, a System ID field appears. Press Tab to go to the next field.
 - Enter your System ID into the System ID field. Press Tab to go to the next field.
 - Enter your Device ID (shown on the S4 Software License Activation screen) into the Device ID field.
 - When a valid ID number is entered into each field, a green check mark appears. If any characters are incorrect, and until the correct number of characters has been entered, an error message appears.
 - (Optional) Enter the email address associated with your Avid account to receive an email with a copy of your license file.
- 5 Click Submit, then follow the instructions on-screen to do the following:
 - Download the license file to your computer, then transfer the license file to a USB flash drive.

A Do not use the System Restore drive. Use a separate USB flash drive (not included), formatted as FAT or FAT32.

• Remove the USB drive from your computer, then insert it into one of the USB ports on the back of the Master Module.

- 6 On the Master Module touchscreen, tap Activate. A standard Windows Open dialog appears.
- 7 Navigate the dialog to the USB drive, select the downloaded license file (S6xxx...bin) and tap Open. After a few moments your software will be activated.
- 8 After activating your software, if you are prompted to update module firmware after the system restarts do the following:
 - In the Settings > Surface page, press Update, then press Update.
 - If no Update option is displayed either the system hasn't completely booted yet, or a module is selected on that screen. Wait for the system to finish starting up, and be sure no module is selected on-screen (indicated by a lit rectangle surrounding that module).
 - When prompted, confirm the update and then wait until all modules have updated (which can take several minutes). Do not turn off any modules during this process. The screen displays a message confirming that the update has completed.
- 9 Proceed to Installing S4/S6 Supporting Software.

Installing S4/S6 Supporting Software

Your Avid Master Account also provides workstation software for Windows and Mac, and S4/S6 documentation. XMON EUCON is also included in these installers.

Whenever you update Master Module software you must also update workstation software on all connected workstations.

EUCON installs into a default directory for all EUCON devices (including the Control app, Dock, S3, and S6). This lets you co-install all software for these devices.

After updating Master Module software, do the following:

1 Log in to your Avid Master Account and download EUCON_WorkstationUnifiedInstall software for your workstation (Mac or Windows), documentation, and other resources from the My Products and Subscriptions section.

2 If necessary, insert the USB drive containing the downloaded EUCON_WorkstationUnifiedInstall into a USB port on your workstation.

▲ Do not use the included System Restore USB drive! Use a separate USB flash drive.

To install WSControl (workstation) software:

- 3 Double-click EUCON_WorkstationUnifiedInstall, then double-click the installer to launch it.
- 4 Follow the instructions on-screen (select each option you want to install):
 - To only install S4/S6 Workstation software, click to select S4/S6 Workstation.

	•	🎽 Install EUCON Workstation Unified		
		Custom Install on "Macintosh HD"		
		Package Name	Action	Size
	Introduction	S1 / S3 / Dock / Control / Artist Series		127.6 MB
	License	S4 / S6 Workstation	Install	94.8 MB
	Destination Select	Avid Control Desktop		264.4 MB
	In the Head of The second	XMon		1.3 MB
	Installation Type	External Workstation		37.7 MB
		Uninstall all applications		1 KB
		Remove User Preferences		1 KB
		Space Required: 106.4 MB	Remaining:	497.11 GB
		Install S4 / S6 Workstation Software (WSCon	trolApp).	
		Unchecked items will be uninstalled.		
			Co Rook	Continuo
			GO Back	Continue

Installing S4 / S6 Workstation software

- If you will be using S4/S6 and the Avid Control app simultaneously, select both S1/S3/Dock/Control/Artist Series and S4/S6 Workstation. (Other combinations are allowed (such as S4/S6 Workstation and External Workstation) but once installed cannot be run simultaneously.)
- 5 After installation is complete you can configure WSControl to auto-launch by clicking the S4/S6 icon in the Tool bar (Mac) or system tray (Windows) and selecting WSControl from the Auto Launch sub-menu. Other apps can also be auto-launched.

To uninstall items:

1 Launch the installer.

Items that are currently installed are selected (checked) and indicated as Installed.

- 2 Do the following:
 - To uninstall specific component, make sure it is not selected (no check mark).
 - To uninstall all EUCON applications, select Uninstall all applications.
 - To uninstall all User Preferences, select Uninstall User Preferences (your appsets will not be removed).
- 3 Click Continue (Mac) or Next (Windows).
- 4 Proceed to Connecting S4/S6 to a Network.

Connecting S4/S6 to a Network

Each S4/S6 module and workstation requires a valid and unique IP address in the same range. This IP address can be created from either of the following:

- The DHCP (Dynamic Host Configuration Protocol) server in the Master Module
- An external, third-party DHCP device, such as a standalone router



A Windows workstation name with any of the following characters will not be able to connect to S6: / [] ":; | <> + =,? * For more information, visit Microsoft Support Naming Conventions

A Make sure you have followed all instructions in Software Activation and installed the latest versions of S6 Workstation software (Mac and/or Windows) before connecting S4/S6 to your workstations.

Recommended Setup

Since S4/S6 requires substantial bandwidth, and the network timing between modules is critical, we recommend installing S4/S6 and your workstation(s) on an isolated network/subnet using the Master Module's internal DHCP server.

To connect S6 with your workstation(s) using the Master Module's internal DHCP server:

1 Connect the Master Module from Ethernet port 2 on its back panel to the supplied Ethernet switch. (Either port can be used, but this guide uses port 2 in this example).



Figure 6. Master Module back panel Ethernet ports 1 (left) and 2 (right) on an original S6 Master Module

2 Connect all other modules and workstations to the same Ethernet switch. Do not connect any other equipment to this network.

3 Set your workstation network adapters to: Obtain IP addresses automatically by DHCP (default).

If you must connect your workstation to a Wide Area Network (WAN) to access the Internet or a corporate network, we recommend using a workstation with two Ethernet ports. Similarly, if your system includes a Pro Tools | MTRX or MTRX Studio, use a dedicated network connection for DADman control.

To connect your workstation to a WAN:

- 1 Connect one port to the WAN, and connect the other port to the S6 Ethernet switch or to S4.
- 2 On the workstation that will connect to this S4/S6 system, do either of the following:

•Mac: Click the WSControl icon in the Mac menu bar at the top-right of the screen.



•Windows: Right-click the WSControl icon in the system tray at the bottom-right of the screen.

3 Select Network Setup.



Figure 7. Avid S6 WSControl Network Setup dialog

- **4** If your workstation has multiple networks attached, make sure the Network Interface selected is the one connected to your S4/S6.
- 5 If you selected a new Network Interface, click Apply and Relaunch (Mac) or Apply and Restart (Windows) to reboot the workstation and restart WSControl.

See "Configuring Multiple Systems on One Network" on page 22 to learn how to set the Desk ID for S6 and your workstations.

The Master Module internal DHCP Server uses the following default settings:

	IP Address		
Master Module	192.168.2.1		
Host(s)	192.168.2.2 to 192.168.2.199		
Reserved for Static use	192.168.2.200 to 192.168.2.254		

Advanced Setup

To use a custom setup, you must have networking experience that may require accessing a WAN using a router, or installing the entire S4/S6 network as part of a corporate network infrastructure.

If you will use a third-party DHCP device, Avid recommends the Cisco RV345 Dual WAN Gigabit VPN Router.

Other routers have not reliably met the timing requirements of the S6 modules.

To connect S4/S6 to a DHCP router or server:

- 1 Connect the Master Module from Ethernet port 1 on its back panel to the supplied S4/S6 network switch.
- 2 Connect all other S4/S6 modules to the same switch.
- 3 Connect the S4/S6 network switch to a LAN port on the third-party DHCP router.

4 Connect your workstation(s) to either the S4/S6 network switch or the LAN ports on the router. If your workstation has multiple networks attached, make sure the Network Interface selected is the one connected to your S6.

See **Configuring Multiple Systems on One Network** to learn how to set the Desk ID for S4/S6 and your workstations.

b To connect S4/S6 to a corporate network, consult your IT department for guidance.

Managing Network Connections

(Including Multiple, Selectable Network Connections)

The Master Module can be connected to one or two networks simultaneously and choose between them in order to utilize Ethernet KVM switches, and/or to save Titles, User Preferences, custom Soft Key Appsets, and other S4/S6 data to a WAN.

The following instructions are recommended primarily for single operator systems and basic S6/network configurations. There are many other options to configure systems without using the internal DHCP server. For more information and advanced configuration instructions, see the document EUCON Networking Guidelines.pdf, available from the S4/S6 Support article on our Knowledge Base. This information is updated frequently as more supported workflows are added so check back regularly. http://avid.force.com/pkb/articles/faq/Avid-S6-Support

Network ports can be configured from the Settings > Surface, Local Options (Network Interface) screen of the Master Module. These settings make it easier to maintain network connections by letting you do the following:

- Set the Master Module NIC to either static IP or DHCP.
- Specify which static NIC will use the DHCP server.
- Define the IP range the DHCP server will serve.
- Select which NIC is the S4/S6 network if both ports on the Master Module are connected.

Who Should Use These Settings

Do not use these settings if your system is working as expected, or if you do not have advanced network experience.

- A These settings are for advanced users with prior networking experience only. Incorrect settings could render your system inoperable. Consult your IT department for guidance if you are not sure of any of the required settings.
- If you have changed your network settings in any way it is likely that will not need to edit any of these settings.
- If you get a network error, however, use these settings to select the desired configuration.

To connect the Master Module to a different network in addition to the EUCON network:

- 1 Make sure you are using the internal DHCP server for the S4/S6 Network (Ethernet port 2 on the back of the Master Module).
- 2 Connect the other port (Ethernet port 1 on the back of the Master Module) to your other network.
- 3 Navigate to Settings > About, and choose Shut Down. Wait until the Master Module has completely shut down.
- 4 Start the Master Module by pressing the switch on the top panel, behind the touchscreen (near the Talkback Thru port). The following message should appear on the Master Module when it restarts.

More than one Network Interface detected. Please go to the Surface Page settings and select the interface used for the surface

Multiple Networks message

If it does not, make sure port 1 has a valid network connection and IP address, and restart the Master Module again.

5 Tap to dismiss the message, then go to Settings > Surface and tap the Local Options (gear) icon at the lower right of the screen.



Local Options (gear) icon in Settings > Surface

The Network Interface panel is displayed. The upper (Network Interface) section provides settings for a single S6 network connection. The lower (Network Interfaces) section provides settings for multiple S4/S6 network connections.

Surface	
Network Interface (changes require app restart or system reboot)	
First Available	
Desk ID (changes require restart)	
 1	
1 30	
Network Interfaces (changes require system shut down)	
Network Interface 1 IP Setting (Intel(R) 82579LM Gigabit Network Connection)	
DHCP	
Enable DHCP Server on Interface 1	
Network Interface 2 IP Setting (Intel(R) 82574L Gigabit Network Connection)	
192.168.2.1	
Enable DHCP Server on Interface 2	

Network Interface settings

- 6 Choose the correct adapter for the S6 using the Network Interface selector (the topmost settings).
 - If the Internal DHCP settings haven't been changed then this will be the network with 192.168.2.1 address as shown below.
 - If the settings have been changed, or if you want to specify settings for the different adapters, continue reading.



Network interface configured for S6

To configure the Network Interface 1 and Network Interface 2 settings for multiple network connections:

1 Tap the Network Interface 1 IP Setting or Network Interface 2 IP Setting selector and choose an available setting.

	Unknown (leave unchanged)	
	Custom Static IP (leave unchanged)	
▼ Sur	IP Address Assigned by External DHCP Server	
Dec	192.168.1.1	
Des	192.168.1.2	
1	192.168.1.3	
V Not	192.168.2.1	
· Ne	192.168.2.2	
Net	192.168.2.3	rk Connection)
	192.168.3.1	
	192.168.3.2	
Net	192.168.3.3	Connection)
	192.168.2.1	7

Network interface selector

Choices include the following:

- Unknown (leave unchanged) Indicates a port that could not be determined at startup, such as if that port was not connected.
- Custom Static IP (leave unchanged) Indicates a port that was set to an IP outside the S4/S6 expected range through the OS. This method is no longer recommended, and should only be used if for whatever reasons you need to continue using the previously available (pre-v3.5) method of editing the dhcpsvr.ini file manually.
- · IP Address Assigned by External DHCP Server
- Range of supported IP addresses (192.168.2.0 192.168.10.3), with a fixed subnet mask of 255.255.255.0.
- 2 If desired, click to Enable DHCP Server on Interface 1 (or 2).

This setting is only available when you have set a static IP from the fixed range. It is unavailable if the NIC is set to DHCP or the Custom/Unknown setting.

- 3 Once the settings are changed, the NICs are updated and then the DHCP server scripts updated. The Database file will be deleted and the system will shut down automatically.
- 4 Wait for the Master Module to completely shut down, and then power cycle the entire S6 system.

All modules and workstations must be power cycled after making changes to the NIC or DHCP settings. Failure to power cycle all modules and workstations can result in some or all modules on the wrong network.

Desk ID

It is allowed, though not recommended, to change the Desk ID at the same time as changing other Network Interface settings. If the Desk ID or selected interface is changed, the system will automatically shut down (the DHCP server/NIC IP change takes precedence). It is likely that you will have to reselect the interface once the system starts up again and after you power cycle all modules.

To revert to a single (EUCON) network:

1 Go to Settings > Surface, click the Network Interface selector, and choose First Available.

This selects which NIC is the S4/S6 network if both ports on the Master Module are connected.

Surface	(changes require restart)				
Net	work Interface (changes require app restart or system re	eboo	t)		
	First Available				
Des	First Available				
	Intel(R) 82579LM Gb Network Conn 10.54.101.181				
	Intel(R) 82574L Gb Network Conn 192.168.2.1				

Network Interface configured for just S6 (EUCON) network

2 Remove the network cable from Master Module port 1, then restart S4/S6.

If you remove the cable without restarting, the next time the system is restarted a warning message is displayed. Follow the on-screen instructions to reset the Network Interface to First Available and restart.

Starting Up and Shutting Down the System

This section describes how to start up and shut down the system. If it is the first time you are starting up the system, be sure to follow the instruction in **Starting Up the System for the First Time**.

Starting Up the System

To start up the system:

- 1 Do the following:
 - S6: Make sure you have connected the S6 Power Strip to a UPS, power conditioner, or other switchable power source, then turn on power to S6 from the power device.
 - S4: Make sure you have connected S4 to a power source using one of the included IEC power cables, then turn on the S4 by putting its back panel Power switch to the On position.
- 2 When the system is fully started, follow any instructions that appear on-screen to update firmware, or to activate your software license. (For more information, see **Software Activation**).
- 3 Proceed to Configuring S4/S6 the First Time.

Shutting Down

Never power down the system while the Master Module is running. Always shut down the Master Module first.

To shut down the system:

1 Navigate the touchscreen to the Settings > About page and press Shut Down. Wait until the Master Module stops running.

Always shut down the Master Module before powering down the system!

2 Either press the round Power switch behind the touchscreen, or turn off power at the source device supplying power to the S6 Power Strip (UPS, power conditioner or other), or turn off S4 using its back panel Power switch.

LED Indication of Module Power and Connection Status on System Startup

After you have updated and activated system software and configured the surface (as described in **Configuring S4/S6 the First Time**), specific switch LEDs indicate power and connection status for each module while the Master Module starts up. Use this status indication to see whether a module belongs to a system or needs to be unclaimed before it can be attached to another system.

Module Switch LED Fader Modules Track Color, strip 1 Process Modules Back switch, strip 1 **Knob Module** Back switch, strip 1 Channel Strip Module (S4 Only) Track Color and Back switch, strip 1 Automation Module Track Color switch (Attention fader) Master Module Back switch (lower left) Master Joystick Module Back switch (lower left) Master Post Module Track Color switch, strip 1

Power and Connection Status LEDs

- When lit purple during system start up, the module is ready to use. This will only be the case after you have configured the surface as described in **Configuring S4/S6 the First Time**.
- If lit yellow/orange, the module is powered but not claimed in the current Surface Configuration.
- Once the Master Module completes its startup, LEDs for all claimed modules clear. On unclaimed modules, the LED lights in addition to the standard LED indicators for an unclaimed module.

Configuring S4/S6 the First Time

You must first assemble and connect your system according to the procedures in the Installation Guide. You must also install and activate Master Module Software before configuring the surface. See Starting Up the System for the First Time.

This section shows you how to do the following:

- · Configure your surface modules using the Surface page on the Master Module touchscreen
- · Connect S4/S6 to your workstation(s) using the Workstation page on the touchscreen
- Enable EUCON connectivity in your audio application

Configuring the Surface

After installing or rearranging modules you must configure your surface using the Master Module Settings > Surface page.

To configure your surface:

- 1 Access the Settings pages by doing either of the following:
 - Press the **Settings** switch on the Master Module.



Figure 8. Settings switch on the Master Module

2 Touch Surface along the top of the Settings screen to open the Surface page.

Settings						
Workstations	Surface	Soft Keys	User	System	About	

Figure 9. Top of Settings screen

- 3 Touch Config at the bottom-left of the Surface screen.
- 4 Touch Surface at the bottom-left of the screen.

e.				
Surface	Expand	L Spill	R Spill	Cancel



Back, Next, Undo, Cancel, Clear, and Cancel appear at the bottom of the touchscreen during this process. The instructions refer to touching these controls but you can also press their Master Module Main Menu switches below them.

After completing the instructions in this section, you can use the **Expand** *command to designate Attention Expand modules.*

- **5** Select your Frame Width and Frame Depth using their drop-down selectors.
 - Select your Frame Width (the number of chassis assembled to form the system Frame).
 - S6 Only: Select your Frame Depth. Select 4 if your frame uses Frame Chassis Small (supports one Knob Module per chassis) and 5 if Frame Chassis Large (supports two Knob Modules per chassis).

Settings						
Surface	Soft Kevs	User	System	About	Workstations	
Sanace	cont neys		oystern	, ibeut		
Frame Si	ize					
				(
		Width	3 -	Depth	4	
					4	
					5	
			mmmm			
				:		
					1	
) :0 0		

Figure 11. Setting Frame Size in the Settings > Surface page (S6 shown)

 $\dot{\bigtriangledown}$ Helpful instructions appear in the Info area at the bottom of the screen.

6 Touch Next at the bottom-left to continue to the Modules page.



Figure 12. Modules (S6 shown)

At the top of the screen, allowable module arrangements appear in columns. There are multiple pages of these columns, available by swiping them to the left or right.

• Swipe the displayed module stacks to the left to show the available arrangements for modules. Available arrangements differ for S4 and S6.



Figure 13. Columns of standard modules (left) and one example of other columns showing Expand Zones/Master Joystick Modules (right)

- 7 Drag module stacks to the frame diagram until it matches your physical arrangement of modules. To see additional stacks, swipe the displayed stacks to the left (swipe to the right to return).
 - To replace an existing module, drag a new module stack into that slot.
 - To remove a module from your frame, drag the empty stack into that slot.



Figure 14. Surface modules in frame (S6 shown)

8 Touch Next to continue.

All controls on the surface illuminate. If the controls do not light, check your connections made during installation. If connections are correct, one or more modules might need to be unclaimed before they can be attached to another system. (See **Temporarily Unclaiming a Module**.)

9 To confirm that the module flashing in the Surface page is connected and correctly positioned, touch or press any physical control on that module. Its lights turn off, and the next module flashes. If a module's lights do not turn off, check your assignments in the Settings > Surface page. Touch Undo if you touch the wrong module.

10 When all modules are confirmed, touch Next.

Figure 15 shows all modules confirmed for an S6 configuration except the Knob Modules on the far right, which are light gray.



Figure 15. Confirming modules

11 Do either of the following:

- If you do not have Display Modules to assign, touch Done to accept the new arrangement and complete the process.
- If your system does include Display Modules, drag each numbered Display Module icon to the frame diagram so it matches the number shown on the physical Display Module. These might not be in



Figure 16. Assigning Display Modules

- To designate a Display Module as a Master Meter Display Module (MMM), drag a numbered Display Module onto an empty chassis or Options chassis (such as an S4 chassis with an optional Attention Knob module but no faders).
- To designate a Display Module as a Master Post Display Module (MDM) for PEC/DIR metering, drag a numbered Display Module onto a chassis with a Master Post Module but no faders).

You can have up to two MMMs or MDMs on S6 systems, and a single MMM and a single MDM on S4 systems. You can designate existing Display Modules to be MMMs or MDMs at any time after initial configuration by returning to Settings > Surface, Config, then pressing Display and following the on-screen instructions.

12 When you are done, touch Next.

13 Touch Done to accept the new arrangement and complete the process.





Figure 17. Finished Surface Arrangement (S6 shown at left, S4 shown at right

Configuring Multiple Systems on One Network

Multiple S4/S6 systems can operate on one network, but each system and the workstation that controls it must be able to identify each other. The Desk ID Surface option lets you assign a unique number for this S4/S6 surface. You then assign that same number to the workstation that will control that S4/S6.

If your installation has just one S4/S6 system on a network, leave the Desk ID set to its default value of 1.

To set a unique Desk ID:

1 Touch the Local Options icon at the bottom-right of the Surface page. The Surface options open; Desk ID is the only entry.



Figure 18. Local Options icon (left) and Desk ID slider (right)

2 Drag the slider to set the desired number, which displays to the right of it.

A message box (outlined in yellow) appears at the top of the touchscreen to inform you that the Master Module must restart to enact this change. Touching Cancel avoids restarting and leaves Desk ID with its previous setting.

When the Master Module reboots, the previous arrangement is cleared and you must create a new one.

3 On the workstation(s) that will connect to this S4/S6 system, make sure you have installed Workstation software, then do the following:



•Mac: Click the WSControl icon in the Mac menu bar at the top-right of the screen.

•Windows: Right-click the WSControl icon in the system tray at the bottom-right of the screen.

- or -

Select Network Setup.

4 In the WSControl Network Setup dialog, set the Desk ID to the same number as in step 1.

WSControl Network Setup
Desk ID:
Network Interface: Belkin USB-C LAN - 192.168.2.11
Changing the Desk ID requires relaunching WSControl. Cancel Apply and Relaunch

Figure 19. Setting the Desk ID in the WSControl Network Setup dialog

- **5** If your workstation has multiple networks attached, make sure the Network Interface selected is the one connected to your S4/S6.
- 6 If you only changed the Desk ID, click Apply to restart WSControl.
- 7 If you changed the Network Interface, click Apply and Relaunch (Mac) or Apply and Restart (Windows) to reboot the workstation and restart WSControl.

Connecting S4/S6 to Workstations

In order to control an audio application with S4/S6, you must first install Mac or Windows Workstation software on the desired computer. Then you connect that workstation to S4/S6 using the Settings > Workstations page.

For instructions to install Workstation software, see the What's New in SS4/6 Software.pdf that accompanies all Master Module software downloads.

Multiple workstations can be connected to S4/S6 at once, but only one is *attentioned* (or focused) at a time. The attentioned workstation has exclusive focus of the S4/S6 surface. A workstation can be selected but not attentioned so you can derive information about the workstation, its applications, and EUCON version. Custom names can be assigned to connected workstations. When multiple workstations are connected, you can choose to **Show Workstation Number** on S4/S6 displays (the number corresponds to the order in which Workstations appear in the Connected list of Settings > Workstation).

To connect a workstation to S4/S6:

- 1 Navigate to the Workstations page by doing either of the following:
 - On the Master Module, press Settings and then touch Workstations at the top of the Settings screen.
 - Or press **Shift** + **WS** (hold down **Shift** and press **WS**).

The Workstations screen appears, with the Network column on the left and the Connected column on the right.

Settin	igs				
Works	stations	Surface	Softkeys	Preferences	About
Net	twork			Connected	
G	WMacHDX				

Figure 20. Top of Settings > Workstations page

2 Drag a workstation from the Network list over to a slot in the Connected list.

- The workstation name appears in the Connected slot, flashes as it connects, and then appears solid when it connects.
- The *focused* application (top-most application on that workstation) is listed on the lower right.
- If a previous workstation was connected to that slot, it is disconnected.

• The workstation is selected and attentioned, which is indicated by an orange (upper half) and blue (lower half) rectangular outline. In Figure 21, the workstation in the **Connected** list is selected and attentioned, and Pro Tools is the focused application. (Note that EUCON must be enabled within Pro Tools before it can connect, as explained in **Enabling EUCON Connectivity**).

GWVlacHDX		
GW-TEST1-HP≻S6 1	GW-TEST1-HP	Pro Tools 11PC

Figure 21. Connected workstation

To connect additional workstations:

• Drag additional workstations from the Network list to the Connected list.

To change the attentioned workstation:

• Touch a workstation in the Connected list without a blue outline. In Figure 22, GW-TEST1-HP is attentioned (blue outline).

To select a workstation to display its information at the bottom of the page:

• Touch its entry in the Network list. In Figure 22, GWMAC-2-Mac-Pro is selected (orange outline).

To enter a custom name for a workstation:

- 1 Tap the Local Options (gear) icon at the bottom right of the Workstation page and make sure the setting Show Custom Name in Available List is enabled.
- 2 Double-tap the blank area at the top of the Connected box for that workstation, then enter a name using the on-screen keyboard.



Figure 22. Attentioned workstation(1), selected workstation (2), and Info area (3)

Workstation Status

Connected A connected workstation is indicated by a gray rectangle (see Figure 23).

Offline A connected workstation can become *offline* if WSControl was shut down properly on that workstation (indicated by a red rectangle as shown in Figure 24).

Unreachable A connected workstation can become *unreachable* if the workstation or WSControl crashed, or the workstation's Ethernet cable was disconnected (indicated with the "unreachable" icon shown in Figure 25).

Network Connection Interrupt A connection to a workstation is experiencing either a dropped network packet, CPU or memory overload (indicated with the "interrupt" icon shown in Figure 26). Press the Graphs option at the bottom of the screen to see the issue.

Network	Connected
jvincent-PC>S6 11	jvincent-PC

Figure 23. Workstation connected

Network	Connected	
	jvincent-PC	

Figure 24. Workstation offline

Network	Connected
	<u>^</u>
	jvincent-PC

Figure 25. Workstation unreachable

Network	Connected	
		R
	Ms-Mac-Pro	Finder

Figure 26. Workstation network connection interrupted

Show Workstation Alerts

S4/S6 can alert you to network errors, should they occur. These alert messages can help identify network problems (without having to look through log files) and give you the opportunity to minimize any possible problems by restarting the S4/S6.

Workstation Alerts are enabled by default, but you can disable them in the Workstation section of Settings > System.

When enabled, any Workstation Alert messages appear only once and can be easily dismissed, letting you decide whether you want to continue or restart.

Progress Indicators for Session Load and Workstation Connect

Progress indicators appear on the touchscreen when loading sessions and connecting to workstations. The Workstation page also provides status graphs to monitor system activity.

System Status Graphs

The Settings > Workstations page provides a Graphs button, which lets you see status and data for CPU, Memory, and Network activity. Network errors are also logged. Whenever the system detects a network interrupt, the status graphs are outlined in orange.

To see Status graphs for Workstations:

- 1 Navigate to Settings > Workstations, then tap Graphs (or press its Soft Key).
- 2 Tap to select a different Workstation (if available) to see graphs for that workstation.

Status Graphs				
CPU: 7.6%		Memory: 30.8%	Network: 0.1%	
Interface Name Bandwidth	Ethernet 2 1 Gbps	Transmit Receive	No Errors No Errors	
			nfo	¢

Figure 27. Workstations > Graphs display

3 To exit, tap Info or navigate to any other page.

Enabling EUCON Connectivity

You must enable EUCON connectivity in your audio application to work with S4/S6. The following instructions show how to enable EUCON in Pro Tools. (For other applications, refer to its documentation.)

Enabling EUCON in Pro Tools 2022.12 and Later

When running Pro Tools 2022.12 or later natively on Apple Silicon Macs, the previously available Ethernet Controllers tab in Pro Tools Setup > Peripherals is no longer provided (use the EUCON controls in the Edit window Toolbar to toggle EUCON on or off, and to see status).

When running under Rosetta, or any supported Windows operating system, the Ethernet Controllers tab remains available to enable EUCON (in addition to the Edit window Toolbar controls for EUCON introduced in Pro Tools 2022.12).

To show EUCON controls in the Edit window:

- **1** Do one of the following:
 - Click the Edit Window Toolbar menu (in the upper-right corner of the window).
 - Right-click in the Toolbar.
- 2 From the menu, select EUCON.



Selecting EUCON in the Edit window Tool bar menu

EUCON controls are shown in the Tool bar.



EUCON in the Edit window Tool bar

To turn EUCON on or off:

• Click the EUCON button. EUCON is enabled when the background is lit green with black text.

The Status LED indicates EUCON communication status as shown in the image and table below (you can also hover over the LED to view a Tool Tip, if enabled in Pro Tools Preferences):



EUCON status indication

Pro Tools EUCON Status Indication

Image	Status
1	EUCON is off (not enabled)
2	EUCON is enabled but not connected to an Avid control surface
3	EUCON is enabled and connected to a control surface
4	EUCON is enabled but a communication or connection failure may have occurred (this warning clears after 5 seconds)
5	EUCON is enabled but an unrecoverable error has occurred (such as a network packet loss, crash of EuControl, or other). The indicator flashes red until clicked, after which it stays lit red until the error is resolved.

Enabling EUCON in Setup > Peripherals

The following instructions show how to enable EUCON in Pro Tools when running in Rosetta or any Windows operating system. (For other applications, refer to its documentation.)

To enable EUCON connectivity in Pro Tools:

- 1 Make sure you have connected S4/S6 to your Pro Tools computer via Ethernet as explained in Connecting S4/S6 to a Network.
- 2 Launch Pro Tools, choose Setup > Peripherals, and click the Ethernet Controllers page.
- 3 Select EUCON Control Surfaces.



Figure 28. Pro Tools Setup > Peripherals > Ethernet Controllers tab showing EUCON Control Surfaces enabled

- 4 Click OK. After a quick scan, S4/S6 is ready to use with Pro Tools. You do not need to configure any other settings.
- 5 Connect the workstation running Pro Tools to S6. If you did not yet connect it, see Connecting S4/S6 to Workstations.
- 6 Open a Pro Tools session if one is not already open.
- 7 Click in any Pro Tools window to bring it into focus.
- 8 Verify that the Mix window displays a blue border around Pro Tools track names, and that S4/S6 shows track names and other session data.

Control App Compatibility

You can use the free Avid Control app for iOS and Android simultaneously with S4/S6, letting you control Pro Tools (or other compatible DAWs) without having to leave the couch. When used with S4/S6, only one instance of the Control app can be added to the My Surfaces list in the Surfaces tab of EuControl. Other EuControl devices (S1, S3, Dock, or Artist Series) can be added only when S4/S6 is not attached to that workstation.

 $\dot{\phi}$ Avid Control Desktop is not supported with S4/S6.

Follow the instructions in the Avid Control Guide.pdf to install and configure EuControl software.

About EuControl and S4/S6 Preferences When the Control app and S6 are simultaneously connected to a workstation, Preference settings in EuControl are ignored (only S4/S6 settings apply). Conversely, when only the Control app (and/or S1, S3, Dock or Artist Series) is connected but S4/S6 is not connected to the workstation, only EuControl Preference settings apply.
Part III: Touchscreen

Chapter 3: Master Module Screens

There are four primary Master Module screens: Home, Tracks, Monitoring, and Settings.

The Master Module screens are navigated and controlled using standard touch gestures. To learn more, see Appendix C, "Touchscreen Basics."

Home Screen Lets you select and edit Attention Track functions. Includes the Track and Meter Scrollers.

 $\stackrel{\scriptstyle }{\searrow}$ Parts of the Home screen may appear blank without an Attention Track assigned.

Tracks Screen Lets you quickly select tracks, attention a track to the Home screen, create and recall Layouts, and enable track record, input, mute, and solo functions. Displays categorized and color-coded tracks in the Track Matrix (if supported by the audio application).

Monitoring Screen Lets you assign monitor controls, name speakers and name monitor labels.

Settings Screen Let you set up the control surface, manage workstations, create and edit Soft Keys, and set System and User Preferences. The About page displays software version information and lets you activate your software license, Logout and Shutdown.



Figure 29. The four Master Module Screens: Home, Tracks, Monitoring, and Settings

To display the Home screen from any other screen:

• Press Home (5 on left of Figure 30) on the Master Module.

To display other Screens from the Home screen:

Touch Tracks, Meters, Monitoring, or Settings or press their corresponding Main Menu switches.

Chapter 4: Home Screen

The Home screen provides the following main sections:

Meter Scroller Displays track metering and other information, assists track navigation, and can attention tracks.Track Scroller Displays status indicators for each track, assists track navigation, and can select and attention tracks.Attention Track Editor Central area for selecting and editing Attention Track functions.



Figure 30. Home screen

- 1 Meter Scroller
- 3 Attention Track Knobs
- 5 Home Switch

- 2 Attention Track Editor
- 4 Track Scroller
- 6 Back Switch

To display the Home screen from any other screen:

• Press Home (5 in Figure 30) on the Master Module.

To display other Screens from the Home screen:

Touch Tracks, Meters, Monitoring, or Settings or press their corresponding Main Menu switches.
 Meters is only available when one or more Master Meter Modules are present.

The Attention Track Editor

In the Attention Track Editor, you select a function from the Function Scroller to display and edit in the Function Editor using the Attention Track Knobs. Each function has its own color so their parameters are easy to distinguish.



Figure 31. Attention Track Editor with Function Scroller

Function Colors

S4/S6 displays different functions in unique colors, shown in the table, below. These colors are displayed in the Attention Track Editor, Function Scroller, and on knobs in channel strips.

Switch	Parameter	Color		Additional
Input	Input	Red	Red	
Ins	Inserts	Teal	Teal	S6 Only: Press and hold Ins to access HEAT (Pro Tools)
Dyn	Dynamics	Green	Green	
EQ	EQ	Magenta	Magenta	
User	Instrument	Blue	Blue	To access virtual instrument parameters
Sends	Sends	Yellow	Yellow	
Pan	Pan	Blue	Dark Blue	
Bus	Output	Orange	Orange	On VCA Masters, spills level for VCA members
HEAT	HEAT	Pink	Pink	

When more than one plug-in of the same type or category is inserted on a single track, the Master Module knobs light in slightly different colors to differentiate plug-in controls. For example, multiple EQ plug-ins are shown in different shades of magenta.

Function Scroller

The Function Scroller shows the Attention Track functions.

While the selected function's parameters take precedence, the Function Editor can display parameters from additional functions, depending on the number of parameters and a preference setting. You can also set default function views and knob focus for the Home screen (see **Home Screen Options**).

You can select one function at a time to edit in the Function Editor.



Figure 32. Function Scroller with Pan selected

To select a function from the Function Scroller to edit in the Function Editor:

• Touch a function in the Function Scroller.

The selected function has an orange outline.

Function Editor

The Function Editor can display up to eight columns of eight parameters each. The four parameters in the top or bottom half of each column can be assigned to the left or right Attention Track Knobs.



Figure 33. Function Editor

Assigning New Parameters to the Attention Track Knobs

The left and right Attention Track Knobs can each control four parameters from any single function.

Win You can assign different function parameters to the left and right Attention Track Knobs (see Locking the Knobs).

To assign a new bank of four parameters to the Attention Track Knobs:

- 1 Touch a function in the Function Scroller.
- 2 Touch a group of four parameters in the Function Editor. Two brackets flash slowly around the selected parameters.
- **3** Before the brackets stop flashing, touch or turn any Attention Track Knob. The four selected parameters are assigned to that side's Attention Track Knobs, and the Function Editor provides the following visual feedback:
 - The parameter name, knob state, and value appear beside each Attention Track Knob.
 - A left bracket (green in Figure 33) indicates the parameters to its right are assigned to the left Attention Track Knobs.
 - A right bracket (purple in Figure 33) indicates the parameters to its left are assigned to the right Attention Track Knobs.

Using Page Switches to Navigate Attention Track Knobs

When the Master Module **Shift** switch is held down, you can use the four switches at the bottom left and right of the touchscreen to page functions and focus the touchscreen knobs on different parameters. A focused knob group can page even if the knobs are locked. When in Page mode, the switch LEDs light purple.



Figure 34. Shift and Page switches on the Master Module

When in Page mode:

- The Home and Swap switches assign the Left knobs to their previous or next pages, respectively.
- The **Back** (——) and **Config** switches assign Right knobs to their previous or next pages, respectively.
- If the Left and Right knobs are from the same function, each set of Page switches operates on both knob groups.

Using the Attention Track Knobs

Each Attention Track Knob section provides **In** and **Sel** switches (**1** in **Figure 35**) and a dual-function knob with automation indicator LEDs (**2** in **Figure 35**). The knob lights when active, and in certain contexts can also be pushed.



Figure 35. Attention Track Knob (2) with Sel and In switches (1)

In Toggles a parameter in and out, or between two values (as available in the current application); it lights when active.

Sel Toggles the knob function or a secondary parameter value (such as Q and Frequency for an EQ plug-in).

Function Editor Knob Types

Four virtual knob types are used to represent different kinds of parameters in the Function Editor. Figure 36 shows an EQ plug-in that demonstrates each type.

1 – Typically represents Q but can be used for other parameters that pertain to *width*. This knob type has two white marks at each end that move symmetrically as Q changes.

2 – Typically represents parametric filter gain but can be used for other parameters that *boost* and *cut* level from a center position. This knob type has an outer ring that moves right or left from the top-center as the parameter boosts or cuts; its white mark shows the level of boost or cut.

3 - This knob type does not have an outer ring. The white mark denotes position within a range of values not level.

4 - This knob type has an outer ring, which emphasizes that the white mark denotes level not position.



Figure 36. Knob types used in the Function Editor

Locking the Knobs

When a new function is selected in the Function Scroller, its first parameter bank is assigned to the Attention Track Knobs. You can prevent this by locking the Attention Track Knobs (left, right, or both) to their current parameters (see Figure 37).

Locked knobs are maintained per track. Attentioning different tracks and returning to a track with locked knobs restores the locked assignments.



Figure 37. The right Attention Track Knobs are locked

To lock the Attention Track Knobs:

Touch an unlit Lock icon (above the Attention Track knob indicators in the Function Editor). The Lock icon lights, and selecting
new functions will not change these knob assignments.

To unlock the Attention Track Knobs:

• Touch a lit Lock icon. The Lock icon dims, and selecting new functions will change these knob assignments.

Y If both the left and right Attention Track Knobs are locked, touching blocks of parameters in the Function Editor will not activate the brackets used for knob reassignment.

Functions with Additional Editing Features

The EQ, Dyn, Pan, Inserts, and Fader functions have additional features.

EQ, Dyn, and Pan

• Drag EQ, Dyn, or Pan down into the Function Editor to display them graphically.

- You can touch Pan and drag its indicator(s) with one or two fingers, depending on the pan format.
- You cannot touch to edit the EQ or Dyn curves, but you can get graphical feedback as you adjust the Attention Track Knobs.

Graphs can be displayed for a variable length of time. For more information, see Expand Knob and Expand Fader Function Settings.







EQ (left), Dyn (center), and Pan (right) graphs in the Function Editor

Inserts

Plug-in inserts can collapse into one Inserts function or expand to individual plug-ins in the Function Scroller.

Ö For an overview of touchscreen gestures used in the following instructions, see Appendix C, "Touchscreen Basics"

To expand collapsed plug-in inserts, do either of the following:

- Use the two-finger stretch gesture anywhere in the Function Scroller.
- Select Inserts from the Function Scroller, and press the Attention Track Knob beside the plug-in you want to edit.

To collapse expanded plug-in inserts:

• Use the two-finger pinch gesture anywhere in the Function Scroller.





Function Scroller with Inserts collapsed (left) and expanded (right)

Fader

The Fader function shows the fader position of the Attention Track, and provides the following indicators (top to bottom):



Record Lights or flashes red to indicate record enable or record status (depends on audio application)Input Lights greenSolo Lights yellowMute Lights orange

Meter Scroller and Track Scroller

The Meter Scroller displays detailed metering, and the Track Scroller provides status information for each track. You can attention a track from the Meter or Track Scroller.

To scroll the Track and Meter Scrollers by swiping:

- Swipe the meters or tracks horizontally.
 - Swiping scrolls at a speed proportional to the speed swiped, then gradually slows down.
 - Touching while scrolling stops scrolling at that point, but does not attention the track.

Both the Meter and Track Scrollers use the Universe View. The Universe bar is the rectangular scroll indicator (see Figure 39).

To scroll using the Universe View:

- Touch in the Universe View to scroll to that location.
 - In the Track Scroller, you can touch a colored indicator in the Universe View to scroll to that track group (if supported by the audio application).
 - The size of the Universe bar is inversely proportional to the number of tracks in the focused audio application.

Universe View Indication of Currently Attentioned Track

Whenever a currently attentioned track is scrolled out of view on the Master Module (Universe, Meter, or Track scrollers), a blue box appears in the Universe strip.



Indication of currently attentioned track in Universe view

When the currently attentioned track is within the currently scrolled view, the blue box is not shown (attention is indicated in the Track and Strip scrollers).

Linking the Meter Scroller to the Track Scroller

You can link the scrollers so they respond in unison to scrolling. Note that linking also affects optional display of Track and/or Workstation numbers in the Meter Scroller. See Link Meter Scroller to Track Scroller.

Meter Scroller

The Meter Scroller uses the following indicators:

- The Attention Track has a blue outline.
- Selected tracks can have an orange outline (see Home Screen Options).
- A selected Attention Track has an orange (top half) and blue (lower half) outline.
- Tracks that are record enabled or are actively recording flash or light solid red in Pro Tools (depends on audio application).



Figure 38. Meter Scroller with Universe bar; Audio 6 is the Attention Track

Track Scroller

The Track Scroller uses the following indicators:

- The Attention Track has a blue outline.
- Selected tracks have an orange outline.
- A selected Attention Track has an orange (top half) and blue (lower half) outline.
- Tracks that are record enabled or are actively recording flash or light solid red in Pro Tools (depends on audio application).
- Each track has a small level meter.
- Tracks dim when muted.



Figure 39. Track Scroller with Universe bar; Bass is record enabled, muted, and attentioned

The top of each track provides the following indicators (left to right):

Record Tracks that are record enabled or are actively recording flash or light solid red in Pro Tools (depends on audio application).

Input Lights green

Solo Lights yellow

Mute Lights orange

Attentioning a Track From the Meter and Track Scrollers

To attention a track from the Meter and Track Scrollers:

• Tap a track or meter.

The track is assigned to the Attention Track Editor and the Attention Track Fader on the Automation Module.

See **Home Screen Options** to enable parameters that interact with the Meter Scroller.

Rename Tracks

You can rename Pro Tools tracks directly from the Master Module.

To rename tracks:

- 1 In the Home screen, double-tap the displayed name of the currently attentioned track.
- 2 Enter a name using the on-screen keyboard and press Return or Enter.



Renaming a track on the Home screen

Home Screen Options

To open the Home Screen Options:

Touch the Local Options icon on the bottom-right of the Home screen (see Figure 40).
 To close it, touch the Local Options icon again or touch outside the Home Screen Options page.



Home

Attention Tracks from Meter Scroller

This option toggles whether or not a track can be attentioned from the Meter Scroller.

Display Selection/Attentioned Track Border on Meter Scroller

This option lets you toggle whether or not selected and attentioned tracks are outlined in the Meter Scroller.

Track Scroller Follows Attentioned Track

The Track Scroller shows the Attention Track at its left border.

Link Meter Scroller to Track Scroller

Scrolling the Track Scroller scrolls the Meter Scroller so they show the same track, and vice versa.

In addition, this setting controls whether Track and/or Workstation numbers are shown in track blocks in the Meter Scroller.

- When enabled/linked, track blocks in the Meter Scroller do not show Track and/or Workstation number (even if **Show Track Number** and/or **Show Workstation Number** are enabled in Settings > User).
- When disabled/unlinked, track blocks in the Meter Scroller show Track or Workstation number (when those settings are enabled).

Knobs and Functions

Knob View

All Functions The Function Editor displays all functions. Swiping the Function Editor horizontally scrolls to other functions.

Selected Function The Function Editor displays just the selected function.

Enable Attention Expand Knob Zone

Toggles the Attention Expand Knob Zone (if any) on or off. Being able to toggle Expand Knob Zones on or off lets you quickly place Knob Modules into whichever mode (Attention Expand or standard mode) best suits the current task, without having to reconfigure the Surface page. For more information, see **Attention Expand Zones**.

Enable Attention Expand Fader Zone

Toggles the Attention Expand Fader Zone (if any) on or off. When the Expand Fader Zone is toggled off, the Fader Module continues to show volume, pan, or other track parameters when their corresponding Knob Module is in use as an Expand Knob Zone. When the Expand Fader Zone is toggled on you are able to map custom parameters to strips on the Expand Fader Zone, and store the mappings for later recall. (Note that you can only recall existing Expand Fader maps; you cannot create fader maps from the Home Screen Local Options.) For more information, see **Attention Expand Zones**.

Open Windows on Workstation When Knobs Assigned

The Home screen Local Options setting Open Windows on Workstation When Knobs Assigned option lets you restrict the opening of plug-in windows to actions taken on a specific module.

- Attentioning a track opens the plug-in window that corresponds to the Primary or Backup Function for that module.
- Manually or automatically assigning a plug-in or its parameters to controls on the selected module (only) opens the corresponding plug-in window.

To optimize plug-in window display for S6:

- 1 Go to Settings > User, and make sure **Open Windows on Workstation When Editing Mode** is enabled.
 - When enabled, plug-in windows open when selecting a plug-in function from a strip (Process Module), or from the module specified in the Open Plug-Ins on Workstation When Knobs Assigned selector.
 - When disabled, plug-in windows do not open in response to any S6 actions.
- 2 Navigate to the Home screen, then open the Local Options page (tap the gear icon).
- 3 Tap the Open Plug-Ins on Workstation When Knobs Assigned selector and choose one of the following:
 - Off
 - Master Module
 - Expand Fader Module
 - 1st Expand Knob Module
 - 2nd Expand Knob Module

Expand Knob and Expand Fader Function Settings

The Home screen Local Options settings for Expand Knob Function and Backup Function Selected on Attention Change let you configure functions to display on Attention Expand Knob Zones when a track is attentioned. Two pairs of selectors set primary and backup functions for each of up to two Knob Modules. A similar pair of selectors is available for Expand Fader Function and Backup Function Selected on Attention Change (Expand Fader Zones are available on S6 only).

The Display Knobs From Most Recently Clicked DAW Area setting lets you specify where you want clicked DAW controls to appear (such as only on the Master Module, on an Expand Knob Module, or on both the Master and Expand Fader).

Expand Modules use the Primary and Backup Functions when clicked DAW controls do not have a corresponding knob type (such as clicking on Track Name or in the timeline). In addition to extending the usefulness of the Primary and Backup Function settings, this also prevents Attention Expand Zones from going blank in certain attention-via-click scenarios.

So M40/Master Module Universal-based systems support up to two Attention Expand Knob zones and one Attention Expand Fader Zone. So M10 and M10 Plus systems support a single Attention Expand Knob zone and one Attention Expand Fader Zone. So systems support up to two Attention Expand Knob Zones but do not support Attention Expand Fader Zones. All systems support a single strip Expand Fader zone.

To configure Expand Knob and Expand Fader function preferences:

1 Navigate to the Home Screen, then tap its Local Options (gear) icon.

Two sets of selectors (1st and 2nd Expand Knob Function....) are provided for Expand Knob functions, which correspond to Knob Modules configured as Expand Knobs in Settings > Surface. One set of selectors is provided for Expand Fader Function and Backup Function Selected on Attention Change.

The left selector sets the primary function, and the selector to the right sets the backup function for the corresponding module.

- 2 Tap to display the first (left-most) drop down menu for the desired zone (Knob or Fader).
 - To keep the Expand zone focused on the most recently edited function, choose Last Selected.
 - To specify a function, select a function such as EQ, or an Insert slot (1–10). Not all functions are available in all applications.
- **3** Repeat for the second (right-most) "backup" drop down menu. This lets you define a function to display whenever you attention a track that does not contain the same function as the previously attentioned track.
- 4 Repeat for the second Expand Knob module, if any, or for Expand Fader Zones.

Function and Knob Page on Attention Change Settings

The Home screen Local Options settings for Function and Knob Page Selected on Attention Change let you configure which function and page of controls the Home screen displays when a track is attentioned.

To configure default Home screen function and knob page settings:

- 1 Tap to display the first (left-most) drop down menu for Function and Knob Page Selected on Attention Change.
 - To keep the Home screen focused on the most recently edited function, choose Last Selected.
 - To specify a function, select a function such as EQ, or an Insert slot (1-10). Not all functions are available in all applications.
- 2 Tap to display the second (right-most) drop down menu.
 - · To have the Attention Track knobs maintain their current or previous focus, choose Last Selected.
 - To specify a page of knobs to be focused, choose a page (such as 1st, 2nd, and so on).

In Figure 41, below, the settings for Function and Knob Page are EQ and 2nd, respectively. When a track is attentioned, the Home screen displays the EQ function with the Assignable Track knobs focused on page 2 of EQ controls.





Figure 41. Home screen showing default function (EQ) and Knob Page (2nd) as defined in Home screen Local Options (shown at right)

Backup Function and Knob Page Settings

These settings let you define a default function view and knob focus to display whenever you attention a track that does not contain the same function as the previously attentioned track.

To configure backup function and knob page view settings:

- 1 Navigate to the Home screen and tap the Local Options (gear) icon.
- 2 Tap to display the first (left-most) drop down menu for Backup Function and Knob Page Selected on Attention Change.
 - To have the Home screen stay focused on whichever function was most recently edited, choose Last Selected.
 - To specify a function, select a function such as Pan, Bus, EQ, or Dynamics from the drop down menu.
- **3** To specify a knob page to be automatically focused when that function is displayed, tap to select a page from the second (right-most) drop down menu.
 - To have the Attention Track knobs maintain their previous focus, choose Last Selected.
 - To specify a page of knobs to be focused, choose a page (such as 1st, 2nd, and so on).

Function Graph

Auto Show Function Graph on Selection

When enabled, attentioning a track automatically shows the EQ, Dyn, or Pan graph for that track on the touchscreen.

Auto Show Function Graph on Knob Touch

When set to any value other than 0 secs (Off), adjusting a function that has a graph display automatically displays the graph in the Home screen, temporarily replacing the current view. The graph stays on-screen after you let go of the knob for the length of time specified in the Auto Show Function Graph on Knob Touch slider (between 0.0 and 5.0 seconds).

Chapter 5: Tracks Screen

The Tracks screen lets you:

- Display different track types (if supported by your audio application).
- Select tracks, Attention tracks to the Home screen and Attention Track Fader, and enable record, input, solo, and mute.
- Assign tracks to Layouts.



Figure 42. Tracks screen

- 1 Track Filter
- 2 Track Matrix
- 3 Attention, Select, Assign, Record, Input, Solo, and Mute controls
- 4 Current Session and Information Display
- 5 Universe view, Track Scroller, Commands for Layouts and Titles, and Local Options icon

Displaying Tracks

Here are a few quick ways to customize the Track Matrix.

Filter by Track Type

If your audio application supports track types, you can choose which types to display in the Track Matrix.

To change the track type displayed:

• Touch a track type from the tabs at the top of the Tracks screen. Only tracks of the chosen type are displayed. You can also swipe the Track Matrix horizontally to scroll between track types.

Display Breaks on Track Color

If your audio application also supports track colors, you can configure the Track Matrix to display track rows by color as shown in Figure 43 (for more information, see **Display Breaks On Track Color**).



Figure 43. Tracks Matrix configured to display tracks in rows according to color assignment

Displaying Hidden Tracks and Member Tracks of Closed Folders

If your audio application supports hidden tracks or Folder tracks you can choose whether or not they are shown on the S4/S6 surface and touchscreen. Display can be configured separately for the Banking, Layouts, and VCAs modes for both Layouts and Folder Tracks in Settings > User. For more information, see Show Hidden Tracks In and Show Closed Folder Members In.

Track Matrix Controls

The Attention, Select, Assign, Record, Input, Solo, and Mute controls (3 in Figure 42) are exclusive: One is always active, and only one can be active at a time.

Attention

To attention a track:

- Touch Attention, then touch a track.
 - This track is assigned to the Attention Track Editor and the Automation Module's Attention Track Fader.
 - If the Tracks screen Local Option setting Show Home Screen on Track Attention is enabled, the Home screen is shown.
 - The Attention Track has a blue outline in the Track Matrix, Track Scroller, and Meter Scroller.

 \bigtriangledown A selected Attention Track has an orange (top half) and blue (lower half) outline.

Select, Assign, Record, Solo, Input, and Mute

To select tracks or enable them for recording, input, mute, or solo:

- 1 Touch Select, Record, Solo, Input, or Mute to enable that control.
- 2 Touch one or more tracks. Touch a selected or enabled track to deselect or disable it.

To quickly select or enable multiple tracks:

- 1 Touch Select, Record, Solo, Input, or Mute to enable that control (make sure Assign is not enabled).
- **2** Do one of the following:
 - Touch and hold a track, then touch others to add to the group.
 - Touch a track and drag over a row or column.

Selected tracks have an orange outline in the Track Matrix, Track Scroller, and Meter Scroller (see Home Screen Options).

When tracks are record enabled:

- · They are armed for recording.
- Rec flashes red on their Fader Module strips.
- Tracks that are record enabled flash red in Pro Tools (depends on audio application).
- Fader in the Function Scroller and entire track in the Meter Scroller flash red in Pro Tools.

Pro Tools indicators that flash red when record enabled, light solid red during recording.

Kecord indications are controlled by each audio application and may vary between applications.

When tracks are enabled for input monitoring:

- Their track audio is routed directly from input to output, bypassing track plug-ins and functions.
- Input lights on their Fader Module strips.
- Their track Input indicators light green in the Track Matrix, Track Scroller, and Fader in the Function Scroller.

When tracks are soloed:

- Those tracks are audible, all others are muted.
- Solo lights yellow on Fader Module strips with soloed tracks, and Mute lights orange on other strips.
- The track Solo indicator lights yellow in the Track Matrix, Track Scroller, and Fader in the Function Scroller.

When tracks are muted:

- Mute lights orange on their Fader Module strips.
- The Mute indicator lights orange and the track dims in the Track Matrix, Track Scroller, Fader in the Function Scroller, and on the Display Module (if any).

To assign tracks to a standard Track layout:

- 1 Touch Assign. The Tracks screen switches to Layout mode.
- 2 Touch one or more tracks.

You can learn other ways to create and manage layouts in Chapter 23, "Layouts"

When Master Post, Master Meter Display, or Master Post Display Modules are present, tracks can also be assigned to **Post Lay**outs and Meter Layouts.

Clear

Touch Clear to clear any tracks that have been enabled for record or input, muted, or soloed. This control appears only when Record, Input, Solo, or Mute is selected.

Current Title and Auto-Saved Session Display

The Tracks screen shows the name of the current Title and/or Auto-Saved session (application with the blue star in Settings > Workstations), so you can confirm where Layouts and other attributes will be saved.



Current Title/Auto-save session display on the Tracks screen

Confirmation text also appears whenever a Save or Save As is performed.



Confirmation text after saving a Title/Layouts

Track Scroller

The Universe view and Track Scroller provide additional display and control for tracks, able to perform most of the same functions as Track tiles in the Track Matrix and unique capabilities for layouts.

See Meter Scroller and Track Scroller to learn about Track Scroller displays and behavior. Note that attentioning a track from the Track Scroller in the Tracks screen keeps the display on the Tracks screen, unless the Track local option for Show Home Screen on Track Attention is enabled. (see Track Selector Options).

The commands along the bottom of the Tracks screen provide menu commands for layouts and file management, and the Local Options (gear) icon.

Track Selector Options



Figure 44. Track Scroller with Local Options icon at far right

To display the Track Selector Options:

 Touch the Local Options icon at the lower right of the Tracks screen. To close it, touch the Local Options icon again or touch outside the Track Selector Options screen.

▼ Track Selector						
Position						
Always Start with Channel 1 on All Page						
Last Position of Track Selector						
O Attentioned Track						
Display Breaks on Track Color						
✓ Auto-Bank to Attentioned Track						
Show Home Screen on Track Attention						
Auto Select Joystick Strips when Storing Layouts						
Store Hidden Virtual Strips in Layouts						
Double Tap Assign to Copy Tracks from Banking Mode into C	urrent Layout					
Number of Strips in Layout						
	32					
Number of Lought Sump Lougr						
	4					
1						
Show Available Swap Track Names on Display Module	Show Available Swap Track Names on Display Module					
☑ Insert / Delete Assign Modes Affect All Swap Layers						
▼ Post Layouts						
Number of Post Strips in Post Layout						
10 80	20					
Lavout						
Large Meters						
Number of Post Rows						
	1 Row of 10					
Mirror Post Strips on Multiple Post Modules						
Auto Assign PEC Meter from Post Track Assign						
DIR Meters in Red						
▼ Meter Layouts						
Layout						
Large Meters						
Number of Meter Rows	3					
1 4						

Track Selector Options

Position

These settings determine which track to display at the top-left of the Tracks screen.

Always Start With Channel 1 on All Page Displays track 1 at top left in the Track Matrix.

Last Position of Track Selector Displays the Track Matrix as it appeared most recently.

Attentioned Track Displays the attentioned track at the top-left of the Track Matrix.

Display Breaks On Track Color

When selected, tracks with assigned colors appear in separate rows.

Auto-Bank to Attentioned Track

When selected, each track attentioned automatically banks the surface according to the current Banking Justification Mode setting (see Bank and Spill Zone Justification Settings). The display remains on the Tracks screen.

Show Home Screen on Track Attention

When selected, attentioning a track in the Tracks screen automatically displays that track in the Home screen. When unselected, the Home screen is not automatically displayed when a track is attentioned in the Tracks screen.

Auto Select Joystick Strips when Storing Layouts

The Tracks Local Option setting Auto Select Joystick Strips when Storing Layouts determines the initial state of the joystick blocks when storing Layouts. The default setting is off.

This setting only affects the initial state of the Joystick strip blocks.

When not enabled Joy 1 and Joy 2 blocks are unlit (no green highlight) when storing a Layout, meaning their assignments will not be stored and recalled with the current Layout. You can override this default state by tapping Joy 1 or Joy 2 so that they light green.

When enabled Joy 1 and Joy 2 blocks are automatically lit (green highlight) when storing a Layout, meaning their assignments will be stored and recalled with the current Layout. You can override this state by tapping so they become unlit.

Store Hidden Virtual Strips in Layouts

This setting lets you show or hide "virtual" strips in Layouts that exceed the current setting for Number of Strips in Layout, and for Number of Post Strips in Post Layout.

For example, if the current Number of Strips Per Layout setting is 24, and you load a Title (Layouts) file that was saved with 64 strips per Layout, the first 24 strips will be available but the remaining 48 will not. By enabling Store Hidden Virtual Strips in Layouts, the additional 48 virtual strips will be retained in the Title (though not visible). When this setting is not enabled, additional strips will not be saved.

Double Tap Assign to Copy Tracks from Banking Mode into Current Layout

When selected, double-tapping the Assign button (Tracks screen) places all currently banked tracks onto blocks in the lower strip scroller to quickly update or create a layout. For more information, see **Chapter 23**, "Layouts"

Number of Strips in Layout

You can specify the number of strips available for track assignment in Layouts from the Tracks Local Options screen. Using the Number of Strips in Layout setting, Layouts can include more tracks than available physical strips.

When a Layout that includes virtual strips is recalled, all surface banking controls are available to bank and nudge. If the Layout was saved on a system with more strips than the current system, increase the Number of Strips in Layout setting to access the additional Layout members.

To configure virtual strips:

- 1 Navigate the touchscreen to the Tracks screen, and tap the Local Options (gear) icon.
- 2 In the Tracks Local Options screen, adjust the Number of Strips in Layout slider to the desired value between 8 and 256 strips.

The settings in this section let you optimize Master Post Display Modules.

Number of Layout Swap Layers

Choose 2, 3, or 4 layers. Default is 1 (no Swap layers).

Show Available Swap Track Names on Display Module

When enabled, Display Modules show the names of all tracks assigned to other Swap layers below the currently active track (listed on top). Note that enabling this option can impact performance (such as how quickly Display Modules follow banking).

Insert/Delete Assign Modes Affect All Swap Layers

When enabled, inserting or deleting a track from a Swap layer inserts or deletes that slot in all Swap layers.

Post Layouts

The settings in this section let you optimize Master Post Display Modules.

Number of Post Strips in Post Layout

You can specify the number of Master Post Module strips available for assignment in Post Layouts from the Tracks Local Options screen. Using the Number of Post Strips in Layout setting, Post Layouts can include more tracks than available Master Post Module strips.

When a Post Layout that includes virtual strips is recalled to a Master Post Module, banking and nudging controls are available to bring different member tracks to the strips on the Master Post Module.

Layout

The Layout selector sets whether MPMs show Large Meters, or Large Meters and Automation.

Number of Post Rows

You can specify how many tracks are displayed on MDMs using the Number of Post Rows slider. Default MDM views are 10 tracks in width, matching the Master Post Module, and you can choose to display up to 4 rows of 10 meters. One additional, larger view is available that provides two rows of five tracks.

Mirror Post Strips on Multiple Post Modules

When enabled on systems with more than one Master Post Module, all Master Post Modules are linked to act as a single, mirrored unit. Track assignments are mirrored (identical) on all Master Post Modules. In the Strip scroller (Layouts), a single set of Master Post Module strips is displayed.

When disabled, each Master Post Module has their own set of tracks. In the Strip scroller (Layouts), unique Master Post Module strips are displayed for each module. Different tracks can be assigned, recalled, and controlled to or from each module.

Auto Assign PEC Meters from Post Tracks Assign

This setting, located in the Tracks > Local Options (gear icon) can simplify assignment of tracks for MDMs. When enabled, assigning a track to a Post Layout automatically assigns it as the PEC track on the MDM. When not enabled, assign tracks to PEC and DIR manually.

DIR Meters in Red

The two meter sources are distinguished by different colored meters on the MDM, selectable to be either blue and green (the default), or red and green. This setting, located in the Display section of the Settings > User page, controls the colors that indicate PEC and DIR meters on MDMs. By default, DIR meters are blue and PEC are green. When this option is enabled, DIR meters will be red (PEC are always green).

Meter Layouts

The controls in the Meter Layouts section of the Tracks > Local Options screen lets you configure the layout of MMM displays. Both of these settings are stored per Meter Layout.

Layout

The Layout selector sets whether MMMs show Large Meters, Large Waveforms, or Meters and Waveforms. When viewing a Meter Layout on an MMM you can adjust waveform zoom by pressing **Display 1** or **2** on the Master Module. You can cycle through the available views by pressing **Shift** + **Display 1** or **2** (see also Additional Master Meter Display Settings).

Number of Meter Rows

The Number of Meter Rows slider configures the MMMs to display tracks in 1, 2, 3 or 4 rows (each row can show 8 tracks).

Chapter 6: Monitoring Screen

The Monitoring screen lets you configure S4/S6 monitoring features.

To display the Monitoring screen, do either of the following:

- From the Home screen, touch Monitoring or press its corresponding Main Menu switch on the Master Module.
- Press the lower-right **Setup** switch on the Master Module.

The Monitoring screen and S4/S6 monitoring controls automatically lock to the first focused EUCON monitoring application (such as DADman and XMON). S4/S6 can also be locked to any other current audio application using the **Setup** switch on the Master Module. Source Select and other choices are determined by the focused monitoring application (such as MTRX | Studio or XMON EUCON). For information on how to use the monitoring controls, see **Monitor Select Controls and Display**.

Monitoring										
Μ	lains									
				Sc	urce					
			Surrou	Stereo			Stereo	Listen	AFL	
	All									
				Source	e Select					
		А		None						
	6 50			Main					-33.00	
	MonitorA							т	alkback	
				Sum	ound					
				Ste					(0)	
	-23.00			Stereo 2 -10.00					-10.00	
	MonitorB							Lis	tenback 1	
				Stereo 3				(
				Stereo 4				9		
	0.00 MonitorC			-60.00 Listenback Dim					-60.00 Dim	
					-					
		D		A	IFL			(
									0.00	
	0.00 MonitorE								Mix	
		Mair	Main	Main	Main	Main	Main	Main	Main	
	All	Out	1 Out 2	Out 3	Out 4	Out 5	o Out 6	Out 7	Out 8	
	Folddown	Mon	o 7.1		м					

Figure 45. Monitoring screen with Sources on and off

To toggle a Source on and off:

• In the Source row, touch the rectangular area below the source name. Blue sources are on, dimmed sources are off.

Assigning Monitor Sources

You can assign up to 24 sources in the Monitoring screen. (S4/S6 also supports up to 16 Folddowns and 22 Speakers.) All 24 possible Monitor Sources are available as Surface Soft Keys.

To access additional sources:

- 1 Navigate to the Monitoring screen.
- 2 At the top of the screen, swipe the row of Sources to the left to display sources 9–16 (as available).

If you are using XMON the list of available sources is automatically generated. If you are using DADman with a Pro Tools | MTRX (or AX32), see next.

Configuring Sources for Pro Tools | MTRX, MTRX Studio, or AX32

If you are using a Pro Tools | MTRX, MTRX Studio, or AX32 with S4/S6, you need to first configure DADman software and then configure sources in the S4/S6 Monitoring page.

To configure DADman:

- 1 Launch DADman and make sure you to do each of the following before proceeding:
- Choose Settings > Monitor Profile, then enable and create a monitor profile.

			Groups	Fold down		
Select unit:	Rr, ID: 1, SN: AX32-00099		0			
Enable monitor						
Groups	Mode	EuCon	Role	Channel	Label	Trim
▼ Monitor	Master	Control Room				
▼ Sources	Switched					
	5.1					
HDX						

Monitor profile enabled in DADman

• Enable EUCON by selecting it from the Settings menu.



EUCON enabled in DADman

• Right-click on any monitor in the profile and assign the EUCON mode to what you want to define as Control Room, Monitor A, Monitor B, Monitor C, and Monitor D by selecting it from the sub-menu.



Assigning EUCON mode in DADman

To configure sources on S4/S6:

1 Navigate the touchscreen to the Monitoring page (from the Home screen press Monitoring, or press the Setup 2 switch in the Monitor Controls section of the Master Module).

All available sources are listed in the Source Select section in the center of the Monitoring screen. Available sources are dark until they are assigned.



Available Sources in the Source Select list

2 In the upper Source row, touch the small arrow along the top of the first input source.

The selected input source is outlined in yellow, and the items in the Source Select list become lit (available).

3 Tap an available source in the Source Select list to assign it to the selected input source.

When first assigned, input sources are inactive (as shown in the image to the right). After assigning all your input sources you can activate them as desired by tapping on their block in the upper Source row.

- 4 Repeat the previous steps to assign additional input sources. Sources can be duplicated and put in any order.
- 5 To see additional available sources, scroll the Source Select list up or down. To see additional input source slots (such as 9–16) in the Source row, scroll it left or right.

Additional Monitor Soft Keys

Monitoring Cue Speaker Sources and Cut (mute) are available as Soft Keys. In the default Pro Tools appset, Monitor cue Speaker Cut and Sources appear in the Master Post Module Soft Keys, and in the Monitoring Soft Keys access from the Extras page > Control Room on the top level page (right) of the Automation Module. Because these commands are also available in the Soft Keys Editor, you can create custom Soft Key assignments for monitor control.





Monitoring Screen Local Options

The Monitoring screen provides its own Local Options, accessed by touching the Local Options (gear) icon.



Figure 46. Monitoring Local Options

To set Monitoring Local Options:

1 Press Setup in the Monitoring section of the Automation Module to go to the Monitoring screen.

2 Tap the Local Options icon (or press its Soft Key, below the icon), and set the following preferences as desired.

Auto Listenback

When enabled, Listenback sources mute during playback and recording, and unmute when stopped. When disabled, Listenback must be muted and unmuted manually using the **Coms** switch.

Enable Surface Listenback Latching

When enabled, the Listenback switch operates in Latching mode if held down for less than 1/2 second (it stays in its current state until the switch is pressed again).

Soft Keys for Listenback

Listenback controls are available in the Soft Key Editor.

Listenback Soft Keys

Command	Command Type	Category 1	Category 2
Auto Listenback	Surface >	Monitoring Options >	Auto Listenback
Enable Surface Listenback Latching	Surface >	Monitoring Options >	Enable Srfc Lstnbck Ltchng

Auto Talkback

When enabled, the Talkback mic automatically shuts off when the Transport is playing or recording. When the Transport is stopped, in shuttle, rewind or any mode other than play or record, Talkback turns on. Pressing the Talkback switch overrides this setting.

Enable Surface Talkback Latching

When enabled, the Talkback switch operates in Latching mode if held down for less than 1/2 second (it stays in its current state until the switch is pressed again).

Enable GPI Talkback Latching

When enabled, GPI-triggered Talkback operates in Latching mode if engaged for less than half a second (it stays in its current state until the switch is triggered or pressed again).



For more information on GPI, see Appendix A, "GPIO."

Enable Speaker Label Editing

You can enter custom names for some or all speaker outputs and monitor labels directly from the Touchscreen. Names and labels are stored with User Preferences. (See **Saving and Loading User Preferences**). Custom naming is enabled (or disabled) from the Monitoring Local Options screen.

To enable speaker and monitor naming:

- 1 Make sure S4/S6 is focused on (or locked to) DADman or XMON EUCON.
- 2 Navigate the Touchscreen to the Monitoring screen (from the Home screen, press Monitoring).
- 3 Tap the Local Options (gear) icon.
- 4 Click to enable the option Enable Speaker Label Editing.
- 5 Tap the Local Options (gear) icon again to hide the Monitoring Local Options settings.

To enter custom speaker names or monitor labels:

 In the Monitoring screen, double-tap a monitor label (A–D) next to the knobs, or a speaker tile along the bottom of the screen. The tapped tile becomes highlighted, and the on-screen keyboard appears.



Monitor labels and Speaker names in the Monitoring screen.

- 2 Enter a name, then tap Enter to hide the keyboard.
- 3 Repeat to enter custom names for other speakers and monitors.
- 4 To prevent items from being renamed unintentionally (such as when selecting speakers to mute), open the Monitoring Local Options screen and disable the option to Enable Speaker Label Editing. Custom names persist.

To reset names to their default names:

- 1 In the Monitoring screen, double-tap a speaker tile along the bottom of the screen.
- 2 Delete the name for the speaker, then tap Enter to hide the keyboard.

The speaker is renamed to its default name as provided by the monitoring application (such as XMON).

3 Repeat to clear custom names for other speakers.

Sum and Intercancel Modes for Source and Speaker Switches

Sources and Speaker selection can be configured to operate in Sum or Intercancel mode.

To configure Source and Speaker selection:

- 1 Navigate the touchscreen to the Monitoring screen (from the Home screen, press Monitoring).
- 2 Tap the Local Options (gear) icon to open the Monitoring settings.
- 3 Tap to enable the desired mode for Source Mode and Speaker Cut Mode.

Sum Selected Sources or Speaker cuts are added to those currently selected.

Intercancel Selecting a Source or Speaker cut deselects any currently selected sources or speakers.

These and other Monitoring settings are also available as Soft Keys in the Soft Key Editor (via Surface commands), and from the Master Post Module.

Enable EUCON Monitor

(Pro Tools Only)

Pro Tools lets you designate a Master Fader to act as a Monitor Path that can be controlled from S4/S6 (and other EUCON control surfaces even when there is no MTRX, XMON, or similar outboard monitoring solution.

To enable a Master Fader for EUCON Monitoring:

- 1 Ensure that Enable EUCON is selected in Setup > Peripherals > Ethernet Controllers.
- 2 Create a Master Fader track and assign it to any path being used for monitoring (can be your main Monitor Path, or other).
- 3 Right-click the name of the Master Fader and select EUCON Monitor.





Enabling a Master Fader as EUCON Monitor in Pro Tools (shown at left) and S6 Studio/Talk level knob (shown at right)

The Control Room/Monitor knob on your EUCON control surface controls that Master Fader track for monitoring. For example:

On S4/S6 with a Pro Tools Master Fader assigned to EUCON Monitor:

- Rotating the level knob in the Studio/Talk section raises and lowers the Master Fader level.
- Pressing the knob sets the Master Fader level to -INF. Pressing again returns it to its previous level.

Designation of a Master Fader as a EUCON Monitor path is stored in the Pro Tools session, letting it persist when a session is moved from a system with an S4/S6 to one with a Dock, or similar.

Chapter 7: Settings Screen

The Settings screen lets you connect workstations, configure your surface, create and edit Soft Keys, and set S4/S6 preferences.

Settings					
Workstations	Surface	Soft Keys	User	System	About

Figure 47. Settings screen with Workstations page selected

To go to the Settings pages:

- 1 Press the Settings switch on the Master Module (or from the Home screen, touch Settings at the lower-right).
- 2 To display different Settings pages, do either of the following:
 - Touch Workstations, Surface, Soft Keys, User and System Preferences, or Workstations at the top of the Settings screen.
 - Swipe the Settings screen horizontally.
- 3 To return to the previous view and exit Settings, press Tracks on the Master Module.

Workstations

To open the Workstations page:

• Press Shift + WS on the Master Module (or navigate to the Settings screen and touch Workstations at the top of the screen).

Multiple workstations can be connected to S4/S6 at once, but only one is *attentioned* at a time. The attentioned workstation has exclusive access to the S4/S6 surface.

For more information, see Connecting S4/S6 to Workstations.

You can attention different workstations by tapping to select them in the Connected list of the Workstations screen, using the Master Module Soft Keys (see Workstations, Layouts, and Tracks Soft Keys), or by attentioning tracks (see Focus Workstation of Most Recently Selected Track).

Layouts and other S4/S6 data can be saved and auto-loaded (see Autoload from Titles and Sessions).

Switching KVM Source Independent of Workstation Focus

By default, changing focus to a different workstation also switches the KVM (if any, see KVM Switch). You can instead switch only the KVM without changing workstation focus.

To switch the KVM without changing workstation focus:

- 1 Navigate to either the Settings > Workstation screen, or press the Master Module WS switch to list available workstations on the Master Module Soft Keys.
- 2 On the Master Module hold the **Shift** switch (in the Navigation switch section) then do either of the following:
 - Tap to select a workstation on the Workstation screen.
 - Press the Soft Key for a different workstation.

The attached KVM switches to the selected workstation but does not focus that workstation. On-screen, a KVM icon appears next to the current KVM source.

Surface

The Surface page lets you configure the S6 surface arrangement, define Spill Zones, designate Knob Modules for Attention Track Expand mode, initiate firmware updates, and calibrate modules after the arrangement is configured.

Configuring the Surface You need to configure the surface only when you first set up or modify S4/S6. The Surface page also lets you define Spill Zones, designate up to two Knob Modules for Attention Track Expand mode.



To configure the surface arrangement for the first time, see **Configuring the Surface**. To configure spill and expand zones, see **Chapter 25**, "Spill Zones."

Calibrating Modules You can calibrate faders (see Fader Calibration), the joysticks on Master Joystick Modules (if any, see Assigning Tracks to the Joysticks), and calibrate LEDs on individual modules (see LED Calibration and Brightness Control).

Update and Update All (Firmware)

In the Settings > Surface, Config page, you can choose to update firmware only on specific modules by first selecting them and then pressing Update. To update firmware on all modules, press Update All.

Soft Keys

S4/S6 provides a Soft Key Editor for creating and managing Soft Keys on the Master, Automation, and Master Post Modules.

See Chapter 8, "Soft Keys."

User and System Preferences

The User and System Preferences let you optimize many characteristics of the system.

- User Preferences include settings for banking, display, behavior of strips and knobs, and other settings. User preferences can be saved and loaded to/from disk for transfer to other systems and for archiving.
- System Preferences set system-specific settings such as brightness, GPIO, and KVM. System preferences stay with the system on which they are configured.

User and System Settings Views

The different sections of preference settings in both the User and System pages can be expanded and collapsed, letting you show or hide settings. View settings (expanded or collapsed states) are maintained and persist. By default, all views are expanded.

To expand or collapse preference settings views:

- 1 Navigate to Settings > User or Settings > System.
- 2 Tap the expand/collapse icon next to the desired heading or section.

For example, to expand or collapse all Surface sections in the User page, tap the icon next to the heading Surface. To expand or collapse only the Banking settings, tap the icon next to Banking.



Expand/collapse icons in Settings > User

About

The About page displays system and software version information, and provides the Log Out and Shut Down controls. Log Out lets you access the Master Module desktop to perform software updates or system maintenance. Shut Down lets you shut down the Master Module prior to powering down the system.



Always shut down the Master Module using the Shut Down command in the About screen before powering down the system. Wait for the Master Module to completely shut down before powering off.

Chapter 8: Soft Keys

The Master Module, Automation Module, and Master Post Module *Soft Keys* are pre-configured to provide convenient access to many of the most used features and commands in your DAW. You can also create your own Soft Keys assignments to optimize your workflows, including specific customizable keys on Fader Modules and CSMs. (Not all DAW manufacturers supply Soft Keys for S4/S6.)

Check out the Avid Pro Tools | S6 Workflows on YouTube for in-depth explorations of how to use S6, including Layouts, Spill Zones, Expand Zones, and more. Check back frequently for updates to this ongoing series.

Overview of Soft Keys

Soft Keys are organized into pages arranged on the different Soft Key banks on the Master and Automation Modules.

- Two banks of Soft Keys, each with 15 Soft Keys surrounding its own display, are provided on both the Master and Automation Modules.
- The Master Post Module provides a single bank of 15 Soft Keys.
- On Fader Modules, most switches surrounding the strip display can be customized.

Each page can provide keys to execute one or more DAW commands, page jumps to other Soft Key pages, S6 surface commands, and alpha-numeric keys and commands. The Automation Module Wheel switches, Locate switches, Numeric Keypad, and Transport switches are also editable Soft Keys, as are the switches in the Monitoring section on the Master Post Module.

Default Soft Key assignments (known as an *Appset*, or Application Set) are provided for Pro Tools, DADMan (for Pro Tools | MTRX and MTRX Studio), Logic Pro, Nuendo, Cubase, Pyramix, and other applications (for other DAWs, contact the manufacturer). To get started utilizing the factory-assigned Soft Keys for Pro Tools, see **Using Soft Keys**.

 $\dot{\nabla}$ The available Soft Keys on your system may differ from those shown in this document, depending on which version of S6 software is installed, whether an S6 appset is available for your DAW, and whether you have customized your Soft Keys.

Soft Keys can be customized to add or rearrange commands, and custom assignments can be exported and imported. S6 provides a Soft Key Editor in the Settings screen for creating and managing Soft Keys. You can add, delete, rename, color, save and load Soft Keys. Multiple layers of assignments are available via modifier keys. Full-color icons can be assigned to both the active and inactive states, and background colors and names can be changed.

Soft Key assignments can include multiple EUCON commands in addition to combinations of Key, Page, and Surface commands. You can also configure Soft Keys to apply to multiple DAWs.

To learn how to create and edit Soft Keys, see Soft Keys Editor.

About Appsets and Software Updates

S6 software uses a default Appset installed at the factory. If you have customized any Soft Key assignments, S6 creates and maintains those in a custom Appset and uses that set instead of the factory default set. Installing new S6 Master Module software will not install the default Appsets if you have customized the Appset from a previous version in any way. To access the new factory Appset provided in the most recent Master Module software, first save your custom Appset (see **Importing and Exporting Soft Key Appsets**). After updating the system press **Factory** at the bottom of the Soft Key Editor (any custom Soft Keys will be lost and will need to be reassigned).

Location of AppSet Files on the Master Module

If you ever need to locate an appset file you can find them at the following location on the Master Module C: drive:

C:\ProgramData\Avid\S6\AppSets\

Importing and Exporting Soft Key Appsets

The Soft Keys screen (Settings > Soft Keys) provides Export and Import buttons to store and load Appset files.

- Use Export to save custom Soft Key assignments to disk for archiving and transfer.
- Use Import to recall saved Appsets for a specific project or when you move to a different system. You can also load Appsets from earlier versions of the current DAW.
- Use Factory to replace the currently loaded Soft Key assignments with the default assignments for your DAW. (If you have customized any Soft Keys, be sure to save your assignments before resetting to Factory.)

Factory Import Export

Factory, Import, and Export commands in Settings > Soft Keys

Location of Custom Appsets

The ability to import and export Appsets lets you backup and transfer Soft Key assignments.

S4/S6 Appset files are stored in the following default location on the Master Module:

C:\ProgramData\Avid\S6\Appsets

If the ProgramData folder is hidden, do the following to show it:

- 1 Navigate the touchscreen to the Settings > About page and press Logout.
- 2 Select Administrator. When prompted enter the following default password: password
- 3 Click the File Explorer tile.
- 4 In Explorer, tap View, then tap Options.
- 5 In the Folder Options dialog, tap to select the View tab, then tap to enable Show Hidden folders, files, and drives.

Using Soft Keys

Take a few minutes to explore the default Soft Key assignments for Pro Tools to familiarize yourself with what is available, how the pages and keys are organized, and how to navigate among them. The following sections include examples that highlight some of the features provided in the default Pro Tools appset.

If you have customized your Soft Keys, use the Export command in the Soft Key editor to ensure your custom appset is exported and saved. Then restore the Factory appset to see the new assignments for Pro Tools. To restore your custom appset, use the Import command to load them.

Navigating Soft Keys

To begin, look at the default first page on the pair of Master Module Soft Key banks. These banks are labeled Automation 1 and Session Management 1. Most banks are color coded to make it easier to recognize their function. For example, session management pages have a blue banner, while automation pages are red, editing pages are green, and so on.

Navigation keys are provided along the bottom of each bank.



Navigation switches along the bottom of the left Soft Key bank on the Master Module (default Pro Tools appset)

- Pressing the Menu switch jumps to the Page Menu keys, which list numerous other available pages. Similarly, pressing Playlists
 or Show/Hide jumps to those corresponding pages.
- Pressing Home (when available) jumps back to the first page in that bank.

Quick View of Layer 2

Hold down the Ctrl switch on any Fader Module to access alternate functions (layer 2) on some Soft Key pages.

The default appset provided for Pro Tools is updated and improved with each software release, so it is possible that not all of the images or layers shown in this section will match your system.

Navigating Soft Key Banks from the Numeric Keypad

By holding **Shift** on a Fader Module, you can press the numeric keys on the Numeric Keypad to navigate Soft Key banks on the Master and/or Automation Module to different pages, as described in the following table.

Numeric Keypad Switch (Hold Shift (Fader Module) Function while Pressing)		Description
. (decimal)	Control Room	Access all control room Sources and Speakers, toggle Sum/Intercancel modes, access Folddowns, Talkback and Listenback, and access Monitoring Preferences
0 Default		The default Soft Key pages (Automation 1, Session Management 1, Automation 2, and Extras) are shown in all banks
1	Automation	All four banks of Soft Keys display Automation pages
2	Automation Alt 1	Automation pages 1 and 2 appear on the Automation Module Soft Key banks (use- ful when Layouts are shown in both the Master Module left and right Soft Keys)
3	Automation Alt 2 Multi-DAW	Nearly identical to Shift + 1 (which shows the Auto1, Auto2, Auto3, and Auto4 pages), but all commands are enabled for multi-DAW and will affect all connected DAWs/workstations.
4	Management	Session management pages appear on all banks
5	Satellites & Machines	Dsplays pages for Satellites, Machine Control, Solo (SIP/AFL/PFL, and switch behavior), along with Automation 1 (in the Master Module left bank)
6 Configuration Editor Interface, Tools and Setup, Session Maing pages appear on the four banks		Editor Interface, Tools and Setup, Session Management 1, and Counters & Scroll- ing pages appear on the four banks
7 Editing		Pages and commands to edit Clips, Clip Gain, Clip FX, Selections, and Tracks. Playlist menu includes Target, Recent, Cycle, +/- 5, First, Last, etc. Editing addi- tions include Save Track Preset, Make Active/Inactive, Duplicate + Extend & Hide & Deactivate.
8	MIDI	MIDI composition, creation, and editing command, as well as access to Windows, Editing, and Workflow functions.
9	Recording	Commands for recording, tracking, and Playlists
Enter	Spill Zones	Bank, Nudge, Home, and End for each Spill Zone (Left and Right)
1	User Pages	User 1, 2, and 3 provide many frequently used commands
*	Preferences	Access all of the Console Preferences on Soft Keys
-	Memory Locations	Access to Memory Locations on the left Soft Keys, and essential Automation func- tions on the right Soft Keys.
+	Monitoring and Automation	Access to Monitoring Sources on the left Soft Keys, and essential Automation func- tions on the right Soft Keys.

Fader Module Shift + Numpad Assignments for the Numeric Keypad in the default Pro Tools appset

Automation Example using the Master Module Soft Keys

The first page of the left bank of Soft Keys on the Master Module is the Automation 1 page, providing many of the most frequently used automation commands. The following example shows you how you can use Soft Keys to set Pro Tools track automation modes.

To set track automation mode using the Soft Keys:

- 1 Make sure the Master Module Soft Key left bank is showing the Automation 1 page. The left column of track Automation modes indicate currently assigned modes with lit switch LEDs. For example, if the Read switch LED is lit, it indicates that all tracks are in Read mode.
- 2 Press and hold the Soft Key for the desired track automation mode (such as Latch).
- 3 On the Fader Module strip for the desired track, press Select (or its F switch.The F switch lights red, the strip display shows Latch, and the Soft Key for Latch mode lights.

Extras Page

In the default Pro Tools assignments, the right-side bank of Soft Keys on the Automation Module shows the Extras page. This page provides access to other Soft Key pages including Snapshots, Satellites, Groups, and Control Room, and commands including Link Track and Edit Selection, Insertion Follows Playback, Scrolling Modes, Expand Zone toggles, and more. At the bottom of this window are keys to take you to pages for Recording, and for Workflow.

Hold down **Ctrl** (on any Fader Module) to reveal previous commands such as Pre-Roll, Post-Roll and Click.

Workflow Pages

Be sure to explore the Workflow pages in the default Soft Key assignments for Pro Tools. These provide Soft Keys for many of the most useful Pro Tools commands including Rendered Workflow functions Freeze Track(s), Commit Track(s), and Bounce Track(s), as well as Clip functions (Loop Clip(s), Lock Clip(s), and Mute Clip(s).

Pro Tools Appset Reference

The factory Pro Tools appsets for S4/S6 version include many pre-configured pages of assignments for Pro Tools, and for DADman software (for Pro Tools | MTRX and MTRX Studio). To learn more, see the *S4/S6 Operations.pdf* (available for download from your Avid account).









S4 / S6 Operations.pdf
Soft Keys Editor

The Soft Keys Editor screen lets you create and customize Soft Keys.

To access the Soft Key Editor:

• Navigate the touchscreen to Settings > Softkeys. The default Soft Keys Editor screen provides the following main sections.



Figure 48. Soft Key Editor default screen

A – Module Selector Touch to choose to target Master Module Soft Keys or GPIO, Soft Keys on the Automation Module or Master Post Module (if present), or Channel Strip Keys on Fader Modules.

B – Soft Key Banks and Commands Displays Soft Key banks and assignments for the selected module, and provides commands to edit bank name and color, Insert, Add, Clear, or Delete banks.

C – Soft Key Editor Command to Insert, Add, Clear, and Delete Soft Key blocks that make up the Soft Key definition.

D – Modifier Locks Modifier keys to define and access additional commands from a Soft Key.

E - Help Text Instructions for how to use the Soft Key Editor.

F – Soft Key Commands Provides the Factory button to reset the Soft Key Editor to its default set of Soft Keys (any custom Soft Keys will be deleted), and Soft Key Import and Export commands. This area of the Soft Key Editor changes to different views depending on the current task.

To exit the Soft Keys page at any time:

Press Home on the Master Module or select another Settings screen from the top of the touchscreen.
 Custom Soft Keys are automatically saved on the Master Module.

To reset the Soft Keys to their factory (default) assignments:

• In the Soft Keys Editor, press Factory.

Creating Soft Keys

This section gives examples of the following:

- Customizing a Soft Key in a User Bank
- Creating a New Soft Key Bank
- Adding Navigation Keys to a Bank

See also **Special Soft Key Functions** to learn about special features available in the Soft Key Editor, including modifier key locks (Soft Key layers), drag-and-drop, key commands, multi-DAW commands, and more.

You can also customize most switches on Fader Modules using Soft Keys (see Channel Strip Keys).

Customizing a Soft Key in a User Bank

To customize a Soft Key:

- 1 Navigate the touchscreen to Settings > Softkeys.
- 2 In the Soft Key Editor, select the module on which you want to create a new Soft Key by tapping the Module Selector at the top of the page and choosing Automation Module Soft Keys.



Figure 49. Module Selector (1) and page navigation/editing commands (2)

The Soft Key Editor shows the Automation Module Soft Keys, with the currently banked page (User Page 1) displayed in the right bank. (To select a different page, tap at the top of the displayed page to select that bank, then use the < and > buttons to navigate to the desired page.)

This page provides 12 undefined Soft Keys labeled User, along with pre-defined navigation keys (User 1, Extras, and User 3) across the bottom.

3 Tap to select a Soft Key to customize.

When a key is selected it becomes highlighted in yellow. The lower half of the Soft Key Editor displays commends for defining the Soft Key.



Figure 50. A selected Soft Key

igodow You can also create new Soft Keys in secondary layers for existing Soft Keys. For more information, see Modifier Locks.

- 4 Tap Add in the Soft Key Editor section. A Soft Key block appears in the center of the Editor section, and the commands EUCON, Page, Key, Surface, Options, and Done appear across the bottom.
- 5 Tap the Soft Key block to select it. It becomes highlighted in yellow.
- 6 Tap EUCON, Page, Key or Surface at the bottom of the screen.

The block becomes highlighted and displays choices and commands for the selected command type. For example, if you tap EU-CON, the hierarchical listing of EUCON commands appears below. If you tap Page, Soft Key navigation choices appear, and similarly for **Key Strokes** and **Surface Soft Keys**.



Figure 51. Soft Key Editor with one block added

7 Use the hierarchical EUCON command lists to navigate to and select the desired command. For example, scroll to and then tap Mixing, then scroll to and tap Solo Tracks w/ Sel as shown in Figure 52.



Figure 52. Selecting a EUCON command

- 8 Tap Done (or tap the Soft Key block) to close the EUCON command menus.
- Soft Key assignments can include multiple EUCON commands in addition to combinations of Key, Page, and Surface commands. To optimize multi-command Soft Keys, see **Soft Key Options**.
- **9** Tap the Text/Icon Display Mode selector and select how you want text and/or icons displayed for the Soft Key. Choices include Not Used (no text or icon), Icon Only, and other options for Soft Key text and icon appearance.



Figure 53. Text/Icon Display Modes

10 Under State, do the following:

- Tap the Inactive/Active selector to choose which state you want to define first. (Some commands only have an inactive state.)
- Tap the Icon display below the Inactive/Active selector (the Icon display will be blank for newly created Soft Keys), then use the displayed library to choose an icon for the current state. The Icon palette can be filtered to show All icons or Pro Tools icons, and can be scrolled up, down, left, and right. Tap Done (or tap outside the Icon palette) to return to the Soft Key Editor.

- Double-tap the text field (directly below the Icon display) and enter a text label for the Soft Key using the on-screen touch keyboard. Tap Enter to close the on-screen keyboard. When assigning a command to a new (blank) Soft Key, the text label is automatically filled in with the text of the assigned command. When editing an existing Soft Key (such as any of the pre-configured User keys), rename the text label manually.
- Tap the Color Picker and tap to select a color for the text and its background to appear in the currently selected state. Tap Done (or tap outside the Color Picker) to close it and return to the Soft Key Editor.

5 You can save custom colors by dragging the modified color box onto the palette.

• Repeat for the other state (if you defined display characteristics for the Inactive state, now choose Active and choose an icon, enter a name and choose a color).

In the example Soft Key we created, we defined text for both the Inactive and Active states as "Solo Tks w/Sel" and chose a custom icon as shown in Figure 54.

Automation Module Soft Keys 🔻	
Aldomation 2 Prove Image: The local State Prove Wink to Matter Prove Wink to Matter Prove Wink to State Prove Wink to Prove Prove Prove	User Page 1 Sob Ta wr6k1 User User User User
Soft Key Editor	
Insert Add	Clear Delete
Modifier Locks 🗌 Shift 🗌	¥/Alt □ Ctrl □ ∿/Win
State:	Text/Icon Display Mode:
Active	Text Below Icon
8	
Solo Tks w/ Sel	

Figure 54. Custom Soft Key defined with text and icon

11 To exit the Soft Keys page, press **Tracks** on the Master Module, or select another Settings screen from the top of the touchscreen. Soft Keys are saved automatically.

Creating a New Soft Key Bank

This section describes how to create a new, empty Soft Key bank.

To create a new Soft Key:

1 In the Soft Key Editor, select the module on which you want to create a new Soft Key by tapping the Module Selector at the top of the page and choosing one of the available sets of Soft Keys.



Figure 55. Module Selector

2 Tap the image of the Soft Key bank you want to edit. The selected set is outlined in yellow and its name is displayed below in the Bank commands section.



Figure 56. Automation Module Soft Keys, Right set, selected (Add command, below)

- **3** Tap Add in the Bank commands section to create a new, empty bank after the last existing bank. New banks are automatically numbered.
 - To create a new bank between existing banks, tap Insert; the new bank will be inserted before the currently selected bank.

4 Name the bank and choose a text color by doing the following:

- Double-tap the name field (to the left of the Color Picker) and enter a name for the bank using the on-screen touch keyboard. Tap Enter to close the on-screen keyboard.
- Tap the Color Picker and tap to select a color for the bank name text and for the background color displayed behind the text. Tap Done (or tap anywhere outside the Color Picker) to close it and return to the Soft Key Editor.

Adding Navigation Keys to a Bank

Navigation keys use the Page commands to navigate among banks of Soft Keys. In this example, we will define keys to navigate to the previous and next page of banks.

To add navigation keys to a bank:

1 In the three keys across the bottom of the bank, tap to select the left key as shown in Figure 57.



Figure 57. Selecting a key for page navigation

- 2 Tap Add in the Soft Key Editor section.
- 3 Tap the newly created Soft Key block to select it (the block is highlighted in yellow).

Soft Key E	ditor						
Insert	Add		_			Clear	Delete
Мо	difier Locks	🗆 Shi	ift 🛛	¥/Alt	□ ~/Ctr	I 🗆 O	pt/Win
Tap the r Use EUC Use Page Use Clea Only one comman	menus to set th ON to create a e to create a co r to reset the s e EUCON comm d will be cleare	ne selected c command ti immand to c elected comi nand is allow ed	ommand's t hat connects hange the M mand to a b red per soft l	vpe and allo to the focu laster or Au ank state xey. If a sec	w the comma sed DAW tomation Moc	nds to be ea lule's soft ke Jed the exis	lited ry displays ting EUCON
EUCON	Page	Key	Surface		Option	s	Done

Figure 58. Soft Key Editor after a command block has been added

4 Tap Page at the Bottom of the screen. The command block you just added displays Page, and the Page commands appear.

Soft Key Editor		
Insert Add Page	Clear Del	ete
Modifier Locks 🗌 Shift	□ ¥/Alt □ ∿/Ctrl □ Opt/Wi	n
Section to Change:	Available Pages:	
Automation Module Right Soft Keys	s 🔹 0 : Transport Extras 1	
Action:		
Go to Next Page		
EUCON Page Key Sur	urface Options	Done

Figure 59. Page commands

Make sure the Section to Change selector shows the correct set of Soft Keys (such as Automation Module Right Soft Keys). If necessary, tap and choose a different set.

- 5 Tap the Action selector and choose the desired action (for the "left" key selected in Figure 57, you would typically choose Go to Previous Page). If you choose Jump to Specified Page, the Available Pages list to the right lets you select the desired page.
- 6 Tap Done to close the Page commands.
- 7 Double-tap the name field and enter a text label for the Soft Key (such as "Left") using the on-screen touch keyboard. Tap Enter to close the on-screen keyboard.
- 8 Repeat the previous steps for the "right" navigation key of the new bank, defining it to Go to Next Page as shown in Figure 60.



Figure 60. Left and Right navigation keys defined for a Soft Key bank

- 9 To assign Soft Keys to the new bank, follow the instructions in Customizing a Soft Key in a User Bank.
- **10** To exit the Soft Keys page, press **Tracks** on the Master Module, or select another Settings screen from the top of the touch-screen. Soft Keys are saved automatically.

Special Soft Key Functions

The Soft Key Editor also lets you add **Key Strokes** and **Surface Soft Keys**, configure **Soft Key Options**, utilize **Modifier Locks** for Soft Key layers, **Drag and Drop Transport Switches**, and customize **Wheel Shift Functions**.

Key Strokes

Alpha, numeric, Function, arrow, and other keys from the computer keyboard (including OS modifier keys and other unique functions such as Pause) can be included in a Soft Key definition. Selecting Key provides the following controls:

Key Command Double-tap to access the on-screen keyboard to assign letters or numbers from the computer keyboard to the Soft Key definition.

Insert Special Key Tap to display the Special Key menu, where you can choose special keys to include in the Soft Key definition such as numeric keys (Keypad 0–9), Pause (25ms), Function keys, arrow keys, Return, Enter, and other.

Key Command Modifier Tap to include one or more modifier keys in the Soft Key definition. This lets you create Soft Keys that execute keyboard shortcuts with a single press (such as Shift + Tab).

Insert Add	Кеу		Clear	Delete
Modifier Locks	Shift	□ %/ Alt □	Ctrl 🗆 🛰	/Win
Key Command:				
			Insert Special K	Key -
Key Command Modifi □ Shift □ ¥/	er: Alt 🗌 Ctrl	□ ~/Win		
EUCON Page	Key Surfa	ce	Options	Done

Figure 61. Key Command settings in the Soft Key Editor

Surface Soft Keys

The Soft Key Editor now lets you assign Surface commands to Soft Keys, letting you control more aspects of the S6 surface from customizable Soft Keys. Surface commands let you define Soft Keys for surface banking, talkback and other monitoring controls, Layouts, workstations, and many other common surface functions.

To access Surface Soft Key commands:

- 1 Navigate the touchscreen to Settings > Soft Keys.
- 2 Select a module and key to create or edit its Soft Key assignment as explained in the S6 Guide.
- In the lower half of the Soft Key Editor, tap Add.
 Choices for EUCON, Page, Key, and Surface (as well as Done) appear across the bottom.
- 4 Tap Surface to add a Surface command.

EUCON	Page	Key	Surface	Options	Done

Surface command in the Soft Key Editor

The Editor shows the top level of Surface commands, such as Monitoring, Navigation, Titles, Surface Options, and others.

5 Tap to select a category and reveal associated choices.

Take a few minutes to explore the available Surface commands. The following table lists the choices available in each category.

Category	Commands	Notes
CR Monitoring	Dim, Cut, Main, Alt1, Alt2, Speaker Cuts (mode, and select 1– 24), Folddowns (select), Monitor Insert, Talkback, Listenback, and Sources (mode, and select 1–24)	
Mon A Monitoring	Dim, Cut, and Source select 1–24	For monitor control from Soft Keys on the Master Post Module or other modules. (To add these to
Mon B Monitoring	Dim, Cut, and Source select 1–24	your DAW appset, focus and lock your monitoring application first.)
Mon C Monitoring	Dim, Cut, and Source select 1–24	
Mon D Monitoring	Dim, Cut, and Source select 1–24	
Navigation	Banking, Layouts, Spill Zone Left, and Spill Zone Right select/collapse	Surface and spill zone banking from Soft Keys
Titles	Layout Recall and Post Layout Recall select	Recall any currently loaded layouts
Surface Options	Attention, Strips, Layouts, Knobs, Soft Keys, 3D Panner, Brightness (including Activate/Deactivate Screening Mode), and GPIO	Control preferences in the Settings screen
Workstation Options	Show Custom Names, General (such as Follows Knob Set Changes, and Open/Close Plug-Ins), KVM switch (enable)	
Display Module Options	Common (Show Automation, and Reverse Automation Lanes), and options for Master Post Display Modules	
General Options	Preferences	Autoload from Titles and Sessions settings
Attention Track Options	Attention Clicked Track Name/Fader/Edit Win- dow/Plug-In/Pan/Sends/Edit Sel Move, Attention from Meter Scroller, Show Borders Meter Scroller, Track Scroller follows Attention, Link Scrollers, Enable Attention Knob/Fader Zones, and Auto Show Sel Function Graph, and Use 3D Panner	
Track Selector Options	Display Breaks on Color, Auto Bank to Attention, Show Home on Attention, Auto Select Joystick in Layouts, Store Virtual Hidden Strips in Layouts, Auto Store PEC/Dir in Layouts, Dou- ble Tap to Assign in Banking, Mirror Post Strips, and Auto Assign PEC Meter	Assign any of these commands to Soft Keys to be able to control their settings without leaving the current Track Selector view
Monitoring Options	Auto Listenback, Enable Surface Listenback Latching, Auto Talkback, Enable Surface Talkback Latching, Enable GPI Talkback Latching, and Enable Speaker Label Editing	For monitor control from Soft Keys on the Master Post Module or other modules
KVM Options	Allow Dual Monitor Routing, and Disconnect Previous Routes	
GPIO	Settings for Momentary and Latching GPIO	
Fader Glide	Strips, Buckets, and Surface	
Workstations		All currently connected workstations

Soft Key Options

When any command is added to a Soft Key assignment, a new Options command appears along the bottom of the Soft Key Editor.



Options command in the Soft Key Editor

Pressing Options lets you define the following two aspects of Soft Key behavior for single-DAW commands. (For other Options, see Multi-DAW Commands).



Command Options in the Soft Key Editor

Initial Delay Enter a value (in milliseconds) for the system to pause before executing the command.

Display Feedback This setting determines which commands of a multi-EUCON Soft Key is indicated on the surface. When enabled, S4/S6 displays status indication of the corresponding EUCON command. When not enabled, status indication or other feedback from the corresponding DAW is not displayed. Availability and status of this option varies depending on the associated command. This setting is useful for optimizing system response to multi-EUCON Soft Key assignments.

After entering a value for Initial Delay and configuring Display Feedback if available, press Done to save the Command Option settings with the selected command. Or press Cancel to close the Command Options without changing the command definition.

Multi-DAW Commands

You can configure Soft Keys to apply to multiple DAWs. Use this to enable automation Preview or Match Out across multiple DAWs from a single Soft Key. Feedback (LED indication of function state) and a Delay ("wait") time can be specified as needed.

 \overleftarrow{O} For pre-configured examples, see **Default Multi-DAW Commands**.

To configure a multi-DAW Soft Key command:

- 1 Make sure all desired workstations are connected in Settings > Workstation.
- 2 Go to Settings > Soft Keys, and select an existing Soft Key command or create a new one. Multi-DAW Soft Keys can include EUCON, Key, and Surface commands. When a command is assigned to a Soft Key, or its command block (such as EUCON) is selected in the Soft Key Editor, the Options menu appears at the bottom of the Soft Keys page.
- You can include multiple commands in a single Soft Key assignment, including multi-DAW and single DAW commands. Each multi-DAW command can have unique Command Options for delay, feedback, and workstations.
- 3 Press Options to display the Command Options window.



Command Options window for a multi-DAW EUCON command

Initial Delay (milliseconds) Enter a value (in milliseconds) for the system to pause before executing the command.

Display Feedback When enabled, S6 displays status indication of the corresponding EUCON command. Availability and status of this option varies depending on the associated command.

Attached Workstations These blocks select which workstations to control with the current multi-DAW command. The order of workstations in the Connected list (Settings > Workstations) from top to bottom determines their workstation number.

- Enable Focus to limit the command to only the currently focused workstation.
- Enable All to apply the command to all connected workstations.
- Enable one or more workstation numbers to apply the command to those specific workstations.
- 4 Press Done to save the Command Option settings. Or press Cancel to close without changing the command definition.

The command block for multi-DAW commands displays Multi, the Delay value (if other than 0), and the Feedback status.



Command block indicating Multi, Delay, and Feedback status

Default Multi-DAW Commands

The default Pro Tools Appset includes many pre-configured multi-DAW commands for some of the most frequently requested automation tasks. These include Write to All, Preview, Punch, Auto-Match, and Save. Even if you do not expect to need these specific commands, you can look at them in the Soft Key Editor to see examples of how multi-DAW commands are defined.

To access these new Soft Keys:

- 1 Make sure you have imported the default (factory) Appset for Pro Tools.
- 2 On the Automation Module > right Soft Keys bank > Home page, press the Soft Key for User Pages, then press User 3.

The commands on the User 3 page are all pre-configured to apply to All workstations. To distinguish them from other, single-DAW commands an asterisk (*) has been added at the end of their command names.

Beginning in version 20.5, execution of multi-DAW commands was standardized to correctly interpret and indicate command state. The following table lists examples of multi-DAW commands available in Pro Tools (note that multi-DAW can be applied to any Soft Key that is a multi-state switch):

Category	Commands
	Do To All
	Do To Selected
	Preview, Punch Preview, Trim All, Suspend Preview, Capture, Punch Capture, Capture ALL
Automation >	Auto Match, Auto Join, Join, Suspend Trim Automation
	Suspend Automation
Automation > Modes >	Touch, Read, Write, Latch, Touch/Latch, Off
Automation > Manual Write >	Write to All, Write to Selected, Write to Start, Write to End, Write to Punch, Write to Next
Automation > Write Enable >	Enable Plug-In Automation, Enable Volume Automation, Enable Pan Automation, Enable Mute Auto- mation, Enable Object/Bus Automation, Enable Send Volume Automation, Enable Send Pan Auto- mation, Enable Send Mute Automation
Automation > Write on Stop >	Write to All on Stop, Write to Selected on Stop, Write to Start on Stop, Write to End on Stop, Write to Punch on Stop, Write to Next on Stop
Track Menu >	Coalesce VCA Automation, Clear Trim Automation,
Groups	Suspend All Groups

Optimized Commands for Multi-DAW Sync

Identifying Multi-DAW Sync Soft Keys in the Soft Key Editor

In the Soft Key Editor, EUCON commands that support multi-DAW sync are indicated with yellow text.

oft Key Editor						
Insert Add	EUC	ON U			Clear	Delete
Modifier Locks		Shift 🗌 🛪/Alt		Ctrl		ت/Win
Mixing		Modes		Write Au	ito Sel Sta	irt Stop
Groups		Suspend Automation		Write Au	ito Sel Sto	ор
Navigation		Suspend Trim Automatio	n	Write Au	ito Sel En	d Stop
Automation	≻	Write Enable		Write Au	ito Punch	Pt Stop
Preferences		Manual Write		Write Au	ito Next E	reakPt Stop
OS Modifiers		Write On Stop	>			
Rulers		Auto Join				

Multi-DAW Sync-compatible commands in the Soft Key Editor

Soft Key LED Indication of Multi-DAW Parameter States

Multi-DAW Soft Keys now indicate status by showing three unique states for the Soft Key LED.

Soft Key LED	Status (of all DAWs included in the Multi-DAW Soft Key assignment)
On, bright	At least one track on each DAW has the current command enabled
On, dimmed	Some, but not all, DAWs have at least one track with the current command enabled
Off	No track on any DAW has the current command enabled

MultiDAW Soft Key Feedback From Focused DAW

This setting optimizes LED indication and focused DAW feedback, and applies to all multi-DAW Soft Keys from any DAW. If you enable the MultiDAW Soft Key Feedback From Focused DAW Only option for a Soft Key, the multi-DAW LEDs will not dim (they will only show you the state of the focused DAW). In addition, if the currently focused DAW is not set as one of the multi-DAW Soft Key targets, the LED will be off no matter the state of any DAWs affected by the Soft Key.



Settings > User, Soft Keys section

Modifier Locks

Soft Keys can be created in modifier-driven layers for existing Soft Keys.

The Modifier Locks section lets you "lock" modifier keys on (pressed) to create Soft Keys that become available while a modifier key is pressed. This lets you create new Soft Keys in the same position as an existing Soft Key but which only becomes available when holding down the associated modifier switch on the Fader Module.

Once defined, you can toggle the Soft Key view between modifier "layers" by holding down the associated modifier key(s).

Drag and Drop Transport Switches

The Automation Module Transport Soft Keys can be rearranged via drag-drop. Drag a key onto another Transport switch and the two will swap locations.

 $\overleftarrow{0}$ On the Automation Module, Transport switch caps can be removed and re-installed to match custom Transport Key arrangement.

Wheel Shift Functions

The Wheel section offers a dedicated **Shift** switch (lower right of the wheel) which can be included in a custom Soft Key to assign additional functions to the Wheel switches. This additional layer is in addition to other OS modifier key layers.

To include the Wheel section **Shift** switch in a Wheel Soft Key, tap the on-screen Shift switch (see Figure 62) before selecting a Wheel switch to edit.



Figure 62. Wheel Shift

Preference Settings for Soft Keys

Soft Key Preference settings let you turn Soft Key switch LEDs on or off, choose how Workstation choices appear in the Soft Keys, and set the Workstation Soft Key pages to automatically close after selecting a workstation. For more information, see **Soft Keys**.

Workstations, Layouts, and Tracks Soft Keys

The Master Module Soft Key banks provide special functionality for workstations, Layouts, and track types.

Workstations, Layouts, and Track keys are not defined, and cannot be edited like standard Soft Keys.

Workstations

When multiple workstations are attached to S4/S6, you can use the Soft Keys to focus them. If you use a supported KVM switch, monitor and keyboard focus follows workstation selection.

To attention Workstations from the Soft Keys:

- 1 Make sure all Workstations are connected (Settings > Workstations).
- 2 Press **WS** on the Master Module. The left bank Soft Keys on the Master Module displays the available workstations, and the right bank displays all EUCON-aware applications on the selected workstation.
- 3 Press the corresponding Soft Key switches to attention the corresponding Workstation and/or application.

 $\check{\heartsuit}$ You can configure S6 to include or exclude system icons from Workstation Soft Keys. See System Soft Key lcons Enabled.

4 To exit, press **Close** at the bottom of the Soft Key bank.

 \bigtriangledown You can configure S6 to automatically close the workstation Soft Key displays. See Auto Close Surface Recall Soft Keys.

Layouts

You can also recall Layouts from the Soft Keys. For more information, see Recalling Layouts from Soft Keys.

Track Types

You can spill tracks by type from the Soft Keys. For more information, see Chapter 25, "Spill Zones."

Soft Keys on the Master Post Module

The Master Post Module (MPM) provides a single Soft Key bank similar to those on the Master and Automation Modules, and a set of Monitoring switches, all of which can be customized in the Soft Key Editor.

Soft Keys on Fader Modules and CSMs

See Channel Strip Keys.

Chapter 9: Channel Strip Keys

Using the Soft Key Editor you can customize the assignments for *channel keys* (Fader Module switches surrounding the track OLED (display) such as **Select**, **Swap**, **M S**, **Menu**, and **L G**, as well as the **F (A)** and **M (T)** switches).

Original Fader Modules labeled the two automation keys M and F. Current Fader Modules label these keys T (for Trim) and A (for Automation). Functionality is the same on both generations of Fader Modules. In this and other guides, these switches are referred to as M (T) and F (A).

Custom channel keys let you put commands you use most often directly onto Fader Module strips. Both the Attention and **Menu** switches are available as modifiers for up to three "layers" per hardware switch (one default layer, one layer accessible while the strip Attention switch is held down, and another while strip **Menu** is held down).



Example channel key assignments

Custom assignments can be the same on all tracks or be unique per track type, and you can save and load different assignments for different workflows. For example, on a post production project you might want single-key access to Spill functions, but for a band or other music tracking session it would be more useful to have Record Enable, Input Monitoring, and DSP Mode on each strip.

O DSP Mode requires a Pro Tools | HDX or Pro Tools | Carbon system.

Custom channel keys also provide access to Pro Tools Plug-in Copy and Paste, improved Customizing Automation Mode Selection and Cycling options and Auto Take Over mode.

About New Available Commands

(Pro Tools 2022.9 or Higher)

In addition to customizable channel keys, other new commands are also available with S4/S6 2022.12 including Pro Tools Plug-In Copy and Paste, **Surface Command to Add (or Remove) Track to Layout**, **Display Track Type**, and more.

Using Channel Keys

To access and apply channel keys:

- On the Fader Module for the desired track, press the key to perform its assigned primary function.
- To access additional layers hold down either modifier lock to access the Attention or Menu layer assignments.

 \eth To have all strips enter Attention or Menu layers, hold the All switch while pressing Attention or Menu on any strip.

Customizing a Channel Key

To make a custom assignment to a channel key:

1 Navigate the touchscreen to Settings > Soft Keys, tap the Module Selector and choose Channel Strip Keys.



Choosing Channel Strip Keys from the Soft Keys Module Selector

Select an available channel key in the Channel Strip Keys editor images at the top of the editor. Available keys are bright; un-2 available keys are dimmed. Current assignments are shown as they appear on the Fader Module displays. When an available channel key is selected, its border is highlighted and the Channel Strip Key Editor controls are displayed.

Channel Strip Keys		
	Select Spill L Rec MS Mark La	Attention + Menu Pages

A channel key (Swap, shown above) selected

Availability of assignable commands varies depending on which key is selected, per layer. For example, selecting the L G key lets you choose a command from the Channel Strip Key Command selector, while selecting the F (A) key in default layer provides Automation mode-related tools only.

- In addition, though the default assignment for some keys is fixed in order to maintain a consistent location for certain primary functions, many of these keys can still have custom assignments in either or each Modifier Lock layer (Attention or Menu).
- 3 For additional available keys, enable a Modifier Lock (Attention or Menu). For even more, use Channel Key Pages.

Channel Strip Keys	Channel Strin Kews	Channel Strin Keys
Attention + Menu Negat	Channel Sing Keys	Criatine surprises
Strip Menu Page	Strip Menu Page	Strip Menu Page
< Insert Add Clear Delete >	< Insert Add Clear Delete >	< Insert Add Clear Dates >
Channel Strip Key Editor	Channel Strip Key Editor	Channel Strip Key Editor
Track Category: All Tracks -	Track Category: All Tracks *	Track Category: All Tracks -
Modifier Locks Attention Menu	Modifier Locks 🛛 Attention 🗌 Menu	Modifier Locks 🗌 Attention 🧭 Menu
Default	Attention	Menu

Default

Available Channel Keys Default, Attention, and Menu switches

4 From the Track Category selector, choose All Tracks or a specific track type (such as Audio or Folder, as available for the current DAW). Track Category determines which track type or types (All Tracks) will use custom channel keys.



Track Category selector (Pro Tools shown)

- 5 Do the following as available for the currently selected key and layer:
 - Choose a command from the Channel Strip Key Command selector. Scroll the list to see all commands. Note that not all listed commands will be valid for the current Track Category.
 - · For automation-related switches and commands, see Customizing Automation Mode Selection and Cycling.
 - The default assignment for the current Track Category is shown below the Channel Strip Key Command selector.
- 6 (Optional) Configure surface display options for the channel key in the State section, including icons and colors, when available for the currently selected key.

Channel Key Pages

Multiple pages of Channel Keys can be created to be able to set up different combinations of assignments. Channel key pages can be added, cleared, deleted, and moved just like other Soft Key pages. On fader strips, pages can be accessed through the **Menu** switch.

Creating and Managing Channel Key Pages

To create channel key Pages:

1 In the Channel Key Editor, select the Attention + Menu Pages OLED display in the image to the right to highlight it, and to enable the Page controls directly below.



Attention + Menu Pages, OLED selected (above) and Page commands (below)

- 2 Tap Add in the Page commands section to create a new, empty page after the last existing page. To create a new page between existing pages, tap Insert; the new page is inserted before the currently selected page. New pages are automatically numbered.
- 3 Assign commands to channel keys on the new page (see Customizing a Channel Key).
- 4 Repeat to add additional pages, if desired.

Clearing and Deleting Pages

To clear a page of all assignments:

- 1 Select the OLED so it is highlighted, then use the < and > buttons to navigate the touchscreen to the desired Channel Key Page.
- 2 Tap Clear. All assignments are cleared from the current page.

To delete a page:

- 1 Select the OLED so it is highlighted, then use the < and > buttons to navigate the touchscreen to the desired Channel Key Page.
- 2 Tap Delete. The page and all its assignments are deleted. If the deleted page was between other pages, the remaining pages are renumbered.

Using Channel Key Pages

To access other pages of channel keys from a Fader Module:

Press and hold Attention on a strip (A in the figure below) then press the lit Menu switch (B in the figure below) and release the Attention switch. The strip display shows the next available page of channel keys and, when additional pages exist, the Menu key becomes a Next switch (C in the figure below). If no other pages exist, the display shows Close.





Figure title figure title figure title

2 To go to the next page, press Next (Menu switch). Repeat to access other pages.

To exit Channel Key pages:

- Hold down Next (Menu key) for a half second or more and then release.
- Or press and hold Attention, and press Close (Menu switch).

The next time you access channel keys the last viewed page will be displayed.

Import and Export Channel Keys

You can save and load channel key maps using the Import and Export commands at the bottom of the Channel Strip Keys screen. Unlike Soft Keys (which are only stores in separate files) Channel Strip Keys are automatically stored in Titles and Sessions but can also be stored separately.

You can also load Factory default assignments to reset all channel keys.

To export (save) a channel key map:

- 1 In the Channel Strip Keys editor, tap Export.
- 2 Name and save the Channel Strip Key File.

To import (load) a channel key map:

- 1 In the Channel Strip Keys editor, tap Import.
- 2 Navigate to the desired Channel Strip Keys file or Title and tap Open.

Auto-Load Settings for Channel Strip Keys

Channel key assignments are stored in User Settings (not Soft Keys). For more information, see Autoload from Titles and Sessions.

Channel Strip Keys Editor Screen

The Channel Strip Keys Editor screen provides the following elements.

Channel Strip Keys



Channel Strip Key images

These images let you see and select the desired key to customize. Available keys vary depending on the key selected and the status of either Modifier Lock setting.

Кеу	Name	Default / Factory Assignment	Notes
1	Select	Select	Always Select (not customizable)
2	Swap	S6 Swap S4 Focus	Customizable on S6 only
3	MS	Input Monitor	Key to the left of Menu
4	LG	Record Enable	Key to the right of Menu
5	M (T)	Trim Automation	Always Trim Automation (not customizable) Labeled "M" on original Fader Modules; labeled "T" on newer
6	F (A)	Automation Modes	Always Automation Modes (not customizable)
7	Attention	Attention	Not customizable

Channel Strip Keys Editor Controls

Track Category Leave at the default All **Tracks** to be able to choose commands that are valid regardless of track type. Choose a specific track type for additional commands specific to that type.

Modifier Locks Defines the available modifier key (Attention or Menu) for additional assignment layers.

Channel Strip Key Command Lists all valid commands for the current channel key, Modifier Lock, and Track Category.

State (Text, Icon, Color) Determines the surface display name, icon, and color (as available) for active and/or inactive states.

Factory Channel Key Assignments

The following table lists Factory assignments for Channel Keys. You can reset all channel keys by tapping Factory at the bottom of the Channel Keys Editor. You can also reset commands to their individual default by selecting their assigned switch, then reassigning that switch to Default in the Channel Strip Key Command selector.

Кеу	Factory Assignment	Notes	
F (A)	Automation Mode	Only Automation modes allowed	
Attention + F (A)	Automation Mode	Only Automation modes allowed (starts all off)	
M (T)	Automation Trim	Always Automation Trim	
Attention + M (T)			
Select	Select	Always Select	
Swap	Swap	S6 only (S4 always Focus)	
Left (of Menu)	I/P Monitor	Labeled M S on Fader Module	
Right (of menu)	Record Enable	Labeled L G on Fader Module	
Menu + Select	Spill Zone Left	Only shown for spillable track and if zone exists	
Menu + Swap	Spill Zone Right	Only shown for spillable track and if zone exists	
Menu + Left (of Menu)	Dynamic Spill Left	Only shown for spillable track and strips exist to left	
Menu + Right (of menu)	Dynamic Spill Right	Only shown for spillable track and strips exist to right	
Attention + Select	CDM Strip Layout Cycle		
Attention + Swap	Swap Layer A	Only shown for S6 Swap layer B-D	
Attention + Left (of Menu)	Open / Close Folder Toggle	Only shown for Folder track types	
Attention + Right (of Menu)	Lock / Unlock Strip Tog- gle		
Menu	Collapse Spill	Always Collapse Spill	
Attention + Menu	Open OLED Menu		

Factory (Default) Channel Key Assignments

Chapter 10: Using the S4 Channel Strip Module

Channel Strip Modules (CSMs) provide the fader strips for S4 systems (only). Each CSM provides eight fader strips with a lower fader section and upper knob section, and central function select section.



Channel Strip Module

CSMs provide the same functionality on S4 as Fader, Process, and Knob Modules on S6. The primary differences are:

- The CSM provides a single set of Function Select switches for the eight fader strips, unlike the S6 Process Module which provides Function switches for each fader strip. Function Select switches include **EQ**, **Dyn**, **Exp**, and more.
- The CSM fader **Focus** switch determines the fader strip to which the Function Select switches apply. **Focus** is only available on the S4 CSM, not on S6 Fader Modules.

Throughout this guide, references to switches on S6 Fader, Process, and Knob modules also apply to the equivalent switches on CSMs.

Function Switches

The Function switches select the function displayed on the Knobs. They operate similarly to the Function switches on S6 Process Modules, except that on the CSM they apply to the currently *Focused* strip.



Function switches

 $\dot{\bigtriangledown}$ The Function Select switches Shift and X are not yet implemented.

Expand

Expand mode maps parameters beyond the current strip, expanding (or "spilling") EQ, dynamics, or other functions across multiple controls on the upper Knob section, or to the lower Fader section, on the same CSM as the track. *Attention Expand* mode uses up to two optional Knob Modules as Attention Expand zones.

For complete instructions for using strip Expand and Attention Expand Zones, see Expand.

Clear (Reset to Default)

You can quickly reset faders, individual parameters, functions, Expand Fader maps, or entire tracks to their default values using the **Clear** switch, located at left of the CSM Function select section, and on the top of each strip on the S6 Process Module.

To clear:

- 1 Press Clear on the desired strip. Its LED flashes red, and switches for all functions available to be reset are lit.
- 2 While **Clear** is engaged (flashing) do any of the following:
 - To reset a fader unity (0 dB on the strip), press **F** in the CSM Fader section, or on the S6 Fader Module, or touch the fader.
 - To reset an individual parameter, press its knob top.
 - To reset a function, press the desired function switch in that strip (such as EQ, Dyn, or Pan). Not all functions support Clear.
 - To reset an entire strip, press the strip Select switch (in the CSM Fader section, or on the S6 Fader Module).

The parameter or function resets and the Clear switch stops flashing and remains unlit.

Func (Enable All Plug-In Automation)

Pressing the **Func** switch on a CSM (or S6 Process Module) enables automation for all controls in that strip's currently focused EQ, Dyn, or Insert function.

To protect automation data, pressing the Func switch only enables (it does not toggle automation off).

Function Select Switches

The function select switches let you assign different functions to the Knob Module (S6) or upper knob section of the CSM (S4). One function can be selected at a time, and its function select switch lights.

Ins, **Dyn**, **EQ**, and **User** switches each have a corresponding **In** switch. On the S6 Process Module, **In** switches are next to their function select switches. On the S4 CSM, **In** switches are below their function select switches.

Input

To assign the Input function to the Knob Module:

Press Input.

For more information, see Assigning Track Input and Output.

Inserts, Dynamics, EQ, and User (Instrument)

To toggle Ins, Dyn, EQ, and User in and out:

Press In for the desired function select switch. The In switches for Ins, Dyn, EQ, and User light when active.

To access Inserts:

Press Ins.

To access Dynamics:

• Press Dyn. When more than one Dynamics plug-in is on a track, press its Dyn switch again to cycle through each Dyn plug-in.

To access EQ:

• Press EQ. When more than one EQ plug-in is on a track, press its EQ switch again to cycle through each EQ plug-in.

To access Instrument plug-ins:

Press User.

If you press an EQ or Dynamics Function select switch for a track without these plug-ins already inserted, some audio applications can insert a default plug-in automatically. In Pro Tools, you can select EQ and Dynamics defaults in Setup > Preferences > Mixing.

Sends, Pan, Edit, Grp, Bus, and HEAT

To access Sends on the Knob Module:

- Press Sends.
- To access Pan on the Knob Module:
- Press Pan.
- To access Edit functions:
- Press Edit on any strip assigned to an audio track. (See Editing.)

To access Groups on the Knob Module:

• Press Grp.

To access Buses (outputs) on the Knob Module:

Press Bus.

To access HEAT controls (Pro Tools Only):

Press HEAT.

Focus

At the top of each CSM fader strip is a **Focus** switch. When a strip is focused (its **Focus** switch is lit blue) the central Function Select section on the same CSM lets you choose a function to display in the Knob section for that strip (4 knobs). You can also *Expand* a function to have the entire Knob section provide parameters for that function for the currently focused strip (up to 32 knobs). Note that the **Focus** switch is associated with the fader strip, not any track assigned to the strip.



Focus switch (shown lit)

Examples of CSM Focus

The following examples show how to use the **Focus** switch for per-strip and Expand parameter access, as well as how to use the **All** switch to access parameters across all strips.

Example 1: Per-Strip (Accessing a Function for a Single Strip)

The strip Focus switches let you target a strip for Function selection. In this mode, the selected function will be displayed on the four knobs for the Focus strip only (other knobs continue to display their current function). For example, pressing strip 4 **Focus** and then the **Pan** Function switch displays Pan parameters in the Knob section for strip 4 while leaving EQ parameters on all other strips.

To focus a strip and select a function:

- 1 Press the **Focus** switch on the desired strip. The Focus switch lights.
- 2 Press a Function switch (such as **Pan**).



Pan for the currently focused strip (strip 4)

Example 2: Expand Mode

Expand mode spills parameters for the currently selected function and focused strip across the entire Knob section (up to 32 knobs).

To access Expand mode on a CSM:

- 1 Press **Expand** to enable Expand mode.
- 2 Focus a strip.
- **3** Select a function (such as **EQ**).



Pan for the currently focused strip (strip 4)

Example 3: All

To assign the same function to all strips on a CSM:

- **1** Press **All** on the Master Module.
- 2 Press a Function switch on any CSM.

For example, pressing All + EQ displays the same EQ parameters across the upper Knob section for every strip.



EQ for each strip when no strip is focused

K Layouts let you store and recall custom arrangements of tracks as well as their knob assignments.

Adjusting Parameters Using the Knobs Section

To adjust track parameters using the knobs and switches of the CSM upper Knob section:

- 1 Bank the track so it appears on a strip.
- 2 Use the Function Select, **Focus**, and/or **Expand** switches to display parameters for the desired function on the upper Knob section.
- **3** Do the following:
 - To select from multiple choices (such as specifying a plug-in when **Ins** is enabled), press the knob for the desired function to have its parameters appear. The next level of parameters appear on the knobs.
 - To see additional parameters for the selected function, press the > switch in that strip (below the knobs).
 - To toggle parameters, use the **Sel** and **In** switches next to the corresponding knob. For example, when Sends are shown press that knob's **In** switch to toggle the send on or off, or press **Sel** to toggle pre- and post-fader.
 - To adjust parameters, rotate the corresponding knob.

Navigating CSM Knobs

• To navigate any strip's column to other pages of parameters, use the lit Previous/Home/Next switches (<, _____, or >) at the bottom of the column of knobs for the desired strip.

Functions and Colors

Switch	Parameter	Color		Additional
Input	Input	Red	Red	
Ins	Inserts	Teal	Teal	S6 Only: Press and hold Ins to access HEAT (Pro Tools)
Dyn	Dynamics	Green	Green	
EQ	EQ	Magenta	Magenta	
User	Instrument	Blue	Blue	To access virtual instrument parameters
Sends	Sends	Yellow	Yellow	
Pan	Pan	Blue	Dark Blue	
Bus	Output	Orange	Orange	On VCA Masters, spills level for VCA members
HEAT	HEAT	Pink	Pink	

The following table describes Function Select switches, their LEDs, and their functions.

Pressing **Bus** on the strip for a VCA master lets you adjust output level for tracks assigned to that VCA. On S6 (only) pressing and holding **Ins** lets you adjust HEAT controls (when HEAT is available).

F (A) and M (T) Switches

Original CSMs labeled the two automation keys M and F. Current CSMs label these keys T (for Trim) and A (for Automation). Functionality is the same on both generations of Fader Modules. In this and other guides, these switches are referred to as M (T) and F (A).



Figure 1. Automation and Trim switches on original Fader Module (shown at left) and current Fader Module (shown at Right)

Channel Keys and Automation

Using the Soft Key Editor you can customize the assignments for *channel keys* (CSM switches surrounding the track OLED (display) such as **Select**, **Swap**, **M S**, **Menu**, and **L G**, as well as the **F (A)** and **M (T)** switches).

Custom channel keys let you put commands you use most often directly onto CSM strips. Both the Attention and **Menu** switches are available as modifiers for up to three "layers" per hardware switch (one default layer, one layer accessible while the strip Attention switch is held down, and another while strip **Menu** is held down). You can also customize Automation mode cycling, engage **Auto Take Over**, and more.

Use the rest of this section to learn how to work with automation from S4/S6 default key assignments. To learn how to customize automation controls, see **Customizing Automation Mode Selection and Cycling**.

Part IV: Using S4/S6

Chapter 11: Common Tasks

This chapter shows you how to perform the following tasks using S4 and S6:

- Nudging and Banking
- Pro Tools Folder Tracks
- Changing Display Module Views From the Surface
- Selecting Tracks
- Attentioning Tracks
- Assigning Track Input and Output
- Adjusting Track Parameters
- Using the Transport and Jog/Shuttle Controls
- Working with Track Groups
- Pro Tools Commands Using the Track Color / Modifier Keys

 \bigtriangledown References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

Check out the **Avid Pro Tools | S6 Workflows** on YouTube for in-depth explorations of how to use S6, including Layouts, Spill Zones, Expand Zones, and more. Most of these videos are also relevant to S4, so check back frequently for updates.

Nudging and Banking

You can nudge and bank tracks assigned to the surface using switches on the Master Module, or from any Fader Module or CSM. The switches described in this section let you nudge and bank tracks in standard Banking mode, Layouts mode, and within spill zones. You can also lock strips to make them unaffected by banking (see Locking Strips).

igodow For additional ways to arrange tracks on the surface, see Chapter 23, "Layouts."

Nuding and Banking Using the Master Module

Switches in the Navigation section of the Master Module let you nudge and bank tracks in banking mode, spill zones and Layouts.



Figure 2. Nudge left (1), Nudge right (2), Bank left (3), Bank right (4), and Shift (5) switches

Nudging

To nudge left by one track:

■ Press </Mixer.

To nudge right by one track:

■ Press ►/Close.

Banking

The number of tracks to bank, bank justification and other useful options are set in the Settings > Preferences page (see Banking).

To bank left:

■ Press **◄/Home**.

To bank right:

■ Press ►►/End.

The following refer to the Shift Navigation Switch (5 in Figure 2), not Shift on the Fader Module/CSM or computer keyboard.

To bank so the first track appears on the first (left-most) strip:

■ Press Shift + **<**/Home.

To bank so the last track displays on the last (right-most) strip:

■ Press Shift + ► ►/End.

Bank and Nudge Switch LEDs

The Bank and Nudge switch LEDs light in different colors that correspond to the element focused for banking or nudging. For example, when the system is in standard Banking mode, one or more of the Bank and/or Nudge switches light blue to indicate that pressing them will bank or nudge tracks.



Bank and Nudge switches

Whenever an element is spilled into a Spill Zone, pressing the corresponding **L Spill** or **R Spill** switch so that it lights white enables that zone for banking and nudging. In this state, the Bank/Nudge switches light in the same color as the spilled element.

Color indication of Bank and Nudge switch LEDs

L Spill / R Spill LEDs	Bank/Nudge LEDs	Indicates
Off	Light Blue	Banking mode
	Dark Green	VCA spilled to zone
White	Dark Blue	Layout spilled to zone
white	Light Blue	Workstation spilled to zone
	Pink	Track Type spilled to zone

You can also spill tracks by type (such as All, Audio, Aux, and Master) across as many strips as needed.

To spill tracks by type across the surface:

- 1 On the Master Module, make sure neither spill switch is enabled (L Spill or R Spill).
- 2 Press Type, then press a Master Module Soft Key to spill all tracks of the corresponding type across as many strips as required.
- 3 To exit, recall a Layout or Workstation, or repeat the previous steps and press the Soft Key for All.

igodow Y Pressing any Type key while in Layout mode enables Banking Mode, exiting Layout mode.

Banking from the Fader Module or CSM

The **User 1** and **User 2** switches on Fader Modules and CSMs bank the surface left and right, respectively. User 1 and 2 also bank Spill Zones if the zone is on that module. If the module contains both the left and right spill zones, the left zone is banked.



User 1 and User 2 switches on a Fader Module

Configuring Pro Tools to Follow Surface Banking

Banking the surface also banks tracks on-screen. In Pro Tools, this is enabled using the Preference settings for Edit or Mix Window Follows Bank Selection. For other applications, refer to its documentation.

To have on-screen banking follow surface banking:

- 4 In Pro Tools, go to Setup > Preferences, and click to open the Mixing tab.
- 5 In the Controllers section, click to enable either or both of the following:
 - Edit Window Follows Bank Selection
 - Mix Window Follows Bank Selection
- 6 Click OK to close the Preferences dialog.
- 7 With either of these settings enabled, the corresponding Pro Tools window follows surface banking.

With either of these settings enabled, the corresponding Pro Tools window follows surface banking (as determined by the S4/S6 Banking settings).

 $\overleftarrow{igodyle}$ Surface banking can also be configured to follow track or strip selection, attention, or both.

Spill Zones

Spill zones provide additional ways to arrange tracks on the surface. For more information, see Chapter 25, "Spill Zones."

Banking from Pro Tools

(Scroll to Track and Scroll Into View)

EUCON surfaces fully support ICON-style Scroll to Track and Scroll into View to scroll Pro Tools windows so that the selected track is at the far left in the Mix window and at the top of the Edit window. On S4/S6, strips bank so that the selected track is on strip 1 (or other, as determined by the current setting for Banking Justification Mode).

- Scroll to Track lets you search for and scroll/bank to tracks by name. The searched track becomes selected.
- Scroll into View lets you scroll and bank without selecting the desired track by clicking on their on-screen name, or using their strip **Select** switch.

Scroll to Track

To enable Scroll to Track:

In Pro Tools, go to Preferences > Mixing and enable "Scroll to Track" Banks Controllers.

To utilize Scroll to Track:

- 1 Choose Track > Scroll to Track (or press Command-Option-F (Mac) or Control-Alt-F (Windows).
- 2 Enter the desired track name and click OK (you only need to type the first few letters and matches will be suggested).

Scroll into View

To scroll a track into view and bank it onto the surface without selecting it:

• Shift-Control-click (Mac) or Shift-Win-click (Windows) on the track Name on-screen.

To scroll a track into view that is off-screen but is already banked on the control surface:

- Hold Shift-Control (Mac) or Shift-Win (Windows) and do either of the following:
 - Press **Select** on the strip for the desired track.
 - Select the desired track in the Master Module Tracks screen.

To scroll a track into view and select it:

• Right-click the track name and choose Scroll Into View.

Locking Strips

You can lock strips to anchor them in their current location, unaffected by banking, nudging, spilling and Layout recall. Any channel strip can be locked in position using a Fader Module, CSM, or Master Joystick Module. You can also lock a strip on the Master Post Module. You cannot lock strips to the Automation Module Attention Track fader.

You can optimize how banking handles locked strips in Banking mode and separately in Layouts mode using the **Bank Around Locked Strips** settings.

The following shows how to lock a strip using the default (Factory) Channel Strip Keys.

To lock a strip on a Fader Module, CSM, or Master Joystick Module:

- 1 Bank or nudge, and/or recall a Layout so that the strip you want to lock is where you want it.
- 2 On a Fader Module, CSM, or Master Joystick Module, press and hold **Attention** on the desired strip.

The strip Menu switch lights purple and the OLED displays Lock above the LG switch.

3 Press the LG (Lock) switch.

A lock icon appears on the Fader Module in the strip OLED to the right of the track name, and on the corresponding Display Module strip (if present). If the **Bank Around Locked Strips** setting is enabled, a duplicate appears immediately to its right, shuffling all subsequent strips to the right by the number of locked strips.





Locked strip

4 To unlock a strip, hold Attention and press Menu again.

 \overleftarrow{a} If your system includes one or more Master Post Modules, see Locking MPM Strip 1.

Pro Tools Folder Tracks

S4 and S6 support Folder Tracks introduced in Pro Tools 2020.3. Folder Tracks are their own new track Type, letting you select and filter Folder Tracks on the Tracks screen and on the surface. You can open and close Folder Tracks from the Tracks screen and from fader strips, and using new Soft Keys.

Folder Tracks in the Track Matrix

To change the track type displayed in the Track Matrix:

• Touch a track type such as Folder from the tabs at the top of the Tracks screen. Only tracks of the chosen type are displayed. You can also swipe the Track Matrix horizontally to scroll between track types.





Folder Tracks on Fader Strips

To assign only Folder Tracks to the fader strips:

- 1 On the Master Module press **Type** to display available track types on the Soft Keys. Enable **Spill L** or **Spill R** to put chosen tracks into either zone.
- 2 Press the Soft Key for Folders.

Folder Tracks appear on fader strips like other track types.

Opening and Closing Folder Tracks

Folder Tracks can be opened and closed from the Tracks screen, from the fader strips, and using Soft Keys.

To open or close Folder Tracks from the Tracks screen:

- 1 Navigate to the Tracks screen and make sure a Folder Track is visible in the Tracks matrix.
- In the Navigation Switch section of the Master Module, press and hold Shift.On the Tracks screen the Record and Input buttons change to Open and Close buttons.



Master Module Shift (shown at left) and Tracks matrix Open and Close buttons (shown at right)

- 3 Touch to enable the Open or Close button. It lights to indicate it is active.
- 4 In the Tracks matrix, tap a Folder Track to open or close it.
- 5 Open and Close remain available until you select a different function (such as Attention or Select).

To open or close Folder Tracks from fader strips:

1 Bank the surface so a Folder Track is on a fader strip. In the strip display an open or closed Folder icon is shown.





Open Folder Track

Closed Folder Track Fader strip icons for Folder Tracks

2 On the strip for the Folder Track, hold its Attention switch.The strip display changes to show Open (or Close) above the Input switch, and Lock above the Record switch.



Folder Track Open/Close on a fader strip

- 3 Press the Open (or Close) switch to open or close the Folder Track.
- *V* In previous versions of S4/S6 software, holding Attention and pressing the strip **Menu** switch toggled strip Lock on and off. Strip Lock is now available by holding Attention and pressing the strip Lock (Rec) switch. **Menu** is reserved for future functionality.

Automation Module Attention Fader and Folder Tracks

On the Automation Module fader strip only, pressing and holding the strip Attention switch displays Clear (instead of Lock). Selecting Clear blanks ("un-attentions") the Automation Module strip. In previous versions of S4/S6 you could "un-attention" by pressing and releasing the Attention switch on the Automation Module, but this functionality has been removed (use Clear instead).
Folder Spill

S4 and S6 let you spill Pro Tools Folder Tracks from the fader strips. Folder Track members can be spilled to adjacent faders, to Spill Zones, and set to auto-spill on attention, just like spilling and unspilling VCAs. Indication of spill state and zone banking are identical for spilled Folder Tracks and VCAs. The Synchronize Folder State with Spill setting in the Strips section of Settings > User lets you link Pro Tools Folder Track display (open or closed) with surface spill.

To spill a Folder Track from a fader strip:

- 1 Navigate a Folder Track to a fader strip.
- 2 Press and hold the **Menu** switch on the Folder Track strip.

The upper corners of the channel display show choices to spill to either zone (Zone L and Zone R, if you have defined Spill Zones in Settings > Surface) and the lower corners show choices to spill to adjacent faders (Spill L and Spill R).



Folder Track Spill L/R on a fader strip

3 While continuing to hold down **Menu**, press the switch that corresponds to the desired spill action.

Action	Switch
Zone L	Select
Zone R	Swap
Spill L	Input
Spill R	Rec

4 To unspill (close) a Folder Track, press the green Menu switch on that spilled Folder Track or on any of its dsiplays members.

Displaying Member Tracks

You can choose whether or not member tracks of closed folders are shown on the S4/S6 surface and touchscreen, similar to the previously available settings for hidden tracks. Display of closed folder member tracks can be configured separately for Banking, Layouts, and VCAs modes in the Strips section Settings > User.

Show Closed Folder Track Members

Banking Mode When enabled, member tracks of closed Folder Tracks are visible in Banking mode and can be assigned to Layouts (default is disabled).

Layout Mode When enabled, member tracks of closed Folder Tracks stored in Layouts are visible when the layout is recalled (default is enabled).

 $\dot{\nabla}$ In Layouts mode, member tracks of closed Folder Tracks are not shown in the track screen even when the preference to show hidden tracks is enabled.

VCA Spill When enabled, member tracks of closed Folder Tracks are visible when their master VCA is spilled (default is enabled).

 \diamondsuit The previously available choices to Show Hidden Tracks are still available and have been renamed.

Show Hidden Tracks			
🗌 Banking Mode	Layout Mode	🗹 VCA Spill	
Show Closed Folder Trac	(Members		
🗌 Banking Mode	🗹 Layout Mode	VCA Spill	

Show Hidden Tracks and Show Closed Folder Track Members settings in Settings > User, Strips section

Soft Keys for Folder Tracks

The following Soft Keys for Folder Tracks are available in the default Pro Tools 2020.5 and later appset from the right bank of Automation Module Soft Keys. To view the new assignments, from the Extras page press the Folder Tracks Soft Key to jump to the Folder Tracks page).

Automation Module Soft Keys		Folder Track Commands
Right bank, Extras page >	Folder Tracks >	Toggle Folder
		Toggle Children
		Toggle Siblings
		Open Folder
		Close Folder
		Open Children
		Close Children
		Open Siblings
		Close Siblings

Soft Keys for Folder Tracks in the Default Pro Tools 2020.5 appset

You can also assign these commands to customize Soft Keys using the Soft Keys page in Settings. The following table shows where to find these commands in the Soft Keys > EUCON command menus:

Soft Keys for Meter Layouts

Command	Command Type	Category 1	Category 2	Category 3
Open Folder				Open Folder
Open Sibling Folders				Open Sibling Folders
Open Child Folders				Open Child Folders
Close Folder				Close Folder
Close Sibling Folders	EUCON >	Navigation >	Folders >	Close Sibling Folders
Close Child Folders				Close Child Folders
Toggle Folder				Toggle Folder
Toggle Children Folders				Toggle Children Folders
Toggle Sibling Folders				Toggle Sibling Folders

All Folder Soft Keys support Do to All and Do to Selected.

Parent, Sibling, and Child Folders

S4 and S6 Soft Keys use the terms *Parent*, *Child*, and *Sibling* in Folder commands to provide maximum flexibility when opening and closing Folder Tracks from the surface.

Parent Folder Tracks are the top-most Folder Track in a hierarchy of nested Folder Tracks. In the following diagram Folder Track A is a Parent Folder Track to Folder Track B.



Parent Folder Track (A) and Child Folder Track (B)

The Open/Close Folder commands open/close the currently attentioned Folder Track. For example, if Folder Track A is attentioned, the Open/Close Folder commands open/close Folder Track A. If B is attentioned, they open/close Folder Track B.

Child Folder Tracks are nested within a Parent Folder Tracks. Pro Tools Folder Tracks can be nested up to nine layers. In the following diagram Folder Track B is nested within A, C is nested within B, and D is nested within C, meaning B is a child of A, C is a child of B, and D is a child of C.



Parent Folder Track (A) and Child Folder Tracks (B, C, and D)

Open/Close Child Folders opens/closes all folders contained within the currently attentioned track. In the example diagram above, if Folder Track B is attentioned the Open/Close Child Folders commands open/close Folder Tracks C and D. (The Open/Close Sibling Folders commands do nothing since in this example there is only one Folder Track per layer.)

Sibling Folder Tracks are nested Folder Tracks that are at the same layer within their parent folder. In the following diagram Folder Track A contains Folder Tracks B, C, and D, making Folder Tracks B, C, D *sibling* Folder Tracks.



Sibling Folder Tracks (B, C, and D)

For example, if Folder Track A is attentioned you can use the Open/Close Child Folders commands to open/close Folder Tracks B, C, and D. If Folder Track B, C, or D are attentioned, use the Open/Close Sibling Folders commands to open/close Folder Tracks B, C and D.

Changing Display Module Views From the Surface

(Systems with Display Modules Only)

You can change the view (layout) of Display Module strips from the surface.

- Views can be changed globally across all Display Modules using switches in the Navigation section of the Master Module.
- Views can also be changed for individual strips using switches on the Fader Module for each strip. Strip views are stored in, and recalled by, Layouts.

Both methods select previous or next views as they are listed in the Display Module Layout selector in Settings > User:

• Large Meters, Large Waveforms, Meters and Waveforms, Meters and Function, Waveforms and Function, Waveforms and Dual Function, and Waveforms and Dual Function + Route.

To change Display Module views globally from the Master Module:

- In the Navigation switch section of the Master Module, hold **Shift** and do the following:
 - Press **Display 1** to select the previous Display Module view.
 - Press **Display 2** to select the next Display Module view.



Master Module Shift (1) and Display 1/Display 2 (2) switches

To change the Display Module view for an individual strip:

On a Fader Module press and hold Attention on the desired strip.
 The strip Select switch lights and the OLED displays Meter below the Select switch.



Attention (1) and Select (2) on a Fader Module

2 Press the **Select** switch.

To reset the Display Module view for an individual strip to the current global view:

• On a Fader Module, hold Attention + Select on the desired strip for one second.

Changing Master Meter Module Views

When viewing a Meter Layout on an MMM you can adjust waveform zoom by pressing **Display 1** or **2** on the Master Module. To cycle through available MMM views, press **Shift** + **Display 1** or **2** on the Master Module.

See also **Display**.

Selecting Tracks

You can select tracks from the Fader Module and the Master Module. Selected tracks have an orange outline in the Track Scroller and Track Matrix.



Sum and Intercancel modes affect track selection on the Fader Module and Track Matrix. See Channel Selection Mode for more information.



You can also set track Attention to follow Select, and vice versa. See Strips.

Selecting Tracks Using the Fader Module or CSM

To select a single track from the Fader Module or CSM:

Press Select on the desired strip.



Select switch (S6 Fader Module shown)

The following steps refer to the Shift and Ctrl Track Color / Modifier keys at the bottom of Fader Module strips 1 and 2, respectively. These keys execute Pro Tools commands only, and they are equivalent to the corresponding keys on the computer keyboard.



Fader Module Shift and Ctrl keys

To select sequential tracks:

- 1 Press Select on the desired track.
- 2 Press Shift + Select on the last track.

To select multiple discontiguous tracks:

- 1 Press Select on the desired track.
- **2** Do one of the following:
 - In Sum mode, press Select on additional tracks.
 - In Intercancel mode, press Command + Select (Mac) or Ctrl + Select (Windows) on additional tracks.

To select all Pro Tools tracks on the surface:

- Hold down Option (Mac) or Alt (Windows), and press Select on any track.

Selecting Tracks Using the Master Module

To select tracks using the Master Module:

- 1 Display the Tracks screen by pressing **Tracks** on the Master Module.
- 2 Touch Select.



Select tab on the Tracks screen

3 Touch a track in the Track Matrix to select it.



Track Matrix showing track 4 ("Mic Input") selected

- **4** To select multiple tracks, do one of the following:
 - In Sum mode, touch additional tracks to select them.
 - In Intercancel mode, touch and hold a track and touch additional tracks to select them (also works in Sum mode).

Attentioning Tracks

One track at a time can be *attentioned*, letting you display, edit, and control the Attention Track using the Attention Track Editor (Home screen) and Attention Track Fader (Automation Module). Tracks can be attentioned from Fader Modules, the Home or Tracks Screens, and via on-screen actions in your DAW (see **Surface Attention Follows DAW**).



To attention a track from a Fader or Channel Strip Module:

• Press the desired track's **Attention** key on the Fader Module. The track appears on the Attention Track Fader.



Attention key on Fader Module strip

To attention a track from the Home screen on the Master Module:

• Tap a track in the Track Scroller or in the Meter Scroller (see Home Screen Options to set this preference).

To attention a track from the Tracks screen on the Master Module:

- 1 Navigate to the Tracks screen by touching Tracks at the bottom of the Home screen.
- 2 Select Attention.

Attent	tion	Select	As	sign			- R	ecord	= Inpu	ıt 🛛	- Solo	-	Mut	e
1	2		3		4			5		-	,	7		8
	2		3		4 ==				6		7 =		8	
D.I.	Gui	tar	Re-Amp	Gu	Mic Inp	put	Line	Inputs	Digita	l Inp	Ba	ISS		Drums

Attention tab in the Tracks screen

3 Tap a track in the Track Matrix or the Track Scroller. The attentioned track has a blue outline.



Track Matrix showing track 4 ("Mic Input") attentioned

 $interpretext{interms}$ intermal for the track is also selected, it has a two-color outline: orange (upper half) and blue (lower half).

Disabling Attention on a Track

When a track is attentioned it automatically appears on the Attention Fader on the Automation Module. You can un-attention that track by pressing the lit Automation Module Attention key.

Surface Attention Follows DAW

You can optimize how S6 reacts to actions on-screen in your DAW using the Attention Most Recently Clicked DAW Area options in the Attention section of Settings > User.



Attention Most Recently Clicked DAW Area settings, in Settings > User

Enable any available setting to control when a mouse click tells the surface to attention a track. For example, if Edit Window is enabled and you click in the time line or clicking/selecting a clip in your DAW, that track is automatically attentioned on your controller. If Edit Window is not enabled, clicking in the time line or clicking/selecting a clip will not attention that track.

Similarly, if Pan Controls is enabled clicking on a track Pan control or Output window attentions that track on S6 (and on the Master Joystick Module, if any).

Additional Information for Attention Triggers

Attention Setting	Trigger	Additional Information
Track Name	Clicking a track name in Mix or Edit window	
Fader	Clicking a track volume fader in Mix window	
Edit Window	Clicking in a track/playlist lane in the timeline Keyboard shortcuts that move the insertion or section between tracks (such as Command Focus "p" and ";"). See "Edit Selection Move Up / Down."	When clicking, the attention trigger is only based on the initial mouse click location. If you define a selection spanning multiple tracks, or bound an edit group, the attentioned track is based on the first point of contact on the edit timeline.
Plug-Ins	Clicking to open a plug-in window Clicking anywhere in the plug-in window (including the header with automation, Librarian and the Target icon)	
Pan Controls	Clicking a pan knob or puck in the Mix window Clicking anywhere within a floating Pan window Clicking on a pan puck in the I/O view of the Edit window	Note that clicking on a pan control n the I/O view of the Edit window will not trigger attention.
Send Controls	Clicking to open a send window Clicking anywhere within an open send window (including the window Target)	Note that clicking a send control in any Expanded Sends view will not trigger attention.
Edit Selection Move Up / Down	Using the computer keyboard or EUCON key commands to move the edit cursor or a selection up or down. For example, pressing "p" to move up or ";" to move down will attention the last track in which the cursor lands.	In Pro Tools make sure to enable Link Track and Edit Selection
Show EQ and DYN Plug-Ins as Inserts	Clicking to open an EQ or DYN plug-in window Clicking anywhere in the plug-in window (including the header with automation, Librarian and the Target icon)	For Custom Knob maps

Definitions for Attention Most Recently Clicked DAW Area Settings

You can specify where you want clicked DAW controls to appear on the surface by configuring **Display Knobs from Most Re**cently Clicked DAW Area.

When using a DAW that does not directly support these new features, the previously available "Attention most recently selected track" setting remains available. When using a DAW that does directly support these new features, "Attention most recently selected track" is not available.

Display Knobs from Most Recently Clicked DAW Area

Use this setting to specify where you want clicked DAW controls to appear on S4/S6 (such as only on the Master Module, on an Expand Knob Module, or on both the Master and Expand Fader).

To configure this setting:

1 Go to Settings > User and scroll to the Attention section.

igodow 7 This setting is also available in Home screen Settings.

2 Choose a system element from the Display Knobs from Most Recently Clicked DAW Area selector.



Display Knobs from Most Recently Clicked DAW Area setting in Settings > User

When you click a DAW control that is enabled to Attention Most Recently Clicked DAW area, parameters for that control's function are displayed on the chosen S4/S6 element. When the clicked control does not have a corresponding function (such as track name) the current Primary and Backup Function will be displayed. For more information on the Primary and Backup Functions, see **Expand Knob and Expand Fader Function Settings**.

Assigning Track Input and Output

You can assign track input and output from the Master Module and from channel strips. The exact steps will differ depending on the version of Pro Tools (or other DAW) you are using:

- For Pro Tools 11.3 or earlier, available input sources or output destinations are displayed on as many Attention Track Knobs, or channel strips knobs as required. Use the Master Module or channel strip Page switches to navigate to other available choices, then press the knob top for the desired input or output.
- For Pro Tools 11.3.1 or later, see below.

Input Assignment

To assign track Input from the Master Module:

- 1 Attention a track to bring it to the Attention Track knobs.
- 2 Navigate to the Home screen and tap to select Input in the Function scroller. The upper left knob shows the currently assigned input source. (See Figure 3, left image.)
- **3** Do any of the following:
 - To exit without changing the current assignment, tap to select any other function in the Function scroller.
 - To select a different source, press the upper left knob; the two upper left knobs display interface and bus sources. (See Figure 3, right image.) Rotate the corresponding knob until the desired source is shown, then press that knob's **In** switch.
 - To return to the previous page of choices, press the Master Module **Back** switch (*—*).





Figure 3. Top level Input knob set ((at left) and interface/bus knob set (at right)

To assign track Input from a channel strip:

1 In the strip for the desired track (S6) or current Focus strip (S4 CSM), press **Input** on the Process module (see Figure 4, left image) or CSM. The first knob in the Knob Module (or CSM) shows the current input assignment for the track (see Figure 4, right image). On S6, if no Knob Module is present for that strip, the current assignment appears in the Process Module encoder display.





Figure 4. Input switch on Process Module (at left) and top level input knob set (at right

2 Do any of the following:

- To exit without changing the current assignment, press any other Function switch.
- To select a different input, press the knob top showing the current input assignment. The top two knobs now show interface and bus choices. Rotate the corresponding knob until the desired source is displayed, then press the **In** switch for that knob.
- To return to the previous page of choices, press **Back**.

Output Assignment

To assign track output using the Master Module:

- 1 Attention a track to bring it to the Attention Track knobs.
- 2 Navigate to the Home screen and tap to select Bus in the Function scroller. The upper left knob displays the current output assignment.
- **3** Do any of the following:
 - To exit without changing the current assignment, tap to select any other Function.
 - To select a different output, press the knob showing the current assignment. The top two knobs show available interface and bus outputs. Rotate the corresponding knob until the desired output is displayed, then press the **In** switch for that knob. This assigns the selected output as the only output (removes any other assignments).
 - To assign an additional output to the track, rotate the corresponding knob until the desired output is displayed and press the **Sel** switch for the corresponding knob. This results in multiple output assignments (as indicated by the yellow **Sel** LED lighting, and on-screen in Pro Tools with a "+" in the Output assignment selector).
 - To return to the previous page of choices, press the Master Module **Back** switch (

To assign track output from a channel strip:

- 1 In the strip for the desired track (S6) or current Focus strip (S4 CSM), press **Bus** on the Process module (S6) or CSM (S4). The top-most encoder in the Knob Module shows the current output assignment for the track (if no Knob Module is present for that strip, the current assignment appears in the Process Module encoder display).
- **2** Do any of the following:
 - To exit without changing the current assignment, press any other Function switch.
 - To select a different output, press the knob showing the current assignment. The top two knobs show available interface and bus outputs. Rotate the corresponding knob until the desired output is displayed, then press the **In** switch for that knob. This assigns the selected output as the only output (removes any other assignments).
 - To assign an additional output to the track, rotate the corresponding knob until the desired output is displayed and press the **Sel** switch on the corresponding knob. This results in multiple output assignments (as indicated by the yellow **Sel** LED lighting, and on-screen in Pro Tools with a "+" in the Output assignment selector).
 - To return to the previous page of choices, press **Back**.

Navigating Through Multiple Output Assignments

When there are multiple outputs assigned to a track, you can quickly navigate through assignments by pressing the corresponding knob top. For example, if multiple bus outputs are assigned to a track you can press the bus knob to cycle through each currently assigned output.

Adjusting Track Parameters

Many track parameters can be adjusted directly from the surface, such as track volume and pan. Other parameters are accessed by enabling their corresponding Function switch on the Process Module, then adjusting the parameters on the Knob Module. Parameters assigned to a Knob Module can also be flipped to the faders.

To adjust track volume:

- 1 Bank the track so it appears on a strip.
- 2 Adjust the fader.

To adjust track pan:

- S6: Rotate the knob on the Process Module for the desired track. If Pan is not shown on the Process Module, hold down the **Back** switch directly below the Process Module knob and then press the **Pan** switch.
- S4: Focus the desired strip, press the **Pan** function select switch on the same CSM, then rotate the desired Pan knob.

To adjust a plug-in parameter, send, or other parameter:

1 S4 Only: Focus the desired strip (bank the desired track to the surface then press its CSM Focus switch so it is lit).

Switch	Parameter	Color		Additional
Input	Input	Red	Red	
Ins	Inserts	Teal	Teal	S6 Only: Press and hold Ins to access HEAT (Pro Tools)
Dyn	Dynamics	Green	Green	
EQ	EQ	Magenta	Magenta	
User	Instrument	Blue	Blue	To access virtual instrument parameters
Sends	Sends	Yellow	Yellow	
Pan	Pan	Blue	Dark Blue	
Bus	Output	Orange	Orange	On VCA Masters, spills level for VCA members
HEAT	HEAT	Pink	Pink	S4 Only

2 On the Process Module or CSM for the desired track, press the corresponding Function switch:

Pressing **Bus** on the strip for a VCA master lets you adjust output level for tracks assigned to that VCA. Pressing and holding **Ins** lets you adjust HEAT controls (when HEAT is available).

3 Adjust parameters using the knobs and switches of the Knob Module or upper knob section on S4 CSMs.

- To select from multiple choices (such as specifying a plug-in when **Ins** is enabled), press the knob for the desired function to have its parameters appear on the Knob Module. The next level of parameters appear on the knobs.
- To see additional parameters for the selected function, press the > switch in that strip on the Knob Module.
- To toggle parameters, use the **Sel** and **In** switches next to the corresponding knob. For example, when Sends are shown on a Knob Module strip press that knob's **In** switch to toggle the send on or off, or press **Sel** to toggle pre- and post-fader).
- To adjust parameters, rotate the corresponding knob.
- To have all available parameters appear across all controls of the S6 Knob Module or S4 CSM, press **Exp** on the Process Module to enable Expand mode. You can also configure functions to automatically expand when selected. For more information, see **Expand**.

You can customize the layout of controls per plug-in using **Custom Knobs and Custom Faders**, and pin any one parameter at a time to the

Flip to Faders

The **Flip** switch on the Master Module lets you flip parameter control of certain functions from knobs onto faders across the entire surface.



Master Module Flip switch

To flip rows of parameters sequentially to faders:

1 Press **Flip** on the Master Module.

The LED lights white and the first row of knobs flip to the faders. Volume control flips to the corresponding row of knobs, which also light white. On the Fader Module display, the currently flipped parameter name appears below the track name. Automation Mode indicator LEDs follow parameters when in Flip mode.

2 Press Flip again.

The second row of parameters flips to the faders, and volume control moves to the newly flipped knobs.

- 3 To flip the next row of parameters, press Flip again.
- 4 To exit Flip mode, continue pressing **Flip** until no more rows of parameters are available (it automatically disables), or press **Shift** + **Flip**.

Certain functions automatically cancel Flip mode, such as spilling tracks and enabling Expand on a flipped strip.

 $igodow^{\prime}$ You can also adjust parameters from the faders using <code>Expand</code>.

Using the Transport and Jog/Shuttle Controls

The Automation Module provides a Transport section and Jog/Shuttle Wheel.



Using the Transport Controls

Figure 5. Transport controls

 $\dot{\nabla}$ This section describes the function of switches in the default Pro Tools appset. Transport switches can be customized in the Soft Key Editor. For more information, see Chapter 8, "Soft Keys."

The following table lists the primary and **Shift** functions of the Transport switches. Other functions require use of the modifier keys on the Fader Module or computer keyboard.

Legend	Switch Label	Primary Function	Shift Function	Other Functions
1	<	RTZ (Return to Zero)	End of Session	
2	<	Select Previous Clip	Shift (Add to Selection)	Previous Clip (Opt/Win)
3	>	Select Next Clip	Shift (Add to Selection)	Next Clip (Opt/Win)
4	Back + >	Back and Play	Forward and Play	
5	R Mode	Record Mode	Abort Record	
6	Loc	Zoom Toggle	Zoom to Selection	Zoom to Session (Opt/Win) Previous Zoom (Cmd/Alt)
7	Back	Back	Forward	
8	<<	Rewind		
9	>>	Fast Forward		
10		Stop	Retrospective MIDI	
11	>	Play	Half Speed Playback	
12	•	Record	Half Speed Record	
13	Loop	Loop Playback	Dynamic Transport	

Setup (Transport Lock)

When the Transport **Setup** switch is enabled, the Transport switches lock to the currently focused application on the attentioned workstation. Only the Transport switches lock; the Locate and Numeric Keypad sections always follow workstation switching.



Setup switch

Using the Jog/Shuttle Wheel

The Jog/Shuttle Wheel can be assigned to several functions by enabling one of its mode switches.

This section describes the function of switches in the default Pro Tools appset. Wheel switches can be customized using the Soft Key Editor. For more information, see Chapter 8, "Soft Keys."



Figure 6. Jog/Shuttle Wheel with Jog (1), Shuttle (2), and Shift (3) switches

The ring of LEDs surrounding the wheel are not implemented.

Jog

To Jog with the wheel:

- 1 Press Jog so it lights.
- 2 Spin the wheel clockwise to jog forward or counterclockwise to jog backward. The speed is proportional to the wheel movement, and stops when you remove your finger from the wheel.
- 3 To exit Jog mode, press Jog again so it is unlit, or enable a different Wheel mode, or press any Transport switch.

Shuttle

To Shuttle with the wheel:

- 1 Press Shuttle so it lights.
- 2 Spin the wheel clockwise to shuttle forward or counterclockwise to shuttle backward. The speed is proportional to the wheel movement. Shuttle continues after you remove your finger (and after the wheel stops) at the initiated speed.
- 3 To exit Shuttle mode, press Shuttle again so it is unlit, or enable a different Wheel mode, or press any Transport switch.

Shift

Hold down the Wheel **Shift** switch (3 in Figure 6) to access the secondary (purple) Wheel functions. This **Shift** switch only affects switches surrounding the Wheel. The **Shift** switch on the Master Module and Fader Modules does not affect the Wheel switches.

Switch Label	Primary Function	Shift Function
Jog	Jog (wheel)	
Shuttle	Shuttle (wheel)	
Trim	Move Selection (wheel)	
- / Function	Nudge Clip Gain Down	Zoom Amplitude
+ / Move Selection	Nudge Clip Gain Up	Move Selection
Zoom Horizontal / Scroll Horizontal	Zoom Horizontal	Scroll Horizontal
Zoom Vertical / Scroll Vertical	Zoom Track Height	Scroll Vertical
Shift		

Working with Track Groups

You can add or remove tracks from existing Groups, and suspend individual Groups, from the Master Module and Knob Module.

To add or remove tracks from a Group:

1 Do either of the following:

- Press **Grp** on a Process Module (S6) or CSM (S4). All existing Groups are assigned to the Knob Module(s) in that strip and shown on the Display Module (if any, in a Function view).
- Navigate to the Home screen, then tap to select Group in the Function Scroller. All existing Groups are assigned to the Attention Track knobs, lit to indicate group membership of the currently attentioned track.



Figure 7. Groups selected in the Home screen

- 2 If there are more Groups than available knobs, press either of the lit Page (< >) keys on the Knob Module, or use the Master Module Page switches to see more (see Using Page Switches to Navigate Attention Track Knobs). Group membership for the track is indicated by a lit In switch for all Groups in which the track is a member. All currently enabled Groups are indicated by a lit Sel switch.
- 3 To add or remove a track from the current Group, press its In switch (or its knob) on either the Knob Module or Master Module.
- 4 To suspend (or activate) a Group, press its Sel switch. When lit, the Groups is active; when unlit, it is suspended/inactive.

🎸 See also Momentary Group Suspend.

Pro Tools Commands Using the Track Color / Modifier Keys

This section lists a variety of Pro Tools commands that use the Track Color / Modifier keys at the bottom of the Fader Module S6) and CSM (S4). Note that multiple keys can be held down together. The table lists each key's function for Mac and Windows. The commands refer to knobs, faders, and switches on the Fader Module.



Track Color / Modifier keys

Track Color / Modifier Key functions for Mac and Windows

	Shift	Ctrl	Opt/Win	Command/ Alt	User 1	User 2	Cancel	ок
Mac	Shift	Control	Option	Command	Expand Fader Zone	Expand Fader Zone	Cancel	ОК
Windows	Shift	Ctrl	Win	Alt	Page I	Paye 2		

Do to All and Do to All Selected

To enable Do to All:

• Hold down **Option** (Mac) or **Alt** (Windows).

To enable Do to Selected:

• Hold down **Option + Shift** (Mac) or **Alt + Shift** (Windows).

The following commands apply to all or all selected tracks on the surface:

- · Select, mute, solo, record, input, and automation modes
- Plug-in bypass, send mute
- Assigning I/O, plug-ins, and sends.

OK and Cancel

If there is a dialog window open in Pro Tools or other connected DAW, the **OK** and **Cancel** switches on the Fader Modules flash. When the dialog is on the currently focused workstation they flash green; when on a workstation that is not focused, the switches flash orange. Press **OK** to confirm or **Cancel** to cancel the dialog.

Selecting Tracks

To select contiguous tracks:

- 1 Press **Select** on a track.
- 2 Hold down Shift.
- 3 Press Select on another track. All tracks in between are selected.

To select non-contiguous tracks:

- 1 Press **Select** on a track.
- 2 Hold down Command (Mac) or Ctrl (Windows).
- 3 Press **Select** on another track to add to the selection(s).

Resetting Parameters

To set a parameter to its default value:

• Hold down **Option** (Mac) or **Alt** (Windows) and touch a fader or knob.

With Pro Tools, you can also press the knob on most functions to reset to default value (without holding down the modifier key).

Toggling Sends In/Out

To toggle sends in or out:

- 1 Hold down Control + Command (Mac) or Ctrl + Alt (Windows).
- 2 Press Select on a track displaying a top-level send to toggle it in and out.

Momentary Group Suspend

"Clutching" Control

Hold down Control (Mac) or Win (Windows).
 This temporarily disables Pro Tools track groups so any operation on a track in a group works only on the individual track.

Automation

To enable or disable plug-in controls for automation:

- 1 Hold down Control + Option + Command (Mac) or Ctrl + Win + Alt (Windows).
- 2 Click the mouse on the Plug-In automation enable button in the plug-in header. This toggles the automation status for all controls in that plug-in.

To display track automation data on Display Modules:

- 1 Hold down Control + Command (Mac) or Ctrl + Win (Windows).
- **2** Touch a fader or knob.

On-screen in Pro Tools, the Track View for that track show the corresponding automation. On Display Modules (if any) when set to any Waveform view, automation data is shown along with the waveform.

Chapter 12: Recording

This chapter shows you how to perform many recording tasks with S4/S6:

- Record Enabling Tracks
- Configuring Record Mode
- Soft Keys for Recording

 $igodoldsymbol{\%}$ References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

If your system includes a Master Post Module, you can use it for PEC/DIR-style monitor switching and punch recording. For more information, see **Using the Master Post Module**.

Record Enabling Tracks

To record in an audio application, the track must be record enabled and the Transport must be armed for recording.

To arm the Transport for recording:

• On the Automation Module, press **Record** on the Transport.

You can record enable tracks using the Fader Module and the Master Module.

Record Enabling Tracks Using the Fader Module

To record enable tracks from the Fader Module:

• Press **Rec** on the desired tracks.

To disable a record-enabled track from the Fader Module:

Press a red flashing **Rec** switch.



Fader Module record switch

The following steps refer to the **Shift** and **Ctrl** Track Color / Modifier keys at the bottom of Fader Module/CSM strips 1 and 2, respectively. These keys execute Pro Tools commands only, and are equivalent to the corresponding keys on the computer keyboard.

To record enable contiguous tracks from the Fader Module:

- 1 Press **Rec** on the first track.
- 2 Hold down Shift and press Rec on another strip.

To record enable all Pro Tools tracks on the surface:

• Hold down **Option** (Mac) or **Alt** (Windows), and press **Rec** on any track.

To record enable all selected Pro Tools tracks on the surface:

 Hold down Option + Shift (Mac) or Alt + Shift (Windows), and press Rec on any track. If the track you pressed Rec on was not selected, it is still record enabled.

Record Enabling Tracks Using the Master Module

To record enable tracks using the Master Module:

- 1 To display the Tracks screen, touch Tracks at the bottom of the Home screen.
- 2 Touch Record (above the Track Scroller).



Record tab in the Tracks screen

3 Touch the desired tracks in the Track Matrix.



Track Matrix with tracks enabled for recording (track tiles flash red)

To disable a record-enabled track using the Master Module:

- 1 Touch Record.
- **2** Touch a record-enabled track.

To disable all record-enabled tracks using the Master Module:

- 1 Touch Record.
- 2 Touch Clear.

Indication of Record Status

The following flash red when a track is record enabled:

- **Rec** switch on that Fader Module strip.
- Recording indicator in the Track Matrix, Track Scroller, and Fader in Function Scroller.
- The entire track in the Track and Meter Scrollers.

The indicators that flash red when record enabled light solid red during recording.

 \overleftrightarrow See also Use Pro Tools Track Record Mode Colors.

Configuring Record Mode

The Transport switch **R Mode** lets you cycle through all available recording modes on the current DAW.

 \tilde{O} You can specify the Record Mode and other recording-related functions from the Soft Keys. See **Soft Keys for Recording**.

To configure the current Record Mode:

1 On the Automation Module, press the **R Mode** switch. The next available record mode is enabled.



Figure 8. R Mode

2 Press R Mode again to cycle to the next available record mode.

Soft Keys for Recording

The Automation Module Soft Keys provide many frequently used commands related to recording. The following examples refer to the default appset for Pro Tools.

To toggle Pre/Post roll, or Count Off on or off:

1 Make sure the right bank of Automation Module Soft Keys are on their default page 1 (Extras).



Figure 9. Automation Module Soft Keys default page 1 ("Extras" page at right)

- 2 Press the Soft Keys for Pre Roll or Post Roll to toggle them on/off.
- 3 Press the Soft Key for Count off to toggle it on/off.

To access more recording commands in the Soft Keys:

• Press the Recording Soft Key in the Automation Module right bank.

Chapter 13: Using the Master Post Module

The S4/S6 Master Post Module is a traditional film monitoring panel that lets you switch track monitoring between input sources and punch tracks into and out of record. A comprehensive Speaker/Monitor Control section is provided, along with a bank of customizable Soft Keys and strip Link and Lock controls.

Master Post Module (MPM) strips can have any type of DAW track assigned to them. Tracks are assigned to MPM strips from the Tracks/Layouts page. These and all MPM operations are provided in the following sections.

- Master Post Module Top Panel
- Assigning Tracks to MPM Strips
- Track Monitoring and Recording
- Linking and Locking Strips
- Using the Speaker Controls
- Using the Soft Keys

Using Multiple Master Post Modules

When more than one MPM is installed in a system they can be configured to mirror each others tracks or to work independently.

- When the Tracks > Local Option setting Meter Layouts is enabled, all Master Post Modules' tracks act as a single, mirrored unit. Track assignments are mirrored (identical) on all Master Post Modules.
- When disabled, each Master Post Module acts independently of other Master Post Modules. In the Strip scroller (Post Layouts) unique Master Post Module strips are displayed for each module and numbered according to the current setting for Number of Post Strips in Post Layout. Different tracks can be assigned, recalled, and controlled to or from each module.

Using MPMs in Multi-Operator Configurations

In systems with more than one MPM and only one recorder, make sure all MPMs are connected to the S6 that is connected to the recorder. This includes multi-operator configurations. For more information, see the *S6 Networking Guidelines.pdf*, available for download from your Avid account and from our Knowledge Base.



Figure 10. Ethernet connections for multiple Master Post Modules (dual-operator configuration with Universal Master Modules shown)

Master Post Module Top Panel

The Master Post Module provides five primary sections of controls and displays.



Master Post Module top panel

Master Post Module Main Sections

Section	Description
1 – Strips	10 identical channel strips, each with the following controls and displays (listed from the top down): Link, Solo, Mute, Ready, OLED, Record paddle, Input Monitor paddle, Track Color indicator
2 - < >	Bank left (<) and right (>) switches, to bank the MPM strips only.
3 – Attention	Enables Link Master Assign mode, and Lock Strip 1 mode.
4 – Link	Enables Link mode to select tracks for linked (ganged) control, and locks/unlocks strip 1 (only).
5 – Monitoring	Switches for selecting monitor outputs (Alt 1, Alt 2, Main), modes (such as Dim and Cut), and other essential monitoring functions. These switches can be customized and re-assigned to other functions in the Soft Key Editor.
6 – Soft Keys	One bank of Soft Keys with 15 customizable assignments. Default assignments are provided in the Factory appset. MPM Soft Key assignments are saved and loaded with other S6 Soft Key sets.

Assigning Tracks to MPM Strips

Tracks are assigned to MPM strips from the Tracks screen in Assign Post mode. MPM track assignments are managed in Post Layouts, and are unaffected by standard surface banking or nudging.

To assign tracks to MPM strips:

 Recall a Post Layout containing MPM assignments. You can recall Post Layouts from the MPM Soft Keys or from the Master Module Tracks screen in Assign Post mode (see next).

To assign tracks to a Post Layout:

- 1 Navigate the touchscreen to the Tracks screen.
- 2 In the Navigation Switch section of the Master Module, press and hold Shift.

On the Tracks screen, the Assign button becomes Assign Post.



Master Module Shift (left) and Assign Post mode (right)

3 While still holding **Shift** tap Assign Post.

The Assign Post button lights purple and the lower strip scroller shows Post strips (Post 1, Post 2 and so on).



Assign Post in the Tracks/Layouts screen

- 4 Assign tracks to MPM strips as you would in a standard Track layout.
 - Tap Track blocks in the upper track matrix to select the tracks you want in the Layout, then tap a strip block at the bottom of the screen to place the currently selected track(s) starting on that strip.
 - Repeat to add and arrange other tracks in the Layout. To include tracks from a different application or workstation, focus that application and then repeat the previous steps to add its tracks to the Layout.
 - Swipe the lower strip scroller to the left to access additional MPM strips (if any, as determined by the **Number of Post Strips** in **Post Layout** setting and/or the number of MPMs in your system).
 - When you have selected and placed tracks onto strips, tap Store. The Store Post Layouts grid appears.

In the lower Strip scroller, all strips (scroller at the bottom of the screen) are outlined in bright green, indicating they will be stored and recalled with the Layout. Tap to deselect the strip blocks for any strips you do *not* want stored in and recalled with the Post Layout.

- Tap a block in the Store Post Layouts grid. The block highlights and is automatically numbered, and Store appears at the far right of the Layouts Commands across the bottom of the screen. The Layout Name field also appears with a flashing cursor.
- To store the Layout with only its assigned number for its name, tap Store. To enter a custom name for the Post Layout tap the Layout Name field, enter a name using the on-screen keyboard, then tap Enter.

For complete instructions on creating Layouts, see Layouts.

To exit Assign Post mode:

• Press Assign Post again, or press the Attention or Select buttons on the Tracks screen.

The lower Strip Scroller reverts to showing standard surface strips. On the MPM, the tracks you assigned in the Post Layout remain on their corresponding MPM strips.

Post Layouts

MPM track assignments are not stored in standard track Layouts but are instead managed in separate *Post Layouts*. Just like standard Layouts, Post Layouts are maintained in Titles and sessions, can be saved, loaded, renamed, and edited. When a Display Module is configured as a Master Post Display Module (MDM) and linked to an MPM, Post Layouts also let you assign tracks as the PEC and DIR meter sources.

Post Layouts and Virtual Strips

The Number of Post Strips in Post Layout setting in the Tracks > Local Options screen lets you define how many virtual strips to include in Post Layouts, so that Post Layouts are not limited in size to the number of physical MPM strips in a system. When saved, Layouts save the maximum number of possible virtual strips. For example, with Post Layouts you can define up to 80 virtual strips, so saved Post Layouts maintain 80 strips. This prevents Post Layouts from losing any assignments if transferred to and loaded on a system with fewer MPMs or virtual strips than the original system.

Once you add virtual strips they are not removed or deleted; reducing the number of Post Strips merely hides the previously available strips and they are no longer visible. They are not editable but by default are saved to Titles and sessions. You can control whether hidden virtual strips are retained using the **Store Hidden Virtual Strips in Layouts** setting.

Banking and Spilling Strips

The MPM provides bank left and right switches to bank tracks across MPM strips. These switches (< and >) become available when the currently recalled Post Layout includes more than 10 strips, or when a VCA with more than nine member tracks is spilled. MPMs bank independently of the rest of the surface.

To bank the MPM:

- 1 Recall a Post Layout with more than 10 tracks, or spill a VCA (assigned to an MPM strip) that has more than 10 member tracks.
- 2 On the MPM, press < to bank left or > to bank right.

To spill a VCA on the MPM:

- 1 Recall a Post Layout or bank the MPM so that a VCA appears on an MPM strip.
- 2 Make sure the MPM master Link switch (upper left corner) is off/disabled.
- 3 In the MPM strip for the VCA, press the Link switch (at the top of the strip controls). The member tracks of the VCA spill across as many MPM strips as necessary. If there are more than ten, press < or > to bank the MPM.
- 4 To unspill, press any strip Link switch.

 \bigotimes VCA Spill on an MPM does not support nested VCAs. VCAs can only be spilled one layer deep.

Track Monitoring and Recording

Use the Monitoring and Record paddles to toggle track monitoring and to punch tracks in and out. Paddles can control individual tracks, or multiple, linked tracks.



At the time of this writing, the MPM requires Pro Tools 12.5.2 or higher for basic functionality. Some features require Pro Tools 12.6 or higher. For other DAWs, contact their manufacturer.

Configure Pro Tools

To configure Pro Tools for MPM monitor switching and punch recording:

- 1 In Pro Tools, choose Setup > Preferences, and click to navigate to the Operation tab.
- 2 In the Record section, do the following:
 - Enable the Transport RecordLock setting.
 - · Enable the PEC/Direct Style Input Monitoring setting.
 - Click OK.

Onscreen, TrackInput Monitor controls light green. On MPM strips the Monitoring paddles light green.

Monitoring

The MPM Monitor paddles toggle track monitoring between input and playback.

To toggle track monitoring:

- 1 For input monitoring, push the Input paddle up.
- 2 For playback (disc) monitoring, push the Input paddle down.

Solo and Mute

MPM strips also provide standard Solo and Mute switches.

Recording

The MPM Record paddles punch tracks in and out. The Record Ready switches on each strip arm the paddles for punch recording.

To punch in and out with the MPM:

- 1 Configure Pro Tools for the desired punch record mode (DestructivePunch, TrackPunch, or QuickPunch).
- 2 Configure other DAW settings as appropriate for the chosen punch record mode.
- 3 On the MPM, press the (record) Ready switch on each strip you want to punch so that its LED lights red.
- Pro Tools indicates DestructivePunch- and TrackPunch-enabled status by flashing Record Enable LEDs in alternating red and blue. You can configure the MPM to always indicate record status with Pro Tools colors or to use only red by enabling or disabling the Use Pro Tools Track Record Mode Colors preference in the Settings > User page.
- 4 Begin playback.
- 5 To punch in, push the MPM Record paddle up (On).
- 6 To punch out, push the MPM Record paddle down (Off).

VCA Punch Recording

MPM Record Ready switches arm and disarm Pro Tools tracks including slaves of VCAs, and indicate Ready status of tracks, VCAs, and slaves of VCAs, without requiring any modifier keys be engaged while toggling Record Ready status.

While the Transport is stopped:

- Pressing a Record Ready switch record enables the corresponding Pro Tools track; pressing again record disables the track.
- Pressing a Record Ready switch on a VCA places all its member tracks into Record Ready. When the VCA is in Record Ready you can spill the VCA and disarm individual slaves. The Record Ready switch on any VCA arms and disarms all slaves.

The MPM Record Ready switch LEDs light red when the corresponding Pro Tools track Record Enable button is in any of the following states:

Pro Tools Record Enable State	Mode and Status
Flashing Blue and Red	TrackPunch/DestructivePunch Enabled and Record Enabled
Solid Blue	TrackPunch/DestructivePunch Enabled but not Record Enabled
Flashing Red	Record Enabled, but not TrackPunch/DestructivePunch Enabled
Solid Red	Recording

Linking and Locking Strips

The MPM provides several types of strip Linking, to be able to control functions on multiple strips in unison. Linking is maintained for as long as the current session is open. You can also lock strip 1 to its currently assigned track. All linking states are recallable with Post Layouts in S4/S6 19.5 or later.

Basic Link

In this mode, all linked strips respond in unison when the following functions are engaged on any of the linked strips: Ready, Record paddles (punch in/out), Solo, and Mute.

To link strips:

- 1 Press the master Link switch (in the upper left corner so that it flashes yellow.
- 2 Select strips to link by pressing their individual Link switches so that they flash yellow.
- 3 Bank to other strips using the MPM < and > switches to select those tracks to include in the Link.
- 4 To exit Link setup mode, press the master Link switch again. The master Link switch and all selected strip Link switches stop flashing and light yellow.
- **5** If you need to remove a strip from the Link, repeat the previous steps and deselect the strip to remove (press its **Link** switch so it is unlit/not flashing.

Link Master

When a strip is designated as a Link Master, its controls affect all linked tracks but each individual (linked) track can still be punched, soloed, and muted independently.

To designate a Link Master:

- 1 Press the MPM Attention and (master) Link switches simultaneously so that both switch LEDs flash.
- 2 Press the Link switch on the strip you want to designate as the Link Master.

The **Attention** and (master) **Link** switches stop flashing, the (master) **Link** switch lights yellow, and the selected Link Master strip **Link** switch also lights yellow. In the OLED for the Link Master, horizontal lines appear above and below the track name.



Link Master (on track "Main")

Master Record

When strips are designated as Master Record tracks, they can be punched in unison while maintaining independent (unlinked) control of punch out, Record Ready, Solo and Mute. When punching in tracks on independent (non-mirrored) MPMs, Master Record strips indicate record status of any track on any MPM.

To designate Master Record tracks:

- 1 Press and hold the (master) Link switch for at least two seconds, so that all strip Link LEDs flash quickly.
- 2 Press a flashing Link switch on one or more strips to select them as Master Record tracks.When selected, strip Link switches light yellow and stop flashing. In the OLED for each Master Record track, vertical lines appear on either side of the track name.
- 3 To deselect a Master Record track, press its lit Link switch so it flashes.
- 4 To exit Master Record assign mode, press the (master) Link switch so it becomes unlit.

Link Master and Master Record

Strips can be designated as both a Link Master and a Master Record track. This state is indicated by the track name surrounded by a yellow box.



Indication of a track that is both a Link Master and Master Record

Locking MPM Strip 1

You can lock strip 1 on an MPM so that it remains available and is unaffected by MPM banking and spilling, or by recall of Post Layouts. This is useful for configuring a strip as a traditional PEC/Dir master strip.

To lock an MPM strip:

- 1 Configure a Post Layout, or bank an MPM, so that the desired track is assigned to strip 1 on an MPM.
- 2 On that MPM, press and hold the Attention switch in the upper left corner.
- 3 While still holding Attention, press the strip 1 Link switch.

The track name display for strip 1 becomes highlighted in yellow. Strip lock remains in effect for as long as the current session is open, or until you unlock it.

4 To unlock strip 1, hold Attention and press the strip 1 Link switch again.



Indication of Master Record (on track "Main")

Using the Speaker Controls

The MPM provides a set of Speaker and monitor control switches. The default assignments for these switches are labeled on the switches, and include speaker select (such as **Alt 1**, **Alt 2**, and **Main**), modes (such as **Cut**, **Dim**, **Fold Down** and **Insert**), and special purpose switches such as **Auto Match**. Auto Match lets you punch out of an automation write pass.



Speaker Control

All switches in the Speaker Control section are Soft Keys that can be re-assigned and customized in the Soft Key Editor by selecting Post Module Soft Keys from the module selector.

Using the Soft Keys

Each MPM provides a bank of 15 Soft Keys below the Speaker Control switches. A default (factory) set of MPM Soft Key assignments is provided to let you recall Post Layouts, control monitoring options, and perform other frequently used functions. Like all Soft Keys, you can customize the MPM Soft Keys using the S6 Soft Key Editor.



Soft Keys

For complete instructions on using the Soft Key Editor, see Soft Keys.

Chapter 14: Using Master Display Meter Modules

Display Modules can be designated as Master Display Meter Modules (referred to in this document as MMMs) to provide dedicated meter displays for important session elements. With S6 up to two MMMs can be used; S4 supports one MMM. When two MMMs are designated, both mirror each other.

You can configure MMMs to show meters, waveforms, or meters and waveforms for 8 to 32 tracks (up to four rows of 8 tracks each). You can select MMM views separately from Display Module views, store MMM views in *Meter Layouts*, and link Meters Layouts to Track Layouts.

Views can be changed from the Tracks screen Local Options, using Soft Keys, or by pressing **SHIFT** + **Display 1/Display 2** on the Master Module while in Meters view.



Figure 11. Master Meter Module showing 2 rows in Meters and Waveforms view (upper) and 4 rows in Large Meters view (lower)

Designating Master Meter Modules

MMMs can be added to your surface configuration by designating already assigned Display Modules to become Master Meter Modules, or by adding Display Modules to the surface configuration as Master Meter Modules.

To designate existing Display Modules to use as Master Meter Modules:

- 1 Go to Settings > Surface, then press Config.
- 2 Press Display.



Figure 12. Display command in Settings > Surface, Config

3 Follow the on-screen instructions to designate up to two (S6) or one (S4) Display Modules as Master Meter Modules.



Figure 13. Assign Master Display Meter Hardware screen in Settings > Surface, Config

To add new Display Modules as Master Meter Modules:

- 1 Edit your surface configuration by adding an empty chassis with no modules:
 - Go to Settings > Surface, press Config, then press Surface.
 - Enter your frame width (number of chassis with modules plus one or two empty chassis) and frame depth, then press Next.
 - Drag module stacks to the frame diagram until it matches your physical arrangement of modules (leave MMM stacks empty).
 - Press Next, touch to confirm the flashing modules, then press Next when all modules are confirmed.
- 2 Drag available (unused) numbered Display Module icons to the frame diagram above empty chassis, or chassis that only have Master Post or Master Joystick modules.



Figure 14. Settings > Surface, Config showing how to add a Master Meter Module

3 Press Next, then press Done.

Meter Layouts

Assigning Tracks to MMM Meters

The Meters menu key on the Home page displays the Meters screen, where you assign tracks to meters, store and recall Meter Layouts, and link Meter Layouts to standard Layouts.

To create and assign tracks to Meter Layouts:

 Navigate to the Home screen and press Meters. Or press Shift + Tracks on the Master Module. When showing the Meters screen, the Tracks switch lights orange.

				6		
AN 52_01 AN 901	_01 AN SnT_01	AN SnB_01	AN Rim_01	AN H_01	AN_01 R	AN F_01
Track	s Meters		Monitoring		Settings	¢

Figure 15. Meters command in the Home screen

2 In the Meters screen, press to enable Assign and assign tracks to Meters Layouts.

Assigning tracks to Meter Layouts in the Meters screen is very similar to assigning tracks to other types of Layouts.

• Tap Track blocks in the upper track matrix to select tracks, then tap a strip block at the bottom of the screen to place the currently selected track(s) starting on that meter.

The number of available Meter rows can be configured between 1 and 4 rows (see **Configuring MMM Display Settings**).

- Repeat to add and arrange other tracks in the Meter Layout. To include tracks from a different application or workstation, focus that application and then repeat the previous steps to add its tracks to the Meter Layout.
- When you have selected and placed tracks onto meters, tap Store. The Store Meter Layouts grid appears.

In the lower Meter blocks (at the bottom of the screen) all meters are outlined in bright green indicating they will be stored and recalled with the Meter Layout. Tap to deselect the blocks for any strips you do *not* want stored in/recalled with the Meter Layout.

- Tap a block in the Store Meter Layouts grid. The block highlights and is automatically numbered, and Store appears at the far right of the commands across the bottom of the screen. The Meter Layout Name field also appears with a flashing cursor.
- To link the current Meter Layout to an existing Layout, tap the desired Layout in the upper area of the Store grid. The Meter Layout number appears in the block for that Layout.
- To store the Meter Layout with only its assigned number for its name, tap Store. To enter a custom name for the Meter Layout tap the Meter Layout Name field, enter a name using the on-screen keyboard, then tap Enter.

Meter Lay	outs - Assi	gn Tracks 1	to Master I	Meter Disp	lays		
All VC							
vDX ADR	vDX group 1	vDX group 2	vDX fixes	vGuns	vExplo	vArtil	vProd
1 9							1 16
vBG Vehicles	vBG Planes	vFeet 1	VFEET 2	vFOL 1	vFOL 2	vDX	vMX
1 17	1/18	1 19	1 20	1 21	1 22	1 23	1 24
vFX	vBG	vFOL	ADR 1	ADR 2	ADR 3	GRP 1	GRP 1 L
1 25	1 26	1 27	1 28	1 29	1 30	1 31	1 32
GRP 1 C	GRP 1 R	GRP 2 L	GRP 2 C	GRP 2 R	GRP 2 Ls	GRP 2 Rs	FINAL FIX 1
1 33	1 34	1 35	1 36	1 37	1 38	1 39	1 40
FINAL FIX 2	FINAL FIX 4	FINAL FIX 5	FINAL FIX 6	ADR Short Vr	ADR Med Vr	DRM Vrb	DRM DELAY
1 41	1 42	1 43	1 44	1 45	1 46		1 48
DX CHAIN	2 ORCH (1) 1	2 ORCH (1) 2	4 SYNTH (4)	4 SYNTH (4)	6 DRUM - LF	7 PERC (6) 2	7 PERC (6) 3
1 49							
MX Verb	MX CHAIN	FX Guns	FX Xplosions	FX Artillery	FX Prod	FX Chain	BG
1 57	1 58	1 59	1 60	1 61	1 62	1 63	1 64
Attention Select Assign Insert Delete Meter Clear Meter							
Meter 1	Meter 2	Meter 3	Meter 4	Meter 5	Meter 6	Meter 7	Meter 8
	Mederic	Meters	inder-t	Meter S	Midder o	Medary	Middaro
Recall	Store	Edit		Load	Save	Save As	\$

For complete instructions on creating track, Post, and Meter Layouts, see the S6 Guide.

Soft Keys for Meter Layouts

Like other types of Layouts, Meter Layouts are available in the Soft Key Editor for assigning to custom Soft Keys.

Soft Keys for Meter Layouts

Command	Command Type	Category 1	Category 2	Category 3
Meter Layout 1–n	Surface >	Titles >	Meter Layout Recall >	<meter 1–n="" layout=""></meter>

Chapter 14: Using Master Display Meter Modules

Recalling Meter Layouts

You can recall stored Meter Layouts from the Master Module Soft Keys when in Meters view.

To recall Meter Layouts:

- 1 Do either of the following:
 - Navigate to the Home screen and press Meters.
 - Or press Shift + Tracks on the Master Module.
 When showing the Meters screen, the Tracks switch lights orange.
- 2 Press the Layout Mode switch on the Master Module.

The Master Module Soft Keys show available Meter Layouts. (Meter Layouts are only available when in Meters view.)

As previously described, you can also link Meter Layouts to standard Track Layouts so they recall together.

When recalling standard Layouts from the Soft Keys (Layout Mode), any Layouts that have linked Meter Layouts are indicated with a unique icon:



Figure 16. Soft Key icon for a linked Meter Layout

Configuring MMM Display Settings

The controls in the Meter Layouts section of the Tracks > Local Options screen lets you configure the layout of MMM displays.

- The Layout selector sets whether MMMs show Large Meters, Large Waveforms, or Meters and Waveforms. When viewing a Meter Layout on an MMM you can adjust waveform zoom by pressing **Display 1** or **2** on the Master Module. While actively assigning tracks to Meter Layouts, pressing **Shift** + **Display 1** or **2** cycles through the available views (you can adjust MMM zoom at any time from the **Additional Master Meter Display Settings**).
- The Number of Meter Rows slider configures the MMMs to display tracks in 1, 2, 3 or 4 rows (each row can show 8 tracks).



Figure 17. Meter Layouts settings in Tracks > Local Options

Both of these settings are stored per Meter Layout.

Additional Master Meter Display Settings

The Master Meter Display settings in Settings > User let you control the following aspects of Meter displays (these settings are similar to those available for standard Display Module views):

Waveform Zoom Sets the size of displayed waveforms. When viewing a Meter preset on an MMM you can adjust the Waveform Zoom by pressing **Display 1** on the Master Module.



Figure 18. Master Meter Display section in Settings > User

The following settings affect both Master Meter Display Modules and standard Display Modules, and are located in the Common section of Settings > User, Display Module.

Show Automation Enables display of automation on waveforms.

Reverse Automation Lanes Toggles the orientation of displayed automation left-to-right.

Automation Opacity Sets the opacity of displayed automation between 0 (fully transparent) and 100 (fully opaque).

Auto-Load Layouts and Meters

In Settings > System, the previously available choice for Layouts has been changed and is now Layouts and Meters. When enabled, S4/S6 loads all standard and Meter Layouts stored in a Title, session or project.

Chapter 15: Using Master Post Display Modules

Display Modules can be designated as *Master Post Display Modules* (referred to as MDMs) to provide dedicated PEC/DIR metering for associated Master Post Modules. Linked states for Post Modules are also shown on MDMs, including Link master, master Record, and Link indicators (chain) for each linked track.

🏹 Reminder: MDM = Master Post Display Modules. MMM = Master Meter Display Modules. MPM = Master Post Modules.

Each Master Post Module can have its own MDM assigned to it. With S6 up to three MDMs can be used, and with S4 one MDM. When two or three MDMs are designated, both can mirror each other. MDMs are configured in the Settings > Surface page similarly to how Master Meter Display Modules (MMMs) are assigned.

Tracks displayed on MDMs follow assignments to Post Layouts in the expanded Post Layout Assign screen. MDM views are 10 tracks in width, matching the Master Post Module, and you can choose to display up to 4 rows of 10 meters. One additional, larger view is available that provides two rows of five tracks. Each MDM strip has up to two other tracks assigned as the source for its Input (DIR) or Output (PEC) meter. The two sources are distinguished by either blue and green (the default), or red and green.





Post Module Meter, 2x5 view (shown at left) and close-up of an track meter (shown at right)



An orange outline indicates tracks currently banked on the MPM.

Post Module Meter, 4x10 view with tracks currently banked to the MPM outlined in orange

 \eth Make sure the Pro Tools playback system is set to Post-Fader meters.
Designating Display Modules as Master Post Display Modules

You add MDMs to your surface configuration by associating an already assigned Display Module to a specific Master Post Module.

To designate an existing Display Module as a Master Post Display Module:

1 Go to Settings > Surface, press Config, then press Display.



Display settings in Settings > Surface

- 2 In the next screen that appears, tap to select a Display Module so it becomes highlighted.
- 3 Touch a control on the desired MPM to assign the Display Module to it as a Master Post Display.
- \dot{V} Or touch a lit control on the Master Module or Automation Module to instead designate that Display Modules as a Master Meter Module.

Linked Display Modules and MPMs are indicated with small purple squares.





- 4 Repeat to add a second MDM (S6 only).
- **5** To unlink a module:
 - Select Clear then select a Display Module.
 - Select the module that the Display Module has been assigned to.
- 6 Press Done.

To add new Display Modules as Master Post Display Modules:

- 1 Edit your surface configuration by adding an empty chassis with no modules (see the S4/S6 Guide.pdf for detailed instructions):
 - Go to Settings > Surface, press Config, then press Surface.
 - Enter your frame width (number of chassis with modules plus one or two empty chassis) and frame depth, then press Next.
 - Drag module stacks to the frame diagram until it matches your physical arrangement of modules (leave MDM stacks empty).
 - Press Next, touch to confirm the flashing modules.
- 2 Press Next when all modules are confirmed.
- 3 Drag available (unused) numbered Display Module icons to the frame diagram above empty chassis, or chassis that only have Master Post Modules.

- 4 Touch a lit control on the Master Post Module to link it and the added Display Module.
- **5** Press Next, then press Done.

Assigning Tracks for Meter Sources to a Post Layout

Once they are associated with a Master Post Module, MDMs follow tracks assigned to Post Layouts in the expanded Post Layout Assign screen. Each MDM strip can have up to two other tracks assigned as the source for its Input (DIR) or Output (PEC) meter. You can also configure the system to auto-assign PEC sources when tracks are assigned to a Post Layout. Track assignment provides quick access to member tracks using **Assign Spill**.

Meter source tracks must have the same width and channel order as the primary track assignment.

To assign tracks to a Post Layout:

- 1 Navigate the touchscreen to the Tracks screen.
- 2 In the Navigation Switch section of the Master Module, press and hold Shift. On the Tracks screen, the Assign button becomes Assign Post.



Master Module Shift (left) and Assign Post mode (right)

3 While still holding Shift tap Assign Post.

The Assign Post button lights purple and the lower strip scroller shows Post strips (Post 1, Post 2 and so on) in the upper scroller, with separate rows of strips for DIR and PEC meter source tracks below.



Post Module Assign screen when an MDM is present

- 4 Assign tracks to MPM strips as you would in a standard Track layout. Tap Track blocks in the upper track matrix to select tracks, then tap a strip block at the bottom of the screen to place the currently selected track(s) starting on that strip.
 - Add tracks to the upper row of Post Module strips to assign them to the MPM. These tracks will be controlled by the MPM paddles and switches.

 $\sqrt[V]{}$ When the setting **Auto Assign PEC Meters from Post Tracks Assign** is enabled in the Tracks > Local Options, assigning MPM tracks auto-assigns associated meter display tracks.

• Add tracks to the middle row to assign them as the DIR (input) meter source.

 $\overset{\cdot}{\mathcal{Y}}$ Make sure the Pro Tools playback system is set to Post-Fader meters.

- Add tracks to the bottom row to assign them as the PEC (output) meter source.
- Swipe the lower strip scroller to the left to access additional MPM strips (if any, as determined by the setting for Number of Post Strips in Post Layout and/or the number of MPMs in your system).



Tracks assigned to strip 1 in a Post Layout with DIR and PEC meter source tracks

5 Repeat to add and arrange other tracks in the Layout. To include tracks from a different application or workstation, focus that application (such as DADman for Pro Tools | MTRX and MTRX Studio) and then repeat the previous steps.

 \diamondsuit Track assignment provides quick access to member tracks using Assign Spill.

- 6 When you have selected and placed tracks onto strips, tap Store. The Store Post Layouts grid appears. In the lower Strip scroller, all strips at the bottom of the screen are outlined in bright green, indicating they will be stored and recalled with the Layout. Tap to deselect strip blocks for any strips you do *not* want stored in and recalled with the Post Layout.
- 7 Tap a block in the Store Post Layouts grid. The block highlights and is automatically numbered, and Store appears at the far right of the Layouts Commands across the bottom of the screen. The Layout Name field also appears with a flashing cursor.

8 To store the Layout with only its assigned number for its name, tap Store. To enter a custom name for the Post Layout tap the Layout Name field, enter a name using the on-screen keyboard, then tap Enter.

Assign Spill

Assign Spill mode lets you access VCA members for VCAs assigned to MDM strips, to quickly assign their meter sources.

To use Assign Spill:

- 1 Enter Post Assign mode.
- 2 Assign a VCA to an MPM strip block. The Assign Spill button becomes available on the touchscreen.



Assign Spill button after assigning a VCA

3 Tap Assign Spill.

The lower track blocks are populated with member tracks from all VCAs in the current Post Layout assignment, and display Spill above each upper block.



Assign Spill enabled, showing VCA members

4 Assign meter sources for member tracks, then tap Assign Spill again to return to the primary Post Layout Assign view.

Settings

Track assignments on MDMs follow their associated Master Post Module, and most settings for Post Layouts also apply to MDMs.

Auto Assign PEC Meters from Post Tracks Assign

This setting, located in the Tracks > Local Options (gear icon) can simplify assignment of tracks for MDMs. When enabled, assigning a track to a Post Layout automatically assigns it as the PEC track on the MDM. When not enabled, assign tracks to PEC and DIR manually.

Post Layouts		
Number of Post Strips in Post Layout		
		20
Number of Post Rows		1.0 (10)
1 Row of 10	2 Rows of 5	1 Row of 10
Mirror Post Strips on Multiple Post Modules		
	Post Layouts Number of Post Strips in Post Layout 10 Number of Post Rows 1 Row of 10 Mirror Post Strips on Multiple Post Modules	Post Layouts Number of Post Strips in Post Layout 10 80 Number of Post Rows 2 Rows of 5 1 Row of 10 2 Rows of 5 Mirror Post Strips on Multiple Post Modules 1 Notes of 5

Auto Assign setting in Tracks > Local Options

DIR Meters in Red

The two meter sources are distinguished by different colored meters on the MDM, selectable to be either blue and green (the default), or red and green. This setting, located in the Display section of the Settings > User page, controls the colors that indicate PEC and DIR meters on MDMs. By default, DIR meters are blue and PEC are green. When this option is enabled, DIR meters will be red (PEC are always green).

Number of Post Rows

This setting, located in the Master Post Display section of the Settings > User page, determines how tracks are arranged on MDMs. Choices include 1 row of 10 (MDM tracks align with the 10 strips on the Master Post Module), up 4 rows of 10, or 2 rows of 5.

Enable Off-Disk Only (PEC) Meters for Post Module Assignment (Pro Tools Only)

This setting, located in the Workstation section of Settings > User, ensures that PEC track meters will always be visible on MDMs regardless of the status of the PEC track Input Monitoring setting. In addition, enabling this setting forces Pro Tools 2020.9 and later to always display disk meters.

Important! Pro Tools Meter Settings

Make sure the Pro Tools playback system is set to Post-Fader meters. To revert Pro Tools meters back to normal (not Off Disk), do either of the following:

- Disconnect the workstation from S4/S6 (Settings > Workstation), then quit and re-launch Pro Tools.
- Disable the Enable Off-Disk Only (PEC) Meters for Post Module Assignment (Pro Tools Only) and then quit and relaunch Pro Tools.

Chapter 16: Editing

This chapter shows you how you can edit Pro Tools audio tracks using S4/S6.

- On systems that include Display Modules, you can edit audio using Knob Modules or CSMs (see Editing from the Surface).
- All systems can use the Wheel and its surrounding switches, the Locate switches, and Soft Keys to select and edit clips (see Editing with the Wheel, Locate Switches, and Soft Keys).

5 References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

Editing from the Surface

(Display Module Systems with Pro Tools Only)

S4/S6 lets you edit clips using knobs and their **Sel** and **In** switches on Knob or Channel Strip Modules (or faders when Flip is enabled). You can move a clip, trim the head or tail, adjust Fade In and Fade Out, and adjust Clip Gain.

Clips are targeted for editing when they reach the playhead on the Display Modules when in any Waveform view as shown in Figure 19. Resolution of edits and moves using the **Sel** and **In** switches is determined by the Pro Tools Nudge value, which can also be adjusted directly from S4/S6. Edits made by rotating S6 knobs use the current Knob Preference settings (see **Knob Speed and Sensitivity**).

Visual feedback is provided both in the Pro Tools Edit window and on the channel Display Modules by a variety of yellow outlines that vary depending on the mode.

To move or edit a clip:

1 Make sure Display Modules are configured in one of the available Waveform views. If necessary, go to Settings > Preferences and select one of these views in the Display Module section.

 \bigvee You can adjust the zoom resolution of the Waveform displays in Settings > Preferences, and quickly zoom out or in using the Display 1 and Display 2 switches on the Master Module. See **Waveform Zoom**.

2 On a Process Module or CSM, press **Edit** on the strip you want to edit. The Knob Module for that strip light in fuchsia and display edit parameters, the number and type of which vary depending on track type as follows:

Audio Tracks Clip Gain, Move, Trim Back, and Trim Front, Fade Out, Fade In, Nudge Amount, Undo and Redo.

Instrument and MID Tracks Move, Trim Back, Trim Front, Nudge Amount, Undo and Redo.

Systems with two Knob Modules available for the strip can access all parameters simultaneously. On other systems, press the lit > or < switch on the Knob Module to navigate between pages of Edit controls.

igot' You can also enable Expand mode on that strip to see all Edit parameters simultaneously. See <code>Expandf</code>.

3 Cue the session so that a clip is in contact with the Display Module playhead. On the Display Module, a yellow border or bracket appears around any clip that is in contact with the playhead on a strip in Edit mode (see Figure 19). Once a clip is targeted for editing it will remain the Edit target until another clip on the same track crosses the playhead, or until

Figure 19. Indication of a clip targeted for editing

you enable Edit mode on a different track.

- 4 To adjust a value, do either of the following:
 - Press the Sel switch next to the knob to increment (increase); press In to decrement (decrease).
 - Turn the knob for that parameter clockwise to increment (extend or move later in the timeline), or counterclockwise to decrement (shorten or move earlier in the timeline). Turn slowly for fine adjustment and fast for coarse.

On-screen in the Pro Tools Edit Window, the targeted clip is outlined in yellow as soon as you touch or adjust a knob, or press an edit switch (see Figure 20). Brackets appear when trimming or adjusting fades.



Figure 20. Pro Tools indication of a clip targeted for editing from S6

Display Module Waveform views only show and edit audio clips, regardless of the current Pro Tools Track view (for example, you cannot edit MIDI notes from the surface).

On Display Modules, the waveform or icon shown varies with the edit function being adjusted, as follows:

Clip Gain The waveform gets wider as Clip Gain is increased, and narrower as it is decreased. See "1" in Figure 21.

Move The entire clip remains highlighted and moves later in time (rotate encoder clockwise, or press **Sel**), or earlier (counter-clockwise, or press **In**). See "2" in Figure 21.

Trim Back and Trim Front A bracket appears at the tail of the clip (Trim Back) or head of the clip (Trim Front). See "3" in Figure 21.

Fade In A bracket appears at the head of the clip, and the Fade In length is indicated by a horizontal line that moves as you adjust the Fade In value. See "4" in Figure 21.

Fade Out A bracket appears at the tail of the clip, while the Fade out length is indicated by a horizontal line that moves as you adjust the Fade Out value. See "5" in Figure 21.

Nudge Amount The Nudge value increases or decreases as you adjust the value. This Nudge Value is independent from the Pro Tools Nudge Amount, and is stored with the session. The S4/S6 Nudge value only affects edits made using the S4/S6 **Sel** and **In** switches. Edits made by rotating S4/S6 knobs use a fixed value and knob acceleration.

1	2	3	4	5
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Figure 21. Clip editing indicators

- 5 To Undo or Redo an edit, press the corresponding **Sel** or **In** switch.
- 6 To take a track out of Edit mode, press any other function switch on that strip (such as EQ).

Editing with the Wheel, Locate Switches, and Soft Keys

The Jog/Shuttle wheel and its surrounding switches let you perform many editing functions from the Automation Module. The Locate switches provide additional functions, and the Soft Keys provide multiple pages of edit commands and functions.

This section describes the function of switches in the default Pro Tools appset. Wheel switches and all Soft Keys can be customized in the Soft Key Editor. For more information, see Chapter 8, "Soft Keys."

Editing with the Wheel and Wheel Switches

The Wheel and its surrounding switches are pre-configured to provide numerous editing functions. For a complete list of commands assigned to the wheel and its switches in the default Pro Tools appset, see **Using the Transport and Jog/Shuttle Controls**.

Edit Commands on the Locate Switches

The Locate switches are assigned to several edit commands, including Undo and Redo.

 $ig{arphi}$ Some of the switches in the Locate section have default assignments that no longer match their labels on the Automation Module.



Automation Module Locate switches

The following table lists the primary and **Shift** functions of the Locate switches. Shift Functions and Other Functions require use of the modifier keys on the Fader Module.

Switch Label	Primary Function	Shift Function	Other Functions
Mark In	Mark In (wheel)		
Mem Loc	Show Memory Locations on Automation Module Soft Keys		
Ļ	Clear Selection / In	Restore Last Selection	
Mark Out	Mark Out (wheel)		
Trim +	Mix/Edit Window		
Trim -	Faders Off		
Store Current	Trim Clip to Selection		
Store Locate	Consolidate Clip		
Edit	Edit Memory Location		
Recall	Undo	Revert	
Delete	Redo		
Clear	Save	Save As	Save Copy In (Opt/Win) Save as Template (Cmd/Alt)

Edit Commands in the Soft Keys

The default Master Module Soft Keys include the Edit 1 and Edit 2 pages. Edit 1 provides some of the most frequently edit commands such as Cut, Copy, Paste, Duplicate, and Loop Clip.

To show the Edit Soft Keys:

- 1 Make sure the Master Module left bank is at its default page 1 Automation 1.
- 2 Press the Menu switch (at the bottom, center of the left bank of Master Module Soft Keys). The Page Menu bank opens, with jump switches for Edit 1 and Edit 2 at the bottom.
- **3** Press either Edit 1 or Edit 2.
- 4 Press the Soft Key for any available edit command.

The Automation Module Soft Keys Workflow page provides additional edit-related commands, including Freeze, Commit, and Bounce.

Chapter 17: Plug-Ins and Sends

This section explains how to edit plug-ins and adjust Sends.

 $\dot{\heartsuit}$ References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

Plug-ins

Plug-ins can be accessed and adjusted from the Master Module, Knob Module, Process Module, Channel Strip Module, or from a Fader Module. Plug-in parameter mapping depends on the selected knob set or Expand mode, 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 (as well as EQ or Dyn *Expand* mode), 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. For parameter mapping in Expand mode, see **Appendix B**, "**EQ and DYN Parameters in Expand Mode**."

You can also adjust plug-ins using Expand mode, in which multiple parameters are "spilled" across one or more Knob Modules, or mapped to faders on a Fader Module. For more information, see Expand.

Custom Knobs After learning the basics of working with plug-ins, see also Custom Knobs and Custom Faders.

You can configure S4/S6 to automatically open and close plug-in windows in the focused application. When the **Open Windows** on Workstation When Editing Mode setting is enabled in Settings > User, you can also designate one module to **Open Windows** on Workstation When Knobs Assigned.

Editing a Plug-in Using the Master Module

To edit a plug-in using the Master Module, you must first attention a track with a plug-in.

To attention a track, do one of the following:

- From the Fader Module or CSM, press Attention on the desired track.
- From the Home screen, touch a track in the Track Scroller or Meter Scroller (see Home Screen Options).
- From the Tracks screen, touch Attention, and touch a track in the Track Matrix. (Requires that the Track Selector option Auto-Bank to Attentioned Track is enabled; see Track Selector Options.)

To edit the plug-in the Function Editor:

1 Touch Inserts in the Function Scroller.

The names of plug-ins inserted on the Attention Track appear on the Attention Track Knobs.



Inserts collapsed (left) and expanded (right)

- **2** Press a knob to enter that plug-in.
 - For tracks with two or more plug-ins, the following actions occur on the Master Module:
 - The **Back** switch lights.
 - The plug-in inserts expand in the Function Scroller.
- 3 Tap a different bank of four plug-in parameters to select them. Brackets flash slowly around them.
- 4 Before the brackets stop flashing, touch a left or right Attention Track Knob to assign the parameters to that side.
- **5** Use the Attention Track Knobs to adjust plug-in parameters.

 \bigvee Knob **In** and **Sel** switches control additional parameters. For example, in the EQ3 plug-in the **In** switch for gain controls toggle that band in or out. Similarly, the **Sel** switch for frequency controls let you adjust Q (or slope, as available) using that knob.

- 6 For tracks with two or more plug-ins, press Back on the Master Module to exit the plug-in. The plug-in inserts collapse back into the Inserts, and plug-in names appear on the Attention Track Knobs.
- 7 To navigate to parameters that are off-screen, hold Shift on the Master Module and then use the touchscreen Page controls (lit in purple to the lower left and lower right of the touchscreen) to scroll the Function Editor to the left or right (see Using Page Switches to Navigate Attention Track Knobs).

Bypassing Plug-ins on the Master Module

The In buttons next to the Lock icons in the Home page let you bypass plug-in inserts.



Plug-in bypass (In)

- When lit green, inserts are active (not bypassed). Tap either In control to bypass its currently attentioned plug-in.
- When bypassed, In becomes gray, and so does the name of the bypassed plug-in(s) in the Function Scroller (whether expanded or collapsed).
- When more than one plug-in is bypassed, In is highlighted in orange and the names of bypassed plug-ins are dimmed in the Function Scroller. Tap IN again to bypass all plug-ins on the track (their names dim), and tap again to un-bypasses all.

Editing a Plug-in Using the S6 Knob Module or S4 CSM Knob Section

Plug-ins can be edited using the Knob Module or CSM Knob section in Inserts, EQ/DYN, or Expand mode.

Inserts Mode Parameters are displayed four at a time (on S4, or on S6 strips with one Knob Module) or eight at a time (S6 strips with two Knob Modules).

EQ/DYN 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.

Expand Mode Multiple parameters are "spilled" across one or more Knob Modules, or mapped to faders on a Fader Module. For information on Expand mode and Auto Expand (which support many functions, not just plug-ins and sends) see **Expand**.

Insert Mode

To edit a plug-in using Insert Mode:

1 S4 Only: Focus the desired strip (bank the desired track to the surface then press its CSM Focus switch so it is lit).

2 Press **Ins** on the S6 Process Module or S4 CSM on a track with at least one plug-in. The plug-in names inserted on this track appear on the knobs. The rest of these instructions pertain to the Knob Module's controls.



Inserts switch on Process Module

 \bigvee The **Ins** switch can be configured to automatically enable strip Expand mode. In addition, you can Inserts Selection to Auto Expand. For more information, see **Auto Expand Functions**.

- **3** Press \blacktriangleright (if lit) to display additional plug-in names.
- 4 Press a knob to enter that plug-in. The plug-in's first four parameters are assigned to the knobs, and **Back** lights.
- **5** Press \blacktriangleleft or \triangleright to navigate to additional plug-in parameters.



◄, Back, and ▶ on Knob Module

- 6 Use the knobs to adjust plug-in parameters.
- 7 On the Process Module or CSM, press In next to/below Ins to toggle all plug-in inserts in/out. In lights when the inserts are in. Some parameters use their In switch to toggle in and out, others use it to toggle between different parameters. Each audio application controls their own plug-ins, and some parameters do not include any In switch functionality.
- 8 To exit the plug-in, press **Back** or select another Function from the Process Module.

igodow Plug-ins with parametric EQ filters sometimes use the Sel switch to toggle between Frequency and Q.

Function and Parameter View Options

You can optimize how inserts and sends are displayed, and how plug-in parameters are displayed, in Settings > Preferences. For more information, see Knobs.

EQ and Dyn Mode

To edit a plug-in using EQ or Dyn Mode:

- 1 S4 Only: Focus the desired strip (bank the desired track to the surface then press its CSM Focus switch so it is lit).
- 2 Press **EQ** or **Dyn** on the Process Module or CSM on a track with at least one plug-in. The first EQ or Dyn (dynamics) plug-in inserted on this track appear on the knobs.



Dyn (1, shown lit) and EQ (2) switches on Process Module

You can configure Pro Tools to automatically insert a specified default EQ or Dyn plug-in when either of these switches is first pressed on a strip controlling a track with no plug-ins of either type. (See also **Specifying the Slot to Auto Insert Plug-Ins**).

To be able to auto-insert a default EQ or Dynamics plug-in:

- 1 In Pro Tools choose Setup > Preferences, then go to the Mixing tab.
- 2 In the Setup section, select your desired plug-ins from the Default EQ and Default Dynamics selectors.
- 3 Enable Auto Insert Default Plug-Ins from EUCON Surfaces.
- 4 Click OK to close Preferences.

EQ and Dyn Cycling

(Requires Pro Tools 12.8.2 or Higher)

When **EQ** or **Dyn** is enabled on a Process Module or CSM, double-pressing the **EQ** or **Dyn** switch cycles to the next EQ or Dynamics plug-in (if any) on that track.

To cycle:

- 1 Configure the desired starting insert slot for EQ/Dyn cycling (see Specifying the Slot for EQ/Dyn Cycling).
- 2 Enable **EQ** or **Dyn** on the strip for a track with multiple EQ or Dynamics plug-ins. The plug-in in the designated starting insert slot is displayed.
- 3 To cycle to other EQ or Dyn plug-ins use the EQ or Dyn switches as follows:
 - If EQ or Dyn are pressed within the EQ/Dyn timeout (half a second) S4/S6 cycles to the next EQ or Dyn slot and stays there.
 - If **EQ** or **Dyn** are pressed after the half second timeout S4/S6 remains on the current EQ or Dyn slot. To cycle to the next slot, double-press **EQ** or **Dyn**.

 \bigtriangledown The time out (500 ms) for EQ/Dyn cycling is unrelated to and unaffected by the Pro Tools Touch Timeout Preference setting.

If you change the Pro Tools Preference settings for EQ/Dyn cycling while a session is open you must close and re-open the session.

EQ and Dyn cycling is accessed on Process Modules and CSMs only, it is not available from the Master Module touchscreen. (See also **Specifying the Slot for EQ/Dyn Cycling**).

Editing a Plug-in Using the S6 Process Module

Each strip on the Process Module has one knob section that can be used to edit plug-in parameters when in Insert mode.

When there are no Knob Modules in the same chassis as a Process Module, you can enable Expand mode to have all eight Process Module knobs access insert parameters. For more information, see Expand.

To edit a plug-in using the Process Module:

- 1 Assign a track with at least one plug-in to the surface.
- 2 On this track's Process Module strip, hold down **Back** and press **Ins**. The name of the first plug-in inserted on this track appears on the knob.
- **3** To display additional plug-ins, press ►.
- 4 Press the knob to enter the desired plug-in. **Back** and ▶ light.
- 5 Navigate to and adjust different parameters.
- 6 To toggle all plug-in inserts in and out, press In next to Ins on the Process Module.

Some parameters use their **In** switch to toggle in and out, others use it to toggle between different parameters. Each audio application controls their own plug-ins, and some parameters do not include any **In** switch functionality.

7 To exit the plug-in, press Back. To return the Process Module knob to its default function (pan) hold Back and press Pan.

Dynamics Graphs

Dynamics plug-in graphs and "bouncing ball" indicators are displayed on the Attention Track screen and on Display Modules.

Func Switch to Enable All Plug-In Automation

Pressing the **Func** switch on a Process Module or CSM enables automation for all controls in that strip's currently focused EQ, Dyn, or Insert function.

To protect automation data, pressing the Func switch only enables (it does not toggle automation off).

Specifying the Slot to Auto Insert Plug-Ins

(Pro Tools 2018.1 or Higher)

You can designate a specific slot for Pro Tools to use when automatically inserting plug-ins using the Insert Slot selectors.

To designate the Insert Slot for auto-inserted EQ or Dynamics plug-ins:

- 1 In Pro Tools choose Setup > Preferences, then click the Mixing tab.
- 2 Make sure Auto Insert Default Plug-Ins from EUCON Surfaces is enabled.
- 3 Choose a default EQ and/or Dynamics plug-in from their selectors.
- 4 Use the Insert Slot selector to designate the slot (a-j) where you want the default plug-ins to be inserted when the EQ or Dyn switch is pressed on a strip. If a plug-in is already inserted into the designated slot, Pro Tools uses the next available slot. Choose <none> to have Pro Tools insert the default plug-in into the first available slot.



Pro Tools Preferences (Setup > Preferences), Mixing tab

5 Click OK to close Preferences.

Specifying the Slot for EQ/Dyn Cycling

(Pro Tools 2018.1 or Higher)

You can specify the starting slot for EQ/Dyn cycling for situations when there might be more than one EQ or Dyn plug-in on a track. This lets you optimize EQ and Dyn cycling (via repeated pressing of the **EQ** or **Dyn** switches) to start from either a specific slot, or from the most recently cycled slot.

To designate the starting slot for EQ/Dyn cycling:

- 1 In Pro Tools choose Setup > Preferences, then click the Mixing tab.
- 2 In the Controllers section, choose a slot (a-j) from the EUCON Surfaces EQ Dyn cycling Starting at Insert selector. Choose <none> to have Pro Tools begin cycling from most recently cycled slot.



Pro Tools Preferences (Setup > Preferences), Mixing tab, Controllers section

3 Click OK to close Preferences.

Pro Tools Plug-in Copy and Paste

Using **Channel Strip Keys** you can add a channel key to copy plug-in settings, then use S4/S6 to paste those settings into the same plug-in on the same or a different track.

To use Pro Tools plug-in copy and paste:

- 1 Define a channel key for Copy Plug-In (see Customizing a Channel Key).
- 2 Make sure the desired Pro Tools plug-in is the Target plug-in window (bulls-eye lit red). The plug-in window does not have to be open on-screen but its Target icon must be lit red.



Plug-in Target, enabled

- **3** Press your custom channel key for Copy Plug-In to copy the settings of the current target plug-in. Both that custom channel key and the **Sel** switch on the top-level Inserts knob for the copied plug-in begin to flash.
- 4 In the strip for the destination track, press **Ins** to navigate to its top-level Inserts view and then press the **Sel** switch next to the desired destination plug-in.

To clear the Copy buffer:

Press the flashing Copy channel key, or press the Copy channel key on any strip that does not have a plug-in window open.

Sends

Sends can be adjusted on the Master Module, Knob Module, and Process Module.

Adjusting Sends on the Master Module

To edit sends using the Master Module:

- 1 Attention a track with sends to the Attention Track Editor.
- 2 Press Sends in the Function Scroller. The first eight sends are assigned to the Attention Track Knobs.
- 3 Turn the knob to adjust the send level. In addition
 - Press the knob In switch to mute (or unmute) the send. In the Function Scroller, the name of muted Sends dims.
 - Press the knob **Sel** switch to toggle the send between pre- and post-fader.
 - To adjust send pan, press the Level knob top. L (and R, if the send is stereo) appear in the lower-right of the touchscreen.
- 4 To access additional sends, touch a bank of four sends in the Function Editor. Left and right brackets flash slowly around them.
- 5 To assign the four new sends to that side, touch or adjust an Attention Track Knob.
- 6 To navigate to sends that are off-screen, hold **Shift** on the Master Module and then use the touchscreen Page controls (lit in purple) to scroll the Function Editor to the left or right (see **Using Page Switches to Navigate Attention Track Knobs**).

Adjusting Sends on the Knob Module

Sends can be edited using the Knob Module in default (per strip) or Expand mode.

Default Parameters are displayed four at a time (on strips with one Knob Module) or eight at a time (two Knob Modules).

Expand Mode Multiple parameters are "spilled" across one or more Knob Modules.

The following instructions explain default mode. For information on Expand mode (which supports all functions, not just plug-ins and sends), see **Expand**.

To edit sends using the Knob Module:

- 1 Assign a track with sends to the surface.
- 2 S4 Only: Focus the desired strip (bank the desired track to the surface then press its CSM Focus switch so it is lit).
- 3 Press Sends on that Process Module strip or CSM. The sends appear on the Knob Module or CSM knobs.



Sends switch on the Process Module

- 4 Turn a knob to adjust the level of the corresponding send. In addition
 - Press the knob In switch to mute (or unmute) the send.
 - Press the knob **Sel** switch to toggle the send between pre- and post-fader.
 - To adjust send pan, press the knob top, then press lit ► (Page >) or ◄ (< Page) until R Pan and L Pan appear on the bottom encoders of the Knob Module.

To navigate to other sends:

- 1 Make sure you are viewing the top level of Sends view (slots a-d). If not, press Back until slots are shown.
- 2 Press the lit ► (Page >) or ◄ (< Page) switch to navigate to additional sends.

Function and Parameter View Options

You can optimize how inserts, sends and plug-in parameters are displayed, in Settings > Preferences (see Knobs).

Adjusting Sends on the S6 Process Module

To edit Sends using the Process Module:

- 1 Assign a track with Sends to the surface.
- 2 Hold down Back and press Sends on that Process Module strip. The first Send appears on the Process Module knob.
- 3 Turn the knob to adjust this send level. In addition:
 - Press the knob **In** switch to mute (or unmute) the send.
 - Press the knob Sel switch to toggle the send between pre- and post-fader.
- 4 Press the lit ► (Page >) or ◄ (< Page) switch to navigate to additional sends.
- 5 Press **Back** to exit this send.

Adjusting Sends on the Fader Module or CSM Faders

To control sends from a fader:

- 1 Press the Sends switch on a Process module or CSM so that Sends are displayed.
- 2 Press **Flip** on the Master Module.
- For more information, see Flip to Faders.

Resetting Send Level

You can reset Send level to 0/unity by holding Opt/Win on a Fader Module and then touching the Send knob on the desired track.

In Pro Tools, this will reset the Send to 0/unity regardless of the state of the Sends Default to -inf setting (in Setup > Preferences, Mixing).

Chapter 18: Custom Knobs and Custom Faders

Use Custom Knobs to arrange and save custom mappings of plug-in parameters to knobs (*Custom Knob maps*) or faders (*Custom Fader maps*) on supported EUCON control surfaces. Custom Knob maps let you arrange parameters for each of your different EQ, dynamics, and other plug-in however you desire. Custom Knob maps are compatible with both EuControl and S4/S6 maps of the same size and can be transferred between systems.

Custom Fader maps, introduced in a previous version of S6 software, now use the same method to build maps as the new Custom Knob maps as described below. In addition, Custom Fader maps can now include more than the previously available two pages, and plug-in bypass (In) is automatically mapped to the Track Color switch on strip 8. (Custom Faders are not supported with EuControl devices.) Note that any existing Custom Fader maps will need to be recreated after installing 2021.6.

Creating Custom Maps

To create a Custom Knob or Fader Map:

- 1 Attention a track on which you have inserted the desired plug-in.
- 2 On the Master Module, go to the Home screen and then do one of the following:
 - Select the Inserts function and then select the desired plug-in.
 - To create a new map for EQ or DYN, select the EQ or Dynamics function and then select the desired plug-in.
- 3 Press Custom along the bottom of the screen. The Custom Knobs screen appears with on-screen instructions.



Custom command in Insert view of the Home screen (shown at left) and on-screen instructions (shown at right)

- 4 Follow the on-screen instructions to configure a non-Expand or Expand map, and the size of your custom map:
 - Touch the Master Module if you want to configure a custom non-Expand knob map to use on the Master, Knob, or Process Module. Next, a dialog appears asking you to indicate the type of module you want to use for your non-Expand map. Tap to select Master Module, Knob Module, or Process Module. The Custom Map editor appears.
 - Touch the Fader Module to configure a custom Expand Fader knob map. The Custom Map editor appears.
 - Touch a Knob Module to configure a custom Expand 32-knob map. The Custom Map editor appears.
 - (S6 Only) Touch a Process Module to configure a custom Expand 8-knob map. (Note that to support Strip Expand and Custom Maps, the Process Module must not be in the same chassis (bay) as any Knob Modules.) The Custom Map editor appears.



Select Non-Expand Knob Map Type

5 Tap a plug-in parameter in the center area to select it, then touch a hardware knob (or fader if designing a Custom Fader map) to map that parameter. (See also Selectable Primary and Secondary (Peer) Assignment).)



Custom Map editor

- 6 Repeat for other parameters.
- 7 Use Knob Mode commands to Insert, Delete, or Clear assignments. Hold Shift on the Master Module to access Select None.
- 8 Use Page Actions to Add, Delete, or Clear pages for additional parameters. Hold down **Shift** on the Master Module to access Insert and Clear All. You can create as many pages as desired (in previous versions of S4/S6, Custom Fader maps could only use up to 2 pages). In addition, in Custom Fader maps the Track Color switch on strip 8 now provides the insert In button (to bypass).
- 9 (Display Modules only): Use the Graph Strip selector to specify the strip in which you want EQ or Dynamics graphs displayed on Display Modules. Choices include Default, and strips 1–8.



Graph Strip selector

10 Press Done when your Custom Map is completed. Or press Cancel to cancel the operation.

To replace an assignment:

- 1 Select (highlight) a new parameter.
- 2 Touch a knob to assign the new parameter.

To create an additional Page for custom assignments:

- 1 In the Pages and Commands area, tap "+" (plus sign).
- 2 Repeat the previous steps to select and assign parameters to the new page(s). On your control surfaces, use the same **<Page** and **Page>** commands to access the different plug-in pages.

To delete or clear an assignment or page:

- 1 Tap to enable DELETE or CLEAR.
- 2 Touch an assigned knob to delete or clear its assignment, or tap a page to delete or clear it.

Note also that any blank pages are automatically deleted when exiting Custom mode.

To reorder pages:

• Drag a page to a new position.

Selectable Primary and Secondary (Peer) Assignment)

You can pair any parameters onto the same Custom Knob to be able to switch between them by pressing the knob Sel switch.

To assign different parameters to the primary and secondary "Sel" layer of a custom knob:

- 1 From the Home screen select a plug-in and then enter Custom Knob mode (for instructions see the S4/S6 Guide.pdf).
- 2 By selecting the parameter and then tapping the desired knob:
 - Assign the parameter to an empty, unassigned knob to make it the primary parameter.
 - Assign the parameter to a knob that already has a primary destination, then choose Overwrite (to replace the knob assignment) or Make Secondary to add the new parameter as a secondary (peer) knob.
 - Assign the parameter to a knob that already has a toggle assignment (with both a primary and secondary parameter), then choose Overwrite, Make Primary, or Make Secondary.

Select Action	
Overwrite Knob	
Make Primary	
Make Secondary	
Make Primary Make Secondary	

Select Action dialog

Assigning multiple parameters to knobs in one gesture overwrites any assignments on the destination knobs.

Reset Using Factory and Factory All

You can use the Factory and Factory All commands to clear the current map type and form factor, or all form factors for the current map type, respectively.

- Factory only becomes available after you have selected the type of map to create. Press Factory to clear that map but leave all the other map form factors in place (if any existed).
- Factory All becomes available when you first press Custom, but before choosing the map type (such as Master Module or Knob Module). Press Factory All to clear the entire map for the current function / DAW.

Plug-in Parameter Mapping for Inserts, EQ/DYN, and Custom

Plug-in parameter mapping depends on the selected knobset (function), and whether you have created any custom maps, as follows:

Inserts In the default **Inserts** knobset parameters are mapped according to the manufacturer's specifications. Parameter mapping can vary between plug-ins, even of the same type. Custom Knob maps created through Inserts will be displayed when accessing plug-ins through Inserts.

EQ/DYN In the default **EQ** and **DYN** knobsets, 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. Custom Knob maps created through EQ or DYN will be displayed when accessing any/all EQ or DYN plug-ins through the **EQ** or **DYN** functions.

Custom Knobs You can create Custom Knob maps for both Inserts and EQ/DYN.

• Whenever you access a plug-in through the **Inserts** function, any custom knob map you created for that specific plug-in are displayed.

- Whenever you access an EQ or dynamics plug-in through the **EQ** or **DYN** functions, any custom maps you have created for *any* EQ or Dynamics plug-in using the **EQ** or **DYN** functions will be displayed. If you have not created custom maps using **EQ** or **DYN**, the default EUCON maps are used.
- Only parameters in the current plug-in are available to add to a Custom Knob map. For example, if you create an EQ map using Channel Strip and then focus EQ3 7-band, the 5th band in EQ3 will not be mapped since it does not exist in Channel Strip (and therefore could not have been mapped while creating the Custom Knob map). To add a missing parameter, focus on the desired plug-in, re-enable Custom Assign mode, and add the parameter. A blank knob labeled N/A appears in positions that have a knob assigned that is not in the currently focused EQ/DYN.

Show EQ and DYN Plug-Ins on Surface as Inserts...

(Pro Tools 2021.6 and later): If you want to use Custom Knob maps created in the **Inserts** function when clicking on an EQ or Dynamics plug-in in Pro Tools, enable the Show EQ and DYN plug-ins on surface as inserts if there's an Inserts Custom Map setting in the Attention section of Settings > User. You must also enable Plug-Ins under Attention Most Recently Clicked DAW Area in the Attention section of Settings > User. When enabled, clicking an EQ or Dynamics plug-in on-screen displays its Custom Knob map on the surface as determined by the Home screen option Open Windows on Workstation When Knobs Assigned (such as the Master Module or Expand Knob module).



Show EQ and DYN... and Plug-Ins settings enabled in the Attention section of Settings > User

Auto Load / Clear Custom Knob Maps

S4/S6 provide two settings to control how Custom Knob and Custom Fader maps are handled when sessions are opened and closed. These settings are located in the Auto-Load From Titles And Sessions section of Settings > System.

As with other Auto-Load options, this feature requires a workstation be designated for automatic store/recall (in Settings > Workstation, the workstation must have the blue star indicator). For more information, see **Autoload from Titles and Sessions**.

Custom Maps can be loaded from sessions by enabling the Auto Load Custom Knob and Fader Maps From Sessions. When enabled and a new session is opened, maps are merged (any plug-in map already on the system and in the session will be overwritten).

Custom maps can be cleared from S4/S6 when sessions are closed by enabling the Clear Custom Maps When Session Data Clears setting.

To avoid losing maps, be sure you have designated a workstation for automatic store/recall of layouts in Settings > Workstations.

Location of Custom Knob Map Files

Custom Knob map XML files are stored in the following locations:

- macOS: Go > (Option key) Library > Preferences > Avid > Consoles > KnobMaps
- Windows: C:\Users\<USERNAME>\AppData\Roaming\Avid\Consoles\KnobMaps

Custom Knob Maps Stored in Titles

Beginning in S4/S6 2022.12, Custom Knob Maps are stored in Titles in addition to any designated session.

Custom Faders

In addition to using the Custom method to assign parameters to Custom Fader maps (described above), Custom Faders provide the following:

- Custom Fader maps can use more than 2 pages. When in Expand Faders mode, use the lit **User 1** and **User 2** switches to navigate to additional pages.
- Custom Faders provide the plug-in ln control (bypass) on the Track Color switch (**OK**) in strip 8 in the Fader Module designated as an Expand Fader module.
- The Pan fader map has a special feature that lets you create and use one fader map for all Pan types. Any assigned Pan knob automatically tries to match the Mono version with the Stereo Left version of the knob. If you make a fader map for Pan with stereo pan knobs, but use that map for a mono track, all the "Left" stereo pan knobs in the map will match the mono versions. For example, "Left Pan" in the custom fader map will show "Pan." Similarly, if you made a map with "Pan" then use it for stereo tracks, "Left Pan" is displayed on the surface.

Chapter 19: Assignable Knob

The Assignable Knob can be assigned to almost any on-screen Pro Tools continuous control, including Clip Effects and AudioSuite plug-ins, to be able to keep control over a given parameter regardless of window or controller focus. With the optional ability to mirror the assignment to the Jog Wheel on the S4/S6 Master Module, the Assignable Knob also lets you adjust a parameter with maximum resolution.

Note that while the Assignable Knob supports almost any continuous control parameter that can be automated, not all parameters in all plug-ins from all manufacturers fully support the Assignable Knob. Knob assignment persists in the current session only.



A Make sure all to update to the latest versions of all your plug-ins. While all Avid plug-ins support the Assignable Knob, at the time of this writing not all third-party plug-ins do yet. If you find a plug-in that does not support the Assignable Knob contact the manufacturer for more information.

On S4/S6, the Assignable Knob is located in the lower left corner of the Master Module.

To assign a parameter to the Assignable Knob:

- 1 Do the following:
 - Pro Tools and Avid plug-ins: hover the cursor over the desired parameter or click directly on it.
 - · Third-party plug-ins: click the desired parameter.

On-screen in Pro Tools a blue highlight border appears around either the parameter being hovered over, or the currently assigned parameter (if any) as determined by the Pro Tools Preference for Display of Assignable Knob Control.





Figure 22. Hovering over a pan control in Pro Tools (shown at left) and blue highlighting (shown at right)

On the Master Module the Assignable Knob lights in the function color that corresponds to the hovered or currently assigned parameter and its display shows the parameter name.



Figure 23. Assignable Knob controlling Pan, not locked

2 Press the Assignable Knob to assign to lock it to the current parameter.



Figure 24. The Assignable Knob with pan assigned

3 Rotate the knob to adjust the assigned parameter, or press the **Sel** and **In** switches next to the Assignable Knob to increment and decrement, respecitvely.

The parameter stays locked to the knob until you re-assign a different parameter, or close the session. The Assignable Knob has the same Automation Indicator LEDs as other encoders.

Locking the Assignable Knob

By default, the Assignable Knob controls its assigned parameter for as long as you hover the mouse over that parameter. Lock a parameter to the Assignable Knob so that you can maintain control of the assigned parameter regardless of where you navigate to in Pro Tools. Unlock the Assignable Knob so that you can "soft assign" the knob to any parameter you hover over or click.

To lock or unlock the Assignable Knob:

• Press the Assignable Knob to toggle the Assignable Knob between locked or unlocked.

Adjusting the Assignable Knob Using the Automation Module Jog Wheel

You can use the Jog Wheel to adjust the current Assignable Knob parameter with greater resolution. Automation mode and Lock status is indicated by LEDs surrounding the wheel.

To duplicate the Assignable Knob to the Jog Wheel:

1 With a parameter already assigned, press the **Back** switch below the Assignable Knob. The Jog Wheel now also controls the assigned parameter.



Figure 25. Enabling Wheel mode for the Assignable Knob (shown at left) and indicators in the wheel LED ring (shown lit, at right)

2 Rotate the wheel to adjust the parameter. LEDs light to indicate parameter value or position. When in automation Read mode the Read LED lights green, when in a Write mode the Write LED lights red, and when locked the Lock LED lights in the same function color as the Assignable Knob.

Pro Tools Preference for Display of Assignable Knob Control

On-screen in Pro Tools a blue highlight border appears around either the parameter being hovered over, or the currently assigned parameter (if any) as determined by the Pro Tools Preference setting Always Show EUCON Assignable Knob Highlight.

To optimize Assignable Knob indication:

- 1 In Pro Tools choose Setup > Preferences, and click the Mixing tab.
- 2 In the Controllers section, configure the Always Show EUCON Assignable Knob Highlight setting:
 - When enabled, the Assignable Knob highlight is shown in Pro Tools whenever any parameter is hovered over, clicked, assigned, or adjusted.
 - When not enabled, the Assignable Knob highlight is only shown around the currently assigned parameter (if any).

 $\frac{1}{2}$ The blue highlight appears in Pro Tools whenever EUCON is enabled (Setup > Peripherals, Ethernet Controllers) even when using a control surface that does not support the Assignable Knob.

Controllers
Edit Window Follows Bank Selection Mix Window Follows Bank Selection 'Scroll to Track' Banks Controllers
Always Fill Channel Strips when Banking Always Show EUCON Assignable Knob Highlight
Touch Timeout: 1000 msec (non touch-sensitive controls) EUCON Surfaces EQ Dyn cycling Starting at Insert none

Figure 26. Assignable Knob setting in the Mixing tab of Setup > Preferences

Chapter 20: Automation and Mixing

This chapter shows you how to perform the following tasks using S4/S6:

- Using Automation
- Mixing with VCAs

igotims' References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

F (A) and M (T) Switches

Original Fader Modules labeled the two automation keys M and F. Current Fader Modules label these keys T (for Trim) and A (for Automation). Functionality is the same on both generations of Fader Modules. In this and other guides, these switches are referred to as M (T) and F (A).



Figure 27. Automation and Trim switches on original Fader Module (shown at left) and current Fader Module (shown at Right)

Channel Keys and Automation

Using the Soft Key Editor you can customize the assignments for *channel keys* (Fader Module switches surrounding the track OLED (display) such as **Select**, **Swap**, **M S**, **Menu**, and **L G**, as well as the **F (A)** and **M (T)** switches).

Custom channel keys let you put commands you use most often directly onto Fader Module strips. Both the Attention and **Menu** switches are available as modifiers for up to three "layers" per hardware switch (one default layer, one layer accessible while the strip Attention switch is held down, and another while strip **Menu** is held down). You can also customize Automation mode cycling, engage **Auto Take Over**, and more.

Use the rest of this section to learn how to work with automation from S4/S6 default key assignments. To learn how to customize automation controls, see **Customizing Automation Mode Selection and Cycling**.

Using Automation

You can set the track Automation mode from Fader Modules, from the Attention Track fader, or using a combination of Soft Keys and track **Select** switches. Track meters indicate Trim automation and automation writing. On systems that include Display Modules, automation data can be shown along with waveforms.

The default Pro Tools appset provides track automation modes on the Master Module and Automation module Soft Keys. To learn how to customize automation controls, see **Customizing Automation Mode Selection and Cycling**.

Setting the Track Automation Mode

To set the track automation mode:

• On a Fader Module or CSM, press **F**(**A**) on the desired strip repeatedly to cycle through the automation modes. While writing in Latch mode, press **F**(**A**) to Auto Match out.

Or, on the Master or Automation Module Soft Keys, hold the Soft Key for the desired mode then press a Fader Module/CSM **F (A)** switch (or **Select** switch) to set that track to that automation mode.

To toggle Trim Automation on and off for a track:

• On a Fader Module/CSM, press **M**. Or on the Master or Automation Module Soft Keys, hold the Soft Key for Trim and press a Fader Module **Select** switch.



Figure 28. Automation mode indicated in a strip display

This table lists automation mode LED indication for any knob or switch with automation LEDs. 0 = unlit, 1 = lit, and * = flashes

Automation Mode	Red LED	Green LED
Off	0	0
Read	0	1
Touch	1	0
Latch	1	0
Touch/Latch	1	0
Write	1	0
Preview	0	*
Off + Trim	0	1
Read + Trim	0	1
Touch + Trim	1	1
Latch + Trim	1	1
Touch/Latch + Trim	1	1
Write + Trim	1	1

The red LED flashes while writing automation. The green LED flashes in Preview mode.

Write Mode Locked Out from Fader Module F Key

When cycling through automation modes using the F(A) key on Fader Modules/CSMs, Write mode is *not* included. You can still assign Write mode from the surface by enabling the Soft Key for Write mode and pressing the strip F(A) key.

This helps protect existing automation by requiring a more explicit gesture to enable Write mode.

Func Switch to Enable All Plug-In Automation

Pressing the **Func** switch on a Process Module or CSM enables automation for all controls in that strip's currently focused EQ, Dyn, or Insert function.

To protect automation data, pressing the Func switch only enables (it does not toggle automation off).

In addition:

- When a plug-in is spilled to encoders, press and hold Control-Option-Command (Mac) or Control-Alt-Start (Win) and touch the knob for any parameter to toggle its individual automation enable state.
- When in Inserts view (top level), press and hold Control-Option-Command (Mac) or Control-Alt-Start (Win) and press the **In** switch next to the desired plug-in knob top (such as the knob or slot showing EQ3-7Bnd) to toggle automation enable of all controls in the corresponding plug-in on/off.

A Toggling automation enable status off can cause automation data to be deleted (Pro Tools warns you).

Automation Trim Metering and Write Indication on Fader Strips

Strip meters on Fader Modules/CSMs (and the Attention Track meters on the Automation Module) show Trim automation and indicate when automation is being written in any Write mode other than Trim.

Automation Trim Metering

- While writing an initial Trim pass, the Right meter lights the LED at 0 to indicate you are writing Trim automation.
- While editing an existing Trim pass, the Right meter lights LEDs above or below 0 to indicate the underlying Trim value. On-screen in Pro Tools, this corresponds to the yellow (Trim) or blue (Composite) automation line.

 \dot{igody} In order for the meters to show Trim, the Pro Tools preference for Coalesce Trim Automation must be set to Manually.

Write Indication

Whenever a track is writing automation in any mode other than Trim, the Right meter lights the LED that corresponds to the underlying automation level. For example, if in a Touch write mode the LED indicates where the fader will return when you release it. If a track is the slave of a VCA, the lit LED corresponds to the blue automation line on-screen in Pro Tools.



Figure 29. Automation Trim meter when editing Trim data (left) and Write indication (right) in strip meters

Automation Indication on Display Modules

Display Modules indicate automation Writing and Preview mode with red and green backgrounds, respectively.



Figure 30. Indication of Write (shown at left) and Preview (shown at right) on Display Modules

Automation Breakpoint Data on Display Modules

(Systems with Display Modules Only)



Display Modules can show automation data along with waveforms. When enabled, automation can be shown for individual parameters on one or more strips. You can set a variable amount of opacity and control the left-to-right orientation of displayed automation data.

At left, pan automation is shown on a Display Module strip.

To enable and configure automation data on a Display Module:

- 1 Go to Settings > Preferences, and scroll to the Display section.
- 2 Touch the Layout selector and choose any Waveform view.
- 3 Configure the following settings as desired:

Show Automation When enabled, automation breakpoint data can be shown on Display Modules and customized using the settings for Reverse Automation Lanes, and Automation Opacity.

Reverse Automation Lanes Inverts the orientation of displayed automation data. (Pan is unaffected by this setting.)

Automation Opacity Adjusts the visibility of waveforms behind automation data. When off (0 percent), automation is shown as a single thin line. Raising the percentage adds an increasingly opaque fill.

To show automation data on a Display Module strip:

- 1 Hold down Ctrl + Command/Alt on a Fader Module/CSM.
- 2 Touch a fader or knob.

In the corresponding Display Module strip, automation data for the touched parameter appears.

To show automation data display on all strips:

- 1 Press and hold down Ctrl + Opt/Win+ Command/Alt on a Fader Module/CSM.
- 2 Touch a fader or knob.

On-screen in Pro Tools, the Track View for that track (or all tracks) shows the corresponding automation data. For example, if you touch a Process Module knob while it is assigned to Pan, on-screen in Pro Tools the corresponding track jumps to Pan view.

To exit automation display mode on individual strips:

- 1 Hold down Ctrl + Command/Alt on a Fader Module/CSM.
- 2 Press the strip Select switch on the Fader Module/CSM.

To exit automation display mode on all strips:

1 Hold down Ctrl + Opt/Win+ Command/Alt on a Fader Module/CSM.

2 Press a strip **Select** switch on the Fader Module/CSM.

 \tilde{Q} You can also show (or hide) automation data on Display Modules from the computer keyboard by holding Control + Command (Mac) or Ctrl + Win (Windows) and then tapping a control on S4/S6.

Switching On-Screen Pro Tools Track Views to Automation Data from the Surface

You can use S4/S6 to change on-screen Pro Tools track views to show automation.

To display automation data for a track in Pro Tools:

- 1 Hold down Control + Command (Mac) or Ctrl + Win (Windows) on a Fader Module/CSM.
- 2 Touch a fader or knob.

The Track View for that track shows the corresponding automation data. For example, if you touch a an S6 Process Module knob while it is assigned to Pan, on-screen in Pro Tools the corresponding track jumps to Pan view.

Y If the Display Module setting to Show Automation is enabled, automation also appears on the corresponding Display Module strips. For more information, see Automation Breakpoint Data on Display Modules.

Customizing Automation Mode Selection and Cycling

Beginning in S4/S6 2022.12 you can use **Channel Strip Keys** to optimize Automation mode selection and cycling. You can specify which modes are or are not available, and customize their order when cycling for faster mode selection. Modifier Lock layers let you create and utilize multiple Automation mode setups. For example, if your workflow only requires Read and Touch/Latch, you can use Channel Keys to make the channel $\mathbf{F}(\mathbf{A})$ switch toggle between only those two modes, and use the Modifier Lock "Attention" layer to access other modes you use less frequently.

In addition, a new Auto Take Over mode is available (see Auto Take Over).

Punch out and Trim are not available for custom mode assignments or cycling in channel keys. If using an application other than Pro Tools, automation mode selection is unchanged.

Managing Automation Mode Selection and Cycling

To customize Automation mode selection:

1 Navigate the touchscreen to Settings > Soft Keys, then tap the Module Selector at the top of the page and choose Channel Strip Keys. (For more information, see Customizing a Channel Key). 2 Select the F (A) key in the hardware images at the top of the Channel Key editor. The lower section of the editor shows the Automation Mode Cycles: list.

	Settings							
	Soft Keys				Workstations	Surface		
(Channel S	Strip Keys		 Smp ga Soo Mue 	Attention + Menu Pages			
	Channel S	< Strip Key Ed	Str Insert itor					
	Мо	difier Locks	C Atter	ntion 🗌	Menu			
	State:				Automation Mode	Cycle:		
	Inactive				 Off Read Touch Latch Touch / La 	tch	^ >	-3

Channel Key editor (1) showing F (A) selected (2) and the default Automation Mode Cycle selector (3)

- 3 To filter any modes out of the Automation Mode Cycle list, tap to deselect them (remove the check mark). By default, both Write and Crossover (Steinberg only) are disabled; tap and swipe the list up to reveal these options (or, if you have re-ordered the list, whichever modes are below the default view).
- 4 To re-order the list tap and drag a mode up or down, or tap to select a mode then tap use Up/Down arrow to the right of the list. Here is an example showing the list filtered to toggle between Read and Touch/Latch only (no other modes will be available from the channel strip F (A) key.



Example of an edited Automation Mode Cycle menu

- **5** Optional:
 - To add a second layer of unique Automation Mode Cycle settings, enable Attention in the Modifier Locks section, then repeat the previous steps to configure the Automation Mode Cycle list as desired. While mixing, press and hold Attention on a strip to access the second layer of Automation Mode Cycle settings.
 - To add a second layer of Channel Strip Key Commands to the **M**(**T**) switch, enable Menu in the Modifier Locks section then choose the desired command.
- With Channel Keys, the Modifier Locks Attention and Menu layers are similar to the "Shift" and other modifier-layers available for standard soft keys.

About the M (T) Switch The M (T) key default assignment cannot be changed from Trim, but can have other commands assigned to it in the Attention and Menu layers (Modifier Locks).

About Punch Out and Trim Punch out and Trim are not available for custom mode assignments or cycling in channel keys. If using an application other than Pro Tools, automation mode selection is unchanged.

Auto Take Over

(Requires Pro Tools 2022.12 or higher)

S4/S6 version 2022.12 or higher supports Auto Take Over. While moving a fader to write automation in any mode (including Trim) you can enable Auto Take Over to have the track automatically drop out of automation writing as soon as the level crosses over the previous, underlying automation level.

To use Auto Take Over mode:

- 1 On the desired track(s) select Touch, Latch, or Touch/Latch, or enable Trim mode.
- 2 Begin playback and write new automation.
- 3 While touching the fader, press **F**(**A**) or **M**(**T**) to enable Auto Take Over mode. When enabled, the automation indicator LED flashes rapidly.
- 4 To drop (punch) out of automation writing, move the fader to match the previous, underlying automation. Or let go of the fader and press F(A) or M (T).

If fader touch is released while Auto Take Over is active before crossing the underlying automation level, normal Fader touch release is applied. Auto Take Over is not available in Write mode.

Global ATO

A Global ATO command is available as a Surface Soft Key. By assigning this command to an available Soft Key you can quickly place all tracks that are currently in an automation writing mode into Auto Take Over.

When Global ATO is active, LEDs for write-enabled tracks begin flashing quickly. Each track can be matched out separately by moving its fader across the underlying automation level.

When in Latch and not touched with Global ATO active, crossing the underlying automation punches out. If the fader is touched and released without crossing the underlying automation it returns to writing in Latch.

Releasing a fader writing in Touch or Touch/Latch without crossing the underlying automation level punches out.

Surface Soft Keys for Global ATO

Surface Command	Level 1	Level 2	Level 3	Note
Global ATO	Operations >	Global ATO		

Mixing with VCAs

S4/S6 provides the following VCA features.

Adjusting VCA Slave Levels

When a VCA is banked to the surface, you can adjust level of its slaves from the S6 Knob Module, CSM knobs, or from the Master Module Attention Track Knobs.

- From a strip, enable the **Bus** function on that VCA (press **Bus** on the S6 Process Module for that strip, or on S4 Focus a strip then press **Bus**). Use the strip < Page > switches to navigate to other slave tracks, or press **Exp** on that strip to have slaves take over the Knob Module (S6) or knobs (S4 CSM).
- From the Master Module, first Attention the VCA and make sure the Home screen is displayed. Tap Bus in the Function Scroller to have all slaves appear on the Attention Track Knobs.

VCA Spill

(Pro Tools Only)

VCA Spill lets you quickly expand (or "spill") VCA slave tracks to adjacent faders, or to spill zones.

 $\overleftarrow{igody}^{\prime}$ Spill Zones must first be configured in Settings > Surface. For more information, see Configuring Spill Zones.

The **M**, **S**, and **LG** LED indicators on the Fader Module/CSM show whether the track is a Master (M) or Slave (S), and if it is in a Group (LG). The **Menu**, **Select**, and **Swap** (S6)/**Focus** (S4), and switches above the M/S and LG indicators let you spill/unspill.

You can also spill VCAs automatically when they are attentioned. See Automatic Spill of Attentioned VCA or Folder.



Figure 31. Spill controls and indicators when Menu switch is pressed, showing a VCA slave (S indicator LED lit yellow)

To spill a VCA from a strip:

1 On the Fader Module or CSM for a VCA strip, press and hold Menu.

The strip display shows Zone L and Zone R below the S6 **Select** and **Swap** switches, or S4 **Select** and **Focus** switches (requires that spill zones have been configured in Settings > Surface). The switches light yellow, and Spill L and Spill R appear above the two switches on either side of **Menu**.

- 2 While still holding **Menu**, do any of the following:
 - To spill the VCA to the left spill zone, press Select.
 - To spill the VCA to the right spill zone, press Swap (S6) or Focus (S4).
 - To spill the VCA to the strips to the left or right of the master VCA (standard VCA spill), press either of the switches adjacent to **Menu** (above the **M S** indicators to spill to the left, or above **LG** to spill to the right).



When spilled, the **Menu** switch on the strip of the VCA master lights dark green, and the corresponding Spill switch (L or R) on the Master Module also lights dark green.

On spilled slaves, **Menu** is light green if the option to light them is enabled (see **Spill Zone Menu Key Mode for Lay-outs, Workstations or Types**).

- **3** To bank or nudge tracks within a spill zone, make sure the corresponding Spill (L or R) switch is lit white (press if necessary), then use the Bank and Nudge switches on the Master Module.
- 4 To unspill a VCA, press **Shift** + **L Spill** or **R Spill** (whichever is lit dark green) on the Master Module, or press **Menu** on the master VCA or any spilled member strip.
- You can configure VCAs to spill automatically to zones or adjacent strips when the VCA is attentioned (see Automatic Spill of Attentioned VCA or Folder).

To spill a VCA to a spill zone using the Master Module:

- 1 On the Master Module, press to enable L Spill or R Spill.
- 2 On the Master Module, press **Type**. (To spill a Track Type across as many strips as needed, disable **L** or **R Spill** and press **Type**.) The Master Module soft keys display available choices for the enabled element (Layouts, track types, or workstations).
- **3** Press the soft key for VCAs.

The enabled L Spill or R Spill switch on the Master Module is pink. On channel strips, **Menu** switches within the enabled zone light in the same color as the enabled L Spill or R Spill switch if the option to light them is enabled (see Spill Zone Menu Key Mode for Layouts, Workstations or Types).

4 To bank or nudge tracks within a spill zone, make sure the corresponding L Spill or R Spill switch is lit white (press if necessary), then use the Bank and Nudge switches on the Master Module.

Spill Zone banking commands are also available as Soft Keys in the default Pro Tools assignments (along with other Surface commands). You can navigate spill zones by **Banking from the Fader Module or CSM**.

5 To unspill, press Shift + L Spill or R Spill on the Master Module, or press Menu on any strip in the spill zone when the Menu keys are configured to unspill (see Spill Zone Menu Key Mode for Layouts, Workstations or Types).

igodow Commands to collapse (unspill) the left and right spill zones are also available as Soft Keys.

VCA Unspill

When working with VCAs that include other VCAs as members you can use the **Menu** switch to unspill one level at a time, or to completely unspill and exit VCA spill.

To unspill an individual VCA:

• Press a **Menu** switch once.

To unspill all VCA layers:

• Press and hold a **Menu** switch for longer than one second.

Chapter 21: Immersive and Surround Mixing

This chapter shows you how to perform the following tasks using S4/S6:

- Surround Panning
- Dolby Atmos

igodor Y References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

Surround Panning

You can pan in multichannel formats for surround using the Master Module touchscreen and Attention Track knobs. If your system includes a Master Joystick Module, see **Using the Master Joystick Module**.

You can also use the Avid Control app to control multichannel pan, including Atmos. For more information, see **Control App Compatibility**.

To pan in surround:

- 1 Attention a track that is assigned to a multichannel output path.
- 2 Make sure the Home screen is displayed.
- 3 Select Pan from the Function scroller.
 - If the Auto Show Function Graph on Selection setting is enabled in the Home screen Local Options, the pan Function view appears on the Home screen.
 - If Auto Show Function Graph on Selection is not enabled, drag the Pan function block down to the Home screen to display the pan Function view.

The pan Function view on the Home screen looks similar to the following.



Figure 32. Surround panner on the touchscreen when a stereo track is assigned to a multichannel output path.

Chapter 21: Immersive and Surround Mixing
- 4 To pan, do any of the following:
 - Tap and drag any displayed dot to pan it within the sound field.
 - Rotate the corresponding knobs.
 - Tap a speaker icon to Snap to Speaker.

i If your system includes one or more Display Modules, see also Panner Divergence and Position Display Mode.

Across the top of the panner view are the LFE display, controls to toggle stereo and inverse linking on/off, and a selector for stereo control and visibility.



Figure 33. Pan displays and controls in the Master Module Pan function (stereo to 5.1 shown)

The numbers in the figure above identify each of the following elements.

Legend	Element	Description
1	LFE	Shows the current LFE contribution, if any
2	Link	When enabled (lit), links left and right channels of a stereo pair
3	Front/Rear Inverse	When enabled (lit), applies inverse front/rear pan linking
4	Front Inverse	When enabled (lit), applies inverse front pan linking
5	Rear Inverse	When enabled (lit), applies inverse rear pan linking
6	Stereo Visibility	Drop-down selector that determines what is shown in the surround panner and in the pan Function block. Choices include None, Left, Right, and Both

Stereo Link and Inverse Controls

Tap any of the Link or Inverse buttons to toggle them on/off. Link settings are only available when the attentioned track is stereo assigned to a multi-channel output. (Note that Divergence settings can be linked, but do not follow any Inverse Link setting.)

Link Enable and Inverse Link controls can also be configured using knobs on the Master Module.

To access stereo link controls from the Master Module:

- 1 Attention a stereo or other multi-channel track, then tap to select the Pan function block.
- 2 Assign the Inv P, Inv R, Inv FR, and Link controls to the knobs (tap their column on-screen, then touch either set of knobs).
- 3 Press the In switch for the knob that corresponds to the desired linking control to toggle it on/off.

You can also access Link settings from fader strips (see Adjusting Link and Inverse Pan Control from Channel Strips).

Stereo Control and Visibility

The Stereo Control and Visibility selector lets you control what is shown in the surround panner and in the pan Function block. Tap the selector and choose one of the following from the drop-down selector.

None When enabled, neither Divergence or pan lines (trajectory) are shown.

Left When enabled, left channel Divergence and pan lines are shown.

Right When enabled, right channel Divergence and pan lines are shown.

Both When enabled, both left and right channel Divergence and pan lines are shown.

Snap to Speaker

On the Master Module surround panner, tap a speaker to snap the panner to that speaker position. When panning stereo tracks, the Stereo Control and Visibility controls determine which channel(s) will respond to tapping a speaker; the response of other channels is determined by whether Link is enabled, and if so which Inverse Link settings are enabled, if any.

Adjusting Link and Inverse Pan Control from Channel Strips

You can control Pro Tools stereo pan Link and Inverse Link from S6 channel strips, and from the Master Module.

 $\dot{igodymbol{\bigtriangledown}}$ These controls are also available on the Master Joystick Module.

To access stereo link controls from a channel strip:

- 1 On S6, bank or nudge the surface to access a stereo or LCR track that is routed to a greater-than-stereo output.
- 2 Do any of the following to navigate to the desired parameter (Link, Inv P, Inv R, or Inv F/R). Not all parameters are available in all track formats.
 - On the Process Module, make sure Pan is shown in the strip display and then press the encoder < or > switches to navigate the encoder to the desired parameter.
 - Press the **Pan** switch in that track's strip, then press the Knob Module < or > switches to navigate to the desired parameter.
 - Press the Pan function switch, then press Exp in that strip to enable Pan Expand mode.
- 3 Press the encoder In switch for the desired parameter to toggle it on/off.

Accessing Left/Right Rear via L/R Front + Sel

When the L or R Front parameter is mapped to a knob, press that knob's **Sel** switch to reassign the knob to the corresponding channel's Rear parameter. For example, when L Front is displayed on a Knob Module, pressing that encoder's **Sel** switch maps L Rear to that encoder. Press the lit **Sel** switch again (it becomes unlit) to return the encoder to L Front.

Linking F/R

You can link the Front and Rear pan positions.

- When linked, Rear position follows Front position; if you pan that channel front-to-back while linked, it pans vertically. Automation is written to both front and rear L and R knobs.
- When unlinked, panning the same channel front-to-back will follow the trajectory between the current front position (left-to-right) and the current rear position (left-to-right).

To link Front and Rear:

- 1 Attention a mono or stereo track assigned to a multichannel output.
- 2 Navigate the Home screen, Knob Module or Process Module to their Pan function for the attentioned track.
- 3 Press the In switch next to the encoder assigned to Front or Rear (if the track is mono) or L (or R) Front or Rear if stereo. When linked (In switch lit), adjusting the L (or R) Front or Rear parameter pans the channel front-to-back vertically. Any offset between front and rear is ignored.

On the touchscreen, the L (or R) Front or Rear knob also indicates F/R link status.

- When linked, the on-screen L (or R) Front or Rear knob lights solid blue.
- When not linked, the on-screen L (or R) Front or Rear knob lights with a blue outline.



Figure 34. L Front knob when Front/Rear are unlinked (shown at left) and linked (shown at right)

Dolby Atmos

(Requires Pro Tools | Ultimate 12.8 or Higher)

S4/S6 supports Dolby Atmos[®] busing, panning, and metering in Pro Tools, providing intuitive feedback and ergonomic control for Dolby Atmos parameters directly from the Master Module, Master Joystick Module (MJM), and other S4/S6 modules.

Dolby Atmos Controls and Displays

The following figure and table highlight the unique Dolby Atmos-specific additions in the Pan function view on the Master Module touchscreen. These and other parameters can be assigned to knobs on the Master Module, and to knobs on the MJM, Knob, and Process Modules. The MJM provides additional ways to control parameters (see **Using the Master Joystick Module**). Object/Bus toggling is also available in **Soft Keys**.



Figure 35. Default Dolby Atmos controls on the Master Module touchscreen, standard 2D view, showing a stereo-to-7.1.2 panner

 \oint The Dolby[®] format formerly known as 9.1 is now referred to as 7.1.2. To learn more about Dolby Atmos and its parameters, refer to the information available from **Dolby**.

	Item	Description			
1	Zones Selector and Indicator	Sets the speaker Zone. Choices include All, F/S (front and side), F/R (front and rear), FC/R (front, center and rear), Front, and Rear. The In switch next to the Zone knob toggles Speaker Snap on/off.			
2	2 Height Mode Selectors and Indicator Sets the Height Mode. Choices include FreeForm (manual Height adjustment), Wedge, Sphere, and ing (automatic Height panning). The Height Mode pop-up menu also provides X (Height Mode off). For the term mode, see 7, below.				
3	Size	Increases or decreases the element size			
4	Height	When Freeform Height mode is active, rotating the Height knob determines position in the Z (height) axis.			
5	Height Indicators (Ceiling Speakers)	When lit, indicate whether any Height mode is active. When the Ceiling Speakers are unlit (gray), indicates that no Height Mode is active.			
6	Speaker Snap	For tracks assigned to an Object on the Dolby Atmos Renderer (only), toggles Atmos Speaker Snap on or off. This control is not available for tracks assigned only to a Pro Tools 7.1.2 bus or output. This setting is also available via the Zone Mask In switch.			
7	3D (Theater Mode)	Enabling the 3D button places the panner in Theater mode, in which a three dimensional room is displayed in the pan grid. The room view can be rotated manually from the touchscreen, or using controls in Settings > User. 3D on/off and room rotation are stored in User Preferences.			

Accessing Dolby Atmos Parameters

You can control and automate Dolby Atmos parameters from the Master Module, channel strips, and the Master Joystick Module. The following sections show how to pan in Dolby Atmos from the Master Module in 2D or **3D** / **Theater Mode**. Pan knobs, controls and indicators are similar when adjusting Pan from channel strips. If your system includes an MJM, see also **MJM Features for Dolby Atmos**.

To access Dolby Atmos parameters:

- 1 Attention a track that is routed to a Dolby Atmos bus in Pro Tools. If your system includes an MJM, the surround panner appears on one joystick if the track is mono, or both if the track is stereo.
- 2 For modules other than an MJM, enable the Pan function on the desired module by doing the following:
 - On the Master Module, navigate to the Home screen and drag the Pan function block down to display Pan in the touchscreen.
 - To use knobs and switches in a channel strip, press the S6 Process Module Pan switch in the strip for the desired track (on S4, Focus the desired strip and press its Pan switch). Navigate the knobs to specific Pan parameters by pressing the lit
 < or > switches on the Knob or Process Module or on the CSM.

Dolby Atmos Panning on the Master Module

Dolby Atmos on the Master Module is similar to standard panning, with the addition a few Dolby Atmos-specific parameters.

Panning in Dolby Atmos involves the following steps:

- 1 Configuring Dolby Atmos Renderer communication and Pro Tools bus/object assignment (see Pro Tools documentation).
- 2 Configuring Dolby Atmos Parameters (Room View, Zone Mask, Height Mode, Size and other settings) for each track.

To pan automatically in three dimensions:

- Enable Wedge, Sphere, or Ceiling Height Mode (see Selecting a Height Mode) then do the following:
 - Drag the pan dot left or right to pan the element left-to-right, or use the Front knob.
 - Drag the dot up (towards the top of the touchscreen) or down to pan to the front and rear, respectively, or use the F/R knob. Height is automatically calculated based on the current Height Mode and pan location.

To control Height manually:

- Enable Freeform Height Mode and do the following:
 - Press and hold **Shift** on the Master Module, then drag the dot up or down to increase or decrease Height, respectively. Or use the Height knob to increase and decrease height. You can press/hold and **Shift** at any time to engage or disengage Height. To resume touch panning to front, left, right, or rear, release **Shift**.

Manually Controlling Height From Knobs or the Touchscreen

On the touchscreen you can control Height via dragging by engaging Shift.

To adjust Height from the touchscreen:

- 1 Set the Height Mode to Freeform (see Selecting a Height Mode).
- 2 Press and hold Shift on the Master Module, then drag the pan dot up or down to increase or decrease Height, respectively. You do not need to press Shift prior to panning; press/hold and Shift at any time to engage or disengage Height.
- 3 To resume touch panning to front, left, right, or rear, release Shift.

Adjusting Height from the Touchscreen

While surround panning in the touchscreen you can use two-finger pinch and stretch gestures to control Height at the same time. Prior to S4/S6 2022.12 you could adjust Height from the touchscreen only by holding down the Master Module **Shift** switch.

To pan in surround:

- 1 Attention a track that has a multi-channel output or send, and focus the touchscreen on the panner for that track.
- 2 Touch the pan dot and move it left, right, forward or back (normal surround panning). While moving the pan dot with one finger, use another finger to "pinch" inward to lower the current Height setting, or outward to raise Height.



Raising Height (shown at left) and lowering Height (shown at right)

While pinching or stretching to pan and adjust Height an indicator shows the zoom direction and color of the pan dot being changed. If multiple pan dots are on the panner, the one closest to the center of your fingers when zooming will be grabbed.

Indication of Pan Height

When any Height Mode is enabled in standard (2D) view, the current Height position is indicated by the size of the pan dot. The larger the pan dot, the higher the position. (Note that Height is indicated differently in **3D** / **Theater Mode**.)



Figure 36. A signal at maximum Height (large green pan dot, Left) and minimum Height (small blue pan dot, Right) in standard 2D Pan view

Bus and Object Indicators and Controls

The color of the pan dot indicates bus/object assignment and automation status.

Pan Dot Color Indication

Pan Dot Color	Object/Bus Indication	Automation Mode
Green	Bus	Read
Orange	Object	Read
Red	Any	Any Write mode
Yellow	Any	Off
Gray	Object, but off/bypassed	

Configuring Dolby Atmos Parameters

(View Mode, Zones, Height Mode, Size, Height, and Speaker Snap)

Configure these Dolby Atmos settings as needed on each track.

Selecting the Room View Mode

The panner can be viewed in standard two dimensional mode, or in 3D/Theater mode. 3D/Theater mode on/off and rotation are global settings that affect all tracks/panners, and are stored in (and recalled with) User Preferences.

To toggle View Mode on the Master Module:

- On the Master Module tap to enable the 3D button located below the panner grid. When lit, Theater mode is displayed.
- On the MJM press Setup below the two panner grids. When the Setup switch LED is lit, Theater mode is displayed.





Figure 37. Panning grid in standard 2D view (3D button not enabled, shown at left) and 3D/Theater mode enabled (shown at right)

The following sections explain Dolby Atmos controls common to both views. For unique 3D controls, see 3D / Theater Mode.

Selecting a Zone

You can select a Zone for each track, and for each side of unlinked stereo tracks.

To select a Zone from the Master Module for the currently attentioned track:

• Rotate the knob for Zone until the desired Zone is selected. Or tap and hold the Zone icon and select an available zone.



Figure 38. Zone icon and pop-up menu (right side of a stereo track shown)

Indication of Zone Status

The following table shows how Speaker icons indicate status in the Master Module and MJM panner grids.

Speaker Status Indication

lcon	Description
	Speaker icons light solid green when fully enabled.
	Speaker icons are unlit (gray) when not enabled.
	When a different Zone is enabled in Left versus Right sides of a stereo track, half of each speaker is green or gray to indicate status for L versus R.
	Center and Side speakers are dimmed relative to Center% and Side% settings, respectively.
	When 3D/Theater mode is enabled, no speaker icons are shown.

Selecting a Height Mode

You can select the Height Mode for each track, and for each side of an unlinked stereo signal.

Dolby Atmos Height modes include "automatic" height panning modes (Wedge, Sphere, and Ceiling) and "manual" (FreeForm).

- In automatic modes pan height is derived automatically based on element position and size.
- In FreeForm mode you can manually control pan height. You can also toggle Height mode on/off.

To select a Height Mode from the Master Module:

- 1 Do either of the following:
 - Rotate the knob for Height Mode until the desired mode is selected (such as Free Form, Wedge, Sphere, or Ceiling).
 - Tap and hold the Height Mode icon below the panner grid, then select an available mode from the pop-up menu.



Figure 39. Height Mode icon and pop-up menu

- 2 If you want to turn Height mode off, do either of the following:
 - Tap and hold the Height Mode icon below the desired panner grid and select X.
 - Press the lit In switch next to the Height knob (not the Height Mode knob). When unlit, Height is off.

Indication of Height Mode

On the Master Module and MJM panner grids, the Height Mode icon indicates the current Height Mode. *Height Mode Indication*

lcon		Mode
R	\	FreeForm
^	_	Wedge
^	_	Sphere
ſ	_	Ceiling
	/	Off

The Height (Ceiling Speakers) indicate Height Mode status as follows:

Speaker Status Indication

lcon	Description
0	Ceiling Speaker icons light solid green when enabled and active.
	Ceiling Speaker icons are unlit (gray) when not enabled/inactive.
6	When Height Mode is enabled on only one side (Left or Right) of an unlinked stereo track, half of each Ceiling Speaker is green or gray to indicate active/inactive status for side.

Adjusting Size

You can adjust Size for each track, and for each side of unlinked stereo tracks, using knobs on any module in Pan view.

To adjust Size:

• Rotate the knob for Size.

Indication of Size

When Size is set to any value above 0/off, a transparent grid (or cube if in 3D/Theater mode) surrounds the pan dot. The grid/cube gets larger as Size is increased, and smaller as it is decreased.



Figure 40. Size indicated on the touchscreen (Size = 50% for a channel panned full left/front, in standard 2D view)

Speaker Snap

You can toggle Dolby Atmos Speaker Snap on or off for tracks assigned to an Object.

To toggle Speaker Snap on or off:

- Do either of the following:
 - Press the In switch next to the Zone Mask knob. When In is lit, Speaker Snap is on. When unlit, it is off.
 - Tap and the Speaker Snap icon below the desired panner grid. When lit, Speaker Snap is on. When unlit, it is off.



Figure 41. Speaker Snap icon

igodow Do not confuse Atmos Speaker Snap with the Pro Tools panner ability to click a speaker icon to "jump" the pan dot to a location.

3D / Theater Mode

3D/Theater mode provides a 3D room view that can be rotated. 3D/Theater mode can be enabled separately for the Master Module and for the Master Joystick Module (if any). On/off and rotation are stored in (and recalled with) User Preferences.

To toggle View Mode:

• Tap the 3D button below the panner grid. When lit, the 3D room view is shown in the pan grid and Function scroller Pan block. The on-screen 3D button does not change view mode on the MJM (even if Use 3D Panner on Joystick Module is enabled). However, rotating any room view rotates all S6 3D room views (Master Module and all MJMs).

Indication of Height, Proximity, and Location in 3D/Theater Mode

Height Adjusting the Height value raises or lowers the Height plane. See 1 in the figure, below.

Proximity The size of the pan dot indicates proximity (whether the element is closer or further away relative to the current view). The pan dot appears smallest when panned furthest away and largest when panned nearest (see **2** in the figure, below).

Location Pan lines appear on the Height plane to indicate Left/Right and Front/Rear location. See 3 in the figure, below.

Screen The Screen image provides a visual reference for the front room in all views. See 4 in the figure, below.



Figure 42. 3D/Theater mode indication of Height (1), proximity (2), location (3), and screen/front reference (4)

Rotating the Room View

You can rotate the 3D room view by swiping, or using **3D Panner Preferences**. Rotation is global for all 3D panners on all tracks (not just the currently attentioned track), on the Master Module and all MJMs (if any). Pro Tools panner views are unaffected.

To rotate the room view manually from the pan grid:

- Press and hold Shift on the Master Module (in the Navigation switch section). The 3D button changes to the Rotate icon while Shift is held.
- Rotate icon (unlit) Rotate icon (lit)
- 2 Continue holding down **Shift** and tap the Rotate icon so it becomes lit, then swipe the room view with one finger to rotate the view.

🏈 Once you release Shift you exit Rotation mode. To continue rotating, repeat the entire sequence (Shift + Rotate icon + swipe).

3D Panner Preferences

To configure 3D Panner Preferences:

- 1 Go to Settings > User and navigate the User screen to the 3D Panner section.
- 2 Configure the following as desired:

Use 3D Panner on Joystick Module Toggles MJM 3D room view on/off globally (all screens on all MJMs).

3D Panner Ceiling/Floor Rotation Rotates the 3D room view up and down on the Master Module and MJM (if enabled).

3D Panner Left/Right Rotation Rotates the MJM 3D room view left and right on the Master Module and MJM (if enabled).

The following figure shows the 3D Panner when Ceiling/Floor Rotation is set to 90.



Figure 43. 3D/Theater mode rotated to "top down" room view and indication of Height (1), proximity (2), location (3), and screen/front reference (4)

 \dot{igody} To reset 3D view to its default view, set both Rotation sliders to 0.

Touch Panning in 3D/Theater Mode

Touch panning in 3D mode is similar to standard 2D, the only difference being the room view and **Indication of Height**, **Proximity**, and **Location in 3D/Theater Mode**.

To pan automatically in three dimensions:

- Enable Wedge, Sphere, or Ceiling Height Mode (see Selecting a Height Mode) then do the following:
 - Drag the pan dot left or right to pan the element left-to-right, or use the Front knob.
 - Drag the dot up (towards the top of the touchscreen) or down to pan to the front and rear, respectively, or use the F/R knob. Height is automatically calculated based on the current Height Mode and pan location.

To control Height manually:

- 1 Enable FreeForm Height Mode.
- 2 Press and hold **Shift** on the Master Module, then drag the dot up or down to increase or decrease Height, respectively. Or use the Height knob to increase and decrease height.

You can press/hold and **Shift** at any time to engage or disengage Height. To resume touch panning to front, left, right, or rear, release **Shift**.

Chapter 22: Using the Master Joystick Module

This section explains the following Master Joystick Module (MJM) operations:

- Assigning Tracks to the Joysticks
- Assigning Tracks to the Joysticks
- Writing Automation with the Joysticks
- Constraining the Joysticks to X or Y
- Advanced Pan Parameters
- Assigning Other Parameters to the Joysticks
- Joysticks and Layouts
- MJM Features for Dolby Atmos

 \bigtriangledown References to switches and displays on S6 Fader, Process, and Knob Modules also apply to S4 CSMs unless noted otherwise.

Assigning Tracks to the Joysticks

To assign a track to the joysticks:

- **1** Do either of the following:
 - On a Fader Module or CSM, press the Attention key for the desired track.
 - On the Master Module, navigate the touchscreen to the Tracks page and make sure Attention is enabled, then touch a track block in the track matrix or track scroller.



Figure 44. Attention tab in the Tracks screen

The attentioned track is assigned to the first (left) joystick. If the track has dual panners (such as with a Pro Tools stereo track) the left and right channels of the track are assigned to the left and right joysticks, respectively.

2 To assign a different track to the first joystick, wait two or more seconds and then Attention the new track.

 \bigtriangledown You can change the default timeout of two seconds by adjusting the Assign Right Joystick Timeout setting.

3 To assign a track to the second joystick, Attention that track within two seconds of assigning the first track.The center screen shows the current pan position as a green dot. If the track is automation write-enabled, the dot is red.

igodow Joystick assignments can be stored and recalled with Layouts (see <code>Joysticks and Layouts</code>).

4 To pan, move the corresponding joystick.

You can also use the encoders to control a single pan parameter at a time. Use the encoder Page switches (< and >) to navigate the encoder to the desired parameter.

Channel Switch and Encoder Sections

Each joystick provides channel switch and encoder sections.

Channel switches include **Attention**, **Solo**, **Mute**, **Record Enable**, and automation switches (**M** and **F**), as well as a display, all of which function just like those on Fader Modules. Unlike channel displays on Fader Modules, however, those on the MJM show track Name but not values.

Each encoder section provides a dual-function (press/rotate) knob, with **In**, **Sel**, **Back**, and Page (<>) switches as found on Process Modules. On the MJM, the encoder section controls let you adjust pan parameters only. The knobs and **In** switches have automation indicator LEDs. You can navigate the encoders and displays to pan parameters using the Page switches.



Figure 45. Channel and encoder sections

While the MJM encoder controls access pan parameters only, you can assign the joysticks to adjust other types of parameters. See Assigning Other Parameters to the Joysticks.

Remember Joystick Knobs by Track

A new setting, Remember Joystick Knobs by Track, is provided in the Knobs section of the Settings > User tab.

- When enabled, the assignment of pan parameters to MJM knobs is remembered and restored for each attentioned track.
- When not enabled, attentioning a new track to either joystick inherits the knob assignments of the previously attentioned track.

Locking Tracks to the Joysticks

You can lock joysticks to anchor them to their current track assignment, unaffected by banking, nudging, spilling and Layout recall.

To lock a strip on a Master Joystick Module:

Press Attention + Menu in the track controls for that strip on the Master Joystick Module.

Writing Automation with the Joysticks

To automate pan or other parameters assigned to the joysticks:

- 1 Make sure the desired type of automation is enabled. For example, in Pro Tools choose Window > Automation and make sure Pan or other function types are enabled for automation.
- 2 Put the track into an automation Write mode (such as Touch or Touch/Latch).On the joystick display, the pan dot turns red.



Figure 46. Joystick screen while writing automation

3 Begin playback and move the joysticks.

The Automation indicator LEDs flash red while automation is written.

4 To punch out, press the track **F** switch on the Master Joystick or Fader Module.

Punching Automation In/Out with the In Switch

The In switch punches the joystick in, writing automation at its current location. Note that when a track is in a Touch write mode, the green LED on the In switch lights indicating that it is simulating a touch. The system reacts as if you are holding a joystick, preventing a normal punch out from the **F** key. To punch out, either touch the joystick, stop the transport, or press the In switch again.

In Touch automation mode the **In** switch punches the joystick out (if writing). To punch out of Latch mode, press the **F** switch.

Instant and Pickup Modes for Automation Takeover

By default, joysticks begin writing new automation instantly while in Write mode, as soon as they are touched while in Touch, Latch, or Touch/Latch mode, or when they are punched in via their **In** switch. You can instead enable joystick Pickup Mode to enable "pass-through" writing, in which the joysticks only begin writing automation when they are moved onto (take over) the same position as existing automation.

To enable Pickup mode:

- 1 On the MJM, press the Pickup Mode switch so that it lights white.
- 2 Make sure the desired automation type is enabled, and that the assigned track is in any automation write mode. On the Joystick Module display, the pan dot turns red.
- 3 Begin playback, then touch the corresponding joystick.

As soon as you touch a joystick, the screen shows a semi-transparent white dot representing the current joystick position.



Figure 47. Pickup mode joystick indicator (white, at left) and existing pan position (red)

- **4** To begin writing automation, use the joystick to move the white dot so it is on top of the red dot. Automation writing begins. The Automation indicator LEDs flash red while automation is written.
- **5** To punch out, press the **F** switch on the Joystick or Fader Module.

Constraining the Joysticks to X or Y

Both joysticks provide X and Y switches that toggle the corresponding axis on or off. These switches do not restrict physical movement of the joysticks; they only determine how pan or other assigned parameters respond to the joystick movement.

X When lit, the assigned parameter responds to joystick movement along the X (horizontal) axis.

Y When lit, the assigned parameter responds to joystick movement along the Y (vertical) axis.



Figure 48. X and Y enabled

By enabling only one of these switches (X or Y), you can constrain pan moves to a single axis. For example, to pan an element from side Left to side Right without affecting its front/rear location, disable \mathbf{Y} . Moving the joystick left-to-right pans the track from side to side only, while its front/rear position is unaffected by any vertical movement of the joystick, similar to panning left-to-right using a single knob.

When both switches are unlit, the joysticks have no affect on the assigned parameter.

Advanced Pan Parameters

The MJM lets you adjust Divergence, Center Percentage, and LFE, and configure stereo track pan Link settings.

 \bigtriangledown Available pan parameters can vary depending on the audio application. Refer to the documentation from the manufacturer.

Adjusting Divergence, Center Percentage, and LFE

The MJM lets you adjust and automate advanced pan parameters including Divergence, Center Percentage, and LFE using the encoder sections next to either joystick.

To adjust Divergence, Center Percentage, or LFE from the MJM:

- 1 Attention a track to assign it to a joystick.
- 2 In the encoder section for that joystick, press a lit < or > (Page) switch to navigate to the desired parameter.



Figure 49. Encoder sections, < and > (Page) switches

3 Rotate the encoder to adjust the selected parameter.

When the attentioned track is stereo, the encoder display shows L or R along with the parameter name.

Parameter names are abbreviated as shown in the following table.

Parameter	Function	Displayed on Joystick Module		
LFE	Adjusts track contribution to the LFE channel	Above the joystick display		
Cntr %	Adjusts the Center Percentage value	Dims or brightens the displayed Center speaker		
F Div	Adjusts the Front Divergence value			
R Div Adjusts the Rear Divergence value		Dark blue on the joystick display		
F/R Div	Adjusts the Front/Rear Divergence value			

Parameter abbreviations in the Encoder display

Parameters are displayed on the joystick display as shown in the following example image.



Figure 50. Advanced pan parameters on the joystick display: 1) LFE, 2) Center Percentage at 25%, and 3) Divergence with F Div at 75%

 $\dot{\phi}$ *LFE*, *Center Percentage*, and *Divergence can also be adjusted from channel strips*, and *from the Master Module by selecting the Pan function*.

Linked and Inverse Panning

You can control Pro Tools stereo Link and Inverse pan settings using the MJM Link switches and encoders, from channel strip Pan controls, and from the Master Module.

To configure panner link and inverse pan settings from the MJM:

- 1 Attention a stereo or LCR track to assign its left and right signals to the two joysticks.
- **2** Do either of the following:
 - To use the dedicated Link switches, press any of the following so they become lit to enable their function.



Figure 51. Link and Inverse Pan switches

• To use the MJM encoders, navigate to the desired Link parameter by pressing either lit < or > (Page) switch until the desired Link parameter is shown in the Encoder display. Then press the encoder **In** switch so it is lit (to enable) or unlit (not enabled).

1 – Pro Tools Stereo Link

The Link switch (1 in Figure 51) links or unlinks left and right channels of a stereo pair.

- When lit, channels are linked. When Link is enabled but no Inverse modes are enabled, both channels respond identically when either joystick is moved. If any Inverse mode switches are enabled, linking behaves as described below.
- When unlit, channels are unlinked and can be independently positioned using their corresponding joystick. In addition, any currently enabled Inverse pan modes are ignored.

2 - Front/Rear Inverse

When enabled and lit, the Inverse Front/Rear switch (2 in Figure 51) inverts front and rear pan control linking.

3 – Inverse Pan

When enabled and lit, Front (3 in Figure 51) inverts left and right pan control linkage across the front.

4 - Rear Inverse

When enabled and lit, Rear (4 in Figure 51) inverts left and right pan control linkage across the rear.

igodow Y To adjust these parameters from channel strips or the Master Module, see Surround Panning.

Assigning Other Parameters to the Joysticks

(Func X Y)

The **Func X-Y** switches enable joystick Assign mode, which lets you assign parameters from the track currently attentioned on each joystick to the X and Y planes.

- X is the horizontal axis, where moving left to right adjusts parameters from low to high, respectively.
- Y is the vertical axis, where moving from the bottom to the top adjusts parameters from low to high, respectively.

For example, you can use this capability to control plug-ins that have their own panners.

Parameter assignments to the joysticks are maintained for as long as the current session is open.

To assign parameters:

1 Press either **Func X-Y** switch.

If parameters have already been assigned to the corresponding joystick (left or right), the switch LED lights solid green and the names of assigned parameters are shown above the joystick display.

If no parameters are assigned, it flashes green. Proceed to step 3.

- 2 On the MJM, press Shift + Func X-Y/Setup.The Func X-Y switch LED flashes to indicate joystick Assign mode.
- 3 Touch any encoder on the attentioned track on a Process, Knob, Channel Strip, or Master Module to assign it to X.

The parameter name and value appears at the top of the display.

If only one function needs to be assigned to X, press **Func X-Y** again. The pan dot lights purple and **Func X-Y** lights solid green and stops flashing.

- 4 To assign a second parameter to Y, touch another encoder on the attentioned track while Func X-Y is still flashing. Parameter names and values are shown on the display temporarily replacing the speaker icons, the pan dot lights purple, and Func X-Y lights solid green and stops.
- **5** Move the joystick to adjust the assigned parameters.
- 6 To return the joysticks to controlling track pan, press Func X-Y again (the LED becomes unlit).
- 7 Press Func X-Y again to return to controlling the assigned parameters.

 \heartsuit You can also utilize the X and Y Enable switches while in joystick Assign mode. See **Constraining the Joysticks to X or Y**.

Joysticks and Layouts

In Layout Assign mode, the strip scroller shows the two joystick strips in their position relative to the rest of the surface, labeled Joy 1 and Joy 2.



Figure 52. Joysticks in the Strip scroller of the Layouts screen

You can assign tracks to joystick strips just as you would normal strips, and track assignments are stored and recalled with Layouts. When a Layout is first recalled, its assigned tracks appear on the Joysticks.



Figure 53. Joystick 1 (left) assigned but not stored in a Layout, and Joystick 2 (right) assigned and enabled to be stored (green highlight)

Attentioning different tracks after the recall puts those tracks on the joystick(s) as in banking mode.

Auto Select Joystick Strips when Storing Layouts

The new Tracks Local Option setting Auto Select Joystick Strips when Storing Layouts determines the initial state of the joystick blocks when storing Layouts. The default setting is off.

This setting only affects the initial state of the Joystick strip blocks (whether enabled or not). You can tap to include or exclude them while storying the Layout.



Figure 54. Joystick and Layout setting in Tracks Local Options

When not enabled Joy 1 and Joy 2 blocks are unlit (no green highlight) when storing a Layout, meaning their assignments will not be stored and recalled with the current Layout. You can override this default state by tapping Joy 1 or Joy 2 so that they light green.

When enabled Joy 1 and Joy 2 blocks are automatically lit (green highlight) when storing a Layout, meaning their assignments will be stored and recalled with the current Layout. You can override this state by tapping so they become unlit.

MJM Features for Dolby Atmos

Pan and other Dolby Atmos parameters can be adjusted from the MJM using the joysticks, knobs, and switches. Height Adjust mode lets you use one joystick to pan and the other to adjust Height. The panner grid on the MJM includes indicators for Height, Height Mode, Speaker Snap, and Zones. Both standard 2D and 3D/Theater mode views are available, with settings to control 3D view and optimize track-to-joystick assignment in Settings > User.

To access Dolby Atmos parameters on the MJM:

• Attention a track that is routed to a Dolby Atmos bus in Pro Tools. The surround panner appears on one joystick if the track is mono, or both if the track is stereo.

The following figure and table identify the primary Dolby Atmos indicators and controls on the MJM for a mono track.



Figure 55. MJM with a mono Dolby Atmos track on the left joystick, 2D view

	Item	Description
1	LFE	Indicates the current LFE value.
2	Height Mode	Indicates the current Height mode (FreeForm, Wedge, Sphere, or Ceiling, or X (off)).
3	Speaker Snap	Indicates on/off status of Speaker Snap.
4	Zone	Indicates the current Zone. Speakers around the grid enable or disable as appropriate for each mask.
5	Height Indicators (Ceiling Speakers)	When lit, indicate that any Height mode is active. When unlit (gray), indicate that no Height Mode is active.
6	Shift	 Pressing Shift + Alt 1/Y leaves X/Y on the current joystick, enables Freeform Height mode (and enables Height mode if it was off) and maps the opposite joystick to Height. Pressing Shift + Mode/X cycles through Height modes.
7	Setup	 Toggles 3D/Theater mode on or off. When 3D/Theater mode is enabled, pressing and holding Setup lets you rotate the room view using its joystick.

The pan dot indicates bus/object assignment identically to the Master Module (see Bus and Object Indicators and Controls).

Dolby Atmos Panning on the Master Joystick Module

The MJM joysticks and knobs pan in Dolby Atmos similar to standard surround or stereo, with additional options for manually controlling Height, engaging 3D/Theater mode, and rotating the room view as described in the following sections.

Panning in Dolby Atmos involves the following steps:

- 1 Configuring Pro Tools bus/object assignment and Dolby Atmos Renderer communication as described in your Pro Tools documentation.
- 1 Attentioning a track that is routed to a Dolby Atmos bus in Pro Tools, to assign that track to the MJM. (See also Assign Right Joystick Timeout).
- 2 Configuring stereo Link settings if desired (Atmos parameters follow Link state but not Inverse settings).
- 3 Configuring Dolby Atmos Parameters from the Master Joystick Module for each track.

To pan automatically in three dimensions:

- 1 Enable Wedge, Sphere, or Ceiling mode (see Selecting a Height Mode from the MJM) then do the following:
 - Move the joystick left or right (X axis) to pan left/right, or use the Front knob.
 - Move the joystick up or down (Y axis) to pan front/rear, or use the F/R knob.

Height is automatically calculated based on the current Height Mode and pan location.

To adjust Height manually, see Manually Controlling Height from the MJM.

Manually Controlling Height from the MJM

You can control Height from MJM knobs, or using a joystick by enabling Height Adjust mode.

To control Height from an MJM knob:

- 1 Attention a Dolby Atmos track to assign it to a joystick.
- 2 Enable FreeForm Height mode by pressing that joystick's **Shift** + **Mode/X** switches repeatedly until the FreeForm icon is displayed above the MJM panner grid.



3 Press a lit < or > switch next to the that joystick's knob to navigate the knob to Height.



Figure 56. Knob section for left joystick, assigned to Height

- 4 Rotate the knob to adjust Height.
- 5 Press the knob's In switch to toggle Height on/off. When lit green, Height is on; when unlit Height is off.

To control Height from an MJM joystick:

- 1 Attention a Dolby Atmos track to assign it to a joystick.
- 2 On the MJM, press **Shift** + **Alt 1/Y** in the switches above the joystick assigned to the desired track (see **2** in the figure below). The opposite joystick becomes a Height control (Z axis), with the current Height value displayed above. The attentioned joystick continues to control X/Y pan. In addition:
 - Freeform Height mode is automatically enabled for the track, and Height is also enabled if it was off.
 - The knob below that joystick maps to Size.



Figure 57. MJM panner grid in Height Adjust mode; a mono track at front/center, Height at minimum (0) / joystick 2 all the way down

igee V With stereo tracks you can engage Height mode from either set of joystick switches to put Height on either your right or left.

3 Enable or disable Pickup mode for the joystick now assigned to Height by pressing its **Pickup Mode** switch:

- When enabled, the **Pickup Mode** switch is lit white indicating the joystick is in Pickup (pass-through) mode. In this mode a white circle appears in the Height panner grid representing the current physical position of the joystick. Height will not be changed until you move the joystick so the white circle joins the green dot (the green dot represents the current Height value).
- When disabled, the **Pickup Mode** switch is unlit indicating Takeover mode. In this mode, Height is changed as soon as the joystick is touched.
- **4** To increase Height move the Height joystick up. To decrease Height move it down.

In the MJM panner grid the pan dots become larger as Height is increased, and smaller as Height is decreased. The current Height value 0–100 is shown above the MJM pan grid assigned to Height.



Figure 58. MJM panner grid in Height Adjust mode; the same mono track at front/center, Height at maximum (100) / joystick 2 all the way up

5 To exit Height mode, press Shift + Alt 1 again or attention a new track.

Configuring Dolby Atmos Parameters from the Master Joystick Module

(View Mode, Zone, Height Mode, Size, Height, and Speaker Snap)

You can control and automate Dolby Atmos parameters using the joysticks, knobs, and switches on the MJM. The following instructions assume you have already attentioned a track that is assigned to a Dolby Atmos bus in Pro Tools.

Selecting the View Mode

The MJM panners can be viewed in standard 2D mode, or in 3D/Theater mode, separately from the Home screen Pan view on the Master Module. MJM View mode, room rotation (if any) and other 3D settings are stored in and recalled with User Preferences.

To toggle View Mode on the MJM:

- Do either of the following:
 - Press Setup below the two panner grids. When the Setup switch LED is lit, Theater mode is displayed on the MJM.

The MJM Setup switch does not change view mode on the Master Module.



Figure 59. MJM Setup switch, 3D/Theater mode enabled

• Go to Settings > User, and in the 3D Panner section enable or disable the Use 3D Panner on Joystick Module setting.

MJM 3D on/off is available as a Soft Key.

MJM 3D Soft Key in S6 v3.6.1

Command	Command Type	Category 1	Category 2	Category 3
Use 3D Panner on Joystick Module	Surface >	Surface Options >	3D Panner >	Use 3D Panner Joystick Mdl

Rotating the Room View from the MJM

You can rotate the 3D room view for "top down" or other alternate views using a joystick, or using **3D Panner** settings. Rotation is global, affecting 3D panner view on all tracks (not just the currently attentioned track) on the MJM and Master Module. The 3D Panner Preferences section also provides a setting to optimize how tracks are assigned to pairs of joysticks.

To rotate the MJM 3D view using a joystick:

• Press and hold **Setup**, then move the corresponding joystick to rotate its room view.

To configure room view and other 3D Preferences:

See 3D Panner.

Assign Right Joystick Timeout

The Assign Right Joystick Timeout setting determines the time window within which attentioning an additional track assigns that track to the right joystick, letting you optimize how tracks can be assigned to the different joysticks on Master Joystick Modules.

In previous versions of S6 software the joystick timeout was fixed at two seconds. Attentioning two tracks within two seconds of each other assigned the first attentioned track to the left joystick and the second track to the right joystick. Attentioning the second track two or more seconds *after* attentioning the first track assigned that second attentioned track to the left joystick (replacing the previously assigned track).

You can now specify the time range for joystick assignment to between 0 and 3 seconds in Settings > User.

- A setting of 0/Off means the right joystick will not be assigned to a different track than the left joystick.
- Any setting of 0.25 seconds or higher specifies the time window in which attentioning an additional track assigns that track to the right joystick.

▼	Joystick Strips		
	Assign Right Joystick Timeout		
	Off	O	2.00 secs

Figure 60. Settings > User, Joystick Strips section

Selecting a Zone from the MJM

To select a Zone from the MJM:

- 1 Press a lit < or > switch next to the channel encoders of the appropriate joystick until Zone Mask appears on a knob.
- 2 Rotate the knob to selected the desired Zone.
- 3 To toggle Speaker Snap on/off, press the In switch next to the Zone Mask knob.

Selecting a Height Mode from the MJM

To select a Height Mode from the MJM:

1 On the MJM switches above the joystick currently assigned to the attentioned track, press **Shift** + **X/Mode** to cycle through available Height Modes (see 1 in the figure below). The current Height Mode is indicated above the MJM panner grid.



Figure 61. MJM with a mono Dolby Atmos track on the left joystick

2 If you want to turn Height off from the MJM, press a lit < or > switch to navigate the channel encoder to Height (not Height Mode), then press the lit **In** switch next to the Height knob. When unlit, Height is off.

Adjusting Size from the MJM

You can adjust Size from the MJM using the channel knobs next to either joystick.

To adjust Size from the MJM:

Press a lit < or > switch next to the channel encoders of the appropriate joystick until Size is displayed.
 Or enable MJM Height mode. Size is automatically mapped to the channel knob when the MJM is in Height mode (see Manually Controlling Height from the MJM).

When Size is set to any value above 0/off, a transparent grid surrounds the corresponding pan dot standard 2D view, or a transparent cube in 3D/Theater mode. The greater the Size setting, the larger the grid/cube. For an example, see **Indication of Size**.

Toggling Speaker Snap On or Off

You can toggle Speaker Snap on or off for tracks assigned to an Object.

To toggle Speaker Snap on or off from the MJM:

- 1 Press the lit < or > switches next to the channel encoders of the appropriate joystick until Zone Mask appears on a knob.
- 2 Press the lit In switch next to the Zone Mask knob. When In is lit, Speaker Snap is on. When unlit, it is off.

 $\dot{\nabla}$ Do not confuse Dolby Atmos Speaker Snap with the Pro Tools panner ability to click a speaker icon to "jump" the pan dot to a location.

Chapter 23: Layouts

S4/S6 supports multi-workstation and multi-DAW track Layouts. Any tracks from multiple DAWs can be arranged on the surface simultaneously. S6 M40-based systems support connection to up to eight connected workstations, while other S6 and all S4 systems support up to two connected workstations. Up to 96 unique Layouts can be stored and recalled from the touchscreen or Soft Keys. Layout sets can be automatically saved and loaded to/from a designated application on a connected workstation, and manually exported and imported to/from disk for transfer and archiving.

Layouts Mode versus Banking Mode Banking mode is the default, and lets you access all tracks from one DAW across the surface. In contrast, Layout mode lets you arrange any tracks from any connected DAW on as many (or as few) strips as you want. You can use spill zones to spill Layouts to the surface without affecting banked tracks outside the zone. For more information, see Chapter 25, "Spill Zones."

Check out the Avid Pro Tools | S6 Workflows on YouTube for in-depth explorations of how to use S4/S6, including Layouts, Spill Zones, Expand Zones, and more. Check back frequently for updates to this ongoing series.

Accessing Layout Mode

To enable Layout mode to immediately begin assigning tracks:

- 1 In the Tracks screen, tap Assign. On the Master Module, the Layout Mode switch LED lights blue. On the touchscreen, the Assign button becomes enabled and Layout commands Insert, Delete Strip, and Clear Strip replace Record, Input, Solo, and Mute.
- 2 Select and assign tracks to Layouts (see Creating Layouts). After learning how to create standard Layouts, see the following:
 - If your system includes Master Post Modules see Assigning Tracks to MPM Strips.
 - If your system includes Master Meter Modules, see Using Master Display Meter Modules.
 - If your system includes Master Post Display Modules for PEC/DIR metering, see Using Master Post Display Modules

Keep in mind that whenever the surface enters Layout mode, only tracks from the current or previously recalled layout appear across the strips. If you want to work with tracks from a layout while maintaining access to unassigned strips, spill the layout to a spill zone. For more information, see Spilling Layouts, Tracks, and Workstations.

To enable Layout mode without automatically enabling Assign mode:

- 1 Do any of the following:
 - Press **Shift** + **Layout Mode** on the Master Module.
 - Press Layout Mode on the Master Module, then press a Soft Key to recall the corresponding layout.
 - Tap Recall on the screen and recall a layout from the touchscreen.
 - Tap Load on the screen and load a saved set of Layouts.

The Layout Mode switch LED lights blue. On the touchscreen, Record, Input, Solo, and Mute commands remain available.

2 If you want to enable Layout Assign mode, tap Assign in the Tracks screen.

To exit Layout mode:

• Press Shift + Layout Mode. The surface returns to showing all tracks from the currently focused workstation.

To exit Layout Mode after recalling a Layout from the Soft Keys:

• Press the Soft Key for the currently recalled Layout.

The User setting Auto Close Surface Recall Soft Keys determines whether or not the Soft Keys return to their previous view after recalling a Layout. For more information, see Auto Close Surface Recall Soft Keys.

To exit Layout Mode by spilling a Track Type:

• On the Master Module, press **Type** and then select a Track Type (such as All, Audio, or MIDI) by pressing the corresponding Soft Key. The surface switches to Banking mode with the selected Track Type on the strips.

Layout Screen Commands

Figure 62 shows the Tracks screen with Layout Assign enabled, and identifies its main sections and commands.



Figure 62. Tracks screen, Layouts Mode

A – Tracks Matrix of track blocks representing tracks in the current Track view (All, Audio, Aux, Master, Folder, Instrument, MIDI, or VCA)

B – Track Commands When Assign is enabled in the Tracks screen, Layouts commands Insert Strip, Delete Strip, and Clear Strip replace the Record, Input, Solo, and Mute buttons.

- When Assign is enabled and tracks are selected in the matrix, Select None appears.
- When Assign is enabled and either L Spill or R Spill is enabled on the Master Module, Spill Selected appears.
- When the Master Module Shift switch is held down, Assign changes to Assign Post, and Clear Strip changes to Clear All.

The currently loaded Title/Layouts file is listed directly below the Track commands.

C - Strip Universe scroller Universe view of all strips.

D – Strip blocks Each block represents an individual strip on the surface.

E – Layouts Commands The following choices appear across the bottom of the Tracks screen: Recall, Edit, Load, Save, and Save As. When Layout Assign mode is enabled, the Store command becomes available. Layouts commands can be activated by tapping them on the screen, or by pressing the corresponding switches directly below them.

Virtual Strips

You can specify the number of strips available for track assignment in Layouts from the Tracks Local Options screen.

- Adjusting the Number of Strips in Layout setting lets you include more tracks in Layouts than available physical strips.
- Adjusting the Number of Post Strips in Post Layout setting lets you include more tracks in Post Layouts than available physical strips on Master Post Modules.

Once you add virtual strips they are not removed or deleted; reducing the number of strips (or Post Strips) merely hides the previously available strips and they are no longer visible. They are not editable but by default are saved to Titles and sessions. You can control whether hidden virtual strips are retained using the **Store Hidden Virtual Strips in Layouts** setting.

When a Layout that includes virtual strips is recalled, all surface banking controls are available to bank and nudge across the surface or spill zone.

To configure virtual strips:

- 1 Navigate the touchscreen to the Tracks screen, and tap the Local Options (gear) icon.
- 2 In the Tracks Local Options screen, adjust the Number of Strips in Layout slider to the desired value between 8 and 256 strips.

Number of Strips in Layout	
8 256	8
Number of Post Strips in Post Layout	
10 80	20

Number of Strips in Layout and Number of Post Strips in Post Layouts settings in Tracks Local Options

The next time you enter Assign mode from the Tracks screen, the lower Strip scroller will show the number of strips you selected. Drag the scroller left and right to navigate to strips outside of the current view.

You can change the Number of Virtual Strips setting at any time. For example, if the current session was saved on an S4 or S6 system with 96 virtual strips and is then opened on a system with 64 virtual strips go to the Tracks screen Local Options and increase the Number of Virtual Strips in Layout to 96 to access the addition strips 65–96 in Layouts.

Post Layouts

For systems that include one or more Master Post Modules, Post Layouts let you assign and recall tracks to MPM strips. Post Layouts are managed separately from standard Layouts and Title files. This means that you can create, edit, save, and load Post Layouts for the Master Post Module separately from standard track Layouts.

For more information, see Using the Master Post Module.

Meter Layouts

Up to two Display Modules can be designated as Master Meter Modules (MMM) or a Master Post Display Module (MDM) to provide dedicated meter displays for important session elements. When two MMMs are designated, both mirror each other.

You can configure MMMs to show meters, waveforms, or meters and waveforms for 8 to 32 tracks (up to four rows of 8 tracks each). You can select MMM views separately from Display Module views, store MMM views in *Meters Layouts*, and link Meters Layouts to Track Layouts.

For more information, see Using Master Display Meter Modules.

Display Modules can also be designated as *Master Post Display Modules* (referred to as MDMs) to provide dedicated PEC/DIR metering for associated Master Post Modules. Linked states for Post Modules are also shown on MDM, including Link master, master Record, and Link indicators (chain) for each linked track.

For more information, see Using Master Post Display Modules.

Creating Layouts

Layouts are created by enabling Assign mode, selecting tracks in the matrix, and assigning them to strips in the lower strip scroller.

You can also create a layout consisting of all or all selected tracks currently banked onto the surface. For more information, see **Creating New Layouts Based on Currently Banked Tracks**.

To create a Layout:

1 Tap Assign in the Tracks screen to enable Layout Assign mode. Insert, Delete Strip, and Clear Strip appear to the right.

	Attention	Select	Assign			insert	Delete Strip	Clear Strip	
		2	3	4	5	6	7		8
Rec	all S	store	Edit		Load	Save	Save	As {	¢

Figure 63. Assign mode enabled in the Layouts screen

When Layouts mode is enabled and its Assign switch is active (referred to as Assign mode), only tracks from the current or most recently recalled layout appear on the surface.

If you are creating the first Layout, the strip scroller across the bottom of the screen will be blank, as will strips on the surface. Otherwise, tracks from the last recalled Layout (if any) are displayed.

- If you want to remove only specific tracks from the new layout tap Clear Strip to enable it, then tap the tracks you want to remove in the lower scroller. Tap Clear Strip again to disable it.
- If you want the new Layout to include completely different tracks press and hold **Shift** in the Navigation section of the Master Module; Clear Strip becomes Clear All. While still holding **Shift**, tap Clear All to remove all tracks from the scroller.
- 2 Tap Track blocks in the upper track matrix to select the tracks you want in the Layout. When tracks are selected in the Layouts screen their outlines are green as shown in Figure 64. Once any tracks are selected, a button Select None appears; tap it if you want to clear the current selection of tracks.

				5			a
Ac. Guit. 192	Steel Gtr.1	Steel Gtr.2	Piano 192	Piano M/S 19	Piano Sub	CelloMic.02	M/S Strings.
	10		12	13	14	15	16
String Sub	Moog Bass	Vocal 192	HarmVox	Verb Rtn	Long SI.L	Long SI.R	Sub Master
17	18	19	20				
Master 1	VCA 1_Gtrs	VCA 2_String	VCA 3_Vox				

Figure 64. Three tracks selected to add to the Layout (green outline)

 \overleftarrow{O} You can spill selected tracks to spill zones. For more information, see Spilling Selected Tracks to a Zone.

3 Tap a strip block at the bottom of the screen to place the currently selected track(s) starting on that strip.

On systems with **Virtual Strips** enabled, or with 16 or more fader strips, swipe the lower strip scroller, or the Strip Universe scroller, to navigate to other strips beyond those shown.

1	2	3	4	5	6	7	8
13	14						
Verb Rtn	Long SI.L	Long SI.R					
Recall	Store	Edit		Load	Save	Save As	¢

Figure 65. Selected tracks mapped to strips 1-3

When you tap on a strip block, the currently selected tracks are placed on the surface starting on that strip, in the order in which you selected them (not in their absolute track order). For example:

- If four tracks (1–4) are selected and you tap the first (left-most) strip block, the selected tracks are placed on strips 1–4.
- If four tracks (1-4) are selected and you tap the fifth strip block, the selected tracks are placed on strips 5-8.
- If you first select track 4, then select tracks 1, 2 and 3, when you tap a strip in the strip block track 4 will be placed on that strip, followed by tracks 1, 2, and 3.
- 4 Repeat the previous steps to add and arrange other tracks in the Layout.
- **5** To include tracks from a different application or workstation, focus that application and then repeat the previous steps to add its tracks to the Layout.

You can focus other workstations using the Soft Keys (letting you leave the touchscreen in Layouts view). For more information, see

6 When you have selected and placed tracks onto strips, tap Store.

Y If you create or modify a Layout but press **Recall** before storing it, a new backup Layout can be created in the next available block in the grid, or the current layout can be updated. For more information, see **Saving Changed Layouts to New or Current**.

The Layouts grid appears. In the Strip scroller, all strips (scroller at the bottom of the screen) are outlined in bright green as shown in Figure 66, indicating they will be stored and recalled with the Layout. If your system includes a Master Joystick Module, you can set a default state for their assignments in the Tracks Local Options screen.



Figure 66. Layouts Store grid

- 7 In the lower Strips Scroller, tap to deselect the strip blocks for any strips you do not want stored in and recalled with the Layout.
 - Tap All to highlight and select all strips.
 - Tap None to clear all strip selections, then tap individual strip blocks as desired.

Strip blocks that are not selected will not be stored and, when the Layout is recalled, the corresponding strips remain on their previously displayed tracks. For example, in Figure 67 strips 1–4 are selected while strips 5–8 are not. Tracks have been placed on strips 1, 2, and 3, but not on strip 4. When this Layout is recalled, strips 1–3 will show their assigned tracks, strip 4 will be blank, and strips 5–8 will continue to display tracks from the previously recalled Layout (if any).



Figure 67. Four strips selected to be stored; three with tracks and one blank.

- You can use Spill Zones to keep strips outside the zone in Banking mode (all tracks in the session) available while accessing tracks stored in the Layout. For more information, see Chapter 25, "Spill Zones."
- 8 Tap a block in the Store grid. The block highlights and is automatically numbered, and Store appears at the far right of the Layouts Commands across the bottom of the screen. The Layout Name field also appears with a flashing cursor.



Figure 68. Layouts Store grid

9 Do either of the following:

- To store the Layout with only its assigned number for its name, tap Store.
- To enter a custom name for the Layout tap the Layout Name field, enter a name using the on-screen keyboard, then tap Enter.

10 Repeat to create additional Layouts.

To exit Layout Mode:

Press Shift + Layout Mode. The system returns to Banking mode and displays tracks from the currently focused DAW.

Once Layouts are stored, they can be recalled from the touchscreen or the Soft Keys (see Recalling Layouts).

Inserting, Deleting, and Clearing Tracks from Layouts

You can insert and delete track assignments, as well as clear individual strips or all strips.

Inserting Tracks into a Layout

You can enable the Insert button in the Tracks Assign screen to select and insert a track onto a strip in the Strip Scroller. When the Insert button is not enabled, assigning a track to an already occupied strip replaces the previous track (other strips are unaffected).

To insert tracks into a Layout:

- 1 Enable track Assign mode or Assign Post mode and recall the desired Layout.
- 2 Tap the Insert button to enable Insert Strip mode.

Attention	Select	Assign	Insert	Delete Strip	Clear Strip

Insert track button

Onscreen, the Insert button lights to indicate it is enabled.

- 3 Tap to select one or more strips in the upper Track matrix.
- 4 In the lower strip scroller, tap the strip block where you want to insert the selected track(s).
- **5** The selected track(s) is assigned to the selected strip.

Any track previously assigned to that strip block, as well as all tracks to the right of the targeted strip block, are shuffled to the right by the number of inserted tracks.

Deleting Tracks from a Layout

You can enable the Delete Strip button to be able to delete track assignments from the current Layout.

To delete tracks from Layouts:

- 1 Enable track Assign mode or Assign Post mode and recall the desired Layout.
- 2 Tap the Delete Strip button to enable Delete mode.



Delete Strip button

Onscreen, the Delete Strip button lights to indicate it is enabled.

- **3** In the lower strip scroller, tap to delete the strip(s) you want to delete from the Layout. All strips to the right of the deleted strips shuffle to the left.
- 4 To exit Delete Strip mode, tap Delete again so it becomes unlit.

Clear Strip and Clear All

Use the Clear Strip command to remove individual track assignments from strips, without affecting any other assignments in the current Layout. Use Clear All to remove all track assignments in the current Layout.

To clear individual track assignments:

- 1 Enable track Assign mode or Assign Post mode and recall the desired Layout.
- 2 Tap the Clear Strip button to enable Clear Strip mode.

Onscreen, the Clear Strip button lights to indicate it is enabled.

- 3 In the lower strip scroller, tap the strip(s) you want to clear.The previously assigned track is cleared from the strip.
- 4 To exit Clear Strip mode, tap Clear Strip again so it becomes unlit.

To clear all track assignments:

- 1 Enable track Assign mode or Assign Post mode and recall the desired Layout.
- 2 In the Master Module Navigation switch section, press and hold the **Shift** switch. On-screen, the Clear Strip button becomes Clear All.



Clear All button

When the Master Module Shift switch is held down, it is normal for the Assign button to also change and become Assign Post.

- 3 Tap Clear All. All track assignments are cleared.
- 4 Release the **Shift** switch.

Creating New Layouts Based on Currently Banked Tracks

You can create Layouts consisting of all or all selected tracks currently banked to the surface. This is useful for quickly saving the current state of the surface to a layout. For example, if you use Pro Tools Memory Locations and Windows Configurations to store and recall shown or hidden tracks, you can recall those Memory Locations and quickly store each arrangement of tracks as a layout.

To include or exclude hidden tracks, first configure S6 Hidden Track preferences to show hidden tracks in Banking and in Layout mode (see Show Hidden Tracks In).

There are two ways to assign all banked tracks to a layout, and a quick way to add all selected tracks to a layout.

Add All Use Double-Tap Assign, or Tracks View Assign

Add Selected Use Tracks Assign

See also Surface Command to Add (or Remove) Track to Layout.

Tracks View Assign

In the Tracks page in Banking mode, you can specify whether you want to add all or all currently selected tracks to the Layout.

To add all or all selected tracks to a Layout from the Tracks page:

- 1 Navigate the touchscreen to the Tracks page and make sure you are in Banking mode (not Layouts mode). All desired tracks must be banked to fader strips (any off-bank tracks or those in hidden Swap layers are ignored).
- 2 Press the Assign switch (along the bottom of the screen).



Figure 69. Layout commands in Tracks screen, Banking mode

3 Press All, Selected, or Cancel (also along the bottom of the screen).



Figure 70. Layout Assign commands in Tracks screen

The following table describes each option.

	Description
All	Adds all bankable tracks to the current Layout (equivalent to double-tapping the Assign button in Layouts mode).
Selected	Add all selected tracks to the current Layout starting at position 1 (Locked strips are ignored)
Cancel	Exit with no changes

Double-Tap Assign

To create a new layout based on all currently banked tracks:

- 1 In the Tracks screen Local Options, enable Double Tap Assign to Copy Tracks from Banking Mode into Current Layout.
- 2 Make sure the surface is in Banking mode (the Layout Mode switch LED should be off).
- **3** Arrange all desired tracks onto fader strips by recalling a memory location, by banking or nudging (do not spill to either spill zone: spilled tracks will be ignored).

igodow Keep in mind that you can remove any unwanted tracks before storing the layout, as explained below.

- 4 In the Tracks screen, double-tap the Assign button quickly.All tracks currently banked onto strips are mapped to strips in the strip scroller, and the system enters Layout Assign mode.
- 5 If desired, add or remove tracks, or enable/disable strips using the Track matrix and lower strip scroller.
- 6 Press Store.
- 7 Do either of the following:
 - To create a new layout, tap to select an empty layout block. Enter a custom name for the layout if desired.
 - To overwrite an existing layout, tap its layout block in the store grid.
- 8 Press Store to save the new layout.

Surface Command to Add (or Remove) Track to Layout

You can add tracks to a layout by assigning the Add to Layout command using Channel Strip Keys.

Enable this channel key (it lights orange) to include one or more tracks in the current layout the next time you enter Layout Assign mode. A track can be added to the active layout from a Spill Left, Spill Right, or Spill Zone. Tracks are added to Layout strips in their current banking position.

You can also use this command to remove a track from the current layout.

Add to Layout is not available when the surface is in Layout mode. If the layout is banked too far to the left for the assignment to be in the layout, the track will not be added.

Recalling Layouts

Layouts can be recalled from the touchscreen or from the Soft Keys. Track Layouts can be spilled into spill zones (see **Spilling Se**lected Tracks to a Zone). Track Layouts store and recall the knob function (such as EQ, Dyn, or Sends) assigned when the Layout was stored (you can configure S6 to ignore stored functions if desired). Post Layouts can only be spilled to Master Post Modules. Meter Layouts only affect Master Meter Modules, but can be linked to Track Layouts.

Tracks are stored in a Layout using a unique track ID (UID) to ensure tracks appear on the correct strips. If a Layout is recalled but S4/S6 cannot match the track UID it will search for a matching track name, or (absolute) track number, and then by workstation. By storing and matching track ID, name and/or number, and workstation you can create Layouts in session templates that will persist in new sessions.

For maximum session and project compatibility, a new preference in Settings > System lets you enable "legacy" track matching as available in 2021.10 and earlier. When the Use Legacy Layout Recall Matching setting is enabled, track matching will use UID, track name, or (absolute) track number only. This setting is disabled by default.

 $\overleftarrow{0}$ See also **Recall Layout Banking** for information about optimizing how banking responds when recalling Layouts.

Recalling Layouts from the Touchscreen

To recall a Layout from the touchscreen:

- **1** Navigate to the Tracks screen.
- **2** Do either of the following:
 - To recall a Track Layout, tap Recall.
 - To recall a Post Layout, hold the Master Module **Shift** switch (the on-screen Assign switch becomes Assign Post) and tap Assign Post, then tap Recall.

Recall Layouts								
1 FX, VCAs	7 Submstrs &							
2 FX, VCAs. Master	8 Ks Vx +1							
3 Gtrs & Piano	9 Backup 9							
4 Guitars	10 Backup 10							
	11 Backup 11							
6 Keys & Voz_PT &								

Figure 71. Layouts Recall grid (Track Layouts shown)

- 3 In the Layout Recall grid, tap to recall the desired Layout. The surface updates to match the Layout.
- 4 Tap Done to close the Layout Recall grid.

Recalling Layouts from Soft Keys

Track Layouts and Post Layouts can be recalled from the Master Module Soft Key banks. This lets you recall Layouts without having to leave the current view on the Touchscreen. Post Layouts can also be recalled from the MPM Soft Keys bank.

To recall Track Layouts from the Master Module Soft Keys:

- 1 Create and store, or load Layouts into S6 (see Saving and Loading Layout Sets (Titles)).
- 2 Press Layout Mode on the Master Module. The Soft Keys on the Master Module display the currently available Track Layouts.

 $\overset{}{igody}$ You can configure S6 to include or exclude the fader icons from Layouts Soft Keys. See System Soft Key Display Mode.

- 3 Press the corresponding Soft Key switch to recall that Layout. The surface displays only tracks stored in the selected Layout.
- 4 To return the Soft Keys to their previous view, press the Soft Key Close at the bottom of the bank showing Layouts.

The Layout Recall Soft Keys can automatically close after selecting a Layout. See Auto Close Surface Recall Soft Keys.

To recall Post Layouts from the Master Module Soft Keys:

- 1 Create and store, or load Post Layouts into S6 (see Saving and Loading Layout Sets (Titles)).
- 2 Navigate to the Tracks screen.
- 3 Press Layout Mode on the Master Module.

The Soft Keys on the Master Module display the currently available Track Layouts.

4 Hold the Master Module **Shift** switch (the on-screen Assign switch becomes Assign Post) and tap Assign Post so it remains lit purple.

The Soft Keys on the Master Module display the currently available Post Layouts.

- 5 Press the corresponding Soft Key switch to recall that Post Layout. The MPM(s) display the tracks stored in the selected Post Layout.
- 6 To return the Soft Keys to their previous view, press the Soft Key Close at the bottom of the bank showing Layouts.

To recall Meter Layouts from the Soft Keys:

- 1 Do either of the following:
 - Navigate to the Home screen and press Meters.
 - Or press Shift + Tracks on the Master Module.
 When showing the Meters screen, the Tracks switch lights orange.
- 2 Press the Layout Mode switch on the Master Module.

The Master Module Soft Keys show available Meter Layouts.

As previously described, you can also link Meter Layouts to standard Track Layouts so they recall together.

When recalling standard Layouts from the Soft Keys (Layout Mode), any Layouts that have linked Meter Layouts are indicated with a unique icon:



Figure 72. Soft Key icon for a linked Meter Layout

To exit Layout Mode:

• Press Shift + Layout Mode. The system returns to Banking mode and displays tracks from the currently focused DAW.

Unlike standard Soft Keys, Layouts are not managed in the Soft Key Editor. Instead, they are automatically associated with special banks of Soft Keys on the Master Module as soon as they are stored or loaded.
Spilling Selected Tracks to a Zone

You can spill tracks selected in the Track matrix to spill zones without having to create or recall a layout.

To spill tracks to a zone while in Layout mode:

- 1 Press either L Spill or R Spill on the Master Module (only one can be active at a time).
- 2 Tap Assign so it becomes enabled.
 - Whenever L or R Spill are active, pressing Assign enables the Assign switch but does not put the surface into Layout mode.
- **3** Tap to select tracks in the Track matrix. Selected tracks have a green outline. On-screen, the Spill button appears next to other Track commands.
- 4 Tap the Spill button. Tracks are spilled to the enabled zone in the order they were selected (not their absolute track order).
- 5 To bank or nudge tracks within a spill zone, make sure the corresponding L Spill or R Spill switch on the Master Module is lit white (press if necessary), then use the Bank and Nudge switches on the Master Module.
- **6** To unspill, do any of the following:
 - Press Shift + L Spill or R Spill on the Master Module. (If L Spill or R Spill are lit white, for bank/nudge, press again so it is lit blue to enable unspilling).
 - Press Menu on any strip in the spill zone when the Menu keys are configured to unspill.
 - · Recall a Layout when they are configured to collapse spill zones.

Renaming, Rearranging, and Deleting Layouts in a Set

Once Layouts have been stored, they can be renamed, rearranged within the Layout grid, or deleted from the current Layout set.

 $\overleftarrow{0}$ For ways to add or remove tracks in Layouts, see **Inserting**, **Deleting**, and **Clearing Tracks from Layouts**.

To edit a Layout:

- 1 Press the Tracks switch, and make sure you are in Layout Mode.
- 2 Tap Edit (or press its corresponding switch).
- **3** Do any of the following:
 - To rename a Layout, tap to select it in the grid, then double tap the Layout Name shown at the bottom of the screen. Enter a new name, and then tap Done.
 - To rearrange Layouts, drag any block to a new position. The block you tap or move is shown with an orange outline, while the currently recalled Layout is outline in blue.
 - To delete an individual Layout, tap its box in the grid momentarily until the box flashes, then drag it out of the grid.
 - To delete all Layouts, tap Delete All then tap Delete to confirm (all Layouts will be deleted) or Cancel.
- 4 Tap Done to close the Layouts grid and return to the Layouts screen.

Saving Changed Layouts to New or Current

If you create or modify a Layout but press Recall before storing it as a new Layout, a backup Layout can be created in the next available block in the grid, or the current layout can be updated.

You can specify whether to save the new track arrangement to a new layout or to the currently loaded layout using the selector in the Layouts section of Settings > Preferences.



Layouts settings in Settings > Preferences

To configure Layouts Auto-Save settings:

- 1 In Settings > Preferences, scroll to the Layouts section.
- 2 Tap the selector for Auto-Save Changed Layout on Recall Mode: and choose one of the following:

Off When enabled, no backup Layouts are created.

Save to New Layout Slot When enabled, backup Layouts are created in the next available block in the grid. Backup Layouts will be automatically named and numbered, such as "Backup_01." If there are no tracks assigned, no backup will be created.

Save to Current Layout Slot When enabled, the current (last recalled) layout is updated (no backup is created).

Saving and Loading Layout Sets (Titles)

Layouts can be saved and loaded to/from disk automatically, or manually. Use these features to load Layouts for specific sessions, to transfer Layouts to other S6 systems, and for archiving. When saving or loading Layouts, all Layouts – including Post and Meter Layouts, if any – are saved as a set into an S6 "Title" file (you cannot save individual Layouts). You can enable automatic loading of each type of Layout in the Settings > System page (see Autoload from Titles and Sessions).

Titles can also store and load User Preferences.

The Tracks screen shows the name of the current Title and/or Auto-Saved session (blue star), so you can confirm where Layouts and other attributes will be saved.



Current Title/Auto-save session display on the Tracks screen

Confirmation text also appears whenever a Save or Save As is performed.



Confirmation text after saving a Title/Layouts

Automatic Saving and Loading of Layout Sets by DAW

Layouts can be automatically saved and loaded to/from a designated application on a connected workstation. You can designate the target application from the Workstation screen or from the Soft Keys. You can also disable automatic save/load by not designating any application.

i After designating a workstation, be sure to enable Layouts to Autoload from Titles and Sessions and optimize settings.

To designate an application for layout save and load from the Workstation screen:

1 Navigate to the Workstation screen by doing either of the following:

- Press **Settings**, then scroll the Settings screen to the Workstation page.
- Press Shift + WS.

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2 In the Applications list at the lower right of the screen, tap to select an application.

A small blue star appears next to the selected application.

Applications	Dro Tools 12Mag 🔹	
Applications	Logic Pro X	

Indication of designated DAW in Settings > Workstation

3 If designating the selected application will potentially overwrite current Layouts, a warning dialog appears.

- Press OK to load Layouts from the selected application (if any), replacing any Layouts currently loaded in S6.
- Press Cancel to cancel the operation (no Layouts are loaded).

To designate an application for layout save and load from the Soft Keys:

1 Press WS.

The Master Module Soft Keys list connected workstations in the left bank. Applications on the currently attentioned workstation are listed in the right bank. If the Soft Keys are configured to only use one bank, press the Soft Key Next to access the Applications list.

2 Select a workstation in the left bank of Soft Keys, then select an application in the right bank.

A small blue star appears next to the selected application.



Indication of designated DAW in Soft Keys

3 If designating the selected application will potentially overwrite current Layouts, a warning dialog appears.

- Press OK to load Layouts from the selected application (if any), replacing any Layouts currently loaded.
- Press Cancel to cancel the operation (no Layouts are loaded).

To disable automatic saving and loading of Layouts, do either of the following:

- In the Settings > Workstation screen, tap the currently designated Application name so that the blue star disappears.
- In the Soft Keys, press the Soft Key for the currently designated Application name so that the blue star disappears.

Manually Loading and Saving Layout Sets

To save Layouts manually:

- 1 In the Layouts screen, tap Save. Or, tap Save As to store a new Title containing the current Layouts.
- 2 In the dialog that appears, tap in the File Name field to bring up the touch keyboard and enter a name for the Layout set. Close the touch keyboard by touching Enter.
- **3** Tap Save. (Or tap Cancel to cancel the operation.)

To load Layouts manually:

- 1 In the Layouts screen, tap Load.
- 2 In the dialog that appears, tap to select the desired set of Layouts, then tap Open.

Option to Clear Layouts

When Layouts are stored/recalled to/from a session or project, you can set whether the surface clears or retains the Layouts when the session or project is closed (or when its workstation is disconnected).

In Settings > System, the Auto-Load From Titles and Sessions section provides the Clear Layouts When Session Data Clears setting.

- When enabled, all Layouts will be cleared if the designated session or project is closed or that workstation is disconnected.
- When not enabled, Layouts remain on the system after closing the session or project, or disconnecting that workstation.



Clear Layouts When Session Data Clears setting in Settings > System

Chapter 24: Swap Layers

S4 and S6 let you assign tracks to up to four Swap layers, letting you quickly access different tracks from the same Fader Module strip(s). Tracks are assigned to Swap layers from the Layouts Assign page (Swap layers are only available in Layouts mode). You can then cycle all strips through each Swap layer from the Master Module (S4 and S6). On S6, you can also initiate Swap from fader strips to cycle all strips or individual strips. To simplify navigation, the names of tracks in other Swap layers can be shown on Display Modules.

To assign tracks to Swap layers:

- 1 Go to Tracks > Local Options (gear icon).
- 2 Choose a value 1–4 for Number of Layout Swap Layers. The default value is 1.



Number of Layout Swap Layers slider in Tracks > Local Options

- 3 (Optional) If your system includes CDMs, enable Show Available Swap Track Names on Display Modules.
- 4 Close the Local Options screen.
- 5 In the Tracks screen, tap to enter Layout Assign mode (press Assign so it is lit green). To the left of the touchscreen the masterSwap switch lights blue.



Swap switch on Master Module

6 Assign tracks to the Layout. As tracks are added, their current Swap layer assignment is shown in the lower strip scroller in the strip displays on Fader Modules, and in strips on Display Modules. By default, strips are assigned to Swap layer A.



Track "Audio 1" assigned to Swap layer A in the Layouts Assign strip scroller (shown at left) and a fader strip display (shown at right)

- 7 To assign strips to other layers, press the Master Module **Swap** switch to cycle through layers B, C, and D and assign tracks to each layer as desired.
- 8 Press Store to name and store the new layout.
- 9 Make sure to exit Layout Assign mode (tap Assign so it becomes unlit).

To navigate fader strips to different layers:

- 1 Recall a layout with assignments to multiple layers. On S6 (only) the strip **Swap** switches light to indicate additional tracks are available on other Swap layers.
- 2 To cycle all strips through layers (global swap) press the blue Swap switch to the left of the touchscreen on the Master Module. Or on S6 (only) press the Master Module All switch so it is lit and then press any lit strip Swap switch. (All is latching and remains active until you press it again so it becomes unlit.)
- **3** S6 only: To navigate individual strips through Swap layers, press any lit strip **Swap** switch. If different strips are on different layers, pressing master **Swap** uses the currently attentioned track as the starting layer for cycling.

Settings for Swap Layers

You can choose to have 2, 3, or 4 Swap layers available, and choose to show Swap track names on Display Modules in Tracks > Local Options.



Number of Layout Swap Layers

Choose 2, 3, or 4 layers.

Show Available Swap Track Names on Display Module

When enabled, Display Modules show the names of all tracks assigned to other Swap layers below the currently active track (listed on top). Note that enabling this option can impact performance (such as how quickly Display Modules follow banking).

(See next page for more information.)

Here are a few example images of Swap indication on CDMs.



4 Swap layers

Examples of Swap layer indication on CDM

Insert/Delete Assign Modes Affect All Swap Layers

When enabled, inserting or deleting a track from a Swap layer inserts or deletes that slot in all Swap layers.

Swap Assignments in Titles and Sessions

Swap assignments are stored within their parent Layout(s), in Titles, and in session files. All assignments persist regardless of the Number of Layout Swap Layers setting. For example, assigning tracks to all 4 Swap layers and then lowering the setting to 2 layers does not lose the assignments to layers 3 and 4. Similarly, transferring a Title or session to a different system preserves all Swap assignments, even if there are fewer Swap layers defined on the opening system.

Swap and Spill

Swap layers are not available on tracks spilled using VCA, Track Type, Workstation, or Folder Spill. Swap layers remain available on tracks/strips outside of the spill zone. Swap also remains available when a Layout is spilled to a spill zone.

Flip

Pressing global or strip Swap (S6 only) exits Flip mode, if enabled.

Chapter 25: Spill Zones

Spill Zones let you designate areas of the surface to spill VCAs, Layouts, tracks by type, and tracks by workstation. Up to two non-overlapping spill zones can be defined. Spill zones provide access to session elements in consistent locations, and leave strips outside the zone unaffected and available. **Expand** Knob Zones and Fader Zones provide similar capabilities for attention track functions, with the additional capability to map parameters to faders.

QuickStart for Using Spill Zones

You can spill VCAs, Layouts, tracks, and workstations to spill zones by doing the following:

- Define up to two spill zones in Settings > Surface (see Configuring Spill Zones).
- VCAs can be spilled to a spill zone, or to as many adjacent strips as needed (standard VCA spill), directly from the Fader Module/CSM strip for the VCA master using its **Menu** switch (see **VCA Spill**). You can also configure VCAs to spill automatically to zones or to adjacent strips when the VCA is attentioned (see **Auto Select Joystick Strips when Storing Layouts**).
- Layouts, tracks, and workstations can be spilled to zones by first enabling the L Spill or R Spill switches on the Master Module, enabling the Layout Mode, Type, or WS switches, then selecting the desired element to spill from the Soft Keys.



Master Module switches for Spill Zones: 1) WS, 2) Layout Mode, 3) Type, 4) L and R Spill, 5) Nudge and Bank, and 6) Shift

• Once an element is spilled to a zone, the L Spill and R Spill switch LEDs light in colors matching the element that is spilled. Spill can be indicated on strips by lit Menu switches in corresponding colors, and you can also set the strip Menu switches to unspill (see Options for Spill).

Color	L Spill / R Spill LEDs	Strip Menu LEDs (when enabled to light)
Dark Green	VCA	VCA Master
Light Green		VCA slaves
Dark Blue	Layouts	Layouts
Pink	Track Type	Track Type
Light Blue	Workstation	Workstation

Color indication of spilled elements

• Pressing an enabled Spill switch so it is lit white lets you use the Bank (<< and >>) and Nudge (< and >) switches to bank and nudge tracks within the selected spill zone, without affecting tracks outside the zone.

Check out the Avid Pro Tools | S6 Workflows on YouTube for in-depth explorations of how to use S6, including Layouts, Spill Zones, Expand Zones, and more. Check back frequently for updates to this ongoing series.

Options for Spill

Several Preference settings let you customize the following aspects of spill zone operation.

- Choose how you want spilled elements to be justified within zones (see Bank and Spill Zone Justification Settings).
- Choose whether or not to have spill zone **Menu** switch LEDs light, and whether they let you unspill (see **Spill Zone Menu Key Mode for Layouts, Workstations or Types**).
- Customize how many Master Module Soft Key banks are used for spill selection (see System Soft Key Display Mode).
- Choose whether or not Soft Keys automatically return to their previous view after selecting an element to spill (see Auto Close Surface Recall Soft Keys).
- Choose whether recalling a Layout automatically collapses the currently enabled Spill Zone(s) (see Auto-Collapse Spill Zones with Layout Recall).

Configuring Spill Zones

This section explains how to define spill zones on the surface. Zone assignments are automatically saved on the Master Module.

To configure Spill Zone parameters:

1 Go to Settings > Surface, then touch Config (or press its Main Menu switch).

Buttons for Surface, Expand, L Spill, and R Spill appear below the Diagnostics Info display.

Surface	Expand	L Spill	R Spill	Display	Cancel	

Figure 73. Settings > Surface, Config screen

- **2** Do either of the following:
 - To define the left spill zone, touch L Spill.
 - To define the right spill zone, touch R Spill.

The console dims, and the touchscreen displays the current surface configuration. Commands for Undo, Done, Clear, and Cancel appear along the bottom of the screen. Help text is shown in the Info area. If a previous zone was defined, the Attention keys are lit on all strips in the existing zone.

- 3 Press any track Attention key to assign the beginning strip of the spill zone.
- 4 Press another **Attention** key to assign the end of the zone.

A purple bar appears below all strips between, and including, the selected beginning and end strips.



Figure 74. Strips 1 thru 6 defined as a spill zone

- **5** Do any of the following:
 - · Touch Undo if you press the wrong Attention key.
 - Touch Clear to remove the spill zone.
 - Touch Cancel to exit the spill zone configuration screen without changing the current spill zone definition (if any).
- 6 Touch Done to accept the spill zone.
- 7 Repeat for the other zone, if desired.

Spilling Layouts, Tracks, and Workstations

The following sections provide step-by-step instructions for spilling Layouts, tracks, and workstations to spill zones.

igodow For information on spilling VCAs to spill zones (or to adjacent strips), see VCA Spill.

Spilling Layouts to a spill zone differs from simply recalling a Layout as follows:

- When a Layout is spilled to a zone, strips outside the zone are unaffected and remain on their currently banked tracks.
- When a Layout is *recalled*, the surface enters Layout mode in which only tracks that are in a Layout can appear on the surface. Strips that are not included in the Layout will be blank, or continue to show tracks from the previously recalled Layout (depending on whether their strips were scoped for recall when the Layout was created).

 $\dot{\bigtriangledown}$ You can also spill selected tracks to either zone while in Layout mode (see Spilling Selected Tracks to a Zone).

Tracks can be spilled by type (such as Audio, Aux, Instrument, or Masters) into spill zones, or across as many strips as needed.

Tracks from other workstations can be spilled to zones, without having to focus the parent workstation/application.

To spill a layout, track type or workstation to a spill zone:

- 1 On the Master Module, press to enable **L Spill** or **R Spill**.
- 2 Press one of the following switches on the Master Module:
 - For Layouts, press Layout Mode.
 - For Track types, press Type. (To spill a Track Type across as many strips as needed, disable L or R Spill and press Type.)
 - For workstations, press WS.

The Master Module soft keys display available choices for the enabled element (Layouts, track types, or workstations).

- 3 Press a soft key to select and spill the corresponding Layout, Track type, or workstation to the enabled spill zone (left or right).
 - When a layout is spilled the **Layout Mode** switch LED lights dark blue. The enabled **L Spill** or **R Spill** switch on the Master Module also lights dark blue.
 - When any track type (other than All) is spilled, the enabled L Spill or R Spill switch on the Master Module is pink.
 - When a workstation is spilled, the enabled **L Spill** or **R Spill** switch on the Master Module is light blue (the same color as when tracks are spilled).

On channel strips, **Menu** switches within the enabled zone light in the same color as the enabled **L Spill** or **R Spill** switch if the option to light them is enabled (see **Spill Zone Menu Key Mode for Layouts, Workstations or Types**).

4 To bank or nudge tracks within a spill zone, make sure the corresponding **L Spill** or **R Spill** switch is lit white (press if necessary), then use the Bank and Nudge switches on the Master Module.

Spill Zone banking commands are also available as Soft Keys in the default Pro Tools assignments (along with other Surface commands). You can navigate spill zones by **Banking from the Fader Module or CSM**.

5 To unspill, press Shift + L Spill or R Spill on the Master Module, or press Menu on any strip in the spill zone when the Menu keys are configured to unspill (see Spill Zone Menu Key Mode for Layouts, Workstations or Types).

 \overleftarrow{a} Commands to collapse (unspill) the left and right spill zones are also available as Soft Keys.

Chapter 26: Expand

S4/S6 provides two ways to expand (or "spill") plug-in and function parameters to controls on the surface, *Strip Expand* and *At*-*tention Expand Zones*.

Strip Expand Spills parameters beyond the current strip, expanding (or "spilling") EQ, dynamics, or other functions across multiple controls on Knob, Process, and/or Fader modules in the same chassis as the track (S6), or across the track's CSM (S4).

Attention Expand Zones Spill parameters for the Attention Track to designated Attention Expand modules to provide expanded control for Attention Track parameters in a consistent location. On S6, up to two Knob Modules and one Fader Module can be designated as *Attention Expand Zones*. S4 supports up to two optional Knob Modules as Attention Expand Zones.

Attention Expand Zones follow Home screen focus, and can be configured for primary and fallback function views.

- When a plug-in or function is expanded to an Attention Expand Knob Zone, the arrangement of parameters to knobs is pre-determined, and consistent. You can substitute other parameters temporarily, but substitutions do not persist.
- When a plug-in or function is expanded to an Attention Expand Fader Zone, the arrangement of parameters to faders is determined by your own custom mapping (you must first create custom maps of parameters to faders, as explained in the following sections).
- Attention Expand Knob Zones and Attention Expand Fader Zones can be toggled on and off independently to maximize parameter access and visibility.
- Check out the Avid Pro Tools | S6 Workflows on YouTube for in-depth explorations of how to use S4/S6, including Layouts, Spill Zones, Expand Zones, and more. Check back frequently for updates to this ongoing series.

To see how EQ and Dynamics parameters map to knobs in either Strip Expand or Attention Expand mode, see Appendix B, "EQ and DYN Parameters in Expand Mode."

Strip Expand

Strip Expand mode spills parameters beyond the current strip, expanding (or "spilling") EQ, dynamics, or other functions across multiple controls on Knob, Process, and/or Fader modules in the same chassis as the track (S6) or the CSM (S4).

- When a plug-in or function is expanded to **Expand Knobs**, the arrangement of parameters to knobs is consistent and cannot be changed. To see examples of where EQ and Dyn parameters are mapped, see **EQ and DYN Parameters in Expand Mode**.
- When a plug-in or function is expanded to **Expand Faders**, the arrangement of parameters to faders is determined by your own custom mapping. You must first create or load custom maps as explained in the following sections.

Indication of Expand Mode on Display Modules Whenever any track is in a strip Expand mode, an orange outline appears around the track name of the expanded track on its Display Module strip. When Expand mode is enabled on more than one strip, the outline appears around the most recently expanded strip name.



Figure 75. Indication of Expand mode on a Display Module (track 7)

If the Display Module is in any Function view, the knobs are also outlined in orange. When Display Modules are set to display two functions, both sets of knob functions are outlined. In addition, Display Modules in any Function view show EQ or Dynamics graphs, or Pan, as follows:

- When EQ is expanded, the EQ graph appears on strip 3 (replacing the input and output Function display).
- When Dyn is expanded, the dynamics graph appears on strip 8.
- When Pan is expanded, pan appears on strip 8.

Expand Knobs

You can configure Expand Knobs to automatically follow selection of one or more functions (see **Auto Expand Functions**) or you can enable Expand Knobs manually as described in the following instructions.

To enable Knob Expand mode on a strip:

1 Press **Exp** on the Process Module (S6) or CSM (S4).

Multiple strips can be in Expand mode simultaneously.

To put all strips into strip Expand mode simultaneously, press the **All** switch (on the Master Module) before pressing Expand. The All switch is latching, so press it again to disable All mode (the switch becomes unlit).



The most recently selected S6 strip/function, or S4 Focus strip/function, is expanded. Selecting a different function for an Expanded strip replaces the currently expanded function view.



Figure 76. EQ expanded to a Knob Module

When enabled, the **Exp** switch LED lights orange. Only the currently expanded function LED is lit on the Process Module or CSM, letting you quickly identify what is being viewed.

- If multiple strips are in Expand mode the inactive Expand keys light yellow.
- When enabled in an S6 chassis with one or more Knob Modules, Expand mode takes over either or both Knob Modules depending on the number and mapping of parameters in the current function.
- When enabled on a strip in an S6 chassis with only one Fader Module and one Process module (no Knob Modules), Expand mode takes over the eight knobs of the Process Module.
- 2 If more parameters are available than there are controls, the < and > (Page) switches light on strip 8; press either to navigate to other parameters.
- **3** To take a strip out of Expand mode, press its lit **Exp** switch.

Expand Faders

Expand Faders let you map parameters from plug-ins and other functions to faders on Fader Modules.

- Parameters from each plug-in or function can be mapped to faders in any order. When secondary parameters exist they appear by default on the strip **Mute** and/or **Select** switches. Multiple maps can be created to store and recall assignments for each plug-in (such as one map for EQ3, another map for Dyn3, and so on) and function (one for pan, another for sends, and so on).
- Once maps have been created they can be recalled onto any Fader Module by enabling Fader Expand mode in any resident strip, similar to standard Knob Module Expand. You can also configure Fader Zones to automatically expand when there is a valid map for the selected plug-in or function.



Figure 77. EQ parameters mapped to faders in Expand Fader mode

Creating Expand Fader Maps

You can assign parameters from knobs to faders to create custom parameter maps. You can define one custom map per plug-in/function per session. For example, a single session can include a custom map for the Dyn3 Compressor/Limiter plug-in, and a map for BF-76. Each map can include parameters from a single plug-in or function. You must create at least one parameter map in order to utilize Attention Expand Fader Zones.

Variants of the same plug-in or function (such as 1-band and 7-band EQ3) share a single map. Different formats/channel widths (such as mono versus stereo) vary depending on the type of processing and manufacturer.

- EQ or Dynamics plug-ins can sometimes share a single map between mono, stereo, and other formats.
- Plug-ins from other categories (such as Delay) often require unique maps for each variant or width, but this varies with different plug-ins from different manufacturers.

Custom fader maps are stored in User Preferences (use Autoload from Titles and Sessions to manage fader maps).

Custom Faders maps are created using the same basic technique as Custom Knobs. To learn how, see **Custom Knobs and Custom Faders**.

Recalling an Expand Fader Map

Once maps have been created they can be recalled onto any Fader Module by enabling Fader Expand mode from any resident strip. You can also configure Fader Zones to automatically expand when there is a valid map for the selected plug-in or function (see **Auto Expand Faders**).

To access a stored map:

- 1 If the **Exp** switch on the desired strip is lit blue (solid, not flashing), select a Function that has previously been mapped.
- 2 If the **Exp** switch on the desired strip is not lit, do either of the following:
 - Hold down the **Exp** switch on the desired strip for at least half a second. Any previously stored map is recalled.
 - Press Attention + Exp on the desired strip. Any stored map is recalled, and the Exp switch flashes, indicating map edit mode.
- 3 To exit, press the lit **Exp** switch so it becomes unlit.

Expand Fader Maps 9–16 Banking

The **User 1** and **User 2** switches bank between pages while assigning parameters to faders or when a fader map is recalled on a Fader Module. These switches light to indicate the available bank (press a lit User switch to bring the corresponding bank to the faders).



User 2 switch lit in Expand Faders mode (press to access Expand Faders 9-16)

The modifier switches Shift, Ctrl, Opt/Win, and Cmd/Alt remain available on the Fader Module or CSM when in Expand mode.

Auto Expand Faders

Enabling the Auto Expand Faders setting lets you expand mapped parameters to faders with a single press of the **Exp** switch. When not enabled, expanding parameters to faders requires you to hold down the **Exp** switch, or press **Attention** + **Exp**.

To configure Expand Fader to auto expand:

- 1 Go to Settings > User, and display the Strips section.
- 2 Enable the Auto Expand Faders setting.



Figure 78. Auto Expand Faders enabled in the Strips section of Settings > User

Use Legacy Layout Recall Matching

The Auto-Load preference Use Legacy Layout Recall Matching is available in Settings > System.

Tracks are stored in a Layout using a unique track ID (UID) to ensure tracks appear on the correct strips. If a Layout is recalled but S4/S6 cannot match the track UID it will search for a matching track name, or (absolute) track number, and then by workstation. By storing and matching track ID, name and/or number, and workstation you can create Layouts in session templates that will persist in new sessions.

For maximum session and project compatibility, this preference in Settings > System lets you enable "legacy" track matching as available in 2021.10 and earlier. When the Use Legacy Layout Recall Matching setting is enabled, track matching will use UID, track name, or (absolute) track number only. This setting is disabled by default.



Auto-Load preference to Use Legacy Layout Recall Matching, in Settings > System

This setting is available as a Surface Soft Key.

Saving and Transferring Expand Fader Maps

(Save, Load, Auto Load, and Transfer)

Expand Fader maps are stored in User Preferences along with most S6 settings and attributes, including User Settings, Layouts, and Spill Zone states.

You can manually save User Preference files from the Settings > User page using the Save and Save As commands. These commands let you name the file and choose a location on the Master Module. To archive or transfer your settings and fader maps, go to Settings > About, press Logout, then in the File Explorer navigate to your saved file and transfer it via USB or to an available network destination.

You can also have User Preferences, custom fader maps and other settings stored in sessions, and configure S6 to automatically load some or all attributes from that session or project. To utilize session storage and automatic loading, first designate a workstation and application, then configure Auto Load settings in Settings > System.

- Designating a workstation and application tells S6 to store settings and attributes into sessions or projects on that workstation and application.
- Auto Load settings tell S6 which attributes to load from those sessions or projects.

Store attributes in session/project templates (if your application supports them) to be able to access custom fader maps, Layouts, and other attributes in future work.

Attention Expand Zones

On S6, up to two Knob Modules and one Fader Module can be designated as *Attention Expand Zones*. On S4, up to two Knob Module can be designated as an Attention Expand Zone.

Attention Expand Zones provide expanded control for Attention Track parameters in a designated, consistent location. Attention Expand Zones follow Home screen focus, and can be configured for primary and fallback function views.

- When a plug-in or function is expanded to an *Attention Expand Knob Zone*, the arrangement of parameters to knobs is pre-determined, and consistent. You can substitute other parameters temporarily, but substitutions do not persist. M40 systems support up to two Knob Modules as Expand Zones (M10 systems support one Expand zone).
- When a plug-in or function is expanded to an *Attention Expand Fader Zone*, the arrangement of parameters to faders is determined by your own custom mapping (you must first create custom maps of parameters to faders, as explained in **Creating Expand Fader Maps**
- Attention Expand Knob Zones and Attention Expand Fader Zones can be toggled on (enabled) and off (disabled) independently to maximize parameter access and visibility.

Configuring Modules as Attention Expand Zones

On S6, up to two Knob Modules can be designated as *Attention Expand Knob Zone*, and one Fader Module can be designated as an *Attention Expand Fader Zone*. On S4, up to two Knob Module can be designated as *Attention Expand Knob Zones*.

To designate modules as Attention Expand Zones:

- 1 Go to the Settings > Surface page.
- 2 Press Config, then press Expand.

The choices Knob and Fader appear below the graphic of the current surface configuration. Any currently designated Expand Zones are indicated by a purple triangle (if enabled) or gray triangle (if disabled) with a number 1 or 2.

Diagnostics Info		
Select Knob to change the Expand Select Fader to change the Expand	d Knob Modules. d Fader Module.	

Figure 79. Knob and Fader commands in Settings > Surface, Config Expand (S6 shown)

3 Do one of the following:

- To designate an Attention Expand Knob Zone, press Knob. The knobs on all available Knob Modules light, and the Assign Expand Knob Module screen appears on the touchscreen.
- To designate an Attention Expand Fader Zone, press Fader. The LEDs on all available Fader Modules light, and the Assign Expand Fader Module screen appears on the touchscreen.

Commands for Undo, Done, Clear, and Cancel appear along the bottom of the screen.

- 4 Follow the on-screen instructions to designate the corresponding type of module as an Expand Zone.
 - Touch any knob on any lit Knob Module to assign that Knob Module as an Attention Expand Knob Zone. The touched Knob Module becomes unlit. On-screen, its block in the Surface configuration displays an Attention icon with a number (1 or 2), to indicate its current Expand Zone assignment.
 - S6 only: Touch any fader on any lit Fader Module to assign that Fader Module as an Attention Expand Fader Zone. The touched Fader Module becomes unlit. On-screen, its block in the Surface configuration displays an Attention icon.

Each currently designated Zone is indicated by a purple triangle when the zone is enabled, or gray triangle if disabled.



Figure 80. Settings > Surface, Config Expand showing Expand Zones designated and enabled (shown at left) and disabled (shown at right)

 $\overset{\circ}{igody}$ For more information on enabling Expand Zones, see **Toggling Attention Expand Zones On or Off**.

- **5** Do any of the following:
 - Press Undo if you pressed the wrong module hardware.
 - Press Clear to remove all Expand Knob Modules that are not fixed.
 - Press Cancel to go exit the Expand configuration screen without changing the current surface arrangement.
- 6 Press Done to accept the new arrangement.

 \bigtriangledown Before utilizing an Attention Expand Fader Zone, create Fader maps as described in Creating Expand Fader Maps.

Configuring Expand Zone Function Settings

The Home screen Local Options screen lets you select primary and backup functions for Attention Expand Knob Zones and, separately, for Attention Expand Fader Zones.

Expand Knob Function and Backup Function

These selectors let you configure functions to display on Attention Expand Knob Zones when a track is attentioned. Two pairs of selectors are available to set primary and backup functions on each of up to two Knob Modules.



Figure 81. Settings for Expand Knob and Expand Fader Function settings in Home screen Local Options

To configure primary and backup functions for Attention Expand Knob Zones:

1 Navigate to the Home Screen, then tap its Local Options (gear) icon.

Two sets of selectors are provided, 1st and 2nd Expand Knob Function and Backup Function Selected on Attention Change, which correspond to Knob Modules configured as Attention Expand Knob Zone 1 and 2 (if present) in Settings > Surface. The left selector sets the primary function, and the selector to the right sets the backup function for the corresponding module.

igodow S6 M10 systems support a single Knob Module designated as an Attention Expand Knob Zone.

- 2 Tap to display the first (left-most) drop down menu.
 - To have the Expand Knobs stay focused on whichever function was most recently edited, choose Last Selected.
 - To specify a function, select a function such as Pan, Bus, EQ, or Dynamics. Not all functions are available in all applications.
- **3** Repeat for the second (right-most) "backup" drop down menu. This lets you define a knob function to display whenever you attention a track that does not contain the same function as the previously attentioned track.

Expand Fader Function and Backup Function

When a function is assigned as a Primary Expand Zone function, toggling the Attention Expand Fader Zone on assigns parameters from that function to the faders using your custom map. If no map exists for that plug-in or function, the faders will be blank (see **Creating Expand Fader Maps**).

To configure primary and backup functions for Attention Expand Fader Zones:

- 1 Navigate to the Home screen and press the Local Options (gear) icon.
- 2 Choose a function from the Expand Fader Function and Backup Function Selected on Attention Change selectors.

Using Attention Expand Zones

When modules are configured as Attention Expand Zones, their function assignment follows Home screen focus. Attentioning a strip expands the (last) selected or backup function to the enabled Knob Module(s) and Fader Module.

 $\dot{\bigtriangledown}$ Attention Expand Zones do not require use of the strip Exp (Expand) switch.

While expanded, you can assign a different function to the Knob or Fader Zones from the same track or a different track at any time.

Using Attention Expand Knobs

To use Attention Expand Knob Zones:

- 1 Make sure you have followed the instructions in **Configuring Modules as Attention Expand Zones** to designate at least one Knob Module as an Attention Expand Knob Zone.
- 2 Configure Expand Knob Function and Backup Function.
- 3 Attention the desired track.
- 4 If necessary, enable the Attention Expand Knob Zone (see Toggling Attention Expand Zones On or Off).
- 5 Adjust parameters as needed.
 - Rotate a knob to adjust its parameter. Secondary parameters (if any) can be toggled using the knob In and/or Sel switches.
 - To bypass a currently expanded plug-in, press the **Back** switch in strip 8. When the **Back** switch LED is green, the insert is active (not bypassed). When unlit, the insert is bypassed.



Figure 82. Attention Expand Knob Zone with expanded EQ3 7-band (plug-in bypass via column 8 Back switch)

- 6 To navigate the zone to a different plug-in, function, or track, see Changing Function Assignment or Attention Track.
- 7 To take the designated Attention Expand Knob Module out of Attention Expand mode, toggle the zone off.

Using Attention Expand Faders (S6 Only)

When a Fader Module is configured as an Attention Expand Fader Zone, function assignment follows Home screen focus. You can specify primary and back-up functions, and change function assignment at any time.

To use Attention Expand Faders:

- 1 Make sure you have created a map for the desired plug-ins or functions (see Creating Expand Fader Maps).
- 2 Make sure you have followed the instructions in Configuring Modules as Attention Expand Zones.
- 3 Configure Expand Fader Function and Backup Function.
- 4 Attention a track. If necessary, enable the Attention Expand Fader Zone (see Toggling Attention Expand Zones On or Off).



Figure 83. Attention Expand Fader Zone with EQ3 7-band parameters mapped to the faders

- **5** To access faders 9–16 press the lit **User 2** switch. To return to faders 1–8 press the lit **User 1** switch.
- 6 To navigate the zone to a different plug-in, function, or track, see Changing Function Assignment or Attention Track.
- 7 To exit, toggle the Attention Expand Fader zone off.

Layouts Mode, Banking Mode, and Enabling Expand Faders

- When you enable Expand Faders while in Layout Mode, tracks from the Layout that were on the affected Fader Module are hidden by the Expand Fader Zone (other tracks in the Layout beyond the zone, if any, remain in place and visible).
- When you enable Expand Faders while in standard Banking mode, tracks previously on the affected Fader Module and all subsequent tracks are moved to the right, remaining visible.

Changing Function Assignment or Attention Track

While an Attention Expand Zone is enabled you can use the touchscreen to assign a different function from the currently attentioned track to the Zone, or assign a function from a different track.

To assign a different function to an Attention Expand module:

1 If you want to assign a different function from the same track, skip to step 2.

If you want to access a function on a different track, navigate the touchscreen to the Tracks screen, attention the desired track, and make sure the Home screen is displayed.

- 2 In the Home screen, tap to select a function in the Function scroller, then tap the desired knobs in the Attention Track screen.
 - The bracket next to the tapped knobs flashes.
 - On enabled Attention Expand Knob module(s), the **Back** switches lights purple.
 - On the Attention Expand Fader module (if enabled), the Attention switches light purple.
- 3 Do the following:
 - To assign the selected function to an Attention Expand Knob Zone, press any lit **Back** switch on that module.
 - To assign the selected function to an Attention Expand Fader Zone, press any lit Attention switch on that module.

Toggling Attention Expand Zones On or Off

You can toggle Attention Expand Knob and Fader Zones on or off from the Home screen Local Options, and from Soft Keys.

- Being able to toggle Attention Expand Knob Zones on or off lets you quickly place Knob Modules into whichever mode (Attention Expand or standard mode) best suits the current task, without having to reconfigure the Surface page.
- When the S6 Attention Expand Fader Zone is toggled off, the Fader Module continues to show volume, pan, or other track parameters when their corresponding Knob Module is in use as an Expand Knob Zone. When the Attention Expand Fader Zone is toggled on you can adjust parameters from strips on the Attention Expand Fader Zone using you custom parameter maps.

To toggle Expand Zones on or off from the Home screen Local Options:

- 1 Navigate to the Home screen and press the Local Options (gear) icon.
- 2 Tap to enable or disable Enable Attention Expand Knob Zone, or Enable Attention Expand Fader Zone (S6 only).

To toggle Expand Zones on or off from the Soft Keys:

- 1 Make sure you have loaded the default (Factory) Pro Tools appset (for instructions, see Soft Keys).
- 2 On the Automation Module, make sure the right side Soft Key bank is showing the Extras page.



Figure 84. Automation Module Soft Keys showing Attention Expand Faders enabled and Attention Expand Knobs disabled

3 Press the corresponding Soft Key to toggle Enable Exp Fader or Enable Exp Knob.

When the Soft Key switch LEDs are lit, the zones are enabled. When unlit, the zones are disabled. Status is also shown in the Config Expand screen of the Settings > Surface page.

Soft Keys to Toggle Expand Zones On and Off

Soft Keys to toggle Expand Zones on and off are included in the default Pro Tools appset, and are also are available in the Soft Keys Editor as Surface commands if you want to assign them to custom switches or actions.

Expand Zone Soft Keys in S6 v3.6

Command	Command Type	Category 1	Category 2
Enable Attention Expand Knob Zones	Surface >	Attention Track Options >	Enable Attention Expand Knob Zones
Enable Attention Expand Fader Zone	Surface >	Attention Track Options >	Enable Attention Expand Fader Zone

Managing Expand Fader Zone Maps

Expand Fader maps are stored in User Preferences. You can configure the system to automatically load User Preferences, including Expand Fader Maps, by enabling the User Preferences option in the Auto Load settings in Settings > System. To automatically load only Expand Fader maps (without loading all User Preferences), enable the Expand Faders option in the Auto Load settings and disable the User Prefs option.

For more information, see Autoload from Titles and Sessions.

Part V: Preferences

Chapter 27: User Preferences

User Preferences let you configure global S4/S6 settings for Banking, Strips, Layouts, Knobs, Soft Keys, Workstation (General), Solo, and Display Modules, and custom speaker output and monitor names. Scroll the User Preferences screen down or up to access different sections such as Surface, Workstations, and Display Modules.

User Preferences can be saved and loaded manually, and configured for automatic loading from Titles and sessions.

Saving and Loading User Preferences

User Preferences are automatically stored along with Layouts to Title files on the Master Module, and to session files on any designated workstation. You can enable automatic loading of User Preferences and other attributes from the Settings > System page (see Autoload from Titles and Sessions). User Preferences can also be saved and loaded separately using the Save and Load commands in the User Preferences screen. System settings persist and are not stored with, or affected by recall of, User settings.

To enable loading of User Preferences:

- 1 Navigate the touchscreen to the Settings screen, tap User, and configure the available settings as desired.
- 2 Tap the System tab at the top of the screen.
- 3 In the AutoLoad from Titles and Sessions section at the top of the screen, tap to enable User Preferences.



Settings > System, Autoload User Preferences enabled

To load User Preferences from a Title file:

- 1 Enable the System Auto-Load setting User Preferences.
- 2 On the Master Module, press Tracks.
- 3 Touch Load, select the desired Title and touch Open.

To configure automatic loading of User Preferences:

- 1 Enable the System Preference setting Autoload User Preferences from Titles and Sessions.
- 2 Designate a workstation application for automatic store/recall of Layouts by doing the following:
 - On the Master Module press **WS**, then make sure the desired Workstation is selected in the Master Module Soft Keys. If necessary, press its Soft Key to focus it.
 - Press the Soft Key corresponding to the desired application (a blue star appears next to the designated application).

For complete instructions on designating workstations from the Soft Keys or from the Workstation screen, see **Automatic Saving and Loading of Layout Sets by DAW**.

To save or load User Preferences manually:

- 1 Navigate to Settings > User.
- **2** Do either of the following:
 - To save the current User Preference settings, touch Save and then name and save the file.
 - To load a saved User Preferences file, touch Load, select the desired file, and touch Open.

Location of Titles

By default, S6 Titles files are stored in C:\ProgramData\Avid\S6\Titles

If the ProgramData folder is hidden, do the following to show it:

- 1 Navigate the touchscreen to the Settings > About page and press Logout.
- 2 Select Administrator. When prompted enter the default password (password) or your custom password, if any.
- 3 Click the File Explorer tile and in Explorer, tap View, then tap Options.
- 4 In the Folder Options dialog, tap to select the View tab, then tap to enable Show Hidden folders, files, and drives.

Resetting User Preferences to Factory

The Settings > User page provides a Factory command to reset all User Settings to their factory defaults. To save a copy of any custom User Settings use the Save command in Settings > User.

Surface

The Surface section contains Banking, Attention, Strips, Joystick Strips, Layouts, Knobs, Soft Keys, and 3D Panner settings.

Surface
Banking
Mode:
🔿 8 Strips
Whole Surface
Auto-Bank to Selected Track Mode:
● Off
○ If Not Visible on Surface
○ Always
Banking Justification Mode:
Left 👻
Spill Left and Spill Right Justification Modes:
Left - Left -

Figure 85. Surface Banking section in Settings > User

Banking

The settings in the Banking section determine how the surface responds to banking commands.

Mode:

8 Strips The system banks by eight strips.

Whole Surface The system banks by the number of fader strips in the current S6 arrangement.

Auto-Bank to Track Mode

These settings let you define how banking follows channel selection. These settings apply to all Select methods (tapping to select tracks in the Tracks matrix, pressing a channel **Select** switch, or selecting a DAW track on-screen).

Off Banking ignores channel selection.

If Not Visible on Surface Banking ignores track selection if that track is already on the surface. For example, on a 16 fader system displaying tracks 1–16, selecting track 15 will not bank the surface but selecting track 17 (or any other off-bank track) will bank.

Always When enabled, the surface will always bank to the currently selected track.

Bank and Spill Zone Justification Settings

Bank Justification settings let you specify how selected tracks are justified on the surface. Separately, you can also set justification for each Spill Zone.

To set bank justification:

- 1 Go to Settings > Preferences, and scroll to the Banking section at the top of the screen.
- 2 Tap the Bank Justification Mode selector and choose one of the following:

Left Tracks appear on strips starting with strip 1 (left-most strip), providing "end stop" banking.

Left of Master Module Tracks appear on strips starting with the strip closest to the left side of the Master Module.

Right of Master Module Tracks appear on strips starting with the strip closest to the right side of the Master Module.

Right Tracks appear on strips starting with the last (right-most) strip.

To set Spill Zone justification:

- 1 Go to Settings > Preferences, and scroll to the Banking section at the top of the screen.
- 2 To set justification for the left Spill Zone, tap the left-most selector under Spill Left and Spill Right Justification Mode and choose Left or Right. (These provide identical functionality as the Bank Justification modes, except they apply only to zones.)
- 3 Repeat for the right Spill Zone.

Y For more information on configuring and using spill zones, see **Chapter 25**, **"Spill Zones."**.

Attention

The Attention section provides Attention-related User Preferences in one location.



Figure 86. Attention section in Settings > User

Attention Most Recently Clicked DAW Area

(Requires Pro Tools 2019.5 or Later)

You can optimize how S4/S6 reacts to actions on-screen in your DAW using the Attention Most Recently Clicked DAW Area options in the Attention section of Settings > User.

Enable any available setting to control when a mouse click tells the surface to attention a track. For example, if Edit Window is enabled and you click in the time line or clicking/selecting a clip in your DAW, that track is automatically attentioned on S6. If Edit Window is not enabled, clicking in the time line or clicking/selecting a clip will not attention that track. Similarly, if Pan Controls is enabled clicking on a track Pan control or Output window attentions that track on S6 (and on the Master Joystick Module, if any).

Additional Information for Attention Triggers

Definitions for Attention Most Recently Clicked DAW Area Settings

Attention Setting	Trigger	Additional Information
Track Name	Clicking a track name in Mix or Edit window	
Fader	Clicking a track volume fader in Mix window	
Edit Window	 Clicking in a track/playlist lane in the timeline Keyboard shortcuts that move the insertion or section between tracks (such as Command Focus "p" and ";"). See "Edit Selection Move Up / Down" below. 	 When clicking, the attention trigger is only based on the initial mouse click location. If you define a selection spanning multiple tracks, or bound an edit group, the attentioned track is based on the first point of contact on the edit timeline.
Plug-Ins	 Clicking to open a plug-in window Clicking anywhere in the plug-in window (including the header with automation, Librarian and the Target icon) 	
Pan Controls	 Clicking a pan knob or puck in the Mix window Clicking anywhere within a floating Pan window Clicking on a pan puck in the I/O view of the Edit window 	Note that clicking on a pan control n the I/O view of the Edit window will not trigger attention.
Send Controls	 Clicking to open a send window Clicking anywhere within an open send window (including the window Target) 	Note that clicking a send control in any Expanded Sends view will not trigger attention.
Edit Selection Move Up / Down	Using the computer keyboard or EUCON key commands to move the edit cursor or a selection up or down. For example, pressing "p" to move up or ";" to move down will attention the last track in which the cursor lands.	In Pro Tools make sure to enable Link Track and Edit Selection

You can specify where you want clicked DAW controls to appear on S4/S6 by configuring **Display Knobs from Most Recently Clicked DAW Area**.

When using a DAW that does not directly support these new features, the previously available "Attention most recently selected track" setting remains available. When using a DAW that does directly support these new features, "Attention most recently selected track" is not available.

Display Knobs from Most Recently Clicked DAW Area

Use this setting to specify where you want clicked DAW controls to appear on S4/S6 (such as only on the Master Module, on an Expand Knob Module, or on both the Master and Expand Fader).

Beginning S6 19.7, S6 Expand Fader Modules use the Primary and Backup Functions when clicked DAW controls do not have a corresponding knob type (such as clicking on Track Name or in the timeline). In addition to extending the usefulness of the Primary and Backup Function settings, this also prevents Attention Expand Zones from going blank in certain attention-via-click scenarios.

To configure this setting:

1 Go to Settings > User and scroll to the Attention section.

 $\stackrel{\scriptstyle }{\searrow}$ This setting is also available in Home screen Settings.

2 Choose an S4/S6 element from the Display Knobs from Most Recently Clicked DAW Area selector.

Display Knobs From Most Recently Clicked DAW Area	Off
Off	→ Off
	1st Expand Knob Module
	2nd Expand Knob Module
	Expand Fader Module
	Master Module
	1st Expand Knob and Fader Modules
	2nd Expand Knob and Fader Modules
	Master and Expand Fader Modules

Display Knobs from Most Recently Clicked DAW Area setting, in Settings > User

Attention Most Recently Selected Track

This setting lets you configure whether or not selecting a track by pressing its **Select** switch also attentions that track, and optimize behavior for the focused workstation.

Off Selecting a track does not automatically attention that track.

On Selecting a track on any connected DAW automatically attentions that track. If Focus Workstation of Most Recently Attentioned Track is also enabled, the host DAW becomes the focused DAW.

From Focused DAW Only Selecting a track on the focused DAW automatically attentions that track. Selecting a track on any other connected DAW does not attention that track, which also does not change DAW focus if Focus Workstation of Most Recently Attentioned Track is enabled.

Select Most Recently Attentioned Track

Attentioning a track by pressing its **Attention** key also selects that track.

Attention Track of Most Recently Selected Function

When enabled, this setting links track attention with strip Function selection. Pressing the Function key on a Process Module for any strip automatically attentions the corresponding track.

If the Tracks screen local option setting Show Home Screen on Attention is also enabled, pressing a Function key on a Process Module also switches the touchscreen to the Home screen for the attentioned track.

Attention Track of Most Recently Selected Solo

When enabled, this setting links track attention with strip Solo selection. Soloing a track automatically attentions that track.

Pressing Clear Solo (to clear all currently soloed tracks) leaves the last soloed track attentioned.

Focus Workstation of Most Recently Selected Track

When enabled, this setting links workstation focus with track selection. Selecting a track focuses its workstation, switching the Soft Keys and KVM (if any) accordingly. When not enabled, workstations must be focused from Settings > Workstation.

Show Home Screen on Strip Attention

When enabled, the Touchscreen displays the Home screen when any strip is Attentioned by pressing its **Attention** Key on a Fader or Automation Module.

You can also specify a default function view and knob focus for the Home screen when a track is attentioned. See **Backup Func-tion and Knob Page Settings** for more information.

Automatic Spill of Attentioned VCA or Folder

These settings let you toggle Automatic VCA or Folder Spill on/off, and set VCAs or Folders to automatically spill to either spill zone, or to the left or right of the Attention Track Fader when a VCA or Folder Track is attentioned.

Off When **Off** is enabled, no auto-spill occurs (VCAs and Folder Tracks must be spilled manually; see **Chapter 25, "Spill Zones**").

Spill Left of Attention Track Fader Attentioning a VCA or Folder Track automatically spills members to the left of the Attention Track Fader.

Spill Right of Attention Track Fader Attentioning automatically spills members to the right of the Attention Track Fader.

Spill Zone Left Attentioning automatically spills it to the left spill zone.

Spill Zone Right Attentioning automatically spills it to the right spill zone.

For more information, see Chapter 25, "Spill Zones."

Strips

The Strips preference settings control the behavior of hardware strips on Fader Modules, optimize banking for locked strips, manage how Hidden Tracks are displayed, configure Auto Expand functions, and more.

▼ Strips			
Channel Selection Mode			
Sum			
O Intercancel			
Solo Switch			
🔘 Sum			
O Intercancel			
Show Track Number			
Show Workstation N	umber		
🗹 Show Timed Fader V	alues		
Fader Value Timeout			
Off	•	5.00 secs	2.00 secs
Bank Around Locked	Strips in Banking Mod	e	
	Strips in Layout Mode		
Show Hidden Tracks in	<u> </u>		
	Layout Mode	VCA Spill	
Show Closed Folder Mem	bers in		
Banking Mode	V Layout Mode	VCA Spill	
Exclude Inactive Traci	ks		
Ose Protoois Track R	ecord wode Colors	.u	
Auto-Collapse Spill Z	tata With Caill	111	
Spill Zong Manu Kay Mod	late with spin	tions or Typos	
LEDs On	le for Layouts, Worksta	with the second se	
Auto Expand Functions			
	Group	□ Instruments	
Dynamics		Pan	
□ Edit		□ Sends	
□ EQ	Inserts	Quick Controls	
Filters	Inserts Selection		
Auto Expand Faders			

Figure 87. Strips section in Settings > User

Channel Selection Mode

Channel Selection Mode provides choices for Sum and Intercancel functionality:

Sum Each selected track is added to the existing selection(s). Selecting a selected track deselects it.

Intercancel Each selected track replaces the previous selection. Selecting a selected track *does not* deselect it. In Intercancel mode, you can select multiple tracks by touching and holding a track while touching others.

Solo Switch

Solo Switch provides choices for Sum and Intercancel functionality, as well as DAW Controlled.

Sum Each soloed track is added to the existing selection.

Intercancel Each soloed track replaces currently soloed track(s).

To have all connected DAW Solo switches operate globally in Sum or Intercancel modes, enable the corresponding Sum or Intercancel setting.

DAW-Controlled When S6 is controlling multiple DAWs it can be desired to let each DAW determine whether track Solo switches act in Sum or Intercancel mode. You can configure S6 to allow this by enabling the DAW Controlled setting for surface **Solo** switches.

• When enabled, Solo status in each connected DAW follows the sum/intercancel setting within each DAW.

Show Track Number

When enabled, the track number assigned by the parent DAW is shown to the left of the Track name on strip OLEDs on Fader Modules, Track Name blocks Display Modules, and on the Master Module in the Meter and Track Scrollers.

Track and Workstation numbers are only shown in the Meter Scroller when the Home screen Local Option Link Meter Scroller to Track Scroller is disabled.

Show Workstation Number

Similar to Track Numbers, you can choose to have the Workstation number displayed to the left of the Track name on strip OLEDs on Fader Modules, Track Name blocks Display Modules, and on the Master Module in the Meter and Track Scrollers.

Track and Workstation numbers are only shown in the Meter Scroller when the Home screen Local Option Link Meter Scroller to Track Scroller is disabled.

The Workstation number is derived from the order in which workstations are listed in the Connected column in the Settings > Workstation page.

To show or hide Workstation number:

- 1 To to Settings > User, and navigate to the Strips section.
- 2 Tap to toggle the Workstation Number setting on or off.

When enabled, displays on Fader and Display Modules show Workstation number to the left of track number separated by a vertical line (such as 1|1 for workstation 1/track 1, and 2|4 for workstation 2/track 4).



Fader Module display for a track when Show Workstation Number is enabled

Show Fader Values

Values can temporarily replace track name on S6 Fader Modules and S4 CSMs when the fader is touched or adjusted.

Timed at Fader Release		
Off		
While Fader is Touched		Of
Timed at Fader Touch, Off at Relea	ise	
Timed at Fader Touch		
Timed at Fader Release		

Momentary Fader Value settings in S6 Settings > User

The length of time values are displayed is determined by the Show Fader Values setting and, if applicable, Fader Value Timeout setting.

Settings for	• Momentary	Fader	Value
--------------	-------------	-------	-------

Setting	Description
Off	Displays always show track name (ignore Fader Value Timeout)
While Fader is Touched	Shows value when fader is touched and reverts to track name when released
Timed at Fader Touch, Off at Release	 Shows value on touch, reverts to track name when the timer expires If the fader is released before the timer expires, the display reverts to name If the Fader Value Timeout slider is set to Off (full left), then values are <i>not</i> shown
Timed at Fader Touch	 Shows value on touch, reverts to track name when the timer expires If the fader is released before the Fader Value Timeout setting expires, the display stays on value until the timer expires then reverts to name If the Fader Value Timeout slider is set to Off (full left), then values are <i>not</i> shown
Timed at Fader Release (default)	 Shows the value while touched and continues to show value on release until the timer expires If the timer is set to OFF, shows value when fader is touched and reverts to track name when released (equivalent to 'While Fader is Touched" option)

Fader Value Timeout

The Fader Value Timeout setting lets you customize the length of time values are displayed when faders are touched between 0 and 5 seconds.

igee Y For Fader Module displays to follow the Fader Value Timeout setting, make sure to enable Show Timed Fader Values.

Bank Around Locked Strips

You can configure Bank Around Locked Strips separately for Banking mode and for Layouts mode.

• When enabled, locked strips maintain their presence in the corresponding mode (Banking or Layouts) while still being unaffected by banking. When a strip is locked, a duplicate appears immediately to its right shuffling all subsequent strips to the right by the number of locked strips. By default, Bank Around Locked Strips in Banking Mode is enabled.

When this setting is enabled, locking already locked strips creates multiple duplicate strips, providing multi-strip access to the same track. This can be useful to simultaneously access parameters from different functions (such as EQ, send level, and reverb).

• When either of these settings is not enabled, locking does not shuffle other strips in the corresponding mode (Banking or Layouts). By default, Bank Around Locked Strips in Layout Mode is disabled to help maintain consistent track-to-strip assignments and locations in Layouts.

Show Hidden Tracks In

These Preferences let you choose whether or not hidden tracks are shown in Banking, Layout, or VCA modes. When configured to be shown, hidden track names are dimmed on the touchscreen, on Fader Modules, and on Display Modules.

To configure hidden track display:

- 1 Go to Settings > Preferences.
- 2 In the Strips section, enable the following settings as desired:

Banking Mode When enabled, hidden tracks are visible in Banking mode and can be assigned to Layouts (default is disabled).

Layout Mode When enabled, hidden tracks stored in Layouts are visible when the layout is recalled (default is enabled).

 \overleftrightarrow{V} In Layouts mode, hidden tracks are not shown in the track screen even when the preference to show hidden tracks is enabled.

VCA Spill When enabled, hidden tracks are visible when their master VCA is spilled (default is enabled).

When enabled to be shown in Banking mode, hidden tracks on the Tracks and Home screens have dimmed track names in the Track matrix, Meter scroller and Function scroller. Track Numbers (if enabled) are hidden. On Fader Modules, strip displays are dimmed.

When hidden tracks are shown, they are indicated on Display Modules and distinguishable from muted tracks as follows:

- If a track is active, shown, and unmuted, it appears fully lit ("1" in Figure 88).
- If the track is hidden but unmuted, track name (only) is dimmed, and no track number is shown ("2" in Figure 88).
- If the track is hidden and muted, the entire strip is dimmed, and no track number is shown ("3" in Figure 88).
- If a track is muted, the entire strip is dimmed, track name is dimmed slightly, and track number is shown ("4" in Figure 88).

3

4

Audio 4

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• If a track is inactive, the "@" symbol appears before its group or input/output assignments.



Figure 88. Hidden tracks on Display Modules

Show Closed Folder Members In

You can choose whether or not member tracks of closed folders are shown on the S4/S6 surface and touchscreen, similar to the settings for hidden tracks. Display of closed folder member tracks can be configured separately for Banking, Layouts, and VCAs modes in the Strips section Settings > User.

Banking Mode When enabled, member tracks of closed Folder Tracks are visible in Banking mode and can be assigned to Layouts (default is disabled).

Layout Mode When enabled, member tracks of closed Folder Tracks stored in Layouts are visible when the layout is recalled (default is enabled).

Y In Layouts mode, member tracks of closed Folder Tracks are not shown in the track screen even when the preference to show hidden tracks is enabled.

VCA Spill When enabled, member tracks of closed Folder Tracks are visible when their master VCA is spilled (default is enabled).

Exclude Inactive Tracks

This setting can increase system responsiveness and performance by not loading inactive tracks from Pro Tools sessions or Title files. Enable this setting to reduce load times and overall performance, especially when working with large sessions and session templates that have many active and/or inactive tracks.

To exclude or include inactive tracks:

- 1 Go to Settings > User and navigate to the Strips section.
- 2 Click to toggle Exclude Inactive Tracks.

Use Pro Tools Track Record Mode Colors

- When enabled, this setting sets all S6 indicators to follow Pro Tools track Record mode indication. For example, when Pro
 Tools is in TrackPunch or DestructivePunch mode and tracks are enabled for punch recording, indicators flash blue and red.
- When not enabled, record indicators light (or flash) red only.

Auto-Collapse Spill Zones with Layout Recall

When enabled, recalling a Layout automatically collapses the currently enabled Spill Zone(s).

Make sure neither Spill Zone is selected (make sure neither L Spill or R Spill are lit white). If necessary, press L Spill and/or R Spill so that their switch LEDs light in the color corresponding to what is spilled (dark green for VCAs, light blue for Track Types, or dark blue for Layouts).

Synchronize Folder State with Spill

The Synchronize Folder State with Spill setting lets you link or unlink Pro Tools track display and EuControl Folder Track Spill.

Go to Settings > User, scroll to the Strips section, and configure the Synchronize Folder State with Spill setting as desired.

- When enabled, spilling a Folder Track opens that Folder Track in Pro Tools. Unspilling closes the Folder Track.
- When not enabled, spilling and unspilling Folder Tracks is not reflected on-screen in Pro Tools.

Spill Zone Menu Key Mode for Layouts, Workstations or Types

This settings lets you optimize how Menu switch LEDs behave when spilling Layouts, workstations, and track types.

LEDs Off When enabled, strip Menu switch LEDs do not light when elements are spilled.

LEDs On When enabled, strip Menu switch LEDs light in the same color as the element being spilled.

LEDs On and Collapse Spill When enabled, pressing a lit Menu switch while elements are spilled unspills.

For more information, see Spill Zones.

Auto Expand Functions

This setting lets you designate functions to automatically expand when they are selected. In use, enabling this setting saves you a step of first enabling **Exp** (Expand) on a strip before selecting a function.

To use Auto Expand Functions:

- 1 Go to the Settings > User page, and scroll down to the Strips section.
- 2 In the Auto Expand Functions section, tap to select each function you want to configure for auto expand.

Auto Expand Functions		
🗌 Bus	Group	Instruments
V Dynamics	🗆 HEAT	🗌 Pan
🗆 Edit	🗆 Input	✓ Sends
 ✓ EQ	✓ Inserts	Quick Controls
Filters	✓ Inserts Selection	
✓ Auto Expand Faders		

Auto Expand Function section in Settings > User

Not all functions apply to all DAWs. For example, HEAT only applies to Pro Tools, and Quick Controls to Cubase and Nuendo.

3 Bank the desired track to a strip on the surface.

Make sure the strip is not below either Knob Module designated as an Expand Zone.

- 4 On a Process Module or CSM, press a Function switch for a function you enabled to Auto Expand in the previous step. In that strip on the Process Module or CSM, the **Exp** switch lights. On the corresponding Knob Module(s), parameters for the selected function occupy as many encoders as required.
- 5 To expand a different function on that strip, press the switch for the desired function.
- 6 To exit, press the lit **Exp** switch on a strip or do the following:
 - To collapse all currently expanded functions, press the Master Module All switch and then press any lit Exp switch.
 - Press a Function switch for any function that is not enabled for Auto Expand.

Auto Expand Inserts Selection

The Inserts Selection option was recently added to the choices for Auto Expand. Enable this setting to have any insert Auto Expand when selected from the top level knob set on S6 Knob Modules or from the S4 upper Knob section.

With the ability to trigger Auto Expand from Inserts Selection you have more flexibility for when Expand mode is automatically enabled. For example, by leaving the Auto Expand > EQ setting off you can use the **EQ** switch to list a track's EQ plug-ins without immediately entering Expand mode for the first, last edited, or designated cycle slot. With Inserts Selection enabled, you can then directly expand the EQ plug-in you want. By comparison, when only Auto Expand > Inserts is enabled pressing the **Ins** switch causes other strips to darken.

Auto Expand Faders

Enabling the Auto Expand Faders setting lets you **Expand** mapped parameters to faders with a single press of the strip **Exp** switch. When not enabled, expanding parameters to faders requires you to hold down the **Exp** switch, or press **Attention** + **Exp**.

Assign Right Joystick Timeout

The Assign Right Joystick Timeout setting determines the time window within which attentioning an additional track assigns that track to the right joystick, letting you optimize how tracks can be assigned to the different joysticks on Master Joystick Modules.



Chapter 27[.] User Preferences

You can specify the time range for joystick assignment to between 0 and 3 seconds in Settings > User.

- A setting of 0/Off means the right joystick will not be assigned to a different track than the left joystick.
- Any setting of 0.25 seconds or higher specifies the time window in which attentioning an additional track assigns that track to the right joystick.

Layouts



Figure 89. Layouts in Settings > User

Ignore Functions on Layout Recall

By default, Layouts store and recall the current assignment of functions. You can defeat this behavior so functions are not changed when recalling Layouts by enabling the Ignore Functions on Layout Recall setting.

- When disabled (the default setting), recalling a Layout reassigns controls to the functions assigned while the Layout was saved.
- When enabled, recalling a Layout leaves the surface on its current function assignments and ignores any stored in the Layout.

Recall Layout Banking

(Layout Banked Position on Recall Mode)

The Layout Banked Position on Recall Mode setting controls if and how banking is stored and recalled along with Layouts.

Each available setting is described in the table, below.

- Layout Banking Position is the banking offset that is saved with each Layout.
- Surface Banking Position is where the surface is currently banked at the moment.

Options for Layout Banked Position on Recall Mode

Option Name	Description
Reset Banked Position to Home	Layout banking value is ignored, surface banking position is reset to Home. Layout is recalled with- out any merge changes.
Use Global Banked Position (Do Not Bank)	Layout banking value is ignored, surface banking position is not changed. Layout is recalled with- out any merge changes.
Update Global Banked Position to Stored Position	Surface banking position is updated to the stored Layout banking value. Layout is recalled without any merge changes.
Merge Layout at Stored Position	Surface banking position is not changed. Layout is recalled to the banking position stored and merged with the existing surface tracks. This can leave the existing tracks visible to the left or right of the recalled layout tracks.
Update Global Position for Full Layouts, Merge for Partial	If the Layout being recalled fills the entire set of strips available and has no holes, the surface bank- ing position is updated to the stored Layout banking value and the Layout tracks are recalled. If the Layout does not fill the entire set of strips available or has holes in the set of strips stored in the Lay- out, the surface banking position is not changed, the Layout is recalled to the banking position stored, and merged with the existing surface tracks. This can leave the existing tracks visible to the left or right of the recalled Layout tracks, just like the "Merge Layout at Stored Position" option.

Auto Save Changed Layout on Recall Mode

This setting lets you optimize how **Layouts** are managed. If you create or modify a Layout but press Recall before storing it as a new Layout, a backup Layout can be created in the next available block in the grid, or the current layout can be updated. You can specify whether to save the new track arrangement to a new layout or to the currently loaded layout using the selector in the Layouts section of Settings > User.

To configure Layouts Auto-Save settings:

- 1 In Settings > Preferences, scroll to the Layouts section.
- 2 Tap the selector for Auto-Save Changed Layout on Recall Mode: and choose one of the following:

Off When enabled, no backup Layouts are created.

Save to New Layout Slot When enabled, backup Layouts are created in the next available block in the grid. Backup Layouts will be automatically named and numbered, such as "Backup 01." If there are no tracks assigned, no backup will be created.

Save to Current Layout Slot When enabled, the current (last recalled) layout is updated (no backup is created).

Knobs

Settings in the Knobs section let you control how functions and parameters are displayed across Knob Modules, and set how parameter values respond to knob rotation.



Figure 90. Knobs section in Settings > User

Send/Insert/Input/Bus Knobs Reversed

The Sends/Inserts Knobs Reversed preference lets you configure Knob Modules to display sends and inserts, input source, and bus (output) destinations in either of two ways, "a-j" or "j-a."

- When enabled, function choices are displayed from the bottom knob, up (slot "a" appears on the knob closest to the operator, "b" above it, and so on). This is the default setting.
- When disabled, function choices are displayed from the top knob, down (slot "a" appears on the knob furthest from the operator, with "b" below it, and so on).

Reverse Function Pages for 5-Knob Strips

This setting lets you configure Knob Module function views to display parameters in either their default order, or "reversed" from their factory mapping. When enabled, EQ plug-in parameters start with low frequency parameters instead of high (or the opposite, depending on the default mapping of that plug-in).

Remember Joystick Knobs by Track

This setting determines whether or not pan parameter assignments persist on Master Joystick Module encoders.

- When enabled, the assignment of pan parameters to Master Joystick Module knobs is maintained for each track when attentioned.
- When not enabled, attentioning a new track to either joystick inherits the knob assignments of the previously attentioned track.

Knob Speed and Sensitivity

These settings let you optimize knob response. Two pairs of controls are available (Maximum Speed, and Sensitivity) to configure response settings for function knobs and, separately, for pan knobs.

- · Knob Maximum Speed and Knob Sensitivity configure the response for all function knobs other than pan.
- Pan Knob Maximum Speed and Pan Knob Sensitivity configure the response for knobs controlling pan, only.

Rotating any knob slowly adjusts parameters at the finest resolution available from the function/parameter. The following settings determine response when knobs are twisted quickly. Recommended (default) settings are shown above each slider.

Maximum Speed Determines the range of a knob relative to the minimum to maximum values of the current parameter. At its lowest setting (10), rotating a knob quickly requires approximately two complete rotations to go from minimum to maximum. At its highest setting (100), parameters go from minimum to maximum value with a single rotation of the knob.

Sensitivity Determines how a knob reaches the current Max Speed setting. When set to its maximum setting (100), rotating a knob slowly adjust parameters at the finest resolution available, and rotating quickly adjusts parameters as determined by the current Max Speed setting. At its lowest setting (0), response speed is roughly relative to rotation speed, achieving Max Speed only when turned very quickly.

Examples

- For "fine" control (a 1:1 relationship between knob rotation and parameter increments), rotate the knob slowly.
- To be able to cover an entire parameter range with one rotation of a knob, set Max Speed to its maximum setting (100). For example, set Max Speed to its highest setting to be able to sweep an EQ filter from lowest to highest frequencies with one twist.
- To further optimize knob response, adjust Sensitivity to set the knob speed required to achieve the current maximum speed.
- Because Knob and Pan Knob Speed and Sensitivity settings are stored in User Preferences your current settings will be overwritten when you open a previously saved session or Title and the Autoload from Titles and Sessions setting for User Preferences is enabled in Settings > System. If this occurs, reset the Speed and Sensitivity sliders to your preferred settings and then resave the session and/or Title.

Number of Knobs per Plug-in or Instrument Transmitted over EUCON

This setting helps optimize S6 performance for plug-ins with extremely large numbers of parameters. Available settings range from 100/minimum to 2000, or Unlimited/maximum, with a default setting of 1000. Settings lower than Unlimited do not affect DAW performance or automation in any way, they only limit the amount of data being sent or received across EUCON. Limiting the amount of data can improve performance.

Pro-Load All Knobs on Session Open (Speeds All Mode)

This setting provides an additional way to balance system response with session load times.

- When enabled, S6 loads all parameters over EUCON when the session or project is first opened. This makes session navigation immediately faster, especially if you use the **All** mode frequently, but sessions and projects can take longer to initially open and load.
- When not enabled, S6 loads knob parameters as determined by the Number of Knobs per Plug-In or Instrument Transmitted Over EUCON setting.
Soft Keys

These settings turn Soft Key switch LEDs on or off, optimize indication of MultiDAW Soft Keys, choose how Workstation choices are displayed in the Soft Keys, and let you set the workstation Soft Key pages to automatically close after selecting a workstation.

Soft Key LEDs Enabled

When selected, LEDs in Soft Key switches on the Master and Automation Module light when enabled/active. When unselected, Soft Key LEDs remain unlit regardless of their active or inactive state.



Figure 91. Soft Keys section in Settings > User

MultiDAW Feedback From Focused DAW

This setting optimizes LED indication and focused DAW feedback, and applies to all multi-DAW Soft Keys from any DAW. If you enable the MultiDAW Soft Key Feedback From Focused DAW Only option for a Soft Key, the multi-DAW LEDs will not dim (they will only show you the state of the focused DAW). In addition, if the currently focused DAW is not set as one of the multi-DAW Soft Key targets, the LED will be off no matter the state of any DAWs affected by the Soft Key.

System Soft Key Icons Enabled

This setting enables (or disables) the display of icons for Layouts and Workstation Soft Keys. This setting is enabled by default, but you can disable it if you prefer to have only text (names) shown for Layout and Workstation Soft Keys. When enabled, Layout and Workstation Soft Keys show the following icons:

Soft Key icons for Workstations



System Soft Key Display Mode

These settings let you specify which Soft Key bank(s) to devote to system Soft Key functions including spilling and recalling Layouts, tracks, and workstations, and whether to have spill/recall Soft Keys automatically close.

Both Master Module Soft Key Displays When enabled, both banks show choices for the currently enabled element, even when the number of Layouts, tracks or workstations only requires one bank. Note that when spilling workstations, the left bank will show connected workstations and the right bank will show available applications on the currently attentioned workstation.

Left Master Module Soft Key Display Only When enabled, only the left bank shows choices for the currently enabled element. When spilling workstations, use the **Previous** and **Next** Soft Key bank switches to access applications.

Right Master Module Soft Key Display Only When enabled, only the right bank shows choices for the currently enabled element. When spilling workstations, use the **Previous** and **Next** Soft Key bank switches to access applications.

Auto Close Surface Recall Soft Keys

When enabled, Soft Keys automatically close (return to their previous view) after a Layout, track type, or workstation is spilled.

3D Panner

These settings configure the Atmos panner.

Use 3D Panner on Joystick Module

Toggles MJM 3D room view on/off globally (all screens on all MJMs).

3D Panner Ceiling/Floor Rotation

Rotates the 3D room view up and down on the Master Module and MJM (if enabled).

3D Panner Left/Right Rotation

Rotates the MJM 3D room view left and right on the Master Module and MJM (if enabled).

Workstation

The Workstation settings include General and Solo settings.



Figure 92. Workstation, General section in Settings > User

General

Ö These features may not be implemented by all audio applications, so consult your documentation.

Workstation Follows Knob Set Changes

The workstation displays the controls selected on the Knob or Process Module.

Open Windows on Knob Touch

Extends the Open Windows on Workstation When Editing Mode functionality to knobs assigned to individual parameters.

Open Windows on Workstation Attention

- When this setting is enabled plug-in, pan, or send window in your DAW will be opened when a track is attentioned according to the current Attention Most Recently Clicked DAW Area settings.
- When this setting is not enabled (the default setting), windows will only open in the DAW when you explicitly attention a track from your control surface.

Open Windows on Workstation When Editing Mode

Opens plug-in, pan, and/or send windows on the workstation when editing them on the surface.

To configure this setting:

- 1 Choose an option from the Open Windows on Workstation When Editing Mode selector:
 - Off
 - · Plug-Ins Only
 - · Plug-Ins and Pan
 - · Plug-Ins and Sends
 - · Plug-Ins, Pan, and Sends
- 2 When Open Windows on Workstation When Editing is enabled for plug-ins, pan and/or sends, do any of the following:

Plug-Ins Pressing a knob to access a function (such as Inserts > EQ3, or EQ if that type of insert exists on the currently selected track) opens the corresponding window on-screen and closes any previously opened window of the same types.

Pan and Sends Touch a knob assigned to Pan or Sends.

If any Soft Key assignments included the previous Open Plug-in on Workstation When Editing command they must be manually renamed to the new command name.

Close Plug-ins on Workstation When No Longer Editing

Closes plug-in, pan, or send windows when another function is selected on S6.

Tip for Managing Pro Tools Windows

If you want certain plug-in, output/pan, or sends windows to remain visible at all times, use the *Target* feature in Pro Tools. For windows such as essential metering plug-ins, turn the Target off to ensure it remains visible. Click on the Target to toggle it on/off, or hold Shift on the computer keyboard while clicking to open a plug-in window to open it with the Target off. For example, using the Control app hold down Shift on the computer keyboard (or the Soft Key for computer Shift) while tapping an Insert. On S3, hold down **Multi-Select/Shift** (or Shift on the computer keyboard. The window opens with the Target off.

When the Target icon is unlit (grey), that window remains on-screen until you explicitly close that window.

Track	Preset 🗢	Auto		
Master 1 a 💙 a 🍸	<factory default=""></factory>	6		•
MasterMeter	- + 🔁 COMPARE	SAFE	Native	

Target, unlit/off

When the Target icon is lit red in a plug-in, output/pan or send window, that window is replaced when another similar element is attentioned (such as a plug-in on a different track). By default, windows open with the Target on.

Track	Preset 🗢	Auto	
Master 1 a	<factory default=""></factory>	8	
MasterMeter	- + 🔁 COMPARE	SAFE Native	

Target, lit/on

Post Module Sends Record with Arm

When this option is enabled, the Master Post Module sends a Transport Record Arm command each time you punch in on a track.

Enable Off-Disk Only (PEC) Meters for Post Module Assignment (Pro Tools Only)

This setting ensures that PEC track meters will always be visible on MDMs regardless of the status of the PEC track Input Monitoring setting.

Solo

Solo modes are implemented differently by different audio applications. In Pro Tools, Solo Mode has the following three settings which are selected by the Solo settings in the Workstations tab:



Figure 93. Workstation, Solo section in Settings > User

Solo In Place Soloing a track mutes all tracks except the soloed track(s).

After-Fader Listen Solo signal is derived after the fader (AFL).

Pre-Fader Listen Solo signal is derived before the fader (PFL).

Display Module

The Display Module section includes the Common, Display, and Master Meter Display sections.



Figure 94. Display Module section in Settings > User

Common

The following settings apply to all Display Modules (standard and Master Meters).

Automation on Display Modules

Display Modules and Master Meter Modules can show automation data along with waveforms. When enabled, automation can be shown for individual parameters on one or more strips. You can set a variable amount of opacity and control the left-to-right orientation of displayed automation data.

Show Automation When enabled, automation breakpoint data can be shown on Display Modules and customized using the settings for Reverse Automation Lanes and Automation Opacity.

Reverse Automation Lanes Inverts the orientation of displayed automation data. (Pan is unaffected by this setting.)

Automation Opacity Adjusts the visibility of waveforms behind automation data. When off (0 percent), automation is shown as a single thin line. Raising the percentage adds an increasingly opaque fill.

For more information, see Automation and Mixing.

Display

The following settings apply to standard Display Modules only.

Layout

Tap the Layout field to select a view for all standard Display Modules.





Figure 95. Display Module section in Settings > User

Display Modules have the following display layout options:

• Large Meters, Large Waveforms, Meters and Waveforms, Meters and Function, Waveforms and Function, Waveforms and Dual Function + Route.

When any Function display mode is enabled, Display Modules show different functions, graphs, and knobs/values depending on the strip and its associated display state.

- When a function is selected that doesn't have a graph associated with it, up to eight encoder knobs are shown.
- When a selected function has a graph (such as EQ), it is displayed simultaneously.
- Group name, Group ID and color are shown. (To see all Group assignments for a track, press Grp on the Process Module.)
- When any of the Dual Function display modes is enabled, the Function view splits into an upper and lower view. The currently selected function is shown above, and Pan below.
- When Waveforms and Dual Function + Route is enabled, each track's I/O assignments are shown below the functions.

Touching or adjusting a knob temporarily displays the value for that knob, and reverts back as determined by the current setting of the .

You can change the Display Module view from the surface for all tracks, or for individual tracks. See Changing Display Module Views From the Surface.

Waveform Zoom

You can adjust the zoom of waveforms shown on Display Modules from 3 seconds up to 60 seconds. Waveform Zoom can be adjusted during playback. On the Master Module, the **Display 1** switch zooms out by 10 seconds; **Display 2** zooms in 10 seconds.

Panner Divergence and Position Display Mode

This setting lets you configure the display of divergence and pan position (trajectory lines) on Display Modules. The available settings are the same as those available on the Master Module surround panner, but only affect Display Modules.

None When enabled, neither Divergence or pan lines are shown on Display Modules.

Left When enabled, left channel Divergence and pan lines are shown on Display Modules.

Right When enabled, right channel Divergence and pan lines are shown on Display Modules.

Both When enabled, both left and right channel Divergence and pan lines are shown on Display Modules.

Master Post Display

These settings let you control the following aspects of MDMS (only):

DIR Meters in Red Sets the display color for DIR meters to red on Master Post Display Modules.

Number of Post Rows Sets the display format for Master Post Display Modules.

For more information, see Using Master Post Display Modules.

Master Meter Display

These settings let you control the Waveform Zoom for Master Meter Display Modules.

Number of Post Rows Sets the display format for Master Post Display Modules.

Waveform Zoom Sets the size of displayed waveforms on Master Meter Display Modules.

For more information, see Using Master Display Meter Modules, and Using Master Post Display Modules.

Chapter 28: System Preferences

S4/S6 System Preferences include General settings for (use) preferences, Surface brightness, GPIO, and language, as well as Workstation (KVM) enable. System Preferences are local to the system and are not saved or loaded with User Preferences.

General

Autoload from Titles and Sessions

The Auto-Load From Titles and Sessions controls specify which elements of a project you want to be automatically loaded when opening Titles and Sessions. These System preferences are saved on the S4/S6 system and are not affected by loading of User preferences. For more information, see **Saving and Loading User Preferences**. The following table describes each available setting.



Figure 96. Auto-Load settings in Settings > System

Setting	Description
User Preferences	Loads the stored configuration of Settings > User settings, which includes Local Options for the Tracks, Home, and Monitoring screens, as well as Expand Fader maps (if any)
Banking/Layout State	Restores standard banking or Layouts mode, as stored in a Title, session, or project
Layouts and Meters	Loads all standard and Meter Layouts stored in a Title, session or project
Layout Banked Position	Restores the surface to the same Layout banking state (including Spill Zones, if any) as when the session or project was closed
Channel Strip Keys	Loads all Channel Key assignments stored in a Title, session or project
Post Module State	Restores any Link or Locked states on Master Post Modules
Post Layouts	Loads all Post Layouts stored in a Title, session or project
Locked Strips State	Restores all locked strip states (requires the matching workstation be connected)
Spill Zone State	Restores Left and Right spill zones states, including track and function assignments as well as VCA spill (if any), as stored in a Title, session, or project
Custom Knob and Fader Maps	Loads the mappings for Custom Knobs and Fader Maps

Auto Load from Titles and Sessions

Clear When Session Data Clears

These settings let you select which elements you want cleared from S4/S6 when sessions are closed. Choices include Layouts, Custom Knob and Fader Maps, and Channel Strip Keys.



For more information on these and other Auto Load settings, see the S4/S6 Guide.pdf.

Remove Unused Session Data on Load

When enabled, loading a Title or opening a different session clears any unused and/or temporary system lookup data, reducing load times. This should be left on unless you experience load issues.

Use Legacy Layout Recall Matching

Tracks are stored in a Layout using a unique track ID (UID) to ensure tracks appear on the correct strips. If a Layout is recalled but S4/S6 cannot match the track UID it will search for a matching track name, or (absolute) track number, and then by workstation. By storing and matching track ID, name and/or number, and workstation you can create Layouts in session templates that will per-sist in new sessions.

For maximum session and project compatibility, this preference in Settings > System lets you enable "legacy" track matching as available in 2021.10 and earlier. When the Use Legacy Layout Recall Matching setting is enabled, track matching will use UID, track name, or (absolute) track number only. This setting is disabled by default.

Designating an Auto-Load Workstation

To designate a workstation for Auto-Load and Store:

1 Navigate the touchscreen to Settings > Workstation, and check the Applications list in the lower right of the screen. The workstation must have the blue star indicator.



Settings > Workstations showing Pro Tools designated for automatic store and recall

2 If the blue star is not next to a list application, tap the desired application to assign it as the Auto-Load/Store application).Location of Custom Knob Map Files

Surface

System Surface settings include Brightness, GPIO, and Language.

Brightness

These settings globally manage the brightness of various S6 components, and can help save energy.

Surface	
Brightness	
Auto	
Touchscreen	
90 %	
OLED, LED, Display Module	
100 %	
Console Timeout	
1 hr, 10 mins	
Activate Screening Mode (Touch Master Module Screen to Exit)	

Figure 97. Surface Brightness section in Settings > Preferences,

Auto

When selected, light sensors at the top of the Master Module measure ambient illumination to set appropriate brightness levels for the OLED, LED, Display Module, and touchscreen.

Touchscreen

Touch and drag the slider to set the desired brightness.

OLED, LED, Display Module

Touch and drag the slider to set their desired brightness.

Console Timeout

Touch and drag the slider to set the desired time for displays to sleep when the system is inactive.

Activate Screening Mode

You can enable Screening mode to temporarily darken the S4/S6 surface. When enabled, all knobs, OLEDs and screens (including Display Modules, if any) darken. On the Master Module touchscreen, the S4/S6 logo appears to indicate Screening mode.

Faders stay in their current position and continue to control DAW channel levels, but do not move in response to existing automation (if any).

To exit Screening mode, tap anywhere on the Master Module touchscreen.

Screening mode can also be activated and deactivated using Soft Keys. If you have any previously created soft keys for Screening mode that also included the Faders Off command, edit those soft key assignments to instead use the Disable Faders command. Disable Faders is also available as a Surface soft key (Surface Options > Strips > Disable Faders), and it allows faders to more reliably exit Screening mode.

Strips

The setting in this section lets you optimize fader behavior in Screening mode.

Disable Faders

The setting Disable Faders is provided to be used in soft key definitions for Screening mode.



Figure 98. Strips settings in Settings > System

 $\dot{\nabla}$ The Disable Faders setting replaces the previous Faders Off command in the soft key for Screening Mode (dark mode) to ensure faders come back online when exiting Screening mode.

GPIO

The settings in this section let you configure General Purpose inputs and outputs.



Figure 99. GPIO settings in Settings > System

For more information, see GPIO.

Language

You can specify the language in which track names, memory locations and dynamic Soft Key names (such as Soft Keys for memory locations or groups) are displayed using the new Language setting in Settings > Preferences.

Track names language preference (requires application re-start):	Language preferences	
	Track names language preference (requires applicat	tion re-start):
English (United States)	English (United States)	

Figure 100. Language section in Settings > Preferences.

Tap to display the choices for language, then tap again to make a selection. After changing the Language setting, you must restart the Master Module.

Workstation

The Workstation settings let you enable workstation alerts and KVM switch support.



Figure 101. Workstation settings in Settings > System

General

Show Workstation Alerts

S4/S6 can alert you to network errors, should they occur. These alert messages can help identify network problems (without having to look through log files) and give you the opportunity to minimize any possible problems by restarting the S4/S6.

Workstation Alerts are disabled by default, but you can enable them in the Workstation section of Settings > System. When enabled, any Workstation Alert messages appear only once and can be easily dismissed, letting you decide whether you want to continue or restart.

KVM Switch

When enabled, a dedicated KVM tab appears across the top of the Settings screen, providing controls for serial and Ethernet KVM switches. You can also name sources and destinations, and route up to two devices (for example, to manage two displays).

ThinkLogic KVM Support S4/S6 fully supports Ethernet KVM switches by ThinkLogic. These are configured the same way other KVM switches are enabled in S4/S6 (Settings > System, KVM Switch "Support Enabled", as described above).

For product information and configuration instructions, visit the ThinkLogic website:

https://www.thinklogical.com/

When a supported KVM switch is connected to the Master Module COM port (9-pin male), a single display can follow S4/S6 workstation focus, or be selected independently. You can also use Soft Keys to select workstation focus and/or to switch KVM sources.



Figure 102. COM port for serial KVM connection (original Master Module shown)

To configure KVM:

- 1 Navigate the touchscreen to Settings > System.
- 2 Scroll to the Workstation section and under KVM Switch tap Support Enabled to enable it (a check mark appears).

Workstation	
KVM Switch	
✓ Support Enabled	

KVM Switch enabled

When KVM support is enabled, an additional tab (KVM) appears across the top of the touchscreen.

- 3 Tap the KVM tab at the top of the Settings screen to display the KVM Settings page.
- 4 Select your KVM switch type (Serial, or IHSE (Ethernet)) from the KVM Settings > Mode selector at the bottom of the page. S4/S6 supports serial KVM switches from Geffen, and Guntermann and Drunck, and Ethernet controlled switches from IHSE.

KVM Sett	ings
Mode	Disabled Disabled
	Serial
	IHSE Draco Tera (Ethernet)

KVM mode selector

5 The upper part of the page displays settings for the chosen type of switch.





KVM settings for Serial (left) and Ethernet (right)

To configure a serial KVM switch:

• Enter the serial settings specific to your device. Refer to the documentation from the manufacturer (the default settings will work for most models).

To configure an Ethernet KVM switch:

- 1 Tap the IP field and type the IP address using the on-screen keyboard.
- \overleftrightarrow To determine the switch IP address, refer to the documentation from the manufacturer.

Once a valid IP address has been entered and S6 is able to connect to the Ethernet controlled KVM switch, the Inputs and Outputs lists populate with available devices.

- 2 Drag a source from the Workstation Inputs list and drop it on the desired slot (workstation) in the KVM Assignments list.
- 3 Drag one or more destinations from the Terminal Outputs list to the same KVM Assignment slot.

To update the lists of available sources and destinations:

Tap the Sync button.

KVM Source and Destination Assignment and Naming

Use the KVM page to assign and name sources and destinations. Each KVM assignment can include one source (Workstation Input) and up to two destinations (Terminal Outputs).

To manage KVM(s):

- 1 Make sure you KVM Switch "Support Enabled" is enabled in Settings > System, then go to Settings > KVM. The KVM page shows current KVM Assignments in the upper right, Workstation Inputs (sources) and Terminal Outputs (destinations).
- 2 To assign input, drag and drop a Workstation Input to a slot in the KVM Assignments column.
- 3 To assign output, drag and drop up to two Terminal Outputs to a slot in the KVM Assignment column.



Assigning input and outputs

4 To rename, double-click a Workstation Input name or Terminal Output name and enter a new name.



Settings						
KVM Abo			Surf		Soft Keys	
Workstatio	on Inputs			I	KVM Assignments	
1001 S	System 19	9364			System 19364	
1002 S	System 29	9363			BKG 56029321	
1003 S	System 39	9366			System 29363	
1004 S	System 49	365			BKG 56029321	
					System 39366	
					BKG \$6029321	
					System 49365	
					BKG S6029321	
Terminal O	Outputs					
3001 B	BKG S602	9321				

Renaming elements in System > KVM

To reset all inputs and outputs to their defaults, press the Clear Names switch (along the bottom of the KVM page).

Part VI: S4/S6 Modules

Chapter 29: S4/S6 Master Modules

Each S4/S6 system has master and channel modules. This section describes the following master modules:

- Master Module
- Automation Module
- Master Joystick Module
- Master Post Module

Master Module

The upper part the Master Module features a 12.1-inch touchscreen with eight adjacent knobs that control virtual knobs on the screen. The upper part of the Master Module can be tilted to achieve the best viewing angle. The lower part of the Master Module has two Soft Keys sections, dedicated monitoring controls, and a section to control global system parameters and settings.



Figure 103. Master Module controls and displays

- **1** Home Screen
- 2 Attention Track Knobs
- 3 Home (left) and Back (right) switches
- 4 Navigation switches
- 5 Soft Keys
- 6 Soft Keys Navigation switches
- 7 Main Menu switches
- 8 Studio/Talk controls
- 9 Monitoring controls
- **10** Talkback mic input
- 11 Assignable Knob
- Chapter 29: S4/S6 Master Modules

Home Screen

This section identifies the different elements of the Home screen.

For operational information, see



Figure 104. Home screen with Meter Scroller (1), Attention Track Editor (2), Track Scroller (3), and Home Screen Local Options icon (4)

Attention Track Knobs

Eight touch-sensitive, dual-function Attention Track Knobs surround the touchscreen. They control Attention Track function parameters in the Home screen and monitor levels in the Monitoring screen. In addition to rotating, the knob can also be pressed in certain contexts to enter a plug-in or send.



Attention Track Knob (2) with Sel and In switches (1)

The knob and In switch each have two automation LEDs (red and green).

For more information, see Using the Attention Track Knobs. For more information about automation status indication, see Using the Transport and Jog/Shuttle Controls

Home and Back Switches

 \bigtriangledown The Master Module switch labeled "2" in Figure 105 is called the Back switch.

Home Displays the Home screen. Becomes active whenever another screen is displayed.

Swap Navigates and manages Swap Layers in track Layouts.

Back Changes the Attention Track Knobs from plug-in editing to plug-in selection. Becomes active when editing a plug-in on a track with two or more plug-ins.

For example, if you are editing EQ in the Function Editor on a track that also has a reverb plug-in inserted, pressing the Back switch assigns the top two left Attention Track Knobs to EQ and Reverb plug-in selection; the Back switch is unlit. Pressing a plug-in knob assigns the first eight parameters to the Attention Track Knobs and the Back switch lights.



Figure 105. Home (1), Swap (2), and Back (3) switches

Swap and Config become page switches (along with Home and Back) for the Attention Track Knobs when the Automation Module Shift switch is held down. (For more information, see Using the Attention Track Knobs.)

Navigation Switches



Figure 106. Navigation switches

WS Lets you select workstations to spill from the Soft Keys, and designate the Layouts Auto-Save application on the current workstation. **Shift + WS** displays the Workstation screen.

Layout Mode .lets you recall and select Layouts to spill from the Soft Keys. Shift + Layout Mode enables Layout Mode (see Chapter 23, "Layouts.")

All Enables All mode, in which pressing any strip Function switch on any Process Module enables that function on all strips. For example, with All mode enabled pressing **Exp** (Expand) on any strip places all strips into Expand mode.

Tracks Jumps to Tracks screen.

Type Lets you select track types (such as Audio, Aux, VCA, and Master) to spill from the Soft Keys.

Flip Flips knob parameters to the faders (see Flip to Faders).

Clear Clip Clears Clip (over) indicators from the meters.

 \blacktriangleleft /Mixer Nudges the surface (or currently enabled spill zone) left. Shift + \blacktriangleleft /Mixer opens and closes the audio application's Mixer window unless the Edit window is closed, in which case the Edit window opens first.

 \blacktriangleright /Close Nudges the surface (or currently enabled spill zone) right. Shift + \blacktriangleright /Close closes the audio application's front window.

Clear Solo Clears all soloed channels.

\triangleleft/**Home** Banks the surface (or currently enabled spill zone) left. **Shift** + \triangleleft /**Home** banks the surface so track 1 appears on fader strip 1 (left-justified).

 \blacktriangleright / End Banks the surface (or currently enabled spill zone) right. Shift + \triangleright / End banks the surface so the last track appears on the last strip (right-justified).

See also Nudging and Banking

Display 1 Zooms all Display Module Waveform views out by 10 seconds. **Shift + Display 1** selects the previous Display Module view across all Display Modules.

Display 2 Zooms all Display Module Waveform views in by 10 seconds. **Shift** + **Display 2** selects the next Display Module view across all Display Modules.

Settings Jumps to Preferences screens.

Shift Holding this Shift key accesses secondary functions on Master Module switches as described throughout this guide, and enables the touchscreen Page switches.

The Tracks, Display 1, Display 2, and Settings switches replaced the App, Clear Mute, Do to All, and Do to Selected switches found on original series Master Modules.

Soft Keys

The Master Module provides two Soft Keys sections, each with twelve Soft Keys surrounding its own high resolution TFT display. Soft Keys navigation switches at the bottom let you move to additional Soft Keys pages.



Soft Keys section

Each Soft Keys section has its own Soft Keys pages that can be customized in the Soft Key Editor (see Soft Keys).

Main Menu Switches



Figure 107. Main Menu switches

These context-sensitive switches light when active. The function of any active switch is displayed on the touchscreen directly above that switch.

Assignable Knob Section



Assignable knob section with knob (1), knob automation LEDs (2), and OLED display (3)

Using the Assignable Knob

The Assignable Knob on the Master Module (to the left of the Soft Keys) can control knob or switch parameters in Pro Tools (2024.4 or later), Logic Pro X, Nuendo, or Cubase. A single Assignable Knob assignment is available for each connected application. When a different application is attentioned, the Assignable Knob becomes available to be assigned in that application if no previous assignment exists. Returning to the original application restores the knob assignment.

For more information, see Assignable Knob.

Monitoring

Studio/Talk Controls and Display

The Studio/Talk section provides controls for control room monitoring, speaker selection, and talkback. It includes one touch-sensitive knob, an OLED, and the following switches. The knob can be assigned to a Pro Tools Master Fader (see **Enable EUCON Monitor**).

igtirsis The Monitor section can be locked so the current application retains monitor control when focusing on another application.



Studio/Talk controls and display

Setup Accesses the Studio/Talk Setup to select the source for the Studio/Talk feed, select a folddown matrix, solo speakers, and set the dim and talkback mic levels.

The following switches let you select Studio/Talk speakers:

Alt 1 Spkrs Selects Alt 1 Speakers.

Alt 2 Spkrs Selects Alt 2 Speakers.

Main Spkrs Selects Main Speakers.

Dim Dims the Studio/Talk level by the current Dim amount. While Dim is engaged, the Studio/Talk knob sets the dim amount.

Cut Cuts (mutes) the Studio/Talk level entirely.

Mon Insert This control is not implemented.

Monitor Select Controls and Display

The Monitor Select section includes two touch-sensitive knobs, an OLED, source select switches, and two **Setup** switches. The upper knob controls the monitor level; the lower knob is not implemented.



Figure 108. Monitor Select Controls

Setup (1) The Master Module automatically locks to the first focused EUCON monitoring application (such as XMON or DADman). When locked to a monitoring application, the **Setup** switch in the Master Module Monitor Select section lights yellow. When lit (yellow) the current application retains monitor control when focusing on another application or workstation.

To lock to a different monitoring application:

- 1 Unlock the current monitoring application by pressing the lit Setup (1) switch in the Monitor Select section so it becomes unlit.
- 2 Focus the desired monitoring application. The Master Module locks to the application.

Setup (2) Displays the Monitoring screen (see Monitoring Screen).

Mon A Selects Monitor A.

Mon B Selects Monitor B.

Coms Dims the Studio/Talk output (according to the Dim level) and activates the Listenback sources. When **Coms** is lit, Listenback is on. When unlit, Listenback is off. When a Listenback source is connected via XMON, you can manually enable and disable Listenback, adjust levels, and configure Auto Listenback if desired.

To control Listenback:

1 Make sure your Listenback mics or sources are patched to the Listenback inputs on XMON.

Signal Name	Hot (+)	Cold (–)	Ground (shield)
Talkback 2 Mic Input	24	12	25
Listen Mic 1 Input	10	23	11
Listen Mic 2 Input	21	9	22
AFL Input 1	20	7	8
AFL Input 2	6	18	19
Mini Speaker Out (L)	4	17	5
Mini Speaker Out (R)	15	3	16
Talkback/Slate Out	1	14	2
GND			13
SHIELD GND			connector housing

XMON Talkback/Listenback (TB/LB/Util) DB-25 pinouts

2 Make sure XMON is the focused S6 monitoring application.

To toggle Listenback on or off from the Monitor Select section:

Press the Coms switch in the Master Module Monitor Select section.
 When Coms is lit, Listenback is on. When unlit, Listenback is off.

To adjust Listenback level:

- Navigate to the Monitoring screen by pressing the Setup (2) switch in the Monitor Control section (or navigate to the Home screen and then press the Monitoring menu switch).
 Listenback 1 and 2 are mapped to a single encoder on the Master Module.
- 2 Focus the desired Listenback input (1 or 2) by pressing the Listenback encoder **In** switch. When **In** is unlit, Listenback 1 is focused; when lit, Listenback 2 is focused.
- 3 To adjust the focused Listenback level, rotate the Listenback knob.

 \hat{V} Listenback can be configured for auto on/off (based on the state of the transport), and for momentary or latched switch behavior. For more information, see Monitoring Screen Local Options.

Talk Dims the Studio/Talk output (according to the Dim Level) and activates the Talkback Mic channels. Some audio applications provide momentary and latch functionality for this switch.

 \bigvee Talkback can be configured for auto on/off (based on the state of the transport), and to drive or follow GPI. For more information, see **Monitoring Screen Local Options**.

Talkback In

 \cap 6

Talkback In XLR connector on top panel of Master Module

One XLR F (female) input is provided on the top panel, above and to the right of the touchscreen, to connect a Talkback microphone. The placement of this input is optimized for a gooseneck mic.

This signal from Talkback In passes directly through to the Talkback Out connector on the back of the Master Module.

Automation Module

This section identifies the hardware features on the Automation Module.



Automation Module

- 1 Attention Track Fader
- 2 Soft Keys Sections
- 3 Soft Key Navigation Switches
- 4 Jog/Shuttle Wheel
- 5 Synchronizer Soft Keys
- 6 Time Code and Locate Display
- 7 Transport Controls
- 8 Numeric Keypad
- 9 Setup Switch

Attention Track Fader

The Attention Track Fader provides a fader strip with the same controls and displays as those on the Fader Module, but it is dedicated to the Attention Track. The colored key at the bottom of the fader denotes track color *but does not inherit the Modifier attribute* if that track was attentioned from the Fader Module.

See Fader Module for a complete description of the fader strip's controls and displays.

Soft Keys Sections

The Automation Module provides two Soft Keys sections, each with twelve Soft Keys surrounding its own high resolution TFT display. Soft Keys navigation switches (below the displays) let you display different Soft Keys pages.



Figure 109. Soft Keys section

Each Soft Keys section has its own pages that can be customized in the Soft Key Editor (see Soft Keys).

Jog/Shuttle Wheel

The Jog/Shuttle Wheel can be assigned to several functions by enabling one of the mode switches. The wheel and its surrounding switches provide jog/shuttle, zoom, and edit functions as implemented by the manufacturer of your DAW. For Pro Tools, see **Using the Transport and Jog/Shuttle Controls**. For other DAWs, consult the documentation provided by the manufacturer.





Figure 110. Jog Wheel, mode switches, and Shift key (1)

Shift

Hold down Shift ("1" in Figure 110) to access the secondary (upper) Jog/Shuttle Wheel functions.

Locate Displays and Controls

The Automation Module Locate controls include the Time Code and Locate Display, and Locate Soft Keys.

Time Code Display

This display shows the absolute time code at the current transport location.

01.06.23.01

Figure 111. Time Code and Locate display

Locate Switches



Figure 112. Locate Soft Keys

The switches in the Locate section provide locate and editing functions, as implemented by the manufacturer of your DAW. For Pro Tools, see **Edit Commands on the Locate Switches**. For other DAWs, consult the documentation provided by the manufacturer.

 $\dot{\nabla}$ You can define your own functions for these switches using the Soft Key Editor. For more information, see **Soft Keys**. For other *DAWs*, consult the documentation from the manufacturer.

Numeric Keypad

These switches mimic the functionality of the numeric keypad on the computer keyboard to store (Enter) and recall memory locations, enter numeric values, and control the transport (when the Pro Tools preference for Numeric Transport mode is enabled).

Witches can be customized using the Soft Key Editor. For more information, see **Soft Keys** For other DAWs, consult the documentation from the manufacturer.



Figure 113. Numeric Keypad

Transport Controls



Figure 114. Transport controls

These switches provide transport functions as implemented by the manufacturer of your DAW.

For Pro Tools, see **Using the Transport and Jog/Shuttle Controls**. For other DAWs, consult the documentation provided by the manufacturer.

Transport switches can be customized in the Soft Key Editor. For more information, see **Soft Keys**.

Setup

When the **Setup** switch above and to the right of the Transport section is enabled, the Transport locks to the focused application on the attentioned workstation.

Master Joystick Module

This section identifies the controls and displays on the Master Joystick Module.



Joystick Module top panel

1 – Joysticks

Two touch-sensitive joysticks, each with In and Sel switches. The In switches have automation indicator LEDs.

2 – Panner Display

One 3.2-inch (8.1 cm) wide TFT display, to show pan location, divergence, and other parameters. The **Setup** switch below the display is not yet implemented.

3 – Panning Mode Switches

Two banks of eight switches each. Each switch is labeled with its primary function in white, and its **Shift** function above in purple. **Mode**, **Alt 1**, **Alt 2**, and **Link** are not implemented.

4 - Channel Switch Sections

Each section provides channel **Attention**, **Solo**, **Mute**, and **Record Enable**, automation switches (**M** and **F**), and a display. The Joystick and Fader Module displays are similar, but the Joystick display shows track Name (not values).

5 – Encoder Sections

Each encoder section shows Pan functions only, and provides a dual-function knob that can be rotated and pressed. Each encoder also has **In**, **Sel**, **Config** (Back), and Page (<>) switches. The knobs and **In** switches have automation indicator LEDs.

Master Post Module

This section identifies the controls and displays on the Master Joystick Module. For information on using the Master Joystick Module to adjust pan and other parameters, see **Using the Master Post Module**.



Master Post Module top panel

Master Post Module Main Sections

The Master Post Module provides five primary sections of controls and displays.

1 – Strips

10 identical channel strips, each with the following controls and displays (listed from the top down): Link, Solo, Mute, Ready, OLED, Record paddle, Input Monitor toggle, Track Color indicator

2 - Bank (< and >)

Bank left (<) and right (>) switches, to bank the MPM strips only.

3 – Attention

Accesses secondary functions for MPM Link switches.

4 – Link

Enables Link mode to select tracks for linked (ganged) control, and lets you lock strip 1.

5 – Monitoring

Switches for selecting monitor outputs (Alt 1, Alt 2, Main), modes (such as Dim and Cut), and other essential monitoring functions. These switches can be customized and re-assigned to other functions in the Soft Key Editor.

6 – Soft Keys

One bank of Soft Keys with 15 customizable assignments. Default assignments are provided in the Factory appset. MPM Soft Key assignments are saved and loaded with other S6 Soft Key sets.

Chapter 30: Channel Modules

Each S4/S6 system has *master* and *channel* modules. This chapter describes the channel modules that comprise the console fader strips: S6 Fader, Process, and Knob Modules, S4 Channel Strip Modules, and Display Modules.

See Chapter 29, "S4/S6 Master Modules" to learn about the master section of the console.

Fader Module

(S6 Only)

The Fader Module has eight fader strips. Each strip has a fader and meters, **Attention** key, **Select**, **Record**, **Input**, **Solo**, **Mute**, and automation punch switches, an OLED display, and a Track Color / Modifier key.



Fader Module

Fader Strip

The main entities of the fader strip are identified in Figure 115 and explained in the following sections.



Figure 115. Fader strip

- **1** Select switch
- 2 OLED, Record and input switches
- **3** Solo and mute switches
- 4 Automation mode and punch switches
- **5** Attention key
- 6 Fader
- 7 Meters
- 8 Track Color / Modifier key

Select and Swap Switches

Select Toggles the selection status of the track and lights when active. Also lets you spill a VCA to the left spill zone when the **Menu** switch is held down.

See Selecting Tracks, and Position to learn about track selection and modes.

Swap Lets you spill a VCA to the right spill zone when the Menu switch is held down.

OLED

Displays the track name, workstation number (optional), track number (optional), automation mode, and record and input indicators. When Flip mode is enabled, the OLED shows the name of the parameter currently assigned (flipped) to the fader.



Input (1) and Record (2) switches, OLED (3)

 \overleftarrow{V} Track numbers can be shown or hidden using the Show Track Numbers preference setting. See Strips.

Input and Record Switches

Input Toggles the Input Monitor status of the track.

Rec Toggles the record enable status of the track.

For more information on status indication of track input and record, see Select, Assign, Record, Solo, Input, and Mute

Menu

Puts the Input and record switches into VCA Spill mode. When Menu is held down:

- The Input switch becomes Spill Left (as shown in the OLED).
- The Record switch becomes Spill Right (as shown in the OLED).
- · The Select switch becomes Spill to Left Zone.
- · The Swap switch becomes Spill to Right Zone.

For more information, see Mixing with VCAs.

Mute and Solo Switches

Mute Mutes the track and lights when active.

Solo Solos the track and lights when active.



Solo (1) and Mute (2) switches



Master, Slave, and Link Indicators

These indicators identify VCA masters and slaves (when spilled). For more information, see Mixing with VCAs.



Master (1) Slave (2) and Link Group (3) indicators

Master Indicates the track is a VCA Master.

Slave Indicates the track is assigned to and controlled by a VCA Master.

Link Group Indicates the track is a member of a link group.

Automation Mode and Punch Switches



M (1) and F (2) Automation Punch (2) switches with Automation Status indicators (3)

F Punches the track out of automation writing when in Latch mode. Pressing **F** repeatedly cycles through automation modes. The switch lights red when writing automation.

M Pressing **M** toggles Trim automation on or off for the currently selected Automation mode. The switch lights red when writing trim automation.

Automation Indicator LEDs The LEDs to the right of **F** indicate its automation status. The automation LEDs to the right of **M** are not implemented.

To learn how these LEDs indicate automation status, see "Using the Transport and Jog/Shuttle Controls" on page 114

Attention Key

The Attention key is directly above the meters, and lights when active.

To assign a track to the Attention Track Fader on the Automation Module:

1 Press the Attention key on the desired track's Fader Module strip.



Attention key (1) and Fader (2) with meter

You can configure the Attention keys to automatically display the Home screen using the Show Home Screen on Strip Attention preference setting. Other settings let you link track Select and Attention keys. For more information, see Strips.

Fader and Meter

Each strip features a motorized, touch-sensitive 100-mm fader with a dual, 30-segment meter to its left.

Track Color / Modifier Key

The Track Color / Modifier key at the bottom of the fader strip lights in the color of its assigned track. The key's Modifier function remains fixed on the Fader Module, even when tracks (and their colors) change. In fact, they remain active when the strip is empty.

igodold Y The Attention Track Fader does not inherit the Modifier attribute from its Fader Module track.

These keys modify and execute Pro Tools commands with defined keyboard shortcuts (see **Pro Tools Commands Using the Track Color / Modifier Keys** for a list of commands).

If there is a dialog window open on the Pro Tools DAW, the **OK** and **Cancel** switches on the Fader Modules flash. When the dialog is on the currently focused workstation they flash green; when on a workstation that is not focused, the switches flash orange. Press **OK** to confirm or **Cancel** to cancel the dialog.

When using Expand Faders, the User 1 and User 2 switches bank between Expand Faders 1–8 and 9–16.

Process Module

(S6 Only)

The Process Module lets you assign functions to the Knob Module, toggle them in and out, and control parameters from its knob section. The Process Module provides eight strips, each with a knob section, function switches, and other controls.

The default knob parameter is Pan but you can reassign it to any other parameter. This is especially useful if your configuration does not include a Knob Module.

See "Editing a Plug-in Using the S6 Process Module" on page 150.



Process Module

Process Module Strip

Each strip provides the following controls and displays.



Figure 116. Process Module strip

- 1 Function select switches
- 2 Knob section
- 3 Navigation switches

Clear (Reset to Default)

You can quickly reset faders, individual parameters, functions, Expand Fader maps, or entire tracks to their default values using the **Clear** switch, located at the top of each strip on the Process Module.

To clear:

- 1 Press Clear on the desired strip. Its LED flashes red, and switches for all functions available to be reset are lit.
- 2 While **Clear** is engaged (flashing) do any of the following:
 - To reset a fader unity (0 dB on the strip), press **F** on the Fader Module or touch the fader.
 - To reset an individual parameter, press its knob top.
 - To reset a function, press the desired function switch in that strip (such as EQ, Dyn, or Pan). Not all functions support Clear.
 - To reset an entire strip, press the strip **Select** switch on the Fader Module.

The parameter or function resets and the Clear switch stops flashing and remains unlit.
Func

Pressing the **Func** switch on a Process Module or CSM enables automation for all controls in that strip's currently focused EQ, Dyn, or Insert function. To protect automation data, pressing the **Func** switch only enables (it does not toggle automation off).

Expand

Expand mode maps parameters beyond the current strip, expanding (or "spilling") EQ, dynamics, or other functions across multiple controls on S6 Knob Module(s) or Process Modules (when no Knob Module is present in that chassis), to knobs on S4 CSMs, or to Fader Modules. For complete instructions for using strip Expand and Attention Expand Zones, see **Expand**.

Function Select Switches

The function select switches let you assign different functions to the Knob Module. One function can be selected at a time, and its function select switch lights. The **Ins**, **Dyn**, **EQ**, and **User** functions each have an **In** switch. Pressing the **Func** switch on a CPM toggles the automation enable of all controls in the currently focused EQ, Dyn, or Insert function on/off.

Input

To assign the Input function to the Knob Module:

• Press Input.

For more information, see Assigning Track Input and Output.

Inserts, Dynamics, EQ, and User (Instrument)

To toggle Ins, Dyn, EQ, and User in and out:

Press In next to the desired function select switch. The In switch next to Ins, Dyn, EQ, and User lights when active.

To access Inserts on the Knob Module:

Press Ins.

To access Dynamics on the Knob Module:

• Press Dyn. When more than one Dynamics plug-in is on a track, double-press its Dyn switch to cycle through each plug-in.

To access EQ on the Knob Module:

• Press EQ. When more than one EQ plug-in is on a track, double-press its EQ switch to cycle through each plug-in.

To access Instrument plug-ins on the Knob Module:

Press User.

If you press an EQ or Dynamics Function select switch for a track without these plug-ins already inserted, some audio applications can insert a default plug-in automatically. In Pro Tools, you can select EQ and Dynamics defaults in Setup > Preferences > Mixing.

HEAT

To access HEAT controls:

• Press and hold **Ins**.

Sends, Pan, Edit, Grp, Bus

To access Sends on the Knob Module:

• Press Sends.

To access Pan on the Knob Module:

Press Pan.

To access Edit functions:

Press Edit on any strip assigned to an audio track. (See Chapter 16, "Editing".)

To access Groups on the Knob Module:

• Press Grp.

To access Buses (outputs) on the Knob Module:

Press Bus.

For more information, see Assigning Track Input and Output.

Knob Section

Each strip has one knob section with a dual-function, continuous knob, **In** and **Sel** switches, and an OLED. The knob lights when active and, in certain contexts, it can be pushed. The OLED shows the track name and number and the parameter value.



OLED (1), knob (2), and In and Sel switches (3) for the knob

In Toggles a parameter in and out, or between two values; it lights when active. The behavior depends on the audio application, and not every parameter includes **In** switch functionality.

Sel Toggles the knob function or a secondary parameter value. For example, **Sel** can toggle between Q and Frequency for an EQ plug-in, or pre- and post-fader for a send.

Automation Indicators

The knob and In switch each have red and green LEDs that indicate automation status.

For more information, see **Using Automation**.

Knob Navigation Switches

At the bottom of the Process Module are knob navigation switches.



Figure 117. ◀ (1), Back (2), and ► (3) navigation switches

▲ ► These switches navigate between function parameters. They light when available.

Back Navigates up one level and helps assign a new function for the knob. It lights when available.

The **Config** function (\blacktriangleleft and \blacktriangleright held down together) is not implemented.

For more information, see Editing a Plug-in Using the S6 Process Module.

Knob Module

The Knob Module provides eight strips, each with four identical knob sections and one set of navigation switches. The side panel provides power and Ethernet connectors. The Knob Module lets you adjust function parameters and select them for editing.



Knob Module

Knob Module Strip

Each strip has four knob sections, each with a dual-function continuous knob, In and Sel switches, and an OLED display.



Knob Module sections (1) and navigation switches (2)

Knob Section

Each Knob Module strip has four knob sections, each with a dual-function, continuous knob, **In** and **Sel** switches, and an OLED. The knob lights when active and, in certain contexts, it can also be pushed. The OLED shows track name and number, and parameter value.



OLED (1), knob (2), and In and Sel switches (3) for the knob

In Toggles a parameter in and out, or between two values; it lights when active. The behavior depends on the audio application, and not every parameter includes **In** switch functionality.

Sel Toggles the knob function or a secondary parameter value. For example, **Sel** can toggle between Q and Frequency for an EQ plug-in, or pre- and post-fader for a send.

Automation Indicators

The knob and In switch each have red and green LEDs that indicate automation status (see Using Automation).

Knob Navigation Switches

At the bottom of the Knob Module are the navigation switches.



Figure 118. ◀ (1), Back (2), and ► (3) navigation switches

▲ ► These switches navigate between groups of four function parameters. They light when available.

Back Navigates up one level. It lights when available.

The **Config** function (\blacktriangleleft and \blacktriangleright held down together) is not implemented.

See "Editing a Plug-in Using the S6 Knob Module or S4 CSM Knob Section" on page 147.

Channel Strip Module

(S4 Only)

Channel Strip Modules (CSMs) provide the fader strips for S4 systems. Each CSM provides eight fader strips with a lower fader section and upper knob section, and central function select section.



Channel Strip Module

CSMs provide the same functionality on S4 as Fader, Process, and Knob Modules on S6. The primary differences are:

- The CSM provides a single set of Function Select switches for the eight fader strips (unlike the S6 Process Module which provides Function switches for each fader strip). Function Select switches include EQ, Dyn, Exp, and more.
- The CSM fader **Focus** switch determines the fader strip to which the Function Select switches apply. **Focus** is only available on the S4 CSM, not on S6 Fader Modules.

Function Switches

The Function switches select the function displayed on the Knobs. They operate similarly to the Function switches on S6 Process Modules, except that on the CSM they apply to either the currently *Focused* strip, or all strips on that module if no strip is focused.



Function switches



Focus

At the top of each CSM fader strip is a **Focus** switch. When a strip is focused (its **Focus** switch is lit) the central Function Select section on the same CSM lets you choose a function to display in the Knob section for that strip. You can also have the Knob section display the same function for all strips, or *Expand* a function to have the entire Knob section provide parameters for that function for the currently focused strip. Note that the **Focus** switch is associated with the fader strip, not any track assigned to the strip.



Focus switch (shown lit)

Display Module

The Display Module has a TFT display and mounting bracket. The underside of the Display Module has power and Ethernet connectors.

When configured as standard Display Modules, each displays eight tracks. Display Modules can also be configured as Master Meter Modules (MMMs). For more information on MMMs, see Using Master Display Meter Modules. If your system includes Master Post Modules see Assigning Tracks to MPM Strips. If your system includes Master Post Display Modules for PEC/DIR metering, see Using Master Post Display Modules

The following sections describe standard Display Modules.

Different display Layouts are available, including Large Meters, Large Waveforms, Meters and Waveforms, Meters and Function, Waveforms and Function, Waveforms and Dual Function, and Waveforms and Dual Function + Route.

See Display Module to set the global display layout. You can also configure views for strips individually (see Changing Dis-play Module Views From the Surface).

Each display layout shows the track name, input, and automation status at the bottom. For Large Waveforms and Waveforms and Function, a single meter displays the track's maximum channel level. When in any Waveform view, automation breakpoint data can be shown. Group name and ID are shown while in any function view. All other display Layouts can show 7.1-channel meters. Pan display for multichannel tracks can be optimized in User settings (see Panner Divergence and Position Display Mode).

The USB connectors are used to service and unclaim a Display Module from an S6 system. Do not insert a USB drive for any other reason unless instructed to do so by an Avid technician.

Examples of available display Layouts are shown in Figure 119 and Figure 120, Figure 121 and Figure 122, and Figure 123. These figures may not show certain display elements that are available in the most recent version of S6 software.

Figure 119. Large Meters



Figure 120. Large Waveforms



Figure 121. Meters and Waveforms









Figure 124. PEC/DIR meters on a Master Post Display Module (MDM)



Variable Waveform Zoom

When set to any Waveform view, the zoom resolution of all standard Display Modules can be set between 1 second and 60 seconds in the Settings > Preferences screen. For more information, see Waveform Zoom. Zoom resolution of waveforms can be set separately for Master Meter Modules (see Configuring MMM Display Settings).

Gain Reduction Meters and Bouncing Ball Dynamics Graph

(Pro Tools Only)

High resolution Gain Reduction Meters are displayed on Display Modules and the Master Module Home page. Lower resolution Gain Reduction Meters (green) are displayed on the Fader Module between the two Level Meters. S6 gain reduction meters follow the metering preference setting in the DAW, letting you choose to see compression, expansion, or a sum of both.

 $\dot{\nabla}$ In Pro Tools, choose Setup > Preferences, and click to go the Metering tab. Gain Reduction settings are in the Display section.

Dynamics Graphs with bouncing level ball can be displayed on Display and Master Modules by enabling any of the Function views. (Not all dynamics plug-ins support graphs or bouncing level ball.)

Global Track Type Meter

You can change the Display layout for all tracks of the same type, globally, using the Display Global Meter Layout channel key. This lets you use different meter layouts for audio tracks versus Auxiliary Inputs. Global configurations are stored in User settings, individual meter strips are stored in Layouts.

To change the global meter layout for all tracks of the same type:

- 1 Create a custom channel key and assign it to Display Global Meter Layout.
- 2 For another way to change the meter layout for the current strip only, create a custom channel key for Display Meter Layout.

Note that if a recalled layout included meter type, its setting will be applied and replace the current track or global meter layout.

You can also see and configure global meter layouts using **Display Track Type**.

Display Track Type

You can specify the format for strips on Display Modules per track type. For example, you could have Meters and Waveformss shown for audio tracks, but have Large Meters shown for VCAs.

To designate Display Track Type:

- 1 Navigate the touchscreen to Settings > User, then scroll down to the Display Track Type section.
- 2 Choose the desired layout for the different available track types. Not all track types apply to all DAWs or applications.

▼ Display Track Type	
Audio Layout	
Unspecified	
VCA Layout	
Unspecified	

Display Track Type selectors (partial view)

Display of Active versus Inactive Inserts, Sends, Groups, Outputs, and Objects

Display Modules now make it easier to distinguish active or inactive status of inserts, sends, groups, outputs, and objects. When active, sends, groups, and outputs are shown in a lit colored box. When inactive (or set to none) the block is unlit and text is inverted.



Example active and inactive status on Display Modules

This same indication is also shown in the Function Scroller on the Master Module touchscreen.

Part VII: Appendix

Appendix A: GPIO

GPIO (General Purpose Input/Output) is an interface protocol to interconnect machines to perform various functions. The 25-pin D-Sub connector on the back panel of the Master Module (see Figure 127) provides 8 channels of GPI input and 8 channels of GPO. The inputs are opto-isolated, and the outputs are relays. Switches used for GPI input must be momentary (not latching).

Basic (legacy) S4/S6 lets you define GP inputs and outputs to control Talkback, Monitoring, and basic Transport commands.

Advanced GPIO are also provided in the Soft Key Editor for greater flexibility and options, and include Fader Start and Glide from a GPI.

See also "Auto Talkback" on page 54.

To enable basic (legacy) GPI:

- 1 Navigate to Settings > Preferences.
- 2 In the GPIO section, enable any of the following:
 - Talkback Enabled
 - Monitoring Enabled (Dim, Cut)
 - Transport Enabled (Stop, Play, Record)





Advanced GPIO and Fader Glide

On S4/S6, GPIO are provided in the Soft Key Editor for greater flexibility and options, and include Fader Glide.

- The Master Module GPIO page of the Soft Key Editor lets you assign specific GP inputs (1-8) to trigger S4/S6 Soft Keys, and assign S4/S6 Soft Keys to trigger specific GP outputs (1-8).
- Fader Glide lets a GP input, or any surface Soft Key, trigger a specific fader to glide to a designated level at a prescribed rate. You can specify Fader Glide to apply to only the attentioned strip or to any specific fader strip, all strips in a "bucket" (8-fader chassis), strips in all buckets or any strip on the surface. Fader Glide provides a single set of settings (affecting any/all enabled Fader Glide strips) for Fader Start Glide Time, and Fader Start Target.

You can apply these GPIO capabilities to be able to have different commands on different GPIOs, to have a greater number of S4/S6 commands trigger or be triggered by GPIO such as monitoring commands, Transport, turn on Record lights, turn off AC (air conditioning), and similar.



Note that the legacy GPIO functions (Talkback, Monitoring Cut/Dim, and Transport Play/Stop/Record) are still available but will be automatically disabled if a GPIO Soft Key is defined that includes the same function. To restore the previous functionality you must first disable any and all GPIO Soft Keys assigned to that same function.

Soft Key Color Indication

Soft Key color lets you quickly see what type of Soft Key is actually turning on a GPO.

- If a GPO surface Soft Key is activating a GPO and it is applied to a Soft Key that can show color it will light that Soft Key purple.
- If the GPO surface Soft Key is not actually the Soft Key that is turning on the GPO, but the same GPO is being activated by some other Soft Key that *is* applied directly to the GPO, then the surface Soft Key will light with the color applied by the appset.
- If any Soft Key is applied to a GPIO or if one of the latching/momentary GPO surface Soft Keys are applied to any other Soft Key, then the default hard-coded GPIO functionality (Transport, Monitor and Talkback) will be disabled until the GPIO soft keys are no longer applied by any Soft Key area.

Fader Start GPO

Fader Start Output Trigger lets you trigger a GPO when a fader is moved from -inf to any other value, and turn off when the fader is moved back to –inf. You can configure Fader Start Output Trigger to listen to the current Attention fader, any specific fader, any fader in one or any chassis ("bucket"), or any/all faders on the surface (including the Automation Module attention fader).

To configure Fader Start GPO:

- 1 Navigate to Settings > System.
- 2 In the GPIO section, configure Fader Start Output Trigger to the desired trigger level (-inf/off to +12 dB).

Soft Keys for Fader Start Output Trigger

Soft Keys for Fader Start Output Trigger

Command Type	Category 1	Category 2	Category 3
Surface >		String >	Attention Strip
	Fader Trigger >	Sulps >	Strip 01–64
		Buckets >	Bucket 1–8
		Surface >	All Buckets
			Entire Surface

Configuring GPIO

To configure GPIO:

- 1 Navigate to Settings > Soft Keys.
- 2 From the Module Selector, choose Master Module GPIO.



Selecting the Master Module GPIO in the Soft Key Editor

- 3 Select a GP input (1-8) or output (1-8), then assign EUCON or Surface commands as you would for other Soft Key definitions.
 - Momentary and latching GPIO commands are available from their Surfaces > GPIO sub-menus.
 - Soft Key Options for Delay and Multi-DAW can be configured for GPIO Soft Keys. (Feedback cannot be changed.)
 - Key and Page commands are only available for GPIO inputs.

	-			GP I	nput					
	0	•	•	۲	•	•	•	•		
				GP O	o Hutput					
Soft Key Editor										
insert A	dd	Surfa	ce ს					Cle	ear Delet	•
Modifier Lo	sks (⊐ s	hift		≭ /Alt		Ctrl		□ ~/Win	
CR Monitoring		>	Alt2							
Mon A Monitorin	9		Speake	r Cuts						
Mon B Monitorin	9		Folddov	wns						
Mon C Monitorin	9		Monito	r Insert	1					
Mon D Monitorin	9		Talkbac	k						
Navigation			Listenb	ack						
Titles			Sources							
EUCON Page	k	Key	Sur	face			Optio	ns		Done

Soft Key Editor, Master Module GPIO showing a simple Talkback example.

To configure Fader Glide:

- 1 Navigate to Settings > System.
- 2 In the GPIO section, configure Fader Start Glide Time and Fader Start Target.

Fader Start Glide Time (0.0-3.0 seconds) determines the amount of time the fader will take to travel to the designated Fader Start Target level (-inf/off to +12 dB).



GPIO section in Settings > System

Example GPIO Circuits

Switches and LEDs from the S4/S6 surface can control and be remote controlled via the 25 pin D-Sub connector on the back of the Master Module. For connector pinouts, see **Table 1 on page 297**.



Figure 126. Example GPI output and input diagrams

Connector Pinout

Table 1. 25-pin D-Sub, Female

Pin	Description	Function
1	Ground	
14	GPI 1	Talkback
2	GPI 2	Dim
15	GPI 3	Cut
3	GPI 4	Stop
16	GPI 5	Play
4	GPI 6	Record
17	GPI 7	
5	GPI 8	
18	GPO 1 - A	Talkhaak
6	GPO 1 - B	TAIKDACK
19	GPO 2 - A	Dim
7	GPO 2 - B	Dim
20	GPO 3 - A	Cut
8	GPO 3 - B	Cut
21	GPO 4 - A	Stop
9	GPO 4 - B	Stop
22	GPO 5 - A	Play
10	GPO 5 - B	гау
23	GPO 6 - A	Depard
11	GPO 6 - B	Record
24	GPO 7 - A	
12	GPO 7 - B	
25	GPO 8 - A	
13	GPO 8 - B	
shell	Ground	

Relay model: NEC UB2-12NU



Figure 127. GPIO port on the back of the Master Module (original Master Module shown)

Appendix B: EQ and DYN Parameters in Expand Mode

The tables, below, show how default EQ and DYN parameters map to Knob or Process Modules in Expand mode. All EQ and DYN plug-ins map to the same knobs when **EQ** or **DYN** functions are expanded.

Wanufacturer-specific parameter mappings are still accessed from the **Inserts** knob set. These will typically have more controls than the unified layouts used in Expand mode. Not all parameters are available in all plug-ins.

The following tables show the location of EQ and Dynamics parameters on Knob Modules when in Expand Mode.

EQ Parameter Layout in Expand Mode, Knob Module

<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob
	HPF Slope		LPF Slope												
	HPF		LPF				LF O		LMF		MF		HMF		HF
HPF Type	9	LPF Type	a a			LF Type	3	LMF Type	3	MF Type	3	HMF Type	ų.	HF Type	3
	HPF		LPF		Input		LF Fred		LMF Fred		MF		HMF		HF
HPF Type	rieq	LPF Type	Ticq		Ticq	LF Type	Ticq	LMF Type	Ticq	MF Type	Ticq	HMF Type	ПСЧ	HF Type	Ticq
	HPF		LPF		Out-		LF Gain		LMF		MF		HMF		HF
HPF In/Out	iii/Out	LPF In/Out	in/Out		Gain	LF In/Out	Gall	LMF In/Out	Gall	MF In/Out	Gall	HMF In/Out	Gall	HF In/Out	Gall

DYN Parameter Layout in Expand Mode, Knob Module

<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob	<u>Sel</u> In	Knob								
	C/L Rel		C/L Depth				E/G Rel		E/G Range				Ext Key		
	C/L Attack						E/G Attack		E/G Hold				HPF Type *		LPF** Type
												Key Listen			
	C/L Ratio		C/L Knee		Input Gain		E/G Ratio		E/G Knee				HPF Freq *		LPF** Freq
	C/L Thresh		C/L Makeup		E/G Output		E/G Thresh		E/G Hyster-				HPF* Q or Slope		LPF**Q or Slope
			Gain		Gain				esis			HPF In/Out		LPF In/Out	

*HPF filter may be labeled "LF" (Low Filter) in the plug-in.

** LPF filter may be labeled "HF" (High Filter) in the plug-in.

 $\dot{\bigtriangledown}$ You can define your own custom default EQ and DYN maps using Custom Knobs and Custom Faders.

Appendix C: Touchscreen Basics

This chapter explains the gestures interpreted by the touchscreen.

Tap and Release

• Tap the screen briefly and release without moving to select an object, activate its primary function, or toggle a parameter value between its two states. This is equivalent to a single mouse click.

Double Tap

• To enter a name for an on-screen item (such as a Layout or a Soft Key), double tap quickly in the Name field.

Touch, Hold, and Drag

•Touch an object, hold briefly, then drag it to another location.

Swipe



Touch and drag quickly left/right/up/down to do the following: •Scroll the current page •Move between different Settings pages •Scroll between parameters in the Function Editor •Scroll in the Track Matrix, Track Scroller, Meter Scroller, and Function Scroller

Stop Scrolling

for

•Tap the touchscreen once and release to stop scrolling.

Touch and Hold, then Touch

Touch and hold an object, then touch others to add to a selection.

This makes it easy to select, record enable, mute, and solo multiple tracks in the Track Matrix View, even when Intercancel is selected in Track Selector Options (see "Track Selector Options" on page 47).

Two-Finger Stretch





•Touch the screen with two fingers, then move them farther apart. This expands a collapsed Inserts function in the Function Scroller (if it has two or more plug-ins), and lets you adjust Height in immersive panners.

Two-Finger Pinch



•Touch the screen with two fingers, then move them closer together. This collapses expanded plug-in inserts into the Inserts function in the Function Scroller (if it had two or more plug-ins) and lets you adjust Height in immersive panners.

Appendix D: Troubleshooting and Utility Mode

This section provides information for calibrating S4/S6 elements, troubleshooting, and using Utility Test Mode for Modules.

Diagnosing Module Status

Specific switch LEDs indicate the power and connection status for each module while the Master Module starts up. See LED Indication of Module Power and Connection Status on System Startup.

Fader Calibration

Fader Calibration is available in the Settings > Surface page to calibrate and align faders.

To calibrate faders:

- 1 Go to Settings > Surface, and touch Config.
- 2 In the image of the current surface configuration, tap to select a Fader Module.
- 3 Tap the Fader button along the bottom of the screen, then follow the on-screen instructions to calibrate each fader.
- 4 Repeat for additional Fader Modules.
- 5 When finished, tap Done (or tap Cancel to exit).



Fader Calibration controls in Settings > Surface, Config (S6 shown)

LED Calibration and Brightness Control

You can customize the brightness of LEDs on a per-module basis, to match the brightness of elements on modules of varying ages or revisions. Presets are provided for the most common settings, and you can copy and paste settings among modules.

 \heartsuit To control the brightness of all OLEDs, LEDs, and Display Modules, use the Brightness controls in the Settings > System page.

To calibrate module LEDs:

- 1 Go to the Settings > Surface page.
- 2 In the image of your surface arrangement, tap to select a module.

The selected module is outlined in orange, and across the bottom of the screen the command LED appears.

- 3 Press LED. The LED Calibration screen appears.
- 4 Do the following:
 - To adjust brightness for small switch LEDs (such as **Back**, < and >), adjust the Mono Gamma slider.
 - To adjust brightness for larger switches (such as Function switches on Process Modules), adjust the Switch Red/Green/Blue Gamma sliders.
 - To adjust brightness for knobs, adjust the Knob Red/Green/Blue Gamma sliders.
 - Load one of the **LED Presets**.
 - Copy and Paste LED Settings.
- **5** To save your settings for the currently selected module, press Done.

LED Calibration settings are stored on the Master Module.

- **6** To close without changing any settings, do any of the following:
 - Press Cancel.
 - Tap to select a different module in the arrangement.
 - Navigating to any other view on the MTM.
- 7 Tap to select another module and repeat the previous steps.



Settings > Surface, LED Calibration (S6 shown)

LED Presets

Presets are provided so that you can quickly match brightness on systems that include both old and new revisions of S4/S6 modules.

To use LED Presets, first identify the revision of each module by viewing its Part Number in the Settings > Surface page, then load the appropriate Preset. The most common use of Presets is to configure new modules to match the brightness of older modules, as explained in the following instructions.

To determine module revision:

- 1 If you are already in the LED Calibration screen, press Done. Otherwise, go to the Setting > Surface page.
- 2 In the image of your surface arrangement, tap to select a module.The Part Number for the currently selected module is shown in the lower section of the screen. Note the last two numbers.
 - If the Part Number ends in -00, -01, -02, or -03, the module is an early (older) revision.
 - If the Part Number ends in -13 or -23, the module is a later (newer) revision.
- 3 Repeat the previous step to determine the revision of all other modules in your system.

To use an LED Calibration Preset:

- In the image of your surface arrangement, tap to select a "new" module.
 The selected module is outlined in orange, and across the bottom of the screen the command LED appears.
- 2 Press LED. The LED Calibration screen appears.
- 3 Press New.

Brightness settings are loaded that approximately match those of earlier modules.

- 4 Adjust individual brightness parameters as appropriate (module brightness changes as sliders are adjusted).
- 5 To save the current settings, press Done. (See also Copy and Paste LED Settings). LED Calibration settings are stored on the Master Module.
- 6 To close without changing any settings, do any of the following:
 - · Press Cancel.
 - Tap to select a different module in the arrangement.
 - Navigating to any other view on the MTM.
- 7 Tap to select another module and repeat the previous steps.

Copy and Paste LED Settings

To Copy and Paste LED Calibration settings among modules.

- 1 Go to the Settings > Surface page.
- 2 In the image of your surface arrangement, tap to select a module.
- 3 Press LED.
- 4 Adjust individual brightness parameters as appropriate (module brightness changes as sliders are adjusted).
- 5 Press Copy.
- 6 If you adjusted any settings, press Done to save those settings for the currently selected module.
- 7 In the image of your surface arrangement, tap to select a different module.
- 8 Press LED.
- 9 To paste copied settings, press Paste.
- 10 Press Done to save those settings for the currently selected module.
- 11 LED Calibration settings are stored on the Master Module.

Calibrating the Joysticks

Calibrate the joysticks on the Master Joystick Module to optimize their response. You can calibrate the joysticks at any time.

To calibrate the joysticks:

- 1 Navigate the Touchscreen to Settings > Surface.
- 2 In the image of your surface arrangement, tap to select a Master Joystick Module.The commands LED, Joystick, Reboot, and Graphs appear along the bottom of the screen.
- 3 Tap Joystick (or press the switch directly below it) along the bottom of the screen.
- 4 Follow the instructions on-screen to calibrate the joysticks:
- Move each joystick through their entire range until the displayed values stop changing.



Joystick Calibration screen in Settings > Surface, Config

5 Press Done to accept the new calibration, or press Cancel to exit without changing the calibration settings.

To calibrate the MJM LEDs, see LED Calibration and Brightness Control.

Calibrating the Master Module Touchscreen

The touchscreen on the Master Module can occasionally display "false touches" (such as a circle appearing when you are not touching the screen). A touchscreen calibration tool can be run to correct certain false touches. If the false touches prevent you from performing any of the following steps, a USB Keyboard and Mouse can be connected to the Master Module to interface with the operating system.

The exact steps for screen calibration differ slightly depending on the age of your Master Module.

Touchscreen Calibration on Early Versions of the S6 Master Modules

1 Log out of S6 by doing the following:

- Press Settings on the Master Module (dedicated switch or on the touchscreen).
- Press About on the touchscreen.
- Press Logout on the touchscreen.
- 2 Press Administrator, type in "password" and press Return, then press File Explorer.
- 3 In the left column of the Explorer window press Computer.
- 4 Open the Primary (C:) drive by double-tapping on it.
- 5 Open Program Files.
- 6 Open Touch Panel Calibration Tool.
- 7 Open WDT8650_PTool_2008 The application will take a moment to appear.
- 8 Press Start Do not touch the screen during calibration.
- 9 An error message will appear: "Access to the path 'C:\Program Files\Touch Panel Calibration Tool\ptool_testlog.txt' is denied." This is expected. Press OK.
- **10** Close the application.
- 11 Press on the right edge of the touchscreen and swipe from right to left to expand the Windows 8 side bar.
- 12 Press Start, press Administrator in the top right corner of the screen, press Sign out, then press Avid S6 User.

Touchscreen Calibration on Newer Versions of the Master Modules

- 1 Download the S6 Touchscreen Calibration Tool from the following location: http://akmedia.digidesign.com/support/compressed/S6_New_Touchscreen_Calibration_83675.zip
- 2 Decompress the .ZIP file and copy the folder to a USB flash drive.
- 3 Insert the USB flash drive into an available port on the back of the Master Module.
- 4 Log out of S6 by doing the following:
 - Press Settings on the Master Module (dedicated switch or on the touchscreen).
 - Press About on the touchscreen.
 - Press Logout on the touchscreen.
- 5 Press Administrator, type in "password" and press Return, then press File Explorer.
- 6 In the left column of the explorer window press Computer.
- 7 Open the USB drive by double tapping on it.
- 8 Run the Calibration Tool and follow the directions on-screen.
- 9 Swipe inwards from the right side of the screen, then press Start.

10 Press Administrator, press Sign out, then press Avid S6 User to use the S6 again.

Gamma Correction for Display Modules

You can adjust brightness for individual Display Modules from the Surface page on the Master Module touchscreen.

To match and adjust Display Modules:

- 1 Navigate the touchscreen to Settings > Surface, then tap to select a Display Module.
- 2 Tap Display (along the bottom of the touchscreen).
- 3 Adjust the Backlight Gamma slider to the desired setting.
- 4 Use the Copy and Paste commands to match settings across multiple Display Modules.
- 5 When finished tap Done, or Cancel top exit without changes.



Calibrate Module Display Backlight in Settings > Surface

Utility Test Mode for Modules

If you want to run diagnostic test on any module you can enable Utility Test mode on that module. Note that after running Utility Test mode on a module, the module will have to be rebooted from the Surface page on the Master Module.

To enable Utility Test mode on a module:

- 1 Make sure the modules are fully powered up and initialized.
- 2 Hold down the two switches listed below for several seconds until each of the OLEDs on that module display the Avid logo.

Accessing Utility Test Mode

Module	Switches to Hold
Automation Module	Select + Swap (Attention Track)
Channel Strip Module	Upper Knob Section Test: Sel (channel 1) + Sel (channel 2) in top row Lower Fader Section Test: Select + Swap (channel 1)
Display Module	See "Display Module Test Mode" on page 307.
Fader Module	Select + Swap (channel 1)
Knob Module	Select (channel 1) + Select (channel 2)
Master Joystick Module	Select + Swap (upper left)
Master Module	Sel + In (next to top knob on left side of Touchscreen)
Master Post Module	Attention + Link (upper left)
Process Module	Clear + Func (channel 1)

- **3** Release the switches and the OLEDs display tests available on that module. For example, a Fader Module will display Main in channel 1, with System, Fader, LED, OLED, Switch, Vegas, and Exit displayed in channels 2–8.
- igodow Y The specific tests available on each module may differ from those listed in this guide.

Available tests are indicated by the switch directly below each test flashing blue. To exit, press the flashing switch for Exit.

- 4 Press the flashing blue switch below the desired test to see choices for that mode. For example, entering Fader test mode lets you choose Sine, Step, Group, or Triang. OLED test mode offers Vegas.
- 5 Press the flashing switch below the desired test.
- 6 To end the test and return to the previous page of choices, press the flashing switch to Exit.
- 7 After performing a Utility Test on any module, reboot each module by doing the following:
 - Navigate the Touchscreen to the Surface page, then tap the tested module(s) on-screen to select it.
 - Tap Reboot (at the bottom of the screen). After rebooting modules, touch the banner display to dismiss the alert dialog.

Display Module Test Mode

Display Modules provide a test mode to evaluate display integrity. Test mode can be run on a Display Module while it is connected to your surface (you do not need to disconnect, unclaim, or power down).

To use Test Mode on a Display Module:

- 1 Connect a USB keyboard (Windows-compatible recommended) to the USB port on the bottom of the Display Module.
- **2** On the USB keyboard, press Ctrl + Alt + Shift + V.

An image moves across the screen.

- 3 To exit, press Ctrl + Alt + Shift + V again (or power cycle the Display Module).
- 4 Disconnect the USB keyboard from the Display Module.

Network Guidelines

For suggested network connections and configurations, download the *EUCON Networking Guidelines.pdf* (and any other S4/S6 documentation) from the **EUCON Product Guides** article on our Knowledge Base.

Centralized Log File Collection

The Collect Support Files command in the WSControl menu simplifies the gathering of log files that are sometimes for troubleshooting and support.

To create logs:

1 Choose Collect Support Files from the WSControl menu.

Mac Click on the EuControl or WSControl icon in the menu bar.

Windows Right-click on the EuControl or WSControl icon in the System Tray at the bottom of the screen.

- 2 In the Save dialog that appears, choose or make note of the destination for the saved files, then click Save Support Files. Or click Cancel to cancel without saving support files.
- A .zip file is created containing all log files and crash reports that might be requested by Avid Customer Support.

Temporarily Unclaiming a Module

If you forget to remove a module from the surface arrangement before physically moving it to another system, you can temporarily unclaim it after the new systems boots by holding the top two right-most switches on that module. However, it will reset back to its previous owner after a power cycle if not properly claimed by another system by adding it to that system's arrangement.

Unclaiming Display Modules

To unclaim a Display Module:

- 1 Create a file named "unclaim.txt" and copy it to a FAT-formated USB flash drive.
- 2 Plug the USB drive into the Display Module you want to unclaim. After a few seconds, the Display Module screen displays a "Not Connected" message indicating that the process is complete.
- 3 Be sure to add the Display Module back to your configuration. While doing so in the Settings > Surface, Config screen, the module and/or its vacant slot might display red as if they are unavailable. This can be ignored, however, and you can drag the module back into the surface configuration to reclaim it.



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