GETTING TO WORK WITH THE AVID S6

AN INTRODUCTION AND LEARNING GUIDE



CURT SCHULKEY



Getting to Work with the Avid S6

This complete guide to the Avid S6 console offers the best techniques and practices from a seasoned industry veteran, Curt Schulkey, for utilizing its unique features and functions.

The Avid S6 was created to be the industry standard virtual mixing console; however, it is so feature-packed that it can be difficult for new users to navigate. This book provides the ultimate guide to breaking down these amazing features and demonstrating how to use them effectively in your next project, with easy-to-follow instructions, rich illustrations, and general real-world advice from the author.

This book takes students from neophyte to high-level intermediate. Readers should begin with a functional knowledge of Pro Tools and general understanding of mixing for cinema, but previous knowledge of mixing surfaces is not necessary as this book provides guidance through rudimentary, basic, and intermediary level workflows.

Curt Schulkey is a post-production industry veteran, and an educator at Loyola Marymount University in Los Angeles. He continues to work as a supervising sound editor, dialogue editor, and mixer on feature films and longform streaming content.



Getting to Work with the Avid S6

An Introduction and Learning Guide

Curt Schulkey



First published 2022 by Routledge 605 Third Avenue, New York, NY 10158

and by Routledge 2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business © 2022 Curt Schulkey

The right of Curt Schulkey to be identified as author of this work has been asserted by him/her/them in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilized in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

This book is a teaching guide and is therefore not a comprehensive or definitive reference for the Avid S6 or any other product. While every attempt has been made to ensure that the information in this book is thorough, accurate, and current, the author and publishers cannot warrant or guarantee that this is the case. Any use of the information in this book is at your own risk. In an attempt to lighten the inherent tedium of this genre, some fanciful liberties have been taken with history; hopefully they are absurd enough to amuse, and not be taken as truths. The author, publishers, and their agents, officers, partners, directors, employees, representatives, and the cat's meat man disclaim all liability for any loss arising out of or in connection with anything that appears or does not appear in this book.

The author of this book has no affiliation with nor endorsement from Avid Technology, Inc, Waves Inc, Izotope, MeterPlugs, McDowell Signal Processing, LLC, or any other company or product shown, written about, or ignored herein.

Library of Congress Cataloging-in-Publication Data A catalog record for this book has been requested

ISBN: 978-0-367-62999-1 (hbk) ISBN: 978-0-367-62996-0 (pbk) ISBN: 978-1-003-11180-1 (ebk)

DOI: 10.4324/9781003111801

Typeset in Arial Nova by Apex CoVantage, LLC

To my partner, friend, wife, producer, director, and inspiration, Lisa Pegnato.



Contents

Acknowledgments Preface	xvi xvii
Part I – Fundamental Knowledge	1
Welcome to the S6	3
Introduction	3
How to Learn	4
Chapter 1 – Beginning Work on the Avid S6	5
Starting from Scratch	5
Special Terms or Word Usage	6
Settings in General	g
Types of Settings	g
You Should Control the Settings	10
Settings for Beginners	10
Three Quick Tips	10
Outboard Keyboard	10
A Most Important Setting	11
LEDs Point the Way	11
An Overview of the S6 Surface	11
Track Modules	12
Surface Configurations	13
A Closer Look at the Master Modules	13
Master Module – Upper Section	14
Navigating Around in the Touchscreen	14
Navigating to the Home Screen	14
Master Module – Lower Section	15
Automation Module	16
Locate Section	16
Important Note on Button Name Changes	17
Chapter 2 – Starting the S6 Systems	19
Cut to the Chase: Startup Summary	19
Shutting-Down the S6 Systems	23

Monitor Levels, Room Mute, and Dim.	24
What's Happening To Me?!?!	24
Using Cut	24
Using Dim	25
Level	25
Chapter 3 – Mixing with Mouse and Keyboard	27
How To Mix Without Knowing How To Use the Surface	27
How to Not Use the Surface	28
A Need for Metering	28
Session Design	29
Quckie Meters (This is my pet name, not an official name.)	29
Using the Transport Controls	30
Chapter 4 – Setting Up the Settings	31
Getting Set	31
System Settings	32
User Preferences	32
Title Files	33
The Relationship of Title Settings to User Preferences	34
Saving and Loading Preferences	34
To manually save or load a title to or from a file:	36
Automatically Using Preference Files	37
Changing Settings	37
Find the Settings Type That You Need	38
Chapter 5 – The Channel Strip	39
Mixing Like an Old-School Mixer	39
What Are All Those Buttons?	39
Modifier Keys	40
The Fader Section	40
The Fader	41
Fader Meters	41
Input Meter	41
OLED	41
Select Button	42
M, S, LG LEDs	43

Chapter 7 – Meters!	11
Meter Needs	77
Set the Standard (Of Your Meters)	78
Meter Strategies	78
Quick and Dirty Meters	78
Spill Zone Meters	79
Metering That's Too Cool (Complicated) for School	80
Fader Meters – What's All That Flashing About?	81
Input Meter	81
Gain Reduction Meter	82
Underlying Automation Meter	82
Trim Meter	82
Chapter 8 – Three Ways to Approach Mixing	85
VCA's and How They Started	85
Spilling VCA Masters	86
Using VCA Master Spilling	86
Automatic VCA Spilling	87
Expanding VCA GMs to Knobs	88
Sending VCA GMs to Attention Track Knobs	89
VCA Master Mixing: What Is It Good For?	89
Tips on Organizing for VCA masters	91
A Tale of Two Methods	92
Attention Mode or Strip Expand Knobs? Which One Is For You?	92
Strip Expand Knobs Mode – In a Nutshell	92
Attention Mode – In a Nutshell	93
Expand Knobs Mode – The Simpler Way	93
Attention Mode – The More Complicated Mode	96
Chapter 9 – Ready for Mixing at a Basic Level	105
How Do You Mix on the Surface?	106
How I Mix on the Surface	107
Part III – Intermediate Tools	111
Chapter 10 – More Advanced Features	113
Do to All, Do to Selected	113
Using Modifiers	113
Using the All Button on the Master Module	113

	Contents	хi
PEC/Direct – Monitoring After and Before the Recorder	114	
Knob Control Displays	115	
Chapter 11 – Soft Keys – Shortcuts to Commands	117	
Intro to Soft Keys	117	
Using Soft Key Pads	118	
Appsets	118	
What Page Is It On?	120	
Navigating to Soft Key Pages Manually	120	
Soft Key Pad Navigation Buttons	120	
Alternate Soft Key Page Choices	121	
QuickJump to Soft Key Pages	121	
Page Menu	123	
Some Soft Key Page Suggestions	123	
Mode-Specific Pages	123	
Chapter 12 – Spill Zones – What, Why, and Where Are They?	125	
What Are Spill Zones?	125	
Cut to the Chase: Spill Zones	126	

Appsets	118
What Page Is It On?	120
Navigating to Soft Key Pages Manually	120
Soft Key Pad Navigation Buttons	120
Alternate Soft Key Page Choices	121
QuickJump to Soft Key Pages	121
Page Menu	123
Some Soft Key Page Suggestions	123
Mode-Specific Pages	123
Chapter 12 – Spill Zones – What, Why, and Where Are They?	125
What Are Spill Zones?	125
Cut to the Chase: Spill Zones	126
How Do Spill Zones Work?	126
Configuring Spill Zones	126
Using Spill Zones	127
Spill Button Actions	127
Hobo Signs – Deciphering Cryptic Messages	129
Spill Button LED Rules	130
Bank and Nudge Button LED Rules	130
Element Colors	130
Spill Zone Examples	131
Chapter 13 – Track Layouts and the Tracks Screen	133
Track Layout Rules	133
What Is the Difference Between Track Layouts and Spill Zones?	134
Two Other Great Features of Track Layouts	135
Cut to the Chase – Track Layouts	135
The Tracks Screen	135
The Parts of the Tracks Screen	136
The Tracks Grid	136
Controls Strip	137

Scrollers	137
What You Can Do on the Tracks Screen	137
Using Layout Mode	137
Layout Sets and the Layout Grid	138
Preparing to Create Layouts	139
Layout Width	139
Clearing Unwanted Layouts	140
Creating Track Layouts	140
The Strip Scroller Explained	141
Selecting Tracks in the Track Grid	142
Saving or Loading the Layout Set	144
Recalling Track Layouts	145
Editing Track Layouts	145
More Uses of the Tracks Screen	146
Part IV – Options and Extras	149
Chapter 14 – Master Meter Modules	151
Cut to the Chase: To Use a Master Meter Module	152
Designating a Display Module as Master Meter Module	152
Creating Master Meter Layouts	153
Un-Designating a Master Meter Module	154
Chapter 15 – The Master Post Module	155
Why use the Master Post Module?	156
The Mixing Process (A Little Background)	156
The Mixer	156
Deliverable Elements	156
Using Post Layouts for the Master Post Module	157
Creating Post Layouts	158
Recalling Post Layouts	159
Using the Master Post Module Track Record Controls	160
Linking Strips	161
Using Basic Link	161
Using Link Master	161
Using Ready Lights	162
Using Master Record	162

	Contents xiii
	400
Banking Strips	163
Banking and Locking MPM strips	163
Spilling Strips	163
VCA Spilling – An Alternative to Banking the Post Strips	163
Chapter 16 – The Joystick Module	165
Introducing the Joystick Module	165
Assigning Tracks to the Joystick Module	166

167168

169

169

169

170

170

171

171

172

173173

175

175

176

177

179

179

180

180

183

185

185

185

185

186

Locking Joystick Assignments

Using Pickup Mode

Linking Stereo Pairs

Chapter 17 – Snapshots

Recalling Snapshots

Applying Snapshots

Using Expand Faders

What are Selections?

Changing a Selection

Channel Strips

Function Colors

Soft Key Page Headers

Signals

Chapter 18 - Expand Faders

Create an Expand Fader Map

Recall an Expand Fader Map

In and Out vs. Start and End?

Chapter 20 - Colors and Lights

Creating Selections with Mark In and Mark Out

Other MJM Controls

Writing Automation With the Joysticks

Controlling Other Panning Parameters

Navigating to Shapshot Soft Key Pages

Capturing and Saving Snapshots

Constraining Joysticks to Horizontal or Vertical

Chapter 19 – Making Selections in the Pro Tools Timeline

Flashing Lights	187
Module Status on Startup	187
Chapter 21 – What is Next?	189
Editing on the Surface	189
Using Attention Expand Zones	189
Using Multiple Workstations	189
Using Multiple Post Modules	190
Customize Soft Key Pages	190
Customize Post Module Buttons	190
Customizing Jog Wheel Buttons	190
ATMOS Panning with the Joystick Module and the Touchscreen Function Editor	190
Assigning Unconventional Parameters to the Joysticks.	190
Appendix 1 – A Collection of Disconnected Facts and Features.	191
A Bit More on the Monitoring Screen and XMon	191
Speaker Output Selection	191
Audio Sources	192
Cue Paths (Monitor A, B, C, D)	192
Talkback and Listenback	193
Useful Soft Key Pages	195
Showing Hidden Tracks Without Un-Hiding Them	196
Copying All Automation from One Track to Another	196
Changing OLED Display Options	197
Assigning an Assignable Knob	197
Focusing an Application or Workstation	198
Locking Transport Controls to an Application or Workstation	198
Jog Wheel LEDs	199
Momentary Group Suspend	199
VCA Masters vs Aux Tracks vs Grouped Tracks	199
What's So Bad About Auto Insert?	199
Console Keystroke Oddities	200
Automation Mode Status LEDs	200
What Good Are Automation Mode Status LEDs?	201
Cascading Outputs	201
Reconfiguring Transport Keys	202
Troubleshooting	204

	Contents	ΧV
Settings to Drive You Crazy	207	
Details of Example in Chapter 9	208	
Default Location of Settings Files	209	
Appendix 2 – System Settings – User Preferences	211	
Listing of System Settings	211	
System – General	211	
System – Surface	211	
System – Workstation	212	
User – Surface	213	
User – Layouts	215	
User – Knobs	215	
User – Soft Keys	216	
User – 3-D Panner	216	
User – Workstation	216	
User – Display Module	217	
Surface	218	
Local Options (*)	218	
Home Screen – Local Options	218	
Tracks Screen - Local Options	219	
Monitoring Screen - Local Options	220	
Surface Config Screen - Local Options	220	
Appendix 3 – Button Names Lookup	221	
Button Functions of the Master Modules (by Button Name)	221	
Appendix 4 – Soft Key Quick-Jump Shortcuts	225	
Avid S6 Soft Key Page – Pro Tools App Set v2018.3	226	
Avid S6 Soft Key Page - Pro Tools App Set v2019.5	227	

229235

Index

Image Index

Acknowledgments

As much as I would like to say "I did it all myself; nobody helped," that is not true. From the start, Tom Burns, a top mix tech at Sony Studios, offered me enthusiastic encouragement and technical assistance whenever it was needed. Jeremy Davis, also at Sony, contributed his personal expertise and support as well.

Since much of my empirical study of the S6 took place in the Playa del Rey studios of Loyola Marymount University, I have to thank the university at large, and specifically thank Recording Arts Chair, Professor Rodger Pardee for his encouragement, and LMU tech guru Brian Kotowski for his patient assistance. When the pandemic hit, closing LMU's Playa campus completely, Peggy Rajski, Dean of the School of Film and Television, cleared the way to grant me special access to the locked-down facility. When I needed to explore S6 modules which LMU did not own, Trip Brock at Monkeyland Audio generously opened a mix room for me. Thank you all.

I also want to thank editor Katherine Kadian who's sleuthing was instrumental in getting this book to publication. Thanks, too, to Editorial Assistant Alyssa Turner for keeping the whole publishing process under control.

Preface

People plot and people plan their actions and their lives, but sometimes things just happen on their own, to our surprise.

This book seems to have begun all on its own.

I have been teaching part-time in the School of Film and Television at Loyola Marymount University for the last several years, sneaking out of work a bit early on Thursday nights to fight my way across Los Angeles at rush-hour, usually arriving in time to start my 7:15 class in post-production sound. When LMU decided to vastly expand their SFTV footprint into a slightly off-campus location, I was happy that it shortened my commute by a few miles. Their new facility was nicely equipped with two new rooms which sported Avid S6 mix surfaces, and the paint was still wet behind the doors when classes were to begin.

In my "day job" as supervising sound editor, I had been working in very close proximity to the S6 for the previous few years and had attended a few hands-on orientation sessions when Warner Bros installed their first S6, but most of my real mixing experience was on its predecessor, the ICON D-Control. I had absorbed enough of the S6's functions from watching mixers and chatting with engineers and mix techs, that I could use it at a very basic level, but I was by no means an expert. I was a bit surprised, then, to be asked for advice when faculty users at LMU became perplexed as to why their tracks did not appear on the surface, or why no sound was coming out of the speakers, or other seemingly basic questions. I did not know the answer to their questions, but I poked at the surface and prodded into the documentation, and I discovered a sprawling range of "gotcha's" that could snag the unwary user.

I set about to put together a short instructional paper which would get new users started and maybe keep them going using the S6. I had estimated that 8 to 12 pages would do it. However, I began to find that most problems that people were having were not simple "one-step" fixes; to use the S6 moderately well required a much wider knowledge base than expected.

When my instructional paper hit 80 pages I realized that it had no clear structure, and there were many more elements that I had not yet addressed. It was much too long for a "quick instructional." I determined that this undertaking would require an entire book. I knew that books are supposed to be written by experts on their subjects, but I felt I was in an interesting position of useful ignorance. I was seeing the S6 from the same perspective as other learners, and this might aid me in addressing their needs. They

xviii Preface

could not use or appreciate the cool features of this device if they couldn't find the power switch. So, I jumped in; reading, interpreting, talking to tech experts, and trying to explain, in an understandable sequence, how to use and love this complicated, fun toy, er, I mean, tool.

I hope this brings understanding, power and confidence to novice S6 users, elevating them to intermediate level and beyond.

Part I

Fundamental Knowledge



Welcome to the S6



Introduction

The Avid® S6 is the workhorse virtual mixing desk for cinema, television, and other media, used in film studios, commercial studios, home studios, and schools throughout the world. The S6 was created to be an industry standard virtual mixing console to interface with Pro Tools® and other workstations. Unlike other digital cinema mixing consoles, the S6 acts as an interface, not as a recording device. The S6 is a collection of physical knobs, sliders, buttons, touch screens and other controls. The S6 reads the touches, slides, twists, pushes and adjustments which the mixer makes to those controls and conveys them to the workstation(s). The workstation(s) can write the values into its timeline, and can then play back those adjustments, displaying them on the surface controls and modifying the sounds per those adjustments.

The Avid S6 is designed to be operated by a diverse group of users. It addresses the different needs, workflows, and behaviors of its users by presenting to them many different working options. On the S6 there may be several ways to accomplish a single task; the user may decide which method fits their way of working and thinking. This flexibility, however, adds complexity to the process of learning how you might want to best use this powerful tool.

There are videos and tutorials about this console which demonstrate its many features, and some of them *may* prove to be very helpful to your understanding of the S6. But when I began to try to understand, control and master the S6 myself, I found two significant shortcomings. First, videos demonstrated features as if they were free-standing parts of the whole – with no depth and no real plan to guide me towards an understanding of how to really sit down and work with this tool. Too often they show

4 Fundamental Knowledge

features which require you to have previously created setups, settings or systems without which the features just do not work. Secondly, videos are linear, with a fixed time of presentation. After watching a 20-minute video on creating layouts, I had an idea of what was possible, but when I got about four steps into doing a task and could not recall the exact sequence of button pushes and menu selection, I found it difficult to jump back to the exact point in a video where I could find the information I needed. With a book you may skim, jump forward or backward, make notes in the margins or look to the index to more quickly remind yourself of the necessary steps, methods, and procedures for accomplishing your desired tasks.

How to Learn

I believe it is easier to learn to use the S6 by starting with the basic usage, then introducing more complex and intricate features.

Some readers will have deep experience and understanding of mixing, and possibly mixing on virtual surfaces. Some readers will be new to the entire world of mixing, control surfaces, and sound-to-picture workflows.

This book will begin from the start, presuming that the reader has no experience with this device. I will try to take you on a reasonable journey of enlightenment. Good luck to all of us.

Chapter 1

Beginning Work on the Avid S6



Starting from Scratch

For new users of the S6, it is difficult to know which skills and tools are basic and essential, which should be learned later, and which should be ignored completely.

The S6 is a complicated device with layers of overlapping functions and nested settings. The positive aspect of this redundancy is that it allows users different paths to accommodate their individual ways of thinking and working. At the start of the digital revolution – when work in the world of audio was transitioning from electro-mechanical tools to computerized, virtual tools – we experienced many different approaches to workstation design and implementation. Most of those workstations allowed only one method to accomplish a task. A fade-in was created, for example, by doing step 1, step 2, and step 3. If the user had the same mindset as the designer, the tool was easy for them to use, while people with different personalities, experiences or characteristics might find it frustrating or impossible. After much pushing and pulling between software designers and users and between competing workstation creators, those tools which had the most versatility attracted the most users. Workstations which offered limited flexibility in workflow lost their place in the market. Digi Design®, the developers of Pro Tools, eventually became the powerhouse of audio workstations, in part due to the flexibility of their products. Now we can create a fade-in with Pro Tools by selecting an end-point and pressing Ctrl+D, or by selecting an area at the start of a clip and pressing Cmd+F, or by using Edit > Fades > Create, or I can drag across the start of a clip with the magic tool, and maybe there are a couple of other ways I never learned to use. There is room for improvement in the S6, but right now it is the best tool available, so let us explore how to use it.

Using the S6 is not always intuitive. There are terms that are used in untraditional ways, buttons, knobs, and switches which have ambiguous or unusual labels, and long lists of settings, options, and modes. It is easy for new users to get stuck – unable to make the console work – simply because they cannot recognize that a setting or mode

needs to be changed, or how to change it. Empirical attempts to divine procedures on this surface can cause users to auger into the mud.

In most commercial settings, there is an experienced mix technician or engineer on hand who helps the mixer find their way on this console. In a school setting, students more often need to work on their own. They therefore need to have a higher level of knowledge about the S6 before they can begin creating mixes effectively.

With this book I am trying to present the first level of required understanding of this device and its operation. At the start I will skip over several complicated features such as Layouts, Spill Zones, Post Module States, Layout Banking positions, VCA masters, etc. because those features will be better understood and utilized after learners are comfortable with the basic operations of the surface. This book will not cover everything there is to learn about the S6. It is not a reference manual. Avid's manual "S6 Guide" is the ultimate reference. New users should study its content and structure as it can be invaluable when seeking information on individual controls or functions.

The S6 is not easily mastered without developing a body of knowledge regarding its operation, and I hope to fill that need. There are several pages of background information which users need to understand before any real work on the surface begins, so please be patient and bear with the instruction. Your experience with the S6 will be much more satisfying, less frustrating, and more time-effective if you take this in steps.

Special Terms or Word Usage

Avid is not always consistent or conventional with its terminology. To alleviate some of the confusion I have compiled a few terms which require some explanation and understanding. It may help you to know their Avid meanings before you get too deeply into the S6.

Process/Function – Avid calls EQ, compression, expansion, and other things which plug-ins do, or even the plug-ins themselves, Processes or Functions. Avid uses the terms interchangeably. This document will use "function" as a noun – except where Avid uses "Process" as an official designation. I will refer to the Process Module as such, since that is what Avid calls it, but all those tools which effect sound, such as EQ's, compressors, or other plug-ins, I will call functions. The things which those functions do to audio, I will call processes.

Control – Any knob, button, switch, or fader is a control. Controls may be physical or virtual. There are many references to controls, so keep in mind that a control is one of those individual items.

Button, knob, switch, fader, etc. – Even though these are controls, they will be referred to by these crude names when appropriate. These are indeed controls, but as individuals, they require more identifiable names. The Avid manual likes to use "key" or "switch" or "encoder" to describe them, but I usually press buttons, twist knobs, flip switches, and slide faders.

Edit – Avid sometimes uses the term *edit* to refer to changing written parameters. I might say that you are using a control to change a setting, whereas Avid might say that you are editing a parameter.

Attention – Avid uses this word as a verb – in place of "bring to attention." You can attention a track. The past-tense "attentioned," which upsets the spellcheck, is used instead of "bringed to attention." After I attention a track, that track is attentioned. If was attentioning my writing I would have used "brought" in that last sentence.

Layout. – Avid uses this word in at least three different ways. Three of them are:

- A Track Layout is a user-defined configuration of tracks from one or more attached workstations. Users can assign tracks from their workstation(s) to a layout in any sequence desired. Once created, a layout may be recalled to the surface. Users can define up to 99 different layouts within one layout set. Track Layout sets may be saved, transferred, and recalled.
- A Display Layout is a factory-designed graphic configuration of meters, waveforms and other data shown on the Display Module at the top-end of the track modules. Users may choose among the seven Display Layouts provided, but those seven layouts cannot be modified. In addition, there are three different Master Meter layouts, also factory-designed, which may be applied to a Master Meter Module.
- A Meter Layout is like a Track Layout. It defines which tracks are displayed in a Master Meter Module. This layout can be built from the tracks of one or more attached workstations, saved and recalled.

Selection. In this book, when "Selection" is capitalized it refers specifically to an area within a workstation track which has been selected. A Selection can be moved, saved, and adjusted. The word is otherwise used as an action noun, as in "When your selection is complete, press **ok**."

Insert - When used as a verb, Avid usually means "place into," as in "Insert a plugin into a track." This sometimes gets confusing because a plug-in is also an insert. This could lead to: "Insert an insert into a track." I will use "instantiate" to describe the assignment of a plug-in into a track, and "insert" as the noun. "Instantiate an insert into a track" clarifies the action. Sometimes the verb form of insert must be used for other purposes.