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Part I: Introduction
Chapter 1: Introduction

Pro Tools® | S6 is a modular, ergonomically designed control surface for Avid Pro Tools® and other EUCON™-compatible DAWs (Digital Audio Workstations). S6 is flexible and scalable, letting you choose the best system for your needs. Many different configurations are possible with different numbers of faders, knobs, and displays. All systems let you place the master section in any position, left-to-right, within a frame. More fader strips, knobs-per-strip, or displays can be added later.

This guide explains how to assemble the system frame, how to install modules, and how to configure your S6 system.

Before You Begin

• Make sure your workspace is clean, dry, is well lighted, and has ample room to work.
• Make sure you have a sturdy table or other flat surface, preferably with padding to protect the hardware. (If your system includes Legs, you will use the Leg Frame instead of a table.)
• Make sure you have another person available to help lift, turn, and move the system during and after assembly.

⚠️ Components and systems are heavy! Team lift, always. We recommend four people, one lifting each corner. Never attempt to move systems that are five or more chassis in width. Disassemble it first (see Appendix A, “Expanding or Disassembling S6”). Also, never move or lift a chassis (any size) by the Side Covers, Bolster, or Rear Covers (they can break). Move or lift while holding on to the metal chassis (frame) instead.

• Identify and organize the packages that make up your purchased system (see Figure 1) to simplify the assembly process. All required tools are in the Side Covers package (see “What’s Included” on page 2).

Figure 1. Packages organized before assembling an example S6 system

1– Master Module Includes this guide and your M10 or M40 Master Module.

2– Frame Components Chassis kits, Side Covers, Bolster, and Rear Covers (number and type vary depending on configuration; Leg Frames, Producers Desk, and other hardware Options not shown).

3– Power and Connectivity Power Supply Units (PSUs), Ethernet switch(es), Power Strip, and Cable Sets.

4– Modules Automation, Fader, Process, Knob, and Display Modules (number and type vary depending on configuration).
Overview of Installation

1 Determine module layout (“Modules and Configuration Overview” on page 5)

2 Assemble the frame
   • Assemble Legs if your system includes them (“Assembling Legs” on page 13)
   • Assemble the Frame Chassis kits (“Assembling Frame Chassis” on page 19)

3 Install modules
   • Install the power strip, Ethernet switch(es), power supplies and cables (“Installing Power and Connectivity” on page 33)
   • Install modules (“Installing Modules” on page 51)

4 Start up your system to confirm module communication, then activate your system purchase online, log into your Avid Master Account, download and install S6 software updates (Chapter 7, “Confirm Installation and Update Software”)

5 Complete the hardware assembly (“Chapter 8, “Complete the Hardware Assembly”)

What’s Included

The Master Module package contains the following items:

- Master Module (M10 or M40)
- This guide (S6 Installation Guide), which contains the following items in the front pouch of the binder:
  - Activation Card
  - Registration Card
  - System Restore USB Flash Drive

⚠️ Do not use the System Restore drive for anything other than S6 System Restore software. Do not use this drive to store audio files or any other data or software.

- Health & Safety Guide

Tools

The following tools are required for assembly of the S6 frame and are included in the Side Covers package:

- Hex M2.5
- Hex M3
- Hex M4
- Hex M5
- Hex M6
- Phillips screwdriver #1 (long)
- Phillip screw driver #2
- Small flat screw driver

Legs

The following tools are included with the Leg Set package (not all systems include Legs):

- One open end wrench (13 mm)

💡 Though not required, we also recommend using a level (not included) to help level the Leg Frame.
Additional Required Components

The following items are required to use S6 and must be purchased separately:

- USB Flash drive to use when transferring and installing S6 system software updates
- Workstation running Pro Tools or other EUCON-compatible digital audio workstation (see www.Avid.com/compatibility)

Optional

The following items are recommended and can be purchased separately:

- UPS (Uninterruptable Power Supply), power conditioner/timer, or other power management system
- USB computer keyboard and mouse/trackball (the Master Module provides a touchscreen keyboard, but you might prefer to use a dedicated keyboard/mouse/trackball for some administrative or troubleshooting tasks)

System Requirements and Compatibility

Avid can only assure compatibility and provide support for hardware and software it has tested and approved.

For complete system requirements and a list of qualified computers, operating systems, hard drives, and third-party devices, visit: www.avid.com/compatibility

Activation and Registration

Review the enclosed Activation Card and Registration Information Card and follow the instructions to Activate (required) and Register (optional, but highly recommended). These cards are located in the pouch at the front of this guide.

Activate S6 System Software Immediately

As soon as you have assembled your S6 system and confirmed a successful hardware installation, activate your S6 system software on-line. Use the alphanumeric code on the included S6 System Software Activation Card to activate and download all S6 system software and documentation.

Be sure to Activate your purchase using the enclosed Activation card so you can receive software updates directly in your Avid account. Check your Avid account for system software updates, Workstation software, and monitor control software (XMON EUCON software, and Studio Monitor Pro).

Registering

By registering, you become eligible to receive the following:

- Technical support information
- Software update and upgrade notices
- Hardware warranty information
About This Guide
This guide explains how to assemble your Avid S6 system.

Conventions Used in This Guide
All of our guides use the following conventions to indicate menu choices and key commands:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>File &gt; Save</td>
<td>Choose Save from the File menu</td>
</tr>
<tr>
<td>Control+N</td>
<td>Hold down the Control key and press the N key</td>
</tr>
<tr>
<td>Control-click</td>
<td>Hold down the Control key and click the mouse button</td>
</tr>
<tr>
<td>Right-click</td>
<td>Click with the right mouse button</td>
</tr>
</tbody>
</table>

The names of Commands, Options, and Settings that appear on-screen are in a different font.
The names of switches and keys on the control surface are shown in bold (such as Select).
The following symbols are used to highlight important information:

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

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

 RootState shortcuts show you useful keyboard or mouse shortcuts.

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

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

Product Registration and Activation Register your purchase online, and activate

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 community on the User Conference.

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

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

News and Events Get the latest news from Avid or sign up for a product demo.
Chapter 2: Modules and Configuration Overview

This chapter identifies each of the S6 modules, and tells you how and where they can be arranged within a system. Use this information to determine your module layout before proceeding with the assembly.

There are two primary types of modules in a system, Master modules and Channel modules.

Master Section Modules

The S6 Master Module and S6 Automation Module are often installed in the same chassis to form a master section.

Master Module

The Master Module is the primary module of the system, providing the Touchscreen, two banks of Soft Keys, a monitoring section and other controls. Each system must have one Master Module. There are two models of Master Module (M10 and M40) that are used in S6 M10 or S6 M40 systems, respectively. They share identical controls and features, the only difference are the number of other modules they each support, and the number of workstations that can be connected.

S6 M10 Systems  These systems include an M10 Master Module that supports up to 10 other S6 modules, and up to two attached workstations. S6 M10 systems accommodate 8 to 24 faders per frame and are suitable for smaller configurations. Display Modules are not supported on S6 M10 systems.

S6 M40 Systems  These system include an M40 Master Module that supports up to 40 S6 channel modules and up to 64 fader strips, including Display Modules. M40 systems support up to eight attached workstations.

\[\text{Master Module}\]

⚠️ The S6 frame is designed to ensure adequate ventilation and cooling for the Master Module. If you are installing a Master Module in a custom (non-Avid) frame, be sure that the frame does not obstruct the Master Module fan inlet, heat sink fins or air vents. Any unit that has been installed in a custom frame will have its warranty voided if the fault is found to be due to insufficient ventilation.
**Automation Module**

The Automation Module provides transport and locate controls, the Attention fader strip, Jog/Shuttle wheel, a numeric keypad, and additional Soft Keys. The Automation Module is most often installed directly below and in the same chassis as the Master Module.

**Channel Modules**

Channel modules combine to form the fader strips of the system, and include the S6 Fader Module, S6 Process Module, S6 Knob Module, and S6 Display Module. Not all configurations include each type of channel modules.

**Fader Module**

Each Fader Module provides eight channel faders with meters and other controls. Fader Modules are installed in the first slot of each chassis (closest to the front).

**Process Module**

Each Process Module provides eight channel strips, each with a knob, OLED displays and other controls.
Knob Module

Each Knob Module provides eight channel strips, each with four dual-function (rotate/press) encoders, OLED displays, and other controls. Up to two Knob Modules can be installed in the larger chassis M40 systems only.

Display Module

Display Modules are supported on S6 M40 systems only, and are installed above channel modules. Each Display Module provides a large display that shows names, meters, waveforms, and other data for up to eight strips.

⚠️ The S6 frame is designed to ensure adequate ventilation and cooling for the Display Module. If you are installing a Display Module in a custom (non-Avid) frame, be sure that the frame does not obstruct the Display Module air vents. Any unit that has been installed in a custom frame will have its warranty voided if the fault is found to be due to insufficient ventilation.
Module Layout

This section describes the arrangements of modules front-to-back in their chassis, and chassis left-to-right in the frame.

*The first two sections show standard arrangements for Avid-configured systems. For custom configurations, see “About Custom Module Configurations” on page 10.*

Front-to-Back Module Arrangements

Master section modules are usually installed together in a single chassis with the Master Module above the Automation Module. They do not have to be in the same chassis, but for simplicity this guide shows them installed together.

Master section modules in a Frame Chassis Small

Channel modules are usually installed together to provide the fader strips in a system. The Fader Module is installed in slot 1, Process Module in slot 2, and Knob Module in slot 3. Frame Chassis Small support one Knob Module per chassis; Frame Chassis Large support up to two Knob Modules per chassis. M40-based systems also support Display Modules. Not all slots need to contain modules. Fill panels are available to cover unused slots.

Channel modules in a Frame Chassis Small (left) and a Frame Chassis Large (right)
Left-to-Right Chassis and Module Arrangements

Channel sections and the master section modules can be arranged in any order, left-to-right. For example, in an S6 M10 16–5 system (16 faders with five knobs per strip) the master section modules can be located in three possible locations, as shown below.

Example 1: S6 M10 16-5 with master section at far right

Example 2: S6 M10 16-5 with master section in the center

Example 3: S6 M10 16-5 with master section at far left
About Custom Module Configurations

While several S6 systems are available in factory configurations that support standard module arrangements, you can customize the arrangement of modules in many different ways. After you have assembled the system you will use the Touchscreen (see Figure 2) to tell the system where you have installed which modules, choosing arrangements as available in the Settings > Surface > Config screens.

1 – None (empty chassis with Fill Panels and/or the Producers Desk option)
2 – Master Module in slots 1 and 2
3 – Automation Module in slot 1 and Master Module in slots 2 and 3 (standard master section configuration)
4 – Automation Module alone in slot 1
5 – Fader Module alone in slot 1
6 – Fader Module in slot 1, Process Module in slot 2
7 – Fader Module in slot 1, Process Module in slot 2, Knob Module in slot 3 (standard channel configuration)
8 – Fader Module in slot 1, Process Module in slot 2, Knob Modules (2x) in slots 3 and 4 (standard channel configuration)

M40 systems also support Display Modules, which can be installed above channel sections (but not above master sections).

The Producers Desk option consists of two chassis (Small or Large) 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 a Fader Module to either or both chassis of the Producers Desk. If your system includes a Producers Desk option, decide whether you want to install it at the far left end, far right end, or between other chassis in the frame.

The location of the Producers Desk in the frame, as well as the presence of any Fader Modules in the Producers Desk, affects placement of the Ethernet switch(es) and PSUs. For guidelines and examples, see “If Your System Includes a Producers Desk” on page 35.

For now, decide where you want your fader strips to be in relation to the master section modules, and where you want the Producers Desk (if your system includes one), then proceed to Part II, “Frames.”
Part II: Frames
Chapter 3: Assembling Legs

This chapter explains how to assemble the Leg Frames for S6. If your system does not include a Leg Frame, proceed to Chapter 4, “Assembling Frame Chassis.”

⚠️ Make sure you have at least one other person available if you need to lift, turn, or move the system during and after assembly. Components and systems are heavy! Team lift, always.

Unpack the Leg Frames

Unpack the Legs and Beams and identify the components shown in Figure 1.

1 – Legs
2 – Beams
3 – Back Corner Brackets
4 – End Brackets
5 – Fasteners and Tools (not shown)

Overview of Leg Frame Assembly

When assembling a Leg Frame you should start by placing one of the Beams on the floor to gauge how far apart the Legs need to be. Place the Legs parallel on the floor with proper spacing and put the first Beam across the back of the Legs, orienting it as shown in the following diagrams and securing it with the included fasteners. Do not tighten down fasteners all the way. Once the back Beam is attached to the Legs, place the other Beam across the front and secure it with fasteners (do not fully tighten the fasteners). Then attach the Back Corner Brackets and End Brackets.

💡 To simplify assembly, do not fully tighten any fasteners until legs, beams, and brackets are put together and aligned. After all parts are assembled and aligned, start at one end and tighten all fasteners securely as instructed.

About Leg Frame Join Modules

If you are joining two Leg Frames, assemble each frame as instructed in this chapter. See the Leg Frame Join Guide to assemble the middle legs and combine the two sets of assembled Leg Frames using the Leg Frame Join Bracket. Then return to this guide to start assembling chassis.
Attaching the Back Beam

Attaching the back Beam:

1. Place one of the Beams on the floor to determine how far apart the Legs need to be.

   Have someone help hold the components while you position the Beams on the Legs and attach the fasteners.

2. Attach the back beam by doing the following (see Figure 2):
   - Put the first Beam across the back of the Legs. Align the pins on the underside of the Beams with the holes in the top of the Legs. Be sure to orient the back Beam so that the pins on the top are closer to the center of the frame.
   - Using four fasteners and washers (included) per mount, secure the Beam at each end. Do not tighten down fasteners all the way until both beams and both Back Corner Brackets are in place.

![Figure 2. Attaching the back Beam to the Legs (orientation of pins shown at upper left)](image)

3. Make sure the Beam sits flat on the top of the legs as shown in Figure 3. If necessary, move the legs in or out.

![Figure 3. Back view showing correct alignment of Beam on leg (at left), and incorrect alignment (middle, and right)](image)

<table>
<thead>
<tr>
<th>Fastener</th>
<th>M8x30 (7760-30606-00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washer</td>
<td>M5 WSHR (7760-30609-00)</td>
</tr>
<tr>
<td>Tool</td>
<td>M4 Hex</td>
</tr>
</tbody>
</table>
Attaching the Front Beam

To attach the front Beam:

1. Align the pins on the underside of the Beam with the holes in the top of the Legs. Be sure to orient the front Beam so that the pins on the top are closer to the center of the frame.

2. Using four fasteners and washers (included) per mount, attach the Beam across the front of the Legs as shown in Figure 4. Do not tighten the fasteners fully.

Figure 4. Attaching the front Beam to the Legs (orientation of pins shown at upper left)
Attaching the Back Corner Brackets

To attach the Back Corner Brackets:

1. First, attach the Back Corner Brackets to the back Beam using four fasteners and washers per bracket. Do not tighten the fasteners fully.

2. Attach the Back Corner Brackets to the legs as shown in Figure 5 using four more fasteners and washers (included) per bracket. Align the pins on the brackets with the holes in the top of the Legs. Do not tighten the fasteners fully.

<table>
<thead>
<tr>
<th>Fastener</th>
<th>M5x15 (7760-30604-00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washer</td>
<td>M5 WSHR (7760-30607-00)</td>
</tr>
<tr>
<td>Tool</td>
<td>M4 Hex</td>
</tr>
</tbody>
</table>

Figure 5. Attaching the Back Corner Brackets (bracket to Beam shown at upper left; bracket to leg shown at lower left)
Attaching the End Brackets

To attach the End Brackets:

- Using four fasteners and washers per bracket, attach the Left and Right End Brackets to the Legs as shown in Figure 6. Do not tighten the fasteners fully.

Leveling the Leg Frame

To level the Leg Frame:

1. Start at the back of the frame (either end) and make sure the back beam sits flat on top of the Leg as shown in Figure 3.

2. Starting at either end, place a level (not included) on the top of the leg between the beams, or across both beams directly above the Leg as shown in Figure 7, and determine whether you need to raise or lower the back or front of the leg.

---

**Figure 6. Attaching the right side End Bracket (left side End Bracket shown attached)**

**Figure 7. Side view of a level placed across front and back beams above the left leg**
3 Raise or lower the back of the leg as needed, using the 13 mm open end wrench included with the Legs (see Figure 8). When looking down at the feet from above, turn the wrench clockwise to raise or counterclockwise to lower.

4 To raise or lower the front of the leg, use an M4 Hex to adjust the front leveling feet from above (one M4 Hex is included in the Tool Kit found in the Side Covers package). Turn clockwise to raise, counterclockwise to lower.

5 Repeat for the other leg.

6 Lay the level across the front beam left-to-right (parallel with the beam) and make sure the left and right legs are the same height. Adjust the left or right legs as necessary. Repeat for the back beam.

**Tighten All Fasteners**

To complete the Leg Frame assembly:

1 At the back of the frame (either end), make sure the beam sits flat on the leg and tighten the 4 fasteners that secure the beam to the leg from underneath, then tighten the 4 fasteners of the Back Corner Bracket. Repeat for the other end of the back beam.

2 At the front of the frame (either end) make sure the front beam sits flat on the leg, then tighten the 4 fasteners that secure the beam to the leg from underneath. Repeat for the other end of the front beam.

3 Make sure the End Brackets are aligned correctly with the top of the Beams, then fully tighten the bracket fasteners to the beams.

**How to Proceed**

When your Leg Frames are assembled, proceed to Chapter 4, “Assembling Frame Chassis.”
Chapter 4: Assembling Frame Chassis

This chapter explains how to assemble the chassis and attach them to each other to form the frame of your S6 system.

As recommended in Chapter 1, identify all Frame component kits (Chassis kits, Side Covers, Bolster, and Rear Panel kits) as shown in Figure 10.

![Figure 10. Frame component packages for an example M10 16-5 system (left-to-right, Chassis Kits, Side Covers, Bolster, and Rear Covers)](image)

Assembly and installation instructions for the Producers Desk are noted throughout this guide.

Before You Begin

Do the following:

1. Locate and open the Side Covers package and remove the included Frame Toolkit (labeled 7020-38627-00).
2. Locate and unpack all Frame Chassis components and place them near the work area.
3. Identify each component (see Figure 11), then note whether your Frame Chassis are Large or Small. Some steps in the assembly process vary depending on the depth (Large or Small) of your Frame Chassis, as noted in these instructions.
Frame Chassis Kit Components

Frame Chassis Kits are either Large (extended depth) or Small (reduced depth). The contents of both kits are the same.

![Diagram of Frame Chassis Kit Components]

- 1 – Chassis (See Figure 12)
- 2 – Back Foot
- 3 – Tie-down Bracket for PSU
- 4 – T-strip
- 5 – Display Module Filler
- 6 – Cable Harnesses (not shown)
- 7 – Fasteners: Phillips and Hex fasteners (not shown)

![Diagram of Chassis Parts]

- A – Chassis Bottom Plate
- B – Back Tie Plate
- C – Side Wall
- D – Front Tie Plate
- E – Cable Harnesses (Ethernet/Power)

Producers Desk Components

The Producers Desk option adds two chassis, one “standard” chassis (Small or Large) and one special Inlay Chassis (Small or Large).

- The standard chassis kit is identical to the chassis shown in Figure 11 and Figure 12.
- The Inlay Chassis kit is nearly identical, except for its special cutaway Side Wall and two-piece T-strip.

Other components of the Producers Desk include the Inlay Module panel, Fill Panels, Rear Covers and Compression Panels, Cable Sets, and fasteners. Instructions for these components appear throughout this guide when relevant. For now, locate the Inlay Chassis kit, then decide where you want to place the Producers Desk in the system relative to channel and master sections. (For guidelines and examples, see “If Your System Includes a Producers Desk” on page 35.)
Assembling the Chassis

If you have not already done so, unpack all Frame Chassis and fasteners and arrange them next to each other on your work surface. The Chassis kits also include tie-down brackets (for PSUs), a T-Strip, and Display Module Fillers. Set these aside for now.

Attaching the End Side Wall

To attach the end Side Wall:

1. From the S6 Side Covers package, unpack the included Side Wall.

2. Attach the Side Wall to the Chassis Bottom Plate of the right-most chassis using three #1 Phillips screws (included in each chassis package). The right edge of the Chassis Bottom Plate sits on top of the left edge of the Side Wall as shown in Figure 15.

   • If your system includes a Producers Desk and you want to install it at the far right end of the frame, attach the end Side Wall to the special Inlay Chassis as shown in Figure 16. For all other positions, assembly is identical to standard chassis. Just remember that the Inlay chassis cannot be the left-most chassis, it must have at least one chassis attached to its left.

   Set the other #1 Phillips fasteners aside for now; you will use these later to secure the switch and/or PSU tie-down brackets.
3. Secure the Side Wall to the Back and Front Tie Plates using Hex fasteners and tighten them fully.

4. If your system does not include Legs, proceed to Step 6.

5. If your system includes a Leg Frame, place the first chassis on the right End Bracket and Beams and secure it loosely from underneath using Hex fasteners (included with the Beams) as shown in Figure 18. Make sure the pins on the top of the Beams align with and fit through the openings in the Chassis Bottom Plate. Do not fully tighten the fasteners yet.

---

**Figure 16. Attaching the end Side Wall to the Producers Desk Inlay Chassis (for systems with a Producers Desk being installed at the far right end, only)**

---

**Figure 17. Attaching the end Side Wall to the Back and Front Tie Plates**

---

**Figure 18. Attaching the first chassis to the End Bracket and Beams of a Leg Frame**

---

### Fastener Specifications

<table>
<thead>
<tr>
<th>Fastener</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>M5x8 FHCS</td>
<td>M3 Hex</td>
</tr>
<tr>
<td>M6x14 (SOC)</td>
<td>M5 Hex</td>
</tr>
</tbody>
</table>

(Not to scale)
6 Move the next chassis into position so that the right edge of its Chassis Bottom Plate sits on top of the left edge of the first chassis as shown in Figure 19.

![Figure 19. Attaching the first two chassis (top view, at left, and front view, at right)](image)

7 If your system includes a Leg Frame, attach the second chassis to the Beams and secure loosely using more of the Hex fasteners included with the Beams as shown in Figure 18. Tighten them enough to hold the chassis in place, but do not tighten them fully.

8 Attach the right edge of the second chassis Bottom Plate to the left edge of the Side Wall of the first chassis using three #1 Phillips screws as shown in Figure 20. Do not tighten the screws fully.

![Figure 20. Securing the Chassis Bottom Plate of the first chassis to the Side Wall of the second chassis](image)

💡 Set the other #1 Phillips fasteners aside for now; you will use these later to secure the switch and/or PSU tie-down brackets.
9 Secure the Back and Front Tie plates of the second chassis to the first chassis using Hex fasteners as shown in Figure 21.

<table>
<thead>
<tr>
<th>Fastener</th>
<th>M5x8 FHCS (7760-30553-00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool</td>
<td>M3 Hex</td>
</tr>
</tbody>
</table>

Figure 21. Securing the Back and Front Tie Plates of the first chassis to the Side Wall of the second chassis (cables not shown)

10 Fully tighten all screws holding the Side Walls to the Chassis Bottom Plate (Phillips), Back and Front Tie Plates (Hex).

11 If your system includes legs, fully tighten the fasteners securing each chassis to the Beams and End Brackets.

12 If you are assembling an 8-fader system (two chassis), proceed to “Attaching the Back Feet” on page 25.

13 All other configurations, repeat the previous steps to assemble all chassis, then continue to the next section.

If your system includes a Producer’s Desk option, see the Producer’s Desk Guide for assembly and installation instructions.

Figure 22 shows an example illustration of four assembled chassis (a 24-fader system).

Figure 22. Four Frame Chassis Large (cables not shown)

**Important**

⚠️ Do not lift or move an S6 system that is five or more chassis in width (32-faders or more). If you need to move a five-or-wider S6 system that does not include Legs, you must partially disassemble the frame so that no section is more than four chassis in width. For more information, see Appendix A, “Expanding or Disassembling S6.”
Attaching the Back Feet

After assembling the chassis, attach the back feet.

- One Back Foot is included with each Frame Chassis kit.
- Two Back Foot Mounting Spacer bars and an additional Back Foot are included in the Side Covers kit.

Install the back feet even if your system includes a Leg Frame.

Installing Back Foot Mounting Spacers

To install the two Back Foot Mounting Spacers:

1. Locate the Back Foot Mounting Spacer bars (2) included in the Side Covers kit.

   Back Foot Mounting Spacer bars included in the Side Covers kit
   
   | Back Foot Spacers | 7600-31390-00 |

2. Standing at the back of the frame, attach one Spacer bar to the left and right back corners of the frame using two Hex fasteners per bar as shown in Figure 23. Make sure to orient the Spacer bars correctly.

Figure 23. Back Foot Mounting Spacer Bars (upper left), and attaching the Back Foot Mounting Spacer bars

<table>
<thead>
<tr>
<th>Fastener</th>
<th>M5x8 FHCS (7760-30553-00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool</td>
<td>M3 Hex</td>
</tr>
</tbody>
</table>
Attaching the Back Feet

To attach the Back Feet:

1. Unpack each Back Foot and fasteners from each Frame Chassis kit. Locate and unpack the additional Back Foot in the Side Covers package.

2. Using a #2 Phillips screwdriver (magnetic tip recommended) and included #2 Phillips screws, attach the assembled feet to the back of the frame. Be sure to orient them correctly before securing them to the frame.
   - At the left- and right-most ends of the frame, attach the feet to the Spacer bars and adjacent Back Tie Plates as shown in Figure 24.

The number of back feet is equal to the number of chassis (width) of the frame, plus one. For example, a 16-fader S6 system has a frame width of three chassis, so it requires four back feet (3+1=4). Similarly, a 32-fader system requires six back feet (5+1=6).

2. Using a #2 Phillips screwdriver (magnetic tip recommended) and included #2 Phillips screws, attach the assembled feet to the back of the frame. Be sure to orient them correctly before securing them to the frame.
   - At the left- and right-most ends of the frame, attach the feet to the Spacer bars and adjacent Back Tie Plates as shown in Figure 24.

If the threaded foot blocks access to the mounting screws, extend the foot a few turns. See “Leveling the Chassis” on page 27.
• All other Back Feet are mounted to adjacent Back Tie Plates as shown in Figure 25.

**Leveling the Chassis**

After the feet are mounted to the frame, check that the chassis is level. If one or more feet are too short or too tall, raise or lower them in order to level and support the back of the frame. You can adjust the feet using an M3 hex driver as shown in Figure 26.
Attaching the Bolster

The Bolster is a one-piece reinforced arm rest that matches the width of your configuration. The wide, padded surface provides a comfortable work area, and its one-piece design provides additional structural support along the front of the control surface. The Bolster also provides a slot in which you can install the Keyboard Tray option.

The Bolster hangs along the front edge of the frame and is secured from below using fasteners.

**To attach the Bolster:**

1. Locate the Bolster and remove it from its packaging, being careful to locate the included fasteners.
2. Note the power cables included in the Bolster package. These are for the PSUs and Ethernet switch and will be installed later. Set them aside.
3. Pick up the Bolster using both hands. When installing larger systems (6 or more chassis in width), get someone to help.
4. Make sure the Bolster is oriented correctly and carefully lower it onto the receiving edge along the top of the front edge of the frame, so the Bolster hangs in position as shown in Figure 27.
5. Attach the Bolster to the frame from below by partially threading all the included Hex fasteners. Do not fully tighten the fasteners yet.
6. After all fasteners are in place, return to the first fastener and tighten it and the others securely.

![Figure 27. Attaching the Bolster](image)

⚠️ Never attempt to move or lift a frame (any size) by the Bolster, Side Covers or Rear Covers to avoid the risk of damage. Move or lift by the frame (metal chassis) instead.
Installing Display Module Mounting Brackets

If your system includes Display Modules, install their mounting brackets as explained in the following instructions. (The Display Modules are attached to the mounting brackets later.)

Display Modules can be added to channel chassis (but not to master section chassis).

If your system does not include Display Modules, proceed to “Installing Rear Cover Mounting Brackets” on page 30.

If your system includes one or more Display Modules, do the following:
1. Unpack all S6 Display Modules and locate their mounting brackets. Fasteners are included in a small bag taped to the bracket. Use the four flathead Hex fasteners to attach the brackets to the chassis. Set the other four rounded fasteners aside (these will be used to attach the module to the brackets later).

2. Attach the first Display Module Mounting Bracket to the four holes located on the center of each channel chassis’ Back Tie Plate using four flathead Hex fasteners. Be sure to orient the brackets correctly, as shown in Figure 28. Do not attach a Display Module Mounting Bracket to the chassis that will contain your master section modules.

3. Repeat for other Display Modules, attaching their brackets to the back of each channel chassis.

4. Leave the actual Display Modules aside for now. You will attach them to the mounting brackets later.

Figure 28. Attaching Display Module Mounting Brackets

<table>
<thead>
<tr>
<th>Fastener</th>
<th>M5x12 FHCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool</td>
<td>M3 Hex</td>
</tr>
</tbody>
</table>
Installing Rear Cover Mounting Brackets

Rear Covers support and conceal cables. Rear Covers consist of two pieces, a lower bracket that mounts to the frame, and an upper cover that attaches to the bracket later.

To install the Rear Cover Mounting Brackets:

1. Unpack the Rear Cover brackets and fasteners from their packaging (each bracket uses two Hex fasteners and washers).

   Each Rear Cover package also includes a Compression Panel, which is installed later. Set all Compression Panels aside for now.

2. Standing at the back of the frame, start at the far left and attach one Rear Cover bracket to the Back Tie Plates of the first two chassis using Hex fasteners and washers. Figure 30 shows how they are attached to the chassis (if your system includes Display Modules, the Rear Cover Mounting brackets are attached between the legs of the Display Module Mounting brackets).

   Before tightening the fasteners, make sure the bottom lip of the tray is flat against the lower back edge of the chassis (make sure the lip is not sitting on, or hooked below, the edge of the chassis) as shown in Figure 31.

   Fastener: M5x8 SHCS (7760-30593-00)
   Washer: M5 WSHR
   Tool: M4 Hex

   Figure 30. Attaching Rear Cover Mounting Brackets (Display Module Mounting Brackets not shown)

   Before tightening the fasteners, make sure the bottom lip of the tray is flat against the lower back edge of the chassis (make sure the lip is not sitting on, or hooked below, the edge of the chassis) as shown in Figure 31.

   Figure 31. Side view showing proper alignment of Rear Panel to back of chassis

How to Proceed

After attaching the Rear Cover brackets, set the upper covers aside for now (these are attached later, after cables are in place) and proceed to Chapter 5, “Installing Power and Connectivity.”
Part III: Modules
Chapter 5: Installing Power and Connectivity

This chapter explains how and where to install the Power Strip, Ethernet switches and Power Supply Units (PSUs), how to connect Ethernet throughout the system using the included Cable Sets, and how to connect power to PSUs and the switch.

As recommended in Chapter 1, identify and organize the packages containing the Power Strip, Ethernet switch(es), PSUs, and Cable Sets, as well as the Bolster package. Though the Bolster was installed previously, its package includes special AC cables required for the Ethernet switch and PSUs.

Overview

The basic steps are:

1. Install the Power Strip (see “Installing the Power Strip” on page 34).
2. Determine switch and PSU placement for your configuration as described in “Ethernet Switch and PSU Placement per System Configuration” on page 34.
3. Place the Ethernet switch in the appropriate chassis (see “Installing the Ethernet Switch” on page 38).
4. Place PSUs in the appropriate chassis (see “Installing PSUs” on page 39) and secure them using the included tie-down brackets.
5. Attach the special AC power cables (included in the Bolster package) to the Ethernet switch and PSUs.
6. Install Cable Sets to connect the Ethernet switch(es) to each chassis, then install the single Ethernet cable for workstations (see “Installing and Connecting Cabling” on page 42).
7. After all Ethernet cables are in place, connect the AC cables for the switch and PSUs to the power strip.
8. Install the Ethernet switch tie-down bracket(s).
Installing the Power Strip

The power strip is placed across the Rear Panel brackets, behind the center of the frame.

To install the power strip:

1. Standing behind the middle of the frame, place the power strip on the Rear Panel brackets so that it sits on the angled arms of the brackets as shown in Figure 2. The power strip’s sockets should face up and towards the front of the frame.

2. Run the power strip AC cable along the back of the frame to the far left or right end. Do not connect it to a power source yet.

Ethernet Switch and PSU Placement per System Configuration

Figure 3 illustrates switch and PSU placement for an example 32-fader (five chassis wide) system. Notice how the Ethernet switch is in the middle chassis; two PSUs are installed in a chassis next to the Ethernet switch; all units are secured with tie-down brackets.

When determining the placement of the Ethernet switch and PSUs, observe the following guidelines:

- Install the Ethernet switch in the chassis in the middle, or next to the middle, of the frame as shown in the diagrams on the following pages.
- Install one PSU in each chassis but do not place one in the same chassis as the Ethernet switch. Instead, put two PSUs in an adjacent chassis.

The diagrams on the following pages show where to put the Ethernet switch(es) and PSUs in Avid-configured and custom configurations.

If your system includes a Producers Desk option, see “If Your System Includes a Producers Desk” on page 35 for additional guidelines.
If Your System Includes a Producers Desk

The width of a system (number of chassis) determines Ethernet switch, PSU, and Cable Set installation requirements. When assembling a system that includes a Producers Desk, the following two factors affect whether or not the two chassis of the Producers Desk are included in the total frame width, and whether or not a PSU is required in any Producers Desk chassis:

- The location (left to right) of the Producers Desk in the frame
- The presence (or absence) of Fader Modules in either or both of the Producers Desk chassis

Examples

Frame Width Ignores Producers Desk

If you want the Producers Desk at the far left or right end of the frame, and will not be installing Fader Modules in any of its chassis, ignore the Producers Desk chassis when determining switch and PSU placement. For example, Figure 4 shows an empty Producers Desk installed at the far right. In this configuration, the switch goes in the middle channel chassis (E in Figure 4).

Frame Width Includes Producers Desk

If you want the Producers Desk anywhere other than the far left or right end, and you will not be adding Fader Modules to the Producers Desk chassis, then include the Producers Desk chassis when determining switch placement. For example, Figure 5 shows the Producers Desk between channel chassis and the master section chassis. In this configuration, the switch goes in the left chassis of the Producers Desk (E in Figure 5).

Regardless of where the Producers Desk is installed, if you add Fader Modules to either or both of its chassis then include the Producers Desk chassis when determining switch and PSU placement. For example, Figure 6 shows the Producers Desk with Fader Modules at the far right. In this configuration, the switch goes in the master section chassis (E in Figure 6), and PSUs in both of the Producers Desk (P in Figure 6).
Switch and PSU Placement for Avid-Configured S6 Systems

These diagrams show switch and PSU placement for all frame widths available with Avid-configured S6 systems, which range in size from 8-fader/two chassis (such as an S6 M10-8-5) up to 32-fader/five chassis (such as an M40-32-9-D). Use these diagrams to determine where to place units, then proceed to “Installing the Ethernet Switch” on page 38.

For systems that include a Producers Desk, make sure you have read “If Your System Includes a Producers Desk” on page 35.

For larger (custom) configurations see “Switch and PSU Placement for Custom S6 Configurations” on page 37.

2–Chassis Systems

3-Chassis Systems

4-Chassis Systems

5-Chassis Systems
Switch and PSU Placement for Custom S6 Configurations

These diagrams show switch and PSU placement for example systems that are six or more chassis in width. Use these diagrams to determine where to place units, then proceed to “Installing the Ethernet Switch” on page 38.

For systems that include a Producers Desk, make sure you have read “If Your System Includes a Producers Desk” on page 35.

6-Chassis Systems

Figure 7 shows an example six-chassis system such as an M40-40-5 that requires a single 24-port Ethernet switch.

Figure 7. Ethernet switch and PSUs in a 40-fader system requiring one switch

Figure 8 shows a different example six-chassis system such as an M40-40-9-D. This configuration uses two Ethernet switches.

Figure 8. Ethernet switches and PSUs in a 40-fader system with two switches, a 16-port in chassis 1 (far left) and a 24-port in chassis 4

7-Chassis Systems

Figure 9 shows an example seven-chassis system such as an M40-48-9-D. This configuration uses one 16- and one 24-port switch.

Figure 9. Ethernet switches and PSUs in a 48-fader system requiring two switches, a 16-port in chassis 2 and a 24-port in chassis 6

9-Chassis Systems

Figure 10 shows an example nine-chassis system such as an M40-64-9. This configuration uses one 16- and one 24-port switch.

Figure 10. Ethernet switches and PSUs in a 64-fader system requiring two switches, a 16-port in chassis 3 and a 24-port in chassis 7

Figure 11 shows another nine-chassis system such as an M40-64-9-D. This configuration uses two 24-port switches.

Figure 11. Ethernet switch and PSU placement for a 64-fader system with two 24-port switches, one in chassis 3 and the other in chassis 7
Installing the Ethernet Switch

The capacity (number of ports) and number of switches in your system depends on the number of chassis and module in your systems. Systems with fewer chassis and modules might only require a single 16-port switch, larger systems a 24-port switch, while the largest systems (23 or more modules) require two Ethernet switches. Ethernet switches are installed into specific chassis and secured with the included tie-down bracket.

To install the Ethernet switch(es):

1. Unpack the Ethernet switch(es), Ethernet cables and tie-down bracket with fasteners. Though the switch includes a standard power cable in its packaging, you must use one of the special power cables (C14 type) included in the Bolster package.

   Do not use the power cable in the Ethernet switch box (standard male IEC connector). It will not work with the S6 Power Strip.

2. Attach the included feet to the bottom of the Ethernet switch. (Very important!)

3. Refer to the diagrams in “Ethernet Switch and PSU Placement per System Configuration” on page 34 to determine switch and PSU placement for your configuration.

4. Install the Ethernet switch(es) in the appropriate chassis by doing the following
   - If necessary, disconnect the power harness from the terminal port on the inside of the Back Tie Plate (see Figure 12).

   Figure 12. Power harness (make sure it is disconnected before installing Ethernet switch)

   - Place the switch in the chassis so that its ports face the back of the frame (the ports should be visible through the horizontal opening in the Back Tie Plate as shown in Figure 13).

   Figure 13. Back view of a chassis with an Ethernet switch

Connecting Power to the Ethernet Switch

To connect power to the Ethernet switch:

1. Take the male AC power cable provided with the Ethernet switch(es), disconnect it from the switch and set it aside.

2. Locate the additional AC (C14) power cable included in the Bolsters package.

3. Feed the switch end through the opening of the Back Tie Plate and connect it to the Ethernet switch(es). Make sure the cable does not run on top of, or underneath, the switch.

4. Connect the other end to the power strip you installed at the beginning of this chapter.

5. If your system includes two Ethernet switches, repeat for the other switch.

6. Set the tie-down bracket aside (it is installed after all cables are in place).
Installing PSUs

Each chassis requires one PSU to supply power for modules. PSUs are installed alone or in pairs and secured with the tie-down brackets (one is included in each Chassis package).

To install PSUs:
1. Unpack all PSUs from their packaging, and collect their special AC cables included in the Bolster package.
2. Place one PSU in each chassis but do not place one in the same chassis as the Ethernet switch. Instead, put two PSUs in an adjacent chassis. In addition:
   • Place PSUs under or between (but not on top of) the built-in Cable Harnesses.
   • Make sure the DC cable is facing the front of the frame, and the AC socket is to the back.
   Refer to the diagrams in “Ethernet Switch and PSU Placement per System Configuration” on page 34 to determine switch and PSU placement for your configuration.
3. Feed the DC cable out through the largest opening in the Back Tie Plate.
4. Secure PSUs with the tie-down brackets as shown in Figure 14. One bracket and fasteners (#1 Phillips) are included in each Chassis kit.

Figure 14. Installing one PSU and tie-down (shown at left) and two PSUs and tie-downs (at right). Cables and wall not shown.
Connecting Power Cables to the PSUs

To connect power to PSUs:

1. If you haven’t already, feed the DC power cable from each PSU out through the opening in the Back Tie Plate as shown in Figure 15.

2. Connect the cable terminal end from the outside back of the chassis to the power terminal connector on the Back Tie Plate as shown in Figure 16. Use a small flathead screwdriver to secure the plug to the terminal.

3. Do the following to connect power to the chassis containing the Ethernet switch (see Figure 17):
   - In the chassis with two PSUs, feed the DC cable of the second PSU through the largest opening in the Back Tie Plate, then run the cable across to the chassis with the switch.
   - Attach the terminal end to the power terminal connector on the Back Tie Plate of that chassis and secure it with a flathead screwdriver.
4 Locate the power cables included in each PSU box and set them aside.

5 Locate the special (C14) cables included in the Bolster package.

6 Connect the appropriate end of the power cables from the Bolster package to the PSU (repeat for all PSUs).

7 Feed the other end of the AC cables through the opening in each Back Tie Plate and run them through the upper (square) cable guide openings in the Rear Panel as shown in Figure 18.

8 Plug each PSUs AC cable into an available socket on the Power Strip you installed at the beginning of this chapter.

**Reconnect the Power Cable Harness to Each Chassis**

After all Ethernet and PSU power cables are installed, reconnect each power harness to its chassis power terminals as shown in Figure 19.
Installing and Connecting Cabling

After installing the Ethernet switch and PSUs you are ready to install Cable Sets.

Cable Sets

Cable Sets are bundles of Ethernet cables that connect the Ethernet switch(es) to each chassis. Cables are labeled (1–5) to identify and organize cables and connections. Cable Sets are provided in Small, Medium, and Large (lengths), in appropriate combinations based on your frame configuration.

Large  Long enough to span up to three chassis.

Medium  Long enough to reach to the adjacent chassis.

Small  Short cables to supply Ethernet to the chassis in which the Ethernet switch is installed.

Single  An individual Ethernet cable (purple) is provided to connect the switch to your workstation, or to your network.

Tip  For systems that require two Ethernet switches, an additional single cable is provided to connect the two switches to each other.

If your system includes a Producers Desk, additional Cable Sets are provided for configurations in which the Producers Desk is either between channel and/or master section chassis, or if Fader Modules are installed in either chassis of the Producers Desk.

Installing Cable Sets

To install Cable Sets:

1  Unpack and identify all Cable Set(s) included with your system. Cable Sets are color coded according to their length (Small, Medium, or Large). Your system may include sets of two or all three lengths depending on the configuration.

2  Standing behind the chassis containing the Ethernet switch, connect cables 1–5 of one of the longest Cable Sets to ports on the Ethernet switch by feeding them through the slot in the Back Tie Plate as shown in Figure 20. We suggest starting on the bottom row of ports to make it easier to connect other Cable Sets later, but your specific configuration will determine the best arrangement. Use the switch ports that make the most sense for distance, identification or personal preference.

Figure 20. Connecting the first Cable Set to the Ethernet switch (top view shown at lower left; back view of chassis shown at upper right)
3 Run the Cable Set through the (lower) triangular cable guides in the Rear Cover brackets to the furthest (left- or right-most) chassis, as shown in Figure 21. (For systems with more than three chassis, see “Installing Cable Sets in Large Configurations” on page 44.)

💡 The recommended order for Cable Sets is to start with the furthest chassis (either far left or far right) from the switch using one of the longest Cable Sets. Then work across the frame, connecting the switch to the next channel chassis (to the left or right of the first chassis you connected) and repeat for every chassis except the master section chassis, which should be connected last.

4 Connect the other ends (1–5) to the Ethernet terminal ports (1–5) on the outside back of the chassis.

5 Repeat for other Cable Sets and chassis (except the chassis containing any Ethernet switches) as shown in Figure 22:
   - Connect cables 1–5 of the next set to the Ethernet switch.
   - Run the cable set through the triangular cable guides in the Rear Cover brackets to the next chassis.
   - Connect the Cable Set cables 1–5 to the Ethernet terminal ports 1–5 on each chassis.

6 For the chassis containing the Ethernet switch(es), use the Small Cable Set and connect cables 1–5 to available ports on the Ethernet switch, and connect the other ends to terminal ports 1–5 on the chassis.
Installing Cable Sets in Large Configurations

Refer to the following diagrams for Cable Set installation examples for four-chassis (24-fader) and larger system configurations. Numbers in the diagram indicate the type of Cable Set installation.

The recommended order for Cable Sets is to start with the furthest chassis (either far left or far right) from the switch using one of the longest Cable Sets. Then work across the frame, connecting the switch to the next channel chassis (to the left or right of the first chassis you connected) and repeat for every chassis except the master section chassis, which should be connected last.

4-Chassis Systems

(See Figure 24)

1  Cable Set Large
2  Cable Set Medium
3  Cable Set Small

Figure 24. Cable Sets in a 24-fader (four chassis) system.

5-Chassis Systems

(See Figure 25)

1  Cable Set Large
2  Cable Set Medium
3  Cable Set Small

Figure 25. Cable Sets in a 32-fader (five chassis) system
6-Chassis Systems

Systems with 40 faders (six chassis) require slightly different cabling depending on the number of modules in the system; the number of modules determines whether the system needs one or two Ethernet switches.

Example 1 (Single Ethernet Switch: see Figure 26)

1. Cable Set Large
2. Cable Set Medium
3. Cable Set Small

![Figure 26. Example 1: Cable Sets in a 40-fader (six chassis) system with a single Ethernet switch](image)

Example 2 (Dual Ethernet Switches: see Figure 27)

1. Cable Set Large
2. Cable Set Medium
3. Cable Set Small
4. Ethernet Cable (single) to connect the two switches to each other

![Figure 27. Example 2: Cable Sets in a 40-fader (six chassis) system with two Ethernet switches](image)

7- and 9-Chassis Systems

For systems with seven or more chassis, use the previous diagrams and order of connections to install Cable Sets. For example, if you are assembling a 7-chassis system connect the Ethernet switches to each other first using the single, long Ethernet cable, then use Large and Medium Cable Sets to connect each switch to its surrounding chassis, following the examples above.
**Short Ethernet Cables for Knob Modules and Display Modules**  
*(Systems with Two Knob Modules per Chassis and/or Display Modules Only)*

If your system includes two Knob Modules in any chassis, take one of the included 12-inch long Ethernet cables and connect one end of it to an available port on the interior of the Back Tie Plate. Repeat for all chassis that will have two Knob Modules.

If your M40-based system includes one or more Display Modules, route a 12-inch Ethernet cable through the middle hole on the back of the chassis as shown in Figure 28. Feed an available 2-pin power cable from the Cable Harness through the same opening (you will connect these to the Display Module later).

![Figure 28. routing a short Ethernet cable for a Display Module (2-pin power cable not shown)](image)

**Ethernet Cabling for Systems with Two Ethernet Switches**

If your system includes 23 or more modules, two Ethernet switches are required. The two switches must be connected to each other using a single Ethernet cable.

To connect two Ethernet switches to each other:

1. Feed one end of the included single Ethernet cable through the opening in the back of either of the chassis containing an Ethernet switch.
2. Connect it to an available port on the switch.
3. Run the cable through the triangular openings in the Rear Covers and connect it to an available port on the other switch.

**Installing the Ethernet Cable for Workstations**

To install an Ethernet cable for connecting to workstations:

1. Connect one end of the single Ethernet cable (included with the Ethernet switch) to an available port on the switch.
2. Guide the cable across the Rear Covers to the far left or right corner. Do not yet connect it to any workstations, routers, or switches.

⚠️ Do not connect the system to any workstation, external routers, switches or networks until after you have updated S6 system software as explained later in this guide.

3. If you plan on connecting directly to multiple workstations, connect another Ethernet cable (not included) to an available port on the switch and route it as described in the previous steps.
Installing the Tie-Down Bracket for the Ethernet Switch

After all Ethernet and power cables are installed, secure the Ethernet switch to its chassis using its included tie-down bracket as shown in Figure 29. The bracket and its fasteners are included in the Ethernet Switch package.

Make sure to orient the bracket correctly so that the notch in the bracket fits around the grounding post on the switch.

![Diagram of installing the tie-down bracket](image)

Figure 29. Orienting the tie-down (at left), installing the tie-down (middle) and top view after installation (right). Cable Harnesses not shown.
Attaching the Side Covers

After cables are in place, install the Side Covers (Side Covers must be installed before modules).

To attach the Side Covers:

1. Before attaching the Side Covers, make sure to route the single Ethernet (workstation) cable and the AC cable from the power strip across the Rear Covers and down through the gap to the right (or left) of the outer Rear Cover brackets (see Figure 30).

![Figure 30. Gap for power strip AC and workstation Ethernet (switch, PSUs and cables not shown)](image)

2. From the inside of the chassis, use four of the included flathead Phillips screws to secure the Side Cover to the frame as shown in Figure 31.

<table>
<thead>
<tr>
<th>Fastener</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4x14 FPH</td>
<td>#2 Phillips</td>
</tr>
</tbody>
</table>

![Figure 31. Securing the left Side Cover (switch, PSUs and cables not shown)](image)
3 From the inside of the chassis, use four more flathead Phillips screws to secure the right Side Cover to the frame as shown in Figure 32.

![Figure 32. Attaching the right Side Cover (switch, PSUs and cables not shown)](image)

**Fastener** | M4x14 FHPH  
**Tool**    | #2 Phillips


⚠️ *Never attempt to move or lift a chassis (any size) by the Side Covers, Bolster, or Rear Panels (they can break). Move or lift while holding on to the metal chassis (frame) instead.*

4 After the Side Covers are attached to the chassis secure them to each end of the Bolster using the included fasteners (one per Side Cover), then insert the included plug to conceal the fasteners as shown in Figure 33

![Figure 33. Securing the left Side Cover the Bolster](image)

**Fastener** | M4x14 FHPH  
**Tool**    | #2 Phillips

5 Repeat step 4 for the right Side Cover.

### How to Proceed

After assembling the frame and installing the Ethernet switch, PSUs and cabling, proceed to Chapter 6, “Installing Modules.”
Chapter 6: Installing Modules

This chapter shows you how to install and connect hardware modules into an assembled frame.

The basic steps for installing and connecting modules are as follows:

• Populate the first (left-most) chassis with all its modules. Install and connect modules in each chassis, front-to-back.

⚠️ The Master Module requires several special connections that are unique from other modules. Be sure to follow all instructions carefully.

• Repeat to populate all other chassis with modules.
• Install Display Modules, if any.

About These Instructions

The following instructions show an S6 M40 24–5 system as an example configuration (see Figure 34). This configuration provides 24 fader strips with 5 knobs per strip, plus a standard master section module configuration.

• 3 Fader Modules
• 3 Process Modules
• 3 Knob Modules
• 1 Master Module (M40)
• 1 Automation Module

Figure 34. Arrangement of modules in example S6 M40 24-5 system

This example configuration has the master section modules at the far right of the system with faders to the left. However, modules can be arranged in many different positions as explained in Chapter 2, “Modules and Configuration Overview.” Your exact installation procedure will differ slightly from this example configuration depending on your system and arrangement of modules.
Installing Modules

Install all modules beginning with the left-most chassis. Begin with the slot/module closest to the front (slot 1). In our example S6 M40 24-5 configuration we are installing channel modules in the left-most chassis, so the first (front-most) module to install is a Fader Module. In other configurations the left-most chassis could be for Master modules (see “Installing Master Section Modules” on page 55).

Installing Channel Modules

To install Channel modules:

1 If you haven’t already done so, unpack one Fader Module.

2 Holding the Fader Module close to its chassis, do the following:
   • Connect the longest 2-pin Molex power cable among those in the built-in Cable Harness to the DC input on the side of the module.
   • Use one of the longest RJ-45 cables in the built-in Cable Harness and connect it to the Ethernet port on the side of the module.

3 Install the connected Fader Module into the slot 1 (the front-most slot) in the chassis, being careful to orient it correctly and seat it at the front edge of the chassis. In our example we are installing the first Fader Module into slot 1 of the first (left-most) chassis. Make sure the module sits completely into the frame and not on any cables.

Later, after all modules are in place, they will be secured within their chassis by installing Compression Panels and T-Strips.
4. Locate the Process Module and connect power and Ethernet to it as you did for the Fader Module. Use the longest available power and Ethernet cables in that Cable Harness.

5. Install the connected Process Module in slot 2 behind the Fader Module, being careful to orient it correctly and seat it fully against the top edge of the Fader Module. Make sure the module sits completely into the frame and not on the previously installed module, nor on any cables.

6. Locate a Knob Module and connect power and Ethernet.

7. Place the Knob Module in slot 3 behind the Process Module. Be careful to orient it correctly and seat it fully against the top edge of the Process Module.
8 If your system includes two Knob Modules in a Frame Chassis Large, do the following:

- Connect power to the second Knob Module.
- Take one of the included 12-inch Ethernet cables you installed earlier (see “Short Ethernet Cables for Knob Modules and Display Modules” on page 46), and connect the other end to the Knob Module.
- Install the second Knob Module in slot 4, directly above the first Knob Module. Make sure the module sits completely into the frame and not on any cables or other modules.

Example of a Frame Chassis Large with one Fader Module, one Process Module and two Knob Modules

9 Repeat the previous steps for all other Channel modules.

Channel Modules installed (switch and PSUs not shown)
Installing Master Section Modules

Installing the Automation Module is nearly identical to installing a Fader Module.

Installing the Automation Module

To install the Automation Modules:

1. If you haven’t already done so, unpack the Automation Module and Master Module.

2. Hold the Automation module above its chassis and do the following:
   • Connect the longest 2-pin Molex power cable to the DC input on the side of the module.
   • Connect the longest Ethernet cable to the Ethernet port on the side of the module.

3. Install the connected Automation Module into the first (front-most) slot of the chassis. Make sure the module sits completely into the frame and not on any cables.
Installing the Master Module

Installing a Master Module is similar to other modules but requires additional connections.

To install the Master Modules:

1. Hold the Master Module above the chassis and connect two of the 2-pin Molex cables in the Cable Harness, one to each of the two DC inputs on the side of the module as shown in Figure 35.

2. Connect the longest available Ethernet cable to the Ethernet port on the side of the module (see Figure 36):

3. After connecting Ethernet to the primary (side) Ethernet port of the Master Module, do either of the following (see Figure 37):
   - If you are connecting S6 to an existing DHCP Server on your network, connect another Cable Harness Ethernet cable to Ethernet port 1 (left) on the back panel of the Master Module.
   - If you are not connecting S6 to an existing DHCP Server on your network (and/or if you will be connecting the S6 switch directly to one or more workstation) connect the second chassis Ethernet cable to back panel Ethernet port 2 (right).

   If you are unsure of whether you have a DHCP server on your network, consult your IT department.

   \[\text{Only connect chassis Ethernet to one of the two Ethernet ports on the back (in addition to the primary module connection on the side panel). The Master Module supports two Ethernet connections, total, but one must be to the primary side panel port.}\]

4. If you plan on using Talkback, connect an XLR cable (90-degree jack recommended) to the XLR THRU port on the back of the Master Module and route it through the opening in the Back Tie Plate. Guide it to the far-left or right corner and down through the opening between the Side Cover and chassis.
5 Install the connected Master Module (the Master Module occupies two slots). Make sure to orient it correctly by seating it fully against the top edge of the Automation Module. Do not fold or pinch its connected cables. Pay special attention to the back panel connectors for Ethernet (required) and/or Talkback (optional).

Master Module and Master Automation Module

Setting the Touchscreen Angle and Removing Protective Film

After installing the Master Module, set the Touchscreen to your desired viewing angle and lock it in place by tightening the thumb-screw on the angled stand. Remove the protective film from the touchscreen.

Installing Display Modules

If your M40 system includes Display Modules, attach them to the brackets you installed earlier (see “Installing Display Module Mounting Brackets” on page 29).

To install a Display Module:

1 Locate the four rounded fasteners included with the Display Module that you unpacked when installing the mounting brackets.

2 There are two positions to mount the Display Module, low and high. Select a position, then attach the Display Module to a Display Module Mounting Bracket and secure it with the included mounting screws.

Figure 38. Attaching a Display Module to its mounting bracket (side view)
3 Connect power and Ethernet to the connectors on the bottom of the display. Use the power cable and 12-inch Ethernet cable you fed through the back of each chassis in “Short Ethernet Cables for Knob Modules and Display Modules” on page 46.

4 Repeat the previous steps to install other Display Modules.

How to Proceed

After all modules and Fill Panels are in place, go to Chapter 7, “Confirm Installation and Update Software” to complete the installation of your S6 system.
Chapter 7: Confirm Installation and Update Software

After assembling the system and installing modules, use the instructions in this chapter to do all of the following:

- Start up the system for the first time to confirm power and Ethernet (see “Starting Up and Shutting Down” on page 59).
- Activate and Register your purchase, then download and install any available updates (see “Activate and Register” on page 59).
- Update S6 system software and supporting software (see “Updating S6 System Software” on page 60).

Starting Up and Shutting Down

Follow these instructions when starting up S6 for the first time.

Starting Up for the First Time

To start up the system for the first time:

1. Make sure the system is not connected to any external workstations, router, switch, or other network device.
2. Turn on power to the S6 power strip from its power source (UPS, power conditioner, or other).
3. Check all Link LEDs on the Ethernet switch(es) and make sure they are all indicating communication. If not, make sure cables are fully connected into their sockets.
4. The Touchscreen displays S6 Master Module startup screens.
5. Follow the on-screen instructions to Shut Down.
6. Use a personal computer to go on-line to Activate and Register, then download important software and updates and follow their included instructions (see “Activate and Register” on page 59).

Shutting Down

To shut down:

1. On the Touchscreen, touch Shut Down. If necessary, navigate the Touchscreen to the About page and touch Shut Down.

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

2. Turn off power at the source device supplying power to the S6 Power Strip (UPS, power conditioner or other).

Activate and Register

Before continuing, review the Activation Card and Registration Information Card (included in the pouch at the front of this S6 Installation Guide binder). Use a separate computer and follow the instructions to activate your Avid Master Account (required) and register your purchase (optional, but highly recommended).

⚠️ Activate your purchase using the enclosed S6 Activation card so you can receive software updates directly in your Avid Master Account. Check your Avid account for updates immediately after configuring your surface.

For complete instructions, see “Updating S6 System Software” on page 60.
Updating S6 System Software

This section provides instructions for acquiring and installing updated S6 Master Module software.

Required Materials

The following are required to transfer the MTMApp software to your S6 system:

- A USB flash drive (not included), formatted as NTFS, FAT32 or other Windows 8-compatible (Mac formatted drives are not supported)

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

- Mac (OS X) or Windows (Windows XP, Windows 7 or Windows 8) computer with an Internet connection and a USB port

Updating Master Module Software

The process of acquiring and updating S6 software involves these basic steps:

- Download the software update from your Avid Master Account and transfer the installer to a USB flash drive
- Log in as Administrator on the S6 Master Module
- Insert the USB flash drive and install the Master Module software update
- If prompted, update module firmware

Downloading and Transferring Software Updates

To download S6 software and other resources:

1. Make sure you have activated your system (see “Activate and Register” on page 59).

2. On a separate computer navigate to www.avid.com and click on My Account to log in to your Avid Master Account. Software updates (if any), Workstation software, documentation, and other resources are available in the My Products section under S6 Software Updates.

3. Click to download the latest versions of the S6 Master Module Software (ZIP file) from your Avid account to your computer.

⚠️ To save time, also download the available workstation software (WSControl) installers and S6 documentation.

4. Insert a USB flash drive into an available USB port on your computer.

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

5. Expand (decompress) the ZIP file containing the Master Module software to unzip it.

6. Copy the resulting folder to the top (root) level of your USB drive.

Logging in as Administrator, Updating Master Module Software and Module Firmware

To install and update S6 Master Module software:

1. On the S6 Master Module Touchscreen, select Logout (From the Home screen, navigate to Settings > About, then tap Logout.)

2. Select Administrator. When prompted enter the following default password:

    password

    Once you are logged in you will see the Windows 8 Start Screen.

3. Click the File Explorer tile.

4. Plug the USB flash drive with the downloaded S6 Master Module installer into one of the available USB ports on the back of the Master Module. The USB drive will now show up in the left hand column under Computer.

5. Tap on the USB flash drive to see the contents.

6. Launch (run) the S6MasterModuleInstall 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 Master Module. Click Yes to restart.

If you are prompted to update module firmware, do the following:

- Navigate to the Settings > Surface page and 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.

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, after which the system will automatically restart.

**Installing S6 Supporting Software**

Your Avid Master Account also provides workstation software for Windows and Mac, and S6 documentation. XMON EUCON and Studio Monitor Pro2 software options are included in these installers.

### After updating S6 system software, do the following:

1. If you have not already done so, on a separate computer navigate to www.avid.com and click on My Account to log in to your Avid Master Account, then click to download the latest versions of the WSControl (workstation) software, S6 documentation, and other resources available in the My Products section under S6 Software Updates.

   You can download these components directly to the workstation(s) you plan to use with S6, or to a USB flash drive as described in the following steps.

2. Transfer the installers to a USB flash drive.

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

### To install WSControl (workstation) software:

1. Insert the USB drive containing the downloaded WSControl installer into an available USB port on your workstation.

2. Navigate to the USB drive, double-click the Workstation Software installer and follow the instructions on-screen. To install XMON EUCON or Studio Monitor Pro2 make sure their options are checked.

3. After (and only after) you have updated S6 system software and installed WSControl on your workstation(s), connect the S6 Ethernet switch to your workstation, router or switch using an Ethernet cable.

   For instructions on how to connect XMON to your system, see the XMON EUCON Application Guide; for Studio Monitor Pro, see the Studio Monitor Pro Guide. Both guides are included in the S6 documentation download available in your Avid Master Account.

After updating S6 software and confirming that all modules are connected and active, proceed to Chapter 8, “Complete the Hardware Assembly.”

To troubleshoot individual modules, see “Utility Test Mode for Modules” on page 75.
Chapter 8: Complete the Hardware Assembly

After installing software updates, add Fill Panels, Compression Panels and T-Strips to secure the modules in place, then install upper Rear Covers to complete the hardware assembly.

Installing Fill Panels

After all modules are installed (including Display Modules, if any), install Fill Panels. Fill Panels are available in two sizes to fill large and small slots.

**Fill Panel Large** Same size as Fader Modules, for filling slot 1 (Fader and Automation Module slots).

**Fill Panel Small** Same size as Process and Knob Modules, for filling slots 2, 3, or 4.

To install Fill Panels:
- Unpack the Fill Panel packages, and install them to cover any empty slots. Fill Panels slide into place, just like modules.

Producers Desk

To install panels on a Producers Desk:
1 Install a Fill Panel Large into slot 1 of each empty Producers Desk chassis.
2 Unpack the Inlay Module and install it above the Fill Panels (and/or Fader Modules).
3 For Producers Desks in Frame Chassis Large, install the two additional Fill Panels above the Inlay Module.

![Figure 40. Installing a Fill Panel Large into slot 1 (at left) and installing the Inlay Module (right)](image-url)
Installing Compression Panels

After you have installed all modules and covered any empty slots with Fill Panels, install a Compression Panel at the top of each chassis.

Compression Panels are spring-loaded panels that seal the top of each chassis and hold the modules in place. Compression Panels come in three sizes, Channel (for channel chassis), Master ED (large, for the master chassis in systems comprised of Frame Chassis Large), and Master RD (small, for the master section chassis in systems comprised of Frame Chassis Small).

To install Compression Panels:

1. Unpack the Compression Panels (included in the Rear Covers package). Remove the protective film from each panel.
2. If there is a Display Module in any chassis, make sure those power and Ethernet cables are routed through the opening in the Back Tie Plate (these will be held in place later when you attach the upper Rear Panels).
3. Holding the panel at an angle, place the spring side of the panel against the back of the chassis and apply enough pressure to compress the springs, then lower the front edge of the Compression Panel into place at the top of the chassis as shown in Figure 42.
4. Repeat for other Channel chassis. If your system includes a Producers Desk, install Compression Panels into its two chassis.
5 Take the Master Compression Panel (included in the Side Covers package) and hold it so that the side with the springs faces the back of the frame. If you have a Frame Chassis Small, use the smaller Master Compression Panel.

6 Holding the panel at an angle, place the spring side of the panel against the back of the chassis. Apply enough pressure to compress the springs, then lower the front edge and snap it into place.

---

**Installing T-Strips**

After installing modules and Compression Panels, install T-strips to further secure the modules in their chassis.

**To install T-Strips:**

1 Collect all T-strips: One is included with each Frame Chassis kit and one is included with the Side Covers kit. In addition, the Producers Desk includes a special two-piece T-strip.

2 Take a full length T-strip and, orienting it as shown in Figure 44, do the following for each channel and master section chassis:
   - Insert the bottom end (the end closest to the front of the control surface) into the receiving slot in the Side Wall.
   - Working towards the back, push the T-strip down into its channel then push the end of the T-strip down so it clicks into place.

3 Repeat for all other full length T-strips.

---

*Figure 43. Installing a Master section Compression Panel*

*Figure 44. Installing a T-strip*
4 If your system includes a Producers Desk, install its two-piece T-strip as shown in Figure 45.

![Figure 45. Installing T-strips in the Producers Desk](image)

5 If you need to remove T-strips, see “Removing Modules” on page 72.

### Attaching the Upper Rear Covers

The upper Rear Covers have open corners to guide power and Ethernet for Display Modules (if your system includes Display Modules), and cutouts to support S6 Options (such as the VESA monitor mount).

![Figure 46. Upper Rear Covers](image)

**To install the upper Rear Covers:**

1 Take one of the upper Rear Covers and, starting at the far left of the frame, lower it into place so that its mounting screw lines up with the receiver on the bracket, then secure its thumb-screw into the threaded receiver on the Rear Cover Mounting Bracket.

![Figure 47. Attaching the Upper Rear Cover (Display Module cables not shown)](image)
2 Do the following before closing the covers as appropriate for your system:

- If your system includes Display Modules, make sure their power and Ethernet cables are guided through the cutouts at the corners of the upper Rear Cover, then close the cover. Do not install the Display Module Fillers.

⚠️ Make sure the Display Module cables are not pinched when the upper Rear Cover is closed to avoid damaging the cables.

- If your system does not include Display Modules, close the upper Rear Covers and then install Display Module Fillers (shown in Figure 48; one is included with each chassis) to seal the openings at the corners of adjacent covers. One Filler is included with each chassis.

![Figure 48. Display Module Filler](image)

---

**Configuring the S6 System**

Refer to the electronic *S6 Guide* included with S6 documentation downloads to configure the surface and learn how to use S6.

Check your Avid Master Account regularly to make sure you always have the latest S6 software and documentation updates.
Part IV: Appendices
Appendix A: Expanding or Disassembling S6

This section provides disassembly instructions for modules, PSUs, Ethernet switches, and chassis (frame) components. Use these instructions when preparing to expand or move your system, or while troubleshooting.

Important

- Do not attempt to lift or move an assembled S6 desktop system if it is five or more chassis in width to avoid risk of damage to the frame. If you need to move a five chassis-or-wider S6 system that does not include Legs, you must partially disassemble the frame so that no section is more than four chassis in width.
- Do not lift or move an S6 desktop system that is five or more chassis in width (32 or more faders). Also, do not attempt to move or lift a chassis (any size) by the Side Covers, Bolster, or Rear Panels (they can break). Move or lift while holding on to the metal chassis (frame) instead.

Update the Surface Settings before Permanently Removing Modules

Before physically removing modules that will not be re-installed in the original system (such as when moving a module to a different S6 system, or any situation where the system will be launched while the module is missing), update the surface configuration in the Surface > Settings page to remove (or “unclaim”) the module(s) from the system.

To remove a module from the surface configuration:

1. Navigate the Master Module touchscreen to the Surface > Settings page.
2. Drag a blank strip over the module(s) you are removing.

If you forget to remove a module from the surface configuration before physically moving it to another system, you can temporarily unclaim it after the new systems has booted by holding the top two right-most switches on that module. This will let you claim it from another Master Module. This is only a temporary unclaim and will reset after a power cycle if not claimed by another system.

Overview

S6 M10 systems can be disassembled for maintenance, moving, and troubleshooting. S6 M10 systems can be expanded by adding additional channel modules up to the limits of the M10 Master Module (a maximum of 10 modules in the system, plus the M10).

S6 M40 systems can be disassembled in order to customize the system by adding or rearranging modules, for moving, or for maintenance and troubleshooting. S6 M40 systems can be customized in numerous ways. Here are a few examples:

- You can add Display Modules at any time.
- You can add channel modules and additional chassis (if necessary) to add more fader strips to the system (up to the maximum number of modules).
- You can arrange modules in several different ways, such as having only a Fader Module in one or more chassis, or having two Knob Modules in some chassis but only one in other chassis.
- You can also remove modules from one system and move them into another S6 system to add more faders or knobs to that other system.
Removing Modules

This section shows how to remove modules in order to rearrange them, expand your system or replace modules.

To remove modules:

1. Make sure the system is powered down.
2. Disconnect all power connections.
3. If your system includes Display Modules and you want to remove one or more of them, do the following:
   - Disconnect power and Ethernet cables connected to the Display Modules.
   - Remove the Hex screws that secure the Display Module mounting brackets to the frame (do not remove the Display Module from its mounting bracket) and lift the module and bracket away from the console.
4. If you want to remove channel or master modules, start by removing the T-strips from between chassis, one at a time. Start at the top (back) of the control surface and use a small flat-head screwdriver or similar tool to push down on the tab that holds the T-strip in place, then lift the strip out.

5. Remove the upper Rear Covers:
   - Standing at the back of the system, start at the far-right.
   - Loosen the thumbscrews that hold the upper covers to their mounting brackets and then lift the covers off.
6. Remove Compression Panels from the top-most slot of each chassis. Once the Compression Panels are removed, any of the modules in a chassis can be slid towards the back of the control surface and lifted out of the chassis.
7. Remove Fill Panels (if any).
8. Remove modules by doing the following:
   - If you are removing all modules from a chassis start by removing Display Modules (if any) or start at the top module (usually a Knob Module). If you are removing just one module, slide the other modules towards the back of the control surface.
   - Slowly lift the module out of the chassis, being careful not to strain the power or Ethernet cables.
   - Disconnect power, Ethernet and any other cables connected to the module (such as Talkback, if removing a Master Module).
   - Repeat for all other modules you want to remove.
Disassembling a Frame

You can expand your system width by adding chassis to an existing frame. In order to add one or more chassis to a frame, or to move a frame that is five or more chassis in width you must first disassemble part of the frame as described in the following instructions.

💡 As you disassemble frame components, be sure to keep fasteners organized to simplify re-assembly.

To disassemble a frame:

1. Make sure the unit is powered off and that the power strip is disconnected from its AC source.
2. Remove all modules (see “Removing Modules” on page 72).
3. Remove the Side Covers by unscrewing their fasteners. (Refer to “Attaching the Side Covers” on page 48.)
4. Disconnect and set aside all Ethernet Cable Sets (the cables connecting the Ethernet Switch to each chassis).
5. Disconnect power from the Ethernet Switch and the PSU in each chassis you plan to disassemble.
6. (Optional) Remove the Ethernet Switch and/or PSUs from the chassis.
   - If you are expanding a frame, you may need to relocate the switch. If so, refer to “Ethernet Switch and PSU Placement per System Configuration” on page 34.
   - If you are disassembling to move a system, do not remove the switch or PSUs.
7. Determine which chassis to detach from each other:
   - If you expanding a frame, detach any two interior chassis and install the new chassis between them.
   - When expanding an S6 frame it is usually best to insert the new chassis between existing ones (do not add a new chassis at either the extreme left or right ends). This reduces the amount of hardware to disassemble and then re-install due to the unique components installed on the left and right end chassis (such as Side Covers and Back Foot Spacer Bars).
   - If you are disassembling a large (five chassis or wider) frame to move it, detach as many pairs of chassis as necessary so that no more than four chassis remain attached to each other.
8. Detach chassis by doing the following (refer to “Assembling the Chassis” on page 21 for diagrams of the components):
   - Remove the two Hex fasteners that secure the Front Tie Plate to the adjacent chassis Side Wall.
   - Remove the two Hex fasteners that secure the Back Tie Plate to the adjacent chassis Side Wall.
   - Remove the three #1 Phillips screws that secure the Chassis Bottom plate to the Side Wall of the adjacent chassis.
   - If your system includes Legs, remove the Hex fasteners and washers that secure Chassis Bottom Plates to the Beams.

The two chassis can now be physically separated.
Appendix B: Reference

This appendix provides the following:

- Utility Test Mode for Modules
- Power Specifications
- Weight Specifications

Utility Test Mode for Modules

If you want to run diagnostic test on any module (except Display Modules), 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**

<table>
<thead>
<tr>
<th>Module</th>
<th>Switches to Hold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fader Module</td>
<td>Select + Swap (channel 1)</td>
</tr>
<tr>
<td>Process Module</td>
<td>Clear + Func (channel 1)</td>
</tr>
<tr>
<td>Knob Module</td>
<td>Select (channel 1) + Select (channel 2)</td>
</tr>
<tr>
<td>Automation Module</td>
<td>Select + Swap (Attention Track)</td>
</tr>
<tr>
<td>Master Module</td>
<td>Sel + In (next to top knob on left side of Touchscreen)</td>
</tr>
</tbody>
</table>

3. Release the enable 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.

   The specific tests available on each module may differ from those listed in this guide.

4. Available tests are indicated by the switch directly below each test flashing blue.
5. To exit, press the flashing switch below Exit. (In all test modes, channel 8 provides Back or Exit.)
6. 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.
7. Press the flashing switch below the desired test.
8. To end the test and return to the previous page of choices, press the flashing switch below Exit (channel 8).
9. After performing a Utility Test on any module, reboot each module by doing the following:
   - Navigate the Touchscreen to the Surface page.
   - 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.
Module Specifications

For complete specifications on S6 modules, see the guide for each module (included in S6 documentation downloads).

Power Specifications

<table>
<thead>
<tr>
<th>Module</th>
<th>Power Requirements (Max. Power Consumption)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fader Module</td>
<td>60 W</td>
</tr>
<tr>
<td>Process Module</td>
<td>15.6 W</td>
</tr>
<tr>
<td>Knob Module</td>
<td>21.6 W</td>
</tr>
<tr>
<td>Display Module</td>
<td>21.6 W</td>
</tr>
<tr>
<td>Automation Module</td>
<td>18 W</td>
</tr>
<tr>
<td>Master Module</td>
<td>80.4 W</td>
</tr>
<tr>
<td>Ethernet switch, 16-port</td>
<td>11.29 W</td>
</tr>
<tr>
<td>Ethernet switch, 24-port</td>
<td>14.83 W</td>
</tr>
</tbody>
</table>

**PSU Power Consumption** To determine the approximate total power consumption per chassis (all modules in an individual chassis plus their PSU), multiply the total power draw of all modules in that chassis by 1.15.

Weights

The following tables list the weight of modules and frame components.

**Modules**

Table 1. Weight of Individual Modules

<table>
<thead>
<tr>
<th>Module</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fader Module</td>
<td>6.75 lbs (3.06 kg)</td>
</tr>
<tr>
<td>Process Module</td>
<td>3.66 lbs (1.66 kg)</td>
</tr>
<tr>
<td>Knob Module</td>
<td>4.1 lbs (1.84 kg)</td>
</tr>
<tr>
<td>Display Module</td>
<td>3.52 lbs (1.60 kg)</td>
</tr>
<tr>
<td>Automation Module</td>
<td>5.02 lbs (2.28 kg)</td>
</tr>
<tr>
<td>Master Module</td>
<td>15.4 lbs (7 kg)</td>
</tr>
</tbody>
</table>

**Ethernet Switches and PSUs**

Table 2. Weight of Switch and PSUs

<table>
<thead>
<tr>
<th>Module</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet switch, 16-port</td>
<td>3.3 lbs (1.5kg)</td>
</tr>
<tr>
<td>Ethernet switch, 24-port</td>
<td>3.5 lbs (1.6 kg)</td>
</tr>
<tr>
<td>PSU</td>
<td>2.4 lbs (1.1 kg)</td>
</tr>
</tbody>
</table>
Frames

Frames per Chassis, Assembled

The following table lists the approximate weight per chassis of desktop and leg frames, including cable harnesses, Rear Covers and Bolster, but not including modules, PSUs, Ethernet switch(es), Cable Sets, Fill Panels, Compression Panels or T-strips.

Table 3. Weights of assembled chassis

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Chassis Small, desktop</td>
<td>11 lbs (5 kg) per chassis</td>
</tr>
<tr>
<td>Frame Chassis Small, Leg frame</td>
<td>12.3 lbs (5.58 kg) per chassis</td>
</tr>
<tr>
<td>Frame Chassis Large, desktop</td>
<td>12.3 lbs (5.6 kg) per chassis</td>
</tr>
<tr>
<td>Frame Chassis Large, Leg frame</td>
<td>17.9 lbs (8.2 kg) per chassis</td>
</tr>
</tbody>
</table>

Side Covers and Legs

Table 4. Weights of Side Covers and Legs

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Cover Small (1x)</td>
<td>1.85 lbs (0.84 kg)</td>
</tr>
<tr>
<td>Side Cover Large (1x)</td>
<td>2.55 lbs (1.16 kg)</td>
</tr>
<tr>
<td>Leg (1x)</td>
<td>20.70 lbs (9.30 kg)</td>
</tr>
</tbody>
</table>

Frame Chassis, Individual

The following table lists weights of individual chassis (including cable harnesses, but not including Rear Covers, Side Covers, modules, PSUs, or other components). If your system includes a Producers Desk, add these weights (2x small or 2x large), plus the weight of any Fader Module(s) and PSUs to the total weight of other chassis in your system. Note that the weights shown below do not include Fill Panels, Inlay Module, or Compression Panels (add approximately 5 lbs/2.27 kg to each chassis weight).

Table 5. Weights of individual chassis

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame Chassis Small</td>
<td>6.15 lbs (2.79 kg)</td>
</tr>
<tr>
<td>Frame Chassis Large</td>
<td>7.30 lbs (3.31 kg)</td>
</tr>
</tbody>
</table>

Determining Total System Weight

Use the data listed in Tables 1–5 to determine the approximate total weight of your configuration.

- Determine the total weight of all modules (Table 1 on page 76).
- Determine the total weight of all Ethernet switches and PSUs (Table 2 on page 76).
- Multiply the weight of each assembled chassis (desktop or leg frame, small or large) by the number of chassis in your system (Table 3 on page 77).
- Add weights of Side Covers (small or large) and legs if your system includes a Leg Frame (Table 4 on page 77).
- If your system includes a Producers Desk option, add the approximate weight of each chassis as explained in “Frame Chassis, Individual” on page 77.

Note that all weights are approximate, and do not include Cable Sets, S6 hardware Options, or the weight of any DAW displays or other items.
Appendix C: Compliance

Environmental Compliance

Disposal of Waste Equipment by Users in the European Union

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

Proposition 65 Warning

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

Perchlorate Notice

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

Recycling Notice
EMC (Electromagnetic Compliance)

Avid declares that this product complies with the following standards regulating emissions and immunity:

- FCC Part 15 Class B
- EN 55022 Class B
- AS/NZS CISPR 22 Class B
- CISPR 22 Class B
- EN 55103-1, Class E2 and E3
- EN 55103-2, Class E2 and E3

FCC Compliance for United States

Communication Statement

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

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

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

Australian Compliance

Canadian Compliance

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

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

CE Compliance

(EMC and Safety)

Avid is authorized to apply the CE (Conformité Européenne) mark on this compliant equipment thereby declaring conformity to EMC Directive 2004/108/EC and Low Voltage Directive 2006/95/EC.
Safety Compliance

Safety Statement

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

Korea Class B EMC Compliance

이기기는 가정용 (B 급 ) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모 든 지역에서 사용할 수 있습니다.

Warning

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this equipment near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
10) Protect power cords from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment.
11) Only use attachments/accessories specified by the manufacturer.
12) For products that are not rack-mountable: Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the equipment. When a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.
13) Unplug this equipment during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) For products that are a Mains powered device:

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

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

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

16) For products containing a lithium battery:

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

17) For products with a power switch:

It should remain accessible after installation.

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

19) This unit is provided with a power supply cord set suitable for 120V AC input only (for U.S.A. and Canada). For other than U.S.A. and Canada, a qualified person must provide for use with this unit, an appropriate, approved power supply cord set which is in compliance with the end use country requirements and has a minimum cross-sectional area of 1.0mm2.

20) For products with more than one power cord:

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

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

21) For products with an operator-accessible fuse:

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

ATTENTION: Pour ne pas compromettre la protection contre les risques d’incendie, remplacer par un fusible de même type et de même caractéristiques nominales.