



kaleidescape

Kaleidescape Premiere Line

Installation Guide

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Section 1

Overview

The Kaleidescape Premiere Line Installation Guide describes how to prepare the site network, set up and configure system components, and add new components to an existing installation. This document also describes basic operation and user configuration.

Current components in the Premiere line can be added to any existing Premiere system. Software updates are issued automatically via the Internet.

Additional Kaleidescape products that are not compatible with a Premiere system include Alto and Cinema One (2nd generation). For help installing one of these systems, refer to the [Kaleidescape Alto Installation Guide](#), or the [Kaleidescape Cinema One Installation Guide](#).

The Kaleidescape Premiere System

The Kaleidescape Premiere system is comprised of one or more **servers** connected via Ethernet to one or more **players**.

Servers in the Premiere line store movies and music and deliver this content to players in the Premiere line connected to audio and video equipment. The Premiere system supports easy integration into audio, video and whole-house control systems, such as Crestron, AMX, Control4, Elan, and Savant.

A Premiere system can be as simple as a single server and player controlled with a handheld remote or can scale to multiple servers and players with integrated controls for lighting and screen masking.

System Components

Components in the Premiere line are designed to be easy to install and set up. Simply connect network and audio/video cables, and configure the system from the browser interface. [Table 1-1](#) lists current components in the Premiere line.

Table 1-1 **Currently Available Components in the Premiere Line**

| Kaleidescape Component | Model Number | Description |
|------------------------|--------------|---|
| 1U+ Movie Server | KSERVER-1550 | One rack-unit server with up to four 10 TB disk cartridges. Capacity for up to 800 Blu-ray quality movies. |
| 3U Server | KSERVER-5000 | Three rack-unit server with up to fourteen 6 TB disk cartridges. Capacity for up to 1,950 Blu-ray quality movies. Includes a hot spare disk cartridge as additional measure of protection. |
| M500 Player | KPLAYER-M500 | Movie player that plays Blu-ray quality movies, DVD quality movies, and CDs streamed from the server. Plays Blu-ray discs, DVDs and CDs direct from the tray. Catalogs Blu-ray discs and DVDs. Imports Blu-ray discs and CDs. |
| M300 Player | KPLAYER-M300 | Smaller version of the M500 Player without a disc tray, S-video, optical audio or RS-232. Plays Blu-ray quality movies, DVD quality movies, and CDs, all streamed from the server. |
| DV700 Disc Vault | KVAULT-DV700 | Disc carousel that automatically adds up to 320 movies or albums to the system at one time. Imports Blu-ray discs and CDs. Catalogs DVDs and plays them direct from the internal optical drive. Stores up to 320 discs required for playback. |
| M700 Disc Vault | KVAULT-M700 | Same as the DV700 Disc Vault, but adds an integrated player that plays Blu-ray quality movies, DVD quality movies, and CDs, all streamed from the server. |

Data Protection

Every server in the Premiere line includes **RAID-K technology**, a proprietary technology developed by Kaleidescape to provide data protection for movies and music. With RAID-K technology, a failed hard drive should not cause any loss of data.

Unlike other variations of RAID technology, RAID-K allows new drives with different storage capacities to be added to the array. However, RAID-K technology does NOT allow swapping used disk cartridges between servers.

The 3U Server has an additional protection feature, a hot spare disk cartridge. If a drive fails, information on the failed disk is automatically rebuilt on the hot spare disk cartridge, and the Premiere system continues to operate without loss of data protection.

The hot spare disk cartridge reduces urgent service calls, and provides peace of mind for marine or other remote installations.

System Control

There are several Kaleidescape options available for controlling a Premiere system.

- ▶ Kaleidescape Remote
- ▶ Kaleidescape App for iPad
- ▶ Kaleidescape Child Remote
- ▶ Browser interface control panels

In addition, a Premiere system can be controlled by several types of third party control devices.

- ▶ Infrared (IR) remotes
- ▶ Touch panels
- ▶ Keypads

Kaleidescape provides control modules and templates as well as sample programs for several products from leading manufacturers. Kaleidescape also provides database files and IR codes for popular IR remotes. For more information on control systems, see [Control Systems on page 104](#).

Installation Requirements

The equipment required to install a Premiere system depends on the installation site and system configuration. Basic requirements fall into four categories. [Figure 1-1](#) shows a typical Premiere system installation.

- ▶ General equipment
- ▶ Network requirements
- ▶ Audio cables
- ▶ Video cables

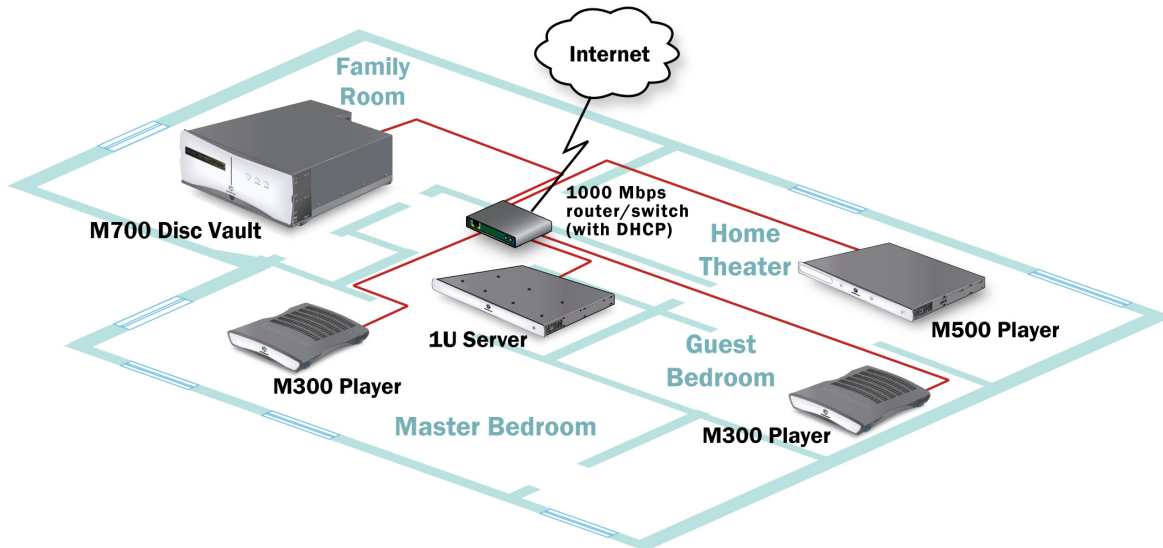


Figure 1-1 Typical Premiere System Installation

General Equipment

The following basic items are required:

- #2 Phillips screwdriver to rack mount system components
- High-quality surge protector and sufficient outlets
- Computer with an Ethernet port and a web browser running an up-to-date version of the Java software.

Network Requirements

The site network must meet the following minimum requirements:

- High-speed Internet connection
- Gigabit Ethernet switch with sufficient ports
- Cat5e or better twisted-pair Ethernet cables with RJ45 connectors

For detailed network requirements, see [Network Requirements on page 165](#).

Audio Cables

Players in the Premiere line have multiple audio connectors, including a combined audio/video High-Definition Multimedia Interface (HDMI) connector.

For more information on audio installation, see [Video and Audio Settings on page 80](#).

Video Cables

Players in the Premiere line have multiple video outputs including a combined audio/video HDMI output.

For more information about video installation, see [Video and Audio Settings on page 80](#).

Installation Locations

When installing a Premiere system, the following considerations must be addressed:

- ▶ Customer requirements
- ▶ Ventilation and clearance
- ▶ Proper grounding

For detailed information on the best places to install components, see [Physical Installation on page 25](#).

Space Planning

All components in the Premiere line fit in standard 19 inch racks, and other than the M300 Player, ship with removable mounting brackets, or rack ears.

Note: M300 players fit in a 19 inch rack when mounted on an optional Mini Player Rack-Mount Shelf (KSHELF-300) that can hold up to two mini players.

When planning the site, the following criteria must be met:

- Components must have adequate ventilation
- All components require at minimum a 1 inch clearance in front and a 2 inch clearance at the rear
- Front grilles must be unobstructed

Some components need more space if the rack has a front door.

- The 3U Server front panel opens outward from the top
- The 1U+ Movie Server has a removable front panel for disk cartridge access
- M500 Players have disc trays that must be able to eject unobstructed
- DV700 and M700 Disc Vaults must be able to accept discs and eject discs from the front slot unobstructed

Power Supplies

Power supplies in components in the Premiere line are universal input and operate on any nominal line voltage between 100–240 V, 50–60 Hz.

Power outlets must be grounded and preferably shielded from power surges and brownouts. Kaleidescape recommends a high-quality surge protector for the server power source; a UPS is optional. See [Table 3-1 on page 27](#) for a detailed list of component power consumption.

A/V Connections to Players in the Premiere Line

There are two options for installing components in the Premiere line.

- A/V closet with cables that run from player to the video display
- Same area as the display for (1) IR control, (2) disc tray access, and (3) short HDMI cable lengths

Note: Check manufacturer specifications of cables to the A/V equipment. [Table 3-2 on page 29](#) lists cable length limits for optical and coaxial cables.

Unpacking and Inspection

A Premiere system ships with components individually boxed. Check the packing list to verify that all components are included in the order.

Note: Be sure to save original packaging in case anything has to be shipped. Failure to use the original packaging for return shipments may void the warranty.

3U Server

The 3U Server ships with disk cartridges in the shipping box that must be installed in the server. The server ships with an IEC-type AC power cord and screws for rack mounting.

1U+ Movie Server

The 1U+ Movie Server ships with disk cartridges in the shipping box that must be installed in the server. The server ships with an IEC-type AC power cord and screws for rack mounting.

M500 Player

The M500 Player ships in a single box with an IEC-type AC power cord, screws for rack mounting, a remote control and two AA batteries, and side panels.

M300 Player

The M300 Player ships in a single box with the following items:

- Bracket for wall mounting the mini player
- Bracket for wall mounting the mini player power supply
- Power supply and IEC-type AC power cord
- Screws and drywall anchors for wall mounting brackets
- Remote control and two AA batteries

A Mini Player Rack-Mount Shelf contains a rack-mounting kit for mounting one or two mini players in a 19 in. rack. The shelf (KSHELF-300) is available separately.

DV700 Disc Vault

The disc vault ships in a single box with an IEC-type AC power cord and rack ears and screws for rack mounting.

M700 Disc Vault

The disc vault ships in a single box with an IEC-type AC power cord, rack ears and screws for rack mounting, and a remote control and two AA batteries.

Kaleidescape Disc Collections

Blu-ray or DVD Collections ship in boxes containing the physical Blu-ray discs or DVDs inside unopened cases.

Activating the System

After a Premiere system is installed, it must be activated by the customer.

Until the system is activated, the following reminder message appears when playing a movie that is stored on the system.

Please register your system at <http://www.xxx.yyy.zzz>

You can use your system 50 more times before you are required to register it.

Press **OK** or **Select** to clear this message for 60 minutes.

Note: <http://www.xxx.yyy.zzz> is the IP address of the server.

The message can be dismissed a limited number of times to perform video calibration or other testing. When the number of dismissals reaches zero, the text remains and cannot be dismissed. At that time, the customer must activate the system to remove the activation message.

Note: Movies or albums can be played from the tray without the message appearing. In addition, content can be added to the server prior to activation.

This message disappears once activation is complete. The server must be connected to the Internet to activate the system.

Use the following procedure to activate the system.

Note: Activation must be completed by the system owner, not the dealer.

1. Open a web browser and enter:

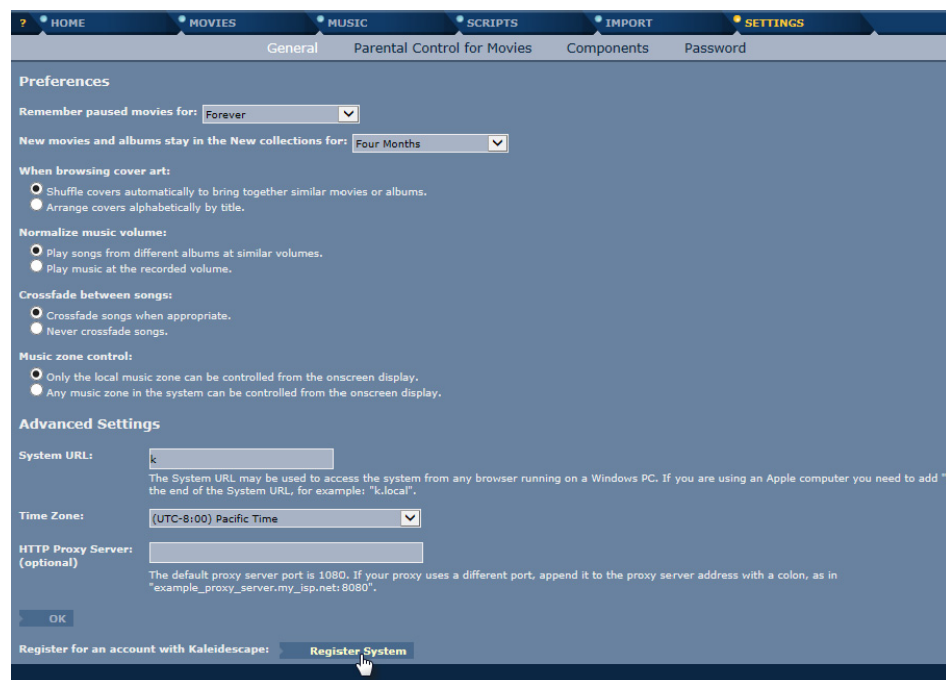
<http://my-kaleidescape> (Windows) or

<http://my-kaleidescape.local> (Mac) or

<http://www.xxx.yyy.zzz> (Windows or Mac) where www.xxx.yyy.zzz is the IP address of the server.

If a login page appears, enter the password and select **Login**. The *HOME* page appears.

2. Open the **SETTINGS** tab and select **Register System** from the bottom of the page.



3. Enter the email address of the system owner and select **OK**.

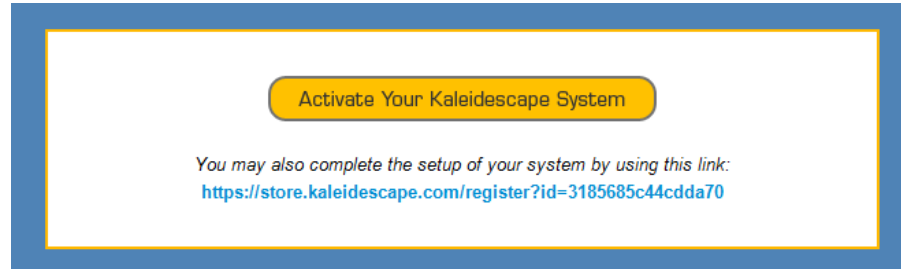


Note: Before registering, be sure that all components are turned on and that all servers are listed.

4. An email will arrive from support@kaleidescape.com with activation instructions.


Note: If the message does not appear, check the spam or junk folder.

5. Follow the link in the email message.



Note: The link is valid for 7 days. If it expires, restart the activation process.

6. The **Activate your Kaleidescape System Page** appears.
 - a. Enter user information.
 - b. Enter system information. Provide a unique name to distinguish the system from other Kaleidescape systems for the same owner.
 - c. Select the button to agree to the terms of the Kaleidescape Service & License Agreement (SLA), and then select who will be entering into the agreement.
7. When all information has been entered, select the **Activate my Kaleidescape System** button at the bottom of the page. See [Figure 1-2](#).



Activate your Kaleidescape System

Congratulations on your purchase of a Kaleidescape System!
We are pleased to have you as a customer and hope you will enjoy your system for years to come.

You must activate your system prior to use. Simply tell us about yourself and your Kaleidescape System.



Your Contact Information

| | | | |
|--------------------|-----------|---------------|------------|
| Kaleidescape | Support | United States | |
| 440 Potrero Avenue | Address 2 | Sunnyvale | California |
| | | 95118-4117 | |
| | | 650.625.6160 | |

Your System Information

Support System

Kaleidescape Service & License Agreement

1. Introduction
Welcome to the Kaleidescape family! Congratulations on your imminent, or recent purchase of a Kaleidescape System. We are pleased to welcome you as a customer and we hope you will enjoy your Kaleidescape System for years to come. You belong to an elite group of customers who own this innovative audio/video entertainment system. Because the Kaleidescape System incorporates, stores, and communicates valuable intellectual property and sensitive customer information, Kaleidescape is very serious about protecting its customers' privacy as well as the intellectual property of Kaleidescape and the many technology and content owners and licensors that make the Kaleidescape System possible.

This agreement is between you (the person named as owner of a Kaleidescape account: "you") and Kaleidescape, Inc. ("Kaleidescape", "we" or "us") and contains the terms and conditions that apply to your use of the Kaleidescape System. By clicking the button below that indicates your acceptance of these terms, you agree that your use of the Kaleidescape System and the Kaleidescape Service is subject to the terms and conditions in this agreement, including its attachments (together: "Agreement").

IF YOU DO NOT AGREE TO THESE TERMS IN THEIR ENTIRETY, YOU MAY NOT ACCESS OR USE THE KALEIDESCAPE

☒ I have read, understand, and agree to the terms of the Agreement above
☐ I do not agree to the terms of the Agreement above

This Service & License Agreement will be entered into by:

☒ the Individual described above
☐ a Legal Entity or Legal Person (e.g. a Trust, LLC, Corporation, etc.)

Activate My Kaleidescape System

Figure 1-2 Activate My Kaleidescape System

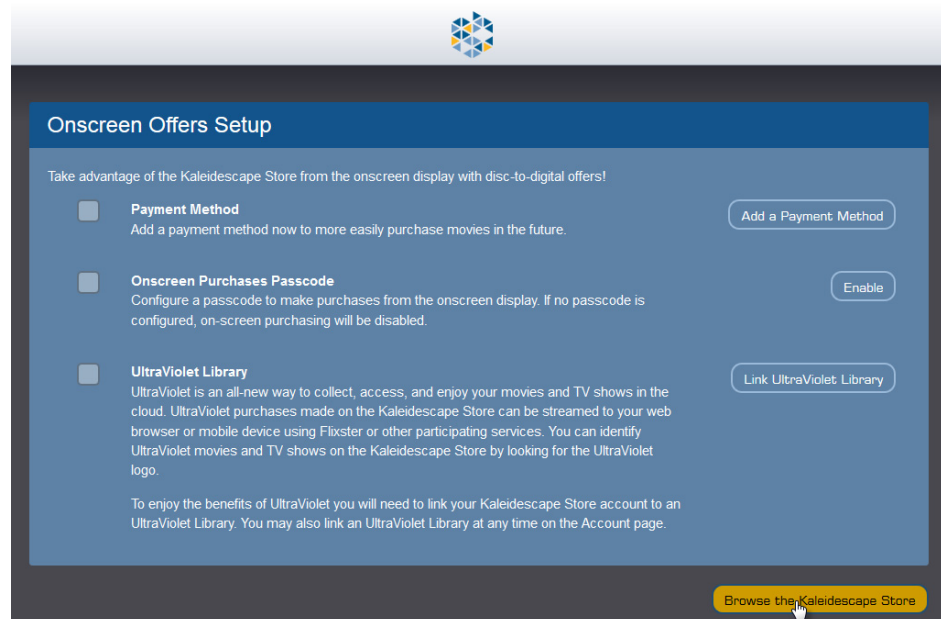
8. When the Premiere system is installed in a territory where the Kaleidescape Movie Store is supported, the **Onscreen Offers Setup** page appears.
 - a. Select the **Add a Payment Method** button and enter credit card information to allow purchasing of movies from the Kaleidescape Movie Store for direct download to the server.
 - b. Select the **Enable** button to configure a passcode and enable purchases when browsing movies from the onscreen user interface.

Note: When no passcode is configured, onscreen purchasing is disabled.
 - c. Select **Link UltraViolet Library** and create a new UltraViolet account or link an existing UltraViolet account.

Linking an UltraViolet account allows for disc to digital upgrades, and also allows many of the movies downloaded from the Kaleidescape Movie Store to be streamed to mobile devices running a third party UltraViolet player such as Flixster.

The settings for the Kaleidescape Movie Store can be entered at any time on the **Account** page.

9. When all information has been entered, select the **Browse the Kaleidescape Store** button at the bottom of the page.



Section 2

Quick Start

This section describes the basic steps required to connect and test components in the Premiere line. If problems occur, refer to [Troubleshooting on page 114](#).

Step 1 – Verify Network Connections

All Premiere line components in the system must be connected to the same local network. For best performance, connect the components to a 1000Base-T network switch. These instructions assume there is a router or DHCP server on the network, to assign DHCP addresses. For more advanced network configuration, see [Appendix C on page 165](#).

To receive software, Movie Guide and Music Guide updates, and to download cover art, the network must be connected to the Internet. An Internet connection is also required when activating the system, when downloading content from the Kaleidescape Store, and for system monitoring.

Prior to installation, test the network connection for each Premiere line component by connecting the network cable for the component to a computer, being certain to disconnect the computer from any WiFi networks, and then open a new, non-cached web page. If the page fails to load, troubleshoot the network.

Note: Connecting the server to a 100Base-TX switch port limits the server to one Blu-ray zone and can slow down imports.

Step 2 – Set Up the Server

Players in the Premiere line require a connection to a server from the Premiere line in order to operate. Always set up servers first.

**CAUTION**

Disk cartridges are sensitive and susceptible to damage from shock. Use care when handling. Do not bump or drop.

Disk cartridges are susceptible to electrostatic discharge. Be careful not to touch the exposed connector at the back of the disk cartridge. Static electricity can damage the electronics inside the disk cartridge. Always store and ship disk cartridges in an anti-static bag.

1. Unpack and check against the packing list.

a. **1U+ Movie Server**

- ▶ Remove the front panel.
- ▶ Rack-mount the server chassis, or remove the rack ears and install it on a table or shelf.
- ▶ Check disk cartridges for sticking latches, insert into server, and press each disk cartridge firmly to verify that each is completely seated. Replace the front panel.

Note: Learn how to fix a sticking latch at www.kaleidescape.com/go/latch.

b. **3U Server**

- ▶ Rack-mount the server chassis, or remove the rack ears and install it on a table of shelf.
- ▶ Open the front panel.
- ▶ Check disk cartridges for sticking latches, insert into server, and press each disk cartridge firmly to verify that each is completely seated. Close the front panel.

Note: Learn how to fix a sticking latch at www.kaleidescape.com/go/latch.

2. Connect one end of an Ethernet cable into the server **NETWORK** port and plug the other end into a 1000Base-T network switch.

Connect the server AC power cable to a high-quality surge protector with a line-noise filter. Front panel status lights glow blue immediately. After about two minutes, disk cartridge status lights glow blue, turn off, then turn on again, and the server is ready to use. Additionally on a 3U Server, the hot spare disk cartridge begins to flash blue.

Check the color of the network indicator light on the server network port and confirm the correct color for a 1000Base-T connection.

On a 1U+ Movie Server the **right** light is green when a 1000Base-T connection is established. The **left** light blinks green for activity.

On a 3U Server the **left** light is orange when a 1000Base-T connection is established. The **right** light blinks yellow for activity.

The 1U+ and 3U Server power supplies are universal input and operate on any nominal line voltage between 100–240 V, 50–60 Hz.

3. Power on the server if front panel does not light.
 - a. **1U+ Movie Server** – Press the **POWER** button on the front panel. When the front panel is removed, press the **POWER** button along the bottom edge of the chassis.
 - b. **3U Server** – Open the front panel and press the **POWER** button. If a disk cartridge is amber, or if the server's front panel and power button are amber, see [Troubleshooting Amber Lights on page 116](#).
4. Open a web browser on a computer connected to the same network and enter:
<http://my-kaleidescape> (Windows) or
<http://my-kaleidescape.local> (Mac) or
<http://www.xxx.yyy.zzz> (Windows or Mac) where www.xxx.yyy.zzz is the IP address of the server.

If a login page appears, enter the password and select **Login**.

5. The *HOME* page appears. Select the **SETTINGS** tab, and then select **Components** from the second row of tabs.
6. Confirm that the serial number listed for the server matches the serial number printed on the physical server. (The serial number is located on the back of the server and behind the front panel.)
7. Select the **Settings** button on the right and configure network and control settings as applicable based on installation requirements. Select **OK** at the bottom of each tab to save.
8. When the system has more than one server, select **add a component** from the message at the top of the page and add additional servers. See [Adding Components on page 99](#) for more information.

Step 3 – Set Up the Players

1. Unpack and check against the packing list.
2. Mount the player according to the instructions for [Premiere Line Players on page 35](#).

3. Plug one end of an Ethernet cable into the player **NETWORK** port and plug the other end into a 1000Base-T network switch. Verify that the switch is connected to the same network as the server.
4. Connect audio and video cables as appropriate for the installation.
5. Connect the player AC power cable to a high-quality surge protector with a line-noise filter. The front panel status lights glow blue after a few seconds.

After about 30 seconds, longer during a software upgrade, the front panel pulses two times to signal that the player is ready to use.

(Player power supplies in the Premiere line are universal input and operate on any nominal line voltage between 100–240 V, 50–60 Hz.)

Note: If the player glows amber, check that the server is running, verify network connections, then refer to [Troubleshooting Amber Lights on page 116](#).

6. Open a web browser on a computer connected to the same network and enter:

<http://my-kaleidescape> (Windows) or

<http://my-kaleidescape.local> (Mac) or

<http://www.xxx.yyy.zzz> (Windows or Mac) where www.xxx.yyy.zzz is the IP address of the server.


If a login page appears, enter the password and select **Login**.

7. The *HOME* page appears. Select **add a component** from the message at the top of the page and add the player to the system.

Note: When more than one Premiere system is installed on the network, the player glows amber until assigned to a system.

8. Select the **SETTINGS** tab, and then select **Components** from the second row of tabs.
9. Locate the player and enter a descriptive name in the **Device Name** and **Zone 1 Name** fields to help easily identify the player. Set the intensity of the front panel lights, the screen saver timeout, and the import/catalog preferences (for the M500 Player). Select the **OK** on the right to save.
10. Select the **Settings** button on the right and configure audio, video, network, control, language and region settings as applicable based on installation requirements. Select **OK** at the bottom of each tab to save.

Note: Network configuration changes requires the player be restarted. When changes to audio and video settings are made during playback, stop and restart the movie to see the results.

11. Turn on A/V equipment and switch to the correct input. The Kaleidescape logo or the onscreen user interface appears on the display.
12. To add content to the Premiere system using a Kaleidescape M500 Player, press the **EJECT** button on the front panel and place a disc in the tray. Press the  button to close the tray. Front panel lights begin pulsing, indicating that the disc is being cataloged or imported.

When connected to a Premiere system sold by Kaleidescape on or after November 30th 2014, CSS-protected DVDs can only be cataloged. For more information, visit www.kaleidescape.com/protected-dvds.

13. Test the movie player using either the browser interface or an IR remote.
 - a. To use the browser interface, open the **HOME** page and locate the **Control Panels** area in the lower right corner. Click the link (links are colored amber) to control the player being tested.

To access the control panel from the **Components** page, locate the player to be tested and click **Control the onscreen display**.

Note: The control panels require an up-to-date version of the Java software (current version can be found at www.java.com).
 - b. To use an IR remote other than the Kaleidescape Remote, program the remote for the Toshiba or Kenwood DVD player code set. For a list of all IR codes (in hex) available from Kaleidescape, or for the CCF file, go to www.kaleidescape.com/go/ir.

Step 4 – Set Up the Disc Vaults

1. Unpack and check against the packing list.
2. Mount the disc vault according to the instructions provided for [DV700 and M700 Disc Vaults](#) on page 38.
3. Plug one end of an Ethernet cable into the disc vault **NETWORK** port and plug the other end into a 1000Base-T network switch. Verify that the switch is connected to the same network as the server.
4. When using the integrated player in the M700 Disc Vault, connect audio and video cables as appropriate for the installation.
5. Connect the disc vault AC power cable to a high-quality surge protector with a line-noise filter. The front panel status lights glow blue after a few seconds.

After about 30 seconds, longer during a software upgrade, the front panel pulses two times to signal that the disc vault is ready to use.

(Disc vault power supplies in the Premiere line are universal input and operate on any nominal line voltage between 100–240 V, 50–60 Hz.)

Note: If the disc vault glows amber, check that the server is running, verify network connections, then refer to [Troubleshooting Amber Lights on page 116](#).

6. Open a web browser on a computer connected to the same network and enter:

<http://my-kaleidescape> (Windows) or
<http://my-kaleidescape.local> (Mac) or
<http://www.xxx.yyy.zzz> (Windows or Mac) where www.xxx.yyy.zzz is the IP address of the server.

If a login page appears, enter the password and select **Login**.

7. The *HOME* page appears. Select **add a component** from the message at the top of the page and add the disc vault to the system.

Note: When more than one Premiere system is installed on the network, the disc vault glows amber until assigned to a system.

8. Select the **SETTINGS** tab, and then select **Components** from the second row of tabs.
9. Locate the disc vault and enter a descriptive name in the **Device Name** and **Zone 1 Name** fields to help easily identify the disc vault. Set the intensity of the front panel lights, and the screen saver timeout (for M700 Disc Vault). Select the **OK** on the right to save.
10. Select the **Settings** button on the right and configure network, control and region settings based on installation requirements. When using the integrated player in the M700 Disc Vault, also configure video, audio and language settings. Select **OK** at the bottom of each tab to save.

Note: Network configuration changes require the disc vault be restarted. When changes to audio and video settings are made during playback on the M700 Disc Vault, stop and restart the movie to see the results.

11. If the integrated player in the M700 Disc Vault is connected, turn on A/V equipment and switch to the correct input. The Kaleidescape logo or the onscreen user interface appears on the display.
12. To begin adding content to the Premiere system using a DV700 or M700 Disc Vault, insert discs into the insertion slot one at a time with the label facing to the **right**; releasing the disc just as it is engaged by the internal mechanism.

CAUTION: Do not insert discs when the lights glow amber at the top and bottom of the insertion slot.

After all discs are inserted, the vault identifies every title before cataloging or importing each disc. When content is being added to the system, the front panel lights on the disc vault pulse blue.

When connected to a Premiere system sold by Kaleidescape on or after November 30th 2014, CSS-protected DVDs can only be cataloged. For more information, visit www.kaleidescape.com/protected-dvds.

For more detailed instructions on the installation or operation of the disc vaults, refer to the [Disc Vaults Installation and Operation Guide](#).

13. Test the integrated player in the M700 Disc Vault using either the browser interface or an IR remote.
 - a. To use the browser interface, open the **HOME** page and locate the **CONTROL PANEL** area in the lower right corner. Click the link (links are colored amber) to control the disc vault being tested.

To access the **CONTROL PANEL** from the **Components** page, locate the disc vault to be tested and click **Control the onscreen display**.

Note: The **CONTROL PANEL** requires an up-to-date version of the Java software (current version can be found at www.java.com).
 - b. To use an IR remote other than the Kaleidescape Remote, program the remote for the Toshiba or Kenwood DVD player code set. For a list of all IR codes (in hex) available from Kaleidescape, or for the CCF file, go to www.kaleidescape.com/go/ir.

Kaleidescape Support

For detailed information refer to the appropriate section of the installation guide or search the knowledge base at www.kaleidescape.com/support.

If additional help is required, contact Kaleidescape Support.

- ▶ Send an email message to support@kaleidescape.com.
- ▶ Call the Kaleidescape support line at +1 (650) 625-6160.

When contacting Kaleidescape Support, be prepared to provide the serial number of the Kaleidescape server. The serial number label is located behind the front panels of servers.

Section 3

Physical Installation

Planning the Installation

Ventilation and Clearance

All components in the Premiere line fit standard 19-inch racks and with the exception of the M300 Player, ship with removable mounting brackets. The Mini Player Rack-Mount Shelf (KSHELF-300) is an optional accessory kit for mounting up to two M300 Players in a 19-inch rack.

[Figure 3-1](#) shows minimum clearance requirements. For individual component dimensions and weights, refer to Appendix A, Product Specifications [on page 134](#).

Use the following guidelines when installing system components to ensure proper clearance and ventilation. These guidelines apply to all installations including rack mounting.

1. Mount components in a location with adequate ventilation.
2. Check for proper grounding if installing components in a rack.
3. Maintain a 2 in. (5 cm) clearance in back, and a 1 in. (2.5 cm) clearance in front and on the sides.
4. Ensure that front grilles are unobstructed.
5. Verify that the mounting site allows sufficient clearance for the **3U Server** front panel which opens outward from the top.
6. Install the **1U+ Movie Server** so that the front panel can be easily removed to access disk cartridges.
7. Verify that there is sufficient space for the Kaleidescape M500 Player disc tray to be able to slide out completely.
8. The DV700 and M700 Disc Vaults must be able to accept discs and eject discs from the front slot unobstructed.

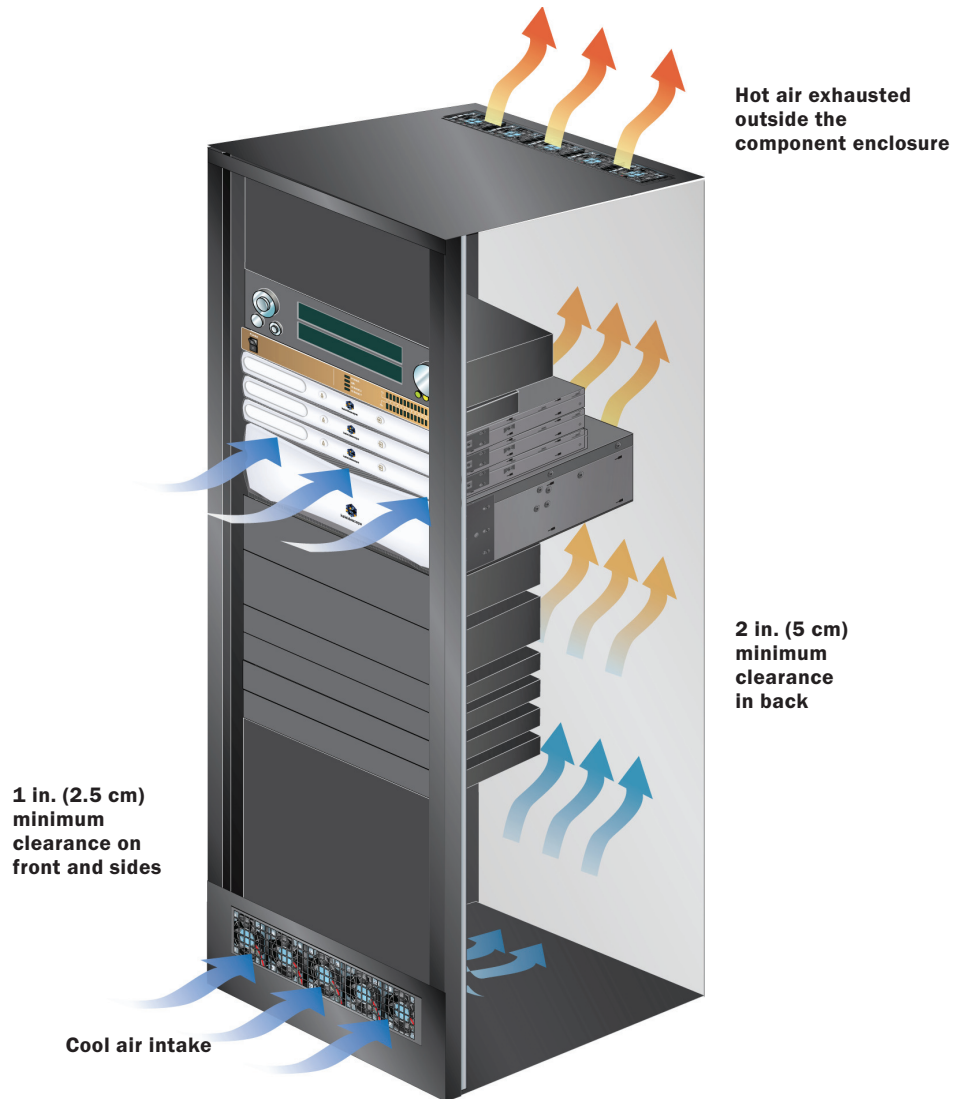


Figure 3-1 Minimum Clearance Requirements

Power Requirements

Component power supplies in the Premiere line are universal input and operate on any nominal line voltage between 100–240 V, 50–60 Hz. Verify that power outlets are grounded, preferably shielded from power surges and brownouts.

Kaleidescape recommends a grounded outlet with a high-quality surge protector for the power source for players, disc vaults and servers. A UPS is optional for servers. [Table 3-1](#) lists power requirements for each component.

Table 3-1 Component Power Requirements

| Component | Power Consumption | Maximum Current Draw |
|------------------|---|----------------------------------|
| 1U+ Movie Server | 50 W typical consumption with four disk cartridges (100 W max) | 1.0 A @ 100 V 0.42 A @ 240 V |
| 3U Server | 183 W typical consumption with fourteen Disk Cartridges (205 W max) | 3 A @ 100 V 1.3 A @ 240 V |
| M500 Player | 36 W typical consumption (27 W standby; 42 W max) | 0.37 A @ 120 V 0.18 A @ 240 V |
| M300 Player | 28 W typical consumption (20 W standby; 28 W max) | 0.25 A @ 120 V 0.13 A @ 240 V |
| DV700 Disc Vault | 34 W typical consumption (32 W standby; 46 W max) | 1.1 A @ 120 V 0.6 A @ 240 V |
| M700 Disc Vault | 37 W typical consumption (32 W standby; 52 W max) | 1.1 A @ 120 V 0.6 A @ 240 V |

System Design

Before beginning the installation, determine the type of the displays and audio systems that will connect to the components in the Premiere system.

Premiere systems support combinations of the following outputs:

- **Video**

- ▶ High-Definition Multimedia Interface (HDMI)
- ▶ Component
- ▶ S-Video (not available on M300 Player)
- ▶ Composite

Note: In accordance with the analog sunset provisions, component, S-Video, and composite do not output video during Blu-ray playback.

- **Audio**

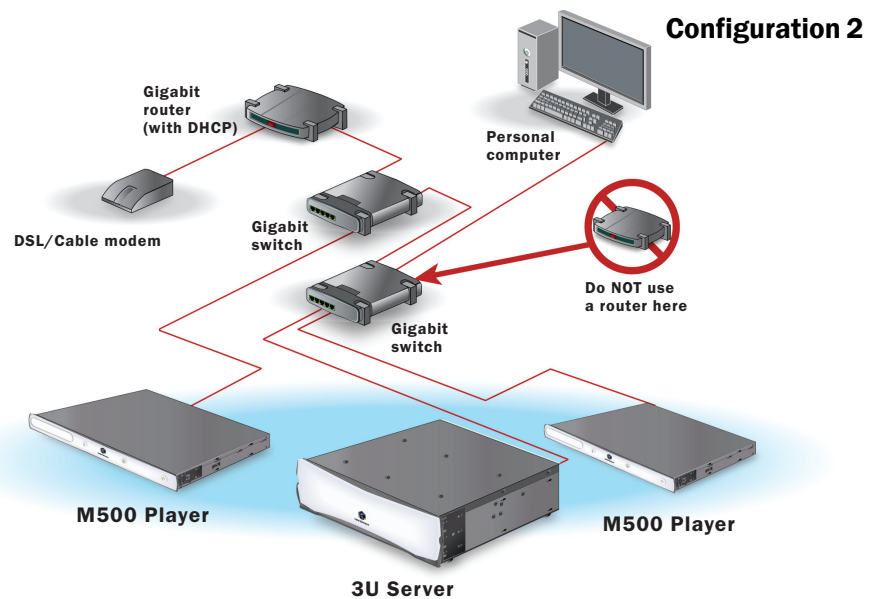
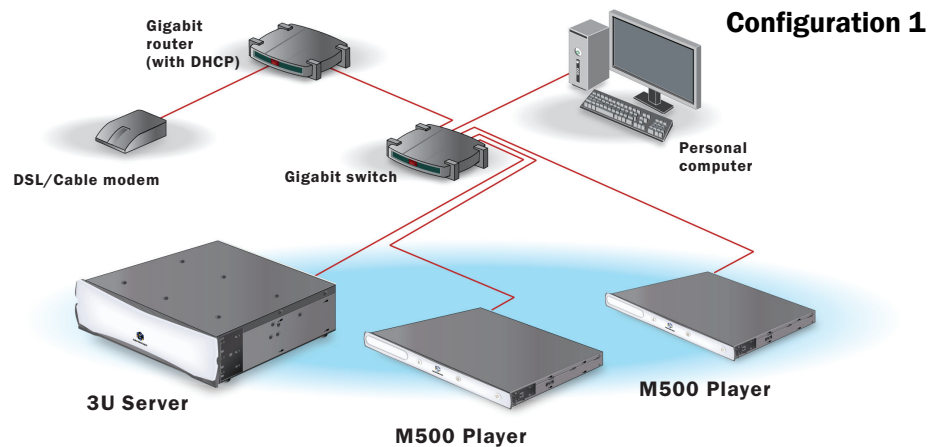
- ▶ HDMI (digital stereo or multi-channel)
- ▶ Coaxial (digital stereo or multi-channel)
- ▶ Optical (digital stereo or multi-channel - not available on M300 Player)
- ▶ Analog (stereo)

Note: When the HDMI audio decode mode is set to *Player decode*, all audio outputs are active. When the HDMI audio decode mode is set to *Bitstream pass-through*, optical, coaxial and analog audio are disabled during movie playback.

A Gigabit network is suggested for all Premiere systems, and required if Blu-ray quality movies are played in more than one room at the same time.

Kaleidescape recommends using a checklist for connections to expedite the installation process. For a sample checklist, see Appendix D [Installation Checklist on page 170](#).

Below are two basic network configurations.



Note: If the existing switch has too few ports, or Ethernet cable lengths to the switch exceed 328 ft (100 m), add an extra switch to the network. Do NOT substitute a router. Connect additional switches to the switch. Do NOT use the router to connect two switches or bandwidth suffers.

Note: Components in the Premiere line are accessed through a computer browser interface, which MUST be on the same IP subnet. A second router creates an additional subnet and prevents communication.

A/V Connections to Players in the Premiere Line

Players in the Premiere line can be installed in either of the following locations:

- In an A/V closet with cables running from the player to the display
- In the same area as the A/V equipment

Locating the player in the same area as the A/V equipment allows for direct control with an IR remote to the IR receiver on the front of the player and convenient access to the disc tray (where applicable). The player must be located so that IR signals can be readily received, or fitted with an IR emitter/IR extension cable connected to a remote IR receiver.

The Kaleidescape M500 Player has the ability to import Blu-ray discs and CDs, catalog Blu-ray discs and DVDs, and playback a disc direct from the tray. Locating these players near a display area is ideal when using this functionality.

If the movie player is controlled remotely, whether through an IR receiver, a programmable controller, or the control panel in the browser interface, A/V cable length limits become a major installation consideration.

Check specifications for both cables and A/V equipment. HDMI must be used when planning to output 1080p video or lossless Blu-ray quality audio. [Table 3-2](#) lists the cable requirements for movie players depending on the audio option.

Note: Cable lengths are limited by the cable and signal type.

- For example, with audio signals, optical cables are typically limited to less than 16 ft (5 m) and coaxial cables are typically limited to less than 32–50 ft (10–15 m).
- Always use a certified high speed (category 2) HDMI cable. The longer the HDMI cable, the more important the quality. For cable runs longer than 10 meters, a solution such as an active cable, repeater, amplifier, or Cat5/6 or fiber extender is required.

Table 3-2 Cable Requirements for Kaleidescape Players

| Signal | Player Connections | Cable | Cable Connectors |
|-----------------------|--------------------|---|--|
| HDMI (video/audio) | HDMI | HDMI cable | 19-pin HDMI Type A (outside dimensions: 13.9 mm × 4.45 mm) |
| | | HDMI-DVI adapter + DVI cable (video only) | |
| Composite (video) | Yellow RCA | RCA video cable | Single RCA plug |

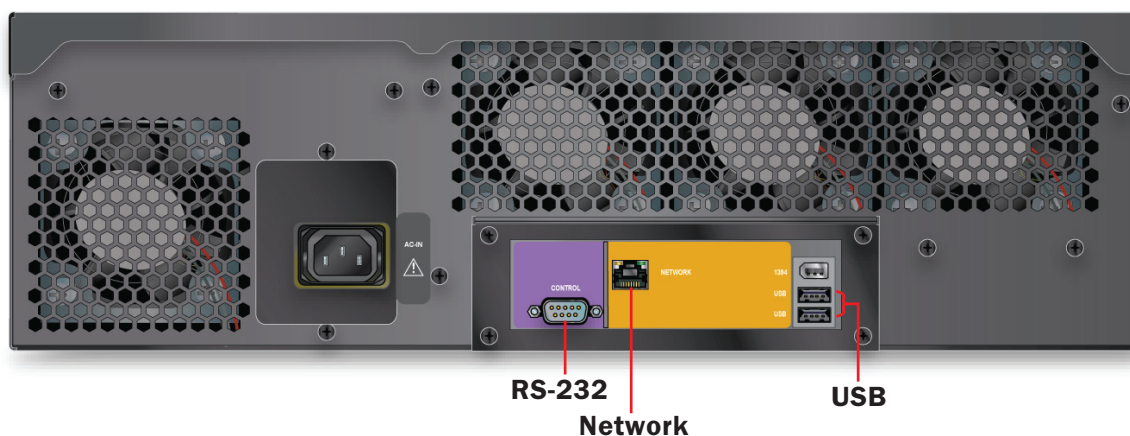
Table 3-2 Cable Requirements for Kaleidescape Players (Continued)

| Signal | Player Connections | Cable | Cable Connectors |
|-------------------------|--|--|-------------------------------|
| Component (video) | Three RCA connections colored green (Y), blue (Pb), and red (Pr) | 75-ohm YP _b P _r analog component video cable | Three RCA plugs |
| S-Video (video) | S-Video (not available on the M300 Player) | S-Video cable | S-Video plug (4-pin mini-DIN) |
| Digital coaxial (audio) | Orange RCA | Digital audio coaxial cable | RCA plug |
| Digital optical (audio) | TosLink (not available on the M300 Player) | Digital audio optical cable | TosLink plug |
| Analog stereo (audio) | Red and white RCA | Analog stereo audio cable | RCA plugs |

The figures below show cable connections for Kaleidescape components.

**Figure 3-2 1U+ Movie Server Connections**

Note: The 1U+ Movie Server RS-232 connection is for diagnostic use and the USB ports are reserved.

**Figure 3-3 3U Server Connections**

Note: The 3U Server RS-232 connection is for diagnostic use. The USB ports and FireWire port are reserved.

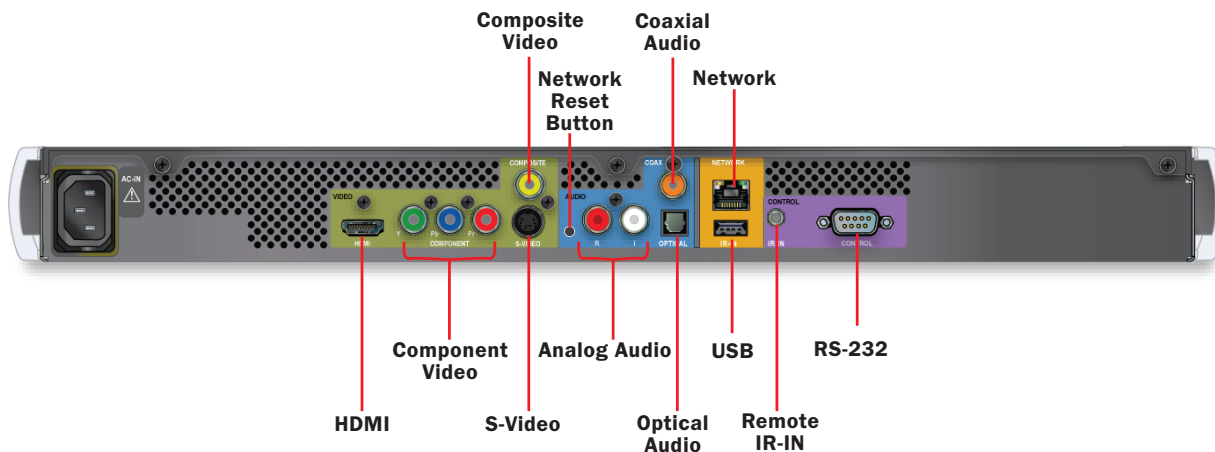


Figure 3-4 M500 Player Connections

Note: The USB port on the M500 Player is reserved.

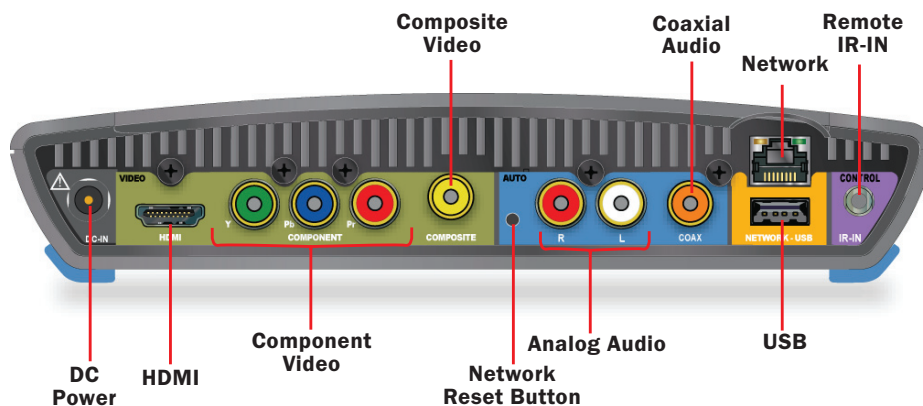


Figure 3-5 M300 Player Connections

Note: The USB port on the M300 Player is reserved.

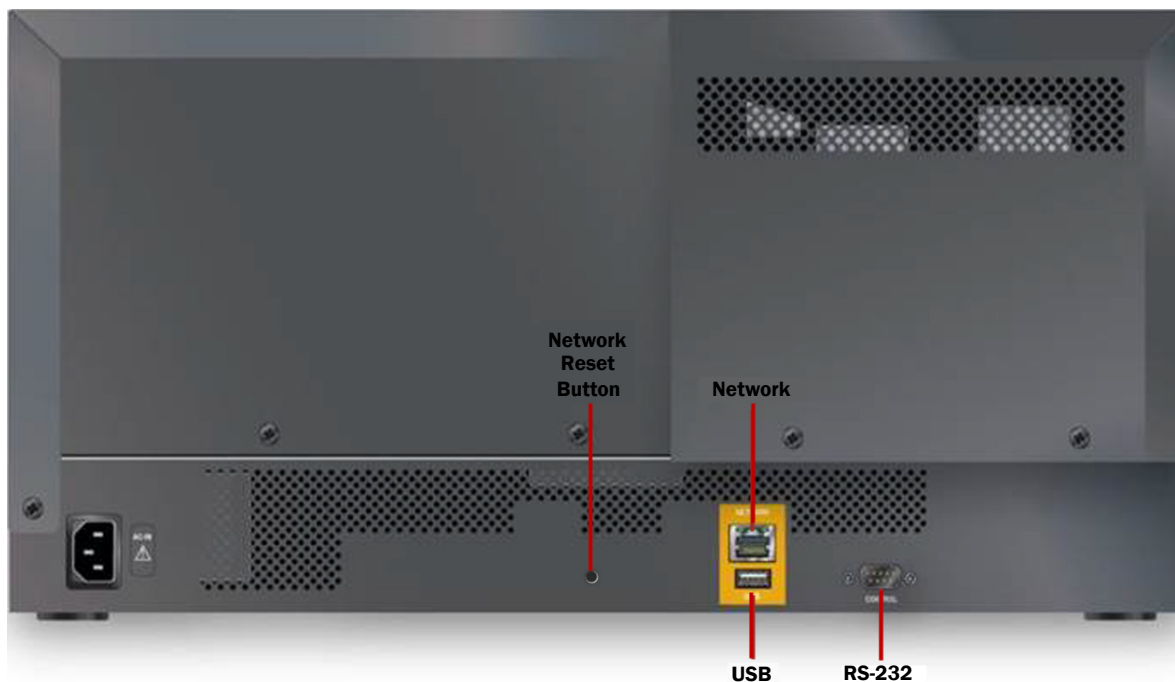


Figure 3-6 DV700 Disc Vault Connections

Note: The USB port on the DV700 Disc Vault is reserved.

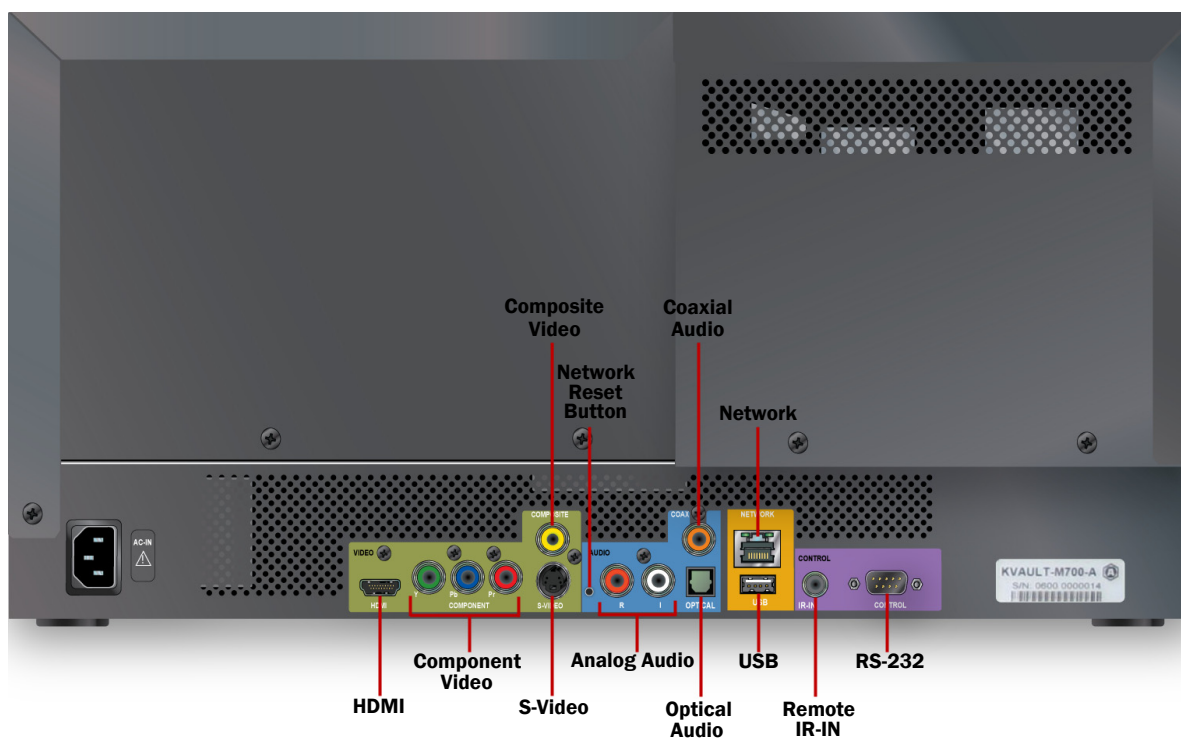


Figure 3-7 M700 Disc Vault Connections

Note: The USB port on the M700 Disc Vault is reserved.

Installing System Components

The Premiere line installation can be as simple as plug-and-play. Or apply optional settings such as local time zone and parental controls, and the system is ready to deliver movies and music. Disk cartridges can be added to expand server capacity as needed.

Set up the Premiere line server before other system components. When installing a system with multiple servers, set up all the servers before setting up other components.

Rack Mounting Components

Premiere Line Servers

Use the following procedures to rack mount a Kaleidescape Premiere line server.

1. Verify that the rack is strong enough to bear the combined weight of the components in the Premiere line.
2. Position the server in the rack.



WARNING

A 3U Server weighs 46 lbs (20.9 kg) with eight disk cartridges installed, and 59 lbs (26.9 kg) with fourteen disk cartridges installed. Use two people to lift and mount a loaded 3U Server.

A 1U+ Movie Server weighs 24 lbs (10.9 kg) with four disk cartridges installed. Always use proper lifting techniques.

3. Attach the server to the rack by fastening rack ears with the four screws provided. A Phillips #2 screwdriver is required.
4. Check that disk cartridges are firmly seated.



CAUTION

Disk cartridges are sensitive and susceptible to damage from shock. Use care when handling. Do not bump or drop.

Disk cartridges are susceptible to electrostatic discharge. Be careful not to touch the exposed connector at the back of the disk cartridge. Static electricity can damage the electronics inside the disk cartridge. Always store and ship disk cartridges in an anti-static bag.

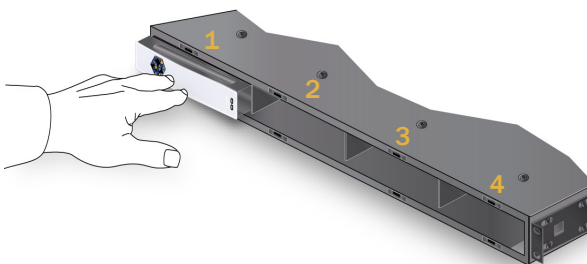
Note: Do NOT operate the server with empty slots. Open slots compromise the cooling system. Insert all disk cartridges or blank cartridges.

a. **1U+ Movie Server** - Unpack disk cartridges. Save packaging.

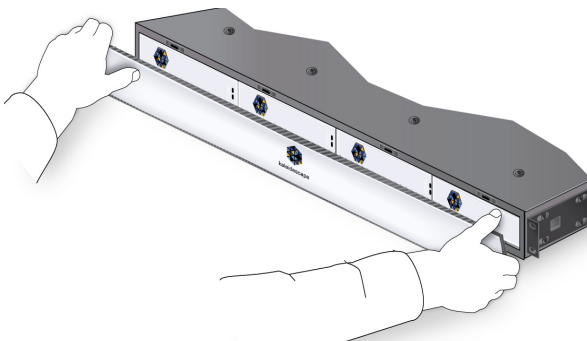
- ▶ Remove the front panel by tugging gently on both sides.



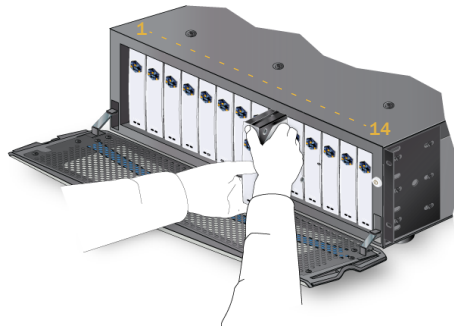
- ▶ Install disk cartridges. Insert the first disk cartridge into the first storage slot and push the disk cartridge in until it clicks into place. Refer to [Removing and Adding Disk Cartridges or Blanks](#) on page 59 for a detailed procedure.



- ▶ Press firmly, then press once more to be sure disk cartridges are completely seated.
- ▶ Replace the front panel aligning the six posts on the back of the front panel with the six slots in the chassis and push the panel to snap the panel into place.



- b. **3U Server** - Unpack disk cartridges and blanks. Save packaging.
- ▶ Pull down the front panel.
 - ▶ Install disk cartridges, then blanks. Insert the first disk cartridge into the first storage slot and push the disk cartridge in until it clicks into place. Staggering blank cartridges in storage slots between disk cartridges provides optimal cooling. Refer to [Removing and Adding Disk Cartridges or Blanks on page 59](#) for a detailed procedure.



- ▶ Press firmly, then press once more to be sure disk cartridges are completely seated.
- ▶ Close the front panel.

Premiere Line Players

Use the following procedure to rack mount Players in the Premiere line.

M500 Player

Note: The M500 Player can also be installed on a tabletop. See [Tabletop Installation for the M500 Player on page 49](#).

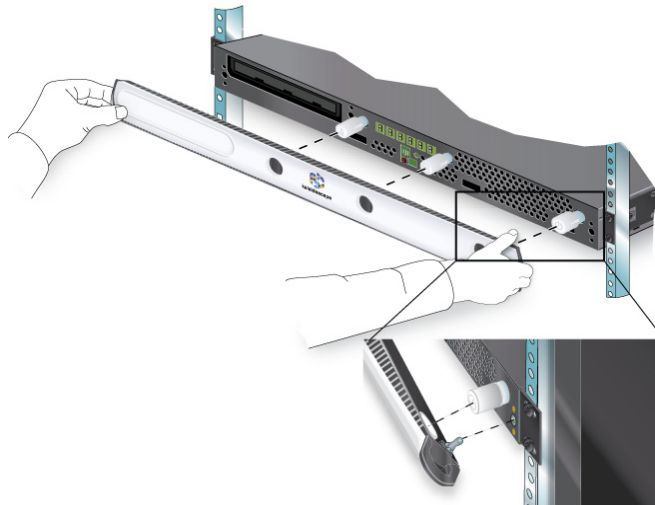
1. Rack mount the player.
 - a. Tug gently on both sides of the front panel until panel comes off. Set the panel aside.



- b. Position the player in the rack and fasten to the rack by the mounting ears with the screws provided.

Note: Player buttons can come loose or come out when the front panel is removed. Replace button caps so that the curvature of the buttons matches the curvature of the front cover and the icons are oriented correctly.

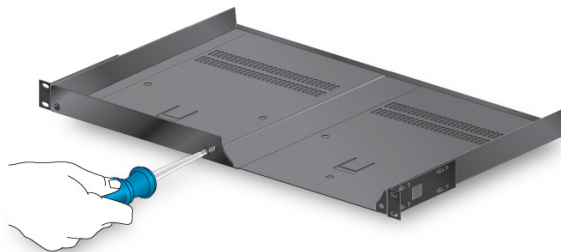
- c. Replace the front panel. Align the three pegs in the front panel with the holes in the player chassis and press until the front panel snaps into place.



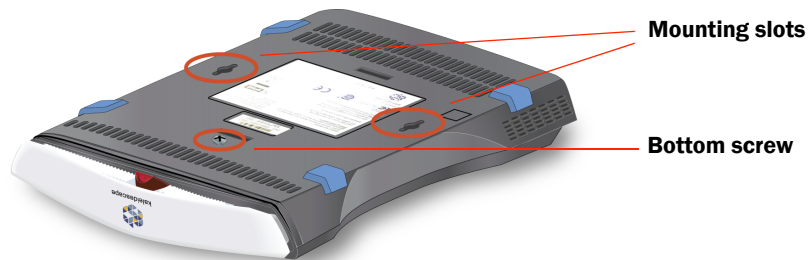
M300 Player

Rack mount the M300 Player with an optional rack-mount shelf. This shelf holds up to two M300 Players and fills one rack unit.

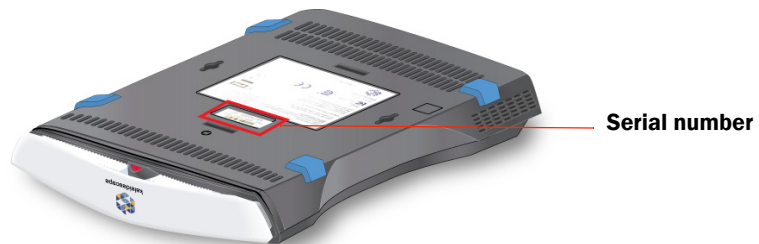
1. If installing two M300 Players, remove the two screws that secure the blanking plate, then the blanking plate.



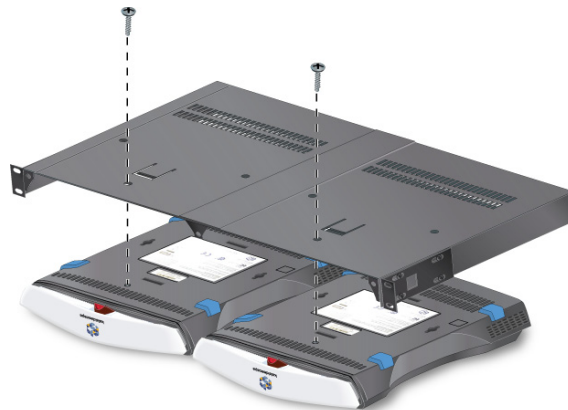
2. Remove the bottom screw from the M300 Player.



3. The player serial number is not visible after the player is mounted. Write it down for future reference.

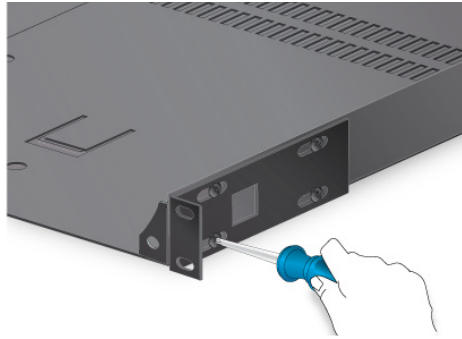


4. Align the mounting slots with the shelf pegs, and slide the player towards the back of the shelf until the player clicks into place.
Repeat if installing a second player.
5. Turn shelf over and attach retaining screws. Do NOT use the screws that were removed.



6. Mount the rack on the shelf in the best forward position.

7. Adjust the rack ears so that rack ears are equally aligned from the front of the shelf. Loosen the four side screws, adjust the rack ears and tighten.



8. Fasten the shelf to the rack using the lower holes in the rack ears.
9. Install screws in the upper two holes to secure the shelf.

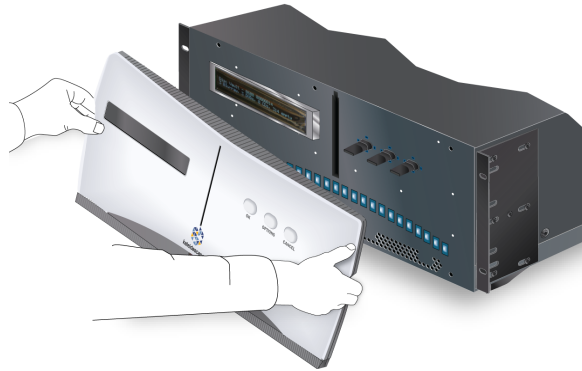


Note: The Kaleidescape M300 Player can also be mounted against a wall. See [Wall Mounting the M300 Player on page 50](#).

DV700 and M700 Disc Vaults

Note: The DV700 and M700 Disc Vault can also be installed on a tabletop. See [Tabletop Installation for the DV700 and M700 Disc Vault on page 57](#).

1. Remove the front panel by gripping each side and pulling it straight from the disc vault.

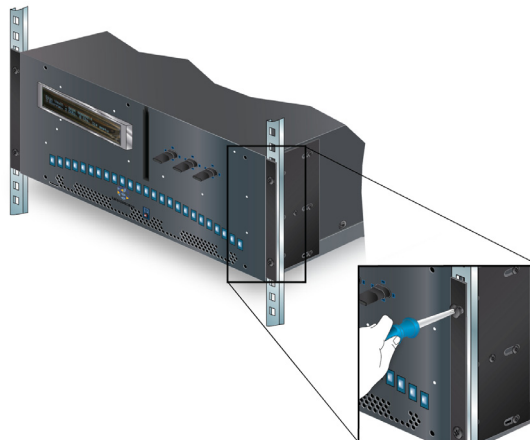


Note: The front panel is heavier than it appears; remove with caution.

2. Remove the feet using a Phillips screwdriver so the disc vault does not obstruct the rack space below.
3. Mount the vault in the rack with the provided Phillips screws.

! WARNING

The DV700 and M700 Disc Vaults are large (5 rack units) and weigh 38 lbs (17.2 kg) when empty and 49 lbs (22.2 kg) when fully loaded with discs. Use two people when mounting a disc vault.



Note: If additional space at the back of the vault is required, adjust the rack ears using the following steps:

- a. Remove the center screw on each rack ear.
- b. Loosen the remaining screws and slide the rack ears back.
- c. Tighten the screws securely, disregarding the center screw.

4. Replace the front panel by aligning the metal tab at the bottom inside of the panel with the slot in the front of the chassis. Press firmly and evenly to snap the panel into place.

Connecting Components to the Network

Use the following procedures to connect components to the network.

Connect servers before connecting other components.

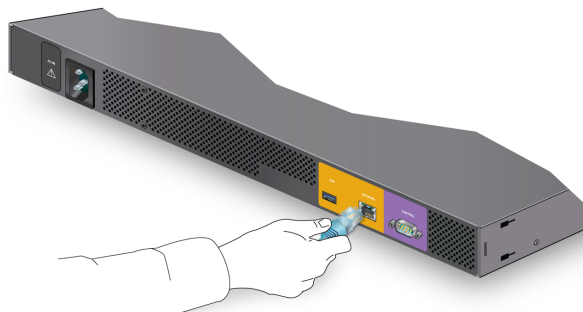
The two lights above the network connection indicate activity and the type of connection.

Servers

1. Connect the Ethernet cable to the port labeled **NETWORK** on the back of the server.

1U+ Movie Server: The **left** LED blinks green to indicate activity. The right LED lights solidly green when a link is established.

3U Server: The **left** LED lights solidly orange to indicate when a link is established. The **right** light blinks amber to indicate activity.

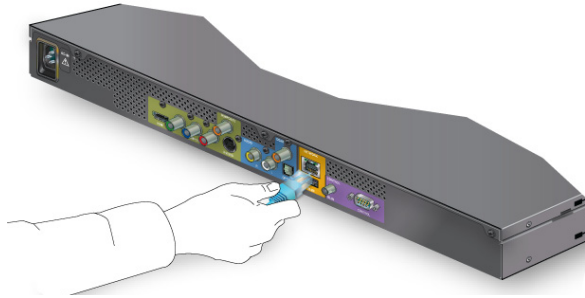


2. Plug the other end of the server Ethernet cable into a **1000Base-T Ethernet switch** port.

The server has an RS-232 serial port labeled **CONTROL** reserved for control systems. For more information, see [Control Systems on page 104](#).

M500 Player

1. Make sure the server is connected to the network and powered on.
2. Connect the Ethernet cable to the port labeled **NETWORK** on the back of the player.



3. Plug the other end of the Ethernet cable into an Ethernet switch. A Gigabit switch is strongly recommended, and required if more than one player is used to watch Blu-ray quality movies at the same time.

The **left** light indicates connection speed. When a 1000Base-T link is established, this light is amber. With a 100Base-TX link, this light is green. The **right** light blinks green when there is Ethernet activity. The activity light on the M500 player also indicates that network **RESET** has been pressed.

4. Connect appropriate A/V cables. Refer to [Table 3-2](#) for cable restrictions.
5. Connect control cables for the controller being used. The player can connect to three types of controllers.
 - ▶ Serial controller (RS-232)
 - ▶ Ethernet (TCP/IP)
 - ▶ IR controller

a. Connecting to a serial controller

The M500 player acts as standard Data Terminal Equipment (DTE) with an RS-232 serial controller, connected via a female-female DB-9 serial cable.

Use the pinout shown in [Figure 3-8](#) to wire the DB-9 female connector.

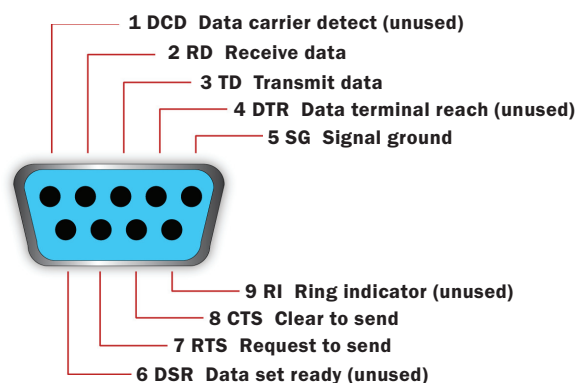


Figure 3-8 Serial Control Port Pinout (Male DB-9)

For complete instructions for serial control, refer to the *Kaleidescape System Control Protocol Reference Manual* at www.kaleidescape.com/go/control-protocol.

b. Connecting to the Ethernet

No additional cabling is required for Ethernet (TCP/IP) controllers if the controller is part of the network.

c. Connecting to an IR controller

The IR receiver on the front of the player is paired with an IR emitter wired directly to the **IR-IN** port on the back panel of the player.

Use the **IR-IN** port to connect the player to a remote IR receiver, an RF gateway, or a control system that sends IR commands.

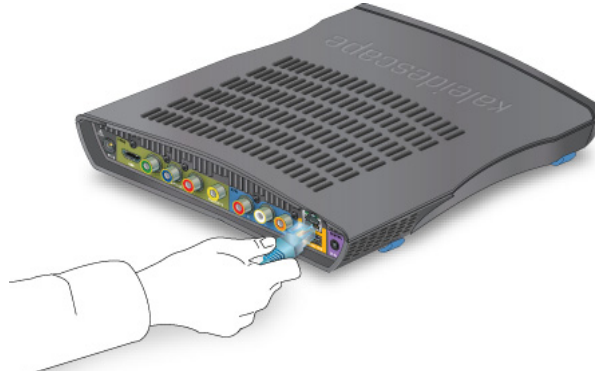
- ▶ Cut the emitter off any existing IR repeater or control system.
- ▶ Solder a cable with an 1/8 in. (3.5 mm) tip-sleeve (mono) connector to the leads that were connected to the emitter.
- ▶ Connect the signal to the tip of the connector and the ground to the sleeve.

When this cable is connected to the player **IR-IN** port, the player receives the same IR commands that would have been sent by the emitter.

M300 Player

1. Make sure the server is connected to the network and powered on.
2. Plug an Ethernet cable into the port labeled **NETWORK** on the back of the player.
3. Plug the other end of the Ethernet cable into an Ethernet switch. A Gigabit switch is strongly recommended, and required if more than one player is used to watch Blu-ray movies at the same time.

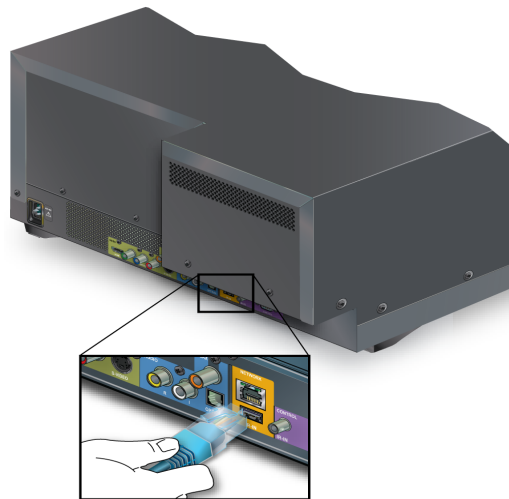
The **left** light indicates connection speed. When a 1000Base-T link is established, this light is amber. With a 100Base-TX link, this light is green. The **right** light blinks green when there is Ethernet activity.



4. Connect appropriate A/V cables. Refer to [Table 3-2](#) for cable restrictions.
5. Connect IR controller cable if required. See M500 IR cabling instructions above. No additional cabling is required for Ethernet (TCP/IP) controllers if the controller is part of the network.

DV700 and M700 Disc Vaults

1. Make sure the server is connected to the network and powered on.
2. Plug an Ethernet cable into the port labeled **NETWORK** on the back of the disc vault.



3. Plug the other end of the Ethernet cable into an Ethernet switch. A Gigabit switch is strongly recommended.

The **left** light indicates connection speed. When a 1000Base-T link is established, this light is amber. With a 100Base-TX link, this light is green. The **right** light blinks green when there is Ethernet activity.

4. When using the integrated player in the M700 Disc Vault, connect A/V cables and control cables as required. The player can connect to three

types of controllers. Refer to cabling instruction for the [M500 Player on page 40](#).

- ▶ Serial controller (RS-232)
- ▶ Ethernet (TCP/IP)
- ▶ IR controller

Wireless and Powerline Networking

The Premiere line server must be connected to the Internet to receive software, Movie Guide and Music Guide updates, and to download cover art. An Internet connection is also required when activating the system, when downloading content from the Kaleidescape Movie Store, and for system monitoring.

Although the reliability of a wired Internet connection is preferred, in some situations the most practical option is an Internet connection using one of the following technologies:

- Wireless LAN
- Powerline communication

Wireless networks use radio frequencies to communicate without wires. Powerline networks carry data over a conductor also used for electric power transmission.

Wireless and powerline connections work well for providing Internet access to the Kaleidescape Premiere line server, for connecting control systems, and for accessing the browser interface from a computer. However, a **wired Ethernet network is required between the Kaleidescape Premiere line components** because of the small tolerance for latency while streaming movies or music.

Wireless LANs

A wireless router (or router and Wireless Access Point (WAP)) can be connected to a DSL or cable modem to provide wireless Internet connectivity. To connect a server from the Premiere line to the Internet, connect a wireless bridge (sometimes called a “wireless game adapter”) to the network connection on the server. Follow the instructions for the wireless bridge to establish a connection.

Using channels that are five channel numbers apart decreases the channel cross-talk and improves performance. In the United States, only channels 1 through 11 are available, which means that the only three wireless networks that do not overlap are channels 1, 6, and 11.

Powerline Communications

Powerline communication (PLC) uses electrical wiring to interconnect segments of an Ethernet network. There are several proprietary PLC standards, including HomePlug, HD-PLC, and UPA. All equipment used in a setup must have the same standards.

To connect the Premiere line server to the Internet using a powerline network, plug a powerline adapter into an electrical outlet, and then to a router or switch with Internet access. Install a second powerline adapter near the Premiere line server, connect the adapter to the network connection on the Premiere line server and an electrical outlet.

Note: Because standards vary, Kaleidescape recommends using two powerline adapters of the same make and model.

Configuration Examples

Any Premiere line server can be connected to the Internet with wireless or powerline networking equipment. Depending on installation requirements, many configurations are possible if the connection between player and server always uses Ethernet cabling.

Figure 3-9 is a sample configuration for the 3U Server. A wireless access point (WAP) or powerline adapter is connected to a router. The router is connected to the Internet access device (such as a cable or DSL modem). A wireless bridge or powerline adapter is connected to the 3U Server. Note that a wireless router performs the functions of both a router and a WAP.

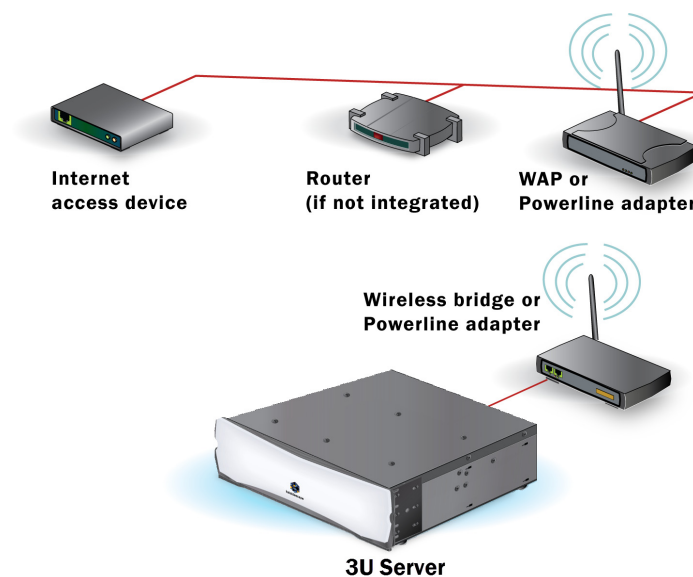


Figure 3-9 Kaleidescape 3U Server with Wireless or Powerline Networking Equipment

Figure 3-10 is a sample configuration for a 3U Server with an M500 Player and an M300 Player connected to an Ethernet switch. The switch is connected to the Internet using either wireless or powerline networking equipment.

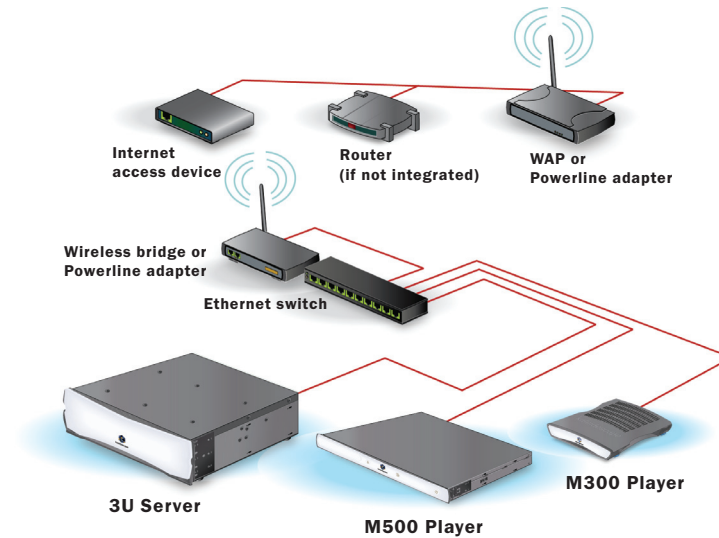


Figure 3-10 3U Server, M500 Player and M300 Player with Wireless or Powerline Networking Equipment

Connecting Components to Power Supply and Powering On

Use the following procedure to connect components to a power source and power on.

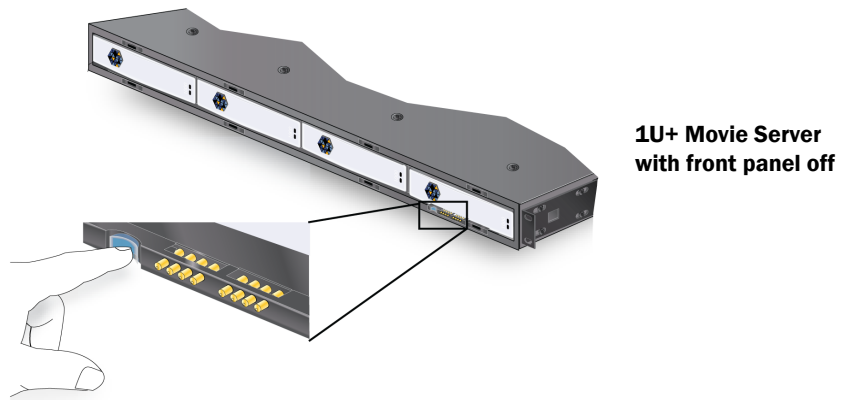
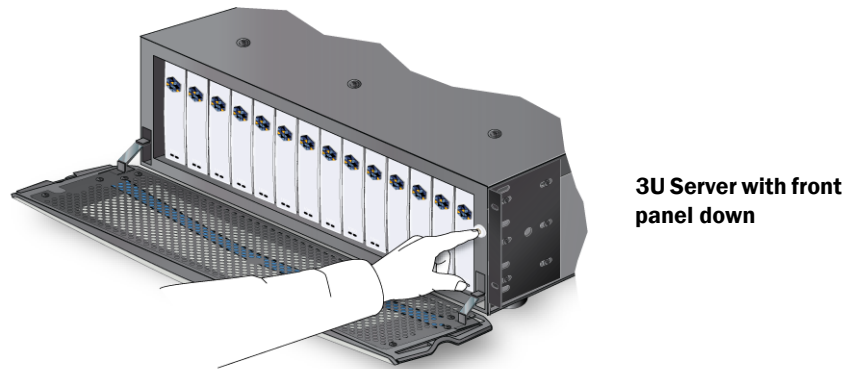
Servers

1. Plug the power cord into the socket labeled **AC-IN** on the back of the server. Plug the other end into a grounded outlet with a high-quality surge protector for the server power source. A UPS is optional.
2. **3U Server** — Open the front panel of the server and press the **POWER** button.

1U+ Movie Server — Press the **POWER** button on the right side of the front panel or remove the front panel and press the blue **POWER** button.

The blue lights on the disk cartridges illuminate sequentially and then turn off briefly before turning on again and remaining on.

The blue light on the 3U Server hot spare disk cartridge blinks.



3. Check that all lights are blue before closing the front panel.



CAUTION

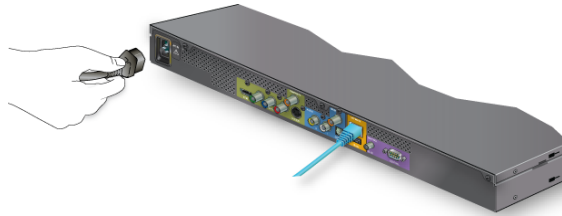
Do NOT operate the server with empty slots. Empty slots compromise the cooling system. Fill any empty slots with blank disk cartridges.

4. Leave the server connected to the Internet for at least one hour.
5. After waiting an hour, power off the server, then restart. This power off/on sequence installs the most recent software and activates licensing.

The server can be powered on/off by pressing the **POWER** button, or can be rebooted remotely from the browser interface. See [Configuring System Components on page 76](#).

M500 Player

1. Plug the power cord into the socket labeled **AC-IN** on the back of the player. Plug the other end of the cable into a grounded outlet with a high-quality surge protector.



2. Press the **POWER** button on the front of the player. The front panel glows blue.

M300 Player

1. Plug the DC power cord from the power supply into the socket labeled **DC-IN** on the back of the player.



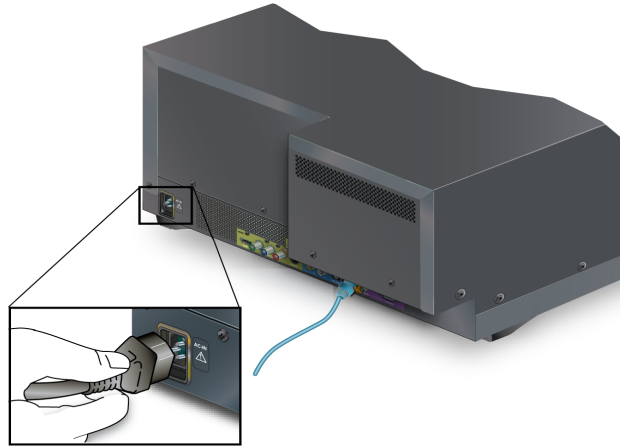
2. Plug the AC power cord into the power supply.
3. Plug the other end of the AC power cord to a grounded outlet with a high-quality surge protector.

The M300 Player does not have a power button. The front panel glows blue when the player is connected to a power source.

If the front panel does not glow blue, the player might be receiving power but set to standby mode. Use the **ON** button of a remote control to exit standby mode and turn on the player.

DV700 and M700 Disc Vaults

1. Plug the power cord into the socket labeled **AC-IN** on the back of the disc vault.
2. Plug the other end of the cable into a grounded outlet with a high-quality surge protector.



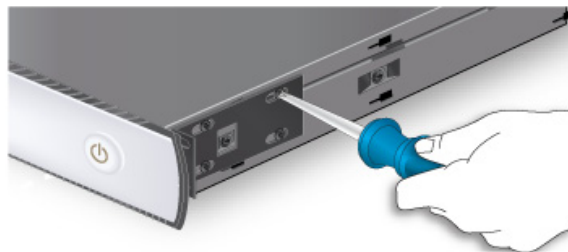
The disc vaults do not have a power button. The front panel glows blue when connected to a power source, and automatic initialization begins. Initialization may take several minutes. A message appears on the front panel display until the vault is ready to accept discs and commands.

```
Disc vault is initializing  
Please wait a moment
```

Tabletop Installation for the M500 Player

The M500 Player is packaged with rack ears. Tabletop installation involves removing the rack ears and installing side panels.

1. Remove the four screws that fasten each of the rack ears to the player. Use a #2 Phillips screwdriver.



2. Identify the left side panel (as viewed from the front of the player). The number 502-1005 can be found in the middle of the inside of the left side panel.
3. Position the side panel tab to back, finger guide to front.



4. Align the six plastic tabs on the panel with the six slots on the left side of the player.



5. Press the side panel tabs into the slots.
6. Slide panel forward until the panel locks into place and is flush with the back of the player.
7. Repeat for right side panel, number 502-1003.



Note: Panels are purely cosmetic. If space is a consideration, panels can be left off.

Wall Mounting the M300 Player

The M300 Player ships with a bracket for mounting the player to a vertical surface and a bracket for mounting the power supply.

The M300 Player can be mounted two ways.

- Permanently to a wall with bracket screwed to the player
- Without a screw in the bracket so the player can be easily removed

Note: Mounting the M300 Player vertically can interfere with receiving IR commands by the IR receiver on the front of the player (just below the front panel). The **IR-IN** port on the back of the player can be used to connect the

player to a remote IR receiver, an RF gateway, or a control system. See [Connecting Components to the Network on page 40](#).

Site Preparation

Use the following procedure to prepare the mounting site.

1. Plan the location. Consider orientation, cable lengths, and ventilation as well as local building and electrical codes.

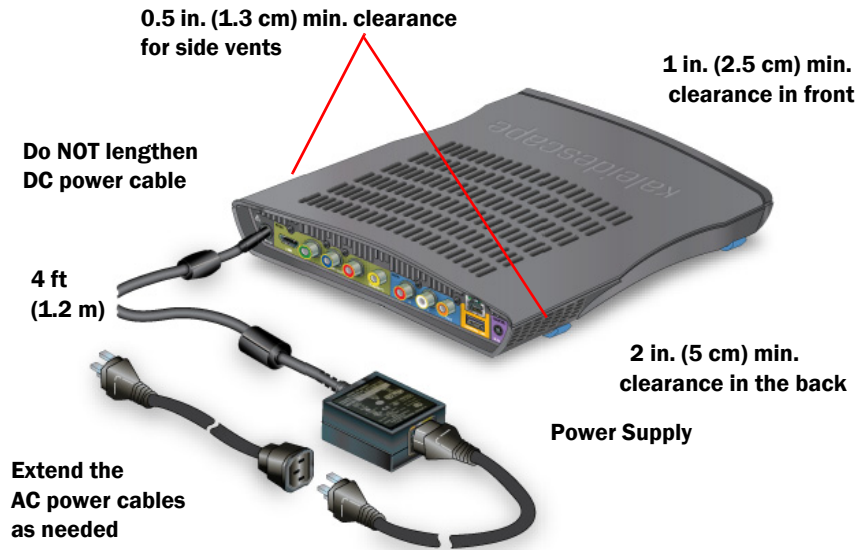
The M300 Player can be mounted with connectors up or down, or to either side (front panel down provides best cooling). The shape of the bracket fits the shape of the player.



2. Find a mounting spot that allows for cable length limitations. Make allowances for strain relief.
3. Determine if the power supply must be mounted with the player to keep the player within the DC cable length limitation [4 feet (1.2 meters)].

Do NOT lengthen the DC cable of the power supply.

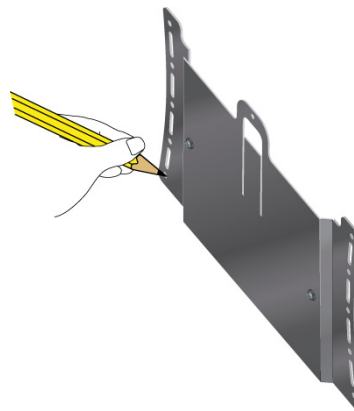
Note: Mounting the mini player vertically can interfere with remote control IR reception because the IR receiver is located on the front of the player just below the front panel. The IR-IN port on the back of the player can be used to connect the player to a remote IR receiver, an RF gateway, or a control system.



4. Verify that there is adequate airflow around the player [1 in. (2.5 cm) in front and 2 in. (5 cm) in back, minimum].

Note: The mini player automatically turns off if it becomes too hot.

5. Prepare mounting holes. Place the bracket or bracket template against the wall and mark the locations of the four holes.



Invert bracket for mounting orientation with connectors up

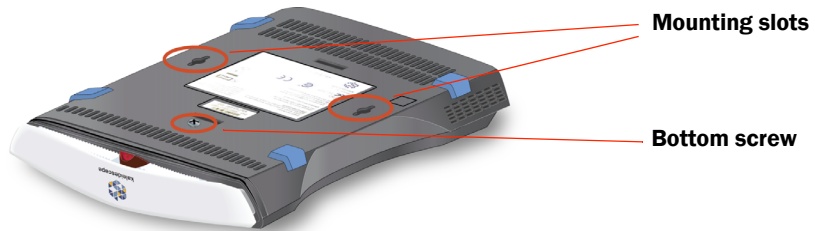
6. Drill holes for fasteners. If the surface is wood or a similar material, drill a 3/32 in. (2 mm) pilot hole at each location.
7. Check that the mounting screws are the appropriate length. Do not use the screw anchors for wood.
 - a. If mounting on drywall (hollow wall) or masonry (solid wall), drill a 3/16 in. (5 mm) hole for the screw anchors. Insert the anchors and tap with a hammer until anchors are flush with the surface.
 - b. If mounting the power supply with the player, repeat steps for the power supply bracket.

8. The player serial number is not visible after the player is mounted. Write it down for future reference.

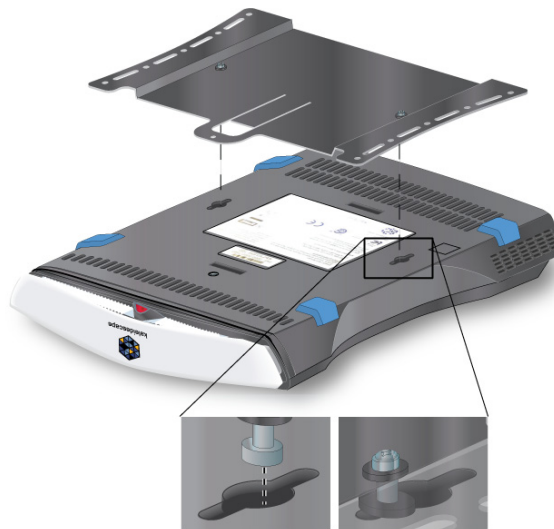
Permanent Mounting

Use the following procedure to mount the M300 Player permanently.

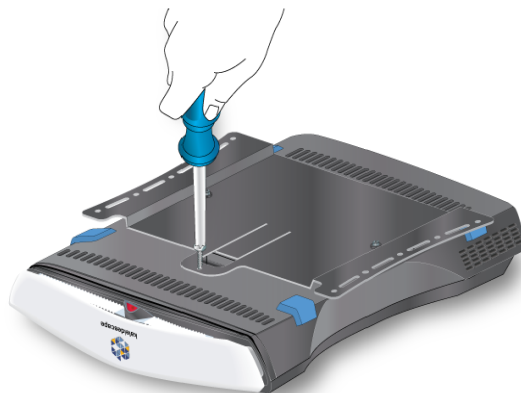
1. Use a #1 Phillips screwdriver to remove the screw located on the bottom of the player.



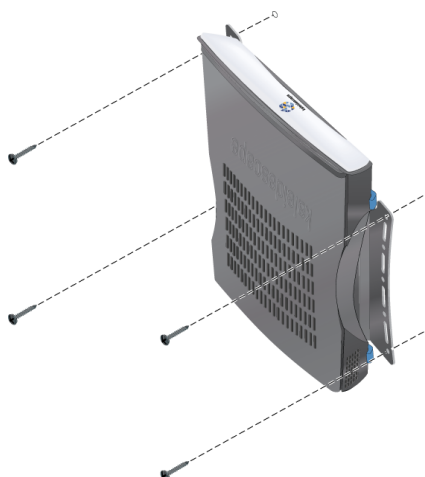
2. Align mounting slots on the bottom of the player to bracket pegs.
3. Slide the bracket down until the player clicks into place.



4. Fasten the bracket to the player with the retaining screw provided. Do NOT use the screw that was removed, that screw is too short.



5. Place the player and bracket over mounting holes.
6. Check that the mounting screws are the appropriate length. Do not use the screw anchors for wood.
7. Use a #2 Phillips screwdriver to fasten bracket with the mounting screws until the player and bracket are secure.



- a. If mounting to drywall (hollow wall), or masonry (solid wall), drill a 3/16 in. (5 mm) hole for the screw anchors. Insert the anchors and tap with a hammer until anchors are flush with the surface.
- b. Tighten each screw with additional turns to expand the anchor inside the wall. See [Table 3-3](#).
- c. If mounting the power supply with the player, repeat steps for the power supply bracket.

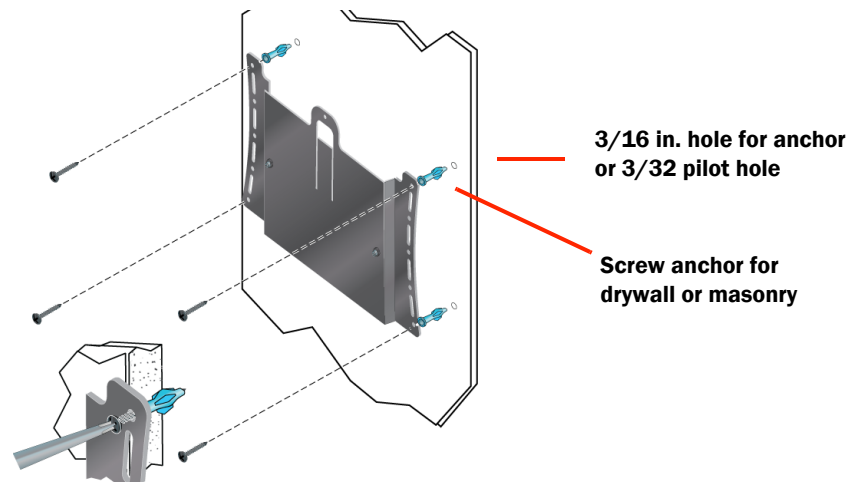
Table 3-3 Drywall Mounting

| Drywall Thickness | Number of Turns Required |
|-------------------|--------------------------|
| 3/8 inch | 7 to 9 turns |
| 1/2 inch | 5 to 7 turns |
| 5/8 inch | 3 to 4 turns |
| 3/4 inch | 1 to 2 turns |

Removable Player Mounting

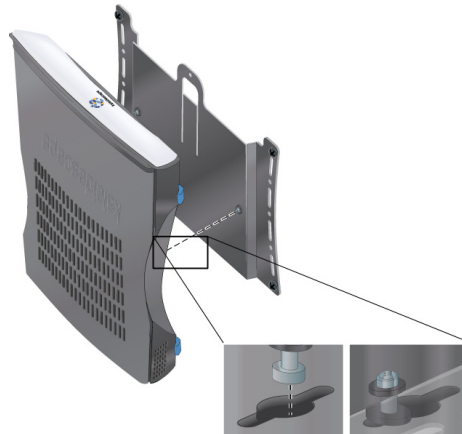
Use the following procedure to mount the M300 Player so that the player can be easily removed and replaced.

1. Place the bracket over mounting holes.
2. Use a #2 Phillips screwdriver to fasten with mounting screws until the bracket is secure.



If mounting to drywall (hollow wall), or masonry (solid wall), drill a 3/16 in. (5 mm) hole for the screw anchors. Insert the anchors and tap with a hammer until anchors are flush with the surface. Tighten each screw additional turns, refer to Table 3-3 on page 55.

3. Align the player mounting slots to the bracket pegs and slide the player down until the player clicks into place.



Power Supply Mounting

Use the following procedure to mount the M300 Player power supply.

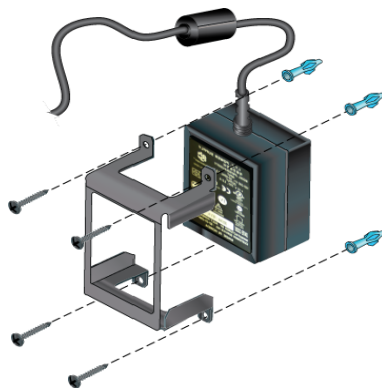
1. Follow the steps in [Site Preparation on page 51](#) using the power supply bracket as a template.
2. Place the power supply inside the bracket with the label facing away from the wall.



WARNING

To avoid electrical hazard and protect the player, use the power supply provided with the M300 Player.

3. Place the bracket and power supply over the holes and mount using a #2 Phillips screwdriver to fasten with mounting screws until the bracket is secure.



If mounting to drywall (hollow wall) or masonry (solid wall), drill a 3/16 in. (5 mm) hole for the screw anchors. Insert the anchors and tap with a

hammer until anchors are flush with the surface. Tighten each screw additional turns, refer to Table 3-3 on page 55.

Tabletop Installation for the DV700 and M700 Disc Vault

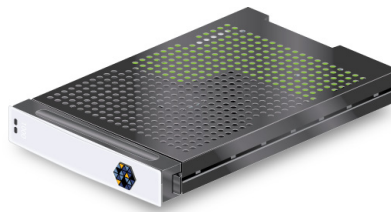
Unpack the disc vault, using a two-person lift technique to remove it from the box. The disc vault ships with feet and rack ears attached.

1. Use a 2.5 mm hex screwdriver to loosen and remove the seven screws that secure the rack ears to each side of the chassis.



Disk Cartridges

Kaleidescape Premiere line servers use low-profile disk cartridges.



1U+ Movie Server and 3U Server disk cartridge



WARNING

Disk cartridges are sensitive mechanical devices susceptible to damage from shock. Handle carefully. Protect from bumps and drops.

Always transport and ship disk cartridges in anti-static, well-cushioned containers.

Handling Disk Cartridges

Servers in the Premiere line house disk cartridges that contain high-capacity hard drives to store movies and music. Disk cartridges are packaged separately, but shipped in the same box with the server.

Handling disk cartridges correctly is critical to prevent damage.

Shock and Vibration

Disk cartridges are sensitive mechanical devices susceptible to damage from shock. **Do NOT shake or rattle disk cartridges.**

Damage to a disk cartridge is often difficult to detect and can cause sudden drive failure. Protect disk cartridges from bumps and drops and always transport or ship them in well-cushioned containers.

Note: Shipping containers designed to protect disk cartridges are available from Kaleidescape.

Electrostatic Discharge

Avoid touching the exposed connector at the back of a disk cartridge. Static electricity can damage the electronics inside the disk cartridge. Always store and ship disk cartridges in an anti-static bag.

Hard Drive Handling Video

A short video demonstrates the correct way to handle disk drives and avoid catastrophic damage. To view this video, go to www.kaleidescape.com/go/drive-handling.

Server Fault Tolerance

RAID-K Data Protection

Every Kaleidescape Premiere line server includes RAID-K technology for content protection. RAID-K is a proprietary technology developed by Kaleidescape to provide the following features:

- Better performance for movies and music
- Increased safety for content storage
- Content protection from a single drive failure
- Incremental additions to storage capacity

Unlike other variations of RAID technology, RAID-K allows new drives with different storage capacities to be added to the array.

If a drive fails, RAID-K data and parity information allow the server to continue providing content from the failed drive until a replacement disk cartridge can be installed.

Note: A failed disk cartridge must be replaced as soon as possible. If a second drive failure occurs before the first failed disk cartridge is replaced on a 1U+ Movie Server or a 3U Server missing the hot spare, content will be lost.

RAID-K technology does NOT allow swapping disk cartridges between servers.

Note: When a disk cartridge with a storage capacity larger than the other disk cartridges is added to a 1U+ Movie Server, the larger capacity disk cartridge allocates the same amount of storage capacity as the largest disk already in the server. Any excess capacity is allotted to parity information. However, when a second large capacity disk cartridge is added, the entire storage capacity can be used to store movies and music.

Note: When a disk cartridge with a storage capacity larger than the other disk cartridges is added to a 3U Server, the first larger disk is used as hot spare, second is used for data and some parity, the third is all data.

3U Server Hot Spare Disk Cartridge

A hot spare disk cartridge is an additional disk cartridge installed in the **3U Server**. The hot spare is immediately available as a replacement if an existing drive fails. The 3U server continues to operate because of RAID-K technology and no content is lost. Information on the failed disk is recreated on the hot spare disk cartridge.

The hot spare disk cartridge can be identified by the slow blink on the blue light at the base of the disk cartridge. Active disk cartridges have steady blue lights.

When a failed disk cartridge is replaced, the replacement cartridge becomes the new hot spare disk cartridge.

Note: Because the hot spare must be able to replace any disk cartridge in the array, the capacity of the hot spare **cannot be smaller** than any other disk in the array.

(The 1U+ Movie Server does not have a hot spare disk cartridge and cannot begin failure recovery until a replacement cartridge is installed.)

Removing and Adding Disk Cartridges or Blanks

Server disk cartridge slots **MUST** be filled with disk cartridges or blanks. Disk cartridges can be added to expand server capacity or replaced as needed.

**WARNING**

Do not operate the server with empty slots. Always use blank cartridges to fill slots. Open slots compromise the cooling system.

When a Disk Cartridge Can Be Removed

If a server is powered on, the disk cartridge can be removed ONLY under the following conditions:

- Disk cartridge status light glows amber which indicates that the disk should be removed.
- Disk cartridge status light is unlit indicating that the disk is not being recognized at all. (This could be just a seating problem.)

If more than one disk cartridge status indicator glows amber or is unlit on the same server, turn the server off immediately by pressing the **POWER** button, and contact Kaleidescape Support at +1 650-625-6160 or send a message to support@kaleidescape.com.

When a Disk Cartridge Does Not Glow Blue

Active disk cartridge status lights glow blue. If a disk cartridge status indicator light fails to glow blue when the server is powered on, it is usually for one of the following reasons:

- The disk cartridge is improperly installed.
Power off the server, remove the disk cartridge, and reinsert. Be sure that the disk cartridge is firmly seated.
- The disk cartridge is defective.
Power off the server and remove the disk cartridge. Contact Kaleidescape Support for assistance.
- The disk cartridge was previously installed in another server.

Removing and Adding Disk Cartridges

Use the following procedure to remove a disk cartridge or blank from a 3U or 1U+ Movie Server.

1. Access the front panel of the server.

3U Server – Pull down the front panel.

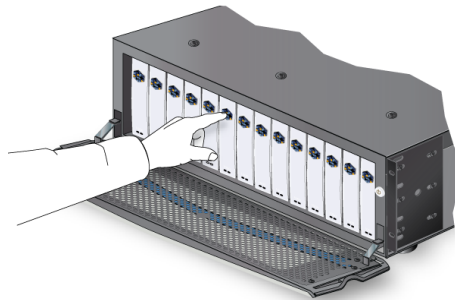
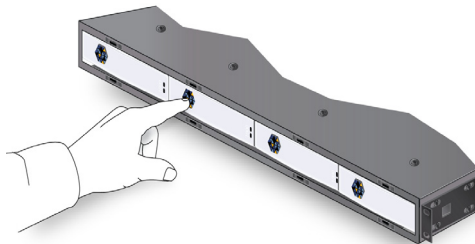
1U+ Movie Server – Tug gently on both sides of the front panel and remove.

2. If the server is powered on, check the status light of the disk cartridge. Only a disk cartridge with a status light that is amber or unlit should be removed when the server is powered on. Power off the server if the disk cartridge to be removed has a blue status light.

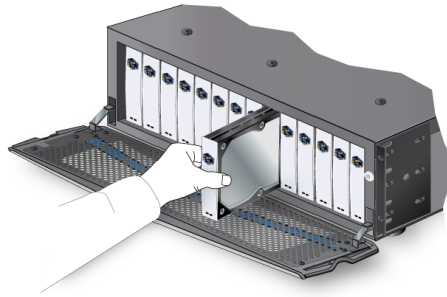
**WARNING**

Do NOT remove a disk cartridge with a blue status light when the server is powered on. This can result in loss of content.

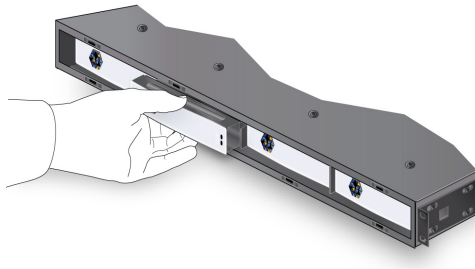
3. When ready to remove the disk cartridge, press the **EJECT** button (Kaleidescape logo) on the disk cartridge. (Blank cartridges do not have the logo on the **EJECT** button).

**3U Server EJECT button****1U+ Movie Server
EJECT button**

4. Gently glide the disk cartridge out of the slot.



**Removing a disk cartridge
from a 3U Server**



**Removing a disk cartridge
from a 1U+ Movie Server**

5. Insert the disk cartridge into an anti-static bag and place in a well-padded container for safe storage and transport.
6. When removing all disk cartridges, make sure the server is powered off and repeat steps 2, 3 and 4 until the server is empty.
7. For the 3U Server, close the front panel. For the 1U+ Movie Server, replace the front panel by aligning the six posts on the rear of the front panel with the slots in the chassis and pushing the panel until the panel snaps into place.

Adding a Disk Cartridge

A disk cartridge can be added at any time to increase server storage capacity or to replace a failed drive, whether the server is running or not.

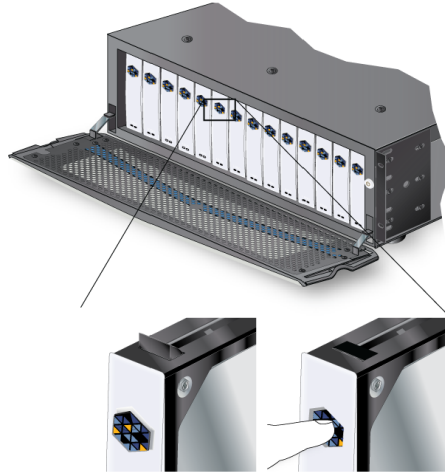
Use the following procedure to add a disk cartridge to a 3U or 1U+ Movie Server.

1. Access the front panel of the server.

3U Server – Pull down the front panel.

1U+ Movie Server – Tug gently on both sides of the front panel and remove.

2. Verify that the latch on the disk cartridge works properly. The latch is the gray plastic wedge that extends from the top of the disk cartridge.



The latch is designed to retract when the Kaleidescape logo (or white button on a blank) is pressed, and to pop up and engage with the chassis when a disk cartridge is inserted. If the latch sticks in the retracted position the disk cartridge does not lock in place and cannot operate properly.

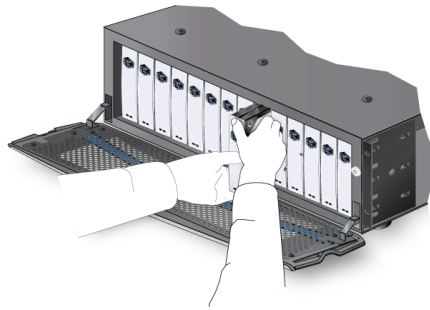
Note: If the latch sticks, follow the procedure to resolve the problem at www.kaleidescape.com/go/latch.

3. Align the disk cartridge to the slot.

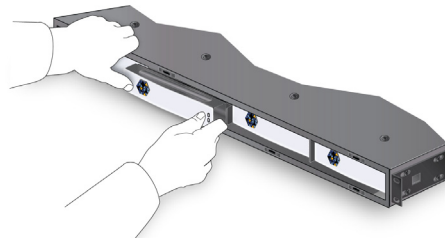
3U Server – Latch goes to the top with lights at the bottom.

1U+ Movie Server – Latch goes to the left with lights to the right.

4. Insert the disk cartridge into the open slot. Push firmly but gently until the disk cartridge clicks into place. Do NOT slam the disk cartridge.



**Adding a disk cartridge
to a 3U Server**



**Adding a disk cartridge
to a 1U+ Movie Server**

5. Verify that the disk cartridge status light glows blue.

Note: If replacing a single failed drive on a **3U Server**, the newly installed disk cartridge usually becomes the new hot spare. The blue status light on the hot spare disk cartridge blinks at two second intervals.

6. For the 3U Server, close the front panel. For the 1U+ Movie Server, replace the front panel by aligning the six posts on the rear of the front panel with the slots in the chassis and pushing the panel until the panel snaps into place.

Section 4

System Configuration

Browser Interface

From configuring preferences and settings, to organizing movie and music libraries, the browser interface on a Premiere system is a valuable resource consisting of the following main pages.

- ▶ **HOME:** View basic status of the Premiere system and link to player control panels.
- ▶ **MOVIES:** Browse and edit movie information, organize the library with user created collections, and manage scenes.
- ▶ **MUSIC:** Manage the music library with custom collections and mix albums, and view and edit album information.
- ▶ **DISC VAULTS:** Selectively choose discs to eject, and monitor import or catalog progress of vault titles.
- ▶ **SCRIPTS:** Create, edit and delete movie scripts.
- ▶ **IMPORT:** View and edit content added to the Premiere system from a chronological list.
- ▶ **SETTINGS:** Register the system, set up parental controls, and configure preferences and settings for all components in the Premiere system.

Accessing the Browser Interface

There are three primary ways to access the browser interface: System URL, server IP address, and serial number URL.

- **System URL**

<http://my-kaleidescape> (Windows) or
<http://my-kaleidescape.local> (Mac)

Note: The *System URL* has the name **my-kaleidescape** by default but that name can be changed on the **SETTINGS > General** page of the browser interface. If the *System URL* has been changed, enter the new address.

- **Server IP address**

<http://www.xxx.yyy.zzz> (Windows or Mac) where www.xxx.yyy.zzz is the IP address of the server.

- **Serial number URL**

When setting up separate Premiere systems, each with a dedicated server on the same subnet, and System URLs have not been changed and the server IP addresses are not known, use an address beginning with **ks-** followed by all twelve digits of the server serial number.

For example, to access the browser interface of a server with the serial number 0103 0001 2345, enter

<http://ks-010300012345> (Windows) or

<http://ks-010300012345.local> (Mac)

Troubleshooting if the Browser Interface Does Not Load

If the web browser cannot load the browser interface using one of the methods above. Refer to [Network Requirements on page 165](#).

Viewing System Information

After the Premiere line server is installed, powered on, and has an active network link, use the following procedure to view system information.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. If a login page appears, enter the password and select **Login**. If the password needs to be reset, connect the system to the Internet and contact Kaleidescape Technical Support
3. The **HOME** page appears. See [Figure 4-1](#).

When more than one Premiere system exists on the network, select the **SETTINGS > Components** page and verify that the connection is to the correct system by checking the server serial number(s) listed. For help accessing the *Components* page see [Configuring System Components on page 76](#).

To connect to a different system, select **View another system** from the message at the top of the page and select the system. A new window opens with a connection to the **HOME** page of the browser interface for the other system. See [Figure 4-1](#).

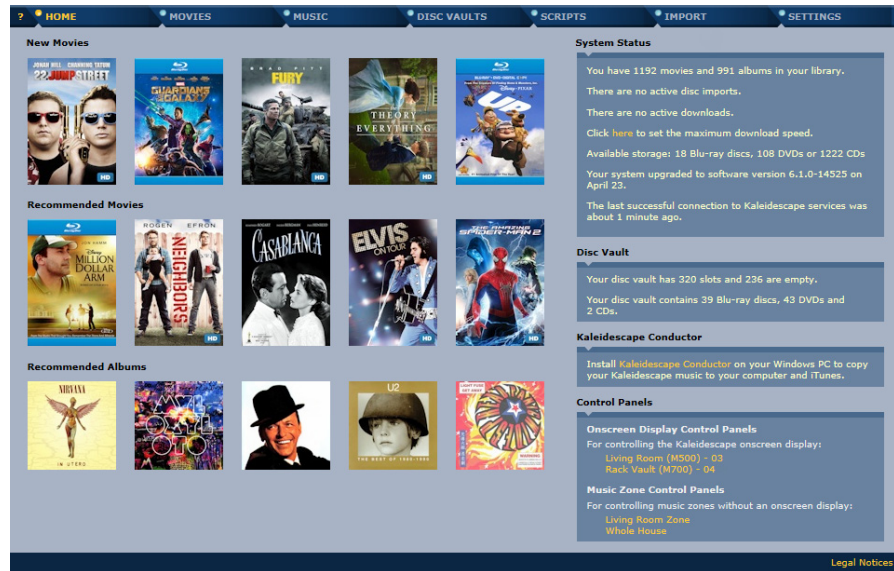


Figure 4-1 Browser Interface HOME Page

Multiple areas are displayed on the right side of the *HOME* page depending on system capabilities. The *System Status* and *Disc Vaults* areas report information about the Premiere system.

► **System Status**

The *System Status* area combines information from all servers in the Premiere system, and displays the following details.

- Number of movies and albums in the library
- Progress of active imports
- Progress of active downloads, and the ability to set the maximum download speed (in territories where the Kaleidescape Movie Store is supported)
- Available storage
- Current software version and when last upgraded
- Last successful connection to Kaleidescape services
- Alerts reporting possible configuration or hardware errors
- Status of a rebuilding disk cartridge (when applicable)

► **Disc Vaults**

When one or more disc vaults are installed on the Premiere system, the *Disc Vault* area appears reporting details from all vaults.

- Total number of slots and number of empty slots
- Number of Blu-ray discs, DVDs or CDs
- Current status of discs being added to the system or waiting to be ejected

The *HOME* page may also include areas with links to Kaleidescape Conductor and control panels.

► Kaleidescape Conductor

On Premiere systems that support music, the *Kaleidescape Conductor* area appears. Select the amber colored **Kaleidescape Conductor** link to download the current version of Conductor.

► Control Panels

When one or more players are installed on the Premiere system, the *Control Panels* area appears. Select the amber colored link to control the onscreen display or the music zone.

Note: Control of the onscreen display should be done while viewing the TV or display. No video is sent to the control panel.

Note: The control panels require an up-to-date version of the Java software (current version can be found at www.java.com).

Browser Interface Alerts

When a component encounters a problem, an alert appears at the top of every page of the browser interface. Below is an example of an alert on the *HOME* page for a failed or missing disk cartridge.

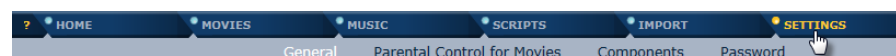
In this example, the notification also appears in the *System Status* area along with another alert reporting a possible network issue.



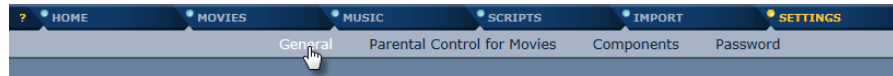
Setting System Preferences

System preferences on a Premiere system are configured from the *General* tab on the *SETTINGS* page of the browser interface.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select the **SETTINGS** tab.

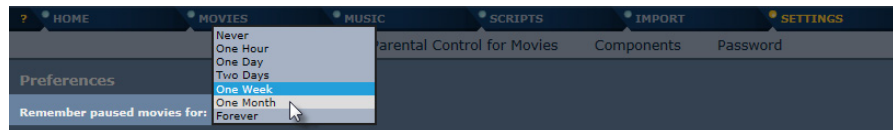


3. If the **General** tab is not open, select it from the second row of tabs.



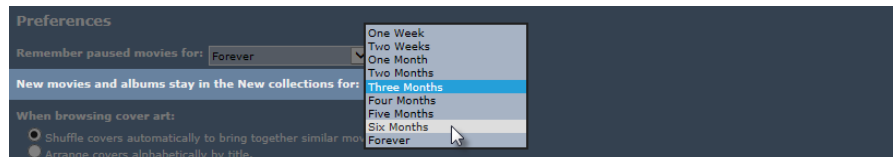
4. A **paused bookmark** is created when any movie or TV episode is stopped before reaching the end credits. Movies with a paused bookmark appear in the *Paused* movie collection and can be resumed from any player in the Premiere system.

From the drop-down menu for **Remember paused movies for**, choose how long paused bookmarks are stored.

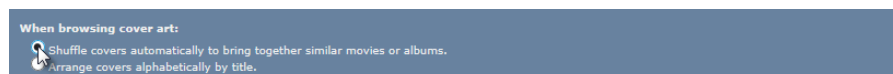


5. When content is added to a Premiere system, it automatically appears in the *New* movie collection or the *New* music collection.

Choose how long new movies and albums remain in the *New* collections, from the drop-down menu for **New movies and albums stay in the New collections for**.



6. By default, cover art on the *Covers* view is automatically shuffled surrounding the highlighted cover with similar titles. Under **When browsing cover art**, leave this default preference intact, or choose to have cover art arranged alphabetically.



Note: The SHUFFLE_COVER_ART and ALPHABETIZE_COVER_ART commands can be sent to the control system to change the cover art arrangement on the fly.

7. Under **Normalize music volume**, choose to have songs from different albums played at similar volumes, or choose to have music played at the recorded volume.



8. Under **Crossfade between songs**, choose to crossfade songs when appropriate, or choose to never crossfade songs.



9. For **Music Zone Control**, choose to limit control from the onscreen display to the local music zone, or choose to allow control of any music zone from any player in the Premiere system.

Music zone control:

- ☐ Only the local music zone can be controlled from the onscreen display.
- ☒ Any music zone in the system can be controlled from the onscreen display.

To choose the zone to control from the onscreen display (when configured to control any music zone), open the *Now Playing* view on any player and select **Control Zone...**



10. During the activation process, the name of the Premiere system is defined. If the system owner has not completed the activation process, see [Activating the System on page 13](#).

If the activation process is complete and the name needs to be changed, enter the new name in the **System Name** field.

Advanced Settings

| | |
|--------------|--------------------|
| System Name: | Beach House System |
| System URL: | my-kaleidescape |

Note: In territories where the Kaleidescape Movie Store is supported, the system name can be modified from the Movie Store, by visiting the **Account > My System** page.

11. Change the **System URL** when setting up multiple Premiere systems at the same site. Specifying a descriptive name provides direct access to the browser interface for each specific system.

Note: Characters must be lower case with no spaces.

Advanced Settings

| | |
|--------------|--------------------|
| System Name: | Beach House System |
| System URL: | beachmovies |

The System URL may be used to access the system from any browser running on a Windows PC. If you are using an Apple computer, the end of the System URL, for example: "k.local".

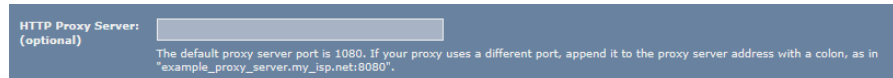
In this example, the browser interface can be accessed by entering:

<http://beachmovies> (Windows) or
<http://beachmovies.local> (Mac)

12. Select the **Time Zone** from the drop-down menu.

Time Zone: (UTC-8:00) Pacific Time

13. Enter the appropriate **HTTP Proxy Server** if necessary.



Only use this setting if the network has to communicate to the Internet through a proxy server.

14. Once all preferences and settings are configured, click **OK** at the bottom of the page.

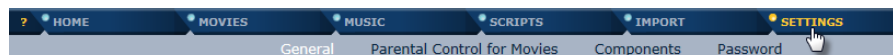
Configuring Parental Controls for Movies

On Kaleidescape Premiere systems, there are four parental control levels, three of which can be passcode protected. Each player can be configured to display and allow playback of only movies from certain parental control levels. For example, the toy room player can be configured to only display content rated G and below, while the master bedroom player is configured to display content rated R and below. The existence of restricted content can even be completely hidden from the onscreen user interface.

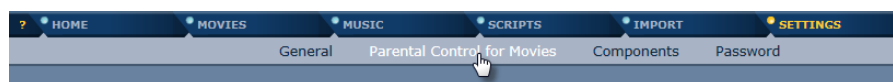
Accessing Parental Control Settings

Parental Controls on a Premiere system are configured from the *Parental Controls for Movies* tab on the *SETTINGS* page of the browser interface.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select the **SETTINGS** tab.



3. Select **Parental Control for Movies** from the second row of tabs.



Defining Parental Control Levels

Each level must have a unique rating with *For children* assigned the lowest rating and *Restricted content* assigned the highest rating.

1. Define a rating for each of the four levels from the **Rating** drop-down menus. See [Figure 4-2](#).

| | Rating | Passcode |
|---------------------|--------------|----------|
| For children: | G and Below | |
| For young adults: | PG and Below | |
| The main library: | R and Below | |
| Restricted content: | All Movies | |

Figure 4-2 Parental Control Levels - Define Rating Levels

2. Click **OK** to save.

The four defined parental control levels now appear in the *Parental Control* view of the onscreen user interface. Selecting a specific parental control level limits the player to only display movies contained by the defined rating.

With the level selected in the example, only movies rated PG and below appear in the onscreen user interface. All movies with a higher rating are hidden.

Assigning Passcodes

When a passcode is assigned to a parental control level, the movies contained in that level and all movies rated higher will not appear until the correct passcode is entered. When a passcode is not defined for a parental control level, that level can be accessed from any player without passcode protection.

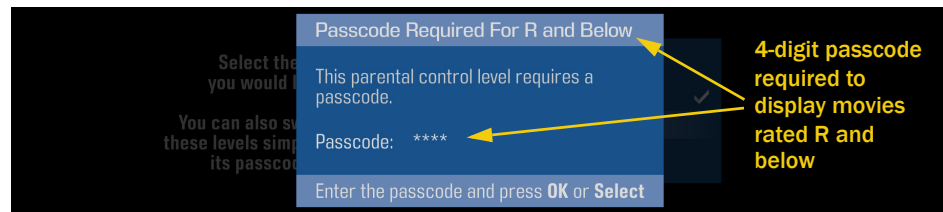
1. Assign a numeric passcode with up to eight digits to each parental control level to protect.

| | Rating | Passcode |
|---------------------|--------------|----------|
| For children: | G and Below | |
| For young adults: | PG and Below | **** |
| The main library: | R and Below | |
| Restricted content: | All Movies | ***** |

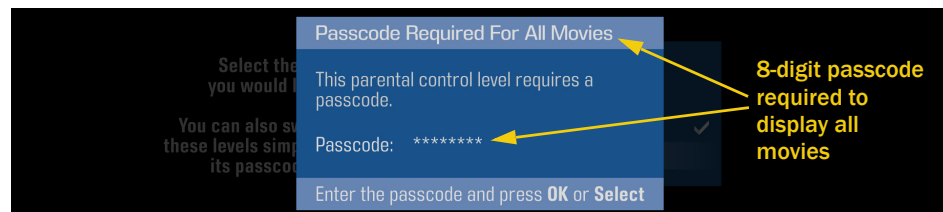
2. Click **OK** to save.

In the example, *The main library* is assigned a 4-digit passcode while *Restricted content* is assigned an 8-digit passcode.

When someone tries accessing movies rated R and below, the 4-digit passcode for *The main library* must be entered.



When someone tries accessing all movies, the 8-digit passcode for *Restricted content* must be entered.

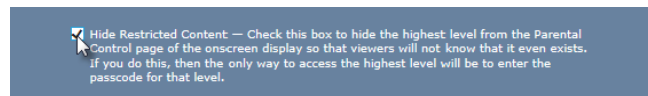


Note: As a shortcut, levels protected with a passcode can be accessed by simply entering the passcode from any view in the onscreen user interface. In the example, if the four numeric keys that make up the 4-digit passcode were pressed while on the *Covers* view, movies rated R and below would then appear.

Hiding Restricted Content

Movies contained in the *Restricted content* level can be hidden from the *Parental Control* view so users are not even aware of their existence on the Premiere system.

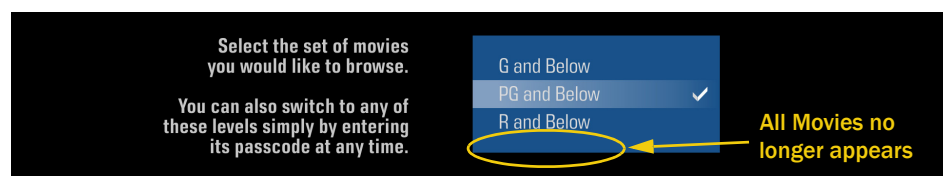
1. Check the box next to **Hide Restricted Content** to hide the highest level from the Parental Control view on the onscreen user interface.



2. Click **OK** to save.

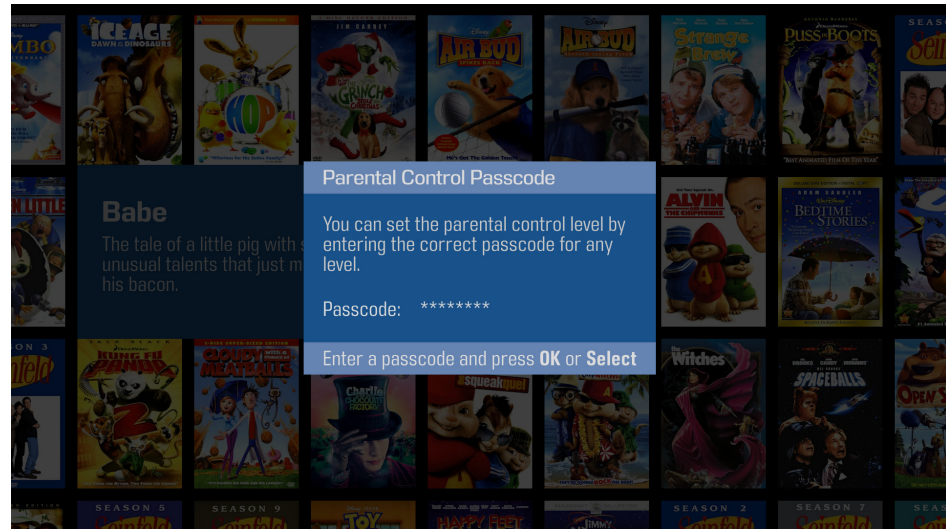
When hidden, the *Restricted content* level no longer appears on the *Parental Control* view.

In the example, *Restricted content* is defined as *All Movies*. With this level hidden, *All Movies* no longer appears as an option when the Parental Control view is accessed.



When restricted content is hidden, the passcode must be entered (from any view in the onscreen user interface) to access movies contained in the *Restricted content* level.

In the example, *Restricted content* can be accessed while viewing *Movie Covers* simply by pressing the eight numeric keys that make up the 8-digit passcode.

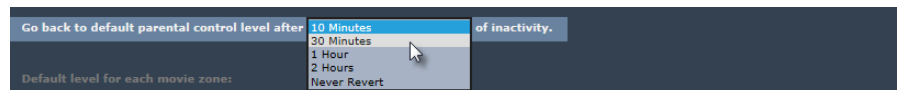


After the passcode is entered, the *Movie Covers* view (and all other views) displays *All Movies*.

Setting Inactivity Timeout

The inactivity timeout is the amount of time an idle player displays and allows playback of movies from a protected level before returning to the default level.

1. Select the time of inactivity from the **Go back to default parental control level after** drop-down menu.



Note: When *Never Revert* is selected, the player only returns to the default level after a reboot, or when someone deliberately changes levels.

2. Click **OK** to save.

Setting Player Default Levels

By default, each player in the Premiere system is set to the automatic safe level. The **Automatic Safe Level** is defined as the highest parental control level not protected with a passcode.

The last sentence in the paragraph in the bottom right corner of the *Parental Control for Movies* page reports the automatic safe level. This changes based on the current definition of each parental control level and the passcode settings.

In the example, the highest level without a passcode is *For young adults*, therefore the *Automatic Safe Level* is defined as *PG and Below*.

Each movie zone starts at the Parental Control level that you select as the default. If "Automatic Safe Level" is selected then the movie zone will use the highest Parental Control level that has no passcode. With the above settings, the automatic safe level is "PG and Below."

Each movie player can be set to a different default level.

1. Under **Default level for each movie zone**, set the default parental control level for each player in the Premiere system. Use the drop-down menu next to each movie zone name.

Default level for each movie zone:

| | |
|------------------------|----------------------|
| Master Bedroom Player: | Restricted content |
| Toy Room Player: | Children |
| Theater Player: | Automatic Safe Level |

2. Click **OK** to save.

With the default levels defined in the example, each player displays a different set of movies by default. The master bedroom player displays all movies, the toy room player displays movies rated G and below, and the theater player displays movies defined by the automatic safe level, or movies rated PG and below.

Setting Default Rating for Unrecognized Movies

The Kaleidescape Movie Guide includes ratings as determined by the Motion Picture Association of America (MPAA). When an unrecognized movie is added to the Premiere system, it is not part of the Movie Guide and the rating is unknown. A default rating can be chosen to assign to all unrecognized movies.

1. Under **Default rating for unrecognized movies**, use the drop-down menu to set the default rating to use for movies that are unrecognized.

Go back to default parental control level

Default level for each movie zone:

| | |
|------------------------|----------------------|
| Master Bedroom Player: | Restricted content |
| Toy Room Player: | Children |
| Theater Player: | Automatic Safe Level |

Default rating for unrecognized movies:

OK

Select Rating

- G
- PG
- PG-13
- R
- X
- NC-17
- TV-Y
- TV-Y7
- TV-G
- TV-PG
- TV-14
- TV-MA
- Unrated (For Kids)
- Unrated (General Audiences)
- Unrated (Mature Audiences)
- Unrated (For Adults)
- Unrated (Adults Only)

If you do this, then the only way to access the highest level will be to passcode for that level.

If inactivity.

the Parental Control level that you select as the default. If "Automatic Safe Level" is selected then the movie zone will use the highest Parental Control level that has no passcode. With the above settings, the automatic safe level is "PG and Below."

2. Click **OK** to save.

Accessing Parental Control View

Use the *Parental Control* view in the onscreen user interface to change the parental control level of a movie zone.

1. Press the **Menu** button on the Kaleidescape remote, or press **Menu** on the *Remote Control* page of the Kaleidescape iPad app.

Note: This is equivalent to sending the KALEIDESCPE_MENU_ON or KALEIDESCPE_MENU_TOGGLE command.

2. Use the arrow buttons to highlight **Movies**, then select **Parental Control**. The *Parental Control* view appears.
3. The current parental control level is indicated with a check-mark. Use the arrow buttons to select the desired level, and then press **OK** or **Enter**.
4. If the level is protected, enter the passcode when prompted.

To access a protected level without opening the *Parental Control* view, simply enter the passcode from any place in the onscreen user interface.

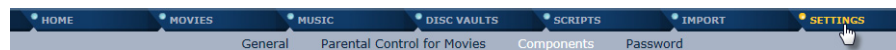
Configuring System Components

The **COMPONENTS** page lists properties for system components. Use the following procedures to view and set preferences, and settings.

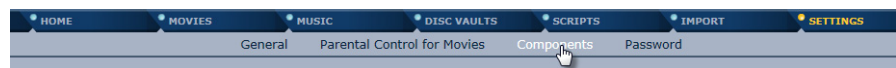
Setting Component Preferences

Preferences for components in a Premiere system are configured from the *Components* tab on the *SETTINGS* page of the browser interface.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select the **SETTINGS** tab.



3. Select **Components** from the second row of tabs.



A list of the components in the Premiere system appears including detailed information about each component (serial number, IP address, MAC address, storage capacity, storage available, front panel lighting, temperature, and more...). See [Figure 4-3](#).

The screenshot displays the 'COMPONENTS' page in the Kaleidescape interface, which is divided into four main sections: Server, 2 Players, and Disc Vault. Each section contains configuration fields for various hardware components.

Server Section:

- Device Type:** 3U Server
- Serial Number:** 0000 00176AE7
- IP Address:** 10.100.12.109
- MAC Address:** 00:03:1D:07:8A:B4
- Capacity:** 47747 GB
- Available Storage:** 47587 GB (99%)
- Front Panel Lights:** 8 (default)
- Average Disk Temperature (°C):** 36
- Buttons:** OK, Settings, Restart, Remove from system

2 Players Section:

Player 1 (M300 Player):

- Device Name:** Master Bedroom Player
- Serial Number:** 0000 00000197
- IP Address:** 192.168.15.73
- MAC Address:** 00:08:63:00:75:93
- Front Panel Lights:** 1
- Screen Saver Timeout:** 5 minutes
- Zone 1 Name (for music):** Master Bedroom Music
- Temperature (°C):** 75
- Buttons:** OK, Settings, Restart

Player 2 (M500 Player):

- Device Name:** Toy Room Player
- Serial Number:** 0000 0018E671
- IP Address:** 192.168.15.72
- MAC Address:** 00:08:63:00:75:D8
- Front Panel Lights:** 5
- Importing and Cataloging of Discs:** Allow
- When Importing or Cataloging Finishes:** Do not eject disc
- Screen Saver Timeout:** 5 minutes
- Zone 1 Name (for music):** Toy Room Music
- Temperature (°C):** 68
- Buttons:** OK, Settings, Restart

Disc Vault Section:

- Device Type:** M700 Disc Vault
- Device Name:** Theater Player
- Serial Number:** 0600 00000004
- Slots:** 320 total, 234 empty
- IP Address:** 192.168.15.71
- MAC Address:** 00:08:63:00:92:1B
- Front Panel Lights:** 8 (default)
- Screen Saver Timeout:** 5 minutes
- Zone 1 Name (for music):** Theater Music
- Contents:** 41 Blu-ray discs, 42 DVDs, 2 CDs
- Status:** An error has occurred
- Temperature (°C):** 71
- Buttons:** OK, Settings, Restart, Eject all Blu-ray discs, Eject all DVDs, Eject all CDs, Eject all discs

Figure 4-3 Components Page

- Configure preferences for each player or disc vault by completing all fields and then selecting OK before moving to the next component.

- Input a meaningful **Device Name** in the text box, for example *Living Room* or *Guest Room*.

The **Device Name** identifies the component throughout the user interface. For example, the **Device Name** appears as the name of the onscreen display control panel for the component movie zone and on the *Parental Control for Movies* tab on the *SETTINGS* page of the browser interface.

The **Device Name** also appears on the Kaleidescape iPad app.

- Set the brightness of the **Front Panel Lights** from the drop-down menu.
- For M500 Players, set the import or catalog privilege. Use the drop-down menu next to **Importing and Cataloging of Discs** to allow or not allow discs to be imported or cataloged from the tray.

Every M500 Player has the option to allow or disallow discs from being imported or cataloged. This option prevents guests or children

from accidentally adding content to the Premiere system. With importing and cataloging of discs disabled, movies and albums can still be played from the tray of the M500 Player.

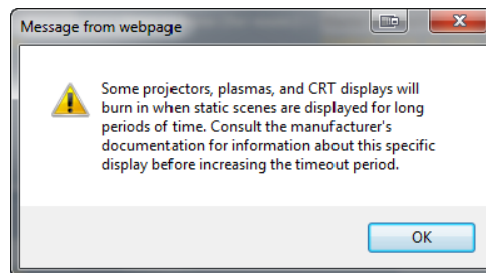
On a Premiere system sold by Kaleidescape on or after November 30th 2014, CSS-protected DVDs can only be cataloged. For more information, visit www.kaleidescape.com/protected-dvds.

- ▶ For M500 Players, select whether or not to open the disc tray automatically **When Importing or Cataloging Finishes**. Make the selection from the drop-down menu.

Note: This option is useful if the player in question is behind a door that can prevent the tray from ejecting properly.

- ▶ Select the **Screen Saver Timeout** from the drop-down menu. This determines how long the idle player shows the onscreen user interface before the screen saver appears.

If selecting a screen saver timeout of more than the 15 minute default, a warning message appears about display burn-in.



Be sure to consult the manufacturer's documentation.

- ▶ On Premiere systems that support music, enter a name for the **Music Zone** in the text box. It is useful to choose descriptive names such as living room, patio, or bedroom. The music zone name appears on the **HOME** page of the browser interface for the corresponding music zone control panel and throughout all user interfaces.

The onscreen user interface lists the names of the music zones on the *Now Playing* view if the **Music zone control** feature is enabled.

5. After setting all preferences for the player or disc vault, click **OK** to save changes.
6. Repeat steps 4 and 5 for all players and disc vaults in the Premiere system.

Control Panels

Useful for testing and troubleshooting system configurations, the *Components* page includes onscreen display and music zone control panels.

Note: The control panels require an up-to-date version of the Java software (current version can be found at www.java.com).

These same control panels can be accessed on the *HOME* page of the browser interface.

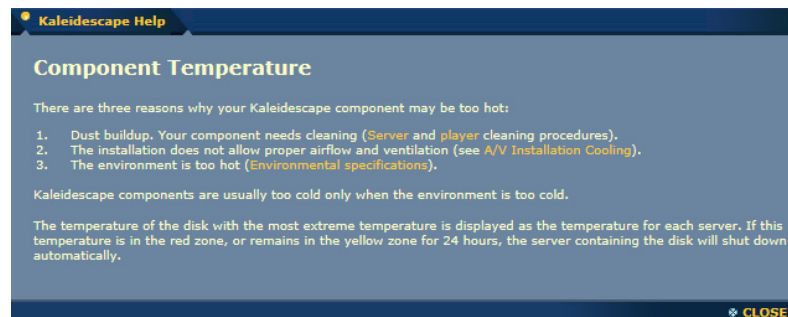
1. To control the onscreen user interface, click the amber **Control the onscreen display** link to bring up the control panel for a player.

Note: Control of the onscreen display should be done while viewing the TV or display device. No video is sent to the control panel.

2. To control music in areas without a display device, click **Control Music on Zone #** to access the control panel for that music zone.

Temperature Bar

A temperature bar shows the current operating temperature of each component. If a component is in, or approaching, the red section of the high temperature range, click the **Help** link. A window appears with instructions for corrective action.



If a component is in, or approaching, the red low temperature range, the room temperature is likely too cold. Refer to the environmental specifications in [Appendix A on page 134](#).

Restart

The **Restart** button is used to restart components remotely. It takes two minutes or longer to restart a server. Any imports in progress are aborted.

Restarting the server prompts a check for software updates, and Movie Guide and Music Guide updates. A restart also clears alerts; however, if the condition still exists, the alerts reappear.

All components must be restarted for network changes to take effect.

Settings

The **Settings** button is used to access specific configuration tabs.

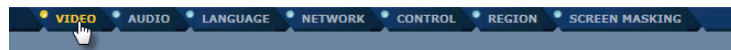
- Servers in the Premiere line have two settings tabs: **NETWORK** and **CONTROL**.
- The M300 Player, M500 Player, and M700 Disc Vault have seven settings tabs: **VIDEO**, **AUDIO**, **LANGUAGE**, **NETWORK**, **CONTROL**, **REGION**, and **SCREEN MASKING**.
- The DV700 Disc Vault has three settings tabs: **NETWORK**, **CONTROL** and **REGION**.

Each component must be configured individually.

Video and Audio Settings

Players have several video outputs which are all active simultaneously, however, DVD and Blu-ray playback restrictions exist on analog outputs.

Select the **VIDEO** tab to optimize video for **each player** in the system.

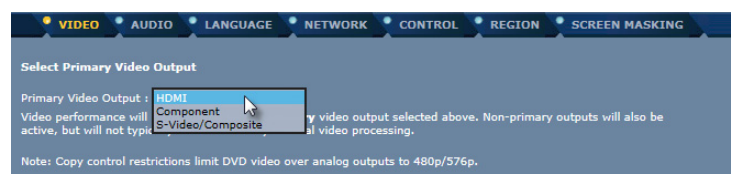


If a player is connected to more than one display device (either using multiple video outputs from the player or a matrix switcher) video cannot be optimized for each display device. One set of settings must be chosen for the movie player that presents the fewest problems for all connected displays.

The M300 Player, M500 Player and integrated player in the M700 Disc Vault each player supports up to 16 downstream HDCP devices. For more information regarding HDMI, refer to the [HDMI and the Kaleidescape System Technical Note](#).

1. Select Primary Video Output

Select the **Primary Video Output** from the drop-down menu. The primary output is typically the output that connects to the primary display device (the display most watched). Default setting is **HDMI**.



The player synchronizes audio and video for the primary video output, although all video outputs remain active. The video outputs cannot be controlled independently, and restrictions may exist during playback.

- When HDMI is the primary video output, component video output is 480i/576i.
- In accordance with analog sunset restrictions, Blu-ray video only appears on HDMI. All analog outputs are disabled.
- Copy control restrictions limit DVD video over analog outputs to 480p/576p.
- 1080p is available only over HDMI.
- When component is the primary video output, HDMI has the same video mode as component.
- 1080p24 output from DVD content is not supported. Only Blu-ray content is explicitly authored for playback at 24 frames per second.



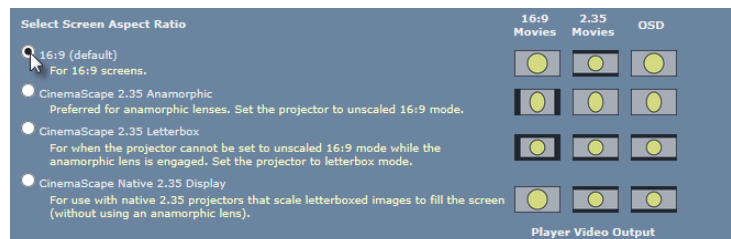
CAUTION

Selecting the wrong primary video output or the wrong video modes can result in bad color, flickering, mismatched aspect ratio, or no picture at all

Consult display documentation if necessary.

2. Select Screen Aspect Ratio

Select the appropriate radio button for the aspect ratio. Default is 16:9.



Choose the appropriate **CinemaScape** mode when HDMI is the primary video output and a projector with a screen masking system is connected. Refer to the [CinemaScape Technical Note](#) for help with this setting.

3. Select Video Mode for each Media Format

Extended Display Identification Data, or **EDID**, is a data structure provided by a display device over HDMI to describe its capabilities. The data includes essential information such as manufacturer, supported and preferred video resolutions, and supported audio modes.

When HDMI is the primary video output, the default video mode is **Use Highest Available Resolution**. In this video mode, the player outputs the preferred resolution as reported in the EDID, which generally provides the best picture. In rare cases, inaccurate EDID or an EDID that was

corrupted by a switcher or an extender may result in no picture, or a signal that is less than optimal.

In these cases, and when the primary video output is set to *Component* or *S-video/Composite*, select the **Video Mode for each Media Format** from the drop-down menus.

| Media Format | Video Mode |
|----------------------------|------------|
| Onscreen display | 1080p60 |
| DVD quality content (NTSC) | 1080p60 |
| DVD quality content (PAL) | 1080p50 |
| Blu-ray quality content | 1080p |

Video Modes for Remaining Video Outputs:

| | |
|-------------------|---|
| Component | The onscreen display and all video will be output in 480i/576i. |
| S-Video/Composite | The onscreen display and all video will be output in 480i/576i. |

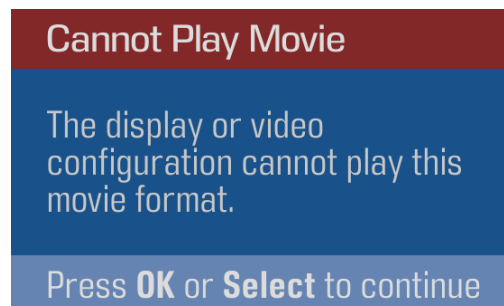
For more detailed information regarding HDMI, refer to the [HDMI and the Kaleidescape System Technical Note](#).

Video mode choices for secondary video outputs are automatically determined depending on the primary video output selected and its video modes.

The video modes for secondary video outputs are displayed below the drop-down menus in the **Video Modes for Remaining Video Outputs** section.

In accordance with analog sunset restrictions analog outputs are disabled during Blu-ray quality playback. Copy control restrictions forbid outputting DVD quality content at resolutions higher than 480p/576p over component video outputs.

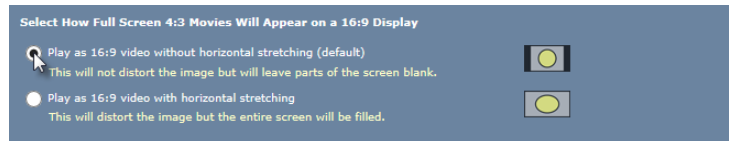
Do not choose a video mode that the display does NOT support. For example, if the display does not support PAL video modes, select **Do Not Play** for PAL media formats. With this configuration, playback of a PAL formatted movie results in a message stating that the movie format cannot be played.



The message also appears when a video mode is played that is not supported in the EDID (assuming the media format is set to **Use Highest Available Resolution** or **Pass Through**).

4. Select How Full Screen 4:3 Movies Will Appear on a 16:9 Display

Select the appropriate radio button to determine how 4:3 movies appear on the 16:9 display device.



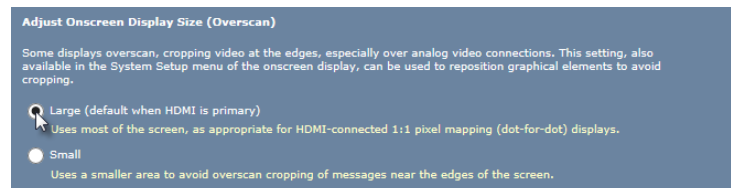
- **Play as 16:9 video without horizontal stretching** (default) causes black bars to appear on the sides of a 4:3 image.
- **Play as 16:9 video with horizontal stretching** causes the image to fill the 16:9 display screen but distorts 4:3 images.

- Click **OK** to save all video settings to this point, or select **Show Advanced Video Settings** for options related to performance and calibration.



6. Advanced Video Settings

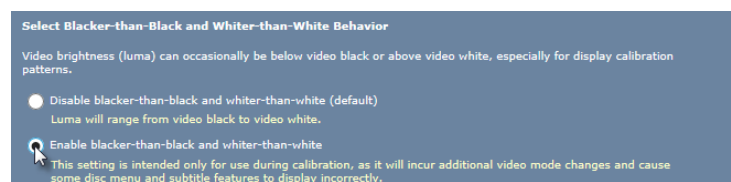
- Select the appropriate radio button for **Adjust Onscreen Display Picture Size (Overscan)** to control how messages are placed at the edges of the display.



- ▶ **Large** is the default when HDMI is selected as the primary output.
- ▶ **Small** is the default when HDMI is NOT the primary output. Use this setting if messages near the edge of the screen (e.g, **Play** or **Pause**) are cut off on the display with the large setting.

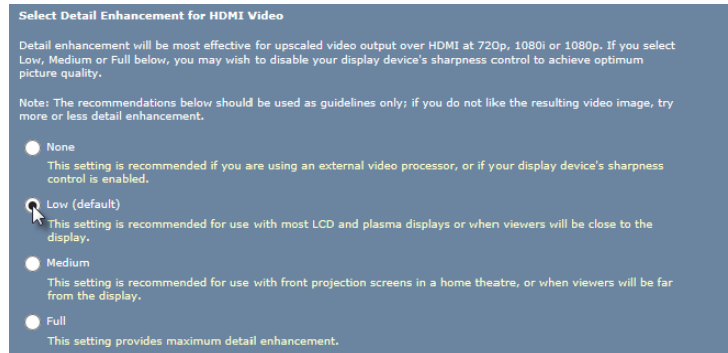
Note: The adjustment can also be performed from the onscreen display **System Status** view.

- Select the radio button for **Enable blacker-than-black and whiter-than-white** when calibrating the display. Disable for normal use after calibration is complete.

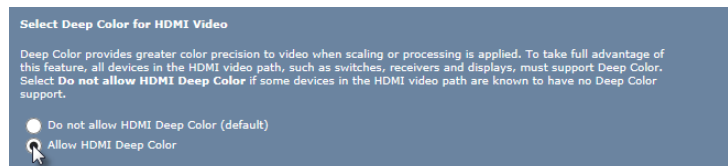


M-Class players can output the full luma range, but it causes video mode changes between the onscreen user interface and movies, and causes some disc menus and subtitles to appear incorrectly.

- c. Configure **Detail Enhancement for HDMI Video** to influence how sharp the edges of scaled video appear. (Option is only available if HDMI is the primary video output.)



- d. Enable **Deep Color for HDMI Video** only if all devices on the HDMI video path support deep color. (Option is only available if HDMI is the primary video output.)



- e. Click **OK** to save settings.



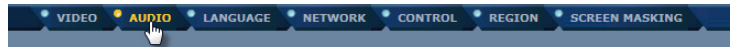
Note: The player does not need to be restarted. If changes are made during playback, stop and restart the movie to see results.

Audio Settings for Premiere Line Players

Players in the Premiere line support Linear PCM (up to 7.1), Dolby Atmos®, Dolby TrueHD, Dolby Digital Plus, Dolby Digital, DTS-HD Master Audio™, DTS-HD High Resolution Audio, DTS Digital Surround® and MPEG audio. However some codecs can only be output as bitstreams.

Premiere line players can be used to watch DVD and Blu-ray quality movies with nearly any audio receiver or processor. To hear lossless audio tracks (for example, Dolby Atmos or DTS-HD Master Audio) from Blu-ray quality movies without alteration, the A/V receiver or audio processor must be able to decode these formats. When lossless audio is played using the **Bitstream pass-through** setting, the coaxial, optical and analog audio outputs are silent.

Select the **AUDIO** tab to optimize audio for **each player** in the system.



1. HDMI audio decode mode

Select the appropriate **HDMI audio decode mode**.

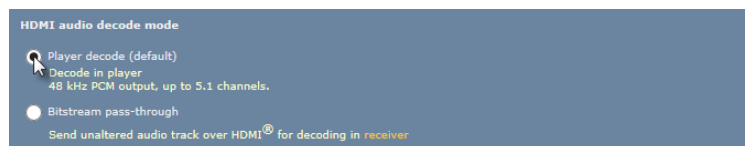
- **Player Decode (default)**
- **Bitstream pass-through**

The audio decode mode affects all other audio settings. The decode mode determines if the player or the receiver decodes the audio.

Audio can be sent as multichannel PCM over HDMI by default, with all outputs enabled, or it can be passed through to HDMI with other outputs disabled.

Player Decode Mode

Select **Player decode** (default) to hear Blu-ray secondary audio or when coaxial, optical, or analog audio outputs are used.



Player decode sends 48 kHz PCM output over HDMI, up to 5.1 channels depending on content and cabling.

In **Player decode** mode, optical/coaxial outputs carry DTS Digital Surround when the Blu-ray soundtrack has more than two channels.

- **Secondary audio with picture-in-picture**

Blu-ray discs support a secondary audio track typically used for interactive audio and commentary. This track is mixed with the main audio so both tracks can be heard at the same time. M-Class players play secondary audio with picture-in-picture when in the **Player decode** mode.

(To hear unaltered primary audio, the players must be set to the **Bitstream pass-through** setting.)

- **Downmixing**

In **Player decode** mode, M-Class players downmix DTS Digital Surround and Dolby Digital soundtracks to the stereo audio output when playing Blu-ray or DVD quality movies.

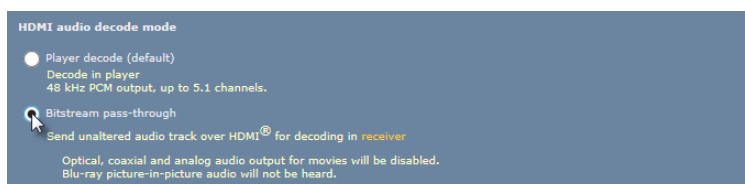
[Table 1](#) shows the output with the **Player decode** (default) setting which provides maximum compatibility.

Table 1 Outputs with the Player Decode (Default) Audio Setting

| Audio Output Format | HDMI | Coax/Optical | Analog |
|-----------------------|------------------------|--------------------------------------|--------|
| Blu-ray quality movie | PCM up to 5.1 channels | DTS up to 5.1 channels or PCM Stereo | Stereo |
| DVD quality movie | PCM up to 5.1 channels | Source bitstream | Stereo |
| CD | PCM stereo | PCM stereo | Stereo |

Bitstream Pass-Through Mode

Select **Bitstream pass-through** to send 7.1-channel Blu-ray soundtracks over HDMI at the highest bandwidth possible (up to 192 kHz or 7.1 channels) at the expense of other features.



The lossless audio formats available on Blu-ray quality movies, such as Dolby Atmos, Dolby TrueHD, DTS-HD Master Audio and 7.1-channel PCM, exceed the capabilities of analog and optical/coaxial audio outputs. These formats are only available over HDMI, and only when using the **Bitstream pass-through** mode. This setting turns off the analog and optical/coaxial outputs, and picture-in-picture audio cannot be heard.

[Table 2](#) shows behavior with the **Bitstream pass-through** setting.

Table 2 Outputs with the Bitstream Pass-through Audio Setting

| Audio Output Format | HDMI | Coax/Optical | Analog |
|-----------------------|------------------|--------------|--------|
| Blu-ray quality movie | Source bitstream | off | off |
| DVD quality movie | Source bitstream | off | off |
| CD | PCM stereo | PCM stereo | Stereo |

In **Bitstream pass-through** mode, optical/coaxial audio outputs are silent.

2. Number of audio channels

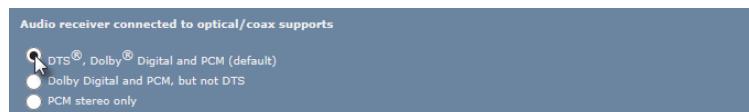
Configure the **Number of audio channels** based on the audio capabilities of the receiver. (Option is available only if **Player decode** is selected.)



If the audio level for movies is lower for M-Class players than the audio level for music and there are only two speakers, set the number of audio channels to two.

3. Audio receiver connected to optical/coax supports

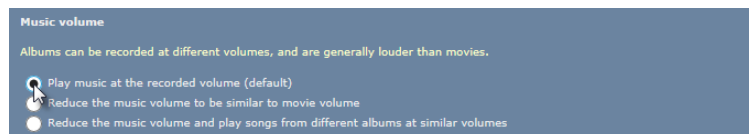
If using a coaxial or optical connection, select the audio formats that the receiver supports. If the receiver connected to coaxial or optical does not support DTS Digital Surround or Dolby Digital, these soundtracks can be decoded by the player and stereo PCM output instead. (Option is available only if **Player decode** is selected.)



The **Audio receiver connected to optical/coax supports** option is used when a receiver, processor or display using the coaxial or optical S/PDIF connection has limited audio format decoding capabilities. Most modern receivers and processors offer comprehensive audio format decoding, and so the default option can be used. But for more limited devices, audio can be sent as PCM stereo only, or as any format except DTS Digital Surround.

4. Music volume

Choose how to output the **Music volume**.



With the default setting **Play music at the recorded volume**, music volume may be louder than movie volume. To play music at the same volume as movies, select **Reduce the music volume to be similar to movie volume**. To play all albums at the same volume, select **Reduce the music volume and play songs from different albums at similar volumes**.

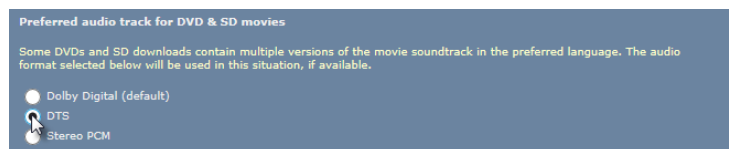
5. Click **OK** to save the configuration to this point, or select **Show Advanced Audio Settings** to adjust advanced settings including overrides for capabilities that are misreported in the EDID.



6. Advanced Audio Settings

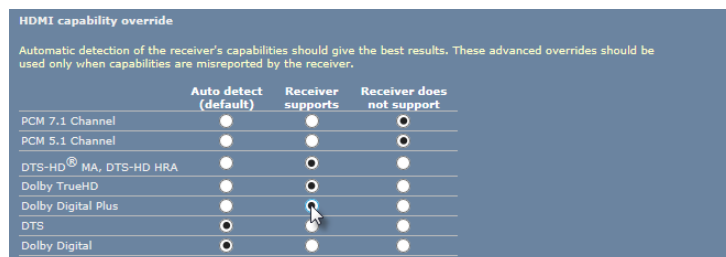
a. Preferred audio track for DVD & SD movies

Some DVD quality movies have more than one version of the movie soundtrack in the preferred language. Select which audio format to use when these movies are played.



b. HDMI capability override

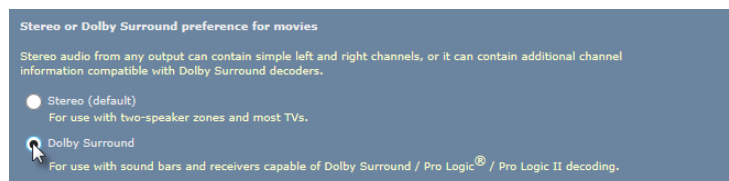
Audio receivers connected via HDMI automatically provide information via EDID used to determine the audio formats sent by the player to the receiver. In rare cases, these capabilities must be overridden because of an EDID that is inaccurate or has been corrupted by an HDMI extender or switcher.



c. Stereo or Dolby Surround preferences for movies

Select whether PCM stereo audio from any output contains simple left and right channels, or contains additional channel information compatible with Dolby Surround decoders.

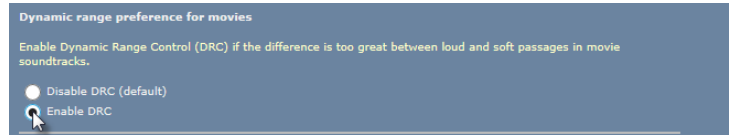
If the output is connected to a sound bar or receiver capable of Dolby Surround / Pro Logic / Pro Logic II decoding, select **Dolby Surround**.



This option is only available when D-BOX Mode is disabled in the Advanced Audio Settings.

d. Dynamic range preference for movies

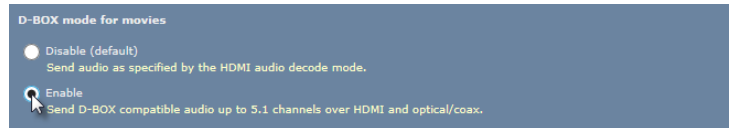
Select the audio dynamic range for movies. If the range between soft and loud sounds is too great, select **Enable DRC**.



This option is only available when D-BOX Mode is disabled in the Advanced Audio Settings.

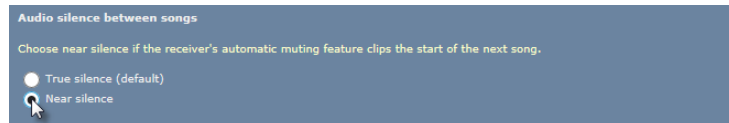
e. D-BOX mode for movies

To send D-BOX compatible audio over HDMI and optical/coaxial, **Enable D-BOX mode for movies**.



f. Audio silence between songs

If the audio receiver's automatic muting feature clips the start of the next song, choose **Near silence**.



g. Click **OK to save settings.**



Note: The player does not need to be restarted. If changes are made during playback, stop and restart the movie to hear the results.

Troubleshooting Audio Problems

| Problem | Action |
|--|--|
| No audio over analog, optical, coaxial, or HDMI connection | <ol style="list-style-type: none"> 1. Play a CD, which always produces the stereo audio output. If there is no output, check for a problem with cabling, audio receiver or processor, or television. 2. If the CD plays, but movie audio does not, verify that the Player decode setting is selected as the HDMI audio decode mode. With this setting all audio outputs are active. DVD and Blu-ray audio share the same setting. |
| No audio over HDMI | <p>The Bitstream pass-through HDMI audio decode setting (a) sends lossless audio formats, which may not be accepted by the attached equipment, and (b) does not play picture-in-picture audio.</p> <p>When Player decode is selected, there is 5.1-channel PCM audio over HDMI for both DVD and Blu-ray quality movies. If the attached device does not support 5.1-channel PCM, at least stereo PCM can be heard.</p> |

Language Settings

The preferred language for movie playback can be configured for each player.

1. Select the **LANGUAGE** tab.



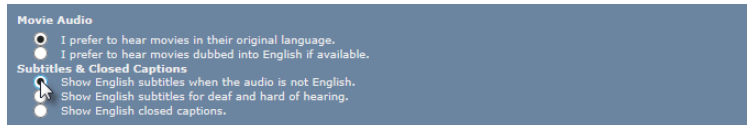
2. Select the **Preferred Language** from the drop-down menu.



If **None** is selected, movies play in the original language.

When a language is selected, the soundtrack is played without subtitles if it matches the preferred language.

- When a soundtrack that matches the preferred language is not available, subtitles may appear. Select whether or not to see **subtitles** or **hear a soundtrack dubbed** in the preferred language. (The movie must contain subtitles or an overdub soundtrack in the selected language for these options to be active.).



- Click **OK** to save settings.



Note: The player does not need to be restarted.

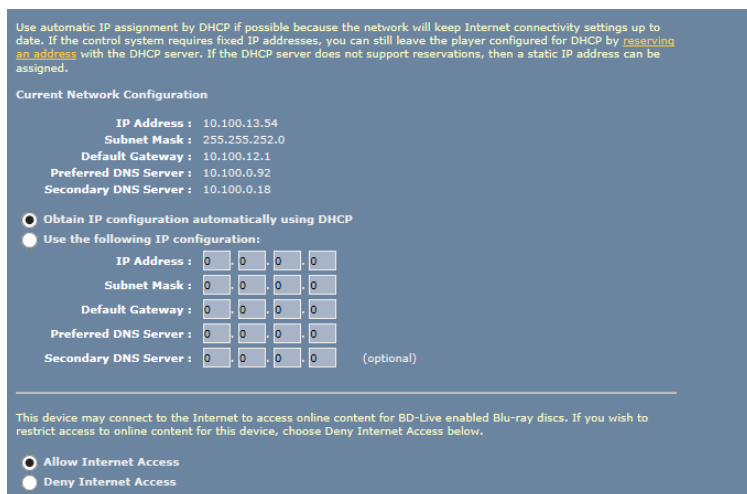
Network Settings

Components in the Premiere line, by default, obtain IP addresses from a DHCP server. Use the following procedure if a static IP address must be set (used with control systems) or to change other network parameters.

- Select the **NETWORK** tab.



- Information about the current network configuration for the component is displayed.



- Most control systems that communicate via TCP/IP require a fixed address for each component connected to the control system. The safest and easiest way to do this is to create a DHCP reservation in the

router and use the default **Obtain IP configuration automatically** setting.

DHCP reservations help prevent duplicate addresses from being assigned, provide simple centralized management, and provide automatic updates when network settings change.

With DHCP reservations, network parameters such as IP address, subnet mask, router IP, and DNS servers are configured in one place (at the DHCP server). If any of these parameters change, only the DHCP server has to be modified. For most installations, the DHCP server built into the router is perfectly adequate.

DHCP reservations are usually made using MAC addresses. The procedure to create DHCP reservations is device-specific. Refer to the documentation for the router or DHCP server.

Note: MAC addresses are listed on the *Components* page of the browser interface. Player MAC address are also listed on the *System Summary* page of the onscreen user interface.

If DHCP reservations are not an option, select **Use the following IP configuration** and manually enter the IP Address, Subnet Mask, Default Gateway, and DNS Servers. This information is required for interactive BD-Live features of Blu-ray discs to operate correctly

4. For M-Class players, select the radio button to allow or deny Internet access through BD-Live. If not interested in chat, downloaded trailers, or other Internet features, or have privacy concerns, select **Deny Internet Access**.
5. Click **OK** to save changes, and then restart the component to use the new settings.



Control Settings

Use the following procedure to configure control settings.

1. Select the **CONTROL** tab.



2. The serial parameters for a Premiere line server are fixed.

These settings are used by this component to communicate with controllers using the serial port.

These parameters cannot be changed on a server.

Baud Rate 115200

Data Bits 8

Parity Bits None

Stop Bits 1

Flow Control None

3. The serial parameters for a Premiere line player including the M700 Disc Vault can be changed to match settings of a serial controller. Select the appropriate serial port settings for the player.

These settings are used by this component to communicate with controllers using the serial port.

Baud Rate 19200

Data Bits 8

Parity Bits None

Stop Bits 1

Flow Control None

Table 3 shows serial port settings for the server and the default serial port settings for players. Server serial port settings cannot be changed. When communicating to the server via serial connection, the control software settings must match the server serial settings.

Table 3 Serial Port Settings

| | Server | Player |
|---------------------|---------|--------|
| Baud Rate | 115 200 | 19 200 |
| Data Bits | 8 | 8 |
| Parity Bits | none | none |
| Stop Bits | 1 | 1 |
| Flow Control | none | none |

4. Select the **Control Protocol Device ID** from the drop-down menu.

A Control Protocol Device ID (CPDID) may be assigned to this component. The CPDID allows indirect access through the control protocol. Be careful not to assign the same CPDID to more than one component in the same system.

Control Protocol Device ID 09

The Control Protocol Device ID (**CPDID**) allows indirect access to the Premiere line component through another component. This is called **command routing**. Assigning a unique device identifier allows a controller to communicate with multiple Premiere line devices using a single connection.

The only module provided by Kaleidescape that requires CPDIDs to be set is the AMX module. Other modules communicate directly with the player.

Note: It is NOT usually necessary to connect a server to a control system. The server is generally used as a gateway to perform command routing to other devices with CPDIDs.

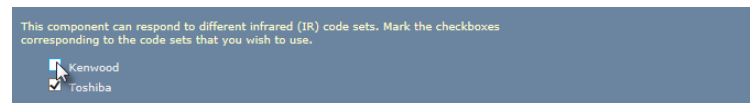
When connecting a serial controller directly to a player via the serial control port, communication parameters must be set to match the serial controller.

The M300 Player has no serial port but can be controlled directly via TCP/IP or IR, or a CPDID can be set for routing control protocol commands from another Premiere line component.

For detailed information about control protocol configuration, refer to the Kaleidescape System Control Protocol Reference Manual at www.kaleidescape.com/go/control-protocol.

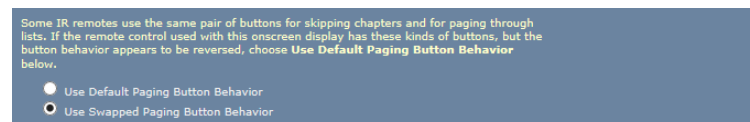
- Set the **Control Protocol Device ID** to **None** if control is linked directly to the player.
 - If command routing is used, select a number from the drop-down menu.
5. For a player, select the infrared (IR) code set by selecting one or more of the checkboxes. Both the Kenwood and Toshiba options are selected by default to provide maximum flexibility when programming an IR remote.

To turn off a code set, uncheck the box.



Note: When both boxes are unchecked, the player will not respond to any IR commands.

6. Select IR remote behavior for the paging button by clicking one of the two radio buttons.



Note: If the paging button behavior seems reversed, select the other option.

7. Click **OK** to save changes.



Note: The component does not need to be restarted.

Region Settings

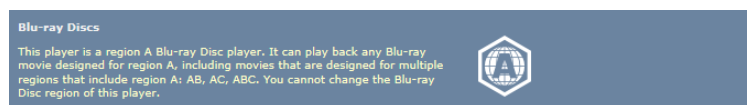
A DVD region and a Blu-ray region are assigned to all players and disc vaults with the exception of the M300 Player, which is only assigned a Blu-ray region.

Select the **REGION** tab to view the Blu-ray disc region, or to view and change the DVD region.



Blu-ray Discs

The current Blu-ray disc region is listed in the **Blu-ray Discs** section of the *REGION* page.



The Blu-ray disc region cannot be changed in the browser interface. To have this modified, write down the serial number of the component along with the current Blu-ray region and the desired Blu-ray region, and contact an authorized Kaleidescape dealer or Kaleidescape Technical Support.

An imported Blu-ray movie will play on any player in the Premiere system as long as there is at least one component in the system that matches the region code of the Blu-ray disc. If the disc is not recognized by the Kaleidescape Movie Guide, enter the region code using the browser interface to ensure proper playback.

Note: The region code for an unrecognized Blu-ray disc cannot be changed once entered. Double-check the region code before entering.

Blu-ray discs that are played direct from the optical drive of an M500 Player must match the region of that player.

DVDs

The current DVD region and the number of remaining changes is reported in the **DVDs** section of the *REGION* page.



Most DVDs are authored for a specific region. Players and disc vaults must match that region to play or catalog the DVD.

Players in the same system can be set to different DVD regions.

Use the following procedure to change the region setting to play a DVD from another region.

1. Insert a DVD from the other region in the disc tray of an M500 Player, or into the disc vault.
2. Select the new DVD region from the **DVD Region** section. The default is **1 - United States, U.S. territories, Canada, Bermuda**.
3. Click **OK**.

When the player or disc vault successfully reads the DVD from the other region, the change is complete.

Note: The DVD region setting can only be changed four times.

On a Premiere system sold by Kaleidescape on or after November 30th 2014, CSS-protected DVDs can only be cataloged. For more information, visit www.kaleidescape.com/protected-dvds.

Screen Masking

Movie players send control messages with aspect ratio and screen masking information to the control system every time a movie plays.

Control systems use this information to position screen masks, engage special projection lenses, and adjust the aspect ratio mode of the display

device. The player can be configured to ensure that masks do not cover any part of the onscreen display or subtitles.

Note: If screen masking does not adjust for a movie, the movie might not be recognized by the Kaleidescape Movie Guide. Use the Kaleidescape loan process to send the disc for processing. For more information go to www.kaleidescape.com/loan.

The Kaleidescape Movie Guide includes aspect ratio information for most movies. This information can be used by a control system to automate screen masking and anamorphic lens movement, to optimize the presentation of each movie. A small percentage of movies, including the Blu-ray release of *The Dark Knight*, has more than one aspect ratio within the feature. For these movies, the Movie Guide indicates a single aspect ratio so that none of the active image is cropped or projected into the masks. This method results in unmasked black bars during some of the movie, but avoids distracting lens or mask movement during the movie.

- Premiere line players feature a 2.35:1 user interface when configured in one of the three CinemaScape modes.

Refer to the [CinemaScape Technical Note](#) for more information.

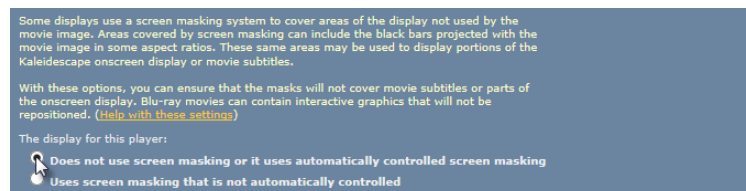
- Most home theaters with masking have constant image height masking.

Use the following procedure to set screen masking options and subtitle repositioning.

1. Select the **SCREEN MASKING** tab.



2. Select the **type of screen masking** on the display. Click on the appropriate radio button.



- a. Select **Does not use screen masking or it uses automatically controlled screen masking** if the display uses an automatically controlled screen masking system.

This option causes the player to reposition onscreen display elements only when the player receives control messages indicating that screen masking is being used.

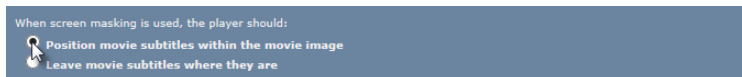
- b. Select **Uses screen masking that is not automatically controlled** if screen masking is not automatically controlled.

With this option, the player operates as if screen masking is present even without receiving a control message indicating masking is in use.

- ▶ Select this option if the control system does not send messages to the player, even though the control system might be using messages from the player to control the screen masking.
- ▶ This option is also appropriate for screen masking systems that are controlled manually or fixed to a certain aspect ratio. When the player is set to use screen masking not automatically controlled, the player always shows display elements within the movie image so that elements are not covered by screen masking.

Note: For more information on programming a control system for automatic screen masking, refer to the control system documentation on www.kaleidescape.com/support/control-systems.

3. Select **how to display subtitles** when screen masking is used. Click on the appropriate radio button.



Subtitles are often placed below the movie image to avoid interfering with the scene. Screen masking systems sometimes cover subtitles positioned below the movie image.

(Unless configured for use with a screen masking system, the player does not change the position of subtitles. Subtitles appear in the original position.)

- a. Select **Position movie subtitles within the movie image** to cause the player to position subtitles within the movie image. With this option, subtitles can always be read even when part of the screen is covered by masking or cropped by a lens.
- b. Select **Leave movie subtitles where they are** if the screen masking system is designed to leave room for subtitles at the bottom of the screen. Subtitles appear in the original position, which can place them below the movie image. Display elements continue to be placed within the movie image.

Note: Click the **Help file** link for screen masking to see pictorial examples.

4. Click **OK** to save changes.



Note: The player does not need to be restarted.

Adding Components

The following are key points to remember when adding players, disc vaults and servers to a Premiere system.

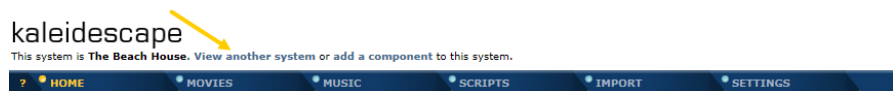
- ▶ When only one server or one collection of servers exist on the same local subnet, new players and disc vaults join that one system automatically.
- ▶ When adding a new server to an existing system, it must deliberately be linked to the existing system.
- ▶ Adding movies and music using a component in a system will add that content to a server that is in the same system.
- ▶ All players in the system will present a single movie and music library comprised of the content from all servers in that system.
- ▶ Disc vaults enable playback of imported Blu-ray movies and cataloged DVD movies stored on servers in the same system.

When multiple Premiere systems exist on the same local subnet, each new component must be associated with a system when added to the network and powered on. The front panel of a player or disc vault glows amber until associated with a Premiere system.

View Another System

When multiple Premiere systems exist on the same local subnet, it is important to access the appropriate browser interface.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select **view another system** from the message across the top of the page.



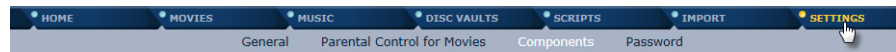
3. The **VIEW ANOTHER SYSTEM** page appears listing all Kaleidescape systems available on the network.



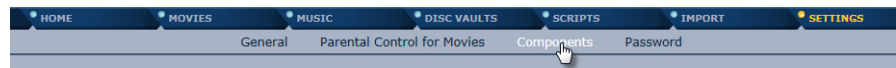
Check the serial numbers and select the system name link to view the appropriate system.

Note: In addition to Premiere line servers, Kaleidescape Alto and Cinema One (2nd generation) systems may appear on the VIEW ANOTHER SYSTEM page.

4. A new window opens with the browser interface for the selected system.
5. Select the **SETTINGS** tab.



6. Select **Components** from the second row of tabs.



The *Components* page lists all servers, players and disc vaults associated with the selected system.

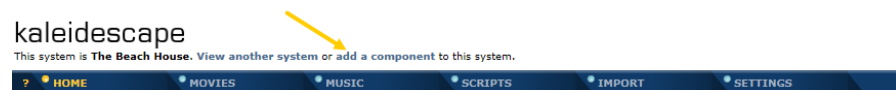
To add components to the selected system, continue to the next section.

To view another Premiere system repeat steps 2 through 6.

Adding Components

Use the following procedure to add components to a Premiere system.

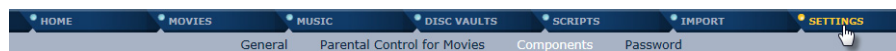
1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select **add a component** from the message at the top of the browser interface.



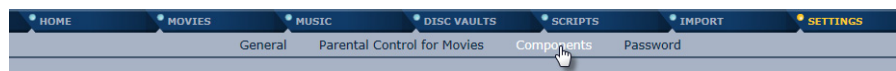
- The **ADD COMPONENT** page appears listing all Premiere line components on the same local subnet.



- Click the **Add** button next to each component to link to the selected system. When done adding components, close the **ADD COMPONENT** page.
- Select the **SETTINGS** tab.



- Select **Components** from the second row of tabs.



Wait while any added components reboot. Verify that all components are linked to the system. Repeat steps 2, 3 and 4 to add more components.

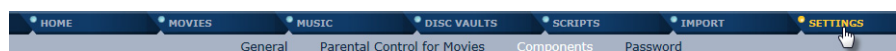
If a player or disc vault is accidentally added to the wrong system, simply view the correct system, and then add the component to that system.

There is not a deliberate method for removing a player or disc vault from a system.

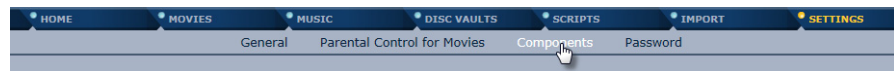
Removing Servers

Use the following procedure to remove servers from a Premiere system.

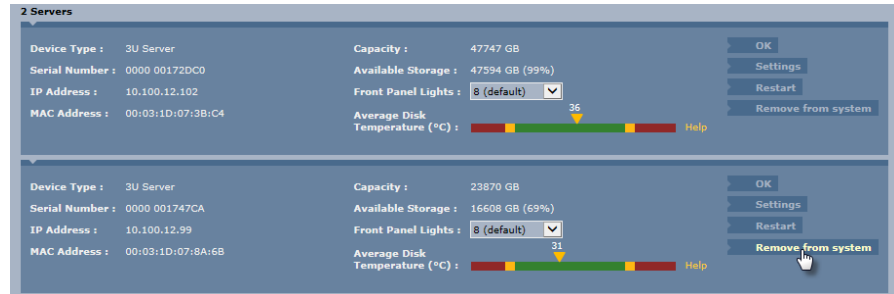
- Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
- Select the **SETTINGS** tab.



3. Select **Components** from the second row of tabs.



4. Click **Remove from system** next to the server to remove from the system.



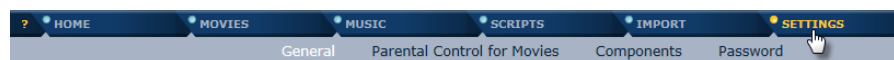
Password Protecting the Browser Interface

Setting a password for the browser interface is a precautionary procedure to prevent:

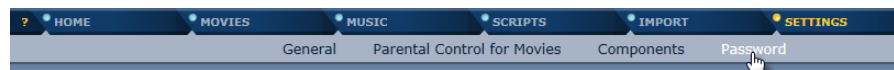
- ▶ Unwelcome alteration of the movie and music libraries including the deletion of content
- ▶ Unauthorized modification of the system settings and preferences
- ▶ Children from overriding parental control settings

The browser interface password is set on the *Password* tab of the *SETTINGS* page. The password must contain a minimum of 1 character and a maximum of 16 characters. If the password is forgotten, make sure the Premiere line server is connected to the Internet and contact Kaleidescape Support.

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. Select the **SETTINGS** tab.



3. Select **Password** from the second row of tabs.



4. Enter a new password, change an existing password, or clear an existing password.
 - ▶ **Enter a new password**

When no password exists, complete the **New password** and **New password (confirm)** fields. Click **OK** to save.

A screenshot of a web interface for creating a new password. It features two text input fields: 'New password' and 'New password (confirm)'. Both fields are filled with eight dots. Below the fields is a blue button with the text 'OK' in white. A mouse cursor is pointing at the 'OK' button.

► **Change an existing password**

To change a password, enter the existing password in the **Old password** field, and then complete the **New password** and **New password (confirm)** fields. Click **OK** to save.

A screenshot of a web interface for changing an existing password. It features three text input fields: 'Old password', 'New password', and 'New password (confirm)'. The 'Old password' field is filled with eight dots. The 'New password' and 'New password (confirm)' fields are also filled with eight dots. Below the fields is a blue button with the text 'OK' in white. A mouse cursor is pointing at the 'OK' button.

► **Clear an existing password**

To clear a password making the browser interface accessible without entering a password, enter the existing password in the **Old Password** field and leave the **New password** and **New password (confirm)** fields blank. Click **OK** to save.

A screenshot of a web interface for clearing an existing password. It features three text input fields: 'Old password', 'New password', and 'New password (confirm)'. The 'Old password' field is filled with eight dots. The 'New password' and 'New password (confirm)' fields are empty. Below the fields is a blue button with the text 'OK' in white. A mouse cursor is pointing at the 'OK' button.

Resetting the Password

If the password is forgotten, then the browser interface is inaccessible. To reset the password, make sure the Premiere system is connected to the Internet and contact Kaleidescape Support.

- Send an email message to support@kaleidescape.com.
- Call the Kaleidescape support line at **+1 (650) 625-6160**.

When contacting Kaleidescape Support, be prepared to provide the serial number of the Kaleidescape server. The serial number label is located behind the front panels of servers.

Section 5

Control Systems

There are several Kaleidescape options available for controlling a Premier system.

- Kaleidescape Remote
- Kaleidescape App for iPad
- Kaleidescape Child Remote
- Browser interface control panels

A Premiere system can also be controlled by several types of third party control devices.

- Infrared (IR) remotes
- Touch panels
- Keypads

Kaleidescape provides control modules along with touch panel templates and sample programs for most leading control systems. Kaleidescape also provides databases and IR codes for popular IR remotes.

For specific product support including modules and reference manuals, go to www.kaleidescape.com/support/control-systems.

The following figures show examples of typical setups for Kaleidescape players and control devices.

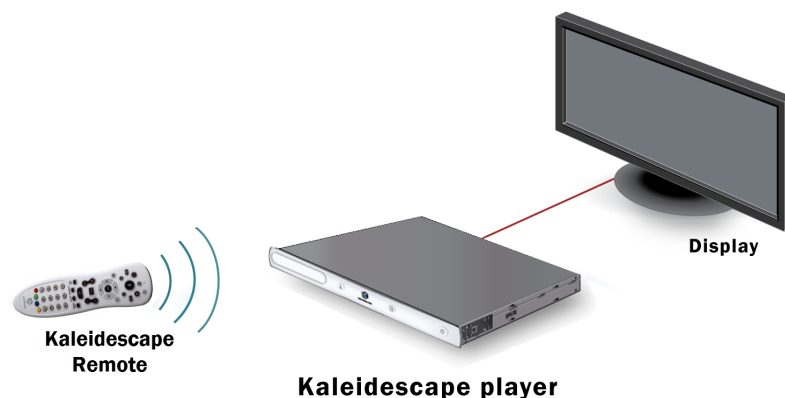


Figure 5-1 Kaleidescape Player and IR Remote Control



Figure 5-2 Kaleidescape Player and iPad Application

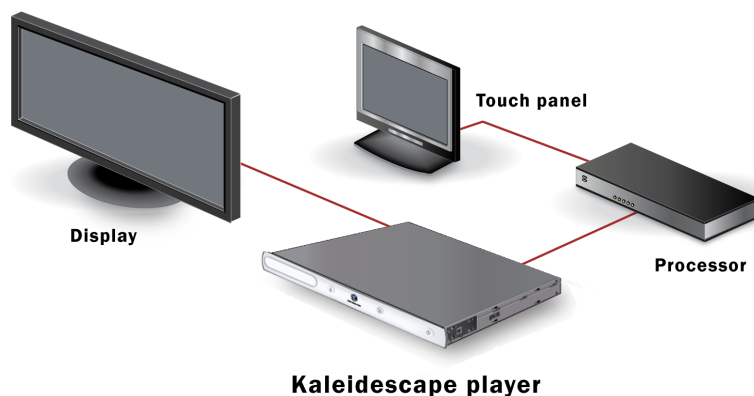


Figure 5-3 Kaleidescape Player and Touch Panel

Communication

A control device communicates with a Premiere System using a simple text-based protocol over Ethernet or RS-232, or IR. Although connected to a single component, a control device can route messages to any Premiere line component using device ID numbers or serial numbers. IR control cannot be routed like serial and Ethernet commands.

Control devices can use three types of control interfaces.

- ▶ Ethernet
- ▶ RS-232
- ▶ IR (one-way communication)

Kaleidescape recommends using **TCP/IP over Ethernet** for control connection in most cases. TCP/IP over Ethernet has several advantages over RS-232.

- Enables significantly faster communications
- Provides error detection and correction
- Uses standard Cat5/5e/6 cable and pinout
- Allows longer cable run
- Requires only a single network port
- Usually requires no additional equipment or wiring

Bandwidth can be a key issue, especially with multi-zone systems. Text-based feedback from several zones can cause noticeable response latency over an RS-232 connection. This is especially critical if controlling multiple Premiere line components through a single RS-232 port.

If the controller does not support an Ethernet connection, an RS-232 connection can provide the same level of control. If the controller does not support either an Ethernet or RS-232 connection, IR can be used for one-way control.

For more information on control connections, refer to the [Kaleidescape System Control Protocol Reference Manual](#) and the [Kaleidescape System IR Hex Codes Reference Guide](#).

Kaleidescape Control Devices

Kaleidescape Remote

The M300 Player, M500 Player and M700 Disc Vault come with a backlit IR remote to control movies and music. It features one-button access to key commands such as **Intermission**, **Shuffle** and **Now Playing**, while the **Movies** and **Music** buttons toggle views between *List*, *Covers* and *Collections*.

The **VOLUME** and **MUTE** buttons can be programmed to control the volume on the TV or other audio device.

1. Press and hold the **INFO** and **PAUSE** buttons at the same time. When the indicator light at the top of the remote begins blinking, release the buttons. The indicator light stays on. The Kaleidescape Remote is now in programming mode.

2. Place a remote that already controls the volume flat on a table with the Kaleidescape Remote about 6 inches (15 cm) away.



3. The following steps have to be repeated for the **MUTE** button and both **VOLUME** buttons.
 - Check that the indicator light is still on. If it is off, repeat Step 1.
 - Press and release the button on the Kaleidescape Remote for the function you want to program.
 - Press and hold the button for the same function on the remote that already controls the volume for two seconds.
 - The indicator light on the Kaleidescape Remote blinks twice to indicate success. If the indicator light blinks four times, try again.
4. When finished, press the **OK** button on the Kaleidescape Remote. The indicator light blinks twice to confirm programming is complete.

Learn more in the [Using the Kaleidescape Remote Reference Guide](#).

Kaleidescape Application for iPad

The Kaleidescape App for iPad provides an immersive experience for browsing and searching your collection of movies and music. The app extends the Kaleidescape experience to the iPad, displaying your movie collection with vivid high-resolution cover art, synopses, and other details.

The Kaleidescape App for iPad includes volume controls and Return button for integration with other control systems. The following is a typical use case:

- The user is running a controller app on an iPad and wants to use their Kaleidescape System.
- The user taps a button represented by the Kaleidescape app icon within the controller app.
- The controller app configures the A/V equipment for use with the Kaleidescape System, and launches the Kaleidescape App for iPad by opening a specific URL.
- The user can browse movies and music, play any selection, and control the Kaleidescape System from within the Kaleidescape app.
- When the user is finished with the Kaleidescape app, they can tap the Return button and a popover appears containing an option to return to the controller app.
- The user taps the popover option to return to the controller app.

For help, refer to [Integrating with the Kaleidescape App for iPad](#).

Kaleidescape Child Remote

When the Child Remote is used, the onscreen user interface automatically switches to the simplified child user interface, eliminating all text-based menus in favor of pure graphical navigation of movie covers.

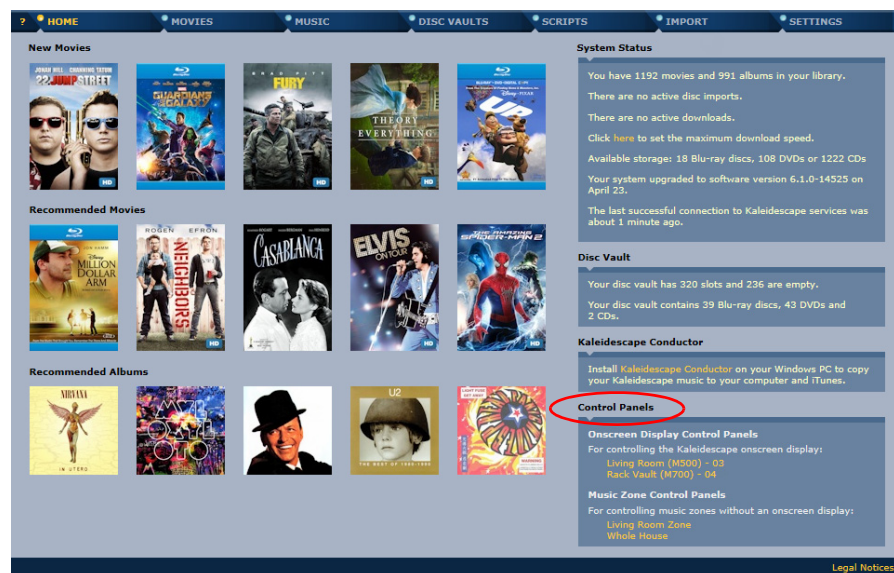
In addition to the preprogrammed Kaleidescape Child Remote, the child user interface commands can be sent to any programmable controller. Refer to [IR Control Hex Codes for Kaleidescape Systems](#) or the [Kaleidescape System Control Protocol Reference Manual](#).

Browser Interface Control Panels

The Premiere system can be controlled from a web browser using the control panels on the browser interface.

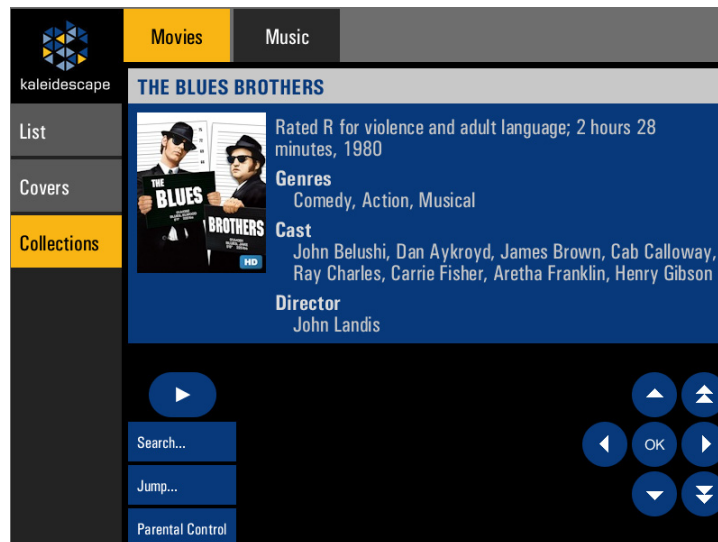
Note: The control panels require an up-to-date version of the Java software (current version can be found at www.java.com).

1. Open the browser interface as described in [Accessing the Browser Interface on page 65](#).
2. If a login page appears, enter the password and select **Login**.
3. The **HOME** page appears.



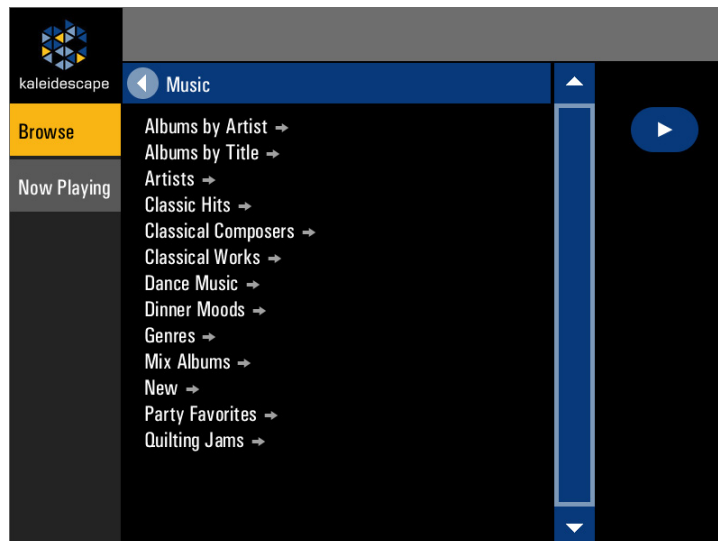
4. The **Control Panels** section is located on the bottom right of the **HOME** page.

- For control of movies and music in zones with a video display, locate the player name in the **Onscreen Display Control Panels** area and click the amber link.



Note: Control of the onscreen display should be done while viewing the TV or display device. No video is sent to the control panel.

- For text-based music control in zones without a video display, locate the player name in the **Music Zone Control Panels** area and click the amber link.



The control panels can also be accessed from the *Components* tab on the *SETTINGS* page of the browser interface.

Select **Control the onscreen display** for control of a zone connected to a video display, or select **Control Music on Zone #** for control of a zone without a video display.

Third Party Control Devices

Kaleidescape provides a wide range of templates, modules, and sample programs for control systems from several manufacturers.

Some manufacturers also provide templates, modules and IR libraries to control Premiere systems.

Control devices can be simple IR remotes or touch panels.

IR Remote Control

The simplest control device is a generic IR remote control for a DVD player.

IR Code Sets

The Kaleidescape movie player supports two major infrared remote control code sets.

- Code set used by Toshiba DVD players and other manufacturers including Philips, Magnavox, Zenith, Onkyo, and Marantz
- Code set used by Kenwood DVD players

IR code sets can be disabled on the *CONTROL* tab of the player settings page. When both code sets are disabled, the player will not respond to IR commands. For help configuring the IR code sets, visit [Control Settings on page 92](#).

Types of Remotes

IR remotes (other than the Kaleidescape Remote) fall into the following basic categories:

- Pre-programmed
- Learning
- PC Programmable

Pre-programmed Remotes

Pre-programmed remotes only require setting the remote to control a Toshiba or Kenwood DVD player. Custom buttons that jump directly to Kaleidescape menu selections are not available.

Learning Remotes

Learning remotes can be used two ways: as a general remote with a Toshiba or Kenwood code set, or set to accept (learn) Kaleidescape-specific commands from a device that can generate these commands (for example, the Kaleidescape Remote).

PC Programmable Remotes

PC Programmable remotes can support commands specific to the Kaleidescape interface and provide a more complete experience. The manufacturer provides software that allows the remote to be programmed via a computer. This type of programming often allows IR codes to be imported in hex format (usually copying and pasting the codes into a text box), or from a Philips CCF file.

For a list of all IR codes (in hex) or CCF format available from Kaleidescape, or for the CCF file, go to www.kaleidescape.com/go/ir.

Templates are available for download for RTI, URC, and Elan remotes. Kaleidescape is also included in IR code database libraries for URC, Logitech Harmony and Opus.

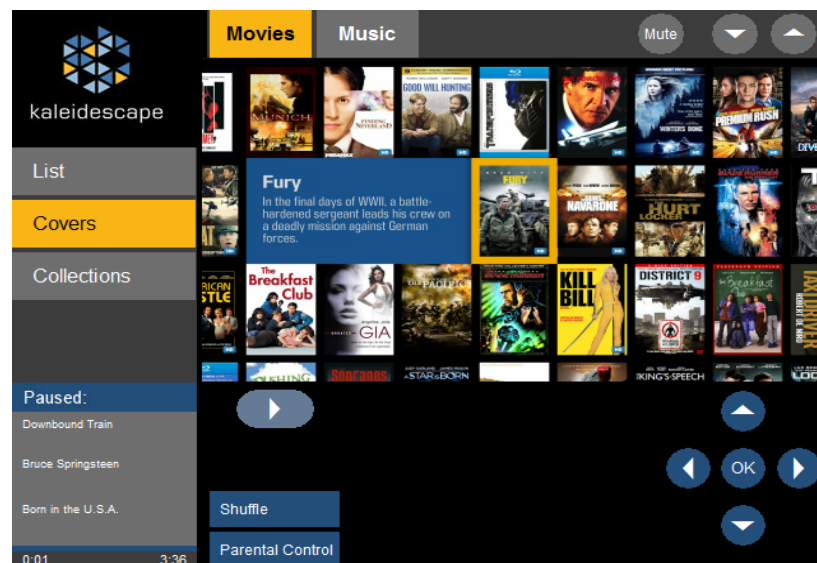
Touch Panels

Kaleidescape supports several variations of touch panel control.

- Onscreen Display with Video
- Onscreen Display without Video
- Standalone music control interface for music zones

Onscreen Display with Video

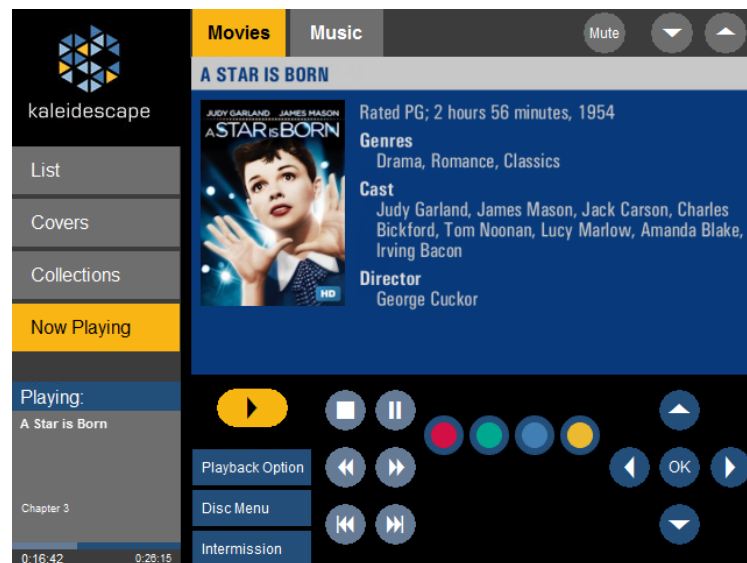
Onscreen Display with Video (OSD Video) displays the Kaleidescape onscreen display on the touch panel, along with other controls, by using a video window on the touch panel. Touching the video display makes selections or navigates menus. OSD Video provides the richest user experience and is the implementation suggested by Kaleidescape whenever possible.



Note: Always use the connection that provides the highest signal quality. Fonts are small and hard to read if using composite video connections.

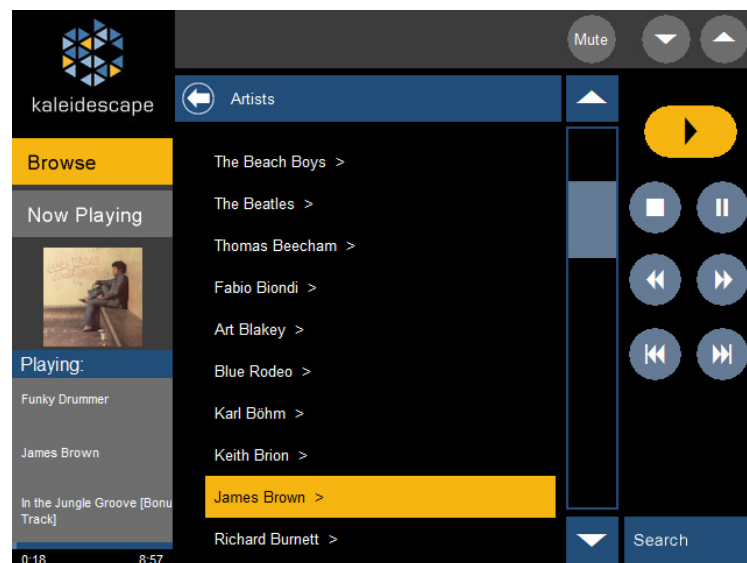
Onscreen Display without Video

Onscreen Display without Video (OSD No Video) provides supplemental information with text-based details for content. The touch panel replicates the details pages for movies or albums while browsing the onscreen display.



Standalone Control for Music Zones

The standalone music control interface for music zones provides text-based music controls on touch panels in rooms without video displays (e.g., hallways). A user can browse and control music playback.



When selecting the touch screen for an installation, consider whether a video display is present and the technical capabilities of the touch panel. Installations can require more than one type of touch panel interface to provide the best control for every zone.

For more information, go to
www.kaleidescape.com/support/control-systems.

Keypad Control for Music

In-wall keypads are convenient for music zones that have no video display and no touch panel. There are two types of keypad control.

▶ Keypad presets

With keypad presets, a keypad can be programmed to play a music selection. Presets can be set to behave like car radio buttons. Press and hold to store, then press to recall.

▶ Music collections

With music collections, a keypad can be programmed so users can cycle through music selections within a music collection. This interface enables cycling through any collection by using the **NEXT** and **PREVIOUS** buttons.

An installer can program a keypad to control music on a Premiere system as long as the keypad can send a programmer-defined string over RS-232 or TCP/IP. Kaleidescape also provides keypad control modules for several manufacturers that can be downloaded from the Kaleidescape web site.

Note: The keypad must be able to send a programmer-defined string. Presets cannot be triggered via IR.

For more information on keypad control commands, refer to the *Kaleidescape System Control Protocol Reference Manual* at www.kaleidescape.com/go/control-protocol.

Chapter 6

Troubleshooting

Preparation

The following **tools and assorted items** are recommended to assist with troubleshooting. All items should be **tested ahead of time and known to be working**.

- ▶ A laptop with an Ethernet port and a web browser running an up-to-date version of the Java software (current version can be downloaded from www.java.com).

The computer should also have a working serial port or a USB to serial adapter in the rare case a serial capture needs to be performed

- ▶ Null modem serial cable (F-F DB-9)
- ▶ Spare router with at least four ports
- ▶ Spare Cat5e or Cat6 cables
- ▶ Spare HDMI cables
- ▶ Extra IEC power cord
- ▶ Kaleidescape Remote with fresh batteries

The following equipment is optional, but useful and can save time.

- Spare 8 or 16 port 1000Base-T switch
- Ethernet cable tester
- Blu-ray disc, DVD and CD
- Small test display with appropriate inputs
- Spare power strip
- AC Socket tester

The following information and access can be required to troubleshoot Kaleidescape Systems.

- Serial number of at least one component in the Premiere system, preferably the server
- Access to the back of the Kaleidescape equipment

Troubleshooting Guide

The following tables provide information to troubleshoot most common problems encountered during installation.

Table 1 [Troubleshooting Power](#)

Table 2 [Troubleshooting Amber Lights](#)

Table 3 [Troubleshooting Problems with the Network](#)

Table 4 [Troubleshooting Problems with the Browser Interface](#)

Table 5 [Troubleshooting Problems with Imports](#)

Table 6 [Troubleshooting Problems with Audio & Video](#)

Table 7 [Troubleshooting Parental Control](#)

Table 8 [Troubleshooting Kaleidescape Conductor](#)

Troubleshooting Power

| Problem | Probable Cause | Solution |
|--|---|---|
| The front panel does not glow when power is applied. | 1. Power source is not turned on or there is a loose power connection. | Check that the power source is turned on and power cables are secure. Verify the socket is live by using a socket tester. Test using a spare IEC power cord. |
| | 2. The component is in standby mode. | Use the ON button on a remote control to exit standby mode and turn on the player. If a remote is not available, press the POWER button on an M500 Player, 1U+ Movie Server or 3U Server. There is no power button on the M300 Player, or the DV700 and M700 Disc Vaults. They will power on when the power cord is connected. |
| | 3. With a 1U+ Movie Server or 3U Server, there is no contact between front panel and chassis. | Clean contacts and reseal the front panel. Press the POWER button behind the front panel to help determine if the front panel is defective or if the contacts are dirty, or defective. Dirty contacts can be cleaned with a pencil eraser. |
| | 4. The power supply needs to be reset. | With older components, the power supply may need to be reset. Unplug the power cord for 5-10 minutes before re-connecting. If the problem continues, contact an authorized Kaleidescape dealer or Kaleidescape Technical Support. |

| Problem | Probable Cause | Solution |
|--|--|--|
| The front panel glows when power is applied, but turns off after a couple minutes. | 1. The front panel lights are turned off in the browser interface. | Open the browser interface from a computer on the same local subnet and access the SETTINGS > Components page. Check the drop-down menu for the front panel lights and choose the new intensity. |
| | 2. The component may be resetting excessively. | If the behavior repeats every few minutes, the component is likely resetting excessively. Check the integrity of the power source. If the behavior continues, unplug the power cord immediately and contact an authorized Kaleidescape dealer or Kaleidescape Technical Support. |

Troubleshooting Amber Lights

| Problem | Probable Cause | Solution |
|--|--|--|
| Front panel glows amber, and the network link and activity status lights are not on. | Component is not connected to network. | <ul style="list-style-type: none"> • Verify that Ethernet cables are properly terminated. Check that correct connector is used with the cable type (stranded or solid conductor). • Verify that Ethernet cables are connected to a switch. • Check that the router and switch are turned on and functioning properly. • Check that there are available addresses on the DHCP server. |
| Front panel alternates between amber glow and blue glow. | Intermittent network connectivity problem. | <ul style="list-style-type: none"> • Verify that Ethernet cables are properly terminated. Check that correct connector is used with the cable type (stranded or solid conductor). • Check that the router and switch are functioning properly. • Check that there are no duplicate IP addresses on the local subnet. |

| Problem | Probable Cause | Solution |
|--|---|--|
| The front panel glows amber, and network link and activity status lights are on. | 1. Component network connection is not full-duplex or at least 100Base-TX. | Check that the component is connected to a full-duplex 100Base-TX or 1000Base-T switch. Hubs and half-duplex switches are not supported. If used, expect degraded performance or no playback at all. |
| | 2. Component cannot contact a network DHCP server. | Verify that the network DHCP server is functioning properly. |
| | 3. There are no available DHCP addresses. | Configure the network DHCP server with larger IP address range. Be sure DHCP address pool is large enough and does not overlap devices with static IP addresses. |
| | 4. Component is outside normal operating temperature range. | Check that there is at least 1 inch of clearance in front and 2 inches of clearance in back of the component. Verify that the component is not dusty. |
| | 5. A disk cartridge is missing or has failed (only happens on a server). | Remove the server's front panel and inspect the status lights on the disk cartridges. Proceed to the next sections if a disk cartridge status light is not solid blue. |
| | 6. A player or disc vault is not linked to a system when more than one Premiere system is on the local network. | Link the player or disc vault to the correct system from the add a component link in the message at the top of the browser interface. |
| Disk cartridge status light flashing blue. | This indicates the hot spare in a 3U server. | This is normal operation. A normal hot spare blinks blue every two seconds. |
| Disk cartridge status light flashing amber. | The hot spare in a 3U Server does not have enough capacity to replace at least one of the drives. | Replace the hot spare with a disk cartridge with equal or greater capacity than the largest disk cartridge in the file system. |
| Disk cartridge status light does not come on. | Disk cartridge is either not seated properly or is failing to power on. | Turn off the server, wait 30 seconds for the drive to spin down and check the disk cartridge for a sticking latch. Note: If the latch sticks, visit www.kaleidescape.com/go/latch . Reseat the disk cartridge, then turn the server back on. If the status light remains unlit after other drives light, the drive has likely failed. Contact an authorized Kaleidescape dealer or Kaleidescape Technical Support. |

| Problem | Probable Cause | Solution |
|--|--|--|
| Disk cartridge status light glows solid amber. | 1. Disk cartridge is either not seated properly, latch is sticking, or is failing. | Turn off the server, wait 30 seconds for the drive to spin down, then check for sticking latch and reseal the disk cartridge. Be sure the disk cartridge is completely seated, then turn the server back on. Note: If the latch sticks, visit www.kaleidescape.com/go/latch . If the status light remains amber or unlit after other drives light, the disk cartridge is probably defective and must be replaced. Contact an authorized Kaleidescape dealer or Kaleidescape Technical Support. |
| | 2. Disk cartridge was previously used in another server. | Disk cartridges cannot be mixed between servers. When disk cartridges are being moved from one server to another, <u>all</u> disk cartridges in the disk set must remain together. |
| | 3. Disk cartridge has not been initialized. | If the disk cartridge was purchased as a standalone drive, contact an authorized Kaleidescape dealer or Kaleidescape Technical Support. |

Troubleshooting Problems with the Network

| Problem | Probable Cause | Solution |
|-----------------------------------|---|---|
| Network status lights are not on. | 1. Component has not finished the boot process. | <p>Wait at least two minutes for component to finish booting.</p> <p>Indicators that boot process is complete:</p> <ul style="list-style-type: none"> • Player - the front panel blinks two times • 3U Server - disk cartridge status lights all on and hot spare blinks • 1U+ Movie Server - disk cartridge status lights all on • When booting a server, the disk cartridge status lights come on in a sequential pattern. When the boot completes, the front panel blue glow dims. <p>If the component does not boot, contact an authorized Kaleidescape dealer or Kaleidescape Technical Support.</p> |
| | 2. Network cable is defective or not connected. | Check cable termination and seating. Check with known good network cable. |
| | 3. Switch port is faulty. | <p>Reboot the switch. Test with a known good switch. Move cable to known good port.</p> <p>A simple router can be a good tool for diagnostics. Use the router and bypass the home network to determine that the Kaleidescape System works correctly. Then proceed with network troubleshooting.</p> |
| | 4. Server is powered off. | Turn server on. |

| Problem | Probable Cause | Solution |
|--|---|---|
| Component does not show up on the Components page of the browser interface. | 1. Component is powered off. | Turn component on. |
| | 2. Network cable is not connected properly. | Check cable termination and seating. Test with a known working Ethernet cable. |
| | 3. More than one DHCP server is issuing IP addresses. | Verify that there is only one DHCP server on the network. |
| | 4. No DHCP server or no available IP addresses. | Verify there is a DHCP server and that the DHCP server has available IP addresses in the DHCP range. (The DHCP server is usually in the router.) |
| | 5. Incorrect network settings. | <ul style="list-style-type: none"> Make sure all settings are correct. Check the list of Kaleidescape devices by entering [server_ip_address]/lskd.html into the browser. This procedure will confirm if the IP address settings are correct. Network setting on players and vaults can be reset to DHCP by pressing the reset button on the back of the component. The reset button is inside the pinhole located next to the analog audio outputs. Network settings might have to be changed through the serial port. Refer to the article at www.kaleidescape.com/go/set-network-settings. |
| | 6. Network divided with VLANs. | Check network settings to make sure all Kaleidescape devices are on the same segment (or VLAN). |
| | 7. Duplicate IP address. | Change the IP address on the device causing the conflict. This device is very likely newly added to the network. For example, a new print server is added to the network at the same address as a Kaleidescape component. |
| | 8. Component not assigned to the Premiere system. | <p>When more than one Premiere system is installed on the same local network, new components must be linked to the appropriate system. Click add a component from the message at the top of the browser interface and add the new component.</p> <p>When only one Premiere system exists on the local network, the player will join the system automatically.</p> |
| | 9. Managed switch configuration. | Verify that ports are set up correctly in the switch configuration. |

| Problem | Probable Cause | Solution |
|--|--|--|
| <p>Onscreen user interface displays error message saying, <i>"This player cannot access your library. Check that all components are running and your network is functioning properly."</i></p> <p>and/or</p> <p>Onscreen user interface displays error message saying, <i>"Difficulty reading movie"</i>.</p> | 1. Insufficient bandwidth for playback | <p>Test by playing back a high-definition or Blu-ray quality movie, as this content requires the most bandwidth.</p> <p>Verify that wiring and switch are full-duplex and 100Base-TX or 1000Base-T (when playing more than one Blu-ray quality movie at the same time).</p> <p>Bandwidth is limited when using powerline networking or a wireless connection. Always test with a wired connection to eliminate this possibility.</p> |
| | 2. Faulty switch/router | Test with a known working switch/router. Fix or replace a faulty switch/router. |
| | 3. Using a hub | Replace hub with 1000Base-T switch. |
| | 4. Bad import or download | Although rare, a bad import or download can cause this behavior. Check to see if playback stops at the same point in a movie every time. If this is the case, delete the movie (use the browser interface to put the movie into the trash can, then delete permanently), and re-import/re-download. |
| | 5. Network cable | Test with a known working network cable. Fix or replace a faulty cable. |
| | 6. Duplicate IP address | Change the IP address on the device causing the conflict. This device is very likely newly added to the network. For example, a new print server is added to the network at the same address as a Kaleidescape component. |

| Problem | Probable Cause | Solution |
|--|--|--|
| Server is offline/not communicating with Kaleidescape. | 1. Internet connection is down. | Connect a computer to the same Ethernet cable and test Internet connectivity. Contact the Internet service provider if it does not work. |
| | 2. Incorrect DNS | Change to a valid DNS server. |
| | 3. MTU (Maximum Transmission Unit) size | This setting can usually be changed in the router. |
| | 4. Incorrect or missing network settings (default gateway, subnet mask, DNS servers) | Use DHCP reservations instead of static IP address, or connect a laptop wired to the same cable as the server and verify the laptop can access the Internet. Get the network settings for the laptop using the ipconfig command in the command prompt screen (Start, Run, Command). Use the default gateway, subnet mask, and DNS servers listed for the Kaleidescape server on the SETTINGS > Components page of the browser interface. If using a Mac, use ifconfig in a terminal window. |
| | 5. Server not powered on. | Power on the server. If the server does not appear to be booting, retrieve diagnostic information from the server and send to support@kaleidescape.com . Refer to the Quick Reference Guide at www.kaleidescape.com/go/diagnostic-info . |
| | 6. Server cannot boot. | Retrieve diagnostic information from the server and send to support@kaleidescape.com . Refer to the Quick Reference Guide at www.kaleidescape.com/go/diagnostic-info . |
| | 7. Router is faulty or powered off. | If the router is powered on, try resetting. If the router comes on, but the problem reappears frequently, the router should be replaced. |
| Connection is half-duplex. | 1. Hub used | Replace hub with 1000Base-T switch. |
| | 2. Using incorrect network cable | Check that Cat5e or Cat6 cables are used for all network connectors, and that all pairs are terminated. |
| | 3. Switch is set up incorrectly. | If the switch is managed, verify that all ports are set to allow for a 100Base-TX/1000Base-T full-duplex connection. |

| Problem | Probable Cause | Solution |
|--|--|---|
| 100Base-TX connection established between 1000Base-T components. | Not all pairs were used when terminating the Cat5e/Cat6 cable. | Terminate using all eight wires. A 1000Base-T connection requires that all 4 pairs be terminated. |
| Duplicate IP address | 1. The static IP address assigned is within the DHCP range. | Either change the DHCP range on the DHCP server (usually the router), or change the static IP address to be outside the range. Be careful not to set IP address to the same IP address as another static device. |
| | 2. Two DHCP servers on the same network. | Eliminate one of the DHCP servers or consult an IT professional to ensure the network is configured properly. |
| | 3. Two devices assigned the same static IP address. | Change the IP address on the device causing the conflict. This device is very likely newly added to the network. |
| Cannot resolve hostnames with DNS. | 1. Incorrect DNS setting | Change DNS setting to a known good setting. |
| | 2. DNS server is not resolving correctly. | Change DNS setting to a known good setting. |
| Disc menu does not recognize the player connection to the Internet when trying to use BD-Live. | Network setting | <p>Open the browser interface, select the SETTINGS > Component page, click the Settings button for the M-Class player, select the NETWORK tab. Verify that Allow Internet Access is selected.</p> <p>If a static IP address is used, verify the default gateway, subnet mask, and DNS servers are correct.</p> |

Troubleshooting Problems with the Browser Interface

| Problem | Probable Cause | Solution |
|--------------------------------------|---|--|
| Cannot access the browser interface. | 1. Server is not powered on. | Verify that the server is powered on. |
| | 2. Not using the correct access URL for a Mac. | For Mac, use http://my-kaleidescape.local or http://my-kaleidescape.local/installer or ks- followed by the server twelve-digit serial number; for example, http://ks-00001000040b.local/installer or use the IP address of the server found on the System Summary page on the onscreen display. Note: If browser interface still does not appear, see Accessing the Browser Interface on page 65 . |
| | 3. The network connection is failing for the computer or server. | Check network connections for the computer and the server. Connect a laptop to each cable and open a different web page (so page is not loaded from cache). If the page fails to load, troubleshoot the network. |
| | 4. Network is set up so that System URL on the Kaleidescape browser interface cannot be opened. | Refer to Network Requirements on page 165 for instructions on checking and updating computer network settings to allow the web browser access to a Kaleidescape system. or Use the IP address of the server found on the System Summary page on the onscreen display. |
| | 5. Server connected to a router that hides the server from the PC. | Use a switch to connect the server to the site network, or connect the PC to the router. |
| Browser interface is running slowly. | Mismatched or duplicate IP addresses | Browser interface will load slowly until any network changes are in place; however, loading http://[server_ip_address]/lskd.html will not be slow. Use this page to check IP addresses. To change any IP addresses, open the SETTINGS > Components page in the browser interface, click the Settings button for the component, select NETWORK tab and make settings changes, then reboot the applicable component. |

| Problem | Probable Cause | Solution |
|---|---|---|
| The login screen appears, but unable to log in to the browser interface. | The browser interface is protected with a password. | If the system administrator does not know the password, make sure the server is connected to the Internet and contact Kaleidescape Technical Support. |
| When trying to access the browser interface, redirected to Kaleidescape website or get 404 error. | 1. NetBIOS is required to view the URL http://my-kaleidescape on a Windows computer, but is commonly blocked by firewalls and other protective software. | Use the IP address of the server as address for the browser interface. For example, if the server IP address is 172.16.31.1 , access the browser interface at http://172.16.31.1 . The simplest method to get the current IP address of the server is look at the System Summary on the onscreen display. If using DHCP, this IP address can change over time. See Network Requirements on page 165 . |
| | 2. On a Mac, the browser interface must be accessed from the URL http://my-kaleidescape.local . | Try entering http://my-kaleidescape.local or the IP address of the server. The URL http://my-kaleidescape.local can generally be accessed from a Windows computer with Bonjour installed (Bonjour is usually included with iTunes). |
| Information in browser interface does not match the system. | 1. Multiple Kaleidescape Systems are set up on the local network and using the same System URL. | Use address http://ks-[server_serial_number] or http://ks-[server_serial_number].local or http://[server_ip_address] to open the browser interface, open the SETTINGS > General page to change the System URL. Note: If NetBIOS does not resolve, use the server IP address. |
| | 2. Components are not powered on or not connected to the network, and therefore do not appear on browser interface. | View http://[server_ip_address]/lskd.html considering it displays all Kaleidescape components on the local network. If the component does not appear on this page, check power and connectivity. |
| | 3. There are multiple Premiere systems on the local network and components are not linked to the appropriate system | Open the SETTINGS > Components page and make note of what components are missing from the system. Select add a component from the message at the top of the browser interface and add the noted components to the system. |

| Problem | Probable Cause | Solution |
|--|---|--|
| Some content is missing from the browser interface. | 1. At least one server is missing from Premiere system that contains multiple servers. | Check power and connectivity of all servers in the system. Open http://[server_ip_address]/lskd.html and check that all servers are listed, and then sort by Effective SGID . If a server does not have the same <i>Effective SGID</i> , open the browser interface and click add a component in the message at the top of the page, and add the server to the system. |
| | 2. Content has been moved to the Trash. | Visit the Trash on the <i>MOVIES</i> or <i>MUSIC</i> page and select the missing titles and return them to the library. |
| Control panel in the browser interface does not control the player. | 1. Latest version of Java not installed. | Enable Java in the web browser or go to www.java.com to download the latest version. The download process verifies that Java is running and installed before updating. |
| | 2. A control panel for a zone other than the one being viewed was unintentionally opened. | Verify the correct zone is being controlled. Be sure to name the players on the Components page to help identify the movie and music zones. |
| Browser interface is running slowly. | Mismatched or duplicate IP addresses | Browser interface will load slowly until any network changes are in place; however, loading http://[server_ip_address]/lskd.html will not be slow. Use this page to check IP addresses. To change any IP addresses, open the SETTINGS > Components page in the browser interface, click the Settings button for the component, select NETWORK tab and make settings changes, then reboot the applicable component. |
| The login screen appears, but unable to log in to the browser interface. | The browser interface is protected with a password. | If the system administrator does not know the password, make sure the server is connected to the Internet and contact Kaleidescape Technical Support. |

Troubleshooting Problems with Imports

| Problem | Probable Cause | Solution |
|---|---|---|
| Blu-ray disc or CD fails to import (possibly ejecting). | <p>1. Disc is not a Blu-ray disc or CD, contains computer data, or was inserted with label down.</p> <p>IMPORT tab message: “Disc is not a music CD” or “Disc is not a Blu-ray disc or music CD”</p> | <p>Verify that the disc is a movie or album and the label is face up in the tray.</p> <p>On a Premiere system sold by Kaleidescape on or after November 30th 2014, CSS-protected DVDs cannot be imported. However, they can be cataloged so they appear in the onscreen user interface just like imported content and titles downloaded from the Kaleidescape Movie Store. For more information, visit www.kaleidescape.com/protected-dvds.</p> |
| | <p>2. Disc has already been imported</p> <p>IMPORT tab message: “Disc already imported”</p> | <p>Movie or album has already been imported. If not on the <i>List</i> view, check the trash. Also verify the player's parental control level.</p> |
| | <p>3. Disc is dirty, scratched, or flawed.</p> <p>IMPORT tab message: “Problem reading disc”</p> | <p>Check the disc for surface defects and clean if necessary.</p> <ul style="list-style-type: none"> • Clean disc by wiping from the center of the disc outward. Do NOT wipe around the surface in a circular motion. • Try another copy of the movie or album. |
| | <p>4. Server has a failed disk drive or is rebuilding the disk array. Imports are disabled during a rebuild.</p> | <ul style="list-style-type: none"> • Check the browser interface to see if a disk is rebuilding. • A rebuild can take up to 100 hours or more depending on the amount of content on the drive and server. Confirm that the browser interface does not show that a drive is rebuilding or a drive is missing or failed, then try importing content. |
| | <p>5. Disc import is disabled for a player.</p> | <p>Open the SETTINGS > Components page in the browser interface. Change Importing and Cataloging of Discs to Allow.</p> |
| | <p>6. System is not licensed for both movies and music.</p> | <p>Contact Kaleidescape Technical Support for movie and music license information.</p> |
| | <p>7. Server is full.</p> | <p>Go to the HOME page of the browser interface or System Summary on the onscreen display to check available capacity of the server.</p> |
| | <p>8. Drive failure.</p> | <p>Contact Kaleidescape Technical Support.</p> |

| Problem | Probable Cause | Solution |
|---|---|--|
| Blu-ray disc or CD fails to import (possibly ejecting). | 9. Server restarted IMPORT tab message: “System restarted during import” | Try importing again. |
| | 10. Blu-ray disc contains AVCHD content. | M-Class players cannot play AVCHD content at this time. |
| | 11. User ejected the disc. IMPORT tab message: “Eject button pressed” | Some imports take a long time because of the authoring method. Try importing again and leave in the player or disc vault until import is complete. |
| Blu-ray disc takes longer than about 60 minutes per disc (average speed). | 1. Network fault between player and server. | Verify there are no network disconnects or faulty Ethernet cables and slow switches, and that the network is active. |
| | 2. Disc is dirty, scratched, or flawed. IMPORT tab message: “Problem reading disc” | Check the disc for surface defects and clean if necessary. <ul style="list-style-type: none"> • Clean disc by wiping from the center of the disc outward. Do NOT wipe around the surface in a circular motion. • Try another copy of the movie or album. |
| | 3. Too much network traffic. | <ul style="list-style-type: none"> • If the server network connection is operating at 100Base-TX, stop movie playback from some players. • Put the player or disc vault and server on a 1000Base-T network to improve Blu-ray import speed. |
| Home-authored disc fails to import. | Incorrectly authored | Some home-authored content can be incorrectly authored. Refer to the article at www.kaleidescape.com/go/home-movies . |

Troubleshooting Problems with Audio & Video

| Problem | Probable Cause | Solution |
|--------------------------------|---|---|
| No audio | 1. Audio cables loose or disconnected. | Check audio cable connections and terminations. |
| | 2. Wrong audio source selected | Verify that the audio system is set to play Kaleidescape audio. |
| | 3. Using optical, coaxial, or analog output when playing a movie, and HDMI audio decode mode is set to Bitstream pass-through . | <ul style="list-style-type: none"> Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the AUDIO tab, and set the HDMI audio decode mode to Player decode. Listen to audio through the HDMI connection. |
| | 4. EDID is inaccurate or corrupt. | <ul style="list-style-type: none"> Correct the EDID if possible. Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the AUDIO tab, and open advanced audio settings. Select Receiver supports for the supported sound modes. |
| | 5. Error in the control system programming | If using a controller with the Kaleidescape system, check controller programming and connections. |
| | 6. Home-authored content | Some home-authored content can contain video but no audio. Refer to the article at www.kaleidescape.com/go/home-movies . |
| No audio in multiple zones | 1. Zones not set correctly | Verify that the zone to be controlled is the zone that is actually being controlled. |
| | 2. Using optical, coaxial, or analog output when playing a movie, and HDMI audio decode mode is set to Bitstream pass-through . | <ul style="list-style-type: none"> Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the AUDIO tab, and set the HDMI audio decode mode to Player decode. Listen to audio through the HDMI connection. |
| Audio level too low for movies | Setting for number of audio channels is incorrect | Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the AUDIO tab, and set the HDMI audio decode mode to Player decode . Select Two-channel under Number of audio channels . |

| Problem | Probable Cause | Solution |
|----------|---|--|
| No video | 1. Video cables are loose or disconnected | Check video cable connections. HDMI cables and related components are a common source of problems. Use known good display to verify the cable connection and signal from the player. |
| | 2. Display does not support current player output. | Check the video modes supported by the display. Open the SETTINGS > Components page in the browser interface, click the Settings button for the component, select the VIDEO tab, and make VIDEO settings changes to a supported video mode. |
| | 3. Static IP on player does not match the IP range of the server. | A player set to a static IP address can have a blue glow indicating the player is on the same network as the server but can be on a different subnet. Reset the player to DHCP by pressing the reset button on the back of the player, and then reconfigure the player. |
| | 4. Onscreen display but no video playback | If available, test playback of the <i>Kalahari</i> HD movie. This film is HD but has no HDCP protection. If <i>Kalahari</i> plays back, then the problem is likely an HDCP issue. The Kaleidescape player likely cannot communicate with the display to verify that content playback is allowed. See the article at www.kaleidescape.com/go/troubleshooting-video . |
| | 5. Home-authored content | Home-authored content which does not follow Kaleidescape guidelines might import but can fail to play back. Refer to the article at www.kaleidescape.com/go/home-movies . |
| | 6. Player is not on the network or not making a connection with the server. | There is video from a player during boot (called the <i>lobby screen</i>), but the onscreen user interface does not load without a network connection to the server. Follow the troubleshooting steps above. Use known good display to verify the cable connection and the signal from the player. |
| | 7. Wrong source selected. | Verify the source setting is correct on the display, switcher, A/V receiver, or A/V processor. |
| | 8. Player is powered off or in standby. | Power the player on or bring it out of standby (LEAVE_STANDBY). |

| Problem | Probable Cause | Solution |
|---|--|--|
| Video appears distorted, stretched or compressed. | 1. Display aspect ratio not set properly | Check the aspect ratio settings on the display device or scaler. |
| | 2. The movie has a 4:3 ratio and is stretched to fill the 16:9 display | Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the VIDEO tab, and select Play as 16:9 video without horizontal stretching . |
| | 3. Player configured for the wrong format. | When outputting PAL and NTSC, make sure the display supports both formats. |
| Player not outputting preferred resolution of the display device. | 4. The player is set to the default video mode, Use Highest Available Resolution , and the EDID is inaccurate or corrupt. | <ul style="list-style-type: none"> • Verify that all devices in the HDMI path support the preferred resolution. • Correct the EDID if possible. • Open the SETTINGS > Components page in the browser interface, click the Settings button for the player, select the VIDEO tab, and ignore the EDID by selecting preferred Video Mode for each media format. |
| No video when playing Blu-ray quality movie. | Component does not output video during Blu-ray playback. | In accordance with analog sunset provisions , the analog video outputs are disabled during playback of Blu-ray quality movies. |
| Video/audio stalls or stutters. | 1. Fault in network path between player and server. | Verify there are no network disconnects or faulty Ethernet cables and slow switches, and that the network is active. |
| | 2. Duplicate IP address | Change the IP address on the device causing the conflict. This device is very likely newly added to the network. For example, a new print server is added to the network at the same address as a Kaleidescape component. |
| | 3. Too much network traffic on a 100Base-TX network | <p>Only one Blu-ray movie can be played from a server using a 100Base-TX connection.</p> <p>Turn off some players, or stop importing some movies, or connect the server to a 1000Base-T Ethernet connection (cable and switch).</p> |
| | 4. HDMI handshake problem | Verify integrity of cables and check connections. Test by bypassing any switchers, baluns, A/V receivers or processors, and connect directly to a known good display with a known good cable. |
| | 5. Using powerline network or wireless connection | These types of connections provide limited bandwidth. Use a wired Ethernet connection when possible. |

Troubleshooting Parental Control

| Problem | Probable Cause | Solution |
|--|---|--|
| Movies are missing from onscreen user interface. | Parental control is active. | Check the default parental control level of the player. If the player is set to an undesired level this problem will continue until this setting is changed. Change to appropriate level. Enter a passcode if necessary. |
| | Movie is in the trash. | Open the MOVIES tab in the browser interface and remove movie from the trash can. |
| | Multiple servers exist in the Premiere system, but at least one server is not currently part of the system. | Check power and connection of all servers in the system. If a server is not booting, retrieve diagnostic information from the server and send to support@kaleidescape.com . Refer to the Quick Reference Guide at www.kaleidescape.com/go/diagnostic-info . |
| Cannot enter the passcode. | Remote is not programmed correctly. | Program the remote correctly. Kaleidescape components can be programmed with IR codes for a standard Toshiba or Kenwood DVD player. |
| Numeric keypad is not showing up on the touch panel. | Keypad was not added to the template. | Add keypad to the touch panel template. |
| Parental control is not working on a specific player. | Default level is set incorrectly for that player. | Check the SETTINGS > Parental Control for Movies page on the browser interface to verify that the player is set to the correct level. If Automatic Safe Level is selected, the default rating is displayed in the paragraph on the bottom right of the page. |
| After entering the passcode, movies are still missing. | 1. Wrong passcode | Try again. Note: A forgotten passcode can be changed on the SETTINGS > Parental Control for Movies page without knowing the old passcode. |
| | 2. Time out exceeded | Enter the passcode again or extend the timeout on the browser interface. |
| Parental control menu in onscreen user interface does not list restricted content. | Restricted content is selected to be hidden. | Enter the passcode from any screen on the onscreen display even if the option is not visible. |

| | | |
|-----------------------------------|--|--|
| A restricted movie is not hidden. | Movie is unrecognized and does not have the correct rating. | Temporary solution is edit the rating manually from the MOVIES tab. Permanent solution is to use the Kaleidescape loan process, see www.kaleidescape.com/loan . |
| Cannot block adult content. | Confusion with how to set up just two levels of parental control when four levels are available. | <ol style="list-style-type: none"> 1. Open the SETTINGS > Parental Control for Movies page on the browser interface. 2. Set a passcode for Restricted content and set the rating to All Movies. 3. Next set the rating for The main library to the acceptable movie rating for the whole family. 4. Click OK. <p>If the players are set to Automatic Safe Level, this procedure works for a simple two-level configuration.</p> <p>To hide the existence of the restricted content level on the Parental Control view, select Hide Restricted Content. To access the restricted level, enter the passcode from any view.</p> |

Troubleshooting Kaleidescape Conductor

| Problem | Probable Cause | Solution |
|--|---|--|
| Conductor does not connect. | 1. Computer name is too long. | Check computer properties and verify that the computer name is 14 characters or less. Change the name if necessary. |
| | 2. NetBIOS problem. | <ul style="list-style-type: none"> • See Network Requirements on page 165. • Contact Kaleidescape Technical Support. |
| Conductor does not work on the Mac. | This configuration is not supported. | <p>Conductor is not supported on a Mac. However a Windows emulator such as Parallels Desktop can be used.</p> <p>If an emulator is used, the Windows version of iTunes must be installed because Conductor does not sync with the Mac version.</p> |
| Cannot sync Conductor on a VLAN through a second router. | Computer uses NetBIOS and NetBIOS does not work across VLANs. | Connect computer to the same LAN as the server. |

Appendix A

Product Specifications

Kaleidescape 1U+ Movie Server, Model KSERVER-1550

Dimensions

- 17.5 in. × 1.7 in. × 18.8 in. (W × H × D)
(44.5 cm × 4.3 cm × 47.8 cm)
- 1 rack unit (rack ears included)
- Front panel protrudes 1 in. (2.5 cm)

Weight

- 15.0 lbs (6.8 kg) with no disk cartridges installed
- 24.0 lbs (10.9 kg) with four disk cartridges installed

Disk Cartridges

- KDISK-6000-L: 2.2 lbs (1.0 kg)
- KDISK-10000-L: 2.2 lbs (1.0 kg)
- KDISK-BLANK-L: 0.35 lbs (0.16 kg)

Power

- 100–240 V, 50–60 Hz, universal input
- 50W typical (100W max) consumption with four disk cartridges installed

Environment

- Operating temperature: 41 to 86 °F (5 to 30 °C)
- Storage temperature: -4 to 140 °F (-20 to 60 °C)
- Relative humidity: 5 to 90% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 170 BTU/hr (50 W) max with four disk cartridges
- Airflow: 10 CFM (17 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Note: Make sure rack or other doors do not reduce the 1 in. (2.5 cm) air space required at the front of the chassis.

Connections

- 100Base-TX/1000Base-T Ethernet (RJ45 connector)
- RS-232 control port (DB-9 male)
- One USB 3.0 (reserved)

Storage

- One disk cartridge for data protection (RAID-K parity)
- Three disk cartridges for content. Storage up to 800 Blu-ray quality movies or 4,500 DVD quality movies when using 10 TB Disk Cartridges.
- More servers can be added to provide thousands of movies and albums in one library.

Bandwidth

- Serves Blu-ray quality movies to up to 15 zones simultaneously
- Servers DVD quality movies or music to up to 50 zones simultaneously
- 4 simultaneous imports

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Kaleidescape 3U Server, Model KSERVER-5000

Dimensions

- 17.5 in. × 5.2 in. × 19.3 in. (W × H × D)
(44.5 cm × 13.2 cm × 49.0 cm)
- 3 rack units (rack ears included)
- Front panel protrudes 1.1 in. (2.8 cm)

Weight

- 29.0 lbs (13.2 kg) with no disk cartridges installed
- 59.0 lbs (26.8 kg) with fourteen disk cartridges installed

Disk Cartridges

- KDISK-6000-L: 2.2 lbs (1.0 kg)
- KDISK-BLANK-L: 0.35 lbs (0.16 kg)

Power

- 100–240 V, 50–60 Hz, universal input
- 133 W typical (161 W max) consumption with fourteen 6 TB Disk Cartridges

Environment

- Operating temperature: 41 to 86°F (5 to 30°C)
- Storage temperature: -4 to 140°F (-20 to 60°C)
- Relative humidity: 5 to 90% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 550 BTU/hr (161 W) max with 6 TB Disc Cartridges
- Airflow: 40 CFM (68 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Note: Make sure rack or other doors do not reduce the 1 in. (2.5 cm) air space required at the front of the chassis.

Connections

- 100Base-TX/1000Base-T Ethernet (RJ45 connector)
- RS-232 control port (DB-9 male)
- Two USB 2.0 (reserved)
- IEEE 1394 (FireWire) 6-pin (reserved)

Storage

- Two disk cartridges for data protection (RAID-K parity and hot spare)
- Expandable to fourteen 6 TB disk cartridges for a maximum of 72 TB of storage (1,950 Blu-ray quality or 10,800 DVD quality movies)
- More servers can be added to store thousands of movies and albums in one library

Bandwidth

- Serves Blu-ray quality movies to up to 15 zones simultaneously
- Servers DVD quality movies or music to up to 50 zones simultaneously
- 4 simultaneous imports

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Kaleidescape M500 Player, Model KPLAYER-M500

Dimensions

- 17.5 in. × 1.7 in. × 13.8 in. (W × H × D)
(44.5 cm × 4.3 cm × 35.0 cm) without side panels
- 1 rack unit (rack ears included)
- Front panel protrudes 1 in. (2.5 cm)

Weight

- 10.0 lbs (4.6 kg)

Power

- 100–240 V, 50–60 Hz, universal input
- 36 W typical consumption
(27 W standby, 42 W max)

Network

- 100Base-TX/1000Base-T Ethernet
(RJ45 connector)

Control

- Kaleidescape Remote included
- Front panel IR receiver window
- IR input (1/8 in. mini-plug)
- RS-232 control port (DB-9 male)

Environment

- Operating temperature: 41 to 95 °F (5 to 35 °C)
- Storage temperature: -4 to 140 °F (-20 to 60 °C)
- Relative humidity: 5 to 90% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 143 BTU/hr (42 W) max
- Airflow: 7 CFM (12 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Note: Make sure that the air space required at the front of the chassis is maintained.

Video Outputs

- HDMI
- Component YP_bP_r (RCA connectors)
- S-Video
- Composite (RCA connector)

Video Modes

- 1080p60/50/24, 1080i60/50, 720p60/50, 576p, 576i, 480p, 480i

Audio Outputs

- HDMI
- Digital coaxial (RCA connector)
- Digital optical (TosLink connector)
- Analog stereo (RCA connectors)

Audio Formats

- Bitstream pass-through of Dolby[®] TrueHD, Dolby Atmos[®] and DTS-HD Master[™]
- Dolby Digital
- DTS Digital Surround[™]
- MPEG Audio
- PCM

Media

- Downloads from the Kaleidescape Store that precisely match the quality of movies available on Blu-ray disc and DVD
- Blu-ray disc, BD-R, BD-RE
- DVD, DVD-R, DVD-RW, DVD+R, DVD+RW

Blu-ray Disc

- BD-Live
- Profile 2.0

Region Codes

- DVD region code can be changed up to four times
- The Blu-ray disc region code of the M500 Player is set at time of purchase and cannot be changed by the customer.

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Kaleidescape M300 Player, Model KPLAYER-M300

Dimensions

- 8.4 in. × 1.7 in. × 10.6 in. (W × H × D)
(21.3 cm × 4.3 cm × 26.9 cm)
- Optional rack-mount shelf is available to hold two M300 Players in one rack unit

Weight

- 3.0 lbs (1.4 kg) includes 1 lb (0.5 kg) power supply
- Rack-mount shelf: 0.5 lbs (0.2 kg)

Power

- 100–240 V, 50–60 Hz, universal input
- 28 W typical consumption
(20 W standby, 28 W max)
- External power supply included

Network

- 100Base-TX/1000Base-T Ethernet
(RJ45 connector)

Control

- Kaleidescape Remote included
- Front panel IR receiver window
- IR input (1/8 in. mini-plug)

Environment

- Operating temperature: 41 to 95 °F (5 to 35 °C)
- Storage temperature: -4 to 140 °F (-20 to 60 °C)
- Relative humidity: 5 to 90% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 96 BTU/hr (28 W) max
- Airflow: 6 CFM (10 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Video Outputs

- HDMI
- Component YP_bP_r (RCA connectors)
- Composite (RCA connector)

Video Modes

- 1080p60/50/24, 1080i60/50, 720p60/50, 576p, 576i, 480p, 480i

Audio Outputs:

- HDMI
- Digital coaxial (RCA connector)
- Analog stereo (RCA connectors)

Audio Formats

- Bitstream pass-through of Dolby[®] TrueHD, Dolby Atmos[®] and DTS-HD Master[™]
- Dolby Digital
- DTS Digital Surround[™]
- MPEG Audio
- PCM

Blu-ray Disc

- BD-Live
- Profile 2.0

Region Codes

- The Blu-ray disc region code of the M300 Player is set at time of purchase and cannot be changed by the customer.

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Kaleidescape M700 Disc Vault, Model KVAULT-M700

Dimensions

- 17.5 in. × 8.8 in. × 21.9 in. (W × H × D)
(44.5 cm × 4.3 cm × 35.0 cm)
- 5 rack units (rack ears included)

Weight

- 38 lb (17.2 kg) empty
- 49 lb (22.2 kg) fully loaded with discs

Power

- 100–240 V, 50–60 Hz, universal input
- 37 W typical consumption
(32 W standby, 52 W max)

Network

- 100Base-TX/1000Base-T Ethernet
(RJ45 connector)

Control

- Kaleidescape Remote included
- Front panel IR receiver window
- IR input (1/8 in. mini-plug)
- RS-232 control port (DB-9 male)

Environment

- Operating temperature: 41 to 95 °F (5 to 35 °C)
- Storage temperature: -4 to 140 °F (-20 to 60 °C)
- Relative humidity: 20 to 80% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 180 BTU/hour (52 W) max
- Airflow: 7 CFM (12 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Video Outputs

- HDMI
- Component YP_bP_r (RCA connectors)
- S-Video
- Composite (RCA connector)

Video Modes

- 1080p60/50/24, 1080i60/50, 720p60/50, 576p, 576i, 480p, 480i

Audio Outputs

- HDMI
- Digital coaxial (RCA connector)
- Digital optical (TosLink connector)
- Analog stereo (RCA connectors)

Audio Formats

- Bitstream pass-through of Dolby[®] TrueHD, Dolby Atmos[®] and DTS-HD Master[™]
- Dolby Digital
- DTS Digital Surround[™]
- MPEG Audio
- PCM

Media

- Downloads from the Kaleidescape Store that precisely match the quality of movies available on Blu-ray disc and DVD
- Blu-ray disc, BD-R, BD-RE
- DVD, DVD-R, DVD-RW, DVD+R, DVD+RW
- CD Audio, CD-R, CD-RW
- Standard 12 cm (4.7 in.) diameter discs

Capacity

- 320 discs

Import Speed

- 1 Blu-ray disc per hour or 15 CDs per hour

Regional Playback Control

The DVD region code can be changed up to four times. As long as the DVD matches the region code configured for the M700, any movie player can play a DVD from the vault once it has been cataloged.

The Blu-ray disc region code of the M700 Disc Vault is set at time of purchase and cannot be changed by the customer. Any M700 Disc Vault can import any Blu-ray disc. An imported Blu-ray movie will play if a component of the system matches the region code specified by the disc.

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Kaleidescape DV700 Disc Vault, Model KVAULT-DV700

Dimensions

- 17.5 in. × 8.8 in. × 21.9 in. (W × H × D)
(44.5 cm × 4.3 cm × 35.0 cm)
- 5 rack units (rack ears included)

Weight

- 38 lb (17.2 kg) empty
- 49 lb (22.2 kg) fully loaded with discs

Power

- 100–240 V, 50–60 Hz, universal input
- 34 W typical consumption
(32 W standby, 46 W max)

Network

- 100Base-TX/1000Base-T Ethernet
(RJ45 connector)

Environment

- Operating temperature: 41 to 95 °F (5 to 35 °C)
- Storage temperature: -4 to 140 °F (-20 to 60 °C)
- Relative humidity: 20 to 80% non-condensing
- Maximum operating altitude: 10,000 ft (3000 m)
- Heat output: 160 BTU/hour (46 W) max
- Airflow: 7 CFM (12 m³/hr) min

Ventilation

- Minimum 1 in. (2.5 cm) ventilation space at the front
- Minimum 2 in. (5 cm) ventilation space at the rear

Disc Media

- Blu-ray disc, BD-R, BD-RE
- DVD, DVD-R, DVD-RW, DVD+R, DVD+RW
- CD Audio, CD-R, CD-RW
- Standard 12 cm (4.7 in.) diameter discs

Capacity

- 320 discs

Import Speed

- 1 Blu-ray disc per hour or 15 CDs per hour

Regional Playback Control

The DVD region code can be changed up to four times. As long as the DVD matches the region code configured for the M700, any movie player can play a DVD from the vault once it has been cataloged.

The Blu-ray disc region code of the M700 Disc Vault is set at time of purchase and cannot be changed by the customer. Any M700 Disc Vault can import any Blu-ray disc. An imported Blu-ray movie will play if a component of the system matches the region code specified by the disc.

Certifications

- CSA (IEC 60950-1, CSA 60950-1-07)
- FCC Class B
- CE
- RoHS compliant

Limited Warranty

- 3 years (extendable)

Appendix B

Notices

Compliance

FCC Notice

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 to correct the interference by one or more of the following measures:

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

CE Declaration

The KSERVER-1550, KSERVER-5000, KPLAYER-M500, KPLAYER-M300, KVAULT-M700 and KVAULT-DV700 carry the mark. These products have been tested and conform to the European Union 2014/30/EU directive and the 2014/35/EC Low Voltage Directive.

These products are shipped with a formal Declaration of Conformity.

WEEE Notice

In compliance with European directive 2012/19/EU and norm EN50419:2006, this device must not be thrown away with household garbage. The device must be the object of an appropriate, selective removal procedure in order to recuperate it. Cooperation will contribute to the respect for the environment and the protection of our natural resources.

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Kaleidescape Operating System (kOS)

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Kaleidescape App for iPad

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JSON Framework

JSON.h, NSObject+SBJSON.h, NSObject+SBJSON.m, NSString+SBJSON.h, NSString+SBJSON.m, SBJsonBase.h, SBJson-Base.m, SBJsonParser.h, SBJsonParser.m, SBJsonWriter.h, SBJsonWriter.m

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iOS Frameworks

CommonCrypto/CommonDigest.h, CommonCrypto/CommonCryptor.h, Security/Security.h

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sys/socket.h

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netinet/in.h

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| Message | Cinavia Message Code |
|---------------------------|----------------------|
| Cinavia stopped playback. | 1 |
| Cinavia muted the audio. | 3 |

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Appendix C

Network Requirements

This appendix provides information on designing, troubleshooting and optimizing Ethernet networks used with Premiere systems.

The Browser Interface

The browser interface is used to view and edit information about movies and music and configure a system. The computer used to access the browser interface must be on the same local subnet as the Premiere system.

For Windows

Use the following procedure to open the browser interface using Windows.

1. Open a web browser and enter <http://my-kaleidescape>.
If the browser interface does not appear, go to the next step.
2. Enter <http://my-kaleidescape.local>.
If the browser interface does not appear, go to the next step.
3. Install **Bonjour** for Windows. Go to the [Bonjour download](#) page and click the **DOWNLOAD** button.
4. Try entering <http://my-kaleidescape.local> again.
If the browser interface does not appear, go to the next step.
5. Enter the **Browser Interface URL** in the web browser. Visit the onscreen display of any player in the Premiere system and use the following steps to locate the **Browser Interface URL**.
 - a. Press the **Menu** button on a remote control, or press **Menu** on the *Remote Control* page of the Kaleidescape iPad app.
 - b. Use the arrow buttons to highlight **System**, and then select **Status**.
 - c. Highlight **System Summary** to see the **Browser Interface URL**.
 - d. Enter the **Browser Interface URL** in the web browser.

If access to the onscreen display of a player is not readily available and the IP address of the server is known, try entering this in the web browser. The **Browser Interface URL** is the IP address of the server.

For Mac

Use the following procedure to open the browser interface using a Mac.

1. Open a web browser and enter <http://my-kaleidescape.local>.
If the browser interface does not appear, go to the next step.
2. Enter the **Browser Interface URL** in the web browser. Visit the onscreen display of any player in the Premiere system and use the following steps to locate the **Browser Interface URL**.
 - a. Press the **Menu** button on a remote control, or press **Menu** on the *Remote Control* page of the Kaleidescape iPad app.
 - b. Use the arrow buttons to highlight **System**, and then select **Status**.
 - c. Highlight **System Summary** to see the **Browser Interface URL**.
 - d. Enter the **Browser Interface URL** in the web browser.

If access to the onscreen display of a Kaleidescape player is not readily available and the IP address of the server is known, try entering this in the web browser. The **Browser Interface URL** is the IP address of the server.

Special Cases

Under special conditions, other methods are used to access the browser interface.

- ▶ Using a link local address when the server has an unknown static IP address.
- ▶ Using a serial number when more than one Kaleidescape System is on the same network

Link Local Address

The link local address method is used in extreme cases under the following conditions:

- The server has an unknown static IP address.
- The server is on a different subnet than the computer.

(Using the link local address is a somewhat complicated procedure requiring setting the computer to a static IP in the 169.254.xxx.xxx range).

For detailed instructions on using the link local address, see Knowledge Base article at www.kaleidescape.com/go/link-local.

Server Serial Numbers

When more than one Kaleidescape System is on the same network, using `http://my-kaleidescape` accesses one of the servers.

To open the browser interface for a specific server, enter `http://ks-` followed by the twelve-digit serial number of the server.

For example, for a server with the serial number **0000 0001 2345**, enter
`http://ks-000000012345` for Windows or
`http://ks-000000012345.local` for Mac.

A dealer who has a demonstration system plus one or more customer systems on the dealer's network can access the browser interface for each system using this method.

Network Switches

Gigabit Switch

A Gigabit switch is recommended for any Premiere line installation, and is required to watch more than one Blu-ray quality movie from the same server at the same time. Both server and player require a 1000Base-T connection for 1000Base-T throughput.

All-in-one devices that combine the functions of a router and a switch are generally less effective and not recommended. Kaleidescape does not recommend a particular network switch, because there are several quality network switches on the market; however the following switches were tested and worked successfully:

- Dell PowerConnect Series Gigabit Ethernet switches (27xx, 28xx)
- Cisco Small Business Managed Gigabit Switches (SRWxxxx)
- Pagedge Gigabit Switches (SWxx-GBx)

Multiple Switches

If more than one 1000Base-T switch is on the network, make sure all switches are interconnected using only 1000Base-T switches.

- Do not use 100Base-TX switches.
- Do not use a router as a switch.

Network Connections

Cat5, Cat5e and Cat6 network cabling can be used. Network cabling must have all four pairs of the cable terminated at each connector for 1000Base-T speed.

Kaleidescape strongly recommends the use of wired Ethernet network connections between servers and players. Wireless and powerline connections work well for providing Internet access to the Premiere system, for connecting control systems, and for accessing the browser interface from a computer; however, a wired Ethernet network must be used for connecting the Premiere line components because there is little tolerance for latency while streaming movies or music.

Up to 54 megabits per second of network bandwidth is used while streaming a Blu-ray quality movie. Blu-ray quality movies are not compressed when downloaded or imported. Full audio and video fidelity are maintained.

A single 1U+ Movie Server or 3U Server can stream up to 15 Blu-ray quality movies over a well-designed 1000Base-T network at the same time.

Configuring Network Settings

Assigning Fixed IP Addresses Using DHCP Reservations

DHCP reservations provide a central point of management for all IP allocations at a site. With DHCP reservations, network parameters such as IP addresses, subnet mask, default gateway, and DNS servers are set in one place — at the DHCP server. If any of these parameters change, only the DHCP server has to be modified.

For most installations, the DHCP server built into the router is perfectly adequate.

The procedure to create DHCP reservations is device-specific. Refer to the router or DHCP server documentation for instructions. DHCP reservations are usually made using MAC addresses. To see MAC addresses for Premiere line components, go to the **SETTINGS > Components** page on the browser interface. Refer to [Configuring System Components on page 76](#).

The MAC address of a player can also be found on the **System Summary** view of the onscreen user interface.

Resetting a Player or Disc Vault to Use a DHCP Address

To remove a static IP configuration on a player or disc vault, press the network **RESET** button on the back of the component to restore the factory default DHCP setting. The network **RESET** button is located just left of the analog audio connectors on Premiere line players including the M700 Disc Vault, or in the middle of the back panel on the DV700 Disc Vault. Locations of the **RESET** button can be viewed in the section titled, [A/V Connections to Players in the Premiere Line on page 29](#).

Note: For servers and legacy players, the configuration must be changed on the browser interface **NETWORK** settings.

To activate the **RESET** button, insert a paperclip in the reset hole. Press until the indicator on the right side of the **Network** connector starts blinking, then release. The player or disc vault restarts with the factory default DHCP setting.

Assigning Static Network Addresses

If the installation site does not have a DHCP server, or if DHCP cannot be used for Premiere line components, IP addresses can be assigned manually. See [Network Settings on page 91](#). Add a DHCP server temporarily to the site network to access the browser interface and enter IP settings that are valid for the local site network.

Configuring Network Settings from the Serial Port

All Premiere line components, with the exception of the M300 Player, have a serial port (RS-232). If the IP address cannot be determined, it can be reset or changed by connecting a DB-9 serial cable to the serial port of the Premiere line component and a standard DB-9 serial port on a computer (or a known good USB to serial adapter). Use a straight-through cable for players and a crossover cable for servers.

Refer to the Knowledge Base article at www.kaleidescape.com/go/set-network-settings for a list of commands.

Appendix D

Installation Checklist

This checklist clarifies the tools and equipment needed to assist with the installation, helps verify the basic site requirements where the components will be installed, and outlines the settings to configure once the Premiere system is operational.

Tools and Supplies

In addition to common tools such as screwdrivers and pliers, having the following items on hand can help the installation go smoothly, and assist with troubleshooting when needed. All items should be tested ahead of time and known to be working.

- ☐ Spare Cat5e or Cat6 cables
- ☐ Ethernet cable tester
- ☐ Spare 4 port router
- ☐ Spare 8 or 16 port 1000Base-T switch
- ☐ Small test display with appropriate inputs
- ☐ Spare HDMI cable
- ☐ Spare power strip
- ☐ Extra IEC power cord
- ☐ Kaleidescape Remote with fresh batteries
- ☐ Serial RS-232 cable (F-F DB-9 null modem cable)
- ☐ Cable ties
- ☐ Label maker
- ☐ Blu-ray disc, DVD and CD
- ☐ A computer with an Ethernet port and a web browser running an up-to-date version of the Java software (current version can be downloaded from www.java.com).

The computer should also have a working serial port or a known good USB to serial adapter in the rare case a serial capture needs to be performed.

Refer to: [Retrieving Diagnostic Information Quick Reference Guide.](#)

Equipment

The following items contribute to a healthy environment.

- ☐ Single router or other device capable of issuing DHCP addresses. If the home network uses static addresses, then a list of the IP addresses of the network nodes should be available.
- ☐ 1000Base-T or 100Base-TX switch with enough ports for all devices. A 1000Base-T switch is recommended, and required if more than one Blu-ray quality movie will be played from a server at the same time.

Refer to: [K000017] [Does Kaleidescape recommend a particular network switch?](#)

- ☐ Cat5e, Cat6 or higher grade network and patch cables from the equipment rack to all Premiere line components.
- ☐ High quality audio and video cables in the proper lengths. When players will output 1080p video, High Speed HDMI cables should be used. HDMI must be used to output lossless Blu-ray audio.

Refer to: [HDMI and the Kaleidescape System Technical Note](#)

Basic Site Requirements

Survey the site for sufficient resources, and gather necessary information before installation commences.

- ☐ Check that there is adequate power for all the devices being installed. Servers require a high-quality surge protector. A UPS is optional.

Refer to: [K000069] [How much power do Kaleidescape components require?](#)

- ☐ Check that the planned locations for Premiere line components have proper cooling. The operating temperature range varies by component.

Refer to: [A/V Installation Cooling Guide](#)
[Environmental Specifications for Kaleidescape Components](#)

- ☐ Verify that there is a working high-speed Internet connection at the site.
- ☐ Determine if control of the Premiere system will be done over TCP/IP, Infrared (IR), or Serial (RS-232). When using control via TCP/IP, consider whether to assign each Premiere line component a static IP address or a DHCP reservation on the DHCP server.

Download the latest documentation, programs and templates from www.kaleidescape.com/support/control-systems.

- ☐ Record the following information for the network devices and make sure there is a substantial number of free IP addresses on the DHCP server.
- ☐ Router
 brand/model: _____
 user: _____ *password:* _____
 IP address: _____ (*this is also likely the gateway address*)
- ☐ Gateway address (if different than the router IP address)

- ☐ DHCP address range
 _____ to _____
- ☐ Subnet mask

- ☐ DNS server addresses
 preferred: _____ *secondary:* _____
- ☐ Switch
 brand/model: _____
 user: _____ *password:* _____
 IP address: _____
- ☐ List all display devices that will be connected to Premiere line players, along with the primary input, the native resolution, and indicate when screen masking is used.

| Location | Player Serial Number | Display | Resolution | Input | Masking |
|------------------------|----------------------|-------------------|------------|-------|---------|
| theater EXAMPLE | 020600005678 | Sony VPL-VW1100ES | 1080p60 | HDMI | ✓ |
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Note: If NTSC and PAL content will be played from the player, the display device must support both formats, or it must be connected to an external video processor that converts NTSC to PAL, or PAL to NTSC. Premiere line players do not convert one format to the other.

- ☐ Create installation diagrams for the network and audio/video. Note the cable distances for all A/V, Ethernet, and control interfaces. Make sure these distances do not exceed specifications.
- ☐ With a complex HDMI path, check that the HDCP repeater device limit for each component in the path is greater than or equal to the total number of components in the path. Premiere line players support up to 16 downstream devices.
- ☐ For each Premiere line component, take note of the following information. The Network/Control information may need to be entered after installation is complete.

| Type | | | General | | Network/Control | | | | | |
|--------|--------|-------|---------------|----------------|-----------------|--------|------|-------------|-------------------|-------|
| Server | Player | Vault | Serial Number | Location | IP Address | Static | DHCP | Reservation | MAC Address | CPDID |
| ✓ | | | 010300001234 | basement rack | 192.168.15.32 | ✓ | | | 00:07:E9:B5:AA:38 | 2 |
| | ✓ | | 020600005678 | master bedroom | 192.168.15.33 | | ✓ | | 00:0B:63:00:75:93 | 3 |
| | ✓ | ✓ | 060000012345 | theater | 192.168.15.34 | | | ✓ | 00:0B:63:00:92:1B | 4 |
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Note: MAC addresses are listed on the **Components** page of the browser interface. Player MAC address are also listed on the **System Summary** page of the onscreen user interface.

Note: The Control Protocol Device ID, or **CPDID**, is only necessary when routing commands through a central device (e.g., a server). It is configured on the **CONTROL** tab of the **Settings** page for the individual component on the **Components** page of the browser interface.

System Configuration

Before the Premiere system is ready to use, review the following items.

- ☐ Ask the customer to **activate the system**. Installation, configuration and testing can be performed prior to activation.

Refer to: [K001255] [How do I activate my new Kaleidescape System?](#)

- ☐ Add all components to the Premiere system.

This is done by selecting **add a component** from the message at the top of the browser interface.

Refer to: [Adding Components on page 99](#)

- ☐ When necessary, assign a static IP address and/or control protocol ID number to each component.

This is done from the **Components** page of the browser interface.

Refer to: [K000022] [How do I assign or change IP addresses to components?](#)

- ☐ Allow enough time to add the customer's content, taking into consideration the speed of the Internet connection for downloading content from the Kaleidescape Movie Store, and the number of titles to be imported and/or cataloged.

Cataloging takes less than a minute per disc, while it takes about 1 hour to import each Blu-ray disc and 15 minutes to import each CD. CSS-protected DVDs cannot be imported to systems purchased from Kaleidescape on or after November 30th, 2014, but they can be cataloged so that they appear in the onscreen user interface, just like content downloaded from the Kaleidescape Movie Store.

For more information, visit www.kaleidescape.com/protected-dvds.

- ☐ Configure parental controls for movies when applicable.

Refer to: [K000348] [How do I set up and use parental controls on a Premiere line system?](#)

Player and Disc Vault Configuration

To maximize the potential of each player and disc vault, the following settings should be configured.

- ☐ Enter a unique name for each player and disc vault. Assigning a “friendly name” like this makes the onscreen user interface and the Kaleidescape iPad app easier to use.

This is done on the **Components** page of the browser interface.

Refer to: [K001784] [How do I change the name of a Kaleidescape component?](#)

- ☐ When using music on a Premiere line player, enter the **Zone 1 Name (for music)** on the **Components** page of the browser interface. Descriptive names help when

selecting the correct zone.

- ☐ Check audio and video on each player for optimal performance. Manually configure the audio or video signal when necessary.

Refer to: [HDMI and the Kaleidescape System Technical Note](#)

- ☐ Choose a CinemaScape mode and set up screen masking settings when a projector with a screen masking system is connected to a player.

Refer to: [CinemaScape Technical Note](#)

- ☐ Configure language preferences for each player.

Click the **Settings** button on the *Components* page and open the **LANGUAGE** tab to choose preferences.

- ☐ Change the DVD region if necessary. Contact your dealer or Kaleidescape Support if the Blu-ray region needs to be changed.

Refer to: [K000101] [How do I change the region code?](#)

Kaleidescape Support

For additional help with the installation of a Premiere system, contact Kaleidescape Technical Support.

- ▶ Send email message to support@kaleidescape.com.
- ▶ Call the support line at **+1 (650) 625-6160**.

Be prepared to provide the serial number of the Kaleidescape server (located on the back of the server). Serial numbers are printed on labels located on the backs of all components and behind the front panels of 1U+ Movie Servers and 3U Servers.

The Kaleidescape website always has the latest support updates.

<http://www.kaleidescape.com/support>