

Section 1

Overview

The Kaleidescape 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.

Any Kaleidescape component can be used in any Kaleidescape System, regardless of the date of manufacture. Software updates are issued automatically via the Internet.

The Kaleidescape System

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

Note: Kaleidescape also offers a stand-alone Mini System (server and player combined).

Kaleidescape servers store movies and music and deliver this content to Kaleidescape players connected to audio and video equipment. The Kaleidescape System supports easy integration into audio, video and whole-house control systems, such as Crestron, AMX, Elan, and Philips Pronto.

A Kaleidescape System can be as simple as a single Kaleidescape 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

Kaleidescape components are designed to be easy to install: simply connect the cables. [Table 1-1](#) lists current Kaleidescape components.

Table 1-1 Currently Available Kaleidescape Components

Kaleidescape Component	Model Number	Description
1U Server	KSERVER-1500	One rack-unit server with up to four 2 TB Disk Cartridges. Holds up to 150 Blu-ray Discs or 900 DVDs.
3U Server	KSERVER-5000	Three rack-unit server with up to fourteen 2 TB Disk Cartridges. Holds up to 600 Blu-ray Discs or 3,600 DVDs.
Mini System	KSYSTEM-120	Complete Kaleidescape System in a single component with up to four 500 GB Mini Disk Cartridges. Holds up to 225 DVDs.
M500 Player	KPLAYER-M500	Movie player that imports and plays CDs, DVDs and Blu-ray Discs. Note: There are two versions of this player, M500-A and M500-B, depending on the Blu-ray Disc region.
M300 Player	KPLAYER-M300	Smaller version of the M500 Player without a disc tray, S-video, optical audio or RS-232. Plays imported CDs, DVDs and Blu-ray Discs. Note: There are two versions of this player, M300-A and M300-B, depending on the Blu-ray Disc region.
Music Player	KMUSIC-4000	Music player that supports up to four simultaneous, independent zones of high-quality audio. Can also be used to import CDs and DVDs.
Speed Reader	KSPEEDREADER-2	Bulk media importer that handles up to 280 discs in one session. Note: Imports DVDs and CDs but not Blu-ray Discs.

Data Protection

Every Kaleidescape server 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 does 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 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 Kaleidescape 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

A Kaleidescape System can be controlled by several types of control devices.

- ▶ Infrared (IR) remotes
- ▶ Touch panels
- ▶ Keypads
- ▶ iPhone or iPod software applications
- ▶ Web tablets

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 98](#).

Installation Requirements

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

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

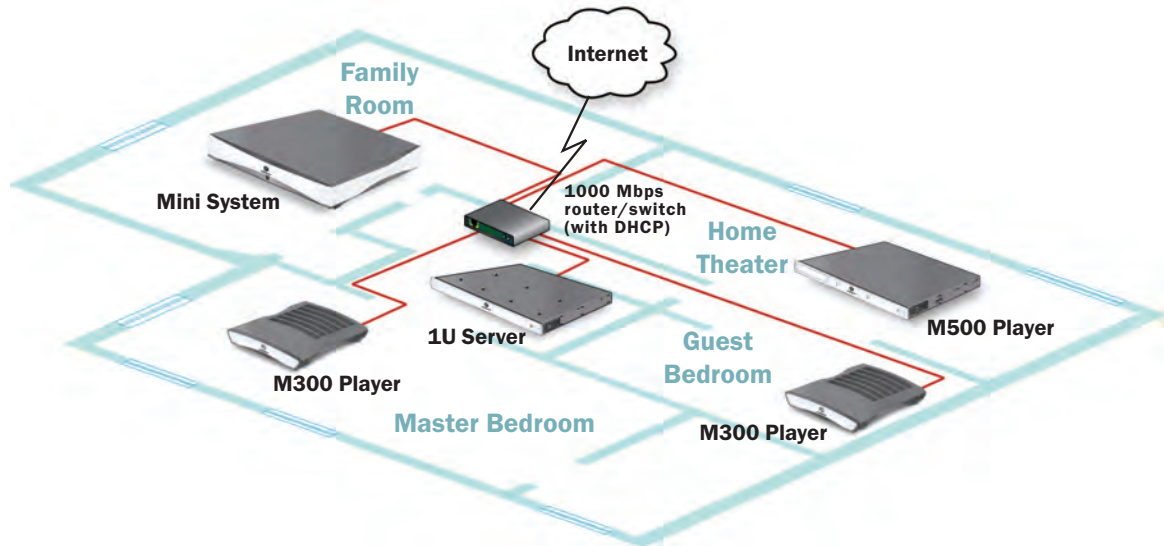


Figure 1-1 Typical Installation

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 a web browser

Network Requirements

The site network must meet the following minimum requirements:

- High-speed Internet connection
- Gigabit Ethernet switch with sufficient ports
- Cat5 or better twisted-pair Ethernet cables with RJ45 connectors

For detailed network requirements, see [Network Requirements on page 153](#).

Audio Cables

Kaleidescape movie players have up to four 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 71](#).

Video Cables

Some Kaleidescape players have up to four video outputs including a combined audio/video HDMI output.

For more information about video installation, see [Video and Audio Settings on page 71](#).

Installation Locations

When installing Kaleidescape Systems, 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 20](#).

Space Planning

All Kaleidescape components, except the Speed Reader, fit in standard 19 inch racks and ship with removable mounting brackets.

Note: Mini players also fit in a 19 in. rack when mounted on an optional Mini Player Rack-Mount Shelf.

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

- Components must have adequate ventilation
- All components require a 1 inch clearance in front and a 2 inch clearance at the back
- 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 Server has a removable front panel for disk cartridge access
- M500 Players, Music Players, and Mini Systems have disc trays that must be able to eject unobstructed.

Power Supplies

Kaleidescape component power supplies 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 22](#) for a detailed list of component power consumption.

A/V Connections to the Kaleidescape Players

There are two options for installing Kaleidescape components.

- 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 24](#) lists cable length limits for optical and coaxial cables.

Unpacking and Inspection

The Kaleidescape 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 and blank cartridges already installed in the server. The server ships with an IEC-type AC power cord and screws for rack mounting.

1U Server

The 1U 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 wrapped in a separate pouch.

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. This shelf is available separately and can hold either the 1080p Mini Player or the M300 Player.

Music Player

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

Mini System

The Mini System ships with disk cartridges and blank cartridges already installed, in a single box with the following items:

- Remote control and two AA batteries
- IEC-type AC power cord
- Rack mounting kit including cooling duct, two rack ears, and screws for rack, duct and rack ears
- Ferrite bead for network cabling

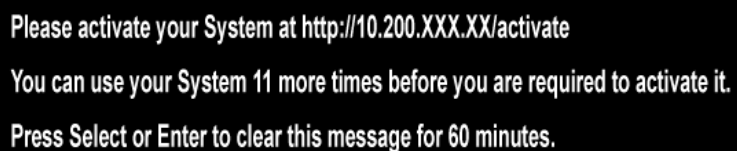
Kaleidescape DVD Collections

DVD Collections ship in boxes containing approximately 100 DVDs.

Activating the System

The Kaleidescape System must be activated.

Until the Kaleidescape System is activated, the following reminder message appears when playing a movie that has been imported into the system:



Please activate your System at <http://10.200.XXX.XX/activate>
You can use your System 11 more times before you are required to activate it.
Press Select or Enter to clear this message for 60 minutes.

This 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 this point, 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. Blu-ray Discs, DVDs and CDs can also be imported before activation.

This message disappears once activation is verified over the Internet.

Use the following procedure to activate the system.

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

1. Open a web browser and go to www.kaleidescape.com/activate. The **Activate your Kaleidescape System** page appears. See [Figure 1-2](#).

The screenshot shows the 'Activate your Kaleidescape System' web page. At the top, there is a navigation bar with links for HOME, THE EXPERIENCE, PRODUCTS, BUY, SUPPORT, FAQ, and NEWS, along with a search bar. The main heading is 'Activate your Kaleidescape System'. Below this, the page is divided into several sections:

- Your Information:** A form with fields for First Name, Last Name, Title, Company Name, Address 1, Address 2, City, Country (with a 'Select Country' dropdown), State/Province (with a 'Select State' dropdown), Postal Code, Daytime Phone, Fax, Email Address, and Confirm Email. A photo of a family is shown to the right of this section.
- Congratulations on your purchase of a Kaleidescape System!** A message stating: 'We are pleased to welcome you as a customer and we hope you will enjoy your Kaleidescape System for years to come. Your Kaleidescape System must be activated prior to use. Activation of your Kaleidescape System is easy. Simply tell us about yourself and your Kaleidescape System. If you agree to the terms of the Kaleidescape Service & License Agreement, the activation process will update your Kaleidescape System and allow you full access to all features of the System. Required fields are in BOLD.'
- Your Kaleidescape System Information:** A field for 'Serial Number' with a link: 'Help me find a Serial Number for one of my components'. A note below states: 'Note: In order to activate your Kaleidescape System, you need to provide the serial number for just one of the components in the System. You do not need to provide the serial numbers for every component - with a single serial number you can activate the entire System.'
- Your Installation Location Information:** A section asking 'This Kaleidescape System will be installed in/on:' with radio button options for 'a Single-family residence', 'an Aircraft or a Yacht', and 'Other'.
- Your Licensing Information:** A section asking 'This Service & License Agreement will be entered into by:' with radio button options for 'the Individual described above' and 'a Legal Entity or Legal Person (e.g. a Trust, LLC, Corporation, etc.)'.
- Kaleidescape Service & License Agreement:** A scrollable text area containing the full text of the agreement, starting with '1. Introduction' and 'Welcome to the Kaleidescape family! Congratulations on your 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 that 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 covers the terms and conditions that will apply to your use of the Kaleidescape System, and constitutes a legally binding agreement between you and Kaleidescape, Inc. ("Kaleidescape"). By accepting delivery of your Kaleidescape System or by using it, you agree to all the terms and conditions in this agreement. I acknowledge and agree that you are bound by all the terms of this Agreement.'

At the bottom of the agreement section, there are two radio button options: 'I represent that I have read and understood this entire Agreement and I agree to all the terms of this Agreement as stated above.' and 'I do not accept the terms of this Agreement as stated above. I understand that I will not be allowed full access to all features of the System.' Below these is a blue button labeled 'Activate My Kaleidescape System'. A final note at the bottom states: 'Note: Translations of the Kaleidescape Service & License Agreement are available in Spanish, French, German and Russian. These translations are currently out of date. Please refer to the English language version of the Kaleidescape Service & License Agreement for the most current terms.'

Figure 1-2 Activation Window

2. Enter user information.
3. Scroll down and enter system information. Note that entering the serial number for a single component activates the entire system.
4. Select the button to agree to the terms of the Kaleidescape Service & License Agreement (SLA), then click on the **Activate my Kaleidescape System** button at the bottom of the window.

A message appears confirming a successful activation. See [Figure 1-3](#).

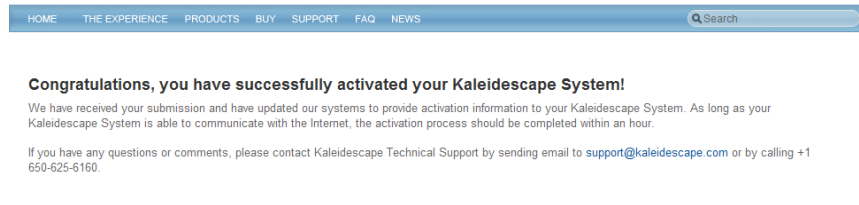


Figure 1-3 Activation Confirmation Message

5. Keep the Kaleidescape System on and connected to the Internet until the reminder message disappears.

When activation is complete, Kaleidescape sends an email message back verifying activation.