# Kaleidescape Terra

**Installation Guide**

**January 2016**

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Revision 25-Jan-2016

This document revision corresponds to kOS software version 7.1.

# Overview

This document provides steps for:

- ▶ Installing a Terra movie server.
- ▶ Integrating a Terra server with a Kaleidescape Encore system.

## Kaleidescape Terra

The Kaleidescape Terra movie server was designed to store movies on an array of high-quality hard drives, without added compression or loss of quality. You can add Terra to any Encore system to store movies downloaded from the Kaleidescape Movie Store, and make them available to every Strato and Alto player in the system. Terra also improves the browsing and playback performance of every player in the system, and makes it possible to configure an Encore system with a large number of players.

A Terra server will only work in a Kaleidescape Encore system.

Features of Terra:

- ▶ Storage for up to 400 4K Ultra HD movies, 800 Blu-ray quality movies, or 3,600 DVD quality movies.
- ▶ Multiple Terra servers can be clustered to store larger collections.
- ▶ Provides caching and computing services that enhance player performance.
- ▶ Enables configurations with large numbers of viewing zones.
- ▶ Up to seven simultaneous playbacks of 4K Ultra HD movies.
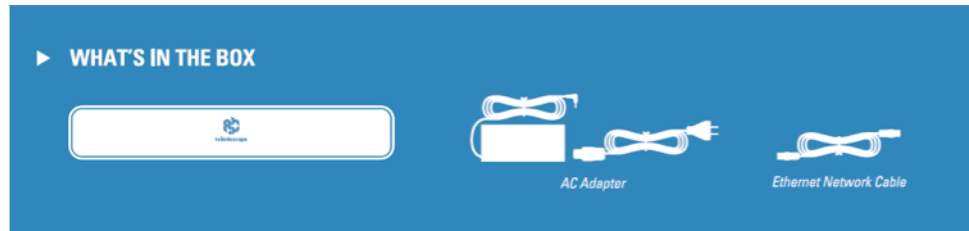- ▶ Up to 15 simultaneous playbacks of Blu-ray quality movies.

Terra is able to continue operating even after a hard drive fails. The movies that were stored on the failed drive can be restored from the Kaleidescape Movie Store, which happens automatically when the failed drive is replaced. A failed hard drive can be replaced in the field.

Terra can simultaneously deliver multiple movies over a standard residential network to Strato and Alto players anywhere in the home. Once a movie is downloaded and stored on Terra, it can be enjoyed immediately from any player. You can purchase Terra with either two or four hard drives. The two-drive model can be upgraded to three or four drives in the field.

## What's in the Box

The following items are included in the box:
- ▶ 1x Terra Server
- ▶ 1x Accessory box containing:
  - ▶ 1x AC Adapter
  - ▶ 1x Ethernet Network Cable



## Front Panel Buttons

There is one button behind the clear acrylic front panel of Terra:
- ▶ Power – turns Terra on or off



## Front Panel Indicators

There are four indicators located on the front panel of Terra. These indicators illuminate briefly during startup, but otherwise are only visible in the event of a problem:
- ▶ Temperature – indicates operating temperature is too hot or too cold
- ▶ Hard Disk – indicates one of the hard disks inside Terra has a failure
- ▶ Network – indicates that Terra encountered a network error
- ▶ General – check the system's browser interface for details of the error

# Physical Installation

## Planning the Installation

### Ventilation and Clearance

Use the following guidelines when installing system components to ensure proper clearance and ventilation. These guidelines apply to all installations including rack mounting.  (Rack-mount hardware sold separately.)

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.

### Power Requirements

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

Kaleidescape recommends a grounded outlet with a high-quality surge protector for the power source for players and servers. A UPS is optional.

### Network Requirements

A Gigabit network is strongly recommended, and is required if there is more than one player linked and Blu-ray quality movies are played in more than one room at the same time. 4K Ultra HD movies require a Gigabit network.
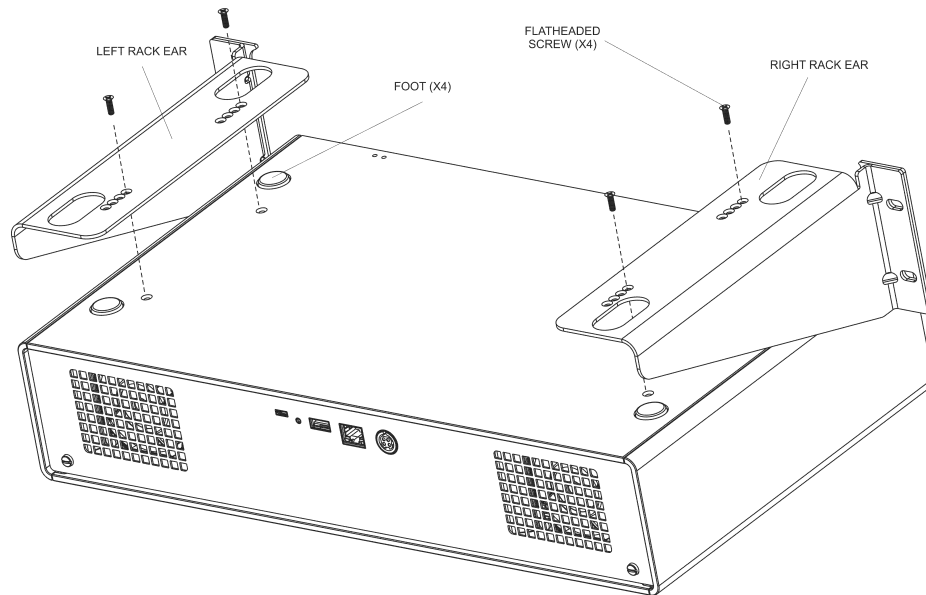
## Installing Terra

### Tabletop / Shelf Installation

1. Choose a suitable location that is sturdy enough to hold the Terra.  A Terra weighs approximately 22 pounds with four hard drives.
2. Place the Terra onto the tabletop or shelf. Terra ships with feet attached.
3. Installation is complete. You may now proceed to the Connection section below.

## Rack Installation

1. Installing Terra in a rack requires the Terra rack-mount kit (KMOUNT-TERRA), sold separately.

2. Terra requires two rack units of space. Determine a location in the rack to install Terra.

3. Place the Terra server upside down on a soft, clean surface.



4. Assemble the rack sides onto the bottom of Terra as shown:

> a. Remove and keep the four flat-head screws installed near the feet on the bottom surface of the Terra.

> b. Place the rack ears over the unit and align with the screw holes that were just exposed when the screws were removed.

> c. Reinstall the four flat-head screws through the rack ears and into the aligned screw holes.
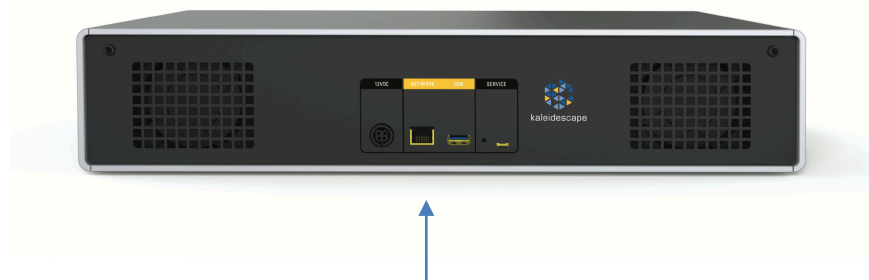
## Network Connection

All Kaleidescape components in the system must be connected to the same Ethernet network.

1. Ensure your Kaleidescape Alto and/or Strato players are connected to a wired network and powered on.

Note: If you have been using a single player connected via Wi-Fi, you must first connect it to the wired Ethernet network before you can link the Terra server.

2. Insert an Ethernet cable (Cat5e or better) into the network port on the back of the Terra server.



3. Insert the other end of the Ethernet cable into a 1000Base-T Ethernet switch for optimal network communication.

Note: When Terra is turned on, the light on the left side of the network port will illuminate to indicate a successful network connection. It will be amber if the connection is 1000Base-T, or green for 100Base-TX. The light on the right side of the port blinks when there is network activity.

4. Connect the power supply.

5. Turn on the Terra Server using the power button.

The power button is behind the front acrylic faceplate. To open the faceplate, gently press inward above the Kaleidescape logo. You will hear a click, and the faceplate will swing out and down.

Press the power button, and close the door. The Kaleidescape logo will be illuminated, indicating that Terra is turned on.

Note: The disk cartridges are also accessed by opening the faceplate. Do not remove these cartridges without instructions from Kaleidescape Support.

Initialization may take several minutes.
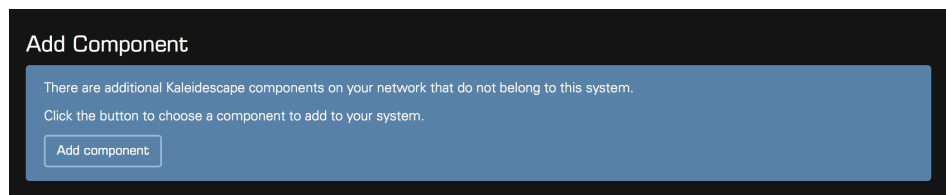
# System Configuration

## First-Time Setup

If you are setting up a new system with Alto and/or Strato players and one or more Terra servers, first set up all of the players, ensure they are linked to each other, and complete the Activation step. You can find out more about activation and linking in the player's installation guide (available [here](#)).

Once all players are linked to each other and the system is activated, you can proceed to add the Terra to the system.
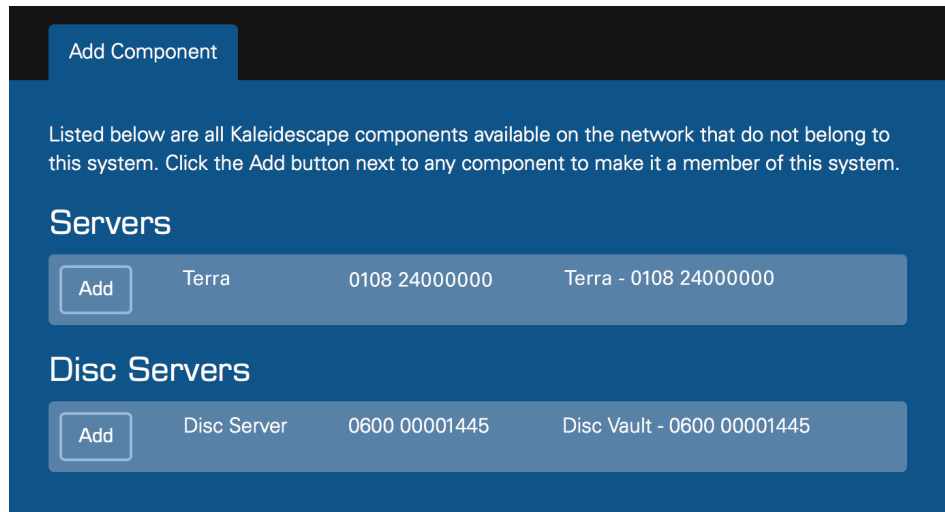
### Browser Interface

You will use the browser interface to add the Terra server to the system. The browser interface must be accessed from a computer on the same local network as the Kaleidescape System.

1.  While looking at the onscreen display of one of the players, press the Menu button on the remote control and select **System → Status → System Summary**. You will see the browser interface URL at the bottom of the system summary.

2.  Open that browser interface URL in the web browser on your computer.

3.  Select the **Settings** tab at the top of the browser interface page.

4.  Select the **Components** sub-tab.

5.  At the bottom of the Components page, you will find an Add Component section. Click the **Add component** button.

    

    If the Add Component section is not present at the bottom of the Components page, check that Terra is powered on and connected to the same Ethernet network as the players.

6. The Add Component page lists all Kaleidescape components on the local network that are not part of the system. Locate the Terra server in the list and click Add.



7. It may take several minutes for the Terra server to join the system, especially when a software update must be performed.

8. When adding more than one Terra server, repeat step 6.