

# Kaleidescape Co-Star for Lumagen

## Installation Guide

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The Co-Star solution allows a Strato movie player to present a unified onscreen library that includes all of a Kaleidescape customer's movies – from DVD discs to downloaded 4K HDR movies – in one seamless interface.

With the Co-Star for Lumagen feature, the Strato player is paired with a second Kaleidescape player via a Lumagen Radiance Pro, which can switch and scale video for 4K displays, convert HDR video to SDR for older displays, and send HDMI audio separately to receivers and audio processors that cannot handle a 4K video signal. Strato directs the processor to switch between players, enabling playback of movies from both systems.

Co-Star may be used in one of two configurations:

1. Strato may be paired with a compatible player that is part of a Premiere or Cinema One system, to enable easy playback of the content stored on that other system.
2. Strato may be paired with an Alto player within its own Encore system, to enable playback of cataloged discs stored in a Disc Server.

In both configurations, Strato presents the user interface and handles playback of all movies downloaded to the Strato system, including 4K content. When someone plays a movie that is stored on the Premiere system (or that is on a cataloged disc in a Disc Server), the Radiance Pro's A/V source is automatically switched from Strato to the paired player, which plays the movie. Strato relays control commands to the paired player, so playback appears as if the movie were playing on the Strato.

These two configurations are covered separately in the remainder of this installation document. Instructions for pairing with Premiere and Cinema One begin on the next page. Instructions for pairing with an Alto player begin on page 8.

# Pairing with Premiere or Cinema One

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## Preparation

### Hardware Requirements

Each player zone that will use the Co-Star for Lumagen feature requires:

- ▶ A Strato or Strato C player
- ▶ An M-Class Premiere player (M300, M500, M700), or a second-generation Cinema One
- ▶ A Lumagen Radiance Pro processor

### Minimum Software Version and Accessing Browser Interface

The Strato system must be running kOS 10.2 or higher. The Premiere or Cinema One system must be running kOS 8.1 or higher. You will need to access the browser interface of the Strato system using a computer or tablet. Follow these instructions to check the kOS versions, and to get the URL for the browser interface of each system.

1. While viewing Strato's onscreen display, press the MENU key on the Kaleidescape IR remote.
2. Select "System" tab then select "Status".
3. Select the "System Summary" tab.
4. Check the software version, and make note of the browser interface URL.
5. Repeat these steps for the Premiere or Cinema One system.

### Player Configuration

The Strato and Premiere/Cinema One system should be tested independently, before connecting to the Lumagen Radiance Pro, to verify basic functionality. Also, because both players will be used for playback, it is important that their playback-related settings are the same. Configure these settings via each player's onscreen Settings interface or browser interface.

Typically, you will only need to configure the Strato to match the settings of the existing player, but if you do need to make changes to the Premiere system's settings, this must be done using the Premiere system's browser interface. **If pairing with a Cinema One, you must make any changes in the Cinema One's onscreen settings interface before pairing the player**, since the interface will not be accessible after pairing.

Ensure that the following settings are configured the same for both players:

- ▶ All audio settings
- ▶ Screen aspect ratio (CinemaScope mode)
- ▶ Screen masking / subtitle repositioning
- ▶ Subtitles and closed captions
- ▶ Preferred movie language

# Physical Installation

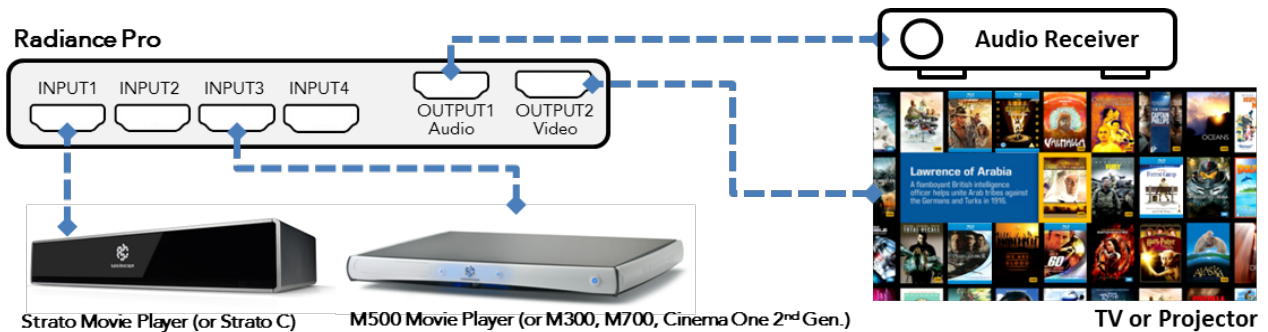
## Planning the Installation

It is helpful to locate the Strato within seven feet of the player with which it will be paired. This will allow use of the provided cables, which support high-speed HDMI 2.0 signals. If using alternate cables, ensure that the cable connection from the Strato to the Radiance Pro, and from the Radiance Pro to the display, have been tested to pass an 18Gbps HDMI 2.0 signal and conform to Lumagen’s guidelines ([Radiance Tech Tip 19](#)).

For more information on cable requirements see the [Kaleidescape Strato Installation Guide](#).

## Connection Diagram

Connect the Strato to an 18 GHz input of the Radiance Pro, and connect the Premiere or Cinema One player to another input (9 or 18 GHz). Avoid using adjacent inputs, as each pair shares an input card (1&2, 3&4, etc) and switching is fastest between independent cards. Connect the video output to the TV, projector, or AV receiver.

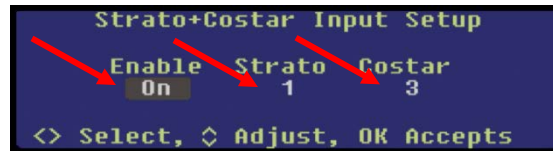


The connection diagram assumes direct connection to the display, or to a component that can pass through full 4K HDR (18Gbps) video to the display. If you are using a receiver or audio processor that does not support 4K HDR, you should connect the Radiance Pro directly to the 4K HDR display, and connect an audio-only Radiance Pro output to the receiver.

**Note:** Some 4K TVs and projectors only support full 4K HDR on specific ports, or enable it via the menu system. Check the TV or projector documentation to enable a setting such as “UHD Color”.

## Lumagen Radiance Pro Configuration

The Radiance Pro has a special Co-Star mode for communicating with a Kaleidescape Strato and paired player.



1. With connections as in the diagram above and both players powered on, view Strato's onscreen display: using the Lumagen remote, press *ON*, then *Input*, then Strato's input number.
2. Activate the Radiance Pro's Co-Star mode by pressing *Menu*, *0*, *5*, *7*, *6* on the Lumagen remote. You should see a Strato Co-Star Input Setup menu containing an **Enable** entry and input numbers for **Strato** and **Costar**.
3. Navigate with the Lumagen remote's arrow keys to set **Enable** to **On** and to set the input numbers to correspond to your Strato and Premiere connections. Press *OK* to exit.
4. **IMPORTANT:** You must press *Menu* on the Lumagen remote, then choose **Save** and press *OK* to save the Co-Star mode settings.

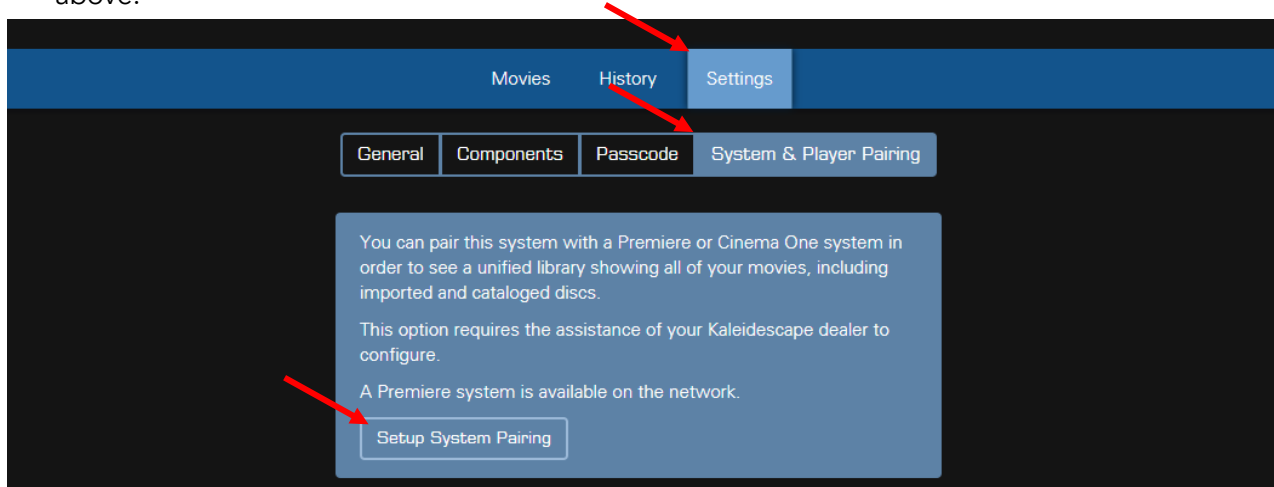
## System & Player Pairing

Pairing is a two-step process. First, you pair the two *systems* (Strato and Premiere, or Strato and Cinema One), so that Strato can see the contents of the library on the other system. Then, you pair *players* so that Strato can control the paired player and control the Radiance Pro.

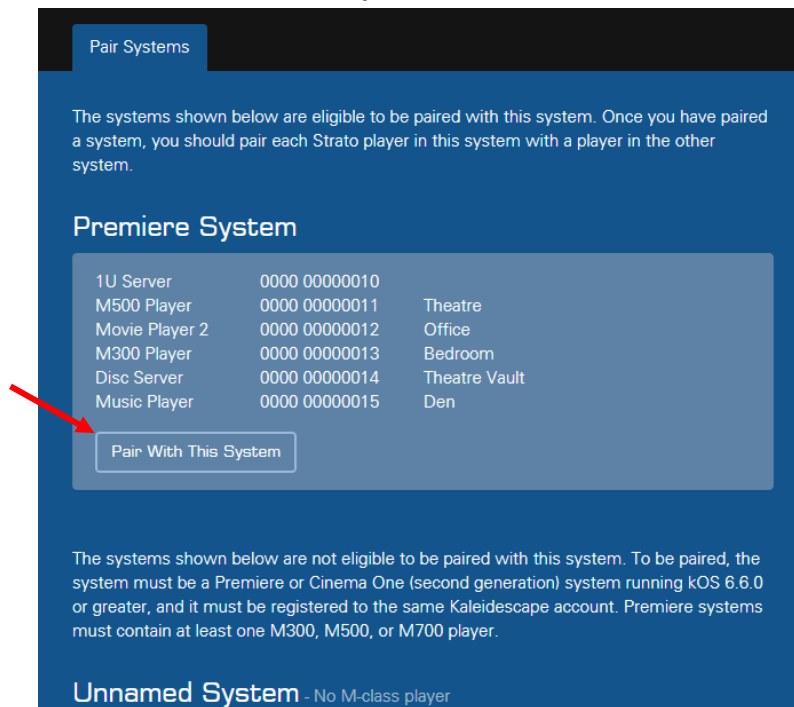
### Pairing Strato with the Premiere or Cinema One System

1. Ensure both systems are registered to the same Kaleidescape account, and are connected to the Internet.
2. In your web browser, enter the URL for the Strato system that you found in the [Preparation](#) section above.

3. Navigate to the **Settings** tab, then select **System & Player Pairing**. If this sub-tab is not visible, your systems may not be running the correct version of kOS. Refer to the [Preparation](#) section above.



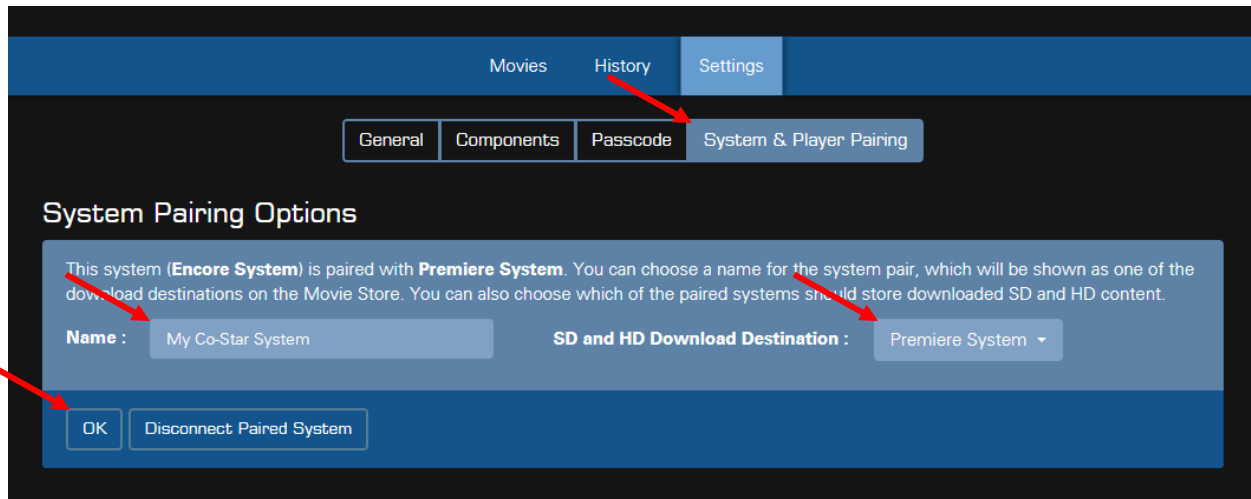
4. Click the **Setup System Pairing** button.
5. From the pop-up window, select the Premiere or Cinema One system to be paired with the Strato system, and click the **Pair With This System** button.



6. The pop-up window will close, and the **System & Player Pairing** page will refresh.
7. Enter a name for the system pair. The name entered here will be shown as the download destination in the Kaleidescape Movie Store.
8. By default, SD and HD downloads go to the Premiere or Cinema One system, leaving the Strato's storage available for 4K movies. If you have paired every Premiere or Cinema One

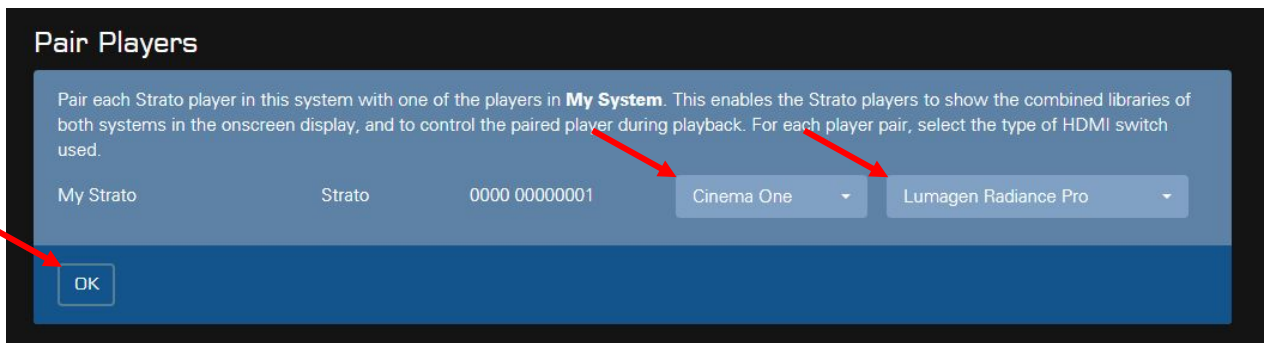
player with a Strato, you may wish to also send SD and HD movies to the Strato system for more immediate playback (avoiding the switch to the paired player).

9. Click the **OK** button to save system pairing options.



## Pairing Players

1. For each Strato player, select the Premiere or Cinema One player with which it is paired.
2. If the Co-Star software license for Lumagen is active, there will be an additional pull-down menu: select **Lumagen Radiance Pro** (see the Troubleshooting section below if this is not visible).
3. Click **OK** to complete the pairing.



## Verification

The onscreen display of each paired Strato should now include all titles on both the Strato and Premiere/Cinema One systems. Ensure you're seeing the correct titles.

Play titles stored on the Premiere or Cinema One, and verify you are seeing and hearing the movie as expected, and that you are returned to the Strato's onscreen display when playback stops.

Play 4K Ultra HD or 4K HDR titles on the Strato, and verify you are getting the full 4K signal and appropriate audio. Use the HDMI Capabilities and Status tool in the Strato browser interface to verify the correct signal. This tool is described in the [Kaleidescape Strato Installation Guide](#).

## Troubleshooting

The Strato and Premiere/Cinema One system should be tested independently, before pairing and connecting to the Lumagen Radiance Pro, so that all network, video and audio configurations work as expected. Radiance Pro firmware should be up-to-date.

In Strato's Browser Interface, if you are seeing an option to **Enable Player Pairing**, rather than the **Setup System Pairing** option described, then your Strato system also contains an Alto and a Disc Server. This is not a supported configuration. You must move your Disc Server to the Premiere or Cinema One system before pairing.

In the **Pair Players** menu, if you do not see a second pull-down menu containing a **Lumagen Radiance Pro** entry, your Co-Star software license for Lumagen may not be active. Contact your dealer.

If titles located on the Premiere/Cinema One system are not visible within the Strato onscreen interface, return to the Strato system's browser interface to verify that the systems are paired, and that the Strato is paired with a Premiere or Cinema One player. Until the players are paired, the Strato will not show titles from the paired system.

Once the players are paired and the Lumagen Radiance Pro is connected, if playback does not switch to the paired player correctly:

- ▶ Consult Lumagen's [Support Pages](#) for general questions about Radiance Pro configuration. Update the firmware if necessary.
- ▶ Ensure the Radiance Pro is on and displaying Strato's output by pressing *ON*, *Input* and Strato's input number on the Lumagen remote. Pressing *OK* will show video signal details.
- ▶ Ensure the Radiance Pro is in the correct Co-Star mode (described in [Lumagen Radiance Pro Configuration](#), above), by pressing *Menu*, *0*, *5*, *7*, *6* on the Lumagen remote.
- ▶ If you paired more than one zone, double-check to ensure the correct players were paired.
- ▶ If using HDMI cables other than those supplied with the Co-Star package, verify cable performance. Poor signals over very short or very long cables can interfere with proper switching.
- ▶ Remove and re-apply power to the paired players that are malfunctioning

# Pairing with Alto

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## Preparation

### Hardware Requirements

Each player zone that will use Co-Star requires:

- ▶ A Strato or Strato C player
- ▶ An Alto player
- ▶ A Lumagen Radiance Pro processor

### Minimum Software Version and Accessing Browser Interface

The system must be running kOS 10.2 or higher. During pairing setup, you will need to access the system's browser interface using a computer or tablet. Follow these instructions to check the kOS version, and to get the URL for the browser interface:

1. While viewing Strato's onscreen display, press the MENU key on the Kaleidescape IR remote.
2. Select "System" tab then select "Status".
3. Select the "System Summary" tab.
4. Check the software version, and make note of the browser interface URL.

### Player Configuration

The Strato and Alto should be tested independently, before connecting to the Lumagen Radiance Pro, to verify basic functionality. Also, because both players will be used for playback, it is important that their playback-related settings are the same. Configure these settings via each player's onscreen Settings interface or browser interface.

Typically, you will be matching the Strato's settings to those of an existing Alto player, but **if you do need to make changes that require access to the Alto player's onscreen settings, you must do this before pairing the player**, since the interface will not be accessible after pairing.

Ensure that the following settings are configured the same for both players:

- ▶ All audio settings
- ▶ Screen aspect ratio (CinemaScope mode)
- ▶ Screen masking / subtitle repositioning
- ▶ Subtitles and closed captions
- ▶ Preferred movie language



## Physical Installation

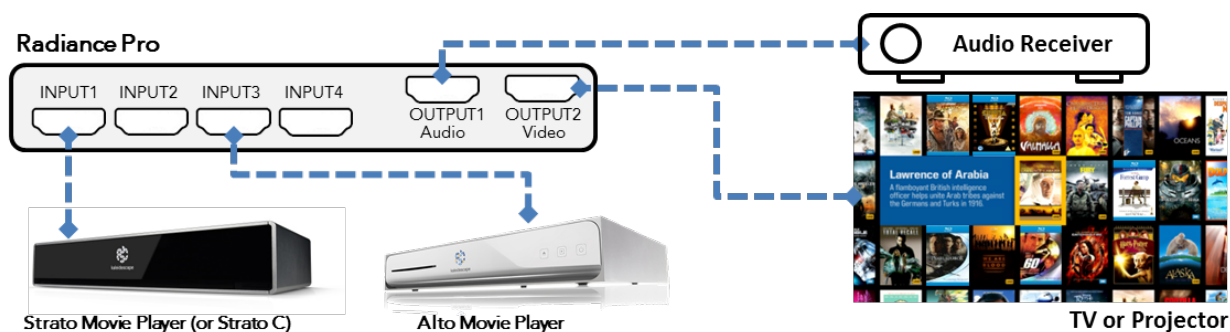
### Planning the Installation

It is helpful to locate the Strato within seven feet of the player with which it will be paired. This will allow use of the provided cables, which support high-speed HDMI 2.0 signals. If using alternate cables, ensure that the cable connection from the Strato to the Radiance Pro, and from the Radiance Pro to the display, have been tested to pass an 18Gbps HDMI 2.0 signal and conform to Lumagen's guidelines (e.g. [Radiance Tech Tip 19](#)).

For more information on cable requirements see the [Kaleidescape Strato Installation Guide](#).

### Connection Diagram

Connect the Strato to one 18 GHz input of the Radiance Pro, and connect the Alto to another input (9 or 18 GHz). Avoid using adjacent inputs, as each pair shares an input card (1&2, 3&4, etc) and switching is fastest between independent cards. Connect the video output to the TV, projector, or AV receiver.

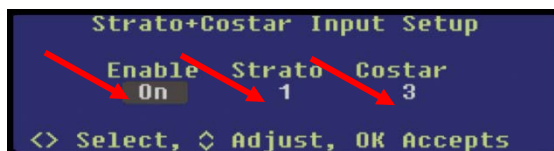


The connection diagram assumes direct connection to the display, or to a component that can pass through full 4K HDR (18Gbps) video to the display. If you are using a receiver or audio processor that does not support 4K HDR, you should connect the Radiance Pro directly to the 4K HDR display, and connect an audio-only Radiance Pro output to the receiver.

**Note:** Some 4K TVs and projectors only support full 4K HDR on specific ports, or enable it via the menu system. Check TV or projector documentation to enable a setting such as "UHD Color".

## Lumagen Radiance Pro Configuration

The Radiance Pro has a special Co-Star mode for communicating with a Kaleidescape Strato and paired player.



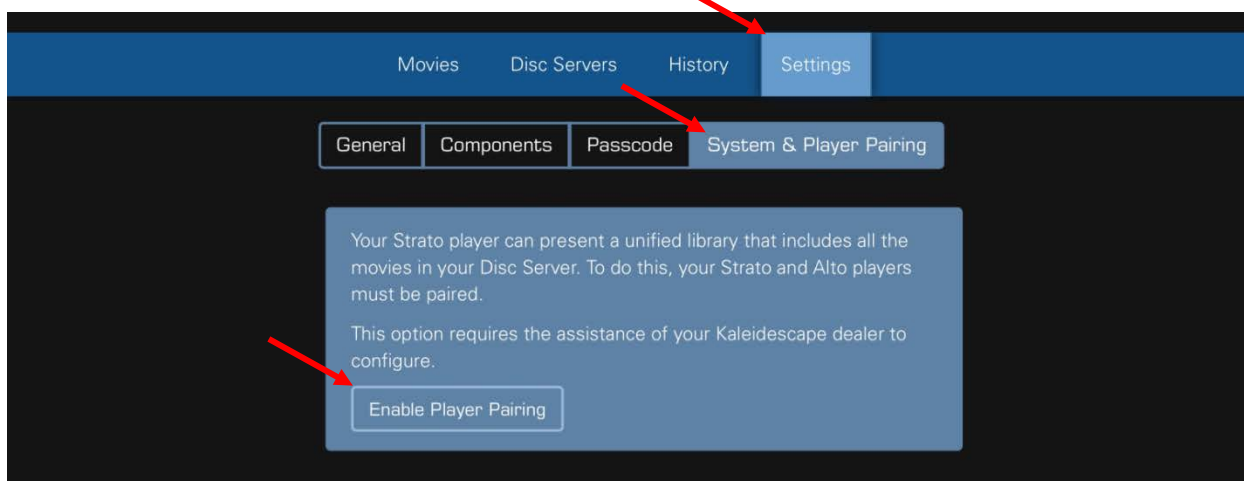
1. With connections as in the diagram above and both players powered on, view Strato's onscreen display: using the Lumagen remote, press *ON, Input*, then Strato's input number.
2. Activate the Radiance Pro's Co-Star mode by pressing *Menu, 0, 5, 7, 6* on the Lumagen remote. You should see a Strato Co-Star Input Setup menu containing an **Enable** entry and input numbers for **Strato** and **Costar**.
3. Navigate with the Lumagen remote's arrow keys to set **Enable** to **On** and to set the input numbers to correspond to match your Strato and Alto connections. Press **OK** to exit.
4. **IMPORTANT:** You must press *Menu* on the Lumagen remote, then choose **Save** and press **OK** to save the Co-Star mode settings.

## Player Pairing

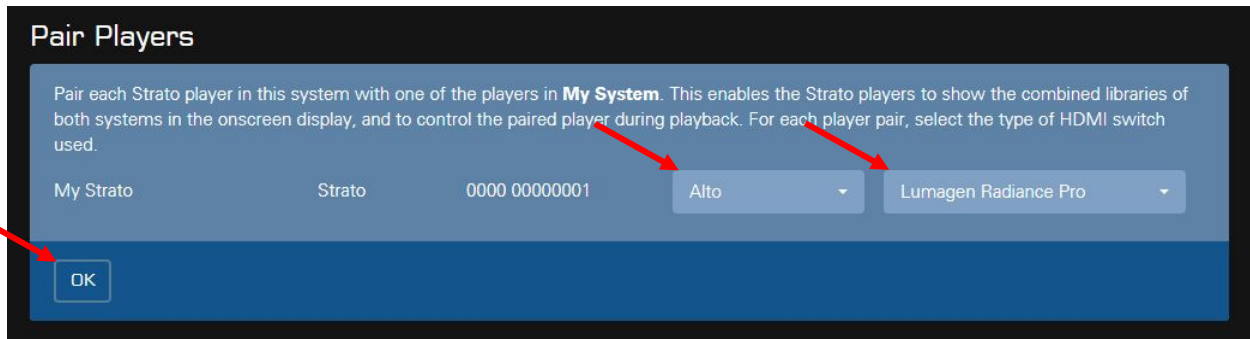
1. Ensure that the system is registered to a Kaleidescape account and can access the Internet.
2. In your web browser, enter the URL for the Strato system that you found in the [Preparation](#) section above.

Click on the **Settings** tab, then select **System & Player Pairing**. If this sub-tab is not visible, your systems may not be running the correct version of kOS. Refer to the [Preparation](#) section above.

3. Click the **Enable Player Pairing** button. The page will refresh.



4. For each Strato player, select the Alto player with which it is paired.
5. If the Co-Star software license for Lumagen is active, there will be an additional pull-down menu: select **Lumagen Radiance Pro** (see the Troubleshooting section below if this is not visible).



6. Click **OK** to complete the pairing.

## Verification

The onscreen display of each paired Strato should now include all titles on the system, including cataloged DVD and Blu-ray discs. Ensure you're seeing the correct titles.

Play movies from Blu-ray disc, and verify you are seeing and hearing the movie as expected, and that you are returned to the Strato's onscreen display when playback stops.

Play 4K Ultra HD or 4K HDR titles on the Strato, and verify you are getting the full 4K signal and appropriate audio. Use the HDMI Capabilities and Status tool in the Strato browser interface to verify the correct signal. This tool is described in the [Kaleidescape Strato Installation Guide](#).

## Troubleshooting

The Strato and Alto players should be tested independently, before pairing and connecting to the Lumagen Radiance Pro, so that all network, video and audio configurations work as expected. Radiance Pro firmware should be up-to-date.

In Strato's Browser Interface, if you are not seeing the option to **Enable Player Pairing**, verify that your system contains at least one Strato player, one Alto player, and one Disc Server.

In the Pair Players menu, if you do not see a second pull-down menu containing a **Lumagen Radiance Pro** entry, your Co-Star software license for Lumagen may not be active. Contact your dealer.

If movies stored on Blu-ray discs in the Disc Server are not visible within the Strato onscreen interface, return to the browser interface and verify that the Strato is paired with an Alto player. Until the players are paired, the Strato will not show titles from the paired system.

Once the players are paired and the Lumagen Radiance Pro is connected, if playback does not switch to the paired player correctly:

- ▶ Consult Lumagen's [Support Pages](#) for general questions about Radiance Pro configuration. Update the firmware if necessary.
- ▶ Ensure the Radiance Pro is on and displaying Strato's output by pressing *ON*, *Input* and Strato's input number on the Lumagen remote. Pressing *OK* will show video signal details.
- ▶ Ensure the Radiance Pro is in the correct Co-Star mode (described in [Lumagen Radiance Pro Configuration](#), above) by pressing *Menu*, *0*, *5*, *7*, *6* on the Lumagen remote.
- ▶ If you paired more than one zone, double-check to ensure the correct players were paired
- ▶ If using HDMI cables other than those supplied with the Co-Star package, verify cable performance. Poor signals over very short or very long cables can interfere with proper switching.
- ▶ Remove and re-apply power to the paired players that are malfunctioning



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