



kaleidescape

Lutron RadioRA 3 and HomeWorks QSX

Kaleidescape Integration Guide

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Overview

Introduction

Kaleidescape players work with Lutron RadioRA 3 and HomeWorks QSX powered devices to make a luxury cinematic lighting installation quick and easy.

This guide explains everything an integrator needs to know to successfully configure a Lutron-powered room and Kaleidescape player to create cinematic lighting. This guide also contains recommendations and best practices for configuring lighting in the home theater to provide a truly immersive experience.

Before you begin

Please read through this document and make sure you have all the necessary equipment and information to complete the deployment. To complete the installation, you will need the following:

- ▶ A Lutron RadioRA 3 or HomeWorks QSX installation (older versions of RadioRA are not supported)
- ▶ Lutron or Lutron-controlled lighting or shades for the movie viewing room
- ▶ A Kaleidescape Strato or Alto movie player running kOS 10.12 or later
- ▶ Ideally, access to the home's lighting project and familiarity with Lutron Designer (for best results)
- ▶ Otherwise, a physical keypad with buttons mapped to appropriate lighting levels (if modifications to the Lutron programming are not possible)

Integration Basics

Kaleidescape players bind to configured keypads in a Lutron-powered home. The player triggers the keypad buttons to adjust the room's ambiance through the different stages of the theatrical presentation. This is like a projectionist pressing the lighting buttons for the viewer throughout the presentation.

For this to occur, the room must include a keypad for the player to interact with. For best results, Kaleidescape recommends that a dedicated "phantom" keypad be used for this integration, separate from the room's main physical keypad. This prevents future programming adjustments on the main keypad from affecting the Kaleidescape integration.

In retrofit installations, where access to the Lutron programming for the house may not be available, it is possible to integrate using only the room's main keypad.

Event Cues

The Kaleidescape player produces six separate events that occur through playback or use of the system. When these events occur, the player will trigger or "push" the corresponding button on the keypad. The events are as follows,

1. **LeaveStandby** – triggered when the player transitions from the standby state (onscreen interface is muted) to the power-on state (onscreen interface is displayed). This event is optional.
2. **Movie** – triggered when a movie is started and whenever the player returns to movie playback. This is the primary playback event and should be mapped to dim the lighting.
3. **Intermission** – Kaleidescape players feature a special form of pause called intermission. Intermission is used to interrupt the movie for an extended period, and to allow the audience to get out of their seats. Therefore, this event should be mapped to bring the lights back up (a regular pause will not raise lights).
4. **CreditsRoll** – Kaleidescape players feature bookmarks that allow the player to recognize when it has entered the end credits portion of the movie. It is common in commercial theaters to raise lighting gently and gradually to an intermediate level when entering the end credits. This event should be mapped to a similar effect for a theatrical experience.

5. **OnscreenDisplay** – triggered when playback ends and returns to the onscreen display. Generally, this button should be mapped to ensure that lighting is brought up at the end of playback.

In certain cases, the customer may opt to omit this cue if the CreditsRoll event raises lighting to appropriate levels and the customer prefers the lighting to remain dim while finding and playing Scenes and Songs.

6. **EnterStandby** – triggered when the player transitions from the power-on state to the standby state. This event is optional.

Working with Lutron Designer

This section applies to new installations and retrofit installations with access to modify the home's Lutron programming.

Configuring a Keypad

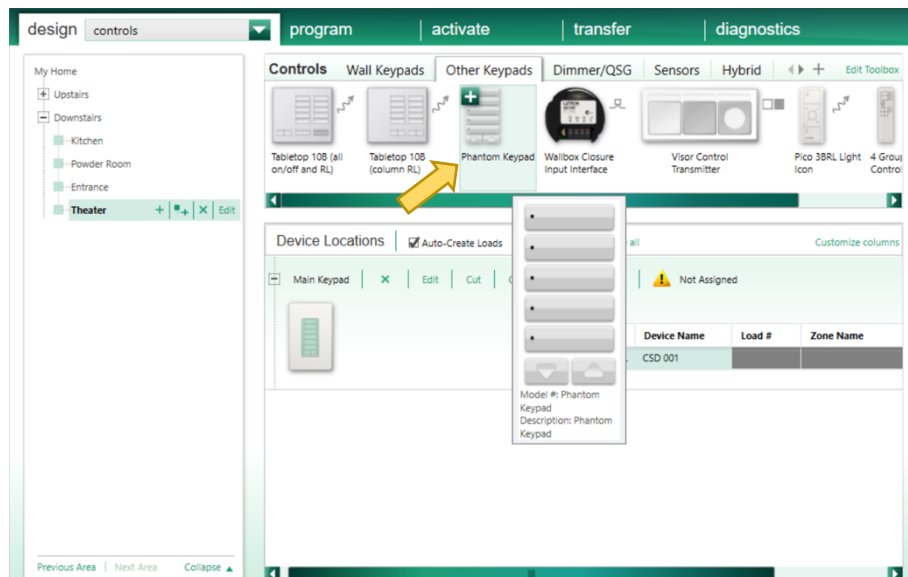
This section details how to configure a keypad to serve as the integration between the Kaleidescape player and the home's Lutron lighting solution.

Note: The screenshots in this section depict the Lutron Designer interface when working with a HomeWorks QSX installation. When working with a RadioRA 3 installation, some features may be missing. Missing features or steps may be ignored for the purposes of this guide.

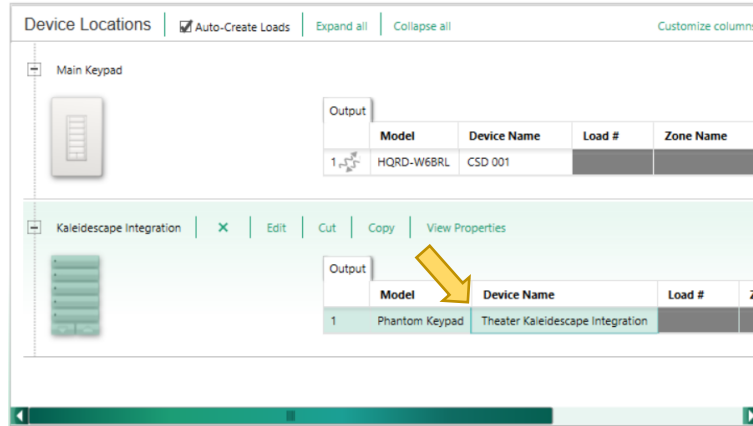
1. Under the **Design** → **Controls** view, add a keypad to the project.

Kaleidescape recommends that a dedicated “Phantom” keypad be used for the installation when possible. The phantom keypad is available under **Other Keypads** if you haven't customized your toolbox.

If working with a RadioRA 3 installation and “Phantom” keypads are not available as a device option, please ensure you are running the latest firmware on your controller and the latest version of Lutron Designer, then try again.

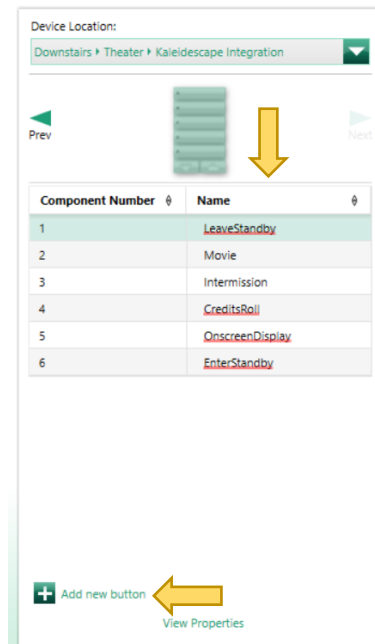


2. In the **Device Name** field of the integration keypad, give it a meaningful name to identify this keypad. This name is the name that will be visible when configuring the Kaleidescape player.

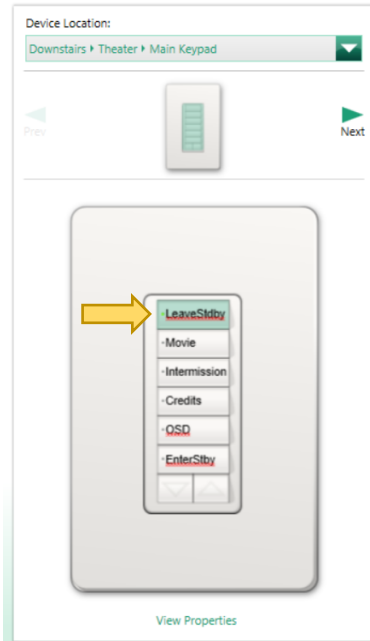


Use a name that includes the word “Kaleidescape”, the player’s configuration will sort keypads named accordingly to the top of the list.

3. Under the **Program → Devices** view, select the keypad. Configure a button for each event cue that will be triggered. The names of these buttons will be used later when mapping buttons on the Kaleidescape interface.
 - a. For phantom keypads, use the **Add new button** link at the bottom of the view to add buttons for each event to be mapped. Enter an appropriate name for each button.



- b. For physical keypads, there will be a fixed number of buttons. Name the buttons appropriately by double clicking on the button on the keypad device in the interface.



- For each button, configure the button as a **Single Action** type and set the **Press** (RadioRA 3) or **Press On** (HomeWorks QSX) scene to adjust the lighting and shades as appropriate.

Note: Other button types, as well as the **Double Tap** and **Hold** actions (HomeWorks QSX only) are not supported as part of this integration.

The screenshot shows a button configuration interface. At the top, there are fields for 'Button Number 4', 'Engraving', 'Program Type' (Normal), and 'Backlight' (On). Below this, the 'Button Type' is set to 'Single Action' and 'LED Logic' is set to 'Scene'. A 'Cycle Dim' checkbox is present. Three yellow arrows point to these settings: (a) points to 'Single Action', (b) points to 'Scene', and (c) points to the 'Press On' tab. Under the 'Press On' tab, there are 'Share this scene' and 'Use shared scene' buttons. Below that, 'Assignable Items' are shown for 'Lighting - Zones' in the 'Current Area'. A tree view shows 'Theater' expanded, with 'Main Lights (1)' at 40%, 'Floor Lights (2)' at 75%, and 'Screen Lights (3)' at 0%. At the bottom, a table lists the assigned items.

Type	Item Description	Setting	Fade	D...
Lighting - Zones	Downstairs ▶ Theater ▶ Main Lights	40%	20 s	0 s
Lighting - Zones	Downstairs ▶ Theater ▶ Floor Lights	75%	40 s	0 s

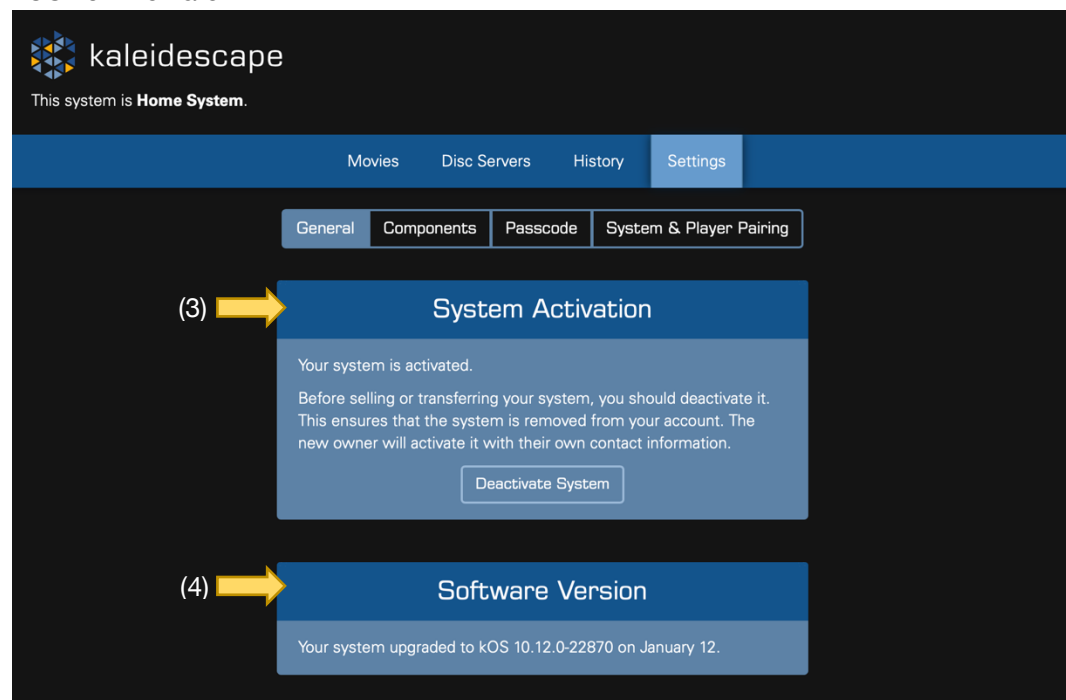
- Set the **Button Type** to **Single Action**
- Set the **LED Logic** to **Scene** (HomeWorks QSX only)
- Under the **Press** (RadioRA 3) or **Press On** (HomeWorks QSX) tab, configure the lighting changes as appropriate

Kaleidescape Player Setup

This section details how to pair a Kaleidescape movie player with a keypad in a Lutron-controlled viewing area. It is assumed that all suggested Lutron Designer programming is complete, and a Lutron keypad (physical or phantom) has been configured with the suggested buttons for the player to control.

Preparing the Player

Before beginning with the installation, check the activation status and the software version of the player. The player should be activated and running kOS 10.12 or later.



Note: while it may be possible to configure a player prior to activation, (re)activating the system may require reconfiguration of the Lutron integration.

1. Enter <http://my-kaleidescape.local> or <http://my-kaleidescape> into a web browser connected to the same local network as the Kaleidescape player.

OR

Enter the Browser Interface URL found in the **System Summary** of a player's onscreen display. Use a remote control to select **Menu → System → Status → System Summary**. You will see the URL at the bottom of the system summary screen.

More details on finding the Browser Interface can be found here: <https://support.kaleidescape.com/article/Accessing-the-Browser-Interface>

2. In the browser interface, navigate to **Settings → General**
3. Ensure the player is "activated". If it is not activated,
 - a. If the player is to be an addition to an existing system, group the player with the system. This should automatically activate the player.
 - b. If the player is stand-alone or part of a new system, have the customer activate the system.
4. Ensure the software version is at least 10.12. If the system is running an older version of kOS, contact Kaleidescape support to have the system upgraded.

Lutron Integration page

All the configuration steps in this guide are performed in the **Lighting & Shades** tab in the player's browser interface.

Lutron Integration

Enjoy a truly cinematic experience by connecting this Kaleidescape playback zone to the home's **Lutron RadioRA 3** or **HomeWorks** lighting solution. Setting up this integration allows lighting and shades in the theater area to be automatically controlled during playback.

Setup may require programming in the home's Lutron Designer project. Please read the [Integration Guide](#) before starting.

Lutron Processor (Serial no. 039BED4D) Status: **Connected**

Keypad Configuration

In order to enable control of the lighting and shading, a specially programmed Keypad must be created in **Lutron Designer**. We recommend creating a **phantom keypad** dedicated to this integration. Keypads with the word "**Kaleidescape**" in the name will be sorted first.

Theater Kaleidescape Integration

The keypad button selected for each event will be triggered when the event occurs.

Event	Description	Keypad Button	Test
LeaveStandby	Zone starts up for the first time	Lights On	Test
Movie	Movie playback starts or resumes	Movie	Test
Intermission	Intermission is started	Lights Dim	Test
CreditsRoll	Playback reaches the end credits of the movie	Ramp Lights	Test
OnscreenMenus	The zone returns to the onscreen display	Select button...	Test
EnterStandby	Zone is placed in standby	Select button...	Test

OK Cancel

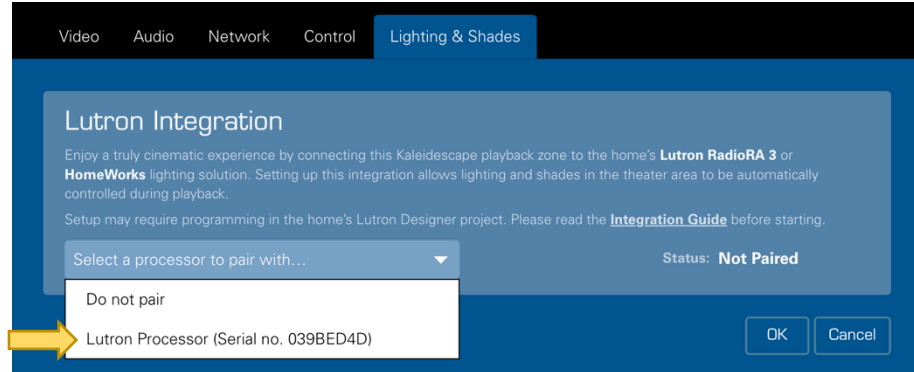
The page may be accessed as follows,

1. Load up the player's browser interface, as described in the previous section.
2. In the browser interface, navigate to **Settings → Components**; find the player to be integrated with the Lutron system; and press the **Settings** button.
3. In the settings pop-up, navigate to the **Lighting & Shades** tab. This will reveal the **Lutron Integration** view.

Pairing

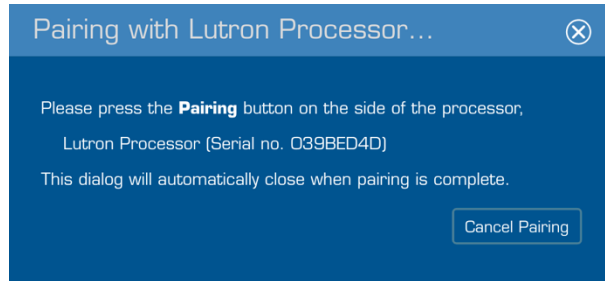
For the Kaleidescape movie player to control the viewing area lighting, the player must be paired with one of the home's Lutron processors or gateways. This step will require physical access to the Lutron devices.

1. Under **Lutron Integration** there is a drop-down list of Lutron processors or gateways detected in the customer's home network. If the player has never previously been configured for Lutron integration, the drop-down will read "Select a processor to pair with...".
2. Open the down-down and select a processor or gateway to pair with. It may take a few moments for the devices to be detected.

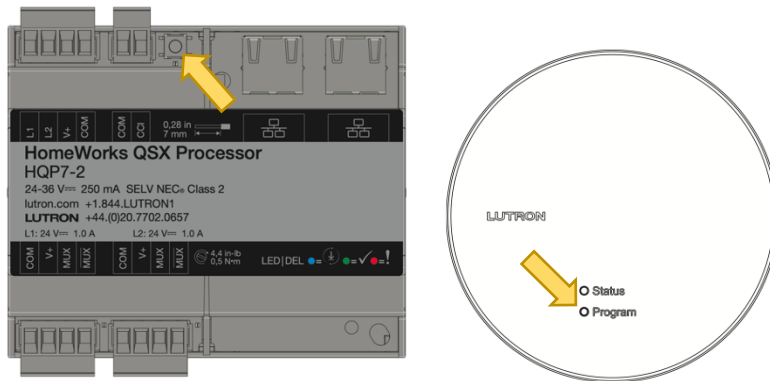


Generally, any processor or gateway in the project may be selected to complete the pairing. If there are many players or 3rd party Lutron integrations however, distributing the integrations over multiple processors may improve performance.

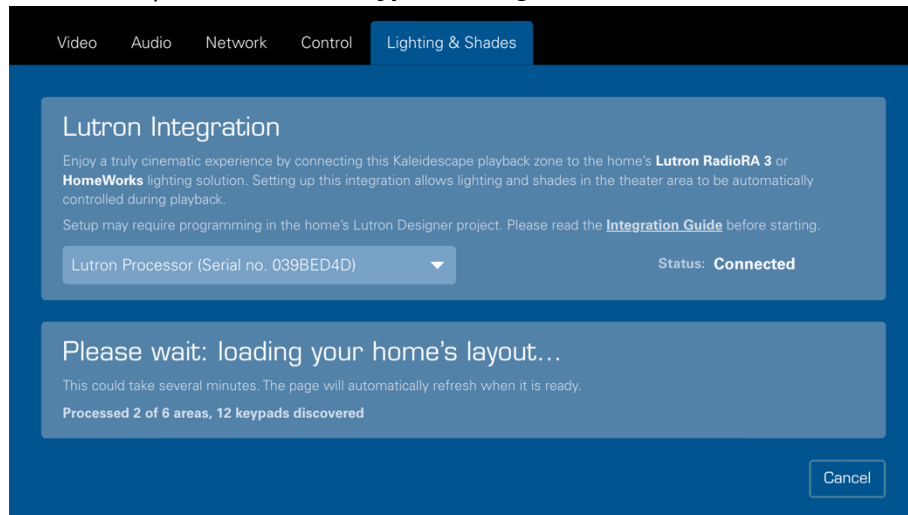
3. If this is the first time the player has ever connected to the bridge or controller, a pairing dialog will appear to indicate that the player has initiated the pairing process.



- To complete pairing, press the physical pairing button located on the Lutron device. The location of the button may vary depending on the model of the device.



- Once the button is pressed, the pairing dialog will automatically dismiss, and the player should automatically connect to and load the home's topology. This step may take a few minutes to complete depending on the size of the project. Do not refresh the page while the loading of the home is in process. The process is complete when the **Status** indicates "Connected" and the **Please wait** section is replaced with the **Keypad Configuration** section.



Keypad configuration

Once the player is paired with a Lutron processor or gateway, a keypad and button mappings must be configured. This is done in the **Keypad Configuration** pane which is visible once the home's topology has been loaded from the Lutron system.

Video Audio Network Control **Lighting & Shades**

Lutron Integration

Enjoy a truly cinematic experience by connecting this Kaleidescape playback zone to the home's **Lutron RadioRA 3** or **HomeWorks** lighting solution. Setting up this integration allows lighting and shades in the theater area to be automatically controlled during playback.

Setup may require programming in the home's Lutron Designer project. Please read the [Integration Guide](#) before starting.

Lutron Processor (Serial no. 039BED4D) Status: **Connected**

Keypad Configuration

In order to enable control of the lighting and shading, a specially programmed Keypad must be created in **Lutron Designer**. We recommend creating a **phantom keypad** dedicated to this integration. Keypads with the word "**Kaleidescape**" in the name will be sorted first.

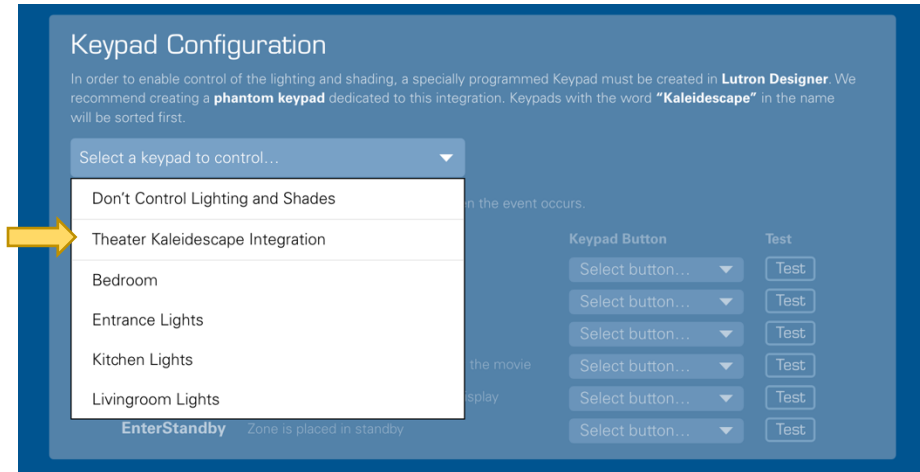
Select a keypad to control...

The keypad button selected for each event will be triggered when the event occurs.

Event	Description	Keypad Button	Test
LeaveStandby	Zone starts up for the first time	Select button...	Test
Movie	Movie playback starts or resumes	Select button...	Test
Intermission	Intermission is started	Select button...	Test
CreditsRoll	Playback reaches the end credits of the movie	Select button...	Test
OnscreenMenus	The zone returns to the onscreen display	Select button...	Test
EnterStandby	Zone is placed in standby	Select button...	Test

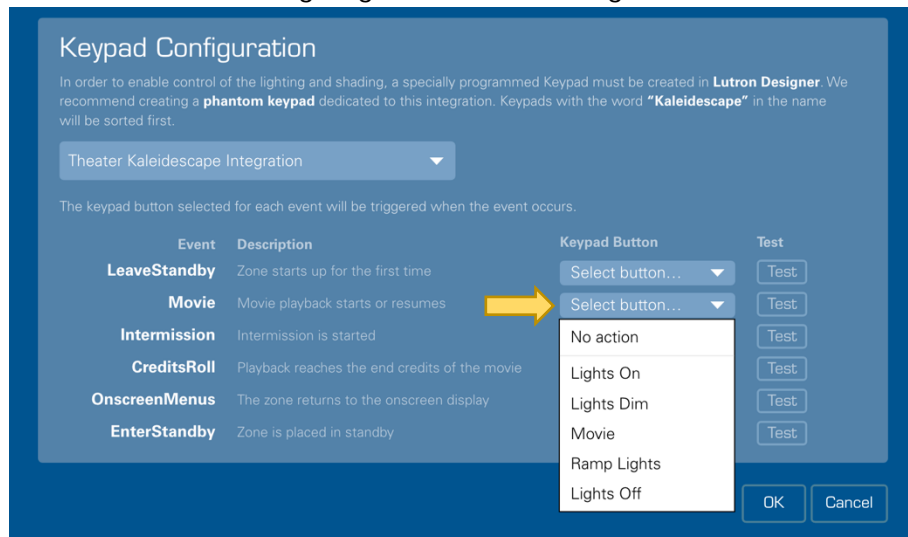
OK Cancel

- Using the keypad selection drop-down, select the keypad that will be used for the room integration. Keypads with “Kaleidescape” in the name will be sorted first.

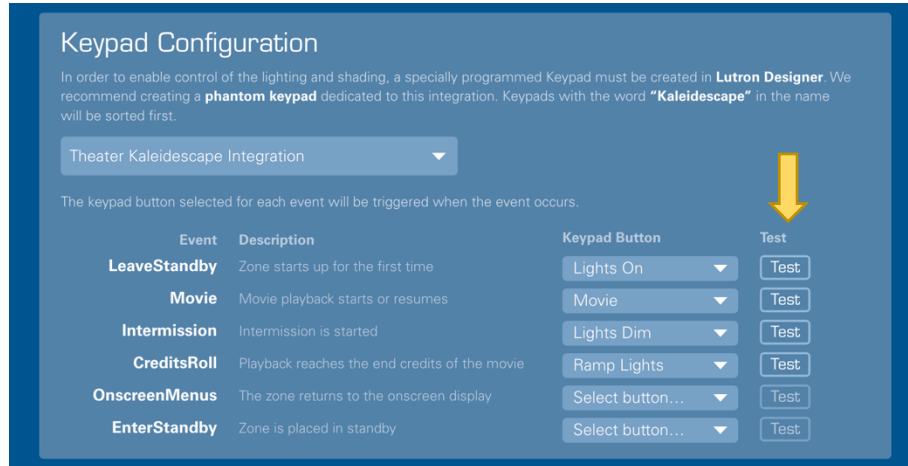


- For each playback event, use the **Keypad Button** dropdown to select the corresponding button on the keypad.

Select **No action** if the lighting is to be left unchanged for the event.



3. Once the event mappings are configured, use each **Test** button to ensure the room’s lighting responds as desired.



4. Press the **OK** button at the bottom of the page to commit the configuration.

Testing the integration

Once the configuration of the Kaleidescape player is complete, the integration should be tested by playing a movie to exercise all the playback events on the player. Ideally, the end-user should be present to provide feedback on the experience and to ensure the integration meets their expectations.

1. Start with the Kaleidescape player in standby and adjust the room’s lighting as the end-user would when entering the room.
2. Bring the player out of standby. Ensure the room’s lighting transitions to the **LeaveStandby** levels (if configured).
3. Select a feature length movie or documentary to test.
4. Start playback of the movie. Ensure the room’s lighting transitions to **Movie** levels.
5. If configured, use the intermission feature on the Kaleidescape player. Playback should pause and display the movie cover. Ensure the room’s lighting transitions to **Intermission** levels.
6. Resume the playback by pressing “play”. Ensure the room’s lighting returns to **Movie** levels.
7. Seek to a point a minute or so prior to the end credits of the movie. Resume playback. When the end credits begin to roll onto the screen, ensure the room’s lighting transitions into **CreditsRoll** levels.

8. Stop playback. Ensure the room's lighting transitions to **OnscreenMenus** levels (if configured).
9. Put the player into standby. Ensure the room's lighting transitions to **EnterStandby** levels.

Troubleshooting

This section covers common pitfalls and the recommended fixes or work-arounds.

Phantom keypad unavailable

Symptom: Using Lutron designer to configure a Lutron RadioRA 3 room for the Kaleidescape integration, the suggested “phantom” keypad is not available as a keypad option.

Causes:

- ▶ The Lutron RadioRA 3 processor is running an early firmware version, or the version of Lutron builder does not have phantom keypad support for RadioRA 3 installations. Please ensure you are running the latest firmware version on the processor and are running the latest version of Lutron builder.
- ▶ If the problem persists, please contact to Lutron support. Otherwise, a physical keypad may be used as a work-around.

No Lutron processors detected

Symptom: A Lutron system is configured, but when the **Lutron Integration** page is opened, the Lutron processors do not appear as selectable drop-downs.

Causes:

- ▶ The Kaleidescape player is not properly connected to the network. Please ensure that the player is connected and has acquired a valid IP address
- ▶ The Lutron processor is not properly connected to the network. Please ensure that the Lutron processor is connected and has a valid IP address
- ▶ The Kaleidescape player is on a different network or subnet than the Lutron processor(s). To use this integration solution, the Kaleidescape player and Lutron processors must be on the same network.
- ▶ The Lutron processor or gateway is a Caseta or RadioRA 2 gateway. Refer to the answer to the next question.
- ▶ The Lutron processor is a RadioRA 3 processor, but the Kaleidescape player is running kOS 10.11. Please connect the Kaleidescape player to the internet and allow it to upgrade to kOS 10.12 or higher. If the problem persists, please contact Kaleidescape support.

Unable to pair with Lutron device

Symptom: When pairing is attempted from the **Lutron Integration** page, the pairing fails or the Lutron system cannot be configured further.

Cause:

- ▶ The Lutron installation is a Caseta or RadioRA 2 system. This integration only supports Lutron RadioRA 3 or HomeWorks QSX installations. The home lighting system must be upgraded, otherwise an alternative integration solution must be used.
- ▶ The Lutron processor is a RadioRA 3 processor, but the Kaleidescape player is running kOS 10.11. Please connect the Kaleidescape player to the internet and allow it to upgrade to kOS 10.12 or higher. If the problem persists, please contact Kaleidescape support.

Missing keypad when selecting keypads

Symptom: A keypad was configured in Lutron Designer to serve as the integration point for this integration, but the keypad is not present in the list of keypads when configuring the integration on the Kaleidescape player.

Causes:

- ▶ In Lutron designer, the keypad was named only in the name field above the keypad picture. The **Lutron Integration** page uses the name configured in the **Device Name** field in Lutron designer. Rename the keypad in the **Device Name** field.
- ▶ The keypad has no buttons. The **Lutron Integration** page displays only keypads with configured buttons. Add appropriate buttons to the keypad.
- ▶ The buttons on the keypad are not configured as **Single Action** type buttons. This integration supports only **Single Action** type buttons. If there are no supported buttons on the keypad, the keypad will be hidden. Add or reconfigure the buttons on the keypad to be compatible.

Missing button when configuring events

Symptom: A keypad was configured in Lutron Designer with appropriate buttons, but after selecting the keypad in the **Lutron Integration page**, some or all of the buttons are not available in the event selection drop-downs.

Cause: The buttons on the keypad are not configured as **Single Action** type buttons. This integration supports only **Single Action** type buttons. Add or reconfigure the buttons on the keypad to be compatible.

Events fail to trigger

Symptom: The integration has fully been configured, but some or all events fail to trigger.

Causes:

- ▶ The button type for the event is configured as a **Single Action** type, but the scene programming was scripted under the **Double Tap** or **Hold** actions. This integration supports invoking only the **Press On** action. Move the scene programming to the **Press On** action.
- ▶ The connection to the Lutron processor or gateway was lost. Ensure both the Kaleidescape player and the Lutron processor(s) are connected to the network and have a valid IP address. Connection status can be monitored beside the bridge selection drop-down in the **Lutron Integration** page
- ▶ The Lutron project was modified or updated after configuring the Kaleidescape integration. Certain modifications to the Lutron Designer project may alter the ids that the Kaleidescape player uses to bind to the keypads or buttons. You may need to redo the keypad and button selection on the **Lutron Integration** page after updating the Lutron Designer project.

Event triggers are sporadic or occasionally fail

Symptom: The integration has fully been configured and the events generally function as configured, but occasionally when using the system, the events fail to trigger.

Causes:

- ▶ Another configured scene or control system is interfering with the event. If another control system is configured in the same zone, it may be triggering changes at the same time as the Kaleidescape player. Ensure that the Kaleidescape integration and 3rd party control system do not alter the same lighting at the same time.
- ▶ The network connection between the Kaleidescape player and the Lutron processor or gateway is unreliable. Check the networking between the Kaleidescape player installation and the Lutron processors and gateways. If using a wireless connection, ensure that the player has a strong signal to the access point. In general, it is recommended that a wired connection be used.
- ▶ The communication between the Lutron lighting devices and/or keypads and the Lutron processor is unreliable. Test triggering the sequences from within Lutron Designer. If testing with Lutron Designer also produces sporadic results, check the connections between the Lutron devices and the Lutron processors.