



How to Set Up a Zūm Space and Add Zūm Devices

Once all devices are physically installed in a board room or conference space, a new Zūm space can be created and devices added.

NOTE: Only set up one Zūm space at a time.

NOTE: For simplified setup of a Zūm space, use the Zūm app on a mobile device.

Step 1 Create a New Zūm Space

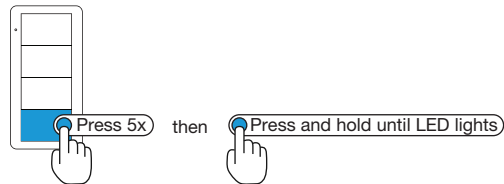
Creating a Zūm space defines the area where the devices are located, such as a board room or conference room. A Zūm space is created with a keypad, dimmer or switch, a J-box device, or an AV Bridge.

NOTE: Creating a Zūm space can only be performed by one device in the space.

NOTE: A Zūm space cannot be created from a battery-powered keypad.

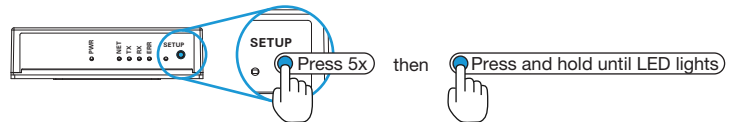
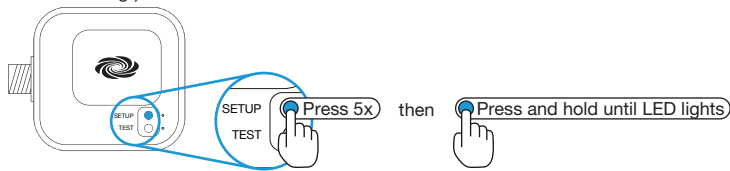
To create a new Zūm space using a keypad, dimmer, or switch:

1. Press the bottom button 5 times.
2. Press and hold the button until the LED on the device lights (about 10 seconds). After approximately 3 seconds, the device LED begins slowly flashing. This indicates that the Zūm space is now created and in Joining mode, allowing you to add devices.



To create a new Zūm space using a J-box device or an AV Bridge:

1. Press the **Setup** button 5 times.
2. Press and hold the **Setup** button until the LED on the device lights (about 10 seconds). After approximately 3 seconds, the device LED begins slowly flashing. This indicates that the Zūm space is now created and in Joining mode, allowing you to add devices.



NOTE: The device that is used to create the Zūm space is automatically added to the space and does not need to be added in Step 2.

Step 2 Add Zūm Devices to the Zūm Space

After a new Zūm space is created, add Zūm devices while the space is in Joining mode.

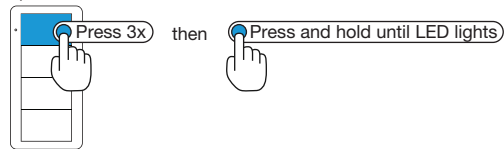
NOTE: A battery-powered device does not flash its LED after joining the space. This is to conserve battery power. The non-battery-powered devices in the space will flash their LED to indicate that the space is in Joining mode.

NOTE: A Zūm mesh device can belong to only one space.

NOTE: Joining mode ends automatically after 4 minutes.

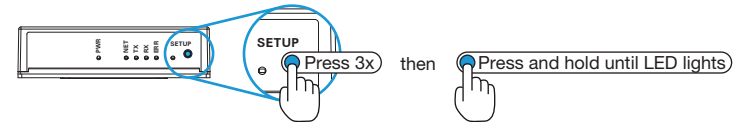
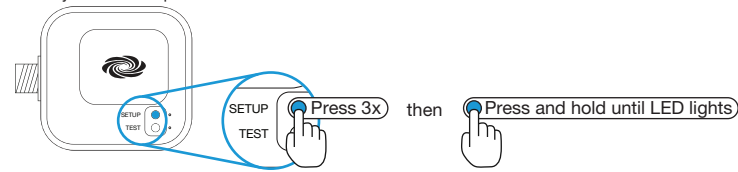
Add a keypad, dimmer, or switch to a Zūm space:

1. Press the top button 3 times.
2. Press and hold the button until the LED on the device lights (up to 10 seconds). The LED on the device will start to flash slowly to indicate that it has joined the space.



Add a J-box device or AV Bridge to a Zūm space:

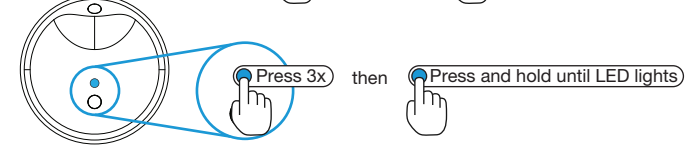
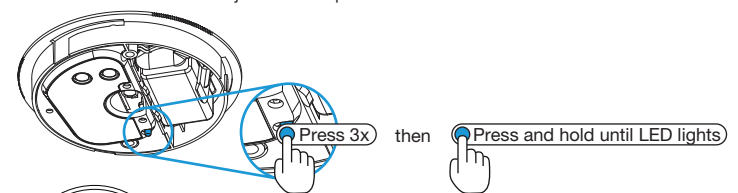
1. Press the **Setup** button 3 times.
2. Press and hold the **Setup** button until the LED on the device lights (up to 10 seconds). The LED on the device will start to flash slowly to indicate that it has joined the space.



NOTE: Only one ZUMMESH-AVBRIDGE can be installed per Zūm space.

Add a photocell or occupancy/vacancy sensor to a Zūm space:

1. Press the setup button 3 times.
2. Press and hold the button until the LED on the device lights (up to 10 seconds) to indicate that it has joined the space.



Step 3 Complete Zūm Space Setup

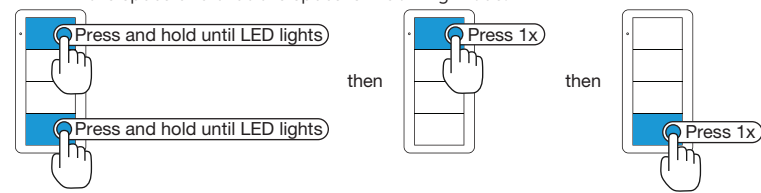
To finish creating a Zūm space, press any button on a device that is part of the Zūm space to exit Joining mode.

Add a Zūm Device to an Existing Zūm Space

Add new Zūm devices to an existing Zūm space by placing the Zūm space in Joining mode.

Add the Zūm device using a keypad, dimmer, or switch:

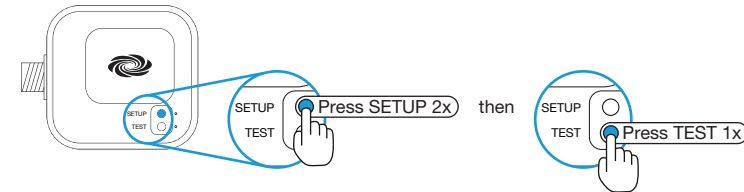
1. Enter Joining mode.
 - a. Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
 - b. Press the top button once.
 - c. Press the bottom button once. The LEDs on all devices in the space (except battery powered devices) flash slowly to indicate that the devices are part of the space and that the space is in Joining mode.



2. Add the Zūm device according to "Step 2 Add Zūm Devices to the Zūm Space."
3. Press any button on a device that is part of the Zūm space to exit Joining mode.

Add the Zūm device using a J-box device:

1. Enter Joining mode.
 - a. Press the **SETUP** button 2 times.
 - b. Press the **TEST** button once. The LEDs on all devices in the space (except battery powered devices) flash slowly to indicate that the devices are part of the space and that the space is in Joining mode.



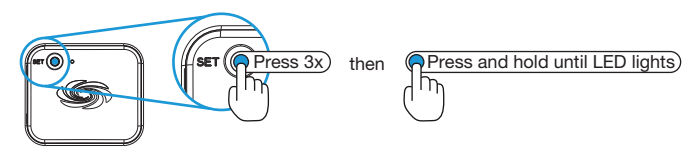
2. Add the Zūm device according to "Step 2 Add Zūm Devices to the Zūm Space."
3. Press any button on a device that is part of the Zūm space to exit Joining mode.

Connect the Network Bridge to the Zūm Net Wireless Gateway

The Zūm Network Bridge connects wirelessly to the Zūm Net Wireless Gateway to form a centrally managed, enterprise-wide lighting control system.

Add the Zūm Network Bridge to the Zūm Net Wireless Gateway's network:

1. Press the **ACQUIRE** button on the Zūm Net Wireless Gateway to place the gateway into Acquire mode.
 - a. Press the **SET** button on the Network Bridge 3 times.
 - b. Press and hold the **SET** button until the LED flashes once (up to 10 seconds). The LED on the Network Bridge slowly flashes to indicate that it is searching for a network to join.
 - The LED lights for 5 seconds when the network bridge successfully joins the gateway.
 - The LED flashes fast to indicate that the network bridge failed to join the gateway. Press the SET button to acknowledge the failure and then repeat this procedure.



3. Press the **ACQUIRE** button on the gateway to exit Acquire mode.

Calibrate and Test the Daylight Sensor

To enable daylight harvesting, calibrate and then test the daylight sensor after all devices are installed and powered in the Zūm space.

NOTE: When setting up the daylight sensor, consider the following:

- Only dimmers are capable of adjusting load levels that are driven by daylight sensor readings.
- Daylighting only operates when Scene 1 is enabled.
- Calibrate the daylight sensor during the day when the sun is bright. Avoid light fluctuations caused by clouds that are rapidly exposing and hiding the sun.
- Do not stand between the daylight sensor and the windows. Doing so affects the readings and can result in poor calibration settings.

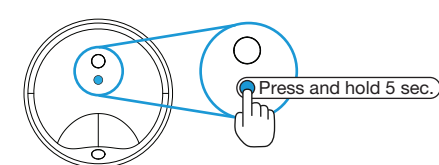
Calibrate the Daylight Sensor:

1. Adjust the lights in the room to the desired levels.

NOTE: Take the natural daylight levels into consideration when setting the load levels. Each dimmer can be set to a different level. Typically, lights closer to windows are dimmed more than lights away from windows.

NOTE: To prevent daylighting from affecting a dimmer, set the lights on the dimmer to brighter than scene 1.

2. Press and hold the button for 5 seconds to initiate the daylight calibration process. The LED flashes red to indicate that the calibration process is in progress; this process takes 60 seconds. During the calibration process, the lights cycle on and off. After the daylight calibration process is complete, the room enters Test mode. Refer to "Test Mode" for details.



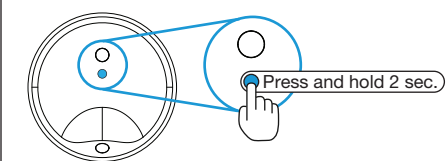
Test Mode

Test mode is used to verify that the settings stored during calibration are correct. Changes to the amount of light in the space results in rapid light level adjustments.

NOTE: During normal operation, the light levels are adjusted slowly so that they are not seen by the occupants in the room.

To enter Test mode, press and hold the button for 2 seconds. When in Test mode, the LED flashes twice, pauses, then repeats. The device exits Test mode after 2 minutes.

To verify the daylight sensor settings, close the blinds or block the cover of the sensor to reduce the amount of light in the space; the light level will increase. Open the blinds or unblock the cover of the sensor to increase the amount of light in the space; the light level will decrease.



Configure Keypads to Control Specific Loads

Keypads control all load controllers in the space (this is the default functionality). Use Binding mode to change the load controllers that are bound (controlled) or not bound (not controlled) by the keypad.

There are two methods of removing or changing loads that are bound to the keypad:

- Local Binding Configuration: Use when all load controllers are accessible.
- Remote Binding Configuration: Use when a load controller is not accessible.

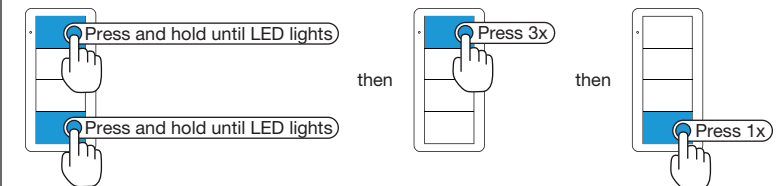
NOTE: Keypads do not control J-box plug controllers.

NOTE: Binding Mode exits after 5 minutes when initiated from an ac-powered keypad or 1 minute when initiated from a battery powered keypad.

Local Binding Configuration

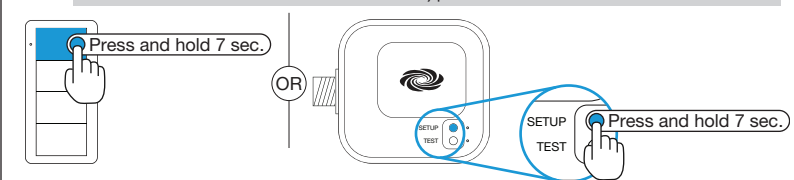
Local binding configuration is used when all load controllers in the Zūm space are accessible (i.e., there are no j-box load controllers in the Zūm space). To change the load controllers that are bound to the keypad.

1. Enter Binding mode.
 - a. Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
 - b. Press the top button three times.
 - c. Press the bottom button once. The LED on the keypad flashes three times, pauses, then repeats.
 - The LED flashes fast to indicate that the load controller is bound.
 - The LED flashes slow to indicate that the load controller is not bound.



2. Walk up to all load controllers in the space and press and hold the top button of the selected load controller until the LED lights (about 7 seconds) to change it to bound or not bound to the keypad.
 - The LED flashes fast to indicate that the load controller is bound.
 - The LED flashes slow to indicate that the load controller is not bound.

NOTE: If all load controllers in the Zūm space are assigned as not bound to the keypad, the keypad will restore its default functionality and all load controllers will become bound to the keypad.

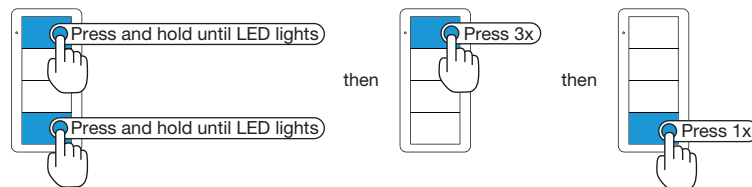


3. Press the bottom button on the keypad 3 times to exit.

Remote Binding Configuration

Remote Binding configuration is used when all load controllers in the Züm space are not accessible (i.e., there are j-box load controllers). To change the load controllers that are bound to the keypad.

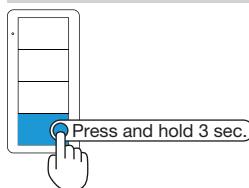
- Enter Binding mode.
 - Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
 - Press the top button three times.
 - Press the bottom button once. The LED on the keypad flashes three times, pauses, then repeats.
 - The LED flashes fast to indicate that the load controller is bound.
 - The LED flashes slow to indicate that the load controller is not bound.



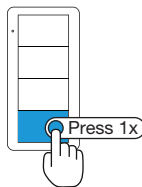
NOTE: Use the keypad that has been selected for controlling the load to perform the entire remote linking process.

- Press and hold the bottom button of the keypad until a set of lights in the space starts to flash on and off (about 3 seconds). The flashing lights indicate the selected load controller. The LED on the keypad flashes to indicate that the load is bound or unbound.
 - The LED flashes fast to indicate that the load controller is bound.
 - The LED flashes slow to indicate that the load controller is not bound.

NOTE: The flashing rate of the lights does not indicate the link status.



- Press the bottom button of the keypad repeatedly to cycle through all of the load controllers in the Züm space until the desired load starts flashing.

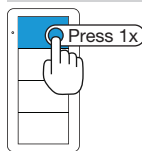


- Press the top button of the keypad to assign the load controller as bound or not bound to the keypad. The LED on the keypad flashes to indicate that the load is bound or unbound.

- The LED flashes fast to indicate that the load controller is bound.
- The LED flashes slow to indicate that the load controller is not bound.

NOTE: If all load controllers in the Züm space are assigned as not bound to the keypad, the keypad will restore its default functionality and all load controllers will become bound to the keypad.

NOTE: The flashing lights indicate the selected load controller, not the binding status.



- Repeat steps 3 and 4 until all load controllers are bound or unbound from the keypad.

- Press the bottom button on the keypad 3 times to exit.

Change the Default Scenes

The Züm keypad buttons recall predefined scenes (light levels) that are stored in the load controllers. The default scenes are ON (scene 1) which sets the loads at 90%, SCENE 2 which sets the loads at 50%, and SCENE 3 which sets the loads at 10%. Load controllers can save up to 16 scenes.

There are several methods of changing the default scenes, use the method that matches your needs.

- End-User Method - Change the light levels for SCENE 2 or SCENE 3 when all load controllers are easily accessible. ON (scene 1) cannot be changed. This method cannot be used on 2-button keypads.
- Manual Method - Change the light levels for ON (scene 1) in addition to SCENE 2 or SCENE 3 when all load controllers are easily accessible.
- Remote Method - Change the light levels for ON (scene 1), SCENE 2, or SCENE 3 when a load controller is not physically accessible.

NOTE: A dimmer lowered to 0% will turn the dimmer off when the scene is recalled.

NOTE: A load controller that is not bound to the keypad cannot be part of the scene.

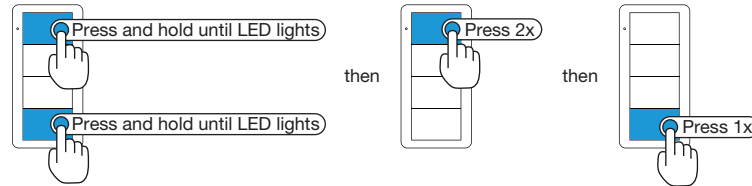
End-User method to change the scene for Scene 2 or Scene 3:

- Set all load controllers that are bound to the keypad to their desired light level.
- Press and hold the **SCENE 2** or **SCENE 3** button until the LED lights (about 5 seconds) to save the light levels to the selected button.

Manual method to change the scene for ON (Scene 1):

NOTE: Scene 2 and Scene 3 can also be changed.

- Enter Scene Setting Mode using the keypad that will recall the scene.
 - Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
 - Press the top button two times.
 - Press the bottom button once. The LED on the keypad flashes its LED two times every two seconds to indicate that it is in Scene Setting mode. Load controllers that are bound to the keypad flash their LED rapidly.

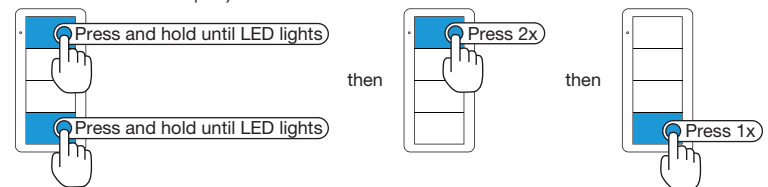


NOTE: Scene Setting Mode exits after 5 minutes when initiated from an ac-powered keypad or 1 minute when initiated from a battery powered keypad.

- Adjust all light levels.
 - Using a dimmer, press and hold the top button to raise the light level or press and hold the bottom button to lower the light level.
 - Using a switch, Press the top button to turn the lights on or press the bottom button to turn the lights off.
 - Using a J-box load controller, press and hold the **TEST** button on the J-box device to cycle-dim the light.
- Using the keypad that initiated Scene Setting mode, press the **ON, SCENE 2,** or **SCENE 3** button to save the light levels to the selected scene button.
- Repeat steps 2 and 3 for each scene button.
- Press the bottom button on the keypad 3 times to exit.

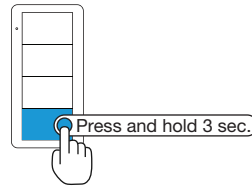
Remote Method to change the scene for ON (scene 1), SCENE 2, or SCENE 3

- Enter Scene Setting Mode using the keypad that will recall the scene.
 - Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
 - Press the top button two times.
 - Press the bottom button once. The LED on the keypad flashes its LED two times every two seconds. Load controllers that are bound to the keypad flash their LED rapidly.

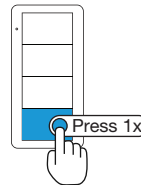


NOTE: Scene Setting Mode exits after 5 minutes when initiated from an ac-powered keypad or 1 minute when initiated from a battery powered keypad.

- Press and hold the bottom button of the keypad until a set of lights in the space flashes on and off twice (about 3 seconds) to indicate that it is selected load. The lights return to their previous level.



- Press the bottom button of the keypad to cycle through all of the load controllers in the Züm space until the desired load starts flashing.



- Adjust the light levels by holding the top button on the keypad to raise the light level or holding the bottom button on the keypad to lower the light level.
- Press the **ON, SCENE 2,** or **SCENE 3** button to save the scene.
- Repeat steps 3 through 5 until all load controllers and all scenes are defined.
- Press the bottom button on the keypad 3 times to exit.

Factory Reset

Perform a factory reset when the device is removed from the network or to remove the configuration settings. The device must also be factory reset if the device is being moved to a different system.

NOTE: New-in-box devices do not need to be factory reset before joining a system.

Factory Reset a Keypad, Dimmer, or Switch

To factory reset a keypad, dimmer, or switch, press and hold the top and bottom buttons until the LED lights (about 5 seconds), and then release both buttons. Then, press and hold the bottom button until the LED lights (about 10 seconds).

Factory Reset a J-Box Device

To factory reset a J-box device, press and hold the **TEST** and **SETUP** buttons until the **SETUP** LED lights (about 10 seconds), and then release both buttons. The **SETUP** LED and output turn on.

Factory Reset an Occupancy or Vacancy Sensor



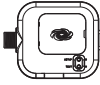







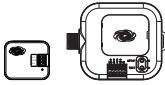
To factory reset an occupancy or vacancy sensor, press and hold the **TEST** button until the LED flashes rapidly 3 times (about 10 seconds), then release the button.

Factory Reset a Daylight Sensor

To factory reset the daylight sensor, press and hold the button until the LED flashes rapidly 3 times (about 10 seconds), then release the button.

Typical Züm Space Devices

A typical Züm space can employ any of the following devices:

<p>Dimmer - Wall Mount Dimmer to raise and lower the lights.</p>  <p>Models: ZUMMESH-5A-LV ZUMMESH-DELV ZUMMESH-DIM</p>	<p>Switch - Wall Mount Switch to toggle the lights.</p>  <p>Models: ZUMMESH-5A-SW ZUMMESH-JBOX-20A-SW</p>
<p>Dimmer - J-box Mount Dimmer to raise/lower the lights (controlled by a keypad).</p>  <p>Models: ZUMMESH-JBOX-16A-LV ZUMMESH-JBOX-5A-LV</p>	<p>Switch - J-box Mount Switch to toggle the lights (controlled by a keypad).</p>  <p>Models: ZUMMESH-5A-SW ZUMMESH-JBOX-20A-SW</p>
<p>Keypad Keypad to control dimmers and switches.</p>  <p>Models: ZUMMESH-KP ZUMMESH-KPBATT</p>	<p>Occupancy or Vacancy Sensor Ceiling mounted sensor to detect occupancy/vacancy. Toggles the lights and the plug controller.</p>  <p>Models: ZUMMESH-PIR-OCCUPANCY-BATT ZUMMESH-PIR-VACANCY-BATT</p>
<p>Plug Controller Toggles the connected plug receptacle</p>  <p>Model: ZUMMESH-JBOX-20A-PLUG</p>	<p>Network Bridge Enables setup using the Züm app and integrates standalone space with the Züm Floor Hub.</p>  <p>Model: ZUMMESH-NETBRIDGE</p>
<p>AV Control Provides AV equipment control using RS-232 commands.</p>  <p>Models: ZUMMESH-KPAVBATT ZUMMESH-AVBRIDGE</p>	<p>Daylight Sensor Detects the light-level in the space and raises or lowers the lights (daylight harvesting).</p>  <p>Model: ZUMMESH-OL-PHOTOCELL-BATT</p>
<p>Integration Module Controls third-party devices.</p>  <p>Models: ZUMMESH-CCO ZUMMESH-JBOX-SIM</p>	

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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