



### Description

The Crestron® ZUMMESH-KP provides control of one or more ZUMMESH-JBOX load controllers (not included). It is available with either a single rocker switch or four pushbuttons. The rocker switch version offers on/off switching and dimming adjustment, with the ability to save one scene preset. The pushbutton version supports on/off switching and dimming adjustment along with three scene presets. Standard gang-box installation allows one or more units to be installed in a 3-1/2 inch (89 mm) deep electrical box. A finished installation requires a decorator-style faceplate (not included).

### Züm Overview

A Züm space consists of one space, such as a board room or conference room, that is equipped with Züm mesh devices. The Züm mesh devices (i.e., dimmers, switches, keypads, and sensors) in the space provide control and communicate directly with each other without the need for a centralized gateway or processor.

To expand the functionality of the Züm space, a ZUMMESH-NETBRIDGE (not included) can be added which provides centralized control and monitoring from a Crestron control system (not included).

**NOTE:** The ZUMMESH-NETBRIDGE requires a compatible J-box device (not included) to provide power.

### Additional Resources

Visit the product page on the Crestron website ([www.crestron.com](http://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.



### Important Notes

**WARNING:** To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

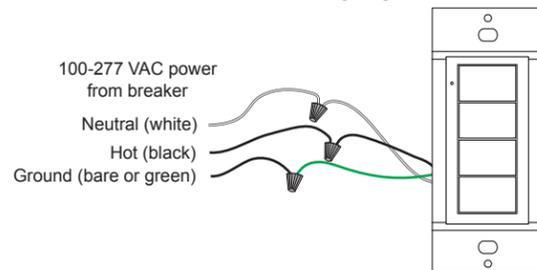
**NOTE:** Observe the following points.

- Neutral: The ZUMMESH-KP requires a neutral connection to operate.
- Codes: Install in accordance with all local and national electrical codes.
- Installation: A qualified electrician should install this product.
- Wiring: Use copper wire only. For supply connections, use wire rated for at least 75 °C.
- Temperature: For use where temperatures are between 32° to 104 °F (0° to 40 °C).
- Electrical Boxes: Devices mount in standard electrical boxes. For easy installation, Crestron recommends using 3-1/2 in (89 mm) deep electrical boxes. Several devices can be installed in one electrical box (multigang). For a smooth appearance, one-piece multigang faceplates (not included) can be installed.
- Switches: Mechanical 3- or 4-way switches do not work with the ZUMMESH-KP.
- Spacing: If mounting one device above another, leave at least 4-1/2 in (115 mm) vertical space between them.

### Installation

To install the ZUMMESH-KP, do the following:

1. Turn the power off at the circuit breaker.
2. Wire the device as shown in the following diagram.



3. Push all power wires back into the electrical box and fasten the device to the electrical box with the provided screws.
4. Attach the decorative faceplate (not included).
5. Restore the power at the circuit breaker.

### Multigang Installations

In multigang installations, several devices are grouped horizontally in one electrical box. For a smooth appearance, install a one-piece multigang faceplate (not included).

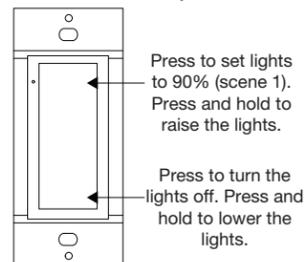
**NOTE:** When installing into a multigang box, do not fully tighten devices to the box until the faceplate has been aligned.

**NOTE:** Devices do not mount within a 2-gang mud ring. Use a standard 2-gang box.

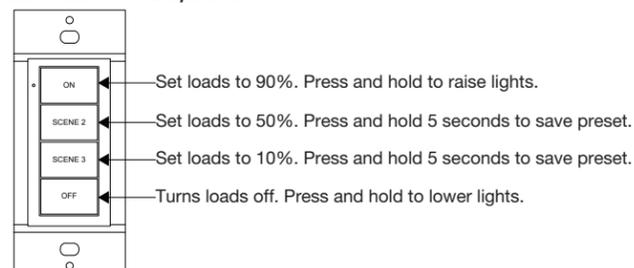
### Operation

Crestron offers the following ZUMMESH-KP units. Their functions are described below.

#### ZUMMESH-KP10A Operation



#### ZUMMESH-KP10B Operation



### How to Set Up a Züm Space and Add Züm Devices

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

**NOTE:** Only set up one Züm space at a time.

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

#### Step 1 Create a New Züm Space

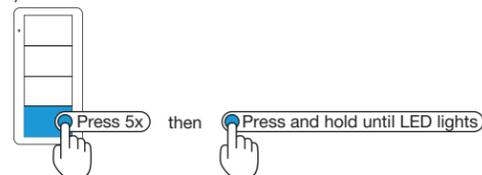
Creating a Züm space defines the area where the devices are located, such as a board room or conference room. A Züm space is created with a keypad, dimmer or switch, a J-box device, or an AV Bridge.

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

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

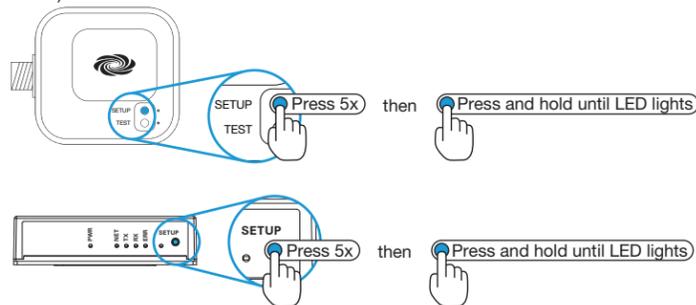
To create a new Züm space using a keypad, dimmer, or switch:

1. Press the bottom button 5 times.
2. Press and hold the bottom 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 Züm space is now created and in Joining mode, allowing you to add devices.



To create a new Züm 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 Züm space is now created and in Joining mode, allowing you to add devices.



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

#### Step 2 Add the ZUMMESH-KP to the Züm Space

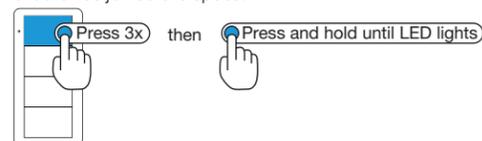
After a new Züm space is created, add the ZUMMESH-KP while the space is in Joining mode.

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

**NOTE:** Joining mode ends automatically after 4 minutes.

To add the ZUMMESH-KP:

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



#### Step 3 Complete Züm Space Setup

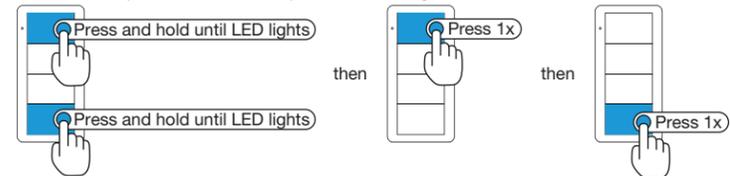
To finish creating a Züm space, press any button on a device that is part of the Züm space to exit Joining mode.

### Add the ZUMMESH-KP to an Existing Züm Space

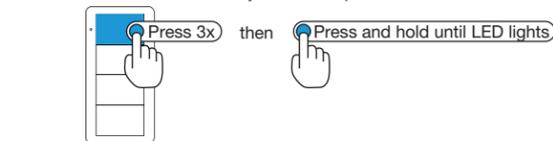
Add the ZUMMESH-KP to an existing Züm space by placing the Züm space in Joining mode.

Add the ZUMMESH-KP 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.



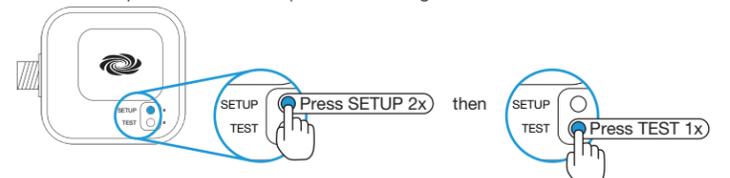
2. Add the ZUMMESH-KP.
  - a. Press the top button 3 times.
  - b. Press and hold the button until the LED on the ZUMMESH-KP lights (up to 10 seconds). The LED on the ZUMMESH-KP will start to flash slowly to indicate that it has joined the space.



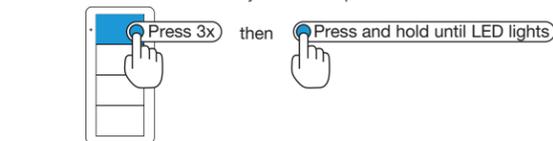
3. Press any button on a device that is part of the Züm space to exit Joining mode.

Add the ZUMMESH-KP 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 ZUMMESH-KP.
  - a. Press the top button 3 times.
  - b. Press and hold the top button until the LED on the ZUMMESH-KP lights (up to 10 seconds). The LED on the ZUMMESH-KP will start to flash slowly to indicate that it has joined the space.



3. Press any button on a device that is part of the Züm space to exit Joining mode.

## 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 on a ZUMMESH-KP10B when all load controllers are easily accessible.
- Manual Method - Change the light levels for ON (scene 1) on a ZUMMESH-KP10A or ZUMMESH-KP10B when all load controllers are easily accessible. Additionally, SCENE 2 and SCENE 3 light levels can be changed on a ZUMMESH-KP10B.
- Remote Method - Change the light levels for ON (scene 1), SCENE 2, or SCENE 3 on a ZUMMESH-KP10A or ZUMMESH-KP10B 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.

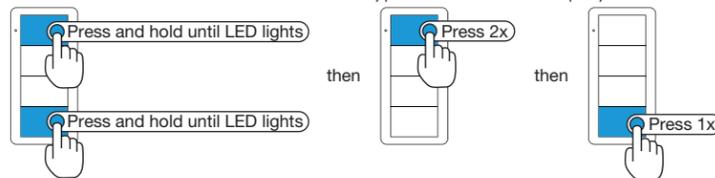
### End-User Method:

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

### Manual Method:

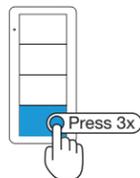
**NOTE:** Scene 2 and Scene 3 can also be changed.

1. Enter Scene Setting Mode using the keypad that will recall the scene.
  - a. Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
  - b. Press the top button two times.
  - c. 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.



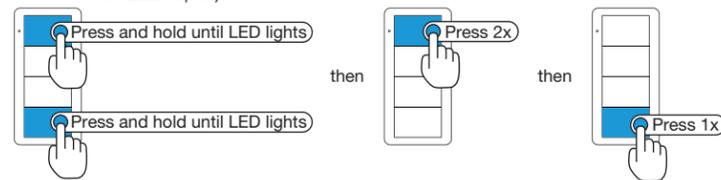
**NOTE:** Scene Setting Mode exits after 5 minutes when initiated from an ac-powered keypad or 1 minute when initiated from a battery powered keypad.

2. 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.
3. 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.
4. Repeat steps 2 and 3 for each scene button.
5. Press the bottom button on the keypad 3 times to exit.



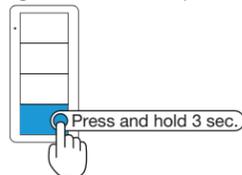
### Remote Method:

1. Enter Scene Setting Mode using the keypad that will recall the scene.
  - a. Press and hold both the top and bottom buttons until the LED lights (about 5 seconds).
  - b. Press the top button two times.
  - c. 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.

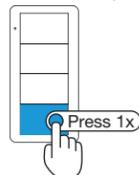


**NOTE:** Scene Setting Mode exits after 5 minutes when initiated from an ac-powered keypad or 1 minute when initiated from a battery powered keypad.

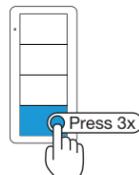
2. Press and hold the bottom button of the keypad until a set of lights in the space flashes on and off twice (about 3 seconds) to indicate that it is selected load. The lights return to their previous level.



3. 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.



4. 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.
5. Press the **ON**, **SCENE 2**, or **SCENE 3** button to save the scene.
6. Repeat steps 3 through 5 until all load controllers and all scenes are defined.
7. Press the bottom button on the keypad 3 times to exit.



**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Industry Canada (IC) Compliance Statement**  
CAN ICES-3(A)/NMB-3(A)

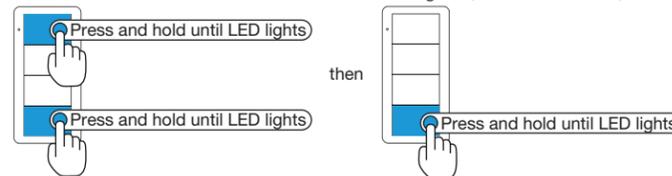
## Factory Reset

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.

To factory reset the ZUMMESH-KP:

1. Press and hold the top and bottom buttons until the LED lights (about 5 seconds).
2. Press and hold the bottom button until the LED lights (about 10 seconds).



This product is Listed to applicable UL® Standards and requirements tested by Underwriters Laboratories Inc.

Ce produit est homologué selon les normes et les exigences UL applicables par Underwriters Laboratories Inc.



### Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

The product warranty can be found at [www.crestron.com/warranty](http://www.crestron.com/warranty).

The specific patents that cover Crestron products are listed at [www.crestron.com/legal/patents](http://www.crestron.com/legal/patents).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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## Specifications

The specifications for the keypad are listed below.

SPECIFICATION	DETAILS
Power Requirements	100-277 VAC, 50/60 Hz
Enclosure	1-gang mountable in a 3-1/2 in deep electrical box; Requires decorator-style faceplate (not included)
Environmental	
Temperature	32° to 104 °F (0° to 40 °C)
Humidity	10% to 90% RH (noncondensing)
Dimensions	
Height	4.13 in (105 mm)
Width	1.75 in (45 mm)
Depth	1.8 in (46 mm)
Weight	5 oz (142 g)

This document was written by the Technical Publications department at Crestron.  
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