ZUMMESH-PART
Zūm™ Wireless Partition Sensor
Installation Guide

Description

The Crestron® Zūm wireless partition sensor (ZUMMESH-PART) is used to facilitate seamless control between two Zūm spaces.

Powered with 24 VDC, the ZUMMESH-PART conveniently receives power from a ZUMMESH-SIM or any Crestron 24 VDC power supply (both not supplied).

Zūm Overview

A Zūm space is an area, such as a board room or conference room, that is equipped with Zūm mesh devices such as dimmers, switches, keypads, and motion sensors. Zūm mesh devices create a wireless mesh network that facilitates seamless communication between devices without using an independent wireless gateway.

Centralized control and monitoring is enabled by adding a ZUMMESH-NETBRIDGE to the space and integrating a ZUMNET-GATEWAY and ZUM-FLOOR-HUB to the Crestron control system (all not included).

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

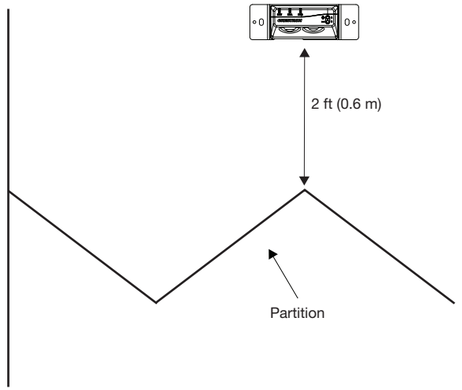
Install the ZUMMESH-PART

NOTE:

- Install and use this product in accordance with appropriate electrical codes and regulations.
- Sensors must be mounted on a vibration-free surface.

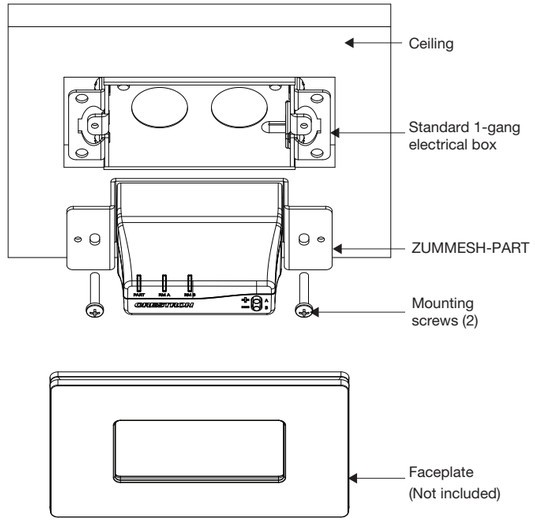
Determine the Mounting Location

Position the ZUMMESH-PART about 2 ft (0.6 m) away from the partition. If necessary, the ZUMMESH-PART can be mounted up to 4 ft (1.2 m) from the partition. The lens on the ZUMMESH-PART must face the partition so that when the partition is opened, the sensor sees the unobstructed room.



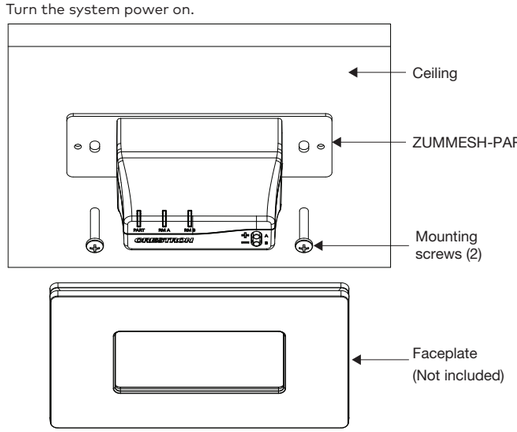
Mount the ZUMMESH-PART in a 1-gang electrical box:

1. Turn off the system power.
2. Connect the 2-pin terminal block to the 24 and G port on the ZUMMESH-PART. When making connections, use 14 to 26 AWG wire, strip the ends of the wires 7/16 in (11 mm) (avoid nicking the conductors), and tighten the connector to 5 in-lb (0.5 to 0.6 Nm).
3. Secure the ZUMMESH-PART to the 1-gang box using the included screws. The sensors must face towards the partition.
4. Attach a decorator style faceplate (not included).
5. Turn the system power on.



Mount the ZUMMESH-PART on a flat surface:

1. Turn off the system power.
2. Remove the two screws from the back of the ZUMMESH-PART and then remove the bracket. Retain the screws.
3. Install the flat bracket to the back of the ZUMMESH-PART using the screws removed in step 2.
4. Connect the 2-pin terminal block to the 24 and G port on the ZUMMESH-PART. When making connections, use 14 to 26 AWG wire, strip the ends of the wires 7/16 in (11 mm) (avoid nicking the conductors), and tighten the connector to 5 in-lb (0.5 to 0.6 Nm).
5. Secure the ZUMMESH-PART to the ceiling using screws that are appropriate for the mounting surface. The sensors must face towards the partition.
6. Attach a decorator style faceplate (not supplied).
7. Turn the system power on.



Adjust the ZUMMESH-PART Sensitivity

The ZUMMESH-PART operates by emitting an IR pulse and then measuring the reflected IR signal. The measurement of the reflected IR signal and the sensitivity level determines if the partition is closed or open.

The ZUMMESH-PART has high, medium (default), and low sensitivity levels.

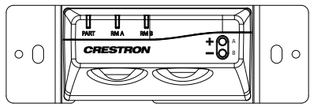
- High: Use when the partition is not being detected due to distance or partition material.
- Medium (default): Sufficient for most installations.
- Low: Use when the partition is falsely detected due to reflectance from other objects such as the ceiling, light fixtures, etc.

View and Adjust the Sensitivity Level:

The + and – buttons are used to view and adjust the sensitivity of the ZUMMESH-PART. The + button increases the sensitivity and the - button decreases the sensitivity.

To view and change the sensitivity level:

1. Press and hold the + or - button until the PART LED blinks.
   - 1 blink: Sensitivity is low
   - 2 blinks: Sensitivity is medium
   - 3 blinks: Sensitivity is high
2. Continue holding the + button to increase the sensitivity or the - button to decrease the sensitivity. Release the button when the desired sensitivity setting is achieved.
3. Open and close the partition to verify the sensitivity level. The green PART LED lights when the partition is closed. It takes several seconds for the ZUMMESH-PART to determine that the partition is closed.



LED Functionality

PART LED:

- Lights green when the partition is closed.
- Is off when the partition is open.

  NOTE: When the partition is opened or closed, there is a small delay for the PART LED to change.

RM A LED:

- Lights solid red to indicate that the ZUMMESH-PART has not joined Room A.
- Once joined to Room A, the LED lights momentarily when a message is received from a device in Room A.

RM B LED:

- Lights solid red to indicate that the ZUMMESH-PART has not joined Room B.
- Once joined to Room B, the LED lights momentarily when a message is received from a device in Room B.

Add the ZUMMESH-PART to Existing Zūm Spaces

NOTE:

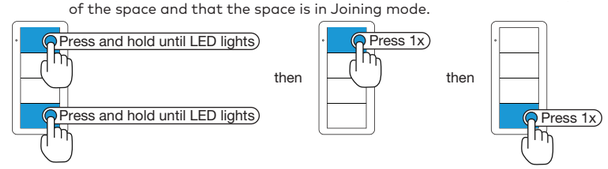
- Scene 1 should be similar for both spaces. Occupancy sensors will recall scene 1 for both spaces, so you want them both to recall the similar light values. To set Scene 1, refer to the Zum Light Control System Setup Guide (Doc. 7957) at www.crestron.com/manuals.
- The ZUMMESH-PART occupies one motion sensor slot in each room. Up to seven additional motion sensors may be added in each room. When the partition is opened, all motion sensors operate in unison to determine occupancy and vacancy.
- Do not mix occupancy and vacancy sensors within the combined rooms. Both rooms must use either occupancy or vacancy sensors.

Add the ZUMMESH-PART to Room A and then Room B by placing the Zūm spaces in Joining mode. The ZUMMESH-PART is added using button press sequences on the Zūm devices in the space. When performing the button press sequences, remember the following:

- Perform consecutive button presses at a rate of one press per second.
- Transition between button press combinations on the same device within 1 second.
- When moving between devices, begin the next button press sequence before the 4 minute timeout period expires.

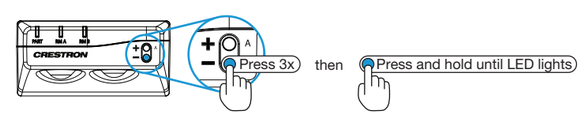
Add the ZUMMESH-PART Using an AC powered Keypad, Dimmer, or Switch

1. Place Room A into Joining mode. Room A is the space where the ZUMMESH-PART is mounted.
   a. Press and hold both the top and bottom buttons until the LED lights.
   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-PART to Room A.
   a. Press the + button 3 times. The RM A LED will flash with each button press and then turn off.
   b. Press and hold the + button until the RM A LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room A.

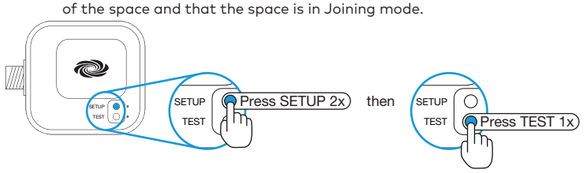
3. Press any button on an AC-powered device that is part of the Room A Zūm space to exit Joining mode.
4. Place Room B into Joining mode as described in step 1 above.
5. Add the ZUMMESH-PART to Room B.
   a. Press the - button 3 times. The RM B LED will flash with each button press and then turn off.
   b. Press and hold the - button until the RM B LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room B.



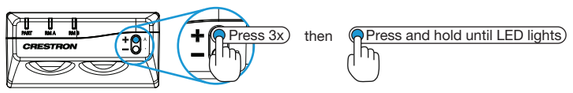
6. Press any button on an AC-powered device that is part of the Room B Zūm space to exit Joining mode.

Add the ZUMMESH-PART using a J-box device:

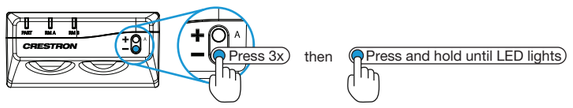
1. Place Room A into Joining mode. Room A is the space where the ZUMMESH-PART is mounted.
   a. Press the **SETUP** button 2 times.
   b. Press the **TEST** button once. The LEDs on all devices in the space (except battery powered devices) flash slowly to indicate that the devices are part of the space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



2. Add the ZUMMESH-PART to Room A.
   a. Press the + button 3 times. The RM A LED will flash with each button press and then turn off.
   b. Press and hold the + button until the LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room A.



3. Press any button on an AC-powered device that is part of the Room A Zūm space to exit Joining mode.
4. Place Room B into Joining mode as described in step 1 above.
5. Add the ZUMMESH-PART to Room B.
   a. Press the - button 3 times. The RM B LED will flash with each button press and then turn off.
   b. Press and hold the - button until the RM B LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room B.

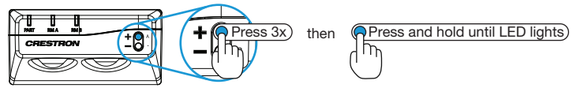


6. Press any button on an AC-powered device that is part of the Room B Zūm space to exit Joining mode.

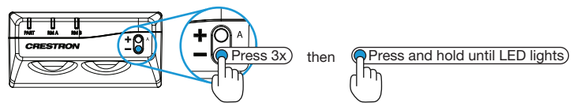
Add the ZUMMESH-PART using an AV Bridge:

1. Place Room A into Joining mode. Room A is the space where the ZUMMESH-PART is mounted.
   a. Press and hold the **SETUP** button for 2 seconds. 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-PART to Room A.
   a. Press the + button 3 times. The RM A LED will flash with each button press and then turn off.
   b. Press and hold the + button until the LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room A.



3. Press any button on an AC-powered device that is part of the Room A Zūm space to exit Joining mode.
4. Place Room B into Joining mode as described in step 1 above.
5. Add the ZUMMESH-PART to Room B.
   a. Press the - button 3 times. The RM B LED will flash with each button press and then turn off.
   b. Press and hold the - button until the RM B LED on the ZUMMESH-PART lights. The ZUMMESH-PART is added to Room B.



6. Press any button on an AC-powered device that is part of the Room B Zūm space to exit Joining mode.

Test the Functionality of the ZUMMESH-PART

Once joined to Room A and Room B, the RM A and RM B LEDs should be off.

Verify Communications:

- Tap the + button. If the lights in Room A toggle, the ZUMMESH-PART is communicating with Room A.
- Tap the - button to toggle the lights in Room B. If the lights in Room B toggle, the ZUMMESH-PART is communicating with Room B.

Test the Functionality:

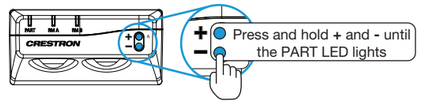
- Open the partition wall and verify that the green PART LED turns off. Recall scenes from the keypads in Room A and Room B. The lights in both rooms should react in unison.
- Close the partition wall and verify that the green PART LED turns on. Recall scenes from the keypad in Room A and the lights in Room A should be controlled. Recall scenes from the keypad in Room B and the lights in Room B should be controlled.

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-PART, press and hold + and - buttons for 10 seconds until the PART LED lights.



Specifications

SPECIFICATION	DETAILS
Sensing	
Method of Detection	Diffuse Reflective
Light Source	Pulse modulated infrared LED
IR Sensitivity	Adjustable
Sensing Distance	4 ft (122 cm)
Power Requirements	
Current Consumption	20 mA @ 24 VDC
Environmental	
Temperature	-13° to 121 °F (-25° to 55 °C)
Housing	
Construction	Plastic
Mounting	Surface mount; 1-gang mountable in a 3-1/2 inch deep electrical box, fits decorator-style faceplate
Weight	3.32 oz (94 g)

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.

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.

CE

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following 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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada (IC) Compliance Statement

CAN ICES-3(B)/NMB-3(B).

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