

ZUMMESH-NETBRIDGE

Zūm™ Network Bridge Installation Guide



Description

The Crestron® ZUMMESH-NETBRIDGE is a Network Bridge that adds enhanced integration and setup capabilities to a Zūm space. It enables Zūm Net wireless communication with a Zūm Floor Hub via a Zūm Net Wireless Gateway (ZUM-FLOOR-HUB and ZUMNET-GATEWAY; both not included). Integration with the Zūm Floor Hub enables every space in the building to be centrally monitored, managed, and controlled as part of a complete Zūm commercial lighting solution.

The Zūm Network Bridge also adds Bluetooth® connectivity within each room to allow setup using a mobile device running the Zūm app.

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

The ZUMMESH-NETBRIDGE is a small module that snaps onto a Zūm J-Box Load Controller or Zūm J-Box Accessory Power Supply (ZUMMESH-JBOX or ZUMMESH-JBOX-PSU; both not included). The Zūm J-Box device provides power for the ZUMMESH-NETBRIDGE.

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.



Zūm Overview

A Zūm space consists of one space, such as a board room or conference room, that is equipped with Zūm mesh devices. The Zūm 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 Zūm space, a ZUMMESH-NETBRIDGE 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.

The Zūm App

The Zūm app is available for download from the App Store® app in iTunes® software or from the Google Play™ store. The Zūm app provides setup of a Zūm space using a mobile device.

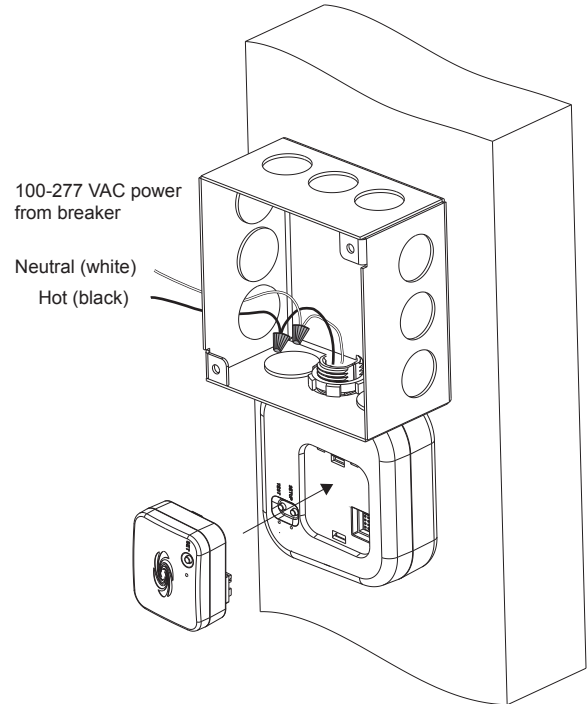
Installation

Mount the ZUMMESH-NETBRIDGE to any ZUMMESH-JBOX device.

NOTE: Observe the following points.

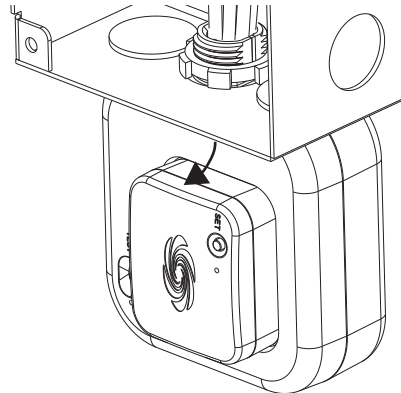
- Install and use this product in accordance with appropriate electrical codes and regulations.
- This meets the requirements of UL® standard 2043 for installation in an environmental air-handling (plenum) space.
- Ensure that the ZUMMESH-NETBRIDGE is installed within range of the ZUMNET-GATEWAY.

1. Insert a flat-head screwdriver into the slot next to the cover and pry up to remove the cover from the ZUMMESH-JBOX.
2. Align the ports on the ZUMMESH-NETBRIDGE and the ZUMMESH-JBOX device, and then insert the network bridge into the ZUMMESH-JBOX device. The network bridge snaps into place.



Remove the ZUMMESH-NETBRIDGE.

1. Place your thumb on the side of the ZUMMESH-NETBRIDGE that is nearest the J-box.
2. Press the ZUMMESH-NETBRIDGE away from the J-box. While pressing on the side of the ZUMMESH-NETBRIDGE, slightly lift your thumb up. The ZUMMESH-NETBRIDGE should easily detach from the J-box device.

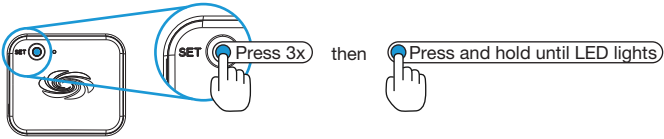


Connect the Network Bridge to the Zūm Net Wireless Gateway

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.
2. Join the Zūm Net Wireless Gateway's network.
 - 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.

Leaving a Zūm Net wireless network:

1. Verify that the device is not within range of a ZUMNET-GATEWAY that is in Acquire mode.
2. Press the **SET** button three times, and then press and hold it down (tap-tap-tap press+hold) until all LEDs on the device flash once (this can take up to 10 seconds), then release the button. The LED flashes slowly.
3. The LED then flashes quickly to indicate that the device has left the Zūm Net wireless network.
4. Press the SET button to confirm that the device has left the Zūm Net wireless network

Verifying Communications Status

To check the communications status of the device, press the **SET** button three times, and then press and hold for less than 2 seconds. The red LED indicates the communications status. Refer to the following table for details.

LED	COMMUNICATIONS STATUS
Red LED turns on for 5 seconds	The device is communicating with the ZUMNET-GATEWAY and ZUM-FLOOR-HUB.
Red LED flashes three times	The device is communicating with the ZUMNET-GATEWAY, but the gateway is not communicating with the ZUM-FLOOR-HUB.
Red LED flashes twice	The device was previously joined to the network but is not communicating with the ZUMNET-GATEWAY.
Red LED flashes once	The device is not joined to the ZUMNET-GATEWAY.

Specifications

The specifications for the ZUMMESH-NETBRIDGE are listed below.

SPECIFICATION	DETAILS
Power	Draws 60 mA average, 250 mA peak @ 3.3 VDC, provided by a J-Box device (not included)
Wireless Communications	Bluetooth low-energy V4.0, pairs with a mobile device running the Crestron Zūm app
Bluetooth	2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), default channel 15; IEEE 802.15.4 compliant;
Zūm Net	50 ft (15 m) between a ZUMNET-GATEWAY and a ZUMMESH-NETBRIDGE; 50 ft (15 m) between multiple ZUMMESH-NETBRIDGE devices, ZUMMESH-NETBRIDGES create a mesh network to transfer data to and from the ZUMNET-GATEWAY; Range between floors or ceilings is limited to one level, subject to site-specific conditions and individual device capabilities
SET LED	(1) LED, indicates connection status to the gateway: Red - Solid: Not acquired to a gateway Green/Red - Flashing: Acquired but has lost connection to the gateway Green - Solid: Communicating with the gateway
Dimensions	
Height	1.66 in (42 mm)
Width	1.94 in (49 mm)
Depth	1.01 in (26 mm)
	Projects 0.75 in (18 mm) when attached to a J-box
Environmental	
Temperature	32° to 104 °F (0° to 40 °C)
Humidity	10% to 90% RH (noncondensing)

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.

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)

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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