

The ZUM-HUB4 enables centralized management for Zūm® commercial lighting systems of up to 1,000 rooms with an Ethernet switch (sold separately) across Zūm wired, Zūm wireless, and external spaces. The device provides a web-based user interface for control. A built-in time clock enables room lighting and occupancy and vacancy sensing automation. The ZUM-HUB4 can also be integrated with other Crestron lighting systems and control systems.

The ZUM-HUB4 is featured in three kits.

- <u>ZUML-HUB4-GW</u>: 4-Series<sup>™</sup> Control Processor for Zūm<sup>®</sup> Lighting Control System with Wireless Gateway and Power Supply Contains:
  - ZUM-HUB4 and PW-2420RU power pack
  - <u>ZUMNET-GATEWAY</u>: Zūm® Net Wireless Gateway for Zūm Light Control System
  - <u>PW-2407WU</u>: Wall Mount Power Pack, 24VDC, 0.75A, 2.1 mm, Universal

For use with the ZUMNET-GATEWAY

- <u>ZUML-HUB4-PAK</u>: Zūm<sup>®</sup> Lighting Control Processor Panel, Basic Contains:
  - o ZUM-HUB4 and PW-2420RU power pack
  - CEN-SW-POE-5: 5-Port PoE Switch
  - GLEX-FT-24-HC: Feed-Through Enclosure, 24 Circuits, Hinged Cover

 <u>ZUML-HUB4-CN-PAK</u>: Zūm® Lighting Control Processor Panel, Expanded

### Contains:

- ZUM-HUB4 and PW-2420RU power pack
- DIN-AP4: 4-Series™ DIN Rail Control System
- DIN-EN-6X18: Enclosure for DIN Rail Devices, 6 DIN Rails, 18 M Wide
- CEN-SW-POE-5 (x2): 5-Port PoE Switch
- o DIN-HUB (x2): DIN Rail Cresnet Distribution Hub
- <u>DIN-PWS60</u> (x2): DIN Rail 60 Watt Cresnet® Power Supply For use with the DIN-HUB



## In the Box

1 ZUM-HUB4, 4-Series™ Control Processor for Zūm® Lighting Control System

#### Additional Items

- 1 Connector, 4-Pin (2003576)
- 1 Power Pack, 24VDC, 2.5A, 100-240VAC (2045873)
- 2 Bracket, Rack Ear, 1U (2032122)
- 4 Foot, 0.5 in. x 0.5 in. x 0.23 in., Rubber, Black (2002389)
- 1 Power Cord, 5 ft 10 in. (1.78 m) (2042043)

**ZUM-HUB4** 

4-Series™ Control Processor for Zūm® Lighting Control System





## Installation

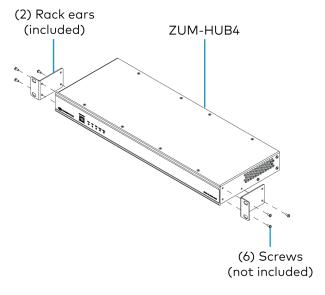
The ZUM-HUB4 can be mounted into a rack or placed onto a flat surface.

## Mounting Into a Rack

The hub occupies 1U of rack space.

To install the included rack ears:

- 1. Use a #1 or #2 Phillips screwdriver to remove the three screws from each side of the front of the device as shown in the following illustration.
- 2. Use the screwdriver and the screws removed in the previous step to attach the included rack ears to the device.
- 3. Mount the device into the rack using four mounting screws (not included).



## Placing onto a Flat Surface

When placing the device onto a flat surface or stacking it with other equipment, attach the included rubber feet near the corners on the underside of the device.



## **Make Connections**

The hub has a dedicated Control Subnet that is used for communication between the control system and Crestron Ethernet devices. This subnet allows for dedicated communication between the control system and Crestron Ethernet devices without interferences from other network traffic on the LAN.

Make the connections, and note the following:

- Use Crestron power supplies for Crestron equipment.
- The included cable(s) cannot be extended.
- Apply power after all connections have been made.

### NOTES:

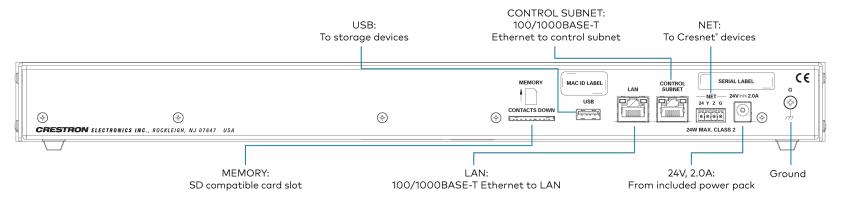
- Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).
- The hub can be powered with the (included) 24VDC power pack.
- Do not connect the CONTROL SUBNET port to the LAN. The CONTROL SUBNET port must be connected only to Crestron Ethernet devices.

For details on using the Control Subnet, refer to the <u>4-Series™ Control</u> Systems Reference Guide (Doc. 8559).

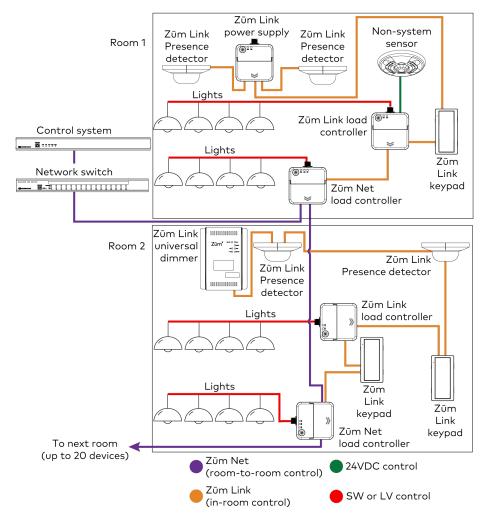
**ZUM-HUB4** 

# 4-Series™ Control Processor for Zūm® Lighting Control System

### Connections



### Zūm Wired System Diagram



## NOTES:

- Daisy-chain up to 20 Zūm Net devices (up to 328 ft (100 m) between Zūm Net devices) with purple CBL-CAT5E-ZUMNET-P RJ-45 cables (sold separately).
- Do not exceed three network switches between a ZUM-HUB4 and a Zūm Net device.
- System sensors communicate digitally via Zūm Link. Non-system sensors communicate via an analog connection on a Zūm Wired load controller.



# Firmware Upgrade

Before using a Zūm Wired device, ensure it is updated with the latest firmware. Check for the latest firmware at <a href="https://www.crestron.com/firmware">www.crestron.com/firmware</a>. Load the firmware onto the device using Crestron Toolbox™ software, the ZUM-HUB4 web interface, or the Zūm app (refer to Update Firmware for a Zūm Space).



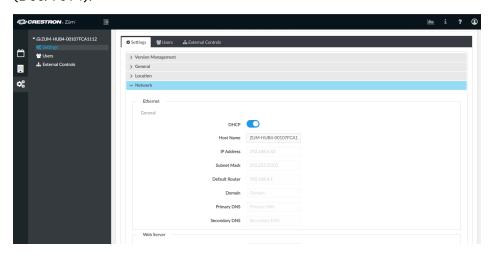


# Configure the ZUM-HUB4

The ZUM-HUB4 is configured using the web interface. Connect to the device by entering the device hostname into a web browser. The hostname is comprised of "ZUM-HUB4-" followed by the entire MAC address (e.g., ZUM-HUB4-00107FCA1112). The **New User Registration** screen is displayed during the first connection. Enter the user's **Username**, **Password**, **Firstname**, **Lastname**, and **Email Address**, and then click **Submit**.

New User Registration	
Username	
Osemanie	
Password	
Firstname	
Lastname	
Email Address	
	Submit

For further configuration, refer to the <u>ZUM-HUB4 Product Manual</u> (Doc. 9094).



Navigate to the Settings page to begin configuring the ZUM-HUB4.



# Zūm Wired Setup

Once all of the devices are installed in the space and using the latest firmware, use the Zūm app to modify default room behavior. Expedite commissioning by copying a room configuration and sending it to a room with identical devices. Save a room configuration template and share it via email, or other methods available on the device. A template can be deployed to any identical room via the Zūm app or the ZUM-HUB4.

**NOTE:** The ZUMLINK-KP Bluetooth® connection is required to configure a Zūm wired space with the Zūm app.

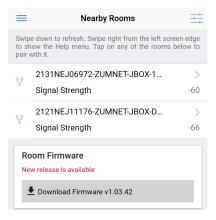
## Connect to the Zūm App

Download the  $Z\bar{u}m$  app from the <u>Google Play</u> online store or the Apple® App Store® online store.

To use the Zūm app:

1. Enable Bluetooth wireless connection on your device to communicate with the  $Z\bar{u}m$  space.

2. Launch the Zūm app and grant the permissions the app requests. The Zūm app displays a list of available spaces.



- 3. If new firmware is detected, update the firmware. Refer to Update Firmware for a Zūm Space.
- 4. Select the desired space.
- 5. When prompted, enter the PIN. The Zūm app main screen opens.

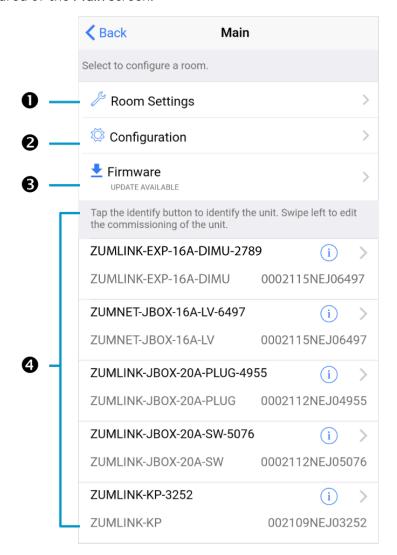
### **NOTES:**

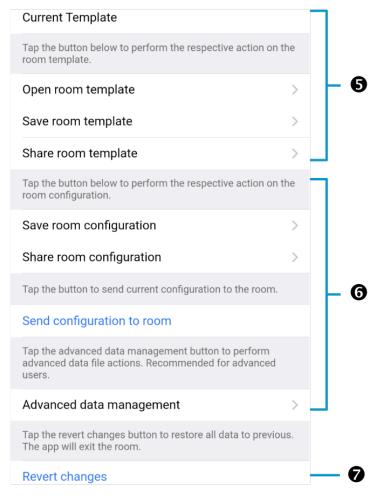
- For Primary load controllers running firmware 3.6.18 and higher, the default PIN is 246800. For firmware lower than 3.6.18, the default PIN is 2468.
- To change the PIN, navigate to the Room Settings. When changing the PIN, the previous PIN is required.
- The first failed log-in attempt locks the user out of the Zūm space. With subsequent failed attempts, the lockout duration increases up to 60 minutes.
- The lockout duration resets when the correct PIN is entered, the Primary load controller reboots, or when the PIN is changed from the ZUM-HUB4 Web-Interface.



## Zūm App Main Screen

From the **Nearby Rooms** screen, tap the desired room to open the **Main** screen. The following sections describe the actions available for each area of the **Main** screen.







**ZUM-HUB4** 

## 4-Series™ Control Processor for Zūm® Lighting Control System

**NOTE:** The numbers below correspond with the numbers in the **Main** screen diagram.

- 1. Room Settings: Edit the Room Name, PIN, Floor ID, Zone ID, and Network information.
- Configuration: Edit the room logic to view the current state of the room.
  - Occupancy Sensors: View details for the connected sensor(s) or edit the sensor name.
  - Photo Sensors: View details for the connected sensor(s) or edit the sensor name.
  - Load Controllers: Identify and view details for the connected load controller(s).
    - ZUMLINK-JBOX-16A-LV and ZUMNET-JBOX-16A-LV load controllers:
      - View Current Scene, Daylighting status, and Output Level.
      - Override: The state of the load when Override is recalled.
        Click the toggle to turn the load on or off during
        Override.
      - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
      - View Dimming Values
      - Edit the Dimming Curve Configuration or Dimmer Scenes Configuration.

- ZUMLINK-JBOX-20A-PLUG load controller:
  - Override: The state of the load when Override is recalled.
    Click the toggle to turn the load on or off during
    Override.
  - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
- ZUMLINK-JBOX-20A-SW load controller:
  - Closed: Click the toggle to turn the load on or off.
  - Override: The state of the load when Override is recalled.
    Click the toggle to turn the load on or off during
    Override.
  - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
  - Scenes: Allow keypad access to the scene by selecting or deselecting the checkbox. Determine the state of the load when the scene is recalled by clicking the toggle on or off.



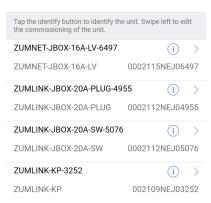
- ZUMLINK-EXP-16A-DIMU load controller:
  - View Current Scene, Daylighting status, and Output Level.
  - Override: The state of the load when Override is recalled.
    Click the toggle to turn the load on or off during
    Override.
  - Assign the occupancy mode (Occupancy menu), vacancy mode (Vacancy menu), vicinity mode (Vicinity menu), and daylight harvesting (Photo menu) to specific load controllers.
  - View Dimming Values.
  - Edit the Dimmer Scenes Configuration.
- Scenes: View and edit room scenes: Scene 1 Scene 16. When editing the scene, tap the Identify icon i to identify the load controller. The load controller emits a sound and flashes the Link LED. The connected loads also flash.

- Keypads: Identify and view details for the connected keypad(s). Edit the keypad name and assign the button layout.
  - Adjust the Double Tap Speed: Set the amount of time between two button presses to qualify as a double tap.
  - Specify the Button Layout and click on a button to configure button actions.

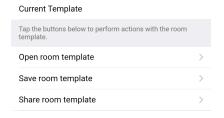
## Button action options:

- None
- Off: Assigned load controllers turn off.
- On: Assigned loads turn on.
- Raise: Assigned load controllers raise.
- Toggle: Switches load controllers between ON and OFF states
- Lower: Assigned load controllers lower.
- Recall Scene 1 Scene 16: Assigned load controllers recall the behavior set for the specified scene.
- Export to Hub: Name and send information to ZUM-HUB4 for macro actions.
- Load Shedding: Set the maximum levels for load shedding.
- Load/Sensor Groups: Create groups within the room.
- DALI Controllers: Address drivers, create DALI groups, assign drivers, and identify drivers.
- Current Scene: Displays the current room scene.
- Occupancy Status: Displays occupied or vacant. If any area of the room is occupied, then the status is Occupied. When all areas of the room are vacant, the status is Vacant.
- 3. Firmware: To update firmware, refer to Update Firmware with the Zūm App.
- 4. Discovered Room Devices: Identify a device and edit the commissioning settings

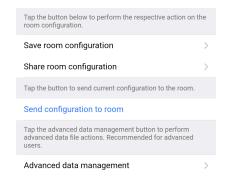




- Tap the Identify icon (i) to identify a device. A load controller emits a sound and the Link LED flashes. The connected loads also flash. A keypad flashes its LED.
- Tap the device to edit or review the device details: Edit Name. Review the Model, Serial Number, Status, and edit the device settings.
- 5. Current Template Settings: Choose Open room template, Save room template, or Share room template.

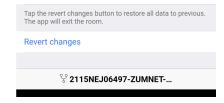


- 6. Configuration Data:
  - Save room configuration: Save the room configuration data in the space.
  - Share room configuration: Share the room configuration data in the space.
  - Send configuration to room: Send room logic changes made in the app to the room.
  - Advanced data management: Review the Map, Logic, and Settings of the data currently loaded. Load, save or share new Map, Logic, or Settings data.



**NOTE:** Changes made in the app are not sent to the room until they are deployed using the Send configuration to room button.

7. Revert changes: Restore all non-deployed changes made since launching the app.



## **Additional Information**

#### **Original Instructions**

The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

Regulatory Model: M201903003

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