ZUM-HUB4

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

The Crestron® 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.

- ZUML-HUB4-GW: 4-Series™ Control Processor for Zūm® Lighting Control System with Wireless Gateway and Power Supply

  Contains:

  - ZUM-HUB4 and PW-2420RU power pack
  - ZUMNET-GATEWAY: Zūm® Net Wireless Gateway for Zūm Light Control System
  - PW-2407WU: Wall Mount Power Pack, 24VDC, 0.75A, 2.1 mm, Universal

    For use with the ZUMNET-GATEWAY

- ZUML-HUB4-PAK: Zūm® Lighting Control Processor Panel, Basic

  Contains:

  - 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

- ZUML-HUB4-CN-PAK: 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
  - DIN-HUB (x2): DIN Rail Cresnet Distribution Hub
  - DIN-PWS60 (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)

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⚙ Installation

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

Mounting Into a Rack

The ZUM-HUB4 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).

(2) Rack ears (included)   ZUM-HUB4

(6) Screws (not included)
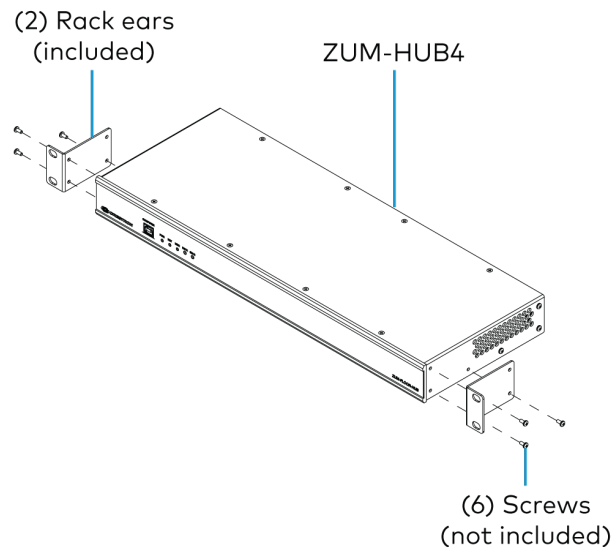
Placing onto a Flat Surface

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 ZUM-HUB4 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.
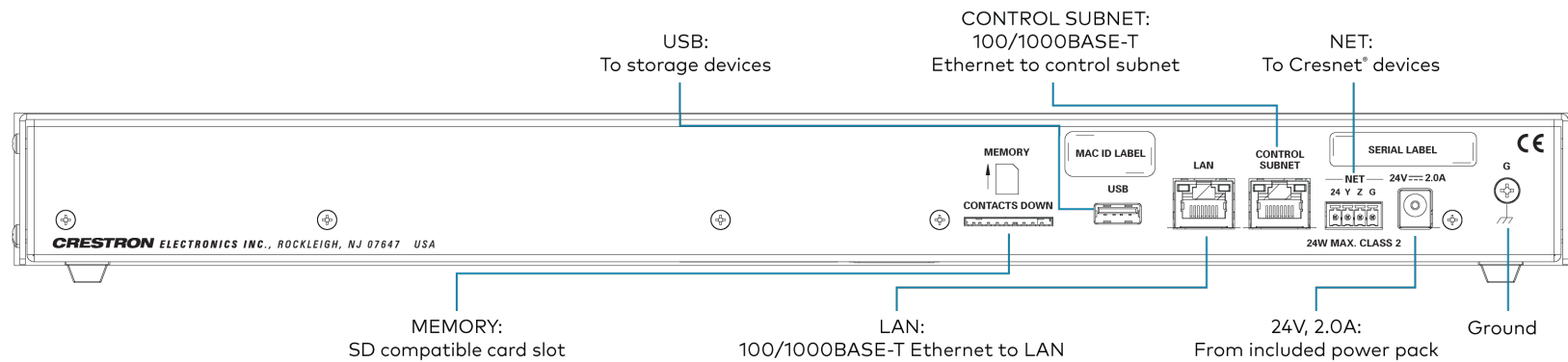- Apply power after all connections have been made.

NOTES:

- Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).
- The ZUM-HUB4 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.

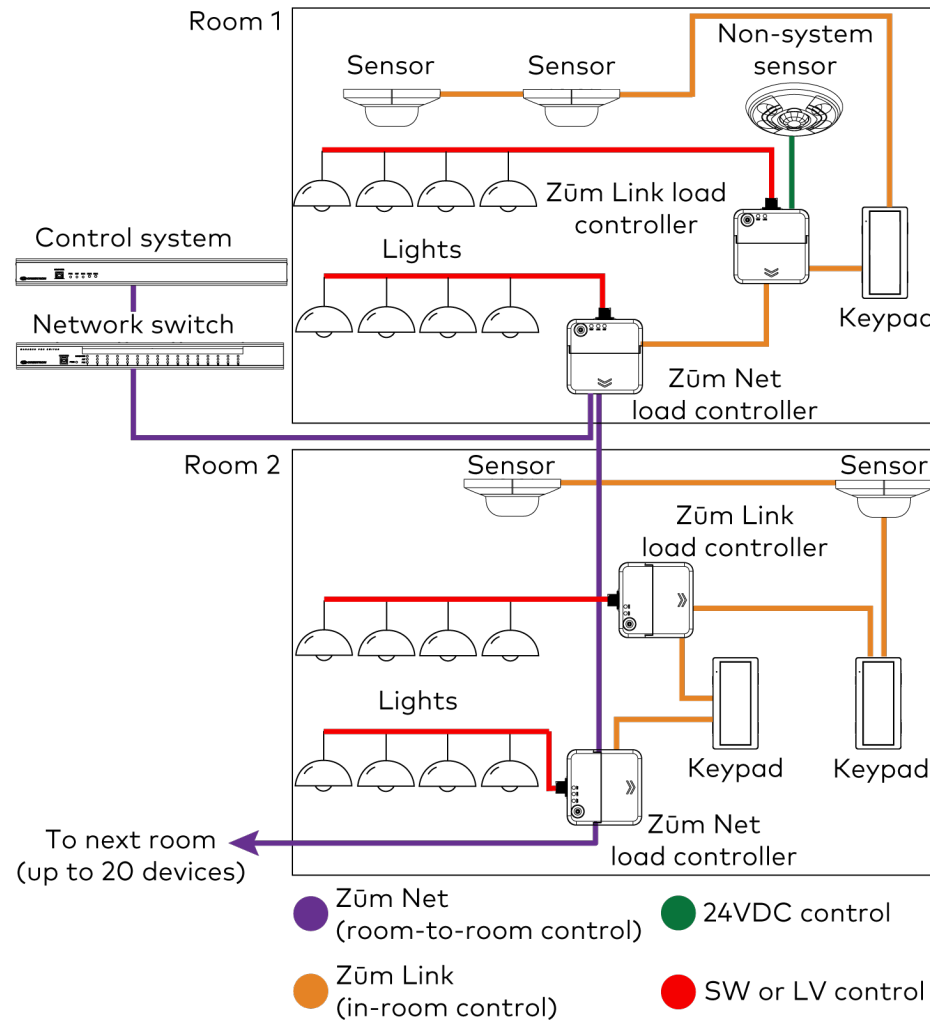For details on using the Control Subnet, refer to the 4-Series™ Control Systems Reference Guide (Doc. 8559).

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

Connections

USB:
To storage devices

CONTROL SUBNET:
100/1000BASE-T
Ethernet to control subnet

NET:
To Cresnet® devices

MEMORY:
SD compatible card slot

LAN:
100/1000BASE-T Ethernet to LAN

24V, 2.0A:
From included power pack

Ground

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Zūm Wired System Diagram

NOTES:

- Daisy-chain up to 20 Zūm Net devices (up to a maximum of 328 ft (100 m) per leg) with purple CBL-CAT5E-ZUMNET-P RJ-45 cables (sold separately).

- System sensors communicate digitally via Zūm Link. Non-system sensors communicate via an analog connection on a Zūm Wired J-BOX.

Firmware Upgrade

Before using the ZUM-HUB4, ensure it is updated with the latest firmware. Check for the latest firmware at www.crestron.com/firmware. Load the firmware onto the device using Crestron Toolbox™ software. Refer to Version Management.

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⚙ 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**.
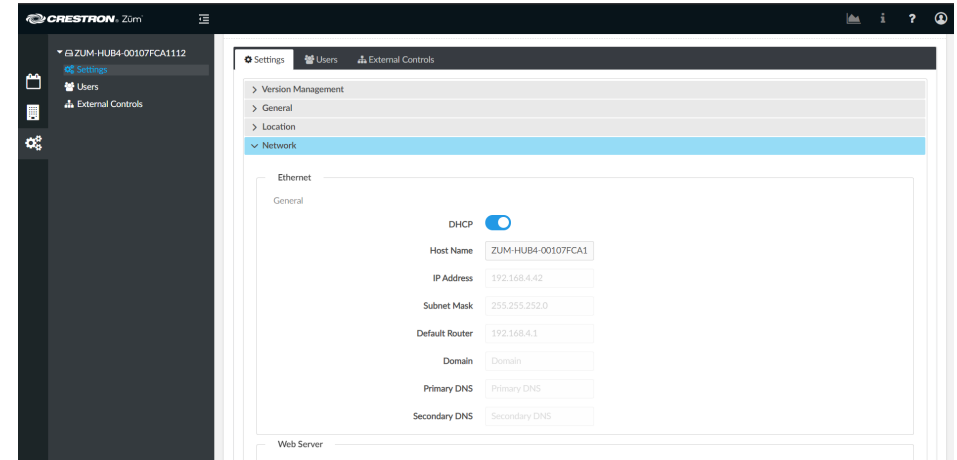
For further configuration, refer to the ZUM-HUB4 Product Manual (Doc. 9094).

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

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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 behavior. Expedite commissioning by copying a room configuration and sending it to an identical room. Save a room configuration template and share it via the ZUM-HUB4 or the Zūm app.
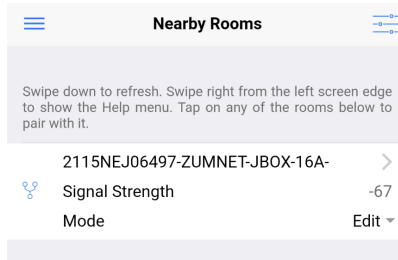
> **NOTE:** The ZUMLINK-KP Bluetooth® connection is required to configure a Zūm wired space with the Zūm app.

Connect to the Zūm App

Download the Zūm app from the Google Play™ online store.

To use the Zūm app:

1. Enable Bluetooth wireless connection on your device to communicate with the Zūm space.

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

Nearby Rooms

Swipe down to refresh. Swipe right from the left screen edge to show the Help menu. Tap on any of the rooms below to pair with it.

2115NEJ06497-ZUMNET-JBOX-16A-	>
Signal Strength	-67
Mode	Edit ▾

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Zūm App Main Screen

From the Nearby Rooms screen, tap the room to open the Main screen.
The following section describes the actions available for each area of the
Main screen.

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1. Room Settings: Edit the Room Name, PIN, Floor ID, Zone ID, and Network information.
2. Configuration: Edit the room logic view the current state of the room.
   - Sensors: View details for the connected sensor(s). Edit sensor name.
   - Load Controllers: Identify and view the details for the connected load controller(s).
     - ○ ZUMLINK-JBOX-16A-LV and ZUMNET-JBOX-16A-LV load controllers:
       - View Current Scene, Daylighting status, 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.
   - Scenes: View and edit room scenes: Scene 1 - Scene 16. When editing the scene, tap the Identify icon ⓘ to identify the load controller: It emits a sound and flashes the Link LED. The connected loads also flash.

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- Keypads: Identify and view the 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.
    - 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.
- 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. Discovered Room Devices: Identify a device and edit the commissioning settings

Tap the identify button to identify the unit. Swipe left to edit the commissioning of the unit.

ZUMNET-JBOX-16A-LV-6497	ⓘ	›
ZUMNET-JBOX-16A-LV	0002115NEJ06497	
ZUMLINK-JBOX-20A-PLUG-4955	ⓘ	›
ZUMLINK-JBOX-20A-PLUG	0002112NEJ04955	
ZUMLINK-JBOX-20A-SW-5076	ⓘ	›
ZUMLINK-JBOX-20A-SW	0002112NEJ05076	
ZUMLINK-KP-3252	ⓘ	›
ZUMLINK-KP	002109NEJ03252	

- Tap the Identify icon ⓘ 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.

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- Tap and slide a device from right to left until the blue Edit button appears.

Tap the identify button to identify the unit. Swipe left to edit the commissioning of the unit.

INET-JBOX-16A-LV-6497	(i) >	Edit
INET-JBOX-16A-LV	0002115NEJ06497	
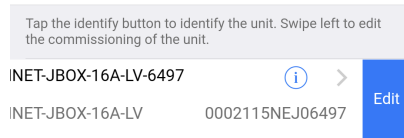
Use the edit screen to change the name of the device and the name of the device functions. Also, identify or edit the connected devices.
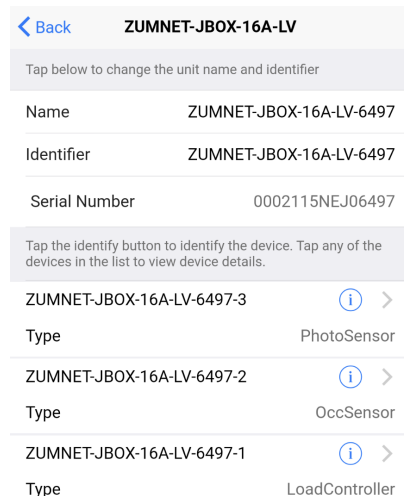
← Back	**ZUMNET-JBOX-16A-LV**
Tap below to change the unit name and identifier	
Name	ZUMNET-JBOX-16A-LV-6497
Identifier	ZUMNET-JBOX-16A-LV-6497
Serial Number	0002115NEJ06497

Tap the identify button to identify the device. Tap any of the devices in the list to view device details.

ZUMNET-JBOX-16A-LV-6497-3	(i) >
Type	PhotoSensor
ZUMNET-JBOX-16A-LV-6497-2	(i) >
Type	OccSensor
ZUMNET-JBOX-16A-LV-6497-1	(i) >
Type	LoadController

4. Current Template Settings: Choose Open room template, Save room template, or Share room template.

Current Template

Tap the buttons below to perform actions with the room template.

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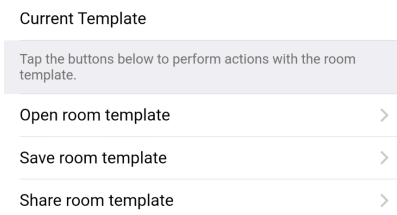
5. Configuration Data:
   - Save room configuration: Save the room configuration data in the space.
   - Send configuration to room: Send room logic changes made in the app to the room.
   - Advanced data management: Review the Map, Logic, and Settings of the data currently loaded. Load, save or share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

Tap to save the current room configuration.

Save room configuration	>

Tap the button to send current configuration to the room.

Send configuration to room

Tap the advanced data management button to perform advanced data file actions. Recommended for advanced users.

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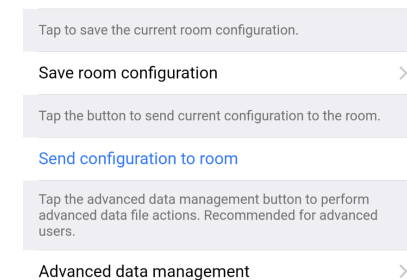
> **NOTE:** Changes made in the app are not sent to the room until they are deployed using the Send configuration to room button.

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

Tap the revert changes button to restore all data to previous. The app will exit the room.

Revert changes

⚷ **2115NEJ06497-ZUMNET-...**
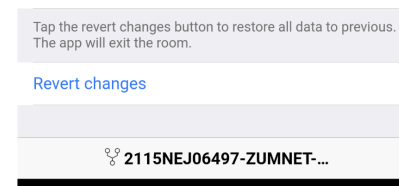
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Calibrate Daylighting Settings

The photocell component of a load controller detects the amount of ambient light in the room. When a space is calibrated for Daylighting and Scene 1 is called, the photocell will detect the ambient light levels and dim the lights accordingly.

Calibrating Daylighting requires four main steps:

1. Assign the photocell component of a load controller to the load controller.
2. Send the new configuration to the space.
3. Adjust the light level in the space.
4. Calibrate Daylighting.

To calibrate the daylight settings:

1. Assign the photocell component to the load controller that will participate in Daylighting.

   a. From the Main screen, click **Configuration**.

‹ Back	**Main**
Select to configure a room.	
🔧 Room Settings	›
⚙ Configuration	›
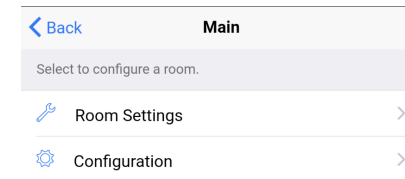
   b. Click **Load Controllers**.

‹ Back	**Configuration**
Select item to configure.	
◠ Sensors	›
💡 Load Controllers	›
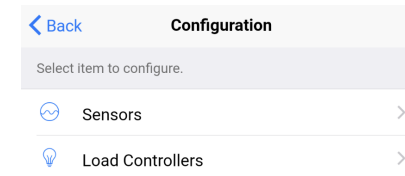
   c. Click the desired load controller.

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d. For Photo, select a photocell from the drop-down menu.

‹ Back	ZUMLINK-JBOX-16A-LV	
SN: 0002133NEJ10536; FW: v1.001.00054		
Current Scene		1
Daylighting		Inactive
Output Level		68%
Tap below to configure the load override.		
Override (0-100%)		100
Select the sensors that are bound to this load controller.		
Occupancy		All ▾
Vacancy		All ▾
Vicinity		None ▾
Photo		None ▾

2. Send the configuration to the room.

a. Navigate back to the Main screen.

b. Click **Send configuration to room**.

Tap to save the current room configuration.	
Save room configuration	›
Tap the button to send current configuration to the room.	
Send configuration to room	
Tap the advanced data management button to perform advanced data file actions. Recommended for advanced users.	
Advanced data management	›

A confirmation window opens stating that the app will disconnect from the room. Click **OK** to continue or **Cancel** to close without sending the configuration. The Retrieving Data Map screen displays.

3. Recall Scene 1 and adjust load levels.

a. From the Main screen, click **Configuration**.

‹ Back	Main
Select to configure a room.	
🔧 Room Settings	›
⚙ Configuration	›

b. Click **Scenes**.

‹ Back	Configuration
Select item to configure.	
⊙ Sensors	›
💡 Load Controllers	›
☰ Scenes	›

c. Select **Scene 1**. Daylighting is only available for Scene 1.

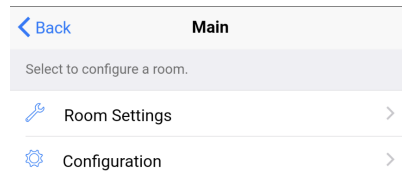| ‹ Back	Scene 1
Please tap on the values or move the sliders to configure the load controllers levels for the scene.	
Load 1 (%)	68 ⓘ
Load 2	ⓘ
Load 3 (%)	100 ⓘ
Save current levels	
Restore original levels	

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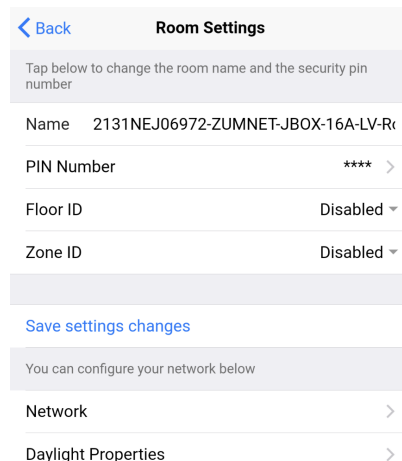d. Adjust the loads in the space to the appropriate level based on the amount of natural light.

> NOTE: DO NOT click Save current levels.

4. Calibrate Daylighting.

   a. Navigate back to the Main screen.

   b. Click **Room Settings**.

‹ Back	Main
Select to configure a room.	
🔧 Room Settings	›
⚙ Configuration	›

   c. Click **Daylight Properties**.

‹ Back	Room Settings
Tap below to change the room name and the security pin number	
Name	2131NEJ06972-ZUMNET-JBOX-16A-LV-R(
PIN Number	**** ›
Floor ID	Disabled ⌄
Zone ID	Disabled ⌄
Save settings changes	
You can configure your network below	
Network	›
Daylight Properties	›

d. Click **Calibrate Daylighting**.

‹ Back	Daylight Properties
Current Daylight properties of the room	
Scene	1
Room Occupancy	Occupied
Calibrate daylighting	

To indicate that Daylighting has been calibrated, the lights in the space will turn full on, turn off, and then back on with the Daylighting settings. Whenever Scene 1 is recalled, the Daylighting settings are initiated.

Visit the Product Page

Scan the QR code to visit the product page.

ZUM-HUB4

www.crestron.com/model/6511480

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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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