### Zūm Wired Presence Detectors with Link Communication

STEINEL<sup>™</sup> presence detectors with Zūm<sup>®</sup> Link wired communication are part of a system designed to provide sophisticated lighting control with simple installation. A wired solution for Zūm commercial lighting systems, the Zūm Link Presence Detectors communicate via <u>CBL-CAT5E-ZUMLINK-P</u> cable (sold separately) which allow for in-room device daisy-chaining to other Zūm Link devices (such as the <u>ZUMLINK-KP</u> keypad or Zūm Link <u>load controllers</u>). The presence detectors are equipped with a daylight sensor and mount directly to the ceiling or via a junction box (not included). The RLY presence detectors also have a three-wire output relay to connect to a relay-input capable device, such as an HVAC call system.

All Zūm Link Wired Presence Detectors are functionally similar. For simplicity within this guide, the term "presence detectors" is used except where otherwise noted. For more information about the presence detectors for wired applications, refer to the following product pages.

# In the Box

1

Zūm Wired Presence Detectors with Link Communication

#### Zūm Link Presence Detectors with Daylight Sensing

- ZUMLINK-IR-QUATTRO-DLS with passive infrared technology
- <u>ZUMLINK-DT-QUATTRO-DLS</u> with passive infrared and ultrasonic technology
- <u>ZUMLINK-US-QUATTRO-DLS</u> with ultrasonic technology
- <u>ZUMLINK-IR-QUATTRO-HD-DLS</u> with high-definition, passive infrared technology
- <u>ZUMLINK-US-HALLWAY-DLS</u> with ultrasonic technology and bidirectional detection for hallways
- <u>ZUMLINK-US-ONEWAY-DLS</u> with ultrasonic technology and unidirectional detection for hallways

#### $Z\bar{\upsilon}m$ Link Presence Detectors with Daylight Sensing and Output Relay

- <u>ZUMLINK-IR-QUATTRO-DLS-RLY</u> with passive infrared technology
- <u>ZUMLINK-DT-QUATTRO-DLS-RLY</u> with passive infrared and ultrasonic technology
- ZUMLINK-US-QUATTRO-DLS-RLY with ultrasonic technology
- <u>ZUMLINK-IR-QUATTRO-HD-DLS-RLY</u> with high-definition, passive infrared technology
- <u>ZUMLINK-US-HALLWAY-DLS-RLY</u> with ultrasonic technology and bidirectional detection for hallways
- <u>ZUMLINK-US-ONEWAY-DLS-RLY</u> with ultrasonic technology and unidirectional detection for hallways



#### Zūm Wired Presence Detectors with Link Communication





### Zūm Wired Presence Detectors with Link Communication



### Installation

The presence detectors can be mounted to a junction box (not included) or directly to a ceiling. Before mounting, make sure the backplate is separated from the presence detectors. Refer to Remove or Attach the Backplate.

#### WARNINGS:

- 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!
- Do **NOT** connect other network devices or the purple ports on the Zūm Net device to the orange ports on a Zūm Link device. This connection may damage network devices.



#### NOTES:

- Install and use this product in accordance with appropriate electrical codes and regulations.
- A licensed electrician should install this product.

### Remove or Attach the Backplate

To remove the backplate from the presence detector:

- 1. Locate the two sliding tabs on opposite sides of the presence detector.
- 2. Extend the sliding tabs out of the housing. A flat-head screwdriver can be used.

Once both sliding tabs are exposed, the presence detector releases from the backplate.

Pull out the sliding tabs (2) to release the presence detector from the backplate.





### Zūm Wired Presence Detectors with Link Communication

To attach the backplate to the presence detector:

- 1. Ensure the sliding tabs are extended out of the housing.
- 2. Align the pins on the back of the presence detector with the socket on the backplate and press.

Match the pin set on the presence detector with the socket on the backplate.



3. Push both sliding tabs back into the housing

### Junction Box Mounting

The presence detectors are compatible with 4 in. square junction boxes, 4 in. round junction boxes, and 3 in. mud rings (not included). After the junction box is installed, follow the procedure for mounting the presence detectors.

- 1. Install the junction box according to its requirements.
- 2. Remove the backplate from the presence detector. Refer to Remove or Attach the Backplate.

- 3. Remove both spring tabs from the backplate. Use your fingers or needle-nose pliers.
  - a. Pinch one spring tab to minimize it's width.
  - b. Carefully lift the spring out of the housing.
  - c. Repeat the process with the other spring tab.
  - d. Discard the spring tabs.





### Zūm Wired Presence Detectors with Link Communication

4. Feed the CBL-CAT5E-ZUMLINK-P cable through the junction box or mud ring, and connect it to the Zūm Link Presence Detectors backplate.



For presence detectors with additional output relays, connect the relays to a relay-input capable device before mounting the backplate to the junction box or mud ring.



Relay connection applicable for the following presence detectors:

- ZUMLINK-IR-QUATTRO-DLS-RLY
- ZUMLINK-DT-QUATTRO-DLS-RLY
- ZUMLINK-US-QUATTRO-DLS-RLY
- ZUMLINK-IR-QUATTRO-HD-DLS-RLY
- ZUMLINK-US-HALLWAY-DLS-RLY
- ZUMLINK-US-ONEWAY-DLS-RLY
- 5. Using two mounting screws (not included), attach the back plate to the electrical box or mud ring.



### Zūm Wired Presence Detectors with Link Communication

6. Attach the presence detector to the backplate. Refer to Remove or Attach the Backplate.



Mounted presence detector (QUATTRO shown)

7. Wire the presence detector according to the Zūm Wired System Diagram

### **Ceiling Mounting**

A mounting hole 2.69 in. (68 mm) to 3 in. (76 mm) in diameter must be cut before mounting the presence detector to the ceiling.

1. Cut a mounting hole that is 2.69 in. (68 mm) to 3 in. (76 mm) in diameter.



Mounting hole diameter: 2.69 in. (68 mm) to 3 in. (76 mm) 2. Feed the CBL-CAT5E-ZUMLINK-P cable through the mounting hole, and connect it to the Zūm Link Presence Detectors backplate.

For presence detectors with additional output relays, connect the relays to a relay-input capable device before mounting the backplate to the mounting hole.



Relay connection applicable for the following presence detectors:

- ZUMLINK-IR-QUATTRO-DLS-RLY
- ZUMLINK-DT-QUATTRO-DLS-RLY
- ZUMLINK-US-QUATTRO-DLS-RLY
- ZUMLINK-IR-QUATTRO-HD-DLS-RLY
- ZUMLINK-US-HALLWAY-DLS-RLY
- ZUMLINK-US-ONEWAY-DLS-RLY



#### Zūm Wired Presence Detectors with Link Communication

3. Flip the backplate spring tabs to the vertical position and insert them into the mounting hole.



When the spring tabs release, they snap back down to secure the backplate to the ceiling.



Release the spring tabs once they are in the mounting hole.

4. Attach the presence detector to the backplate. Refer to Remove or Attach the Backplate.



Attach the presence detector to the backplate. (QUATTRO shown)

5. Wire the presence detector according to the Zūm Wired System Diagram



Zūm Wired System Diagram



### Zūm Wired Presence Detectors with Link Communication

#### NOTES:

- between Zum Net devices) with purple CBL-CAT5E-ZUMNET-P RJ-45 cables (sold separately).
- sensors communicate via an analog connection on a Zūm Wired load controller.



### **Firmware Upgrade**

Before using the Zūm Link Presence Detectors, ensure they are updated with the latest firmware. Check for the latest firmware at www.crestron.com/firmware. Load the firmware onto the devices using Crestron Toolbox<sup>™</sup> software or the ZUM-HUB4 (sold separately).



### Operation

A Zūm Wired space consists of at least one ZUMNET-JBOX or ZUMLINK-JBOX connected to lights, sensors or another Zūm Wired device. Once the devices are installed and connected together in a space, they communicate with each other. Without any programming, the devices behave as described below.

**NOTE:** To add an Zūm Wired device to an existing space, simply connect the device and it will become part of the space logic.

### Presence Detector Sensors

Non-system (such as the GLA-IR-QUATTRO-HD-COM1-24 or GLS-ODT-C-NS) and system sensors (such as the ZUMLINK-IR-QUATTRO-DLS) will trigger and control the connected load controller. Non-system sensors connect to the load controller via the I/O ports, while system sensors connect to the load controller via a CBL-CAT5E-ZUMLINK-P cable.

For presence detectors with a relay (such as the

ZUMLINK-IR-QUATTRO-DLS-RLY), the default function is set to None. Use the Zūm app to change the functionality to follow occupancy logic or button presses.

#### Presence Detector Functionality When Connected to Load Controllers

Load Controller	Occupancy Detected	Vacancy Detected
ZUMNET-JBOX-16A-LV and ZUMLINK-JBOX-16A-LV	Recalls Scene 1 (all on)	Recalls Scene 16 (all off)
ZUMLINK-JBOX-20A-SW	On	Recalls Scene 16 (all off)
ZUMLINK-JBOX-20A-PLUG	On	Off after grace period delay

To adjust the presence detector sensitivity, refer to Sensor Test Mode.



### Zūm Wired Presence Detectors with Link Communication



# 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 the ZUM-HUB4 or the Zūm app.

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

### Connect to the Zūm App

Download the Zūm app from the <u>Google Play™</u> 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.
- 3. Select the desired space.
- 4. When prompted, enter the PIN. The Zūm app main screen opens.



**NOTE:** The default PIN is 2468. To change the PIN, refer to the Room Settings.



### Zūm Wired Presence Detectors with Link Communication

#### Zūm App Main Screen

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

	Kerker Ke	
	Select to configure a room.	
0 –	Room Settings	>
2 –	Configuration	>
ſ	Tap the identify button to identify the the commissioning of the unit.	ne unit. Swipe left to edit
	ZUMNET-JBOX-16A-LV-6497	(i) >
	ZUMNET-JBOX-16A-LV	0002115NEJ06497
	ZUMLINK-JBOX-20A-PLUG-49	955 (i) >
€ -	ZUMLINK-JBOX-20A-PLUG	0002112NEJ04955
	ZUMLINK-JBOX-20A-SW-507	6 (i) >
	ZUMLINK-JBOX-20A-SW	0002112NEJ05076
	ZUMLINK-KP-3252	(i) >
L	ZUMLINK-KP	002109NEJ03252





#### Zūm Wired Presence Detectors with Link Communication

**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.
- 2. Configuration: Edit the room logic to view the current state of the room.
  - 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.
- Scenes: View and edit room scenes: Scene 1 Scene 16. When editing the scene, tap the Identify icon (i) to identify the load controller: It emits a sound and flashes the Link LED. The connected loads also flash.



#### Zūm Wired Presence Detectors with Link Communication

- 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.
- 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	(i) >	
ZUMNET-JBOX-16A-LV	0002115NEJ06497	
ZUMLINK-JBOX-20A-PLUG-49	955 (i) >	
ZUMLINK-JBOX-20A-PLUG	0002112NEJ04955	
ZUMLINK-JBOX-20A-SW-507	6 (i) >	
ZUMLINK-JBOX-20A-SW	0002112NEJ05076	
ZUMLINK-KP-3252	(i) >	
ZUMLINK-KP	002109NEJ03252	

- 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.
- 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	>



#### Zūm Wired Presence Detectors with Link Communication

- 5. 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.

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
౪ి 2115NEJ06497-ZUMNET

### Sensor Test Mode

Use **Sensor Test Mode** to view a sensor's status, and easily edit a presence detector's settings after they are installed. To access the Sensor Test Mode from the Zūm app Main Screen, tap **Configuration** and tap **Occupancy Sensors**. A list of occupancy sensor components displays, including the occupancy sensor components for load controllers and presence detectors.

In this example, the occupancy sensor component for the presence detector is the ZUMLINK-US-ONEWAY-DLS-RLY-0074-2. The other occupancy sensors listed are for load controllers.

Back Occupancy S	Sensors
Select a sensor below to see its d	etails
ZUMLINK-JBOX-16A-LV-053	36-2 >
OccSensor	0002133NEJ10536
ZUMLINK-JBOX-20A-PLUG-2	2522-2 >
OccSensor	000X142522
ZUMLINK-US-ONEWAY-DLS-	-RLY-0074-2 >
OccSensor	21150MA00074
ZUMLINK-JBOX-20A-SW-31	64-2 >
OccSensor	000X143164
ZUMNET-JBOX-16A-LV-6972	2-2 >
OccSensor	0002131NEJ06972
SENSOD TES	TMODE
8 2131NEJU6972-2UN	/INE 1-JBUX-16A



#### Zūm Wired Presence Detectors with Link Communication

To enter test mode, tap **Sensor Test Mode** at the bottom of the screen. The same list of sensors displays. To exit test mode, tap **Stop Test Mode**.

K Back	Sensor-Test-M	lode	
Toggle to Latch	n Motion Sensor Indic	ators.	
Latch Motio	n Sensor Indicator	s (	$\bigcirc$
Tap the identify the commissio	y button to identify the ning of the unit.	e unit. Swipe left t	o edit
		US	IR
ZUMLINK-J LV-0536-2	BOX-16A-	Vacan	t >
ZUMLINK-J PLUG-2522-	BOX-20A- -2	Vacan	t >
ZUMLINK-U ONEWAY-DI 0074-2	IS- LS-RLY-		>
ZUMLINK-J SW-3164-2	BOX-20A-	Vacan	t >
ZUMNET-JE 6972-2	30X-16A-LV-	Occupie	d >
	Clear Motion Ind	icators	

	US	IR
ZUMLINK-JBOX-16A- LV-0536-2	Va	cant >
ZUMLINK-JBOX-20A- PLUG-2522-2	Va	cant >
ZUMLINK-US- ONEWAY-DLS-RLY- 0074-2	0	• >
ZUMLINK-JBOX-20A- SW-3164-2	Va	cant >
ZUMNET-JBOX-16A-LV- 6972-2	Occu	pied >

#### STOP TEST MODE

<sup></sup> 2131NEJ06972-ZUMNET-JBOX-16A...

Sensor Test Mode allows users to view real-time status and US and PIR sensor technology feedback. This screen enables users to make adjustments and confirm the expected detection sensitivities. For presence detectors, the radio button indicates whether the Ultrasonic or Infrared technology triggered. For non-system presence detectors, the room status is identified as Occupied or Vacant.



#### Zūm Wired Presence Detectors with Link Communication

Tap > next to the presence detector to adjust the Name, Timeout, Range, and Sensitivity, as well as review the room Status and connected loads. Refer to Adjust Ultrasonic Sensitivity for best practices on adjusting sensitivity.

<b>C</b> Back	OccSensor	
SN: 21150M	IA00074; FW: v1.4984.152	290
Name ZUMLINK-US-ONEWAY-DLS-RLY-0074-2		
Tap to config before the se	gure the number of second ensor identifies room as oc	s that must elapse ccupied.
Local Time	eout (5-1800 sec)	300
Status		Occupied
Tap To Confi	gure the sensor range and	sensitivity
Range(dis <sup>-</sup>	tance)	190
		-0
Sensitivity		7
	-0-	
This sensor controller(s)	is associated with the follo	owing load
ZUMLINK-	JBOX-20A-SW-3164-1	i
ZUMLINK-	JBOX-20A-SW	000X143164
ZUMLINK-	JBOX-16A-LV-0536-1	(i)
ZUMLINK-	JBOX-16A-LV	0002133NEJ105 36
ZUMNET-J	BOX-16A-LV-6972-1	i
¥ 213	31NEJ06972-ZUMNE	T-JBOX-16A

- Occupy the space where the US or DT presence detector is installed, and access Sensor Test Mode in the Zūm app. Refer to Sensor Test Mode.
- 2. In the Zūm app, locate the desired presence detector(s) in the list and tap **Sensor Test Mode** to begin the test.

#### Adjust Ultrasonic Sensitivity

You can adjust the Ultrasonic (US) sensitivity in US and Dual Technology (DT) presence detectors. Passive Infrared (PIR) sensitivity is fixed and cannot be adjusted in PIR or DT presence detectors.



#### Zūm Wired Presence Detectors with Link Communication

3. Move around the room and observe the behavior of the US and IR radio buttons.

**NOTE:** The radio buttons light momentarily to identify the presence detector and technology triggered. Use the **Latch Motion Sensor Indicators** toggle to retain the radio button with the last motion detected. The **Clear Motion Indicator** button resets the radio buttons.

K Back	Sensor-Test-M	lode	
Toggle to Latch Motion Sensor Indicators.			
Latch Moti	on Sensor Indicators	s	
Tap the identify button to identify the unit. Swipe left to edit the commissioning of the unit.			
		US IR	
ZUMLINK- LV-0536-2	JBOX-16A-	Vacant >	
ZUMLINK- PLUG-252	JBOX-20A- 2-2	Vacant >	
ZUMLINK- ONEWAY-I 0074-2	US- DLS-RLY-	0 0 >	
ZUMLINK- SW-3164-2	JBOX-20A- 2	Vacant >	
ZUMNET- 6972-2	JBOX-16A-LV-	Occupied >	
Clear Motion Indicators			
STOP TEST MODE			

<sup>℅</sup>2131NEJ06972-ZUMNET-JBOX-16A...

 If the presence detector does not trigger enough or triggers too much, press > next to the presence detector to make adjustments to the sensitivity.

<b>&lt;</b> Back	OccSensor	
SN: 21150	0MA00074; FW: v1.4984.152	90
Name	ZUMLINK-US-ONEWA	Y-DLS-RLY-0074-2
Tap to con before the	figure the number of seconds sensor identifies room as occ	s that must elapse cupied.
Local Tir	neout (5-1800 sec)	300
Status		Occupied
Тар То Со	nfigure the sensor range and s	sensitivity
Range(d	istance)	190
		0
Sensitivi	ty	7
	0	
This sense controller(	or is associated with the follows).	wing load
ZUMLIN	K-JBOX-20A-SW-3164-1	í
ZUMLIN	K-JBOX-20A-SW	000X143164
ZUMLIN	K-JBOX-16A-LV-0536-1	i
ZUMLIN	K-JBOX-16A-LV	0002133NEJ105 36
ZUMNET	-JBOX-16A-LV-6972-1	i
° 2	131NEJ06972-ZUMNET	-JBOX-16A

- 5. Move the Sensitivity or Range slider to the desired position.
- 6. To test the new setting, click **<** Back to return to Sensor Test Mode.
- 7. Repeat the process from step 3 until the desired sensitivity is attained.



### Zūm Wired Presence Detectors with Link Communication

#### 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: M202111001, M202111002, M202111003, and M202111004

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