ZUMMESH-JBOX-DALI

Zūm™ Wireless DALI® Controller

- *Zūm™ wireless junction-box-mounted DALI controller*
- *Pair and play wireless integration with Zūm keypads, occupancy sensors, vacancy sensors, and daylight sensors*
- *Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution*
- *Control of DALI compliant dimmable LED, fluorescent loads, or GL-EXP DALI expansion modules*
- *Accommodation for a Zūm™ Network Bridge*
- *Accommodates up to 15 DALI Groups, up to 64 DALI devices*
- *Integrated DALI power supply*
- *Flying lead wiring connections*
- *Knockout mount to a standard 4-in. square junction box*

The Zūm™ wireless ZUMMESH-JBOX-DALI is a single-channel DALI controller capable of controlling up to 64 DALI compatible drivers. The ZUMMESH-JBOX-DALI communicates with other Zūm devices such as keypads, occupancy sensors, vacancy sensors, and daylight sensors.

Zūm Mesh wireless technology affords easy pair and play integration as part of a complete Zūm commercial lighting system. Energy-saving options are available to enable daylighting, occupancy or vacancy sensing, HVAC system integration, and centralized monitoring and management (sold separately).

Integrated DALI Power Supply

The innovative design of the ZUMMESH-JBOX-DALI eliminates the need for the external power supplies required by other DALI controllers on the market. The ZUMMESH-JBOX-DALI provides 14 V of power to the DALI bus.

Energy Efficiency

Occupancy sensor, vacancy sensor, and daylight sensor connectivity drive the potential for significant energy savings. Lights will turn off automatically when the room is vacant and dim gradually according to the amount of natural daylight in the room. This reduces energy usage while maintaining a consistent light level for a comfortable workspace.

Zūm Network Bridge (ZUMMESH-NETBRIDGE)

Attach the ZUMMESH-NETBRIDGE to the ZUMMESH-JBOX-DALI and use the Crestron Zūm app to commission the Zūm room. The Crestron Zūm app is used to create DALI groups for the ZUMMESH-JBOX-DALI.

NOTES:

- A ZUMMESH-NETBRIDGE must be connected to the ZUMMESH-JBOX-DALI for commissioning and control of DALI groups.
- Only one ZUMMESH-NETBRIDGE per Zūm room.

Centralized Management and Monitoring

Add a ZUM-FLOOR-HUB (sold separately) to provide a web-based user interface for easy configuration, control, monitoring, and scheduling of multiple Zūm rooms. A ZUMMESH-NETBRIDGE and ZUMNET-GATEWAY (both sold separately) are required to connect the Zūm rooms to the ZUM-FLOOR-HUB.

Crestron Electronics Inc.
15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041

ZUMMESH-JBOX-DALI

Zūm™ Wireless DALI® Controller

Pair and Play Setup

Designed with flexibility and ease-of-use in mind, the ZUMMESH-JBOX-DALI is pre-programmed with pair and play functionality. An installer can simply install the dimmer in a room along with Zūm occupancy or vacancy sensors and/or a daylight sensor, set up the room with a few quick button taps, and then use the dimmer to control the lights in the room. Room setup can also be accomplished using the Zūm app if the room is equipped with a Zūm Network Bridge. The Zūm Network Bridge also enables centralized monitoring and management via a Zūm Floor Hub and Zūm Net Wireless Gateway (sold separately).

Zūm Mesh Wireless Technology

Ultra-reliable Zūm Mesh wireless technology provides peer-to-peer RF communications within a commercial space without the need for physical control wiring, hubs, or gateways. Employing a 2.4 GHz peer-to-peer mesh network topology, nearly every Zūm Mesh device acts as a routing node, relaying wireless commands directly between Zūm Mesh devices to ensure that every command reaches its intended destination without disruption.

Every Zūm Mesh device that is added to the space effectively increases the range and stability of the peer-to-peer mesh network by providing multiple redundant signal paths. Each Zūm Mesh device auto-negotiates its RF channel to provide robust communication and is protected through AES 128-bit encryption. The wireless range between any two Zūm Mesh devices is typically 50 ft (15 m).[1]

Please refer to the Zūm Lighting Control System Setup Guide (Doc # 7957) at www.crestron.com/manuals for additional information.

Specifications

Load Control

DALI Groups	15
Drivers	64
Load Types	Control of DALI compliant dimmable LED, fluorescent loads, or GL-EXP DALI expansion modules

Power Requirements

100-277 VAC, 50/60 Hz

Wireless Communications

RF Transceiver	Zūm Mesh 2-way RF; 2.4 GHz ISM; Channels 15, 20, 25, or 26 (channel auto-selected); IEEE 802.15.4 compliant; AES-128 encryption
Range (Typical)	50 ft (15 m) to nearest peer-to-peer mesh network device(s); Subject to site-specific conditions and individual device capabilities

NOTES:

- A maximum of 32 Zūm Mesh wireless devices are permitted per room.
- Each DALI group counts as one of the 32 in the room.

Controls and Indicators

TEST	(1) Pushbutton and (1) green LED, press and release the button to toggle the load output on and off, press and hold to cycle the dimming level up and down, LED indicates the load output is energized, also used for room setup and factory reset
SETUP	(1) Pushbutton and (1) red LED, used for room setup and factory reset

Connections

Hot	(1) flying lead, black, line power input
Neutral	(1) flying lead, white, neutral
Purple	(1) flying lead, purple, DALI input/output, low voltage
Grey	(1) flying lead, grey, DALI input/output, low voltage

Crestron Electronics Inc.
15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041

ZUMMESH-JBOX-DALI

ZŪM™

Zūm™ Wireless DALI® Controller

Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% RH (noncondensing)

Construction

Housing	Plastic, white, UL 94 5VA flame rated
Mounting	Mounts to the side of a 4-in. square junction box via a 1/2 in. conduit knockout, meets the requirements of UL 2043 for installation in an environmental air-handling (plenum) space

Dimensions

Height	3.25 in. (83 mm)
Width	4.17 in. (106 mm)
Depth	1.32 in. (34 mm)

NOTE: Projects 3.66 in. (93 mm) from the junction box when installed.

Available Accessories

GL-EXP-DIM-DALI
Crestron Green Light® Dimmer Expansion Module, DALI® Control

GL-EXP-DIMFDB-DALI
Crestron Green Light® 3-Wire Fluorescent Dimmer Expansion Module, DALI® Control

GL-EXP-DIMFLV-DALI
Crestron Green Light® 0-10V Fluorescent Dimmer Expansion Module, DALI® Control

GL-EXP-DIMU-DALI
Crestron Green Light® Universal Dimmer Expansion Module, DALI® Control

GL-EXP-SW-DALI
Crestron Green Light® Switching Expansion Module for DALI® Control

ZUM-FLOOR-HUB
Zūm™ Light Control System, Floor Hub

ZUMMESH-KP10ABATT
Zūm™ Battery-Powered Wireless Keypad, Rocker Switch

ZUMMESH-KP10A
Zūm™ Wireless Keypad, Rocker Switch, 100-277 VAC

ZUMMESH-KP10BBATT
Zūm™ Battery-Powered Wireless Keypad, 4-Button

ZUMMESH-KP10B
Zūm™ Wireless Keypad, 4-Button, 100-277 VAC

ZUMMESH-KP10CBATT
Zūm™ Battery-Powered Wireless Keypad, 6-Button

ZUMMESH-KP10DBATT
Zūm™ Battery-Powered Wireless Keypad, 6-Button w/Sensor Control

ZUMMESH-KP10FBATT ENGRAVED
Zūm™ Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving

ZUMMESH-KP10GBATT ENGRAVED
Zūm™ Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving

ZUMMESH-NETBRIDGE
Zum™ Network Bridge

ZUMMESH-OL-PHOTOCELL-BATT
Zūm™ Wireless Battery-Powered Daylight Sensor, Open-Loop

ZUMMESH-PIR-OCCUPANCY-BATT
Zūm™ Wireless Battery-Powered Occupancy Sensor

ZUMMESH-PIR-VACANCY-BATT
Zūm™ Wireless Battery-Powered Vacancy Sensor

ZUMNET-GATEWAY
Zūm™ Net Wireless Gateway

Crestron Electronics Inc.
15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041

CRESTRON

ZUMMESH-JBOX-DALI

Zūm™ Wireless DALI® Controller

Notes:

1. "Zūm Mesh" refers to the wireless mesh network within each room composed of dimmers, switches, load controllers, keypads, and sensors. "Zūm Net" refers to the wireless mesh network that connects one or more rooms with a Zūm Floor Hub, and consists of a Zūm Net Wireless Gateway and one or more Zūm Network Bridges. AC-powered Zūm Mesh or Zūm Net devices function as routing nodes, which effectively extend the range of a Zūm Mesh or Zūm Net wireless network. Battery-powered devices only function as leaf nodes and do not extend range. A Zūm Mesh network composed predominantly of battery-powered devices may require additional AC-powered devices, such as the ZUMMESH-JBOX-PSU, to serve as supplemental routing nodes to fill any gaps in coverage. Refer to the "Installation and Setup of Crestron RF Products, Best Practices" guide (Doc #6689) at www.crestron.com/manuals for additional guidelines.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Specifications are subject to change without notice.

Rev 02/26/20

Crestron Electronics Inc.
15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041