ZUMMESH-5A-LV



Zūm™ Wireless 0-10V Wall-Box Dimmer

- > Zūm™ wireless 0-10 Volt wall-box dimmer
- > Pair and play with Zūm occupancy sensors, vacancy sensors, and daylight sensors^[1]
- > Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution^[2]
- > Single rocker switch and status LED
- > Controls 0-10 Volt dimmable LED or fluorescent loads
- > Rated 5 Amps at 100-277 Volts AC
- > Flying lead wiring connections
- > Standard 3-1/2 inch (89 mm) deep electrical box installation
- > Available in smooth black, white, almond, gray, or red finish
- > Matching decorator-style faceplate available separately
- > Meets UL® 916 standard for energy management equipment
- > Meets CEC Title 24 energy efficiency standards[3]
- > Meets ASHRAE® 90.1 energy efficiency standards[4]
- > ICC® International Energy Conservation Code® compliant [5]

The Zūm[™] wireless wall-box dimmer (ZUMMESH-5A-LV) provides control of a single 5 Amp, 100-277 Volt lighting load consisting of 0-10 Volt dimmable LED drivers or fluorescent ballasts. It features a single rocker switch to enable simple on/off switching and dimming adjustment, with the ability to save one preset. Standard gang-box installation allows one or more units to be installed in a 3-1/2 inch (89 mm) deep electrical box (decorator-style faceplate sold separately).

Zūm Mesh wireless technology affords easy "pair and play" integration as part of a complete Zūm commercial room lighting system. Energy-saving options are available to enable daylighting, occupancy or vacancy sensing, and centralized monitoring and management.^[1]

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.

Pair and Play

Designed with flexibility and ease-of-use in mind, Zūm dimmers are 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 — no programming required! 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 centralize monitoring and management via a Zūm Floor Hub and Zūm Net Wireless Gateway.^[1]



Zūm Mesh Wireless Technology

Ultra-reliable Zūm Mesh wireless technology provides steadfast peer-to-peer RF communications within a commercial space without the need for physical control wiring, hubs, or gateways. Employing a Wi-Fi® friendly 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.

Zūm Mesh is smart! Every Zūm Mesh device knows its purpose and just the right messages to communicate to other Zūm Mesh devices within the space. Each 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 feet (15 meters). [2]

Please refer to the Zūm Lighting Control System Setup Guide (Doc # 7957) for additional information.

ZUMMESH-5A-LV Zūm Wireless 0-10V Wall-Box Dimmer

SPECIFICATIONS

Load Control

Dimmable Load Types: 0-10 Volt LED drivers or fluorescent ballasts

(4-wire), 60 mA maximum current sink

Load Rating: 5 Amps

Line/Load Voltage: 100-277 Volts AC, 50/60 Hz

Dim Control Output: 0-10 Volts DC, 60 mA maximum sink or source

Idle Power Consumption: <1 Watt

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

Range: 50 ft (15 m) to nearest peer-to-peer mesh network device(s), subject to site-specific conditions and individual device capabilities [2]

Note: A maximum of 32 Zūm Mesh wireless devices is permitted per room.

Controls & Indicators

Switch: (1) 3-Position rocker switch (spring return to center); press up to recall the locally saved preset (turns the lighting load on at the saved preset dim level), press down to turn the lighting load off, press and hold up or down to raise or lower the dimming level; also used for creating a preset, room setup, and factory reset

Status: (1) Green LED, indicates the lighting load is turned on; also used for creating a preset, room setup, and factory reset

Connections

Hot: (1) 16 AWG Class 1 flying lead, black, line power input

Neutral: (1) 16 AWG Class 1 flying leads, white, neutral Ground: (1) 16 AWG Class 1 flying lead, green, ground

Switched Load: (1) 16 AWG Class 1 flying lead, red, switched load output 0-10V Dim +: (1) 18 AWG Class 1 flying lead, purple, 0-10 Volt DC dimming control output, positive

0-10V Dim -: (1) 18 AWG Class 1 flying lead, gray, 0-10 Volt DC dimming control output, negative

Environmental

Temperature: 32° to 104° F (0° to 40° C) Humidity: 10% to 90% RH (non-condensing)

Construction

Composition: Plastic housing and front face with metal bracket Mounting: Mounts in a 1-gang (or larger) 3-1/2 inch (89 mm) deep electrical box (not included)

Faceplate: Requires a decorator-style faceplate (sold separately)

Dimensions

Height: 4.13 in (105 mm) Width: 1.75 in (45 mm) Depth: 1.80 in (46 mm)

Weight

5 oz (142 g)

Compliance

UL Listed for US & Canada, IC, FCC Part 15 Class A digital device, UL 916, CEC Title $24^{[3]}$, ASHRAE $90.1^{[4]}$, IECC $^{[5]}$

MODELS & ACCESSORIES

Available Models

ZUMMESH-5A-LV-A-S: Zūm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V, Almond Smooth

ZUMMESH-5A-LV-B-S: Zūm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V. Black Smooth

ZUMMESH-5A-LV-GRY-S: Zūm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V, Gray Smooth

ZUMMESH-5A-LV-RED-S: Züm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V. Red Smooth

ZUMMESH-5A-LV-W-S: Zūm Wireless 0-10V Wall-Box Dimmer, 5A, 100-277V, White Smooth

Available Accessories

FP-G Series: Decorator-Style Faceplates

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

Notes:

- 1. Item(s) sold separately. Refer to each product's spec sheet for more information.
- 2. "Zūm Mesh" refers to the peer-to-peer wireless mesh network within a room composed of dimmers, switches, load controllers, keypads, and sensors. AC-powered Zūm Mesh devices function as routing nodes, which effectively extend the range of the wireless network within the room. Battery-powered devices only function as leaf nodes and do not extend range. Networks 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) for additional guidelines.
- 3. This product is part of a California Energy Commission Title 24 compliant solution. Refer to http://www.energy.ca.gov/title24/ to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at http://www.crestron.com/about/partner-info/commercial-lighting-consultants.
- 4. This product is part of an ASHRAE 90.1 compliant solution. Refer to https://www.ashrae.org/ to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at http://www.crestron.com/ about/partner-info/commercial-lighting-consultants.
- 5. This product is part of an International Energy Conservation Code compliant solution. Refer to https://www.iccsafe.org/iecc/ to learn more about designing a fully compliant solution. Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at http://www.crestron.com/about/partner-info/commercial-lighting-consultants.

This product may be purchased from an authorized Crestron dealer or distributor. 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/salesreps or by calling 800-237-2041.



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Additional resources can be accessed via the Crestron Commercial Lighting Consultants Partner Portal at http://www.crestron.com/about/partner-info/commercial-lighting-consultants. For assistance with incorporating this product into a design or specification, please contact the Commercial Lighting Consultant Hotline via email at clcdesign@crestron.com or by calling 888-330-1502.

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

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

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