ZUMMESH-KPBATT

Zūm[™] Battery-Powered Wireless Keypad

- > Battery-powered Zūm[™] wireless keypads
- > Pair and play control of one or more Zūm J-Box Load Controllers^[1]
- > Zūm Mesh peer-to-peer RF communications for easy integration into a complete standalone or networked Zūm wireless lighting control solution^[3]
- > Choice of single rocker switch or up to six pushbuttons
- > Up to three scene presets with pushbutton versions
- > Pushbutton versions available with custom button engraving^[2]
- > Optional sensor disable feature
- > Operates for five years or more on a single lithium battery (included)
- > Mounts directly to any flat wall surface with no holes or box required
- > Allows for mounting to a single-gang or multi-gang electrical box
- > 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^[4]
- > Meets ASHRAE[®] 90.1 energy efficiency standards^[5]
- > ICC[®] International Energy Conservation Code[®] compliant^[6]

The Zūm[™] Battery-Powered Wireless Keypad (ZUMMESH-KPBATT) provides control of one or more Zūm J-Box Load Controllers (ZUMMESH-JBOX^[1]). It is available with a rocker switch or various combinations of pushbuttons. The rocker switch version offers simple on/off switching and dimming adjustment, with the ability to save one scene preset. The pushbutton versions support the same capabilities with two or three scene presets. Pushbutton versions may be ordered with standard button labeling or custom button engraving.^[2]

> Slim profile, wireless operation, and long-life battery power enables mounting to any flat wall surface without requiring any holes, wires, or back box





Model ZUMMESH-KP10BBATT-W-S shown, faceplate sold separately.

All versions of the ZUMMESH-KPBATT allow for mounting to a standard electrical box, or they can be attached directly to the wall using screws or two-sided adhesive tape. A finished installation requires a decorator-style faceplate (sold separately).

ZUMMESH-KPBATT keypads are battery powered and completely wireless. They can operate for five years or more on a single lithium battery (included). Zūm Mesh wireless technology affords easy "pair and play" setup and integration as part of a complete Zūm commercial room lighting system.

Pair and Play

Designed with flexibility and ease-of-use in mind, Zūm keypads are pre-programmed with "pair and play" functionality. An installer can simply install the keypad in a room along with Zūm load controllers, occupancy or vacancy sensors, and a daylight sensor, set up the room with a few quick button taps, and then use the keypad 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-topeer 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.



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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).^[3]

Switch and Button Options

There are six versions of the ZUMMESH-KPBATT as follows:



ZUMMESH-KP10ABATT – Provides a single rocker switch for on/off switch control, with the ability to adjust the dim level up or down by pressing and holding the switch. A single custom scene preset can be created, which is recalled when turning the lights on by pressing the up position on the rocker switch.



ZUMMESH-KP10BBATT – Provides four pushbuttons labeled ON, SCENE 2, SCENE 3, and OFF. Three scene presets can be created and recalled, with Scene 1 assigned to the ON button. Manual dimming adjustment is achieved by pressing and holding the ON (up) and OFF (down) buttons.

ON	
•	SCENE 2
+	SCENE 3
OFF	

ZUMMESH-KP10CBATT – Provides six pushbuttons similar to the -KP10BBATT version, but with separate up and down buttons for dimming level adjustment.



ZUMMESH-KP10DBATT – Provides six pushbuttons similar to the -KP10CBATT version, but with a SENSOR DISABLE button in place of SCENE 3. Pressing the SENSOR DISABLE button tells the lighting system to temporarily ignore the room's daylight sensor and occupancy or vacancy sensors for a period of one hour. The sensors can be re-enabled manually by pressing and holding the SENSOR DISABLE button.

ZUMMESH-KP10FBATT ENGRAVED – Provides four buttons with custom engraving. Functionality is identical to the -KP10BBATT version.^[2]

ZUMMESH-KP10GBATT ENGRAVED – Provides six buttons with custom engraving. Functionality is identical to the -KP10CBATT version.^[2]

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

SPECIFICATIONS

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 ^[3]

Note: A maximum of 32 Zūm Mesh wireless devices, inclusive of a maximum of 8 battery-powered keypads, is permitted per room.

Controls & Indicators

Switch (-KP10ABATT models): (1) 3-Position rocker switch (spring return to center); press up to recall the Scene 1 preset (switched loads on and dimmed loads at their saved preset dim levels [default=90%]), press down to turn all lighting loads off, press and hold up or down to raise or lower the dimming level for all dimmable lighting loads; also used for creating a preset, room setup, and factory reset

Buttons (-KP10BBATT models): (4) Pushbuttons as follows:

ON: Press to recall the Scene 1 preset (switched loads on and dimmed loads at their saved preset dim levels [default=90%]), press and hold to raise the dimming level for all dimmable lighting loads SCENE 2: Press to recall the Scene 2 preset (switched loads on and

dimmed loads at their saved preset dim levels [default=50%]), press and hold to save a new Scene 2 preset

SCENE 3: Press to recall the Scene 3 preset (switched loads on and dimmed loads at their saved preset dim levels [default=50%]), press and hold to save a new Scene 3 preset

OFF: Press to turn all loads off, press and hold to lower the dimming level for all dimmable lighting loads

Buttons are also used for creating presets, room setup, and factory reset

Buttons (-KP10CBATT models): (6) Pushbuttons as follows:

ON: Press to recall the Scene 1 preset (switched loads on and dimmed loads at their saved preset dim levels [default=90%])

▲: Press to raise the dimming level for all dimmable lighting loads

▼: Press to lower the dimming level for all dimmable lighting loads SCENE 2: Press to recall the Scene 2 preset (switched loads on and dimmed loads at their saved preset dim levels [default=50%]), press and hold to save a new Scene 2 preset

SCENE 3: Press to recall the Scene 3 preset (switched loads on and dimmed loads at their saved preset dim levels [default=50%]), press and hold to save a new Scene 3 preset

OFF: Press to turn all loads off, press and hold to lower the dimming level for all dimmable lighting loads

Buttons are also used for creating presets, room setup, and factory reset

Buttons (-KP10DBATT models): (6) Pushbuttons as follows:

ON: Press to recall the Scene 1 preset (switched loads on and dimmed loads at their saved preset dim levels [default=90%])

- •: Press to raise the dimming level for all dimmable lighting loads
- •: Press to lower the dimming level for all dimmable lighting loads

SCENE 2: Press to recall the Scene 2 preset (switched loads on and dimmed loads at their saved preset dim levels [default=50%]), press and hold to save a new Scene 2 preset



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SENSOR DISABLE: Press to disable all room occupancy/vacancy and daylight sensors for one hour, press and hold to re-enable the sensors OFF: Press to turn all loads off, press and hold to lower the dimming level for all dimmable lighting loads

Buttons are also used for creating presets, room setup, and factory reset

Buttons (-KP10FBATT ENGRAVED models): (4) Pushbuttons with custom engraving. Functionality is identical to the –KP10BBATT version.^[2]

Buttons (-KP10GBATT ENGRAVED models): (6) Pushbuttons with custom engraving. Functionality is identical to the –KP10CBATT version.^[2]

Feedback: (1) Bi-color LED, green indicates a button press, red indicates a low battery condition when a button is pressed; also used for creating presets, room setup, and factory reset

Power

Battery: (1) CR2032 3 Volt lithium coin cell disposable battery (included) Battery Life: \geq 5 years

Environmental

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

Construction

Composition: Plastic; almond, black, white, gray, or red smooth finish **Surface Mounting:** Adheres to a smooth, flat wall surface using double-sided tape (included) or screws (not included)

Wall Box Mounting: Mounts to a 1-gang (or larger) electrical box Faceplate: Requires a decorator-style faceplate (sold separately)

Dimensions

Height: 4.26 in (109 mm) Width: 1.76 in (45 mm) Depth: 0.42 in (11 mm)

Weight

2.3 oz (65 g)

Compliance

UL Listed for US & Canada, IC, FCC Part 15 Class A digital device, UL 916, CEC Title 24 $^{[4]}$, ASHRAE 90.1 $^{[5]}$, IECC $^{[6]}$

MODELS & ACCESSORIES

Available Models

ZUMMESH-KP10ABATT-A-S: Zūm Battery-Powered Wireless Keypad, Rocker Switch, Almond Smooth

ZUMMESH-KP10ABATT-B-S: Zūm Battery-Powered Wireless Keypad, Rocker Switch, Black Smooth

ZUMMESH-KP10ABATT-GRY-S: Zūm Battery-Powered Wireless Keypad, Rocker Switch, Gray Smooth

ZUMMESH-KP10ABATT-RED-S: Zūm Battery-Powered Wireless Keypad, Rocker Switch, Red Smooth

ZUMMESH-KP10ABATT-W-S: Zūm Battery-Powered Wireless Keypad, Rocker Switch, White Smooth

ZUMMESH-KP10BBATT-A-S: Zūm Battery-Powered Wireless Keypad, 4-Button, Almond Smooth

ZUMMESH-KP10BBATT-B-S: Zūm Battery-Powered Wireless Keypad, 4-Button, Black Smooth

ZUMMESH-KP10BBATT-GRY-S: Zūm Battery-Powered Wireless Keypad, 4-Button, Gray Smooth

ZUMMESH-KP10BBATT-RED-S: Zūm Battery-Powered Wireless Keypad, 4-Button, Red Smooth

ZUMMESH-KP10BBATT-W-S: Zūm Battery-Powered Wireless Keypad, 4-Button, White Smooth

ZUMMESH-KP10CBATT-A-S: Zūm Battery-Powered Wireless Keypad, 6-Button, Almond Smooth

ZUMMESH-KP10CBATT-B-S: Zūm Battery-Powered Wireless Keypad, 6-Button, Black Smooth

ZUMMESH-KP10CBATT-GRY-S: Zūm Battery-Powered Wireless Keypad, 6-Button, Gray Smooth

ZUMMESH-KP10CBATT-RED-S: Zūm Battery-Powered Wireless Keypad, 6-Button, Red Smooth

ZUMMESH-KP10CBATT-W-S: Zūm Battery-Powered Wireless Keypad, 6-Button, White Smooth

ZUMMESH-KP10DBATT-A-S: Zūm Battery-Powered Wireless Keypad, 6-Button w/Sensor Control, Almond Smooth

ZUMMESH-KP10DBATT-B-S: Zūm Battery-Powered Wireless Keypad, 6-Button w/Sensor Control, Black Smooth

ZUMMESH-KP10DBATT-GRY-S: Zūm Battery-Powered Wireless Keypad, 6-Button w/Sensor Control, Gray Smooth

ZUMMESH-KP10DBATT-RED-S: Zūm Battery-Powered Wireless Keypad, 6-Button w/Sensor Control, Red Smooth

ZUMMESH-KP10DBATT-W-S: Zūm Battery-Powered Wireless Keypad, 6-Button w/Sensor Control, White Smooth

ZUMMESH-KP10FBATT-A-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving, Almond Smooth

ZUMMESH-KP10FBATT-B-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving, Black Smooth

ZUMMESH-KP10FBATT-GRY-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving, Gray Smooth

ZUMMESH-KP10FBATT-RED-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving, Red Smooth

ZUMMESH-KP10FBATT-W-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 4-Button w/Custom Engraving, White Smooth

ZUMMESH-KP10GBATT-A-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving, Almond Smooth

ZUMMESH-KP10GBATT-B-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving, lack Smooth

ZUMMESH-KP10GBATT-GRY-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving, Gray Smooth

ZUMMESH-KP10GBATT-RED-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving, Red Smooth

ZUMMESH-KP10GBATT-W-S ENGRAVED: Zūm Battery-Powered Wireless Keypad, 6-Button w/Custom Engraving, White Smooth



Available Accessories

FP-G Series: Decorator-Style Faceplate

ZUMMESH-JBOX-5A-LV: Zūm J-Box Load Controller, 0-10V Dimmer, 5A, 100-277V

ZUMMESH-JBOX-16A-LV: Zūm J-Box Load Controller, 0-10V Dimmer, 16A, 100-277V

ZUMMESH-JBOX-20A-SW: Zūm J-Box Load Controller, High Inrush Switch, 16A, 100-277V

ZUMMESH-JBOX-20A-PLUG: Zūm J-Box Load Controller, Plug Load Switch, 20A, 100-277V

Notes:

- 1. Item(s) sold separately. Refer to each product's spec sheet for more information.
- Custom engraving must be specified at the time of order. Buttons cannot be changed or replaced in the field.
- 3. "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. The ZUMMESH-KPBATT and other 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.
- 4. 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.
- 5. 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.

6. 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.

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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