

## Vierti Keypads

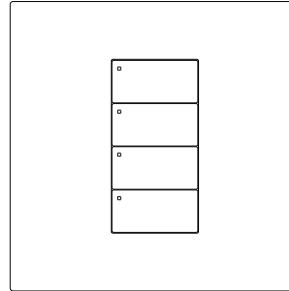
Vierti keypads provide homeowners with a simple and elegant way to operate lights, shades/draperies, motorised screens, and many other devices.

Hybrid keypads function as a dimmer or a switch and keypad combined into a single device. Hybrid keypads are excellent for retrofit applications because they eliminate the need to install two separate devices.

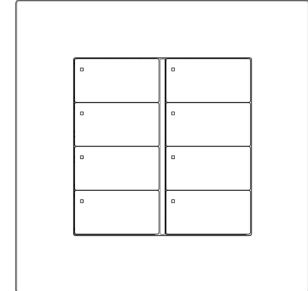
Vierti keypads feature large, easy-to-use buttons with LEDs to aid in locating the keypad in low light conditions. Non-configured keypads are available as bulk models and only include a mounting plate. Configured models include a mounting plate and personalised button kit. Predefined button kits, configured replacement button kits, and wallplates are purchased separately, and are available in Arctic White or Matte Black polymer finish. Wallplates are available in a variety of additional finishes, allowing the colour to compliment the aesthetics of a space.

Keypad markings are important for programming and use of the keypads when installed. The marking colour has been chosen for increased readability, with default markings available as standard product offerings. Custom personalised button kits can be designed to describe its programming using myProjects, Lutron Designer, or the Vierti personalisation form ([engraving.lutron.com/Vierti](http://engraving.lutron.com/Vierti)).

Personalised replacement button kits can be changed in the field after installation. This allows for the keypad to be changed to a variety of button configurations and personalised markings.



1-Column, 4-Button



2-Column,  
4-Button/4-Button

Keypads include a construction cover that provides protection against damage from construction debris for the button kits. The cover also allows for viewing and operation of the keypad buttons while in place and is replaced by the wallplate when construction has been completed.

Only use with Lutron Vierti wallplates. Wallplates are sold separately.

**Note:** Additional button configurations can be found in the **Button Configurations** section starting on page 17.

## Vierti Keypads

### Model Numbers

Bulk Keypads (Includes bulk keypad with mounting plate and construction cover)	Description
RRE-HDS-1	RA3 hybrid keypad square 1-column bulk
RRE-WSS-1	RA3 keypad square 1-column bulk
RRE-HDS-2	RA3 hybrid keypad square 2-column bulk
RRE-WSS-2	RA3 keypad square 2-column bulk

Configured Base Keypads (Includes bulk keypad with mounting plate, personalised button kit, and construction cover)	Description
RR-WS	1-column configured keypad
RR-HD	1-column configured hybrid keypad
RR-WS-2	2-column configured keypad
RR-HD-2	2-column configured hybrid keypad

Predefined Button Kits	Description
C1BK-2BXX <sup>1</sup> -YY <sup>2</sup>	1-column, 2-button
C1BK-3RXX <sup>1</sup> -YY <sup>2</sup>	1-column, 3-button with raise/lower
C1BK-4BXX <sup>1</sup> -YY <sup>2</sup>	1-column, 4-button
C2BK-4RXX <sup>1</sup> -YY <sup>2</sup>	2-column: Left column: 4-button Right column: 3-button with raise/lower
C2BK-42XX <sup>1</sup> -YY <sup>2</sup>	2-column: Left column: 4-button Right column: 2-button

Configured Replacement Button Kit	Description
C1BK	1-column personalised replacement button kit
C2BK	2-column personalised replacement button kit

Wallplates	Description
LW-S-C1-XX <sup>1</sup>	1-gang, 1-column wallplate
LW-S-C11-XX <sup>1</sup>	2-gang, 1-column wallplate at 60 mm on-center spacing
LW-S-C2-XX <sup>1</sup>	1-gang, 2-column wallplate

**Note:** See page 3 for specification information.

<sup>1</sup> "XX" in the model number represents the colour/finish code. See **Colours and Finishes** options on page 23.

<sup>2</sup> "YY" in the model number represents the engraving code. See **Button Text/Icons** section starting on page 19.

## Vierti Keypads

### Specifications

<b>Power</b>	220–240 V~ 50/60 Hz
<b>Power Consumption</b>	0,5 W typical, 1,5 W Max
<b>Regulatory Approvals</b>	CE, UKCA, BIS, RoHS Compliant, WEEE Certified, REACH Compliant, ETSI EN 300 220-2, ETSI 301 489-1 Compliant, IEC/EN 60669-2-1:2021
<b>Environment</b>	Ambient operating temperature: 0 °C to 40 °C, 0% to 90% humidity, non-condensing. Indoor use only. IP20 rated.
<b>Communications</b>	Vierti keypads communicate with the system through Clear Connect – Type X Radio Frequency (RF) and must be located within 23 m of the centrally located wireless processor. There must be a minimum of two Clear Connect – Type X devices within 6 m of the wireless processor. Each Vierti keypad should be within 6 m of at least two other non-battery powered Clear Connect – Type X devices. Using more than two devices is ideal for creating an ultra high-performance mesh network. System devices operate on a radio frequency of 2,4 GHz. For myLutron users, please see Lutron Application Note #842 (P/N 048842) for additional information on Clear Connect – Type X best practices at <a href="http://www.lutron.com/europe">www.lutron.com/europe</a>
<b>ESD Protection</b>	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
<b>Surge Protection</b>	Tested to withstand surge voltages without damage or loss of operation, in accordance with IEC 61000-4-5.
<b>Power Failure</b>	Power failure memory: Should power be interrupted, the keypad will return to its previous state when power is restored.
<b>Mounting Square Backbox</b>	Single gang: Requires a square backbox. 35 mm deep minimum. 47 mm depth recommended. 2-gang: Requires a standard UK double backbox with 120 mm fixing centers. 35 mm deep minimum. 47 mm depth recommended.
<b>Wiring</b>	Vierti keypads require a 220–240 V~ live and neutral connection. Vierti hybrid keypads require a 220–240 V~ live, neutral <sup>1</sup> , and dimmed live connection. All keypads accept wire gauges between 0,5 mm <sup>2</sup> to 2,5 mm <sup>2</sup> (20 AWG to 14 AWG). One wire per terminal.
<b>Limited Warranty</b>	<a href="http://www.lutron.com/warranty">www.lutron.com/warranty</a> or call +1.610.282.3800 for a printed copy. Additional information can be found at <a href="http://www.lutron.com/cedoc">www.lutron.com/cedoc</a>

<sup>1</sup> For additional information, refer to the **Hybrid Keypad: Load Type and Capacity** section on page 8.

## Vierti Keypads

### Design Features

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- At the press of a single button, lights fade ON or OFF to desired levels and shades/draperies open or close to desired positions.
- Light levels and shade/drapery positions can be fine-tuned by pressing and holding the raise/lower buttons.
- Programmable to select scene or room preset levels or positions.
- Adjustable intensity of the status LED is accomplished through system level programming.
- Configurable raise/lower selection using programming software.
  - Last button pressed (default) - devices controlled by the last button pressed will raise/lower.
  - Programmed devices - only the devices programmed to the button will raise/lower.

### Hybrid-Only Design Features

- Internal dimmer is controlled by the keypad buttons to verify proper installation prior to system programming.
- Internal dimmer can be assigned to any button on the hybrid keypad and can be programmed to be controlled by any keypad.
- Advanced dimming technology designed for compatibility with a broader range of high-efficiency bulbs.
- Programmable high-end and low-end trim settings to customize the dimming range and optimise LED compatibility.
- See **Hybrid Keypad: Load Type and Capacity** section on page 8.
- Internal dimmer can be operated as a switched output through the use of the design GUI.

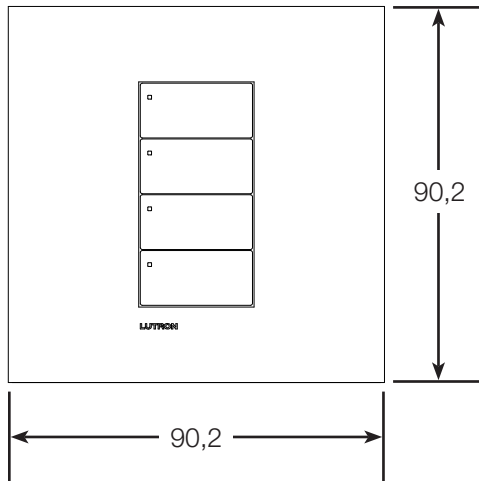
## Verti Keypads

### Dimensions

All dimensions are shown as mm

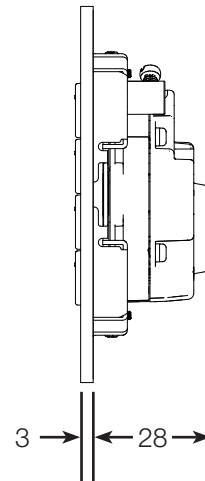
#### Single Column

Front View



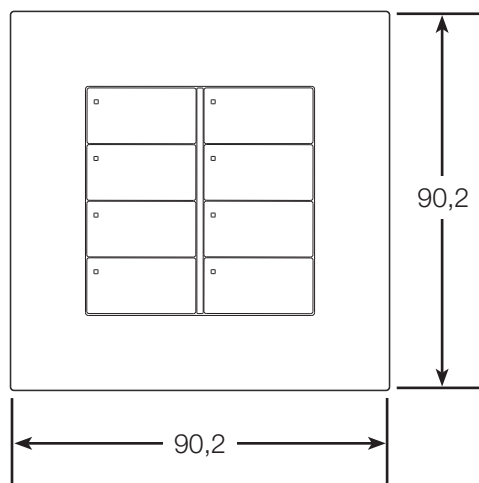
#### UK Square Box

Side View



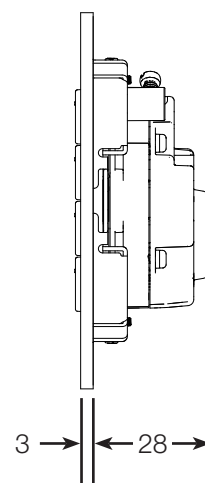
#### Two Column

Front View



#### UK Square Box

Side View

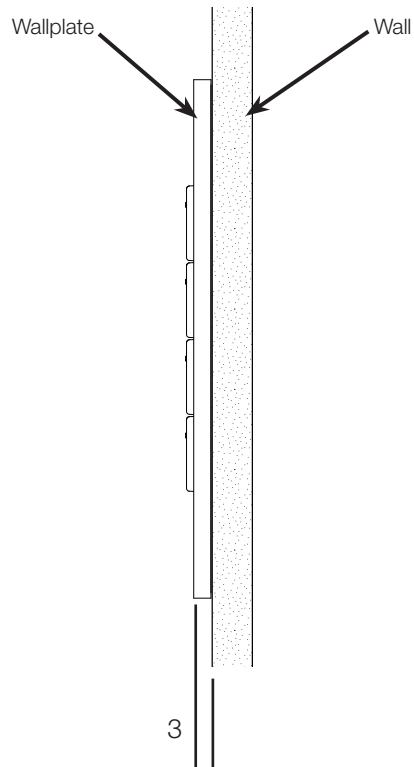


## Vierti Keypads

### Flush Mounting

All dimensions are shown as mm

#### Square Style



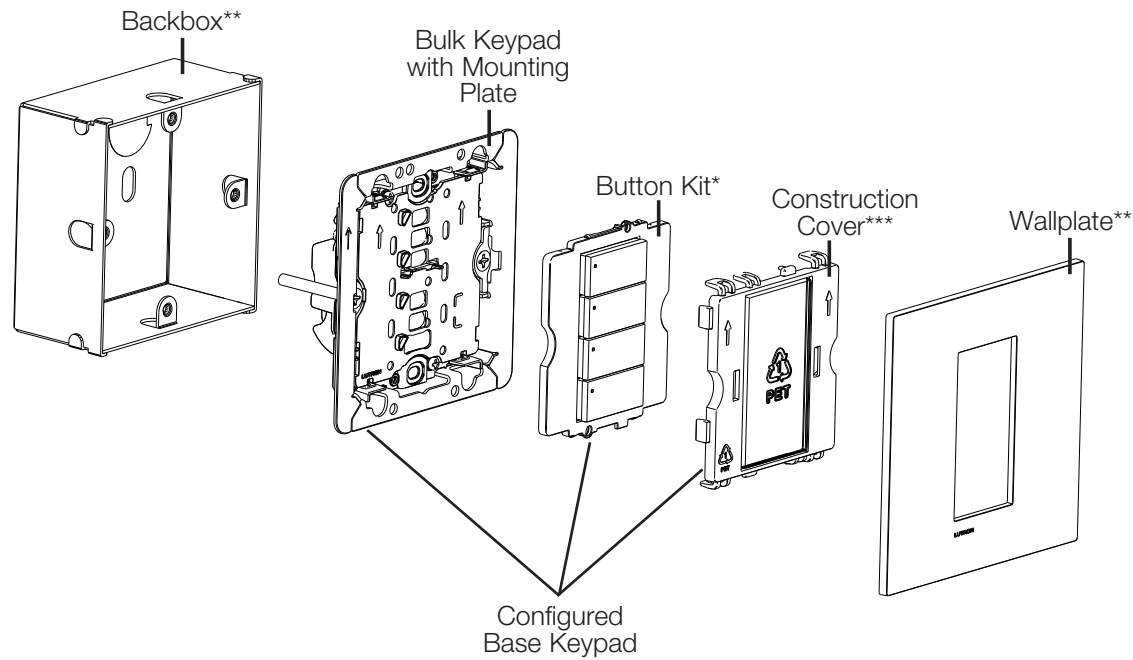
**Note:** A square, flangeless backbox (Lutron P/N EBB-1-SQ or similar style) is recommended for the most flush installation possible. Flanged square backboxes may also be used for retrofit applications or to meet local standards. Square backboxes with no flanges must be installed with the box sides at a minimum depth of flush and maximum depth of 19 mm from the wall surface for best possible installation.

## Vierti Keypads

### Parts Identification

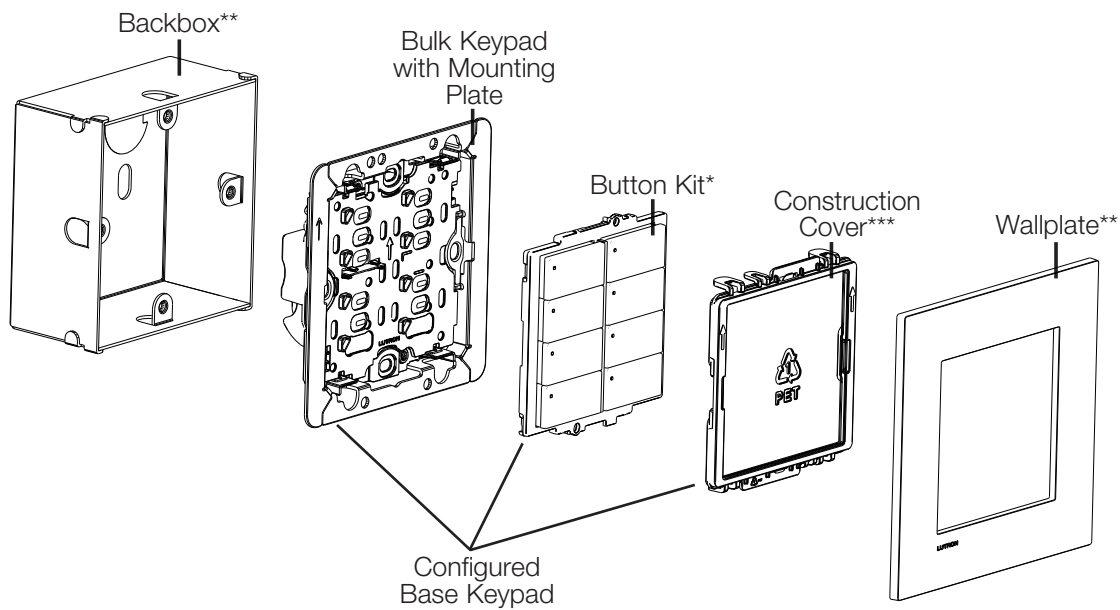
#### Square Style

1-Column



#### Square Style

2-Column



\* The button kit is included with the configured base keypad. It needs to be purchased separately when the bulk keypad is purchased in distribution.

\*\* The wallplate and required backbox are sold separately. They are not included with the product.

\*\*\* **Important:** The construction cover must remain in place until the wallplate is installed. The construction cover must be removed in order to install the button kit and wallplate. Buttons can be used while construction cover is on, before wallplate is installed.

## Vierti Keypads

### Hybrid Keypad: Load Type and Capacity

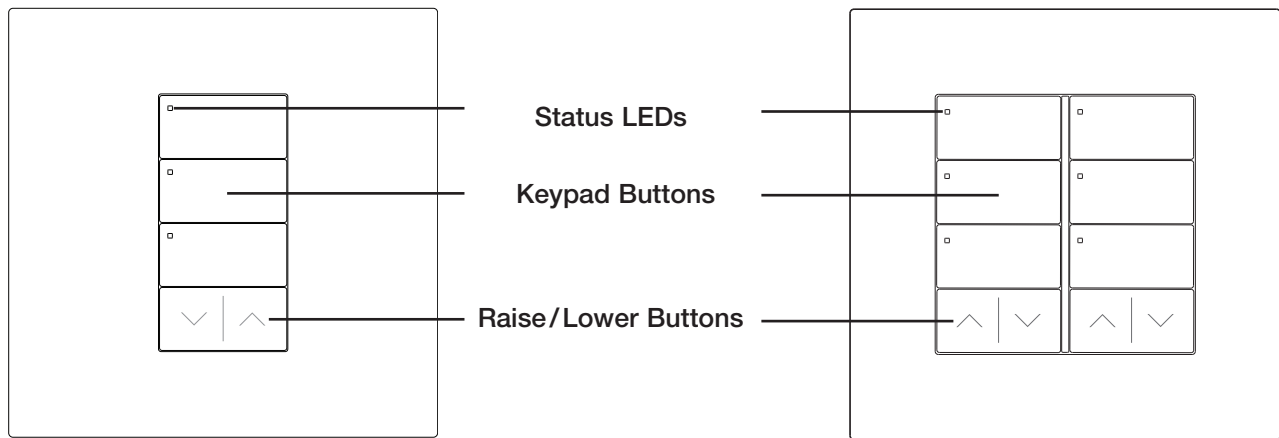
Model Number	Voltage	Load Types	Minimum Load		Maximum Load	Neutral Connection	
			With Neutral	Without Neutral		Dimming	Switching
RRE-HDS-1 RRE-HDS-2 RR-HD RR-HD-2	220 – 240 V~ 50/60 Hz	LED*	0 W	10 W	1 A 150 W	Preferred	Required
		ELV with LEDs	10 W	-	250 W	Required	
		ELV with Inc./Hal.	10 W	-	250 W	Required	
		Inc./Hal.	0 W	10 W	250 W	Preferred	
		PHPM-PA-CE	1 interface	-	3 interfaces	Required	
		GRX-TVI	1 interface	-	3 interfaces	Required	

LED rating is 1 A. If no current rating is specified on the LED lamp, a power rating of 150 W can be used.

**Note:** Do not install hybrid keypads to control sockets or motor-operated appliances.

## Vierti Keypads

### Keypad Operation



#### Status LEDs

- Show which keypad button has been activated.
- Pressed (active) button LEDs are brighter than other buttons.

#### Keypad Buttons

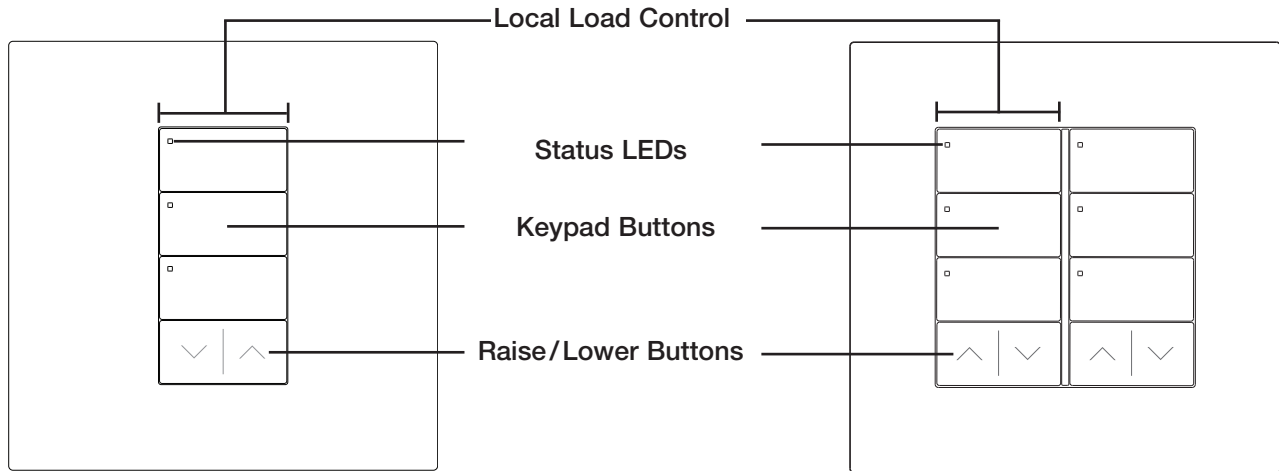
- Press to activate desired levels or positions.
  - This behavior is programmable in the system software.

#### Raise/Lower Buttons

- Press to raise/lower desired levels.

## Vierti Keypads

### Hybrid Keypad Operation



#### Status LEDs

- Show which keypad button has been activated.
- Pressed (active) button LEDs are brighter than other buttons.

#### Keypad Buttons

- Press to activate desired levels or positions.
  - This behavior is programmable in the system software

#### Local Load Control

- Left-most column on a device provides local control of internal dimmer or switch for control of light/shade prior to programming.
- Default operation depends on the button configuration (model number):
  - 2B: Top button is ON, bottom button is OFF
  - 3RL (Switching): Top button is ON, the next button is ON, the next button is OFF, and the buttons at the bottom have no action
  - 3RL (Dimming): Top button is ON, the next button is 50%, the next button is OFF, and the buttons at the bottom raise and lower the lights
  - 4B (Dimming): Top button is ON, the next button is 50%, and the next two buttons are OFF
  - 4B (Switching): Top three buttons are ON, the bottom buttons are OFF

#### Raise/Lower Buttons

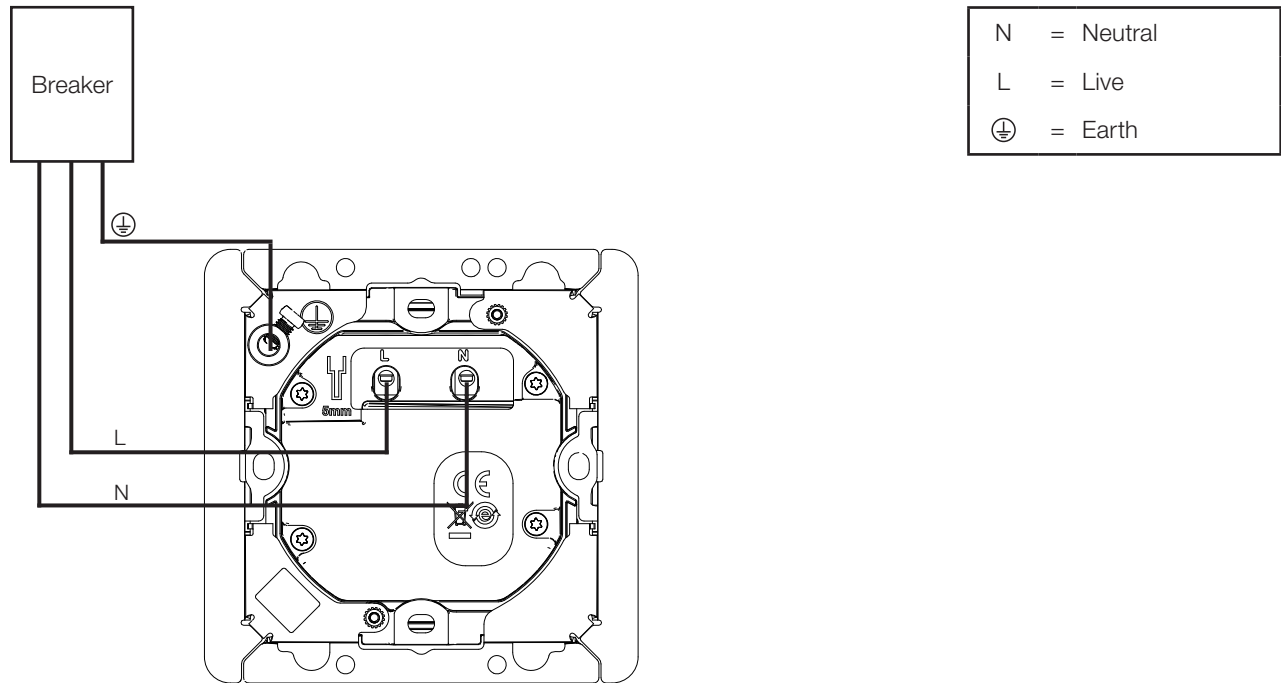
- Press to raise/lower desired levels.

**Note:** The right column of the 2-column hybrid keypad has no default operations. Its button LED flashes for 3 seconds when pressed and activates only after system commissioning.

## Verti Keypads

### Keypad: Wiring Diagram

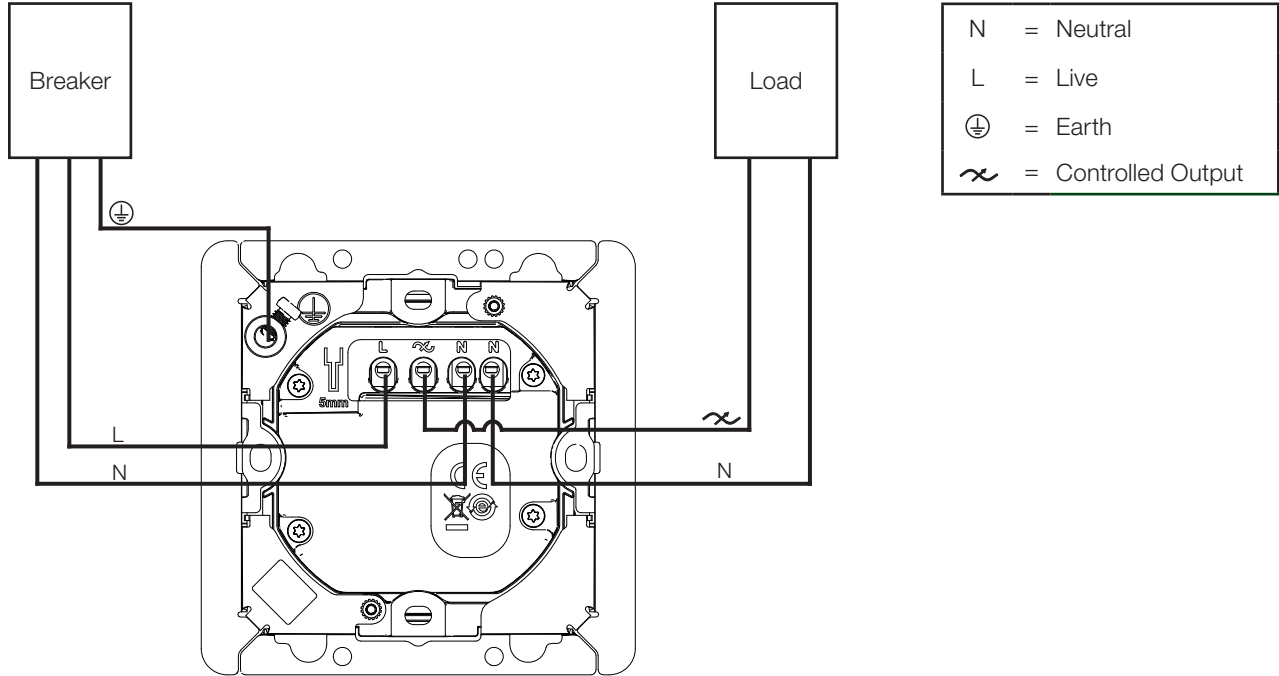
#### Square Style Backbox



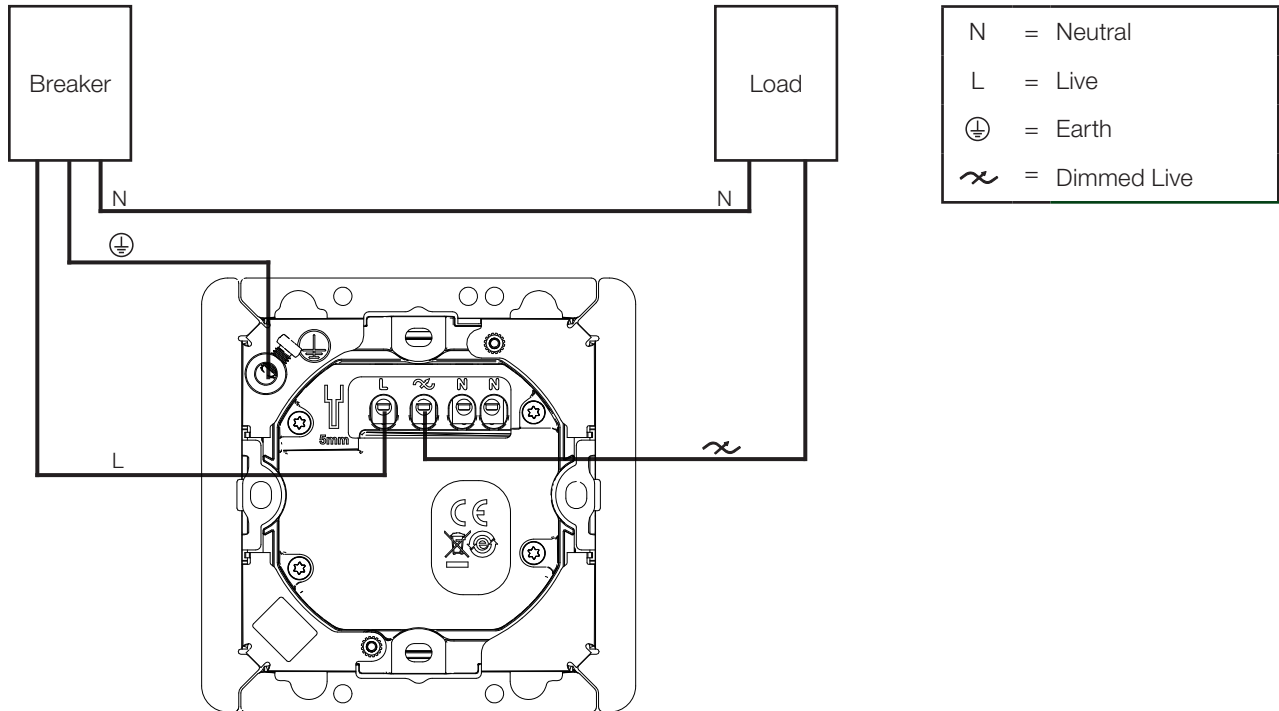
## Verti Keypads

### Hybrid Keypad Models: Wiring Diagram for Square Style Backbox

With neutral (dimming or switching mode):



Without neutral (dimming mode only):



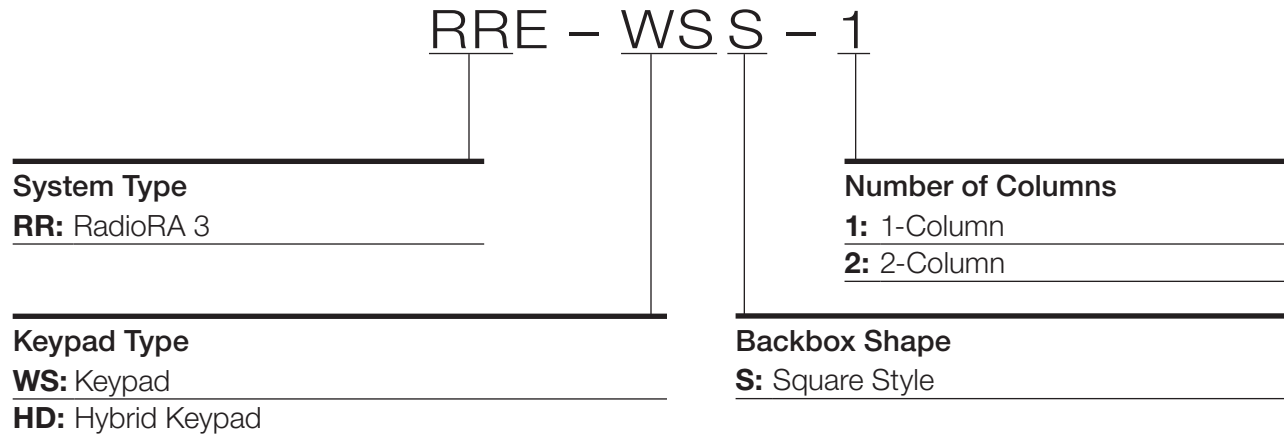
**Note:** See Hybrid Keypad: Load Type and Capacity section on page 8.

## Vierti Keypads

### How to Build a Non-Configured Model Number

#### Bulk Keypads

**Note:** Bulk keypads do not come with a wallplate or button kit. A mounting plate is included with the bulk keypad unit.



## Vierti Keypads

### How to Build a Single Gang Wallplate Kit Model Number

LW – S – C1 – AB

#### Family

**LW:** Vierti Wallplate Kit

#### Ganging

**S:** Single Gang

#### Wallplate Configurations

**C1:** 1-Gang, 1-Column Wallplate

**C2:** 1-Gang, 2-Column Wallplate

#### Colours and Finishes

##### *Polymer Finishes*

**AW:** Arctic White

**BL:** Matte Black

##### *Metal Finishes*

**AB:** Aged Brass

**AZ:** Aged Bronze

**BC:** Bright Chrome

**BRB:** Brushed Brass

**CP:** Champagne

**GP:** Graphite

**SN:** Satin Nickel

## Vierti Keypads

### How to Build a Multigang Wallplate Kit Model Number

LW – S – C11 – AB

#### Family

**LW:** Vierti Wallplate Kit

#### Wallplate Option

**S:** 60 mm on-center spacing\*

#### Wallplate Configurations

**C11:** 2-Gang, 1-Column Wallplate

#### Colours and Finishes

##### *Polymer Finishes*

**AW:** Arctic White

**BL:** Matte Black

##### *Metal Finishes*

**AB:** Aged Brass

**AZ:** Aged Bronze

**BC:** Bright Chrome

**BRB:** Brushed Brass

**CP:** Champagne

**GP:** Graphite

**SN:** Satin Nickel

\*Available for 1-column only.

## Vierti Keypads

### How to Build a Predefined Button Kit Model Number

**C 1BK – 2B AW – L1**

#### Family

**C:** Vierti Button Kit

#### Number of Columns

**1:** 1-Column

**2:** 2-Column

#### Button Configurations

*1-Column*

**2B:** 2-Button

**3R:** 3-Button with Raise/Lower

**4B:** 4-Button

*2-Column*

**42:** 4-Button/2-Button

**4R:** 4-Button/3-Button with Raise/Lower

#### Button Text/Icons

*1-Column*

**L1:** Light Levels

**L2:** Time of Day

*2-Column*

**L1S1:** Light Levels/Shade Levels

**L2S1:** Time of Day/Shade Levels\*

#### Colours and Finishes

*Polymer Finishes*

**AW:** Arctic White

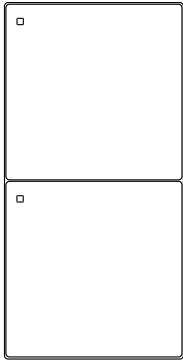
**BL:** Matte Black

\*Available in Button Configuration 42 only.

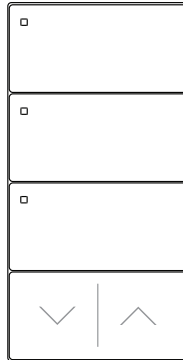
## Verti Keypads

### Button Configurations

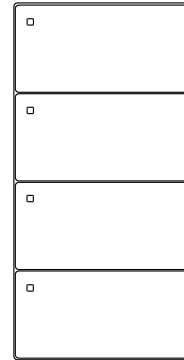
#### 1-Column



2-button (2B)

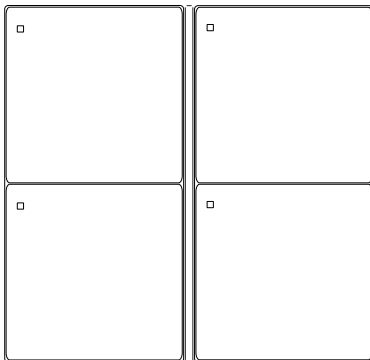


3-button with Raise/Lower (3R)

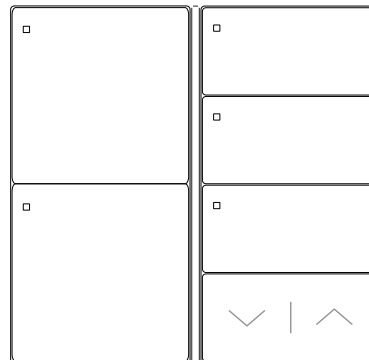


4-button (4B)

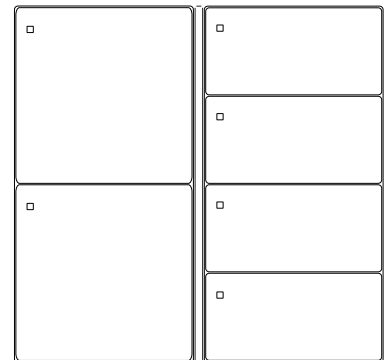
#### 2-Column



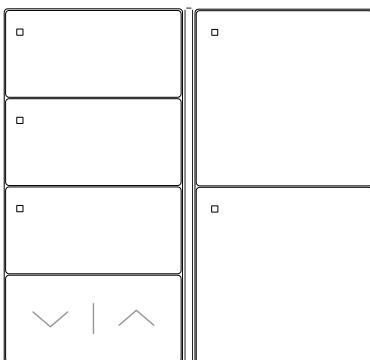
2-button/2-button (22)\*



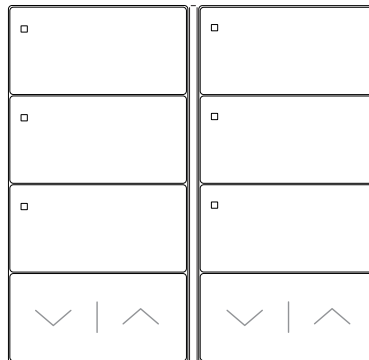
2-button/3-button with Raise/Lower (2R)\*



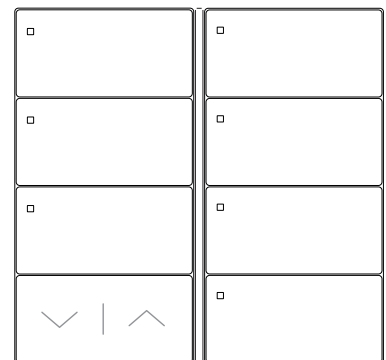
2-button/4-button (24)\*



3-button with Raise/Lower/2-button (R2)\*



3-button with Raise/Lower/3-button with Raise/Lower (RR)\*



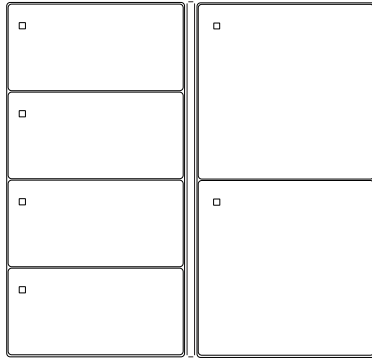
3-button with Raise/Lower/4-button (R4)\*

\* Available in personalised version only.

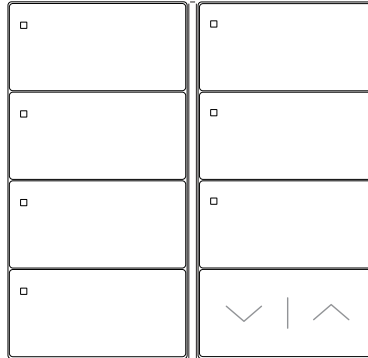
## Vierti Keypads

### Button Configurations (continued)

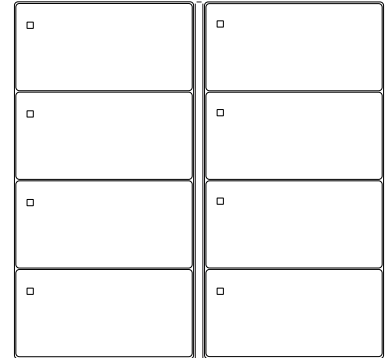
#### 2-Column (continued)



4-button/2-button (42)



4-button/3-button with Raise/Lower (4R)



4-button/4-button (44)\*

\* Available in personalised version only.

## Vierti Keypads

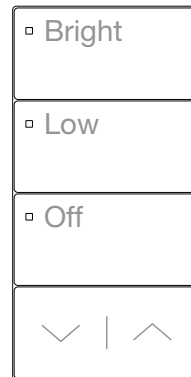
### Button Text/Icons

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#### Lutron Defined (default, predefined button kits only)

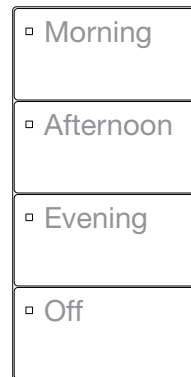
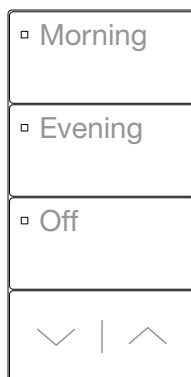
Default marking icons shown below.

*L1: Light Levels*



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*L2: Time of Day*

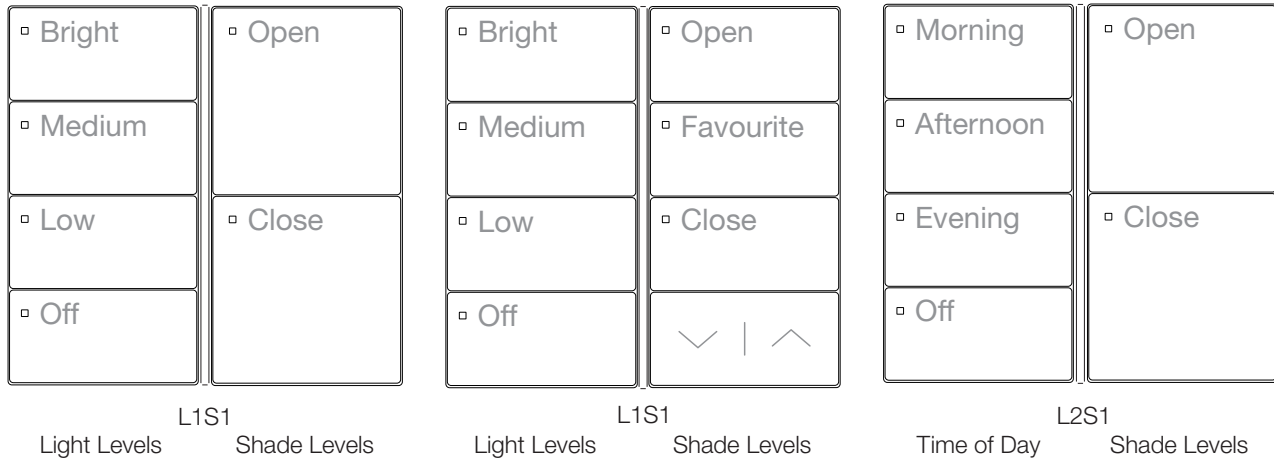


## Vierti Keypads

### Button Text/Icons (continued)

#### Lutron Defined (default, predefined button kits only)

Default marking icons shown below.



### Personalisation

Final personalisation to be specified in myProjects, Lutron Designer, or the Vierti personalisation form. Visit [engraving.lutron.com/Vierti](http://engraving.lutron.com/Vierti) for personalisation options. Personalisation must be defined at the time of order.

**Note:** Orders cannot be processed until personalisation details are received.

## Vierti Keypads

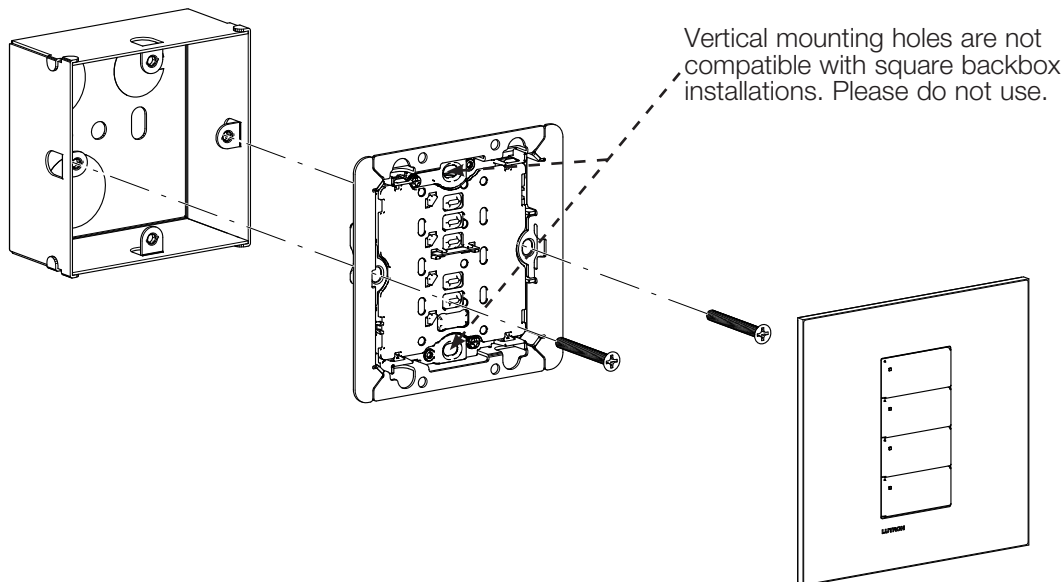
### Mounting

A square, flangeless backbox (Lutron part number EBB-1-SQ or similar style) is recommended for the most flush installation possible. Flanged square backboxes may also be used for retrofit applications or to meet local standards. Square backboxes with no flanges must be installed with the box sides flush with or slightly inset to the wall surface.

**Note:** Wallplate will not be flush to the wall when using flanged backboxes.

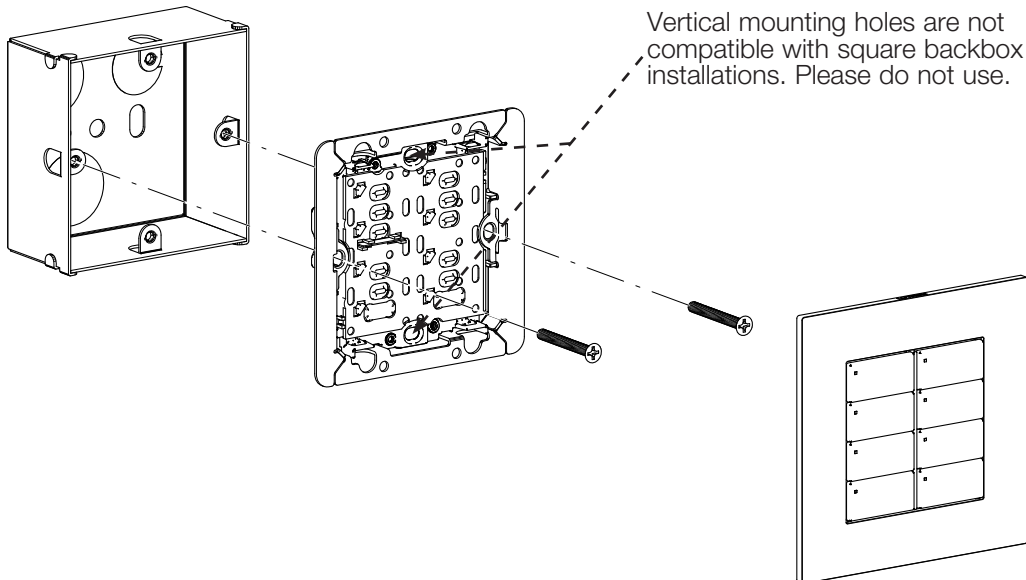
#### Square Style (Square Backbox)

1-Gang, 1-Column



**Note:** Use Lutron part number EBB-1-SQ if a backbox is needed for the project. This backbox is 74 mm x 74 mm x 47 mm.

1-Gang, 2-Column



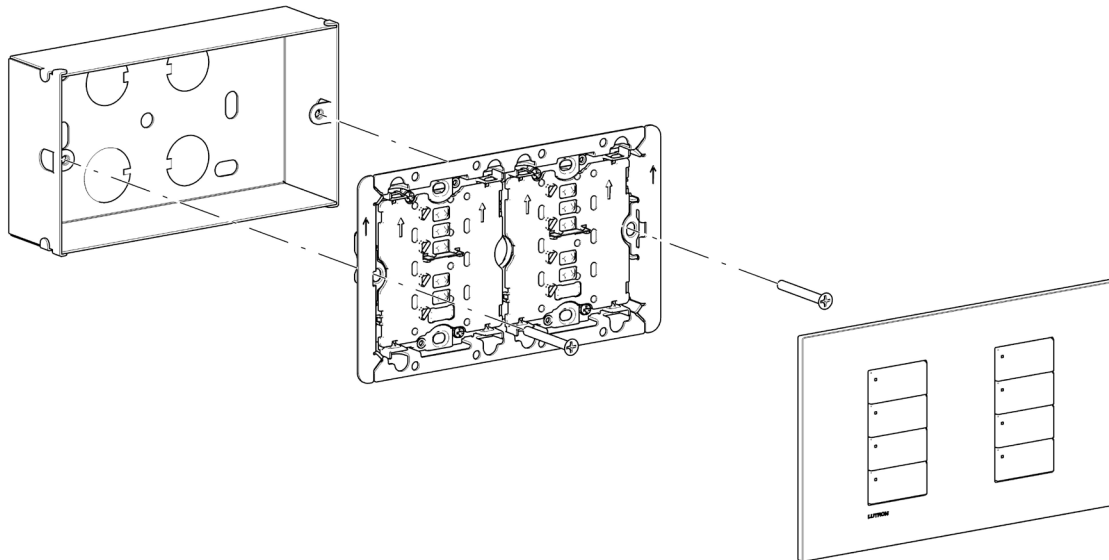
**Note:** Use Lutron part number EBB-1-SQ if a backbox is needed for the project. This backbox is 74 mm x 74 mm x 47 mm.

## Verti Keypads

### Mounting *(continued)*

#### Square Style (Square Backbox) *(continued)*

2-Gang, 1-Column



**Note:** Button configurations can be mixed and matched to achieve up to 9 possible combinations. The 2-gang mounting plate is included with the 2-gang, 1-column wallplate.

## Vierti Keypads

### Colours and Finishes

#### Polymer Finishes



Arctic White  
AW



Matte Black  
BL

#### Metal Finishes (wallplates only)



Aged Brass  
AB



Aged Bronze  
AZ



Bright Chrome  
BC



Brushed Brass  
BRB



Champagne  
CP



Graphite  
GP



Satin Nickel  
SN

- Aged Brass and Aged Bronze finishes are produced using a handcrafted process which introduces a unique variation in both the hue and the graining. There will be natural variation from unit to unit.
- Due to printing limitations, colours and finishes shown cannot be guaranteed to perfectly match actual product colours.
- Keychains are available for more precise colour matching (Metal Finishes only):
  - Signature Metal Chip Kit Demo: SM-CK-DEMO

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