

## Vierti Keypads

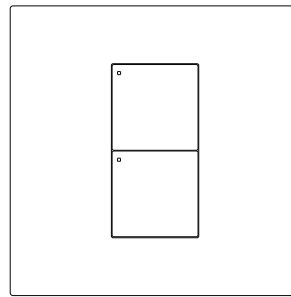
Vierti keypads provide homeowners with a simple and elegant way to operate lights, shades/draperies, motorized screens, and many other devices.

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

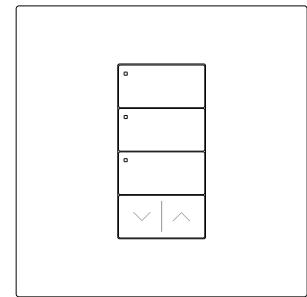
Vierti keypads feature large, easy-to-use buttons with LEDs to aid in locating the keypad in low light conditions. Non-configured keypads are available as bulk models and only include a mounting plate. Configured models include a mounting plate and personalized button kit. Predefined button kits, configured 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 color to compliment the aesthetics of a space.

Keypad markings are important for programming and use of the keypads when installed. The marking color has been chosen for increased readability, with default markings available as standard product offerings. Custom personalized button kits can be designed to describe its programming using the Lutron Designer software.

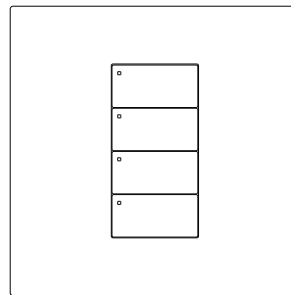
Personalized replacement button kits can be changed in the field after installation. This allows for the keypad to be changed to a variety of button configurations and personalized markings.



2-Button



3-Button with Raise/Lower



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.

## Vierti Keypads

### Model Numbers

Bulk Keypads (Includes bulk keypad with mounting plate and construction cover)	Description
RRE-HDS1	RA3 hybrid keypad square 1-column bulk
RRE-WSS1	RA3 keypad square 1-column bulk

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

Predefined Button Kits	Description
C1BK-2BXX <sup>1</sup> -YY <sup>2</sup>	1-column, 2-button predefined button kit
C1BK-3RXX <sup>1</sup> -YY <sup>2</sup>	1-column, 3-button with raise/lower predefined button kit
C1BK-4BXX <sup>1</sup> -YY <sup>2</sup>	1-column, 4-button predefined button kit

Configured Replacement Button Kit	Description
C1BK	1-column personalized replacement button kit

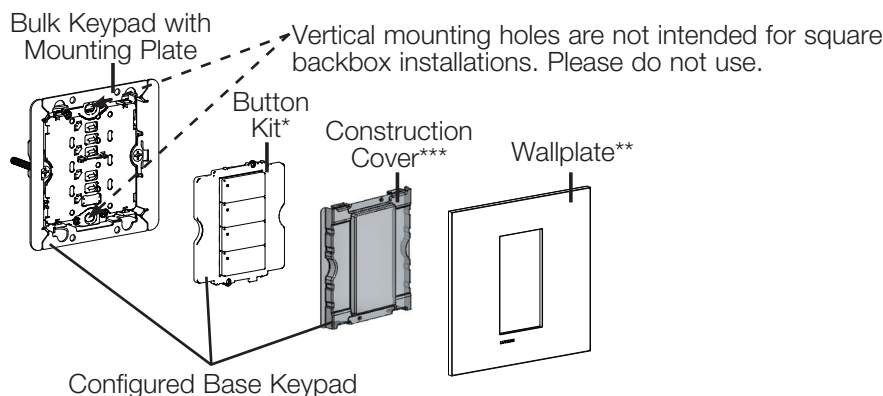
  

Wallplates	Description
LW-S-C1-XX <sup>1</sup>	1-gang, 1-column square wallplate
LW-S-C11-XX <sup>1</sup>	2-gang, 1-column square wallplate

Note: See page 3 for specification information.

<sup>1</sup> "XX" in the model number represents the color/finish code. See **Colors and Finishes** options at the end of the document.

<sup>2</sup> "YY" in the model number represents the engraving code. See **Button Text/Icons** on page 14.



\* 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 square 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.

## 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</b>	Single gang: Requires a square backbox. 35 mm deep minimum. 47 mm depth recommended. Double box (2-gang): Requires a 120 mm fixing centers backbox. 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*, 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>Warranty</b>	2-Year Limited Warranty <a href="http://www.lutron.com/TechnicalDocumentLibrary/Intl_Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Intl_Warranty.pdf</a>

\* Refer to the **Hybrid Keypad: Load Type and Capacity** table on page 6 for additional information.

## 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

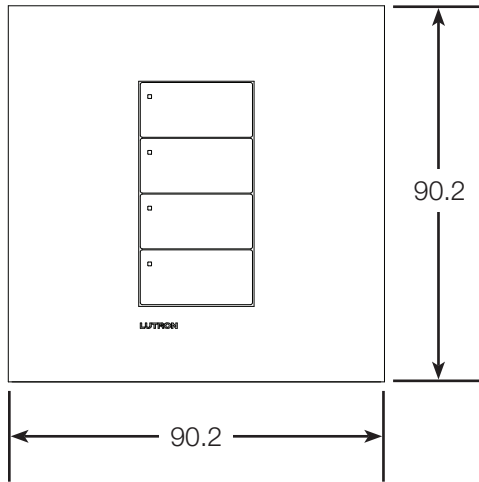
- Internal dimmer is controlled by the keypad buttons to verify proper installation prior to system programming.
- Internal dimmer can be assigned to any button on the hybrid keypad and can be programmed to be controlled by any keypad.
- Advanced dimming technology designed for compatibility with a broader range of high-efficiency bulbs.
- Programmable high-end and low-end trim settings to customize the dimming range and optimize LED compatibility.
- See **Hybrid Keypad: Load Type and Capacity** table on page 6.
- Internal dimmer can be operated as a switched output through the use of the design GUI.

## Verti Keypads

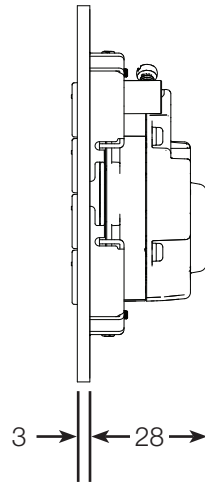
### Dimensions

All dimensions are shown as mm

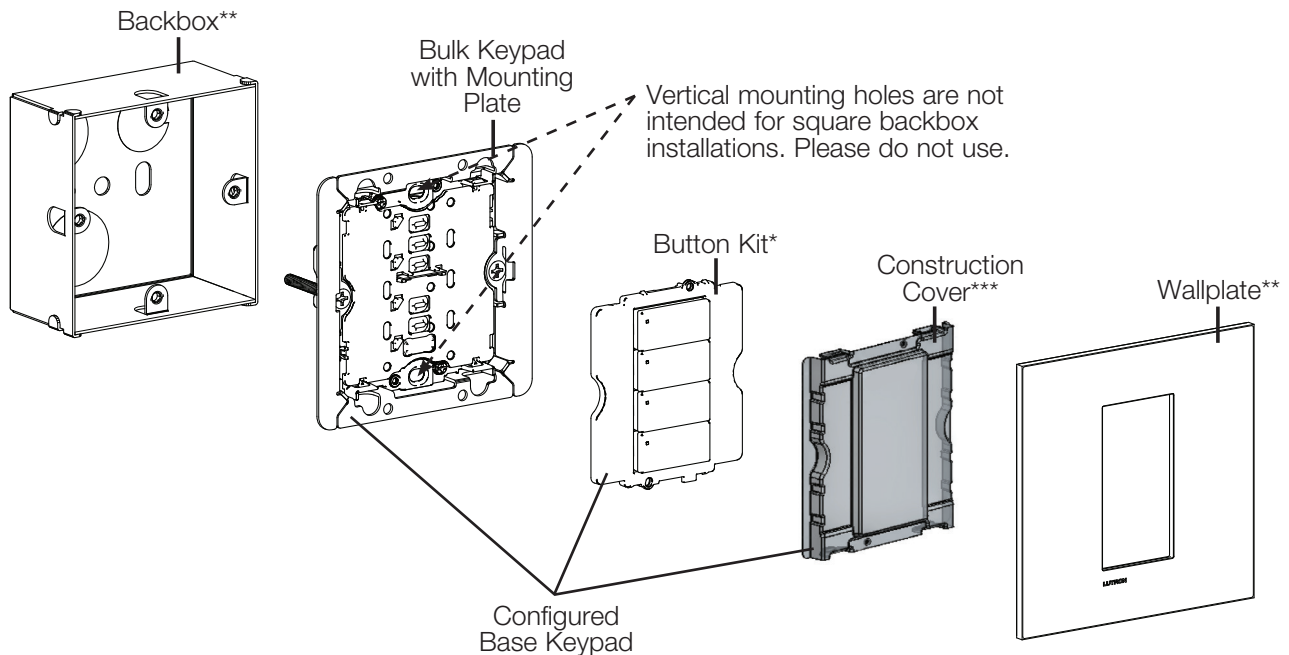
#### Front View



#### Side View



### Parts Identification



- \* 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 square 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.

## Vierti Keypads

### Hybrid Keypad: Load Type and Capacity

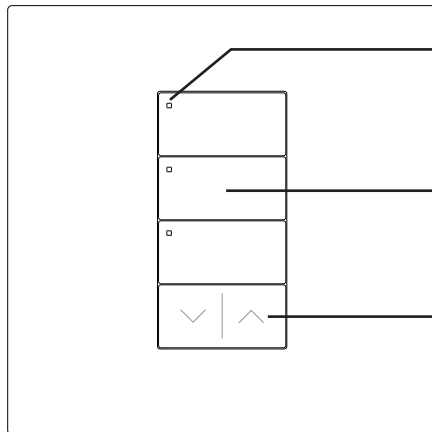
Model Number	Voltage	Load Types	Minimum Load		Maximum Load	Neutral Connection	
			With Neutral	Without Neutral		Dimming	Switching
RRE-HDS-1 RR-HD	220 – 240 V~ 50/60 Hz	LED <sup>1</sup>	0 W	10 W	1 A 150 W	Preferred	Required
		ELV with LEDs	10 W	10 W	250 W	Required	
		ELV with Inc./Hal.	10 W	10 W	250 W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

<sup>1</sup> 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.

## Verti Keypads

### Keypad Operation



**Status LEDs**

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

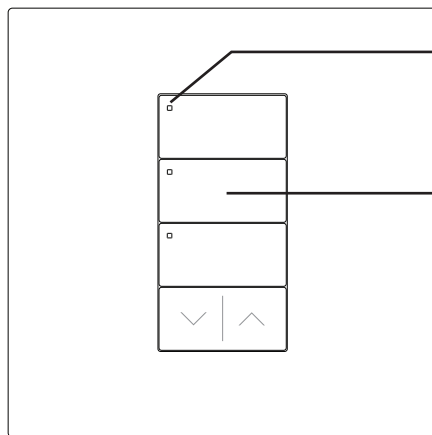
**Keypad Buttons**

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

**Raise/Lower Buttons**

- Press to raise/lower desired levels.

### Hybrid Keypad Operation



**Status LEDs**

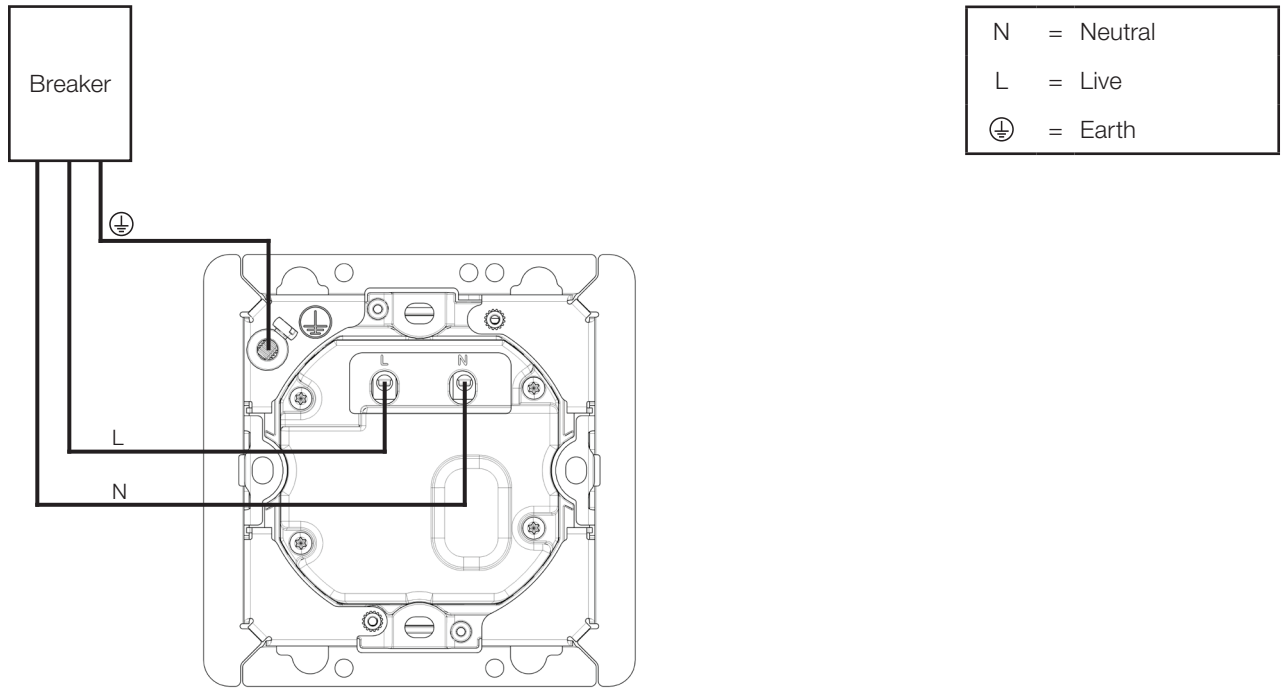
- Show which keypad button has been activated.
- Pressed (active) button LEDs are brighter than other buttons.

**Keypad Buttons**

- Press to activate desired levels or positions.
- Default operation depends on the button configuration (model number):
  - 2B: Top button is ON, bottom button is OFF
  - 3RL: 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: Top button is ON, the next button is 50%, and the next two buttons are OFF

## Vierti Keypads

### Standard Keypad: Wiring Diagram

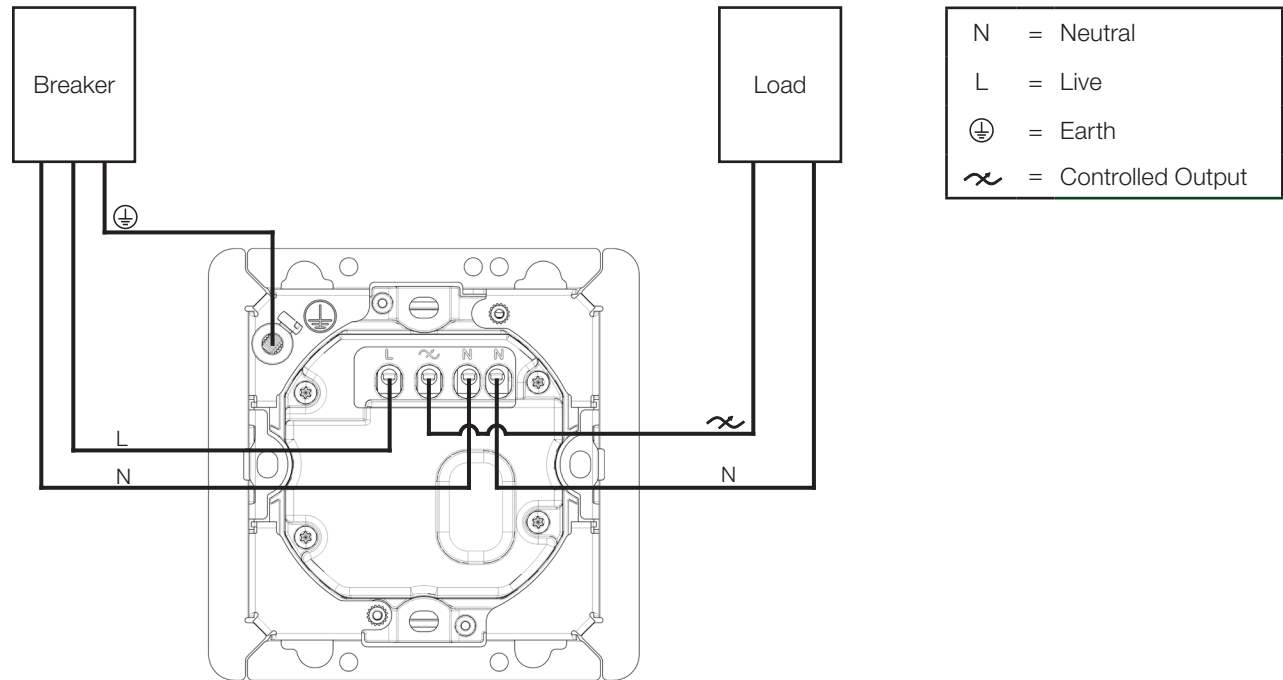




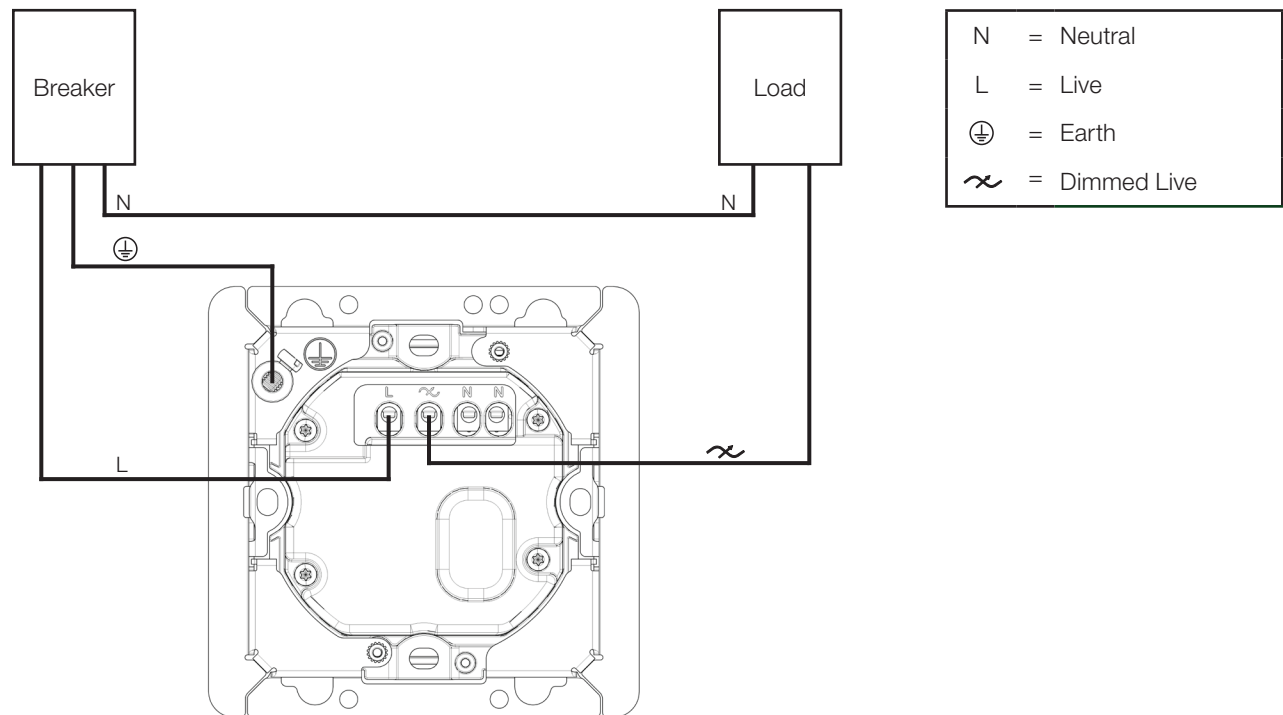
## Verti Keypads

### Hybrid Keypad Models: Wiring Diagram

With neutral (dimming or switching mode):



Without neutral (dimming mode only):



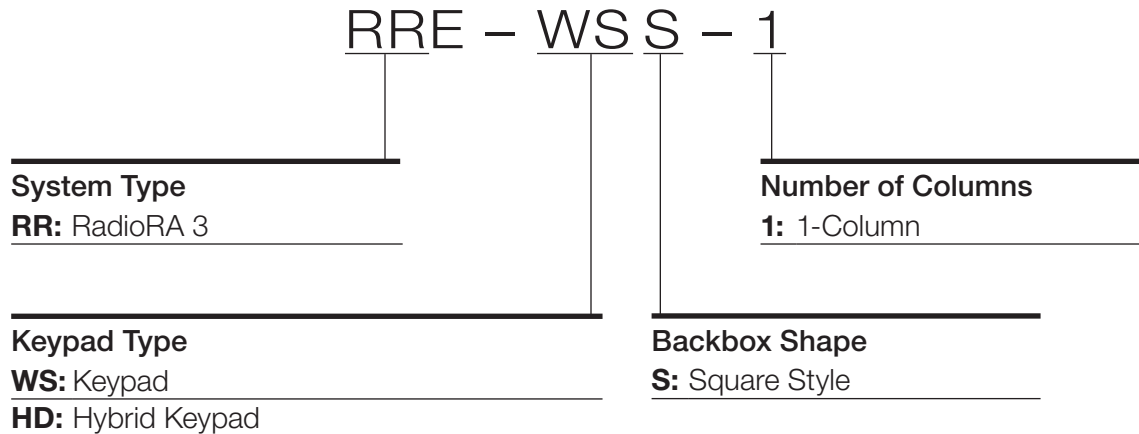
**Note:** See Hybrid Keypad: Load Type and Capacity table on page 6.

## 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.



## Verti Keypads

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

**C 1BK – 2B AW – L1**

**Family**

**C:** Verti Button Kit

**Number of Columns**

**1:** 1-Column

**Button Configurations**

*1-Gang, 1-Column*

**2B:** 2-Button

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

**4B:** 4-Button

**Button Text/Icons**

**L1:** Light Levels

**L2:** Time of Day

**Colors and Finishes**

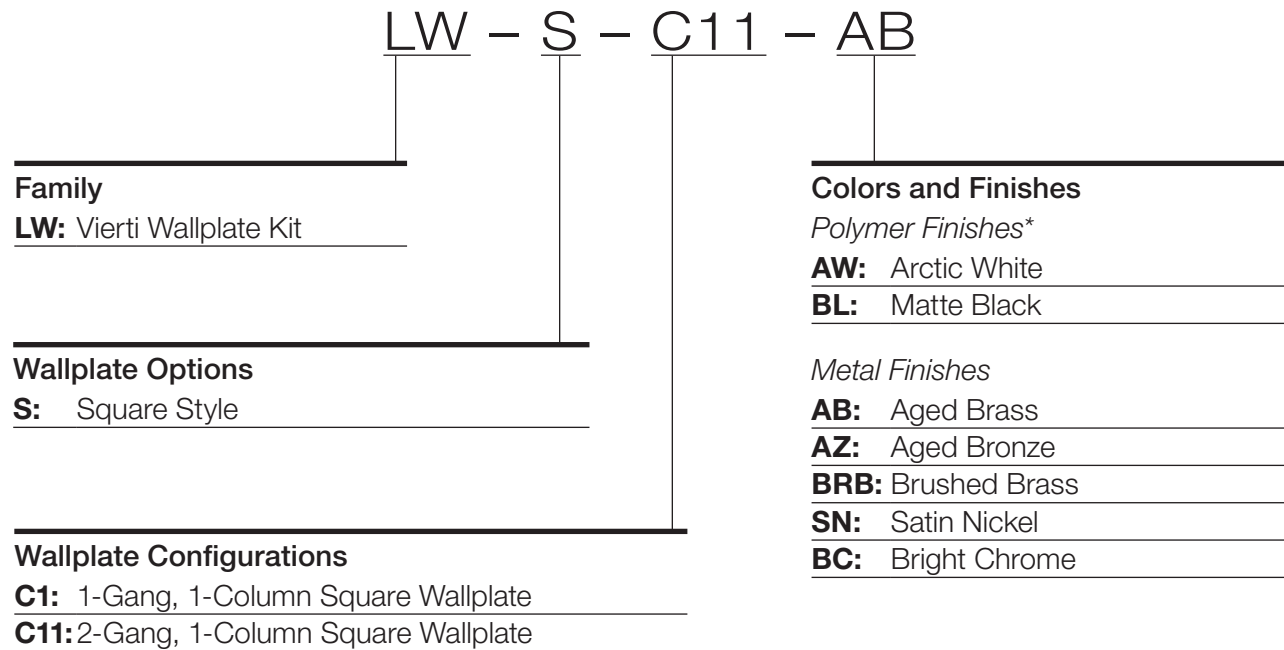
*Polymer Finishes*

**AW:** Arctic White

**BL:** Matte Black

## Vierti Keypads

### How to Build a Wallplate Kit Model Number

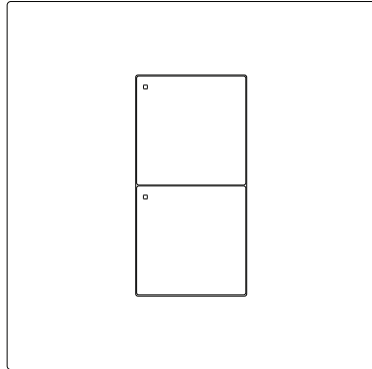


\* Available for the 1-gang, 1-column square wallplate only.

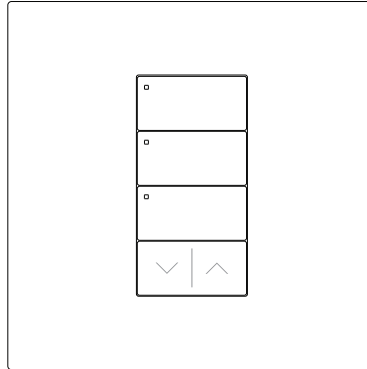
## Vierti Keypads

### Button Configurations

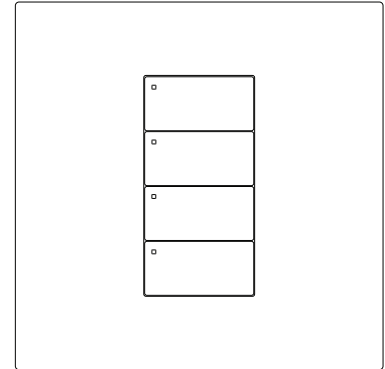
#### 1-Gang, 1-Column



2-Button

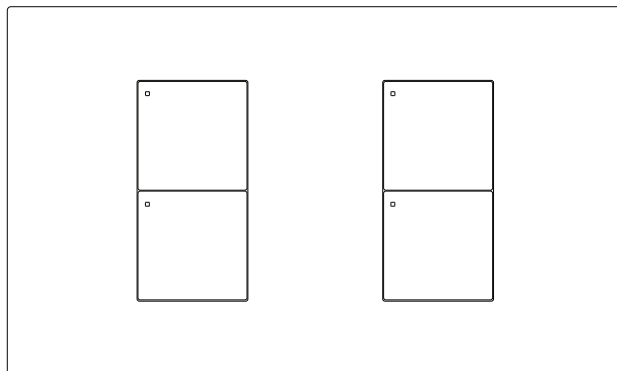


3-Button with Raise/Lower

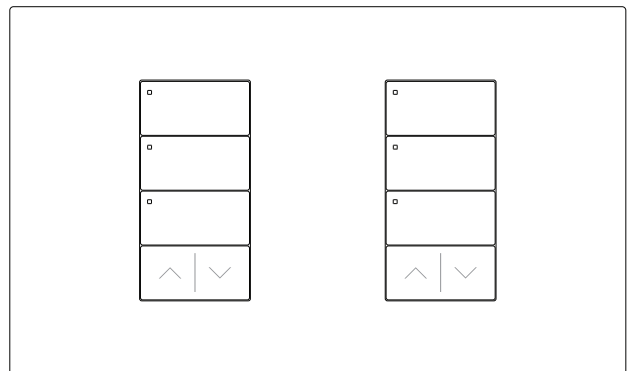


4-Button

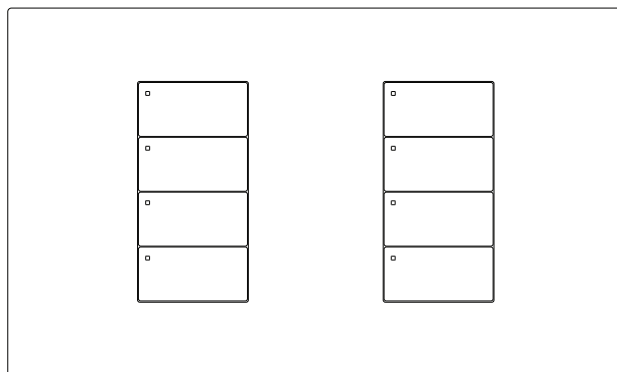
#### 2-Gang, 1-Column



2-Button, 2-Button U.K. Twin



3-Button with Raise/Lower, 3-Button with Raise/Lower U.K. Twin



4-Button, 4-Button U.K. Twin

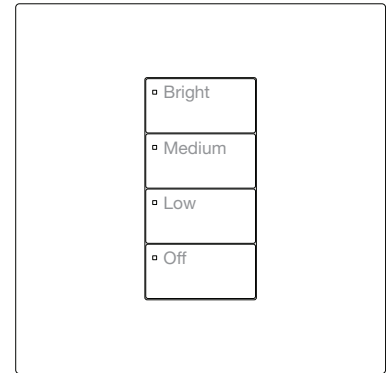
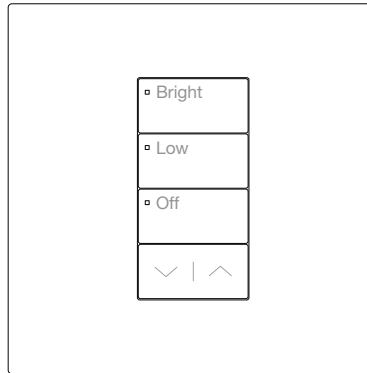
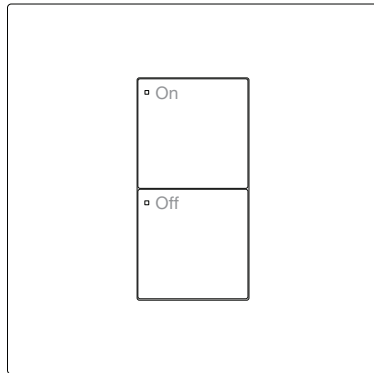
Note: Button configurations can be mixed and matched to achieve up to 9 possible combinations.

## Vierti Keypads

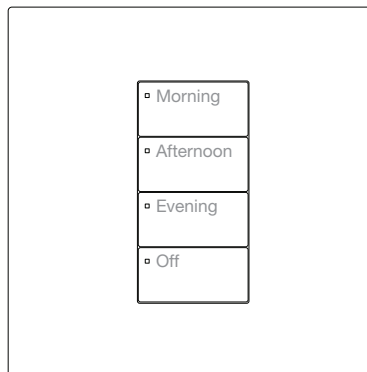
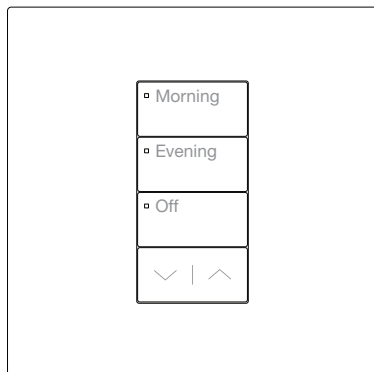
### Button Text/Icons

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

Default marking icons shown below.



L1: Light Levels



L2: Time of Day

### Personalization

Final personalization to be specified in myProjects. Visit [engraving.lutron.com/Vierti](http://engraving.lutron.com/Vierti) for personalization options. Personalization must be defined at the time of order.

Note: Orders cannot be processed until personalization details are received.

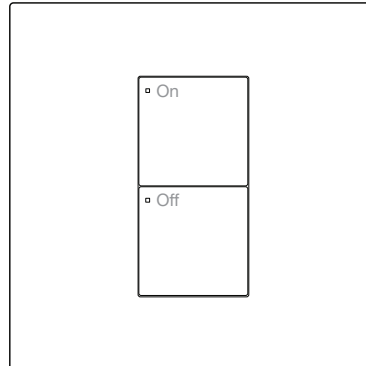
## Vierti Keypads

### How to Select a Vierti Keypad

#### Square Style

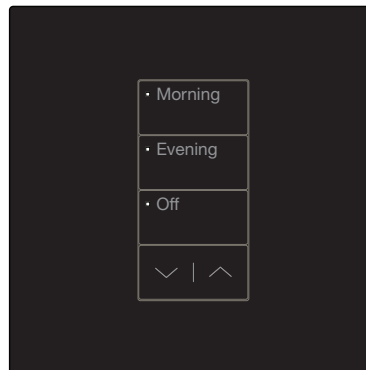
1-Gang, 2-Button keypad:  
Arctic White (AW) with light level printing

Component	Model Number	Quantity
Bulk keypad unit	RRE-WSS-1	1
Predefined button kit	C1BK-2AW-L1	1
1-gang, 1-column wallplate	LW-S-C1-AW	1



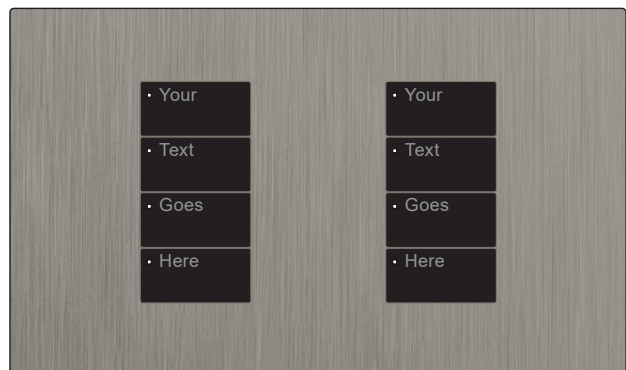
1-Gang, 3-Button with Raise/Lower hybrid keypad:  
Matte Black (BL) with time of day printing

Component	Model Number	Quantity
Bulk keypad unit	RRE-HDS-1	1
Predefined button kit	C1BK-3RBL-L2	1
1-gang, 1-column wallplate	LW-S-C1-BL	1



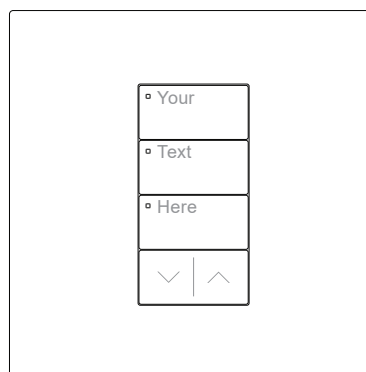
2-Gang, 1-Column, 4-Button keypad in Matte Black (BL) with Satin Nickel (SN) wallplate:

Component	Model Number	Quantity
Configured base keypad	RR-WS	2
2-gang, 1-column wallplate	LW-S-C11-SN	1



1-Gang, 1-Column, 3-Button with Raise/Lower hybrid keypad in Arctic White (AW) with personalized engraving and Arctic White (AW) wallplate:

Component	Model Number	Quantity
Configured base keypad	RR-HD	1
1-Gang, 1-Column wallplate	LW-S-C1-AW	1



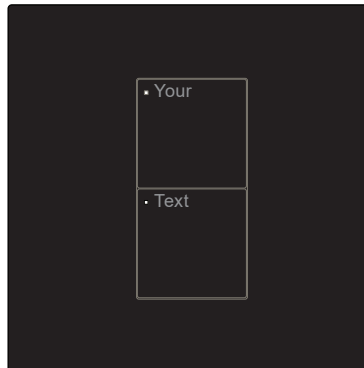
## Vierti Keypads

### How to Select a Vierti Keypad *(continued)*

#### Square Style *(continued)*

1-Gang, 1-Column, 2-Button keypad in Matte Black (BL) with personalized engraving and Matte Black (BL) wallplate:

Component	Model Number	Quantity
Configured base keypad	RR-WS	1
1-gang, 1-column wallplate	LW-S-C1-BL	1



1-Column, 2-Button replacement button kit in Arctic White (AW) with personalized engraving:

Component	Model Number	Quantity
Configured replacement button kit	C1BK	1



1-Column, 4-Button replacement button kit in Arctic White (AW) with personalized engraving:

Component	Model Number	Quantity
Configured replacement button kit	C1BK	1





## Vierti Keypads

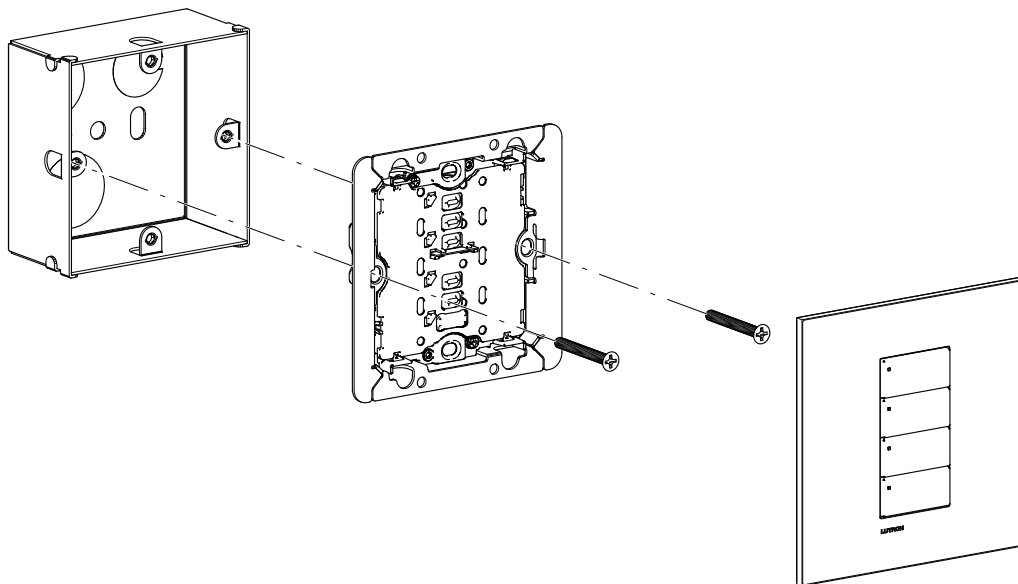
### Mounting

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.

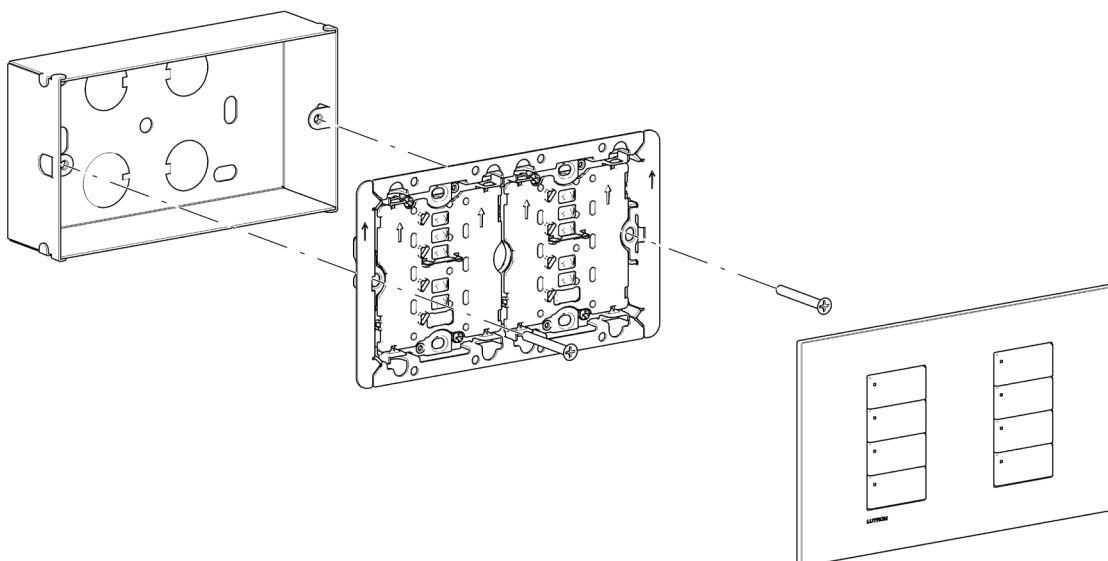
#### Square Style (Square Backbox)

1-Gang, 1-Column



Note: Use Lutron part number EBB-1-SQ if a backbox is needed for the project.

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

### Colors and Finishes

#### Polymer Finishes



Arctic White  
AW



Matte Black  
BL

#### Metal Finishes (wallplates only)



Aged Brass  
AB



Aged Bronze  
AZ



Brushed Brass  
BRB



Satin Nickel  
SN



Bright Chrome  
BC

- 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, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.
- Keychains are available for more precise color matching:
  - Signature Metal Chip Kit Demo: SM-CK-DEMO

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