Vierti Keypads

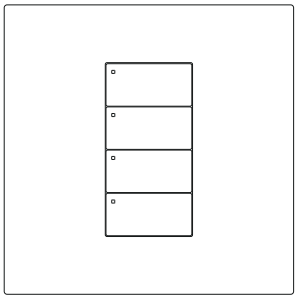
Vierti keypads provide homeowners with a simple and elegant way to operate lights, shades/draperies, motorised screens, and many other devices.

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.

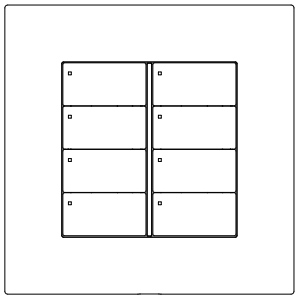
Vierti keypads feature large, easy-to-use buttons with LEDs to aid in locating the keypad in low-light conditions. Keypads are exclusively available as configured base models that include a standard mounting plate and a personalised button kit, which is available in Arctic White and Matte Black polymer finishes. Wallplates are purchased separately in Arctic White and Matte Black polymer finishes, in addition to a variety of other finishes to complement 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. Customised personalised button kits can be designed to describe its programming using myProjects, Lutron Designer, or the Vierti personalisation form (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 for the button kits against damage from construction debris. 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.

Use only with Lutron Vierti wallplates. Wallplates sold separately.

Note: Additional button configurations can be found in the **Button Configurations** section starting on page 18.

Vierti Keypads

Model Numbers

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

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

Wallplates	Description
LW-S-C1-XX[2]	1-gang, 1-column wallplate
LW-S-C11-XX[2]	2-gang, 1-column wallplate at 60 mm on-centre spacing
LW-S-C2-XX[2]	1-gang, 2-column wallplate

Note: See page 3 for specification information.

[1] For Engraving options, see **Button Text/Icons** starting on page 20.
[2] "XX" in the model number represents the colour/finish code. See **Colours and Finishes** options on page 24.

Vierti Keypads

Specifications

Power	220–240 V~ 50/60 Hz
Power Consumption	0.5 W typical, 1.5 W Max
Regulatory Approvals	CE, UKCA, RoHS Compliant, WEEE Certified, REACH Compliant, ETSI EN 300 220-2, ETSI 301 489-1 Compliant, IEC/EN 60669-2-1:2021, CB Certified, WPC, TDRA, ImDA
Environment	Ambient operating temperature: 0 °C to 40 °C, 0% to 90% humidity, non-condensing. Indoor use only. IP20 rated.
Communications	Vierti dimmers, switches, keypads, etc. communicate with the system through (Clear Connect–Type X) Radio Frequency (RF) and must be located within 23 m the processor. There must be a minimum of two devices within 6 m of the wireless processor. Each Clear Connect–Type X device should have two or more non-battery powered Type X devices within 6 m of another compatible Clear Connect – Type X device. 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 https://www.lutron.com/ccx_appnote
ESD Protection	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
Surge Protection	Tested to withstand surge voltages without damage or loss of operation, in accordance with IEC 61000-4-5.
Power Failure	Power failure memory: Should power be interrupted, the keypad will return to its previous state when power is restored.
Mounting Square Backbox[1]	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 centres. 35 mm deep minimum. 47 mm depth recommended.
Mounting Round Backbox[1]	Single gang: Requires a round backbox. 35 mm deep minimum. 47 mm depth recommended.
Wiring	Vierti keypads require a 220–240 V~ live and neutral connection. Vierti hybrid keypads require a 220–240 V~ live, neutral[2], and dimmed live connection. All keypads accept wire gauges between 0.5 mm^2 to 2.5 mm^2 (20 AWG to 14 AWG). One wire per terminal.
Limited Warranty	www.lutron.com/warranty or call 1.844.LUTRON1 (USA/Canada), +44.(0)20.7680.4481 (UK) or +1.610.282.3800 (Others) for a printed copy. Additional information can be found at www.lutron.com/cedoc

[1] Square backbox mounting results in a more flush finished result than round backbox. See **Dimensions** section for details. For information on known backbox compatibility, see Lutron Application Note #862 (P/N 048862) at https://www.lutron.com/vierti_backboxes.

[2] For additional information, refer to the **Hybrid Keypad: Load Type and Capacity** section on page 5.

Vierti Keypads

Design Features

- 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 status LED intensity 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 customise the dimming range and optimise LED compatibility.
- See **Hybrid Keypad: Load Type and Capacity** section on page 5.
- Internal dimmer can be operated as a switched output through the use of the design software.

Vierti Keypads

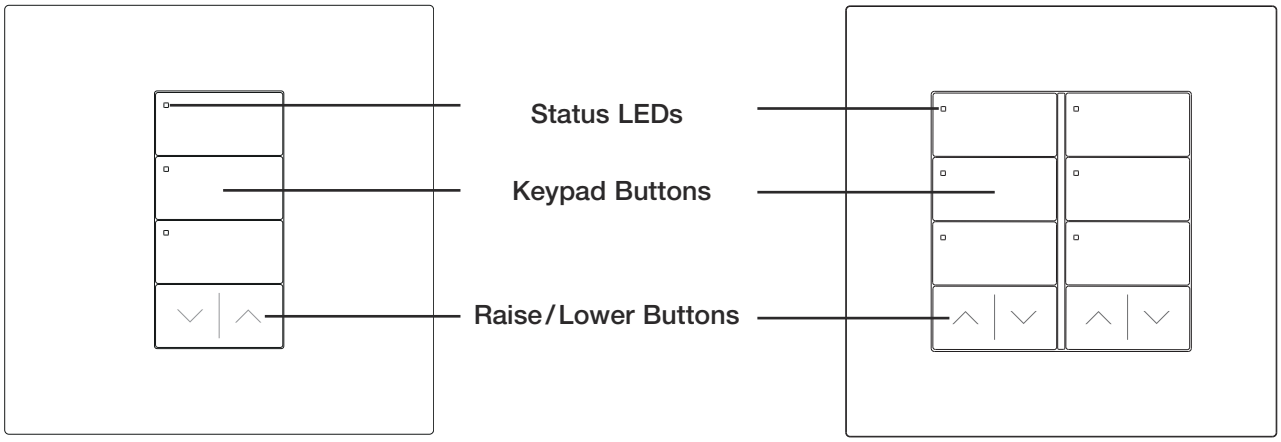
Hybrid Keypad: Load Type and Capacity

Model Number	Voltage	Load Types	Minimum Load		Maximum Load	Neutral Connection	
			With Neutral	Without Neutral		Dimming	Switching
HQ-HD HQ-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

RF Keypad Operation



Status LEDs

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

Keypad Buttons

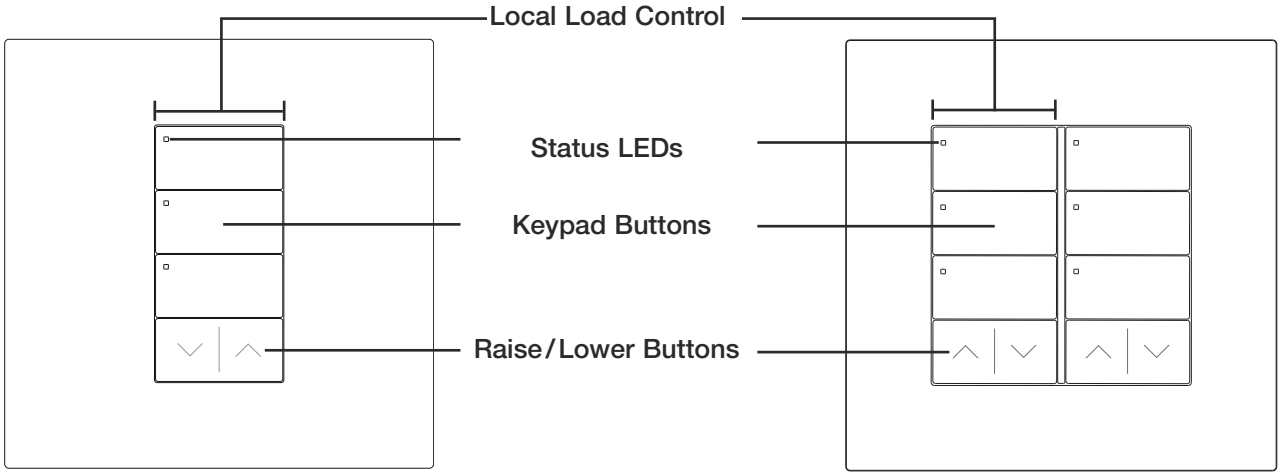
- Press to activate desired levels or positions.
  – This behaviour is programmable in the system software.

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 behaviour 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.

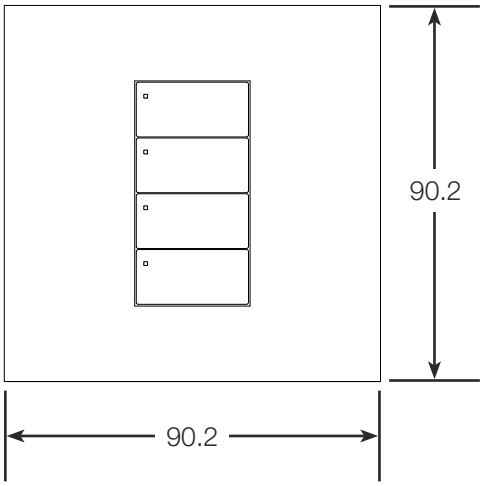
Vierti Keypads

Dimensions

All dimensions are shown as mm

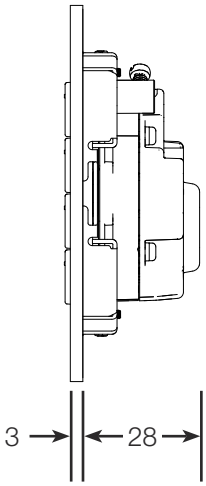
1-Column

Front View



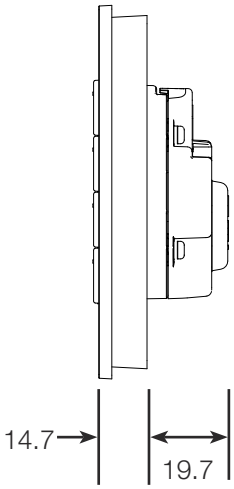
UK Square Box

Side View



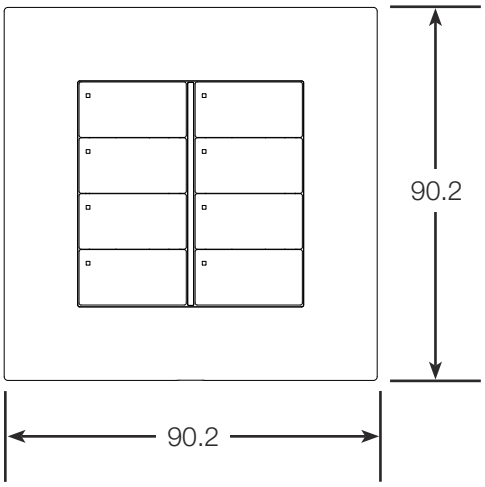
Round Box

Side View



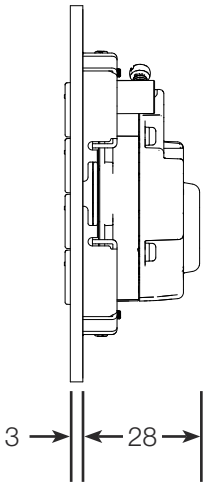
2-Column

Front View



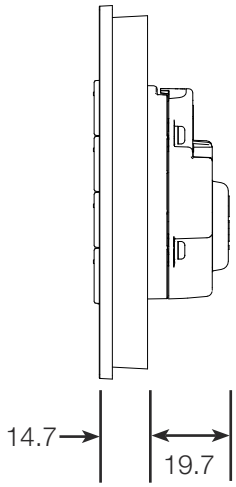
UK Square Box

Side View



Round Box

Side View

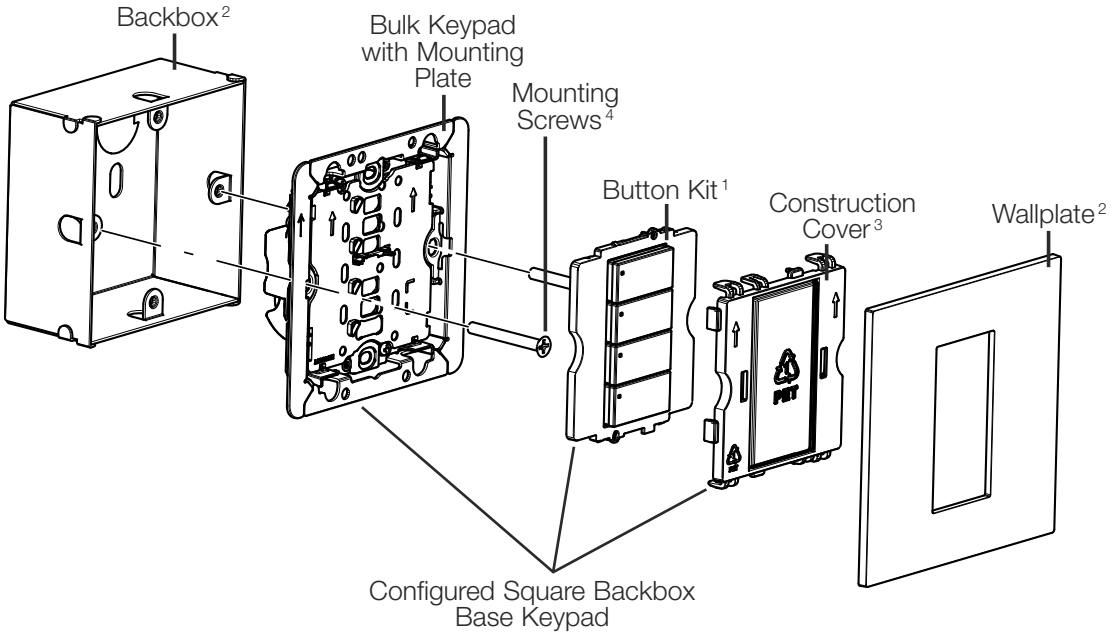


Vierti Keypads

Parts Identification

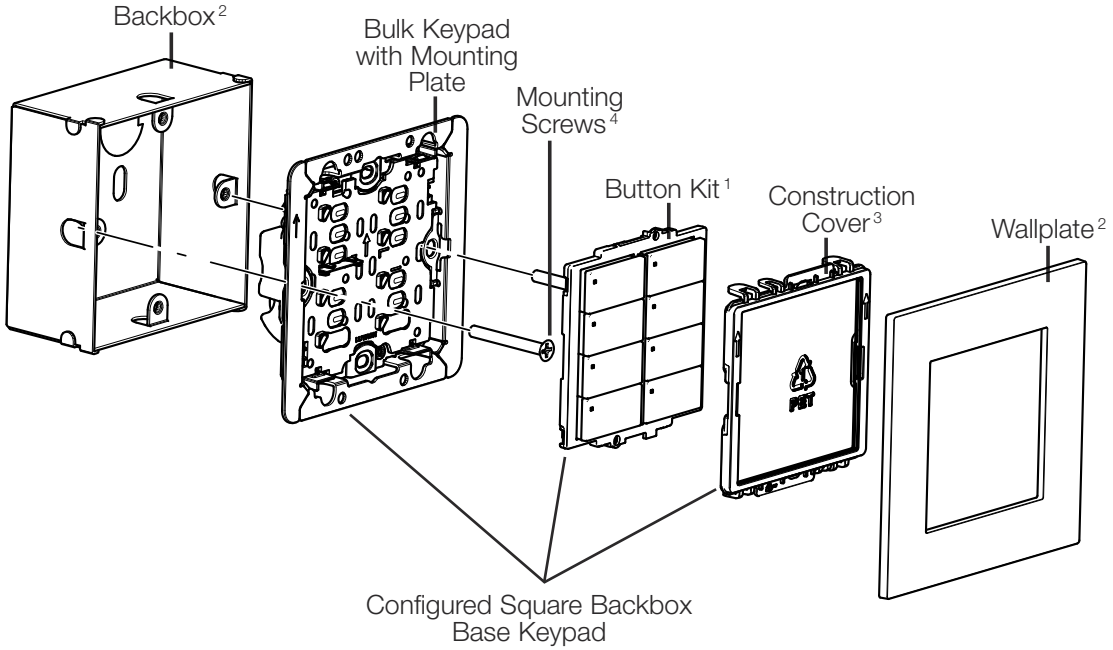
Square Style Backbox

1-Column



Square Style Backbox

2-Column



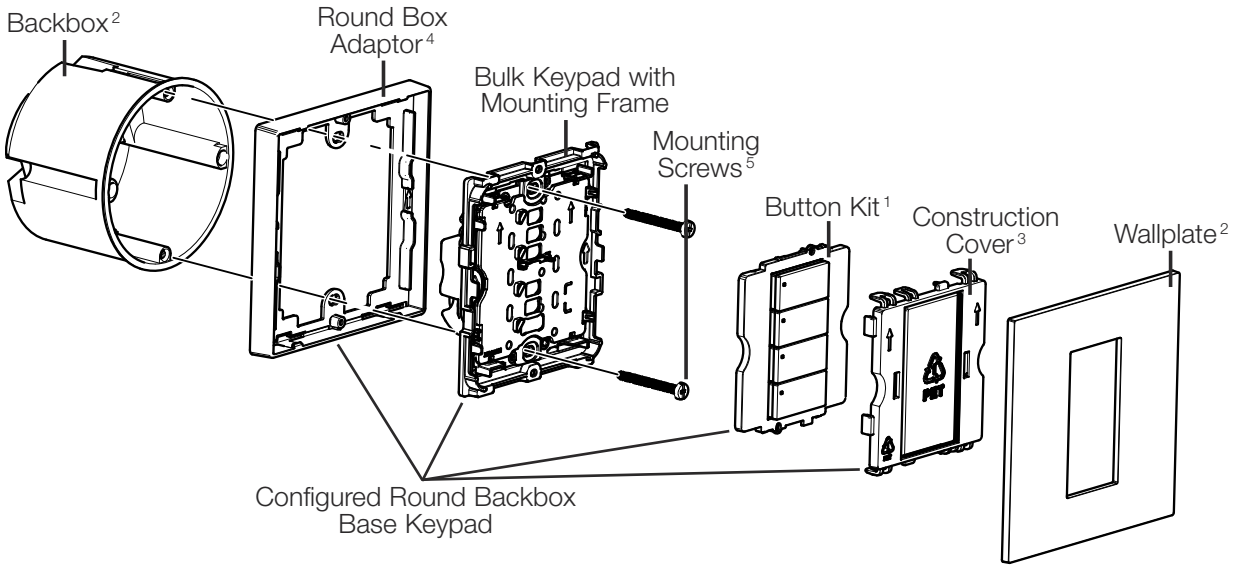
1 The button kit is included with the configured base keypad.
2 The wallplate and required backbox are sold separately. They are not included with the product.
3 **Important:** The construction cover must remain in place until the wallplate is installed. The construction cover must be removed in order to install the wallplate. Buttons can be used while construction cover is on, before wallplate is installed.
4 Square style backbox units have mounting holes on the sides only.

Vierti Keypads

Parts Identification *(continued)*

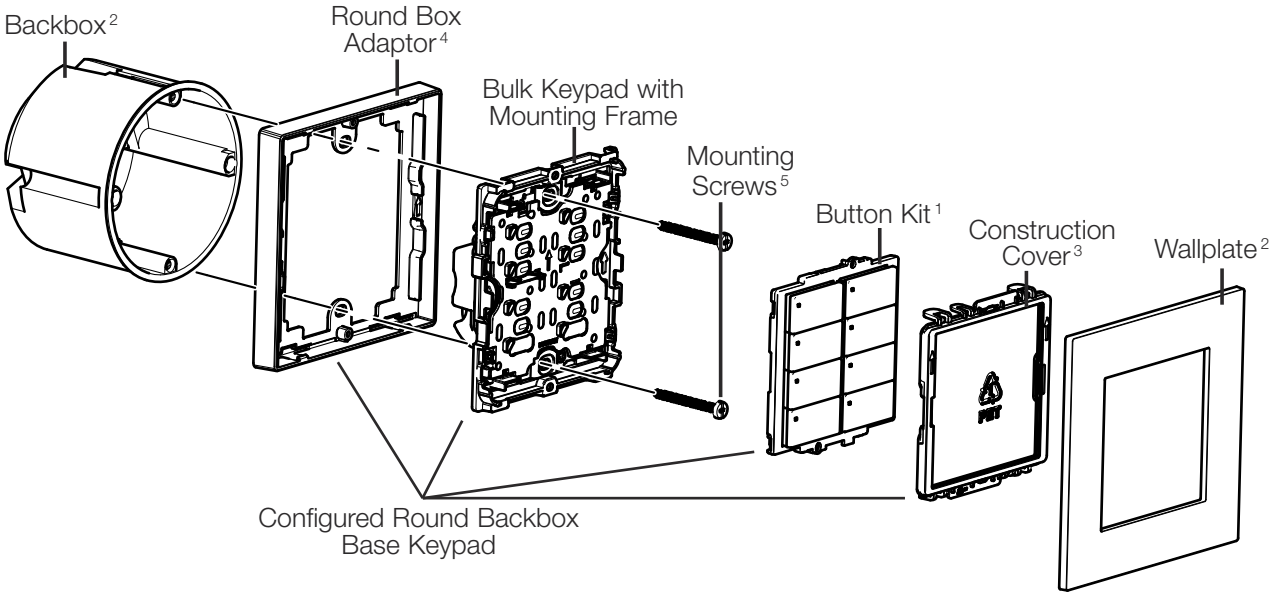
Round Style Backbox

1-Column



Round Style Backbox

2-Column

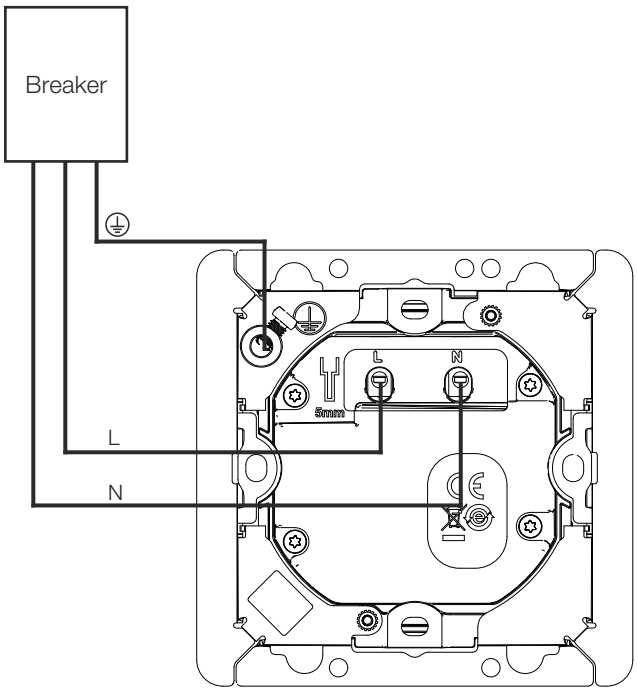


1 The button kit is included with the configured base keypad.
2 The wallplate and required backbox are sold separately. They are not included with the product.
3 **Important:** The construction cover must remain in place until the wallplate is installed. The construction cover must be removed in order to install the wallplate.
4 Round box adaptor is available in Arctic White (AW) and Matte Black (BL).
5 Round style backbox units have mounting holes on the top and bottom only.

Vierti Keypads

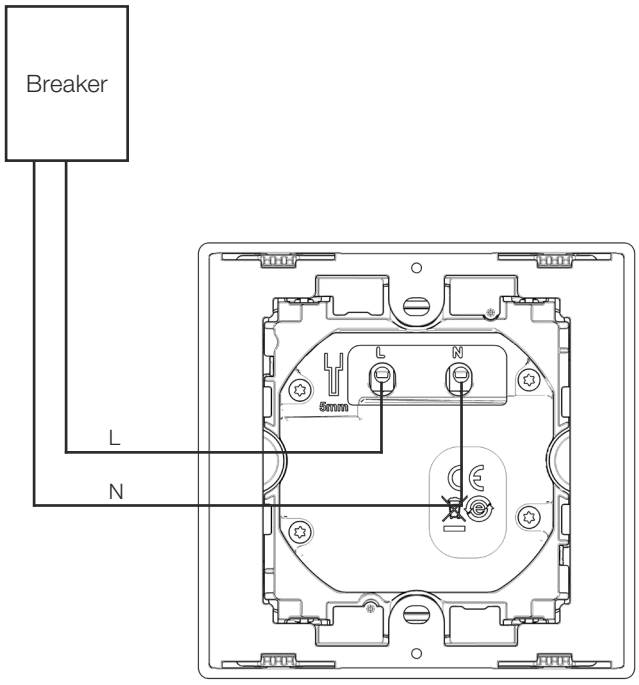
Keypad: Wiring Diagram

Square Style Backbox



N	=	Neutral
L	=	Live
⏚	=	Earth

Round Style Backbox

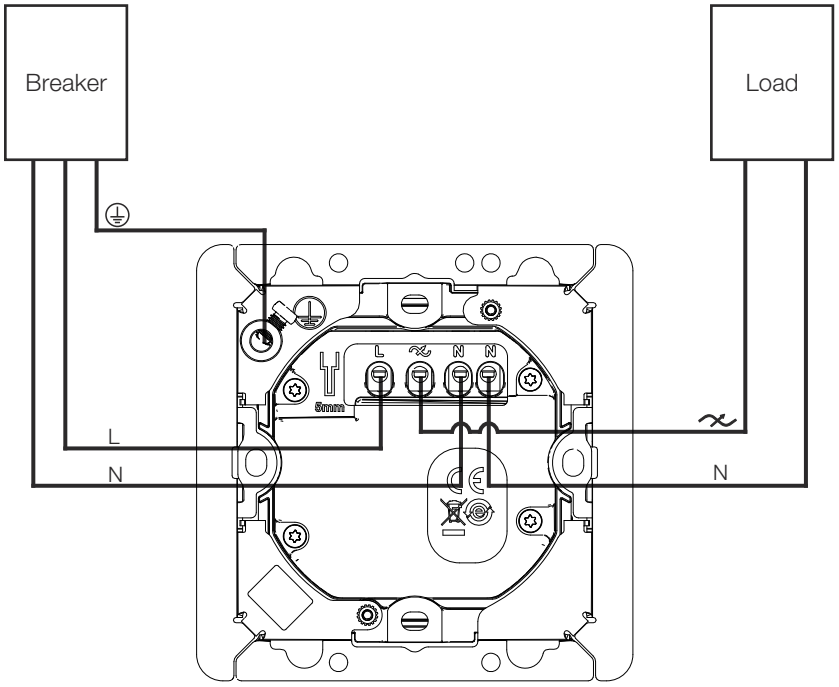


N	=	Neutral
L	=	Live

Vierti Keypads

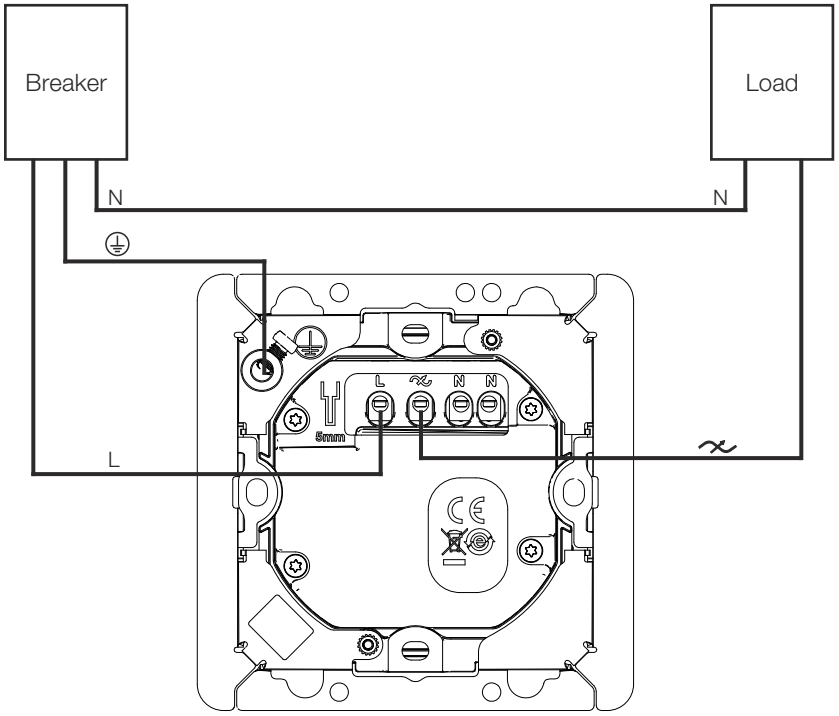
Hybrid Keypad Models: Wiring Diagram for Square Style Backbox

With neutral (dimming or switching mode):



N = Neutral
L = Live
⏚ = Earth
≈ = Controlled Output

Without neutral (dimming mode only):



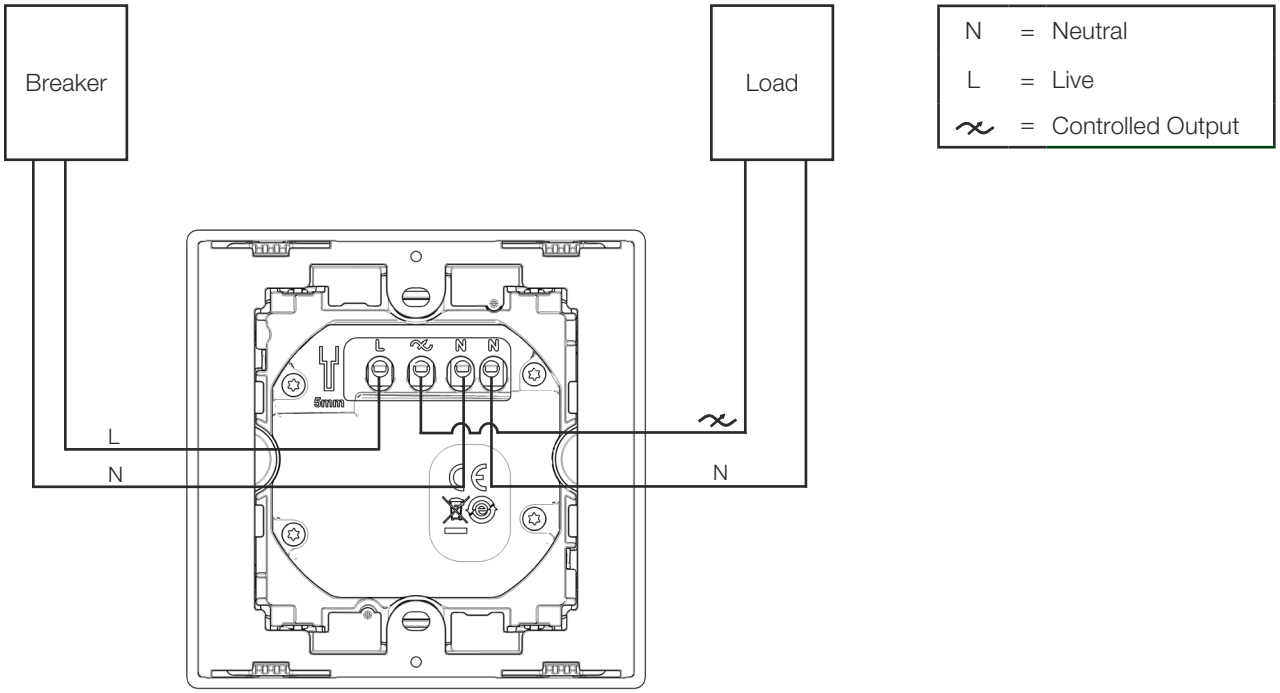
N = Neutral
L = Live
⏚ = Earth
≈ = Dimmed Live

Note: See **Hybrid Keypad: Load Type and Capacity** section on page 5.

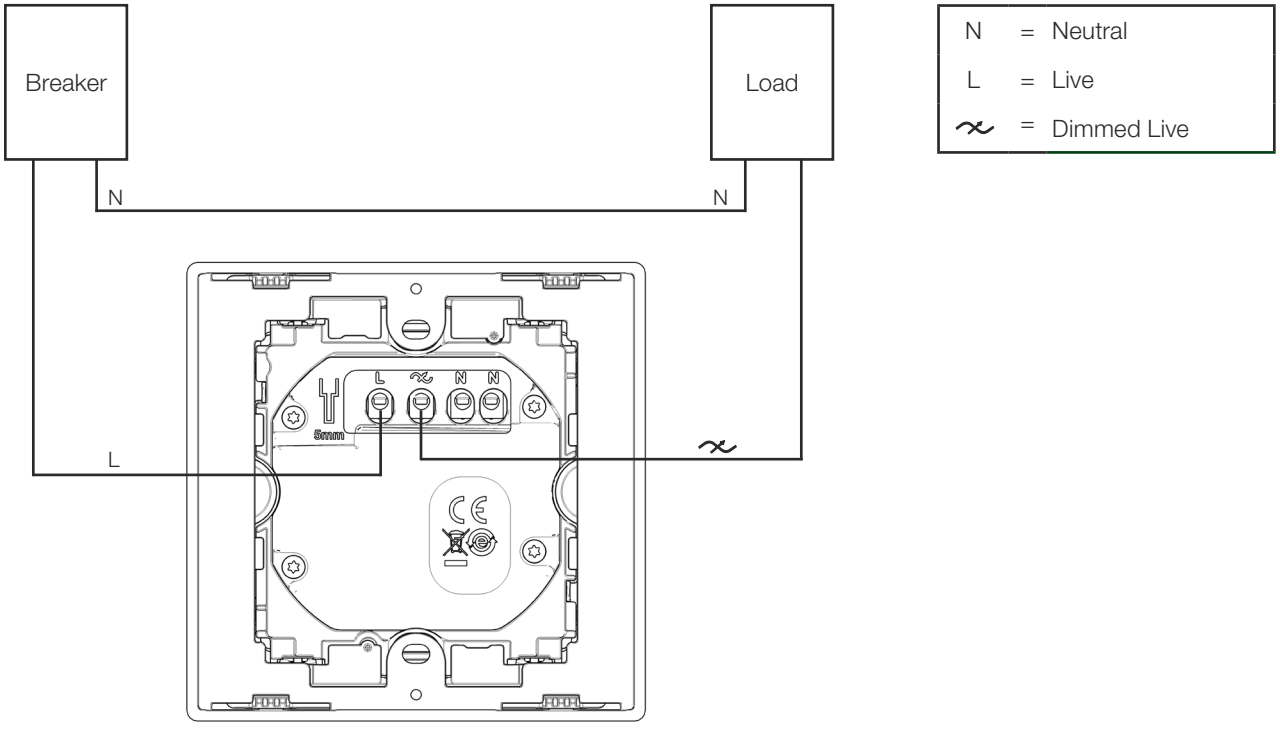
Vierti Keypads

Hybrid Keypad Models: Wiring Diagram for Round Style Backbox

With neutral (dimming or switching mode):



Without neutral (dimming mode only):



Note: See **Hybrid Keypad: Load Type and Capacity** section on page 5.

Vierti Keypads

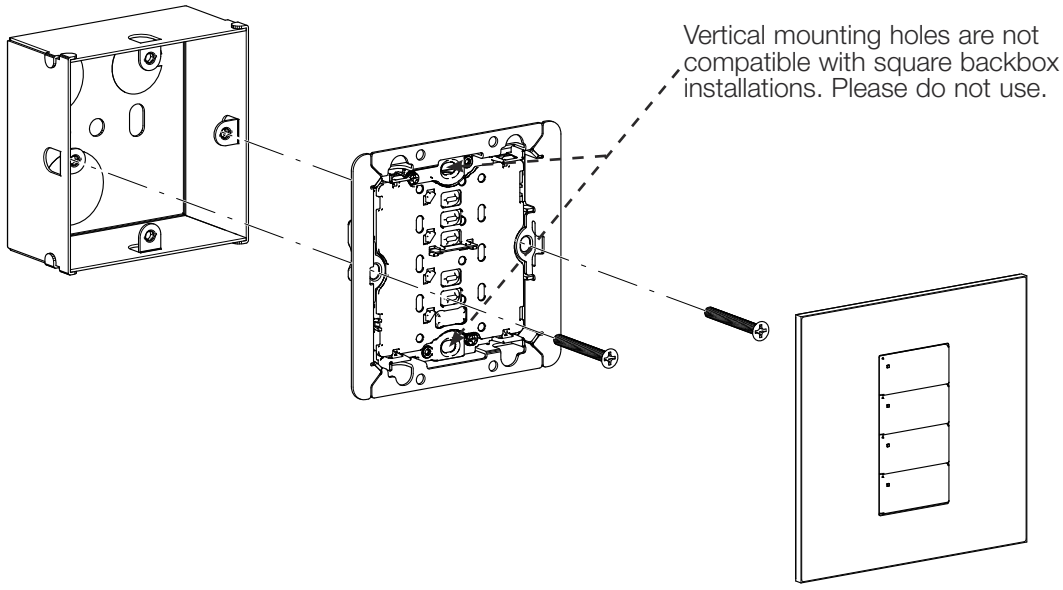
Mounting

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.

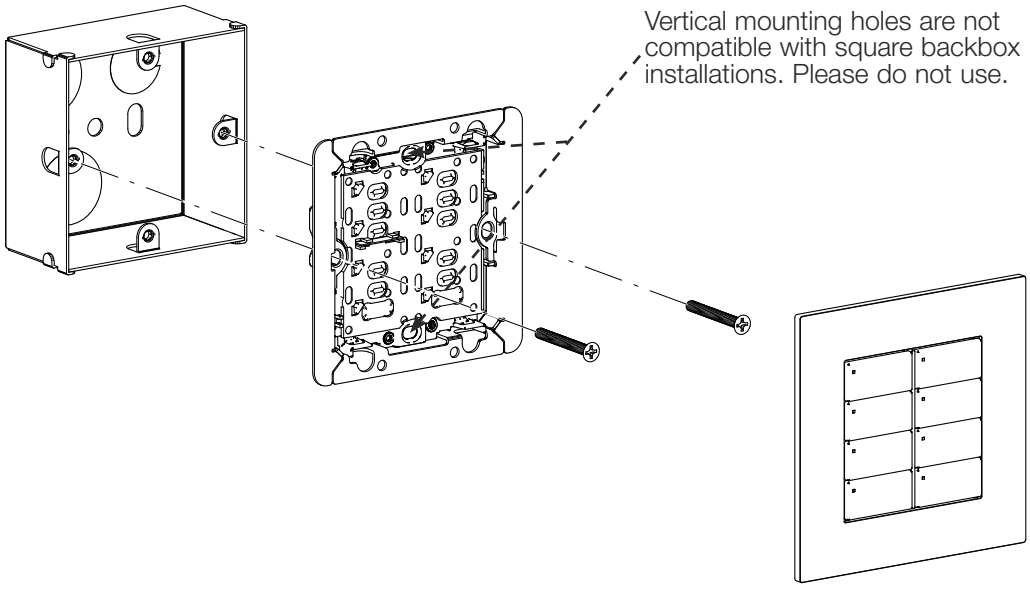
Square Style (Square Backbox)

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



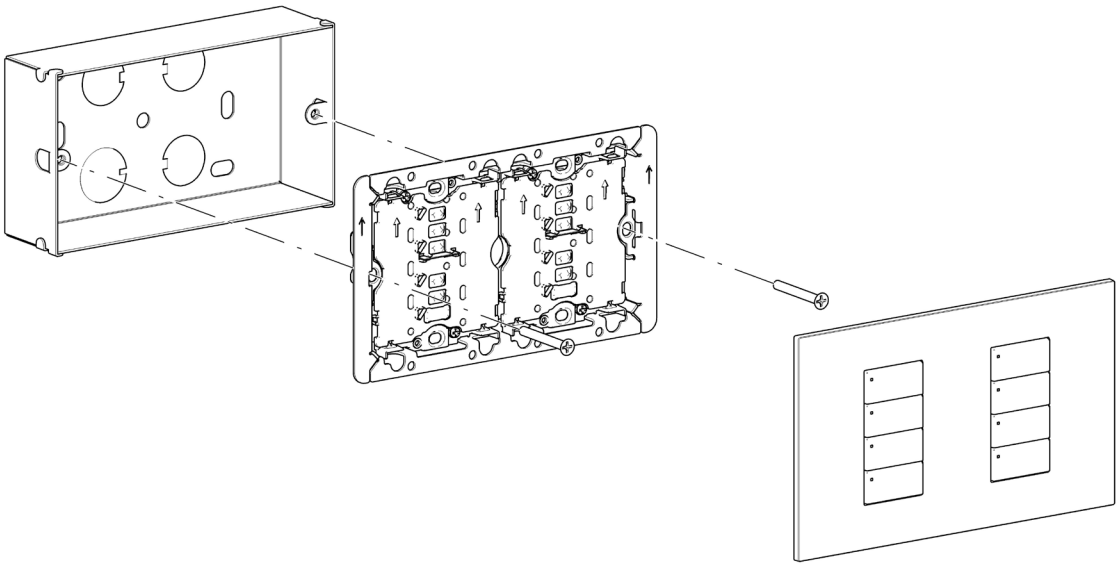
Note: Use Lutron part number EBB-1-SQ if a backbox is needed for the project. This backbox is 74 mm x 74 mm x 47 mm.

Vierti Keypads

Mounting *(continued)*

Square Style (Square Backbox) *(continued)*

2-Gang, 1-Column



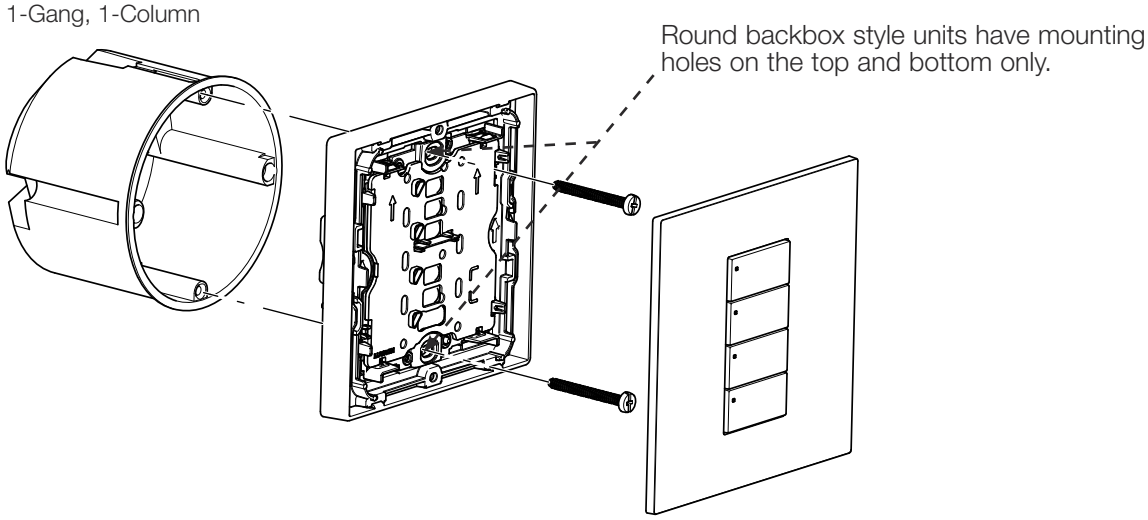
Note: Button configurations can be mixed and matched to achieve up to 9 possible combinations. The 2-gang mounting plate is included with the 2-gang, 1-column wallplate.

Vierti Keypads

Mounting *(continued)*

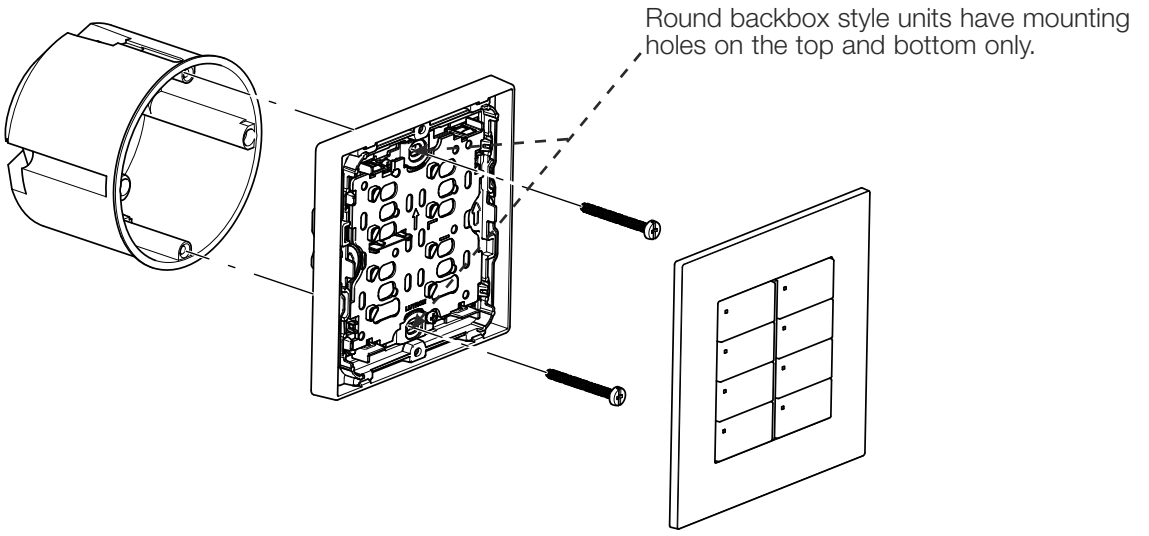
Round Style (Round Backbox)

1-Gang, 1-Column



Note: Use Lutron part number EBB-1-RD if a backbox is needed for the project. This backbox is 68 mm outer diameter x 60 mm deep.

1-Gang, 2-Column



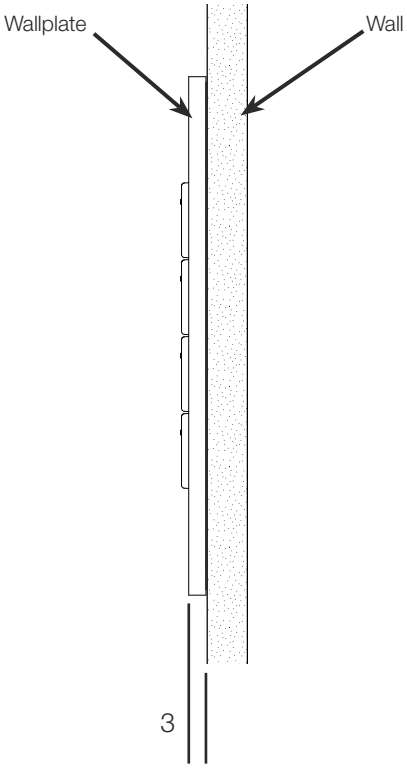
Note: Use Lutron part number EBB-1-RD if a backbox is needed for the project. This backbox is 68 mm outer diameter x 60 mm deep.

Vierti Keypads

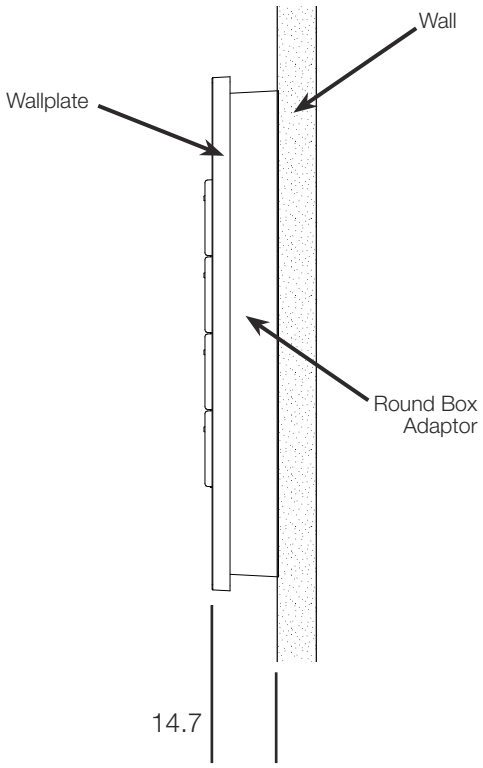
Flush Mounting

All dimensions are shown as mm

Square Style



Round Style

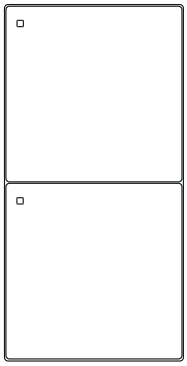


Note: A square, flangeless backbox (Lutron P/N EBB-1-SQ or similar style) is recommended for the most flush installation possible. Flanged square or round backboxes may also be used for retrofit applications or to meet local standards. Square backboxes with no flanges must be installed with the box sides at a minimum depth of flush and maximum depth of 19 mm from the wall surface for best possible installation. For information on known backbox compatibility, see Lutron Application Note #862 (P/N 048862) at https://www.lutron.com/vierti_backboxes.

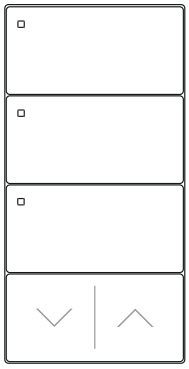
Vierti Keypads

Button Configurations

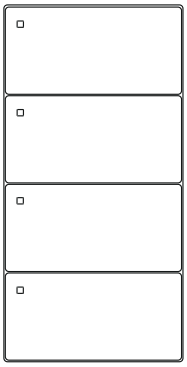
1-Column



2-button (2B)

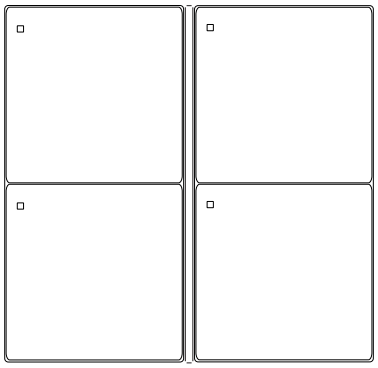


3-button with Raise/Lower (3R)

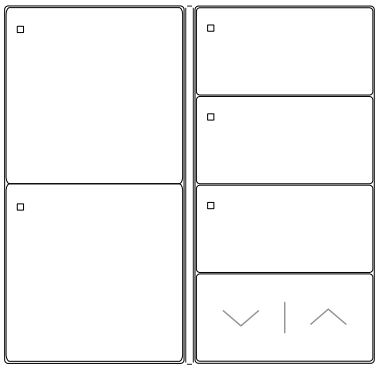


4-button (4B)

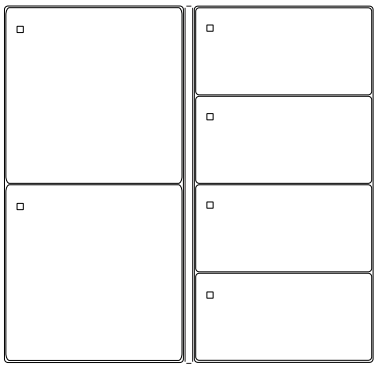
2-Column



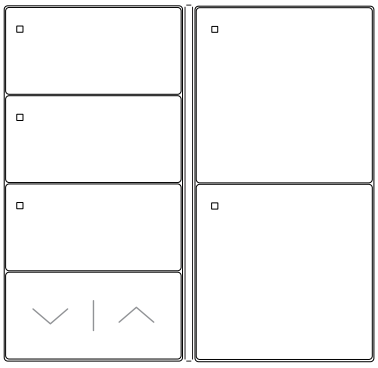
2-button/2-button (22)



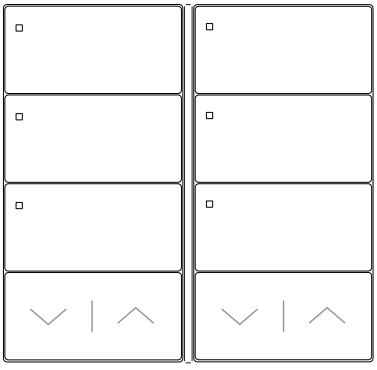
2-button/3-button with Raise/Lower (2R)



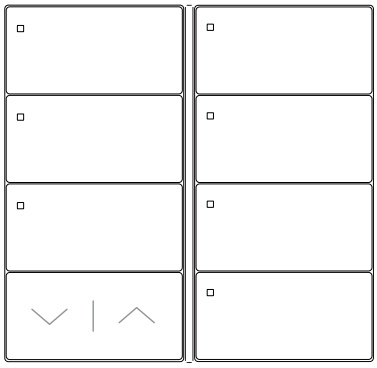
2-button with 4-button (24)



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



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

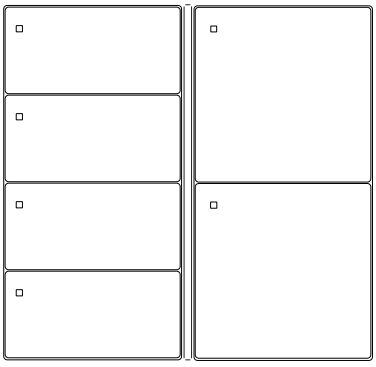


3-button with Raise/Lower/ 4-button (R4)

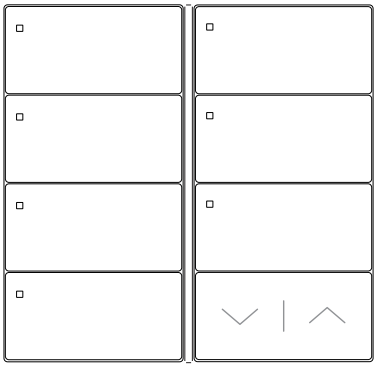
Vierti Keypads

Button Configurations *(continued)*

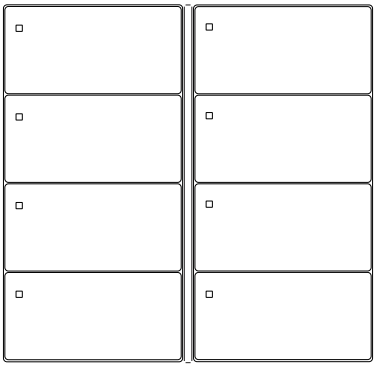
2-Column *(continued)*



4-button/2-button (42)



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



4-button/4-button (44)

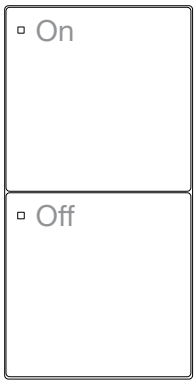
Vierti Keypads

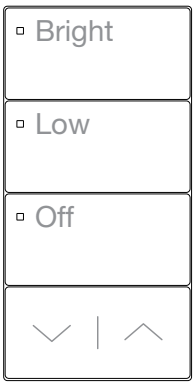
Button Text / Icons

Lutron Defined

Pre-defined markings shown below.

L1: Light Levels

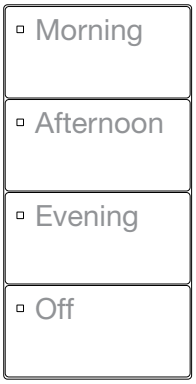






L2: Time of Day



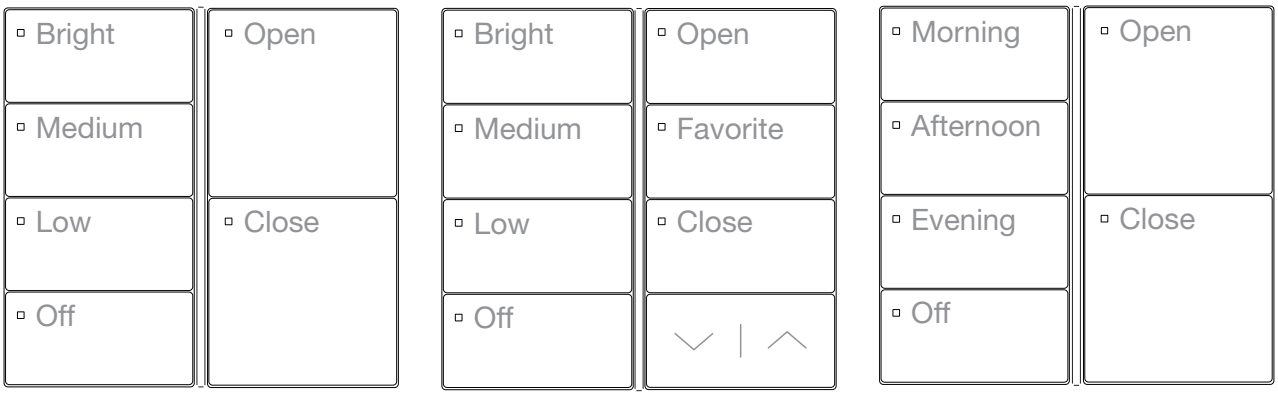


Vierti Keypads

Button Text / Icons *(continued)*

Lutron Defined

Pre-defined markings shown below.



Personalisation

Final personalisation to be specified in myProjects, Lutron Designer, or the Vierti personalisation form. Visit 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

How to Build a Single-Gang Wallplate Kit Model Number

LW – S – ___ – ___

Family

LW: Vierti Wallplate Kit

Ganging

S: Single Gang

Gangs and Openings

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 – ___

Family

LW: Vierti Wallplate Kit

Wallplate Options

S: 60 mm on-centre spacing

Gangs and Openings

C11: 2-Gang, 1-Column Square 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

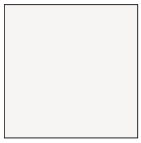
SN: Satin Nickel

*Available for square style backbox only.

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.
- Samples are available for more precise colour matching (Metal Finishes only):
  - Complete Signature Metal Chip Kit Demo: SM-CK-DEMO
  - Aged Brass Chip: SM-E-CHIP-AB
  - Aged Bronze Chip: SM-E-CHIP-AZ
  - Bright Chrome Chip: SM-E-CHIP-BC
  - Brushed Brass Chip: SM-E-CHIP-BRB
  - Champagne Chip: SM-E-CHIP-CP
  - Graphite Chip: SM-E-CHIP-GP
  - Satin Nickel Chip: SM-E-CHIP-SN

Lutron, Clear Connect, HomeWorks, Vierti, and any related trade dress and logos are trademarks or registered trademarks of Lutron Electronics Co., Inc. in the US and/or other countries.
All other product names, logos, and brands are property of their respective owners.