

# Sunnata RF Hybrid Keypads

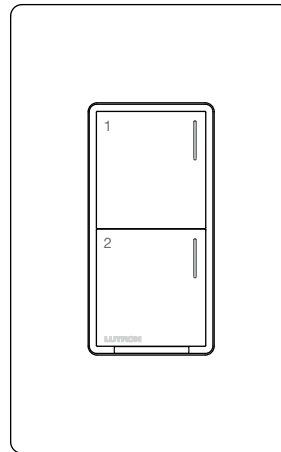
Hybrid keypads function as a dimmer and keypad combined into a single device. Hybrid keypads are great for retro-fit applications since they eliminate the need to install two separate devices.

Hybrid keypads feature large, easy-to-use buttons. LED bars on each button aid in locating the buttons in low light conditions. Printing colors are pre-selected to provide increased readability, regardless of the keypad finish or color. Hybrid keypads include a Front Accessible Service Switch (FASS) for safe lamp replacement.

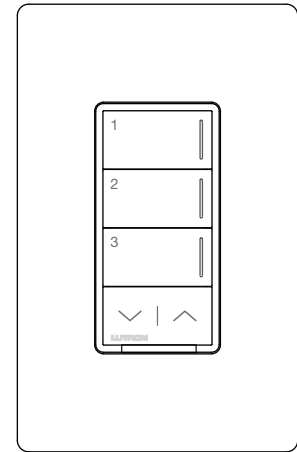
HomeWorks Sunnata RF hybrid keypads are configured using myProjects. Configuration includes button quantity, color/finish, and button personalization. Personalization can be either Lutron defined (shown to the right) or custom.

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

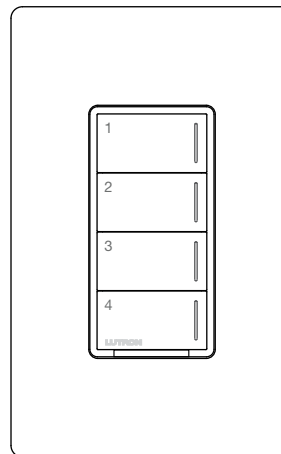
Use with Lutron designer-opening wallplates (sold separately). Lutron wallplates snap on with no visible means of attachment.



2-Button Hybrid Keypad



3-Button Hybrid Keypad with Raise/Lower



4-Button Hybrid Keypad

## Model Numbers

HRST-HN	Configured Hybrid Keypad
STBK-H	Replacement Button Kit

# Sunnata RF Hybrid Keypads

## Specifications

<b>Model Numbers</b>	Hybrid keypads: HRST-HN Replacement Button Kits: STBK-H
<b>Power</b>	120 V~ 50/60 Hz
<b>Typical Power Consumption</b>	0.5 W (1.5 W max.) Test conditions: All LEDs on, constant transmission
<b>Regulatory Approvals</b>	cULus, NOM, FCC, IC
<b>Environment</b>	Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.
<b>Communications</b>	For reliable performance in a system, this device should be placed within 25 ft (7.6 m) of two additional compatible wireless devices, such as HomeWorks Sunnata RF dimmers, Ketra downlights, and the HomeWorks dual-radio wireless processor.
<b>ESD Protection</b>	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
<b>RTISS Equipped</b>	Circuitry compensates in real time for incoming line-voltage variations.
<b>Mounting</b>	Requires a U.S. wallbox. 3 1/2 in (89 mm) deep recommended, 2.5 in (63.5 mm) deep minimum.
<b>Wiring</b>	Hybrid keypads require a 120 V~ hot and neutral wire connection.
<b>Warranty</b>	1-Year Limited Warranty <a href="http://www.lutron.com/TechnicalDocumentLibrary/warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/warranty.pdf</a>

## Design Features

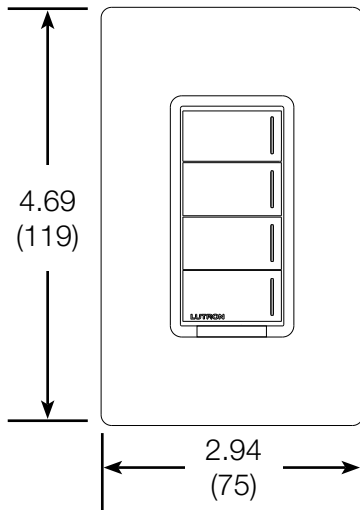
- At the press of a single button, lights fade ON or OFF to desired levels and shades/draperies open or close to desired positions.
- Light levels and shade/drapery positions can be fine-tuned by pressing and holding the raise/lower buttons.
- Programmable to select scene or room preset levels or positions.
- Adjustable status LED intensity through system level programming.
- 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.
- Configurable raise/lower selection using programming software.
  - Last button pressed (default) - devices controlled by the last button pressed will raise/lower.
  - Double-tap - devices controlled by a double-tapped button will raise/lower.
  - Programmed devices - only the devices programmed to the button will raise/lower.
- Keypads include one credit redeemable for a single custom printed button kit through myProjects. Terms and conditions apply.
- 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.
- Programmable phase selection to optimize compatibility with different load types.

# Sunnata RF Hybrid Keypads

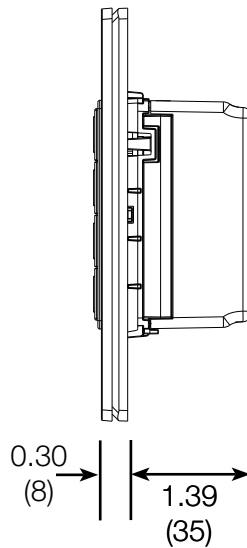
## Dimensions

All dimensions are shown as in (mm)

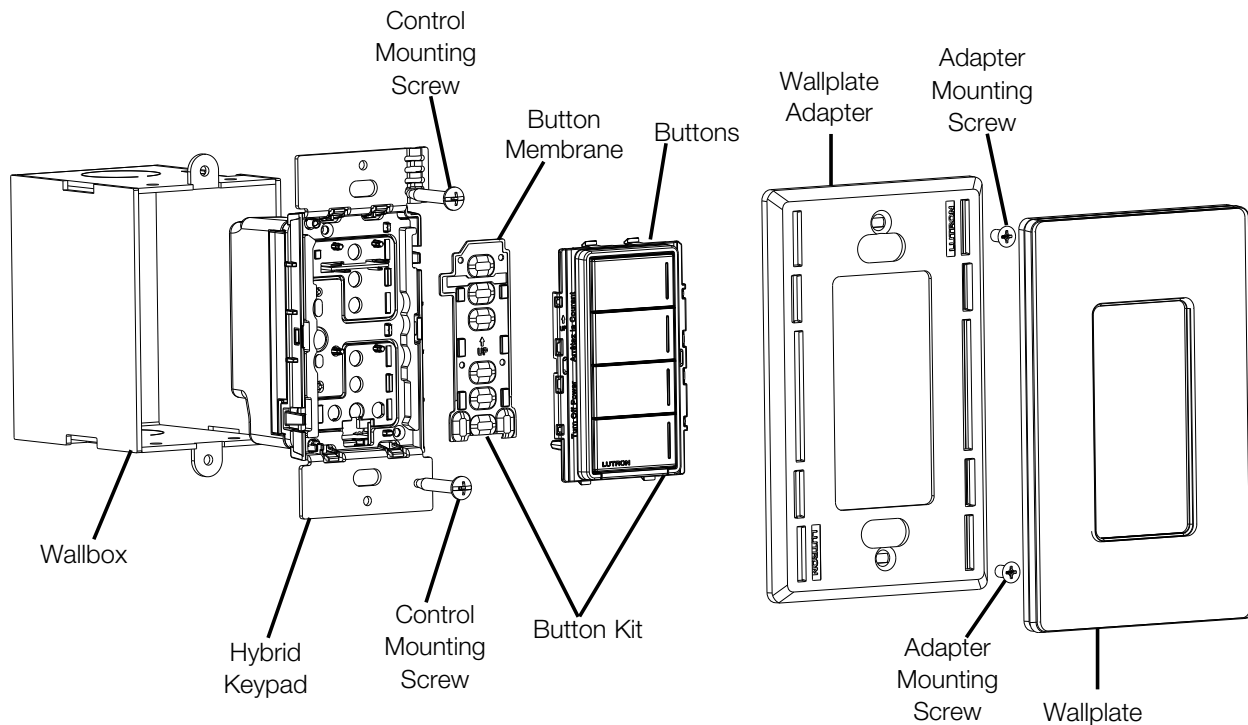
**Front View**



**Side View**




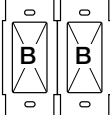
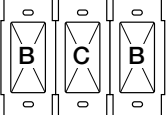
## Mounting and Parts Identification



Wallplate adapter and wallplate purchased separately

# Sunnata RF Hybrid Keypads

## Load Type and Capacity

						
Load Type <sup>2</sup>	Minimum Load	A Not Ganged	B End of Gang	C Middle of Gang	Neutral Connection	Required Phase Mode <sup>3</sup>
LED/CFL	1 bulb	150 W	100 W	100 W	Required <sup>1</sup>	Either
MLV Transformer with LEDs	See Application Note #559 (P/N 048559) at <a href="http://www.lutron.com">www.lutron.com</a> No Derating Required					Forward
ELV Transformer with LEDs						Reverse
MLV Transformer with Halogen	10 W	350 VA (250 W)	250 VA (200 W)	200 VA (150 W)		Forward
ELV Transformer with Halogen	10 W	450 W	350 W	250 W		Reverse
Incandescent/Halogen	10 W	450 W	350 W	250 W		Either
Dimmable Fluorescent Ballast	1 ballast	2.08 A (350 VA)	1.67 A (250 VA)	1.25 A (200 VA)		Forward
Hi-lume 1% 2-wire (LTE) LED Driver	1 driver	2.08 A (350 VA)	1.67 A (250 VA)	1.25 A (200 VA)		Forward
PHPM-PA/3F and GRX-TVI	1 interface	3 interfaces	No Derating Required			Forward

**Notes for dimming MLV fixtures:**

- The total VA rating of the transformer(s) shall not exceed the VA rating of the dimmer. The VA rating of the transformer should be written on the nameplate label or determined by contacting the manufacturer. The maximum halogen lamp wattage is typically 70%- 85% of the transformer's VA rating.
- MLV transformer loads powered by utility power and emergency backup generators should have a minimum 1 second delay between switching power sources. Rapid non-synchronous switching can cause the transformers to draw high currents which would cause breakers to trip or the dimmers controlling them to trip a protection.

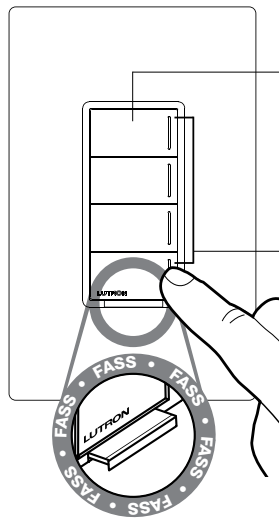
<sup>1</sup> Neutral is required for all applications.

<sup>2</sup> Do not install hybrid keypads to control receptacles or motor-operated appliances.

<sup>3</sup> Phase Mode default setting is reverse-phase.

# Sunnata RF Hybrid Keypads

## Operation



### Keypad Buttons

- Press to activate desired levels of lighting or positions of shades / draperies.
- 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, the buttons at the bottom raise and lower the lights
  - 4B: Top button is ON, the next button is 50%, the next two buttons are OFF

### Status LEDs

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

### FASS

(Front Accessible Service Switch)  
Pull tab out to change the room's light bulb.

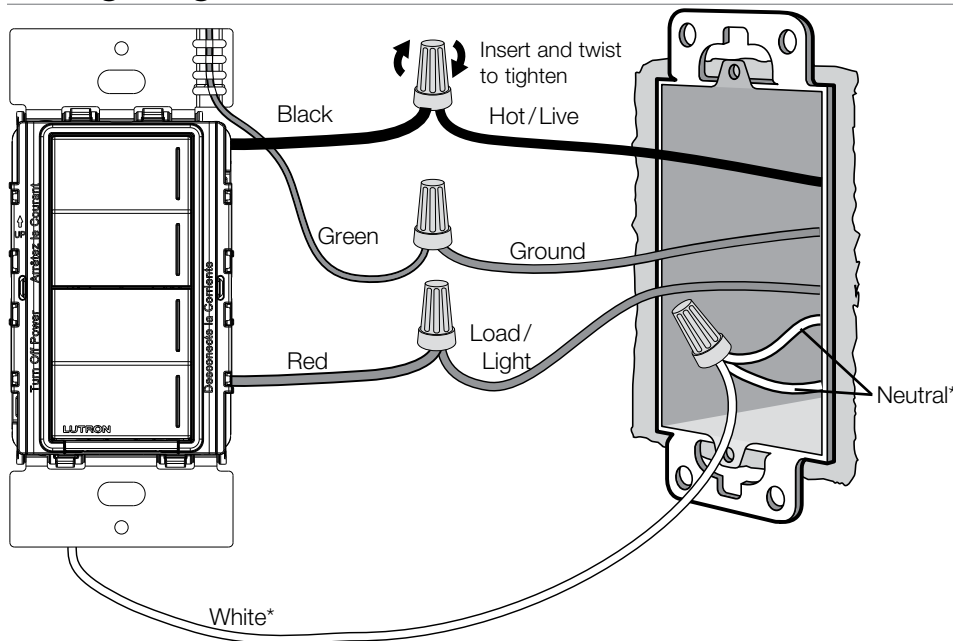
\* This behavior is programmable in the system software.

### IMPORTANT NOTICE:

#### FASS – Front Accessible Service Switch

To replace bulbs, remove power by pulling the FASS out fully. After replacing bulbs, push every FASS back in fully to restore power to the control. Note that the device may be inoperable for up to 60 seconds after power loss while the device re-joins the wireless network.

## Wiring Diagram

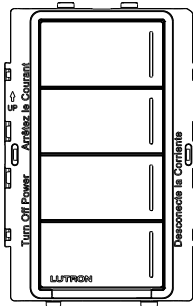


\* Neutral is required for all applications.

# Sunnata RF Hybrid Keypads

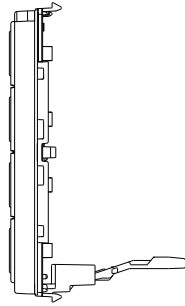
## Replacement Button Kit Selection Guide

Component

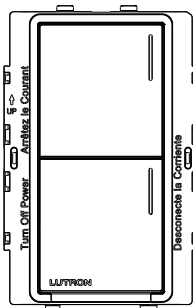


Button Kit only

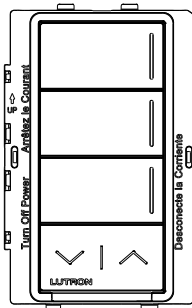
Side View



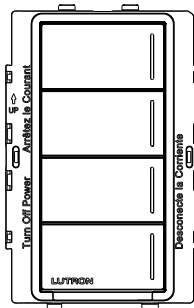
Button Configuration



2-Button



3-Button with  
Raise/Lower



4-Button

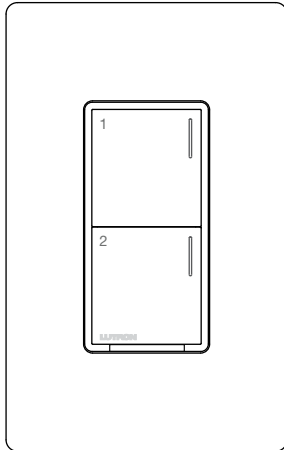
**Note:** These button kits are for hybrid keypads only (model STBK-H). They are different from button kits for standard keypads (model STBK-W).

# Sunnata RF Hybrid Keypads

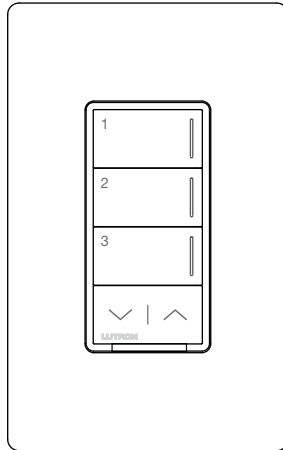
## Button Text/Icons

### Lutron Defined Personalization

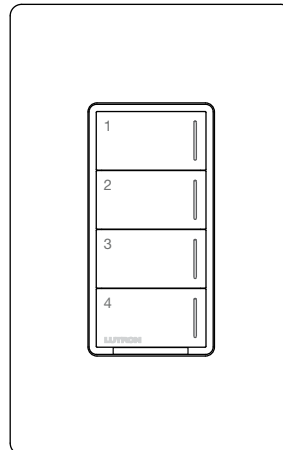
Lutron defined printing icons shown below.



2-Button Hybrid Keypad



3-Button Hybrid Keypad  
with Raise/Lower



4-Button Hybrid Keypad

### Custom Personalization (Replacement Button Kits)

Printing to be specified in myProjects. Custom printing must be defined at time of order.

Note: Button Kit orders cannot be manufactured until printing information is received.

Final Keypad/Replacement Button Kit configuration and selection to be completed in myProjects.  
Printing to be specified in myProjects. Visit [engraving.lutron.com/sunnata](http://engraving.lutron.com/sunnata) for engraving options.

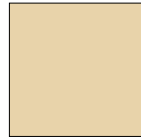
# Sunnata RF Hybrid Keypads

## Colors and Finishes

### Gloss Finishes



White  
WH



Ivory  
IV



Light Almond  
LA

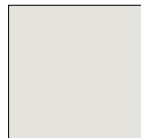


Black  
BL

### Satin Finishes



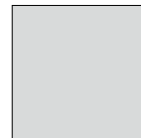
Brilliant White  
BW



Lunar Gray  
LG



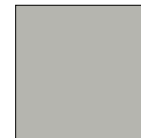
Glacier White  
GL



Mist  
MI



Snow  
SW



Pebble  
PB



Architectural  
White  
RW



Cobblestone  
CS

- Due to printing limitations, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.
- Color chip keychains are available for more precise color matching:

Gloss Finishes – DG-CK-1

Satin Finishes – SF-CK-1

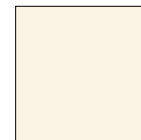
For coordinating wallplates and accessories, visit [lutron.com/claro](http://lutron.com/claro)



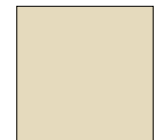
Slate  
SL



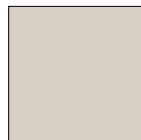
Midnight  
MN



Biscuit  
BI



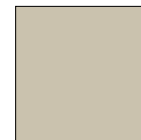
Sand  
SD



Taupe  
TP



Pumice  
PM



Clay  
CY



Sage  
SA



Espresso  
EP



Truffle  
TF



Deep Sea  
DE



Signal Red  
SR

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