

Commercial Sunnata RF Hybrid Keypads

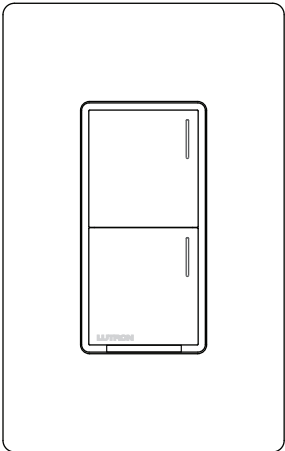
Sunnata RF hybrid keypads function as a dimmer and keypad combined into a single device. Hybrid keypads are great for retro-fit applications since they eliminate the need to install two separate devices.

Features

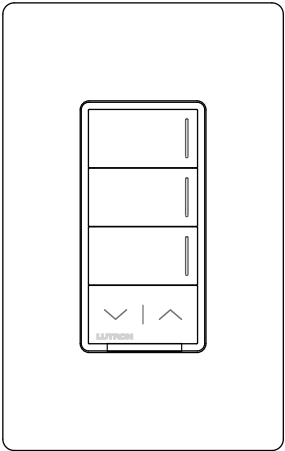
- Large easy-to-use buttons.
- LED bars on each button aid in locating the buttons in low light conditions.
- Hybrid keypad personalizations are important for programming and use of the keypads when installed. All keypads include customized personalization provided at the time of order (default markings not available). Marking color has been chosen for increased readability.
- 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.
- Includes a Front Accessible Service Switch (FASS) for safe lamp replacement.
- Use with Lutron Designer (Claro) wallplates. Wallplates are sold separately. Lutron Claro wallplates snap on with no visible means of attachment.
- Keypads can control load before being programmed into a system to check wiring.
- Phase selectable (non-automatic) technology, allows for operation in either forward- or reverse-phase control.

System Compatibility

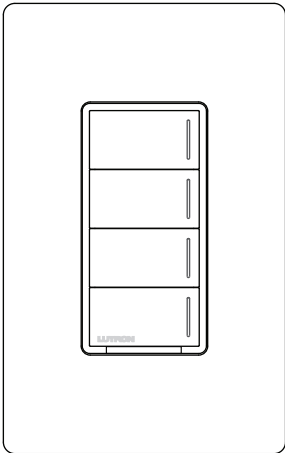
- Athena
- myRoom XC



2-Button Hybrid Keypad



3-Button Hybrid Keypad with Raise/Lower



4-Button Hybrid Keypad

Job Name:	Model Numbers:
Job Number:	

Specifications

Model Numbers	ARST-HN2B-xx-E* ARST-HN3RL-xx-E* ARST-HN4B-xx-E* STBK-H Configured Hybrid Replacement Button Kit
Power	120 V~ 50/60 Hz
Typical Power Consumption	0.5 W (1.5 W max.)
Regulatory Approvals	IFT, QCERT, ANATEL, cULus, NOM, FCC, IC
Environment	Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.
Communications	Keypads communicate with the system through Clear Connect– Type X Radio Frequency (RF) and must be located within 75 ft (22.8 m) of a centrally located Commercial wireless processor/gateway. Each Sunnata keypad must have at least two other non-battery powered Clear Connect–Type X devices within 25 ft (7.6 m). Clear Connect–Type X devices include, for example, the Commercial wireless processor/gateway, Sunnata dimmers, Sunnata switches, and other Sunnata keypads. Companion switches are not Clear Connect–Type X devices. System devices operate on a frequency of 2.4 GHz.
ESD Protection	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
RTISS Equipped	Circuitry compensates in real time for incoming line-voltage variations.
Mounting	Requires a U.S. wallbox. 3 1/2 in (89 mm) deep recommended, 2.5 in (63.5 mm) deep minimum.
Wiring	Hybrid keypads require a 120 V~ hot and neutral wire connection.
Warranty	www.lutron.com/commercial_Limited_Warranty

* Go to Keypad Selection Guide towards the end of this document for more information on button configuration and color options.

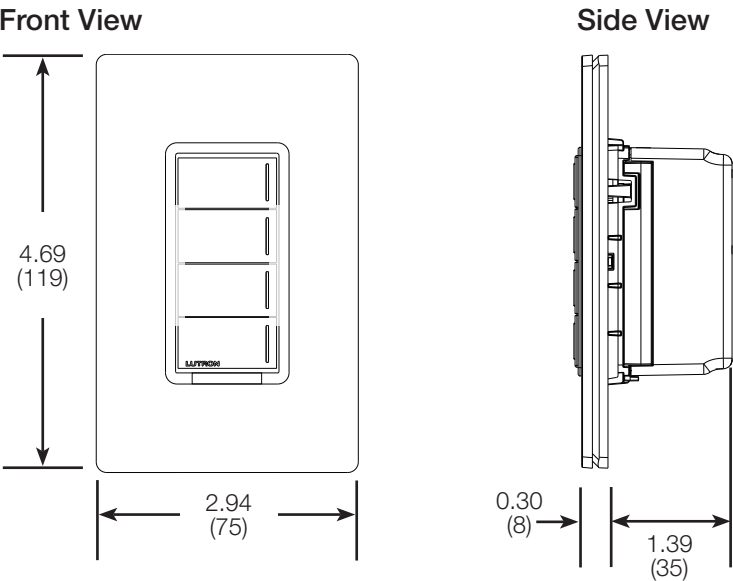
Design Features

- 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.
- 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.
- To see additional personalization options, please visit engraving.lutron.com/sunnata. Personalization must be defined at the time of order.

Job Name:	Model Numbers:
Job Number:	

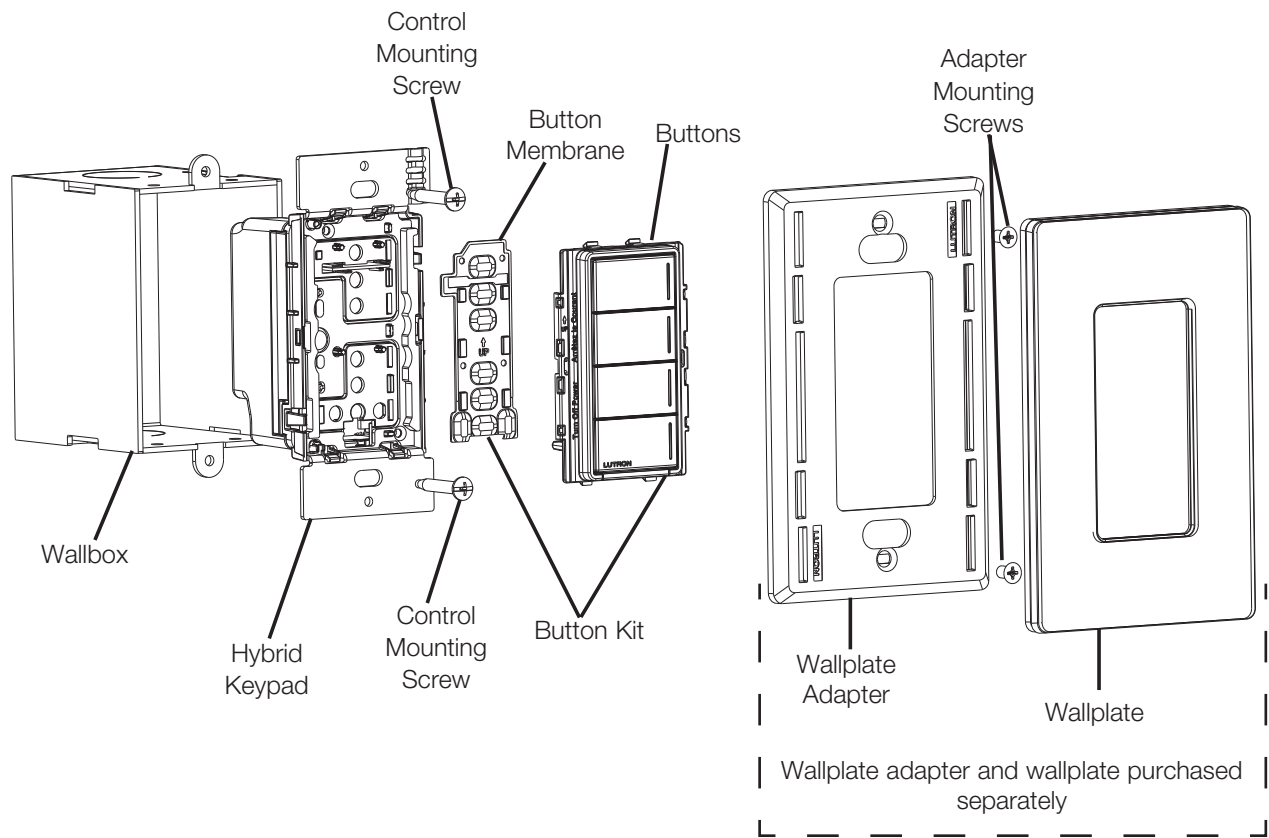
Dimensions

All dimensions are shown as in (mm)

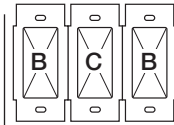
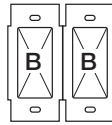


Note: ARST-HN- requires a U.S. wallbox 2 ½ in (63.5 mm) deep minimum.

Mounting and Parts Identification



Load Type and Capacity



Load Type ²	Minimum Load	A Not Ganged	B End of Gang	C Middle of Gang	Neutral Connection	Required Phase Mode ³
LED/CFL	1 bulb	150 W	100 W	100 W	Required ¹	Either
MLV Transformer with LEDs ^{4,5}	See Application Note #559 (P/N 048559) at www.lutron.com No Derating Required					Forward
ELV Transformer with LEDs						Reverse
MLV Transformer with Halogen ^{4,5}	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

¹ Neutral is required for all applications.

² Do not install hybrid keypads to control receptacles or motor-operated appliances.

³ Phase Mode default setting is reverse-phase.

⁴ 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.

⁵ 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 transformer(s) to draw high currents which would cause breakers to trip or the dimmers controlling them to trip a protection.

Important Note

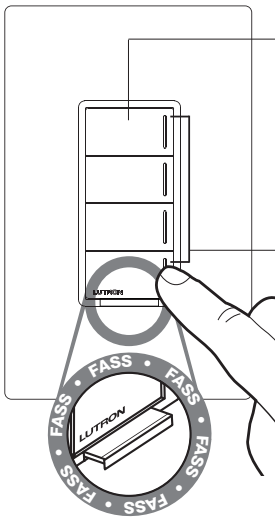
⚠ WARNING: Entrapment/Fire Hazard. To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as entrapment if operated accidentally. Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, industrial doors, space heaters, etc. It is the installer's responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

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Job Name:	Model Numbers:
Job Number:	

Operation



Keypad Buttons*

- Press to activate desired levels of lighting or positions of shades / draperies.
- Default operation prior to system activation 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*

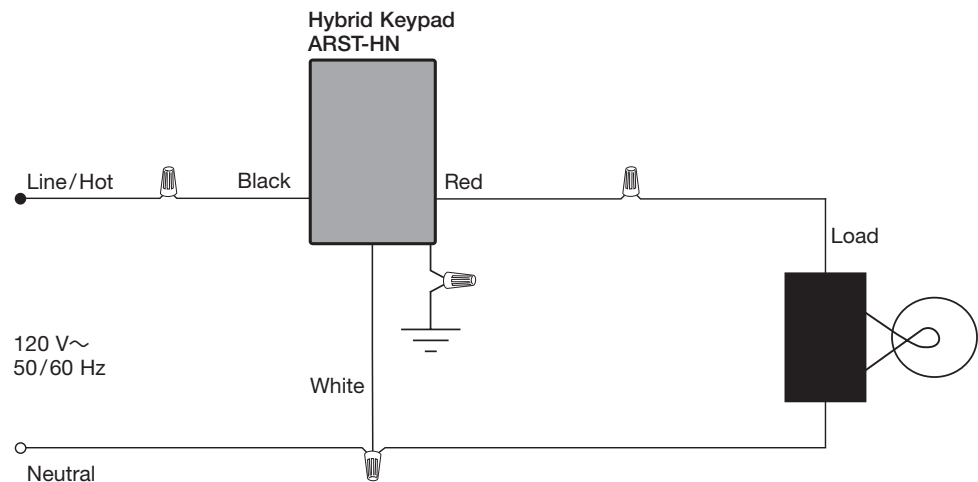
- Show which button has been activated.
- Pressed (active) button LEDs are brighter than other buttons.

* These behaviors are programmable in the system software.

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

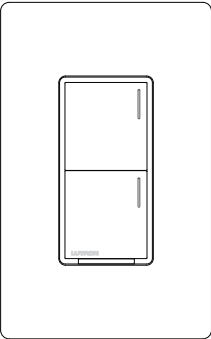
IMPORTANT NOTICE:
FASS – Front Accessible Service Switch
To replace bulbs, remove power by pulling the FASS out fully. After replacing bulbs, push the FASS back in fully to restore power to the control. Note that the device may be inoperable for up to 60 seconds after power loss while the device re-joins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

Wiring Diagram

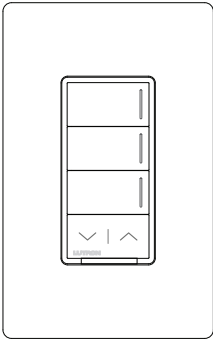


* Neutral is required for all applications.

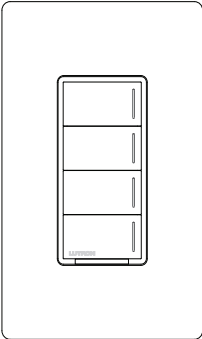
Keypad Selection Guide



2-Button Hybrid Keypad
ARST-HN2B-xx-E



3-Button Hybrid Keypad
with Raise/Lower
ARST-HN3RL-xx-E



4-Button Hybrid Keypad
ARST-HN4B-xx-E

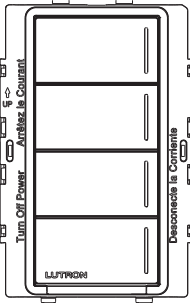
Wallplate sold separately

Personalization

Personalization to be specified in myProjects. Personalization must be defined at time of order.

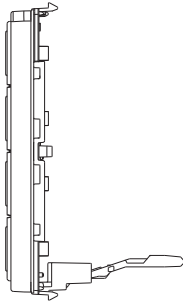
Replacement Button Kit Selection Guide

Component



Button Kit Only
STBK-H

Side View



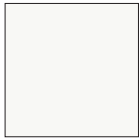
Note: These button kits are for hybrid keypads only (model STBK-H). They are different from button kits for standard keypads (model STBK-W).

Final Keypad/Replacement Button Kit configuration and selection to be completed in myProjects.
Personalization to be specified in myProjects. Visit engraving.lutron.com/sunnata for engraving options.

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Job Name:	Model Numbers:	
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Colors and Finishes

Gloss Finishes



White
WH



Ivory
IV

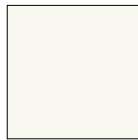


Light Almond
LA

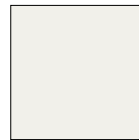


Black
BL

Satin Finishes



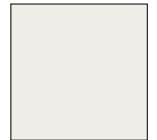
Brilliant White
BW



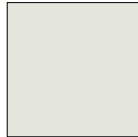
Glacier White
GL



Snow
SW



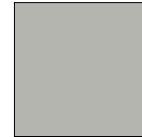
Architectural
White
RW



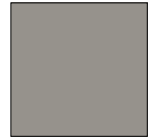
Lunar Gray
LG



Mist
MI



Pebble
PB



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

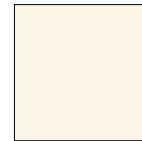
For coordinating wallplates and accessories, visit lutron.com/claro



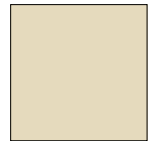
Slate
SL



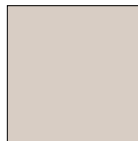
Midnight
MN



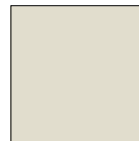
Biscuit
BI



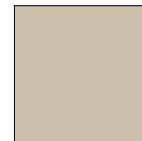
Sand
SD



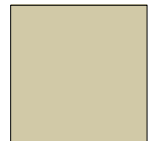
Taupe
TP



Pumice
PM



Clay
CY



Sage
SA



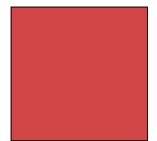
Espresso
EP



Truffle
TF



Deep Sea
DE



Signal Red
SR

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Model Numbers:

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