

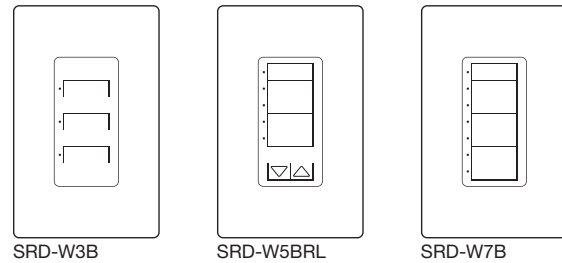
# RadioRA-SR

## RF Designer-style Wall-mount Keypads

SRD-W3B, SRD-W5BRL, SRD-W7B  
120 V ~ 50/60 Hz 0.5 A

### Installation Instructions

Please Read Before Installing



For Installation Guides, System Setup Guide and Setup Tools visit  
<http://www.lutron.com/radiorasr>.

### Overview

The RF Designer-style Keypads are for use with *RadioRA-SR* systems. The keypad buttons are programmed by the installer as shown in these instructions or the *RadioRA-SR Setup Guide*.

### Important Notes

**Codes:** Install in accordance with all local and national electrical codes.

**Environment:** Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0 to 90% humidity, non-condensing. Indoor use only.

**Wallplates:** Use only Lutron® wallplates with these devices. The mechanical design of the keypad is NOT compatible with non-Lutron wallplates. Non-Lutron wallplates will NOT sit flush against the wall. Claro® and Satin Colors® wallplates are strongly recommended for best color match and clean aesthetic appearance. Do not paint controls, buttons, or wallplates.

**Cleaning:** To clean, wipe with a clean damp cloth. DO NOT use any chemical cleaning solutions.

**Wallboxes:** All keypads require a U.S. wallbox. 3 1/2 in (89 mm) deep recommended, 2 1/4 in (57 mm) deep minimum.

**RF Device Placement:** RF Dimmers, Switches, and Fan Speed Controls must be located within 30 feet (9 m) of a controlling keypad. Remote Dimmers and Switches are not required to be within a specific range of controlling keypads. RF Dimmers, Switches or Fan Speed Controls cannot be controlled by the system until they are programmed according to the *RadioRA-SR Setup Guide*.

**Engraving:** The yellow Prepaid Engraving Certificate included with the Keypad can be redeemed for a custom engraved button/faceplate kit. To order an engraved button/faceplate kit please follow the instructions at <http://www.lutron.com/buttons>.

### Technical Assistance:

U.S.A./Canada: 1.800.523.9466  
Mexico: +1.888.235.2910  
Other Countries: +1.610.282.3800  
24 hours a day, 7 days a week.

### Installation

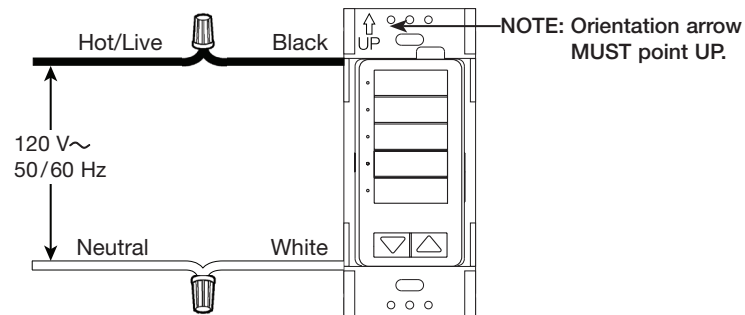


**WARNING:** To avoid the risk of electric shock, locate and remove fuse or lock circuit breaker in the OFF position before proceeding. Wiring with power ON could result in serious injury or death.

- Turn power OFF at fusebox or circuit breaker.
- Prepare wires. When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connectors. Note: Wire connectors provided are suitable **for copper wire only**.

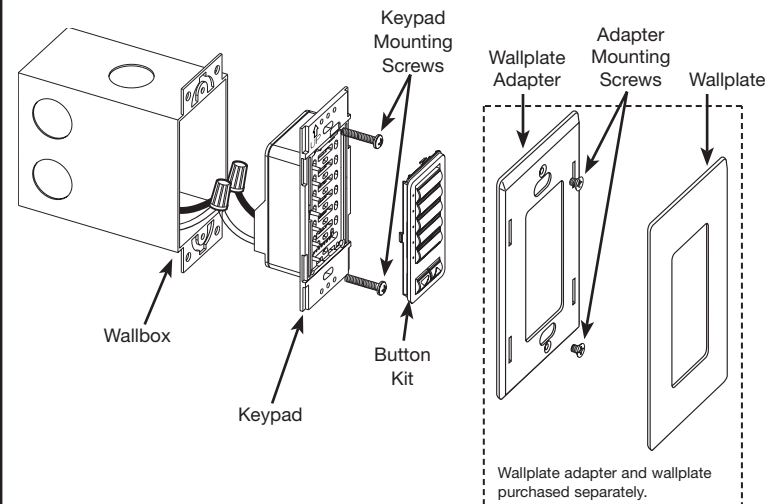
- Strip insulation 3/8 in (10 mm) for 14 AWG (1.5 mm<sup>2</sup>).
- Strip insulation 1/2 in (13 mm) for 18 AWG (0.75 mm<sup>2</sup>).
- Use to join two 14 AWG (1.5 mm<sup>2</sup>) or 12 AWG (2.5 mm<sup>2</sup>) wires.

- Wire control.



- Push all wires back into the wallbox and loosely fasten the control to the wallbox using the keypad mounting screws provided. Do not pinch the wires. See **Mounting Diagram** below.

### Mounting Diagram



- Install Button Kit. (If applicable.)
- Attach Lutron *Claro* or *Satin Colors* wallplate adapter and wallplate (See **Mounting Diagram**).
  - Install the wallplate adapter onto the front of the Keypad(s).
  - Tighten keypad mounting screws until wallplate adapter is flush to wall (do not over-tighten).
  - Snap wallplate onto wallplate adapter, and verify that buttons are aligned properly.
  - If control(s) are misaligned, loosen keypad mounting screws appropriately.
- Restore power.

### System Setup

After all devices have been installed, the keypads must be programmed so that a group of keypad buttons can control a set of light(s) and/or shade(s). Programming consists of:

- assigning dimmers, switches, and shades to a keypad button group
- setting desired light levels and shade positions for each button

#### Assigning zone controls and window treatments to a keypad

- Enter assignment mode** – press and hold the top and bottom button of the desired column until the LEDs begin to flash (approximately 6 seconds). If the column was previously programmed, all of the LEDs in the column will scroll sequentially. If this is the first time the column is programmed, only the top and bottom LEDs will flash alternately. *Note: The keypad will automatically exit program mode after 10 minutes.*
- Press each keypad button** between the top and bottom buttons to add the buttons to the column. Once pressed the LED next to a button will flash in sequence with the other LEDs, indicating that it is now part of the keypad column.
- Assign devices to the keypad column.**
  - Assign dimmers/switches** – press and hold the main button on the device until the load flashes 3 times (approximately 6 seconds). The LEDs on assigned dimmers/switches will continue to flash while the keypad is in assignment mode.
  - Assign window treatments** – press any button on the drive and the green LED will flash.
- Assign other keypad columns** – assigning a column on another keypad is useful for making keypad LEDs track each other. These should already have the same set of zone controls and window treatments assigned to them before assigning them to the first keypad. **Press and hold the bottom button** of the column on the other keypad until all the LEDs begin to flash simultaneously (approximately 6 seconds). While the first keypad is in assignment mode, its LEDs will scroll and the LEDs on assigned keypads will continue to flash simultaneously. *Note: To unassign a device that is assigned, repeat the corresponding method described in step 3.*
- Assign the Integrated Scene Controller** – press the Assign button of the desired Integrated Scene Controller column to be assigned. The corresponding Assign LED will flash red when a column on the Integrated Scene Controller has been assigned to a keypad. Assigning the Integrated Scene Controller to a keypad allows the LEDs on the keypad to track when a scene is manually selected on either Column 1 or 2 of the Integrated Scene Controller. When an Integrated Scene Controller column is assigned to a keypad, the Assign LED on the Integrated Scene Controller will flash green several times to signify that there is a button press occurring on that keypad.
- When all devices have been assigned, exit assignment mode** by holding the top and bottom buttons of the selected column until all LEDs stop scrolling (approximately 3 seconds).
- Individually press several keypad buttons** to confirm that all of the assigned devices respond to the button press by going to the default level for that scene. During keypad operation, the LED next to the button is illuminated when the corresponding button is pressed. The LED turns off after another button is pressed on that keypad, on another assigned keypad, or if a level of a zone control assigned to the button changes.

#### Saving zone control levels/window treatment positions

You can customize the assigned levels or positions of the devices assigned to a column by using the steps below. The column containing the button to be customized must have already been programmed according to **Assigning zone controls and window treatments to a keypad**, above.

- Press the button** you wish to customize. The lights will dim and the window treatments will move to the preset level associated with this button. Wait until the lights and window treatments stop dimming and moving.
- Adjust for each light and window treatment** assigned to that keypad column as follows:
  - Set levels on dimmers** - Use the main button to adjust the lights to go on or off. Use the raise or lower button on the right side of the dimmer to make adjustments to the desired light levels.
  - Set switches** - Use the main button to turn the switch on or off.
  - Set window treatment positions** - Use the clockwise or counter-clockwise buttons on the window treatment drive to adjust the position.
- Making zone controls and window treatments 'unaffected' (optional)** – To make assigned devices not respond to a keypad button press, you may make the devices 'unaffected'. During normal operation when you press a keypad button, a device that is 'unaffected' will ignore the button press. The light level or window treatment position will not change. To make devices 'unaffected', follow the corresponding step below based on the type of device to be made 'unaffected'.
  - Make a dimmer 'unaffected'** – if the dimmer is on, press the main button once to turn it off. After the dimmer is completely off, hold the lower rocker until the three middle LEDs flash (approximately 6 seconds), signifying that the next level save will be ignored. \*\*
  - Make a switch 'unaffected'** – if the switch is on, turn it off using the main button. Pull the FASS™ switch out. Press and hold the main button. While still holding the main button, push the FASS switch in. Continue holding the main button until the LED flashes, signifying that the next level save will be ignored. \*\*
  - Make a window treatment 'unaffected'** – if the window treatment is open, close it using either the clockwise or counter-clockwise button. Release the button. After the window treatment is closed, hold the lower button until the green LED blinks slowly (approximately 6 seconds), signifying that the next position save will be ignored. \*\*
- Press and hold the selected keypad button** until the LED flashes (approximately 6 seconds). The LED will blink rapidly for 1-2 seconds to confirm that the save was successful, then turn back on.

\*\* After a device becomes 'unaffected', you have 10 minutes to complete the level save for all zone controls and window treatments.

*Note: To change the 'unaffected' status of a zone control or window treatment, follow steps 1, 2, and 3 in Saving zone control levels/window treatment positions above.*

### Troubleshooting Guide

Symptom	Probable Cause and Action
LEDs don't light up when buttons are pressed.	Power not present at keypad <ul style="list-style-type: none"> <li>Circuit breaker OFF. Turn ON breaker.</li> <li>Incorrect wiring. Wire the keypad according to the <b>Installation</b> section.</li> </ul>
Dimmer, switch or shade not controlled as part of a Scene.	The dimmer, switch or shade is not assigned to keypad. <ul style="list-style-type: none"> <li>Follow the steps in <b>Assigning zone controls and window treatments to a keypad</b>.</li> </ul> <p>The device is unaffected in the current Scene.  <ul style="list-style-type: none"> <li>Follow the steps <b>Saving zone control Levels and window treatment positions</b> to modify the Scene.</li> </ul> <p>The lamps are burned out.  <ul style="list-style-type: none"> <li>Replace the lamps.</li> </ul> <p>Either there is no power to the device or the FASS™ switch is pulled out.  <ul style="list-style-type: none"> <li>Ensure that the device is powered and push FASS switch in.</li> </ul> </p></p></p>
Dimmer, switch or shade does not go to desired level when a Scene is selected.	The Scene is not setup correctly. <ul style="list-style-type: none"> <li>Follow the steps in <b>Saving zone control Levels and window treatment positions</b> to modify the Scene.</li> </ul> <p>The device is unaffected in the current Scene.  <ul style="list-style-type: none"> <li>Follow the steps in <b>Saving zone control Levels and window treatment positions</b> to modify the Scene.</li> </ul> <p>Functioning as an OFF scene.  <ul style="list-style-type: none"> <li>OFF Scene cannot be setup or modified.</li> </ul> </p></p>
LED on the keypad does not stay lit after button is released.	The keypad is a shade keypad. <ul style="list-style-type: none"> <li>A shade keypad should only be assigned to shades. The LED on a shade keypad does not stay on after the button is released.</li> </ul>
All LEDs on the keypad flash when any button is pressed.	The keypad is in Factory Default mode and has not been configured to work in a <i>RadioRA-SR</i> system. <ul style="list-style-type: none"> <li>Follow the steps in <b>Assigning zone controls and window treatments to a keypad</b>.</li> </ul>

### Returning Keypads to Factory Settings

**Note:** Returning a keypad to its Factory Settings will remove the keypad from the system and erase all programming.

**Step 1:** Triple tap any button on the keypad. DO NOT release after third tap.

**Step 2:** Keep the button pressed after the third tap (for approximately 5 seconds) until all the status LEDs start to flash slowly.

**Step 3:** Release the button and triple tap the button again. The status LEDs on the keypad will flash quickly.

The keypad has now been returned to Factory Settings.

For more information regarding the setup of a *RadioRA-SR* system see the *RadioRA-SR Setup Guide* available at <http://www.lutron.com/radiorasr>.

**Warranty:** For Warranty information, please see the Warranty enclosed with the product, or visit [www.lutron.com/resiinfo](http://www.lutron.com/resiinfo).