

## HomeWorks RF Sunnata Local Controls

HomeWorks Sunnata local controls function much like standard dimmers and switches, but can be controlled as part of a lighting control system. Local lighting controls are useful in locations where single circuits of lighting need to be dimmed or switched.

HomeWorks Sunnata dimmers and companion dimmers incorporate advanced features such as fade-on/fade-off, delayed long fade-to-off, and rapid full-on.

HomeWorks Sunnata local controls include a locator light to assist in locating the controls at night. HomeWorks Sunnata local controls install in single pole or multi-location applications (fan control is single pole only). Sunnata companion dimmers and companion switches must be used for multi-location control. HomeWorks Sunnata local controls include a Front Accessible Service Switch (FASS) for safe light bulb replacement.

Use Lutron Designer (Claro gloss or satin finish) wallplates or designer-style wallplates from other manufacturers. Wallplates are sold separately. Lutron Claro wallplates snap on with no visible means of attachment. Available colors are in the Colors and Finishes section on page 16 at the end of this document.



*Dimmer*



*Switch*



*Companion Dimmer*



*Companion Switch*



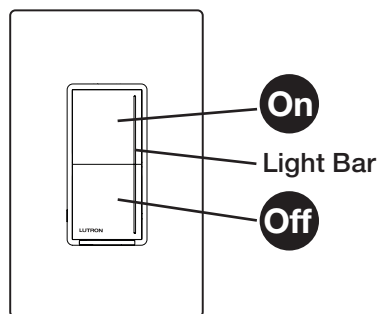
*Fan Control*

# HomeWorks RF Sunnata Local Controls

## Design Features

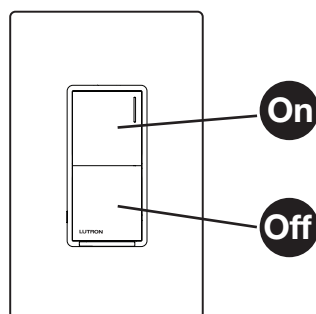
### Dimmer and Companion Dimmer

- Pressing the top of the button, lights fade ON.
- Pressing the bottom of the button, lights fade OFF.
- Anytime - Double tap the top of the button, lights fade rapidly to full brightness.
- Pressing and holding the bottom of the button for more than 1 second - Delayed long fade to OFF (30 second delay).
- Light levels can be fine-tuned by touching your finger to the light bar and sliding your finger up or down until the desired light level is reached.
- Neutral is required. (Dimmer only)



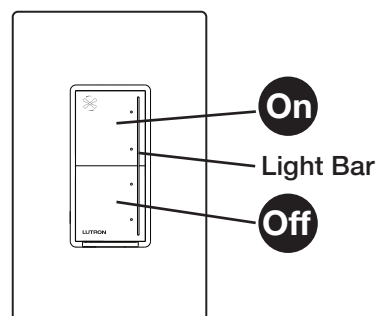
### Switch and Companion Switch

- Pressing the top of the button, lights or motors turn ON.
- Pressing the bottom of the button, lights or motors turn OFF.
- Neutral is required. (Switch only)
- Pressing and holding the bottom of the button for more than 1 second - Delayed Off (30 second delay).



### Fan Controls

- Pressing the ON button, the fan goes to the previous speed. Pressing the OFF button turns the fan off.
- Double-tapping anytime, the fan goes to high speed.
- Fan speed can be adjusted by touching the light bar for one of the four speeds.
- Neutral is required.
- AC fan only.
- Use to control one paddle-type ceiling fan.
- Not for use with DC motor fans or fans with remote controls.
- Not for use with bathroom or kitchen exhaust-type fans.
- Not for use with Wi-Fi only fans.
- Not for use to control lighting loads on a fan.



# HomeWorks RF Sunnata Local Controls

## Model Numbers

### Dimmer

*LED/CFL/Incandescent/Halogen/MLV/ELV/Mark 10 Ballasts/Hi-lume 1% 2-wire Drivers (120 V~)*

HRST-PRO-N-XX      250 W (LED/CFL)\* or 500 W Incandescent/Halogen/ELV or 400 VA MLV  
Phase Selectable Neutral Dimmer

\* Go to [www.lutron.com/ledtool](http://www.lutron.com/ledtool) to see all compatible LED/CFL lamps.

### Switch

*Lighting and Motor Loads (120 V~)*

HRST-8ANS-XX      8 A Light, 1/4 HP 5.8 A Motor  
Neutral Wire Electronic Switch

### Fan Control

*Paddle-type Ceiling Fan (120 V~)*

HRST-ANF-XX      1.5 A max one (1) paddle-type AC ceiling fan only

### Companions (for multi-location installations)

HRST-RD-XX      Companion Dimmer (120 V~)

HRST-RS-XX      Companion Switch (120 V~)

**Note:** "XX" in the model number represents color/finish code. See **Colors and Finishes** at end of document.

# HomeWorks RF Sunnata Local Controls

## Specifications

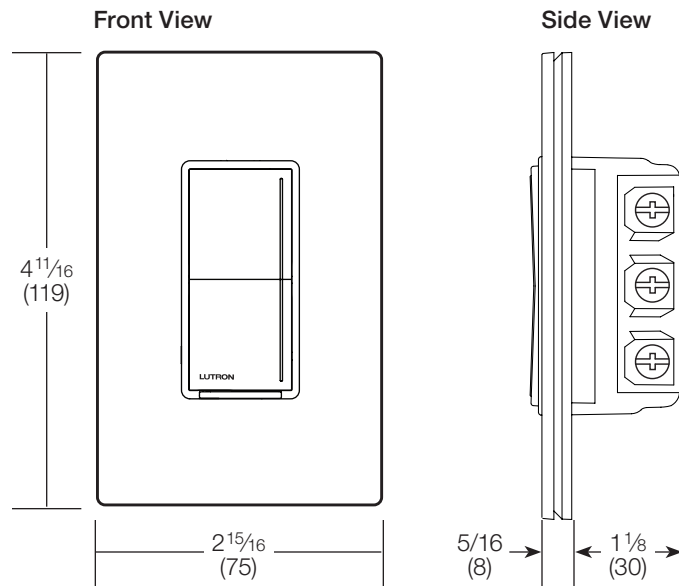
|                                  |   |
|----------------------------------|---|
| <b>Model Numbers</b>             | <b>Dimmer:</b> HRST-PRO-N<br><b>Companion Dimmer:</b> HRST-RD<br><b>Switch:</b> HRST-8ANS<br><b>Companion Switch:</b> HRST-RS<br><b>Fan Control:</b> HRST-ANF   |
| <b>Power</b>                     | <b>120 V~ 50/60 Hz:</b> -PRO-N, -8ANS, -RD, -RS, -ANF   |
| <b>Typical Power Consumption</b> | <b>Dimmer/Switch/Fan:</b> 0.5 W<br>Test conditions: Load is off and locator light is enabled.<br><b>Companion Dimmer/Switch:</b> 0.2 W<br>Test conditions: Load is off.   |
| <b>Regulatory Approvals</b>      | cULus, NOM, FCC, IC, IFT (-ANF, -PRO-N, and -8ANS)<br>cULus, NOM, FCC, IC (-RD and -RS)   |
| <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>            | Dimmers and switches 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 HomeWorks wireless processor/gateway. Each Sunnata dimmer should 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 HomeWorks wireless processor/gateway, Sunnata dimmers, Sunnata switches, and Sunnata keypads. Companion dimmers/switches are not Clear Connect-Type X devices, and are not required to be within a specific range of a HomeWorks wireless processor/gateway. System devices operate on a frequency of 2.4 GHz. |
| <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 IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.  |
| <b>RTISS Equipped</b>            | Circuitry compensates in real time for incoming line-voltage variations (-PRO-N only).  |
| <b>Power Failure</b>             | Power failure memory: Should power be interrupted, the control will return to its previous state when power is restored.  |
| <b>Mounting</b>                  | Requires a U.S. wallbox. 3½ in (89 mm) deep recommended, 2¼ in (57 mm) deep minimum. For best wireless performance, use a metal wallbox when installing the product in a concrete or stone wall. HRST-ANF requires 2.5 in (63.5 mm) minimum depth.  |
| <b>Wiring</b>                    | Use only companion dimmers (-RD) and companion switches (-RS) with dimmers/switches. Up to four companion dimmers (-RD) may be connected to the dimmer and four companion switches (-RS) may be connected to the switch. Total wire length may be up to 150 ft (45 m).  |
| <b>Warranty</b>                  | <a href="http://www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf">www.lutron.com/TechnicalDocumentLibrary/Warranty.pdf</a>  |

# HomeWorks RF Sunnata Local Controls

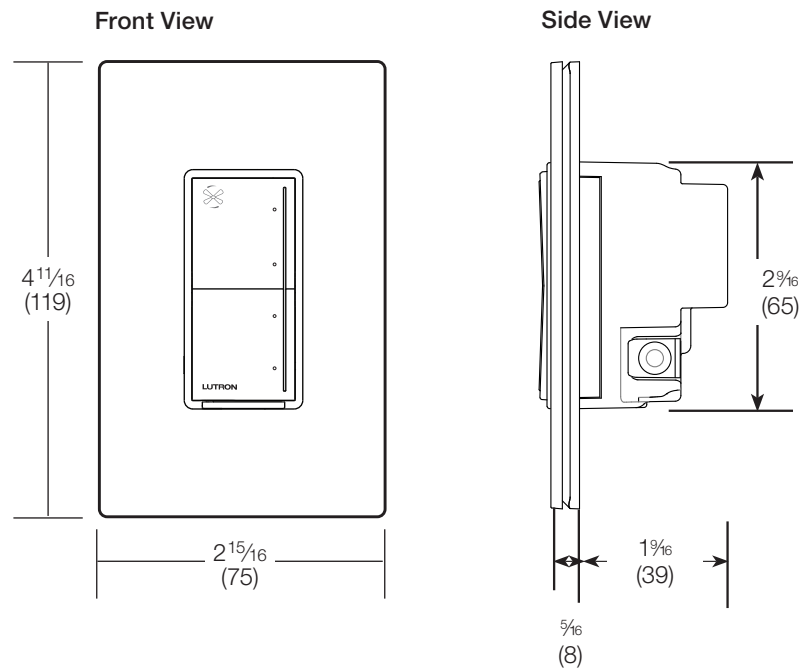
## Dimensions

All dimensions are shown as: in (mm)

### Dimmer/Switch



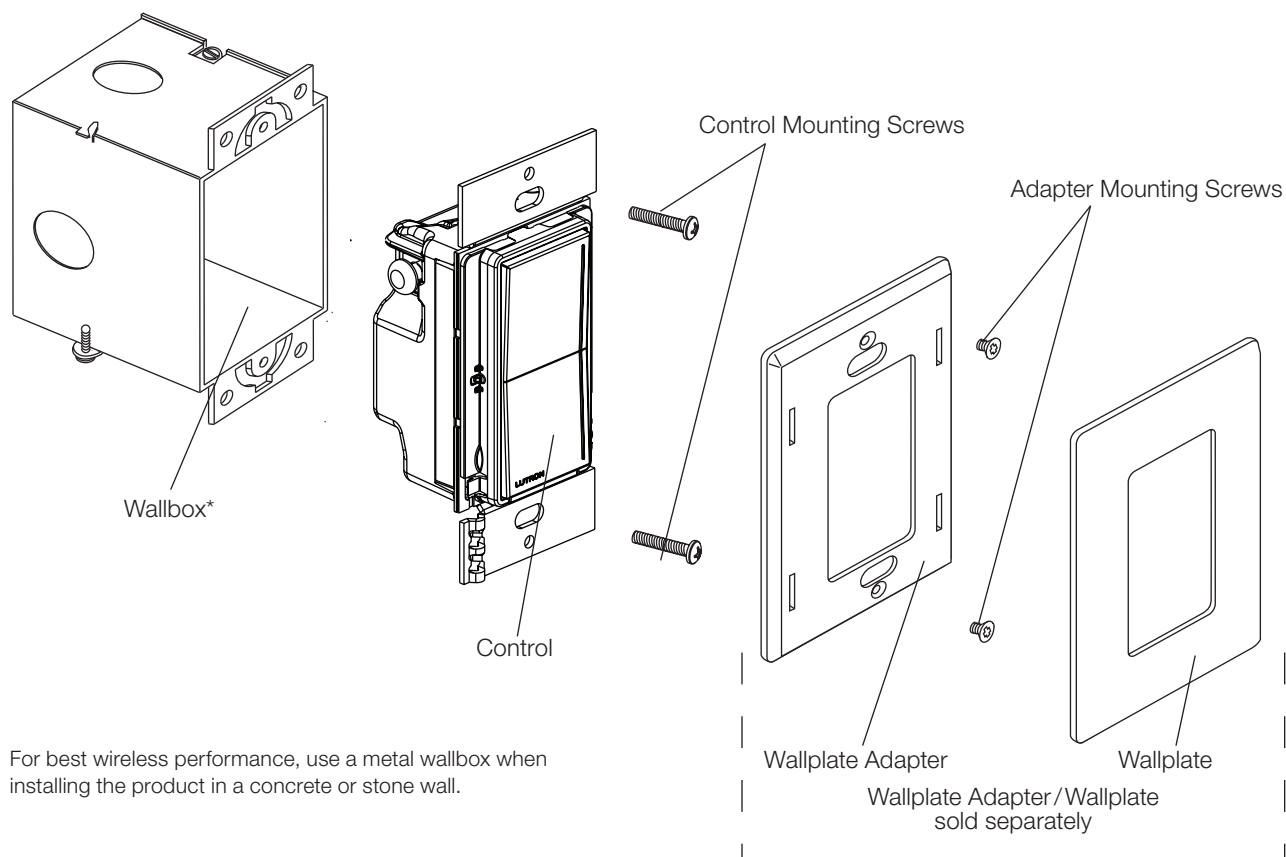
### Fan Control



**Note:** HRST-ANF- requires a U.S. wallbox  $2\frac{1}{2}$  in (64 mm) deep minimum.

## HomeWorks RF Sunnata Local Controls


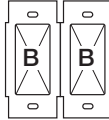
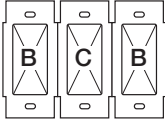
### Mounting and Parts Identification



\* For best wireless performance, use a metal wallbox when installing the product in a concrete or stone wall.

# HomeWorks RF Sunnata Local Controls

## Load Type and Capacity

|                                     |   |  |  |  |                       |                                  |
|-------------------------------------|---|---|---|--|-----------------------|----------------------------------|
| Load Type                           | Minimum Load  | A<br>Not Ganged   | B<br>End of Gang  | C<br>Middle of Gang  | Neutral Connection    | Required Phase Mode <sup>4</sup> |
| HRST-PRO-N <sup>2</sup>             |   |   |   |  |                       |                                  |
| LED                                 | 1 bulb  | 250 W   | 200 W   | 150 W  | Required <sup>1</sup> | Either                           |
| MLV Transformer with LEDs           | See Application Note #559 (P/N 048559) at<br>www.lutron.com<br>No Derating Required |   |   |  |                       | Forward                          |
| ELV Transformer with LEDs           |   |   |   |  |                       | Reverse                          |
| MLV Transformer with Halogen        | 10 W  | 400 VA (300 W)  | No Derating Required  |  |                       | Forward                          |
| ELV Transformer with Halogen        | 10 W  | 500 W   | 400 W   | 300 W  |                       | Reverse                          |
| Incandescent/Halogen                | 10 W  | 500 W   | 400 W   | 300 W  |                       | Either                           |
| Dimmable Fluorescent Ballast        | 1 ballast   | 3.3 A (400 VA)  | No Derating Required  |  |                       | Forward                          |
| Hi-lume 1% 2-wire (LTE) LED Driver  | 1 driver  | 3.3 A (400 W)<br>20 drivers max.  | No Derating Required  |  |                       | Forward                          |
| PHPM-PA/3F and GRX-TVI <sup>3</sup> | 1 interface   | 3 interfaces  | No Derating Required  |  |                       | Forward                          |
| CFL                                 | 1 bulb  | 250 W   | 200 W   | 150 W  |                       | Forward                          |

<sup>1</sup> Neutral is required for all load types.

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

<sup>3</sup> Power Boosters/Load Interfaces: -HRST-PRO-N can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 10.

<sup>4</sup> Phase Mode default setting is Reverse-Phase.

**Note:** For dimming MLV fixtures, the maximum lamp wattage is typically 70%-85% of the transformer's VA rating. For actual transformer efficiency, contact the manufacturer. The total VA rating of the transformer(s) shall not exceed the VA rating of the dimmer.

### Notes for dimming MLV fixtures:


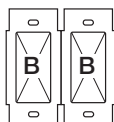
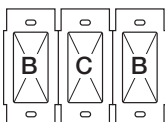
- The total VA rating of the transformer(s) shall not exceed the VA rating of the dimmer. The VA rating of the transformer should be written on the nameplate label or determined by contacting the manufacturer. The maximum halogen lamp wattage is typically 70%–85% of the transformer's VA rating.
- MLV transformer loads powered by utility power and emergency backup generators should have a minimum one (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.

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[www.lutron.com/support](http://www.lutron.com/support)

# HomeWorks RF Sunnata Local Controls

## Load Type and Capacity (continued)

|                          |              |  |  |  |                    |
|--------------------------|--------------|---|---|---|--------------------|
| Load Type                | Minimum Load | A<br>Not Ganged   | B<br>End of Gang  | C<br>Middle of Gang   | Neutral Connection |
| HRST-8ANS <sup>1,2</sup> |              |   |   |   |                    |
| LED Lighting             | 1 bulb       | 8 A   | 6 A   | 4.5 A   | Required           |
| Other Lighting Sources   | 10 W/VA      | 8 A   | 6 A   | 4.5 A   |                    |
| Motor                    | 0.08 A       | 1/4 HP 5.8 A  | 1/4 HP 5.8 A  | 1/6 HP 4.4 A  |                    |
| HRST-ANF <sup>3</sup>    |              |   |   |   |                    |
| Paddle-Type Ceiling Fan  | 0.08 A       | 1.5 A   | 1.5 A   | 1.5 A   | Required           |

**Note:** Do not install switches to control receptacles or motor operated appliances with ratings above the motor ratings listed on this table.

- <sup>1</sup> Power Boosters/Load Interfaces: -8ANS can be used to control power boosters/load interfaces. For a list of compatible power boosters/load interfaces see **Compatible Power Boosters and Load Interfaces**, page 10.
- <sup>2</sup> Switch Load Type:  
-8ANS: Designed for use with permanently installed 120 V~ incandescent, MLV, ELV, tungsten halogen, fluorescent, LED, CFL, or motor loads.
- <sup>3</sup> Do not use to control DC motor fans, fans with remote controls, Wi-Fi only fans, lighting loads on a fan, bathroom or kitchen exhaust-type fans.

## Mixing Lamp Types

Example: If you have two dimmers ganged together and you have two 13 W LED bulbs installed (total LED Wattage = 26 W) on one dimmer, you may add up to 300 W of incandescent or halogen lighting to that one dimmer. Repeat the exercise for the other dimmer with which it is ganged.

<sup>1</sup> Do not install dimmers to control receptacles or motor-operated appliances.

## HomeWorks RF Sunnata Local Controls

### Compatible Power Boosters and Load Interfaces

Some local controls can be used to control power boosters or load interfaces. Up to three power boosters or load interfaces can be used with one control. See table below for a list of controls and compatible power boosters and load interfaces.

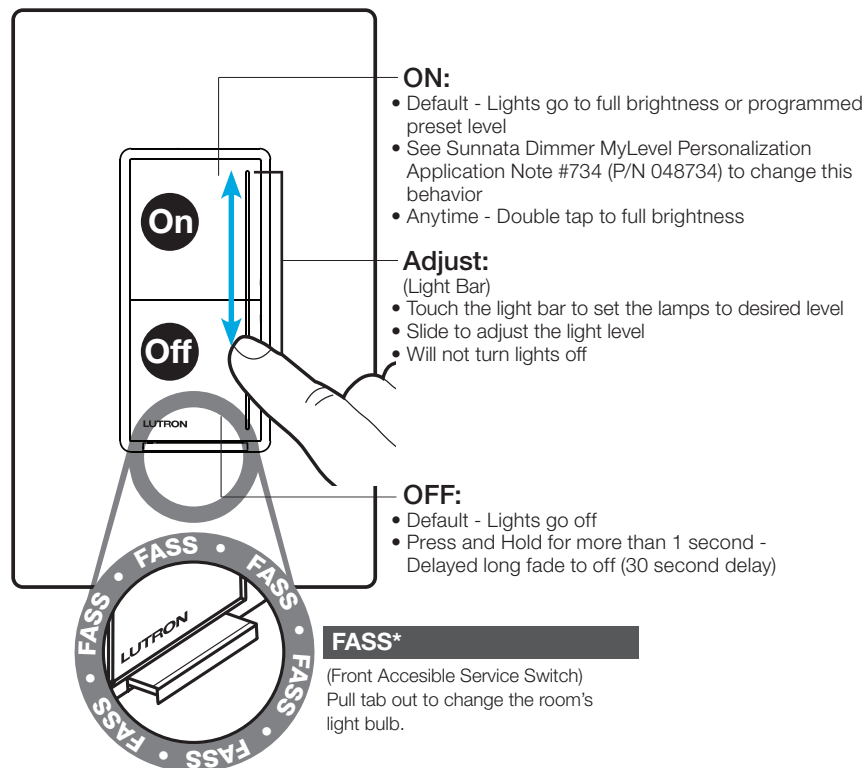
| Control    | Phase Adaptive Power Modules:<br>PHPM-PA-120-WH;<br>PHPM-PA-DV-WH | 3-wire Fluorescent Power Modules:<br>PHPM-3F-120-WH;<br>PHPM-3F-DV-WH | Switched Power Module:<br>PHPM-SW-DV-WH | 0–10 V $\overline{\text{V}}$ Interface and Switching Module: GRX-TVI |
|------------|---|---|---|--|
| HRST-8ANS  |   |   | ✓                                       |  |
| HRST-PRO-N | ✓   | ✓   |   | ✓  |

\* All power modules are 120 V $\sim$  only.

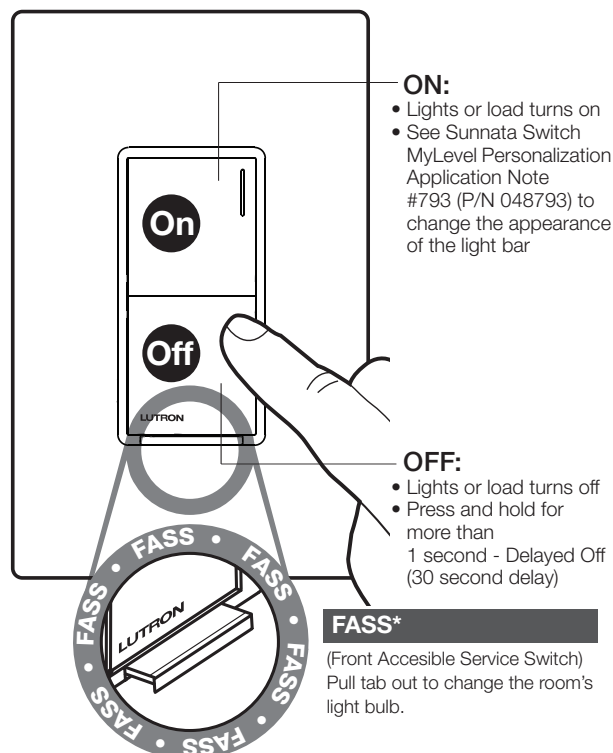
## HomeWorks RF Sunnata Local Controls

### Operation

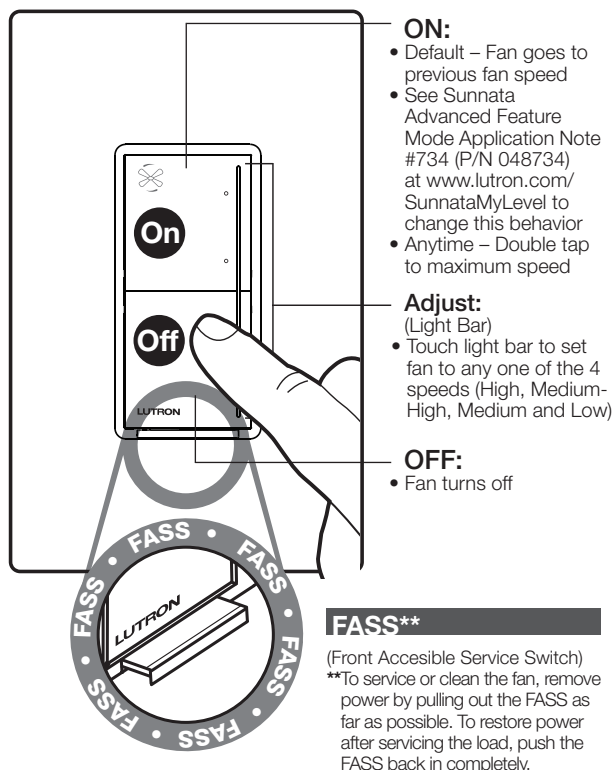
#### Dimmer



#### Switch



#### Fan Control



\* FASS switch is **ONLY** for changing light bulbs in permanently wired fixtures. Changing wiring or installing dimmers/switches/companion devices requires turning off the breaker at the breaker panel.

# HomeWorks RF Sunnata Local Controls

## MyLevel Personalization Advanced Features

Sunnata RF dimmers and switches contain Advanced Features that allow users to customize the control to meet their specific needs. For a detailed description of the features and uses, please refer to the Sunnata Dimmer/Fan Control MyLevel Personalization Application Note #734 (P/N 048734) or Sunnata Switch MyLevel Personalization Application Note #793 (P/N 048793) at [www.lutron.com](http://www.lutron.com). Before entering MyLevel, it is important to have a good understanding of the features. Please note that these local AFM features described below will be disabled when the device(s) are commissioned into a system. All AFM settings will then be based on the system programming. See **Additional MyLevel Features Available in System Programming** below.

### Dimmer

| Available MyLevel Personalization Advanced Features |  |
|---|--|
| Feature   | Description  |
| High-end trim                                       | Select the maximum available light limit.  |
| Low-end trim  | Select the minimum available light limit.  |
| Preset light level                                  | Change the behavior of the device when the ON button is pressed from the OFF state to ON.  |
| Light bar brightness                                | Select between high, medium, and low brightness of the control's light bar.  |
| Light level indicator/<br>locator light             | Select between ON and OFF for the light bar when the lights are on (light level indicator) and when the lights are off (locator light). Default - ON/ON. |
| Phase select  | Select the Phase mode in which the dimmer operates. Forward or Reverse (Default).  |
| Restore factory<br>default settings                 | Select to return dimmer to its original factory settings.  |

| Additional MyLevel Features Available in System Programming |   |
|---|---|
| Feature   | Description   |
| Fade On/Off rate  | The rate at which the load turns ON and OFF from its previous state.  |
| Delayed Long<br>Fade To Off                                 | Allows for control to delay the load from starting the dimming sequence. This setting delays the time between when the OFF button is pressed and the load begins the Fade to Off process. |

### Switch

| Available MyLevel Personalization Advanced Features |  |
|---|--|
| Feature   | Description  |
| Light bar brightness                                | Select between high, medium, and low brightness of the control's light bar.  |
| Light level indicator/<br>locator light             | Select between ON and OFF for the light bar when the lights are on (light level indicator) and when the lights are off (locator light). Default - ON/ON. |

| Additional MyLevel Features Available in System Programming |  |
|---|--|
| Feature   | Description  |
| Delayed Off   | Allows for control over how quickly/slowly the load turns off. This setting delays the time between when the OFF button is pressed (normal operation) and when the lights actually turn off. |

# HomeWorks RF Sunnata Local Controls

## MyLevel Personalization Advanced Features (continued)

### Fan Control

| Available MyLevel Personalization Advanced Features |  |
|---|--|
| Feature   | Description  |
| Preset fan speed                                    | Change the behavior of the device when the ON button is pressed from the OFF state to ON.  |
| Light bar brightness                                | Select between high, medium, and low brightness of the control's light bar.  |
| Fan speed indicator/<br>locator light               | Select between ON and OFF for the light bar when the fan is on (fan speed indicator) and when the fan is off (locator light). Default - ON/ON. |

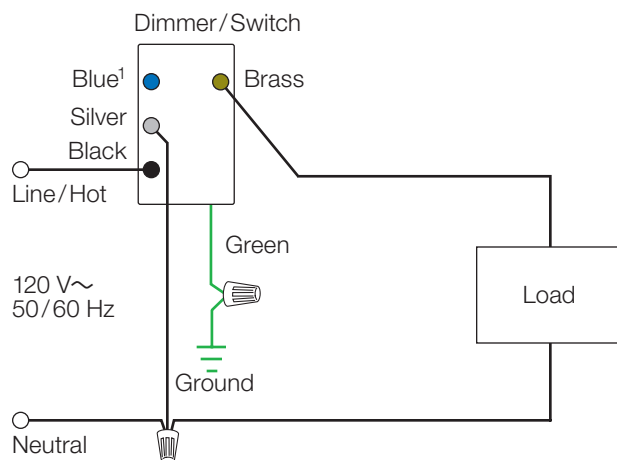
## HomeWorks RF Sunnata Local Controls

### Wiring Diagrams

#### Wiring Diagram 1

Single-Location Installation with required Neutral<sup>1</sup>

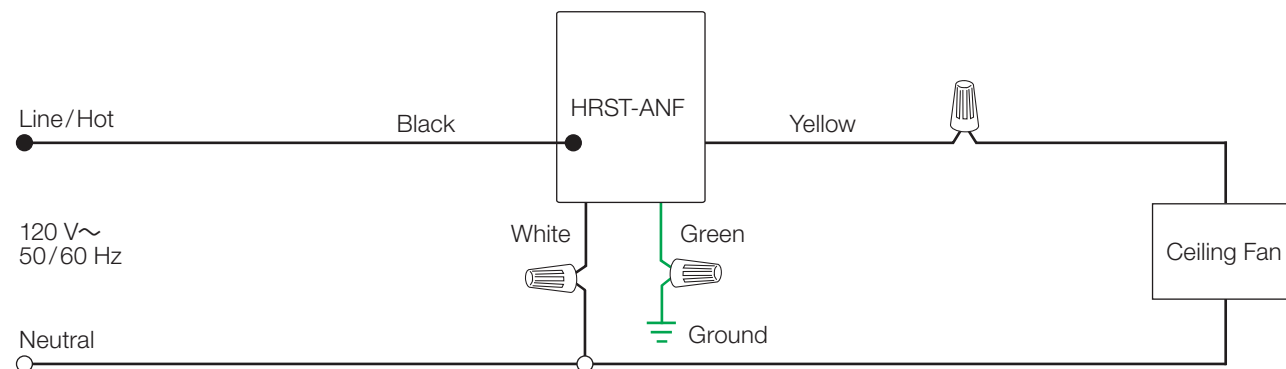
-PRO-N, -8ANS



**Note:** Bolded lines in diagrams indicate leads on products.  
<sup>1</sup> When using controls in single-location installations, tighten the blue terminal.  
 Do not connect the blue terminal to any other wiring or to ground.

#### Wiring Diagram 2

Single Pole Installation (load is controlled from 1 location): HRST-ANF



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# HomeWorks RF Sunnata Local Controls

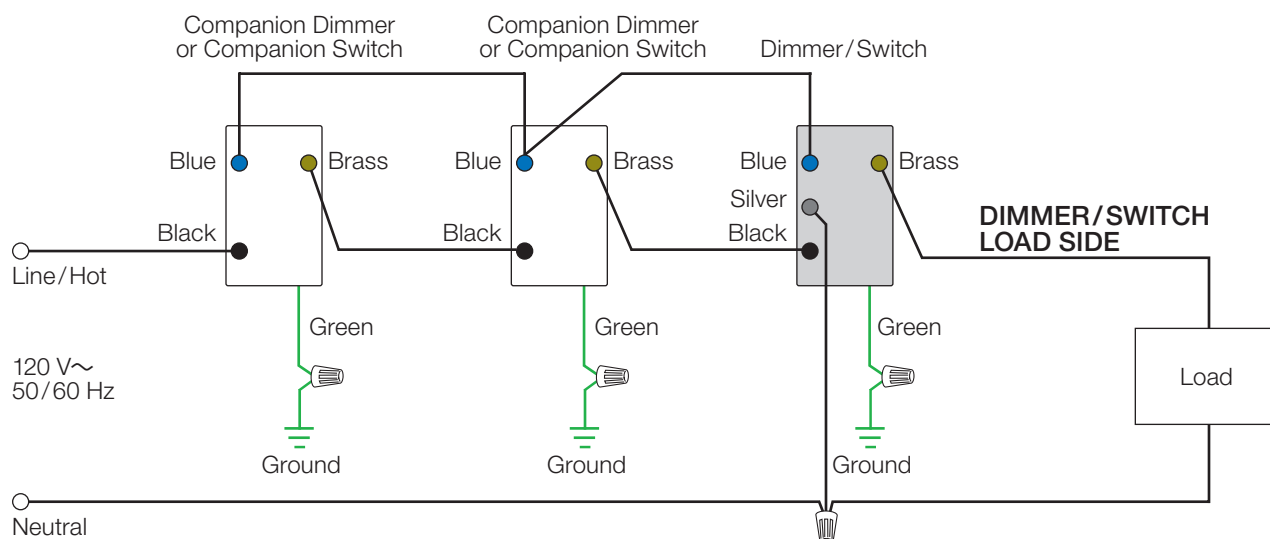
## Wiring Diagrams (continued)

### Wiring Diagram 3

Multi-Location Installation with required Neutral<sup>1</sup>

-PRO-N with -RD OR -8ANS with -RS

**Note:** Dimmer and switch must be on the load side



**Note:** Bolded lines in diagrams indicate leads on products.

<sup>1</sup> Up to four companion dimmers/companion switches may be connected to the dimmer/switch.  
Total blue terminal wire length may be up to 150 ft (45 m).

# HomeWorks RF Sunnata Local Controls

## Colors and Finishes

### Gloss Finishes



White  
WH



Ivory  
IV



Light Almond  
LA

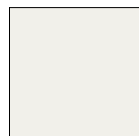


Black  
BL

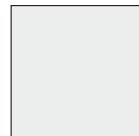
### Satin Finishes



Brilliant White  
BW



Glacier White  
GL



Snow White  
SW



Architectural  
White  
RW



Lunar Gray  
LG



Mist  
MI



Pebble  
PB



Cobblestone  
CS

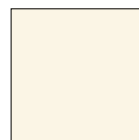
- Due to printing limitations, colors and finishes shown cannot be guaranteed to perfectly match actual product colors.
- Color chip keychains are available for more precise color matching:  
Gloss Finishes: DG-CK-1  
Satin Finishes: SF-CK-1



Slate  
SL



Midnight  
MN



Biscuit  
BI



Sand  
SD



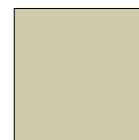
Taupe  
TP



Pumice  
PM



Clay  
CY



Sage  
SA



Espresso  
EP



Truffle  
TF



Deep Sea  
DE



Signal Red  
SR

\* HomeWorks Sunnata dimmer, companion dimmer, switch, and companion switch are NOT field colorizable.

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