Infrared wireless preset lighting scene controls.

PRODUCT FAMILY FEATURES

• Simple-to-use multi-scene preset lighting control for a standard designer wallplate opening
• Recalls preset lighting scenes by wall-mounted master control or infrared remote control
• Simultaneously controls all dimmers in the same room, by infrared hand-held remote control
• Dimmers store up to four present scenes and can function alone or as part of a system
• Special product features, see page 4
• Uses standard single pole and 3-way wiring for easy new or retrofit installations

DIMENSIONS

Including Claro® wallplates - Wallplates sold separately

INFRARED MASTER AND DIMMERS

1 For a coordinated look, use Claro® accessories and wallplates.

SPECIFICATION SERIES STANDARD FEATURES

• Power-failure memory
• Precise color matching
• Front accessible service switch (FASSTM)
• Heavy-duty components for surge protection and long product life

Lutron controls are rated at 120VAC, 60Hz unless otherwise noted.

<table>
<thead>
<tr>
<th>SPECIFICATION SERIES STANDARD FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Power-failure memory</td>
</tr>
<tr>
<td>• Precise color matching</td>
</tr>
<tr>
<td>• Front accessible service switch (FASSTM)</td>
</tr>
<tr>
<td>• Heavy-duty components for surge protection and long product life</td>
</tr>
<tr>
<td>Lutron controls are rated at 120VAC, 60Hz unless otherwise noted.</td>
</tr>
</tbody>
</table>

Have Questions? Call the Lutron Hotline 800-523-9466
To order—Call Lutron Customer Service 610-282-3800
5-SCENE WALL MOUNTED MASTER CONTROLS

- LEDs to indicate scene status
  - Full on
  - Recall 4 preset lighting scenes
  - Master raise/lower
  - Off, user selectable fade-to-off
  - Infrared Receiver

4-SCENE INFRARED (IR) WIRELESS REMOTE CONTROLS

- Press on, to four preset scenes
  - Off, user selectable fade-to-off
  - Master raise/lower

DIMMERS WITH INFRARED RECEIVER

- LEDs to indicate light level, glow softly
  - One tap on to selected light level/off; two taps full bright; user selectable fade-to-off
  - Press rocker to adjust light level
  - Front Accessible Service Switch (FASSTM)
  - Infrared Receiver

FAVORITE SCENE_ INFRARED (IR) WIRELESS REMOTE CONTROLS

- Press to recall favorite scene
  - Master raise/lower
  - Off, user selectable fade-to-off

SWITCHES WITH INFRARED RECEIVER

- LED indicates on/off, glows softly
  - Tap on/off
  - Infrared Receiver
  - Front Accessible Service Switch (FASSTM)

PLUG-IN LAMP DIMMERS WITH INFRARED RECEIVER

- Same functions as the dimmer with infrared receiver

ACCESSORY DIMMERS

For use in multi-location dimming only – use up to nine accessory dimmers with only one Spacer System multi-location dimmer with infrared receiver

- One tap on to selected light level/off; two taps full bright; user selectable fade-to-off
  - Press rocker to adjust light level
  - Front Accessible Service Switch (FASSTM)

CLARO™ COORDINATED ACCESSORIES AND WALLPLATES

Switches, Receptacles, GFCI Receptacles, Telephone Jacks, Cable TV Jacks, and 1- to 6-Gang Wallplates Available.

ACCESSORY SWITCHES

For use in multi-location switching only – use up to nine accessory switches with only one Spacer System multi-location switch with infrared receiver

- Tap on/off
  - Front Accessible Service Switch (FASSTM)

INFRARED TRANSMITTER PHOTOMETRICS

4' 2' 0' 2' 4' 5' from wall
10' from wall
20' from wall
30' from wall*

* 4-scene transmitter has an increased range of up to 50 feet.
### Option 1

**Multiganged Dimmers with a 5-Scene Master Control and 4-Scene Infrared Wireless Remote Control**

- Use Spacer System multiganged dimmers with a master control for new construction - OR - Retrofit by installing a new wallbox that fits the Spacer System dimmers plus the master control
- Spacer System lamp dimmers let you make table and floor lamps part of your system

Shown: Three Spacer System dimmers and a 5-scene master control in a four-gang Claro wallplate. The 4-scene infrared wireless remote control should be ordered, too, for scene control capability.

---

### Option 2

**Multiganged Dimmers with a Remotely Mounted 5-Scene Master Control and 4-Scene Infrared Wireless Remote Control**

- Use Spacer System multiganged dimmers with a remote master control for new construction. Requires two (2) 14 AWG traveler wires between dimmers and master control
- Spacer System lamp dimmers let you make table and floor lamps part of your system

Shown: Three Spacer System dimmers and a remote mounted 5-scene master control in 2 separate wallboxes. The 4-scene infrared wireless remote control should be ordered, too, for scene control capability.

---

### Option 3

**Multiganged Dimmers with a 4-Scene Infrared Wireless Remote Control**

- Use Spacer System multiganged with a remote controls for a very simple and easy retrofit
- Just remove existing switches, install Spacer System dimmers and create and recall scenes with a remote control
- Spacer System lamp dimmers let you make table and floor lamps part of your system

Shown: Three Spacer System dimmers and a three-gang Claro wallplate. The 4-scene infrared wireless remote control should be ordered, too, for scene control capability.
Combinations of Dimmers with a 4-Scene Infrared Wireless Remote Control

• Entire room control is finally available for any room
• Just remove existing switches, install Spacer System dimmers and create and recall scenes with a remote control
• Spacer System lamp dimmers let you make table and floor lamps part of your system

Shown: Three Spacer System dimmers and three single-gang Claro wallplates. The 4-scene infrared wireless remote control should be ordered, too, for scene control capability.
SPACER SYSTEM SPECIAL PRODUCT FEATURES

No wiring needed between wall-mounted master controls and dimmers

Master controls send infrared signals and dimmers receive them through clear backboxes (signal travels four dimmers maximum in either direction)

Set and recall lighting scenes...like setting a radio station in your car

Step 1: Set light levels at dimmers
Step 2: Press and hold the master or remote control scene button until the LED flashes
Step 3: Repeat for each scene button

Use with learnable remotes

Spacer system remote controls are compatible with many learnable remote controls
Now it is possible to use a single remote to control your TV, VCR, stereo system and lighting, for total room comfort - at your fingertips

User-selectable (up to 60 second) fade-to-off for a safe exit from your room

Step 1: Press and hold master, remote control OFF button or dimmer tapswitch
Step 2: LEDs will flash one at a time; each LED indicates a 10 second increment lights stay on before fading to off - release hold at desired setting
**DIMMERS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incandescent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimmers with IR Receiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-location</td>
<td>600W</td>
<td>SPS-600-</td>
</tr>
<tr>
<td>Single-location</td>
<td>1000W</td>
<td>SPS-1000-</td>
</tr>
<tr>
<td>Multi-location</td>
<td>600W</td>
<td>SPS-600M-</td>
</tr>
<tr>
<td>Multi-location</td>
<td>1000W</td>
<td>SPS-1000M-</td>
</tr>
<tr>
<td>Note: For multi-location dimming, use a multi-location dimmer with Spacer System accessory dimmers, SPS-AD-. Not for use with mechanical 3-way or 4-way switches. Minimum load is 60W.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Electronic Low Voltage |                 |        |
| Dimmers with IR Receiver |             |        |
| Single-location | 600W | SPSELV-600- |
| Multi-location | 600W | SPSELV-600M- |
| Note: For multi-location dimming, use a multi-location dimmer with Spacer System accessory dimmers, SPS-AD-. Not for use with mechanical 3-way or 4-way switches. Requires neutral wire connection. Minimum load is 60W. |

| Magnetic Low Voltage |                 |        |
| Dimmers with IR Receiver |             |        |
| Single-location | 600VA (450W) | SPSLV-600- |
| Single-location | 1000VA (800W) | SPSLV-1000- |
| Multi-location | 600VA (450W) | SPSLV-600M- |
| Multi-location | 1000VA (800W) | SPSLV-1000M- |
| Note: For multi-location dimming, use a multi-location dimmer with Spacer System accessory dimmers, SPS-AD-. Not for use with mechanical 3-way or 4-way switches. Wattage indicated maximum lamp load. Minimum load is 60W. |

**Fluorescent Dimming with Tu-Wire™ Electronic Ballasts**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimmers with IR Receiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-location</td>
<td>5A</td>
<td>SPSFTU-5A-</td>
</tr>
<tr>
<td>Note: Use with Lutron Tu-Wire line voltage control electronic dimming ballasts only. See Dimming Ballast Selection Guide, pg. 195. Minimum load is 2 ballasts/250mA.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fluorescent Dimming with Hi-lume® and Eco-10® (ECO-Series) Electronic Ballasts**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimmers with IR Receiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-location</td>
<td>20 ballasts, 6A</td>
<td>SPSF-6A-</td>
</tr>
<tr>
<td>Multi-location</td>
<td>20 ballasts, 6A</td>
<td>SPSF-6AM-</td>
</tr>
<tr>
<td>Single-location, 277V</td>
<td>20 ballasts, 6A</td>
<td>SPSF-6A-277-</td>
</tr>
<tr>
<td>Multi-location, 277V</td>
<td>20 ballasts, 6A</td>
<td>SPSF-6AM-277-</td>
</tr>
<tr>
<td>Note: For multi-location dimming, use one Spacer System multi-location dimmer with up to nine Spacer System accessory dimmers, SPS-AD-. Not for use with mechanical 3-way or 4-way switches. Use with Lutron Hi-lume and Eco-10 (ECO-Series) line voltage control electronic dimming ballasts only. See Dimming Ballast Selection Guide, pg. 195. Requires neutral wire connection. Minimum load is 1 ballast/80mA.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HI-POWER 2•4•6™ DIMMING MODULES**

To increase load capacity up to 30,000W/VA in most popular sources, use one SPS-600- or SPS-600M- and add up to five dimming modules. Cannot be used with 0-10VDC ballast.

**ACCESSORY DIMMERS**

**Provide Multi-Location Dimming from Up to Nine Additional Locations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessory Dimmer, 120V</td>
<td>SPS-AD-</td>
<td></td>
</tr>
<tr>
<td>Accessory Dimmer, 277V</td>
<td>SPS-AD-277-</td>
<td></td>
</tr>
<tr>
<td>Note: For 120V multi-location dimming, use up to nine Spacer System accessory dimmers (SPS-AD-) with only one of the following Spacer System multi-location dimmers: SPS-600M-, SPS-1000M-, SPSLV-600M-, SPSSELV-600M-, or SPSF-6AM-. For 277V multi-location dimming, use up to nine Spacer System accessory dimmers (SPS-AD-277-) with SPSF-6AM-277-. Dimmers and accessory dimmers must have the same voltage rating. Not for use with mechanical 3-way or 4-way switches. No derating required if ganged.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SWITCHES**

**Fluorescent Switching for use with Electronic and Magnetic Fluorescent Non-Dim Ballasts, Magnetic Transformers and Relays**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorescent Switches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-location</td>
<td>6A</td>
<td>SPSF-56A-</td>
</tr>
<tr>
<td>Multi-location</td>
<td>6A</td>
<td>SPSF-56AM-</td>
</tr>
<tr>
<td>Single-location, 277V</td>
<td>6A</td>
<td>SPSF-56A-277-</td>
</tr>
<tr>
<td>Multi-location, 277V</td>
<td>6A</td>
<td>SPSF-56AM-277-</td>
</tr>
<tr>
<td>Note: For multi-location dimming, use one Spacer System multi-location dimmer with up to nine Spacer system accessory dimmers, SPS-AD-. Not for use with mechanical 3-way or 4-way switches. Requires neutral wire connection.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ACCESSORY SWITCHES**

**Provide Multi-Location Switching from Up to Nine Additional Locations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessory switch</td>
<td>6A</td>
<td>SPS-AS-</td>
</tr>
<tr>
<td>Accessory switch, 277V</td>
<td>6A</td>
<td>SPS-AS-277-</td>
</tr>
<tr>
<td>Note: For 120V multi-location switching, use up to nine Spacer System accessory switches (SPS-AS-) with only one SPS-6AM-. For 277V multi-location dimming, use up to nine Spacer System accessory switches (SPS-AS-277-) with only one SPSF-6AM-277-. Not for use with mechanical 3-way or 4-way switches. No derating required if ganged.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 For capacities in multi-gang installations see derating, pg. 7.
2 Actual lamp wattage.
### MASTER CONTROLS

#### Wall-Mounted Master Controls

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>120V 5-scene SPS-5WC-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Requires neutral wire connection. Must be ganged in the same continuous wallbox with one to four (maximum) Spacer System dimmers. Master control can be ganged to the left or right of dimmers. When using 120V and 277V products in the same wallbox, use 600V rated cable. Follow NEC Standard 300-3.

### LAMP DIMMERS

#### Incandescent/Halogen (120V)

Plug-In Lamp Dimmer with Infrared Receiver

- For table or floor lamps 300W SPS-300LD-RP

Note: Can be controlled by either a Spacer System or GRAFIK Eye infrared wireless remote control. Cord is 6’ (1.8m) long. Lamp dimmers intended only for use with table or floor lamps that do not contain integral dimmers. Available in royal plum (RP) only.

- 2.45” W (62mm) x 3.23” H (82mm) x 0.96” D (25mm)

### REMOTE CONTROLS

#### Infrared Wireless Remote Controls

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Scene Wireless remote control SPS-4IT-RP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Recalls preset light levels for four scenes plus off and fine tuning of light levels (scenarios dependent on dimmer settings). Range is 50’ (19.7m) line of sight to receiver.

- 1.51” W (38mm) x 5.69” H (145mm) x 0.88” D (22mm)

#### Favorite-Scene Wireless remote control SPS-FSIT-RP

Note: Recalls preset light levels for one scene plus off and fine tuning of light levels. Range is 30’ (11.8m) line of sight to receiver.

- 1.51” W (38mm) x 4.63” H (118mm) x 0.55” D (14mm)

### CLARO SWITCHES

#### General Purpose Switching of All Sources and Motor Loads

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-pole, 120/277V</td>
<td>15A</td>
<td>CA-1PSH-</td>
</tr>
<tr>
<td>3-way, 120/277V</td>
<td>15A</td>
<td>CA-3PSH-</td>
</tr>
<tr>
<td>4-way, 120/277V</td>
<td>15A</td>
<td>CA-4PSH-</td>
</tr>
</tbody>
</table>

Note: No derating required if ganged.

### CLARO ACCESSORIES

#### Receptacles

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptacle</td>
<td>15A, 125V</td>
<td>CAR-15H-</td>
</tr>
</tbody>
</table>

#### Telephone and Cable Television Jacks

A physical barrier (partition) must exist when ganging with line-voltage products.

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Telephone jack</td>
<td>6-conductor, RJ 11</td>
<td>CA-PJ H-</td>
</tr>
</tbody>
</table>

Note: Also accepts most 4-conductor plugs.

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable TV Jack</td>
<td>F-style, 75-Ohm, coaxial cable</td>
<td>CA-CJ H-</td>
</tr>
</tbody>
</table>

### Remote Control Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Maximum Capacity</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Control Tether and Holster RCTH-GR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Available in gray (GR) only.

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1 Remote controls work for all Spacer system dimmers, lamp dimmers and switches. Remote controls are for use with Spacer System only. Infrared frequency is 40kHz. Available in royal plum (RP) only.
## ACCESSORIES

### Field Customizable Multi-Port Frame

<table>
<thead>
<tr>
<th>Description</th>
<th>Rating</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-Port Frame</td>
<td>Shipped with 6 blanks</td>
<td>CA-6PF-</td>
</tr>
<tr>
<td></td>
<td>Shown with blanks</td>
<td></td>
</tr>
</tbody>
</table>

Product above: For use with Lutron connectors shown below. Also compatible with Hubble Xcelerator™ and snap-fit connectors.

### Connectors

For use with 6-port frame (CA-6PF-). Each connector fills one port.

<table>
<thead>
<tr>
<th>Description</th>
<th>Rating</th>
<th>Model #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone Jack</td>
<td>6-conductor, RJ11, Category 3</td>
<td>CON-1P-C3-WH</td>
</tr>
<tr>
<td>Phone Jack</td>
<td>8-conductor, RJ45, Category 5e</td>
<td>CON-1P-C5E-WH</td>
</tr>
<tr>
<td>Phone Jack</td>
<td>8-conductor, RJ45, Category 6</td>
<td>CON-1P-C6-WH</td>
</tr>
<tr>
<td>Fiber Jack</td>
<td>MT-RJ Feed-Through</td>
<td>CON-1F-MTRJ-WH</td>
</tr>
<tr>
<td>Fiber Jack</td>
<td>SC Simplex</td>
<td>CON-1F-SC-WH</td>
</tr>
<tr>
<td>Fiber Jack</td>
<td>LC Non-Flush Mount</td>
<td>CON-1F-LC-WH</td>
</tr>
<tr>
<td>Fiber Jack</td>
<td>ST Style</td>
<td>CON-1F-ST-WH</td>
</tr>
<tr>
<td>Cable Jack</td>
<td>F-Style, 75-Ohm Coaxial cable</td>
<td>CON-1C-WH</td>
</tr>
<tr>
<td>BNC Jack</td>
<td>BNC connector</td>
<td>CON-1B-WH</td>
</tr>
</tbody>
</table>

Connectors available in white (WH) only. For information about additional colors contact Lutron Customer Service.
### CLARO WALLPLATES

<table>
<thead>
<tr>
<th>Gang</th>
<th>Dimensions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Gang</td>
<td>2.94&quot; W (75mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-1-</td>
</tr>
<tr>
<td>2-Gang</td>
<td>4.75&quot; W (121mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-2-</td>
</tr>
<tr>
<td>3-Gang</td>
<td>6.56&quot; W (167mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-3-</td>
</tr>
<tr>
<td>4-Gang</td>
<td>8.37&quot; W (213mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-4-</td>
</tr>
<tr>
<td>5-Gang</td>
<td>10.18&quot; W (259mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-5-</td>
</tr>
<tr>
<td>6-Gang</td>
<td>12.00&quot; W (305mm) x 4.69&quot; H (119mm) x 0.30&quot; D (7.6mm)</td>
<td>CW-6-</td>
</tr>
</tbody>
</table>

### DERATING/MAXIMUM CAPACITY

<table>
<thead>
<tr>
<th>No fins/side sections removed (Full Capacity)</th>
<th>One fin/side section removed from each control (End Units)</th>
<th>Two fins/side sections removed from center control (Middle Unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incandescent Dimmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600W</td>
<td>500W</td>
<td>400W</td>
</tr>
<tr>
<td>1000W</td>
<td>800W</td>
<td>650W</td>
</tr>
<tr>
<td>Electronic Low Voltage Dimmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600W</td>
<td>500W</td>
<td>400W</td>
</tr>
<tr>
<td>Magnetic Low Voltage Dimmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>600VA</td>
<td>500VA</td>
<td>400VA</td>
</tr>
<tr>
<td>(450W 1)</td>
<td>(375W 1)</td>
<td>(300W 1)</td>
</tr>
<tr>
<td>1000VA</td>
<td>800VA</td>
<td>650VA</td>
</tr>
<tr>
<td>(800W 1)</td>
<td>(650W 1)</td>
<td>(500W 1)</td>
</tr>
<tr>
<td>Fluorescent Dimmers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hi-lume/Eco-10 20 ballasts/6A</td>
<td>20 Ballasts/5A</td>
<td>20 Ballasts/3.5A</td>
</tr>
<tr>
<td>Tu-Wire 5A</td>
<td>4A</td>
<td>3.3A</td>
</tr>
<tr>
<td>Electronic Switches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6A</td>
<td>5A</td>
<td>3.5A</td>
</tr>
</tbody>
</table>

1 Accessory dimmers / accessory switches for Spacer System do not require derating.
2 Minimum load: 60W.
3 Actual lamp wattage.
WIRING DIAGRAMS

Wiring Diagram 1
Single-Pole Wiring

![Wiring Diagram 1]

Model #
CA-1PSH-
SPS-600-
SPS-1000-
SPSLV-600-
SPSLV-1000-

Wiring Diagram 2
Single-Location Wiring

![Wiring Diagram 2]

Model #
SPS-600M-
SPS-1000M-
SPSLV-600M-
SPSLV-1000M-

Wiring Diagram 3
Multi-Location Wiring

![Wiring Diagram 3]

Model #
SPS-600M-
SPS-1000M-
SPSLV-600M-
SPSLV-1000M-
SPS-AD-

Wiring Diagram 4
Multi-Location Wiring

![Wiring Diagram 4]

Model #
SPS-600M-
SPS-1000M-
SPSLV-600M-
SPSLV-1000M-
SPS-AD-
WIRING DIAGRAMS

Wiring Diagram 5
Single-Pole Wiring

Model #

Ground: SPSF-6A-
Wire Connectors: SPSF-6A-277-
Typical 4-Wire Connection

* or Yellow/Blue or
Yellow/Green when
used with magnetic
dimming ballasts
** must use lamp
disconnect sockets
with magnetic
dimming ballasts

Hot 120VAC or
277VAC 60Hz
Neutral

Black
Red
Yellow or Orange
White**
Orange or Brown*
Black
Orange or Brown*
White**

Dimming Ballast

To Additional Ballasts

Wiring Diagram 6
Single-Location Wiring

Model #

Ground: SPSF-6AM-
Wire Connectors: SPSF-6AM-277-
Typical 4-Wire Connection

Hot 120VAC or
277VAC 60Hz
Neutral

Black
Red
Yellow or Orange
White**
Black
Orange
White

Dimming Ballast

To Additional Ballasts

Wiring Diagram 7
Multi-Location Wiring (Control Must be Wired on Load Side)

Model #

Ground: SPSF-6AM-
Wire Connectors: SPSF-6AM-277-
Typical 4-Wire Connection

Hot 120VAC or
277VAC 60Hz
Neutral

Black
Red
Yellow or Orange
White**
Black
Orange
White

Dimming Ballast

To Additional Ballasts
WIRING DIAGRAMS

Wiring Diagram 8
Single-Pole Wiring

Model #
SPSELV-600-
SPSF-S6A-
SPSF-S6A-277-
SPSFTU-5A-

Note: Standard line voltage wiring (travelers) between remote and dimmers not to exceed 200 feet total length.

Wiring Diagram 9
Multi-Location Control with Neutral
Used for Single-Location Wiring

Model #
SPSELV-600M-
SPSF-S6AM-
SPSF-S6AM-277-

Wiring Diagram 10
Multi-Location Wiring

Model #
SPSELV-600M-
SPSF-S6AM-
SPSF-S6AM-277-
SPS-AD-
SPS-AS-

Note: Standard line voltage wiring (travelers) between remote and dimmers not to exceed 200 feet total length.

Wiring Diagram 11
Wall-Mounted Master Control Wiring

Model #
SPS-5WC-

Have Questions? Call the Lutron Hotline 800-523-9466
To order—Call Lutron Customer Service 610-282-3800
WIRING DIAGRAMS

Wiring Diagram 13
Cable TV Jack Wiring

Model # CA-CJH-

Wiring Diagram 14
Telephone Jack Wiring

Model # CA-PJH-

<table>
<thead>
<tr>
<th>Position</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White</td>
</tr>
<tr>
<td>2</td>
<td>Black</td>
</tr>
<tr>
<td>3</td>
<td>Red</td>
</tr>
<tr>
<td>4</td>
<td>Green</td>
</tr>
<tr>
<td>5</td>
<td>Yellow</td>
</tr>
<tr>
<td>6</td>
<td>Blue</td>
</tr>
</tbody>
</table>

*accepts most 4-conductor jacks

Wiring Diagram 15
Receptacle Wiring

Model # CAR-15H-

Wiring Diagram 16
GFCI Receptacle Wiring

Model # CAR-15-GFCIH-

Have Questions? Call the Lutron Hotline 800-523-9466
To order—Call Lutron Customer Service 610-282-3800
PART 1 – GENERAL

1.01 Summary
A. Scope: Provide, install and test all switches, dimmers and related devices as specified herein for the areas indicated on the drawings, specifications, and load schedules.
B. Related Sections: Section 16580 (Ballasts), Section 16570 (Dimming Systems).

1.02 References
A. UL 20, UL 1472, CSA, NOM, ISO 9001

1.03 System Description and Operation
A. Permanently installed, wallbox mounted switches and dimmers
B. Permanently installed, wallbox mounted fan-speed controls
C. Permanently installed, wallbox mounted receptacles
D. Permanently installed, wallbox mounted data, voice and cable jacks
E. Screwless, seamless wallplates

1.04 Submittals
A. Submit manufacturer’s standard catalog data giving all application, wiring, and installation information on basic components and wallplate kits. Provide test data and/or samples as required to demonstrate conformance with PART 2 of this specification.

1.05 Quality Assurance
A. Manufacturer shall have a minimum of 10 years continuous experience in manufacturing wallbox dimming products.
B. Dimmers, switches and Fan-speed controls shall be UL listed, CSA and NOM approved specifically for each required load (i.e., tungsten, electronic low voltage transformer, magnetic low voltage transformer, and fluorescent). Manufacturer shall provide file card or certificate upon request. Universal load-type dimmers shall not be acceptable.
C. Manufacturer shall maintain ISO 9001 certification and provide a copy of the certificate upon request.

1.06 Warranty
A. All devices shall be covered by a minimum one-year warranty.

PART 2 – EQUIPMENT

2.01 Acceptable Manufacturers
A. Lutron Electronics Co., Inc.
B. Unless otherwise noted, all basic components (dimmer, fan-speed control, switch, receptacle, telephone jack and cable TV jack) and wallplate kits shall be provided by one manufacturer.

2.02 Equipment
A. Controls Lutron Spacer System Style
   1. Performance
      a. Dimmers shall provide full-range, continuously variable control of light intensity.

b. Wall controls shall fit a decorator wallplate opening with a flush tapswitch. Dimmers and accessory dimmers shall have a small, raised rocker to the right of the tapswitch. Dimmers shall have seven discrete LEDs to the left of the tapswitch and an infrared receiver built into the tapswitch. Tapswitches shall remain flush in both the on and off state. Wall controls shall have a gloss finish.

c. A single tap of the tapswitch shall raise lights from off to the preset light level, or fade light to off. The raise/fade rate shall travel the dimming range in 3 seconds. A rapid double tap of the tapswitch shall raise lights to full-on in 1.5 seconds. Pressing and holding the tapswitch shall activate a delay and fade-to-off function. Fade-to-off shall be delayed in 10 second increments up to 60 seconds, after which lights shall fade to off over 10 seconds. Total time to off shall be indicated by LED display.

d. The LEDs on the left side of the tapswitch shall indicate light level when the dimmer is on. When the dimmer is off, the LEDs shall glow softly as a night light with the preset level slightly brighter than any of the other LEDs.

e. The rocker on dimmers and accessory dimmers shall raise and lower the light level; this new light level becomes the preset. The rocker shall be able to raise the lights from off to low end and up, and shall lower the lights to low-end, not to off.

f. An actuator accessible from the front of the unit, with the wallplate attached, shall activate a mechanical air-gap switch disconnecting power from the load during “safety off” condition; no leakage current shall be present at the fixture(s). This front accessible safety switch (FASS™) shall be separate from the tapswitch and raise/lower rocker.

g. All actuators shall be captured internally to the control.

h. Dimmer shall be capable of on/off, raise/lower and mechanical air-gap "safety off" from up to 9 additional locations using aesthetically coordinated accessory dimmers.

i. Within rated capacity, dimmers shall be available for direct control of incandescent, magnetic low voltage, electronic low voltage, and fluorescent.

j. Controls shall be capable of operating at the rated capacity; this includes modified capacities for ganging configurations which require the removal of fins. Operation at rated capacity shall be possible across the full ambient temperature range, without shortening design lifetime.

k. To ensure a precise color match between all plastic parts, color variation of any gloss finish control shall not exceed a delta E of 1, CIE L*a*b* color units, as defined in ASTM E 308-99.

l. Controls shall meet the applicable requirements of UL 20 and UL 1472 referring to the inclusion of a visible, accessible air-gap off switch and the limited short circuit test.

m. Controls shall meet ANSI/IEEE Std. C62.41-1980, tested to withstand voltage surges of up to 6000V and current surges of up to 200A without damage.

n. Dimmers shall be designed to reduce interference with radio, audio, and video equipment.
4. Electronic (Solid-State) Low Voltage (ELV) Transformer Dimmers

3. Incandescent Dimmers

2. System Operation
   a. Provide ELV dimmers for direct control of up to 600 watts of electronic low voltage load.
   b. Dimmers shall contain circuitry specifically designed to control the input of electronic (solid state) low voltage transformers. Dimmers using standard phase control shall not be acceptable.
   c. Dimmers shall have a resettable overload protection that automatically shuts off when dimmer capacity is exceeded. Protection methods that are non-resettable or require the device to be removed from the wall to reset shall not be acceptable.
   d. Dimmers shall be designed to withstand a short, per UL 1472 section 5.10, between load hot and either neutral or ground without damage to the dimmer.
   e. Dimmers shall have a high-end of no less than 95% of line voltage.

5. Magnetic Low Voltage (MLV) Transformer Dimmers
   a. Provide MLV dimmers for direct control of up to 1000VA of magnetic low voltage load.
   b. Dimmers shall contain circuitry specifically designed to control and provide a symmetrical AC waveform to the input of magnetic low voltage transformers per UL1472 section 5.11.
   c. Dimmers shall not cause a magnetic low voltage transformer to operate above the transformers rated operating current or temperature.
   d. Dimmers shall have a high-end of no less than 95% of line voltage.
   e. Dimmer shall be capable of operating in either 3-way switch location.

6. Fluorescent Dimming Ballast Dimmers
   a. Provide Fluorescent dimmers for direct control of fluorescent dimming ballasts up to the manufacturers specified rating.
   b. Dimmers shall be designed to operate the following ballasts. Dimmers and ballasts shall be produced by the same manufacturer to ensure proper ballast/control compatibility:
      1) Hi-lume® Architectural Dimming Ballasts (1% 3-wire)
      2) Hi-lume® Compact™ Lamp Dimming Ballasts (5% 3-wire)
      3) Eco-10™ Lighting Management Dimming Ballasts (10% 3-wire)
      4) Tu-Wire™ High Performance Dimming Ballasts (5% 2-wire)

7. Fluorescent Dimming Ballast Switches
   a. Provide electronic switches for direct control of electronic and magnetic fluorescent ballasts, transformers, relays, and contactors.

8. Remote dimming modules for high power loads
   a. Where lighting loads exceed the full rated capacity of single dimmers, provide a Nova incandescent dimmer driving high power modules. High power module and dimmer shall be from the same manufacturer to ensure compatibility.
   b. High power modules shall be remotely mounted.
   c. High power module shall be rated and UL listed for control of incandescent, magnetic low voltage, electronic low voltage, fluorescent, and neon/cold cathode loads in increments of 2,000 Watts up to 30,000 Watts.

9. Accessory Dimmers
   a. Accessory Dimmers shall provide multi-location control and mechanical air-gap switch. All tapswitch and rocker functions shall operate from each Accessory Dimmer. Up to 9 Accessory Dimmers may be used with a Spacer System dimmer.
   b. Accessory Dimmers shall not have any LEDs nor an infrared receiver.
10. Accessory Switches
   a. Accessory Switches shall provide multi-location control and mechanical air-gap switch. Tapswitch function shall operate from each Accessory Switch. Up to 9 Accessory Switches may be used with a Spacer System Switch.
   b. Accessory Switches shall not have any LEDs nor an infrared receiver.

11. Infrared Transmitters
   a. Infrared hand-held remote controls shall be capable of activating the dimmer from up to 30 feet line of sight.
   b. 4-Scene hand-held transmitter shall provide access and programming to four-user-selected preset scenes, and shall provide separate off and master raise/lower. Master raise/lower will allow full-range continuously variable control of light intensity.
   c. A 1-scene hand-held transmitter shall provide access to one preset, user-selected scene, and shall provide separate off and master raise/lower. Master raise/lower will allow full-range continuously variable control of light intensity.
   d. All infrared transmitters shall provide access to delay and fade-to-off function from the off button.

12. Wall-mounted master controls
   a. Wall-mounted master control shall incorporate infrared-beam technology to communicate to devices. When mounted in same wallbox installation does not require any wiring between devices. When mounted remotely in a separate wallbox installation requires one (1) pair of 14 AWG traveler wires between master control and dimmers.
   b. Wall-mounted master controls shall provide access to four user-selected preset scenes, a separate full-on, off and master raise/lower. Master raise/lower will allow full-range continuously variable control of light intensity.
   c. All wall-mounted master controls shall provide access to delay and fade-to-off function from the off button.

B. Accessories Lutron Claro Style

1. Switch Components Lutron Claro Style
   a. Switches shall provide on/off control of any 120/277 VAC load up to 15A. Switches shall be UL Listed as general-use AC switches, Lutron Claro style.
   b. Switches shall be available in single-pole, 3-way and 4-way configurations.

2. Receptacle Components Lutron Claro Style
   a. All receptacles shall be UL Listed, CSA and NOM approved.
   b. Receptacles shall be two pole, three wire ground and rated for 15A at 125VAC. All receptacles shall be NEMA configuration type 5-15R.
   c. Ground-fault interrupter receptacles shall be Lutron Claro style with two-pole, three-wire ground and rated 15A at 125VAC. Configuration shall be of the duplex type with rectangular NEMA WD-6 design. Receptacles shall have a 5 milliampere ground-fault trip level with "test" and "reset" buttons.
   d. Receptacle shall be designed to mate with standard 4- or 6-conductor modular jacks, and be compatible with 2, 4, or 6 conductor lines. Telephone jacks shall meet FCC Part 68, paragraph F standards to ensure compatibility with U.S. telephone systems.
   e. Accessory Switches shall provide multi-location control and mechanical air-gap switch. Tapswitch function shall operate from each Accessory Switch. Up to 9 Accessory Switches may be used with a Spacer System Switch.
   f. Accessory Switches shall not have any LEDs nor an infrared receiver.

3. Telephone Jack and Cable TV Jack Components Lutron Claro Style
   a. Telephone jack shall be designed to mate with standard 4- or 6-conductor modular jacks, and be compatible with 2, 4, or 6 conductor lines. Telephone jacks shall meet FCC Part 68, paragraph F standards to ensure compatibility with U.S. telephone systems.
   b. Telephone jack shall be designed to mate with standard 4- or 6-conductor modular jacks, and be compatible with 2, 4, or 6 conductor lines. Telephone jacks shall meet FCC Part 68, paragraph F standards to ensure compatibility with U.S. telephone systems.
   c. Cable TV jacks shall be the coaxial type, designed for use with standard 75-Ohm cables.

C. Wallplates Lutron Claro Style
   1. Wallplates shall be manufactured from durable polycarbonate plastic with gloss finish, and shall attach to the basic components without using exposed hardware or screws.
   2. Multigang wallplates shall provide a continuous, seamless cover for up to six-ganged decorator-style control and accessory combinations with no exposed hardware or screws.
   3. Multigang wallplates shall include an adapter plate for proper device alignment and wallplate attachment.
   4. Control, accessory and wallplate profiles shall not exceed .30 inches from wall surface to faceplate front surface.
   5. To ensure a precise color match between all plastic parts, color variation of any gloss finish control or wallplate shall not exceed a delta E of 1, CIE L*a*b* color units, as defined in ASTM E 308-99.
   6. Visible parts of dimmers, switches, standard receptacles, cable jacks or any wallplate shall exhibit ultraviolet stability when tested with multiple actinic light sources as defined in ASTM D4674-89.

2.03 Source Quality Control
   A. All dimming controls shall be 100% function tested at the time of manufacture. Statistical sampling plan shall not be acceptable.

PART 3 – EXECUTION

3.01 Installation
   A. Contractor shall furnish all devices (dimmers, accessories, & wallplate kits), labor and other services necessary for the proper installation of the devices as indicated on the drawings and specified herein.
   B. Contractor shall be responsible for derating dimmer capacity if side sections are removed.
   C. Contractor shall run separate neutral wires in 120/208 VAC installations.
   D. Devices shall be installed utilizing manufacturer's recommended application, wiring and installation instructions.
   E. Contractor to provide seamless wallplate covers per specification 2.02 for all devices ganged in a common box. Contractor shall provide barriers within the box where required by code.

3.02 Field Quality Control
   A. Twenty-four hours a day, seven days a week, global customer service and technical hotline available.
   B. Supplemental information shall be provided by manufacturer's Internet site.