## Sensors | Maestro. wallbox occupancy/vacancy sensors



Shown actual size: Maestro dimmer with occupancy/vacancy sensor and 1-gang Claro® wallplate in White (WH).

#### **Product family features**

- · Available as a dimmer or switch with sensor
- Will turn lights on as you enter the space or off after the room is vacated
- Occupancy/vacancy (auto-on/auto-off or manual-on/auto-off) or vacancy only (manual-on/ auto-off) versions available
- 120/277 VAC dual voltage operation
- Vacancy models meet California Title 24 Section 119(j) requirements
- Sensor must have unobstructed view and line-of-sight to room occupants
- Passive infrared motion detection with dependable Lutron XCT<sub>TM</sub> technology for fine motion detection
- 180° sensor field-of-view
- Up to 30ft x 30ft major motion and 20ft x 20ft minor motion coverage
- Mechanical air-gap to disconnect load power
- Coordinating Claro<sup>®</sup>, Satin Colors<sup>®</sup> and Stainless
   Steel wallplates only available separately
- Engraving and custom colors available, for additional information, see pg. 155

#### **Control types**

Single-pole (one location)
 Multi-location (up to ten locations)

#### **Direct load type compatibility**

Incandescent/halogen lighting

#### Also available LOS wall occupancy sensors

# • 0 •

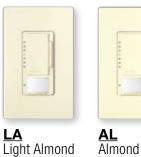
#### **Product family features**

- The LOS-S series of sensors offer a direct and quick replacement of wall switches for standalone line voltage switching of small spaces
- · Heavy-duty models available
- No power pack required
- LED test indicator
- For additional information, see pg. 143

Use **BOLD** color code in model number (Example: MS-OP600M-<u>MN</u>) Gloss finishes\*



White









Brown



<u>BL</u> Black

Satin finishes\*



Stainless Steel wallplate includes black plastic trim/adapter, visible from side. Match with separate Black (BL) or Midnight (MN) controls.

#### Maestro dimmers and switches with sensors

#### Dimmers with occupancy/vacancy sensor

1	
1	-
	_
13	

- Adjustable timeout –
   1, 3, 5, 15 or 30 minutes
- Occupancy/vacancy version can be easily programmed to work as vacancy (manual-on) sensor
- Optional off warning dims the lights by 50%, 30 seconds before the light turns off
- High-low sensitivity adjustment
- Standard Maestro dimmer features: locked preset, fade-to-on and fade-to-off
- Works with up to nine companion dimmers (MA-R-)
- Dual 120/277 V operation

#### **Dimmer model numbers**

#### Incandescent/halogen\*\*

Digital fade dimmer with	
occupancy/vacancy sensor	
Multi-location/single-pole	MS-OP600M- <u>CC</u> 1
120V 600W	

#### Digital fade dimmer with vacancy sensor

Multi-location/single-pole	MS-VP600M-CC1
120V 600W	

**<u>CC</u><sup>1</sup>**: Gloss and Satin color codes, see pg. 141 (Wallplates not included, order separately, see pg. 160)

All models must be derated if ganged unless otherwise noted, see pg. 170. For more information on occupancy/vacancy sensors, visit **www.lutron.com/occsensors**.

\***Requires neutral wire connection.** \*\*Minimum load is 40W/VA.

#### Switches with occupancy/vacancy sensor

- Adjustable timeout –
   1, 5, 15 or 30 minutes
- Occupancy/vacancy version can be easily programmed to work as vacancy (manual-on) sensor
- High-low sensitivity 6 A (120/277 V) switch controls: incandescent, halogen, MLV, ELV and non-dim fluorescent (neutral required) and general purpose fans
- 5 A switch controls: incandescent, halogen, MLV, ELV and non-dim fluorescent (neutral required)
- Works with up to nine companion switches (MA-AS-)

#### Switch model numbers

#### Switches

#### Switch with occupancy/vacancy sensor\*

Multi-location/single-pole	MS-OPS5AM-CC1
120V 5A lighting	

# Dual voltage switch with occupancy/vacancy sensor

Multi-location/single-pole MS-OPS6M-DV-**CC**<sup>1</sup> 120V or 277V 6A lighting 1/10HP @ 120V 3A fan

#### Switch with vacancy sensor\*

Multi-location/single-pole	MS-VPS5AM- <u>CC</u> 1
120V 5A lighting	

#### Dual voltage switch with vacancy sensor

Multi-location/single-pole MS-VPS6M-DV-**CC**<sup>1</sup> 120V or 277V 6A lighting 1/10HP @ 120V 3A fan

#### LOS switches with sensors

#### Passive infrared heavy-duty\*



- Dual 120/277V operation
- Integral adjustable light level sensor
- No minimum load requirement
- 180° field of view
- Adjustable time delay
- Available in White (WH)

#### Passive infrared manual-on residential

120/277 V	LOS-SIR-HD-WH	
LID model has heavy duty long to		

HD model has heavy-duty lens to prevent damage.

#### Passive Infrared two circuit heavy-duty\*

- Dual 120/277V operation
- Integral adjustable light
   level sensor
  - No minimum load requirement
  - 180° field of view
  - Adjustable time delay
  - Available in White (WH)

#### Passive infrared

•

00

120/277V	LOS-S2IR-HD-WH
S2IR-HD model has dual	-level switching,

S2IR-HD model has dual-level switching, allowing for two primary input circuits, each with independent switching.

EE9: Available in White (WH) and Ivory (IV)

\*Product requires ground connection.

# Sensors | Radio Powr Savr<sub>TM</sub> wireless occupancy/vacancy sensors



Shown actual size: Radio Powr Savr wireless occupancy/vacancy sensor in White (WH).

**Product family features** 

- Designed for conference rooms, copy rooms, small offices, classrooms, break rooms, restrooms and other spaces where automatic lighting shut-off is desirable
- Uses Lutron's Clear Connect™ Radio Frequency (RF) Technology which provides reliable wireless RF communication
- Dependable Lutron XCT<sup>™</sup> Technology for fine motion detection
- · Eliminates power pack and wiring expense
- Wall controls remain fully operable during automatic shut-off by sensor
- Vacancy models meet California Title 24 Section 119(j) requirements
- Use up to three sensors per each compatible dimmer/switch for maximum coverage
- One sensor can control up to 10 compatible dimmers/switches for spaces with additional zones of light
  - Coverage varies depending on ceiling height, sensors designed for 8–12 ft (2.4–3.7 m) ceilings
  - Timeout Options include 5 minutes, 15 minutes and 30 minutes
  - Battery included (10 year battery life)
  - · No wiring required



www.lutron.com | 1.800.523.9466 | **LUTRON** 

Use **BOLD** color code in model number (Example: LRF2-OCRB-P-**LA**) Matte finishes







**LA** Light Almond



#### **Occupancy/vacancy sensor**



- Auto-on/auto-off, manual on/auto-off or auto-on low light/auto-off
- 360° field of view

#### Vacancy sensor



- · Manual on/auto-off only
- Complies with California Title
   24 requirements
- 360° field of view

#### Sensor model number

Occupancy/vacancy sensor LRF2-OCRB-P-**EE**<sup>3</sup> Light Almond (LA) and Black (BL) have four week lead time.

#### Sensor model number

Vacancy sensor	LRF2-VCRB-P- <b>EE</b> 3
Light Almond (LA) and Blac	k (BL) have four week
lead time.	

Wireless occupancy/vacancy sensor coverage range		
Ceiling height	Maximum room dimensions for complete floor coverage	Square feet
8ft (2.4m)	18 x 18ft (5.5 x 5.5 m)	324 ft² (30.2 m²)
9ft (2.7 m)	20 x 20ft (6.1 x 6.1 m)	400 ft <sup>2</sup> (37.2 m <sup>2</sup> )
10ft (3.0m)	22 x 22 ft (6.7 x 6.7 m)	484 ft² (44.9 m²)
12ft (3.7m)	26 x 26ft (7.9 x 7.9 m)	676 ft² (62.4 m²)

**<u>EE</u><sup>3</sup>**: Available in White (WH), Light Almond (LA) and Black (BL)

For larger spaces or additional coverage, use multiple sensors, up to three per dimmer/switch.

## Sensors | Radio Powr Savr. wireless occupancy/vacancy sensors



Shown actual size: Radio Powr Savr wall-mount occupancy/vacancy sensor in White (WH)

#### **Product family features**

- Requires compatible receiving device (available separately)
- Uses Lutron's Clear Connect™ Radio Frequency (RF) Technology which provides reliable wireless RF communication
- Three models available for different coverage patterns: Wall-mount: 180° field-of-view
  - Corner-mount: 90° field-of-view Hallway: Long, narrow field-of-view for deeper coverage
- Models available as occupancy/vacancy and vacancy only
- Eliminates power pack and wiring expense
- Vacancy models meet California Title 24 Section 119(j) requirements
- Up to three sensors can be used for additional coverage
- Built-in test-mode and temporary mounting hardware (included) allows for optimum sensor placement and coverage
- Mounts within 60 ft (18 m) line-of-sight or 30 ft (9.1 m) through walls, of the receiving devices.
- Timeout options include: 1 minute, 5 minutes, 15 minutes and 30 minutes
- Battery included (10 year battery life)



#### Works with:

Use **BOLD** color code in model number (Example: LRF2-OWLB-P-**WH**) Matte finishes



<u>WH</u> White

#### **Occupancy/vacancy sensor**

- Auto-on/auto-off, manual on/auto-off
- Wall-mount 180° field of view
- Corner-mount 90° field of view
- Hallway: Long, narrow field-of-view for deeper coverage

#### Vacancy sensor



- Manual on/auto-off only
- Complies with California Title
   24 requirements
- Wall-mount 180° field of view
- Corner-mount 90° field of view
- Hallway: Long, narrow field-of-view for deeper coverage

#### Sensor model number

Hallway mount	LRF2-OHLB-P-WH
Corner-mount	LRF2-OKLB-P-WH
Wall-mount	LRF2-OWLB-P-WH

#### Sensor model number

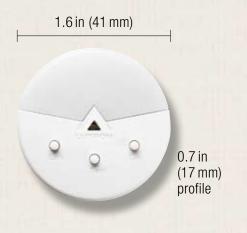
Hallway mount	LRF2-VHLB-P-WH
Corner-mount	LRF2-VKLB-P-WH
Wall-mount	LRF2-VWLB-P-WH

Wall/corner wireless occupancy/vacancy sensor coverage range		
Mounting	Maximum room dimensions for complete floor coverage	Square feet
Wall	50x 60ft (15.2 x 18.3 m)	3000 ft <sup>2</sup> (278.7 m <sup>2</sup> )
Corner	50 x 50ft (15.2 x 15.2 m)	2500 ft² (232.3 m²)

Hallway mount wireless occupancy/vacancy sensor coverage range	
Width of hall	Length of hall
6ft (1.6m) or less	50ft (15.2m)
8ft (2.4m)	100ft (30.5m)
10ft (3.06m) or more	150ft (1.6m)

For larger spaces or additional coverage, use multiple sensors, up to three per dimmer/switch.

# Sensors | Radio Powr Savr. wireless daylight sensors



Shown actual size: Radio Powr Savr wireless daylight sensor in White (WH).

#### **Product family features**

- Uses Lutron's Clear Connect™ Radio Frequency (RF) Technology which provides reliable wireless RF communication
- When sufficient daylight is available, system will decrease or turn off electric light; when insufficient daylight is available, system will increase electric light
- A dimmer/switch can communicate with only one daylight sensor
- One sensor can control up to
   10 dimmer/switches
- Available exclusively in White (WH)
- Battery included (10 year battery life)
- · No wiring required



#### **Daylight sensor**



#### Sensor model number

Daylight sensor LRF2-DCRB-WH

#### **Sensor placement**

#### Determine the daylight sensor mounting location using the diagram below:

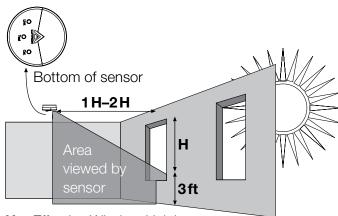
- Place the daylight sensor so the viewing area is centered on the nearest window at a distance from the window of one to two times the effective window height (H)
- The effective window height (H) starts at the window sill or 3 ft (1 m) up from the floor, whichever is higher, and ends at the top of the window
- Do not position the daylight sensor in the well of a skylight or above indirect lighting fixtures
- For narrow areas where the daylight sensor cannot be placed 1 H–2 H from windows, place sensor near windows facing into space

#### Location for average size areas

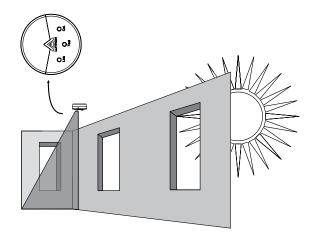
Arrow points towards the area viewed by the sensor (towards windows)

# Location for narrow areas (corridors, private offices)

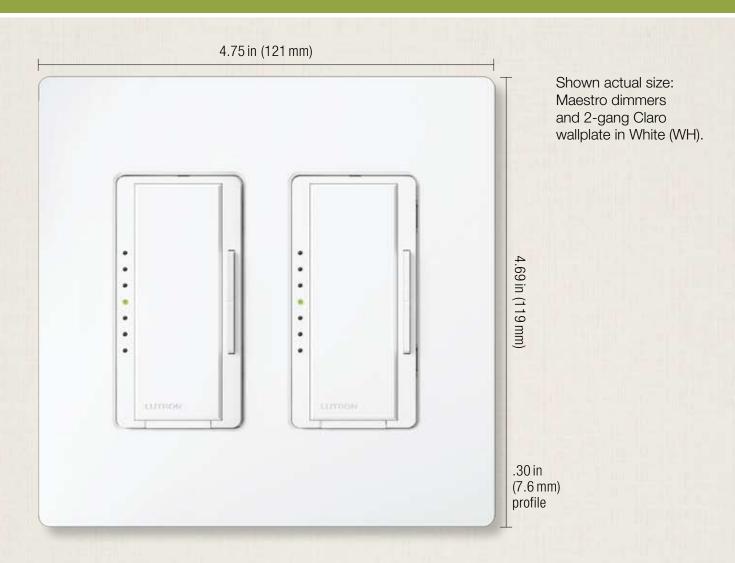
Arrow points towards the area viewed by the sensor (away from window)



 $\mathbf{H} = \text{Effective Window Height}$ 



# Wallplates and accessories | Designer | Claro / Satin Colors



#### **Product family features**

- Can be used in conjunction with the following dimmer(s) and switch(es): Maestroe, Maestro IRe, Maestro Wirelesse, Picotm wireless control, Spacer Systeme, Divae, Lyneoe Lx, Skylarke, Skylark Contourtm
- All Lutron<sup>®</sup> wallplates are screwless, seamless and have no visible hardware; the front plate securely snaps into the alignment adapter plate
- Full line of wiring devices in designer style opening
- Blank inserts available for Gloss colors (DV-BI-) and Satin colors (SC-BI-)
- Customize your designer wallplate with engraving, contact customer service to get started at 1.888.LUTRON1

#### **Ganging and derating**

- · Designer wallplates use standard ganging
- Requires fins to be removed from dimmers for proper spacing ("Fins Broken" ganging), see pg. 170
- May require derating (i.e., reduction of dimmer capacity due to fin removal), see Derating Tables, pg. 172

Use **BOLD** color code in model number (Example: SC-1-**PL**) Gloss finishes



\*Stainless Steel finish wallplates include black plastic trim/adapter, visible from side. Match with separate Black (BL) or Midnight (MN) controls and accessories.

Wallplates for Maestro®, Maestro IR®, Maestro Wireless®, Pico™ wireless control, Spacer System®, Diva®, Lyneo® Lx, Skylark® and Skylark Contour™





1-gang*	CW-1- <u><b>CC</b></u> ² SC-1- <u><b>CC</b></u> ⁴	4-gang*	CW-4- <u>CC</u> <sup>2</sup> SC-4- <u>CC</u> <sup>4</sup>
W: 2.94 in (75 mm); H: 4.69 in (119 mm) D: .30 in (7.6 mm)		W: 8.37 in (213 mm); H: 4.69 in (119 mm); D: .30 in (7.6 mm)	
2-gang*	CW-2- <u>CC</u> ² SC-2- <u>CC</u> ⁴	5-gang*	CW-5- <u>CC</u> ² SC-5- <b>CC</b> ⁴
W: 4.75 in (121 mm); H: 4.69 in (119 mm); D: .30 in (7.6 mm)	00 L <u>99</u>	W: 10.18in (259mm); H: 4.69in (119mm) D: .30in (7.6mm)	
		Multiple devices with line and low-voltage be mounted behind a common wallplate u a standard barrier backbox, see Applicatio Note #213 (Combining Low-Voltage and L Voltage Wiring Devices in a Multi-Gang Bo www.lutron.com/applicationnotes.	using ⊃n ∟ine
3-gang*	CW-3- <u><b>CC</b></u> ² SC-3- <u><b>CC</b></u> ⁴		

Multi-gang dimmer installations may require derating, see pg. 170.

\*Stainless Steel finish wallplates include black plastic trim/adapter, visible from side. Match with separate Black (BL) or Midnight (MN) controls and accessories.

CC<sup>2</sup>: Gloss and Stainless Steel color codes,

W: 6.56 in (167 mm); H: 4.69 in (119 mm);

**<u>CC</u>**<sup>4</sup>: Satin color codes, see pg. 161

D: .30 in (7.6 mm)

see pg. 161



#### 6-gang\*

CW-6-**CC**<sup>2</sup> SC-6-**CC**⁴

W: 12.00 in (305 mm); H: 4.69 in (119 mm); D: .30 in (7.6 mm)

#### **Cable jacks**



F-style, 75-Ohm coaxial cable

Single cable jack\*

CA-CJH-CC3 SC-CJ-CC⁴

#### **Telephone jacks**

6-conductor telephone jack, RJ11



#### Tamper resistant GFCI receptacles

I		
15A, 125V*	GFCI	CAR-15-GFTR- <b>CC</b> <sup>3</sup>
		SCR-15-GFTR- <b><u>CC</u>⁴</b>
20A, 125V*	GFCI	SCR-20-GFTR- <b><u>CC</u>⁴</b>

indicator status

Single telephone jack\*

CA-PJH-CC3 SC-PJ-CC4

CC<sup>2</sup>: Gloss and Stainless Steel color codes, see pg. 161 CC<sup>3</sup>: Gloss color codes, see pg. 161 CC<sup>4</sup>: Satin color codes, see pg. 161

### **Receptacles**



15A, 125V*	CARS-15-TR- <b><u>CC</u></b> ³
	SCRS-15-TR- <b><u>CC</u>⁴</b>
20A, 125V*	SCRS-20-TR- <b>CC</b> ⁴
Receptacles	
15A, 125V*	CAR-15H- <b><u>CC</u>³</b>
	SCR-15- <b><u>CC</u></b> ⁴
20A, 125V*	SCR-20- <b><u>CC</u></b> ⁴

Press test button to confirm LED

Press reset button to reset GFCI

after circuit interruption

#### **GFCI Receptacles**

Tamper resistant receptacles



#### **Receptacles for dimming use**



- Duplex for dimming both connected loads
- Projecting nubs prevent standard plugs from being used
- Requires replacement plugs for dimming use

#### Duplex for dimming use

15A	120/125V*	CAR-15-DFDU- <u>CC</u> <sup>2</sup>
15A	120/125V*	SCR-15-DFDU- <u>CC</u> ⁴
20 A	120/125V*	CAR-20-DFDU- <u>CC</u> 2
20 A	120/125V*	SCR-20-DFDU- <u>CC</u> ⁴

#### **Receptacles for dimming use**

- Top half for dimming
- Projecting nub prevents standard plug from being used
- Requires replacement plugs for dimming use
- Bottom half is a general use receptacle and will fit standard duplex plugs

#### Split duplex (half for dimming use)

15A	120/125 V*	CAR-15-HFDU- <u>CC</u> <sup>2</sup>
15A	120/125V*	SCR-15-HFDU- <u>CC</u> ⁴
20 A	120/125 V*	CAR-20-HFDU- <u>CC</u> <sup>2</sup>
20 A	120/125V*	SCR-20-HFDU- <u>CC</u> ⁴

#### **Receptacles for dimming use**

.

1.1

- Duplex for dimming both connected loads
- Projecting nubs prevent standard plugs from being used
- Requires replacement plugs for dimming use
- 15 A model shown
- Tamper resistant
   shutter mechanism

#### Dual dimming tamper resistant

	• ·	
15A	120/125 V*	CAR-15-DDTR-CC <sup>2</sup>
15A	120/125 V*	SCR-15-DDTR- <u><b>CC</b></u> ⁴
20 A	120/125V*	CAR-20-DDTR- <u>CC</u> <sup>2</sup>
20 A	120/125 V*	SCR-20-DDTR- <u>CC</u> ⁴

#### **Receptacles for dimming use**



- Top half for dimming
- Projecting nub prevents
   standard plug from being used
- Requires replacement plugs for dimming use
- Bottom half is a general use receptacle and will fit standard duplex plugs
- 15 A model shown
- Tamper resistant
   shutter mechanism

#### Half dimming tamper resistant

15A	120/125V*	CAR-15-HDTR-CC <sup>2</sup>
15A	120/125V*	SCR-15-HDTR- <u>CC</u> ⁴
20 A	120/125V*	CAR-20-HDTR-CC2
20 A	120/125V*	SCR-20-HDTR- <b><u>CC</u>⁴</b>

<u>CC</u><sup>2</sup>: Gloss color code and Stainless Steel, see pg. 161 CC<sup>4</sup>: Satin color codes, see pg. 161 \*Stainless Steel finish only available as separate wallplate. Match with separate Black (BL) or Midnight (MN) controls and accessories.

# Replacement plug for dimming (use with receptacles on left)



- This plug required for use with Lutron® receptacles for dimming use—plug will work in standard receptacle
- Easily replaces the existing plugs
   on lamps

120/125V	RP-FDU-10-WH
White	
120/125V	RP-FDU-10-BR
Brown	

UL/CSA/NOM regulatory approvals.

#### **Important notes**

- If the hot and dimmed hot feeds to the split duplex HFDU are supplied from different circuits or split-wired with separate switch-legs, a means to simultaneously disconnect these circuits must be provided at the panel board where they originate (NEC 210.7(C) 2002 Edition). A 2-pole circuit breaker or two single-pole circuit breakers with an approved handle tie can be used to accomplish this simultaneous disconnect. Feed-through dimming panels, which are those without breakers, are recommended when using the HFDU.
- Receptacles and plugs for dimming use are UL listed for use with all Lutron<sub>®</sub> wallbox dimmers included in this catalog.
- If there is only one electrical feed to the receptacle, then the duplex DFDU must be used.
- For detailed information, see Application Notes #91 (Guide to Dimming Table Lamps) and #109 (Guide to Dimming Portable Lamps via Receptacles) at www.lutron.com/applicationnotes.

<u>CC</u><sup>2</sup>: Gloss color code and Stainless Steel, see pg. 161
 <u>CC</u><sup>4</sup>: Satin color codes, see pg. 161

\*Stainless Steel finish only available as separate wallplate. Match with separate Black (BL) or Midnight (MN) controls and accessories.

#### Field customizable 6-port frame



- · Shipped with six blanks in matching colors
- · Connectors and wallplate sold separately
- Connectors snap in (no tools required)
- · Connectors available in White (WH), unless noted

6-port frame*	CA-6PF- <b><u>CC</u></b> <sup>3</sup>
	SC-6PF- <b><u>CC</u>⁴</b>

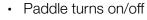
#### **Connectors for 6-port frame**

	Telephone/network jacks	
	8-conductor,	CON-1P-C3- <b>EE</b> ⁴
	RJ45 category 3	
	8-conductor,	CON-1P-C5E- <b>EE</b> ⁴
	RJ45 category 5e	
	8-conductor,	CON-1P-C6- <b>EE</b> ⁴
	RJ45 category 6	
	Fiber jacks	
	MT-RJ feed through	CON-1F-MTRJ-WH
	SC simplex	CON-1F-SC-WH
	LC non-flush mount	CON-1F-LC-WH
	ST style	CON-1F-ST-WH
	Cable jack	
S	F-style,	CON-1C- <u><b>EE</b></u> ⁴
	75-Ohm coaxial cable	
	BNC jack	

CON-1B-WH BNC connector, 50-Ohm

Connectors only for use with 6-port frame.

#### **Switches**



- Use with any 15A load
- General purpose switching of all sources and motor loads
- No derating if ganged

#### General purpose switches (120/277 V)

Single-pole	15A*	CA-1PSH- <b>CC</b> <sup>3</sup>
		SC-1PS- <u><b>CC</b></u> ⁴
3-way	15A*	CA-3PSH- <u><b>CC</b></u> <sup>3</sup>
		SC-3PS- <u><b>CC</b></u> ⁴
4-way	15A*	CA-4PSH- <b>CC</b> <sup>3</sup>
		SC-4PS- <u><b>CC</b></u> ⁴

#### General purpose switch with locator light (120 V only) 15A\* CA-1PSNL-EE<sup>2</sup> Single-pole

		30-IPSINL- <u>EE</u>
3-way	15A*	CA-3PSNL- <u>EE</u> 2
		SC-3PSNL- <u>EE</u> 10
4-way	15A*	CA-4PSNL- <u>EE</u> <sup>2</sup>
		SC-4PSNL- <u><b>EE</b>10</u>

<ul> <li>CC<sup>3</sup>: Gloss color codes, see pg. 161</li> <li>CC<sup>4</sup>: Satin color codes, see pg. 161</li> <li>EE<sup>2</sup>: Only available in Almond (AL), Ivory (IV), Light Almond (LA) and White (WH)</li> <li>EE<sup>4</sup>: Only available in White (WH) and Black (BL)</li> <li>EE<sup>10</sup>: Available in Biscuit (BI), Eggshell (ES), Goldstone (GS), Limestone (LS), Sea Glass (SG) and Snow (SW)</li> </ul>
*Stainless Steel finish only available as separate wallplate. Match with separate Black (BL) or

Midnight (MN) controls and accessories.