

# Selectable Output Chimes and Chime/Strobes



Audio/Visual Devices

## General

System Sensor L-Series selectable-output chimes and chime/strobes are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.

The System Sensor L-Series product line of wall and ceiling-mount chimes and chime strobes include a variety of features that increase their application versatility while simplifying the installation. With white and red plastic housings, System Sensor L-Series can meet virtually any application requirement.

Selectable-output chimes and chime/strobes are private mode notification appliances used to alert trained personnel to investigate possible emergency situations and to take appropriate action. Security guard and nurse workstations are ideal locations for chime products.

All devices feature plug-in design with minimal intrusion into the back box, making the installation fast and foolproof while virtually eliminating costly and time-consuming ground faults.

Installers can easily adapt devices to a wide range of application requirements using field-selectable candela settings, automatic selection of 12-or-24 volt operation, and a rotary switch for chime tones and two volume selections.



CHSCRL



CHWL



CHSWL

## Features

- Updated modern aesthetics
- Plug-in design with minimal intrusion into the back box
- Mounting plate shorting spring feature checks wiring continuity before device installation
- Captive mounting screw
- Tamper-resistant construction
- Field-selectable candela settings:
  - Wall: 15, 30, 75, 95, 110, 135, 185
  - Ceiling: 15, 30, 75, 95, 115, 150, 177
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Rotary switch for tone and volume selections
- Five selectable tones with high and low volume settings
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Wall models listed for wall mounting only, ceiling models listed for ceiling mounting only
- UL 1638 listed

## Architect/Engineer Specifications

### GENERAL

System Sensor L-Series chimes and chime strobes shall mount to a standard  $4 \times 4 \times 1\frac{1}{2}$ -inch back box, 4-inch octagon back box, single-gang  $2 \times 4 \times 1\frac{1}{8}$ -inch back box, or double-gang back box. A universal mounting plate shall be used for mounting products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, System Sensor L-Series products, when used with the Sync•Circuit Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-

volt rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC, or full-wave rectified, unfiltered power supply. Chime strobes shall have field-selectable candela settings of 15, 30, 75, 95, 110, 135, and 185 for wall units and 15, 30, 75, 95, 115, 150, and 177 for ceiling units.

### CHIME STROBE COMBINATION

The chime strobe shall be a System Sensor SpectrAlert Advance Model \_\_\_\_\_ listed to UL 1638 and UL 464. The chime strobe shall comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The chime shall have two audibility options and an option to switch between temporal three pattern, non-temporal (continuous) pattern, 1 second chime pattern, 1/4 second chime pattern, 5 second whoop chime pattern. These options are set by a multiple position switch.

### SYNCHRONIZATION MODULE

The module shall be a System Sensor Sync•Circuit \_\_\_\_\_ listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1Hz and all available chime tones. Also, while operating the strobes, the module shall silence the chimes on chime/strobe models over a single pair of wires. The module shall mount to a  $4\frac{11}{16} \times 4\frac{11}{16} \times 2\frac{1}{8}$ -inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

## PHYSICAL/ELECTRICAL SPECIFICATIONS

- **Standard Operating Temperature:** 32°F to 120°F (0°C to 49°C)
- **Humidity Range:** 10 to 93% non-condensing
- **Strobe Flash Rate:** 1 flash per second
- **Nominal Voltage:** Regulated 12VDC or regulated 24DC/ FWR<sup>1</sup>
- **Operating Voltage Range<sup>2</sup>:** 8 to 17.5V (12V nominal) or 16 to 33V (24V nominal)
- **Operating Voltage Range with MLD3:** 8.5 to 17.5V (12V nominal) or 16.5 to 33V (24V nominal)
- **Input terminal wire gauge:** 12 to 18 AWG
- **Chime strobe dimensions (including lens):** 5.6 in L x 4.7 in W x 1.25 in D (143 mm L x 119 mm W x 32 mm D)
- **Chime dimensions:** 5.6 in L x 4.7 in W x 1.25 in D (143 mm L x 119 mm W x 32 mm D)
- **Ceiling Chime strobe dimensions (including lens):** 6.8 in. Diameter x 2.47in. D (173.5mm Diameter x 62.7mm D)
- **SBBRL (red wall surface mount back box):** 5.6 in L x 4.7 in W x 4.3 in D (142 mm L x 119 mm W x 109 mm D)
- **SBBWL (white wall surface mount back box):** 5.6 in L x 4.7 in W x 4.3 in D (142 mm L x 119 mm W x 109 mm D)
- **SBBCRL (red ceiling surface mount back box):** 6.9 in. Dia. x 2.5in. D (175.8mm Dia. x 63.5mm)
- **SBBCWL (white ceiling surface mount back box):** 6.9in. Dia. x 2.5in. D (175.8mm Dia. x 63.5mm)

### Notes:

1. Full Wave Rectified (FWR) voltage is a non-filtered, time varying power source that is used on some power supply and panel outputs.
2. CHS products will operate at 12 V nominal only for 15 and 30 cd.

## Tone Selection

Chime tone selection is accomplished by using the rotary switch on the back of the product.

The current draw and sound measurements for various chime tone settings are listed below.

### CHIME PATTERNS

Setting	Repetition Rate	dB Level
1	1 Second Chime	High
2	1 Second Chime	Low
3	¼ Second Chime	High
4	¼ Second Chime	Low
5	Temporal Chime	High
6	Temporal Chime	Low
7	5 Second Whoop	High
8	5 Second Whoop	Low
9	Coded**	High
**For chime only.		

### CHIME AND CHIME/STROBE OUTPUT (DBA)

Switch Position	Sound Pattern	dB	8-17.5 Volts		16-33 Volts	
			DC	DC	DC	FWR
1	1 Second Chime	High	61	62	62	
2	1 Second Chime	Low	56	55	55	
3	¼ Second Chime	High	67	70	70	
4	¼ Second Chime	Low	61	61	61	
5	Temporal Chime	High	64	66	66	
6	Temporal Chime	Low	59	60	60	
7	5 Second Whoop	High	76	78	78	
8	5 Second Whoop	Low	62	64	64	
9	Coded**	High	57	51	57	
**For chime only.						

## UL Current Draw Data

### UL MAX. CHIME CURRENT DRAW (MA RMS)

Sound Pattern	dB	8-17.5 Volts		16-33 Volts	
		DC	DC	DC	FWR
1 Second Chime	High	5	8	9	
1 Second Chime	Low	5	8	9	
1/4 Second Chime	High	6	10	10	
1/4 Second Chime	Low	5	9	9	
Temporal Chime	High	7	10	10	
Temporal Chime	Low	6	9	9	
5 Second Whoop	High	12	15	16	
5 Second Whoop	Low	7	10	11	
Coded	High	12	15	16 *	
1 Second Chime	High	5	8	9	

\*This data represents coding at 3 chimes per second. Actual current draw will vary depending upon coding selected.

**UL MAX. CHIME/STROBE CURRENT DRAW (MA RMS) WALL**

DC Input	8–17.5 Volts		16–33 Volts						
	15	30	15	30	75	95	110	135	185
1 Second Chime	90	154	51	71	115	136	161	202	238
1 Second Chime	89	154	50	70	116	136	154	199	242
1/4 Second Chime	90	154	52	72	117	137	168	201	242
1/4 Second Chime	89	153	49	70	115	136	165	199	241
Temporal Chime	88	153	49	69	112	137	168	201	246
Temporal Chime	88	152	47	68	111	136	167	196	241
5 Second Whoop	91	154	52	70	113	132	176	206	243
5 Second Whoop	87	149	46	66	108	130	170	202	240

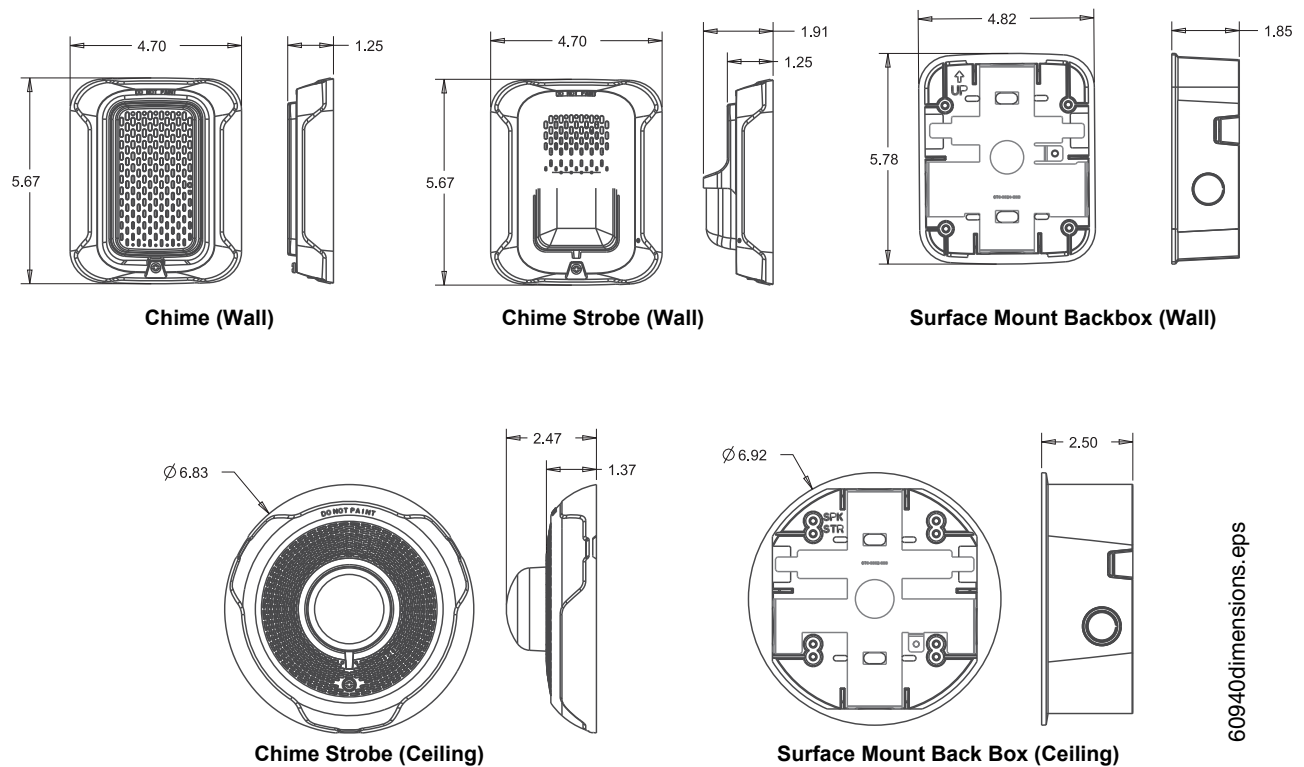
FWR Input	16–33 Volts							
	15	30	75	95	110	135	185	
1 Second Chime	70	90	160	176	197	233	275	
1 Second Chime	67	88	158	175	191	232	271	
1/4 Second Chime	69	93	159	175	198	233	272	
1/4 Second Chime	68	93	154	169	196	232	270	
Temporal Chime	65	90	145	170	189	228	283	
Temporal Chime	64	89	142	170	188	219	282	
5 Second Whoop	70	93	145	168	187	223	278	
5 Second Whoop	62	84	137	159	180	216	272	

**UL MAX. CHIME/STROBE CURRENT DRAW (MA RMS) CEILING**

DC Input	8–17.5 Volts		16–33 Volts						
	15	30	15	30	75	95	115	150	177
1 Second Chime	95.5	165	47	69	117	137	165	202	238
1 Second Chime	93	162	47	68	116	137	165	200	238
1/4 Second Chime	94	161	48	70	117	138	166	202	237
1/4 Second Chime	93	157	48	69	116	137	164	199	236
Temporal Chime	93	163	48	69.5	116	138	165	199	238
Temporal Chime	92	160	47	68.5	116	136	164	198	237
5 Second Whoop	98	169	54	77	124	146	173	206	245
5 Second Whoop	95	166	49	71	117	144	168	202	239

FWR Input	16–33 Volts							
	15	30	75	95	115	150	177	
1 Second Chime	63	90	147	169	184	212	245	
1 Second Chime	63	88	147	169	183	212	244	
1/4 Second Chime	65	90	149	170	184	213	246	
1/4 Second Chime	64	89	148	168	184	213	244	
Temporal Chime	64	89	148	169	184	212	245	
Temporal Chime	63	88	147	169	183	212	245	
5 Second Whoop	75	100	155	178	193	221	255	
5 Second Whoop	68	91	148	170	186	217	248	

## Product Drawings: Dimensions



60940dimensions.eps

## Agency Listings and Approvals

The listings and approvals below apply to L-series devices. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL/ULC Listed:** S4011
- **FM Approved**

## Product Line Information

*Note: ULC-listed devices include required French labeling. See Agency Listings for listing details.*

**CHWL, CHRL.** Chime, Wall (White, Red).

**CHSWL(A), CHSRL(A).** Chime Strobe, Wall (White, Red).

**CHSCWL, CHSCRL.** Chime Strobe, Ceiling (White, Red).

### ACCESSORIES

**SBBWL, SBBRL.** Surface Mount Back Box, Wall (White, Red).

**SBBCWL, SBBCRL.** Surface Mount Back Box, Ceiling (White, Red).