Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

System Sensor L-Series audible visible notification products are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.

Features

- Updated modern aesthetics
- Small profile devices for Horns and Horn Strobes
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Mounting plate for all standard and wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3A sync module
- Strobes and Horn Strobes listed for wall mounting only
- Horns listed for wall or ceiling use

The System Sensor L-Series offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with low current draws and modern aesthetics. With white and red plastic housings, standard and compact footprint devices, System Sensor L-Series can meet virtually any application requirement.

The entire L-Series product line, wall-mount horns, strobes, and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation and protect devices from construction damage, the L-Series mounting plates utilize an onboard shorting spring, so you can test wiring continuity before the device is installed.

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

Agency Listings

ULC LISTED

FM APPROVED

S5512
S4011

FM approved except for ALERT models 3057383, 3057072

L-Series Specifications

Architect/Engineer Specifications

General

L-Series standard horns, strobes, and horn strobes shall mount to a standard 2 x 4 x 1 $\frac{7}{8}$-inch back box, 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 × 4 × 1$\frac{7}{8}$-inch back box. A universal mounting plate shall be used for mounting wall products for all standard models and a separate universal mounting plate shall be used for mounting wall compact models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, 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 (0 to 49 degrees Celsius) from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

Strobe

The strobe shall be a System Sensor L-Series Model _____ listed to ULC and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model _____ listed to ULC and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3A listed to ULC and shall be approved for fire protective service. The module shall synchronize strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 411⁄16 × 411⁄16 × 21⁄8-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 12 DC or regulated 24 DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage Range MDL3 Sync Module	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
Input Terminal Wire Gauge	12 to 18 AWG
Wall-Mount Dimensions (including lens)	5.6″L × 4.7″W × 1.25″D (143 mm L × 119 mm W × 32 mm D)
Compact Wall-Mount Dimensions (including lens)	5.26" L x 3.46" W x 1.93" D (133 mm L x 88 mm W x 49 mm D)
Horn Dimensions	5.6″L × 4.7″W × 1.25″D (143 mm L × 119 mm W × 32 mm D)
Compact Horn Dimensions	5.25" L x 3.45" W x 1.25" D (133mm L x 88mm W x 32mm D)

Notes:

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

ULC Current Draw Data

ULC Max. Strobe Current Draw (mA RMS)

	Candela	8–17.5 Volts DC	16–33 Volts DC	FWR
Candela Range	15	88	43	60
	30	143	63	83
	75	N/A	107	136
	95	N/A	121	155
	110	N/A	148	179
	135	N/A	172	209
	185	N/A	222	257

ULC Max. Horn Current Draw (mA RMS)

Sound Pattern	dB	8–17.5 Volts DC	16–33 Volts DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

ULC Max. Current Draw (mA RMS), Wall Horn Strobe, Candela Range (15–185 cd)

DC Input	8–17.5 Volts 15cd	30cd	16–33 Volts 15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	98	158	54	74	121	142	162	196	245
Temporal Low	93	154	44	65	111	133	157	184	235
Non-Temporal High	106	166	73	94	139	160	182	211	262
Non-Temportal Low	93	156	51	71	119	139	162	190	239
3.1K Temporal High	93	156	53	73	119	140	164	190	242
3.1K Temporal Low	91	154	45	66	112	133	160	185	235
3.1K Non-Temporal High	99	162	69	90	135	157	175	208	261
3.1K Non-Temporal Low	93	156	52	72	119	138	162	192	242

FWR Input	16–33 Volts 15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	83	107	156	177	198	234	287
Temporal Low	68	91	145	165	185	223	271
Non-Temporal High	111	135	185	207	230	264	316
Non-Temportal Low	79	104	157	175	197	235	283
3.1K Temporal High	81	105	155	177	196	234	284
3.1K Temporal Low	68	90	145	166	186	222	276
3.1K Non-Temporal High	104	131	177	204	230	264	326
3.1K Non-Temporal Low	77	102	156	177	199	234	291

Horn Tones and Sound Output Data

Horn and Horn Strobe Output Anechoic (dBA)

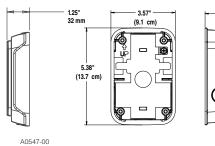| Switch Position	Sound Pattern	dB	8–17.5 Volts DC	16–33 Volts DC	FWR
1	Temporal	High	90	96	95
2	Temporal	Low	82	87	88
3	Non-Temporal	High	90	96	95
4	Non-Temporal	Low	81	88	88
5	3.1 KHz Temporal	High	85	90	89
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	90	90
8	3.1 KHz Non-Temporal	Low	76	82	83
9*	Coded	High	90	96	96
10*	3.1 KHz Coded	High	84	90	90

* Settings 9 and 10 are not available on 2-wire horn strobes. Temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output remains constantly on.
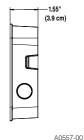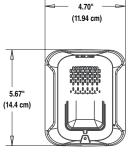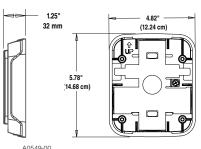
L-Series Dimensions

3.46"
88 mm
1.91"
48.5 mm
1.25"
32 mm
5.27"
133.9 mm

A0548-00

Compact Strobe, Horn Strobe

3.46"
88 mm
5.27"
133.9 mm

Compact Horn

A0547-00

1.25"
32 mm
3.57"
(9.1 cm)
5.38"
(13.7 cm)
1.55"
(3.9 cm)

A0557-00

**Compact Wall Surface Mount Back Box
SBBGRL, SBBGWL**

4.70"
(11.94 cm)
1.91"
(4.85 cm)
1.25"
(3.18 mm)
5.67"
(14.4 cm)

A0550-00

Strobe, Horn Strobe

4.7"
119 mm
5.67"
144 mm
1.25"
32 mm

A0549-00

Horn

4.82"
(12.24 cm)
5.78"
(14.68 cm)
1.85"
(4.69 cm)

A0554-01

**Wall Surface Mount Back Box
SBBRL/SBBWL**

L-Series Ordering Information

Model	Description
Wall Horn Strobes	
P2RLA	2-Wire, Horn Strobe, Red, Bilingual
P2WLA	2-Wire, Horn Strobe, White, Bilingual
P2GRLA	2-Wire, Compact Horn Strobe, Red, Bilingual
P2GWLA	2-Wire, Compact Horn Strobe, White, Bilingual
P2RLA-P	2-Wire, Horn Strobe, Red, Plain
P2WLA-P	2-Wire, Horn Strobe, White, Plain
P4RLA	4-Wire, Horn Strobe, Red
P4WLA	4-Wire, Horn Strobe, White
Wall Strobes	
SRLA	Strobe, Red, Bilingual
SWLA	Strobe, White, Bilingual
SGRLA	Compact Strobe, Red, Bilingual
SGWLA	Compact Strobe, White, Bilingual
SRLA-P	Strobe, Red, Plain
SWLA-P	Strobe, White, Plain

Model	Description
Horns*	
HRLA*	Horn, Red
HWLA*	Horn, White
HGRLA*	Compact Horn, Red
HGWLA*	Compact Horn, White
Accessories	
TR-2	Universal Wall Trim Ring Red
TR-2W	Universal Wall Trim Ring White
SBBRL	Wall Surface Mount Back Box, Red
SBBWL	Wall Surface Mount Back Box, White
SBBGRL	Compact Wall Surface Mount Back Box, Red
SBBGWL	Compact Wall Surface Mount Back Box, White

For strobe models, add suffix -E for English only, -F for French only except for -P models. All -P models have a plain housing (no "FIRE" marking on cover).

*Horn-only models are listed for wall or ceiling use.