

# Indoor Selectable-Output Strobes and Horn Strobes for Ceiling 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.



- 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 ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Universal mounting plate for ceiling units
- Mounting plate shorting spring feature checks wiring continuity before device installation
- Electrically Compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- · Listed for ceiling mounting only



**The System Sensor L-Series** offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, wall and ceiling mounting options, System Sensor L-Series can meet virtually any application requirement.

The entire L-Series product line of ceiling-mount strobes and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature a plug-in design 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, the L-Series utilizes a universal mounting plate so installers can mount them to a wide array of back boxes. With an onboard shorting spring, installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices 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**







FM approved except for ALERT models 3057383

7125-1653:050

# **L-Series Specifications**

#### **Architect/Engineer Specifications**

#### General

L-Series ceiling-mount strobes and horn strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 17/8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products. 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 from a regulated DC or full-wave rectified unfiltered power supply. Ceiling strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 115, 150, and 177.

#### Strobe

The strobe shall be a System Sensor L-Series Model \_\_\_\_\_\_ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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 UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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 MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize L-Series 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 4 11/16 × 4 11/16 × 2 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 12 VDC or regulated 24 DC/FWR <sup>1</sup>      |
| Operating Voltage Range <sup>2</sup>                                   | 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)   |
| Operating Voltage Range (MDL3)   | 8.5 to 17.5V (12 V nominal) or 16.5 to 33 V (24V nominal) |
| Input Terminal Wire Gauge  | 12 to 18 AWG  |
| Ceiling-Mount Dimensions (including lens)                              | 6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)  |
| Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBBCRL, SBBCWL) | 6.9" diameter x 3.4" high (175 mm diameter x 86 mm high)  |

#### 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 and 30 cd.

# **UL Current Draw Data**

| UL Max. Strobe Current Draw (mA RMS) |         |              |             |     |
|--------------------------------------|---------|--------------|-------------|-----|
|                                      |         | 8-17.5 Volts | 16-33 Volts |     |
|                                      | Candela | DC           | DC          | FWR |
| Candela                              | 15      | 87           | 41          | 60  |
| Range                                | 30      | 153          | 63          | 86  |
|                                      | 75      | N/A          | 111         | 142 |
|                                      | 95      | N/A          | 134         | 164 |
|                                      | 115     | N/A          | 158         | 191 |
|                                      | 150     | N/A          | 189         | 228 |
|                                      | 177     | N/A          | 226         | 264 |

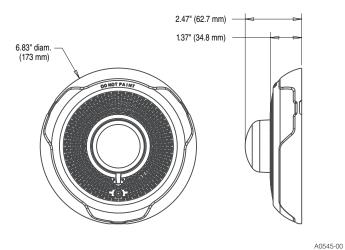
|                      |      | 8-17.5 Volts | 16–33 | Volts |
|----------------------|------|--------------|-------|-------|
| Sound Pattern        | dB   | DC           | DC    | FWR   |
| Temporal             | High | 39           | 44    | 54    |
| Temporal             | Low  | 28           | 32    | 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    |

|                        | 8–17.5 Vo | olts | 16–33 Vo | olts |       |       |       |       |       |
|------------------------|-----------|------|----------|------|-------|-------|-------|-------|-------|
| DC Input               | 15cd      | 30cd | 15cd     | 30cd | 75cd  | 95cd  | 115cd | 150cd | 177cd |
| Temporal High          | 103       | 167  | 71       | 90   | 143   | 165   | 187   | 217   | 254   |
| Temporal Low           | 96        | 165  | 54       | 71   | 137   | 161   | 185   | 211   | 249   |
| Non-Temporal High      | 106       | 173  | 71       | 90   | 141   | 165   | 187   | 230   | 273   |
| Non-Temportal Low      | 95        | 166  | 54       | 71   | 124   | 161   | 170   | 216   | 258   |
| 3.1K Temporal High     | 111       | 164  | 69       | 94   | 147   | 163   | 184   | 229   | 257   |
| 3.1K Temporal Low      | 103       | 163  | 54       | 88   | 143   | 155   | 185   | 212   | 252   |
| 3.1K Non-Temporal High | 111       | 172  | 69       | 94   | 144   | 164   | 202   | 229   | 271   |
| 3.1K Non-Temporal Low  | 103       | 169  | 54       | 88   | 131   | 155   | 187   | 217   | 259   |
|                        | 16–33 Vo  | olts |          |      | ,     |       |       |       |       |
| FWR Input              | 15cd      | 30cd | 75cd     | 95cd | 115cd | 150cd | 177cd |       |       |
| Temporal High          | 107       | 135  | 179      | 198  | 223   | 254   | 286   |       |       |
| Temporal Low           | 78        | 101  | 151      | 172  | 199   | 229   | 262   |       |       |
| Non-Temporal High      | 107       | 135  | 179      | 198  | 223   | 254   | 286   |       |       |
| Non-Temportal Low      | 78        | 101  | 151      | 172  | 199   | 229   | 262   |       |       |
| 3.1K Temporal High     | 108       | 135  | 179      | 200  | 225   | 255   | 289   |       |       |
| 3.1K Temporal Low      | 79        | 101  | 150      | 171  | 196   | 229   | 260   |       |       |
| 3.1K Non-Temporal High | 108       | 135  | 179      | 200  | 225   | 255   | 289   |       |       |
| 3.1K Non-Temporal Low  | 79        | 101  | 150      | 171  | 196   | 229   | 260   |       |       |

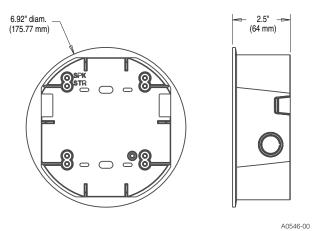
# Horn Strobe Tones and Sound Output Data

| Horn Strobe Output (dBA) |                      |      |                 |                |     |
|--------------------------|----------------------|------|-----------------|----------------|-----|
| Switch                   |                      |      | 8–17.5<br>Volts | 16–33<br>Volts |     |
| Position                 | Sound Pattern        | dB   | DC              | DC             | FWR |
| 1                        | Temporal             | High | 84              | 89             | 89  |
| 2                        | Temporal             | Low  | 75              | 83             | 83  |
| 3                        | Non-Temporal         | High | 85              | 90             | 90  |
| 4                        | Non-Temporal         | Low  | 76              | 84             | 84  |
| 5                        | 3.1 KHz Temporal     | High | 83              | 88             | 88  |
| 6                        | 3.1 KHz Temporal     | Low  | 76              | 82             | 82  |
| 7                        | 3.1 KHz Non-Temporal | High | 84              | 89             | 89  |
| 8                        | 3.1 KHz Non-Temporal | Low  | 77              | 83             | 83  |

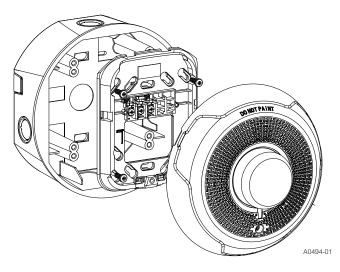
## **L-Series Dimensions**



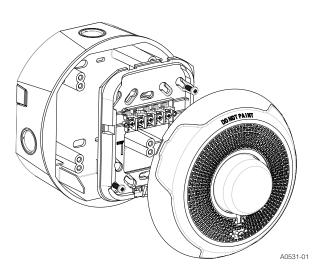
**Ceiling-Mount Horn Strobes** 



**Ceiling Surface Mount Back Box** 



2-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box



4-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Back Box

## **L-Series Ordering Information**

|           | •                          |
|-----------|----------------------------|
| Model     | Description                |
| Ceiling H | orn Strobes                |
| PC2RL     | 2-Wire, Horn Strobe, Red   |
| PC2WL     | 2-Wire, Horn Strobe, White |
| PC4RL     | 4-Wire, Horn Strobe, Red   |
| PC4WL     | 4-Wire, Horn Strobe, White |

| Model           | Description                           |
|-----------------|---------------------------------------|
| Ceiling Strobes |                                       |
| SCRL            | Strobe, Red                           |
| SCWL            | Strobe, White                         |
| SCWL-CLR-ALERT  | Strobe, White, ALERT                  |
| Accessories     |                                       |
| TRC-2           | Universal Ceiling Trim Ring Red       |
| TRC-2W          | Universal Ceiling Trim Ring White     |
| SBBCRL          | Ceiling Surface Mount Back Box, Red   |
| SBBCWL          | Ceiling Surface Mount Back Box, White |

For a ceiling-listed horn-only device, see AVDS865 "Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications".

