



# 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 all compact wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Strobes and Horn Strobes listed for wall mounting only
- Horns listed for wall or ceiling use

## Agency Listings



**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, standard and compact devices, and plain, FIRE, and FUEGO-printed devices, System Sensor L-Series can meet virtually any application requirement.

The L-Series line of 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 utilizes a universal mounting plate for all models with an onboard shorting spring, so installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to 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.

## 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<sup>7</sup>/<sub>8</sub>-inch back box, 4 x 4 x 1<sup>1</sup>/<sub>2</sub>-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 x 4 x 1<sup>7</sup>/<sub>8</sub>-inch back box. A universal mounting plate shall be used for mounting ceiling and 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 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 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 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<sup>11</sup>/<sub>16</sub> x 4<sup>11</sup>/<sub>16</sub> x 2<sup>1</sup>/<sub>8</sub>-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

|                                                       |                                                             |
|-------------------------------------------------------|-------------------------------------------------------------|
| <b>Standard Operating Temperature</b>                 | 32°F to 120°F (0°C to 49°C)                                 |
| <b>Humidity Range</b>                                 | 10 to 93% non-condensing                                    |
| <b>Strobe Flash Rate</b>                              | 1 flash per second                                          |
| <b>Nominal Voltage</b>                                | Regulated 12 DC or regulated 24 DC/FWR <sup>1</sup>         |
| <b>Operating Voltage Range<sup>2</sup></b>            | 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)     |
| <b>Operating Voltage Range MDL3 Sync Module</b>       | 8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal) |
| <b>Input Terminal Wire Gauge</b>                      | 12 to 18 AWG                                                |
| <b>Wall-Mount Dimensions (including lens)</b>         | 5.6" L x 4.7" W x 1.91" D (143 mm L x 119 mm W x 49 mm D)   |
| <b>Compact Wall-Mount Dimensions (including lens)</b> | 5.26" L x 3.46" W x 1.91" D (133 mm L x 88 mm W x 49 mm D)  |
| <b>Horn Dimensions</b>                                | 5.6" L x 4.7" W x 1.25" D (143 mm L x 119 mm W x 32 mm D)   |
| <b>Compact Horn Dimensions</b>                        | 5.25" L x 3.45" W x 1.25" D (133 mm L x 88 mm W x 32 mm D)  |

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. Strobe products will operate at 12 V nominal only for 15 cd and 30 cd.

## UL Current Draw Data

| UL Max. Strobe Current Draw (mA RMS) |         |              |             |     |
|--------------------------------------|---------|--------------|-------------|-----|
|                                      | Candela | 8–17.5 Volts | 16–33 Volts |     |
|                                      |         | DC           | 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 |

| UL Max. Horn Current Draw (mA RMS) |      |              |             |     |
|------------------------------------|------|--------------|-------------|-----|
|                                    |      | 8–17.5 Volts | 16–33 Volts |     |
|                                    |      | DC           | DC          | FWR |
| Sound Pattern                      | dB   |              |             |     |
| 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  |

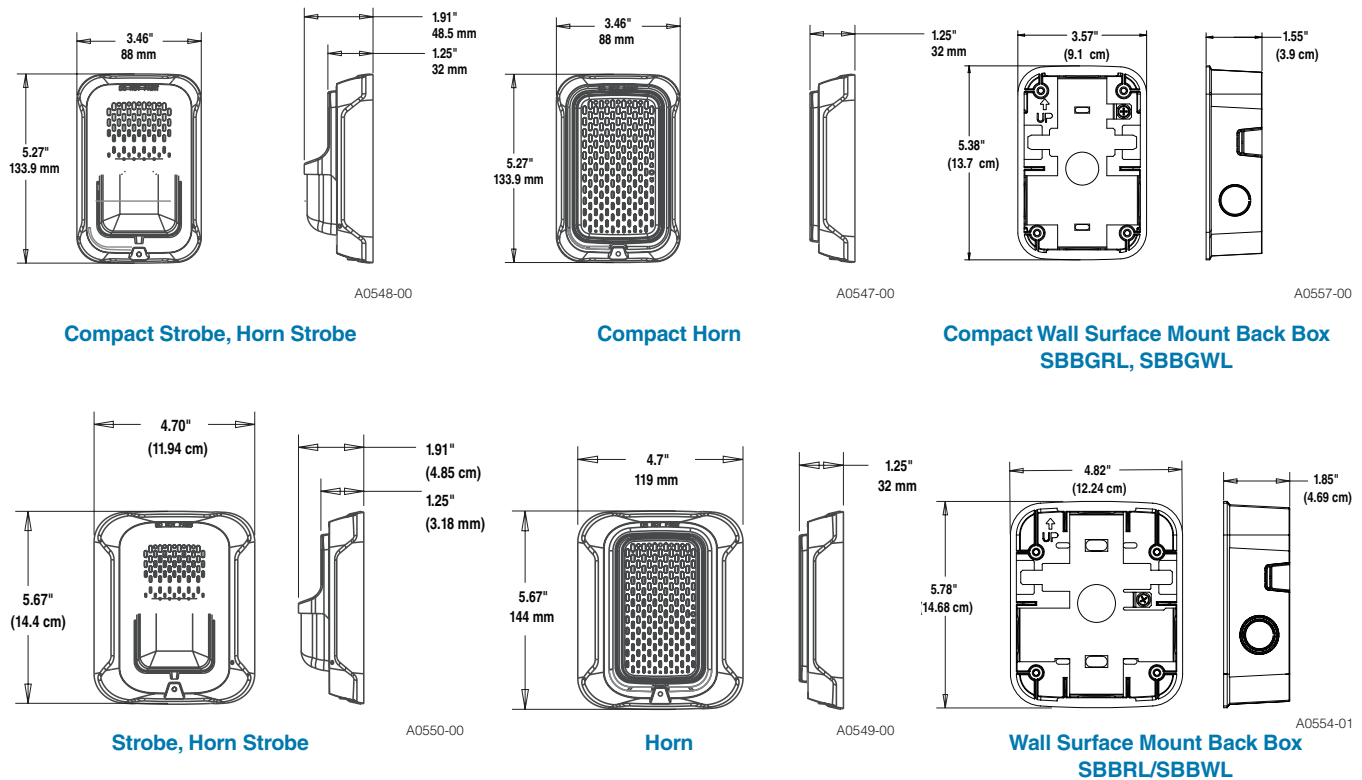
| UL Max. Current Draw (mA RMS), Wall Horn Strobe, Candela Range (15–185 cd) |              |      |             |      |       |       |       |       |       |
|----------------------------------------------------------------------------|--------------|------|-------------|------|-------|-------|-------|-------|-------|
| DC Input                                                                   | 8–17.5 Volts |      | 16–33 Volts |      |       |       |       |       |       |
|                                                                            | 15cd         | 30cd | 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-Temporal 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-Temporal 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 (dBA) |                      |      |              |             |     |
|-----------------------------------|----------------------|------|--------------|-------------|-----|
| Switch Position                   | Sound Pattern        | dB   | 8–17.5 Volts | 16–33 Volts | FWR |
|                                   |                      |      | DC           | DC          |     |
| 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  |
| 9*                                | Coded                | High | 85           | 90          | 90  |
| 10*                               | 3.1 KHz Coded        | High | 84           | 89          | 89  |

\* 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



## L-Series Ordering Information

| Model                    | Description                                |
|--------------------------|--------------------------------------------|
| <b>Wall Horn Strobes</b> |                                            |
| P2RL                     | 2-Wire, Horn Strobe, Red                   |
| P2WL                     | 2-Wire, Horn Strobe, White                 |
| P2GRL                    | 2-Wire, Compact Horn Strobe, Red           |
| P2GWL                    | 2-Wire, Comp 2 fils act Horn Strobe, White |
| P2RL-P                   | 2-Wire, Horn Strobe, Red, Plain            |
| P2WL-P                   | 2-Wire, Horn Strobe, White, Plain          |
| P2RL-SP                  | 2-Wire, Horn Strobe, Red, FUEGO            |
| P2WL-SP                  | 2-Wire, Horn Strobe, White, FUEGO          |
| P4RL                     | 4-Wire, Horn Strobe, Red                   |
| P4WL                     | 4-Wire, Horn Strobe, White                 |
| <b>Wall Strobes</b>      |                                            |
| SRL                      | Strobe, Red                                |
| SWL                      | Strobe, White                              |
| SGRL                     | Compact Strobe, Red                        |
| SGWL                     | Compact Strobe, White                      |
| SRL-P                    | Strobe, Red, Plain                         |
| SWL-P                    | Strobe, White, Plain                       |
| SRL-SP                   | Strobe, Red, FUEGO                         |
| SWL-CLR-ALERT            | Strobe, White, ALERT                       |

| Model              | Description                                |
|--------------------|--------------------------------------------|
| <b>Horns*</b>      |                                            |
| HRL*               | Horn, Red                                  |
| HWL*               | Horn, White                                |
| HGRL*              | Compact Horn, Red                          |
| HGWL*              | Compact Horn, White                        |
| <b>Accessories</b> |                                            |
| 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 |

### Notes:

All -P models have a plain housing (no "FIRE" marking on cover).

All -SP models have "FUEGO" marking on cover.

All -ALERT models have "ALERT" marking on cover.

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



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