

# 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



**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 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 excep for ALERT models 3057383, 3057072



7125-1653:0504 7135-1653:0503 Pacheco 2060, CABA, Buenos Aires, Argentina Teléfono +54 11 4524-2655 www.natursonne.com.ar

### **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 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 x 4 x 1½-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 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  $4^{11}/_{16} \times 4^{11}/_{16} \times 2^{1}/_{8}$ -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 DC 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 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 $\times$ $4.7$ "W $\times$ $1.91$ "D (143 mm L $\times$ 119 mm W $\times$ 49 mm D) |
| Compact Wall-Mount Dimensions (including lens) | 5.26" L x 3.46" W x 1.91" 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 (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) |         |              |             |     |  |
|--------------------------------------|---------|--------------|-------------|-----|--|
|                                      |         | 8-17.5 Volts | 16-33 Volts |     |  |
|                                      | Candela | DC           | DC          | FWR |  |
| Candela                              | 15      | 88           | 43          | 60  |  |
| Range                                | 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 |
| 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    |

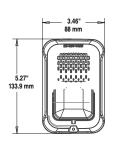
| Temporal High 98 158 54 74 121 142 162 196 245 Temporal Low 93 154 44 65 111 133 157 184 235 Non-Temporal High 106 166 73 94 139 160 182 211 262 Non-Temporal Low 93 156 51 71 119 139 162 190 239 3.1 K Temporal High 93 156 53 73 119 140 164 190 242 3.1 K Temporal Low 91 154 45 66 112 133 160 185 235 3.1 K Non-Temporal High 99 162 69 90 135 157 175 208 261 3.1 K Non-Temporal Low 93 156 52 72 119 138 162 192 242  16-33 Volts  FWR Input 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 High 81 105 155 177 196 234 284 3.1 K Temporal High 81 105 155 177 196 234 284 3.1 K Temporal High 81 105 155 177 196 234 284 3.1 K Temporal High 81 105 155 177 196 234 284 3.1 K Temporal Low 68 90 145 166 186 222 276  |                         | 8–17.5 Vo | olts | 16–33 Vo | olts |       |       |       |       |       |
|--|-------------------------|-----------|------|----------|------|-------|-------|-------|-------|-------|
| 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 High 93 156 51 71 119 139 162 190 239  3.1 K Temporal Low 91 154 45 66 112 133 160 185 235  3.1 K Temporal High 99 162 69 90 135 157 175 208 261  3.1 K Non-Temporal Low 93 156 52 72 119 138 162 192 242  16-33 Volts  FWR Input 15cd 30cd 75cd 95cd 110cd 135cd 185cd  Temporal Low 68 91 145 165 185 223 271  Non-Temporal High 111 135 185 207 230 264 316  Non-Temporal High 81 105 155 177 196 234 284  3.1 K Temporal High 81 105 155 177 196 234 284  3.1 K Temporal Low 68 90 145 166 186 222 276  3.1 K Temporal High 104 131 177 204 230 264 326   | DC Input                | 15cd      | 30cd | 15cd     | 30cd | 75cd  | 95cd  | 110cd | 135cd | 185cd |
| 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  16-33 Volts  FWR Input 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 High 81 105 155 177 196 234 284  3.1K Temporal High 81 105 155 177 196 234 284  3.1K Temporal Low 68 90 145 166 186 222 276  3.1K Temporal High 104 131 177 204 230 264 326  | Temporal High           | 98        | 158  | 54       | 74   | 121   | 142   | 162   | 196   | 245   |
| Non-Temportal Low   93   156   51   71   119   139   162   190   239   | Temporal Low            | 93        | 154  | 44       | 65   | 111   | 133   | 157   | 184   | 235   |
| 3.1K Temporal High 93 156 53 73 119 140 164 190 242 35 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 16-33 Volts  FWR Input 15cd 30cd 75cd 95cd 110cd 135cd 185cd 185cd 164 177 198 234 287 164 175 175 175 175 175 175 175 175 175 175  | Non-Temporal High       | 106       | 166  | 73       | 94   | 139   | 160   | 182   | 211   | 262   |
| 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 16-33 Volts  FWR Input 15cd 30cd 75cd 95cd 110cd 135cd 185cd 185cd 162 177 198 234 287 164 177 198 234 287 165 185 223 271 178 185 207 230 264 316 177 198 185 223 271 185 185 223 271 185 185 223 271 185 185 223 271 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 185 185 185 185 185 185 18  | Non-Temportal Low       | 93        | 156  | 51       | 71   | 119   | 139   | 162   | 190   | 239   |
| 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 16-33 Volts  FWR Input 15cd 30cd 75cd 95cd 110cd 135cd 185cd 185cd 162 177 198 234 287 164 177 198 234 287 165 185 223 271 177 198 185 223 271 185 185 223 271 185 185 185 223 271 185 185 185 185 185 185 185 185 185 18   | 3.1K Temporal High      | 93        | 156  | 53       | 73   | 119   | 140   | 164   | 190   | 242   |
| 3.1K Non-Temporal Low 93 156 52 72 119 138 162 192 242    16-33 Volts     15cd 30cd 75cd 95cd 110cd 135cd 185cd   185c | 3.1K Temporal Low       | 91        | 154  | 45       | 66   | 112   | 133   | 160   | 185   | 235   |
| FWR Input         16–33 Volts           FWR Input         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 High  | 99        | 162  | 69       | 90   | 135   | 157   | 175   | 208   | 261   |
| FWR Input         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   | 93        | 156  | 52       | 72   | 119   | 138   | 162   | 192   | 242   |
| 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   |                         | 16–33 Vo  | olts |          |      |       |       |       |       |       |
| 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  | FWR Input               | 15cd      | 30cd | 75cd     | 95cd | 110cd | 135cd | 185cd |       |       |
| 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  | Temporal High           | 83        | 107  | 156      | 177  | 198   | 234   | 287   |       |       |
| 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  | Temporal Low            | 68        | 91   | 145      | 165  | 185   | 223   | 271   |       |       |
| 3.1K Temporal High 81 105 155 177 196 234 284<br>3.1K Temporal Low 68 90 145 166 186 222 276<br>3.1K Non-Temporal High 104 131 177 204 230 264 326   | Non-Temporal High       | 111       | 135  | 185      | 207  | 230   | 264   | 316   |       |       |
| 3.1K Temporal Low     68     90     145     166     186     222     276       3.1K Non-Temporal High     104     131     177     204     230     264     326   | Non-Temportal Low       | 79        | 104  | 157      | 175  | 197   | 235   | 283   |       |       |
| 3.1K Non-Temporal High 104 131 177 204 230 264 326   | 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 Low 77 102 156 177 199 234 291   | 3.1K Non-Temporal High  | 104       | 131  | 177      | 204  | 230   | 264   | 326   |       |       |
|  | 0.41/ NI=== T=======1.1 | 77        | 400  | 150      | 177  | 100   | 00.4  | 001   |       |       |

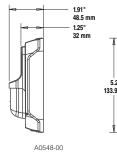
# **Horn Tones and Sound Output Data**

| Horn and | Horn Strobe Output (dE | BA)  |                 |                |     |
|----------|------------------------|------|-----------------|----------------|-----|
| 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  |
| 9*       | Coded                  | High | 85              | 90             | 90  |
| 10*      | 3.1 KHz Coded          | High | 84              | 89             | 89  |

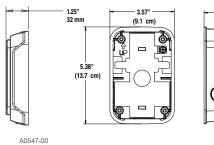
<sup>\*</sup> Settings 9 and 10 are not available on 2-wire horn strobes. Temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output remains constantly on.

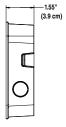
### **L-Series Dimensions**









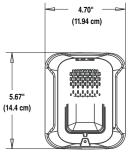


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**Compact Strobe, Horn Strobe** 

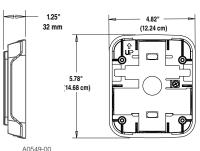
**Compact Horn** 

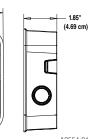
**Compact Wall Surface Mount Back Box** SBBGRL, SBBGWL











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

# **L-Series Ordering Information**

| Model             | Description                                |  |
|-------------------|--|--|
| Wall Horn Strobes |  |  |
| 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                 |  |
| Wall Strobes      |  |  |
| 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                                |
|-----------|--|
| Horns*    |  |
| HRL*      | Horn, Red                                  |
| HWL*      | Horn, White                                |
| HGRL*     | Compact Horn, Red                          |
| HGWL*     | Compact Horn, White                        |
| Accessori | es   |
| 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.

