

# 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**







FM approved except for ALERT models 3057383, 3057072

7125-1653:050 7135-1653:050



**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.

### **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

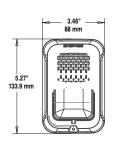
Temporal High 98 158 54 74 121 142 162 196 245 Temporal Low 93 154 44 65 111 133 157 184 235 Non-Temporal High 106 166 73 94 139 160 182 211 262 Non-Temporal Low 93 156 51 71 119 139 162 190 239 3.1 K Temporal High 93 156 53 73 119 140 164 190 242 3.1 K Temporal Low 91 154 45 66 112 133 160 185 235 3.1 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 162 192 242 164 165 185 223 271 175 175 185 223 271 175 185 223 271 175 185 223 271 185 185 223 271 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 223 271 185 185 185 185 223 271 185 185 185 185 185 283 185 185 185 185 283 185 185 283 185 185 185 283 185 185 283 185 185 283 185 185 283 185 185 283 185 185 283 185 185 185 283 185 185 283 185 185 185 283 185 185 185 185 185 185 185 185 185 185	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 3.1K Temporal Low 68 90 145 166 186 222 276 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		
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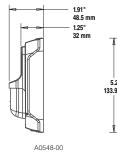
## **Horn Tones and Sound Output Data**

Horn and	Horn Strobe Output (dE	BA)			
Switch			8–17.5 Volts	16–33 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

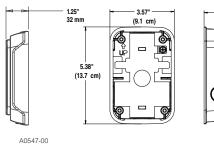
<sup>\*</sup> Settings 9 and 10 are not available on 2-wire horn strobes. Temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output remains constantly on.

### **L-Series Dimensions**









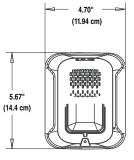


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**Compact Strobe, Horn Strobe** 

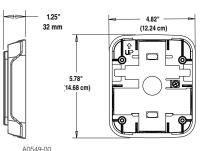
**Compact Horn** 

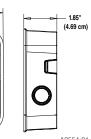
**Compact Wall Surface Mount Back Box** SBBGRL, SBBGWL











**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
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#### 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.

