



## Outdoor Selectable-Output Horns, Strobes, and Horn Strobes

*SpectrAlert® Advance outdoor selectable-output horns, strobes, and horn strobes are rich with features that cut installation times and maximize profits.*



### Features

- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Field-selectable candela settings on wall and ceiling units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Universal mounting plate for wall- and ceiling-mount units
- Mounting plate shorting spring tests wiring continuity before devices are installed
- Weatherproof per NEMA 4X, IP56
- Listed to UL 1638 (strobe) and UL 464 (horn)
- Rated from -40°F to 151°F
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and three volume selections
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products

**The SpectrAlert Advance** series offers the broadest line of outdoor horns, strobes, and horn strobes in the industry. With white and red plastic housings, wall and ceiling mounting options, and plain and FIRE-printed devices, SpectrAlert Advance can meet virtually any application requirement.

SpectrAlert Advance outdoor horns, strobes, and horn strobes can be used indoors or outdoors in wet or dry applications, and can provide reliable operation from -40°F to 151°F.

Like the entire SpectrAlert Advance product line, these devices 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, which make installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

All horns, strobes, and horn strobes use a universal mounting plate with an onboard shorting spring that tests wiring continuity before the device is installed, protecting devices from damage. In addition, field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with three volume selections enables installers to easily adapt devices to suit a wide range of application requirements.

### Agency Listings



S4011 (chimes, horn strobes, horns)  
S3593 (outdoor and alert strobes)



7300-1653:187 (outdoor strobes)  
7125-1653:188 (horn strobes,  
chime strobes)  
7135-1653:189 (horns, chimes)

# SpectrAlert Advance Outdoor Horn, Strobe, and Horn Strobe Specifications

## Architect/Engineer Specifications

### General

SpectrAlert Advance outdoor horns, strobes and horn strobes shall mount to a weatherproof 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, SpectrAlert Advance 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 9 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 17 and 33 volts. Outdoor SpectrAlert Advance products shall operate between –40 and 151 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, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185.

### Strobe

The strobe shall be a System Sensor SpectrAlert Advance 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. The strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The strobe shall be suitable for use in wet environments.

### Horn Strobe Combination

The horn strobe shall be a System Sensor SpectrAlert Advance 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 three audibility options and an option to switch between a temporal three-pattern and a non-temporal (continuous) pattern. These options shall be set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. The horn or horn strobe models shall operate on a coded or non-coded power supply. The horn strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The horn strobe shall be suitable for use in wet environments.

## Physical/Electrical Specifications

|   |  |
|---|--|
| <b>Operating Temperature</b>                                    | –40°F to 151°F (–40°C to 66°C)                           |
| <b>Strobe Flash Rate</b>  | 1 flash per second                                       |
| <b>Nominal Voltage</b>  | Regulated 12 DC/FWR 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>Input Terminal Wire Gauge</b>                                | 12 to 18 AWG   |
| <b>Ceiling-Mount Dimensions (including lens)</b>                | 6.8" diameter × 2.5" high (173 mm diameter × 64 mm high) |
| <b>Wall-Mount Dimensions (including lens)</b>                   | 5.6" L × 4.7" W × 2.5" D (142 mm L × 119 mm W × 64 mm D) |
| <b>Horn Dimensions</b>  | 5.6" L × 4.7" W × 1.3" D (142 mm L × 119 mm W × 33 mm D) |
| <b>Wall-Mount Weatherproof Back Box Dimensions (SA-WBB)</b>     | 5.7" L × 5.1" W × 2.0" D (145 mm L × 130 mm W × 51 mm D) |
| <b>Ceiling-Mount Weatherproof Back Box Dimensions (SA-WBBC)</b> | 7.1" diameter × 2.0" high (180 mm diameter × 51 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 15/75 cd.

## UL Current Draw Data

| UL Max. Strobe Current Draw (mA RMS) |         |              |     |             |     | UL Max. Horn Current Draw (mA RMS) |        |              |     |             |     |
|--------------------------------------|---------|--------------|-----|-------------|-----|------------------------------------|--------|--------------|-----|-------------|-----|
|                                      | Candela | 8–17.5 Volts |     | 16–33 Volts |     | Sound Pattern                      | dB     | 8–17.5 Volts |     | 16–33 Volts |     |
|                                      |         | DC           | FWR | DC          | FWR |                                    |        | DC           | FWR | DC          | FWR |
| <b>Standard Candela Range</b>        | 15      | 123          | 128 | 66          | 71  | Temporal                           | High   | 57           | 55  | 69          | 75  |
|                                      | 15/75   | 142          | 148 | 77          | 81  | Temporal                           | Medium | 44           | 49  | 58          | 69  |
|                                      | 30      | NA           | NA  | 94          | 96  | Temporal                           | Low    | 38           | 44  | 44          | 48  |
|                                      | 75      | NA           | NA  | 158         | 153 | Non-Temporal                       | High   | 57           | 56  | 69          | 75  |
|                                      | 95      | NA           | NA  | 181         | 176 | Non-Temporal                       | Medium | 42           | 50  | 60          | 69  |
|                                      | 110     | NA           | NA  | 202         | 195 | Non-Temporal                       | Low    | 41           | 44  | 50          | 50  |
|                                      | 115     | NA           | NA  | 210         | 205 | Coded                              | High   | 57           | 55  | 69          | 75  |
| <b>High Candela Range</b>            | 135     | NA           | NA  | 228         | 207 | Coded                              | Medium | 44           | 51  | 56          | 69  |
|                                      | 150     | NA           | NA  | 246         | 220 | Coded                              | Low    | 40           | 46  | 52          | 50  |
|                                      | 177     | NA           | NA  | 281         | 251 |                                    |        |              |     |             |     |
|                                      | 185     | NA           | NA  | 286         | 258 |                                    |        |              |     |             |     |

| UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Standard Candela Range (15–115 cd) |              |       |             |       |     |     |     |     |     |  |
|---|--------------|-------|-------------|-------|-----|-----|-----|-----|-----|--|
| DC Input  | 8–17.5 Volts |       | 16–33 Volts |       | 30  | 75  | 95  | 110 | 115 |  |
|   | 15           | 15/75 | 15          | 15/75 |     |     |     |     |     |  |
| Temporal High   | 137          | 147   | 79          | 90    | 107 | 176 | 194 | 212 | 218 |  |
| Temporal Medium   | 132          | 144   | 69          | 80    | 97  | 157 | 182 | 201 | 210 |  |
| Temporal Low  | 132          | 143   | 66          | 77    | 93  | 154 | 179 | 198 | 207 |  |
| Non-Temporal High   | 141          | 152   | 91          | 100   | 116 | 176 | 201 | 221 | 229 |  |
| Non-Temporal Medium   | 133          | 145   | 75          | 85    | 102 | 163 | 187 | 207 | 216 |  |
| Non-Temporal Low  | 131          | 144   | 68          | 79    | 96  | 156 | 182 | 201 | 210 |  |
| <b>FWR Input</b>  |              |       |             |       |     |     |     |     |     |  |
| Temporal High   | 136          | 155   | 88          | 97    | 112 | 168 | 190 | 210 | 218 |  |
| Temporal Medium   | 129          | 152   | 78          | 88    | 103 | 160 | 184 | 202 | 206 |  |
| Temporal Low  | 129          | 151   | 76          | 86    | 101 | 160 | 184 | 194 | 201 |  |
| Non-Temporal High   | 142          | 161   | 103         | 112   | 126 | 181 | 203 | 221 | 229 |  |
| Non-Temporal Medium   | 134          | 155   | 85          | 95    | 110 | 166 | 189 | 208 | 216 |  |
| Non-Temporal Low  | 132          | 154   | 80          | 90    | 105 | 161 | 184 | 202 | 211 |  |

| UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, High Candela Range (135–185 cd) |             |     |     |     |                     |             |     |     |     |  |
|--|-------------|-----|-----|-----|---------------------|-------------|-----|-----|-----|--|
| DC Input   | 16–33 Volts |     |     |     | FWR Input           | 16–33 Volts |     |     |     |  |
|  | 135         | 150 | 177 | 185 |                     | 135         | 150 | 177 | 185 |  |
| Temporal High  | 245         | 259 | 290 | 297 | Temporal High       | 215         | 231 | 258 | 265 |  |
| Temporal Medium  | 235         | 253 | 288 | 297 | Temporal Medium     | 209         | 224 | 250 | 258 |  |
| Temporal Low   | 232         | 251 | 282 | 292 | Temporal Low        | 207         | 221 | 248 | 256 |  |
| Non-Temporal High  | 255         | 270 | 303 | 309 | Non-Temporal High   | 233         | 248 | 275 | 281 |  |
| Non-Temporal Medium  | 242         | 259 | 293 | 299 | Non-Temporal Medium | 219         | 232 | 262 | 267 |  |
| Non-Temporal Low   | 238         | 254 | 291 | 295 | Non-Temporal Low    | 214         | 229 | 256 | 262 |  |

## Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

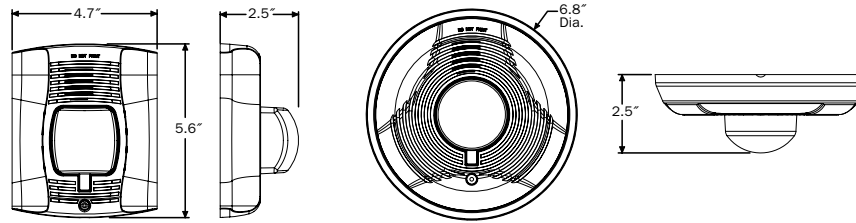
| Strobe Output (cd) |                         |
|--------------------|-------------------------|
| Listed Candela     | Candela rating at –40°F |
| 15                 | Do not use below 32°F   |
| 15/75              |                         |
| 30                 |                         |
| 75                 |                         |
| 95                 | 44                      |
| 110                | 70                      |
| 115                | 110                     |
| 135                | 115                     |
| 150                | 135                     |
| 177                | 150                     |
| 185                | 177                     |

## Horn Tones and Sound Output Data

| Horn and Horn Strobe Output (dBA) |               |        |              |     |             |     |                 |     |          |     |  |
|-----------------------------------|---------------|--------|--------------|-----|-------------|-----|-----------------|-----|----------|-----|--|
| Switch Position                   | Sound Pattern | dB     | 8–17.5 Volts |     | 16–33 Volts |     | 24-Volt Nominal |     |          |     |  |
|                                   |               |        | DC           | FWR | DC          | FWR | Reverberant     |     | Anechoic |     |  |
|                                   |               |        |              |     |             |     | DC              | FWR | DC       | FWR |  |
| 1                                 | Temporal      | High   | 78           | 78  | 84          | 84  | 88              | 88  | 99       | 98  |  |
| 2                                 | Temporal      | Medium | 74           | 74  | 80          | 80  | 86              | 86  | 96       | 96  |  |
| 3                                 | Temporal      | Low    | 71           | 73  | 76          | 76  | 83              | 80  | 94       | 89  |  |
| 4                                 | Non-Temporal  | High   | 82           | 82  | 88          | 88  | 93              | 92  | 100      | 100 |  |
| 5                                 | Non-Temporal  | Medium | 78           | 78  | 85          | 85  | 90              | 90  | 98       | 98  |  |
| 6                                 | Non-Temporal  | Low    | 75           | 75  | 81          | 81  | 88              | 84  | 96       | 92  |  |
| 7 <sup>†</sup>                    | Coded         | High   | 82           | 82  | 88          | 88  | 93              | 92  | 101      | 101 |  |
| 8 <sup>†</sup>                    | Coded         | Medium | 78           | 78  | 85          | 85  | 90              | 90  | 97       | 98  |  |
| 9 <sup>†</sup>                    | Coded         | Low    | 75           | 75  | 81          | 81  | 88              | 85  | 96       | 92  |  |

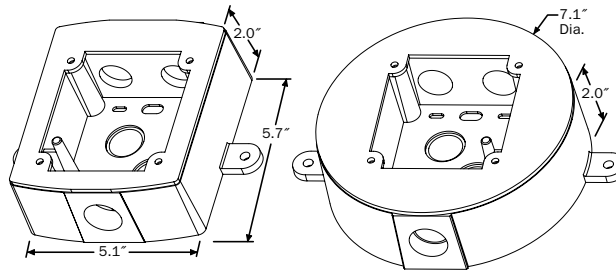
<sup>†</sup>Settings 7, 8, and 9 are not available on 2-wire horn strobe.

## SpectrAlert Advance Dimensions



Wall-mount horn strobes

Ceiling-mount horn strobes



Wall weatherproof back box

Ceiling weatherproof back box

## SpectrAlert Advance Ordering Information

| Model                    | Description                                      |
|--------------------------|--|
| <b>Wall Horn Strobes</b> |  |
| P2RK*†                   | 2-Wire Horn Strobe, Standard cd, Red, Outdoor    |
| P2RHK*†                  | 2-Wire Horn Strobe, High cd, Red, Outdoor        |
| P2WK*                    | 2-Wire Horn Strobe, Standard cd, White, Outdoor  |
| P2WHK*                   | 2-Wire Horn Strobe, High cd, White, Outdoor      |
| P4RK†                    | 4-Wire Horn Strobe, Standard cd, Red, Outdoor    |
| P4WK                     | 4-Wire Horn Strobe, Standard cd, White, Outdoor  |
| P2RHK-120                | 2-Wire Horn Strobe, High cd, Red, Outdoor, 120 V |
| <b>Wall Strobes</b>      |  |
| SRK*†                    | Strobe, Standard cd, Red, Outdoor                |
| SRHK*                    | Strobe, High cd, Red, Outdoor                    |
| SWK*                     | Strobe, Standard cd, White, Outdoor              |
| SWHK*                    | Strobe, High cd, White, Outdoor                  |

| Model                       | Description                                      |
|-----------------------------|--|
| <b>Ceiling Horn Strobes</b> |  |
| PC2RK†                      | 2-Wire Horn Strobe, Standard cd, Red, Outdoor    |
| PC2RHK†                     | 2-Wire Horn Strobe, High cd, Red, Outdoor        |
| PC2WK                       | 2-Wire, Horn Strobe, Standard cd, White, Outdoor |
| PC2WHK                      | 2-Wire, Horn Strobe High cd, White, Outdoor      |
| PC4WK                       | 4-Wire, Horn Strobe, Standard cd, White, Outdoor |
| PC4WHK                      | 4-Wire, Horn Strobe, High cd, White, Outdoor     |
| <b>Ceiling Strobes</b>      |  |
| SCRK†                       | Strobe, Standard cd, Red, Outdoor                |
| SCRHK†                      | Strobe, High cd, Red, Outdoor                    |
| SCWK                        | Strobe, Standard cd, White, Outdoor              |
| SCWHK                       | Strobe, High cd, White, Outdoor                  |
| <b>Horns</b>                |  |
| HRK                         | Horn, Red, Outdoor                               |

### Notes:

\* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2RK-P.

† Add "-R" to model number for weatherproof replacement device (no back box included).

"Standard cd" refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd" refers to strobes that include 135, 150, 177, and 185 candela settings.



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