SYSTEM SENSOR

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

*SpectrAlert® Advance audible visible notification products are rich with features guaranteed to cut installation times and maximize profits.*

SPECTRAlert ADVANCE from System Sensor

## Features

- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Field-selectable candela settings on ceiling units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and three volume selections
- Universal mounting plate for ceiling units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically Compatible with legacy SpectrAlert devices
- Compatible with MDL sync module
- Listed for ceiling or wall mounting

**The SpectrAlert Advance series** offers the most versatile and easy-to-use line of 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.

Like the entire SpectrAlert Advance product line, ceiling-mount 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, SpectrAlert Advance utilizes a universal mounting plate 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 three volume selections.

S

FM APPROVED 3029572

MEA approved VI-A452-98-H

7125-1653.186 (indoor strobes)
7125-1653.188 (horn strobes, chime strobes)
7135-1653.189 (horns, chimes)

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# SpectrAlert Advance Specifications

## Architect/Engineer Specifications

### General

SpectrAlert Advance 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 × 1 7/8-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, 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. Indoor SpectrAlert Advance 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, 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.

### 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 are set by a multiple position switch. On four-wire products, the strobe shall be powered independently of the sounder. 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 MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert 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 DC/FWR or regulated 24 DC/FWR[1] |
| Operating Voltage Range[2] | 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V 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 Back Box Skirt Dimensions (BBSC-2, BBSCW-2) | 7.1" diameter × 2.2" high (180 mm diameter × 57 mm high) |
| Ceiling-Mount Trim Ring Dimensions (sold as a 5 pack) (TRC-HS, TRCW-HS) | 6.9" diameter × 0.35" high (175 mm diameter × 9 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.

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## UL Current Draw Data

**UL Max. Strobe Current Draw (mA RMS)**

| | Candela | 8–17.5 Volts DC | 8–17.5 Volts FWR | 16–33 Volts DC | 16–33 Volts FWR |
|---|---|---|---|---|---|
| Standard Candela Range | 15 | 123 | 128 | 66 | 71 |
| | 15/75 | 142 | 148 | 77 | 81 |
| | 30 | NA | NA | 94 | 96 |
| | 75 | NA | NA | 158 | 153 |
| | 95 | NA | NA | 181 | 176 |
| | 110 | NA | NA | 202 | 195 |
| | 115 | NA | NA | 210 | 205 |
| High Candela Range | 135 | NA | NA | 228 | 207 |
| | 150 | NA | NA | 246 | 220 |
| | 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)**

| | 8–17.5 Volts | | 16–33 Volts | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DC Input | 15 | 15/75 | 15 | 15/75 | 30 | 75 | 95 | 110 | 115 |
| 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 |
| FWR Input | | | | | | | | | |
| 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)**

| | 16–33 Volts | | | | | 16–33 Volts | | | |
|---|---|---|---|---|---|---|---|---|---|
| DC Input | 135 | 150 | 177 | 185 | FWR Input | 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 |

## Horn Strobe Tones and Sound Output Data

**Horn Strobe Output (dBA)**

| Switch Position | Sound Pattern | dB | 8–17.5 Volts DC | 8–17.5 Volts FWR | 16–33 Volts DC | 16–33 Volts FWR | 24-Volt Nominal Reverberant DC | 24-Volt Nominal Reverberant FWR | 24-Volt Nominal Anechoic DC | 24-Volt Nominal Anechoic 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 |
| | [illegible]poral | Medium | 78 | 78 | 85 | 85 | 90 | 90 | 98 | 98 |
| | [illegible]poral | Low | 75 | 75 | 81 | 81 | 88 | 84 | 96 | 92 |
| | | High | 82 | 82 | 88 | 88 | 93 | 92 | 101 | 101 |
| | | Medium | 78 | 78 | 85 | 85 | 90 | 90 | 97 | 98 |
| | | Low | 75 | 75 | 81 | 81 | 88 | 85 | 96 | 92 |

[illegible] not available on 2-wire horn strobes.

AVD[illegible]

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## SpectrAlert Advance Dimensions

Ceiling-mount horn strobes

Ceiling back box skirt

## SpectrAlert Advance Ordering Information

| Model | Description |
|---|---|
| **Ceiling Horn Strobes** | |
| PC2R* | 2-Wire Horn Strobe, Standard cd. Red |
| PC2RH | 2-Wire Horn Strobe, High cd. Red |
| PC2W*† | 2-Wire Horn Strobe, Standard cd. White |
| PC2WH* | 2-Wire Horn Strobe, High cd. White |
| PC4R | 4-Wire Horn Strobe, Standard cd. Red |
| PC4RH | 4-Wire Horn Strobe, High cd. Red |
| PC4W | 4-Wire Horn Strobe, Standard cd. White |

| Model | Description |
|---|---|
| **Ceiling Strobes** | |
| SCR | Strobe, Standard cd. Red |
| SCRH | Strobe, High cd. Red |
| SCW* | Strobe, Standard cd. White |
| SCWH | Strobe, High cd. White |
| **Accessories** | |
| BBSC-2 | Back Box Skirt, Ceiling, Red |
| | Back Box Skirt, Ceiling, White |
| TRC-HS | Trim Ring, Ceiling, Red |
| TRCW-HS | Trim Ring, Ceiling, White |

Notes:

* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2R-P
ser for "FUEGO" marking on cover, e.g., P2R-SP
robes 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

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AVD500501 • 3/12