# SS-P Two-wire Indoor Horn Strobes

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**Invented for life**



▶ Plug-in design with tamper-resistant construction

▶ Field-selectable standard candela (15 cd, 15/75 cd, 30 cd, 75 cd, 95 cd, 110 cd, or 115 cd) settings or high candela settings (135 cd, 150 cd, 177 cd, or 185 cd)

▶ Horn rated at 88 dbA or greater at 16 V

▶ Rotary switch selection for horn tone and one of three volumes

▶ Shorting spring on mounting plate for continuity check before installation

The SS-P System Sensor SpectrAlert Advance notification appliances simplify installations with features such as plug-in designs, instant feedback messages to ensure correct installation of individual devices, and field-selectable candela settings. While there are products specifically designed for use on the ceiling or the wall, these products are listed to be used in either application, and the same mounting plate is used for wall- and ceiling-mount units. SpectrAlert products can be used in either DC or full-wave rectified (FWR) systems (12 V or 24 V). If required, the SSMDL or SSMDLW module can be used to provide synchronization.

**i** **Notice**

Full-wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

**i** **Notice**

SpectrAlert products set at 15 cd and 15/75 cd automatically work on either 12 V or 24 V power supplies. The products are not listed for 12 V operating voltages when set to any other candela settings.

## Functions

### Horn

The horn has three volume options and an option to switch between a temporal Code 3 pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch.

### Strobe

When wired as a primary-signaling notification appliance, the strobe complies with the Americans with Disabilities Act (ADA) requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light consists of a xenon flash tube and associated lens and reflector system.

For 24 V applications, the total number of strobes on a single NAC must not exceed 40, with a maximum loop resistance of 120 Ω. For 12 V applications, the total number of strobes must not exceed 12, with a maximum loop resistance of 30 Ω.

## Certifications and approvals

System Sensor holds these Listings and Approvals:

| Region | Certification | |
|---|---|---|
| USA | UL | ULSZ: Audible Signal Appliances (UL464) |
| | FM | SS-P Family |
| | CSFM | see our website |

## Installation/configuration notes

**Mounting Considerations**
These horn strobes mount on a standard 4-inch square back box, a 4-inch octagon back box, a single-gang back box, or a double-gang back box.

**Wiring Considerations**
The input terminals on the universal mounting plate accept solid wires between 12 AWG (2.3 mm) to 18 AWG (1.2 mm).

## Parts included

| Quant. | Component |
|---|---|
| 1 | Horn strobe |
| 1 | Universal mounting plate (MP120K) |
| 1 | Hardware pack |
| 1 | Literature pack |

## Technical specifications

**Electrical**

Current Draw, UL maximum at 8 V to 17.5 V

Standard-candela Models only

15 cd - Temporal Code 3 Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 137 mA | 136 mA RMS |
| Medium dB Setting: | 132 mA | 129 mA RMS |
| Low dB Setting: | 132 mA | 129 mA RMS |

15 cd – Non-temporal (continuous) Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 141 mA | 142 mA RMS |
| Medium dB Setting: | 133 mA | 134 mA RMS |
| Low dB Setting: | 131 mA | 132 mA RMS |

15/75 cd - Temporal Code 3 Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 147 mA | 155 mA RMS |
| Medium dB Setting: | 144 mA | 152 mA RMS |
| Low dB Setting: | 143 mA | 151 mA RMS |

15/75 cd – Non-temporal (continuous) Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 152 mA | 161 mA RMS |
| Medium dB Setting: | 145 mA | 155 mA RMS |
| Low dB Setting: | 144 mA | 154 mA RMS |

Current Draw, UL maximum at 16 V to 33 V

Standard-candela Models

15 cd - Temporal Code 3 Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 79 mA | 88 mA RMS |
| Medium dB Setting: | 69 mA | 78 mA RMS |
| Low dB Setting: | 66 mA | 76 mA RMS |

15 cd – Non-temporal (continuous) Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 91 mA | 103 mA RMS |
| Medium dB Setting: | 75 mA | 85 mA RMS |
| Low dB Setting: | 68 mA | 80 mA RMS |

15/75 cd - Temporal Code 3 Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 90 mA | 97 mA RMS |
| Medium dB Setting: | 80 mA | 88 mA RMS |
| Low dB Setting: | 77 mA | 86 mA RMS |

15/75 cd – Non-temporal (continuous) Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 100 mA | 112 mA RMS |
| Medium dB Setting: | 85 mA | 95 mA RMS |
| Low dB Setting: | 79 mA | 90 mA RMS |

30 cd - Temporal Code 3 Pattern

| | DC | FWR |
|---|---|---|
| High dB Setting: | 107 mA | 112 mA RMS |
| Medium dB Setting: | 97 mA | 103 mA RMS |
| Low dB Setting: | 93 mA | 101 mA RMS |

30 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 116 mA | 126 mA RMS |
| Medium dB Setting: | 102 mA | 110 mA RMS |
| Low dB Setting: | 96 mA | 105 mA RMS |

### 75 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 176 mA | 168 mA RMS |
| Medium dB Setting: | 157 mA | 160 mA RMS |
| Low dB Setting: | 154 mA | 160 mA RMS |

### 75 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 176 mA | 181 mA RMS |
| Medium dB Setting: | 163 mA | 166 mA RMS |
| Low dB Setting: | 156 mA | 161 mA RMS |

### 95 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 194 mA | 190 mA RMS |
| Medium dB Setting: | 182 mA | 184 mA RMS |
| Low dB Setting: | 179 mA | 184 mA RMS |

### 95 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 201 mA | 203 mA RMS |
| Medium dB Setting: | 187 mA | 189 mA RMS |
| Low dB Setting: | 182 mA | 184 mA RMS |

### 110 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 212 mA | 210 mA RMS |
| Medium dB Setting: | 201 mA | 202 mA RMS |
| Low dB Setting: | 198 mA | 194 mA RMS |

### 110 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 221 mA | 221 mA RMS |
| Medium dB Setting: | 207 mA | 208 mA RMS |
| Low dB Setting: | 201 mA | 202 mA RMS |

### 115 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 218 mA | 218 mA RMS |
| Medium dB Setting: | 210 mA | 206 mA RMS |
| Low dB Setting: | 207 mA | 201 mA RMS |

### 115 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 229 mA | 229 mA RMS |
| Medium dB Setting: | 216 mA | 216 mA RMS |
| Low dB Setting: | 210 mA | 211 mA RMS |

### Current Draw, UL maximum at 16 V to 33 V

### High-candela Models

### 135 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 245 mA | 215 mA RMS |
| Medium dB Setting: | 235 mA | 209 mA RMS |
| Low dB Setting: | 232 mA | 207 mA RMS |

### 135 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 255 mA | 233 mA RMS |
| Medium dB Setting: | 242 mA | 219 mA RMS |
| Low dB Setting: | 238 mA | 214 mA RMS |

### 150 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 259 mA | 231 mA RMS |
| Medium dB Setting: | 253 mA | 224 mA RMS |
| Low dB Setting: | 251 mA | 221 mA RMS |

### 150 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 270 mA | 248 mA RMS |
| Medium dB Setting: | 259 mA | 232 mA RMS |
| Low dB Setting: | 254 mA | 229 mA RMS |

### 177 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 290 mA | 258 mA RMS |
| Medium dB Setting: | 288 mA | 250 mA RMS |
| Low dB Setting: | 282 mA | 248 mA RMS |

### 177 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 303 mA | 275 mA RMS |
| Medium dB Setting: | 293 mA | 262 mA RMS |
| Low dB Setting: | 291 mA | 256 mA RMS |

### 185 cd - Temporal Code 3 Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 297 mA | 265 mA RMS |
| Medium dB Setting: | 297 mA | 258 mA RMS |
| Low dB Setting: | 292 mA | 256 mA RMS |

### 185 cd – Non-temporal (continuous) Pattern

|  | DC | FWR |
|---|---|---|
| High dB Setting: | 309 mA | 281 mA RMS |
| Medium dB Setting: | 299 mA | 267 mA RMS |
| Low dB Setting: | 295 mA | 262 mA RMS |

### Voltage

| | |
|---|---|
| Nominal: | Regulated 12 VDC/FWR or Regulated 24 VDC/FWR |
| Operating Range: | **12 V nominal:** 8 V to 17.5 V or **24 V nominal:** 16 V to 33 V |

### Environmental

| | |
|---|---|
| Relative Humidity: | 10% to 93%, non-condensing |
| Temperature (operating): | +32°F to +120°F (0°C to +49°C) |

### Mechanical

#### Dimensions

| | |
|---|---|
| • Ceiling-mount (Diameter x Height): | 6.8 in × 2.5 in (173 mm × 64 mm) |
| • Wall-mount (Height x Width x Depth): | 5.6 in × 4.7 in × 2.5 in (142 mm × 119 mm × 64 mm) |
| Candela Selections: | 15 cd[1], 15/75 cd[1], 30 cd[2], 75 cd[2], 95 cd[2], 110 cd[2], and 115 cd[2] |

[1] When set at these settings, the devices automatically work on both 12 V and 24 V power supplies. The 15/75 cd selection is listed at 15 cd but provides 75 cd on axis.

[2] The strobe is not listed for 12 V operating voltages when set to these selections. When using a 12 V control panel, this device yields required light output only in the 15 cd and 15/75 cd settings.

### Horn Audibility (minimum) for DC or FWR

#### Temporal Code 3 Pattern

|  | 8 V to 17.5 V | 16 V to 33 V |
|---|---|---|
| High dB Setting: | 78 dBA | 84 dBA |
| Medium dB Setting: | 74 dBA | 80 dBA |
| Low dB Setting: | 71 dBA | 76 dBA |

#### Non-temporal (continuous) Pattern

|  | 8 V to 17.5 V | 16 V to 33 V |
|---|---|---|
| High dB Setting: | 82 dBA | 88 dBA |
| Medium dB Setting: | 78 dBA | 85 dBA |
| Low dB Setting: | 75 dBA | 81 dBA |

### Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

## Ordering information

**SS-P2R Wall-mount, Standard-candela Horn Strobe (red)**
Red, wall-mount device with field-selectable strobe intensities of 15 cd, 15/75 cd, 30 cd, 75 cd, 95 cd, 110 cd, or 115 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-P2R**

**SS-P2W Wall-mount, Standard-candela Horn Strobe (white)**
White, wall-mount device with field-selectable strobe intensities of 15 cd, 15/75 cd, 30 cd, 75 cd, 95 cd, 110 cd, or 115 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-P2W**

**SS-PC2R Ceiling-mount, Standard-candela Horn Strobe (red)**
Red, ceiling-mount device with field-selectable strobe intensities of 15 cd, 15/75 cd, 30 cd, 75 cd, 95 cd, 110 cd, or 115 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-PC2R**

**SS-PC2W Ceiling-mount, Standard-candela Horn Strobe (white)**
White, ceiling-mount device with field-selectable strobe intensities of 15 cd, 15/75 cd, 30 cd, 75 cd, 95 cd, 110 cd, or 115 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-PC2W**

**SS-PC2RH Ceiling-mount, High-candela Horn Strobe (red)**
Red, ceiling-mount device with field-selectable strobe intensities of 135 cd, 150 cd, 177 cd, or 185 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-PC2RH**

**SS-PC2WH Ceiling-mount, High-candela Horn Strobe (white)**
White, ceiling-mount device with field-selectable strobe intensities of 135 cd, 150 cd, 177 cd, or 185 cd and rotary switch selection for horn tone and one of three volumes
Order number **SS-PC2WH**

**Accessories**

**SS-BBS-2 Wall Back Box Skirt (red)**
Red back box skirt.
**Not Available.**
Order number **SS-BBS-2**

**SS-BBSW-2 Wall Back Box Skirt (white)**
White back box skirt
Order number **SS-BBSW-2**

**SS-BBSC-2 Ceiling Back Box Skirt (red)**
Red back box skirt.
**Not Available.**
Order number **SS-BBSC-2**

**SS-BBSCW-2 Ceiling Back Box Skirt (white)**
White back box skirt.
**Not Available.**
Order number **SS-BBSCW-2**

**SSMDL Synchronization Module (red)**
Red, 24VDC device that can connect to two Style Y
(Class B) circuits or one Style Z (Class A) circuit and
synchronize System Sensor SpectrAlert horns, strobes,
and horn strobes.
**Not Available.**
Order number **SSMDL**

**SSMDLW Synchronization Module (white)**
White, 24VDC device that can connect to two Style Y
(Class B) circuits or one Style Z (Class A) circuit and
synchronize System Sensor SpectrAlert horns, strobes,
and horn strobes.
**Not Available.**
Order number **SSMDLW**