



# Outdoor, Selectable-Output Speaker Strobes and Dual-Voltage Evacuation Speakers for Ceiling Applications

*SpectrAlert® Advance outdoor audible visible products are rich with features that cut installation times and maximize profits.*

## Features

- Weatherproof per NEMA 4X, IP56
- Rated from -40°F to 151°F
- Plug-in design reduces ground faults
- Universal mounting plate with onboard shorting spring that tests wiring continuity before devices are installed
- Field-selectable candela settings: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Rotary switch for speaker voltage (25 and 70.7 Vrms) and power settings (1/4, 1/2, 1 and 2 watts)
- Compatible with System Sensor synchronization protocol and legacy SpectrAlert products
- Tamper-resistant construction
- Listed for ceiling or wall mounting

## Agency Listings



**SPECTRAlert**  
**ADVANCE**  
from System Sensor

**SpectrAlert Advance** offers the broadest line of outdoor speakers and speaker strobes in the industry. From metal and plastic outdoor back boxes, to white and red plastic housings, to wall and ceiling mounting options, SpectrAlert Advance can meet virtually any application requirement.

Ceiling-mount outdoor speakers and speaker strobes can be used indoors or outdoors in wet or dry applications, and can provide reliable operation from -40°F to 151°F. These speakers provide a broad frequency response range, low harmonic distortion and maintain a high sound pressure level at all tap settings to provide accurate and intelligible broadcast of evacuation messages.

Like the entire SpectrAlert Advance line, ceiling-mount outdoor speakers and speaker strobes include a variety of features that increase application flexibility and simplify installation. First, field-selectable settings, including candela, speaker voltage and power settings, and automatic selection of 12- or 24-volt operation enable installers to easily adapt devices to meet requirements.

Next, these devices use a universal mounting plate with an onboard shorting spring that ensures wiring continuity before devices are installed, so installers can verify proper wiring without mounting the devices and exposing them to potential construction damage. Once the plates are mounted, all SpectrAlert Advance devices utilize a plug-in design with a single captured screw to speed installation and virtually eliminate costly ground faults.

Outdoor devices ship with weatherproof plastic back boxes (metal back boxes are available separately) that accommodate in-and-out wiring for daisy chaining devices. Plastic back boxes feature removable side flanges and improved resistance to saltwater corrosion. Knock-outs located on the back eliminate the need to drill holes for screw-in mounting. Plastic and metal weatherproof back boxes come with 3/4-inch top and bottom conduit entries and 3/4-inch knock-outs at the back. A screw-in NPT plug with an O-ring gasket for a watertight seal is included with each back box.

# SpectrAlert® Advance Outdoor Speaker and Speaker Strobe Specifications

## Architectural/Engineering Specifications

### General

SpectrAlert Advance outdoor speakers and speaker 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 and amplifier wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance speaker strobes, 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°F and 151°F from a regulated DC, or full-wave rectified, unfiltered power supply.

### Speaker

Speaker shall be a System Sensor SpectrAlert Advance Model \_\_\_\_\_ dual-voltage transformer speaker capable of operating at 25.0 or 70.7 nominal Vrms. Speaker shall be listed to Underwriters Laboratories Standard S4048 for outdoor fire protective signaling systems. Speaker shall have a frequency range of 400 to 4,000 Hz and shall have an operating temperature from –40°F to 150.8°F. Speaker shall have power taps and wattage settings that are selected by rotary switches. The speaker must be installed with its weatherproof back box in order to remain outdoor approved per UL listing S4048. The speaker shall be suitable for use in air handling spaces and wet environments.

### Speaker Strobe Combination

The speaker strobe shall be a System Sensor Model \_\_\_\_\_ listed to UL 1638 and UL 1480 and be approved for fire protective signaling systems. Speaker shall be capable of operating at 25.0 or 70.7 nominal Vrms and shall have a frequency range of 400 to 4,000 Hz. Speaker shall have power taps that are selected by rotary switch. The strobe shall consist of a xenon flash tube with associated lens/reflector system and operate on either 12 or 24 volts. The strobe shall also feature selectable candela output, providing options for 15 or 15/75 candela when operating on 12 volts and 15, 15/75, 30, 75, 110, 115, 135, 150, 177 or 185 candela when operating on 24 volts. The strobe shall comply with the Americans with Disabilities Act requirement for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The speaker strobe must be installed with its weatherproof back box in order to remain outdoor approved per UL. The speaker strobe shall be suitable for use in wet environments.

## Physical Specifications

|                              |                                |
|------------------------------|--------------------------------|
| <b>Operating Temperature</b> | –40°F to 151°F (–40°C to 66°C) |
|------------------------------|--------------------------------|

### Dimensions, Ceiling-Mount

|                           |   |
|---------------------------|---|
| <b>SPS Speaker Strobe</b> | 6.8" Dia. × 4.7" D (including lens and speaker) |
|---------------------------|---|

|                   |                    |
|-------------------|--------------------|
| <b>SP Speaker</b> | 6.8" Dia. × 2.9" D |
|-------------------|--------------------|

|  |                    |
|--|--------------------|
| <b>Dimensions, Ceiling-Mount Weatherproof Back Box</b> | 7.2" Dia. × 2.9" D |
|--|--------------------|

## Electrical/Operating Specifications

|                                   |                          |
|-----------------------------------|--------------------------|
| <b>Nominal Voltage (speakers)</b> | 25 V or 70.7 V (nominal) |
|-----------------------------------|--------------------------|

|   |        |
|---|--------|
| <b>Maximum Supervisory Voltage (speakers)</b> | 50 VDC |
|---|--------|

|                          |                    |
|--------------------------|--------------------|
| <b>Strobe Flash Rate</b> | 1 flash per second |
|--------------------------|--------------------|

|                                  |   |
|----------------------------------|---|
| <b>Nominal Voltage (strobes)</b> | Regulated 12 VDC/FWR or regulated 24 DC/FWR |
|----------------------------------|---|

|  |   |
|--|---|
| <b>Operating Voltage Range (includes fire alarm panels with built in sync)</b> | 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal) |
|--|---|

|   |   |
|---|---|
| <b>Operating Voltage with MDL Sync Module</b> | 9 to 17.5 V (12 V nominal) or 17 to 33 V (24 V nominal) |
|---|---|

|                        |                 |
|------------------------|-----------------|
| <b>Frequency Range</b> | 400 to 4,000 Hz |
|------------------------|-----------------|

|              |                  |
|--------------|------------------|
| <b>Power</b> | ¼, ½, 1, 2 watts |
|--------------|------------------|

## UL Current Draw Data

| UL Max. Strobe Current Draw (mA RMS) |         |                 |     |                |     |
|--------------------------------------|---------|-----------------|-----|----------------|-----|
|                                      | Candela | 8 to 17.5 Volts |     | 16 to 33 Volts |     |
|                                      |         | DC              | FWR | DC             | FWR |
| <b>Standard</b>                      | 15      | 123             | 128 | 66             | 71  |
| <b>Candela Range</b>                 | 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 |
| <b>High</b>                          | 135     | NA              | NA  | 228            | 207 |
| <b>Candela Range</b>                 | 150     | NA              | NA  | 246            | 220 |
|                                      | 177     | NA              | NA  | 281            | 251 |
|                                      | 185     | NA              | NA  | 286            | 258 |

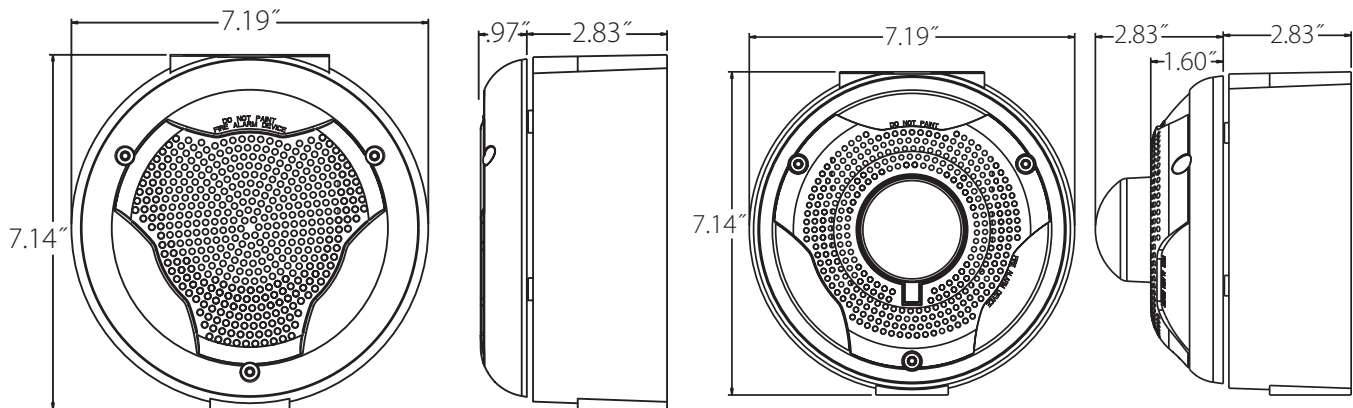
| Sound Output                  |    |    |     |     |
|-------------------------------|----|----|-----|-----|
| UL Reverberant (dBA @ 10 ft.) | 2W | 1W | ½ W | ¼ W |
| <b>Outdoor Speaker</b>        | 90 | 87 | 84  | 81  |
| <b>Outdoor Speaker/Strobe</b> | 89 | 86 | 83  | 80  |

## 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                 | 44                      |
| 95                 | 70                      |
| 110                | 110                     |
| 115                | 115                     |
| 135                | 135                     |
| 150                | 150                     |
| 177                | 177                     |
| 185                | 185                     |

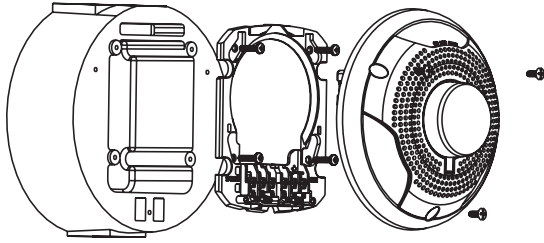
## Dimensions



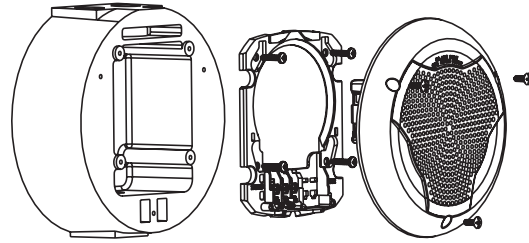
Ceiling-Mount Outdoor Speaker

Ceiling-Mount Outdoor Speaker Strobe

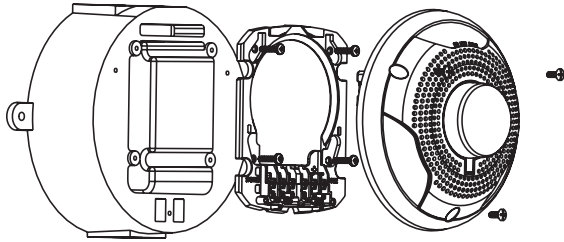
## Surface Mounting



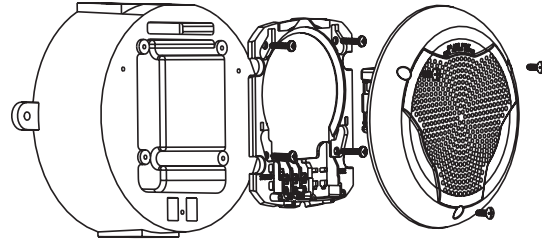
Ceiling-Mount Speaker Strobe with Plastic Weatherproof Back Box



Ceiling-Mount Speaker with Plastic Weatherproof Back Box



Ceiling-Mount Speaker Strobe with Metal Weatherproof Back Box



Ceiling-Mount Speaker with Metal Weatherproof Back Box

## Ordering Information for SpectrAlert® Advance Outdoor Speakers and Speaker Strobes

| Ceiling Mount    |     |   |
|------------------|-----|---|
| White            | Red | Description   |
| SPCWK            | —   | Outdoor Speaker (includes plastic weatherproof back box)  |
| SPSCWK           | —   | Outdoor Speaker Strobe, Standard cd, (includes plastic weatherproof back box)                                   |
| SPSCWHK          | —   | Outdoor Speaker Strobe, High cd (includes plastic weatherproof back box)  |
| SPSCWHK-P        | —   | Outdoor Speaker Strobe, High cd, PLAIN; (includes plastic weatherproof back box)                                |
| SPSCWK-CLR-ALERT | —   | Outdoor Speaker Strobe, Selectable Candela, Clear Lens, ALERT Printed; (includes plastic weatherproof back box) |
| Accessories      |     |   |
| White            | Red | Description   |
| MWBBCW           | —   | Ceiling, Metal Weatherproof Back Box  |

### Notes:

"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. **When replacing standard outdoor units, both the device and back box must be replaced.**



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