



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

*SpectrAlert® Advance outdoor, selectable-output speaker strobes and dual-voltage evacuation speakers meet virtually any outdoor application requirement.*

### Features

- Plug-in design
- Electrical compatibility with legacy SpectrAlert products
- Shorting spring on mounting plate tests continuity before installation
- Rotary switch simplifies field selection of speaker voltage (25 and 70.7 Vrms) and power settings (¼, ½, 1 and 2 watts)
- Ceiling- and wall-mount application
- Universal mounting plate for wall- and ceiling-mount units
- Weatherproof per NEMA 4X, IP56
- Compatible with System Sensor synchronization protocol
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Field-selectable candela settings on wall and ceiling units

### Agency Listings



7550



7320-1653:201



10-08-E



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

**The SpectrAlert Advance series** 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.

SpectrAlert Advance outdoor speakers and speaker strobes can be used indoors or outdoors in wet or dry applications, and can provide reliable operation from  $-40^{\circ}\text{F}$  to  $151^{\circ}\text{F}$ . In addition, 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.

The entire SpectrAlert Advance line, including speakers, provides a plug-in design that reduces ground faults by enabling installers to pre-wire mounting plates and dress the wires before plugging in the speakers. To enable faster installation times, a shorting spring on the mounting plate provides instant feedback to ensure that wiring is properly connected. Furthermore, rotary switches simplify the selection of voltage and power settings. Both wall and ceiling speaker strobes include field-selectable candela settings that enable installers to quickly set each device to meet application requirements.

The speakers' weatherproof plastic back boxes (shipped with product) and metal back boxes (available separately) are designed to accommodate in-and-out wiring for daisy chaining outdoor devices. Plastic back boxes feature removable side flanges and improved resistance to saltwater corrosion. The screw-hole knock-outs located on the back of the back box eliminate the need to drill holes for screw-in mounting. Both weatherproof back boxes come with ¾-inch top and bottom conduit entries and ¾-inch knock-outs at the back. Included with each back box is a screw-in NPT plug with an O-ring gasket for a water tight seal.

# 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 4000 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 4000 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)
<b>Dimensions, Wall-Mount</b>	
<b>SPS Speaker Strobe</b>	6.0" L x 5.0" W x 4.7" D (including lens and speaker)
<b>SP Speaker</b>	6.0" L x 5.0" W x 2.9" D
<b>Dimensions, Ceiling-Mount</b>	
<b>SPS Speaker Strobe</b>	6.8" Dia. x 4.7" D (including lens and speaker)
<b>SP Speaker</b>	6.8" Dia. x 2.9" D
<b>Dimensions, Wall-Mount Weatherproof Back Box</b>	6.5" L x 5.5" H x 2.9" D
<b>Dimensions, Ceiling-Mount Weatherproof Back Box</b>	7.2" Dia. x 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 4000 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 Candela Range</b>	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
<b>High Candela Range</b>	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

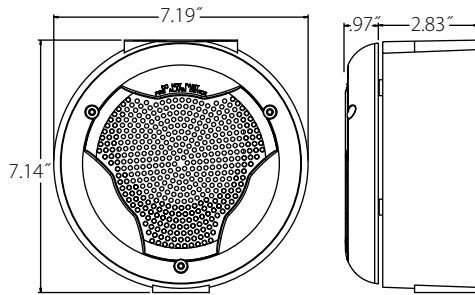
Sound Output				
UL Reverberant (dBA @ 10 ft.)	2W	1W	½ W	¼ W
<b>Outdoor Speaker</b>	90	87	84	81
<b>Outdoor Speaker/Strobe</b>	89	86	83	80

## Candela Derating

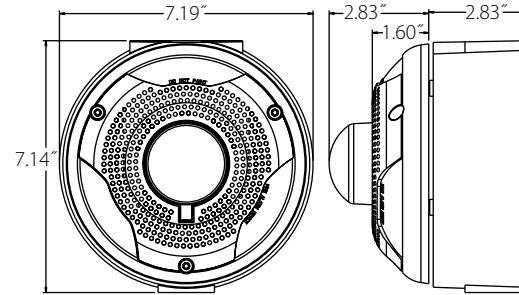
For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.

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

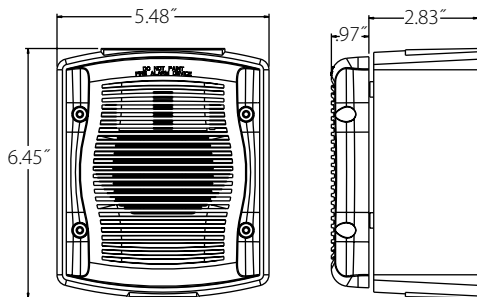
## Dimensions



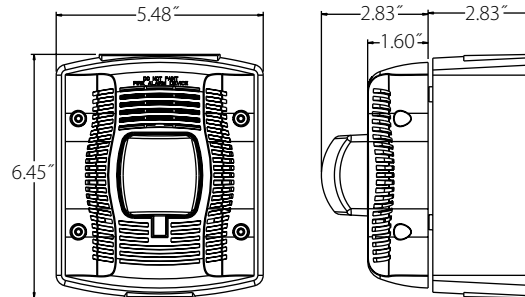
Ceiling-Mount Outdoor Speaker



Ceiling-Mount Outdoor Speaker Strobe

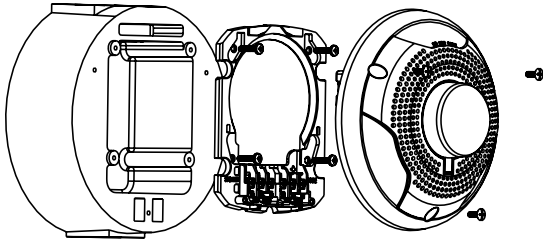


Wall-Mount Outdoor Speaker

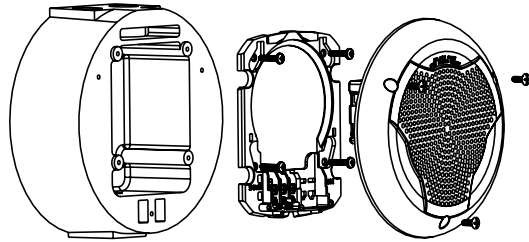


Wall-Mount Outdoor Speaker Strobe

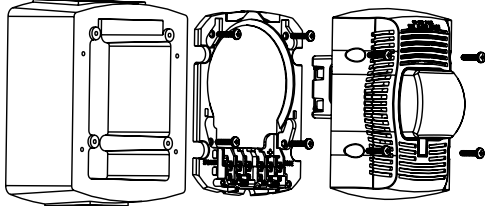
## Surface Mounting



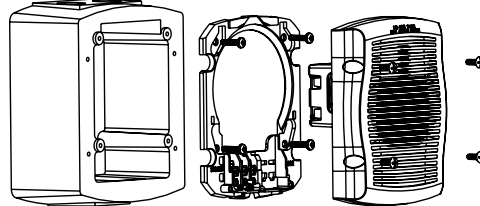
Ceiling-Mount Speaker Strobe with Plastic Weatherproof Back Box



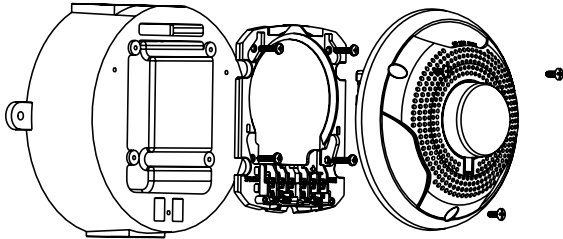
Ceiling-Mount Speaker with Plastic Weatherproof Back Box



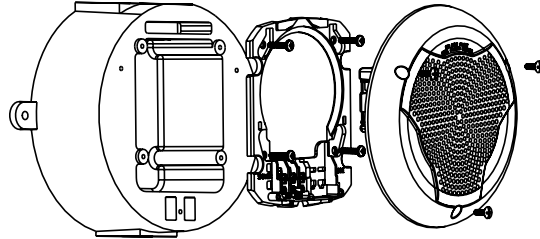
Wall-Mount Speaker Strobe with Plastic Weatherproof Back Box



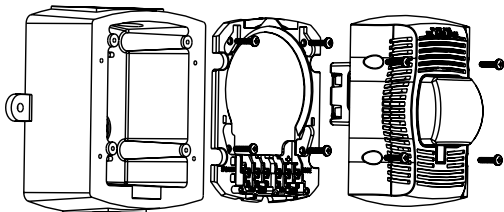
Wall-Mount Speaker with Plastic Weatherproof Back Box



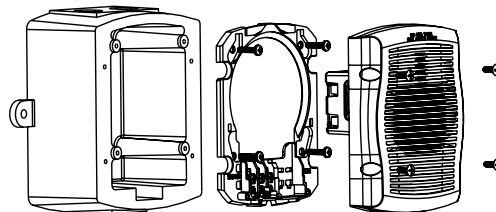
Ceiling-Mount Speaker Strobe with Metal Weatherproof Back Box



Ceiling-Mount Speaker with Metal Weatherproof Back Box



Wall-Mount Speaker Strobe with Metal Weatherproof Back Box



Wall-Mount Speaker with Metal Weatherproof Back Box

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

Wall Mount		
White	Red	Description
SPWK*	SPRK*	Outdoor Speaker (includes plastic weatherproof back box)
SPSWK*†	SPSRK*†	Outdoor Speaker Strobe, Selectable Candela (15, 15/75, 30, 75, 95, 110, 115) (includes plastic weatherproof back box)
—	SPSRHK	Outdoor Speaker Strobe, Selectable Candela (135,150,177,185) (Includes plastic weatherproof back box)
Ceiling Mount		
White	Red	Description
SPCWK	—	Outdoor Speaker (includes plastic outdoor back box)
SPSCWK	—	Outdoor Speaker Strobe, Selectable Candela (15, 15/75, 30, 75, 95, 110, 115) (includes plastic weatherproof back box)
SPSCWHK	—	Outdoor Speaker Strobe, Selectable Candela, High cd (135, 150, 177, 185) (includes plastic weatherproof back box)
Accessories		
White	Red	Description
MWBBW	MWBB	Wall, Metal Weatherproof Back Box
MWBBCW	—	Ceiling, Metal Weatherproof Back Box

### Notes:

\*Add "-R" to model number for weatherproof replacement device (no back box included), e.g., SPWK-R.

Especially for use with weatherproof outdoor flush mounting plates, WTP-SP and WTP-SPW

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



3825 Ohio Avenue • St. Charles, IL 60174  
Phone: 800-SENSOR2 • Fax: 630-377-6495

©2009 System Sensor.  
Product specifications subject to change without notice. Visit [systemsensor.com](http://systemsensor.com) for current product information, including the latest version of this data sheet.  
A05-0425-005 • 6/09 • #2189