System Sensor®

Indoor Selectable-Output Speaker Strobes and Dual Voltage Evacuation Speakers for Ceiling Applications

SpectrAlert® Advance selectable-output speaker strobes and dual-voltage evacuation speakers can reduce ground faults and enable faster installation.

SPECTRALERT ADVANCE
from System Sensor

Features

- Plug-in design and protective cover reduce ground faults

- Universal mounting plate with an onboard shorting spring tests wiring continuity before installation

- No extension ring required

- Field selectable candela settings:
  Standard: 15, 15/75, 30, 75, 95, 110, 115
  High: 135, 150, 177, 185

- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela

- Rotary switch simplifies field selection of speaker voltage (25 and 70.7 Vrms) and power settings (¼, ½, 1 and 2 watts)

- SP speakers offer high fidelity sound output

- SPV speakers offer high volume sound output

- Compatible with System Sensor synchronization protocol

- Electrical compatibility with existing SpectrAlert products

- Optional tamper resistant Torx head screw included

- Listed for ceiling or wall mounting

The SpectrAlert Advance Series of speakers and speaker strobes reduce costly ground faults using a plug-in design and universal mounting plate that allow the installer to pre-wire mounting plates, dress the wires, and confirm wiring continuity before plugging in the speakers. In addition, a protective plastic cover prevents nicked wires by covering exposed speaker components.

These devices also enable faster installations by providing instant feedback to ensure that wiring is properly connected, rotary switches to select voltage and power settings, and 11 field-selectable candela settings for both wall and ceiling speaker strobes.

The low total harmonic distortion of the SP speaker offers high fidelity sound output while the SPV speaker offers high volume sound output for use in high ambient noise applications.

SpectrAlert Advance makes installation easy

- Attach a universal mounting plate to a 4 × 4 × 2⅛ inch back box . Flush-mount applications do not require an extension ring.
- Connect the notification appliance circuit or speaker wiring to the terminals on the mounting plate.
- Attach the speaker or speaker strobe to the mounting plate by inserting the product tabs into the mounting plate grooves. Rotate the device into position to lock the product pins into the mounting plate terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.

Agency Listings

SIGNALING
UL LISTED
S4048

7320-1653:201

FM APPROVED

MEA approved
10-08-E

SpectrAlert Advance Speaker and Speaker Strobe Specifications

General

SpectrAlert Advance speaker and speaker strobes shall mount to a 4 × 4 × 2⅛-inch 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 nine 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°F and 120°F from a regulated DC, or full-wave rectified, unfiltered power supply. Speaker strobes shall have field-selectable candela settings including 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185.

Speaker

The speaker shall be a System Sensor SpectrAlert Advance model _____ dual-voltage transformer speaker capable of operating at 25.0 or 70.7 nominal Vrms. It should be listed to UL 1480 and shall be approved for fire protective service. The speaker shall have a frequency range of 400 to 4,000 Hz and shall have an operating temperature between 32°F and 120°F. The speaker shall have power taps and voltage that are selected by rotary switches.

Speaker Strobe combination

The speaker strobe shall be a System Sensor SpectrAlert Advance model _____ listed to UL1480 and UL 1971 and be approved for fire protective signaling systems. The speaker shall be capable of operating at 25.0 or 70.7 nominal Vrms selected via rotary switch, and shall have a frequency range of 400 to 4,000 Hz. The speaker shall have power taps that are selected by rotary switch. The strobe shall comply with the NFPA 72 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.

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. The module shall mount to a 4¹¹⁄16 × 4¹¹⁄16 × 2⅛-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 Specifications	
Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity Range	10 to 93% non-condensing
Dimensions, Ceiling-Mount	
SPS Speaker Strobe	6.8 in Dia. × 4.7 in D (including lens and speaker)
SPSV Speaker Strobe	6.8 in Dia. × 4.8 in D (including lens and speaker)
SP Speaker	6.8 in Dia. × 2.8 in D
SPV Speaker	6.8 in Dia. × 2.9 in D
Electrical/Operating Specifications	
Nominal Voltage (speakers)	25 Volts or 70.7 Volts (nominal)
Maximum Supervisory Voltage (speakers)	50 VDC
Strobe Flash Rate	1 flash per second
Nominal Voltage (strobes)	Regulated 12 V DC/FWR or regulated 24 DC/FWR
Operating Voltage Range (includes fire alarm panels with built in sync)	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
Operating Voltage with MDL Sync Module	9 to 17.5 V (12 V nominal) or 17 to 33 V (24 V nominal)
Frequency Range	400 to 4,000 Hz
Power	¼, ½, 1, 2 watts

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)					
		8 to 17.5 Volts		**16 to 33 Volts**	
	Candela	**DC**	**FWR**	**DC**	**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

Sound Output				
UL Reverberant (dBA @ 10 ft.)	**2W**	**1W**	**½ W**	**¼ W**
Ceiling-Mount SPC Series	86	83	80	77
Ceiling-Mount SPCV Series	90	87	84	81
Ceiling-Mount SPSC Series	85	82	79	76
Ceiling-Mount SPSCV Series	89	86	83	80

Dimensions

6.81″ .97″ 1.96″
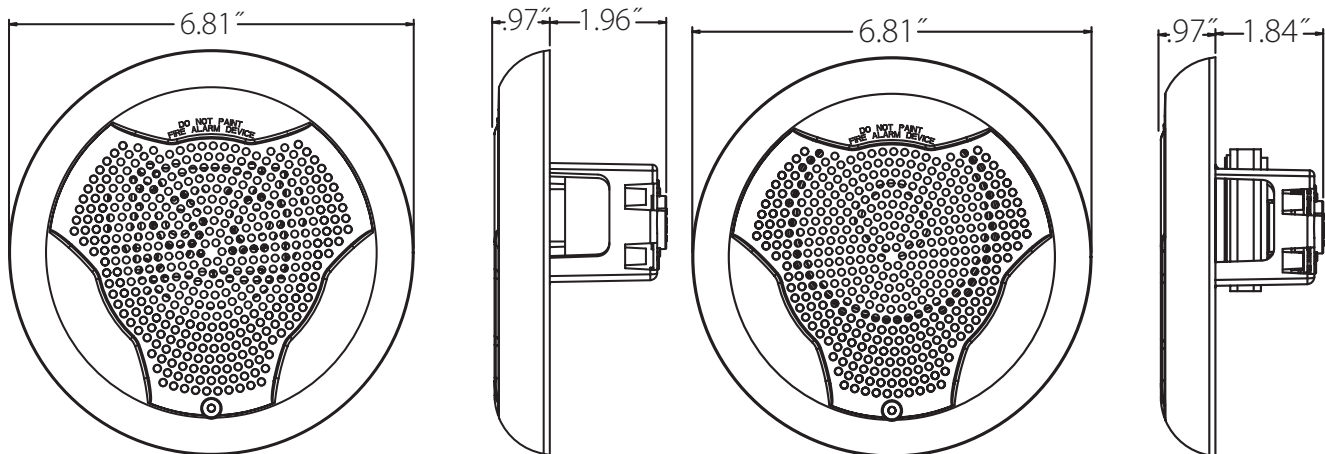
Ceiling-Mount SPV Speaker

6.81″ .97″ 1.84″

Ceiling-Mount SP Speaker

6.81″ 2.83″ 1.60″ 1.84″

Ceiling-Mount SPS Speaker Strobe

AVDS00701
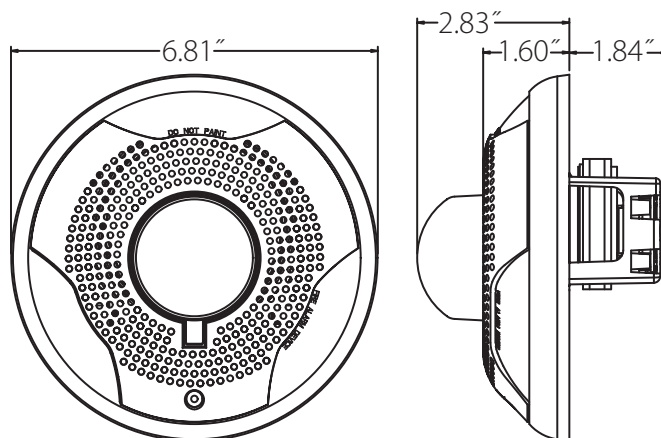
Surface Mounting
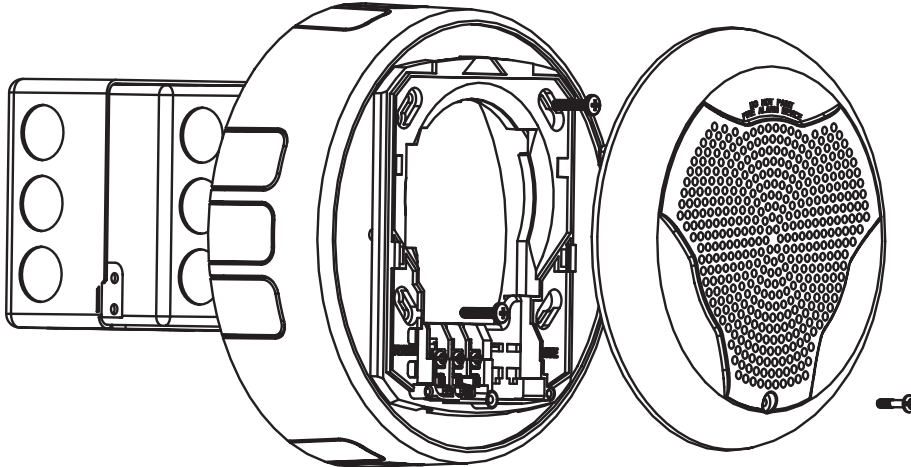
Ceiling-Mount Speaker with SPBBSCW Back Box

Ordering Information for SpectrAlert® Advance Speakers and Speaker Strobes

Ceiling Mount		
White	**Red**	**Description**
SPCW	SPCR	Speaker only
SPCWV	SPCRV	Speaker only, High dB
SPSCW*	SPSCR	Speaker Strobe, Standard cd
SPSCWH*	SPSCRH	Speaker Strobe, High cd
SPSCWV*	SPSCRV	Speaker Strobe, Standard cd, High dB
SPSCWVH	SPSCRVH	Speaker Strobe, High cd, High dB
SPSCW-CLR-ALERT	—	Speaker Strobe, Standard cd, Clear Lens
Accessories		
White	**Red**	**Description**
RFPW	RFP	7 in × 9.5 in Retrofit Plate
SPBBSCW	SPBBSC	Ceiling Mount Back Box Skirt
TRCW	TRC	Ceiling Mount Trim Ring

Notes:

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

‡ "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.