Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 07/29/13

Indoor Selectable Output Speaker Strobes and Dual Voltage Evacuation Speakers

The new SpectrAlert® Advance selectable output speaker strobes and dual evacuation speakers can reduce ground faults and allow faster installation.

Features

- Plug-in design
- Protective cover isolates speaker components, reduces ground faults
- Electrical compatibility with existing SpectrAlert products
- Field selectable candela settings on wall and ceiling units:
  Standard: 15, 15/75, 30, 75, 95, 110, 115
  High: 135, 150, 177, 185
- 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)
- Universal mounting plate for wall- and ceiling-mount units
- Compatible with System Sensor synchronization protocol
- SP speakers offer high fidelity sound output
- SPV speakers offer high volume sound output
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- No extension ring required
- Ceiling and wall mount application
- Optional tamper resistant Torx head screw included

Agency Listings

SIGNALING UL LISTED S4048 · 7320-1653:201 · FM APPROVED · MEA approved 10-08-E

The SpectrAlert Advance Series of speakers and speaker strobes is designed to reduce ground faults. The plug-in design allows the installer to pre-wire mounting plates and dress the wires before plugging in the speakers. The plastic cover prevents nicked wires by covering exposed speaker components.

This design also allows faster installations with instant feedback to ensure that wiring is properly connected, rotary switches to select voltage and power settings, and 11 field selectable candela settings for 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 are achievable without the need for 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.

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SpectrAlert Advance Speaker and Speaker Strobe Specifications

Architectural/Engineering Specifications

General

SpectrAlert Advance speaker and speaker strobes shall mount to a 4 × 4 × 2⅛-inch back box. A universal mounting plate shall be us wall products. The notification appliance circuit and amplifier wiring shall terminate at the universal mounting plate. Also, SpectrAler when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and s 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt rated notification appliance circuit outputs shall operate between ni rated notification appliance circuit outputs shall operate between 17 and 33 volts. Indoor SpectrAlert Advance products shall operat from a regulated DC, or full-wave rectified, unfiltered power supply. Speaker strobes shall have field-selectable candela settings includ 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 4000 Hz and shall have an operating temperature between 32°F and 120°F. 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. 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 4000 Hz. Speaker shall have power taps which are selected by rotary switch. The strobe shall comply with the NFPA72 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 1Hz. The module shall mount to a 4 11/16 × 4 11/16 × 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, Wall-Mount	
SPS Speaker Strobe	6.0 in L × 5.0 in W × 4.7 in D (including lens and speaker)
SPSV Speaker Strobe	6.0 in L × 5.0 in W × 4.9 in D (including lens and speaker)
SP Speaker	6.0 in L × 5.0 in W × 2.8 in D
SPSV Speaker	6.0 in L × 5.0 in W × 2.9 in D
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 VDC/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 33V (24 V nominal)
Operating Voltage with MDL Sync Module	9 to 17.5 V (12 V nominal) or 17 to 33V (24 V nominal)
Frequency Range	400 to 4000 Hz
Power	¼, ½, 1, 2 watts

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UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)					
		8 to 17.5 Volts		16 to 33 Volts	
	Candela	DC	FWR	DC	
Standard Candela Range	15	123	128	66	
	15/75	142	148	77	
	30	NA	NA	94	
	75	NA	NA	158	155
	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
Wall-Mount SP Series	86	83	80	77
Wall-Mount SPV Series	90	87	84	81
Ceiling-Mount SPC Series	86	83	80	77
Ceiling-Mount SPCV Series	90	87	84	81
Wall-Mount SPS Series	85	82	79	76
Wall-Mount SPSV Series	89	86	83	80
Ceiling-Mount SPSC Series	85	82	79	76
Ceiling-Mount SPSCV Series	89	86	83	80

Dimensions

Ceiling Mount SPV Speaker

Ceiling Mount SP Speaker

Ceiling Mount SPS Speaker Strobe

Wall Mount SP Speaker

Wall Mount SPS Speaker Strobe

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Surface Mounting

Ceiling Mount Speaker with SPBBSCW Back Box Skirt

Wall Mount Speaker Strobe with SPBBS Back Box Skirt

Ordering Information for SpectrAlert® Advance Speakers and Speaker Strobes

Wall Mount		
White	**Red**	**Description**
SPW	SPR	Speaker only
SPWV	SPRV	Speaker only, High dB
SPSW*	SPSR*	Speaker Strobe, Selectable Candela (15, 15/75, 30, 75, 95, 110, 115)
SPSWH*	SPSRH*	Speaker Strobe, Selectable Candela, High cd (135, 150, 177, 185)
SPSWV*	SPSRV*	Speaker Strobe, Selectable Candela (15, 15/75, 30, 75, 95, 110, 115), High dB
Ceiling Mount		
White	**Red**	**Description**
SPCW	SPCR	Speaker only
SPCWV	SPCRV	Speaker only, High dB
SPSCW*	SPSCR	Speaker Strobe, Selectable Candela (15, 15/75, 30, 50, 75, 95, 110, 115)
SPSCWH*	SPSCRH	Speaker Strobe, Selectable Candela, High cd (135, 150, 177, 185)
SPSCWV*	SPSCRV	Speaker Strobe, Selectable Candela (15, 15/75, 30, 75, 95, 110, 115), High dB
SPSCWVH*	SPSCRVH	Speaker Strobe, Selectable Candela, High dB, High cd (135, 150, 177, 185)
Accessories		
White	**Red**	**Description**
RFPW	RFP	7 in × 9.5 in Retrofit Plate
SPBBSCW	SPBBSC	Ceiling Mount Back Box Skirt
SPBBSW	SPBBS	Wall Mount Back Box Skirt
TRW	TR	Wall Mount Trim Ring
TRCW	TRC	Ceiling Mount Trim Ring

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

SYSTEM SENSOR®

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