

## by Honeywell

## Description

The SpectrAlert<sup>®</sup> Advance Series speakers are UL<sup>®</sup> 464 Compliant for the 520 Hz low frequency signal and is compatible with the E3 Series<sup>®</sup> Voice Evacuation panels that use the AM-50 Series amplifiers. These speakers and speaker strobes are designed for ease of installation and to reduce ground faults. The plug-in construction allows the installer to prewire mounting plates and dress the wires before plugging in the speakers. The plastic cover prevents nicked wires by covering exposed speaker components.

This unique design allows faster installations that provide instant feedback to ensure that the following conditions are met.

- Wiring is properly connected.
- Rotary switches are set to the selected voltage and power settings.
- 11 field selectable candela settings are used for wall and ceiling speaker strobes.

The low total harmonic distortion of the SP model speaker offers high fidelity sound output. The SP model speaker maintains a low frequency alert tone (that is compatible with the E3 Series Voice System), and is compliant with the low frequency requirements defined in the UL Standard 464, Section 24.3

#### SpectrAlert Advance makes installation easy

- 1. Attach a universal mounting plate to a 4" x 4" x 2-1/8" back box. Flush mount applications are achievable without the need for an extension ring.
- 2. Connect the notification appliance circuit or speaker wiring to the PEMS terminals on the mounting plate.
- 3. To attach the speaker or speaker strobe to the mounting plate, insert the product tabs into the mounting plate grooves.
- 4. 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**<sup>®</sup> Advance **Indoor Notification Appliances**

### 520 Hz Low Frequency, Selectable **Output Speaker Strobes and Dual Voltage Evacuation Speakers**



SpectrAlert Advance

#### Features

- Complies with UL® Standard 464 for 520 Hz Low Frequency.
- Offers a plug-in design.
- Protective cover isolates speaker components, reduces ground faults.
- Electrical compatibility with existing SpectrAlert products
- Field selectable candela settings on wall & 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 and power settings.
- Universal mounting plate for wall- & ceiling-mount units.
- Compatible with System Sensor synchronization protocol.
- SP model speakers offer high fidelity sound output.
- Automatic selection of 12 or 24 volt operation at 15 and 15/75 candela.
- No extension ring required.
- Includes a ceiling and a wall mount application.
- Optional tamper resistant Torx head screw included.



**GAMEWELL-FCI** 12 Clintonville Road, Northford, CT 06472-1610 USA • Tel: (203) 484-7161 • Fax: (203) 484-7118 Specifications are for information only, are not intended for installation purposes, and are subject to change without notice. No responsibility is assumed by Gamewell-FCI for their use. ©2014 by Honeywell International Inc. All rights reserved. www.gamewell-fci.com



#### Architectural/Engineering Specifications

#### General

SpectrAlert Advance speaker and speaker strobes shall mount to a 4" x 4" x 2-1/8" ( $10.16 \times 10.16 \times 5.5 \text{ cm}$ ) backbox. 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. 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  $V_{RMS}$ . It should be listed to UL<sup>®</sup> 1480 and shall be approved for fire protective service. The speaker shall have a frequency range of 400 to 4000Hz 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 UL 1480 and UL 1971 and be approved for fire protective signaling systems. Speaker shall be capable of operating at 25.0 or 70.7 nominal  $V_{RMS}$  selected via rotary switch, and shall have a frequency range of 400 to 4000Hz. Speaker shall have power taps which are selected by rotary switch. The strobe shall comply with the NFPA 72 requirements for visible signaling appliances, flashing at 1Hz 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" x 4-11/16" x 2-1/8" ( $10.4 \times 10.4 \times 5.5 \text{ cm}$ ) backbox. 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.

#### UL Maximum Strobe Current Draw (mA RMS)

	Candela	8 to 17.	5 Volts	16 to 3	3 Volts
		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
	135	NA	NA	228	207
High Candela Range	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

#### Table 1: UL Maximum Strobe Current Draw (mA RMS)

Sound Output				
UL Reverberant (dBA@10 ft)	2 W	1 W	1/2 W	1/4 W
Wall Mount SP Series	86	83	80	77
Ceiling Mount SPC Series	86	83	80	77
Wall Mount SPS Series	85	82	79	76
Ceiling Mount SPSC Series	85	82	79	76

Table 2: Sound Output

## **Specifications**

#### **Physical Specifications**

Operating Temperature:	32°F to 120°F (0°C to 49°C)
Humidity Range:	10 to 93% non-condensing
Wall-Mount Dimensions:	
SP Speaker:	6.0"L x 5.0"W x 2.8"D
SPS Speaker/Strobe:	6.0"L x 5.0"W x 4.7"D
<b>Ceiling-Mount Dimensions</b>	:
SPC Speaker:	6.8"Dia x 2.8"D
SPSC Speaker/Strobe:	6.8"Dia x 4.7"D

#### **Electrical/Operating Specifications:**

Nominal Voltage (speakers):	25 Volts or 70.7 Volts (nominal)
Maximum Supervisory	
Voltage (speakers):	50VDC
Strobe Flash Rate:	1 flash per second
Nominal Voltage (Strobes):	Regulated 12VDC/FWR or regulated 24VDC/FWR
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**Operating Voltage Range** (includes fire panels with built-in sync):

8 to 17.5V (12V nominal) or 16 to 33V (24 nominal)

**Operating Voltage with** MDL Sync Module:

**Frequency Range:** Power:

9 to 17.5V (12V nominal) or 17 to 33V (24V nominal)

400 to 4000Hz 1/4, 1/2, 1, 2 watts

## **Ordering Information**

Wall Mount				
Part Number	Description			
<b>NOTE1:</b> Add -P to model number for plain housing (no 'FIRE' marking on the cover), e.g. SPSW-P.				
<b>NOTE2:</b> (W) indicates white coloring; (R), red.				
SP(W)(R):	Speaker only (white/red)			
SPS(W)(R)*:	Speaker strobe, selectable candela (15, 15/75, 30, 75, 95, 100, 115)			
SPS(W)(R)H*:	Speaker strobe, selectable candela, high cd (135, 150, 177, 185)			
SPSR-P:	High fidelity speaker strobe (red)			
SPSRH-P:	Speaker strobe, high candela (red)			
SPSW-ALERT:	Speaker strobe, amber lens, ALERT, (white)			
SPSW-CLR-ALERT:	Speaker strobe, clear lens, ALERT, (white)			
SPSW-P:	Speaker strobe, plain, (red)			
SPSWH:	Speaker strobe, high candela, (white)			
SPSWH-P:	Speaker strobe, high candela, plain (red)			
<b>Ceiling Mount</b>				
Part Number	Description			
SPC(W)(R):	Speaker only			
SPSC(W*)(R):	Speaker strobe, selectable candela (15, 15/75, 30, 50, 75, 95, 110, 115)			
SPSC(W*)(R)H:	Speaker strobe, selectable candela, high cd (135, 150, 177, 185)			
SPSCW-CLR-ALERT:	•			
SPSCW-P:	Speaker strobe plain, (white)			
SPSCWH-P:	Speaker strobe, high candela, plain (white)			
Accessories				
Part Number	Description			
RFP:	Retrofit plate, red			
RFPW:	Retrofit plate, white			
SPBBSC:	Ceiling mount backbox skirt, red			
SPBBSCW:	Ceiling mount backbox skirt, white			
SPBBS:	Wall mount backbox skirt, red			

Wall mount backbox skirt, white Wall mount trim ring, red

Wall mount trim ring, white Ceiling mount trim ring, red

Ceiling mount trim ring, white

SPBBSW:

TR: TRW:

TRC:

TRCW: