



# Selectable-Output Low Frequency Sounder and Low Frequency Sounder Strobes for Wall Applications

*SpectrAlert® Advance audible visible notification products are rich with features guaranteed to cut installation times and maximize profits.*

## Features

- 520 Hz  $\pm$  10% square wave tone
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Field-selectable candela settings on wall units: 135, 150, 177, and 185
- Rotary switch for low frequency sounder tone
- Universal mounting plate for wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert devices
- Compatible with MDL3 sync module
- Listed for ceiling or wall mounting



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

**The SpectrAlert Advance series** offers the most versatile and easy-to-use line of low frequency sounder and low frequency sounder strobes in the industry. With white and red plastic housings, dual listed for wall and ceiling mounting, SpectrAlert Advance can meet virtually any application requirement.

The wall-mount low frequency sounder, and low frequency sounder strobes were designed to address the NFPA 72 sleeping space requirements that require a low frequency notification appliance that operates within frequency range of 520 Hz  $\pm$  10% and is of a square wave tone. Like the entire SpectrAlert Advance product line they include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation and protect devices from construction damage, SpectrAlert Advance utilizes a universal mounting plate with an onboard shorting spring, so installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to a suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for 520 Hz low frequency sounder tones.

## Agency Listings

SIGNALING



S4011 (sounder)  
S5512 (strobes)



3047563

**MEA**  
approved

MEA452-05-E



7135-1653:0223  
7125-1653:0224

# SpectrAlert Advance Specifications

## Architect/Engineer Specifications

### General

SpectrAlert Advance low frequency sounder and low frequency sounder strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box, or double-gang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 17/8-inch back box. A universal mounting plate shall be used for mounting products. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, SpectrAlert Advance products, 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 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor SpectrAlert Advance products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Low Frequency Sounder strobes shall have field-selectable candela settings including 135, 150, 177, and 185. The field selectable tones will sound within the frequency range of 520 Hz ±10% square wave tone and have a permanent marking on the housing that reads "low frequency sounder".

### Low Frequency Sounder

The low frequency sounder shall be a System Sensor SpectrAlert Advance Model \_\_\_\_\_ listed to UL 464 and shall be approved for fire protective service. The low frequency sounder and the Sync•Circuit™ MDL3 Module accessory, if used, shall be powered from a notification appliance circuit output and shall operate on a nominal 12 or 24 volts (includes fire alarm panels with built in sync). When used with the Sync•Circuit Module MDL3, 12-volt rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 16.5 to 33 volts. If the notification appliances are not UL 9th edition listed with the corresponding panel or power supply being used, then refer to the compatibility listing of the panel to determine maximum devices on a circuit. The low frequency sounder has an option to switch between temporal three pattern, non-temporal (continuous) pattern and coded supply within the frequency range of 520Hz ± 10% square wave tone. The low frequency sounder shall operate on a coded or non-coded power supply.

### Low Frequency Sounder Strobe Combination

The low frequency sounder strobe shall be a System Sensor SpectrAlert Advance Model \_\_\_\_\_ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The low frequency sounder strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act 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. The sounder shall have an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The low frequency sounder on low frequency sounder strobe models shall operate on a non-coded power supply. The field selectable tones will sound within the frequency range of 520 Hz ±10% square wave tone.

### Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert strobes at 1 Hz and low frequency sounder at temporal three. Also, while operating the strobes, the module shall silence the low frequency sounder on low frequency sounder strobe models over a single pair of wires. The module shall mount to a 4<sup>11</sup>/<sub>16</sub> × 4<sup>11</sup>/<sub>16</sub> × 2<sup>1</sup>/<sub>8</sub>-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/Electrical Specifications

<b>Standard Operating Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Humidity Range</b>	10 to 93% non-condensing
<b>Frequency Range</b>	520 Hz ± 10%
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage Low Frequency Sounder</b>	Regulated 12 DC/FWR or regulated 24 DC/FWR <sup>1</sup>
<b>Nominal Voltage Range Low Frequency Sounder Strobe</b>	Regulated 24 VDC/FWR <sup>1</sup>
<b>Operating Voltage Range</b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Operating Voltage Range MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
<b>Input Terminal Wire Gauge</b>	12 to 18 AWG
<b>Wall-Mount Dimensions (including lens)</b>	6.4 inches L x 4.7 inches W x 2.5 inches D (162 mm L x 119 mm W x 64 mm D)
<b>Sounder Dimensions</b>	5.6 inches L x 4.7 inches W x 1.3 inches D (142 mm L x 119 mm W x 33 mm D)
<b>Low Frequency Sounder/Strobe with Surface Mount Back Box Dimensions (SBBR, SBBW)</b>	6.4 inches L x 4.7 inches W x 4.3 inches D (162 mm L x 120 mm W x 108 mm D)
<b>Low Frequency Sounder with Surface Mount Back Box Dimensions (SBBR, SBBW)</b>	5.7 inches L x 4.8 inches W x 3 inches D (145 mm L x 120 mm W x 76 mm D)

### Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

# UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)					
	Candela	8–17.5 Volts		16–33 Volts	
		DC	FWR	DC	FWR
High Candela Range	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

UL Max. Low Frequency Current Draw (mA RMS)					
Sound Pattern	dB	8–17.5 Volts		16–33 Volts	
		DC	FWR	DC	FWR
Temporal 3	High	191	262	138	166
Continuous	High	292	384	138	208
Coded	High	292	388	153	205

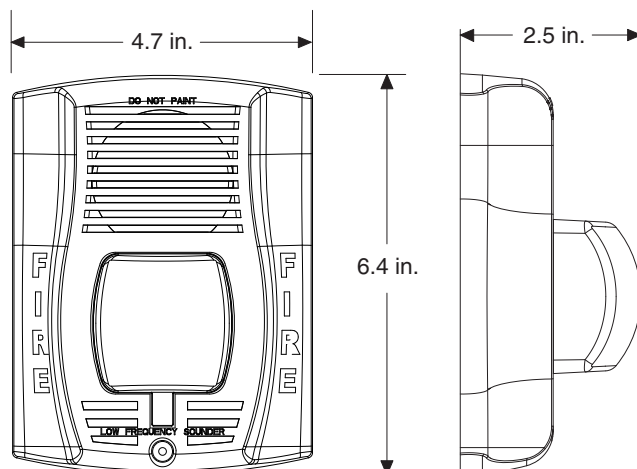
UL Max. Current Draw (mA RMS), 2-Wire Low Frequency Sounder Strobe, High Candela Range (135–185 cd)									
DC Input	16–33 Volts				FWR Input	16–33 Volts			
	135	150	177	185		135	150	177	185
Temporal 3	277	292	325	344	Temporal 3	296	309	343	351
Continuous	337	362	387	417	Continuous	393	395	432	433

# Low Frequency Sounder Tones and Sound Output Data

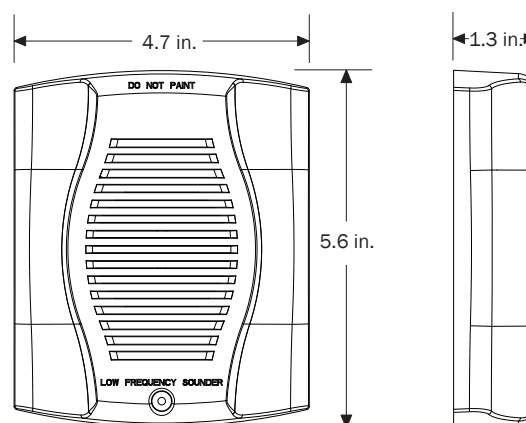
Low Frequency Sounder and Low Frequency Sounder Strobe Output (dBA)									
Switch Position	Sound Pattern	8–17.5 Volts		16–33 Volts		24-Volt Nominal			
						Reverberant		Anechoic	
		DC	FWR	DC	FWR	DC	FWR	DC	FWR
1	Temporal 3	76	76	76	76	76	76	86	86
2	Continuous	80	80	80	80	80	80	90	90
3†	Coded	80	80	80	80	80	80	90	90

† Sounder ratings provided are for continuous voltage as provided by the NAC

## SpectrAlert Advance Dimensions



Wall-mount low frequency sounder strobes



Wall-mount low frequency sounder

## SpectrAlert Advance Ordering Information

Model	Description
<b>Wall Low Frequency Sounder Strobes</b>	
P2RH-LF	2-Wire Low Frequency Sounder Strobe, High cd, Red
P2WH-LF	2-Wire Low Frequency Sounder Strobe, High cd, White
<b>Low Frequency Sounders</b>	
HR-LF	Low Frequency Sounder, Red
HW-LF	Low Frequency Sounder, White
<b>Accessories</b>	
SBBR	Surface Mount Back Box, Wall, Red
SBBW	Surface Mount Back Box, Wall, White
TR-HS	Trim Ring, Wall, Red

### Notes:

"High cd" refers to strobes that include 135, 150, 177, and 185 candela settings.



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