SpectrAlert® Advance™
Selectable-Output Low Frequency Sounders & Sounder Strobes

General
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 ± 10% and is of a square wave tone. Like the entire SpectrAlert Advance product line, all-mount low frequency sounder, and low frequency sounder strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the black box, making installations fast and fool-proof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation and protect devices from construction damage, SpectrAlert Advance use 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 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 low frequency sounder tones.

Features
- 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 (520 Hz ± 10% square wave tone).
- Universal mounting plate for wall units.
- Mounting plate shorting spring checks wiring continuity before device installation.
- Electrically compatible with legacy SpectrAlert Advance devices.
- Compatible with MDL3 sync module.
- Listed for ceiling or wall mounting.

Architect/Engineer Specifications

GENERAL
SpectrAlert Advance low frequency sounder and low frequency sounder strobes shall mount to a standard 4x4x1-1/2" back box, 4-inch octagon back box, or double-gang box. Two-wire products shall also mount to a single-gang 2x4x1-7/8" 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.

LOW FREQUENCY SOUNDER
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™ 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. 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 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.

**Synchronization Module**
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 1-11/16x4-11/16x2-1/8-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**
**Standard Operating Temperature:** 32°F to 120°F (0°C to 49°C).
**Humidity Range:** 10 - 93% non-condensing.
**Strobe Flash Rate:** 1 flash per second.
**Nominal Voltage Low Frequency Sounder:** Regulated 12 DC/FWR or regulated 24 DC/FWR.
**Nominal Voltage Range Low Frequency Sounder Strobe:** Regulated 24 VDC/FWR
**Operating Voltage Range:** 8 to 16.5 V (12V nominal) or 16 to 33 V (24 V nominal).
**Operating Voltage Range MDL3 Sync Module:** 8.5 to 17.5V (12V nominal) or 16.5 to 33 V (24 V nominal).
**Input Terminal Wire Gauge:** 12 to 18 AWG.
**Wall-Mount Dimensions (including lens):** 6.4 inches L x 4.7 inches W x 2.5 inches D (162mm L x 119mm W x 64mm D).
**Sounder Dimensions:** 5.6 inches L x 4.7 inches W x 1.3 inches D (142mm L x 119mm W x 33mm D).
**Low Frequency Sounder/Strobe with Surface Mount Back Box Dimensions (SBBR, SBBW):** 6.4 inches L x 4.7 inches W x 3 inches D (145mm L x 120mm X x 76mm D).

**UL Current Draw**

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

<table>
<thead>
<tr>
<th></th>
<th>8-17.5 Volts</th>
<th>16-33 Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candela DC</td>
<td>135 N/A</td>
<td>228 207</td>
</tr>
<tr>
<td>Candela FWR</td>
<td>150 N/A</td>
<td>246 220</td>
</tr>
<tr>
<td>High Candela Range</td>
<td>175 N/A</td>
<td>281 251</td>
</tr>
<tr>
<td></td>
<td>185 N/A</td>
<td>286 258</td>
</tr>
</tbody>
</table>

**UL Maximum Low Frequency Current Dra (mA RMS)**

<table>
<thead>
<tr>
<th>Sound Pattern</th>
<th>8-17.5 Volts</th>
<th>16-33 Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporal High</td>
<td>191 262</td>
<td>238 266</td>
</tr>
<tr>
<td>Continuous High</td>
<td>292 384</td>
<td>238 208</td>
</tr>
<tr>
<td>Coded High</td>
<td>292 388</td>
<td>153 205</td>
</tr>
</tbody>
</table>

**UL Maximum Current Draw (mA RMS), 2-Wire Low Frequency Sounder Strobe, High Candela Range (135 - 185 CD)**

<table>
<thead>
<tr>
<th>16-33 Volts</th>
<th>16-33 Volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Input</td>
<td>135 150 177 185</td>
</tr>
<tr>
<td>FWR Input</td>
<td>135 150 177 185</td>
</tr>
<tr>
<td>Temporal</td>
<td>277 292 325 344</td>
</tr>
<tr>
<td></td>
<td>296 309 343 351</td>
</tr>
</tbody>
</table>
Low Frequency Sounder Tones and Sound Output Data

**LOW FREQUENCY SOUNDER AND LOW FREQUENCY SOUNDER STROBE OUTPUT (DBA)**

<table>
<thead>
<tr>
<th>Switch Position</th>
<th>Sound Pattern</th>
<th>DC</th>
<th>FWR</th>
<th>DC</th>
<th>FWR</th>
<th>DC</th>
<th>FWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Temporal</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>76</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>2</td>
<td>Continuous</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>Coded</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>

* Sounder ratings provided are for continuous voltage as provided by the NAC.

### Agency Listings and Approvals

These listings and approvals below apply to the SpectrAlert Advance series. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be process. Consult factory for latest listing status.

- **UL Listed:** S4011, S5512
- **CSFM:** 7135-1653:0223 (HR-LF, HW-LF), 7125-1653:0224 (P2HR-LF, P2WH-LF)
- **FM:** 3047563

### Ordering Information

- **P2RH-LF:** 2-wire wall low frequency sounder strobe, High cd, red.
- **P2WH-LF:** 2-wire wall low frequency sounder strobe, High cd, white.
- **HR-LF:** low frequency sounder, red.
- **HW-LF:** low frequency sounder, white.
- **BBS-2:** back box skirt, wall red.
- **BBSW-2:** back box skirt, wall, white.
- **SBBR:** surface mount back box, wall, red.
- **SBBW:** surface mount back box, wall, white.
- **TR-HS:** trim ring, wall, red.
- **TRW-HS:** trim ring, wall white.

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