The Genesis Ceiling Speaker-Strobe is a fire alarm notification appliance designed for indoor ceilings and walls. See Table 1 for a list of model numbers.

The speaker-strobe includes field configurable switches for selecting both the desired candela output and wattage tap. These settings are locked in place and remain visible after final installation.

This strobe features an enhanced synchronization circuit to comply with the latest requirements of UL 1971 Signaling Devices for the Hearing Impaired. Synchronized operation requires a separately installed synchronization control module. See Table 2 for a list of compatible synchronization modules.

Install this device in accordance with applicable requirements in the latest editions of the NFPA codes and standards and Canadian Electrical Code, Part 1, Section 32, CAN/ULC-S524-2001, Standard for the Installation of Fire Alarm Systems, and in accordance with the local authorities having jurisdiction.

### Table 1: Models

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaker-strobe, 25 Vrms, 15 to 95 multi-cd, white</td>
<td>ADTGC-S2VM MGC-S2VM EGC-S2VM XLSGC-S2VM GC-S2VM ZGC-S2VM GC-S2VM-LG</td>
</tr>
<tr>
<td>Speaker-strobe, 25 Vrms, 15 to 95 multi-cd, white, with FIRE marking</td>
<td>ADTGC-F2VM MGC-F2VM EGC-F2VM XLSGF-F2VM GC-F2VM ZGCF-F2VM GC-F2VM-LG</td>
</tr>
<tr>
<td>Speaker-strobe, 70 Vrms, 15 to 95 multi-cd, white</td>
<td>ADTGC-S7VM MGC-S7VM EGC-S7VM XLSGC-S7VM GC-S7VM ZGC-S7VM GC-S7VM-LG</td>
</tr>
<tr>
<td>Speaker-strobe, 70 Vrms, 15 to 95 multi-cd, white, with FIRE marking</td>
<td>ADTGC-F7VM MGC-F7VM EGC-F7VM XLSGF-F7VM GC-F7VM ZGCF-F7VM GC-F7VM-LG</td>
</tr>
<tr>
<td>Speaker-strobe, 70 Vrms, 15 to 95 multi-cd, red, with FIRE marking</td>
<td>EGCF-S7VM MGCFR-S7VM EGC-F7VM XLSGF-F7VM GC-F7VM ZGCF-F7VM</td>
</tr>
</tbody>
</table>

### Table 2: Compatible synchronization modules

<table>
<thead>
<tr>
<th>Description</th>
<th>Model number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Sync Output Module</td>
<td>SIGA-CC1S SIGA-MCC1S</td>
</tr>
<tr>
<td>Genesis Signal Master - Remote Mount</td>
<td>SIA-CC1S SIA-MCC1S</td>
</tr>
</tbody>
</table>

### Specifications

#### Operating voltage

- Speaker: 25 Vrms (model S2) or 70 Vrms (model S7)
- Strobe: Regulated 16 to 33 Vdc, 16 to 33 Vfwr

This device was tested to the regulated 24 Vdc/fwr operating voltage limits of 16 V and 33 V. Do not apply 80% and 110% of these values for system operation.

#### Supervisory voltage

30 V maximum

#### Sound level output

See Table 3

#### Speaker response

400 to 4,000 Hz

#### Strobe operating current

See Table 4

#### Light output

Selectable at 15, 30, 75, and 95 cd

#### Synchronization

Meets UL 1971 requirements. Maximum allowed resistance between any two devices is 20 \( \Omega \). Refer to specifications for the synchronization control module, this strobe, and the control panel to determine allowed wire resistance.

#### Wire size

12 to 18 AWG (2.50 to 0.75 sq mm)

#### Compatible electrical boxes

North American 4 in square electrical box, 2-1/8 in deep (UL/ULC listed flush mounted with no extension ring)

#### Operating environment

- Temperature: 32 to 120 °F (0 to 49 °C)
- Humidity: 0 to 93% RH, noncondensing at 90 °F (32 °C)

Agency listings: Meets ULC-S541, year 2004 UL requirements for standards UL 1638 and UL 1971 (see Figure 1), and complies with UL 1480 fifth edition. Meets BS EN 60065:2002. Nameplate marking is located on the inside surface of the device.

### Table 3: Sound level output (dBA)

<table>
<thead>
<tr>
<th>Wattage</th>
<th>25V (UL)</th>
<th>25V (ULC)</th>
<th>70V (UL)</th>
<th>70V (ULC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 W</td>
<td>80</td>
<td>78</td>
<td>80</td>
<td>81</td>
</tr>
<tr>
<td>1/2 W</td>
<td>84</td>
<td>81</td>
<td>84</td>
<td>81</td>
</tr>
<tr>
<td>1 W</td>
<td>87</td>
<td>87</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2 W (UL)</td>
<td>90</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 W (ULC)</td>
<td>90</td>
<td>90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Sound level output (dBA)

<table>
<thead>
<tr>
<th>Wattage</th>
<th>25V (UL)</th>
<th>25V (ULC)</th>
<th>70V (UL)</th>
<th>70V (ULC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>dBA = Decibels, A-weighted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UL 1480: Sound level output at 10 ft (3.05 m) measured in a reverberant room using 400 to 4,000 Hz band limited pink noise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ULC-SS41: Meets or exceeds 85 dBA in an anechoic chamber at 10 ft (3.05 m).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directional characteristics: Within 6 dB of on-axis sound level when measured 90° off-axis (horizontal).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Strobe operating current in RMS (A)

<table>
<thead>
<tr>
<th>Candela</th>
<th>15 cd</th>
<th>30 cd</th>
<th>75 cd</th>
<th>95 cd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vdc</td>
<td>0.109</td>
<td>0.151</td>
<td>0.281</td>
<td>0.318</td>
</tr>
<tr>
<td>Vfwr</td>
<td>0.131</td>
<td>0.194</td>
<td>0.379</td>
<td>0.437</td>
</tr>
</tbody>
</table>

Vdc = Volts direct current, regulated and filtered
Vfwr = Volts full wave rectified

Operating currents shown above were measured by UL at 16 Vdc and 16 Vfwr.

Installation instructions

Warning: To reduce the risk of shock, disconnect all power and allow 10 minutes for stored energy to dissipate before handling.

Caution: Electrical supervision requires the wire run to be broken at each terminal. Do not loop the signaling circuit field wires around the terminals.

Note: When installed, these devices are not centered on the electrical box. Make sure boxes are mounted to compensate for this difference. See "Mounting template".

To install the speaker-strobe:

1. Open the cover by depressing the tabs on either side of the unit with a small screwdriver. Hinge the cover down, to access the mounting screws and selectable candela and wattage switches. The cover is also detachable for installation convenience.
2. If temporal strobe (private mode) operation is desired, cut jumper JP1. See Figure 2.
3. Connect the speaker and strobe terminals to the signal circuit field wiring. You must observe polarity for the unit to function properly. See Figure 3.
4. Slide the wattage switch to the desired wattage tap (2 W, 1 W, 1/2 W, or 1/4 W) by aligning it with the indicator below the switch. See Figure 4.
5. Slide the candela switch to the desired candela output (15, 30, 75, or 95 cd) by aligning it with the indicator below the switch. See Figure 4.
6. Mount the unit onto a compatible electrical box. See Figure 5.
7. Reattach and/or hinge the cover up to latch into place.
8. Test the unit for proper operation.

To change the strobe signal output from 1 fps (public mode) to temporal (private mode) cut jumper JP1.

Figure 1: UL 1971 minimum light output (% of rating vs. angle)

Figure 2: Strobe setting

Note: If the strobe is set to temporal (private mode), this device is no longer UL 1971 listed and FM Approved but is UL 1638 listed.

Figure 3: Wiring diagram
**Maintenance**

This unit is not serviceable or repairable. Should the unit fail to operate, contact the supplier for replacement.

Perform a visual inspection and an operational test twice a year or as directed by the local authority having jurisdiction.
Mounting template

To center the speaker-strobe:

1. Position the template to the center of the ceiling tile.
2. Orient the strobe to the desired visual position.
3. Mark the location for the electrical box.

Cut location for electrical box

4 1/16" (10.316 cm)

Center of ceiling tile or speaker-strobe