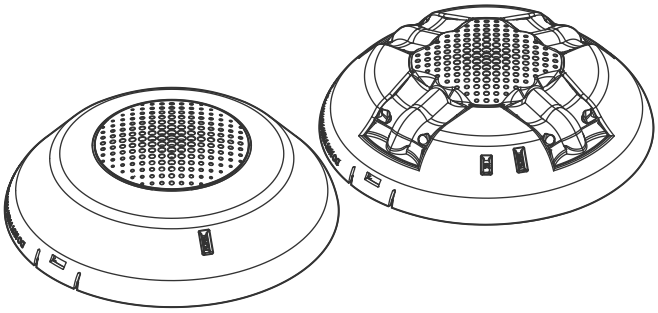
Genesis LED EGCS Series Ceiling Speaker/Strobe Installation Sheet



Description

Genesis LED EGCS Series speakers and speaker-strobes are ceiling- or wall-mounted fire alarm notification appliances designed for indoor dry applications with 25 or 70 VRMS distributed speaker systems. See the tables below for a list of models.

Table 1: Speakers

Catalog number	Description
EGCSRF	Speaker, ceiling, red, FIRE
EGCSRN	Speaker, ceiling, red, no marking
EGCSWA	Speaker, ceiling, white, ALERT
EGCSWF	Speaker, ceiling, white, FIRE
EGCSWN	Speaker, ceiling, white, no marking

Table 2: Speaker-strobes

Catalog number	Description
EGCSVRF	Speaker-strobe, ceiling, red, FIRE
EGCSVRN	Speaker-strobe, ceiling, red, no marking
EGCSVWA	Speaker-strobe, ceiling, white, ALERT
EGCSVWF	Speaker-strobe, ceiling, white, FIRE
EGCSVWN	Speaker-strobe, ceiling, white, no marking

Genesis LED EGCS Series notification appliances feature:

- Field-configurable speaker and strobe outputs. See Figure 2 and Figure 3.
- Enhanced synchronization circuitry to comply with the latest requirements of UL 1638 and CAN/ULC-S526.
- Input wiring test points available from the front of the appliance when the cover is removed.
- Speakers are approved for low frequency sounder applications when used with compatible tone file and systems.

Note: Synchronized operation requires a separately installed synchronization device. See the control unit or remote booster/auxiliary power supply compatibility list for compatible synchronization devices.

Configuration

Caution: Equipment damage hazard. Using excessive force when removing the appliance cover may damage the cover and prevent it from latching in place.

To configure the notification appliance:

1. Remove the appliance cover. See Figure 1.

   Insert a small, flat-bladed screwdriver into the slot at the bottom of the appliance.

   Gently pull up on the screwdriver to pry the bottom of the appliance cover down and away from the appliance.

   Lift the bottom of the cover out and over the top of the appliance.

2. Select the speaker's voltage and power setting. See Figure 2.

   Set the voltage for 25 or 70 VRMS. Set the power for 1/4, 1/2, 1, or 2 watts.

3. Select the strobe's output for 15, 30, 75, or 115 candelas. See Figure 3.

4. Replace the appliance cover. Press until it snaps firmly into place.

Figure 1: Removing and replacing the cover

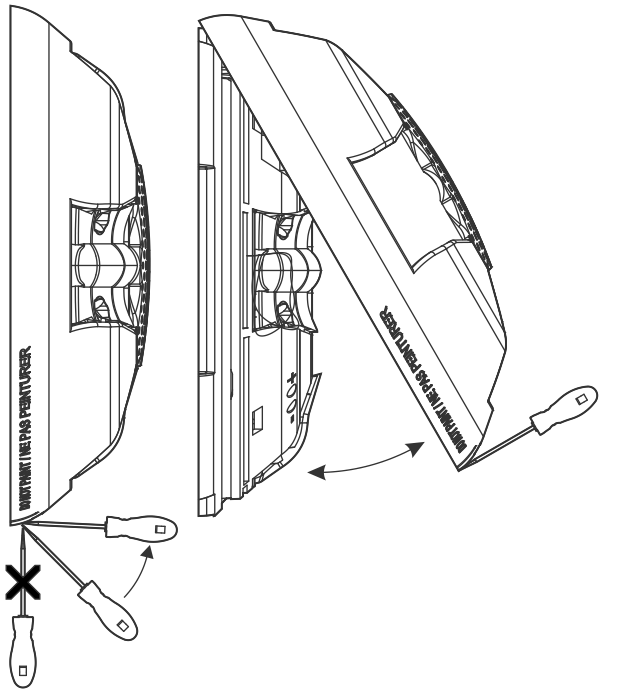


Figure 2: Speaker switch settings

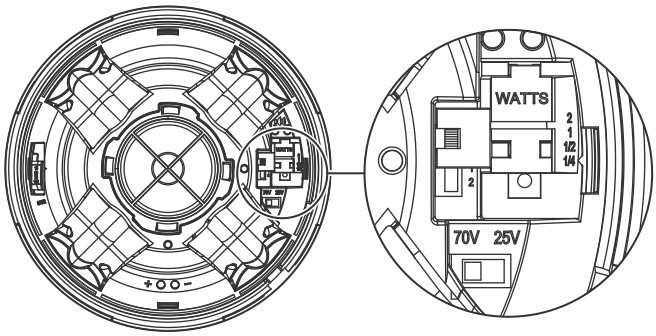
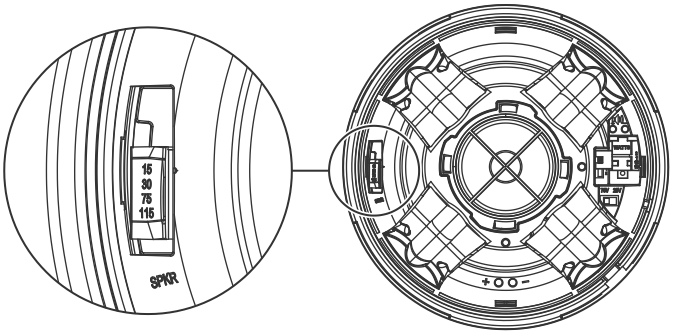


Figure 3: Strobe switch settings



Installation

Install and wire this device in accordance with applicable national and local codes, ordinances, and regulations.

Caution: Electrical supervision requires that you break the wire run at each terminal. Do not loop the notification circuit field wires around the terminals.

To install the appliance:

1. Attach the wiring plate and, if used, the trim plate to the electrical box. See Figure 4. Do not overtighten the screws.

   The trim plate is ordered separately.

2. Connect the field wiring. Observe signal polarity for the appliance to operate properly. See Figure 5.

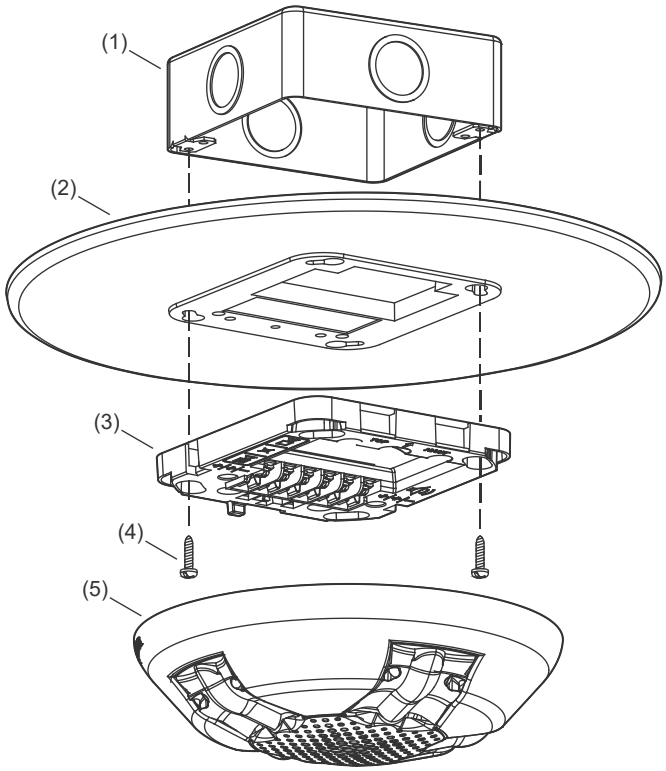
3. Remove the shorting clip (Figure 5, item 5). Retain for future use.

4. Plug the appliance into the wiring plate by setting the appliance on the top of the wiring plate, and then snapping the bottom into place. See Figure 6.

   To remove the appliance, press the spring clip on the bottom, and then lift the appliance away from the wiring plate. See Figure 6.

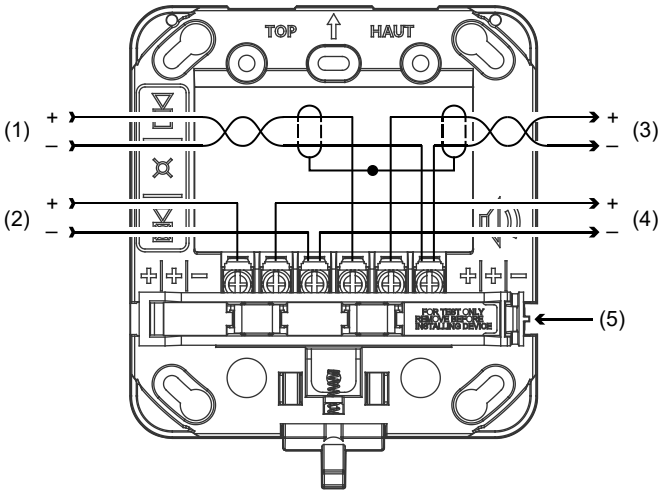
5. Test the unit for proper operation.

Figure 4: Mounting diagram



(1) Electrical box
(2) Trim plate (optional)
(3) Wiring plate (required)
(4) Machine screw (2X, supplied with wiring plate)
(5) Notification appliance

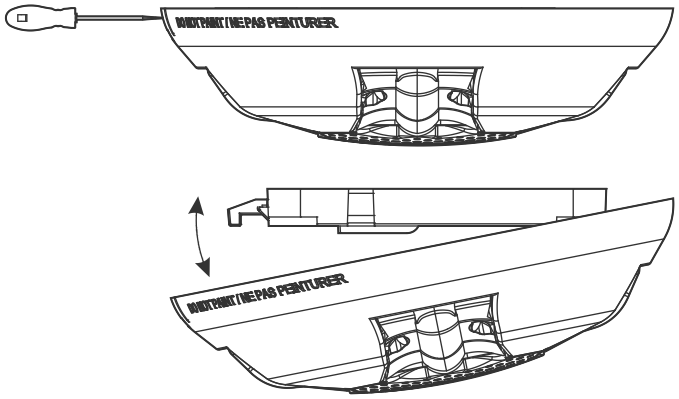
Figure 5: Wiring



(1) Speaker circuit in (shields, if used, must be continuous and free from earth ground except at the signal source)
(2) Strobe circuit in (polarity shown in the active condition)
(3) Speaker circuit out
(4) Strobe circuit out
(5) Shorting clip

Note: Do not remove the shorting clip (Figure 5, item 5) until you are ready to install the notification appliance.

Figure 6: Removing and replacing the appliance



Maintenance and testing

Caution: Equipment damage hazard. To maintain the required agency listings, do not change factory-applied finishes.

This unit is not serviceable or repairable. If the unit fails to operate, contact the supplier for a replacement.

Perform a visual and operational inspection in accordance with applicable codes and standards or as directed by the local authority having jurisdiction.

Input wiring test points are available on the front of the appliance when the cover is removed. The test points allow easy measurement of wiring voltages without the need to remove the appliance from the wall. See Figure 7 and Figure 8.

Figure 7: Speaker circuit test points

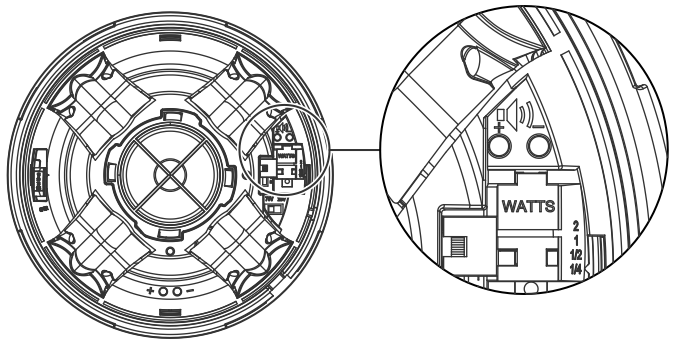
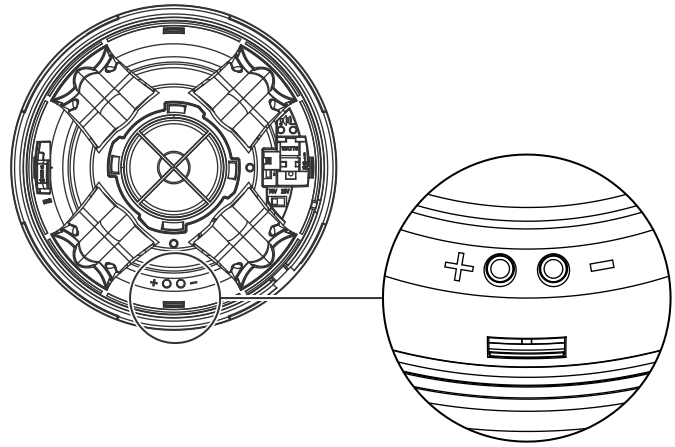


Figure 8: Strobe circuit test points



Note: Marking indicates signal polarity when the circuit is active.

Specifications

Operating voltage	
Strobe	16 to 33 VDC, 16 to 33 VFWR
Speaker	25 VRMS, 70 VRMS (field configurable)
Operating current	
16 to 33 VDC	35 mA
16 to 33 VFWR	45 mA
Supervisory voltage	30 V max.
Sound output	See Table 3 and Table 4
Speaker response	400 to 4,000 Hz
Strobe flash rate	1 fps (flash per second) approx.
Light output	15, 30, 75, or 115 cd
Light distribution	See Figure 9.
Synchronization	20 Ω max. between any two devices. To determine allowed wire resistance, refer to these specifications, and the specifications for the synchronized signal source.
Dimensions (Ø × D)	6.8 × 1.82 in. (17.27 × 4.62 cm) See Figure 10
Center offset	0 in. (0 cm)
Compatible electrical boxes	2-gang, 4-inch square, 4-inch octagon with GOCT adapter plate
Wire size	12 to 18 AWG (0.75 to 2.50 mm²)
Screw torque	
Mounting screws	10 lbf-in (1.2 N-m) max.
Terminal screws	12 lbf-in (1.4 N-m) max.
Trim plates	EGCTR, EGCTW
Replacement covers	See Table 5 and Table 6
Operating environment	
Temperature	32 to 122°F (0 to 50°C)
Relative humidity	0 to 93% noncondensing
Storage temperature	-40 to 158°F (-40 to 70°C)

Table 3: Sound level (dBA) at 3.05 m (10 ft.)

Voltage setting	Wattage setting	Reverberant (UL 1480)	Anechoic (CAN/ULC-S541)
25V / 70 V	1/4W	78	77
	1/2W	81	80
	1W	84	83
	2W	87	86

Table 4: Sound pattern (ULC)

Axis	Angle	Change in output
Horizontal	120° and 60°	−3 dBA
	140° and 40°	−6 dBA
Vertical	120° and 60°	−3 dBA
	140° and 40°	−6 dBA

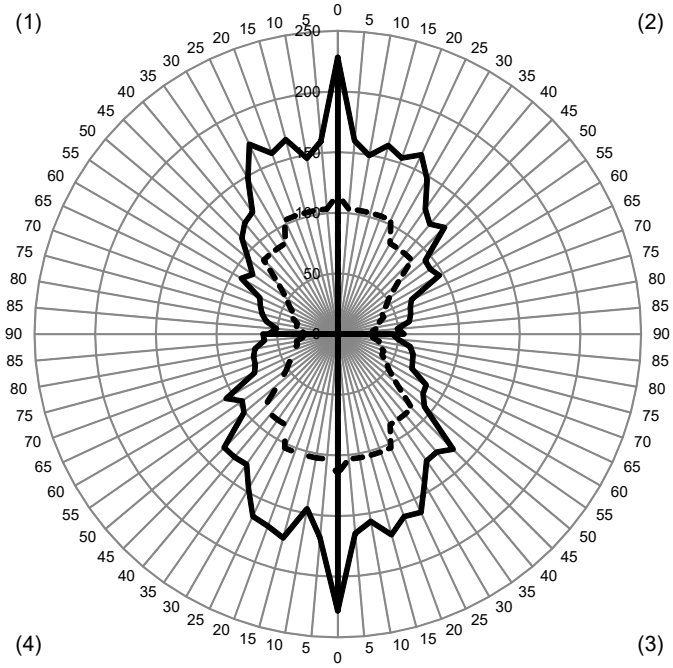
Table 5: Speaker replacement covers

Number	Description
EGCSRF-CVR	Cover, ceiling speaker, red, FIRE
EGCSRN-CVR	Cover, ceiling speaker, red, no marking
EGCSWA-CVR	Cover, ceiling speaker, white, ALERT
EGCSWF-CVR	Cover, ceiling speaker, white, FIRE
EGCSWN-CVR	Cover, ceiling speaker, white, no marking

Table 6: Speaker-strobe replacement covers

Model	Description
EGCSVRF-CVR	Cover, ceiling speaker-strobe, red, FIRE
EGCSVRN-CVR	Cover, ceiling speaker-strobe, red, no marking
EGCSVWA-CVR	Cover, ceiling speaker-strobe, white, ALERT
EGCSVWF-CVR	Cover, ceiling speaker-strobe, white, FIRE
EGCSVWN-CVR	Cover, ceiling speaker-strobe, white, no marking

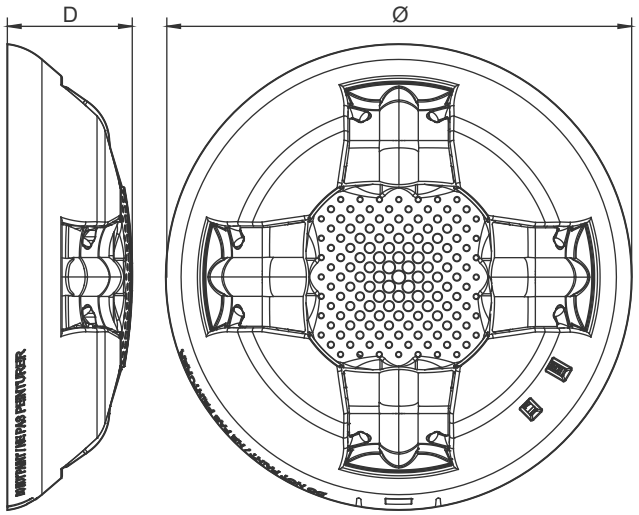
Figure 9: Light distribution



(1) Horizontal left
(2) Horizontal right
(3) Vertical below
(4) Vertical above

——————— UL measured
– – – – – UL minimum for 115 cd

Figure 10: Dimensions



Regulatory information

UL rating	Regulated 24 DC and 24 FWR
FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Industry Canada compliance	This Class A digital apparatus complies with Canadian ICES-003.
Environmental class	Indoor, dry

Contact information

For contact information, see www.kidde-esfire.com.

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