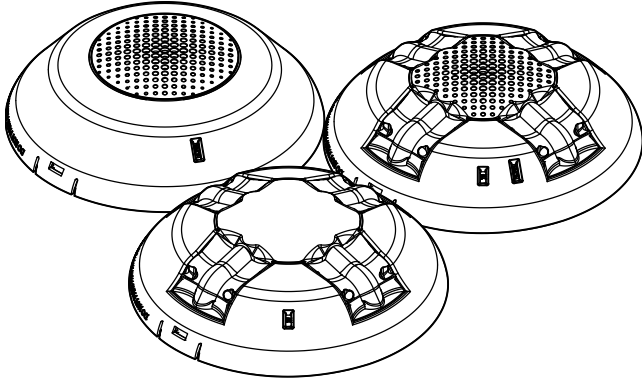# Genesis EGC Series Signaling Appliance Installation Sheet

Description

Genesis EGC Series horns, strobes, and horn-strobes are ceiling- or wall-mounted plug-in fire alarm signaling appliances designed for indoor dry applications. See Table 1 for a list of models.

Table 1: Models

Number	Description
EGCARF	Ceiling horn, red, FIRE
EGCAWF	Ceiling horn, white, FIRE
EGCVRF	Ceiling strobe, red, FIRE
EGCVRN	Ceiling strobe, red, no marking
EGCVWF	Ceiling strobe, white, FIRE
EGCVWN	Ceiling strobe, white, no marking
EGCAVRF	Ceiling horn-strobe, red, FIRE
EGCAVRN	Ceiling horn-strobe, red, no marking
EGCAVWF	Ceiling horn-strobe, white, FIRE
EGCAVWN	Ceiling horn-strobe, white, no marking

Genesis EGC Series signaling appliances feature:

• Field-configurable horn and strobe outputs. See Figure 2.
• Enhanced synchronization circuitry to comply with the latest requirements of UL 1638 and CAN/ULC-S526.
• Input wiring test points on the front of the appliance when the cover is removed.

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 signaling 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. Set the light and sound output switches. See Figure 2.

3. Replace the appliance cover.

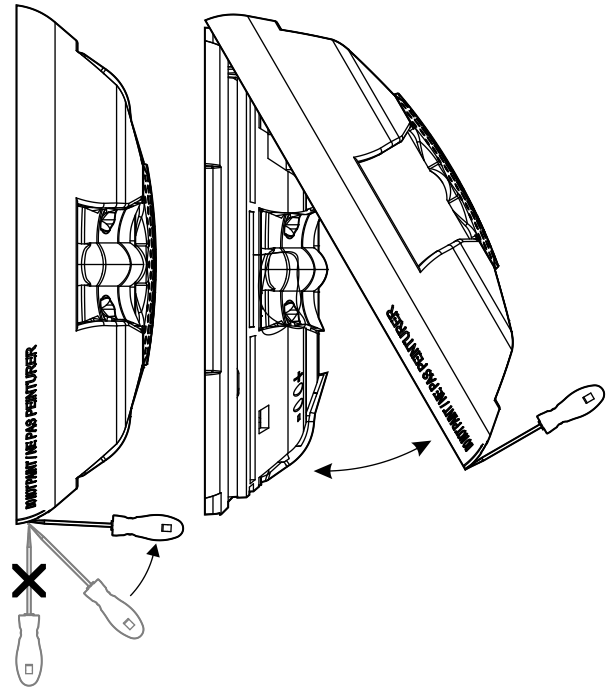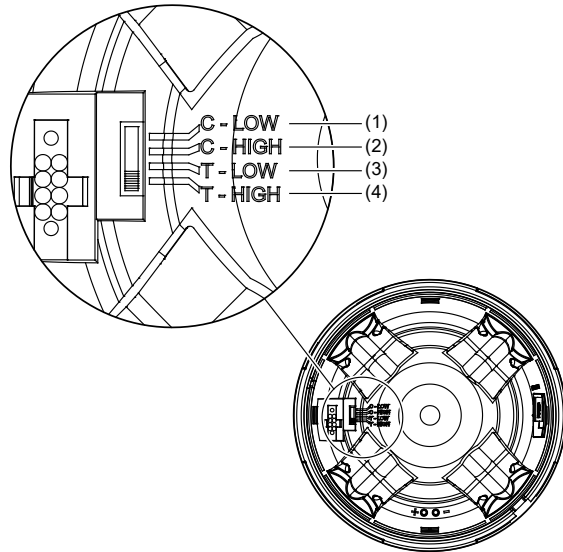**Figure 1: Removing and replacing the cover**

Figure 2: Light and sound output settings

(1) Constant, low dB
(2) Constant, high dB
(3) T3 temporal, low dB
(4) T3 temporal, high dB
(5) 115 candela
(6) 75 candela
(7) 30 candela
(8) 15 candela

Note: Temporal 3 coding is the required output for fire notification devices per NFPA 72. Any device coding other than Temporal 3 is at the discretion and approval of the local authority having jurisdiction (AHJ).

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 signaling 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 3. The trim plate is ordered separately.

2. Connect the field wiring. Observe signal polarity for the appliance to operate properly. See Figure 4.

3. Remove the shorting clip (Figure 4, item 3). 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 5.

   To unplug the appliance, press the spring clip on the bottom, and then lift the appliance away from the wiring plate.
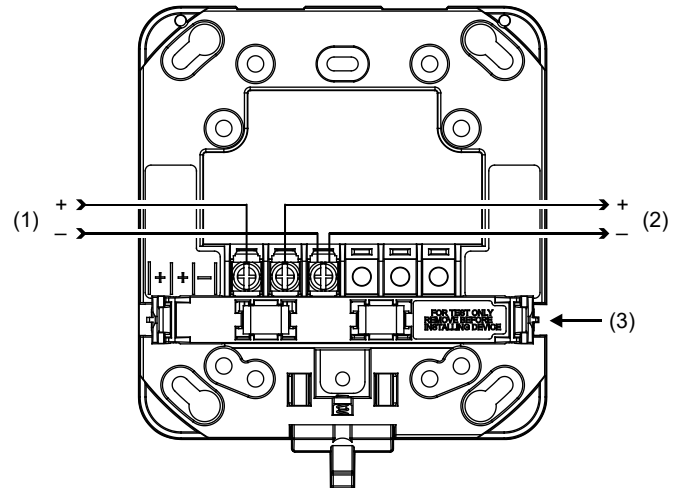
5. Test the unit for proper operation.

Figure 3: Mounting diagram
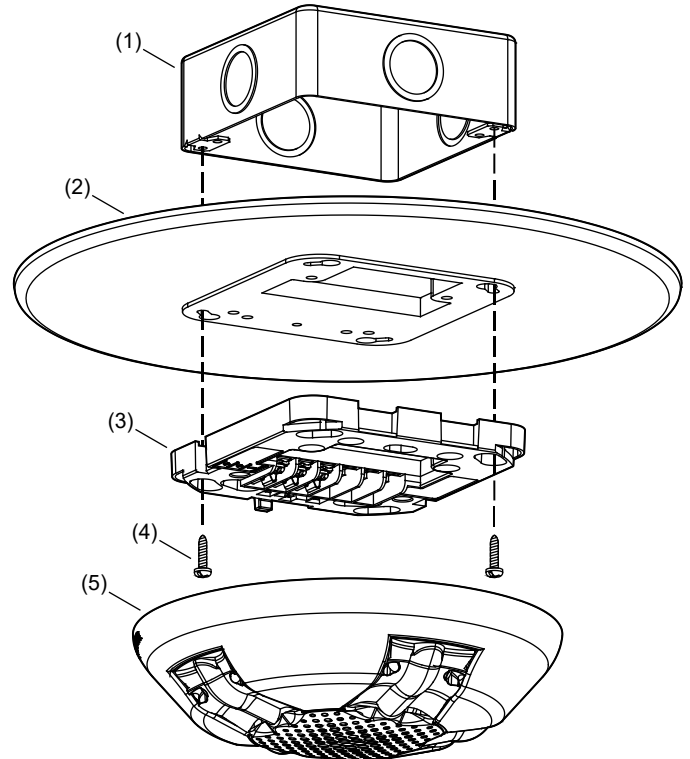
(1) Electrical box
(2) Trim plate (optional)
(3) Wiring plate
(4) Machine screw (2X, supplied with wiring plate)
(5) EGC Series signaling appliance

Figure 4: Wiring

(1) Horn/strobe circuit in (signal polarity shown in the active condition)
(2) Horn/strobe circuit out
(3) Shorting clip

Figure 5: Removing and replacing the appliance
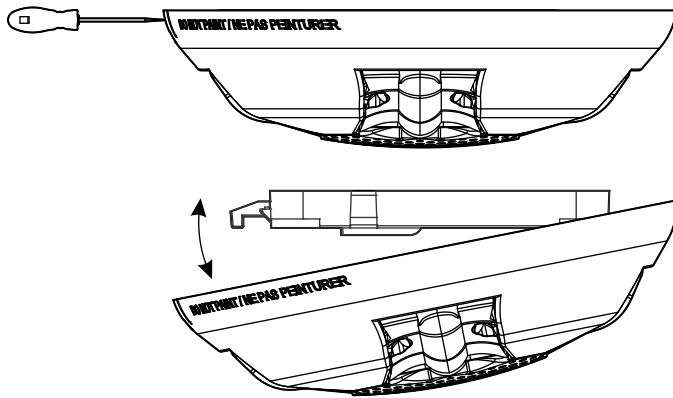

Maintenance and testing

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 let you easily spot check the field circuit wiring without the need to remove the appliance from the wall. See Figure 6.

Figure 6: Test points
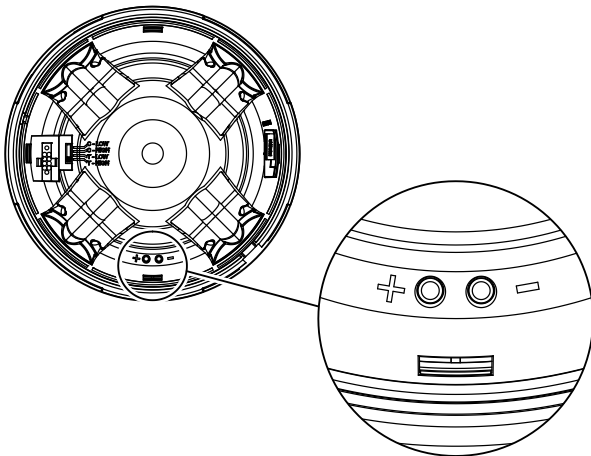
Note: Marking indicates signal polarity when the circuit is active.

Specifications

Operating voltage	16 to 33 VDC, 16 to 33 VFWR
Operating current	See Table 2 to Table 4
Horn signal type	Constant or T3 temporal
Sound output	See Table 5 and Table 6
Sound pattern	See Table 7 and Table 8
Light output	15, 30, 75,or 115 cd
Strobe flash rate	1 fps (flash per second) approx.
Light distribution	See Figure 7
Synchronization	20 Ω max. between any two devices.
	To determine allowed wire resistance, refer to these specifications, and the specifications for thesynchronized signal source.
Dimensions (Ø × D)	6.8 × 1.82 in. (17.27 × 4.62 cm) See Figure 8
Strobe-to-box center offset	0 in (0 cm)
Compatible electrical boxes	1-gang, 2-gang, 4-inch octagon, 4-inch square
Trim rings	EGCTR, EGCTW
Replacement covers	See Table 9
Operating environment Temperature Relative humidity	 32 to 122°F (0 to 50°C) 0 to 93% noncondensing
Storage temperature	-40 to 158°F (-40 to 70°C)

Table 2: Operating current (horn models)

Sound setting	16 to 33 VDC	16 to 33 VFWR
C-LOW, T-LOW	20 mA	25 mA
C-HIGH, T-HIGH	30 mA	40 mA

Table 3: Operating current (strobe models)

Strobe setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75, 115	35 mA	45 mA

Table 4: Operating current (horn-strobe models)

Strobe setting	Sound setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75, 115	C-LOW, T-LOW	50 mA	60 mA
	C-HIGH, T-HIGH	60 mA	75 mA

Table 5: Sound output (horn models)

Sound setting	Reverberant (UL 464)	Anechoic (CAN/ULC-S525)
C-LOW, T-LOW	80 dBA	86 dBA
C-HIGH, T-HIGH	86 dBA	92 dBA

Table 6: Sound output (horn-strobe models)

Sound setting	Reverberant (UL 464)	Anechoic (CAN/ULC-S525)
C-LOW, T-LOW	80 dBA	86 dBA
C-HIGH, T-HIGH	86 dBA	92 dBA

Table 7: Sound pattern – horn models (ULC)

Axis	Angle (°)	Output (dBA)
Horizontal	115 and 55	93.3
Vertical	125 and 50	91.7

Table 8: Sound pattern – horn-strobe models (ULC)

Axis	Angle (°)	Output (dBA)
Horizontal	145 and 35	93.0
	155 and 25	90.8
Vertical	135 and 35	92.0
	155 and 25	85.4

Table 9: Horn replacement covers

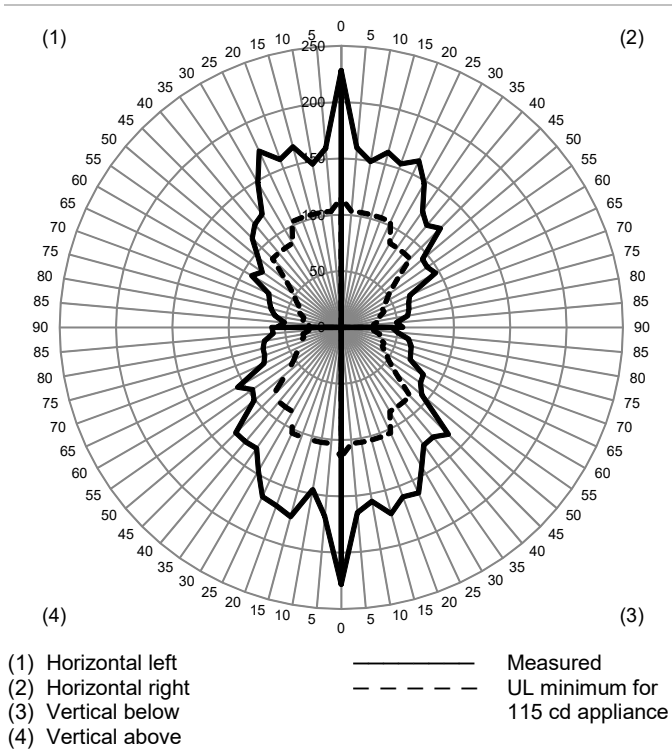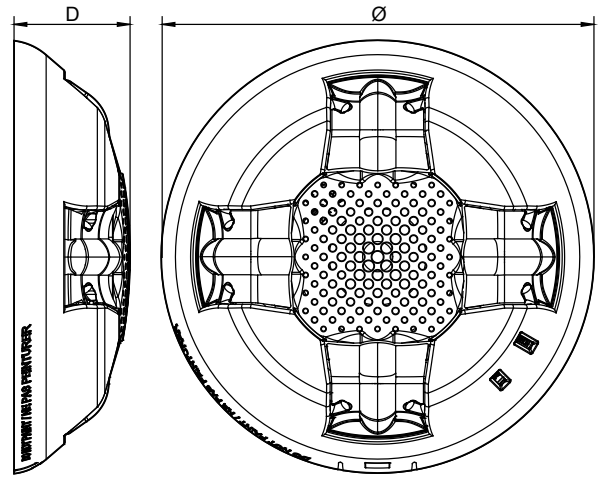| Model	Description
EGCARF-CVR	Cover, ceiling horn, red, FIRE
EGCAWA-CVR	Cover, ceiling strobe, white, ALERT
EGCAWF-CVR	Cover, ceiling horn, white, FIRE
EGCAWN-CVR	Cover, ceiling strobe, white, no marking
EGCVRF-CVR	Cover, ceiling strobe, red, FIRE
EGCVWA-CVR	Cover, ceiling strobe, white, ALERT
EGCVWF-CVR	Cover, ceiling strobe, white, FIRE
EGCVWN-CVR	Cover, ceiling strobe, white, no marking
EGCAVRF-CVR	Cover, ceiling horn-strobe, red, FIRE
EGCAVWA-CVR	Cover, ceiling horn-strobe, white, ALERT
EGCAVWF-CVR	Cover, ceiling horn-strobe, white, FIRE
EGCAVWN-CVR	Cover, ceiling horn-strobe, white, no marking

Figure 7: Light distribution

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

——————— Measured
– – – – – – UL minimum for 115 cd appliance

Figure 8: 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.kiddelifesafety.com.