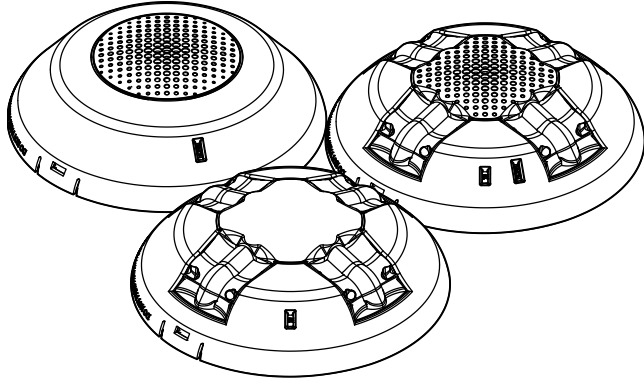


Genesis GC Series Signaling Appliance Installation Sheet



Description

Genesis GC 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 through Table 3 for a list of models.

Table 1: Horn models

Number	Description
GCARF	Ceiling horn, red, FIRE
GCARF-FR	Ceiling horn, red, FEU
GCARF-SP	Ceiling horn, red, FUEGO
GCARN	Ceiling horn, red, no marking
GCAWF	Ceiling horn, white, FIRE
GCAWF-FR	Ceiling horn, white, FEU
GCAWF-SP	Ceiling horn, white, FUEGO
GCAWN	Ceiling horn, white, no marking

Table 2: Strobe models

Number	Description
GCVRF	Ceiling strobe, red, FIRE
GCVRF-FR	Ceiling strobe, red, FEU
GCVRF-SP	Ceiling strobe, red, FUEGO
GCVRN	Ceiling strobe, red, no marking
GCVWF	Ceiling strobe, white, FIRE
GCVWF-FR	Ceiling strobe, white, FEU
GCVWF-SP	Ceiling strobe, white, FUEGO
GCVWN	Ceiling strobe, white, no marking

Table 3: Horn-strobe models

Number	Description
GCAVRF	Ceiling horn-strobe, red, FIRE
GCAVRF-FR	Ceiling horn-strobe, red, FEU
GCAVRF-SP	Ceiling horn-strobe, red, FUEGO
GCAVRN	Ceiling horn-strobe, red, no marking
GCAWVF	Ceiling horn-strobe, white, FIRE
GCAWVF-FR	Ceiling horn-strobe, white, FEU
GCAWVF-SP	Ceiling horn-strobe, white, FUEGO
GCAVWN	Ceiling horn-strobe, white, no marking

Genesis GC 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

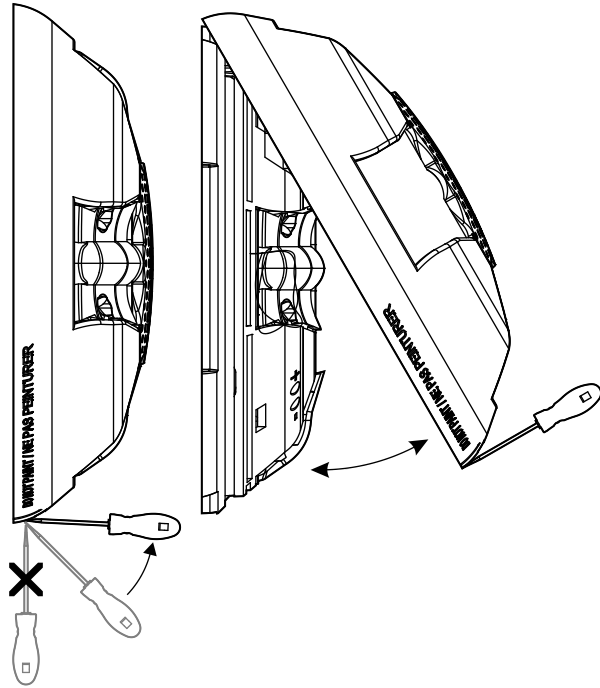
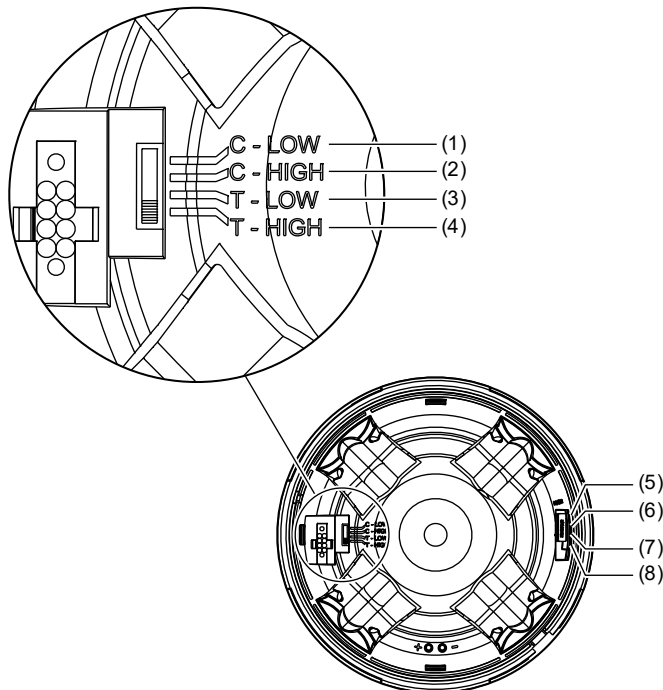


Figure 2: Light and sound output settings



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

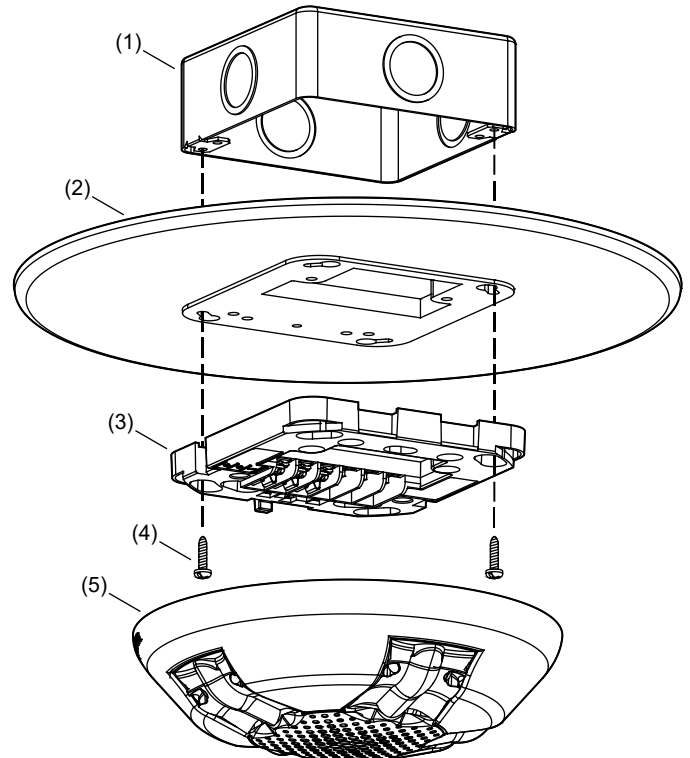
To install the appliance:

1. Attach the wiring plate and, if used, the trim plate to the electrical box. See Figure 3. The wiring plate and the trim plate are both 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.

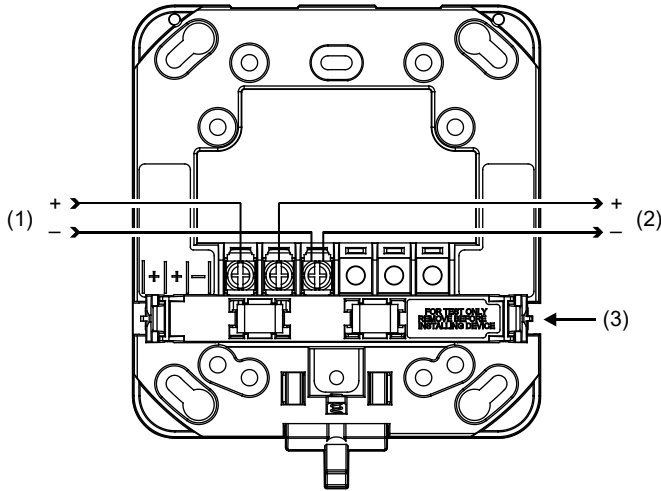
5. Test the unit for proper operation.

Figure 3: Mounting diagram



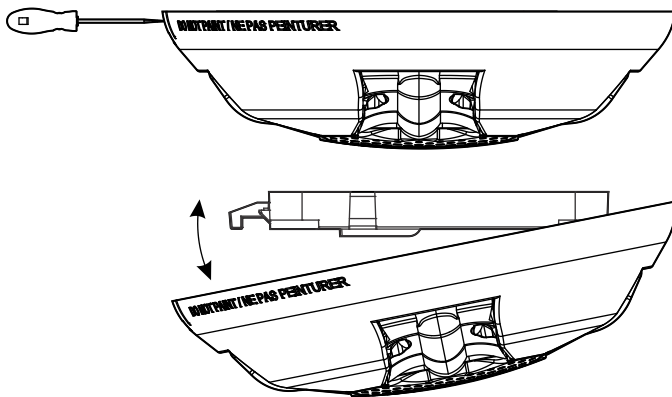
- (1) Electrical box
- (2) Trim plate (optional)
- (3) Wiring plate (required, ordered separately)
- (4) Machine screw (2X, supplied with wiring plate)
- (5) GC Series signaling appliance

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

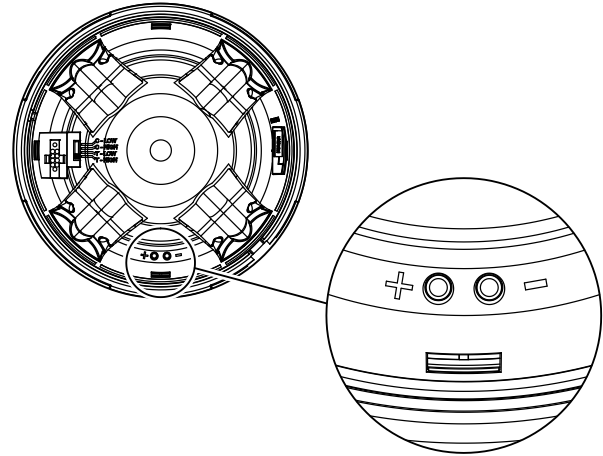
Caution: Equipment damage hazard. To maintain the required agency listings, do not change factory-applied finishes.

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 4 to Table 6	
Horn signal type	Constant or T3 temporal	
Sound output	See Table 7 and Table 8	
Sound pattern	See Table 9 and Table 10	
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 the synchronized 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	
Wiring plate	GP10 (pack of ten)	
Trim rings	GCTR, GCTW	
Replacement covers	See Table 11 to Table 13	
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 4: 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 5: Operating current (strobe models)

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

Table 6: 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 7: 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 8: 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 9: Sound pattern – horn models (ULC)

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

Table 10: 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 11: Horn replacement covers

Model	Description
GCARA-CVR	Cover, ceiling horn, red, ALERT
GCARF-CVR	Cover, ceiling horn, red, FIRE
GCARF-FR-CVR	Cover, ceiling horn, red, FEU
GCARF-SP-CVR	Cover, ceiling horn, red, FUEGO
GCARN-CVR	Cover, ceiling horn, red, no marking
GCAWA-CVR	Cover, ceiling horn, white, ALERT
GCAWF-CVR	Cover, ceiling horn, white, FIRE
GCAWF-FR-CVR	Cover, ceiling horn, white, FEU
GCAWF-SP-CVR	Cover, ceiling horn, white, FUEGO
GCAWN-CVR	Cover, ceiling horn, white, no marking

Table 12: Strobe replacement covers

Model	Description
GCVRA-CVR	Cover, ceiling strobe, red, ALERT
GCVRF-CVR	Cover, ceiling strobe, red, FIRE
GCVRF-FR-CVR	Cover, ceiling strobe, red, FEU
GCVRF-SP-CVR	Cover, ceiling strobe, red, FUEGO
GCVRN-CVR	Cover, ceiling strobe, red, no marking
GCVWA-CVR	Cover, ceiling strobe, white, ALERT
GCVWF-CVR	Cover, ceiling strobe, white, FIRE
GCVWF-FR-CVR	Cover, ceiling strobe, white, FEU
GCVWF-SP-CVR	Cover, ceiling strobe, white, FUEGO
GCVWN-CVR	Cover, ceiling strobe, white, no marking

Table 13: Horn-strobe replacement covers

Model	Description
GCAVRA-CVR	Cover, ceiling horn-strobe, red, ALERT
GCAVRF-CVR	Cover, ceiling horn-strobe, red, FIRE
GCAVRF-FR-CVR	Cover, ceiling horn-strobe, red, FEU
GCAVRF-SP-CVR	Cover, ceiling horn-strobe, red, FUEGO
GCAVRN-CVR	Cover, ceiling horn-strobe, red, no marking
GCAVWA-CVR	Cover, ceiling horn-strobe, white, ALERT
GCAVWF-CVR	Cover, ceiling horn-strobe, white, FIRE
GCAVWF-FR-CVR	Cover, ceiling horn-strobe, white, FEU
GCAVWF-SP-CVR	Cover, ceiling horn-strobe, white, FUEGO
GCAVWN-CVR	Cover, ceiling horn-strobe, white, no marking

Figure 7: Light distribution

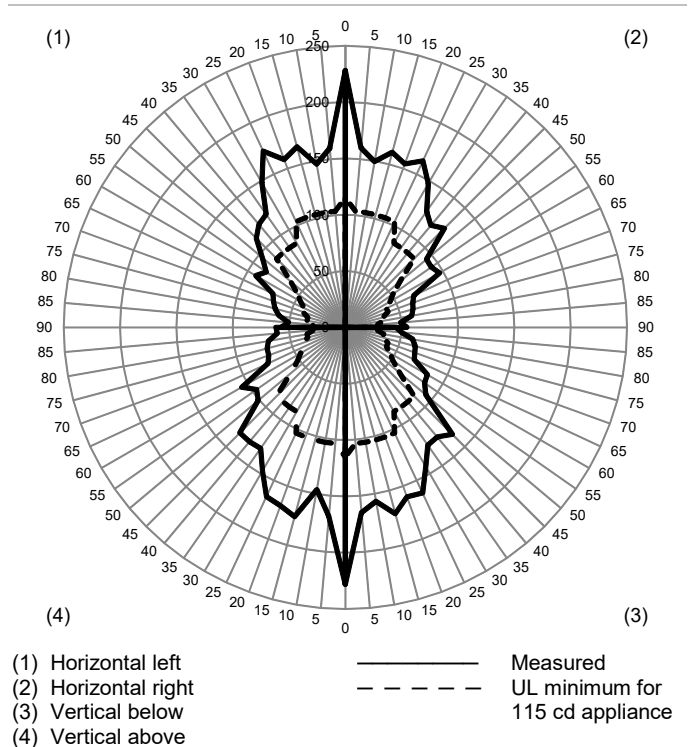
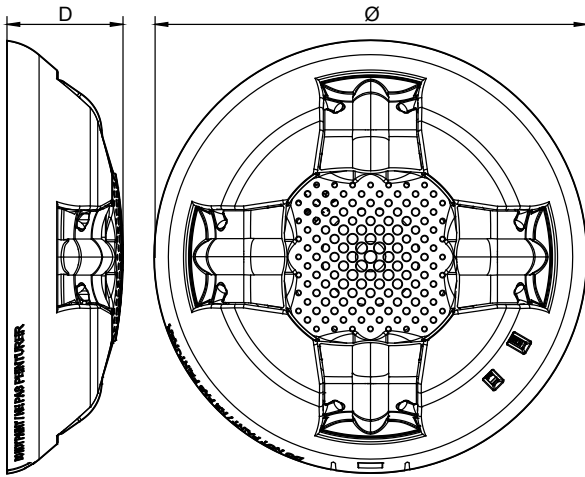


Figure 8: Dimensions



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.edwardsfiresafety.com.