

Genesis EG1 Series Signaling Appliance Installation Sheet



Description

Genesis EG1 Series horns, strobes, and horn-strobes are compact, wall-mounted, 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
EG1ARF	Compact wall horn, red, FIRE
EG1ARN	Compact wall horn, red, no marking
EG1AWF	Compact wall horn, white, FIRE
EG1AWN	Compact wall horn, white, no marking

Table 2: Strobe models

Number	Description
EG1VRF	Compact wall strobe, red, FIRE
EG1VRN	Compact wall strobe, red, no marking
EG1VWF	Compact wall strobe, white, FIRE
EG1VWN	Compact wall strobe, white, no marking

Table 3: Horn-strobe models

Number	Description
EG1AVRF	Compact wall horn-strobe, red, FIRE
EG1AVRN	Compact wall horn-strobe, red, no marking
EG1AVWF	Compact wall horn-strobe, white, FIRE
EG1AVWN	Compact wall horn-strobe, white, no marking

Genesis EG1 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







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.

Note: Do not use Genesis EG1 Series strobe and horn-strobe signaling appliances in applications where signal power is cycled on and off, such as coded or private mode signaling systems.

To install the appliance:

- 1. Remove the appliance cover.
- 2. Connect the field wiring. Observe signal polarity for the appliance to operate properly. See Figure 3.
- 3. Attach the appliance and, if used, the trim ring backplate to the electrical box. Do not overtighten the screws. See Figure 4.
- Replace the cover by hooking it to the top of the appliance, and then snapping the bottom into place. See Figure 1.
- 5. Test the unit for proper operation.

Figure 3: Wiring



(1) Horn/strobe circuit in (signal polarity shown in the active condition)

(2) Horn/strobe circuit out

Figure 4: Mounting on a 1-gang electrical box



- (1) Electrical box
- (2) EG1 Series signaling appliance
- (3) Captive screw (2X)
- (4) Appliance cover

Note: Using a trim ring is optional except when installing the signaling appliance on electrical boxes greater than three inches wide. For installation instructions when using a trim ring, see *Genesis EG1 Series Trim Ring Installation Sheet* (P/N 3102552-EN).

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. Should the unit fail to operate, contact the supplier for 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 5.

Figure 5: 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
Sound pattern	See Table 8
Light output	15, 30, or 75 candela
Strobe flash rate	1 fps (flash per second) approx.
Light distribution	See Figure 6
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.
Wire size	12 to 18 AWG (0.75 to 2.50 mm ²)
Screw torque Mounting screws Terminal screws	15 lbf-in (1.8 N-m) max. 12 lbf-in (1.4 N-m) max.
Dimensions (W×H×D)	3 × 4-5/8 × 1-1/8 in. (7.62 × 11.75 × 2.86 cm) See Figure 7
Strobe-to-box center offset	-0.71 inches (-1.8 cm)
Compatible electrical boxes [1]	1-gang, 2-gang, 4-inch octagon, 4-inch square
Trim rings	EG1TR, EG1TW
Replacement covers	See Table 9 to Table 11.
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)

[1] Electrical boxes must be at least 1-1/2 in. (3.81 cm) deep. Electrical boxes greater than three inches wide require a trim ring.

Table 4: Operating current (horn models)		
Sound setting	16 to 33 VDC	16 to 33 VFWR
C-LOW, T-LOW	13 mA	15 mA
C-HIGH, T-HIGH	23 mA	29 mA

Table 5: Operating current (strobe models)

Strobe setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75	24 mA	32 mA

Table 6: Operating current at 16 to 33 VDC (horn-strobe models)

Strobe setting	Sound setting	16 to 33 VDC	16 to 33 VFWR
15, 30, 75	C-LOW, T-LOW	35 mA	43 mA
	C-HIGH, T-HIGH	45 mA	55 mA

Table 7: Sound output (horn and 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 8: Sound pattern (ULC)

Axis	Angle	Change in output
Horizontal	45° and 115°	–3 dBA
	5° and 130°	–6 dBA
Vertical	65° and 135°	–3 dBA
	45° and 140°	–6 dBA

Table 9: Horn replacement covers

Model	Description
EG1ARN-CVR	Cover, compact wall horn, red, no marking
EG1AWA-CVR	Cover, compact wall horn, white, ALERT
EG1AWN-CVR	Cover, compact wall horn, white, no marking

Table 10: Strobe replacement covers

Model	Description
EG1VRN-CVR	Cover, compact wall strobe, red, no marking
EG1VWA-CVR	Cover, compact wall strobe, white, ALERT
EG1VWN-CVR	Cover, compact wall strobe, white, no marking

Table 11: Horn-strobe replacement covers

Model	Description
EG1AVRN-CVR	Cover, compact wall horn-strobe, red, no marking
EG1AVWA-CVR	Cover, compact wall horn-strobe, white, ALERT
EG1AVWN-CVR	Cover, compact wall horn-strobe, white, no marking

Figure 6: Light distribution



Note: Figure 6 shows the light distribution for 75 cd output. For 30 cd output, multiply point by 0.40. For 15 cd output, multiply point by 0.20.



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.