



LIFE SAFETY &amp; INCIDENT MANAGEMENT

# Wall Model LED Strobes and Horns

## Genesis GL Series



### Overview

Innovative LED technology allows the new Genesis GL Series horns and LED strobes a more energy-efficient and sleek low-profile design compared to previous Genesis models making them less expensive to install and operate by reducing overhead, and requiring fewer power supplies, backup power and batteries. These new appliances are designed with performance, energy-efficiency, and life safety in mind.

About the size of a deck of playing cards, Genesis GL strobes do not require bulky specular reflectors to maximize output. Instead, high efficiency optics, combined with patented electronics, deliver highly-controlled and uniform light distribution pattern in exchange for lower current requirements.

These devices are designed to improve efficiency by reducing overhead — requiring fewer power supplies and often smaller wire gauge. This makes them ideal for any installation that calls for high efficiency and clean modern design appeal.

Serviceability is another area where GL Series appliances shine. Field configurable light and sound output levels provide the flexibility modern life safety projects demand, while the Genesis control and synchronization protocol keeps multiple strobes on compatible NAC circuits synchronized.

### Standard Features

- **LED technology**
  - More energy efficient
  - High efficiency optics
- **Low-profile design**
  - Compact design... single gang mounting
  - Ultra-slim... protrudes about one inch from mounting surface
  - Attractive appearance... no visible mounting screws
- **Field-configurable visible and audible settings**
  - Selectable 15, 30, 75, or 110 cd strobe output
  - Selectable high (default) or low dB horn output
  - Selectable temporal (default) or steady horn output
- **Easy to install**
  - Fits standard 1-gang electrical boxes
  - no trim plate needed
  - Optional trim plate for 4-inch square boxes
  - Slide switches for field configuration
  - 12 to 18 AWG in-out screw terminals for quick wiring
- **High performance standards for demanding applications**
  - UL 1971 standards
  - No synch modules needed
  - RoHS (Restriction of Hazardous Substances) compliant
  - UL/ULC/CSFM/FCC approved

## Application

### Strobes

Genesis GL Series strobes are UL 1971-listed for use indoors as wall-mounted public-mode notification appliances for the hearing impaired. Prevailing codes require strobes to be used where ambient noise conditions exceed 105 dBA (87 dBA in Canada), where occupants use hearing protection, and in areas of public accommodation as defined in the *Americans with Disabilities Act*.

All Genesis strobes exceed UL synchronization requirements (within 10 milliseconds over a two-hour period) when used with a synchronization source. Synchronization is important in order to avoid epileptic sensitivity. See the specifications table for a list of compatible sources.

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**Note:** Due to differences in technology and light output characteristics, **Genesis GL Series strobe lights cannot be installed in the same field of view as a Genesis Xenon-based strobe light appliance.**

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### Horns

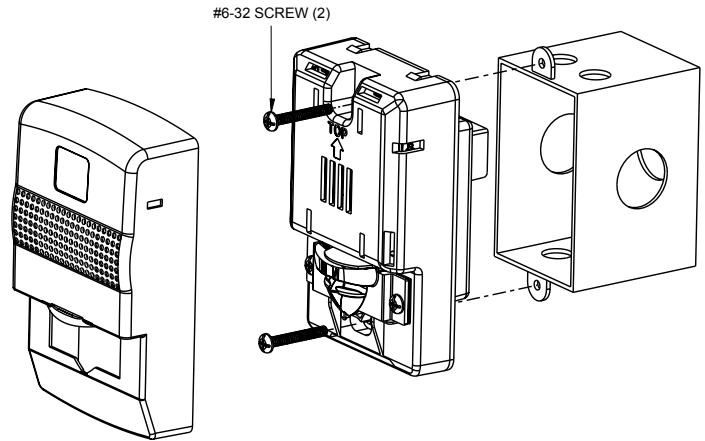
Genesis horn output reaches as high as 95 dBA-fast and features a unique multiple frequency tone that results in excellent sound penetration and a warning of danger. Horns may be configured for either coded or noncoded notification appliance circuits. They can also be set for low dBA-fast output. This setting reduces horn output by about 5 dBA-fast. Horn-only models may be ceiling-mounted or wall-mounted.

The suggested sound pressure level for each signaling zone used with alarm signals is at least 15 dBA-fast above the average ambient sound level, or 5 dBA-fast above the maximum sound level having a duration of at least 60 seconds, whichever is greater. These values are measured at five feet (1.5 m) above the floor. The average ambient sound level is A-weighted, fast response sound pressure measured over a 24-hour period.

Doubling the distance from the signal to the ear will theoretically result in a 6 dBA-fast reduction of the received sound pressure level. The actual effect depends on the acoustic properties of materials in the space. A 3 dBA-fast difference represents a barely noticeable change in volume.

## Installation

Genesis horns and strobes mount to any standard one-gang surface or flush electrical box. Matching optional trim plates are used to cover oversized openings and can accommodate one-gang or four-inch square boxes. Optional color matched single-gang surface boxes are available.

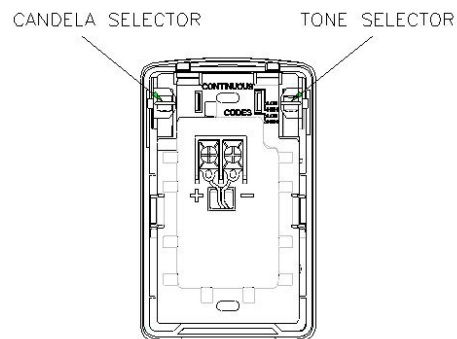


All Genesis devices come with mounting screws for easy installation. Two tabs at the top of the device unlock the cover to reveal the mounting holes. The shallow depth of Genesis devices leaves ample room behind them for extra wiring. Once installed with the cover in place, no mounting screws are visible.

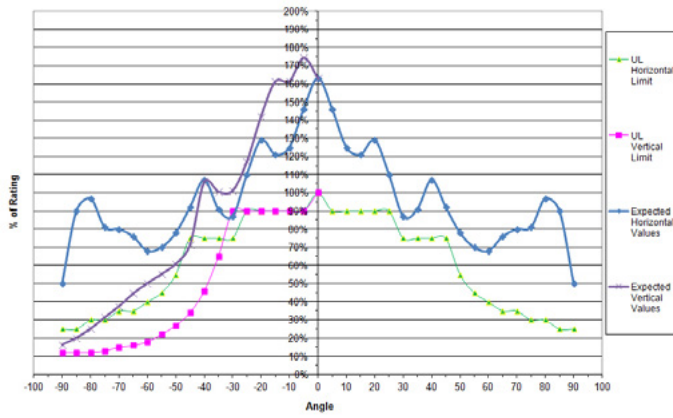
### Field Configuration

Temporal horn and horn-strobe models are factory set to sound in a three-pulse temporal pattern. Units may be configured for steady (nonpulsed) output that can be coded (turned on and off) at precise intervals by certain EDWARDS control panels and control modules. Genesis strobes and horn-strobes may be set for 15, 30, 75, or 110 candela output. The output setting is changed by simply removing the cover and two mounting screws and sliding the switch to the desired setting. The setting remains visible through a small window on the side of the device after the cover is closed.

Horns and horn-strobes are factory set for high dB output. Low dB output may be selected by sliding the tone selector switch. This reduces the output by about 5 dBA-fast.



## Light Output



## Sound Output

Horn and Horn-Strobe Sound Output, Reverberant dBA per UL 464

Output mode	dB Setting	Horns & Horn-Strobes at 24 V		
		16.0 V	24.0 V	33.0 V
Continuous	High	80	83	86
Horn	Low	78	81	81
Temporal	High	76	79	81
Horn	Low	75	77	77

Horn and Horn-Strobe Sound Output, Anechoic dBA per CAN/ULC-S525-07

Output mode	dB Setting	Horns & Horn-Strobes at 24 V		
		16.0 V	24.0 V	33.0 V
Continuous	High	91	94	97
Horn	Low	86	90	92
Temporal	High	91	95	96
Horn	Low	86	90	91

### ULC Directional Characteristics

Axis	dBA	Angle
Horizontal	- 3 dBA	35 degrees left and right
	- 6 dBA	90 degrees left and right
Vertical	- 3 dBA	45 degrees down; 30 degrees up
	- 6 dBA	90 degrees up and down

## Current Draw (mA) at 16 volts

Horn/strobe		15 cd	30 cd	75 cd	110 cd
DC	Temporal low	38	42	122	209
	Temporal high	40	46	125	219
	Continuous low	42	44	128	214
	Continuous high	47	55	131	209
FWR	Temporal low	58	70	151	261
	Temporal high	66	76	152	263
	Continuous low	68	77	156	267
	Continuous high	77	87	161	270

Strobe Only		15 cd	30 cd	75 cd	110 cd
	DC	30	40	115	200
	FWR	44	60	153	266

Horn Only		Temporal low	Temporal high	Continuous low	Continuous high
	DC	22	30	26	37
	FWR	50	49	50	59

### Notes: Unfiltered Full Wave Rectified Ratings

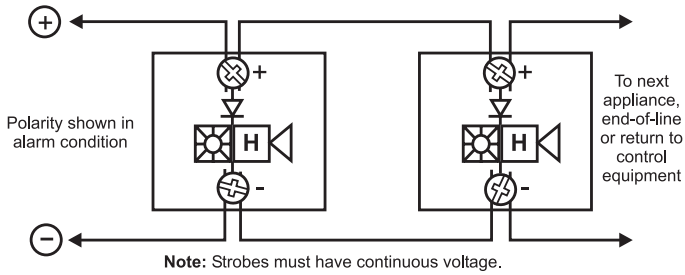
Candela and Horn Settings will determine the current draw of the device.

Genesis GL appliances were tested to the regulated voltage limits of 16.0 to 33.0 V. Do not apply voltage outside of this range.

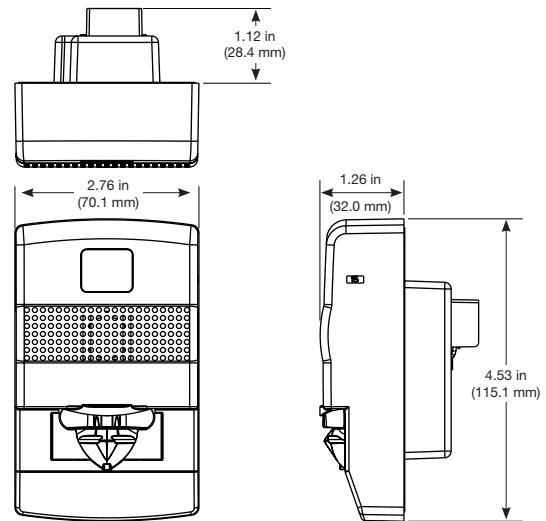
Strobes are not designed to be used on coded systems in which the applied voltage is cycled on and off.

## Wiring

Field wiring terminals accommodate 12 to 18 AWG (0.75 to 2.5 mm<sup>2</sup>) wiring. Horns, strobes, and combination horn-strobes are interconnected with a single pair of wires as shown below.



## Dimensions



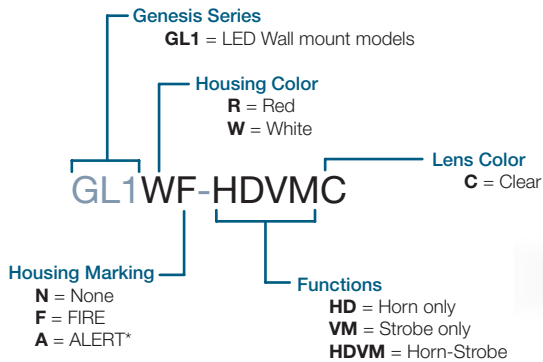
## Specifications

Material	Red or white textured UV stabilized, colored impregnated engineered plastic. Exceeds 94V-0 UL flammability rating
Weight	0.35 lbs
Lens	Lexan
Dimensions	<b>Appliance:</b> 4.53" H x 2.76" W x 1.27" D (115 mm x 70 mm x 32 mm). <b>Trimplate:</b> 5.25" H x 4.58" W x 0.32" D (133 mm x 116 mm x 8 mm).
Operating Temperature	Indoor: 33.8 °F to 120.2 °F (1 °C to 49 °C) and maximum humidity of 93%
Mounting (indoor only)	Strobes and horn-strobes are for wall-mount installation only. Horn-only models may be ceiling- or wall-mounted. <b>Flush mount:</b> 2-1/2 inch (64 mm) deep one-gang box. <b>Surface mount:</b> Model GL1xN-BB1G surface mount box, wiremold box, or equivalent surface-mount box. <b>With optional GL1xN-TP trim plate:</b> One-gang or four-inch square box.
Wire Connections	12 to 18 AWG (0.75 to 2.5 mm <sup>2</sup> )
Operating Voltage	24 VDC: 16 to 33 VDC
Strobe Output Rating	Selectable 15, 30, 75, 110 candela output (UL 1971 and ULC S526)
Strobe Flash Rate	Strobes are designed to flash at 1 flash per second
Synchronization Sources	SIGA-CC1S, SIGA-MCC1S, SIGA-CC2A, SIGA-MCC2A, G1M-RM, BPS6A, BPS10A, APS6A, APS10A, iO64, iO500, Fireshield Plus 3, 5 and 10 zone.
Horn Pulse Rate	<b>Selectable Continuous or Temporal Code 3 Horn tone:</b> The temporal pattern (1/2 second on, 1/2 second off, 1/2 second on, 1/2 second off, 1/2 second on, 1-1/2 seconds off and repeat) is specified by ANSI and NFPA 72 for standard emergency evacuation signaling.

## Ordering Information

Model	Housing	Marking	Lens	Strobe	Horn	Ship Wt. lb. (kg)
<b>Fire Alarm Appliances</b>						
GL1RF-HD	Red	FIRE	N/A	Horn only	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1RF-HDVMC	Red	FIRE	Clear	Selectable 15, 30, 75, or 110 cd	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1RF-VMC	Red	FIRE	Clear	Selectable 15, 30, 75, or 110 cd	Strobe only	0.25 (0.11)
GL1RN-HD	Red	None	N/A	Horn only	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1RN-HDVMC	Red	None	Clear	Selectable 15, 30, 75, or 110 cd	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1RN-VMC	Red	None	Clear	Selectable 15, 30, 75, or 110 cd	Strobe only	0.25 (0.11)
GL1WF-HD	White	FIRE	N/A	Horn only	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1WF-HDVMC	White	FIRE	Clear	Selectable 15, 30, 75, or 110 cd	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1WF-VMC	White	FIRE	Clear	Selectable 15, 30, 75, or 110 cd	Strobe only	0.25 (0.11)
GL1WN-HD	White	None	N/A	Horn only	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1WN-HDVMC	White	None	Clear	Selectable 15, 30, 75, or 110 cd	Temporal or Steady, High or Low dB	0.25 (0.11)
GL1WN-VMC	White	None	Clear	Selectable 15, 30, 75, or 110 cd	Strobe only	0.25 (0.11)
<b>Trim Plates</b>						
GL1WN-TP	White	None	Genesis GL Series Trim Plate (for 4-inch square boxes)			0.15 (0.7)
GL1RN-TP	Red	None	Genesis GL Series Trim Plate (for 4-inch square boxes)			0.15 (0.7)
<b>Surface Boxes</b>						
GL1WN-BB1G	White	N/A	One-gang surface mount box for GL Series			1 (0.4)
GL1RN-BB1G	Red	N/A	One-gang surface mount box for GL Series			1 (0.4)

## Model Selector





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