

LIFE SAFETY $\mathscr G$ INCIDENT MANAGEMENT

Wall Mount Strobes and Speaker-Strobes

Genesis LED Mass Notification







7320-1657:0505 7320-1657:0516





Overview

Genesis LED Mass Notification strobes and speaker-strobes combine high performance output with a sleek low profile design and energy-efficient technology that makes them less expensive to install and operate. High performance LEDs require fewer power supplies, backup power, and batteries. These new appliances are designed with energy-efficiency, and life safety in mind.

Speakers feature selectable wattage taps, while speaker-strobes allow for both wattage and light output levels to be configured in the field. Both settings remain clearly visible — even after final installation. Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch. All this flexibility allows devices to be easily fine-tuned to exactly how they're needed to perform. All Genesis speakers include a DC blocking capacitor to allow electrical supervision of the audio distribution circuit.

Genesis LED Mass Notification strobes are available in 4 colors; amber, red, green and blue. Cover skins are available with alert marking or no marking and all strobe colors have the same low current draw.

Compared with Xenon-type strobes, Genesis LED Mass Notification appliances offer greatly reduced current draw which provides benefits in longer circuit lengths, more devices per circuit, smaller wire gauge and reduced power supply quantities for an installation. They are also backwards compatible with legacy strobes, so there's no need to replace all your existing devices to upgrade to new LED technology. In fact, strobes can be mixed

on the same circuit and used in the same field of view as Xenon based strobes. This makes Genesis LED Mass Notification ideal for new installations and retrofits alike.

Field-configurable sound output levels provide the flexibility modern life safety projects demand, while the Genesis LED control protocol keeps multiple strobes on compatible NAC circuits synchronized to well within NFPA 72 requirements. They also meet NFPA and UL 520Hz requirements for sleeping areas making them ideal for new construction or retrofits.

Mass Notification speakers produce crisp, clear voice audio output that is highly intelligible over large areas. In an emergency, intelligibility is critical to life safety. Understanding the content of the message is as important as knowing there is an emergency. Intelligibility is measured in Speech Transmission Index and anything above .76 is considered excellent. Mass Notification speakers deliver audio with an STI of .81 ensuring the message is clear.

Serviceability is another area where Mass Notification appliances shine. The universal room side wiring plate allows for pre-installation and electrical wiring as well as checking continuity with the included diagnostics check bar. Devices can then be easily snapped into place with the confidence of knowing the wiring is correct. The innovative under-cover diagnostic test points provide easy access to device circuit testing while mounted.

Standard Features

High Fidelity performance with excellent STI

 Increased sound fidelity and audio intelligibility with an STI rating of .81 (More than .76 is excellent)

Low Frequency (520Hz) capable

 Low frequency output meets NFPA standards for newly constructed commercial sleeping areas

• High Performance LED Strobe Technology

- Ultra low device current consumption allows:
 - More devices per circuit
- Ability to use lower gauge wire
- Longer wire runs
- Fewer booster power supplies
- High efficiency optics
- Available in amber red, blue and green lens color
- LED devices may be mixed with legacy Xenon strobes on the same circuit and in the same field of view

Field flexibility

- Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch
- Speakers feature selectable wattage taps for ¼W, ½W,
 1W, and 2W to configure sound output levels in the field

Low-profile Design

- Ultra-slim... protrudes about 1.5" from the mounting surface
- Attractive appearance... no visible mounting screws

• Multiple Marking Options

- Order alert or no markings
- Change markings at any time with replaceable quick-swap covers

Easy to Install

- Pre-install and pre-wire with convenient universal room side wiring plate
- Check electrical continuity on room side wiring plate with included diagnostics check bar
- Diagnostics port streamlines device circuit testing
- Fits 2-gang and 4-inch square electrical boxes
- Optional red and white trim plates available
- Slide switches for field configuration
- 12 to 18 AWG in-out screw terminals for quick wiring

Application

Strobes

Mass Notification strobes are available in four colors to customize the identification of emergency events. Synchronization is important in order to avoid triggering seizures in people with photosensitive epilepsy. All Genesis strobes exceed UL synchronization requirements (within 10 milliseconds over a two-hour period) when used with a synchronization source. See the specifications table for a list of compatible sources.

Speakers

The suggested sound pressure level for each signaling zone used with alert or alarm signals is a minimum of 15 dB above the average ambient sound level or 5 dB above the maximum sound level having a duration of at least 60 seconds, whichever is greater. This is measured 5 feet (1.5 m) above the floor.

Doubling the distance from the signal to the ear will theoretically cause a 6 dB reduction in the received sound pressure level. The actual effect depends on the acoustic properties of materials in the space. Doubling the power output of a device (e.g.: a speaker from 1W to 2W) will increase the sound pressure level by 3dBA.

High Fidelity Sound

Genesis LED G4S Series High Fidelity appliances feature 87dB of sound output along with a highly intelligible Speech Transmission Index (STI) rating of .81. An STI rating above .76 is considered excellent for speech intelligibility They are also effective in areas subject to high levels of ambient noise.

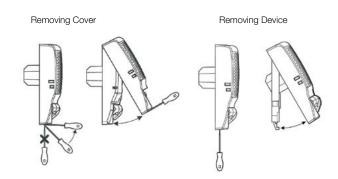
These appliances are ideal for hotels, dormitories and other residential occupancies that have sleeping areas that require 520Hz tones. In sleeping areas, always ensure that the wattage tap of the speaker is set sufficiently high so that the sound pressure reaches at least 75 dBA at the pillow.

These appliances are part of an end-to-end audio system approved for use in sleeping areas when used in conjunction with approved audio hardware and a factory-supplied 520 Hz tone. Check the System Compatibility List for other 520 Hz signaling requirements.

Installation

Mass Notification strobes and speaker-strobes mount to the required GRSW room side wiring plate. The GRSW mounting plate is ordered separately from the device in packs of 10 (GRSW-10) for convenient pre-installing and pre-wiring. The device can be removed easily from the room side wiring plate by pushing up with a screwdriver. The cover can also be removed from the device easily with a screwdriver to access the light and sound output settings and a diagnostics test port for voltage testing.

Genesis LED Mass Notification strobes and speaker-strobes mount to any standard two-gang and 4-inch square electrical box. Matching optional G4T trim rings are available to cover oversized openings. Optional color matched double-gang surface boxes are also available.



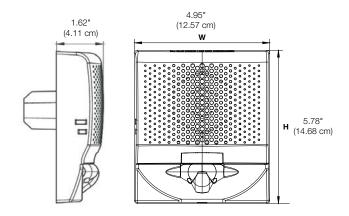
Installation

Electrical Box

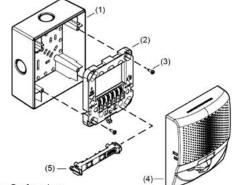
Trim Plate (optional) Mounting Plate Machine Screw Signaling Appliance Shorting Clip

Dimensions

Mass Notification Appliances

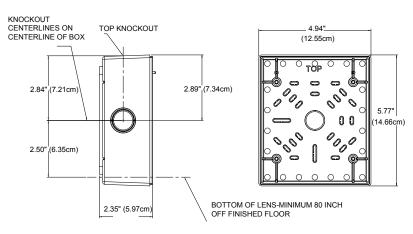




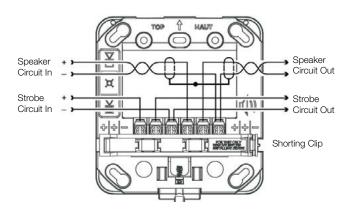


- (1) Surface box
- (2) Wiring plate (required, ordered separately)
- (3) Machine screw (2X, supplied with wiring plate)
 (4) Notification appliance
 (5) Shorting clip

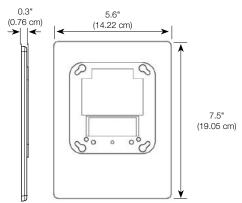
Surface Mount Box



Wiring



G4T Trim Plate (optional)



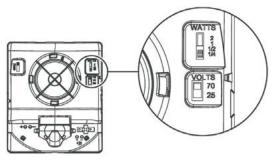
Field Configuration

Genesis LED speakers are capable of both 25V and 70V operation depending on the system, The voltage is set via a switch under the cover. Speakers also may be set for 1/4, 1/2, 1, or 2 watt operation. The wattage setting is visible through a small window on the side of the device and is changed by simply sliding the switch under the cover until the desired setting appears in the window. The speaker does not have to be removed to change the wattage, only the cover skin.

Genesis LED strobes and speaker-strobes in four lens colors; amber red, green and blue. Color and candela output remains visible through a small window on the left-hand side of the device after the cover is closed.

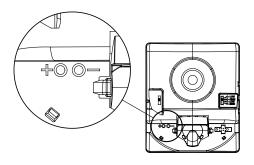
Light and Sound Output Settings

Sound Settings (Watts and Volts)



Diagnostics

Strobe Circuit Test Points



Sound Output

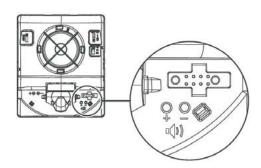
Sound pattern (ULC)

Axis	Angle	Change in output		
Horizontal	117° and 61°	-3 dBA		
	134° and 49°	–6 dBA		
Vertical	128° and 68°	-3 dBA		
	138° and 52°	–6 dBA		

Sound Level Output

Operating Current	Rating
16-33 VDC	28 mA
16-33 VFWR	36 mA
Light Current	Rating
Amber lens (-A models)	75 cd
Green lens (-G models)	65 cd
Blue lens (-B models)	30 cd
Red lens (-R models)	15 cd

Speaker Circuit Test Points



Test points indicated above are used to validate the Notification Appliance Circuit and verify device function.

Notification Appliances		Lens Color	Marking		
	G4SVWA-A	Amber	Alert		
	G4SVRA-A	Amber	Alert		
	G4SVWA-R	Red	Alert	-	
Speaker-strobes	G4SVWA-B	Blue	Alert	G4SVWA-A	
	G4SVWA-G	Green	Alert		
	G4SVWN-A	Amber	None		
	G4SVWN-R	Red	None		
	G4SVWN-B	Blue	None	G4SVWA-R	
	G4SVWN-G	Green	None	G43VWA-N	
	G4VWA-A	Amber	Alert		
	G4VRA-A	Amber	Alert	606	
	G4VWA-R	Red	Alert		
	G4VWA-B	Blue	Alert	G4VWA-A	
Strobes	G4VWA-G	Green	Alert		
	G4VWN-A	Amber	None		
	G4VWN-R	Red	None	-	
	G4VWN-B	Blue	None	G4VWA-R	
	G4VWN-G	Green	None	G4VVA-N	

Accessories





LIFE SAFETY & INCIDENT MANAGEMENT

Contact us

Phone: 800-655-4497 (Option 4) Email: edwards.fire@carrier.com Website: edwardsfiresafety.com

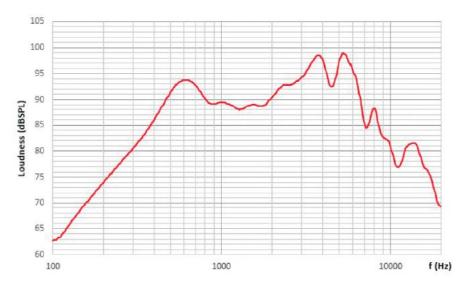
8985 Town Center Pkwy Bradenton, FL 34202

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Specifications

Strobe operating voltage	16 to 33 VDC, 16 to 33 VFWR			
Speaker operating voltage	25VRMS of 70VRMS (selectable)			
Speaker frequency response (UL rated)	400Hz-4,000Hz			
Speaker frequency response (nominal)	100Hz-11,000Hz			
Light output	See chart by color			
Strobe flash rate	1 fps (flash per second) approx.			
Synchronization	$20~\Omega$ max. between any two devices. To determine allowed wire resistance, refer to these specifications, and the specifications for the synchronized signal source.			
Synchronization Sources	Edwards CC Series Signal Modules, Booster and Auxiliary Power Supplies, Intelligent and Conventional Control Panels			
Wire size	12 to 18 AWG (0.75 to 2.50 mm ²)			
Dimensions (W×H×D)	4.95 x 5.78 x 1.62 in (12.57 x 14.68 x 4.11 cm)			
Strobe-to-box center offset	-1.70 inches (-4.32 cm)			
Compatible electrical boxes [1]	2-gang, 4-inch square			
Trim plates	G4TR, G4TW (5.6 x 7.5 x 0.3 in (14.22 x 19.05 x 0.76 cm))			
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)			
Environmental compliance	RoHS directive 2011/65/EU			
RAL Color	Red=RAL 3013 White=RAL 9002			

- [1] Electrical boxes must be at least 1-1/2 in. (3.81 cm) deep. (2) Recommend electrical boxes be mounted at 81 inches AFF



Typical Frequency response @ 1W/1m