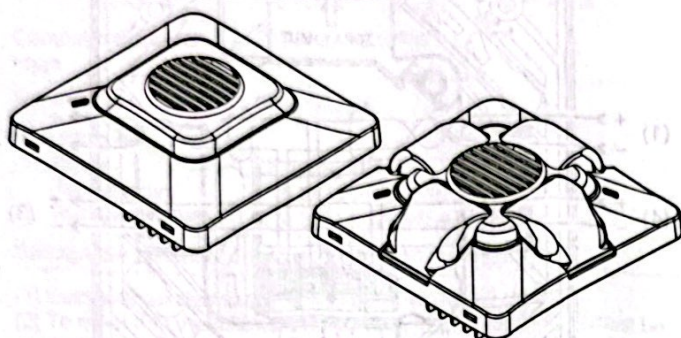




# Genesis LED Outdoor Speaker-Strobe Installation Sheet



## Description

Genesis LED outdoor speakers and speaker-strobes are wall or ceiling mounted fire alarm notification appliances designed for outdoor wet applications and are suitable for use with 25 or 70 VRMS distributed speaker systems. See Table 1 for a list of models.

Table 1: Models

Number	Description
WGSRA	Speaker, outdoor, red, ALERT
WGSRF	Speaker, outdoor, red, FIRE
WGSRF-FR	Speaker, outdoor, red, FIRE FEU
WGSRF-SP	Speaker, outdoor, red, FUEGO
WGSRN	Speaker, outdoor, red, no marking
WGSWA	Speaker, outdoor, white, ALERT
WGSWF	Speaker, outdoor, white, FIRE
WGSWF-FR	Speaker, outdoor, white, FIRE FEU
WGSWF-SP	Speaker, outdoor, white, FUEGO
WGSWN	Speaker, outdoor, white, no marking
WGSVRA	Speaker-strobe, outdoor, red, ALERT
WGSVRF	Speaker-strobe, outdoor, red, FIRE
WGSVRF-FR	Speaker-strobe, outdoor, red, FIRE FEU
WGSVRF-SP	Speaker-strobe, outdoor, red, FUEGO
WGSVRN	Speaker-strobe, outdoor, red, no marking
WGSVWA	Speaker-strobe, outdoor, white, ALERT
WGSVWF	Speaker-strobe, outdoor, white, FIRE
WGSVWF-FR	Speaker-strobe, outdoor, white, FIRE FEU
WGSVWF-SP	Speaker-strobe, outdoor, white, FUEGO
WGSVWN	Speaker-strobe, outdoor, white, no marking

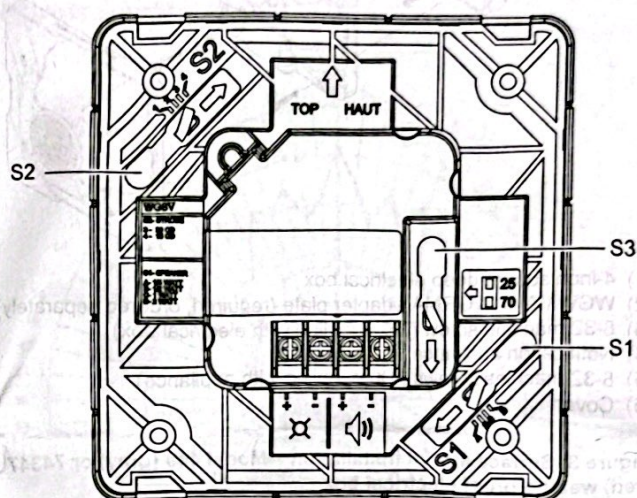
## Configuration

**Caution:** Equipment damage hazard. Configuration switches are protected by a rubber cover that is attached at the end opposite the arrow. Lift the end indicated by the arrow to access the switch underneath. When you lift the cover, be careful not to detach it from the appliance.

1. Select the speaker wattage by lifting the cover on S1, and then sliding the switch to the required setting. See Figure 1.
2. Select the speaker voltage by lifting the cover on S3, and then sliding the switch to the required setting. See Figure 1.
3. On speaker-strobes, select the strobe candela by lifting the cover on S2, and then sliding the switch to the required setting. See Figure 1.

**Note:** Switch S2 is not available on speaker-only models.

Figure 1: Light and sound output settings



S1 switch settings	S2 switch settings	S3 switch settings
A 1/4 Watt	1 Not used	25 25 VRMS
B 1/2 Watt	2 Not used	70 70 VRMS
C 1 Watt	3 30 candela	
D 2 Watt	4 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.

Connect the field wires as shown in Figure 4, and then attach to the wall box as shown in Figure 2 and Figure 3.

When installing the notification appliance on a 4-inch square deep electrical box, remove the trim skirt from the adapter ring by removing the two screws from the back of the adapter ring.

Synchronized operation requires a separately installed synchronization device. See the control unit or power supply compatibility list for compatible synchronization devices.

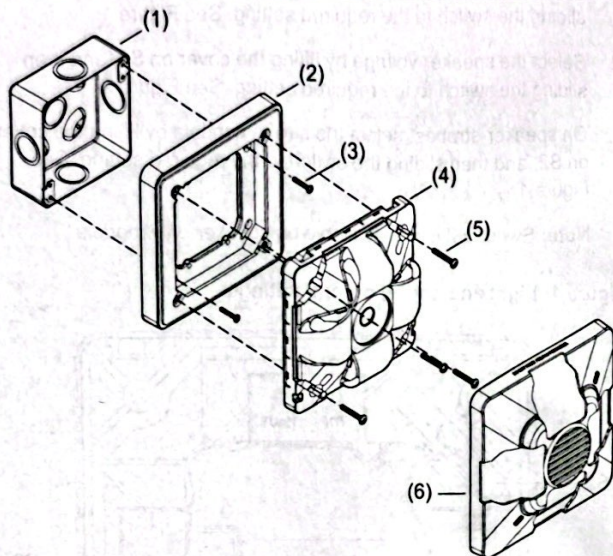




## Notes

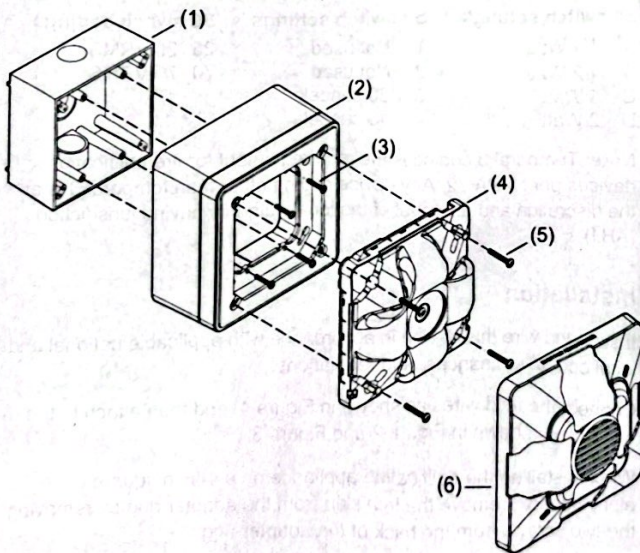
- See "Specifications" below for a list of compatible electrical boxes that meet UL/ULC, IP66, and NEMA 4X requirements.
- To meet IP66 requirements, plumbing tape (Teflon tape) must be applied to all threaded conduit plugs and connectors.

**Figure 2: Flush mount installation – 4-inch square deep electrical box**



- (1) 4-inch square deep electrical box
- (2) WGWM or WGRMA adapter plate (required, ordered separately)
- (3) 8-32 machine screw (2X, supplied with electrical box)
- (4) Notification appliance
- (5) 8-32 machine screws (4X, supplied with appliance)
- (6) Cover

**Figure 3: Surface mount installation – Model 449 (gray) or 74347U (red) weatherproof electrical box**



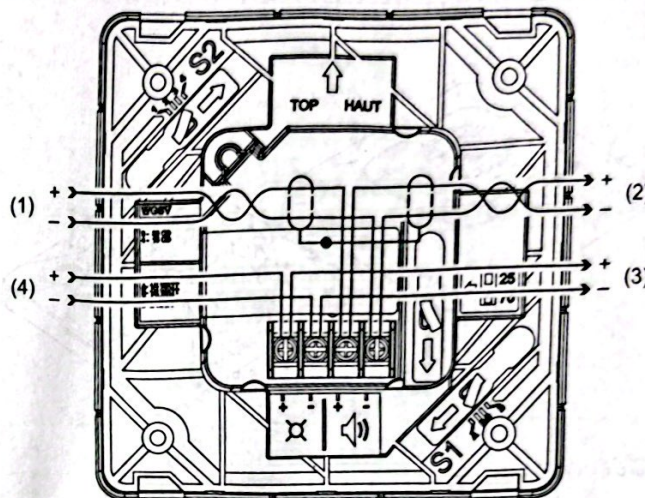
- (1) Model 449 or 74347U weatherproof surface mount box
- (2) WGWM or WGRMA adapter plate with ring (required, ordered separately)
- (3) 6-32 machine screw (4X, supplied with appliance)
- (4) Notification appliance
- (5) 8-32 machine screws (4X, supplied with appliance)
- (6) Cover

## Wiring

Wire as shown in Figure 4.

**Caution:** Electrical supervision requires that you break the wire run at each terminal. Do not loop field wires around the terminals.

**Figure 4: Speaker and-strobe wiring**



- (1) Speaker circuit in (shields, if used, must be continuous and free from earth ground except at the signal source)
- (2) Speaker circuit out
- (3) Strobe circuit out
- (4) Strobe circuit in (signal polarity shown in the active condition)

## 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.

## Specifications

Operating voltage	16 to 33 VDC
Strobe	25 VRMS, 70 VRMS
Speaker	
Operating current	See Table 2
Supervisory voltage	30 V max.
Sound output	See Table 3 and Table 4
Speaker response	400 to 4,000 Hz
Resonant frequency	520 Hz
Light output	15, 30 cd
Strobe flash rate	1 fps (flash per second) approx.
Light distribution	See Figure 5
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.
Wire size	12 to 18 AWG (0.75 to 2.50 mm <sup>2</sup> )



Screw torque	
Mounting screws	15 lbf-in (1.8 N-m) max.
Terminal screws	12 lbf-in (1.4 N-m) max.
Dimensions	See Figure 6
Compatible electrical boxes [1]	
Surface mount [2]	
UL/ULC, IP66, NEMA 4X	Model 449 (gray) or 74347U (red) electrical box with WGWMA or WGRMA adapter plate with ring
Flush mount [2]	
UL/ULC, IP66, NEMA 4X	Deep 4-inch square electrical box with WGWMA or WGRMA adapter plate
Compatible adapter rings	WGWMA, WGRMA
Replacement covers	See Table 5
Operating environment	
Class	Outdoor, wet
Temperature	-40 to 150.8°F (-40 to 66°C)
Relative humidity	0 to 95% noncondensing
Storage temperature	-40 to 158°F (-40 to 70°C)

[1] Electrical boxes must be at least 2 in. (5.08 cm) deep.

[2] To meet IP66 requirements, plumbing tape (Teflon tape) must be applied to all threaded conduit plugs and connectors.

**Table 2: Operating current (speaker-strobe models)**

Strobe setting	16 to 33 VDC
15, 30	35 mA

**Table 3: Sound level (dBA) at 3.05 m (10 ft.)**

Voltage setting	Wattage setting	Reverberant (UL 1480)	Anechoic (CAN/ULC-S541)
25V / 70V	1/4W	78	76
	1/2W	81	79
	1W	84	82
	2W	87	85

**Table 4: Sound pattern (speaker-strobe models)**

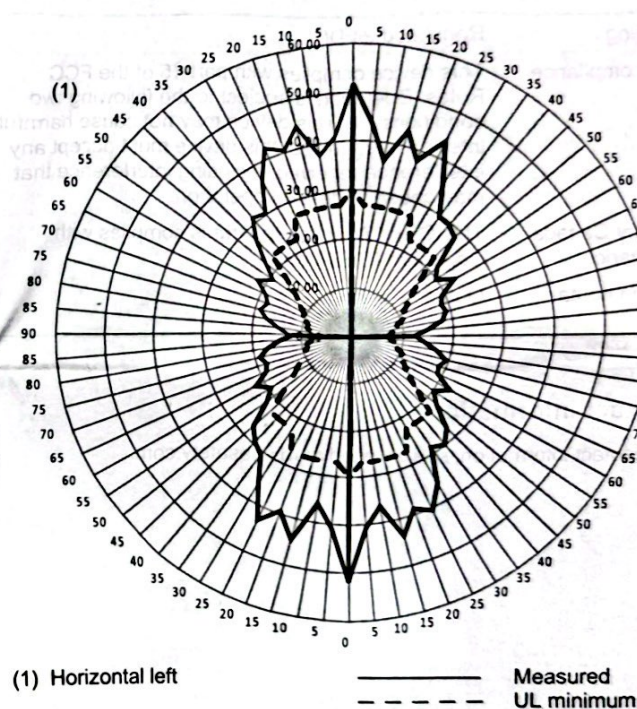
Axis	Angle	Change in output
Horizontal	± 50°	-3 dBA
	± 73°	-6 dBA
	± 90°	-9 dBA
Vertical	± 49°	-3 dBA
	± 71°	-6 dBA
	± 90°	-9 dBA

**Table 5: Replacement covers**

Number	Description
WGARA-CVR	Outdoor cover, audible, red, ALERT
WGAVRA-CVR	Outdoor cover, audible/visual, red, ALERT
WGARF-CVR	Outdoor cover, audible, red, FIRE
WGARF-SP-CVR	Outdoor cover, audible, red, FUEGO
WGARF-FR-CVR	Outdoor cover, audible, red, FIRE FEU
WGAVRF-CVR	Outdoor cover, audible/visual, red, FIRE
WGAVRF-SP-CVR	Outdoor cover, audible/visual, red, FUEGO
WGAVRF-FR-CVR	Outdoor cover, audible/visual, red, FIRE FEU

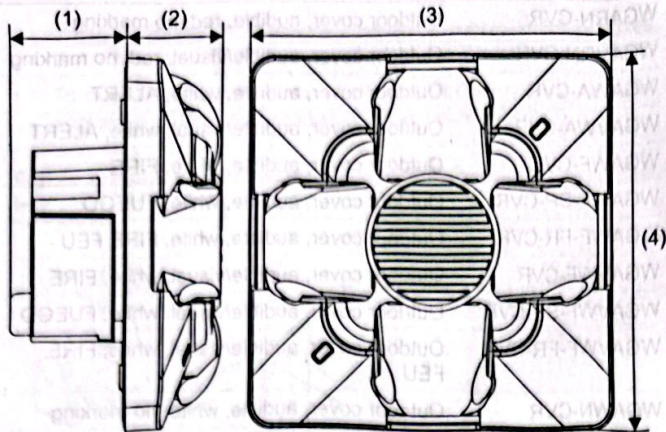
Number	Description
WGARN-CVR	Outdoor cover, audible, red, no marking
WGAVRN-CVR	Outdoor cover, audible/visual, red, no marking
WGAWA-CVR	Outdoor cover, audible, white, ALERT
WGAVWA-CVR	Outdoor cover, audible/visual, white, ALERT
WGAWF-CVR	Outdoor cover, audible, white, FIRE
WGAWF-SP-CVR	Outdoor cover, audible, white, FUEGO
WGAWF-FR-CVR	Outdoor cover, audible, white, FIRE FEU
WGAVWF-CVR	Outdoor cover, audible/visual, white, FIRE
WGAVWF-SP-CVR	Outdoor cover, audible/visual, white, FUEGO
WGAVWF-FR-CVR	Outdoor cover, audible/visual, white, FIRE FEU
WGAWN-CVR	Outdoor cover, audible, white, no marking
WGAVWN-CVR	Outdoor cover, audible/visual, white, no marking

**Figure 5: Light distribution**





**Figure 6: Dimensions**



- (1) 1.8 in. (4.57 cm)  
 (2) 1.55 in. (3.94 cm)  
 (3) 6.0 in. (15.24 cm)  
 (4) 6.0 in. (15.24 cm)

### Regulatory information

UL rating	Regulated 24 DC
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	Outdoor, wet

### Contact information

For contact information, see [www.edwardsfiresafety.com](http://www.edwardsfiresafety.com).