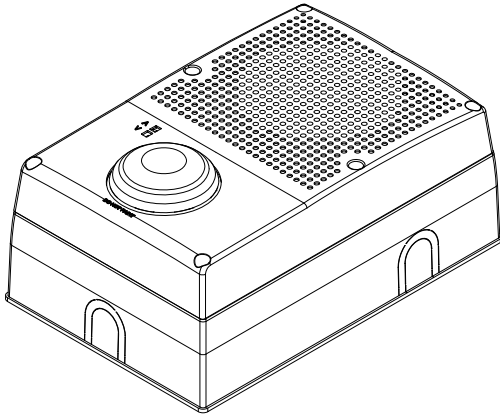


Genesis WG4 High-Candela Speaker-Strobe Installation Sheet



Description

The Genesis WG4 High-Candela Speaker-Strobe is a fire alarm and mass notification and emergency communication (MNEC) appliance designed for indoor or outdoor wet location use on ceilings or walls. See Table 1 below for a list of models and Table 2 for a list of accessories.

The speaker-strobe includes field-configurable switches for setting speaker and strobe output levels. The settings are visible after final installation.

Table 1: Models

Number	Description
WG4RF-SVMHC	Outdoor-rated wall/ceiling speaker-strobe (25/70 V), multi-tap, red with FIRE marking, 102/123/147/161 cd, clear lens
WG4RN-SVMHC	Outdoor-rated wall/ceiling speaker-strobe (25/70 V), multi-tap, red without marking, 102/123/147/161 cd, clear lens
WG4WA-SVMHA [1]	Outdoor-rated wall/ceiling speaker-clear-strobe (25/70 V), multi-tap, white with ALERT marking, 84/101/125/130 cd, Amber lens
WG4WA-SVMHC	Outdoor-rated wall/ceiling speaker-strobe (25/70 V), multi-tap, white with ALERT marking, 102/123/147/161 cd, clear lens
WG4WF-SVMHC	Outdoor-rated wall/ceiling speaker- strobe (25/70 V), multi-tap, white with FIRE marking, 102/123/147/161 cd, clear lens
WG4WN-SVMHA [1]	Outdoor-rated wall/ceiling speaker-strobe (25/70 V), multi-tap, white without marking, 84/101/125/130 cd, amber lens

Number	Description
WG4WN-SVMHC	Outdoor-rated wall/ceiling speaker-strobe (25/70 V), white without marking, 102/123/147/161 cd, clear lens

[1] Only indoor strobes with a clear lens comply with the latest requirements of UL 1971 *Signaling Devices for the Hearing Impaired*.

Table 2: Accessories

Number	Description
WG4WTS [1]	Outdoor-rated surface skirt, white - for Genesis WG4 speaker or speaker/strobe
WG4RTS [1]	Outdoor-rated surface skirt, red - for Genesis WG4 speaker or speaker/strobe
WGRGSKT	Appliance replacement gasket

[1] The trim skirt is outdoor-rated when used with the 449 weatherproof box.

Synchronized operation requires a separately installed synchronization control module. See Table 3 on page 3 for a list of compatible synchronization sources.

Installation

Install this appliance in accordance with the latest edition of NFPA 72 and the local authority having jurisdiction.

WARNING: Electrocutation hazard. To avoid personal injury or death from electrocution, remove all sources of power and allow stored energy to discharge before installing or removing equipment.

Caution: Electrical supervision requires the wire run to be broken at each terminal. Do not loop the signaling circuit field wires around the terminals.

Note: The Genesis WG4 High-Candela Speaker-Strobe may be ceiling-mounted or wall-mounted and may be placed in one of four positions (strobe above, strobe below, and strobe to either side); place the electrical box accordingly. See Figure 4.

To install the speaker-strobe:

1. Remove the cover from the speaker-strobe by first removing the six cover screws. See Figure 1 on page 2.
2. If desired, place the optional trim skirt over the electrical box. See "Specifications" for a list of compatible boxes.

3. Remove the gasket that comes with the 449 weatherproof box and replace it with the gasket that comes with the WG4 speaker-strobe.
4. Place the gasket over the backplate, and then feed the field wiring through the wire slots on the gasket and the backplate. See Figure 5, item 3.
5. Secure the backplate to the electrical box with four screws.
6. Connect the wiring to the terminal strip.
7. Connect the speaker to the audio NAC and the strobe to the strobe NAC. Observe polarity. See Figure 5.
8. If temporal strobe (private mode) operation is desired, cut jumper JP1. See Figure 5, item 5.
9. Set the speaker voltage.

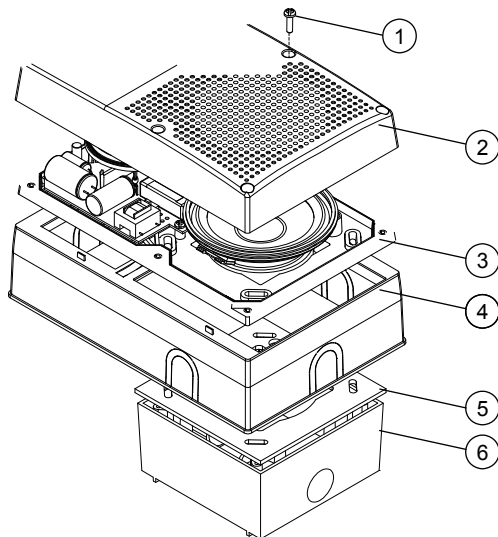
The default speaker voltage is 70 V. For 25 V, reposition the speaker voltage-setting switch S3. See Figure 5, item 4.

10. Set the candela output.

The default candela setting is D. To select a different candela output, align the S2 indicator to the desired candela output. See Table 5 and Figure 5, item 1.

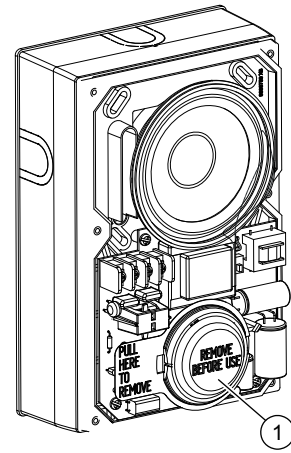
11. The default wattage setting is Z, corresponding to 1/4 watt. To select a different wattage, align the S1 indicator to the desired wattage setting. See Table 4 and Figure 5, item 2.
12. Remove the strobe protective cover. See Figure 2.
13. Position the cover over the backplate and secure with the six cover screws.
14. Test the unit for proper operation.

Figure 1: Exploded view of assembly



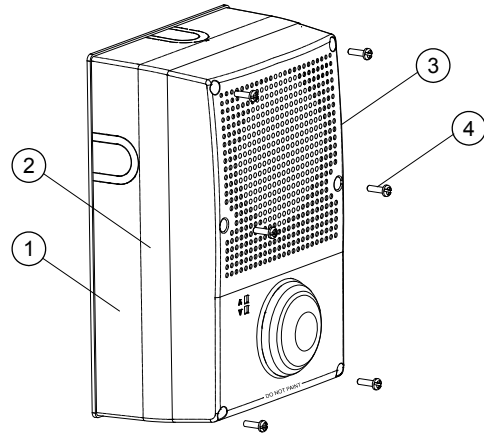
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| 1. Cover screws (6X) | 4. Optional skirt |
| 2. Front cover | 5. Gasket |
| 3. Backplate | 6. Electrical box |

Figure 2: Protective cap



1. Protective cap

Figure 3: Assembled



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|-------------------|----------------------|
| 1. Optional skirt | 3. Front cover |
| 2. Backplate | 4. Cover screws (6X) |

Figure 4: Mounting positions

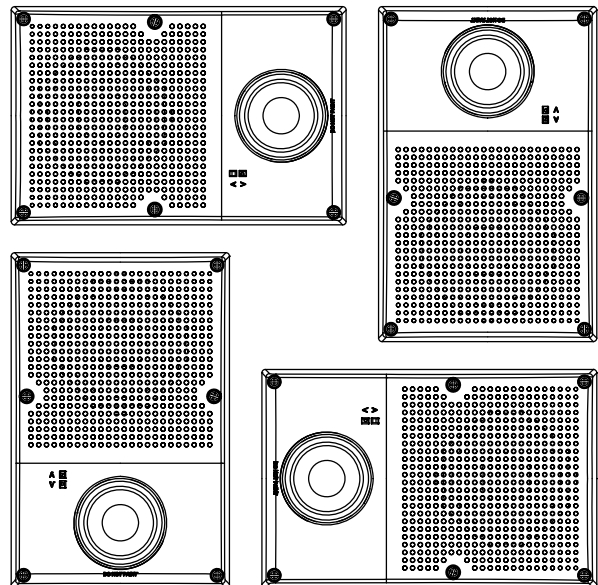
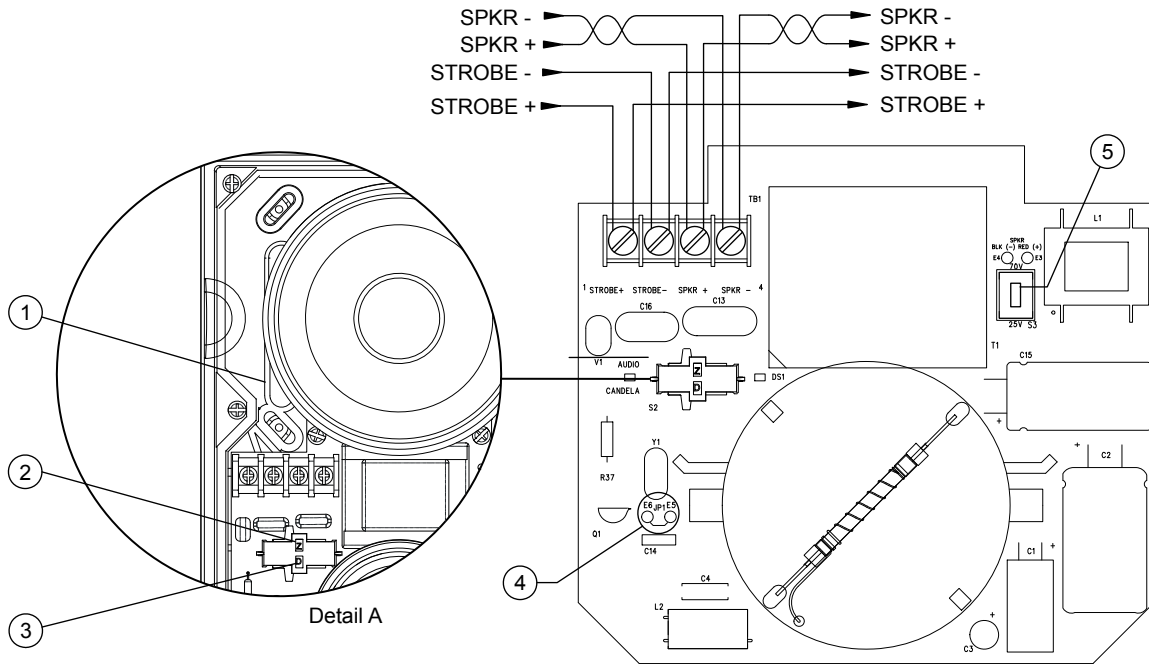


Figure 5: Wiring, JP1, and switch locations



1. Wire slot.
2. S1 wattage-setting switch (see Table 4).
3. S2 candela-setting switch (see Table 5).
4. JP1 strobe temporal mode selection jumper.
5. S3 speaker voltage-setting switch. UP position is 70 V (default); DOWN position is 25 V.

Note: Polarity shown in alarm condition

Maintenance

This unit is not serviceable or repairable. Should the unit fail to operate, contact the supplier for replacement.

Perform a visual inspection and an operational test twice a year or as directed by the local authority having jurisdiction.

Caution: Do not change the factory-applied finish.

Specifications

Operating voltage	
Speaker	25 VRMS or 70 VRMS, switch selectable
Default	70 VRMS
Strobe	24 VDC, 24 VFWR nominal
Supervisory voltage	30 V max.
Sound level output	See Table 4
Speaker response	400 to 4,000 Hz
Strobe operating current	See Table 8
Light output	Table 5, Table 6, and Figure 6
Wire size	12 to 18 AWG (0.75 to 2.50 mm ²)
Compatible electrical box	
Wet	Model 449
Dry	4 in. square by 1-1/2 in. deep box
Operating environment	
Temperature	-31 to 151°F (-35 to 66°C)
Relative humidity	0 to 95% noncondensing

Table 3: Compatible synchronization sources models

Name	Number		
Auto-Sync Output Module	SIGA-CC1S	GSA-CC1S	SIGA-MCC1S
	GSA-MCC1S	SIGA-CC2A	SIGA-MCC2A
Genesis Signal Master Remote Mount	ADTG1M-RM	G1M-RM	EG1M-RM
	MG1M-RM		

Table 4: Sound level output (dBA)

Wattage	Setting	25 V	70 V
2 W	T	90.0	89.7
1 W	X	87.1	86.9
1/2 W	Y	84.0	83.9
1/4 W	Z	80.8	80.8

dBA = Decibels, A-weighted.

UL 1480: Sound level output at 10 ft. (3.05 m) measured in a reverberant room using 400 to 4,000 Hz band-limited pink noise.

Table 5: Indoor strobe output (cd)

Lens	Standard	D	C	B	A
Clear	UL 1971	102	123	147	161
Amber	UL 1638	84	101	125	130

Table 6: Outdoor strobe output (cd)

Lens	Standard	D	C	B	A
Clear	UL 1638	41	50	60	65
Amber	UL 1638	34	41	51	52

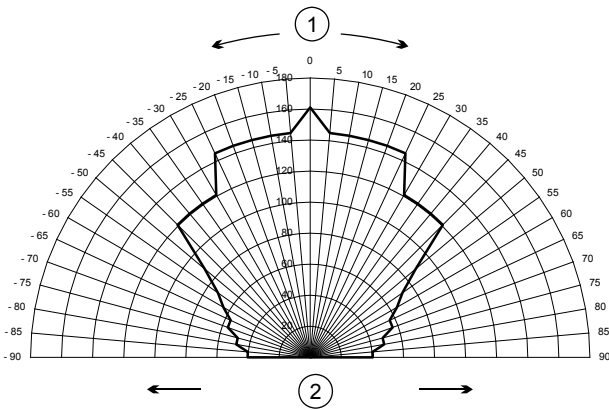
Table 7: UL 1638 outdoor light output

Lens	Rating (cd)
Clear	233 nominal, 65 cd at -35°C
Amber	188 nominal, 52 cd at -35°C

Table 8: Strobe operating current in RMS (A)

Setting	D	C	B	A
VDC	324	390	494	495
VFWR	412	487	607	646

Figure 6: UL 1971 minimum light output (% of rating vs. angle)



1. Angle
2. Percentage of rated output

Note: Horizontal plot

Regulatory information

Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
Year of manufacture	The first two digits of the DATE MFG number (located on the product identification label) are the year of manufacture.
UL rating	Regulated 24 DC, Regulated 24 FWR
Synchronization	Meets: UL 1971 requirements [1]
North American standards	Meets: UL 1971 [1], UL1638, UL1480 Follow: NFPA 72
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

[1] Only models with a clear lens meet UL 1971.

Contact information

For contact information see: www.utcfireandsecurity.com.