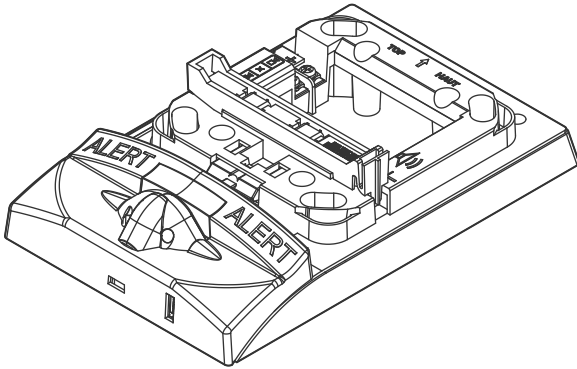




# G4SE Genesis LED Strobe Expander Installation Sheet



## Description

G4SE Genesis LED Strobe Expanders add a second synchronizable, multicolor strobe to Genesis LED G4 horn/strobes and Genesis LED G4S speaker/strobes. Together, they provide fire alarm signaling and mass notification/emergency communication signaling in one compact assembly.

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

This document provides installation instructions for the G4SE strobe expander models listed in Table 1 below.

Table 1: Models

| Model    | Description                                    |
|----------|--|
| G4SEWA-A | Strobe expander, white, "ALERT," amber lens    |
| G4SEWA-R | Strobe expander, white, "ALERT," red lens      |
| G4SEWA-G | Strobe expander, white, "ALERT," green lens    |
| G4SEWA-B | Strobe expander, white, "ALERT," blue lens     |
| G4SEWN-A | Strobe expander, white, no marking, amber lens |
| G4SEWN-R | Strobe expander, white, no marking, red lens   |
| G4SEWN-G | Strobe expander, white, no marking, green lens |
| G4SEWN-B | Strobe expander, white, no marking, blue lens  |
| G4SERA-A | Strobe expander, red, "ALERT," amber lens      |

## Wiring

Wire the G4SE as shown in Figure 2 and Figure 3.

**Note:** To maintain circuit continuity, do not remove the shorting clip until you are ready to install the notification appliance.

## 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 notification circuit field wires around the terminals.

For new flush mount installations, install the electrical box so the bottom is at least 83 inches above the finished floor. See Figure 1.

### To install the G4SE strobe expander:

1. Attach the G4SE strobe expander to a standard metal electrical box. Use the screws provided with the electrical box. Tighten until flush with the mounting surface.
2. Run the field wires through the strobe expander opening, and then connect them to the terminal screws. See Figure 2 and Figure 3.
3. Remove the shorting clip and then install the notification appliance. Refer to the notification appliance's installation sheet for instructions.

Figure 1: Typical flush mount installation

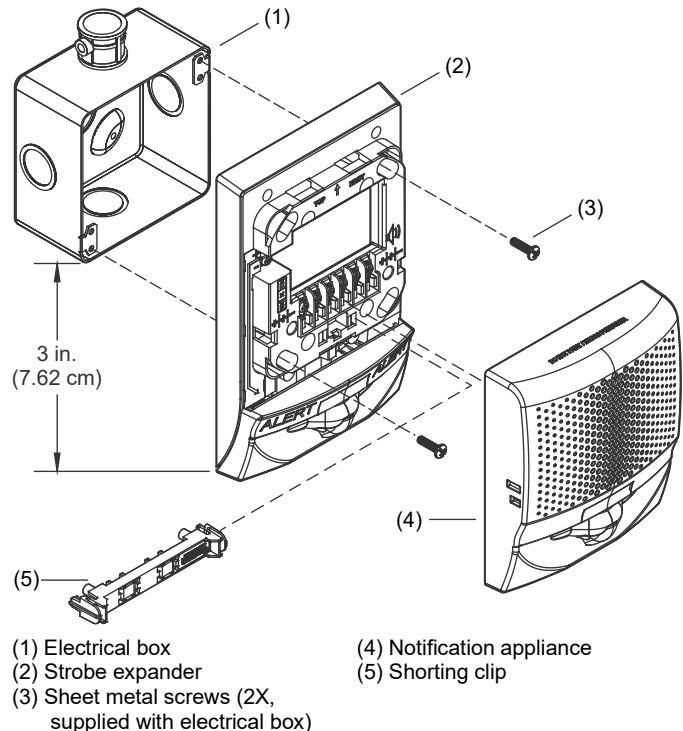
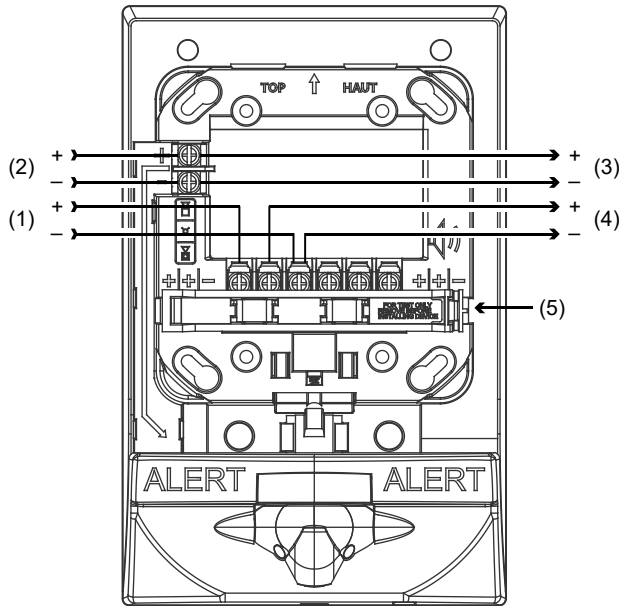
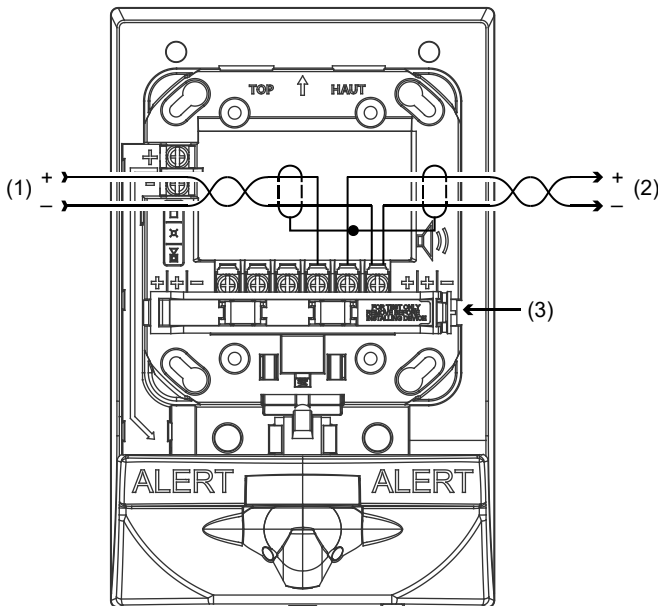


Figure 2: G4SE strobe circuit wiring



- (1) Notification appliance strobe circuit in (signal polarity shown in the active condition)
- (2) Expander strobe circuit in (signal polarity shown in the active condition)
- (3) Expander strobe circuit out
- (4) Notification appliance strobe circuit out
- (5) Shorting clip

Figure 3: G4SE speaker circuit 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) Shorting clip

### Maintenance and testing

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

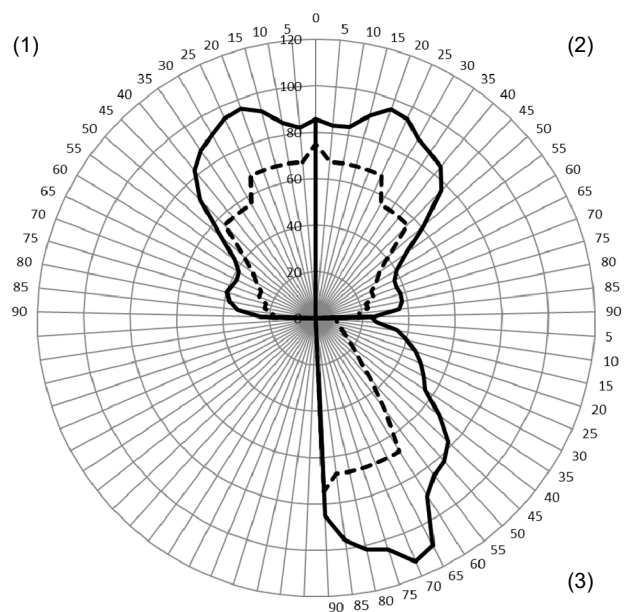
Perform a visual inspection and operational testing upon completion of installation and annually thereafter or as directed by the local authority having jurisdiction.

### Specifications

|                             |  |
|-----------------------------|--|
| Operating voltage           | 16 to 33 VDC, 16 to 33 VFWR  |
| Operating current           |  |
| 16 to 33 VDC                | 28 mA  |
| 16 to 33 VFWR               | 36 mA  |
| Light output                |  |
| Amber lens (-A models)      | 75 cd  |
| Green lens (-G models)      | 65 cd  |
| Blue lens (-B models)       | 30 cd  |
| Red lens (-R models)        | 15 cd  |
| Strobe flash rate           | 1 fps (flash per second) approx.   |
| Light distribution          | See Figure 4   |
| Synchronization             | 20 $\Omega$ max. between any two devices.<br>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             |  |
| Machine screws              | 5 lbf-in (0.6 N-m, typical)  |
| Plastite screws             | 15 lbf-in (1.8 N-m), typical   |
| Terminal screws             | 12 lbf-in (1.4 N-m) max.   |
| Dimensions                  | See Figure 5   |
| Strobe to box center offset | 3.9 in. (9.9 cm)   |
| Compatible electrical boxes | North American 4-inch square box, 2-1/8 inches deep (no extension ring)  |
| Operating environment       |  |
| Temperature                 | 32 to 122°F (0 to 50°C)  |
| Relative humidity           | 0 to 93% noncondensing   |
| Storage temperature         | -40 to 158°F (-40 to 70°C)   |

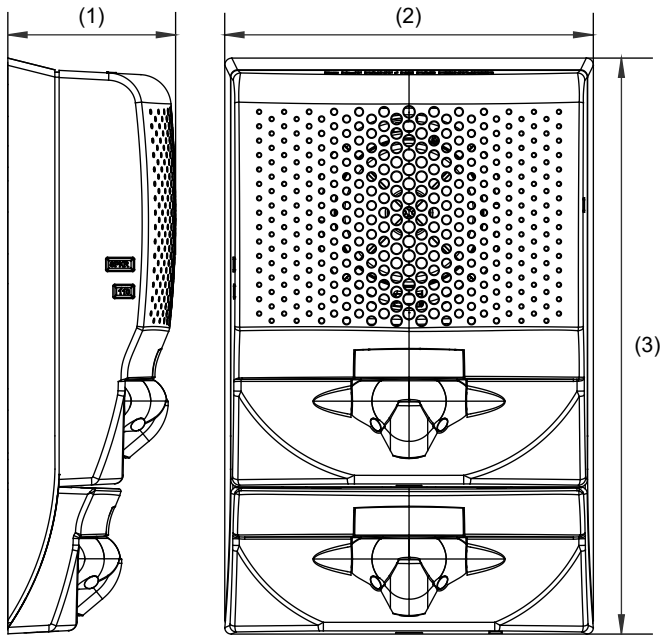
**Note:** This device was tested to the regulated 24 VDC/FWR operating voltage limits of 16 V and 33 V.

Figure 4: 75 cd light distribution



- (1) Horizontal left
  - (2) Horizontal right
  - (3) Vertical bottom
- Measured  
 - - - - - UL minimum

Figure 5: Dimensions



(1) 2.33 in. (5.92 cm)  
(2) 5.12 in. (13.0 cm)

(3) 8.0 in. (20.32 cm)

## 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.edwardsfiresafety.com](http://www.edwardsfiresafety.com).