

Overview

The Signature Series AB4G sounder base adds an audible output function to any Signature Series detector. The base can operate as an independent local alarm, or as part of a zone or system alarm with synchronized audible output.

The sounder base matches the finish of Signature Series detectors and the sound output slots complement the smoke/heat entry openings of the detector. The result is a compact unit with an attractive appearance.

The base generates a loud piercing tone that has excellent wall penetration qualities. It uses the same tone generator found in the award-winning Genesis line of wall and ceiling horns.

The AB4G may be configured in the field for either steady or temporal output and either high or low dB output. Low dB and steady output selections are made by cutting jumpers on the circuit board. The default setting is high dB with temporal output.

AB4G sounder bases on the same circuit may be activated as a group or zone with the use of a SIGA-CRR polarity reversal module, and the group or zone may be synchronized audible output with the use of a G1M-RM signal master.

The AB4G sounder base can simply operate according to the state of its detector, or it can be configured through system programming to operate in conjunction with all sounder bases on the same circuit, or it can be controlled by program rules. Available operating modes are determined by the system that supports the Signature data loop.

Standard Features

- **Temporal or steady tone**
Jumper selects steady or synchronized temporal output.
- **High or low dB output**
Jumper selects low or high dBA output.
- **Single or group operation**
Optional polarity reversing module configures base for group alarm output.
- **UL268 and UL464 listed**
UL listing under smoke detector and audible signal standards allows application as smoke alarm and/or audible signal.
- **Attractive installation**
Flush mount to a wide selection of North American boxes or surface mount to optional custom-matched box.

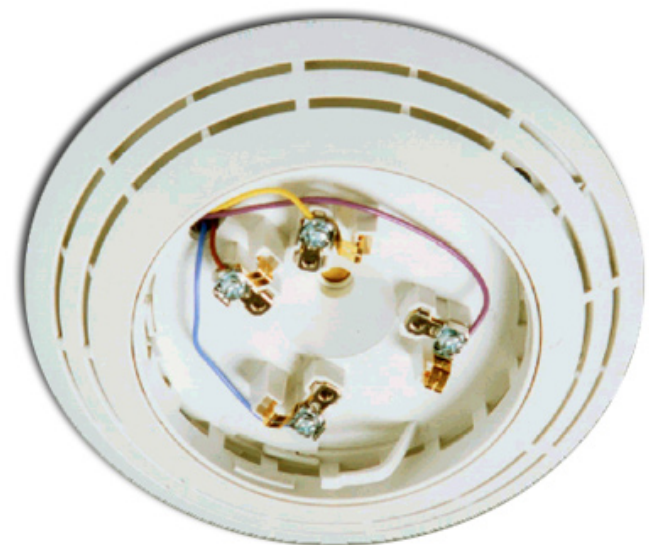
Application

The Signature Series AB4G sounder base is for use with Signature Series detectors in applications where localized or group alarm signaling is required. The base uses the same address and programming label as the detector it supports.

The base is listed by Underwriters Laboratories under the UL268 and UL464 standards, allowing its application where both smoke alarms and/or notification appliances are required. This makes the AB4G ideal for hotels, dormitories, and other residential occupancies where supplementary audible output is required to meet required sound levels for sleeping areas or areas subject to high levels of ambient noise.

Sounder Base

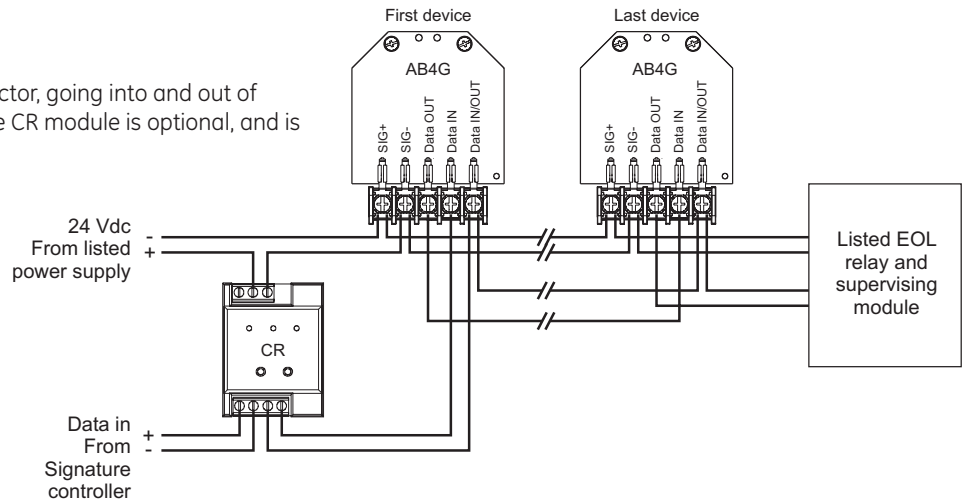
Model SIGA-AB4G



Applications

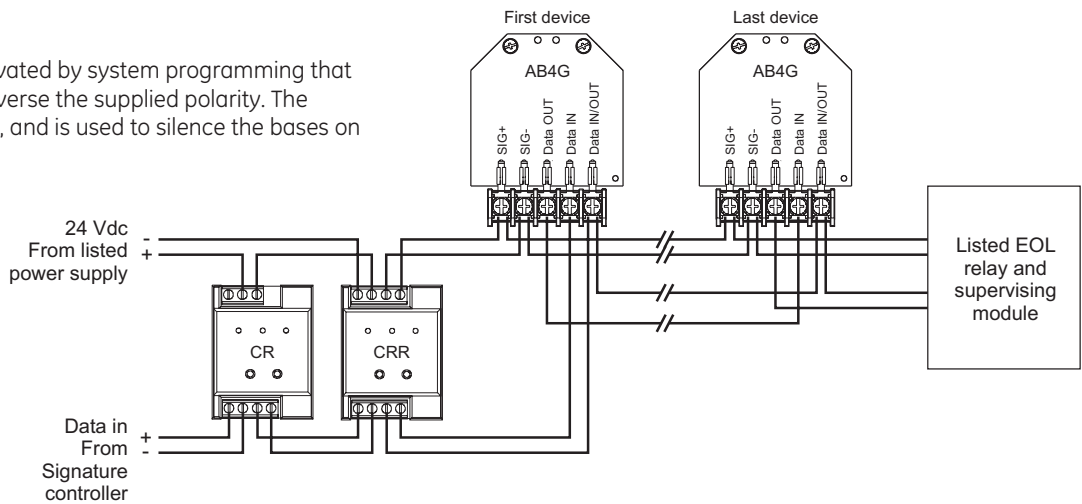
Detector operates the base

The base follows the state of the detector, going into and out of alarm with the detector. The Signature CR module is optional, and is used to silence the bases on the line.



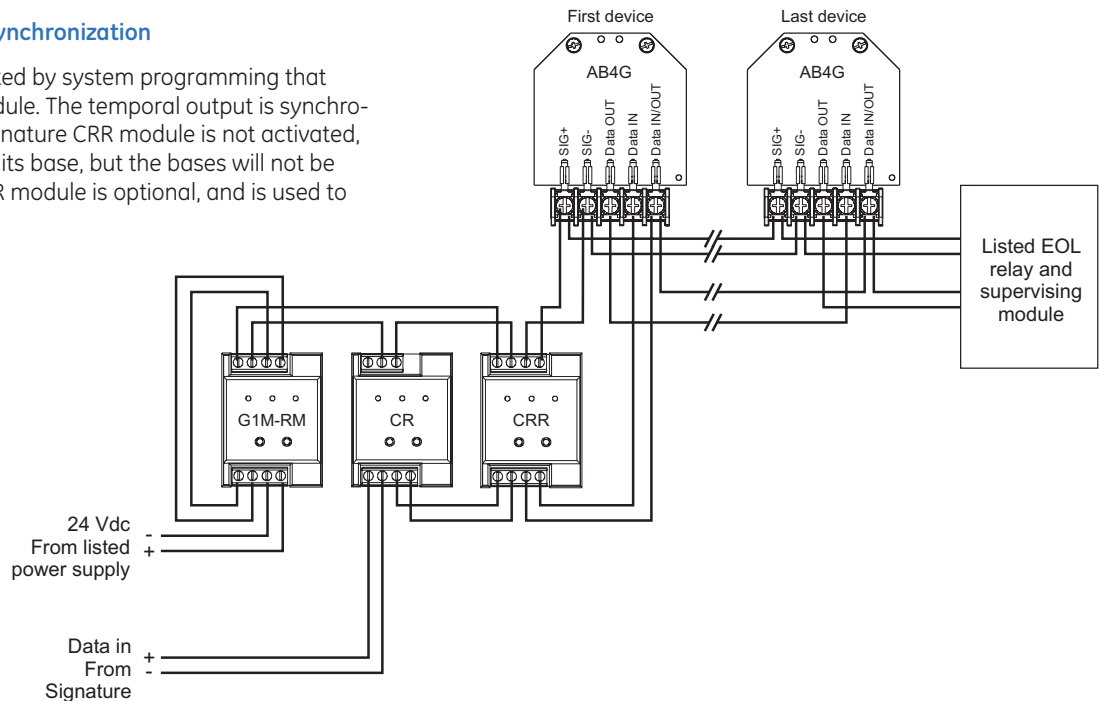
System turns on all bases

All bases on the line can be activated by system programming that triggers the Signature CRR to reverse the supplied polarity. The Signature CR module is optional, and is used to silence the bases on the line.



System turns on bases with synchronization

All bases on the line are activated by system programming that triggers the Signature CRR module. The temporal output is synchronized by the G1M-RM. If the Signature CRR module is not activated, each detector can still operate its base, but the bases will not be synchronized. The Signature CR module is optional, and is used to silence the bases on the line.



References NFPA 72 (2002 edition)

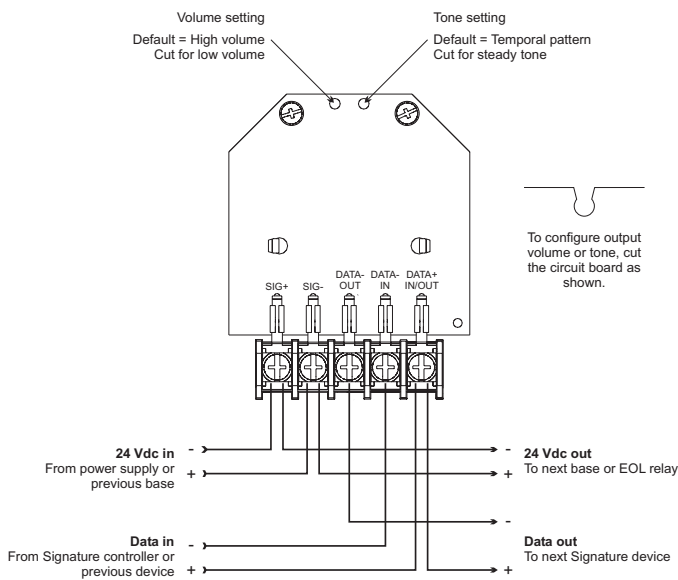
7.4.2 Public Mode Audible Requirements.

7.4.2.1 To ensure that audible public mode signals are clearly heard ... they shall have a sound level at least 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, measured 1.5 m (5 ft) above the floor in the occupiable area, using the A-weighted scale (dBA).

7.4.4 Sleeping Areas.

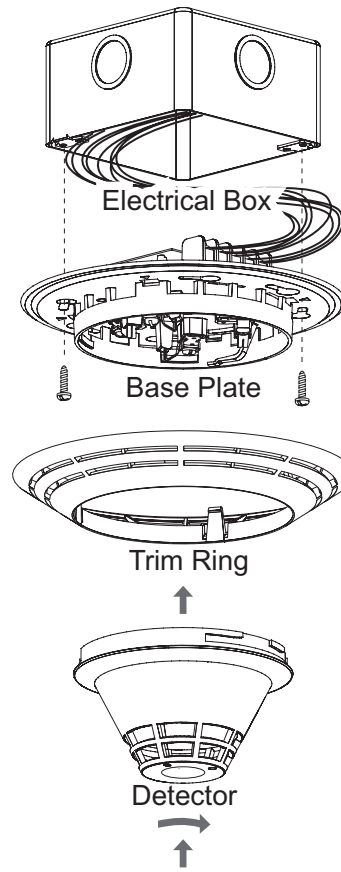
7.4.4.1 Where audible appliances are installed to provide signals for sleeping areas, they shall have a sound level of at least 15 dB above the average ambient sound level or 5 dB above the maximum sound level having a duration of at least 60 seconds or a sound level of at least 75 dBA, whichever is greater, measured at the pillow level in the occupiable area, using the A-weighted scale (dBA).

Configuration and Wiring



Installation and Mounting

Flush Mounting: The sounder base flush mounts into 2-1/8 inch (54 mm) deep standard North American 4 inch square electric box, North American 4 x 4 inch octagonal concrete ring (mud box), and standard European 100 mm square electric boxes. The terminal block makes field wire connections fast and efficient. After wiring, a simple push and twist motion locks the Signature detector into the base.



AB4G-SB
Optional Surface Box
(6.8" diameter x 1.8" deep)

GE Security recommends that fire alarm systems and their devices always be installed in accordance with the latest recognized edition of national and local fire alarm codes.

Sound Level Output

Signal	Voltage	Low dBA	High dBA
Reverberant room per UL 464*			
Temporal	16 Vdc	71.5	78.1
	24 Vdc	75.5	80.7
	33 Vdc	78.5	83.1
Steady	16 Vdc	75.5	81.7
	24 Vdc	79.5	84.5
	33 Vdc	81.8	86.5
Reverberant room per UL 268			
Temporal	16 Vdc	77.5	84.1
	24 Vdc	81.5	86.7
	33 Vdc	84.5	89.1
Steady	16 Vdc	81.5	87.7
	24 Vdc	85.5	90.5
	33 Vdc	87.8	92.5

dBA = Decibels, A-weighted

*For UL 464 applications low dBA settings are for private mode only.

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Specifications

Operating Voltage	16-33 Vdc, 16-33 Vfwr (continuous voltage required for temporal output)						
Supervisory Current	DC=1.46mA; FWR=2.15mA						
Operating Current in mA (RMS)	16 Vdc	24 Vdc	33 Vdc	16 Vfwr	24 Vfwr	33 Vfwr	
Low dBA	17	24	31	41	51	60	
High dBA	28	41	52	48	60	66	
Default Settings	Output volume: high dBA Output tone: temporal pattern (0.5 s on, 0.5 s off, 0.5 s on, 0.5 s off, 0.5 s on, 1.5 s off, repeat cycle).						
Environmental	Operating Temperature: 32° to 120° F (0° to 49° C) Operating Humidity: 0 to 93% RH Storage Temperature: -4 to 140 °F (-20 to 60 °C)						
Wire Size	12 to 18 AWG (2.5 to 0.75 mm ²)						
Compatible Detectors	All Signature Series Detectors (SIGA-IPHS, SIGA-PHS, SIGA-IS, SIGA-PS, SIGA-HFS, SIGA-HRS)						
Compatible Electrical Boxes	AB4G-SB Surface Box for Audible Bases, North American 2-1/8 in (54 mm) deep 4-inch square box, North American 4 by 4 inch octagonal ring (mud box), Standard European 100 mm square box						
Dimensions	Base diameter: 6.8 in (173 mm). Base height from box: 0.8 in (21 mm)						
Wall mount applications	Distance from ceiling 12 in (305 mm) maximum						
Agency Listings	Meets or exceeds requirements specified in UL 268, UL 464, and ULC-S525. (MEA, CSFM pending)						

Ordering Information

Catalog Number	Description	Ship Wt., lb. (kg)
SIGA-AB4G	Audible (Sounder) Base	0.3 (0.15)
AB4G-SB	Surface Box for Audible Base	1.0 (0.45)

Related Equipment		
Catalog Number	Description	Ship Wt., lb. (kg)
SIGA-MCRR	Polarity Reversal Relay (Plug-in UIO module)	0.18 (0.08)
SIGA-CRR	Polarity Reversal Relay (Standard mount module)	0.2 (0.1)
SIGA-MCR	Control Relay Module (Plug-in UIO module)	0.18 (0.08)
SIGA-CR	Control Relay Module (Standard mount module)	0.2 (0.1)
G1M-RM	Signal Master (1-gang remote mount)	0.2 (0.1)



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