



GEH24 Series Low-frequency Horns



- ▶ **Evacuation tone**
- ▶ **Use the SuperSlide feature for easy testing**
- ▶ **Wide voltage range; 16 to 33 VDC or FWR**
- ▶ **Select high or low frequency, high or low volume, and temporal Code 3 or continuous tone pattern**
- ▶ **Wire then install the entire system**
- ▶ **Rugged die-cast metal mounting plate**

The Gentex Commander² Series Low-frequency Horns (GEH24) offer a dependable audible alarm and a low current draw.

Functions

Easy Installation and Testing

The user can wire then install the entire system, reducing installation and operating costs. Use the SuperSlide feature to test supervision.

Horn Output

The horns provide a selection of high or low volumes with a peak sound of 100 dBA or greater at 10 ft (3 m).

The series offers a choice between a 2400 Hz (remote signaling) tone or a broadband low frequency (1500 Hz to 3000 Hz) mechanical sounding (evacuation) tone where closed doors could prevent hearing the other tone. The user can also select either continuous or temporal Code 3 tone output, and synchronize the temporal signal by using the AVS Series Synchronization Modules or a compatible control panel.

Certifications and Approvals

Gentex Corporation holds these Listings and Approvals:

Region	Certification	
USA	UL	ULSZ: Audible Signal Appliances (UL464), ULSZ7: Audible Signal Appliances Certified for Canada (cULus)
	FM	
	CSFM	7135-0569: 122
	CBFP	City of Chicago Bureau of Fire Protection
	NYC/MEA	285-91-E: Vol. XV
	ADA	Complies with Americans with Disabilities Act ADA 4.28.3
NFPA	Complies with National Fire Protection As- sociation NFPA 72	

Installation/Configuration Notes

Compatible Products

The following products are compatible with the GEH24 Series Horns:

Category	Product ID	Product Description
Control Panels	D7022 ¹	Conventional FACP
	D7024 ²	Addressable FACP
	D7024	Conventional FACP
	D8024 ³	Analog FACP

Category	Product ID	Product Description
Modules	D9124 ³	Addressable FACP
	D10024A ³	Analog FACP
	AVS-44	Synchronization module (red)
	AVS44-W	Synchronization module (white)
	AVSM-R	Synchronization module (red)
	AVSM-W	Synchronization module (white)

¹ The D7022 must be set for 24 VDC operation and requires the AVS44 or AVSM Synchronization Modules for synchronization.

² When used with a D7039 Multiplex Expansion Module, the D7024 becomes an addressable FACP.

³ For synchronization, use the AVS44 or AVSM Synchronization Modules with these control panels.

Mounting Considerations

Outdoor Applications

For an outdoor application or a severe environment (NEMA 3R) application, the GEH24 Series Horns must be surface mounted on a flat wall in a GOE Outdoor Enclosure. Use a watertight conduit fitting.

Indoor Applications

Install the horns with their tops at least 90 in. (2.3 m) above the floor and no closer than 6 in. (15.2 cm) to the ceiling. The horns are equipped with a four-inch square mounting plate that can be attached as follows:

	Conduit Applications	Surface Mounted	Semi-flush Mounted
Single-gang	•		•
Double-gang	•	•	•
Four-inch square	•	•	•
GSB	•	•	
GOE	**	•	

* The GOE Outdoor Enclosure has knockout holes sized for half-inch conduit and matching connector. Use a watertight conduit fitting.

Shipping Information

The horns are delivered from the factory set to the temporal lower frequency mode. Also included is a locking mechanism that secures the product to the bracket without any screws showing.

Wiring

The input terminals accept wires with diameters between 18 AWG (1.2 mm) and 12 AWG (2.3 mm).

Parts Included

Quant.	Component
1	Horn with finish plate
1	Die-cast mounting plate
1	Plastic test card
1	Hardware pack
1	Literature pack

Technical Specifications

Alarm Ratings

Horn (Continuous, 2400 Hz)

Audible Device Current (maximum):	28 mA RMS; 48 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 86 dBA Low output: 78 dBA

Horn (Continuous, Mechanical)

Audible Device Current (maximum):	25 mA RMS; 44 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 84 dBA Low output: 76 dBA

Horn (Temporal Code 3, 2400 Hz)

Audible Device Current (maximum):	28 mA RMS; 48 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 83 dBA Low output: 75 dBA

Horn (Temporal Code 3, Mechanical)

Audible Device Current (maximum):	25 mA RMS; 44 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 81 dBA Low output: 73 dBA*

Chime (Continuous)

Audible Device Current (maximum):	15 mA RMS; 30 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 71 dBA* Low output: 68 dBA*

Chime (Temporal Code 3)

Audible Device Current (maximum):	15 mA RMS; 30 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 71 dBA* Low output: 68 dBA*

Whoop

Audible Device Current (maximum):	56 mA RMS; 62 mA FWR
Sound output at 10 ft (3 m) at 24 VDC:	High output: 83 dBA Low output: 72 dBA*

* If you operate the horn in this mode at this voltage, it does not meet the UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high output setting for public mode application.

Note The sound output for the temporal (Code 3) tone is rated lower because the time the horn is off is averaged into the sound output rating. When the horn is producing a tone in the

Temporal mode its sound pressure is the same as the Continuous mode.

Environmental Considerations

Relative Humidity	Up to 93% non-condensing
Temperature (Operating):	+32°F to +120°F (0°C to +49°C)

Mechanical Properties

Dimensions (H x W x D):	5.0 in. x 4.5 in. x 2.5 in. (12.7 cm x 11.4 cm x 6.4 cm)
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Power Requirements

Voltage Range:	16 VDC or FWR to 33 VDC or FWR
Voltage (Input):	24 VDC or FWR nominal

Trademarks

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SuperSlide is a trademark of the Gentex Corporation, USA.

Ordering Information

GSB Surface Back Box (red) 5.6 in. x 4.6 in. x 1.5 in. (14.1 cm x 11.6 cm x 3.7 cm)	GSB
GOE-R Outdoor Enclosure (red) For use with Gentex GECB (indoor) and WGECB (outdoor) notification appliances	GOE-R
GOE-W Outdoor Enclosure (white) For use with Gentex GECB (indoor) and WGECB (outdoor) notification appliances	GOE-W

Ordering Information

GEH24-R 24 VDC Horn (red) Red, 24 VDC horn; field-selectable for high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern	GEH24-R
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GEH24-W 24 VDC Horn (white)	GEH24-W
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Accessories

AVS-44 Synchronization Control Module (red) Synchronization Control Module primarily for use with the Gentex HS24 Series and ST24 Series notification appliances.	AVS-44
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AVS44-W Synchronization Control Module (white) Synchronization Control Module primarily for use with the Gentex HS24 Series and ST24 Series notification appliances.	AVS44-W
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AVSM-R Synchronization Control Module (red) Synchronization module for use with all Gentex synchronizable notification appliances except the HS24 Series and the ST24 Series.	AVSM-R
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AVSM-W Synchronization Control Module (white) Synchronization module for use with all Gentex synchronizable notification appliances except the HS24 Series and the ST24 Series.	AVSM-W
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