

GEH24 Low-frequency Horns

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Invented for life



- ▶ 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

The Gentex Commander² 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). They offer 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 | see our website |

Installation/configuration notes

Compatible Products

The following products are compatible with the GEH24 Horns:

| Category | Product ID | Product Description |
|----------------|-------------------------|---------------------|
| Control Panels | D7022 ¹ | Conventional FACP |
| | D7024 ² | Addressable FACP |
| | D7024 | Conventional FACP |
| | D8024 ³ | Analog FACP |
| | D9124 ³ | Addressable FACP |
| | D10024A ³ | Analog FACP |
| | FPD-7024 ^{2,4} | Addressable FACP |
| | FPD-7024 | Conventional FACP |

| | | |
|---------|---------|--------------------------------|
| Modules | 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 FPD-7024 and D7024 become addressable FACP's.

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

⁴ The FPD-7024 is not UL864 9th edition approved for use with the Gentex synch protocol.

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 and 12 AWG (ISO 0.75 mm² and 4 mm²).

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

Electrical

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

Environmental

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

Mechanical

| | |
|-------------------------|---|
| 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) |
|-------------------------|---|

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.

**Notice**

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.

Trademarks

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

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
Order number **GEH24-R**

GEH24-W 24 VDC Horn (white)

Order number **GEH24-W**

Accessories**AVS-44 Synchronization Control Module (red)**

Synchronization Control Module primarily for use with the Gentex HS24 Series and ST24 Series notification appliances.

Not Available.

Order number **AVS-44**

AVS44-W Synchronization Control Module (white)

Synchronization Control Module primarily for use with the Gentex HS24 Series and ST24 Series notification appliances.

Not Available.

Order number **AVS44-W**

AVSM-R Synchronization Control Module (red)

Synchronization module for use with all Gentex synchronizable notification appliances except the HS24 Series and the ST24 Series.

Not Available.

Order number **AVSM-R**

AVSM-W Synchronization Control Module (white)

Synchronization module for use with all Gentex synchronizable notification appliances except the HS24 Series and the ST24 Series.

Not Available.

Order number **AVSM-W**

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)

Order number **GSB**

GOE-R Outdoor Enclosure (red)

The Gentex GOE-R Outdoor Enclosure is ANSI/UL 464 listed for use in indoor and outdoor applications when used with the Gentex GEH Series horn and WGE Series strobe and horn/strobe. It is red.

Not Available.

Order number **GOE-R**

GOE-W Outdoor Enclosure (white)

The Gentex GOE-W Outdoor Enclosure is ANSI/UL 464 listed for use in indoor and outdoor applications when used with the Gentex GEH Series horn and WGE Series strobe and horn/strobe. It is off-white.

Not Available.

Order number **GOE-W**

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