GEC Low-frequency Horn Strobes

www.boschsecurity.com

- ▶ Silence the horn while strobes flash
- ▶ Evacuation tone
- ▶ Use the SuperSlide feature for easy testing
- ▶ Wide voltage range; 16 to 33 VDC or FWR
- ▶ Many candela choices

The Gentex Commander[2] (GEC) Low-frequency Horn Strobe combinations offer dependable audible and visual alarms, a low current draw, and a minimum flash rate of 1 Hz regardless of input voltage.

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 dBA. They produce a peak sound of 100 dBA or greater at 10 ft (3 m). The horns offer a choice between a 2400 Hz (remote signaling) tone or a low frequency 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 signals by using an AVS Synchronization Module.

Strobe Output
The signaling appliance with the AVS-44, AVSM, or a compatible control panel, can silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires.

Certifications and approvals

Gentex Corporation holds these Listings and Approvals:

Region	Certification	
USA	UL	ULSZ_S3406 - Audible Signal Appliances
	UL	ULSZ7_S3406 - Audible Signal Appliances Certified for Canada (15/75cd and 177cd models)
	FM	
	CSFM	7135-0569-0122

Installation/configuration notes

Compatible Products
The following products are compatible with the GEC Horn Strobes:

Category	Product ID	Product Description
Control Panels	D7022[1]	Conventional FACP
	D7024[2]	Addressable FACP
	D7024	Conventional FACP

Category	Product ID	Product Description
	D8024[3]	Analog FACP
	D9124[3]	Addressable FACP
	D10024A[3]	Analog FACP
	FPD-7024[2]	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 D7024 and FPD-7024 become addressable FACPs.
[3] For synchronization, use the AVS44 or AVSM Synchronization Modules with these control panels.

Mounting Considerations
These horn strobes are easy to install with the GSB Surface Back Box.

Indoor Applications

> **i** **Notice**
> Use these horn strobes for indoor installations only.

These horn strobe combinations are equipped with a four-inch square metal mounting plate that can be attached as follows:

	Conduit Applications	Surface Mounted	Semi-flush Mounted
Single-gang	·		·
Double-gang	·	·	·
Four-inch square	·	·	·
GSB	·	·	

Shipping Information
The horn strobes 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

> **i** **Notice**
> Do not use these units in coded or pulsed signaling circuits.

The input terminals accept wires with diameters between 18 AWG and 12 AWG (ISO 0.75 mm^2 and 4 mm^2).

Parts included

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

Technical specifications

Electrical

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

Strobe Current (maximum)	
• 15 cd	78 mA RMS; 113 mA FWR
• 15/75 cd	96 mA RMS; 135 mA FWR
• 30 cd	96 mA RMS; 135 mA FWR
• 60 cd	137 mA RMS; 186 mA FWR
• 75 cd	180 mA RMS; 245 mA FWR
• 110 cd	224 mA RMS; 313 mA FWR

Environmental

Relative Humidity	Up to 93% non-condensing
Temperature (Operating)	+32℉ to +120℉ (0℃ to +49℃)

Mechanical

Dimensions (HxWxD)	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 (maximum range) at 10 ft (3 m)	High output: 86 dBA Low output: 78 dBA

Horn (Continuous, Mechanical)

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

Chime (Continuous)

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

Chime (Temporal Code 3)

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

Whoop

Audible Device Current (maximum)	56 mA RMS; 62 mA FWR
Sound output (maximum range) at 10 ft (3 m)	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.

> **ⅈ 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

GEC24-15WR 15 cd Horn Strobe (red)
Red, 24 VDC device with 15 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-15WR**

GEC24-15WW 15 cd Horn Strobe (white)
White, 24 VDC device with 15 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-15WW**

GEC24-15/75WW 15/75 cd Horn Strobe (white)
White, 24 VDC device with 15/75 cd strobe, 16 to 33 VDC or FWR voltage range, and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-15/75WW**

AVS44-W Synchronization Control Module (white)
Order number **AVS44-W**

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**

GEC24-30WR 30 cd Horn Strobe (red)
Red, 24 VDC device with 30 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-30WR**

GEC24-30WW 30 cd Horn Strobe (white)
White, 24 VDC device with 30 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-30WW**

GEC24-60WR 60 cd Horn Strobe (red)
Red, 24 VDC device with 60 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-60WR**

GEC24-60WW 60 cd Horn Strobe (white)
White, 24 VDC device with 60 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-60WW**

GEC24-75WR 75 cd Horn Strobe (red)
Red, 24 VDC device with 75 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-75WR**

GEC24-75WW 75 cd Horn Strobe (white)
White, 24 VDC device with 75 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-75WW**

GEC24-110WR 110 cd Horn Strobe (red)
Red, 24 VDC device with 110 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-110WR**

GEC24-110WW 110 cd Horn Strobe (white)
White, 24 VDC device with 110 cd strobe and with field-selectable high or low frequency, high or low volume, and temporal (Code 3) or continuous tone pattern.
Not Available.
Order number **GEC24-110WW**

Accessories

AVS-44 Synchronization Module (red)
Not Available.
Order number **AVS-44**

AVS44-W Synchronization Module (white)
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**