



SELECTABLE CANDELA EVACUATION SIGNALS

APPLICATIONS

The Fike Selectable Candela Evacuation Signals, manufactured by Gentex Corporation, are low profile horn, strobe or horn/strobe combination that offer dependable audible and visual alarms and the lowest current available.

The Fike Selectable Candela Evacuation Strobe Horn/Strobe 24VDC offers field selectable candela options of 15, 30, 60, 75, and 110 candela. The 12VDC offers selectable candela options of 15, 30, 60, and 75 candela.

Evacuation horn offers a continuous or synchable temporal 3 in 2400Hz and mechanical tone, a chime as well as a whoop tone. All tones are easy for the professional to change in the field by using switches. The Horn Strobe is shipped from the factory on the temporal lower frequency mode and it comes standard with a rugged cast metal mounting plate.

The Fike Selectable Candela Evacuation Signals have a minimal operation current and a minimum flash rate of 1Hz regardless of input voltage.

Units also come standard with the 4" mounting plate which incorporates the popular SuperSlide feature that allows you to easily test for supervision. Also included is a locking mechanism which secures the product to the bracket without any screws showing.

Appliances are UL 464 and UL 1971, listed for use with fire protective systems and are warranted for three years from date of purchase.

STANDARD FEATURES

- 24 VDC units have field selectable candela options of 15, 30, 60, 75, and 110 candela
- 12 VDC units have field selectable candela options of 15, 30, 60, and 75 candela
- The horn is available in 12 or 24 Volt
- Prewire Entire System, Then Install Your Signals
- Ease of Supervision Testing (SuperSlide)
- Lower Installation and Operating Costs
- Input Terminals 12 to 18 AWG
- Switch Selection for High or Low dBA
- Switch for Chime, Whoop, Mechanical and 2400Hz Tone
- Switch for Continuous or Temporal 3 (not available on whoop tone)
- Tamperproof Re-entrant Grill
- Surface Mount with the Surface Mount Box
- Synchronize Strobe and/or Horn by Using the AVS Series Control Module
- Silence Horn While Strobes Remain Flashing
- Rugged Die Cast Metal Mounting Bracket
- True Evacuation Tone
- Wide Voltage Range 8-17.5 VDC (12 Volt Models)
16-33 VDC or FWR (24 Volt Models)
- Available in Red or Off-White



Strobe Horn/Strobe Horn

APPROVALS

- Americans with Disabilities Act (ADA 4.28.3)
- BFP (City of Chicago)
- BS+A/MEA #285-91-E
- CSFM 7135-0569:122 (Horn Strobe); 7125-0569:123 (Strobe)
- FM Approved
- NFPA 72
- UL ULC Dual Listed 464, 1971

Data Sheet

Form No. P.1.62.01-1

AVAILABLE MODELS

12 or 24 Volt Low Profile Evacuation Horn, Wall Mount				
Fike P/N	Manf. P/N	Color	Nominal Voltage	dBA @ 10Ft.
20-123-142	904-1239-002	Red	12 VDC	100
20-123-143	904-1241-002	White	12 VDC	100
20-123-27	904-1205-002	Red	24 VDC	100
20-123-28	904-1207-002	White	24 VDC	100

12 or 24 Volt Selectable Candela Low Profile Evacuation Strobe, Wall Mount				
Fike P/N	Manf. P/N	Color	Nominal Voltage	Candela (UL 1971)
20-123-144	904-1235-002	Red	12 VDC	15, 30, 60, 75
20-123-145	904-1237-002	White	12 VDC	15, 30, 60, 75
20-123-146	904-1236-002	Red, Plain (no lettering)	12 VDC	15, 30, 60, 75
20-123-147	904-1238-002	White, Plain (no lettering)	12 VDC	15, 30, 60, 75
20-123-01	904-1321-002	Red	24 VDC	15, 30, 60, 75, 110
20-123-02	904-1319-002	White	24 VDC	15, 30, 60, 75, 110
20-123-46	904-1322-002	Red, Plain	24 VDC	15, 30, 60, 75, 110
20-123-47	904-1320-002	White, Plain	24 VDC	15, 30, 60, 75, 110

12 or 24 Volt Selectable Candela Low Profile Evacuation Horn/Strobe, Wall Mount				
Fike P/N	Manf. P/N	Color	Nominal Voltage	Candela (UL 1971)
20-123-148	904-1231-002	Red	12 VDC	15, 30, 60, 75
20-123-149	904-1233-002	White	12 VDC	15, 30, 60, 75
20-123-150	904-1232-002	Red, Plain	12 VDC	15, 30, 60, 75
20-123-151	904-1234-002	White, Plain	12 VDC	15, 30, 60, 75
20-123-48	904-1317-002	Red	24 VDC	15, 30, 60, 75, 110
20-123-49	904-1315-002	White	24 VDC	15, 30, 60, 75, 110
20-123-50	904-1318-002	Red, Plain	24 VDC	15, 30, 60, 75, 110
20-123-51	904-1316-002	White, Plain	24 VDC	15, 30, 60, 75, 110

Horn Ratings Over Input Voltage Range of 8-17.5V												
Horn Mode	dBA @ 10 Ft. Per UL464 (High)			dBA @ 10 Ft. Per UL464 (Low)			DC (mA) @ Low Setting			DC (mA) @ High Setting		
	8V	12V	17.5V	8V	12V	17.5V	8V	12V	17.5V	8V	12V	17.5V
Temp 3 2400Hz	76	78	81	69*	73	76	10	16	21	16	22	29
Temp 3 Mechanical	75	78	80	68*	72*	75	10	14	20	14	20	26
Temp 3 Chime	62*	63*	64*	60*	62*	63*	7	9	12	8	10	13
Continuous 2400Hz	79	82	84	74*	76	79	10	16	21	16	22	29
Continuous Mechanical	78	81	83	72*	75	79	10	14	20	14	20	26
Continuous Chime	63*	64*	65*	61*	63*	64*	7	9	12	8	10	13
Whoop	78	79	80	71*	74*	77*	20	29	41	45	52	55

Horn Ratings Over Input Voltage Range of 16-33V												
Horn Mode	dBA @ 10Ft. Per UL464 High dB			dBA @ 10 Ft. Per UL464 Low dB			DC (mA)			FWR (mA)		
	16V	24V	33V	16V	24V	33V	16V	24V	33V	16V	24V	33V
Temp 3 2400Hz	78	83	84	71*	75	77	13	19	24	27	37	43
Temp 3 Mechanical	76	81	82	70*	73*	76	11	16	22	23	33	40
Temp 3 Chime	70*	71*	71*	66*	68*	70*	9	12	15	19	24	29
Continuous 2400Hz	81	86	87	74*	78	80	14	21	28	21	42	48
Continuous Mechanical	80	84	85	72*	76	78	13	18	25	27	37	44
Continuous Chime	70*	71*	73*	66*	68*	70*	10	12	15	19	24	30
Whoop	82	83	83	69*	72*	75	43	51	56	51	58	62

NOTES: The Strobe Horn/Strobes are not listed for outdoor use.

Operating temperature: 32° to 120°F (0° to 49° C). For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual. 12 volt models are DC only.

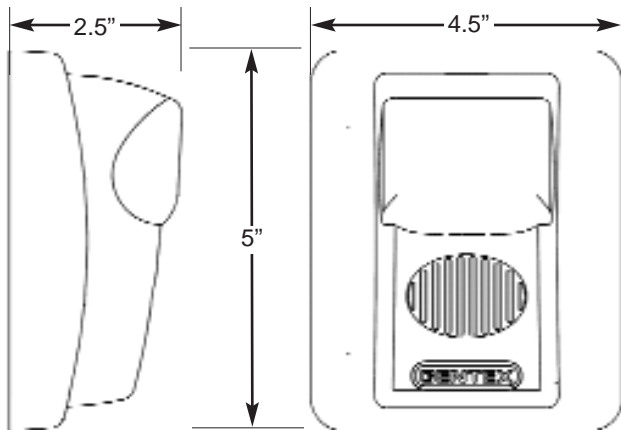
Fike does not recommend using a coded or pulsing signaling circuit with any of our strobe products (see Gentex Technical Bulletin Number 014)

Operating Strobe Current		
Candela	@ 12VDC	2 24VDC
15	106mA	55mA
30	131mA	63mA
60	186mA	88mA
75	237mA	112mA
110	N/A	136mA

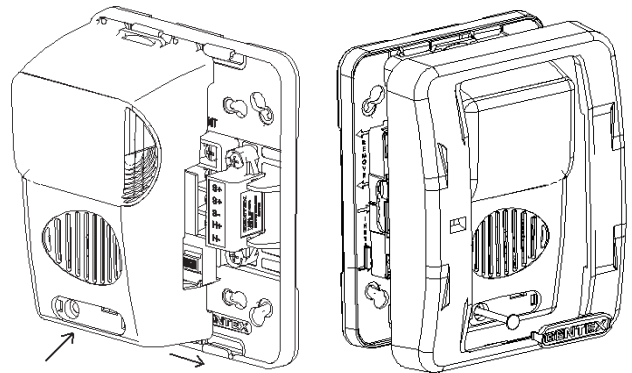
* Operating the horn in this mode at this voltage will result in not meeting the minimum UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private model).

NOTES: The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

Dimensions

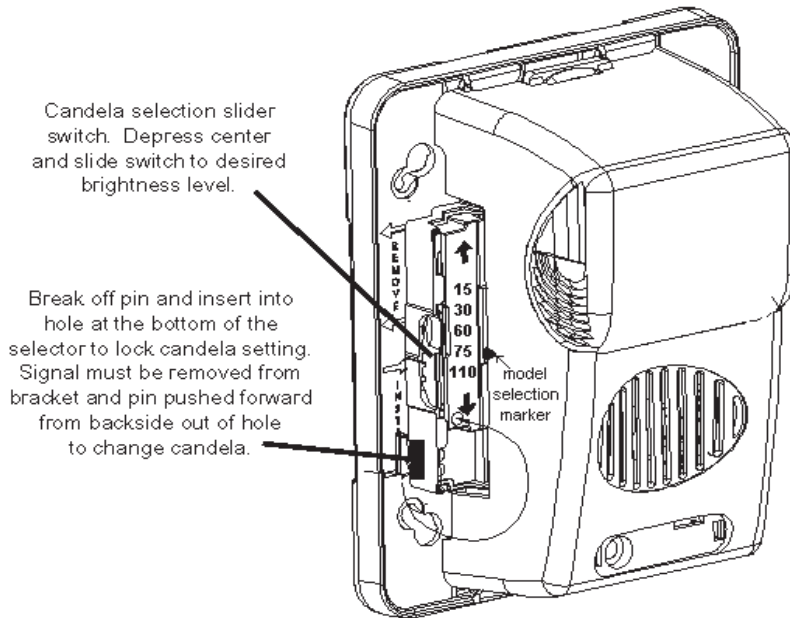


Mounting SuperSlide

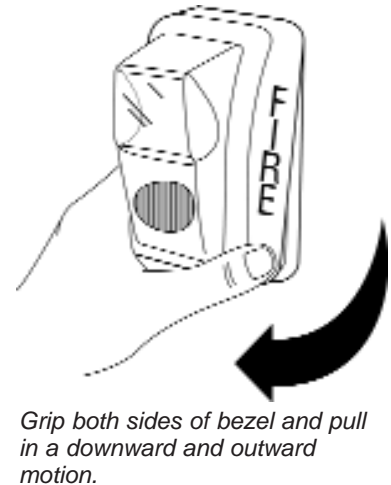


Die Cast Metal Mounting Plate: Mounts to a single gang, double gang 4" square boxes or GSB box.

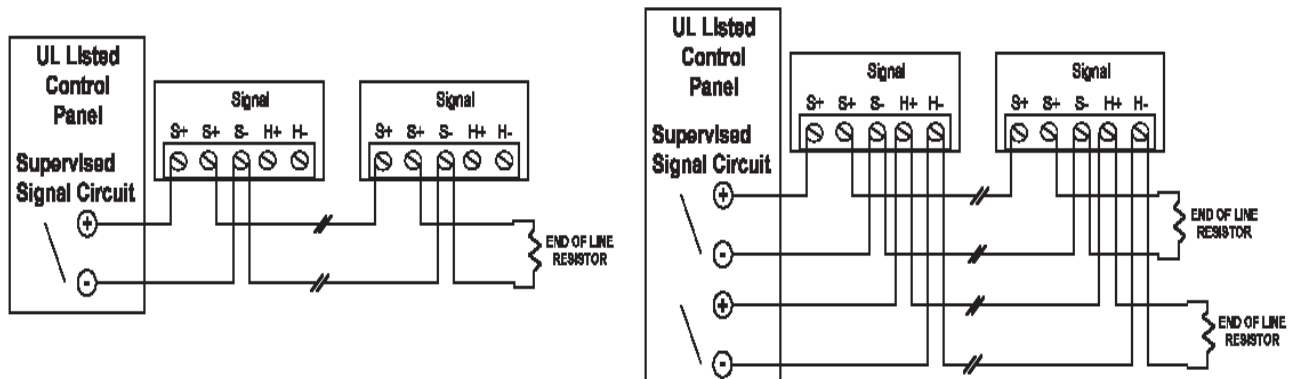
Switch Locations



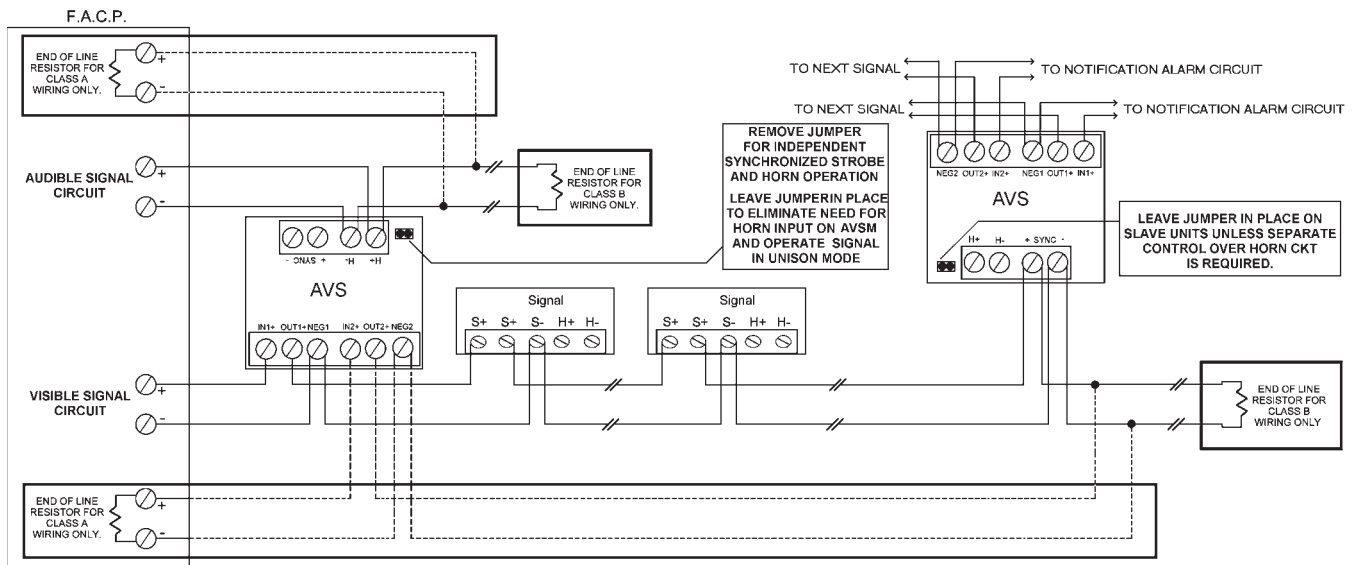
Removing Bezel



Conventional Strobe/Horn Strobe Wiring Diagrams



Wiring Diagram Strobe/Horn Strobe with AVS Series Synchronization Module



NOTES: See Gentex Technical Bulletin 015 for proper synchronization module for application.
When synchronizing the Strobe or Horn/Strobe, the AVSM synchronization module MUST be used.

ARCHITECT AND ENGINEERING SPECIFICATIONS

The audible and/or visible signal shall be a Gentex Selectable Candela Evacuation Signal or approved equal and shall be listed by Underwriters Laboratories Inc. per UL 1971 and/or UL 464. The notification appliance shall also be listed with the California State Fire Marshall (CSFM) and the Bureau of Standards and Appeals (NYC).

The notification appliance (combination audible/visible) shall produce a peak sound output of 100dBA or greater at 12 or 24V as measured in an anechoic chamber. The signaling appliance shall also have the capability to silence the audible signal while leaving the visible signal energized with the use of a single pair of power wires. Additionally, the user shall be able to select either continuous or temporal tone output with the temporal signal having the ability to be synchronized.

Unit shall be capable of being installed so that any unauthorized attempt to change the candela setting will result in a trouble signal at the fire alarm control panel.

The audible/visible and visible signaling appliance shall also maintain a minimum flash rate of 1Hz or greater regardless of power input voltage. The appliance shall have an operating current of 55mA or less at 12 or 24 VDC for the 15Cd strobe circuit.

The appliance shall be polarized to allow for electrical supervision of the system wiring. The unit shall be provided with a mounting bracket with terminals with barriers for input/output wiring and be able to mount to a single gang or double gang box or double workbox without the use of an adapter plate. The unit shall have an input voltage range of 16-33 volts with either direct current of full wave rectified power for 24 volt models or a voltage range of 8-17.5 volts for 12 volt models.

The appliance shall be capable of testing supervision without disconnecting wires. Also the appliance shall be capable of mounting to a surface back box.



Copyright © Fike Corporation All Rights Reserved.

Form No. P.1.62.01-1 August, 2005 Specifications are subject to change without notice.