

# COMMANDER<sup>4</sup> SERIES CEILING MOUNT SIGNALS GC SERIES



## Description

The GCS/GCC Series is a ceiling mount strobe or horn/strobe combination that offers dependable audible and visual alarms and the lowest current available. The Commander<sup>4</sup> offers tamperproof field selectable candela options of 15, 30, 75, 95, 115 and 150 candela.

The GCC horn offers a continuous or synchable temporal three in 2400Hz or mechanical tone. These tones are easy for the professional to change in the field by using switches. The models are shipped from the factory in the temporal three alarm mode.

The GC Series has a minimal operating current and has a minimum flash rate of 1Hz regardless of input voltage. The Commander<sup>4</sup> Series comes standard with the 4" mounting plate which incorporates the popular Super-Slide™ feature that allows the installer to easily test for supervision.

The Commander<sup>4</sup> also features the Checkmate™ - Instant Voltage Verification feature which allows the installer to check the voltage without removing the signal. The GC Series appliances are UL 464 and UL 1971 listed for use with fire protective systems and are warranted for three years from the date of purchase.

## Engineering Specifications

The visible and audible/visible signal shall be a model GCS or GCC or approved equal and shall be listed by Underwriters Laboratories Inc. per UL 1971 for the GCS and also UL 464 for the GCC. The notification appliance shall also be listed with the California State Fire Marshal (CSFM) and the Bureau of Standards and Appeals (NYC).

## Features

- Nominal Voltage 24 VDC
- Tamperproof Field Selectable Candela options of 15, 30, 75, 95, 115 & 150
- Unit Dimensions: 6" x 2.6"
- Super-Slide™ Bracket - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Input Terminals 12 to 18 AWG
- Switch Selection for High or Low dBA
- Switch Selection for 2400Hz or Mechanical Tone
- Switch Selection for Continuous or Temporal 3
- Tamperproof Re-entrant Grill
- Synchronize GC Series by using AVSM Series Control Module
- Wide Voltage Range 16-33 VDC or FWR
- Faceplate Available in Red or Off-White
- Surface Mount with the GCSB Ceiling Surface Mount Box).

The notification appliance (combination audible/visible units only) shall produce a peak sound output of 90dBA or greater 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.

The audible/visible and visible signaling appliance shall also maintain a minimum flash rate of 1Hz or up to 2Hz regardless of power input voltage. The appliance shall have an operating current of 72mA or less at 24 VDC for the 15 Cd 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 with the use of an adapter plate. The unit shall have an input voltage range of 16-33 volts with either direct current or full wave rectified power.

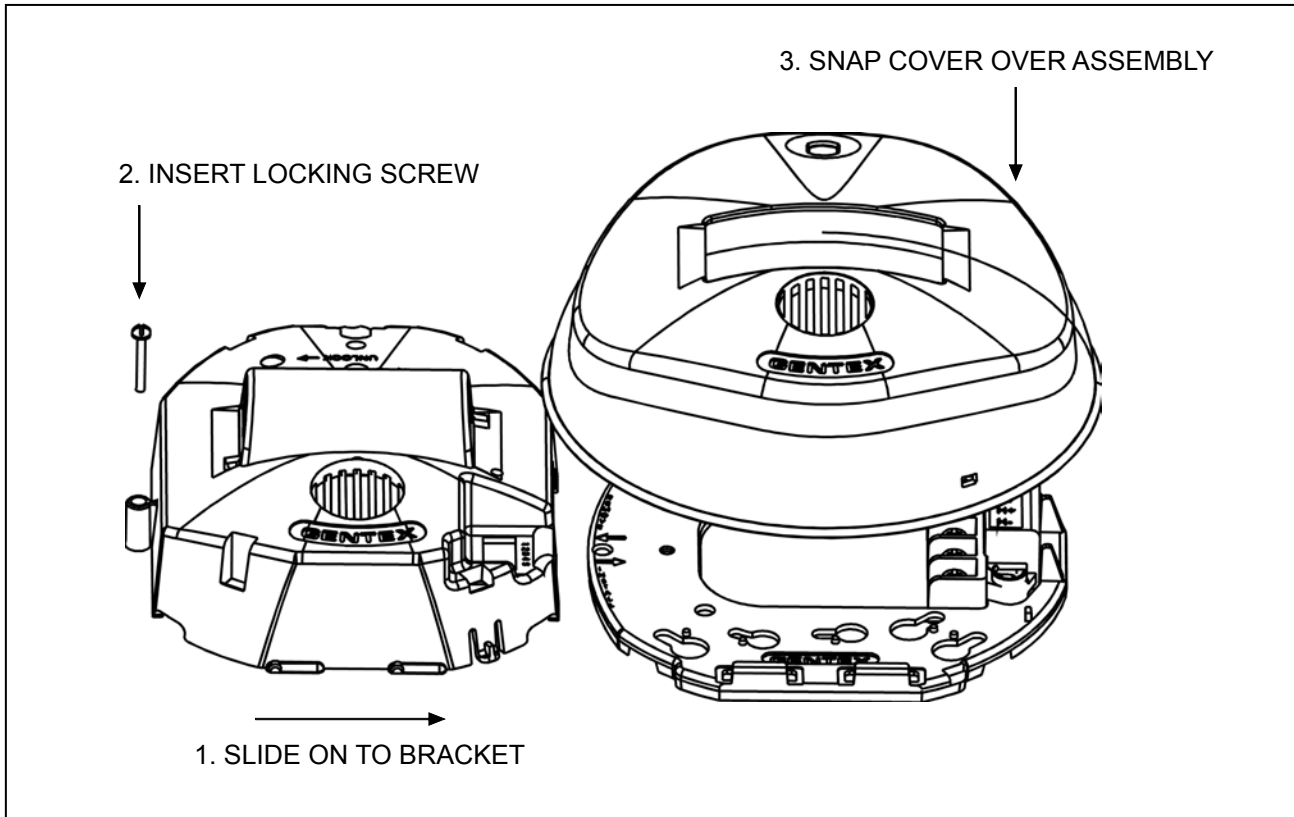
The appliance shall be capable of test supervision without disconnecting wires. Also the appliance shall be capable of mounting to a surface box. The unit shall also be able to verify voltage at the unit without removing unit.



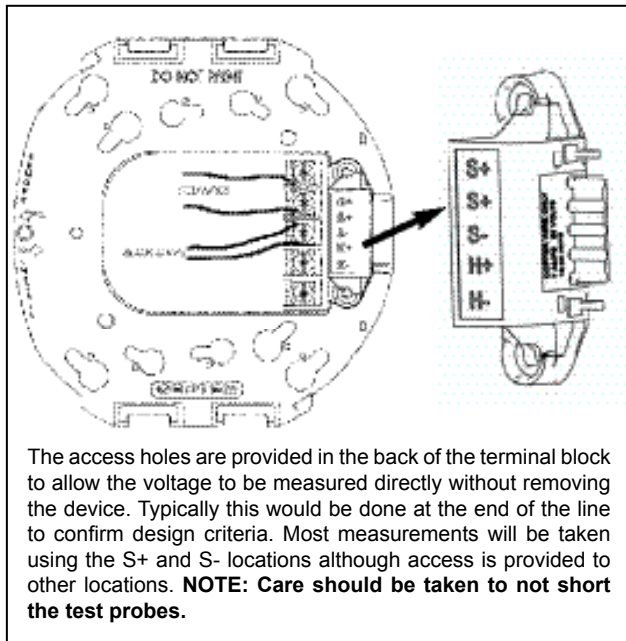
CATALOG NUMBER **5240**

NOT TO BE USED FOR INSTALLATION PURPOSES.

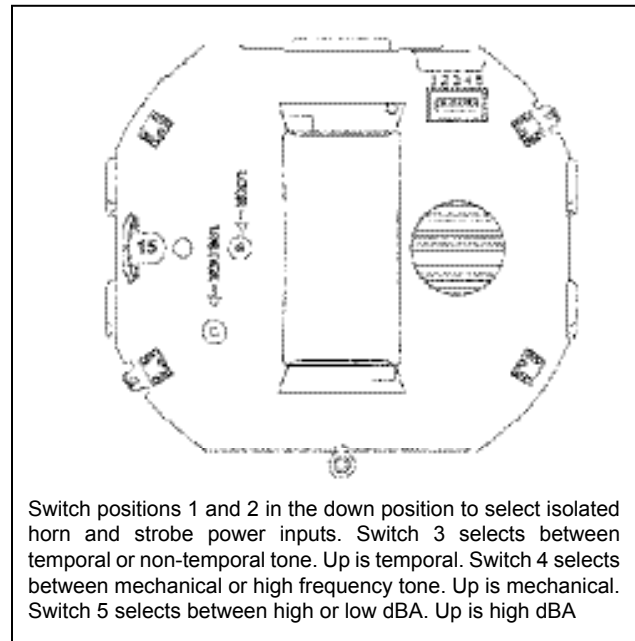
## Mounting



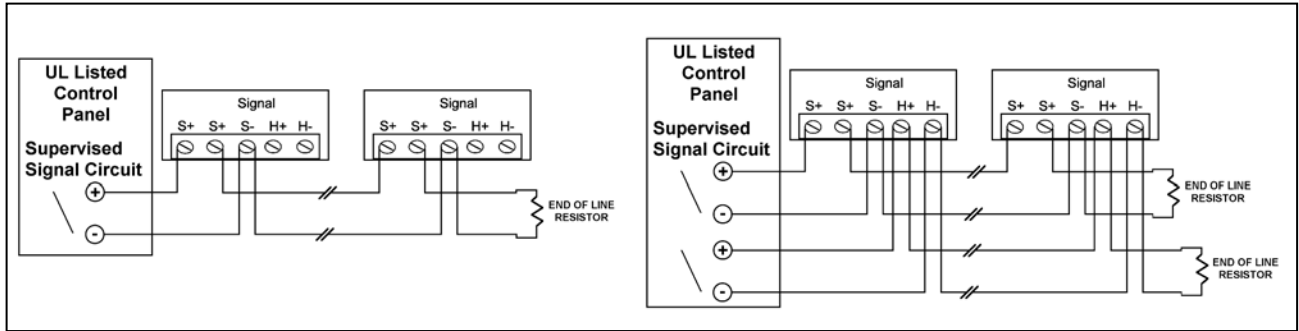
## Checkmate™ Instant Voltage Verification



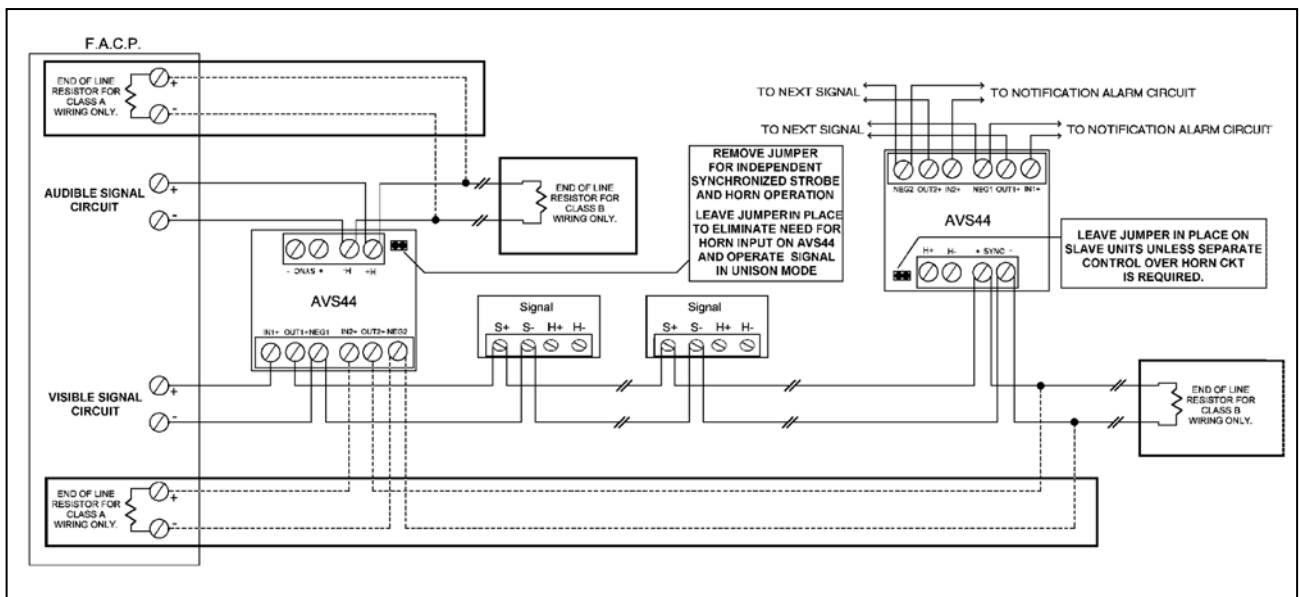
## Dip Switch



## Conventional Wiring Diagrams GCS/GCC Series



## Wiring Diagram GSC/GCC Series Using the AVS Series Synchronization Module



## GCS 24 VDC Ceiling Mount Selectable Strobe

Model Number	Nominal Voltage	Candela
GCS24-CR	24 VDC	15, 30, 75, 95, 115, 150
GCS24-CW	24 VDC	15, 30, 75, 95, 115,150
GCS24-PCR	24 VDC	15, 30, 75, 95, 115,150
GCS24-PCW	24 VDC	15, 30, 75, 95, 115,150

## GCC 24 VDC Ceiling Mount Selectable Horn/Strobe

Model Number	Nominal Voltage	Candela (UL 1971)	Reverberant dBA @ 10ft Per UL464 <sup>1</sup>	In Anechoic Room dBA @ 10 ft.
GCCS24-CR	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCCS24-CW	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCCS24-PCR	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCCS24-PCW	24 VDC	15, 30, 75, 95, 115, 150	81-86	90

### Notes:

- The GC Emergency Notification Evacuation Series is 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.
- Coded or pulsing signaling circuits is recommended with use of any of these strobe products.

### Model designations:

“C” = Ceiling Mount , “R” = Red Faceplate, “W” = Off-White Faceplate

## Strobe Current Ratings

Candela	15cd	30cd	75cd	95cd	115cd	150cd
24 VDC	72mA	101mA	167mA	200mA	214mA	286mA
UL Max <sup>2</sup>	120mA	130mA	247mA	318mA	360mA	454mA

## Horn Ratings

Horn Mode	Minimum dBA @ 10 ft. per UL464 (High)	Minimum dBA @ 10 ft. per UL464 (Low)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	83	75	23
Temp 3 Mechanical	81	73*	22
Continuous 2400Hz	86	78	23
Continuous Mechanical	84	76	22

\*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.

**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. To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.

<sup>1</sup> The listed horn current draws are for the Continuous Tone mode. The Temporal 3 Tone has a reverberant dBA @ 10ft. per UL 464 is 77-83 with a horn current draw of 34mA.

<sup>2</sup> RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range (16-33VDC for 24VDC units) (8-17VDC for 12VDC units). For strobes the UL max current is usually at the minimum listed voltage (16VDC for 24VDC units) (8VDC for 12VDC units). For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

NOT TO BE USED FOR INSTALLATION PURPOSES.



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