Commander⁴ Series Selectable Ceiling Mount Strobe and Horn Strobe

GCC/GCS
24 VDC
S E R I E S

Applications

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 GCS/GCC 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 Commander⁴ 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 Commander⁴ 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.

Standard Features

- Nominal Voltage 24 VDC
- Tamperproof Field Selectable Candela options of 15, 30, 75, 95,115 & 150
- Super-Slide™ Bracket - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- **Unit Dimensions:** 6" x 2.6"
- Synchronize GC Series by using Gentex Series Control Module
- Prewire Entire System, then Install Your Signals
- 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
- Surface Mount with the GCSB (Gentex Ceiling Surface Mount Box).
- Silence Horn While Strobes Remain Flashing
- Wide Voltage Range 16-33 VDC or FWR
- Faceplate Available in Red or Off-White

Product Listings

This symbol on the product's nameplate means it is Listed by UNDERWRITERS LABORATORIES, INC.

- BFP (City of Chicago)
- BS+A/MEA #285-91-E
- CSFM 7135-0569:122 (GCC)
           7125-0569:123 (GCS)
- FM Approved
- UL 464 & UL 1971 Listed
- CAN/ULC S526-M87 Listed
           ULSZ7.S3406 Listed (GCC)

Product Compliance

- NFPA 72
- Americans with Disabilities Act (ADA)

NEMA MEMBER   ASSEMBLED IN THE USA

GCS 24 Volt Ceiling Mount Selectable Strobe

Model Number	Part Number	Nominal Voltage	Candela
GCS24CR	904-1213-002	24 VDC	15, 30, 75, 95, 115, 150
GCS24CW	904-1215-002	24VDC	15, 30, 75, 95, 115, 150
GCS24PCR	904-1214-002	24VDC	15, 30, 75, 95, 115, 150
GCS24PCW	904-1216-002	24VDC	15, 30, 75, 95, 115, 150

GCC 24 Volt Ceiling Mount Selectable Horn/Strobe

Model Number	Part Number	Nominal Voltage	Candela	Reverberant dBA @ 10ft. Per UL 464[1]	In Anechoic Room dBA @10ft.
GCC24CR	904-1209-002	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24PCR	904-1210-002	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24CW	904-1211-002	24 VDC	15, 30, 75, 95, 115, 150	81-86	90
GCC24PCW	904-1212-002	24 VDC	15, 30, 75, 95, 115, 150	81-86	90

Notes:
- The GC 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.
- **Gentex does not recommend using a coded or pulsing signaling circuit with any of our strobe products (see technical bulletin number 014 for more information).**

Model designations:
"P" = Plain (no lettering) "C" = Ceiling Mount, "R" = Red Faceplate/"W" = Off-White Faceplate

GCS/GCC Product Strobe Current Ratings						
Candela	15cd	30cd	75cd	95cd	115cd	150cd
24 VDC	72mA	101mA	167mA	200mA	214mA	286mA
UL Max[2]	120mA	130mA	247mA	318mA	360mA	454mA

Horn Mode	Minimum dBA @ 10ft. per UL464 (HIGH)	Minimum dBA @ 10ft. 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.
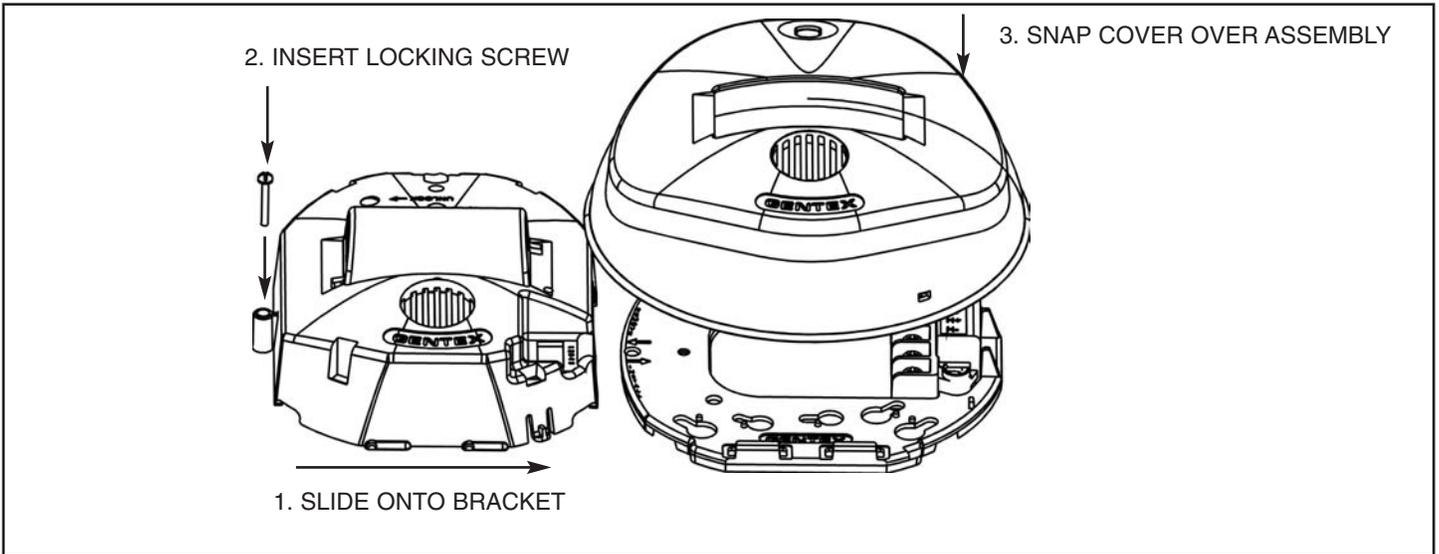
Notes: The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.
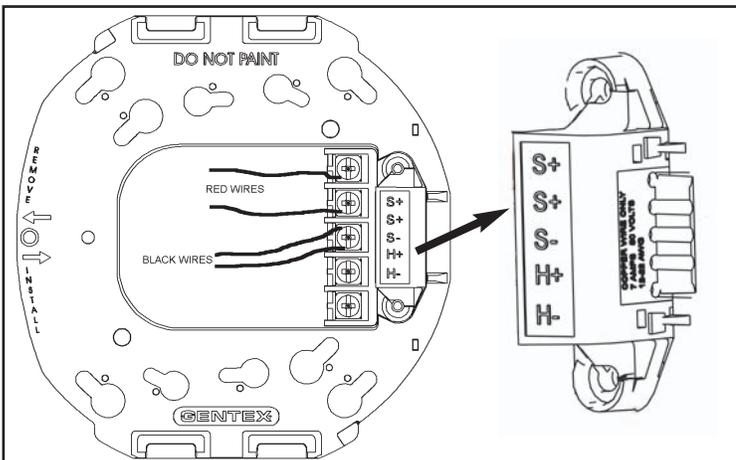
[1] The listed horn current draws are for the Continuous Tone mode. The Temporal 3 Tone has a reverberant dBA @ 10ft. per UL 464 is 77-83 with a horn current draw of 34mA.

[2] 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.

Mounting Super-Slide™

2. INSERT LOCKING SCREW

3. SNAP COVER OVER ASSEMBLY

1. SLIDE ONTO BRACKET

Checkmate™ Instant Voltage Verification

DO NOT PAINT
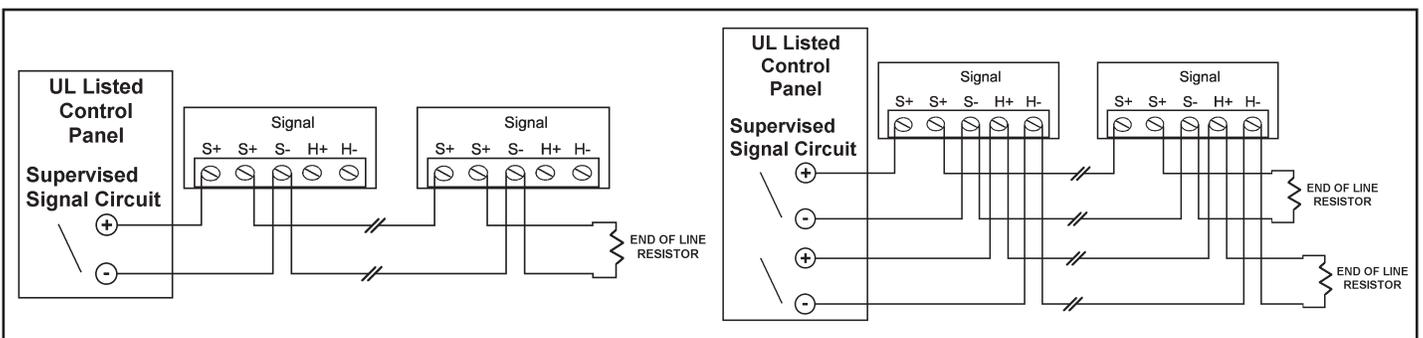
RED WIRES

BLACK WIRES

S+
S+
S-
H+
H-

S+
S+
S-
H+
H-

The access holes are provided in the back of the terminal block to allow the voltage to be measured directly without removing the device. Typically this would be done at the end of the line to confirm design criteria. Most measurements will be taken using the S+ and S- locations although access is provided to other locations. **NOTE: Care should be taken to not short the test probes.**

Switch Locations

1 2 3 4 5

LOCK

UNLOCK

15

GENTEX
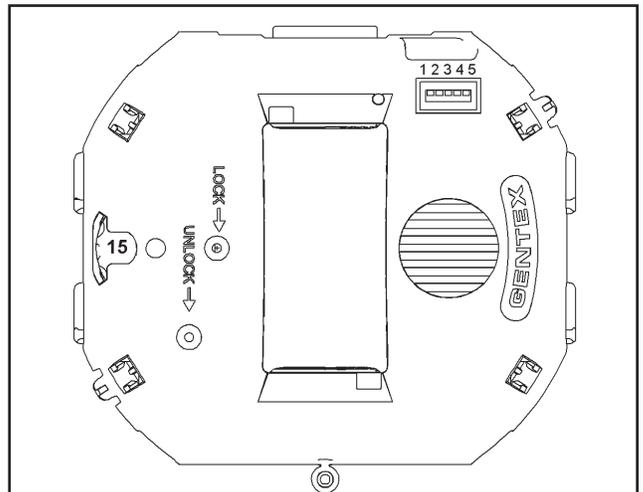
Switch positions 1 and 2 in the down position to select isolated horn and strobe power inputs. Switch 3 selects between temporal or non-temporal tone. Up is temporal. Switch 4 selects between mechanical or high frequency tone. Up is mechanical. Switch 5 selects between high or low dBA. Up is high dBA.

Conventional GCS/GCC Wiring Diagrams

UL Listed Control Panel

Supervised Signal Circuit

+

-

Signal
S+ S+ S- H+ H-

Signal
S+ S+ S- H+ H-

END OF LINE RESISTOR

UL Listed Control Panel

Supervised Signal Circuit

+

-

+

-

Signal
S+ S+ S- H+ H-

Signal
S+ S+ S- H+ H-

END OF LINE RESISTOR

END OF LINE RESISTOR

Wiring Diagram GCS/GCC Series with Gentex Synchronization Module
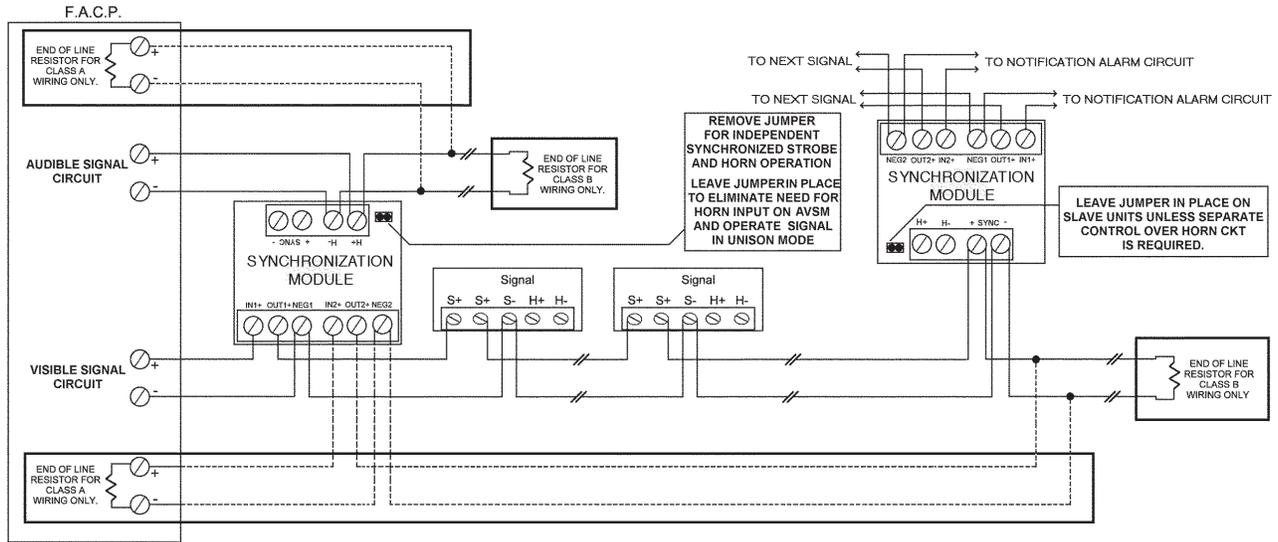
Note: See Technical Bulletin 015 for proper synchronization module for application.

Architect & Engineering Specifications

The visible and audible/visible signal shall be Gentex 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).

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.

24 units per carton
29 pounds per carton

551-0051-02

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