Technology that saves lives

Local Operator Console

VM-LOC

Overview

The VM-LOC Local Operator Console is an integrated communications unit that provides a point of command and control for Mass Notification/Emergency Communications (MNEC) activities. It comprises a VM-REMICA remote microphone and a GCI graphic annunciator driver module mounted inside a purpose-built cabinet. The cabinet offers ready access to the microphone, as well as eight toggle switches that provide input points for initiating digital messages or other control features on the VM network. Each switch has a customizable label card and two LEDs mounted adjacent to it. The label is for identifying the input point, and the LEDs indicate whether the point is active. The unit also includes a single MNEC Activated LED and a Lamp Test switch.

A single VM network can accommodate up to 30 consoles, which may be mounted as far as 4,000 feet (1,219 m) away from the control panel. Live paging is accomplished by means of the integrated microphone, while a series of software-configured switches offer system control features. The unit is monitored by the VM Series control panel via its fully-supervised RS-485 data circuit.

The integrated microphone module provides a push-to-talk handset and status LEDs showing local and remote paging activity, as well as trouble indication. It automatically overrides external audio inputs such as tone generation, pre-recorded messages, background music, or telephone paging.

Standard Features

- Integrated remote microphone and annunciator driver card
- Eight toggle switches for messaging control
- Dedicated LED message status indicators
- Customizable label cards
- Console status (MNEC Activated) indicator
- Can be installed up to 4,000 feet (1,219 m) away from the VM control panel
- Remote microphone activation overrides external audio sources
- All output circuitry is power limited
- May be flush or surface mounted
- Internal terminal block accepts up to 16 AWG wiring
- Integrated Lamp Test function
- Up to 30 VM-LOCs per VM Series control system node
- Supervised RS-485 data circuit
- May be configured for Class A or Class B operation

DATA SHEET K85006-0068
Not to be used for installation purposes. Issue 1

Application

VM-LOCs should be located to provide response personnel and building occupants ready access to the MNEC system. Consoles should be used to send messages in emergency situations from locations in the building other than from the VM control panel, which in MNEC terminology, operates as an Autonomous Control Unit (ACU).

LOC Location Guidelines:[1]

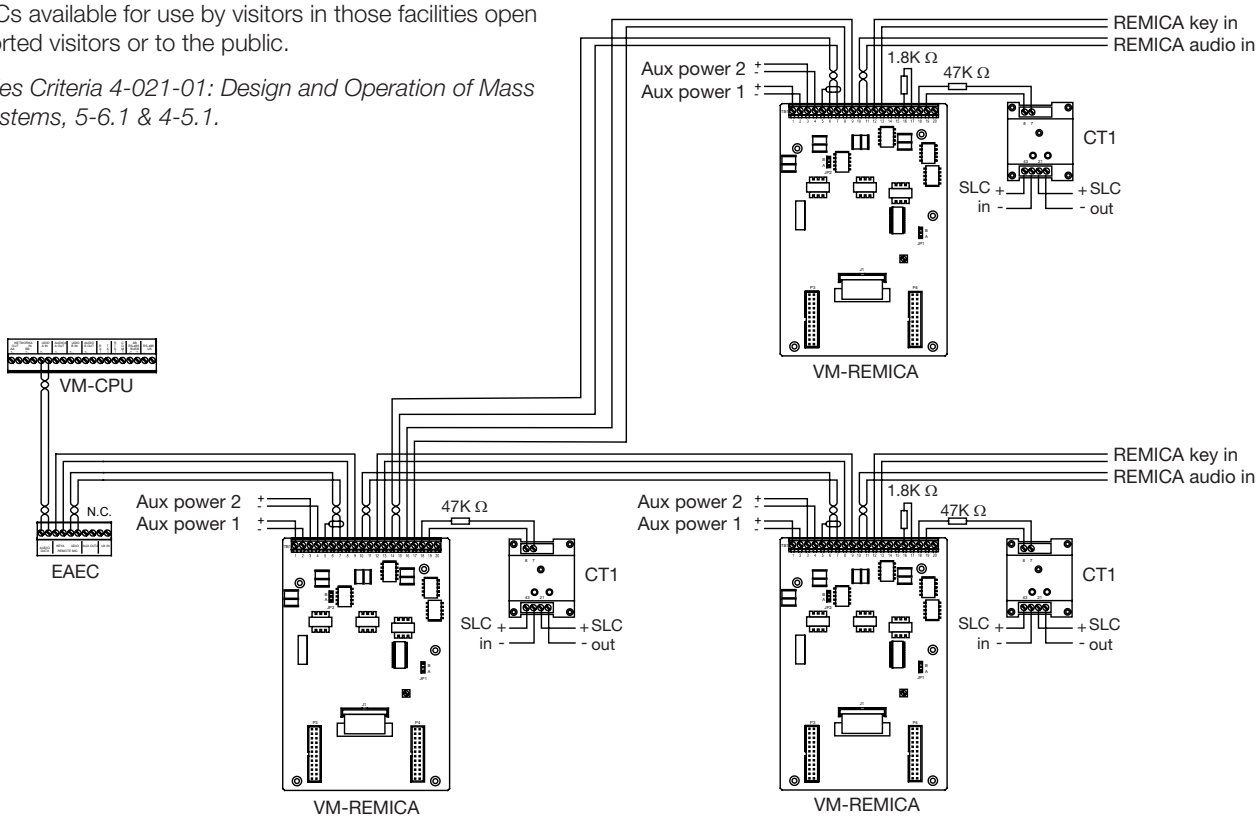
- Provide a separate LOC for use by the fire department near the building fire alarm control panel (or fire command center) unless this is also the location of the ACU.
- Do not place an LOC inside locked rooms or closets (with the possible exception of the operating console intended for use by the fire department near the FACP).
- Install LOCs at those facility entrances/exits that will be used when building access is limited during emergency situations.
- Locate LOCs so that occupants do not need to travel a distance in excess of 200 ft (61 m) horizontally or to other floors to access one.
- Make LOCs available for use by visitors in those facilities open to unescorted visitors or to the public.

[1]*Unified Facilities Criteria 4-021-01: Design and Operation of Mass Notification Systems, 5-6.1 & 4-5.1.*

Remote Microphone Specifications

Voltage	21 to 27 VDC
Current	52 mA
Wiring	
Type	
Audio out	14 to 18 AWG (1.0 to 2.5 mm²) max., shielded twisted-pair, in conduit
Key out	14 to 18 AWG (1.0 to 2.5 mm²) max., twisted-pair, in conduit
Resistance	210 Ω max.
Capacitance	1 µF
Audio Output	1 VRMS at 400 to 4,000 Hz (4 kHz)
Trouble relay	
Current	1 A at 30 VDC resistive
UL rating	Common
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

Remote Microphone Wiring

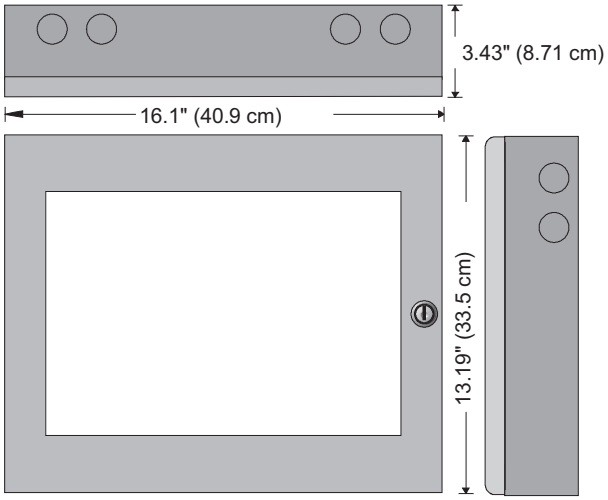


Installation

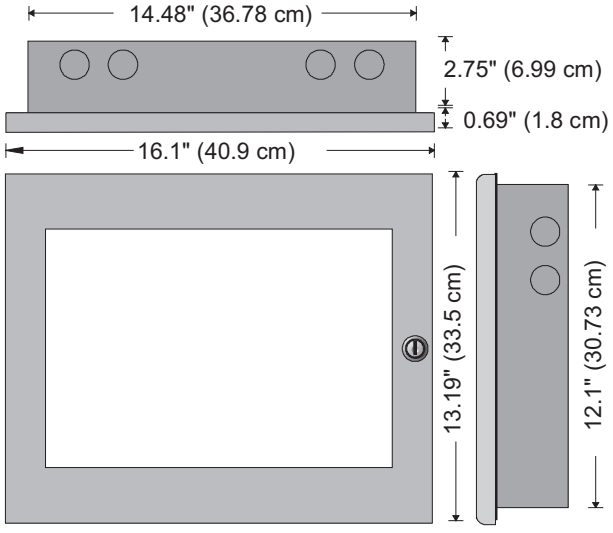
The switches and status LEDs are card-mounted and attach the reverse side of a hinged inner door. Switch cards are connected to the GCI module via two flexible ribbon cables. The message name plate holder is located beside each toggle switch. Customizable cards simply slide into the tabs provided. The enclosure has a separately hinged outer door with a clear window through which all indicators are visible. The outer door includes a cam lock to prevent unauthorized access.

VM-LOC enclosures may be flush or surface mounted.

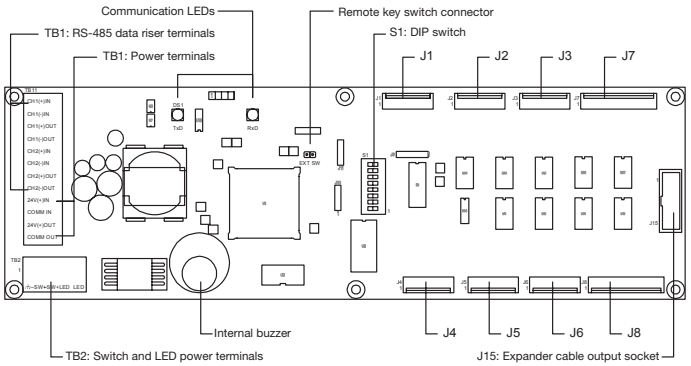
Surface mount



Semi-flush mount

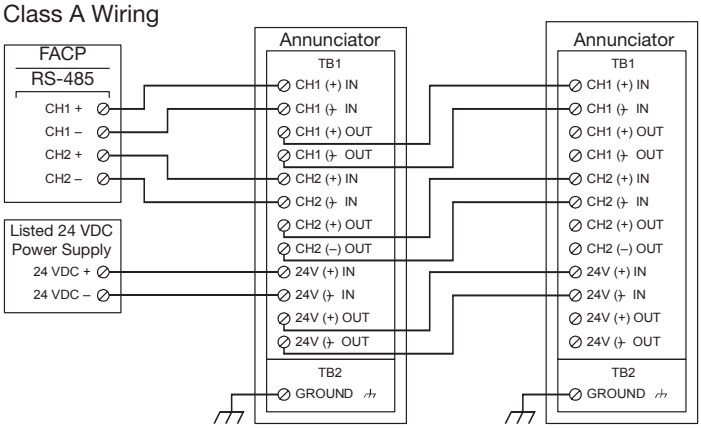


GCI Graphics Annunciator Driver

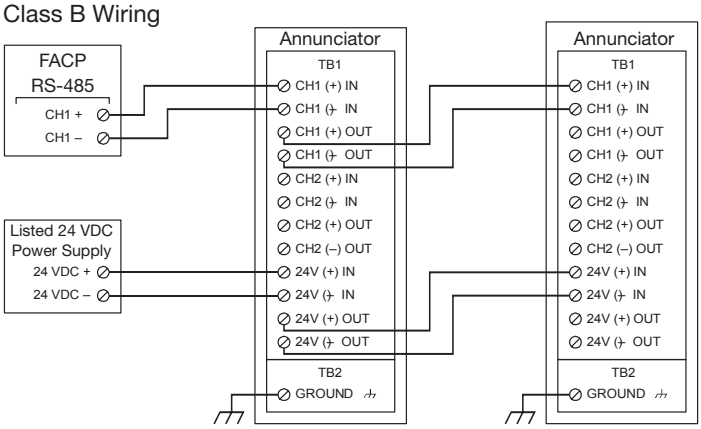


GCI Wiring

Class A Wiring



Class B Wiring



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Contact us...

Email: kidde.fire@fs.utc.com
Web: *Kidde.com/EngineeredSystems*

Kidde is a UTC brand.
1016 Corporate Park Drive
Mebane, NC 27302

GCI Specifications

Operating voltage	24 VDC, continuous. Do not use FACP accessory power outputs that are interrupted when the panel is reset. Supply must be UL/ULC Listed for use with fire protective signaling systems and have a rating designation of Regulated 24 DC.
Standby current	36 mA
Alarm current	146 mA
Open collector outputs	For LED driver use only
Current	10 mA at 5.7 V input max.
Power factor	PF 1.0 (resistive)
Quantity	32
Type	Common control or programmable
LED current	7 mA at 5.7 VDC per LED, typical
Power wiring	18 to 14 AWG (1.0 to 2.5 sq. mm)
RS-485 communications	Class A or Class B, 9600 baud
Data wiring	18 to 14 AWG (1.0 to 2.5 sq mm) twisted pair (6 twists per foot minimum). Maximum wire run is 4,000 ft. (1,219 m).
Remote key switch circuit	5 VDC at 1 mA, power-limited, unsupervised
Ground fault impedance	0 Ω
Card-to-card wiring	Short cable: CGI-CONS 2-inch ribbon cable (P/N 7140163-01) Long cable: CGI-CONL 7-inch ribbon cable (P/N 7140163-02).
Display wiring (card to graphic annunciator)	Custom cables provided with display panel. Six 8-pin cables for the LEDs and two 12-pin cables for the switches. Required connectors are shipped with the CGI.
Dimensions (H x W x D)	3¼ x 10¼ x 1½ in. (8.3 x 26.0 x 3.8 cm)
Operating environment	Temperature: 32 to 120°F (0 to 49°C) Humidity: 0 to 93% RH, noncondensing at 90°F (32°C)

Ordering Information

Please order the VM-LOC directly from the following authhorized supplier:

Light Engineered Displays, Inc.

109 Portwatch Way, Wilmington, N.C. 28412
Email: *sales@ledinc.com*
Phone: (800) 251-2512
Fax: (800) 251-9878