



The Tech Works **CC2-CM-Z** is a Zone Output Control Module designed to work with Tech Works Intelligent Networks. Units are equipped with screw terminals capable of supporting up to four light outputs. The **CC2-CM-Z** is a surface-mounting device constructed of cold rolled steel with a removable cover plate and is designed to provide LED outputs for Zone Lights and an Alarm contact closures output.

The **CC2-CM-Z** uses our standard Zone Light firmware to monitor all or selected network communication. Zone Selection is made through the dipswitches to program the unit. Whenever a system message is received the **CC2-CM-Z** activates the associated LED output. LED outputs are protected from short circuit and over current to prevent damage from overloading or miswiring. Each LED output have an associated indicator to tell the technician the current status of each output.

A common "Alarm" output is provided to activate other integrated equipment by other manufacturers such as loud buzzers or remote dialers. The Alarm output is optically isolated to protect other electrical devices.

The *Tech Works* Intelligent Data Network Communication allows the status of these buttons and lights to be sent to Intelligent Master/Annunciator and other Substations. Dip switches provide easy addressing for each network module to work with other network devices.

# CC2-CM-Z

## Zone Output Module

### BENEFITS

- Easy to Install
- Easy to Program
- Easy to Operate
- Durable Construction
- Two Twisted Pair Cable

### Associated Equipment

<b>CC2-RS-4</b>	Room Status Substation
<b>CC2-DL-44</b>	Smart Dome Light
<b>CC2-AN-84</b>	8-Column, 4-Color Annunciator
<b>CC2-MC-16</b>	Control Panel
<b>PS-2437A</b>	Power Supply

### Design Information

<b>Power</b>	11-25 V DC @ 44 mA Min. / 240 mA Max.
<b>Color</b>	Light Gray
<b>Mounting</b>	Wall / Backboard
<b>Dimensions</b>	7" W x 3" H x 1.25" D
<b>Weight</b>	3 lbs.

### Architects' and Engineers' Specifications

The Light Signaling System Zone Control Module shall be a surface-mounting device constructed of cold rolled steel with a removable cover plate. The Module shall include screw terminals for support of passive lights and employ Zone Light firmware to monitor all or selected network communication. Whenever a system message is received the associated LED output shall activate. LED outputs shall be protected from short circuit and over current to prevent damage from overloading or miswiring. The Control Module shall be an intelligent electronic device, addressable by the installer, requiring no more than 240 mA at 11-25 Volts DC for full operation. The system shall operate on two twisted pair parallel wiring. Any system that requires more than two twisted pair wire and is not installer programmable will not be considered under this specification.

The Light Signaling System Substation shall be  
Tech Works Model CC2-CM-Z



# Tech Works®

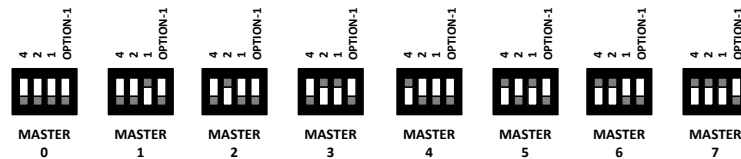
"Making Specialized Communication Easy"



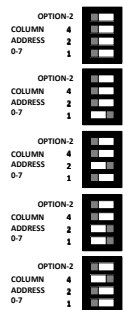
## Programming

The Tech Works CC2-CM-Z is an intelligent microprocessor device capable of displaying the status of multiple stations on any Tech Works CC or NC Series system. The LED-1 output is associated with the top horizontal row of a light annunciator, the LED-2 output is associated with the second row, LED-3 with the third row, and LED-4 with the fourth row. A single CC2-CM-Z can display the status of a group of 4, 8, 16, 32, or 64 columns. It monitors the network and if a substation on the system sends a message indicating a light status the Zone Module looks to see if it is assigned to display that station's status. If this station is programmed to display a message it checks to see if any other assigned station is currently active with a higher priority signal. A flashing light is always a higher priority than a steady light. If the only signals on the system assigned to a Zone Module are steady then the LED output will be steady. If a substation assigned to a Zone Module has a Flashing Light signal on that row then that light output will be Flashing on the Zone Module.

Each Zone Module has 2 sets of dipswitches which set the address and function of the unit. The Master address sets the Master or lowest address Master for the Zone Module to Monitor. The Master address should match the address of the substations to be monitored 0-7.



The dipswitch labeled "Column" is used to set the functional operation of the Zone Module. Each unit has the ability to monitor the first half of a single Master (Column 0-3), the second half of a Master (Column 4-7), a whole Master (all 8 columns), two whole Masters (the Master address +1), four whole Masters (the Master address +1, plus the Master address +2, plus the Master address +3), or All Master addresses. These functions are accomplished as follows.



The first half of a single Master (Master 0-7) (Column 0-3).

The second half of a Master (Master 0-7) (Column 4-7).

One whole Master (Master 0-7) (all 8 columns).

Two whole Masters (Master 0-6) (the Master address +1).

Four whole Masters (Master 0-4) (the Master address +1+2+3).



Master 8 addresses, All Stations.

OPTION 1 and 2- Set the Alarm Output option on the CC2-CM-Z

Option 1 = 0 & Option 2 = 0

Alarm Output is any "Steady" Light is a single contact closure and any "Flashing" Light is a repeating contact closure. If only steady lights are ON, a reminder contact closure activates every 15 seconds.

Option 1 = 1 & Option 2 = 0

Alarm Output is a single pulse each time any zone goes from off to on.

Option 1 = 0 & Option 2 = 1

Alarm Output is a repeating contact and only activate on a Red or LED 1 "Flashing"

Option 1 = 1 & Option 2 = 1

Alarm Output is a single pulse when the zone goes from off to on and only activate on a Red or LED 1 "Flashing"

