

GEM-CO-MOD Carbon Monoxide Cadence Module

333 Bayview Avenue Amityville, New York 11701 For Sales and Repairs, (800) 645-9445 For Technical Service, (800) 645-9440 (Note: Technical Service is for alarm professionals only) Publicly traded on NASDAO Symbot NSSO

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OVERVIEW

The **GEM-CO-MOD** Carbon Monoxide Cadence Module enables the bell output signal of the alarm system to conform to the audible cadence required by the NFPA for carbon monoxide (CO) zones (4 pulse CO cadence ("beep, beep, beep, beep")).

The GEM-CO-MOD is suited for residential applications, and is designed for 12VDC alarm system control panels.

SPECIFICATIONS

Power	. 12V nominal, operating voltage
	range 13.6-10.5VDC
Siren Output Power	. As determined by your system,
	maximum 2A
Current Draw	. Standby: 8mA
Field Wiring	. Use 14-22 AWG
Operating Temperature	. 0°C – 49°C

WIRE AND TERMINAL DESCRIPTIONS

Located at the bottom of the GEM-CO-MOD PC board, the 4 wires and 2 terminals are described as follows:

Red Wire (AUX +)

Positive auxiliary input power. Wire to the control panel "AUX PWR" positive (+) terminal.

Black Wire (AUX -)

Negative auxiliary input power. Wire to the control panel "AUX PWR" negative (–) terminal.

Purple Wire (+ BELL IN)

Positive bell input. Wire to the control panel positive (+) bell output terminal.

Yellow Wire (TRIG –)

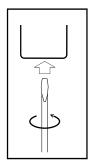
CO active low control panel alarm output. Program to activate upon a CO alarm.

+BELL OUT (terminal)

Wire to a listed audible sounding appliance. **Note:** Audible sounding appliance must have an internal driver capable of a steady output such as *MG Electronics* model MG 441-PDS.

- BELL OUT (terminal)

Wire to a listed audible sounding appliance. **Note:** Audible sounding appliance must have an internal driver.



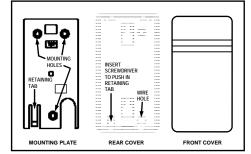


Fig. 1. Open the Case

Fig. 2.
GEM-CO Component Parts

INSTALLATION

This device is designed to be connected to a UL Listed Burglary/ Fire Alarm Control Panel by a qualified security professional trained in the installation and service of burglary and fire alarms in accordance with local and national requirements. Mount the GEM-CO-MOD inside the control panel housing as follows:

MOUNTING

Choose a mounting location within the control panel housing and install using the screws provided. Mount as follows:

- Open the GEM-CO-MOD case by inserting a small screwdriver into the slot at the bottom of the Rear Cover and twist (see Fig. 1).
- 2. A Mounting Plate is provided on the back of the GEM-CO-MOD Rear Cover. Remove the Mounting Plate from the back of the GEM-CO-MOD by inserting a small screwdriver in the small opening in the Rear Cover and pushing in the Retaining Tab (see Fig. 2), then slide the Mounting Plate off the Rear Cover.
- Use screws to secure the Mounting Plate to the inside of the control panel housing using the holes indicated in Fig. 2.
- 4. With the Front Cover removed, slide the GEM-CO-MOD onto the mounting plate. After the wiring (described below) is completed, secure the Front Cover by placing the Front Cover onto the two top tabs of the Rear Cover, then pressing the bottom of the Front Cover; the Front Cover will snap on to the Rear Cover.

WIRING

Internal terminal block is intended for 14-22 AWG wires. Ensure all terminal connections are secure.

Connect the Red, Black, Purple and Yellow wires to the control panel terminals as shown in the following wiring diagram (see Fig. 3) using wiring nuts or UL listed connectors suitable for the application.

CO ZONE PROGRAMMING

Program the CO zone monitored by the control panel as detailed in the installation and programming instructions for the installed system.

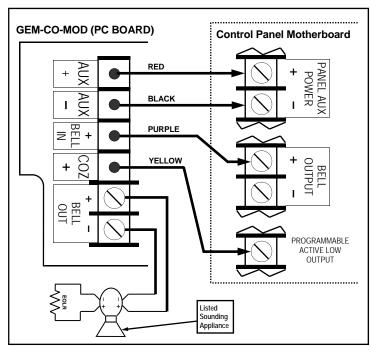


Figure 3: System Connections

NAPCO LIMITED WARRANTY

NAPCO SECURITY SYSTEMS, INC. (NAPCO) warrants its products to be free from manufacturing defects in materials and workmanship for *thirty-six months* following the date of manufacture. NAPCO will, within said period, at its option, repair or replace any product failing to operate correctly without charge to the original purchaser or user.

This warranty shall not apply to any equipment, or any part thereof, which has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to acts of God, or on which any serial numbers have been altered, defaced or removed. Seller will not be responsible for any dismantling or reinstallation charges.

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Any action for breach of warranty, including but not limited to any implied warranty of merchantability, must be brought within the six months following the end of the warranty period. IN NO CASE SHALL NAPCO BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

In case of defect, contact the security professional who installed and maintains your security system. In order to exercise the warranty, the product must be returned by the security professional, shipping costs prepaid and insured to NAPCO. After repair or replacement, NAPCO assumes the cost of returning products under warranty. NAPCO shall have no obligation under this warranty, or otherwise, if the product has been repaired by others, improperly installed, improperly used, abused, altered, damaged, subjected to accident, nuisance, flood, fire or acts of God, or on which any serial numbers have been altered, defaced or removed. NAPCO will not be responsible for any dismantling, reassembly or reinstallation charges.

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NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.

Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; or that the product or system will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; nor that the product or system will in all cases provide adequate warning or protection. A properly installed and maintained alarm may only reduce risk of burglary, robbery, fire or otherwise but it is not insurance or a guarantee that these events will not occur. CONSEQUENTLY, SELLER SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY, PROPERTY DAMAGE, OR OTHER LOSS BASED ON A CLAIM THE PRODUCT FAILED TO GIVE WARNING. Therefore, the installer should in turn advise the consumer to take any and all precautions for his or her safety including, but not limited to, fleeing the premises and calling police or fire department, in order to mitigate the possibilities of harm and/or damage.

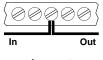
NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, or differentiate in their treatment of limitations of liability for ordinary or gross negligence, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

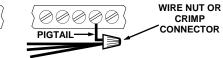
IMPORTANT WIRING METHODS



For single-conductor terminal blocks (like the type shown at left), to terminate more than one conductor to a terminal, use the wiring methods shown at right:



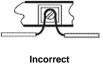
Out In
Incorrect Correct -- Single



Correct -- Single incoming and/or pigtail with wire nut / crimp connectors

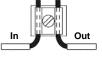


For "barrier" type terminal blocks (like the type shown at left), to terminate two conductors to a terminal, use the wiring methods shown at right:





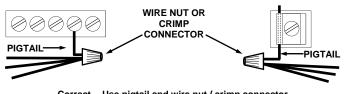




Correct -- Separate incoming and outgoing conductors

To terminate more than two conductors or conductors of different wire sizes to a terminal, use the "pigtail" type wiring method as shown at right. Use insulated wire for the pigtail, and firmly secure the conductors to the pigtail using an appropriate wire nut or crimp connector for the number and gauge of conductors used.





Correct -- Use pigtail and wire nut / crimp connector