



333 Bayview Avenue  
Amityville, New York 11701  
For Sales and Repairs, (800) 645-9445  
For Technical Service, (800) 645-9440  
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# GEMC-RM3008 RELAY MODULE INSTALLATION INSTRUCTIONS

WI1706 08/10

**UL Listed: Burglary and Fire Warning System Control Unit Accessory**

## GENERAL DESCRIPTION

The GEMC-RM3008 is an 8-channel relay interface accessory for use with the Gemini C-Series control panels. The GEMC-RM3008 relay board comes pre-mounted in a metal housing and connects onto the remote panel Burglary or Fire bus along with other accessories such as keypads and zone expansion modules. Up to eleven (11) GEMC-RM3008 units may be used within a GEMC-Series system.

Eight independent programmable dry-contact unsupervised relay outputs are provided for controlling bells, door latches, lights and other similar devices. The panel controls the closure of each relay. Refer to installation instructions for the control panel in use for wiring requirements in UL-listed applications.

## SPECIFICATIONS

### Electrical Ratings

**Input Power:** 12.6 - 11.8VDC, 22mA + 12mA per energized relay, total 118mA of all relays energized.

### Contact Ratings:

**Voltage:** 30VAC or 30VDC maximum.

**Current:** 2A maximum (resistive load).

**Maximum Wiring Length for each run (on Fire Bus or GEMC-BM burg bus):** 750 feet with #22AWG, 1000 feet with #18AWG.

**Maximum Wiring Length for each run (on GEMC-BM/PS burg bus):** 20 feet with #22AWG, 40 feet with #18AWG. **Note:** Do not use bus power to power devices on relay outputs or wire length must be reduced by half for each 120mA used.

**Metal Housing (H x W x D):** 10 5/16" x 8 3/8" x 3"

## INSTALLATION

**Caution:** Always remove AC and battery power from main control panel before installing or removing the GEMC-RM3008.

The GEMC-RM3008 relay board metal housing is connected to the remote panel Burglary or Fire bus. For more information regarding wiring to the remote Burg bus and to the remote Fire bus, see the GEMC-Series control panel installation instructions (WI1653). **Note:** When wiring and programming are complete, secure the housing door closed with either a key lock or with the four Hex-head zinc plated 6-32 x 3/8 screws (part SC227, provided).

## BOARD/MODULE ASSIGNMENT

The control panel must be able to identify the relay board or module. This is accomplished by the proper placement of jumpers on Jumper Block J1 (see Wiring Diagram on page 2 and Table 1, below).

## WIRING

1. Mount the enclosure with hardware sufficient to secure the unit to the mounting surface. **Note:** Use NAPCO part number GEM-TAMPERKIT to protect against the unauthorized removal of the GEMC-RM3008 by dedicating a zone to monitor the tamper switch.
2. Connect the four wires to the control panel as shown in the Wiring Diagram (Fig. 2).
3. Connect the remote devices as required to the individual relays. Refer to Table 2 and Fig. 2. Note that, for each relay, two terminals provide normally-open contacts, whereas the common terminal and a related lug provide normally-closed contacts.

**Note:** Use Napco Part No. WL2 for field wiring connections to normally-closed relay lugs.

## PROGRAMMING

Use PCD-Windows Quickloader Download software. **Note:** Outputs of the GEMC-RM3008 may not be programmed as SILENCE-ABLE.

Module No.	External Relay Nos.	Jumper Block J1				
		J1-1	J1-2	J1-3	J1-4	J1-5
1	1--8	•	ON	ON	ON	ON
2	9--16	ON	•	ON	ON	ON
3	17--24	•	•	ON	ON	ON
4	25--32	ON	ON	•	ON	ON
5	33--40	•	ON	•	ON	ON
6	41--48	ON	•	•	ON	ON
7	49--56	•	•	•	ON	ON
8	57--64	ON	ON	ON	•	ON
9	65--72	•	ON	ON	•	ON
10	73--80	ON	•	ON	•	ON
11	81--88	•	•	ON	•	ON

Table 1. Board/module identification by jumper placement.

NOTE: "•" Indicates jumper is OFF.

Relay	COM Terminal	N-O Terminal	N-C Lug
1	1	2	E1
2	3	4	E2
3	5	6	E3
4	7	8	E4
5	9	10	E5
6	11	12	E6
7	13	14	E7
8	15	16	E8

Table 2. Relay connections.

**NOTES:**

1. ONLY CONNECT POWER LIMITED CIRCUITS
2. ALL RELAY OUTPUTS UNSUPERVISED FOR OPEN OR SHORT ACROSS CIRCUIT
3. DS1 BLINKS IF BEING POLLED
4. MAX 2 WIRES PER TERMINAL, 14-22 AWG.

**INPUT POWER: 12.6 - 11.8VDC, 22MA + 12MA PER ENERGIZED RELAY, TOTAL 118MA ALL RELAYS ENERGIZED.**

**CONTACT RATINGS: 30VAC OR 30VDC MAXIMUM, 2A MAXIMUM (RESISTIVE)**

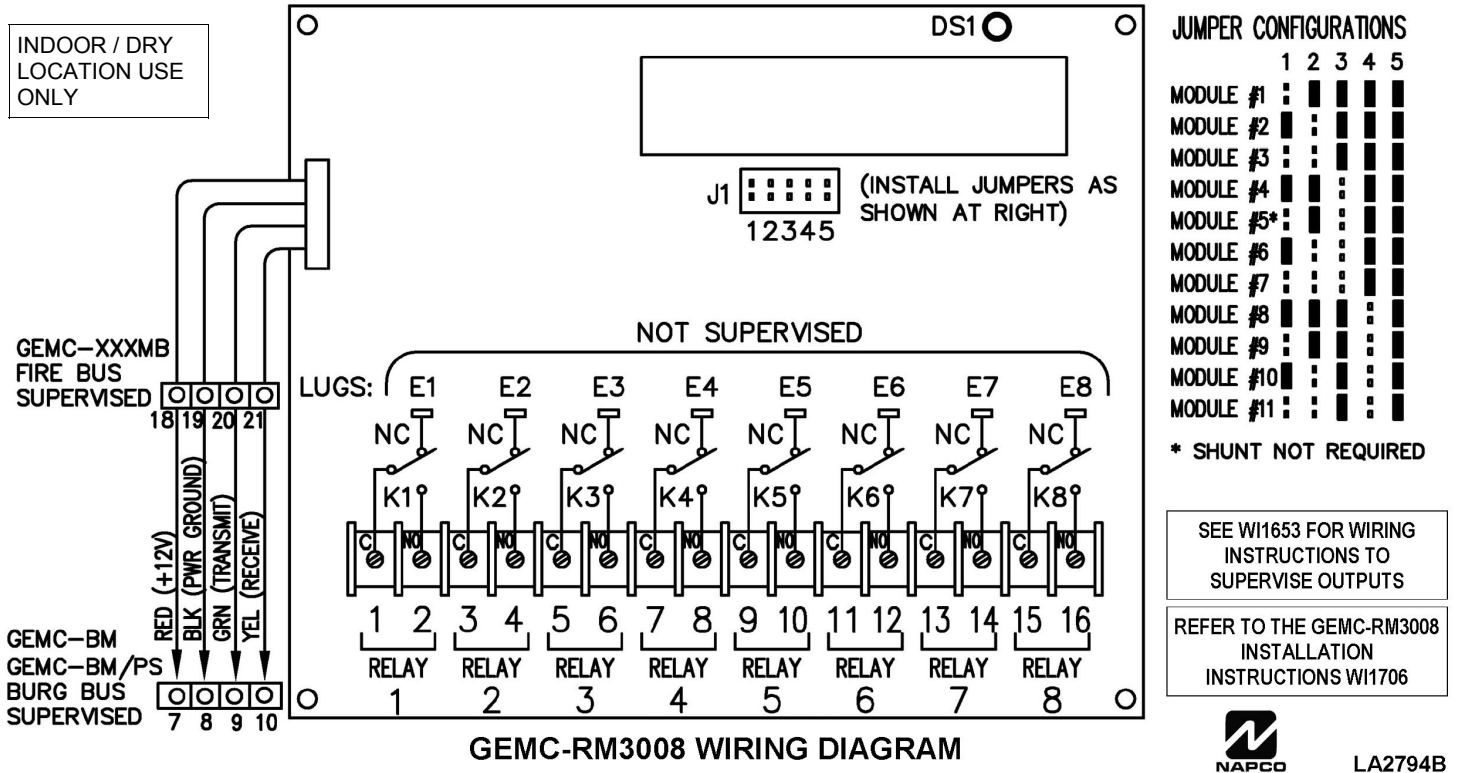
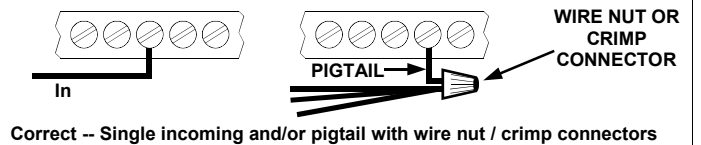
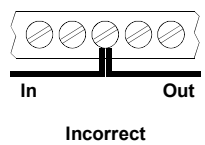


Fig. 2. GEMC-RM3008 Wiring Diagram

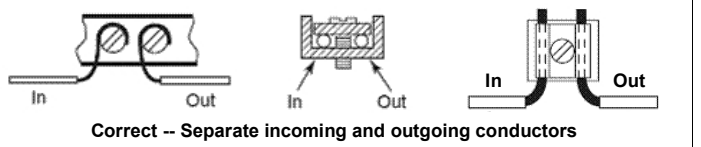
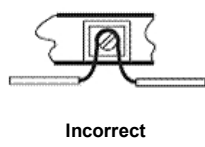
## IMPORTANT WIRING METHODS



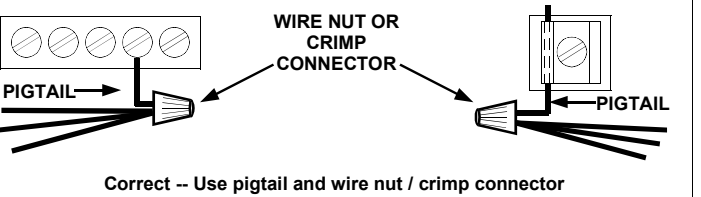
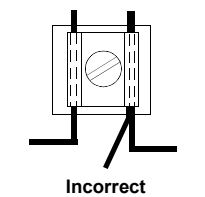
For single-conductor terminal blocks (like the type shown at left), to terminate more than one conductor to a terminal, use the wiring methods shown at right:



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:



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.



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