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# GEMC-BSLC-RLY

## NON POLARIZED

## SINGLE POINT RELAY MODULE

## INSTALLATION INSTRUCTIONS

WI1723 06/10

### GENERAL DESCRIPTION

The GEMC-BSLC-RLY "Non-Polarized" Single Point Relay Module is a low-current Form C relay interface accessory. The GEMC-BSLC-RLY provides a dry contact relay output for controlling bells, door latches, lights, strobes and other similar Burglary and Home Automation devices.

The GEMC-BSLC-RLY Relay Module connects onto the

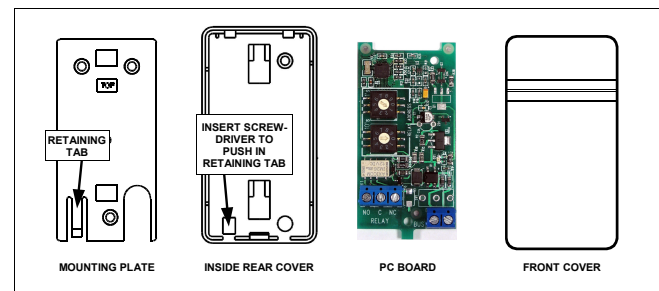


Fig. 1. GEMC-BSLC-RLY Component Parts

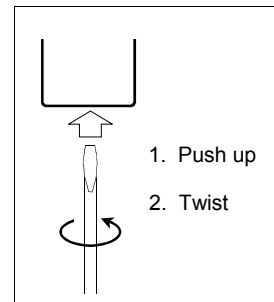


Fig. 2. Opening the case

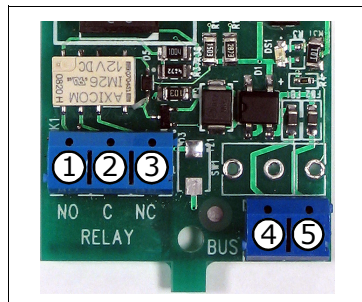


Fig. 3. Terminal Descriptions:

1. Relay NO (Normally Open)
2. COM (Relay Common)
3. Relay NC (Normally Closed)
4. BUS (BSLC Bus)
5. BUS (BSLC Bus)

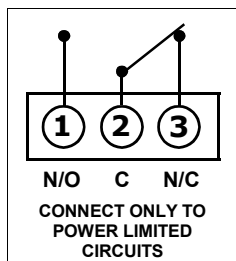


Fig. 4. Wiring

SLC Bus (polling loop terminals on the GEMC-BSLC board) along with such other accessories as GEMC-BSLC-1PT and GEMC-BSLC-4PT modules.

The GEMC-BSLC-RLY is easy to install--when wiring to the polling loop, the terminals (4 and 5) are non-polarized and so can be connected to either side of the SLC loop. Up to 88 GEMC-BSLC-RLY units may be used with any one Gemini C-Series control panel. Based on the available current the GEMC-BSLC provides, up to 44 GEMC-BSLC-RLY modules may be used with any one GEMC-BSLC.

The first 40 External Outputs (1-40) of the Gemini C-Series control panels are supervised Form C relay contacts (the

position of the relay is supervised, but the external relay output wiring is not supervised for opens or shorts). Due to relay supervision, reporting and disabling options, we recommend these first 40 outputs be reserved for controlling Fire devices. Devices addressed as 41-88 are not supervised (do not have a local or remote trouble indication) and thus are for supplementary use only. For UL installations, the external device must be mounted no greater than 3 feet from the GEMC-BSLC-RLY module with no intervening walls or barriers. Refer to the control panel installation instructions for wiring requirements in UL-listed applications.

Other features include:

- Communication and operating power received from the control panel via the addressable polling loop
- Electronics enclosed within a easy to install plastic case
- Approved for Commercial Burglary and Residential Burglary installations. **Note:** For Commercial applications, the GEMC-BSLC-RLY module must be installed within a UL-Listed tamper-protected enclosure (i.e. GEMC-HSKIT12V-R, GEMC-HSKIT12V-CF or CI-HSKIT12V UL Listed Enclosure Subassembly with GEMC-TAMPERKIT).

### SPECIFICATIONS

#### Electrical Ratings

##### Input Power:

**Voltage:** 13.6-16.5VDC (connected to the GEMC-BSLC).

**Current:** Standby, 3.0mA + 5.0mA with energized relay.

**Note:** The GEMC-BSLC-RLY is equivalent to 5 devices (and have a maximum distance of 3000 feet per home run when using 16AWG wire). See WI1648.

**Output Power:** Form C dry contact. Wire only to power-limited circuits.

**UL Contact Ratings:** 30VDC, 2A and 30VAC, 1A (resistive load).

**Maximum Wiring Length:** 3000' (#16 AWG). Refer to GEMC-BSLC documentation for complete wiring information.

**Dimensions (inches):** Width: 1½ (38mm) Height: 3⅜ (79mm) Depth: 1 (25mm)

**Operating Temperature:** 32° to 120°F (0° to 49°C)

### INSTALLATION

**Caution:** Always remove AC and battery power from

main control panel before installing or removing the GEMC-BSLC-RLY.

**Note:** For reference purposes in this text, the module will be considered oriented with the screw terminals at the bottom, as shown in these illustrations.

1. **Remove the cover.** Remove the GEMC-BSLC-RLY point module cover by inserting a small screwdriver into the slot at the bottom and twisting while applying upward pressure. See Fig. 2.
2. **Select External Output Number.** Use a small screwdriver to select the External Output Number (01-88) on the dial switches marked "10's" and "1's" ("10's" is the tens digit and "1's" is the ones digit).
3. **Remove point module mounting plate.** Use a small screwdriver to push in retaining tab (Fig. 1) and slide cover upward.
4. **Attach mounting plate.** **Note:** While use of the point module mounting plate is recommended, mounting holes in the rear case allow mounting without the plate. Use #6 flat-head screws to affix the mounting plate.
5. **Install Device.** Snap the point module onto its mounting plate. For recessed wiring, drill an access hole for the wire.
6. **Wire the terminals.** Run the wiring through the access slots in the rear case and connect at the appropriate terminal block screws (see wiring diagram). Connect two wires from an external power limited de-

vice to Terminals 1–2 for N.C. contacts. Likewise, for N.O. contacts, connect to Terminals 2–3. Wire terminals 4 and 5 to either side of the SLC loop (terminals 4 and 5 are not polarized). N.O. devices must be mounted no farther than 3 feet from the module. In Commercial installations, wiring must be mechanically protected with conduit or equivalent. See **Wiring Diagram**, below.

7. **Close the point module case.** Close the case by engaging the hooks at the top, then snap the bottom together.
8. **Select the GEMC-BSLC External Output Group Number.** Use the table in the wiring diagram (Fig. 5) to convert the "External Output Number" (01-88) used in step 2 to an "External Output Group Number". Enter this Group Number into the 11-position dip switch marked "OUTPUT GROUP" on the GEMC-BSLC PC board.

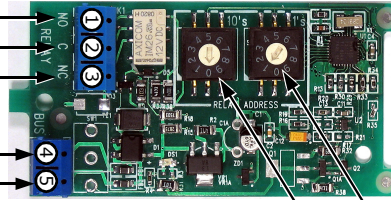
See panel programming instructions WI1673 to activate the relay. Basic control of the relay can be accomplished from Dealer Program Mode, but to activate based on a schedule, the PCD-Windows Quickloader download software must be used.

# WIRING DIAGRAM

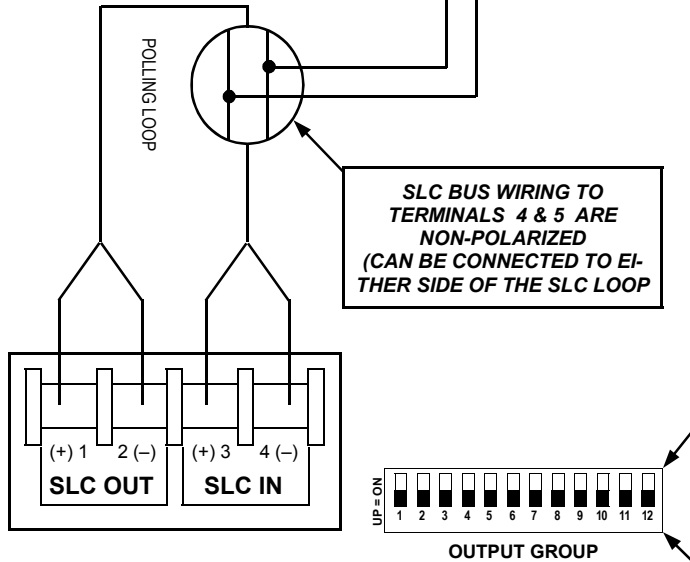
## TERMINAL DESCRIPTIONS

1. Relay NO (Normally Open)
2. COM (Relay Common)
3. Relay NC (Normally Closed)
4. BUS (SLC Bus + or -)
5. BUS (SLC Bus + or -)

RELAY NO  
RELAY COMMON  
RELAY NC



"EXTERNAL OUTPUT NUMBER" (01-88) ON THE DIP SWITCHES MARKED "10'S" (LEFT) AND "1'S" (RIGHT)  
"10'S" = TENS DIGIT; "1'S" = ONES DIGIT



"GEMC-BSLC" BOARD SHOWN ABOVE:  
POLLING LOOP TERMINALS (POLARIZED) AND  
"EXTERNAL OUTPUT GROUP NUMBER" DIP SWITCHES 1-11.

GROUP # DIP SWITCH POSITION (UP = ON)	"EXTERNAL OUTPUT NUMBER" (01-88)
1	01-08
2	09-16
3	17-24
4	25-32
5	33-40
6	41-48
7	49-56
8	57-64
9	65-72
10	73-80
11	81-88
12	(NOT USED--LEAVE OFF / DOWN)

Fig. 5. Wiring Diagram

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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.

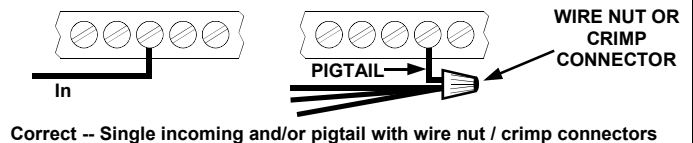
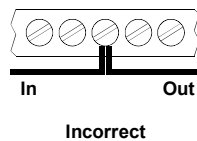
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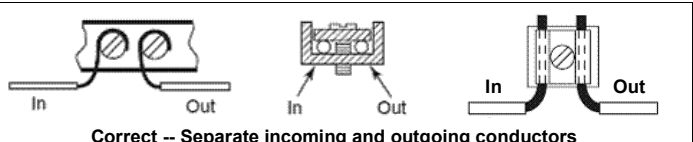
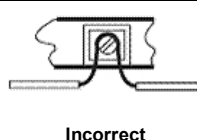
## IMPORTANT WIRING METHODS



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.

