



333 Bayview Avenue  
Amityville, New York 11701  
For Sales and Repairs, (800) 645-9445  
For Technical Service, (800) 645-9440  
Publicly traded on NASDAQ Symbol: NSSC  
© NAPCO 2010

# GEMC-BK1 KEYPAD INSTALLATION INSTRUCTIONS

WI1650 08/10

## DESCRIPTION

The GEMINI 4 wire bus GEMC-BK1 keypad is compatible with the NAPCO GEMC-Series control panels (for Commercial and Residential Burglary installations). See Installation instructions (WI1653) for more information.

**Note:** Do not install classic Gemini "RP" series keypads or Gemini "K Series" keypads within a GEMC-Series system.

## ELECTRICAL RATINGS

**Input Power:** 12.5 - 7.5VDC, 110mA maximum (120mA when using integral EZM). 35mA if backlighting is disabled (cut jumpers W1, W2 & W3).

**Output Power:**

**PGM Output (active low):** 5mA, 12V. Wiring to power limited circuits less than 14VDC.

**Maximum Number of Burglary Keypads:** 15.

**Maximum Number of Fire Keypads + Burglary Keypads:** 15.

**Maximum Wiring Length for each run: (#22AWG):** 1000' divided by total number of keypads on run.

## POWER RATINGS

GEMC-FK1 and GEMC-BK1 are both powered by the keypad bus of the control panel, GEMC-12V2APS or an appropriately rated UL Listed Security/Signaling power-limited power supply. Deduct these values from the system standby current, as described in the control panel wiring diagram.

**GEMC-BK1 supports an integral 4 zone EZM:**

**Zone Loop Voltage:** 12V

**Zone Loop Current:** 4.7mA nominal, 5.5mA when shorted.

**Maximum Zone Loop Resistance:** 300 ohms.

**2.2K End of line resistor.**

## MOUNTING THE KEYPAD

A keypad should be located near each exit/entry door. To open the case, insert a screwdriver into either slot at the bottom and push up with a slight twisting motion to release the retainer tab. Repeat for the other slot. Pull out at the bottom and lift off the two hooks at the top.

The keypad features a handy pull-up reference label (this label must be used in UL installations). Before mounting the keypad onto the wall, push the Sliding Label Plate

(with label and felt backing affixed and handle facing forward) down the guides at the rear of the keypad until it snaps into place. Once installed, the Sliding Label Plate cannot be removed without first removing the keypad from the wall. **Note:** The keypad fire and panic keys should not be considered a substitute for a listed manual initiating device, such as a pull box.

If installing onto a double-gang box, insert mounting screws through the two vertical elongated holes on the left side of the case and into the box. If the box is visible when viewed from the front, adjust the keypad vertically and tighten the screws. Then, using hardware suitable for the mounting surface, add one or two screws at the right side of the keypad case directly into the wall to ensure a secure installation. **Note:** Do not over tighten the screws! Uneven walls may cause the keypad case to distort.

## WIRING

Connect the keypad wires to the GEMC-BM and/or GEMC-BM/PS terminals shown in the table below.

COLOR	FUNCTION
GREEN	(Terminal 9) Keypad RX
YELLOW	(Terminal 10) Keypad TX
RED (+)	(Terminal 7) 12V Power
BLACK (-)	(Terminal 8) Power Ground
Brown	PGM Output
Gray	Alarm Com
Orange	Zone 1
Blue	Zone 2
Gray	Zone Com 1
Violet	Zone 3
White	Zone 4
Gray	Zone Com 2

## KEYPAD ADDRESS AND OPTION JUMPERS:

See product label.

# 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.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF NAPCO.

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.

This warranty contains the entire warranty. It is the sole warranty and any prior agreements or representations, whether oral or written, are either merged herein or are expressly cancelled. NAPCO neither assumes, nor authorizes any other person purporting to act on its

behalf to modify, to change, or to assume for it, any other warranty or liability concerning its products.

In no event shall NAPCO be liable for an amount in excess of NAPCO's original selling price of the product, for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of any failure of the product. Seller's warranty, as hereinabove set forth, shall not be enlarged, diminished or affected by and no obligation or liability shall arise or grow out of Seller's rendering of technical advice or service in connection with Buyer's order of the goods furnished hereunder.


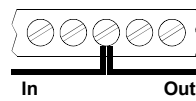
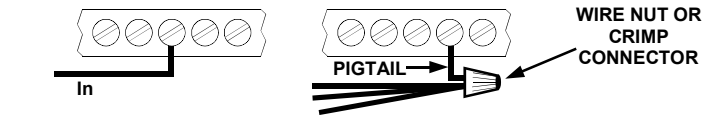
NAPCO RECOMMENDS THAT THE ENTIRE SYSTEM BE COMPLETELY TESTED WEEKLY.


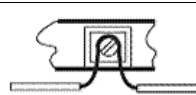
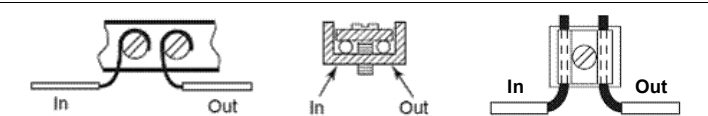
**Warning:** Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented; 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.

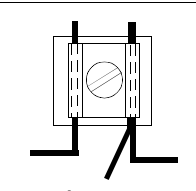
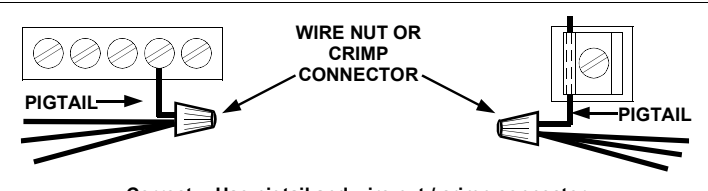
NAPCO is not an insurer of either the property or safety of the user's family or employees, and limits its liability for any loss or damage including incidental or consequential damages to NAPCO's original selling price of the product regardless of the cause of such loss or damage.

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

 <p><b>For single-conductor terminal blocks</b> (like the type shown at left), to terminate more than one conductor to a terminal, use the wiring methods shown at right:</p>	 <p>Incorrect</p>	 <p>Correct -- Single incoming and/or pigtail with wire nut / crimp connectors</p>
---	--	--

 <p><b>For "barrier" type terminal blocks</b> (like the type shown at left), to terminate two conductors to a terminal, use the wiring methods shown at right:</p>	 <p>Incorrect</p>	 <p>Correct -- Separate incoming and outgoing conductors</p>
--	--	--

<p><b>To terminate more than two conductors</b> 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.</p>	 <p>Incorrect</p>	 <p>Correct -- Use pigtail and wire nut / crimp connector</p>
--	--	---