NAPCO
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 GEMC-WL-PIR Wireless PIR Transmitter

WI1745B 09/13

GENERAL DESCRIPTION

The GEMC-WL-PIR is an advanced PIR sensor designed for use with Napco's GEMC-RECV and GEM-RECV Series wireless receivers. The unit is powered by two supplied 3-volt lithium batteries (estimated battery life 3 years). When battery voltage drops below normal, a low-battery report will be sent to the receiver (replace with Duracell DL123A, Varta/Power-One CR123A or Panasonic CR123A only). See the GEMC-RECV installation instructions (WI1682) or the GEM-RECV installation instructions (WI751) for programming the wireless devices into the system. Coding switches are not used in the GEMC-WL-PIR; each transmitter has a unique factory-programmed RF ID code (printed on the unit) that distinguishes itself to the receiver. (**Note:** See control-panel instructions for entering this six digit hexadecimal code and checksum digit into the panel; be sure to enter all numbers and/or letters, including leading zeros, if any).

SPECIFICATIONS

PIR Coverage (LxW): 50 feet x 50 feet (15.2m x 15.2m) at 68°F (20°C), typical.
Operating Temperature: 32° to 120°F (0° to +49°C)
Note: Detector stabilizes within 3 minutes of power up.
Mounting: Wall or corner, 6 - 10 feet (1.8 - 3m) maximum
Dimensions (HxWxD): 4.5 x 2.5 x 1.7 inches (11.4cm x 6.4cm x 4.3cm)
Shipping Weight: 6.4oz (181g)
Operating Frequency: 319.5Mhz

STANDARD LENS

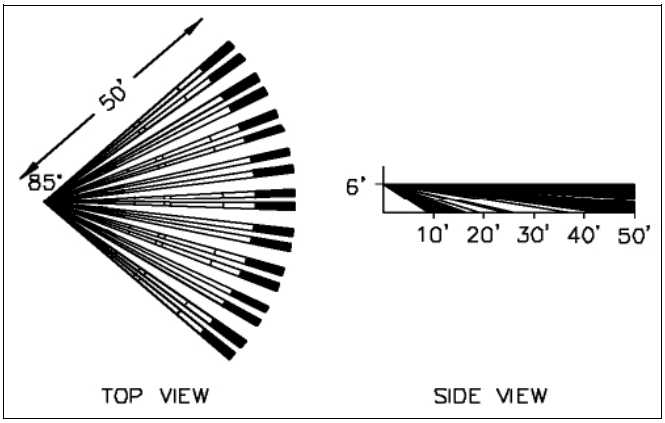


Fig. 1. Standard Lens coverage pattern for 6' mounting height.

FEATURES

- Signal Selective Processing for reliable operation
- Unique circuit design protects against false alarms due to radio-frequency interference
- Vertical and horizontal aiming capabilities
- Dual-element sensor
- Lens Bank of optional accessory lenses (optional lenses not evaluated by UL)
- Large lens area assures high sensitivity
- Small size
- Corner mountable
- Built-in front and rear tamper micro switches to protect against removal of front cover and removal from wall

REPLACING THE LENS

The lens is "sandwiched" between the front case and a Lens Support insert, which also serves to hold the LED jewel in place. To install one of the accessory lenses, proceed as follows.

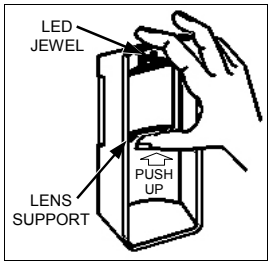


Fig. 2

1. To open the case, insert a small screwdriver in the slot at the bottom and push up slightly. Remove the front cover.
2. Push up on the lower edge of the Lens Support until it is clear of its retainers, then pull out the support from the bottom. Be careful not to dislodge the LED jewel. **Note:** If the LED jewel pops out, reinsert it with the small index key positioned at the top.
3. Slide out the lens and install the replacement.
4. Replace the Lens Support: Slip the Lens Support under the top guides with its two tabs straddling the LED jewel, then push in at the bottom until the Lens Support snaps into place. Accessory lenses not evaluated by UL.

WALK TESTING

The LED will light in the Walk-Test Mode only. Allow at least 3 minutes for the unit to settle. Press the Walk-Test Button to access the Walk-Test Mode for 5 minutes.
Walk out to the maximum range and walk across the field of coverage. The LED will light whenever motion is detected. Check for environmental disturbances with all disruptive devices (heaters, air conditioners) on and no human activity within the coverage area. Adjust beams laterally by removing the Lens Support (see REPLACING THE LENS) and sliding the lens slightly left or right. To block a problem zone, apply a piece of lens foil (supplied) to the inside segment of the lens representing that zone.

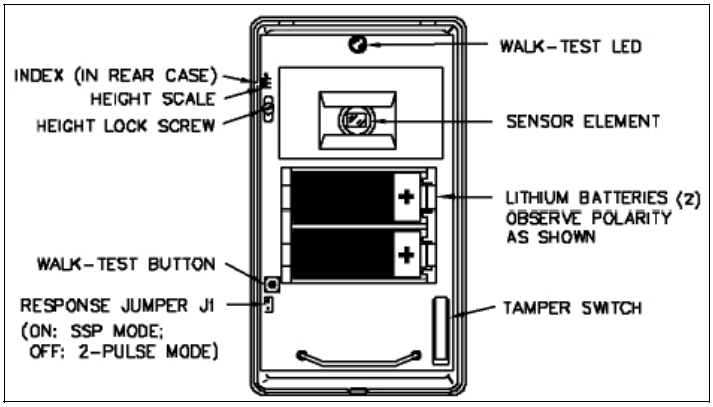


Fig. 3

SETTING THE OPERATING MODE

The GEMC-WL-PIR comes set for operation in the Signal Selective Processing (SSP) Mode. To change to the fixed 2-pulse bipolar mode for use with the Long-Range Lens* (LENS840), Barrier Lens* (LENS818) or other lens with a limited number of beams, remove the Response-Mode Jumper, J1.

INSTALLATION

CHOOSING A SUITABLE LOCATION

The unit may be either wall mounted or corner mounted. Corner mounting is generally recommended as greater coverage may be obtained. Select a rigid surface that is relatively free of vibration.

Position the sensor with respect to access doors or windows so that an intruder will pass across its field of view, not directly toward or away from it. Avoid areas containing devices that may pose a chronic problem to either sensor.

MOUNTING THE SENSOR

Open the case by inserting a small screwdriver in the slot at the bottom and pushing up slightly. Remove the front cover.

An array of "push-thru" holes is provided in the rear case to simplify wall or corner mounting. Remove all burrs from outside surface to ensure rear case will lay completely flat against wall(s). A round push-thru hole permits cable entry at the bottom. Cutaway notches in the rear case will accommodate surface-mounted cables if the outer jacket is removed. After the proper knockouts have been removed, the rear case may be used as a template to mark drill holes. Note the words "UP" and "TOP" printed in raised text on inside of rear case. Any unused knockout must be sealed with the caulking material supplied to eliminate drafts and prevent entry by insects. If mounting higher than 3 meters, it may be necessary to tilt the unit downward slightly for proper microwave coverage, and to reset the Height Scale slightly for proper PIR coverage.

Note: The "Flat Wall" mounting procedure and the "Corner Wall" mounting procedure are different; be sure to select the correct procedure for your application. The rear tamper actuator (supplied) must be installed for proper tamper operation. To open the case, insert a small screwdriver in the slot at the bottom of the case and push up slightly. Remove the front cover.

Flat Wall Mounting:

1. Note the words "UP" and "TOP" printed in raised text on inside of rear case. Remove the four mounting "knock-out" holes in the rear case and remove all burrs from the outside surface to ensure the rear case will lay completely flat against the wall.
2. Place rear case against the wall at the selected mounting location and, using the rear case as a template, mark the mounting holes with a pencil. Secure the rear case to the wall with the four #6 x 1" mounting screws provided.
3. Insert the #7 x 1" drywall screw (only one supplied) into center of the ***short*** rear tamper actuator (Fig. 4).

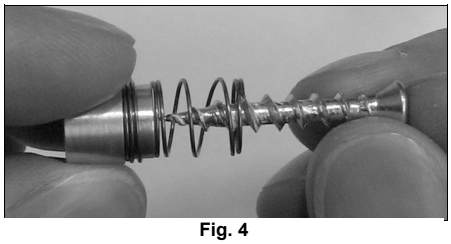


Fig. 4

4. Insert the short rear tamper actuator (with screw) into the tamper hole in the rear case. Screw the tamper actuator into wall (Fig. 5).

Fig. 5

Corner Wall Mounting:

1. Note the word "UP" and "TOP" printed in raised text on inside of rear case. Place rear case against corner walls at selected mounting location and use a pencil to mark the location of the rear tamper actuator hole (Fig. 6).

Fig. 6

2. Insert the #7 x 1 5/8" drywall screw (only one supplied) into center of the ***long*** rear tamper actuator (Fig. 7).

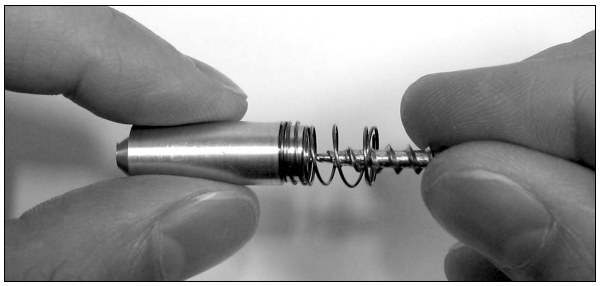


Fig. 7

3. Screw the rear tamper actuator into corner at Sleeve hole location previously marked in step 1 (Fig. 8). Be sure actuator is centered between both walls. The tapered end of the actuator must be flush against both wall surfaces before securing with the screw.

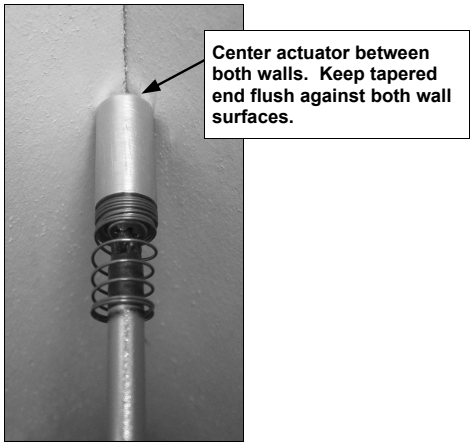


Fig. 8

4. Prepare rear case by removing 2 of 4 mounting "knock-out" holes (Only two mounting holes should be used on ONE wall because the case may distort if both wall surfaces are not exactly 90° apart). Remove all burrs from outside surface to ensure rear case will lay completely flat against both walls.

5. Place rear case with the rear tamper actuator protruding through the tamper hole (Fig. 9). Mount rear case to wall using two of the four #6 x 1" mounting screws (supplied) into only one of the walls.

Fig. 9

Install the two lithium batteries as shown in the illustration on page 1. Loosen the Height Lock Screw and set the board's height scale to the mounted height of the unit. Retighten the screw. To reduce range if necessary, set height scale at a higher number than actual mounting height of unit. Do not point the unit at sources of heat, such as radiators, space heaters, etc. **Note:** In UL burglary installations, the burglary output must be programmed for all protective devices.

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.

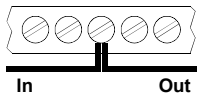
Warning: Despite frequent testing, and due to, but not limited to, any or all of the following; criminal tampering, electrical or communications disruption, it is possible for the system to fail to perform as expected. NAPCO does not represent that the product/system may not be compromised or circumvented;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

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:



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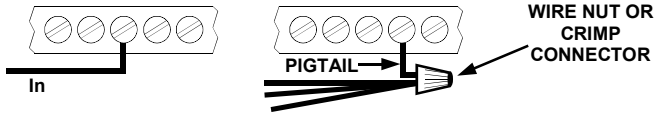
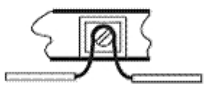


Correct -- Single incoming and/or pigtail with wire nut / crimp connectors

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:



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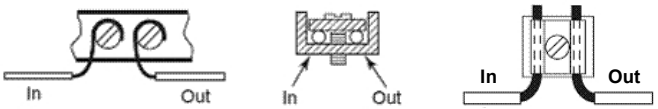
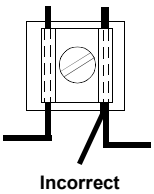


Correct -- Separate incoming and outgoing conductors

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.



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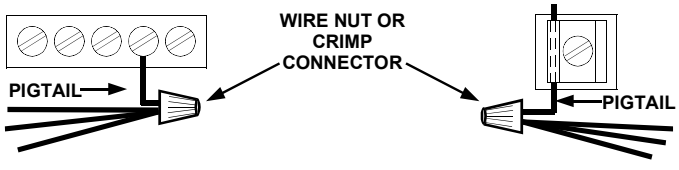

Correct -- Use pigtail and wire nut / crimp connector