



# NAPCO GEM-PIR Wireless PIR Transmitter

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Publicly traded on NASDAQ Symbol: NSSC  
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## GENERAL DESCRIPTION

The GEM-PIR is an advanced PIR sensor designed for use with Napco's GEM-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). Coding switches are not used in the GEM-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 check-sum digit into the panel; be sure to enter all numbers and/or letters, including leading zeros, if any).

## SPECIFICATIONS

**PIR Coverage (l x w):** 50' x 50' (15.2m x 15.2m) at 20°C (68°F), typical.

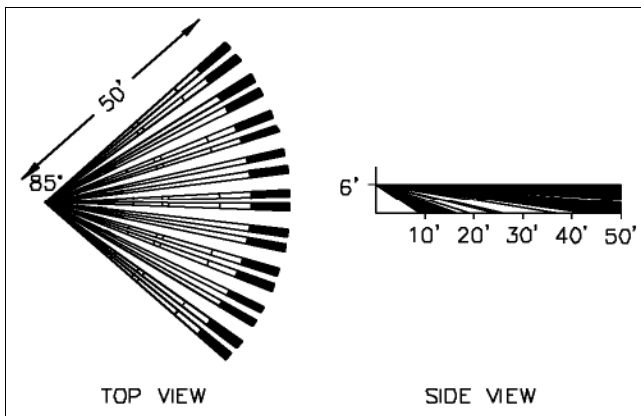
**Operating Temperature:** 0° to +50°C (32° to 122°F)

**Mounting:** Wall or corner, 10' (3m) max.

**Dimensions:** 4.5" x 2.5" x 1.7" (11.4cm x 6.4cm x 4.3cm) (HxWxD)

**Shipping Weight:** 6.4oz (181gm)

## STANDARD LENS



Standard Lens coverage pattern for 6' mounting height.

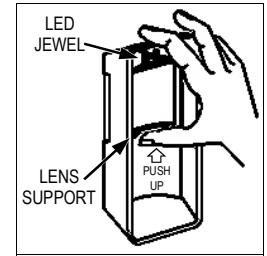
## FEATURES

- 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
- Large lens area assures high sensitivity
- Small size with ample wiring space
- Corner mountable
- Built-in Tamper microswitch

## 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.

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. Removing Lens Support.

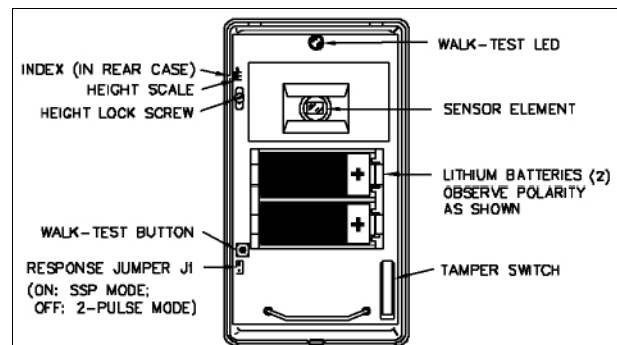


## INSTALLATION

An assortment of "push-thru" holes is provided in the rear case for wall or corner mounting. Install the two lithium batteries as shown in the illustration below. 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.

## 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.



## SETTING THE OPERATING MODE

The GEM-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.

# 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.

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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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