

10 **PROFILER**™



Advanced Profiling Technology PASSIVE INFRARED SENSOR INSTALLATION INSTRUCTIONS



NAPCO®

Napco Security Systems, Inc.

333 Bayview Avenue, Amityville, New York 11701

For Sales and Repairs, (800) 645-9445

WI1017 08/00

Now it just takes a minute and a screwdriver to install the smart microprocessor-based PIR that profiles targets against a built-in library of 1200+ false alarm and alarm sources for verified detection -- NAPCO's IQ Profiler Sensor!

- 50 lb. Pet Immunity (22.7kg) *
- Maximum Range: 50 x 50 Feet (15.2m x 15.2m)
- Superior False Alarm Discrimination and Unique Dual Focal Lenses in Advanced Bi-Optic Contour Case.
- IQ Profiling: Each detected signal is profiled against Napco's proprietary built-in library of false alarm signals and real alarm signals for maximum accuracy.
- Shielded High-Performance Aspheric Lenses plus Look-Down/Creep Zone
- Sensor Chamber prevents insect, draft, and dust interference.
- **Quick Mount:** A quarter-turn of a screwdriver in the back housing's mounting disk and the unit embeds itself in any corner in seconds, with innovative self-projecting, fast anchoring wall pins.
- **Quick Wire:** "Snap-Down" Terminal Strips hold wires fast (No screws!) Just insert stripped wires in each and snap down (speaker-jack style).
- Wall & Swivel Mounting (SVL2), too.

* Pet Immunity has not been evaluated by UL.

SPECIFICATIONS

Coverage (l x w): 50' x 50' (15.2m x 15.2m) at 20°C (68°F), typical. (with High Sensitivity Jumper “SEN” installed)
30' x 35' (9.1m x 10.6m) at 20°C (68°F), typical. (with Normal Sensitivity)

Operating Temperature: -10° to +50°C (14°F to 122°F)

Mounting: Wall or corner, 6.5' to 8.5' max.

Alarm Output: Normally-Closed Form-A Relay

Contact Ratings: 100mA, 24VDC with internal 10 Ohm current-limiting resistor

POWER-SUPPLY REQUIREMENTS

Note: This unit is intended for operation from a power source that provides a 4 hour battery backup in the event of a power failure.

Filtered Dc: 10.6 to 16V DC nominal with battery backup from control panel.

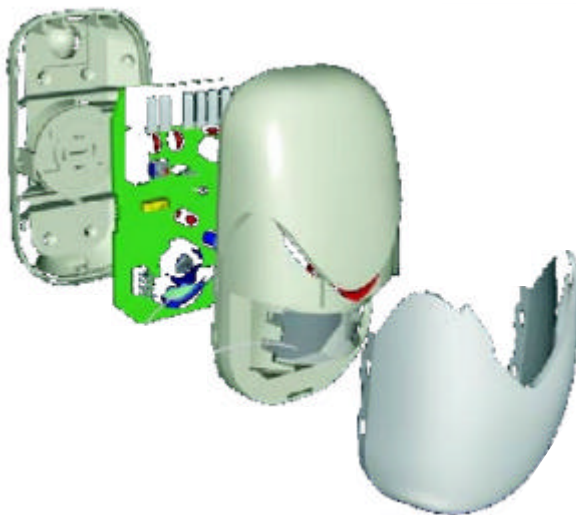
Current Drain: 28mA (idle or alarm) at 12VDC (nominal) 33mA (idle or alarm) at 16VDC (nominal).

PHYSICAL

Dimensions: 4.5 in x 2.5 in x 1.8 in (HxWxD)

Shipping Weight: 6 oz.

- Bi-Optic Contour Case and Dual focal lenses provide exceptional distance profiling:
 - “Far Field Lens” allows for detection of large objects and ignores small targets nearby
 - “Near Field Lens” allows for discrimination of small targets nearby

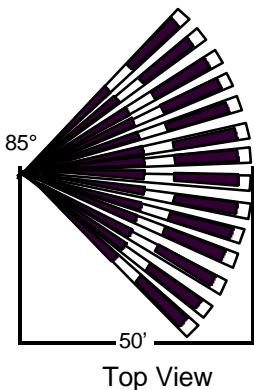


© NAPCO 10/00 Pats. Pending
IQ Profiler is a trademark of NAPCO

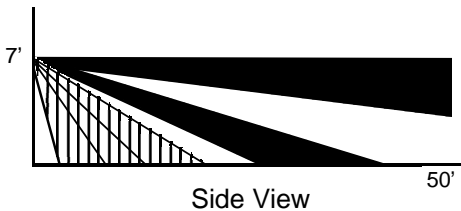
Locating the Detector

Corner mounting is preferred as it provides the best overall coverage. Choose a corner where the path of an intruder will most likely cross beams, as opposed to walking towards or away from them. This lens is intentionally made with an 85 degree angle of view, to help prevent curtains on windows from being in detection zones.

Sources of heat, such as radiators and space heaters, do not usually pose a problem as long as hot air from them does not *blow directly* onto the detector. One exception to this is overhead radiant heaters, these produce very high levels of infrared energy and can heat the unit at some distance. Mount the unit as far from these as possible. Do not mount the unit where the sun can shine directly on it. Mount it away from the direction of sunlight.



Standard Installation Protection pattern



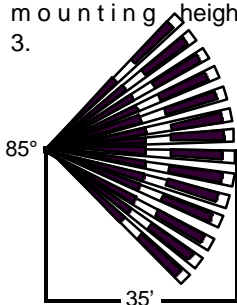
Installations with Pets

The IQ Profiler will provide good immunity to small to medium sized pets in most applications. The pet or pets should be less than 50 lbs. and less than 24" tall. Several small cats are acceptable. If you have three or more large ones, we recommend that the NAPCO C200AP dual technology sensor be used. Mount the unit at a height of 7 ft. Following are 2 installation techniques, one for small pets and one for larger pets. NOTE: For all Pet Installations, the (SEN) jumper should be off (normal sensitivity). NOTE: Pet Immunity has not been evaluated by UL.

Small Pet Avoidance

If you are protecting a typical room area which may include small pets or rodents (no larger than 20 lbs. total weight), locate the detector at a height of 7 ft. and avoid placement that would allow the pets to get within 6 ft. of the detector. It may be necessary to mask a zone of the lens with the supplied material if a staircase is closer than 20 ft. to the detector and directly in a zone. The detector should be mounted at a height of 7 ft. with the PC Board mounting height index set to

3.



Top View

Small Pet Avoidance Protection Pattern (Jumper SEN off)

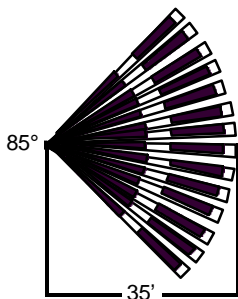


Side View

Large Pet Avoidance

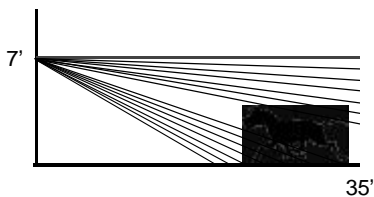
The IQ Profiler can be configured to avoid detection of pets up to 50 pounds and less than 24" tall. Remove or mask the small look down lens just below the PIR sensor. Configured in this manner, the IQ Profiler will allow a larger pet to freely move about, but still retain the sensitivity required to detect an intruder. The detector should be mounted at a height of 7 ft. with the PC Board mounting height index set to 3.

NOTE: Pet Immunity has not been evaluated by UL.



Top View

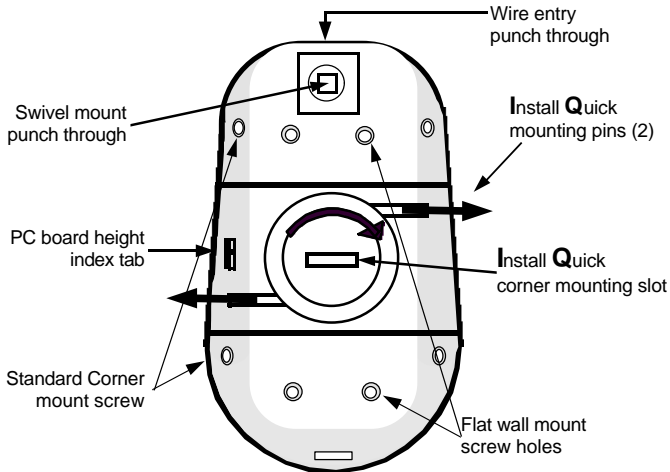
Large Pet Avoidance Protection pattern (Jumper SEN off and Animal Attenuation Mask installed)



Side View

Preparing to Mount the IQ Profiler

- 1 Insert screwdriver into slot on bottom of unit to remove top of housing
- 2 Remove the circuit board from the housing by gently pushing outward on the PC board height index tab which is located on the left edge of the housing.
- 3 Determine the wire entry point to be used. The housing provides an entry point on the top of the enclosure. Any unused screw hole recess may also be used for wire entry. Determine which entry is most convenient and punch out or remove the thin plastic section.
- 4 Feed wire through punch out hole.

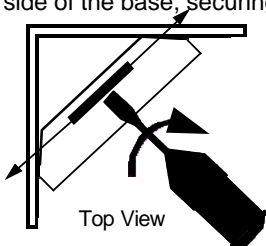


IQ Profiler base detail

Install Quick Corner Mounting Instructions

The IQ Profiler incorporates a patented Install Quick Corner Mounting feature which allows quick corner mounting on standard sheet rock (drywall) surfaces.

- 1 Firmly hold the base of the housing against the corner of the wall in the location in which it is to be mounted.
- 2 Insert a large bladed screwdriver into the Install Quick corner mounting slot and twist clockwise approximately 45 degrees (1/8 turn). The unit has a built in stop which will prevent over turn. The 2 Install Quick mounting pins will project from each side of the base, securing the unit to the wall.



Caution: Use care not to project the mounting pins while holding the base in your hand. The pins will pierce the skin causing injury.

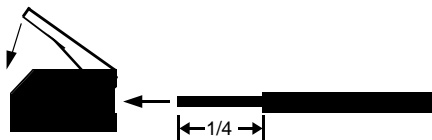
The base must be held against wall before projecting pins

- 3 Install circuit board and proceed with installation. When installing circuit board, gently push PC Board indexing tab outward to allow the board to rest on the shelf slots of housing. For standard installations, align the PCBoard index designation 1 with the dimple on index tab.

Note: The Install Quick Corner Mounting method is designed for standard sheet rock walls. For corner mounting on harder wall surfaces, such as plaster or brick, push through the standard corner mount holes and use the supplied screws to secure the unit.

Wiring the IQ Profiler using the Install Quick Terminals

The IQ Profiler incorporates innovative Install Quick wiring terminals which allow wiring within seconds. Strip approx. 1/4" of insulation from the end of each wire, insert into the top of the terminal and press the lever down to secure the wire.



Wiring & Terminal Descriptions

Refer to the wiring diagram and terminal descriptions, connect the appropriate wire to the corresponding terminal. When you have finished wiring the terminals seal the opening around the wire entry hole and any other unused holes with the supplied sealer.

Power (Terminals 1 [+] & 2 [-]): Connect 12 volt regulated or unregulated power.

N.C. (Terminals 3 & 4) Normally closed alarm relay: Connect to zone wiring, either detection of an intruder or loss of power will cause relay to open.

TRBL (Terminal 5) (Optional) Active low (open collector transistor) auxiliary output, can be configured to provide an activation on high temperature, low temperature or self test failure. Using the appropriate jumper settings this output can activate on any combination of the the above items including all or none.

Tamper (Terminals 6 & 7): With lens cover in place, the contacts are closed.

Mounting the IQ Profiler to a Flat Wall

To mount the IQ Profiler on a flat wall, push through any of the 4 recesses marked “flat wall mount” on the base detail diagram.

Swivel Bracket Mounting the IQ Profiler

The optional SVL2 Swivel Bracket Kit may be used to mount the IQ Profiler units against a wall or under a ceiling and provides vertical and horizontal tilting. To mount the SVL2 to the IQ Profiler, follow the detailed instructions included with the SVL2.

Mounting Height Index

On the left of the IQ Profiler circuit board is the Mounting Height Index, which must be set according to the parameters of the installation. Adjust the Mounting Height Index by gently pushing outward on the PCB board height index tab located on the left edge of the housing. Slide the circuit board up or down until the Height Index on the Tab aligns with the appropriate Height Index setting on the circuit board.

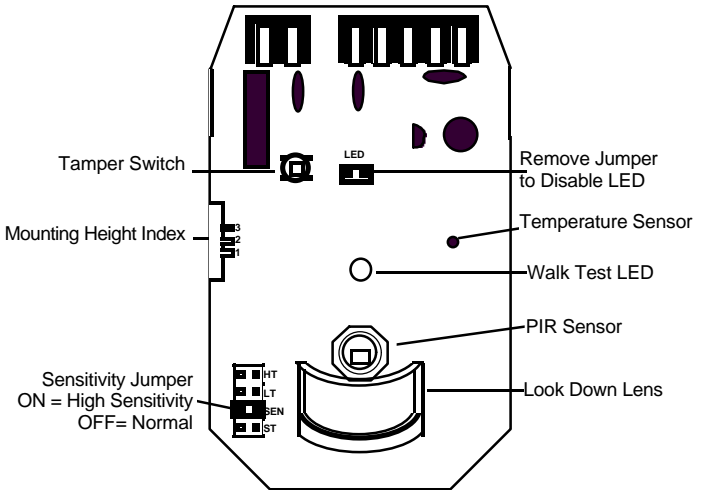
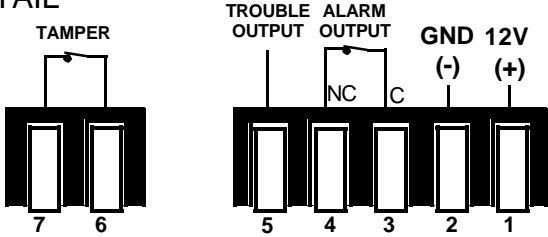
Index 2

Set the PCB mounting height index to 2 if the unit is mounted at a height of 8.5 feet.

Index 3 (default setting)

The PCB mounting height index is set to 3 for a Standard Installation or if the unit is to be installed in a Pet Avoidance Installation.

DETAIL



IQ PROFILER CIRCUIT BOARD DETAIL

CONFIGURING THE IQ PROFILER

LED Disable Jumper

To prevent the walk test LED from turning on, remove the jumper from the pins labeled LED DISABLE. Removing this jumper will not affect the flashing of the LED on self test failure.

Sensitivity Setting (SEN Jumper)

The unit is shipped with no jumper in this position. This is the normal sensitivity mode and is recommended for most installations whose coverage area does not exceed 30' x 35'. Coverage out to 50' x 50' is possible in this mode, but the intruder will have to cover a larger distance before detection. To have faster catch performance this jumper must be installed. **Note:** Advanced signal processing will be defeated in this high sensitivity mode. **DO NOT INSTALL THIS JUMPER IF PETS OR RODENTS ARE PRESENT.**

COMPLETING THE INSTALLATION

Allow at least three minutes for the unit to stabilize after applying power, during this time the unit will perform its own self diagnostics and set a baseline detection level. The LED will flash rapidly for approximately 1 minute and not function until the unit is ready. If the unit was installed after being kept in a hot or cold vehicle allow the unit to operate with its cover in place for about 15 minutes. This will insure that the unit has measured the proper room temperature. Walk test the unit to insure the desired coverage, making any board height adjustments that may be necessary. **Note:** One common cause of short range is having the lens in up side down, always check this! During walk test, the unit will go into a zone finding mode for 15 seconds after each trip. This will cause the LED to light each time a beam is entered. To view the normal detection pattern remain motionless for at least 15 seconds between walk tests.

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 canceled. NAPCO neither assumes, nor authorizes any other person

NAPCO LIMITED WARRANTY

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.