

## PASSIVE INFRARED DETECTOR W / PET IMMUNITY

# RX-40PI

### ■ FEATURES

- 40ft × 40ft (12m × 12m) Wide Angle
- QUAD Zone Logic
- Patented Multi-focus Lens
- Improved Sealed Optics
- Temperature Compensation Logic
- Pet Immunity
- (See Section 4 for Special Instructions)

### ■ EASY INSTALLATION

- Easy Wiring Knockout
- Wiring Guide
- Wide Wiring Space

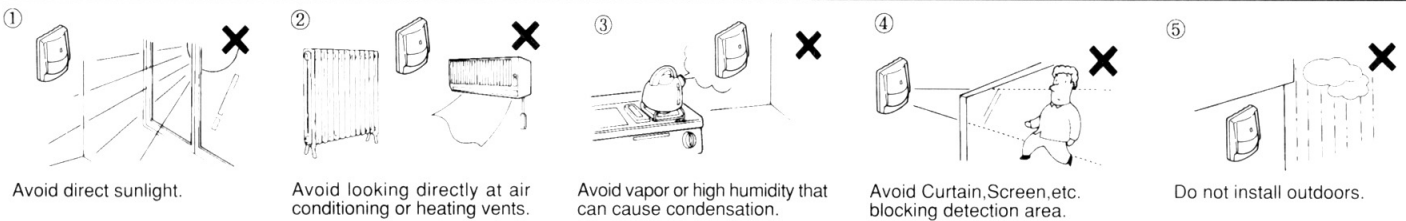
### ■ FUNCTION

- Selectable Pulse Count (2 or 4)
- LED ON/OFF

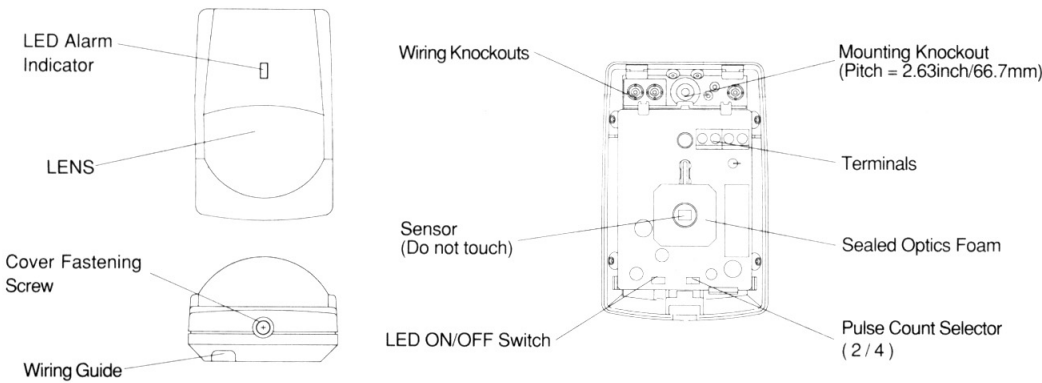
### ■ OPTION

- FL-60N Long Range Curtain Lens (60ft/18m)
- FA-3 Wall & Ceiling Mount Bracket (Horizontally ±45° & Vertically 0° to -15°)

## 1. INSTALLATION HINTS



## 2. DESCRIPTION AND OPERATION



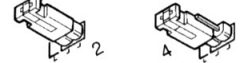
### ■ LED ON/OFF

Use the pin switch for LED ON/OFF .



### ■ PULSE COUNT

Use the pin switch for Pulse Count Selection (2 or 4) .



### ■ EASY WIRING KNOCKOUTS

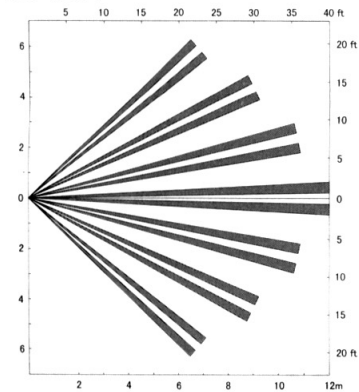
Press firmly with a screwdriver to open. Enlarge the hole according to size of wire.



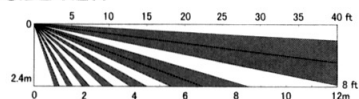
## 3. DETECTION AREA

### WIDE ANGLE

#### ■ TOP VIEW



#### ■ SIDE VIEW

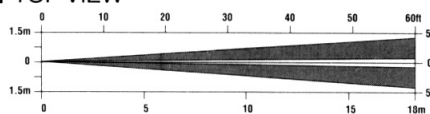


### LONG RANGE (OPTIONAL LENS : FL-60N)

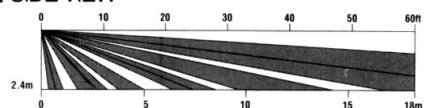
#### — IMPORTANT —

When selecting the long range detection pattern , always set pulse count selector to "2" .

#### ■ TOP VIEW



#### ■ SIDE VIEW



### ■ PATTERN AREA SELECTION

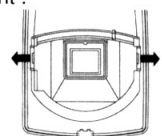
Use the optional lens FL-60N for long range area.



FL-60N  
Engraved  
"LONG RANGE"

### ■ HOW TO REMOVE & FIT LENS

To remove , press both lens hooks to outside and push to the front.  
To fit , press the lens into cover from the front .



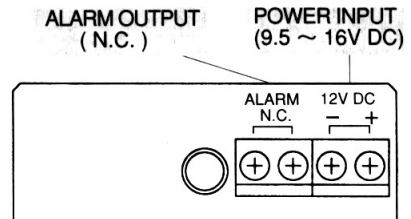
COVER INSIDE

## 4. SPECIAL INSTRUCTIONS FOR PET IMMUNITY

- Pet Immunity is most effective on the following sized animals :  
Rodents = 0 to 4 inches high  
Cats and small to medium sized dogs = 0 to 16 inches high at normal room temperature
- Installation Instructions
  - Mount between 7 and 8 ft. (For better immunity, especially for medium sized dogs, mount as close to 8ft. as possible.)
  - Do not angle detector towards the ground or use the angle bracket. Mount flat on the wall or in the corner.
  - For best pet immunity, limit the detectors field of view to 30 ft. maximum in any direction.
  - For rodents  
If any shelves within 15 ft. of the detector have a height that comes within 2.5 ft. below the mounting height of the detector and rodents can access these areas, pet immunity will be reduced. Please select mounting location of detectors carefully to avoid this situation.
  - For cats and dogs (16 inches in height or less at normal room temperature)  
When a dog jumps up on desks, the detector may detect it. Adjust detection area to avoid such places.
  - For cats  
If there are cats, any shelves in the detection area will reduce pet immunity.
  - FL-60N Long Range Curtain Lens  
When pet immunity is required, optional Long Range Curtain Lens cannot be used. Pet immunity can only be achieved with Wide Angle Lens.
  - Pulse count 4 is not required for Pet Immunity applications. Use 4 pulse only in harsh environment.

※ These feature has been tested by Underwriters Laboratories.

## 5. WIRING



Power wires should not exceed the following lengths.

WIRE GAUGE	12V DC	14V DC
AWG 22 (0.33mm <sup>2</sup> )	1070' (320m)	2140' (650m)
AWG 20 (0.52mm <sup>2</sup> )	1700' (510m)	3400' (1020m)
AWG 18 (0.83mm <sup>2</sup> )	2700' (820m)	5300' (1600m)

When using two or more units on one wire, the maximum length is obtained by dividing the maximum wire length listed above by the number of units used.

※ UL requires RX-40PI to be connected to a UL listed power supply capable of providing a nominal input of 12VDC, 17mA (max.) (at 12VDC) and battery standby time of 4 hours.

※ The equipment shall be installed in accordance with the National Electrical Code, NFPA 70.

## 6. TROUBLE SHOOTING AND MAINTENANCE

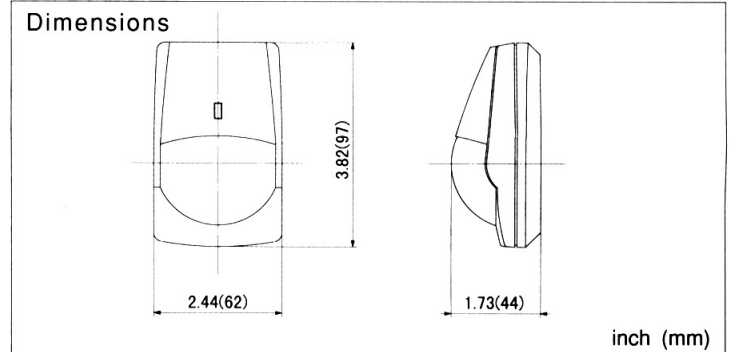
PROBLEM	PROBABLE CAUSE	REMEDY
LED does not light.	Incorrect power supply voltage. (disconnection, low voltage) Incorrect detection area. Incorrect polarity to detector. LED switch is OFF.	Correct the voltage supply to 9.5~ 16V DC. See Section 3. Switch positive and negative at terminal. Turn on the Switch. (See Section 2 )
LED lights even though no person is within area.	Moving object within area. (curtain, wall hanging, etc.) Rapid temperature changes within area. (heater, air-conditioner, etc.)	Remove object from detection area, or change location of detector. Remove the source from area, or change location of detector.
LED lights but signal is not sent.	Relay contact is stuck or damaged due to overloading. Faulty wiring.	Check load of output. The unit needs repair or replacement. Wire correctly.

## 7. SPECIFICATIONS

MODEL	RX-40PI
Detection method	Passive Infrared
Coverage	WIDE : 40ft X 40ft (12m X 12m) 85° wide
Detection zones	WIDE : 78 zones
Mounting Height	5 ~ 8ft (1.5 ~ 2.4m)
Sensitivity	3.6°F (2°C) at 2ft/sec (0.6m/sec)
Detection speed	1 ~ 5ft/sec (0.3 ~ 1.5m/sec)
LED Alarm indicator	Switch-able ON/OFF
Alarm period	Approx. 2.5 sec
Alarm output	N.C. , 28VDC 0.2A max.
Pulse Count	Approx. 20 sec 2 or 4
Warm up period	Approx. 30 sec
Power input	9.5 ~ 16VDC
Current draw	17mA (max.) at 12VDC
Weight	2.5 oz (70g)
Operating temperature	-4°F ~ +122°F (-20°C ~ +50°C )
Environmental humidity	95% max.
RF interference	No Alarm 20V/m

\*Specifications and design are subject to change without prior notice.

FL-60N (Optional Lens for Long Range Curtain Pattern )	
Coverage	LONG : 60ft X 6ft (18m X 1.8m) Long Range
Detection zones	LONG : 20 zones



### NOTE

This unit is designed to detect movement of an intruder and activate an alarm control panel. Being only a part of a complete system, we can not accept responsibility for any damages or other consequences resulting from an intrusion.  
This Product conforms to the EMC Directive. 89/336 EEC.

No.0770 9707-18

59-0770-2 99-07



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