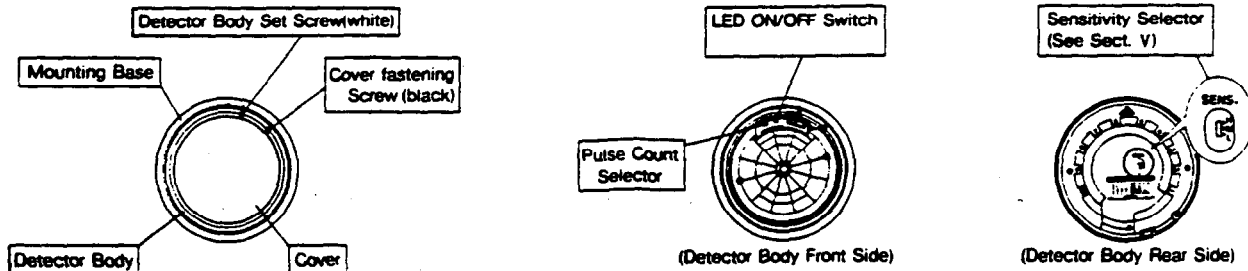


## INSTALLATION INSTRUCTIONS

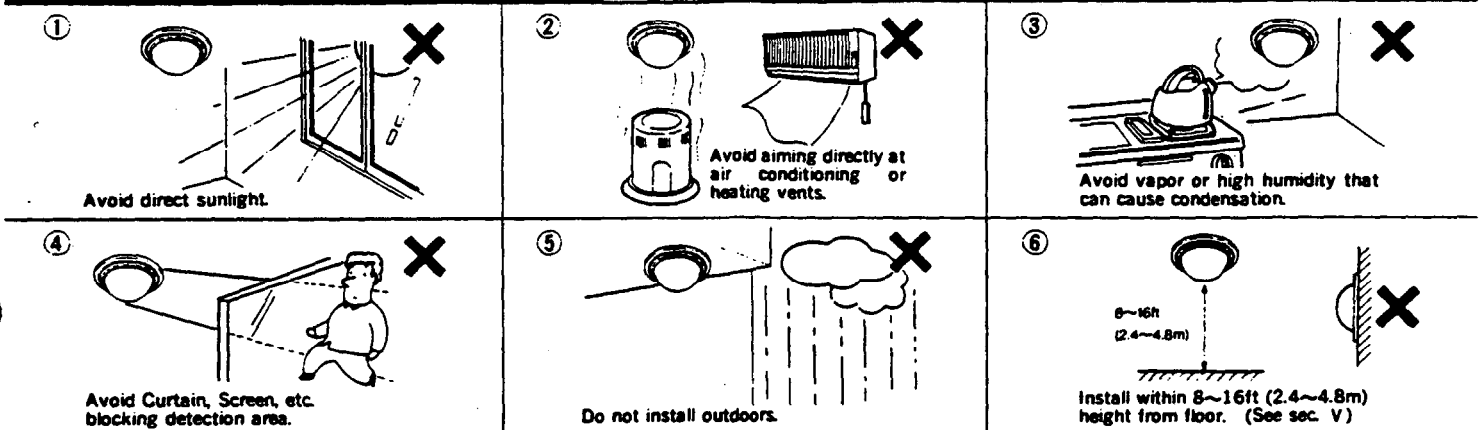
### I FEATURES

- Unique 360 degree rectangle pattern provides ideal coverage for every installation.
- Multi-Focus Lens Design creates curtain detection patterns; eliminating the need for vertical adjustments.
- Double Shielding of the pyroelectric element brings far greater immunity against false alarms. (Patent Pending)
- Selectable Sensitivity (H, M, L) and Pulse Count (1, 2, 4) give flexibility to suit every installation site.

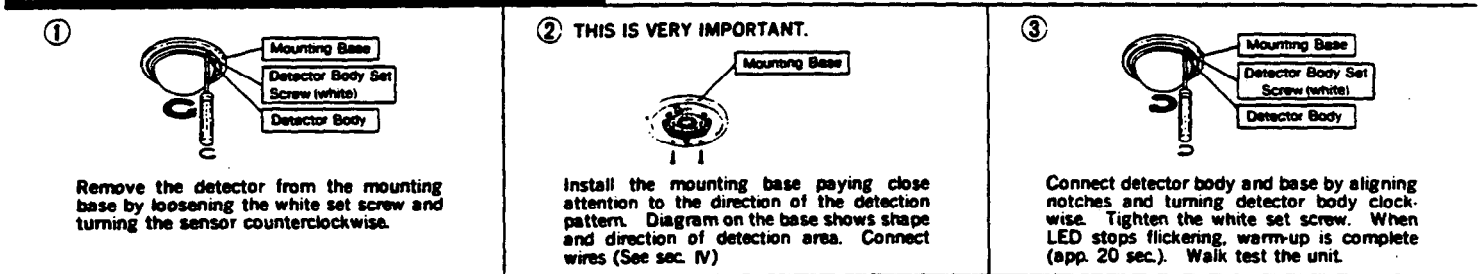
### DESCRIPTION



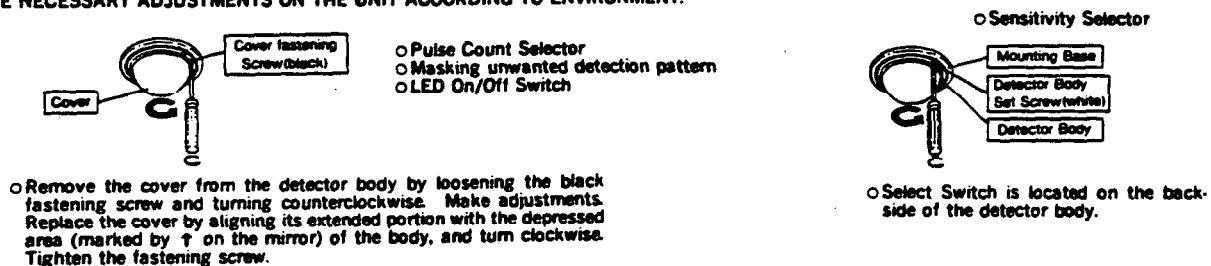
### II INSTALLATION HINTS



### III INSTALLATION METHOD



### 4 MAKE NECESSARY ADJUSTMENTS ON THE UNIT ACCORDING TO ENVIRONMENT.

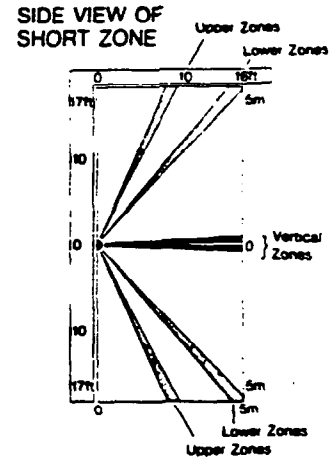
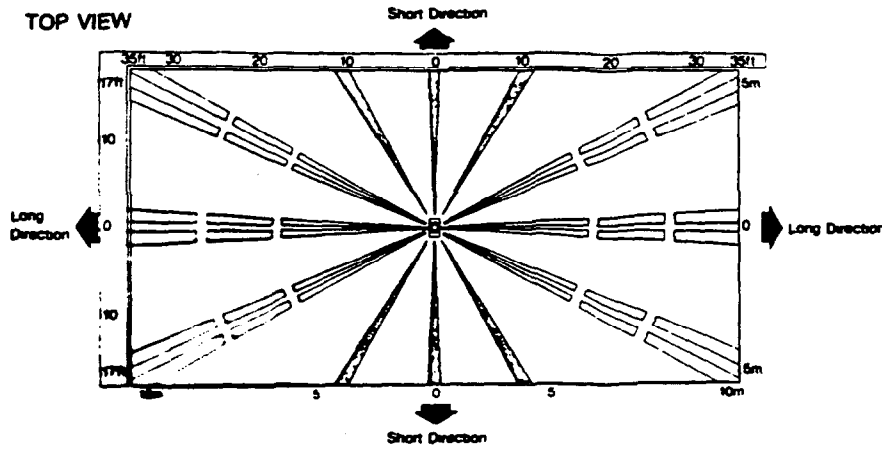


### IV WIRING

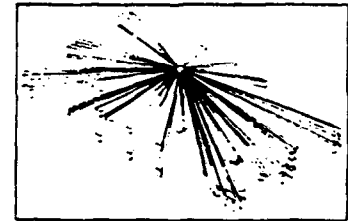
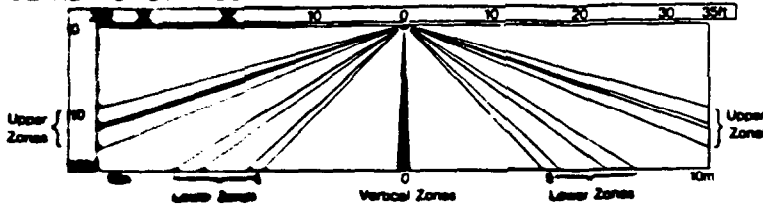
Terminal	Function
1	(+) Power Input, 6-18VDC
2	(-) Power Input
3&4	Alarm Output (N.C., 28VDC, 0.2max)
9&10	Tamper (N.C., opens when cover removed)

# V DETECTION AREA

## 1) AREA PATTERN TOP VIEW



## SIDE VIEW OF LONG ZONE



## 2) MASKING UNWANTED DETECTION AREAS (OPTIONAL)

The stickers are supplied to eliminate any unwanted area of detection. It is necessary to cover only the mirror segments that are on the detector body.

### PROCEDURE :

- Loosen the black fastening screw and remove the cover.
- Refer to the figures on the right, and mask the segments of the unwanted detection zones.

#### MASKING THE Upper AND Lower ZONES :

Cut off the masking sticker along halfcut line, and mask the mirror segment. Outer part of mirror corresponds to Lower zones, and inner part to Upper zones.

#### MASKING THE VERTICAL ZONES :

Use the two stickers marked "Vertical Zones". Be sure to mask both of two mirror segments.

- Replace the cover and tighten the black screw.

#### When mirror gets dirty :

Clean the mirror with soft cloth.

- If very dirty, use cloth with neutral detergent.
- Do not use thinner, benzene nor alcohol. (Do not use any such caustic cleaners on any part of the unit.)

## 3) SELECT SWITCHES

### A. SENSITIVITY ADJUSTMENTS

See chart below for restrictions regarding UL installations.

Mounting Height	Sens. Switch	Detection Range (Non-UL installations)	Detection Range (UL instructions)
8ft	L	30' x 50'	25' x 40'
10ft	M	35' x 60'	30' x 50'
12ft	H	35' x 70'	35' x 60'
16ft	H	35' x 70'	Not to exceed 12 ft

### B. PULSE COUNT ADJUSTMENT

Adjust pulse count as follows.

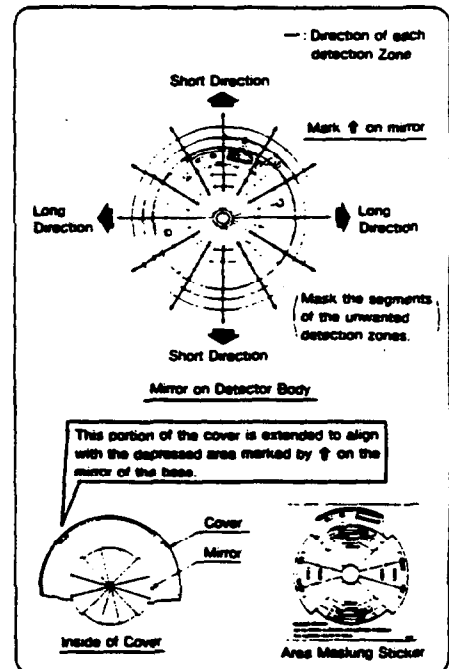
- ★ Pulse Count 1 (Instant alarm mode)  
Select this position for walk test only.

- ★ Pulse Count 2 (Standard position)  
Select this position for most applications.

- ★ Pulse Count 4  
For bad environments, changing temperatures etc.

- After a trigger strength signals received, the pulse count feature counts additional trigger strength signals for 20 seconds. After an alarm is generated, each additional trigger generates an alarm and will reset to the selected pulse count if no movement occurs within 20 seconds.

### C. LED ON/OFF Switch use switch to enable or disable LED.



## VI TESTING

**IMPORTANT :** Wait at least two minutes after applying power before attempting to walk-test unit.

Testing of the detector should be conducted with the protection area cleared of all people. In some business establishments, it may be more convenient to do this after the business is closed. The protective system's control should be disarmed during the procedure to prevent reporting unwanted alarms.

**Walk-Test :**

Replace the front cover and walk-test the unit. Test operation by walking through the protective zones and observing the walk-test LED. It will light whenever motion is detected.

The absolute range of all Passive IR units is subject to variation because of different types of clothing, backgrounds and ambient temperature. For this reason, ensure that the most likely intruder routes are well within the PIR's protective zones and that walk-testing is carried out along these routes.

**Walk-Test LED Disable :**

In some installations it may be desirable to disable the walk-test LED after the initial tests at installation, in order to prevent potential intruders from determining the exact limits of the protected area. This is easily accomplished by using the LED ON-OFF switch. Subsequently, all periodic walk-testing must be in conjunction with the indicators of the associated control panel.

## VII TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	REMEDY
LED does not light	Incorrect power supply voltage. (disconnection, low voltage)	Correct supply voltage to 6-18V DC.
	Incorrect detection area.	See Section V.
	Incorrect polarity to detector	Switch positive and negative at terminal
	LED switch is OFF	Turn the Switch on. See Section V.
LED light even though no person within area.	Moving object within area. (curtain, wall hanging, etc.)	Remove object from detection area.
	Rapid temperature change of object (heater, air-conditioner, etc.) Within area.	Remove the sources from detection area.
LED lights but signal is not sent.	Relay contact is stuck or damaged due to overloading.	Check load of output. The unit needs repair or replacement.
	Faulty Wiring.	Wire correctly

Conduct walk test at least once per year.

## VIII MAINTAINING PROPER OPERATION

In order to maintain the detector in proper working condition, it is important that the following be observed by the user.

- Power should be provided at all times. Loss of power to the unit will result in the alarm contacts reverting to an alarm state. The unit's DC source should have standby power available for at least 4 hrs of operation during emergencies.
- Units should never be repaired or relocated without the advice or assistance of the alarm service company.

- The physical surroundings of the protected area should not be changed. If furniture or stock is moved, or air-conditioning or additional heating is installed, the system may have to be readjusted by the alarm service company.
- Walk-test should be conducted frequently (at least weekly) to confirm continued proper coverage by each detector.

## IX SPECIFICATIONS

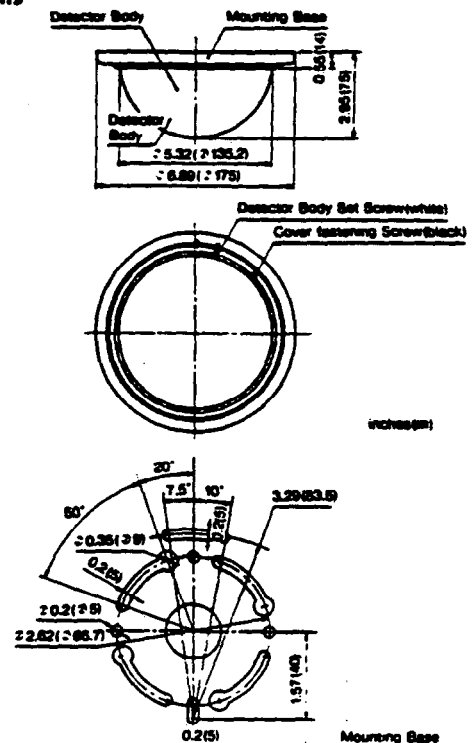
Detection method	Passive infrared
Coverage	35ft x 70ft (11m x 21m)
Detection zones	62
Mounting	Height 8-16ft (2.4-4.8m)
Sensitivity	3F (1.6°C) at 2ft/sec. (0.6m/sec)
Detectable speed	1-6ft/sec. (0.3-1.8m/sec)
LED indicator	LED is blinking during warm-up period. Alarm indicator optional
Alarm period	2.0 ± 0.5sec
Alarm output	N.C., 28V DC 0.2A max
Tamper switch	N.C., Opens when cover or body removed
Pulse count	20 ± 5sec. 1, 2 or 4
Warm up period	Approx. 40 sec. (LED blinks)
Power input	6-18V DC
Current draw	20mA max
Weight	11.3oz (320g)
Operating Temperature	-4°F - +122°F (-20°C - +50°C)
Environment humidity	95% max

### NOTE

For UL installations, do not mount above 12'. Maximum coverage for UL installations is 35' x 60' at 12' mounting height.

This unit is designed to detect movement of an intruder and activate an alarm control panel. Being only part of a complete alarm system, we cannot accept responsibility by any damages or other consequences resulting from an intrusion.

### Dimensions



## TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system.

The installer should assume the responsibility of developing and offering a regular maintenance program to the user as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts.

Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's proper operation at all times.

## WARNING

### THE LIMITATIONS OF THIS PASSIVE INFRARED MOTION DETECTOR

While the Intrusion Detector is a highly reliable intrusion detection device, it does not offer guaranteed protection against burglary. Any Intrusion Detection device is subject to compromise or failure to warn for a variety of reasons:

- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in this installation manual.
- Passive Infrared Motion Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams.
- Passive Infrared Detectors cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows.
- Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce the detection ability of the Passive Infrared Motion Detection.
- Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.

• This Passive Infrared Detector will not operate without appropriate DC power connected to it, or if the DC power is improperly connected (i.e., reversed polarity connections).

• Passive Infrared Detectors, like other electrical devices, are subject to component failure. Even though they are designed to last as long as 10 years, the electronic components could fail at any time.

We have cited some of the most common reasons that a Passive Infrared Motion Detector can fail to catch intrusion. However, this does not imply that these are the only reasons, and therefore it is recommended that weekly testing of this type of unit, in conjunction with weekly testing of the entire alarm system, be performed to ensure that the detectors are working properly. Installing an alarm system may make one eligible for lower insurance rates, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to insure their lives and property.

## ONE YEAR LIMITED WARRANTY

Alarm Device Manufacturing Company, a Division of Pittway Corporation ("Seller"), 165 Eileen Way, Syosset, New York 11791, warrants its security equipment (the "product") to be free from defects in materials and workmanship for one year from date of original purchase, under normal use and service. Seller's obligation is limited to repairing or replacing, at its option, free of charge for parts, labor, or transportation, any part proven to be defective in materials or workmanship under normal use and service. Seller shall have no obligation under this warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than the Seller. In case of defect, contact the security professional who installed and maintains your security system or the Seller for product repair.

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Seller does not represent that the product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of a burglary, robbery or fire occurring without providing an alarm, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result. 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. However, if Seller is held liable, whether directly or indirectly, for any loss or damage arising under this Limited Warranty or otherwise, regardless of cause or origin, Seller's maximum liability shall be the complete and exclusive remedy against Seller. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. No increase or alteration, written or verbal, to this warranty is authorized.



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