IS-280CM Installation Instruction

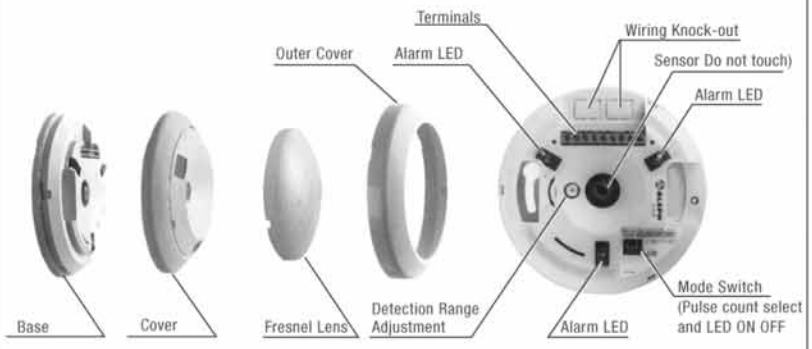
Passive Infrared Detector

Honeywell

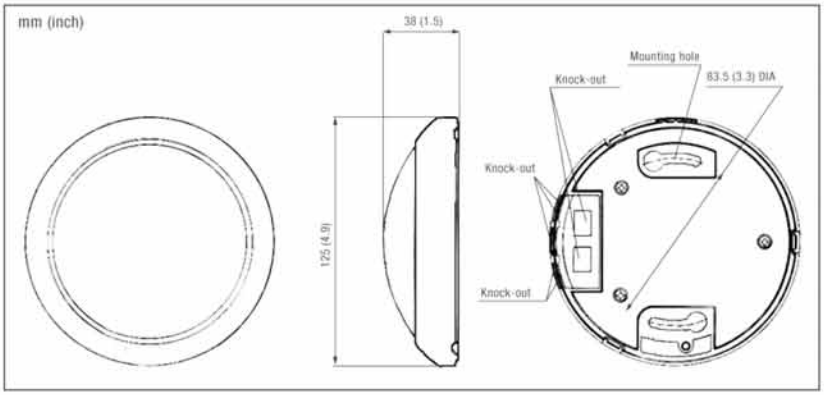
SPECIFICATION

COVERAGE	360º (14m DIA. Adjustable)
DETECTOR ZONES	50 ZONES
DETECTION METHOD	Passive Infrared
DETECTION SPEED	0.2 ~ 5.0m/sec. (0.5 ~ 15ft./sec.)
WARM UP PERIOD	35 ± 3 sec. (Red LED blinks during WARM UP PERIOD)
ALARM DISPLAY	Red LED Monitor (ON/OFF Selectable)
ALARM PERIOD	20.5 sec.
RELAY OUTPUT	N.C. Dry Contact 30V DC 500mA 10W Max.
TAMPER SWITCH	N.C. Integral
PULSE COUNT SELECTION	1, 2, 3, 4 Pulses (Selectable)
ALARM MEMORY	Integral
LED ON/OFF REMOTE	Integral
FIRST TO LATCH	Integral
VOLTAGE SUPPLY	9 to 30V DC, 7.5 to 24V AC
CURRENT DRAW	17mA Max. at 12V DC
OPERATING TEMPERATURE	-10ºC ~ +50ºC (+14F ~ +122F)
ENVIRONMENT HUMIDITY	95% Max.
DIMENSIONS	125mm DIA. x 38mm H (4.9" DIA. x 1.5" H)
WEIGHT	176g (6.2 oz.)

DESCRIPTION

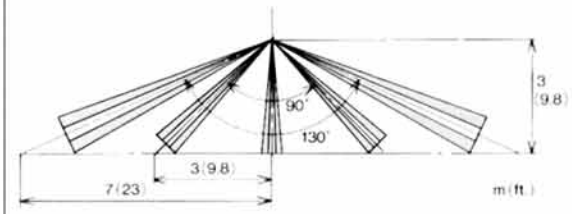


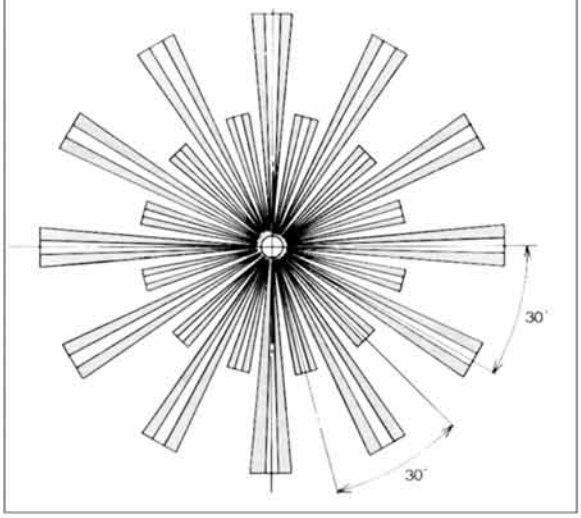
DIMENSIONS



DETECTION AREA

H	RI	Rs
1.0 (3.30	2.33 (7.6)	1.0 (3.3)
1.5 (4.9)	3.5 (11.5)	1.5 (4.9)
2.0 (6.0)	4.7 (15.4)	2.0 (6.5)
2.5 (8.2)	5.8 (19.0)	2.5 (8.2)
3.0 (9.8)	7.0 (23.0)	3.0 (9.8)



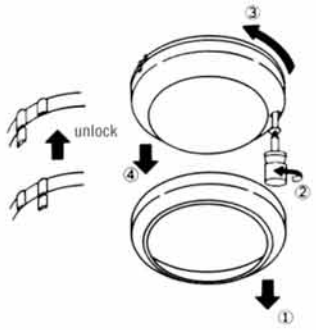


TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Alarm LED does not turn on.	LED on/off select switch turned off.	Turn on LED on/off select switch.
	Alarm Memory terminal is at 12V.	Open Alarm Memory terminal.
Alarm LED turns on when no intruder within area.	Alarm Memory is being indicated.	Clear Alarm Memory.
LED turns on but relay does not trip.	Moving objects (curtains, etc.) or heat sources (cooler, heater, etc.) within area.	Adjust detection area or remove these objects from detection area.
	Relay contact is stuck or relay is damaged due to overloading.	Check load of output. The faulty unit requires repair.
	Faulty wiring.	Repair fault.
Unable to clear Alarm Memory.	Closing time off Alarm Memory terminal is too short.	Close switch "A" for more than 1 sec.
	Intruder has been sensed during closure of A.M. terminal.	Re-clear.
First To Latch Indication is constantly on at first PIR.	Supply Voltage under 9V. Signal received within 1sec. after reset of Alarm Memory.	Correct supply voltage to 9 to n30V DC. Re-clear.
First To Latch Indicator is flickering on second alarmed PIR.	Supply Voltage over 30V.	Correct supply voltage to 9 to n30V DC.
	Over 20 PIR's are connected to First To Latch terminal.	Max. of 20 PIR's can be connected to F. T. L. terminal.
	First To Latch wiring (AWG22) run over 1km (3000 ft.)	Keep wire runs under 1km (3000ft.) or run larger gauge wire.

INSTALLATION

Remove cover by loosening the screw.



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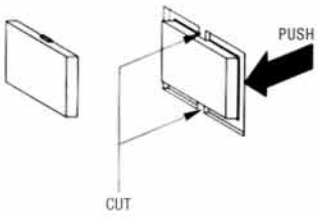
To remove knock-outs, cut along indentations then push out from inside.



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Terminal Block

TAMPER	F. T. L.	A.M		ALARM	POWER

TAMPER:
TAMPER SWITCH (N. C.)

F. T. L.:
FIRST TO LATCH
(See "ALARM MEMORY and FIRST TO LATCH")

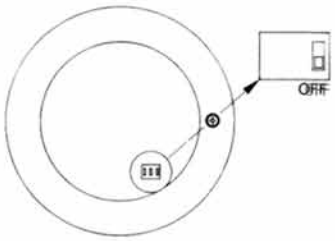
A. M.:
ALARM MEMORY
(See "ALARM MEMORY and FIRST TO LATCH")

ALARM:
ALARM OUTPUT (N. C.)

POWER:
POWER INPUT (NON POLAR)

3

If alarm LED is not needed, turn off the mode switch as indicated.
During warm up period, LED flashes for about 30 seconds and relay is kept in alarm condition.



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To mask off unwanted zones-remove the lens by pulling-up the lens lock plate, then place the masking sticker inside the lens.

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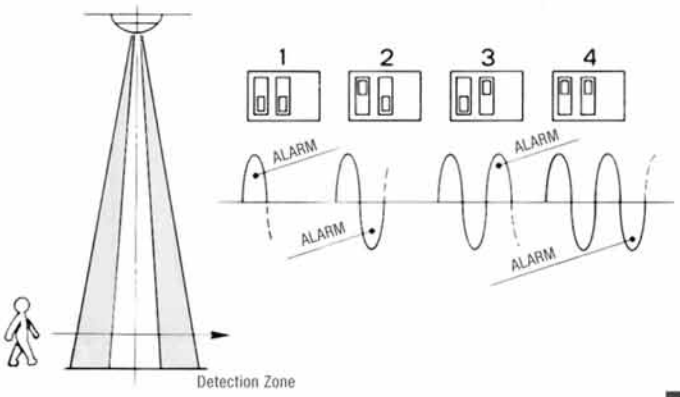
Select pulse count. Alarm signal is triggered with 1-2-3-4 pulse counts of detection.
Normal setting is 2 pulse counts.



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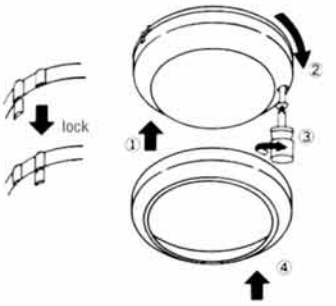
Attach the cover, then tighten screw.



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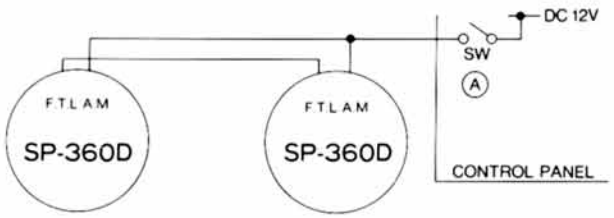
ALARM MEMORY AND FIRST TO LATCH

To use the alarm memory and first to latch function, wire as shown below.



When using the Alarm Memory only

- Wiring of the first to latch is not needed.
- Run single wire from A.M. terminal to switch A (manual switch, etc.) and then to 12V DC + (Input power unit).
- Switch A should stay in the closed position for the normal condition.
- When needed alarm history, change switch A to the open position, LED of IS-280CM, which has alarm history, will start flickering.

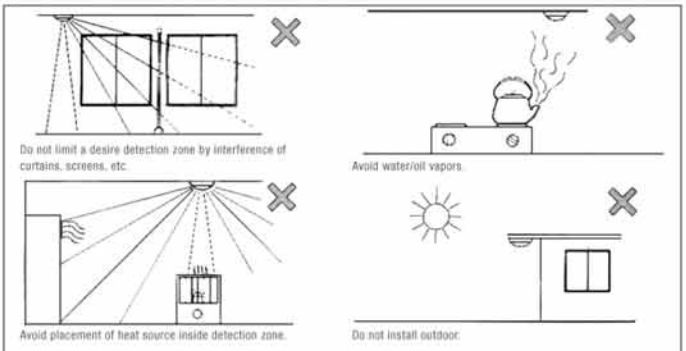
When using in conjunction with First To Latch

- First To Latch function separates between the first alarmed IS-280CM and other IS-280CM's.
- Procedure is the same as Alarm Memory function.
- When checking the alarm history the LED of the first alarmed IS-280CM will start to flicker. The LED of all other alarmed IS-280CM's will stay on.

Notes

1. If IS-280CM does not have alarm history, their operation is the same as the normal condition when switch A is open.
2. If switch A stays closed over 1 second indication the memory will be cleared.
3. If the LED on/off select switch (located on the inside of the cover) is in the off mode, the LED will indicate the alarm history when using only alarm memory or when using both alarm memory and First To Latch.
4. If the LED on/off select switch (located on the inside of the cover) is in the on mode and switch A is in the closed position, the LED will not operate during normal conditions when using the alarm memory and First To Latch functions.

INSTALLATION HINTS



TESTING AND MAINTENANCE

Inspection: An Inspection of this unit should be made periodically, consisting of, but not limited to, all mounting, wiring, and the condition of all components.
Cleaning: Clean the plastic parts of this unit with a soft, clean, and damp cloth.
Testing: This unit should be tested at least once a year for proper performance and operation.

Honeywell