

X. LED ON-OFF

1. LED On/Off Switch (Models SX-360Z, SX-360ZS)



Use switch to enable or disable LED.

2. DL Terminal

- ★ Controls operation of LED only; does not affect Alarm Memory function.
- ★ LED can be enabled/disabled remotely or at the detector.

	Resistivity	At the Detector
LED Enabled	Connect DL terminal to common ground (with detector).	Connect ○ terminal of power unit to DL terminal.
LED Disabled	No ground to DL terminal (open circuit).	No connection to DL terminal (open circuit).

XI. TROUBLE SHOOTING AND MAINTENANCE

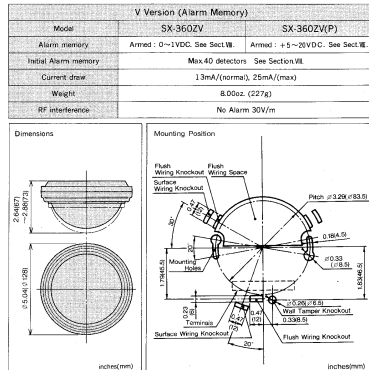
PROBLEM	PROBABLE CAUSE	REMEDY
LED does not light	Incorrect power supply voltage (disconnection, or low voltage)	Correct supply voltage to 6~18V DC.
	Incorrect detection area	See Section II and Section VI.
	Incorrect polarity to detector	Switch positive and negative at terminal.
	LED switch is OFF	Turn on the Switch. See Section X.
LED lights even though no person within area	Moving object within area (curtain, wall hanging, etc.)	Remove object from detection area.
	Rapid temperature changes (heaters, air-conditioner, etc.) within area.	Remove the sources from detection area.
LED continues to light	Poor connection of alarm memory. (SX-360ZV, SX-360ZV(P))	Reconnect wire.
	Wrong control voltage from panel. (SX-360ZV, SX-360ZV(P))	Must be 0~1VDC (grounded).
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 a walk test at least once per year.

XII. SPECIFICATIONS

Model	SX-360Z
Detection method	Passive Infrared
Coverage	±60ft (±18m), 360°/200M
Detection zones	276 zones
Mounting	Ceiling : Height 8~1.6ft. (2.4~5m)
Sensitivity	3F (1.6°C) at 2ft/sec. (0.6m/sec.) See Sect VI.
Detectable speed	1~6ft/sec. (0.3~1.8m/sec.)
LED indicator	LED is blinking during warm-up period.
Alarm period	2.0 ± 0.5sec
Alarm output	N.C., 28VDC 0.2A (max)
Tamper switch	N.C., 30VDC 0.1A max. Opens when cover removed.
Pulse Count	20 ± 5sec. 1, 2 or 4
Warm up period	Approx 20sec. (LED blinks)
Power input	6~18VDC
Current draw	13mA/(normal), 18mA/(max)
Weight	7.90oz. (224g)
Operating temperature	-4F ~ +122F (-20°C ~ +50°C)
Environment humidity	95% (max)
RF interference	No Alarm 30 V/m

S Version (Form C)	
Model	SX-360ZS
Alarm output	Form C 28VDC 0.2A (max)
Current draw	30mA/(normal), 35mA/(max)
Weight	7.94oz. (227g)



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



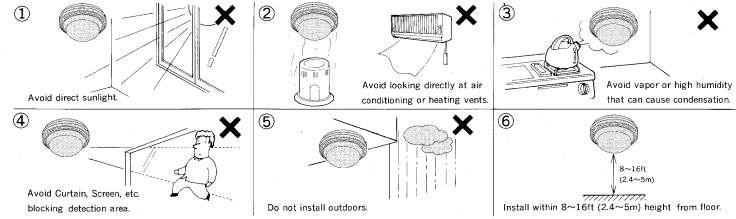
WONDEREX DETECTOR

SX-360Z, SX-360ZV, SX-360ZV(P), SX-360ZS
 (Standard) (Alarm Memory) (Form C)

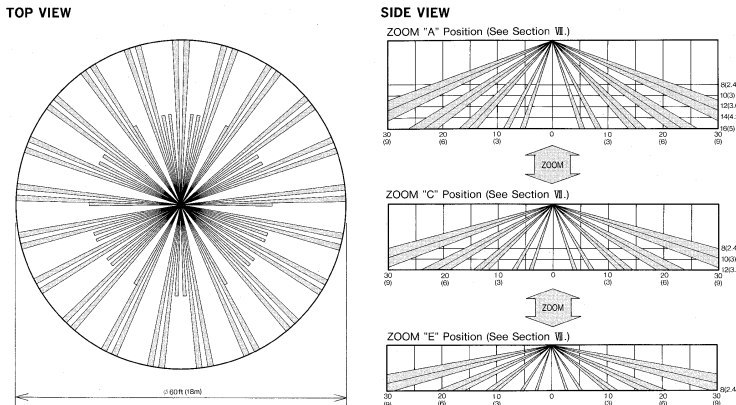
FEATURES

- Ceiling Mount 360° PIR Detector
- Zoom Area Adjustment : ±60ft Detection Area can be obtained at any installation height between 8 to 16ft. (±18m at H. 2.4 to 5.0m)
- High Density Detection Area with 276 zones.
- Selectable Sensitivity (High, Medium or Low)
- Selectable Pulse Count (1, 2 or 4)
- Initial Alarm Memory (SX-360ZV & SX-360ZV(P) only)
- LED Remote Control Terminal
- Form C Relay (SX-360ZS only)
- UL Listed only for models SX-360Z, SX-360ZS

I. INSTALLATION HINTS



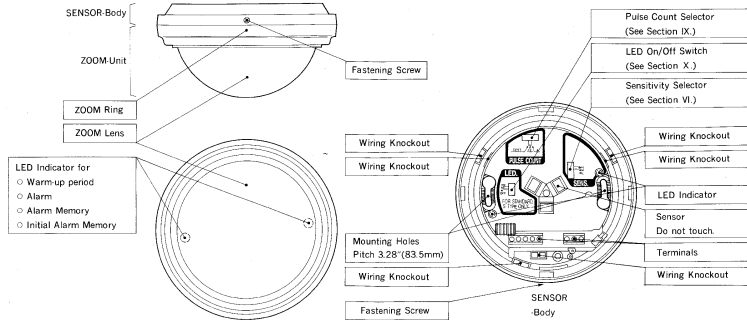
I. DETECTION AREA



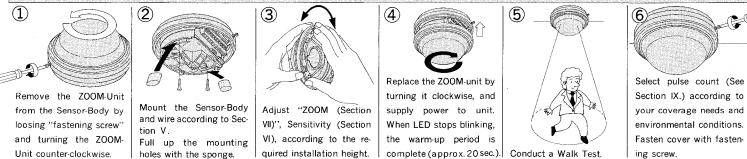
NOTE
 This unit is designed to detect movement of an intruder and activate an alarm control panel. Being only a part of a complete system. We cannot accept responsibility for any damages or other consequences resulting from an intrusion.

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 OPTEX CO., LTD. 100-800 Ganyocho 1-URQ1
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OPTEX (U.S.A.) INC.
 2225 East Street, Suite 201, Channahon, CA 93030 U.S.A.
 TEL: (815) 798-2800 FAX: (815) 798-2801
OPTEX (EUROPE) LTD. 100-800 Ganyocho 1-URQ1
 Cleveland Road, Colnbrook, Bucks. SL4 7BU U.K.
 TEL: (0494) 531100 FAX: (0494) 531101

III. DESCRIPTION AND OPERATION

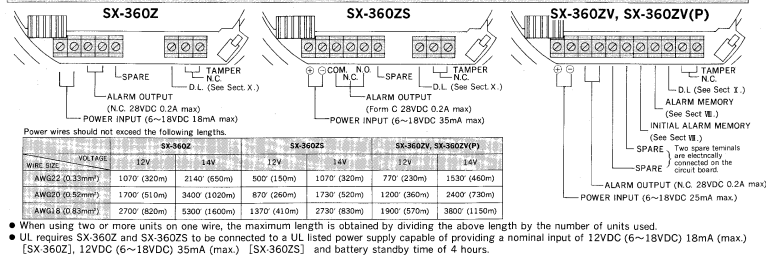


IV. INSTALLATION METHOD

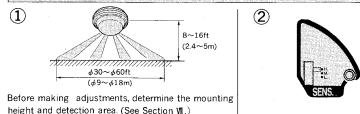


NOTE : When the warm up period is over, alarm may be given once. This is an electric characteristic of SX-360Z and not a mal-function

V. WIRING



VI. SENSITIVITY ADJUSTMENT



Select the sensitivity "H (High)", "M (Medium)" or "L (Low)". The following chart shows recommended setting for diameter of detection area.

SENS.	L	M	H
DIAMETER OF DETECTION AREA	φ30~φ40ft (9.9~12.2m)	φ40~φ50ft (12.2~15.2m)	φ50~φ60ft (15.2~18.3m)

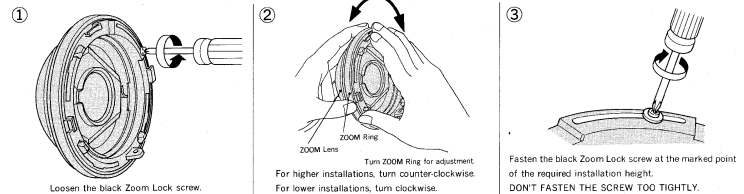
VII. ZOOM AREA ADJUSTMENT

The SX-360Z series detection pattern can be adjusted for installations at any height, between 8 to 16ft. (2.4~5m).

< DETECTION AREA CHART >

HEIGHT/DETECTION HEIGHT	ZOOM AREA					ft. (m)	
	A	B	C	D	E		
3.6ft. (4.8m)	φ60 (418)	---	---	---	---	---	---
14ft. (4.3m)	φ52 (414)	φ60 (418)	---	---	---	---	---
12ft. (3.6m)	φ45 (413)	φ50 (415)	φ60 (418)	---	---	---	---
10ft. (3m)	φ37 (411)	φ40 (413)	φ50 (415)	φ60 (418)	---	---	---
8ft. (2.4m)	φ30 (409)	φ34 (410)	φ40 (412)	φ48 (414)	φ60 (418)	---	---

< ADJUSTING THE ZOOM UNIT >



VIII. INITIAL ALARM MEMORY & ALARM MEMORY (SX-360ZV, SX-360ZV(P))

The SX-360ZV and SX-360ZV(P) have an "initial alarm memory function". When several detectors are connected in one alarm loop, this function will indicate, by LED, memories which of the detectors was triggered first.

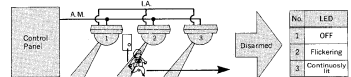
1. Wiring of Alarm Memory

Connect control voltage signal terminal of control panel to A.M. terminal.

	SX-360ZV	SX-360ZV(P)
System armed	0~1 VDC (grounded)	+5~20 VDC
System disarmed	Open	0~1 VDC (grounded)

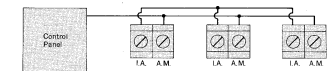
*grounded = AM terminal is electrically connected with ⊖ power supply terminal (ground).

* When the initial alarm memory is used : Initial alarm memory is indicated by a flickering LED. Other memories (from the second detection on) are indicated by a continuously lit LED.



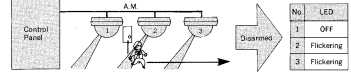
2. Wiring of Initial Alarm Memory

Connect I.A. terminals of the detectors in one loop. (Parallel Connection)



NOTE : Maximum 40 detectors can be connected in one loop for initial alarm memory.

* When the initial alarm memory is not used : All alarm memories are indicated by flickering LED.



3. LED Indications

If the unit if triggered during an armed period, when the system is disarmed, it's LED condition will indicate that it reported the alarm.

4. Reset

Alarm memory resets automatically when system is re-armed.

5. NOTES

Alarm Memory will operate whether the LED is disabled or not. Alarm Memory will not latch while system is disarmed. LED operation and alarm output are not affected by alarm memory when system is armed.

A compatible control panel is required for alarm memory.

IX. 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.