

PASSIVE INFRARED DETECTOR

WONDEREX

FX-360, FX-360L, FX-360L(P), FX-360S

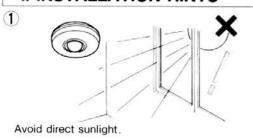
(Alarm Memory)

(Form C)

FEATURES

- Ceiling Mount Type 360° PIR Detector.
- Selectable pulse count 2 or 4.
- LED ON/OFF remotely from the control panel or at the detector.
- Alarm Memory (FX-360L, FX-360L(P))
- Form C Relay (FX-360S only)
- OUL Listed only for models FX-360, FX-360S

I. INSTALLATION HINTS

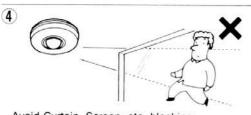




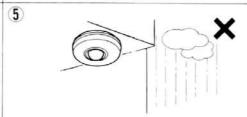
Avoid aiming directly at air conditioning or heating vents



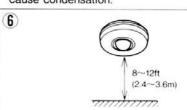
Avoid vapor or high humidity that can cause condensation.



Avoid Curtain, Screen, etc. blocking detection area.

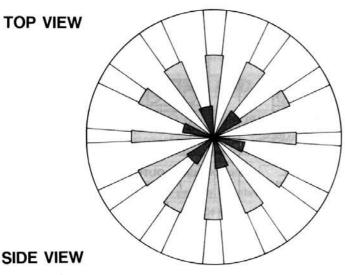


Do not install outdoors.



Install within $8\sim$ 12ft (2.4 \sim 3.6m) height from floor.

II. DETECTION AREA



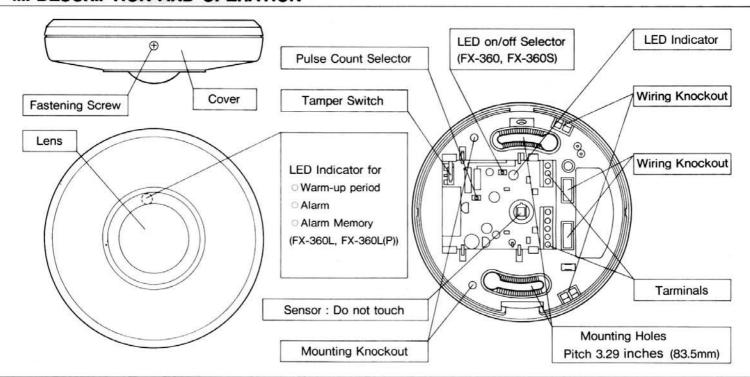
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D ft (m)

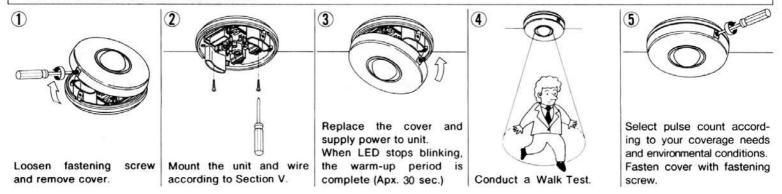
MAX. Detection AREA

Installation Height ft (m)	8 (2.4)	10 (3)	12 (3.6)
Detection Area (Diameter) ft (m)	25 (8)	32 (10)	40 (12)

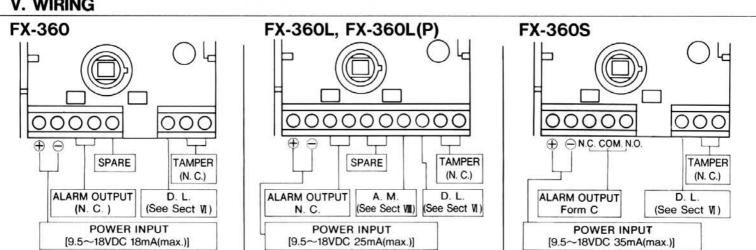
III. DESCRIPTION AND OPERATION







V. WIRING



Power wires should not exceed the following lenghts

FX-3		360	FX-360L, FX-360L(P)		FX-360S	
WIRE SIZE	12V	14V	12V	14V	12V	14V
AWG22 (0.33mm²)	1070' (320m)	2140' (650m)	770' (230m)	1530' (460m)	500' (150m)	1070' (320m)
AWG20 (0.52mm²)	1700' (510m)	3400' (1020m)	1200' (360m)	2400'(730m)	870' (260m)	1730' (520m)
AWG18 (0.83mm²)	2700' (820m)	5300' (1600m)	1900' (570m)	3800' (1150m)	1370' (410m)	2730' (830m)

When using two or more units on one wire, the maximum length is obtained by dividing the above length by the number of units used.
UL requires FX-360 and FX-360S to be connected to a UL listed power supply capable of providing a nominal input of 12VDC (9.5~18VDC) 18mA (max.) [FX-360], 12VDC (9.5~18VDC) 35mA (max.) [FX-360S] and battery standby time of 4 hours.

VI. LED ON-OFF

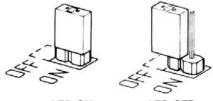
MODEL: FX-360, FX360S

Use Jumper Pin Switch for LED "ON" "OFF" as shown.

- Use D. L. terminal to turn LED ON-OFF from control panel remotery.
 - i) Place Jumper Pin Switch in OFF position.
 - ii) LED On: Connect D. L. terminal to common ground with detector LED Off: No connection to the D. L. terminal.

MODEL: FX-360L, FX-360L(P)

Use D. L. terminal as follows, (No Jumper Pin in this model) LED can be turned ON-OFF at the detector or remotely at the control panel.



JUMPER PIN SWITCH

LED ON

LED OFF

	Remotely	At the Detector
LED Enabled	Connect DL terminal to common ground (with detector).	Connect (-) terminal of power input to DL terminal.
LED Disabled	No ground to DL terminal (open circuit).	No connection to DL terminal (open circuit).

LED operation of Alarm Memory (FX-360L, FX-360L(P))

LED will remain lit for alarm memory even when the LED is disabled during normal operation.

VII. PULSE COUNT

Select 2 for regular applications. For unstable environments, select 4. Shift Pin Switch as shown.

*NOTE ON PULSE COUNT DURING WALK TEST

Once initial movement is detected during the walk test, subsequent movements that are within the delayed timer period (approx. 20 seconds) will overtide the pulse count setting and cause an instant trigger.

This feature assures location of each detection zone and accelerates the confirmation of pattern coverage in the walk test.



2 PULSE



4 PULSE

VIII. ALARM MEMORY (FX-360L, FX-360L(P))

1. Wiring

Connect control voltage signal terminal (System arming status voltage output terminal) of control panel to A. M. terminal.

MODEL: FX-360L

	Control Voltage Signa
System armed	0~1 VDC (grounded)
System disarmed	OPEN

MODEL: FX-360L(P)

	Control Voltage Signa
System armed	+5~20VDC
System disarmed	0~1 VDC (grounded)

(Must have common ground with sensor)

2. Operation of Alarm Memory

If the unit is triggered during an armed period, when the system is disarmed, its LED will remain lit to confirm that it reported the alarm.

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

3. Reset

Alarm memory resets automatically when system is re-armed. Optional compatible control panel required.

IX. TROUBLE SHOOTING AND MAINTENANCE

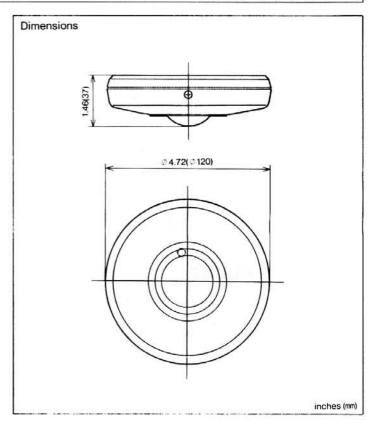
PROBLEM	PROBABLE CAUSE	REMEDY	
	Incorrect power supply voltage. (disconnection, low voltage)	Correct supply voltage to 9.5 \sim 18V DC.	
LED does not light.	Incorrect detection area.	See Section II.	
_	Incorrect polarity to detector.	Switch positive and negative at terminal.	
	LED switch is OFF	Turn on the Switch. See Section VI.	
LED lights even	Moving object within area. (curtain, wall hanging, etc.)	Remove object from detection area.	
though no person within area.	Rapid temperature changes within area. (heater., air-conditioner, etc.)	Remove the sources from detection area.	
LED continues to light	Poor connection of alarm memory.	Reconnect wire.	
LED continues to light	Wrong control voltage from panel.	Must be 0~1 VDC. (grounded) See Section VIII.	
LED lights but signal Relay contact is stuck or damaged due to over		Check load of output. The unit needs repair or replacement.	
is not sent.	Faulty Wiring	Wire correctly.	

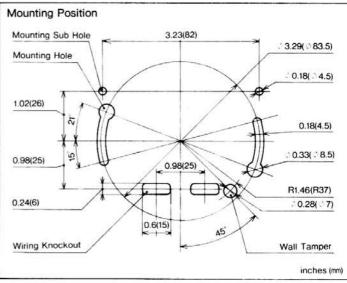
X. SPECIFICATIONS

Model	FX-360	
Detection method	Passive Infrared	
Coverage	Ø 25ft~ Ø 40ft / (Ø 8m~ Ø 12m) Height 8ft~12ft / (2.4m~3.6m)	
Detection zones	62 zones	
Sensitivity	3°F (1.6°C) at 2ft/sec (0.6m/sec)	
Detectable speed	1~5ft/sec. (0.3~1.5m/sec.)	
LED indicator	LED is blinking during warm-up period.	
LED Indicator	Alarm indicator optional	
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 2 or 4	
Warm up period	Approx 30sec. (LED blinks.)	
Power input	9.5~18VDC	
Current draw	17mA / (normal)	
Current draw	18mA/(max.)	
Weight	4.9 oz (140g)	
Operating temperature	-4°F~+122°F (-20°C~+50°C)	
Environment humidity	95% max.	
RFI interference	No Alarm 20V/m	

	L, L(P) Version (Alarm Men	nory)	
Model	FX-360L	FX-360L(P)	
Alarm Memory	System armed: 0~1VDC (grounded) See Section VIII	System armed: +5~20VDC See Section VIII	
Current draw	17mA / (normal)		
Current draw	25mA	./(max.)	
Weight	4.902	z (140g)	

S Version (Form C)		
Model	FX-360S	
Alarm output	Form C 28VDC 0.2A (max.)	
Current draw	32mA /(normal)	
Current draw	35mA/(max.)	
Weight	4.9oz (140g)	





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

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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