OPTEX

PASSIVE INFRARED DETECTOR **WONDEREX**

FX-360

INSTALLATION INSTRUCTIONS

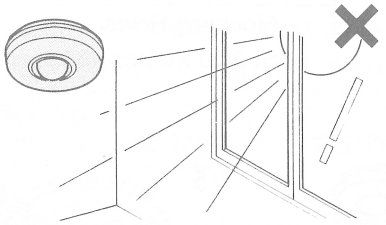
No. 59-0523-2 06-6

N219 CE

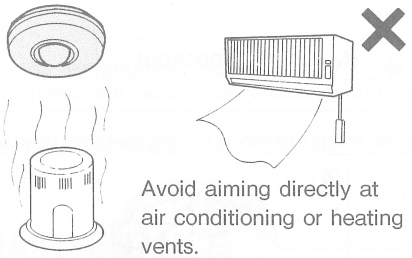
FEATURES

- Ceiling Mount Type 360° PIR Detector.
- Selectable pulse count 2 or 4.
- LED ON/OFF remotely from the control panel or at the detector.
- UL Listed

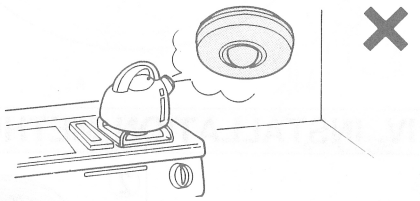
I. INSTALLATION HINTS

① 

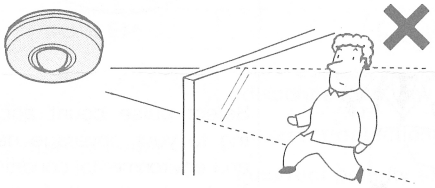
Avoid direct sunlight.

② 

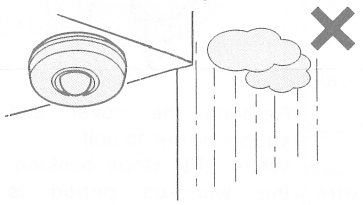
Avoid aiming directly at air conditioning or heating vents.

③ 

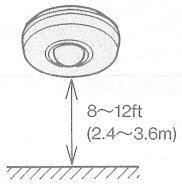
Avoid vapor or high humidity that can cause condensation.

④ 

Avoid Curtain, Screen, etc. blocking detection area.

⑤ 

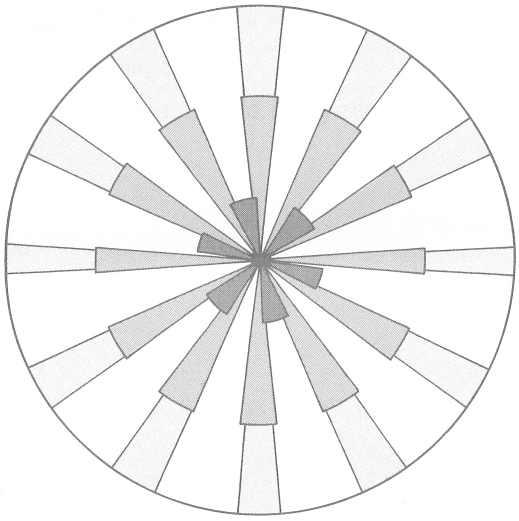
Do not install outdoors.

⑥ 

Install within 8~12ft (2.4~3.6m) height from floor.

II. DETECTION AREA

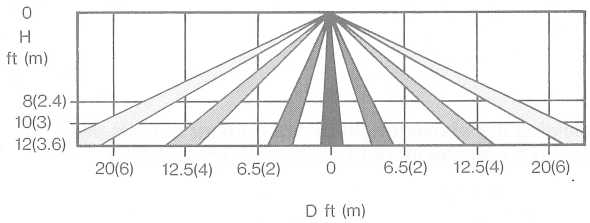
TOP VIEW



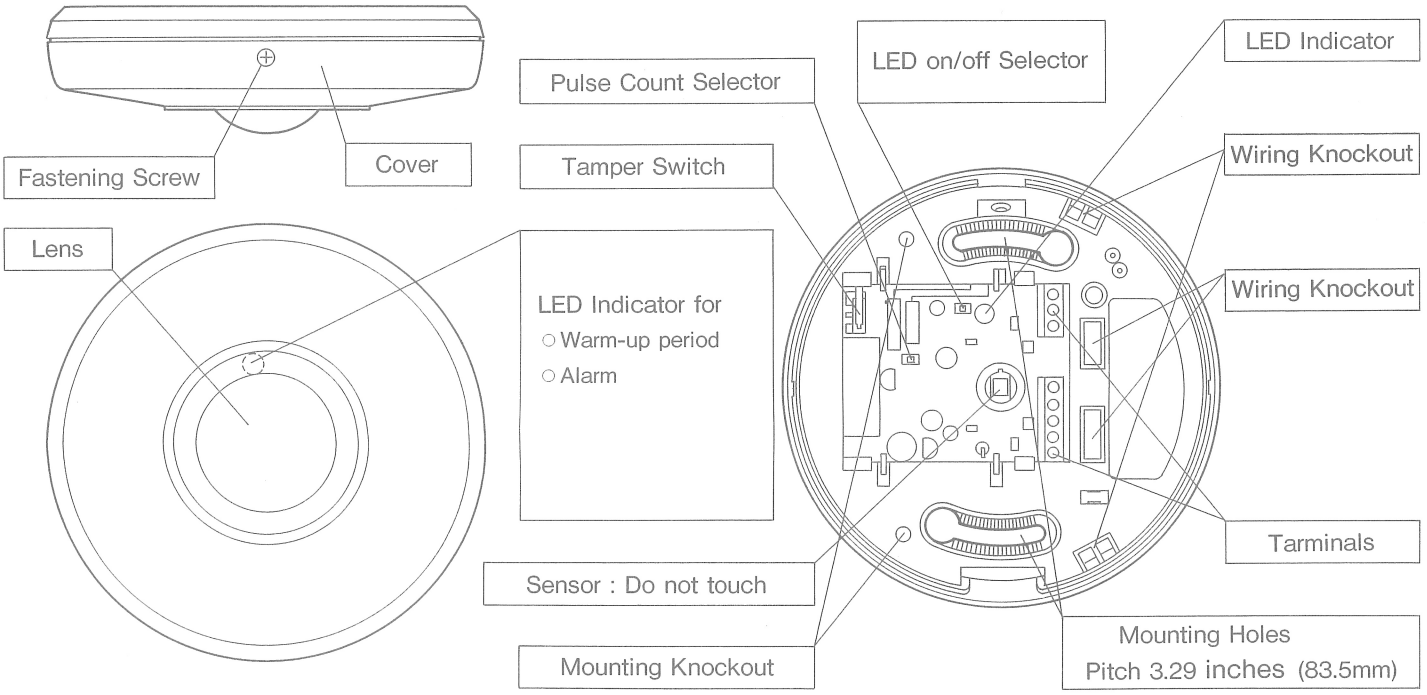
MAX. Detection AREA

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

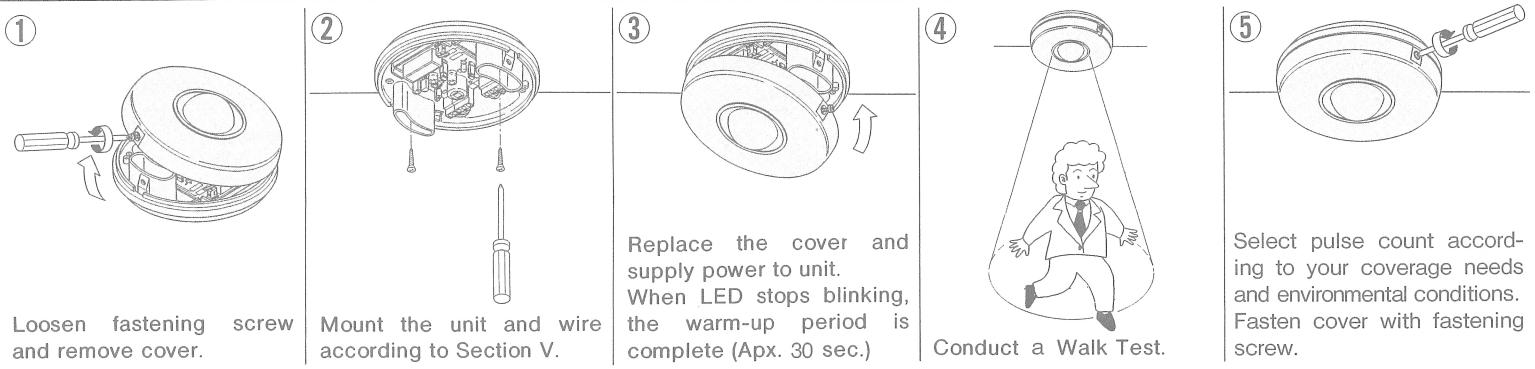
SIDE VIEW



III. DESCRIPTION AND OPERATION



IV. INSTALLATION METHOD



① Loosen fastening screw and remove cover.

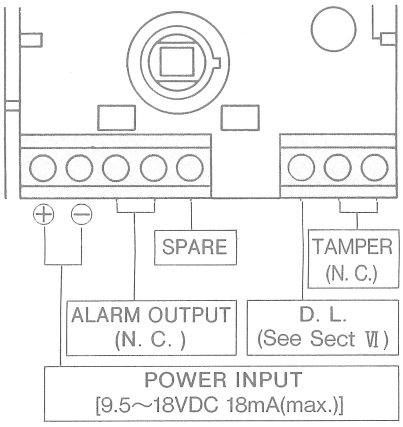
② Mount the unit and wire according to Section V.

③ Replace the cover and supply power to unit. When LED stops blinking, the warm-up period is complete (Apx. 30 sec.)

④ Conduct a Walk Test.

⑤ Select pulse count according to your coverage needs and environmental conditions. Fasten cover with fastening screw.

V. WIRING



Power wires should not exceed the following lenghts.

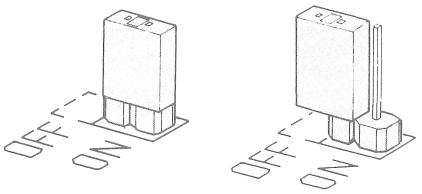
	FX-360	
WIRE SIZE	12V	14V
AWG22 (0.33mm^2)	1070' (320m)	2140' (650m)
AWG20 (0.52mm^2)	1700' (510m)	3400' (1020m)
AWG18 (0.83mm^2)	2700' (820m)	5300' (1600m)

- 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 to be connected to a UL listed power supply capable of providing a nominal input of 12VDC (9.5 ~ 18VDC) 18mA(max.) [FX-360], and battery standby time of 4 hours.

VI. LED ON-OFF

JUMPER PIN SWITCH

○ 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.



LED ON LED OFF

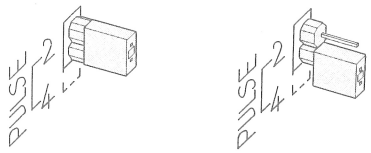
	Remotely	At the Detector
LED Enabled	Connect DL terminal to common ground (with detector).	Connect (−) terminal of power input to DL terminal.
LED Disabled	No ground to DL terminal (open circuit).	No connection to DL terminal (open circuit).

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. TROUBLE SHOOTING AND MAINTENANCE

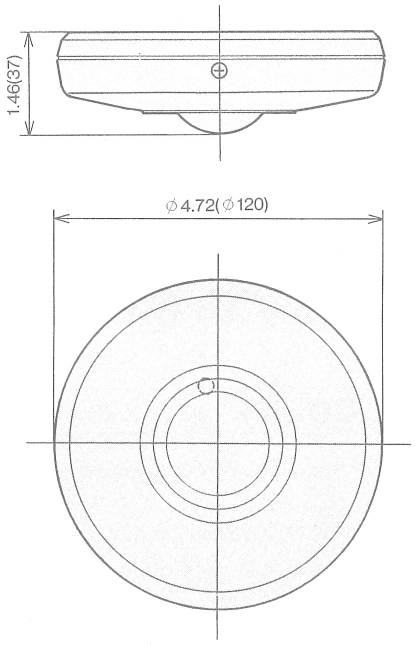
PROBLEM	PROBABLE CAUSE	REMEDY
LED does not light.	Incorrect power supply voltage. (disconnection, low voltage)	Correct supply voltage to 9.5 ~ 18V DC.
	Incorrect detection area.	See Section II.
	Incorrect polarity to detector.	Switch positive and negative at terminal.
	LED switch is OFF	Turn on the Switch. See Section VI.
LED lights even though no person within area.	Moving object within area. (curtain, wall hanging, etc.)	Remove object from detection area.
	Rapid temperature changes within area. (heater., air-conditioner, etc.)	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 a walk test at least once per year.

IX. SPECIFICATIONS

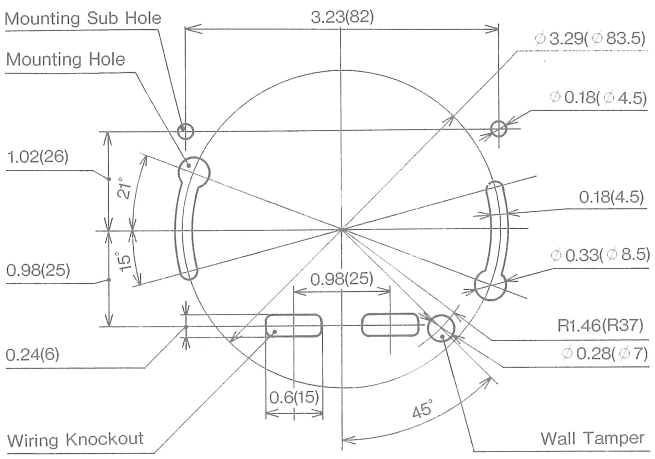
Model	FX-360
Detection method	Passive Infrared
Coverage	∅25ft～∅40ft/(∅8m～∅12m) Height 8ft～12ft/(2.4m～3.6m)
Detection zones	62 zones
Sensitivity	3°F (1.6°C) at 2ft/sec (0.6m/sec)
Detectable speed	1～5ft/sec. (0.3～1.5m/sec.)
LED indicator	LED is blinking during warm-up period.
	Alarm indicator optional
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)
	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

Dimensions



inches (mm)

Mounting Position



inches (mm)

＊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. This Product conforms to the EMC Directive. 89/336 EEC.

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