

OUTDOOR PASSIVE INFRARED DETECTOR

INSTALLATION INSTRUCTIONS

LX-40, LX-80N

120° wide Long Range

1 YEAR WARRANTY

1. INSTALLATION HINTS

① Installation Height



Maximum Installation Height is 8.3ft. (2.5m).

② Location



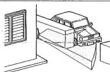
Mount the sensor directly to a wall or ceiling with the optional bracket (model CA-1W or CA-2C).

③



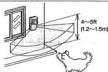
Avoid areas with moving objects (i.e. swaying trees, bushes, etc.).

④



Aim the Sensor at wall or the ground, to avoid unwanted detection.

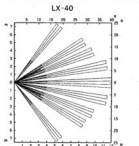
⑤



When using the pet alley pattern, the installation height should be between 4~5ft. (1.2~1.5m)

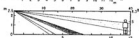
2. DETECTION AREA PATTERNS

A. TOP VIEW



B. SIDE VIEW

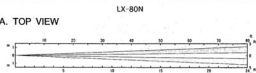
①MULTI-LEVEL PATTERN



②PET ALLEY PATTERN

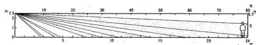


A. TOP VIEW



B. SIDE VIEW

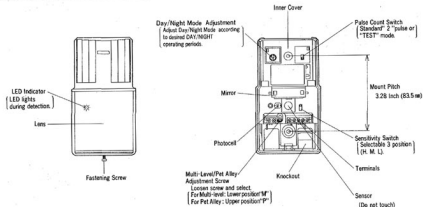
①MULTI-LEVEL PATTERN



②PET ALLEY PATTERN



3. DESCRIPTION AND OPERATION



4. INSTALLATION PROCEDURE

A. Installation on walls

1 Loosen fastening screw and remove cover.

2 Pull wire through.

If angled mounting is necessary, use the optional "CA-W" mounting bracket.

3 NOTE

4 Connect wires to terminals, as shown.

Power supply wires should not exceed the following lengths.

wire size	120V	240V
#14 (2.08 mm)	10700 (330 ft)	5350 (175 ft)
#16 (1.27 mm)	17000 (558 ft)	8500 (279 ft)
#18 (1.02 mm)	27000 (886 ft)	13500 (443 ft)

5 Set the photocell adjustment to the "24HR" Setting (DAY).

6 Replace the cover and supply power to unit. After the warm-up period is complete (Apx. 60 sec.), Conduct Walk Test.

The LED indicator lights when the unit detects movement.

7 After conducting Walk Test.

Set the photocell adjustment to the NORMAL ("position" "1") if night only operation is desired, see SECTION 6-3.

8 After wiring, patch the provided foam rubber into the opening between the wire and the knockout hole.

Select HIGH, MEDIUM, or LOW Sensitivity (H.M.L.). Fasten cover with fastening screw. (See Section 6-3)

B. Installation on ceilings

Use optional ceiling Mount Bracket "CA-2C".

1 Install the bracket "CA-2C" on ceiling and pull wire.

2 Attach the LX-40/80N to the bracket and pull wire.

Note! If you have problems feeding wire through the back of the detector, remove adjusting screw and remove the PCB from the base (see illus.)

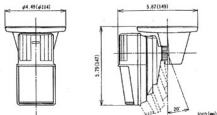
5. OPTIONAL BRACKETS

Note! Maximum Installation Height is 8.3 ft (2.5m)

① Ceiling Mount Bracket "CA-2C"

Adjust Horizontally: $\pm 45^\circ$

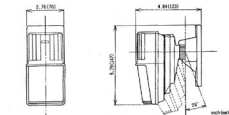
Vertically: 0° to 20° downward



② Multi-Angle Wall Mount Bracket "CA-1W"

Adjust Horizontally: $\pm 45^\circ$

Vertically: 0° to 20° downward



6. SETTING AND ADJUSTMENT

① Day/Night Mode

Adjust Day/Night Mode according to desired operating periods:



NORMAL Position

- Select "NORMAL" position for standard night only operation.



- Turn towards "DAY" if desired activation time is during brighter environmental conditions.



- Turn towards "NIGHT" if desired activation time is during darker environmental conditions.



- Select "DAY" position for 24 Hour operation, and walk testing unit.

Unit is pre-set at "NORMAL" position.

② Pulse Count Switch



"2" mode

- Select "2" for normal applications.



"TEST" mode

- Select "TEST" mode when conducting WALK TEST, or for use in extremely stable environments.

Unit is pre-set at "2" position.

③ Sensitivity Switch



STANDARD Position

- Use "M" position for normal applications.



- Use "H" Position when you need high sensitivity.



- Use "L" position in areas that may be unstable.

Unit is pre-set at "M" position.

7. DETECTION AREA ADJUSTMENT

A. Changing vertical detection area

① Multi-Level Pattern



Use this area for normal applications.

Unit is pre-set at Multi-Level setting.

② Pet Alley Area



Provide a horizontal detection pattern with no declination of zones, allowing pets to move through the area.

Selecting Pet Alley Pattern

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Carefully loosen adjusting screw.
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Slide the cover down and fasten screw at the "P" position.
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
Flip the Mirror to the upper position.

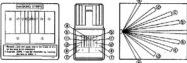
NOTE ! Pet Alley Area will not function if these two changes are not performed.

B. Eliminating unwanted detection zones

(LX-40 only)

Unwanted detection zones can be eliminated by simply masking the lens with the provided masking strip, as follows:

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Remove cover and apply strip to the inside of lens on the zone to be eliminated (see illus.).
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Example: ZONE ⑨ can be eliminated by masking the lens at AREA ⑨ (see illus.).

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8. TROUBLE SHOOTING AND MAINTENANCE

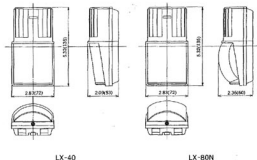
PROBLEM	PROBABLE CAUSE	REMEDY
LED does not light.	Incorrect power supply voltage (disconnection low voltage)	Correct supply voltage 10.8~13.2V DC.
	Wrong Polarity	Correct
	Sensor is in warm up period.	Wait for. (approx. 60 sec.)
	Light condition is too bright.	See Section 6-③. Correct adjustment volume.
	Incorrect detection area.	See Section 2.
LED lights even though no one is in detection area.	Moving object within area.	Remove object from detection area.
	Improper power supply voltage.	Correct.
	Unit detects something beyond rated detection area.	Check Area.
	Rapid temperature changes within area.	Remove the heat sources from detection area.
LED lights but signal is not sent.	Relay contact is stuck or damaged due to over-loading.	Check load of output. The unit needs repair or replacement.
	Faulty Wiring	Wire correctly.
	Alarm output connects to other devices as follows. when NC output is used : connect in parallel when NO output is used : connect in series.	When NC output is used : connect in series. When NO output is used : Connect in parallel.

9. SPECIFICATIONS

Model	LX-40	LX-80N
Detection method	Passive Infrared	
Detection area	43ft x 32ft (13m x 10m) 120° wide	86ft x 64ft (26m x 20m) 90° wide
Coverage	Multi-area	40 zones
	Per-ally area	18 zones
Mounting height	Multi-area	8.3ft (2.5m) max
	Per-ally area	4~5ft (1.2~1.5m)
Detectable speed	1~3.3ft/sec. (0.3~1.0m/sec.)	
Sensitivity adjustment	Selectable 3 position (H.M.L.)	
LED indicator	LED lights during detection	
Alarm period	2 ± 1 sec. (Delay timer)	
Alarm output	NC, NO 28V DC 0.2A max	
Tamper switch	Opens when cover removed.	
Pulse count	"2" position : 2 (20 ± 5 sec)	
	"TEST" mode : 1 pulse	
PhotoCell adjustment	Approx. 10 to 100,000 lux	
Warm up period	Approx. 60 sec.	
Power input	12VDC ± 10%	
Current draw	25 mA max	
Installation place	Indoor or Outdoor on wall	
Operating temperature	-4°F ~ +122°F (-20°C ~ +50°C)	
Environment humidity	95% max	
Weight	5.3oz (150g)	
Accessory	Masking strips (LX-40 only), Mounting screw, Foam	

※ Specifications may be changed without prior notice for improvements.

10. DIMENSIONS



NOTE

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

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