INSTALLATION INSTRUCTIONS

No.59-1561-1 0904-10



PASSIVE INFRARED DETECTOR

AP2-20N

FEATURES

- Fresnel Lens design
- Novel and elegant appearance
- **Double Conductive Shielding** Technology(Patented)
- High-Density Detection Zone
- **Even Sensitivity**

EASY INSTALLATION

- 86-box Bracket Mounting
- Universal Bracket Mounting
- Combine Wall and Ceiling Mounting
- Easy Wiring Knockouts

FUNCTIONS

- LED On/Off Switch
- Tamper Switch
- Selectable Sensitivity(H/L)

INSTALLATION HINTS



Avoid direct sunlight.



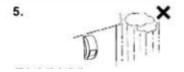
Avoid looking directly at air conditioning or heating vents.



Avoid vapor or high humidity that can cause condensation.



Avoid curtain, screen, etc. blocking detection area.



Do not install outdoors.

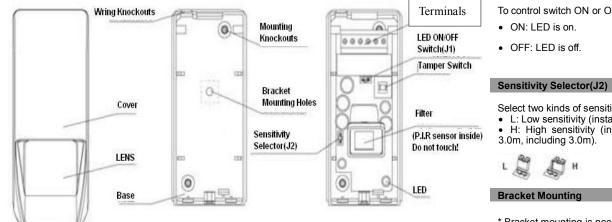


Do not mount in unstable location where vibration or shock may affect the detector.



Do not aim detection area towards equipment which continually moves in the detection area (i.e. curtain, blinds).

2. DESCRIPTION AND OPERATION



LED ON/OFF Switch(J1):

To control switch ON or OFF by adjusting the pin switch.

· ON: LED is on. · OFF: LED is off.



Select two kinds of sensitivity by adjusting the pin switch.

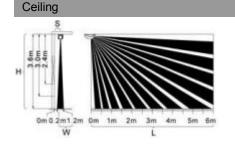
- L: Low sensitivity (installation height is less than 3.0m).
 H: High sensitivity (installation height is higher than
- 3.0m, including 3.0m).



Bracket Mounting

- * Bracket mounting is necessary when needs to adjust the angle of zone during installation.
- * When install bracket, it should to be mounted in the bracket mounting hole which is in the base.

3. DETECTION AREA PATTERNS



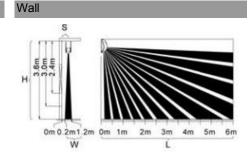


Table of installation parameters:

Installation height(H)	2.4m	3.0m	3.6m
Zone width(W)	0.6m	0.8m	1.0m
Zone length (L)	6.0m	6.0m	6.0m
Distance from the wall- recommend (S)	0.5m	0.6m	0.7m

4.INSTALLATION



1. Open the cover

and remove it.



2. Loosen the hook at forepart of base, and then remove the P.C.B.



3. Put the point of screw-driver in wiring knockouts of base, and hit the top of driver to crack into knockouts. Mount base with supplied two screws.



4. Wire according to Section 5, And then fix P.C.B. unit with hook.



5 Fit cover (first buckle up top side, then press down bottom side) and lock screws as required.



Note 1: Note 1. When using bracket, it should be mounted in the square hole that showed in the figure.



Note 2. To remove cover in installation state, first remove the screw which fits cover, and then pry off according to direction shown in the figure by using screwdriver which can be inserted into either hole on both sides.

5 WIRING

Power input: 9.5V~16V DC Alarm output: N.C. Tamper: N.C.



Power wires should not exceed the following lengths.

WIRE GAUGE	12V DC	14V DC
AWG22(0.33mm ²)	480m	1030m
AWG20(0.52mm ²)	750m	1630m
AWG18(0.83mm ²)	1200m	2600m

- •The wiring length between power supply and detector should not be longer than the length listed in the left table.
- •When using two or more units on one wire, the maximum length is obtained by dividing the maximum wire length listed by the number of detectors used.
- •Only use the wire which diameter is under Φ
- 4.5mm(including Φ4.5mm) during mounting.

6 TROUBLE SHOOTING AND MAINTENANCE

PROBLEM	PROBABLE CAUSE	REMEDY
	Incorrect power supply voltage.(disconnection, low voltage)	Correct the voltage supply to 9.5V~16 V DC.
LED does not light.	Incorrect detection area.	See Section 3.
	LED switch is OFF.	Turn on the switch.(See Section 2)
LED lights even though no person within area.	Moving object within area (curtain, wall hanging, plants, etc.)	Remove object from detection area, or change
		location of detector.
	Rapid temperature changes within area (heater, air-	Remove the heat sources from detection area, or
	conditioner, etc.)	change location of detector.
LED lights but signal is not sent.	Relay contact is stuck or damaged due to overloading.	Check load of output.
	Trelay contact is stuck of damaged due to overloading.	The unit needs repair or replacement.
	Faulty wiring.	Wire correctly.

7. SPECIFICATIONS

MODEL	AP2-20N
Detection Method	Passive Infrared
Coverage	6.0x1.0m(Mounting height at 3.6m)
Mounting	Ceiling and wall
Mounting Height	2.4~3.6m
Zone Width	1.0m max(Mounting height at 3.6m)
Sensitivity	2℃ at 0.6m/s
Detectable Speed	0.3~3.0m/s
LED Indicator	Switch-able ON/OFF
Sensitivity Adjustment	H/L
Alarm Output	Approx. 2.5 sec, N.C., 28V DC, 200mA max
Tamper Switch	N.C., Opens when cover is removed
	N.C. 28V DC, 100mA(max)
Warm up Period	Approx. 60 sec
Power Input	9.5∼16V DC
Current Draw	12mA(max)
Weight	Approx. 50g
Operating Temperature	-20℃~+50℃
Environmental Humidity	95% max.
RF Interference	No alarm 10V/m at 80MHz~1GHz
Using Occasions	Indoor

^{8.}DIMENSIONS





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

OPTEX

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

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