

TriWatcher

SIR10S : Intelligent Outdoor Detector :
SIR10SA : with Anti-Masking



Newly developed TriWatcher method realizes high precision outdoor surveillance by discriminating/eliminating false alarm factors.

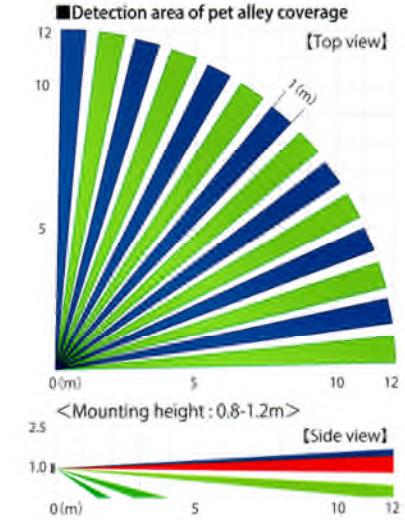
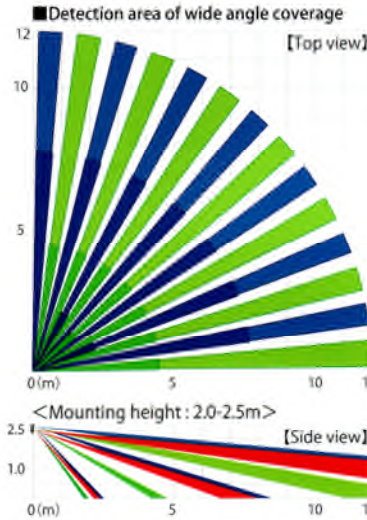
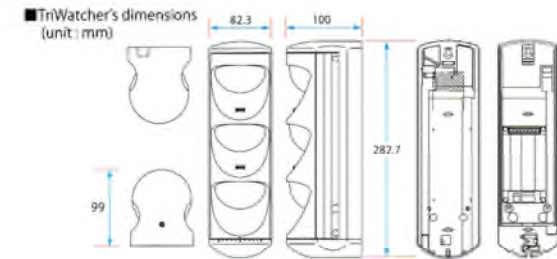
TriWatcher method discriminates false alarm factors

Eliminates false alarm factors

Realizes high precision outdoor surveillance

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TriWatcher SIR10S Intelligent Outdoor Detector



Description		INTELLIGENT OUTDOOR DETECTOR	
Model	SIR10S	SIR10SA	
Input voltage	9-28VDC		
Current draw	SIR10S:30mA(Max)	SIR10SA:35mA(Max)	
Operating temp./humid.	-25~+50°C RH95% or less		
Storage temp./humid.	-30~+60°C RH95% or less		
Wide angle	12m, 84°(mounting height) 1.0~3.0m, 47 pairs (34 sectors)		
Pet alley	12m, 84°(mounting height) 0.8~1.2m, 25 pairs (54 sectors)		
Detection method	Passive infrared method		
LED indicators	Self-diagnosis	LED(red) Flashes (1/sec)	
	Power-on & Warning-up	LED(red) Flashes (1/sec)	
	Alarm	LED(red) Light up (light off setting available)	
	Anti-masking	LED(red) Flashes (5/sec)	
	Precaution	LED(red) Flashes (1/2.5 sec)	
Alarm output	Contact form	1b	
	Output period	One-shot 3 sec.	
	Rated load	30VDC, 0.1A (resistance load)	
	Output resistance	3.0 Ω or less	
Model	SIR10S	SIR10SA	
Tamper output	Contact form	1b	
	Output period	Open while the lower cover opens	
	Rated load	30VDC, 0.1A (resistance load)	
Anti-Masking output	Contact form	1b	
	Output period	N/A	Open while anti-masking is performed
	Rated load	N/A	30VDC, 0.1A (resistance load)
Sensitivity	Output resistance	3.0Ω or less	
	Detection mode	90 - 150% selectable	
	Pulse count	1/2-3/4 pulses selectable	
Optical adjustment	Horizontal direction	±45°	
	Installation	Indoor / outdoor, on wall or pole	
IP rate	IP55		
Weight	800g		
Color	White (DIC G-21)		

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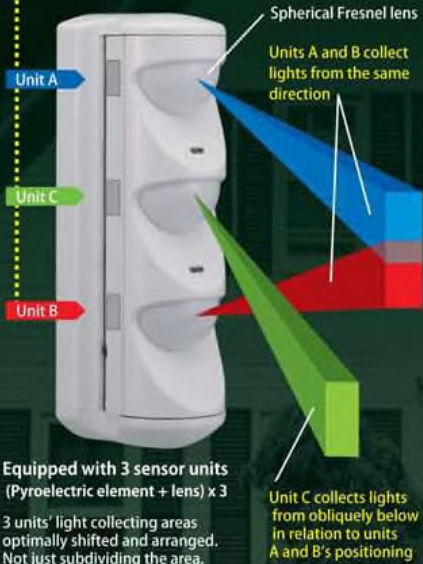
TriWatcher method discriminates false alarm factors

What is TriWatcher method that discriminates false alarm factors?

Our own unique zone formation of 3 sensor units

Processes signals from 3 sensor units by our own unique algorithm

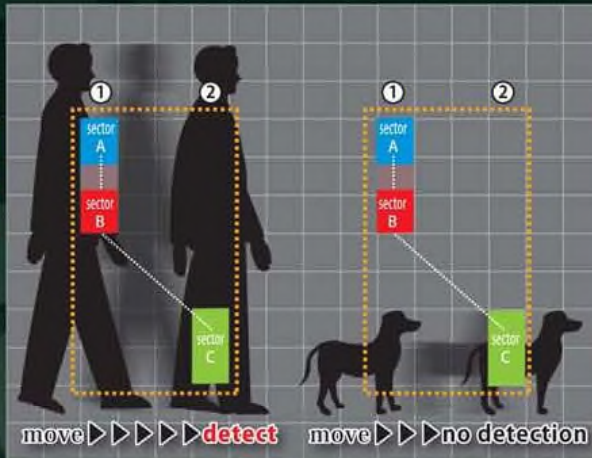
Collects lights from objects by 3 sensor units



Equipped with 3 sensor units (Pyroelectric element + lens) x 3

3 units' light collecting areas optimally shifted and arranged. Not just subdividing the area, but also applying definite roles to each sensor unit.

[Zone image seen from TriWatcher]



TriWatcher method

- ① AND detection at both sector A and B
- +
 - ② Detection at sector C
- ||
- Triggers an alarm only when a human size object moves across a certain distance

TriWatcher method : Patent pending

Eliminates false alarm factors

Countermeasures to false alarms by TriWatcher method

Countermeasure to sunlight

Detects at sectors A and B, but not at sector C

Unit A

Unit C

Unit B

Incidence (detect)

Incidence (detect)

No incidence (no detection)

Even when sectors A and B are facing toward the sun, it does not trigger an alarm.

Countermeasure to insects, birds, and pets, etc.

Detects at sector A, but not at sectors B and C

Unit A

Unit C

Unit B

detect

No detection

Flying insects or birds, or floating leaves or trash do not trigger an alarm.

Countermeasure to swaying vegetation

Detects at sectors A and B, but not at sector C

Sector A

Sector B

Sector C

Even when vegetation sways by wind, it does not trigger an alarm.

Realizes high precision outdoor vigilance

TriWatcher method realizes high precision outdoor vigilance with pyro sensors.

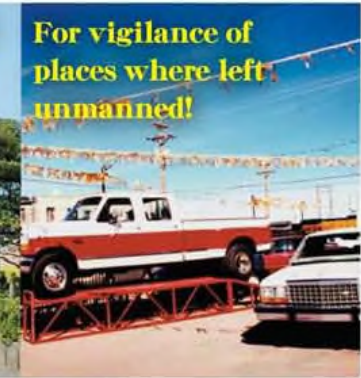
For vigilance of your home garden and premises!



For vigilance against intruders into buildings!

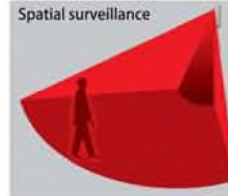


For vigilance of places where left unmanned!



Selectable from 2 kinds of coverage patterns

Spatial surveillance



Mounting height : 2.0-2.5m

◆ Wide angle

With wide angle, the unit is installed at a high place (2.0 - 2.5m), which allows multipurpose application. In addition, installing at a high place prevents vandalism.

Horizontal surveillance



Mounting height : 0.8-1.2m

◆ Pet alley

With pet alley, the unit does not detect movements of objects that are lower than the height installed. It is ideal for residences that keep big pets in the garden.

Features of TriWatcher

◆ Unwanted external-light-proof performance

By adopting a special visible-light cut filter, the unit considerably blocks external lights such as sunlight or car headlights, etc.

◆ Equipped with newly designed spherical Fresnel lens

Adopting spherical Fresnel lens has made an improvement on the unit's non-detect performance of small objects such as small animals, etc. Also, use of polyethylene for its material effectively prevents things from sticking on its surface, such as snow, frost, or even bird or insect droppings, thus enabling to maintain its high precision performance.

◆ 2 LED indicators that provide easy operation check, and also warning effects

Equipped with 2 LEDs on the front of the body unit. When detection occurs, the LEDs will light up, thus producing deterrence effects against intruders. In walk test mode, you can confirm by the LED indicators whether or not detection is taking place.



◆ Connecting with flash sirens and/or cameras

Output period is adjustable within the range of 3 to 300 seconds. By combining with other devices, firm security system can be built.

◆ Variety of installation choices

As it presents no concern about interference between transmitter and receiver as in beam detectors or microwave detectors, the unit can be installed as many as required, in the proximity of one another and even facing each other. With the use of optional pole mount kit (PMK-1), the unit can be installed where no walls to mount on.

