

BSD-PIR90A

Passive infrared detector (PIR)

Detects movement by e.g. a person

Indoor applications

Smart-house output

Operating distance: 10 m

Built-in transmission time: 12 s to 10 min

Operating angle: 90°

Walk test: LED indication

Switch for NO/NC, transmitting channel output

Channel coding by BGP-COD-BAT

Supplied by smart-house



GENERAL SPECIFICATIONS

Power ON delay	Typ. 1 min. It is therefore advisable to keep the unit connected to smart-house	Environment	Degree of protection IP 40 For indoor applications
Walk test indication	LED, red		Operating temperature -10° to +50°C (+14° to +122°F)
Switch 1 ON	Walk test ON		Storage temperature -30° to +70°C (-22° to +158°F)
Switch 1 OFF	Walk test OFF	Connection	Screw terminals
Delay time adjustment	Potentiometer (Transm. timer) controls the range selected by switch 2	Terminal D+.	Smart-house signal
		Terminal D-	Smart-house signal
		Weight	Approx. 150 g
		Dimensions (WxHxD)	104 x 55 x 57 mm

INPUT SPECIFICATIONS

Inputs	PIR on I/O 1	Delay on release	12 s to 10 min*) see next page
Lens	Dual detecting zones	Switch 2 OFF	12 s to 2 min
Segments	24	Switch 2 ON	1 to 10 min
Levels	3	Default channel status	
Angle	90°	Switch 3 OFF	NO
Operating distance	≤ 10 m (see radiation diagram)	Switch 3 ON	NC
Wave length	7 to 14 µm	Output	
Input detection speed	0.5 to 5 pulses/s	LED output	Red LED on I/O 5
Transmission delay		Tamper signal	on I/O 2
Switch 4	Delay on/off		

SUPPLY SPECIFICATIONS

Power supply	Supplied by smart-house
Rated operational current	< 2.6 mA with walktest on < 1.9 mA with walktest off

TYPE SELECTION

Supply	Ordering no.
By smart-house	1 channel PIR detector BSD-PIR90A

MODE OF OPERATION

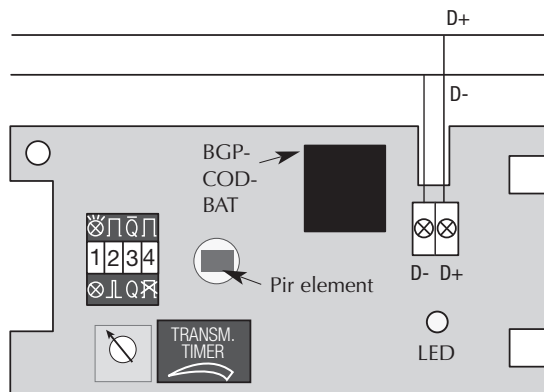
BSD-PIR90A is a 1-channel monostable transmitter with a PIR detector, which operates by means of a dual-element detector.

The transmitter is activated if the temperature suddenly changes (most often it will be heat radiation from a person) in relation to the background radiation. Consequently, the transmitter can be used for ON/OFF switching of lighting, air conditioning, burglar alarm etc. If a person moves within a detection zone, BSD-PIR90A is activated.

The module should not be installed in the following places:

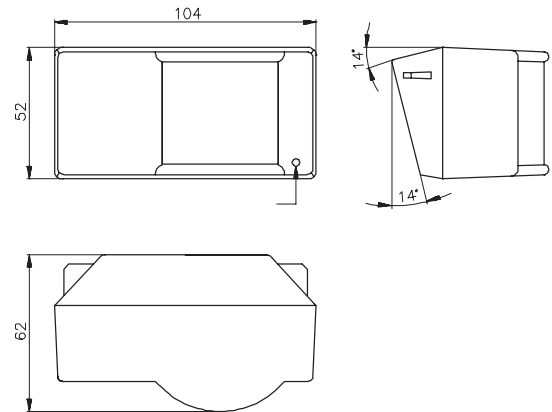
- Outdoors.
- In places exposed either to sunlight or to motor vehicle headlights pointing directly at the sensor.
- In places exposed to direct air flow from a heater or air conditioner.
- In places where rapid temperature changes occur.
- In places exposed to severe vibration.
- Close to glass or other objects which might reflect the infrared radiation.

WIRING DIAGRAM



Switch 1: LED on/off
 Switch 2: Delay time selection *
 Switch 3: Channel status. NO or NC
 Switch 4: Delay on/off *

Dimensions



*) Note: Switch 2 is related with Switch 4 and potentiometer "transm. timer". When Switch 4 is on and Switch 2 is off, you can use the potentiometer to set the delay time from 12 sec to 2 min. When Switch 4 is on and Switch 2 is on, you can use the potentiometer to set the delay time from 1 min to 10 min. When Switch 4 is off, the delay function is not in use.

RADIATION DIAGRAM (M)

