CE

EN 50131-2-4 grade 2
EN 50130-5 class II

Xline

XIR100H

INDOOR PASSIVE INFRARED DETECTOR FOR INTRUSION ALARM SYSTEMS

The XIR100H professional series PIR detector is especially suited for indoor applications.

Digital signal processing (DSP) and a dual pyroelectric PIR element provide the XIR100H with a perfect combination of high sensitivity and an ultra-low false alarm rate.

The powerful combination of PIR digital signal processing and the latest extremely-stable signal amplification and filtering technology allows this device to respond efficiently to intrusion in the protected area and to deliver superior catch performance and precision.

DSP technology provides temperature compensation for perfect operation in the protected area.

The XIR100H is suitable for a vast range of residential and commercial applications.

MAIN FEATURES

The main features of the XIR100H are:

- Digital analysis of signals
- Detection range 15m
- Detection angle 100°
- Bypassable alarm LED
- Automatic temperature compensation
- Sensitivity adjustment
- White light immunity
- Pulse count
- Anti-tamper switch

TECHNICAL SPECIFICATIONS

Operating power supply voltage	from 9 to 16V===
Supply voltage	13.8V===
Stand-by current draw	13mA
Maximum current draw	15mA
Sensor type	digital dual PIR
Alarm pulses	from 1 to 4
Intrusion alarm output	N.C., 28V===, 100mA max
Alarm relay pulse duration	5s
Tamper output	N.C., 28V===, 100mA max
Environmental conditions	from -10 to +55°C, ≤93%
Security rating	2
Environmental class	II
Detection range (max)	15m
Detection angle	100°
Installation method	wall-mounting
Installation height	2.2m
Dimensions (HxWxD):	96x60x44mm
Weight	65g

GENERAL VIEW

A) Wire-entry
B) Mounting screw locations
C) Terminal board
D) Alarm LED
E) Anti-opening tamper
F) PIR sensor
G) PCB retaining screw
H) Sensitivity trimmer
I) Configuration DIP switch
J) Cover retaining screw location
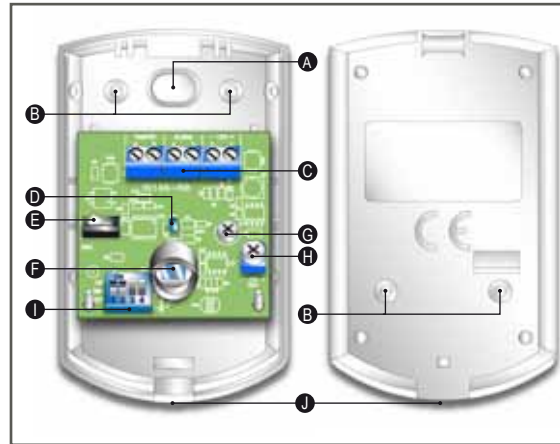
OPERATING PRINCIPLES

- On first 12V power up, the LED will blink and the detector will initialise the auto-test phase.
- After approximately 10 seconds the detector will stabilise and become operational and the LED will go Off. The microswitch 4 on the DIP switch controls alarm display on the LED.

Note: The microswitch 4 influences the LED only, and in no way influences the functionality of the detector.

- If motion is detected in the protected area, the LED will go On and the alarm contact will open. After that the alarm signal will be active for 5 seconds at least.
- The microswitches 2 and 3 on the DIP switch are for alarm pulse number (from 1 to 4).
- The temperature in the protected area influences the performance of the detector. The trimmer on-board the PCB will allow you to adjust detection sensitivity:
  - ● clockwise (**+**), increases the sensitivity (maximum 15 m)
  - ● anticlockwise (**-**), decreases the sensitivity (minimum 3 m)
- Any changes to the DIP switch configuration or any adjustments to detection sensitivity will be signalled by three fast blinks on the device LED.

INSTALLATION

1. Choose a suitable mounting location.
2. Remove the retaining screw and detector cover.
3. Remove the wire-entry and wall-plug knockouts, pull the wires through the wire entry and, using wall plugs, attach the mounting plate to the wall.
4. Complete the connections on the terminal board.
5. Configure the microswitches on the DIP switch.
6. Adjust the sensitivity of the PIR sensor.
7. Replace the detector cover and tighten the retaining screw.

Notes: • Recommended installation height: 2.2m.
  - Do not drill in the vicinity of electrical wiring or plumbing, etc.
  - The detector should be located in place that is far from sources of interference, such as: reflective surfaces, direct air flow, air-conditioning systems, windows, steam, oil vapour, infrared sources, power lines and appliances which may cause temperature changes (heaters, ovens, refrigerators, etc.).
  - Do not blind the field of detection of the sensor, even partially.
  - The alarm LED should be located over the lens.

DETECTION RANGE
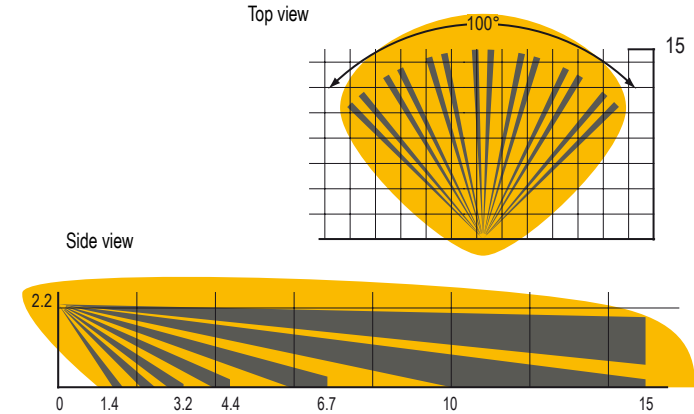
DIP SWITCH

Microswitch	Function			
1	Not used			
2	Alarm pulse number selection			
	1	2	3	4
3	OFF	OFF	ON	ON
	OFF	ON	OFF	ON
4	LED activation			
	ON - LED working			
	OFF - LED bypassed			

WARNING

- This detector must be installed in compliance with the laws and standards in force.
- Do not touch the electronic components as this may damage the circuits and reduce the reliability of the detector. If necessary, clean the detector with a soft cloth only.
- Do not install the detector in locations where there is risk of rapid temperature changes.
- Install the detector strictly in accordance with the instructions in this leaflet.
- The device should be tested on a regular basis.

DECLARATION OF CONFORMITY

Hereby, INIM Electronics s.r.l., declares that XIR100H is in compliance with the essential requirements and other relevant provisions of Directive 2004/108/EC.
The declaration of conformity may be consulted at:
www.inim.biz/certifications