

SIR2000-5026, infrared, sensor with radio signalling

Passive pyroelectric effect intrusion detector with remote signalling by an RF codified transmission.





Technical features

	Min.	Typical	Max.	Unity	
Battery supply		9		Vdc	
Rest consumption		15		μA	
Alarm consumption		10		mA	
Working frequency		433,92		MHz	
Coding type 145026		19683		bit	
Inhibition time between alarms		120		S	
Test inhibition time		4		S	
Covered distance	12		15	m	
Working temperature	-20		+80	°C	
Dimensions		120 x 60 x 45 mm			

How it operates

[1] Dip-switch 1 : in ON position, after an alarm, it inhibits for 2 minutes the PIR sensor (standard operation). In OFF position, the inhibition time is 4 seconds (test operation).

[1] **Dip-switch 2** : It activates the LED, essential for the sensor's test.

[1] Dip-switch 3 : in ON position, continuously activates the RF transmission, to be used to verify the useful radio transmission distance.

[3] Dip-switch tri-states, 9 positions: determines the RF transmission code (Fig.1).

The number of the possible combinations is 19683, which can be set by the 3 positions, 9 commutators (ON-OFF-OPEN).

[6] Battery control: when the battery voltage reaches less than 5V, during an alarm, the buzzer will emit a sound signal.

N.B. The battery must be replaced within few days from the first sound signalling.

[2] Anti-tampering: The device is protected against tampering; any attempt of breaking the plastic case will trigger an alarm.

Technical features are subject to change without notice. AUREL S.p.A. does not assume responsibilities for any damages caused by the device's misuse.





Mounting

Wall fitting without hinge:

- 1) Remove the front cover and the card by pushing back the plastic spring (M see fig. 2).
- 2) Brake through the pre-formed mounting holes, in the bottom cover, according to need (see fig.2) then drill 6 mm Ø fitting holes in the wall at 210 cm from floor level, and fit on them the plastic back cover, turning its rounded side towards the floor (see fig. 3-4)
- 3) Reassembly the sensor by repeating at the contrary what stated at point 1 above.

Wall fitting with hinge:

Remove the front cover and the small plug T (see fig. 2), mount the hinge at the bottom of the sensor by the self-threading screws.

Mount the hinge on the wall at 210 cm from the floor level and block the hinge's screw while keeping the sensor perpendicular to the floor or inclined toward it of about 12° (fig. 5)

Fit back the small plastic plug, connect the battery and mount back the front cover.







Fig. 5



Recommendations

For a correct installation, be sure that the sunlight does not hit directly the sensor and it is not mounted close to heating elements. If so, false alarms may be originated.

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Sensor test

1) Remove the front cover and set up the code by the 9 positions dip-switch **[3]**, same as for its correspondent receiver.

2) Connect the 9V battery to the specific clip [5], and wait approximately 3 minutes till the sensor is stabilized.

3) Set the dip-switches 2 and 3 (function) (fig.1) in ON position, and the dip-switch 1 in OFF position; the LED activates; verify that the correspondent receiver gives out the acknowledgment of received code.

4) Set dip-switch 3 in open position, fit back the cover on the sensor and then, starting from a maximum 15 meters distance, zigzag in front of the sensor verifying if the LED goes on.

Attention: stop for at least 4 seconds when the LED activates to allow the sensor to set up.

N.B. In case the sensor does not react as described above, read the paragraph "Suggestions for quick trouble shooting", or contact your Supplier.

Normal operating condition

Once the sensor's test is over, set the dip-switch **[1]** in ON position, and dip-switches 2 and 3 in OFF position, and then close the plastic case.

Against each detection the device shall send a signal of a variable length (from 0,5 to 1,5 seconds), and inhibiting itself for the subsequent 3 minutes.

Battery replacement

Remove the sensor's front cover and replace the battery paying very much attention to the polarity. 9V, possibly alkaline type batteries are suggested to assure a long lasting.

Should the battery acid leak, remove it paying attention not to touch such acid.

Dispose of the discharged batteries by complying with the Rules in force for such polluting thing.



Suggestions for a quick trouble shooting

Hereinafter few possible malfunctioning cases easily solvable:

- a) The sensor does not work at all: verify that the battery clips are sufficiently tight;
- b) The receiver does not confirm the message reception: verify the combination of the dip-switches [1];
- c) The detecting LED does not lit-up: verify that the dip-switch 1 (central position) is in ON position;
- d) When the battery is connected the buzzer goes on: the battery is defective or discharged.

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