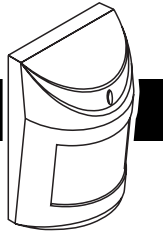


# Satel®

## AQUA PET

DIGITAL PASSIVE INFRARED DETECTOR  
PET IMMUNITY UP TO 15 KG



aqua\_pet\_en 06/09

The microprocessor-based, fully digital AQUA PET digital movement detector is dedicated for use in spaces in which pets may stay when the alarm security system is armed. It is immune for animals up to 15 kg in weight. Due to an advanced digital temperature compensation feature, the device can work in a wide temperature range. A dual element pyrosensor is used in the detector.

For 30 seconds after the power-up, the detector remains in the **starting state**, which is signaled by a rapid LED blinking. Only after this time has elapsed, the detector will be ready to work.

The detector is monitoring power supply voltage and availability of the signal path. In case of a voltage drop below 9 V ( $\pm 5\%$ ), lasting longer than 2 seconds, or detection of a fault in the signal path, the detector will signal a trouble by activating the alarm relay and steady lighting of the LED. The signaling continues as long as the trouble exists.

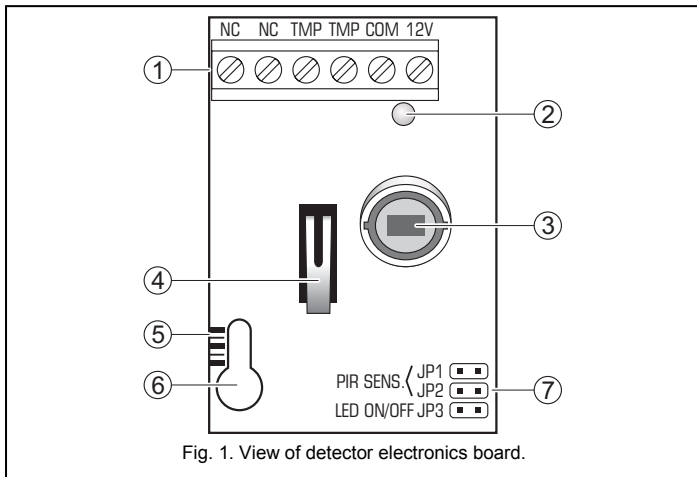


Fig. 1. View of detector electronics board.

Explanations to Fig. 1:

1 – terminals:

- NC** – relay (NC)
- TMP** – tamper contact
- COM** – common ground
- 12V** – supply input

2 – red color LED to indicate:

- alarm – lit up for 2 seconds;
- starting state – blinking rapidly;
- low supply voltage – red light.

3 – pyroelement.

4 – tamper contact.

5 – scale for positioning of pyroelement against the lens (see Fig. 6).

6 – fixing screw hole.

8 – detector configuration pins:

- PIR SENS** – setting detector sensitivity (see Fig. 2);
- LED ON/OFF** – enabling/disabling the LED signaling. The signaling is enabled when the pins are shorted.

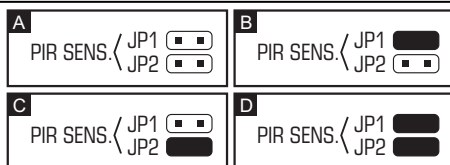


Fig. 2. Setting the detector sensitivity  
(A – low sensitivity, B and C – medium sensitivity, D – high sensitivity)  
[■] – pins shorted; [□] – pins open.

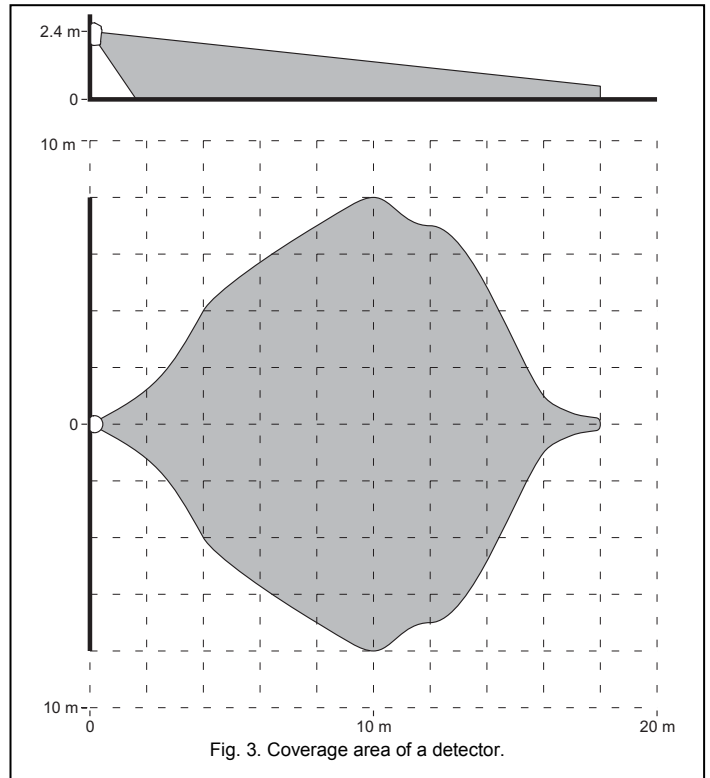


Fig. 3. Coverage area of a detector.

**Note:** The factory mounted lens must not be replaced by another type lens.

### Installation



1. Open the housing as shown on Fig. 4.

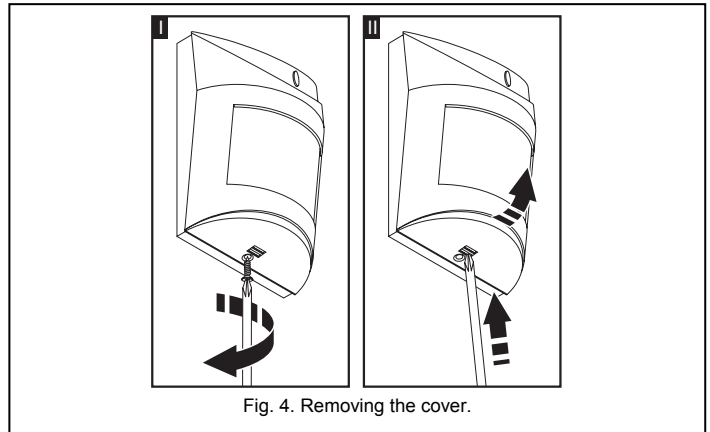


Fig. 4. Removing the cover.

2. Remove the electronics board.
3. Make suitable openings for screws and cable in the rear panel of the housing.
4. Pass the cable through the prepared opening.
5. Secure the rear housing panel to the wall.

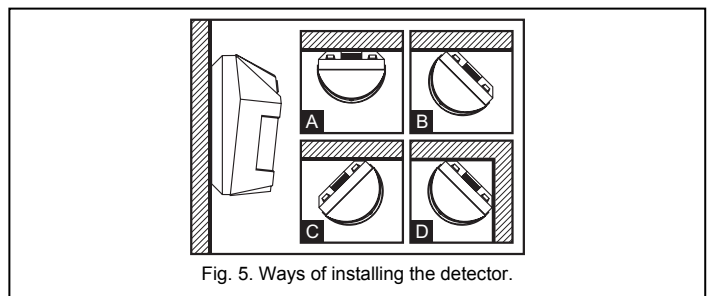



Fig. 5. Ways of installing the detector.

6. Fasten the electronics board, taking into consideration the height of detector installation (see Fig. 6).

The latest EC declaration of conformity and product approval certificates are available for downloading on website [www.satel.pl](http://www.satel.pl) 

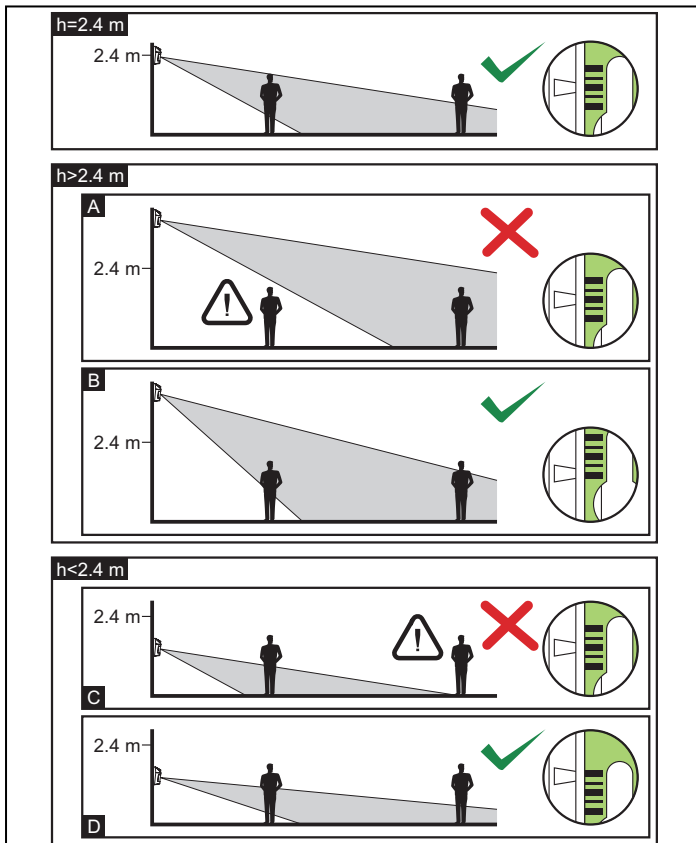


Fig. 6. Effect of the height of installation on the detector coverage area and the way of positioning the electronics board to optimize the area. Depending on the mounting height, the medium scale line should be: aligned with the mark on the housing (installation at a height of 2.4 m), situated above the mark (installation higher than 2.4 m – example B) or below the mark (installation lower than 2.4 m – example D).

7. Connect the leads to the corresponding terminals.
8. Using jumpers, set the working parameters of the detector.
9. Close the detector housing.

## Start-up

1. Switch the detector power on. The LED will start blinking (if the LED ON/OFF pins are shorted).
2. When the detector enters its working state (the LED will stop blinking), carry out the detector range test, i.e. check that movement within the supervised area will activate the alarm relay and lighting of the LED.
3. If necessary, change the detector sensitivity (pins PIR SENS.).

## Specifications

Supply voltage .....	12 V DC $\pm 15\%$
Current consumption, standby .....	10 mA
Current consumption, maximum .....	12 mA
Detectable speed .....	0,3...3 m/s
Relay contacts rated load (resistive) .....	40 mA / 16 V DC
Alarm signaling time .....	2 s
Pet immunity .....	up to 15 kg
Standards complied with .....	EN50131-1, EN50131-2-2, EN50130-4, EN50130-5
Security grade according to EN50131-2-2 .....	Grade 2
Environmental class according to EN50130-5 .....	II
Operating temperature range .....	-10...+55 °C
Dimensions .....	63 x 96 x 49 mm
Recommended installation height .....	2.4 m
Weight .....	73 g

SATEL sp. z o.o.  
 ul. Schuberta 79  
 80-172 Gdańsk  
 POLAND  
 tel. + 48 58 320 94 00  
 info@satel.pl  
 www.satel.pl