

The **APRO 10** microwave detector is used for controlling automatic doors. It detects the motion of people and vehicles in the monitored area.

APRO 10 implements planar technology. It may be configured in **one-way mode** (for independent detection either backwards or forwards) or **two-way mode** (for detection in both directions). A microprocessor processes the received signals generated by Doppler effect and outputs a control enabling signal.

A LED on the front right indicates motion has been detected in the monitored area.

APRO 10



TECHNICAL SPECIFICATIONS

Power voltage	12 – 24 V _{AC} /12 - 30 V _{DC}
Power current	max. 50 mA
Operative frequency	9.90 GHz
Output power (EIRP)	≤14 dBm
Range	1-6 m adjustable
Relay control time	1-6 s adjustable
Degree of protection	IP 55
Installation height	max. 3 m
Detectable speed	0.1 m/s minimum
Relay contact	1A - 24 V _{AC/DC}
Vertical directionality	0-60°
Horizontal directionality	+/- 45°
Operating temperature	- 20 °C to + 50 °C
Dimensions/Weight	140x100x70 mm / 250 g
Warranty	24 months

NOTE: A SELV power source must be used (certified power supply unit or safety transformer) in compliance with CEI EN 41003:1993 standard.

We hereby declare that Apro10 complies with the essential requirements of Directive 99/05/EC (R&TTE) harmonised radio standard pursuant to Art. 3.2 of Italian Law No. 269 dated 9.5.2001: EN300440-2 V 1.1.2



FUNCTION SETTING

The **APRO 10** detector can be configured in **one-way** mode (only one direction) or **two-way** mode (both directions).

Use the dip-switch on the electronic board (Fig. 1-A) to set the required function choosing it from the functions listed in the following table.

DSW1	DSW2	DSW4	SENSITIVITY	CONDITION
OFF	-	ON	Low	Both directions are detected (default)
OFF	-	OFF	High	Both directions are detected
ON	OFF	ON	Low	Movement towards sensor is detected
ON	OFF	OFF	High	Movement towards sensor is detected
ON	ON	ON	Low	Movement away from sensor is detected
ON	ON	OFF	High	Movement away from sensor is detected

FASTENING AND ORIENTATION

The **APRO 10** detector may be installed in central position or by the side of the door on structures free from vibrations at a maximum height of 3 metres, on wall or ceiling (use the template provided for drilling the holes).

Remove the lid, insert the wire in the seat and fix the apparatus using the holes shown (Fig.1-B).

Turn the detecting module (Fig.1-C) towards the area to be monitored.

For correct operation, do not install **APRO 10**:

- facing moving parts of the door
- facing fluorescent lamps (a minimum distance of 2 metres)
- facing zones in which streams of water may be present when it rains.

These conditions could cause undesired opening.

ELECTRIC CONNECTIONS

Connect the terminal board as described in Fig. 2 and power the detector up.



The LED present on the electronic board (Fig. 1-D) will signal that a movement has been detected for as long as the relay is energised.

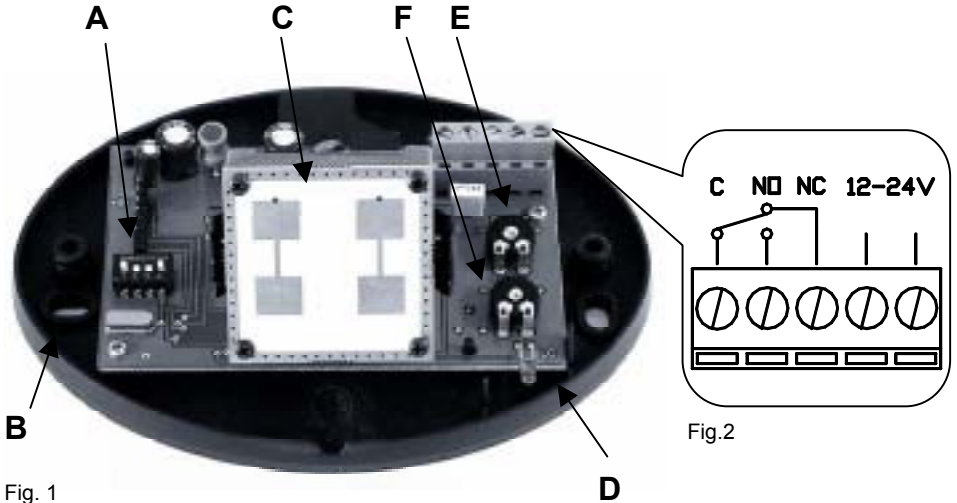


Fig. 1

Fig.2

RELAY CONTACT SETTING

The terminal board has a relay with switch contact, as shown in Fig. 2. Set the dip switch 3 to obtain the combinations described in table 1. These conditions apply when the device is powered.

<p>DSW3 ON (Normal operation) (default)</p>				
<p>DSW3 OFF (Positive safety)</p>				

Table 1



RANGE ADJUSTMENT

Separate areas can be obtained by inclining the detector and appropriately setting dip switch 4 (to selecting high or low sensitivity). Trimmer TR1 on the electronic board (Fig.1-E) is used to optimise adjustments and make the detector sensitive to the concerned area only.

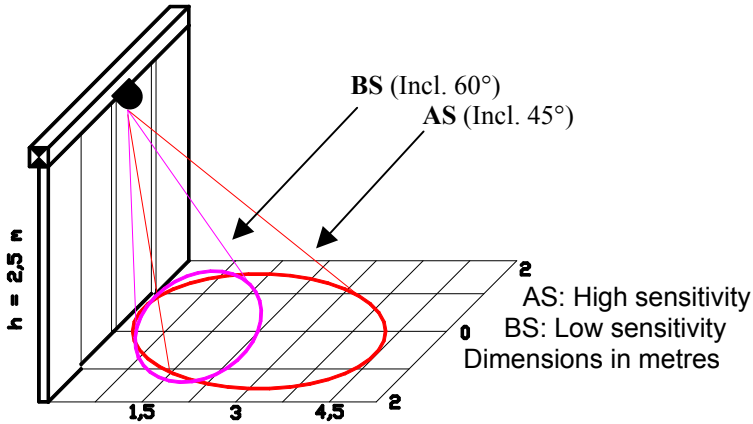


Fig. 3

CONTACT HOLD TIME ADJUSTMENT

Adjust trimmer TR2 on the electronic board (Fig.1-F) to set the required hold time in a range from 1 to 6 seconds.

