Art. 9452-9454

DOUBLE TECNOLOGY OUTDOOR DETECTOR WITH ANTIMASKING SYSTEM.

INSTALLATION AND USER GUIDE

CE

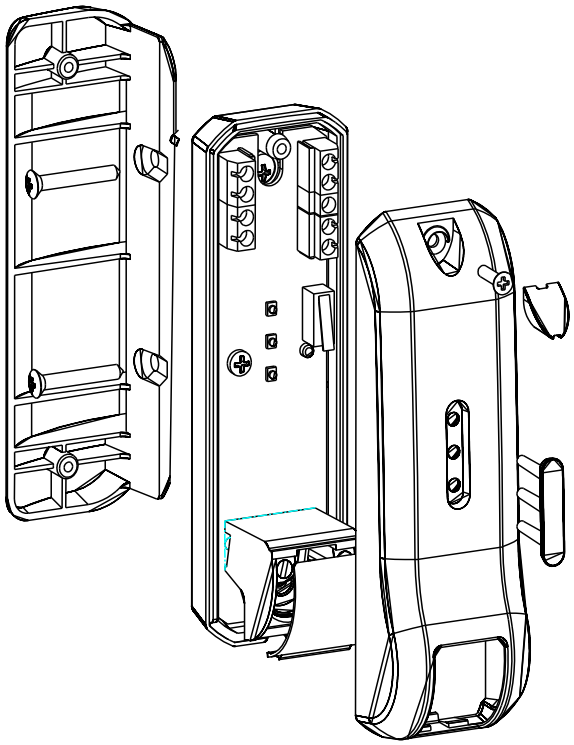
TECHNICAL CHARACTERISTICS

Wall mount	Detection length 12m, 7.5°
Microwave frequency	24.125 GHz
Microprocessor technology	DSP (Digital Signal Processing)
Detection length	From 0.30 to 12m
Detection area	Single curtain area (7.5° see chart on page 5)
Horizontal detection area	IR = 7.5° - MW = 32°
Vertical detection area	IR = 90° - MW = 80°
Curtain area characteristics (2-10m)	25cm - 130cm
Installation height	2.1m (wall or windows mount)
Detection technology	Adjustable : AND - OR
Power supply	10 -15 Vcc
Maximum consumption	25mA
Minimum consumption	11mA
Alarm relay time	5sec commutation
Antimasking relay time	5sec commutation after 25sec of masking time.
TAMPER relay	Open relay when cover removed.
Sensitivity	Adjustable through trimmer
Microwave sensitivity	Adjustable through trimmer
Max. detection length	Adjustable through dip switch
Led indicator	Enabled/disable through DIP Switch
Alarm memory	Yes
RF interference	No Alarm up to 2GHz
Led indicator purpose	MW > yellow ; PIR > green; Alarm > red
Operating temperature	Auto compensation
Cover color	Art.9452 -> white - Art. 9454 ->brown
Dimension	37 x 125 x 40m

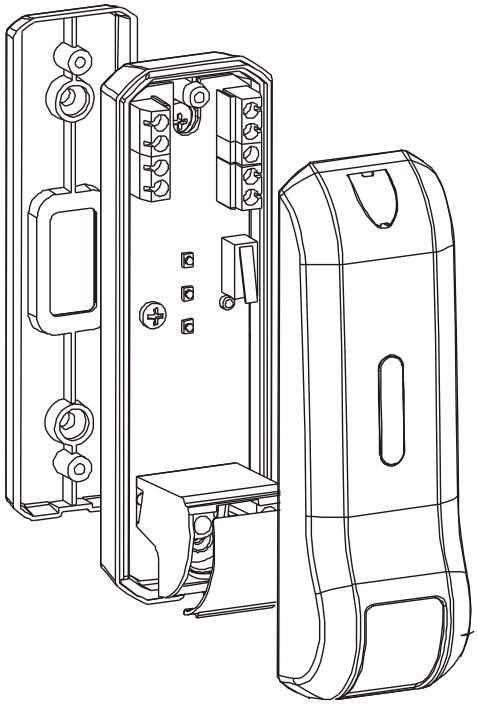
WARNING!!!! : To avoid the risk of damaging the product, never touch the PIR sensor with hands. Use a clean and soft cloth to clean the sensor.

GENERAL DESCRIPTION

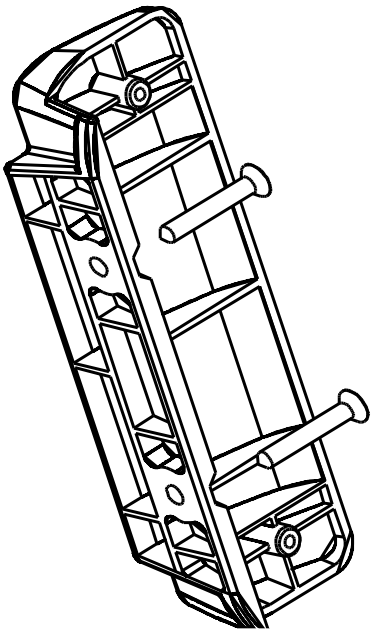
Remove screw plastic protection, in the upper side of detector, using a screw driver.



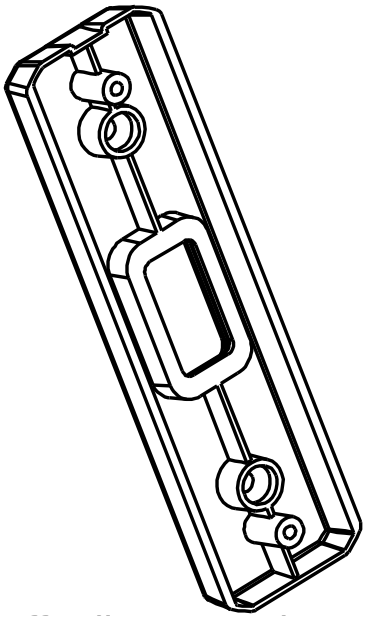
ANGULAR BRACKET



WALL MOUNTING



Angular reversible mounting bracket

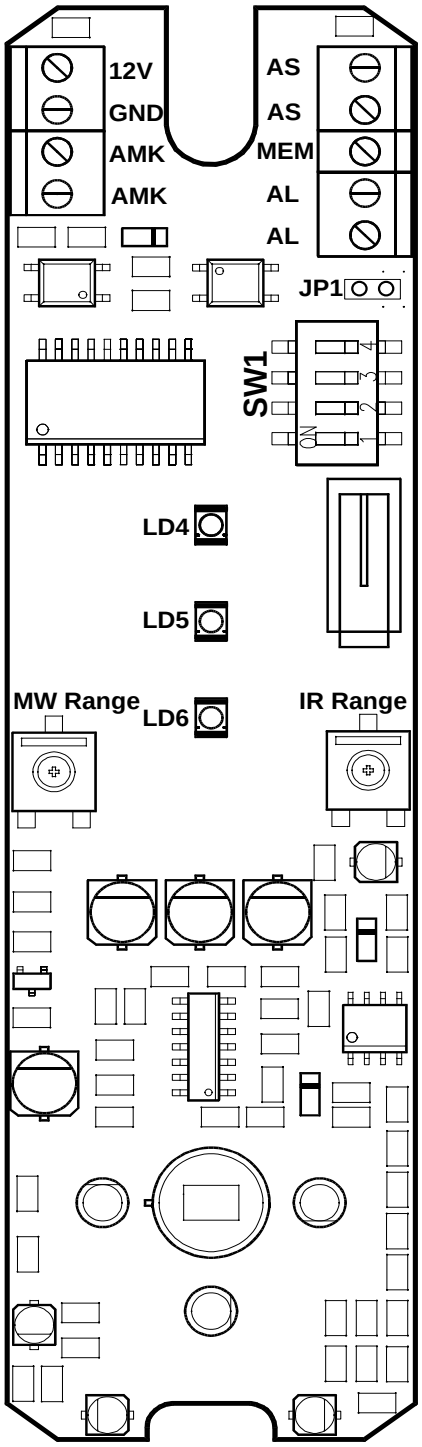


Wall mounting bracket

WIRING

Clamp description and purpose :

12V = Positive 12Vcc.
GND = GND (negative)
AMK = Antimasking Output N.C.
AS = TAMPER (N.C.)
MEM = Inhibition input and alarm memory enabling (positive)
AL = Alarm output N.C.



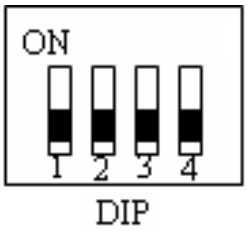
LED indicator

LD4 = Red Led (alarm)
LD5 = Yellow Led (microwave)
LD6 = Green Led (IR)

Trimmer

IR Range = IR range adjustment
MW Range = MW range adjustment

DIP Switch SW1



DIP

DIP	1	2	3	4
ON	Antimask Enabled	AND	IR ANTIMASK ENABLED	Led Enabled
OFF	Antimask Disabled	OR	IR ANTIMASK DISABLED	Led Disabled

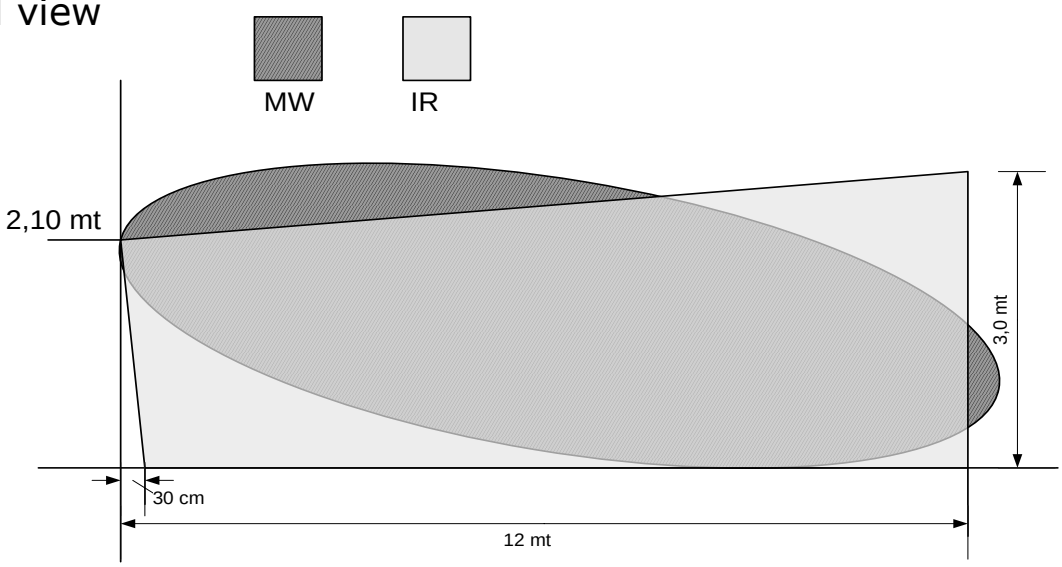
JUMPER JP1

It is possible to set up detector for external or internal use using ’**JP1**’Jumper ‘’ as described in the following chart:

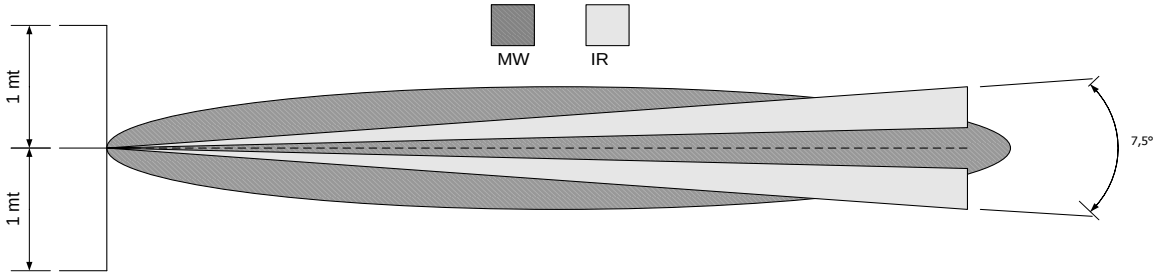
JP1 plugged in	External use setup: more stability, more power consumption
JP1 plugged out	Internal use setup: more sensitivity, less power consumption

DETECTION LENGTH CHART

Lateral view



Top view



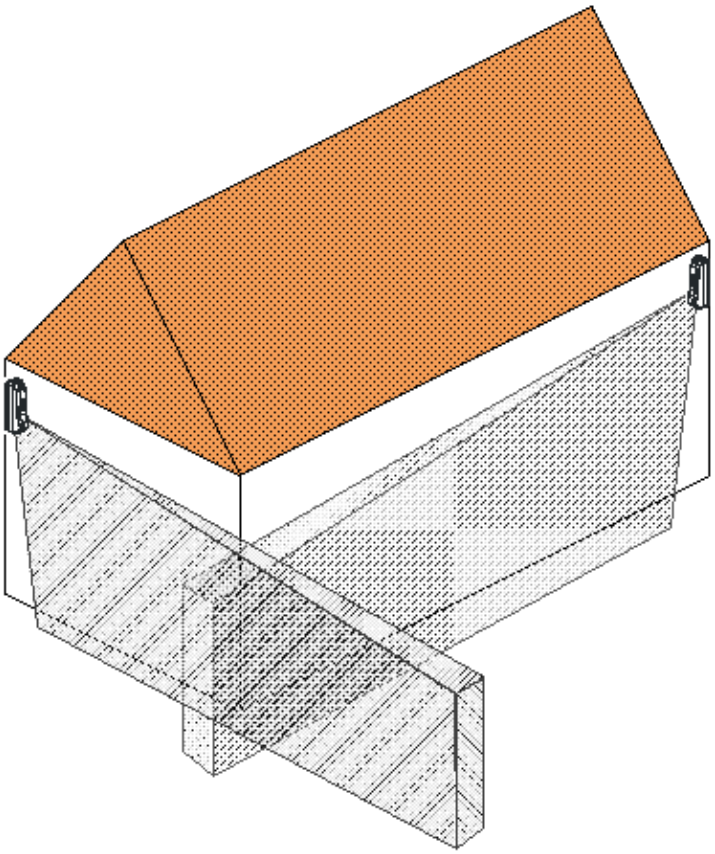
LED indicator

MEM input:
In case of alarm or masking attempt, a positive signal on this clamp shows the following events:

	LIGHTED ON	**FLASHING**
GREEN LED	IR detection (no alarm)	//////////////////
YELLOW LED	MW detection (no alarm)	//////////////////
RED + GREEN LED	IR detection (alarm)	//////////////////
RED + YELLOW LED	MW detection (alarm)	//////////////////
RED + GREEN + YELLOW LED	IR + MW detection (alarm)	//////////////////
GREEN and RED LED		IR antimask detection (enabled AMK output)
RED + YELLOW LED	//////////////////	MW antimask detection (enabled AMK output)
RED + YELLOW + GREEN LED		IR+MW antimask detection (enabled AMK output)

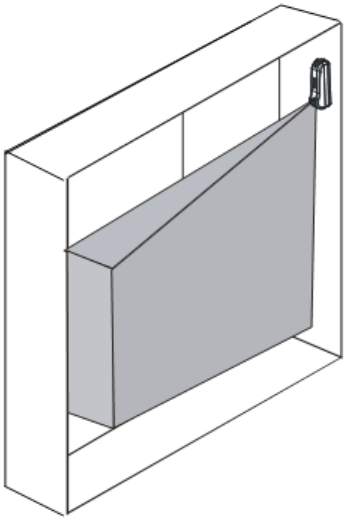
N.B. In case both masking and alarm condition occur, first LED will light on, then they will start flashing.

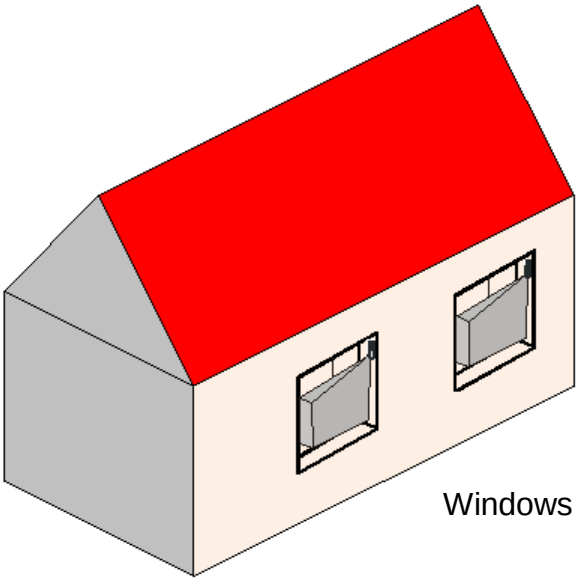
GENERAL INSTALLATION GUIDE



Perimeter protection

Windows protection





Windows and door protection

Installation

To avoid troubles on the detector, it is necessary to check what follows:

When the detector is powered on, LED indicator will flash alternatively (stabilization time). After that GREEN LED will flash fast and in the end YELLOW LED will flash fast.

GREEN LED flashing fast means that detector is acknowledging environmental conditions necessary for **"Beam antimask"** function**.**

YELLOW LED flashing fast means that detector is acknowledging conditions necessary for **"MW antimask"** function**.**

This acknowledging phase is necessary to evalue default conditions (no masking condition), so that any other condition can be considered as a masking attempt.

During this procedure do not stay in front of detector and do not put any obstacle between detector and covered area.
When detector will stop flashing, it will start working normally.

- GREEN LED will show pre alarm condition (IR).
- YELLOW LED will show pre alarm condition (MW).
- RED LED will show detector alarm condition (IR).

When a positive signal is present on MEM clamp, usually connected to +Off clamp of some control panels, LED indicator are always lighted off and detector will be not working.

If an alarm occurs, alarm memory will be shown as described in the above chart. When control panel will be activated again, detector will start working normally.

If a masking alarm occurs, detector will repeat acknowledgment of environmental conditions, when control panel will be activated again.

DETECTION OPTIONS

- **Mw antimask**
  When this function is enabled, AMK output activates if an obstacle remains in front of detector about 25sec.

- **IR antimask**
  When this function is enabled, AMK output activates if an obstacle remains in front of detector. A IR active signal will be checked out to verify this condition.

IMPORTANT NOTICE:

We suggest to do not activate **"Mw Antimask"** function if detector is installed outside where it can be exposed to rain, snow etc..

- AND

Detector will be in alarm only if MW and IR are both in pre alarm condition.

- OR

Detector will be in alarm if MW or IR are in pre alarm condition.