OUTDOOR DUAL TECH BARRIER DETECTOR (MW + IRP)

PRODUCT DESCRIPTION

Dual Sensor Technology (MW + IRP) volumetric barrier for outdoor applications.

Global self-protection, excludable and partialized, composed of an Antimask on the microwave and an Antimask on the IR lens by active infrared .

4 sensitivity settings optimized for Inside, Outside, Approach, Crossing, in combination with the trimmer for the adjustment of the coverage

Barrier 12 mt x 200cm.

Polycarbonate case IP65, resistant to environmental agents

Environment temperature compensation

-Selective Optical Filter of the Infrareds bandwidth

-Alarm memory, Antimask memory, and interactive management of Led OFF.

-Ability to wall / wall installation or ceiling / floor installation using the supplied angle bracket and the optional pivot bracket Hub

-Deep optical slot for a high immunity of the infrared section to all of the phenomena / disorders that do not show up in its field of detection view .

-Filter LED,to enable the vision of the detection only close of the detector.

ENCLOSED IN THE PACKAGE

n°1 - Polycarbonate angle Bracket.

N°2 - screws 3.5 x 9.5 for fixing the Angle Bracket(+ 2 of reserve)

N°2 - 6 mm dowels for wall mounting.

N° 2 - 4 x 30 screws for wall mounting.

INSTALLATION

Open the detector by unscrewing the closing screw .

Remove all, Intermediate Plastic Bottom and Circuit Board, from the Plastic Bottom.

To the wall or with angle bracket

Cut the Locations A and B on the Plastic Bottom

Pass the cable through the Cable Entry on the Plastic Bottom

For direct mounting to the wall, fix the Plastic Bottom with the screws through the locations A and B.

For installation with Angle Bracket *, attach first the bracket to the wall with the screws and then attach the Plastic Bottom to the bracket through locations A and B with the Angle Bracket screws.

Pass the cable through the Rubber on the Intermediate Plastic Bottom and replace the all, Intermediate Plastic Bottom and Circuit Board, on the Plastic Bottom.

Proceed with the cable connection.

*The Angle Bracket can be mounted either left or right handed.

With Swivel Bracket Hub (Grey Polycarbonate version)

The Swivel Bracket HUB-P will be applied in a horizontal manner, or directly to the wall with screws and dowels, or on the support HUB-CP through the Angle Bracket screws.

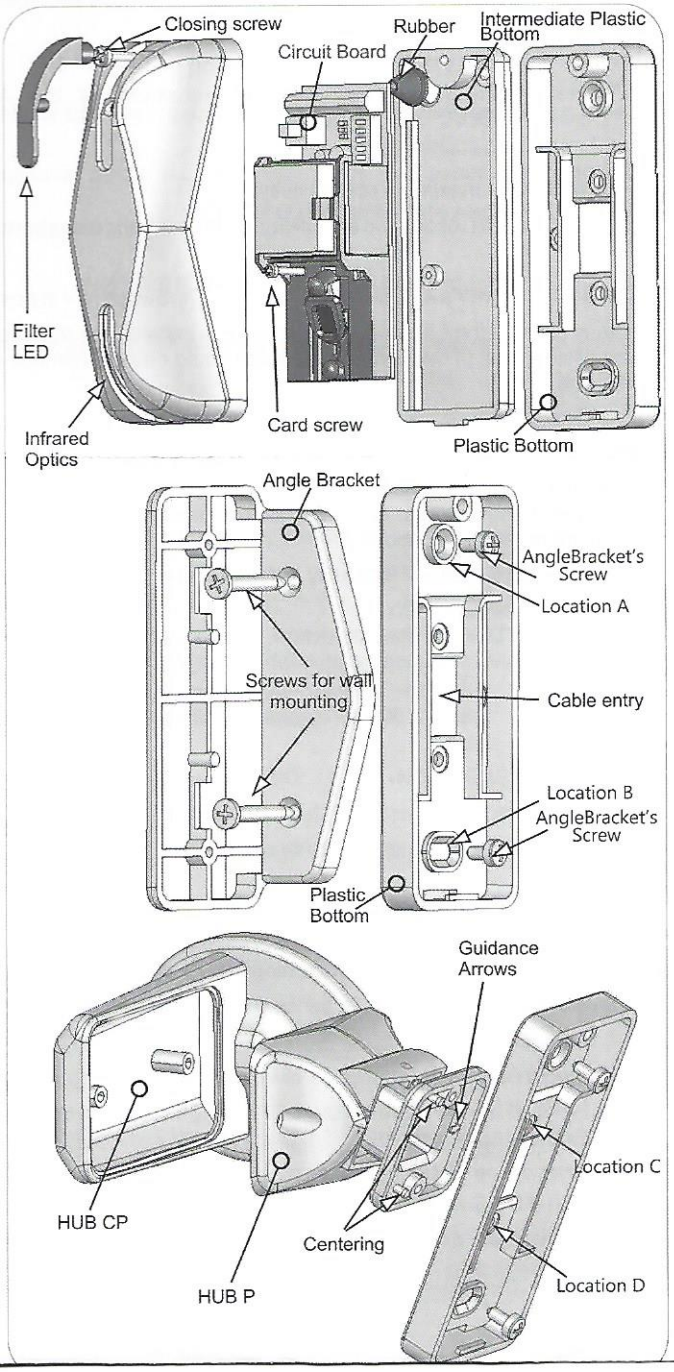
The HUB-P allows orientation of + / - 45 ° vertically, and +30 ° in the opposite direction to that of the "Guidance Arrows", in the horizontal plane.

Pass the cable through the Swivel Bracket and the Cable Entry

Place the Plastic Bottom on the Swivel Bracket with the Angle Brachet screws through the Location C and D.

Orient the swivel Bracket and tighten the locking screw through the Cable Entry.

Pass the cable through the Rubber on the Intermediate Plastic Bottom and replace the all, Intermediate Plastic Bottom and Circuit Board, on the Plastic Bottom



Proceed with the cable connection.

Cable connection

Connect the cable to the terminal as in the scheme.

Adjust the range through the trimmer (see chapter settings)

If it is necessary, perform the setting of operating. (see chapter settings)

Apply the Plastic Front.

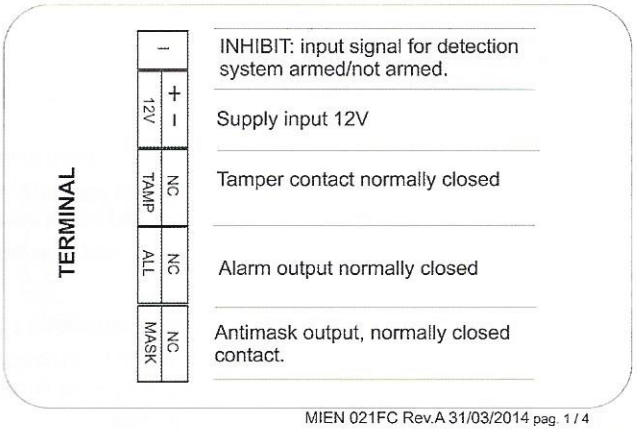
Run the walk test by checking the detections through the LEDs.

Tighten the closing screw.

Apply the Filter LED . This element has a dual function:

-Allows you to leave ON the LEDs so that they can not be seen at a distance by an intruder, but allowing the verification of operation only in the immediate vicinity of the sensor by the user;

-Hide aesthetically the closing screw of the detector.



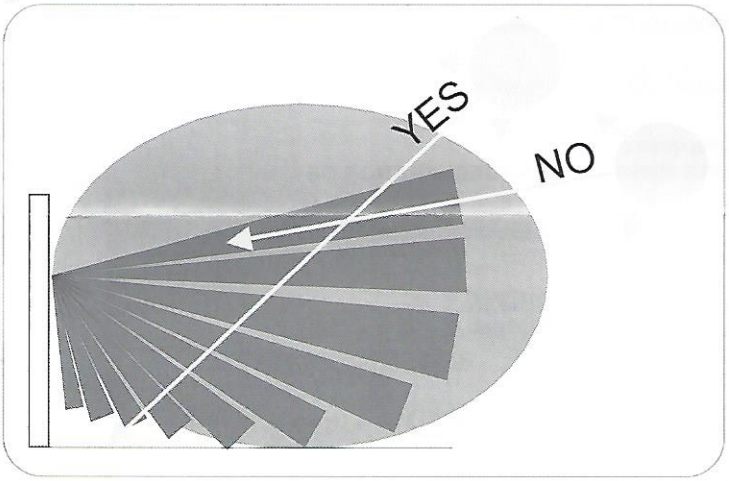
TIPS FOR INSTALLATION

In indoor installations, prefer placement of the sensor toward the inside of the room and away from operating machinery and heat sources.

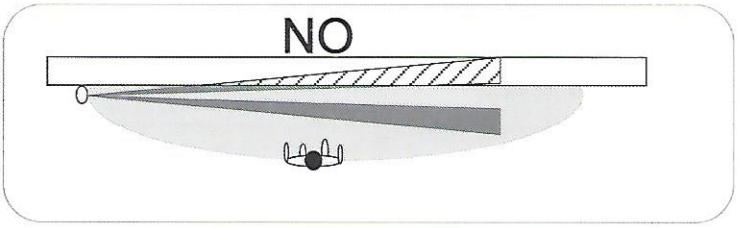
Avoid to direct it toward the windows exposed to the sunny.

In outdoor installations, prevent that the sun's rays, especially during the hottest hours of the day, come directly to the infrared sensing element.

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For protection of walls, avoid that a sensitive area of infrared is in contact with the wall, in order to don't cancel the benefit of the dual-element infrared sensor.



Overcome this by mounting the sensor detached from the wall (see table),

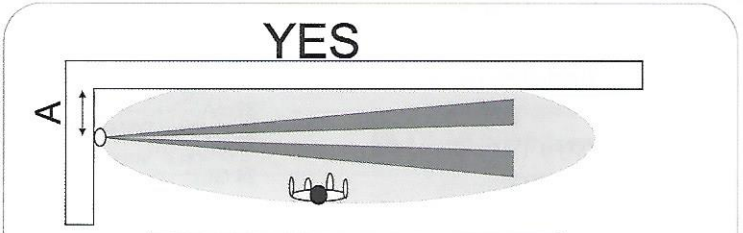
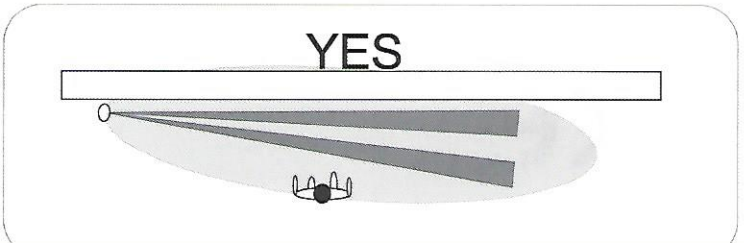


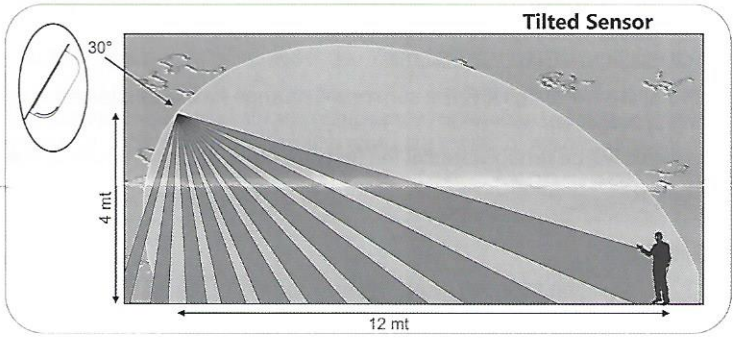
Table of distance A function of the Range selected	
12 m	120 cm
8 m	70 cm
4 m	35 cm
2 m	18 cm

or orienting the sensor of a few degrees (<10 °) using the optional accessory Swivel Bracket Hub P + HUB-CP.



** Note: The sensor range is set by trimmer according to the mass of a human body. Large animals (horses, cows) or large mass of moving objects (cars) can be detected at greater distances.*

Where is not possible an installation Wall / Wall or Ceiling / Floor, to prefer the tilted sensor installation.



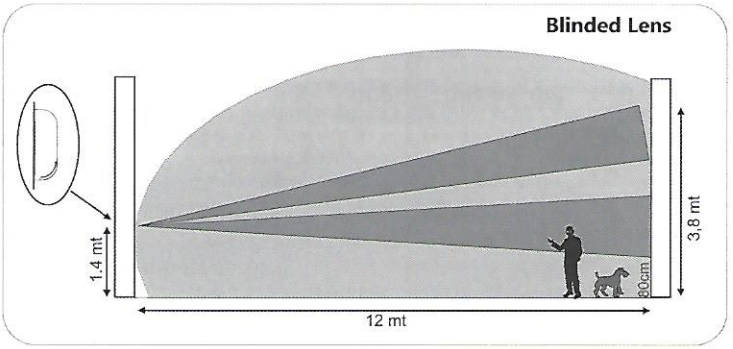
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Exclud from the sensor's detection zone any object in motion or oscillating.

PET IMMUNITY

If there is the possibility of transit of pets in the protected zone, use the optional Blinding's lens by applying it* on the lens so as to leave uncovered only the two upper zones.

The result is it in the figure below.



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Aplication of Blinding's lens

Insert the «Blinding's lens» within the particular «Lens blocker» already mounted in the inner part of the «Front Cover».The «Blinding's lens» will have to be inserted with the «Slot» facing towards the top of the sensor, and stopped behind the Hook that stops the «Lens blocker» ..

. ** Note: To have the Pet Immunity effect , the sensor must be installed only on a vertical wall, and a height of 80 cm / 140 cm from the ground*



SETTING

Through the positioning of the 5 Dip Switches is possible to adapt the sensor working to the your installing needs ..

DIP SWITCHES	
GLOBAL MASK IR + MW	ON = Actived OFF = Deactivated
OUTDOOR / INDOOR	ON = Indoor OFF = Outdoor
CROSSING / APPROACH	ON = Approach OFF = Crossing
MW Antimask Deactivation	ON = Deactived OFF = Activated
LED OFF	ON = LED OFF OFF = Led ON

GLOBAL ANTIMASK - *Total Antimask MW + IR*
DipSwitch N°1 in pos. ON and Plastic Front closed

Any element that can mask the MW or the lens of the IR generates an alarm displayed by the three flashing LEDs, and sent to the central through the connection terminal MASK. This signal remains until it is removed the cause that generated it.

The enabling of Antimask function will be active only after the closing of the plastic front and will bring the sensor in a condition to MaskAdjust

In this condition, in which the LEDs will flash alternately for about 60 seconds, the sensor will calibrate its antimask levels.

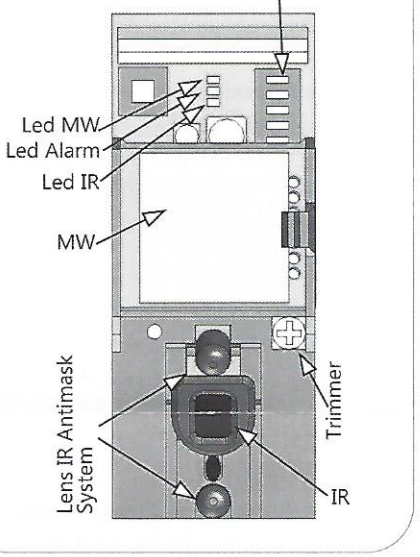
Closed the Plastic Front is therefore necessary to remove your hands from the sensor, and do not move and do not put anything in its immediate vicinity.

At the end of MaskAdjust the sensor will be ready for operation.

You automatically have two levels of sensitivity of the AntiMask selecting the operation OUTDOOR/INDOOR:

INDOOR : maximum of sensitivity

OUTDOOR: optimized sensitivity on atmospheric disturbances



EXCLUSION of MW's ANTIMASK - *DipSwitch N°4 in pos. ON*

You may exclude the Antimask of Microwave in installations that presenting solid bodies in motion in the immediate vicinity of the sensor and which could cause Antimask alarms : Blinds of metal, shutters of metal, etc..

INDOOR /OUTDOOR - *Dip Switch n° 2 in pos OFF Outdoor/ in pos ON Indoor*

You have the ability to select the most suitable algorithm, such as sensitivity and speed, to the type of installation chosen in order to reduce false alarms and to have always the highest detection capability in the istallation you have choose.

INDOOR has a capacity of detection and false alarm rejection typical of indoor volumetric sensors.

In OUTDOOR, the detection capability has been optimized considering the possible disturbances caused by atmospheric disturbances.

Note: The Installer can reverse the use of two settings (OUTDOOR to the Indoor of a building, and INDOOR for outdoor use) if the Installer detects an external site where there is a low possibility of interference, or an internal site where there is high possibility of false alarm.

CROSSING / APPROACH- *Dip Switch n° 3 in pos OFF Crossing / in pos ON Approach*

In a Barrier protection is necessary to establish at the time of installation, which will be the transit direction of the intruder in reference of the barrier.

The two settings are then optimized to exploit the different characteristics of the two detection sensors (MW and IR) in these two different situations of detection.

Considerations about the selectable sensitivities :

Using the dip switch No. 2 and No. 3 will have 4 different sensitivity of detection that have been optimized for operation in installations for outdoor or indoor, with movements that approaching the sensor, or crossing its detection lobe .

The levels of sensitivity, sorted by sensing speed (from fastest 1 ^ to slowest ^ 4), are listed in the table below:

1^ Indoor Crossing
2^ Indoor Approach
3^ Outdoor Crossing
4^ Outdoor Approach

LED OFF *DipSwitch N°5 in pos. ON*

Disable the views of detection, keeping enabled the views of the memories.

Tab.1	DISPLAY		
	Led BLU	Led ROSSO	Led GIALLO
	MW	ALARM	IR
ANTIMASK	FLASH	FLASH	FLASH

TRIMMER

Adjusts the range of the sensor.

To the adjusting to keep as a reference the range determined by the microwave (MW). The sensor will automatically adjust the operation of the Infrared (IR) to this adjustment.

Note: contrary to the microwave, for which it is possible to determine with sufficient precision its limit of detection, for the infrared this condition is not applicable.

This is because the infrared detection is affected by ambient temperature, from clothing of the intruder, the presence / absence of wind, etc..

The trimmer thus automatically adjusts the detection capability of the Infrared as a function of the microwave range selected, without necessarily delimit its field of action as that of the microwave (the Infrared will be automatically configured for the most adverse conditions at that range).

You can so have infrared detections even to greater distance than that defined by the trimmer without compromising the reliability of the sensor.

FUNCTIONS TROUGHT INPUT LINE

These functions are activated / deactivated by the System arming ON / System arming OFF.

It is considered:

12V on INPUT = System arming **OFF**

0V on INPUT = System arming **ON**

REMOTE ENABLING LED

REQUEST CONDITION LED OFF

At the System arming OFF, the sensor will arrange for the rehabilitation of the views of detection.

The views will be rehabilitated at the first detection, and will remain active for 30sec.

MEMORIES

At System arming OFF, will displayed the memory of the first alarm occurred, as in fig.1.

The memory will be resetted to the next System arming ON

DELAY of MEMORY for use in TIMED ZONES

Time of Exit: alarms that occur within the first 30sec. from the System arming ON will be erased.

Time of Entry: alarms that occur 30 sec. before the System arming OFF will be erased

Tab.2	MEMORY DISPLAY		
	BLU Led	RED Led	YELLOW Led
PIR+MW	OFF	ON	OFF
ANTIMASK	FLASH	ON	FLASH

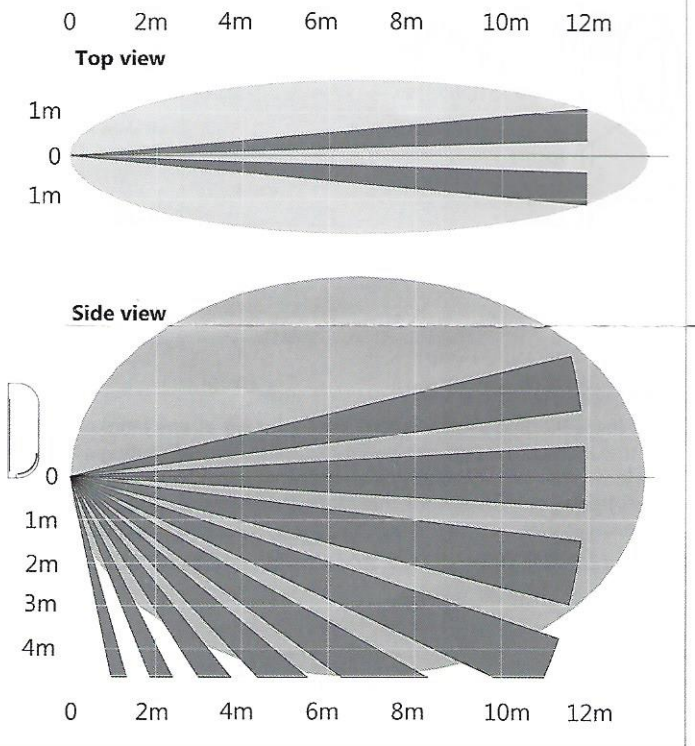
DECLARATION OF CONFORMITY'

The Manufacturer declares that this equipment is compatible with the essential requirements of Directive 1999/5/EC

REFERENCE NORMATIVES

EN50131-2-4 Grade 2, CLASS IV

The manufacturer reserves the right to add, remove or change features or functions in order to technical improvements at any time.



SPECIFICATION

Voltage:	12V ⎓ +/- 3V
Current Max (in memory of All.):	32mA
Current Stand By:	12mA
Mocrowave:	24 Ghz
Alarm Period:	3 sec
Opto Rele':	100mA/24V
Tamper:	100mA/30V
Operating Temp: -	-10°C/+55°C
Ambient umidity:	95%
Teoric MTBF:	120.000 ORE
Dimensions:	110 x 44 x 46mm
Performance Level:	**EN50131-2-4 Grade 2 CLASS IV**

CE R&TTE