





## PRODUCT DESCRIPTION

Curtain Dual-technology detector Microwave (MW) + Infrared sensor (PIR).

  Total self-protection system (bypass and partial activation possibilities) consisting of Microwave Anti-Mask and active IR-lens Anti-Blinding.

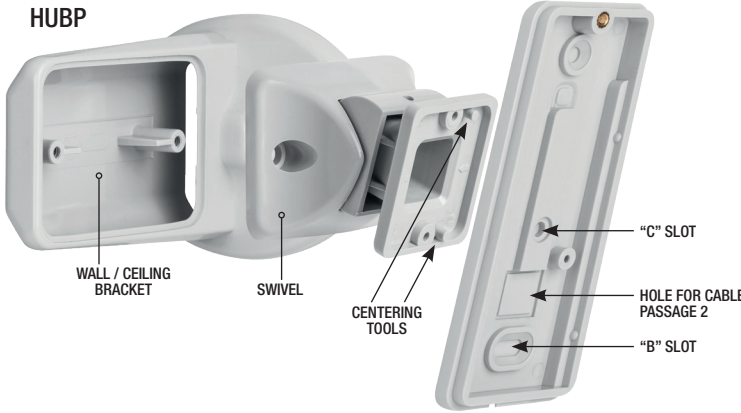
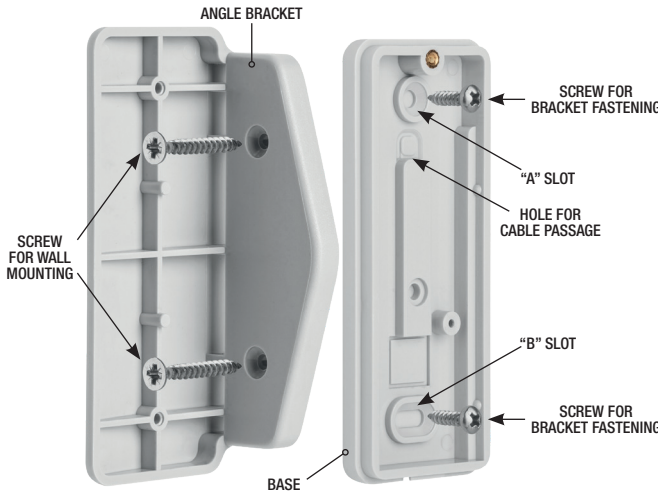
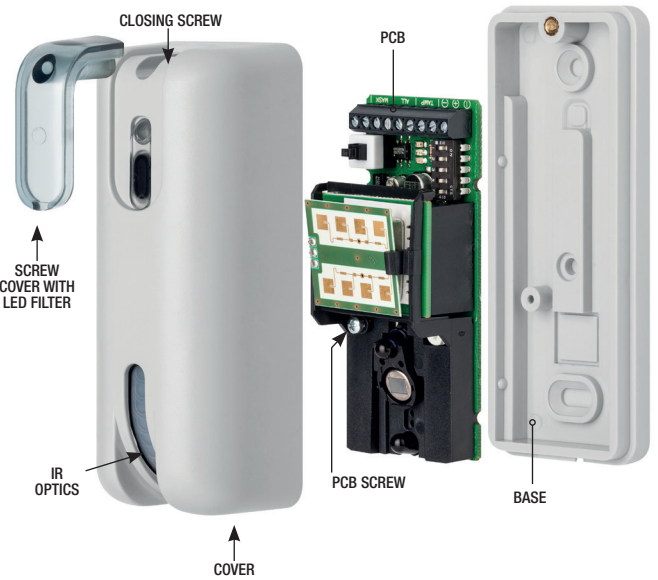
 4 sensitivity degrees for all possible installations (indoor, outdoor, approach, crossing) come with a trimmer to adjust the detection range.

 8m x 140cm barrier.

- Alarm memory, Anti-Mask memory and interactive management of LEDs switching off.
- Possibility to choose between wall or ceiling mounting thanks to the angle bracket (standard accessory).
- IP61 polycarbonate housing, perfect for all weather conditions (*To obtain IP61 degree, seal the hole dedicated to cable passage using some silicone*).
- Deep-slot optics ensuring high immunity of the IR section against all phenomena/interference excluded from its detection range.
- LED filter enabling to limit the detection range to the immediate area of the device.

## ACCESSORIES PROVIDED WITH THE DETECTOR

- 1 pc. polycarbonate angle bracket
- 4 pcs. 3.5 x 9.5 screw to fasten the angle bracket
- 2 pcs. 6 mm diameter wall plug
- 2 pcs. 4 x 30 screw for wall mounting.



## INSTALLATION

- Unscrew the CLOSING SCREW to open the COVER.
- Unscrew the PCB SCREW to remove the PCB from the BASE.

### WALL installation or installation with ANGLE BRACKET:

- Cut A SLOT and B SLOT located on the BASE.
- Cut the HOLE FOR CABLE PASSAGE.
- Pass the cable through the HOLE FOR CABLE PASSAGE (*To obtain IP61 degree, seal the hole dedicated to cable passage using some silicone*).
- For direct wall installation, fasten the BASE using the screws provided that must be located in A SLOT and B SLOT.
- For installation with ANGLE BRACKET\*, mount the bracket on the wall using the screws provided and then fasten the BASE to the bracket using the screws provided that must be located in A SLOT and B SLOT.
- Fasten the PCB to the BASE and then proceed to POWER SUPPLY AND ADJUSTMENT.

*\*The angle bracket can be mounted rightwards or leftwards.*

### Installation with HUBP (Optional):

The SWIVEL can be mounted directly on the wall/ceiling using the screws and wall plugs provided, or on the WALL/CEILING ADAPTER using the screws for bracket fastening. This accessory enables the detector to be turned of +/-45° on a level and of +30° on the other level.

- Pass the connection cable through the WALL/CEILING ADAPTER and proceed to wall fastening.
- Pass the connection cable through the HUBP and fasten it to the WALL/CEILING ADAPTER.
- Pass the cable through the HOLE FOR CABLE PASSAGE 2.
- Fasten the BASE on the SWIVEL using the screws for bracket fastening that must be located in B SLOT and C SLOT.
- Adjust the swivel and fasten the screw to block the swivel through the HOLE FOR CABLE PASSAGE 2.
- Fasten the PCB to the BASE and proceed to POWER SUPPLY AND ADJUSTMENT.

## Power supply and adjustment:

- Connect the cables to the terminal block following the scheme.
- Use the trimmer to adjust the detection range (*see Setting section*).
- If necessary, proceed to working setting (*see Setting section*).
- Locate the COVER and fasten it using the CLOSING SCREW.
- Locate the SCREW COVER WITH LED FILTER.
- Power the detector and wait for the Walk Test condition to run automatically. All LEDs blink one after the other for about 60" and the detector adjusts its parameters. At the end of the Walk Test, the device is ready to work.

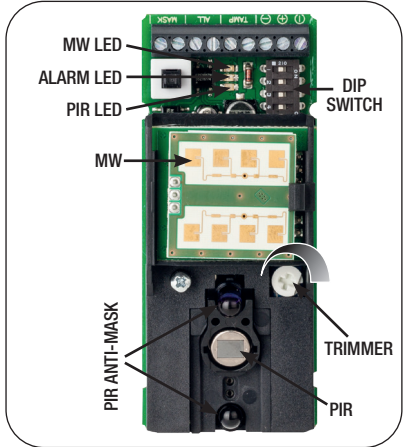
TERMINAL BLOCK	-	INPUT for alarm system recognition
	12V +	12V power supply input
	TAMP	NC tamper contact
	ALL	NC alarm relay
	MASK	NC anti-mask relay

**WARNING: IF MODIFICATIONS OF THE DIP SWITCHES OR OF THE TRIMMER OF THE DETECTION RANGE OCCUR WHILE THE DETECTOR IS WORKING, IT IS ADVISABLE TO TAKE AND GIVE POWER BACK TO THE DETECTOR TO ACHIEVE AN OPTIMIZED ADJUSTMENT OF MICROWAVE, INFRARED AND ALL ANTI-MASK FEATURES.**

## SETTING

Set the dip switches according to the scheme below to adapt the detector to the specific installation needs.

DIP SWITCH	
1. GLOBAL ANTI-MASK PIR + MW	ON = ENABLED OFF = DISABLED
2. INDOOR / OUTDOOR	ON = INDOOR OFF = OUTDOOR
3. APPROACH / CROSSING	ON = APPROACH OFF = CROSSING
4. MW ANTI-MASK BYPASS	ON = DISABLED OFF = ENABLED
5. LED DEACTIVATION	ON = LEDs OFF OFF = LEDs ON



## GLOBAL ANTI-MASK – DIP SWITCH 1

Microwave (MW) Anti-Mask + Infrared sensor (PIR) Anti-Blinding are enabled: DIP SWITCH 1 is in ON position.

Everything able to mask the microwave or the infrared causes an alarm, that is signaled through a blink of the three LEDs and sent to the Control Panel via the dedicated terminal (MASK). The signalization remains until the cause generating the Anti-Mask alarm is removed. To enable the Anti-Mask function, the cover of the detector must be located in its position and properly fastened. The detector starts a Mask Adjust condition: all LEDs blink one after the other for about 60" and the detector adjusts its parameters. At the end of the Mask Adjust time, the device is ready to work.

## INDOOR/OUTDOOR – DIP SWITCH 2

DIP SWITCH 2 in OFF position: OUTDOOR working mode

DIP SWITCH 2 in ON position: INDOOR working mode

This function enables the device to be adapted to the installation needs: sensitivity and speed are set to reduce false alarms and maximize the detection potential.

INDOOR working mode enables a better detection power, whereas OUTDOOR working mode makes the detector immune against interferences caused by weather events.

This configuration automatically sets both Anti-Masking and Anti-Blinding in OUTDOOR and INDOOR working mode.

**Note:** settings can be reversed in case of OUTDOOR installation with low interference possibility or in case of INDOOR installation with high false alarms possibility.

## CROSSING/APPROACH – DIP SWITCH 3

DIP SWITCH 3 in OFF position: CROSSING working mode

DIP SWITCH 3 in ON position: APPROACH working mode

When installing the detector, the installer must choose the passage direction for the intruder to be detected. The two working modes are optimized to maximize the detection power of the device.

### About sensitivity type:

The chart below lists the detection speed for each working mode chosen. Use DIP SWITCHES 2 and 3 to select the best option according to the installation characteristics.

*The sensitivity degrees are ordered according to the detection speed (from 1, the fastest, to 4, the slowest)*

SPEED	DIP SWITCH 2	DIP SWITCH 3
1	INDOOR	CROSSING
2	INDOOR	APPROACH
3	OUTDOOR	CROSSING
4	OUTDOOR	APPROACH

### MW ANTI-MASK BYPASS – DIP SWITCH 4

DIP SWITCH 4 in ON position: MW ANTI-MASK is bypassed.

Microwave Anti-Mask function can be bypassed in case solid bodies are expected to move close to the device since, if MW Anti-Mask remains active, such passages might cause masking alarms.

### LEDs OFF – DIP SWITCH 5

If DIP SWITCH 5 is in ON position, the LEDs of the device do not provide any signalization with reference to the detections occurring. Memory signalizations remain active.

LEDs		
BLUE LED	RED LED	YELLOW LED
MICROWAVE	ALARM	INFRARED
FLASHING LED IN CASE OF MASKING OR BLINDING ALARM		

### TRIMMER

The trimmer sets the detection range of the device.

The setting determines the maximum detection range of the microwave. The device itself adapts the infrared automatically.

**Note:** while the Microwave allows its detection limit to be determined in a quite precise way, such possibility is not available for the Infrared, since the Infrared detection is influenced by several factors: the temperature the device works in, how the intruder is dressed up, presence of wind, etc.  
Infrared detections at a greater distance with respect to the one set through the trimmer are possible. However, this does not invalidate the detector reliability.

### FUNCTIONS WITH INPUT LINE

The INPUT line enables the remote management of the FUNCTIONING LEDs and of the MEMORY function of any alarm occurred.  
Such functions are activated giving to INPUT terminal 12V, which the detector considers as ALARM SYSTEM DISARMING, and OV, which the detector considers as ALARM SYSTEM ARMING.

### REMOTE LEDs ACTIVATION

ONLY WITH DIP SWITCH 5 IN ON POSITION

When the alarm system is disarmed, the detector enables once again the LEDs signalization. All signalizations are enabled again at the first detection and remain active for 30".

### MEMORY

When the alarm system is disarmed, the memory of the first alarm occurred is visualized. The memory is reset at the following alarm system arming.

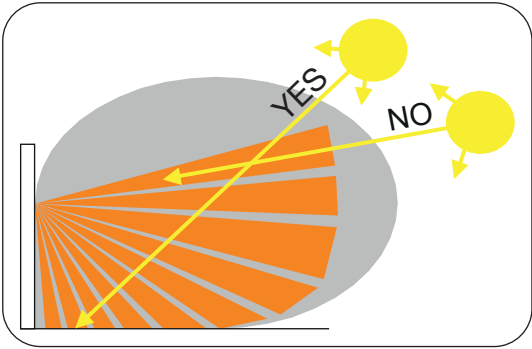
#### Memory delay because of usage in timed-zones

- Exit time: all alarms occurring during the first 30" after alarm system arming are cancelled;
- Entry time: all alarms occurring during the 30" preceding alarm system disarming are cancelled.

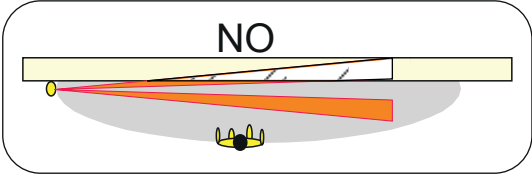
MEMORY STATUS VISUALIZATION			
	BLUE LED	RED LED	YELLOW LED
PIR+MW	OFF	ON	OFF
ANTI-MASK	FLASHING	ON	FLASHING

### INSTALLATION ADVICES

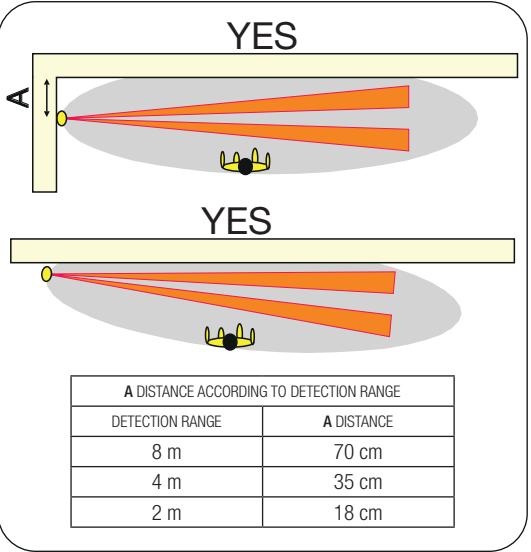
The manufacturer suggests to locate the detector between 1.80 m and 2.50 m height from the ground. If the SWIVEL is used in the installation, the detector should be mounted in tilted position (30°) between 1.80 m and 4.00 m height from the ground.  
In indoor installations, the manufacturer suggests to locate the detector looking towards the inside of the room, far from moving machineries and heat sources.  
The device should not be positioned looking towards windows with direct sun exposition. In outdoor installations, avoid the sunrays to directly hit the IR OPTICS, especially in the hottest hours.



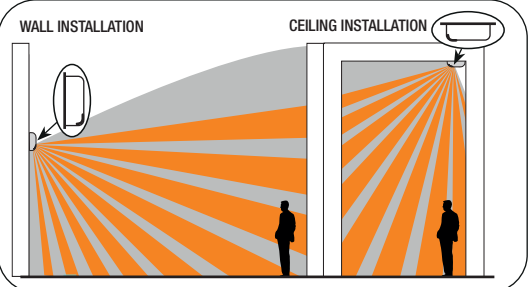
When the device is installed as wall protection, avoid one of the IR beams to intersect the wall since this might interfere with the detection effectiveness.



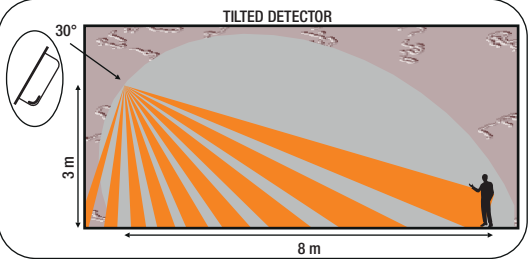
Follow the instructions provided in the chart and install the detector in detached position with respect to the wall, or use HUBP swivel accessory to twist the detector of some degrees (optional).



In case of horizontal or vertical installations (without using HUBP accessory), it is advisable to have a wall/floor limiting the detection area of the device. The detector must not point towards an unlimited space.



In case the detection range cannot be limited through a wall/floor, the detector should be mounted in tilted position (30°) using HUBP SWIVEL.

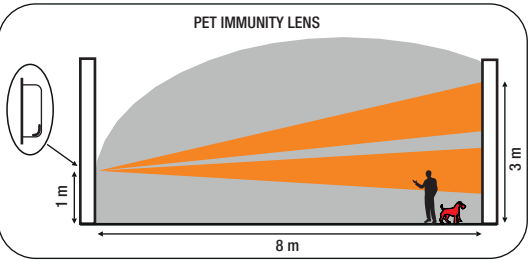


PREVENT THE DEVICE TO CATCH ANY MOVING OBJECT IN ITS DETECTION AREA.

**Note:** the maximum detection area of the detector is set according to the average mass of a human body. Therefore, the device is able to detect big animals (horses, cows) or big moving objects (cars) at greater distances.

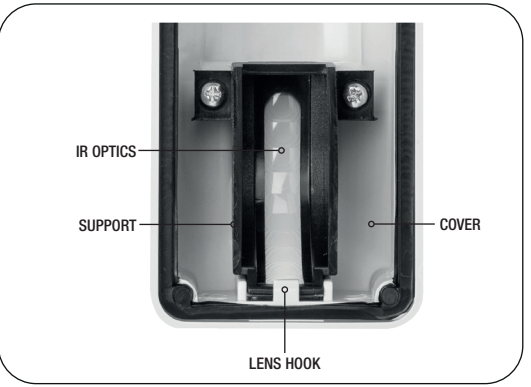
### PET IMMUNITY LENS

In case small animals are expected to pass in the detection area of the device, use the Pet Immunity lens (optional).  
In such case, the detector must be located on a vertical surface, between 80 cm and 140 cm height from the ground.



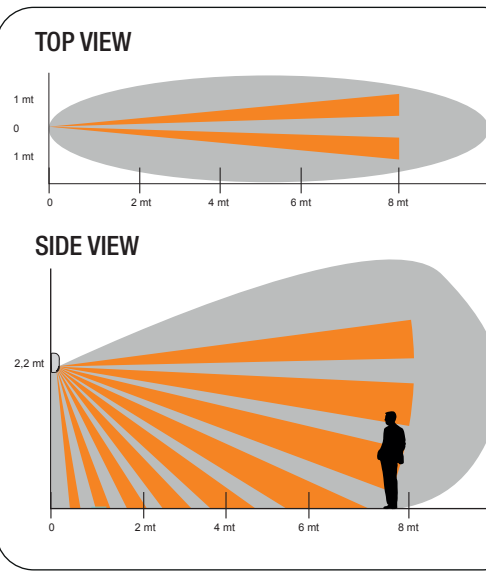
### HOW TO MOUNT THE PET IMMUNITY LENS

Insert the Pet Immunity lens in the SUPPORT. The lens slot must look towards the upper part of the detector. Block the lens through the LENS HOOK.  
In this way, the lens leaves the upper detection zones free.



### ANTI-REMOVAL TAMPER (Optional)

Possibility to include the ANTI-REMOVAL TAMPER accessory to detect any tampering attempt of the HUBP swivel.



TECHNICAL FEATURES	
Power supply:	12V --- +/-3V
Max consumption:	32 mA
Consumption in stand-by:	12 mA
Microwave:	24 Ghz
Alarm time:	3"
Alarm relay:	100 mA/24V
Tamper:	100 mA/30V
Wall Tamper: (optional)	300 mA/48V
Working temperature:	-10°C/+55°C
Environment humidity:	95%
Supposed MTBF:	120,000 hours
Size without accessories:	110x44x42 mm
Performance degree:	EN50131-2-4 Degree 2, CLASS III

### COMPLIANCE DECLARATION

VENITEM srl declares that this radio equipment is compatible with the essential requirements of the Directive 2014/53/UE. The declaration of conformity is available on website: [www.venitem.com](http://www.venitem.com)

### REFERENCE NORMS

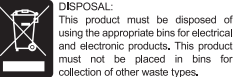
EN50131-2-4 Degree 2, CLASS III.

The Serial Number «ID» of the detector is printed on a label on the board of the detector.

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

### WARRANTY

All Venitem products are guaranteed against manufacturing or components defects. With the aim of improving design and quality of its products, Venitem retains the right to modify the products without any previous notice. All defective or failed products have to be returned to the supplier.



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VENITEM SRL  
Via del Lavoro, 10  
30030 Salzano (VE) - Italy  
[www.venitem.com](http://www.venitem.com)