



User manual

IVP 7001 MW PET



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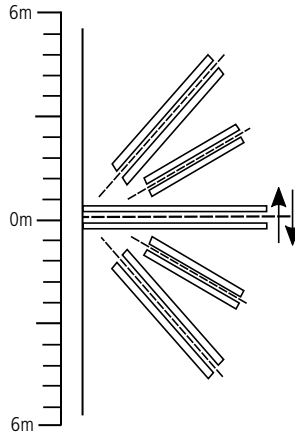
Passive infrared sensor

Congratulations, you have just purchased a product with Intelbras quality and safety.

The IVP 7001 MW PET passive infrared sensor has triple technology, which combines microwave detection with detection by passive infrared rays and immunity to animals up to 20kg. Advanced signal analysis technology prevents false triggering indoors.

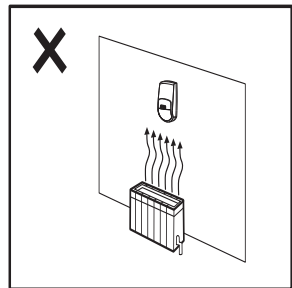
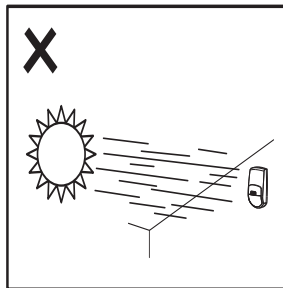
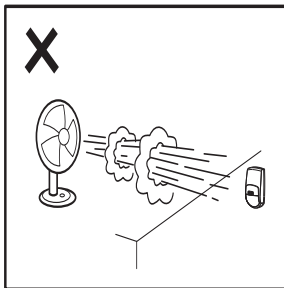
Care and safety

- » Follow all instructions in the manual for assembling and installing the product.
- » This sensor is intended for indoor environments.
- » LGPD - General Law for the Protection of Personal Data: Intelbras does not access, transfer, capture, or perform any other type of treatment of personal data from this product.
- » Do not touch the surface of the infrared (PIR) sensor. If necessary, use a soft cloth for cleaning.
- » The sensor must be installed where a possible intruder is easily detected, that is, where a person performs movements transverse to the sensor's detection beams when entering the environment. The optimal installation height is 2.2 m, depending on the installation environment, the sensor can be installed from 2 to 2.4 m in height.

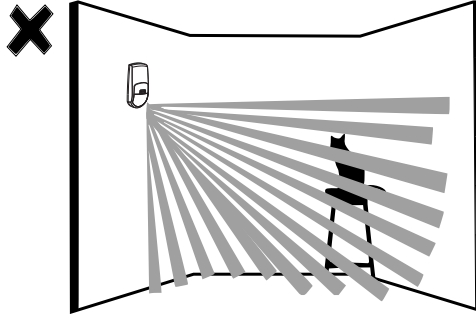


Top view

- » Do not place objects in front of the sensor. Keep the detection area free of objects that move or block the scan. Do not exceed the maximum sensor installation height (2.4 m).
- » Do not use the sensor in areas with sudden changes in temperature, near air conditioners, heaters, cooling fans and ovens.

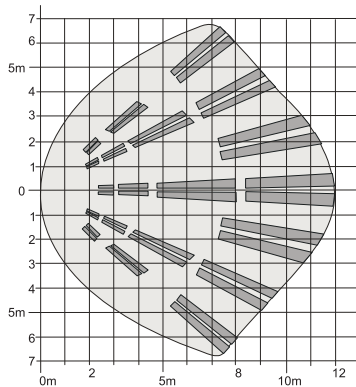


» It is important *to note that the Pet function is designed for crawling animals*, so if the animal is not on the ground, but on top of a bench, for example, it can be detected thus canceling the Pet function , as seen in the image below :

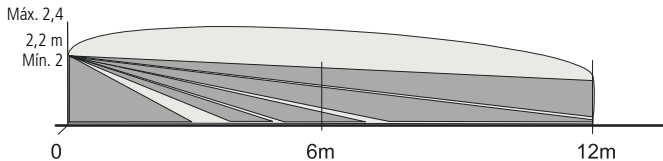


- » Do not install the sensor facing glass doors or windows.
- » Make sure the installation location is stable and free from flickering.
- » For your security, test the product and systems at least once a week. This is necessary due to changes in environmental conditions, electrical or electronic interruptions and violations. Take all necessary precautions for the security and protection of your property.

Scan (top view)



Detection range (side view)



Summary

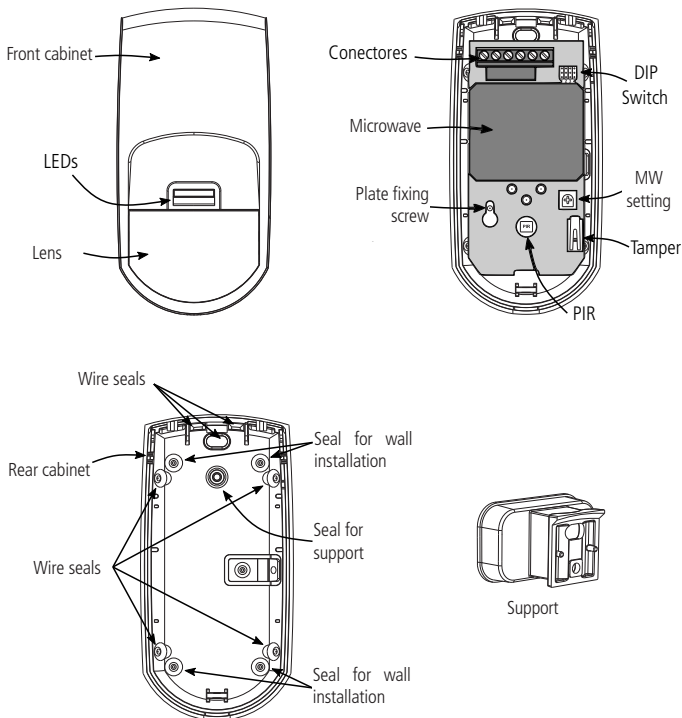
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1. Technical specifications

Operating voltage	9-16 Vdc
Operating Current	≤ 40 mA (12 Vdc)
Detection Angle	90°
Detection range ¹	12 × 12 m ± 20%
Detection method	MW and PIR
AND and OR function	Yes
Anti-camouflage	Yes (OR function)
Sensor element	Low noise PIR
MW antenna	GaAs FET
MW Frequency	10.525 GHz
Immunity to animals	Up to 20 kg
Detection pulse (P. COUNT)	1P, 2P, 3P
Recommended installation height	2.2m
Installation height range	2.0 to 2.4 m
Alarm output	NF / NA selectable, 28 Vdc, 80 mA max
Tamper switch	NF, 28 VDC and 100 mA max
LED indicators	Green (PIR), Yellow (MW) and Red (Alarm)
Start Time	60s
Relay opening time	5s
Operating temperature	-10 °C ~ +50 °C
Dimensions (W × H × D)	60 × 120 × 37 mm

¹ The sensor's detection range can be influenced by the environment.

2. Product



3. Characteristics

- » Microcontrolled signal processing;
- » Microwave (Doppler effect) + infrared;
- » Adjustable microwave power;
- » Automatic temperature compensation to reduce false alarms;
- » Immunity to white light up to 10,000 lux;
- » Articulating bracket for attachment;
- » High immunity to RFI / EMI - shield;
- » Selectable relay output NA and NF (Normally open and normally closed);
- » Infrared sensitivity (PIR) adjustable;
- » Immunity to crawling animals weighing less than 20 kg;
- » Anti-tamper protection (tamper switch).

4. Installation

Before starting the installation, it is necessary to define the height at which the sensor will be positioned, which can vary from 2 to 2.4 m;

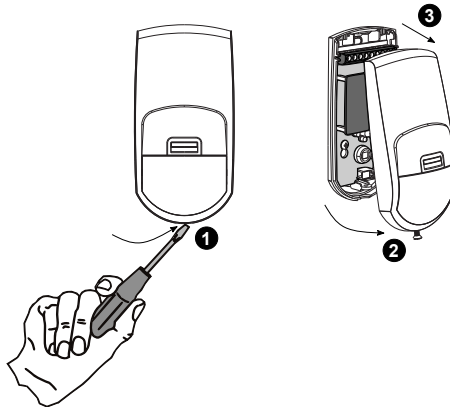
- » Do not install sensors that have microwave technology close to each other, as there may be interference between them;
- » Adjustment of the sensitivity of the PIR (P. Count) and the microwave must be made according to each environment.
- » For environments that have the circulation of pets, we recommend that you use the following configuration for the correct operation of the *PET function*:

<i>PET function</i>	
Installation height	Between 2.3 and 2.4 m
AND / OR function	AND
PIR sensitivity	3P

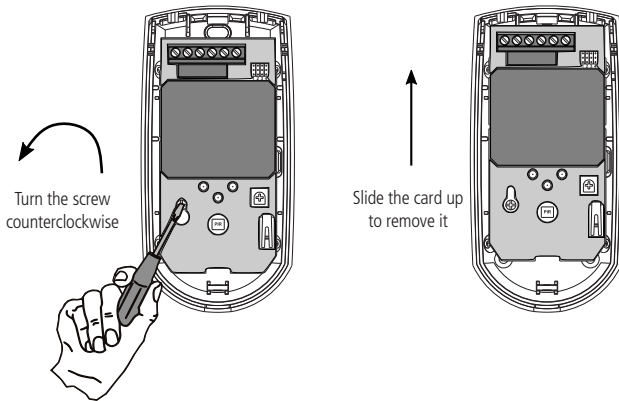
Note: if the sensor is configured at maximum sensitivity (1P), unwanted triggering may occur with the presence of pets.

To attach the sensor follow the steps described below:

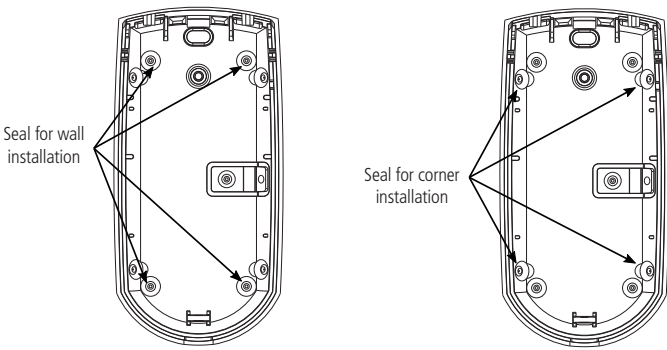
1. Open the sensor, as shown below:



2. Remove the card to perform the installation:



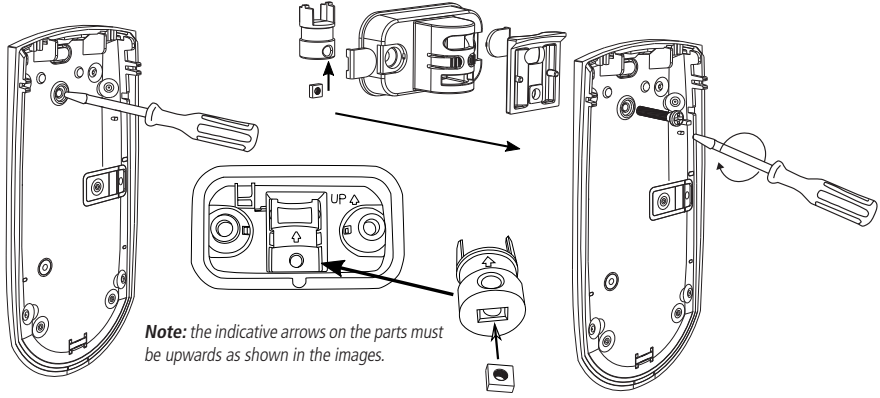
3. For installation directly or in a wall corner, break the seals indicated for the holes in the rear attaching cover:



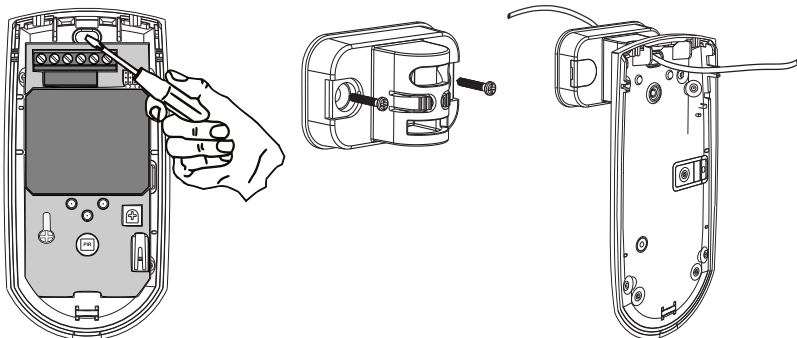
4. Installation without using the articulator:

Attention: if the mounting bracket is inclined with respect to the ground, the characteristics of the **PET function** will change. This support only has horizontal movement, and vertical movement is not possible.

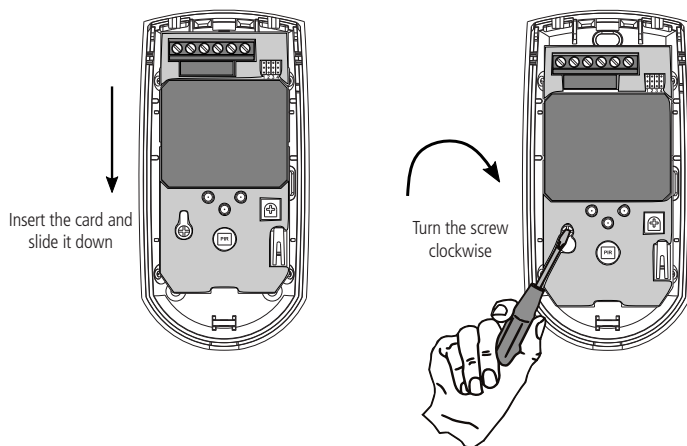
» With the help of a wrench, break the screw passage seal located on the rear cover and connect the articulator parts and the screw on the rear of the cabinet, as shown below:



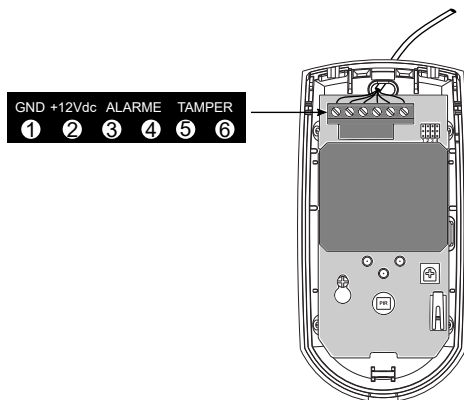
- » For installation directly on the wall, drill the holes in the positions indicated on the base of the articulator. For installation in the corner of the wall, it is not possible to use the bracket. Before screwing the articulator in position, drill the cable passage seal on the base and pass the cable as shown in the images:



5. Fit the board back into the cabinet as shown below:



6. Connect the cables following the terminal indications. When powered on, the sensor LEDs will flash for 60s. This time is necessary to stabilize the amplification circuit of the PIR sensor and the microwave.



7. Perform the configuration on the sensor:

- » The LED jumper is used to control the LED indication without interfering with the detector. With the switch in the On position, the LEDs are enabled to function normally. With the switch in the Off position, the LEDs are disabled, that is, they do not light up. Factory default: LEDs On.

LED		
Dip	Position	Condition
2	On	LED on.
	Off	LED off

- » P.COUNT: controls the pulse count of the PIR sensor to trigger the alarm. This adjustment has three selectable levels, according to the table below. Choose the configuration accordingly according to the environment in which the sensor will be installed. Factory Default: 1P

Note: Off-Off configuration must not be used.

P. COUNT			
Dip	Position	Condition	
4	5	On - On	1P - Maximum sensitivity
		On - Off	2P - Intermediate sensitivity
	Off - On	3P - Minimum sensitivity (EMI and RFI) Greater immunity to false triggering	

- » *AND / OR function*: controls the sensor detection mode. In the AND position, both the PIR and the microwave need to detect the presence of an intruder simultaneously to trigger the sensor. In the OR position, the sensor will trigger if the PIR or microwave detects it. Factory Default: AND

AND / OR		
Dip	Position	Condition
1	On	AND - PIR and microwave detection for triggering the alarm
	Off	OR - PIR or microwave detection for triggering the alarm

- » The sensor also has a trimpot (MW setting) to adjust the microwave sensitivity. Turning the trimpot clockwise will increase the sensitivity, turning it counterclockwise will make the microwave less sensitive. Factory default: MAX (maximum sensitivity).

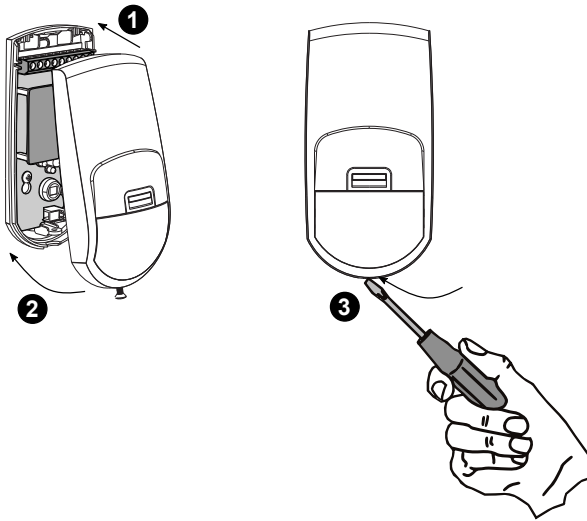
Caution: the microwave setting must be at the sensitivity that is able to provide detection only in the protected area to avoid undue triggering.

Microwaves	
Position	Condition
MIN.	Minimum detection range
MAX	Maximum detection range

- » Relay: controls the state of the relay contact. In the Off position, the contact is normally closed. In the On position, the contact is normally open. Factory default: NF (normally closed).

Relay		
Dip	Position	Condition
3	On	NF- Normally closed
	Off	NA- Normally open

8. Close the sensor by inserting the front of the case again and tightening the screw:



5. Troubleshooting

- » Perform the walk test by verifying that the entire area you want to protect is being detected by the sensor. If this does not happen, readjust the PIR and microwave detection sensitivity. To do this, perform the following steps:
 1. Remove the front of the case by unscrewing the locking screw;
 2. Readjust the PIR and MW sensitivity as desired;
 3. If the articulator is being used, make sure that its position allows you to detect the desired area. If necessary, change the position of the articulator;
 4. Reseat the front of the case and perform detection tests;
 5. Tighten the locking screw.

Important: make sure that the microwave is detecting movement only in the desired environment, this is necessary because the microwave can cross obstacles, such as walls, doors, windows, glass, etc.

- » LED Indications
 - » Green LED: infrared activation.
 - » Yellow LED: microwave activation.
 - » Red LED: alarm activation

Note: when there is a detection, the LED and the Relay were activated for an interval of 3 seconds.

6. Approval

This equipment is not entitled to protection against harmful interference and must not cause interference in duly authorized systems.

Warranty term

It is established that this warranty is granted upon the following conditions:

Client's name:

Client's signature:

Invoice number:

Date of purchase:

Model:

Serial number:

Retailer:

1. All the parts, pieces and components of the product are guaranteed against possible manufacturing defects, which may arise, for the term of 1 (one) year - this being 90 (ninety) days of legal warranty and 9 (nine) months' contractual warranty –, counting from the date of purchase of the product by the Consumer, as appears in the product purchase bill of sale, which is an integral part of this Term throughout the domestic territory. This contractual warranty includes the free exchange of parts, pieces and components which have a manufacturing defect, including the expenses with labor used in this repair. If there is no manufacturing defect, but defect(s) arising from misuse, the Consumer shall bear these expenses.
2. The installation of the product shall be executed in accordance with the Product Manual and/or Installation Guide. If your product requires the installation and configuration by a qualified technician, seek a suitable specialized professional, the costs of these services not being included in the product amount.
3. Having perceived the defect, the Consumer shall immediately contact the nearest Authorized Service which appears in the report offered by the manufacturer – they are the only ones authorized to examine and remedy the defect during the warranty term foreseen herein. If this is not respected, this warranty shall lose its validity, as it shall be characterized as product infringement.
4. If the Consumer requests home service, it shall contact the nearest Authorized Service to inquire about the technical visit rate. If it is necessary to remove the product, the ensuing expenses, such as those of transportation and insurance of the taking and return of the product, shall be the Consumer's responsibility.
5. The warranty shall lose its validity totally in the occurrence of any of the following cases: a) if the defect is not one of manufacture, but is caused by the Consumer or by third parties foreign to the manufacturer; b) if the damage to the product arises from accidents, disasters, agents of nature (lightning, floods, landslides, etc.), humidity, voltage in the electrical network (excess voltage caused by accidents or excessive fluctuations in the network), installation/use in disagreement with the user's manual or arising from natural wear of the parts, pieces and components; c) if the product has undergone effects of a chemical, electromagnetic, electrical or animal (insects, etc.) nature; d) if the serial number of the product has been falsified or erased; e) if the appliance has been infringed.
6. This warranty does not cover loss of data; therefore, it is advisable that if it is the case of the product, the Consumer makes a backup regularly of the data which appears in the product.
7. Intelbras is not responsible for the installation of this product, or for possible attempts at fraud and/or sabotage in its products. Maintain the updates of the software and applications used up-to-date, if it is the case, as well as the network protection required for defense against hackers. The equipment is guaranteed against defects in its usual conditions of use, it being important to bear in mind that, as it is electronic equipment, it is not free of fraud and scams which may interfere with its correct functioning.
8. After its useful life, the product must be delivered to an authorized Intelbras service center or directly disposed of in an environmentally appropriate manner to avoid environmental and health impacts. If you prefer, the battery, as well as other unused Intelbras brand electronics, can be disposed of at any Green Eletron collection point (waste management facility to which we are associated). If you have any questions about the reverse logistics process, please contact us at (48) 2106-0006 or 0800 704 2767 (Monday to Friday 8am to 8pm and Saturdays 8am to 6pm) or via -mail support@intelbras.com.br.

These being the conditions of this complementary Warranty Term, Intelbras S/A reserves the right to alter the general, technical and esthetic features of its products without prior notice.

The manufacturing process of this product is not covered by the requirements of ISO 14001.

All the images of this manual are illustrative.

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talk to us

Customer Support: (48) 2106 0006

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Where to buy? Who installs it? 0800 7245115

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