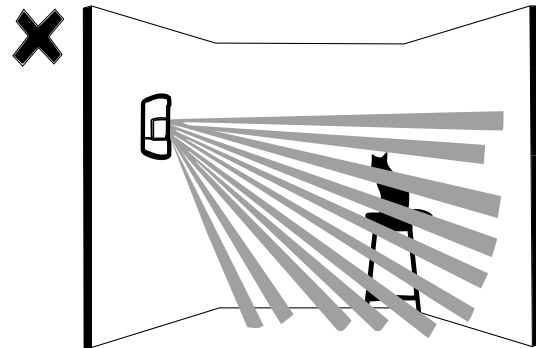
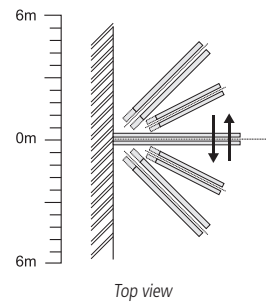


1. Care and safety

- » Follow all instructions in the manual for assembling and installing the product.
- » This motion sensor is intended for indoor and semi-open environments. Do not use the sensor in areas with sudden changes in temperature, near air conditioners, heaters, refrigerators and ovens. In semi-open environments, such as garages, sheds and covered balconies, the sensor must be fully protected from rain and direct sunlight.
- » Make sure the installation location is stable and free from flickering.
- » The sensor must be installed parallel to the wall, without tilting. If installed with any tilting, its performance may be impaired.
- » To clean the product, use a soft cloth.
- » 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 :



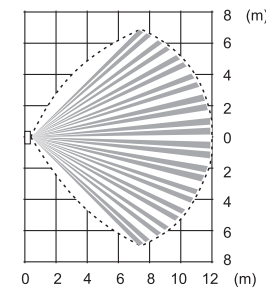
- » Do not touch the surface of the infrared (PIR) sensor. If necessary, use a soft cloth for cleaning.
- » The sensor must be installed where a possible intruder is easily detected, that is, where a person performs movements transverse to the sensor's detection beams when entering the environment. See the figure below.



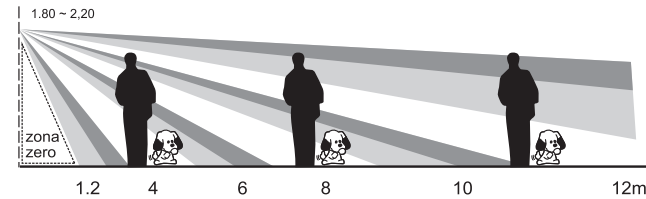
- » For the use of the articulator, we recommend that the installation is done by a professional installer, as its incorrect use may impair the *PET* function and the sensor coverage angle.
- » Do not place objects in front of the sensor. To ensure the detection area, avoid curtains, screens, partitions, or any object that blocks the scan. If the sensor is installed at a height greater than 2.2 m, its performance may be impaired.

Note: Before starting the installation, it is necessary to define the height at which the sensor will be positioned, which can vary from 1.80 to 2.2 m, according to the item table of 5. Instalação this manual.

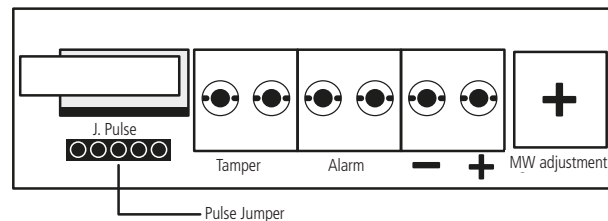
1.1. Scan (top view)



1.2. Detection range (side view)



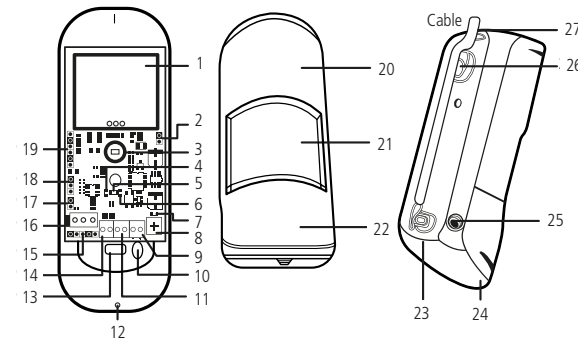
1.3. Terminal Block



2. Technical specifications

Operating voltage	9 – 16 Vdc
Operating Current	38 mA
Detection Angle	90°
Detection Range	12 m
Detection method	PIR and microwave
Immunity to animals	Up to 20 kg
Start Time	80 seconds
Operating temperature	-10 °C ~ +50 °C
Relay output	Optional Open / Closed
MW frequency	10.525 GHz
Sensor dimensions (W x H x D)	55 x 140 x 60 mm
Relay opening time	3 seconds

3. Product



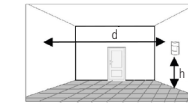
1. Microwaves
2. LED Jumper
3. PIR Sensor
4. LED microwave detection
5. Trigger LED
6. PIR detection LED
7. LED Microwave adjustment
8. Microwave sensitivity adjustment trim pot
9. Power feed terminal
10. Cable passages for installation
11. Alarm terminal
12. Screw hole for attaching the lower front cover
13. Screw hole for fixing directly to the wall
14. Tamper terminal
15. Pulse adjustment jumper
16. Tamper switch.
17. Relay adjustment jumper (NO / NC)
18. Mode jumper (AND is anti-camouflage)
19. Sensitivity adjustment jumper
20. Upper Front Cover
21. Fresnel lens
22. Lower Front Cover
23. Recess for lower cable routing
24. Screw hole for attaching the lower front cover
25. Screw location for installation in the corner of the wall
26. Oblong
27. Recess for upper cable routing

4. Features

- » Microcontrolled sensor;
- » Anti-camouflage technology.
- » Microwave sensitivity adjustment.
- » PIR pulse and sensitivity adjustment.
- » Automatic temperature compensation in real time;
- » Immunity to white light up to 20,000 lux;
- » High immunity to RFI / EMI;
- » Highly effective algorithm against false triggering.
- » Immunity to pets up to 20 kg;
- » Anti-tamper switch for lower front cover.
- » Quick Hitch Connector
- » Easy installation.

5. Installation

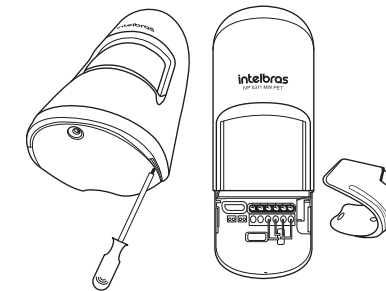
Before starting the installation, it is necessary to define the installation height of the sensor. We recommend that this sensor be installed according to the table below.



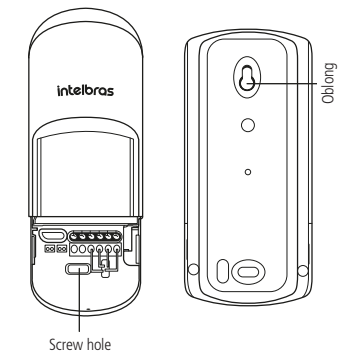
Distance (d)	Pet Animal	Installation height (h)
Less than or equal to 4 m	Without the presence of an animal pet	1.8 to 2 m
	With the presence of an animal pet	
Greater than 4 m to 12 m	With the presence of an animal pet	2.1 to 2.2 m
	Without the presence of an animal pet	1.8 to 2.2 m

The IVP 5311 Pet sensor does not have an articulator. . So for your installation, follow the procedure below:

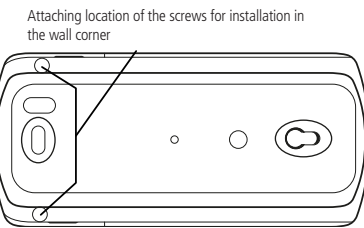
1. Remove the lower front cover of the sensor;



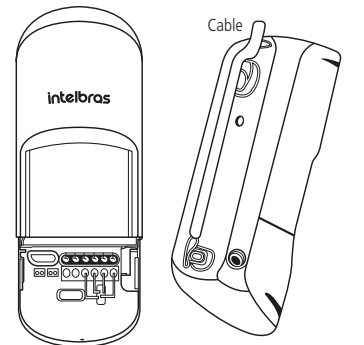
2. If the installation is done directly on the wall, use the oblong located in the upper back of the sensor and the hole indicated for placing the screw just below the connectors;



If installing in the corner of the wall, use the holes indicated on the back cover.

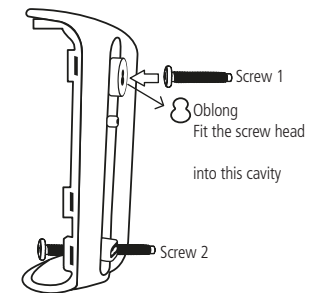


3. Connect the installation cables to the terminals;



Note: to facilitate installation, use the recesses in the rear cover for cable routing.

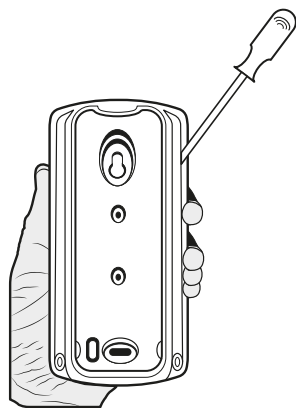
4. Using a 6 x 20 mm screw, install the sensor on the wall, performing the following procedure. Attach screw 1 on the wall and attach the sensor so that it does not have any slack. Using the hole below the connectors, place screw 2 and screw until the sensor is fully attached.



6. Configuring the IVP 5311 MW Pet sensor

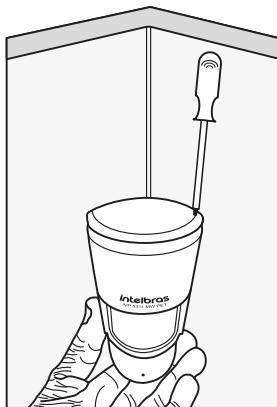
- » The J.LED jumper is used to control the LED indication without interfering with the detector. With the jumper in the *Closed* position, the LEDs are enabled to function normally. With the jumper in the *Open* position, the LEDs are disabled, that is, they do not light. Factory default: *LEDs enabled*.
 - » The J.Pulse *jumper* controls the pulse count of the PIR sensor to trigger the alarm. This adjustment jumper has four selectable levels, according to the second table below. Choose the configuration accordingly according to the environment in which the sensor will be installed. Factory default: 2 pulses.
 - » The SENS jumper also influences the sensitivity of the PIR sensor. This adjustment jumper has five selectable sensitivity levels, according to the third table below. Choose the configuration accordingly according to the environment in which the sensor will be installed. Factory default: level 3.
 - » 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: 50%.
- Note:** the microwave setting should be kept to the minimum possible sensitivity that can provide detection in the entire protected area to avoid undue fire.
- » The *Relay* jumper controls the state of the relay contact. With the jumper in the *Closed* position, the contact is normally closed. With the jumper in the *Open* position, the contact is normally open. Factory default: *Normally closed*
 - » The jumper *Mode* makes it possible to enable two different alarm activation modes, *AND* mode or *Anti-camouflage mode*.
 - » With th jumper *MODE* in position1 the sensor will operate in AND mode, that is, the sensor will activate when both technologies (PIR and microwave) detect the presence of an intruder at the same time. This function is indicated when the sensor is installed in semi-open environments or when pets are present in the environment.
 - » With the jumper *MODE* in position2, the sensor will be configured in anti-camouflage mode, that is, it will activate when there is detection in both technologies at the same time or when there are continuous detections of only the microwave, this guarantees the protection of the environment even if the PIR is camouflaged. This function is indicated for indoor environments without the presence of domestic animals.

Note: to make the Mode, Relay and LED sensitivity adjustments, it is necessary to open the front cover of the sensor, as shown in the following images.



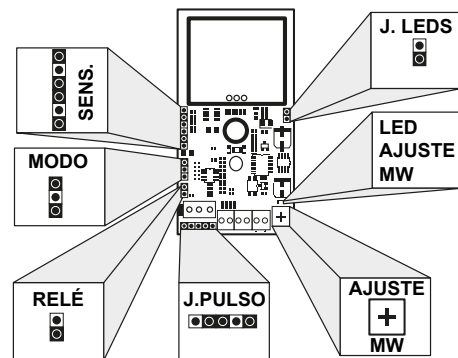
Situation 1 - before installation

Insert a screwdriver into the slot on the side of the cover. Gently move the key horizontally until the cover separates from the base.



Situation 2 - after installation

Insert a screwdriver into the side of the top cover fitting, making a movement similar to situation 1.



Setting jumpers identification

6.1. J.LED Jumper

Position	Condition
Open	LEDs disabled
Closed	Enabled LEDs (factory default)

6.2. Jumper J. PULSE

Position	Condition
1	High sensitivity
2	Sensitivity (factory default)
3	Medium Sensitivity
4	Low sensitivity

¹ If the JP4 jumper is absent, the low sensitivity setting will prevail.

6.3. SENS Jumper

Position	Condition
1	High sensitivity
2	Medium Sensitivity
3	Sensitivity (factory default)
4	Low sensitivity
5	Minimum sensitivity

¹¹ the SENS jumper is absent, the minimum sensitivity setting will prevail.

6.4. MW adjustment

Direction	Condition
	Rotating the trimpot clockwise will increase the sensitivity of the microwave Factory default: 50%.
	Rotating the trimpot counterclockwise will decrease the sensitivity of the microwave Factory default: 50%

Microwave range

Trimpot position	Maximum distance (meters)
	0 to 0.50
0%	
	5 to 11
25%	
	8 to 18
50%	
	11 to 26
75%	
	14 to 40
100%	

Note: the maximum detection distance of the microwave can vary according to the installation environment, therefore, perform some detection tests verifying that the entire area to be protected is safe.

LED Microwave adjustment

The LED microwave adjustment is a way of signaling the microwave detection. Therefore, when making the sensitivity adjustment, walk across the area you want to protect, observing

if the LED will light up.

6.5. Relay Jumper

Position	Condition
Open	Relay Open normally
Closed	Normally closed relay (factory default)

6.6. Jumper Mode

Position	Condition
1	AND mode (factory default)
2	Anti-camouflage mode

7. Test

When turned on, the sensor LED will flash with a 0.5 s interval for 80 s. This time is necessary to stabilize the amplification circuit of the PIR sensor and the microwave. 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 adjust the microwave sensitivity, perform the following steps:

1. Remove the lower front cover;
2. Do the walk test in the entire area you want to protect, observing if the LED indicating the microwave will light up, if the microwave is not covering the desired area, adjust the potentiometer (MW adjustment) gradually until the area is fully protected.

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.

7.1. LED indication

- » **Yellow LED:** infrared activation.
- » **Red LED:** activation by microwave.
- » **Blue LED:** alarm activation.

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

8. Approval



This equipment operates on a secondary basis, that is, it is not entitled to protection against harmful interference, even from stations of the same type, and cannot cause interference to systems operating on a primary basis.

Warranty

It is expressly stated that this contractual warranty is granted under the following conditions:

Customer name:

Customer Signature:

INVOICE NO.

Date of purchase:

Model: Serial number:

Reseller:

1. All parts, pieces and components of the product are guaranteed against any manufacturing defects, which may present, for a period of 1 (one) year - this being 90 (ninety) days of legal warranty and 9 (nine) months of contractual warranty -, counted from the date of purchase of the product by the Consumer, as stated in the invoice for the purchase of the product, which is an integral part of this Term throughout the national territory. This contractual warranty includes the express exchange of products with manufacturing defects. If no manufacturing defect is found, but a defect (s) arising from improper use, the Consumer shall bear these expenses.
2. The installation of the product must be done according to the Product Manual and / or Installation Guide. If your product requires installation and configuration by a qualified technician, look for a suitable and specialized professional, and the costs of these services are not included in the value of the product.
3. Once the defect is found, the Consumer must immediately contact the nearest Authorized Service listed in the list provided by the manufacturer - only these are authorized to examine and remedy the defect during the warranty period provided herein. If this is not respected, this guarantee will lose its validity, as it will be characterized as a violation of the product.
4. In the event that the Consumer requests home care, he / she should go to the nearest Authorized Service for consultation of the technical visit fee. If the need to remove the product is found, the resulting expenses, such as transportation and security of the product's return, are under the responsibility of the Consumer.
5. The warranty will totally lose its validity in the event of any of the following cases: a) if the defect is not a manufacturing defect, but caused by the Consumer or by third parties outside the manufacturer; b) if the damage to the product comes from accidents, disasters, agents of nature (lightning, floods, landslides, etc.), humidity, voltage in the electrical network (overvoltage caused by accidents or excessive fluctuations in the network), installation / use not in accordance with the user manual or due to the natural wear and tear of parts, pieces and components; c) if the product has been influenced by a chemical, electromagnetic, electrical or animal nature (insects, etc.); d) if the product's serial number has been tampered with or erased; e) if the device has been tampered with.
6. This warranty does not cover loss of data, therefore, it is recommended, if applicable for the product, that the Consumer regularly back up the data contained in the product.
7. Intelbras is not responsible for the installation of this product, and also for any attempted fraud and / or sabotage of its products. Keep the software and applications updates used up to date, if applicable, as well as the necessary network protections to protect against intrusions (hackers). The equipment is guaranteed against vices within its normal conditions of use, and it is important to be aware that, as it is an electronic equipment, it is not free from fraud and scams that may interfere with its correct functioning.
8. After its useful life, the product must be delivered to an authorized technical assistance from Intelbras or directly to the environmentally appropriate final destination, avoiding environmental impacts and health. If you prefer, the battery, as well as other unused Intelbras electronics, can be disposed of at any Green Eletron collection point (electronic waste manager to which we are associated). In case of doubt about the reverse logistics process, please contact us by phone (48) 2106-0006 or 0800 704 2767 (Monday to Friday from 8 am to 8 pm and on Saturdays from 8 am to 6 pm) or through e-mail suporte@intelbras.com.br.

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

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

All images in this manual are illustrative.

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Customer Support: (48) 2106 0006

Forum: forum.intelbras.com.br

Support via chat: intelbras.com.br/suporte-tecnico

Support via e-mail: suporte@intelbras.com.br

Customer Service: 0800 7042767

Where to buy? Who installs it? 0800 7245115

Produced by: Intelbras S/A – Indústria de Telecomunicação Eletrônica Brasileira
Rodovia BR 459, km 124, 1325 – Distrito Industrial – Santa Rita do Sapucaí/MG – 37540-000
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