intelbras IVP 2000 SF Passive Infrared Sensor User Manual

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intelbras IVP 2000 SF Passive Infrared Sensor

Specifications

- Operating voltage: 9Vdc
- Operating current: < 25 mA
- Detection angle: 68 degrees
- Detection range: 12m
- Operating Temperature: Not specified
- Transmission frequency: Not specified
- Detection method: Passive infrared sensor
- Supervision: Yes

Product Information
The IVP 2000 SF Passive Infrared Sensor by Intelbras offers efficient detection with a reduced risk of false triggering. It features SMD technology and automatic temperature compensation, ensuring reliable performance. The sensor is compatible with most devices on the market working at the same frequency and modulation.

Product Usage Instructions

Sensor Opening
To access the IVP 2000 SF sensor board for battery change or configuration, squeeze the base latch located on the bottom of the sensor.

Sensor Stabilization
Before installation, define the height at which the sensor will be positioned, which should range from 2m to 2.2m above ground level.

Sensor Registration
Refer to the user manual for instructions on sensor registration and setup.

Installation
Follow the installation guide provided in the user manual for proper mounting of the sensor.

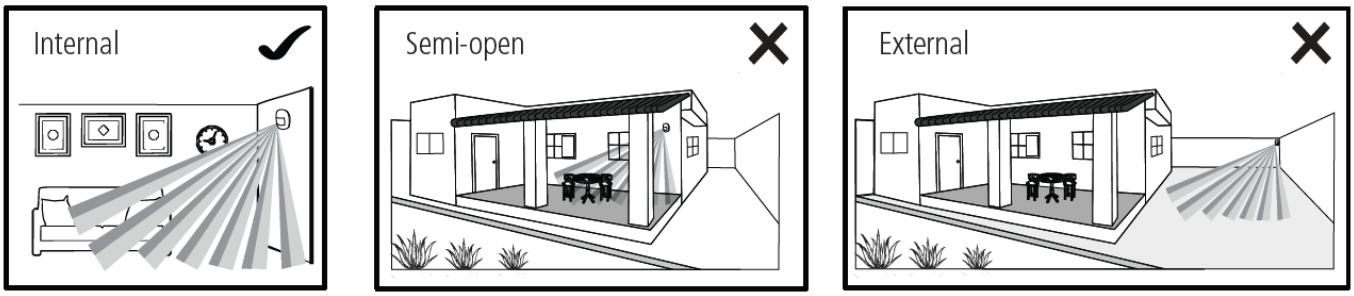
Trial Period
After installation, test the sensor to ensure it is functioning correctly during the trial period.

Passive infrared sensor

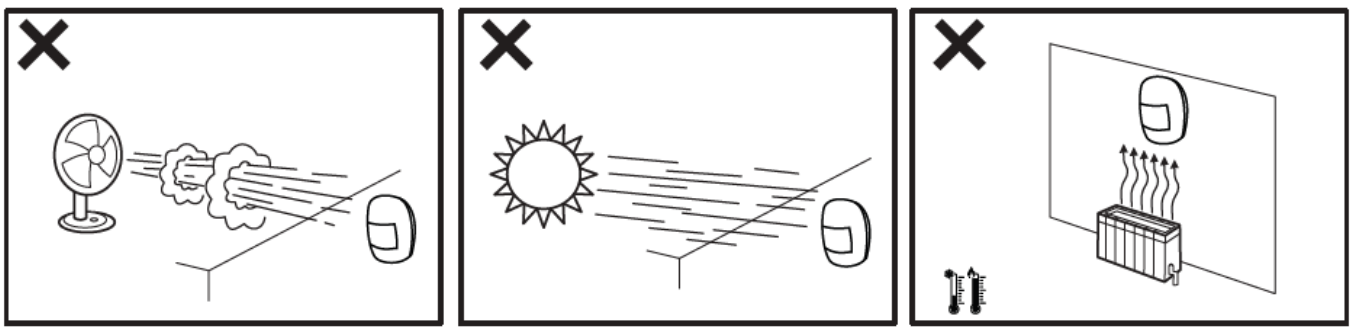
Congratulations, you have just purchased a product with Intelbras quality and safety. The passive infrared sensor IVP 2000 SF was developed by Intelbras with 100% digital technology. The sensor features SMD technology, offers efficient detection with reduced risk of false triggering and has automatic temperature compensation. It is compatible with most devices on the market that work at the same frequency and modulation. For access to tutorial videos, frequently asked questions and other support materials, visit the link: **www.intelbras.com**

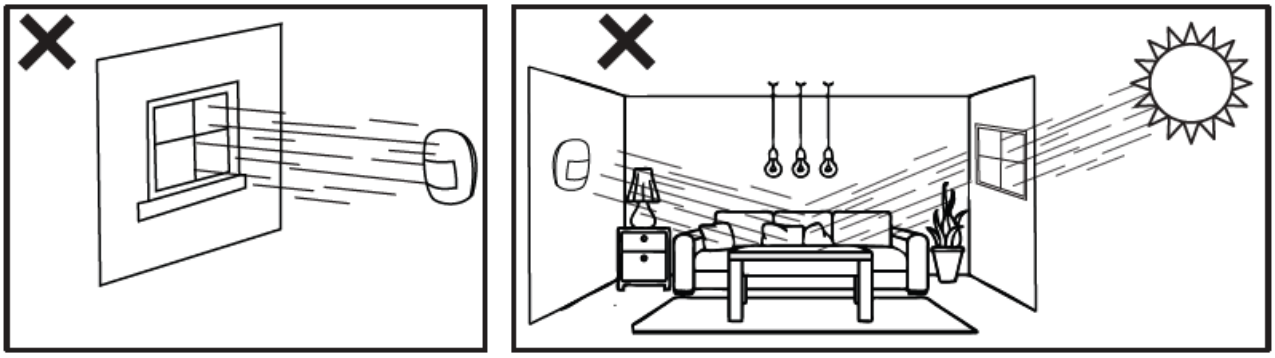
Care and safety

- Follow all instructions in the manual for assembling and installing the product;
- LGPD – Data processing by Intelbras: Intelbras does not access, transfer, capture or perform any type of processing of personal data from this product.
- Fix the sensor on stable surfaces, where there are no vibrations;
- This sensor is intended for an indoor environment;

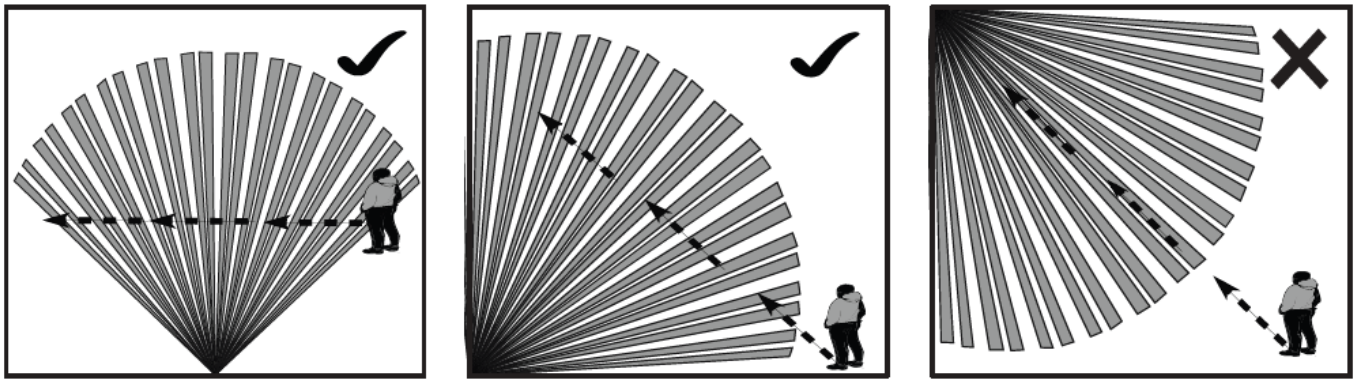


- Do not use the sensor in areas with sudden temperature changes such as near air conditioners and heaters, fans, refrigerators and ovens. Do not expose the sensor directly or to sunlight reflections;



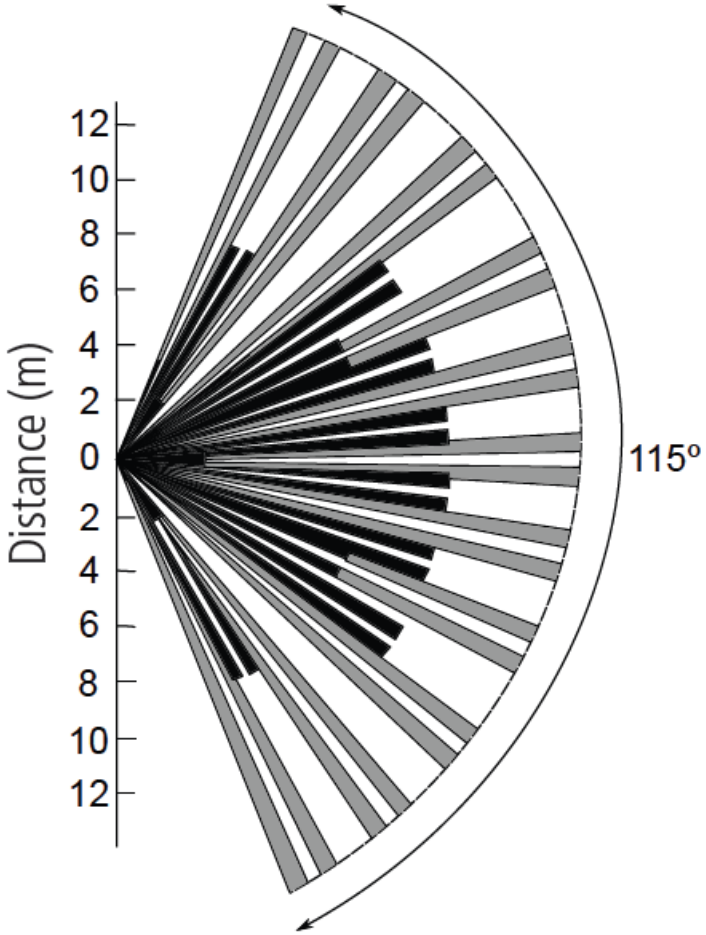


- Do not touch the surface of the infrared sensor (PIR), if necessary, use a cleaning cloth.
- Do not place objects in front of the sensor. To ensure the detection area, avoid curtains, screens, screens, or any object that may interfere with its coverage area.
- Wireless communication technology, when exposed to environments with high power irradiation, may suffer interference and have its performance impaired. Example: locations close to TV towers, AM/FM radio stations, amateur radio stations, routers, etc.
- The maximum recommended installation height is 2.2 m, do not exceed it.
- The sensor must be installed where a possible intruder can be easily detected, that is, where it makes transverse movements to the detection beams (see the figure below).

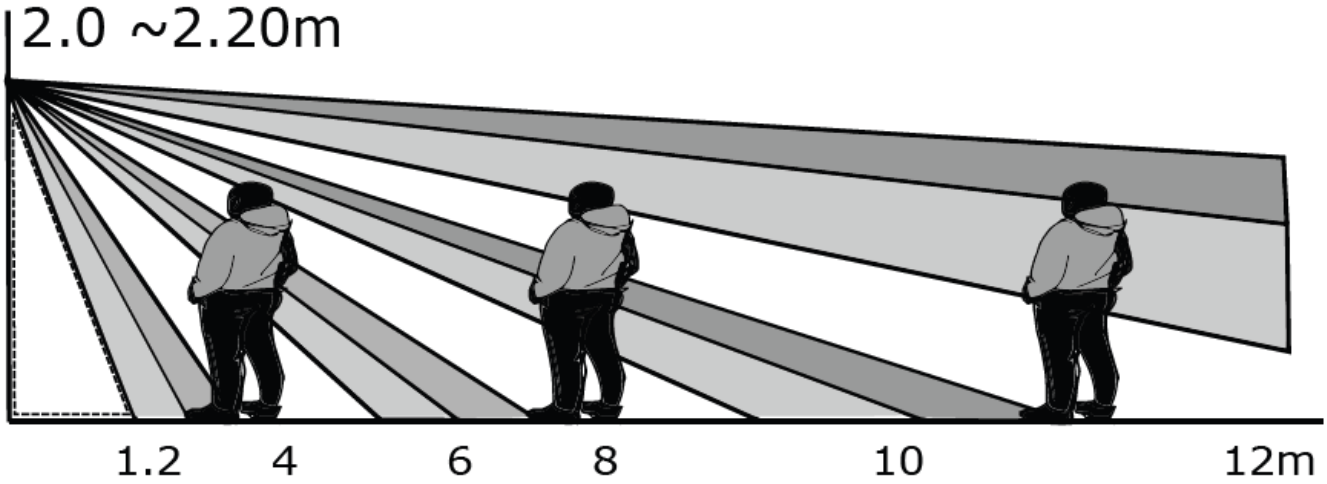


Note: before starting the installation, it is necessary to define the height at which the sensor will be positioned, which can vary from 2 m to 2.2 m.

Scan



Upper view



Side view

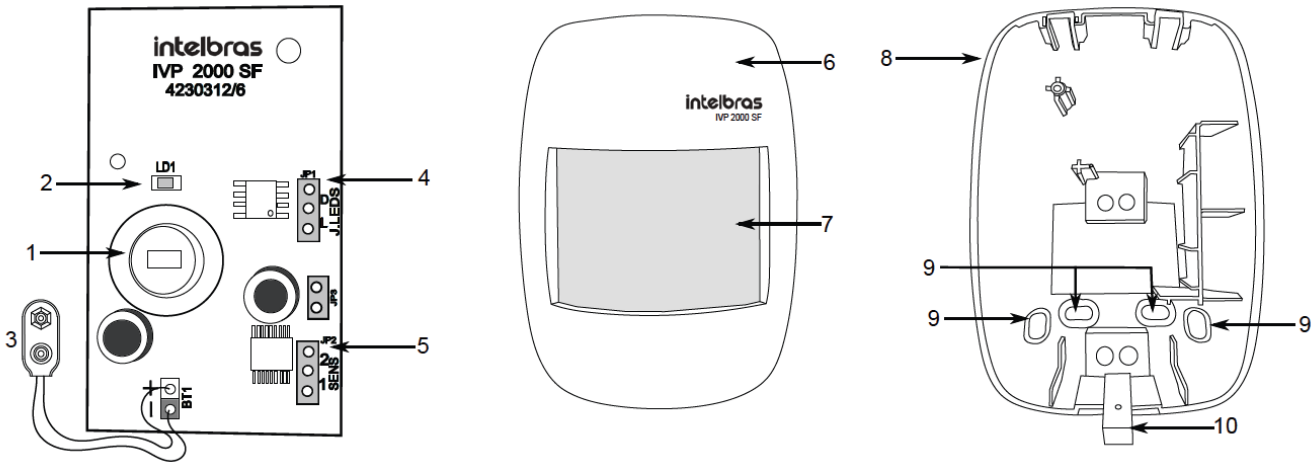
Technical specifications

Ooperating voltage	9Vdc
Operating current	< 25 mA
Detection angle	115°
Detection range	12 m
Operating Temperature	- 10 °C to + 50 °C
Transmission frequency	433,92 MHz
Detection method	PIR
Supervision	Unsupervised (OOK)

Characteristics

- Micro processed digital detection technology;
- 2 sensitivity levels;
- Operating modes: Economical;
- Battery level sensor;
- Dual-element passive infrared;
- Power: 9 V battery;
- Ease of installation.

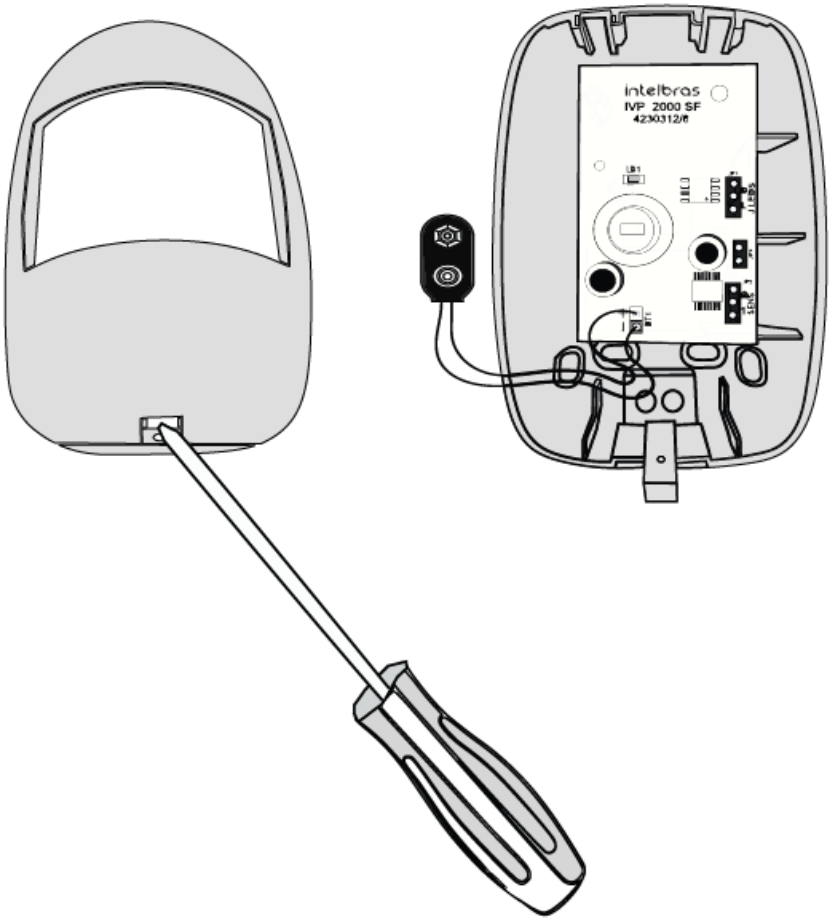
Product Overview



1. Pir sensor
2. LED trigger
3. Battery connector
4. Jumper LEDs (JP1)
5. Jumper (JP2) Sensitivity
6. Front cover
7. Fresnel lens
8. Basis
9. Screw installation seal
10. Base lock

Sensor opening

To access the IVP 2000 SF sensor board for battery change or configuration, squeeze the base latch, located on the bottom. See image below:



Sensor stabilization
After inserting the battery, the sensor goes into stabilization mode and the blue LED flashes for a few seconds. When stabilization is complete, the blue LED will stop flashing.

IVP 2000 SF sensor registration
To register the sensor in the alarm control panel, check the procedure in the manual of the used alarm panel and trigger a trigger by moving in front of the sensor to complete its registration.
Note: do not register the sensor in the control panel during the stabilization time.

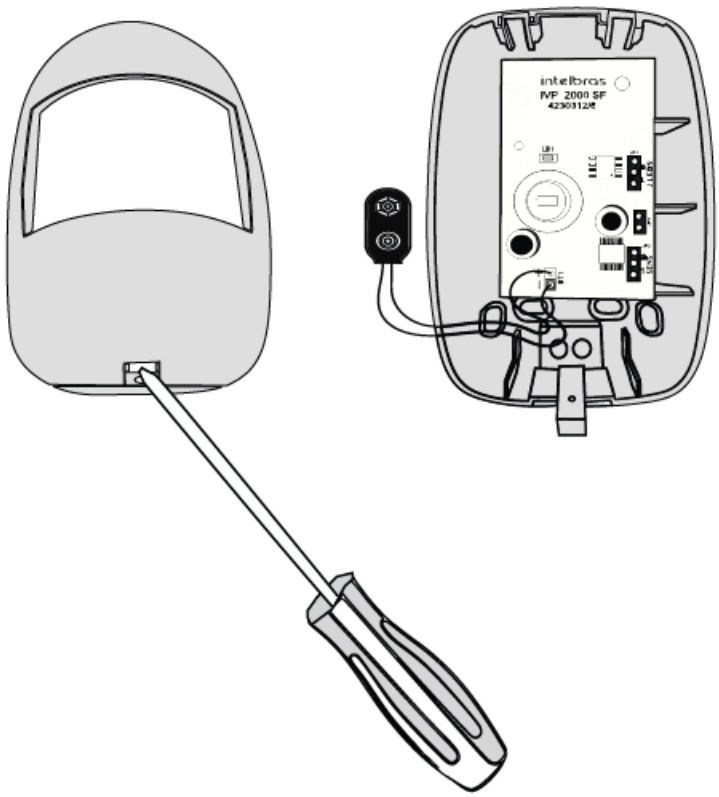
Installation

After identifying the best installation location, follow the recommendations:

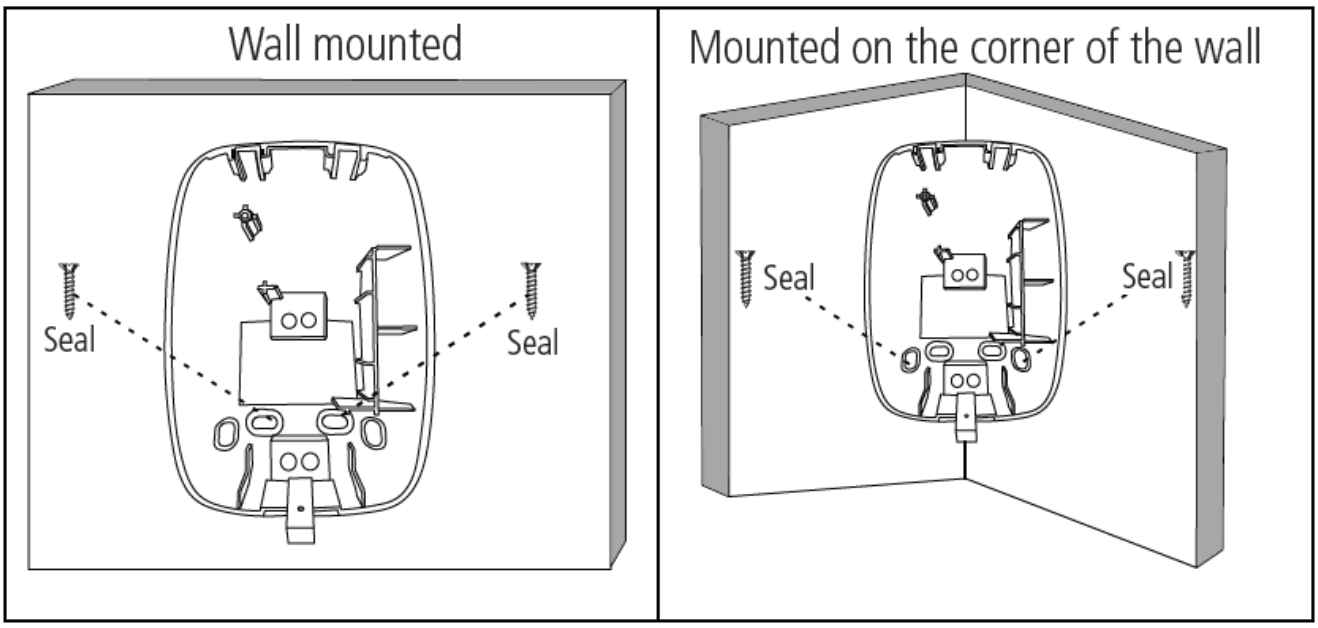
- It must be installed at a height of 2.0 m to 2.2 m and positioned so that the intruder makes transverse movements to the sensor's detection radius.
- It is not recommended to install the sensor tilted upwards or downwards, as this could impair its functioning.
- Make sure the sensor is securely fixed and not subject to jitter in order to avoid unwanted triggers. The IVP 2000 SF sensor does not have an articulator, as it already has a 15° inclination angle.

Therefore, for its installation, follow the procedure:

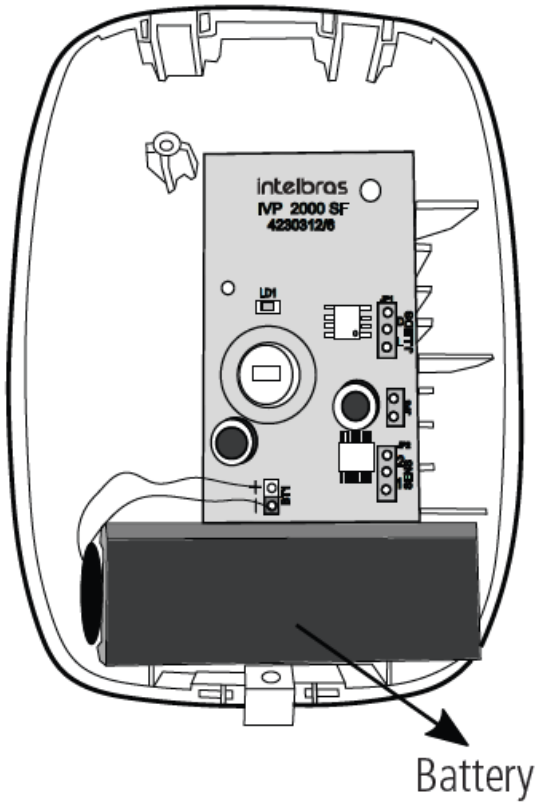
1. Remove the front cover by pressing the base latch, as shown in the image.



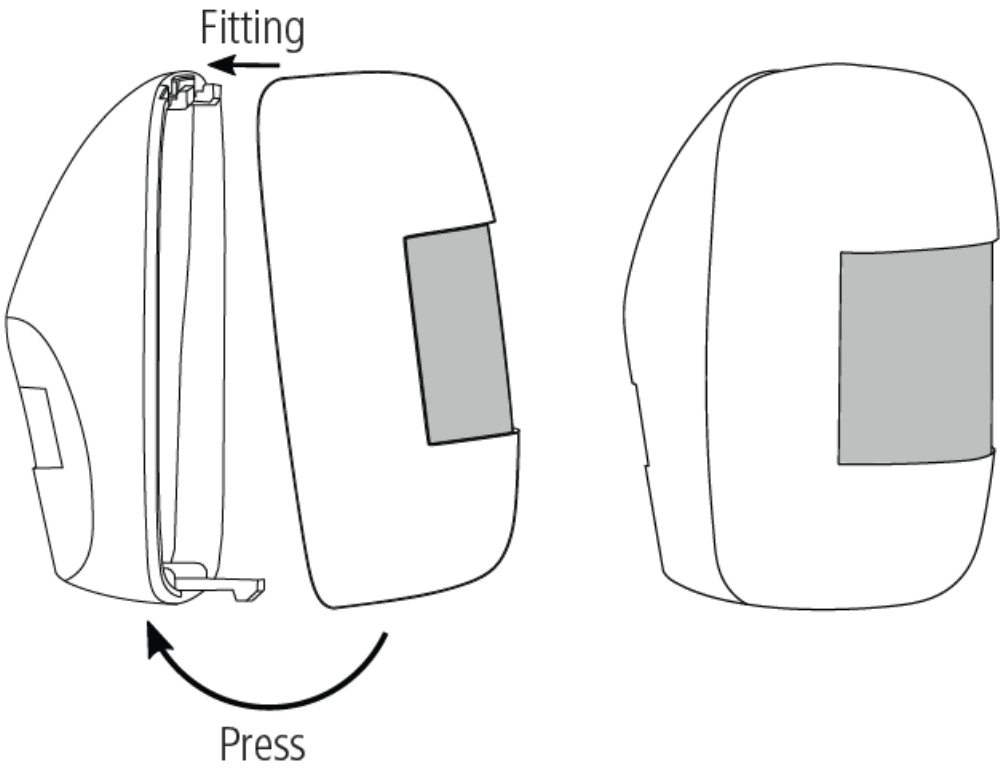
2. For direct-to-wall or corner-wall installation, remove the plate and break the indicated seals for the holes in the base.



3. To close the lid, place the battery at the bottom of the base, as shown in the image.



4. After fixing the base, fit the front cover to the top of the base and press the bottom of the front cover so that it fits into the base latch.

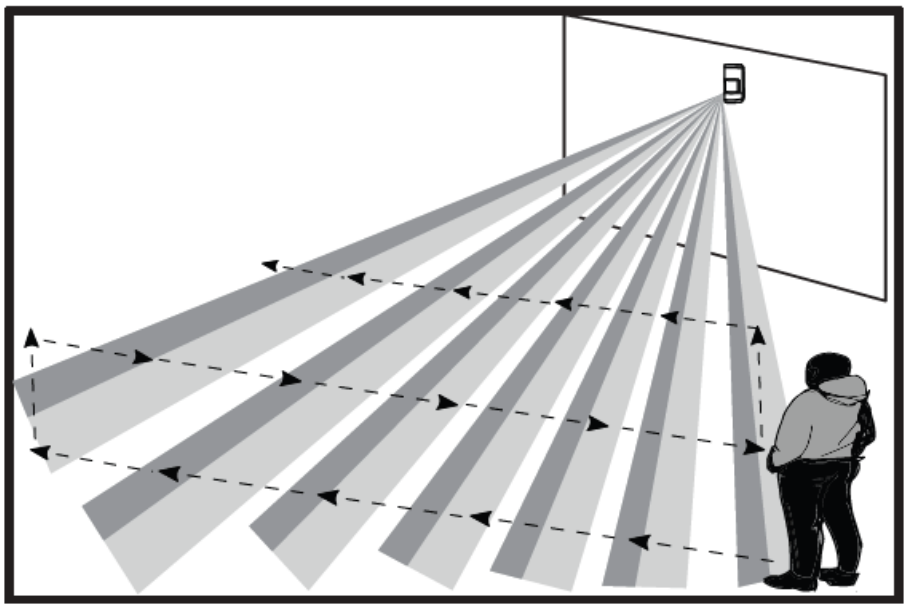


Trial period

The sensor goes into test mode for 15 minutes after inserting the battery and after the stabilization time. During this period, at any motion detection, the blue LED lights up and a trigger is generated, regardless of the settings that are applied.

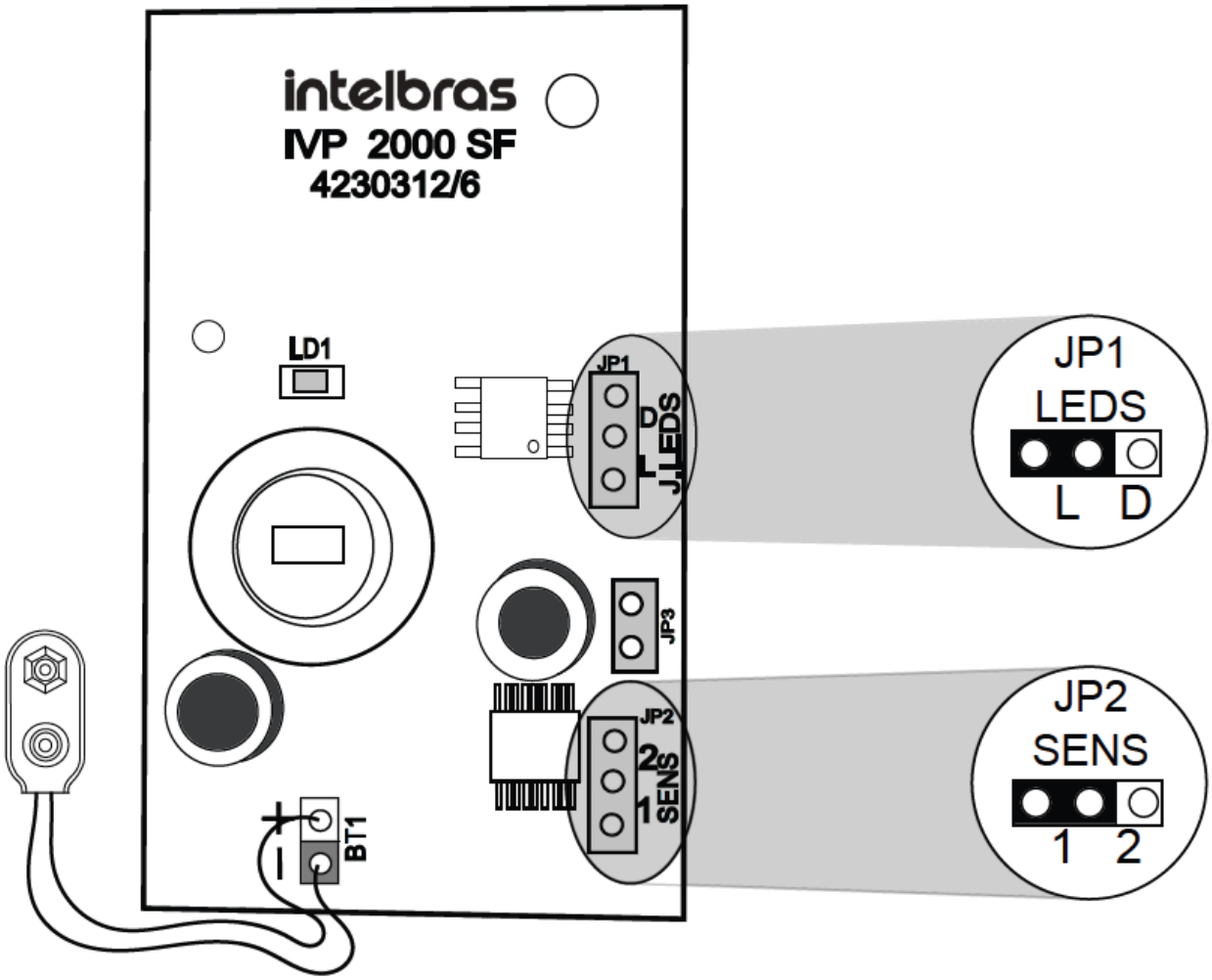
Test

Once installed and running, walk across the area to be protected simulating a possible intrusion into the environment. Check if the sensor is able to detect your movements during the course, through the Blue LED (triggering). Adjust the sensitivity if necessary or reposition the sensor. Be sure to take all precautions and follow installation recommendations to get the best operating performance from your product.



Note: if the control panel used is Intelbras, put it in test mode, this way it will not be necessary to observe the LED, as the control panel will indicate the functioning of the sensor through siren beeps. For more information, consult the central manual on the website: **www.intelbras.com.br**.

Configuring the IVP 2000 SF sensor (for boards in version 4230312/5 and firmware 2.0.0 or higher)
After the sensor is properly installed, perform the adjustments according to the information below:

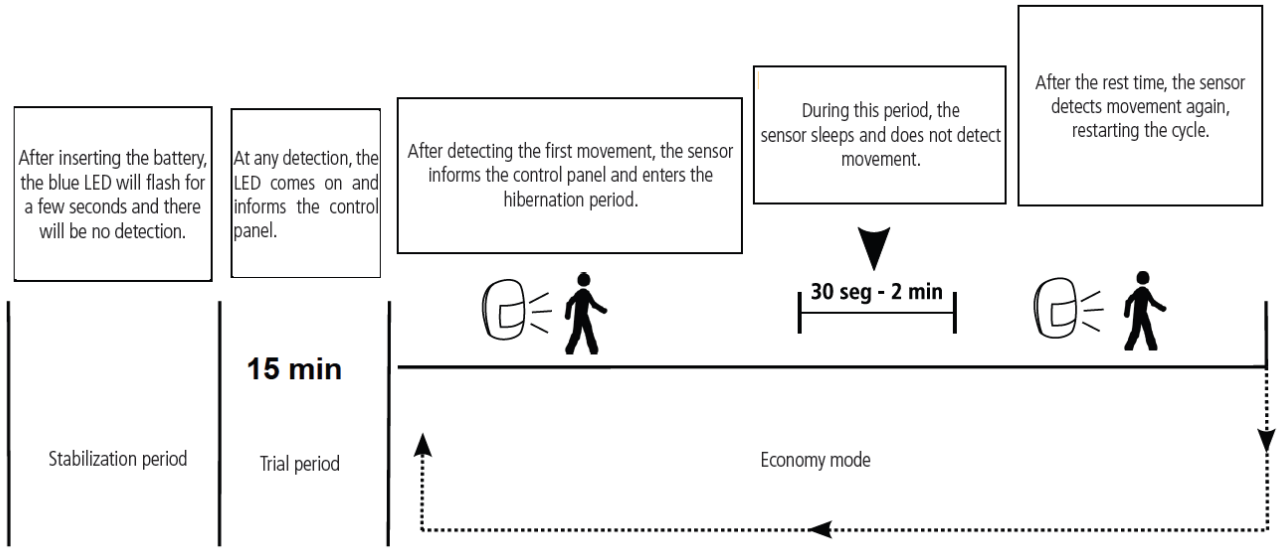


IVP 2000 SF sensor sensitivity adjustment
The SENS jumper (JP2) is used to control the detection sensitivity. With jumper JP2 in position 1 the sensor provides maximum sensitivity. With jumper JP2 in position 2 the sensor provides minimum sensitivity. Factory default: position 1 (maximum).

LED adjustment
The LEDS jumper (JP1) is used to control the indication of the LEDs, without interfering with the detector. With the key in the L position, the LEDs are enabled to function normally. With the key in position D, the LEDs are disabled, that is, they do not light up. Factory default: L position.

IVP 2000 SF sensor operating mode
After being energized, the sensor will operate during the test period for 15 minutes so that the installer can make all adjustments to the sensor's positioning. During this period, at any movement detection, the LED lights up and a trigger is generated. Then the sensor will operate in economy mode.

- **Economy Mode:** when detecting movement, it turns on the LED, triggers and goes into hibernation, remaining for a period that can last from 30 seconds (environment with little movement) to 2 minutes (environment with a lot of movement). During this sleep period the LED is not activated and no new triggers are generated, as a notification has just been sent to the control panel. After the hibernation period, the sensor monitors the environment again until a new movement is detected. This ability to learn from the movement of the environment means that in places with a lot of movement, periodic and non-continuous shots are generated, in turn, saving battery life.



Configuring the IVP 2000 SF sensor (for board version 4230312/4 and firmware 1.0.2 or earlier)

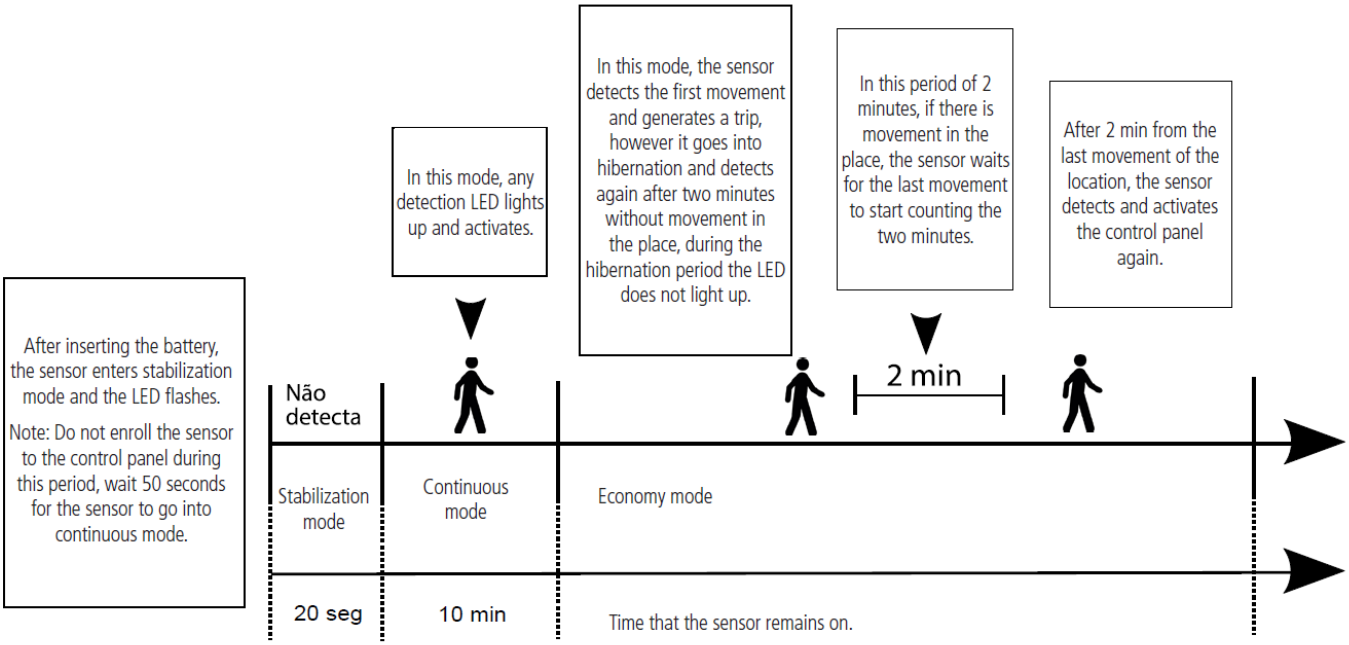
IVP 2000 SF sensor sensitivity adjustment

The SENS jumper (JP2) is used to control the detection sensitivity. With jumper JP2 in position 1 the sensor provides maximum sensitivity. With jumper JP2 in position 2 the sensor provides minimum sensitivity. Factory default: position 1 (maximum).

LED adjustment
The LEDS jumper (JP1) is used to control the indication of the LEDs, without interfering with the detector. With the key in the L position, the LEDs are enabled to function normally. With the key in position D, the LEDs are disabled, that is, they do not light up. Factory default: L position.

IVP 2000 SF sensor operating mode
After being energized, the sensor will operate during the test period for 10 minutes so that the installer can make all adjustments to the sensor's positioning. During this period, at any movement detection, the LED lights up and a trigger is generated. Then the sensor will operate in economy mode.

- **Economy mode operation:** the sensor will detect and transmit 1 (once) time to the alarm center, after this trigger, the sensor enters economy mode (low consumption mode without detection). In this mode, the sensor will detect again and transmit to the alarm center only after 2 (two) minutes without movement in the environment. After 2 (two) minutes, the sensor will be able to detect and transmit the event to the alarm center. For a better understanding of Economy mode, observe the timeline below.



Low battery sensor

The IVP 2000 SF sensor controls the battery level, and if it is critical (equal to or below 7 V), it sends the information to the alarm control panel.

- If the low battery signal is enabled on the control panel, the information is sent during the trip.

Note: consult the alarm control manual to verify compatibility with low battery signaling and supervision. Use only quality batteries with the correct size for the device, as the expected battery life can be influenced by the number of activations, weather conditions and configuration mode.

Homologation

ANATEL 0577-09-0160

This equipment is not entitled to protection against harmful interference and may not cause interference in duly authorized systems. This is a product approved by Anatel, the approval number can be found on the product label, for inquiries visit the website: https://www.gov.br/anatel/pt-br

Warranty terms

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 guarantee and 9 (nine) months of 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 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. Properly dispose of your product after its useful life – deliver it to collection points for electrical and electronic products, at an authorized Intelbras technical assistance center or consult our website **www.intelbras.com.br** and **support@intelbras.com.br** or (48) 2106-0006 or 0800 7042767 for more information.
9. 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. All the images of this manual are illustrative.

FAQs

Q: How do I adjust the sensitivity of the IVP 2000 SF sensor?
A: Depending on the board version and firmware, refer to sections 10.1 or 11.1 in the user manual for instructions on sensitivity adjustment.

Q: How do I change the battery in the IVP 2000 SF sensor?
A: To change the battery, access the sensor board by squeezing the base latch at the bottom of the sensor. Refer to the user manual for detailed steps.

Customer Support: +55 (48) 2106 0006
Forum: forum.intelbras.com.br
Support via chat: chat.apps.intelbras.com.br
Support via e-mail: suporte@intelbras.com.br
Customer Service / Where to buy? / Who installs it?: 0800 7042767

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Rodovia BR 459, km 126, nº 1325 – Distrito Industrial – Santa Rita do Sapucaí/MG – 37538-400
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Documents / Resources

	intelbras IVP 2000 SF Passive Infrared Sensor [pdf] User Manual IVP 2000 SF, IVP 2000 SF Passive Infrared Sensor, Passive Infrared Sensor, Infrared Sensor, Sensor

References

- Fórum Intelbras - Índice
- intelbras.com.br
- intelbras.com/
- intelbras.com/en
- Anatel — Agência Nacional de Telecomunicações
- User Manual