intelbras IVP 4000 Smart Wireless Passive Infrared Sensor User Manual

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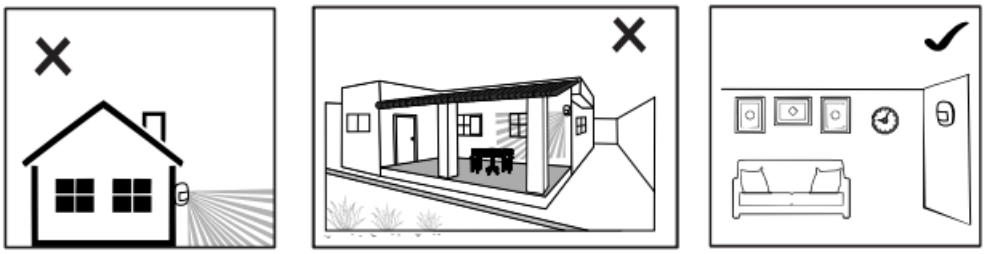
Intelbras IVP 4000 Smart Wireless Passive Infrared Sensor User Manual

Congratulations, you have just purchased a product with Intelbras quality and safety.
The passive infrared sensor IVP 4000 smart was developed by Intelbras with 100% digital technology. The sensor has an integrated Temperature Sensor to offer the same detection sensitivity in different environments (from -10 to

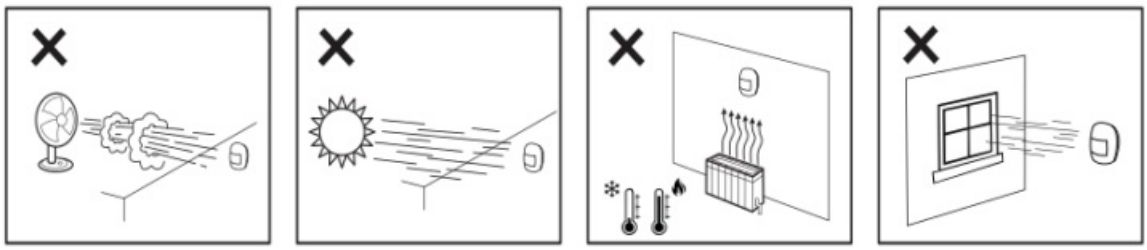
+50°) reducing the risk of false triggers, DIGITAL technology and SMD mounting, and can be installed in most devices on the market that work on the same frequency.

Care and Safety

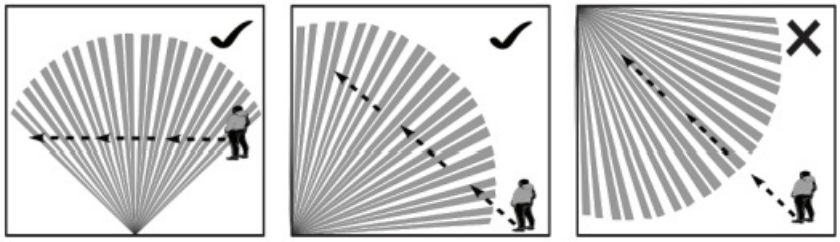
- This product is intended for Indoor environments.



- Avoid touching the surface of the PIR, if necessary, use a soft cloth for cleaning.
- Do not place objects in front of the sensor. To secure the detection area, avoid curtains, screens, screens, or any object that blocks the scan.
- Wireless communication technology, when exposed to environments with high power radiation, can suffer interference and have its performance impaired. Example: locations near TV towers, AM/FM radio stations, ham radio stations, routers, etc.
- Recommended installation height ranges from 2 m to 2.2 m.
- Do not use the sensor in areas with sudden changes in temperature such as air conditioners and heaters, fans, refrigerators and ovens. Do not expose the sensor directly or to sunlight reflections.



- For the use of the articulator, we recommend that the installation be done by a professional installer, as its incorrect use may affect the sensor's coverage angle.
- The sensor must be installed where a possible intruder is easily detected, that is, where there is movement across the sensor's detection beams.



- LGPD – General Personal Data Protection Law: Intelbras does not access, transfer, capture, or perform any other type of processing of personal data from this product.

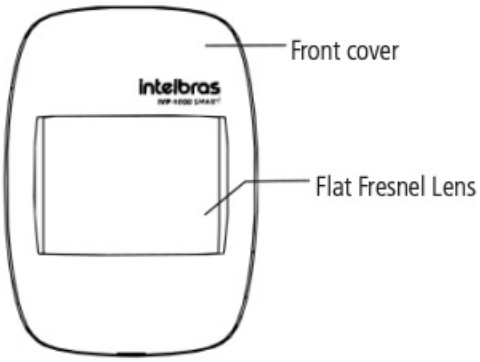
Technical Specifications

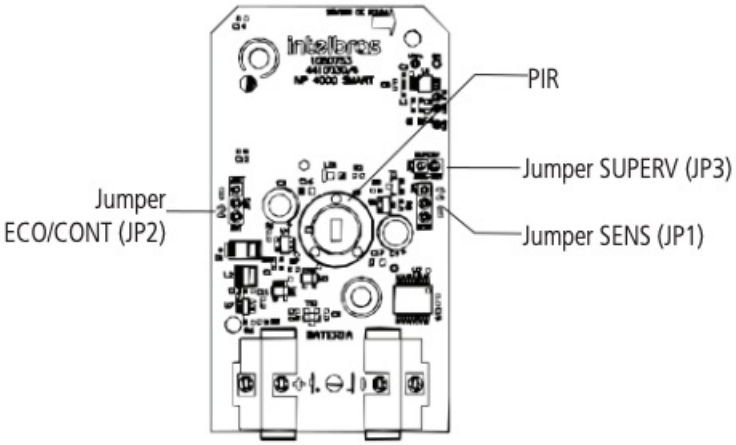
Consumption	< 20 mA
Detection angle	115°
Detection range	12 m
Operating Temperature	10 °C to + 50 °C
Transmission frequency	433,92 MHz
Detection method	PIR
Battery	LITHIUM CR123A 3 V
Supervision	Supervised (FSK) or unsupervised (OOK)
Anti-jamming	Immunity against interference from malicious signals

Characteristics

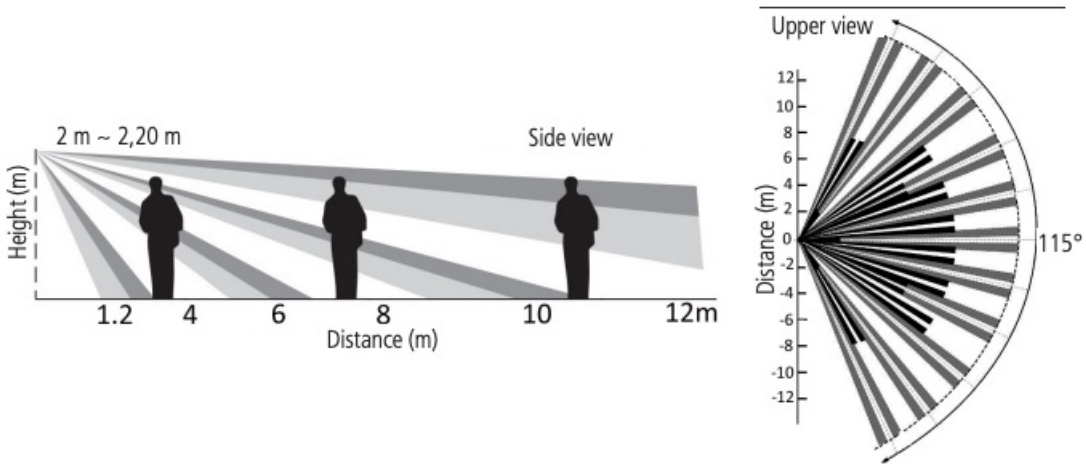
- Digital micro-processed detection technology;
- 2 levels of sensitivity;
- 2 modes of operation: Continuous Intelligent (CONT) and Economical (ECO);
- Battery level sensor;
- Passive infrared with dual element;
- Power: LITHIUM 3 Vdc battery – CR123A;
- Ease of installation.

Product





Detection Range



Installing the IVP 4000 Smart Sensor

To install the sensor, carefully read the topic Care and safety and follow the procedure below:

1. Open the sensor front cover by pressing the sides.
2. With the help of a tool, drill a hole in the back cover for the screw.
3. Insert the CR123A battery and position the sensor in the desired location. The IVP 4000 smart does not need to be installed with an articulator as it already has a 15° inclination angle.

Configuring the IVP 4000 Smart Sensor (for cards in version 4410030/4 and firmware 2.0.0)

After the sensor is properly installed, make the adjustments according to the information below:

Sensitivity Adjustment of the IVP 4000 Smart Sensor

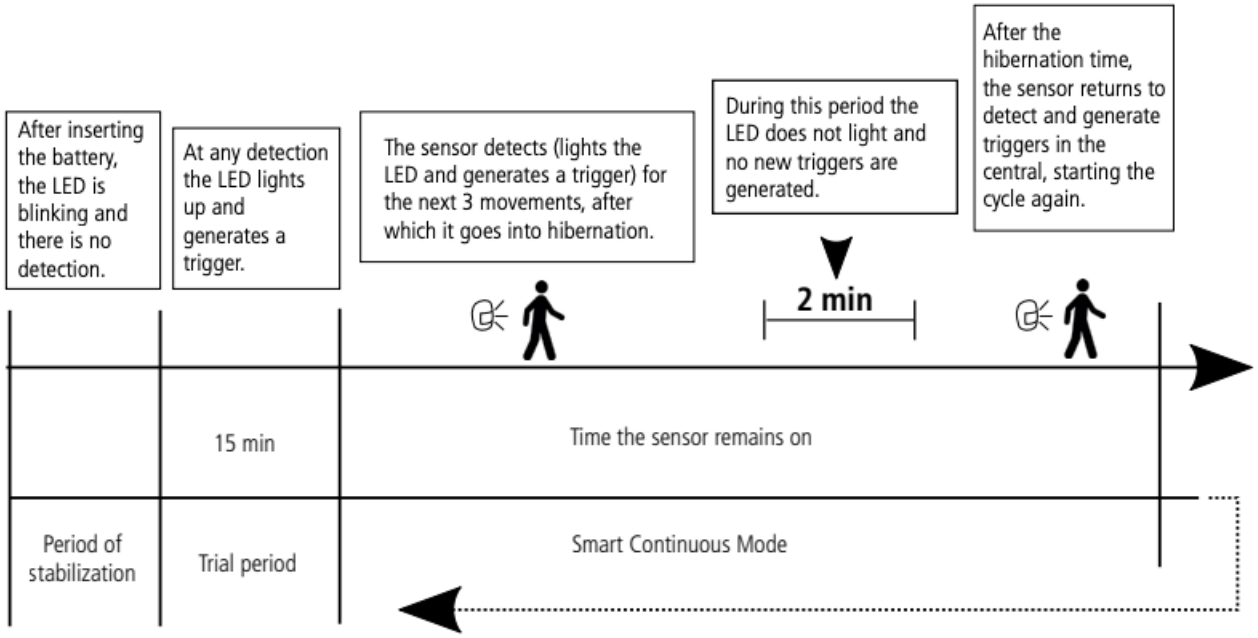
The SENS jumper (JP1) is used to control the detection sensitivity. With jumper JP1 in position 1 the sensor provides maximum sensitivity. With jumper JP1 in position 2 the sensor provides minimum sensitivity. Factory default: position 2.

Setting the Operating Mode of the IVP 4000 Smart Sensor

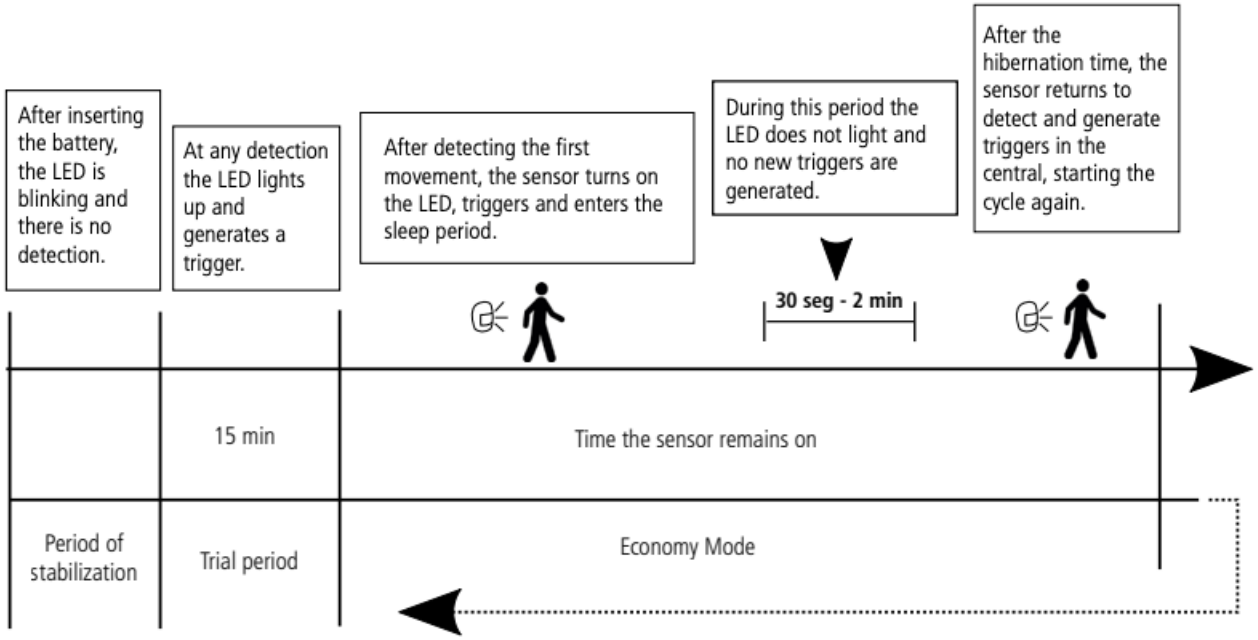
Via the ECO/CONT jumper (JP2), select between intelligent continuous mode and economy mode. With jumper JP2 in position 1 the sensor is in intelligent continuous mode. With jumper JP2 in position 2 the sensor is in economy mode. Factory default: position 2.

Once energized, the sensor will operate in the test period for 15 minutes so that the installer can make all sensor positioning adjustments. During this period, at any motion detection, the LED lights up and a trigger is generated. Then the sensor will operate as configured mode.

- **Intelligent Continuous Mode:** the sensor takes a reading of the environment and generates a trigger for 3 movements, after this trigger generation the sensor goes into hibernation for 2 minutes. During this period the indication LED is not activated and no new triggers are generated, as a notification has just been sent to the switch. After the sleep time, the sensor is monitoring the environment until detecting 3 more events.



- **Economy Mode:** the sensor takes a reading of the environment and immediately after motion detection and triggering it goes into sleep, which can last for a period of 30 seconds (environment with little movement) up to 2 minutes (environment with a lot of movement). During this period the indication LED is not activated and no new triggers are generated, as a notification has just been sent to the switch. After the sleep time, the sensor is monitoring the environment until detecting a new movement.



Advantage of the Economy mode: this ability to learn from the environment, means that in places with high degrees of movement, periodic and non-continuous shots are generated, in turn, saving battery power.

IVP 4000 Smart Sensor Supervision Adjustment

The SUPERV jumper (JP3) is used to select between supervised (FSK) or unsupervised (OOK) modes. With jumper JP3 open the sensor is in supervised mode (FSK). With jumper JP3 closed the selected mode is unsupervised (OOK). The type of supervision to be used will depend on the receiver's compatibility with the control panel.

Factory standard: unsupervised

Low Battery Sensor

The IVP 4000 SMART sensor controls the battery level. If it is critical (equal to or below 2.5V), it will send the information to the control panel.

If the sensor is configured in unsupervised mode (OOK) and the low battery signal is enabled in the control unit, the information is sent during the trip. Otherwise, if the sensor is configured in supervised mode (FSK), low battery sending is done during supervision and triggering.

Note: *consult the control panel manual to verify compatibility with low battery signaling and supervision.*

To make the desired adjustments follow the steps below:

1. Open the IVP 4000 smart sensor;
2. Configure the jumpers according to the desired settings;
3. Take a trigger to effect changes to the sensor configuration.

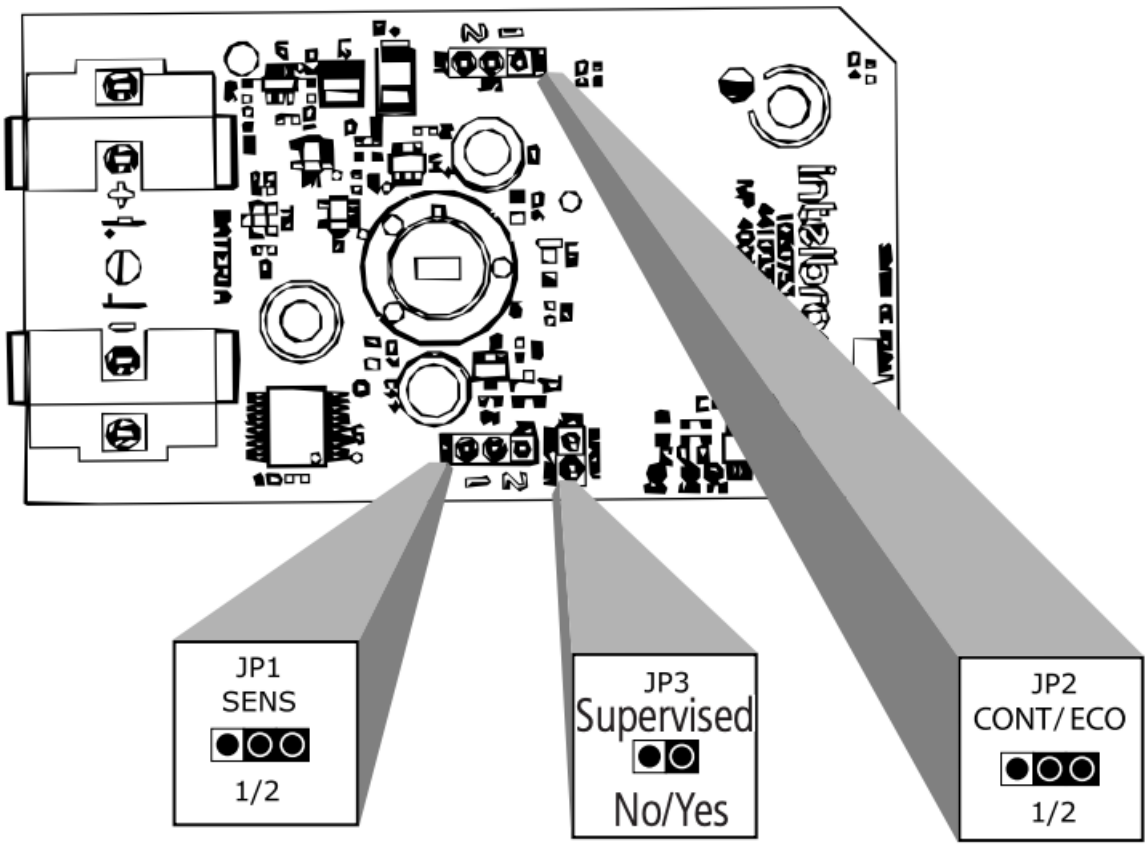
Note: *do not register the sensor in the control panel during the stabilization time, wait for it to start working in intelligent or economical continuous mode.*

To register the sensor code in the alarm control panel, check the procedure in the manual of the used alarm control panel and trigger a trigger by moving in front of the sensor to complete its registration.

Jumper SENS (JP1)	
Position	**Condition**
1	Maximum sensitivity
2	Minimal sensitivity

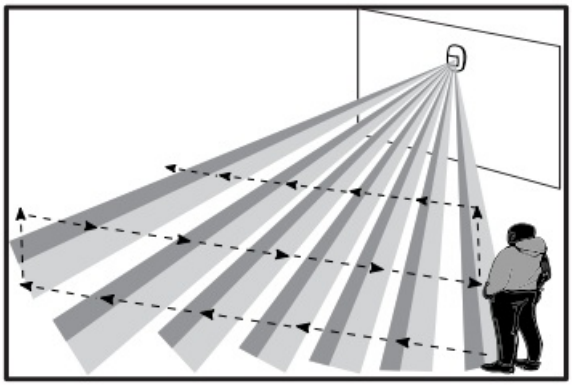
Jumper INT/CONT (JP2)	
Position	**Condition**
1	Smart Continuum
2	Economic

Jumper SUPERV (JP3)	
Position	**Condition**
Closed	No (Unsupervised)
Open	Yes (Supervised)



Test

Once installed and energized, walk in the area to be protected simulating a possible intrusion. Observe if the sensor is able to detect your movements during the journey, by lighting the lens. Adjust its sensitivity if necessary or reposition the sensor installation.



If the alarm 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 sensor's operation through siren beeps.

Configuring the IVP 4000 Smart Sensor (for board version 4410030/3 and firmware 1.3.2 or earlier)

Sensitivity Adjustment of the IVP 4000 Smart Sensor

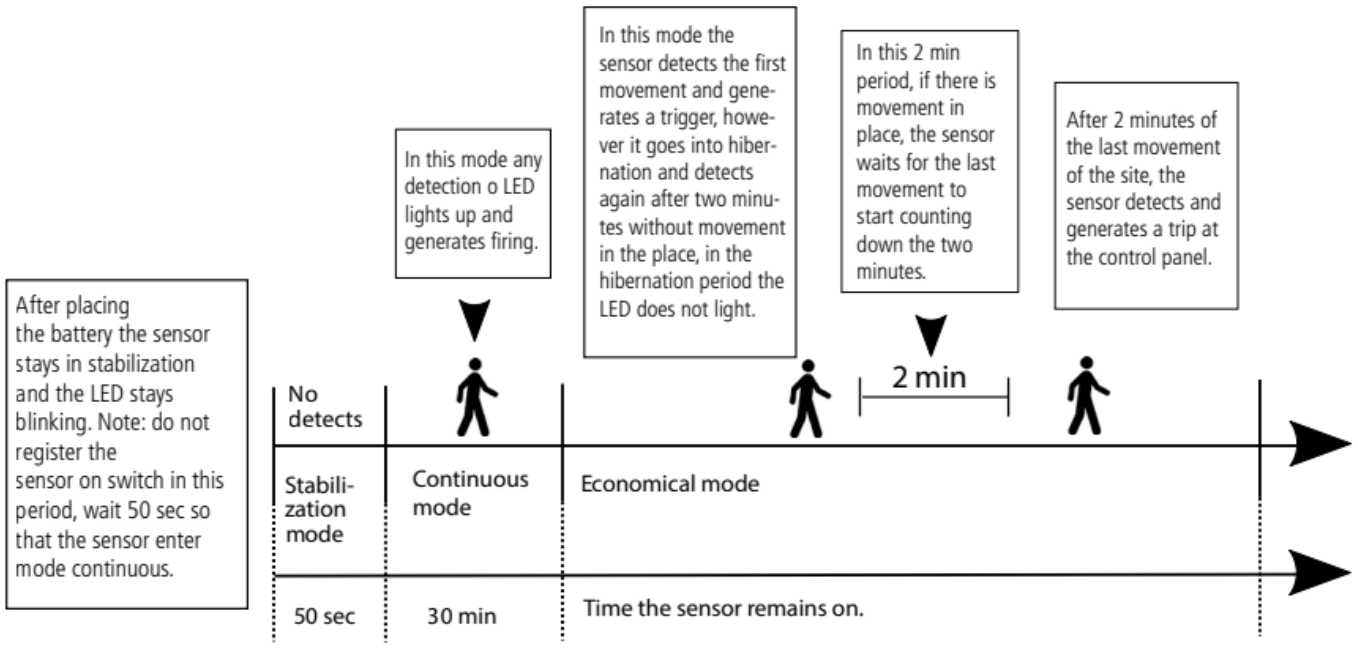
The SENS jumper (JP1) is used to control the detection sensitivity. With jumper JP1 in position 1 the sensor provides maximum sensitivity. With jumper JP1 in position 2 the sensor provides minimum sensitivity. Factory default: position 1.

Setting the Operating Mode of the IVP 4000 Smart Sensor

Via the ECO/CONT jumper (JP2), select between intelligent continuous mode and economy mode. Factory default economy mode.

With jumper JP2 in position 2 (ECO) the sensor will operate in economy mode, working as follows: after power-up, the sensor will work continuously for 30 minutes so that the installer can make all the adjustments to the sensor. After this time the sensor enters economy mode.

- **Economy mode operation:** the sensor will detect and transmit 1 (once) to the control panel, after this trigger, the sensor enters the economy mode (low consumption mode without detection). In this mode, the sensor will detect 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 central alarm. For a better understanding of Economy mode, see the timeline below.



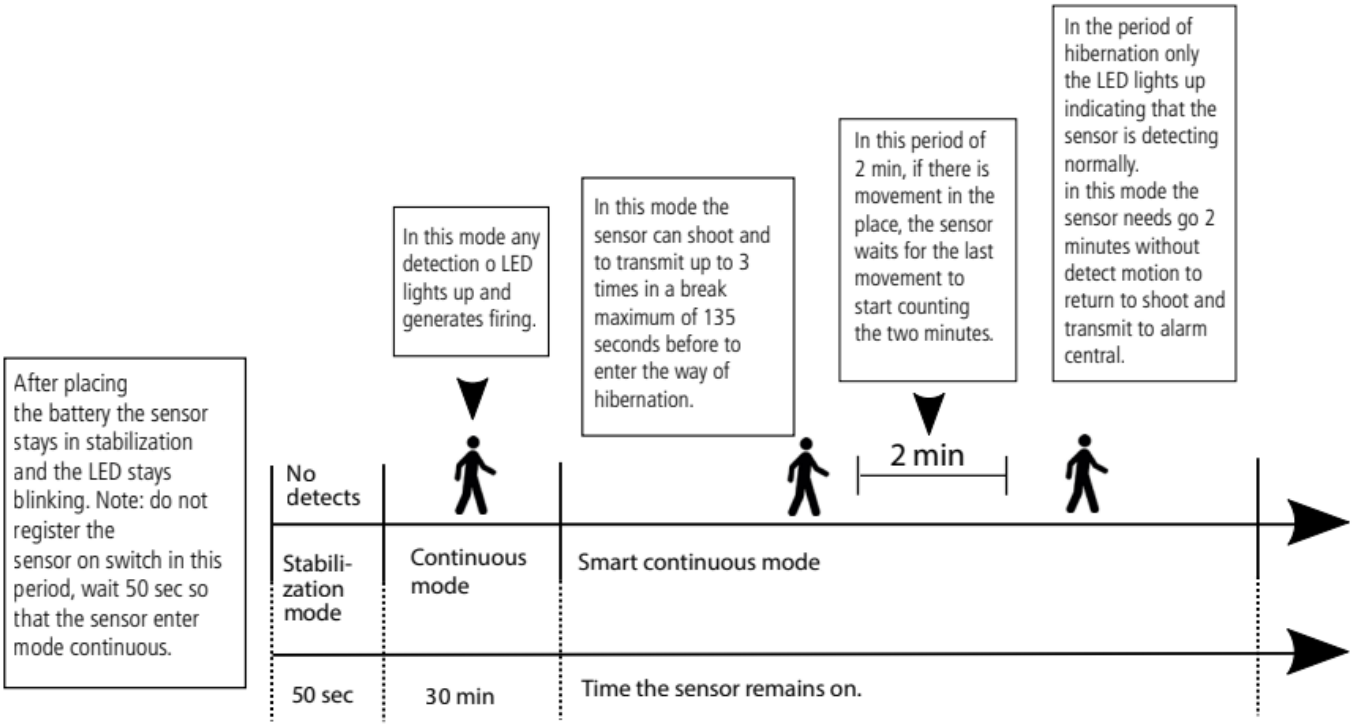
After power-up, the sensor will work continuously for 30 minutes so that the installer can make all the adjustments to the sensor.

After this time the sensor goes into intelligent continuous mode.

Intelligent continuous mode operation: the sensor can transmit up to 3 consecutive shots, after the last shot, the sensor goes into SLEEP mode (low consumption mode without transmission to the central alarm) for 2 (two) minutes. The sensor will only detect and transmit a trigger again if there is 2 (two) minutes without movement in the environment. After the 2 (two) minutes the sensor will be able to transmit up to 3 consecutive shots within an interval of 135 seconds if there are movements. Right after the 3 shots or 135-second interval, the sensor will

enter the Hibernation period, that is, it needs to stay again for two minutes without movement to be able to detect and transmit a shot. During this hibernation period the sensor will not transmit to the control panel, but the LED will light indicating that the sensor is detecting normally.

For a better understanding of the smart continuous mode, check the timeline below:



IVP 4000 Smart Sensor Supervision Adjustment

- **For board version 4410030/2 or 4410030/3:** to change the modulation from OOK to FSK, simply remove the battery from the sensor, open the OOK/FSK jumper (JP3) and then put the battery back in its original position. Once this is done, the sensor will operate in FSK mode. Changing the FKS mode to OOK (factory default) is also simple, just remove the battery from the sensor, close the OOK/FSK jumper terminals (JP3) again and replace the battery in the original position. Once this is done, the sensor will return to operating in *OOK* mode.
- **For board version 4410030/1:** to change the modulation from OOK to FSK, just remove the battery from the sensor, cut the path (FSK) indicated on the board by a small arrow (figure A) and then replace the battery in its original position. Once this is done, the sensor will operate in FSK mode. Changing the FSK mode to OOK (factory default) is also simple, just remove the battery from the sensor, rejoin the two pads of the FSK track indicated on the board by the arrow, replace the battery in the original position. Once this is done, the sensor will return to operating in *OOK* mode.

Homologation

0912-14-0160

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

This is a product approved by Anatel, the approval number can be found on the product label, for queries go to the website: *sistemas.anatel.gov.br/sch*.

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, with a term of 3 (three) months' legal warranty plus 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.

All the images of this manual are illustrative.

Product benefiting from the Legislation of Informatics.

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talk to us

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Support via e-mail: suporte@intelbras.com.br
Customer Service: 0800 7042767
Where to buy? Who installs it? 0800 7245115

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Documents / Resources

	**intelbras IVP 4000 Smart Wireless Passive Infrared Sensor** [pdf] User Manual IVP 4000 Smart Wireless Passive Infrared Sensor, IVP 4000 Smart, Wireless Passive Infrared Sensor, Passive Infrared Sensor, Infrared Sensor, Sensor

References

- CHAT Intelbras
- Fórum Intelbras - Índice
- SCH
- Intelbras | Segurança eletrônica, Redes, Comunicação e Energia