

## User manual

### IVP 4101 PET SMART

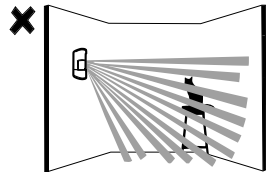
#### Passive infrared sensor

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

The passive infrared sensor IVP4 101 PETSMART was developed by Intelbras with 100% digital technology. The sensor has an integrated Temperature Sensor to offer the same detection sensitivity in different environments (-10°C to +50°C) reducing the risk of false trigger, DIGITAL technology, SMD assembly, suitable for INTERNAL ENVIRONMENTS with the presence of pets up to 20Kg, easy installation because it is wireless and can be installed on most devices that work on the same frequency and modulation available on the market.

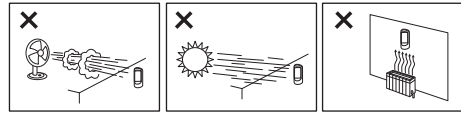
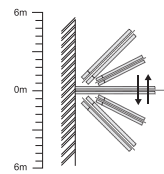
## 1. Care and Safety

- » Follow all instructions in the manual for assembling and installing the product.
- » Use only in INTERNAL ENVIRONMENTS.
- » 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 you can see in the image below:



- » Do not touch the surface of the infrared sensor (PIR).
- » The sensor must be installed where a possible intruder is easily detected, that is, where there are movements transversal to the sensor's detection beams.
- » Do not place objects in front of the sensor. To secure the detection area, avoid curtains, nettings, partition walls, or any object that blocks the scan.
- » Wireless communication technology, when exposed to environments with high power radiation, may suffer interference and have its performance impaired. Example: locations near TV towers, AM/FM radio stations, amateur radio stations etc
- » Do not exceed the sensor installation height (2.20m).
- » Do not install the sensor facing air conditioners or heaters.
- » Do not expose the sensor to direct sunlight.
- » Confirm that the installation location is stable and free from flickering.
- » Do not install the sensor directly on windows and glass doors.
- » This sensor does not have a "Lookdown" or zero zone (see the second figure in item 4), so make sure that the installation of the sensor makes it impossible for intruders to enter this area.
- » To use the articulator, we recommend that a professional installer does the installation, as its incorrect use may impair the PET function and the coverage angle of the sensor.
- » For your safety, test the product and systems at least once a week. This is necessary due to changing environmental conditions, low battery. Take all necessary precautions for the safety and protection of your property.
- » In order to avoid incompatibilities, check in advance the characteristics of the product in which the sensor will be registered..
- » We recommend that the sensor configuration is done according to item 6.

**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 table in item 5 – Installation of this manual.



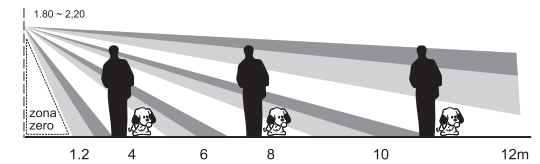
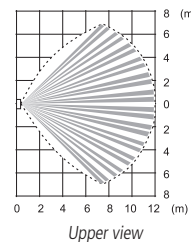
## 2. Technical specifications

Coverage	90° angle grid
Detection range	12 m
Operating temperature	- 10°C a + 50°C
Transmission frequency	433,92 MHz
OOK / FSK transmission rate	2 Kbps (open source)
Immunity to animals	20 kg
Installation height	Check item 5 of this manual
Detection method	PIR
Battery	LITHIUM CR123A 3V
Modulation	OOK or FSK
Anti-jamming	Immunity against interference from malicious signals.

## 3. Features

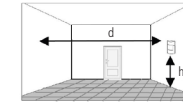
- » Micro-processed digital detection technology
- » 2 levels of sensitivity
- » 2 modes of operation: CONT (Continuous) and ECON (Economic)
- » Battery level sensor
- » No articulator required for wall installation
- » Passive infrared with double element
- » Motion detection activation
- » Power supply: LITHIUM 3VCC – CR123A battery
- » Immunity to domestic animals up to 20 kg
- » Easy installation

## 4. Product



## 5. Installing the IVP 4101 PET SMART Sensor

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



Distance (d)	Pet	Installation height (h)
Less or equal to 4 m	No pet	1,8 to 2 m
	With pet	
Larger than 4m up to 12m	With pet	2,1 to 2,2 m
	No pet	1,8 to 2,2 m

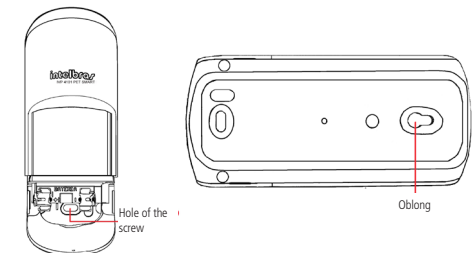
**Note:** in order to install the IVP4101 PET SMART sensor, please make sure that the battery is not connected to the board

The IVP 4101 PETSMART sensor does not have an articulator. So for your installation, please follow the procedure below:

Step 1: Remove the lower front cover of the sensor.

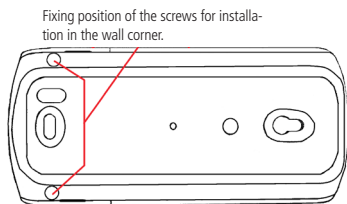


Step2: If the installation is performed directly on the wall, please use the oblong located in the upper rear region of the sensor and of the hole indicated for placing the screw just below the connectors.



Step 2.1: if the installation is done in the corner of the wall.

Use the holes indicated on the rear cover.



**Important:** IVP4101 PET SMART was designed for INTERNAL AND CLOSED AREAS and with the presence of animals up to 20Kg, so do not use it for protection of external or open areas and with the presence of animals over 20 kg.

## 6. Configuring the IVP 4101 PET SMART sensor

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

### 1. Sensitivity adjustment of the IVP 4101 PET SMART sensor.

The SENS (JP1) jumper is used to control the detection sensitivity. With the JP1 jumper open, the sensor provides minimal sensitivity. With the JP1 jumper closed, the sensor provides maximum sensitivity. Closed factory standard.

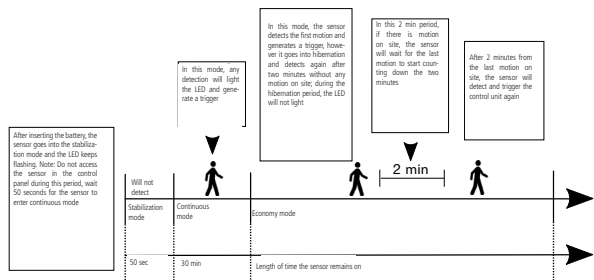
### 2. Adjust the operating mode of the IVP 4101 PET SMART sensor

Using the ECO/CONT (JP2) jumper, select between continuous intelligent mode and economical mode. Factory standard economy mode.

With the JP2 jumper closed, the sensor will operate in economy mode, functioning as follows: After the power supply, the sensor will operate continuously for 30 minutes so that the installer can make all sensor adjustments. After this time, the sensor enters the economy mode.

### Operation of the economy mode:

The sensor will detect and transmit 1 (one) time to the control panel; after this trigger, the sensor enters the economy mode (low consumption mode without detection). In this mode, the sensor will re-detect and transmit to the control panel 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 panel. For a better understanding of the Economy mode, please check the following timeline.



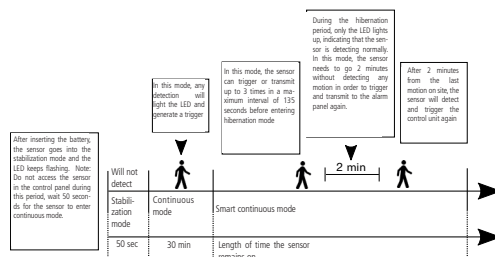
With the JP2 jumper open or when the sensor does not work in CONT mode (Continuous smart), operating as follows: After the power supply, the sensor will operate continuously for 30 minutes so that the installer can make all sensor adjustments.

After this time, the sensor enters the continuous intelligent mode.

### Smart continuous mode operation

The sensor can transmit up to 3 consecutive triggers; after the last trigger, the sensor enters HIBERNATION mode (low consumption mode without transmission to the control panel) for 2 (two) minutes. The sensor will only re-detect and transmit a trigger and remain 2 (two) minutes without movement in the environment. After 2 (two) minutes, the sensor can transmit up to 3 consecutive triggers within an interval of 135 seconds if movements occur. Right after the 3 triggers or 135-second interval, the sensor will enter the HIBERNATION period, that is, it needs to be motionless again for two minutes to be able to detect and transmit a trigger. During this hibernation period, the sensor will not transmit to the alarm panel, yet it will light up the LED indicating that the sensor is performing detection normally.

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



The OOK/FSK (JP3) jumper is used to select between the two types of modulation present in the sensor transmission. With the JP3 jumper open, the selected modulation is FSK. With the JP3 jumper closed, the selected modulation is OOK. The type of modulation to be used will depend on the compatibility of the receiver with the Control Panel.

### To choose the desired modulation, please follow this sequence:

1. Remove the battery from the IVP 4101 PET SMART sensor;
2. Set the JP3 jumper according to the desired modulation (closed OOK, open FSK);
3. Insert the LITHIUM 3VCC – CR123 Year IVP4101 PET SMART battery, the LED will flash for a few seconds (stabilization time); when it goes out, the sensor will already be in normal operation and configured for the desired modulation.

To check the detection of the sensor, walk slowly in front of the sensor observing if the LED lights up in the entire area that needs to be protected; if necessary, readjust the position of the sensor. If Intelbras is the alarm panel used, put it in test mode, this way the LED is not required to be observed, as the panel will indicate the sensor's operation through siren beeps.

Low battery sensor: OIWP4101 PET SMART has a battery level sensor; if it is critical (2.3V), it will send the information to the alarm panel. If the alarm panel is Intelbras, the low battery warning will be indicated on the panel, in case this function is enabled on the panel

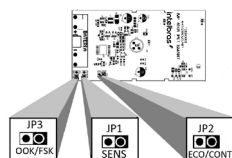
Versions with this function: ANM2004/2008MF and AMT2008/AMT4010/RF/2010/2018/2018EG

To register the sensor code in the control panel to be used, check the procedure in the control panel manual. For the sensor to transmit its code, trigger a trip by moving in front of it.

Jumper SENS (JP1)		Jumper ECO/CONT (JP2)	
Position	Condition	Position	Condition
Open	Maximum sensitivity	Closed	Economy
Closed	Minimum sensitivity	Open	Continuous

Jumper OOK/FSK (JP3)	
Position	Condition
Closed	OOK
Open	FSK



## 7. 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 Term

This contractual warranty is granted under the following conditions

Customer name:

Customer signature:

Invoice number:

Purchase date:

Version

Dealer:

Serial number:

### This product requires installation by a factory-trained professional or by a specialized channel

1. All parts, pieces and components of the product are warranted against any manufacturing defects it may present for a period of 1 (one) year; this period being 3 (three) months of legal warranty plus 9 (nine) months of contractual warranty, counted from the date of purchase of the product by the Consumer, as stated in the purchase invoice for the product, which is an integral part of this Term nationwide. 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 no manufacturing defect is found, but instead any defect arising from inappropriate use is found, the Consumer shall bear these expenses.
2. The installation of the product must be done in accordance with the Product Manual and/or Installation Guide. If your product requires installation and configuration by a trained technician, look for a suitable and specialized professional, whereas the costs of these services are not included in the value of the product...
3. Once the defect is found, the Consumer shall immediately contact the nearest Authorized Service 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 warranty will lose its validity, as product violation will be characterized.
4. In the event that the Consumer requests home service, he/she should go to the nearest Authorized Service for consultation of the technical visitation fee. If the need to withdraw the product is found, the resulting expenses such as transportation and security for the round trip of the product are under the responsibility of the Consumer.
5. The warranty will totally lose its validity in the event of any of the following hypotheses: a) if the defect is not a manufacturing defect, but caused by the Consumer or by third parties extraneous to the manufacturer; b) if the damage to the product comes from accidents, damages, agents of nature (lightning, floods, landslides etc.), humidity, voltage in the electrical network (over voltage caused by accidents or excessive fluctuations in the network), installation/use in disagreement with the user manual or due to the natural wear and tear of the 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 adulterated or erased; e) if the device has been violated.
6. This warranty does not cover data loss, therefore, it is recommended, if this is the case of the product, that the Consumer regularly backs up the data contained in the product.
7. Intelbras is not responsible for the installation of this product, as well as for any attempted fraud and/or sabotage of its products. Keep up-to-date software and applications updates, if applicable, as well as the required network protections to protect against intrusions (hackers). The equipment is protected against defects 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. This product has an internal battery. After their useful life, the batteries must be delivered to an authorized technical assistance office at Intelbras or directly to the environmentally appropriate final disposal, avoiding environmental and health impacts. 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 +55 48 2106 0006 or 0800 7042767 (Monday to Friday, 8am-8pm / Saturdays, 8am-6pm) or by email suporte@intelbras.com.br.

With these as the conditions of this complementary Warranty Term, Intelbras SA reserves the right to change the general, technical and aesthetic features 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.

# intelbras



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**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

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