intelbras IVP 2000 SF Wireless Passive Infrared Motion Sensor User Manual

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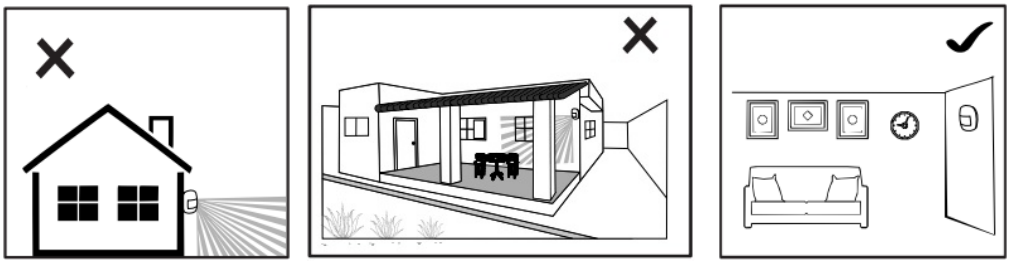
User manual

IVP 2000 SF
Passive infrared sensor

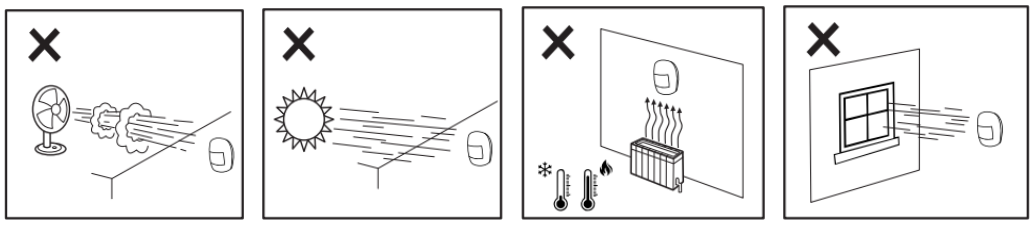
Congratulations, you have just purchased a product with Intelbras quality and safety.
The passive infrared sensor IVP 2000 SF was developed by Intelbras with 100% digital technology. This sensor features SMD technology, offers efficient detection with reduced risk of false triggers, and has automatic temperature compensation. It is compatible with most devices on the market that work on the same frequency and modulation.

Care and safety

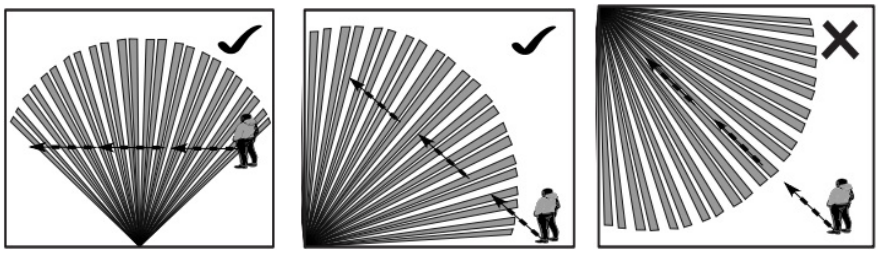
» This product is intended for INDOOR environments.



» 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 is 2 to 2.2 meters.
» 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.



» We recommend that the sensor configuration be done according to item 5. Configuring the IVP 2000 SF sensor (for boards in version 4230312/5 and firmware 2.0.0) and item 7. Configuring the IVP 2000 SF sensor (for board version 4230312/4 and firmware 1.0.2 or earlier).
» 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.

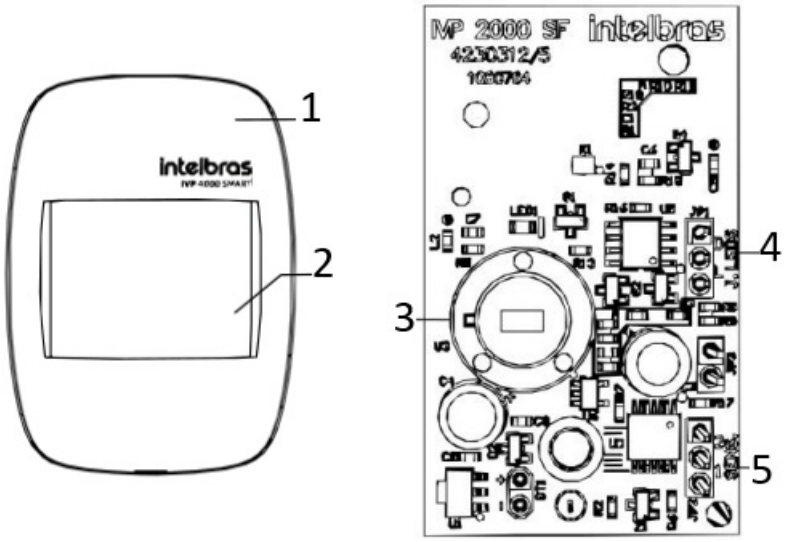
1. Technical specifications

Detection angle	115°
Detection range	12 m
Power	9 Vdc battery
Consumption	25 mA
Operating Temperature	-10 °C to + 50 °C
Modulation	Unsupervised (OOK)
Frequency	433.92 MHz
Baud rate	2 KBps (open source)

2. Characteristics

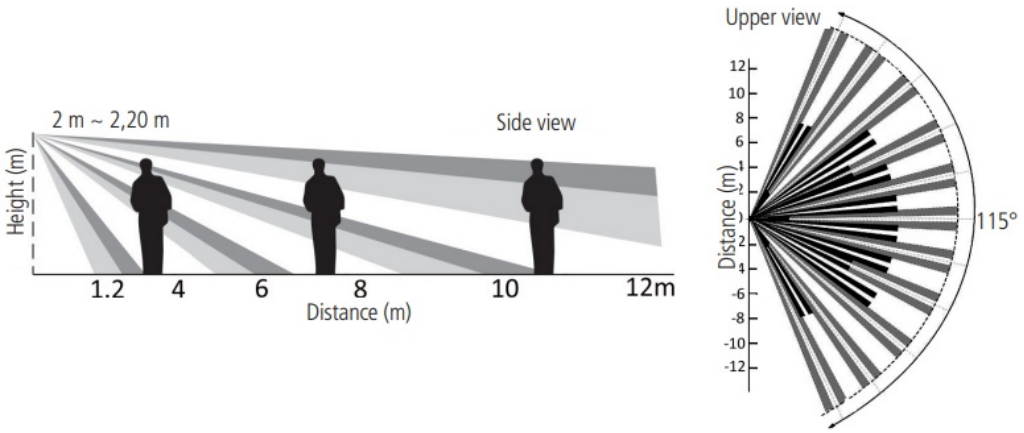
» 2 levels of sensitivity.
» Economy mode of operation.
» Passive infrared with dual element.
» Low battery sensor.
» Ease of installation.

3. Product



1. Front cover
2. Flat Fresnel Lens
3. PIR
4. Jumper LEDS (JP1)
5. Jumper SENS (JP2)

3.1. Detection range



4. Installing the IVP 2000 SF 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 screws.
3. Insert the 9V battery and position the sensor in the desired location. The IVP 2000 SF does not need to be installed with an articulator, as it already has a 15° inclination angle.

5. Configuring the IVP 2000 SF sensor (for boards in version 4230312/5 and firmware 2.0.0)

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

5.1. LED adjustment

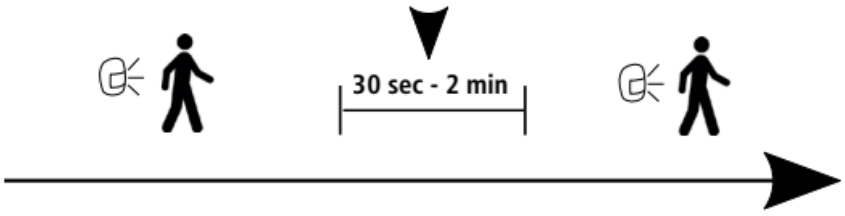
The LEDS jumper (JP1) is used to control the LED indication without interfering with the detector. With the switch in position L the LEDs are enabled to function normally. With the switch in position D, the LEDs are disabled, that is, they do not light up. Factory default: L position.

5.2. Sensitivity adjustment of the IVP 2000 SF sensor

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.

5.3. IVP 2000 SF sensor operating mode

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 in eco-mode.
In this mode, the sensor takes a reading of the environment and right after the detection of movement 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.

<table>
<tr><td>After inserting the battery, the LED is blinking and there is no detection.</td><td>At any detection the LED lights up and generates a trigger.</td><td>After detecting the first movement, the sensor turns on the LED, triggers and enters the sleep period.</td><td>During this period the LED does not light and no new triggers are generated.</td><td>After the hibernation time, the sensor returns to detect and generate triggers in the central, starting the cycle again.</td></tr>
<tr><td></td><td></td><td colspan="3"> 
</td></tr>
<tr><td></td><td>15 min</td><td colspan="3">Time the sensor remains on</td></tr>
<tr><td>Period of stabilization</td><td>Trial period</td><td colspan="3">Economy Mode
  </td></tr>
</table>

» Advantage of eco-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.

5.4. Low battery sensor

The IVP 2000 SF sensor controls the battery level. If it is critical (7V), it will send the information to the control

panel. If low battery signaling is enabled in the control unit, the information is sent during the trigger.
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. Set the jumpers to the desired settings.
2. Perform a trip as the jumper update will occur after the next shot.

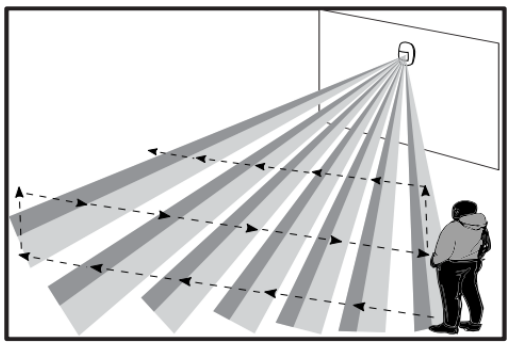
Note: do not register the sensor in the control panel during the stabilization time, wait for it to start working in continuous mode.

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 LEDS (JP1)		**Jumper SENS (JP2)**	
Position	**Condition**	**Position**	**Condition**
D	LEDs off	1	Maximum sensitivity
L	LEDs on	2	Minimal sensitivity

6. 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.

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

LED adjustment

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

7.1. Sensitivity adjustment of the IVP 2000 SF sensor

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.

7.2. IVP 2000 SF sensor operating mode

After inserting the battery, the LED will blink for approximately 20 seconds (stabilizing time and performing self-test). When it goes off, the sensor will operate for 10 minutes in Continuous mode (immediate firing) so that the installer can make all adjustments to the position of the sensor. After the time of 10 minutes the sensor will work in Economy mode. When the sensor triggers while in Economy mode, it is necessary to wait a period of two minutes without movement for it to detect again.

Advantage of Economy mode: In environments where there is a lot of people, the Economy mode will reduce the excessive consumption of the battery. For a better understanding of the Economy mode, observe the following timeline:

<table>
<tr><td>After inserting the battery, the sensor is in stabilization mode and the LED is blinking. Note: do not register the sensor in the control during this period, wait 20 seconds for the sensor to enter continuous mode.</td><td>In this mode any detection LED lights up and triggers.</td><td colspan="3">In this mode, the sensor detects the first movement and generates a trigger, but it goes into hibernation and returns to detect it after two minutes with no movement in place, during the hibernation period the LED does not light up.</td><td>In this period of 2 min, if there is movement in the place, the sensor waits for the last movement to start counting the two minutes.</td><td>After the 2 min of the last movement of the place, the sensor returns to detect and generate a trigger in the control unit.</td></tr>
<tr><td>Does not detect</td><td>  </td><td colspan="4"> 
</td></tr>
<tr><td>Stabilization Mode</td><td>Continuous mode</td><td colspan="4">Economy mode</td></tr>
<tr><td>20 sec</td><td>10 min</td><td colspan="4">Time the sensor remains on</td></tr>
</table>

7.3. Low battery sensor

The IVP 2000 SF sensor controls the battery level. If it is critical (7V), it will send the information to the control panel. If low battery signaling is enabled in the control unit, the information is sent during the trigger.

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

8. Homologation

0577-09-0160

This equipment is not entitled to protection against harmful interference and may not cause interference to properly 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:

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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 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 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) 21060006 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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Documents / Resources

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References

- CHAT intelbras
- Fórum Intelbras - Índice
- SCH
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