VIDEO-PIR   Wireless indoor infrared sensor with camera

VIDEO-PIR is a sensor that detects the movement of a person inside a building through passive infrared (PIR), takes some color photos and transfers them wireless to the CE-LAN panel for a visual confirmation of the alarm (video-verification). The camera is equipped with a night illuminator to take pictures even in the dark. The device can also take photos by manual user command. The detector has a detection range up to 12 meters with mounting at 2.20 meters from the ground. It consists of two parts: a main body inserted in the front cover and a base, which acts as a fixing part. The device can also be mounted on an adjustable wall joint (included), equipped with anti-removal protection.
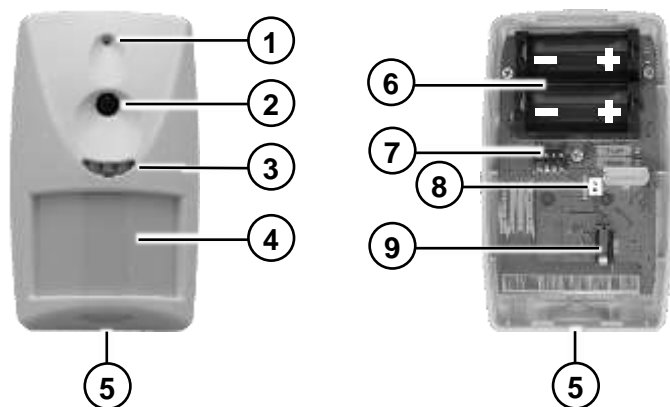

PLEASE NOTE.
The sensor transmits the images to the control panel on a dedicated wireless band. The control panel uses the RTX2 section to receive images. It is therefore mandatory to also insert the second wireless antenna on the control panel to receive video verification images.

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1. Identification of parts

1 - Night illuminator
2 - Camera lens
3 - Signaling LED
4 - PIR lens
5 - Locking screw

6 - Batteries (2xCR123A)
7 - Dip-switch
8 – Wall joint tamper input
9 - Anti-opening tamper

2. Installation

Do not use the device in outdoor environment. Before definitively fixing the sensor, carry out some transmission tests towards the control panel to check that the position is adequate.

The sensor can be installed at a height of about 2.20m on a wall or in the corner of a room. Do not aim the sensor towards objects that can quickly change the temperature (eg electric heaters) or that can move (eg curtains hung over a radiator) in the detector's field of view.
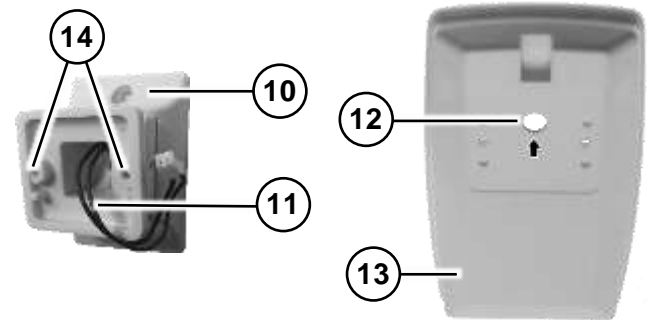
It is not recommended to orient the sensor towards windows or areas with strong air circulation (eg fans, heat sources, air conditioning, doors not sealed). In front of the sensor there should be no obstacles that could obstruct his view.

1. Open the sensor by loosening the locking screw (5)
2. Open the holes to pierce on the base necessary for the desired assembly, then use the base as a template for the wall fixing holes
3. Fix the sensor base on the wall (with the locking screw facing down). Recommended height about 220cm from the ground.
4. If the joint (10) is used, it must be oriented and fixed on the wall, so the sensor base (13) must be fixed to the joint by the two screws included (14). Drill a hole (diameter 7 mm) on the base (12) to pass the anti-removal tamper cable on the joint (11). Connect the tamper cable to the dedicated input (8).
5. Hook the main body to the base, then tighten the locking screw
6.

10 – Wall Joint
11 –Anti-removal tamper cable
14 – Fixing base-joint

12 - Tamper cable passage hole
13 - Sensor base (rear view)

3. Dip-switch

DIP		ON	OFF
1	Mode	Enroll	Normal
2	NOT USED		**LEAVE OFF**
3	NOT USED		**LEAVE OFF**
4	Joint Tamper	Disabled	Enabled

4. Wireless enroll

To enroll the sensor on the CE-LAN central panel, proceed as follows:
1. Log in as INSTALLER on the control panel
2. Enter SETUP> DEVICES> LEARN RADIO DEVICES. The control unit waits for the sensor to be enrolled
3. Enter ENROLL MODE on the sensor (DIP1 = ON)
4. Press the sensor TAMPER button (9)
5. Check that the control panel has learned the code
6. Exit the ENROLL MODE on the sensor (DIP1 = OFF)

5. LED signals

The multicolor LED on the device (3) provides the following indications:

- Flashing blue/red for about 15 seconds at start-up
- Lit up blue for 2 seconds in alarm (if enabled)
- 2 flashes green for enter/exit enroll mode (DIP1) and enter/exit wireless setup from control panel
- 2 flashes white during enroll transmission
- Quick flashing during image transmission to the control panel, then on for 1 second if the transmission is successful (can be disabled)
- Flashing green/red during firmware update

6. Settings

The sensor must be set up in all its functions by the CE-LAN control panel software (available for Windows, iOS and Android).
The control panel must have a Firmware version 2.10.x or higher.
On the control panel software enter SETUP> DEVICES and select the VIDEO-PIR sensor to be set.
From here you can access the following features:

DEVICE SETTINGS

This function is divided into three parts:
1. TEST: here you can perform tests in real time for wireless range, PIR detection and Camera
NOTE: In TEST mode the quiet time is not active.
2. SETUP: here it is possible to modify all the operating parameters of the device, including:

- PIR SENSITIVITY – PIR detection sensitivity/range level (1-10)
- ANTI-DISTURBANCE – consecutive detections before for alarm signalling (1-3)
- QUIET TIME – detection inibition time after an alarm (1-120 seconds)
- ALARM LED – Use of the LED to indicate alarms (ON/OFF)
- SUPERVISION INTERVAL – Interval for sending supervision to the control panel (3-60 minutes)
- ILLUMINATOR THRESHOLD – brightness level under which the night illuminator is activated (0-255)
- ILLUMINATOR POWER – Night illumination power level (1-20)
- IMAGES BRIGHTNESS – Brightness level of images captured by the camera (1-255)

3. COUNTERS: here you can view the event counters stored in the sensor

FIRMWARE UPDATE

This function allows the wireless update of the device firmware.

7. Operation

The device is always active and transmits every movement detection to the control panel, both with the system armed and disarmed.
In order to preserve battery autonomy, the sensor waits for the quiet time to pass without any detection before accepting a new alarm event.
If the device is included in a disarmed sector, the camera is not activated, if instead the sector is armed, following a motion detection, the camera acquires three images and transfers them wireless to the control unit.

In conditions of normal visibility the camera acquires color images. When visibility is poor (with programmable level), the camera activates the night illuminator and acquires black and white images.

CAUTION. If the sensor is set as delayed, in case of detection during the entry time, it will capture the images and transmit them immediately to the control panel. Use this configuration with caution when installing the sensor in an obligatory passage area before disarming, because it will be subject to high consumption and consequently reduced battery life.

8. Battery

The battery level is constantly monitored and sent to the control panel. The status of the battery can be viewed in real time on the CELAN CONNECT application. In case of low battery, the control panel records it as an event and, if programmed, notifies the user.

BATTERY REPLACEMENT

- Disconnect the discharged batteries
- Press the tamper for about 3 seconds (circuit discharge)
- Connect the new batteries observing polarity

CAUTION:
DANGER OF EXPLOSION IF THE BATTERY IS REPLACED BY ANOTHER INCORRECT TYPE. DISPOSE OF USED BATTERIES FOLLOWING THE INSTRUCTIONS.

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9. Auto-protection

The device is equipped with anti-opening tamper protection. When the supplied joint is used, anti-removal protection is also added.

10. Technical features

Power supply	2 lithium batteries 3V type CR123A
Consumption	30uA in stand-by 50mA in alarm
Typical battery life	About 2 years (with 50 camera events per month)
Installation height	Recommended 2.20 m from ground
PIR detection	Max distance 12 m | 105° angle
Camera	640x480 pixel resolution (VGA) Horizontal opening approx. 100°
Night illuminator	Max range 8 m (adjustable power)
Image transfer	Images sent by wireless to the control panel on dedicated band. Typical transfer time of 3 images about 8 seconds
Wireless frequency	869.4 ÷ 869.7 MHz
Wireless range	200 m (open field)
Dimensions	68 x 112 x 45 mm (joint excluded)