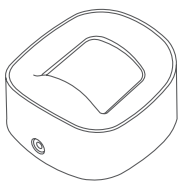


## Motion Sensor 2



## INSTALLATION MANUAL

Version 1.0



### Product description

The compact Motion Sensor 2 allows you to detect if somebody is in the room or not. With the Motion Sensor 2, you can set the light to turn on and off as people come and go. The motion sensor is PIR based and is able to sense movement up to 9 meters from the sensor. It is available with pet immunity and alarm certification.

### Precautions

- When mounting with tape, make sure the surfaces are clean and dry.
- When mounting with tape, the room temperature should ideally be between 21° C and 38° C and minimum 16° C.
- Avoid mounting with tape on rough, porous or fibred materials such as wood or cement, as they reduce the tape bond.

### Placement

- Place the sensor indoors at a temperature between 16-50°C.
- Its angle of detection from above, the sides, and below must be 45°.

- Place the Motion Sensor 2 in a location with a clear view of the monitored area and the windows.
- The distance from the sensor to a fireplace or a stove must be at least four meters.
- The Motion Sensor 2 must be reachable for battery testing and maintenance.
- Place the sensor free of curtains and other obstacles.
- Avoid placing the Motion Sensor 2 close to a heating/cooling source.
- Avoid placing the Motion Sensor 2 in direct sunlight or bright light.

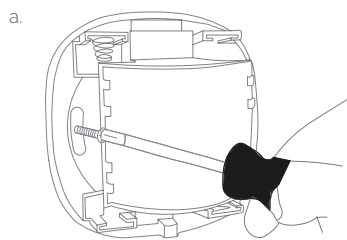
### Mounting

There are several mounting options for the Motion Sensor 2. You can mount it flat on a ceiling or wall, using the screws, adhesive tape, or magnet. If you have a sensor with a corner bracket included, you can mount the bracket in corners or on the ceiling, using screws or adhesive tape. Afterwards, you can attach the sensor to the bracket by using the magnet inside the device or the screws. If you have a stand included, you can also place the sensor on the stand.

For pet immune motion sensors, it is important that they are placed at minimum 2.1m height. Furthermore, it is recommended to install pet immune motion sensors in the corner of the room.

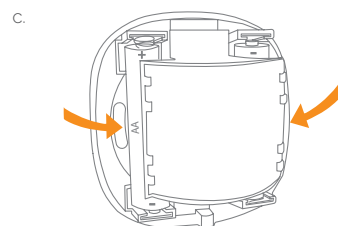
#### MOUNTING FLAT ON CEILING OR WALL

1. Open the casing, and use the sensor part with oval holes to mark the screw holes on the ceiling or the wall.
2. Mount the sensor on the wall or the ceiling by installing one screw from the bag marked "A" through each oval hole. Using screws for mounting is the most secure mounting option, as it prevents sudden, unwanted removal.



Alternatively, you can use the large, round piece of double adhesive tape to mount the sensor. Make sure to press firmly on the sensor with the tape to make it stick.

- b.
3. Insert batteries and make sure that the battery polarity is correct (+/-).



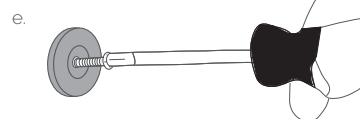
4. Close the casing of the sensor.

#### MOUNTING WITH MAGNET

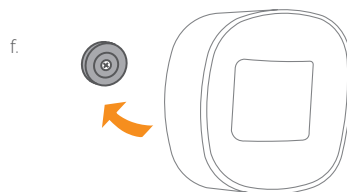
If your sensor includes a corner bracket, you can mount the sensor flat on the wall or ceiling, using the magnet from the bracket.

1. Unscrew the small magnet from the bracket.

- d.
2. Screw the magnet on a ceiling or a wall.

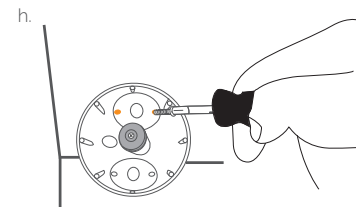
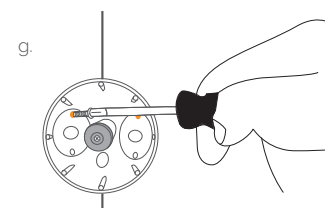


3. Attach the sensor to the magnet.

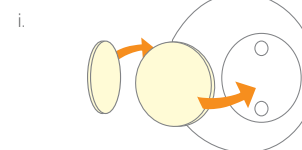


#### CORNER OR CEILING MOUNTING WITH CORNER BRACKET

1. If you have a sensor with a corner bracket included, you can mount the sensor with this bracket in a corner or on the ceiling.
2. Use the corner bracket to mark the screw holes on the two walls in the corner of the room or on the ceiling.
3. Use the two screws in the bag marked "A" to install the bracket in the marked place. Using screws for mounting is the most secure mounting option, as it prevents unwanted removal, e.g. by intruders.



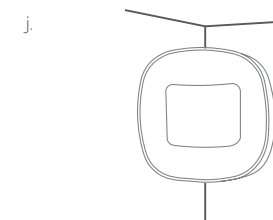
Alternatively, you can use the two small, round pieces of double adhesive tape to mount the bracket in the corner (do not mount it on the ceiling with tape). Make sure to press firmly on the bracket with the tape to make it stick, and then attach the sensor to the bracket.



When mounting with a corner bracket, you have two options for mounting the sensor on the bracket: either with the magnet or screws.

#### MOUNTING THE SENSOR ON THE CORNER BRACKET WITH THE MAGNET

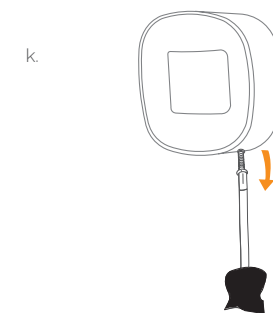
1. Open the casing of the sensor.
2. Insert batteries.
3. Close the casing of the sensor.
4. Attach the sensor to the corner bracket, which includes a magnet.



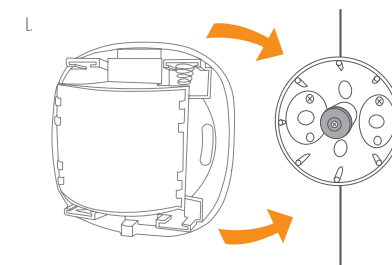
#### MOUNTING THE SENSOR ON THE CORNER BRACKET WITH THE SCREWS

If you are using the sensor for security purposes, we recommend using screws to mount the sensor on the bracket for a more secure fastening.

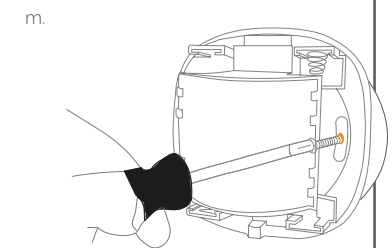
1. Open the casing of the sensor.



2. Place the part with oval holes against the already mounted bracket.



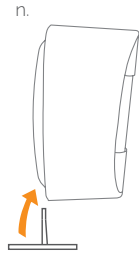
3. Take two screws from the bag marked "B". Mount one screw through each oval hole and into two holes on the corner bracket.



4. Insert batteries and make sure that the battery polarity is correct (+/-).
5. Close the casing of the sensor.

#### STAND

1. If you have a sensor with a plastic stand included, you can insert the stand in the opening on the back of the sensor as shown on the drawing.
2. Place the standing sensor on the shelf or on a desk.

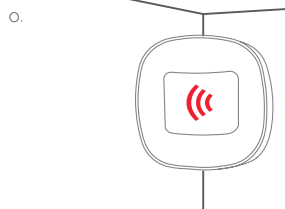


#### ALARM SENSORS

Alarm sensors must be mounted with screws to the wall or to the corner bracket. The break-away tamper switch of the alarm sensors requires mounting with screws, so that the break-away part is attached to the mounting surface in case of tampering.

#### Connecting

1. When batteries are inserted, the Motion Sensor 2 will automatically start searching (up to 15 minutes) for a Zigbee network to join.
2. Make sure that the Zigbee network is open for joining devices and will accept the Motion Sensor 2.
3. While the sensor is searching for a Zigbee network to join, the LED flashes red.



4. When the sensor is connected to a network, it will stop flashing.

#### Modes

##### SEARCHING GATEWAY MODE

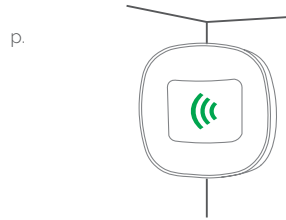
Red LED light is flashing every second (up to 15 minutes).

##### LOW BATTERY MODE

The device will flash red twice every minute when the battery is low.

#### ALARM TESTING MODE

The motion sensor will automatically flash green every time movement is detected by the Intruder Alarm System (IAS), no matter if the alarm system is activated or deactivated. The green flashes can help you determine if the placement of the sensor is suitable for alarm purposes.

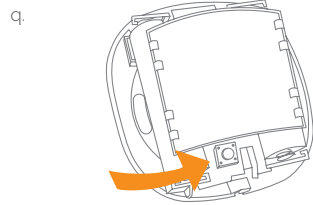


#### Resetting

Resetting is needed if you want to connect your Motion Sensor 2 to another gateway, or if you need to perform a factory reset to eliminate abnormal behaviour.

#### STEPS FOR RESETTING

1. Detach the sensor from the bracket and/or open the casing.
2. Check that the batteries are inserted correctly.
3. Press and hold the round menu button inside the device.



4. While you are holding the button down, the LED first flashes once, then two times in a row, and finally numerous times in a row.
5. Release the button while the LED is flashing numerous times in a row.
6. After you release the button, the LED shows one long flash, and the reset is completed.

#### Fault finding

- In case of a bad or weak signal, change the location of the Motion Sensor 2. Otherwise, you can relocate your gateway or strengthen the signal with a smart plug.
- If the search for a gateway has timed out, a short press on the button will restart it.

#### Battery replacement

The device will blink twice every minute when the battery is low.

#### CAUTION:

- Risk of explosion if batteries are replaced by an incorrect type.
- Dispose of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery can result in an explosion
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas
- Maximum operation temperature is 50°C

**CAUTION:** When removing cover for battery change - Electrostatic Discharge (ESD) can harm electronic components inside

1. To replace the battery, detach the Motion Sensor 2 from the bracket and/or open the casing.
2. Replace the battery respecting the polarities.
3. Close the casing of the sensor.

#### Disposal

Dispose the product and battery properly at the end of their lives. This is electronic waste, which should be recycled.

#### FCC statement

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the

equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

#### IC statement

##### English

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20 cm** between the radiator and your body.

##### Français

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;

2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux radiations IC CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de **20** cm entre le radiateur et votre corps.

#### ISED statement

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B).

#### CE certification

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product and, in particular, its compliance with the harmonized standards and specifications.



#### IN ACCORDANCE WITH THE DIRECTIVES

- Radio Equipment Directive (RED) 2014/53/EU
- RoHS Directive 2011/65/EU amending 2002/95/EC
- REACH 1907/2006/EU + 2016/1888
- RF Frequency: 2405MHz-2480MHz  
Max RF Power: 7.87dBm (for EU)

#### Other certifications

Zigbee 3.0 certified.

EN 50131 certified



#### All rights reserved.

Develco Products assumes no responsibility for any errors, which may appear in this manual. Furthermore, Develco Products reserves the right to alter the hardware, software, and/or specifications detailed herein at any time without notice, and Develco Products does not make any commitment to update the information contained herein. All the trademarks listed herein are owned by their respective owners.

Distributed by Develco Products A/S  
Tangen 6  
8200 Aarhus N  
Denmark  
www.develcoproducts.com