

## INSTALLATION MANUAL

v.1.0



eng

## MAGNETIC SENSOR

*Detecting exits  
and entrances  
of your home*

## PRODUCT DESCRIPTION

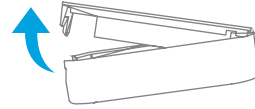
The Magnetic Sensor detects and reports opening and closing of doors and windows. Easily installed on any door or window, the sensor triggers a signal when parted. This lets you know when a room is entered, if a window or a door has been left open, etc.

## PRECAUTIONS

- When removing cover for battery change - electrostatic discharge can harm electronic components inside.
- Always mount indoors as sensor is not waterproof.
- Do not place the sensor close to magnetic or electromagnetic fields. This device includes a magnet. The magnet creates a magnetic field that may cause damage to computer hard drives, magnetic cards, data storage devices, hearing aids and speakers e.g. Therefore, we strongly advise you to never position the magnet close to electronic devices.

## GETTING STARTED

1. Open the casing of the device by pushing the fastening on top of the device to remove the front panel from the back cover.



2. Plant the enclosed batteries into the device respecting the polarities.
3. Close the casing.
4. The Magnetic Sensor will now start searching (up to 15 minutes) for a ZigBee network to join.
5. Make sure that the ZigBee network is open for joining devices and will accept the Magnetic Sensor.
6. While the Magnetic Sensor is searching for a ZigBee network to join, the red LED is flashing.



7. When the red LED stops flashing, the Magnetic Sensor has successfully joined the ZigBee network.

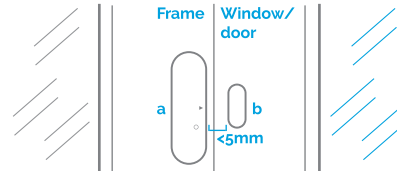
## PLACEMENT

- Place the sensor indoors at a temperature between 0-50°C.
- The magnet has to be placed on that side of the sensor which is marked with a small triangle.
- The magnet and sensor also have to be aligned/centered thickness-wise on as similar level as possible.
- In case of a weak or a bad signal, change the location of the Magnetic Sensor or strengthen the signal with a smart plug.

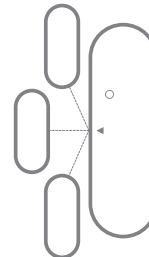
SEE PAGE 2 FOR ILLUSTRATIONS.

## MOUNTING

- Clean the surface before mounting.
- The Magnetic Sensor (a) should be mounted to the frame using the double stick tape, already applied on the back of the sensor and magnet. Press firmly to secure sensor.



- The magnet (b) should be mounted on the door or window no further than 5 mm away from the arrow on the sensor.
- There are many ways to mount the sensor and magnet, as windows and doors vary greatly. The most important consideration is for the magnet to be placed as near to the point on the sensor indicated by the grey arrow.



- The sensor and magnet may be placed on separate three dimensional planes, though this does affect the maximum distance allowed. The magnet may also be placed either facing the side of the sensor or sitting parallel to it.
- **NOTE:** Always mount indoors as sensor is not waterproof.
- SEE REVERSE FOR MORE ILLUSTRATIONS

## TESTING

You can test if the positioning of the sensor and magnet are correct by checking whether the green light on the Magnetic Sensor is flashing when you open or close the window/door.

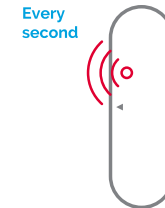
## RESETTING

Resetting is needed if you want to connect your Magnetic Sensor to another gateway or if you need to perform a factory reset to eliminate abnormal behavior.

The reset button is marked with the small ring on the front of the sensor.

### STEPS FOR RESETTING

1. Open the casing of the device by pushing the fastening on top of the device to remove the front panel from the back cover.
2. Remove the batteries and reinsert the batteries.
3. Press and hold down the reset button for approximately 8-10 seconds. The button has to be pushed within one minute after inserting the batteries.
4. When the red light starts flashing every second, the reset process has been successfully implemented.



## MODES

### ACTIVATION MODE

A single green flash means that the sensor and the magnet are moving either away from or towards each other.



### SEARCHING GATEWAY MODE

Red flashes every second for a longer period, means that the device is searching for a gateway.

### LOST CONNECTION MODE

When the red LED flashes 3 times, it means that the device has failed to connect to a gateway.

### LOW-BATTERY MODE

Two consecutive red LED flashes every 60 seconds, means that the battery should be replaced.

## FAULT FINDING

- If the Magnetic Sensor does not work when the window or door is parted, the probable cause is a faulty battery. Replace the batteries if they are worn out.
- In case of a bad or weak signal, change the location of the Magnetic Sensor. 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

**CAUTION:** RISK OF EXPLOSION IF BATTERIES ARE REPLACED BY AN INCORRECT TYPE. DISPOSE OF THE BATTERIES IN ACCORDANCE WITH THE INSTRUCTIONS.

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

1. Open the casing of the device by pushing the fastening on top of the device to remove the front panel from the back cover.
2. Replace the batteries respecting the polarities. The Magnetic Sensor uses 2xAAA batteries.
3. Close the casing.
4. Test the Magnetic Sensor.

## OTHER INFORMATION

Note local regulations about information to your insurance company regarding installed Mmagnetic Sensors.

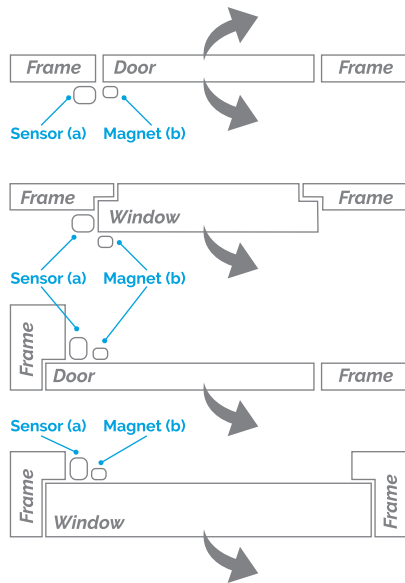
## DISPOSAL

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

## PLACEMENT EXAMPLES

### TOP VIEW

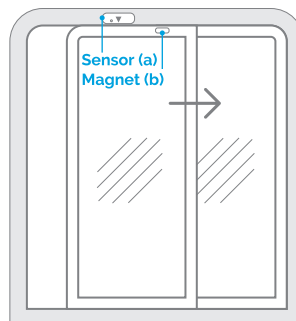
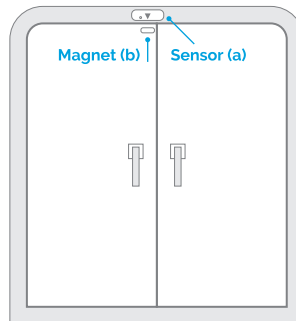
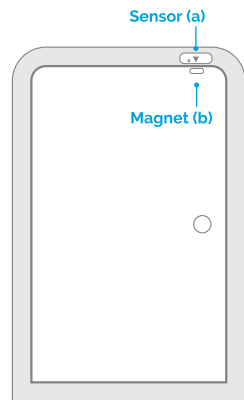
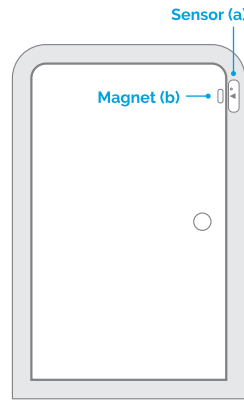
- The most beneficial distance between the sensor and the magnet is 0.2-0.5 cm.
- Be aware that on magnetic surface (e.g. metal door), the distance between the sensor and the magnet has to be 0.1-0.3 cm.



## PLACEMENT EXAMPLES

### DOORS

- Be sure to mount the sensor on the frame, to protect the electronics from heavy vibrations.
- The sensor and magnet should be mounted on the side opposite from the hinge/pivot point.
- Pay careful attention to the arrow printed on the sensor. This should be oriented to face the magnet. The distance between the two should not exceed 5 mm.

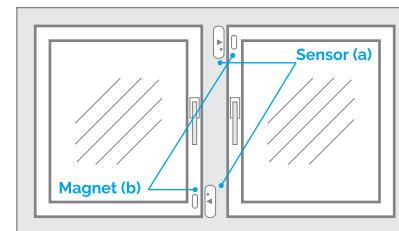
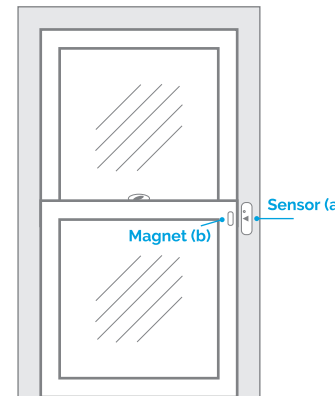
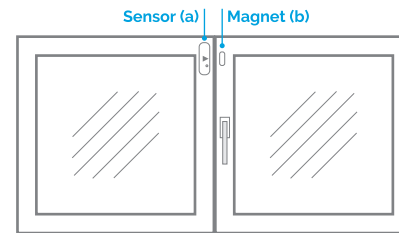


Sliding door

## PLACEMENT EXAMPLES

### WINDOWS

- Be sure to mount the sensor on the frame, to protect the electronics from heavy vibrations.
- The sensor and magnet should be mounted on the side opposite from the hinge/pivot point.
- Alternatively, if the window slides open, the sensor and magnet may be mounted in many positions, however the sensor should always be placed on the frame.
- Pay careful attention to the arrow printed on the sensor. This should be oriented to face the magnet. The distance between the two should not exceed 5mm.



## 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.

## 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 & Telecommunications Terminal Equipment Directive 2014/53/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU

## OTHER CERTIFICATION

- ZigBee Home Automation certified



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