## YOUR NEW STRIPS (A)

Your Strips Comfort is a Z-Wave multi-sensor that can be added to any certified Z-Wave system and operate with any Z-Wave device.

Strips Comfort is a discreet temperature and light sensor.

Strips Comfort has a range up to 40 meters. The range can be extended by using any non-battery Z-Wave device, which automatically acts as a repeater when placed between Strips Comfort and the controller.

Visit **www.sensative.com/comfort** to find out more, including instructional videos or for any support inquires.

## GETTING STARTED (B)

### Adding Strips Comfort to your Z-Wave system (Figure 1-4)

Strips Comfort comes in auto-add mode. Follow the process below to add Strips Comfort to your network:

1. Set your Z-Wave controller in add mode. See your controller's manual.
2. Keep Strips Comfort near its intended location during the add process. Remove the magnet from Strips Comfort.
3. Your Z-Wave controller application should now add Strips Comfort.
4. You may verify that your controller shows Strips Comfort reporting correctly by exposing it to a light source for 5 minutes.

**Note: Strips auto-add mode is started when the magnet is removed for the first time out of the box. If your Strips did not get added with auto-add, use the wake up command to add.**

## GETTING STARTED (C)

Strips Comfort will now report sensor levels and alarms according to the set configuration (see table A on the backside).

The Comfort kit includes a mounting plate that can be used for hanging Strips Comfort on the wall with screws.

### Mounting Strips Comfort

You may mount Strips Comfort directly on the wall using Strips Comfort's adhesive (**ALT. A**), or use the mounting plate (**ALT. B**):

ALT. A

Avoid placing Strips Comfort directly on metal as it affects the range.

Note that Strips Comfort's adhesive is strong and can affect the surface if it is removed.

A5 Remove the protective tape from Strips Comfort adhesive.

A6 Place Strips Comfort on the wall.

ALT. B

B5 Mark holes for the screws using the mounting plate.

B6 Drill 4 mm diameter holes, place the plugs, and mount the screws included in the kit.

B7 Remove the protective tape from Strips Comfort's adhesive.

B8 Mount Strips Comfort on the marked "Strips side" of the plate.

B9 Hang your Strips Comfort on the screws so that it can be removed again if needed.

## USING YOUR NEW STRIPS

Your Strips Comfort is now mounted and added to your Z-Wave system. It will give you valuable sensor data that may be used for alarms or controlling other devices.

Please note that poor network reliability will affect Strips Comfort's battery life. When Strips Comfort blinks 5 times, this indicates that Strips Comfort failed to communicate with the controller. If it happens frequently you may move the controller closer or add an extender between the controller and Strips Comfort.

Enjoy Strips Comfort for years to come!

Need help? Contact Support@sensative.com

You may configure Strips Comfort to better support your needs using the configuration parameters (see Table A on the backside).

Z-Wave is an international standard for wireless communication in smart homes and buildings, enabling you to monitor and control your home remotely.

Strips supports association group 1 (lifeline). Max 1 node.

Strips uses low power (< 2 dBm) radio signals to communicate with your Z-Wave controller.

The radio frequencies used are: 868.42/869.85 MHz (EU), 908.4/916.0 MHz (US/Can)

### How Strips Comfort reports temperature and LUX

Temperature reporting

1. When a temperature alarm is triggered, according to parameters 6, 7 & 8
2. When the temperature has changed more than 2°C since last report was sent
3. Following the rules of configuration parameter 3

When configuration parameter 3 is set to Normal (1): Temperature will report when change is more than 1 degree since last report & more than 1 hour has passed. Device will also report at least once every 24 hours.

When configuration parameter 3 is set to Frequent (2): Temperature will report when change is more than 0.5 degree since last report & more than 15 minutes have passed. Device will also report at least once every 6 hours.

Ambient Light Reporting (1-64 000 LUX)

Strips will report when the Lux value is double or half of the previous sent value. Device will also report at least once every 24 hours.

For more details visit : www.sensative.com/comfort

## A) CONFIGURATION PARAMETERS

| No. | Description | Values | Default |
|---|---|---|---|
| 2 | LED alarm event reporting (1 byte) | 0: Off<br>1: On | 1 |
| 3 | Temperature & Light reporting frequency (1 byte) | 1: Normal<br>2: Frequent | 1 |
| 4 | Temperature reporting (1 byte)<br>(Does not affect temperature alarms) | 0: Off<br>1: On | 1 |
| 5 | Temperature reporting unit (1 byte) | 0: Celsius<br>1: Fahrenheit | 0 |
| 6 | Temperature alarms (1 byte) | 0: Off<br>1: On | 0 |
| 7 | High temperature alarm level (1 byte) | -20 to +60 (degree C) | 60 |
| 8 | Low temperature alarm level (1 byte) | -20 to +60 (degree C) | -20 |
| 9 | Ambient light reporting (1 byte) | 0: Off<br>1: On<br>2: Report only when levels defined in parameter 10 & 11 are passed. | 1 |
| 10 | High ambient light report level (4 bytes) | 3 - 64 000 | 40 000 |
| 11 | Low ambient light report level (4 bytes)<br>(Must be significantly lower than parameter 10) | 1 - 42 000 | 5 000 |
| 12 | Leakage alarm (1 byte) | 0: Off<br>1: On | 0 |
| 13 | Leakage alarm level (1 byte) | 1 to 100 (1 = almost dry, 100 = wet) | 10 |
| 14 | Moisture reporting period (1 byte) | 0-120 (Hours between reports) | 0 (Off) |

Note: Comfort still supports moisture functionality. Moisture sensors and alarms may appear after adding Strips Comfort.

## B) LED LIGHT SIGNALS

| | |
|---|---|
| **1 short blink** | Seen when doing user commands (Table C) or alarm event - when Strips is added in network. |
| **2 short** | Seen when doing user commands (Table C) - when Strips is not added in a network. |
| **1 long** | Indicates successful transmission of user commands (Table C) |
| **5 short** | Error (E.g. communication with controller failed) |

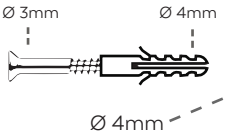
## C) USER COMMANDS

| | |
|---|---|
| **Wake up** | Wake up Strips manually for Z-Wave communication. Move the magnet to the rounded edge, and once the LED blinks, move the magnet away (See figure below). Repeat two more times within 10 seconds. A successful wake-up is confirmed with one LED blink. |
| **Add/remove** | Set your controller to add/remove mode (see your controller's manual). Then follow the instruction above for the "Wake up" command. |
| **Reset** | You may need to reset Strips if your Z-Wave controller is missing or not responding. Follow the instructions for "Wake up" above, but on the 3rd repetition, leave the magnet over the user command sensor as seen below, for 10 seconds. |

## OTHER

| | |
|---|---|
| **Wake up time** | Strips wake up time is set to 24 hours by default, it is possible to change this value between 30 minutes and 24 hours but this will affect battery life. |
| **Association** | Strips supports association group 1 (lifeline). Max 1 node. Normally used to send Strips' status to the Z-Wave controller. |

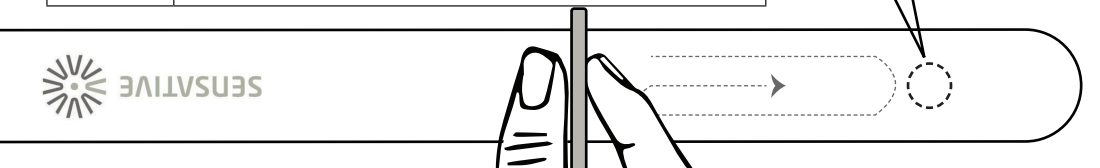
## TEMPLATE FOR DRILLING




Ø 4mm

110 mm

In order to send commands, hold the magnet in the position you see below and move it over the user command sensor (LED will signal),then move the magnet away. Repeat this according to the user command directions (Table C) of the command you want to send.



## YOUR NEW STRIPS (A)

Your Strips Drip is a Z-Wave multi-sensor that can be added to any certified Z-Wave system and operate with any Z-Wave device.

Strips Drip is a water leak sensor that includes temperature and light sensing options.

Strips Drip's range is up to 40 meters, but can be extended by any non-battery Z-Wave device placed between Strips Drip and the controller as it will automatically act as a repeater to increase reliability and range of your system.

Visit **www.sensative.com/drip** to find out more, including instructional videos or for any support inquires.

## GETTING STARTED (B)

### Adding Strips Drip to your Z-Wave system (Figure 1-4)

Strips Drip comes in auto-add mode. Follow the process below to add Strips Drip to your network:

1. Set your Z-Wave controller in add mode. See your controller's manual.
2. Keep Strips Drip near its intended location during the add process. Remove the magnet from Strips Drip.
3. Your Z-Wave controller application should now add Strips Drip.
4. You may verify that your controller shows Strips Drip reporting correctly by holding it firmly according to figure 4 for about 15 seconds. Strips Drip will then sense the proximity and send a leakage alarm.

## GETTING STARTED (C)

Strips Drip will now report sensor levels and alarms according to the set configuration (see Table A on the backside).

**Note: Strips auto-add mode is started when the magnet is removed for the first time out of the box. If your Strips did not get added with auto-add, use the wake up command to add.**

### Mounting Strips Drip (Figure 5-8)

5. Remove the protective tape from Strips Drip adhesive.
6. Mount Strips Drip on the marked "Strips side" of the mounting plate.
7. Make sure that the surface is clean. You may then remove the protective tape from the mounting plate and place Strips Drip firmly on the surface. Note that the adhesive is permanent and may damage your surface upon removal.
8. Place Strips Drip so that the moisture detection pads will soak any leaking water.

## USING YOUR NEW STRIPS

Do not remove Strips Drip if a leak occurs. The sensor pads will dry after the water has been removed.

Your Strips Drip is now mounted and added to your Z-Wave system. It will give you valuable sensor data that may be used for alarms or controlling other devices. Strips Drip analyzes the moisture of the pads to indicate leaks.

Please note that poor network reliability will affect Strips Drip battery life. When Strips Drip blinks 5 times, this indicates that Strips Drip failed to communicate with the controller. If it happens frequently you may move the controller closer or add an extender between the controller and Strips Drip.

Need more help? Contact Support@sensative.com

You may configure Strips to better support your needs using the configuration parameters (see Table A on the backside).

Z-Wave is an international standard for wireless communication in smart homes and buildings enabling you to monitor and control your home remotely.

Strips supports association group 1 (lifeline). Max 1 node.

Strips uses low power (< 2 dBm) radio signals to communicate with your Z-Wave controller.

The radio frequencies used are: 868.42/869.85 MHz (EU), 908.4/916.0 MHz (US/Can)

**Hint 1**

To extend the battery life of your Strips Drip you may turn off temperature/light reporting.

**Hint 2**

Make sure to save the included magnet. It can be used to wake up/add/remove Strips Drip. Note that most magnets will work as a replacement.

**Hint 3**

In certain locations, Strips Drip can be mounted using the screw holes in the mounting plate, or by simply placing Strips Drip (including the mounting plate) without mounting it in a fixed position.

## A) CONFIGURATION PARAMETERS

| No. | Description | Values | Default |
|---|---|---|---|
| 2 | LED alarm event reporting (1 byte) | 0: Off<br>1: On | 1 |
| 3 | Temperature & Light reporting frequency (1 byte) | 1: Normal<br>2: Frequent | 1 |
| 4 | Temperature reporting (1 byte)<br>(Does not affect temperature alarms) | 0: Off<br>1: On | 1 |
| 5 | Temperature reporting unit (1 byte) | 0: Celsius<br>1: Fahrenheit | 0 |
| 6 | Temperature alarms (1 byte) | 0: Off<br>1: On | 0 |
| 7 | High temperature alarm level (1 byte) | -20 to +60 (degree C) | 60 |
| 8 | Low temperature alarm level (1 byte) | -20 to +60 (degree C) | -20 |
| 9 | Ambient light reporting (1 byte) | 0: Off<br>1: On<br>2: Report only when levels defined in parameter 10 & 11 are passed. | 1 |
| 10 | High ambient light report level (4 bytes) | 3 - 64 000 | 40 000 |
| 11 | Low ambient light report level (4 bytes)<br>(Must be significantly lower than parameter 10) | 1 - 42 000 | 5 000 |
| 12 | Leakage alarm (1 byte) | 0: Off<br>1: On | 1 |
| 13 | Leakage alarm level (1 byte) | 1 to 100 (1 = almost dry, 100 = wet) | 10 |
| 14 | Moisture reporting period (1 byte) | 0-120 (Hours between reports) | 0 (Off) |

## B) LED LIGHT SIGNALS

| | |
|---|---|
| **1 short blink** | Seen when doing user commands (Table C) or alarm event - when Strips is added in network. |
| **2 short** | Seen when doing user commands (Table C) - when Strips is not added in a network. |
| **1 long** | Indicates successful transmission of User commands (Table C) |
| **5 short** | Error (E.g. communication with controller failed) |

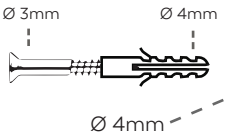
## C) USER COMMANDS

| | |
|---|---|
| **Wake up** | Wake up Strips manually for Z-Wave communication. Move the magnet to the rounded edge, and once the LED blinks, move the magnet away (see figure below). Repeat two more times within 10 seconds. A successful wake-up is confirmed with one LED blink. |
| **Add/remove** | Set your controller to add/remove mode (see your controller's manual). Then follow the instruction above for the "Wake up" command. |
| **Reset** | You may need to reset Strips if your Z-Wave controller is missing or not responding. Follow the instructions for "Wake up" above, but on the 3rd repetition, leave the magnet as shown in the figure below (20mm from the rounded edge) for 10 seconds. |

## OTHER

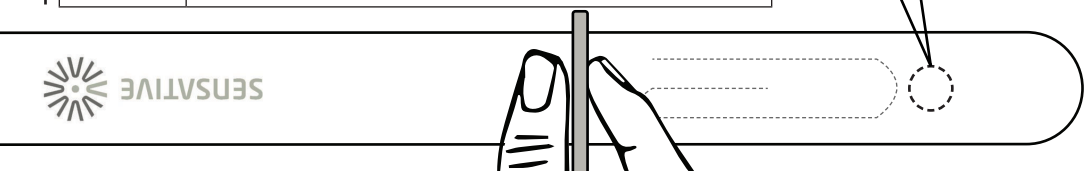
| | |
|---|---|
| **Wake up time** | Strips wake up time is set to 24 hours by default, it is possible to change this value between 30 minutes and 24 hours but this will affect the battery life. |
| **Association** | Strips supports association group 1 (lifeline). Max 1 node. Normally used to send Strips' status to the Z-Wave controller. |

## TEMPLATE FOR DRILLING




110 mm

In order to send commands, hold the magnet in the position you see below and move it over the user command sensor (LED will signal),then move the magnet away. Repeat this according to the user command directions (Table C) of the command you want to send.



PRODUCT /WARRANTY/WARRANTY PERIOD/DEFECT:

Sensative AB ("Company") warrants to the original end-user purchaser ("Purchaser") that Strips ("Product") will be free from substantial defects in material and workmanship from the date when the Product is delivered to the Purchaser and continues for twelve (12) months thereafter ("Warranty period"). The information contained herein is provided to the Purchaser as a convenience.

LIMITATION OF PRODUCT WARRANTY:

Company warrants that the Product under normal use is free from substantial defects in material and workmanship ("Defect") during the Warranty Period, subject to a proper installation, operation and maintenance of the Product as set forth in the user manual and other documentation that may become available to the Purchaser from time to time at www.sensative.com/strips_tips ("User Manual"). Company does however not warrant that the Product will operate uninterrupted or error-free or that all deficiencies, errors, defects or non-conformities will be corrected.

The Warranty extends only to Purchaser and is not transferable to anyone else.

CLAIMS PROCEDURE:

Warranty claims are handled at www.sensative.com/Strips_tips.

Note that warranty claims must be filed to the Company by the Purchaser within 30 days of the manifestation of the problem.

EXCLUSIONS:

The warranty shall not apply to problems or damages resulting from or related to

i) mechanical and/or transport problems

ii) external causes such as accidents, acts of God, disasters, weather conditions, air pollution, abuse, misuse, misapplication or any equipment that generates electrical disturbance of radio communication that violates FCC regulations

iii) negligence, improper handling and failure to operate the Product according to the User Manual

iv) operating and storage problems

v) electrical power and telecommunications

vi) the network and/or other products in the network

vii) change of window/door position

viii) accessories or attachments not recommended by Company or modifications to the Product or its parts

ix) failure to follow Companys instructions relating to the Product´s use or installation and/or to fulfil the maintenance and servicing activities defined in the User Manual.

x) cracks, fractures, cuts, abrasions, physical deformations caused by impact, falling or dropping the device or other object, improper use or not observing the User Manual

xi) service performed by anyone who is not an authorized representative of Company

xii) a Product or part that has been modified

xiii) a Product that is used commercially or for a commercial purpose

xiv) failure of goods or services not obtained from Company

Company does not authorize any person or party to assume or create for it any obligations or liability in connection with the Product except as set forth herein.

This warranty shall not apply to any Product if the Company´s serial number has been removed or defaced in any way

COMPANY IS NOT RESPONSIBLE FOR ANY PROBLEM OR DAMAGE THAT OCCURS AS A RESULT OF PURCHASER´S FAILURE TO OBSERVE THE USER MANUAL

GENERAL TERMS:

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY COMPANY MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. COMPANY EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY STATUTORY LAW ARE LIMITED IN DURATION TO THE WARRANTY PERIOD HEREUNDER.

IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY LOSS OF DATA OR ANY INDIRECT, INCIDENTAL, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES OR DAMAGES FOR LOSS OF PROFITS, REVENUE OR USE INCURRED BY PURCHASER OR ANY THIRD PARTY, WHETHER IN ACTION, IN CONTRACT, OR OTHERWISE EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

COMPANY´S LIABILITY AND PURCHASER´S EXCLUSIVE REMEDY FOR ANY CAUSE OF ACTION ARISING IN CONNECTION WITH THE SALE OR USE OF THE PRODUCT WHETHER BASED ON NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR EQUITABLE PRINCIPLES IS EXPRESSLY LIMITED TO COMPANY´S OPTION OF REPLACEMENT OF OR REPAYMENT OF THE PRODUCT PRICE FOR THAT PORTION OF THE PRODUCTS WITH RESPECT TO WHICH DAMAGES ARE CLAIMED.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE PURCHASER´S SOLE AND EXCLUSIVE REMEDIES AGAINST COMPANY. [THEY DO NOT HOWEVER AFFECT OR RESTRICT THE RIGHTS THAT PURCHASER MAY HAVE AGAINST THE DISTRIBUTOR, SERVICE PROVIDER AND/OR RETAILER.

ALL CLAIMS OF ANY KIND ARISING IN CONNECTION WITH THE SALE OF THE PRODUCT SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO THE COMPANY WITHIN 30 DAYS FROM COMPANY'S DELIVERY OR THE DATE FIXED FOR DELIVERY IN THE EVENT OF NON DELIVERY.

DISCLAIMER:

The Product uses radio to wirelessly communicate data between itself and other devices. Radio communication is inherently not always 100% reliable, and as such, the Product should not be used in situations in which life and/or valuables are solely dependent on its function.

WARNINGS:
1) DO NOT EXPOSE THE PRODUCT TO EXTENSIVE TEMPERATURE, FIRE, CHEMICALS, OR EXPLOSIVES

2) DO NOT BRING THE PRODUCT INTO CONTACT WITH FOOD OR FOODSTUFF

3) DO NOT DISASSEMBLE THE PRODUCT; RECHARGE THE BATTERY, DISCHARGE, SHORT-CIRCUIT OR INCINERATE

4) DO NOT KEEP THE PRODUCT IN CONTACT WITH EXPLOSIVE GASES

5) DO NOT PLACE THE PROCUCT IN A MICRO WAVE, OVEN, WASHING MACHINE, LAUNDRY DRYER, OR ANY OTHER HEAT PRUDICING APPLIANCE

**6) THE PRODUCT USES VERY STRONG NEODYMIUM MAGNETS WHICH CAN BE HAZARDOUS IF SWALLOWED. KEEP THIS PRODUCT AWAY FROM CHILDREN AT ALL TIMES**

**7) MAGNETS FOUND WITHIN THE PRODUCT CAN INTERFERE OR DAMAGE CERTAIN MAGNETIC MEDIA, INCLUDING BUT NOT LIMITED TO OPTICAL HARD DRIVES, TELEVISIONS, MAGNETIC STORAGE MEDIA, PACE-MAKERS AND OTHER SENSITIVE ELECTRONICS**

7) DO NOT DISPOSE OF ELECTICAL APPLIANCE AS UNSORTED MUNICIPAL WASTE USE SEPARATED COLLECTION FACILITIES

FCC NOTICE (for USA):

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.

Federal Communication Commission (FCC) Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

No changes shall be made to the equipment without the Company's permission as this may void the user's authority to operate the equipment.

INDUSTRY CANADA STATEMENTS:

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with the safety requirements for RF exposure in accordance with RSS-102 §2.5.2. This equipment must be installed and operated in accordance with the provided instructions and a minimum 20 cm spacing must be provided between the antenna and any person's body during wireless modes of operation.

INDUSTRY CANADA NOTICE:

"This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device"

INDUSTRY CANADA STATEMENTS:

Cet appareil est conforme avec Industrie Canada exempt de licence Rss standard(s). Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne peut causer d'interférences, et (2) cet appareil doit accepter toute interférence, y compris des interférences qui peuvent provoquer un fonctionnement indésirable du périphérique.

Ce dispositife est conforme à la norme de sécurité en matière d'exposition RF conformément à la RSS-102 §2.5.2. Ce dispositif doit être installé et utilisé conformément aux instructions fournies et à 20 cm espacement minimal doit être prévu entre l'antenne et le corps de toute personne pendant les modes sans fil de fonctionnement.