

MULTISENSOR DUO

QUICK INSTALLATION GUIDE v1.5

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ELECTROMAGNETIC COMPATIBILITY

When operated according to manufacturer instructions, the product complies with all applicable CE harmonised standards from EMC Directive 2004/108/EC and Part 15 of the FCC Rules. The connections conducting HF signals must not be damaged or altered in any way by the user.

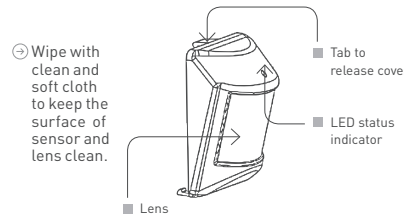
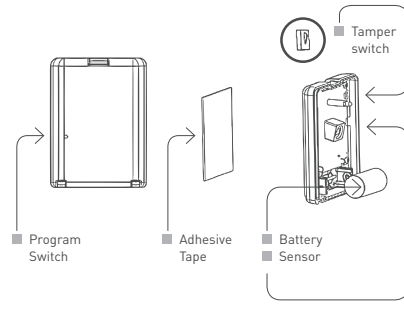
TAKE CARE OF YOUR SAFETY

Display extreme caution when using ladders or steps, please follow manufacturer's instructions. Be careful when using hand and power tools and follow the manufacturer's guidelines when using them. Take care that the correct tools are used. Wear goggles or protective clothing where required.

INTRODUCTION

Thanks for choosing Zipato Multisensor Duo for increasing your home security. This sensor is a Z-Wave enabled device (interoperable, two-way RF mesh networking technology) and is fully compatible with any Z-Wave enabled network, regardless of the manufacturer. Every mains powered Z-Wave enabled device acts as a signal repeater and multiple devices result in more possible transmission routes which helps eliminate "RF dead-spots". Presence detector and temperature meter in one device, Zipato Multisensor Duo offers elaborate security and ambient sensing options. Multi-functional nature of this product allows you to detect motion, and measure room's temperature. When used with Zipato home automation controllers it can be part of any automation scenario created using Zipato Rule Creator. Accordingly it can be used to automatically trigger other Z-Wave devices when activated. This product is a security enabled Z-Wave product that is able to use encrypted Z-Wave messages to communicate to other security enabled Z-Wave products. A security enabled Z-Wave controller should be used in order to fully utilize the product.

OVERVIEW



PACKAGE CONTENT

1PC	Multisensor Duo
1PC	Adhesive tape for sensor
1PC	CR123A Lithium battery
1PC	Quick installation guide

SPECIFICATION

TECHNICAL SPECS

PROTOCOL	Z-Wave Plus
POWER	CR123A battery
OPERATING VOLTAGE:	3V
OPERATING CURRENT	31.9 – 34.5 mA
STANDBY CURRENT	14 – 16 uA
OPERATING TEMPERATURE	-10°C – 40°C
TEMPERATURE DETECT RANGE	-20°C – 50°C
TEMPERATURE DETECT ACCURACY	+/- 2°C (MAX)
ILLUMINATION RANGE	0 – 100%
MOTION DETECT RANGE	2 – 10m
MOTION DETECT ANGLE	120°
RANGE	Up to 31 meter in line of sight (indoor use only)
WEIGHT	60g
DIMENSIONS	50 x 60 x 38mm
PACKAGE WEIGHT	114g
PACKAGE DIMENSIONS	117 x 60 x 60mm
REGULATIONS	EMC 2004/108/EC, R&TTE 1995/5/EC, LVD 2006/95/EC, FCC PART 15
WARRANTY	1 year

MODEL AND FREQUENCIES

EUROPEAN UNION - EU version	vs-zp3102+.eu / 868.42 MHz
UNITED STATES - US version	vs-zp3102+.us / 908.42MHz

RUSSIA - RU version	vs-zp3102+.ru / 869.02MHz
ISRAEL - IS version	vs-zp3102+.is / 916.02MHz
AUSTRALIA - AU version	vs-zp3102+.au / 921.42MHz
INDIA - IN version	vs-zp3102+.in / 865.20MHz

INSTALLATION

Notice: If you are installing the entire Z-Wave system for the first time, please refer to the installation guide of your Z-Wave Controller before installing Multisensor Duo.

- 1 | Release cover tab to open the cover and insert a CR123A battery into the battery compartment. LED will start to flash slowly, which means the sensor has not yet been included to Z-Wave network.
- 2 | Close the cover back.
- 3 | "INCLUSION" (ADDING TO) THE NETWORK: Put your Z-Wave Controller into "inclusion" mode, and follow the instructions to add Multisensor Duo to your controller. To get in the "inclusion" mode, the distance between sensor and controller should be up to 1 meter. Press the program switch of Multisensor Duo once. The LED on the sensor should stop flashing, if not, please try again.

"EXCLUSION" (REMOVING FROM) THE NETWORK: Put your Z-Wave Controller into "exclusion" mode, and follow the instructions to remove the Multisensor Duo from your controller network. Press the program switch of Multisensor Duo once to be excluded. The LED on the Multisensor Duo should start to flash.

"ASSOCIATION": Remove the cover of the Multisensor Duo to get into "Awake" mode, then put your Z-Wave Controller into "association" mode, and follow the instructions to associate the Multisensor Duo with the other device. Close the cover back after "association" is done, after which the Sensor will get into "Sleep" mode for power saving purposes. One association group is supported (5 nodes).

SUPPORTED ASSOCIATION GROUPS:

GROUP ID: 1 - Lifeline
MAX NODES IN GROUP: 5

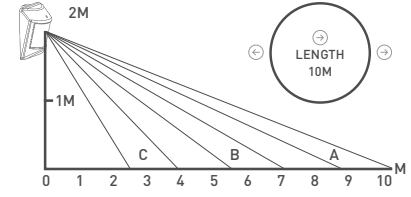
- 4 | AWAKE MODE: It will be triggered after opening the front cover. Red LED will last 10 seconds and Multisensor Duo will send "Wake Up Notification" after 10 seconds.
- 5 | AUTO WAKE UP: Use "Wake Up" command to set up the awaking time (from 10 minutes to 1 week) and send the wake up notification to controller.
- 6 | BATTERY CAPACITY DETECTION: Use "Battery Get" command to have the battery capacity back in %. It will detect battery capacity automatically. Low Battery Auto report when power is low than 2.6V +/- 0.1V.
- 7 | TEMPERATURE REPORT: The user needs to get the controller for receiving the current temperature except when the temperature is +1 °C or -1 °C degree. Then the sensor will automatically report to the controller. (Multisensor Duo will send the Multilevel Sensor Report to controller).
- 8 | CONFIGURATION COMMAND CLASS:

	BYTE	VALUE
PARAMETER 1	1	1 – 255 (unsigned decimal) minutes (default: 3 minutes)
PARAMETER 2	1	0x00 (Celsius) / 0x01 (Fahrenheit) (default: 0x00)
PARAMETER 3	1	1 – 7 (default: 4)

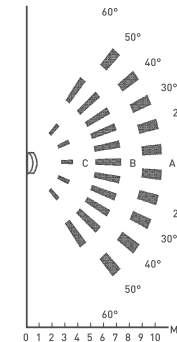
(PARAMETER 1) RE-TRIGGER DURATION: User can change value from

1 to 255 minutes to setup the re-trigger when there is no movement detected in the period of time. Default is 3 minutes.

- (PARAMETER 2) CELSIUS / FAHRENHEIT switching function
(PARAMETER 3) INFRARED SENSOR SENSITIVITY ADJUSTMENT: 7 levels sensitivity, 1 = most sensitive, 7 = most insensitive, default value = 4.
9 | Use adhesive tape to mount Multisensor Duo 2 meters above surface. To ensure proper operation, carefully direct Multisensor Duo to maximise room coverage.
10 | FACTORY DEFAULT RESET: Remove cover to triggered tamper switch, LED ON & send out Alarm Report. Press Program Switch 10 times within 10 seconds. Multisensor Duo will send the "Device Reset Locally Notification" command and reset to the factory default settings. (Remark: This is to be done only in case of primary controller being inoperable or otherwise unavailable.)



SENSOR



OPERATION

- 1 | When you walk in front of Multisensor, it will send status "ON" (Basic Set, Value: 0xFF) to any associated nodes, and the LED will flash once.
- 2 | If no movement is detected in three minutes [default is 3 minutes, based on user's configuration setting, refer Table 1, Parameter 1], the sensor will send Basic Set OFF (0x00) to any associated nodes. LED will flash once.
- 3 | Multisensor Duo is equipped with tamper switch. If the tamper switch is triggered (or cover removed), Multisensor Duo will send Alarm Report, LED will go ON. Refer to table for status.
- 4 | If the tamper switch is closed, Multisensor Duo will send Alarm Report. LED will go ON. Refer to table for status.
- 5 | Alarm report will not be send if there is no association set. Before closing the tamper switch (or cover) the sensor is in "Awake" mode.

	ALARM V1 (MOVEMENT & TAMPER SWITCH)	NOTIFICATION V4 (MOVEMENT)	NOTIFICATION V4 (TAMPER SWITCH)
Alarm type	0x07		
Alarm level	0x00 (No movement after 3 min.) 0xFF (Motion detected)		
Notification type		0x07	0x07
Notification Event	0x08 (Motion detected) / 0x00 (no Movement after 3 min.)		0x03 (removed cover) / 0x00 (cover closed)
Notification Parameter		0x08	0x03

6 | Supports OTA upgrade from controller. Please refer to your controller manual. Once OTA functions, make sure to exclude and include the device again before using it.

Z-WAVE COMMAND CLASSES

COMMAND_CLASS_ASSOCIATION_GRP_INFO
 COMMAND_CLASS_ASSOCIATION_V2
 COMMAND_CLASS_BASIC
 COMMAND_CLASS_BATTERY
 COMMAND_CLASS_CONFIGURATION
 COMMAND_CLASS_DEVICE_RESET_LOCALLY
 COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2
 COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
 COMMAND_CLASS_NOTIFICATION_V4
 COMMAND_CLASS_POWERLEVEL
 COMMAND_CLASS_SENSOR_MULTILEVEL_V5
 COMMAND_CLASS_VERSION_V2
 COMMAND_CLASS_WAKE_UP_V2
 COMMAND_CLASS_ZWAVEPLUS_INFO_V2

TROUBLESHOOTING

Having trouble installing your new product?
 Zipato's website contains the latest user documentation and software updates for Zipato products and services:
www.zipato.com

You can also find answers in the Zipato Community at: community.zipato.com
 Zipato Support: support@zipato.com

LIMITED PRODUCT WARRANTY

GENERAL TERMS

Nothing in this Limited Product Warranty affects your statutory rights as a consumer. The Limited Product Warranty set forth below is given by Tri plus grupa d.o.o. (Europe) [herein referred to as "ZIPATO"]. This Limited Product Warranty is only effective upon presentation of the proof of purchase. Upon further request by ZIPATO, this warranty card has to be presented, too.
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This Limited Product Warranty applies to ZIPATO branded hardware products (collectively referred to as "ZIPATO Hardware Products") sold by ZIPATO (Europe), its European subsidiaries, affiliates, authorized resellers, or country distributors (collectively referred to as "ZIPATO Resellers") with this Limited Product Warranty. The term "ZIPATO Hardware Product" is limited to the hardware components and all its internal components including firmware. The term "ZIPATO Hardware Product" DOES NOT include any software applications or programs.

GEOGRAPHICAL SCOPE OF THE LIMITED PRODUCT WARRANTY

This Limited Product Warranty is applicable to Hardware Products sold by Zipato Resellers in all countries listed at the beginning of this document under the heading "Countries in which this ZIPATO Limited Product Warranty applies". The Limited Product Warranty will be honored in any country where ZIPATO or its authorized service providers offer warranty service subject to the terms and conditions set forth in this Limited Product Warranty. However, warranty service availability and response times may vary from country to country and may also be subject to registration requirements.

LIMITATION OF PRODUCT WARRANTY

ZIPATO warrants that the products described below under normal use are free from material defects in materials and workmanship during the Limited Product Warranty Period set forth below ("Limited Product Warranty Period"), if the product is used and serviced in accordance with the user manual and other documentation provided to the purchaser at the time of purchase (or as amended from time to time).

ZIPATO does not warrant that the products will operate uninterrupted or error-free or that all deficiencies, errors, defects or non-conformities will be corrected. This warranty shall not apply to problems resulting from: (a) unauthorized alterations or attachments; (b) negligence, abuse or misuse, including failure to operate the product in accordance with specifications or interface requirements; (c) improper handling; (d) failure of goods or services not obtained from ZIPATO or not subject to a then-effective ZIPATO warranty or maintenance agreement; (e) improper use or storage; or

(f) fire, water, acts of God or other catastrophic events. This warranty shall also not apply to any particular product if any ZIPATO serial number has been removed or defaced in any way. ZIPATO IS NOT RESPONSIBLE FOR DAMAGE THAT OCCURS AS A RESULT OF YOUR FAILURE TO FOLLOW THE INSTRUCTIONS FOR THE ZIPATO HARDWARE PRODUCT.

LIMITED PRODUCT WARRANTY PERIOD

The Limited Product Warranty Period starts on the date of purchase from ZIPATO. Your dated sales or delivery receipt, showing the date of purchase of the product, is your proof of the purchase date. You may be required to provide proof of purchase as a condition of receiving warranty service. You are entitled to warranty service according to the terms and conditions of this document if a repair to your ZIPATO branded hardware is required within the Limited Product Warranty Period. Other than in respect of products for domestic use (in particular those listed in the first and last boxes in the table below), this Limited Product Warranty extends only to the original end user purchaser of this ZIPATO Hardware Product and is not transferable to anyone who obtains ownership of the ZIPATO Hardware Product from the original end-user purchaser.

PRODUCT WARRANTY PERIOD TABLE

PRODUCT TYPE	Multisensor Duo
PRODUCT WARRANTY PERIOD	One (1) year

IMPORTANT

The content of "Product Type" listed above is subject to change; please refer to the www.zipato.com for latest update.

PERFORMANCE OF THE LIMITED PRODUCT WARRANTY

If a product defect occurs, ZIPATO's sole obligation shall be to repair or replace any defective Zipato Hardware Product free of charge provided it is returned to an Authorized ZIPATO Service Centre during the Limited Warranty Period. Such repair or replacement will be rendered by ZIPATO at an Authorized ZIPATO Service Centre. All component parts or hardware products that are replaced under this Limited Product Warranty become the property of ZIPATO. The replacement part or product takes on the remaining Limited Warranty Period of the replaced part or product. The replacement product need not be new or of an identical make, model or part; ZIPATO may in its discretion replace the defective product (or any part thereof) with any reconditioned equivalent [or superior] product in all material respects to the defective product.

WARRANTOR

Tri plus grupa d.o.o. TEL +385 (0)1 4004 404
 Banjavecveva 11 FAX +385 (0)1 4004 405
 10 000 Zagreb, CROATIA

DECLARATION OF CONFORMITY



The manufacturer Tri plus grupa d.o.o. declares under our sole responsibility that the product:
Marketing model: Multisensor Duo
Regulatory model: vs-zp3102+
Trade/Brand name: Zipato
 is in conformity with the Low Voltage Directive 2006/95/EC, EMC Directive 2004/108/EC and R&TTE Directive 1995/5/EC and carries the CE marking accordingly.

The following harmonised standards were applied:

R&TTE (1995/5/EC)
 EN 300 220-1: V2.4.1

EN 300 220-2: V2.4.1
 EN 61000-3-2:2006 + A1:2009 + A2:2009, Class A
 EN 62479:2010
 EN 55022:2010 /AC:2011
EMC (2004/108/EC)
 EN 301 489-1: V1.9.2
 EN 301 489-3: V1.6.1
LVD (2006/95/EC)
 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011

Changes or modifications not expressly approved by Tri plus grupa d.o.o. for compliance could void the user's authority to operate the equipment.



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.

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

DISPOSING AND RECYCLING YOUR PRODUCT

When it reaches end of life, dispose of the product according to your local environmental laws, guidelines and regulations.

BATTERY DISPOSAL

Dispose of batteries according to your local environmental laws, guidelines and regulations.



This symbol on the product or packaging means that according to local laws and regulations needs to be disposed of separately from household waste. Once this product has reached the end of its life, please take it to a collection point (recycle facilities) designated by your local authorities, some will accept your product for free or simply drop it off at your Zipato re-seller store. By recycling the product and its packaging in this manner you help to conserve the environment and protect human health. At Zipato, we understand and are committed to reducing any impact our operations and products may have on the environment. To minimize this impact Zipato designs and builds its products to be as environmentally friendly as possible, by using recyclable, low toxic materials in both products and packaging.

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