![Zipato logo] **zipato**®
everything under control

MICROMODULE SINGLE SWITCH MAX.LOAD: 11A

QUICK INSTALLATION GUIDE
v1.0

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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.

⚡ **DANGER**
RISK OF ELECTROCUTION
All work on the device should only be carried out by trained and skilled electricians. Observe the country-specific regulations.

⚡ **DANGER**
RISK OF FATAL INJURY FROM ELECTRIC CURRENT.
The device has no basic insulation and must therefore be installed in a way that protects against accidental contact.

⚡ **DANGER**
RISK OF FATAL INJURY FROM ELECTRIC CURRENT.
When installing a wall plate, the distance between the cover's fixing brackets or screws and the connections of the flush- mounted Micromodule Single Swtich Max.Load 11A must be at least 4 mm once installed. If the distance is less than 4 mm, a deeper installation box must be used. The fixing brackets or screws of the cover must not press against the housing. Only insulated tools may be used for operation on the device, e.g. an insulated phase tester.

⚡ **CAUTION**
The connected devices and the flush-mounted receiver can become damaged if devices are operated that do not correspond to the technical specifications (see technical data).
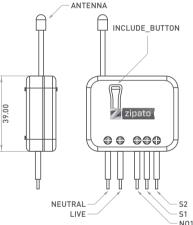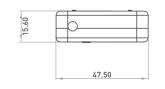
INTRODUCTION

Micromodule Single Switch Max.Load: 11A is a security enabled wireless switch, based on Z-Wave Plus technology. Z-Wave Plus enabled devices displaying the Z-Wave Plus logo can also be used in other Z-Wave networks, regardless of the manufacturer. Remote On/Off control of the connected load is possible with other manufacturer's wireless Controller. Each switch is designed to act as a repeater. Repeaters will re-transmit the RF signal to ensure that the signal is received by its intended destination by routing the signal around obstacles and radio dead spots. Because Micromodule supports Security Command Class, it can learn with Secured controller. Its functionality and supported command classes are identical when included both as a secure or non-secure device.

Micromodule is able to detect instant wattage and overload current (11A with resistive load) of connected lights or appliances. When detecting overload state, the Micromodule will be disabled and its On/Off button will be locked of while LED will keep flashing repeadetly. Unplugging and reconnecting the Micromodule will reset its overload condition to normal status.
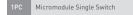
OVERVIEW

FIGURE 1
Dimensions (unit: mm)

Z·WAVE®

ANTENNA

INCLUDE_BUTTON

zipato

39.00

NEUTRAL
LIVE

S2
S1
NO1

15.60

47.50

→ **PACKAGE CONTENT**

1PC	Micromodule Single Switch
1PC	Quick Installation Guide

FEATURES

■ Slim, compact remote Z-Wave module switches and controls all parameters of power that your electrical appliance consumes.
■ Voltage, Current, Power factor, Instant power wattage and Accumulated power report
■ Resistive load 1500W (120V)
■ Zero-crossing switch
■ Higher output power enhances communication range(+2.5dBm output power compared to -2.5dBm 300 series)
■ New Z-Wave 500 series chip supports multichannel operation and higher data rates (9.6/40/100kbps)
■ Overload protection
■ Auto reports wattage when variation exceeds 5%
■ Very low power power consumption
■ Over-the-air firmware update
■ Easy installation

SPECIFICATION

→ **TECHNICAL SPECIFICATION**

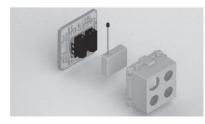|	
PROTOCOL	Z-Wave Plus
OPERATING VOLTAGE:	230V/50HZ
MAXIMUM LOAD	11A (Resistive load)
OPERATING TEMPERATURE	0°C – 40°C
RANGE	Minimum 30m indoor / 70m outdoor
WEIGHT	39g
DIMENSIONS	46mm x 39mm x 15mm
PACKAGE WEIGHT	68g
PACKAGE DIMENSIONS	67mm x 22mm x 162mm
REGULATIONS	EMC 2004/108/EC, R&TTE 1995/5/EC, LVD 2006/95/EC, FCC PART 15
WARRANTY	1 year

→ **MODELS AND FREQUENCIES**

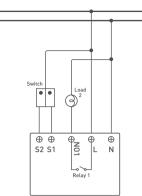|	
EUROPEAN UNION - EU version	ph-pan03.eu / 868.42 MHz
UNITED STATES - US version	ph-pan03.us / 908.42MHz
RUSSIA - RU version	ph-pan03.ru / 869.02MHz
ISRAEL - IS version	ph-pan03.is / 916.02MHz
AUSTRALIA - AU version	ph-pan03.au / 921.42MHz
INDIA - IN version	ph-pan03.in / 865.20MHz

INSTALLATION AND OPERATION

■ Put the in wall switch into a wall box and connect the AC power wire L,N to Micromodule's L and N.
■ Connect the wall switch to the Micromodule as shown in picture.
■ Three operation modes can be configured on Micromodule to match different kinds of wall switches, please refer to 3-10 Edge / Pulse / Edge-Toggle modes which are described in next section of this user manual

→ **APPLICATION**
■ In Wall Switch 1 relay; 1A Type

L
N

Switch
Load 2

S2 S1 NO1 L N

Relay 1

→ **CHOOSING A SUTABLE LOCATION**
■ Do not locate the Micromodule facing direct sunlight, humid or dusty place.
■ The suitable ambient temperature is 0°C–40°C.
■ Do not locate the Micromodule where exists combustible substances or any source of heat, e.g. fires, radiators, boiler etc.
■ After putting it into use, the Micromodule's casing can become little hot which is normal phenomenon during operation..

→ **LED INDICATION**
To know what mode the Micromodule is in, please see from the LED indication.

State Type	LED Indication
Normal	Whenever we switch On and Off of the Micromodule by S1 S2 or On/Off button or RF command, the LED will light up for 1 second.
No node ID	Under normal operation, when the Micromodule has not been allocated to a node ID, the LED flashes on and off alternately at 2-second intervals. By pressing S1, S2 or On/Off button, it will stop flashing temporarily.
Learning	When Micromodule is in learning mode, LED flashes on and off alternately and repeatedly at 0.5 second intervals.
Overload	When overload state occurs, the Micromodule is disabled of which LED flashes on and off alternately at 2 second intervals. Overload state can be cleared by unplugging and reconnecting the Micromodule to the wall outlet.

ADDING TO Z-WAVE NETWORK

In the front casing, there is an On/Off button with LED indicator which is used to toggle on/off switching or to carry out inclusion, exclusion, reset or association. When first power is applied, its LED flashes on and off repeatedly at 0.5 second intervals. It implies that it has not been assigned a node ID and start auto inclusion.

→ **AUTO INCLUSION**
The function of auto inclusion will be executed as long as the Micromodule does not have Node ID and is plugged into a wall outlet.
Note: Auto inclusion timeout lasts 2 minutes during which the node information of explorer frame will be emitted once per every few seconds. Unlike "inclusion" function as shown in the table below, auto inclusion doesn't require pressing on/off buttons on the switch.

The table below lists an operation summary of basic Z-Wave functions. Please refer to the instructions for your Z-Wave Primary Controller to access the Setup function, and to include/exclude/associate devices.

Function	Description	LED Indication
No node ID	The Z-Wave Controller does not allocate a node ID to the Micromodule.	2-second on, 2-second off
Inclusion	Put your Z-Wave controller into inclusion mode by following the instructions provided by the controller manufacturer.	
	Pressing On/Off button three times within 2 seconds will enter inclusion mode.	
Exclusion	Put your Z-Wave controller into exclusion mode by following the instructions provided by the controller manufacturer.	
	Pressing On/Off button three times within 2 seconds will enter exclusion mode.	
	Node ID has been excluded.	0.5s On, 0.5s Off (Enter auto inclusion)
Reset	Pressing On/Off button three times within 2 seconds will enter inclusion mode.	Use this procedure only in the event that the primary controller is lost or otherwise inoperable.
	Within 1 second, press On/Off button again for 5 seconds.	
	IDs are excluded.	0.5s On, 0.5s Off (Enter auto inclusion)
Association	Micromodule is an always listening Z-Wave device, so associations may be added or removed by a controller at any time. **OR** If your controller requires Micromodule to send a 'node information frame' or Node Information Frame (NIF) for associations, then pressing the On/Off button three times within 2 seconds will cause the Micromodule to send its NIF.	
	There is only one group for the switch	

Note: Including a node ID allocated by Z-Wave Controller means inclusion. Excluding a node ID allocated by Z-Wave Controller means exclusion. Failed or success in including/excluding the node ID can be viewed from the Z-Wave Controller.
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Sometimes, users find it hard to execute exclusion or inclusion especially when Micromodule is already installed in a wall box. To solve this issue, Micromodule supports special feature that can use S1 or S2 to execute "exclusion, inclusion, Reset or Association" during 3 minutes when connected to the main power for first time.

PROGRAMMING

1 | BASIC COMMAND CLASS / BINARY SWITCH COMMAND CLASS
The Micromodule will respond to BASIC and BINARY commands that are part of the Z-Wave system.
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1.1 | BASIC_GET / BINARY_SWITCH_GET
Upon receipt of the following commands from a Z-Wave Controller, the Micromodule will report its On/Off state to the requesting node.

BASIC GET COMMAND: **[COMMAND CLASS BASIC, BASIC GET]**

Basic Report Command:
Report OFF: **[Command Class Basic, Basic Report, Value = 0(0x00)]**
Report ON:**[Command Class Basic, Basic Report, Value = 255(0xFF)]**

Binary Switch Get Command:**[Command Class Switch Binary, Switch Binary Get]**

Binary Switch Report Command:
Report OFF:**[Command Class Switch Binary, Switch Binary Report, Value =0(0x00)]**
Report ON:**[Command Class Switch Binary, Switch Binary Report, Value = 255(0xFF)]**

1.2 | BASIC_SET / SWITCH_BINARY_SET
Upon receipt of the following commands from a Z-Wave, the load attached to the Micromodule will turn on or off.

[Command Class Basic, Basic Set, Value = 1~99,255(0xFF)]: the load attached to the Switch turns on.

[Command Class Basic, Basic Set, Value = 0(0x00)]: the load attached to the Switch turns off.

[Command Class Switch Binary, Switch Binary Set, Value = 1~99, (255)0xFF]: the load attached to the Switch turns on.

[Command Class Switch Binary, Switch Binary Set, Value = 0(0x00)]: the load attached to the Switch turns off.
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2 | Z-WAVE'S GROUPS (ASSOCIATION COMMAND CLASS VERSION 2)
Micromodule can be set to send associated Z-Wave devices. It supports one association group with one node support for Grouping 1. For group 1, the Switch will report its latest status to Z-Wave Controller.
Grouping 1 includes, SWITCH_BINARY_REPORT, METER_REPORT, ALARM_REPORT.

2.1 | AUTO REPORT TO GROUPING 1 (MAXIMUM NODE 1)
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2.1.1 | ON/OFF EVENT REPORT
When "on" or "off" state has been changed, it will send Binary Switch Report to the node of Grouping 1.
Binary Switch Report

ON:**[Command Class Switch Binary, Switch Binary Report, Value =255(0xFF)]**
OFF:**[Command Class Switch Binary, Switch Binary Report, Value =0(0x00)]**
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2.1.2 | INSTANT POWER CONSUMPTION VARY OVER 5% REPORT
When the power consumption of load vary over 5%, it will send Meter report to the nodes of Grouping 1.

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01. Meter Type = 0x01, Precision = 1, Scale = 0x02, Size = 4, Meter Value(W)]
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2.1.3 | OVERLOAD ALARM REPORT
When Micromodule detects the current is more than 12A, it will send Alarm Report to Group 1 node.
The content of Alarm Report:

Alarm report command: **[Command_Class_Alarm, Alarm_Report, Alarm Type = 0x08, Alarm Level = 0xFF]**
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2.2 | RESPONSE TO METER GET COMMAND
The Micromodule will report its (1) instant Power Consumption (Watt) or (2) accumulated power consumption(KWH) or (3) AC load Voltage (V) or (4) AC load current (I) (5) load power factor (PF) to Z-Wave Controller after receive the Meter Get Command from Z-Wave Controller.

2.2.1 | INSTANT POWER CONSUMPTION (WATT) OF SWITCH
When receiving Meter Get Command, it will report Meter Report Command to the node.

Meter Get Command: **[Command Class Meter, Meter Get, Scale =0x02(W)]**

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01, Meter Type = 0x01, Precision = 1, Scale = 0x02, Size = 4, Meter Value(W)]

Example:
Meter Value 1 = 0x00 (W)
Meter Value 2 = 0x00 (W)
Meter Value 3 = 0x03 (W)
Meter Value 4 = 0xEA (W)
Meter(W) = Meter Value 3 *256 + Meter Value 4 = 100.2W

2.2.2 | ACCUMULATED POWER CONSUMPTION (KW/H)
When receiving Meter Get Command, it will report Meter Report Command to the node.

Meter Get Command: **[Command Class Meter, Meter Get, Scale = 0x00 KW/h)]**

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01, Meter Type = 0x01, Precision = 2, Scale = 0x00, Size = 4, Meter Value (KWh)]

Example:
Scale = 0x00 (KWh)
Precision = 2
Size = 4 Bytes (KW/h)
Meter Value 1 = 0x00(KWh)
Meter Value 2 = 0x01(KWh)
Meter Value 3 = 0x38(KWh)
Meter Value 4 = 0xA3(KWh)
Accumulated power consumption (KW/h) = (Meter Value 2*65536) + (Meter Value 3*256) + (Meter Value 4) = 800.35 (KW/h)
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2.2.3 | CLEARING ACCUMULATED POWER CONSUMPTION
If you want to reset accumulated power consumption, you can use Meter Reset Command to clear it.

Meter Reset Command: **[Command Class Meter, Meter Reset]**
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2.2.4 | AC LOAD VOLTAGE (V)
When receiving Meter Get Command, it will report Meter Report Command to the node.

Meter Get Command: **[Command Class Meter, Meter Get, Scale =0x04(V)]**

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01, Meter Type = 0x01, Precision = 1, Scale = 0x04, Size = 2, Meter Value(V)]

Example:
Scale = 0x04 (V)
Precision = 1
Size = 2 (2 Bytes of V)
Meter Value 1 = 0x09(V)
Meter Value 2 = 0x01(V)
AC load Voltage = (Meter Value 1*256) +(Meter Value 2)= 230.5 (V)

2.2.5 | AC LOAD CURRENT (I)
When receiving Meter Get Command, it will report Meter Report Command to the node.

Meter Get Command: **[Command Class Meter, Meter Get, Scale =0x05(I)]**

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01, Meter Type = 0x01, Precision = 2, Scale = 0x05, Size = 2, Meter Value(I)]

Example:
Scale = 0x05 (I)
Precision = 2
Size = 2 (2 Bytes of I)
Meter Value 1 = 0x01(I)
Meter Value 2 = 0x21(I)
AC load current = (Meter Value 1*256) +(Meter Value 2)= 2.89 (A)

2.2.6 | LOAD POWER FACTOR (PF)
When receiving Meter Get Command, it will report Meter Report Command to the node.

Meter Get Command: **[Command Class Meter, Meter Get, Scale =0x06(PF)]**

Meter Report Command:
[Command Class Meter, Meter Report, Rate Type = 0x01, Meter Type = 0x01, Precision = 2, Scale = 0x06, Size = 1 Bytes, Meter Value(PF)]

Example:
Scale = 0x06 (PF)
Precision = 2
Size = 1 (1 Byte of PF)
Meter Value 1 = 0x63(PF)
Load power factor (PF) = Meter Value 1 =0.99
―――

3 | Z-Wave Configuration

Configuration Parameter 1		
Function	Size (byte)	Value
Watt Meter Report Period	2	0x01-0x7FFF
Unit	Default	Description
5s	720	720*5s=3600s=1 hour

Configuration Parameter 2		
Function	Size (byte)	Value
KWH Meter Report Period	2	0x01-0x7FFF
Unit	Default	Description
10min	6	6*10min=1 hour

Configuration Parameter 3		
Function	Size (byte)	Value
Threshold of current for Load caution	2	10-1100
Unit	Default	Description
0.01A	1100	1100*0.01A = 11A

Configuration Parameter 4		
Function	Size (byte)	Value
Threshold of KWh for Load caution	2	1-10000
Unit	Default	Description
1KWh	10000	

Configuration Parameter 5		
Function	Size (byte)	Value
Restore switch state mode	1	0-2
Unit	Default	Description
	1	0 : Switch off 1 : Last switch state 2 : Switch on

Configuration Parameter 6		
Function	Size (byte)	Value
Manual On/Off mode	1	0-1
Unit	Default	Description
	0	0: Disable manual On/Off 1: Enable manual On/Off

Configuration Parameter 7		
Function	Size (byte)	Value
LED indication mode	1	1-3
Unit	Default	Description
	1	1 : Show switch state 2 : Show night mode 3 : One flash mode

Configuration Parameter 8		
Function	Size (byte)	Value
Auto off timer	2	0-0x7FFF
Unit	Default	Description
1s	0	0 : Disable auto off function 1-0x7FFF : 1s ~ 32767s

Configuration Parameter 9		
Function	Size (byte)	Value
RF off command mode	1	0-3
Unit	Default	Description
	0	0 : Switch off 1 : Ignore 2 : Switch toggle 3 : Switch on

Configuration Parameter 10		
Function	Size (byte)	Value
Edge or Pulse mode or Edge-Toggle mode	1	1-3
Unit	Default	Description
	1	1 : Edge mode 2 : Pulse mode 3 : Edge-Toggle mode

3.1 | WATT METER REPORT PERIOD:
If the setting is configured for 1hour (set value =720), the Micromodule will report its instant power consumption every 1 hour to Group1 node. The maximum interval to report its instant power consumption is 45 hours (5s*32767/3600=45hr).

3.2 | KWH METER REPORT PERIOD:
If the setting is configured for 1hour (set value =6), the Micromodule will report its Accumulated Power Consumption (KW/h) every 1 hour to Group1 node. The maximum interval to report its Accumulated Power Consumption (KW/h) is 227.55 days (10min*32767/1440=227.55 days).

3.3 | THRESHOLD OF CURRENT FOR LOAD CAUTION:
This is a warning when the current of load over the preset threshold value, if the setting value is 1100, when the load current of Relay1 over this value, Micromodule will send current meter report to warn the Group1 node, the Range of the setting value is from 10 to 1100, and the default value is 1100.

3.4 | THRESHOLD OF KWH FOR LOAD CAUTION
This is a warning when the KWh of load over the preset threshold value, if the setting value is 10000, when the Accumulated Power Consumption of Relay1 over this value, Micromodule will send KWH meter report to warn the Group1 node, minimum value is 1KWh and default value is 10000 kWh.

3.5 | RESTORE SWITCH STATE MODE:
Whenever the AC power return from lost, Micromodule will restore the switch state which could be SWITCH OFF, LAST SWITCH STATE, SWITCH ON. The default setting is LAST SWITCH STATE.

3.6 | MANUAL ON/OFF MODE:
The On/Off function of S1, S2 and learn switch can be disabled or enabled by this parameter, default value is Enable. But the learning operation won't be affected. When manual On/Off function is disabled, the RF command can only switch On but not Off. This is useful function for keeping the device in switch on state.

3.7 | LED INDICATION MODE:

3.7.1 | SHOW SWITCH STATE:
When Micromodule is on, LED is on. When Micromodule is off, LED is off. The default setting is Show Switch State.

3.7.2 | SHOW NIGHT MODE:
When Micromodule is on, LED is off. When Micromodule is off, LED is on.

3.7.3 | ONE FLASH MODE:
When the state of switch changes, LED will turn on for 1 second.

3.8 | AUTO OFF TIMER:
Whenever Micromodule switches to on, the auto off timer begin to count down. After the timer decrease to zero, it will switch to off automatically. However if Auto off timer is set as 0, the auto off function will be disabled. The default setting is 0.

3.9 | RF OFF COMMAND MODE:
Whenever a switch off command, BASIC_SET, BINARY_SWITCH_SET, SWITCH_ALL_OFF, is received, it could be interpreted as 4 variety of commands.

3.9.1 | SWITCH OFF:
It switches to OFF state. The default setting is Switch Off.

3.9.2 | IGNORE:
The switch off command will be ignored.

3.9.3 | SWITCH TOGGLE:
It switches to the inverse of current state.

3.9.4 | SWITCH ON:
It switches to ON state.

3.10 | EDGE MODE, PULSE MODE AND EDGE-TOGGLE MODE:
Manual switch S1 and S2 can set to Edge mode or Pulse mode or Edge-Toggle mode, default value is Edge mode.

3.10.1 | EDGE MODE:
This mode is suitable for the bi-stable wall switch that has indicator point on the switch, and the same position correspond to same state of relay1. If the Micromodule relay change the state because of receiving Z-Wave RF command, it may need two times of change (switch on to off or switch off to on) to let relay back to the correspond state. Manual switch S2 is disabled in this mode.

3.10.2 | PULSE MODE:
This mode is suitable for the toggle type wall switch to swap the state of Relay1.

3.10.3 | EDGE-TOGGLE MODE:
This mode is suitable for the normal bi-stable switch, whenever change state of the wall switch will also swap the state of Relay1.

4 | PROTECTION COMMAND CLASSES
Micromodule supports Protection Command Class version 2, it can protect the Micromodule against unintentional control by e.g. a child. And it can also protect the Micromodule from being turned off by setting it in "No RF Control" state. After being set to "Protection by sequence" state, any intentional pressing of On/Off button should be held for longer than 1 second, or the Micromodule's state will not change. However, the operation of learn function will not change, because learning will not be protected.

Z-WAVE COMMAND CLASSES

COMMAND_CLASS_ZWAVEPLUS_INFO
COMMAND_CLASS_VERSION
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_SECURITY
COMMAND_CLASS_DEVICE_RESET_LOCALLY
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_ASSOCIATION_GRP_INFO
COMMAND_CLASS_POWERLEVEL
COMMAND_CLASS_SWITCH_BINARY
COMMAND_CLASS_BASIC
COMMAND_CLASS_SWITCH_ALL
COMMAND_CLASS_METER_V3
COMMAND_CLASS_CONFIGURATION
COMMAND_CLASS_ALARM
COMMAND_CLASS_PROTECTION
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2

OVER THE AIR FIRMWARE UPDATE

Micromodule is based on 500 series SoC and supports Firmware Update Command Class, it can receive the updated firmware image sent by controller via the Z-wave RF media. It is helpful and convenient way to improve some functions if needed.

TROUBLESHOOTING

Symptom	Cause of Failure	Recommendation
Micromodule is not working and LED off	The Switch is not plugged into the electrical outlet properly	1. Check power connections 2. Don't open up the Micromodule and send it for repair.
Micromodule's LED is illuminating, but cannot control the ON/OFF Switch of the load attached	1.Check if the load plugged into the Micromodule has its own ON/OFF switch 2. The switch is protected	1. Set the ON/OFF switch of the load attached to ON 2. Unprotected the switch or follow the instruction of protection.
Micromodule's LED is illuminating, but the Detector cannot control the Micromodule	1. Not carry out association 2. Same frequency interference	1. Carry out association 2. Wait for a while to re-try
LED keep flashing, but cannot control	Overload occurs	Remove the load attached or check max. load cannot exceed 11.0A

Having trouble installing your new product?
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www.zipato.com

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

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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.

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⊖ 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.

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⊖ PRODUCT WARRANTY PERIOD TABLE

PRODUCT TYPE	Micromodule Single Switch Max.Load 11A
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.

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⊖ 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.
Banjavciceva 11
10 000 Zagreb
CROATIA

TEL +385 (0)1 4004 404
FAX +385 (0)1 4004 405

DECLARATION OF CONFORMITY

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The manufacturer Tri plus grupa d.o.o. declares under our sole responsibility that the product:

Marketing model: Micromodule Single Switch Max.Load 11A
Regulatory model: ph-pan03
Trade/Brand name: Zipato

is in conformity with the Low Voltage Directive 2006/95/EC, EMC Directive 2004/108/EC, R&TTE Directive 1995/5/EC and carries the CE marking accordingly.

The following harmonized standards were applied:

R&TTE (1995/5/EC)
EN 300 220-1: V2.4.1
EN 300 220-2: V2.4.1

EMC (2004/108/EC)
EN 301 489-1: V1.9.2
EN 301 489-3: V1.6.1

LVD (2006/95/EC)
EN 60669-2-1:2004 + A1:2009 + A12:2010 used in conjunction with EN 60669-1:1999 + A1:2002 + A2:2008
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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.

FC

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.

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⊖ DISPOSING AND RECYCLING YOUR PRODUCT
When it reaches end of life, dispose of the product according to your local enviromental 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 facilites) 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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⊖ COPYRIGHT