USER MANUAL EN

QUBINO FLUSH RGBW DIMMER

The Qubino Flush RGBW Dimmer is ideal for dimming 12/24VDC RGB/RGBW strips, LED strips and bulbs, or even halogen bulbs. It can create different lighting effects (scenes) and adjust the colour and intensity of the light source.

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About Qubino

Qubino is a family of innovative Z-Wave devices, many of them the smallest of their kind. Numerous breakthrough innovations, 100% quality control, and responsive customer service make Qubino the number one choice for making your life more comfortable.

Qubino enables you to transform – inexpensively and invisibly – any traditional electric device into a smart, connected one that you can control with your smart phone. Qubino devices are simple to install and use, but also extremely versatile - they offer a wealth of additional features and parameters for you to play with.

We love helping people who enjoy creating new ideas for their home and then using their hard work and skill to turn those ideas into reality. We admire their passion and resourcefulness. We do our best to supply you with products that will enable you to create a unique and special home for yourself. We innovate so that you can be free to make the smartest home possible. With just a touch of magic.

"Simple is smart." We believe it is smart to make complex things simple. But only when this means simple for our customers, not for ourselves. We think a lot so that you won't have to when it comes to installing or using our devices.

For more information visit: www.qubino.com

About Z-Wave:

The Z-Wave protocol is an interoperable, wireless, RF-based communications technology designed specifically for control, monitoring, and status reading applications in residential and light commercial environments. Mature, proven, and broadly deployed (with over 50 million products sold worldwide), Z-Wave is by far the world market leader in wireless control, bringing affordable, reliable, and easy-to-use 'smart' products to millions of people in every aspect of daily life.

Source: www.z-wavealliance.org

Safety Information

For Qubino, safety is first, so we have prepared lots of safety tips and information that can be found throughout this manual.

To ensure your safety, please read this manual carefully before installing the device; follow the instructions exactly. The manufacturer (GOAP d.o.o. Nova Gorica) shall not be legally responsible for any equipment damage or personal injury caused by incorrect installation or operation other than that covered in this manual.

WARNING

Your safety is the most important for us!

Read & understand this manual before installing the device.
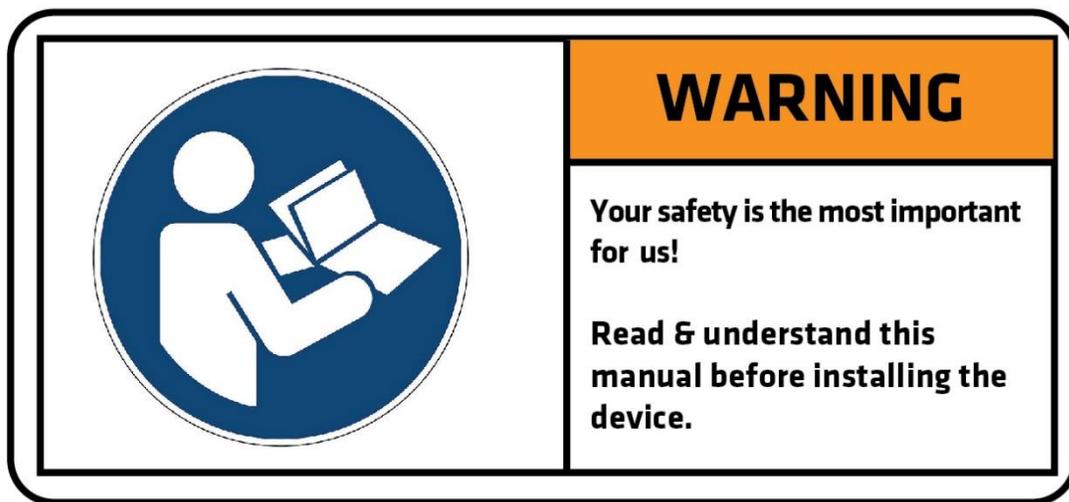
(i) Please check the Technical Specifications and Electrical Diagram chapters, as well as fuse requirements in the Installation chapter before installing the device.

Flush RGBW Dimmer - Available Frequencies

ORDERING CODE (MODEL NUMBER)	Z-WAVE FREQUENCY*
ZMNHWD1	868,4 MHz
ZMNHWD2	921,4 MHz
ZMNHWD3	908,4 MHz
ZMNHWD4	869,0 MHz
ZMNHWD5	916,0 MHz
ZMNHWD6	868,4 MHz
ZMNHWD7	919,8 MHz
ZMNHWD8	865,2 MHz
ZMNHWD9	922,5 MHz
ZMNHWDA	919,7 – 921,7 – 923,7 MHz
ZMNHWDB	868,1 MHz
ZMNHWDC	868,1 MHz
ZMNHWDD	919,8 MHz
ZMNHWDE	920,9 MHz

*You can check the Z-Wave frequency in your country here:

https://z-wave.sigmadesigns.com/wp-content/uploads/Z-Wave_Frequency_Coverage-.pdf

Where To Buy

To find your nearest Qubino dealer visit: http://qubino.com/where-to-buy/

1. Introduction

The Qubino Flush RGBW Dimmer is designed to control your RGB/RGBW strips, LED strips or bulbs and even halogen bulbs in order to create countless colour options and includes 6 special lighting effects (Ocean, Lightning, Rainbow, Snow, Romantic and Party). The wide range of colours let you "paint" your home according to your mood. Highlight your favourite wall by illuminating a picture on it in tones that you choose yourself. The Flush RGBW Dimmer can work in combination with the other Z-Wave devices in your house. You can control it either remotely through the Z-Wave network or through wall switches. The Qubino Flush RGBW Dimmer also acts as a Z-Wave repeater to improve the range and stability of the Z-Wave network.
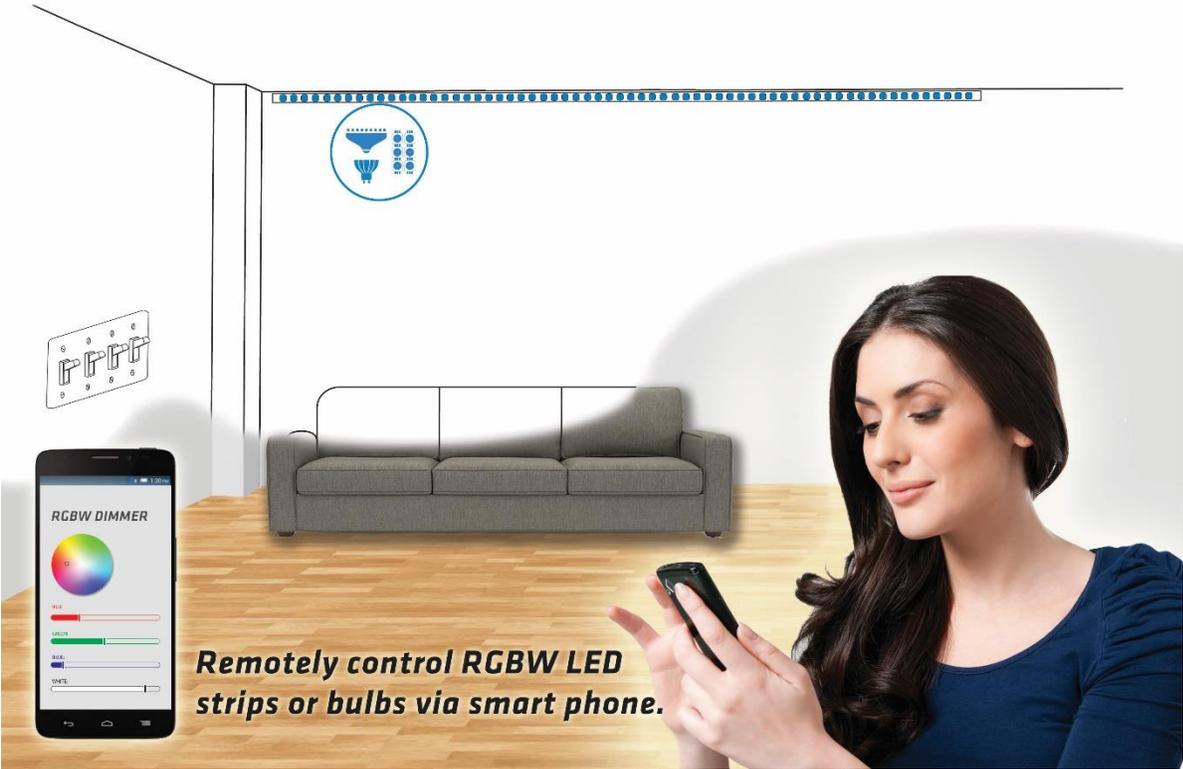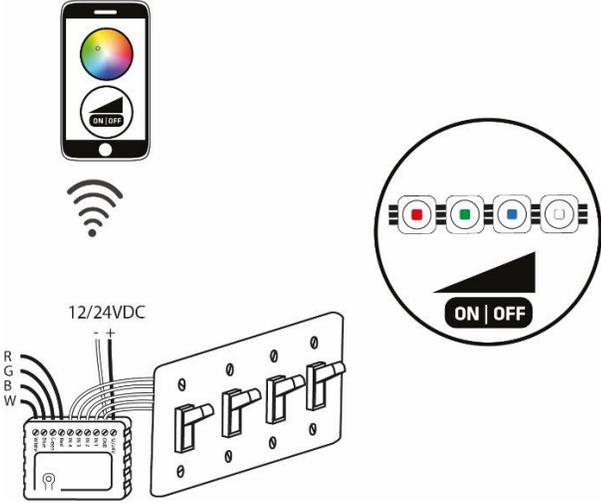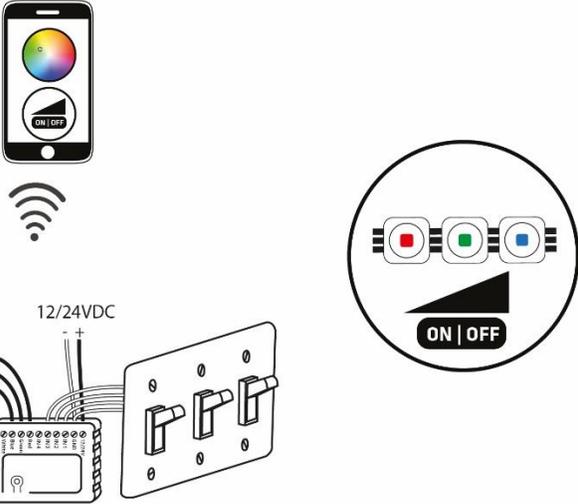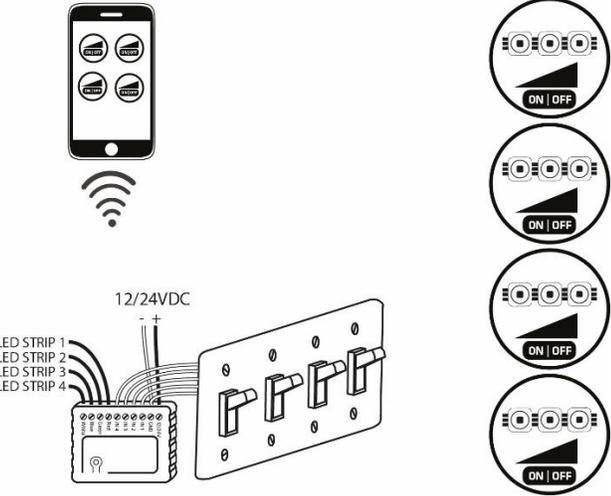
**Flush RGBW Dimmer supported functions:**

| Control RGB/RGBW strips, LED strips or bulbs, halogen bulbs	lighting effect-Ocean	lighting effect-Lightning	lighting effect-Rainbow	lighting effect– Snow	lighting effect-Romantic	lighting effect-Party	Automatically turn ON/OFF	Z-Wave Repeater	Auto-inclusion
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Control your house from anywhere
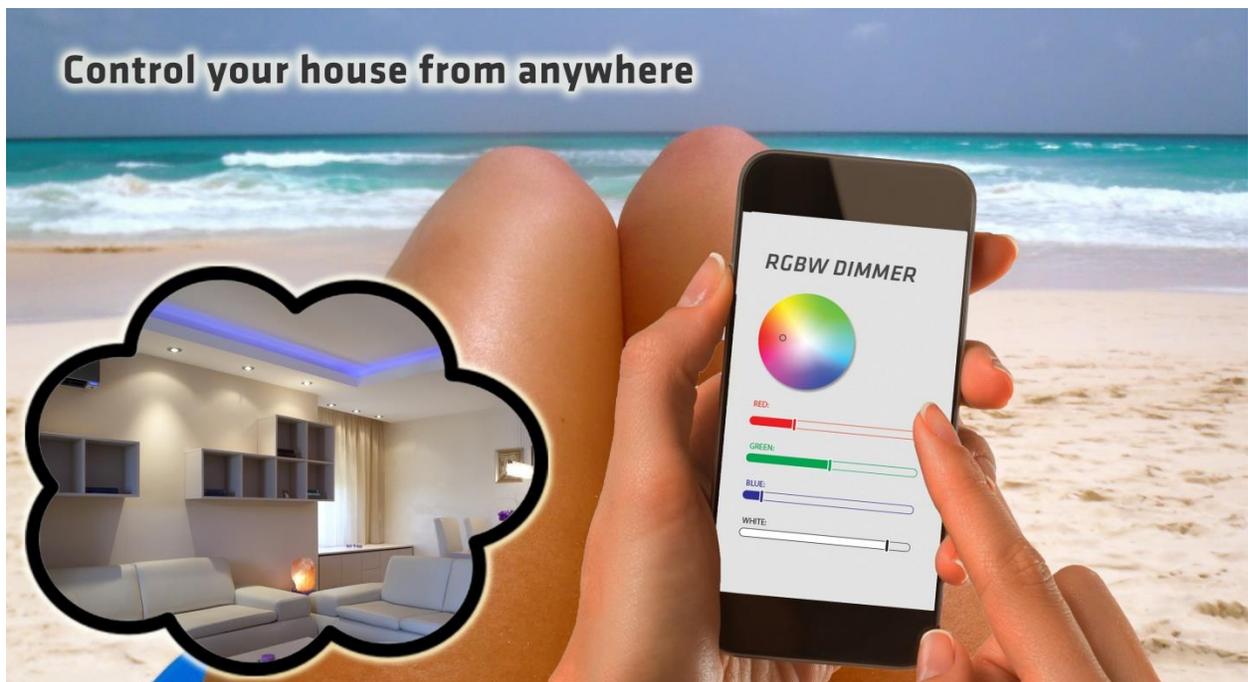
2. Use Cases

The Flush RGBW Dimmer can be used in many different scenes, which can help make your life more comfortable. We have prepared a few of them for you so you can get an idea for your next smart home project. Of course, there are countless of other options for how to use Qubino Flush RGBW Dimmer to remotely control devices via your smartphone.

2.1. Installation examples for Flush RGBW Dimmer

• Remotely dim RGBW strips or turn them ON/OFF 	• Remotely dim RGB strips or turn them ON/OFF
• Remotely dim up to 4 LED strips or turn them ON/OFF 	• Remotely dim up to 4 halogen bulbs or turn them ON/OFF
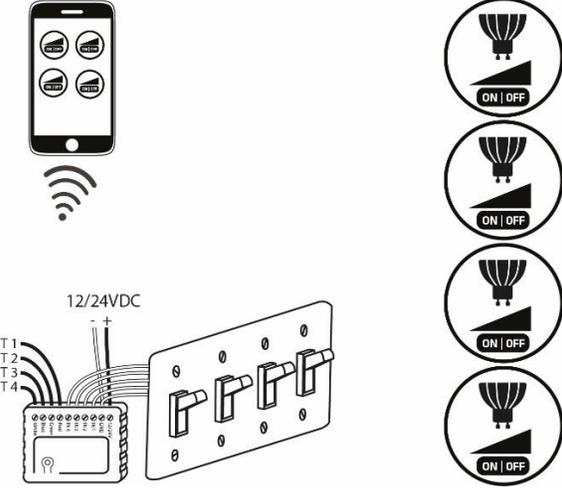
- Remotely dim up to 4 LED bulbs or turn them ON/OFF
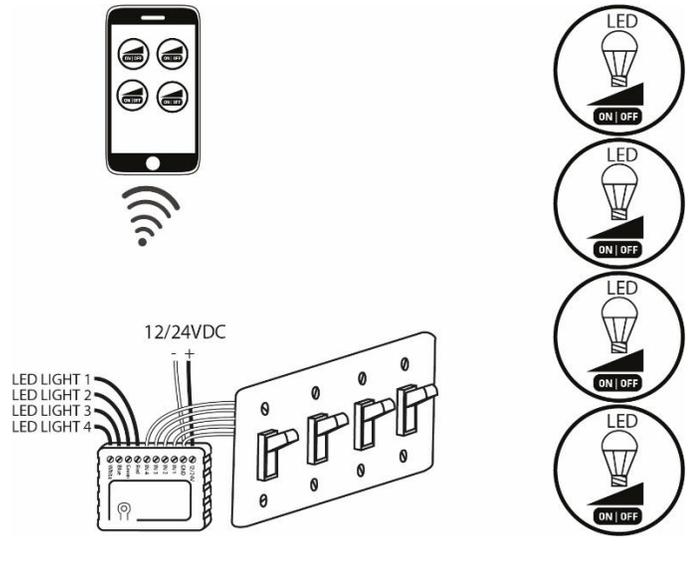
2.2. Additional features of Flush RGBW Dimmer which can make your life easier

- **Do you often forget to turn off the lights/RGBW/RGB strips when you leave your home, like in the basement or attic?**

- The Flush RGBW Dimmer can automatically turn lights/RGBW/RGB strips on or off after a set period of time (when you're away from home). For example, the light will automatically turn off if it's been on for 8 hours, let's say. This function is independent of other scenes and gateway (hub) commands.
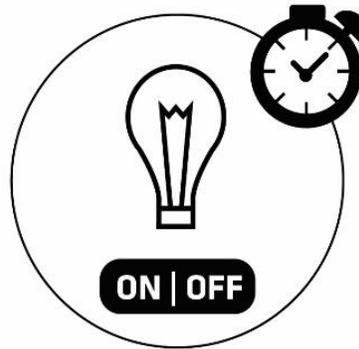
3. Qubino Flush RGBW Dimmer Advantages and Highlights

3.1. Advantages

- Qubino Flush RGBW Dimmer has a function to behave as usual dimmer, but it also allows a direct connection of LED lights which are working on 12/24DC voltage.

- With Qubino Flush RGBW Dimmer you can choose from among 16 million different shades. Change the colours of your rooms and the things in them and create lighting effects on outdoor surfaces such as summerhouses, paths or even the outlines of your house.
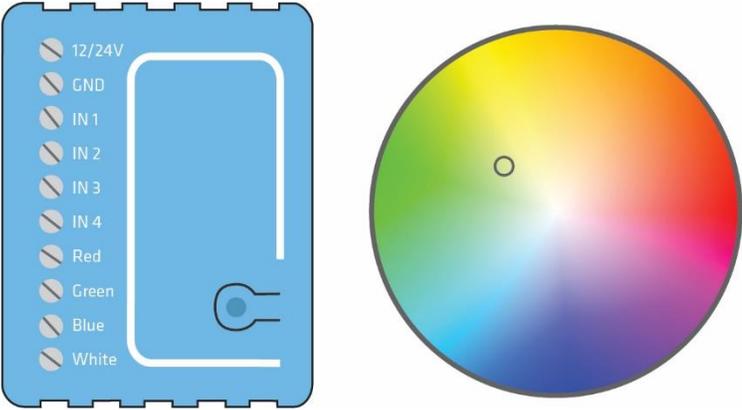
- Qubino Flush RGBW Dimmer comes with 6 pre-programmed lighting effects: Ocean, Lightning, Rainbow, Snow, Romantic and Party, so you can come home from work to a relaxing atmosphere created by the pre-set lighting effects.

OCEAN LIGHTNING RAINBOW SNOW ROMANTIC PARTY SCENE

- Qubino Flush RGBW is the only Z-Wave dimmer for controlling LED strips which can be used without a Z-Wave gateway. Without gateway you can use its functions with 4 push buttons:
  - Change Brightness (I1)
  - Change Colour (I2)
  - Turn on or off the lighting effects or change the lighting effects (I3)
  - Turn on the Q4 output (I4) - White colour on the RGBW strip

BRIGHTNESS MODE RAINBOW MODE SCENE MODE NORMAL MODE

IN1 IN2 IN3 IN4

- Qubino guarantees **100% device quality**. Such high quality can be delivered because every Qubino goes through rigorous quality control standards throughout the production process. Every device has a unique serial number and a part number, which are assigned to the device only after it goes through a strict testing procedure.

- By scanning the QR code on the back of your Qubino device, the serial and part numbers will be automatically copied on your mobile phone; they also provide **direct access to Qubino's technical support team**. The serial and part numbers of your device are given automatically every time you open an inquiry with our support team: this instantly shares the relevant device information we need to provide the best technical support possible. For details, please see the Device Information and Support chapter.

- The Qubino Flush RGBW Dimmer has CE, LVD, EMC and FCC certificates to ensure the highest safety standards.
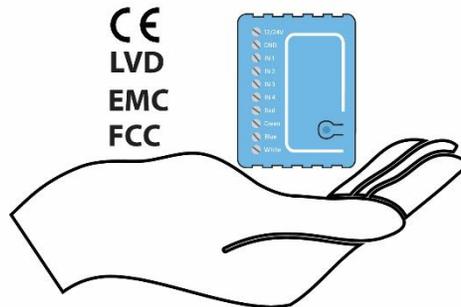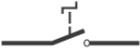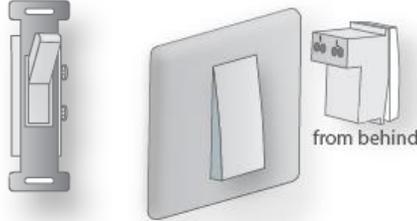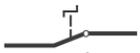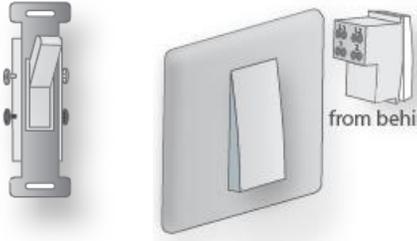

3.2. Highlights

- Remote (via smartphone or PC) and local on/off control of RGB/RGBW strips, up to 4 LED strips or bulbs and up to 4 halogen bulbs
- Features one of the easiest and quickest installations of devices of this kind
- Saves and restores the last status after a power failure.
- Supports auto-inclusion mode for quick set up
- Can automatically turn devices on and off after a set period of time (helpful when you're away from home, for example)*
- Supports additional parameters for expert users, which allows for advanced configuration*
- Acts as a signal repeater which improves the range and stability of your Z-Wave network
- Can be used to remotely control and trigger other devices in your Z-Wave network
- Set minimum and maximum dimming levels*
- Go from any value between 0% and 98% to full brightness with a double-click - no more pushing and holding*
- Customize ramp rate - regulate the speed which the dimmer adjusts brightness with*

*Your gateway (hub) needs to support advanced configuration and parameter input if you wish to use this feature

4. Package Contents

- Flush RGBW Dimmer Device
- Installation Manual

5. Technical Terms for Switches

Symbol	Switch example images	Definition	EU	USA	Qubino	Other names
	from behind	Single pole, single throw (SPST) - One switch controlling one light / circuit of lights	One-way switch	Two-way switch (regular switch)	Toggle switch	Switch; Bi-stable switch
	from behind	Single pole, double throw (SPDT) - Two switches controlling the same light / circuit of lights	Two-way switch	Three-way switch	Two-way switch	
	from behind	Used when you have three or more switches controlling the same light	Intermedi-ate switch	Four-way switch	Intermedi-ate switch	Crossover switch; Cross connection
	from behind	After being released, it goes back to its original state	Momentary switch		Momentary switch	Monostable switch; Push button
		Used when motion sensor is connected to the device.	Toggle with memory switch		Toggle with memory switch	
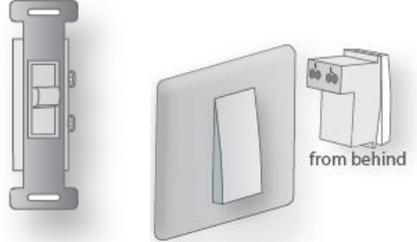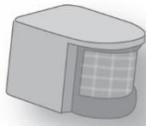
6. Compatibility with Z-Wave Gateways (hubs)

Please check compatibility with your Z-Wave gateway (hub) before you purchase this device. If you don't see your gateway (hub) in the table below, please contact us at: http://qubino.com/support/#email.

ⓘ Please note that the gateway (hub) compatibility was updated on 14.3.2018 and it may not include the latest testing data.

Flush RGBW Dimmer	IN 1 updates UI	IN 2 updates UI	IN 3 updates UI	IN 4 updates UI	ON/OFF using UI	Brightness in UI	Change RGBW colors using UI	4 dimmers mode	Comments
Domoticz V3.5877	✕	✕	✕	✕	✓	✓	✕	✕	
Fibaro HC Lite v 4.130	O	O	O	O	✓	✓	✓	✓	I1, i2, i3, i4 updates in UI work in normal, brightness and rainbow mode.
Vera Edge v 1.7.3231	O	O	O	O	✓	✓	✓	✓	I1, i2, i3, i4 updates in UI work in normal, brightness and rainbow mode. To enable full functionality use RGBW controller app
Zipato 1.1.38	✓	✓	✕	✓	✓	✓	✓	✓	
Z-Wave Me	T	T	T	T	T	T	T	T	
Eedomus	T	T	T	T	T	T	T	T	
Jeedom	T	T	T	T	T	T	T	T	
Homeseer 3	✕	✕	✕	✕	✓	✓	✓	✓	
Open Z-Wave	✕	✕	✕	✕	✓	✓	✓	T	
Piper	T	T	T	T	T	T	T	T	
SmartThings	✓	✓	✓	✓	✓	✓	✓	✓	
NETIChome	T	T	T	T	T	T	T	T	
Homey	T	T	T	T	T	T	T	T	
Zipatile	T	T	T	T	T	T	T	T	
Devolo	O	O	✕	O	✓	✓	✕	✕	Inputs only update dimming percentage.
Verbund	T	T	T	T	T	T	T	T	
Indigo 7	✓	✓	✓	✓	✓	✓	X	✓	Indigo recognizes module as one or 4 dimmers, no rgb control
ImperiHome	O	O	O	O	✓	✓	O	✓	Inputs update dimmer % value, since ImperiHome detects the module as a dimmer. Rgbw vale change available after rgb controller app is installed(using Vera edge).
OpenHab	X	X	X	X	✓	✓	X	X	

Symbol	Explanation
✓	Works fully
✕	Not working
O	See comment
T	Testing in progress

7. Installation

Before installing the device, please read the following carefully and follow the instructions exactly:

ⓘ **Danger of electrocution!**

Installation of this device requires a great degree of skill and may be performed only by a licensed and qualified electrician. Please keep in mind that even when the device is turned off, voltage may still be present in the device's terminals.

ⓘ **Note!**

Do not connect the device to loads exceeding the recommended values. Connect the device exactly as shown in the provided diagrams. Improper wiring may be dangerous and result in equipment damage.

The installation process, tested and approved by professional electricians, consists of the following simple steps:

Step 1 – Turn OFF the fuse:

- To prevent electrical shock and/or equipment damage, disconnect electrical power at the main fuse or circuit breaker before installation and maintenance.
- Be aware that even if the circuit breaker is off, some voltage may remain in the wires — before proceeding with the installation, be sure no voltage is present in the wiring.
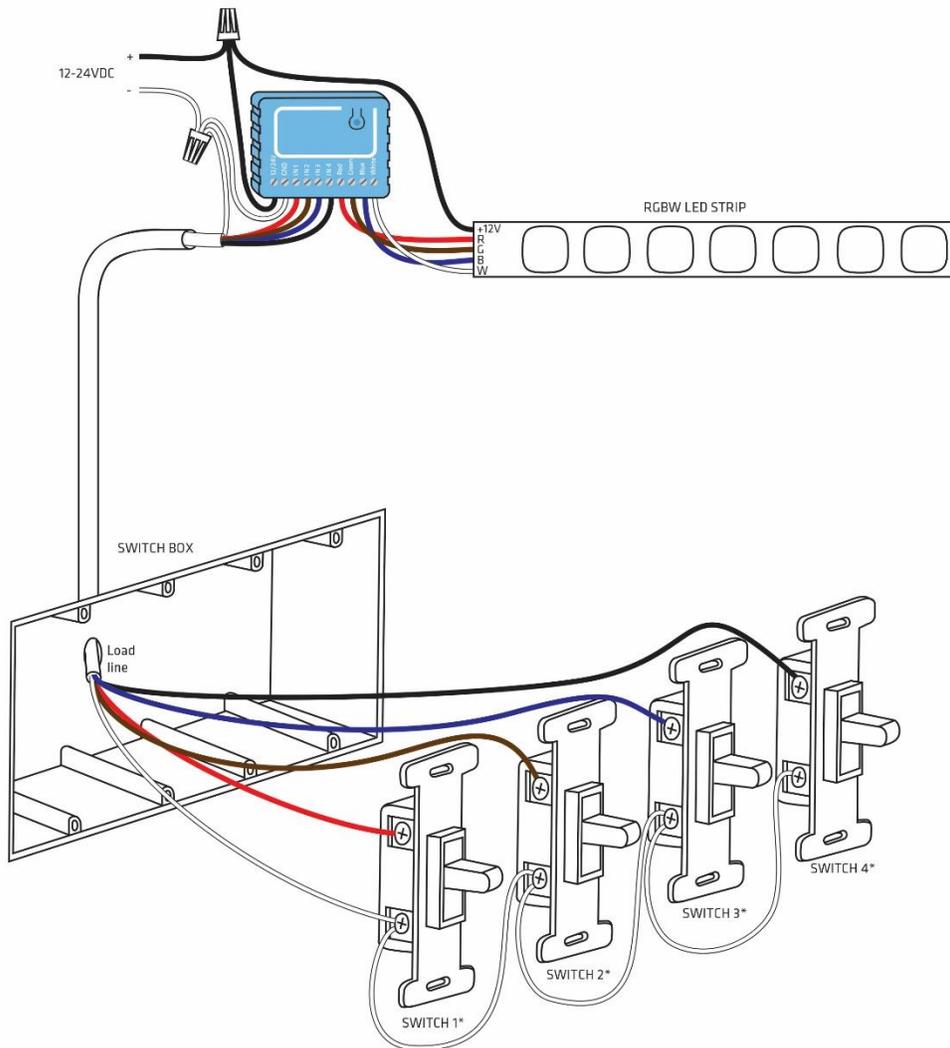- Take extra precautions to avoid accidentally turning the device on during installation.
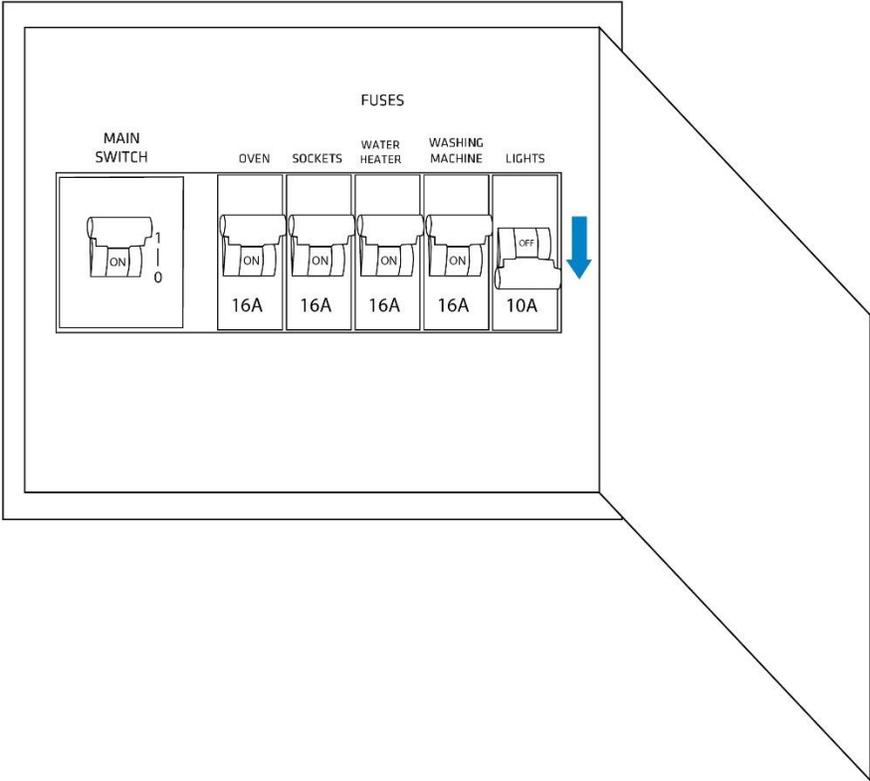
Step 2 – Installing the device:

- Connect the device exactly according to the diagrams shown below
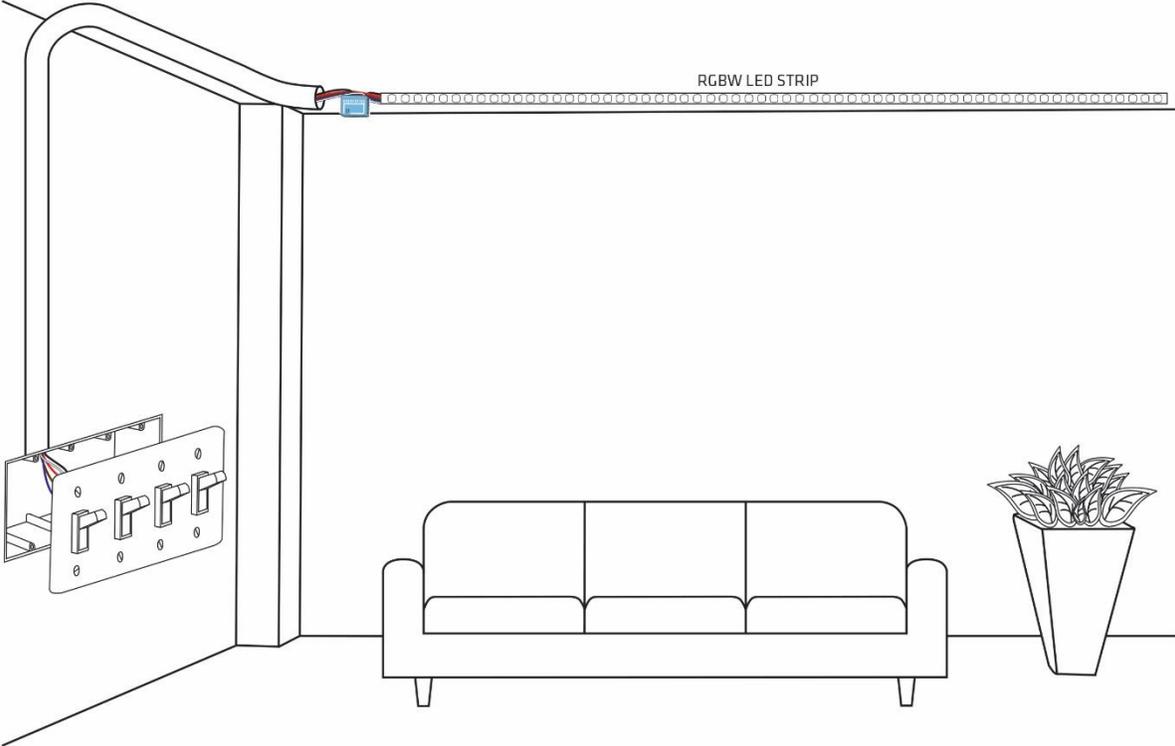
STEP 2

INSTALLATION EXAMPLE

Controlling RGBW led strip

*SWITCH 1, 2, 3 and 4 CAN BE TOGGLE SWITCHES, MOMENTARY SWITCHES OR TOGGLE WITH MEMORY SWITCHES. YOU MUST SET THE PARAMETERS TO THE RIGHT VALUE FOR DIFFERENT TYPES OF SWITCHES.

Installation and wire connections are the same in USA and EU.

After Qubino installation:

RGBW LED STRIP

INSTALLATION EXAMPLE

Controlling four halogen or LED lights

*SWITCH 1, 2, 3 and 4 CAN BE TOGGLE SWITCHES, MOMENTARY SWITCHES OR TOGGLE WITH MEMORY SWITCHES. YOU MUST SET THE PARAMETERS TO THE RIGHT VALUE FOR DIFFERENT TYPES OF SWITCHES.
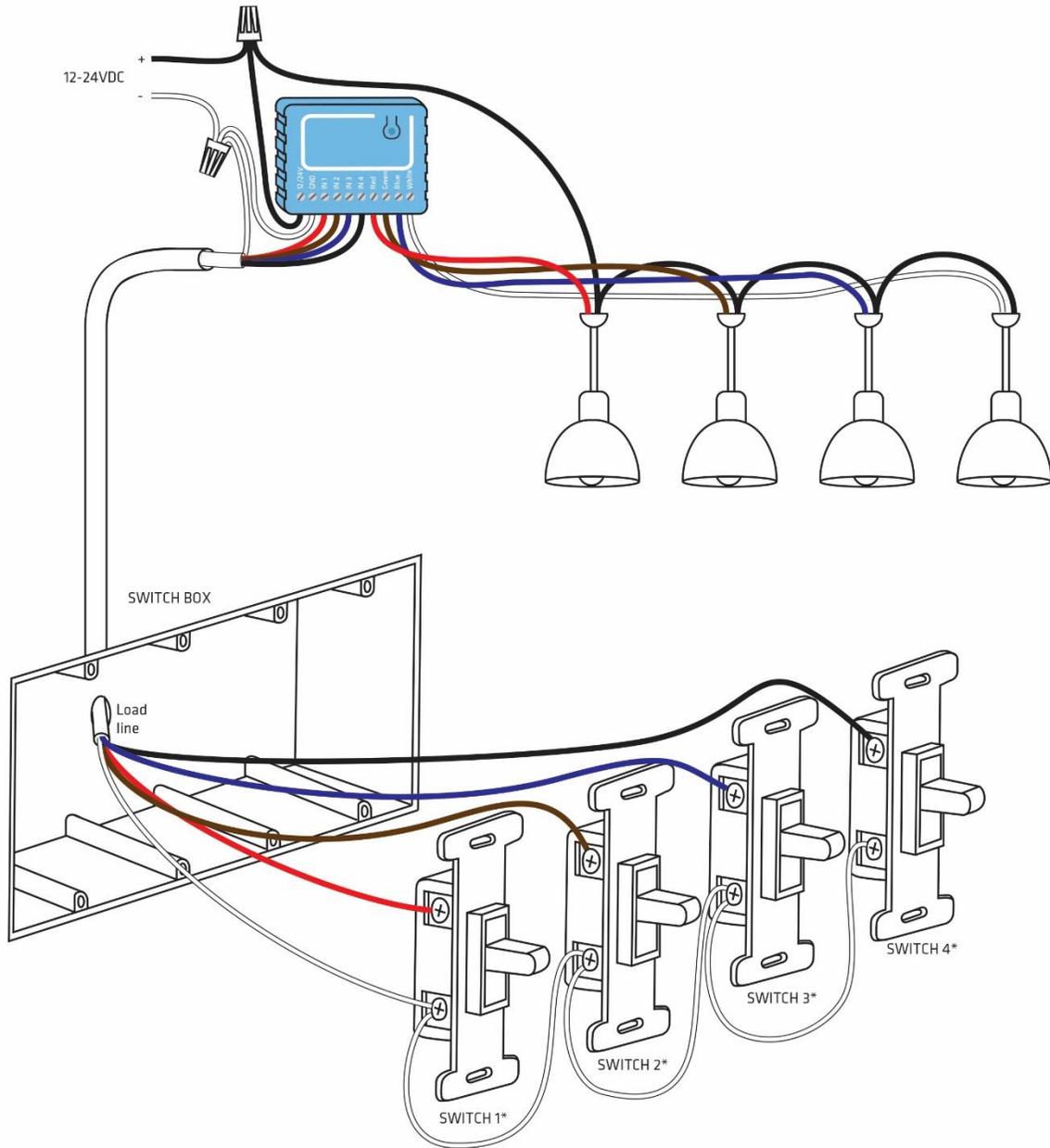
After Qubino installation:
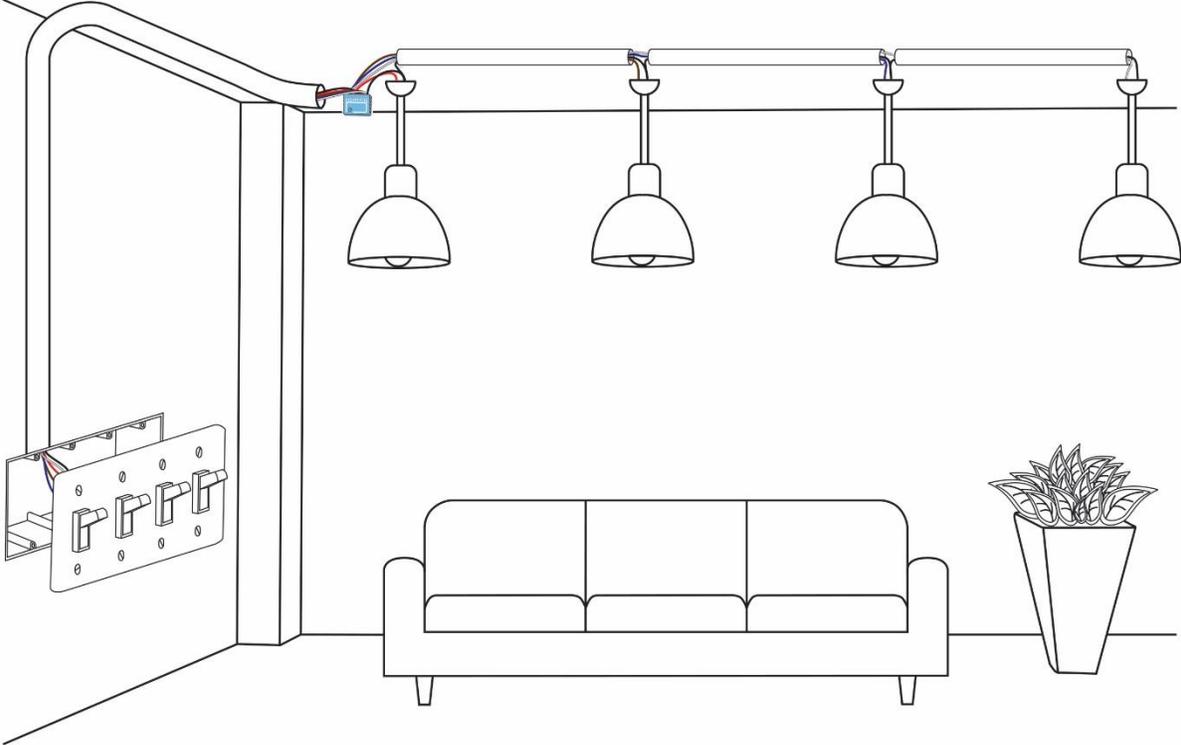
ⓘ **Note!**

- Place the antenna as far as possible from metal elements as they may cause signal interference.
- Do not shorten the antenna.

The device's antenna should be as upright as possible. This ensures the device's operational range is maximized (up to 98 feet (30 m) line of sight).
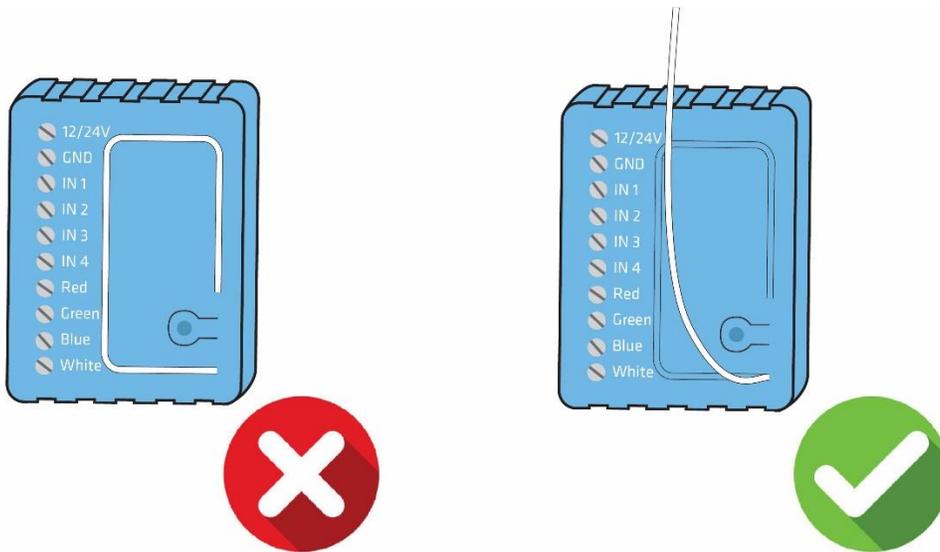
Step 3 – Turn ON the fuse:

Step 4 – Add the device to your Z-Wave network:

- For more details on how to include the device, please refer to the Z-Wave Inclusion chapter.
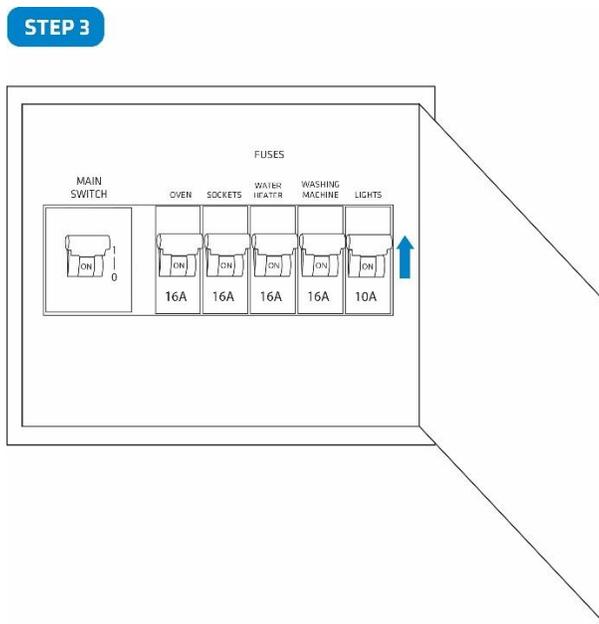
Step 5 – The Installation is now complete. It's time to make your life more comfortable with the help of the Qubino Flush RGBW Dimmer

8. Device Information and Support

Did you know that Qubino offers Z-Wave devices with 100% quality control guaranteed throughout the production process? Every single unit is tested and examined before being approved for sale – a truly unique pledge in the industry.

Why is this important?

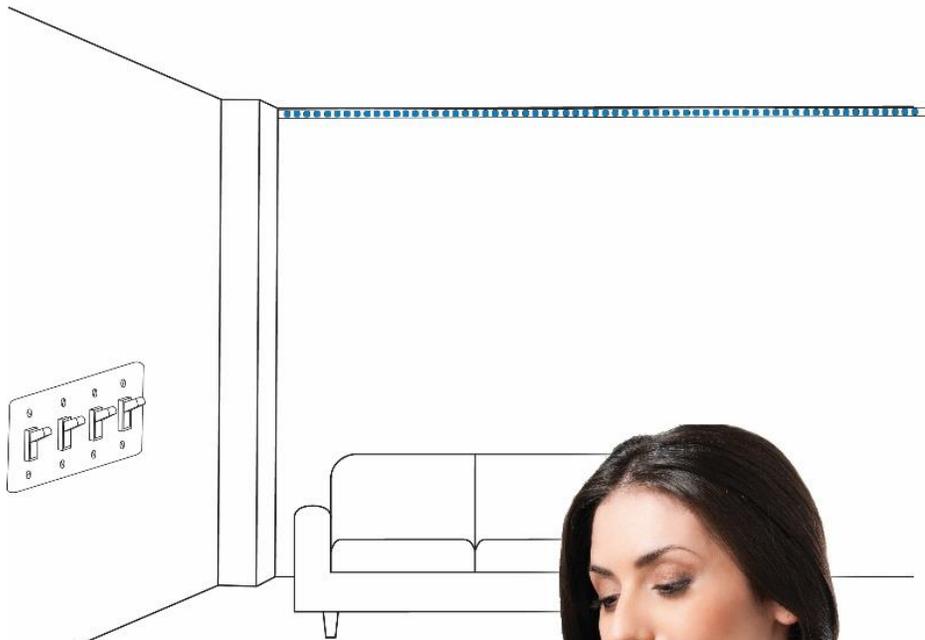Every device has a dedicated serial number and part number, which is assigned to the device only after it goes through a strict testing procedure.

By scanning the QR code on the back of your Qubino, its device title, serial number, and part number are automatically copied to your mobile phone. You can also use the code for direct access to the device page for more information. If you still don't find what you're looking for, click on the link to Qubino technical support team. They will be able to automatically read the serial and part number from your device and quickly review the production log file containing the production date as well as any relevant device parameters and information. This process allows our team to immediately identify and address issues, giving you the best support possible.

GET SUPPORT IN 3 SIMPLE STEPS:

01 SCAN THE QR CODE ON THE MODULE LABEL
02 GET ALL THE NEEDED PRODUCT INFORMATION
03 HAVE DIRECT ACCESS TO PRODUCT WEB PAGE AND TECHNICAL SUPPORT

Based on customer and business partner feedback, we're proud to boast Qubino's support team as the best and fastest on the market. If you don't find the answers to your questions in this document, please contact our support team by scanning the QR code on your device or through our website: http://qubino.com/support/#email. We will try to help you as soon as possible.

9. Electrical Diagram (12/24VDC)
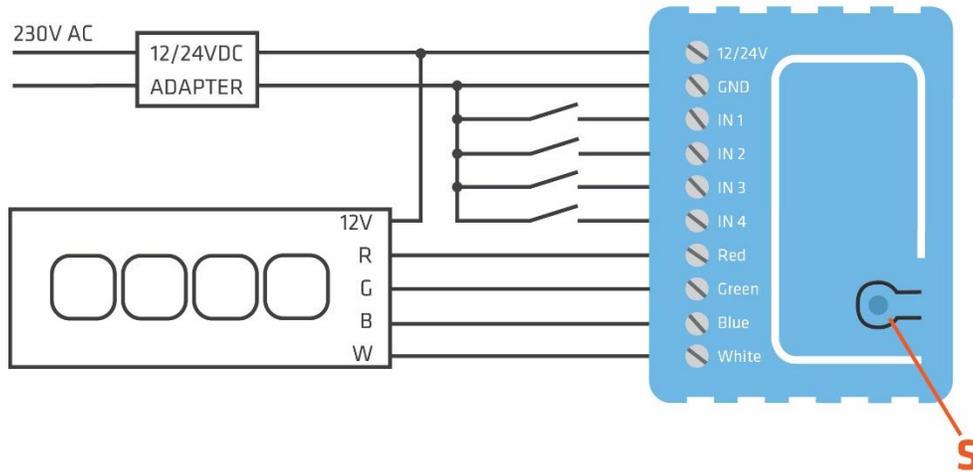
Notes for diagram:

12/24V	Input for 12VDC or 24VDC (+)
GND	Ground (-)
IN1	Push button – Brightness control (in default configuration)
IN2	Push button – Rainbow mode (in default configuration)
IN3	Push button – Scene mode (in default configuration)
IN4	Push button – Normal mode (in default configuration)
Red	Output for R wire of the LED strip or bulb in 4 Dimmers mode
Green	Output for G wire of LED strip or bulb in 4 Dimmers mode
Blue	Output for B wire of LED strip or bulb in 4 Dimmers mode
White	Output for W wire of LED strip or bulb in 4 Dimmers mode
S	Service button – Inclusion/ Exclusion/ Reset

10. Adding the device to a Z-Wave network (Inclusion)

AUTOMATICALLY ADDING THE DEVICE TO A Z-WAVE NETWORK (AUTO INCLUSION)

1. Enable add/remove mode on your Z-Wave gateway (hub)

2. Connect the device to the power supply

3. Auto-inclusion will be initiated within 5 seconds of connection to the power supply and the device will automatically enrol in your network.

4. If the device is properly included, the green LED inside the device will stay ON.

MANUALLY ADDING THE DEVICE TO A Z-WAVE NETWORK (MANUAL INCLUSION)

1. Connect the device to the power supply

2. Enable add/remove mode on your Z-Wave gateway (hub)

3. Press and release the S button 3 times within 2 seconds

4. If the device is properly included, the green LED inside the device will stay ON.

11. Removing the device from a Z-Wave network (Exclusion)

REMOVAL FROM A ZWAVE NETWORK (Z-WAVE EXCLUSION)

1. Connect the device to the power supply

2. Make sure the device is within direct range of your Z-Wave gateway (hub) or use a hand-held Z-Wave remote to perform exclusion

3. Enable add/remove mode on your Z-Wave gateway (hub)

4. Press and release the S button 3 times within 2 seconds

5. After exclusion device will automatically attempt to re-include in the next 2 minutes.

6. The device will be removed from your network but any custom configuration parameters will not be erased

FACTORY RESET

1. Connect the device to the power supply.

2. Press and hold the S (Service) button for more than 10 seconds (the white blink on LED strip, signal that the device is reset now you can release the S button)

3. After the factory reset device will automatically attempt to re-include in the next 2 minutes.

(i) By resetting the device, all custom parameters previously set on the device will return to their default values, and the owner ID will be deleted. Use this reset procedure only when the main gateway (hub) is missing or otherwise inoperable.

12. Additional Information

1. Flush RGBW Dimmer is suggested to operate within low voltage circuits (12VDC or 24VDC). Connecting loads powered by higher voltage to the device may damage Flush RGBW Dimmer. Please refer to the following table when wiring the device.

RGBW Strip Current	Stranded Wire
High current	18 AWG
Low Current	22 AWG

2. Flush RGBW Dimmer must be powered by the same voltages as the connected light source. I.e. when controlling a 12V LED strip, the device must be connected to a matching 12V power supply. Similarly, when controlling a 24V RGBW strip, Flush RGBW Dimmer must be powered by a 24V power supply.

3. The device's output is controlled by PWM at 488Hz.

4. When controlling long RGBW/RGB/LED strips, voltage drops may occur, resulting in lower light brightness farther away from the R/G/B/W outputs. To minimize this issue, it's recommended to connect several shorter strips in parallel instead of one long strip connected in sequence. The maximum recommended RGBW/RGB/LED strip length is 33 feet (10 m). Please follow manufacturer recommendations regarding connection wire size for each load you connect to the device.

5. If your primary Z-Wave gateway (hub) is damaged or lost, but you have connected the device to an external switch, Flush RGBW Dimmer can operate normally with local control. Otherwise, please replace your Z-Wave gateway (hub) to exclude the device from your previous network and re-include it to restore wireless control (follow inclusion / exclusion instructions above for the process).

LED Indication

Status	LED Signal	Remark
Not included to the Z-Wave network	Red & Green blinking interchangeably	
Included to the Z-Wave network	Solid Green	
Inclusion	Blinking Green (Interval: 1 sec)	Press 3 times in 2 seconds
Exclusion	Blinking Green (Interval: 1 sec.)	Press 3 times in 2 seconds
Auto inclusion	Blinking Green (Interval: 1 sec.)	Power cycle to connect with Z-Wave network

Input Type	Remark
Momentary	Mono-stable or push button switch
Toggle	Bi-stable switch
Toggle w/Memory	ON: Active for closing terminals OFF: Active for opening terminals

13. Flush RGBW Dimmer Mode Descriptions

NORMAL MODE:

1. *__Momentary switch type__*

Controlling output (Q is defined as output) assigned to given input terminal. In this setting outputs will be controlled independently from one another, e.g. allowing for free adjusting each colours saturation.

NOTE:

- Q1 on the device is marked as →Red
- Q2 on the device is marked as →Green
- Q3 on the device is marked as →Blue
- Q4 on the device is marked as →White

INx (for orientation this function is set on IN4 by default)
- **Fast press** on input INx (less than 1 second) -> turn the Qx to the "last non zero dimming value"
  - o Dimming time depends on Parameter no. 12 value.

- **Fast press** on INx -> turn Qx OFF
  - o Dimming time depends on Parameter no. 12 value.

- **Press and hold (more than 1 second)** -> increase brightness on Qx and set new "last non zero value" for Qx
  - o Dimming time depends on Parameter no. 13 value.

- **Press and hold (more than 1 second) -> decrease brightness on Qx** -> decrease brightness on Qx and set new "last non zero value" for Qx
  - o Dimming time depends on Parameter no. 13 value.

- **Fast double click** -> turn the Qx to "MAX dimming value" (Parameter no. 10)
  - o Dimming time depends on Parameter no. 12 value.

2. *Toggle switch type*

INx

- Switch position -> turn the Qx OFF
    - Dimming time depends on Parameter no. 12 value.
- Switch position -> turn the Qx to "MAX dimming value"
    - Dimming time depends on Parameter no. 12 value.

3. *Toggle with memory switch type*

This mode is very important when using motion sensors, which are connected to the inputs. Only positive impulses turn it on and only a negative turn the device off.

Example: If the motion sensor turns on the light and then the user turns it off via the app, when the negative impulse comes from motion sensor, the light should not turn on again.

INx

- Position 1 to Position 2 -> turn the Qx to "MAX dimming value"
    - Dimming time depends on Parameter no. 12 value.
- Position 2 to Position 1 -> turn the Qx OFF
    - Dimming time depends on Parameter no. 12 value.

BRIGHTNESS MODE:

All outputs are controlled together, i.e. one switch controls brightness of all channels at the same time.

1. _**Momentary switch type**_

INx (for orientation this function is set on IN1 by default)
- **Fast press** on input INx (less than 1 second) -> turn the Q1, Q2, Q3, Q4 brightness to the "last non zero value"
    - Dimming time depends on Parameter no. 12 value.

- **Fast press** on INx -> turn Q1, Q2, Q3, Q4 brightness OFF
    - Dimming time depends on Parameter no. 12 value.

- **Press and hold (more than 1 second)** -> increase brightness on Q1, Q2, Q3, Q4 and set new "last non zero value" for Q1, Q2, Q3, Q4
    - Dimming time depends on Parameter no. 13 value.

- **Press and hold (more than 1 second) -> decrease brightness on Q1, Q2, Q3, Q4 ->** decrease brightness on Q1, Q2, Q3, Q4 and set new "last non zero value" for Q1, Q2, Q3, Q4
    - Dimming time depends on Parameter no. 13 value.

- **Fast double click** -> turn the Q1, Q2, Q3, Q4 brightness to "MAX dimming value"
    - Dimming time depends on Parameter no. 12 value.

2. _**Toggle switch type**_

INx
- Switch position -> turn the Q1, Q2, Q3, Q4 brightness OFF
    - Dimming time depends on Parameter no. 12 value.
- Switch position -> turn the Q1, Q2, Q3, Q4 brightness to "MAX dimming value"
    - Dimming time depends on Parameter no. 12 value.

3. _**Toggle with memory switch type**_

Example: If the motion sensor turns on the light and then the user turns it off via the app, when the negative impulse comes from motion sensor, the light should not turn on again.

INx
- Position 1 to Position 2 -> turn the Q1, Q2, Q3, Q4 to "MAX dimming value"
    - Dimming time depends on Parameter no. 12 value.
- Position 2 to Position 1 -> turn the Q1, Q2, Q3, Q4 OFF
    - Dimming time depends on Parameter no. 12 value.

RAINBOW MODE:

Rainbow mode is intended to change output Colour by using Input Button.

Rainbow mode is in a relation to Brightness mode:

- o For instance, if the brightness level is set to 80%, this will have effect also on Rainbow mode (brightness will be 80% even between changing output Colours)

1. ***Momentary switch type***

INx (for orientation this function is set on IN2 by default)
- **Press and hold (more than 1 second)** -> Red, Green, Blue, White Colours are changing from the last set value. The Colours goes through the whole RGB spectrum smoothly.
  - o When the Push button is released, the current Colour is set to a new value.
- **Fast press (less than 1 second)->** change RGBW Colours by steps from the last set value
- **Fast double press (less than 1 second)** -> change RGBW Colours by step from the last set value in opposite direction

SCENE MODE:

1. ***Momentary switch type***

INx (for orientation this function is set on IN3 by default)

- **Fast press (less than 1 second)** -> turn on the last lighting effect or default lighting effect
- **Fast press** -> turn OFF
- **Press and hold (more than 1 second)** -> switch to a next lighting effect

2. ***Toggle switch type***

INx
- Switch position -> turn on the last lighting effect or default lighting effect
- Switch position -> turn OFF

3. ***Toggle with memory switch type***

INx
- Position 1 to Position 2 -> turn on the last lighting effect or default lighting effect
- Position 2 to Position 1 -> turn OFF

4 DIMMERS MODE:

If this option is set, the device would be presented as 4 independent dimmers in one device.

For example: Using this option, 4 independent LED strips could be connected and controlled using one device.

NOTE: re-inclusion of device is required

NOTE: In 4 DIMMERS mode, Parameter no.5 and Parameter no.6 has no influence.

14. Configuration Parameters

Parameter no. 1 – Input IN1 configuration

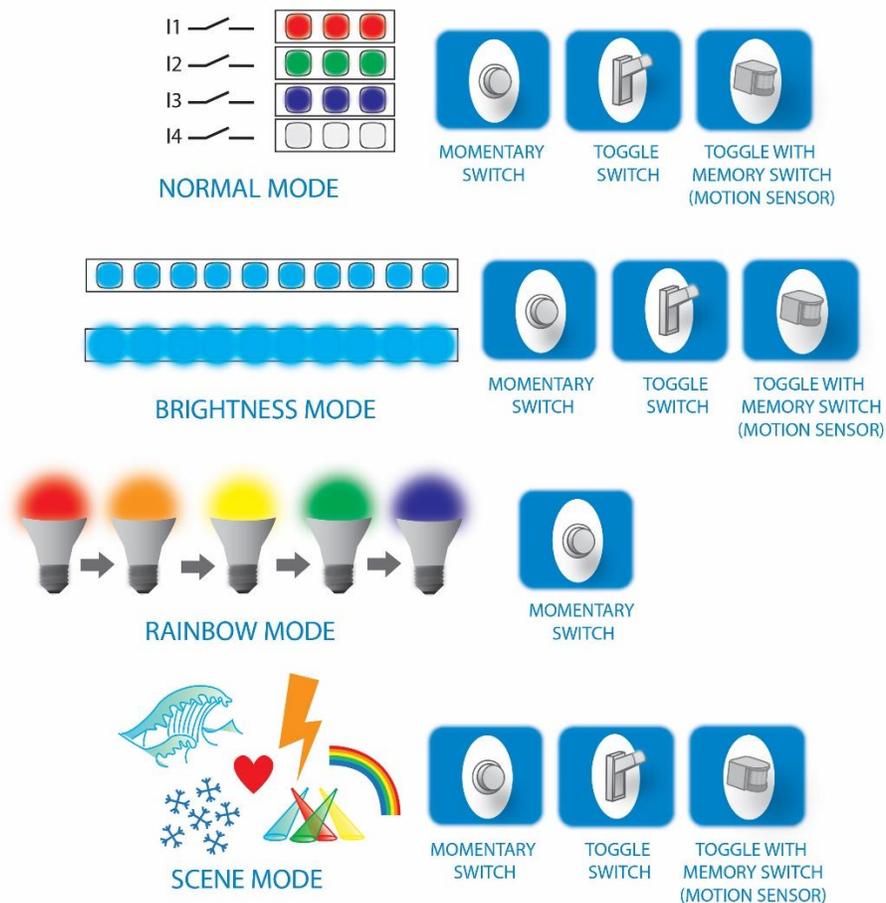Available configuration parameters (size is 1 Byte DEC)

- Default value: = 4 (BRIGHTNESS mode – momentary switch type)

- 1 – NORMAL mode – momentary switch type
- 2 – NORMAL mode – toggle switch type
- 3 – NORMAL mode – toggle with memory switch type (exp. Motion sensor)
- 4 – BRIGHTNESS mode – momentary switch type
- 5 – BRIGHTNESS mode – toggle switch type
- 6 – BRIGHTNESS mode – toggle with memory switch type (exp. Motion sensor)
- 7 - RAINBOW mode – momentary switch type
- 8 – SCENE mode – momentary switch type
- 9 – SCENE mode – toggle switch type
- 10 – SCENE mode – toggle with memory switch type (exp. Motion sensor)
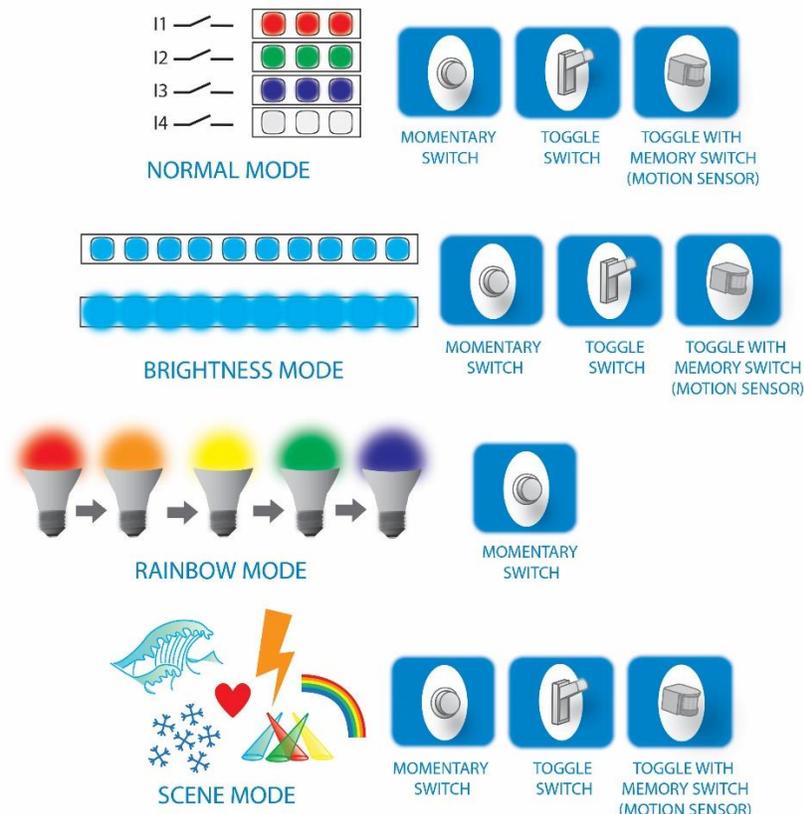
Parameter no. 2 – Input IN2 configuration

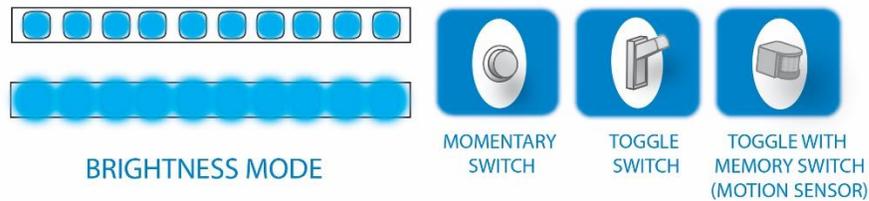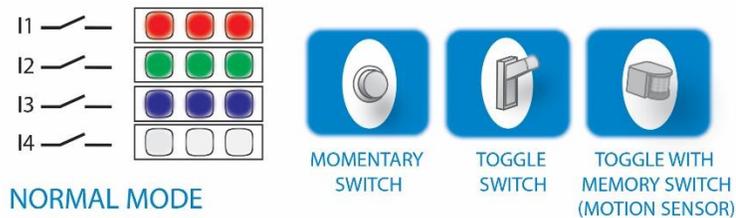Available configuration parameters (size is 1 Byte DEC)

- Default value: = 7 (RAINBOW mode – momentary switch type)

- 1 – NORMAL mode – momentary switch type
- 2 – NORMAL mode – toggle switch type
- 3 – NORMAL mode – toggle with memory switch type (exp. Motion sensor)
- 4 – BRIGHTNESS mode – momentary switch type
- 5 – BRIGHTNESS mode – toggle switch type
- 6 – BRIGHTNESS mode – toggle with memory switch type (exp. Motion sensor)
- 7 - RAINBOW mode – momentary switch type
- 8 – SCENE mode – momentary switch type
- 9 – SCENE mode – toggle switch type
- 10 – SCENE mode – toggle with memory switch type (exp. Motion sensor)

Parameter no. 3 – Input IN3 configuration

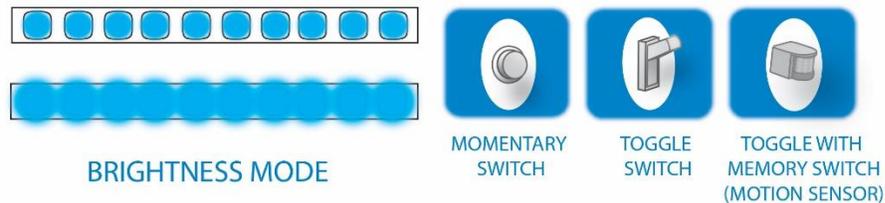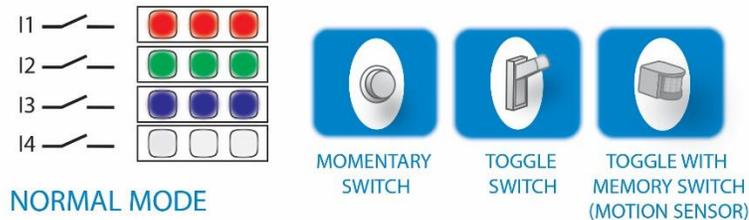Available configuration parameters (size is 1 Byte DEC)

- Default value: = 8 (SCENE mode – momentary switch type)

- 1 – NORMAL mode – momentary switch type
- 2 – NORMAL mode – toggle switch type
- 3 – NORMAL mode – toggle with memory switch type (exp. Motion sensor)
- 4 – BRIGHTNESS mode – momentary switch type
- 5 – BRIGHTNESS mode – toggle switch type
- 6 – BRIGHTNESS mode – toggle with memory switch type (exp. Motion sensor)
- 7 - RAINBOW mode – momentary switch type
- 8 – SCENE mode – momentary switch type
- 9 – SCENE mode – toggle switch type
- 10 – SCENE mode – toggle with memory switch type (exp. Motion sensor)

Parameter no. 4 – Input IN4 configuration

Available configuration parameters (size is 1 Byte DEC)

- Default value: = 1 (NORMAL mode – momentary switch type)

- 1 – NORMAL mode – momentary switch type
- 2 – NORMAL mode – toggle switch type
- 3 – NORMAL mode – toggle with memory switch type (exp. Motion sensor)
- 4 – BRIGHTNESS mode – momentary switch type
- 5 – BRIGHTNESS mode – toggle switch type
- 6 – BRIGHTNESS mode – toggle with memory switch type (exp. Motion sensor)
- 7 - RAINBOW mode – momentary switch type
- 8 – SCENE mode – momentary switch type
- 9 – SCENE mode – toggle switch type
- 10 – SCENE mode – toggle with memory switch type (exp. Motion sensor)

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Parameter no. 5 – Auto Scene Mode Set

Available configuration parameters (size is 1 Byte DEC)

- Default value 1
- 1 – **Ocean** (soft flowing between shades of blue colour)
- 2 – **Lightning** (fast flashing of white colour)
- 3 – **Rainbow** (flowing between colours of rainbow)
- 4 – **Snow** (flowing between shades of white and cyan colour)
- 5 – **Romantic** (soft flowing of the red colour)
- 6 – **Party scene** (random flashing between colours)

OCEAN   LIGHTNING   RAINBOW   SNOW   ROMANTIC   PARTY SCENE

Parameter no. 6 – Auto Scene Mode – Duration between Colour change

This parameter is used to adjust time between 2 Colours in the Scene

Available configuration parameters (size is 2 Byte DEC)

- Default value 3
- 1-127 – delay duration is 1 sec to 127 sec
- 1001-1127 – delay duration is from 1 min to 127 min. This parameter has no effect on Lighting and Party Scene.
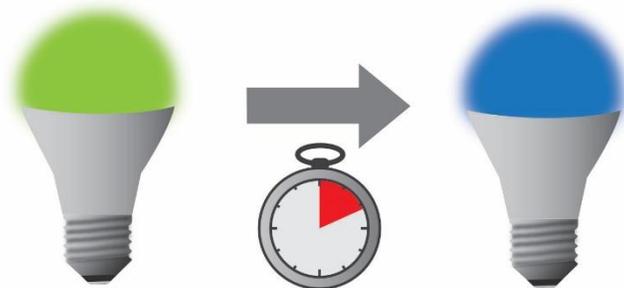
Parameter no. 7 – Memorize device status at power cut

Device will be set to status memorized before power cut.

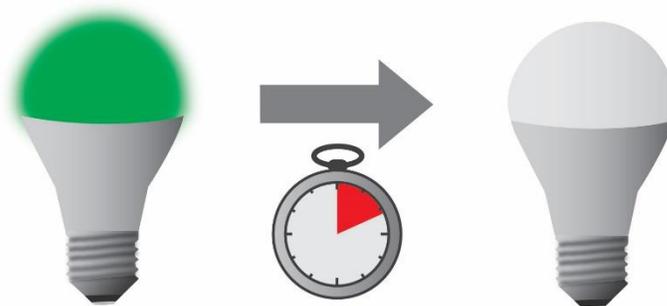Available configuration parameters (size is 1 Byte DEC)

- Default value 0
- 0 – device does not memorize its status at power cut. Load is disconnected
- 1 – device memorizes its status at the power cut. Load will be set to the status from before power cut

Parameter no. 8 – Automatic turning off output after set time

Output is turned automatically off after the time, set in this parameter.

Available configuration parameters (size is 2 Byte DEC)

- Default value 0
- 0 – Auto OFF disabled
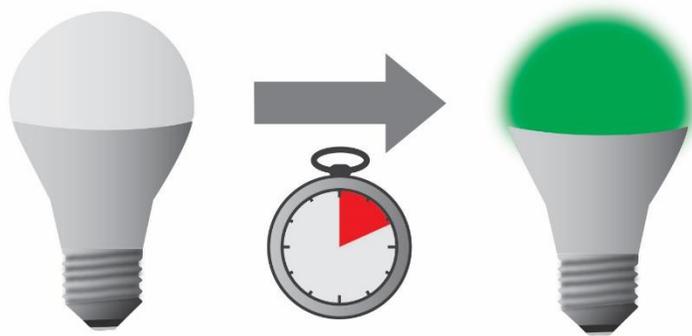- 1 – 32536 = 1 second – 32536 seconds Auto OFF

Parameter no. 9 – Automatic turning on output after set time

Output is turned automatically on after the time, set in this parameter.

Available configuration parameters (size is 2 Byte DEC)

- Default value 0
- 0 – Auto ON disabled
- 1 – 32536 = 1 second – 32536 seconds Auto ON

Parameter no. 10 – MAX dimming value

Available configuration parameters (size is 1 Byte DEC)

- Default value 99
- 2-99 = 2 % – 99 %

max. dimming value

Parameter no. 11 – MIN dimming value

Available configuration parameters (size is 1 Byte DEC)
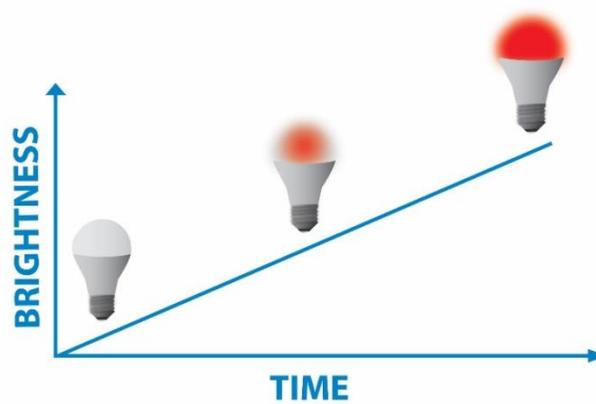
- Default value 1
- 1-98 = 1 % – 98 %

NOTE: The minimum level may not be higher than the MAX dimming value.

min. dimming value

Parameter no. 12 – Dimming time (soft on/off)

Available configuration parameters (size is 1 Byte DEC)

- Default value 10 = 1 s
- 5 – 25 = from 0.5 to 2.5 seconds
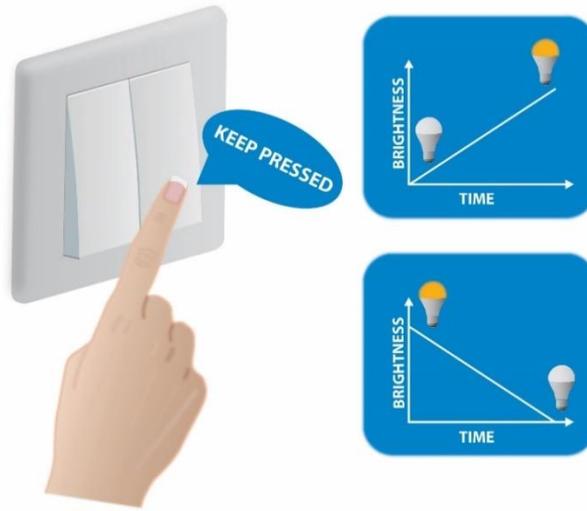
Parameter no. 13 – Dimming time when key pressed

Available configuration parameters (size is 1 Byte DEC)

- Default value 3 = 3 s
- 1 – 127 = from 1 to 127 seconds

NOTE: Dimming time depends also on Min and Max dimming value.

Parameter no. 14 – 4 Dimmers mode

Available configuration parameters (size is 1 Byte DEC)

- Default value: = 0 (4 dimmers mode disabled)
- 0 – Four dimmers mode disabled
- 1 – Four dimmers mode enabled – momentary switch type
- 2 – Four dimmers mode enabled – toggle switch type
- 3 – Four dimmers mode enabled – toggle with memory switch type

NOTE: If the parameter no. 14 is enabled, parameter no. 1,2,3,4 has no effect.

NOTE: After parameter change, first exclude device (without setting parameters to default value) and then re include the device.
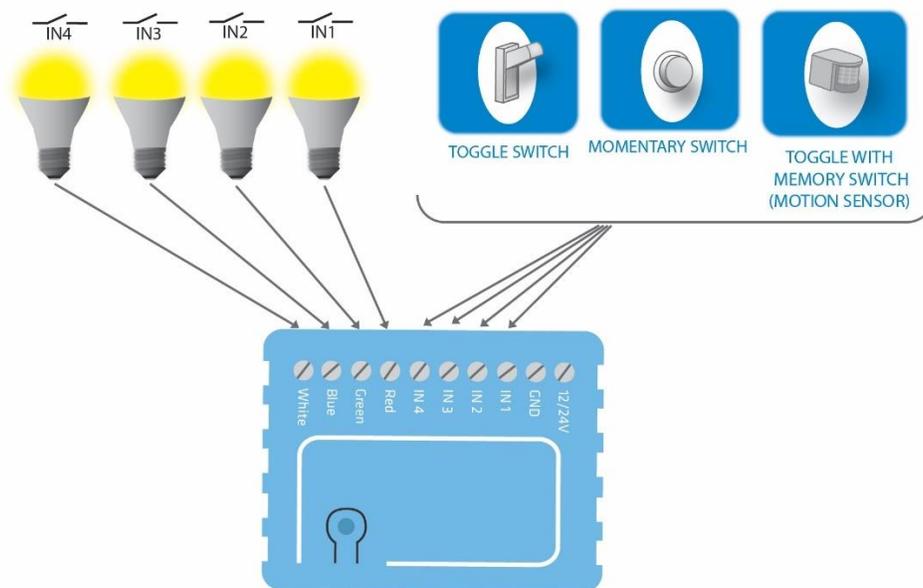
15. Technical Specifications

Power supply	12 / 24V DC
PWM output frequency	488Hz
Rated output power	8A for single output channel,13A at max. (3,25A for R.G.B.W. single output channel is suggested)
Max load (e.g. halogen bulbs)	At 12V- 156W combined at 24V- 312W combined
LED Indicator	Red/Green *1
Operation temperature	0 ~ +40°C (32 ~ 104°F)
Z-Wave operation range	up to 30 m indoors (98 ft)
Dimensions (WxHxD) (package)	40.5x32x14.5mm (79x52x22 mm) / 1,60x1,26x0,57 in (3,11x2,05x0,87 in)
Weight (with package)	28g (34g) / 0.97oz (1.20oz)
Electricity consumption	12V: 0.48W; 24V: 0.72W
For installation in boxes	Ø ≥ 60 mm (2,36 in) or 2M (78,74 in), depth≥ 60 mm (2,36 in)
Z-Wave Repeater	Yes

Supported loads:

Flush RGBW Dimmer may control:

- o 12/24VDC powered RGB strips
- o 12/24VDC powered RGBW strips
- o 12/24VDC powered LED strips, bulbs, etc.
- o 12/24VDC powered halogen lights

EXAMPLE:

- - 10m of 12VDC RGBW LED strip (60 LED/metre) 14.4W/m
- - 12VDC 4X35W LED BULB or 1X 95W BULB
- - 24VDC 4X75W LED BULB or 1X 190W BULB

16. Z-Wave Command Classes

ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON

GENERIC_TYPE_SWITCH_MULTILEVEL

SPECIFIC_TYPE_POWER_SWITCH_ MULTILEVEL

Supported Z-Wave Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2

COMMAND_CLASS_VERSION_V2

COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2

COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1

COMMAND_CLASS_POWERLEVEL_V1

COMMAND_CLASS_SWITCH_MULTILEVEL_V2

COMMAND_CLASS_SWITCH_COLOR_V2

COMMAND_CLASS_CONFIGURATION_V1

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1

COMMAND_CLASS_SWITCH_BINARY_V1

COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2

4Dimmers mode

Device class:

GENERIC_TYPE_SWITCH_MULTILEVEL

SPECIFIC_TYPE_POWER_SWITCH_ MULTILEVEL

Command classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2

COMMAND_CLASS_VERSION_V2

COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2

COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1

COMMAND_CLASS_POWERLEVEL_V1

COMMAND_CLASS_SWITCH_MULTILEVEL_V2

COMMAND_CLASS_CONFIGURATION_V1

COMMAND_CLASS_MULTI_CHANNEL_V4

COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1

COMMAND_CLASS_SWITCH_BINARY_V1

COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2

Endpoint 1, 2, 3, 4:

Device class:

GENERIC_TYPE_SWITCH_MULTILEVEL

SPECIFIC_TYPE_POWER_SWITCH_ MULTILEVEL

Command classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2

COMMAND_CLASS_SWITCH_MULTILEVEL_V2

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1

COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3

This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from any other manufacturers. All constantly powered nodes in the same network will act as repeaters regardless of the vendor in order to increase reliability of the network.

17. Important Disclaimer

Z-Wave wireless communication is not always 100% reliable. This device should not be used in situations in which life and/or valuables are solely dependent on its functioning. If the device is not recognized by your gateway (hub) or shows up incorrectly, you may need to change the device type manually and make sure your gateway (hub) supports multi-channel devices. Contact us for help before returning the device: http://qubino.com/support/#email

18. Warning

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal free of charge.

Warning: Rapid light changes may potentially trigger seizures for people with photosensitive epilepsy.

19. Regulations

FCC COMPLIANCE STATEMENT:

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: 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 in-stalled 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.

Legal Notice

This user manual is subject to change and improvement without notice. GOAP d.o.o. Nova Gorica reserves all rights to revise and update all documentation without any obligation to notify any individual or entity.

Declaration of Conformity

Qubino Flush RGBW Dimmer device is in compliance with the essential requirements and other relevant provisions of the Low voltage (LVD) Directive (2014/35/EU), Electromagnetic Compatibility (EMC) Directive (2014/30/EU), Radio Equipment Directive (2014/53/EU), Directive RoHS 2 (2011/65/EU) and Directive ErP (2009/125/EC).

WEEE

According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

NOTE: User manual is valid for device with SW version S3 (SW version is part of P/N)!
Example:P/N: ZMNHWDxHxS3Px

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