MONOPRICE

Z-Wave Plus® RGBW Dimmer Controller Module

P/N 36511

Quick User Guide

SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference. For more information, please refer to the full manual on the website.

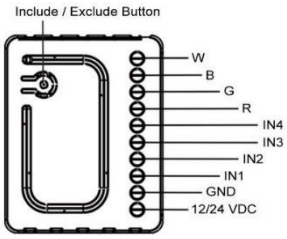
- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind.
- This module is intended for use with low-voltage (12 VDC or 24 VDC) lighting systems. Do not use it with any other voltage level.
- This module must be powered by a 12 VDC or 24 VDC stabilized power supply without outputs load capacity matching to loads voltage.
- This module must be installed by an electrician or someone with experience installing electric devices.

ONLINE SUPPORT

Monoprice is pleased to provide free online support. For order related issues, contact the Customer Service department through the Live Chat link on our website **www.monoprice.com** during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at **support@monoprice.com**

For technical issues, contact the Technical Support department through the online chat button on our website **www.monoprice.com** during regular business hours, 7 days a week. You can also get assistance through email by sending a message to **tech@monoprice.com**

PRODUCT OVERVIEW



12/24 VDC: Power supply signal/positive input.

GND: Power supply ground/negative input.

IN1: Switch input 1.

IN2: Switch input 2.

IN3: Switch input 3.

IN4: Switch input 4.

R: Output assigned to IN1.

G: Output assigned to IN2.

B: Output assigned to IN3.

W: Output assigned to IN4.

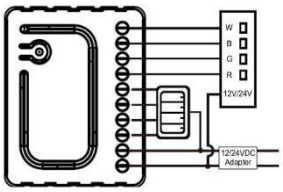
INSTALLATION

Before installation, please read and adhere to the following power requirements and recommendations.

- The controller must be operated in a low voltage, 12 VDC or 24 VDC, circuit. Using a different voltage level can damage the module.
- Use 18 AWG wire when connecting a high current LED strip. 22 AWG wire can be used in low current circuits.
- The controller must be powered with the same voltage level (12 VDC or 24 VDC) as is used to power the LED strip.
- The controller must be powered by a 12 VDC or 24 VDC stabilized power supply without outputs load capacity matching to loads voltage.
- When connecting a long LED strip, voltage drops may occur, resulting in lower brightness towards the end of the strip. To compensate for this, it is recommended to connect a few shorter strips in parallel, rather than one long strip. The maximum recommended length of LED strips is 16.4 feet (5 meters). Observe the manufacturer's wire gauge recommendations for connected loads.
- For the IN1-IN4 connections, it is suggested to connect the four inputs individually to the same type of switch. Supported switch types are Momentary, Toggle, and Toggle with Memory.

Perform the following steps to install this controller into your lighting system.

1. Disconnect the 12 VDC or 24 VDC power supply from its power source.
2. Pull the antenna wire out of the groove on the module, straighten it out, and extend it 90 degrees from the module surface.
3. Connect the module to your system according to the following diagram.



4. Connect the 12 VDC or 24 VDC power supply to its power source. If the module is installed properly, the LED strip will blink once and the module will automatically enter inclusion mode. Auto inclusion will time out after 2 minutes.

LED INDICATIONS

The LED under the **Include/Exclude Button** indicates the status of the module, as shown in the following table.

LED INDICATION	STATUS
Flashing Red and Green	Not included in a Z-Wave® network
Solid Green	Included in a Z-Wave network
Flashing Green	In Inclusion or Exclusion mode, including Auto Inclusion

INCLUSION

1. Enable **Inclusion Mode** on your Z-Wave controller.
2. Momentarily press the **Include/Exclude Button** on the module 3 times within 2 seconds to include the module in your Z-Wave network.

EXTERNAL SWITCH OPERATIONS

The following tables list the various types of actions that can be performed with the three supported switch types.

Normal Input Operating Mode

Switch Type	Switch Action	Result
Momentary	Momentary press	Single output turn ON to the last dimming value / Turn OFF
	Momentary double press	Single output turn ON to the MAX dimming value
	Press and hold for more than 1 second	Single output increase or decrease brightness
Toggle	Change position	Single output turn ON to MAX dimming value / Turn OFF
Toggle with Memory	Position 1 to Position 2	Single output turn ON to MAX dimming value
	Position 2 to Position 1	Single output turn OFF

Brightness Input Operating Mode

Switch Type	Switch Action	Result
Momentary	Momentary press	Four outputs simultaneously turn ON to the last dimming value / Turn OFF
	Momentary double press	Four outputs simultaneously turn ON to the MAX dimming value
	Press and hold for more than 1 second	Four outputs simultaneously increase or decrease brightness
Toggle	Change position	Four outputs simultaneously turn ON to MAX dimming value / Turn OFF
Toggle with Memory	Position 1 to Position 2	Four outputs simultaneously turn ON to MAX dimming value
	Position 2 to Position 1	Four outputs simultaneously turn OFF

Scene Input Operating Mode

Switch Type	Switch Action	Result
Momentary	Momentary press	Turn ON the last scene or default scene / Turn OFF
	Press and hold for more than 1 second	Changes the scene
Toggle	Change position	Turn ON the last scene or default scene / Turn OFF
Toggle with Memory	Position 1 to Position 2	Turn ON the last scene or default scene
	Position 2 to Position 1	Turn OFF

Four Dimmers Input Operating Mode

Switch Type	Switch Action	Result
Momentary	Momentary press	Single output turn ON to the last dimming value / Turn OFF
	Momentary double press	Single output turn ON to the MAX dimming value
	Press and hold for more than 1 second	Single output increase or decrease brightness
Toggle	Change position	Single output turn ON to MAX dimming value / Turn OFF
Toggle with Memory	Position 1 to Position 2	Single output turn ON to MAX dimming value
	Position 2 to Position 1	Single output turn OFF

COMMAND CLASSES

This module supports the following Command Classes.

Multilevel Switch Device Information

GENERIC_TYPE_SWITCH_MULTILEVEL
SPECIFIC_TYPE_POWER_SWITCH_MULTILEVEL

Multilevel Switch 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_BASIC_V1
COMMAND_CLASS_SWITCH_MULTILEVEL_V2
COMMAND_CLASS_COLOR_CONTROL_V2
COMMAND_CLASS_CONFIGURATION_V1
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1
COMMAND_CLASS_SWITCH_BINARY_V2
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2

Detailed Descriptions

- **COLOR CONTROL** command class: This class is used for Color setting. Refer to the following table for the configuration variables.

Capability ID	Color	State Level
0 (0x00)	Warm White	0x00-0xFF
2 (0x02)	Red	0x00-0xFF
3 (0x03)	Green	0x00-0xFF
4 (0x04)	Blue	0x00-0xFF

CONFIGURATION command class: This class is used for setting certain vendor specific configuration variables. Refer to the following table for the configuration variables.

Parameter	Name	Size (byte)	Range	Default Value	Description
1 (0x01)	Input IN1	1	1-9	1	1 NORMAL Mode: momentary switch type 2 NORMAL Mode: toggle switch type 3 NORMAL Mode: toggle with memory switch type 4. BRIGHTNESS Mode: momentary switch type 5 BRIGHTNESS Mode: toggle switch type 6 BRIGHTNESS Mode: toggle with memory switch type 7 SCENE Mode: momentary switch type 8 SCENE Mode: toggle switch type 9 SCENE Mode: toggle with memory switch type
2 (0x02)	Input IN2	1	1-9	1	Same as parameter 1
3 (0x03)	Input IN3	1	1-9	1	Same as parameter 1
4 (0x04)	Input IN4	1	1-9	1	Same as parameter 1
5 (0x05)	Auto Scene Mode Set	1	0-6	1	0: SCENE OFF 1: Ocean 2: Lightning 3: Rainbow 4: Snow 5: Sun 6: Dancing
6 (0x06)	Auto Scene Mode Duration	2	1-127 1001-1127	3	Adjust scene delay time: When value is 1-127, the duration is 1-127 seconds. When value is 1001-1127, the duration is 1-127 minutes. Note: This parameter has no effect on the Lightning and Dancing scenes.
7 (0x07)	Memorize Device Status at Power Cut	1	0-1	1	0: Device does not memorize its status at power cut. The load is disconnected. 1. Device memorizes its status at power cut. The load will be set to the status before power cut.
10 (0x0A)	MAX Dimming Value	1	2-99	99	2-99 = 2%-99%
11 (0x0B)	MIN Dimming Value	1	1-98	1	1-98 = 1%-98%
12 (0x0C)	Dimming Time (Soft On/OFF)	1	5-25	10	5-25 = 0.5-2.5 seconds 10 = 1 second
13 (0x0D)	Dimming Time When Key is Pressed	1	1-127	5	1-127 = 1-127 seconds
14 (0x0E)	Dimmer Mode	1	0-3	0	0: 4 dimmers mode disabled 1: 4 dimmers mode enabled - momentary switch type 2: 4 dimmers mode enabled - toggle switch type 3: 4 dimmers more enabled - toggle with memory switch type Note 1: If this is enabled, parameters 1-4 have no effect. Note 2: After you enable or disable 4 dimmer mode, the device should be excluded from the controller, then included again.

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