

## OPERATING MANUAL

### RGB BULB

HKZW-RGB01-V1.0

RGB BULB is a smart bulb enables Z-Wave remote command and control (on/off/dim). It has over 16,000,000 colors, you can choose its color according to your favour.

The features list:

- (1) Z-Wave Plus certified for wide compatibility (500 serials products).
- (2) Support remote control, at anywhere and anytime.
- (3) Support multicolor switch, over 16,000,000 colors.
- (4) Support warm white and cold white.
- (5) Support multi-level of color brightness, every color is dimmable.
- (6) Support firmware OTA

## I . GENERAL INFORMATION ABOUT RGB BULB

### 1. Product layout



- (4) Auto-inclusion will be activated. If the inclusion is successful, the RGB BULB will blink fast in blue for less than 5 seconds and then keep on for 3 seconds. RGB BULB will keep on in the color before it is included into the Z-Wave network after the inclusion procedure is finished.

To include RGB BULB into a Z-Wave network as a security device:

- (1) Screw in the RGB BULB.
- (2) Set the Z-Wave network main controller into learning mode (see Z-Wave network controller operating manual).
- (3) Toggle the wall switch off and on 3 times quickly (within 3 seconds and the final ending position of the wall switch must be on).
- (4) If the inclusion is successful, the RGB BULB will blink fast in green for less than 5 seconds and then keep on 3 seconds. RGB BULB will keep on in the color before it is included into the Z-Wave network after the inclusion procedure is finished.



**TIP:**  
If you want your RGB BULB to be a security device that use secure/encrypted message to communicate in a Z-Wave network, then a security enabled Z-Wave controller is needed.

## IV. REMOVING FROM Z-WAVE NETWORK

To remove the RGB BULB from the Z-Wave network:

- (1) Screw in the RGB BULB.
- (2) Set the Z-Wave network main controller into excluding mode (see Z-Wave controller operating manual).
- (3) Toggle the wall switch off and on 3 times quickly (within 3 seconds and the final ending position of the wall switch must be on), if the exclusion is successful, the RGB BULB will blink fast in orange for less than 5 seconds and then keep on for 3 seconds. RGB BULB will keep on warm white after the exclusion procedure is finished.

## 2. Specifications

Power supply:	100-240VAC +/-10%, 50/60Hz
Standby power:	<1W
Rate power:	7W
Bulb holder type:	E26 (USA) E27 (EU)
Max brightness:	600lm
Storage environment:	-10~50°C 0%~80%
Operating temperature:	-10~40°C
Radio protocol:	Z-Wave
Radio frequency:	868.42MHz (EU) 908.42MHz (US) 921.42MHz (AU)
Range:	More than 100m outdoors About 30m indoors (depending on building materials)
Dimensions:	65mm (Φ) x 118mm (L)

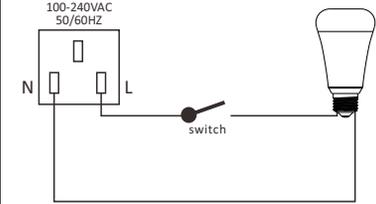


**NOTE:**  
Danger of electrocution! Any work on device regarding electrical connections may be performed only after the power supply has been disconnected.

## II. INSTALLATION

RGB BULB is simple to install and use.

- (1) Before installation make sure the power supply is disconnected.
- (2) Screw in the RGB BULB.
- (3) Power it on.
- (4) Include the RGB BULB into your Z-Wave network (follow the procedure Z-Wave network inclusion).
- (5) Select a color if necessary.



## III. Z-WAVE NETWORK INCLUSION

RGB BULB can be included and operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

To include RGB BULB into a Z-Wave network as a non-security device:

- (1) Make sure the power supply is disconnected and the RGB BULB is located within a direct Z-Wave network's main controller communication range.
- (2) Set the Z-Wave network main controller into learning mode (see Z-Wave network controller operating manual).
- (3) Insert the RGB BULB into a lamp-socket and then power on.

## VII. ASSOCIATION

Association allows RGB BULB to report its status to the associated nodes.

RGB BULB supports only one association groupings: RGB BULB will send the follow notification to the associated nodes when the status of the RGB BULB is changed.

1. Set Configuration parameter 24 to 0: Reserved
2. Set Configuration parameter 24 to 1: Send Basic Report
3. Set Configuration parameter 24 to 2: Send Basic Report only when the status of the RGB BULB is not changed by Z-WAVE Command.

## VIII. ADVANCED CONFIGURATION

RGB BULB offers a wide variety of advanced configuration settings. Below parameters can be accessed from main controllers configuration interface.

### Parameter No. 21 Setting device status after power failure

Define how the RGB BULB will react after the power supply is back on.

- 0 - RGB BULB memorizes its state after a power failure.
- 1 - RGB BULB does not memorize its state after a power failure. Connected device will be on after the power supply is reconnected.
- 2 - RGB bulb does not memorize its state after a power failure. Connected device will be off after the power supply is reconnected.

Default setting: **0**

Parameter size: **1 [byte]**

### Parameter No. 24 Notification when Load status change

RGB BULB can send notifications to associated device (Group Lifeline) when the status of the RGB BULB is changed.

- 0 - The function is disabled.
- 1 - Send BASIC REPORT.
- 2 - Send BASIC REPORT only when the status of the RGB BULB is not changed by Z-WAVE Command.

Default setting: **1**

Parameter size: **1 [byte]**

### Parameter No. 255 Resetting to factory default.

RGB BULB will exclude from the Z-Wave network with this particular command.

Value: **1431655765** – Resetting to the factory default.

Default: **1**

Parameter size: **4 [byte]**



**NOTE:**  
Remove procedure will clear the RGB BULB's memory which means it will erase all information about Z-Wave network and advanced configuration.

## V. RESET RGB BULB

There are two ways to reset the RGB BULB. One is that removing RGB BULB from the Z-Wave network, the other is that using the configuration command class shows in the section of the "VII. ADVANCED CONFIGURATION".

## VI. SELECT A LIGHT COLOR

- (1) Screw in the RGB BULB.
- (2) Toggle the wall switch off and on 2 times quickly (within 2 seconds and the final ending position of the wall switch must be on), the RGB BULB will blink fast in purple for 1 second, which indicate the RGB BULB is successfully set into color switch mode. Light color will cyclic change in order of: warm white, cool white, red, green, blue, warm white.
- (3) Toggle the wall switch off and on quickly (within 1 second), the light will maintain the color at the moment the action takes place.



**TIP:**  
You can repeat step 2 to select another color. Quitting from the select mode: Power off for more than 2 seconds after finish step 2.