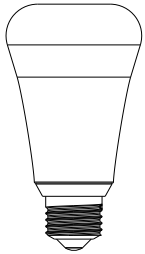


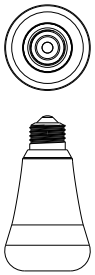
User manual
Model:HKZW-RGB01

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 cool 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



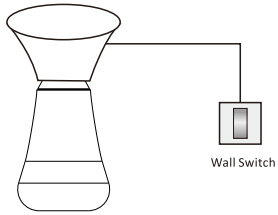
2. Specifications

Power supply:	100-240VAC+/-10%, 50/60Hz
Standby power:	<1W
Rate power:	7W
Bulb holder type:	E26
Max brightness:	600lm
Storage environment:	-10~50℃ 0%~80%
Operating temperature:	-10~40℃
Radio protocol:	Z-Wave
Radio frequency:	908.42MHz
Range:	More than 150m outdoors About 40m 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 into the Z-Wave network as a non-security or security device.

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.
(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.

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 learning 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.

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

Reset procedure will clear the RBG BULB's memory, including Z-Wave network information.

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 "Ⅷ. 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.

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.

TIP:
1. The max number of associated nodes of the group is 5.
2. Association allows for direct transmission of report its status to the associated nodes without the participation of main controller.

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. 51 Enable/disable the function of using wall switch to turn on/off RGB BULB

0 - Disable
1 - Enable

Default setting: **0**
Parameter size: **1 [byte]**

Parameter No. 61 Advance mode
RGB BULB can blink or cyclic/random change color automatically at set intervals. It will stop blink or change color when receiving any control command like Basic Set.

3072 - Stop changing.
16826368 - Color gradual change randomly.
33603584 - Color change randomly with a breathing blink.
50380800 - Blink with random color.
67158016 - Color change randomly.
285261824 - Color gradual change.
302039040 - Breathing blink with a specific color.
318816256 - Blink with a specific color.

Default setting: **3072**
Parameter size: **4 [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]**

FCC Caution.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 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.