RGB BULB   HKZW-RGB01-V1.0

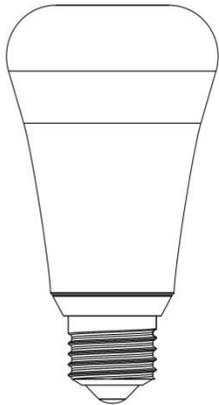# Operating Manual

Thank you for your support!

Please read the user manual carefully before operating the device.
Please keep the user manual for future reference.

Specifications

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

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

To include the RGB BULB into a Z-Wave network as **a non-secure device**:

1) Make sure the power supply is disconnected and the RGB BULB is located within the direct communication range of the Z-Wave network controller.
2) Set the Z-Wave network controller into the Add (inclusion) mode (see Z-Wave network controller operating manual).
3) Insert the RGB BULB into a lamp-socket and then power on.
4) The 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 it for 3 seconds. The 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 secure device**:

1) Screw the RGB BULB into a lamp socket.
2) Set the Z-Wave network controller into the Add (inclusion) mode (see Z-Wave network controller operating manual).
3) Toggle the wall switch off and on quickly 3 times (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 it for 3 seconds. The 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 secure device and use secure/encrypted messages to communicate in the Z-Wave network, then a security enabled Z-Wave controller is required.

fast in purple for 1 second, which indicates that the RGB BULB is successfully set into the color switch mode. The light color will change cyclic in the order: warm white, cool white, red, green, blue and warm white.

3) Toggle the wall switch off and on quickly once (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.
To quit from the select mode: Power off for more than 2 seconds after finishing step 2.

ASSOCIATION

Associations allow the RGB BULB to report its status to the associated nodes.

The RGB BULB supports only one association group. It will send the following notification to associated nodes when the status of the RGB BULB has changed.

1) Setting configuration parameter 24 to 0: Reserved
2) Setting configuration parameter 24 to 1: Send a Basic Report
3) Setting configuration parameter 24 to 2: Send a Basic Report only when the status of the RGB BULB is not changed by a Z-Wave command.

ADVANCED CONFIGURATION

The RGB BULB offers a wide variety of advanced configuration settings.

Below parameters can be accessed from controllers configuration interface.

SUPPORTED COMMAND CLASSES

This device supports the Command Classes as below:

- Association Group Information (V1)
- Association (V2)
- Basic (V1)
- Color Switch (V1)
- Configuration (V1)
- Device Reset Local (V1)
- Firmware Update MB (V2)
- Manufacturer Specific (V2)
- Multilevel Switch (V2)
- Powerlevel
- Scene Activation
- Scene Actuator Configuration
- Security (V1)
- Switch All (V1)
- Version (V2)
- Z-Wave Plus Info (V2)

Product Introduction

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

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.
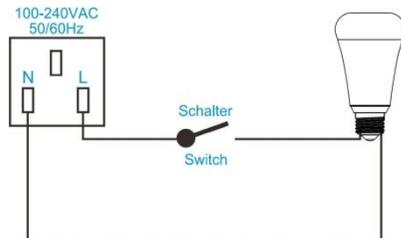6) Support firmware OTA (over the air update)

GENERAL INFORMATION

Product Layout

INSTALLATION

The RGB BULB is simple to install and to use.

1) Before the 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.

Z-WAVE NETWORK INCLUSION (ADD)

The 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 the vendor to increase reliability of the network.

REMOVING FROM Z-WAVE NETWORK

To remove the RGB BULB from the Z-Wave network:
1) Screw the RGB BULB into a lamp socket.
2) Set the Z-Wave network controller into the Remove (exclusion) mode (see Z-Wave controller operating manual).
3) Toggle the wall switch off and on quickly 3 times (within 3 seconds and the final ending position of the wall switch must be on).
4) If the exclusion is successful, the RGB BULB will blink fast in orange for less than 5 seconds and then keep it for 3 seconds. The RGB BULB will keep on warm white after the exclusion procedure is finished.

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

RESET RGB BULB

There are two ways to reset the RGB BULB. The first possibility is removing the RGB BULB from the Z-Wave network as described in the section above, the second is to use the configuration command class shown in the section of the "ADVANCED CONFIGURATION".

SELECT A LIGHT COLOR

1) Screw the RGB BULB into a lamp socket.
2) Toggle the wall switch off and on quickly 2 times (within 2 seconds and the final ending position of the wall switch must be on). The RGB BULB will blink

Parameter No. 21 Setting device status after power failure

This parameter defines 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 changed

The RGB BULB can send notifications to associated devices (Group Lifeline) when the status of the RGB BULB has changed.

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

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

Parameter No. 255 Resetting to factory default

The RGB BULB will be excluded from the Z-Wave network with this particular command.

Value: **1431655765** – Resetting to the factory default
Default setting: **1**
Parameter size: **4 [bytes]**

DISPOSING AND RECYCLING

When the device reaches its end of life, dispose it according to your local environmental laws, guidelines and regulations. The WEEE symbol on the product or the packaging means that according to local laws and regulations it 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 facility) designated by your local authorities. By recycling the product and its packaging you help to conserve the environment and protect human health.

MANUFACTURER

HANK ELECTRONICS CO., LTD

Address:	Floor 32th, Block B, Dachong Business Center, Nanshan District, Shenzhen, China, 518057
Web:	www.hank-tech.com
Tel:	+86 – 755 – 26404450 / 82024967
Fax:	+86 – 755 – 26657180
E-mail	sales@hank-tech.com

All above is for references only.