User Manual

Wireless Dimmable Light

Model: ZC07

20150915

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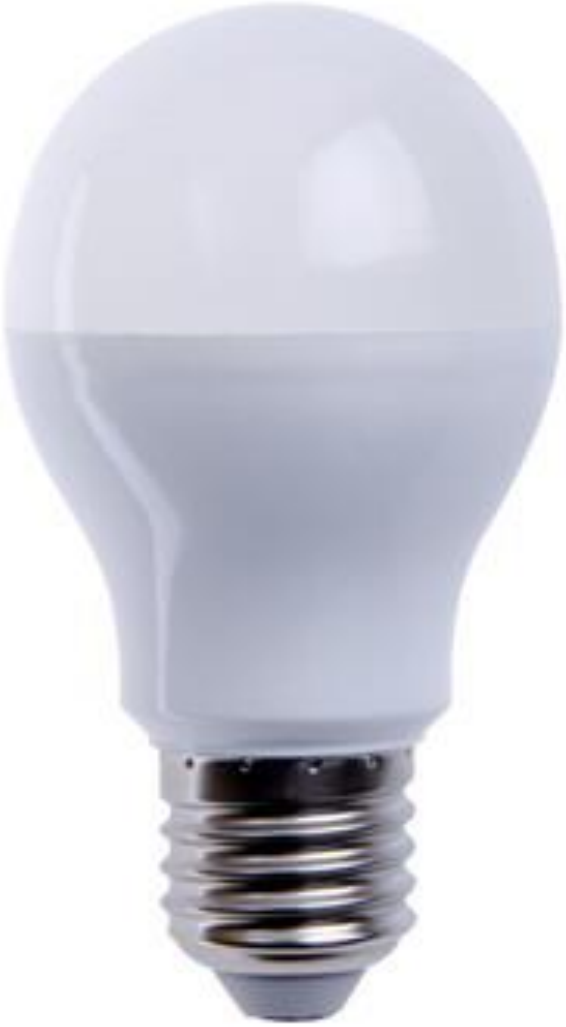
1. Introduction

ZC07, a wireless dimmable LED bulb, is a robust light bulb based on ZigBee technology. ZC07 utilized E27 screw base and has 256 dimmable light levels. It is a long life LED bulb and has light weighted power consumption comparing to conventional light bulbs. ZC07 acts as a Router Device in ZigBee network. It performs the On/Off /Dimmer controlling feature.

What is ZigBee?

ZigBee is a short range wireless transmission technology based on IEEE802.15.4 standard and supports multiple network topologies such as point-to-point, point-to-multipoint, and mesh networks. It is defined for a general-purpose, cost-effective, low-power-consumption, low-data-rate, and easy-to-install wireless solution for industrial control, embedded sensing, medical data collection, smoke and intruder warning, building automation and home automation, etc.

2. Product Appearance



3. Specification

- Fully IEEE 802.15.4 compliant
- Utilizes 2.4GHz ISM band; up to 16 channels
- E27 base
- Supply Current: 32mA±5mA
- 5W±0.8W rate power
- Power Factor >0.5
- LED Drive current: 115mA±10mA
- Beam Angle: 135°
- Illuminance: 400LM
- CCT: 6000K
- 15,000-hr light life
- Dimmable Level: 256 levels
- Easy installation and configuration

4. Setting up ZC07

4-1. Join the ZigBee Network

Install ZC07 into the socket and power it on. After ZC07 is powered on, it will search for an existing ZigBee network and send a request to join the network automatically.

4-2. Restore to Factory Setting

Method 1. Put Z716A into ZC07 within a distance of less than about 20cm, then press setup key 10s(release the key when LCD shows "!" 2 times), and then LCD shows 100d, the LED will flashes 10 times. ZC07 restore to factory setting, and start to join the zigbee network automatically.

Method 2:

Step1. Power on and then power off ZC07 within 3 seconds for **5 times**.

Step2. When restore is succeed, the LED will flashes and then the brightness will decrease and increase.

Step3. Reboot ZC07 to complete the restore.

5. Home Automation Clusters for ZC07

A cluster is a set of related attributes and commands which are grouped together to provide a specific function. A simple example of a cluster would be the On/Off cluster which defines how an on/off switch behaves. This table lists the clusters which are supported by ZC07.

1.End Point(s)：0x01

2.Device ID：Dimmable Light (0x0101)

3.EndPoint Cluster ID

Server side	**Client side**
EP 0x01 (Device ID：Dimmable Light (0x0101))	
Basic(0000)	*None*
Identify(0003)	
Group(0004)	
Scene (0005)	
On/Off(0006)	
Level control(0008)	
Diagnostics(0B05)	
ZLL Commissioning (0x1000)	

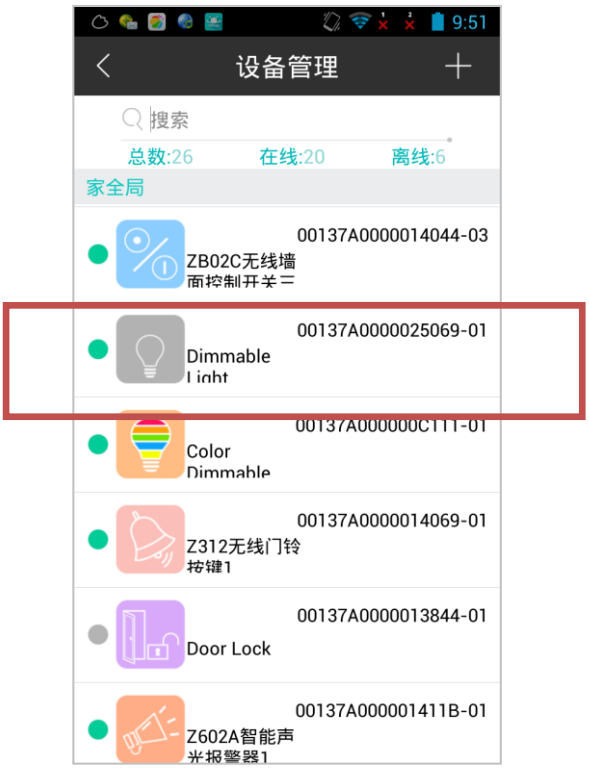
Attributes of the Basic Device Information attribute set

Identifier	**Name**	**Type**	**Range**	**Access**	**Default**	**Mandatory / Optional**
0x0000	*ZCLVersion*	8-bit Unsigned integer	0x00 –0xff	Read only	0x03	M
0x0001	*ApplicationVersion*	8-bit Unsigned integer	0x00 –0xff	Read only	0x0A	O
0x0002	*StackVersion*	8-bit Unsigned integer	0x00 –0xff	Read only	0x33	O
0x0003	*HWVersion*	8-bit Unsigned integer	0x00 –0xff	Read only	0x0A	O

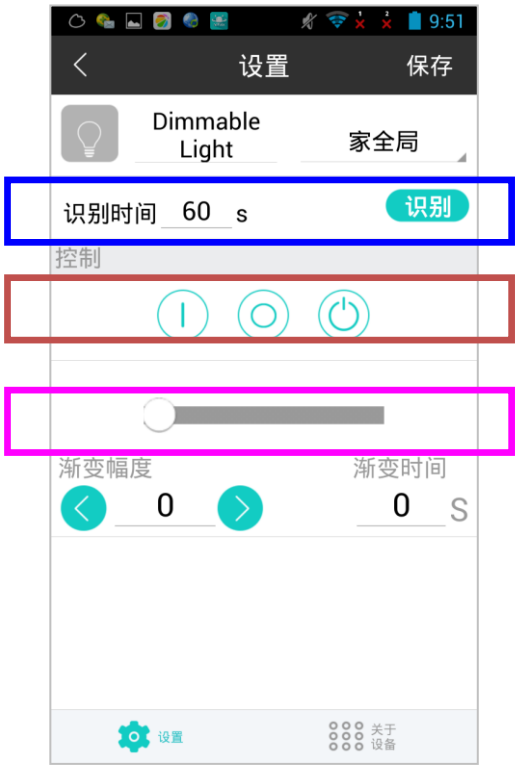
Identifier	Name	Type	Range	Access	Default	Mandatory / Optional
0x0004	*ManufacturerName*	Character string	0 – 32 Bytes	Read only	netvox	O
0x0005	*ModelIdentifier*	Character string	0 – 32bytes	Read only	ZC07E3R	O
0x0006	*DateCode*	Character string	0 – 16 bytes	Read only		O
0x0007	*PowerSource*	8-bit Enumeration	0x00 –0xff	Read only	0x01	M

7. Netvox App Control Interface

Add device to device list of ZC07 in Netvox App and the device information will show up in the management interface as below:

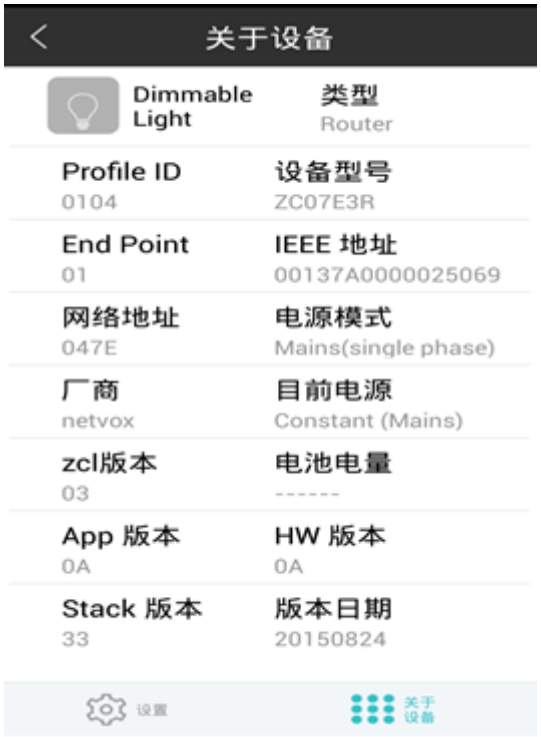


The added device EP01 is a “Dimmable Light” device type. Choose it to enter control interface as below:



- Blue area shows the identity duration in order to identify the specific device to control, if it is setted to be 60 seconds and the light flash 60 times to show identity.
- Red area shows the function of on / off / toggle.
- Purple area shows the dimmable function. Users can stretch the bar to adjust the light.
- Darkness to the left, brightness to the right.
- Graduated time shows time duration of light changing.

Choose “ about device” to check device information as below:



8. Related Netvox Devices

- Z503: Local Commander

- Z501A: Remote Controller with ON/OFF and Level control

9. Important Maintenance Instructions

- Please keep the device in a dry place. Precipitation, humidity, and all types of liquids or moisture can contain minerals that corrode electronic circuits. In cases of accidental liquid spills to a device, please leave the device dry properly before storing or using.
- Do not use or store the device in dusty or dirty areas.
- Do not use or store the device in extremely hot temperatures. High temperatures may damage the device or battery.
- Do not use or store the device in extremely cold temperatures. When the device warms to its normal temperature, moisture can form inside the device and damage the device or battery.
- Do not drop, knock, or shake the device. Rough handling would break it.
- Do not use strong chemicals or washing to clean the device.
- Do not paint the device. Paint would cause improper operation.

Handle your device, battery, and accessories with care. The suggestions above help you keep your device operational. For damaged device, please contact the authorized service center in your area.

FCC 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.

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.

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

Note:

1. Use the product in the environment with the temperature between -10°C and 50°C.

For the following equipment:

CE 0700

Is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC,
The equipment was passed. The test was performed according to the following European standards:

EN 301 489-1 V1.9.2: 2011-09
ETSI EN 301 489-17 V2.1.1: 2009-05
ETSI EN 300 328 V1.7.1:2006-10
EN62311:2008
EN 60950-1:2006+A11:2009+A1:2010+A12:2011

CAUTION
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING
TO THE INSTRUCTIONS