

Wireless Switch Control Unit

# *Wireless Switch Control Unit* (2-Output) User Manual

Firmware: V5.2 Hardware: V7.1

# Content

1. Introduction	2
2. Appearance	2
3. Main Features	3
4. Installation	3
4.1 Join into ZigBee network	4
4.2 Permit join	5
4.3 Binding	5
4.4 Control	5
4.5 Restore to factory setting	6
4.6 ZigBee description	6
5. Related products:	7
6. Important Maintenance Instructions	8

# **1. Introduction**

Z806 is defined as a wireless switch device based on ZigBee protocol. It has two circuits to be on or off wirelessly controlled. It allows user using a ZigBee remote controller to wirelessly switch on or off the load attached to it. Z806 is a router device in the network which permits other devices to join the network.

Z806 utilizes 2.4 GHz ISM band for ZigBee HA or SE profile and communicates with routers, coordinator, and end devices in a network.

# 2. Appearance



# 3. Main Features

- Device type: On/Off Output (HA Profile) / Load Control Device (SE Profile)
- ZigBee high power output switch
- Protocol based on ZigBee
- Equipped with router device
- Two dry-contact output relay controlling individual device
- Compact size that can be installed in power junction box

# 4. Installation



Fig 1. Z806 structure diagram

Z806 Wiring Diagram :



Fig 2. Z806 Wiring Diagram

Input power port:

Refer to Fig. 1, mark 1 and 2 are input power ports which can support input power range from AC 100V-240V

50/60HZ

Output power port:

Main PCB Board carries 2 relays that the control terminal and the controlled terminal is electrically isolated.

Reference numeral 3,4,5,6 four terminals are output port interface of relays. Numeral 3,4 port to connect one relay output switches at both ends. Two terminals are turned on and off by controlling the relay inside the machine. And they are galvanically isolated from other parts of the lines on the board (ie, here are dry contact outputs).

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## 4.1 Join into ZigBee network

In order to communicate in ZigBee network, join Z806 into the network as below steps:

① Power on Z806, it will search network automatically.

(2) If there are coordinator or router sharing same channel in the network and allowing other devices to join. Z806 will join the network automatically.

③ After joining into ZigBee network successfully, the network indicator will stay on. Otherwise, the network will stay off.

### 4.2 Permit join

Z806 acts as a router and allows other devices to join the network. Turn on permit join function: press shortly binding key, status indicator flashes to show permitting join. Other devices are allowed to join network through Z806, permitting interval 60 seconds; the network indicator will flash 60 times. Z806 will shut down permitting function after 60 seconds and the status indicator stops flashing.

### 4.3 Binding

Z806 can bind with devices of client side carrying On/Off (0x0006) Cluster ID. Z806 can receive on/off command and perform the corresponding on/off switching

Binding operation are as below:

Objects can be bound : switching devices as Z501, Z503, ZB02C, etc.

Binding operations: press and hold binding key for 3 seconds, after the status indicator flashes once, release the key bindings, within 5 seconds press binding key N times to choose Nth channel to be bound. Each time you press the key; the status light flashes once to show prompted key is valid. For example , channel 2 to bind with other devices, press and hold binding key for 3 seconds, then the status indicator blinks once, release binding key. Within 5 seconds continuously press the binding key 2 times, the status light flashes twice individually to show each prompted key is valid . 5 seconds later, Z806 will send a binding request. Operate devices to be bound to also send a binding request. After binding is successful, Z806 status indicator blinks 5 times. Status indicator will flash 10 times to show that binding is not successful.

NOTE: The device supports 32 groups, 32 scenes.

# 4.4 Control

Devices which are bound with Z806 can send on/off command to Z06.

When Z806 receives the ON command, relay magnet of the corresponding channel will connect; thereby the external circuit of that channel is turned on. When Z806 receives OFF command, relay magnet will disconnect, so the external circuit cut off.

# 4.5 Restore to factory setting

Z806 carries functions of saving data such as saving the distributed network addresses. If users would like Z802 to join a new network, Z802 has to be restored to factory setting first.

To restore to factory setting, press and hold binding key for 15 seconds till status indicator flashes three time individually at 3<sup>rd</sup>, 10<sup>th</sup>, 15<sup>th</sup> second, and then press shortly within 2 seconds; the status indicator will keep flash to that show restoring is completed. Two indicator will then shut off; status indicator will start to search network and Z806 will re-join the network.

# 4.6 ZigBee description

1.End Point(s): 0x01, 0x02

- 2.Device ID: On/Off Output (0002)
- 3.Cluster ID which EndPoint supports

Cluster ID for Z806							
Server side	Client side						
EP 0X01、0x02(Device ID: On/Off Output (0002))							
Basic(0x0000)	None						
Identify(0x0003)							
Group(0x0004)							
Scene(0x0005)							
On/Off(0x0006)							
Commissiong (0x0015)							
Diagnostics(0x0B05)							

#### (1) Attributes of the Basic Information

Identifier	Name	Туре	Range	Access	Default	Mandatory / Optional
0x0000	ZCLVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0X03	М
0x0001	ApplicationVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0X34	0
0x0002	StackVersion	Unsigned 8-bit integer	0x00 – 0xff	Read only	0X35	0
0x0003	HWVersion	Unsigned	0x00 -	Read only	0X47	0

		8-bit integer	0xff			
0x0004	ManufacturerName	Character string	0 – 32 bytes	Read only	netvox	0
0x0005	ModelIdentifier	Character string	0 – 32 bytes	Read only	Z806E <mark>3</mark> R	0
0x0006	DateCode	Character string	0 – 16 bytes	Read only	20150508	0
0x0007	PowerSource	8-bit Enumeration	0x00 – 0xff	Read only	0X01	М
0x0010	LocationDescription	Character string	0 – 16 bytes	Read/write	-	0
0x0011	PhysicalEnvironment	8-bit Enumeration	0x00 – 0xff	Read/write	0x00	0
0x0012	DeviceEnabled	Boolean	0x00 – 0x01	Read/write	0x01	М

# 5. Related products:

Switch (model: ZB02A/B/C)



Remotes (model: Z503/Z501B)



Motion Detector (model: ZB01B)



# 6. 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.