

Product specification

Name: Zigbee Monochrome slave

MODEL: WF321



Summarization

Zigbee Monochrome slave is a node controller of Zigbee multipoint control system in our company, it adopts Zigbee Intelligent network, automatic recovery technology, Zigbee standard protocol. Integral synchronous control and single point of control can be achieved through Android, iOS system client software.

This controller has a variety of built-in static mode, not only can be controlled through client software, but also can achieve dimming by controlling buttons. With the features of simple operation, flexible controlling and convenient installation, it make the control of led easier and more humanized, which brings a colorful smart lighting experience to users.

Technical Parameters

working voltage: DC12-24V

communication protocol: Zigbee wireless communication protocols

working temperature: -20-60 °C

networking mode: Zigbee Network

working power consumption: <1W(12V)

networking protocol: Zigbee IEEE 802.15.4

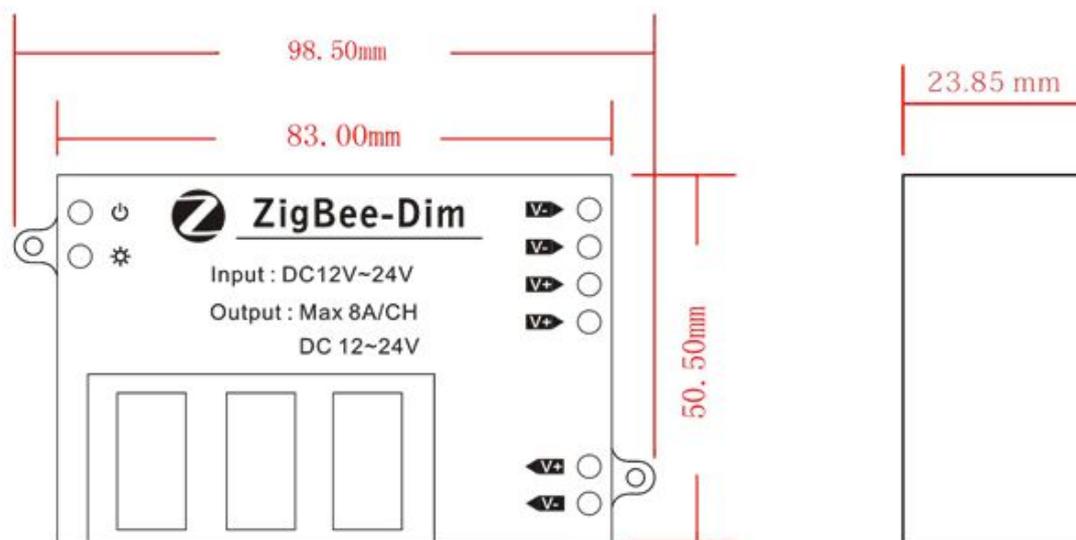
Communication distance: Less than 50m

Output: 1 channel(common anode)8A/CH

working frequency: 2.4GHz

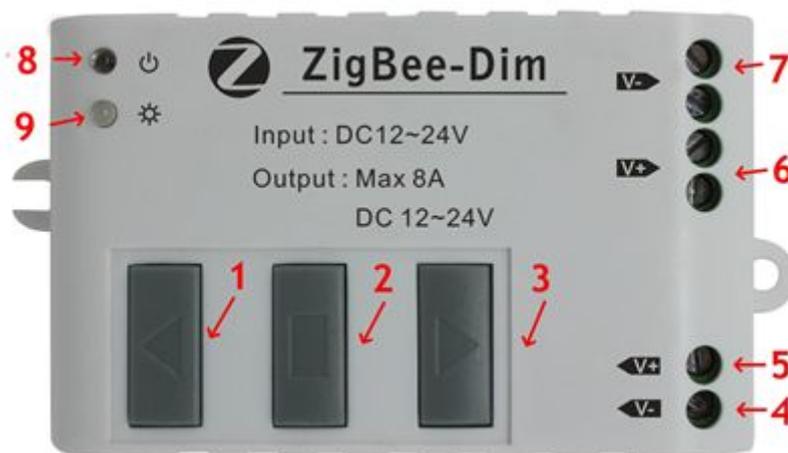
packing size: L105*W64*H40 (mm)
 transmitting power: -1dbm
 external dimension: L99*W51*H24 (mm)
 receiving sensitivity: -91dbm
 net weight: 51.7g
 gross weight: 102.2g

External Dimension



Operation Instruction

Interface specification



Number	Function	Explanation
1	Parameter increasing set key	Increase the brightness of light
2	Mode on-off key	Short press can change built-in mode, long press over 3 seconds can open or close output

3	Parameter decreasing set key	Decrease the brightness of light,
4	Power input negative pole	Provide the power supply to control circuit and load output
5	Power input positive pole	
6	Output positive pole	Connected to the positive common port of monochromatic light
7	Output negative pole	Connected to the negative common port of monochromatic light

Working State Directions

Number	Indicator light	Explanation
8	Power indicator light	Power indicator light keeps on, showing normal power supply
9	Status indicator light	Green flash once, showing receiving host data
		Green light keeps on, showing long press the key
		Yellow light keeps on, showing being access network
		Red light keeps on, showing failure to access network

Operation procedure

1. Plug in power supply(number 4,5) and led strips(number 6,7,8,9) on the basis of interface specification diagram.
2. Connect power supply to the master and slave, make sure the voltage is correct. At this moment, power indicator light(number 8) become red.
3. Operation of the slave joining host network
 - (1) Press MATCH of the master until signal light of the master is on, then let go of your hands.



- (2) Then press together the slave parameter increasing set key(number 1) with

parameter decreasing set key (number 3)for 3 seconds until signal light(number 9) become yellow.



4. After the slave successfully join host network, zigbee signal light(number 9) of the master and the slave will go out, otherwise it shows failure to access network, if so, please repeat the step 3.

(Please refer to Illustration of working condition for signal light information when normal working, interface specification for key operation when invoking built-in mode)

Built-in mode table

User can use monochromatic light to match up with phone control software, which can achieve overall brightness adjustment. Built-in mode table as below:

Number	Brightness	Remark	Number	Brightness	Remark
1	1%	Brightness proportion	12	55%	Brightness proportion
2	5%		13	60%	
3	10%		14	65%	
4	15%		15	70%	
5	20%		16	75%	
6	25%		17	80%	
7	30%		18	85%	
8	35%		19	90%	
9	40%		20	95%	
10	45%		21	100%	
11	50%				

System Application Diagram



System Application Diagram

Notice: when the controller is being installed, in order to achieve the best controlling effect, the master should be placed in central position of each slave.

Notice

1. Please don't install controller in a seal off , high magnetic field and high-voltage area.
2. In order to reduce the risk of fire disaster and device damage caused by short circuit , please make sure correct connection.
3. Make sure that the controller is installed in ventilation to guarantee appropriate temperature.
4. Installation position of controller should be as near as possible to the router so as to ensure normal controlling;
5. Check if the voltage and power supply match with the controller.
6. Before switching on the power, please check if connection is correct, and use instrument to test if there is a short circuit.
7. Any problem , please do not open the shell of controller at will.
8. This manual is only applicable to this controller, if there is an update without prior notice.

Fault Analysis

No.	Phenomenon	Reason	Solutions
1	Load has no output	<ol style="list-style-type: none">1. out of power2. output is overload3. mistaken connection	<ol style="list-style-type: none">1. check the power2. increase power amplifier3. check the connection
2	Failure to connect network	Zigbee wireless network signal is poor	Adjust installation site and rejoin network
3	The end of led strips is dark when the length of it is too long	<ol style="list-style-type: none">1. output cable is too long2. output cable diameter is too small3. controller or power supply is overload	<ol style="list-style-type: none">1. shorten the length of cable2. use cable with large diameter3. increase power amplifier