

# Product Specification

**Name:** Zigbee Full-color Slave Controller

**MODEL:** WF323



## Summarization

Zigbee full-color slave controller is a kind of node controller in our Zigbee multipoint control system, it adopts the Zigbee intelligent network, the technology of auto-recovery and the Zigbee standard protocol. Through the Android and iOS system client software, it can achieve the whole controller synchronization controlled or single point controlled.

This controller has various of static and dynamic modes, not only can be controlled by the client software, but also can achieve light dimming by button control, with the characteristic of simple operation, flexible control and convenient installation. This makes the LED control more convenient, more humanized, to provide users with colorful intelligent lighting experience.

## Technical Parameters

Supply voltage: DC12-24V

Communication Protocol: Zigbee Wireless Communication Protocol

Working temperature: -20-60 °C

Networking: Zigbee network

Working power consumption: <1W (12V)

Net Protocol: Zigbee IEEE 802.15.4

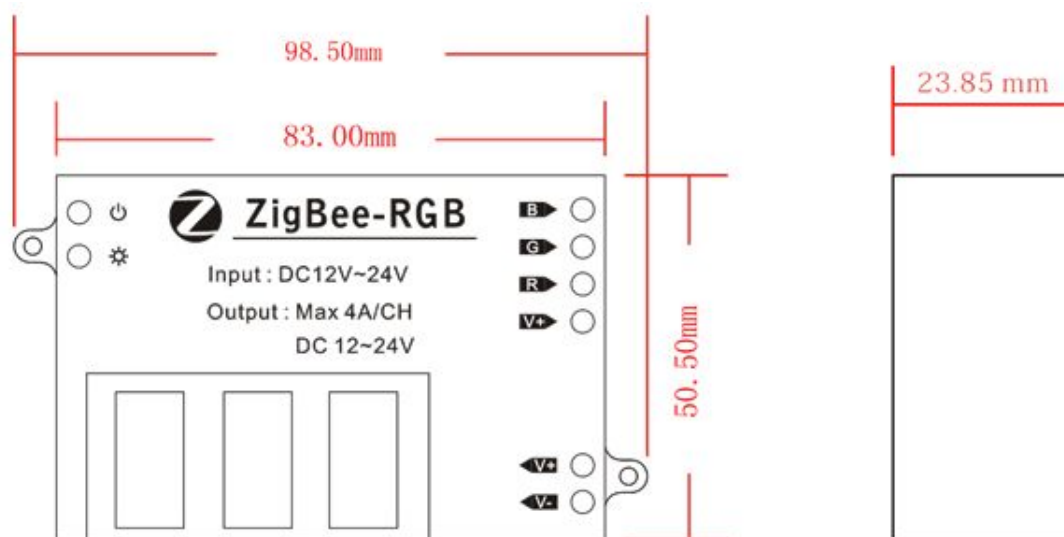
Communication distance: Less than 50m

Output: 3 channel (Common anode) 4A/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: 59.7g  
 Gross weight: 109.2g

**External Dimension**



**Operation Instruction**

**Interface specification**



Number	Function	Explanation
1	Parameter increasing set key	Increase the brightness of light under static mode, Increase the speed of light under dynamic mode
2	Mode on-off key	Short press change the built-in pattern, for long press over 3 seconds means turn on/off the output.
3	Parameter	Decrease the brightness of light under static

	decreasing set key	mode, Decrease the speed of light under dynamic mode
4	Power input negative pole	Provide power supply for control circuit and load output.
5	Power input positive pole	
6	Anode output	Connected to RGB strip common anode port.
7	output channel 1	Connected to the red control port of RGB strip.
8	output channel 2	Connected to the Green control port of RGB strip.
9	output channel 3	Connected to the blue control port of RGB strip.

### Working State Directions

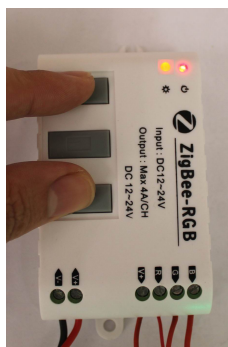
Number	Indicator light	Explanation
10	Power supply indicator light	Power indicator light, long-time bright shows power supply normally
11	State indicator light	Green flash once, showing receiving host data
		Green light keeps on, showing long press the key
		Yellow light keeps on, showing being access network
		Red light keeps on, showing failure to access network

### Operation procedure

1. According to the interface directions graph connect the power supply (no. 4, 5) and LED strip (no. 6, 7, 8, 9).
2. Connect power supply of master controller and slave controller, make sure the voltage is correct. At that time, power supply indicator light (no. 10) will be red.
3. Operation for adding slave to the master controller net:
  - (1) First long press MATCH key on the master, leave your hand until the Zigbee signal lights on.



- (2) Then press the parameter increasing (no. 1) and reducing key (no. 3) 3 seconds at the same time. Until the signal light (no. 11) turns yellow.



4. When the slave join the master network successfully, the signal light (no. 11) will be off, and the master power supply lights on, if not means the net access failed, then repeat step3 operation.

(The signal light information in normal working state please reference the working state directions graph, when adjust the built-in mode please accroding to the operation of interface directions.)

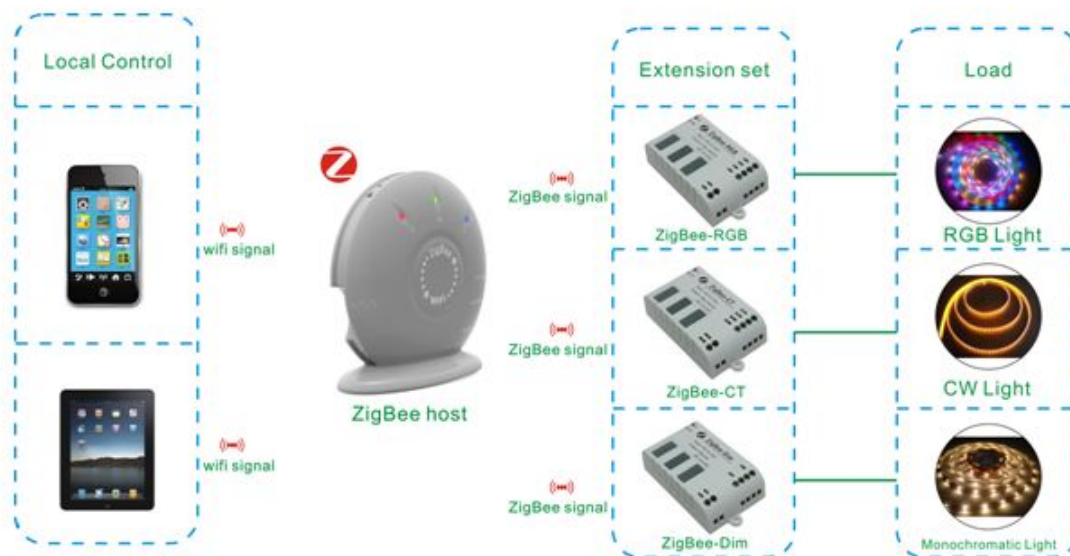
### The Controller Built-in Mode Table

Using RGB light bar and let it coordinate with cell phone software can achieve the brightness adjust by self, or static mode and dynamic mode.

And the controller built-in mode table as follows:

No.	Color	Remark	No.	Color	Remark
1	static red	Brightness is adjustable, speed is unadjustable.	12	red stroboflash	Brightness is unadjustable, speed is adjustable
2	static blue		13	blue stroboflash	
3	static green		14	purple stroboflash	
4	static cyan		15	green stroboflash	
5	static purple		16	yellow stroboflash	
6	static yellow		17	cyan stroboflash	
7	static white		18	white stroboflash	
8	three-color jumpy changing	Brightness is unadjustable, speed is adjustable.	19	R/B crossfade	Brightness is unadjustable, speed is adjustable.
9	seven-color jumpy changing		20	B/G crossfade	
10	three-color gradual changing	Brightness is unadjustable, speed is adjustable.	21	G/R crossfade	
11	seven-color gradual changing		22	user-defined color	

### Typical Application



**Notice:** When controller is being installed, for the best control effect, the master should be placed on each control center.

**Notice:**

1. Please don't install dimmers in a seal off , high magnetic or high voltage field ;
2. In order to reduce the risk of fire disaster and device damage caused by short circuit, please make sure correct connection;
3. To ensure the installation in a ventilation area and the right temperature.
4. Controller installed near the location of the router, as close as possible to ensure the normal control.
5. Check whether the voltage and the power supply is matching the controller.
6. Before power on, please check whether the circuit is properly connected, and instrument test whether 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 model of controllers, if there is an update without prior notice.

**Fault Analysis**

Label	Phenomenon	Reason	Solution
1	Load has no output	1. No electricity; 2. Output over load 3. mistake connection	1. check the power supply 2. increase the power amplifier 3. check the connection
2	Color is not correct	RGB line connect wrong	Check the RGB line connection whether is corresponding or not

3	Failed to connect the network	Zigbee wireless network signal is bad	Adjust the installation location and join the network again
4	Light strip is too long, the tail is darker.	<ol style="list-style-type: none"><li>1. Output cable is too long</li><li>2. Output cable diameter is too small</li><li>3. Controller or power supply overload</li></ol>	<ol style="list-style-type: none"><li>1. Shorten the length of cable</li><li>2. Change the line diameter of cable</li><li>3. Increase the power amplifier</li></ol>