Product   Specification

Name: WiFi-DMX Master Controller

Model: WF311

Product Summarization

This controller is a WiFi to DMX controller independently developed by our company. Its main functions are dimming of 512 channels, setting and calling of scenes and simple dynamic modes on the mobile APP panel, and lighting control for bars, stages, venues and other places in some small areas. External DMX signal can also be connected to switch between internal and external DMX through the switch on the controller. The main features of the product are as follows:

Technical Parameters

1. Music mode, 170 RGB pixels of microphone or audio signal jump with the music;

2. 512 channels slide dimming, you can also select the overall brightness dimming of the channel brightness;

3. 512 channel static brightness scene editing and calling;

4. 512 channel dynamic mode editing and calling;

5. To switch the output signal, switch the internal and external DMX signal through the switch interface;

6. Switch between the direct connection and routing modes of the mobile phone and the controller;

1.Software technical parameters

Control software：

1. Name: DMX512

2. Runtime platform: IOS and Android system

3. Language: Automatically switch between Chinese and English according to the mobile phone software language system

4. Category: communications

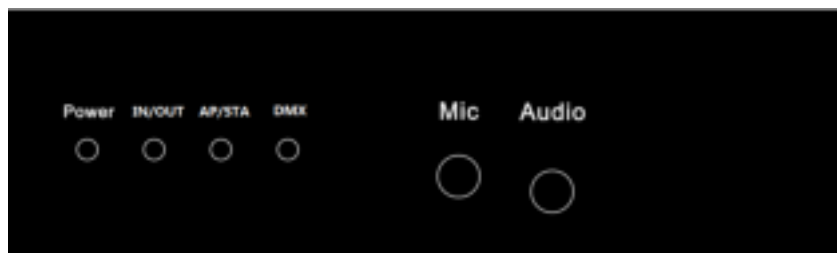5. Other: Free, no plug-ins

2.Controller technical parameters

1. Working voltage: DC12V-24V

2. Working temperature: -20-60℃

3. Working Power consumption: less than 1.5W

4. Output: DMX512 signal (address 1-512)

5. Communication protocol: Art-net, DMX512

6. Net weight: 333g

7. Gross weight: 625g

8. External dimension: L146*W73*H38 mm

9. Packing dimension: L252*W180*H60 mm

Controller interface description

Indicator status and front-end interface instruction

NO.	Mark	Function declaration
1	Power	Power indicator light, long-time bright shows power supply normally
2	IN/OUT	DMX signal source indicator light, off represents the internal DMX signal, on the light represents the external DMX signal, flashing represents the mobile APP instruction issued
3	AP/STA	Hotspot mode or routing mode, AP mode on, STA mode off;

4	DMX	DMX signal output indicator light, flashing indicates DMX signal output
5	Mic	Built-in audio head
6	Audio	External audio port, external audio signal is preferred

Note: If the device has just been powered on, all the indicator lights are on at the same time, indicating that the device is in preparation

1.Back-end interface description

Fun: Mode switch, reset button

A. Mode switching: press the button to switch mode to switch 8 static scenes, 6 dynamic scenes and A total of 15 modes for voice control;

B. Reset operation: long press and hold for more than 5 seconds, release the IN/OUT light flashes 4 times, restart the factory setting after power off (it will take about 1 minute to return to normal after power on), WIFI module will switch to AP mode, WIFI will be on, connect WIFI can search the device.

DMX OUT: DMX signal output card mouth;

DMX INT: external DMX signal input card mouth;

Switch: internal and external DMX signal switching port, K short GND to forward external input DMX signal;

Instructions for using the mobile APP "WF-DMX"

1. Summarization

The mobile APP software "WF-DMX" is the control APP used by the controller, and the APP can edit DMX signals of 512 channels. Users can edit and invoke 8 static scenes and 6 dynamic scenes.
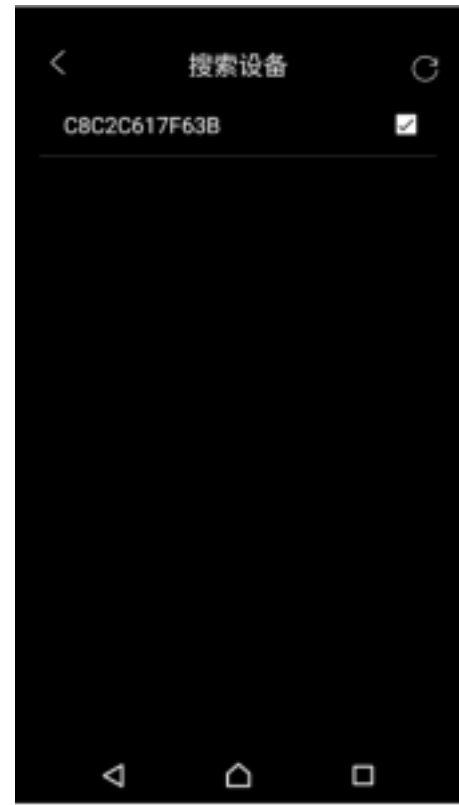
2. Instructions

2.1 installation "WF - DMX"

The software can be installed through the Android or iOS download provided in the CD, and the APP is called WF-DMX.

2.2 Connect WIFI network and device

First of all, the independent WiFi connected to the controller is used. Generally, the SSID is WF311-XXXX. Then open the APP to search for devices, and click on the device to be controlled (tick) to start the control.

2.3 Router Settings

Click the router Settings and click the search icon, the input box of WIFI name and password will appear. Please make sure that the password is correct, so as to avoid the need to reset the device and rejoin later. WIFI of the device will be closed after this setting, and only the WIFI can be connected when controlling the device.

2.4 Scene jump time

This function represents the time required for color transition during static scene switching from 0 to 30 seconds.

2.5 Channel Control

1) In this page, parameters of each channel can be set directly. Before setting, light the lightbulb icon in the top left corner, and then select the channel (red is the selected state) to adjust the output parameters

2) The top right side lights up the music icon to indicate "Music Mode".

Music mode: devices on the bus beat every 3 channels as an RGB pixel, according to the music rhythm.

Each channel brightness adjustment

2.6 Static Scenes

Long press the scene icon to rename it. Click the upper right corner to enter the scene editing state. After editing the static channel parameters, it needs to be saved
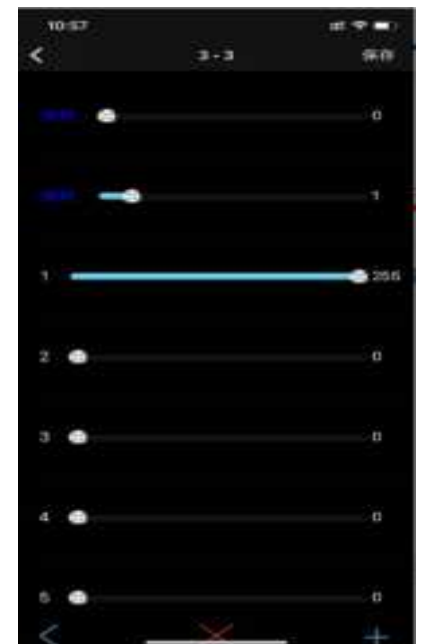

Static scene setting

2.7 Dynamic scene

The editing method of dynamic scene is similar to that of static scene. Click the upper right corner to enter the editing interface, and long press the icon to rename it. However, there are a few points that need to be noted:

1) Add frame: dynamic scene needs to have a change frame to express the next changed scene. "+" in the lower right corner of the editing interface means to add and enter the configuration of the next frame. (The bottom operation is "return to previous frame", "delete frame", "add frame" in order)

2) Hold: Indicates how long the state of this frame lasts (seconds) before entering the next frame, and the output state does not change within the state of this frame.

3) Jump: represents the time (seconds) required for the transition (gradient) of this frame state to the next frame, and the output state will change in the continuous state.

4) Optional unit of time: Click the unit to pop up the unit selection box, there are three units of time to choose, MS, S, M.

Dynamic scene setting

2.8 Exit routing mode

Search the device page, long press the device number to choose to exit the routing mode.
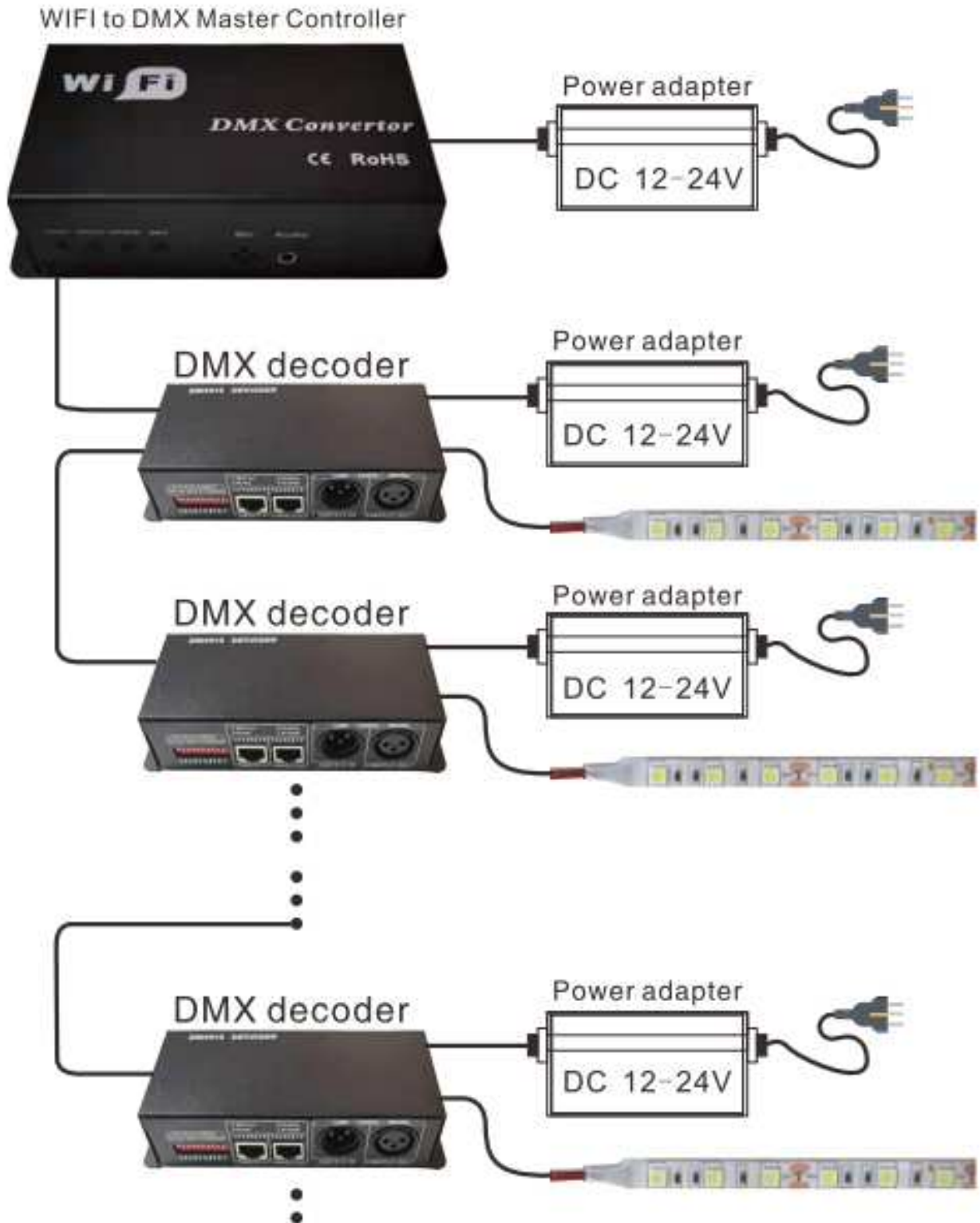
2.9 Controller built-in mode table

NO.	Modes	NO.	Modes
1	Static scene 1	9	Dynamic scene 1
2	Static scene 2	10	Dynamic scene 2
3	Static scene 3	11	Dynamic scene 3
4	Static scene 4	12	Dynamic scene 4
5	Static scene 5	13	Dynamic scene 5
6	Static scene 6	14	Dynamic scene 6
7	Static scene 7	15	Music voice control
8	Static scene 8		

Typical connect diagram

1. APP controls the internal DMX signal wiring mode

2. Switch to external DMX signal wiring mode

WIFI to DMX Master Controller

wi Fi

DMX Converter

CE RoHS

Power adapter

DC 12-24V

Switch

DMX console input external DMX signal

DMX decoder

Power adapter

DC 12-24V

DMX decoder

Power adapter

DC 12-24V

DMX decoder

Power adapter

DC 12-24V