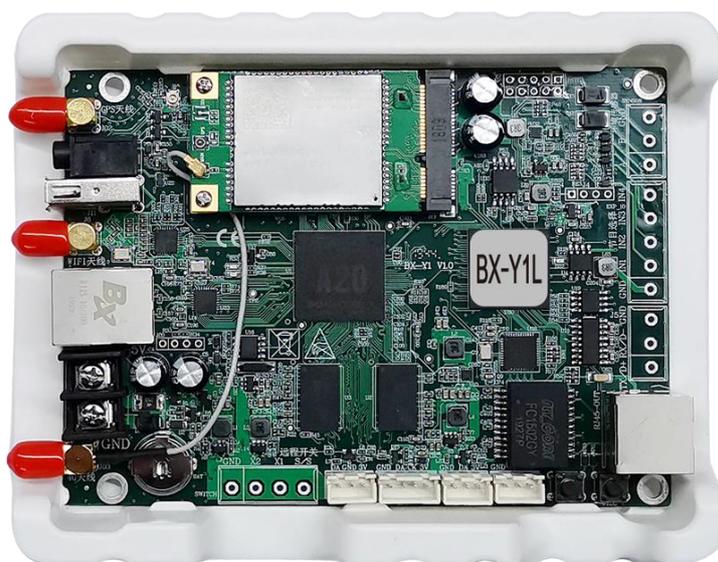


USER MANUAL

BX-Y1L Video Controller



Statement

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The specifications and information which are mentioned on the file is for reference only, if there's update, we will not inform you. This file is only for guidance, and all information will not be for any promises.

-

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Brief Introduction

Thanks for ordering LED control card. The design of the control card is according to the international and industrial standard, but if the operations are incorrect, it will probably bring you personal injury and financial harm. As to avoid these and win more from your equipment, please obey the specifications of this file.

Overview

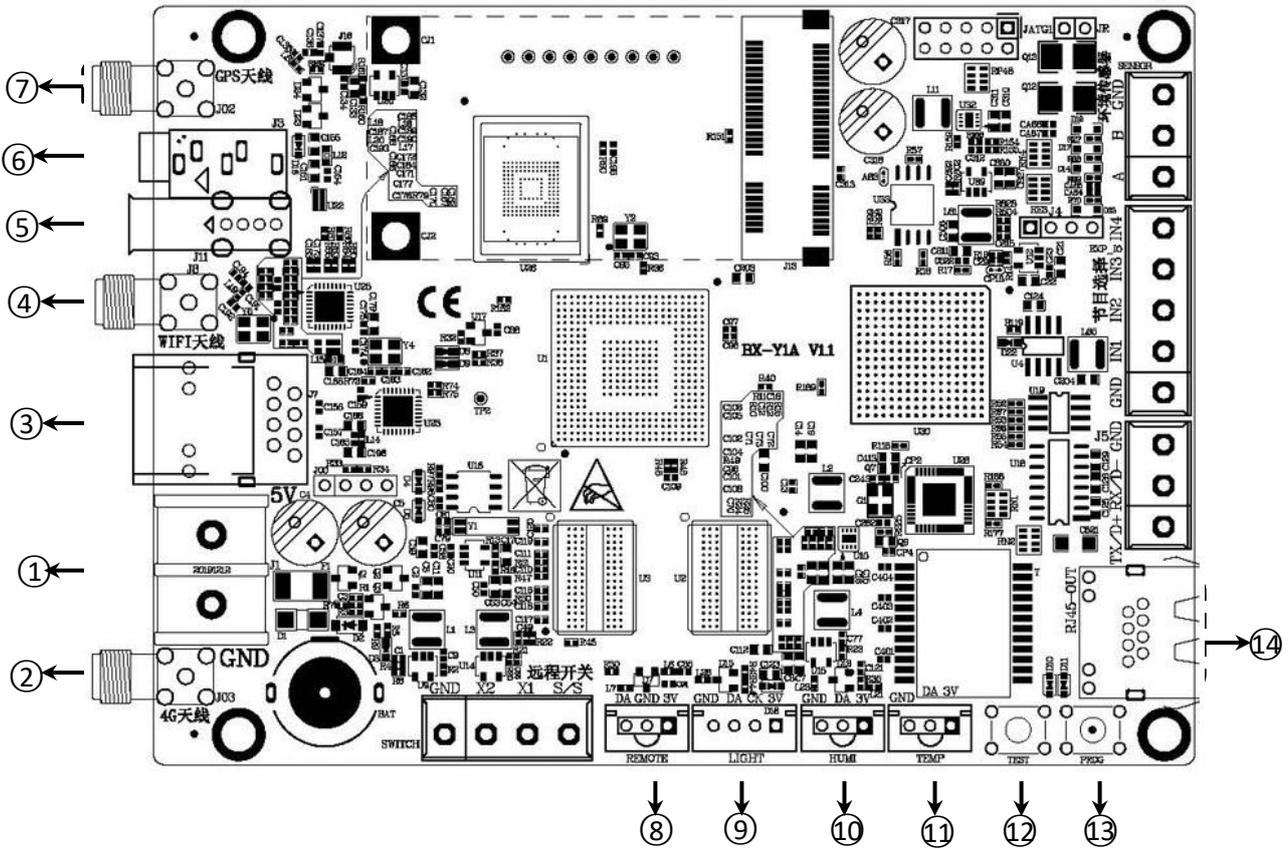
BX-Y1L controller supports high refreshment, you will get a good photo by camera and mobile phone. And it supports 100M LAN port, WIFI, and 4G is optional.

It offers abundant control and management platform, including PC software LedshowYQ, iLEDCloud. LedshowYQ PC software supports windows XP, win7, win 10.

Supports many areas, including graphic&text, subtitle, video, lunar, clock, timing, temperature, humidity, announcement, weather broadcasting; Supports database function, can be connected with MySQL, sqlserver, and supports displaying in several pages. This function can be used on high-speed train, hospital, bank which need announce and update data in real time.

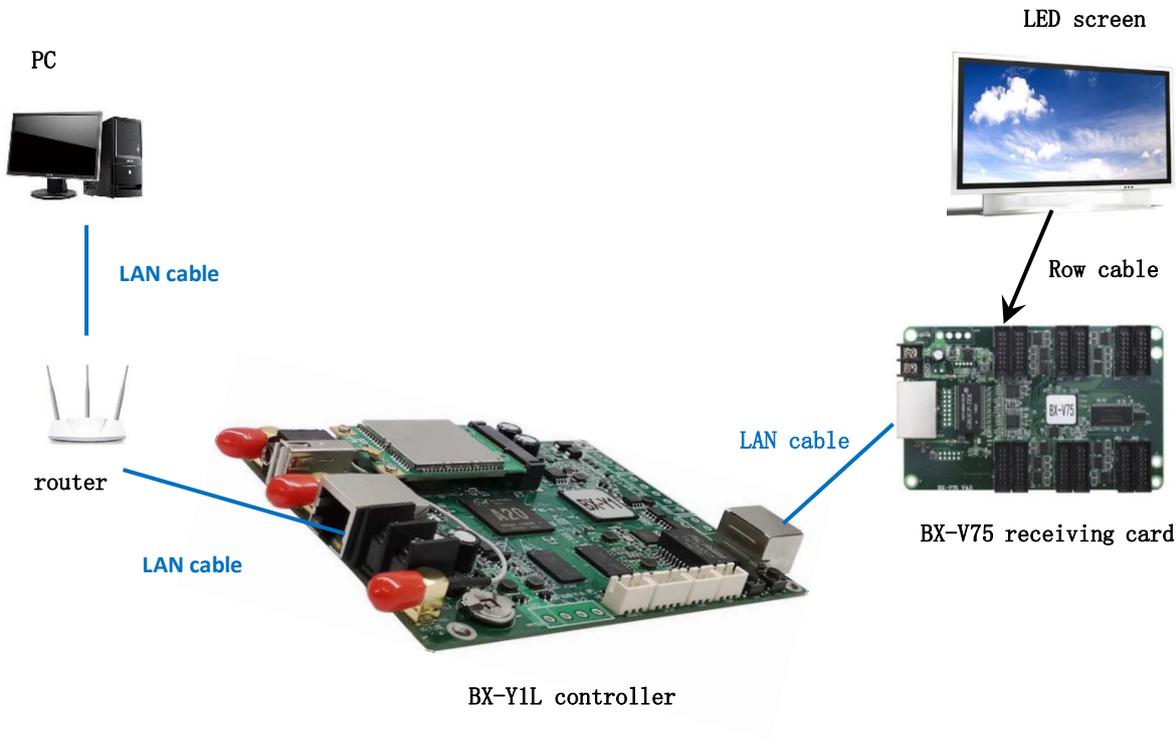
Y series support mobile APP, easy and understandable. Users can control the screen by mobile phone, pad; APP supports "search and add screen" , supports "multi languages" / "dynamic preview" and "video transcoding" ; Supports zoom in/out manually.

Interface Specification



Interface specification		
1	Power supply	5V power supply port, DC voltage input, support 3.3V-6V wide working voltage
2	Antenna	connect with 4G antenna
3	100M	100M Ethernet port
4	Antenna	connect with WIFI antenna
5	USB port	USB port, send programs by U disk
6	AUDIO	Audio output
7	Antenna	Connect with GPS antenna
8	IR	Infrared remote controller port
9	LIGHT	brightness sensor port
10	HUMI	temperature/temp&humid sensor port
11	TEMP	temperature sensor
12	TEST	test button
13	PROG	Switch button for programs
14	output LAN port	connect with receiving card

Hardware Connection

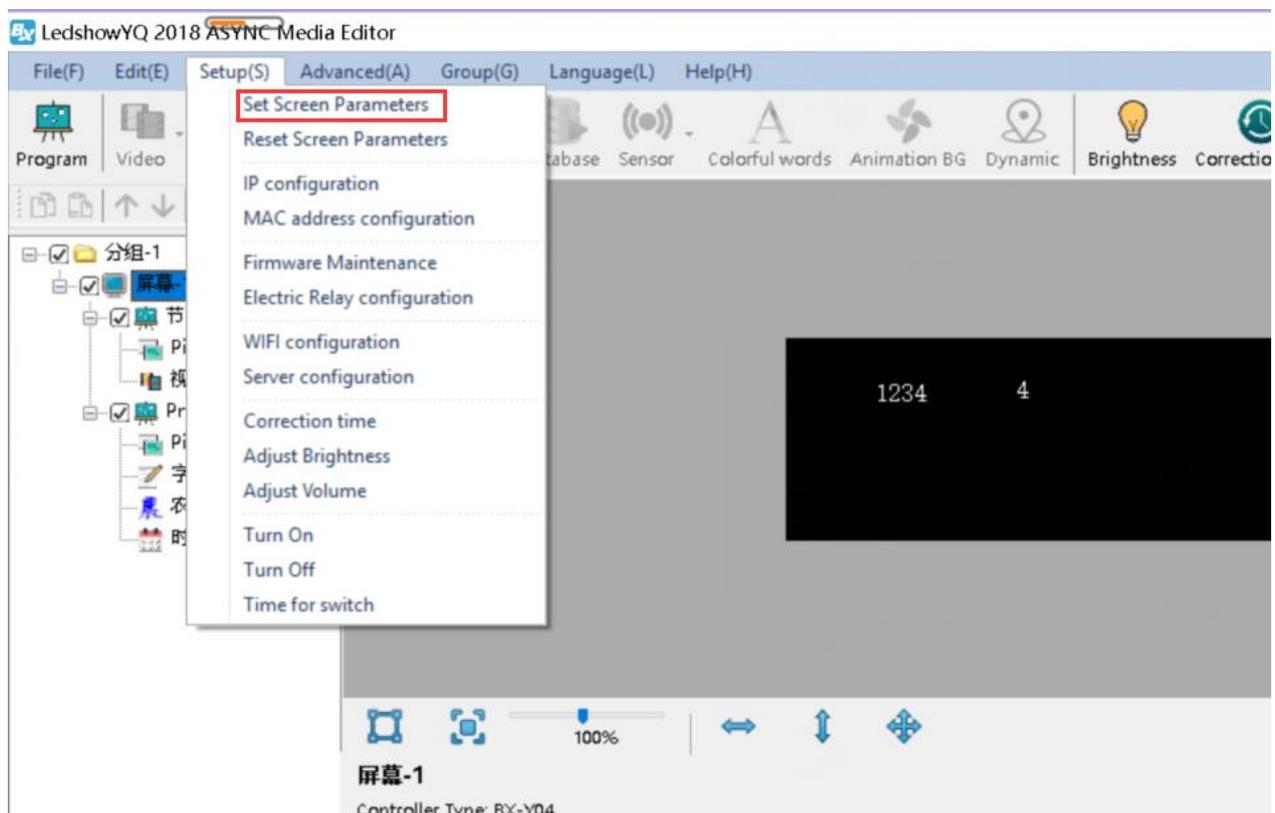


Steps

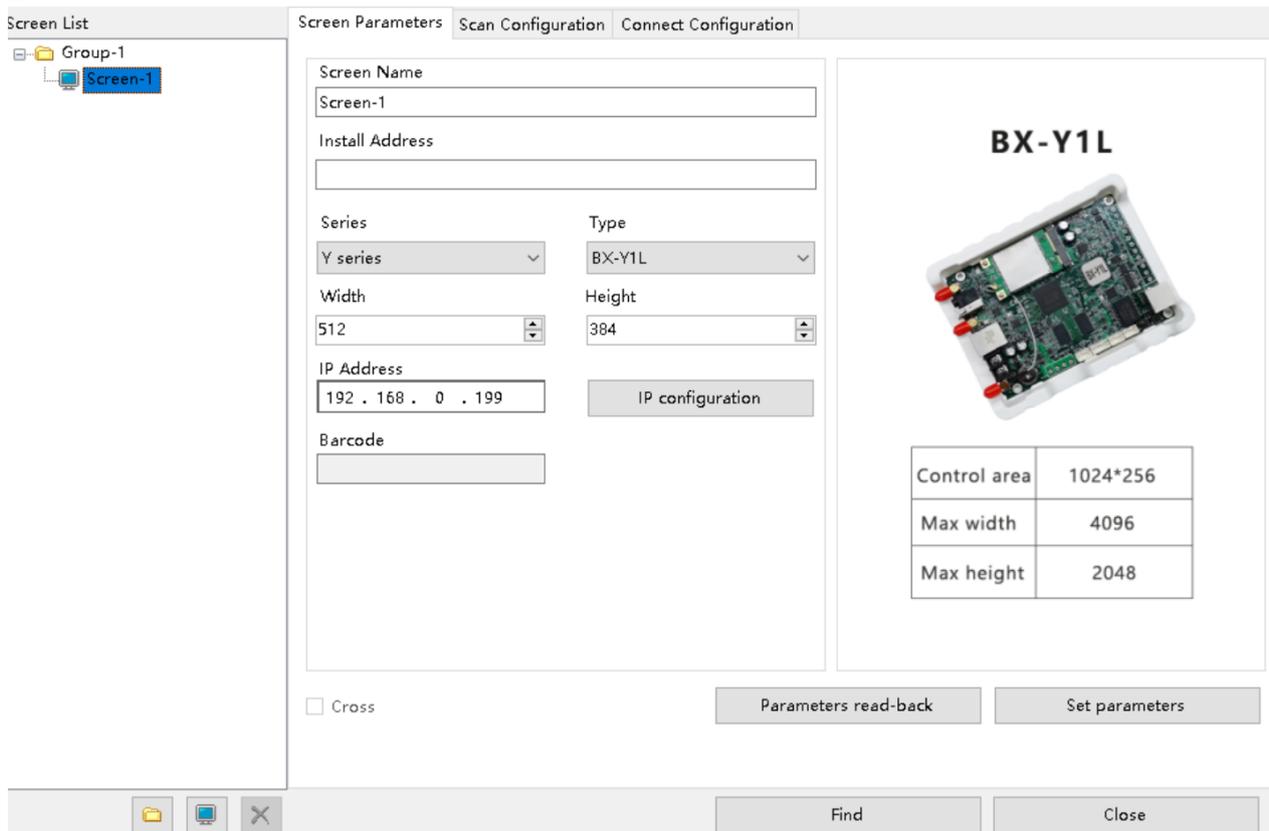
This user manual is just for fast understanding, if you want to know more functions, please check our User Manual for LedshowYQ 2018.

Add screen

1. Open "LedshowYQ 2018", click "setup", select "set screen parameters", as below.
Input password "168", enter into "set screen parameters", click , enter into "add screen", as below.



Picture 1



Picture 2

- Click  behind "online card list", then select the controller which is online, screen will be added in, click "add" as to finish this setting, as below:



Picture 3

Choose "add all screen", as to add screen for all online controller, as below:

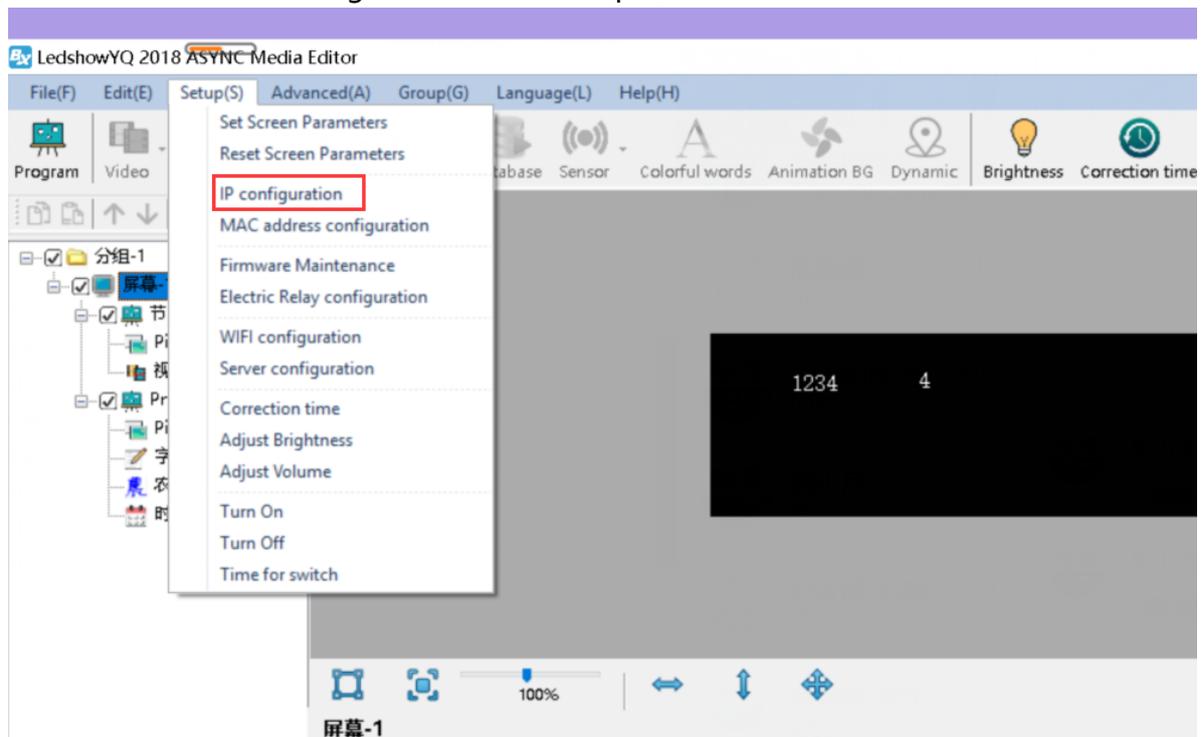


Picture 4

IP Configuration

Step 1

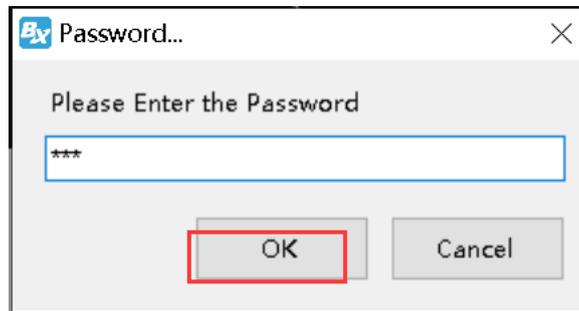
Click "controller IP configuration" in "setup", as below:



Picture 5

Step 2

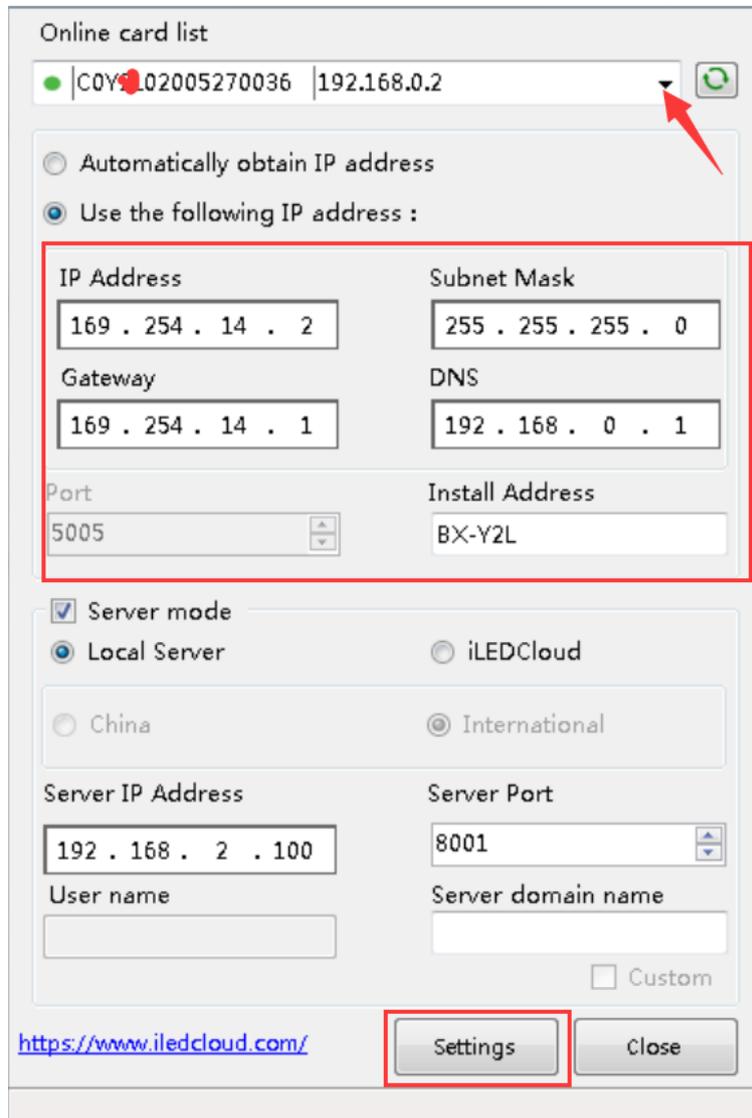
Input password "168" , click "OK" , as below:



Picture 6

Step 3

Users can see all online controllers in "online card list" , click the controller you need to do IP modification, and then select IP obtain method, click "set" button, as below:

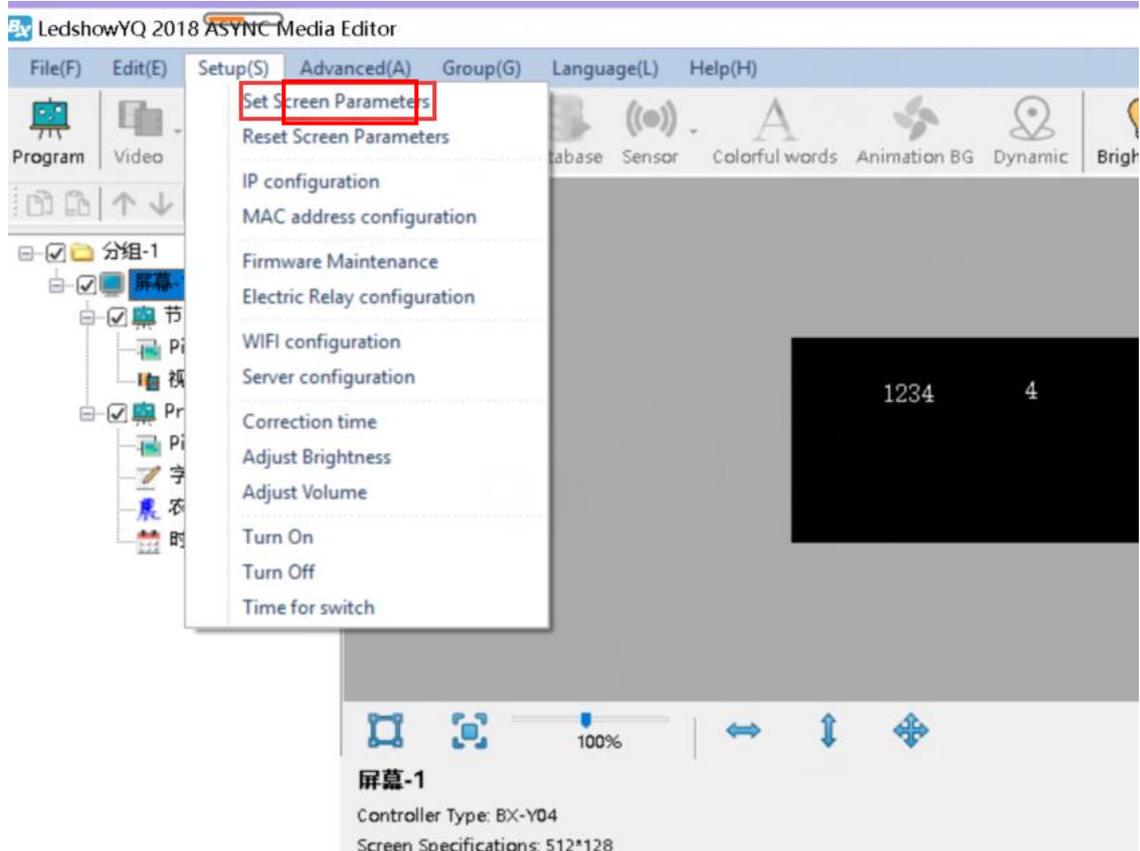


Picture 7

Set Screen Parameters

Step 1

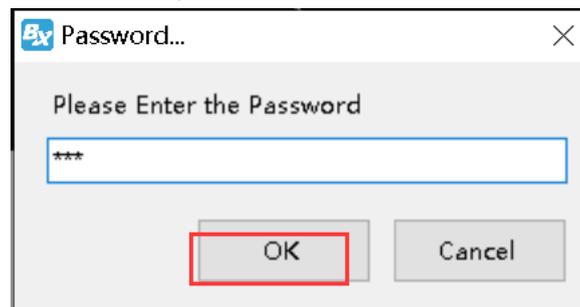
Click “set screen parameters” in “setup” , as below:



Picture 8

Step 2

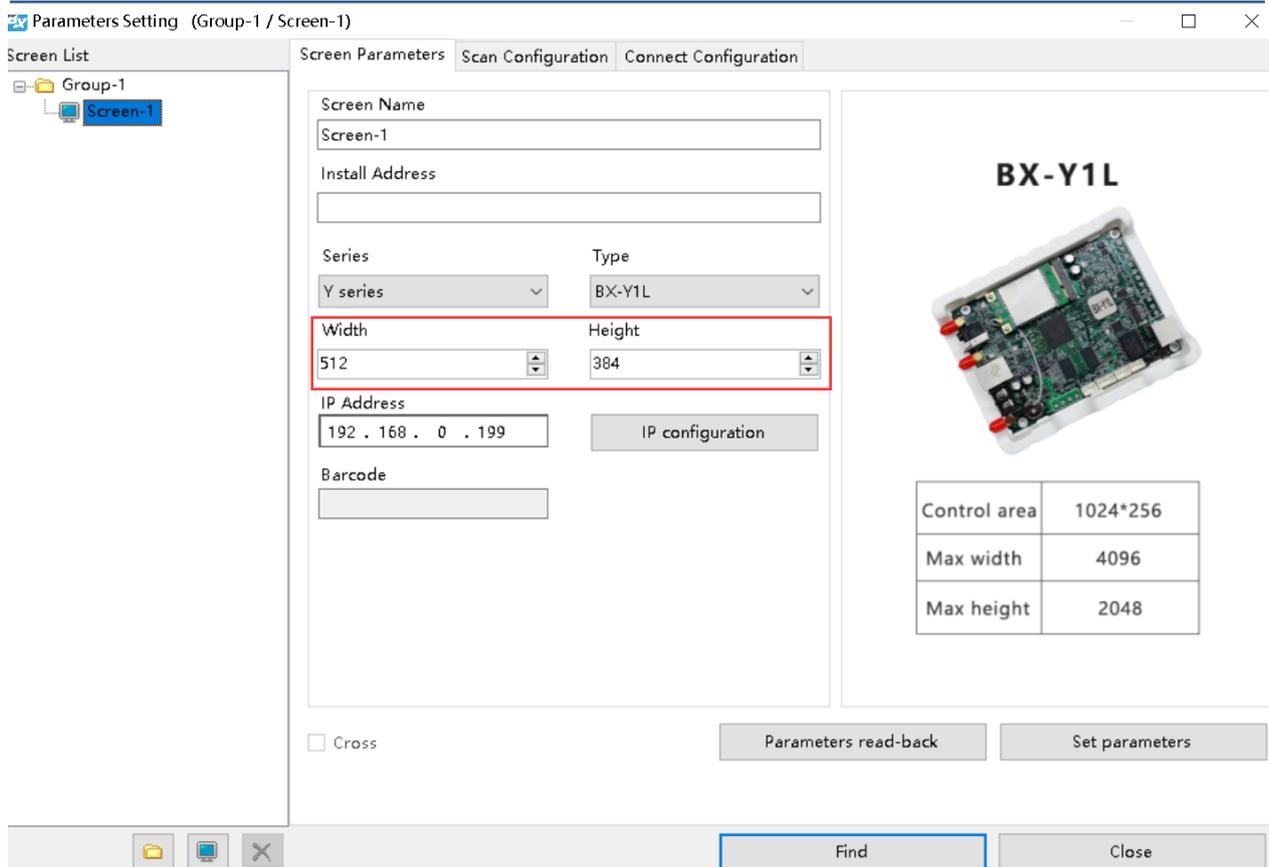
Input password 168, and click OK, as below:



Picture 9

Step 3

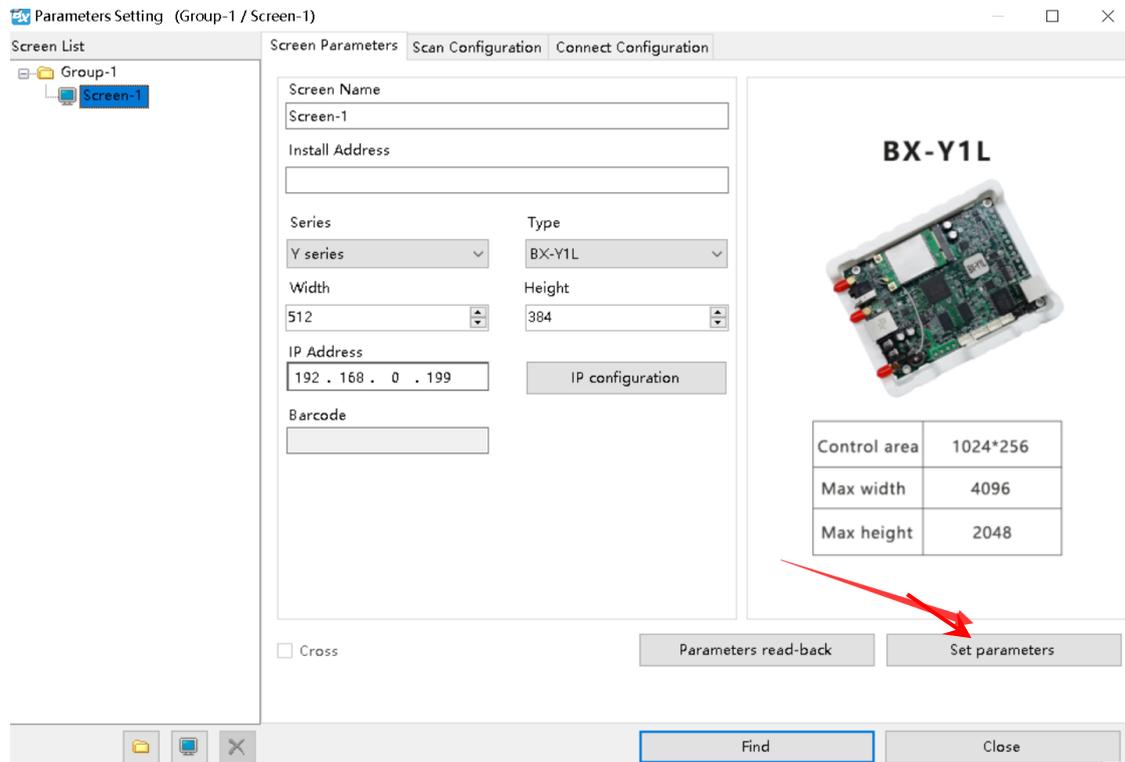
Set width and height pixels according to LED screen size, as below:



Picture 10

Step 4

Click "set parameters" , as below:



Picture 11

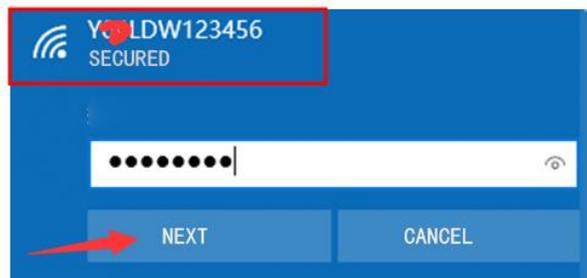
WIFI configuration

There are two WIFI modes for Y series controller: AP mode and STA mode. (If there no wireless card, please prepare one USB wireless card.)

1. AP mode (controller is hotspot, as to connect controller' s WIFI by PC)

Step 1

Open network connection on PC, the hotspot name of controller is the barcode of controller, as below:



Picture 12

Step 2

Input passwords, initial password of controller is last 8 digits of barcode, then click "next" , your PC will connect with controller wifi, as below:



Picture 13

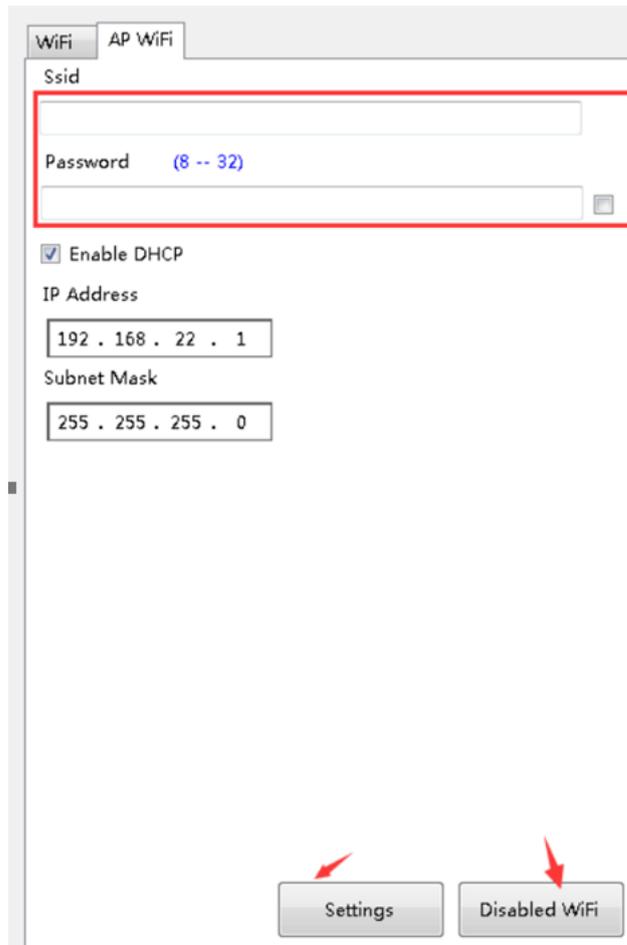
Step 3

Open LedshowYQ 2018, you can operate normally.

Step 4

Users can modify WIFI name and passwords. "setup" -- "WIFI configuration" -- passwords "168" -- select "AP WiFi" , input new WIFI name and passwords -- click "set" , it will be modified successfully. (name cannot be set as Chinese, passwords support numbers, characters, 8-12 digits.)

If users do not want to use controller WIFI, you can close it.

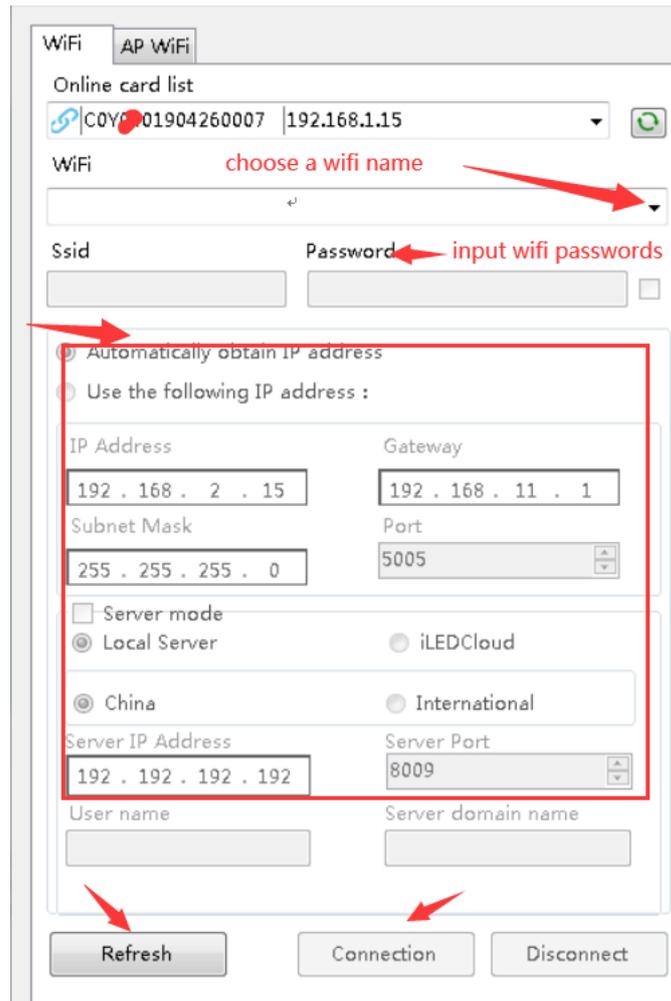


Picture 14

2. STA mode(controller connect with outside WIFI network)

Step 1

Select "Wifi" icon—click "refresh" button—choose the WIFI name you want—input WIFI passwords—select "obtain IP address automatically" or input IP method manually—click "connect" button, then you can connect with this WIFI.



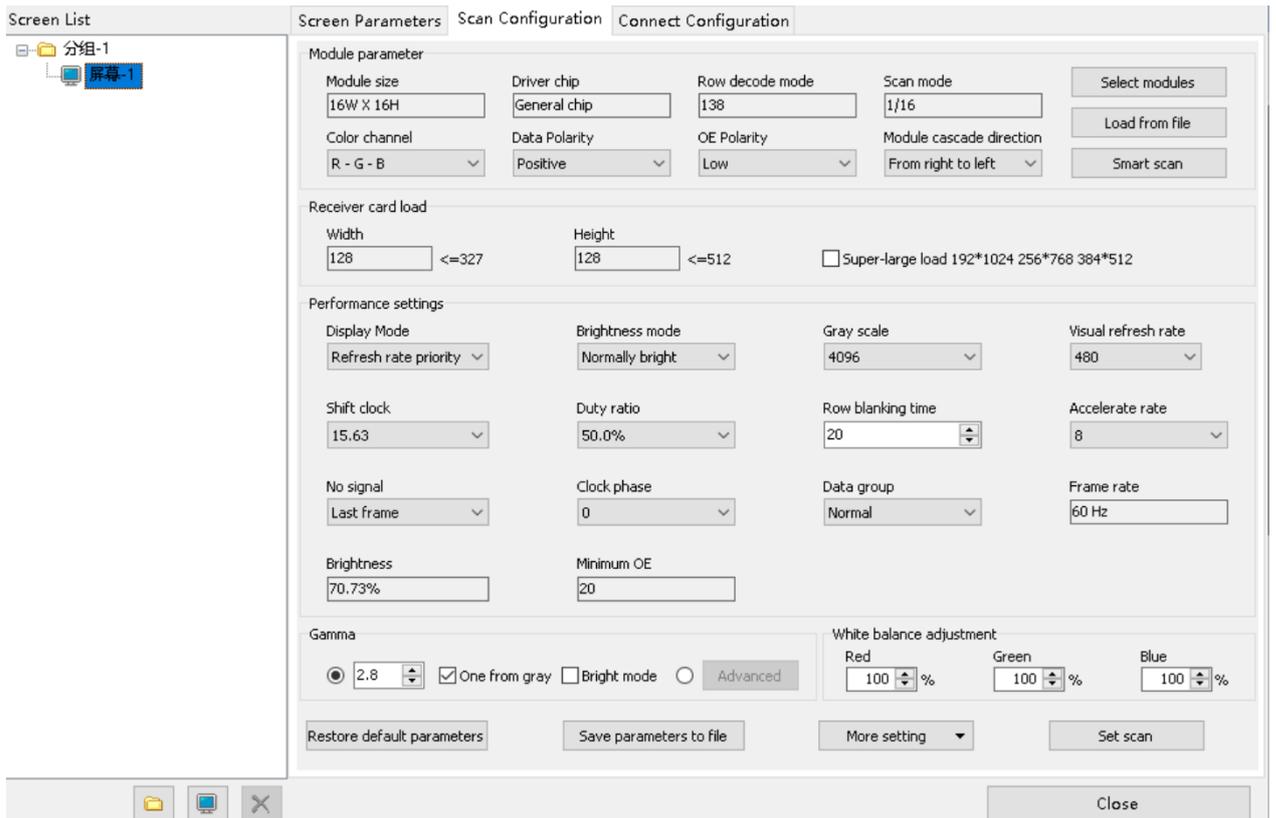
Picture 15

Step 2

After connect successfully, plug off LAN cable of controller. And PC joins up same wireless router, by LAN cable or WIFI. Then, LedshowYQ 2018 software can communicate with controller normally.

Scan Configuration

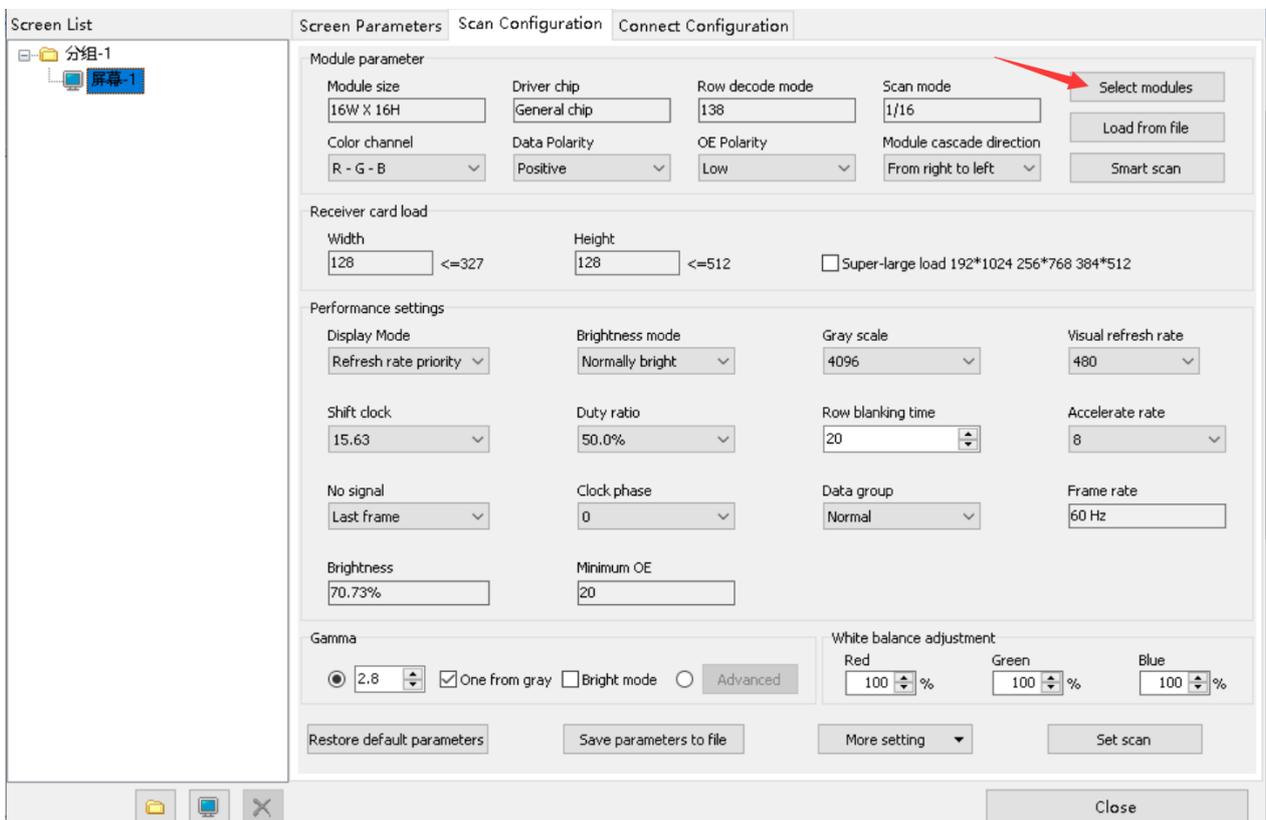
Click "scan configuration" in "set scan parameters", as below. Users can set "module parameters", "receiver card load", "performance settings", "Gamma", "white balance adjustment", "smart scan".



Picture 16

1. Write Scan Method

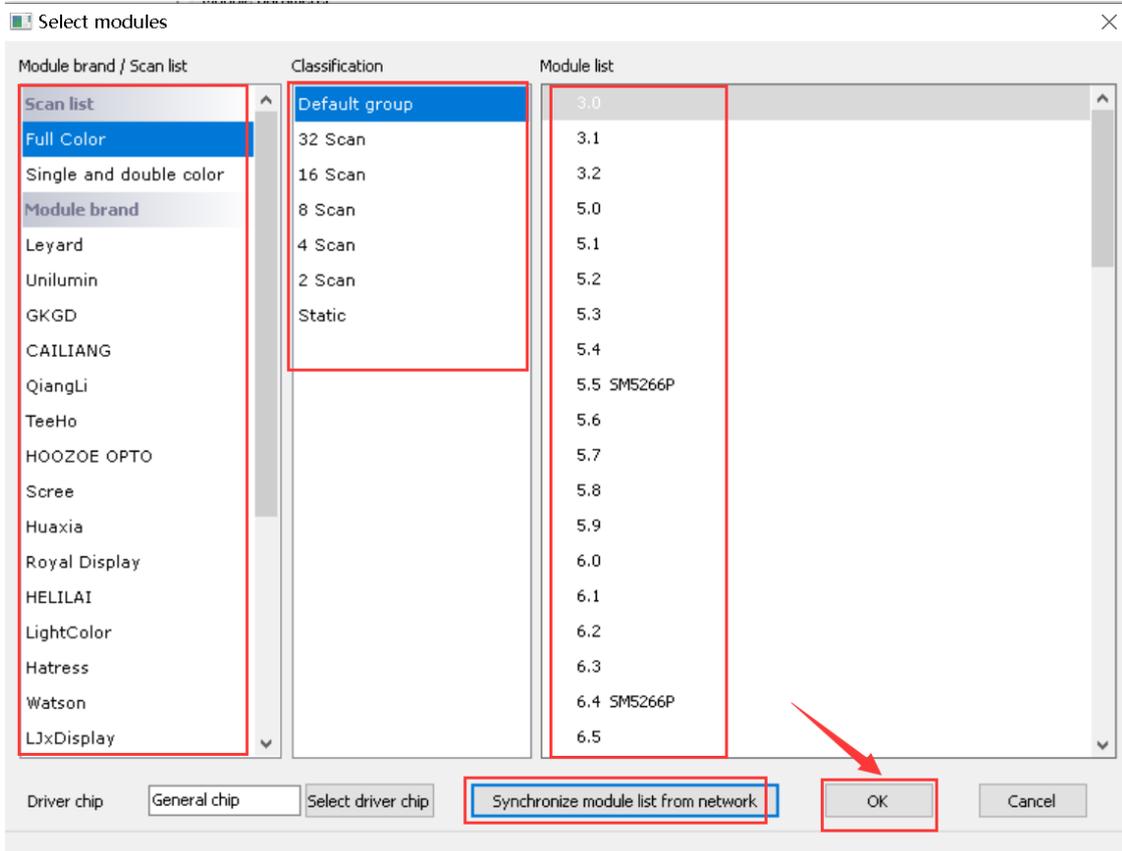
1) Firstly, click "scan configuration" —click "select modules" , as below:

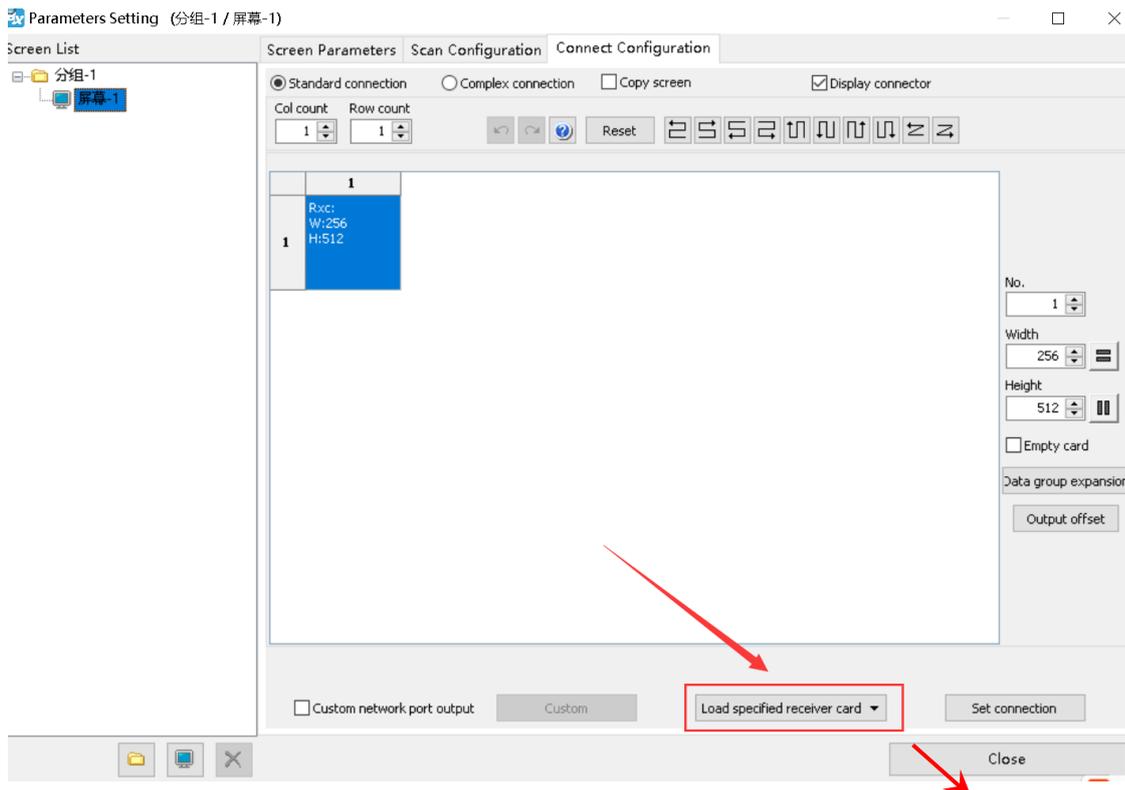


Picture 17

2) Select module on “module brand/scan list ” and “module list” -- click “OK” , click “lock specified receiver card” on “connection configuration” .

Note: Support download configuration file from Cloud. If the module is saved configuration file, users can click “Synchronize module list from network” .





Picture 18

- ◆ **Full color module:** There are several scan mode: scan 32/16/8/4/2 and static. Usually indoor single and dual color is scan 16, indoor full color is scan 8, outdoor single and dual color is scan 4, outdoor full color is static.
- ◆ **Color channel:** R-G-B, R-B-G, G-R-B, G-B-R, B-R-G, B-G-R.
- ◆ **Data polarity:** positive and negative.
- ◆ **OE polarity:** low or high.
- ◆ **Module cascade direction:** connection direction of receiving card, from right to left, from left to right, from up to bottom, from bottom to up.
- ◆ **Driver chip:** default is general chip, users can click "select driver chip" on "select module" , as to choose the correct chip.

2. Smart Scan Configuration

If users do not know the scan mode of module, you can find out by Smart Scan.

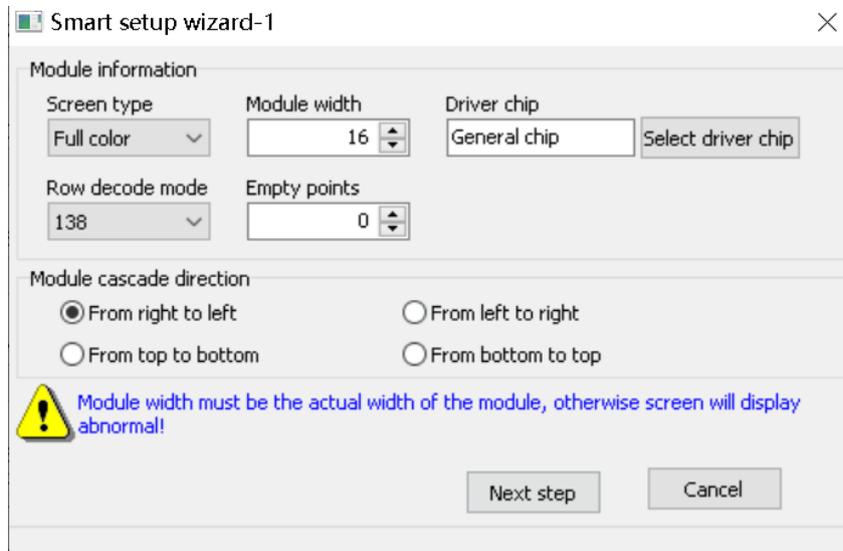
Step 1

Click "smart scan" , enter into "smart setup wizard-1" .

- ◆ **Screen type:** full color, single/dual color.
- ◆ **Module width:** according to your LED module.
- ◆ **Driver chip:** default is general chip, or select by yourself.
- ◆ **Row decode mode:** no decode, 138, 74HC595, RT5958, SM5266P, 9739 anode, 9736 anode, 9737 anode, 9735 anode, ICND2018, usually choose 138.

- ◆ **Empty points:** If you are using empty points screen, you need to input the empty points.
- ◆ **Module cascade direction:** connection direction of receiving card, from right to left, from left to right, from up to bottom, from bottom to up.

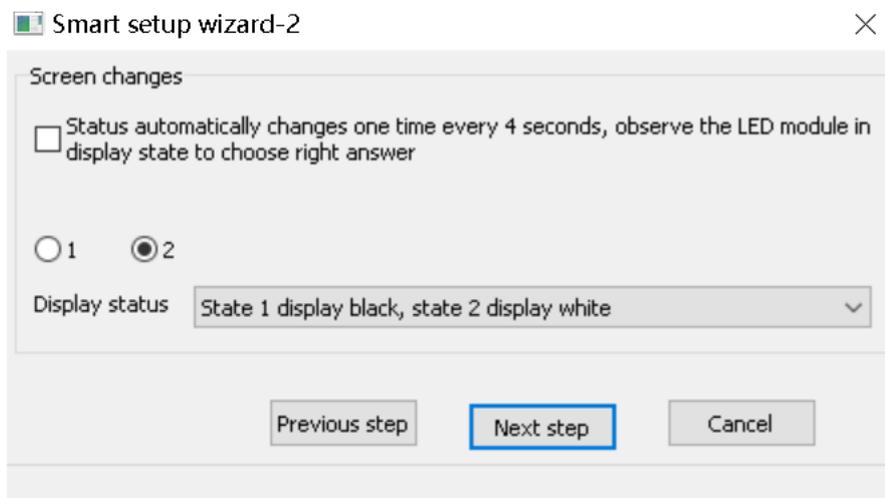
After setting, click "next step" .



Picture 19

Step 2

Enter into "smart setup wizard-2" .

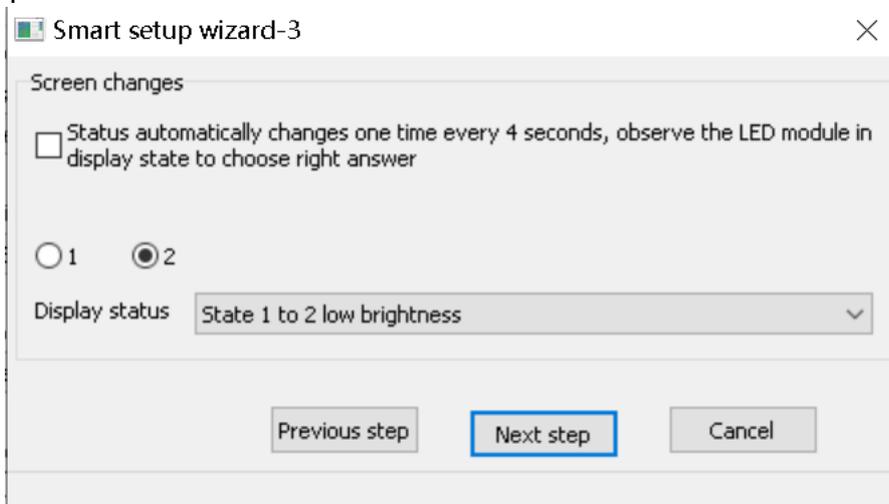


Picture 20

Firstly click "1" , check the LED screen (is black or white" , then click "2" , check the LED screen (is black or white), and if users want to check carefully the changes of screen, you can choose "status automatically changes ..." on the top, then select the right status in "Display status" . Click "Next step" .

Step 3

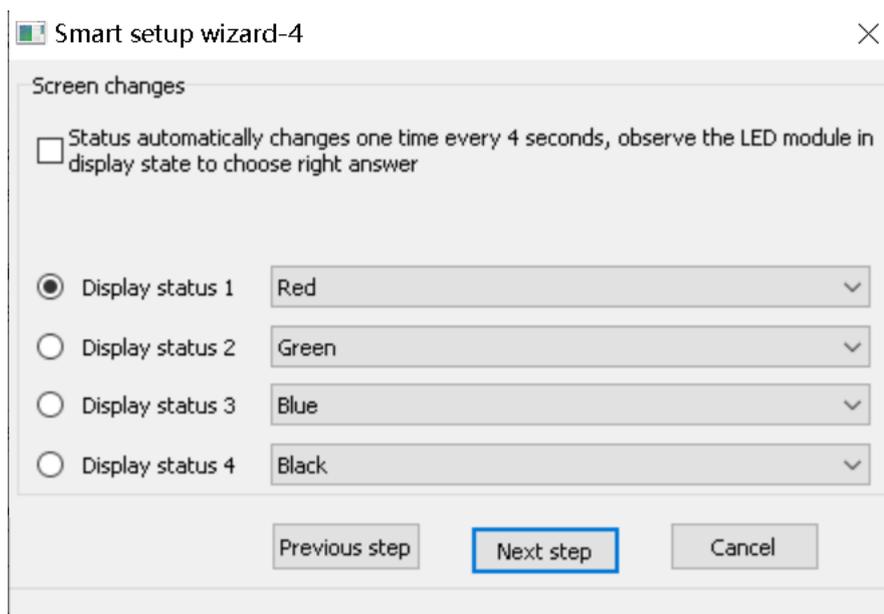
Click "1" , check the brightness of LED screen, then click "2" , check the brightness of LED screen, if users want to check the changes of screen carefully, please choose "status automatically changes..." on the top. Then, choose the correct status on "Display status" , click "next step" .



Picture 21

Step 4

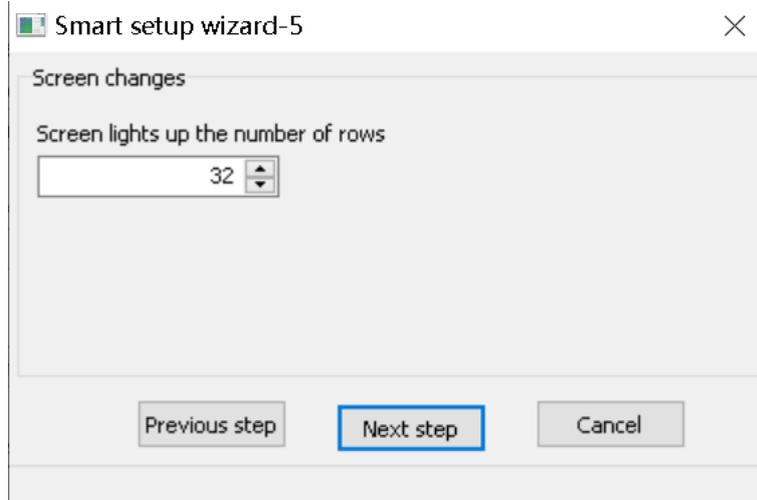
Click "Display status 1" , check the color of LED screen, and select the correct color; Click "Display status 2" , check the color of LED screen, and select the correct color (same with 3 and 4). If users want to check the changes of screen carefully, please choose "status automatically changes..." on the top. Then, choose the correct status on "Display status" , click "next step" .



Picture 22

Step 5

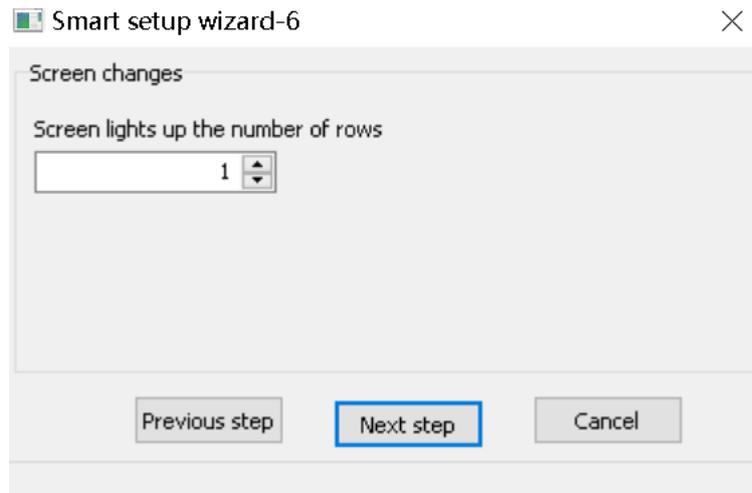
Count the lights of LED screen, click "next step" .



Picture 23

Step 6

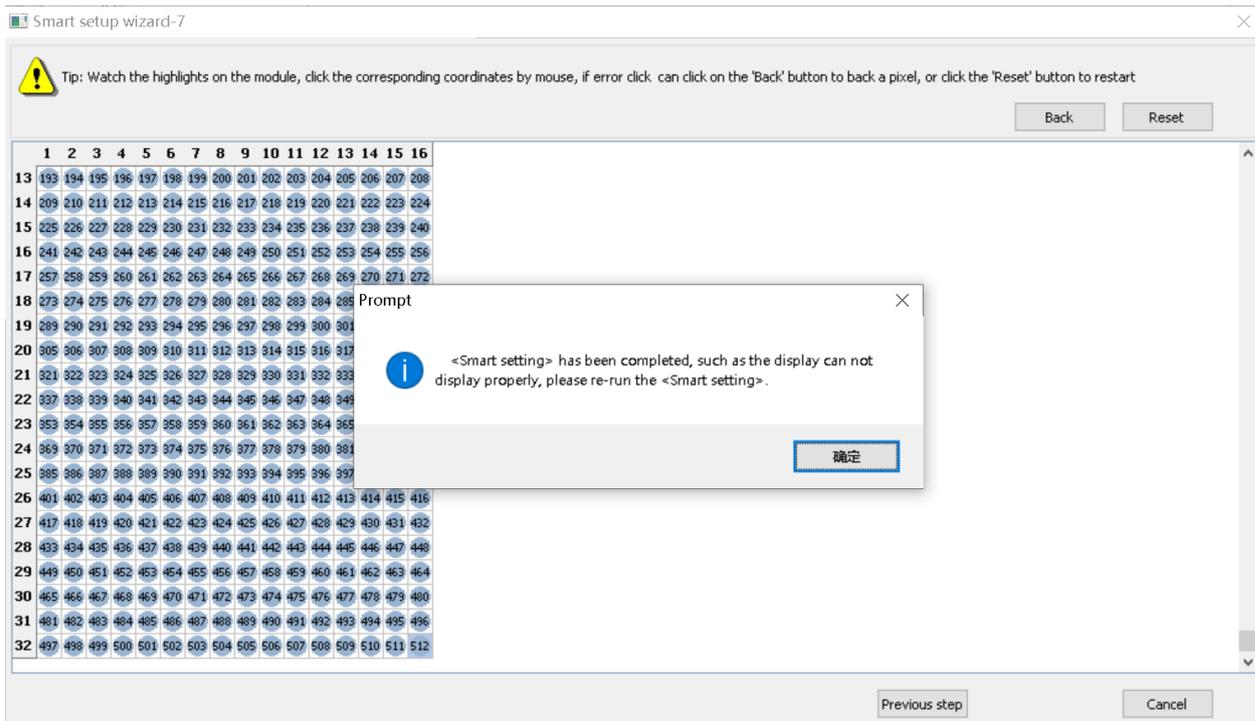
Count the lights of LED screen, click "next step" .



Picture 24

Step 7

Click the corresponding grid according to the lights of LED screen, until all the lights are lighting on LED screen, as below. Click "OK" , software will show you a scan mode, you can save this file.



Picture 25

3. Receiver card load

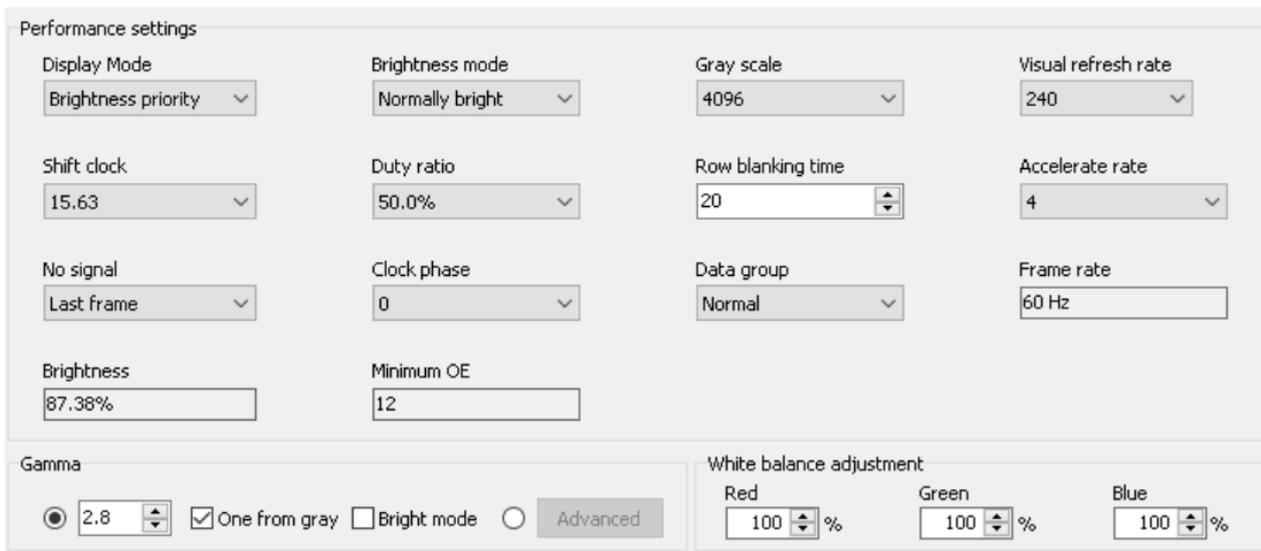
Set the width and height of receiving card, users can refer to the recommended width and height of our software. C version receiving card, choose "super-large load 192*1024 256*768 384*512", this one is the best choice for bar KTV.



Picture 26

4. Performance setting

Performance setting: set display mode, brightness mode, gray scale, visual refresh rate, shift clock, duty ratio, row blanking time, accelerate rate, no signal, clock phase, data group, gamma, white balance adjustment



Picture 27

- **Display mode:** default is refresh rate priority. Users can get a better effect by camera, but the brightness is lower. Usually, for indoor screen with low requirement of brightness, choose refresh rate priority. You can get a high brightness by brightness priority, high brightness with low refresh rate. Or on the same refresh rate, the maximum width is smaller. Usually, for outdoor screen, choose brightness priority.
- **Brightness mode:** normally bright, lowly bright, highly bright.
- **Gray scale:** 64, 128, 256, 512, 1024, 2048, 4096, 8192, 16384, 32768, 65536.
- **Visual refresh rate:** higher parameters for more stable screen.
- **Shift clock:** set bigger data for shift clock, width will be bigger, but shift clock is also limited. If your screen gets flashing, means you need to lower the shift clock.
- **Duty ratio:** means the duty ratio of shift clock, users can get higher shift clock by changing this data.
- **Row blanking time:** adjust the scan afterglow. If with serious afterglow, users can set bigger value (minimum is 5s, maximum is 400s).
- **Accelerate rate:** high accelerate rate, for high visual refresh rate, but brightness will be lower.
- **No signal:** if receiving card cannot get signal, you can choose “last frame” or “black screen” .
- **Clock phase:** sometimes there' s malposition or flash points, you can adjust this parameter.
Data group: default is normal, if choose 20 data groups, need to use special converter.

5. Gamma

You can input gamma value, or choose “one from gray” as to adjust the brightness of

receiving card. If choose “bright mode” , screen colors will be brighter.

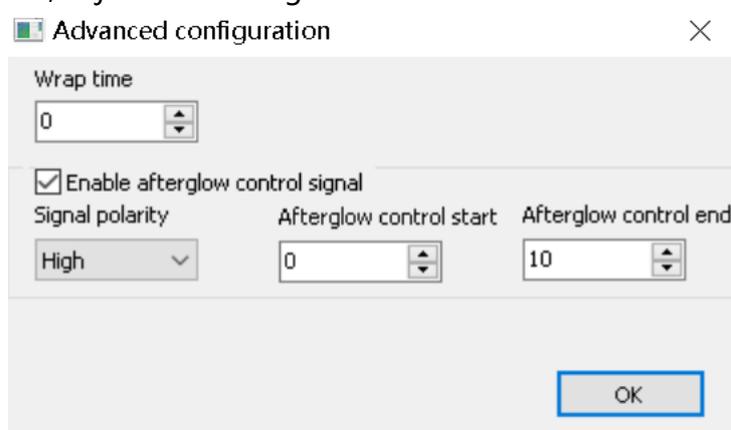
6. White balance adjustment

If the colors (red, green, blue) of screen is equal, then it’ s white balance. If customers want more saturated for some of the color, you can modify by “white balance adjustment” .

7. Advanced configuration

Click “more setting” , you will enter into advanced configuration page, as below:

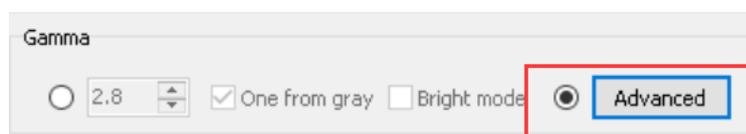
- Wrap time: match up with row blanking time, adjust the scan afterglow.
- Signal polarity: high or low.
- Afterglow control start and afterglow control end: match up with row blanking time and wrap time, adjust scan afterglow.



Picture 28

8. Chip Configuration

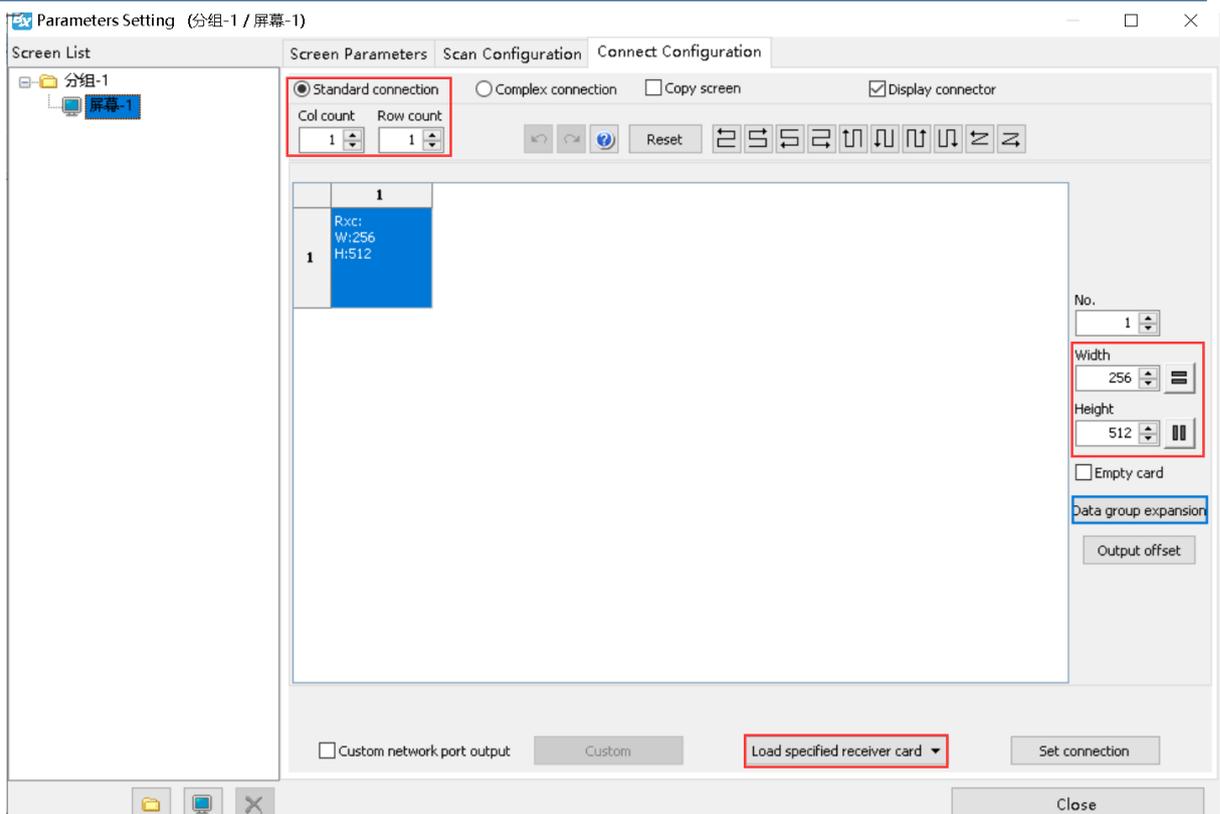
When you choose some modules chip, there’ s “chip configuration” under “advanced” , as to achieve with a better effect, please contact with professional technical person.



Picture 29

Connect Configuration

Click “connect configuration” in “parameters setting” , as below. You can set the receiving cards number of horizontal and vertical direction. Also receiving card’ s number, width and height. Lastly click “Load specified receiver card” .



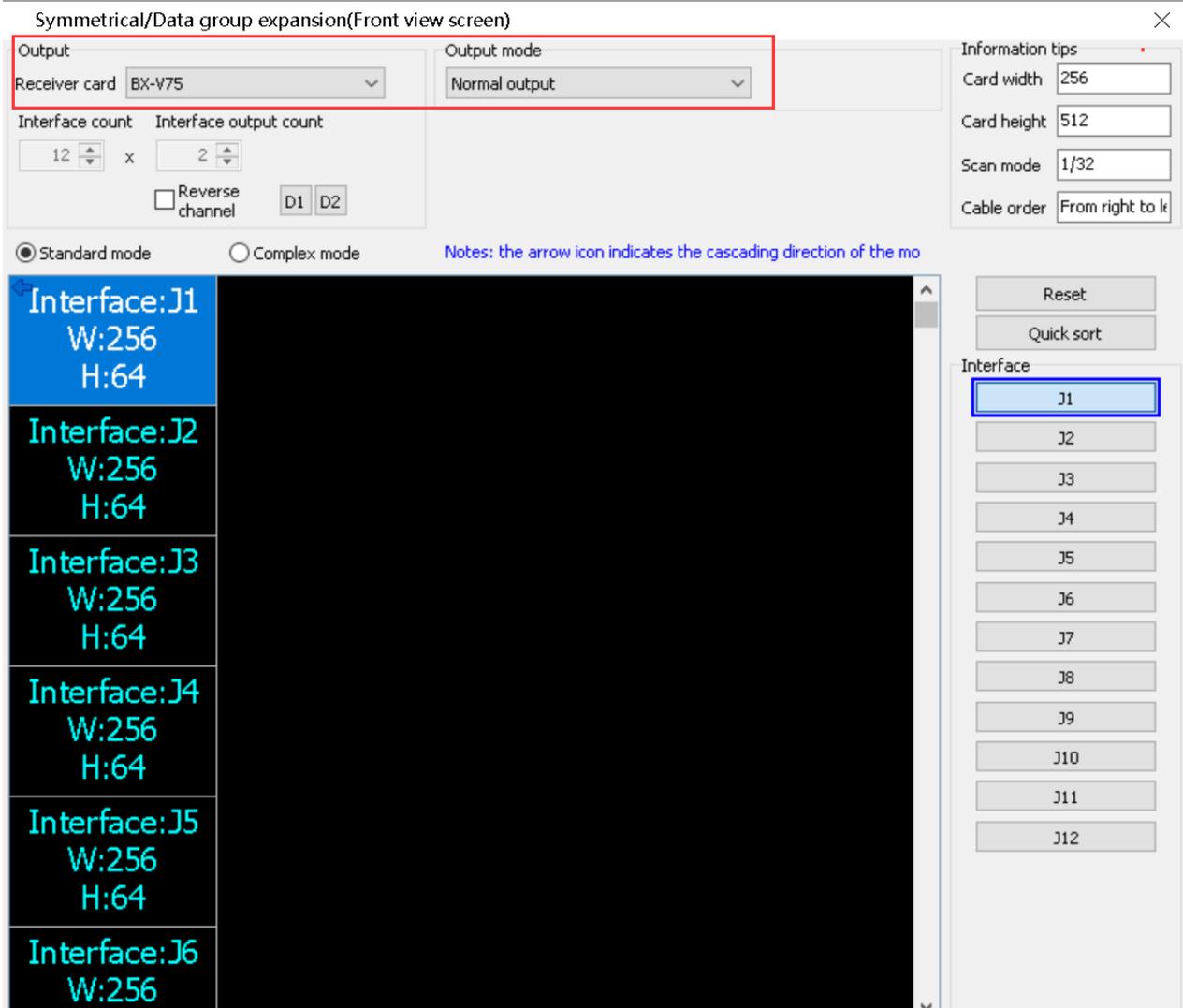
Picture 30

One receiving card support width 384 and height 356. So, if the width of LED screen is 512, height is 96, you can see one receiving card is not enough for width, but more rest for height, so, as to get a full use of one receiving card, we can use "data group expansion" function.

Click "data group expansion" to set parameters.

Output mode: choose receiving card type in "receiver card", default output mode is "normal output", or "2 split", "3 split", "4 split". 2 split means to make half in height and double in width for receiving card; 3 split means to cut 1/3 in height and add 1/3 in width for receiving card, and so on.

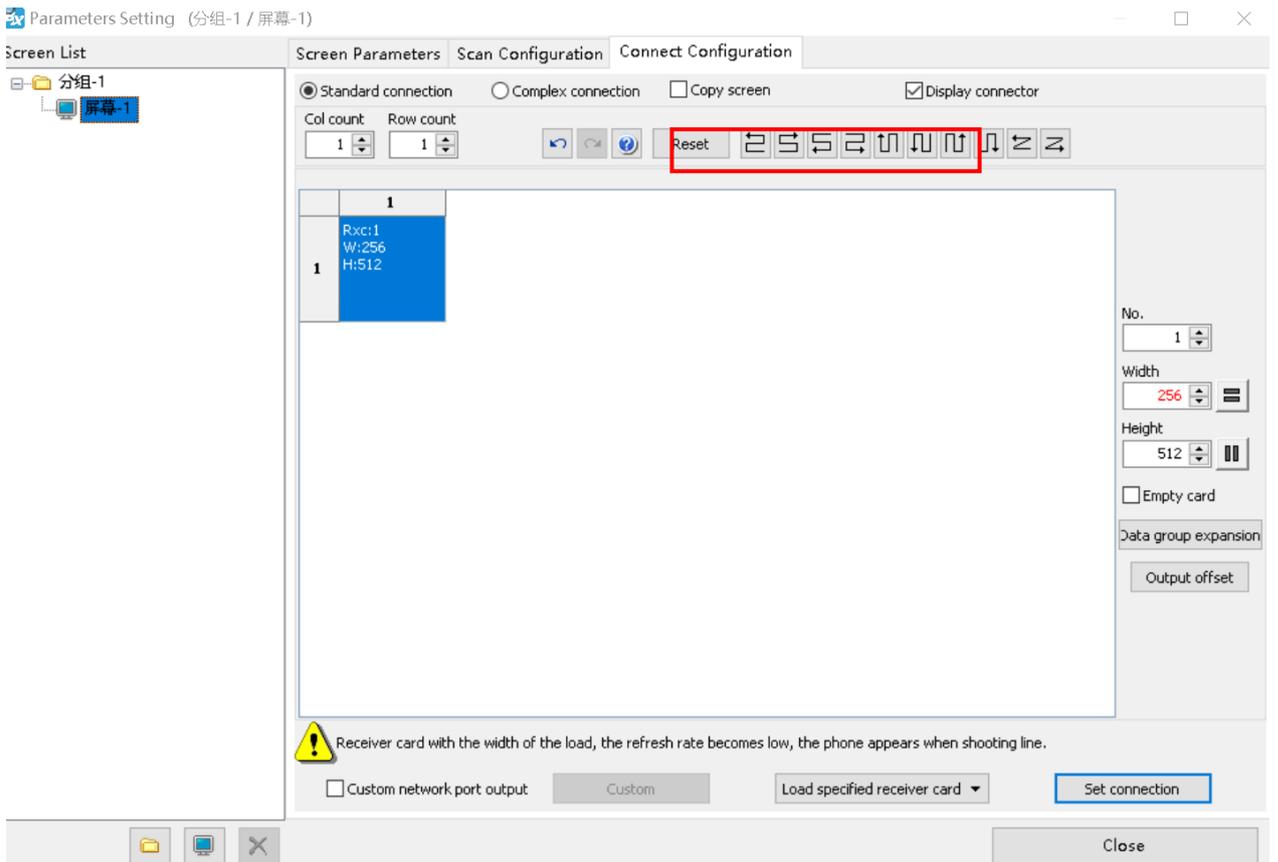
Data group expansion: 16 groups data for V75L, 24 groups data for V75.



Picture 31

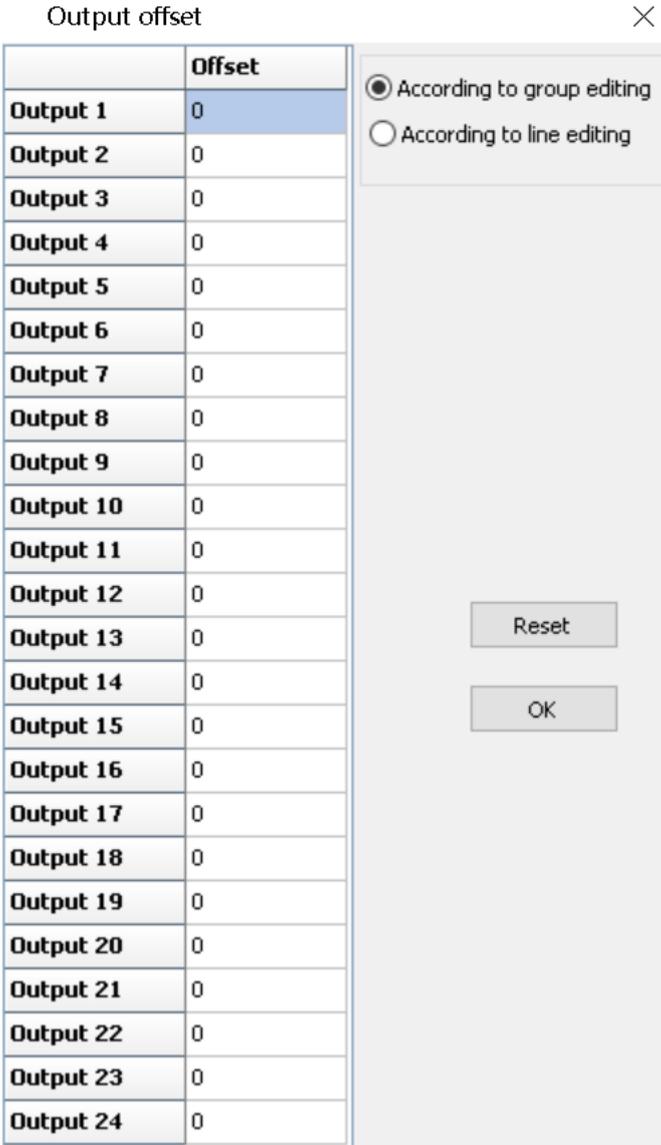
If customers installed many receiving cards, need to configurate cascade direction of receiving cards, as below. Click "custom" , you can choose



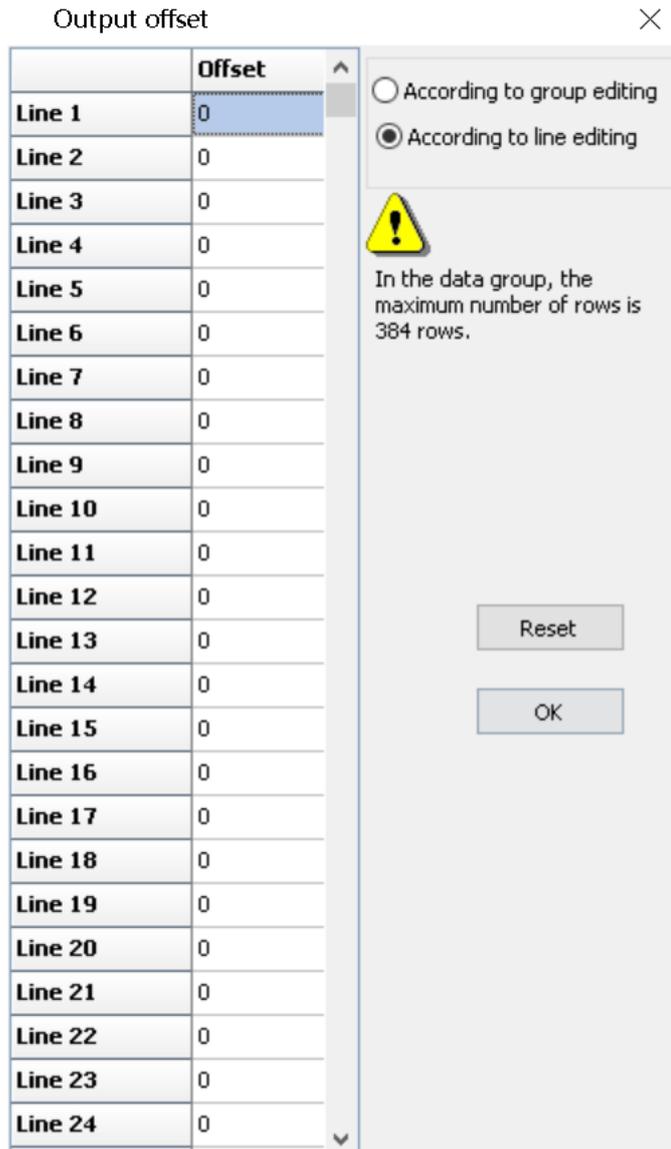


Picture 32

If users want to adjust the offset, you can click "output offset", as below Picture 57. Choose "according to group editing", and input offset data. Also, users can choose "according to line editing", and input data. If there's a little mistake for setting, please click "reset".

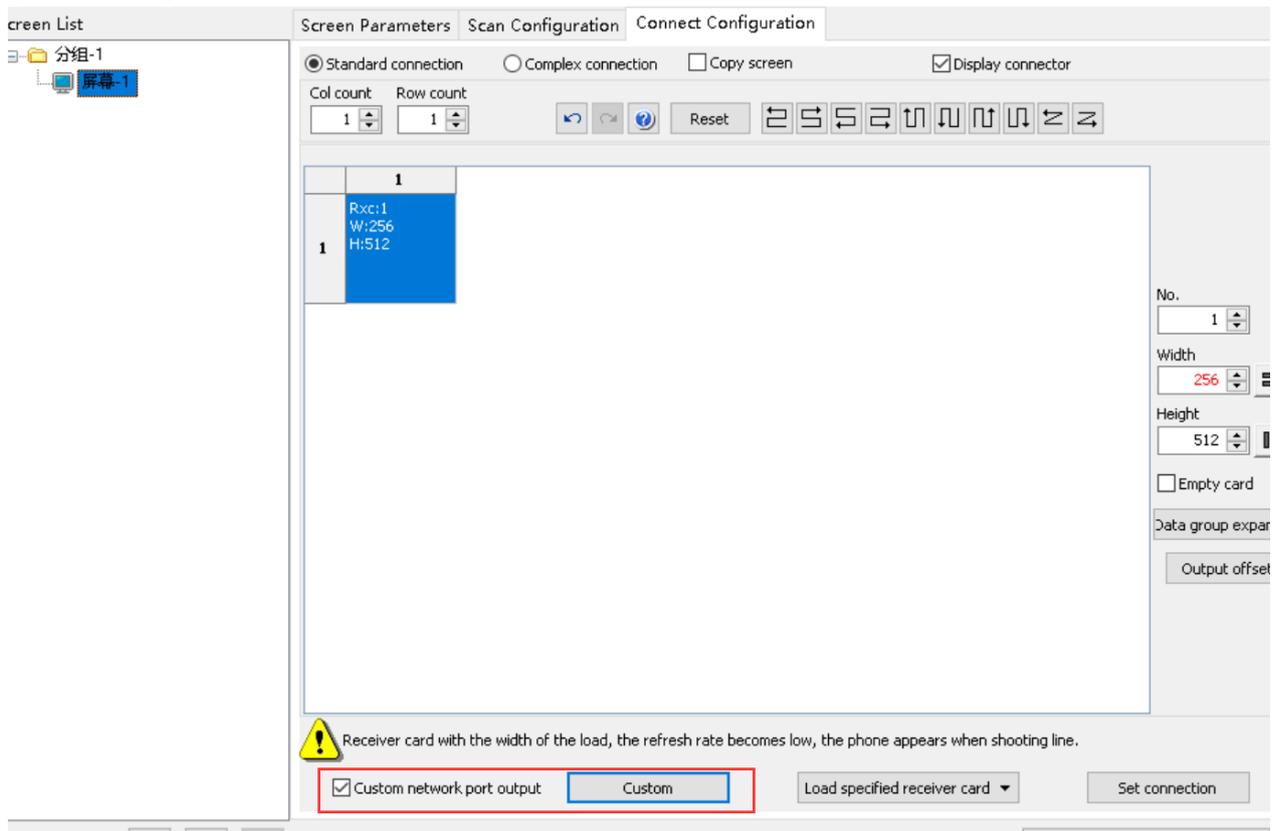


Picture 33

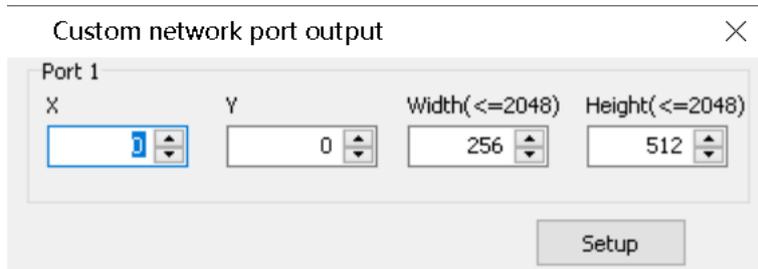


Picture 34

Usually, the horizontal value and vertical value is 0 in program position, users can choose "custom network port output" , click "custom" , as below.



Picture 35



Picture 36

Server Configuration

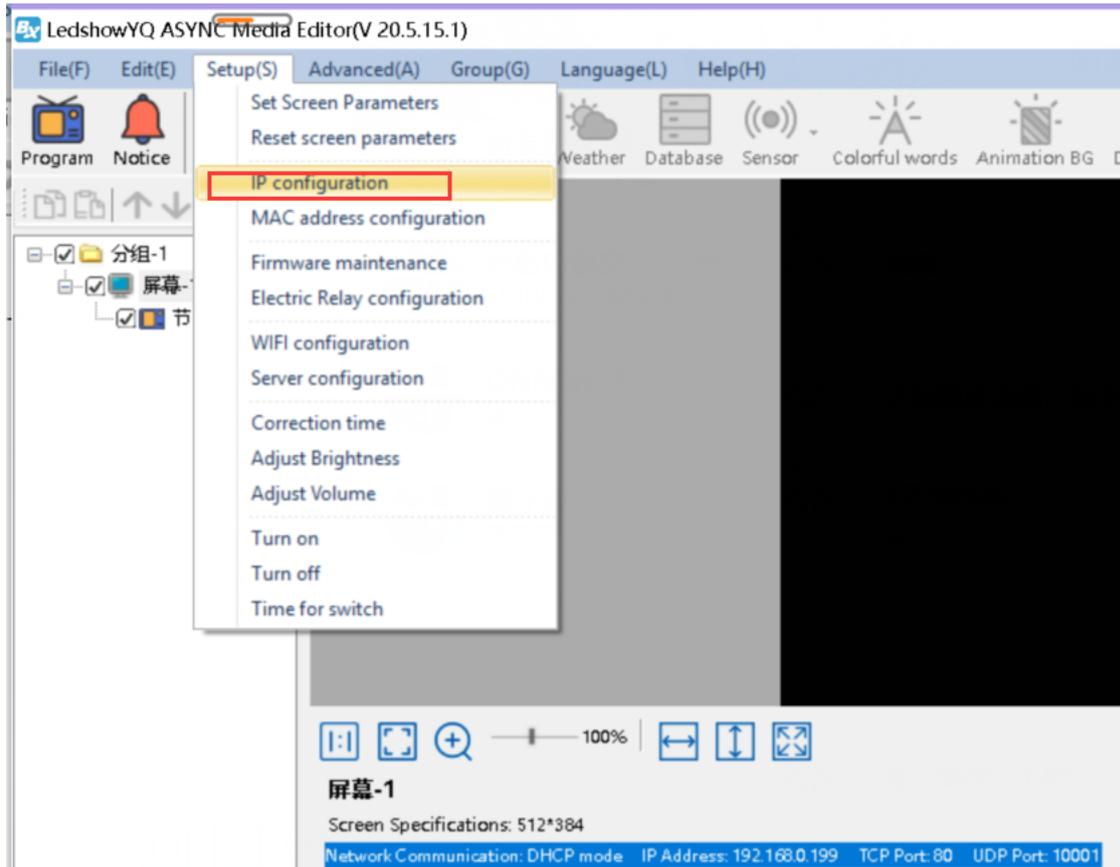
Set server IP information

Step 1

Connect 5V power supply for controller, and connect controller with PC by LAN cable.

Step 2

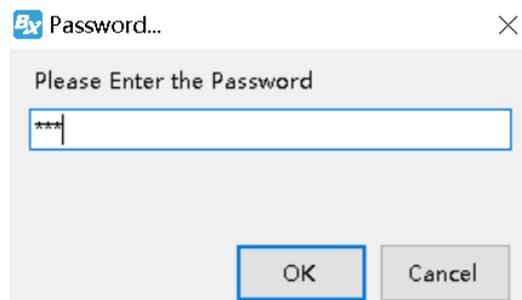
Click "IP configuration", as below:



Picture 37

Step 3

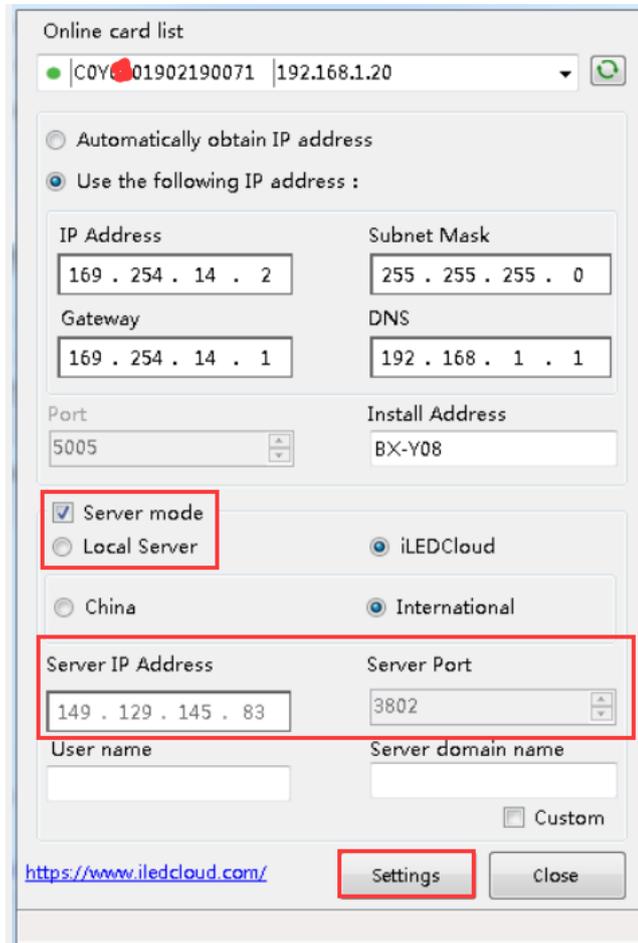
Input passwords "168", as below.



Picture 38

Step 4

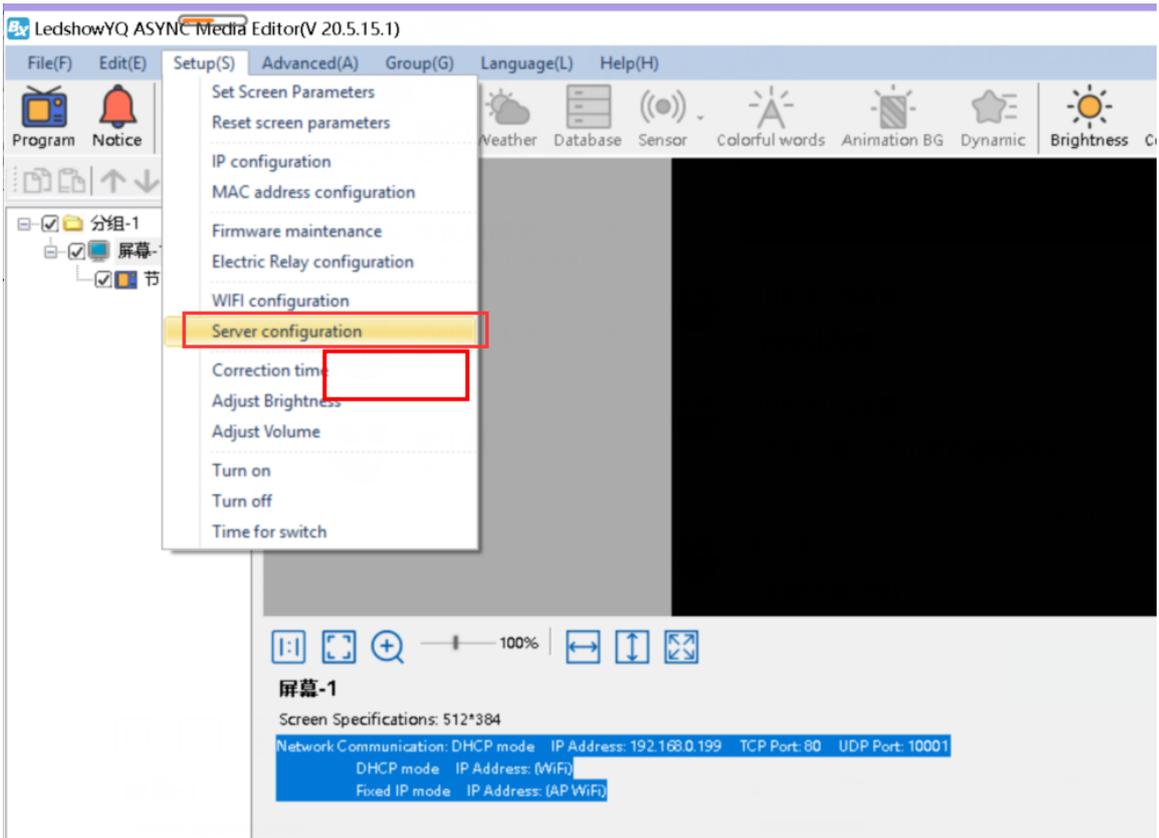
Enter into "IP configuration" page, choose "server mode" - "local server" - input "server IP address" and "server port" - click "set" . It will be succeed after 10 seconds.



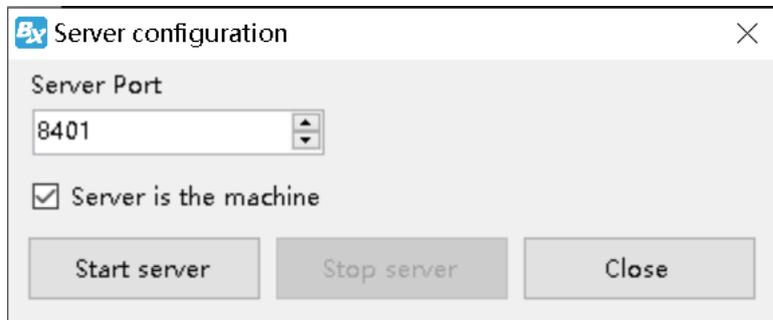
Picture 39

Step 5

Click "server configuration" , as below. Input passwords "168" , input "server port" number (this server port number is the "server port" number in "IP configuration" of step 4. Then, click "start server" , red "🔴" turns to "🟢" , means server is online.



Picture 40



Picture 41

Connect Wireless Router

After set controller IP, you should plug off the LAN cable which connect with controller and PC, and then connect with router. BX-Y1 series usually use 4G module BX-4G(U).

Plug in SIM card in the back side of BX-4G module, and connect 4G antenna



Picture 42

WEB Server Communication

Y series products support WEB server communication mode by iLEDCloud. Only if you are in the area which has network, then, can operate all the screens in real time remotely.

1. Set WEB server

Open "LedshowYQ 2018" - click "IP configuration" in "setup" - input passwords 168, choose "iLEDCloud" in "server mode" - choose "China" or "International" - input iLEDCloud account and passwords in "user name" , others keep default, then click "set" . As below.

Online card list

COY 01902190071 | 192.168.1.20

Automatically obtain IP address

Use the following IP address :

IP Address	Subnet Mask
169 . 254 . 14 . 2	255 . 255 . 255 . 0
Gateway	DNS
169 . 254 . 14 . 1	192 . 168 . 1 . 1

Port: 5005 | Install Address: BX-Y08

Server mode

Local Server

iLEDCloud

China

International

Server IP Address	Server Port
149 . 129 . 145 . 83	3802

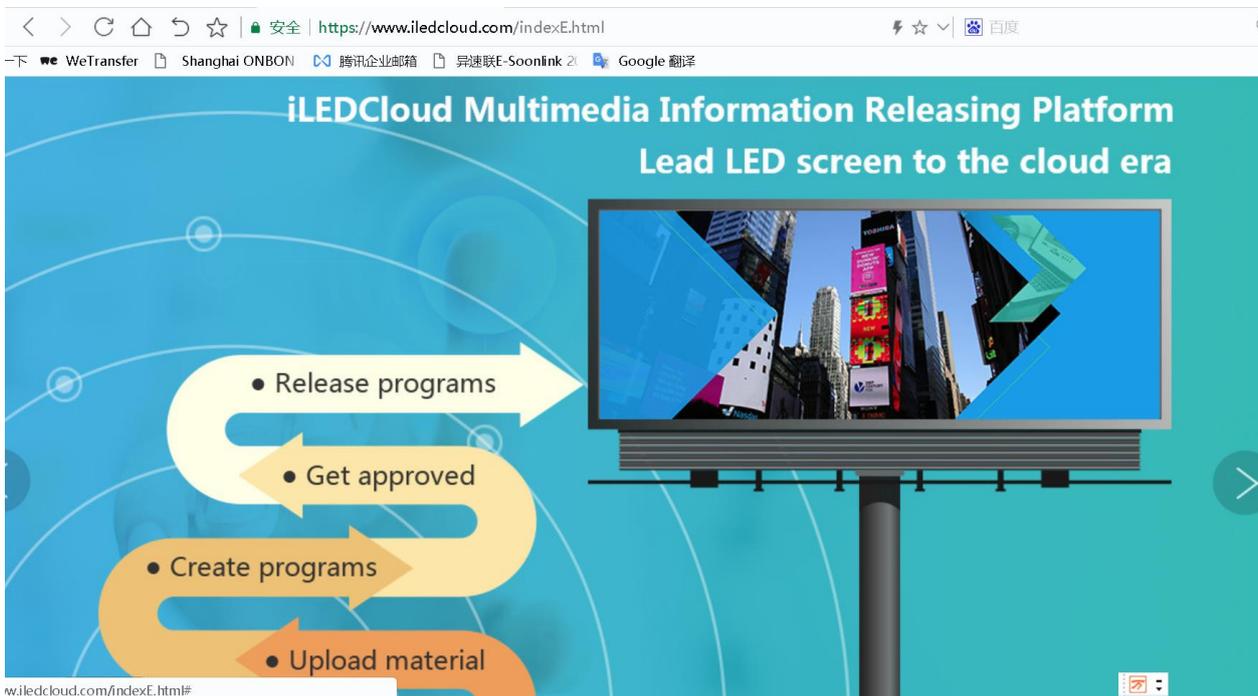
User name: | Server domain name: | Custom

<https://www.iledcloud.com/> | **Settings** | Close

Picture 43

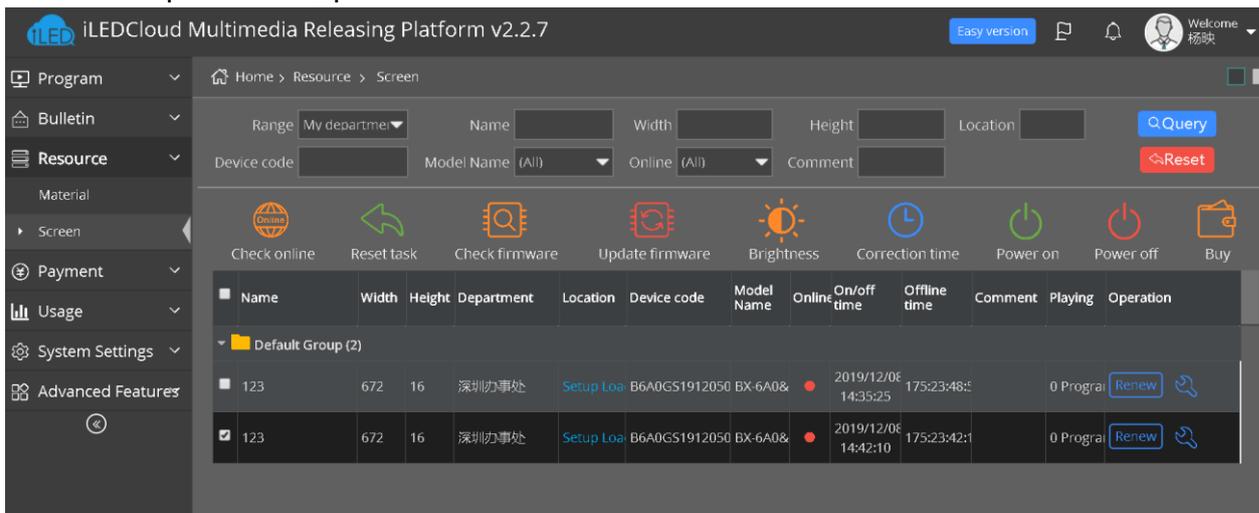
1. Enter into iLEDCloud

Enter into the link : www.iledcloud.cn/indexC.html



Picture 43

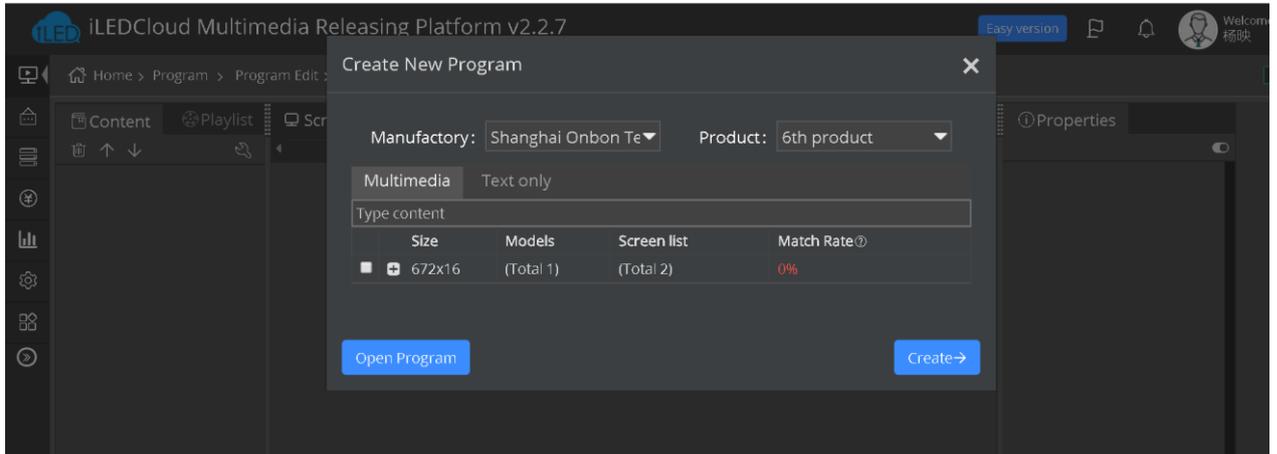
If the controller is online and equipment is connecting with network, users can check the bound controllers in “screen ” of “resource” , also check the equipment ID/name/width/height and online status of each control card. If you want to modify screen name or screen parameters, please click  .  means online.



Picture 44

2. Create New Program

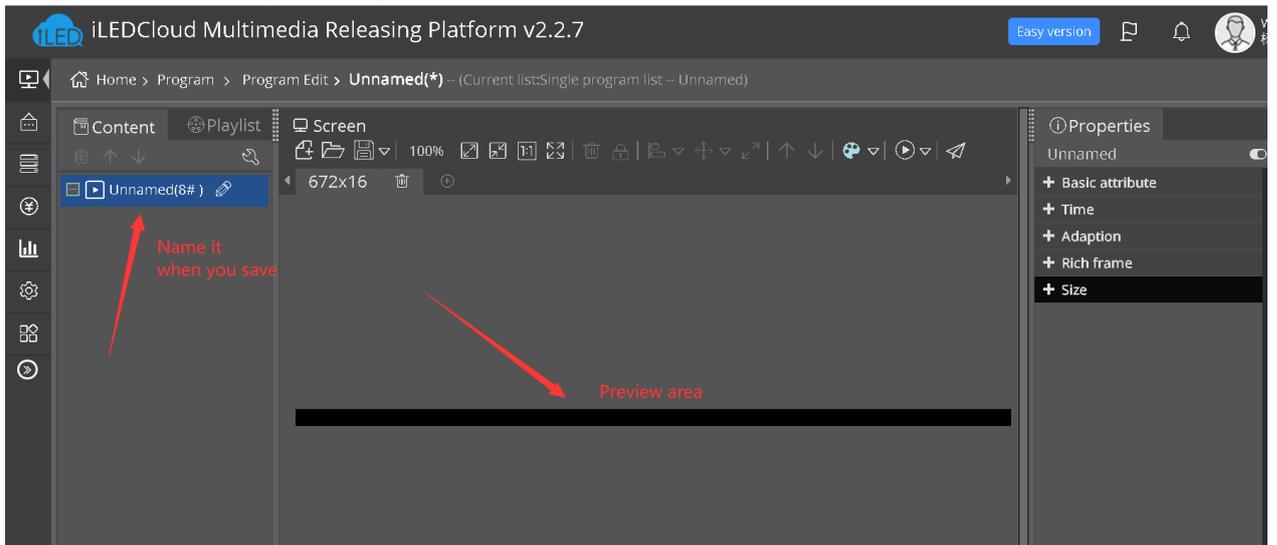
Switch to “program” , click “program edit” , select the corresponding factory, product type and exact equipment.



Picture 45

3. Add Program

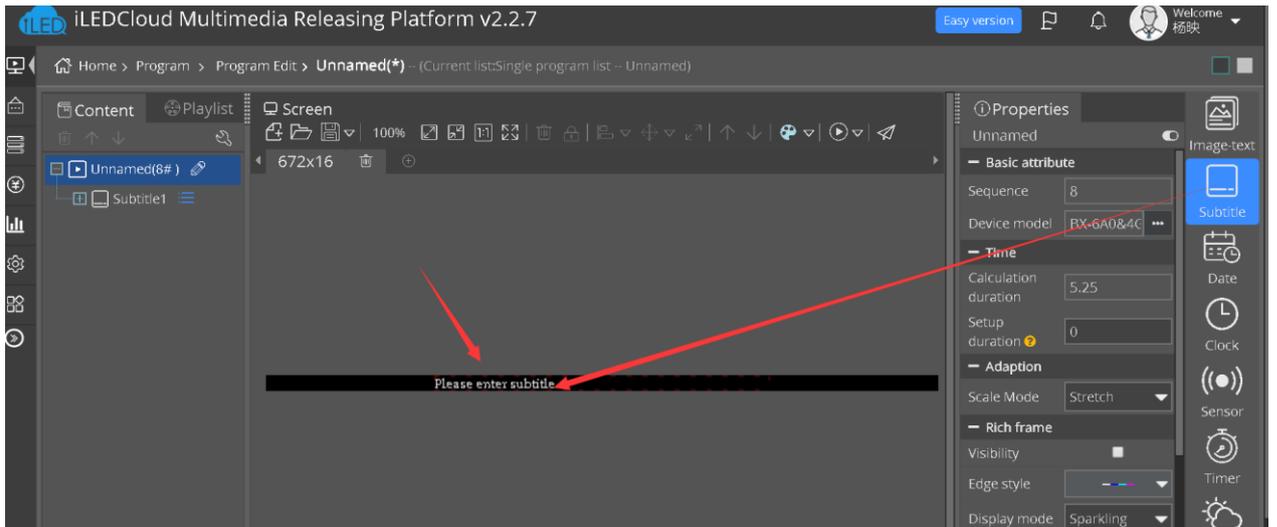
Users can add many areas, graphic, video, text, etc. After edit, click “save” button.



Picture 46

4. Edit Program

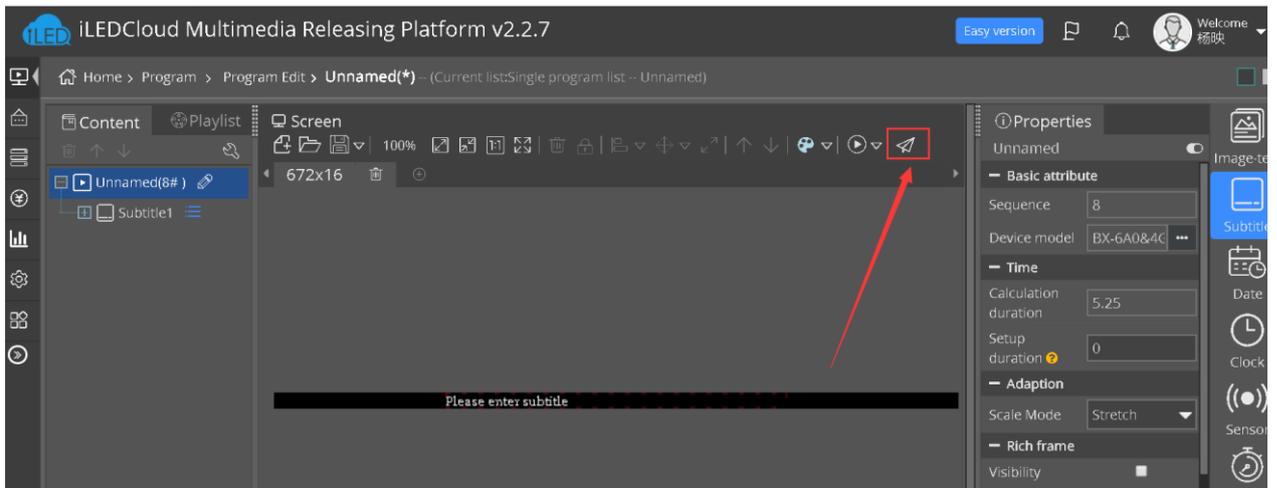
Click edit button in right side, example, add a subtitle zone, as below:



Picture 47

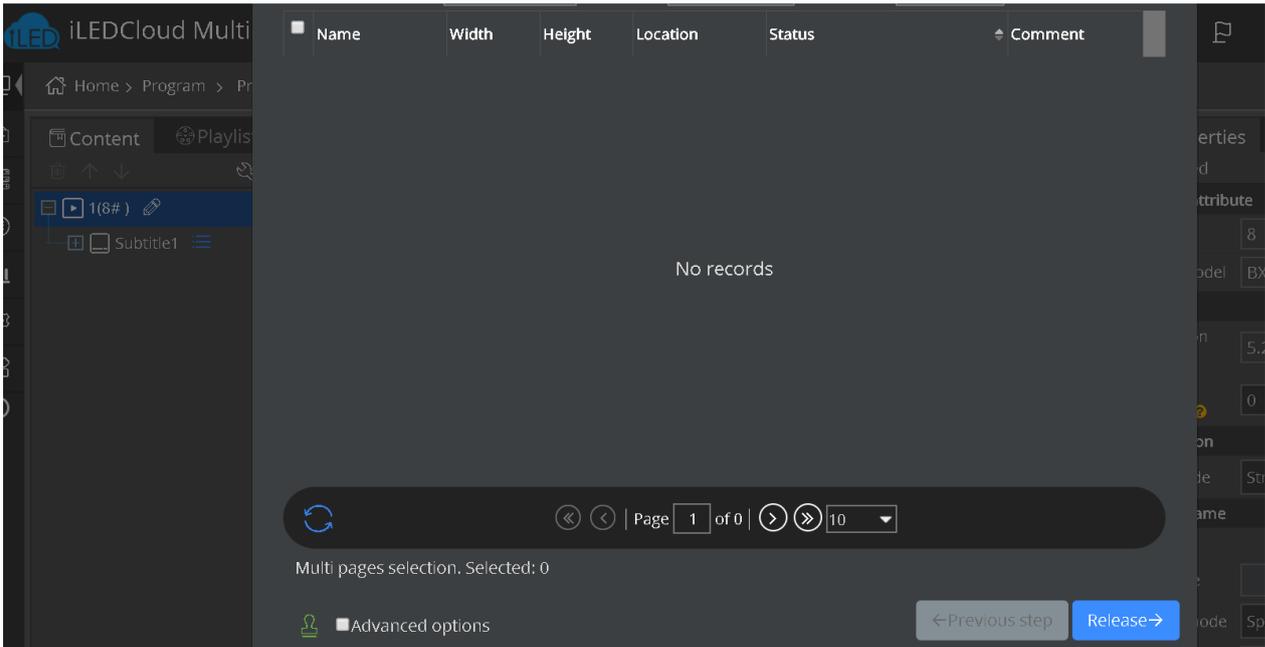
5. Program Release

After add program, you can release it by 



Picture 48

You need to give a name to this program, then release.

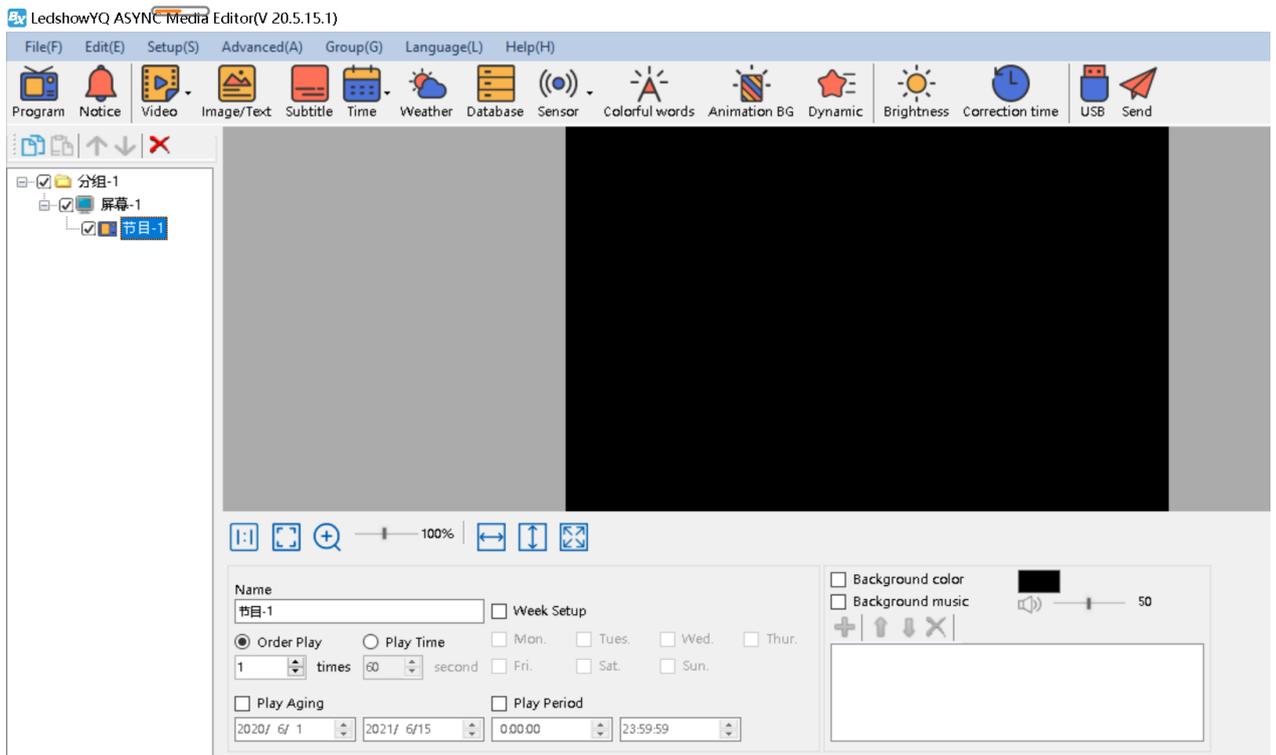


Picture 49

Steps for Making Program

1. Add Program

You can add Notice area/ Video area/ Image/text area/ Subtitle area/ Time area/ Weather area/ Database and Sensor area, as below:

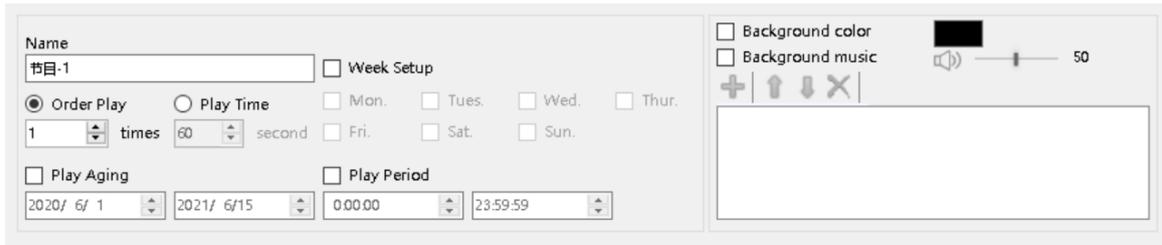


Picture 50

- **Notice area:** you can add a notice text.
- **Video area:** you can add and play video file with all kinds of format, also support high resolution video and video from outside equipment like camera, TV card, DVD machine etc.
- **Image/text area:** add animation, image, text and form.
- **Subtitle area:** add text with simple format.
- **Time area:** time, clock, lunar and timing.
- **Weather:** weather situation and wind direction/speed.
- **Database:** access mysql or sqlserver database, display the specified content of database.
- **Sensor area:** display temperature and humidity value.

2. Program attributes

Set the below parameters:



Picture 51

- **Program name:** Edit the name of this program.
- **Order play:** after display all the contents in this program, will switch to another program.
- **Play time:** This program is displayed in this given time, will switch to another program.
- **Play Aging:** set year, month, day of start and end, program will be displayed at this period.
- **Play period:** set playing period for this program.
- **Week setup:** program can be displayed at this given week.
- **Background color:** set background color for program.
- **Background music:** add more MP3 format music as background music, volume is from 0~100.

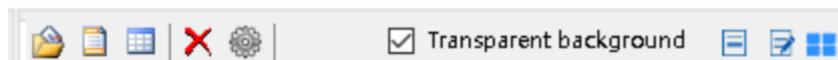
Add Image/text

1. Add Image/text



Click , **Image/Text** , add image/text area. Or “add image/text area” in “edit” . Add the files you want to display, as below picture, and it will display in preview area at the same time, and users can re-add and modify program according to LED screen status.

Users can move file position by mouse or by setting coordinate. One program supports many image/text areas, also you can set the size and position of image/text area.



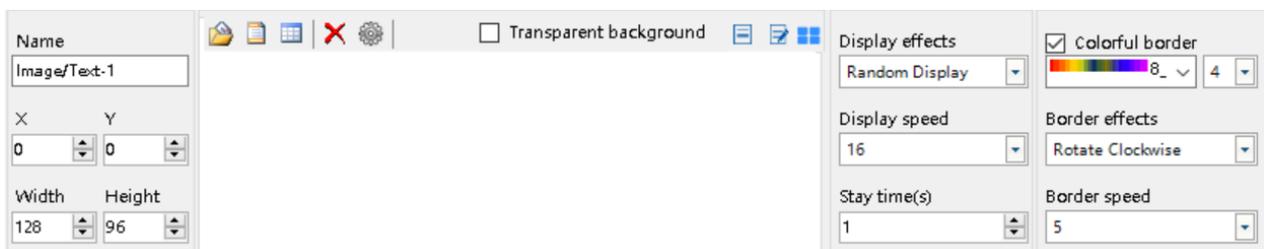
Picture52

- : Click here as to add picture or text file.
- : Click here as to add text.
- : Click here as to add form.
- : Click here as to move up.
- : Click here as to move down.

-  : Click here as to delete selected areas.
-  : Click here to set added content as present status.
- : Transparent bakcground: choose this, there will be no background color.
-  : For mongolian language.
-  : For Arabic, Hebrew language.
-  : Display method is list displaying.
-  : Display method is preview displaying.

2. Image/text Attribute

As below picture.



Picture 53

- **Name:** names for different files.
- **X start:** top left corner of file is matching with left side of LED screen, unit is pixel.
- **Y start:** top left corner of file is matching with top side of LED screen, unit is pixel.
- **Width:** width of file area, unit is pixel.
- **Height:** height of file area, unit is pixel.
- **Display effects:** quick type, flashing, static display, continuously move, push up, push down, push left, push right, etc.
- **Display speed:** from 1-16, 1 is the fastest.
- **Stay time:** from 1-128 seconds, 1 is the shortest.
- **Colorful border:** after choosing, users can set thick or thin of border, thin is 1, thick is 8.
- **Border effects:** select as you want.
- **Border speed:** fastest is 1, slowest is 8.

Finish Making Program

From the above steps, we finished to make one program. If you need more programs, please add according to these steps. Do not forget to save them.

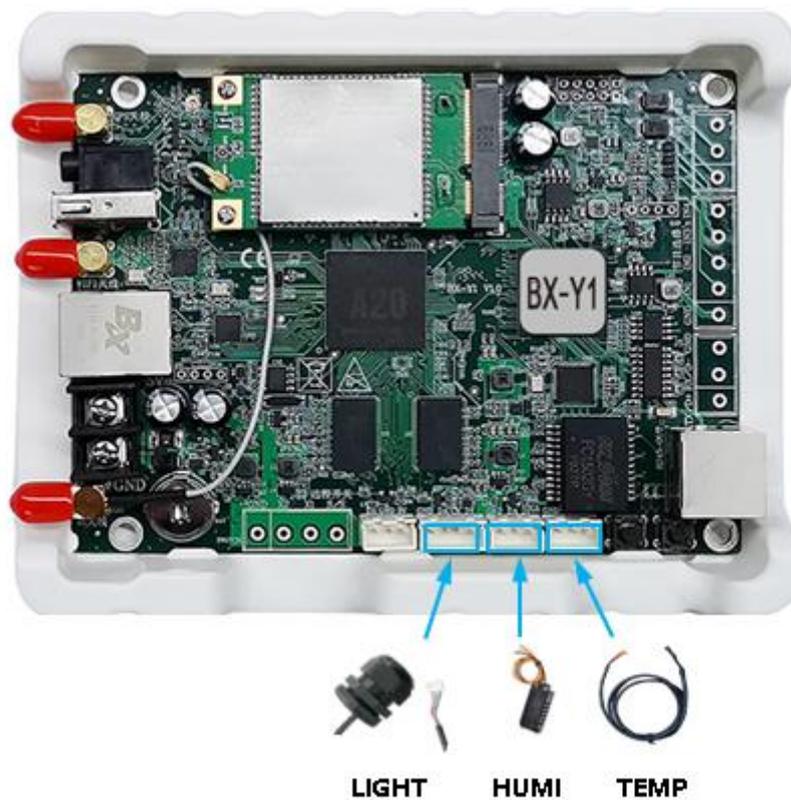
Display program



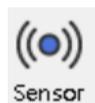
If you want to display the present program file, please click  , preview window and screen will display the same program at the same time. If need to display different program file, click “open” button, open program file and display.

Sensor Display

Y04 controller connection



Picture 54

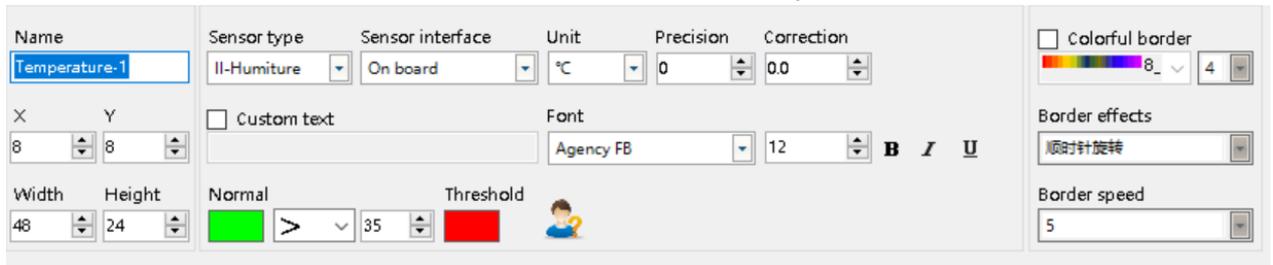


After connection, click  button, add sensor area.

1. Temperature display

Choose sensor type, sensor interface, unit, precision, correction, need custom text or not, font, font number, bold, italic, underline, threshold and normal color.

Click  icon as to check the connection method of temperature sensor.

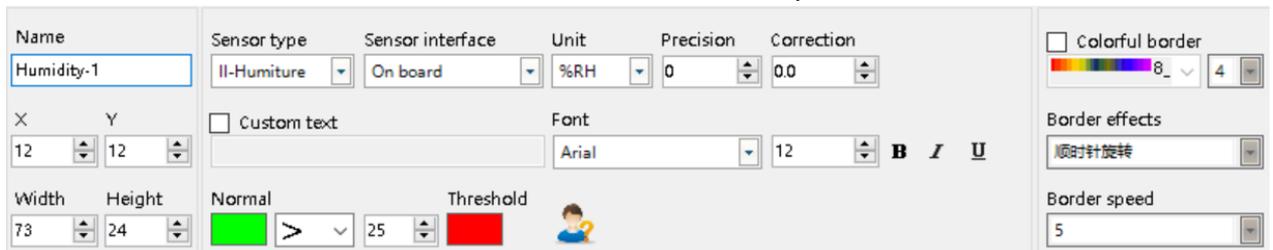


Picture 55

2. Humidity display

Choose sensor type, sensor interface, unit, precision, correction, need custom text or not, font, font number, italic, underline, threshold and normal color.

Click  icon as to check the connection method of temperature sensor.



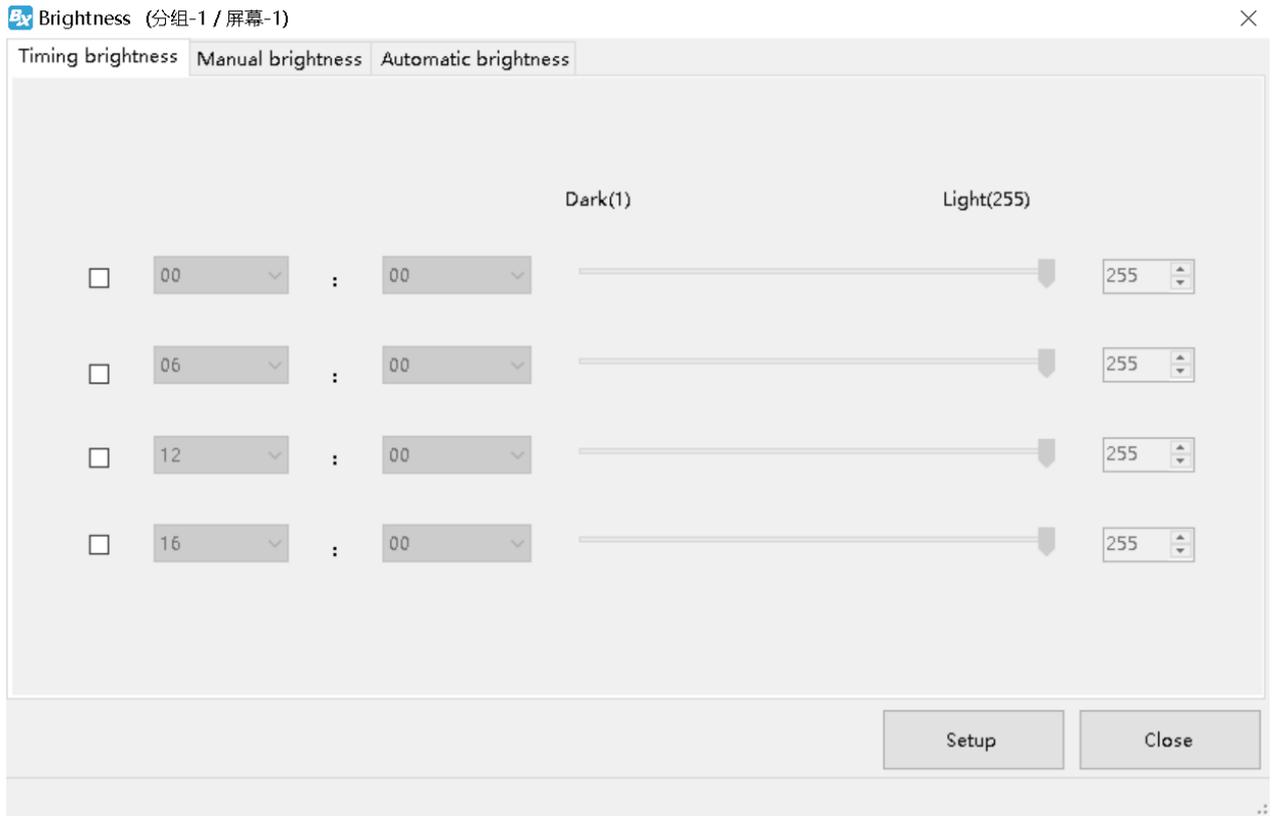
Picture 56

3. Brightness display

Click  **Brightness** button as to set brightness.

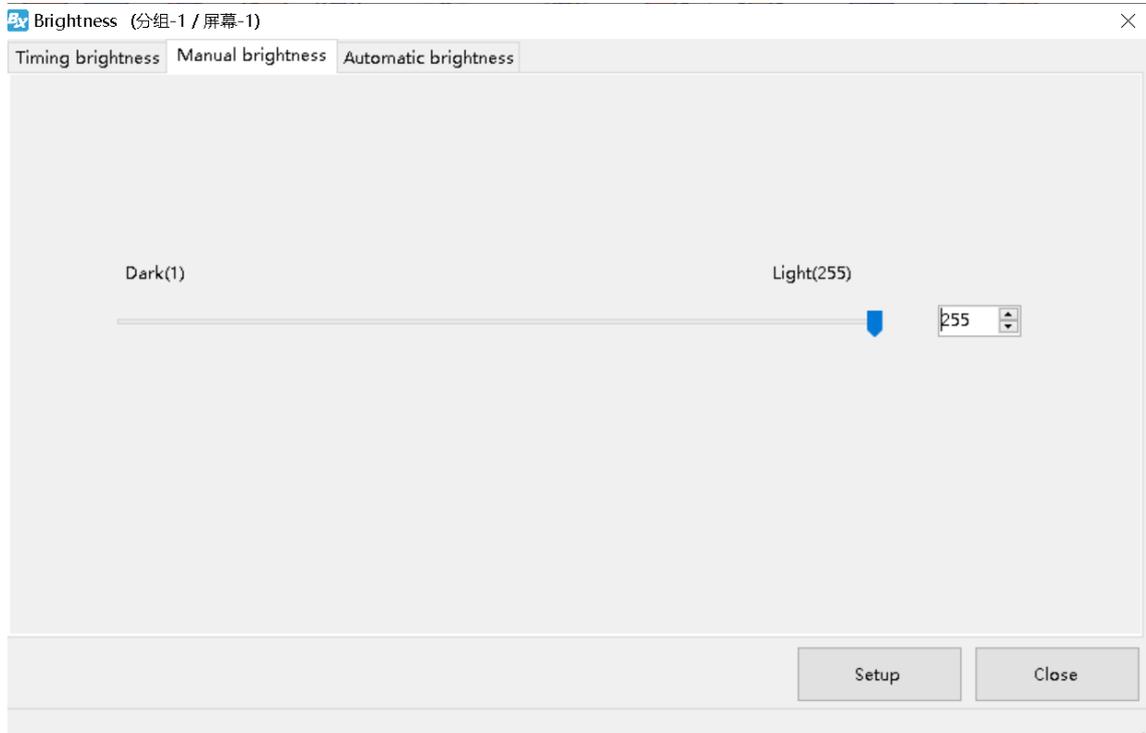
There are "timing brightness", "manual brightness" and "automatic brightness."

- Timing brightness: there are 4 time period, as below:



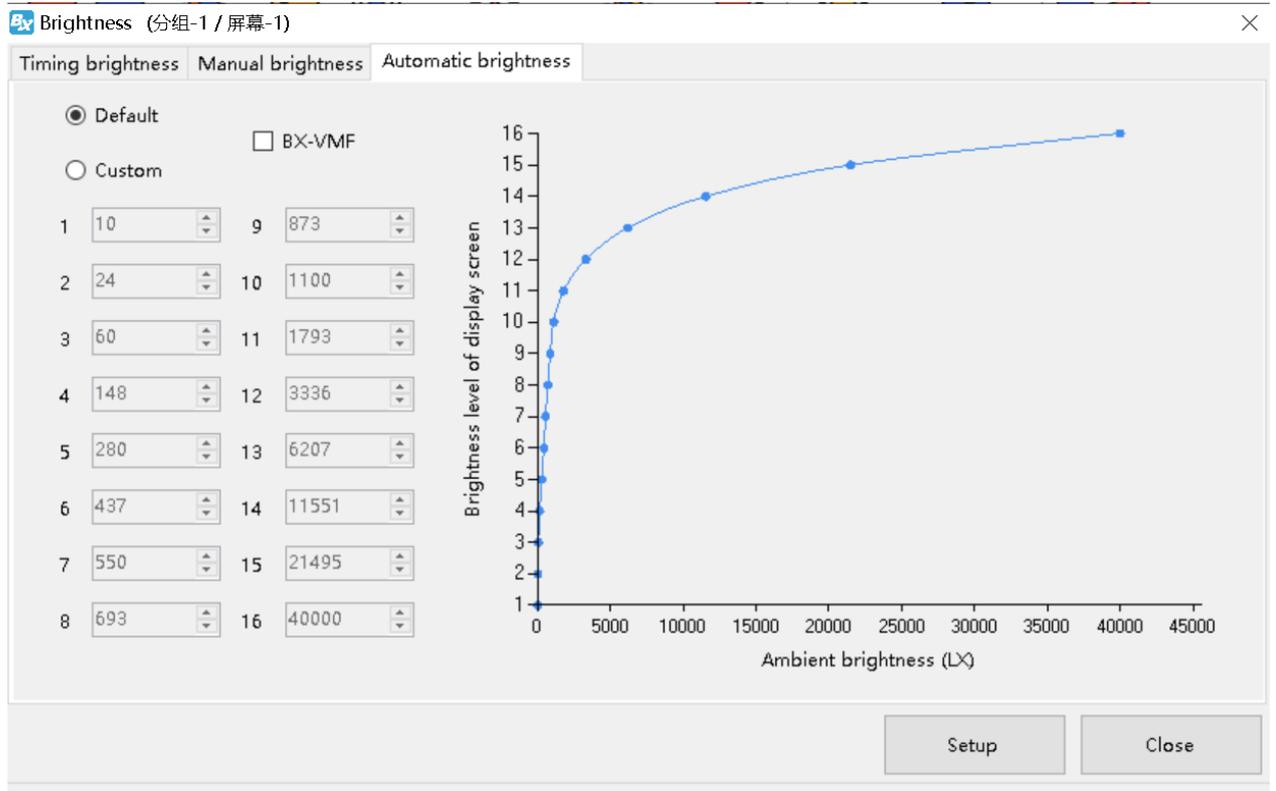
Picture 57

- Manual brightness: as below:



Picture 58

- Automatic brightness: choose "BX-VMF" , as below, brightness value can be default or custom, click "setup" , brightness of screen will be adjusted according to the sensor.



Picture 59

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