

BX-YQ3/YQ4/YQ2E

User Manuel

2017-1-12

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Version	Date	Author	Description
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BX-YQ3/YQ4/YQ2E user manual

1. Product Description

BX-YQ3/YQ4/YQ2E Control cards can support video, graphic, text, etc; Support multi programs, multi areas; Support remote managing programs; Support Ethernet communication cluster management; Support uploading programs by flash/U disk, support playing programs by USB, SD card; Support -40℃ ~ 80℃ wide environment temperature.

Stable performance, simple installation and operation, with high cost performance; Widely used on kinds of LED full color display screens and LED media full color cluster display systems.

1.1. Technical parameters

Storage	4GByte
Screen types	All kinds of full color screens
Software functions	Groups cluster management/multi-program,editing/multi-area display/language version
Program types	Normal/Shared program
Program quantity	Support 512 programs, each program with 8 areas
Area type	Graphic/subtitle/video/time/clock/timer/temperature/temperature&humidity/weather forecast
Frame mode	The colorful and active area frame
Time mode	Dial/in Chinese and English/timer (all support multi-groups)
Communication	Support 100M Ethernet and 3G wireless sending
Remote control	Select program/lock screen/brightness adjustment/power on & off/screen test
Bright regulation	8 grades brightness, support manual and auto-timing adjustment/software adjustment/remote control
Power on/off mode	Support auto-timing power on & off/software power on & off/remote control
Working Voltage	5V(4.5V-6.5V wide voltage; we suggest supply power alone to the card)



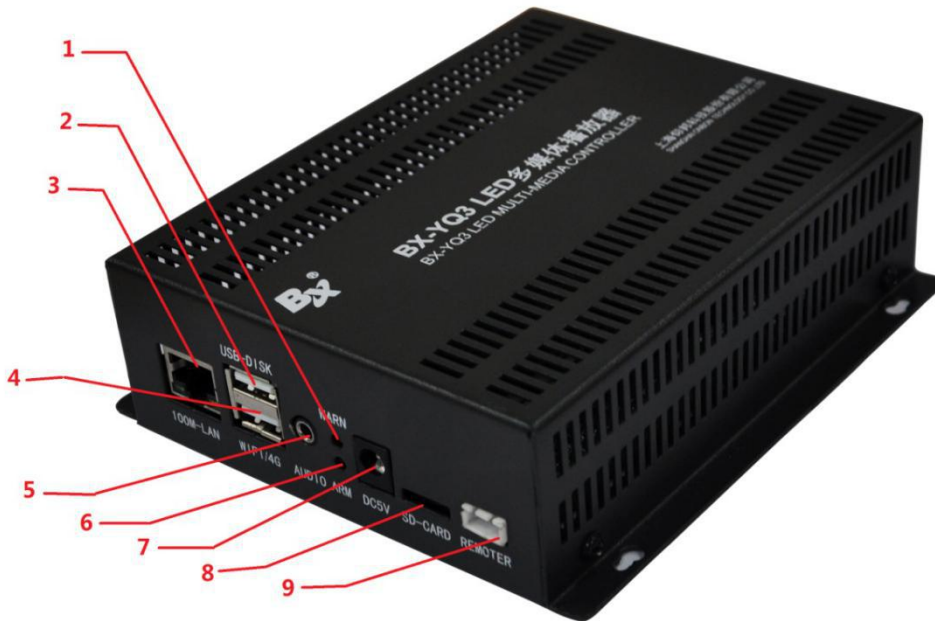
SDK	Provide a complete DLL dynamic library, and open communication protocol, convenient for secondary development
Software	LedshowYQ2016
Maximum power	≤4W
Environment	-40℃~80℃

1.2. Screen Specification

Controller Type	Control size	Screen specification	Description
BX-YQ3	1280×720	Maximum pixels in width=1920 , Maximum pixels in height=1024	Work together with BX-V75、 BX_V、BX_V75L receiving card
BX-YQ4	1920×1080	Maximum pixels in width =1920 , Maximum pixels in height =1024	Work together with BX-V75 receiving card
BX-YQ2E	800×600	Maximum pixels in width=1920 , Maximum pixels in height=1024	Work together with BX-V75 receiving card

2. Interface Definition

2.1. BX-YQ3/YQ4/YQ2E interface definition





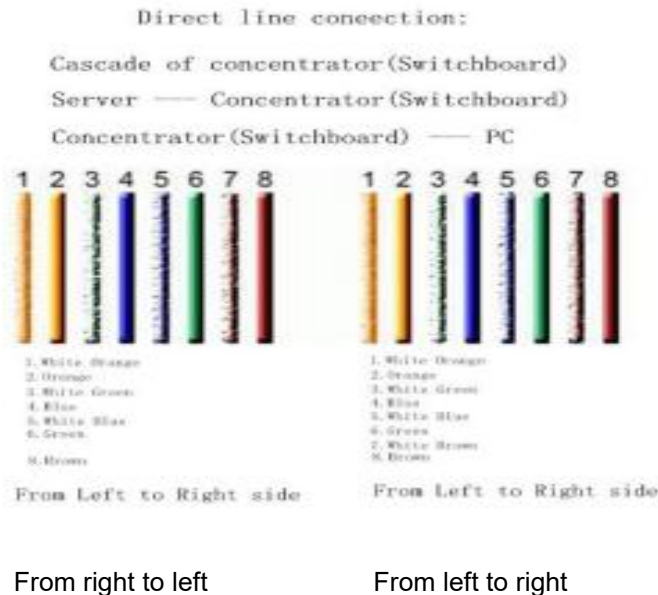
Number	Interface name	Description
1	Warning light	The warning light is on when there is no storage medium
2	USB interface 0	U disk Plug-and-Play
3	Ethernet interface 0	Connect with PC
4	USB interface 1	WiFi &4G wireless interface
5	Audio output interface	Double track , stereo sound
6	Power light	Flashes about once per second if the controller is working normally
7	5V power interface	Wide voltage input, support 4.5V ~ 5.5V
8	SD card interface	SD card interface ; prohibit plug-in SD card with power
9	Remote control interface	Infrared receiver interface
10	Ok button	Interactive menu confirmation button; also is the shortcut



		key in test mode;
11	Down	Interactive menu focus down
12	Up	Interactive menu focus up
13	Menu	Call out / leave configuration main interface
14	Multi function card interface	Connect Multi function card
15	Ethernet interface 1	Connect with full color receiving card ,Scan data output port
16	Ethernet interface 2	Connect with full color receiving card ,Scan data output port

2.2. Ethernet interface specification

It's RJ45 Ethernet interface, connect the Ethernet port of PC by Ethernet line(or the Ethernet port of router & switchboard). There are two lines of Ethernet line: Direct connection and Cross connection, the controller supports both of them. Making method:





Cross line connection: P C — P C
 Concentrator — Concentrator
 Switchboard — Switchboard



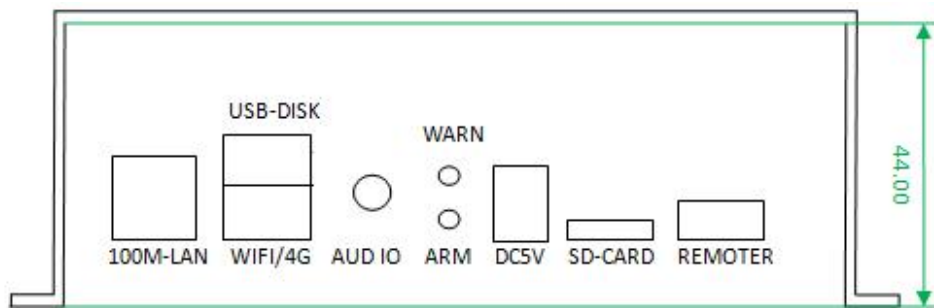
From right to left

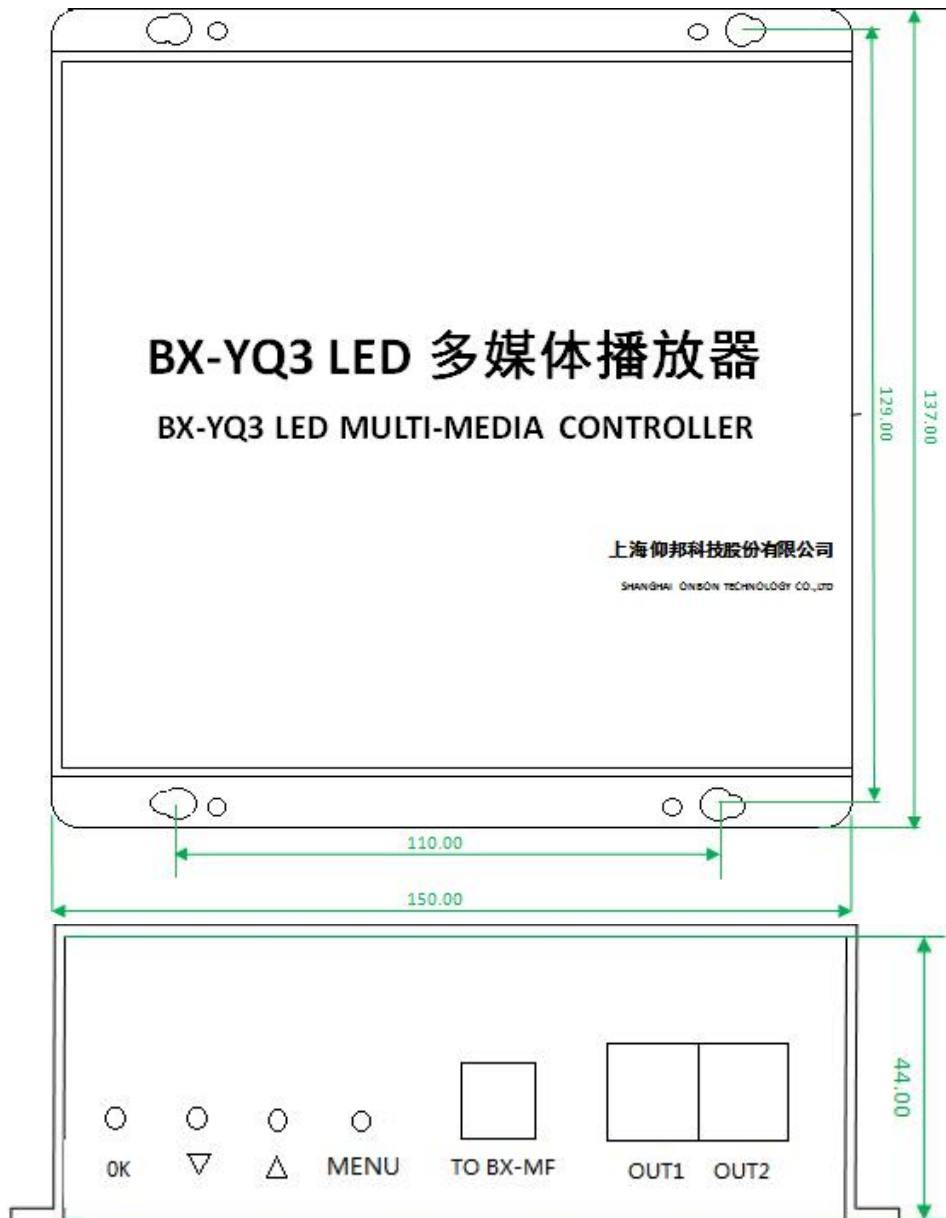
From left to right

3. Controller specification

3.1. BX-YQ2E/BX-YQ3/BX-YQ4 specification

Unit: Millimeter





4. DC characteristic

Input voltage: 4.5V~7V, suggest you give power supply singly.

Working electric current: ≤ 1360 mA

Power: ≤ 4 W

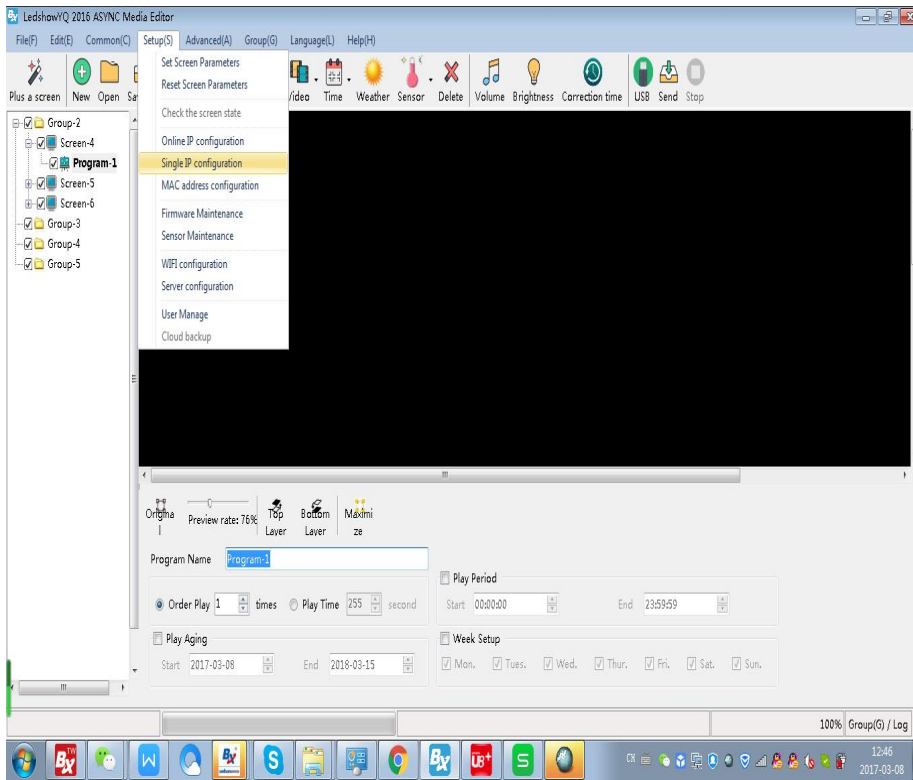
5. Steps for use

5.1. *BX-YQ3/YQ4/YQ2E install*

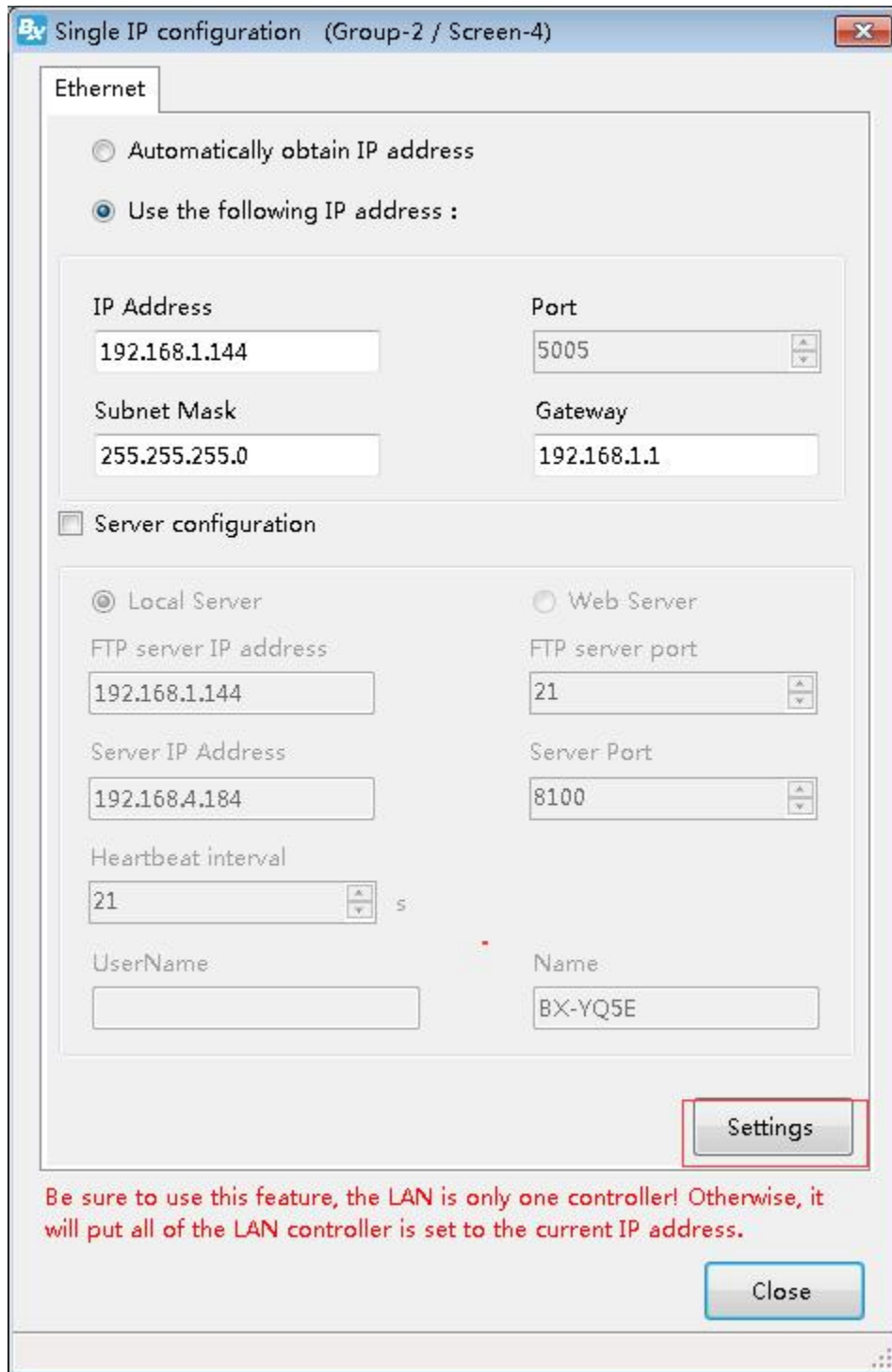


5.2. **Setup controller IP address**

Open "LedshowYQ 2016", click "setup" -- "set screen parameters", input "888" as to setup the screen parameters.



Click setting when finished setting IP details



Single IP configuration (Group-2 / Screen-4)

Ethernet

Automatically obtain IP address
 Use the following IP address :

IP Address: 192.168.1.144
 Subnet Mask: 255.255.255.0
 Port: 5005
 Gateway: 192.168.1.1

Server configuration

Local Server
 Web-Server

FTP server IP address: 192.168.1.144
 Server IP Address: 192.168.4.184
 Heartbeat interval: 21 s
 UserName:
 FTP server port: 21
 Server Port: 8100
 Name: BX-YQ5E

Settings

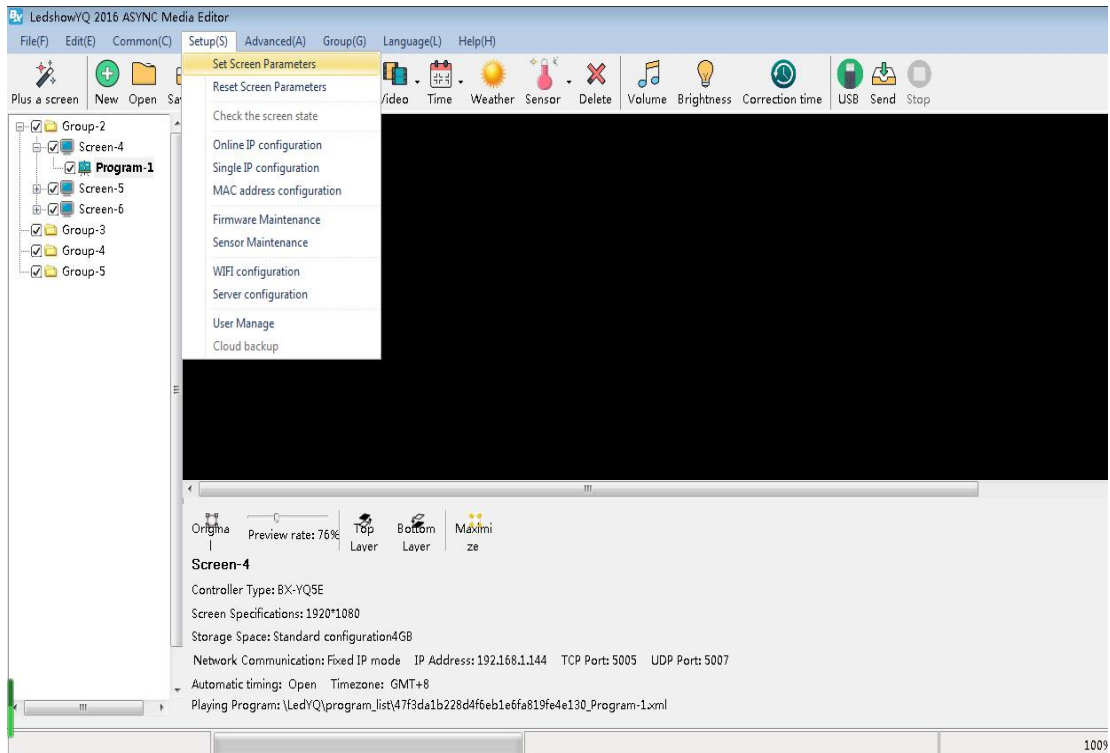
Be sure to use this feature, the LAN is only one controller! Otherwise, it will put all of the LAN controller is set to the current IP address.

Close

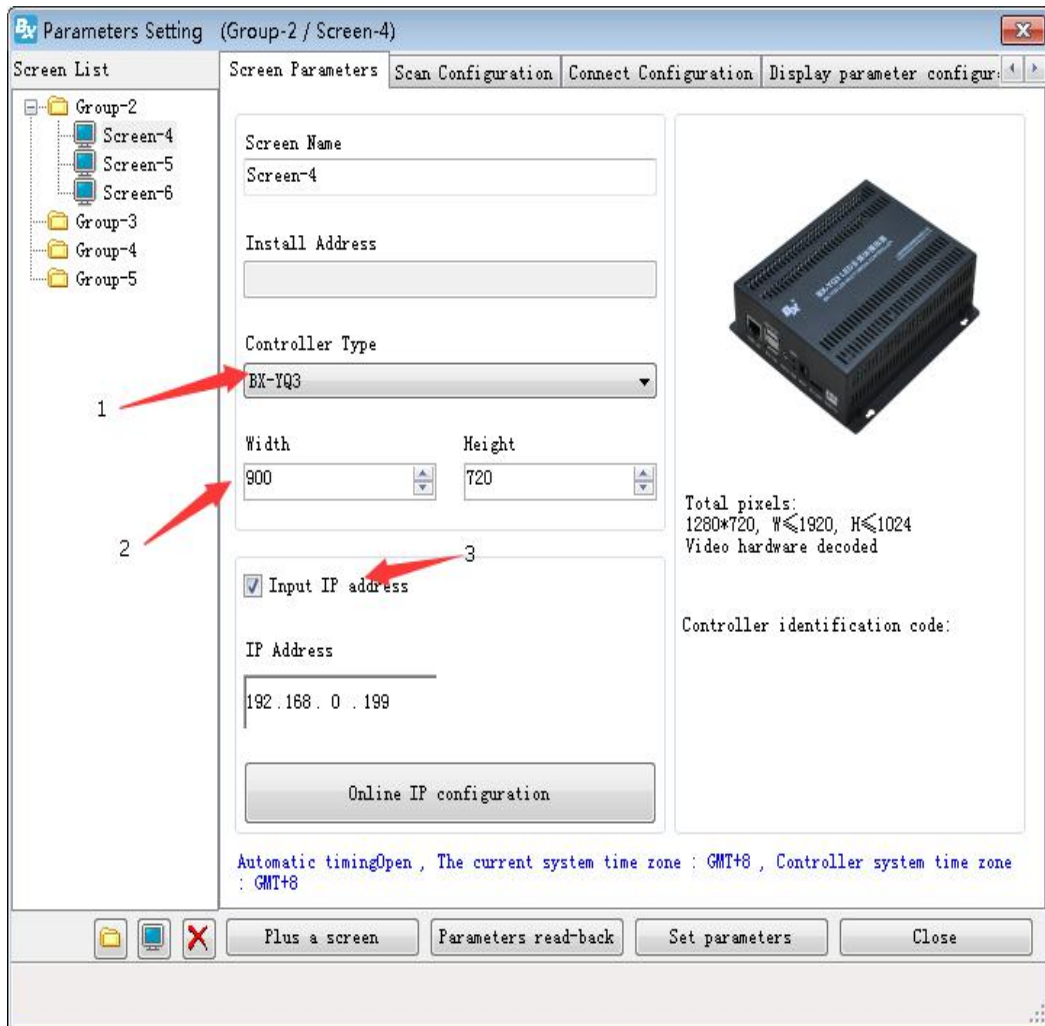
The default IP of controller is "192.168.0.199". If it's by direct link, without router, then, the IP of controller and PC should be on the same network, or it will be failed. And if it's failed because of the IP setting, then reset IP address, it will get OK.

5.3. *Set Screen Parameters*

Open "LedshowYQ 2016", click "setup" -- "set screen parameters", input "888".



The following is the steps for setting parameters:



Step 1: Select the correct controller model, usually, if your connection is right, the PC software could identify the controller model automatically, under this circumstance, you do not need to select manually. please choice BX-YQ3 if you are using BX-YQ3

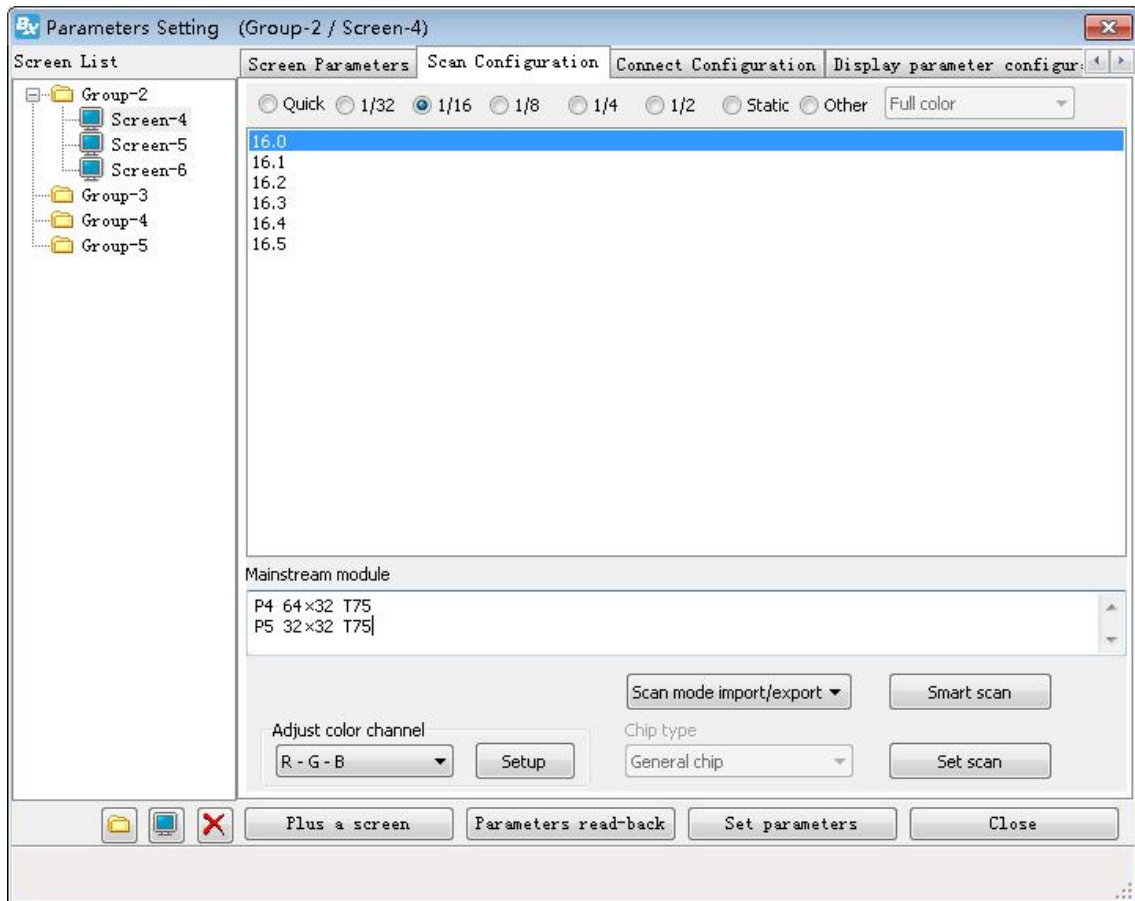
Step 2: Input the correct height and width pixels according to your screen.

Step 3: Select the correct communication mode and configure the correct interface parameters. And IP address should be the same with the one you contribute to the controller.

Step 4: Click “ set parameters” Now, you finished all the steps of set screen parameters. You could check the screen now, it should show “ Add ” or something about it. You need to check that the font showed on the screen is normal, if not, you need to reset the scan mode.

5.4. Scan Configuration

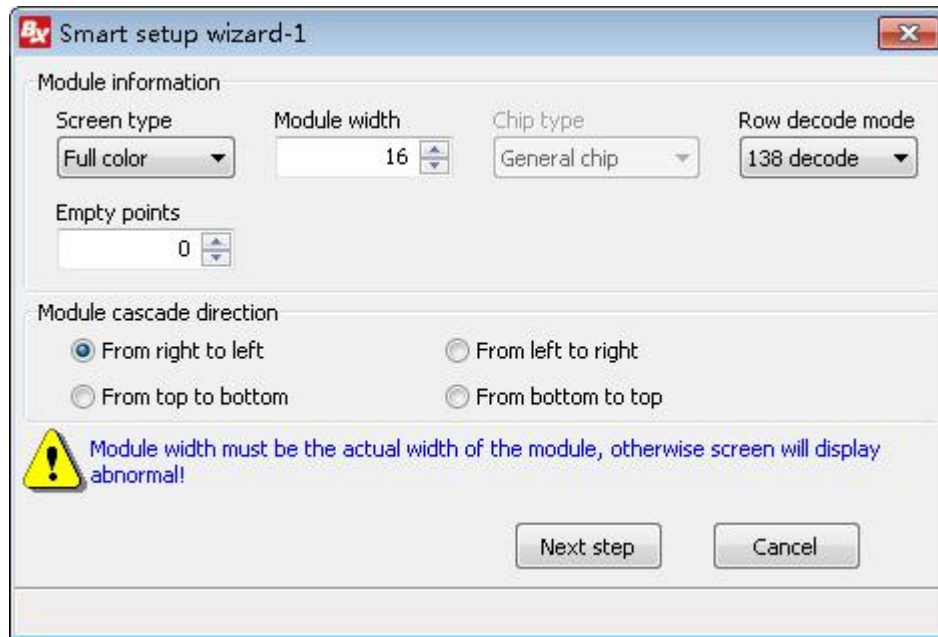
On "set screen parameters" window, click "scan configuration" :



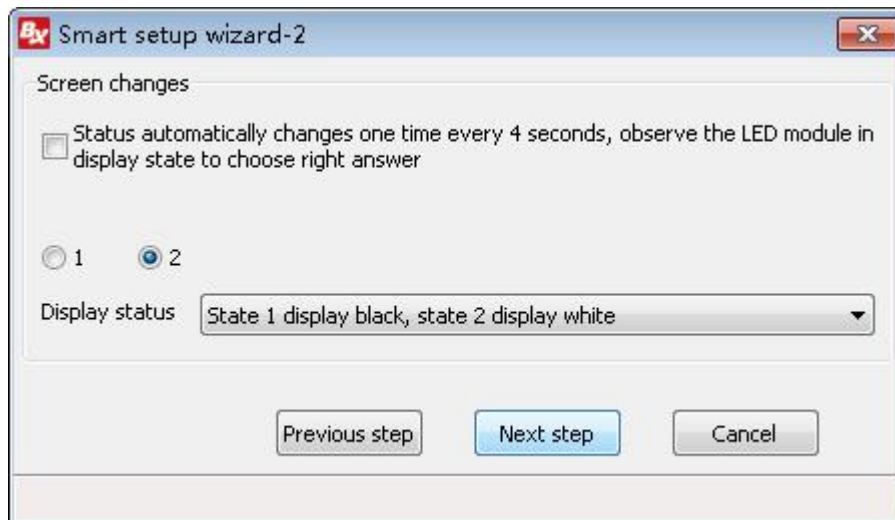
In the scan mode, if the one in our software can not correspond with your module, you need to do "smart scan", Then you could choose it and set.

5.5. Smart Scan configuration

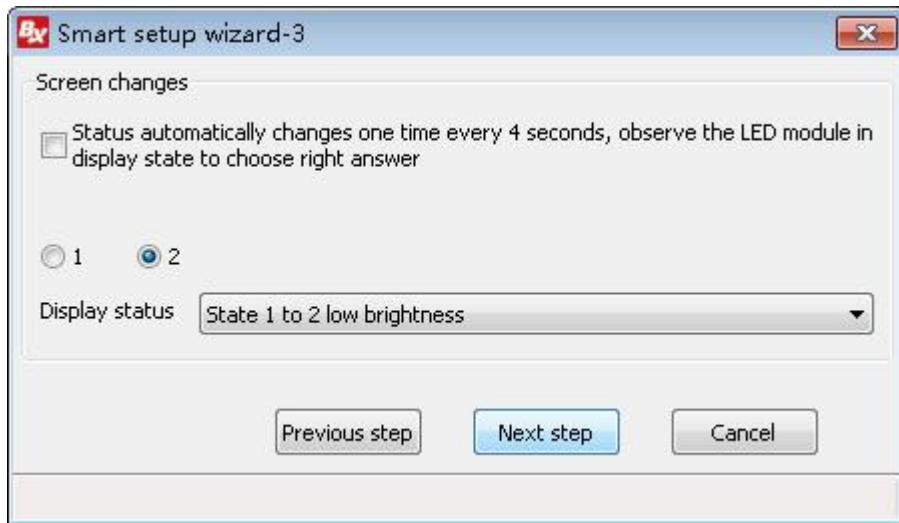
Click "Smart scan", enter "Smart setup wizard-1", check the picture below. You could set module width, driver chip, scan point outlet, with or without 138, cascade direction, etc. You need to set it according to your modules.



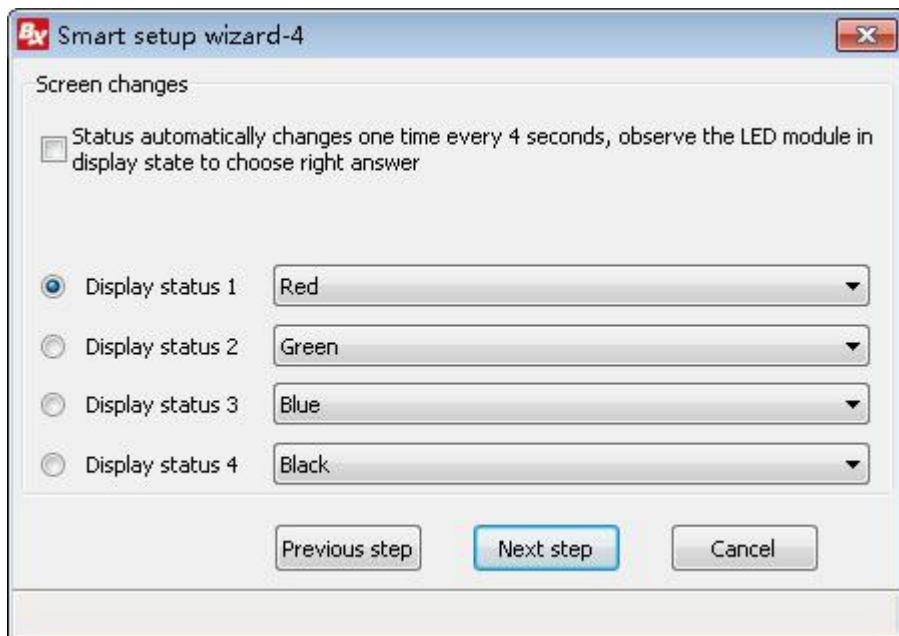
Click “ next step”, enter into “ Smart setup wizard-2”, check the picture below:



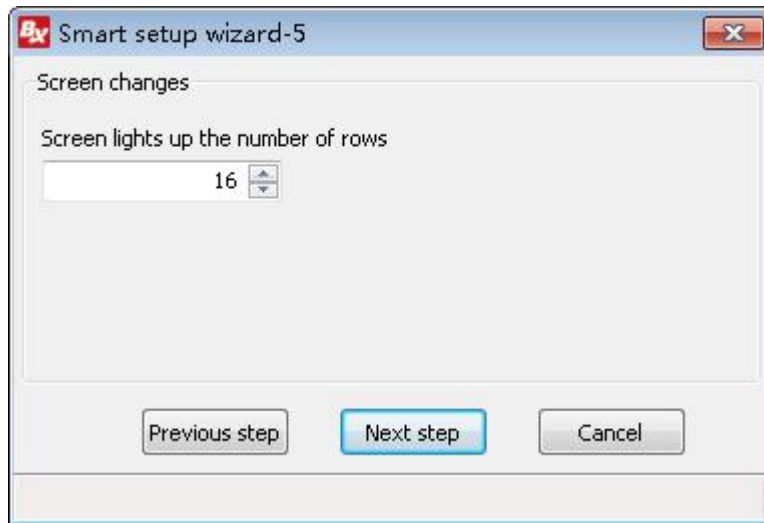
Select the correct display status, click “ next step “, enter into “ Smart setup wizard-3”, check the picture below:



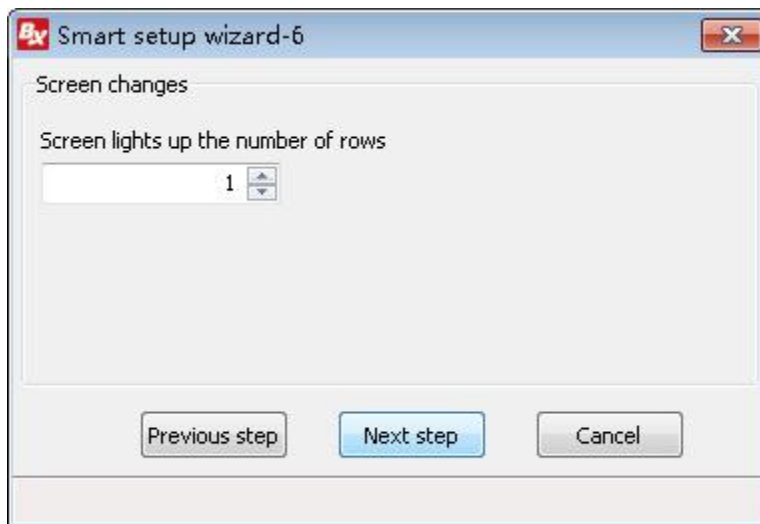
Select the correct display status, click " next step ", enter into " Smart setup wizard-4" , check the picture below:



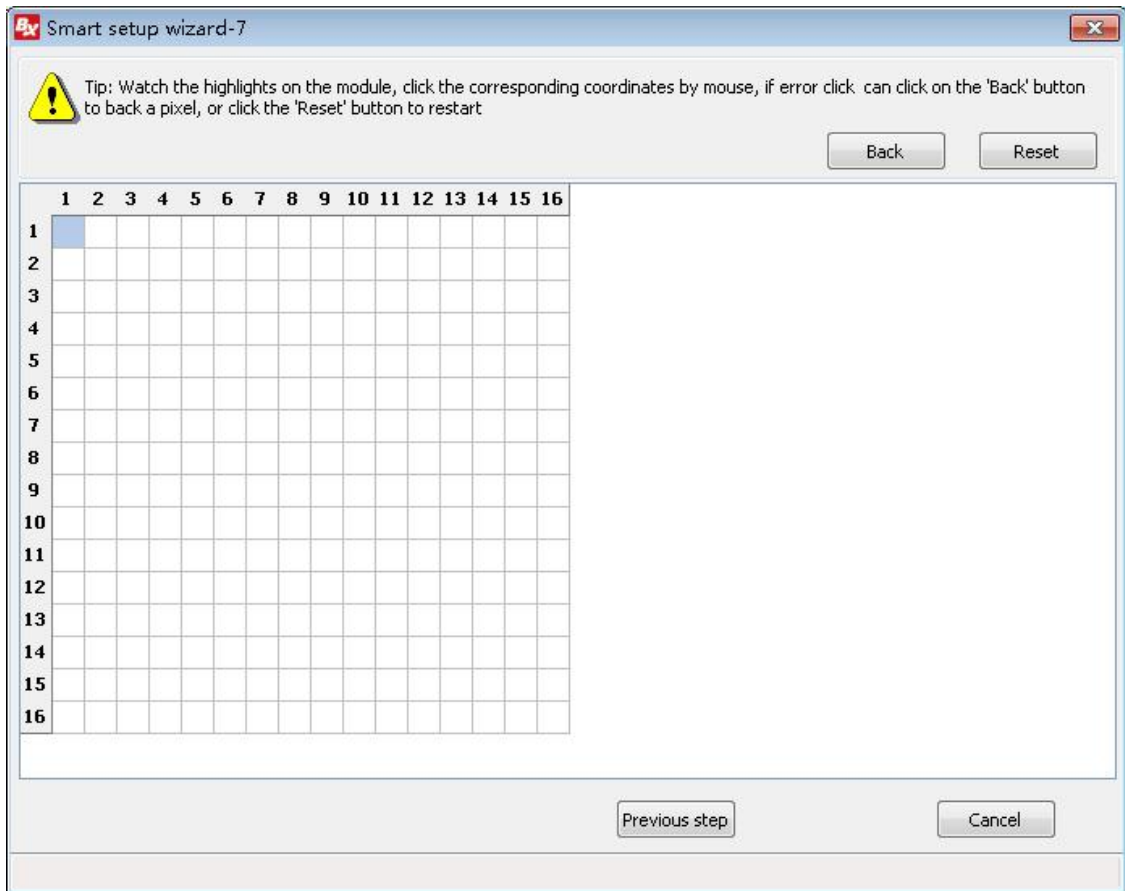
Select the correct display status, click " next step ", enter into " Smart setup wizard-5" , check the picture below:



Select the correct display status, click " next step ", enter into " Smart setup wizard-6" , check the picture below:



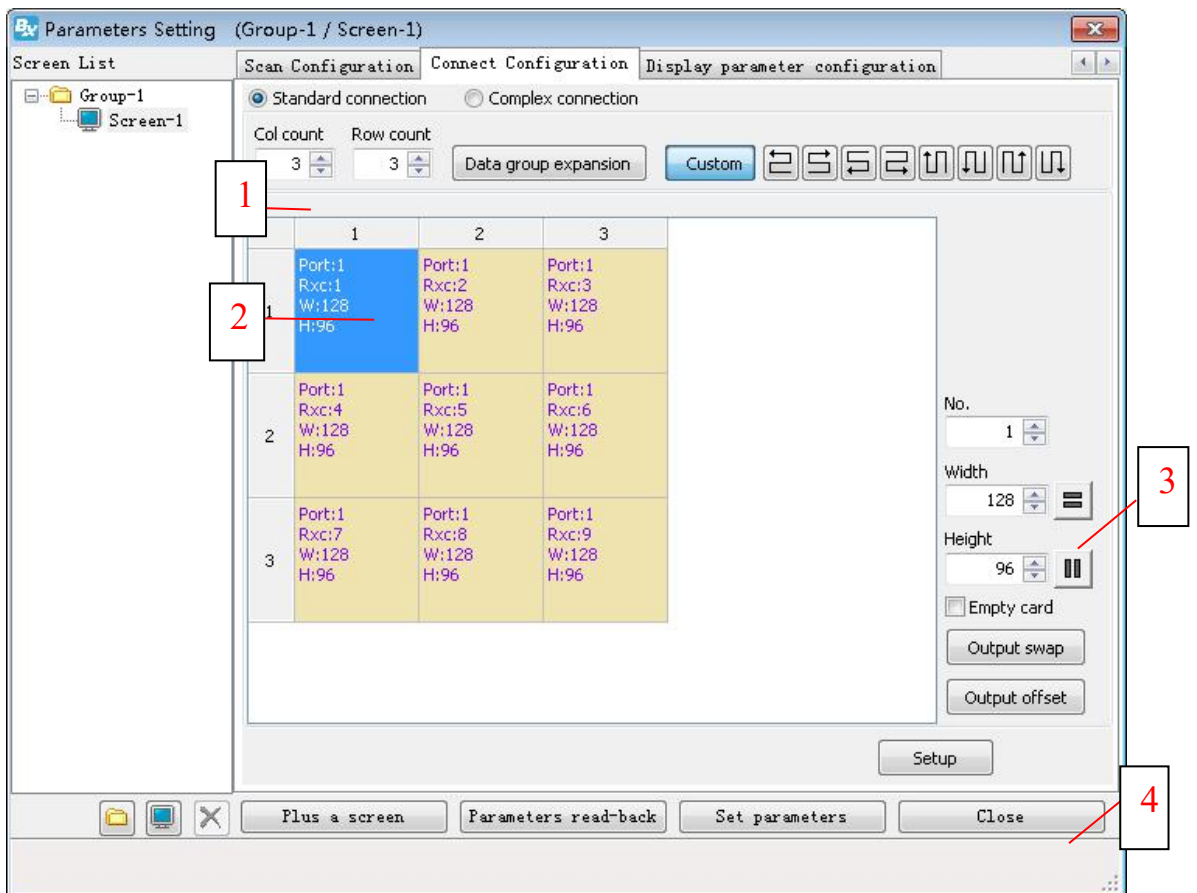
Select the correct display status, click " next step ", enter into " Smart setup wizard-7" , check the picture below:



After you finished all the steps, there will be a new scan mode. Next, the PC will prompt you that send the scan configuration to controller.

5.6. BX-YQ3/YQ4/YQ2E receiving card setup

BX-YQ3/YQ4/YQ2E need to work together with full color receiving card such as BX-V75/BX_V/BX_V75L , please set the receiving card as the following steps



Step 1: Input the correct cards quantity horizontally and vertically according to the actual quantity you use on the screen;

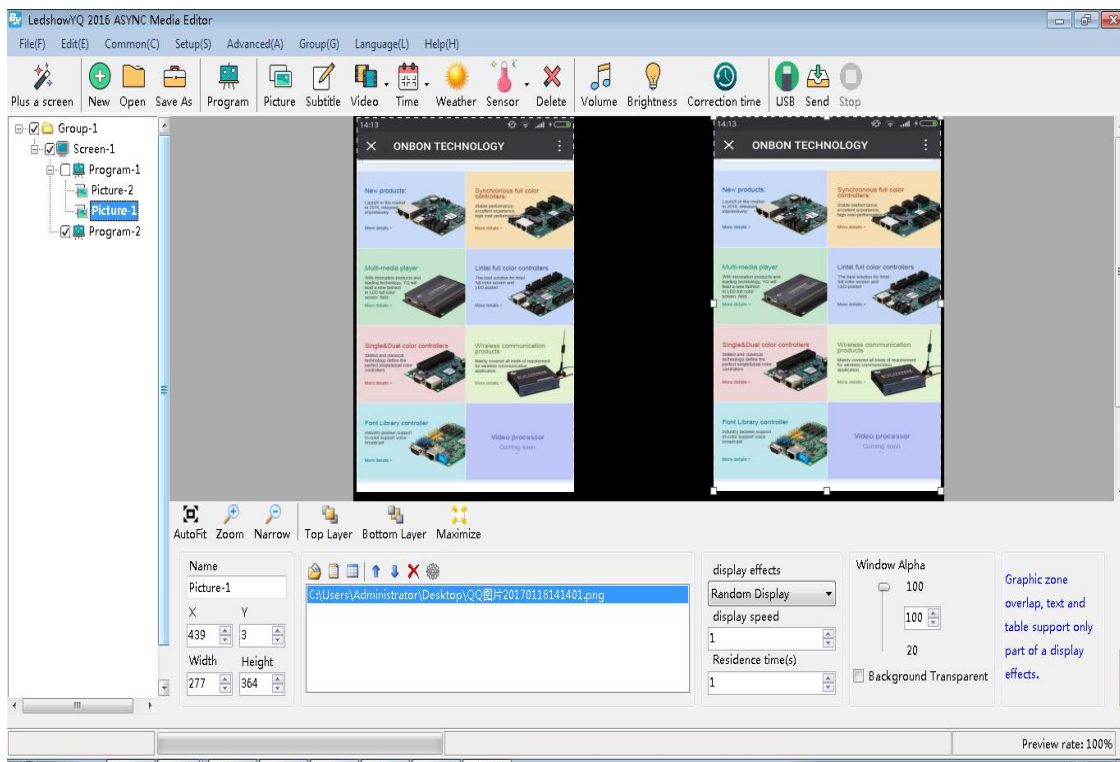
Step 2: Select the right location of receiving cards according to the order of receiving card, and single click;

Step 3: Set the height and width pixels of your receiving card;

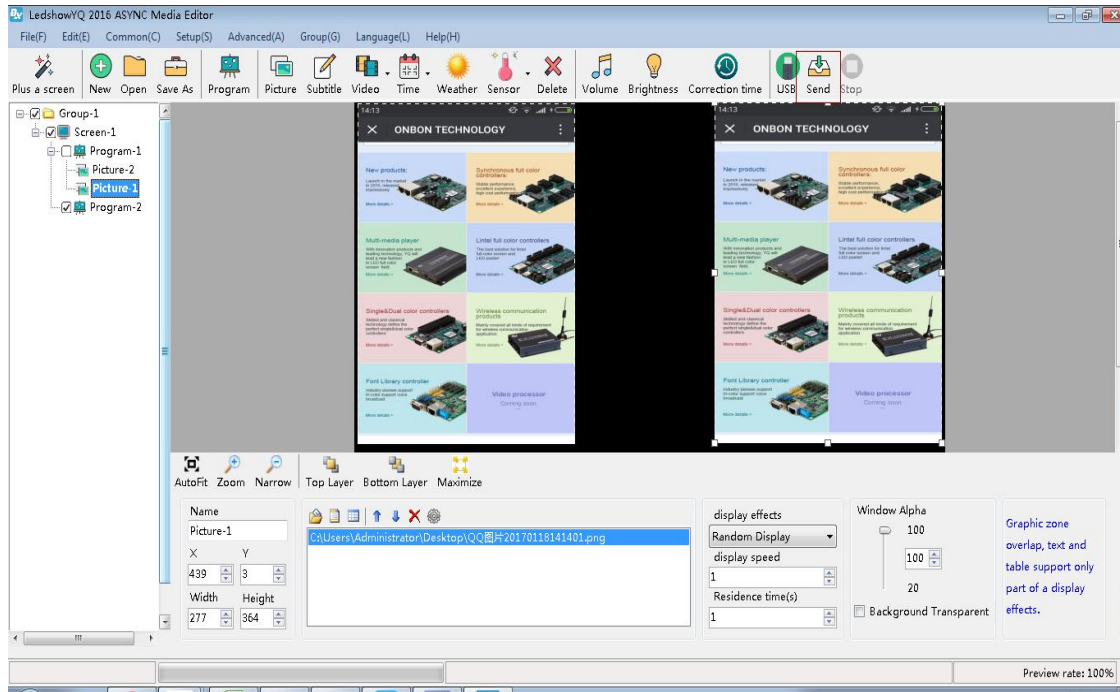
Step 4: Click “ Send to receiver”. Finished all the configurations of receiving card.

6. Edit and Send programs

Open “LedshowYQ 2016”, choose “program 1” on the left side, --- click “graphic “ button on the tool bar as to add a graphic area,--- click “video” button as to add an “video”area. Import the picture or video you want. Check the below:



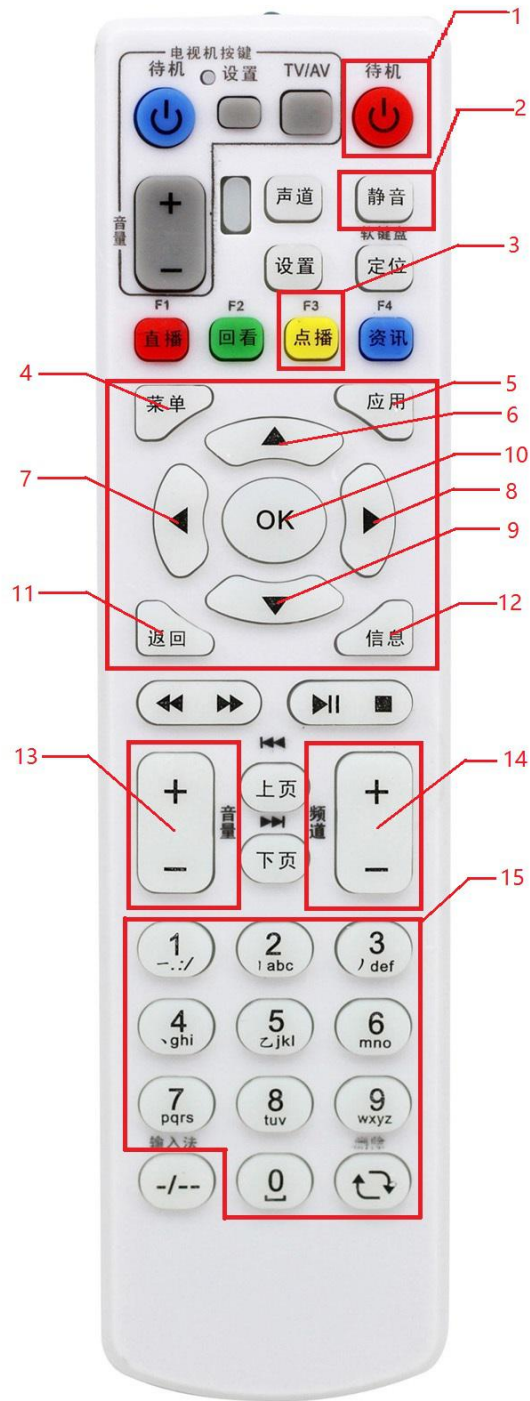
Click “send” as to send the present programs





For more details please refer to the contents under the help menu.

7. Use remote control to select programs

7.1. *Specification of remote control*



ZTE Set-top box remote controller, the buttons marked in red can be used for ONBON controllers ;

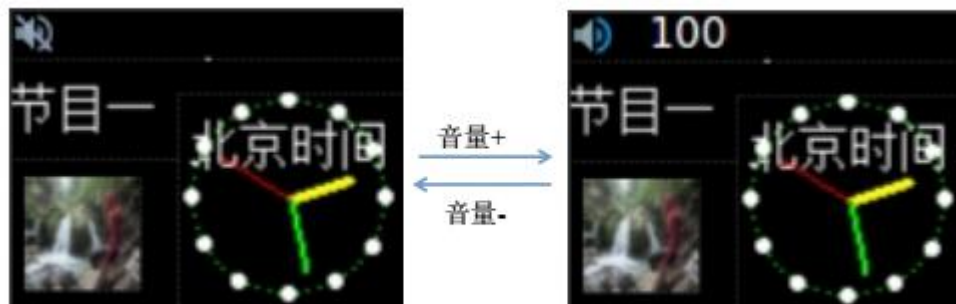
Number	Button name	Main function	Note
1	Power	Power on and power off	
2	Mute	Mute / restore volume	
3	Demand program	Display menu interface and double click will adjust menu interface position	There are many type of controller screen configuration , according to adjustment menu you can see menu interface with different screen parameters
4	Menu	Display / close the menu interface	
5	Application	Enter into test mode	
6,9	▲▼	Add /reduce Brightness	
7,8	◀▶	Fast Increases / Decreases Brightness / Volume	
10	OK	Show current program states and program number	Program states can be  and  , The Minimum program number should be 1
11	Return	Lock/Unlock current program	
12	Information	Controller information	
13	Volume+/-	volume+/-	
14	Channel +/-	Lock +/- program	
15	Number Key	Enter number	In setting interface, the digital key is used for digital

			input. In program play interface, the digital key is used to lock the program.
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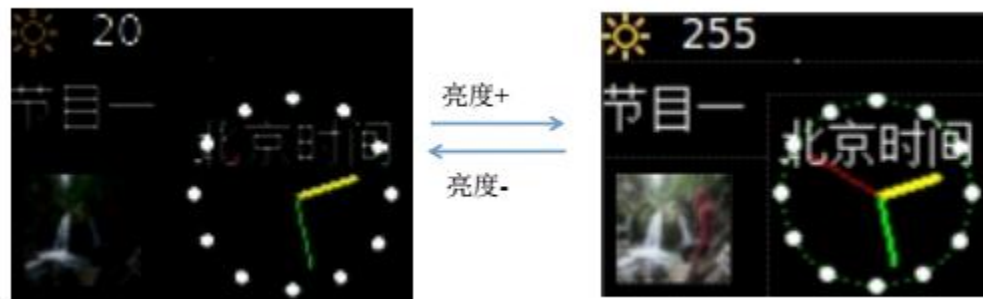
7.2. Main function of remote control

1. Power key :Power key can switch the state of the controller , on power off state the program will stop playing and the screen will be the dark

2. Volume: volume +, - button can adjust volume ,the step length is 1; ◀▶ button will adjust the volume rapidly , the step length is 5; the maximum volume is 100%, the minimum value is 0% . , The mute button will mute the volume



3. Brightness setting : ▲▼ button will increase or decrease the brightness the step length is 1; ◀▶ button can fast adjust the brightness of the fast adjustment, the step is 10. ☀️ The maximum brightness is 255, the minimum is 20.

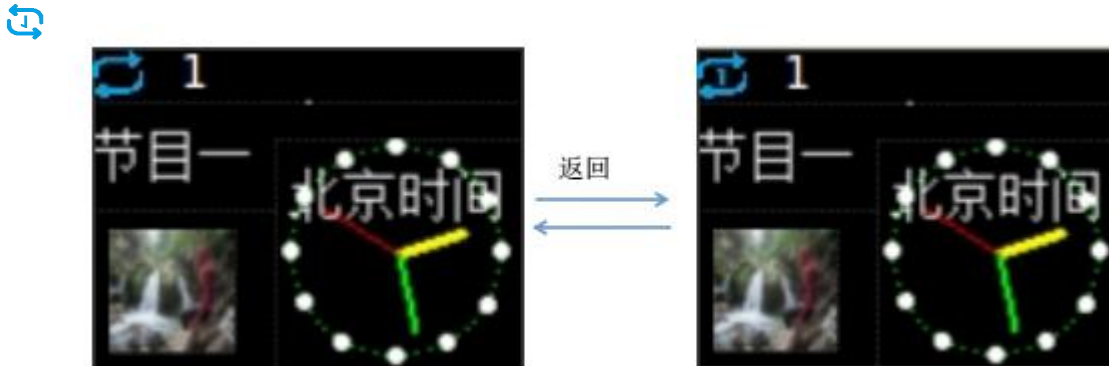


4. Controller information: Click Information button will show the basic information of current controller, including controller type, firmware version, FPGA version, RTC state, SD storage states

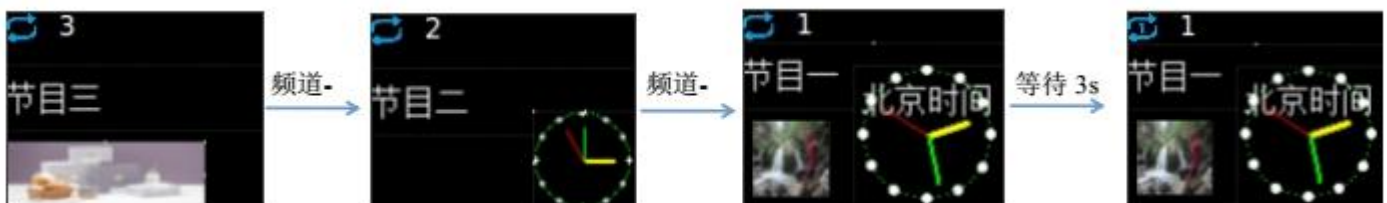
```

控制卡型号: BX_Q3
固件版本: 15103000
FPGA版本: 15072300
RTC: OK
SD: ● 24% G
USB: ● 24% G
  
```

5.Lock Program : Press OK button can show the current program number and display states , loop program mode, The return button can change the current program state, if the current program is in loop state, press the return key it will be locked; if the current program is locked, press the retur key it will be changed to loop state, but it should start with the first program



Press channel +/-button ,it could switch the current program quickly ,after stop the press for 3 seconds, it will lock the corresponding programs



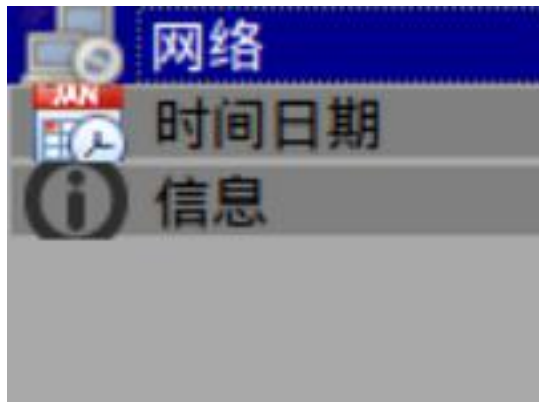
Press the number button to lock the corresponding number of program directly , eg, if you want to lock program 2, you can enter 002 for lock fast(enter 02 or 2 then wait 3seconds can also get the program locked.) If there are three programs on the control card, Press 2 for lock Program 2



4. Menu button: Press menu button to display the controller menu options, since different screen parameters may be different, please press "on demand" key to adjust the menu button, move the display order as following:



5.The first level of the menu interface is the language setting , it can support for Chinese and English (The following samples are in Chinese):

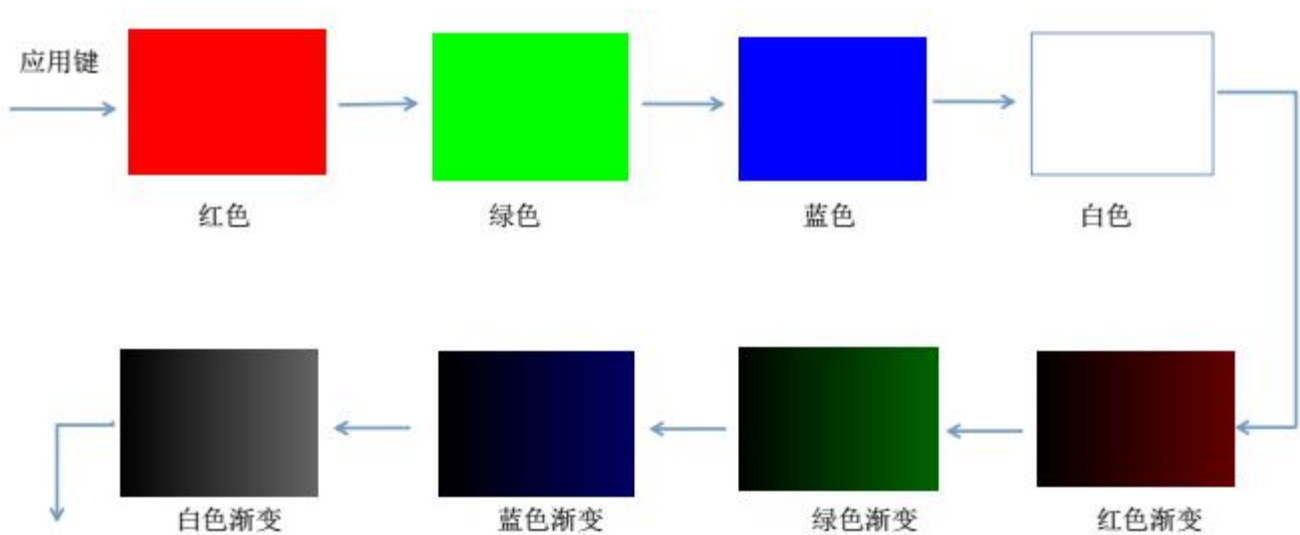


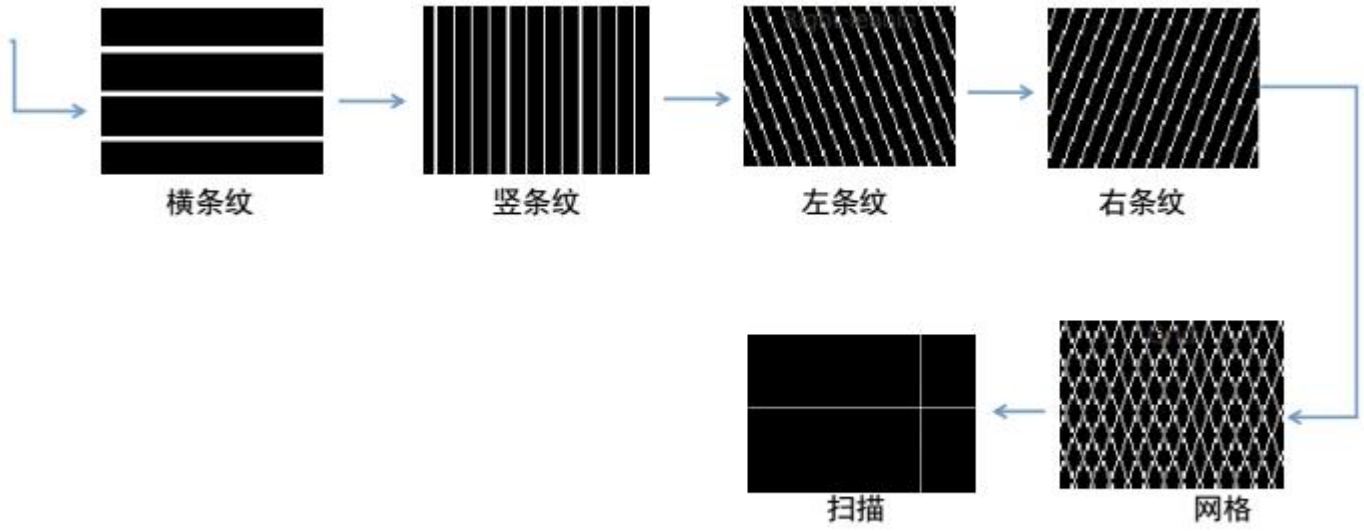
6.The second level of the menu interface allows you to set the IP configuration, set the time and date, and the controller information.

Set Date and Time



7. Test mode: Press application button ,enter into test mode, check if the modules on the screen are working normally, use these buttons to ▲▼◀▶ switch the first and next test mode,it will also switch automatically every 10 seconds.





8. Factory reset

BX-YQ3 / BX_YQ4 / BX_YQ2E series controllers support reset to factory firmware. If the user finds that the current firmware is running abnormally, or after updated new version but found that some of the original features are lost. The controller can be reset to factory state. After the factory settings are restored, the controller will be restored to the factory state. Scan parameters, IP, programs will be deleted ;So users need to re-set the controller IP, screen parameters and also program.

Method: press Multi function button, last about 10 seconds, until the indicator D8 re flash.

9. Test led display screen

You could enter into test display screen mode by pressing OK button. Then, there will be kinds of testing window on the screen. Under the testing mode, click “▲”、“▼”could switch the testing window; long press OK button exit this testing mode.

You can also use remote control enter test mode;

10. Trouble shooting

10.1. Indicator light

The state indicator is composed of two indicator lights: "power / operation indicator light (green light)", "medium / fault indicator light (Yellow light)":

Number	Action	Specification
1	Green light flash	Normal
2	Green light always on	SD card gets trouble
3	Yellow light flash in 200ms	U/Flash disk upload the programs
4	Yellow light flash in 2s	4G network patency

10.2. FAQ

Number	Phenomenon	Solution
1	Power supply indicator light does not work	Check the connection of power supply, measure the voltage of power supply, with normal voltage.
2	Power supply indicator not flash	Check the power supply, and check the connection of modules and the accessories. Get power supply again.
3	Communicate with software failed	Check the parameters setting on the software, check the communication line, and check the communication interface on PC.
4	Controller time error	Open software, correction time again
5	Cannot save the time after correction time	Change RTC button battery.

6	Data of Temperature and Humidity sensor is not correct	Check the connection of temperature & humidity sensor.
7	Status light D9 always light	Change SD card.

11. Notes

- ◆ BX-YQ series, used together with 5V power supply, do not mix the positive and negative side
- ◆ When plug SD card ,please turn off power first
- ◆ Please avoid crash the controller
- ◆ Put the controller to dry and cold place

12. Contact us

Shanghai ONBON Technology Co.,Ltd (Headquarter)

Address : Floor 7, Tower 88, 1199#, North Qinzhou Road,Xuhui District, Shanghai ,China

Website : <http://www.onbonbx.com>

Onbon (Jiangsu) photoelectric industrial Co., Ltd.

Address : No 1299 Fuchunjiang road ,kunshan city , Jiangsu province , China

Tel : 00-86 15921814956

Email : onbon@onbonbx.com