BX-YQ3/YQ4/YQ2E

User Manuel

2017-1-12

Copyright

Version	Date	Author	Description
1.0	2017-1-12	Chen Min	BX-YQ3/YQ4/YQ2E user manual

Catalogue

BX-YQ3/YQ4/YQ2E user manual

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 withBX-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
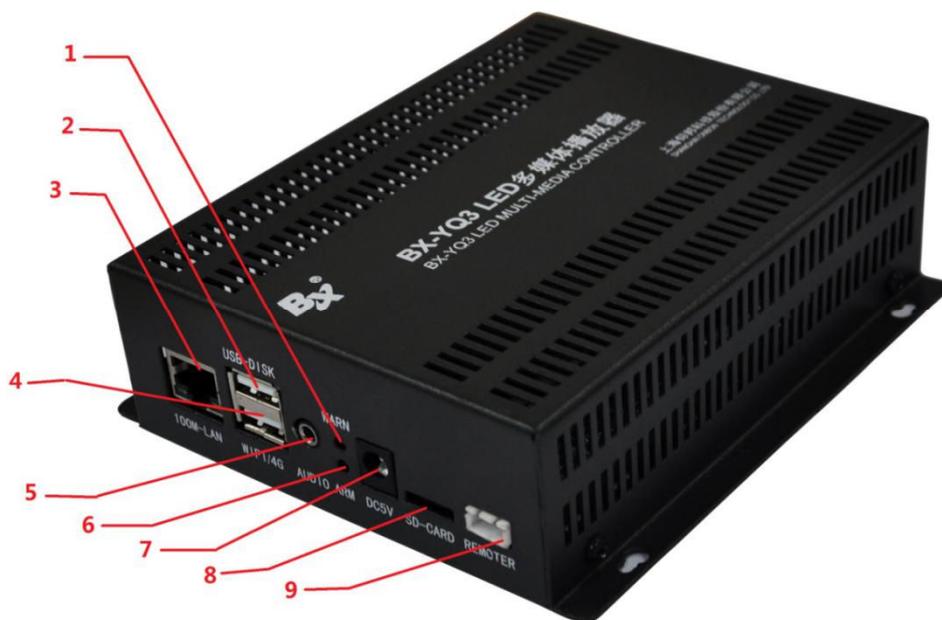
Number	Interface name	Description
1	Warning light	The warning light is on when there is no storage medium
2	USB interface 0	U disk Plug-and-Play
3	Ethernet interface 0	Connect with PC
4	USB interface 1	WiFi &4G wireless interface
5	Audio output interface	Double track，stereo sound
6	Power light	Flashes 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:

From right to left   From left to right
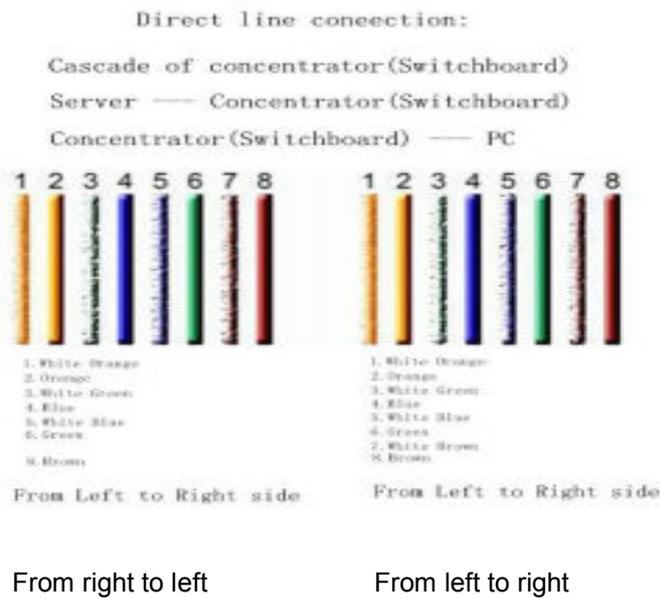
Cross line connection: P C ———   P C

　　　　Concentrator ——— Concentrator

　　　　Switchboard ——— Switchboard

1 2 3 4 5 6 7 8　　　1 2 3 4 5 6 7 8

1.White Green
2.Green
3.White Orange
4.Blue
5.White Blue
6.Orange
7.White Brown
8.Brown

From Left to Right side

1.White Orange
2.Orange
3.White Green
4.Blue
5.White Blue
6.Green
7.White Brown
8.Brown

From Left to Right side

From right to left　　　From left to right

3. Controller specification

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

Unit: Millimeter

USB-DISK

WARN

44.00

100M-LAN WIFI/4G AUDIO ARM DC5V SD-CARD REMOTER
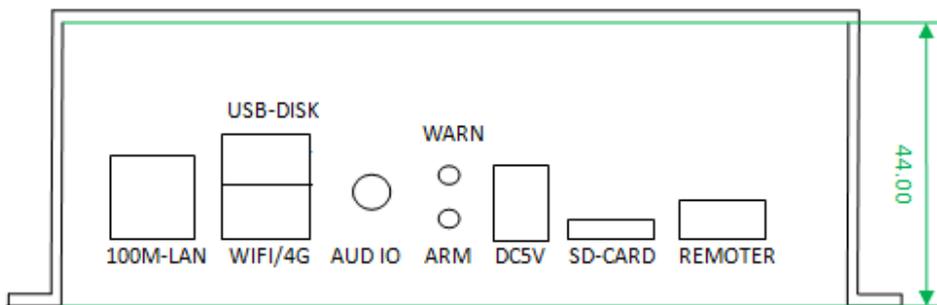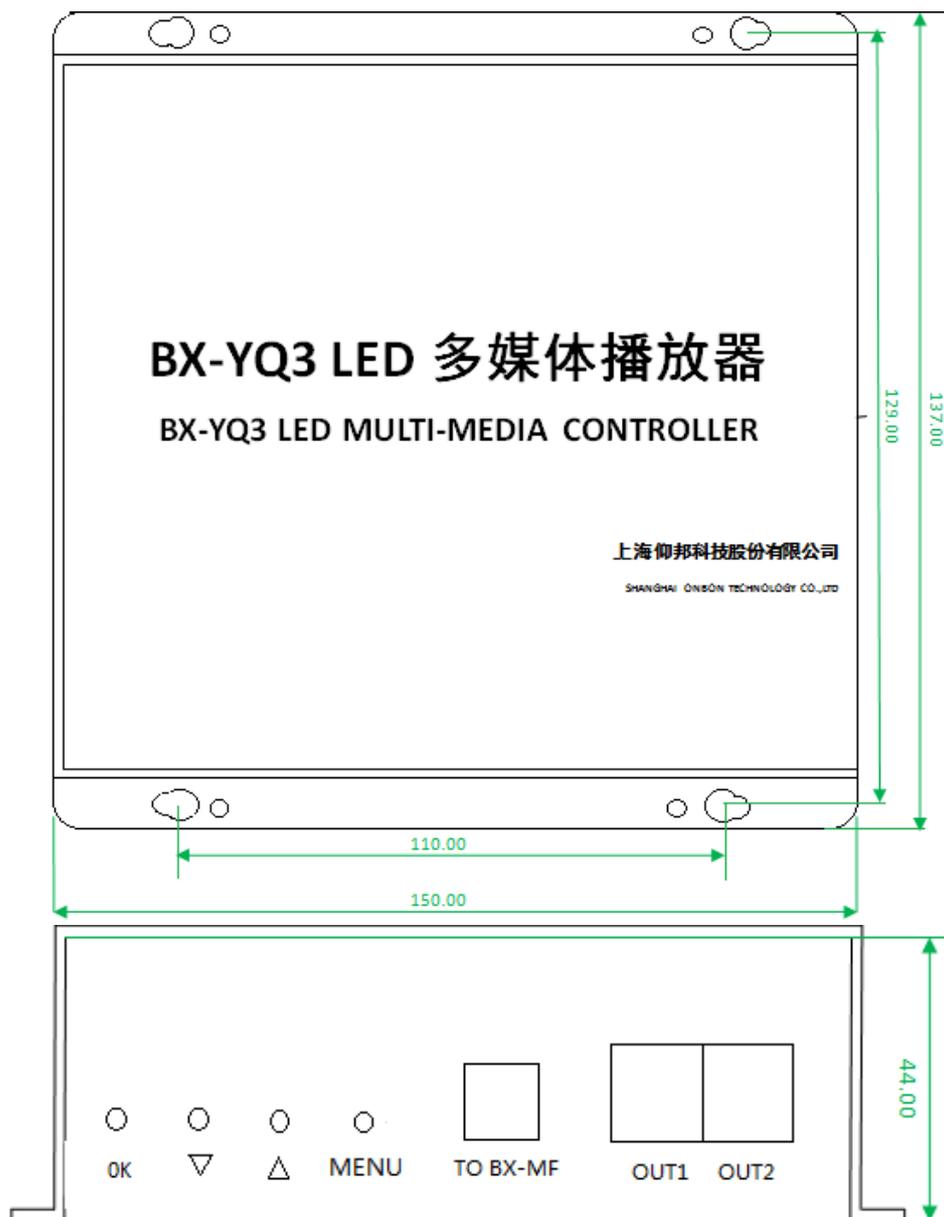
4. DC characteristic

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

Working electric current: ≤1360 mA

Power: ≤4W

5. Steps for use

5.1. BX-YQ3/YQ4/YQ2E install
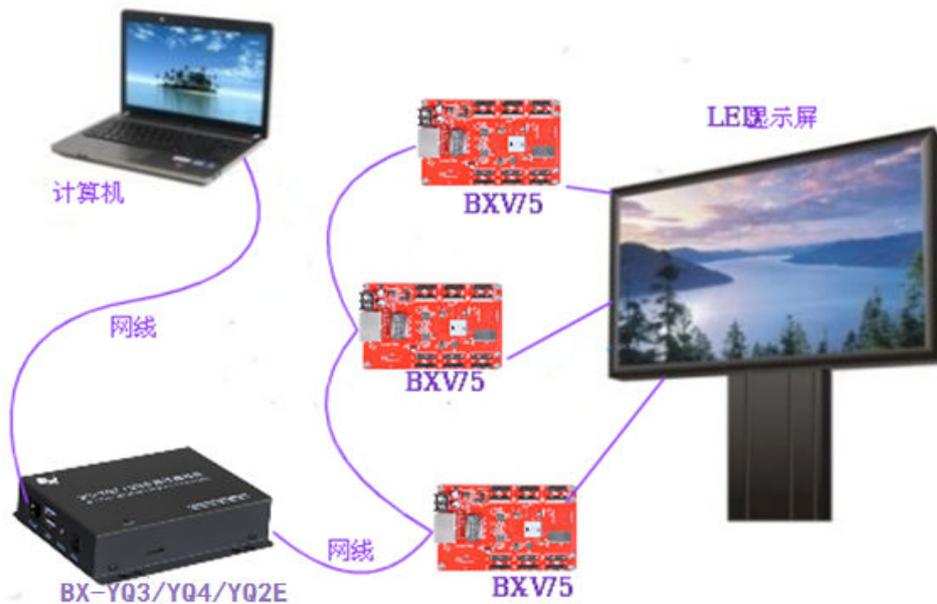
5.2. Setup controller IP address

Open "LedshowYQ 2016", click " setup" -- "set screen parameters", input " 888 " as to setup the screen parameters.
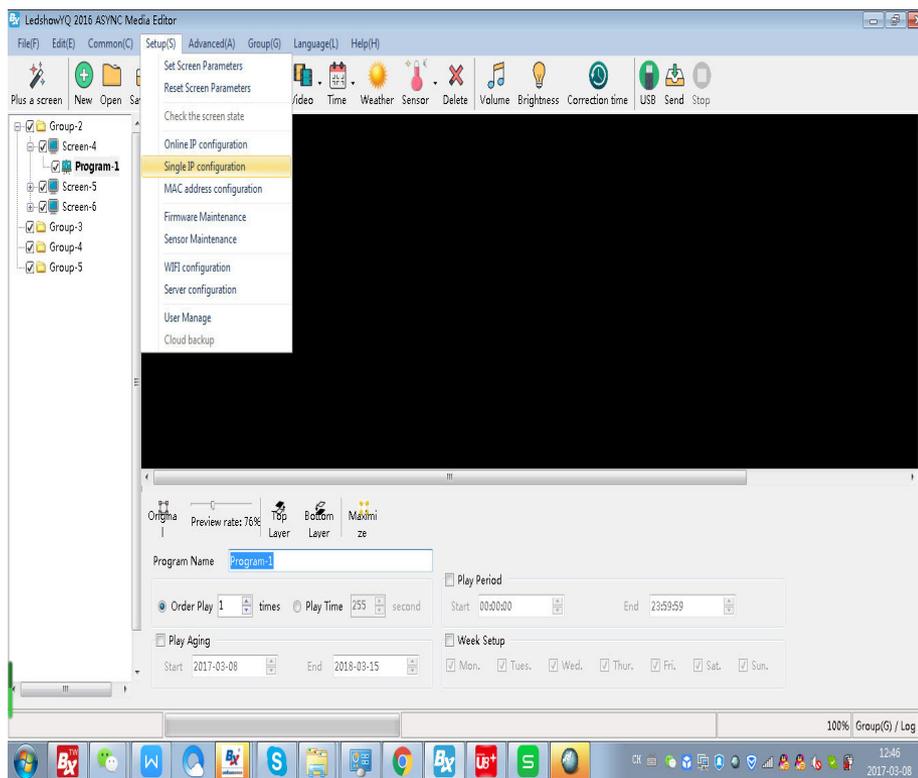
Click setting when finished setting IP details

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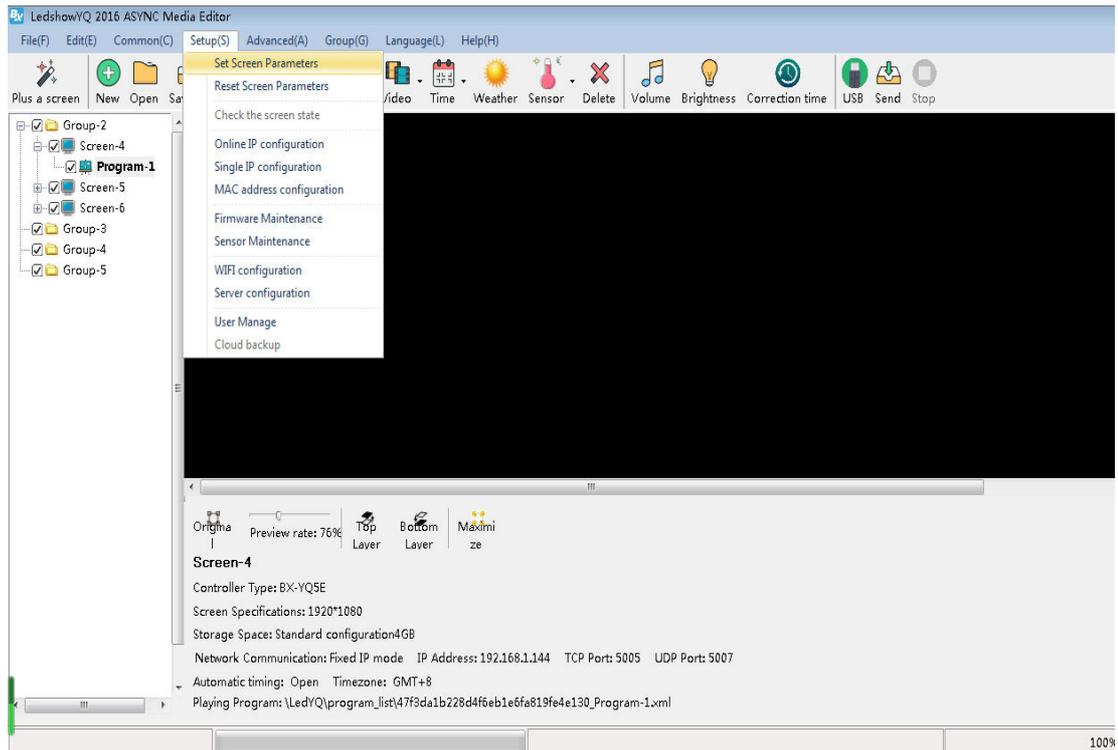
The following is the steps for setting parameters:
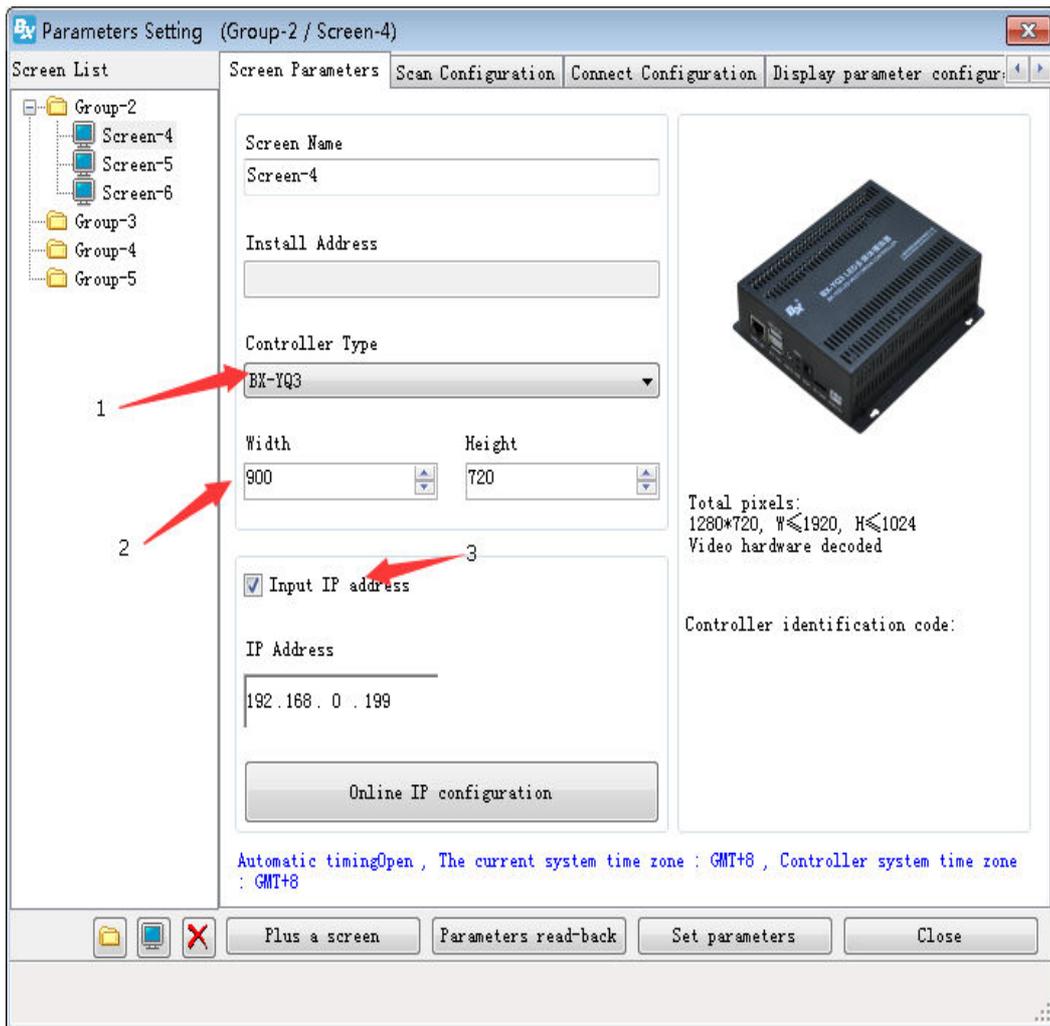
Step 1: Select the correct controller model, usually, if your connection is right, the PC software could identify the controller model automatically, under this circumstance, you do not need to select manually.please choice BX-YQ3 if you are using BX-YQ3

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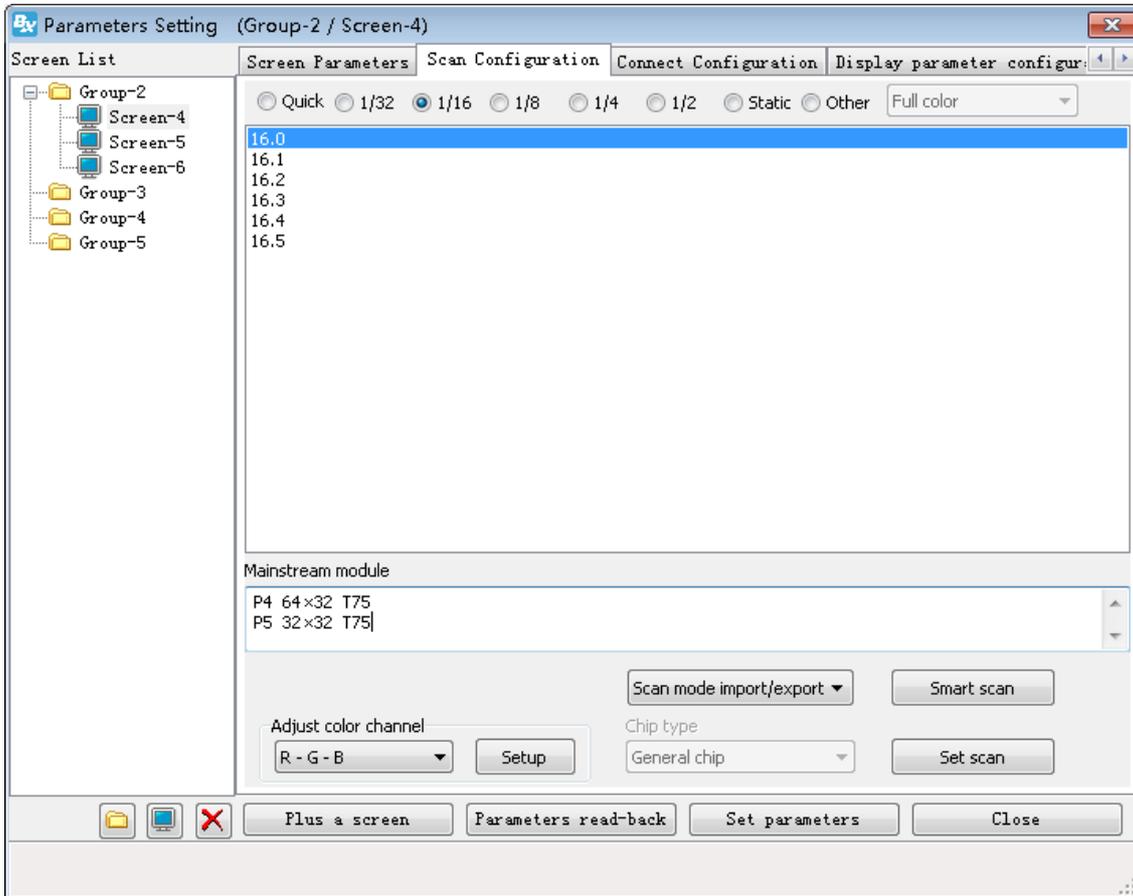
In the scan mode, if the one in our software can not correspond with your module, you need to do "smart scan", Then you could choose it and set.

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 without138, cascade direction, etc. You need to set it according to your modules.
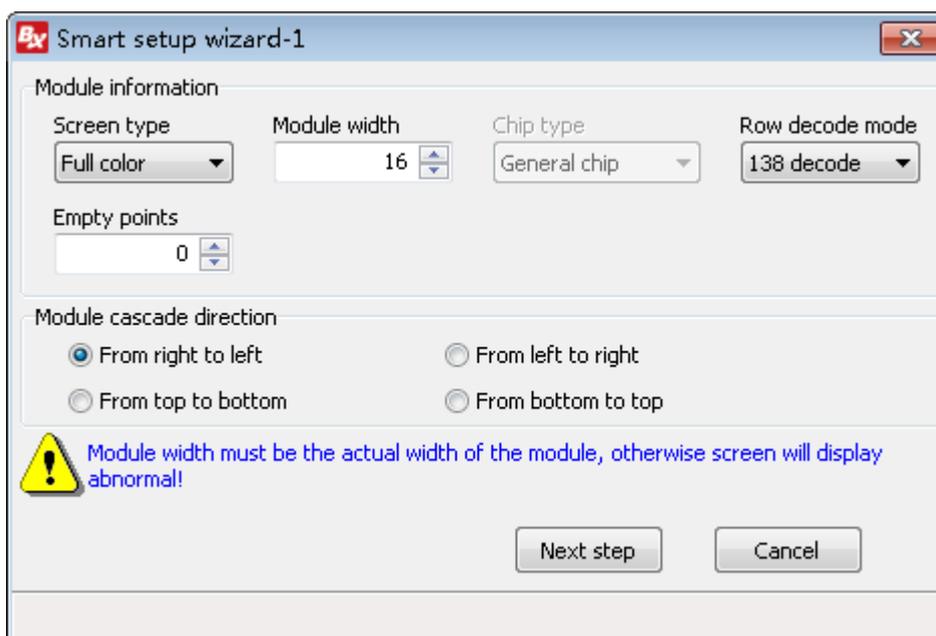
Click " next step", enter into " Smart setup wizard-2", check the picture below:
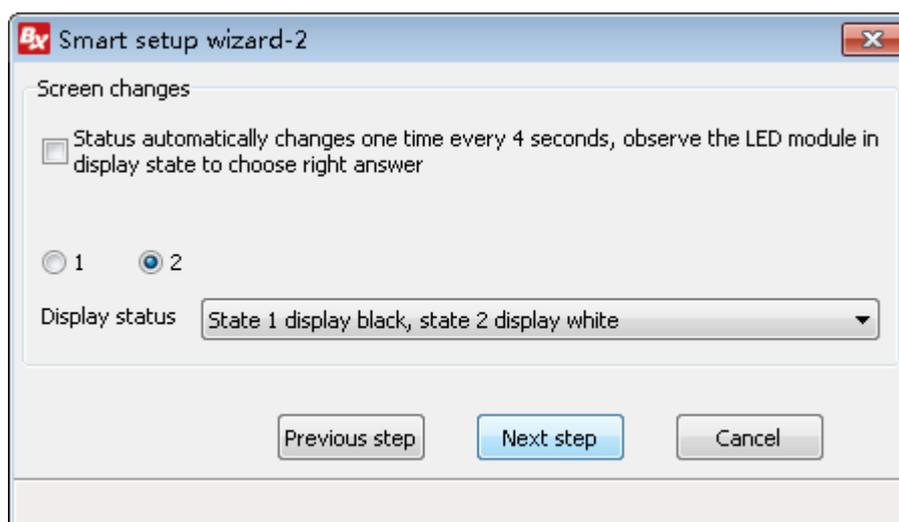

Select the correct display status, click " next step ", enter into " Smart setup wizard-3", check the picture below:
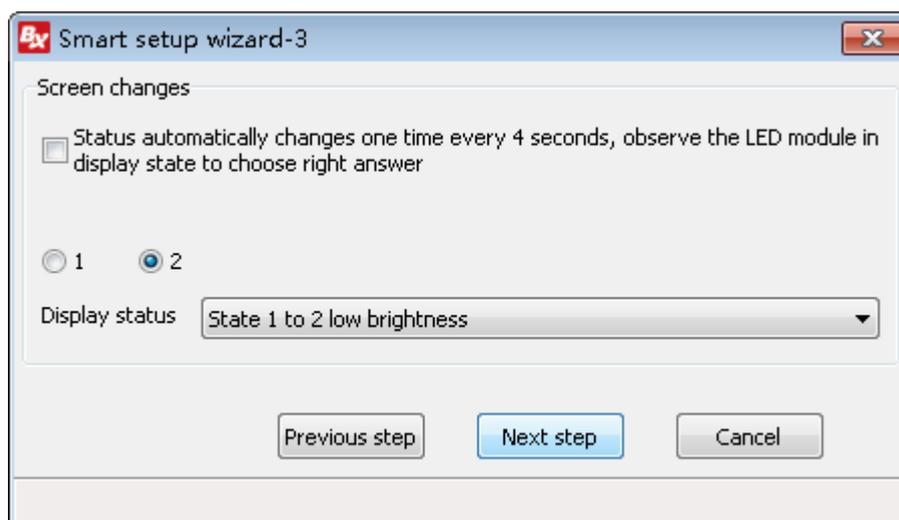
Select the correct display status, click "next step", enter into "Smart setup wizard-4", check the picture below:
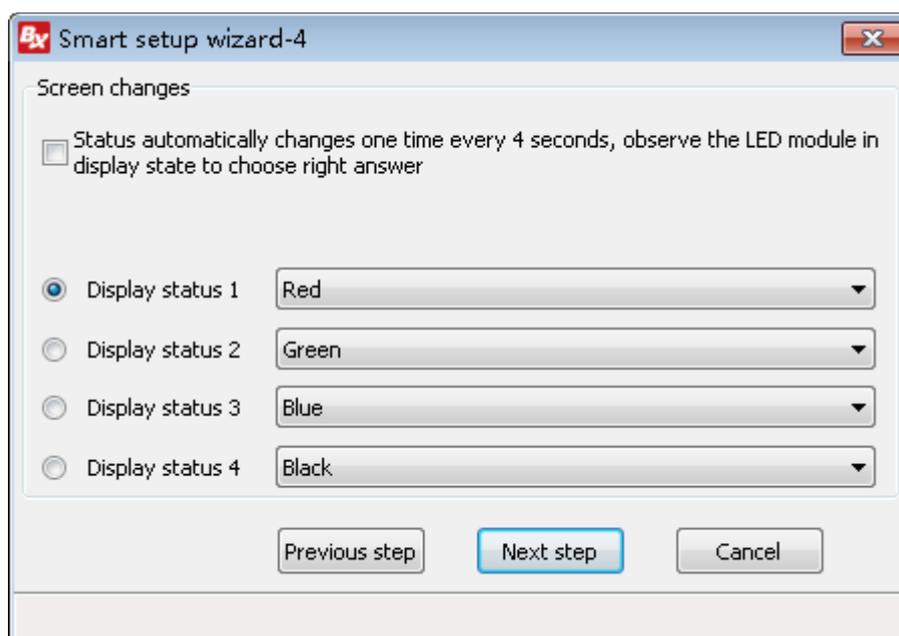

Select the correct display status, click "next step", enter into "Smart setup wizard-5", check the picture below:
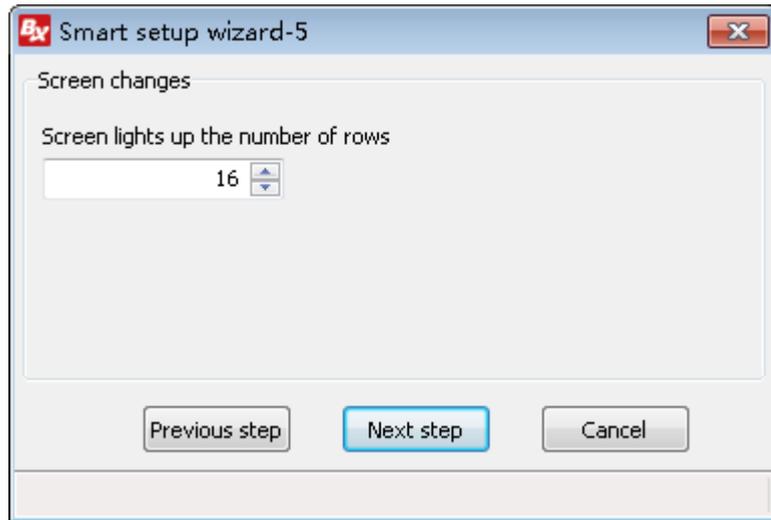
Select the correct display status, click ″next step ″, enter into ″Smart setup wizard-

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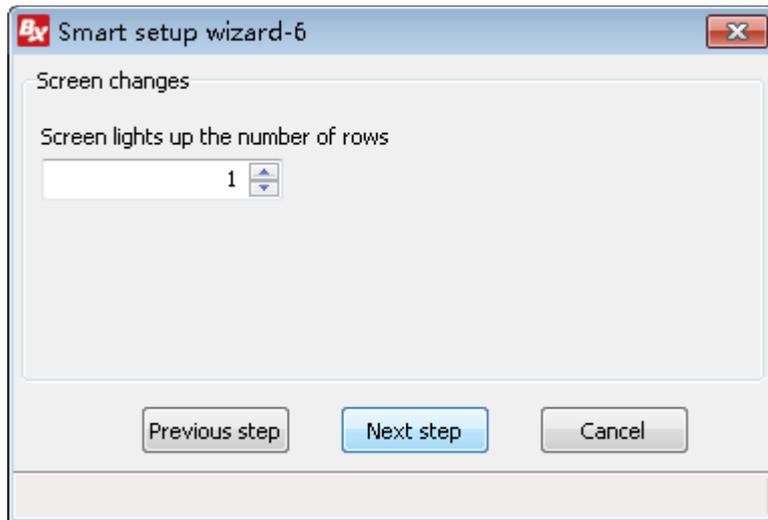
Select the correct display status, click ″next step ″, enter into ″Smart setup wizard-

7″, check the picture below:
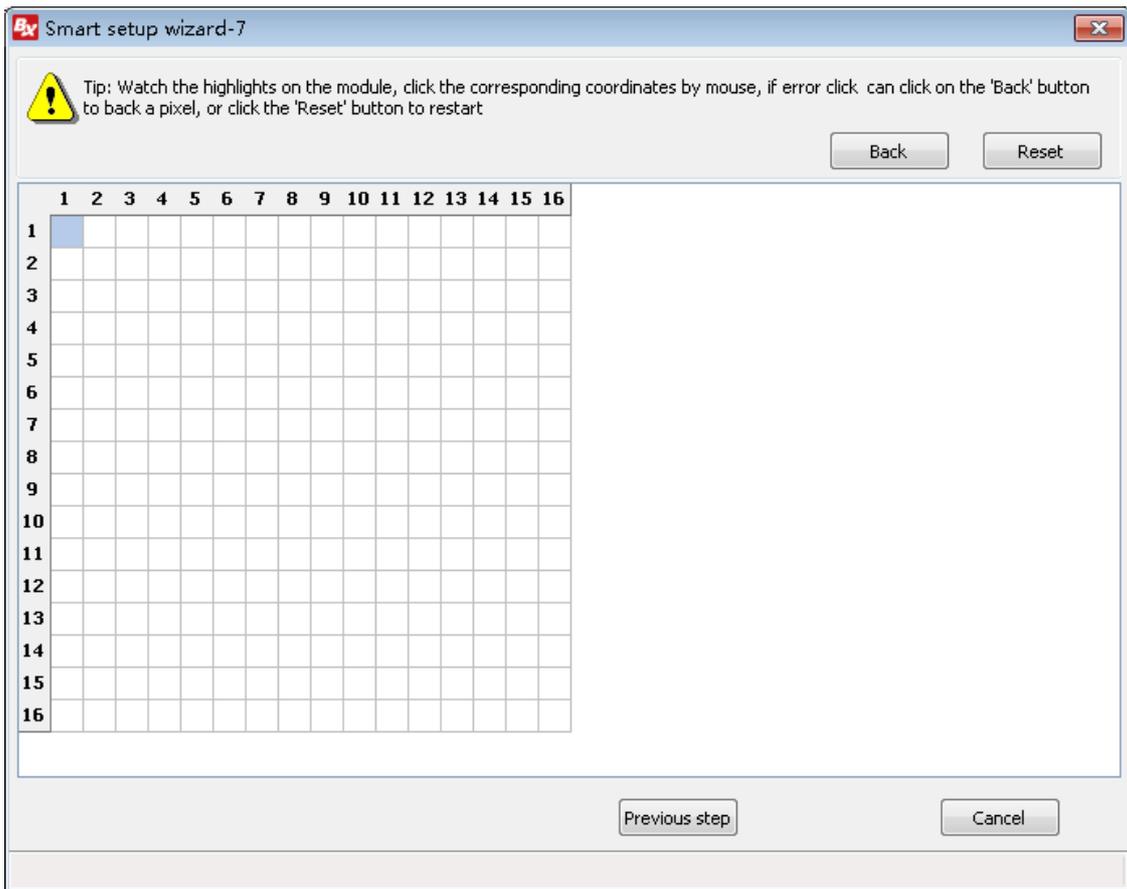
After you finished all the steps, there will be a new scan mode. Next, the PC will prompt you that send the scan configuration to controller.

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

BX-YQ3/YQ4/YQ2E need to work together with full color receiving card such asBX-V75/BX_V/BX_V75L，please set the receiving card as the following steps
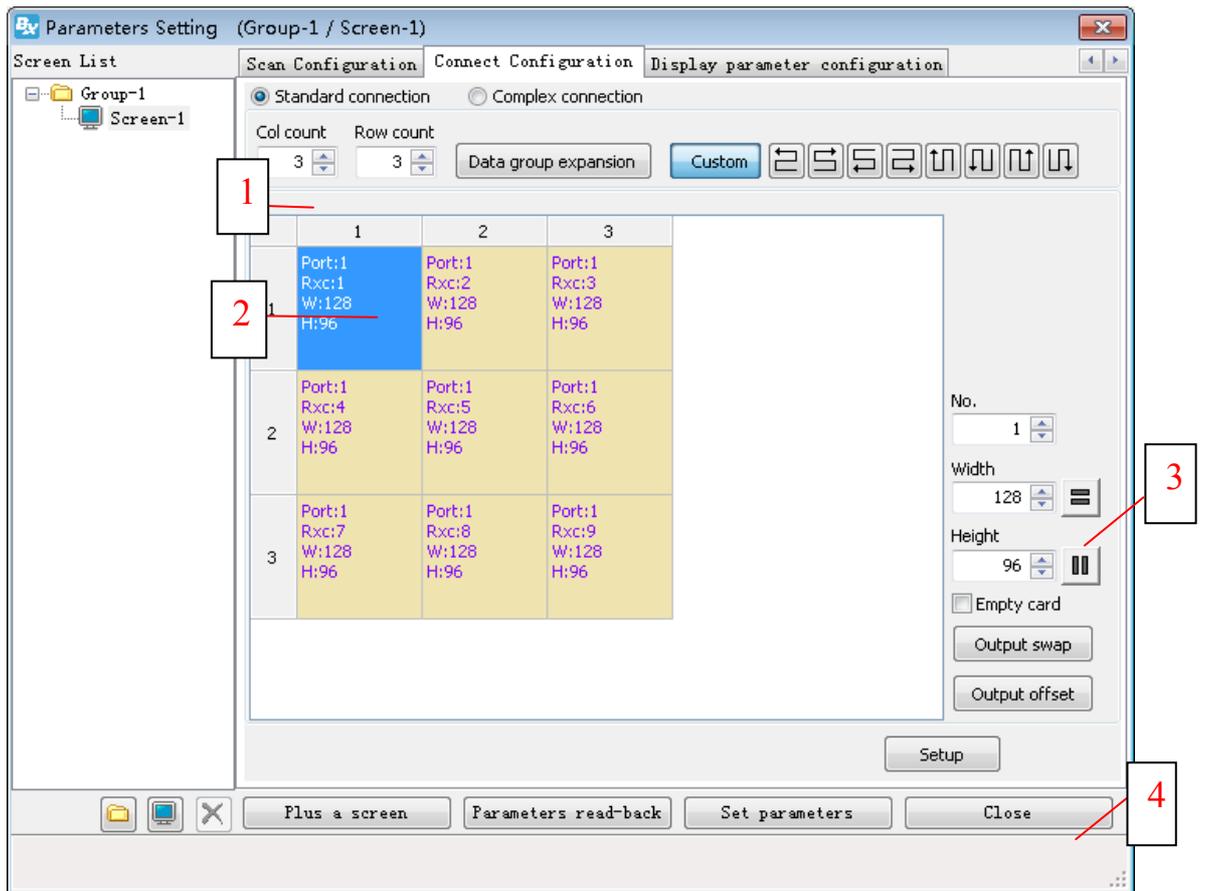
Step 1: Input the correct cards quantity horizontally and vertically according the actual quantity you use on the screen;

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:
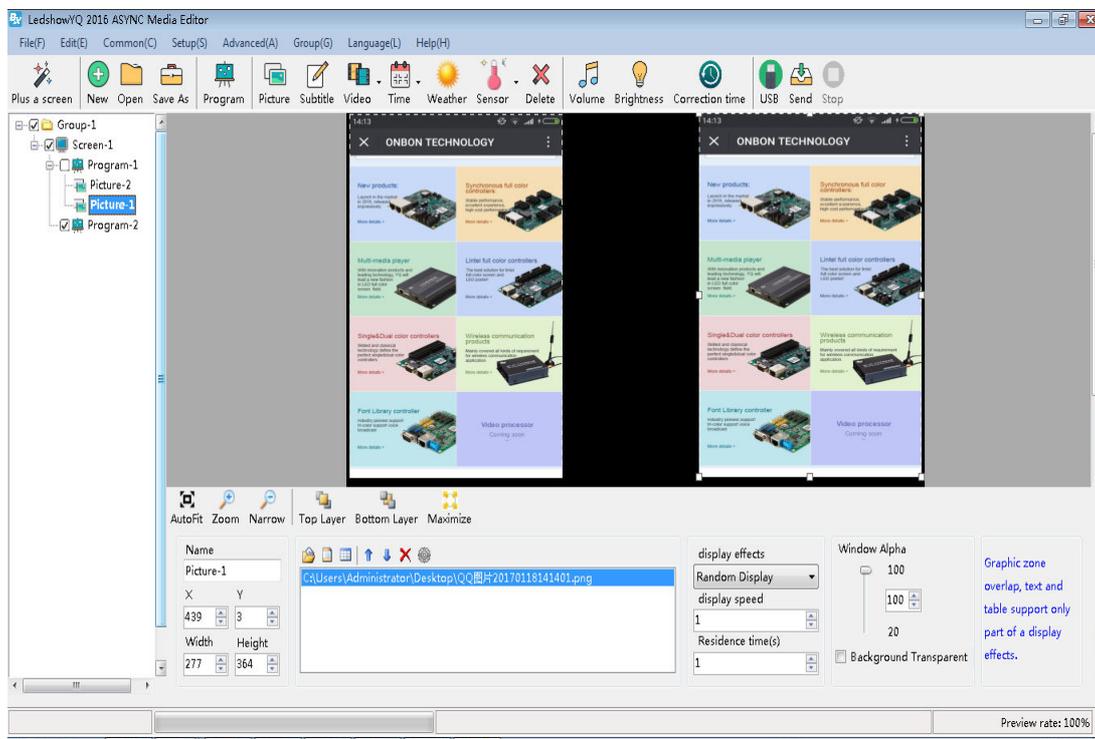
Click "send" as to send the present programs
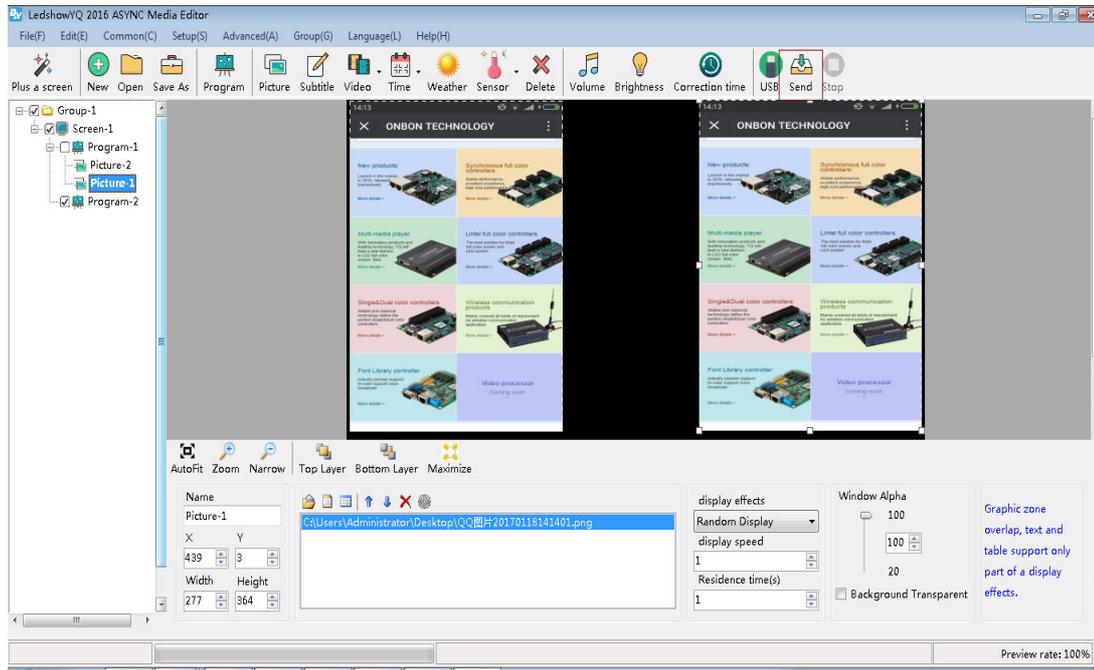
For more details please refer to the contents under the help menu.

7. Use remote control to select programs

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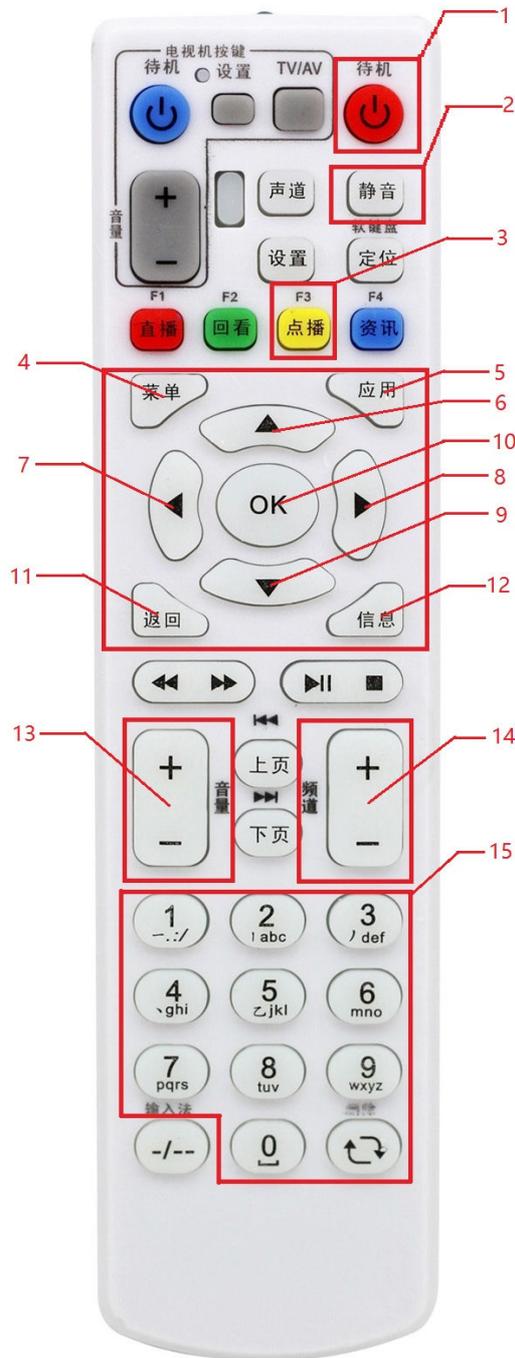
ZTE Set-top box remote controller,the buttons marked in red can be used for ONBON controllers；

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 1 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. |

## 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 is0%. , The mute button will mute the volume
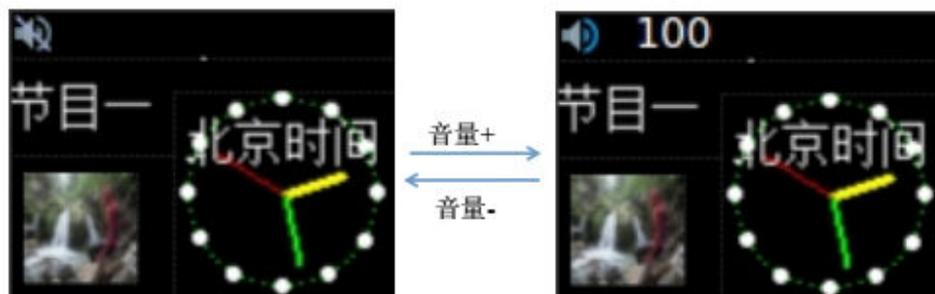
3.Brightness setting :▲▼ button will increase or decrease the brightness the step length is 1;◄► button can fast adjust the brightness of the fast adjustment, the step is 10.The maximum brightness is 255, the minimum is 20.
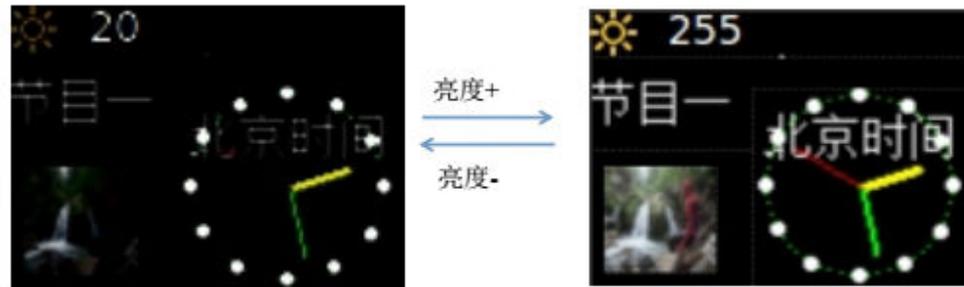

 4.Controller information:Click Information button will show the basic information of current controller, including controller type ,firmware version , FPGA version, RTC state, SD storage states

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
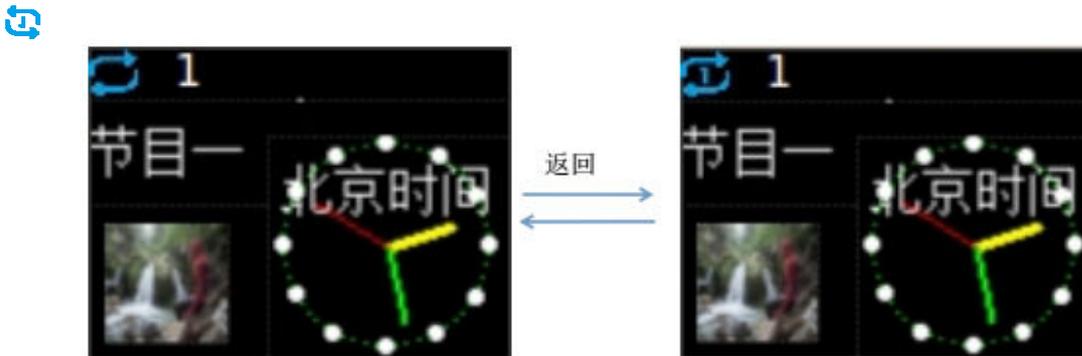
Press channel +/-button ,it could switch the current program quickly ,after stop the press for 3 seconds, it will lock the corresponding programs
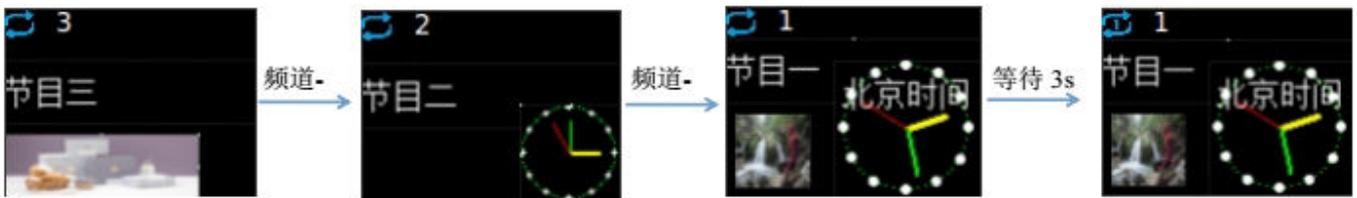
Press the number button to lock the corresponding number of program directly , eg, if you wwant to lock program 2, you can enter 002 for lock fast(enter 02 or 2 then wait 3seconds can also get the program locked.) If there are three programs on the control card, Press 2 for lock Program 2
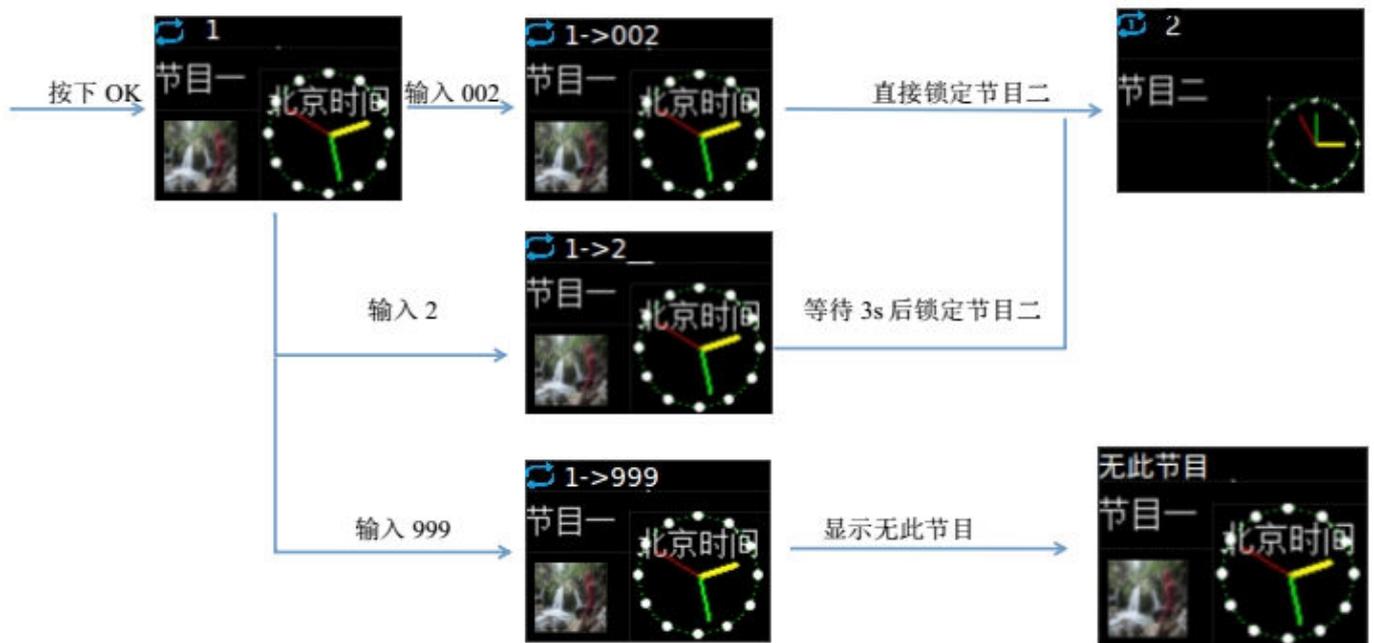
4. Menu button: Press menu button to display the controller menu options, since different screen parameters may be different, please press "on demand" key to adjust the menu button, move the display order as following:

Screen size 500x360
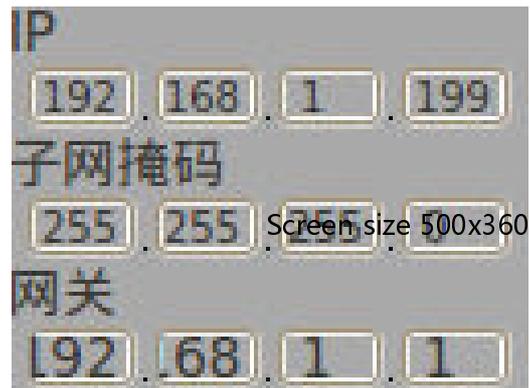
5.The first level of the menu interface is the language setting , it can support for Chinese and English (The follo samples are in Chinese):
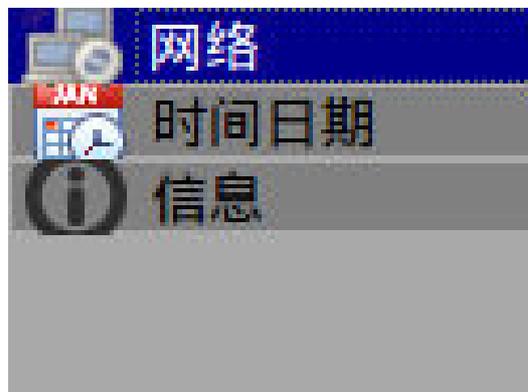
6.The second level of the menu interface allows you to set the IP configuration, set the time and date, and the controller information.

Set Date and Time

日期
| 2015 | 11 | 20 |

时间
| 12 | 00 | 00 |

2015-11-20 12:00:00
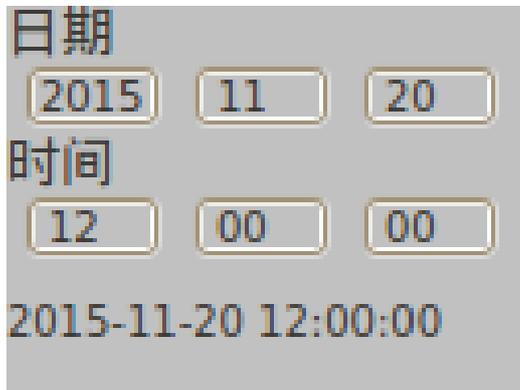
7. Test mode: Press application button ,enter into test mode, check if the modules on the screen are working normally, use these buttons to ▲▼◄► switch the first and next test mode,it will also switch automatically every 10 seconds.

应用键

红色   绿色   蓝色   白色

白色渐变   蓝色渐变   绿色渐变   红色渐变

横条纹　　　　　　　竖条纹　　　　　　　左条纹　　　　　　　右条纹

扫描　　　　　　　　网格
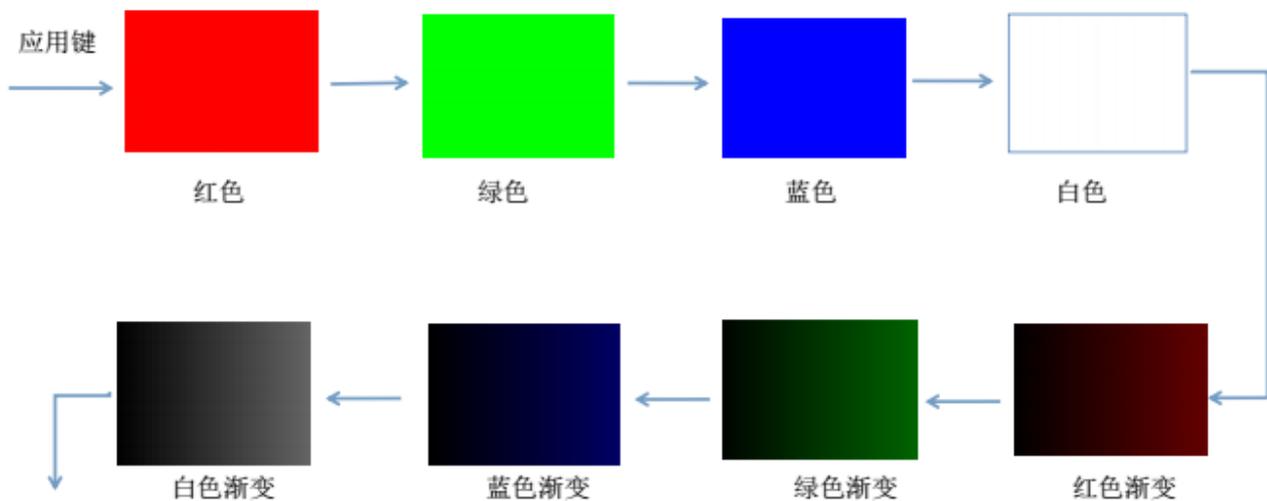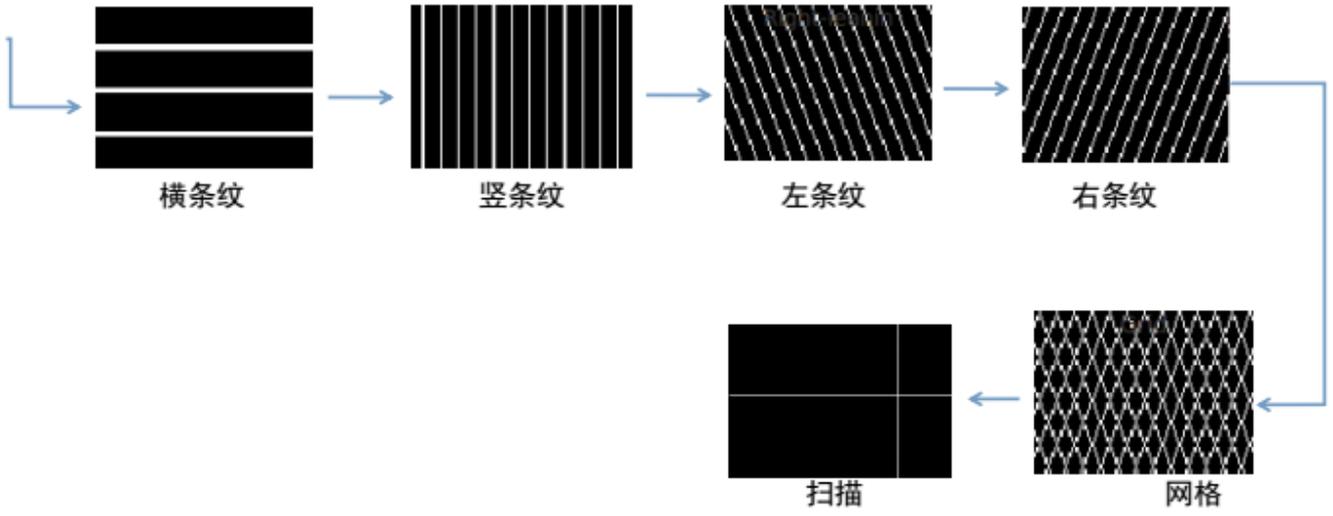
8. Factory reset

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

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