

User Manuel

6K series controller

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Catalog

| | |
|---|-----------|
| User guide..... | 3 |
| Hardware connection..... | 3 |
| Parameter setting..... | 3 |
| Send static program..... | 12 |
| Finish edit programs..... | 14 |
| Sent dynamic programs..... | 14 |
| Communication setting..... | 15 |
| Serial communication..... | 15 |
| GPRS Communication..... | 16 |
| 4G DTU Communication..... | 18 |
| Controller firmware maintaine..... | 20 |
| Restore factory settings..... | 20 |

User guide

BX-6K series mainly for special applications, flexibly to meet the secondary development and customized requirements.

Based on the font pattern design, it is suitable for update info in real-time .open protocol,easy for secondary development.Support Ethernet ,serial ,wireless communication,widely used in It is widely used in industrial field, matched equipment, logistics warehouse, on-board display, intelligent station and cluster display system. The following will take 6K1 (Network + U) as an example to introduce how to use BX-6K series controller.

Hardware connection

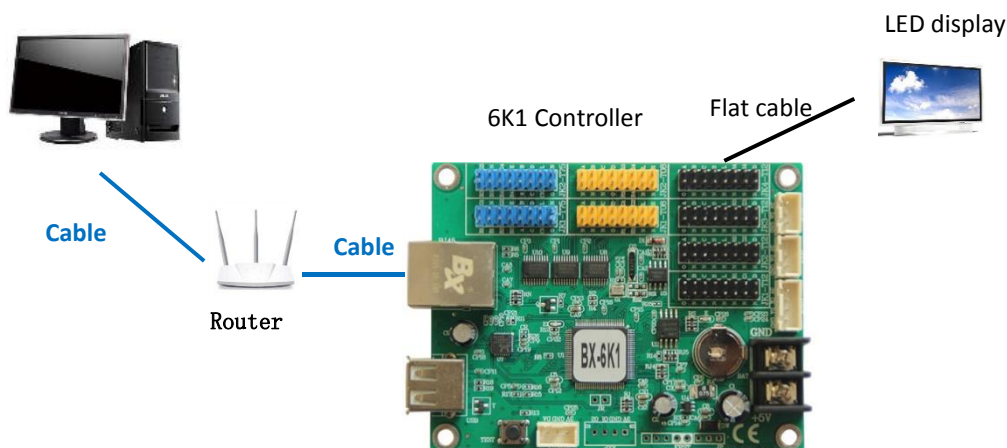


Image 1

Parameter setting

Step1 set communication mode

Open LedshowZK software,click "setup" —> "set screen parameter" —>enter

password "168" ,then enter "screen parameter setting " interface. Select the controller type and communication mode .

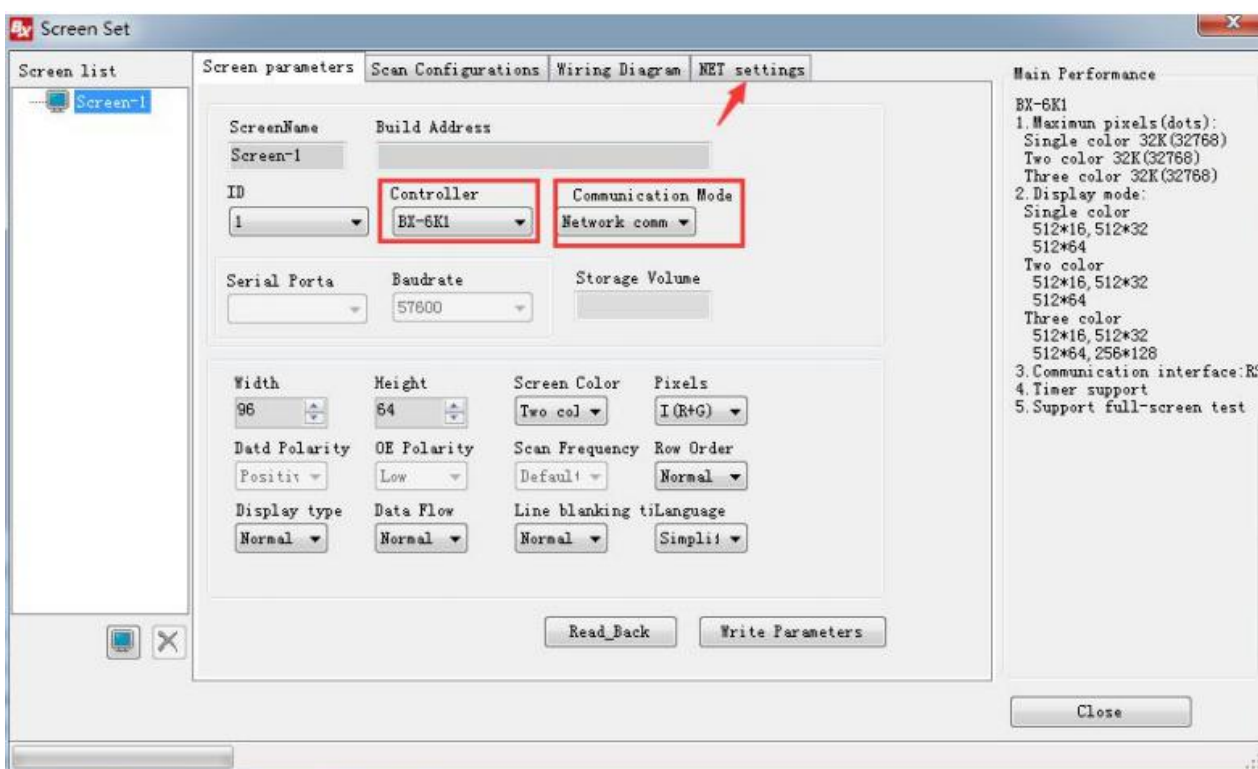


Image2

Step 2 Net setting

Click "Net setting" , choice "Direct link" or "Fixed IP mode" .



Picture 3

Image3

- Direct link mode

Select "Direct link mode" , After setting the width and height, click "load screen parameter".

- Fixed IP mode

Select "Fixed IP" mode , click "IP setting

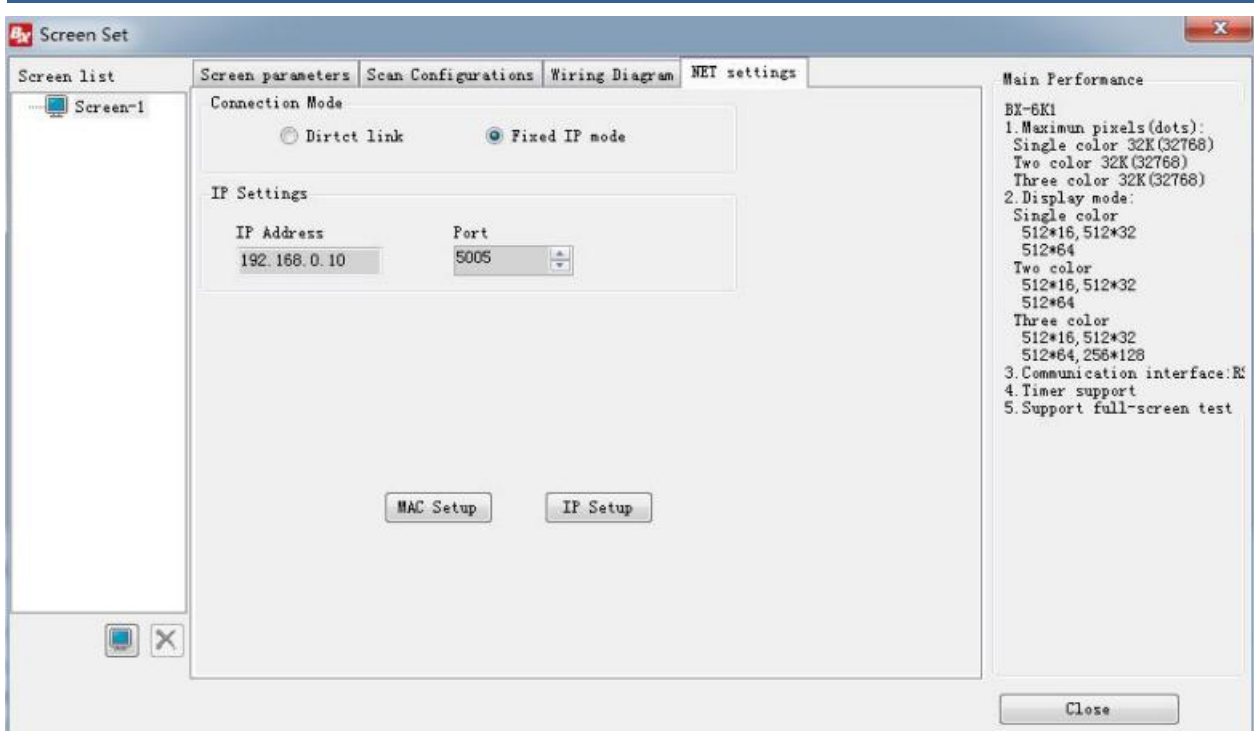


Image4

In the "IP setting" interface, fill in the IP address, subnet mask, gateway, port and other parameters, and then click "setting" to finish.

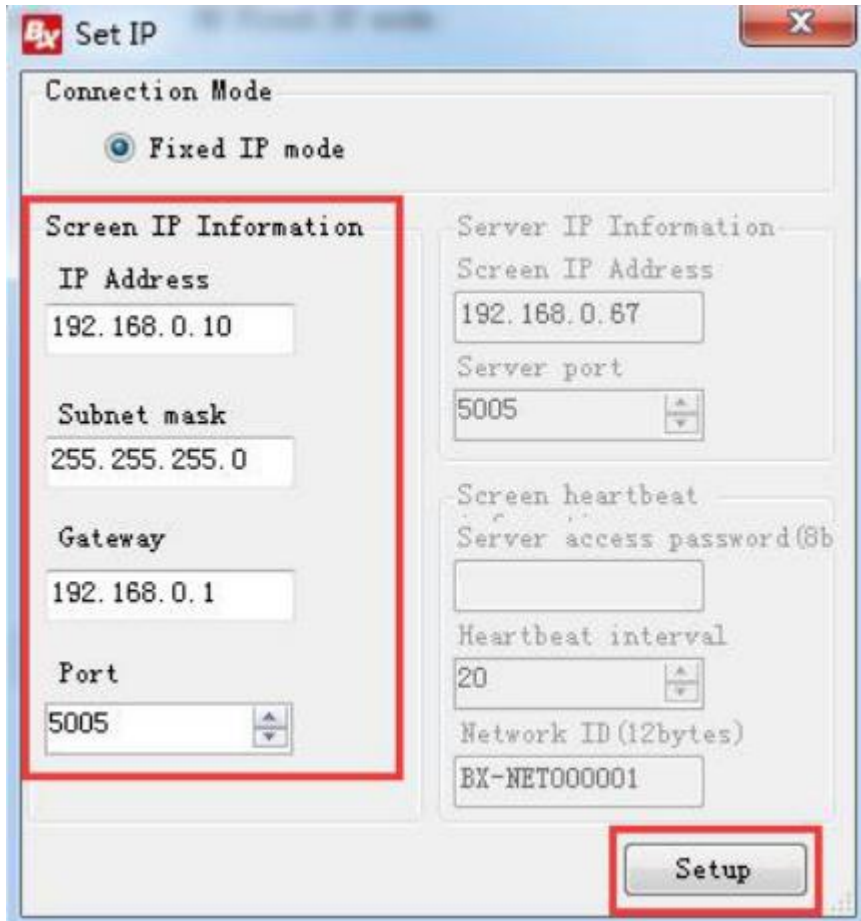


Image5

Finally, in the screen parameter setting interface, after setting the width and height, click load screen parameter.

Step 3 Scan setting

In the “set screen parameters” --click “scan configuration” option ,then go to the scan configuration interface,as shown in picture , user can set “scan mode””color Channel””data polarity””OE polarity””chip model””smart scan configuration” and “scan mode export/import”

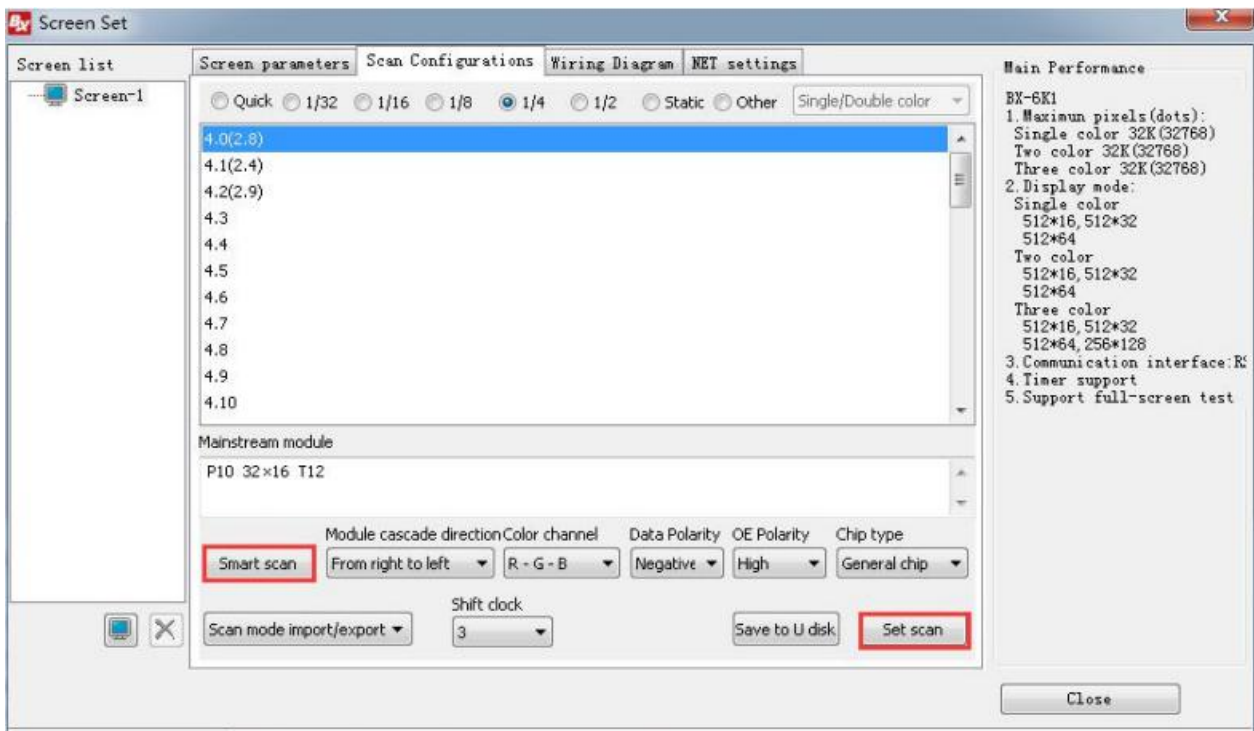


Image6

User can use smart scan configuration to set the scan mode if don’ t know which one is suitable for the module.

Smart scan setting

Click “smart scan configuration” --”smart setup wizard-1”to set the parameters.

Screen type: single color dual color and full color

Module width: user can input the module width according to the LED screen total pixel

for one line

Chip type: default is general chip ,also can specified the LED screen chip.

Row decode mode: including no decode, 138 decode,74HC595 decode and RT5958 decode, usually select138 decode.

Empty points: when use empty points ,can input the empty points numbers.

Module cascade direction:receiving card connection direction :from right to left ,from left to right,from top to bottom,from bottom to top.

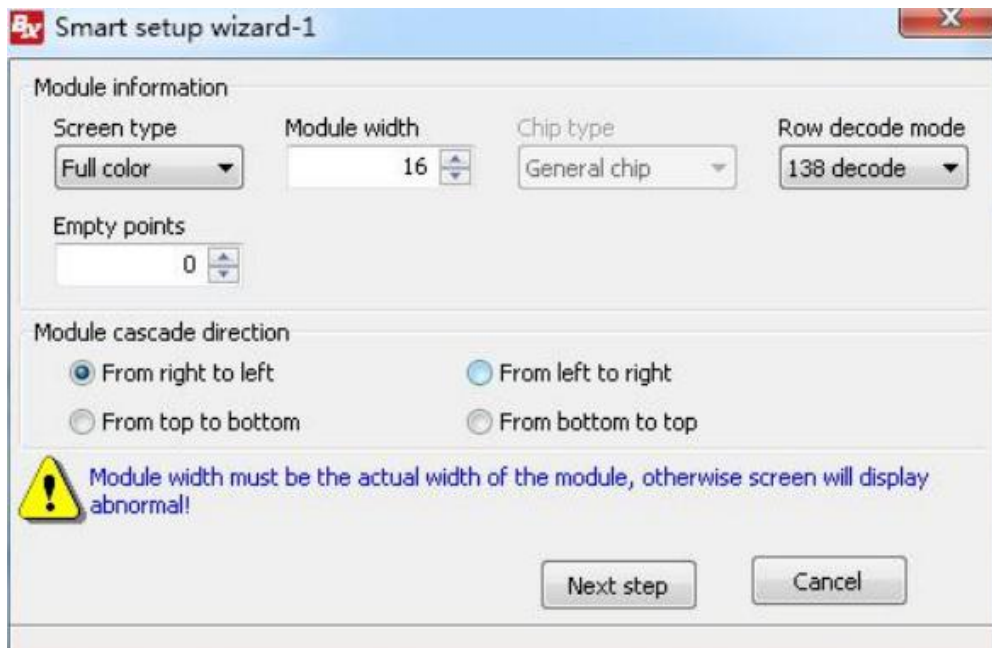


Image7

Smart setup wizard-2

In the "smart setup wizard-2" to set the parameters as shown in the picture.



Image8

Click “1” ,check the LED screen display black or white ,then click the “2” ,then check the screen is black or white,if user want to check the screen variation ,can select the “status automatically changes one time every 4 seconds ,observe the LED module in display state to choose right answer ” then click “next step” .

Smart setup wizard-3

Click“1” ,check the LED screen display black or white ,then click the“2” ,then check the screen is black or white,if user want to check the screen variation ,can select the “status automatically changes one time every 4 seconds ,observe the LED module in display state to choose right answer ” then click “next step” .

**Image9****Smart setup wizard-4**

Click“1”,check the LED screen display black or white ,then click the“2”,then check the screen is black or white,if user want to check the screen variation ,can select the “status automatically changes one time every 4 seconds ,observe the LED module in display state to choose right answer ”then click “next step”.

Note: when the user uses the monochrome screen, the normal state is: 1 displays

red, 2 display green ,3 display blue ,4 display black.



Image10

Smart setup wizard-5

Set the lights up number of rows ,then click the "next step" .

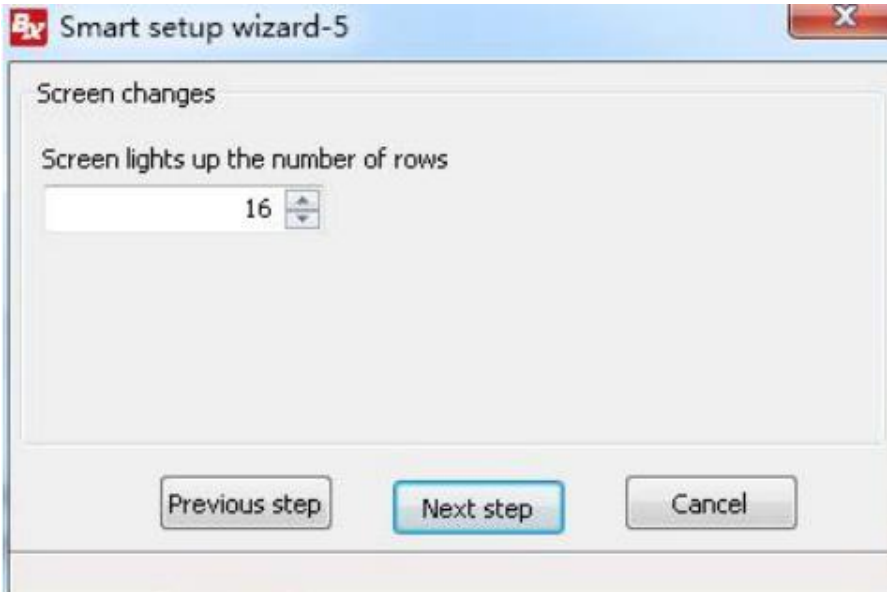


Image11

Smart setup wizard-6

Set the lights up number of rows ,then click the "next step" .



Image12

Smart setup wizard-7

Set the module scan mode as shown in picture ,then make coordinates as shown in picture ,,click “reset” then will prompt the Picture ..then save the scan mode .

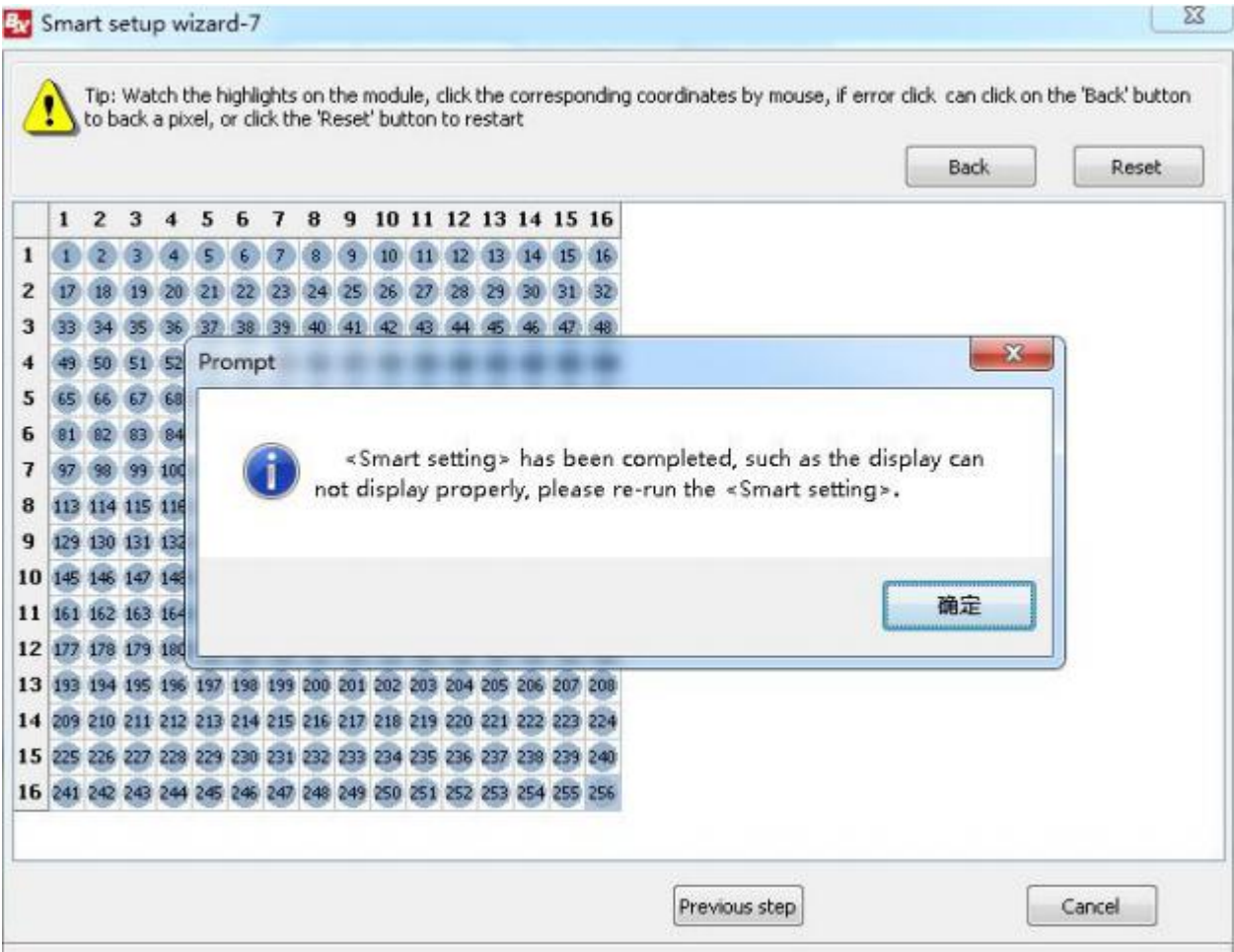
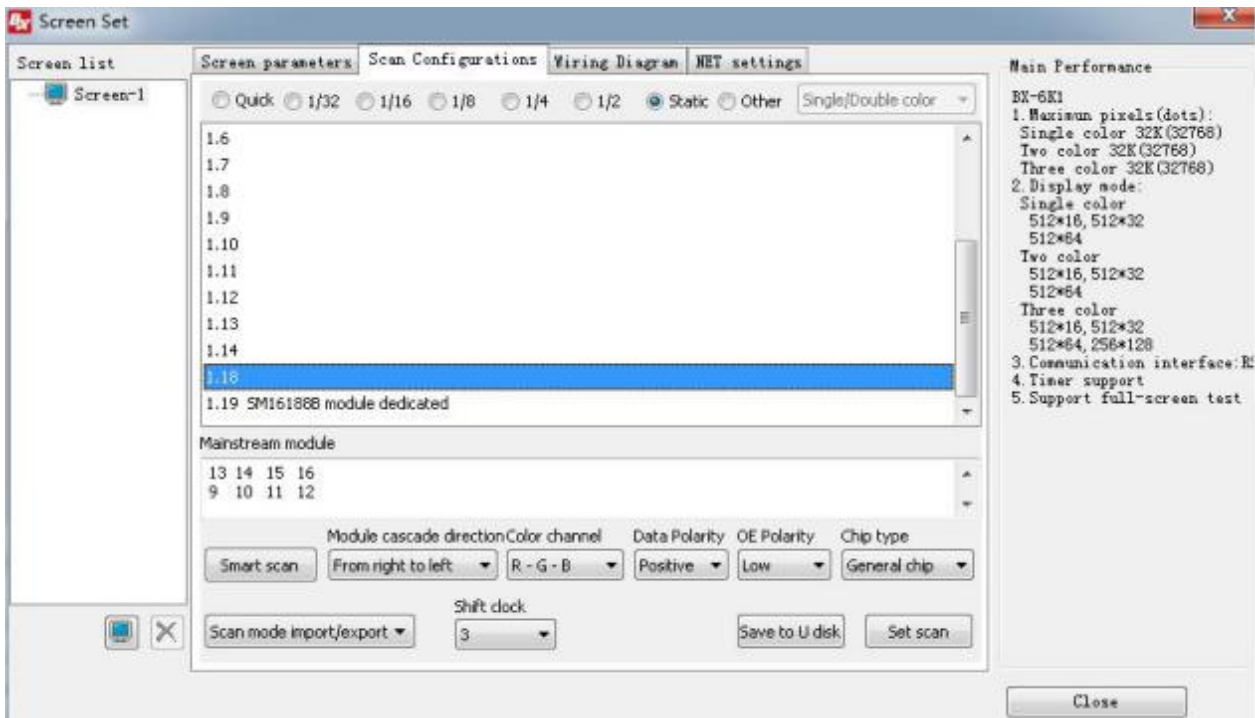
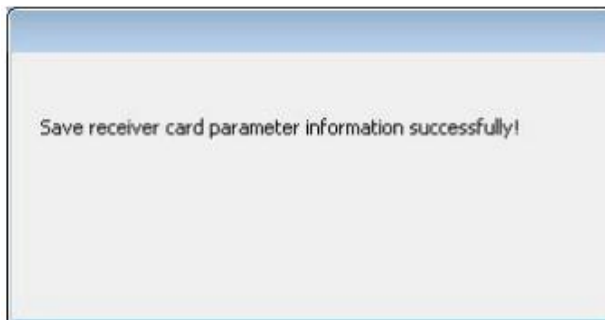


Image13

At last in the scan configuration interface will display the recommend scan mode as shown in picture



Load font and image file

The controller has built-in 8 * 16 English font and 16 * 16 simplified Chinese font. If you need other sizes and traditional font, you can load them by yourself. The method is as follows: click "Settings"

-> "font maintenance" in the menu bar to open the dialog box:

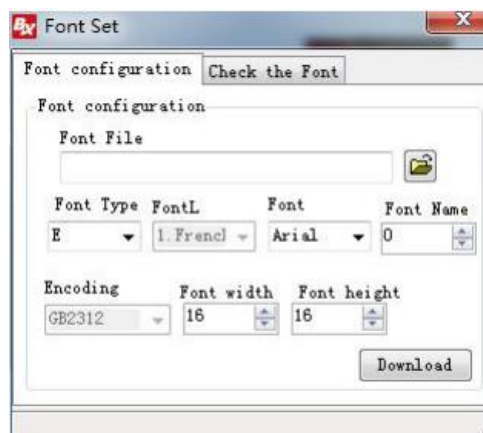


Image14

Select the required font or map library file, set the corresponding parameters, and click the "load" button. Font type: E for English font, O for Chinese font, T for graph, K for other font (such as Korean). Encoding: GB2312 is simplified Chinese font, GBK is traditional Chinese font, and Unicode is character encoding format.

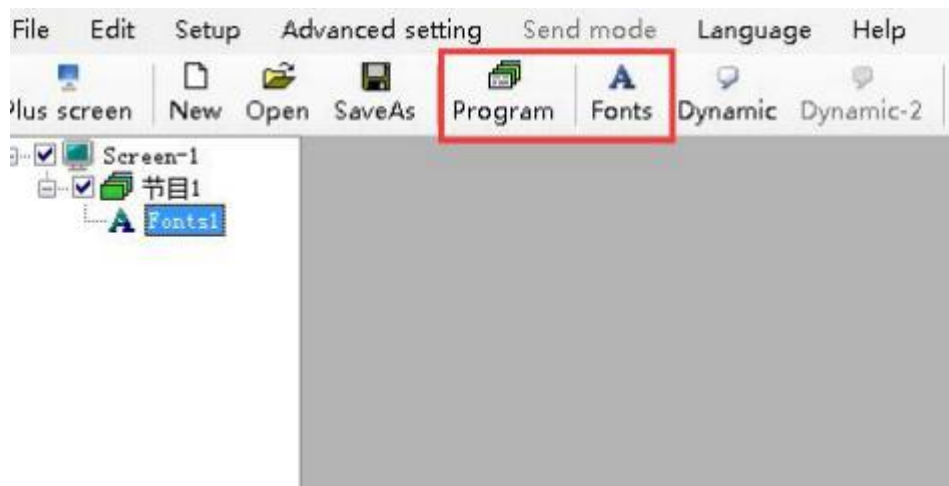
Please make sure the font width and height are selected correctly before loading the font library file. Generally, the width of the English font library is half of the height. If the irregular font library is loaded, you need to set the corresponding font width. For example, the font width of 12 * 16 point library is 12. At this time, you need to pay special attention to the setting of screen parameters. Please read the section displaying irregular fonts. If the library type is O and the library name is 0, then the library file name is 0000, and so on.

Note: the actual font size displayed is determined by the corresponding font library file used

Send static program

Click the program button in the toolbar to add a program, and click the word bank button to add a word bank area under the current program.

1. Add font area

**图 15****Image15**

Click the "text" button below to create a new graphic information file: edit the required graphic information in the pop-up edit box.

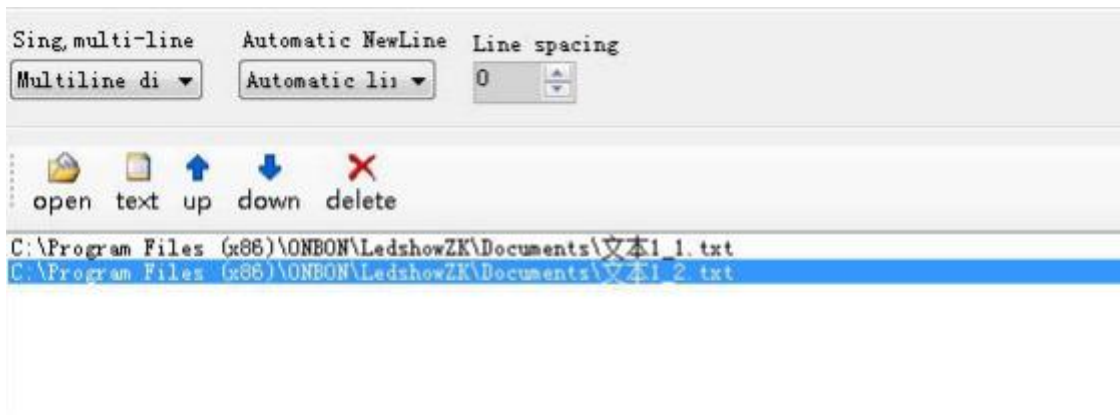


Image16

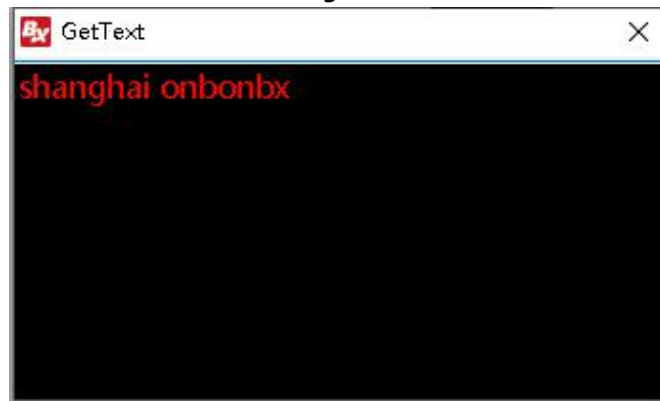


Image17

2. Properties of font area

All the font areas have the same properties as shown in the figure below.

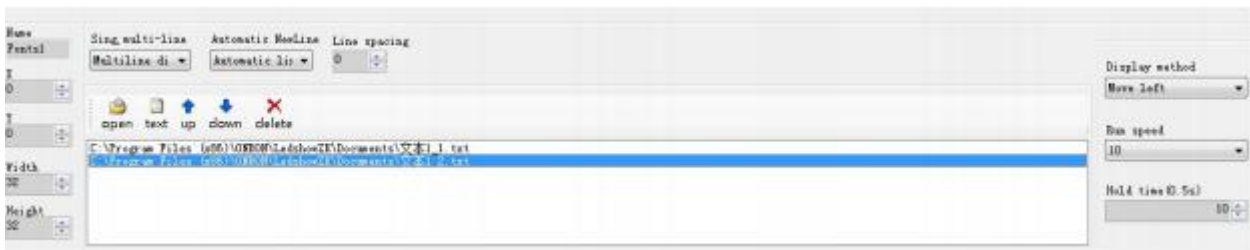


Image18

- Program name : edit program name
- Starting point X: the position of the top left corner vertex relative to the left boundary of the LED display screen, in pixels.
- Starting point y: the position of the top left corner vertex relative to the upper boundary of the LED display screen, in pixels.
- Width: the width of the font area, in pixels.
- Height: the height of the font area, in pixels.
- Single line and multi line: text can be displayed in single line and multi line.

- Line feed mode: manual line feed or automatic line feed is optional.
- Line spacing: the spacing of each line can be set.
- Display special effects: the special effects are displayed randomly by default, and the specified special effects will be displayed after selection. Stunt methods include: fast play, static display, up continuous move, down continuous move, left continuous move, right continuous move and other special effects.
- Operation speed: the operation speed of stunt entering the site is level 1-24, of which level 1 is the fastest.

Finish edit programs

After the above steps, one program has been completed. If users need more than one program , please repeat the above steps. After making the program , please don't forget to save it. Click "save program file as" under menu file.

Play programs

To play the current program file, click the send button, and the play window and display screen in the preview area will start playing the program at the same time. To play different program files, click the open button to open the program file and then play it.

Sent dynamic programs

Click the "dynamic" button in the toolbar to add a dynamic area. Its content editing steps are the same as that of static programs. The dynamic area can be selected into three operation states: automatic cycle display, staying on the last page after completion, and not updated and deleted after timeout. Timeout not updated deletion means that if the controller does not receive the information to update the area within the time set by the user, it means the communication link is interrupted. At this time, the controller deletes the outdated information of the area. Click the "send "button on the toolbar to send all the dynamic area data to the controller.



Communication setting

BX-6K series control card supports network communication, serial communication, GPRS wireless communication and 4G DTU wireless communication.

Serial communication

Click "Settings" > "setting screen parameters" > "setting screen parameters" in the menu bar, and enter the "setting screen parameters" interface after entering the password "168". After entering the screen parameter setting interface, there are the following steps to set the screen parameters:

Step 1: select the correct controller type under "control component" and "controller model".

Generally, when the controller is connected correctly, the software can automatically identify the controller type. In this case, it is not necessary to manually select the controller type.

Step 2: select the correct communication mode and configure the communication interface parameters correctly. Select "serial communication" for "communication mode".

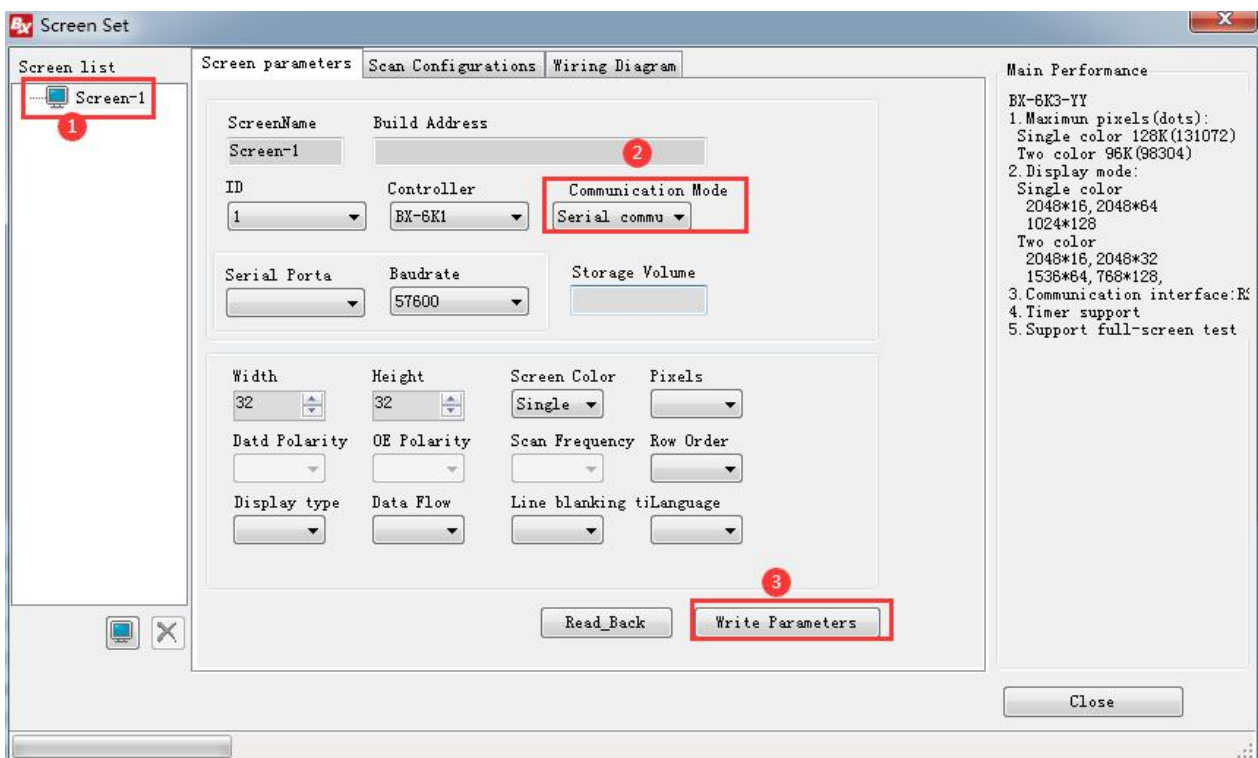
Step 3: set the screen width and height, and click "load screen parameters" to load screen parameters.

- Baud rate: the transmission rate of data to the display screen.
- Screen width: the length of the display screen.
- Screen height: the height of the display screen.
- Screen type: monochrome, bicolor and tricolor can be selected according to the screen type.

- Lattice: when the display screen is of dual primary colors, type I (R + G) means left red and right green, and type II (G + R) means left green and right red.
- Data polarity: it can be divided into negative polarity and positive polarity.
- OE polarity: it can be divided into high efficiency and low efficiency.

In step 3, when setting the scan configuration, you can click the "scan configuration" tab, which provides the configuration files of most popular displays on the market, or select "intelligent scan configuration" to configure.

Image19



GPRS Communication

GPRS wireless communication mode can be set by SMS, which is easy to operate. First, the control card is connected to the GPRS module, and the SIM card is inserted into the SIM card slot of the control card. (6K1 & G series control card does not need external GPRS module). Click "Settings" > "setting screen parameters" > "setting screen parameters" in the menu bar, and enter the "setting screen parameters" interface after entering the password "168". After entering the screen parameter setting interface, there are the following steps to set the screen parameters:

Step 1: select the correct controller type under "control component" and "controller model".

Generally, when the controller is connected correctly, the software can automatically identify the controller type. In this case, it is not necessary to manually select the controller type.

Step 2: select the correct communication mode and configure the communication interface parameters correctly. Select "GPRS wireless communication" for "communication mode".

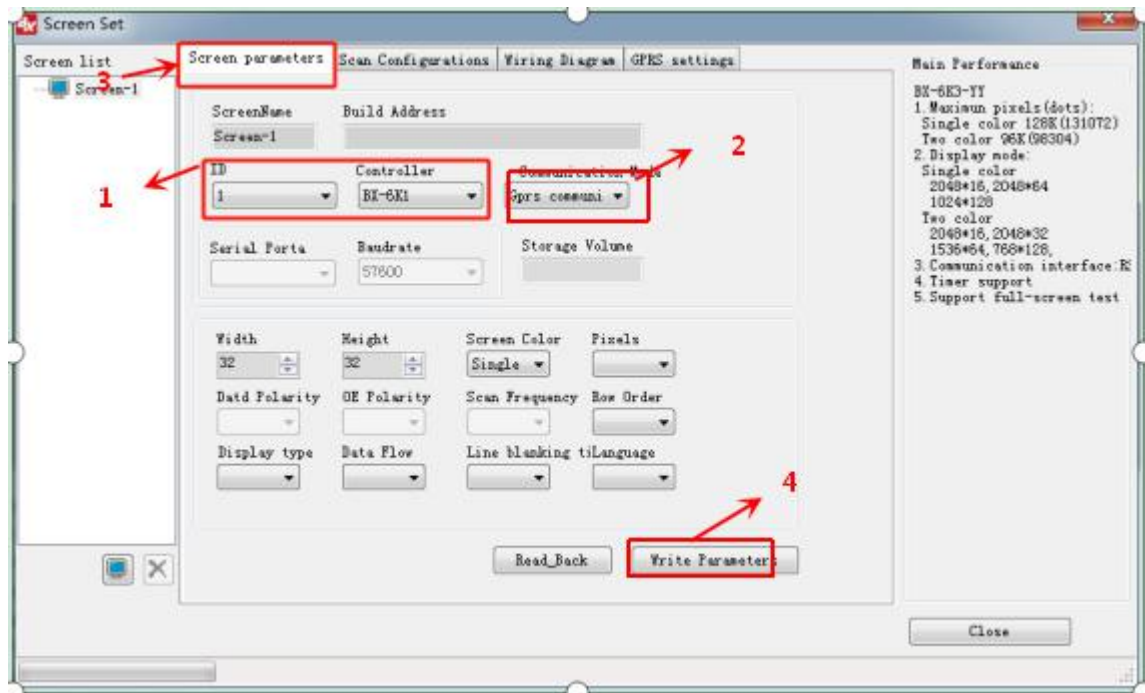


Image20

Step 3: configure SMS

Use your own mobile phone to edit the SMS and send it to the module mobile card. SMS format of mobile phone card (a55a * 1 * 112.65.245.174 * 6058 3 * **cmnet** 4 * gprs0000001). SMS format of Unicom mobile card (a55a#1 * 112.65.245.174 * 6058#3 * **uninet**#4 * gprs0000001) After sending, you will receive a reply message: IP OK # APN OK # ID OK #, that is, the setting is successful

Step 4: set the screen width and screen height, and click "load screen parameters" to load the screen parameters.

Step 5: click the "Settings" menu, select the "server settings" option, enter the "server configuration" interface, enter the "server port" number (the server port number here is the mapping port number made by the router), click "start server", wait for the red image mark "" in front of the screen to turn into blue "" to indicate that the server is online, and then the server is set ted

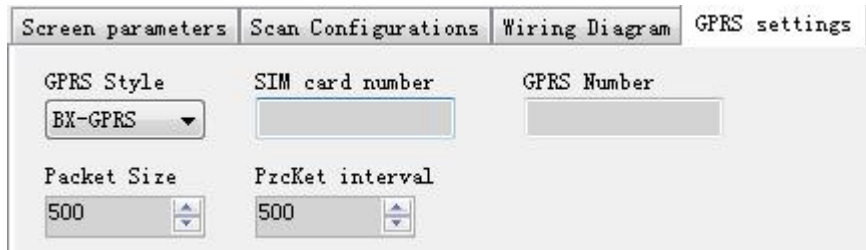


Image21

4G DTU Communication

4G DTU wireless communication mode supports SMS configuration. First, the control card is connected to the 4G DTU module, and the 4G SIM card is inserted into the SIM card slot of the control card.

After entering the screen parameter setting interface, there are the following steps to set the screen parameter:

Step 1: select the correct controller type under "control component" and "controller model". Generally, when the controller is connected correctly, the software can automatically identify the controller type. In this case, it is not necessary to manually select the controller type.

Step 2: select the correct communication mode and configure the communication interface parameters correctly. Select "4g-dtu" for "communication mode".

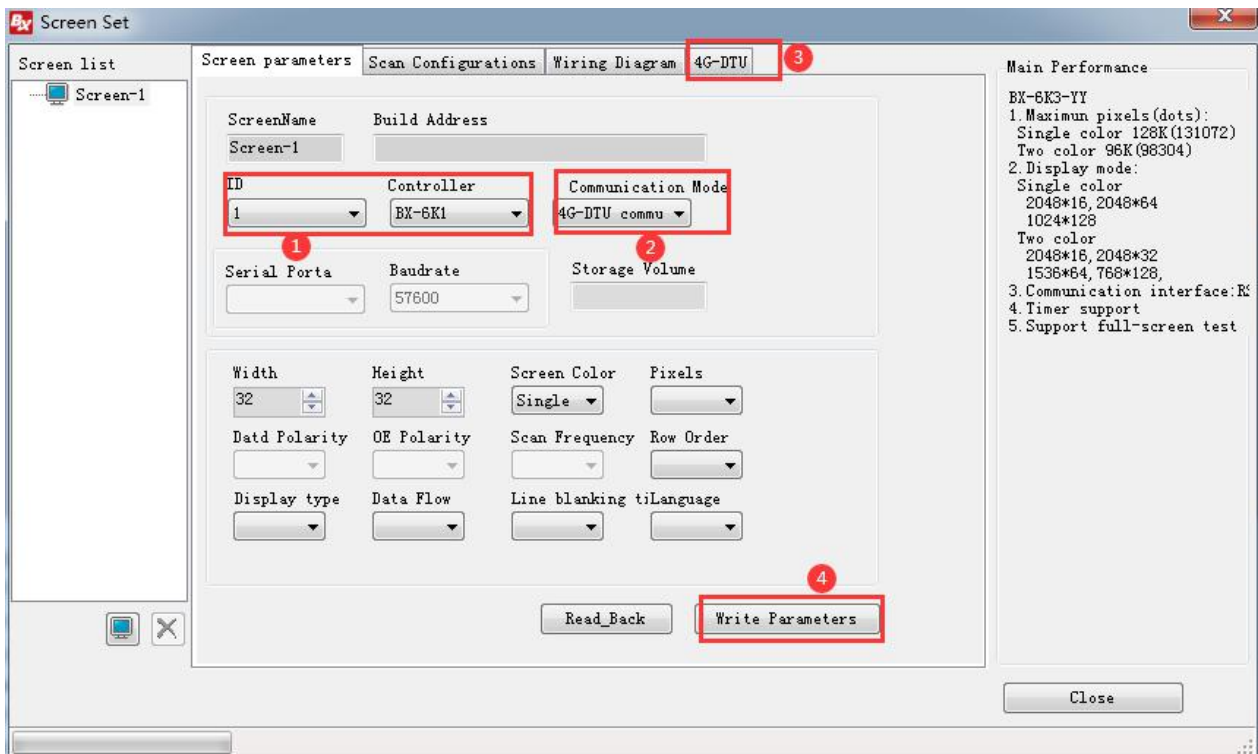


Image22**Step 3:** configure SMS

Use your own mobile phone to edit the SMS and send it to the module mobile card.

SMS format of China mobile phone card

(A55A#1*149.129.145.83*3801#3*CMNET#4*BX-4G000001#5*0)

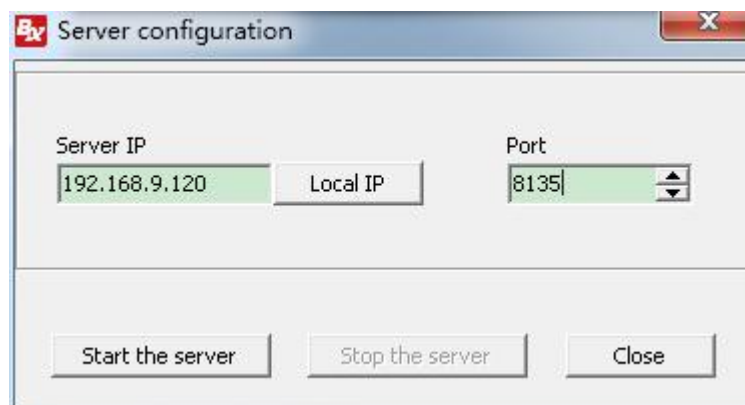
SMS format of China Unicom mobile phone card

(A55A#1*149.129.145.83*3801#3*UNINET#4*BX-4G000001#5*0)


After sending, you will receive a reply message: **IP OK APN OK ID OK** , that means the setting is successful

Step 4: set the screen width and screen height, and click "load screen parameters" to load the screen parameters.

Step 5: click the "Settings" menu, select the "server settings" option, enter the "server configuration" interface, enter the "server port" number (the server port number here is the mapping port number made by the router), click "start the server", wait for the red image mark "" in front of the screen to turn into blue "" to indicate that the server is online, and then the server settings are completed

**.Image23**

Controller firmware maintaince

To ensure that the firmware version of the controller matches the ledshowzk software, you can first check the controller program maintenance. First, select "controller firmware maintenance" under "Settings" in the menu bar, and enter password "168" before entering the interface, as shown in the following image. First click "check" to find out the connected controller, then click the image icon  after "firmware name", select the corresponding controller upgrade program in the pop-up dialog box, and finally click "Settings" to complete the update of the controller program.

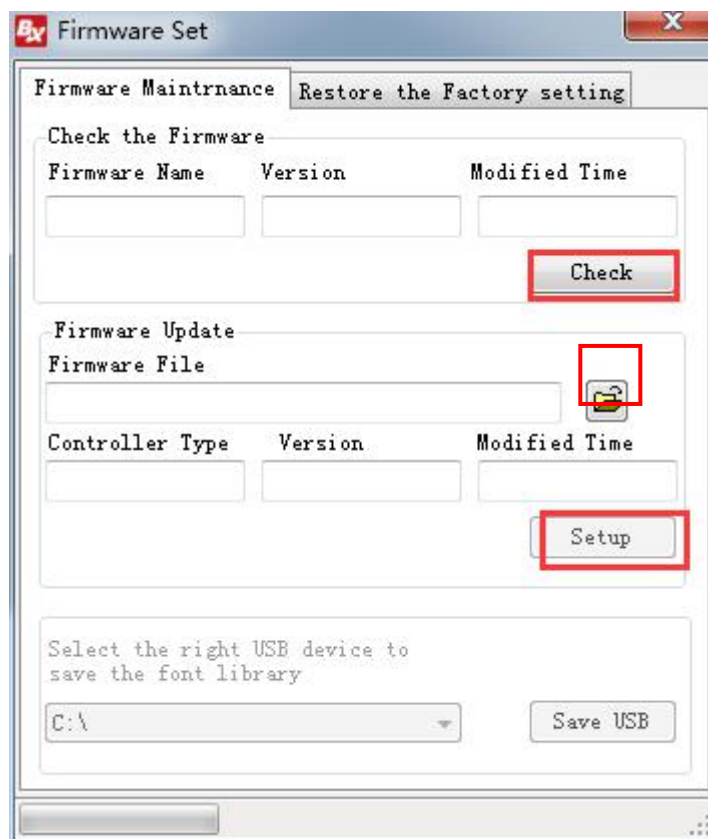


Image24

Restore factory settings

In the "firmware settings" interface, select the "restore factory settings" tab, as shown in the following image. First click "restore factory settings" to restore the firmware program of the control card to the factory state.

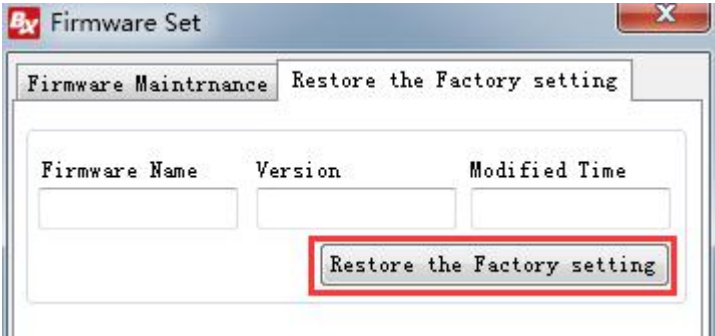


Image25

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Public Wechat



ONBON APP