

Ledshowsuite User Manuel

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Statement

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1. Function instruction

1.1. Summery

Ledshowsuite software is a PC software that supports the full range of ONBON BX controllers. The software integrates our existing four editing software into one software, including LedshowTW software for program editing, sending, and management of the fifth generation dual-color and sixth generation three-color controllers; LedshowYQ software for program editing, control, and management of the YQ/Y/C series asynchronous full-color controllers; LedshowTV software for intelligent parameter setting, program editing, and receiving cards of the BX-V series; and LedshowZK software for program editing and management of various font controllers. The software is powerful, has a simple interface, and is easy to operate.

The software has video, graphic, subtitle, text, time, weather, sensor and other sections, and supports dynamic preview of sections, making it easier for users to edit programs more intuitively and efficiently. The software supports display parameter configuration and scanning configuration for new generation high-refresh rate architecture products, and network port output can be customized. The product supports adjustment of brightness, volume, screen switching, and supports single-machine direct connection, fixed IP, server, wireless wifi and other communication modes.

Ledshowsuite software supports simplified Chinese and English.

1.2. Operating Environment

Ledshowsuite software supports Windows 7, Windows 8, Windows 10, and Windows 10 and above operating systems.(Note: Windows Server operating system is not currently supported)



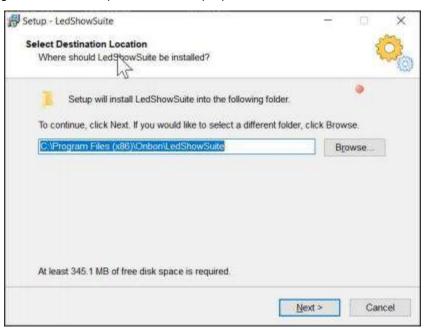
2. Installation and Uninstall

2.1. Software installation

 Double-click the Ledshowsuite installation package, select the software installation language, and click "OK".

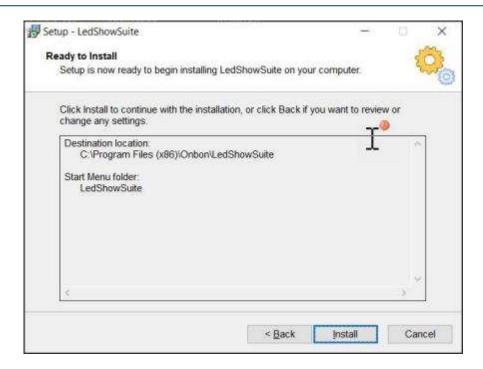


2. After selecting the installation path, enter the preparation installation interface and click "Next".



2. After selecting the installation path, enter the preparation installation interface and click"install"





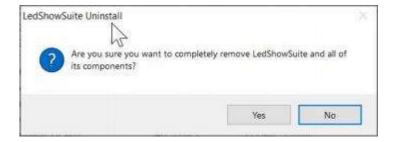
3. After installation, complete the installation of the Ledshowsuite software and click "Finish".
After installation, the system will automatically generate a desktop shortcut, which can be double-clicked to open the software. Alternatively, users can find the Ledshowsuite program group in the "Start" → "All Programs" of the computer, and click "Ledshowsuite" to run the program, as shown in the figure below:



2.2. Uninstall Ledshowsuite

The software provides an automatic uninstall function. In the "Start" - "All Programs" section of the computer, users will find the "Ledshowsuite" program group. Clicking on "Uninstall Ledshowsuite" will facilitate the uninstallation of all files and shortcuts for "Ledshowsuite". Alternatively, users can also choose to select "Programs and Features" → "Ledshowsuite"→"Uninstall" in the "Control Panel" of the computer, and the software will be uninstalled.

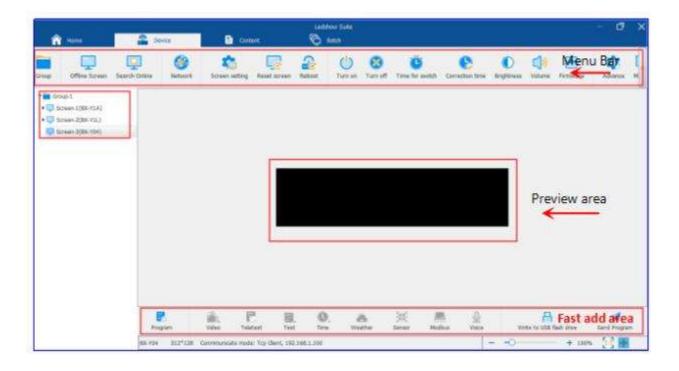




3. Interface description

3.1 Software interface

After launching the software, users can see the software interface shown in the figure below.It mainly includes five parts: menu bar, program area, main toolbar, preview area, and quick add area.



3.1.1.Menu Bar

The menu bar is divided into five menus: Home, Equipment, Content, Group, and Program/Announcement.

3.1.2. Preview Area

The preview area is the corresponding preview display window of the LED screen on the computer screen.

3.1.3. Program Area



A program refers to a set of file areas and content that are set by the user. Each "program" is in a parallel and sequential playback relationship. After creating a program area, users can create different graphic areas, text areas, time zones, weather, and so on under the program area.

3.1.4. Main toolbar

By selecting the buttons on the main toolbar, users can choose different menus, and under each menu, select the corresponding toolbar to perform operations such as creating a new program, searching for screens online, setting screen parameters, and adding regions.



3.2 Menus and Tools

3.2.1.Home page



In the home menu, users can create, open, save, and export programs. In the user management, tools, language, and about sections, users can manage software permissions, configure languages, view software versions, and configure functions such as fonts, videos, and sensors.

3.2.2.Device



In the device menu, users can add groups, manually add screens, search screens online, control card communication, set screen parameters, reset screen parameters, restart, turn on the screen, turn off the screen, turn on and off at a fixed time, time adjustment, brightness adjustment, volume adjustment, firmware upgrade, remote control, IO program selection, advanced settings, screen monitoring, and more operations.(Note: The menus corresponding to different controllers will vary.)



3.2.3.Content



In the partition menu, users can add programs, announcement areas, video areas, graphic areas, text areas, time areas, weather areas, sensor areas, dynamic areas, Modbus areas, and voice areas under an already added partition.(Note: The menus corresponding to different controllers will vary.)

3.2.4.Batch



In the Batch menu, users can perform operations such as communication, resetting screen parameters, restarting, turning on and off the screen, timing, adjusting brightness, volume, firmware maintenance, sending offline programs, and sending programs to control cards. Users can use these functions to perform group operations on multiple LED screens under different groups.

4.Add screen

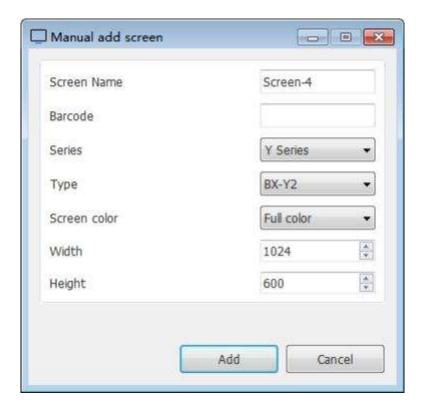
4.1. Manual add screen





Click "Device" in the menu bar -> "Group-1" and select "Offline Screen Addition".

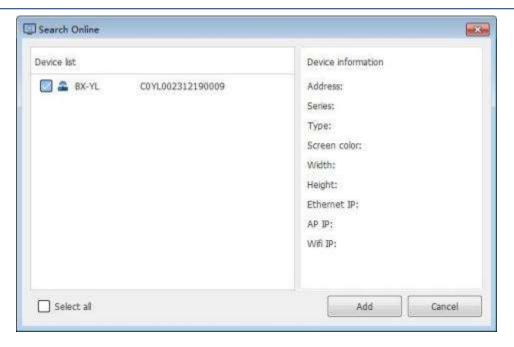
Enter the "Manual Screen Addition" interface.users can modify the name in the "Screen Name" field, select the corresponding controller series and specific model under the "Series" and "Type" fields, select the corresponding screen type in the "Screen Color" field, and enter the width and height of the screen. Click "Add" to complete the process.



4.2. Search Online screen

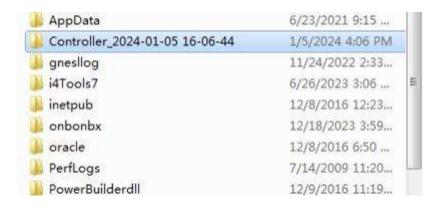
Click "Device" in the menu bar -> "Group-1" and select "Online Screen Search". Enter the "Online Screen Search" interface, and all online screens can be seen in the "Device List". Click on the screen name, and the screen type, screen color, width, and other information will be displayed under the "Device Information" on the right. Click "Add" to complete the screen addition, as shown in the figure below.





4.3.Import screen

Select a group and right-click to choose "Import Screen". Select the locally saved screen parameter file on the computer and import it under the group, as shown in the following figure:

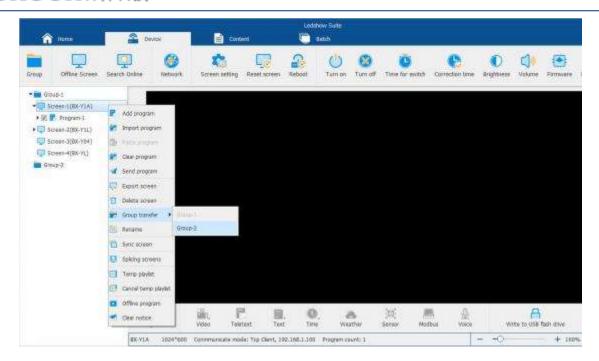


4.4.Transfer Group

When there are multiple groups, select a screen under a group and click the right mouse button.

Users can choose "Transfer Group" to transfer the selected screen to another group, as shown in the following figure:



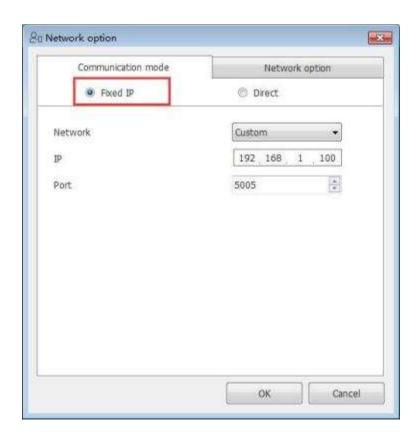


5. Network setting

5.1.Network

The communication methods of the controller mainly include fixed IP, direct link, and serial communication. The following describes these three communication methods.

5.1.1.Fixed IP





Select the controller that needs to be configured, click "Device" - > "Communication" in the menu bar, and enter the "Network Configuration" interface.

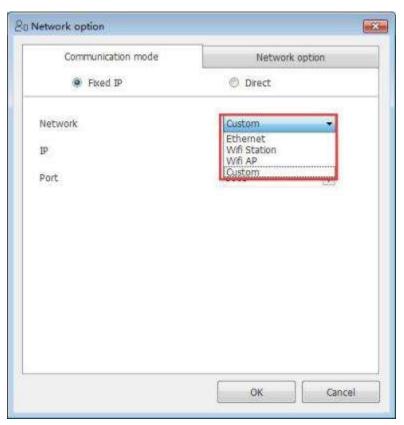
Select the "Fixed IP" mode, and users can choose "Ethernet", "Wifi Station", "Wifi AP" or "Custom" in the "Set Network" drop-down list. After selecting a communication method, click "OK" to confirm. Ethernet communication: When the control card is connected to the router through a network cable, it can perform Ethernet communication.

Wifi Station: When it is necessary to connect to an external WIFI network through the controller, Wifi Station communication can be carried out.

WiFi AP: When the controller is used as a hotspot and the computer is connected to the controller's WiFi,

WiFi AP communication can be performed.

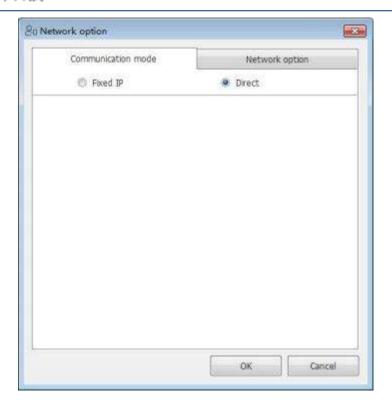
Customization: When the control card has already been set with an IP address, it is possible to communicate by entering the IP address and port parameters of the control card through customization.



5.1.2.Direct link

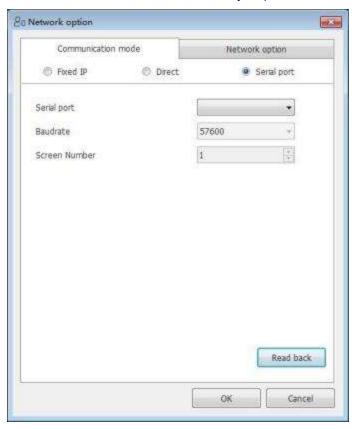
When the controller is connected to the computer through a network cable, select the "direct link" mode and click "OK".





5.1.3. Serial mode

Select the "Serial Port" mode, then select the corresponding "Serial Port" and click "OK". (If users want to modify the "Baud Rate" and "Screen Number" parameters, users can go to the "Screen Information" interface of the "Set Screen" menu to adjust.)



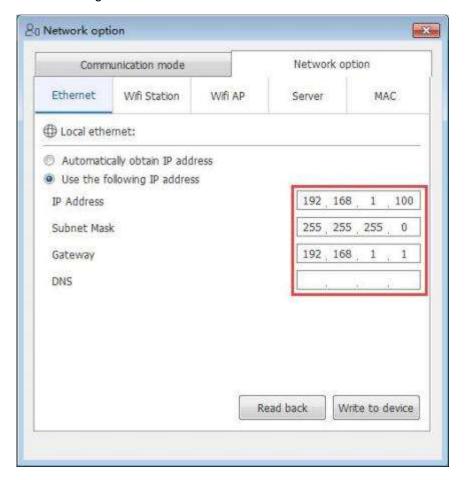


5.2. Network configuration

The network configuration modes under network communication configuration are divided into Ethernet, Wifi Station, Wifi AP, MAC address, and 4G.

5.2.1. Ethernet network

When selecting Ethernet communication in fixed IP, in the network configuration interface, click "Ethernet", and in the Ethernet interface, users can see the computer's local IP address. The selection of IP acquisition method is "automatically obtain IP address" or enter the IP address, subnet mask, gateway, and other information users information, and click "Write to device" to complete. As shown in the figure below:

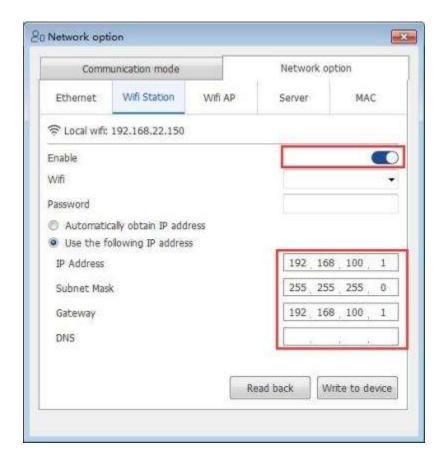


5.2.2. Wifi Station

When selecting Wifi Station communication, in the network configuration interface, click "Wifi Station", and in the Wifi Station interface, click "Switch" to turn on the Wifi Station function, click

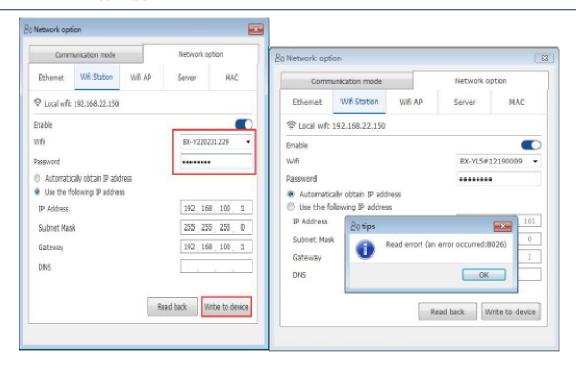


"Read Back" to read the external WIFI network information. After successful readback, userscan see the surrounding external WIFI networks in the drop-down list after "Wifi", and select the WIFI network users want to connect, as shown in the following figure:



Enter the "password" of this WIFi, select the "automatically obtain IP address" or manually fill in the IP address, and click the "write to device" button in the lower right corner.

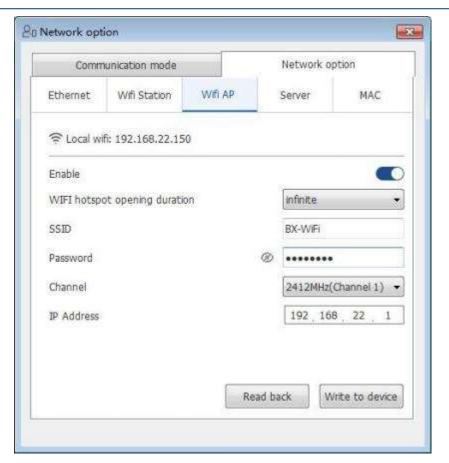




5.2.3.Wifi AP

When selecting Wifi AP communication, in the network configuration interface, click "Wifi AP", in the Wifi AP interface, click "switch" to turn on the Wifi AP function, click "read back" to control the card's wifi information, and the user can modify the hotspot name and password. Enter the new wifi name and password into the corresponding "SSID" and "password", and leave the rest as default. Finally, click "write to device", and the hotspot name and password are modified successfully. See the figure below for details. (Note: Please do not set the hotspot name to Chinese, and the password supports numbers, letters, and length of 8-32 bits.)

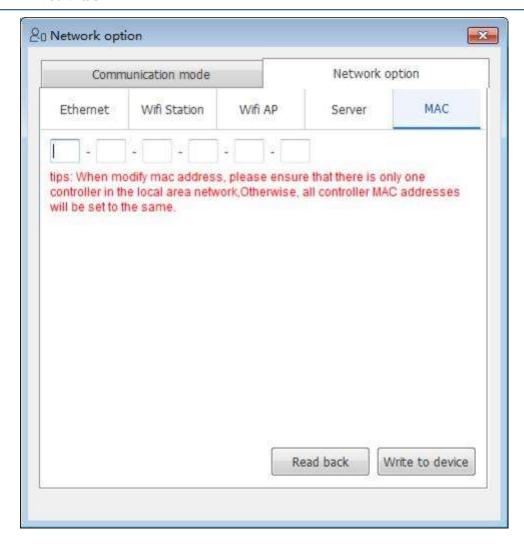




5.2.4.MAC address

After setting the IP to a standalone configuration, click "MAC address" in the network configuration interface, click "read back" on the MAC address interface to control the card's MAC address information, and click "write to device" to complete the configuration.



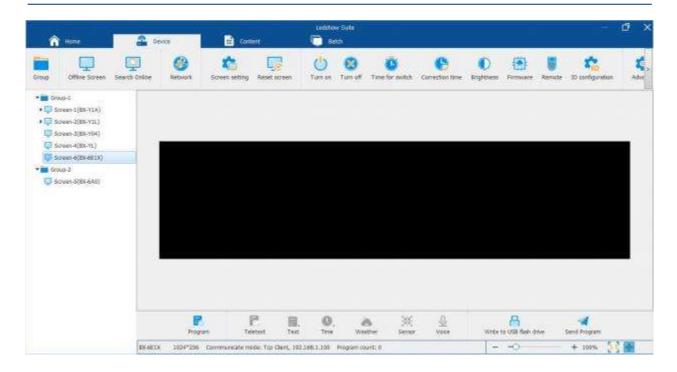


5.2.5. 4G Communication

The six-generation three-primary color control card is equipped with BX-4Gm, Y series and C series control cards configured with 4Gu1 or 4Gu4 to support 4G wireless communication. Through logging in to the iLEDCloud cloud platform, users can achieve WEB server communication mode, allowing them to remotely monitor the playback content of any LED display in real time as long as they are in an Internet-enabled area, with a wide coverage area. The configuration method of the six-generation three-primary color control card with BX-4Gm:

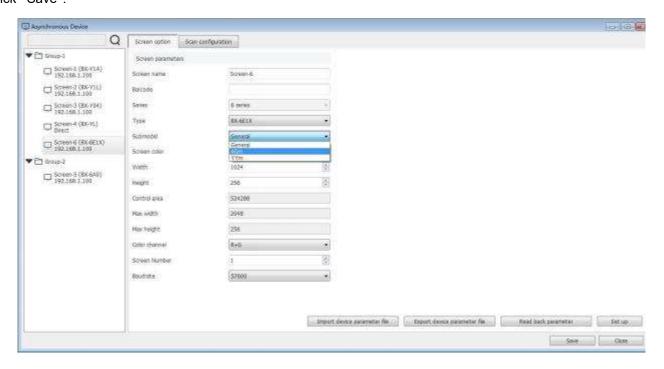
Step 1 :Click "Device" in the menu bar -> "Set Screen Parameter", enter password "888" to enter this interface .





Step 2

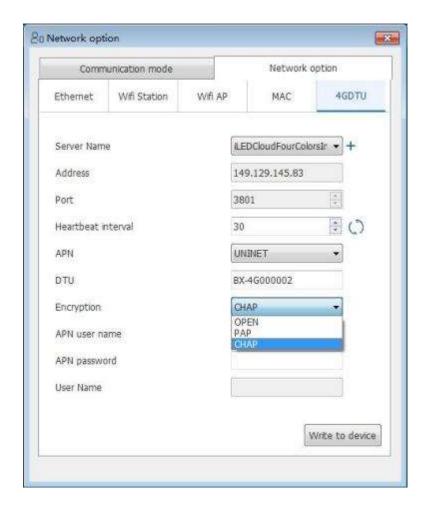
In the "Screen Information" interface, select "4Gm" from the "Sub-model" drop-down list, and click "Save".





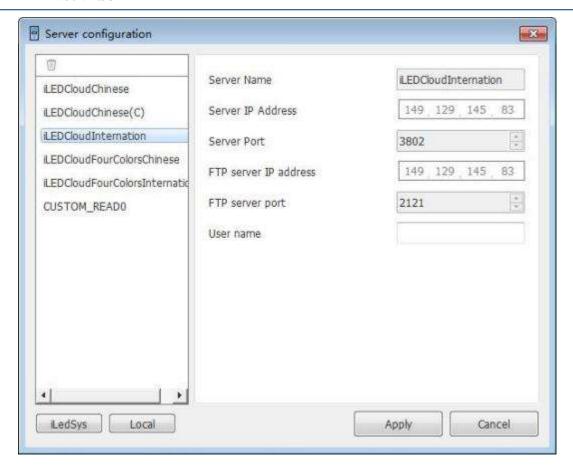
Step 3

Click "Device" in the menu bar - > "Communication" - > in the network configuration interface, click "4G", and perform the following operations in the 4G interface:1) Please modify the server name according to the actual situation.2) Select the mobile network operator from the drop-down list of APN. "CMNET" is China Mobile, "UNINET" is China Unicom, and "CTNET" is China Telecom. Select the network operator of the SIM card according to the actual situation. Finally, click "save to device"



If users need to build their own server, they can click on the right side of the "Server Name" to enter the "Server Configuration" interface. Click on the "iLedSys Server" or "Local Server" at the bottom of the interface, enter the server IP address and port number, and click "Apply" to complete the process.





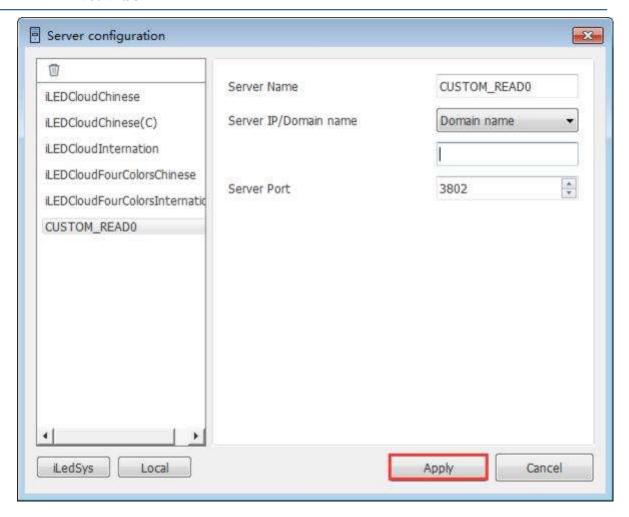
The configuration of the Y series and C series control cards with 4Gu1 or 4Gu4 is as follows

Click "Device" - > "Communication" in the menu bar, and then click "Server" in the network

configuration interface. In the server interface, check "Enable Server".Click "Write Device" to complete the operation.

If users need to build their own server, they can click on the right side of the "Server Name" to enter the "Server Configuration" interface. Click on the "iLedSys Server" or "Local Server" at the bottom of the interface, enter the server IP address and port number, and click "Apply" to complete the process.



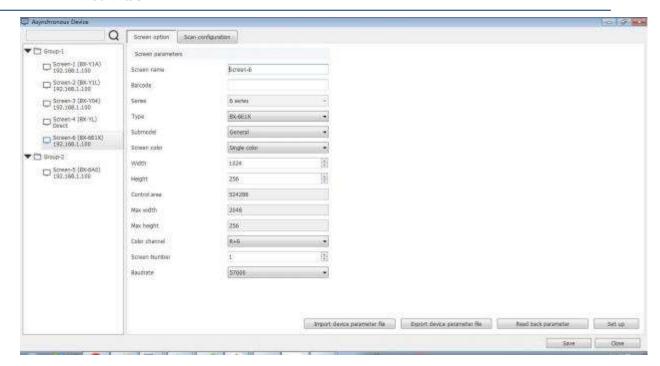


6. screen setting

6.1. Screen information

The screen information interface of the six-generation three-primary-color control card allows for the configuration of screen name, barcode, card type, sub-model, screen color, width, height, color channel, HUB, screen number, baud rate, and other parameters. After configuration, click "Settings" and "Save".





The screen information interface of the Y series and C series control cards allows usersto configure parameters such as screen name, barcode, width, height, screen shape, and number of split screens. After configuration, click "Settings" and "Save".

6.2. Scan configuration/scan parameters

6.2.1.Scan Configuration

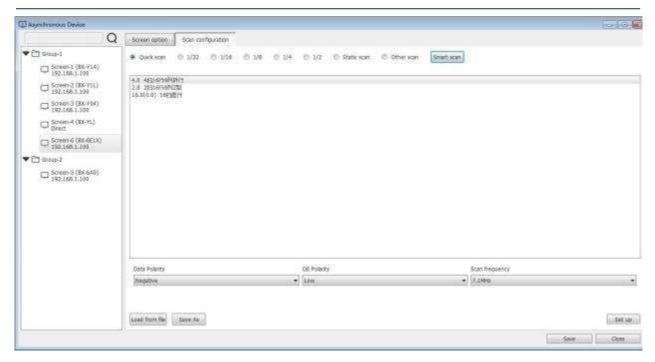
The scanning configuration interface of the fifth-generation control card and the sixth-generation tricolor control card allows users to select the scanning method for the LED screen module. Click the "Scan Configuration" tab to select the scanning method for the LED screen module. When users are not sure which scanning method to choose, they can use the "Smart Scan" method to understand which scanning method is suitable for the LED screen used.

Data polarity: It can be divided into two types of data polarity, such as negative polarity and positive polarity.

OE polarity: It can be divided into high effective and low effective polarities.

Scan point frequency: select the corresponding scan point frequency. Line blanking time: Use this parameter to adjust the persistence of scanning screen. If the persistence is serious, increase this value. Users can choose from 0S-8S. Click "Settings" and "Save" after configuration.

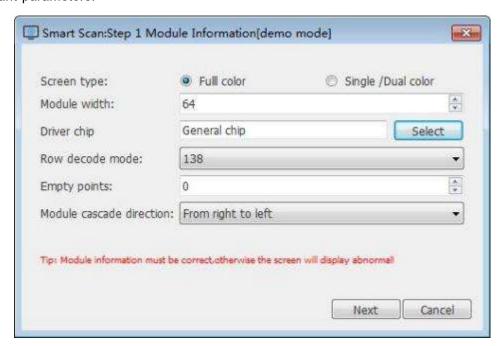




Smart scan setting

1.Smart scan setting -1

Click "Smart Scan Configuration" to enter the "Smart Setup Wizard-1", as shown below, to set the relevant parameters.



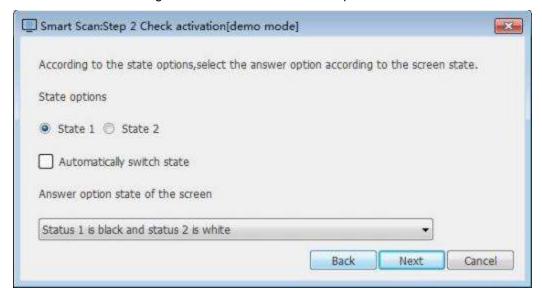
- ◆ Display type: full color and single/double color.
- Module width: Users can enter the module width based on the total number of points in one line of the LED screen used.



- ◆ **Driver chip**: The default is a general-purpose chip, but users can also choose to specify a specific LED screen chip.
- Row decoding mode: divided into no decoding, 138 decoding, 74HC595 decoding, RT5958 decoding, SM5266P decoding, ICND2018, SM5366, TC7558N, usually choose 138 decoding.
- Number of empty points: When using an empty point screen, uses can enter the number of empty points.
- ◆ Module cascade direction: The connection direction of the receiving card is divided into right-to-left, left-to-right, top-to-bottom, and bottom-to-top. After the settings are complete, click "Next".

2.Smart scan setting -2

Enter the "Smart scan setting - 2" interface to set relevant parameters.



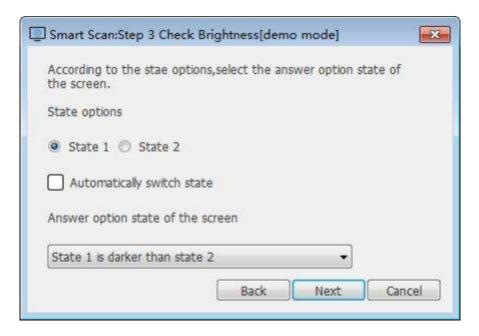
First click on "Status 1" to see if the LED screen displays black or white, then click on "Status 2" to see if the LED screen displays black or white again. If the user wants to observe the changes in the screen carefully, they can check the "Automatically change status" option at the top of the interface, which will change every few seconds. Observe the LED module and select the correct answer in the display status. Then select the change status of the screen in the drop-down list of "Display status" and click "Next".

3. Smart scan setting -3

First click "Status 1" to view the brightness of the LED screen, then click "Status 2" to view the



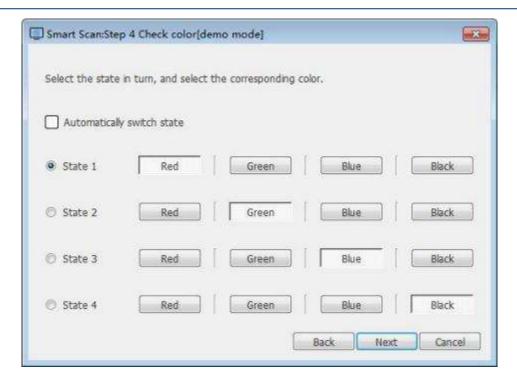
brightness of the LED screen again. If the user wants to carefully observe the changes in the screen, they can check the "Automatically change status" option at the top of the interface. The status changes every few seconds. Observe the LED module and select the correct answer in the display status. Then select the status of the screen change in the drop-down list of "Display status" and click "Next".



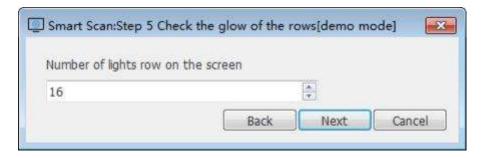
4. Smart scan setting -4

First click on "Status 1" to view the color of the LED screen and select the correct color, then click on "Status 2" to view the color of the LED screen and select the correct color, and so on. Select all four status changes. If the user wants to observe the changes in the screen carefully, they can check the "Auto Switch Status" box on the top of the interface. The status changes every few seconds. Observe the LED module and select the correct answer in the display status. Click "Next". Note: When the user uses a monochrome screen, the normal state is: screen 1 displays red, nd screens 2-4 display black.



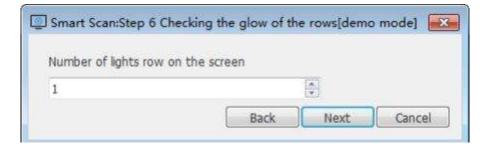


5.Smart Setting Wizard - 5Count the number of lines on the LED screen and click "Next".



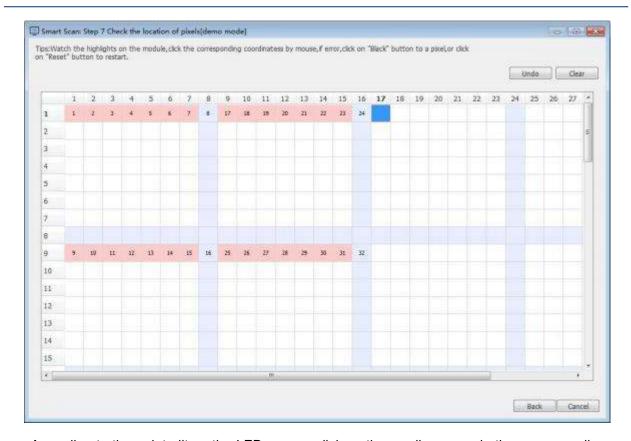
6. Smart Setting Wizard - 6

Count the number of lines on the LED screen, and click "Next".



7. Smart Settings Wizard - 7



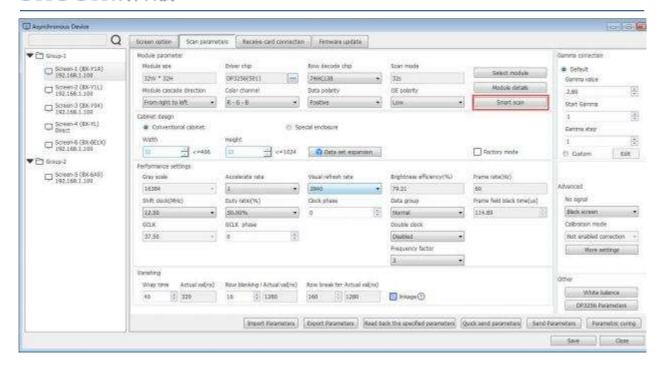


According to the points lit on the LED screen, click on the small squares in the corresponding position on the interface until all the lit points on the screen are clicked once. Then, the "scan settings" can be completed, and the system will pop up with the recommended scanning method. The user can save this scanning method. Finally, the recommended scanning method will be displayed on the first line of the scanning configuration interface.

5.2.2. Scan Parameters

The scanning parameter interface of the BX-Y series and C series control cards is shown below. Users can select the scanning method for the LED screen module in the "Scanning Parameters" interface and click "Set Scanning" to complete the configuration. When users are not sure which scanning method to choose, they can use the "Smart Scan" method to understand which scanning method is suitable for the LED screen used.





Smart scan configuration

1. Scan scan Settings Wizard-1

Click on "Smart Scan Configuration" to enter the "Scan scan Settings Wizard-1", as shown in the following figure, and set the relevant parameters.

Display type: divided into horizontal and vertical.

Module width: Users can input the module width based on the total number of points in a row of the LED screen they are using.

Grouping: Parallel, three color one point serial, three color 16 point serial, and single bus output can be selected.

Every sweep empty points: When using an empty point screen, you can enter how many empty points there are.

Driver chip: defaults to a universal chip, and specific LED screen chips can also be specified. Line decoding methods: There are various line decoding methods, including no decoding, 74HC138, 74HC595, RT5958, SM5266P, LS9739 co positive, LS 9736 co positive, LS 9737 co positive, LS 9735 co positive, etc.

Module cascading direction: The connection direction of the receiving card is divided into right to left, left to right, top-down, and bottom-up.

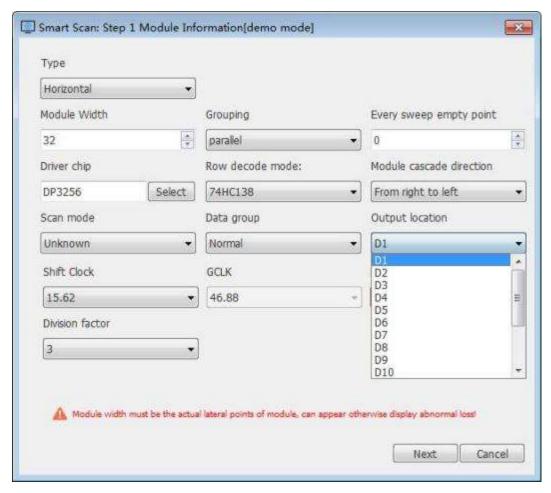
Scan mode: Select the scanning method of the module.



Data group: defaults to normal, but you can also choose 20 sets of data, single/double primary colors, custom 1, custom 2, and custom 3

Output location: Select the output position of the data group.

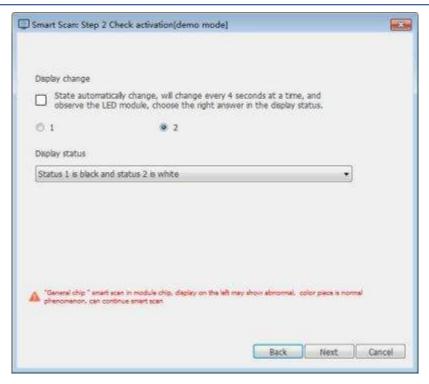
After setting up, click "Next".



2.Smart scan Wizard-2

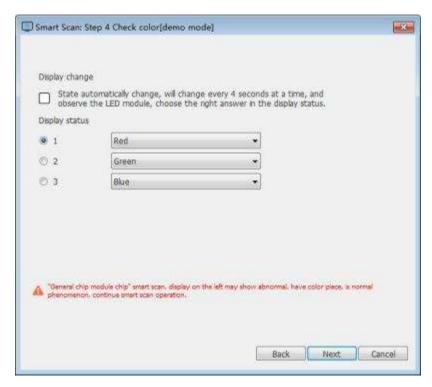
Enter the "Smart scan Wizard - 2" interface to set relevant parameters.





3. Smart scan Wizard - 3

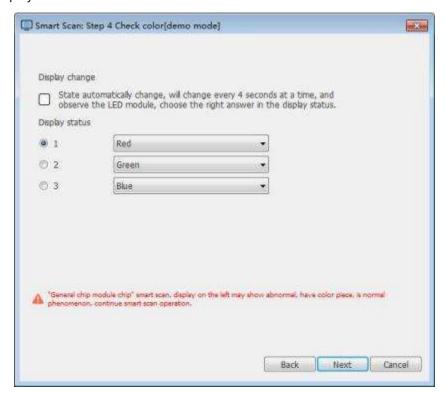
First click "Status 1" to view the brightness of the LED screen, then click "Status 2" to view the brightness of the LED screen again. If the user wants to carefully observe the changes in the screen, they can check the "Automatic Status Change" option at the top of the interface. The status changes every few seconds. Observe the LED module and select the correct answer in the display status. Then select the status of the screen change in the drop-down list of "Display Status" and click "Next".





4. Smart Scan Wizard - -4

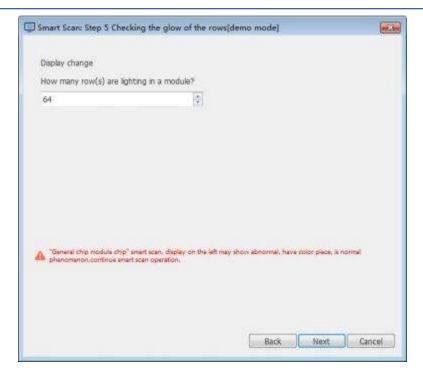
First click on "Status 1" to view the color of the LED screen and select the correct color, then click on "Status 2" to view the color of the LED screen and select the correct color, and so on. Select all three status changes. If the user wants to observe the changes in the screen carefully, they can check the "Automatic Status Change" option at the top of the interface, which will change every few seconds. Observe the LED module, select the correct answer in the display status, and click "Next".Note: When the user uses a monochrome screen, the normal state is: 1 displays red, and screens 2-4 display black.



5. Smart Scab Wizard-5

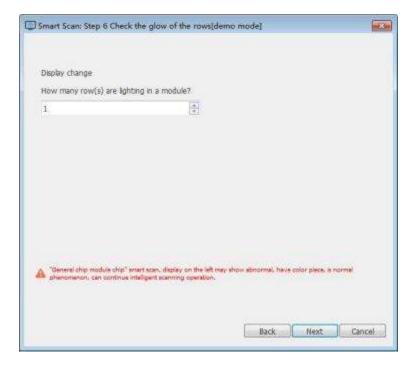
Count the number of lines on the LED screen and click "Next".





6. Smart Scan Wizard -- 6

Count the number of lines lit on the LED screen again, and click "Next"...

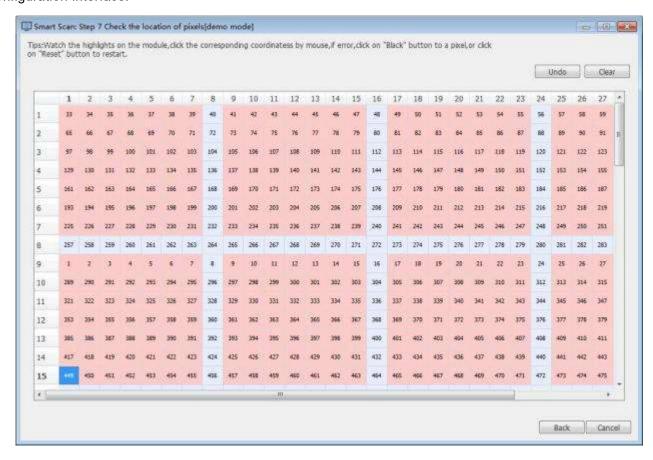


7. Smart Scan Wizard-7

According to the lit pixels on the LED screen, click on the small squares in the corresponding position on the interface until all lit points on the screen are clicked. Then, "Scan Settings" is complete, and the system will pop up with the recommended scanning method, which the user can



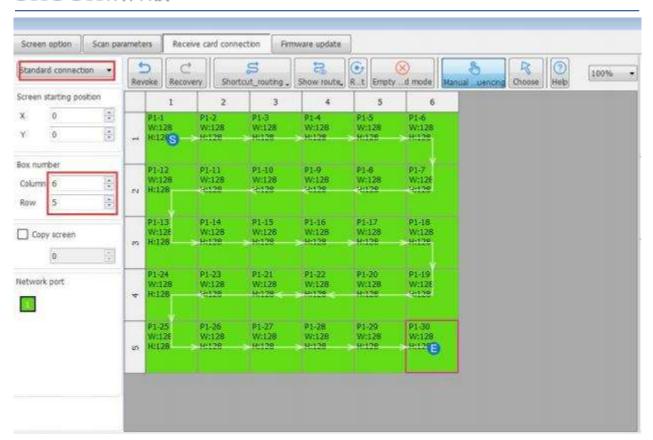
save. Finally, the recommended scanning method will be displayed on the first line of the scanning configuration interface.



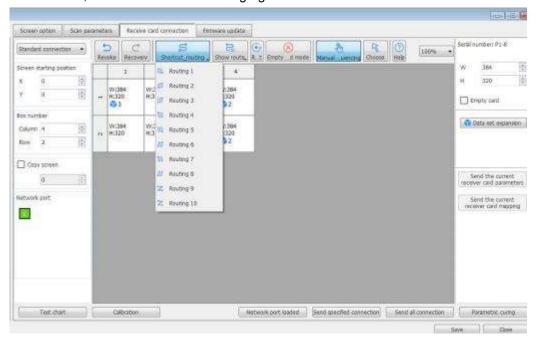
6.3. Receiving card connection

Click "Receiving Card Connection" to enter the receiving card connection interface. Users
can set the number of receiving cards in the horizontal and vertical directions according to
the actual situation. The default connection method is standard connection, as shown in
the following figure.



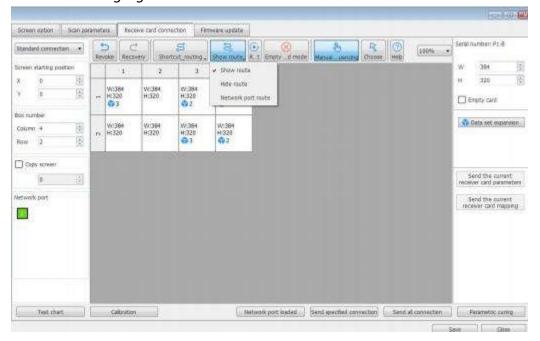


2. Set the width and height of the receiving card by connecting it to the actual width and height of the LED screen, and set the connection method of the receiving card. For example, click on "Connection Line 3" and hold down the left mouse button, drag the mouse over the receiving card connection diagram to select all receiving cards, and complete the configuration of the connection method. Finally, click on "Send Specified Connection" or "Send All Connections" to complete the configuration of the receiving card connection, as shown in the following figure.





If the user wants to know the connection status of the receiving cards, they can view it by using the receiving card connection display connection line function. As shown in the following figure



Other icons:

Click the "Undo" icon to undo the previous operation.

Click the "Restore" icon to restore the previous operation.

Click the "routing" icon to click each box in each interface for routing connection.

Click the "Select" icon, the "Route" icon will not be selected. At this time, clicking the box in the interface will not perform routing connections, allowing users to easily view the properties of the box.

Click the "Empty Card Mode" icon to set the selected box to empty card mode.

Click the "Reset" icon to clear and reset all receiving card connections.

Click the drop-down list and select the percentage displayed on the interface. For example, when there are many cabinets, users can select 30% to view all cabinets.

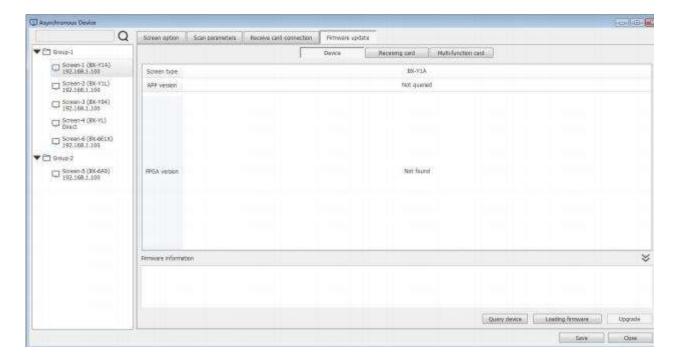
6.4. Firmware update

To ensure that the software version in the controller matches the software, users can first perform controller program maintenance, click "firmware upgrade" to enter the "firmware upgrade" interface



6.4.1.Controller firmware upgrade

Click "Device" in "Firmware Upgrade", and then click the "Query " button to find the connected device, as shown below:



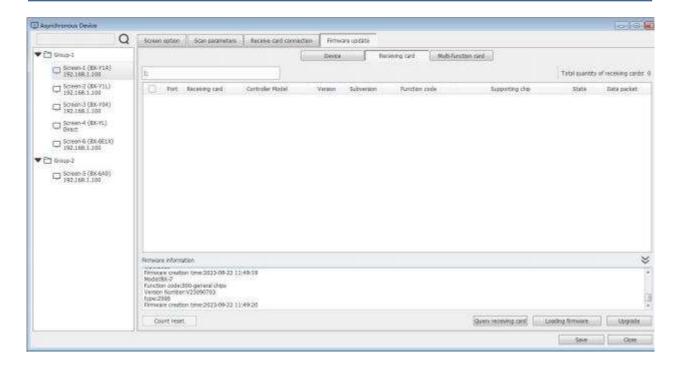
Then select "Load Firmware" and select the upgrade program for the corresponding device.

Finally, click "Upgrade" and "Save" to complete the update of the device program.

6.4.2. Receiving card firmware upgrades

Click "Receive Card" in "Firmware Upgrade", and then click the "Query Receive Card" button to find the connected receive card, as shown below:





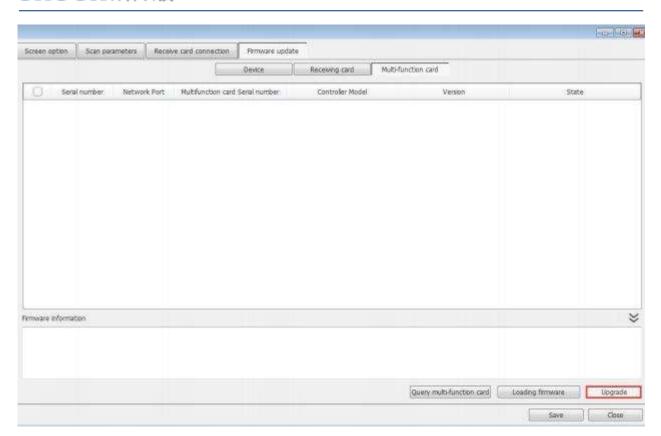
Then select "Load Firmware" and select the upgrade program for the corresponding device.

Finally, click "Upgrade" to complete the update of the device program.

6.4.3. Multi-function card firmware upgrade

Click "Multi-function card" in "Firmware upgrade", and then click the "Query multi-function card" button to find the connected multi-function card, as shown in the following figure:





Then select "Load Firmware" and select the upgrade program for the corresponding device. Finally, click "Upgrade" to complete the update of the device program.

7. Create programs

7.1 Add programs

After successfully add the screen, we can go to the main interface of the software to edit the program content. Clicking on the "Content" menu bar, users can choose to add "Video Area", "Teletext area", "Text area", "Time area", "Weather area" and "Sensor area" as shown in the following figure:

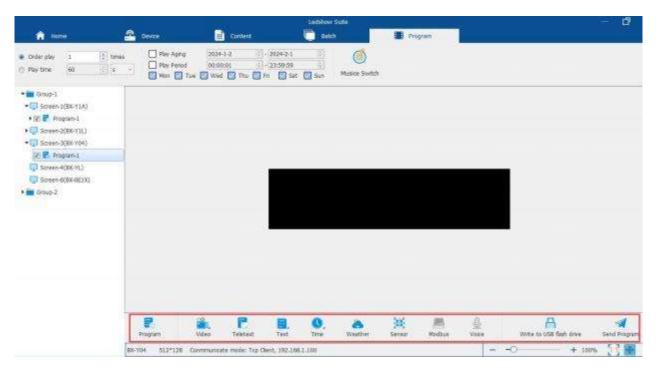


7.1.Add program area

Click the button on the program quick add toolbar, or click "Program" under the "Content" menu.Multiple areas can be added and played simultaneously under one program, which can be divided into the following categories according to the different contents contained in the window:Video



area: Add high-definition video or live streaming. The image and text area: users can add text, tables, and so on. Text area: users can add adaptive text, and modify font, font size, font color, etc. for the text content in segments. As well as subtitles, colorful text, and vertical text. Time zone: users can add clocks, dials, lunar calendars, timers, button timers, stopwatches, and counters. Weather: users can add weather conditions, air quality index, wind speed and other meteorological indexes for each region. Sensor area: users can add various environmental sensor settings such as temperature, humidity, noise level, air quality, wind speed, and wind direction ect.



After the above steps, a program page has been created. If users need multiple program pages, please repeat the above steps. After creating the program page, do not forget to save it. Click "Save" under the "Home" menu.

7.2.send program

To send the current program file, click the Send button below the program area, and the display screen will start playing the program. To play a different program file, click the Home button and select the Open button. After opening the program file, click Send to play it.





8. Program area details

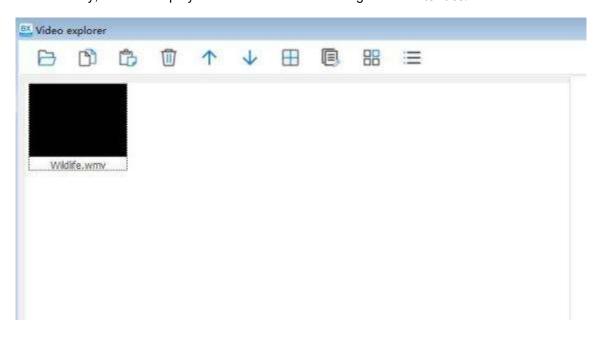
8.1. Video area

8.1.1.Add video

Click "Video" under the "Partition" menu, and the software supports all video formats: mp4、rmvb、mpg、flv、vob、f4v、mpeg、3gp、avi、mov、m4v ect.

8.1.2. Video management

After adding a video, click the icon to open, copy, paste, delete, move up, move down, select all, batch modify, and set display mode in the "Video Management" interface.





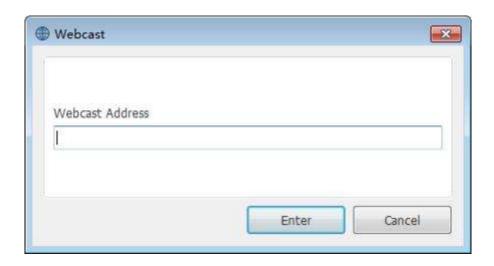
Copy and paste: After clicking on a video, select "Copy" and "Paste" to copy a video that plays together with the original video. Move up and down: Adjust the playback order of the video by moving the video position up and down. Select All: Select all videos. Batch modification: Adjust the volume of all selected videos together. Video preview format: The icon is a picture display mode, and the icon is a list display mode, as shown in the following figure.

8.1.3. Other setting

In the video partition toolbar interface, users can also view video progress, video transcoding, and adjust video volume. Video progress: Users can drag the progress bar to fast forward or rewind the program. Video volume: change the volume of the video file from 0-100. Transcoding: When the video on the computer can be previewed but cannot be displayed on the LED screen, users can check "Transcoding" to transcode individual special video formats so that the video can be played normally. Click the icon to check "Use" to add a border to the video, and set the style, border effect, and effect speed of the border.

8.1.4. Webcasting

Users can add a live broadcast by clicking the Live button. In the pop-up dialog box, they can add the link of the live broadcast platform under the "Live Address" field, as shown in the figure below. Finally, click "Enter" to complete the process.





8.2.Text area

8.2.1.Adaptive Text

Click "Text" under the "Partition" menu and select "Adaptive Text". Adaptive Text can adjust the font size of the text based on the screen size. The relevant attributes can be modified in the Adaptive Text Partitioning toolbar interface.



Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels

Starting point Y: The position of the top left corner of the partition relative to the upper boundary of the LED display, in pixels.W: The width of the partition, in pixels.H: The height of the partition, in pixels. Click Open to open the dialog box, and select the adaptive text userswant to add.Click Edit. In the pop-up editing interface, userscan edit the adaptive text content and set the font, bold, italic, font color, and background color.

Display effects: Add display effects to text, including fast typing, static display, leftward movement, leftward continuous movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward continuous movement.:

Text is shifted upward.: Text is shifted downward.:

Text stretching: Text compression.

Running speed: stunt running speed is 1-16 levels, with level 1 having the fastest running speed. **Stay time**: stunt stay time is 1-99 seconds, with 1 second the shortest.Rotation angle: Text can be displayed in 90°, 180°, and 270°.

Background transparency: When selected, the background color is transparent.

Border: After selecting, userscan add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.

Background: After selecting, userscan add various custom images or system-provided images as backgrounds.

8.2.2.Subtitle

Click "Text" under the "Partition" menu and select "Subtitle".



Users can modify the relevant attributes in the subtitle partition toolbar interface.



Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.

Starting point Y: The position of the top left corner of the partition relative to the upper boundary of the LED display, in pixels.

W: The width of the partition, in pixels

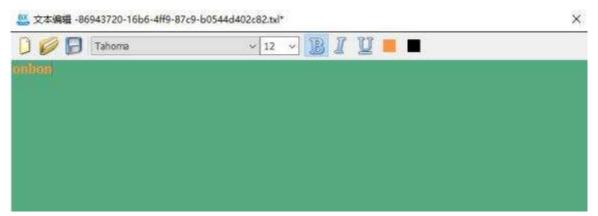
H: The height of the partition, in pixels.

Click Open to open the dialog box, and select the subtitle file users want to add.

Click Edit to open the editing box, where users can create, open, save, and directly edit text content.

Users can set display properties such as text color, background color, font, bold, italic, and underline. The displayed text can come from text files or input boxes.

If it comes from text files, the displayed content can be automatically updated according to changes in the text file content. The subtitle does not support carriage return for line breaks.



• **Display effects:** add display effects to subtitles. The effects include: fast typing, static display, leftward movement, leftward continuous movement, upward movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward continuous movement.

Text is shifted upwards.

Text is offset downward.

• : Text Stretch

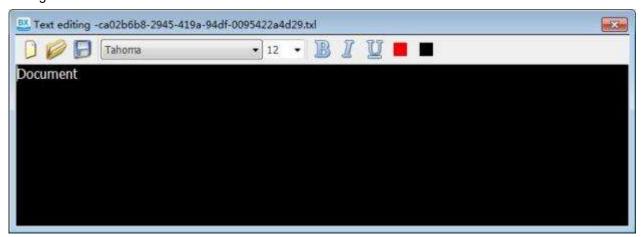
• : Text compression.

• Running speed: stunt running speed of 1-16 levels, with level 1 having the fastest running speed.

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- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- W: The width of the partition, in pixels.
- H: The height of the partition, in pixels...
- Click Open to open the dialog box, and select the colorful text file users want to add.
- Click Edit to open the editing box, where users can create new documents, open existing documents, save documents, and directly edit the text content.users can set font, font size, bold, italic, underline, and other display attributes. The displayed text can come from text files or input boxes. If it comes from text files, the displayed content can be automatically updated based on changes in the text file content.



- **Display effects:** Add display effects to subtitles, including fast typing, static display, leftward movement, leftward continuous movement, upward movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward continuous movement.
- The text is shifted upwards
- : The text is shifted downward.
- : Text stretching.
- Text compression.
- Running speed: stunt running speed is 1-16 levels, with level 1 having the fastest running speed.
- **Dwell time:** stunt dwell time is 1-99 seconds, with 1 second being the shortest dwell time.
- Rotation angle: Text can be displayed in 90°, 180°, and 270°.
- Background transparency: After selecting this option, the background color will be transparent.
- **Borders:** After selecting "Use", users can choose the style of the border, and set the effect and speed of the border.



• Colorful style: users can choose the color style of the colorful words.Background: After selecting "Use", users can choose a colorful background.

8.2.3. Vertical text

Click "Text" under the "Partition" menu and select "Vertical Text".users can modify the relevant attributes in the vertical text partition toolbar interface.



- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the upper boundary of the LED display, in pixels
- .W: The width of the partition, in pixels.
- **H**: The height of the partition, in pixels.
- IIII: Click Open to open the dialog box, and select the text file users want to add.
- Click Edit, and in the pop-up editing interface, users can edit the content of the vertical text as well as set the font, bold, italic, font color, and background color.
- Display effects: Add display effects to text, including fast typing, static display, leftward movement, leftward continuous movement, upward movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward continuous movement.
- Text is shifted upwards.
- : Text is offset downward.
- : Text Stretch
- Text compression.
- Running speed: stunt running speed of 1-16 levels, with level 1 having the fastest running speed.
- Stay time: stunt stay time is 1-99 seconds, with 1 second as the shortest.
- Rotation angle: The text can be displayed in 90°, 180°, and 270°.
- Background transparency: After selecting this option, the background color will be transparent.
- **Border**: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.

8.3.Time area

8.3.1.Time

Click "Time" under the "Partition" menu and select "Clock".users can modify relevant attributes



in the clock partition toolbar interface.



In the "Clock" section, users can check whether to display the date, week, and time, and choose the display style for the date, week, and time.users can also set single-line and multi-line display and check whether to display text, select the font, font size, and color of the text.users can set the time zone as needed.

- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- **W**: The width of the partition, in pixels.
- **H**: The height of the partition, in pixels.
- **Border**: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- **Background**: After selecting, users can add various custom images or system-provided images as backgrounds.

8.3.2.Dial

Click "Time" under the "Partition" menu and select "Dial".users can modify relevant attributes in the dial partition toolbar interface.



In the "Dial" section, users can set the display style of the dial.users can also set the time zone as needed.

- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels...
- W: The width of the partition, in pixels.
- **H**: The height of the partition, in pixels.
- **Border**: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- **Background**: After selecting, users can add various custom images or system-provided images as backgrounds.



8.3.3.Lunar calendar

Click "Time" under the "Partition" menu and select "Lunar Calendar".users can modify relevant attributes in the Lunar Calendar Partition toolbar interface.



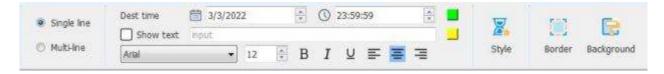
In the "Lunar Calendar" section, users can set whether to display the Heavenly Stems, Lunar Calendar, and Solar Terms, as well as their display colors. users can also set single-line and multi-line display, check fixed text, and set the font, font size, font color, bold, italic, underline, left alignment, center, and right alignment of the fixed text.

- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels...
- **W**: The width of the partition, in pixels.
- **H**: The height of the partition, in pixels..
- **Border**: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- **Background**: After selecting, users can add various custom images or system-provided images as backgrounds.

8.3.4.Timer

Click on "Time" under the "Content" menu and select "Timer".

Users can modify relevant properties in the timer partition toolbar interface.



Set the display text of the timer in the "Timer" section, as well as the font, size, bold, italic, underline, color, and other styles of these texts; Set the target time for timing. Single line and multi line display can be set.

• Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.



- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- **W**: The width of the partition, in pixels.
- H: The height of the partition, in pixels.
- **Border**: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- Background: After selecting, users can add various custom images or system-provided images as backgrounds.

8.3.5. Button timer

Click "Time" under the "Content" menu and select "Button Timer". The modification of relevant attributes can be made in the button timer partition toolbar interface



After selecting to add a Button Timer, you can set the following parameters:

- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- **W**: The width of the partition, in pixels.
- H: The height of the partition, in pixels.

Button countdown: After selecting, countdown according to the target time. Under "Initial State", select "Run", and set the target time as needed, including days, hours, minutes, and seconds. After setting, click "Send Program" to start the countdown.users can also set the display color of the target time.

Note: Select "Pause" in the "Initial State", click "Send Program" and then it will be static without timing. Select "Run" in the "Initial State" to start timing.users can control the timing through the remote control.Push Button Countdown: Select this option to countdown according to the target time. In the "Initial State" tab, select "Run", and set the target time as desired in days, hours, minutes, and seconds.After setting, click "Send Program" to start the countdown.users can also set the display color of the target time.Single-line and multi-line display: users can choose single-line or multi-line display for setting the timing.

Display Text: users can check whether to display text. After checking, the entered text content



can be displayed.users can also choose the text color, font, font size, bold, italic, underline, left, center, and right.

- **Style**: users can choose the unit displayed in the button timing area and can choose to perform operations such as accumulation.
- Border: After selecting, users can add various styles of borders, as well as set the display
 effects, movement step size, and running speed of the border.
- Background: After selecting, users can add various custom images or system-provided images as backgrounds.

After clicking "Send Program" to start the timing, users can click the "Remote Control" button under the "Device" menu , Select "Timer" and start/pause and reset the timer through the pop-up "Timer Remote Control".

8.3.6.Stopwatch

Click "Time" under the "Partition" menu and select "Stopwatch".

Users can modify relevant attributes in the stopwatch partition toolbar interface. After selecting to add a stopwatch, users can set the following parameters:



After selecting to add a stopwatch, users can set the following parameters:

Starting point X: Add the position of the top left corner of the area relative to the left boundary of the LED display, in pixels

.Starting point Y: Add the position of the top left corner of the area relative to the upper boundary of the LED display, in pixels.W: The width of the added area, in pixels.H: The height of the added area, in pixels.Initial state: The initial state of the stopwatch can be set to run or pause.

Note: If users select "Pause" in the "Initial State", clicking "Send Program" will stop the timing. users need to select "Run" in the "Initial State" to start timing.

Number of Times: users can select the number of times in the "Number of Times" drop-down list. The number of times is the maximum number of times displayed on the screen. A maximum of five times is displayed. Select "Run" in the "Initial State" and click "Send Program" to start timing after the settings are complete.

Stopwatch font: users can set the font, font size, bold, italic, underline, and font color of the stopwatch. The font for counting: The top of the screen for counting is the latest count, followed by the next count. The font, font size, bold, italic, underline, and font color for counting can be set.

Border: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.Background: After selecting, users



can add various custom images or system-provided images as backgrounds.

After clicking "Send Program" to start the timing, users can click the "Remote Control" button under the "Device" menu , Select "Stopwatch" and use the pop-up "Time Remote Controller" to start/pause, reset, and record the stopwatch.

8.3.7.Counter

Click "Time" under the "Partition" menu and select "Counter".users can modify relevant attributes in the counter partition toolbar interface.



After selecting to add a "counter", users can set the following parameters:

- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- W: The width of the partition, in pixels.
- H: The height of the partition, in pixels.
- Starting value: users can enter a specified starting value, which can be a decimal.users can
 also modify the display color, font, font size, bold, italic, underline, left, center, and right of the
 starting value.
- Cycle: When selected, it will return to the starting value when reaching the maximum or minimum value.J
- Jump step size: The default value for each increase or decrease in value (for example, if the
 jump value is 3, then each increase or decrease is 3) is 1.
- Display Text: users can check whether to display text. After checking, the entered text content
 can be displayed.users can also choose the text color, font, font size, bold, italic, underline, left,
 center, and right.
- Maximum value: Display the maximum value of the counter. The added value cannot exceed this value.
- Minimum value: Display the minimum value of the count, and the reduced value cannot be lower than this value.
- Decimals: The number of decimals that can be displayed on the screen. Border: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- Background: After selecting, users can add various custom images or system-provided images as backgrounds.



After clicking "Send Program" to start the timing, users can click the "Remote Control" button under the "Device" menu , Select "Counter" and select the counting area to be modified through the pop-up "Time Remote Control". users can increase, decrease, or reset the selected counting area.

8.4. Weather area

Click "Weather" under the "Partition" menu, and you can modify relevant attributes in the weather partition toolbar interface.



- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- W: The width of the partition, in pixels.
- **H**: The height of the partition, in pixels.

Update method:The weather forecast update methods include automatic update by the controller and manual update by software.

Automatic controller update: The controller automatically updates weather information at regular intervals.(Internet connection and upgrading to the latest firmware version are required.)

Manual software update: After adding the weather, click the "Send" button to obtain the latest weather information.

City: Set country and city. Style: Set the display style of weather, whether to display icons and temperature, air index, wind, air quality, etc.

Border: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.

Background: After selecting this option, users—can add various custom images or system-provided images as backgrounds. In addition, users—can set the font, font size, color, bold, italic, and underline. The weather display style also has various special effects to choose from, with running speeds ranging from 1S-16S and dwell time options ranging from 0S-99S.

8.5. Sensor area

Click "Sensor" under the "Partition" menu, and users can modify relevant attributes in the sensor partition toolbar interface.





- Sensor type: Select the corresponding sensor type.
- Sensor model: Select a specific sensor model. After selecting a specific sensor model, users can set the sensor's access location, display accuracy, units, correction values, whether to display fixed text, the font, font size, bold, italic, underline, alarm conditions, and normal and alarm value display colors.
- Alarm settings: Enter the specific threshold and color for the alarm.
- Border: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.
- Background: After selecting, users can add various custom images or system-provided images as backgrounds.

8.6. Modbus Area

Click "Modbus" under the "Partition" menu, and users can modify relevant attributes in the Modbus partition toolbar interface. Select the access location, device name, corresponding parameter value, sensor serial number, sensor format of the device, and also enter the sensor operation formula. Select to check the control display or hide the "Sensor Unit" and "Static Text", and also select the display color. Users can set the font, font size, bold, italic, and underline of the text. Click the "Alarm" button to set the alarm conditions and normal value display color and alarm value display color.







8.7. Voice area



Click "Voice" under the "Partition" menu, and users can modify relevant attributes in the voice partition toolbar interface.

Click "Create New", double-click the text preview area on the right, and in the pop-up "Text Edit" interface, users—can create new text, open text, save text, or directly edit text content. Set display properties such as text color, background color, font, bold, italic, underline, alignment, line spacing, and so on.



• **Display effects**: add display effects to subtitles, including fast typing, static display, leftward movement, leftward continuous movement, upward movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward

continuous movement.

- The text is aligned upwards.
- The text is vertically centered.
- Align text downwards.
- : Text stretching.
- Text compression.

Running speed: Level 1-16 for stunt running speed, with Level 1 having the fastest running speed.

Dwell time: stunt dwell time is 1-99 seconds, with 1 second being the shortest dwell time.



Border: After selecting, users can add various styles of borders, as well as set the display effects, movement step size, and running speed of the border.

Background: After selecting, users can add various custom images or system-provided images as backgrounds.



Click "Voice Broadcast", check "Enable", and select the voice playback style, volume, speed, playback times, interval, and playback mode.

Type: Select the voice playback style, with a total of 6 styles.

Volume: Select the voice playback volume, ranging from 0 to 10, with a total of 11 volume levels, where 0 is the lightest and 10 is the loudest.

Speed: Select the voice playback speed, ranging from 1 to 11, with a total of 11 speeds, with 1 being the slowest and 11 being the fastest.

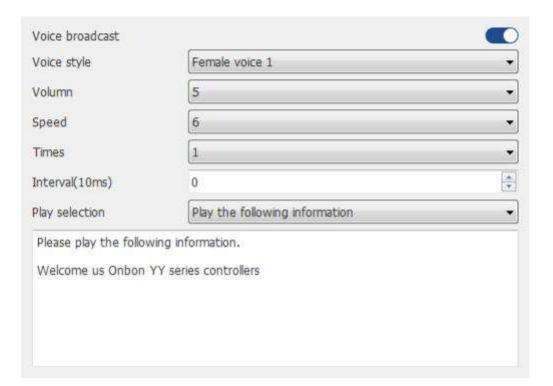
Play Count: Select the number of voice plays, ranging from 1 to 15 and looping.

Interval: select the voice playback interval.

Mode: It is divided into playing area information and playing the following information. The playing



area information indicates the text information that has been added to the program area, and the playing the following information indicates the text information that is entered in the following text box.

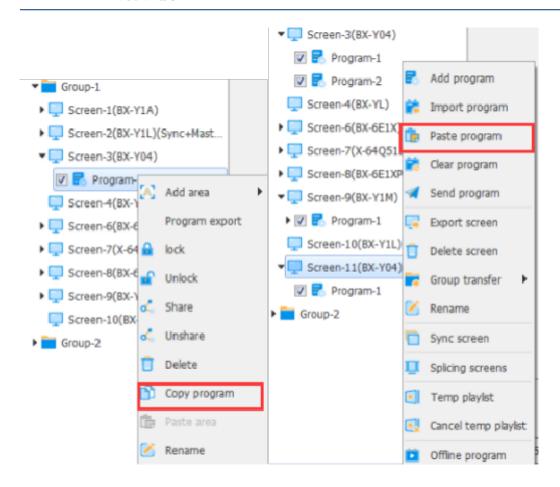


9. Program setting

9.1.Copy/Paste Programs

Select a program under the screen, right-click and select "Copy Program", then select the screen where the program needs to be copied, right-click and select "Paste Program" to complete the program copying and pasting, as shown in the following figure.





9.2.Import/Export Programs

- Export a program: Select a program on the screen, right-click and select "Export Program", and select the path to export the program to the computer.
- Import programs: Select the screen that needs to import this program, right-click and select "Import Program", and the program saved in the computer can be imported to the screen.

9.3. Multi-screen synchronized program

Select a screen, right-click and select "Multi-screen synchronization". In the "Multi-screen synchronous display" interface, check the screens that need to be synchronized, and select a screen as the main screen. Then select the synchronization mode, device synchronization or time synchronization, and click "OK" to complete.

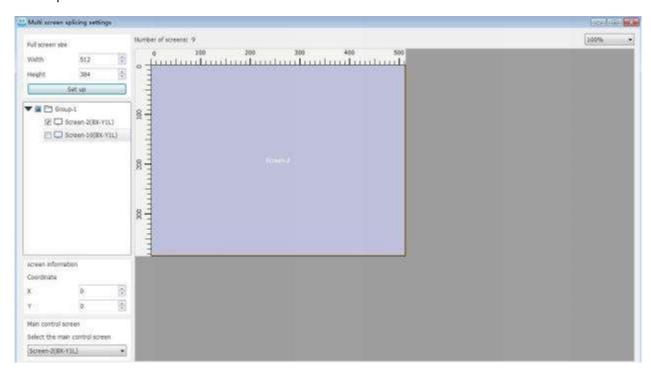
 Equipment synchronization: The default is equipment synchronization, where the same type of control card on different screens plays the program simultaneously.



 Time synchronization: Select time synchronization to set the start time and end time for the program to start playing synchronously.

9.4. Splicing screens

Select a screen, right-click and select "Multi-screen splicing". In the "Multi-screen splicing" interface, check the screens that need to be spliced, and select a screen as the main screen. Then set the width and height of the entire screen size, as well as the coordinates of the screen. Click "OK" to complete.



9.5. Temporary play list

Select a screen, right-click and select "Insert Program". In the "Insert Program" interface, check the program to be inserted, set the number of times and duration of the program to be played, and click "Send" to complete.





9.6.Offline program

Select a screen, right-click and select "Offline Program". In the "Send Offline Program" interface, check the programs that need to be sent offline, turn on the offline program switch, set the offline time, and click "OK" to complete.





10. Edit announcement

10.1.Edit announcement

The announcement is mainly used for emergency announcement information inserted during program broadcast.



- Starting point X: The position of the top left corner of the partition relative to the left boundary of the LED display, in pixels.
- Starting point Y: The position of the top left corner of the partition relative to the upper boundary of the LED display, in pixels.
- W: The width of the partition, in pixels.
- H: The height of the partition, in pixels.
- Click Edit, and in the pop-up editing interface, users can edit the content of the adaptive text as well as settings for font, bold, italic, font size, font color, and background color.

Display effects: Add display effects to text, including fast typing, static display, leftward movement, leftward continuous movement, upward continuous movement, downward movement, downward continuous movement, rightward movement, and rightward continuous movement.

Playing time: After selecting the playing time, set the start and end time of the announcement playing.

Running speed: stunt running speed is 1-16 levels, with level 1 having the fastest running speed.

Stay time: stunt stay time is 1-99 seconds, with 1 second as the shortest.



Rotation angle: Text can be displayed in 90°, 180°, and 270°

Background transparency: When selected, the background color is transparent.

Voice broadcast: Announcements can be set to be broadcast in voice mode. After selecting voice broadcast, set the voice style, speed, volume, number reading, playback count, playback interval, power-down storage, and playback mode.

10.2.Send notice

Click the Send button after setting



10.3.Clear notice

Select the notice and right-click to select "Delete" to clear the notice .

11. Common functions

11.1.Turn on screen

Click "turn on " under the "Device" menu to turn on the screen.

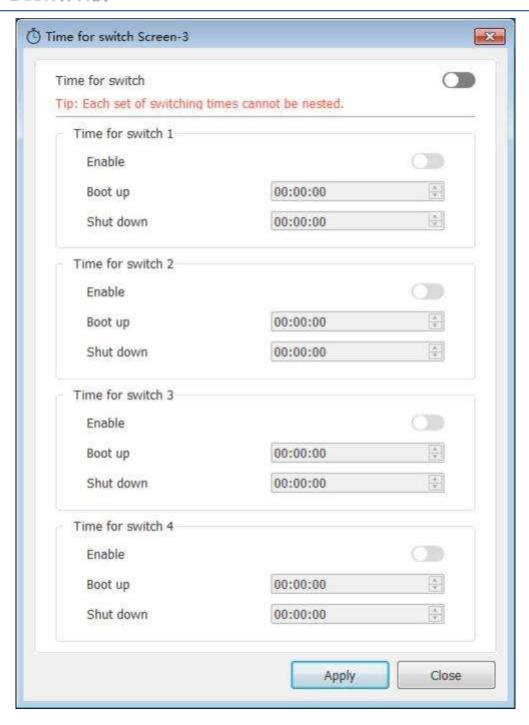
11.2.Turn off screen

Click "turn off" under the "Device" menu to turn off the screen.

11.3. Timing switch set up

Click "Time for Switch" under the "Device" menu. On the "Time for Switch" interface, turn on the "Timed Switch", click "Use" to set the time for turning on and off the device, and finally click "Apply", as shown in the figure below.





11.4.Correction time

Click "correction Time" under the "Device" menu to complete the time calibration with the time chip in the controller.

11.5.Brightness

Click "Brightness" under the "Device" menu to set the brightness of the screen on the "Brightness" interface.Brightness adjustment includes manual, scheduled, and automatic brightness adjustment

1) Manual brightness adjustment: Manually pull the scale of the brightness value and click

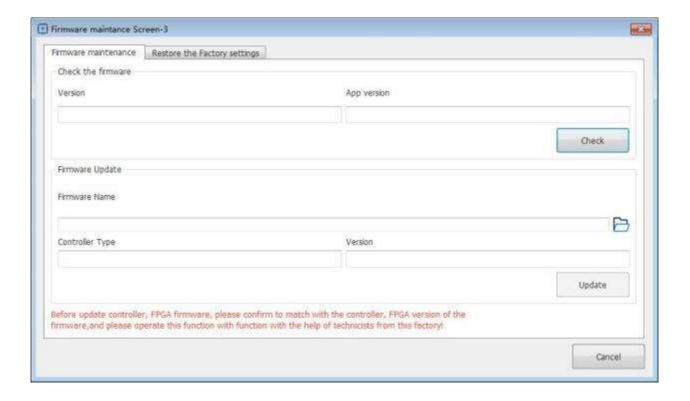


"Settings" to complete the brightness adjustment.

- 2) Timed brightness adjustment: The brightness value is adjusted at regular intervals, and there are 4 time periods. After the user checks the box before the time period, the setting can be set. Set the brightness value.
 - 3) Automatic brightness adjustment: After connecting the VMF control card or sensor, the user can select the default brightness value or click "ambient light reference value" and "obtain current brightness". The user can also customize the brightness value. Finally, click "Apply" to set the brightness of the screen. The brightness of the screen will change according to the change in the ambient light level of the VMF control card or sensor.

11.6.Firmware

To ensure that the software version in the controller matches the software, users can first perform controller program maintenance by selecting "Firmware" under "Device" in the menu bar to enter the "Firmware Maintenance" interface.



11.7.Remote

Click "Program" under the "Content" menu. After adding a program, click the toolbar button to select the add-on timer, button timer, stopwatch, and counter. (For more information on time



partitioning, see 8.3.)

11.7.1.Button timer

Add a button timer, then click "Send Program" to start the timer. users can click the "Remote Control" button under the "Device" menu, select "Timer", and use the pop-up "Timer Remote Control" to start/pause and reset the timer.

11.7.2.Stop watch

After clicking "Send Program" to start the timing, users can click the "Remote Control" button under the "Device" menu, select "Stopwatch", and use the pop-up "Stopwatch Remote Control" to start/pause, reset, and record the stopwatch.

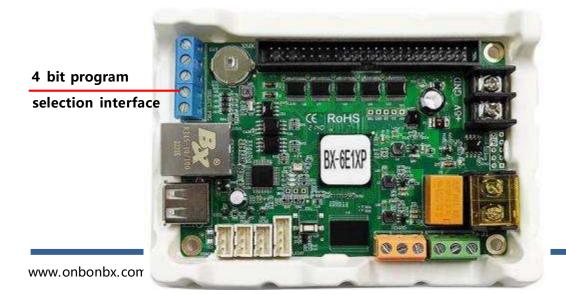
11.7.3.counter

After adding the counter and clicking "Send Program" to start the timing, users can click the "Remote Control" button under the "Device" menu, select "Counter", and use the pop-up "Counter Remote Control" to start/pause and reset the counter.

11.8.IO setting

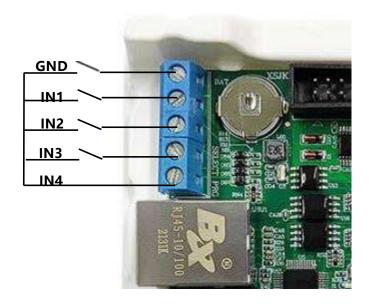
The control card has an on-board 2-4-bit program selection interface, which supports the function of selecting programs using external pins.By using external signals to select programs, it is possible to achieve different signal display scenarios for different programs.(Currently, the 6th generation card and the Y/C series use different interfaces for this function.) Firstly, we will introduce the IO configuration of the 6th generation card. The following figure takes the BX-6E1XP as an example.

11.8.1 IO interface Introduction





11.8.2.Logic connection diagram



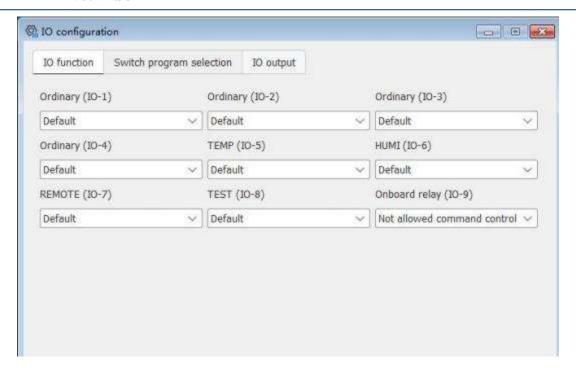
11.8.3.IO Function

Select "IO Configuration" under "Device" in the menu bar to enter the interface.



In the "IO Configuration" interface, users can select the corresponding control function from the drop-down list for each pin to control the program. After selecting the required function for each pin, click "Settings" to complete the configuration.





- Normal (IO-1) Normal (IO-4): The default is the program selection switch, which can also be used for IO output, timing-start/pause, timing-reset, stopwatch-start/pause, stopwatch-reset, stopwatch-count, count 1-increase, count 1-decrease, count 1-reset, count 2-increase, count 2-decrease, count 2-reset.
- 2. IO output: When selecting IO output, the IO pin is used to control the switch of the relay. Timing Start/Pause:
- 3. Select Timing Start/Pause, and the IO pin is used to control the timing switch. After receiving the signal, the timing starts, and after receiving the signal again, the timing pauses. Time-Reset:
 Select Time-Reset, the IO pin is used for timing reset switch.
- 4. Stopwatch Start/Pause: Select Stopwatch Start/Pause, and the IO pin is used to control the stopwatch switch. Upon receiving the signal, the stopwatch starts timing, and upon receiving the signal again, the stopwatch timing pauses. Stopwatch Reset: Select Stopwatch Reset, and the IO pin is used as a switch for the stopwatch reset.
- 5. Stopwatch Counting: Select Stopwatch Counting, the IO pin is used as a switch for stopwatch counting. When a signal is sent, it is recorded once. Currently, the function can record up to 5



data points.

- 6. Count 1-increase: Select Count 1-increase, the IO pin is used for the count-increase switch, sending a signal once, counting increases by one, and increasing the transition step by one.
- 7. Count 1-decrease: Select Count 1-decrease, the IO pin is used for the count-decrease switch, sending a signal once, counting down by 1, and reducing the transition step by 1.
- 8. Count 1-Reset: Select Count 1-Reset, and the IO pin is used as a switch for counting 1 reset. Count 2-increase: Select Count 2-increase, the IO pin is used for the count-increase switch, sending a signal once, counting increases by one, and the jump step increases by one. Count 2-decrease: Select Count 2-decrease, the IO pin is used for the count-decrease switch, sending a signal once, counting down by 1, and reducing the transition step by 1. Count 2-Reset: Select Count 2-Reset, and the IO pin is used as a switch for Count 2 Reset.
- 9. Temperature TEMP (IO-5): The default is the temperature sensor interface, which can be extended to function as an IO-5 pin for controlling program switching. It can also be used for IO output, timing-start/pause, timing-reset, stopwatch-start/pause, stopwatch-reset, stopwatch-count, count 1-increase, count 1-decrease, count 1-reset, count 2-increase, count 2-decrease, count 2-reset.
- 10. Humidity and temperature HUMI (IO-6): The default is the temperature and humidity sensor interface, which can be extended to function as an IO-6 pin for controlling program switching. It can also be used for IO output, timing-start/pause, timing-reset, stopwatch-start/pause, stopwatch-reset, stopwatch-count, count 1-increase, count 1-decrease, count 1-reset, count 2-increase, count 2-decrease, count 2-reset.
- 11. Remote control (IO-7): The default is infrared remote control interface, which can be expanded to function as an IO-7 pin for controlling program switching. It can also be used for timing start/pause, timing reset, stopwatch start/pause, stopwatch reset, stopwatch count, count 1 -



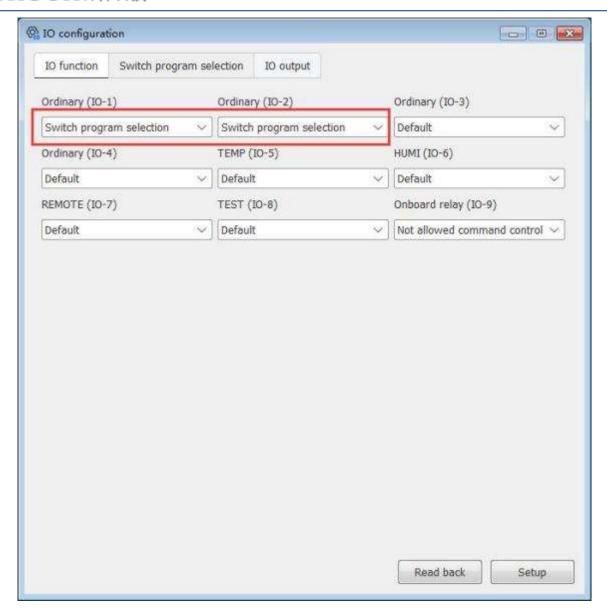
increase, count 1 - decrease, count 1 - reset, count 2 - increase, count 2 - decrease, count 2 - reset.

- 12. TEST (IO-8): The default is the test button, which can be expanded to function as an IO-8 pin for controlling program switching. It can also be used for timing start/pause, timing reset, stopwatch start/pause, stopwatch reset, stopwatch count, count 1 increase, count 1 decrease, count 1 reset, count 2 increase, count 2 decrease, count 2 reset.
- 13. On-board relay (IO-9): The default is the relay interface. The IO-9 pin only has the options of "allow command control" and "disallow command control". The default is "disallow command control", and is not used for switching program selection.Note: The infrared remote control interface "remote control" IO-7 pin of the BX-6E series controller cannot be used for IO output.

11.8.4. IO select programs

For example, in the "IO Function" interface, select "Normal IO-1" and "Normal IO-2" for the "Switch Program Selection" function, and then click on the "Switch Program Selection" interface to check the "Switch Program Configuration", as shown below.





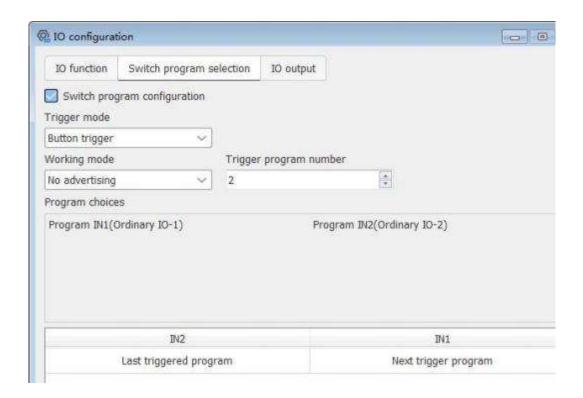
- 1. Select the triggering mode
- 2. Switch program configuration triggering modes are divided into: switch triggering and button triggering. The default is switch triggering, which is commonly used and provides flexible switching between programs

Button mode is usually used for projects like bus stop announcement, where programs are played one by one in sequence.

When selecting the "Button Trigger" mode, it is necessary to configure "Normal IO-1" and "Normal IO-2" as "Switch Program Selection" in the "IO Function" interface. In this way, in the "Switch Program



Selection" interface, the "Program Selection" box will display [Program Selection IN1 (Normal IO-1)]/
[Program Selection IN2 (Normal IO-2)]. The program is triggered through "Normal IO-1" and "Normal IO-2". As shown in the figure below:



Logic control

When the "trigger mode" is selected as "switch trigger", the logic control can be selected as "single logic control" or "combined logic control". Single logic control. The default is single logic control, which is usually used when there are fewer programs. Usually, the default is to use "Normal IO-1" and "Normal IO-2". Click "Settings" to complete the configuration, which enables the function of switching between programs. The control logic is as follows:

Combination logic

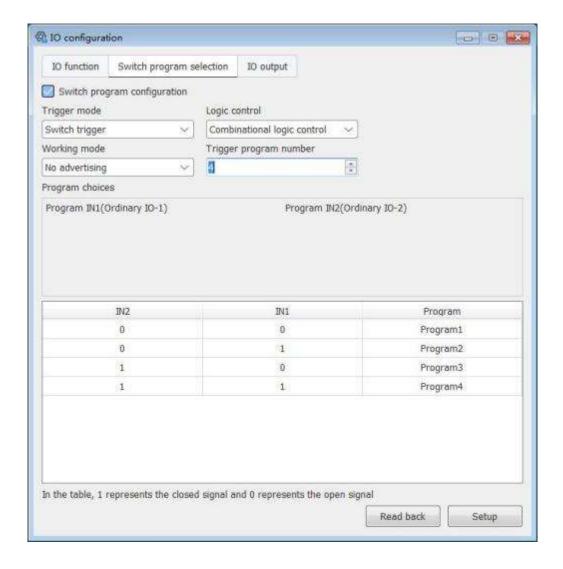
When there are many programs, combination logic is usually used. In addition to checking "Normal IO-1" and "Normal IO-2", more pins can also be used to control program switching. Click "Settings" to complete the configuration, which can achieve the function of switching programs. For example, using TEMP IO-5 pins and IN1 and IN2, the control logic is as follows:



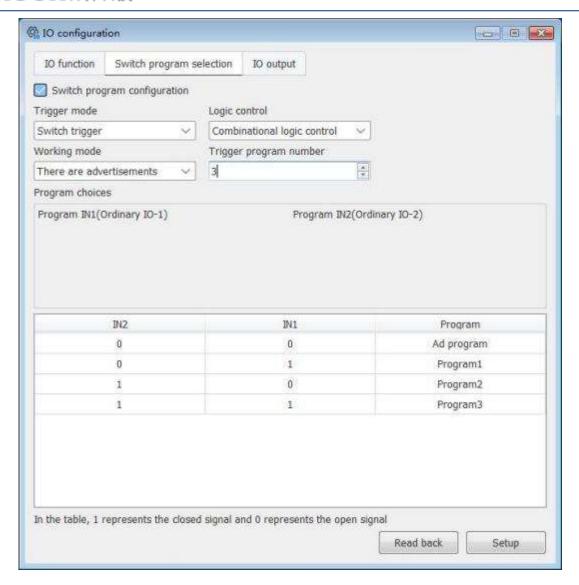
Working mode

• Advertising+single logic control

Select the "Advertisement" working mode, and when the IO pin is not short circuited, play the advertisement program (all programs except for the trigger program can be considered as advertisement programs). Only when the pin is short circuited will the corresponding trigger program be displayed.



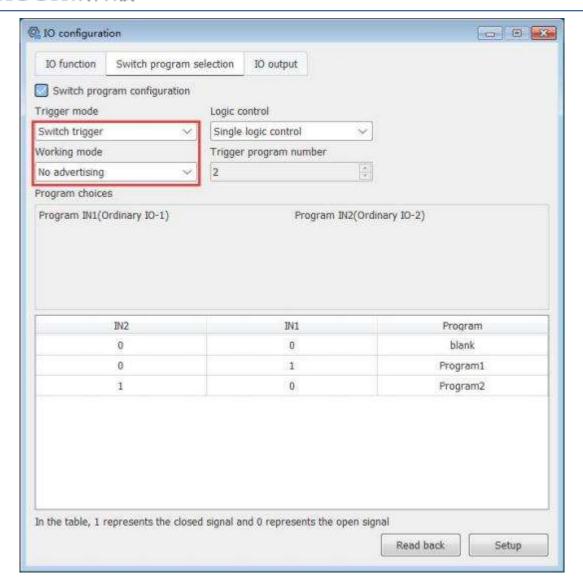


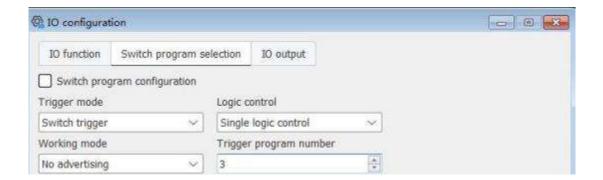


No advertisements+single logic control

The default is no advertisement, and the "no advertisement" working mode is selected. When the IO pin is not short circuited, the screen will appear black. Only when the pin is short circuited will the corresponding program be triggered.





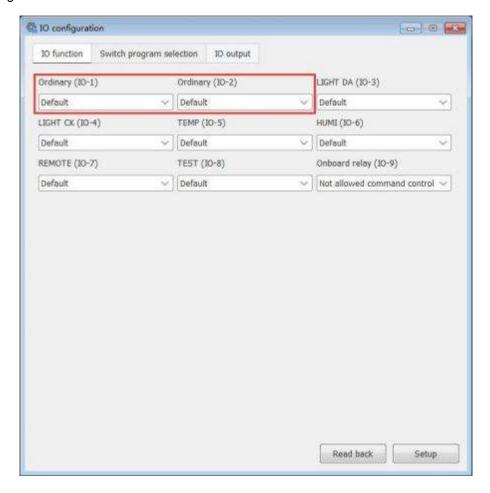


1. IO output

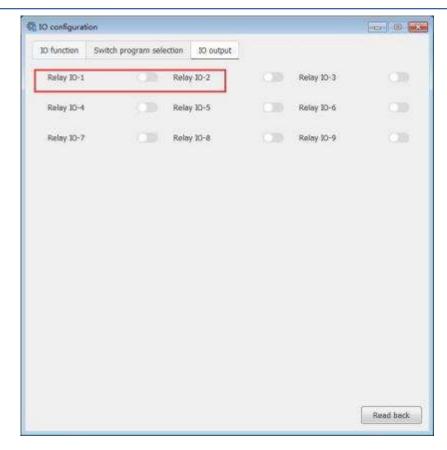
The relay switch control function can be achieved by directly connecting the relay through the IO output function. In the "IO Function" interface, select "Common IO-1" and "Common IO-2" for the "IO



Output" function, and then click on the "IO Output" interface to turn on the relay switch, as shown in the following figure.







Note: The remote control interface and test interface do not have IO output function.

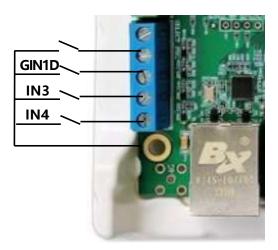
Now let's introduce the IO configuration of the Y/C series. The following figure takes BX-Y3A as an example

11.8.5. Introduction of Pin Interface



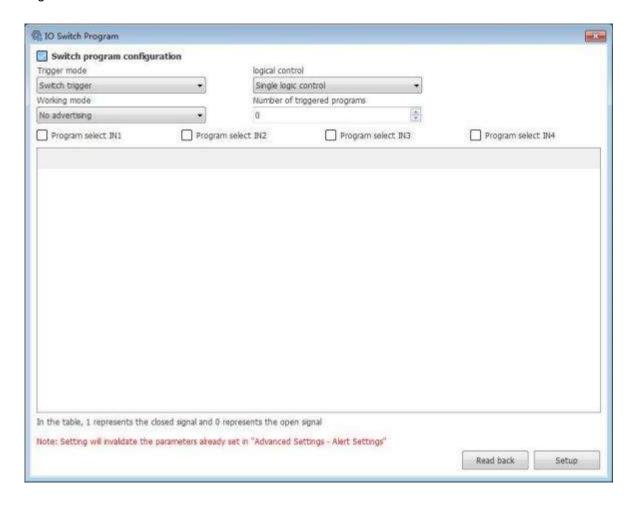






11.8.6.IO function

Select "IO setting", Enter the "IO Program Configuration" interface and select "On/Off Program Configuration".



Select trigger mode

1. The trigger mode for program configuration is divided into switch trigger and button trigger.



The default is triggered by a switch, which is commonly used and allows for flexible program switching. The button mode is usually used for projects similar to bus stop announcements, where programs are played in sequence one by one.

When selecting the "button triggered" mode, it is necessary to configure "ordinary IO-1" and "ordinary IO-2" as "on/off program selection" on the "on/off program selection" interface. In this way, in the "on/off program selection" interface, the "program selection" box will display [program selection IN1 (ordinary IO-1)]/[program selection IN2 (ordinary IO-2)]. Trigger the program through "ordinary IO-1" and "ordinary IO-2". As shown in the following figure:



1. Logic control

When the "trigger mode" is selected as "switch trigger", the logic control can be either "single logic control" or "combination logic control".

2. Working mode

Advertising+single logic control

Select the "Advertisement" working mode, and when the IO pin is not short circuited, play the advertisement program (all programs except for the trigger program can be considered as advertisement programs). Only when the pin is short circuited will the corresponding trigger program be displayed.

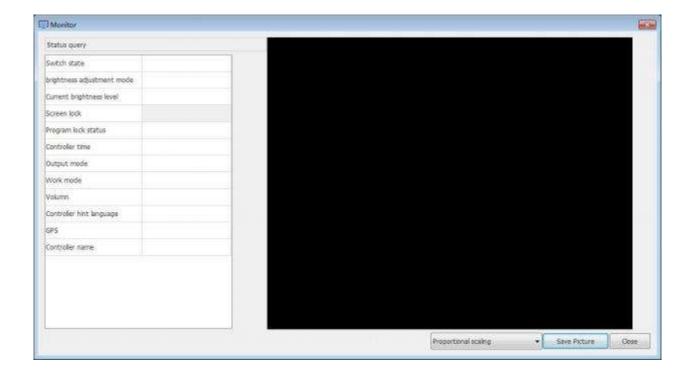
No advertisements+single logic control



The default is no advertisement, and the "no advertisement" working mode is selected. When the IO pin is not short circuited, the screen will appear black. Only when the pin is short circuited will the corresponding program be triggered.

11.9. Screen monitor

Screen monitor allows users to directly view the current program being played on the screen when they are unable to access the screen. Click on "Screen Monitor" under the "Device" menu to enter the screen monitoring interface. Users can stretch the screen or display the time size, and also save the images on the screen. Users can also view information such as the screen's on/off status, brightness adjustment mode, current brightness level, screen lock status, program lock status, controller time, output mode, working mode, volume, controller prompt voice, GPS, and controller name.



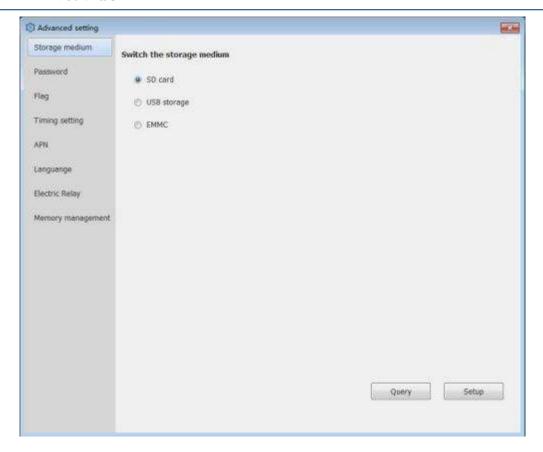
12、Advance

12.1.Y/C Series

12.1.1. Switch the storage medium

Click "Advanced Settings" under the "Device" menu to enter the advanced settings interface. Click "Switch Storage Media" to select SD card, USB storage, or memory.



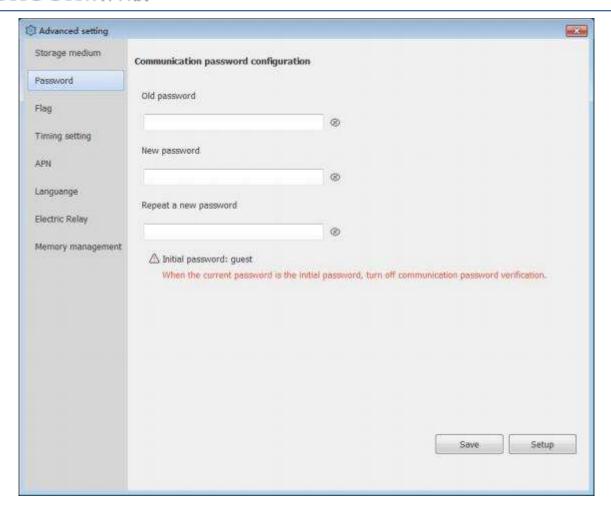


12.1.2. Communication password setting

In the advanced settings interface, click "Communication Password Settings" to enter the communication password configuration interface: the old password defaults to the initial password guest, enter the new password, click "Settings", and the prompt "Password modification successful!"; Users can also change password again on this interface.

Note: When changing the password to guest, the communication password mode will be turned off.





• Communication password verification

Communicate with the controller (set screen parameters, time calibration, etc.), and a communication password verification interface will pop up. After correctly entering the communication password, communication can proceed; If the password is entered incorrectly, communication cannot proceed.

Cancel communication password

Click to clear password, enter the current correct communication password, and then clear the communication password.

12.1.3.Flag setting

Screen marking is for the convenience of users to adjust the screen, displaying the words "LED" in the four corners of the screen, which can be turned on and off.IP marking refers to the display of

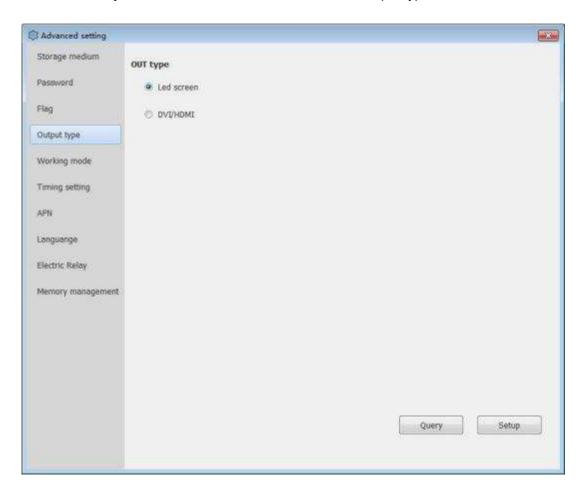


"Please add program", controller model, screen parameters, IP, and other information on the screen when there is no program on the controller.

Whether the IP is displayed or not is controlled by the IP tag.In the advanced settings interface, click "Tag Configuration" to enter the tag configuration interface. Users can choose to turn on or off screen tags and IP tags.

12.1.4.Out put type

(OVP-Y5E Support) In the advanced settings interface, click "Output Method" to enter the output type interface, where you can choose whether the controller's output type is LED screen or DVI/HDMI.



12.1.5. Working mode

(Controller BX-Y2A/Y2E/Y3A/Y3E and OVP-Y5E support)

In the advanced settings interface, click "Work Mode" to enter the work mode interface, where you can choose whether the controller's work mode is synchronous mode (DVI/HDMI) or asynchronous mode.

12.1.6. Correction time



In the advanced settings interface, click "Timing Settings" to enter the timing settings interface. You can select network timing, check "Automatic Timing" or "Custom Network Time Server", fill in the network address of the time zone, and finally click "Settings" to complete the configuration.

12.1.7.Set APN

In the advanced settings interface, click "Set APN" to enter the set APN interface. Users can fill in the name, user name, password, and dial-up number of the APN. After filling it out, click "Settings" to complete the configuration.

12.1.8.Language

In the advanced settings interface, click "Language" to enter the language interface and switch the language of the control card, supporting Simplified Chinese and English.

12.1.9.Relay

Board load

After connecting the relay switch on the control card, in the advanced settings interface, click "Relay" to enter the relay interface, select "Board Load", configure the sensor type, conditions, limit values, IO switch and other parameters to achieve relay control function.

Multi functional card

After connecting the VMF multifunctional card with an external relay, in the advanced settings interface, click "Relay" to enter the relay interface, select "Multifunctional Card", and configure the sensor type, conditions, limit values, IO switches and other parameters to achieve relay control function.

12.1.10. Warning Configuration

After connecting the external sensor, in the advanced settings interface, click "Warning Configuration" to enter the warning configuration interface. Click to open the "Warning Switch", select the sensor type, connection location, set warning values, and play the program to achieve the warning function.

12.1.11.Clean up memory

In the advanced settings interface, click "Clean Memory" to enter the Clean Memory interface, where users can clean the memory of the controller.

12.2.BX 6 series



12.2.1. Delay start screen

In the advanced settings interface, click "delay start screen". This function is used to prevent abnormal display of the car mounted display screen due to unstable voltage during car ignition. After setting the delay start time of the display screen, click "Configure" to complete the setting.

12.2.2.serial setting

In the advanced settings interface, click "Serial Port Configuration" to set the functions of the RS232 and RS485 serial ports. The serial port configuration interface RS232 defaults to serial communication and can be configured for voice function; RS485 default serial communication, can be configured as an environmental sensor or radar sensor function. After selecting the function of the serial port, click "Configure" to complete the settings.

12.2.3. Password setting

In the advanced settings interface, click on "Communication Password Settings" to enter the communication password configuration interface. Set the communication password for the controller. When the customer sets the communication password for the controller, they need to enter the correct password before configuring the parameters for the controller again.

Delay start screen

Serial

Password

Clear screen

New password

Repeat a new password

Remember the password

Set the password for the first time. The old password must be consistent with the new password

When changing or cleaning the password, the old password must be filled in correctly.

Note: 6E1XP/6E2XP/6E3XP supports 32-bit strong passwords

Set password



Enter the "Communication Password Configuration" interface, enter the old password, new password, and duplicate new password, then click on "Save and Configure", and the prompt "Password changed successfully!"

Note: When setting a password for the first time, the old and new passwords must be set to be consistent.

Verify communication password

Communicating with the controller again (setting screen parameters, timing, etc.) will pop up a communication password verification interface. After correctly entering the password, communication can proceed; If the password is entered incorrectly, communication cannot proceed. Note: The same computer only needs to enter the communication password once.

Cancel communication password

Click to clear password, enter the current correct communication password, and then clear the communication password.

12.2.4.4G Status query

Add and select a 4G series control card. In the advanced settings interface, click "4G status query" to view relevant information about the 4G SIM card.

12.2.5. Clear screen settings

When playing multiple programs, it is generally assumed that the previous program will be cleared when the next program is played. If the customer does not want the previous program to be cleared, they can click "Clear Screen Settings" on the advanced settings interface, check "Do not clear screen", and click "Configure" to complete the settings.

12.2.6. Radar sensor setting

After connecting the radar sensor, in the advanced settings interface, click "Radar Sensor" to enter the radar sensor configuration interface. Check "Use" to set the speed value of the radar sensor and configure the corresponding display program according to non numerical values.

12.3.BX 5 series controllers

12.3.1. Delay start screen

Supports 5-series cards for X-W series/5E series/5M series .In the advanced settings interface, click "Display screen delay start". This function is used to prevent abnormal display of the car



mounted display screen due to unstable voltage during car ignition. After setting the delay start time of the display screen, click "Configure" to complete the setting.

12.3.2. Controller button function configuration

Supports 5-series cards for X-W series/5E series/5M series,In the advanced settings interface, click on "Controller Button Function Configuration", which is applicable to special applications where manual buttons are used to control the sequence of program playback. According to the different needs of users, three different functional configurations are provided: testing function, edge triggered program switching, and level triggered program switching. After selecting the button function, click "Configure" to complete the settings.

12.3.3. Smooth Movement Setting

Supports 5 series controllers for 5E/5M series. In the advanced settings interface, click "Smooth Movement Settings" to fine tune the movement speed level and movement effect.

12.4.K series

12.4.1.Start LOGO

In the advanced settings interface, click "Start Logo", and according to the needs of different users, you can enter the desired logo information to edit the height, width, and dwell time.

13、K series font library function

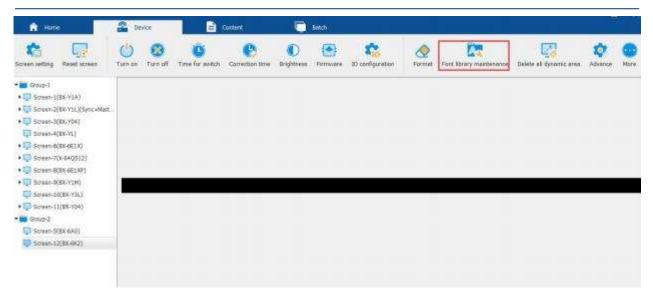
13.1.Format

If it is possible to delete both the program and font files in the controller, click on "Devices" -> "Format" in the menu bar to format and clear the original program and font files.

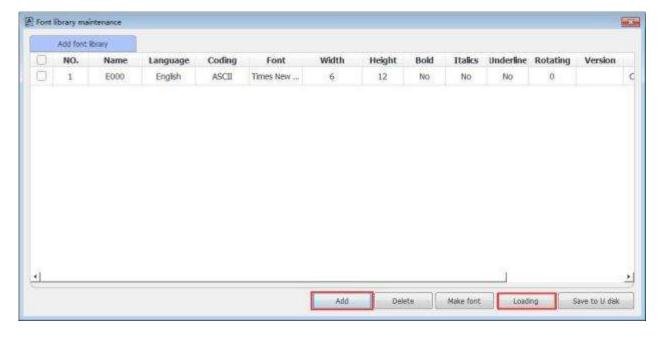
13.2.font maintenance

The controller is equipped with an 8 * 16 English font library and a 16 * 16 Simplified Chinese font library. Users can also load other self-made fonts by clicking on "Device" -> "Font Maintenance" -> in the menu bar to enter the "Font Maintenance" interface.





Click "Add" to select the desired font file, check the font file that needs to be loaded, click the "Download" button to complete the loading of the font file.



13.3.Clear dynamic area

If users don't want to continue playing the dynamic area program, you can click on "Devices" in the menu bar and select "Clear Dynamic Area" , Delete all dynamic area program content of the controller. (Note: Only delete content without deleting dynamic areas)

14、Batch function



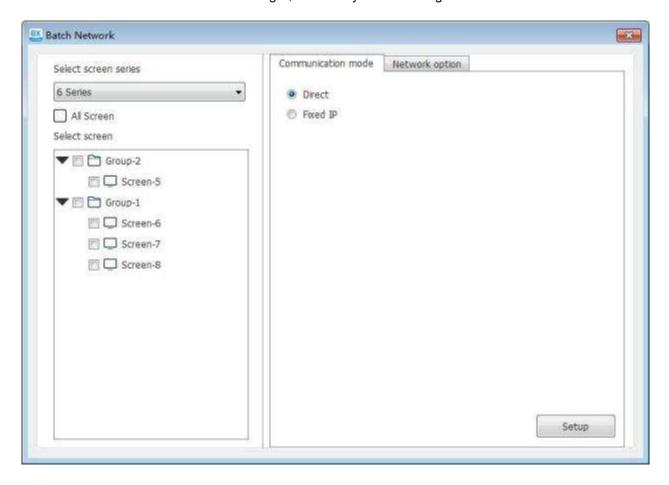
14.1.1.network configuration

Click on the "Batch" menu on the main menu bar. The BX-Y series/C series/6 series can support setting communication mode, resetting screen parameters, turning on/off the screen, timing switch, timing, lighting up, volume, firmware upgrade, sending offline programs, and sending programs.

14.1.2. Network

Direct link

After clicking on the "Batch" menu on the main menu bar, click "Network" to enter the group network configuration interface. Check the screen that requires group configuration, select "Direct link" under the "Batch network" on the right, and finally click "Settings".

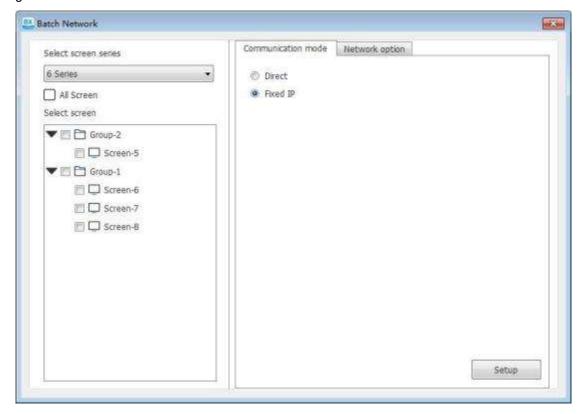


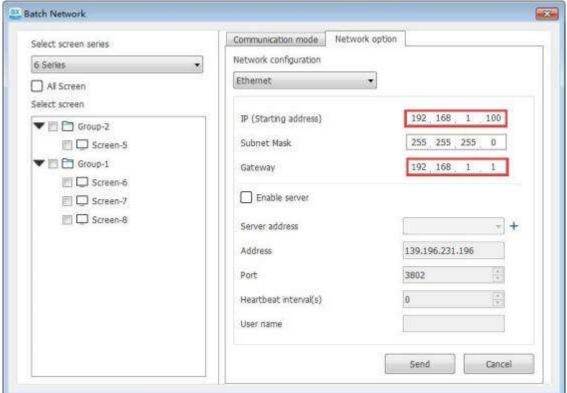
Fixed IP

If the IP address of multiple screens needs to be set to a fixed IP, click on the "Group" menu on the main menu bar, click "Communication" to enter the group network configuration interface, check the screen that needs group configuration, and modify the IP network segment, IP starting address,



gateway, and other content in the "IP (Starting Address)" section under "Network Configuration" on the right, and click "Send". Then select "Fixed IP" in "Communication Mode", and finally click "Settings".

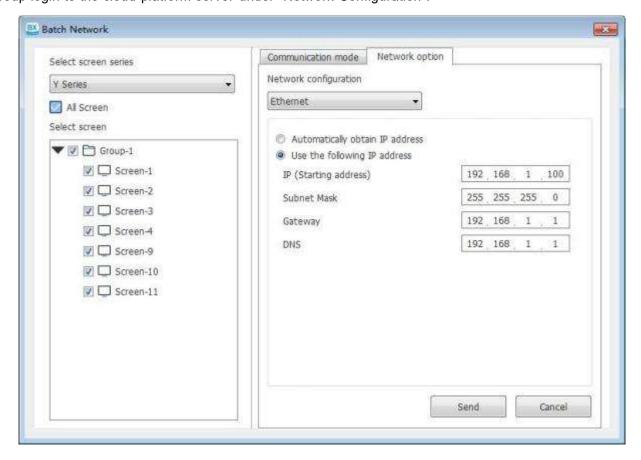




14.1.3.Network



In addition to modifying parameters such as IP address, the server can also be enabled for group login to the cloud platform server under "Network Configuration".



14.1.Batch reboot screens

After clicking on the "Batch " menu on the main menu bar, click "Reboot" to enter the "Group Settings" dialog box. User can select all screens under a group, or select one screen under different groups. After selecting the screen, click the "Send" button to enter the group sending interface and complete the group restart.

14.2.Batch turn on screens

After clicking on the "Batch" menu on the main menu bar, click "turn on" to enter the "Group Settings" dialog box. Users can select all screens under a group, or select one screen under different groups. After selecting the screen, click the "Send" button to enter the group sending



interface and complete the group opening.

14.3.Batch turn off screens

Click the "Batch " menu on the main menu bar, and then click "Turn Off" to enter the "Batch Settings" dialog box. Users can select all the screens under a group, or select one screen under different groups. After selecting the screen, click the "Send" button to enter the group sending interface, and then users can complete the group screen off.

14.4.Batch timing switch

Click the "Group" menu on the main menu bar, click "Timed Switch", and enter the "Group Settings" dialog box. Check to turn on the "Timed Switch" to select the control card type under the screen type. Then select all the screens under a group, or select one screen under different groups. In the Timed Switch Settings interface, check "Use", set the power-on time and power-off time, and click the "Send" button to enter the Group Send interface. Then the group timing switch settings are complete.

14.5.Batch correction time

Click the "Group" menu on the main menu bar, and then click "Timing" to enter the "Group Settings" dialog box. Users can select the control card type under the screen type, and then select all the screens under a group. Users can also select one screen under different groups. After selecting the screen, click the "Send" button to enter the group sending interface, and then complete the group timing.

14.6.batch brightness

Click the "Group" menu on the main menu bar, click "Brighten", and enter the "Group Settings" dialog box. Users can select the control card type under the screen type, and then select all the screens under a group. Users can also select one screen under different groups, and select manual, scheduled, or automatic brightness adjustment in the "Brightness" drop-down list on the right.

14.7.Batch firmware update



Click the "Group" menu on the main menu bar, and then click "Volume" to enter the "Group Settings" dialog box.users can select the control card type under the screen type, and then select all the screens under a group. Users can also select one screen under different groups. On the right side of the "Volume" adjustment interface, drag the ruler of the volume value. After setting the volume value, click the "Send" button to enter the group sending interface, and then complete the group volume adjustment.

14.9.Offline Program

Click the "Group" menu on the main menu bar, and then click "Offline Program" to enter the "Group Settings" dialog box. Users can select the control card type under the screen type, and then select all the screens under a group. Users can also select one screen under different groups, check the "Offline Program Switch" to turn it on, set the time to send offline programs, and click the "OK" button to enter the group sending interface. Then users can complete the group offline program sending.

14.10.Group send program

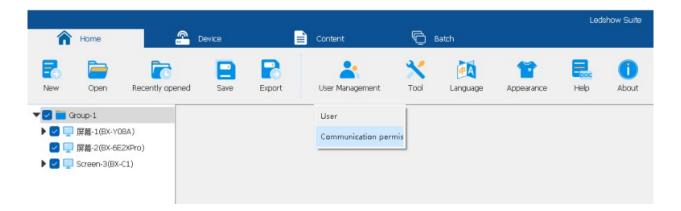
Click the "Group" menu on the main menu bar, and then click "Send" to enter the "Group Settings" dialog box. Users can select the control card type under the screen type, and then select all the screens under a group. Users can also select one screen under different groups, or check "All Screens". After clicking the "Send" button, users will enter the group sending interface, and then users can complete the group program sending.



15.Other notes

15.1. Communication verification pop-up window

Go to the home page and click "User Management" to open the "Communication Permissions" interface:



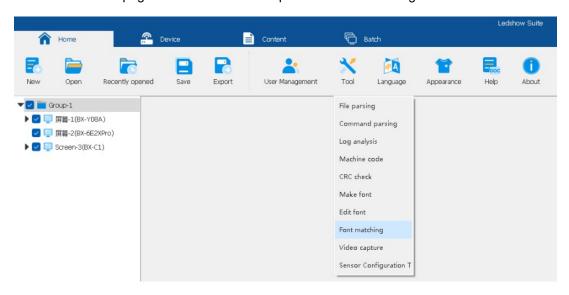
The communication pop-up window is closed by default. Check the box to open it. When open, you will be required to enter the communication password for verification each time you perform a



communication operation.

15.2. Font Matching

Go to the home page and click "Tools" to open the "Font Matching" interface:



Click "Open" to select a font file from your local drive, then click "Import" to complete the font matching process.

Note: You must manually install the font before importing it.

