LED Batch Controller Client

User Manual

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Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
Note	Provides additional information to emphasize or supplement important points of the main text.

Contents

Chapter 1 Introduction

1.1 Product Introduction

The LED batch controller client (hereinafter referred to as the client or software) is a powerful and user-friendly software. Through the client, you can easily add and manage multiple LED controllers (hereinafter referred to as the sending card or device) and control the full-color LED display (hereinafter referred to as the display or screen). The client supports multiple functions and is suitable for meeting rooms, studios, gyms, airports, banks, advertisements, family cinemas, and other scenarios.

1.2 Configuration Wizard

After you start the client, you will enter the **Configuration Wizard** page automatically. You can click **Normal Sending Card**, **Multi-Input Device**, or **54-Inch Splicing Screen** tab and follow the wizard to complete the device basic configuration according to the actual added device type.

Refer to the figure and table below for the basic configuration flow and detailed configuration description of normal sending cards, multi-input devices, and 54-inch splicing screen.

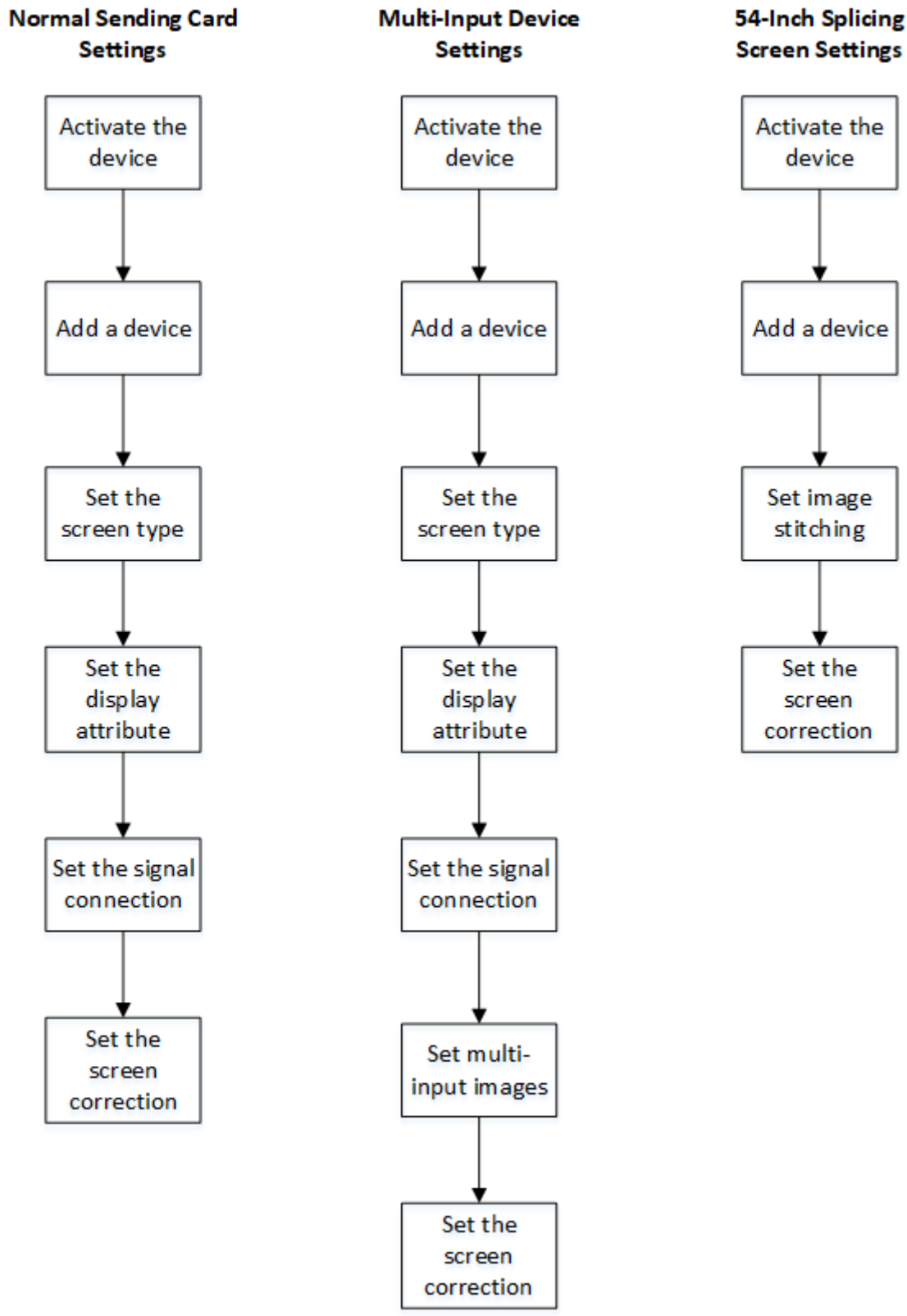


Figure 1-1 Configuration Wizard Flow

Table 1-1 Configuration Wizard Description

Device Type	Configuration Description
Normal Sending Card	1. Activate the device. Refer to ***Activate Device*** . 2. Add a device. Refer to ***Add Device*** . 3. Lighten the screen. Refer to ***Set Signal Connection*** . 4. Set the screen. Refer to ***Set Signal Connection*** . 5. Set the signal connection. Refer to ***Set Signal Connection*** . 6. Set the screen correction. Refer to ***Correct Receiving Card*** .
Multi-Input Device	1. Activate the device. Refer to ***Activate Device*** . 2. Add a device. Refer to ***Add Device*** . 3. Lighten the screen. Refer to ***Set Signal Connection*** . 4. Set the screen. Refer to ***Set Signal Connection*** . 5. Set the signal connection. Refer to ***Set Signal Connection*** . 6. Set multi-input images. Refer to ***Set Multi-Input Image*** . 7. Set the screen correction. Refer to ***Correct Receiving Card*** .
54-Inch Splicing Screen	1. Activate the device. Refer to ***Activate Device*** . 2. Add a device. Refer to ***Add Device*** . 3. Set image stitching. Refer to ***Set Image Splicing*** . 4. Set the screen correction. Refer to ***Correct Receiving Card*** .

Note

You can check **Do not prompt again next time**. Thus, **Configuration Wizard** page will not prompt again next time you start the client. If you want to enter **Configuration Wizard** page, click on the upper-right corner of the client, and select **Configuration Wizard**.

Chapter 2 Device Management

Note

Only the devices supporting OTAP (Over-the-Air Programming) protocol can be accessed and managed via the client.

The password is required in the device management. Passwords are divided into 4 types: digits, lowercase letters, uppercase letters, and special symbols. Passwords are classified into 3 levels:

- Level 0 (risky password): the password length is less than 8 characters or the password contains only one type of character.
- Level 1 (normal password): the password length is equal to or more than 8 characters and the password contains two types of characters.
- Level 3 (strong password): the password length is equal to or more than 8 characters and the password contains three or more types of characters.

Set the password by obeying the following rules:

- The password cannot contain the user name, 123, admin (case insensitive), a string of at least four consecutive digits (such as 1234, 12345, 4321, etc.), a string of at least four repeating characters (such as 1111, 8888, aaaa, etc.).
- Do not use the common risky passwords.

2.1 Activate Device

The client should be used with the LED controllers to control the displays. Activate the corresponding LED controller via the client when using it for the first time.

Before You Start

- The client has been installed correctly.
- Ensure the PC running the client and the LED controller are in the same LAN. You can use the network cable to connect the LED controller to the on-site network, and connect the PC running the client to the on-site network through network cable or Wi-Fi. Some LED controllers support connection to the network via Wi-Fi.

Steps

1. Run the client.

   Online Device list will display all the online devices in the current network segment. You can click **Refresh** to refresh the online devices.

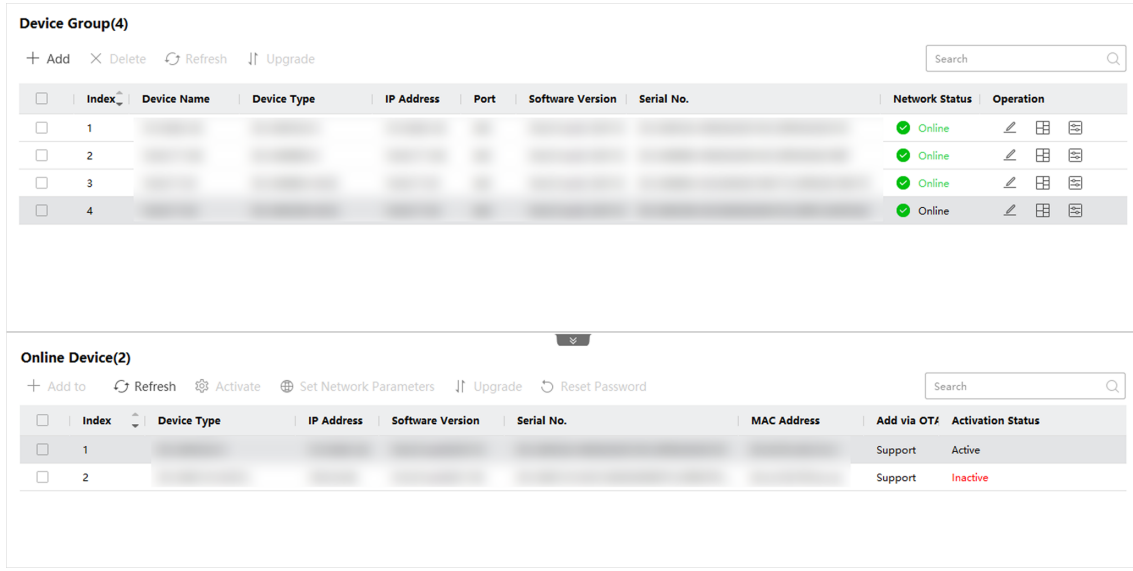


Figure 2-1 LED Batch Controller Client

2. Select the inactive device from the list, and click **Activate**.

3. Enter the password and confirm it. Click **OK**.

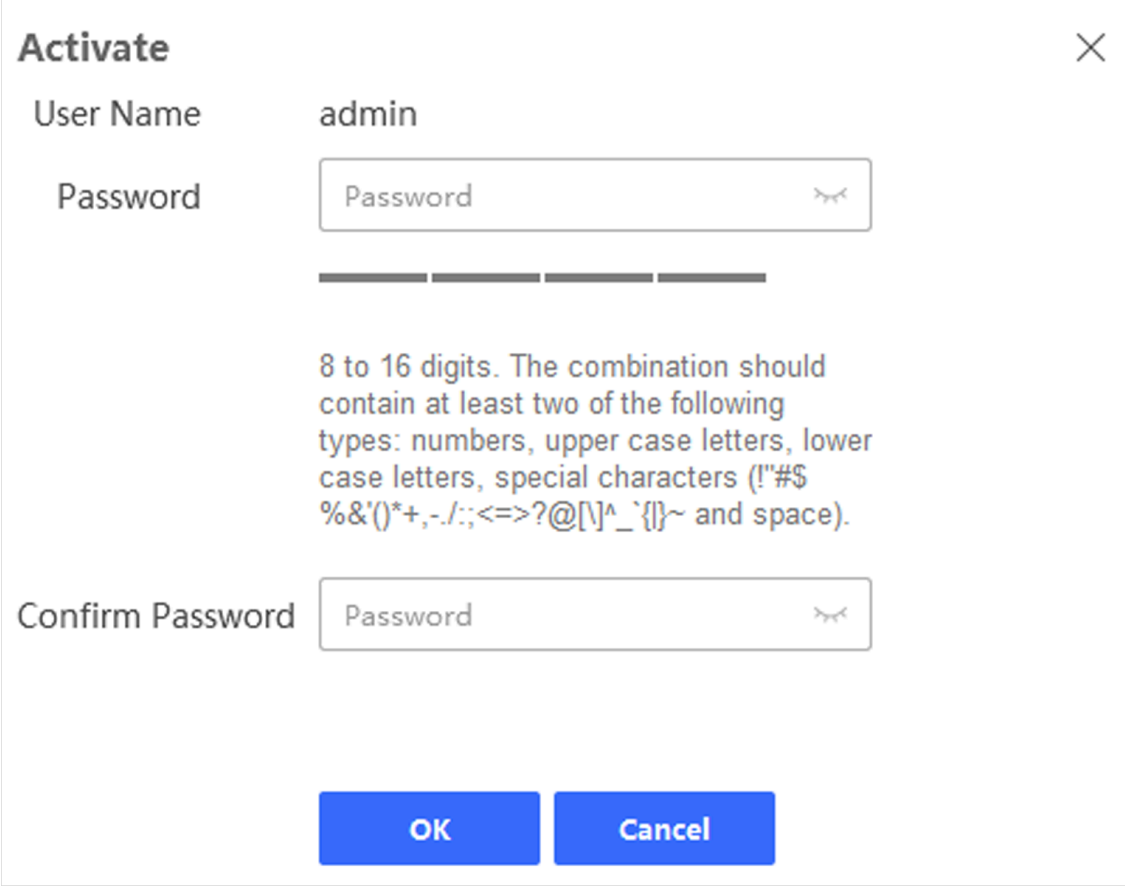


Figure 2-2 Activation

4. **Optional:** Edit network parameters of the activated device.
   1) Select the activated device from**Online Device** list.
   2) Click **Set Network Parameters**.
   3) Edit the network parameters of the device, such as the IP address, subnet mask, gateway, etc.
   4) Enter **Admin Password**, and click **OK**.

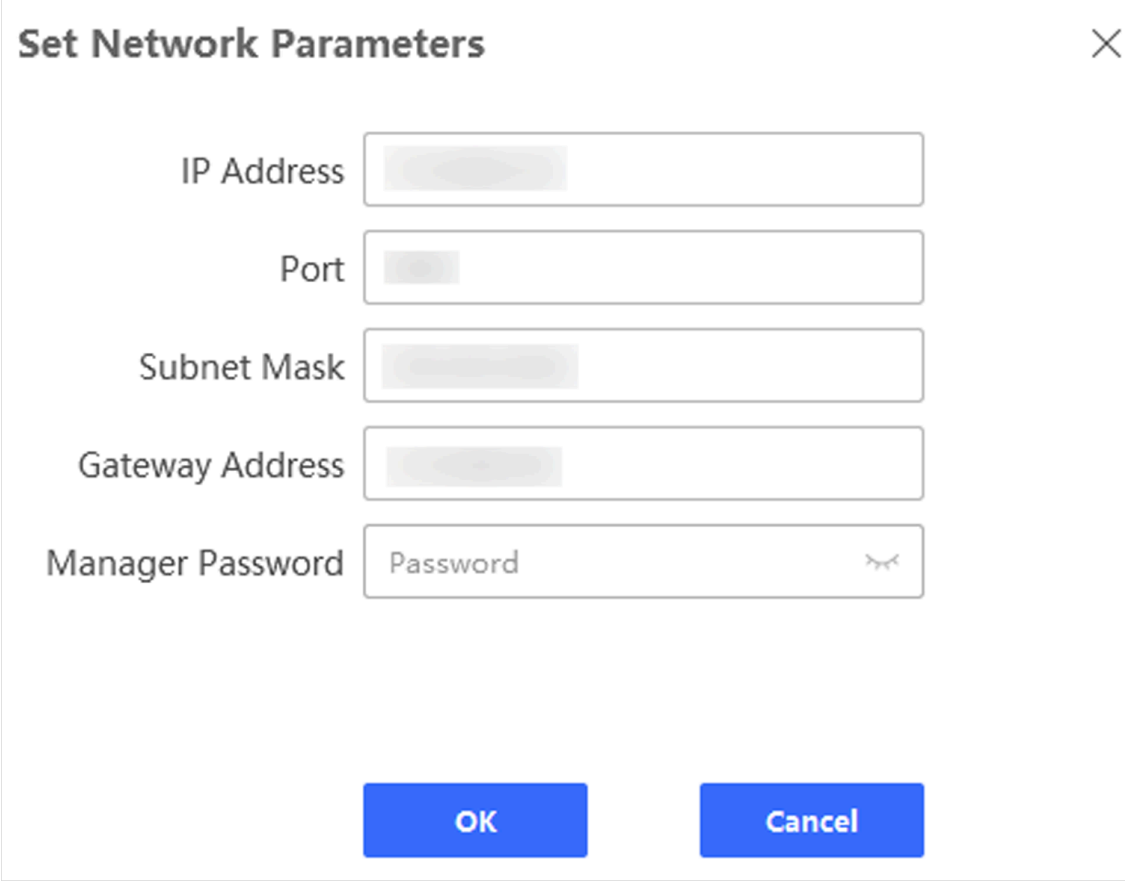


Figure 2-3 Set Network Parameters

Note

If the device connected network has DHCP function, the IP address of the device will be allocated automatically. You can skip step 4.

2.2 Add Device

The client provides multiple device adding modes including by IP address and IP segment. You can also import multiple devices in batch when there are large amount of devices to be added. After the devices are added to the client, you can realize remote configuration and management of the added devices.

Note

If you want to add the 54-inch splicing screen, after adding, a message will prompt on top of **Device Group** list: The current configuration is only available for the 54-inch LED splicing display

unit. If you need to set the normal LED display, delete the added 54-inch LED splicing display unit(s) first.

2.2.1 Add Single or Multiple Online Devices

The client can detect online devices which are in the same network with the PC running the client. You can select a detected online device displayed in the online device list and add it to the client. For detected online devices sharing the same user name and password, you can add them to the client in batch.

Before You Start

- The device(s) to be added are in the same network with the PC running the client.
- The device(s) to be added have been activated.

Steps

1. Click **Device Management**.
2. Check one or more online device(s) from **Online Device** list, and click **Add to**.

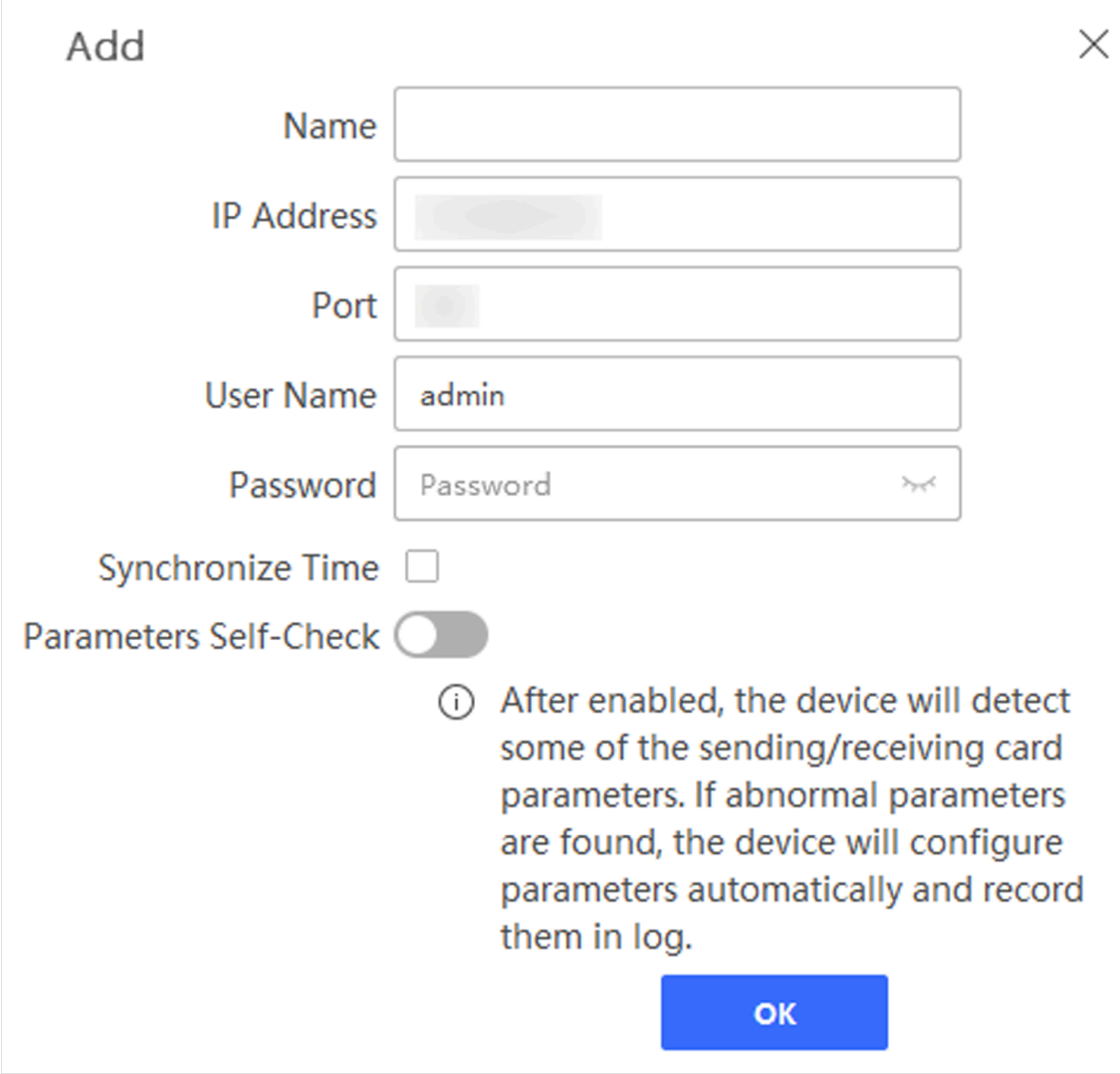


Figure 2-4 Add Online Device

Note

You can judge whether the device(s) can be added to **Device Group** list via the status shown under **Add via OTAP** item. Only the supported device(s) can be added to **Device Group** list.

3. Enter the required information.

Name

Enter a descriptive name for the device.

IP Address

The IP address of the device is obtained automatically in this adding mode.

Port

The port No. of the device is obtained automatically in this adding mode. You can also customize the port No.

User Name

By default, the user name is ***admin***.

Password

Enter the device password.

Synchronize Time

Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.

4. Click **OK**.

2.2.2 Add Device by IP Address

If you know the IP address or domain name of the device to be added, you can add devices to the client by specifying the IP address, user name, password, etc.

Steps

1. Click **Device Management**.
2. Click **Add** in **Device Group** list.
3. Select **Adding Mode** as **IP Address**.

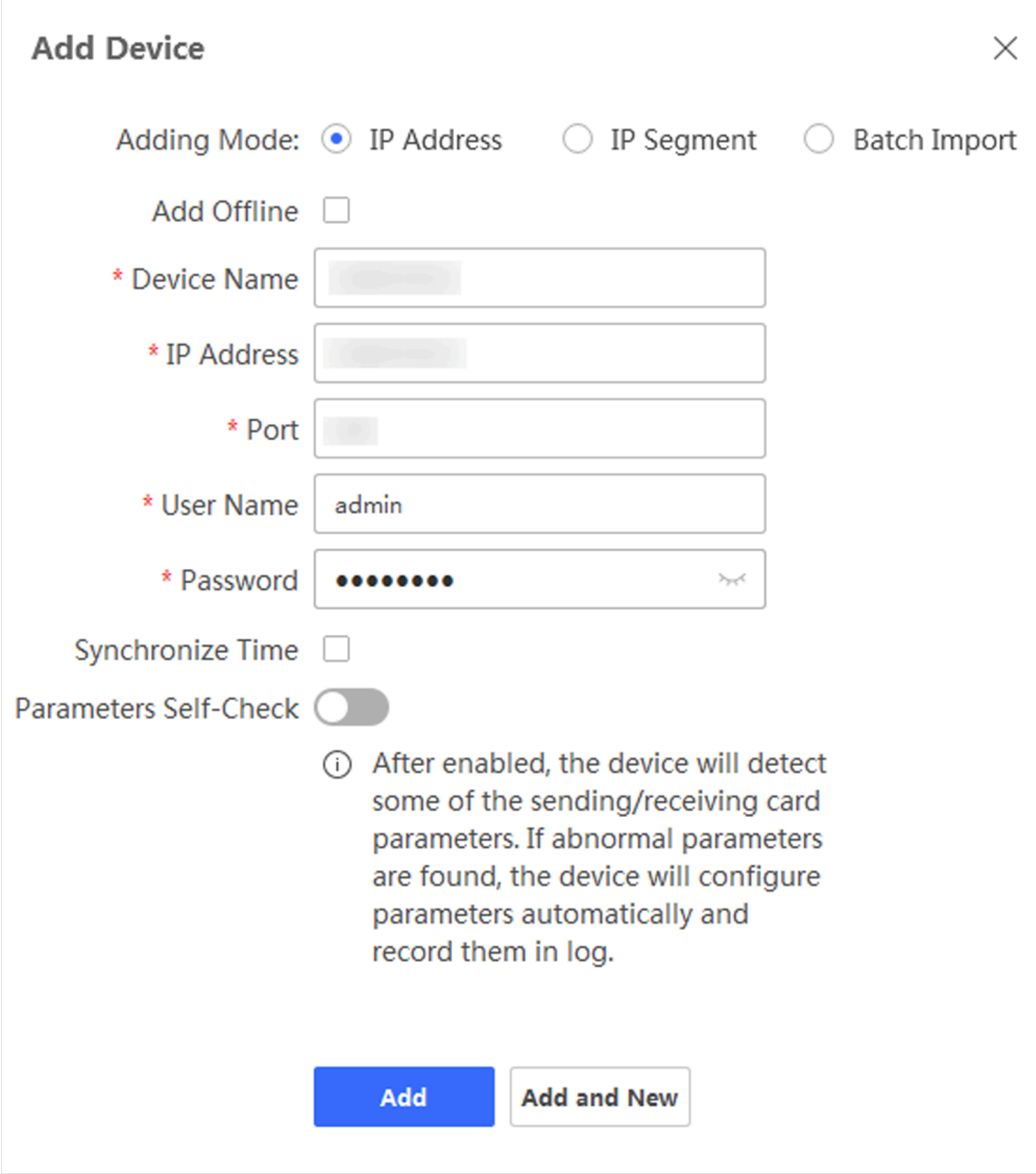


Figure 2-5 Add Device by IP Address

4. Enter the required information.
5. **Optional:** Other operations.

Add Offline You can check **Add Offline** if you want to add offline device(s). After adding succeeded, the **Network Status** of the device shows **Offline**. When the device is online, the **Network Status** will switch to **Online** automatically, and the client will connect it automatically.

Note

If you do not check **Add Offline**, you cannot add the offline device(s).

Synchronize Time	Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
Parameters Self-Check	If you enable **Parameters Self-Check**, the device will detect some of the sending/receiving card parameters. If abnormal parameters are found, the device will configure parameters automatically and record them in log.

6. Click **Add** to add the device and exit from the interface. Or click **Add and New** to save the settings and continue to add other devices.

2.2.3 Add Device by IP Segment

If the devices share the same port No., user name, and password, and their IP addresses range in the same IP segment, you can add them to the client by specifying the start IP address and the end IP address, port No., user name, password, etc of the devices.

Steps

1. Click **Device Management**.
2. Click **Add** in **Device Group** list.
3. Select **Adding Mode** as **IP Segment**.

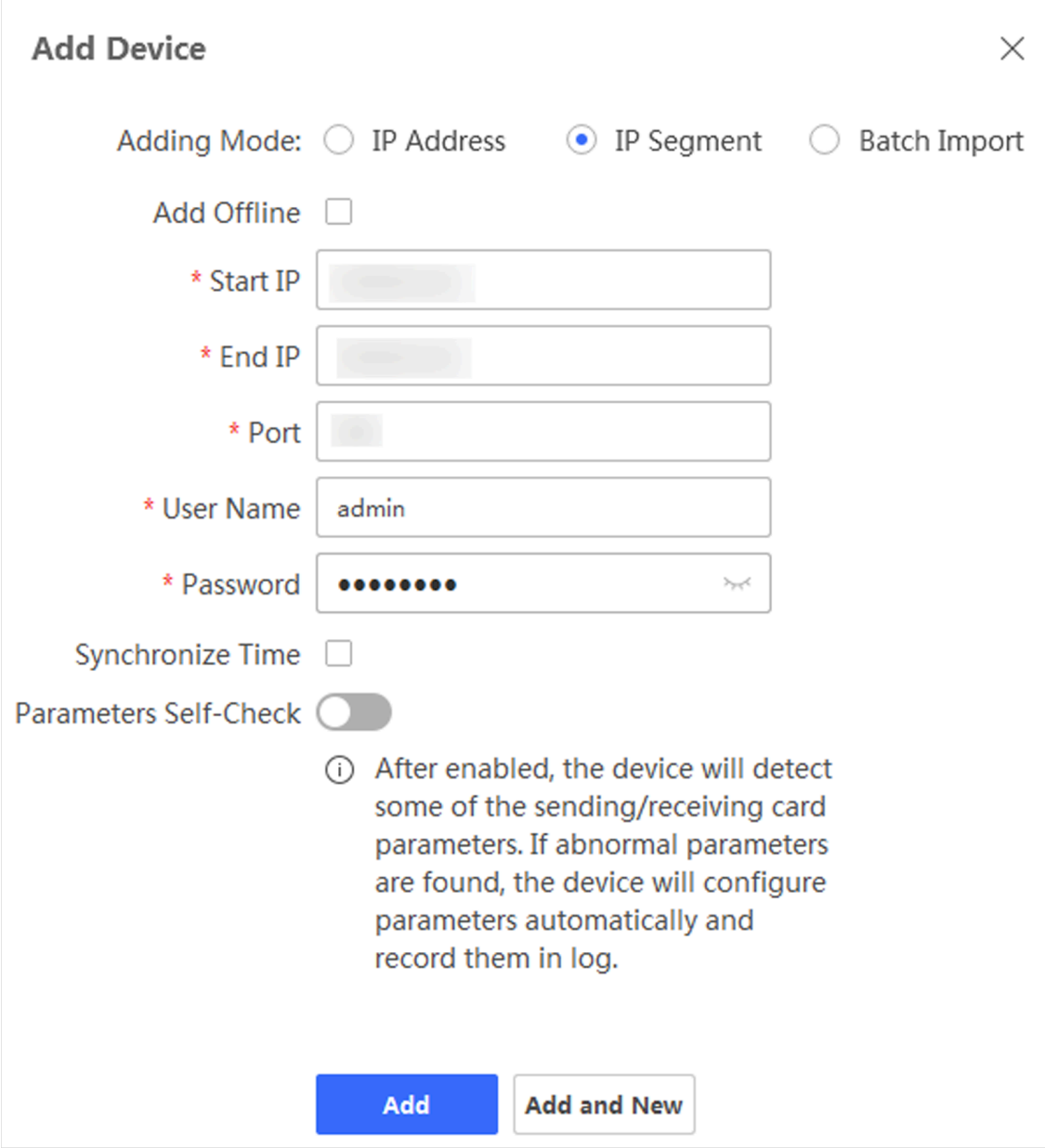


Figure 2-6 Add Device by IP Segment

4. Enter the required information.

Note

The top three segments of the start and end IP addresses should be same. Up to 255 devices in the same IP segment can be added.

5. **Optional:** Other operations.

Add Offline	You can check **Add Offline** if you want to add offline device(s). After adding succeeded, the **Network Status** of the device shows **Offline**. When the

device is online, the **Network Status** will switch to **Online** automatically, and the client will connect it automatically.

Note

If you do not check **Add Offline**, you cannot add the offline device(s).

Synchronize Time	Check **Synchronize Time** to synchronize the device time with the PC running the client after adding the device to the client.
Parameters Self-Check	If you enable **Parameters Self-Check**, the device will detect some of the sending/receiving card parameters. If abnormal parameters are found, the device will configure parameters automatically and record them in log.

6. Click **Add** to add the device and exit from the interface. Or click **Add and New** to save the settings and continue to add other devices.

2.2.4 Import Devices in Batch

You can add multiple devices to the client in batch by entering the device parameters in a pre-defined CSV file.

Steps

1. Click **Device Management**.
2. Click **Add** in **Device Group** list.
3. Select **Adding Mode** as **Batch Import**.

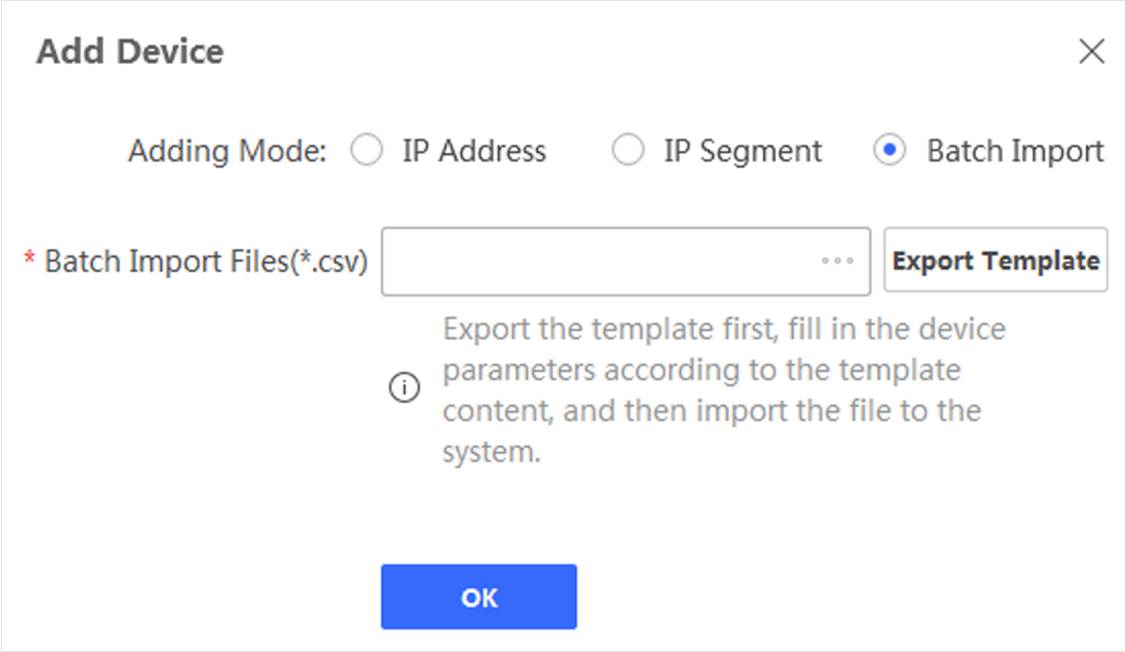


Figure 2-7 Import Devices in Batch

4. Click **Export Template** and save the pre-defined template (CSV file) to your PC.
5. Open the exported template file and enter the required information of the devices to be added on the corresponding column.
6. On **Add Device** interface, click ... and select the edited template file.
7. Click **OK**.

2.3 Reset Device Password

If you forgot the password of the detected online device, you can reset the device password via the client.

Steps

Note

The function should be supported by the device. The interface only shows the resetting mode supported by the device.

1. Click **Device Management**.
2. Select the device needed to reset password from **Online Device** list, and click **Reset Password**.

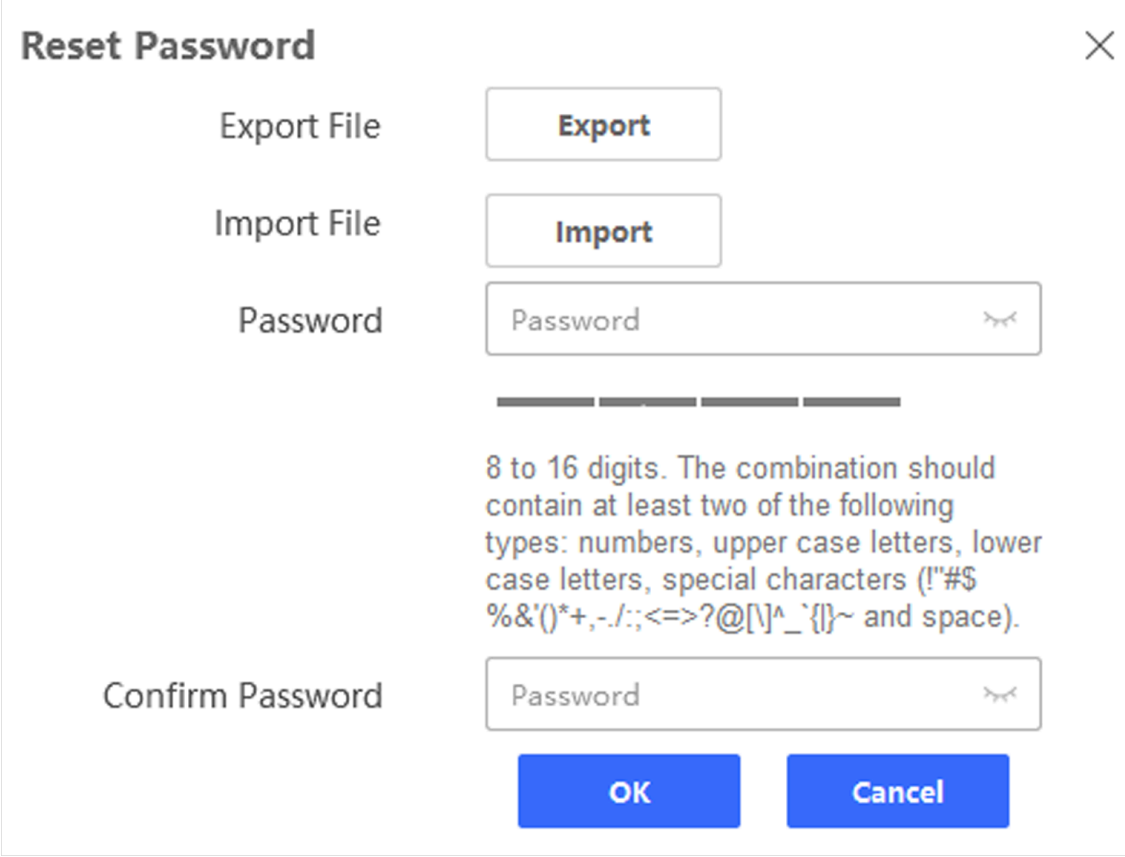


Figure 2-8 Reset Password

3. Click **Export** to save the XML file on your PC and send the file to our technical support to get the Encryp.xml file.
4. Click **Import** to import the gotten Encryp.xml file.
5. Enter the new password and confirm the password.
6. Click **OK**.

2.4 Manage Added Devices

After adding devices to the client, you can manage the added devices including editing device parameters, deleting devices, applying debug configuration, and viewing device details.

- Select an added online device from **Device Group** list. Click to edit the device name.

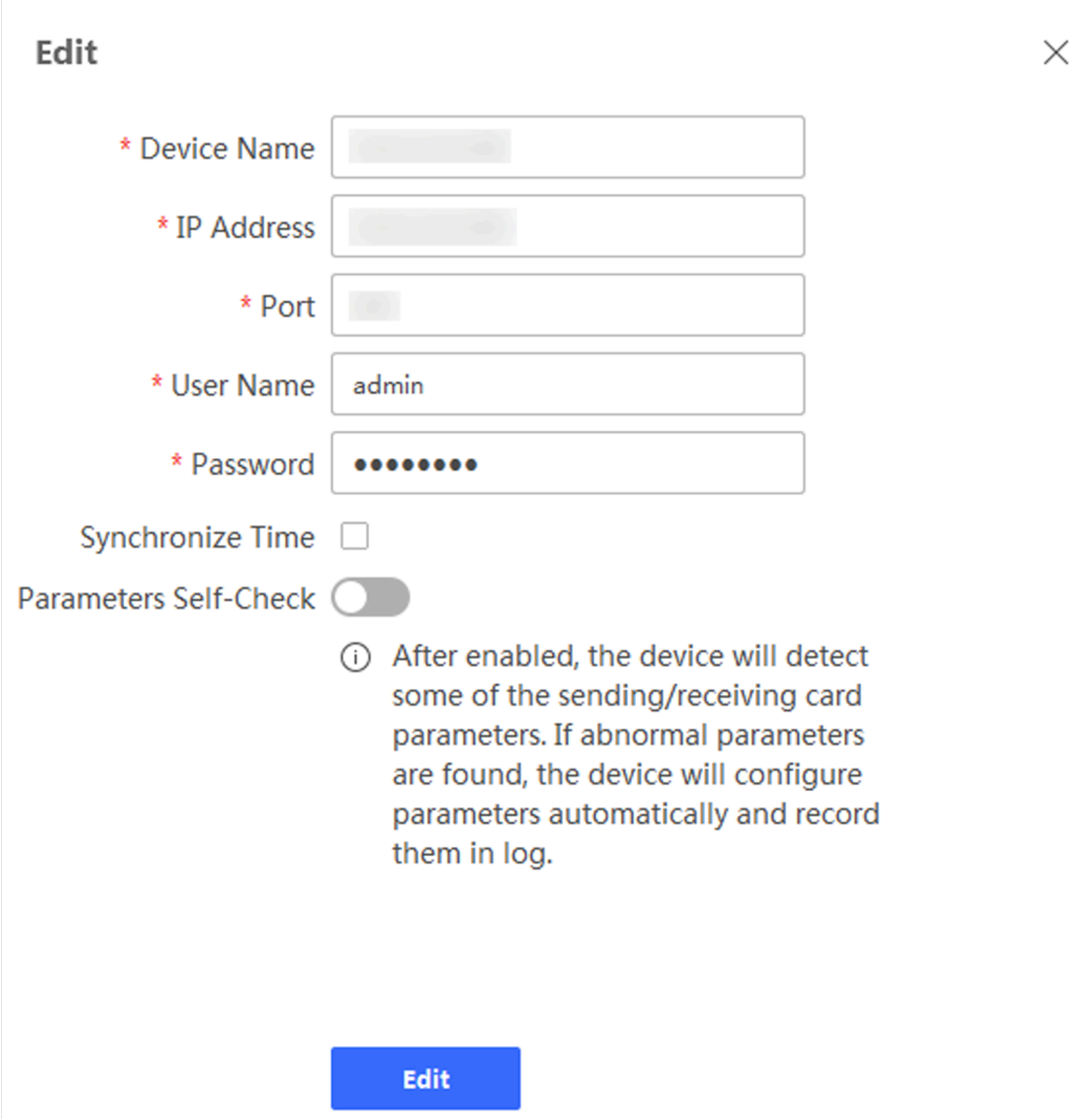


Figure 2-9 Edit Device Login Information

- Check one or more devices from **Device Group** list. Click **Delete** to delete the selected device(s) from the list.
- Select an added online device from **Device Group** list. Click to enable the debug, and click **Apply** to apply the debug configuration to the device.

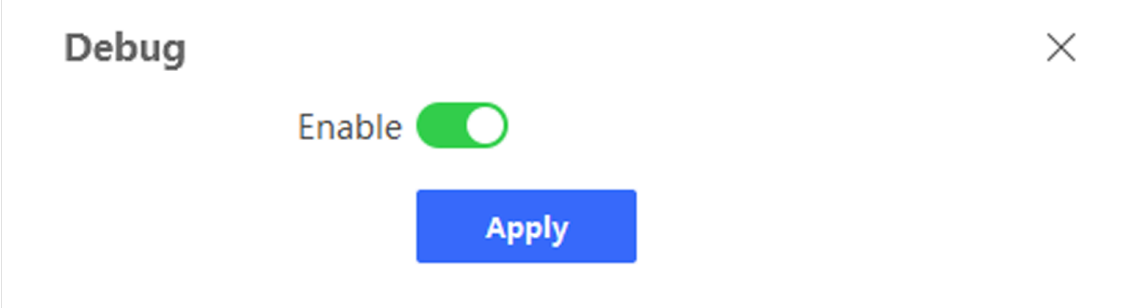


Figure 2-10 Apply Debug Configuration

- Select an added online device from **Device Group** list. Click ⊞ to view the device detailed information such as screen type, controller version, receiving card type, etc. You can click ✎ to edit **Alias** of the device.

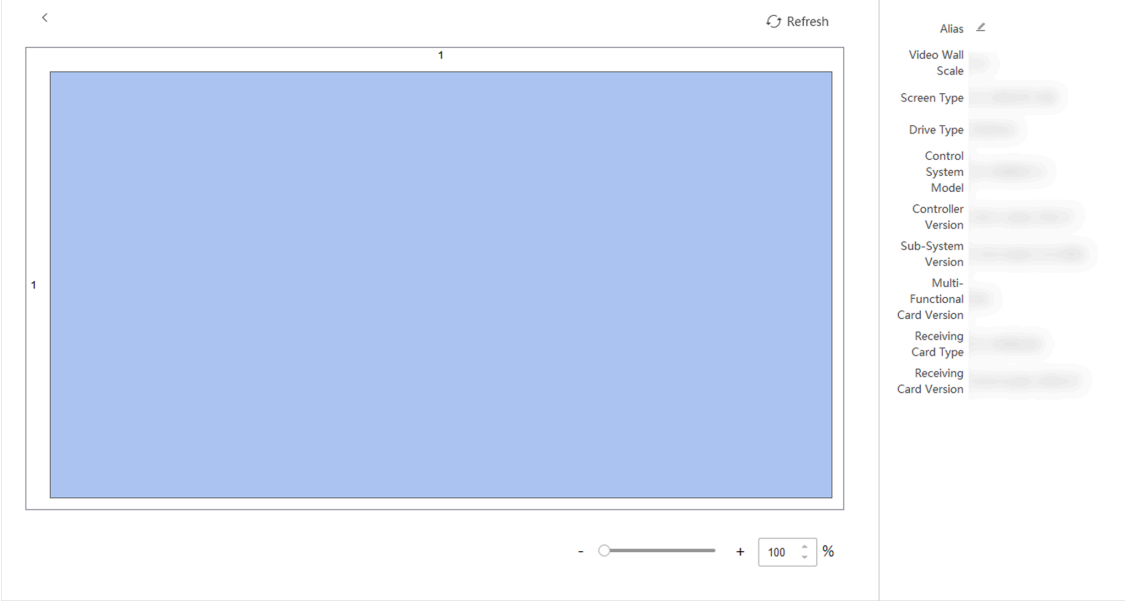


Figure 2-11 View Device Detailed Information

- In **Device Group** list, click **Refresh** to get the latest device information.
- Check one or more upgradable devices from **Device Group** list. Click **Upgrade** to upgrade the sending card or receiving card/multi-functional card. Refer to ***Upgrade Added Device*** for details.

2.5 Upgrade Device

Caution

Do not disconnect the power supply during upgrade.

2.5.1 Upgrade Added Device

You can upgrade the added device online or offline.

Steps

1. Click **Device Management**.
2. Select an added device that is online, and click **Upgrade**.

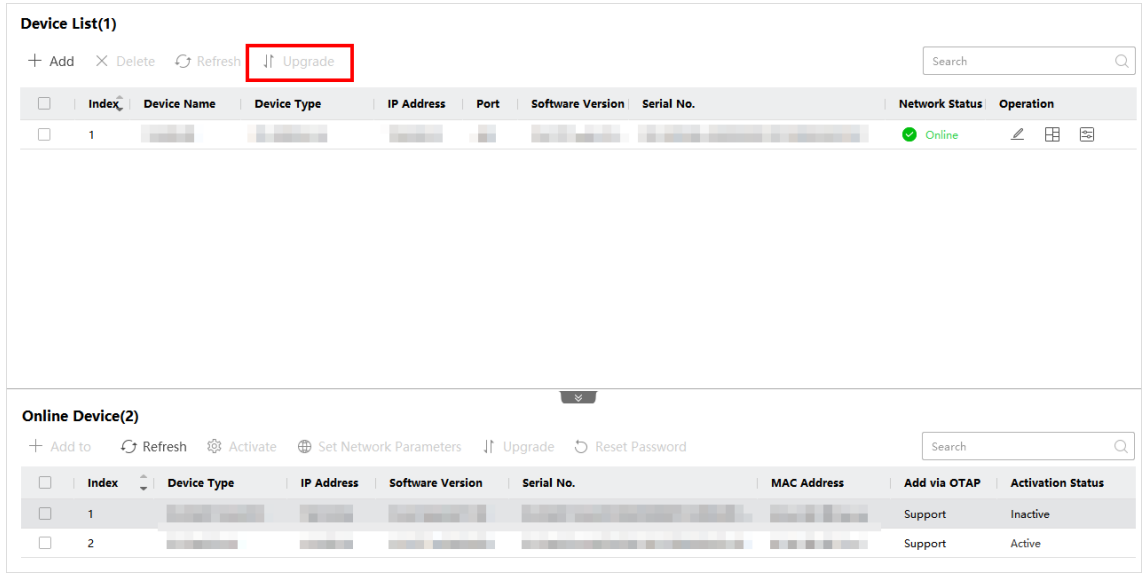


Figure 2-12 Select Added Device

3. Select **Upgrade Content** as **LED controller** or **Receiving/Multi-Functional Card**.
4. Select **Upgrade Mode** from the following options.
   - Select **Online** to get the latest upgrade package from the cloud and click **Upgrade**.

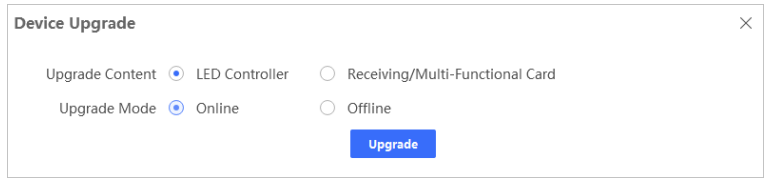


Figure 2-13 Upgrade Added Device Online

   - Select **Offline**. Click ··· to select the upgrade package from the PC and click **Upgrade**.

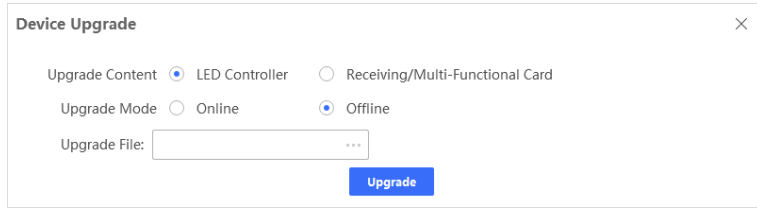


Figure 2-14 Upgrade Added Device Offline

Note

If upgrading failed and the device cannot function correctly, contact the supplier in time.

Result

The device will restart automatically when upgrading succeeded.

2.5.2 Upgrade Activated Device

Only the devices supporting OTAP (Over-the-Air Programming) protocol can be accessed and managed via the client. For the devices which do not support OTAP protocol, they can be managed by the client via online upgrade.

Before You Start

The device has been activated.

Steps

1. Click **Device Management**.
2. Select the device from **Online Device** list, and click **Upgrade**.

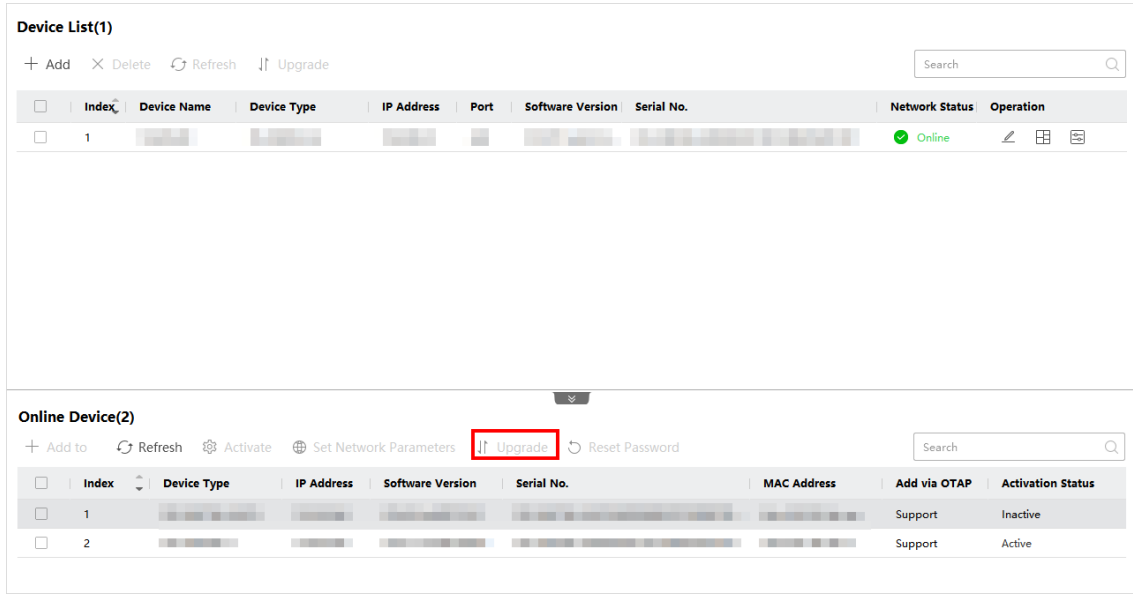


Figure 2-15 Select Activated Device

3. Select **Upgrade Mode** from the following options.

- Select **Online** to get the latest version of the upgrade package from the cloud to upgrade the sending card. Enter **User Name** and **Password**. Click **Upgrade**.

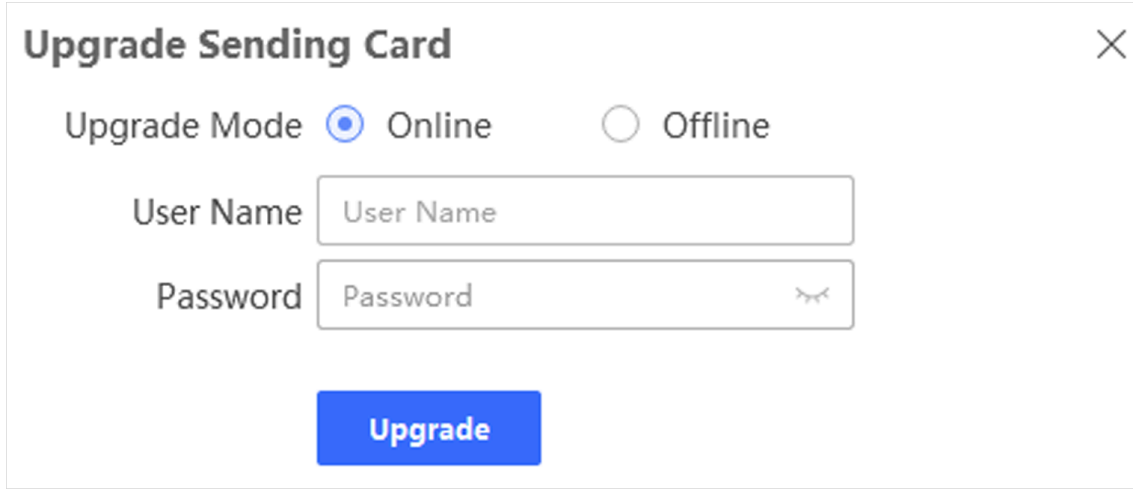


Figure 2-16 Upgrade Activated Device Online

- Select **Offline** to upload the upgrade package to upgrade the sending card. Select **File Path**, and enter **User Name**, **Password**, and **Port**. Click **Upgrade**.

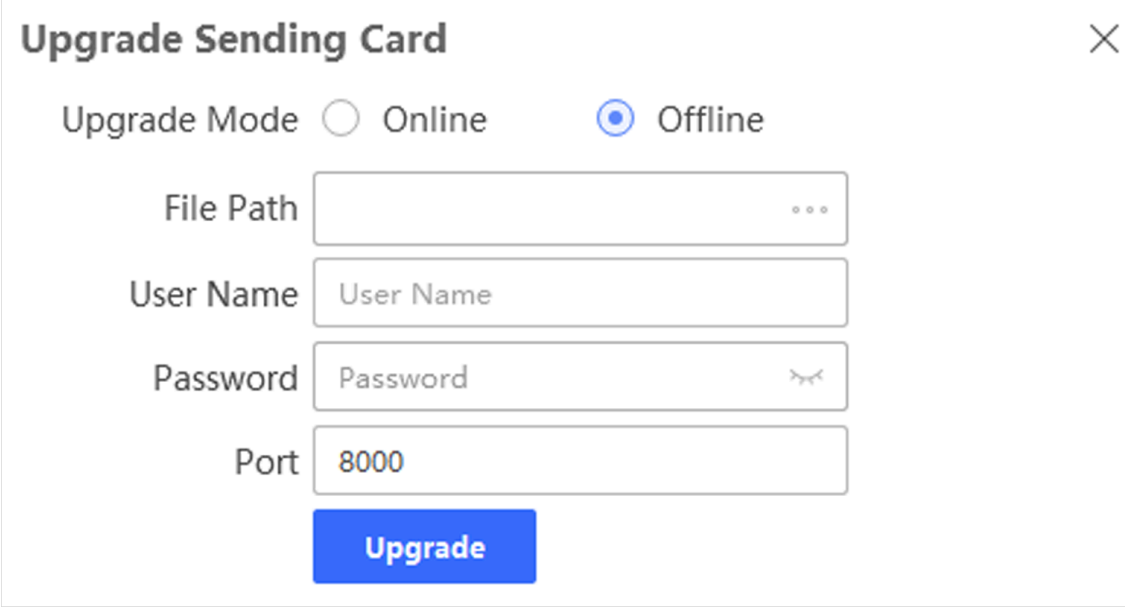


Figure 2-17 Upgrade Activated Device Offline

Chapter 3 LED Settings

Note

When you set device parameters via the client, if you select a device but not check it, you can only get the selected device parameters. You can only set and save the parameters to the device by checking one or more devices. When you check multiple devices to set parameters in batch, if the actual device does not support a certain function, the client will prompt when you save the settings.

3.1 Screen Control

3.1.1 Set Signal Connection

When the loading resolutions of multiple receiving cards controlled by a single sending card are consistent, select general settings. When the loading resolutions of multiple receiving cards controlled by a single sending card are inconsistent, select complex settings.

General Settings

When the loading resolutions of multiple receiving cards controlled by a single sending card are consistent, select general settings.

Steps

1. Go to **LED Settings → Screen Control → Signal Connection** .
2. Check the device(s) to be set from the device list.
3. Select **General**.

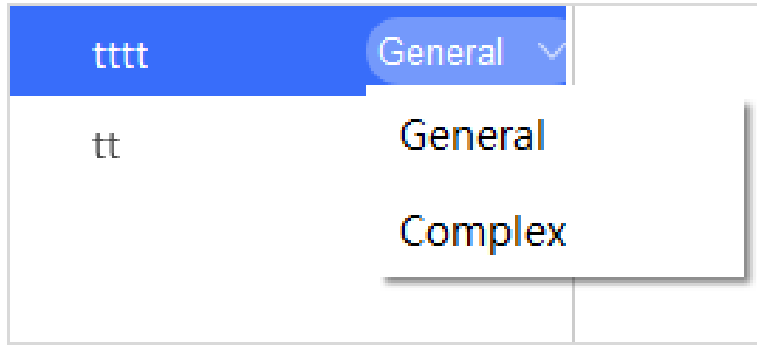
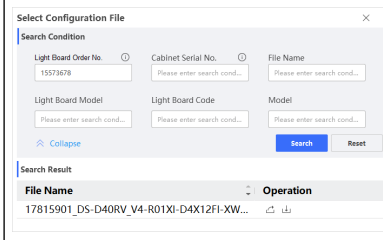
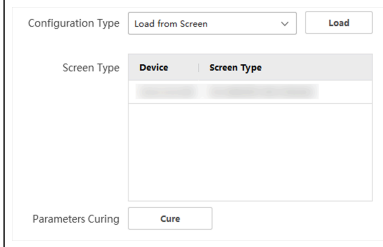
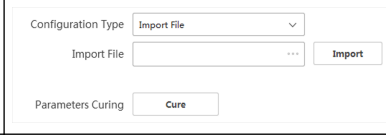


Figure 3-1 Set General Screen

4. Lighten the screen.
   1) Choose either of the following methods to set the screen.

Table 3-1 Select Device Screen

Configuration Type	Image
Select **Load from Cloud**. Enter the keyword, click **Search**. Click to apply the searched configuration file to the device or click to download the configuration file.	
Select **Load from Screen**. Click **Load**. The system will load the screen type automatically.	
Select **Import File**. Click to select the configuration file. Click **Import** to import the configuration file.	

2) Click **Cure** to save the parameters to the receiving card to ensure the screen can display normally after next restart.
3) Click **Save**.

5. Set the screen.

1) Click **Screen Settings**.
2) Set the screen attribute.

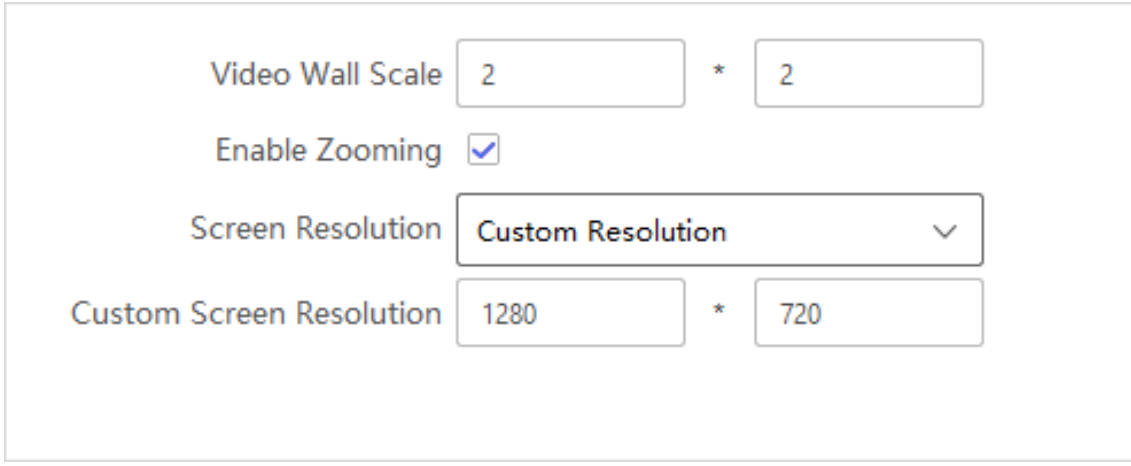


Figure 3-2 Set Screen Attribute

Video Wall Scale

Set the row(s) and column(s) of the screen according to the receiving card quantity. Each cabinet contains 1 or 2 receiving cards.

Enable Zooming

Check it to enable the signal source zooming. Uncheck it in splicing scenes.

Screen Resolution

Select the appropriate resolution. If there is no appropriate resolution, you can select **Custom Resolution**.

Note

The width of the custom resolution should be a multiple of 4.

3) Click **Save**.

6. Set signal line connection according to the actual receiving card connection between LED cabinets.

1) Click **Signal Connection**.

Note

After setting the video wall scale, the LED screen will show the signal line connection. The signal connection via the client must match with the actual screen connection.

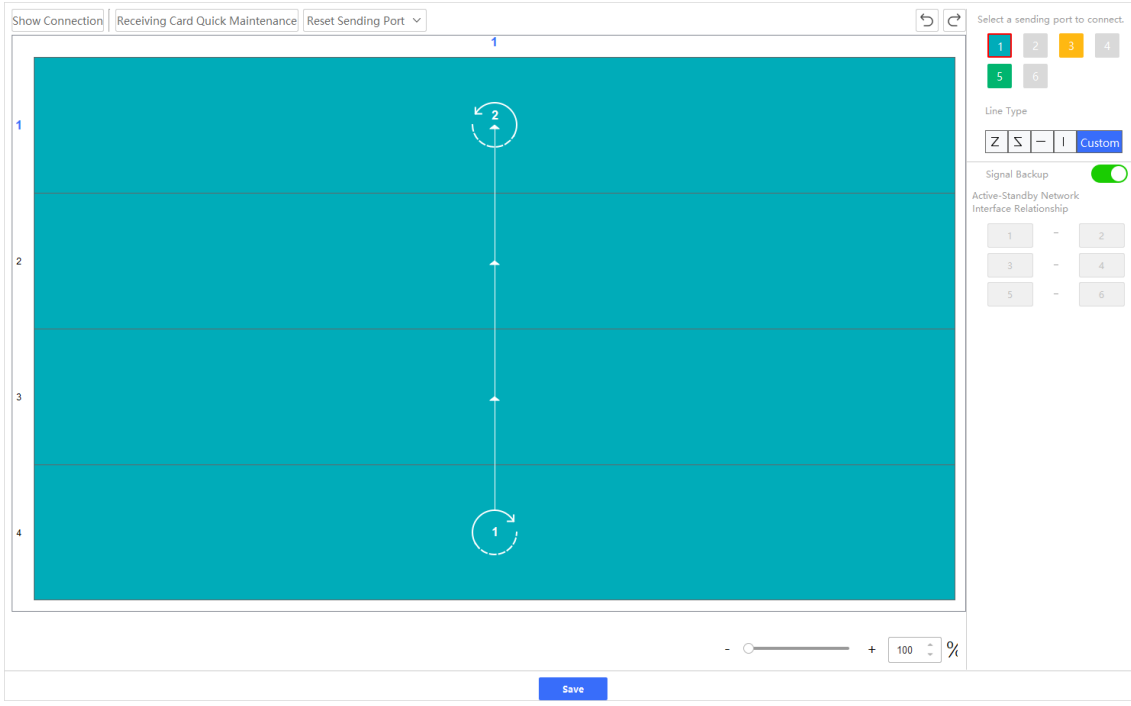


Figure 3-3 Set Signal Connection

2) Click **Show Connection**. The location prompt of each screen will show on the screen.

3) Select a sending port to connect.

Note

- Connect the signal line according to the location prompt on each screen. If the prompt is 2-1, the screen is the first screen to connect to No. 2 sending port.
- Signal line connection should be the same as the actual screen connection.

4) Connect signal cables.
   - Click the screen on the right side of the interface to connect signal lines.
   - Select **Line Type**, and select the start port and end port.
5) **Optional:** Other operations.

Related Operations	Description
Show or hide connection.	Click the button to show/hide the connection lines on the screen.
Quickly maintain receiving card.	Click the button to enter **Receiving Card Quick Maintenance** interface. • Copy the configuration of the referenced receiving card to the new receiving card. • Export the program or configuration file of the referenced receiving card and import it to the other receiving cards of the current screen or to the receiving cards in other projects. Refer to ***Quickly Maintain Receiving Card*** .
Reset the sending port.	Click **Reset Sending Port**, and select the operation. • Click **Reset Current Sending Port** to clear all the configuration of the current signal sending port. • Click **Reset All Sending Ports** to clear all the configuration of all the signal sending ports.
Cancel.	Click to cancel the last operation.
Restore.	Click to restore the last operation.
Backup the signal.	Enable **Signal Backup** to enable dual-channel signal inputs to ensure signal stability.

Related Operations	Description
	Note If the function is enabled, the relationship between the active and standby network interfaces should be the same as **Active-Standby Network Interface Relationship** shown on the client.

6) Click **Save**.

Complex Settings

When the loading resolutions of multiple receiving cards controlled by a single sending card are inconsistent, select complex settings.

Before You Start

The large-scale normal cabinet LED has been lightened by using the normal setting method.

Steps

1. Go to **LED Settings → Screen Control → Signal Connection** .
2. Check the device(s) to be set from the device list.
3. Select **Complex**.

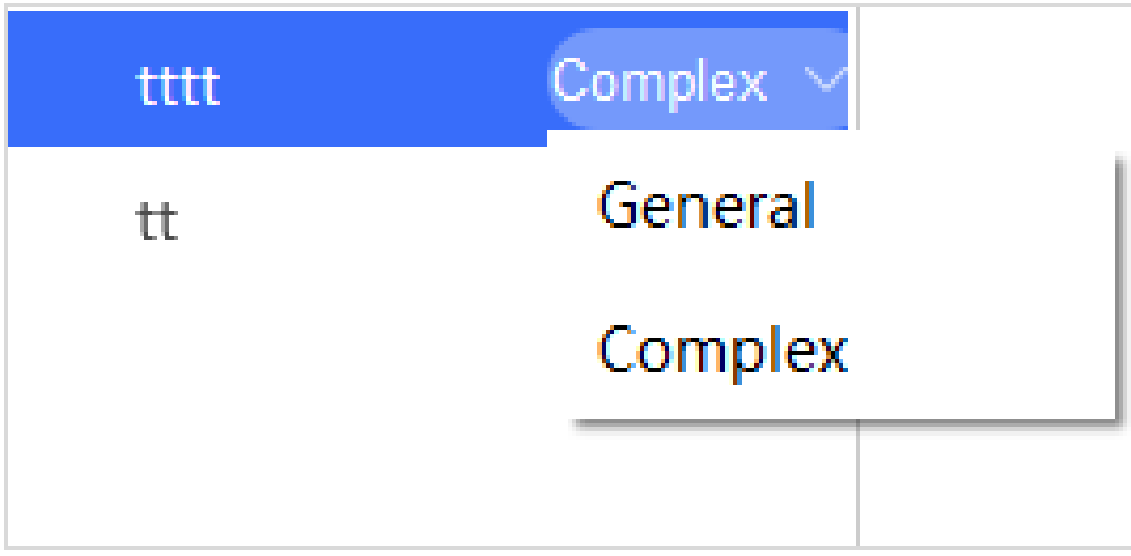


Figure 3-4 Select Complex Screen

1) Click **Screen Settings**.
2) Set the screen attribute.

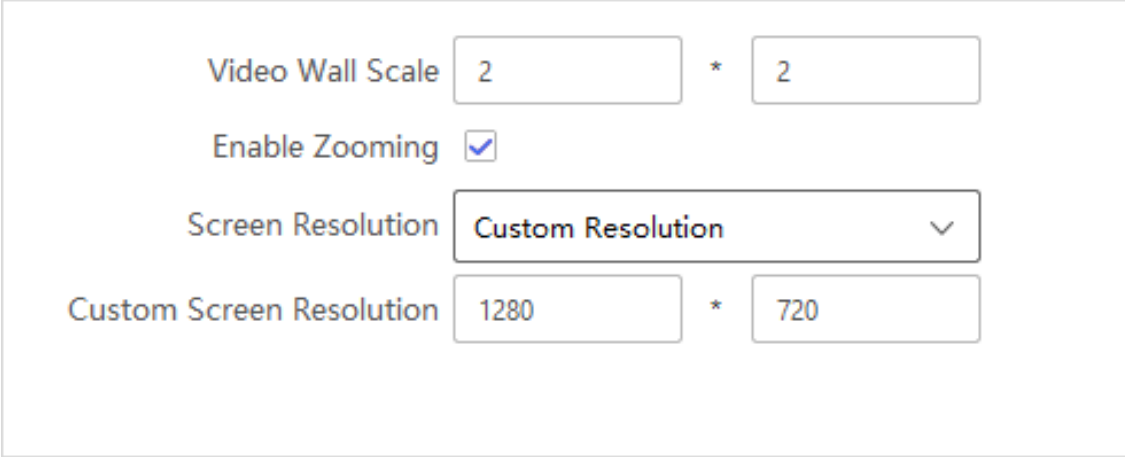


Figure 3-5 Set Screen Attribute

Video Wall Scale

Set the row(s) and column(s) of the screen according to the receiving card quantity. Each cabinet contains 1 or 2 receiving cards.

Enable Zooming

Check it to enable the signal source zooming. Uncheck it in splicing scenes.

Screen Resolution

Select the appropriate resolution. If there is no appropriate resolution, you can select **Custom Resolution**.

Note

The width of the custom resolution should be a multiple of 4.

3) Click **Save**.

4. Set signal line connection according to the actual receiving card connection between LED cabinets.

1) Click **Signal Connection**.

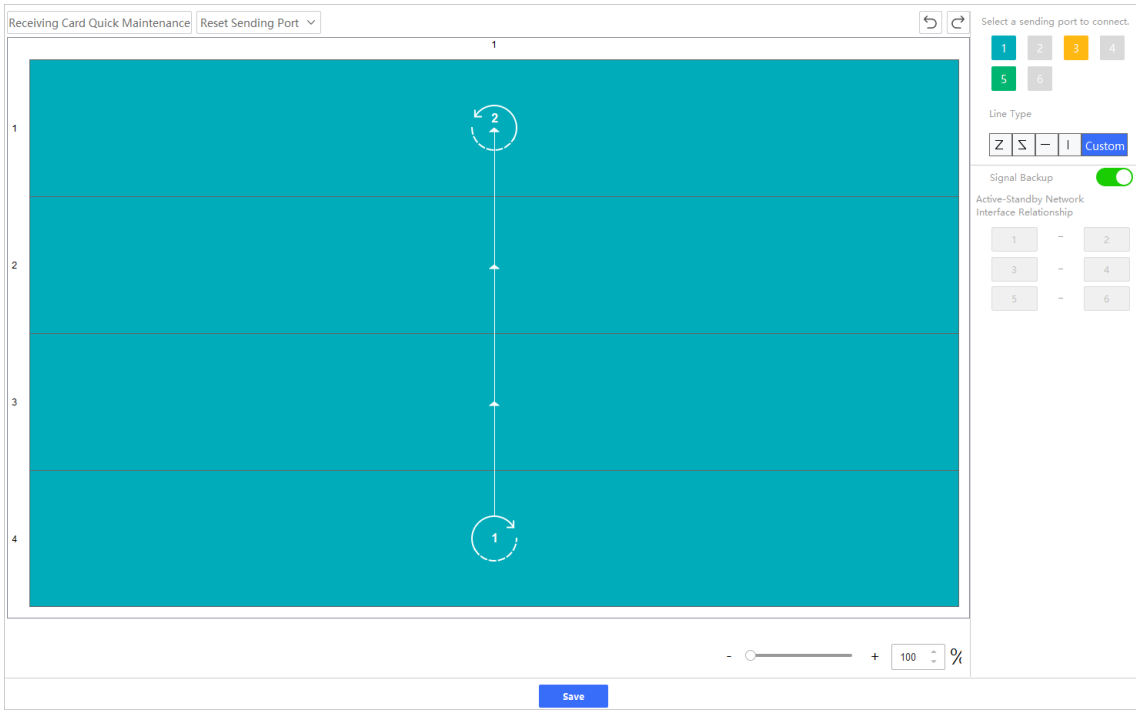


Figure 3-6 Set Signal Connection

2) Select a sending port to connect.
3) Connect signal cables.
   - Click the screen on the right side of the interface to connect signal lines.
   - Select **Line Type**, and select the start port and end port.
4) **Optional:** Other operations.

Related Operations	Description
Quickly maintain receiving card.	Click the button to enter **Receiving Card Quick Maintenance** interface. • Copy the configuration of the referenced receiving card to the new receiving card. • Export the program or configuration file of the referenced receiving card and import it to the other receiving cards of the current screen or to the receiving cards in other projects. Refer to ***Quickly Maintain Receiving Card*** .
Reset the sending port.	Click **Reset Sending Port**, and select the operation.

Related Operations	Description
	• Click **Reset Current Sending Port** to clear all the configuration of the current signal sending port. • Click **Reset All Sending Ports** to clear all the configuration of all the signal sending ports.
Cancel.	Click to cancel the last operation.
Restore.	Click to restore the last operation.
Backup the signal.	Enable **Signal Backup** to enable dual-channel signal inputs to ensure signal stability. **Note** If the function is enabled, the relationship between the active and standby network interfaces should be the same as **Active-Standby Network Interface Relationship** shown on the client.

5) Click **Save**.

5. Split and lighten the screen.

1) Click **Split and Lighten Screen**.

2) Click a screen and drag to select multiple screens, and then right click the mouse or click **Edit**.

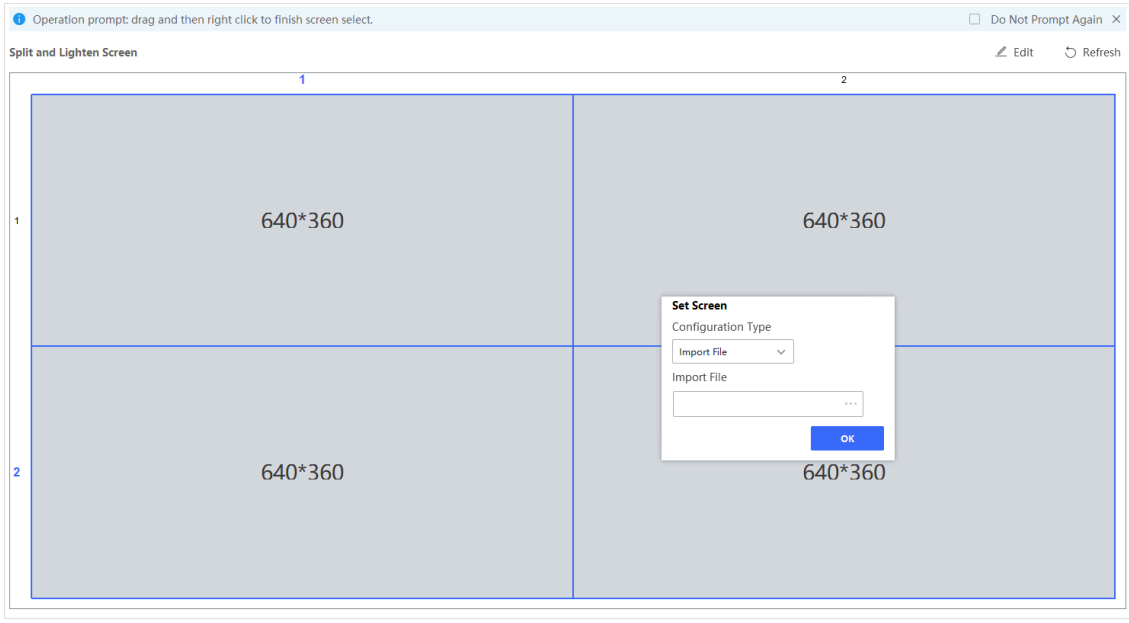
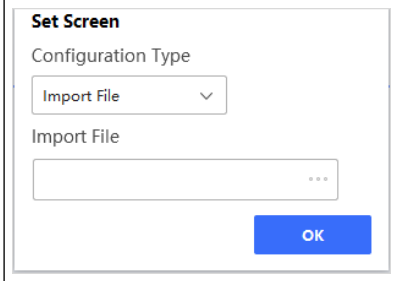
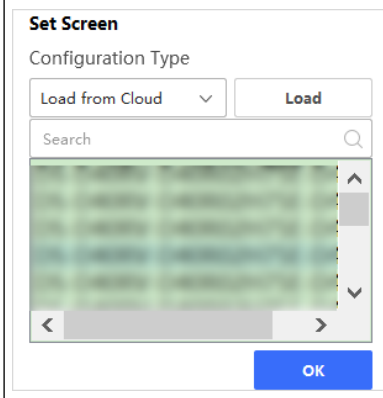
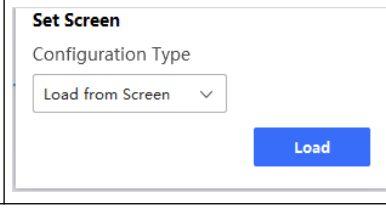


Figure 3-7 Split and Lighten Screen

3) Choose either of the following methods to select **Configuration Type**.

Table 3-2 Select Configuration Type

Configuration Type	Image
(Recommended) Import File: a. Click ··· to select the configuration file. b. Click **Import** to import the configuration file.	 **Note** This software supports a maximum of 10 types of configuration files.
Load from Cloud: a. Click **Load**. The system automatically obtains the screen type. b. Select a screen type or enter a keyword to select.	
Load from Screen: Click **Load**. The system automatically obtains the screen type.	

4) Click **Save**.

3.1.2 Quickly Maintain Receiving Card

You can copy the configuration of the referenced receiving card to the new receiving card, or export the program or configuration file of the referenced receiving card and import it to the other receiving cards of the current screen or to the receiving cards in other projects.

Go to **LED Settings → Screen Control → Signal Connection → Signal Connection** , and click **Receiving Card Quick Maintenance**. You can maintain the receiving card by the following 2 methods quickly.

Method 1

1. Select a receiving card, and right click to select **Referenced Receiving Card**.
2. Click **Export Program** or **Export Configuration File** to save the program or configuration file to the PC.
3. Import the program or configuration file of the referenced receiving card to the other receiving cards of the current screen or to the receiving cards in other projects.

Method 2

1. Select a receiving card, and right click to select **Referenced Receiving Card**.
2. Click **Quick Card Change** to copy the configuration of the referenced receiving card to the new receiving card.

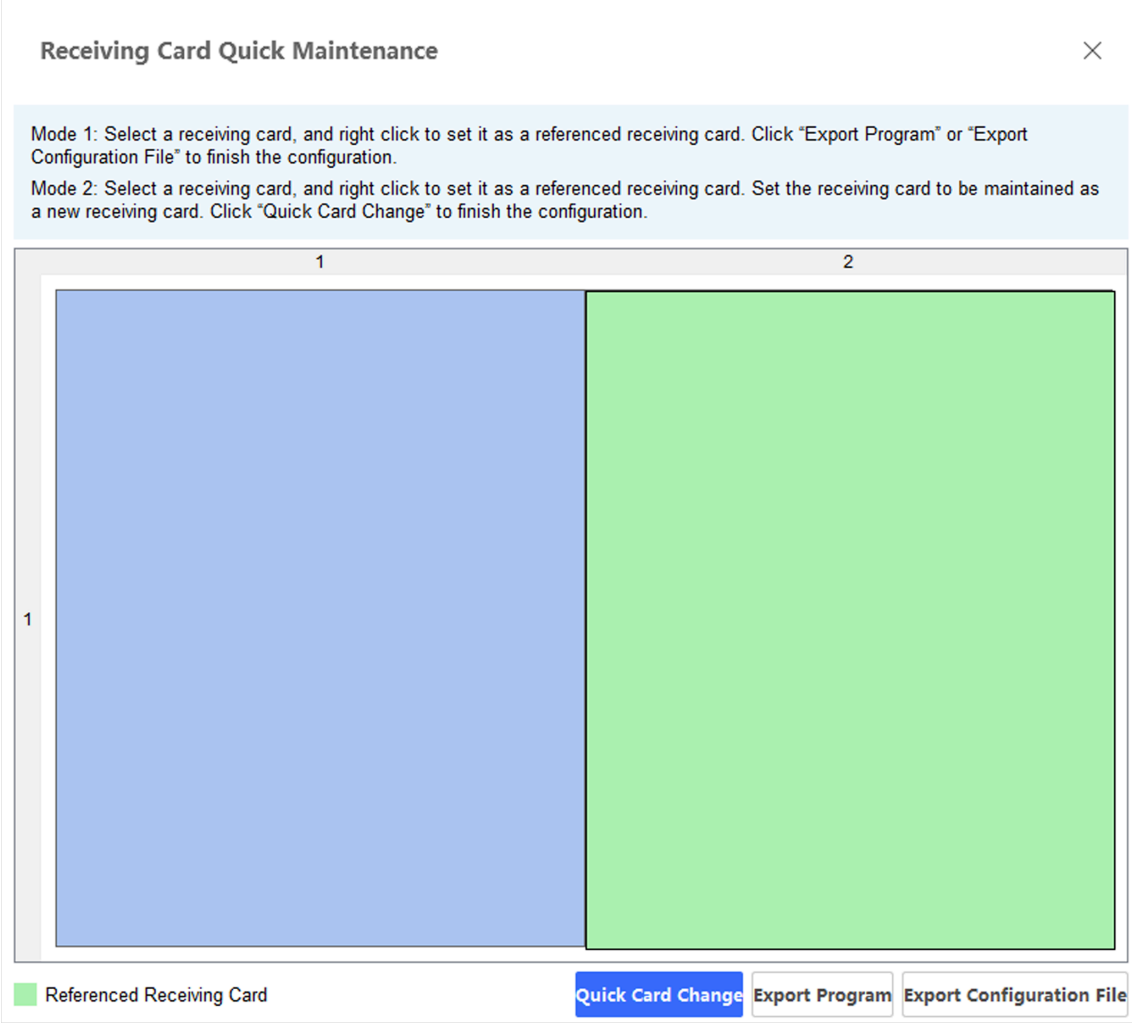


Figure 3-8 Receiving Card Quick Maintenance

3.1.3 Set Signal Input

You can set input signal type, 3D video processing, input signal auto detection, custom resolution, audio configuration, etc.

Steps

1. Go to **LED Settings → Screen Control → Signal Source Management** .
2. Check the device(s) to be set from the device list.

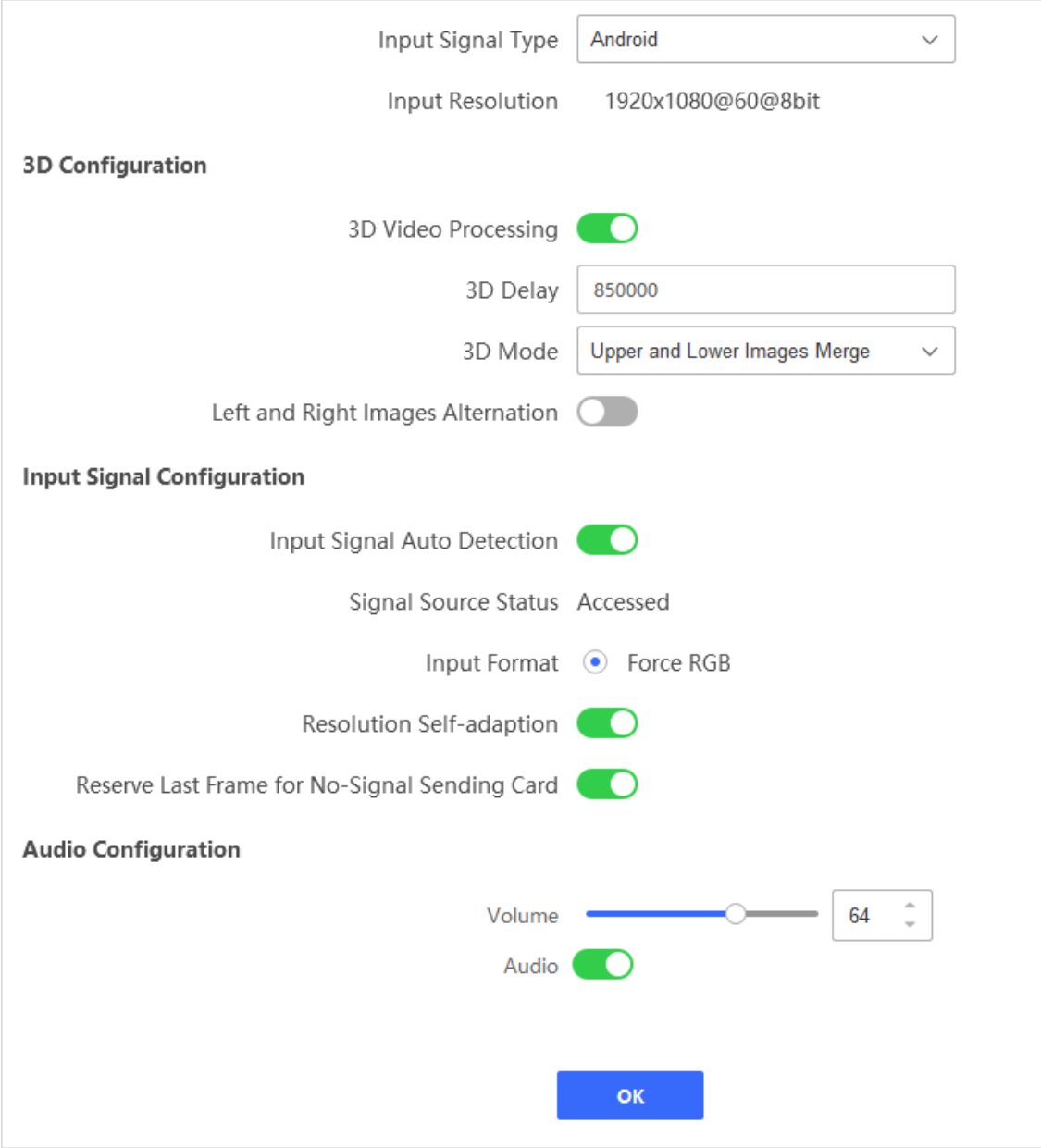


Figure 3-9 Signal Input Management

Note

The shown functions vary with the device models. The unsupported functions will not be shown. The actual device prevails.

3. Set parameters.

Input Signal Type

Select the correct input signal type according to the actual connection condition of the sending card.

3D Configuration

3D Video Processing

Enable the function if you need to process 3D video.

Note

- Before enabling the function, you need to install multi-functional card first.
- Enable this function only when 3D parameters are configured into screens before leaving the factory.

3D Delay

Keep the default value 850000.

3D Mode

- Select **Upper and Lower Images Merge** for video sources in upper and lower format.
- Select **Left and Right Eyes Alternate Output** for video sources in left and right format.

Left and Right Images Alternation

When the left image is opposite to the right image, you can enable the function.

Input Signal Configuration

Input Signal Auto Detection

Enable the function, and the system will detect and recognize the input signal automatically.

Input Format

The input standard is RGB by default. Select **Auto Recog** when the signal standard is not RGB.

Resolution Self-adaption

Enable the function, and the input resolution will not change with the output resolution. Disable the function, and you can set **Custom Resolution** which will not change with the output resolution.

Reserve Last Frame for Non-Signal Sending Card

Enable the function, and then when the sending card has no signal input, the screen will reserve the last frame. After the signal input is restored, the screen will restore to normal display.

Audio Configuration

Enable **Audio**, and then set the volume.

4. Click **OK**.

3.1.4 Set Scene

You can save the configurations of, for example, input signal type, 3D video processing, or video opening window, as a scene to call for convenience.

Steps

1. Go to **LED Settings → Screen Control → Signal Source Management/Multi-Screen** .
2. Check the device(s) to be set from the device list.
3. Click **Scene** on the right of the interface.

Figure 3-10 Set Scene

4. Click + .
5. Enter the scene name.

6. Click **Save** to save the scene to the scene list.
7. **Optional:** Other operations.

Edit	Click ✎ to edit the scene name.
Call	Call the scene.
Save	Apply the scene.
Delete	Delete the scene.

3.1.5 Set Image Splicing

You can set the image splicing of the normal screens and 54-inch splicing screens.

Set Normal Screen Splicing

You can splice multiple LED screens into one to display a complete picture. 3D screen splicing is available. If you use a decoding device to splice normal screens, select splicing by other device. If you use the LED controller to splice normal screens, select splice by LED controller.

Steps

1. Go to **LED Settings → Screen Control → Image Stitching** .
2. Add the screen.
   1) Click **Add Screen**.
   2) Enter **Screen Name**.
   3) Select **By LED Controller** or **By Other Device** as the image stitching mode.

   Note

   If you use a decoding device to splice normal screens, select splicing by other device. If you use the LED controller to splice normal screens, select splice by LED controller.

   4) Click **OK**.
3. Set **Sending Card Scale**.

   Note

   Up to 4 × 4 sending card scale is supported.
4. Select the online device(s) from the device list and drag to the area(s) on the right window.

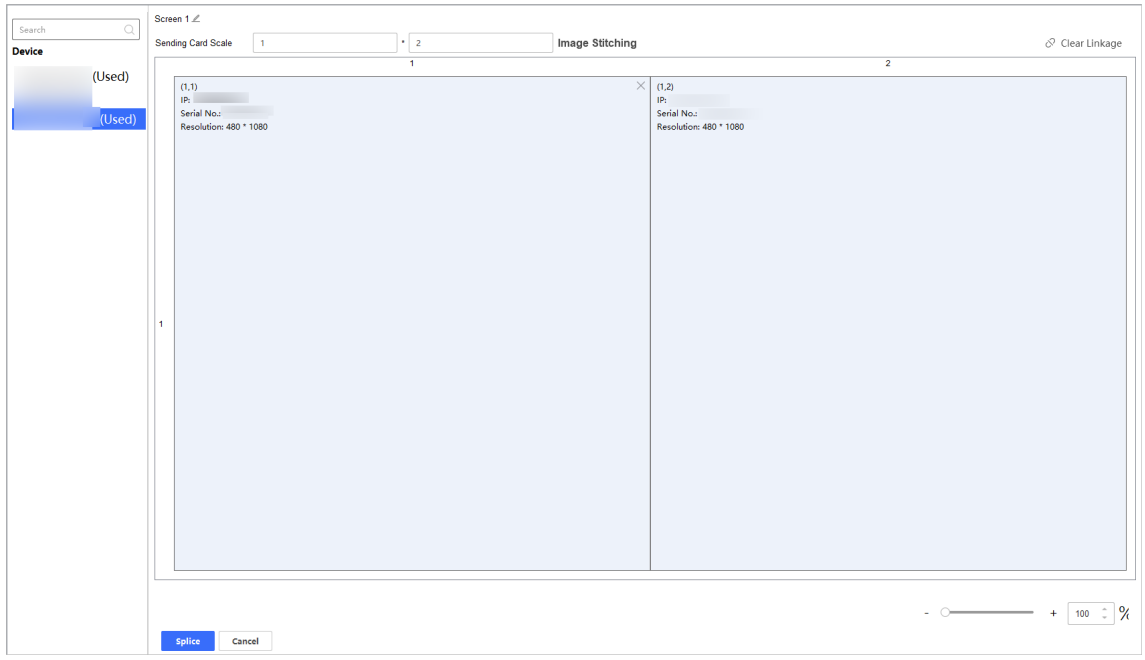


Figure 3-11 Splice Normal Screens by LED Controller

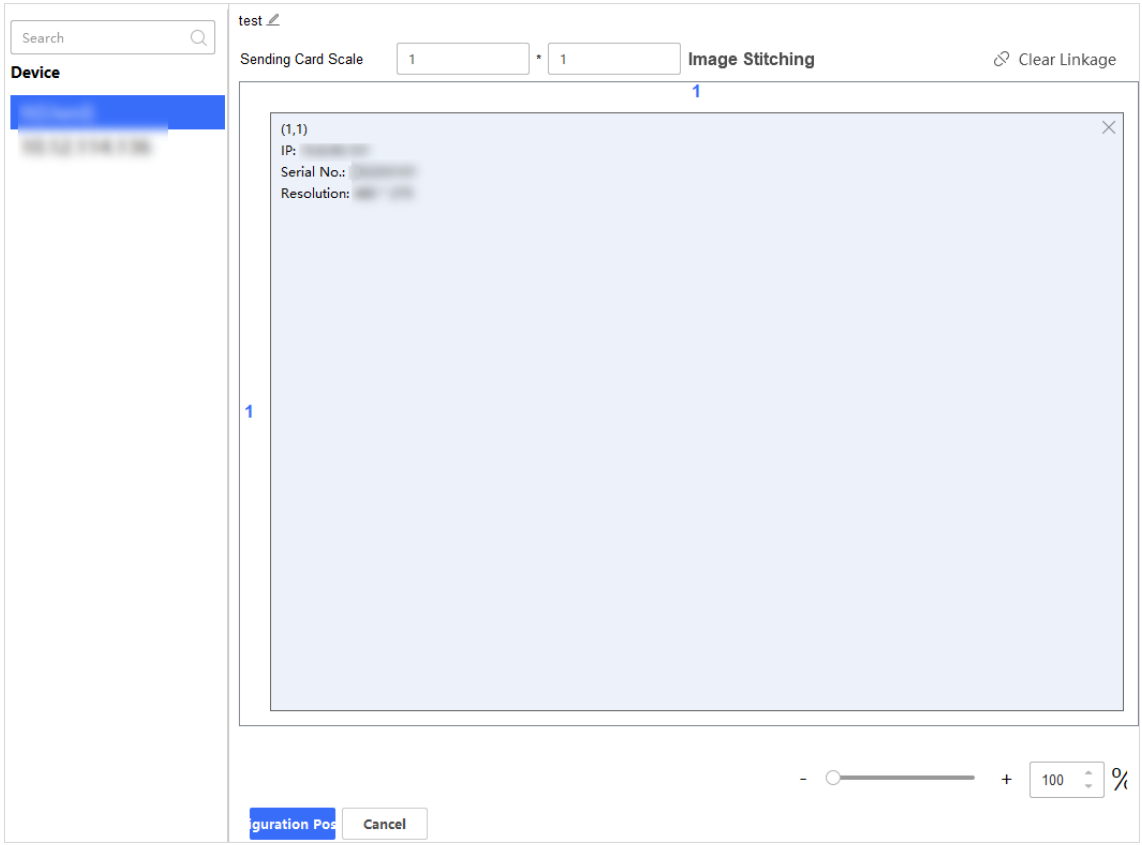


Figure 3-12 Splice Normal Screens by Other Device

Note

- Enter the user name and password for the first-time login of the device.
- If the linked device is offline, the splicing area will turns grey.

5. **Optional:** Other operations.

   Clear linkage Click the button to clear all the linked devices.

   Edit Click to edit the screen name.

6. Click **Splice** to save the settings for splicing by LED controller and click **Configuration Position** to save the settings for splicing by other device.

Set Splicing of 54-Inch Splicing Screen

You can use the LED batch controller client or remote control to set the splicing of the 54-inch splicing screen.

Steps

1. Go to **LED Settings → Screen Control → Image Stitching** .
2. Click **Display Device Information**.

The device IP address and physical wiring No. will be displayed on the screen.

3. Select the first device of physical wiring from the left device list, or enter the first device name of physical wiring in the text filed to search.
4. Enter **Splicing Scale** according to the actual condition.

Note

The splicing scale is the video wall scale.

5. Click **Display Screen Coordinate**, and select **Wiring Mode** according to the coordinates shown on the screen. Click **Number**.

   The splicing window will show the corresponding device information according to the selected wiring mode and No.

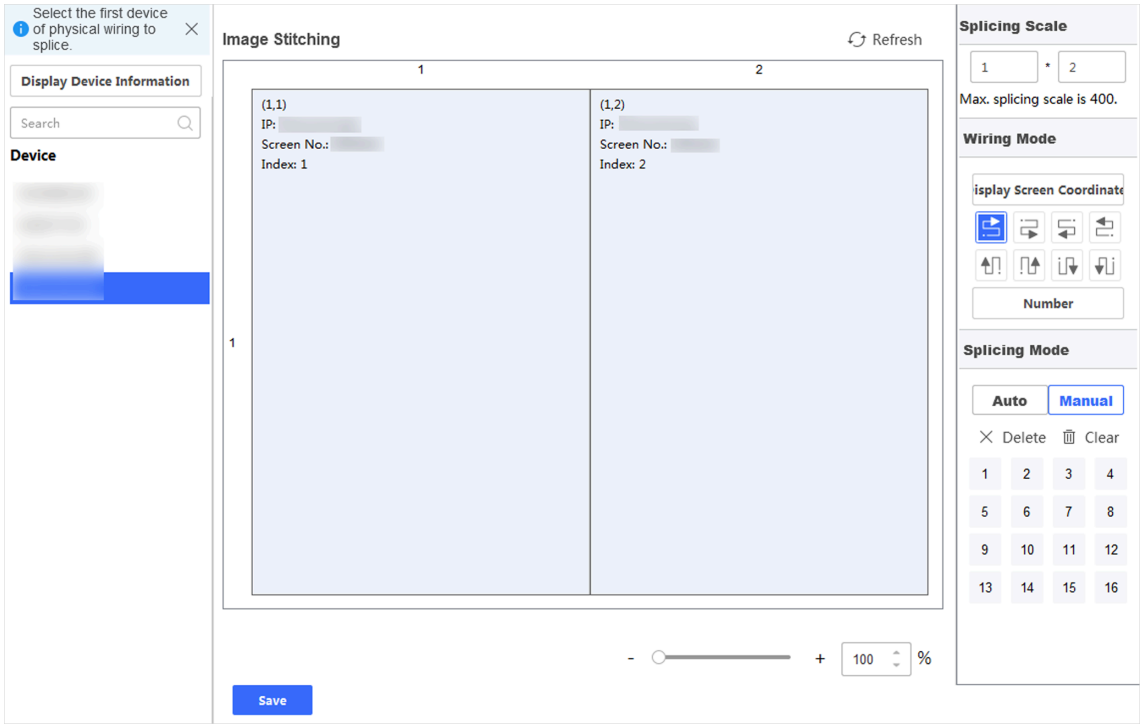


Figure 3-13 Splice 54-Inch Splicing Screen

6. Select **Splicing Mode**.
   - Auto splicing: Click **Auto** and set the splicing module scale. It is recommended to set as 2 × 2. You can click **Clear** to clear the set auto splicing module scale.
   - Manual splicing: Click **Manual**, and select the number of the splicing module. Drag the mouse to select the screens to be spliced, and click **Confirmed**. Up to 16 splicing modules are supported for each splicing window, and up to 25 splicing units are supported for each splicing module. Select the set number of splicing module and click **Delete** to delete the selected settings. Click **Clear** to clear all the settings.
7. Click **Save**.

3.1.6 Set Multi-Input Image

Multi-input screens are virtual split screens on the LED display. It supports the display of HDMI signal source, DVI signal source, subtitles, graphic clock, and other contents.

Note

Only the multi-input devices support the function.

Go to **LED Settings → Screen Control → Multi-Screen** . Click to select the device. The interface is divided into 3 areas. In left area, you can select the layout template or signal source. In middle area, you can edit the windows. In right area, you can set window parameters.

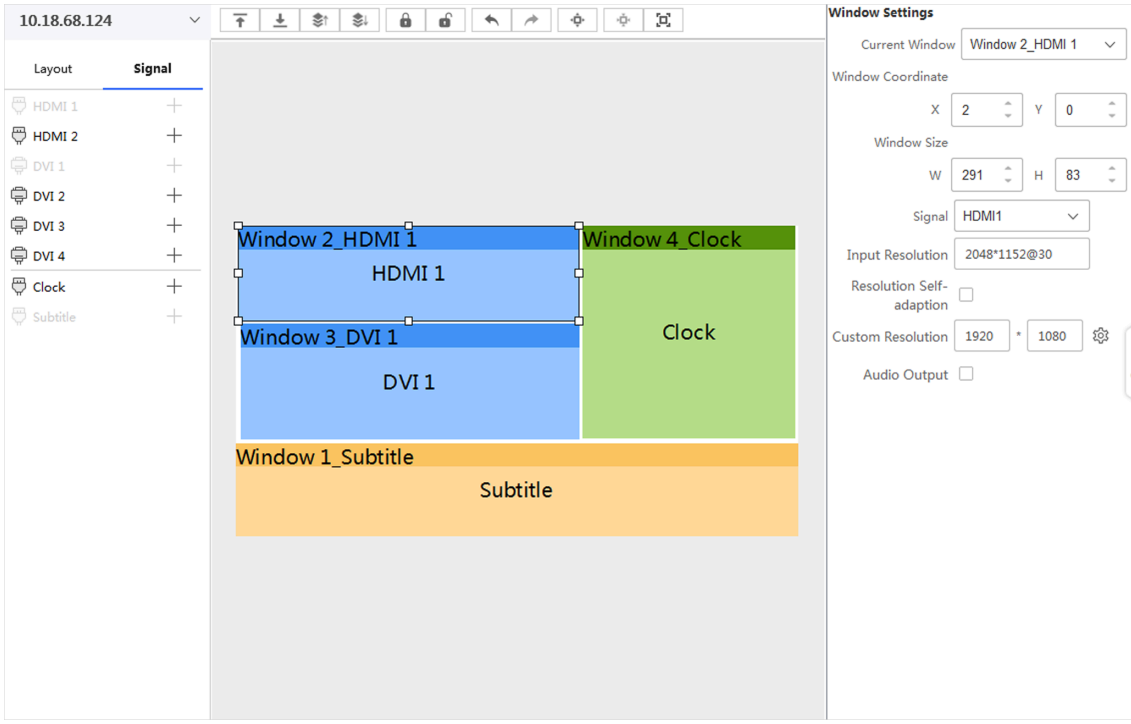


Figure 3-14 Set Multi-Input Image

Table 3-3 Multi-Input Image Interface Description

Configuration Item/Icon	Description
Layout	You can select multiple layout templates to edit the windows, including the signal source template, subtitle template, clock template, and composite template. Drag the corresponding template to the window area.

Configuration Item/Icon	Description
	Note Applying the new template will clear the original template data.
Signal	You can select multiple signal sources, including HDMI signal, DVI signal, clock, and subtitle. Click + to add the signal source to the window area.
/	Stick the selected signal source on top/at bottom.
/	Move the selected signal source up/down.
/	Lock/Unlock the selected signal source.
/	Cancel/Restore the last operation.
	Display the selected signal source in full screen.
	Display the window size.
	Display the actual size.
Window Settings	Set the window parameters.

Note

- Up to 9 windows can be added in one screen.
- The same HDMI or DVI source can only be added once.
- One subtitle source can only be added once.
- One clock source can be added twice.

Set HDMI/DVI Signal Source Image

Steps

1. Add the signal source.
   - Click **Layout**. Drag the needed template to the window area.
   - Click **Signal**. Click + to add the signal source to the window area.
2. Select the HDMI/DVI window.
   - Click the HDMI/DVI window from the window area.
   - In the right **Window Settings** area, select **Current Window** as HDMI or DVI window.

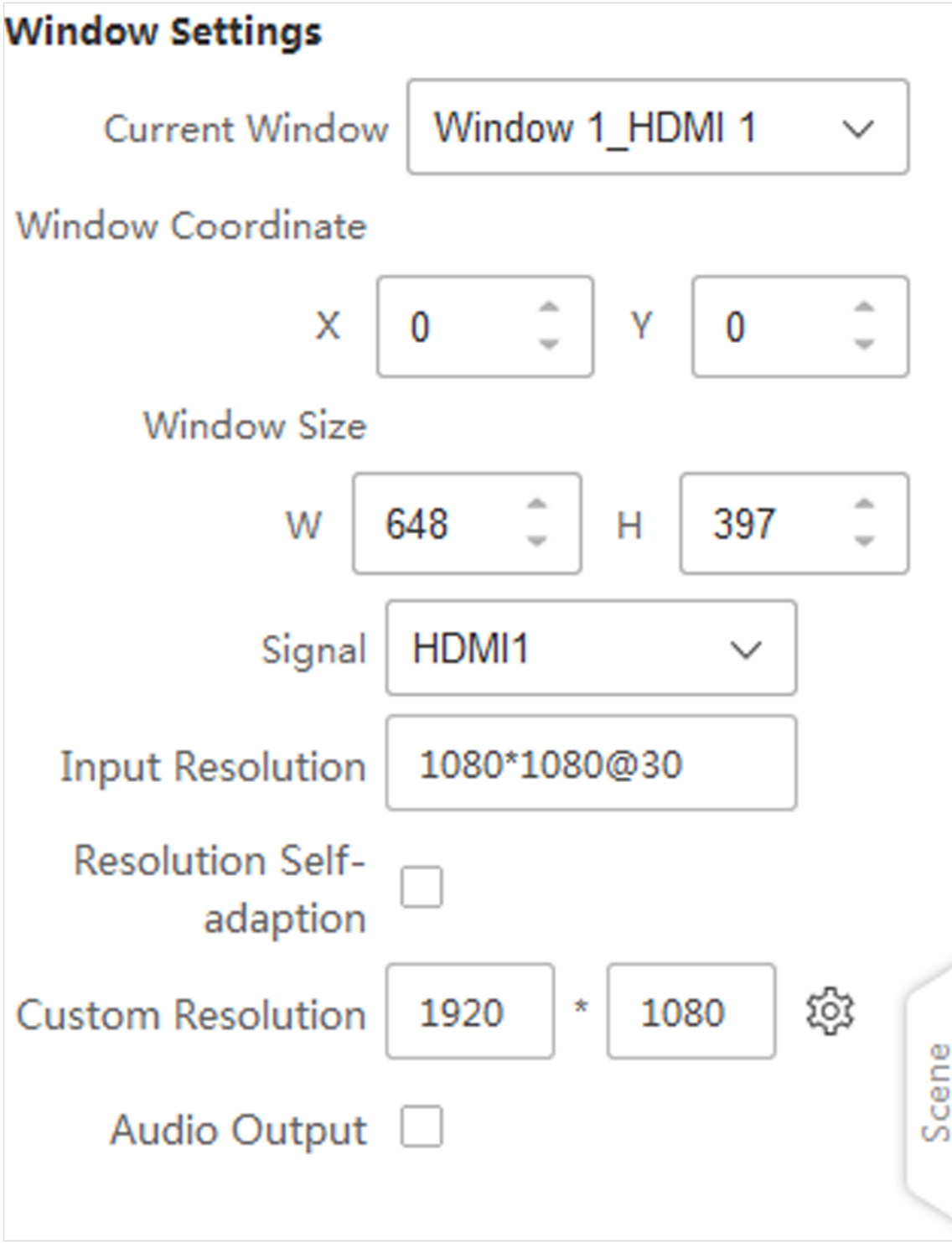


Figure 3-15 Set HDMI/DVI Signal Source Image

3. Adjust the window position and size.

- In the middle window area, select and drag the window to adjust position. Select and drag the borders or vertexes of the window to adjust size.
- In the middle window area, select the window. In the right **Window Settings** area, set **Window Coordinate** and **Window Size**.

4. Select **Signal**.
5. Set the resolution.
   - Check **Resolution Self-adaption**.
   - Uncheck **Resolution Self-adaption**. Enter **Custom Resolution**, and click ⚙ to save.
6. **Optional:** For HDMI signal source, if you want to output audio, check **Audio Output**.

Set Graphic Image

Steps

1. Add the signal source.
   - Click **Layout**. Drag the needed template to the window area.
   - Click **Signal**. Click + to add the signal source to the window area.
2. Select the clock window.
   - Click the clock window from the window area.
   - On the right **Window Settings** area, select **Current Window** as the clock window.

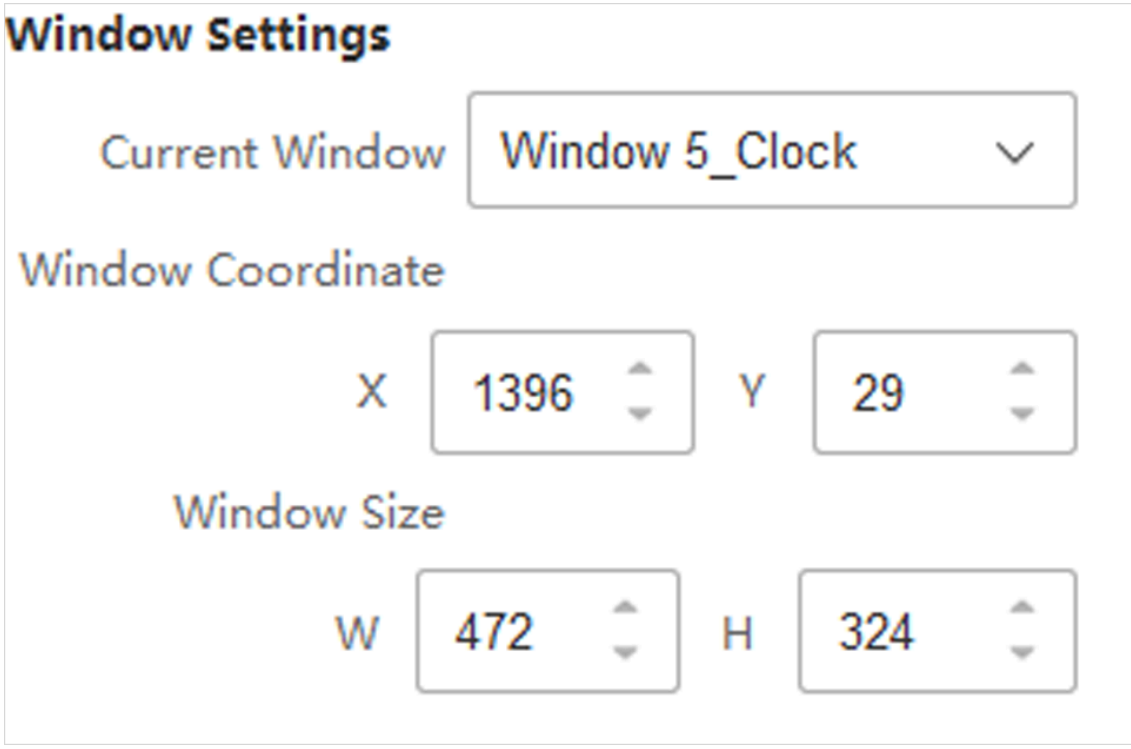


Figure 3-16 Set Graphic Image

3. Adjust the window position and size.

- In the middle window area, select and drag the window to adjust position. Select and drag the borders or vertexes of the window to adjust size.
- In the middle window area, select the window. In the right **Window Settings** area, set **Window Coordinate** and **Window Size**.

4. Double click the clock window to edit it.

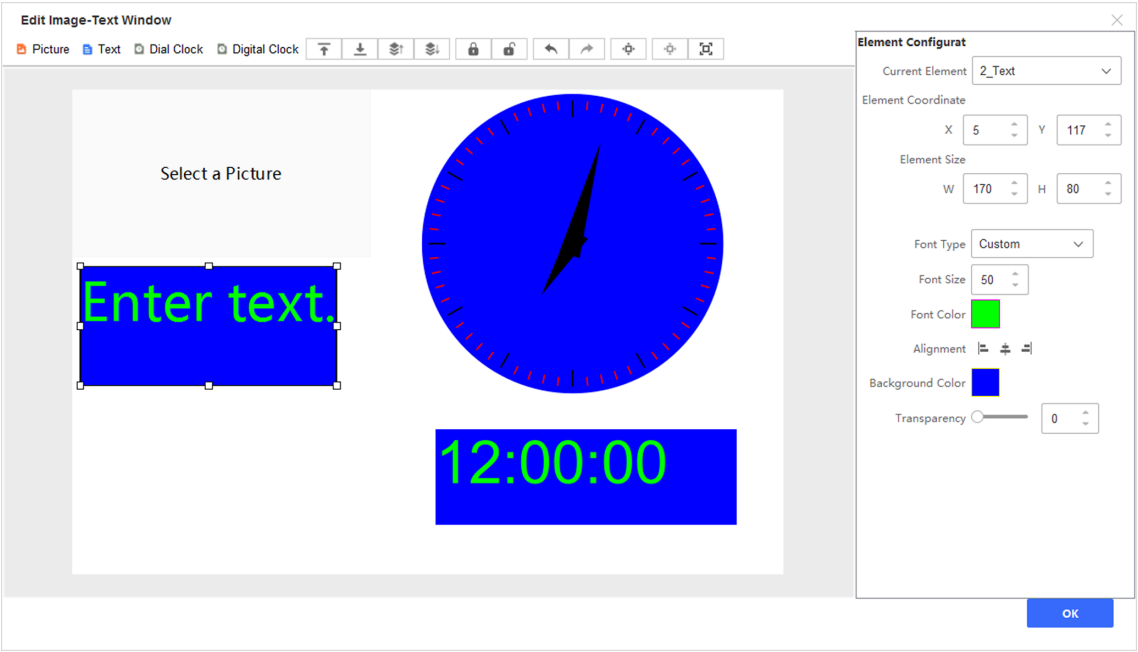


Figure 3-17 Edit Graphic Window

5. Select **Picture**, **Text**, **Dial Clock**, or **Digital Clock** in the element bar on the upper left corner to add different elements.

Note

Up to 3 picture elements, 2 clock elements, and 5 text elements can be added.

6. Select the element to be edited, and set the parameters in **Element Configuration** area.

Table 3-4 Graphic Element and Parameters Description

Element Type	Description
Picture	Add a picture. You can adjust the picture position and size, and upload the local pictures.
Text	Add the text. You can adjust the text position and size, the font type, size, and color, alignment, background color, and transparency.

Element Type	Description
Dial Clock	Add a dial clock. You can adjust the clock position and size, the clock style, font color, background color, dial plate scale color, and transparency.
Digital Clock	Add a digital clock. You can adjust the clock position and size, the clock style, font size and color, alignment, background color, and transparency.

7. Click **OK** to apply the current window contents.

Set Subtitle Image

Steps

1. Add the signal source.
   - Click **Layout**. Drag the needed template to the window area.
   - Click **Signal**. Click + to add the signal source to the window area.
2. Select the clock window.
   - Click the clock window from the window area.
   - On the right **Window Settings** area, select **Current Window** as the subtitle window.

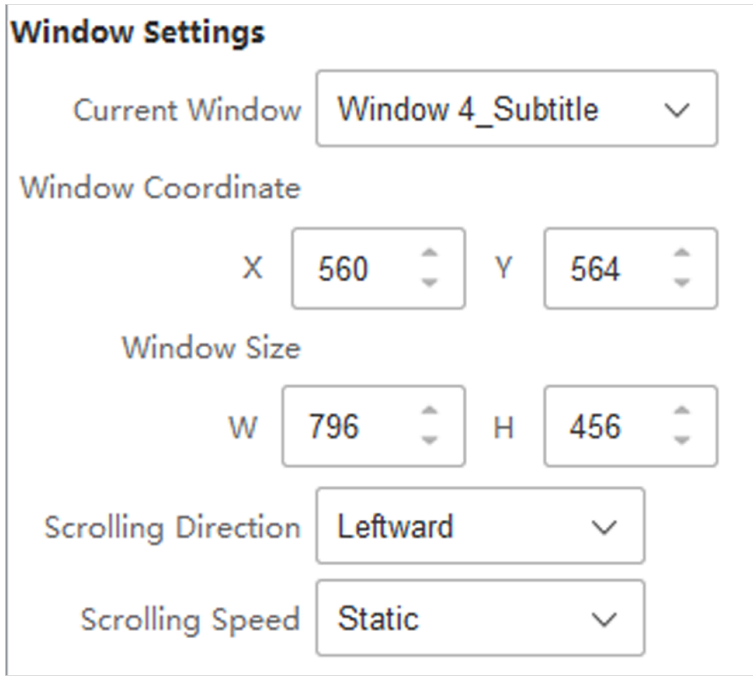


Figure 3-18 Set Subtitle Image

3. Adjust the window position and size.
   - In the middle window area, select and drag the window to adjust position. Select and drag the borders or vertexes of the window to adjust size.

- In the middle window area, select the window. In the right **Window Settings** area, set **Window Coordinate** and **Window Size**.

4. Set **Scrolling Direction** and **Scrolling Speed**.
5. Double click the subtitle window to edit it.

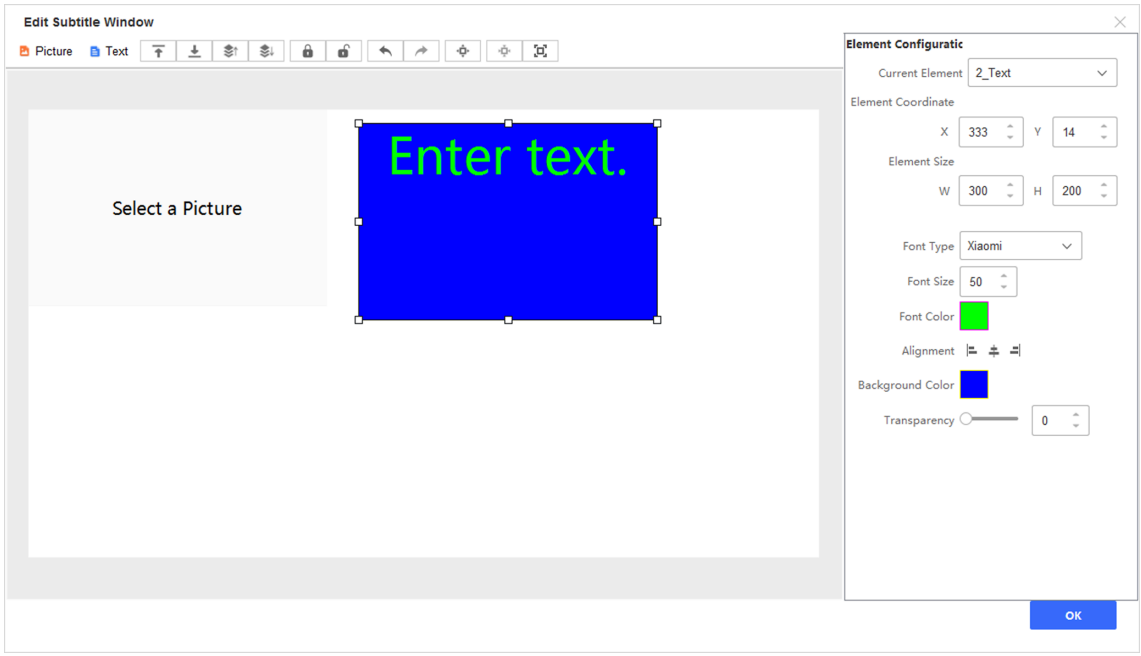


Figure 3-19 Edit Subtitle Window

6. Select **Picture** or **Text** in the element bar on the upper left corner to add different elements.

Note

Up to 3 picture elements and 5 text elements can be added.

7. Select the element to be edited, and set the parameters in **Element Configuration** area.

Table 3-5 Graphic Element and Parameters Description

Element Type	Description
Picture	Add a picture. You can adjust the picture position and size, and upload the local pictures.
Text	Add the text. You can adjust the text position and size, the font type, size, and color, alignment, background color, and transparency. **Note** If you want to set **Font Type** as **Custom**, import the custom font library first. Refer to for details.

8. Click **OK** to apply the current window contents.

3.1.7 Device Backup

For the device supporting dual backup, you can add main card and backup card, and switch them.

Steps

1. Go to **LED Settings → Screen Control → Device Backup** .
2. Click **Add Linkage**.
3. Drag the devices from the device list to the main card and backup card areas on the right.
4. Repeat the steps above to add more linkages.

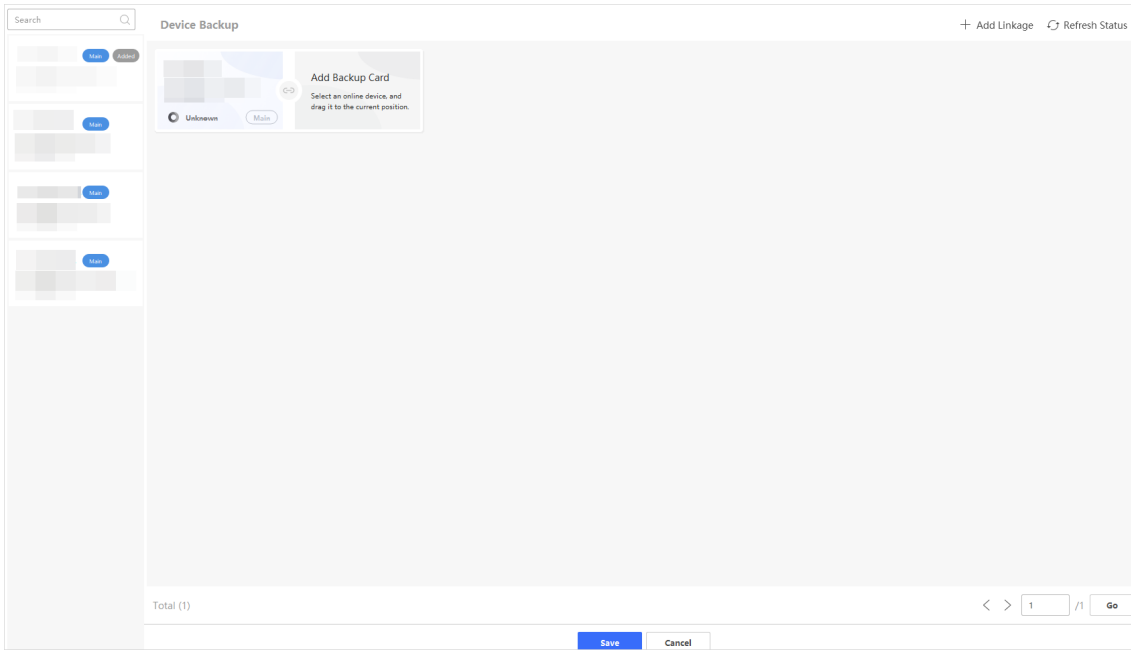


Figure 3-20 Device Backup

5. **Optional:** Other operations.

Delete the linked devices	Move the cursor to the linkage area, and click the trash can icon on the upper right corner of the tab to delete the linked device.
Cancel the linkage	Move the cursor to the linkage area, and click the deleting icon on the upper right corner of the area to cancel the linkage between the main device and backup device.
Switch main device and backup device	Click to switch the main device and backup device.
Refresh linkage status	Click **Refresh Status** to refresh the linkage status.

6. Click **Save**.

3.2 Display Effect

3.2.1 Set Basic Image Parameters

According to the different scenarios, set the basic image parameters. Before leaving the factory, the screen color has been adjusted and the color data is stored on the screen. If the default color data is missing, import the color file. When you select the original color standard and refined adjustment, you need to import the color file.

Steps

1. Go to **LED Settings → Display Effect → Basic Display Effect → Basic Parameter** .
2. Check the device(s) to be set from the device list.
3. Select **Display Mode**.

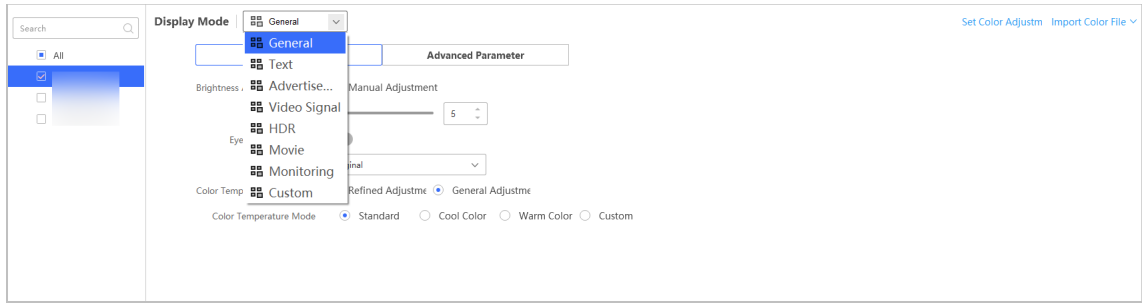


Figure 3-21 Select Display Mode

4. Adjust the brightness value.

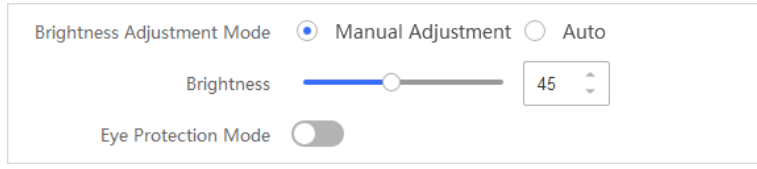


Figure 3-22 Adjust Screen Brightness

Note

The brightness adjustment mode supports manual adjustment by default. To support the auto brightness adjustment, perform the following steps:

a. Connect a light sensor to the device.
b. Go to **LED Settings → Maintenance → System Maintenance → Sensor Settings** , select the light sensing for the corresponding camera.
c. Go to **Device Management**, select the device connected with the light sensor, and click **Refresh**.

5. **Optional:** Enable **Eye Protection Mode** as needed.

6. Select **Color Standard**.

Wide Color Gamut

Applicable to UHD (Ultra High Definition) devices.

Digital Cinema

Applicable to digital cinemas and high-end displays.

HDTV

Applicable to general displays, HDTV (High Definition Television), and other common video devices.

General

Applicable to the user defined color adjustment via the remote controls.

Original

Restore to the original color.

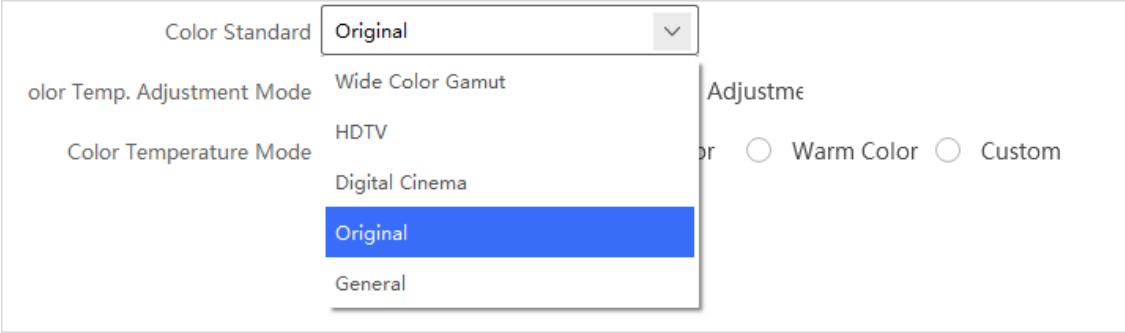


Figure 3-23 Select Color Standard

7. Adjust the color temperature.
   1) Select **Color Temp. Adjustment Mode**.
   2) Select **Color Temperature Mode**.

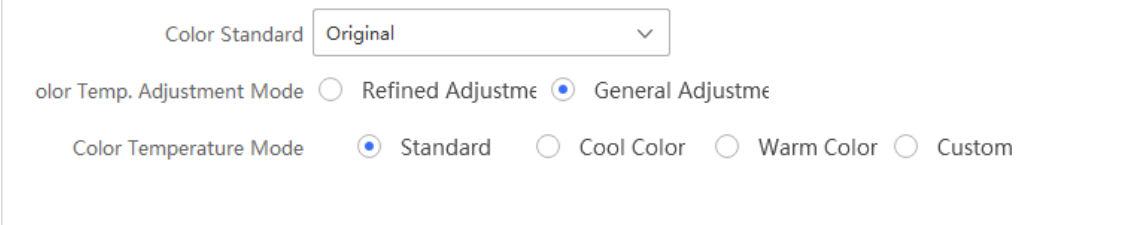


Figure 3-24 Select Color Temperature Adjustment Mode

8. **Optional:** If you find the color of the spliced screens is inconsistent, adjust the color of some screen areas.
   1) Select a device from the device list.
   2) Click **Set Color Adjustment Area**.
   3) Drag and hold the left mouse button to draw a box around multiple screen areas and then adjust the RGB values.

4) Select another device to adjust the color of screen areas.

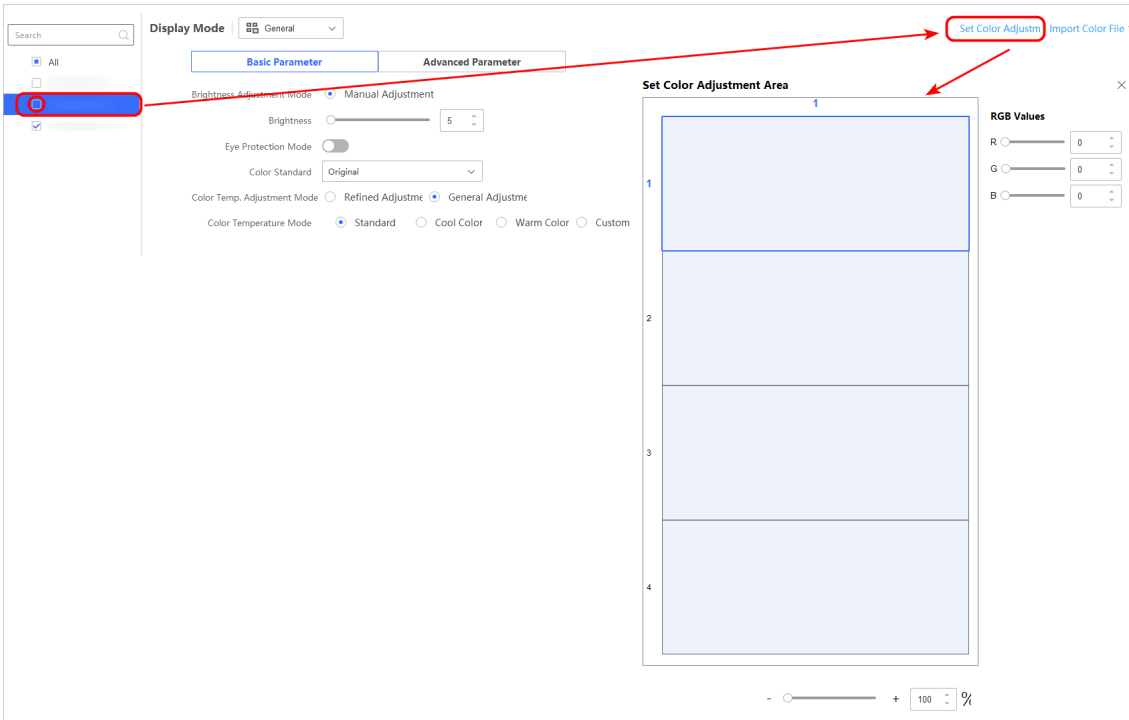


Figure 3-25 Adjust Color of Some Screen Areas

3.2.2 Import Color File

Before leaving the factory, the screen color has been adjusted and the color data is stored on the screen. If the default color data is missing, import the color file. When you select the original color standard and refined adjustment, you need to import the color file. The color file must be in .bin format and its size cannot exceed 20 KB.

Steps

1. Go to **LED Settings → Display Effect → Basic Display Effect** .
2. Check the device(s) to be set from the device list.
3. Import the color file:
   - Local Import: Click **Import Color File**, select **Local Import**, and then select a local color file to import.
   - Load from Cloud: Click **Import Color File**, select **Get from Cloud**, enter the keyword to search, and then select a searched color file.

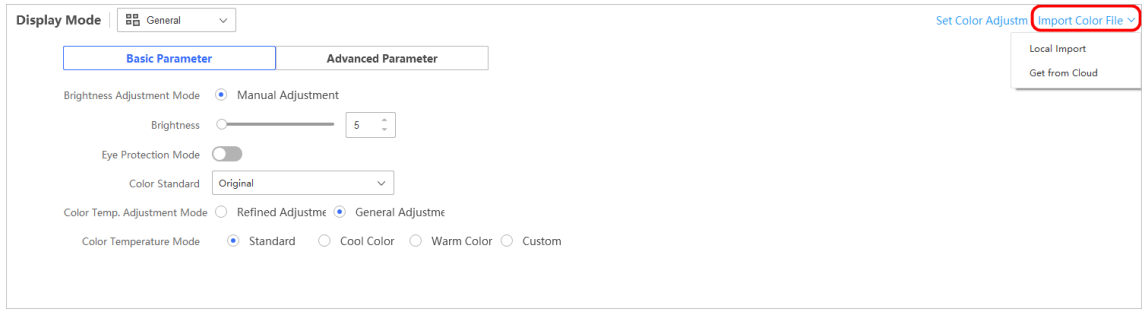


Figure 3-26 Import Color File

3.2.3 Set Advanced Image Parameters

You can set filter, contrast mode, initial brightness level, brightness management, shooting management, ultra-low gray, etc.

Steps

1. Go to **LED Settings → Display Effect → Basic Display Effect → Advanced Parameter** .
2. Check the device(s) to be set from the device list.

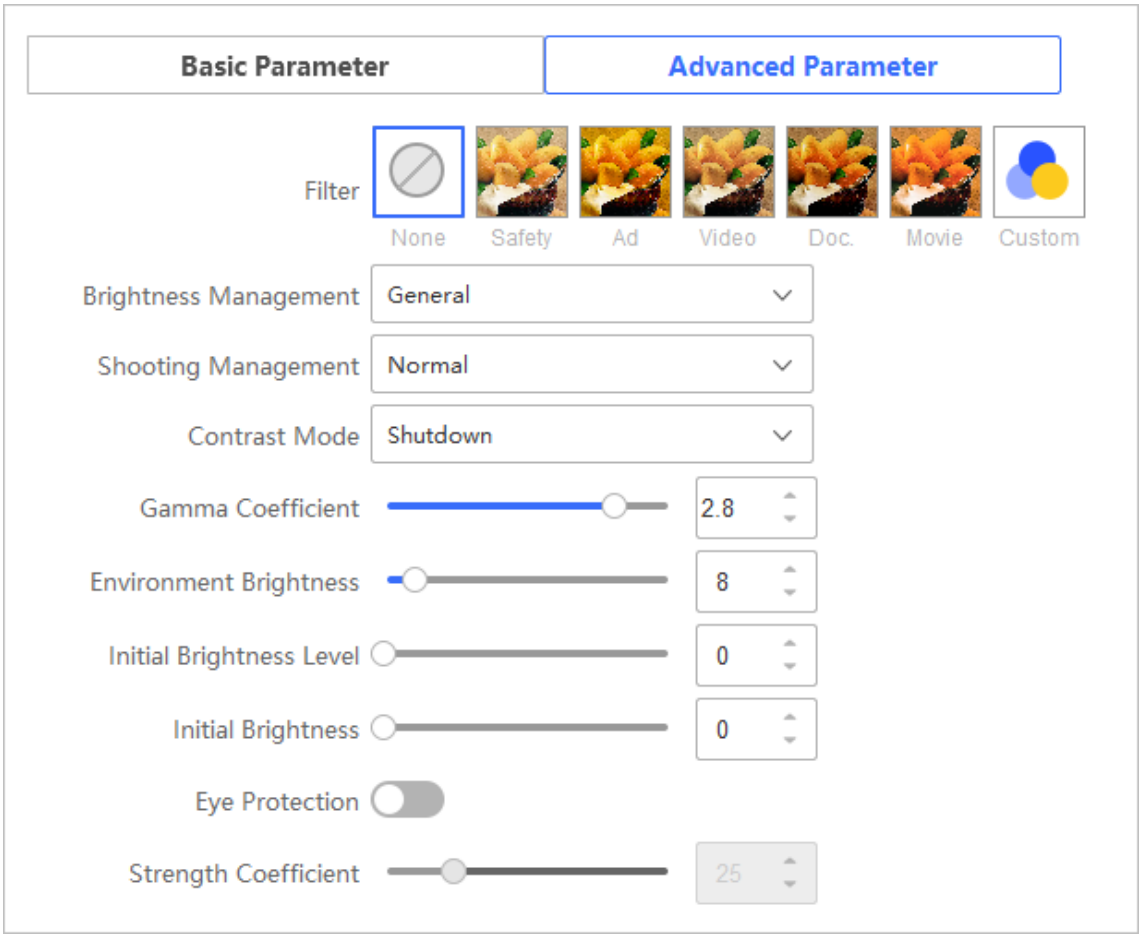


Figure 3-27 Set Advanced Image Parameters

3. Select a filter according to the scene. The filter function is available only on some devices.
4. Select a brightness management mode. The brightness of the screen under different modes: **General** > **Low Light**.
5. Select a shooting management mode. The professional mode has a higher refresh rate than the normal mode, which can avoid the moire pattern better.
6. Select a contrast mode.
7. Set the Gamma coefficient. Lower gamma coefficient makes shadows look brighter and higher gamma coefficient makes shadows look darker.
8. Set the environment brightness according to the actual scene.
9. Set the initial brightness level and initial brightness of the screen.
10. Enable **Eye Protection** to reduce the brightness in high gray scale condition and power consumption and to make the screen light softer.
11. Set the strength coefficient.
12. **Optional:** Other operations.
    1) Click **Cure Scene Parameters** to save the set parameters and load the cured parameters next startup.

2) Click **Restore Scene Parameters** to restore the scene parameters to the default.
3) Click **Export Parameters** to export the parameters.

13. Set the gray parameters.
1) Go to **LED Settings → Display Effect → Advanced Display Effect → Image Parameters** .
2) Check the device(s) to be set from the device list.
3) Enable **Ultra-Low Gray Control** or **Gray Scale Optimization**.

Ultra-Low Gray Control

Enable the function to avoid the low gray halo phenomenon.

Gray Scale Optimization

Enable the function to make the screen gray display more uniformly.

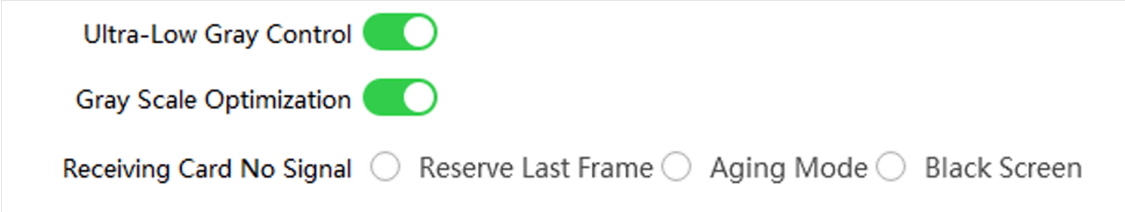


Figure 3-28 Set Gray Parameters

14. Optional: Select the image when the receiving card has no signal.

Note

The function varies with different models. The actual device prevails.

Reserve Last Frame

When the receiving card has no source input, the screen will keep the last frame display, and continue to display normally when the signal is restored.

Aging Mode

The screen will flash in a random pure color.

Black Screen

When the receiving card has no source input, the screen will display in black.

3.2.4 View Receiving Card Parameters

When the technical support personnel debug the device, they need view the receiving card parameters.

Go to **LED Settings → Display Effect → Advanced Display Effect** , check the device(s) to be set from the device list. And then click **Receiving Card Parameters** or **Gamma Table** to view the related information.

Receiving Card Basic Parameters

View the basic parameters of the receiving card.

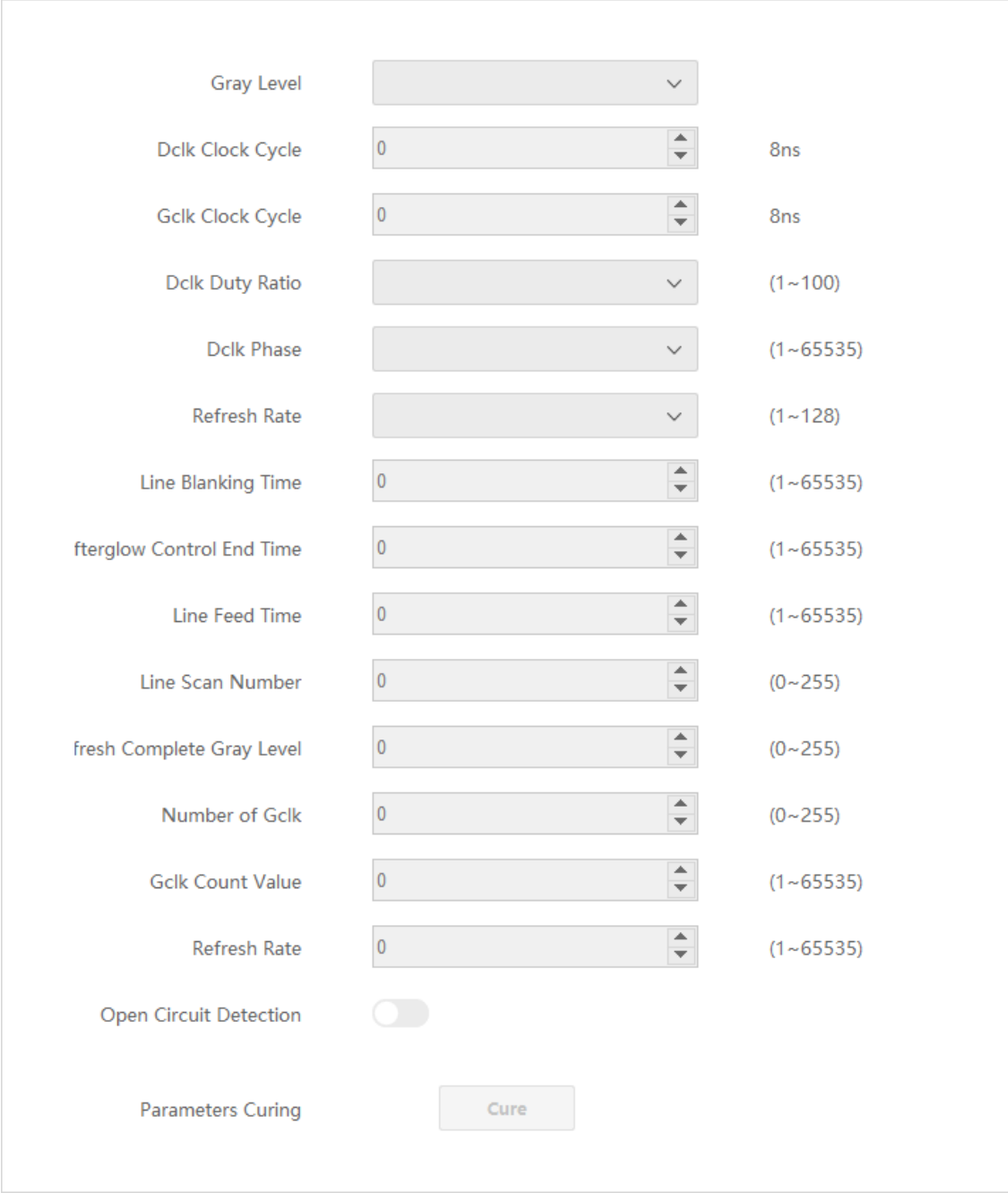


Figure 3-29 Basic Parameters of Receiving Card

Related Operation	Description
Open Circuit Detection	Enable this function to repair the cross phenomenon caused by damaged lamp beads. Before repairing the damaged lamp beads, disable this function.
Cure	Save the set parameters. Load the cured parameters next startup.

Gamma Table

View the Gamma table information, import, or export the table.

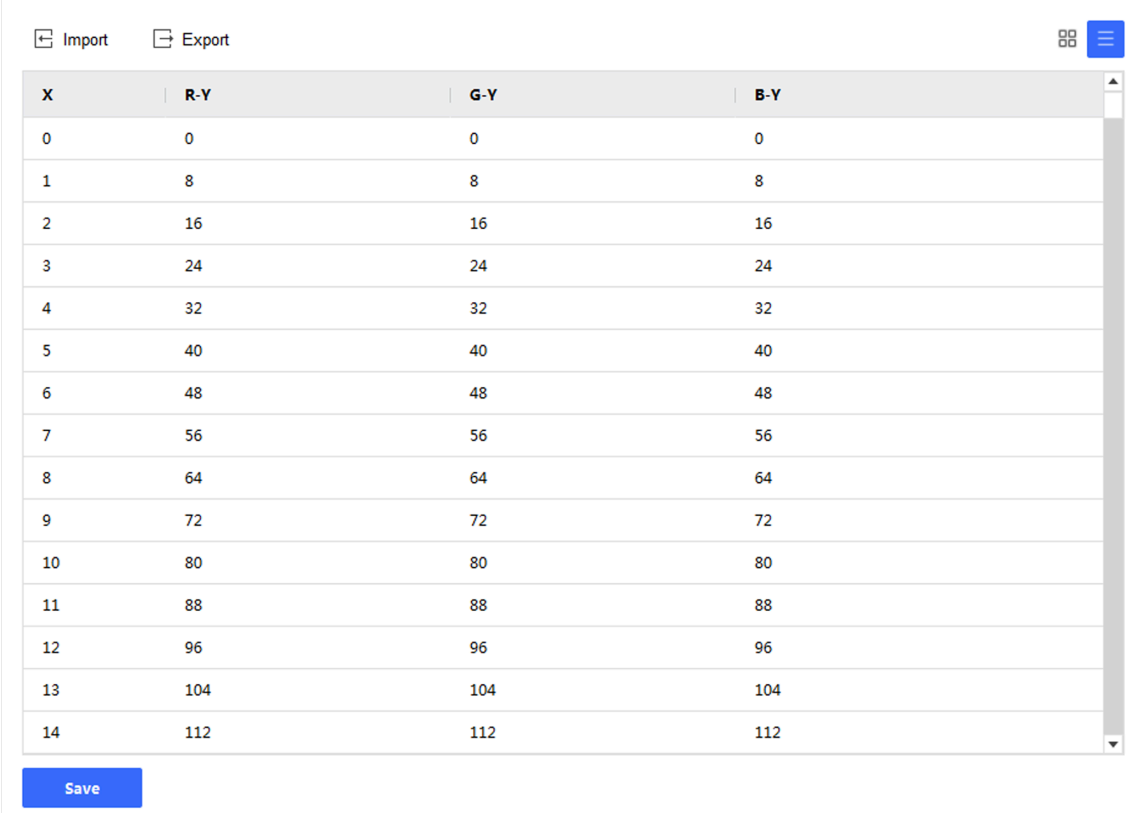


Figure 3-30 Gamma Table

Related Operation	Description
Switch view modes	Click ⊞ or ☰ to switch the viewing modes of the Gamma table.
Save	Apply the current parameters.
Import	In list view, click **Import** to import the Gamma table from the PC.

Related Operation	Description
	Note The Gamma table saved in the PC should be in CSV format.
Export	In list view, click **Export** to export the current Gamma table to the PC.

3.3 System Settings

3.3.1 Set Screen Saver

When the connected signal input is weak or there is no signal input, the screen will display the screen saver automatically.

Steps

1. Go to **LED Settings → System Configuration → Screen Saver** .
2. Check the device(s) to be set from the device list.

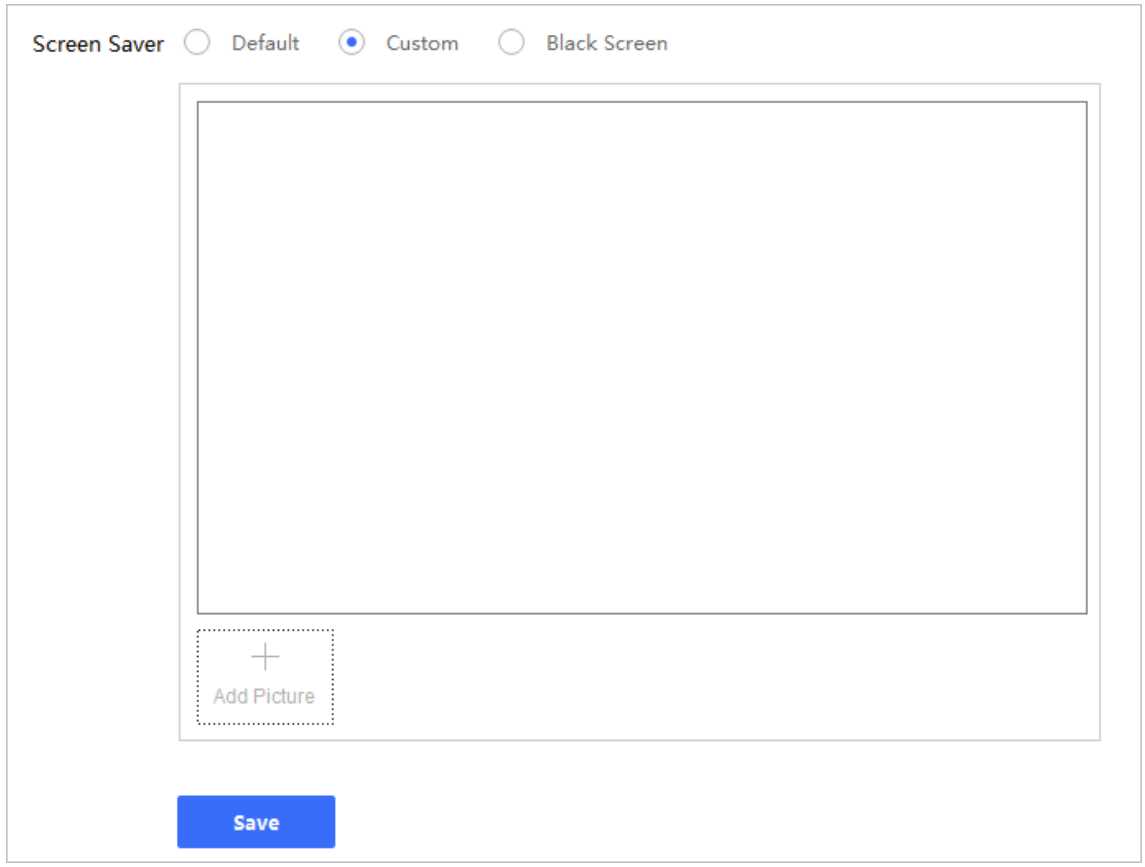


Figure 3-31 Set Screen Saver

3. Select **Screen Saver**.

Default

System default screen saver.

Custom

You can upload a picture as the screen saver. Click **Add Picture** to select one picture as the screen saver.

Note

The picture must be in JPG or JPEG format, with a width of 640 to 3840 pixels and a height of 480 to 2160 pixels. For 2K LED controllers, the picture size must be less than 2 MB, and for 4K LED controllers, the picture size must be less than 4 MB.

Black Screen

When there is no signal input, the screen will show black.

4. Click **Save**.

3.3.2 Set Startup Logo

Only some devices support configuring the startup logo and the startup logo configuration varies by device model.

Steps

1. Go to **LED Settings → System Configuration → Startup Logo** .
2. Check the device(s) to be set from the device list.
3. Select **Logo**.

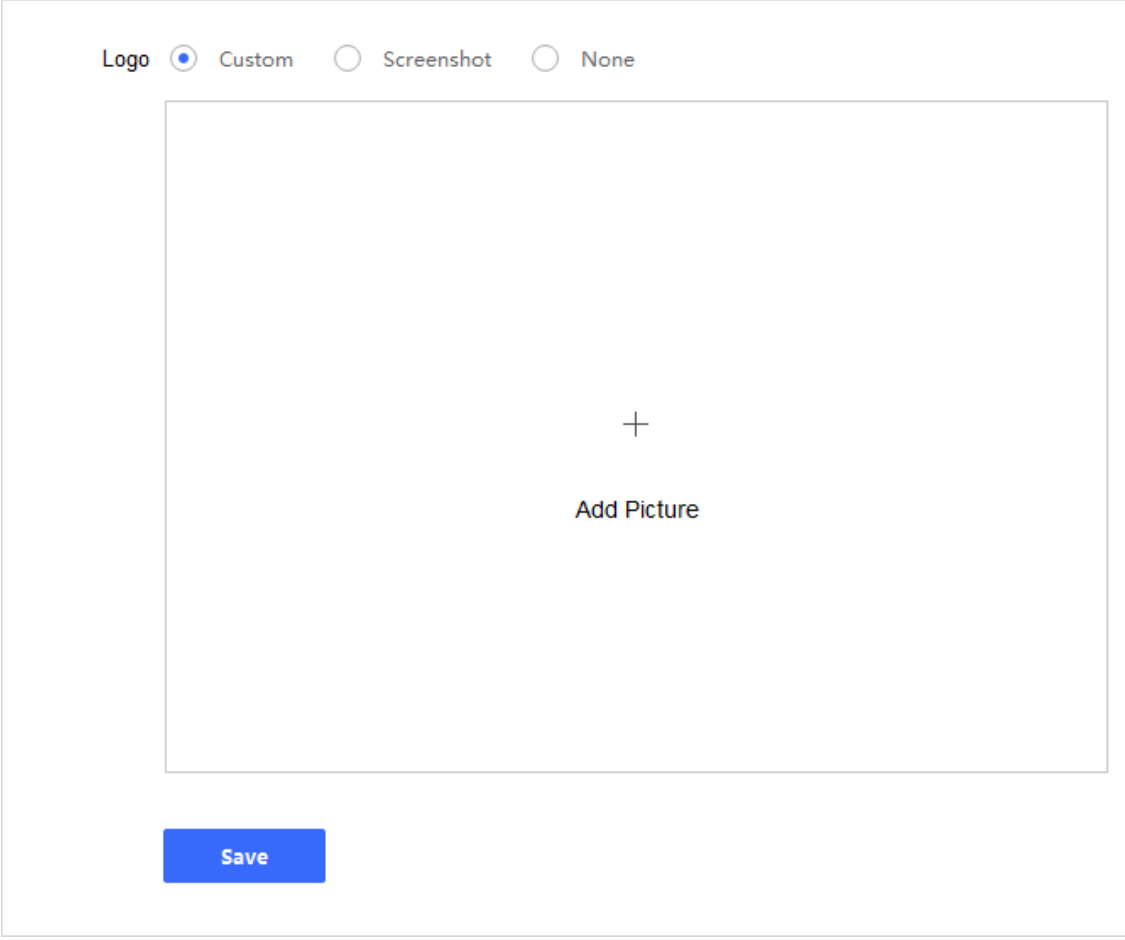


Figure 3-32 Set Startup Logo

Custom

You can upload a picture as the startup logo. Click **Add Picture** to select one picture from the PC.

Note

The picture must be in JPG or JPEG format, with a width of 640 to 3840 pixels and a height of 480 to 2160 pixels. For 2K LED controllers, the picture size must be less than 2 MB, and for 4K LED controllers, the picture size must be less than 4 MB.

Screenshot

Snipe the current display image as the startup logo.

None

No startup logo.

4. Click **Save**.

3.3.3 Set OSD

You can set the OSD (On-Screen Display) of the display.

Steps

1. Go to **LED Settings → System Configuration → OSD** .
2. Check the device(s) to be set from the device list.

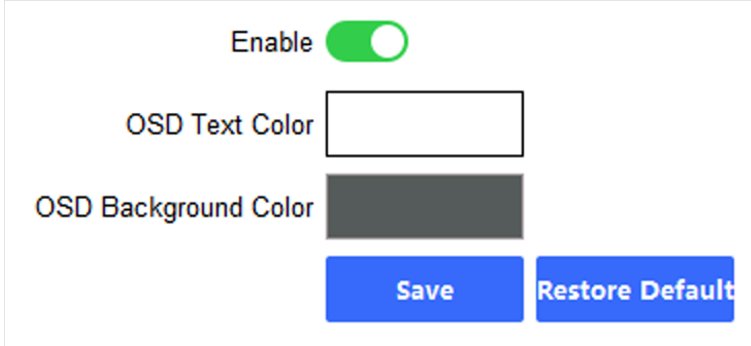


Figure 3-33 Set OSD

3. Enable the function.
4. Set **OSD Text Color** and **OSD Background Color**.
5. Click **Save**.
6. **Optional:** Click **Restore Default** to restore to the default settings.

3.3.4 Set Dehumidification Mode

After the display is turned on, the dehumidification function automatically adjusts the brightness and preheats the lamp beads to evaporate the water vapor in the lamp beads, thereby improves the service life of the LED display. You can set the dehumidification mode of the following two triggering methods via the client.

Triggered by Shutdown Time

In this method, when the device is turned off for more than 24 hours, it will automatically match the dehumidification mode parameters according to the humidity type in the current area and enable the dehumidification function immediately when it is restarted.

Before You Start

When there are multiple sending cards in the same project, use a switch to set the sending cards that need dehumidification in the same network segment.

Steps

1. Enable simultaneous dehumidification mode.
   1) Add a sending card, and go to **LED Settings → System Configuration → Sending Card Network Cascade** .
   2) Enable the function.
   3) Check **Simultaneous Dehumidification Mode**.
   4) Check all the device(s) that need to be dehumidified, including the added sending card.
   5) Click **Save**.

   Note

   If there is only one sending card in the project, you only need to log in to the sending card via the client, and the operations above are not required.

   The sending card enabling the simultaneous dehumidification mode is the primary dehumidification card by default, and other checked devices will synchronize the dehumidification configuration of the primary card.
2. Synchronize time. Refer to ***Synchronize Time*** for details.
3. Set dehumidification.
   1) Go to **LED Settings → System Configuration → Dehumidification** .
   2) Check the device(s) to be set from the device list.

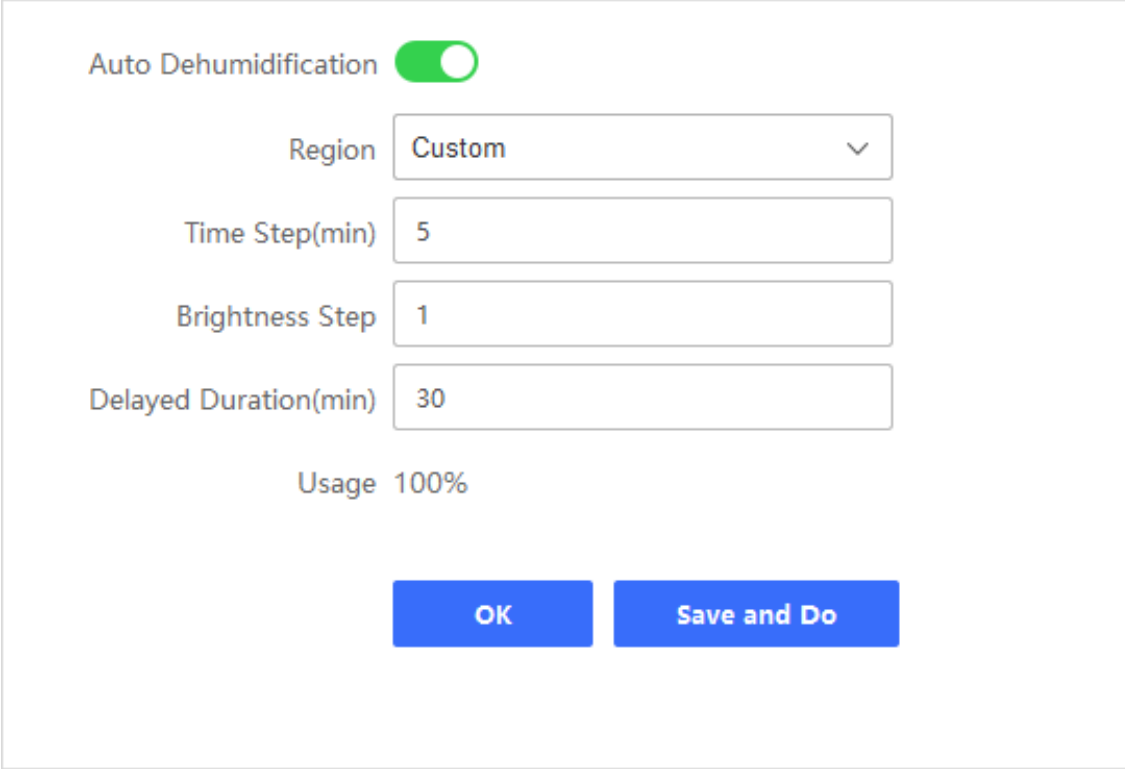


Figure 3-34 Dehumidification

3) Enable **Auto Dehumidification**.
4) Select **Region** according to the actual humidity condition of the device location.
5) **Optional:** If you select **Custom**, set the parameters below.

Time Step

The time interval the brightness increases in the total working time within single dehumidification.

Brightness Step

The brightness interval the brightness increases in the total working time within single dehumidification.

Delayed Duration

The total working time within single dehumidification.

6) Click **OK**.
7) **Optional:** Click **Save and Do** to start dehumidification immediately.
8) **Optional:** Disable **Auto Dehumidification** to disable dehumidification function manually.

Note

Disabling dehumidification function manually is only valid once. The next time you start the device, the dehumidification will be enabled automatically.

Triggered by External Sensor

In this method, the device will obtain the current surrounding humidity via an external temperature and humidity sensor, and compare it with the humidity threshold set by the system. If the current humidity exceeds the threshold, it will automatically match the dehumidification parameters and enable the dehumidification function immediately.

Before You Start

The sensor has been connected to the multi-functional card via RS-485 interface. When there are multiple sending cards in the same project, use a switch to set the sending cards that need dehumidification in the same network segment.

Steps

1. Enable simultaneous dehumidification mode.
   1) Add a sending card, and go to **LED Settings → System Configuration → Sending Card Network Cascade** .
   2) Enable the function.
   3) Check **Simultaneous Dehumidification Mode**.
   4) Check all the device(s) that need to be dehumidified, including the added sending card.
   5) Click **Save**.

   Note

   If there is only one sending card in the project, you only need to log in to the sending card via the client, and the operations above are not required.

   The sending card enabling the simultaneous dehumidification mode is the primary dehumidification card by default, and other checked devices will synchronize the dehumidification configuration of the primary card.
2. Enable the sending card temperature detection, environment temperature detection, and environment humidity detection. Refer to for details.
3. Set dehumidification.
   1) Go to **LED Settings → System Configuration → Dehumidification** .
   2) Check the device(s) to be set from the device list.

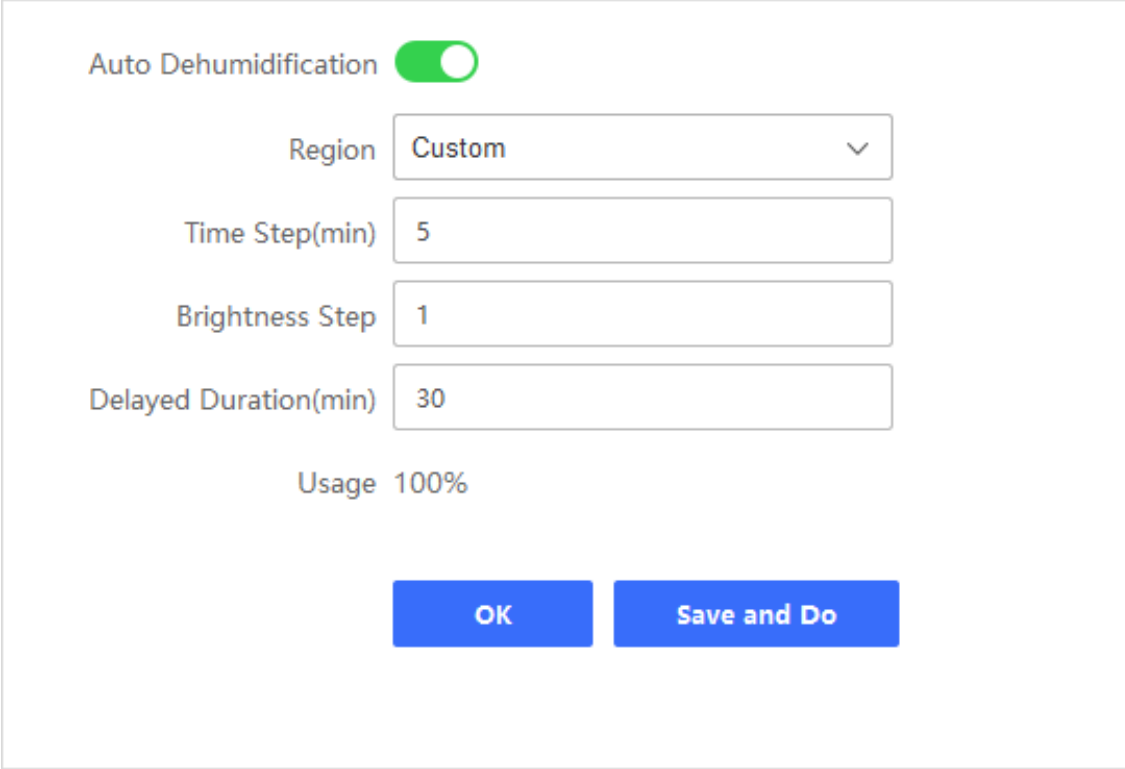


Figure 3-35 Dehumidification

3) Enable **Auto Dehumidification**.
4) Select **Region** according to the actual humidity condition of the device location.
5) **Optional:** If you select **Custom**, set the parameters below.

Time Step

The time interval the brightness increases in the total working time within single dehumidification.

Brightness Step

The brightness interval the brightness increases in the total working time within single dehumidification.

Delayed Duration

The total working time within single dehumidification.

6) Click **OK**.
7) **Optional:** Click **Save and Do** to start dehumidification immediately.
8) **Optional:** Disable **Auto Dehumidification** to disable dehumidification function manually.

Note

Disabling dehumidification function manually is only valid once. The next time you start the device, the dehumidification will be enabled automatically.

3.3.5 Set Sending Card Network Cascade

You can set the sending card parameters simultaneously in batch.

Before You Start
The multiple sending cards to be configured simultaneously must be in the same LAN.

Steps
1. Go to **LED Settings → System Configuration → Sending Card Network Cascade** .
2. Enable the function.

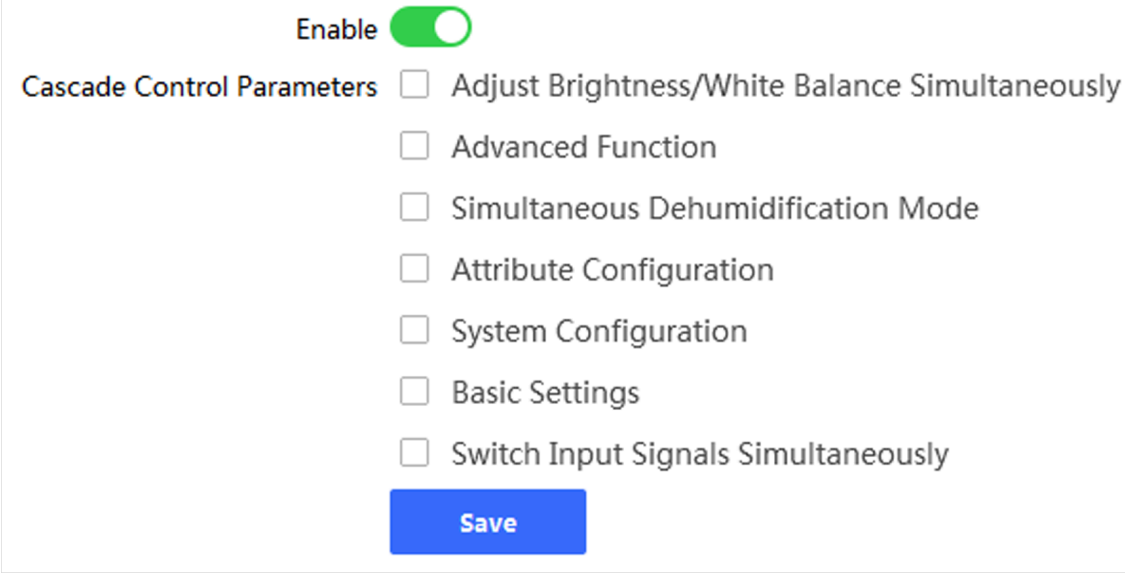


Figure 3-36 Set Sending Card Network Cascade

3. Select **Cascade Control Parameters**.
4. Check the device(s) to add to the multicast.
5. Check any device added to the client to realize simultaneous control.
6. Click **Save**.

3.4 Device Maintenance

3.4.1 Correct Receiving Card

Clicking start correction is the first step to correct the receiving cards and then you need to configure the correction parameters. To correct the AXS receiving cards for the first time, load the original correction data to make the data on the lamp board consistent with the data on the receiving cards.

Steps

1. Go to **LED Settings → Maintenance → Defective Pixel Correction** .
2. Select the device to be corrected:
   - Select a device to be corrected from the device list.
   - Click **Batch Correction**, select the devices, enable correction, and check the correction content.
3. Click **Start Correction** to start configuring the correction.

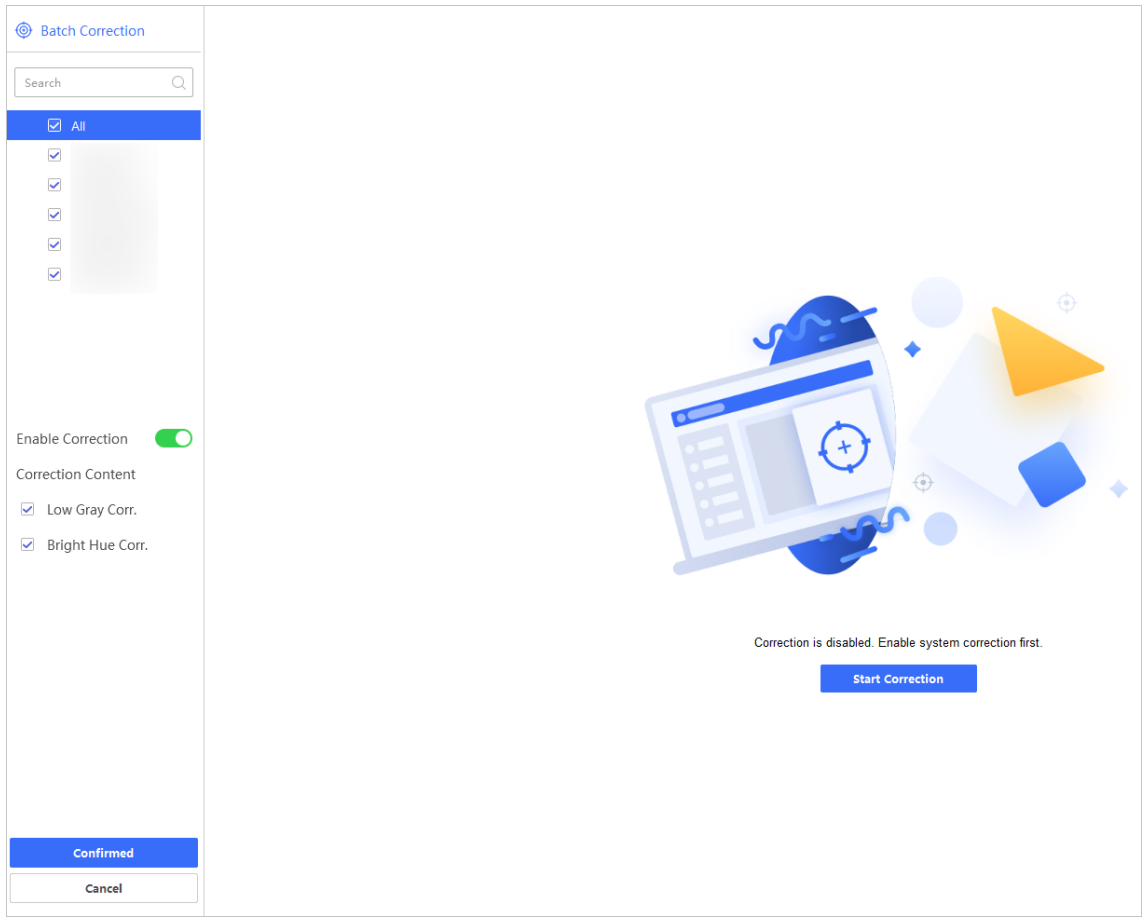


Figure 3-37 Start Configuring Correction

4. Set the correction area.
   - Click , and select the area to be corrected.

Note

- If single or multiple modules need to be corrected, check **Show Module**. If single or multiple screens need to be corrected, uncheck **Show Module**.
- If you select seam correction, you cannot check **Show Module**.

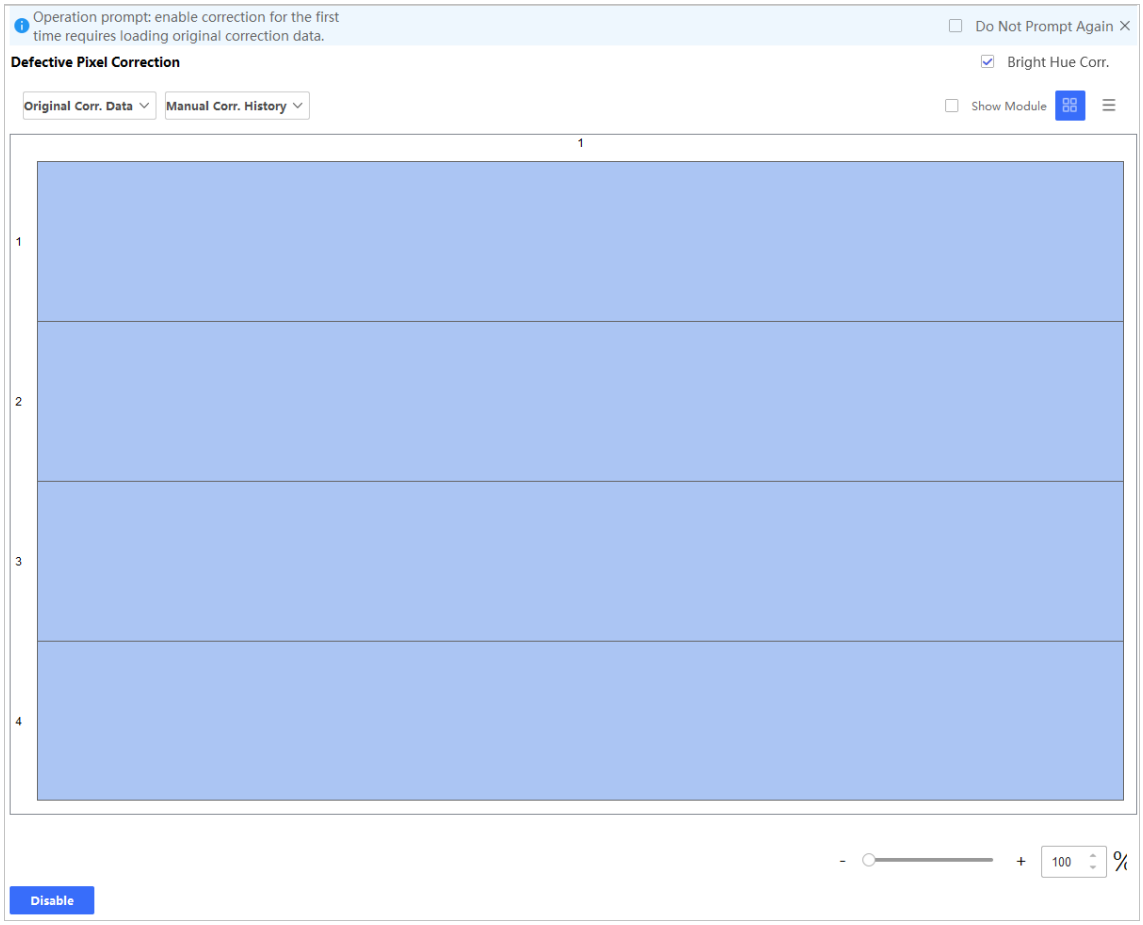


Figure 3-38 Select Correction Area

- Click ☰ , and enter **Start Coordinate** and **End Coordinate**.

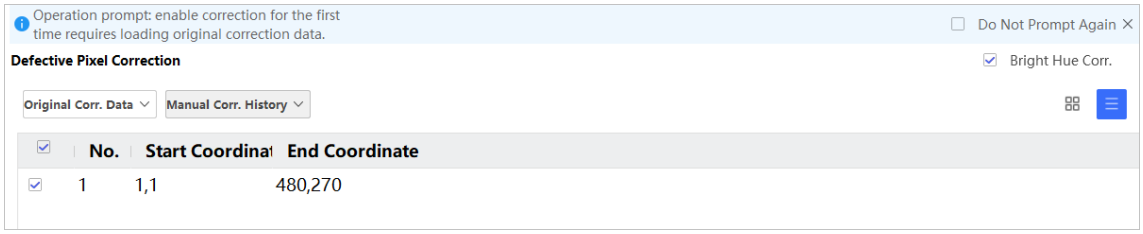


Figure 3-39 Set Correction Area Coordinate

5. Correct the receiving cards according to different screen status.

- For the AXS receiving cards, perform the following correction as required:
  - If the display effect does not meet the requirements, click **Original Corr. Data** and **Load Original Corr. Data** to make the data of the AXS receiving cards and lamp board consistent.
  - If the display effect still does not meet the requirements after loading the lamp board data, click **File Correction** and **Load Upload** to upload a locally saved correction file, and then click **Apply**.

- If the display effect still does not meet the requirements after loading the lamp board data, click **File Correction** and **Load from Cloud**, click **Select File** to select a searched correction file, and then click **Apply**.
- If the color difference exists after importing the correction file, click **Manual Correction** and **Screen Correction**, and and adjust the RGB values.
- If bright or dark seams exist after importing the correction file, select **Manual Correction** and **Seam Correction**, set the seam width, and adjust the RGB values.
- After manually correcting the screens or seams, you can click **Manual Corr. History** and **Reuse Manual Corr History** to reuse the historical correction data.

- For the HUB receiving cards, perform the following correction as required:
  - If the display effect does not meet the requirements, click **File Correction** and **Load Upload** to upload a locally saved correction file, and then click **Apply**.
  - If the display effect does not meet the requirements after loading the lamp board data, click **File Correction** and **Load from Cloud**, click **Select File** to select a searched correction file, and then click **Apply**.
  - If the color difference exists after importing the correction file, click **Manual Correction** and **Screen Correction**, and and adjust the RGB values.
  - If bright or dark seams exist after importing the correction file, select **Manual Correction** and **Seam Correction**, set the seam width, and adjust the RGB values.
  - After manually correcting the screens or seams, you can click **Manual Corr. History** and **Reuse Manual Corr History** to reuse the historical correction data.

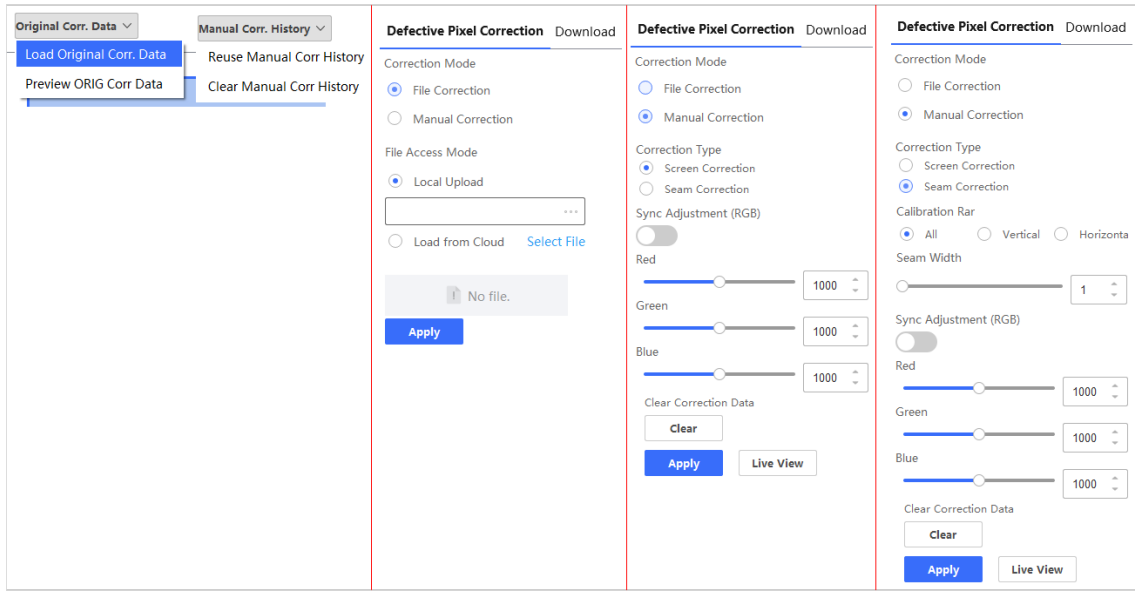


Figure 3-40 Correct Receiving Card

6. Click **Live View** to preview the display effect.
7. Click **Apply** when the desired display effect is reached.
8. **Optional:** You can perform the following operations as required.

- If the historical manual correction data do not meet the requirements, click **Manual Corr. History** and **Clear Manual Corr History**.
- Enable **Sync Adjustment (RGB)** to synchronize the red, green, and blue percentages to the same value.
- Click **Original Corr. Data** and **Preview ORIG Corr Data** to preview the display effect by using the original correction data.
- Click **Clear** to clear the data on the receiving card.
- Click **Download** to download the correction file to the desired path.

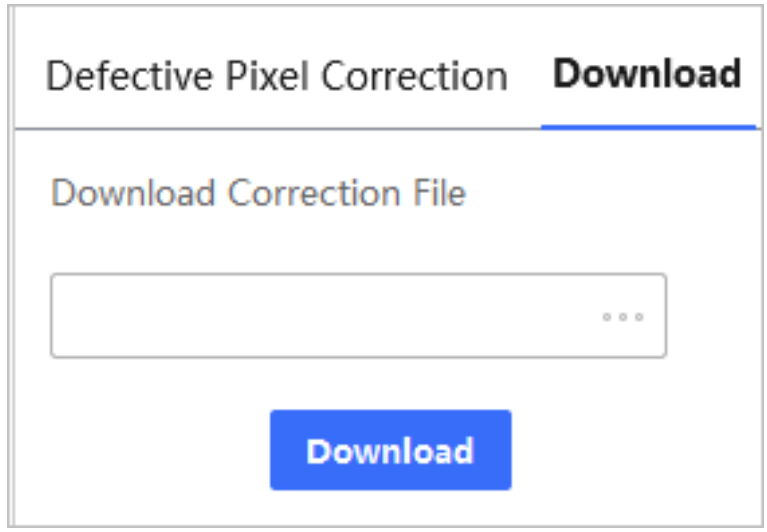


Figure 3-41 Download Correction File

- Click **Disable** to exit from the correction configuration.

3.4.2 Detect Screen Color

You can select different images to test if the screen can display normally.

Steps

1. Go to **LED Settings → Maintenance → Screen Detection** .
2. Check the device(s) to be set from the device list.
3. Enable detection.

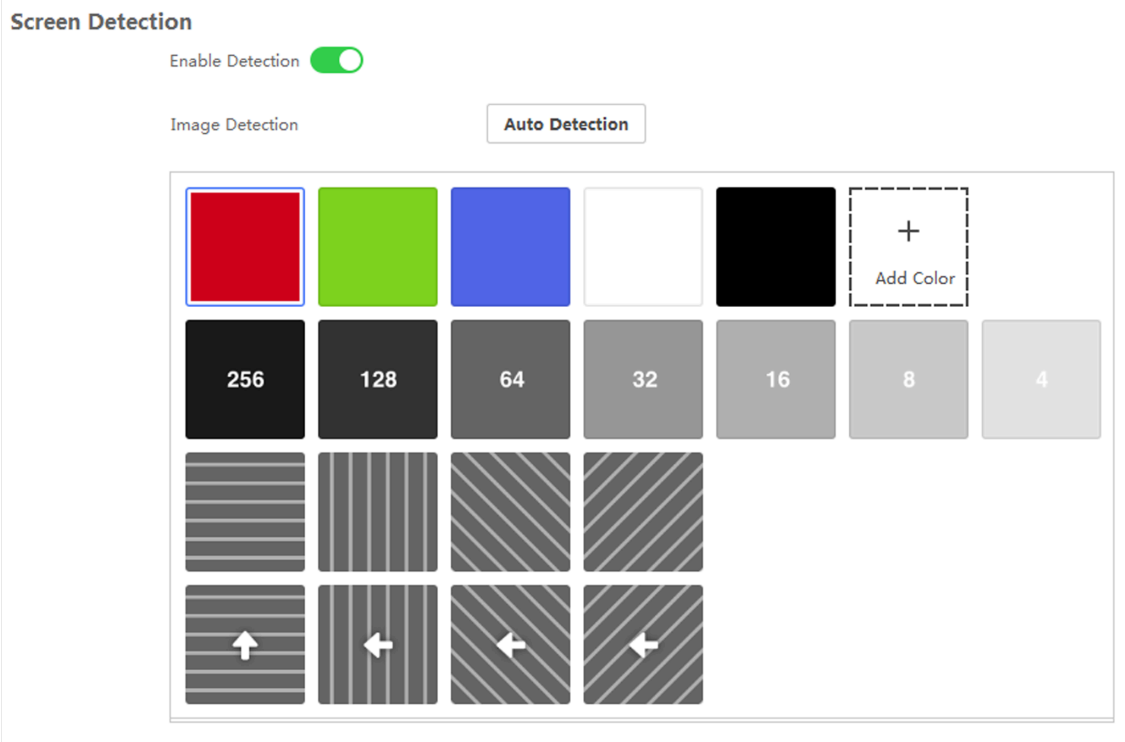


Figure 3-42 Detect Screen Color

4. Detect the screen color.

- Manual detection.
  - Click the color bars and ripples to detect the corresponding screen colors.
  - Click **Add Color**, select the color to be detected, and click **OK** to complete the custom color detection.
- Auto detection. Click **Auto Detection**, and the system will display the detection images one by one automatically.

3.5 System Maintenance

3.5.1 Smart Maintenance

Go to **LED Settings → Maintenance → Smart Maintenance** to synchronize parameters, monitor device status, export device information, compare parameters, etc.

Synchronize Parameters

You can synchronize the parameters of the sending cards in the same device group.

Steps

1. Go to **LED Settings → Maintenance → Smart Maintenance** .
2. Select the device group from the dropdown list.
3. Click **Sync Parameters**.

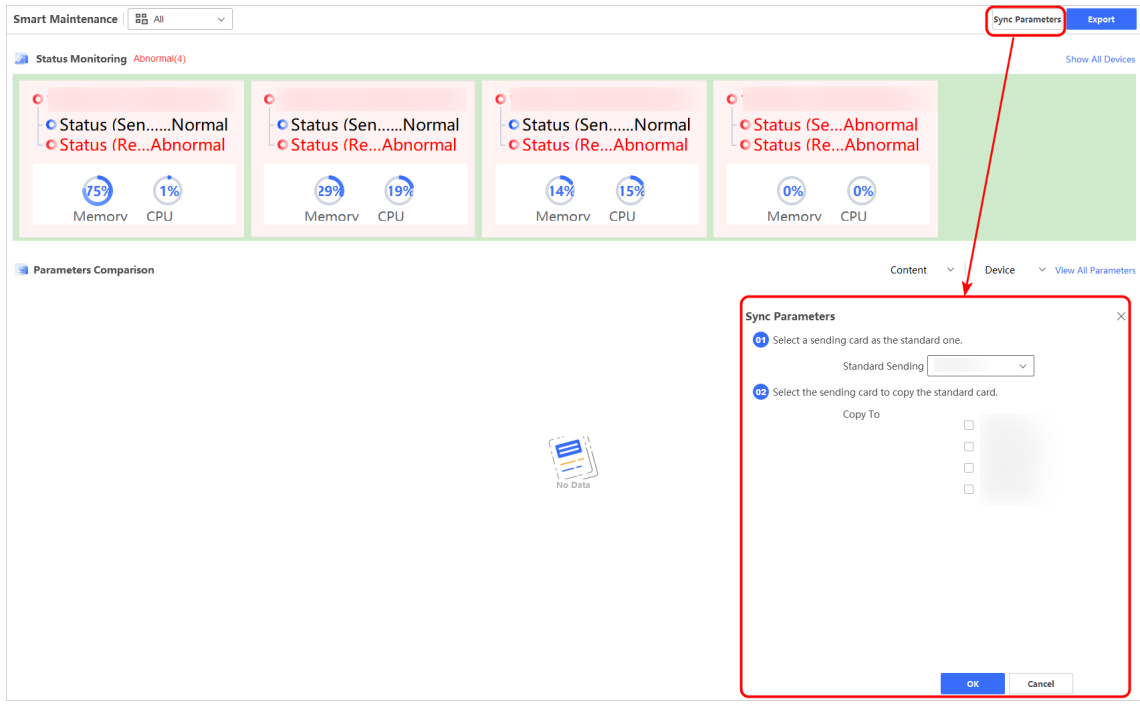


Figure 3-43 Synchronize Parameters

4. Select **Standard Sending Card**.
5. Select the sending card to copy the standard card.
6. Click **OK**.

Monitor Device Status

You can monitor the added device status.

Steps

1. Go to **LED Settings → Maintenance → Smart Maintenance → Status Monitoring** .
2. Select the device group from the dropdown list to view the device status.
3. Click **Show All Devices**, and select **Show All** or **Display Exception** to view the status of all the added devices, including the sending card status, receiving card status, memory usage, and CPU usage.

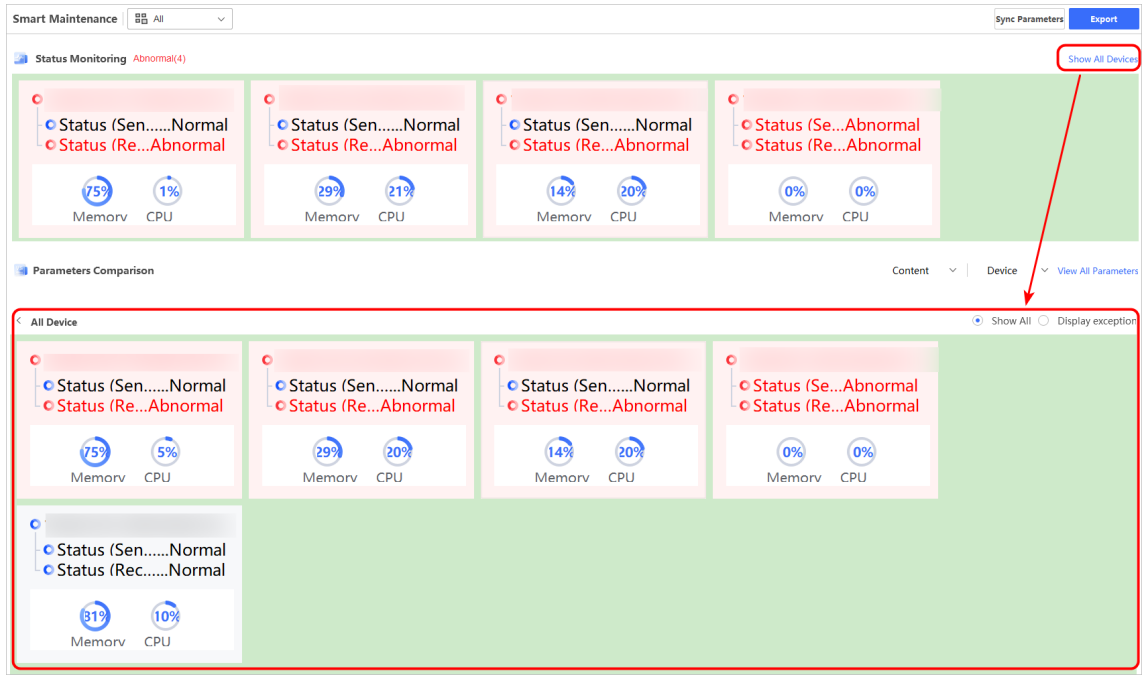


Figure 3-44 Monitor Device Status

4. Click the specific device status tab to view the device status details or export the status information.
   1) Click **Sending Card**, **Receiving Card**, **Register**, or **Multi-Functional Card** to view the status details.

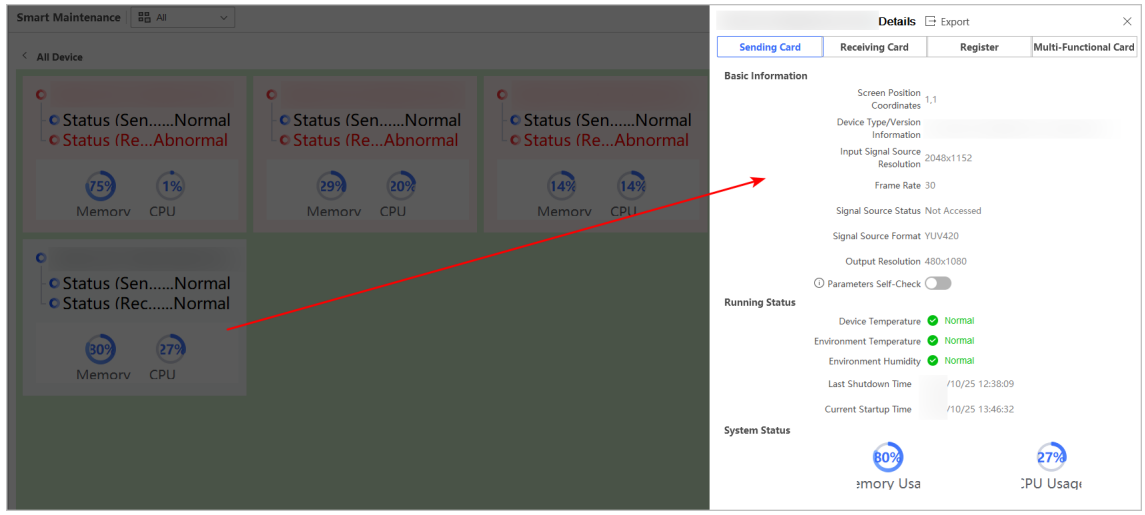


Figure 3-45 Sending Card Status Details

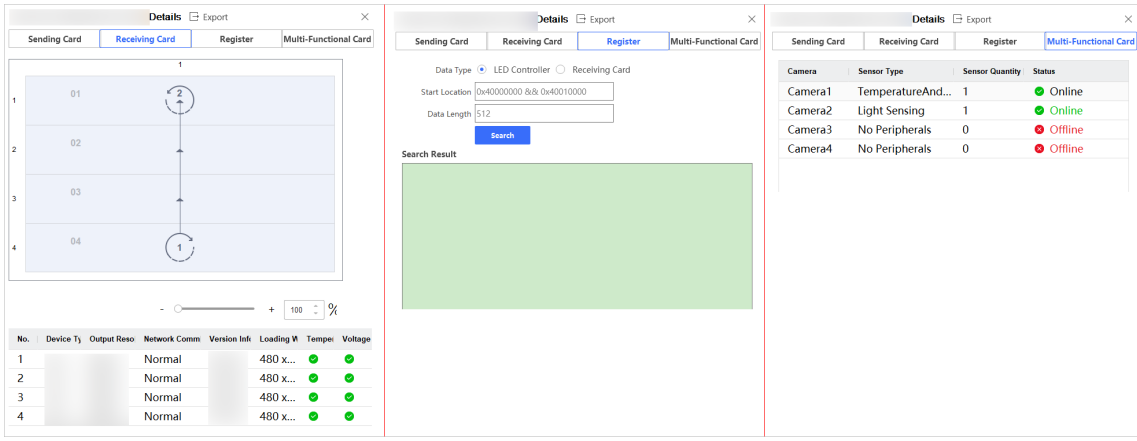


Figure 3-46 Other Device Status Details

2) **Optional:** For register status, you can select **Data Type**, and click **Search** to search the details of the sending card or receiving card register.
3) **Optional:** Click **Export**, and select the content(s) to export. Click **Export**, and select the saving path to save the exported files.

   The CSV file named with the device IP address and the picture named as "Topological_graph.jpg" will be exported. Open the CSV file, and you can view the detailed information such as device type, display effect, sending card status, etc.

5. **Optional:** On **Smart Maintenance** interface, click **Export** and select the device group to export the detailed status information of the device group.

   The CSV file named with the device IP address and the picture named as "map.jpg" will be exported. Open the CSV file, and you can view the detailed information such as device type, display effect, sending card status, etc.

Compare Parameters

You can compare the added device parameters for troubleshooting.

Steps

1. Go to **LED Settings → Maintenance → Smart Maintenance → Parameters Comparison** .
2. Select the parameters types which need to be compared from **Content** dropdown list, and select the devices which need to be compared from **Device** dropdown list.

   The parameters comparison table will display. Click **View All Parameters** to fill the table in full display mode. Click ‹ to return to **Smart Maintenance** interface.

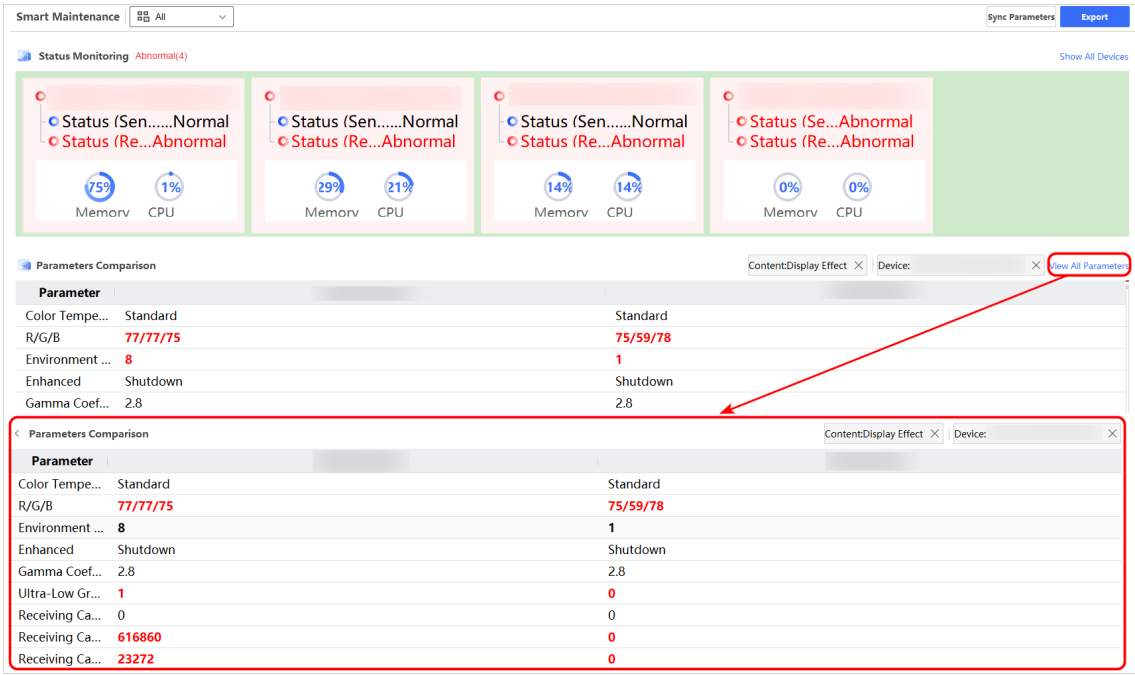


Figure 3-47 Compare Parameters

3.5.2 Search and Export Log

You can search for and export device operation and exception logs, or view the client operation and exception logs.

Steps

1. Go to **LED Settings → Maintenance → Log** .
2. View the device logs:
   1) Select **Search Mode**.
   2) Click the device to search.
   3) Click **Search**. The log information will display on the right.

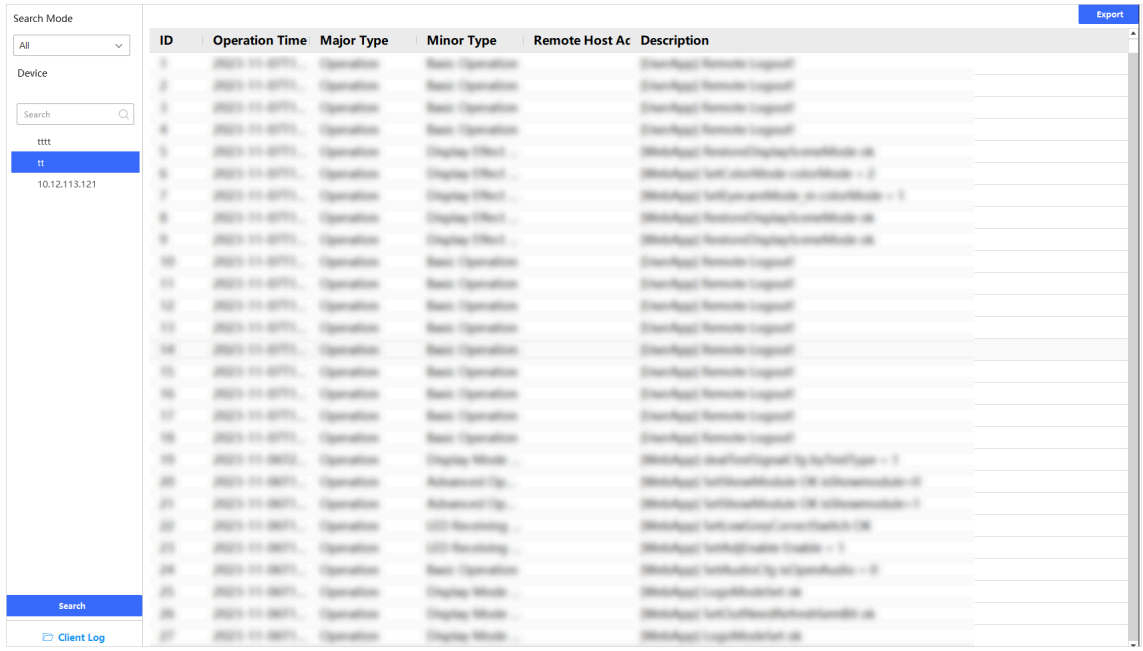


Figure 3-48 Search Log

3. Click **Client Log** to view the client logs.
4. **Optional:** Click **Export** and select the saving path to export device logs as a CSV file.

3.5.3 Edit Password

You can edit the device password.

Steps

1. Go to **LED Settings → Maintenance → System Maintenance → Password** .
2. Check the device(s) to be set from the device list.
3. Enter **Old Password**, **New Password**, and confirm the new password.

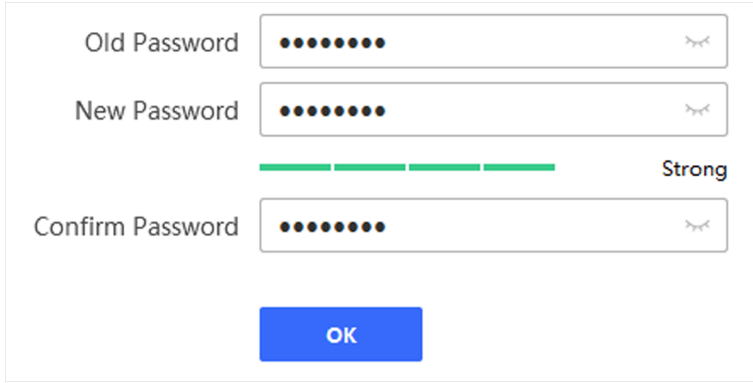


Figure 3-49 Edit Password

4. Click **OK**.

3.5.4 Synchronize Time

Select the time zone and synchronize the system time.

Steps

1. Go to **LED Settings → Maintenance → System Maintenance → Time** .
2. Check the device(s) to be set from the device list.
3. Select **Time Zone**, and click **OK**.
4. Select the time synchronization Mode.
   - Enable **Local Time** to synchronize the device time with that of the PC running the client, and then click **Sync**.
   - Set **Time** manually from the calendar and click **OK**. Click **Sync**.

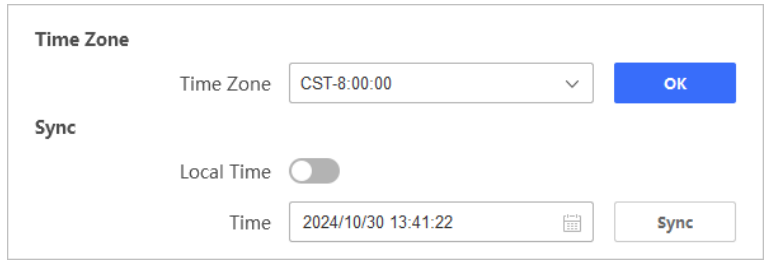


Figure 3-50 Synchronize Time

3.5.5 Set Network

The DHCP function is supported by all devices but the Wi-Fi function is supported by only some devices.

Before You Start

The network segment connected by the device has DHCP (Dynamic Host Configuration Protocol) function.

Steps

1. Go to **LED Settings → Maintenance → System Maintenance → Network** .
2. Check a device to be set from the device list.

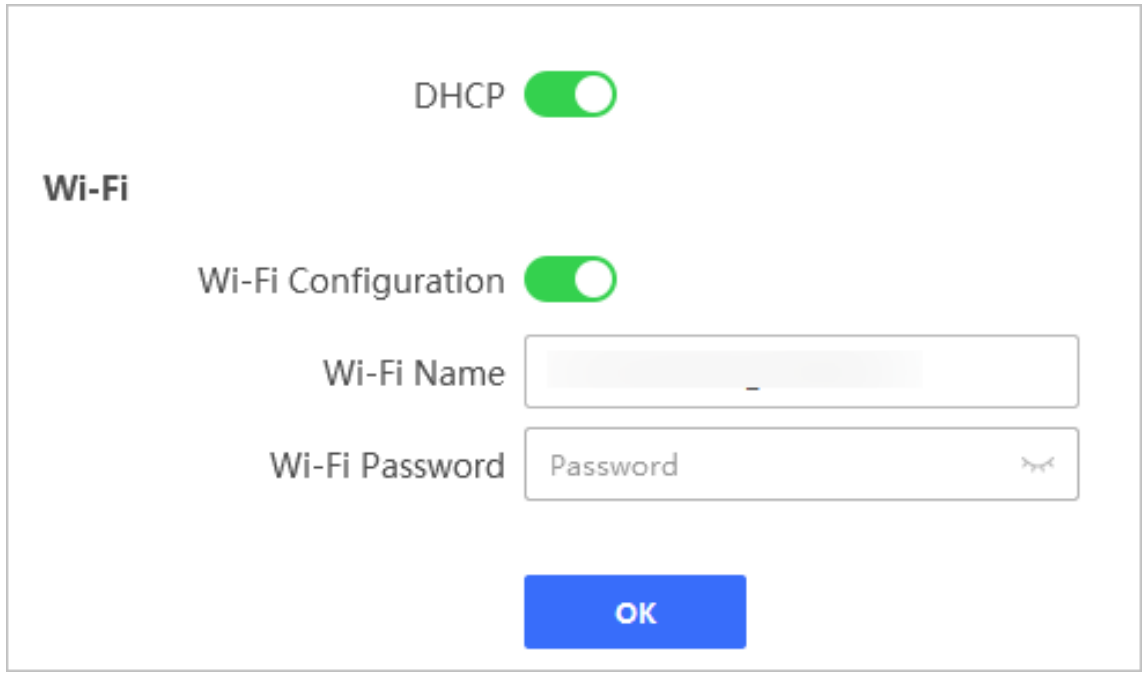


Figure 3-51 Set Network

3. Enable **DHCP**.
4. Enable **Wi-Fi Configuration**, edit the default Wi-Fi name, and set the Wi-Fi password.
5. Click **OK**.

3.5.6 Set Sensor Parameters

Some cabinets support voltage and temperature monitoring. To monitor environment temperature and humidity and set the auto sleep, first select the sensor type and then set the threshold. When the set threshold is reached, the screen will display the alarm information and the current value of the monitored item.

Steps

1. Go to **LED Settings → Maintenance → System Maintenance → Sensor Settings** .
2. Check a device to be set from the device list.
3. Monitor the following items and set the thresholds as required.
   - When the receiving cards that support cabinet voltage and temperature monitoring are online, you can monitor **Cabinet Voltage** or **Cabinet Temperature**.
   - Monitor **Sending Card Temperature**.
   - After you select the temperature and humidity sensor for the corresponding circuit of the sending card or multi-functional card that is connected with a temperature and humidity sensor, monitor **Environment Temperature** or **Environment Humidity**.

- After you select the human body sensing for the corresponding circuit of the sending card or multi-functional card that is connected with a human body sensor, enable **Auto Sleep** and set the **Brightness Reduction Time**, **OSD Prompt Time**, and **Sleep Time**.

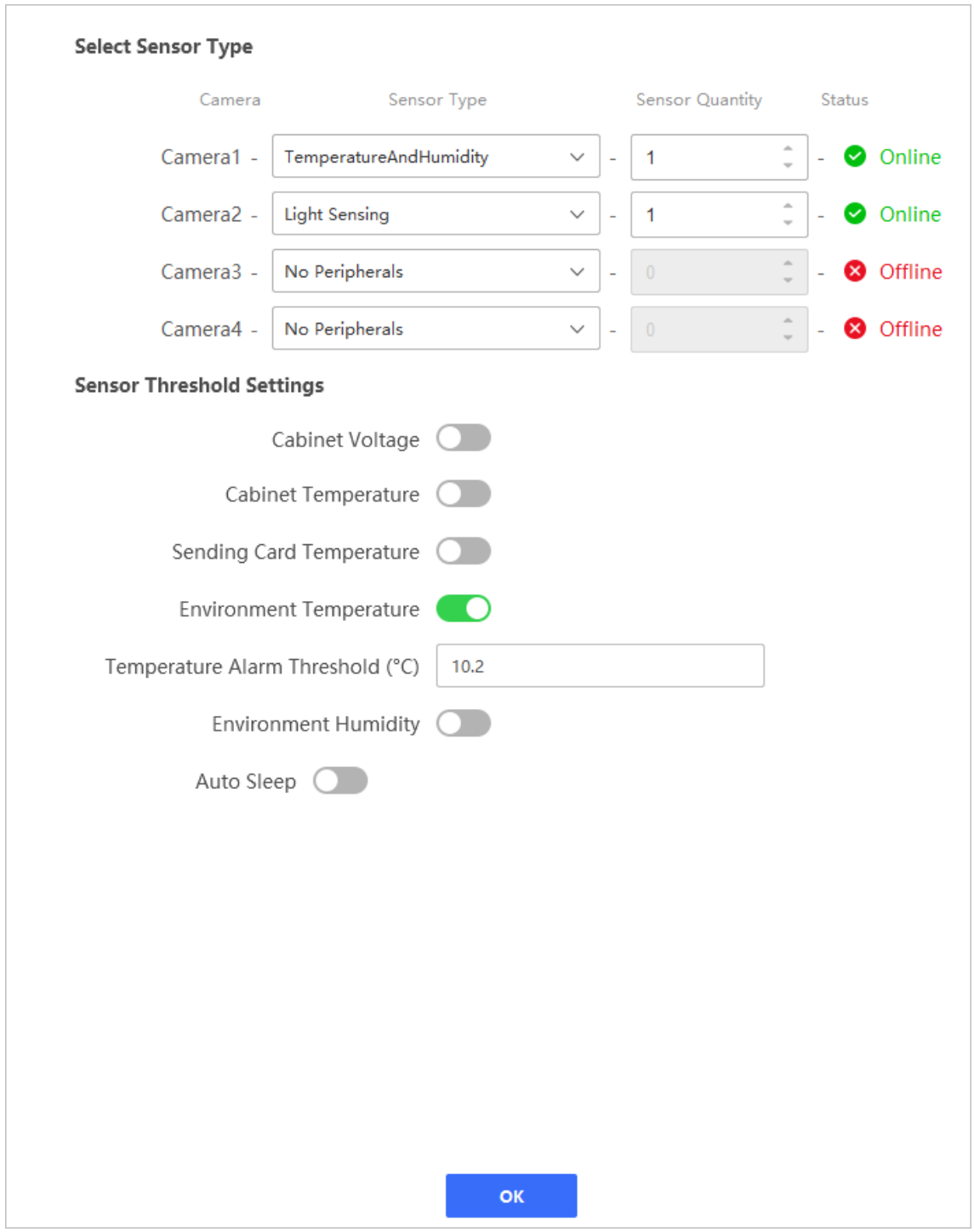


Figure 3-52 Set Sensor Parameters

4. Click **OK**.

3.5.7 Import/Export Configuration

The device supports importing configuration file and font library file, and exporting sending card configuration file, receiving card configuration file, receiving card debug file, and receiving card program.

Go to **LED Settings → Maintenance → System Maintenance → Import/Export** .

Import Configuration File

Click ··· after **Import Configuration File** to select a locally saved configuration file, click **Import**, and enter the password.

Import Font Library File

Click ··· after **Import Font Library** to select a locally saved font library file, and click **Import**.

Export Configuration File

Select an exported type, click ··· to select a locally saved configuration file, and click **Export**.

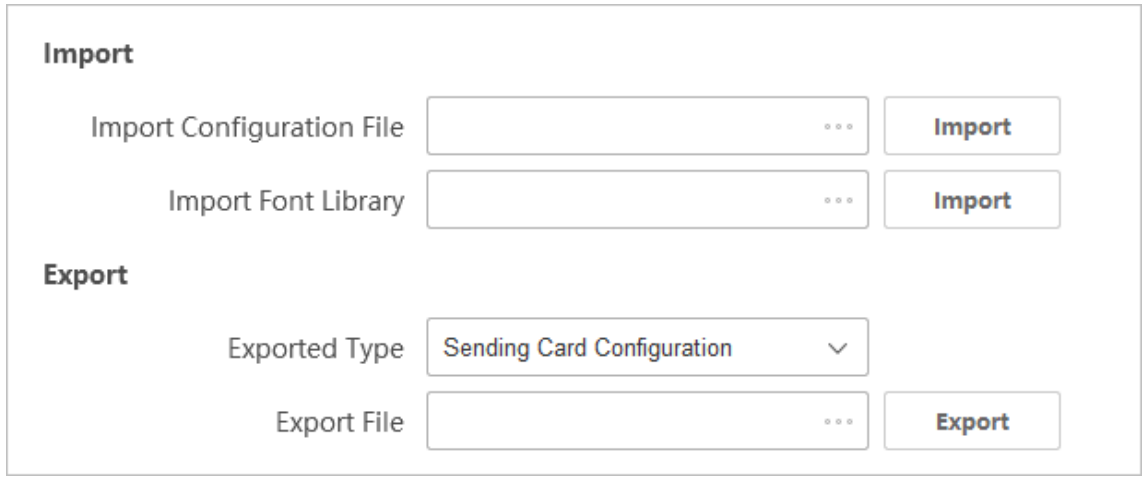


Figure 3-53 Import/Export Parameters

3.5.8 Control Device Status

The device supports restarting the device remotely, resetting the device, powering on or off the device, and setting dual power supply.

Go to **LED Settings → Maintenance → System Maintenance → Device Control** .

Restart Receiving Card/LED Controller Remotely

Select a device type and click **Reboot**.

Restore Factory Settings Locally

Click **Restore Factory Settings Locally**.

Restore Default Settings

Click **Restore Default Settings**.

Power On/Off Device

Enable **Device Status** to power on the device and disable **Device Status** to power off the device.

Control Dual Power Supply

Click **Startup** to enable dual power supply and click **Close** to disable dual power supply.

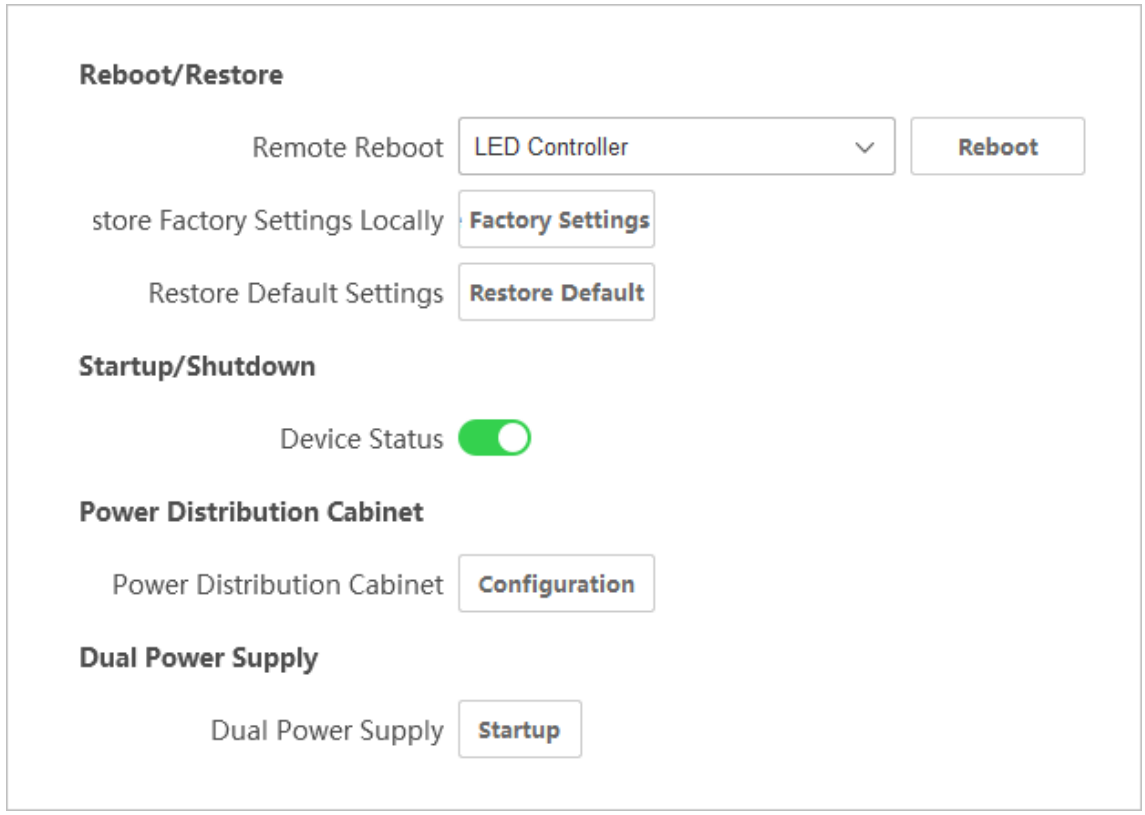


Figure 3-54 Control Device Status

3.5.9 Control Power Distribution Cabinet

You can add power distribution cabinets and set their timed on/off time to control the screen on/off status.

Steps

1. Go to **LED Settings → Maintenance → System Maintenance → Device Control → Power Distribution Cabinet** .
2. Check a device to be set from the device list.
3. Click **Configuration**.
4. Configure the power distribution cabinet according to the connection method between the power distribution cabinets and device.
   - If the LED controller connects to a power distribution cabinet through a multi-functional card, select **Dry Contact** and use either of the following methods to control the on/off status of the power distribution cabinet.
     - Enable **Device Status** of the circuit that is connected to the power distribution cabinet to power on the power distribution cabinet. Disable **Device Status** of the circuit to power off the power distribution cabinet.
     - Click **Add Timer** to set the timer and circuit, and then click **Save**. Enable **Timed Startup/ Shutdown** to control the timed on/off status of the power distribution cabinet.

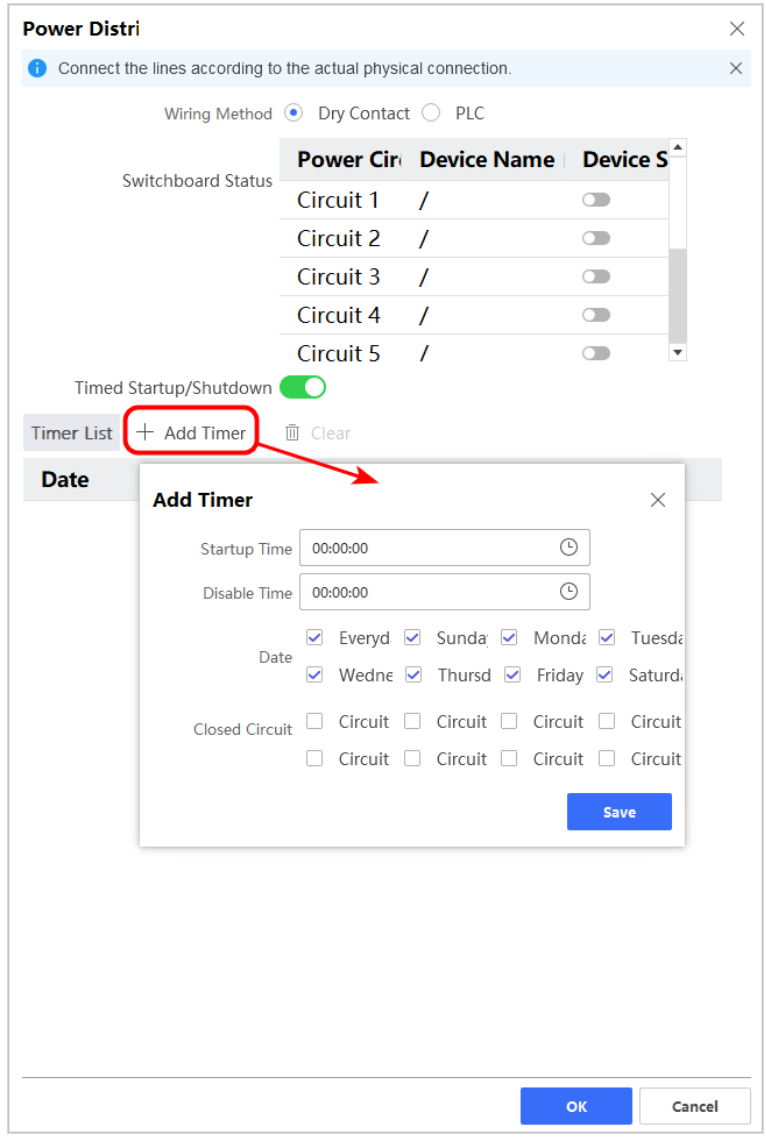


Figure 3-55 Use Multi-Functional Card to Control Power Distribution Cabinet

- If the LED controller and power distribution cabinets are connected through the network, select **PLC** and perform the following steps to control the on/off status of the power distribution cabinets.
  a. Enter the IP address and port number of a power distribution cabinet.
  b. Enable power distribution cabinet to power on the power distribution cabinet.

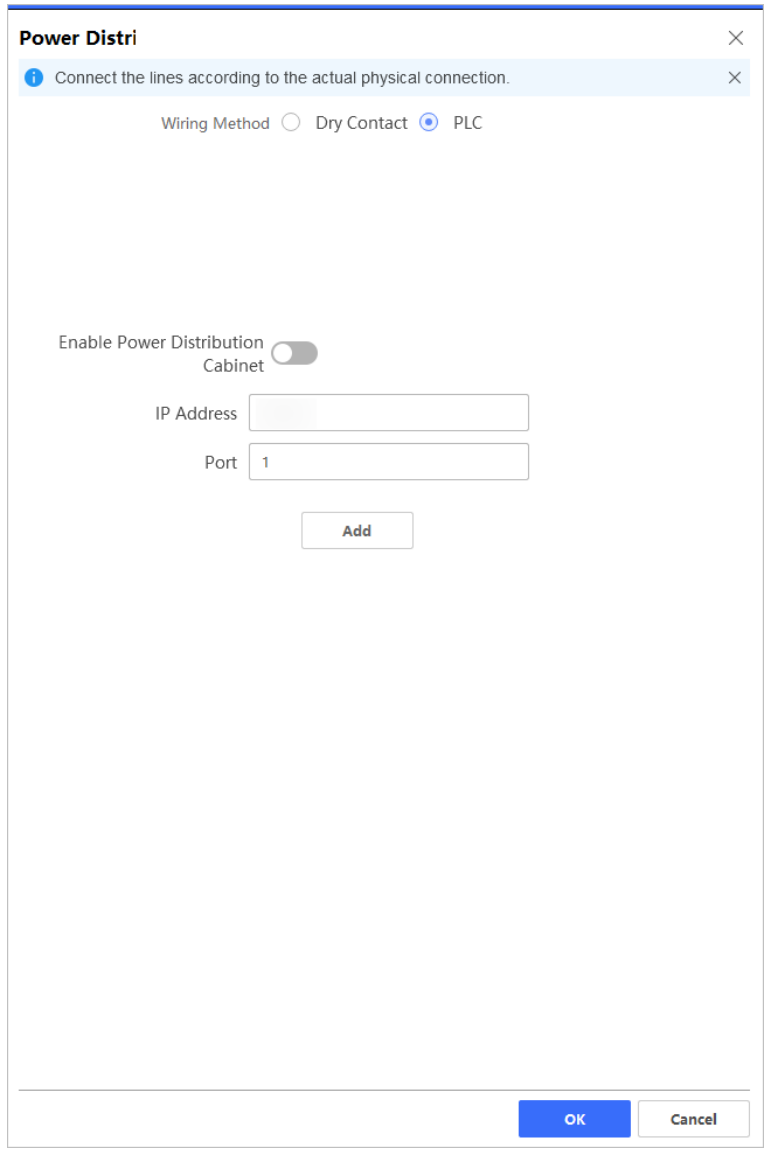


Figure 3-56 Use Network to Control Power Distribution Cabinets

Note

To add multiple power distribution cabinets, click **Add**.

5. Click **OK**.

Chapter 4 Shortcut Key Functions

Click the icons on the upper right corner of the client to use the functions quickly.

4.1 Report Device Exception Event

When exception occurs to the device(s) added to the client, the exception event information will be reported to the client. After the client receives the information, you can view the real-time prompt on the client. For further checking, you can view the details of real-time exception events or historical exception events.

4.1.1 View Real-time Event Information

When exceptions occurs to the device(s) added to the client, you can view the details of the real-time exception events.

Steps

1. Enter **Real-time Event**.
   - When the exception event information prompts on the screen, click **View Details** to enter **Real-time Event**.
   - Click on the upper right corner of the client interface. Click **Real-time Event**.

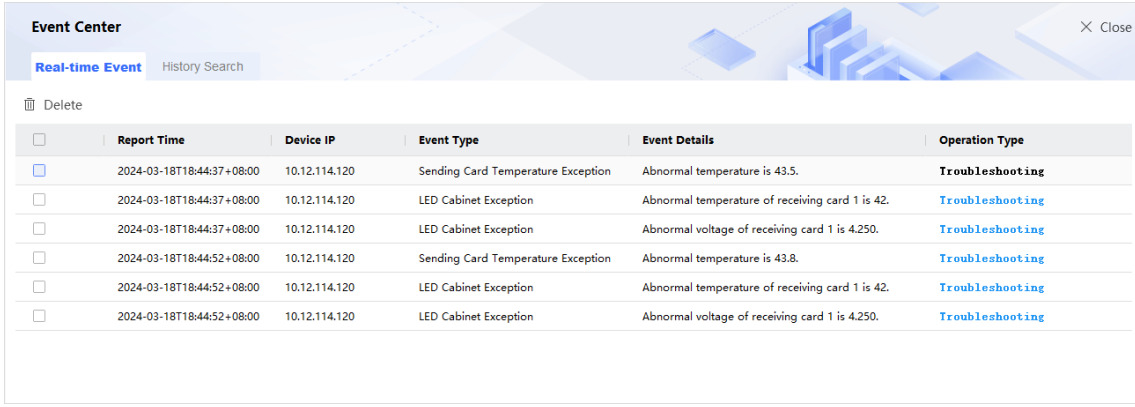


Figure 4-1 View Real-time Event Information

2. View the exception event information, including **Report Time**, **Device IP**, **Event Type**, **Event Details**, and **Operation Type**.

Note

You can click **Troubleshooting** to view the troubleshooting methods for common questions.

3. **Optional:** Select the item(s), and click **Delete** to delete the event information.
4. Click **Close** to exit from **Real-time Event** interface.

4.1.2 Search Event Information

When exceptions occurs to the device(s) added to the client, you can search the historical device exception event information.

Steps

1. Click on the upper right corner of the client interface.
2. Click **History Search**.
3. Set **Event Type**, **Start Time**, and **End Time**.
4. Click **Search** to view the exception event information, including **Report Time**, **Device IP**, **Event Type**, **Event Details**, and **Operation Type**.

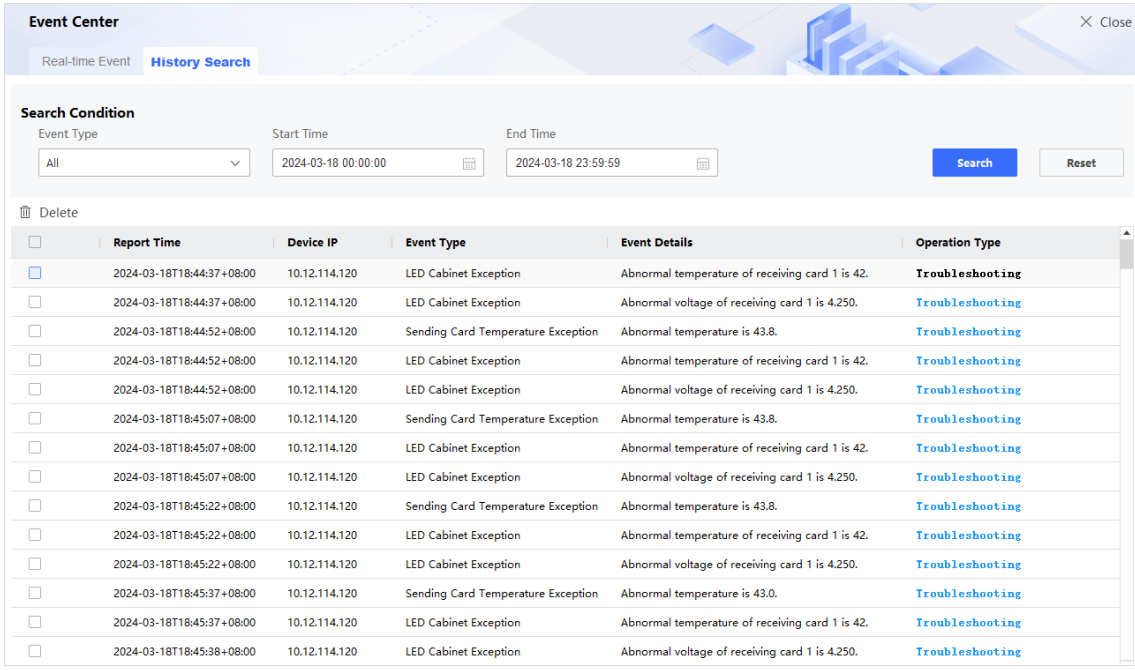


Figure 4-2 Search Event Information

Note

You can click **Troubleshooting** to view the troubleshooting methods for common questions.

5. **Optional:** Other operations.

Reset search condition	Click **Reset** to reset the search condition.
Delete event information	Select the item(s), and click **Delete** to delete the event information.

6. Click **Close** to exit.

4.2 Search Cloud File

To lighten the screen, you need to use the upgrade file to upgrade the receiving card and then import the configuration files to the sending card. After the screen is lightened, if the screen display effect does not meet the requirements, you can import the color file or correction file to adjust. The upgrade file, configuration files, color file and correction file are stored on the cloud, you can search them from cloud and download the required files to the local computer. Thus, you can import those files to the device when the network is not available.

Steps

1. Click on the upper right corner of the client.
2. Select a method to search the upgrade file according to the obtained device information.
   - If you know light board order number, cabinet serial number or other information, click **Normal Search**, enter the search condition, and click **Search**.

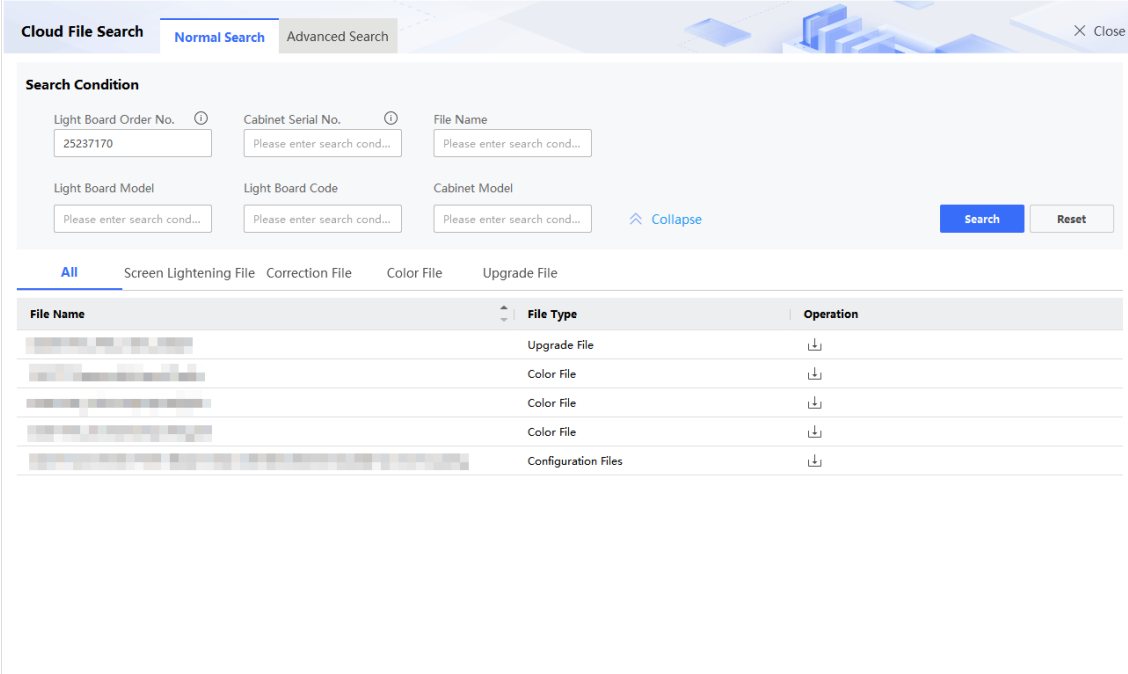


Figure 4-3 Normal Upgrade File Search

   - If you have the configuration file saved locally and know the receiving card model, click **Advanced Search**, select **Local Config. File Parsing**, click to upload the local configuration file, and then click **Search**.

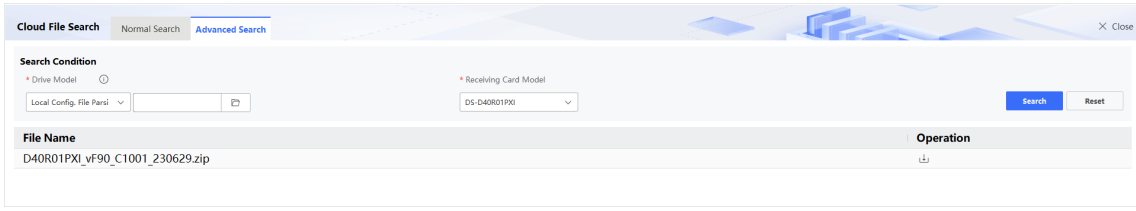


Figure 4-4 Parsing Local Configuration File to Search Upgrade File

- If you know the drive model and receiving card model, click **Advanced Search**, select **Drive IC Online Selection**, select the related search condition, and then click **Search**.

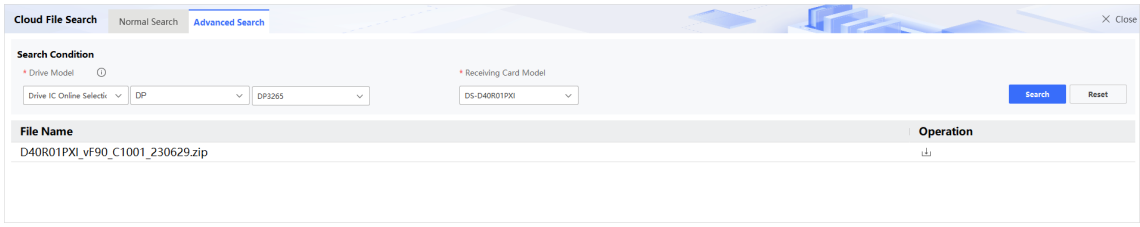


Figure 4-5 Advanced Upgrade File Search

4.3 View Video Cloud Classroom

Click on the upper right corner of the client and then select **Video Cloud Classroom** to enter the video cloud classroom. You can view the device installation and configuration instruction videos.

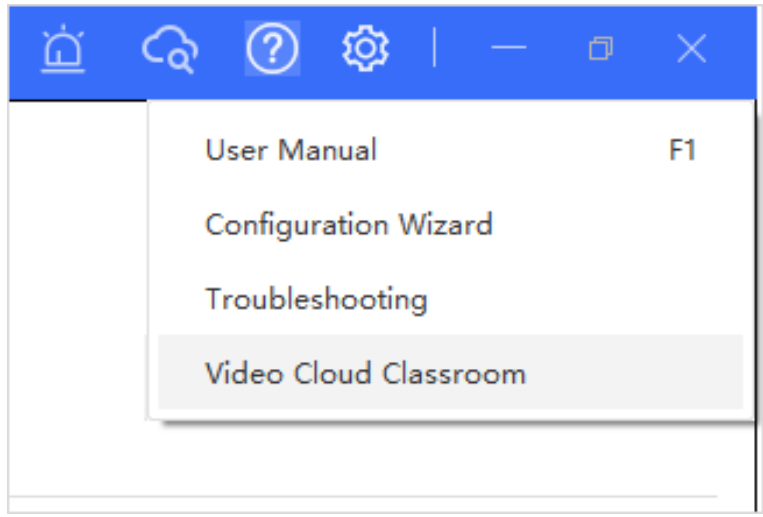


Figure 4-6 View Video Cloud Classroom

Note

- Only when the PC running the client has been connected to the Internet, can you view the videos.
- You can also click on the upper right corner of the client to view user manual and configuration wizard.

4.4 View Troubleshooting Method

Steps

1. You can view the troubleshooting methods for common questions in the client. Use either of the following methods to enter the troubleshooting interface.
   - Click on the upper right corner of the client and then select **Troubleshooting**.

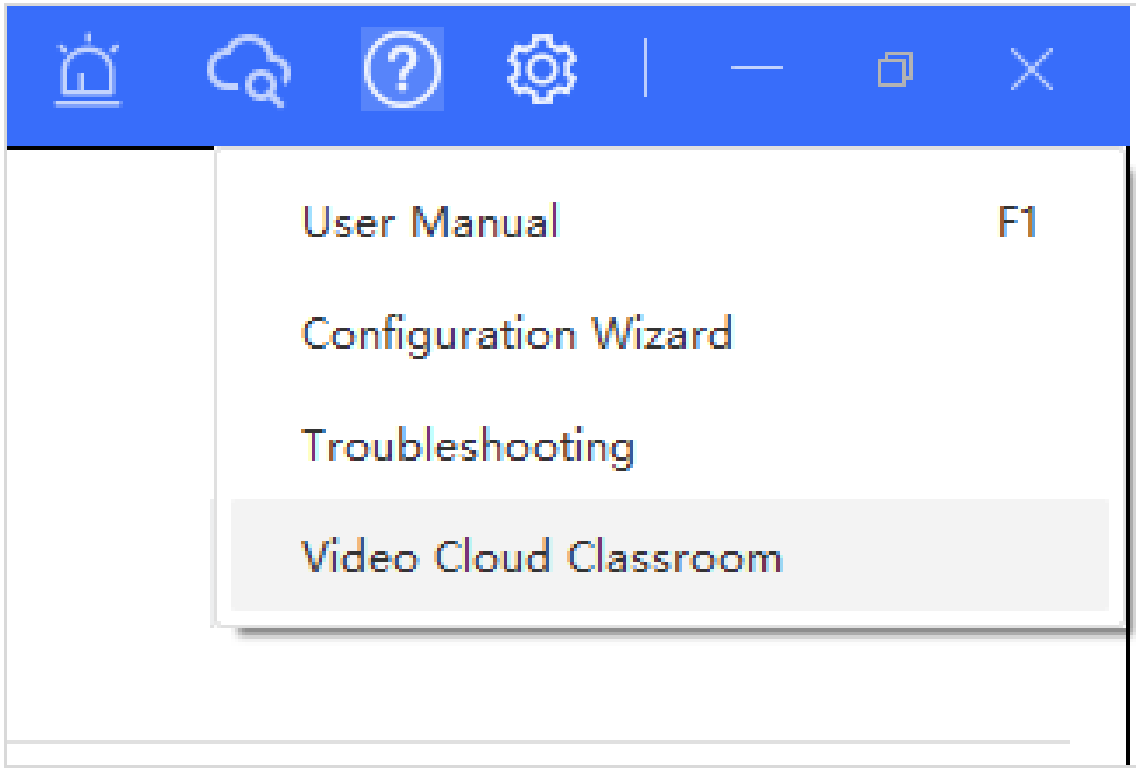


Figure 4-7 Select Troubleshooting

   - Click **Troubleshooting** in the **Event Center**.

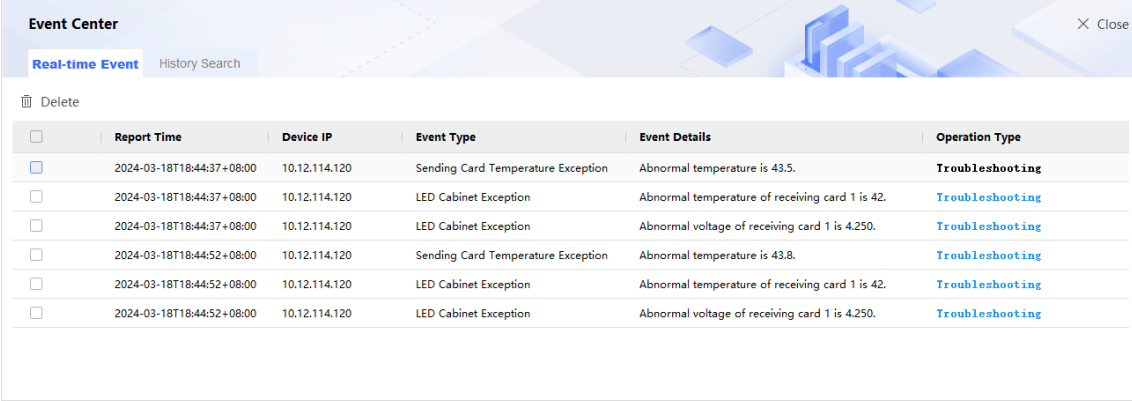


Figure 4-8 Click Troubleshooting

2. View the troubleshooting methods.

4.5 Switch Language

Click on the upper right corner of the client to switch the language.

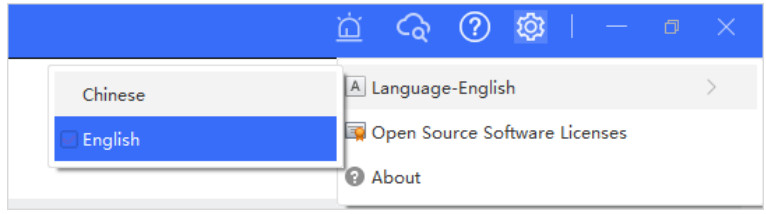


Figure 4-9 Switch Language

Note

You can also click on the upper right corner of the client to view the open source software licenses and the related client information.

Chapter 5 FAQ

5.1 Full screen is unlit.

Reason

- No power supply for screen or control device.
- No input signal.
- The controlling computer is sleeping or the graphics card settings are incorrect.
- Incorrect receiving card configuration.

Solution

- Check if the computer is in sleep or screensaver mode. If yes, start the computer, go to **Control Panel → Power Options → Change Plan Settings** , and set the sleep time to **Never**. If not, check the connection of the DVI cable between computer and control card.
- Check the graphics card settings.
- Check the connection between receiving card and sending card, and the connection between receiving cards.
- Restore to default settings.

5.2 Image displays incompletely or in wrong position.

Reason

- Incorrect screen configuration file.
- Incorrect signal cable connection.
- Incorrect screen size configuration.

Solution

- For incomplete image, check if the configured screen scale and the actual screen scale are the same.
- For image in wrong position, check if the configured display position and screen scale are the same as the actual. If not, adjust the parameters based on the difference until they are the same.
- Check if the signal cable connection and the receiving card connection among screen cabinets are the same.
- Check if the configured sending card output resolution and the actual receiving card input resolution are the same.

5.3 Full-screen image flashes or vibrates.

Reason

- Signal output of graphics card or other device fails.
- The number of the receiving card loaded by single network interface is larger than its load capacity.
- Signal cable is too long.

Solution

- Check system connection to see if the signal cable or the network cable is loose, if the signal cable length exceeds the allowable transmission distance, etc.
- Reduce receiving card loading capacity of each network interface. Configure signal cable again via the client after changing connection mode.
- Check the resolution configurations of the graphics card, sending card, and video processor.

5.4 Spots/Strips exist in full-screen image.

Reason

Incorrect screen type configuration.

Solution

Check screen type configuration.

5.5 Image on certain display unit flashes or has spots.

Reason

- Loose connection of receiving card or HUB card.
- Incorrect receiving card program.

Solution

- Check the receiving card, HUB card, and data cable connection in the unit.
- Check if the receiving card program of the unit is correct, or if the receiving card functions well.

5.6 Certain display unit screen is unlit.

Reason

- The power supply or the receiving card of the unit fails.
- The signal output of the previous unit fails.

Solution

- Check if the power supply output of the unit is 5 VDC.
- Check if power supply indicator of the receiving card in the unit is solid red, or if the receiving card is operating normally.
- Check the receiving card, HUB card, and data cable connection in the unit.
- Check if the receiving card signal output of the previous unit is normal.

5.7 Certain module or row of modules are unlit in display unit.

Reason

- The switching power output controlling the modules fails.
- The signal output controlling the modules fails.

Solution

- Check if the power supply output of the modules is 5 VDC.
- Check the connection of the data cable and the HUB card controlling the modules.

5.8 Display error occurs when setting screen attributes.

Reason

Incorrect screen parameters.

Solution

- Check if the resolution of receiving card and output resolution of graphics card is the same. If not, set them as the same.
- If the resolution of receiving card and output resolution of graphics card is the same, check if the screen attributes parameters are correct.

5.9 Searching online device failed.

Reason

- The network cable of the sending card is not connected.
- Incorrect client installation (the WinPcap plugin is not installed well or its version is incorrect).

Solution

- Check network cable connection.
- Reinstall the client, or update WinPcap plugin directly.

5.10 Color differences exist for sending cards.

Reason

1. Go to **LED Settings → Maintenance → Smart Maintenance → Parameters Comparison** .
2. Select the parameters types which need to be compared from **Content** dropdown list, and select the devices which need to be compared from **Device** dropdown list.
3. Click **View All Parameters** to compare the display parameters of the devices. The red marked parameters are the differences, which causes the color differences.

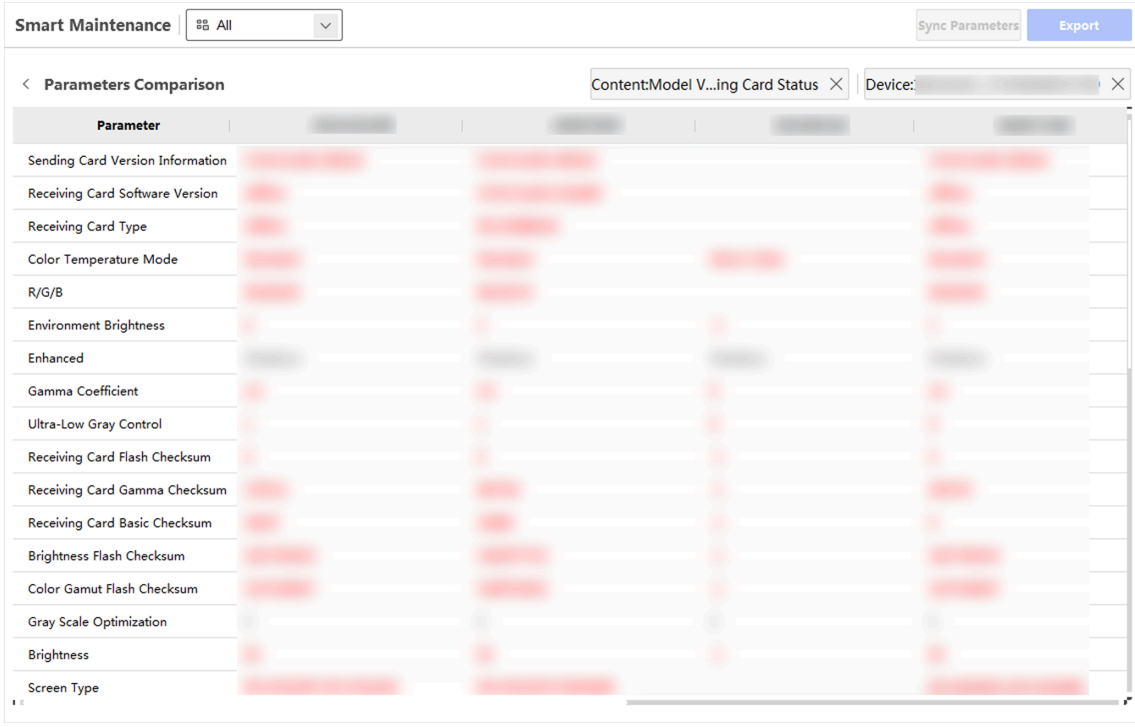


Figure 5-1 Compare Parameters

Solution

According to the parameters differences, you can solve the problems in two ways.

- If **Receiving Card Flash Checksum**, **Brightness Flash Checksum**, and **Color Gamut Flash Checksum** are different, export the configuration file of the receiving card with the normal

display, and import it to the receiving card with color differences. Then compare other parameters and adjust. Refer to and for details.
- If the other parameters are different, edit the settings until the parameters are the same to remove the color differences. Or restore to the factory settings. Refer to for details.

5.11 Screen color is inconsistent with LCD.

Reason

The screen display capability depends on the color gamut. The color gamut of LED is larger than that of LCD, which results in that the LED screen color is inconsistent with that of LCD.

Solution

1. Go to **LED Settings → Display Effect → Basic Display Effect → Basic Scene** . Select **Color Standard** as **HDTV**.
2. Go to **LED Settings → Display Effect → Basic Display Effect → User Configuration** . Select **Color Temperature Mode** as **Custom**, and adjust the RGB value according to the actual display effect.

5.12 Color exception occurs for the screen loaded by sending card.

Reason

- Incorrect receiving card settings.
- The sending card signal source has problems.

Solution

- Go to **LED Settings → Maintenance → Screen Detection** . Enable detection, and check if the displayed colors are normal. If abnormal, the receiving card settings are incorrect, and you need to set again. If normal, the sending card signal source has problems, and you need to check the sending card signal source.
- Connect to the sending card directly with the PC signal source, or with other signal sources in the site crosswise. Check if the screen signal source display is normal. If abnormal, the signal source processing has problems, and you need to contact to the technical support. If normal, the signal source, signal source lines, and the interconnecting device have problems, and you need to change a new device.


See Far, Go Further