LED Controller (P Series)

User Manual

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Preface

Applicable Models

This manual is applicable to the P series LED controller.

Default Parameters

Type	Default Parameter
Device	• Login user name: admin • IP address: 192.168.1.22
SSH connection	

Caution

To improve system security, it is highly recommended to change password regularly. In order to protect your privacy and corporate data and avoid network security issues, it is recommended to set strong password that meets security requirements.

Symbol Conventions

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

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

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Chapter 1 Introduction

1.1 Overview

The LED controller (hereinafter referred to as the sending card or device) can be used together with the full-color LED display (hereinafter referred to as the display or screen) to provide seamless splicing display of LED screens. The device can be used in the meeting rooms, studios, gyms, airports, banks, advertisements, family cinemas, etc.

The display is a dot matrix module using the light-emitting diodes or a large display consisting of pixel units. The display has a wide color gamut, stable performance, long service life, strong environmental adaption, cost effectiveness, and low cost of use. It can be widely used in radio and television broadcasting, video security, conference display, information display and other fields.

After using the cable to connect the device and display, you can add other devices, manage those devices, configure the display parameters, detect the display status, and correct and maintain the display.

1.2 Key Features

The device has the following features:

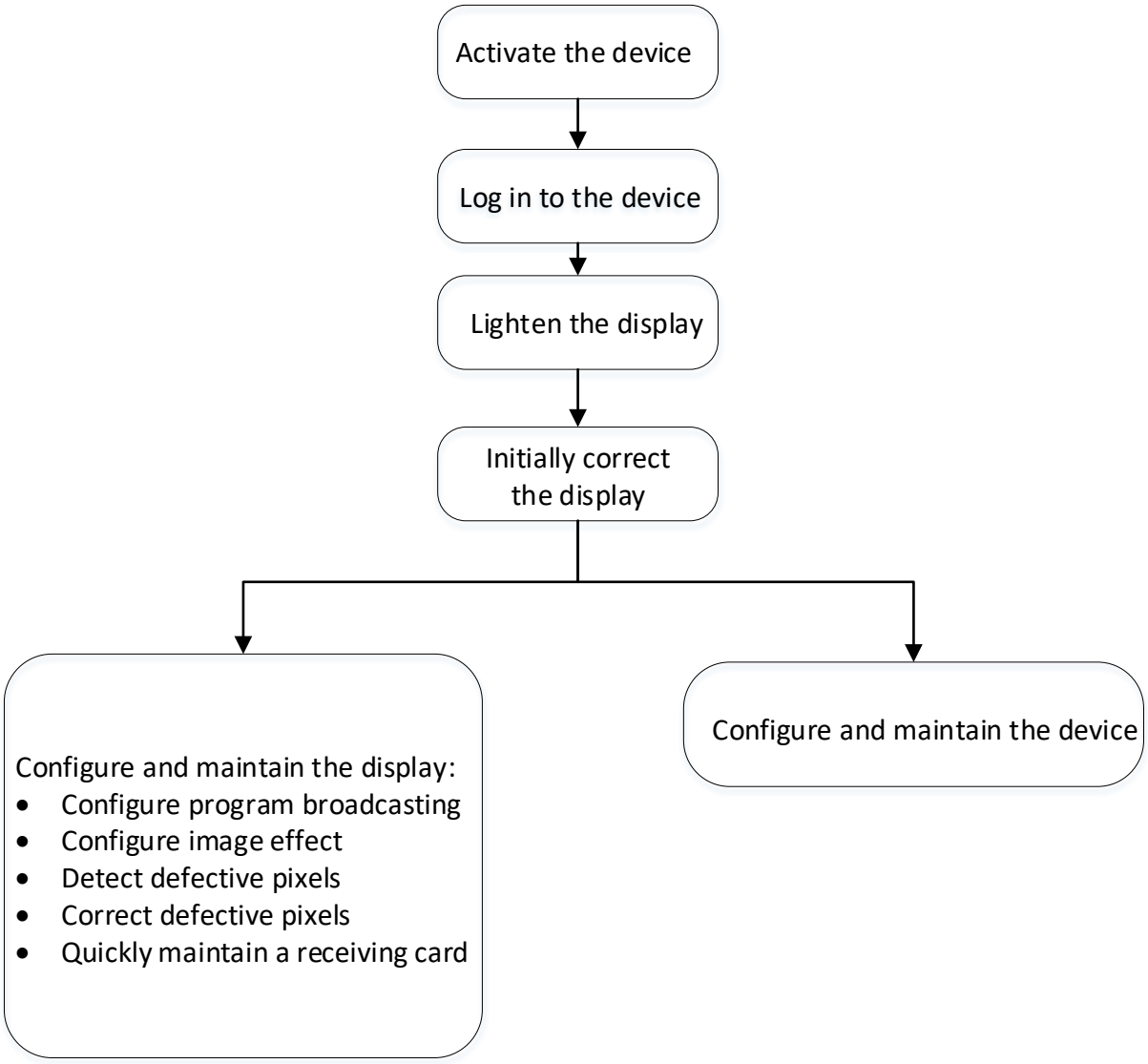
- Provides strong loading capacity, up to 0.65 MP loading per network port, and the output of multiple Gigabit Ethernet network ports.
- Provides a USB extension port to allow the connection of the mouse, keyboard, or USB flash drive.
- Supports audio input and output, Wi-Fi connection, Bluetooth connection, infrared remote control access, and remote control UI menu on the screen.
- Supports 1 channel or 2 channels of HDMI input and 1 channel of HDMI output.
- Some LED controllers support light sensor access.
- Support window division to display the custom contents and slogans.

The display has the following features:

- Supports seamless screen splicing of any size at any direction with uniform images and without black lines.
- Provides high brightness and high contrast ratio.
- Provides broadcast level greyscale processing to display more image details.
- Provides a complete image by controlling the brightness and color temperature of every pixel to a certain limitation.
- Provides ultra high refresh rate to make the image more smooth and delicate.

- Provides images that are more realistic.
- Provides nanosecond response time to avoid trailing or ghosting phenomenon.
- Provides long service life.
- Provides wide viewing angle to achieve high-quality visual effects in every angle.
- Provides wide color gamut coverage with range larger than NTSC.
- Provides low heat generation, good heat dissipation and super quiet feature.
- Provides energy saving and environmental protection features.
- Provides small screen footprint.
- Provides low defect rate and low maintenance cost.

1.3 First-Time Configuration Process



First-Time Configuration Process

Chapter 2 Device Login

You should activate the device before using the device for the first time. When activating the device, obey the following requirements to set the password:

- To improve system security, it is highly recommended to change password regularly. In order to protect your privacy and corporate data and avoid network security issues, it is recommended to set strong password that meets security requirements.
- Password should contain 8 to 16 characters and at least 2 of the following types: digits, lowercase letters, uppercase letters, and special characters.
- Password cannot contain user name, 123, admin, 4 or more continuously ascending or descending digits, or 4 or more consecutive repeated characters.

2.1 Activate the Device

Step 1 Use a network cable to connect a computer to the device.

Step 2 Set an IP address for the computer.

To ensure the normal communication between the computer and device, the IP address of the computer should be in the range of 192.168.1.2 to 192.168.1.253 (excluding 192.168.1.22). Because the default IP address of the device is 192.168.1.22.

Step 3 Enter 192.168.1.22 in the computer browser to enter the device activation page.

The Chrome web browser and Edge browser are supported, but the IE web browser is not supported.

Step 4 Set the activation password.

Step 5 Click **Activate**.

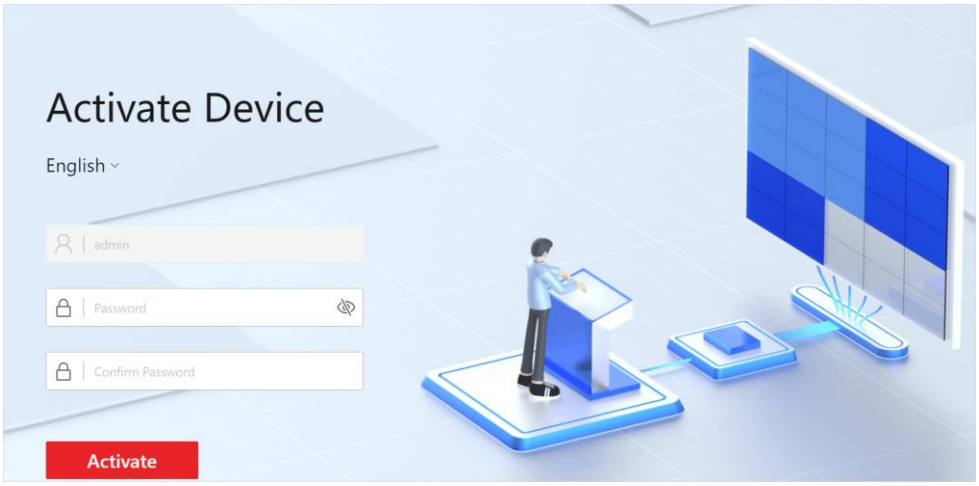


Figure 2-1 Activate the Device via Web Browser

2.2 Log In to the Device

Step 1 Enter the device's default IP address in the web browser of the computer.

Step 2 Enter the user name and the set activation password.

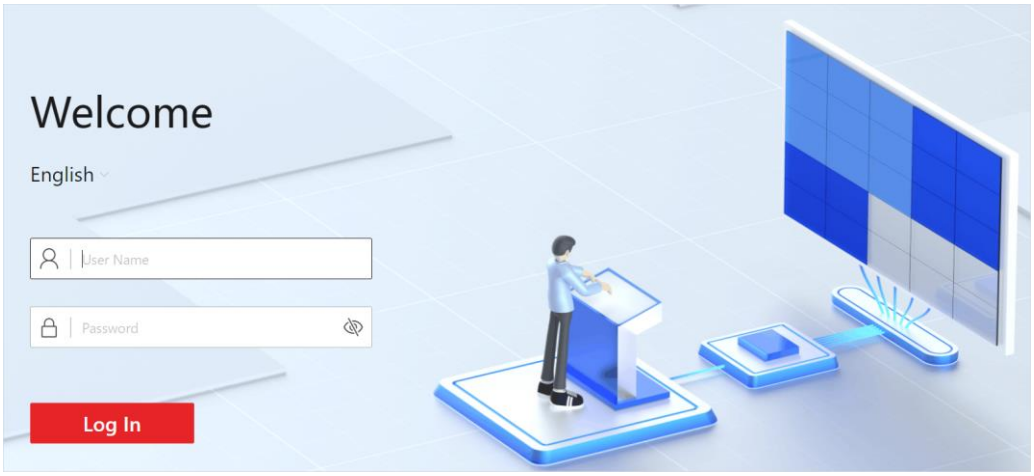


Figure 2-2 Login Page

Step 3 Click **Log In** to go to the **Overview** page.

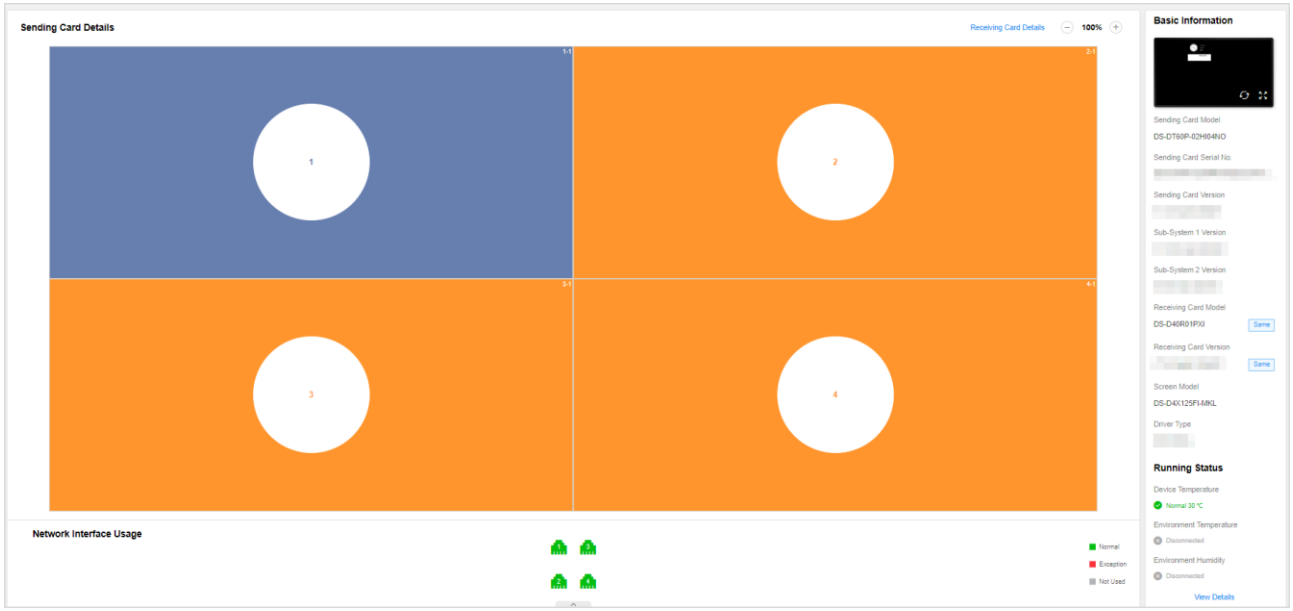


Figure 2-3 Overview Page

Step 4 Remove the network cable that connects the device and computer, use the network cable to connect the device to the on-site network, and connect the computer to the on-site network through network cable or Wi-Fi. Make sure the computer and device are in the same LAN.

After joining the on-site network, the device will be assigned with a new IP address automatically.

Step 5 Enter the new IP address of device in the web browser of the computer to log in to the web page of the device.

Step 6 (Optional) You can click admin in the upper right corner of the page to change the account password.

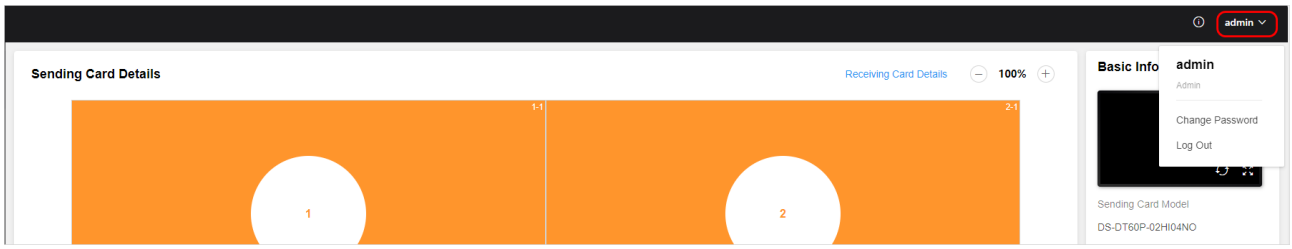


Figure 2-4 Change Password

Chapter 3 Display Configuration

3.1 Lighten the Display

Step 1 Go to **Screen Lightening Configuration** > **Lightening Settings**.

Step 2 Configure the display unit:

- Select **Load from Screen** as the configuration type and click **Load**.

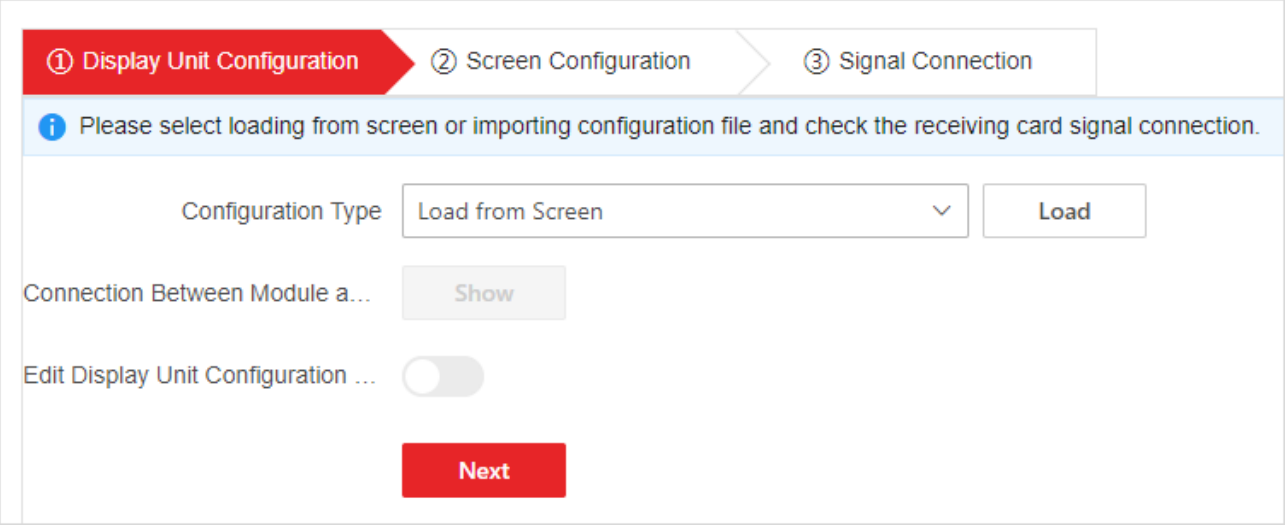


Figure 3-1 Load Display Unit Parameters from Screen

- Select **Import File** as the configuration type and then click  to import a file.

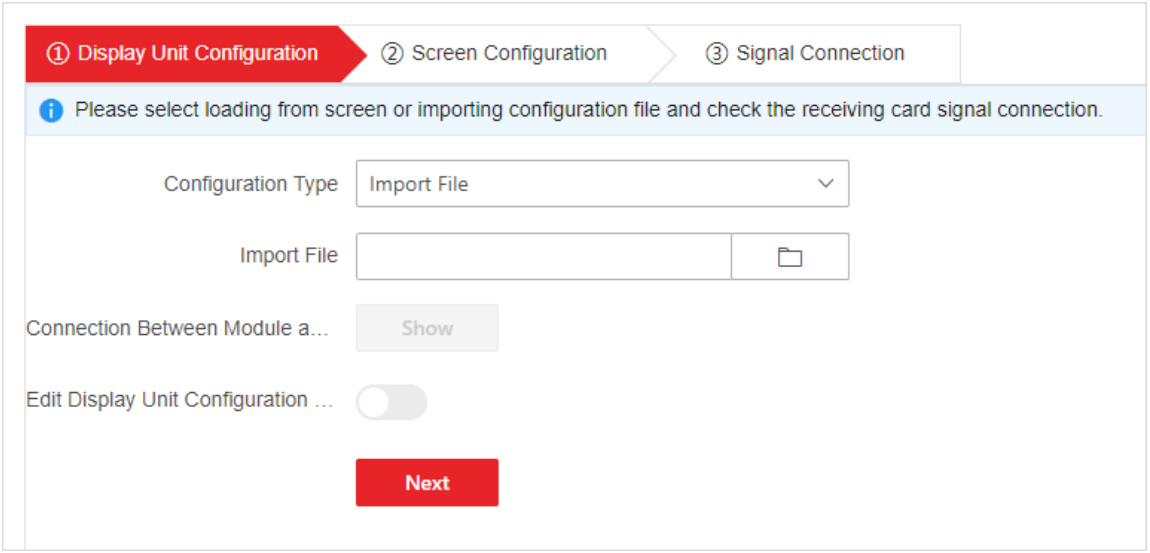


Figure 3-2 Import File to Set Display Unit Parameters

Step 3 Click **Next** to configure the screen parameters:

1) Set the screen size according to the receiving card quantity. Make sure the product of the screen column value and screen row value is equal to the actual receiving card quantity.
2) Set the resolution. Make sure the set resolution match the actual screen resolution to avoid incomplete image or black screen.

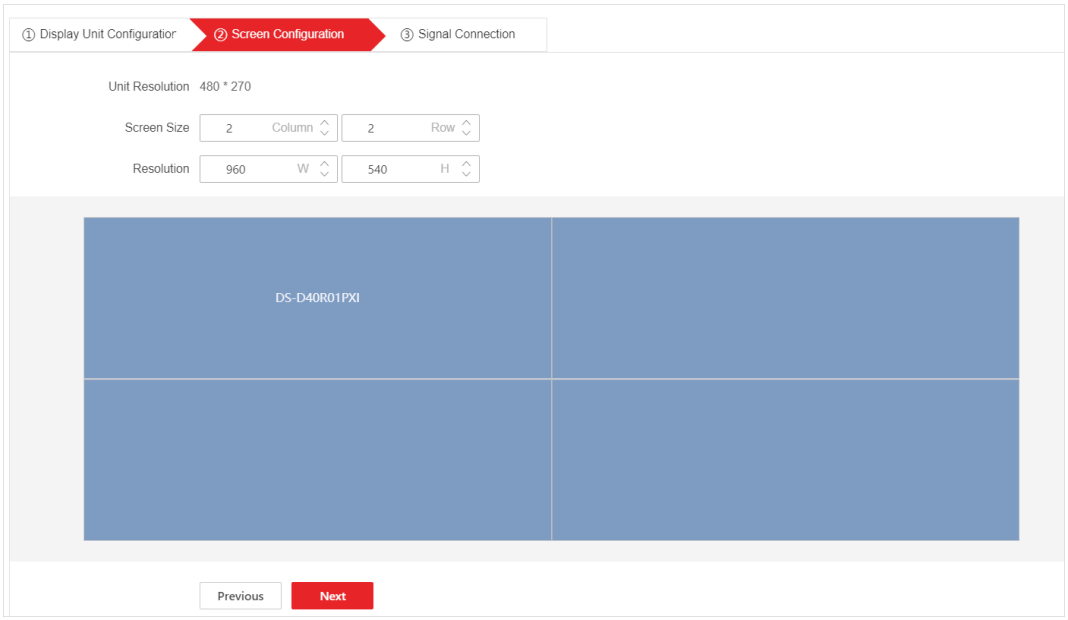


Figure 3-3 Configure the Screen

Step 4 Click **Next** to configure the signal connection.

After setting the screen size, the LED display will show the actual signal connection by default unless you click **Hide Connection** on this page. According to the actual signal connection of the LED display, configure the same signal connection on the web page:

1) Select a network interface of the device.
2) Take either of the following methods to configure signal connection for the selected network interface:
   - Click to select screens and connect them in the order of operation. The connection can cross different network interfaces of the device.
   - Click a screen to set as the start point of the connection and hold a screen to select the connection range. Batch connect screens in the order of operation. The connection can cross different network interfaces of the device. If the start point and end point are not on the same row or column, the connection will be S-shaped in the order of operation.
3) Use the same method to configure signal connection for other network interfaces.
4) (Optional) You can perform the following operations as required:
   - Click **Undo** to undo the previous operation.
   - Click **Restore** to restore the previous operation.

- Click **Clear Current Sending Port Connection** to clear the signal connection of the current network interface.
- Click **Clear All Sending Port Connection** to clear the signal connection of all network interfaces.
- Click **Display Connection** to display the signal connection on the LED display.
- Click **Hide Connection** to hide the signal connection on the LED display.
- Enable **Signal Backup** to use two channels for signal input to ensure signal stability.

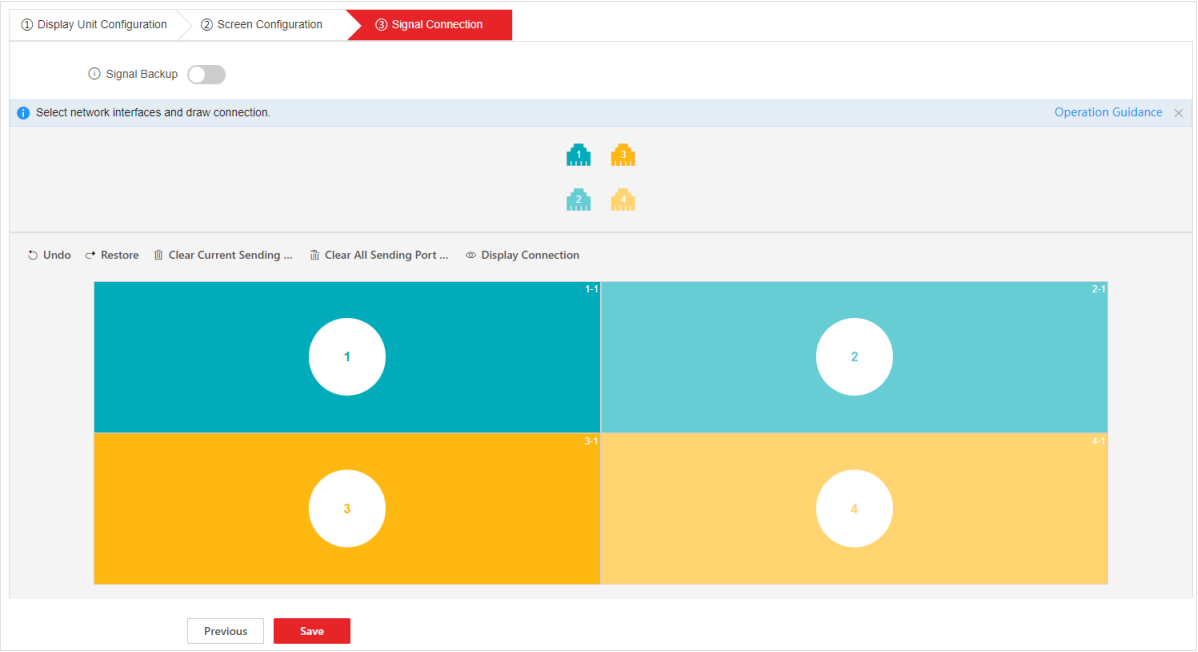


Figure 3-4 Configure Signal Connection

Step 5 Click **Save**.

3.2 Configure Device Correction Initialization

Step 1 Go to **Screen Lightening Configuration** > **Correction Initialization**.

Step 2 Click **Load** to load the correction file.

Step 3 After the loading of the correction file, enable correction.

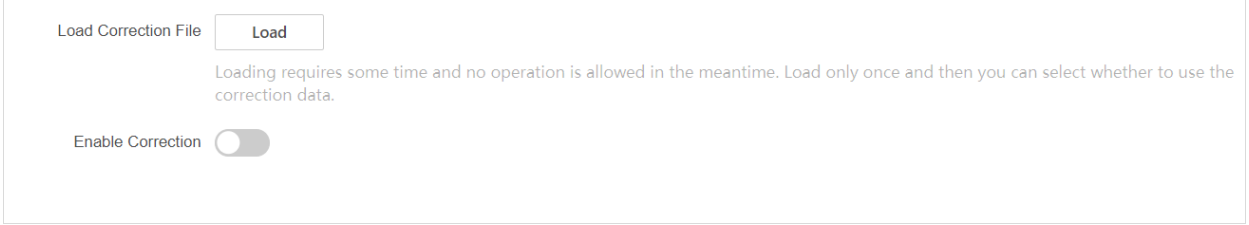


Figure 3-5 Configure Device Correction Initialization

3.3 Configure Programs for Displaying on Screen

You can create a program and bind at least a material (for example, signal source, image, video, text subtitle, time subtitle, PDF file or web page) to the created program. Then you can create other programs and set the schedule for displaying programs on the screen.

3.3.1 Create Programs

Step 1 Go to **Screen Operation**.

Step 2 Enter a program name and set the screen size for the program.

- When you create the first program, the program setting window pops up by default.
- After setting the screen size for the program, you can click  on top of the page to open the program setting window to change the screen size for the program as required.
- If you click **Restore to Screen Size**, the program screen size will be restored to the connected screen size.

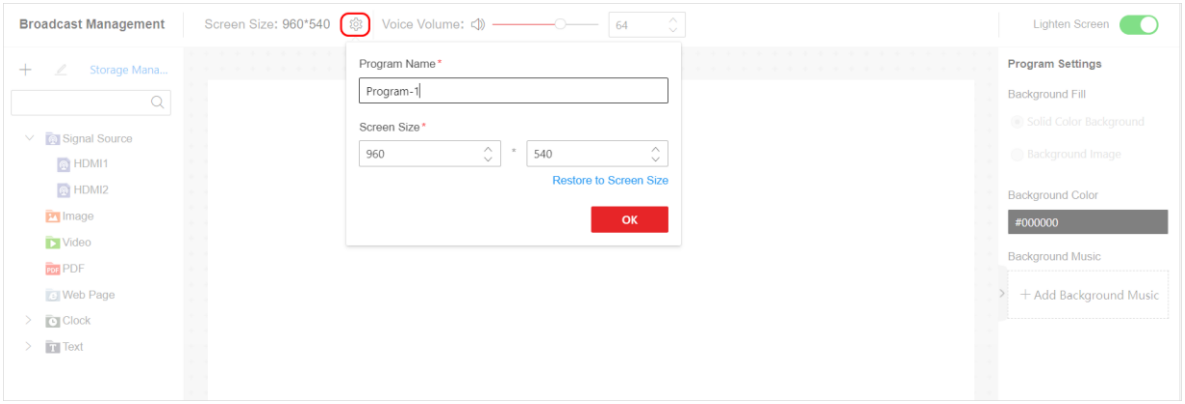


Figure 3-6 Create a Program

Step 3 Select a template. The following uses the 1+2 template as an example.

If you want to customize the template, select **Blank Page** and set the template layout as required. After selecting a template, you can also click **Change Template** to change the selected template as required.

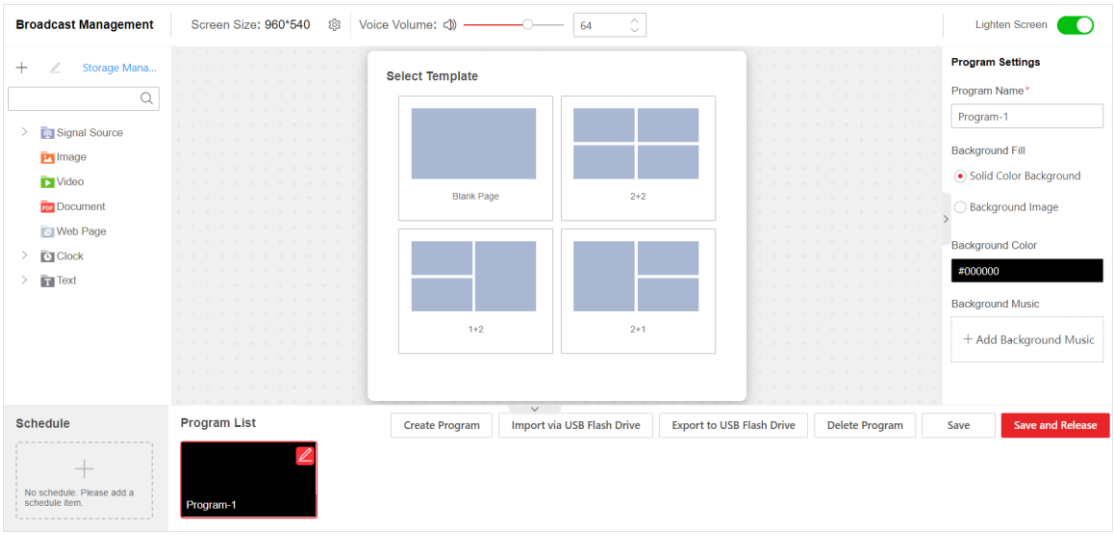


Figure 3-7 Select a template

Step 4 (Optional) You can perform the following operations to configure the background for the program:

- Set the background fill for the program.
  - Select **Solid Color Background** and then select a color.
  - Select **Background Image**, click **Add Background Image**, and then click **Local Upload** or **Select from Material Library** to select an image.

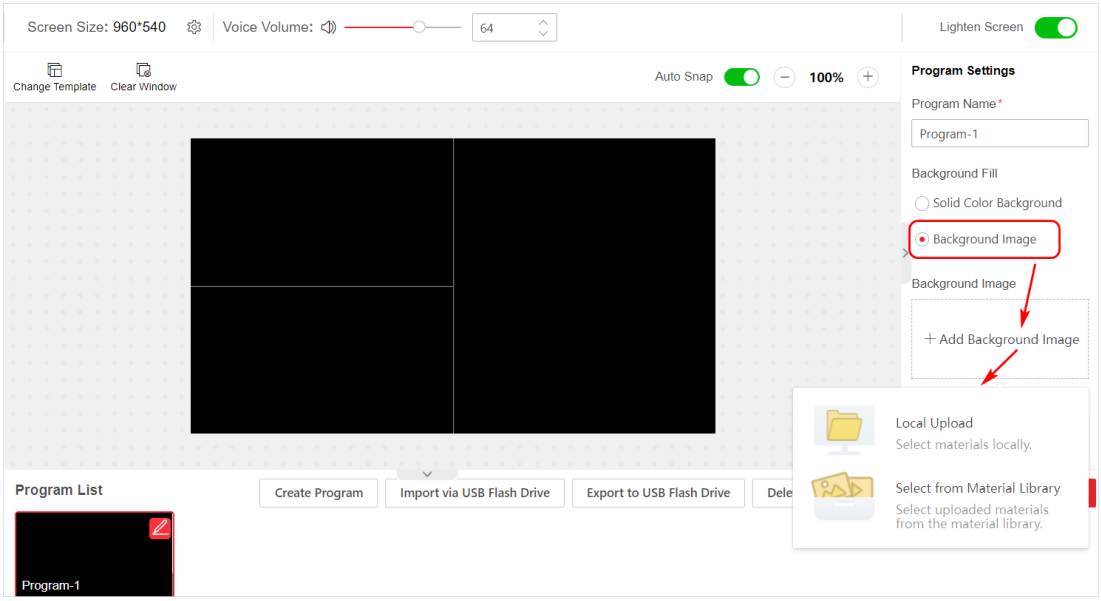


Figure 3-8 Add a Background Image

- Set the background music for the program: Click **Add Background Music** and then click **Local Upload** or **Select from Material Library** to select a music. The music must be in the MP3, WAV, or WMA format.

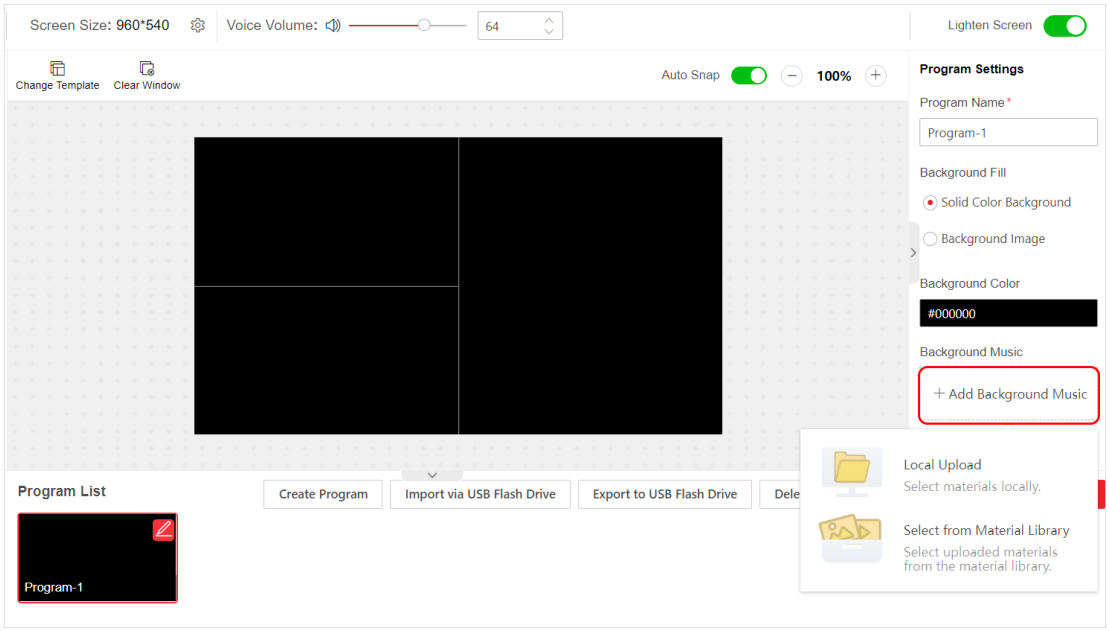


Figure 3-9 Set a background music

Step 5 (Optional) Enable **Auto Snap**. Thus, the bound material will be in alignment with the program window division line.

Step 6 Add materials and bind materials to the program window. For more information, see 3.3.2 Manage Materials.

You can click **Clear window** to unbind the materials from the program window.

Step 7 Click **Save**.

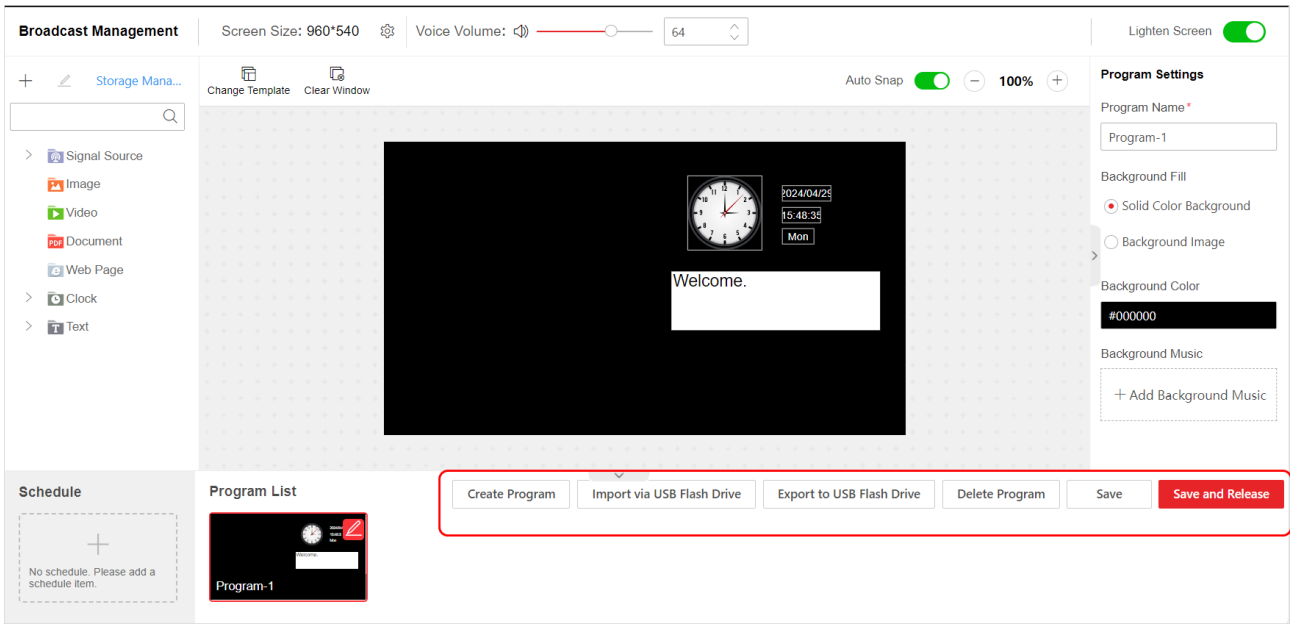


Figure 3-10 Save the Program

Step 8 Click **Create Program** to create a new program. Enter the program name, and repeat the above steps to create the new program.

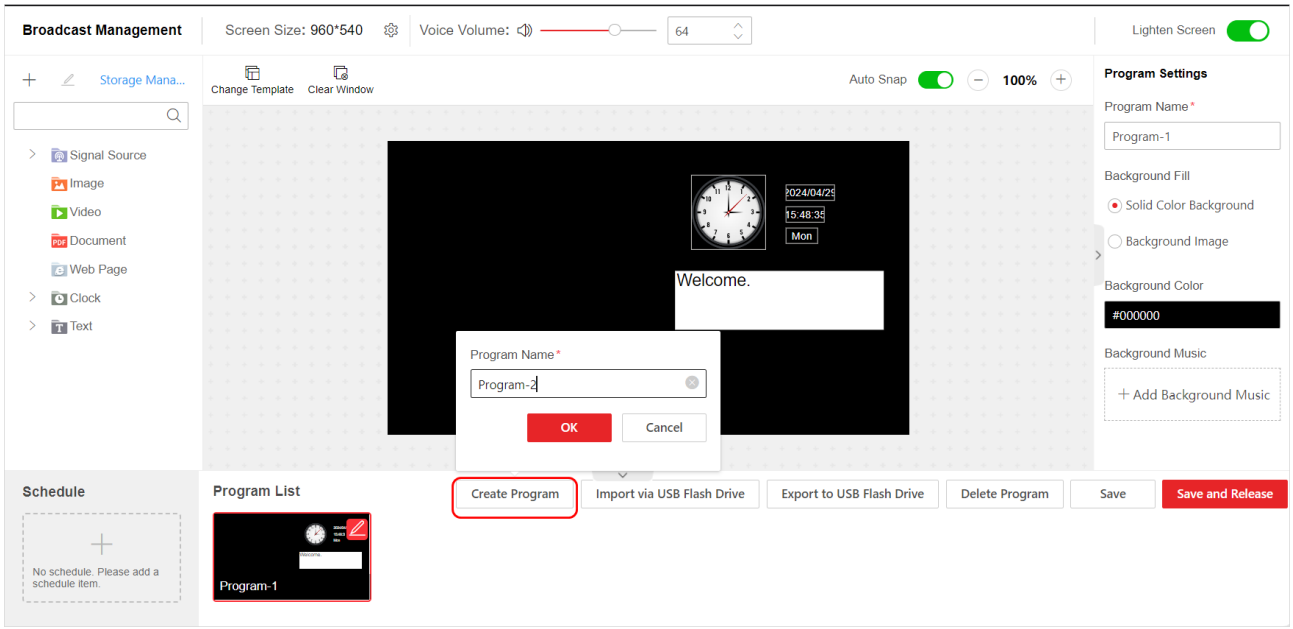


Figure 3-11 Create a New Program

Step 9 Set the schedule. For more information, see 3.3.3 Set the Schedule.

Step 10 Enable **Lighten Screen**.

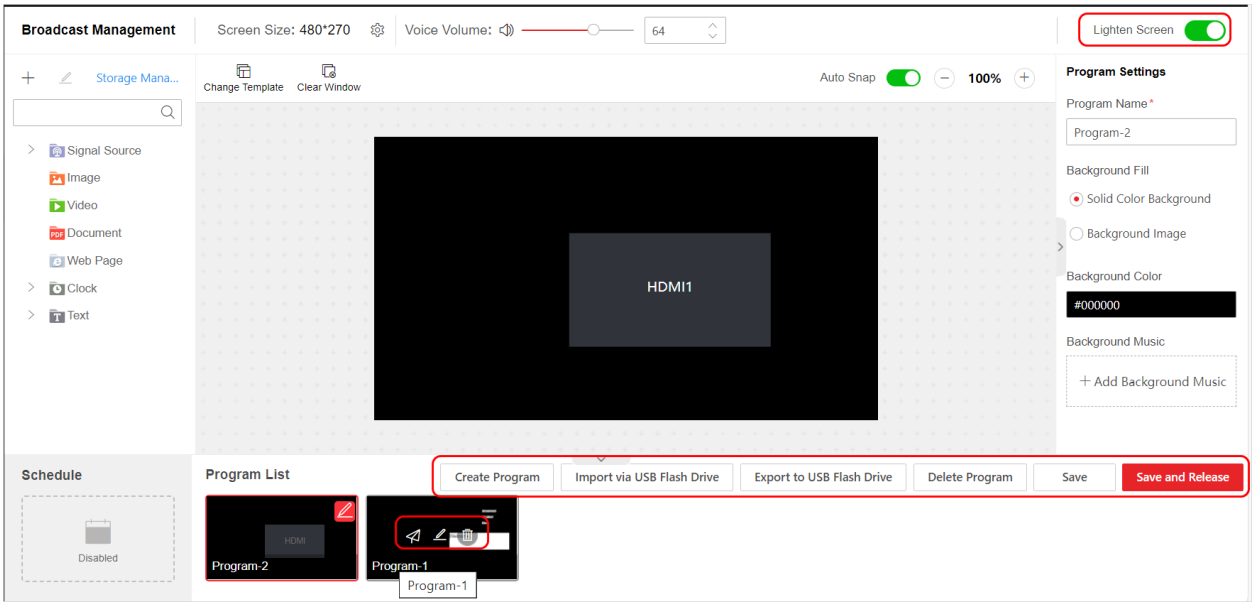


Figure 3-12 Lighten Screen

Step 11 Release the configured programs to the LED display. The currently played program will be identified by the icon  .

- Click **Save and Release** to release the currently edited program to the LED display.

- Hover over a saved program and click  to release the saved program to the LED display.

- Hover over the schedule and click  to release the programs to the LED display. Thus, the programs will be displayed according to the set schedule.

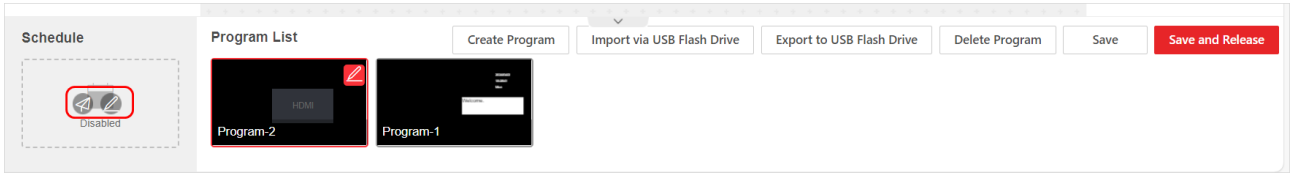


Figure 3-13 Release the Programs

Step 12 (Optional) You can perform the following operations as required:

- Adjust the voice volume: Draw the voice volume bar or enter the value at the top center of the page.

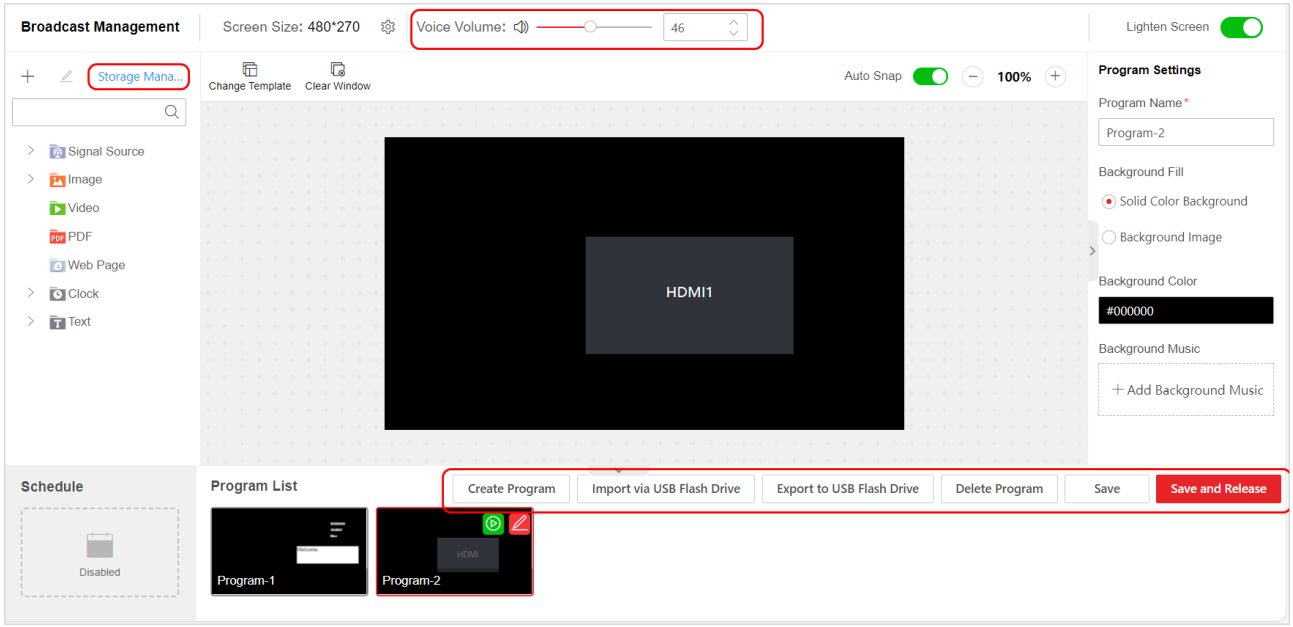


Figure 3-14 Adjust Voice Volume

- Delete a program:
  - Click **Delete Program** to delete the edited program.
  - Hover over a saved program and click  to delete a saved program.
- Edit a program:
  - Click  to edit the program.
  - Hover over a saved program and click  .

- Hover over the schedule and click  to edit the schedule.
- Insert a USB flash drive to the device, and the click **Import via USB Flash Drive** to import the stored programs, materials, and the schedule in the USB flash drive to the device.
- Insert a USB flash drive to the device, and then click **Export to USB Flash Drive** to export all programs, materials, and the schedule to the USB flash drive.

3.3.2 Manage Materials

Step 1 Click  to add the image materials, video materials, document materials and web page materials.

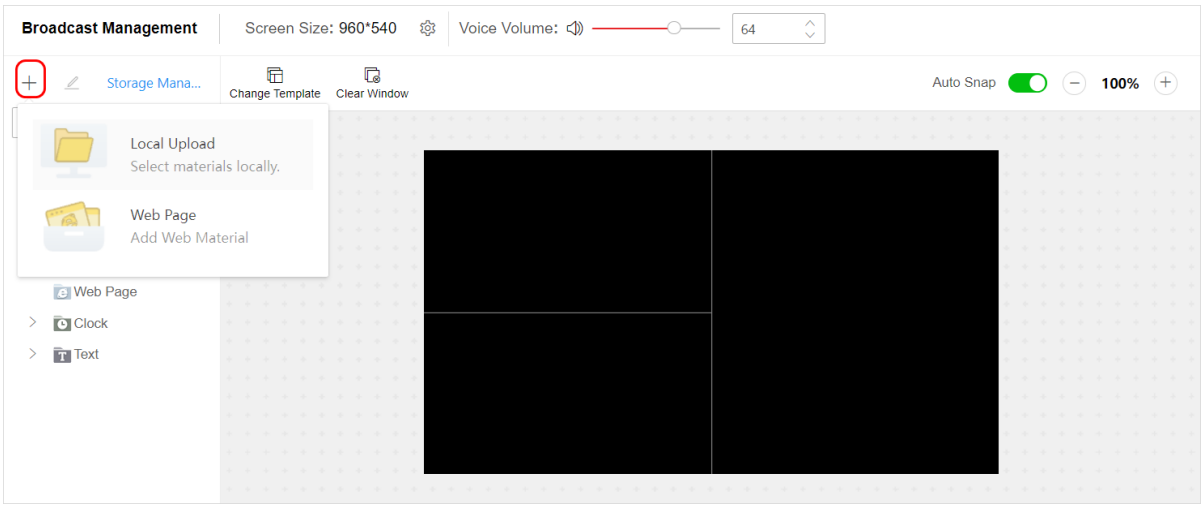


Figure 3-15 Add Material

- Click **Local Upload** to upload the local images, videos, and documents.
  - The images must be in the GIF, JPG, JPEG, PNG or BMP format.
  - The videos must be in the MP4, MOV, RM, RMB, FLV, WMV, MKV, 3GP, MPG, AVI, or ASF format.
  - The documents must be in PDF format.

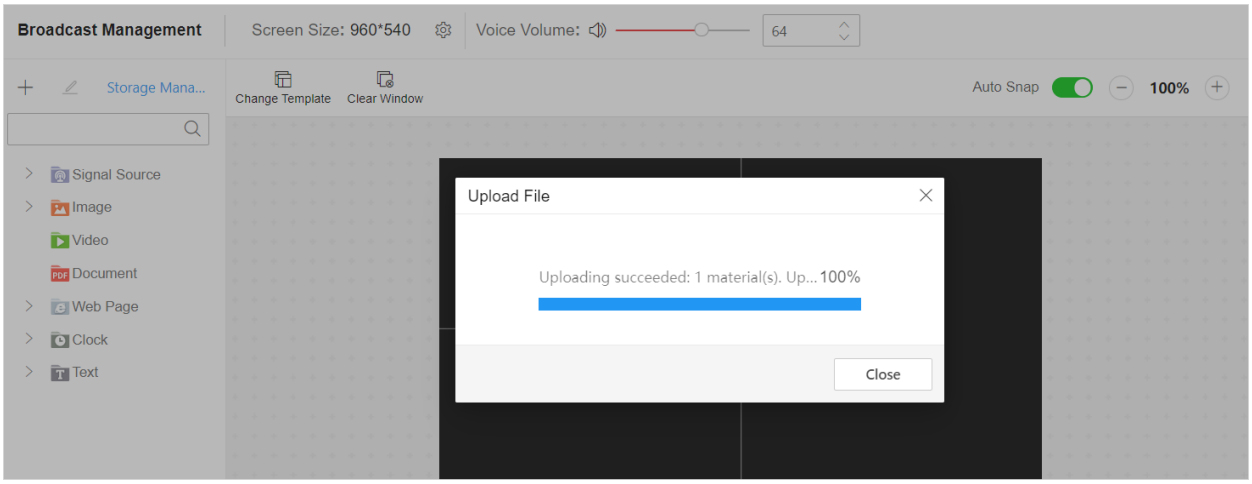


Figure 3-16 Upload Local Material

- Click **Web Page** to add the web page materials. Enter the URL using HTTP or HTTPS as the prefix, and click **OK**.

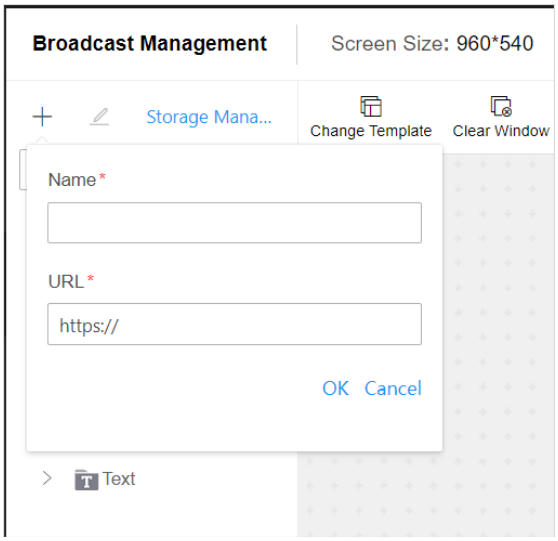


Figure 3-17 Add Web Material

Step 2 Bind materials with the program window.

- Click **Signal Source**, select a signal source and drag it to a program sub-window.
  - Manually enter the resolution or enable **Resolution Self-adaption.**
  - Move the edge of the signal source window to enlarge or reduce its size.
  - Enable **Audio Switch** to enable the audio output of the current signal source.

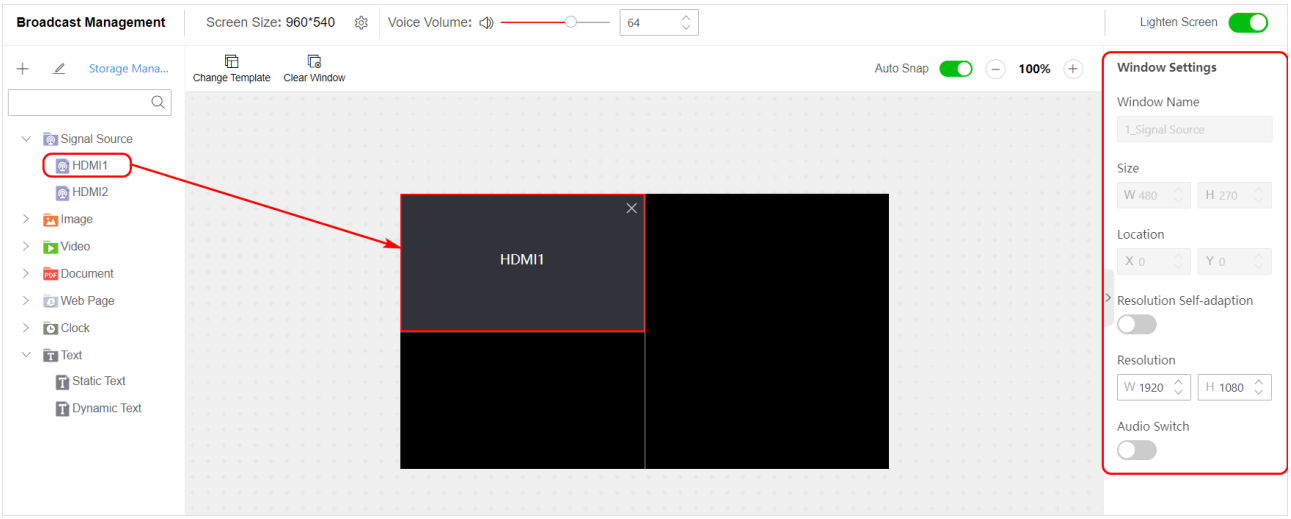


Figure 3-18 Bind a Signal Source with a Program Sub-Window

- Click **Image**, select an image and drag it to a program sub-window.
  - Move the edge of the image window to enlarge or reduce its size.
  - Click **Add More Materials**, and then click **Local Upload** or **Select from Material Library** to add more images. Up to 64 images can be added.
  - Set an interval for each image. When multiple images are bound with the same program sub-window, the system automatically change the displayed image according to the set interval.
  - Drag an image to change its displaying order.

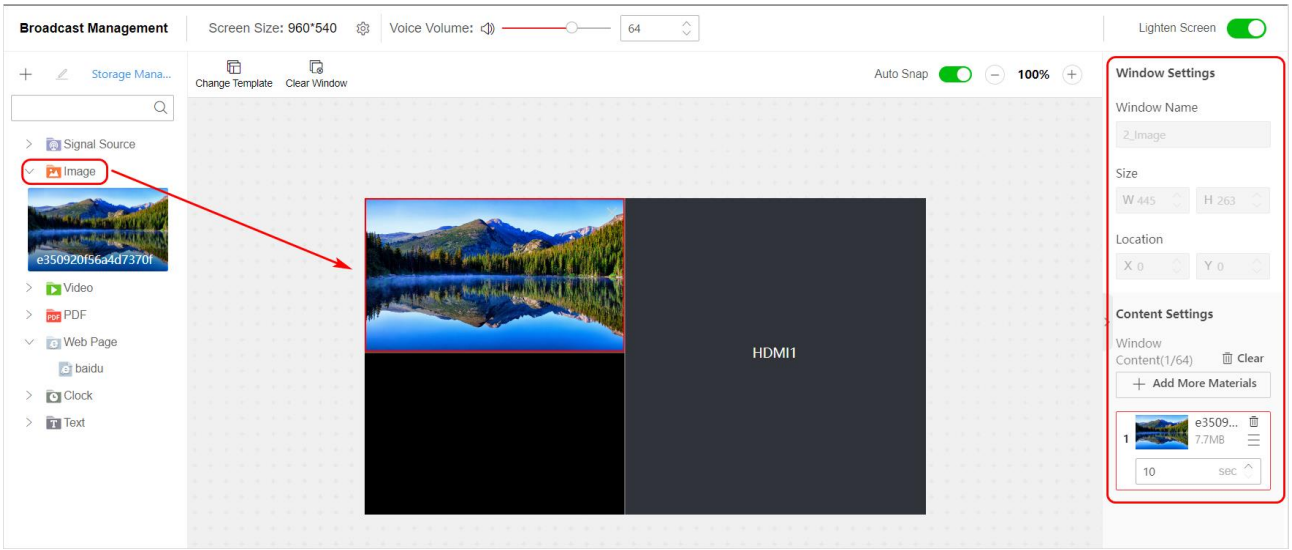


Figure 3-19 Bind an Image with a Program Sub-Window

- Click **Video**, select a video and drag it to a program sub-window.
  - Move the edge of the video window to enlarge or reduce its size.
  - Click **Add More Materials**, and then click **Local Upload** or **Select from Material Library** to add more videos. Up to 64 videos can be added.

– Set an interval for each video. When multiple videos are bound with the same program sub-window, the system automatically change the displayed video according to the set interval.

– Drag a video to change its displaying order.

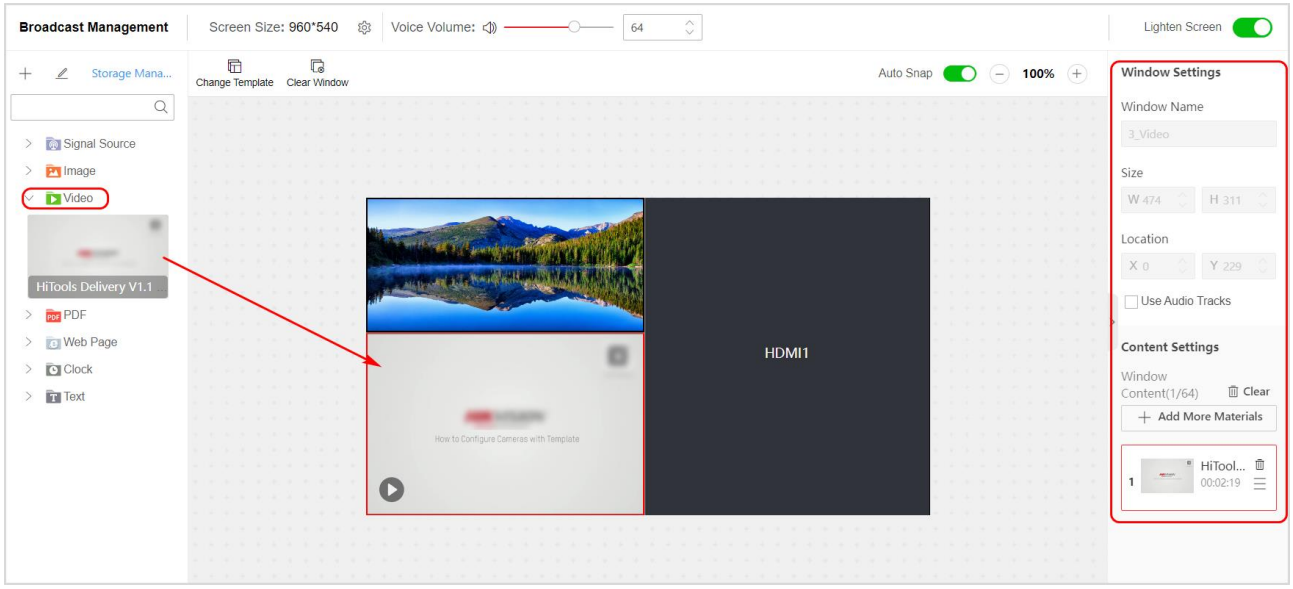


Figure 3-20 Bind a Video with a Program Sub-Window

- Click **PDF**, select a PDF file and drag it to a program sub-window.
  – Move the edge of the document window to enlarge or reduce its size.
  – Set a paging time. When the PDF file has multiple pages, the system automatically switches to the next page according to the set paging time.

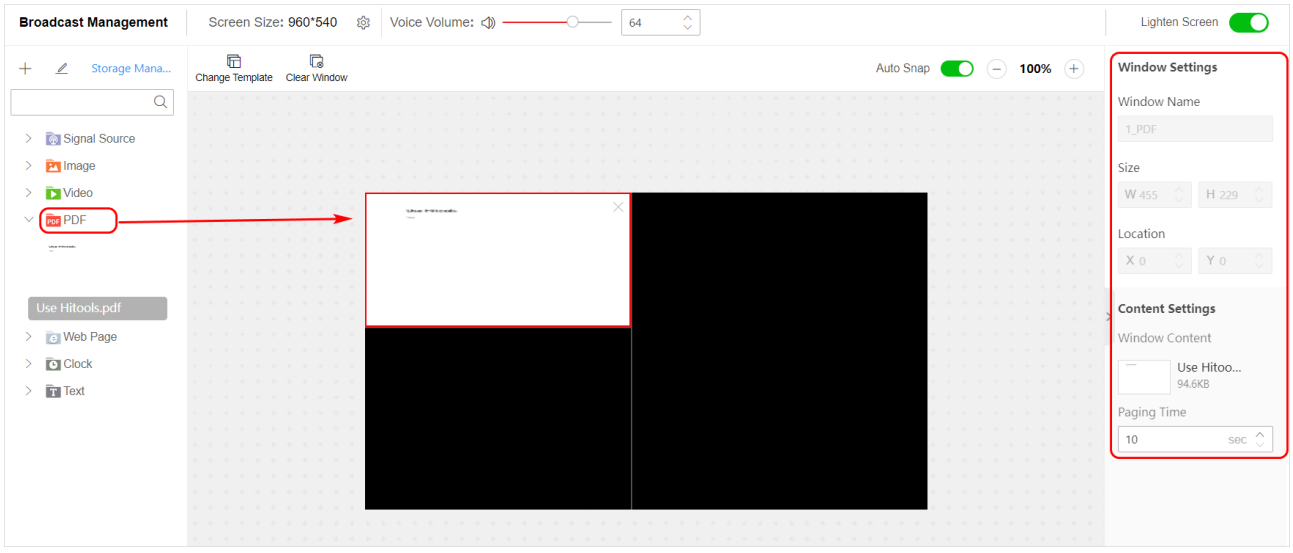


Figure 3-21 Bind a PDF file with a Program Sub-Window

- Click **Web Page**, select a web page and drag it to a program sub-window. You can move the edge of the web page window to enlarge or reduce its size.

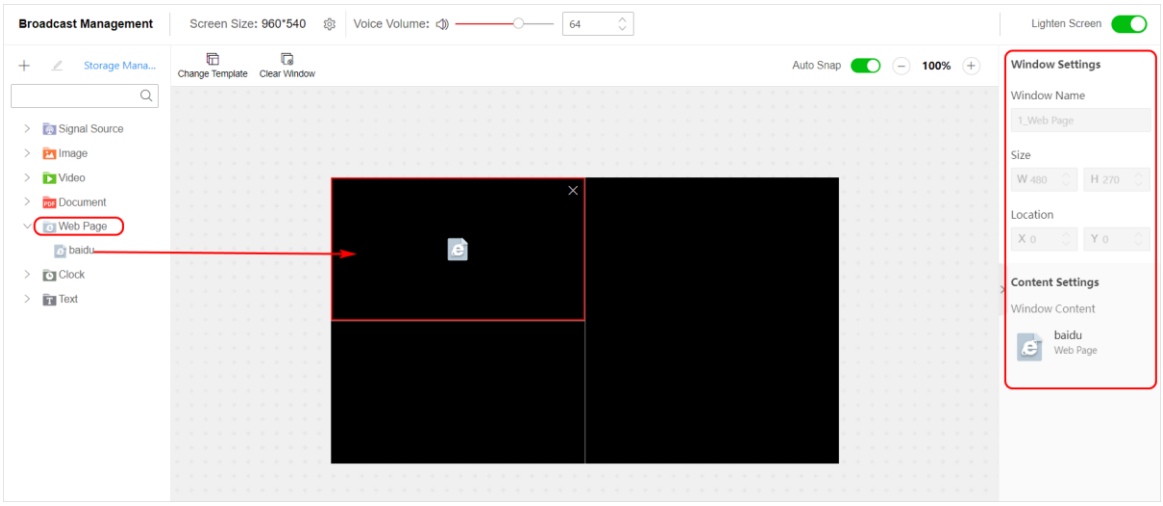


Figure 3-22 Bind a Web Page with a Program Sub-Window

- Click **Clock**, select a clock and drag it to a program sub-window.
  - Seven types of clocks are available. One program supports only one clock.
  - Directly drag the clock window, or enter the X value and Y value to change the clock window location.
  - Move the edge of the clock window, or enter the W value and H value to enlarge or reduce the clock window size.
  - Click  to display the clock template and then select a clock type.
  - Click  to display the date, time, or week. You can also set the font size and font color.

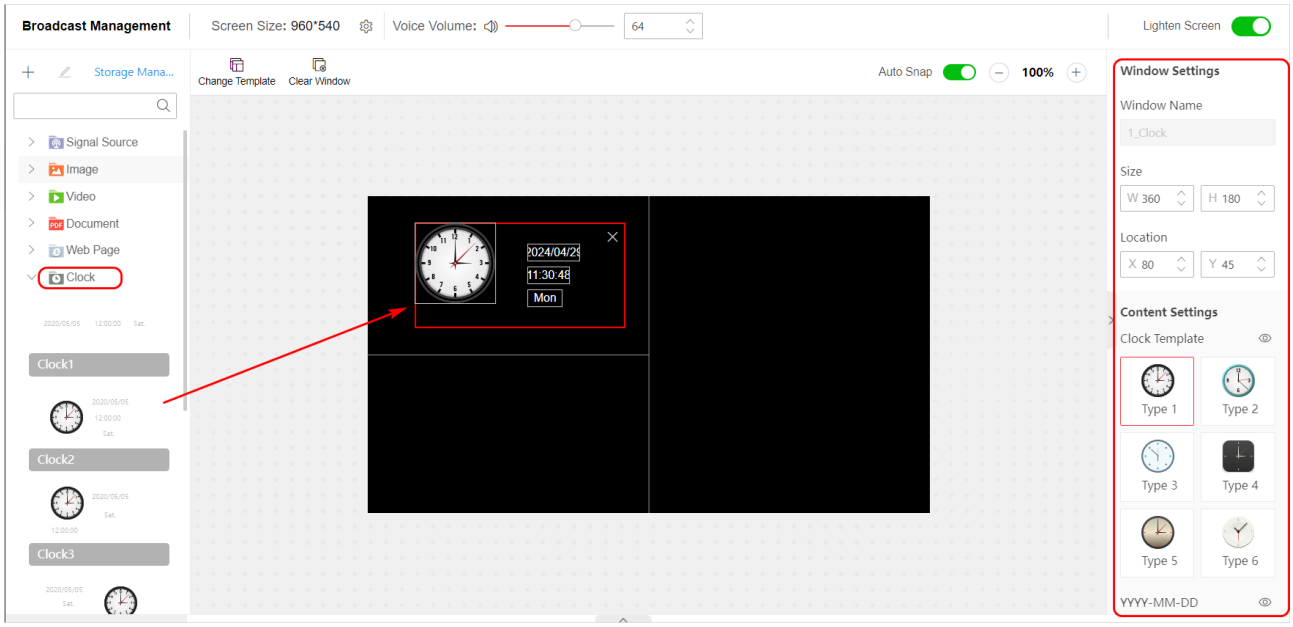


Figure 3-23 Bind a Clock with a Program Sub-Window

- Click **Text**, select a static text or dynamic text, and drag it to a program sub-window.
  - Directly drag the text window, or enter the X value and Y value to change the text window location.
  - Move the edge of the text window, or enter the W value and H value to enlarge or reduce the text window size.
  - Enter the content, and set the font type, font size, font color, alignment mode, background color, and background opacity.
  - For a dynamic text, you can set the scrolling direction and scrolling speed.

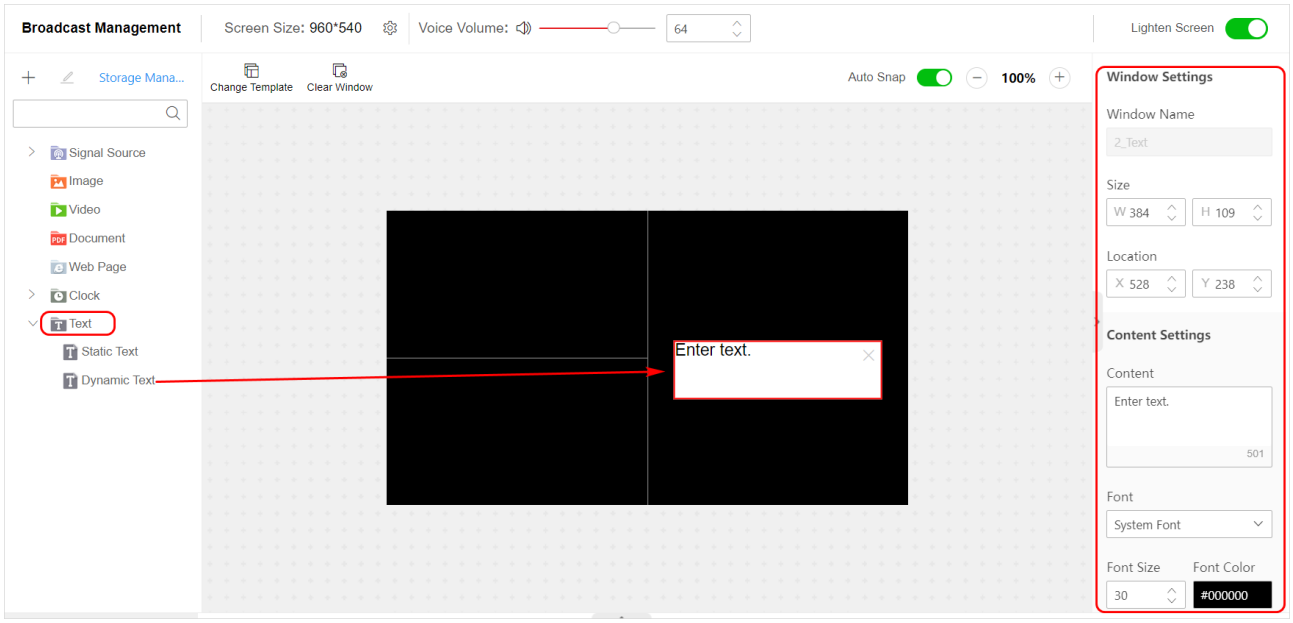


Figure 3-24 Bind a Text with a Program Sub-Window

Step 3 (Optional) Click **Storage Management** to go to the **Storage Management** page to delete the unused materials.

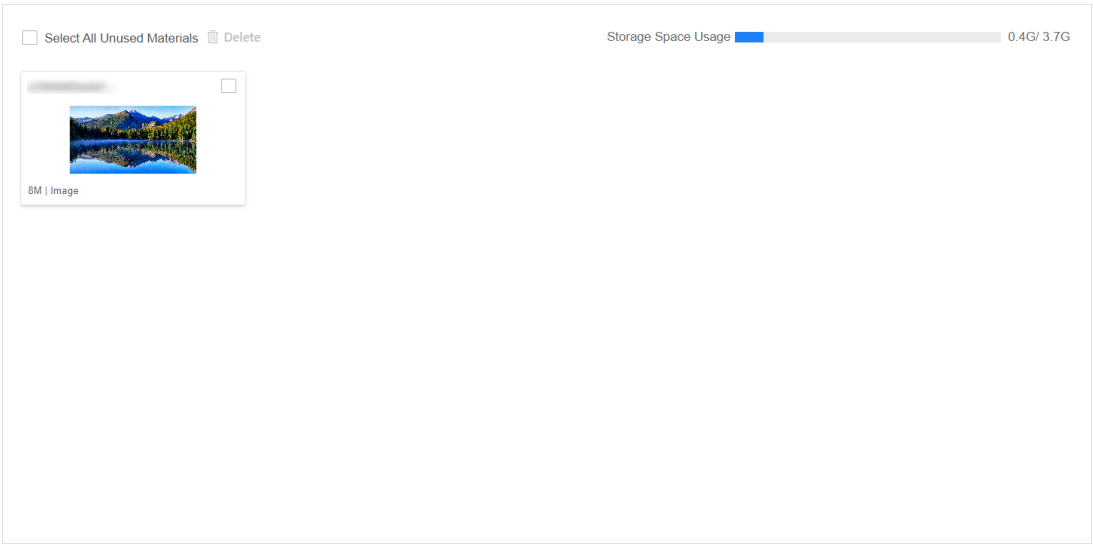


Figure 3-25 Storage Management Page

3.3.3 Set the Schedule

Step 1 Click + to set the schedule.

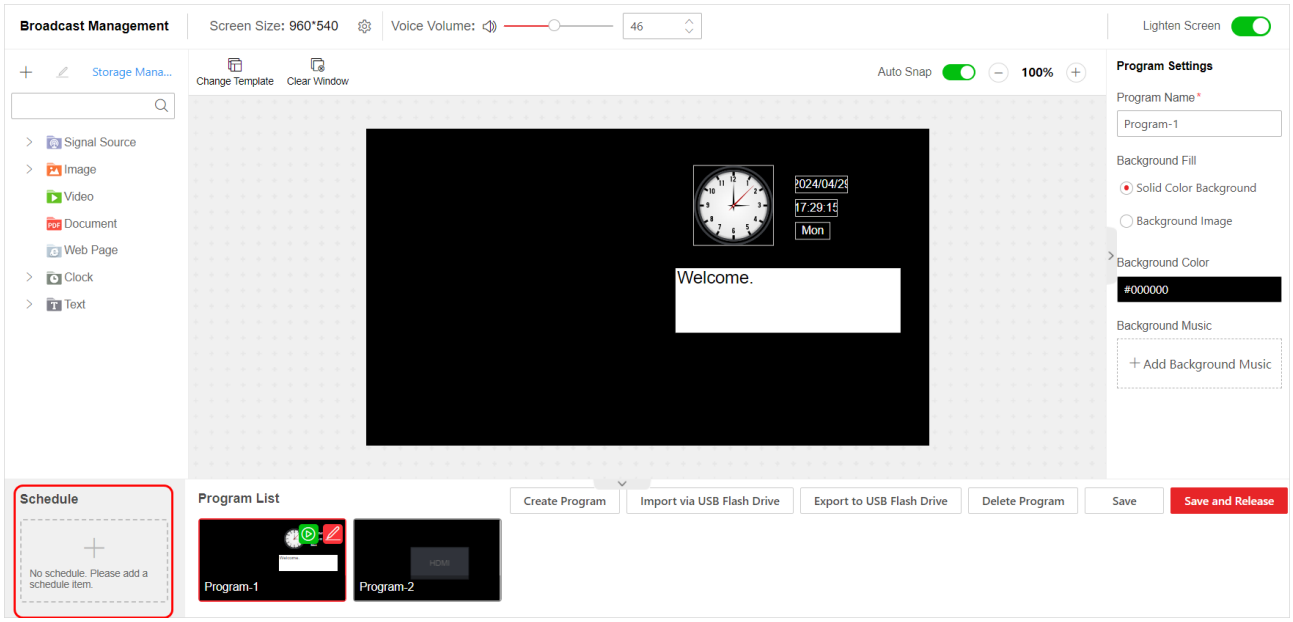


Figure 3-26 Set the Schedule

Step 2 On the schedule list, left click the mouse to select the start time and hold the mouse to select the end time.

Step 3 Select a program and click **OK**.

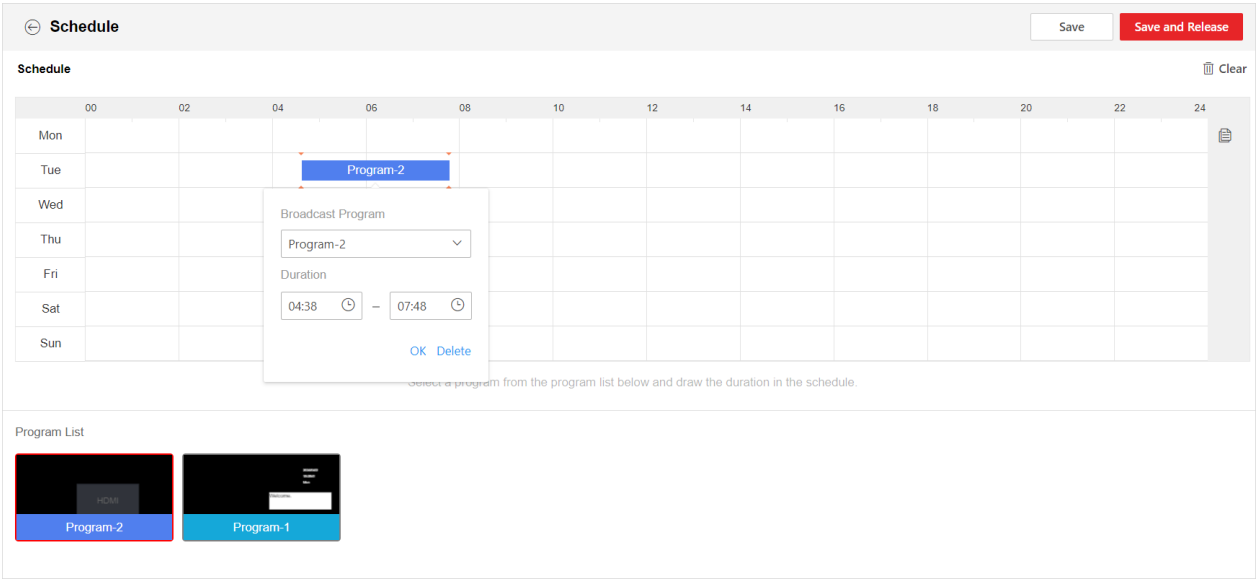


Figure 3-27 Create a Schedule Item

Step 4 (Optional) You can perform the following operations as required:

- If you want to change the start time and end time, you can move the duration bar or click  to set the start time and end time.
- Click **Delete** to delete the current schedule item.
- Click **Clear** to clear all schedule items.
- Click  to copy the current schedule item settings to the selected weekdays and weekends.

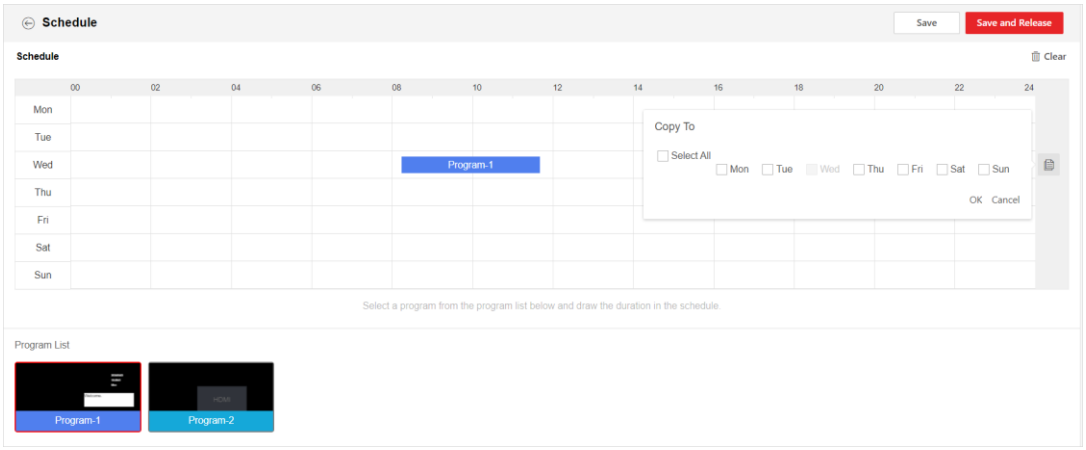


Figure 3-28 Copy the Schedule Item Settings

Step 5 Click **Save** to save the schedule settings, or click **Save and Release** to save the schedule settings and release the schedule to the LED display.

3.4 Configure Image

3.4.1 Configure Display Parameters

Step 1 Go to **Configuration** > **Display Effect** > **Display Parameters**.

Step 2 Select a display mode.

Step 3 Edit the default parameters of the selected display mode:

1) Select a color standard:
   - The wide color gamut color standard is applicable to UHD devices.
   - The HDTV color standard is applicable to high definition televisions and other common video devices.
   - The digital cinema color standard is applicable to digital cinemas and high-end displays.
   - If you select the original color standard, the display will be restored to the original color.
   - The general color standard is applicable to the common displays.

2) Adjust the brightness value.
3) Select a color temperature adjustment mode and color temperature mode.

Step 4 Click **Save**.

Step 5 Click **Solidify Parameter** to save the configured parameters for the selected display mode.

Step 6 (Optional) Click **Restore Default**. Thus, the selected display mode will use the default parameters.

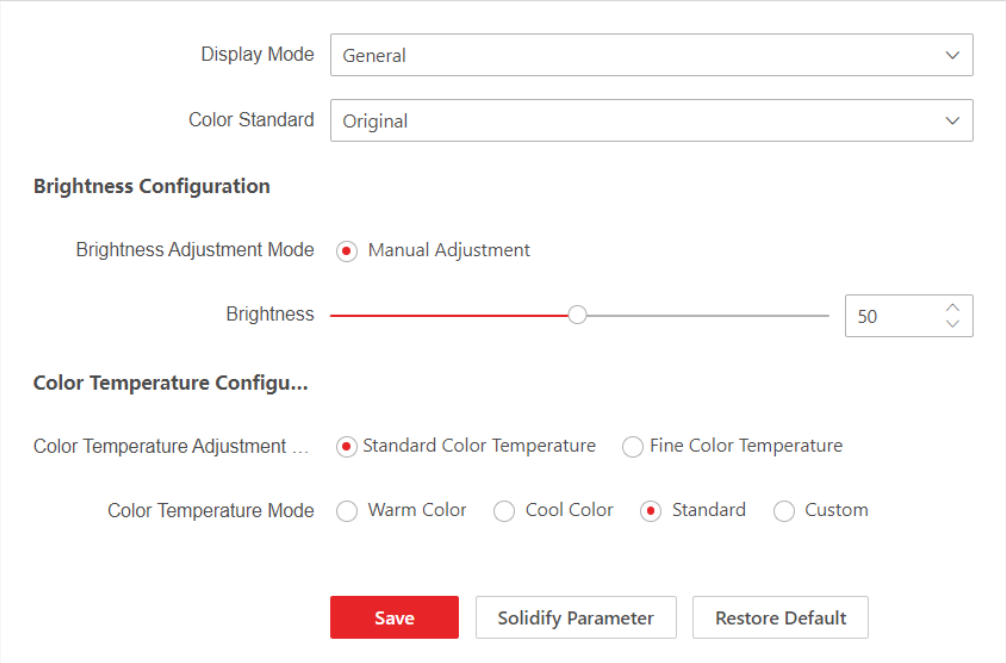


Figure 3-29 Configure Display Parameters

3.4.2 Configure Startup Image

Step 1 Go to **Configuration** > **Display Effect** > **Image Settings** > **Startup Image**.

Step 2 Select an image as the startup image.

If you select **Custom**, you can upload an image.

Step 3 Click **Save**.

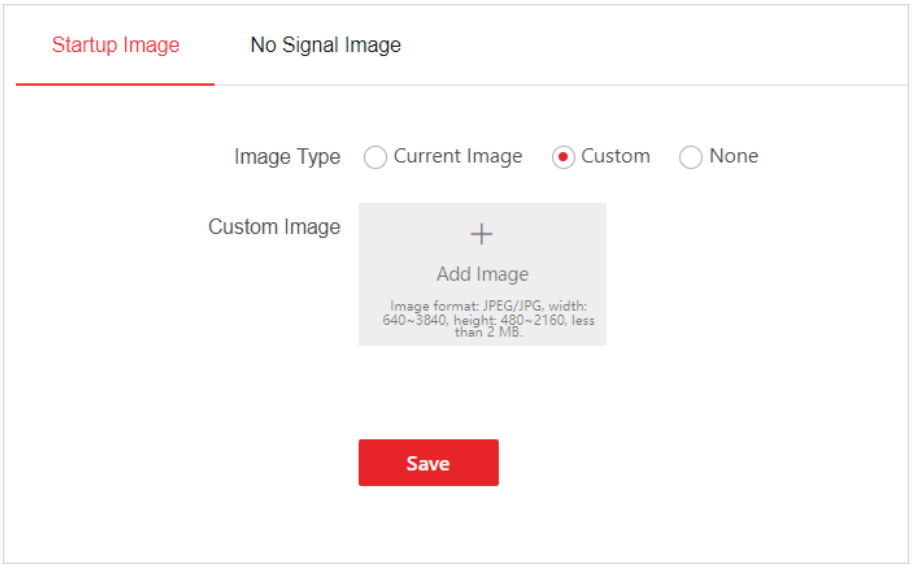


Figure 3-30 Configure Startup Image

3.4.3 Configure Images Displayed at Signal Interruption

Step 1 Go to **Configuration** > **Display Effect** > **Image Settings** > **No Signal Image**.

Step 2 Select an image to display when the signal interruption of the receiving card occurs.

- If you select **Last Frame**, the last frame image will be displayed when the signal interruption of the receiving card occurs.
- If you select **Aging Mode**, the display enters random solid color mode and flashes regularly when the signal interruption of the receiving card occurs.

Step 3 Select an image as the screen saver when no input signal exists.

Step 4 Click **Save**.

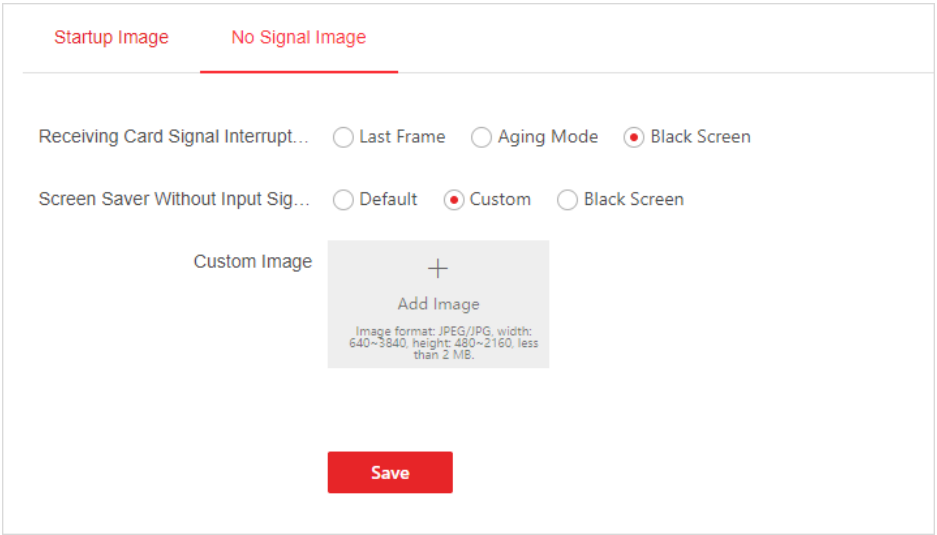


Figure 3-31 Configure Images Displayed at Signal Interruption

3.5 Detect Defective Pixels

Step 1 Go to **Maintenance and Security** > **Screen Detection**.

Step 2 Enable the screen condition detection.

Step 3 Select an image to check whether the defective pixels exist on the screen.

- Select an existing solid color, or add a new color and select the new color. You can edit or delete the newly added color.

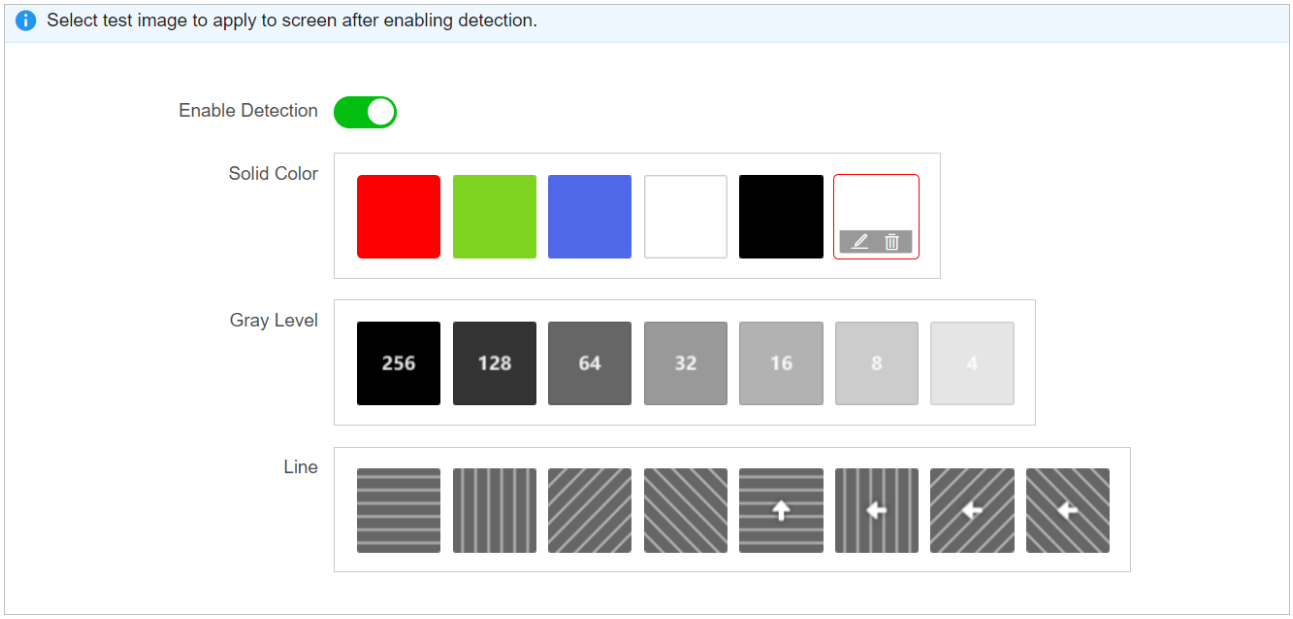


Figure 3-32 Configure the newly added color

- Select a gray level.
- Select a line.

3.6 Correct Defective Pixels

3.6.1 Manually Correct Receiving Cards

After using either of the following methods to load the original correction file, if you still find the color difference and seam lines on some screens, then you can manually correct the receiving cards.

- Go to **Maintenance and Security** > **Receiving Card Correction**, click **Load Original Correction File**.
- Go to **Screen Lightening Configuration** > **Correction Initialization**, enable correction.

Step 1 Go to **Maintenance and Security** > **Receiving Card Correction**.

Step 2 Switch on **Enable Correction** at the top of the page to start configuring the correction parameters of the receiving cards.

If the display supports low gray correction and bright hue correction, the low gray correction and bright hue correction will be enabled simultaneously after you enabling correction. It is recommended to enable the low gray correction and bright hue correction.

Figure 3-33 Enable Correction

Step 3 Set the correction area.

- Click and select the area to be corrected.
- Click and enter the start coordinate and end coordinate.

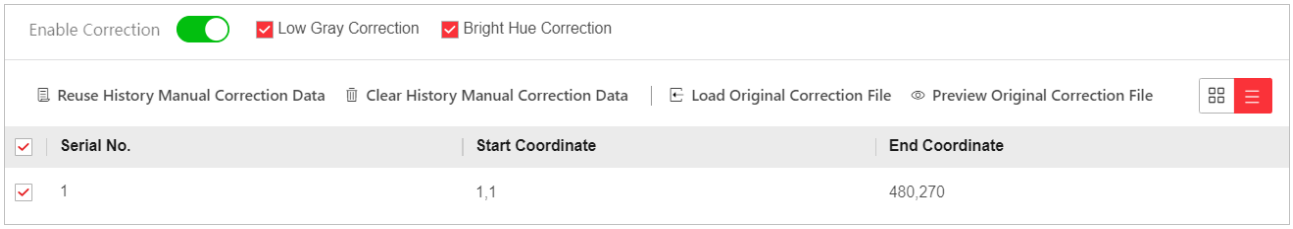


Figure 3-34 Set Correction Coordinates

Step 4 Click **Correction** and select **Manual Correction**.

- Select **Screen Correction** as the correction type.
- Select **Seam Correction** as the correction type.

1) Select a calibration range, all seams, all vertical seams, or all horizontal seams.
2) Set the seam width.

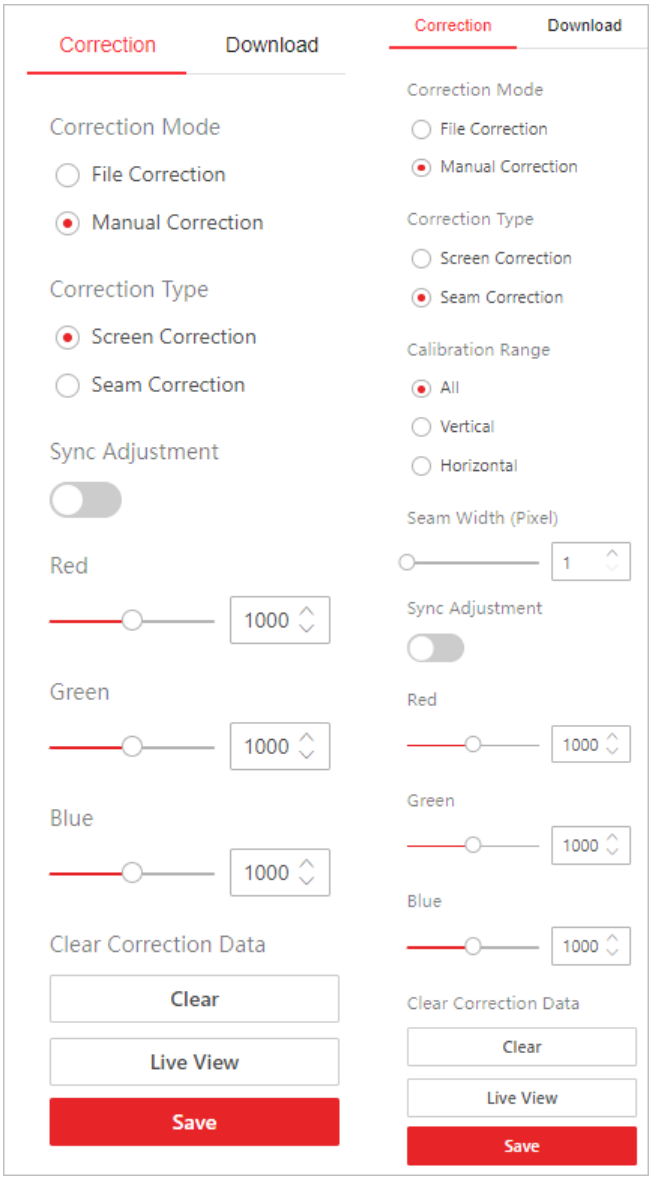


Figure 3-35 Manually Correct Screens or Seams

Step 5 Adjust the RGB (Red Green Blue) value.

With **Sync Adjustment** enabled, the RGB values are adjusted simultaneously.

Step 6 Click **Live View** to preview the display effect.

If the display effect is not appropriate, you can configure the correction parameters again.

Step 7 When the desired display effect is reached, click **Save**.

Step 8 (Optional) You can perform the following operations as required:

- Click **Reuse History Manual Correction Data** at the top of the page.
- Click **Clear History Manual Correction Data** at the top of the page.
- Click **Preview Original Correction File** at the top of the page.

- If the correction data is completely misaligned and loading the original correction data cannot solve this issue, you can click **Clear** on the bottom of the page to clear the data of the receiving cards.
- Click **Download** to download the configured correction data.

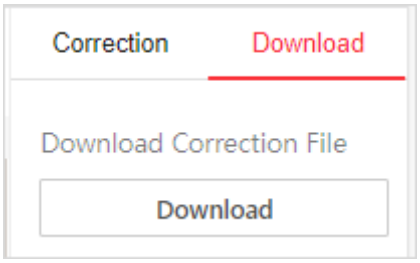


Figure 3-36 Download a Correction File

3.6.2 Import a Correction File

After using either of the following methods to load the original correction file, if you still find the color difference and seam lines on multiple screens, then you can manually correct the receiving cards.

- Go to **Maintenance and Security** > **Receiving Card Correction**, click **Load Original Correction File**.
- Go to **Screen Lightening Configuration** > **Correction Initialization**, enable correction.

Step 1 Go to **Maintenance and Security** > **Receiving Card Correction**.

Step 2 Switch on **Enable Correction** at the top of the page to start configuring the correction parameters.

If the display supports low gray correction and bright hue correction, the low gray correction and bright hue correction will be enabled simultaneously after you enabling correction. It is recommended to enable the low gray correction and bright hue correction.

Figure 3-37 Enable Correction

Step 3 Click and select an area as the start area of the batch correction.

Step 4 Click **Correction** and select **File Correction**.

Step 5 Click to select a locally saved correction file, and then click **Upload**.

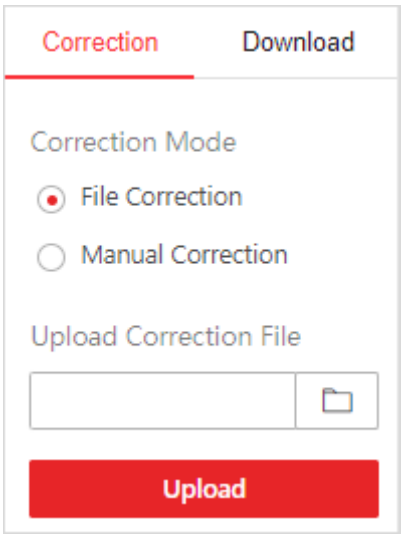


Figure 3-38 Import a Correction File

Step 6 (Optional) Click **Download** to download the correction file.

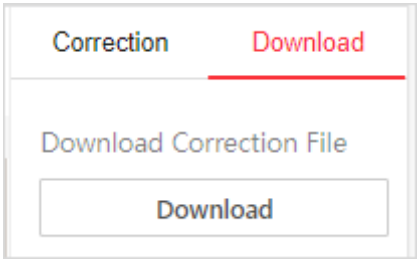


Figure 3-39 Download a Correction File

3.7 Quickly Maintain a Receiving Card

If the display is installed with a new receiving card, you can use this function to copy the configuration of the referenced receiving card to the new receiving card. Make sure the newly installed receiving card is connected with the sending card.

Step 1 Go to **Maintenance and Security** > **Receiving Card Quick Maintenance**.

Step 2 Select a receiving card and click **Set as Reference Card**.

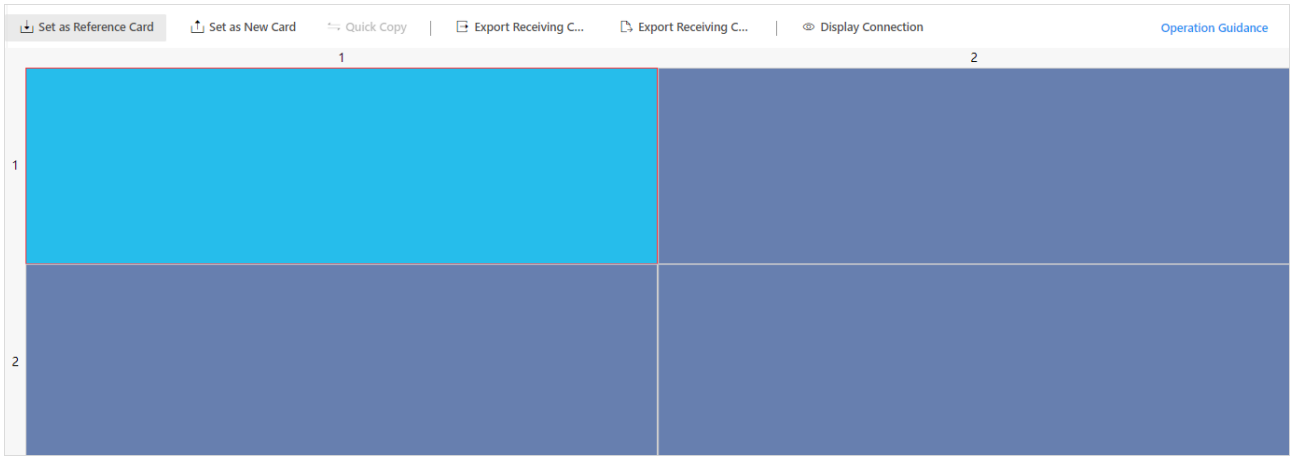


Figure 3-40 Set as the Reference Card

Step 3 Select a receiving card and click **Set as New Card**.

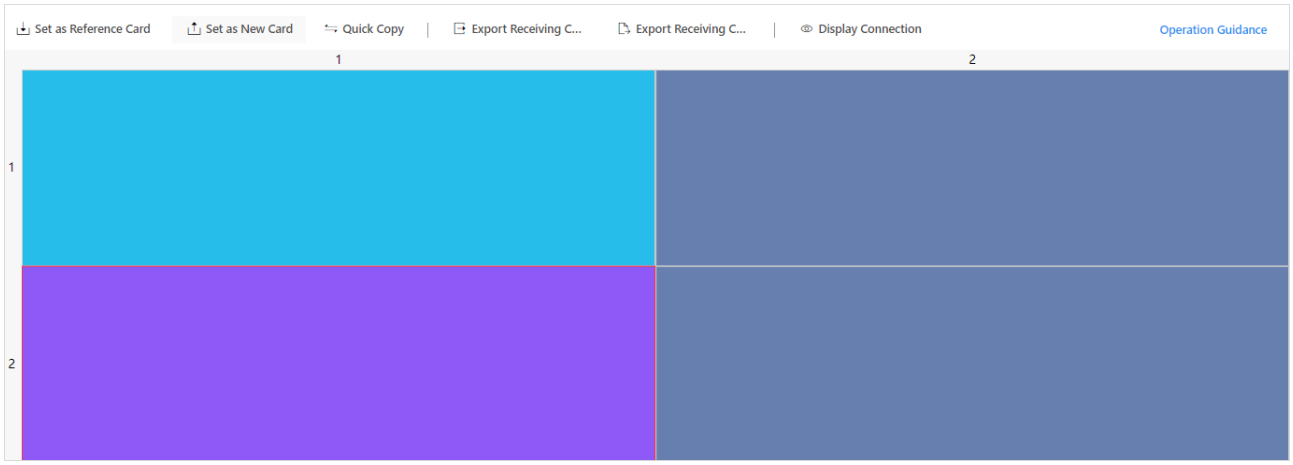


Figure 3-41 Set as a New Card

Step 4 Click **Quick Copy** to copy the configuration file of the reference card to the new card.

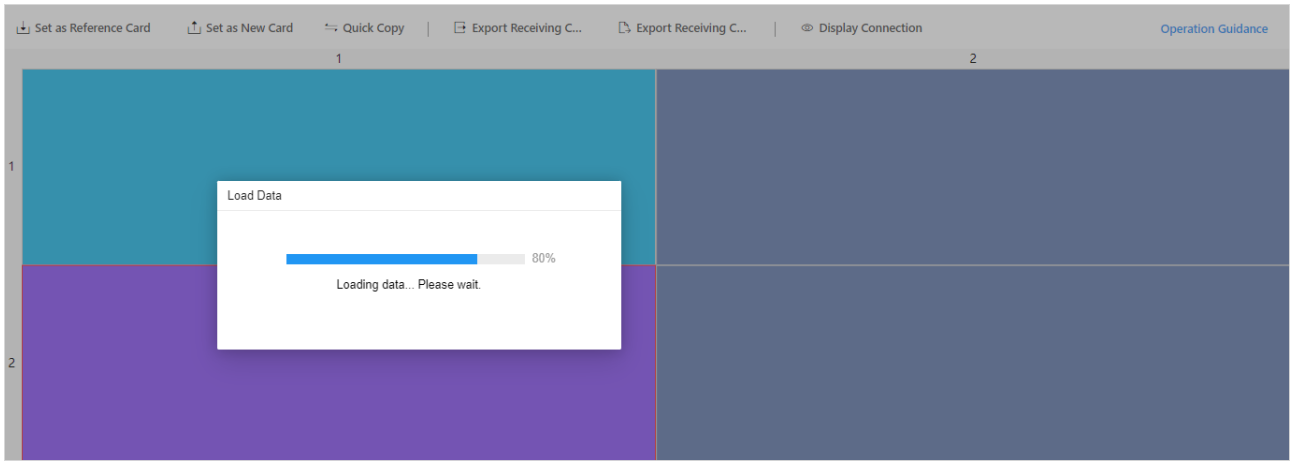


Figure 3-42 Quickly Set the New Card

Step 5 (Optional) You can perform the following operations as required:

- Click **Export Receiving Card Program** at the top of the page to export the program file of the receiving card.
- Click **Export Receiving Card Configuration File** at the top of the page to export the configuration file of the receiving card.
- Click **Display Connection** at the top of the page. Thus, you can view the sending card signal connection.

3.8 Configure Timed Operations

3.8.1 Configure Timed Screen On/Off

Step 1 Go to **Configuration** > **Timed Screen On/Off**.

Step 2 Enable timed screen on/off.

Step 3 On the schedule list, click and drag the mouse to select the start time and end time.

Step 4 Click **OK**.

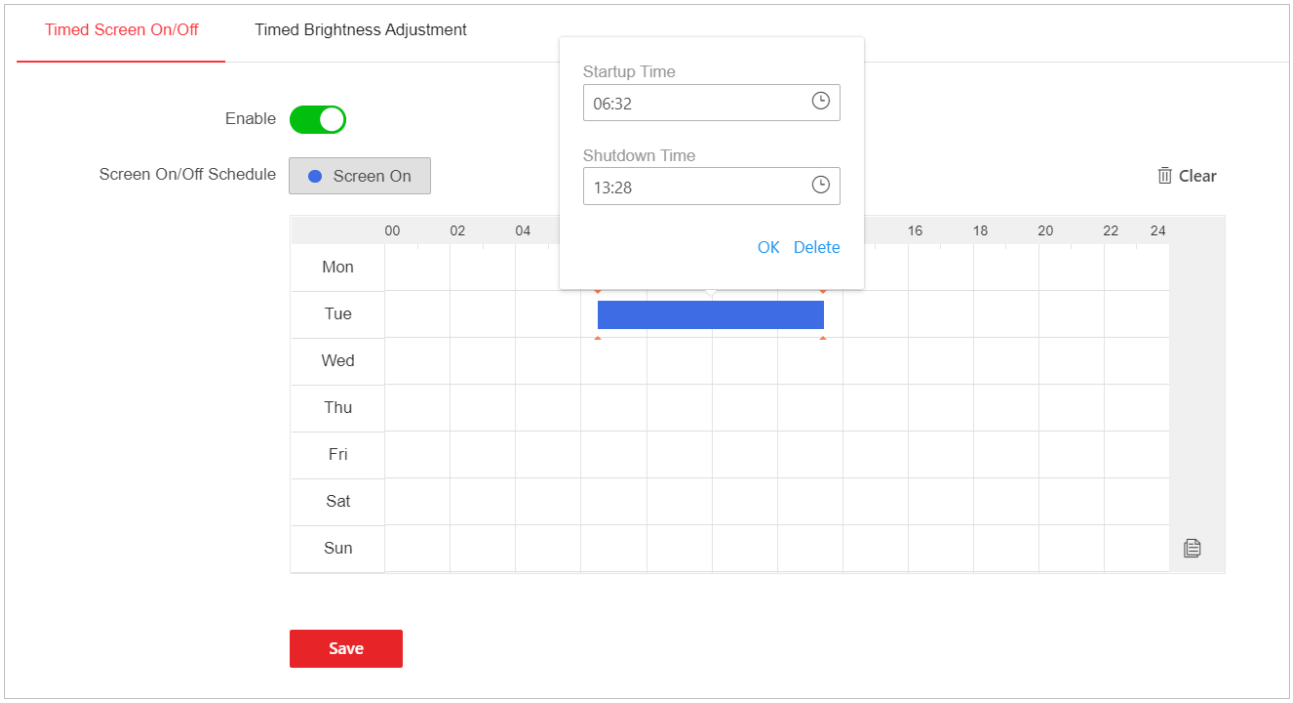


Figure 3-43 Configure Timed Screen On/Off

Step 5 (Optional) You can perform the following operations as required:

- If you want to change the start time and end time, you can move the duration bar or click to set the start time and end time.
- Click **Clear** to clear all schedule items.

- Click  to copy the current schedule item settings to the selected weekdays and weekends.

Step 6 Click **Save**.

3.8.2 Configure Timed Brightness Adjustment

Step 1 Go to **Configuration** > **Timed Brightness Adjustment**.

Step 2 Enable timed brightness adjustment.

Step 3 On the schedule list, click and drag the mouse to select the start time and end time.

Step 4 Draw the brightness bar or enter the brightness value to configure the target brightness value.

Step 5 Click **OK**.

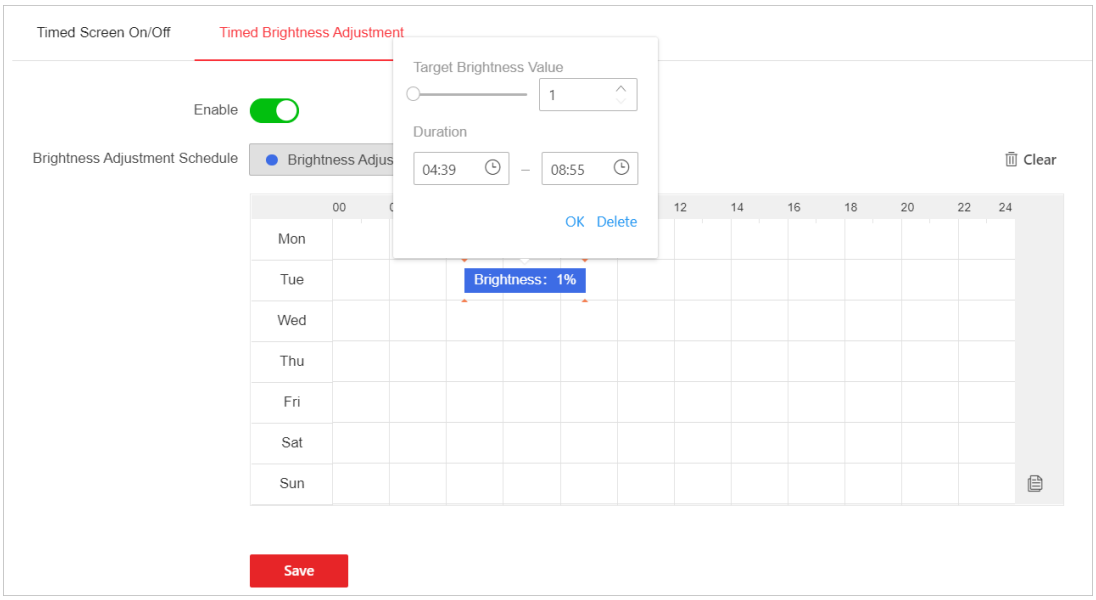


Figure 3-44 Configure Brightness Adjustment

Step 6 (Optional) You can perform the following operations as required:

- If you want to change the start time and end time, you can move the duration bar or click  to set the start time and end time.
- Click **Clear** to clear all schedule items.
- Click  to copy the current schedule item settings to the selected weekdays and weekends.

Step 7 Click **Save**.

Chapter 4 Device Configuration and Maintenance

4.1 View Device Basic Information

Go to **Overview** to view the basic information of the sending card and receiving card.

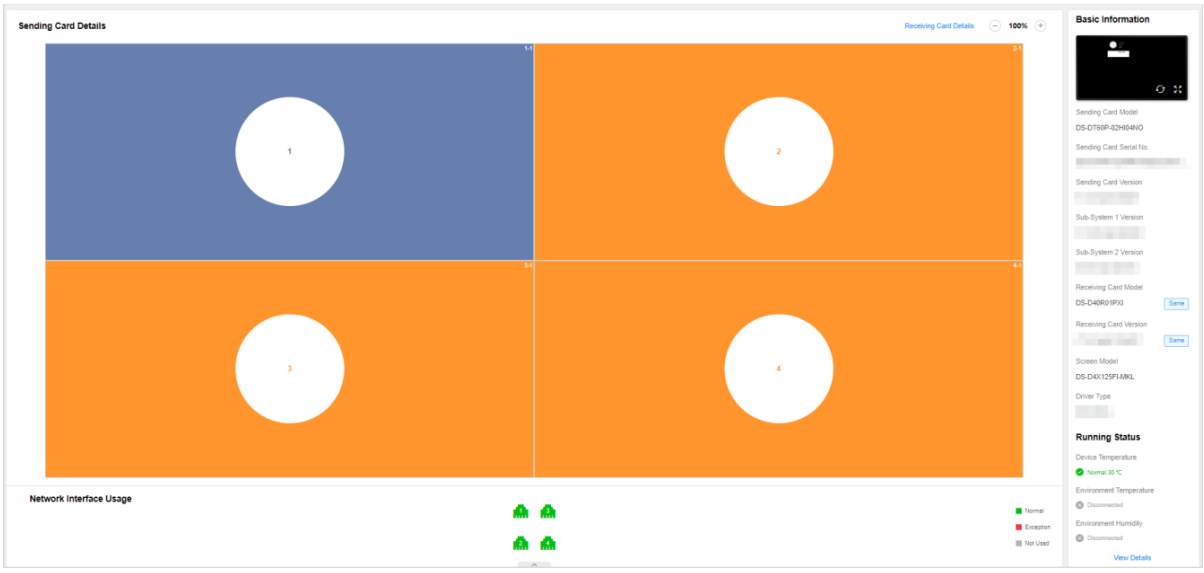


Figure 4-1 Overview Page

- Click **View Details** in the bottom right corner of the **Overview** page to enter the **Basic Information** page.
- Click **Receiving Card Details** at the top of the **Overview** page to view the detailed information of the receiving card.

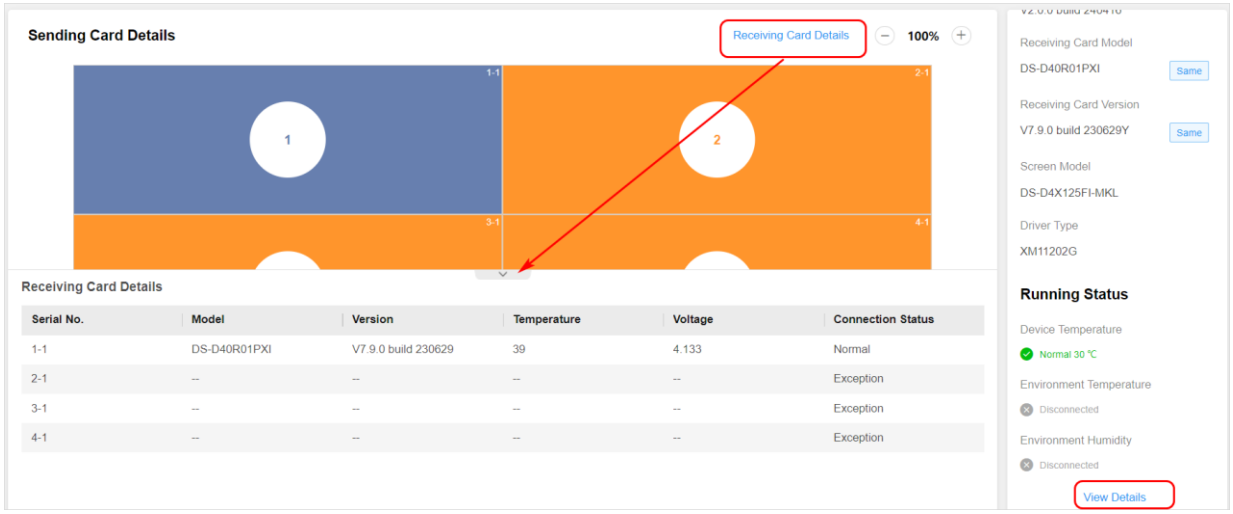


Figure 4-2 View Details

4.2 Configure System Parameters

Go to **Configuration** > **System Configuration** to view and configure the following parameters:

- Click **Basic Information** to view its basic information, running status, and system status.

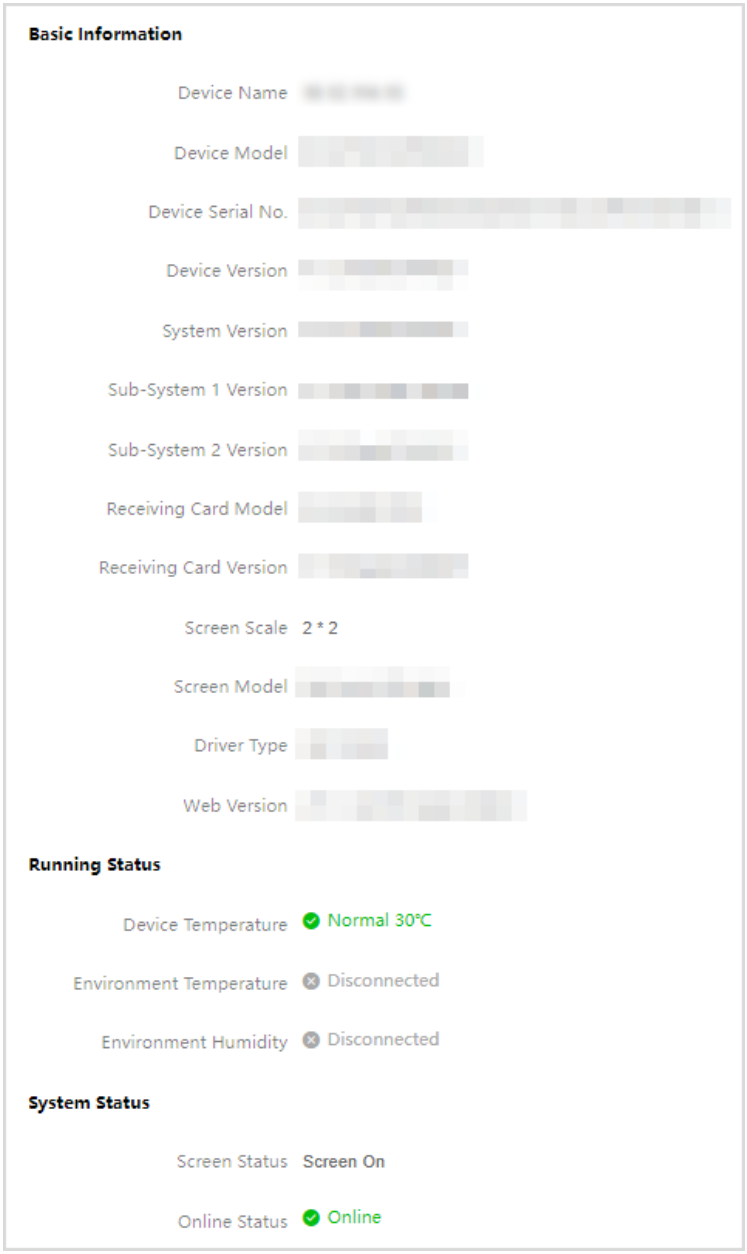


Figure 4-3 View Basic Information

- Click **Time Settings**.
  1) Select a time zone.
  2) Select the time sync mode and set the time:
     - Select **Manual Time Sync**, and then enter the time or click **Sync with Computer Time** to make the device time consistent with the computer time.

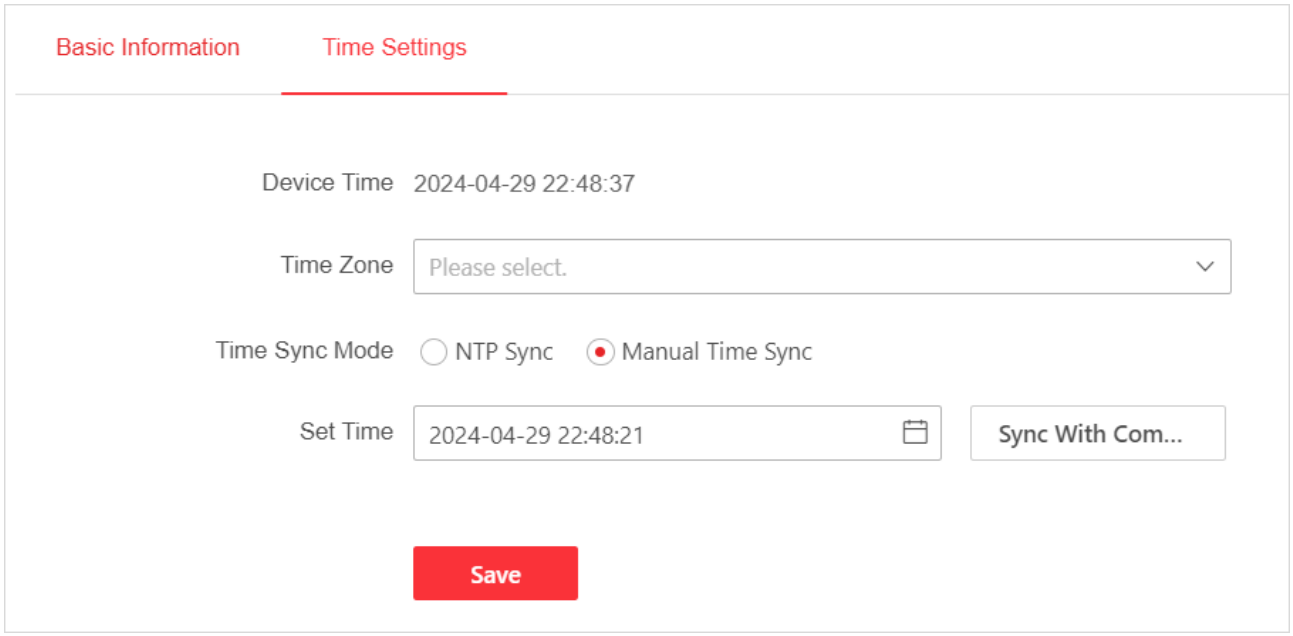


Figure 4-4 Manual Time Sync

– Select NTP Sync, and then enter the server address, NTP port, and interval.

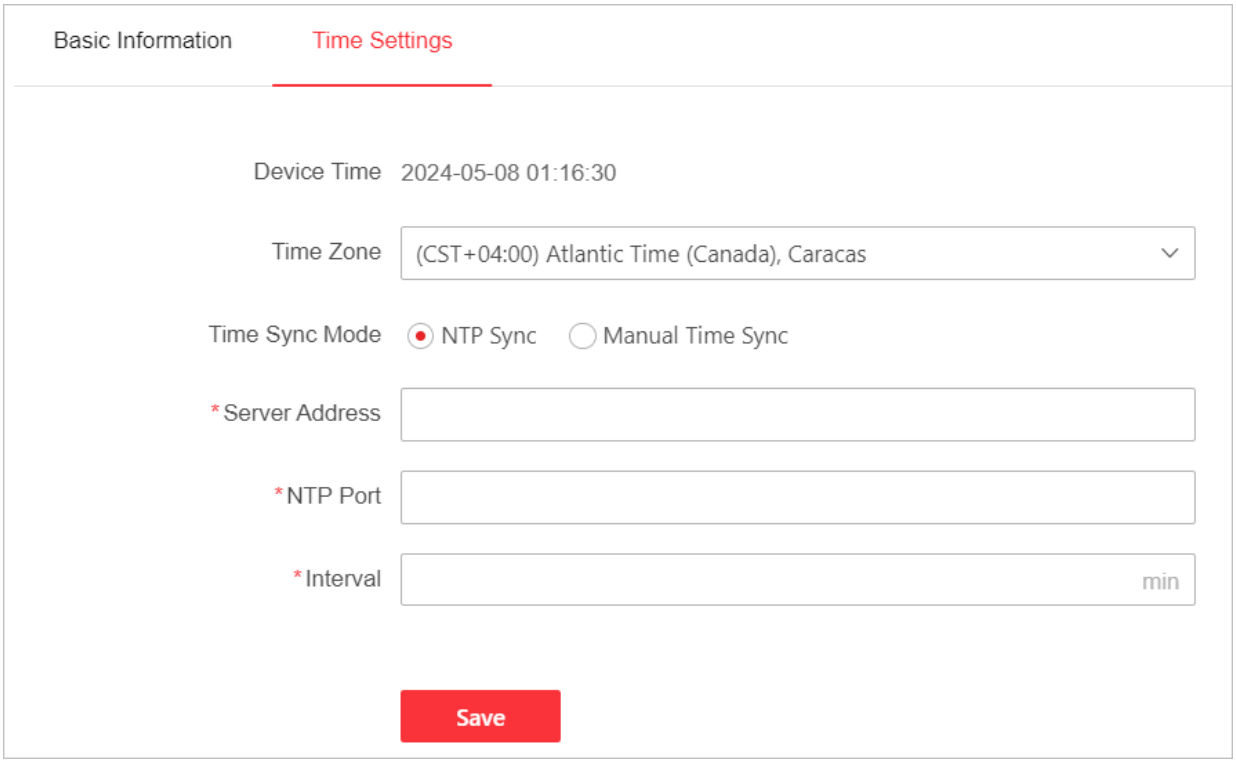


Figure 4-5 NTP Sync

3) Click **Save**.

4.3 Configure Network Parameters

4.3.1 Enable Wi-Fi

Before enabling Wi-Fi, connect a Wi-Fi antenna to the WIFI STA port.

Step 1 Go to **Configuration** > **Network Configuration** > **Wi-Fi Settings**.

Step 2 Enable Wi-Fi.

The available Wi-Fi networks will be displayed in the list.

Step 3 (Optional) If you need to connect to a specific Wi-Fi network that is not in the list, click **Manually Add**. Enter the Wi-Fi name, select the security, and enter the required information.

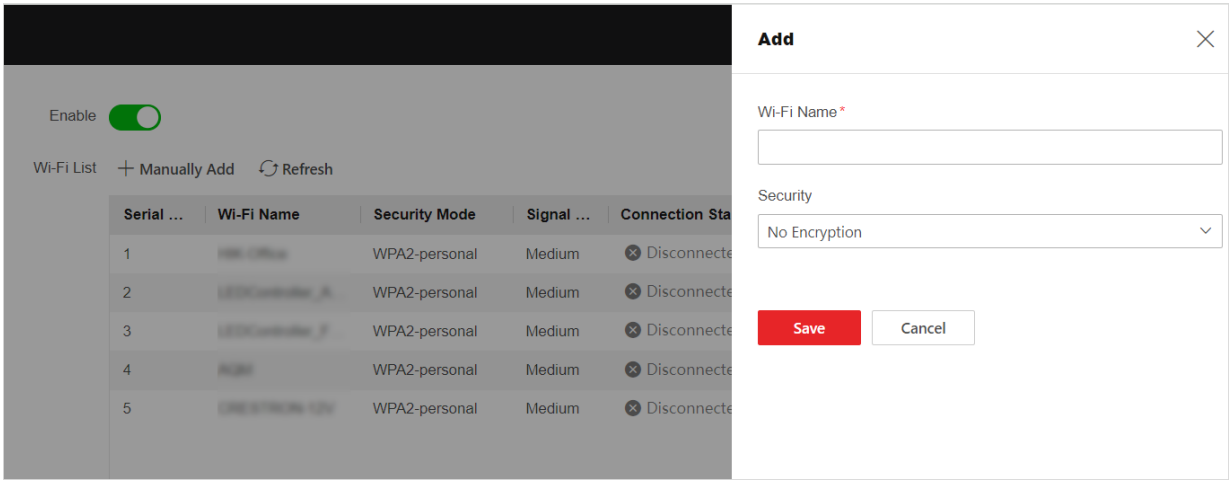


Figure 4-6 Enable Wi-Fi

Step 4 Click **Connect** to connect the device to a Wi-Fi network.

If the device is connected to both a wired network and a Wi-Fi network, the Wi-Fi network is preferred.

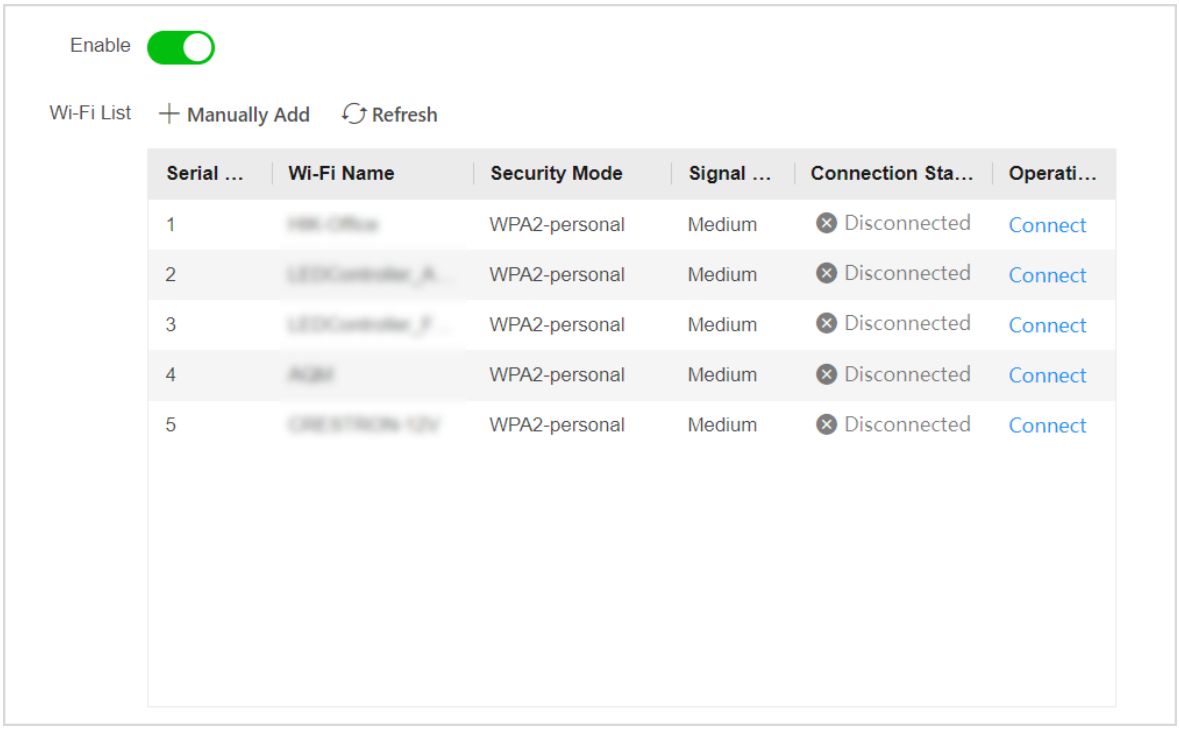


Figure 4-7 Connect the Device to a Wi-Fi Network

4.3.2 Enable Bluetooth

Before enabling Bluetooth, connect a Wi-Fi antenna to the WIFI STA port.

Step 1 Go to **Configuration** > **Network Configuration** >**Bluetooth Configuration**.

Step 2 Enable Bluetooth.

All available Bluetooth networks within 10 meters of the device will be displayed in the list.

Step 3 Click **Pair** to connect the device to a Bluetooth network.

Step 4 Click **Save**.

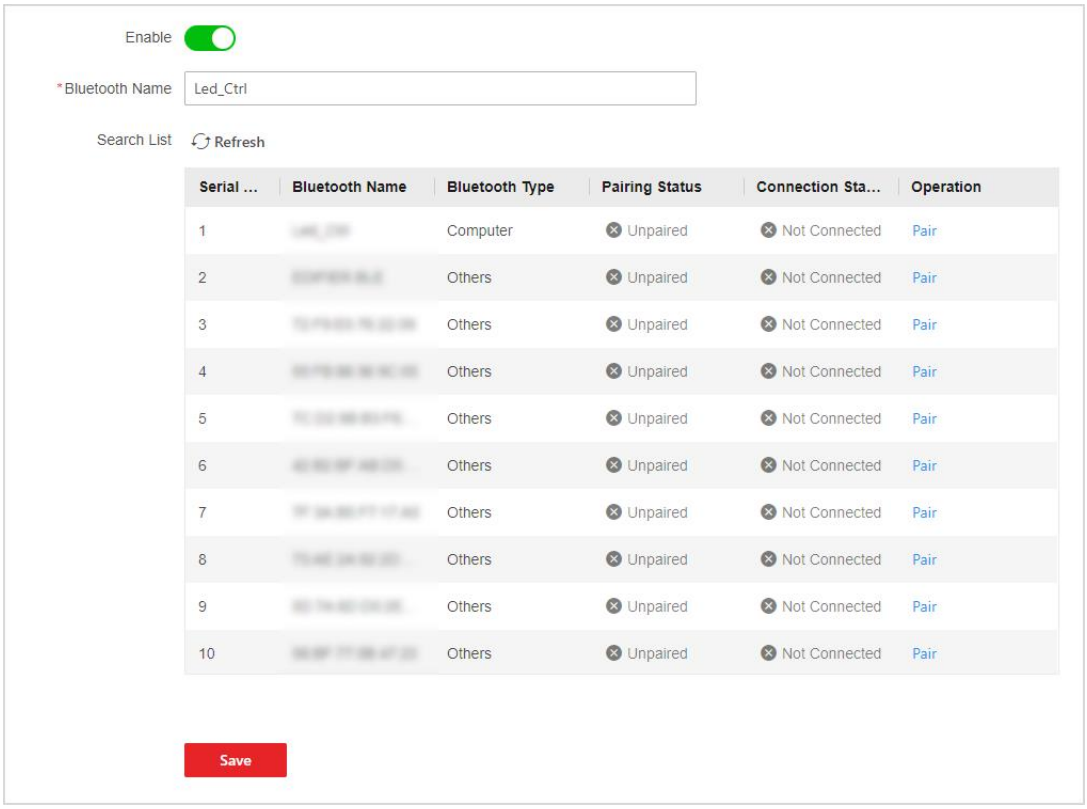


Figure 4-8 Enable Bluetooth

4.3.3 Enable Hot Spot

Before enabling hot spot, connect a Wi-Fi antenna to the WIFI AP port.

Step 1 Go to **Configuration** > **Network Configuration** >**Hot Spot Configuration**.

Step 2 Enable hot spot.

Step 3 (Optional) You can perform the following operations as required:

- If you want to change the default hot spot name, edit the name.
- If you want to change the password assigned randomly by the system, edit the password.
- Select an AP band and the AP channel.

Step 4 Click **Save**.

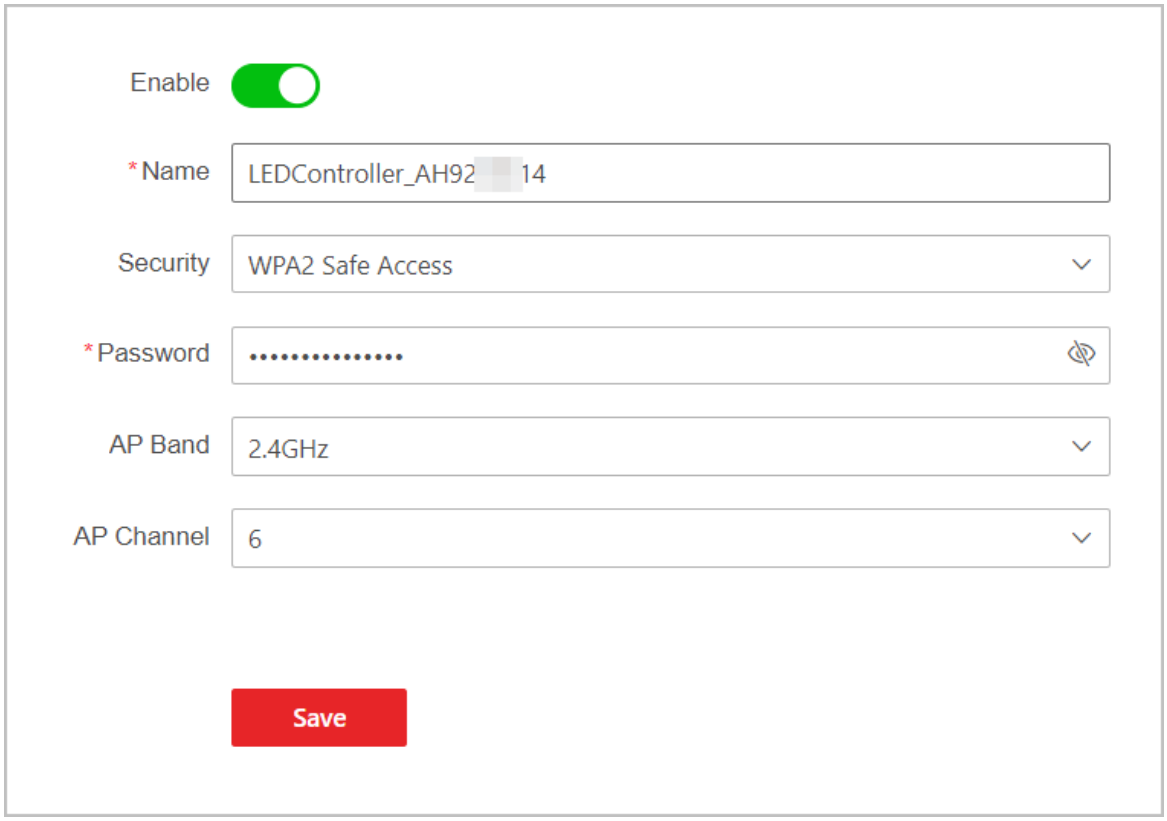


Figure 4-9 Enable Hot Spot

4.4 Maintain the System

Go to **Maintenance and Security** > **System Maintenance** to perform the following operations as required:

- Click **Restart** to restart the sending card or receiving card.

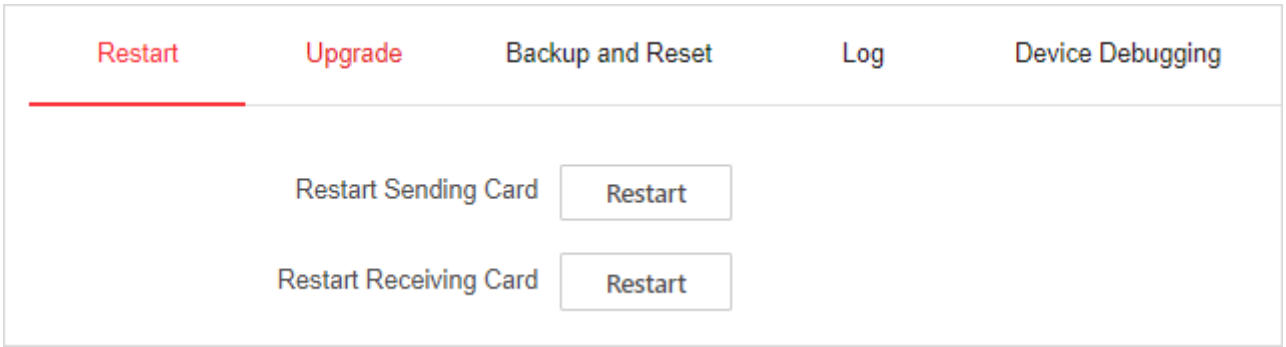


Figure 4-10 Restart Device

- Click **Upgrade**, select an upgrade file and click **Upgrade**.

Note

- Do not power off the device during the upgrade process.
- If the device cannot run normally due to the upgrade failure, contact the supplier timely.
- After the upgrade process is complete, the device restarts automatically.

Figure 4-11 Upgrade Device

- Click **Backup and Reset** to export the sending card configuration file or receiving card configuration file.
- Click **Backup and Reset** to reset the device:
  - Click **Restore Default** to restore the display effect and receiving card parameters to the factory settings. Please use this function with caution.
  - Click **Restore Factory** to restore all functions and parameters to the factory settings. Please use this function with caution.
- Click **Backup and Reset**. Click to select a locally saved configuration file and click **Upload**.

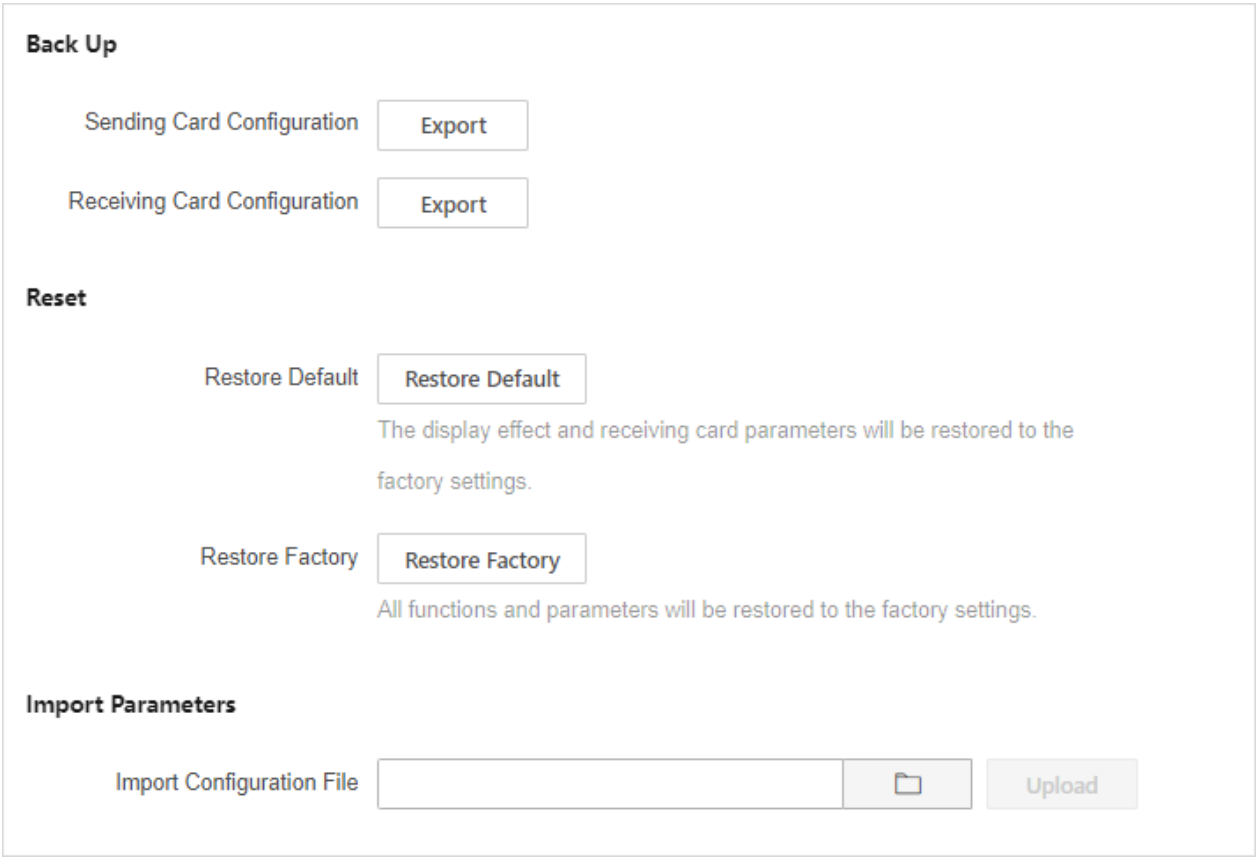


Figure 4-12 Back Up and Reset Device Parameters

- Click **Log**. Set the search condition and click **Search**. You can view the searched logs in the list below. You can click **Export** to export the logs.

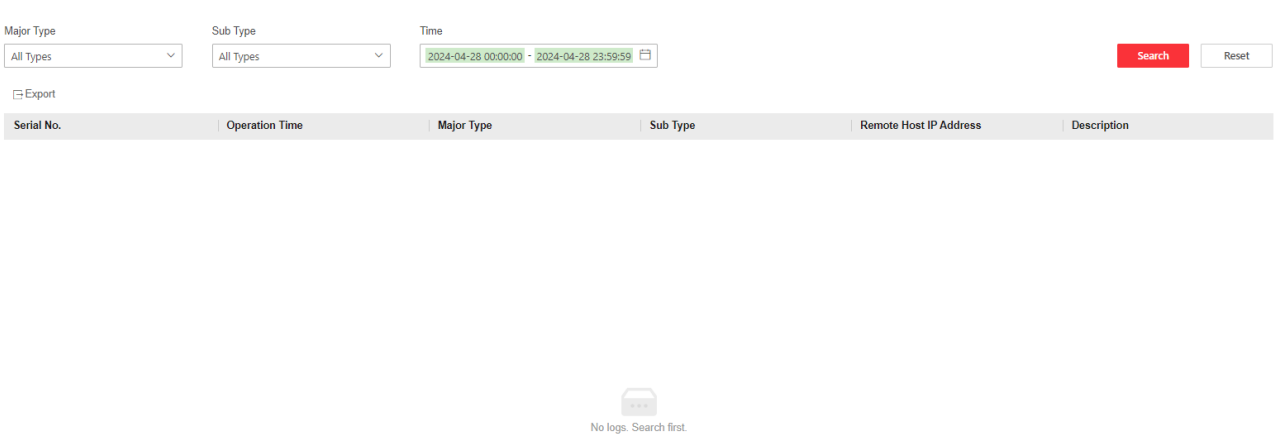


Figure 4-13 Search Logs

- Click **Device Debugging** to configure the following parameters:
  - Enable **Log Records** to record the Android system maintenance logs.
  - Click **Export** to export the Android system maintenance logs.
  - Enable **ADB Debugging**, and then use the Android Debug Bridge (ADB) tool and the device activation password to maintain the Android system of the device.
  - If the device supporting dual power supply is installed with two power supplies, you can enable **Dual Power Supply**. When one power supply fails, you can view the relevant prompt on the device web page.
  - Enable cabinet voltage detection and set the high threshold and low threshold of the cabinet voltage. When the threshold is exceeded, you can view the relevant prompt and current voltage value on the device web page and display.
  - Enable cabinet temperature detection and set the threshold. When the threshold is exceeded, you can view the relevant prompt and current temperature value on the device web page and display.
  - Enable sending card temperature detection and set the threshold. When the threshold is exceeded, you can view the relevant prompt and current sending card temperature value on the device web page and display.
  - Connect a temperature sensor to the receiving card, and then enable environment temperature detection and set the threshold. When the threshold is exceeded, you can view the relevant prompt and current environment temperature value on the device web page and display.
  - Connect a humidity sensor to the receiving card, and then enable environment humidity detection and set the threshold. When the threshold is exceeded, you can view the relevant prompt and current environment humidity value on the device web page and display.

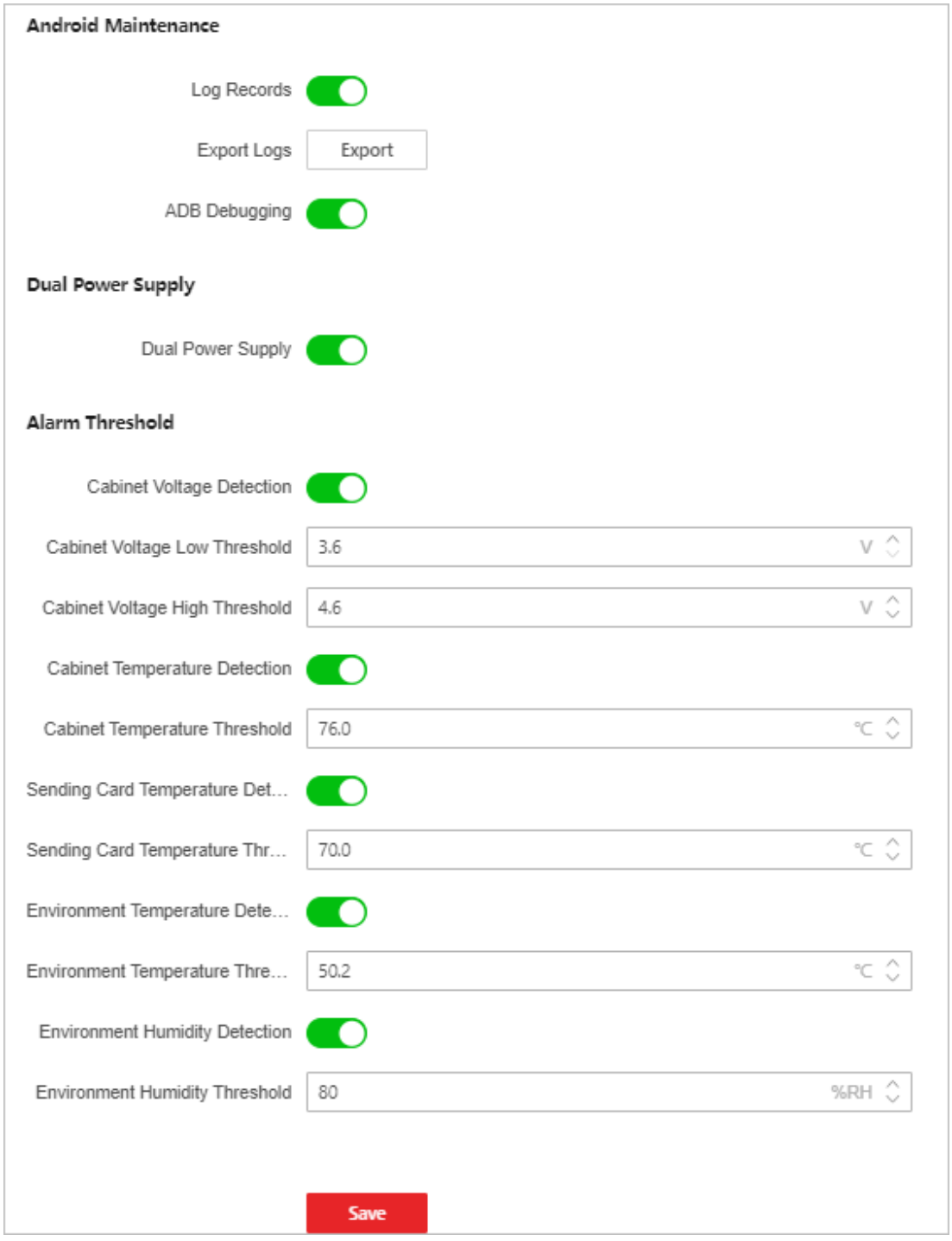


Figure 4-14 Configure Device Debugging Parameters


See Far, Go Further