
# Video Wall Controller

User Manual

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# Preface

## Applicable Models

This manual is applicable to the C30S series video wall controller.

## Default Parameters

| Type | Default Parameter |
| --- | --- |
| Device | • Login user name: admin<br>• IP address: 192.0.0.64 |
| 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. |

# Safety Instructions

**Caution**

In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.

**Note**

- Provide a surge suppressor at the inlet opening of the device under special conditions such as the mountain top, iron tower, and forest.
- + identifies the positive terminals of the device which is used with, or generates direct current, and - identifies the negative terminals of the device which is used with, or generates direct current.
- The USB port of the device is used for connecting to a mouse, a keyboard, or a USB flash drive only. The current for the connected device shall be not more than 0.1 A.
- The serial port of the device is used for debugging only.
- The interface varies with the models. Please refer to the product datasheet for details.
- In case of cyber security problems when the device is accessing the Internet, please strengthen the protection of your personal information and data security. Pease contact us in time if there is any possible network security risks.
- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

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# Chapter 1 Introduction

## 1.1 Overview

As a new-generation FPGA-based hardware image processing device, the DS-C30S series video wall controller (hereinafter referred as the device or the controller) has a new system architecture, adopts dual data exchange technology, and uses main control board plus input board and output board. It supports large-capacity data transmission and processing, multi-channel HD (High Definition) and UHD (Ultra High Definition) signal access and real-time processing, and multi-screen management. It is mainly used for large screen splicing control system, and is the core control device of the system.

## 1.2 First-Time Configuration Process

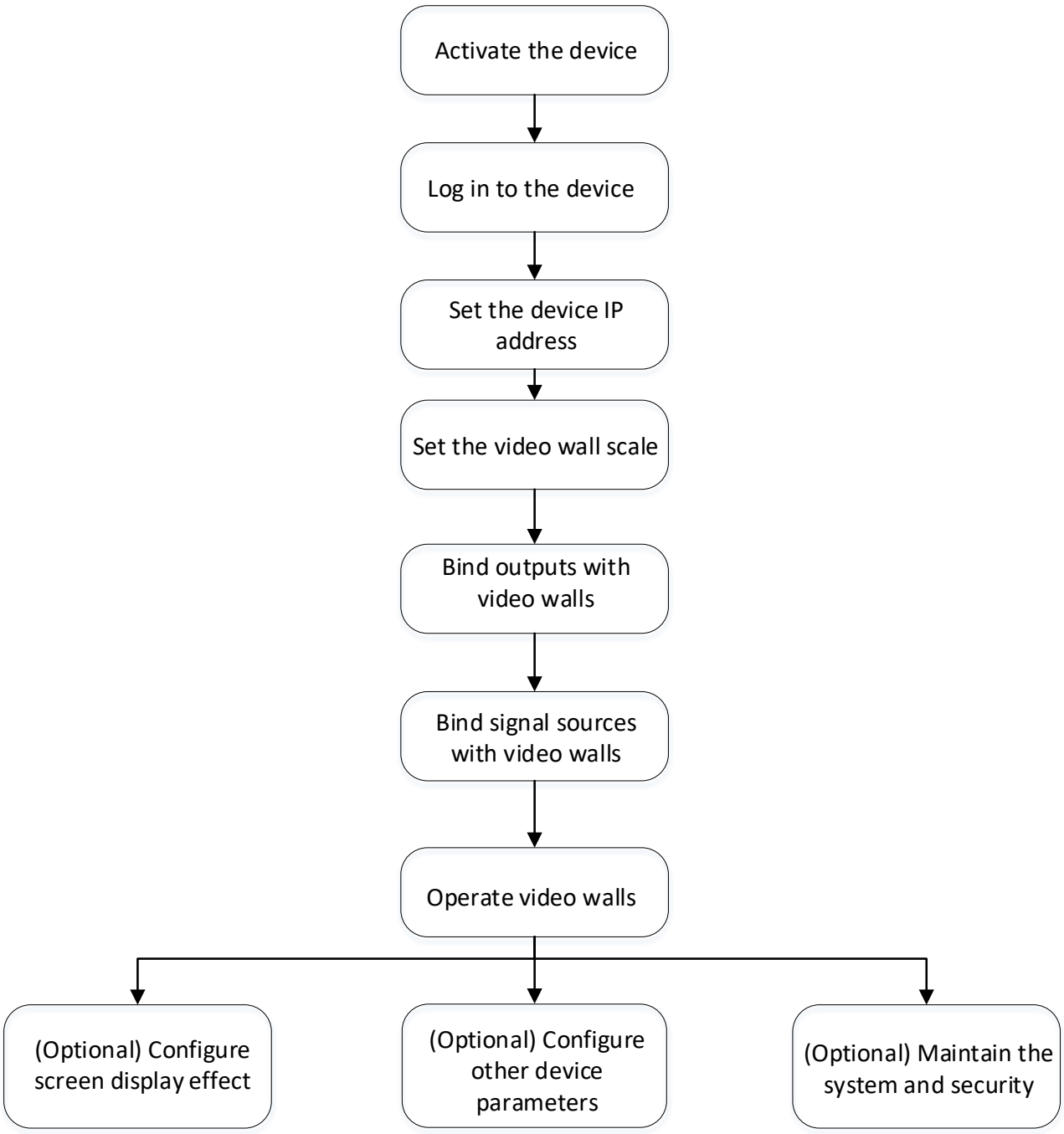


Figure 1-1 First-Time Configuration Process

# Chapter 2 Device Activation

First 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 via SADP Software

Step 1 Download the SADP software from the Hikvision website and install the SADP software.

Step 2 Open the SADP software.

Step 3 Select the device that is not activated.

**Note**

- When the computer is in the same network segment with the device, you can search the device using the SADP software in the computer.
- If the device cannot be searched through SADP, you can close the SADP software and restart the SADP software.

Step 4 Enter the password and confirm it in the right corner.

Step 5 Click **Activate**.

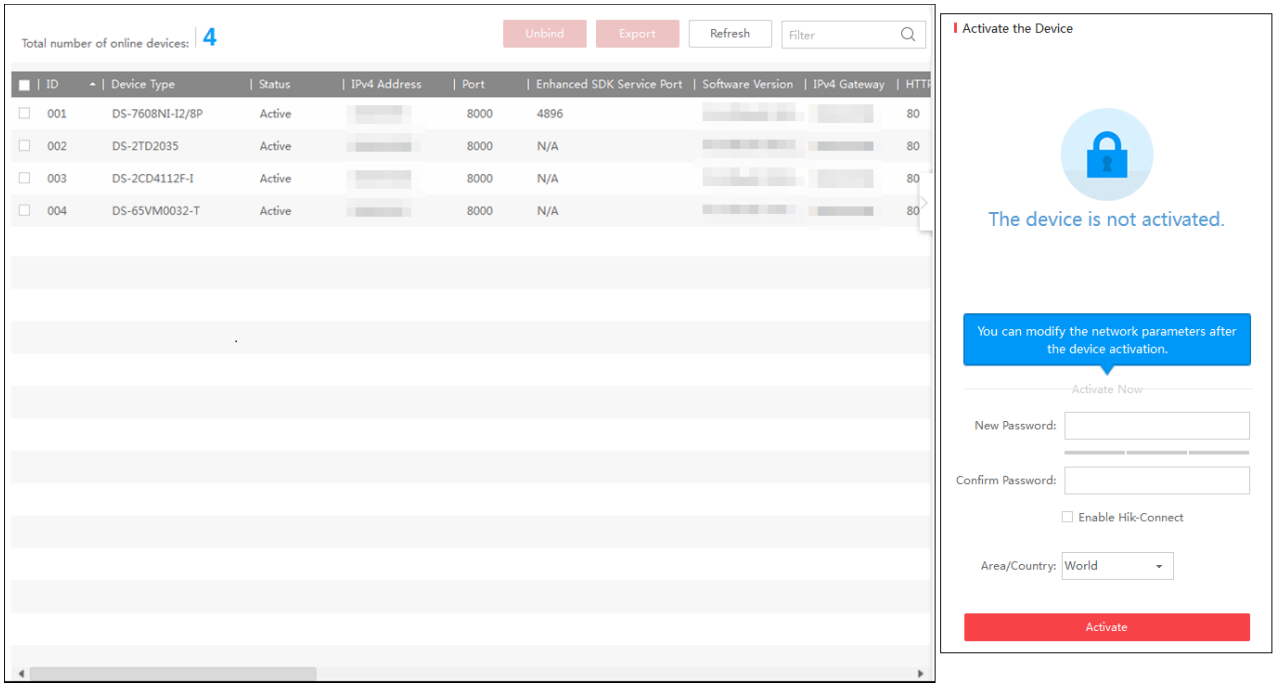


Figure 2-1 Activate the Device via SADP Software

## 2.2 Activate the Device via Web Browser

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

Step 2 Set an IP address for the computer.

**Note**

The IP address of the computer ranges from 192.0.0.2 to 192.0.0.253 (excluding 192.0.0.64). By default, the device IP address is 192.0.0.64.

Step 3 Enter 192.0.0.64 in the computer browser to enter the device activation page.

Step 4 Set the activation password.

Step 5 Click **Activate**.

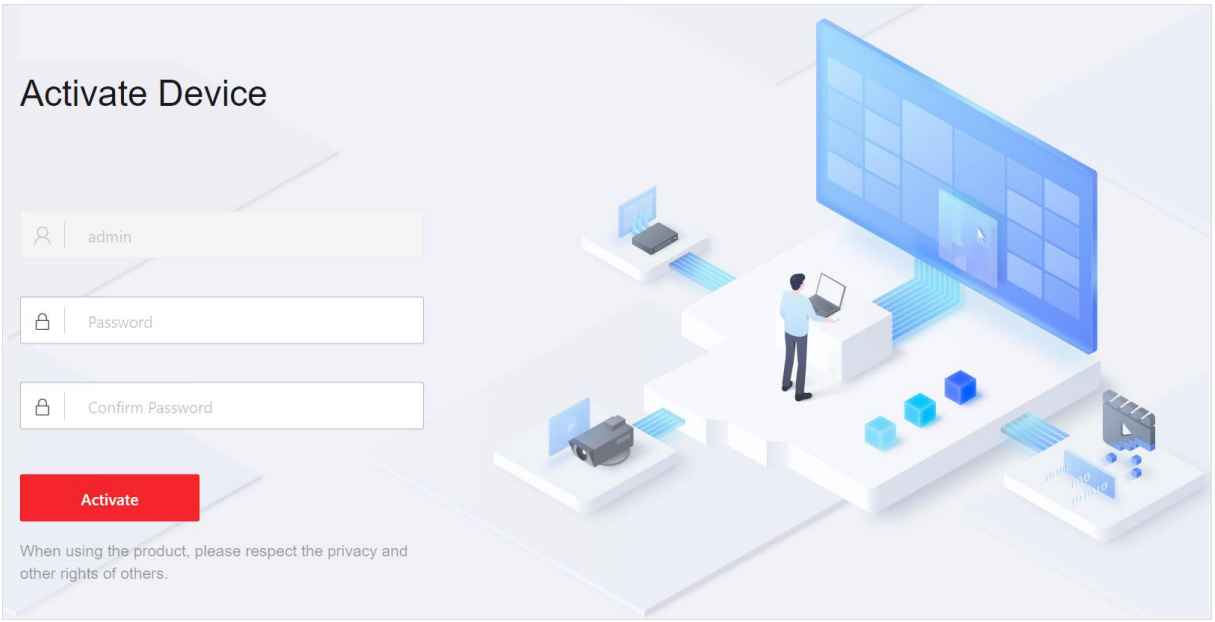


Figure 2-2 Activate the Device via Browser

# Chapter 3 Device Configuration

On the web page, you can configure video walls, operate video walls, configure the device parameters, and maintain system and device security.

## 3.1 Log In to the Device via Web Browser

Step 1 Enter the device factory IP address in the web browser of the computer.

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

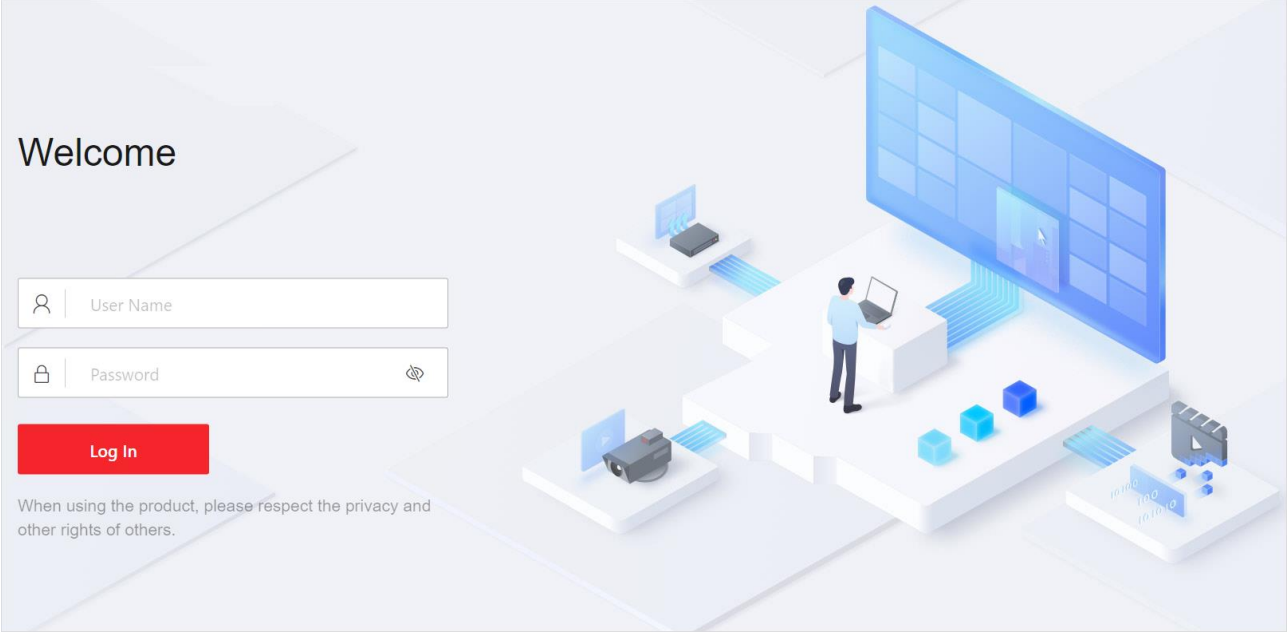


Figure 3-1 Login Page

Step 3 Click **Log In**.

## 3.2 Configure the Network Address

Step 1 Go to **Configuration** → **Network** → **Network Configuration** → **TCP/IP**.

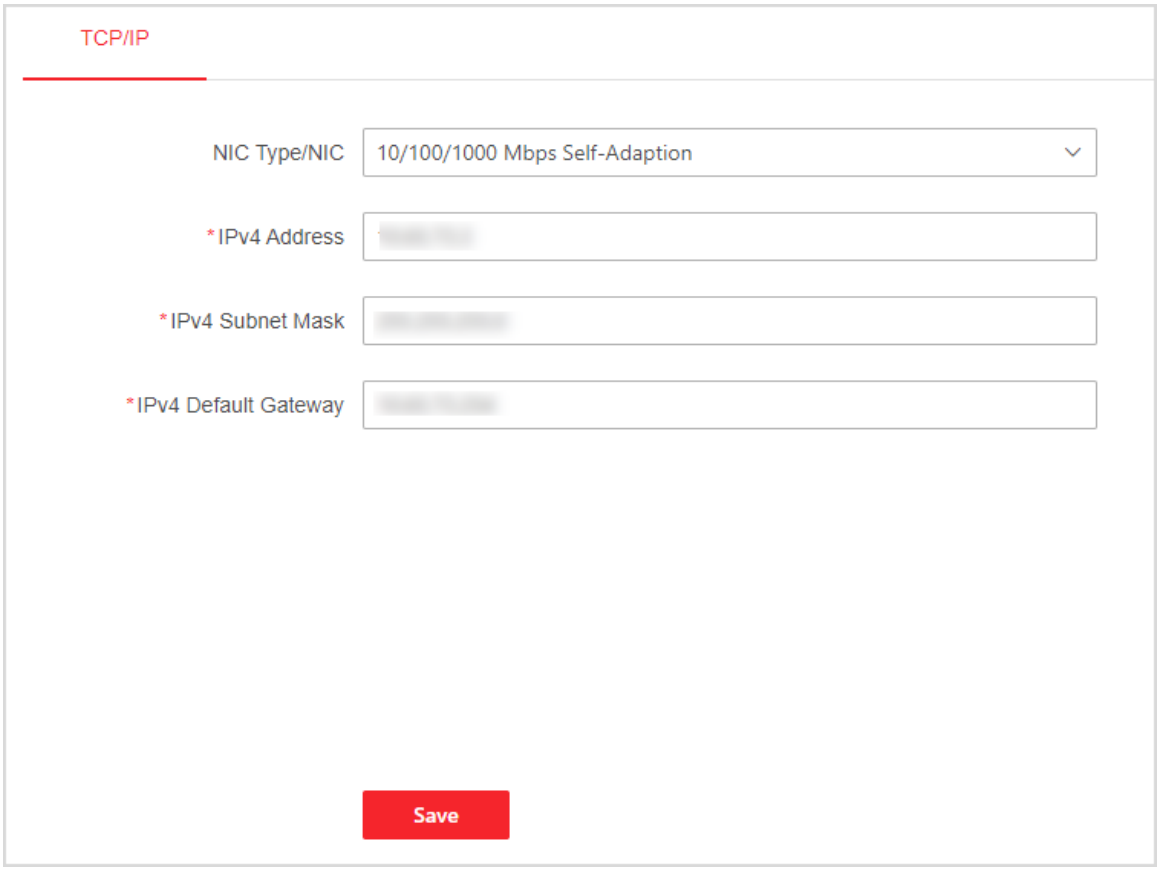


Figure 3-2 Configure the Device IPv4 Address

Step 2 Select the NIC type.

Step 3 Set the IPv4 address, IPv4 subnet mask, and IPv4 gateway.

Step 4 Click **Save**.

Step 5 Remove the network cable that connects the device and computer, and use the network cable to connect the device to the on-site network. Enter the configured device IP address in the web browser of the computer to log in to the web page of the device.

# 3.3 Configure a Video Wall

## 3.3.1 Configure the Video Wall Scale

Step 1 Go to **Video Wall Configuration**, select a video wall in the upper left corner and click **Edit Video Wall Specification**.

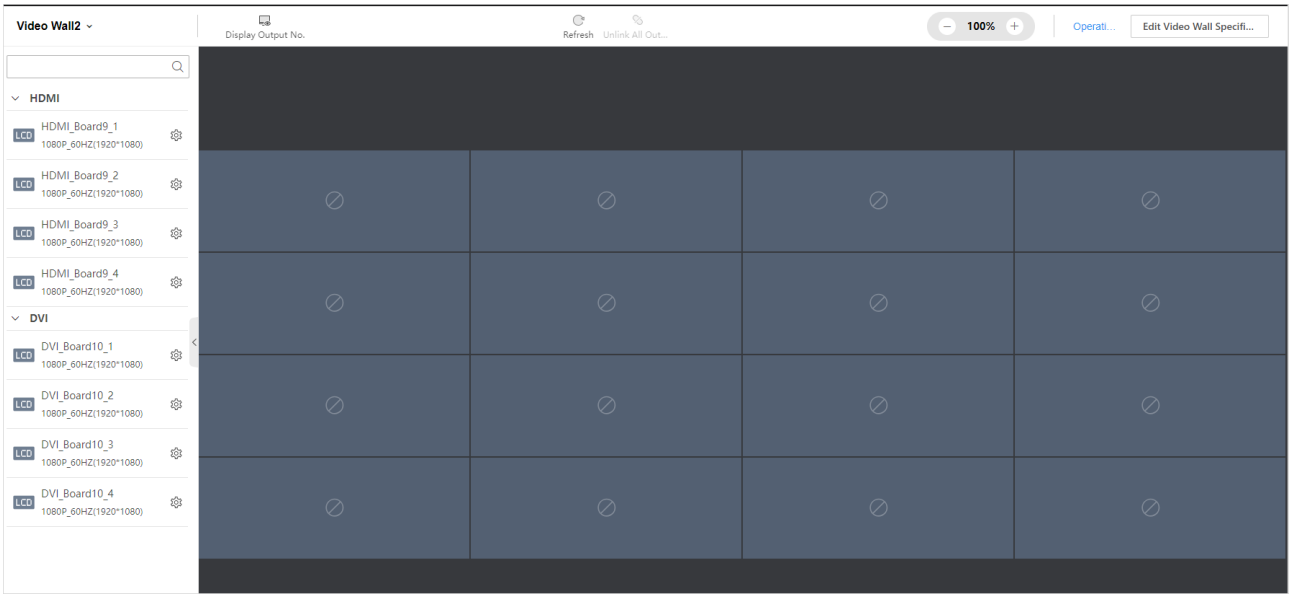


Figure 3-3 Video Wall Configuration Page

Step 2 According to the actual screen quantity, set the video wall scale and click **Save**.

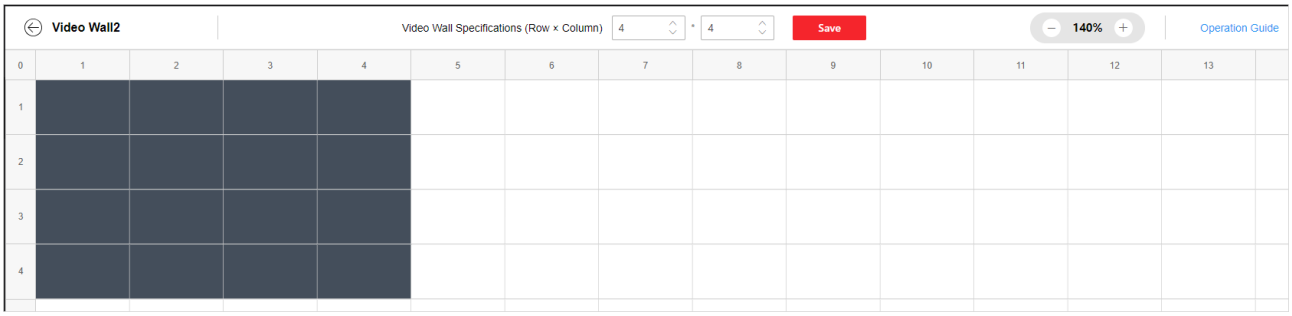


Figure 3-4 Set the Video Wall Scale

**Note**

You can also drag the mouse with the left button held to scale the video wall.

## 3.3.2 Bind Output Ports with Video Wall

**Note**

A video wall can contain one screen or multiple screens. At a time, one screen can join only one video wall, and one output port can be bound with only one screen.

Step 1 On the **Video Wall Configuration** page, drag output ports on the left to the video wall on the right.

**Note**

If all screens of the video wall are bound with output ports, click in the upper right corner of a screen and then bind another output port with the screen.

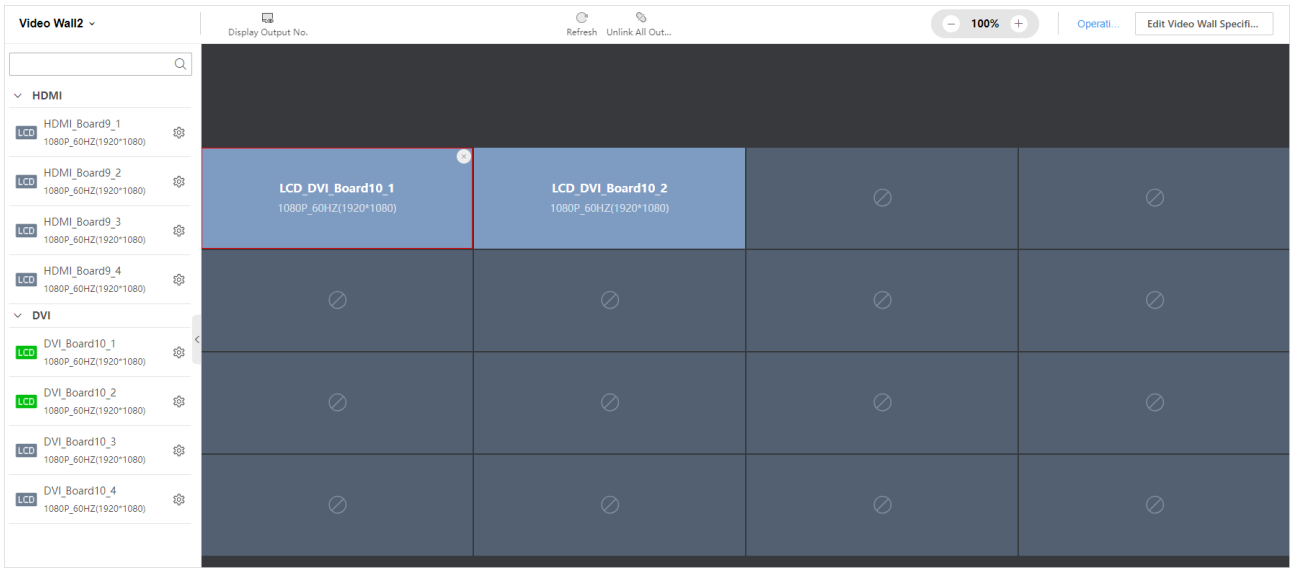


Figure 3-5 Bind Output Ports with Video Wall

Step 2 Click of an output port on the left to configure the following items:

- Set the output mode of the device according to the actual connection between the device and the screen. You can select HDMI and DVI.
- Select the output method according to the type of the connected screen. You can select LCD or LED.
- Set resolution according to the type of the connected screen.
  - Select LCD resolution if you select LCD output method.
  - If you select LED output method, you need to select clipping mode or loading mode and then set the resolution. Select clipping mode when the sending card resolution is less than 1080p. It is recommended to select loading mode when the sending card resolution is greater than 1080p (e.g., width is greater than 1920, height is greater than 1080).

**Note**

- For an output board with four HDMI ports or four DVI ports, the loading capacity of each port cannot exceed 2.6 MP.
- For an output board with two HDMI ports, the loading capacity of each port cannot exceed 8.8 MP.
- When an HDMI output port is configured with DVI mode, its loading capacity cannot exceed 2.3 MP.

Step 3 (Optional) Click **Copy To** to copy the current configuration to other selected output ports.

Step 4 Click **Save**.

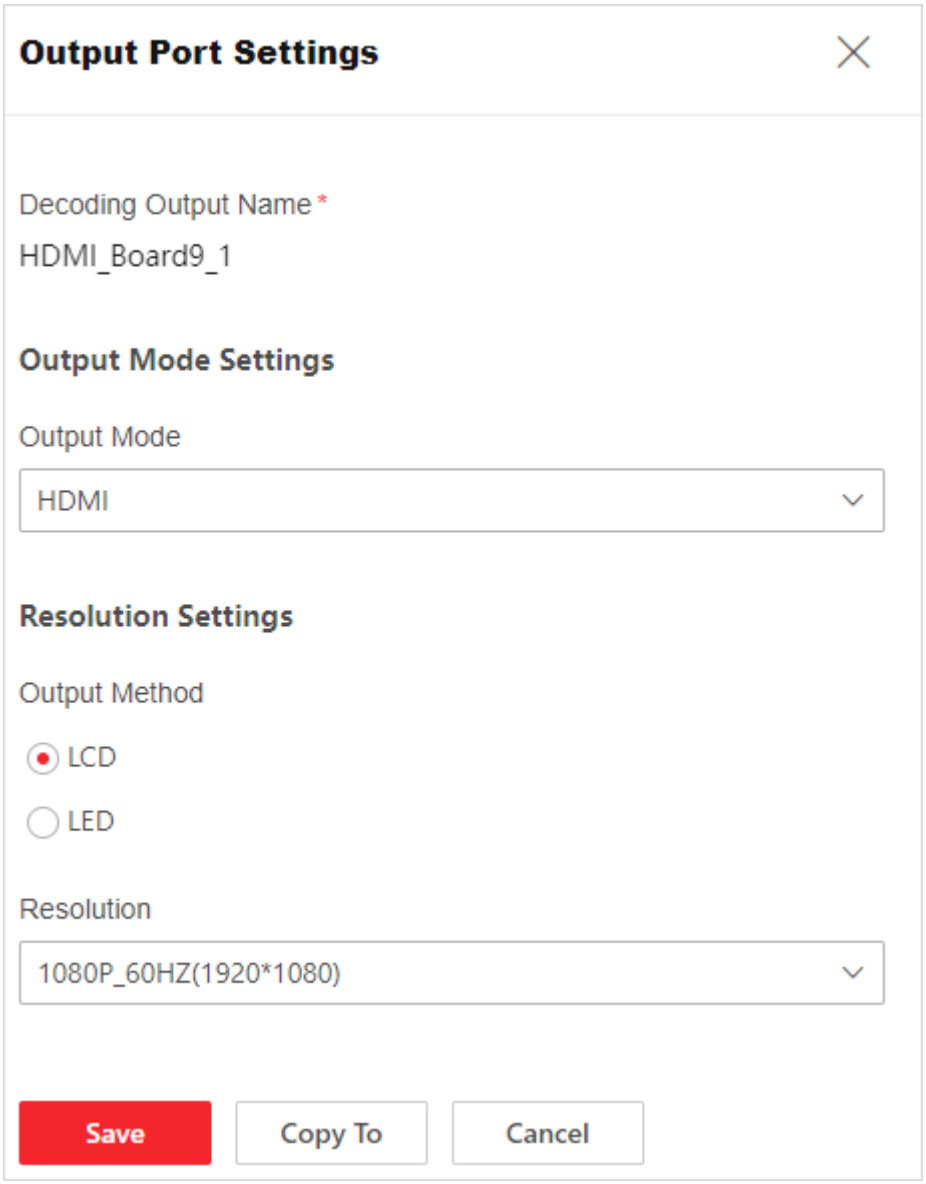


Figure 3-6 Configure Output Port

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

- Click **Unlink All Output Ports** at the top of the **Video Wall Configuration** page, then click **OK** on the pop-up window.
- Click **Display Output No.** at the top of the **Video Wall Configuration** page to display the output port number on the screen.
- Click **Refresh** at the top of the **Video Wall Configuration** page to refresh the video wall configuration.

## 3.3.3 Configure a Sending Card

To bind a sending card to the video wall, go to **Video Wall Configuration**, and then click of the selected sending card to configure the signal connection, display effect and screen correction or to view the receiving card status.

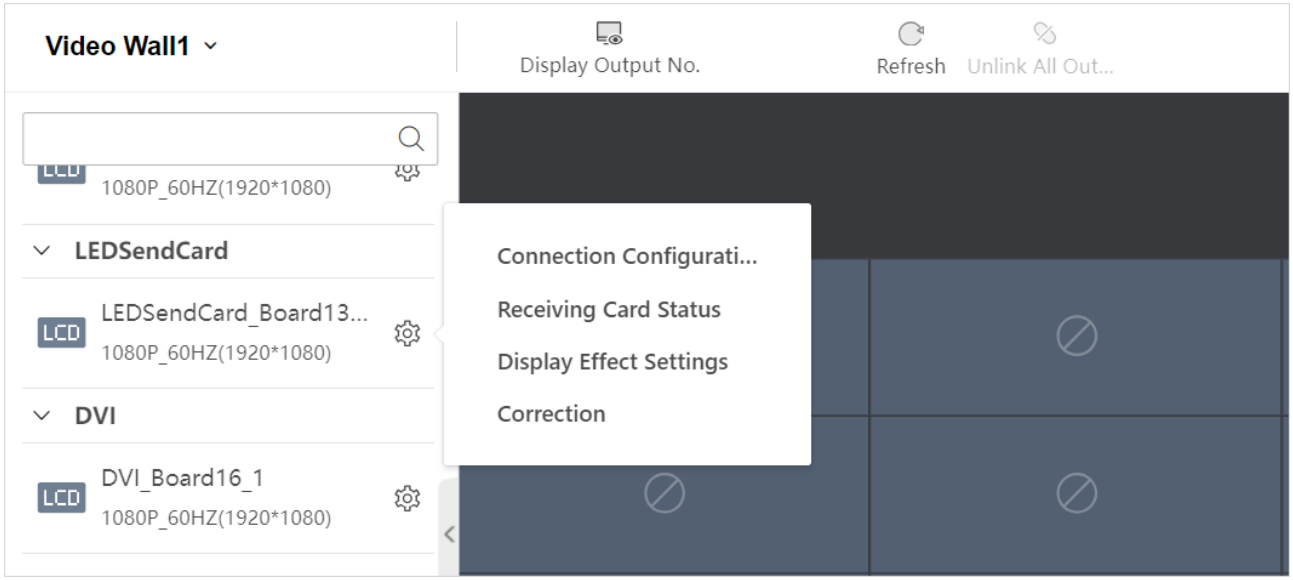


Figure 3-7 Configure Sending Card

### Configure Connection

When the loading modes of multiple receiving cards controlled by one sending card are the same, select **General Configuration**. Otherwise, select **Complex Settings**.

- Click **General Configuration** and complete the following parameters:
  1) Configure the scale, type and resolution of the screen, and click **Next**.

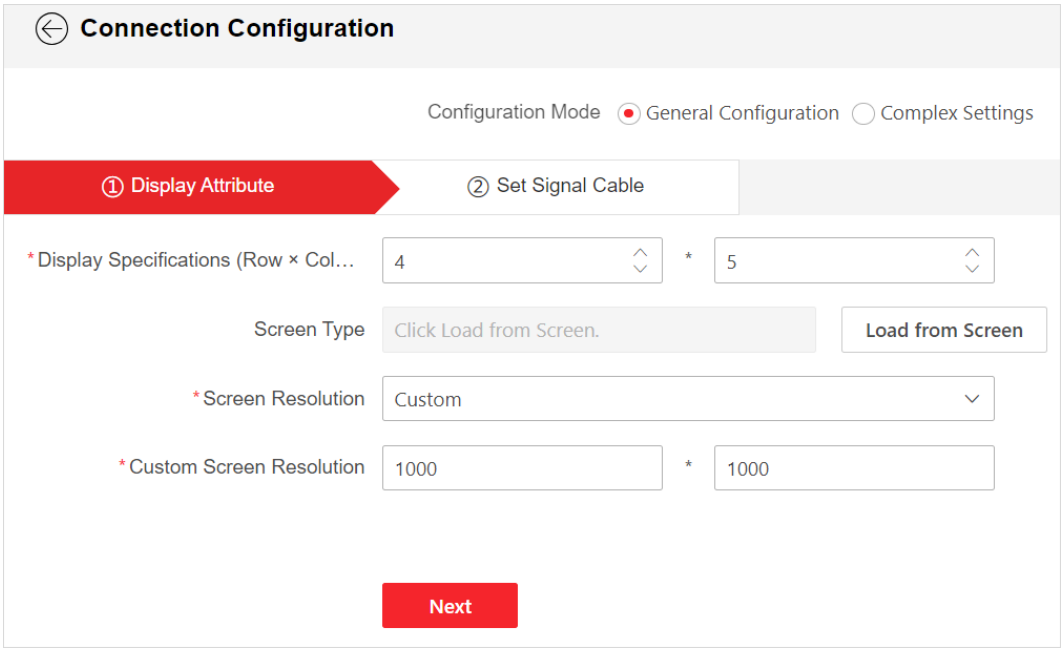


Figure 3-8 Set Screen Attribute

2) Select a sending port, and click the screen to finish the signal connection.
3) Select other sending ports to finish the signal connection.
4) Click **Save**.

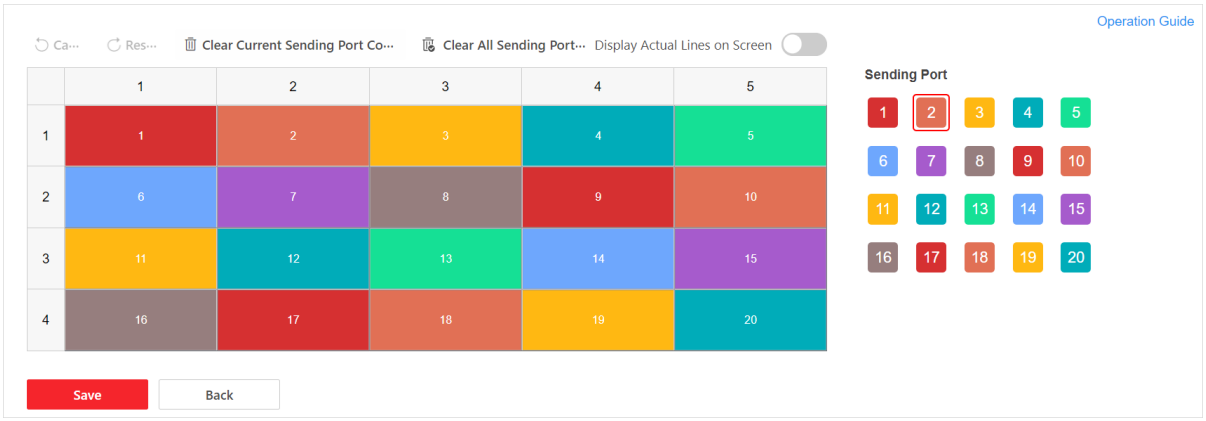


Figure 3-9 Set Signal Connection

- Click **Complex Settings** and complete the following parameters:

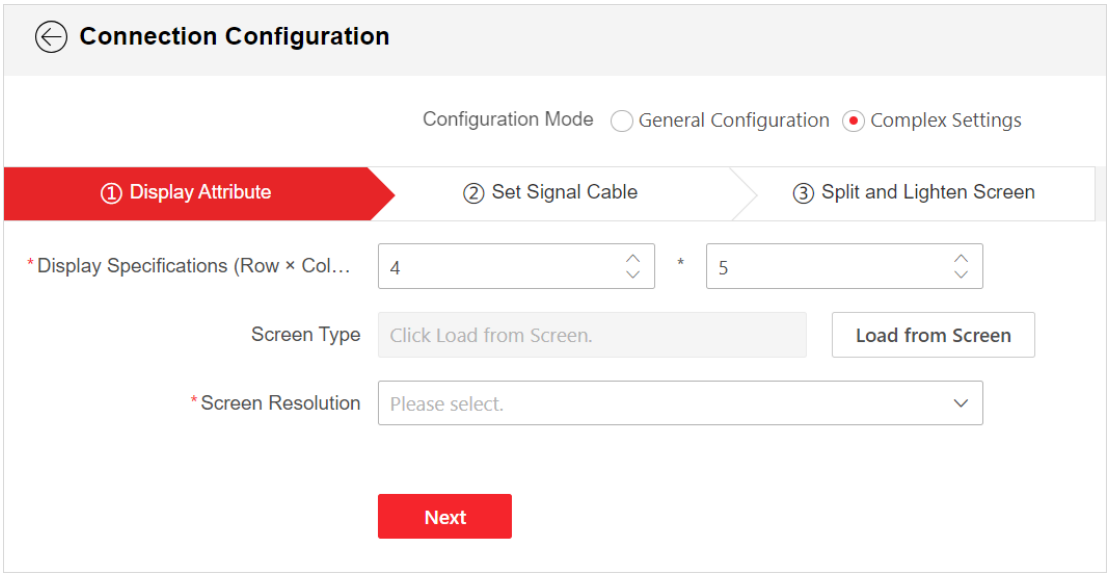


Figure 3-10 Select Complex Settings

1) Set the screen attribute.
2) Set the signal connection.
3) Select the screens that are bound with sending cards and lighten the screens.
   - Select **Load from Screen** as the screen configuration mode, and click **Load**.
   - Select **Import File** as screen configuration mode, click  to import a locally saved file.

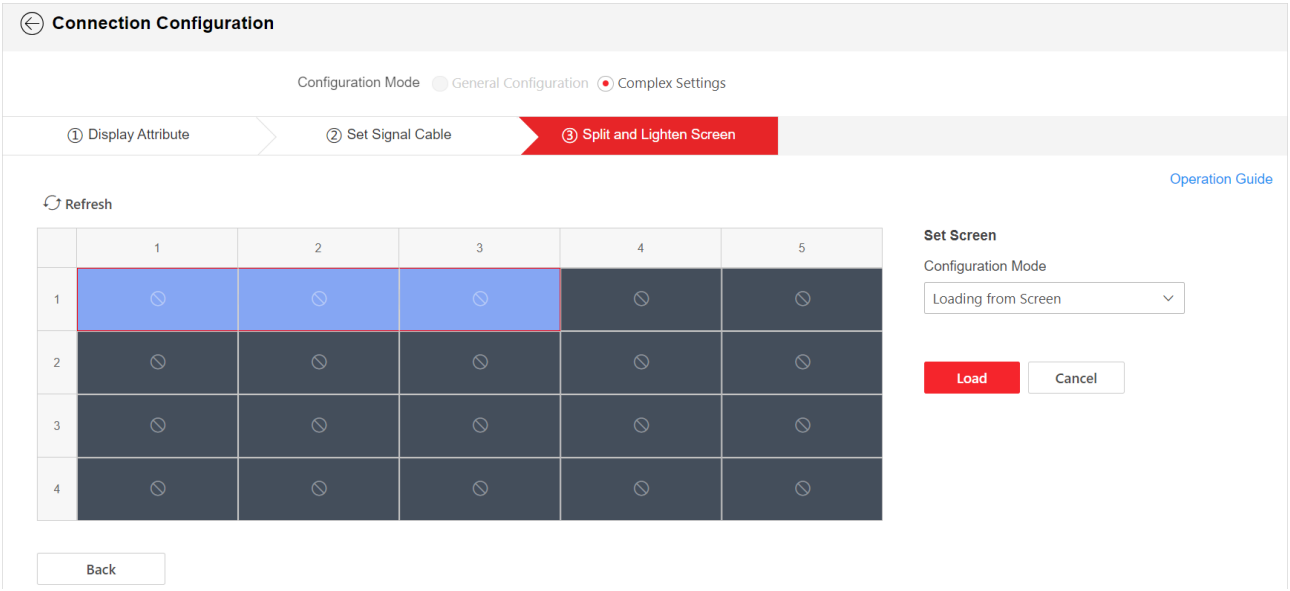


Figure 3-11 Lighten Screen

## Configure Display Effect

Click **Display Effect Settings** to configure basic screen parameters, Gamma table, receiving card expansion parameters, and advanced image parameters and view the receiving card basic parameters.

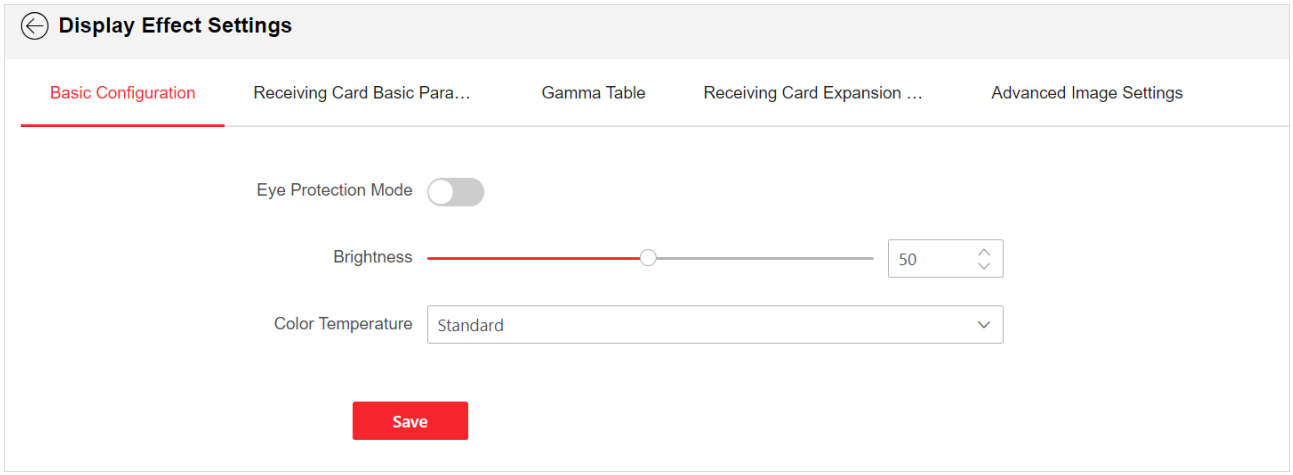


Figure 3-12 Configure Display Effect

## Correct Screen or Seam

When you enable correction for the first time, load the original correction data to make the data in the light board consistent with the data of the receiving card. Select **File Correction** if the light board data is missing. Otherwise, select **Manual Correction**.

If there is color difference or seam, you can adjust the RGB values of the screen or seam.

- Select manual correction:
  1) Switch on **Enable** to start the correction configuration.
  2) Select the corrected area.
     – Click ⊞ to select the area to be corrected.

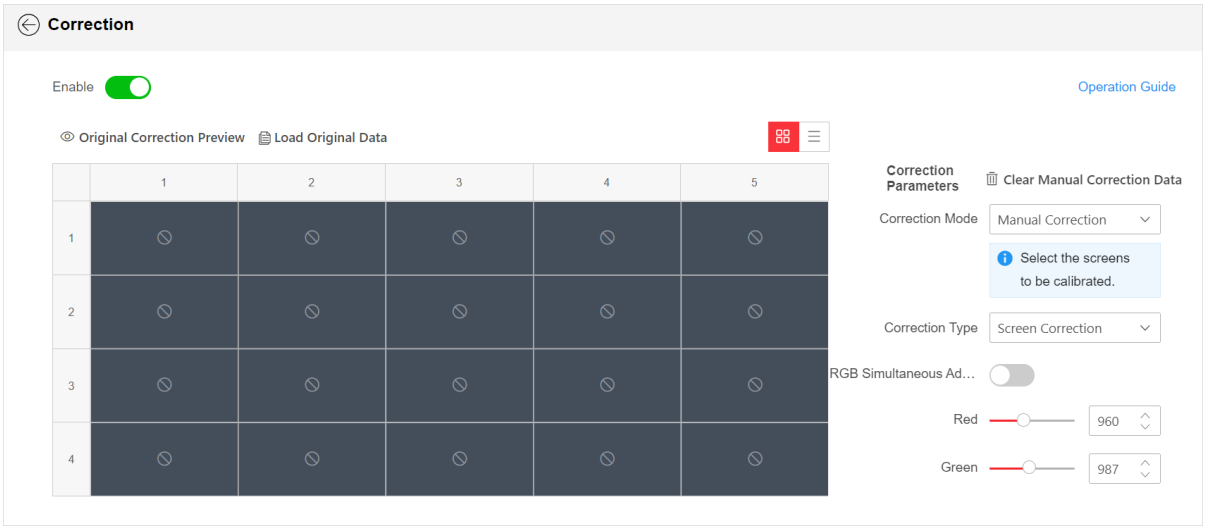


Figure 3-13 Select Correction Area

– Click ☰ to enter the start and end coordinates of the area to be corrected.

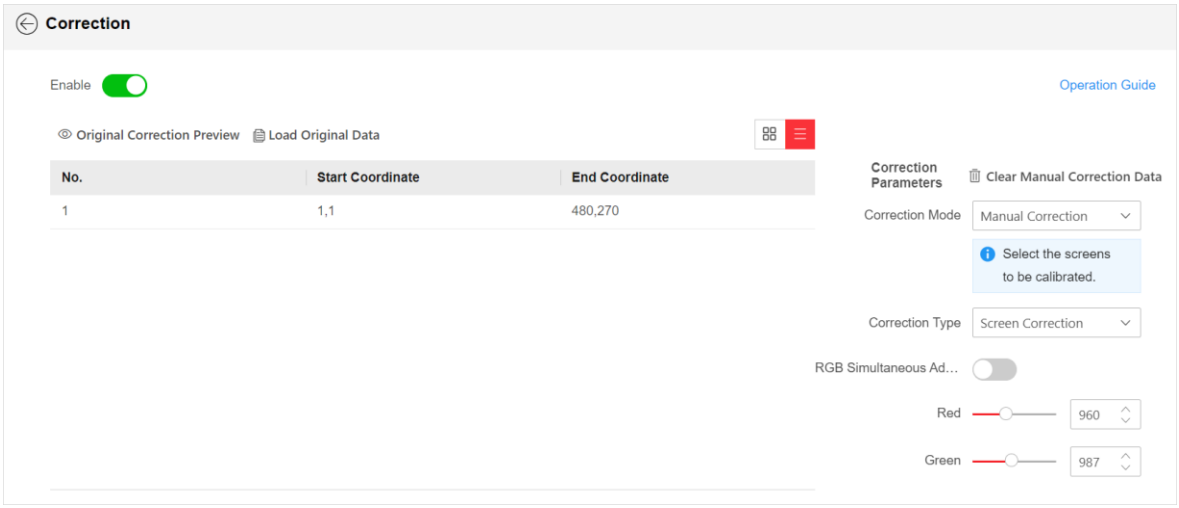


Figure 3-14 Set Correction Area Coordinate

3) Click **Original Correction Preview** to preview the original correction data.
4) Click **Load Original Data** to load the factory correction data of light board.
5) If the light board data still exists, select **Manual Correction**.
6) Select a correction type.
   – Select **Screen Correction**.

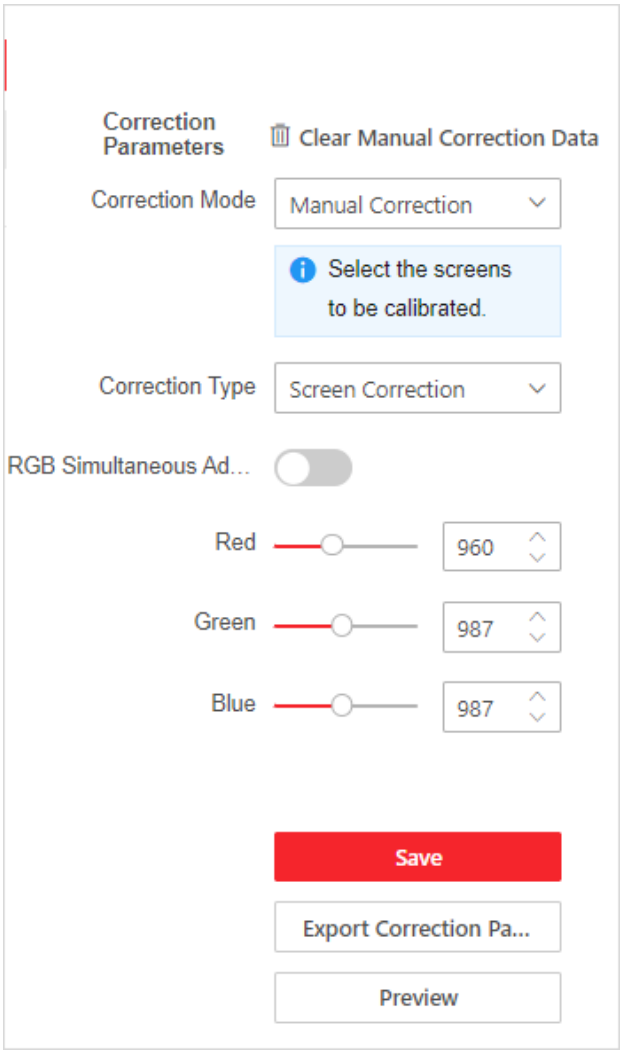


Figure 3-15 Manual Correction of Screen

– Select **Seam Correction**, and then set the calibration range and seam width.

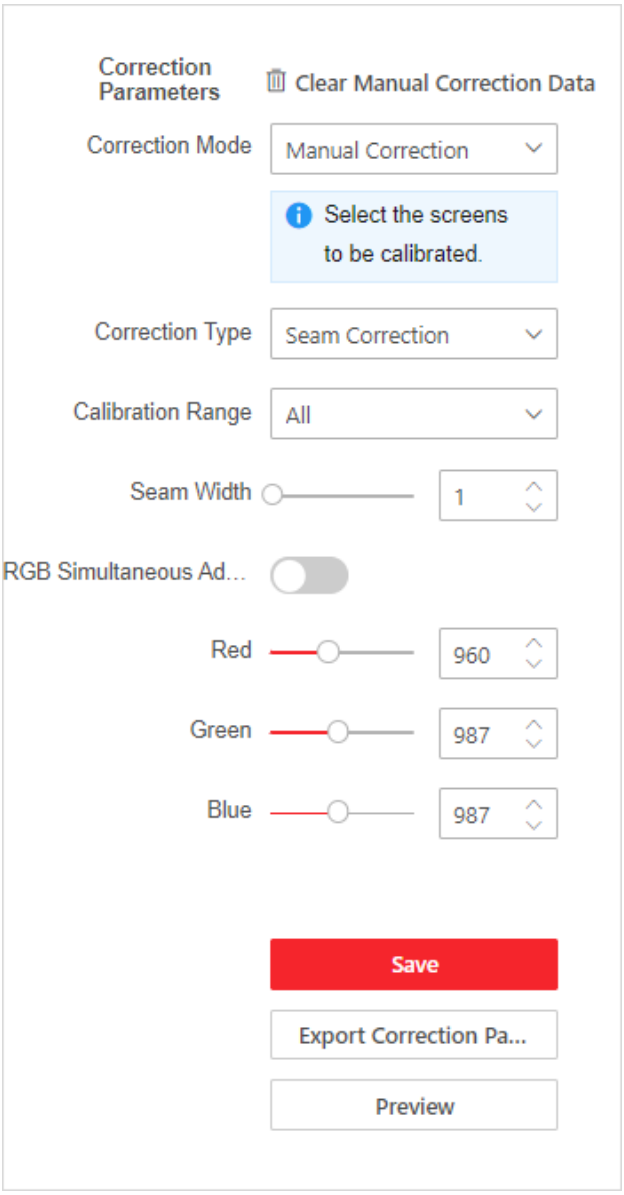


Figure 3-16 Manual Correction of Seam

7) Drag the control bar to set the RGB (Red Green Blue) values. The value ranges from 800 to 1200, and the default value is 1000.
8) Click **Preview** to view the display effect.

**Note**

If the display effect does not meet the requirements, adjust the RGB values again.

9) Click **Save** if the display effect meets the requirements.
10) (Optional) You can perform the following operations:
   - Click **Clear Manual Correction Data**.
   - Click **Export Correction Parameters**.

- Select file correction:

If the light board data is missing, you can import the correction file to batch correct screens or seams. Correction file should be in VU3 format, and the file size should be no more than 1 GB.

1) Switch on **Enable** to start the correction configuration.
2) Click to select an area as the start point of batch correction.
3) Select **File Correction**.
4) Click , select a VU3 file, and click **Import**.

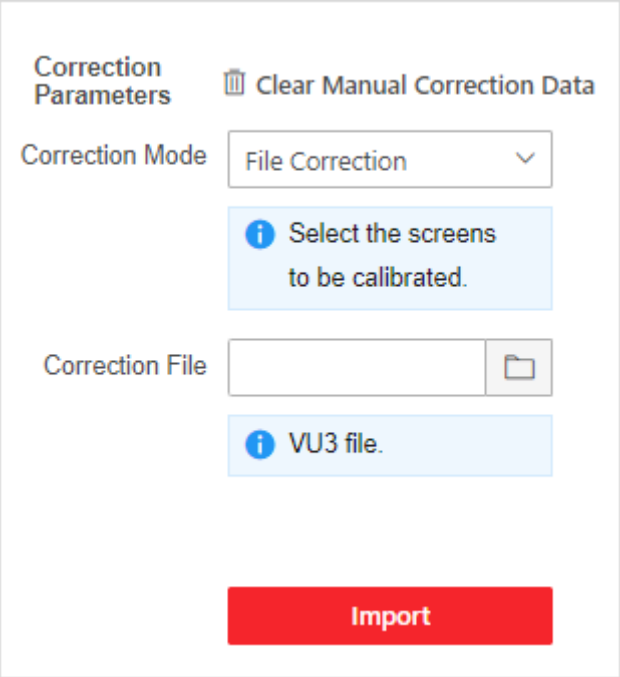


Figure 3-17 File Correction

## 3.3.4 Add a Network Signal Source

### Add a Network Signal Source via IP Address

Step 1 Go to **Video Wall Operation** → **Signal Source**, click , and select **IP Address**.

Step 2 Enter the signal source information and stream media information.

- Select an added group or click **Add Group** to create a new group.
- Select the channel type. You can select **Conventional Network Source** or **Zero-Channel Network Source**.

**Note**

- If you select **Conventional Network Source**, enter **Number of Channels** according to the channel quantity of the network signal source, and select the channel to add.
- If you want to add a Network Video Recorder (NVR), the number of channels should start from 33. The first 32 channels are reserved. For example, if you want to add a 32-channel NVR, the number of channels should be 64.
- Click **More** to select the transmission protocol, stream type, device manufacturer, and streaming media information.

**Note**

After enabling **Get Stream via Streaming Server**, you can perform live view data forwarding through the streaming server to reduce network stress.

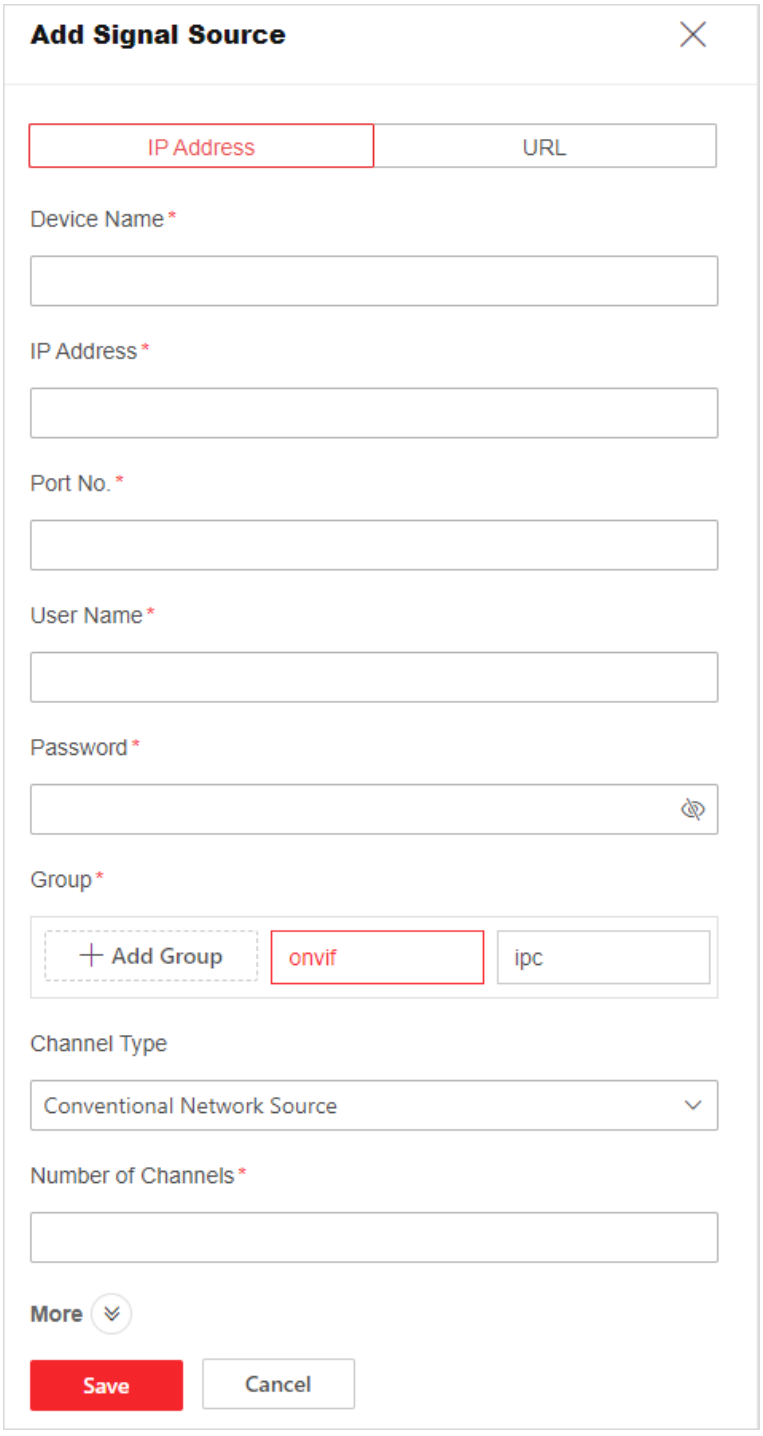


Figure 3-18 Add a Network Signal Source via IP Address

Step 3 Click **Save**.

## Add a Network Signal Source via URL Address

Step 1 Go to **Video Wall Operation** → **Signal Source**, click , and select **URL**.

Step 2 Enter the signal source information.

- Enter the URL address of the signal source. The format of URL address should be RTSP://IP address: 554/h264/ch1/main/av_stream/?username=user name?password=password?linkmode=TCP.
- Select an added group or click **Add Group** to create a new group.

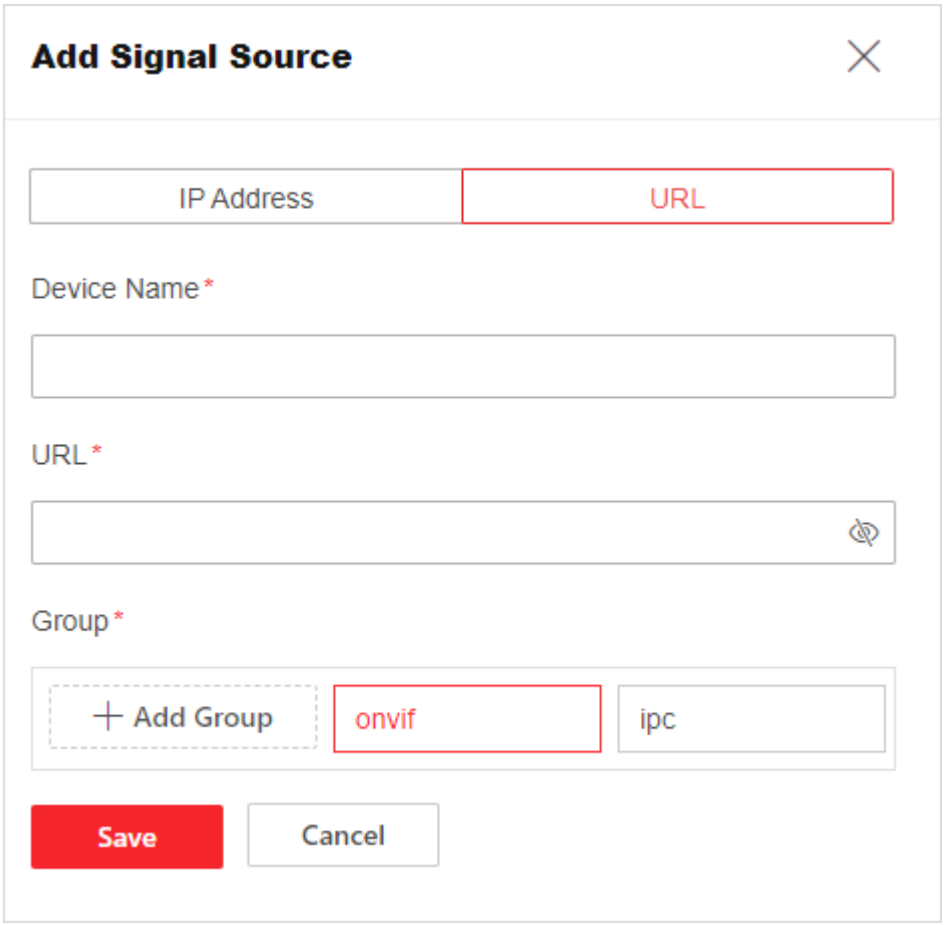


Figure 3-19 Add a Network Signal Source via URL Address

Step 3 Click **Save**.

## 3.3.5 Bind Signal Sources with Video Wall

Step 1 Go to **Video Wall Operation** and then select a video wall.

Step 2 Take either of the following methods to bind signal sources with the video wall:

- Drag a local signal source or network signal source on the left to the video wall on the right. Repeat the operation to bind multiple signal sources to the video wall.

**Note**

Before dragging a network signal source to the video wall, make sure the decoding board is in the device.

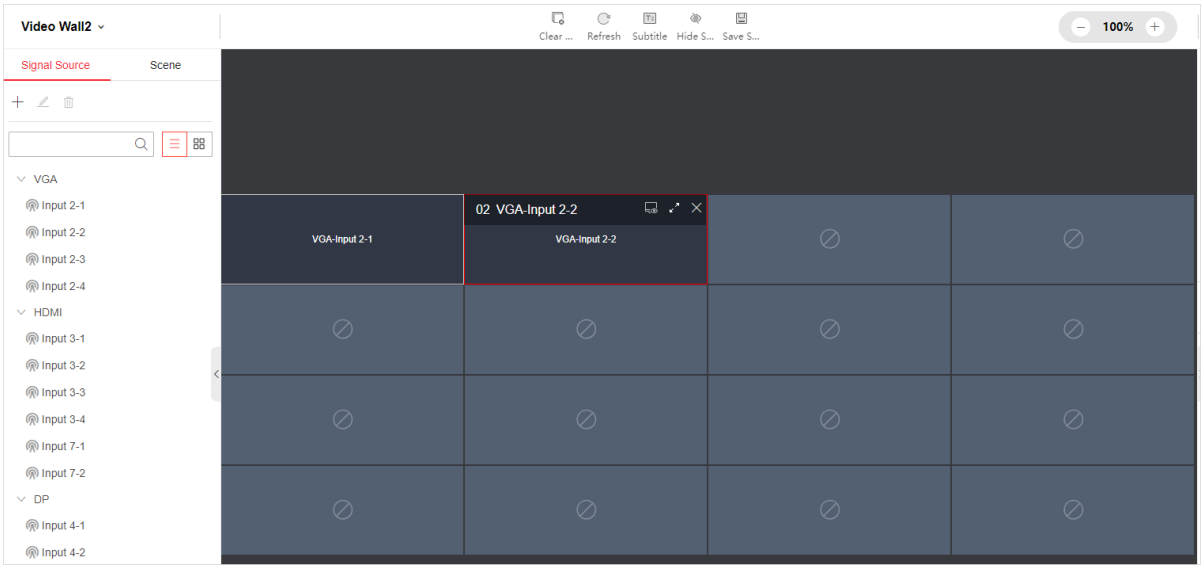


Figure 3-20 Drag Signal Sources to Video Wall

- Drag a signal source folder to the video wall to batch bind multiple signal sources with the video wall.

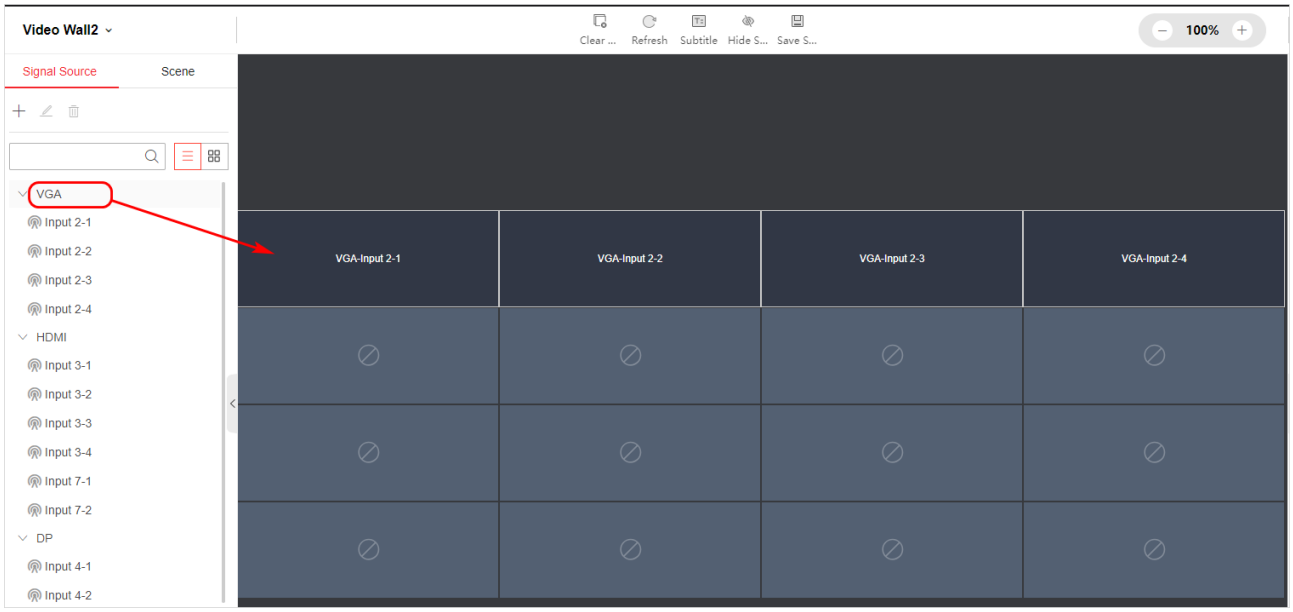


Figure 3-21 Drag a Signal Source Folder to Video Wall

# 3.4 Operate a Video Wall

## 3.4.1 Edit a Signal Source Window

Go to **Video Wall Operation** and perform the following operations as required:

- Click  to power on the screen or click  to power off the screen.
- Adjust the position of a signal source window:

- Select a signal source window to move directly.
- Select a signal source window, and enter the specific X and Y values in the pop-up window.

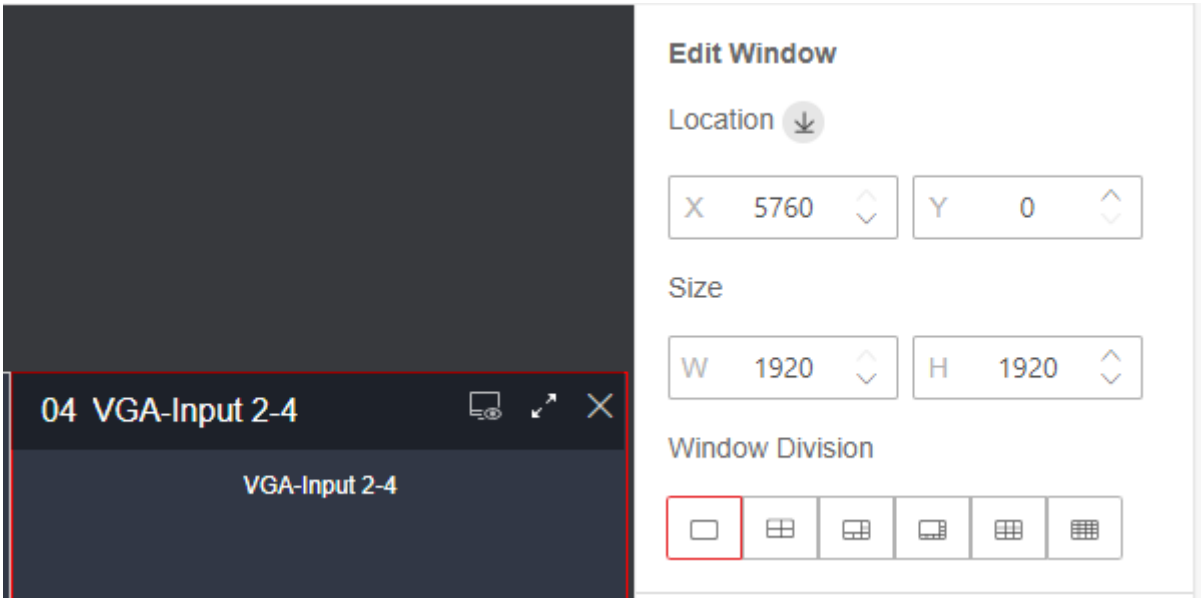


Figure 3-22 Adjust Position of a Signal Source Window

- Divide a signal source window: Select a signal source window, and click the window division icon.
- Adjust the size of a signal source window:
- Drag the edge of a signal source window to adjust its size.
- Select a signal source window and enter W and H values in the pop-up window.
- Click at the upper right corner of the signal source window to make it fully cover the occupied output ports and click to restore the original size.

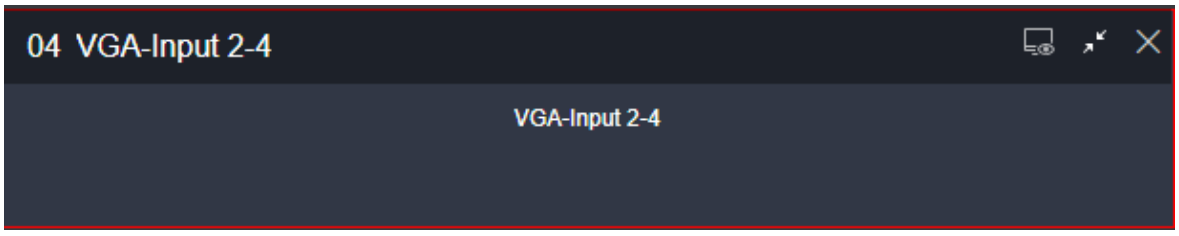


Figure 3-23 Zoom In the Window

- Select a signal source window, and click to set the signal source window to the bottom.
- Select a network signal source to start decoding or stop decoding, and set decoding delay.

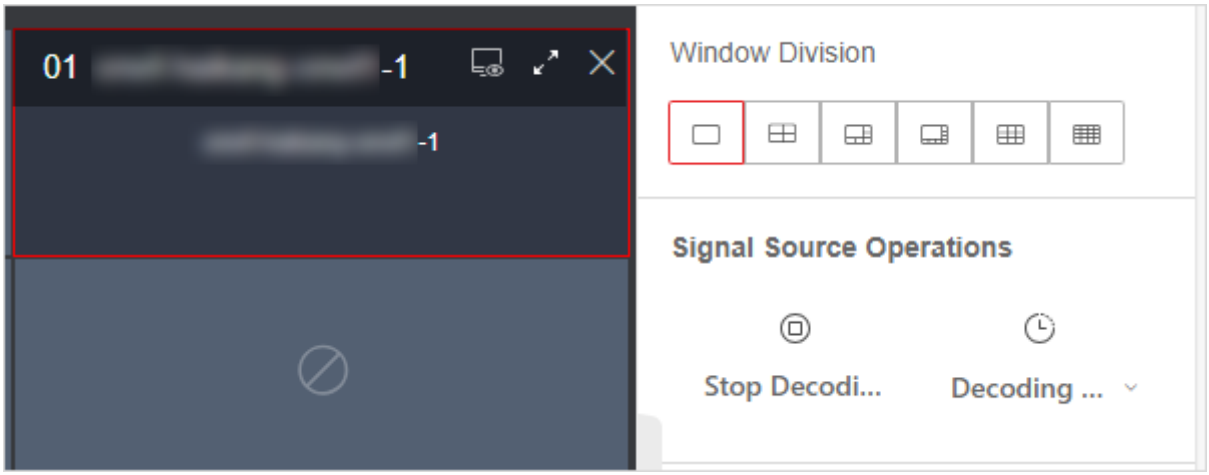


Figure 3-24 Set Decoding Status of a Network Signal Source

- View the window status. You can click **Show All** to enter decoding status list to view details.

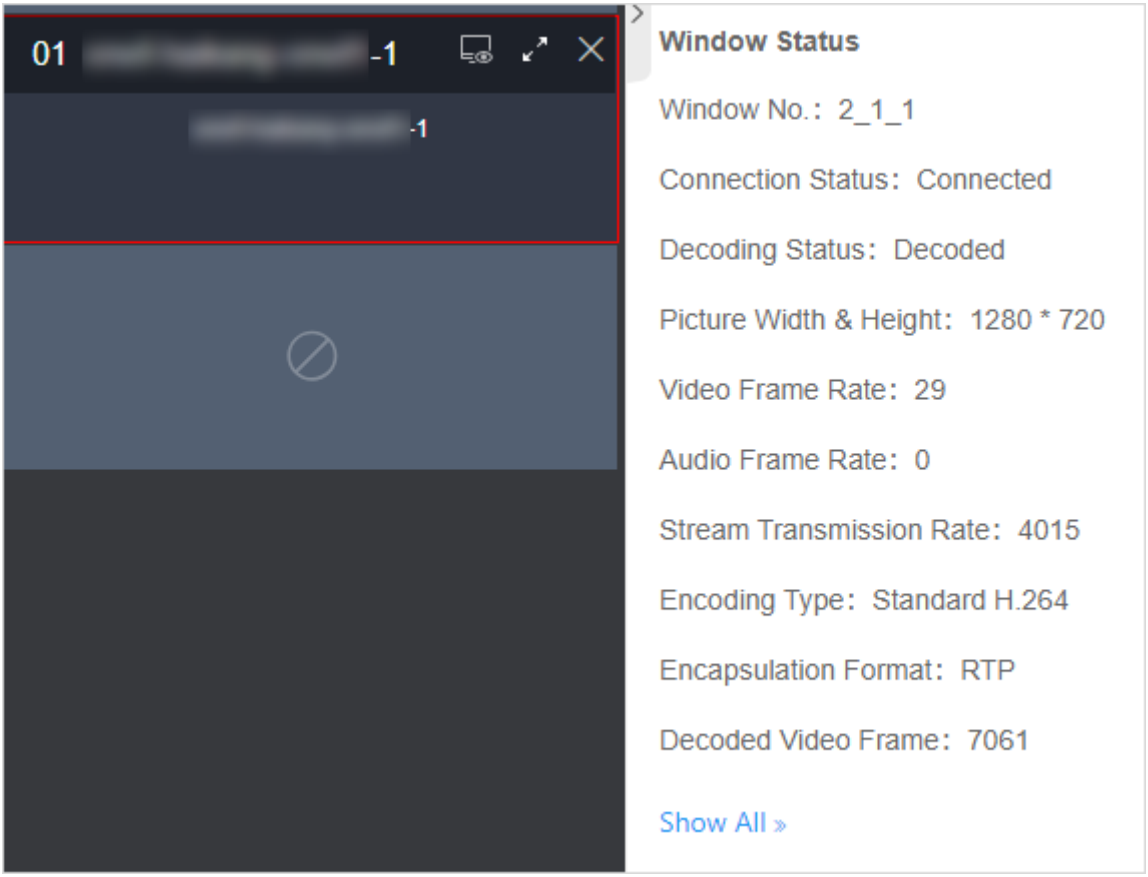


Figure 3-25 View Window Status

- Click  at the upper right corner of a signal source window to preview the signal source. Click  to cancel the live view.


Figure 3-26 Preview Signal Source

- Click **Clear Window** to clear all signal sources bound with the video wall.
- Select a network signal source to be edited, and then click to edit the signal source parameter.

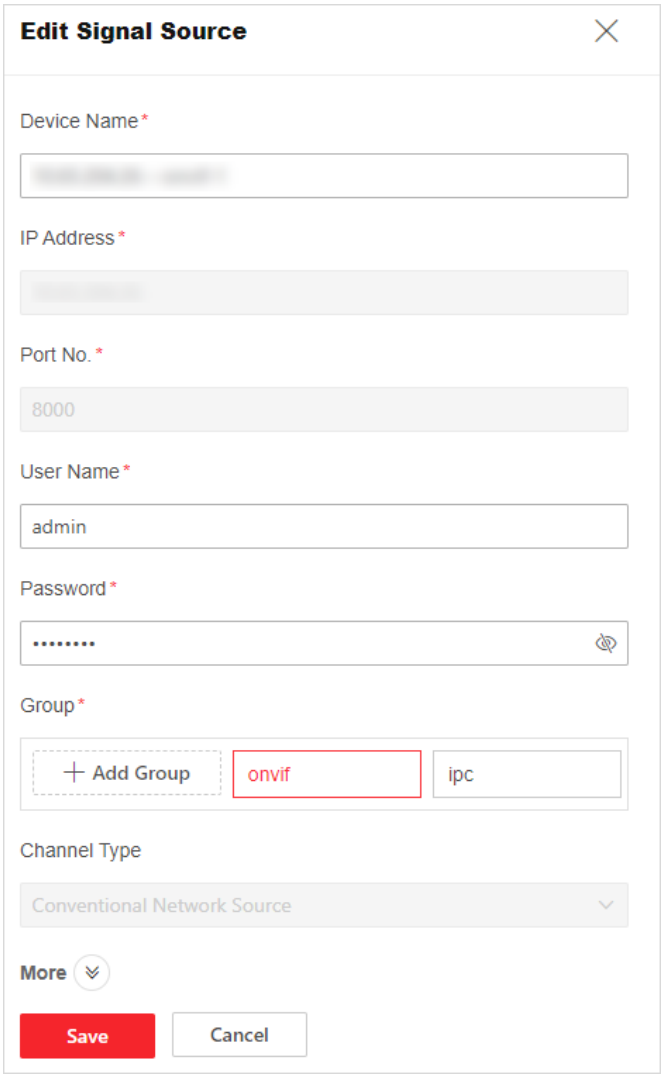


Figure 3-27 Edit Signal Source Parameters

## 3.4.2 Configure Subtitles

You can add subtitles to the video wall. Go to **Video Wall Operation**, click **Subtitle**, press and hold the left mouse button to drag the text to screens bound with output ports.

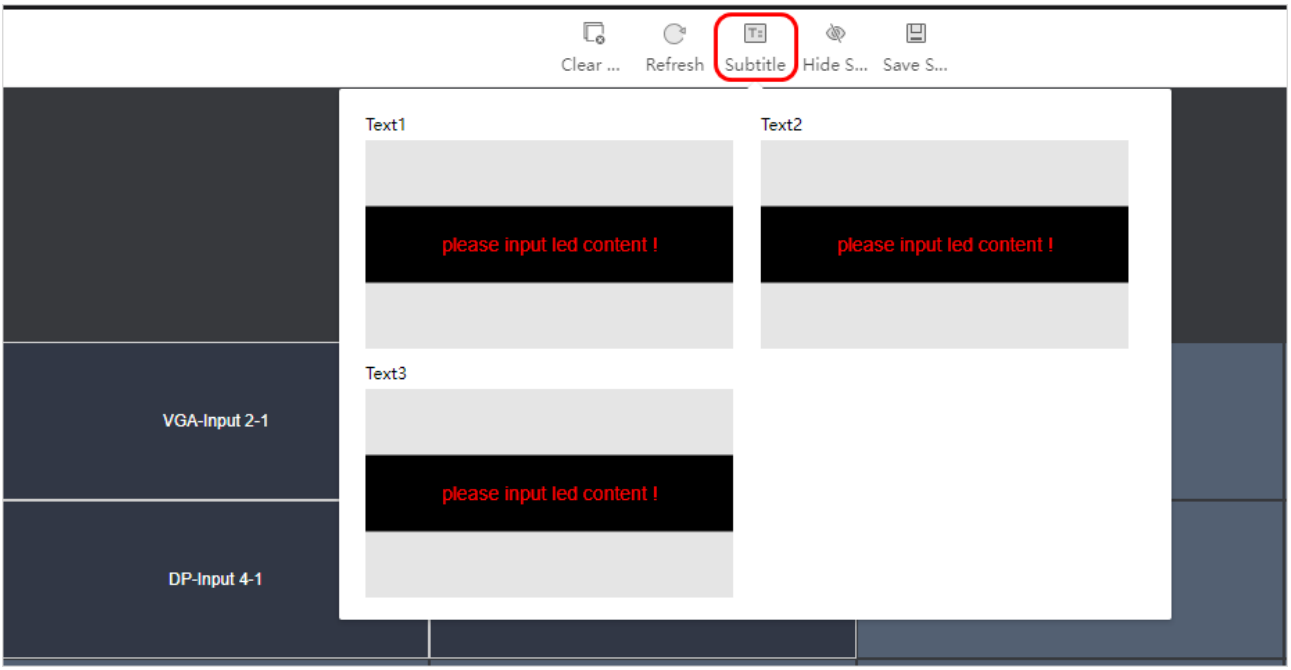


Figure 3-28 Select a Subtitle Type

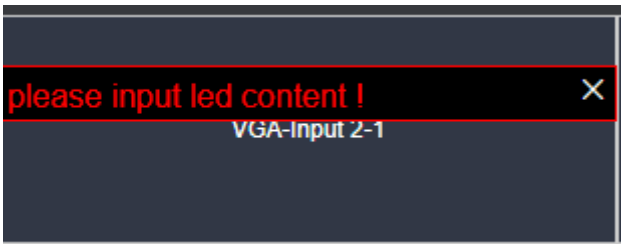


Figure 3-29 Drag a Subtitle to Screen

**Note**

To add multiple subtitles, you drag the remaining subtitles.

### Configure a Text Subtitle

Step 1 Select **Text** for the subtitle type and enter the subtitle content.

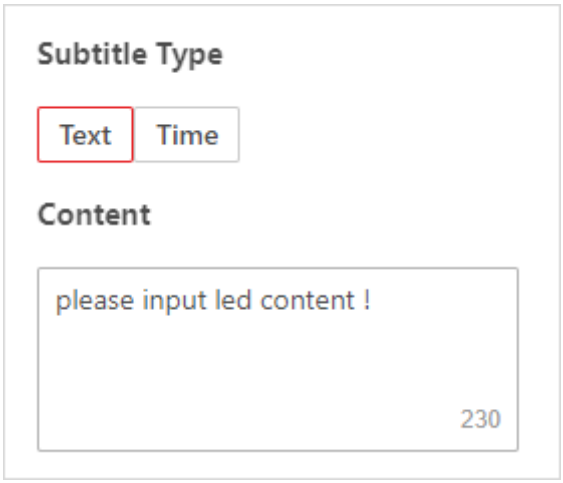


Figure 3-30 Enter Subtitle Content

Step 2 Adjust the subtitle position and size.

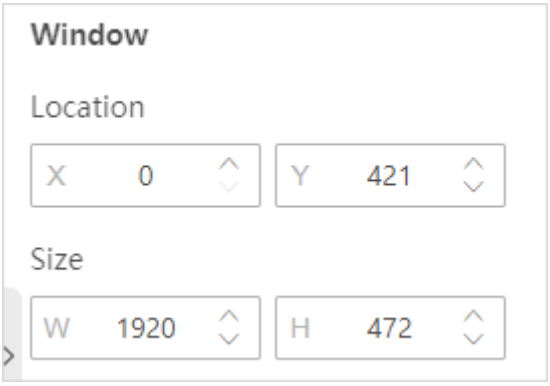


Figure 3-31 Adjust Subtitle Position and Size

Step 3 Adjust the font size, font direction, alignment, and background transparency.

Step 4 Enable **Move** to set the movement direction and speed.

The subtitle will scroll according to the set speed and direction.

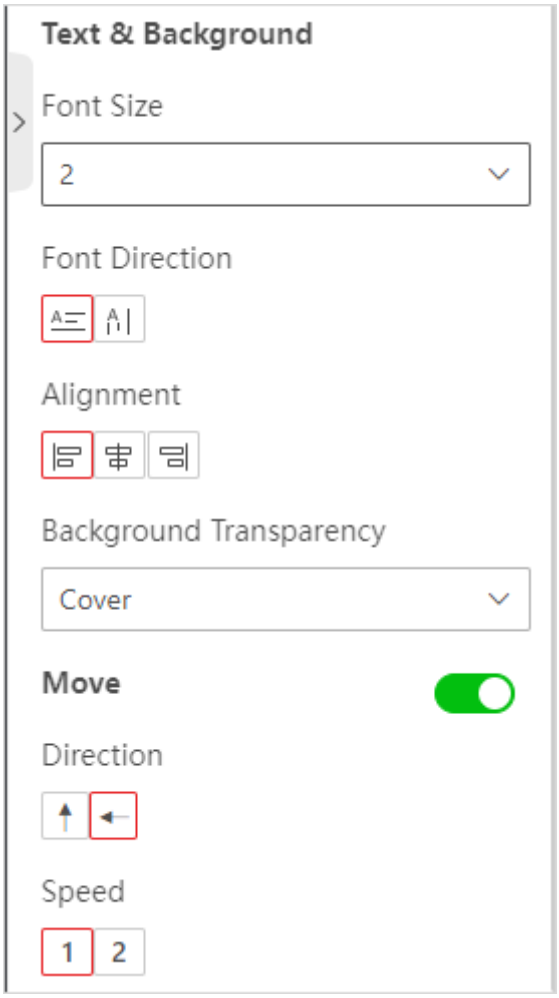


Figure 3-32 Configure Text Subtitles

## Configure a Time Subtitle

Step 1 Select **Time** as the subtitle type and adjust the position and size of the subtitle.

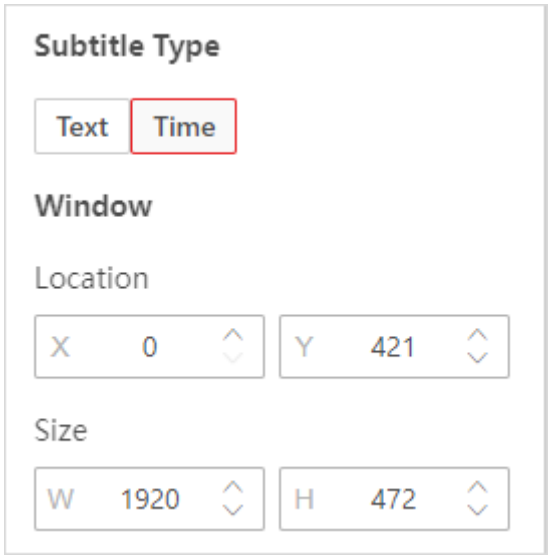


Figure 3-33 Adjust Position and Size

Step 2 Adjust the time format.

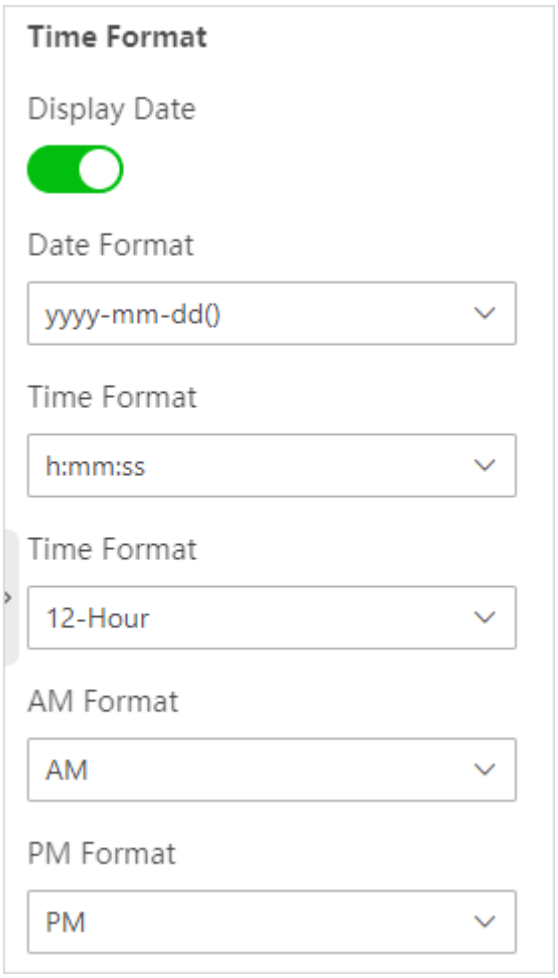


Figure 3-34 Adjust Time Format

Step 3 Adjust the font size, alignment, and background transparency.

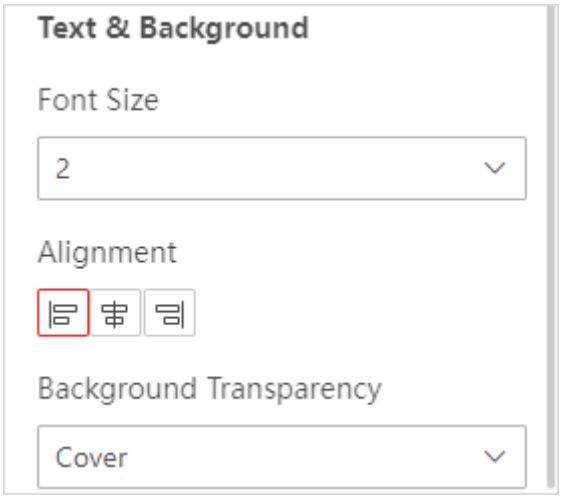


Figure 3-35 Adjust Text and Background

## 3.4.3 Manage Scenes

Up to 128 scenes are supported. Go to **Video Wall Operation** to manage scenes.

- Click **Save Scene** to save the current video wall configuration as a new scene or overwrite the existing scene.

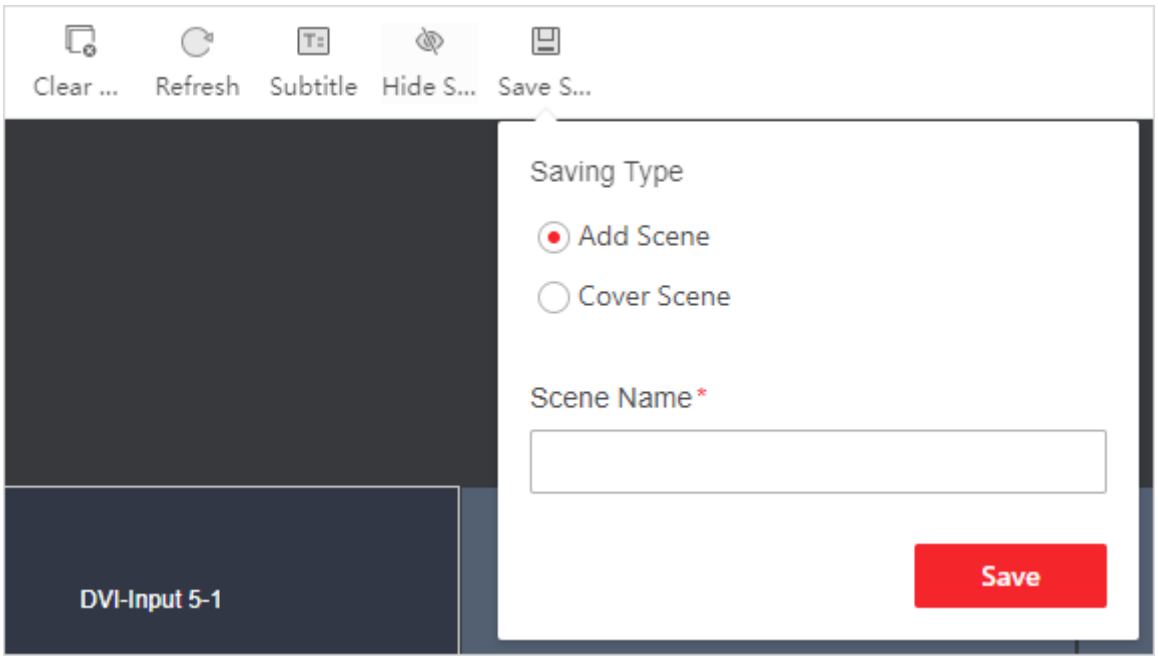


Figure 3-36 Save Scene

- Click **Scene** and hover over a scene name. Click ▷ to call the scene.
- Click **Scene** and hover over a scene name. Click ✎ to edit the scene name.
- Click **Scene** and hover over a scene name. Click 🗑 to delete the scene.

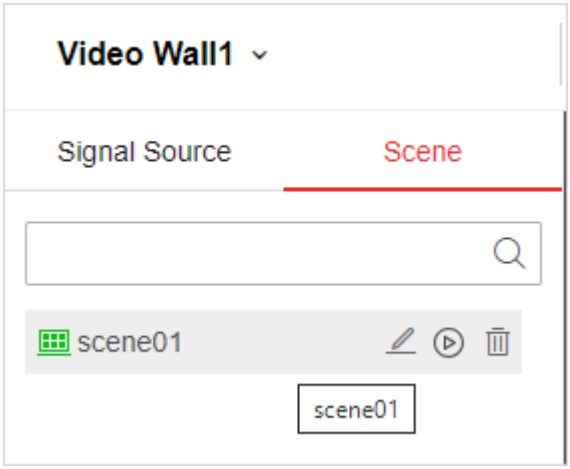


Figure 3-37 Manage Scene

## 3.4.4 Maintain Screens

**Note**

Only some models support screen maintenance. Please refer to the actual capability of the device.

Step 1 Go to **Configuration** → **System** → **Serial Port Settings** → **Mater Device Serial Port Settings**, select **Screen Control** as the working mode, set the baud rate of the device same as the baud rate of the screen, and set other serial port parameters.

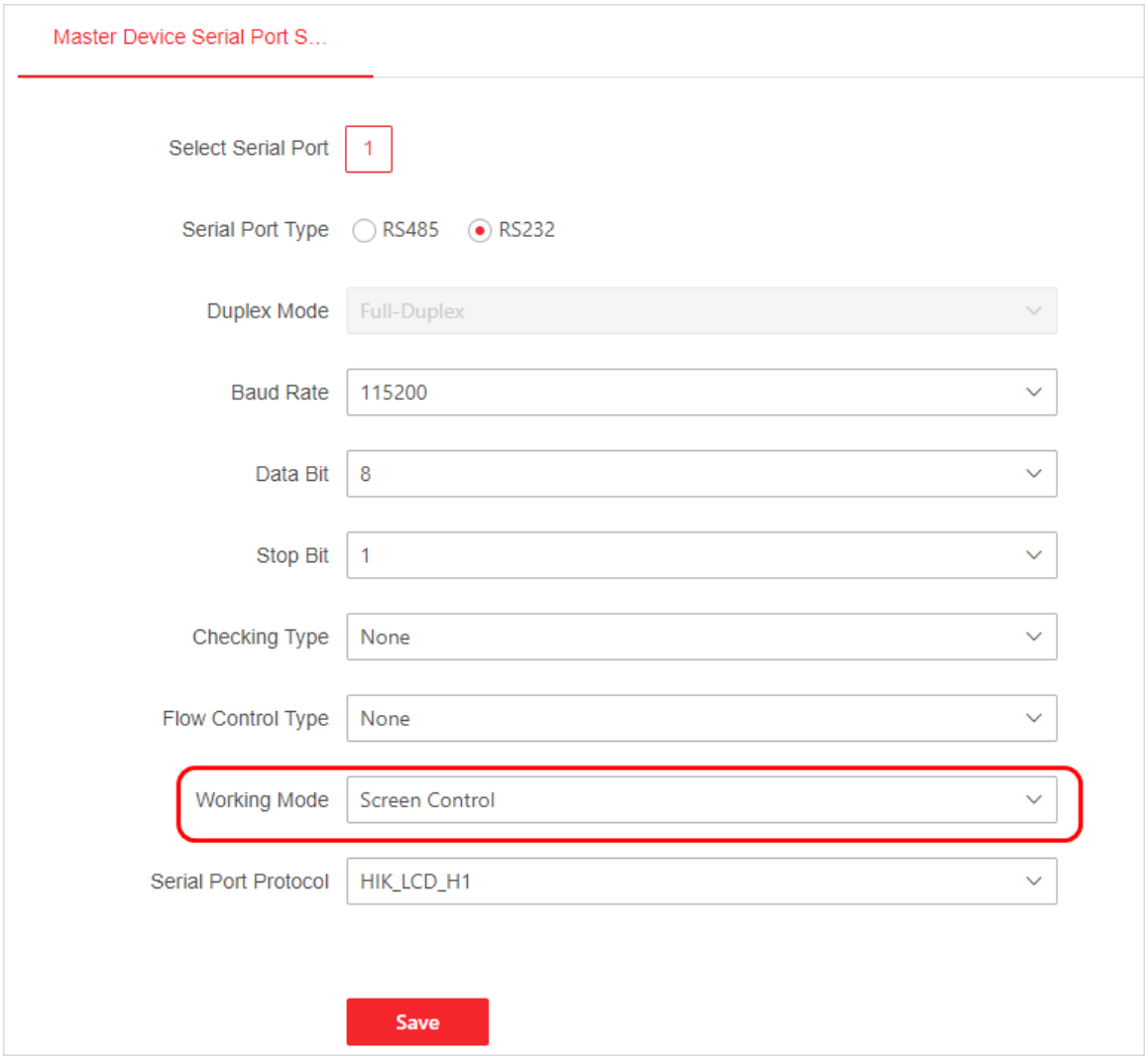


Figure 3-38 Configure Serial Port

**Note**

The serial port also supports the keyboard control working mode. If you need to use the serial port for keyboard control, select **Keyboard Control** as the working mode, and set the baud rate of the device same as the baud rate of the keyboard.

Step 2 Connect the screen with the device by using the serial port.

Step 3 Go to **Screen Maintenance** and select an output.

Step 4 Select an input source type.

Step 5 Set the image brightness, contrast, color, and sharpness.

Step 6 Adjust the image position.

Step 7 (Optional) Click **Copy to All Screens** to copy the screen parameters to all screens.

Step 8 (Optional) Click to power on the screen or click to power off the screen. You can also power on or power off the screen via the serial port.

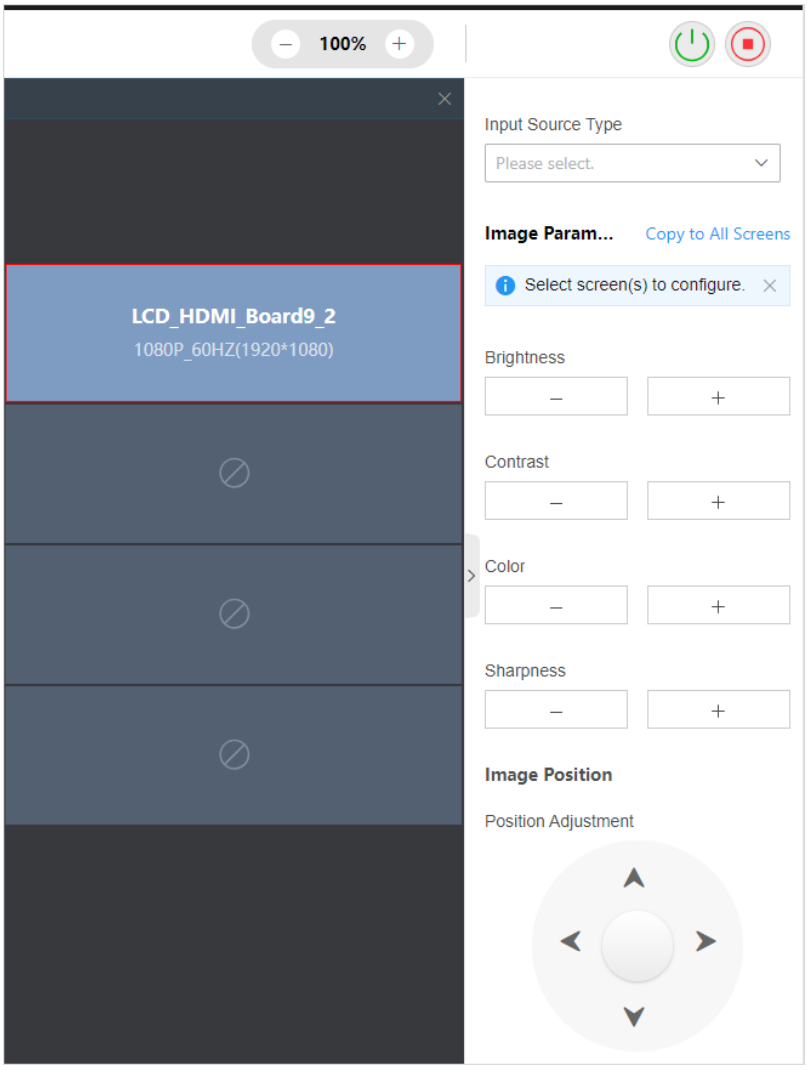


Figure 3-39 Screen Maintenance Page

# 3.5 Configure Screen Display Effect

## 3.5.1 Configure Screen Parameters

Go to **Configuration** → **Signal Source Settings** → **Image Settings** to configure video parameters, image tuning, signal source clipping, resolution, and OSD display.

- Click **Video Parameter**, select a signal source and color mode, and adjust the brightness.

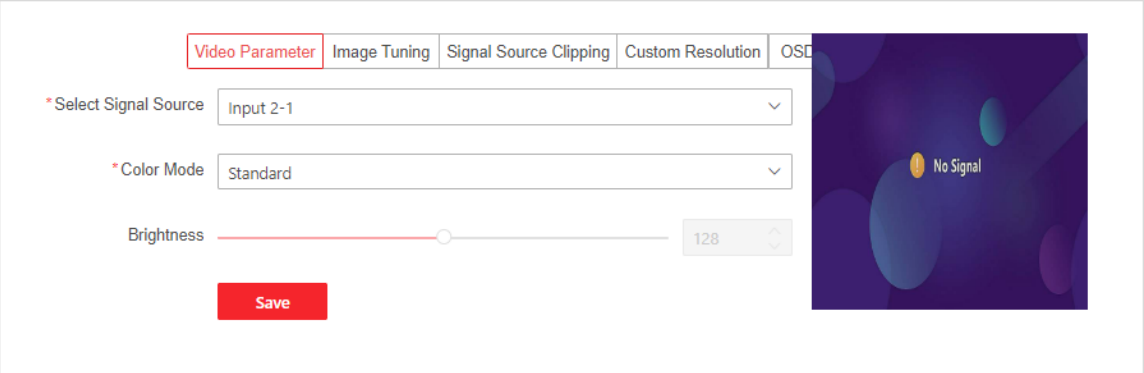


Figure 3-40 Set Video Parameters

**Note**

If you select **Custom** as the color mode and select **Simple Restore** in the **Backup and Reset** page, the video parameters will be restored to the default settings.

- Click **Image Tuning**, select a signal source, set the tuning unit, and adjust the position.

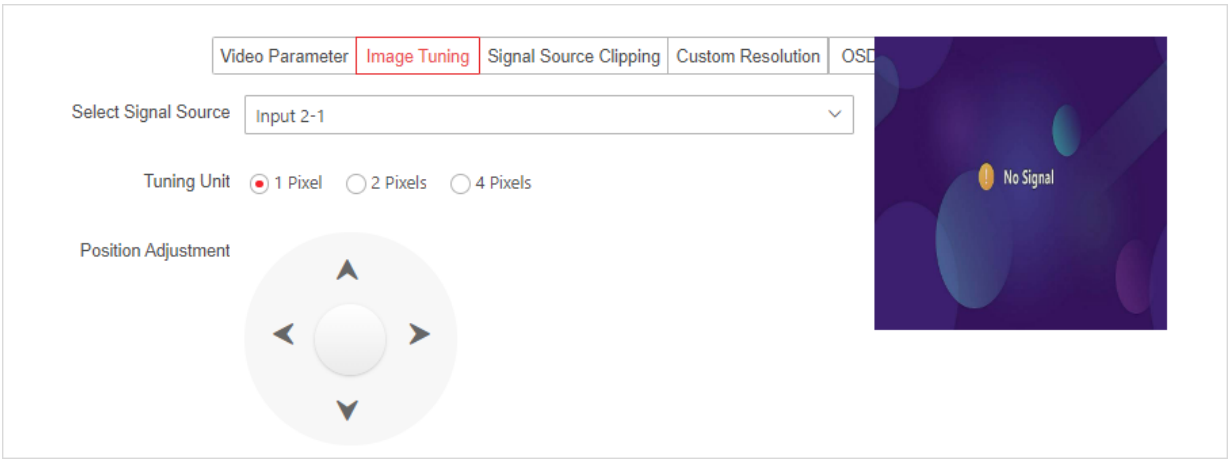


Figure 3-41 Set Image Tuning

**Note**

Only VGA signal sources support image tuning.

- Click **Signal Source Clipping**, select a signal source, and set the clipping value at top, bottom, left, and right edges.

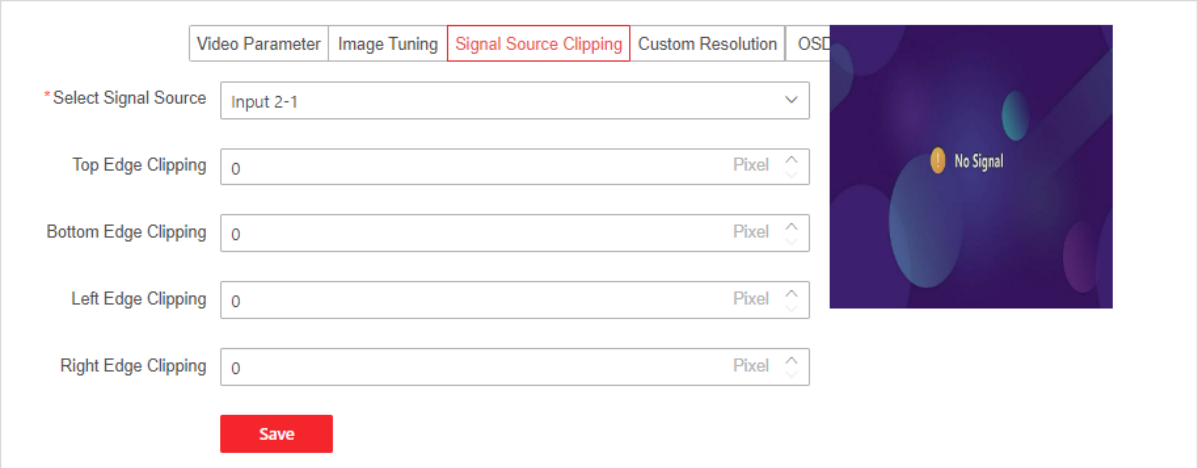


Figure 3-42 Clip a Signal Source

**Note**

The clipping value ranges from 0 to 200. The clipping value at the top and bottom edges should be a multiple of 2, and the clipping value at the left and right edges should be a multiple of 4.

## Customize the Resolution

If the resolution of a signal source does not match the resolution of the screen, you can customize the resolution of signal source.

Step 1 Click **Custom Resolution**, and select a signal source.

Step 2 Switch on **Enable** to set the refresh rate and resolution.

The minimum resolution (width × height) should be 1920 × 1080, and the maximum resolution should be 4092 × 2160. The width should be a multiple of 4 and the height should be a multiple of 2.

Step 3 (Optional) Click **Copy To** to copy the current signal source configuration to other signal sources.

Step 4 Click **Save**.

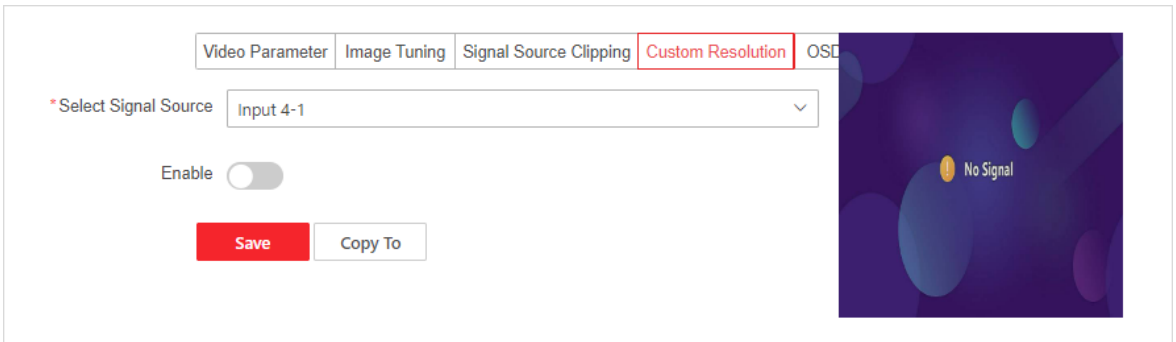


Figure 3-43 Customize Resolution

**Note**

Only UHD signal sources (such as 4K HDMI input channels or 4K DP input channels) support the resolution customization.

### Set OSD Display

You can add multiple On-Screen Displays (OSDs) to the input signal image.

Step 1 Click **OSD Display** and select a signal source.

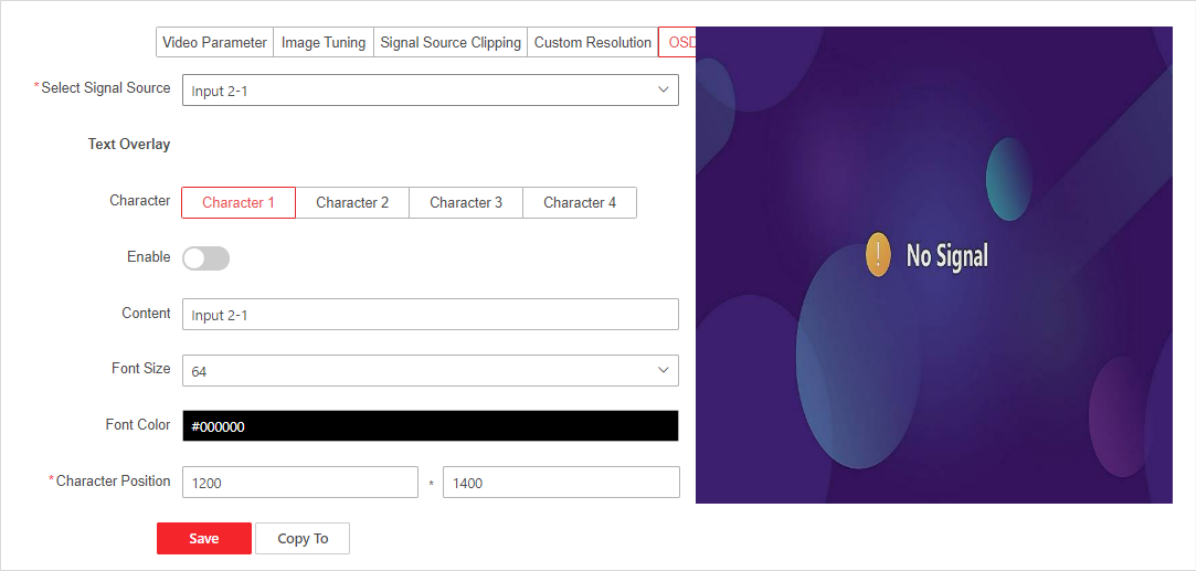


Figure 3-44 Set OSD Display

Step 2 Select a character, and then switch on **Enable** to overlay the character to the input signal image.

**Note**

You can overlay up to 4 characters to the input signal image.

Step 3 Enter the content, and set the font size, font color, and character position according to requirements.

You can also drag the character to adjust its position.

Step 4 (Optional) Click **Copy To** to copy the current signal source configuration to other signal sources.

Step 5 Click **Save**.

## 3.5.2 Splice Signal Source

This function allows you to splice multiple signal source images into one signal source image. After the signal source splicing, the spliced signal sources will disappear from the signal source list.

**Note**

- Only local signal sources support splicing.
- Only UHD signal sources (such as 4K HDMI input channels or 4K DP input channels) support splicing.
- All spliced signal sources should use the same resolution and frame rate to avoid affecting the display effect.
- The joint signal source will be displayed in one signal source window on the video wall.
- When the joint signal source moves the position or adjusts the size, the spliced signal sources also move the position or adjust the size.

Step 1 Go to **Configuration** → **Signal Source Settings** → **Signal Source Splicing** and click +.

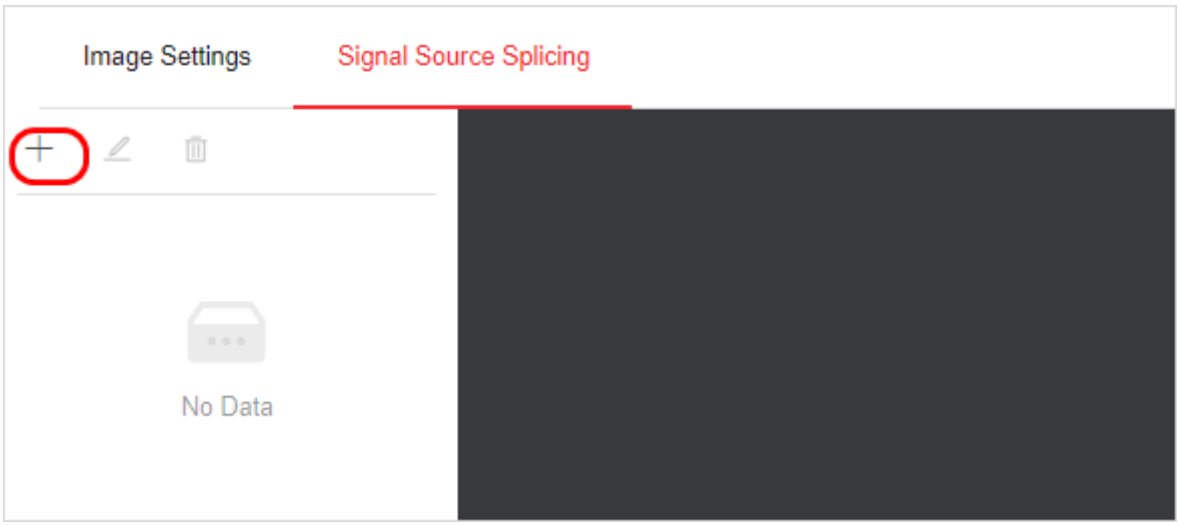


Figure 3-45 Signal Source Splicing Page

Step 2 Customize the joint signal source name and splicing scale.

Step 3 Drag the signal source in the signal source list on the left to the splicing window on the right.

**Note**

The signal sources that are dragged to the splicing window on the right will be spliced to one-way signal source.

Step 4 (Optional) Click **Cancel All Linkage** to cancel the previous signal source splicing and relink the signal source.

Step 5 Click **Save**.

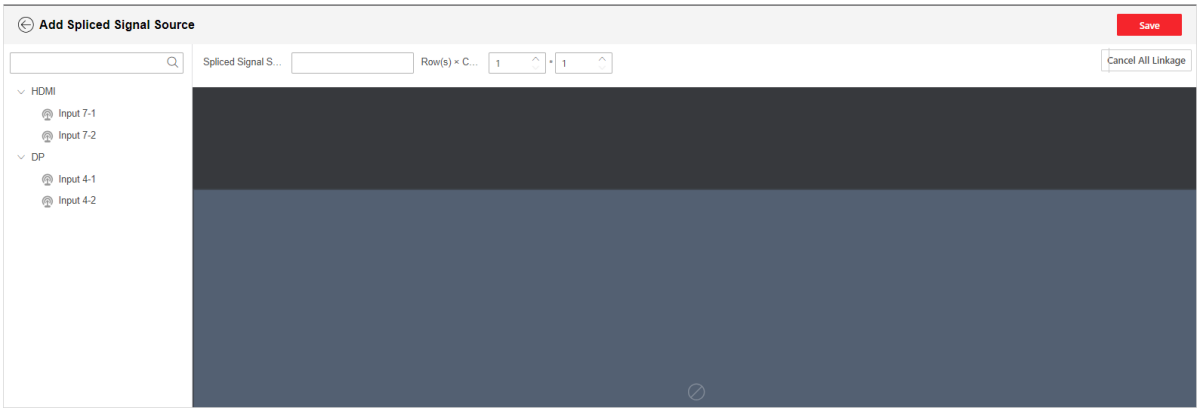


Figure 3-46 Add a Joint Signal Source

## 3.5.3 Configure Other Parameters

- Go to **Configuration** → **Performance Configuration** to select a performance mode of the UHD input board and the UHD output board, and click **Save**.
- If you select **Standard Mode**, a UHD input board supports 2 channels of 4K 60 fps signal source input, and a UHD output board supports 2 channels of 4K 60 fps signal source output.
- If you select **One Drag Multiple Outputs Mode** for a UHD input board, only the input port 1 of the UHD input board supports 1 channel of 4K 60 fps signal source input, and the device supports dragging the signal source of the input port 1 to multiple video walls.
- If you select **One Drag Multiple Outputs Mode** for a UHD output board, only the output port 1 of the UHD output board supports 1 channel of 4K 60 fps signal source output, and the device supports forwarding 1 signal source to multiple video walls.


Figure 3-47 Configure Performance Mode

- Go to **Configuration** → **Other Settings** → **Split image to get sub-stream**, switch on **Enable**, and set the window division threshold. If the window division reaches the upper limit, the device will automatically use sub-stream to get the images. In low bandwidth networks, you can use sub-stream to get relatively smooth images with a small bandwidth footprint.

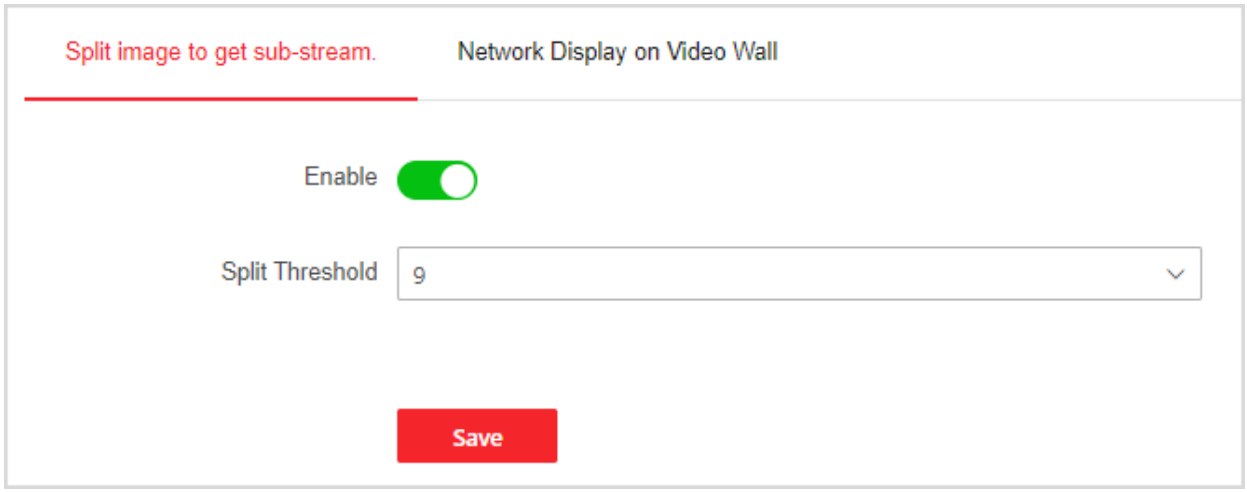


Figure 3-48 Set Sub-Stream

## Configure Displayed Video Wall on HikCentral Professional Control Client

To display the video wall images of the device on the HikCentral Professional Control Client in real time, configure this function.

Step 1 Go to **Configuration** → **Other Settings** → **Network Display on Video Wall**, and select a video wall to be displayed on the HikCentral Professional Control Client.

Step 2 Select a resolution according to the actual video definition requirements.

The higher the resolution, the higher the bandwidth requirement.

Step 3 Set the frame rate according to actual bandwidth.

The higher the frame rate, the smoother and more realistic the picture, but more requirements on bandwidth and storage space.

Step 4 Set the I-frame interval.

The larger the I-frame interval, the smaller the bit stream, the poorer the image quality. The larger the I-frame interval, the larger the bit stream, the better the image quality.

Step 5 Select a bit rate type and set the bit rate.

- If you select CBR (Constant Bit Rate), the bit rate is maintained at the average bit rate for transmission, and the compression speed is fast, but video mosaic may occur. Set the bit rate according to needs.
- If you select VBR (Variable Bit Rate), the bit rate will adjust on the basis of the upper limit of the bit rate, the compression speed is relatively slow, but it can ensure the image definition in complex scenes. Set the max. bit rate value according to needs.

Step 6 Click **Save**.

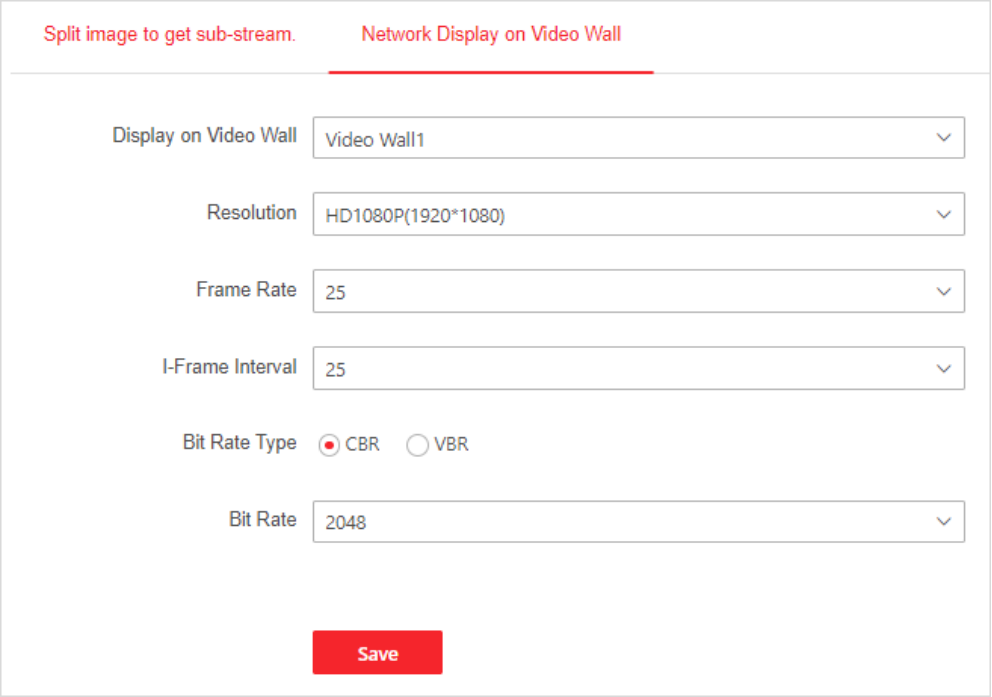


Figure 3-49 Set Display on HikCentral Professional Control Client

# 3.6 Configure the Device

## 3.6.1 Configure System Parameters

Go to **Configuration** → **System** to configure the following parameters:

- Go to **System Settings** → **Basic Information** to view the device information and edit the device name as required.

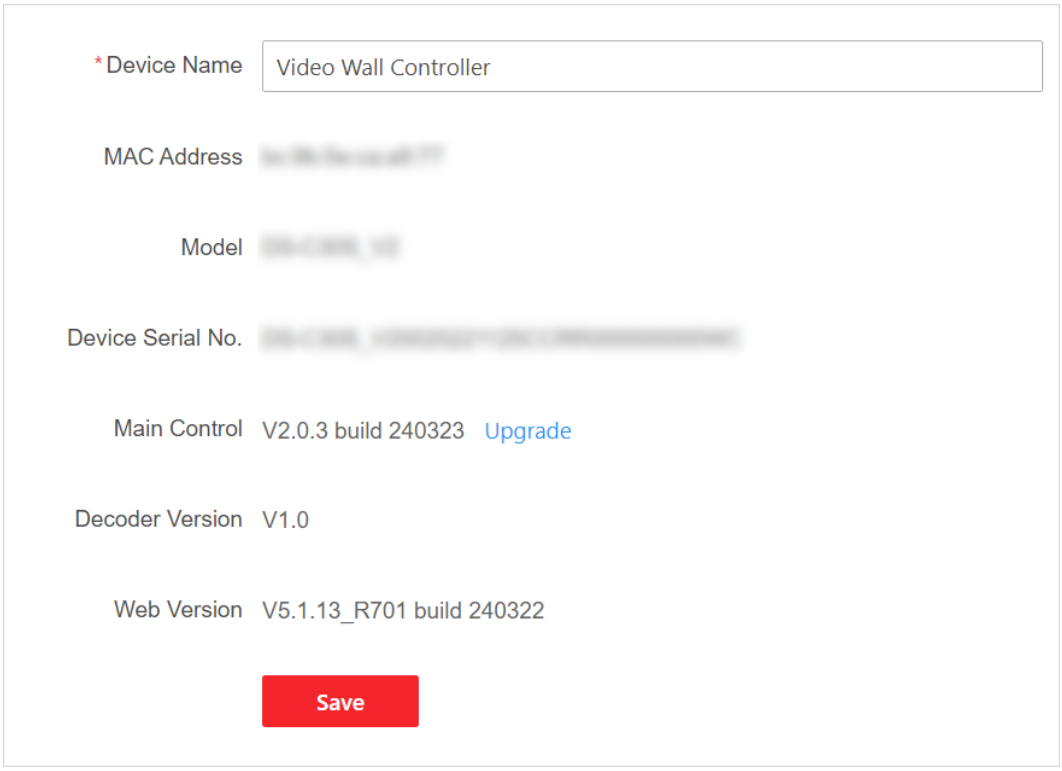


Figure 3-50 View Basic Information

**Note**

Click **Upgrade** to go to the upgrade page.

- Go to **System Settings** → **Time Settings** to configure the following parameters:
- If you select **NTP Sync**, the device clock synchronizes with the clock of the NTP server at the specified interval.
  - Set the address and port number of the NTP server.
  - Set the synchronization interval.

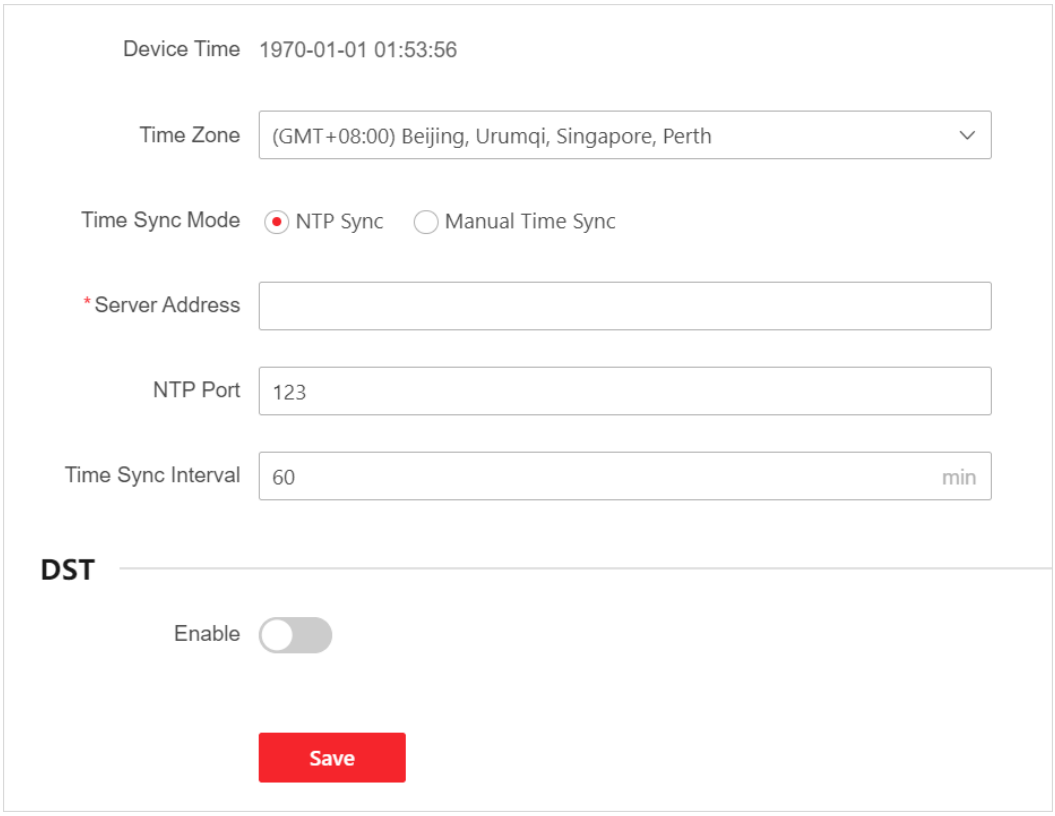


Figure 3-51 Select NTP Sync

- If you select **Manual Time Sync**, you can click **Sync with Computer Time** to make the device time same as the computer time.

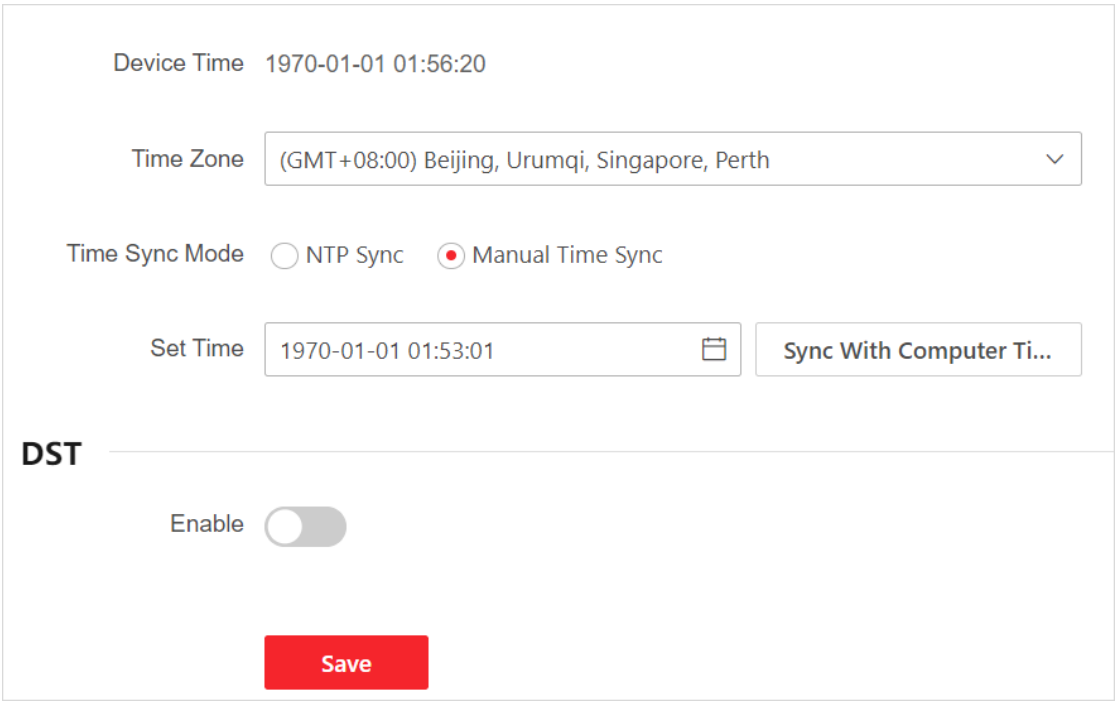


Figure 3-52 Select Manual Time Sync

- If you enable DST (Daylight Saving Time), the device clock is set forward a specified time during the summer months.
  - Set the start time and end time.
  - Set the bias time.

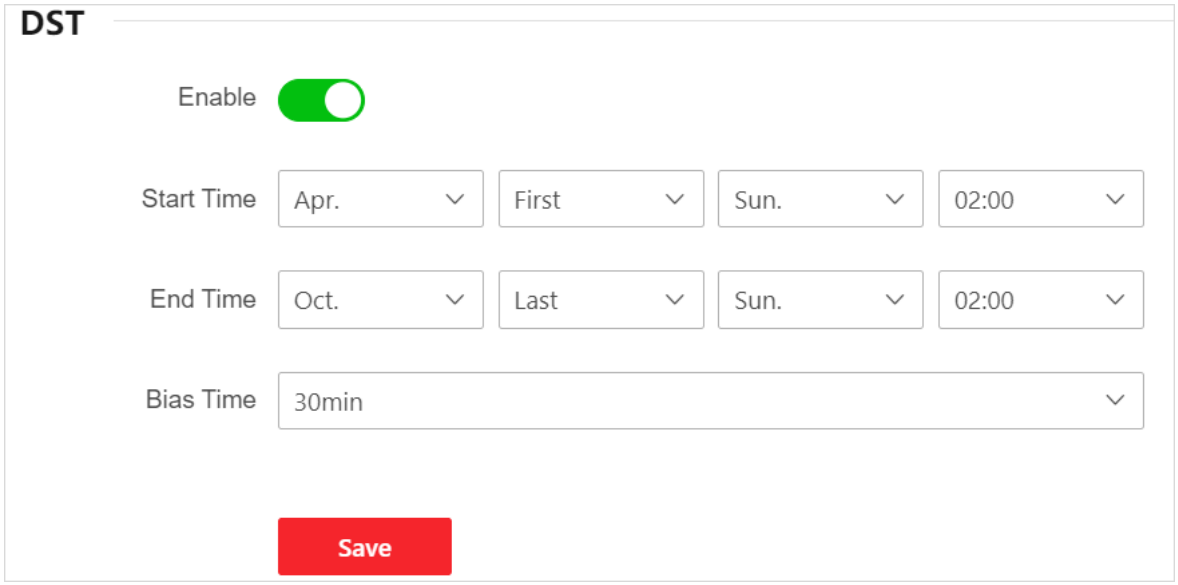


Figure 3-53 Enable DST

- Go to **System Settings** → **Font Settings** to set the font of OSDs and subtitles. You can use the default font, or click **Add** to import a new font.

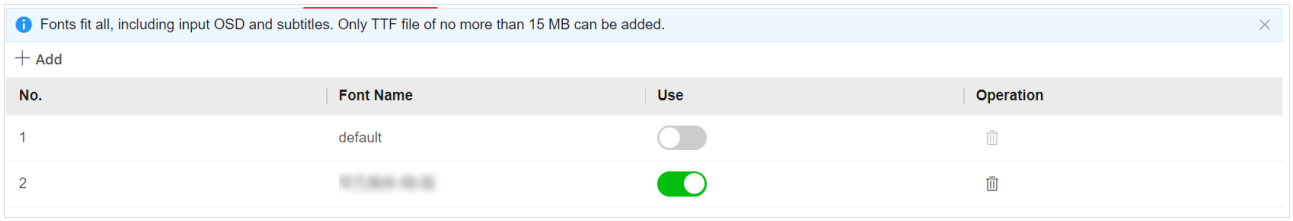


Figure 3-54 Set Font

- Go to **User Management** → **User Management** to manage users.

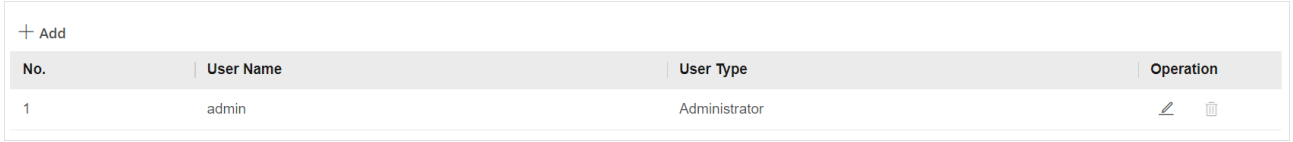


Figure 3-55 Manage Users

- Click **Add** and enter the related user information.

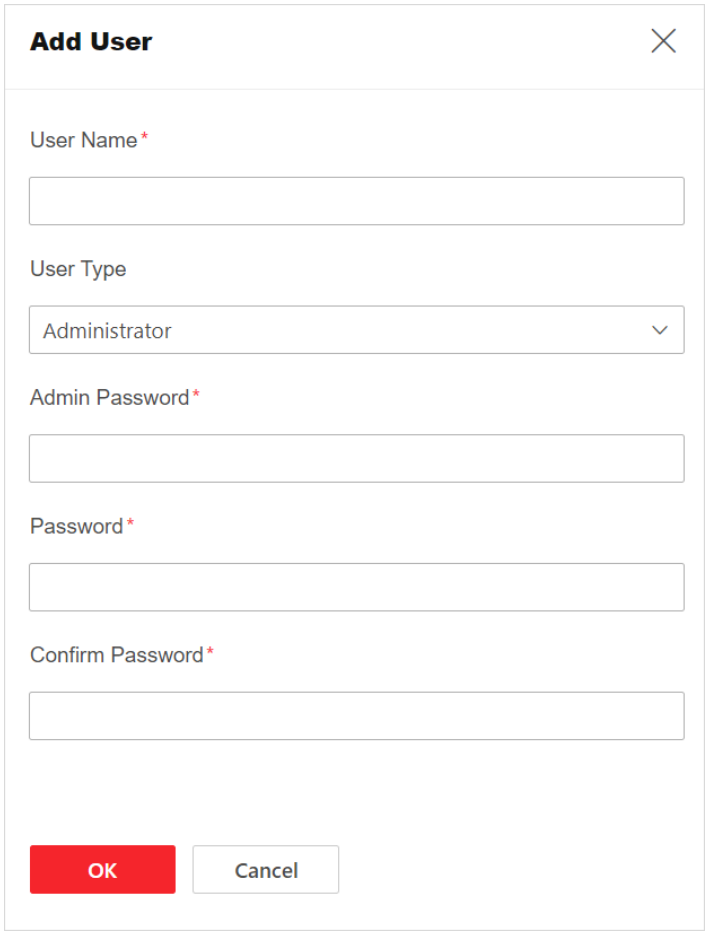


Figure 3-56 Add User

- Click to edit the user name or password.
- Click to delete the user.

**Note**

When the user type is administrator, you cannot edit its user name or delete it.

## 3.6.2 Configure HTTP(S) Parameters

Step 1 Go to **Configuration** → **Network** → **Network Service** → **HTTP(S)**.

Step 2 Set the HTTP port number.

The port number ranges from 80 to 65535. After editing the HTTP port, you need to enter HTTP://Device IP Address: Port in the browser to access the device.

Step 3 (Optional) Enable HTTPS, thus the device access via HTTPS is used by default.

Step 4 Click **Save**.

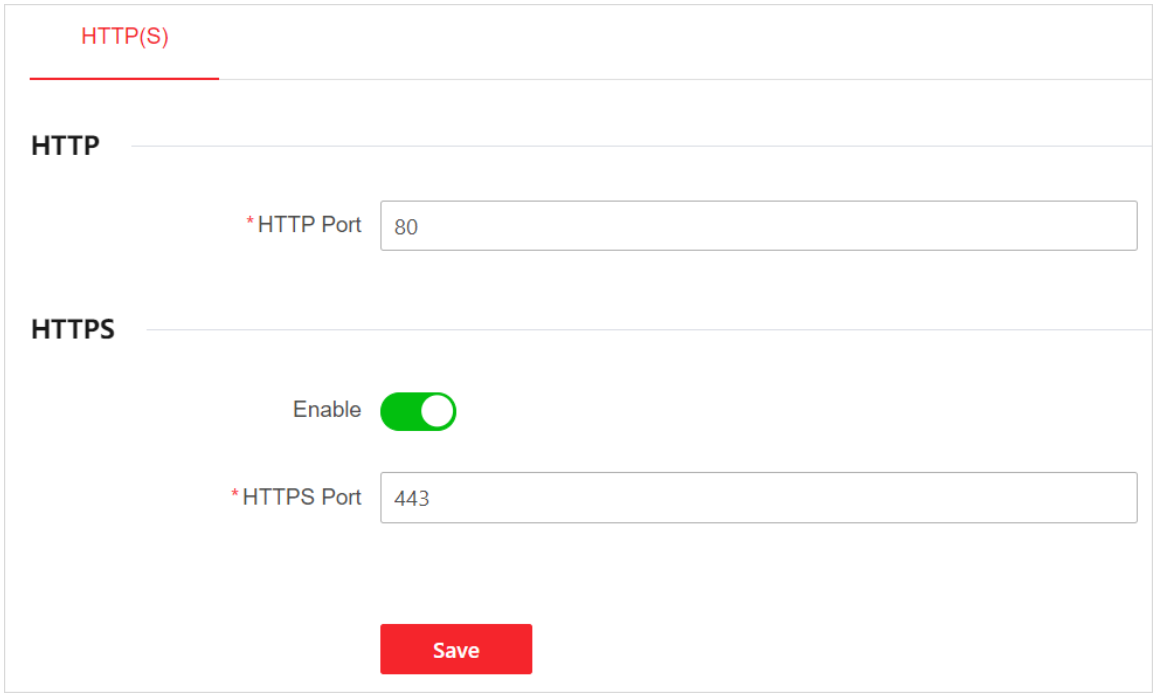


Figure 3-57 Configure HTTP (S) Parameters

## 3.6.3 Configure Event

Go to **Configuration** → **Event** to configure the audible warning and alarm reporting to the platform when the following exceptional events occur:

- The IP address of the device is the same as that of other devices in the network.
- Incorrect user name or password.
- Network is disconnected.
- The device temperature is too high or too low.
- The fan status is abnormal.

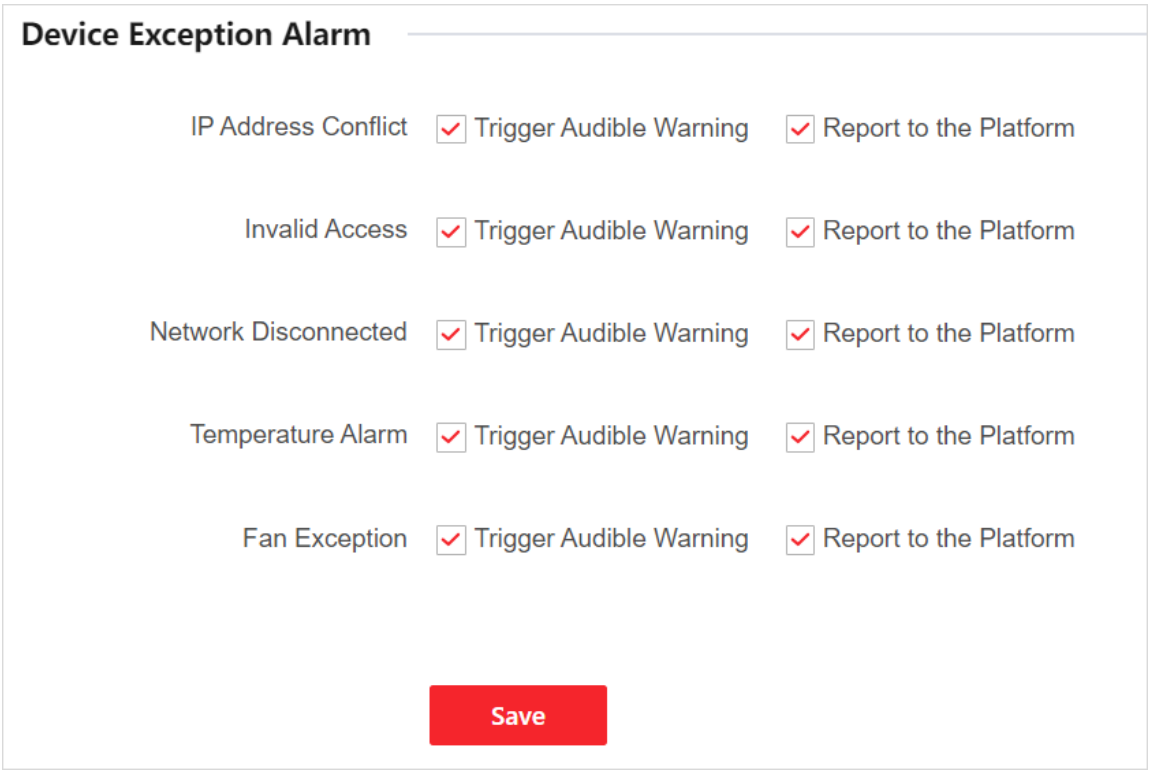


Figure 3-58 Set Device Exception Alarm

## 3.7 Maintain the System

Go to **Maintenance and Security** → **System Maintenance** to configure the following parameters:

- Click **Restart** to restart the device.
- Click to select an upgrade file, and click **Upgrade**. You need to get the upgrade file in advance and save it locally.

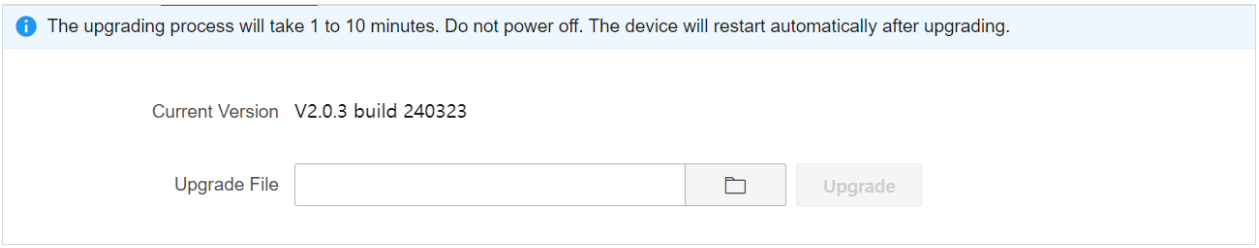


Figure 3-59 Upgrade the System

- Backup the device parameters.

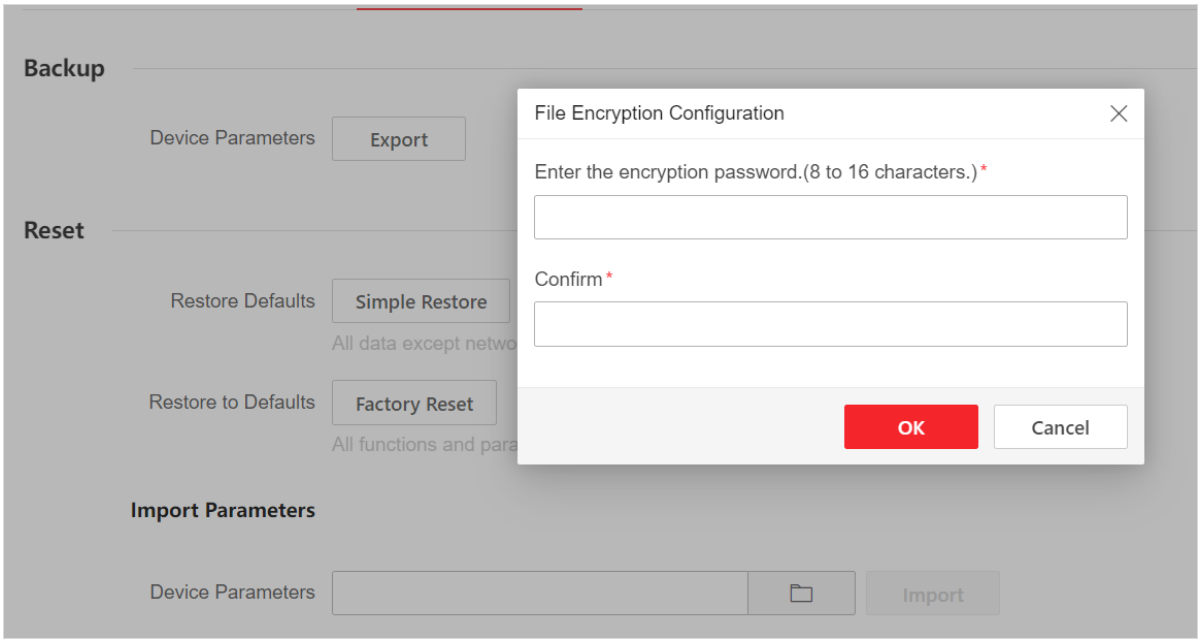


Figure 3-60 Backup Device Parameters

- Reset the device:
  - Click **Simple Restore** to restore other parameters except user information and network parameters to the default settings. Please use this function with caution.
  - Click **Factory Reset** to restore all functions and parameters of the device to the factory settings. Please use this function with caution.
  - Click to select a parameter file saved locally, and click **Import** to import device parameters.

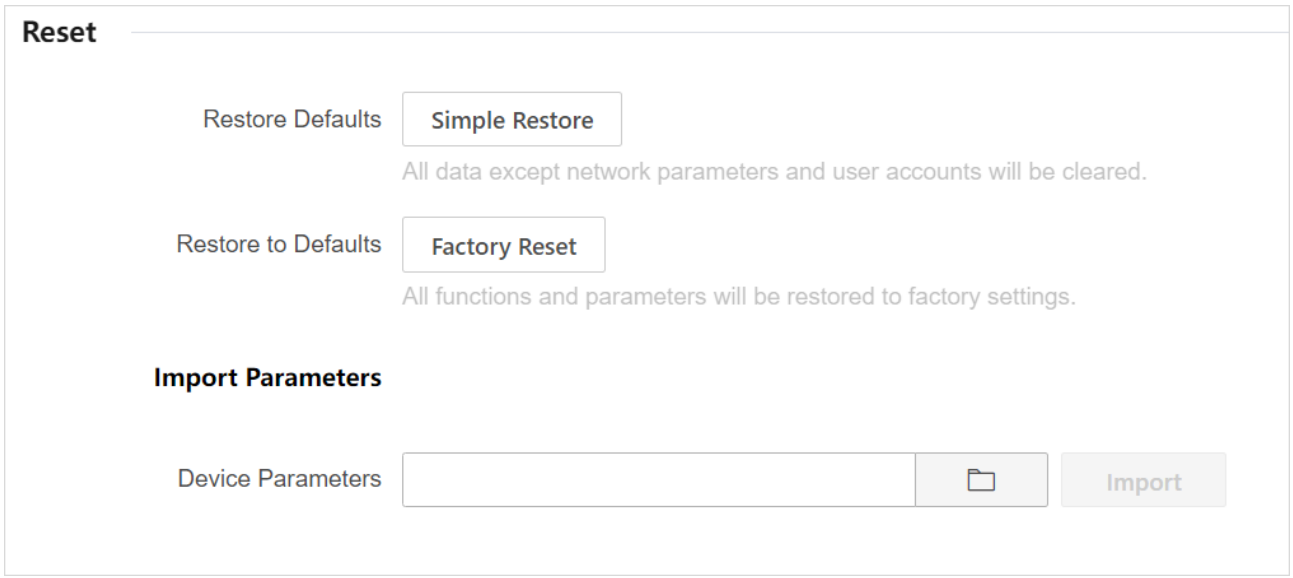


Figure 3-61 Reset Device

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

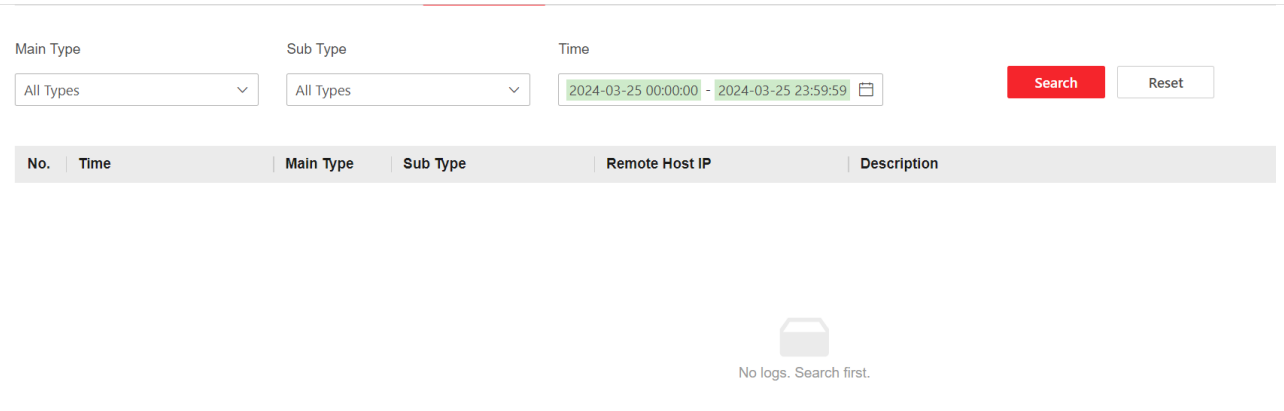


Figure 3-62 Search Logs

## Debug the Device

Click **Device Debugging** to configure the following parameters:

- Enable SSH (Secure Shell) as required. With SSH enabled, you can use a computer installed with the SSH client to access the device.
- Insert a USB flash drive into the device, and click **Start Exporting** to export the logs to the USB flash drive.

  Format the USB flash drive before inserting into the device. Only the USB flash drives in FAT32 format are supported.

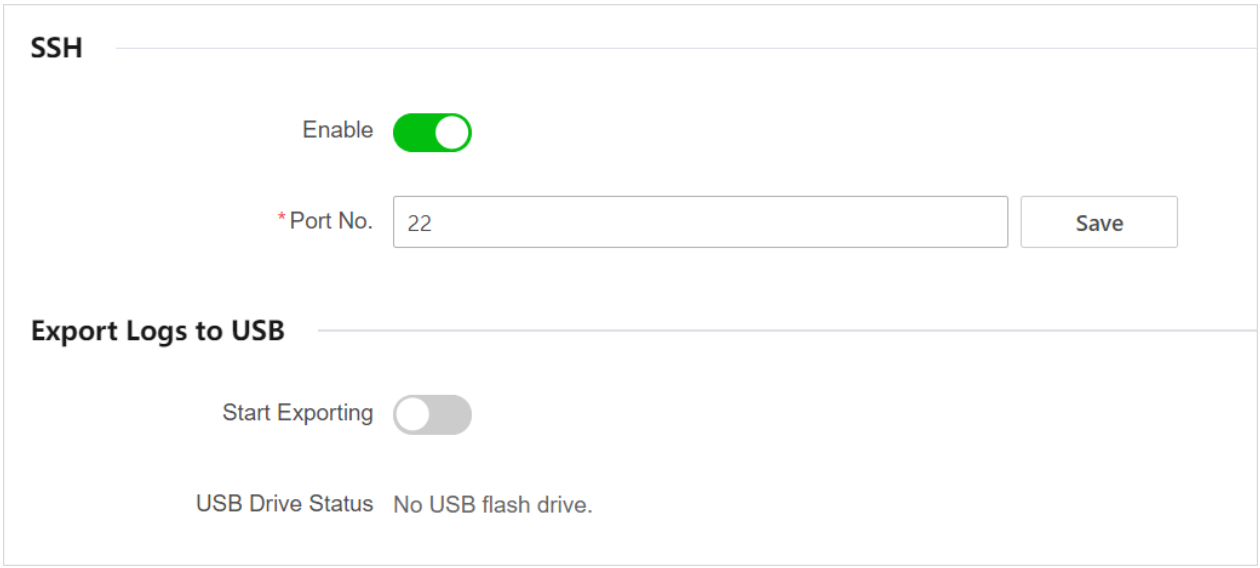


Figure 3-63 Debug the Device

## Upgrade LED Receiving Card

- If the LED screen is in black or mosaic after the screen parameters are loaded, you can import the receiving card configuration file to solve this problem.
  1) Click **Upgrade LED Receiving Card**.
  2) Select a receiving card configuration file, and then click **Import**.

- If the programs of receiving cards in the same LED screen are inconsistent, you can manually upgrade the receiving cards.
  1) Click **Upgrade LED Receiving Card**.
  2) Select a sending card to be upgraded.
  3) Select a sending card upgrade file and click **Upgrade**.

**Note**

You need to get the sending card upgrade file and receiving card configuration file in advance and save them locally.

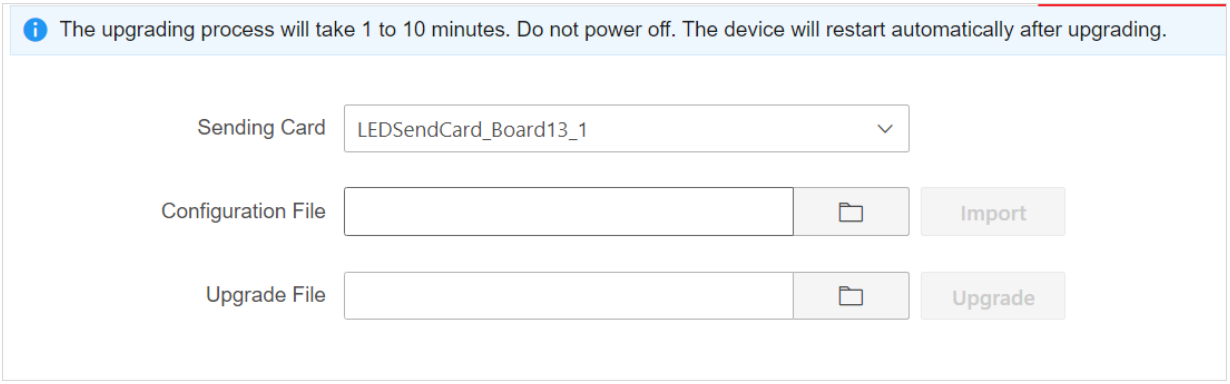


Figure 3-64 Upgrade LED Receiving Card

## 3.8 Maintain the Device Security

Go to **Maintenance and Security** → **Security Management** to configure the following parameters:

- Configure the IP addresses that are allowed to or forbidden to access the device.

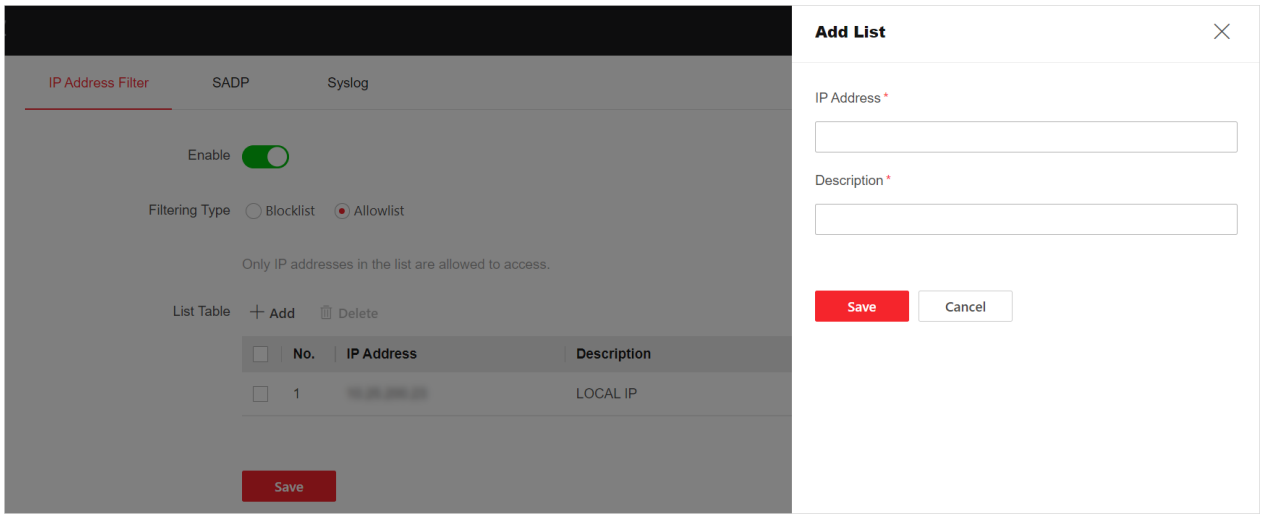


Figure 3-65 Configure IP Address Filter

- Enable SADP as required. With SADP enabled, you can use the SADP software to search the device when it is in the same network segment with the computer.

- Enable Syslog as required. With Syslog enabled, the device logs can be uploaded to the Syslog server.

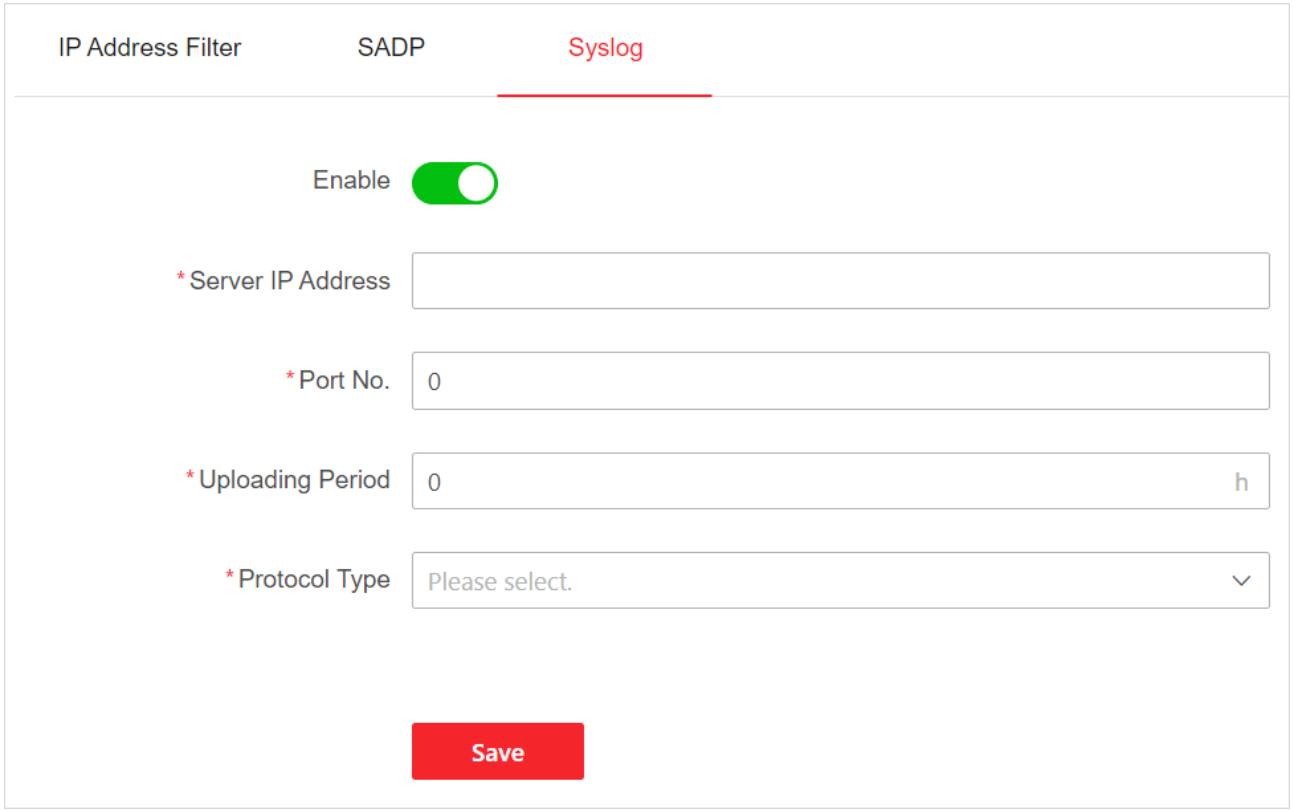


Figure 3-66 Enable Syslog


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