5 Web Page Control

5.1 Connection

The control computer can connect to the device in the following two ways:

- Via Ethernet cable

  Connect the device and the control PC directly via Ethernet cable and set a static IP address for the device to let it and the control PC be on the same network segment.

- Via LAN

  Connect the device and the control PC to the same LAN to ensure that both of them are on the same network segment.

5.2 Enter Web Control Page

Prerequisites

You have completed the connection between the device and control PC.

Notes

When the device is connected directly to a control PC via an Ethernet cable, the device and control PC must be on the same network segment and their IP addresses cannot conflict. For example, if the device IP address is 192.168.0.10, the IP address of the control PC must be 192.168.0.X and X cannot be 10.

Description

Enter the device IP address into your browser's address bar and press Enter. The web page appears.

5.3 Project Management

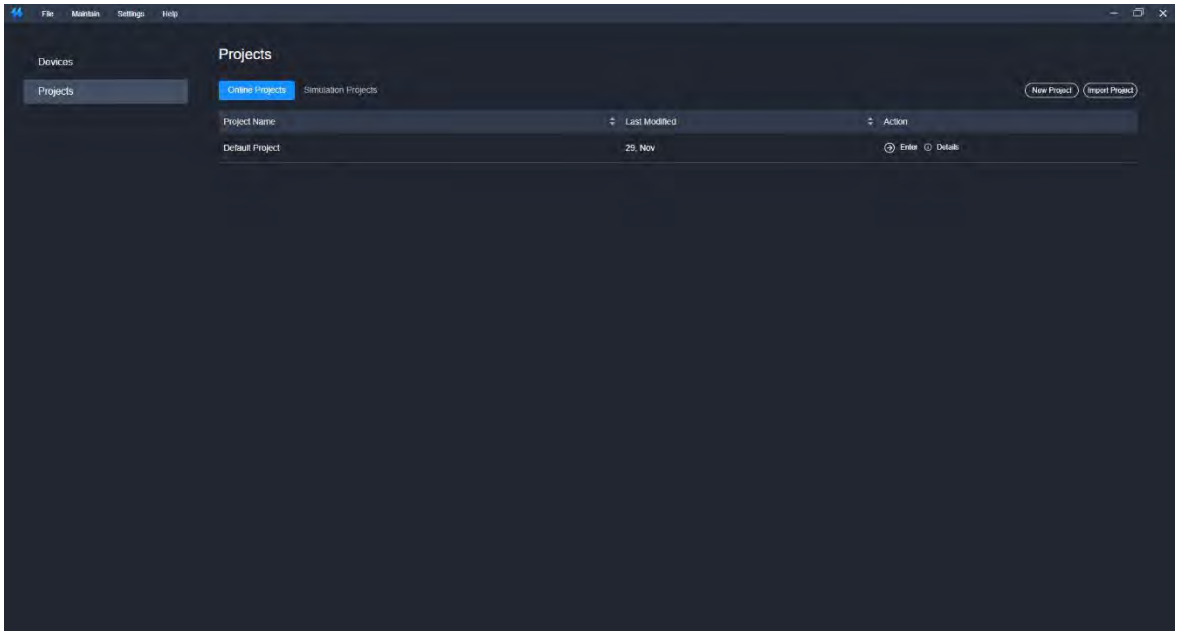
Create, edit and delete projects, and view project details. The project file (.uprj) can be exported by a device, and then imported into other devices of the same model, so as to quickly apply the device parameters and resource files in the project file.

5.3.1 Create New Projects

All the online devices on the same LAN will be automatically added to a default project. Users can create a new project and remove the desired device from the default project to the new one.

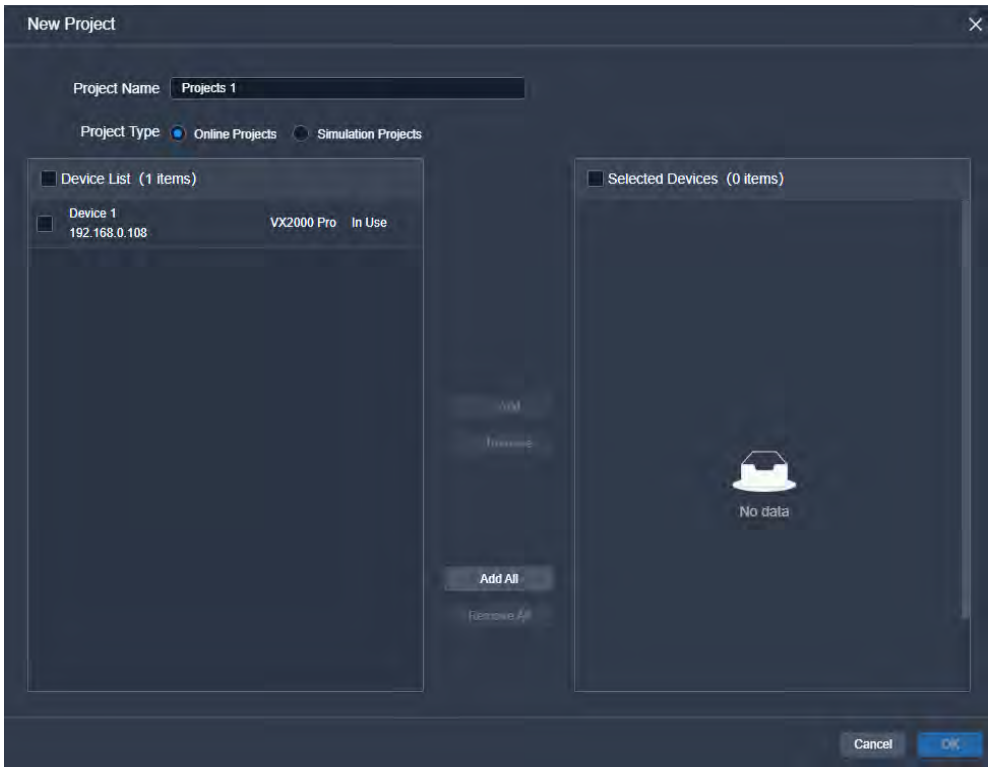
Step 1 Select **Projects** on the left side of the interface to show the project list.

Figure 5-1 Project list



Step 2 Click **New Project** on the **Online Projects** tab interface.

Figure 5-2 Create online projects (VX2000 Pro)



Step 3 Name the project.

Step 4 Select the devices that you want to include in the project, and click **Add**.

Note

A device can be added to one project only.

Related operations are as follows:

- Remove: Withdraw the selected devices in **Selected Devices** list to **Device List**.
- Add All: Add all the devices in **Device List** to **Selected Devices** list.
- Remove All: Withdraw all the devices in **Selected Devices** list to **Device List**.

Step 5 After the settings, click **OK**.

After a project is successfully created, you will enter the device configuration interface.

Note

In the project list area, you can perform the following project-related operations:

- Rename project: Hover the mouse over the desired project and click that appears on the right side of the project name.
- Enter project: Click Enter in the Action column.
- Edit project: Click Edit in the Action column.

- Delete project: Click **Delete** in the **Action** column.
- View project details: Click **Details** in the **Action** column.

5.3.2 Import Projects

Import the local project files (.uprj) to the device. Please note that the device models must match with the models in the project file.

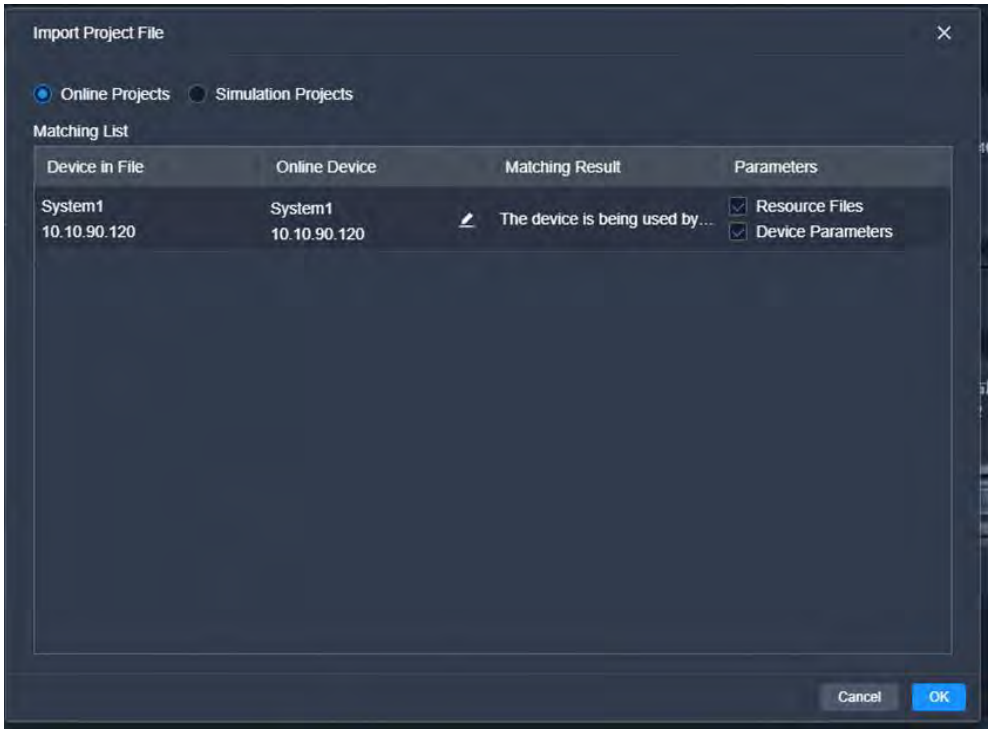
Step 1 Select **Projects** on the left side of the interface to show the project list.

Step 2 Click **Import Project** or go to **File** > **Import**.

Step 3 In the dialog box that appears, select a project file (.uprj) and click **OK**.

Step 4 In the displayed **Import Project File** window, select **Online Projects**.

Figure 5-3 Import project files



Step 5 After successful device matching, select the data to be imported and click **OK**.

The system matches the SN, name, IP address, model, and firmware version from the file with the online device.

Click  and select other online devices from the drop-down menu.

5.3.3 Export Projects

Export the device project files to your local computer.

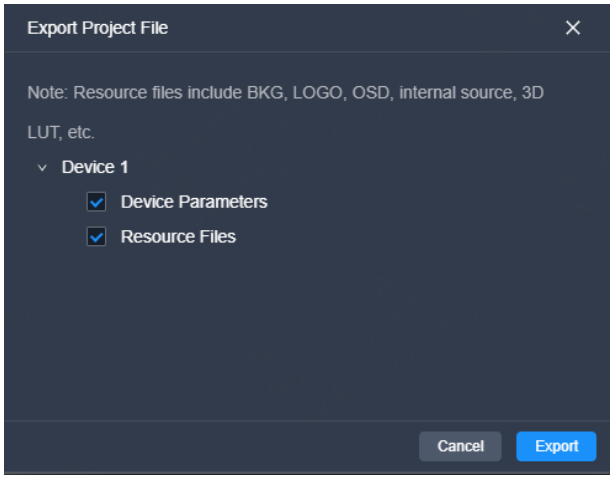
Step 1 Select **Projects** on the left side of the interface to show the project list.

Step 2 Select the **Online Projects** tab, double-click the project name or click **Enter** in the **Action** column to enter the device configuration interface.

Step 3 In the menu bar, select **File** > **Export**.

Step 4 In the displayed dialog box, select the desired data.

Figure 5-4 Export project files



Step 5 Click **Export**.

Step 6 In the displayed dialog box, select a file path and click **Save**.

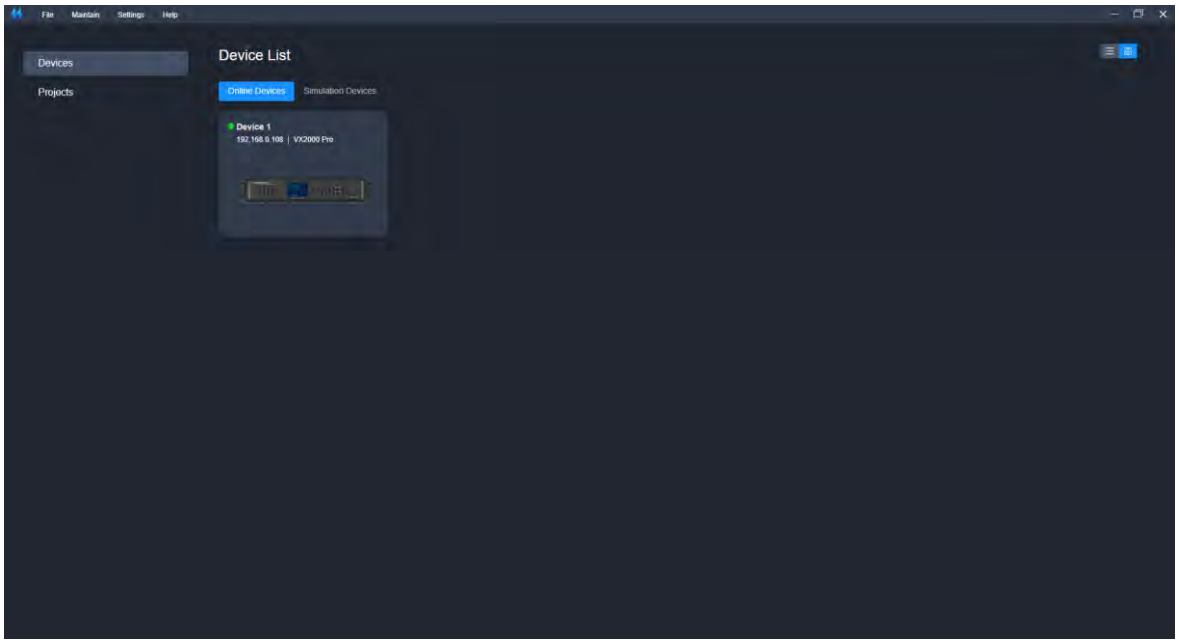
5.4 Device Management

5.4.1 Enter Device Configuration Page

5.4.1.1 Online Devices

Step 1 Select **Devices** on the left side of the interface to show the device list.

Figure 5-5 Online device list (VX2000 Pro)

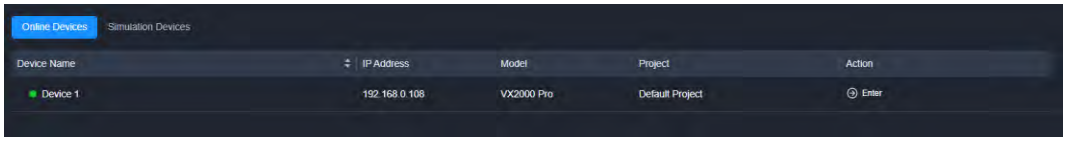


Step 2 (Optional) Switch the display style of the device list as desired.

- : Graphical view
  - View the device name, IP address and model.
  - Double clicking the device front panel image allows you to access the device configuration interface.



- : List view
  - View the device name, IP address, model, and the project the device belongs to.
  - In the **Action** column, you can access the device configuration interface.
  - Place the mouse over the device information and click that appears on the right side of the device name to change the device name.



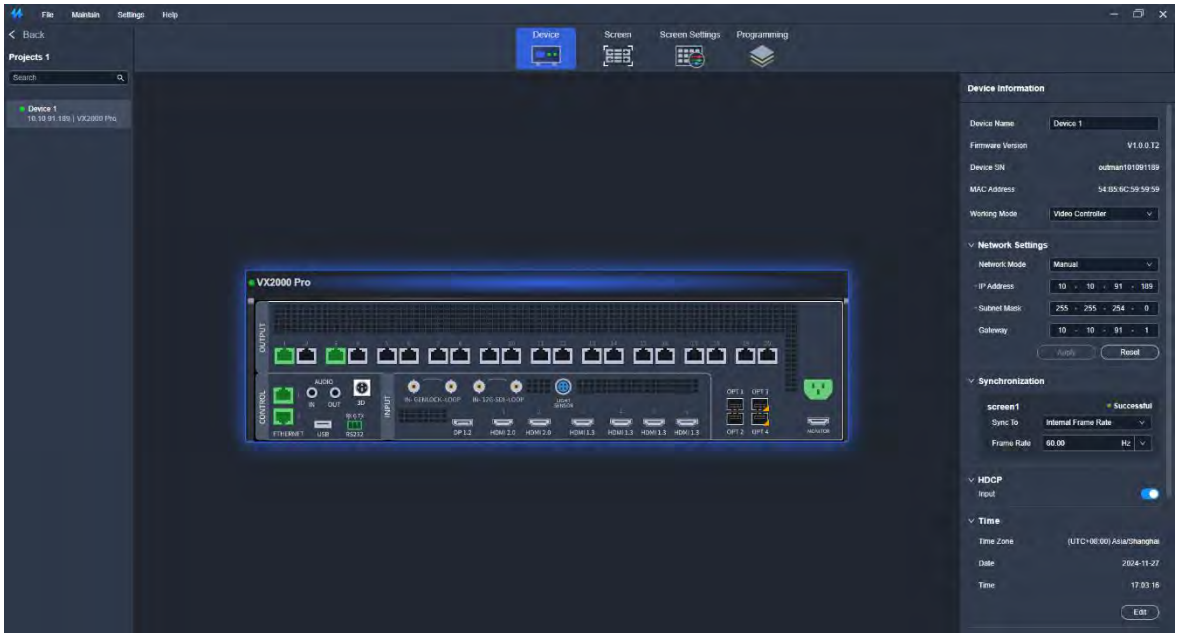
Step 3 Perform either of the following actions to enter the device configuration page.

- In the graphic view mode ( ), double click the image of the device front panel.
- In the list view mode ( ), click **Enter** in the **Action** column.

5.4.2 Configure Device Properties

Select the device on the left side of the device configuration interface, and then configure the device-related properties on the right pane.

Figure 5-6 Device properties (VX2000 Pro)



5.4.2.1 Rename Device

Change the device name.

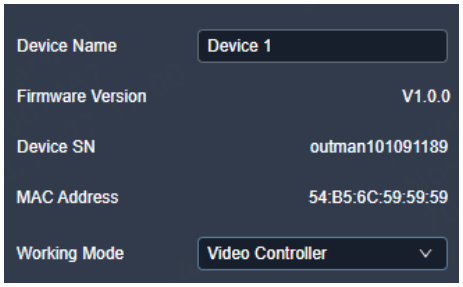
Prerequisites

None

Notes

None

Interface Example



Description

Enter a name for the device in the text box next to **Device Name**.

Note

In the device list on the left side of the interface, you can also right click the device name and select Rename from the context menu to change the device name as well.

5.4.2.2 Switch Working Mode

Switch the device working mode.

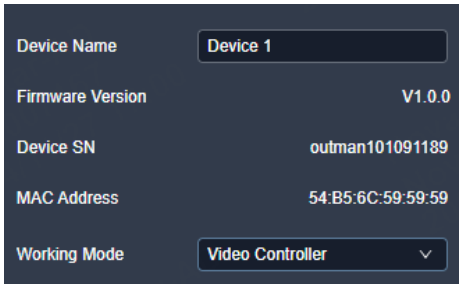
Prerequisites

None

Notes

Set the device working mode according to the on-site application and screen connections.

Interface Example



Description

Select **Video Controller**, **Fiber Converter** or **ByPass** from the drop-down list.

5.4.2.3 Configure IP Address

Manually set a static IP address for the device or let the device to automatically obtain an IP address.

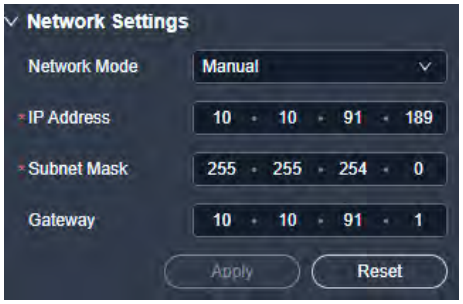
Prerequisites

None

Notes

None

Interface Example



Description

Configure the following parameters and click **Apply** to make the settings take effect.

Parameter	Description
Network Mode	Select the IP configuration method. • Manual: Manually set a static IP address for the device. • DHCP: The device automatically obtains an IP address.
IP Address	The device IP address
Subnet Mask	The subnet mask of the IP address

Parameter	Description
Gateway	The default gateway

5.4.2.4 Configure Sync Source

Select a sync signal to synchronize all the cascaded device units or synchronize the primary and backup devices to display the output images of all the units in sync.

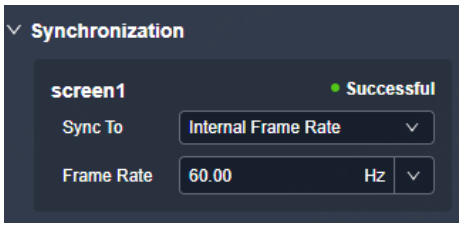
Prerequisites

Before enabling the Genlock sync function, make sure the sync signal has been connected to the Genlock connector of the device.

Note

None

Interface Example



Description

Parameter	Description
Sync To	Select a sync source. • Internal Frame Rate: The frame rate of the output image • DP/HDMI X/SDI: Sync with the frame rate of the selected input source. "X" represents the input source number and its format may vary depending on the actual setup. • Genlock: Sync with the frame rate of the Genlock signal. When the function is enabled, the frame rate of the sync source will be displayed.
Frame Rate	When you select **Internal Frame Rate**, you can manually set the output frame

Parameter	Description
	rate. The default value is 60Hz.

5.4.2.5 Configure HDCP

High-bandwidth Digital Content Protection (HDCP) is a form of digital copy protection to prevent copying of digital audio and video content as it travels across connections. When the accessed input source is an HDCP-encrypted one, you need to turn on this function to enable the device to transmit and process the source.

Prerequisites

None

Notes

None

Interface Example



Description

Parameter	Description
HDCP	Turn on or turn off the function. • : On • : Off

5.4.2.6 Configure Date and Time

Configure the time zone, date and time of the device.

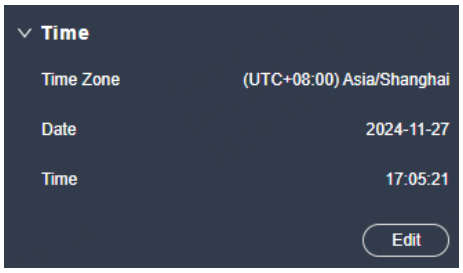
Prerequisites

None

Notes

None

Interface Example



Description

Click **Edit** and the parameters become editable. Set the time zone, date and time respectively, and then click **Apply**.

5.4.2.7 Configure Input Source Backup

Establish a backup relation for two input sources.

Prerequisites

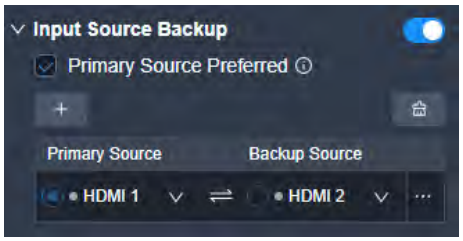
None

Notes

- The backup relation can only be established if the input connectors have identical capacities.
- Once the function is enabled, the switching of the connector capacity is not supported.
- In the **Manual** mode, use the designated source only regardless of signal availability. In the **Auto** mode, adhere to the following principles when the primary source transitions from no signal to signal presence:

- If **Primary Source Preferred** is selected, automatically switch to the primary source.
- If **Primary Source Preferred** is not selected, continue using the backup source.

Interface Example



Description

Step 1 Set the **Input Source Backup** switch to .

Step 2 Select or deselect **Primary Source Preferred**.

Step 3 Click .

Step 4 Select a primary source and a backup source respectively from two drop-down lists to establish a hot backup pair.

The green dot ● indicates the source is accessed normally and ready for use.

- To delete a hot backup pair, click next to the pair and click **Delete**.
- To delete all hot backup pairs, click .

Step 5 Click on the right and set **Mode** to either **Auto** or **Manual**.

If **Manual** is selected, you will also need to choose the desired source.

5.4.2.8 Reset to Factory Settings

Reset the device data and settings to factory default values.

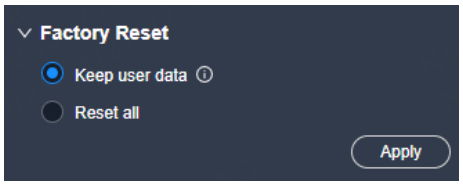
Prerequisites

None

Notes

- Please do this with great caution.
- The reset action does not affect the device firmware version.
- Power-off is not allowed during the reset process.
- The device will restart automatically after the reset is completed.

Interface Example



Description

Select **Keep user data** or **Reset all**, and then click **Apply**.

- Keep user data

  Retain the device IP address, input connector EDID, gallery files, language settings, device name and belonged project.

- Reset all

  Retain the device IP address and belonged project.

5.4.2.9 Restart Device

Restart the device.

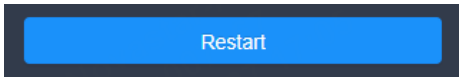
Prerequisites

None

Notes

None

Interface Example



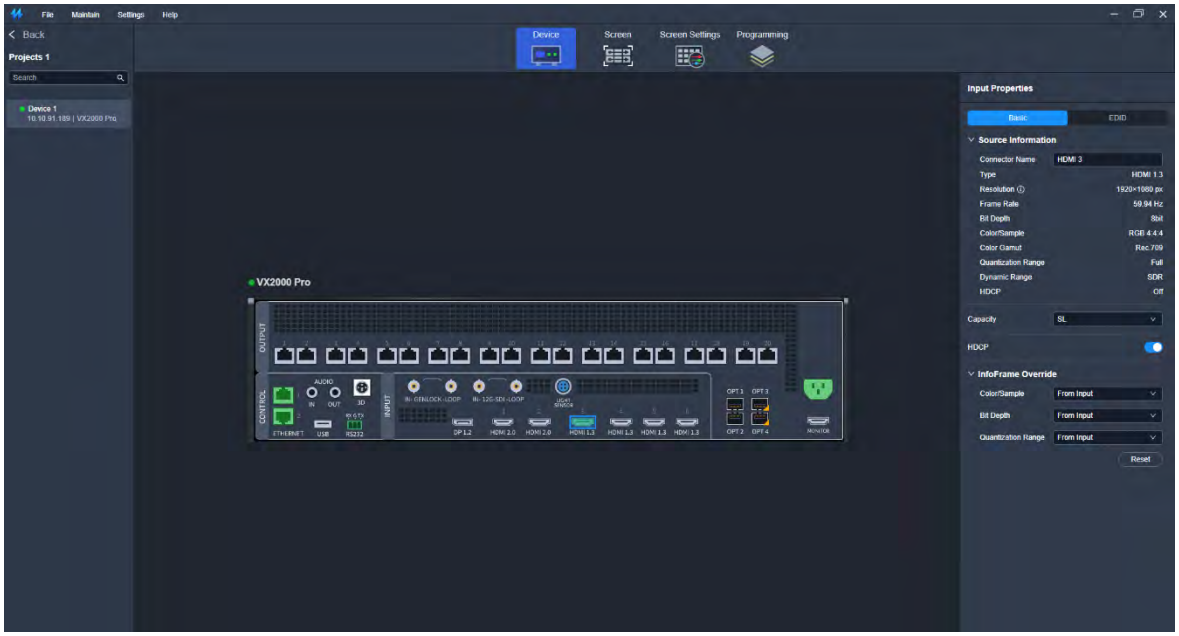
Description

Click **Restart**, and then click **Yes** in the displayed dialog box.

5.4.3 Configure Input Properties

Click the target input connector on the graphical device rear panel, and then set the input-related properties in the property area on the right pane.

Figure 5-7 Input properties (VX2000 Pro)



5.4.3.1 View Input Source Info

View the basic properties of the input connector and change the input connector name.

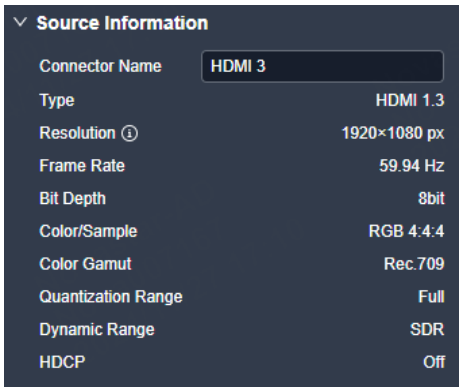
Prerequisites

A fine signal is connected to the input connector.

Notes

None

Interface Example



Description

On the **Basic** tab interface, change the connector name as required.

5.4.3.2 Set OPT Ports

Set the OPT working mode and loop mode.

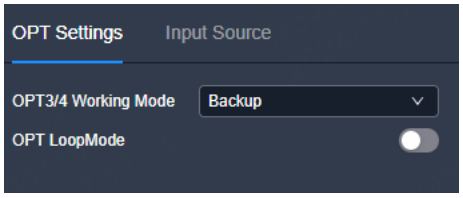
Prerequisites

The device working mode is set to **Video Controller**.

Notes

None

Interface Example



Description

Device Model	Parameter	Description
VX2000 Pro	OPT 3/4 Working Mode	OPT 3 and OPT 4 working modes Config method: Select **Copy** or **Backup** from the drop-down list. • **Copy**: OPT 3 and OPT 4 copy the output on Ethernet port 1~10 and 11~20 respectively. After you complete the settings, the OPT ports on the graphical device panel will be highlighted. • **Backup**: OPT 3 and OPT 4 back up the output on Ethernet port 1~10 and 11~20 respectively. After you complete the settings, the backup icons will be displayed at the bottom right corner of the OPT ports on the graphical device panel.
VX2000 Pro	OPT LOOP Mode	Turn on or turn off the function. • On: After this function is enabled, the video signal accessed by OPT 1 will be looped out via OPT 2. • Off:

5.4.3.3 View OPT Source Info

View the basic properties of the OPT source and change the OPT port name.

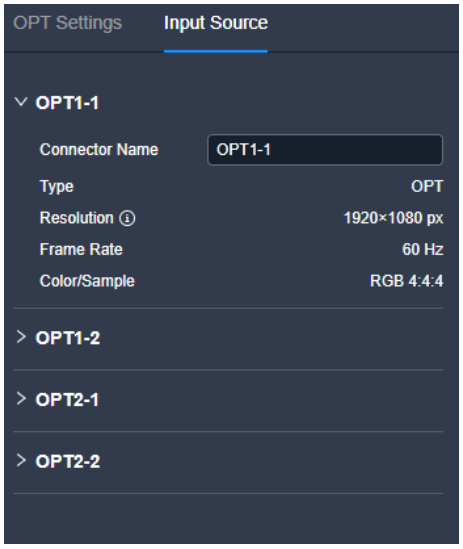
Prerequisites

- The device working mode is set to **Video Controller**.
- OPT 1 and OPT 2 is connected to the OPT ports on the front-end video processor via optical fiber cables. Additionally, a fine signal is connected to the front-end device.

Notes

Each OPT support the transmission of 1x DL or 2x SL sources.

Interface Example



Description

On the **Input Source** tab interface, change the connector name as required.

5.4.3.4 Set Input Connector Capacity

Switch the input connector capacity as desired.

Prerequisites

Notes

Interface Example

When a connector is configured for hot backup, you can no longer switch its capacity.

Interface Example



Description

Parameter	Description
Capacity	Select the desired connector capacity from the drop-down list. • 4K: 4K×2K • DL: 4K×1K • SL: 2K×1K

5.4.3.5 Configure InfoFrame Override Parameters

Configure the InfoFrame override parameters of the input source, so that the device can use it when doing some calculations. This action does not change the parameter values that come with the input source.

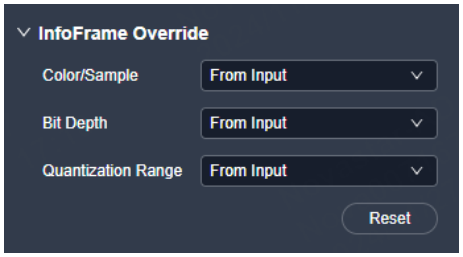
Prerequisites

None

Notes

None

Interface Example



Description

On the **Basic** tab interface, configure the following parameters.

Parameter	Description
Color/Sample	The sampling format of the input

Parameter	Description
Bit Depth	The bit depth of the input, i.e., the binary digits to represent a single color
Quantization Range	The quantization range of the input

Select **From Input** and the device will read the attribute values that come with the input source.

5.4.3.6 Configure EDID

Configure the resolution and frame rate of the input. You can select the standard resolution provided by the device, customize a resolution, or set the advanced parameters.

Prerequisites

- SDI does not support this function.
- The front-end device outputs the video source from the graphics card.

Notes

It is recommended the advanced settings be carried out by the trained personnel only.

Interface Example



Description

On the **EDID** tab interface, configure the following parameters and click **Apply** after the settings.

Parameter	Sub-Parameter	Description
Resolution	-	The number of horizontal pixels and vertical pixels of the image Config method: • Select the desired resolution from the drop-down list. • Select **Custom** from the drop-down list, and then set the width and height values respectively.
Frame Rate	-	The image frames every second (unit: Hz) Config method: Select the standard common frame rates from the drop-down options. The available frame rates may vary according to the chosen resolution.
Advanced	H Total	Total pixel count per line

Parameter	Sub-Parameter	Description
	H Active	The horizontal size in pixels of the active area
	H Front Porch	The offset between the end of the active area and the beginning of the H sync
	H Sync	The horizontal sync width in pixels (or between pixels)
	H Polarity	The polarity of the horizontal sync pulse
	V Total	Total pixel count per column
	V Active	The vertical size in pixels of the active area
	V Front Porch	The offset in lines between the end of the active output area and the beginning of V sync
	V Sync	The vertical sync width in rows (or between rows)
	V Polarity	The polarity of the vertical sync pulse

5.4.3.7 Import and Export EDID

When compatibility problem occurs on an input connector, import an intact EDID file into the device; or export an EDID file from a device and provide the EDID file to other devices or input connectors to solve the compatibility issues.

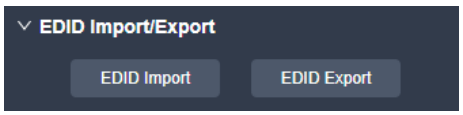
Prerequisites

SDI does not support this function.

Notes

- Each input connector supports importing one EDID file only.
- Once the EDID file is imported, the input connector will recognize and apply the parameters from the file.

Interface Example



Description

- EDID Import

  On the **EDID** tab interface, click **EDID Import**. In the dialog box that appears, select an EDID file and click **Open**.

- EDID Export

  On the **EDID** tab interface, click **EDID Export**. In the dialog box that appears, select a path and click **Save**.

Note

If you need to modify the content of an imported EDID file, just modify it and then re-import it to overwrite the original one.

5.4.3.8 Configure Compatibility with Mac

When the device is incompatible with the EDID of a Mac system, you may activate this feature to resolve the issue.

Prerequisites

None

Notes

None

Interface Example



Description

Parameter	Description
Compatibility	Turn on or turn off the function. • : On

Parameter	Description
	• : Off

5.5 Screen Configuration

5.5.1 Configure Screen Topology

Configure the cabinet topology to complete the physical wiring connections of the cabinets on the screen.

5.5.1.1 Configure Online Cabinets

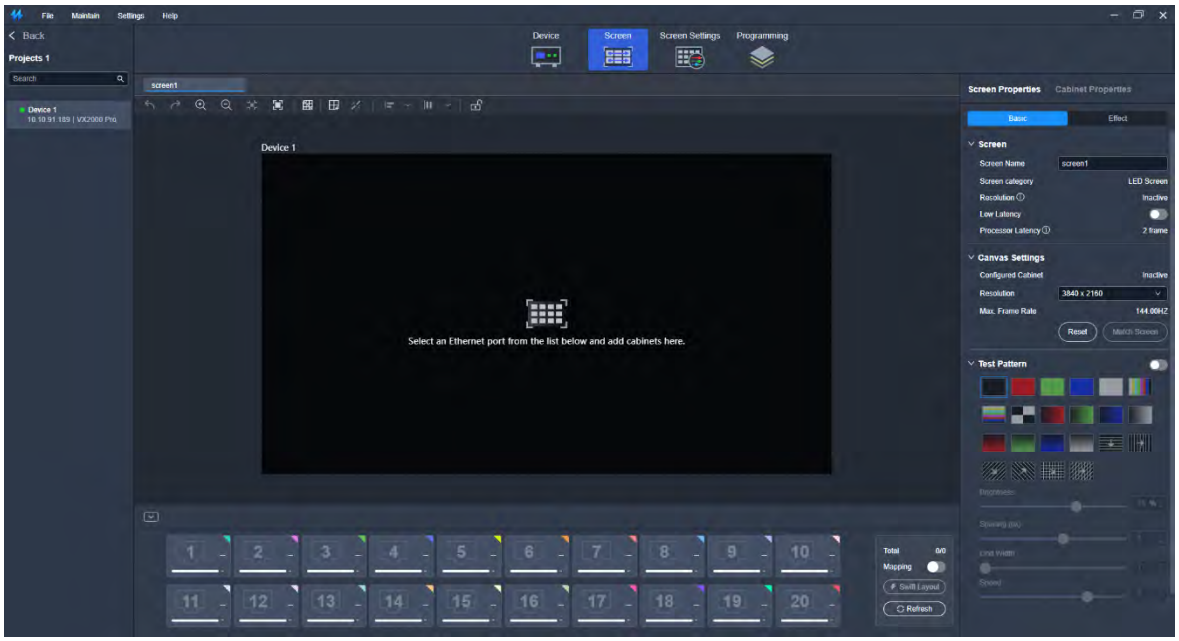
Prerequisites

The device is connected and cabinets are connected to the device.

Operating Procedure

Step 1 Select a device on the left side of the interface and then click **Screen** at the top of the page.

Figure 5-8 Screen configuration (VX2000 Pro)



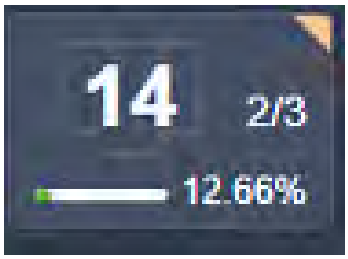
Step 2 Select an Ethernet port at the bottom and then drag and click the mouse in the topology area to add cabinets.

The cabinets will be automatically connected when you are adding them, as shown in Figure 5-9. The Ethernet port's loading capacity information will be displayed, as shown in Figure 5-10.

Figure 5-9 Cabinets connected automatically



Figure 5-10 Ethernet port capacity



- 2/3: Indicates that there are three cabinets connected to Ethernet port 1 and 2 of which are added to the topology.
- 12.66%: Indicates these two cabinets have used 12.66% of the Ethernet port capacity.

Note

- Swift Layout: If all the cabinets loaded by the Ethernet ports have the same model, resolution, and connection topology, you can use the Swift Layout function to quickly add and connect the cabinets for all the Ethernet ports.
- Operating procedure: Click Swift Layout and then drag the mouse in the topology area to add cabinets that match the actual requirements. In the properties area, select a layout and click **Done**.

Step 3 Select other Ethernet ports and continue to add cabinets until all cabinets are connected.

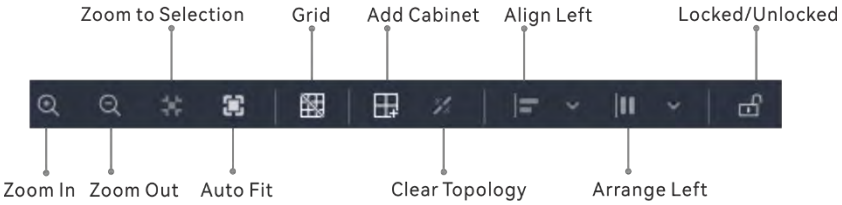
Step 4 For cabinets that have the same size and consecutive serial numbers, if you want to change the cabinet connection topology, select the cabinets and then select a quick topology under **Quick topo** in the properties area, as shown in Figure 5-11. For other cabinets, skip this step.

Figure 5-11 Quick topology

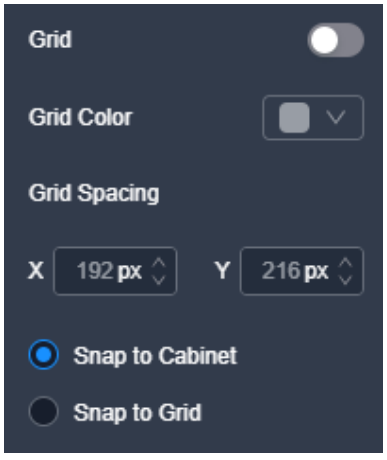


Step 5 Do any of the following to arrange and align the cabinets and cabinet groups to let the cabinet positions meet the display requirements.

- Use the function buttons.



  - Zoom to Selection: The selected element is zoomed and displayed in the center of the canvas.
  - Auto Fit: The canvas size is automatically adjusted to fit the topology area size.
  - Click  to show its drop-down menu shown below. The menu can be used to set the canvas grid.



Grid: When toggled on (), a grid is displayed on the canvas. If you do not need to display the grid, set the switch to .

Grid Color: Set the grid color.

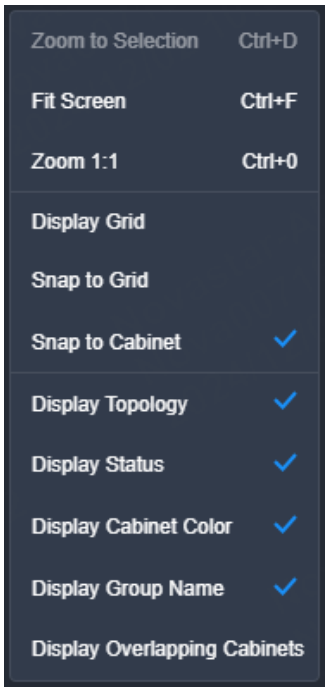
Grid Spacing: Set the spacing of horizontal and vertical lines of the grid. The spacing is set to the resolution of the first cabinet by default.

Snap to Cabinet: When positioning a cabinet near another one, the cabinet being moved will automatically align and snap to the edge of the adjacent cabinet, effectively eliminating gaps.

Snap to Grid: The cabinet will be snapped to the grid.

- Add Cabinet: Add online cabinets or cabinets in the cabinet library.

- Use the right-click function menu
  - Select String: Select all the cabinets on the connection line of the current cabinet.
  - Change Model: Change the model of the current cabinet.
  - Select Same Cabinets: Select the cabinets of the same model of the current cabinet.
  - Blackout: Blackout the output image displayed on the current cabinet.
  - Freeze: Freeze the output image displayed on the current cabinet.
  - Swap: Swap the positions of the two selected cabinets.
  - Group: Select the desired cabinets and right click on them. Click **Group** in the context menu, and then the selected cabinets will be grouped for batch control. To set the group name and color, please select the group and set them in the properties area. You can also use the keyboard shortcuts **Ctrl+G** to perform the grouping operation.
  - Ungroup: Ungroup the cabinets. You can also use the keyboard shortcuts **Ctrl+Shift+G** to perform this action.
  - Add to: Add the selected cabinets to a group.
  - Clear Topology: Clear the current cabinet topology.
  - Delete: Delete the selected cabinet. You can also use the keyboard shortcuts **Del** to perform this action.
- Right click on the canvas edge and use the function menu



- Zoom to Selection: The selected element is zoomed and displayed in the center of the canvas.
- Fit Screen: The canvas size is automatically adjusted to fit the topology area size.
- Zoom 1:1: The canvas size equals the input source resolution.
- Display Grid: Display a grid on the canvas.
- Snap to Grid: The cabinet will be snapped to the grid.
- Snap to Cabinet: When positioning a cabinet near another one, the cabinet being moved will automatically align and snap to the edge of the adjacent cabinet, effectively eliminating gaps.
- Display Topology: Display the cabinet connections.
- Display Status: Display the cabinet status.

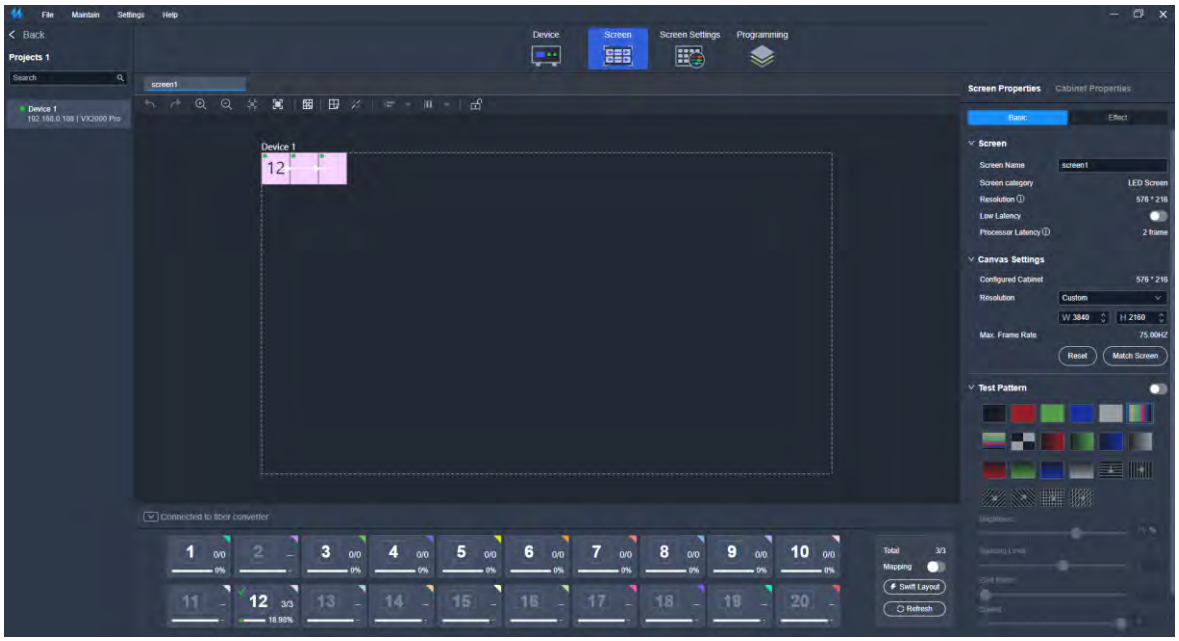
  Green: The cabinet is in the canvas area.

  Gray: The cabinet is offline.

  Orange: Some part of the cabinet is in the canvas area.

  Red: The entire cabinet is out of the canvas area.
- Display Cabinet Color: Display a color icon at the top right corner of an Ethernet port. Once an Ethernet port is loading cabinets, a color icon will be displayed which is of the same color as the cabinet color.
- Display Group Name: Display the cabinet group name.
- Display Overlapping Cabinets: Display the overlapping cabinets.

Figure 5-12 Online cabinet topology (VX2000 Pro)



Note

- Use either Unico web page or NovaLCT to configure the screen.
- Mapping is used to show the relations between the cabinets of the LED screen and the sending devices so that you can view or check the connections between the cabinets.
- In the menu bar, go to **File** > **Export Screen Config File** to export the configured cabinet topology as a file (.scr).
- In the menu bar, go to **File** > **Import Screen Config File** to import a saved screen configuration file for quick topology.

5.5.2 Configure Screen Properties

Set the screen-related properties in the property area on the right pane.

5.5.2.1 Rename Screens

Change the screen name.

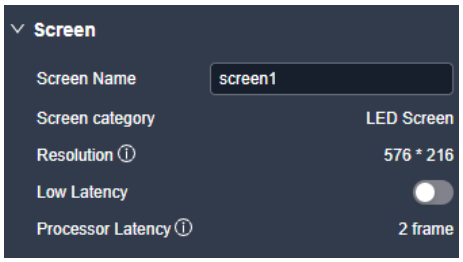
Prerequisites

None

Notes

None

Interface Example



Description

On the **Basic** tab interface, enter a new screen name, and then click elsewhere in the interface to complete the screen name change.

5.5.2.2 Configure Low Latency

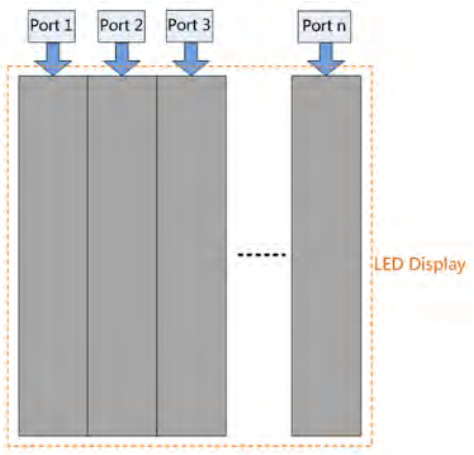
When the input source travels from where it comes to the processing device, sending device and then the receiving card, latency exists inevitably. Turning on this function can effectively help to reduce the latency from the input to output.

Prerequisites

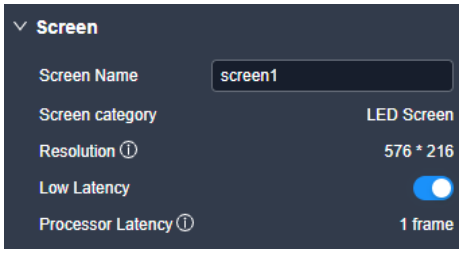
None

Notes

To enable low latency, please make sure all Ethernet ports load the cabinets vertically and share the same Y coordinate. Free screen configuration (for example, Ethernet port 2 loads cabinets horizontally, or its Y coordinate is different from that of Ethernet port 1) will reduce the load capacity.



Interface Example



Description

Parameter	Description
Low Latency	Turn on of turn off the function. • : On The device latency can be reduced by 1 frame. • : off

5.5.2.3 Set Canvas Size

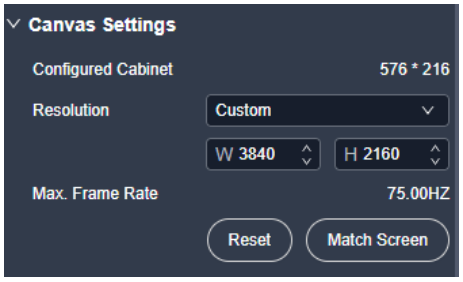
Prerequisites

None

Notes

None

Interface Example



Description

On the **Basic** tab interface, configure the following parameters.

Parameter	Description
Resolution	The size of the canvas, that is the size of the device effective loading area Config method: • Select the desired resolution from the drop-down list. • Select **Custom** from the drop-down list, and then set the width and height values. Generally, the size of the effective loading area should match with that of the physical screen. After you complete the settings, the system will automatically calculate the max output frame rate at the current resolution.
Match Screen	After the screen configuration is completed, click **Match Screen** and the system will automatically change the canvas size to the size of the circumscribed rectangles.

5.5.2.4 Configure Test Patterns

Test patterns are used to check the connection relation between the output connectors and the screen, and check whether the screen display is good.

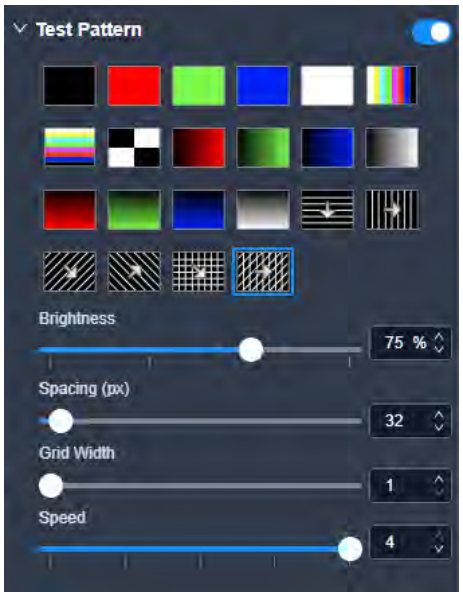
Prerequisites

None

Notes

None

Interface Example



Description

On the **Basic** tab interface, configure the following parameters.

Parameter	Description
Test Pattern	Turn on or turn off the function. • : On • : Off After the function is enabled, select the desired test pattern.
Brightness	Set the brightness of the test pattern.
Spacing Level	Set the spacing between different color areas. If a multi-color test pattern is selected, this parameter is available.
Spacing (px)	Set the spacing between the lines. If a grid test pattern is selected, this parameter is available.
Grid Width	Set the width of the grid lines.
Speed	Set the moving speed of the lines.

5.5.2.5 Configure Output Color

Configure the output color parameters.

Prerequisites

None

Notes

Note

Interface Example



Description

On the **Effect** tab interface, configure the following parameters.

Parameter	Description
Contrast	The ratio of the luminance of the brightest color to that of the darkest color Adjust the contrast value either as a whole or individually adjust the RGB components.
Brightness	The shading of lights in the image Adjust the brightness value either as a whole or individually adjust the RGB components.
Hue	The relative degree of how bright or dark the image is
Saturation	The color purity of the image The higher the value, the more vivid the color.

5.5.3 Configure Cabinet Properties

5.5.3.1 View Cabinet Info

View cabinet-related info.

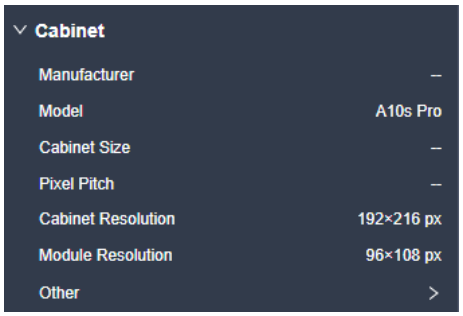
Prerequisites

None

Notes

None

Interface Example



Description

None

5.5.3.2 Configure Cabinet Groups

Change the cabinet group name and background color.

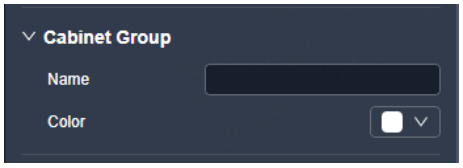
Prerequisites

A cabinet group has been created.

Notes

None

Interface Example



Description

On the **Cabinet Properties** tab interface, configure the following parameters.

Parameter	Description
Name	The name of the cabinet group Config method: Enter a new group name, and then click elsewhere in the interface to complete the group name change.
Color	The background color of the group name Config method: Click the color block next to **Group Color**, and then select a standard color or enter RGB values to set the background color of the cabinet group name.

5.5.3.3 Configure Cabinet Positions

Prerequisites

None

Notes

The cabinet rotation in 90° increments feature is only supported by certain models of receiving cards, as detailed below:

Model	Description
CA50E, XA50Pro, A10s Pro	Supported by all versions.
A8s-N, A7s Plus, A5s Plus	Supported by V4.9.0.0 or later.

Interface Example



Description

On the **Cabinet Properties** tab interface, configure the following parameters.

Parameter	Description
Coordinates	The position of the cabinet on the canvas • X: X coordinate of the cabinet on the canvas • Y: Y coordinate of the cabinet on the canvas
Rotation (0°)	Rotate the cabinet. Once the cabinet is rotated, the input source will display at the adjusted angle. Supported rotation angles: 0°, 90°, 180° and 270°

5.5.3.4 Set Cabinets

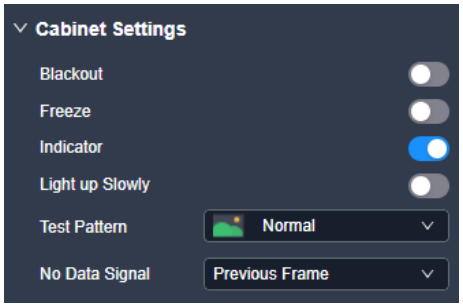
Prerequisites

None

Notes

None

Interface Example



Description

On the **Cabinet Properties** tab interface, configure the following parameters.

Parameter	Description
Blackout	Turn on or turn off the function. • : On • : Off
Freeze	Turn on or turn off the function. • : On • : Off
Indicator	Turn on or turn off the function. • : On • : Off
Light up Slowly	Turn on or turn off the function. • : On • : Off

Parameter	Description
	Once enabled, the display brightness will slowly change from 0 to the target value after the screen is powered on.
Test Pattern	Select a test pattern to perform screen aging test and troubleshoot problems.
No Data Signal	Set the display image after the Ethernet cable is disconnected. • Blackout: The screen displays a black image. • Previous Frame: The screen always displays the last frame.

5.5.3.5 Configure Ethernet Port Backup

Test whether the pre-stored images, backup Ethernet ports and devices take effect without plugging and unplugging the Ethernet cables.

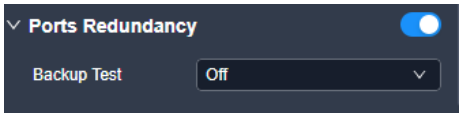
Prerequisites

The pre-stored images, primary and backup Ethernet ports or primary and backup devices have been configured.

Notes

None

Interface Example



Description

On the **Cabinet Properties** tab interface, configure the following parameters.

Parameter	Description
Ports Redundancy	Turn on or turn off the function. • : On • : Off

Parameter	Description
Backup Test	Select the desired backup test. • Off: Enable the output of all the Ethernet ports on the current device to complete the test. • Backup Only: Disable the output of the primary Ethernet port on the current device to test whether the backup port or device takes effect. • Primary Only: Disable the output of the backup Ethernet port on the current device to test whether the output of the primary port is normal. • Disconnect All: Disable the output of all the Ethernet ports on the current device to test whether the pre-stored image takes effect.

Note

After enabling Ethernet port backup, a  icon is displayed between the primary and backup ports in the Ethernet port list. By default, the first half of the ports serve as backups for the second half.

5.6 Screen Settings

5.6.1 Adjust Image Quality

Adjust the Gamma value and brightness of the output to enhance the overall image quality of the LED screen.

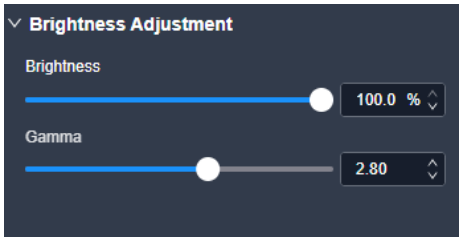
Prerequisites

None

Notes

None

Interface Example



Description

Select **Screen Settings** at the top of the page, and then on the **Image Quality** tab interface, configure the following parameters.

Parameter	Description
Brightness	The brightness of the LED screen
Gamma	Adjust the ratio of the screen brightness to the input level. The parameters are read from the receiving card, which default to optimal values at the factory. It is recommended the parameter adjustment be carried out by the trained personnel when necessary.

5.6.2 Adjust Output

5.6.2.1 Configure 3D

Directly connect a third-party 3D emitter using the device's built-in 3D connector, or connect to the EMT200 emitter via the device's Ethernet port. Then, use the compatible 3D glasses to achieve a 3D display effect.

Prerequisites

- Video source format: Side-by side, top-and-bottom or frame sequential.
- When paired with the EMT200, it is recommended to use a 3D source of 60Hz to enjoy an optimal experience.

Notes

- Enabling the 3D function will halve the device output capacity.

- The 3D function and input cropping cannot be enabled at the same time.
- After enabling the 3D function on the **Screen Settings** page, 3D switches of all the layers will be toggled on. If you want to use a 2D layer, please toggle off the 3D switch of the desired layer in the property area of the **Programming** page.
- The 3D effect follows the layer. The output area where a 3D layer is located always displays the 3D effect.

Interface Example



Description

On the **Output** tab interface, configure the following parameters.

Parameter	Description
3D	Turn on or turn off the 3D function. • : On • : Off
Source Format	The format of the 3D video source Set the format to **Side-by-Side**, **Top-and-Bottom** or **Frame Sequential** according to the format of the accessed video source.
Eye Priority	Set which image is sent first, the right eye image or the left eye image. Put on the 3D glasses to view the screen. If the display appears abnormal, adjust the parameter value to the other one. If the display is normal, no further adjustments are needed.
Third-Party Emitter	Turn on or turn off the function. • : On • : Off
Emitter Delay	Set the delay time of sending the synchronization signal from the 3D signal emitter to the 3D glasses. This setting ensures that the switching between left and right eye images of the 3D glasses is in sync with the switching between the left and right eye images on the screen. This parameter is applicable to both the NovaStar and third-

Parameter	Description
	party emitters.

5.6.2.2 Check Load

Check the capacity usage of each Ethernet port of the device.

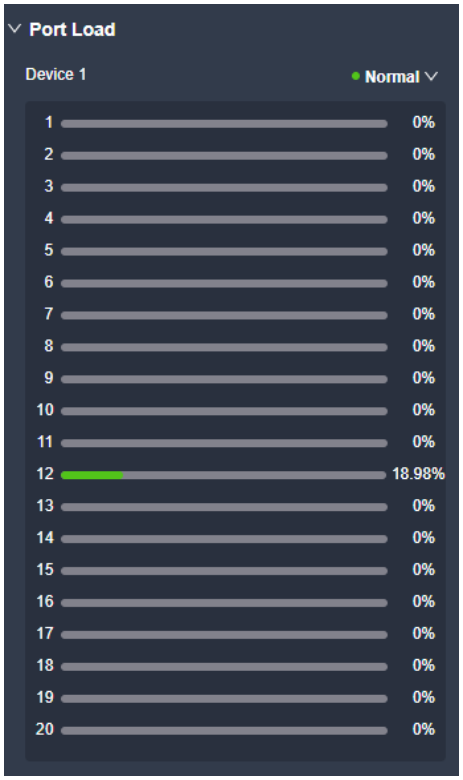
Prerequisites

None

Notes

None

Interface Example



Description

On the **Output** tab interface, click  next to the device information to check the usage of the device loading capacity.

5.7 Layer Operations

5.7.1 Add Layers

Add layers to screen

Prerequisites

Make sure the device is in **Video Controller** mode before adding layers.

Notes

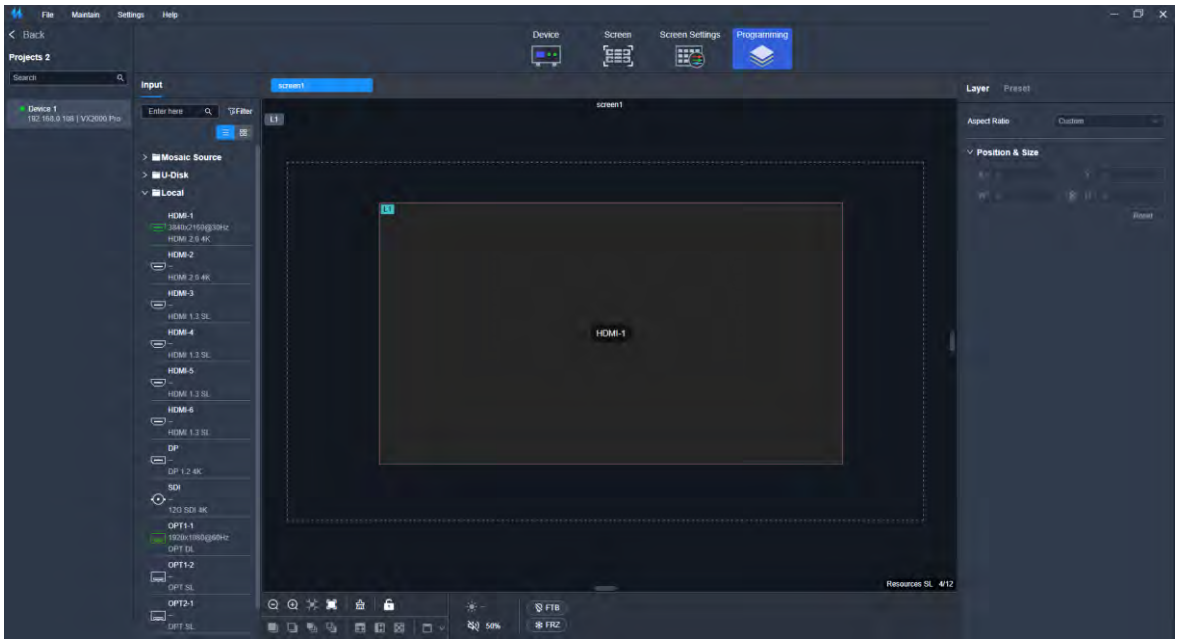
The maximum number of layers that can be added depends on the connected device.

Device Model	Number of Supported Layers (2K×1K)
VX2000 Pro	12

Operating Procedure

Step 1 Select a device on the left side of the interface and then click **Programming** at the top of the page.

Figure 5-13 Programming (VX2000 Pro)

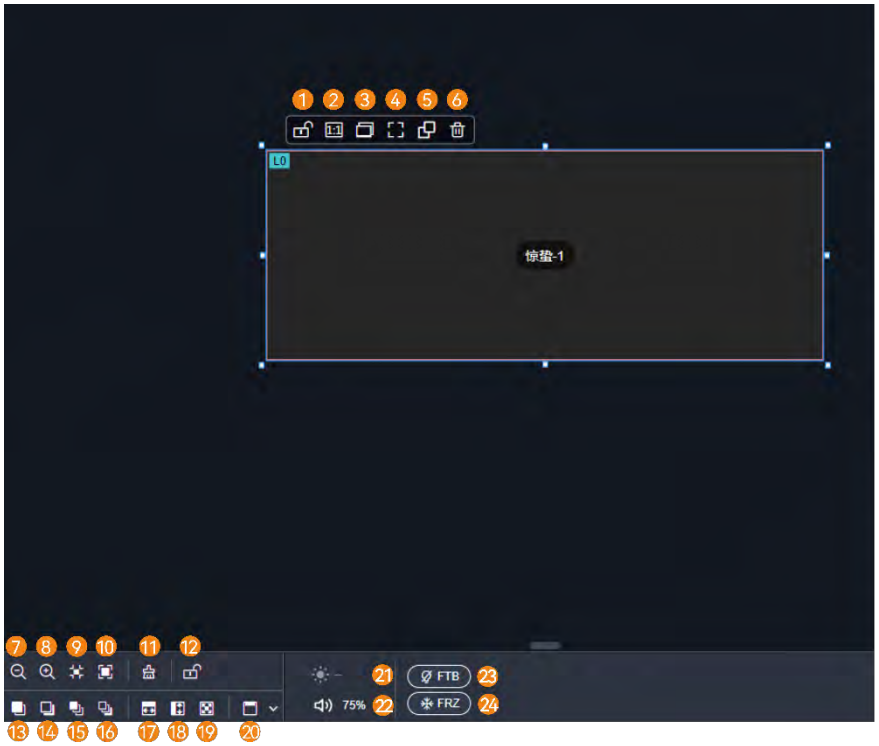


Step 2 Add the layers to the screen.

Drag an input source in the input list to the screen.

Step 3 Perform the desired layer operations as required.

Figure 5-14 Layer operations



1 Lock/unlock layer
2 Pixel-to-pixel display
3 Fill entire screen
4 Fill canvas
5 Follow canvas
6 Delete layer
7 Zoom Out
8 Zoom In
9 Zoom to Selection
10 Auto fit
11 Clear
12 Lock/unlock canvas
13 Bring forward
14 Send backward
15 Bring to front
16 Send to back
17 Fill horizontally
18 Fill vertically
19 Fill entire screen
20 Align top
21 Output image brighness
22 Layer source volume
23 FTB
24 Freez/unfreeze

5.7.2 Configure Video Source Properties

In the input list, select an input source and set the relevant properties on the right pane. For detailed configurations and parameter descriptions, please refer to Configure Input Properties.

5.7.3 Mosaic Source Settings

Both HDMI and OPT sources support mosaicing.

5.7.3.1 View Mosaic Source Info

View the basic properties of the mosaic source and change the source name.

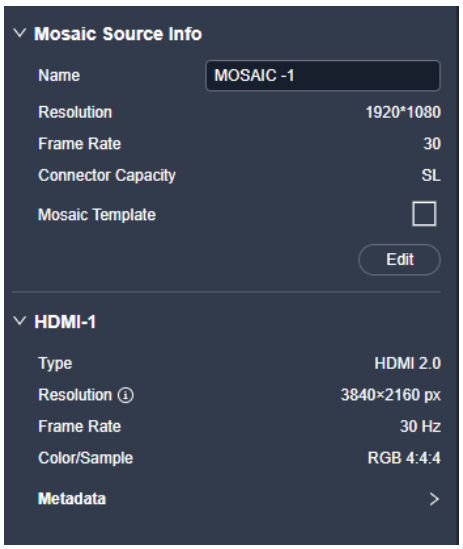
Prerequisites

A mosaic source has been configured and its signal is fine.

Notes

None

Interface Example



Description

On the **Mosaic** tab, type in a new source name and click anywhere else on the interface to save the change.

5.7.3.2 Configure Mosaic Sources

Set the mosaic source name, sub-source type, mosaic layout as well as sub-source size.

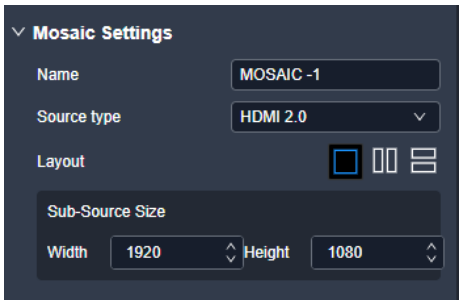
Prerequisites

None

Notes

Only the input sources of the same connector type support mosaicing, and the frame rates of sub-source must be the same.

Interface Example



Description

On the **Edit Mosaic** tab interface, configure the following parameters.

Parameter Name	Description
Name	The name of the mosaic source
Source Type	The type of the sub-sources Config method: Select **HDMI 1.3**, **HDMI 2.0** or **OPT** from the drop-down list.
Layout	The layout of the mosaic source

Parameter Name	Description
	Config method: Select the desired layout from the standard layout template, and then drag the inputs in the input list to the sub-cells respectively.
Sub-Source Size	The size of the sub-sources • Default width: 1920 pixels, max width: 8192 pixels • Default height: 1080 pixels, max height: 8192 pixels • Max width and height: 4096×2160

5.7.4 Configure USB Source Properties

Select a USB source in the input list and configure relevant properties on the **USB Playback Settings** tab interface.

The models of devices that support USB playback and the corresponding output resolutions for USB sources are listed below.

Device Model	USB Source Resolution
VX2000 Pro	3840×2160@60Hz

5.7.4.1 Play USB Files

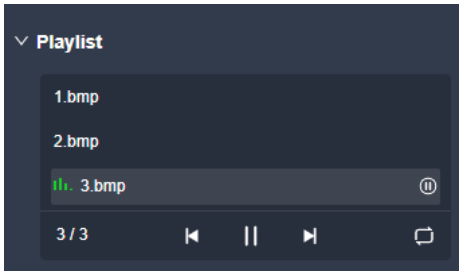
Prerequisites

The U-DISK connector on the front panel is inserted with a USB drive which is successfully identified.

Notes

None

Interface Example



Description

In the playlist, select a file to play it and you can also stop the playback, play the previous or next file as well as set the playback mode.

5.7.4.2 Configure Playback Parameters

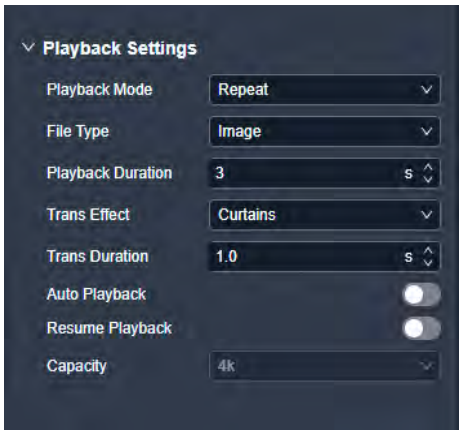
Prerequisites

The U-DISK connector on the front panel is inserted with a USB drive which is successfully identified.

Notes

None

Interface Example



Description

On the **Settings** tab interface, configure the following parameters.

Parameter	Description
Playback Mode	The playback mode of the file • Repeat: Play the files in the playlist in order. Once the playback of the last file is completed, replay the first file. • Repeat in Order: Play the files in the playlist in order. Once the playback of the last file is completed, the screen will display a black image and the playback will stop. • Repeat One: Loop playback of the current file.
File Type	The type of the playback file • Video • Image • All: Video and Image Note After the file type is selected, only the file of the selected type will be displayed in the playlist.
Playback Duration	The duration of the image playback The value ranges from 1 to 60 and it defaults to 5. (Unit: s)
Trans Effect	The trans effect of the image Supported trans effect: Ripple, zoom in, push, flip, blinds, H wipe, V wipe, cube, dissolve, grid, swapping, scroll, fade in/out, twirl, heart trans, curtains, perspective triangle, disappear, bounce, star rotation
Trans Duration	The trans duration of the image The value ranges from 0.5 to 2 and it defaults to 0.5. (Unit: s)
Auto Playback	The auto playback switch Set whether to automatically play the USB files after the device is powered off and then power on with a USB drive inserted. • : On If **Resume Playback** not enabled, replay the files in the playlist in order; If enabled, replay the file being played before power failure from the beginning. • : Off
Resume Playback	Turn on or turn off the function.

Parameter	Description
	• : On If a file is playing before the device power failure, enabling this function allows to replay the file from beginning after the device is powered on with a USB drive inserted. • Off: Replay the files in the playlist in order. Note • Enabling **Resume Playback** will also activate the **Auto Playback** feature at the same time. • After **Resume Playback** is enabled, if the file being played before power failure cannot be found, the files will be played from the beginning of the playlist in order.

5.7.5 Configure Layer Properties

Select the desired layer, and then set the layer-related properties in the property area on the right pane.

5.7.5.1 Configure Basic Properties

Configure the layer name, aspect ratio, position, size, as well as enabling the 3D effect.

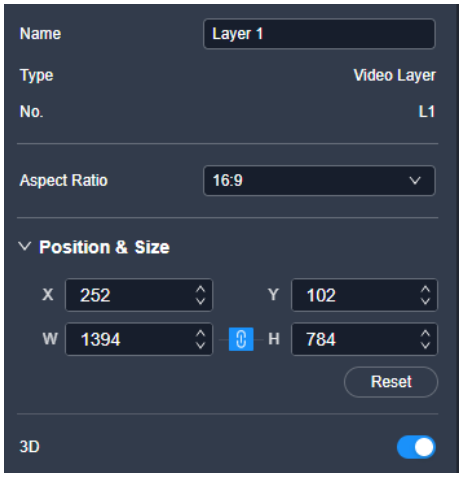
Prerequisites

None

Notes

After enabling the 3D function on the **Screen Settings** page, 3D switches of all the layers will be toggled on. If you want to use a 2D layer, please toggle off the 3D switch of the desired layer in the property area of the **Programming** page.

Interface Example



Description

On the **Basic** tab interface, configure the following parameters.

Parameter	Description
Name	The layer name
Aspect Ratio	The ratio of the layer's width to its height After the aspect ratio is changed, the height of the layer remains unchanged, and the device automatically calculates its width.
X	The horizontal starting position of the layer on the screen The coordinates of the first pixel in the upper left corner of the screen are (0,0).
Y	The vertical starting position of the layer on the screen The coordinates of the first pixel in the upper left corner of the screen are (0,0).
W	The horizontal size of the layer The minimum width of a layer: 64 pixels
H	The vertical size of the layer The minimum height of a layer: 64 pixels
3D	Turn on or turn off the function • : On • : Off

5.7.5.2 Crop Layer Sources

When there are black borders or other redundant info in the input source image, the required picture can be retained through the cropping the input source, so as to improve the screen utilization.

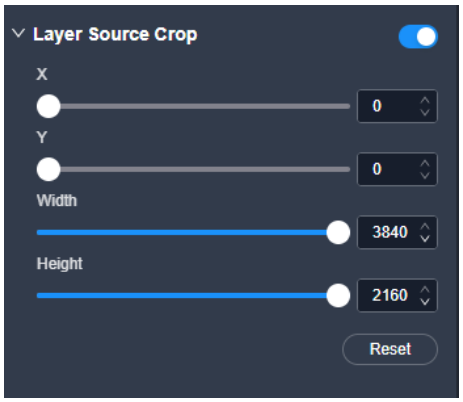
Prerequisites

A fine signal is connected to the input connector.

Notes

- The status and capacity of the cropped source remain consistent with the original one.
- The input cropping and 3D functions cannot be enabled at the same time.

Interface Example



Description

On the **Advanced** tab interface, configure the following parameters.

Parameter	Description
Layer Source Crop	Turn on or turn off the function. • : On • : Off
X	The horizontal start position of the cropped area relative to the original source
Y	The vertical start position of the cropped area relative to the original source

Parameter	Description
Width	The number of horizontal pixels (width) of the cropped area
Height	The number of vertical pixels (height) of the cropped area

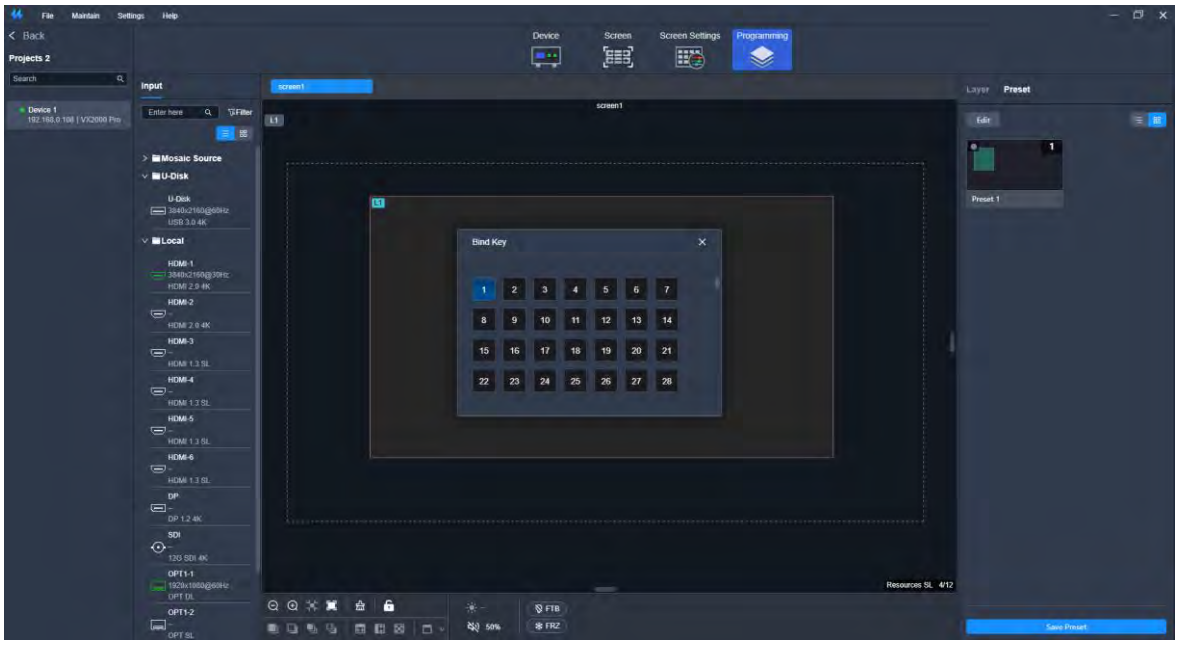
5.7.6 Manage Presets

To manage the presets, click **Preset** on the right side of the Programming interface and perform the corresponding actions as needed.

Save Presets

Step 1 On the **Preset** tab interface, click **Save Preset** at the bottom, and then a pop-up window will appear showing the preset numbers.

Figure 5-15 Bind presets (VX2000 Pro)



Step 2 In the **Bind Key** window, select the desired key number to save the current layer information to the preset.

One key number corresponds to one preset. The name of the save preset: Preset X ("X" refers to the bound key number.)

Load Presets

In the preset list, select the desired preset to load it.

After the preset is successfully loaded, the corresponding indicator light at the top left of the preview area will light up:

- : The preset is not loaded.
- : The preset is loaded.

Rename Presets

Place the mouse over the preset and click . Enter a new name and then click elsewhere to make the change take effect.

Delete Single Presets

Place the mouse over the preset and click . In the pop-up dialog box, click **Yes**.

Delete All Presets

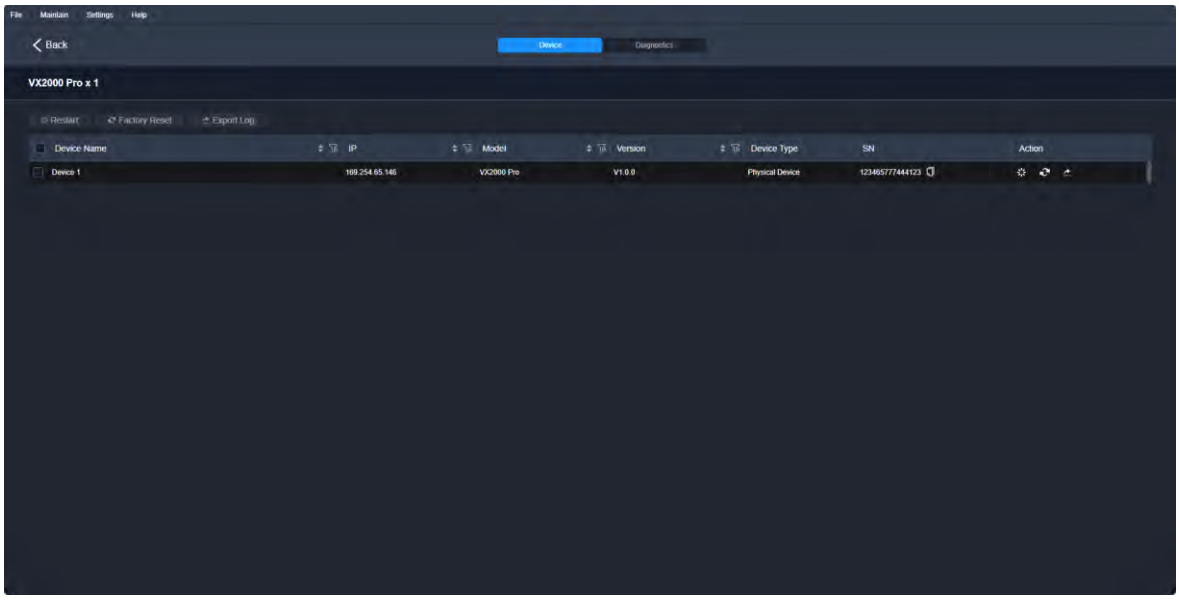
Click **Edit**, check **Select All**, and click . In the pop-up dialog box, click **Yes**.

5.8 Maintenance

5.8.1 Device Maintenance

In the menu bar, select **Maintain**. Select the **Device** tab and the target devices, and then do the following as required.

Figure 5-16 Device maintenance (VX2000 Pro)



Restart

Click **Restart**. In the displayed dialog box, click **Yes** to restart the device.

Factory Reset

Caution

- Please do this with great caution.
- The reset action does not affect the device firmware version.
- Power-off is NOT allowed during the reset process.
- The device will restart automatically after the reset is completed.

Click **Factory Reset**. In the pop-up dialog box, select **Keep user data** or **Reset all**, and then click **OK**.

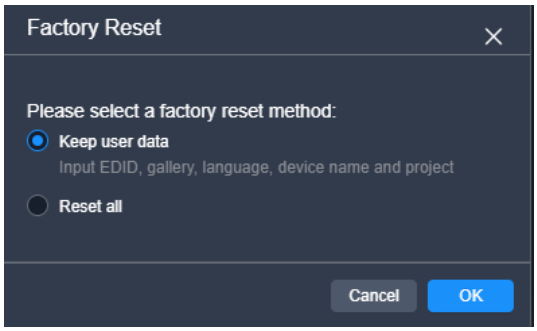
- Keep user data

  Retain the device IP address, input connector EDID, gallery files, device language settings, device name and belonged project.

- Reset all

  Retain the device IP address and belonged project.

Figure 5-17 Factory reset



Export Logs

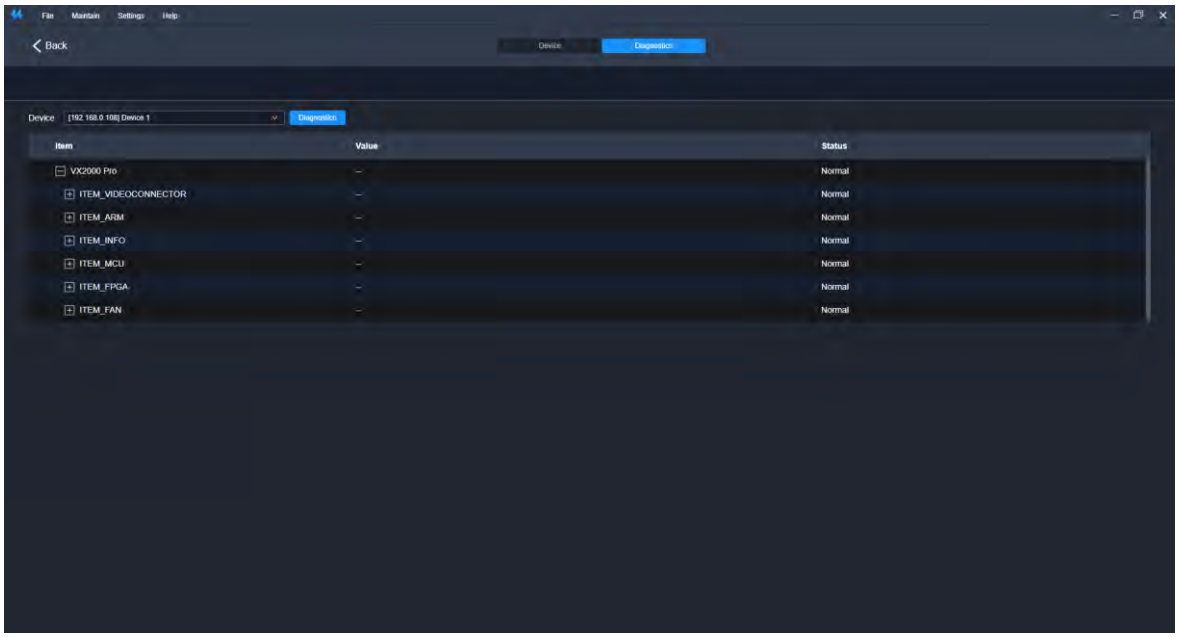
Click **Export Log**. In the dialog box that appears, select a path and click **Save** to save the device logs to local computer.

5.8.2 Device Diagnostics

In the menu bar, select **Maintain**. Select the **Diagnostics** tab, select a device from the drop-down list, and click **Diagnostics**.

After the diagnostics completes, you can view the test result and take necessary measures as required.

Figure 5-18 Device diagnostics (VX2000 Pro)



5.9 Other Settings

5.9.1 Switch UI Language

In the menu bar, go to **Settings** > **Language** to switch the UI language.

5.9.2 Export Logs

In the menu bar, go to **Settings** > **Export Log** to export the logs.

5.9.3 Configure Device Backup

Device backup allows you to set the backup relationship between two devices. You can set one of the devices as the primary device or the backup device. When the primary device has a problem or the primary device's Ethernet cable fails, the backup device will take over the responsibilities of the primary device seamlessly and continue to work well to ensure the LED screen will not go black.

Prerequisites

- Before creating a backup relation, make sure that both the primary and backup devices are on the same LAN.
- In a backup relation, the models and device versions of the primary and backup devices must be the same.

Notes

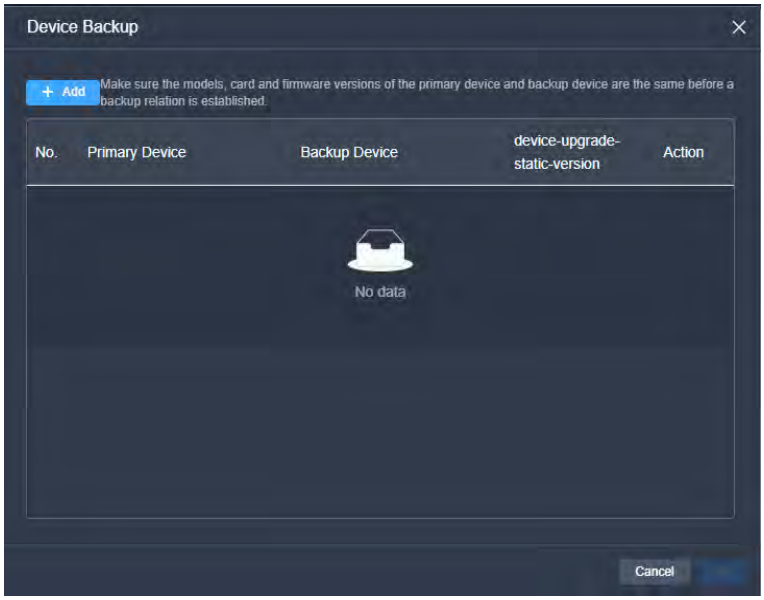
- You have three options to create a backup relation: NovaLCT, Unico web page, or the device LCD menu. However, be aware that these methods do not synchronize with each other. Using more than one can lead to data problems. To prevent issues, choose only one method for setting up your backup. If you do mix them, you'll need to reset the device to factory settings and start over with just one method.
- In the device backup mode, the quantity of the cabinets loaded by each Ethernet port on both the primary and backup devices must be the same, but their data flow must be in a reversed way.

Operation Procedure

Step 1 In the menu bar, go to **Settings** > **Device Backup**.

Step 2 In the pop-up window, click **Add** to add a backup relation.

Figure 5-19 Add backup relations



Step 3 Select the primary and backup devices from the drop-down lists respectively.

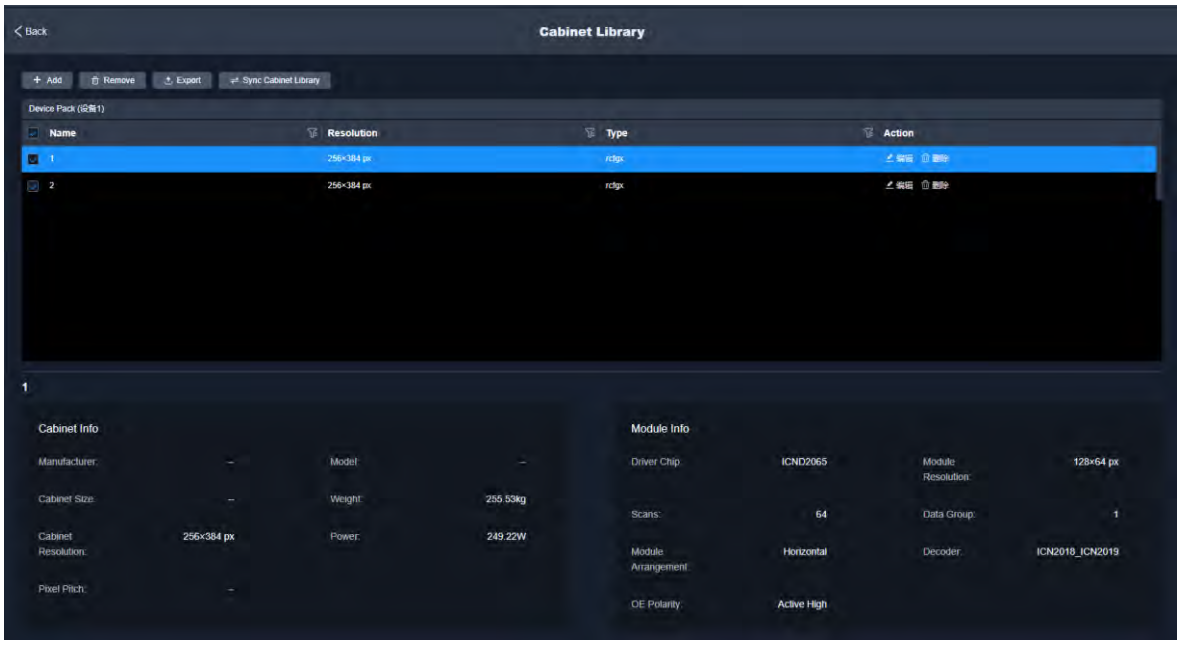
After the action completes, the firmware versions of the primary and backup devices will be displayed.

Step 4 Click **OK** to complete the backup relation settings.

Step 5 (Optional) Click **Delete** to delete the desired backup relation.

5.9.4 Manage Cabinet Library

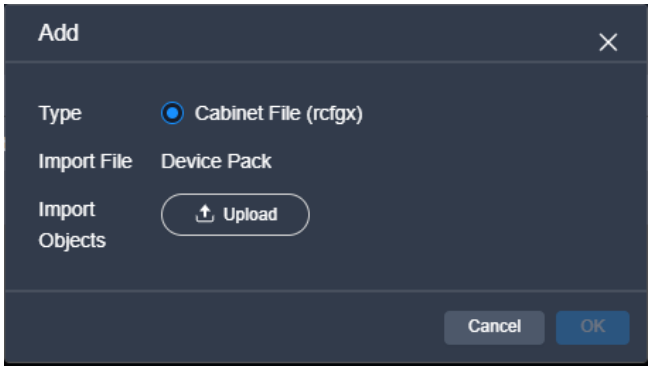
In the menu bar, go to **Settings** > **Cabinet Library**. Do the followings as needed to manage the cabinet library files.



Upload Cabinet Files

Step 1 Click **Add** and select the cabinet type in the displayed window.

Figure 5-20 Cabinet file



Step 2 Select the .rcgx file to be imported from the local computer and click **Upload**.

After the file is selected, you can click **Delete** to delete the uploaded file.

Export Cabinet Files

Step 1 Select one or more files on the **Cabinet Library** interface and then click **Export**.

For batch export, multiple files will be compressed as a .zip file and exported.

Step 2 Select a local directory and click **Save**.

Sync Cabinet Files

- Sync cabinet files between devices

  1) Select the files to be synced (multiple files can be selected), and click **Sync Cabinet Library**.

  2) On the displayed window, select the devices to which the files are synced (multiple devices can be selected).



  3) Click **OK**.

View Cabinet and Flash Info

Select a cabinet file, and the information about all the cabinets that use this cabinet file will be displayed.

5.9.5 Configure Preferences

In the menu bar, navigate to **Settings** > **Preferences**. Turn on the desired features (checked "√") or off (unchecked).

- Screen Resources: Show the layer resources on the **Programming** interface if enabled.

5.9.6 Help

In the menu bar, go to **Help** > **About Us** to view the related info.

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Official website
www.novastar.tech

Technical support
support@novastar.tech