

X100

Video Splicer

Quick Start Guide v1.2

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Safety information

Please read and follow the safety precautions to prevent personal injury and equipment damage.

Electrical safety

- This product supports AC 100-240V wide voltage input. Please use the original power cord included in the package of this product or a power cord that meets the electrical specifications of this equipment.
- To avoid electric shock hazard, make sure the equipment is grounded before use and disconnect the power cord before moving the equipment.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

- Please count the equipment and fittings against the packing list before using the product. If you find anything is missing, please contact your retailer in time.
- This product is an electronic product, please avoid contacting charged objects with functional interface to avoid damage to the circuit components which will affect the normal use of the product.
- Please use this product at altitudes of 5,000 meters and below.
- This product is not waterproof, please do not expose it to liquid or use it in wet environment.
- For more equipment specifications and detailed instructions, please refer to our official website www.colorlightinside.com.
- Please download the corresponding software from the official website to avoid abnormal device settings that may affect normal use.

FCC statement

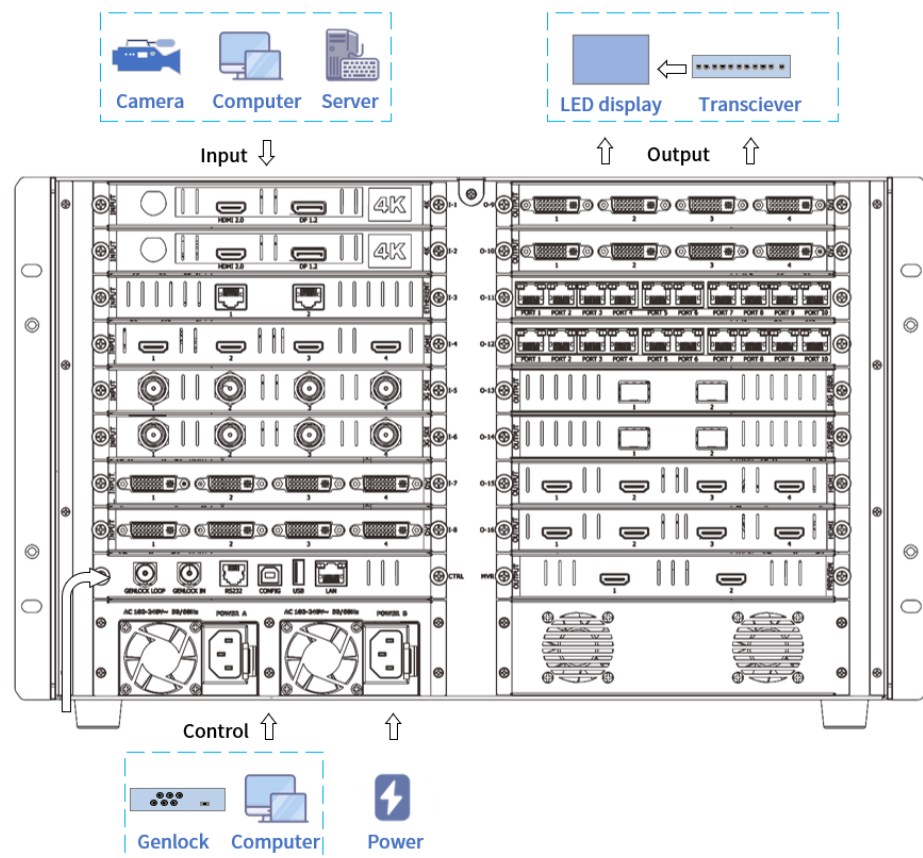
- This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1 Overview

X100 is a brand-new professional video processor especially developed for large screen splicing, which integrates video processing functions such as cropping, scaling, splicing and multi-screen display. It can be used as a video processor for LCD and DLP screen splicing, or as a professional LED controller for high resolution and fine-pitch LED display. With modular design and robust pure hardware architecture, it features powerful video processing capability and excellent image quality, ensuring long time stable operation and virus-free. X100 can be widely used in command & dispatch system, power plant operation and maintenance, party and government conference center, data visualization center, radio and television, high-end stage rental, and other scenarios.

2 Hardware connection

Please connect the signal source, this device, display screen, control equipment and other related hardware correctly. Refer to the corresponding port shown in the diagram.



- **INPUT:** In the input board area, you can replace the board as needed. Connect the front-end equipment to the corresponding port to receive video signals.

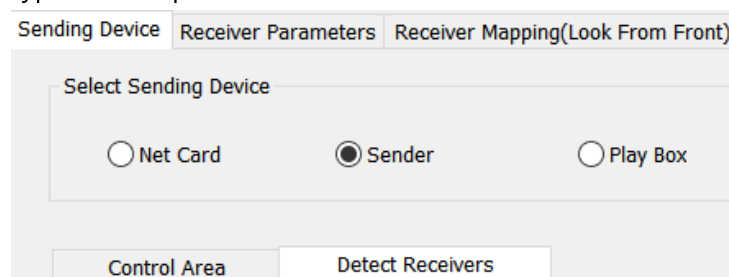
- **CONTROL:** Connect to computers, central control equipment, switches, etc. for the control and setting of the current device.
 - **POWER:** Support AC 100-240V, 50/60Hz AC power supply.
 - **OUTPUT:** In the output board area, you can replace the board as needed. Connect the back-end LED or LCD screen to the corresponding port.
 - **PREVIEW:** Preview and monitoring board slot. With a preview & monitoring board, it can be connected to the LCD displayer for output preview and image monitoring.
- * This figure takes the X100 video splicer 7U dual power version for example (the basic version is a single power supply). The illustration is for reference only and does not constitute any form of commitment.

3 Software settings

Please enter the **Sending Device** interface of LEDVISION software, select **Sender** and **Detect Receivers**, then click **Detect Senders**.

3.1 Detect Devices

The application automatically obtains information about the currently connected device, displaying information such as the device type, the receiver type and the port number.

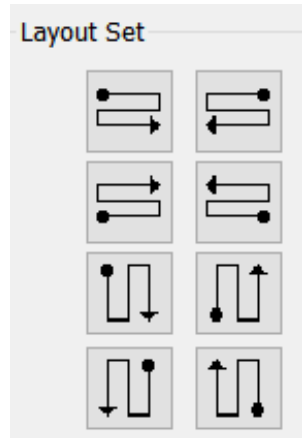


* If the device cannot be detected, please check whether the USB cable or network cable is connected properly or the relevant driver is installed correctly.

3.2 Configure Screen

Please draw the cabinet topology with LEDVISION, according to the structure and actual wiring of the screens which are connected to the output ports of the current device.

- Click **Receiver Mapping (Look from Front)** to enter the screen connection settings page.
- For mapping, select the network port first and click each cabinet controlled by that network port in turn to draw the cabinet string, according to the actual wiring order of network cable.



- Click **Send** at the bottom of the page to test if the receiver mapping is correct.
 - After image is displayed correctly, click **Save to Devices** at the bottom of the page to save the mapping to current devices and receivers.
- * This step must be performed only when network or optical ports are applied for output. It can be skipped when the output port is DVI or HDMI. Please refer to the LEDVISION user manual for details.

4 Display Settings

Please set display parameters of devices with VideoStation Web after completing the screen configuration.

4.1 Detect Devices

Open IP address 192.168.1.10 in browser to enter the login interface of VideoStation Web.

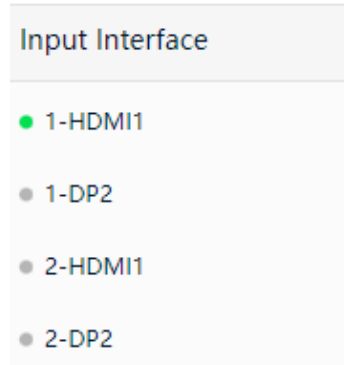
- Enter the account number and password (Initial account is 123456 and initial password is 123456). Click **Login** and enter the user interface of VideoStation Web version.
- View the current device information in the device list on the left side of the main interface.
- If the device information is not displayed in the device list, you can click the refresh icon on the web page. The serial number of the board used by the current device and each port will be displayed below the device name. The signal resolution and frame rate will be displayed when there is signal input.

* Enter IP address 192.168.42.129 for USB port; Enter IP address 192.168.1.10 for network port.

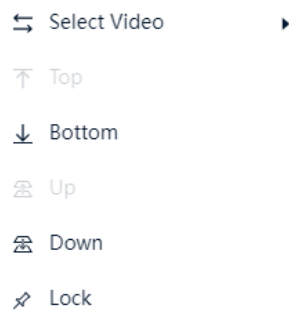
4.2 Set Input Signal

Click on the signal name in the device list and drag it to the screen view area on the right. A signal window will be generated automatically.

- Each input port of the current device is displayed below the input port list, and the port will turn green ● when there is a signal input.



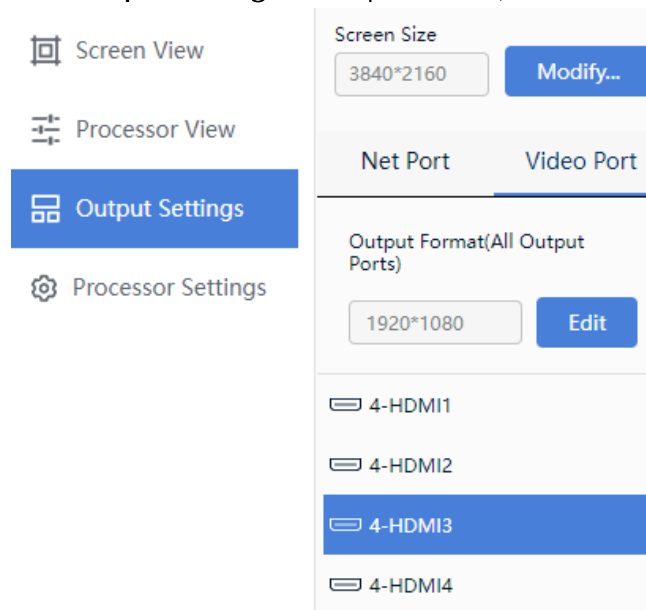
- Right-click the signal window to switch the signal source and set the layer position as needed.



- Click the **Guides** to quickly set the position and size of multiple windows.

4.3 Output Signal Settings

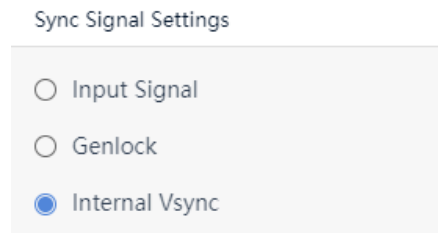
Click **Output Settings** for output format, screen size and other operations.



4.4 Sync settings

Click **Processor View** and select the device for sync settings in the device list or the Processor view area in the center of the interface.

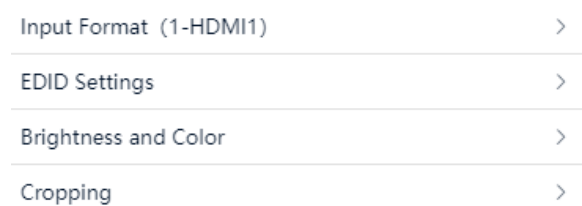
- Click **Sync Signal Settings** on the right side of the interface and select one of the input signals, Genlock signal or self-generated signal (device default) as the sync signal according to the actual situation.



* For self-generated signals, the selectable frame rates are 29.97/30/60.

4.5 Input Port Settings

Enter **Processor View** and select the Input Port to set the **Input format, EDID Settings, Brightness and color, and Cropping**.



4.5.1 EDID management

If the resolution adjustment of the input signal is needed, you can set the front-end device or be assisted by EDID settings.

- Click **Processor View**, select the device in the device list, then click the icon of the signal port to manage EDID.
- In the pop-up window of signal format, select EDID settings and click **Modify EDID**.
- In the EDID window, you can select to preset resolution or add custom resolution, then click **Send**.

* Click " + "to add custom resolution. Enter custom information in the pop-up dialog box, and then click **Generate, OK** to complete adding.

4.5.2 Image Adjustment

Click **Processor View** and select the signal source to be adjusted in the Processor View area.

- Click **Brightness and Color** to adjust the **Brightness** (brightness, contrast, compensation), **Color** (red, green, blue, hue, saturation), and **Color temperature** of the signal source.

* To adjust the brightness and color of the device, select the device in the device list or the processor view area and then click **Brightness and Color** on the right side of the interface, or directly click **Screen View > Brightness and Color** in the menu bar at the top of the interface to adjust the screen.

4.5.3 Cropping

Click **Processor View > Input Signal** and select **Cropping** in the menu list on the right.

- Enable cropping by clicking in the pop-up window of cropping settings.
- For devices that support multiple cropping, the added cropping signal will be displayed under the original signal.

4.6 Global settings

Enter **Processor View**, select the device (click on the position of non-input and output port) to set the **Sync Signal, Test Mode, Precise Color Management, HDR, 3D, Virtual Pixel**, and other items.

Sync Signal Settings	>
Test Mode	>
Precise Color Management	>
HDR	>
3D Settings	>
Virtual Pixel	>
Other Settings	>

4.6.1 Sync signal settings

Click **Sync Signal** settings to select one of the input signal, Genlock signal or self-generated signal (device default) as the sync signal according to the actual situation.

4.6.2 Test Mode

Click on the **Test Mode** the screen will show the corresponding test effect to diagnose the display.

4.6.3 Precise color management

Click **Precise Color Management** and switch the toggle button , then select Settings.

- Modify the **Screen Color** and **Brightness** values and **Output Color Space** as needed.

Screen Color And Brightness Output Color Space

Unknown

Quick Selection

Color Space DCI-P3 Brightness 1000 nit

Luminance

4.6.4 HDR

Click **HDR** to enable **HDR10** and **HLG function**.

- To enable **HDR** button , please make sure the color brightness information before and after the screen calibration is correct (view in the Precise Color Management interface).

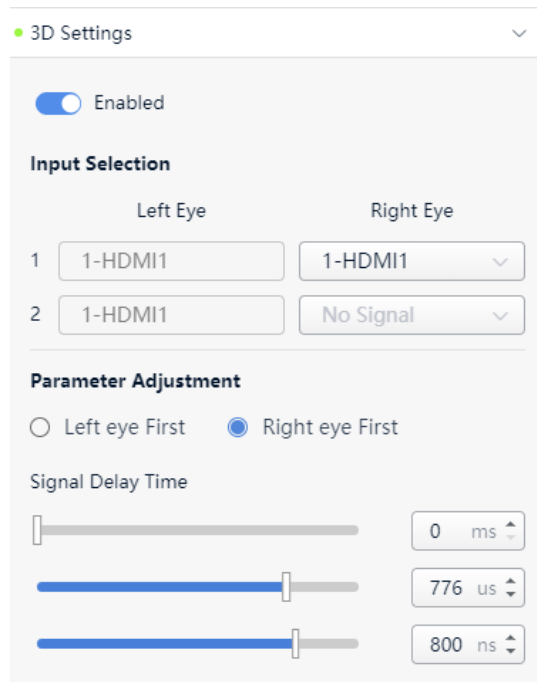
* Before enabling HDR, the precise color management function must be enabled and HDR function must be supported by the receiver program.

4.6.5 Virtual pixel

Click **Virtual Pixels** to set triple virtual and quadruple virtual status. You can also select the route of row offset and column offset.

4.6.6 3D

Click **3D Settings** and switch the toggle button , then select the left and right eye input signals respectively for parameter adjustment. You can also set the **Input Selection**, **Signal Delay Time**, etc.



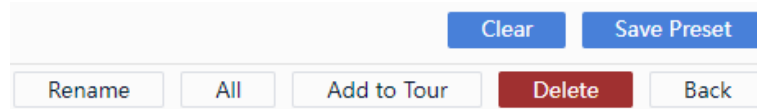
4.6.7 Other Settings

Click **Other Settings** to set **Better grayscale at low brightness** and **Mapping from processor**.

- Check **Better grayscale at low brightness** to optimize the screen display in low brightness.
- Checking **Mapping from processor**, the cabinet topology stored in processor will be adopted.
- **Video bit width** supports 8bit and 10bit. The higher the output color depth, the more accurate and delicate the display effect.

4.7 Preset and Tour


Click **Save Preset** in the menu bar at the bottom of the interface.




- In the pop-up dialog box of save preset, create or replace a preset and enter a preset name, then click OK.
- Click the pull-up arrow in the menu bar at the bottom of the interface to open the Preset Management tab, which allows you to call the saved presets or set the preset tour.
- Click **Edit** and select the preset you want to add to tour, then click **Add to Tour**.
- Set the tour interval and click **Start Tour**.



4.8 Logo

Enter **Screen View** and right-click the signal name in the device list, then select **Logo Overlay**  .

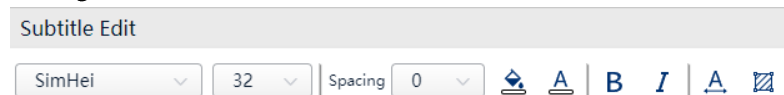
- Turn on the toggle button  in the pop-up window and edit the text or picture logo as needed.

* The maximum resolution of picture that can be overlaid is 512*512.

4.9 Subtitle

Click **Subtitle** in the menu bar at the top of the interface, it is allowed to edit the subtitle position and scroll speed.

- Click **Edit** to edit font size, font weight, word spacing, color, etc., and **save** it after editing.



4.10 Background

Click **Background** in the menu bar at the top of the interface and select **Import Picture** (.png) and **save** it after editing. Three modes are available to display background picture, including fill, uniform and tile.

* If you need to show background when there is no signal, just check the option below.

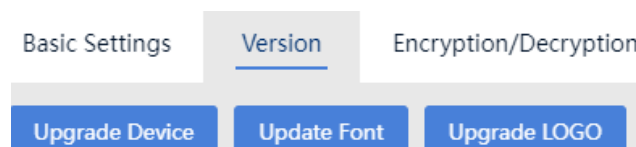
4.11 Processor Settings

4.11.1 Basic Settings

Select **Basic Settings**, you can set the **Device Name**, **Device IP**, **Device parameters import and export**, and **Restore factory settings**.

4.11.2 Version

Select **Version** to enter the **Version** tab interface, it is allowed to **Upgrade Device**, **Update Font**, and **Upgrade LOGO**.

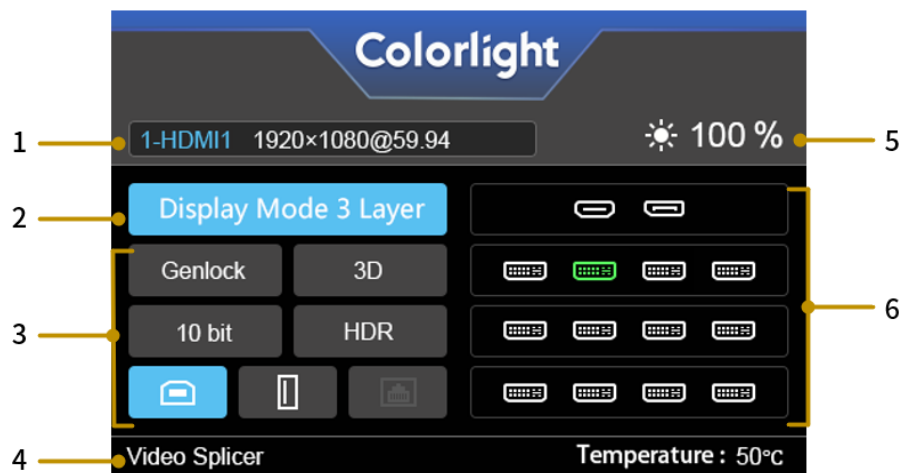


4.11.3 Encryption/Decryption

- In the main interface, click ☰ and select **Authorization**, then enter code 168.
- Select **Processor Settings > Encryption/Decryption** to encrypt, decrypt and synchronize network time.

5 Front Panel

5.1 Front Panel overview



No.	Description
1	The resolution and frame rate of input port will be scrolled across this field.
2	The display mode of LED screen.
3	States of Genlock, 3D, 10bit, HDR, USB IN, USB OUT, LAN functions. <ul style="list-style-type: none"> - A white icon with a blue background indicates that the function or port is in use. - A white icon without a background indicates that the function or port is not in use. - A gray icon indicates that the function or port is not supported.
4	Device name.
5	Global output brightness.
6	Connection status of output port. <ul style="list-style-type: none"> - Gray means not connected. - Green means connected. - Overlapping indicates a backup state.

5.2 Function of Buttons

OK: Confirm the current selection or parameter. Turn on/off the menu item.

ESC: Cancel the current operation or return to the previous menu.

Lock: Lock all the buttons on the front panel. Press the button again and operate following the prompts to unlock.

Bright: Press this button to adjust the display brightness. Then press the knob/**OK** button to confirm the current brightness.

Black: Pressing this button will blackout the screen. Press this button again to make the screen display normally.

Freeze: Freeze the current image. Press again to unfreeze.

Home: Return to the initial interface.

Menu: The menu button opens a context menu for image adjustment, language switching, device version viewing, etc.

Input: View the connection status of each input port of the device.

Output: View the connection status of each output port of the device.

Signal: View the signal status, resolution and frame rate of each input port of the device.

Mode: View the saved preset layout or call the saved presets.

6 Troubleshooting List

Problem	Possible cause	Remedy
No image displayed on the LED screen	Poor contact fault in the power cable	Check the power connector and make sure it has good contact
	Device power is switched off	Make sure the POWER button is on
Bad image display such as ghosting	Unqualified HDMI cable	Replace with high quality cables
	The HDMI cable is too long	Lower the signal resolution or shorten the HDMI cable
No image output after signal switching	The input channel after switching has no signal source connected.	Make sure the signal source is properly connected
	Poor cable contact	Check the input and output cable and ensure good contact
Unable to use this device	Internal damage of the processor	Contact Technical Support

Statement

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