NovaPro UHD Jr

All-in-One Controller
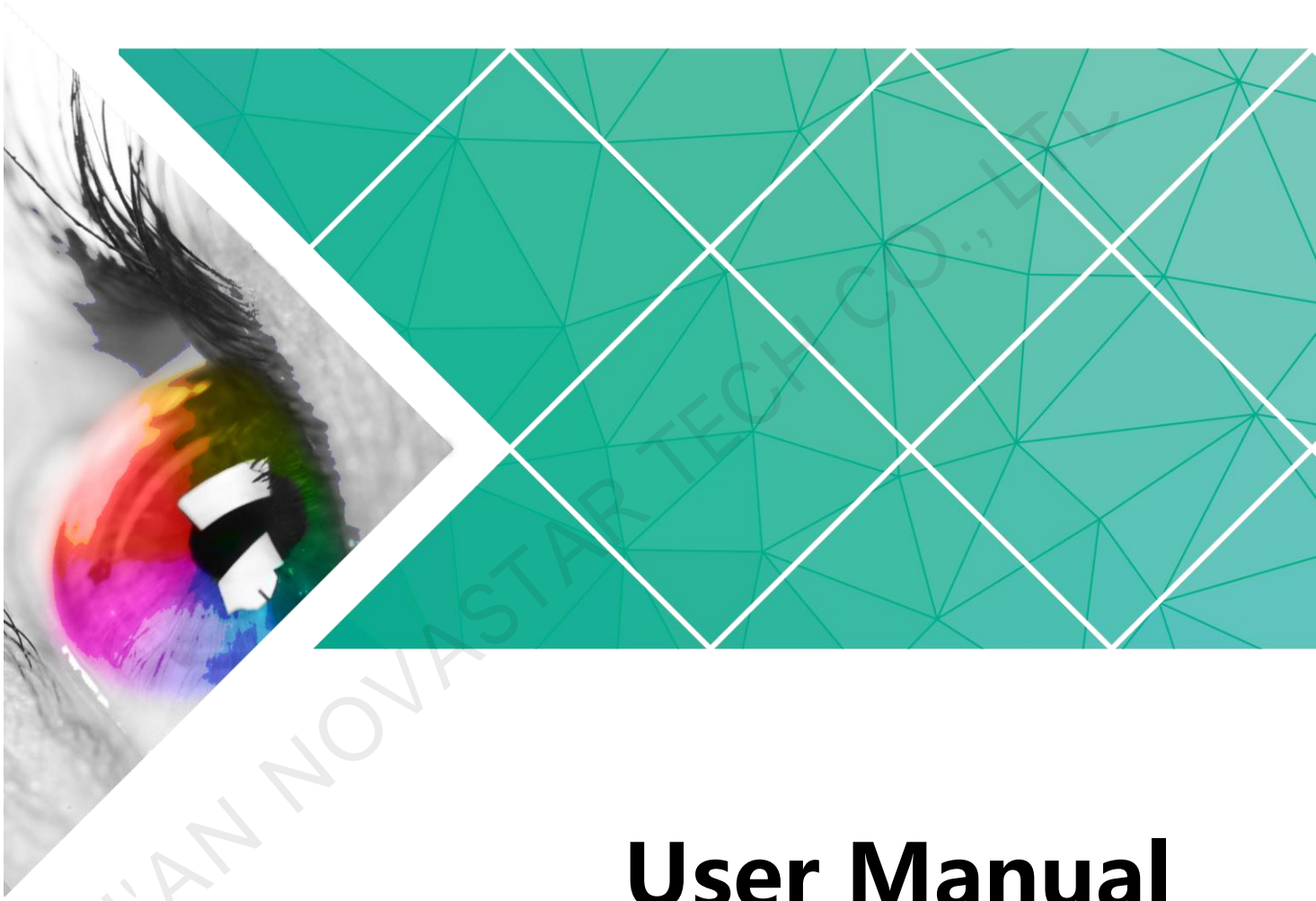
User Manual

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Change History

Version	Hardware Version	Release Date	Description
V1.0.1	V1.0.2.0	2019-07-10	• Updated the connections picture in Image Mosaic. • Added the description of HDMI LOOP supporting only 1 level of device cascading.
V1.0.0	V1.0.2.0	2019-06-06	First release

Contents

1 Overview

The NovaPro UHD Jr is a NovaStar's new all-in-one controller that features excellent video processing capabilities, sending card functions and LED screen configurations. The NovaPro UHD Jr provides a variety of video input connectors, supporting full HD 4K×2K@60Hz image processing and sending capabilities. Besides, NovaPro UHD Jr supports 8K×1K@60Hz ultra-high resolution settings.

With the help of smart control software V-Can from Novastar, the NovaPro UHD Jr can enable richer image mosaic effects and faster and easier operations.

The NovaPro UHD Jr can send the processed video to the LED screen via Neutrik Ethernet ports and optical fiber ports. Thanks to its powerful video processing capabilities and sending functions, the NovaPro UHD Jr is well suited for stage control systems, conference sites, activities, exhibition sites and other high-end rental applications as well as fine-pitch LED displays.

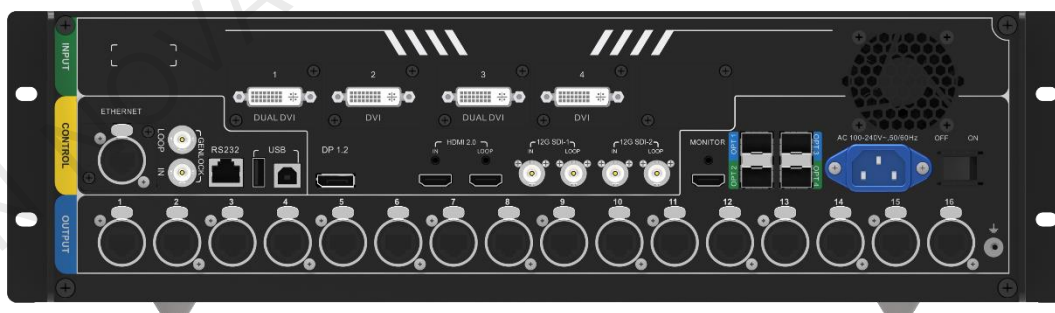# 2 **Appearance**

2.1 Front Panel

Power button Input source buttons Knob Function buttons

USB-B TFT screen ESC button

Button	Description
Power button	• Power on: Press the button to power on the device. • Power off: Hold down the button to pop up a dialog box, then rotate the knob to select **Yes** and press the knob to power off the device.
USB-B	For PC connection for debugging

Input source buttons	• Input source switching buttons
	Press the button to switch the input source for the main layer, and hold down the button to switch the input source for the PIP.
	• Button indicators are used to indicate the working status of the input source signal.
	   – White, always on: Input source is not used, and no input signal is accessed.
	   – Blue, fast flashing: Input source is used, but no input signal is accessed.
	   – Blue, slow flashing: Input source is not used, but input signal is accessed.
	   – Blue, always on: Input source is used, and input

|	
	signal is accessed.
TFT screen	Display the current device status and settings menu.
Knob	• On the home screen, press the knob to enter the operation menu screen. • On the operation menu screen, rotate the knob to select a menu item, and press the knob to confirm the selection or enter the submenu. • When a menu item with parameters is selected, you can rotate the knob to adjust the parameters. Please note that after adjustment, you need to press the knob again to confirm the adjustment.
ESC button	Press the button to exit the current menu or cancel the operation.
Function buttons	• **PIP**: Enable/Disable PIP. • **SCALE**: Enable/Disable full screen function for main layer. • **DVI MOSAIC**: Switch to DVI mosaic input source. Press it to switch the input source of main layer, while hold it down to switch the input source of PIP. Main layer and PIP can be set according to your preference. • **FN**: This is a custom function button. The function can be customized to Synchronization, Freeze, Black Out, Test Pattern, Quick Configuration, Image Quality and Preset Settings. It is Synchronization by default.

2.2 Rear Panel

Input		
Connector	Quantity	Description
DVI	4	• Four DVIs are all single-link DVI connectors by default. – 4 × DVI inputs – Each DVI: Input resolution up to 1920×1200@60Hz, downward compatible – 4 DVI input sources constitute 1 input source (DVI MOSAIC).

| | | – For supported standard resolutions, please see Table 5-2. |
		• In dual-link mode
		– DVI 1 and DVI 3 are dual-link DVI connectors while DVI 2 and DVI 4 are unavailable.
		– DVI 1/DVI 3: Input resolution up to 3840×1080@60Hz, downward compatible
		– For supported standard resolutions, please see Table 5-2.
12G-SDI	2	• Input resolution up to 4096×2160@60Hz, downward compatible • Standard resolutions unsupported
DP 1.2	1	• Input resolution up to 3840×2160 @60Hz, downward compatible • HDCP 1.3 compliant • Standard resolutions supported. For supported standard resolutions, please see Table 5-2.
HDMI 2.0	1	• Input resolution up to 3840×2160 @60Hz, downward compatible • HDCP 1.4 • EDID management • Standard resolutions supported. For supported standard resolutions, please see Table 5-2.
Output		
Connector	Quantity	Description

Ethernet port	16	• 16 × Neutrik Gigabit Ethernet output connectors, allowing for a loading capacity of up to 10,400,000 pixels
		• Maximum loading capacity:
		  Max. width: 16K, max. height: 8K
		• Maximum loading capacity of a single Ethernet port:
		   – 8-bit input source: 650,000 pixels
		   – 10-bit/12-bit input source: 320,000 pixels

OPT 1–4	4	10G optical connectors • OPT 1 transmits data of Ethernet ports 1–8. • OPT 2 transmits data of Ethernet ports 9–16. • OPT 3 serves as the hot backup for OPT 1. • OPT 4 serves as the hot backup for OPT 2.
HDMI 2.0 LOOP	1	• HDMI loop output connector Only 1 level of device cascading supported

		• HDCP 1.4
		• EDID management
12G-SDI LOOP	2	SDI loop output connectors
MONITOR	1	• HDMI connector for output monitoring
		• Resolution up to 1920×1080@60Hz
Control		
Connector	Quantity	Description
ETHERNET	1	Connect to the PC for communication, or connect to the Web for device control.
USB (Type-B)	1	• Connect to the PC for device control.
		• Used as the input connector to connect a NovaPro UHD Jr unit for image mosaic
USB (Type-A)	1	Used as the output connector to connect a NovaPro UHD Jr unit for image mosaic
GENLOCK IN-LOOP	1	Connect to a synchronization signal to synchronize all the connected NovaPro UHD Jr units.
RS232	1	Connect to the control device.

3 Applications
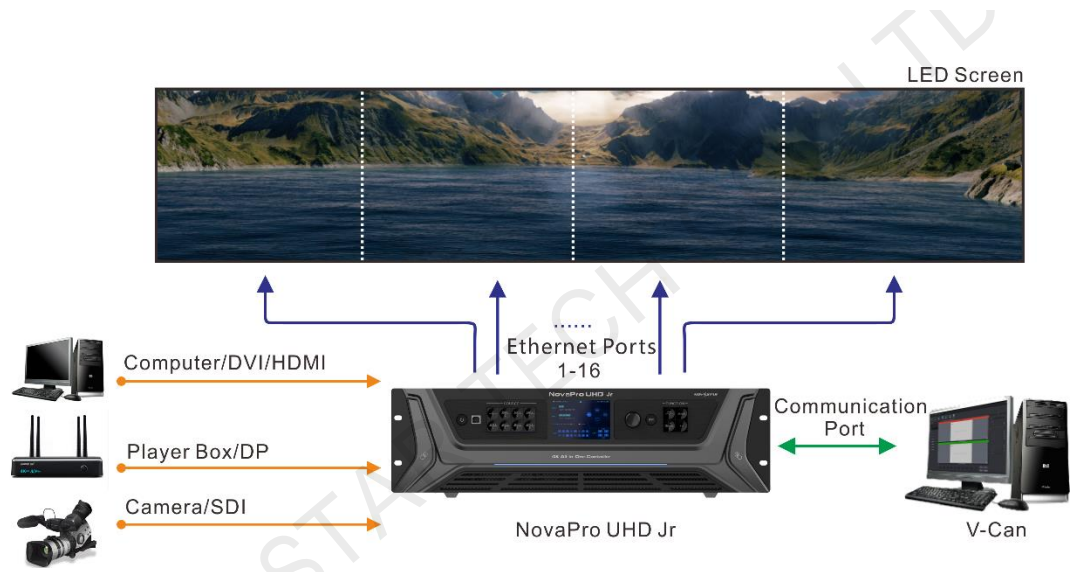
4 Home Screen

Figure 4-1 Home screen
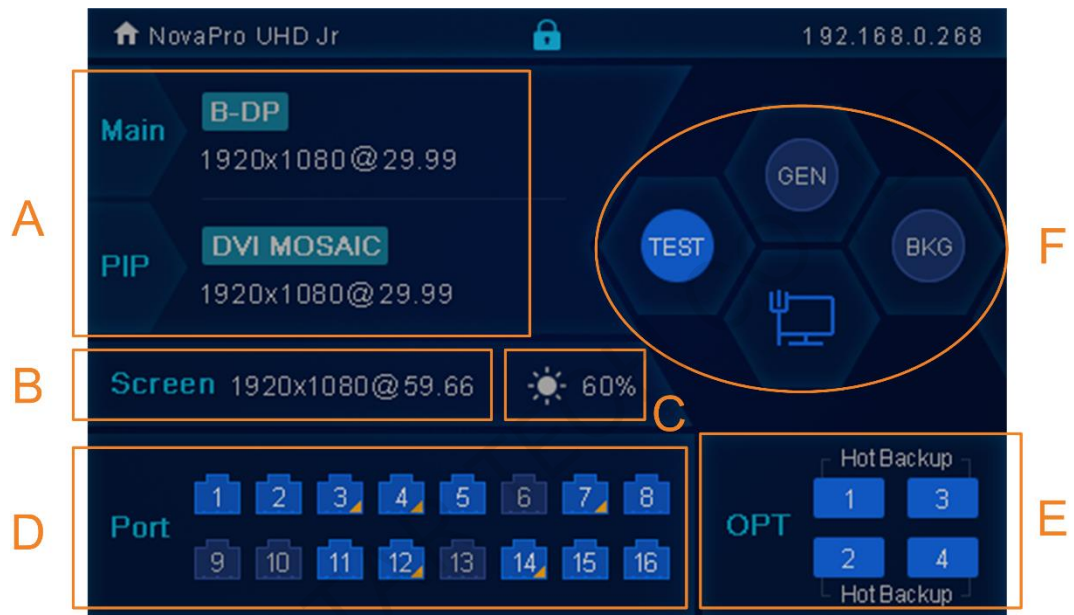
Area	Icon	Description
A	B-DP 1920x1080@29.99	Denotes the layer is active and displays the layer input source name and resolution.
	Inactive	Denotes the layer is inactive.
B	Screen 1920x1080@60	Displays the resolution and frame rate of the configured screen.
C	☀ 65%	Displays the screen brightness.
D	1	The device is in video controller mode and this Ethernet port is connected.
	1	This Ethernet port is not connected.
	1	The device is in fiber converter mode and this Ethernet port is connected.
	1	This Ethernet port is connected and serves as the output backup port.

E	[Hot Backup icon: ports 1, 3, 2, 4]		The OPT mode is set to Hot Backup, optical fiber ports 3/4 backup the data of optical fiber ports 1/2.
	[Copy icon: ports 1, 3, 2, 4]		The OPT mode is set to Copy, optical fiber ports 3/4 copy the data of optical fiber ports 1/2.
F	Synchronization	GEN	The Genlock function is turned on.
		GEN	The Genlock function is turned off.
		GEN...	The Genlock function is waiting to be turned on.
		GEN!	The Genlock function is not turned on successfully.
	Display control	[black icon]	The LED screen displays the black screen.
		TEST	The LED screen displays the selected test pattern.
		[image icon]	The LED screen displays the current input source normally.
		FRZ	The output image is frozen.
	BKG	BKG	The BKG function is turned on.
		BKG	The BKG function is turned off.
	Communication	[USB icon]	The current device communication mode is USB Preferred.
		[LAN icon]	The current device communication mode is LAN Preferred.
		[LAN X icon]	The current device is not connected to the control PC.

5 Menu Operations

Button descriptions:

Knob

• On the home screen, pressing the knob enters the operation menu screen.

• On the operation menu screen, rotate the knob to select a menu item, and press the knob to confirm the selection or enter the submenu.

• When a menu item with parameters is selected, you can rotate the knob to adjust the parameters. Please note that after adjustment, you need to press the knob again to confirm the adjustment.

ESC: Press the button to exit the current menu or cancel the operation.

5.1 Screen Brightness

You can adjust the screen brightness in an eye-friendly way according to the current ambient brightness. Besides, appropriate adjustment of screen brightness can extend the service life of the LED screen.

Figure 5-1 Screen brightness
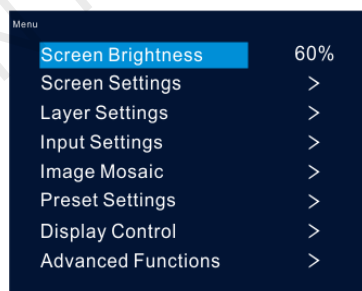
Step 1 Press the knob to enter the device menu.

Step 2 Select **Screen Brightness** and press the knob to confirm the selection.

Step 3 Rotate the knob to adjust the brightness value, and the LED screen will display the effect in real-time. Then press the knob to apply the set brightness when you are satisfied with it.

5.2 Screen Settings

You can configure the screen to make it display the whole image correctly.

The options are **Quick Configuration** and **Advance Configuration**.

5.2.1 Quick Configuration

Preconditions

- LED screen must be a regular screen.
- Cabinets of the screen must be regular cabinets with the same resolution.
- The following data flow settings are supported. During data flow settings, you must ensure that the physical connection of each port is along the same direction and downward to next one.
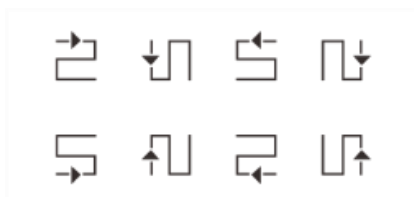
- During data flow settings, you must ensure that the Ethernet Port 1 is at the beginning position of the whole physical connection.

Procedure

Step 1   Power on the LED screen.

Step 2   Rotate the knob to choose **Screen Settings** > **Quick Configuration**, and press it to enter its submenu.

Figure 5-2 Quick configuration
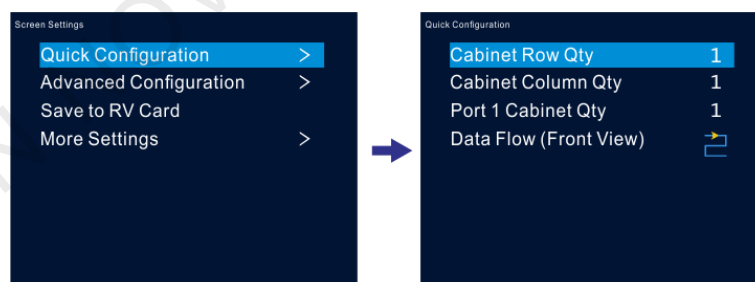
Step 3   Set **Cabinet Row Qty** and **Cabinet Column Qty** according to the actual row and column quantities of the cabinets.

Step 4   Rotate the knob to **Port 1 Cabinet Qty** to set the quantity of the cabinets loaded by Ethernet port 1.

Step 5   Rotate the knob to **Data Flow (Front View)** and press it, then select an appropriate physical connection mode of the cabinets.

During data flow settings, you can view the real-time effects of different data flow settings on LED display by rotating the knob. When you are satisfied with the LED

display image, press the knob to save the settings; when you are not satisfied, press **ESC** button to exit the current operation and the settings will not be saved.

5.2.2 Advanced Configuration

You can set the cabinet row and column quantities, horizontal offset, vertical offset and data flow of the cabinets loaded by a single Ethernet port.

Procedure

Step 1 Press the knob to enter the device menu.

Step 2 Rotate the knob to choose **Screen Settings** > **Advanced Configuration**, and press it to enter its submenu.

Step 3 Turn on the advanced configuration function, and then set the cabinet row and column quantities, horizontal offset, vertical offset and data flow for the target Ethernet port.

Figure 5-3 Advanced configuration
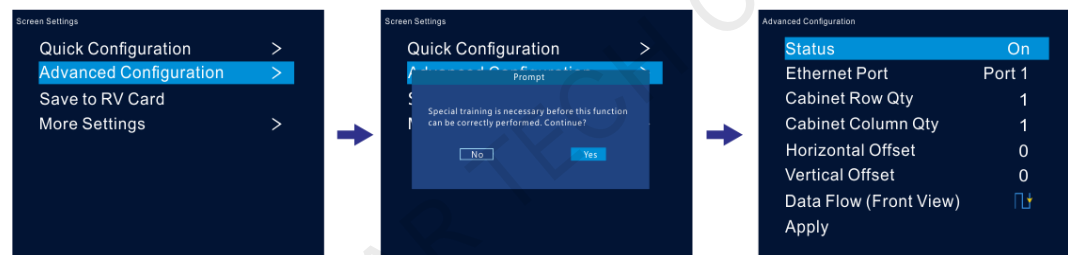
5.2.3 Save to RV Card

You can send and save the screen configuration to the receiving card. The configuration data will not be lost after the device is powered off.

5.2.4 More Settings

Step 1 Press the knob to enter the device menu.

Step 2 Rotate the knob to choose **Screen Settings** > **More Settings**, and press it to enter its submenu.

Mapping

You can turn on this function to display the sequence numbers of Ethernet ports and cabinets.

Figure 5-4 Mapping

Example: "P:05" stands for the Ethernet port number and "#001" stands for the cabinet number.

Note:

The receiving card employed by the system must support the Mapping function.

Load RCFGx Files

After the LED screen is powered on, if a certain cabinet or the entire LED screen is not lit, you can load the receiving card configuration files (namely RCFGx files) that have been configured on NovaLCT software to the NovaPro UHD Jr.

Step 1 On NovaLCT, after you have configured the screen, click **Save to File** to save the configuration file to PC.

Figure 5-5 Save receiving card configuration file
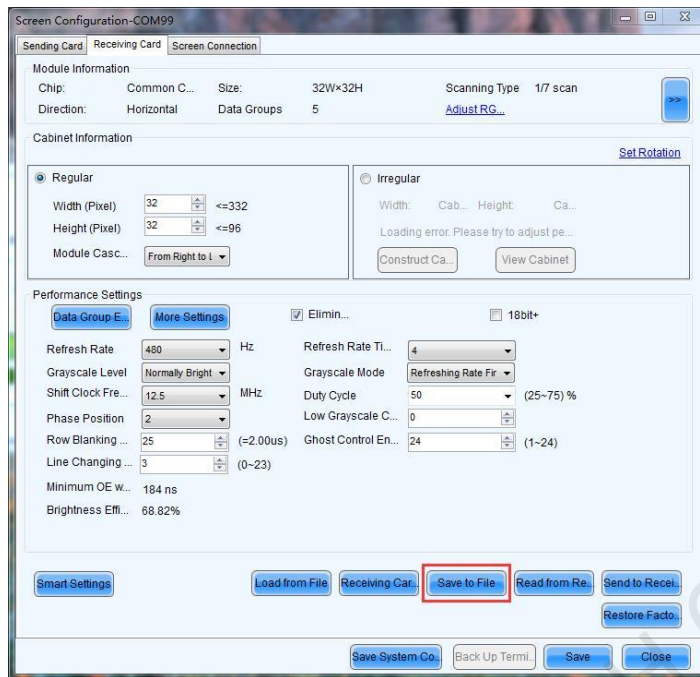
Step 2   On NovaLCT, choose **Tools** > **Controller Cabinet Configuration File Import**, click **Add Configuration File** and select the configuration file you have saved to PC in Step 1.

Figure 5-6 Importing controller cabinet configuration file
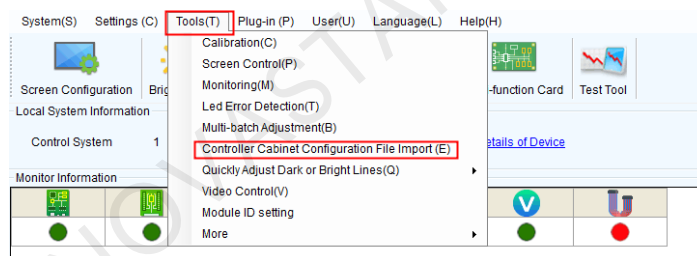
Step 3   Review the configuration file name and click **Save the Change to HW** to save the configuration file to the NovaPro UHD Jr.

Figure 5-7 Saving configuration file to NovaPro UHD Jr

Note:

The configuration file for irregular cabinet is not supported.
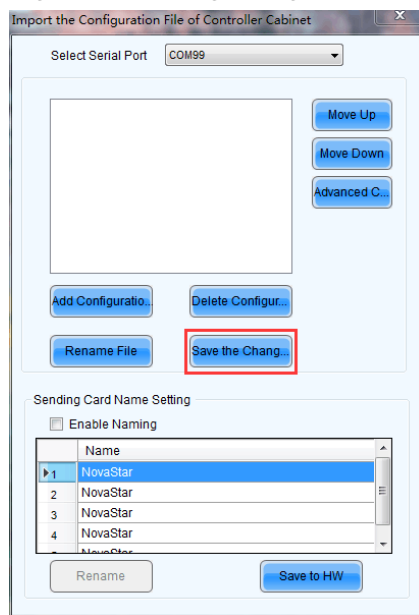
LED Screen Color

You can adjust the screen color and the LED screen will display the effect in real-time.

Table 5-1 Screen color parameters

Parameter	Description
Color temperature	You can set the color to **Standard**, **Cool**, **Warm** and **Custom**. Custom allows you to adjust individual R, G or B value.
Gamma	The range is 1.0–4.0 and the stepping is 0.1.

Figure 5-8 Color temperature effect

Standard   Warm   Cool

5.3 Layer Settings

Step 1 Press the knob to enter the device menu.

Step 2 Rotate the knob to select **Layer Settings** and press the knob to enter the layer settings screen where you can set the followings.

- Main layer
- PIP
- Layout
- BKG

5.3.1 Main Layer and PIP

Menu	Description
Status	The status of the selected layer: **On** and **Off** Note: Press the **PIP** button in **FUNCTION** area on the device front panel to enter the PIP settings screen and turn on the PIP.
Input Source	The input source of the layer Note: Press the input source button in **SOURCE** area on the device front panel to select the input source for the main layer, and hold down the button to select the input source for the PIP.
Scaling Mode	The options are **Full Screen**, **Pixel to Pixel** and **Custom**.
H Width	The horizontal width of the layer The default value for the main layer and PIP is 1920 and 800 respectively. The range is 64–32768.
V Height	The vertical height of the layer The default value for the main layer and PIP is 1080 and 600 respectively. The range is 64–32768.
Initial X	The initial horizontal coordinate of the layer
Initial Y	The initial vertical coordinate of the layer
Input Crop	The function of cropping the input source image and displaying it in full screen • Status: You can turn on or turn off this function for the selected layer. • H Width: The horizontal width of the current input source. If no input source is detected, the default value is 1920. • V Height: The vertical height of the current input source. If no input source is detected, the default value is 1080. • Initial X: The horizontal initial coordinate of the cropped part upon the current input source. The range is 0–horizontal width of input source and the default value is 0. • Initial Y: The vertical initial coordinate of the cropped part upon the current input source. The range is 0–vertical height of input source and the default value is 0.
Priority	The layer priority. The options are **1** and **2**. • 1: Send the layer to the back.

	• 2: Bring to the layer to the front.
Reset	Reset all the layer parameters to default settings.

Figure 5-9 Layer parameter descriptions

Figure 5-10 Input crop
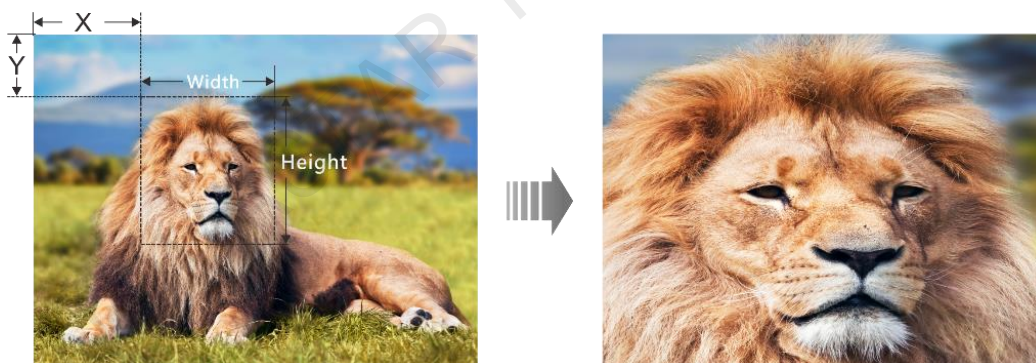
5.3.2 Layout

The NovaPro UHD Jr supports 10 layer layouts.

● P: PIP
● M: Main layer

Layout	Description
	Custom layout
	The PIP is located at the top left corner of the main layer.

Layout	Description
	The PIP is located at the bottom left corner of the main layer.
	The PIP is located at the top right corner of the main layer.
	The PIP is located at the bottom right corner of the main layer.
	The PIP is located at the center of the main layer.
	The PIP is located at the left of the main layer.
	The PIP is located at the right of the main layer.
	The PIP is located at the top of the main layer.
	The PIP is located at the bottom of the main layer.

Note;

For ▢, ▢, ▢ or ▢ layout, the aspect ratio of the main layer and PIP is not kept. The main layer and PIP together fill the screen according to the selected layout.

5.3.3 BKG

You can set the background for the displayed image. The BKG is located at the back.

Menu	Description
Status	The status of the BKG: **On** and **Off** (default)
Type	The options area **Pure Color** and **Image**.
Pure Color BKG	You can adjust the individual R, G or B value to set a pure color BKG.
Capture	• Source: Select an input source. • Save To: Set the save location of the captured image. The options include BKG 1 / BKG 2 / BKG 3 / BKG 4. • Apply: Save the captured image to the selected save location. At most 4 BKG images are supported.

Figure 5-11 Capturing input source image
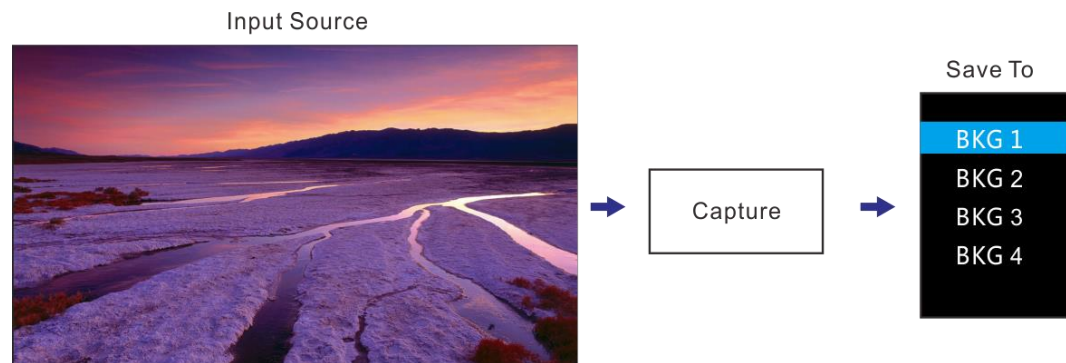
5.4 Input Settings

5.4.1 Input Source

The NovaPro UHD Jr supports DP, HDMI, SDI-1, SDI-2 and DVI input connectors.

Rotate the knob to select the desired input source and press the knob to enter the input source resolution menu.

Figure 5-12 Selecting input source
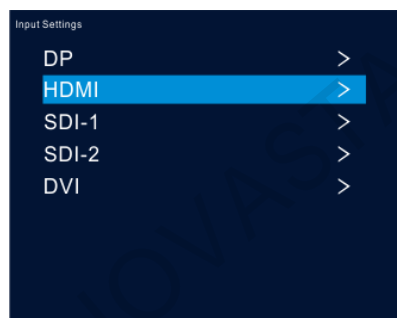
5.4.2 Setting Input Source Resolution

You can adjust the resolution and frame rate of the input source through the following two ways.

- Standard resolution
- Custom resolution

Figure 5-13 Setting input source resolution
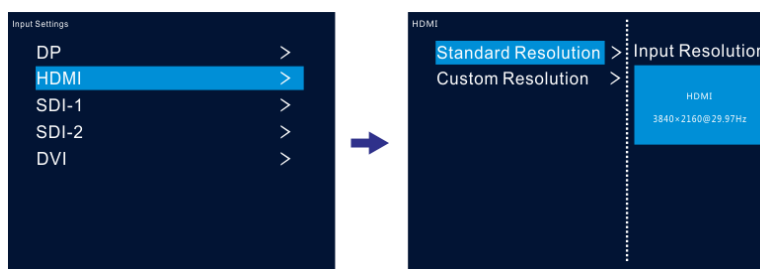
Note:

SDI input source does not support resolution settings.

Standard Resolution

You can select a standard resolution and frame rate. Then rotate the knob to select **Apply** and press the knob to make the settings take effect.

Figure 5-14 Standard resolution
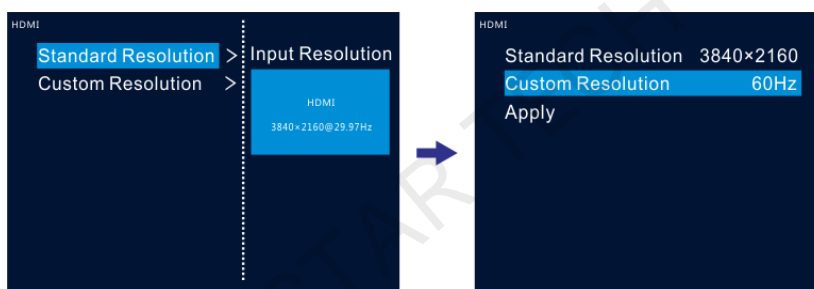
Table 5-2 Standard connector resolutions

Standard resolutions	DP 1.2	HDMI 2.0	Dual-DVI	Single-DVI
1024×768@ (48/50/59.94/60/75/85) Hz	√	√	√	√
1280×720@ (23.98/24/25/29.97/30/48/50/59.94/60) Hz	√	√	√	√
1280×1024@ (48/50/59.94/60/75/85) Hz	√	√	√	√
1364×768@ (50/59.94/60) Hz	✗	√	✗	✗
1366×768@ (50/59.94/60) Hz	√	✗	√	√
1440×900@ (60/75/85) Hz	√	√	√	√
1600×1200@ (48/50/59.94/60) Hz	√	√	√	√
1680×1050@60Hz	√	√	√	√
1920×1080@ (23.98/24/25/29.97/30/48/50/59.94/60) Hz	√	√	√	√
1920×1200@ (50/59.94/60) Hz	√	√	√	√

2048×1080@ (30/48/50/59.94/60) Hz	√	√	√	√
2048×1152@ (30/60) Hz	√	√	√	√
2560×1080@ (50/59.94/60) Hz	√	√	√	�×
2560×1600@ (50/59.94/60) Hz	√	√	√	�×
2560×1600@120Hz	√	√	�×	�×
3840×1080@30Hz	√	√	√	√
3840×1080@ (50/59.94/60) Hz	√	√	√	�×
3840×1080@120Hz	√	√	�×	�×
3840×2160@ (23.98/24/25/29.97/30) Hz	√	√	√	�×
3840×2160@ (50/59.94/60) Hz	√	√	�×	�×

Custom Resolution

Rotate the knob to set a custom width, height and frame rate. Then rotate the knob to select **Apply** and press the knob to make the settings take effect. If you do not press the knob, the settings will not take effect.

Figure 5-15 Custom resolution
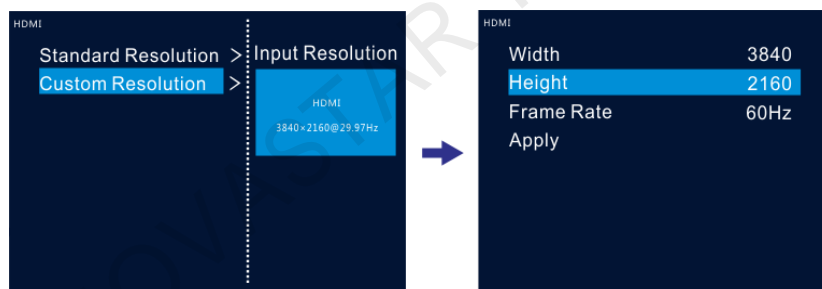
5.4.3 DVI Mosaic

Step 1 Rotate the knob to choose **Input Settings** > **DVI**.

Step 2 Rotate the knob to set the DVI input mode as **Single Link** or **Dual Link**. The connector working mode is shown in below.
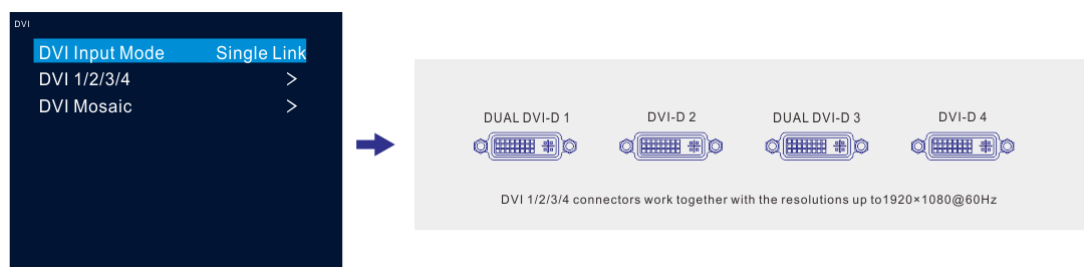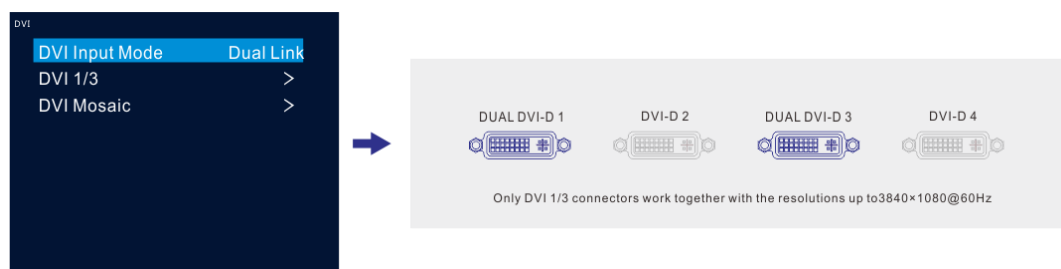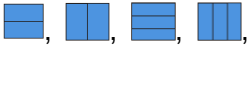
Figure 5-16 Single link mode

Figure 5-17 Dual link mode

Step 3 In single link mode, the resolutions of DVI 1, 2, 3 and 4 are adjusted together. In dual link mode, the resolutions of DVI 1 and 3 are adjusted together. For resolution adjustment, please refer to 5.4.2 Setting Input Source Resolution.

Step 4 Rotate the knob to select **DVI Mosaic** and press the knob to enter the DVI mosaic settings menu.

Menu	Description
Layout	Set the mosaic layout for 4 DVI connectors. • Single link mode supports 7 layouts: ▭, ▥, ▤, ▥, ▤, ▥ and ▦. • Dual link mode supports 2 layouts: ▭ and ▥.
Width	Adjust the width of the individual mosaic area. • Single link: The default width is 1920 and the range is 64–2048. • Dual link: The default width is 3840 and the range is 64–4096.
Height	Adjust the height of the individual mosaic area. • Single link: The default width is 1080 and the range is 64–1200. • Dual link: The default width is 1080and the range is 64–2160.
Apply	Make the settings take effect.

Note:

Only one interlaced SDI input is supported in DVI mosaic mode of four connectors.

5.5 Image Mosaic

When the pixel count of the LED screen is larger than the loading capacity of a single NovaPro UHD Jr unit, the image mosaic function is required. The total loading capacity of all cascaded NovaPro UHD Jr units equals to the total pixel count of the LED screen.

Figure 5-18 Image mosaic parameters

Example: If the pixel count of the LED screen is 7680×4320 which exceeds the loading capacity of a single NovaPro UHD Jr unit, 4 NovaPro UHD Jr units are used together for image mosaic. The connections are shown in the below figure.

Figure 5-19 Connections

Table 5-3 Parameter settings
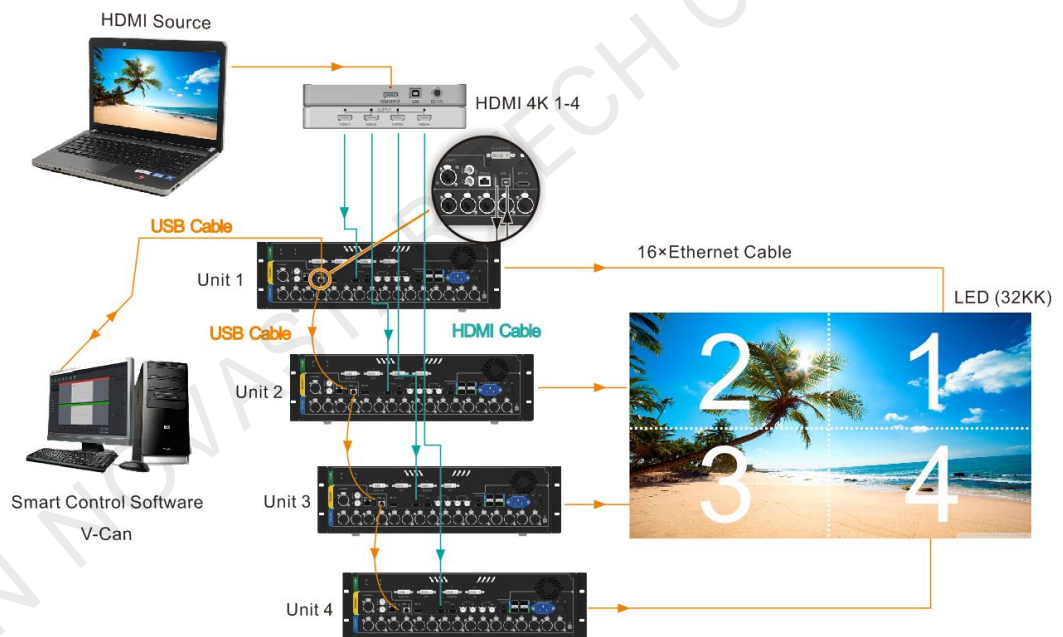
Device No.	Load Area Width	Load Area Height	Load Area Initial X	Load Area Initial Y
1	3840	2160	3840	0
2	3840	2160	0	0
3	3840	2160	0	2160
4	3840	2160	3840	2160

5.6 Preset Settings

The NovaPro UHD Jr supports 10 user presets. User can save, load and clear the configured presets.

Step 1   Rotate the knob to select **Preset Settings** and press the knob to enter the submenu.

Step 2   Rotate the knob to select the desired preset and press the knob to pop up a dialog box. In the box, four preset operations are provided: **Save**, **Load**, **Clear** or **Copy To**.

Figure 5-20 Preset operations
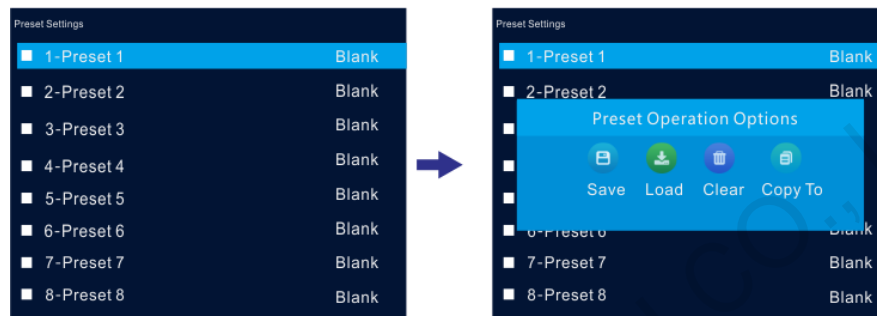
- Save: Save the current layer layout and settings to the target preset.
- Load: Load the selected preset to current lay layout.
- Clear: Clear all the contents in the selected preset.
- Copy To: Copy the current preset to the target preset.

Note:

- If the target preset has data, **Copy To** operation will overwrite the existing data in the preset.
- You can also press the number button on the front panel to quickly load a preset. For example, press the button 1 to load **1-Preset 1** and press the button 2 to load **2-Preset 2**, and so on.

5.7 Display Control

This function is used to control the display. You can set the display to go black, display a test pattern, or go to normal display. You can also set the transition effect and effect duration.

Step 1   Press the knob to enter the device menu.

Step 2   Rotate the knob to select **Display Control** and press the knob to enter the display control screen where you can set the followings.

- Normal: Display the content of current input source normally.
- Freeze: Freeze the current frame of the output image.
- Black Out: Make the screen go black.
- Test Pattern: Test the display effect and working status of the LED screen. Test patterns include **Pure Color**, **Gradient**, **Grid**, **Brightness**, **Spacing** and **Speed**.

- Image Color: Adjust the color of the output image and the LED screen will display the effect in real-time.

Table 5-4 Image color parameters

Menu	Description
Brightness	The range is 0–100 and the stepping is 1.
Contrast	The range is 0–100 and the stepping is 1.
Saturation	The range is 0–100 and the stepping is 1.
Hue	The range is -180–180 and the stepping is 1.

- Transition Effect: Set the transition effect when switching the input source. Fade effect is supported.
- Effect Duration: Set the duration of the transition effect. The range is 0.5s–2s and the default setting is 0.5s.

5.8 Advanced Functions

Advanced functions include HDR, low latency, OPT mode and self-test settings.

5.8.1 HDR

HDR is the abbreviation for High-Dynamic Range. HDR function can greatly enhance the display image quality, allowing for a more clear and vivid image when the device is used together with NovaStar A8s/A10s Plus receiving cards.
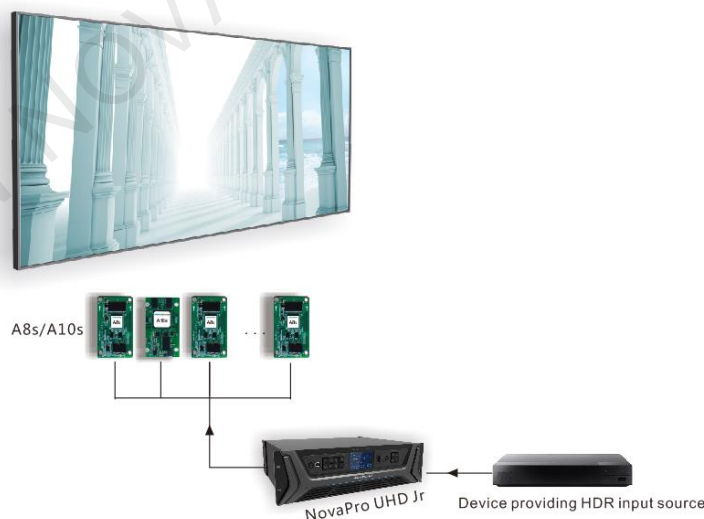
Figure 5-21 System architecture

Figure 5-22 HDR effect

Step 1　Choose **Advanced Functions** > **HDR** > **Status** to enable the HDR function.

Step 2　Rotate the knob to adjust the value of each parameter to improve the image quality.

Menu	Description
Peak Screen Brightness	Adjust the screen brightness under normal operation. The range is 100–1000 and the default setting is **1000**.
Ambient Brightness	Display the ambient brightness. The range is 0–200 and the default setting is **30**.
Low Grayscale Mode	The range is 0–50 and the default setting is **15**.

Step 3　(Optional) Select **Reset** to reset all the parameters to default values.

Note:

● Only HDR10 input source is supported.

● When HDR function is enabled, the output loading capacity will be reduced by 50%.

5.8.2 Low Latency

Low latency reduces the input source signal latency from input to output image of the NovaPro UHD Jr. This function can reduce the latency from sending card to receiving card by 2 frames when the device is used together with NovaStar Armor series receiving cards.

Note:

● The loading width of a single Ethernet port should be no greater than 512 pixels when low latency function is used.

● The supported Armor series receiving cards include A8, A8s, A9s and A10s Plus.
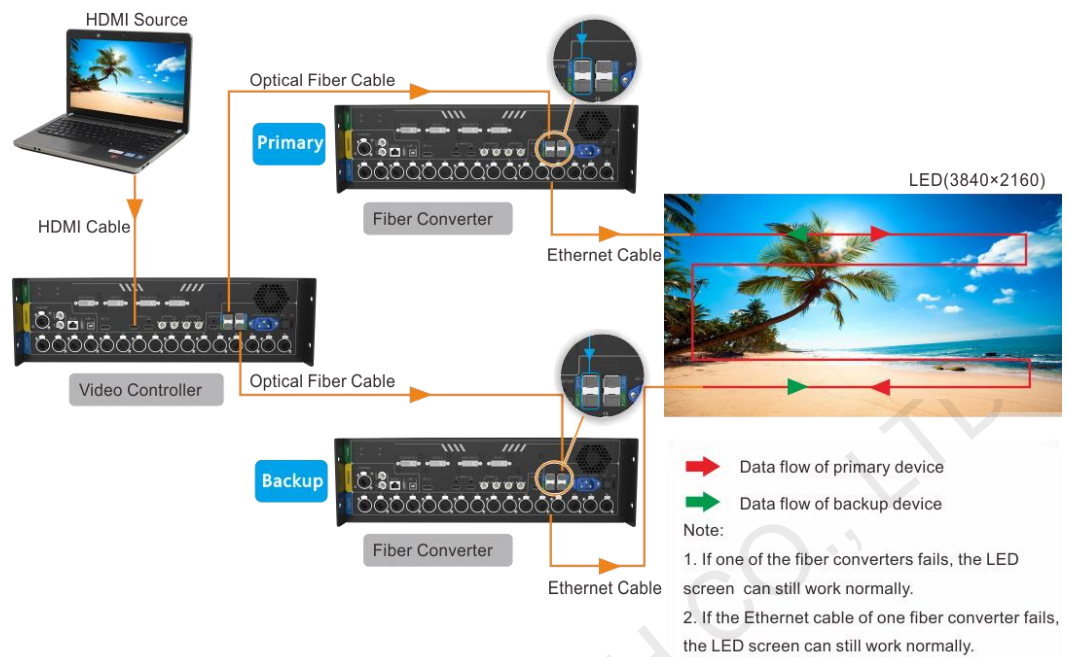
5.8.3 OPT Mode

The NovaPro UHD Jr supports two OPT modes: **Hot Backup** (default) and **Copy**.

● Hot Backup: Optical fiber ports 3/4 backup the data of optical fiber ports 1/2.

● Copy: Optical fiber ports 3/4 copy the data of optical fiber ports 1/2.

Hot Backup

Step 1　Perform the hardware connections for hot backup mode.
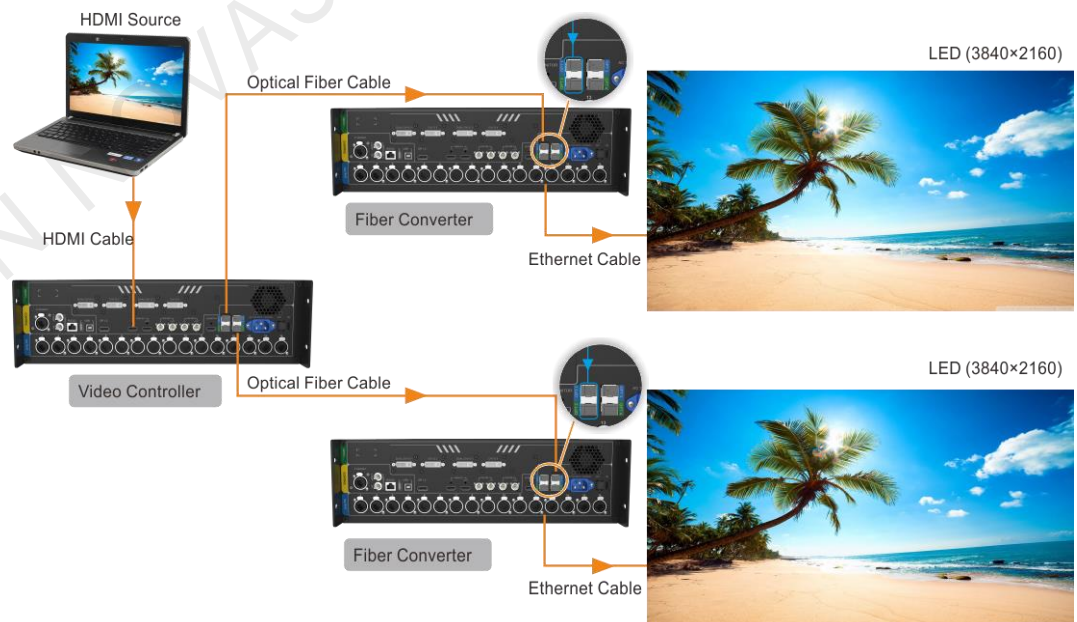
Figure 5-23 Connections for hot backup mode

Step 2   Choose **Advanced Functions** > **OPT Mode** > **Hot Backup** to set the OPT mode as hot backup.

Copy

Step 1   Perform the hardware connections for copy mode.
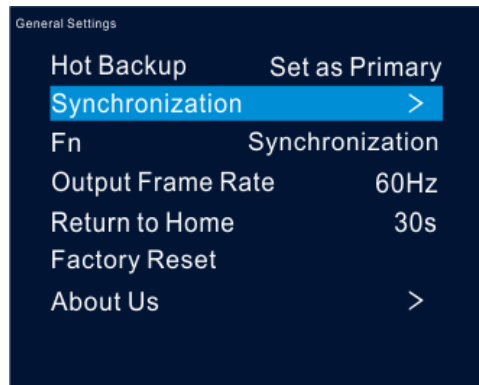
Figure 5-24 Connections for copy mode

Step 2   Choose **Advanced Functions** > **OPT Mode** > **Copy** to set the OPT mode as copy.

5.8.4 Self-Test

You can test the device by yourself when the device fails, then feedback the result to NovaStar.

5.9 General Settings

Figure 5-25 General settings

5.9.1 Hot Backup

The NovaPro UHD Jr supports two hot backup modes: **Set as Primary** and **Set as Backup**. Figure 5-23 shows the application for this function.

- Set as Primary: The target Ethernet port on the home screen is highlighted. For example, [1].

- Set as Backup: The target Ethernet port on the home screen is highlighted and displayed with a small triangle icon at the bottom right. For example, [1].

When the primary device fails, the backup device will take over the work in real time.

5.9.2 Synchronization

You can select a synchronization signal to synchronize the cascaded devices.

Step 1 Rotate the knob to select **Synchronization** and press the knob to enter the submenu.

Step 2 Rotate the knob to set the synchronization status and source respectively.

- Status: Turn on or turn off this function. It is off by default.
- Source: Select the target input source.

Note：

When the input source resolution is changed or the input source cable is replugged, you need to re-set the function. Please turn off the function and turn it on again.

5.9.3 Fn

The **Fn** button on the device front panel can be customized to a **Synchronization**, **Preset Settings**, **Freeze**, **Black Out**, **Test Pattern**, **Quick Configuration**, **Image Color**, **Main Layer** or **Priority** shortcut button.

5.9.4 Output Frame Rate

You can set the output frame rate of the image output by Ethernet port. The range is 23.98 Hz–120 Hz and the default setting is 60 Hz.

5.9.5 Return to Home

You can set the period of time during which the system stays at the current page before returning to the homepage automatically when there is no operation performed. The default setting is 60s and the maximum value is 3600s.

5.9.6 Factory Reset

You can reset all user data on the device to factory settings.

5.9.7 About Us

You can view the following information.

- Device hardware version
- Company website (www.novastar.tech)
- Email address (support@novastar.tech)

5.10 Partial Reset

You can keep the saved parameters and reset the unsaved parameters to factory settings.

The unsaved parameters include renaming, loading RCFGx files, BKG image files, preset parameters, Fn button settings, IP & mask parameters and language settings.

5.11 Communication Settings

5.11.1 Communication Mode

The device is connected to the PC via both USB port and Ethernet port. The communication modes include **USB Preferred** and **LAN Preferred**.

Figure 5-26 Communication mode
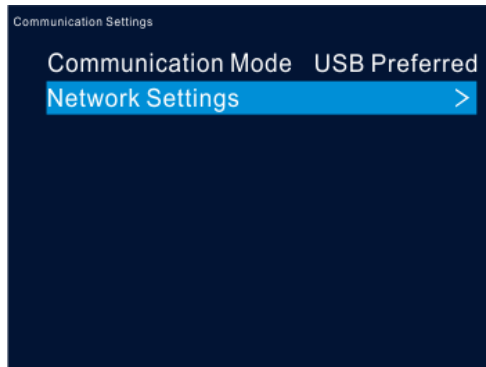
- When USB Preferred is selected, the device communicates with the PC via USB port by preference.
- When LAN Preferred is selected, the device communicates with the PC via Ethernet port by preference.

5.11.2 Network Settings

The network setting modes include **Manual** and **Auto**.

- Manual: Set the device IP address and subnet mask manually.
- Auto: The device reads the network parameters automatically.
- Reset: Reset the parameters to defaults.

Figure 5-27 Network settings
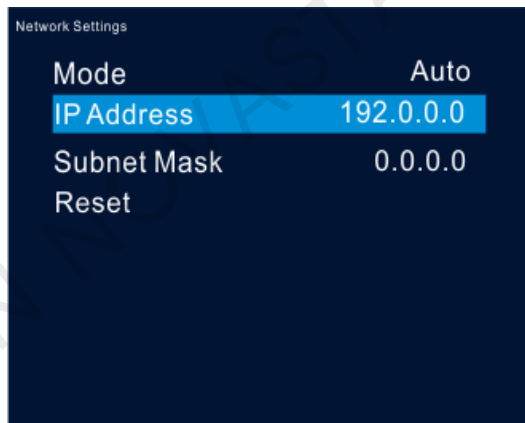
Note:

1. When communicating with the control PC, the device and control PC must be on the same LAN.
2. The IP address of current device cannot conflict with IP addresses of other devices.

5.12 Working Mode

The NovaPro UHD Jr can work as a **Video Controller** (default) or **Fiber Converter**.

Step 1 Press the knob to enter the device menu.

Step 2 Rotate the knob to select **Working Mode** and press the knob to enter the working mode screen to select a desired mode.

- Video Controller: Both Ethernet ports and optical fiber ports are used for output.
- Fiber Converter: Optical fiber ports are used for input, and Ethernet ports are used for output.
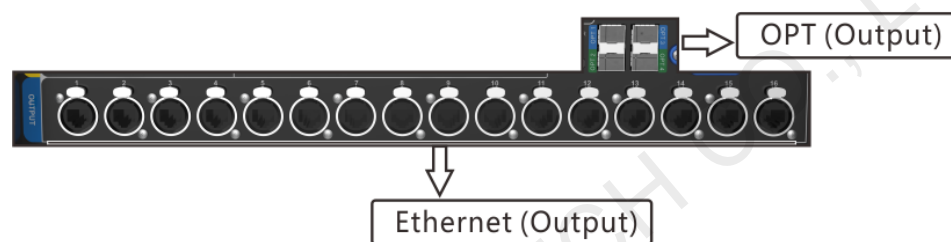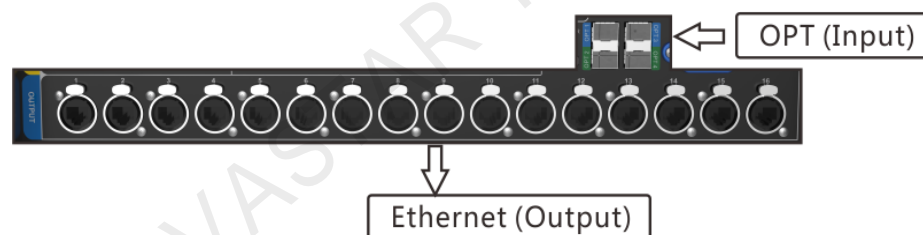
Figure 5-28 Video controller mode

Figure 5-29 Fiber converter mode

5.13 Langugage

The NovaPro UHD Jr supports both **Chinese** and **English**. You can freely switch to either language.

6 Specifications

Overall Specifications	
Type	**Description**
Power connector	AC100-240V~, 50/60Hz
Operating temperature	0°C–50°C
Dimensions	482.6 mm ✕ 396.5 mm ✕ 139.0 mm
Overall power consumption	70 W
Net weight	6.3 kg
Packing dimensions	615.0 mm ✕ 290.0 mm ✕ 525.0 mm