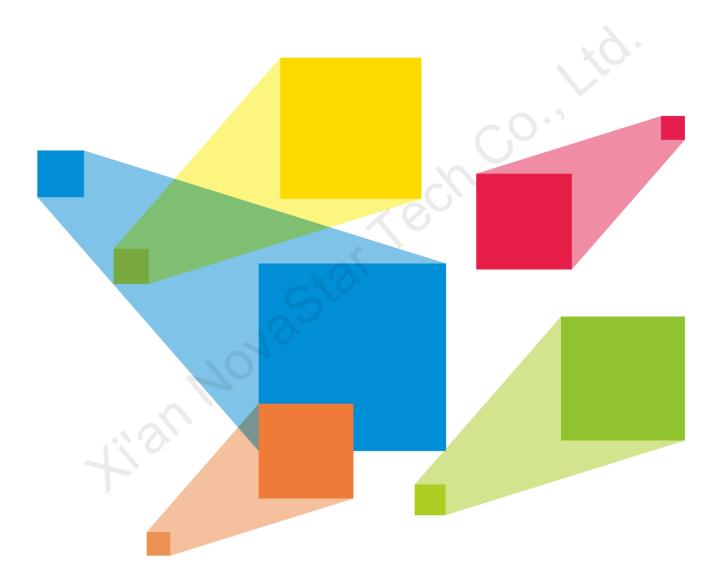




# **Media Server**



# **User Manual**

## Preface

## Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please get in touch with us via the contact information given in the document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

This product has a built-in media playback and control software that is for your use only. The ownership of the software belongs to our company. You can make copies, but only for personal use. If you want to use this software for other purposes, especially for commercial purposes, please contact our company. Our company reserves the right to pursue legal liability for any infringements.

This product is an electrical device, please pay attention to the electricity safety. Please read this manual carefully before use. Improper operation may cause damage to the product. Our company assumes no responsibility for any property damage and personal injury caused by improper operations that are not followed in accordance with the instructions in this manual. If this article conflicts with the local laws and regulations, the local laws and regulations shall prevail.

## **Symbols**

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

## Change History

Release Version	Release Date	Description
V1.8.0	2022-09-28	Updated the device rear panel.
		<ul> <li>Added the descriptions for graphics cards HPGA4000 and HPGA5000.</li> </ul>
V1.7.0	2022-08-02	• Deleted the descriptions for the graphics card HPG5000.
		<ul> <li>Updated the control software name.</li> </ul>
		<ul> <li>Updated the accessories.</li> </ul>
		<ul> <li>Added the stage and layer locking functions.</li> </ul>
V1.6.0	2022-04-15	<ul> <li>Added the sound channel settings and sound channel mapping function.</li> </ul>
V1.5.0	2022-01-17	Changed the TCP/IP default port number.
		The built-in software Kompass FX3 supports the following new functions:
V1.4.0	2021-11-30	<ul> <li>The function of poroject packging</li> </ul>
V 1. 1.0	2021 11 00	<ul> <li>The position adjustment of playback collection</li> </ul>
		<ul> <li>The quantity change of max. output partitions</li> </ul>
V1.3.0	2021-11-04	<ul> <li>Updated the maximum loading capacities of the graphic cards.</li> <li>Updated the recommended video coding format descriptions.</li> </ul>
V1.2.0	2021-09-20	<ul> <li>Updated the device rear panel.</li> <li>Added the rules for the mosaic of connectors on the graphics card.</li> </ul>
	10	Added the descriptions of the HPG4000 graphics card.
		<ul> <li>Added the following supported input sources.</li> </ul>
		<ul> <li>NDI sources</li> </ul>
V1.1.0	2021-08-30	<ul> <li>Sources from capture devices</li> </ul>
		- Website sources
		<ul> <li>Stream media sources</li> <li>Media collections</li> </ul>
V1.0.4	2021-06-16	Updated the power consumption.
V1.0.3	2021-05-28	Updated the media file format descriptions.
V1.0.2	2021-05-14	Updated the product accessories.
V1.0.1	2021-05-12	<ul> <li>Updated the appearance and descriptions of the power module on the rear panel.</li> </ul>
		<ul> <li>Updated the descriptions of the graphics card.</li> </ul>
V1.0.0	2021-04-22	First release

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5.4.1 Edit Layers		
5.4.2 Set Program Properties       48         5.4.3 Play Programs       50         5.4.4 Set Media Playback Properties       50         5.4.5 Set Layer Opacity       51         5.4.6 Set Layer Color       51	5	
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5.4.4 Set Media Playback Properties       50         5.4.5 Set Layer Opacity       51         5.4.6 Set Layer Color       51	•	
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•		
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# 1 Overview

## 1.1 Introduction

The ET4000 is a brand new media server developed by NovaStar, which is specifically designed for multimedia exhibition halls, banquet halls, stage performances and other creative fixed installation scenarios. The ET4000 provides an excellent pixel-to-pixel display with ultra-high definition, diversified mosaic creativity and outstanding media arrangements for professional stage performances. Built-in with intuitive and user-friendly media playback and control software, the ET4000 enables simplified stage display management and best-in-class human-machine interaction.

## 1.2 Features

- A single unit supports up to 8K×4K output capacity, ultra-high-resolution video decoding and pixel-to-pixel display
- Free partitioning, reorganizing and rotating of multiple outputs for irregular screen configuration, unleashing your creative mosaic ideas
- A single output can be split into up to 64 partitions, allowing for quick mapping settings and ultra-wide screen configuration
- Playback of up to 8 layers and 1 audio simultaneously
- Visualized program arrangement and management
- Live and pre-edit modes
  - The program editing and playback are in sync in live mode
  - Edit the programs first before displaying them on the screen in pre-edit mode
- Media library management, including videos, pictures, PowerPoint files and audios
- Media file sorting
- Media file batch import
- NDI sources, website sources, sources from capture devices and stream media sources supported
- Media collection configurations
- Up to 1080p PowerPoint files supported
- Using a laser pointer for moving between slides in PowerPoint
- Playback progress management
- Shortcut key for program jumping and auto jumping settings
- Configurable layer size and priority
- Main KV jumping settings
- Main media based playback progress management
- Crossfade on program switching
- Layer mask, cropping, keying, blurring and opacity adjustment
- Hardware decoding supported
- One-click FTB
- Auto startup of built-in software on system power on, auto program playback on software startup
- Control software VICP (Visual Intelligent Control Platform), enabling a highly efficient and user-friendly control experience



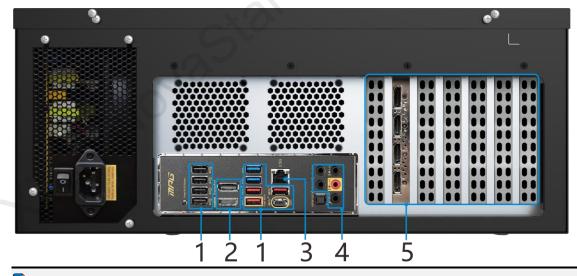
## 1.3 Appearance

## **Front Panel**



No.	Area	Description
1	Power button	Power on or power off the device.
2	USB ports	2x USB3.0
		<ul> <li>Connect to a mouse and keyboard.</li> </ul>
		<ul> <li>Insert a USB drive for importing media files.</li> </ul>

#### **Rear Panel**



## **Note**

The rear panel picture shows the basic configuration without any graphics cards installed. Please go to 1.4 Optional Items to select the desired graphic card which is a must for the system.

No.	Area	Qty.	Description
1	USB ports	10	• 4x Type-A USB 2.0
			• 2x Type-A USB 3.2 Gen1
			• 3x Type-A USB 3.2 Gen2



			• 1x Type-C USB 3.2 Gen2 × 2		
			Connect to the mouse and keyboard or insert the USB drive.		
2	HDMI 2.0	1	Integrated graphics card output via DP 1.2 or HDMI 2.0		
	DP 1.2		<ul> <li>Connect to a monitor for displaying the software interface.</li> </ul>		
			<ul> <li>Max. output resolution: 3840 × 2160@60Hz</li> </ul>		
3	Ethernet port	1	1x RJ45 connector for Ethernet networking		
4	Audio connectors	3	1x MIC IN: 3.5 mm microphone input connector		
	Connoctoro		<ul> <li>1x Line IN: 3.5 mm external audio input connector</li> </ul>		
			<ul> <li>1x Line OUT: 3.5 mm audio output connector</li> </ul>		
5	Graphics card	-	Graphics card and sync card slots		
	and sync card		Please go to 1.4 Optional Items to select the desired graphics card.		
			Notes		
			<ul> <li>At most two graphics cards can be configured.</li> </ul>		
			<ul> <li>The graphics card does not support irregular mosaic layouts. The mosaic layout must be 1×2, 1×3, 1×4, 2×2, 2×1, 3×1 or 4×1.</li> </ul>		
			<ul> <li>The output resolutions of the graphics card connectors that are used for mosaic must be the same.</li> </ul>		
Hardwa	re/Software				
Power s	upply	750 W (Gr	reatWall)		
CPU		11th Generation Intel® Core <sup>™</sup> Processor (I7_11700K)			
Memory		4x 8GB DDR4 high-speed memory			
Mainboa	Mainboard		MPG Z590		
Storage		System disk: Samsung M.2 SSD 250GB (Samsung SSD 980)			
		<ul> <li>Storage disk: Samsung M.2 SSD 500GB (Samsung SSD 980)</li> </ul>			
Fan		Quiet fans (PCCOOLER), dedicated to high-frequency processors			
Keyboard & Mouse		Keyboard and mouse suit (Logitech)			
OS		Windows 10 IoT Enterprise LTSC			
Playback and control software		Kompass FX3 and its dongle			

## 1.4 Optional Items

The following table lists the optional items that you need to purchase from NovaStar separately.

Graphics Card and Sync Card	Specifications	
Graphics card MPG2200	4x DP 1.2	
	<ul> <li>Single connector resolution: Up to 4096 × 2160@60Hz</li> </ul>	
	Four connector mosaic output:	
	<ul> <li>The mosaic width or height can be up to 16384 pixels.</li> </ul>	



Graphics Card and Sync Card	Specifications
	<ul> <li>The loading capacity can be up to 8192 × 4320@60Hz.</li> </ul>
	<ul> <li>Single connector width: 480 - 8192 pixels</li> </ul>
	<ul> <li>Single connector height: 300 - 8192 pixels</li> </ul>
	<ul> <li>Playback of 1 layer of 8K × 4K@30fps SDR video (hardware-decoding)</li> </ul>
	Memory: 5 GB
	• Type: GDDR 5X
	• Bit width: 160 bit
	Note     The MPG2200 graphics card cannot work with the sync card.
Orachiae acad UDO 4000	The MPG2200 graphics card cannot work with the sync card.
Graphics card HPG4000	
	3x DP 1.2, 1x Type-C
	<ul> <li>Single connector resolution: Up to 4096 × 2160@60Hz</li> </ul>
	Four connector mosaic output:
	<ul> <li>The mosaic width or height can be up to 16384 pixels.</li> </ul>
	<ul> <li>The loading capacity can be up to 8192 × 4320@60Hz.</li> </ul>
	<ul> <li>Single connector width: 480 - 8192 pixels</li> </ul>
	<ul> <li>Single connector height: 300 – 8192 pixels</li> </ul>
	<ul> <li>Playback of 1 layer of 8K × 4K@60fps SDR video (hardware-decoding)</li> </ul>
	Memory: 8 GB
	• Type: GDDR 6
	• Bit width: 256 bit
40'	Note     A Type-C to HDMI converter cable is included in the packing list when this card is selected.
Graphics card HPGA4000	
13	
	4x DP 1.2
	<ul> <li>Single connector resolution: Up to 4096 × 2160@60Hz</li> </ul>
	Four connector mosaic output:
	<ul> <li>The mosaic width or height can be up to 16384 pixels.</li> </ul>
	– The loading capacity can be up to $8192 \times 4320@60Hz$ .
	<ul> <li>Single connector width: 480 - 8192 pixels</li> </ul>
	<ul> <li>Single connector height: 300 - 8192 pixels</li> </ul>
	<ul> <li>Playback of 1 layer of 8K × 4K@60fps SDR video (hardware-decoding)</li> </ul>
	Memory: 16 GB
	• Type: GDDR 6
	• Bit width: 256 bit



Graphics Card and Sync Card	Specifications
Graphics card HPGA5000	
	4x DP 1.2
	• Single connector resolution: Up to 4096 × 2160@60Hz
	Four connector mosaic output:
	<ul> <li>The mosaic width or height can be up to 16384 pixels.</li> <li>The loading capacity can be up to 8192 × 4320@60Hz.</li> </ul>
	Single connector width: 480 - 8192 pixels
	Single connector height: 300 - 8192 pixels
	• Playback of 1 layer of 8K × 4K@60fps or 4K × 2K@60fps SDR video (hardware-decoding)
	Memory: 24 GB
	• Type: GDDR 6
	Bit width: 384 bit
Sync card	
	The sync card must work with the HPG4000, HPGA4000, HPGA5000 and other high-end graphics cards.
	• 2x RJ45
	Accept a frame lock signal and output the signal.
	• 1x BNC
	Accept an external sync signal.
	LED lights
12.0	Indicate the statuses of the sync signal connections.
Control software	Visual Intelligent Control Platform (VICP)

# 2 Applications



# 3 ET4000 Settings

## 3.1 Set Main Display

Step 1 Right click on your desktop and select **Display settings**.

# Figure 3-1 Display settings View > Sort by > Refresh > Paste > Paste shortcut > Intel® Graphics Settings > NVIDIA Control Panel > New > Display settings > Personalize >

Step 2 Select a display to set it as the main display.

Figure 3-2 Multiple displays-1

Settings	C,	– 🗆 X
යි Home	Display	
Find a setting	Rearrange your displays	Sleep better Night light can help you get to
System	Select a display below to change the settings for it. Press and hold (or select) a display, then drag to rearrange it.	sleep by displaying warmer colors at night. Select Night light settings to set things up.
🖵 Display		
句》 Sound		Get help
Notifications & actions		Give feedback
J Focus assist		
() Power & sleep	Identify Detect	
📼 Storage		
다. Tablet	Color	
<b>甘</b> Multitasking	Night light	
Projecting to this PC		
ာိ Shared experiences	Night light settings	
🛍 Clipboard	Windows HD Color	
✓ Remote Desktop	Get a brighter and more vibrant picture for videos, games and apps that support HDR.	
① About	Windows HD Color settings	
	Scale and layout	
	Change the size of text, apps, and other items	
	100% (Decommonded)	

## 🖹 Note

When multiple displays are connected, you can click **Identify** to show the number at the bottom left corner on each display.



Step 3 For the Multiple displays item, select Extend these displays.

#### Figure 3-3 Multiple displays-2

Settings	- D X
က် Home	Display
Find a setting	
System	Windows HD Color
🖵 Display	Get a brighter and more vibrant picture for videos, games and apps that support HDR.
4ŵ Sound	Windows HD Color settings
	Scale and layout
Notifications & actions	
J Focus assist	Change the size of text, apps, and other items 100% (Recommended)
() Power & sleep	Advanced scaling settings
📼 Storage	Display resolution
- Tablet	1920 × 1080 (Recommended) ×
-0 lablet	Display orientation
🛱 Multitasking	Landscape
Projecting to this PC	
X Shared experiences	Multiple displays
- Shared experiences	Multiple displays
🛱 Clipboard	Extend these displays
>< Remote Desktop	Make this my main display
① About	Advanced display settings
	Graphics settings

Step 4 On the window that appears, select Keep changes.

#### Figure 3-4 Confirmation

Keep these display settings?		
Reverting to previous display settings in 12 seconds.		
	Keep changes	Revert

Step 5 Check the box next to Make this my main display.

## 3.2 Change Resolutions

#### 3.2.1 Set Standard Resolutions

Step 1 Right click on your desktop and select **Display settings**.

## Figure 3-5 Display settings View > Sort by > Refresh Paste Paste shortcut Intel® Graphics Settings NVIDIA Control Panel New > Display settings Personalize

Step 2 Select a display to set it as the main display.

Figure 3-6 Multiple displays-1		
Settings		×
යි Home	Display	
Find a setting $\rho$	Rearrange your displays	Sleep better Night light can help you get to
System	Select a display below to change the settings for it. Press and hold (or select) a display, then drag to rearrange it.	sleep by displaying warmer colors at night. Select Night light settings to set things up.
🖵 Display		
¢গ) Sound		Get help
Notifications & actions	1 2	Give feedback
J Focus assist		
() Power & sleep	Identify Detect	
📼 Storage		
문 Tablet	Color	
目 Multitasking	Night light	
Projecting to this PC	Off Night light settings	
X Shared experiences	Night nght setungs	
🛱 Clipboard	Windows HD Color	
→ Remote Desktop	Get a brighter and more vibrant picture for videos, games and apps that support HDR.	
① About	Windows HD Color settings	
	Scale and layout	
	Change the size of text, apps, and other items	
	(000) /D   B	

## **Note**

When multiple displays are connected, you can click Identify to show the number at the bottom left corner on each display.

Step 3 For the **Display resolution** item, select the desired output resolution.

#### Figure 3-7 Multiple displays-2

Settings	- L ×
வ் Home	Display
Find a setting	
System	Windows HD Color
🖵 Display	Get a brighter and more vibrant picture for videos, games and apps that support HDR.
ላ») Sound	Windows HD Color settings
Notifications & actions	Scale and layout
J Focus assist	Change the size of text, apps, and other items 100% (Recommended)
O Power & sleep	Advanced scaling settings
📼 Storage	Display resolution
댾 Tablet	1920 × 1080 (Recommended)
보 Multitasking	Display orientation           Landscape         V
Projecting to this PC	
X Shared experiences	Multiple displays Multiple displays
🛱 Clipboard	Extend these displays
✓ Remote Desktop	Make this my main display
① About	Advanced display settings
	Graphics settings

Step 4 On the window that appears, select Keep changes.

Figure 3-8 Confirmation	9
Keep these display settings? Reverting to previous display settings in 12 seconds.	
	Keep changes Revert

Step 5 Repeat Step 2 to Step 4 to complete the resolution settings for other displays.

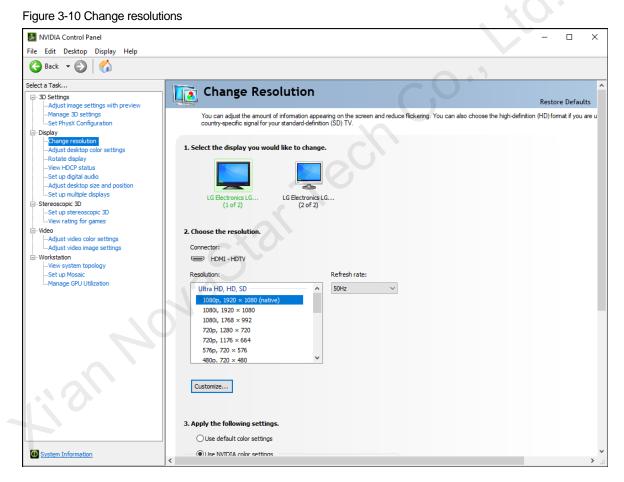
#### 3.2.2 Set Custom Resolutions

Step 1 Right click on your desktop and select NVIDIA Control Panel.

#### Figure 3-9 NVIDIA control panel

0	•	
	View	>
	Sort by	>
	Refresh	
	Paste	
	Paste shortcut	
<b>F</b>	Intel® Graphics Settings	
<b>E</b>	Intel® Graphics Settings NVIDIA Control Panel	
<b>E</b>		>
<b>S</b>	NVIDIA Control Panel	>

Step 2 On the NVIDIA Control Panel interface, go to Display > Change resolution.



Step 3 Select the desired display.

Step 4 Click **Customize** to show the customize window.

Custom	ize		×	
2	Select the resolutions that you want to add. You can create a custom resol that may not use a standard Windows resolution. Note that applying these result in a temporary blank display.	ution for a display resolutions may	¢	
	Resolutions:			
	Click Create Custom Resolution to add items.			
	Enable resolutions not exposed by the display			
	Create Custom Resolution			
	ОК	Cancel		

Figure 3-11 Custom resolution-1

- Step 5 Click Create Custom Resolution.
- Step 6 Read the disclaimer information carefully and click Accept to show the Create Custom Resolution window.
- Step 7 Select the desired display.

#### Figure 3-12 Custom resolution-2

te Custom Resolution				×	
Le Custom Resolution				^	
	n that is not currently sting a new custom r		in Windows. Your displa	ay may flicker a	
Select displays:				Identify displays	
Display		ID	Current resolution		
Quadro K620					
LG Electronics LG		1	1920 x 1080 at 50H 1920 x 1080 at 50H		
		-	1920 X 1000 at 3011	2 (32-01)	
Resolution settings:					
Display mode (as reporte	d by Windows)			Import settings	
Horizontal pixels:	1920 <b>+</b>		Vertical lines:	1080	
Refresh rate (Hz):			Color depth (bpp):		
	50 ≑		Color depth (opp):	32 ~	
Scan type:	Progressive	$\sim$			
Timing					
· ·	CVT reduced blank	~			
	Horizontal		Vertical		
Active pixels:	1920		1080 ÷		
Front porch (pixels):	48		3		
Sync width (pixels):	32 +		5		
Total pixels:	2080		1106	C	
Polarity:					
Polatity.	Positive (+)	$\sim$	Negative (-)	Pixel clock:	
Refresh rate:	55.30 KHz		50.000 🗘 Hz	115.0240 MHz	
			(49.000 to 51.000)		
			Test	Canaal	
			Test	Cancel	

- Step 8 Set the horizontal pixels, vertical lines, refresh rate and scan type.
- Step 9 Click Test and then click Yes on the window that appears.

#### Figure 3-13 Confirmation

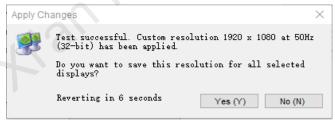


Figure 3	3-14 Custom resolution-3			
Customi	ze		×	
	Select the resolutions that you want to add. You can create a that may not use a standard Windows resolution. Note that a result in a temporary blank display.			
	Resolutions:			
	Click Create Custom Resolution to add items.			
	Enable resolutions not exposed by the display			
	Create Custom Resolution	ок	G	
		UK	ancel	

Step 10 Click OK to complete the custom resolution settings.

After a custom resolution is created successfully, it will appear in the custom area as shown in the figure below.

Figure 3-15 Custom resolution-4

NVIDIA Control Panel		-		×
File Edit Desktop Display Help				
🚱 Back 🝷 🚱 🛛 🐔				
Select a Task	Change Recolution			^
□- 3D Settings	Change Resolution	Resto	re Defaul	ts
Adjust image settings with preview Manage 3D settings	You can adjust the amount of information appearing on the screen and reduce flickering. You can also choose the high-definition			
Set PhysX Configuration	country-specific signal for your standard-definition (SD) TV.	(10)10	nac ii you i	
⊡- Display				
Adjust desktop color settings	1. Select the display you would like to change.			
Rotate display View HDCP status				
Set up digital audio				
-Adjust desktop size and position				
Set up multiple displays	LG Electronics LG (1 of 2) (2 of 2)			
Set up stereoscopic 3D				
	2. Choose the resolution.			
Adjust video color settings				
Adjust video image settings	Connector:			
-View system topology	HDMI-HDTV			
Set up Mosaic Manage GPU Utilization	Resolution: Refresh rate:			
Manage GPO Oblization	Ultra HD, HD, SD 🔨 N 50Hz 🗸			
	1080p, 1920 × 1080 (native)			
	1080i, 1920 × 1080 1080i, 1768 × 992			
	720p, 1280 × 720			
	720p, 1176 × 664			
	576p, 720 × 576 480p, 720 × 480			
	Customize			
	Constanting			
	3. Apply the following settings.			
	O Use default color settings			
O System Information	Ise NVIDIA color settings			>



## 3.3 EDID Management

After the display resolution settings, you need to manage the EDID for precise identification of display properties and to avoid the on-site screen display disorder.

#### Load EDID

The procedure of how to load the EDID is as follows.

#### Step 1 Right click on your desktop and select NVIDIA Control Panel.

Figu	re 3-16 NVIDIA control panel	
	View	>
	Sort by	>
	Refresh	
	Paste	
	Paste shortcut	
	Intel® Graphics Settings	
<u>@</u>	NVIDIA Control Panel	
	New	>
	Display settings	
4	Personalize	

Step 2 On the NVIDIA Control Panel interface, go to Workstation > View system topology.

#### Figure 3-17 NVIDIA control panel

NVIDIA Control Panel						
le Edit Desktop Workstation Help	)					
🔾 Back 🔻 🕑 🛛 🐔						
elect a Task	View System Topology					
- 3D Settings Adjust image settings with preview	View System Topology					
Manage 3D settings	This page shows the displays and graphics cards conne	cted within	this system			
Display						
Change resolution Adjust desktop color settings	🚖 Expand all 🕐 Refresh					
-Rotate display						
View HDCP status Set up digital audio	Mosaic Displays					1
Set up digital audio Set up multiple displays	System topology	Status	Settings			
lideo	🗉 🕎 Mosaic Displays				^	
Adjust video color settings Adjust video image settings	Configuration		1 x 2 Topology			
Vorkstation	Resolution, refresh rate		3840 × 1080 pixel	s, 60.00 Hz	~	
View system topology	Displays and Graphics Cards	<b>C</b> 1 1	6 W			1
Set up Mosaic Change ECC state	System topology	Status	Settings			-
Manage GPU Utilization	System		452.57			
	Driver version					
	Vertical sync	<b></b>	3D Application con	ntrolled		
	3D Stereo		Disabled			
	Quadro P2000 (1 of 2)		Not connected			
	DisplayPort (4)			lulti-Display Cloning (Disabled)		
	HDMI			ctronics LG FULL HD (2 of 2) Iulti-Display Cloning (Disabled)		
	DisplayPort (2)		Not connected EDID (Monitor), M	lulti-Display Cloning (Disabled)		
	DisplayPort (1)		Not connected EDID (Monitor), M	lulti-Display Cloning (Disabled)		
	SLI Mode		Disabled			
	Usage Mode		WDDM			
	Total memory		21459 MB			
	Memory free		4863 MB		More	
	LG Electronics LG FULL HD (2 of 2)					
	Resolution, refresh rate , color de			s. 60.00 Hz. SDR (24 位颜色)		-
			Horizontal (2200)	Vertical (1125)		-
	Active		1920	1080		
	Border		0	0		
	Front porch		88	4		-
	Sync width		44	5		
	Back porch		148	36		
	Polarity		Positive (+)	Positive (+)		
	EDID source		Monitor			-
	OS Screen Identifier		1			-
	Quadro RTX 5000 (2 of 2)					
System Information	DisplayPort (4)		Not connected EDID (Monitor), M	lulti-Display Cloning (Disabled)		



Step 3 Click EDID (Monitor) next to a desired output connector of the current graphics card to show the EDID management window.

#### Figure 3-18 EDID (Monitor)

3 Back 🔹 🕑 🥋					
lect a Task	View System Topology				
- 3D Settings - Adjust image settings with preview	,,,,,,,				
Manage 3D settings	This page shows the displays and graphics cards con	nected withi	n this system.		
- Display - Change resolution					
-Adjust desktop color settings	🚓 Expand all 💍 Refresh				
Rotate display View HDCP status	Mosaic Displays				
-Set up digital audio	System topology	Status	Settings		
Set up multiple displays	Mosaic Displays				
- Video - Adjust video color settings	Configuration		1 x 2 Topology		
Adjust video image settings	Resolution, refresh rate		3840 × 1080 pixe	els, 60.00 Hz	
-Workstation View system topology	Displays and Graphics Cards				
-Set up Mosaic	System topology	Status	Settings		
Change ECC state	System				
Manage GPU Utilization	Driver version		452.57		
	Vertical sync	0	3D Application co	ontrolled	
	3D Stereo		Disabled		
	Quadro P2000 (1 of 2)				
	DisplayPort (4)		Not connected EDID (Monitor),	Multi-Display Cloning (Disabled)	
	HDMI			ectronics LG FULL HD (2 of 2) <u>Multi-Display Cloning</u> (Disabled)	
	DisplayPort (2)		Not connected EDID (Monitor),	Multi-Display Cloning (Disabled)	
	DisplayPort (1)		Not connected EDID (Monitor),	Multi-Display Cloning (Disabled)	
	SLI Mode		Disabled		
	Usage Mode		WDDM		
	Total memory		21459 MB		
	Memory free		4863 MB		More More
	🗆 🌉 LG Electronics LG FULL HD (2 of 2	0			
	🖂 Resolution, refresh rate , color de	P	1920 × 1080 pixe	els, 60.00 Hz, SDR (24 位颜色)	
			Horizontal (2200)	Vertical (1125)	
	Active		1920	1080	
	Border		0	0	
	Front porch		88	4	
	Sync width		44	5	
	Back porch		148	36	
	Polarity		Positive (+)	Positive (+)	
	EDID source		Monitor		
	OS Screen Identifier		1		
	😑 💻 Quadro RTX 5000 (2 of 2)				
System Information	DisplayPort (4)		Not connected EDID (Monitor), [	Multi-Display Cloning (Disabled)	

#### Figure 3-19 Manage EDID

elect Connector to E Connector	Display	Status	Video signal	
Quadro P2000(	1)			
DisplayPort (1)		Not Connected	VGA (Analog)	
DisplayPort (2)		Not Connected	VGA (Analog)	
HDMI	LG Electronics LG FUL	Monitor	DisplayPort (Digital)	
DisplayPort (4)		Not Connected	VGA (Analog)	
Quadro RTX 50	000(2)			
HDMI	DP1.2 (2 of 3)	Monitor	DisplayPort (Digital)	
HDMI	DP1.2 (3 of 3)	Monitor	DisplayPort (Digital)	
HDMI	DP1.2 (1 of 3)	Monitor	DisplayPort (Digital)	
JSB-C	LG Electronics LG FUL	Monitor	DisplayPort (Digital)	
DisplayPort (4)		Not Connected	VGA (Analog)	

Step 4 Click Export EDID and then name the exported EDID file in the window that appears.

- Step 5 Select the Load tab to show the EDID loading window.
- Step 6 Click **Browse** and then select the EDID file exported in Step 4.
- Step 7 In the Select Connector to force EDID area, select the desired connector.

#### Figure 3-20 Load EDID

ID fi	île:		Bro	owse				
ect	Connector to forc	e EDID:	b					
	Connector	Display	Status	Video signal	Comments*	^		
Qu	adro P2000(1)							
	DisplayPort (1)		Not Connected	VGA (Analog)				
	DisplayPort (2)		Not Connected	VGA (Analog)				
		LG Electro	Monitor	DisplayPort (Dig				
	DisplayPort (4)		Not Connected	VGA (Analog)				
Qu	adro RTX 5000	(2)						
	HDMI	DP1.2 (2 o	Monitor	DisplayPort (Dig				
	HDMI	DP1.2 (3 o		DisplayPort (Dig				
	HDMI	DP1.2 (1 o		DisplayPort (Dig				
	HCD C	I C Electro	Monitor	DisplayDart (Dia		>		
-						/		
			and want to load	EDID on selected mo	nitore			

- Step 8 Click Load EDID.
- Step 9 On the dialog box that appears, click **OK** to complete loading the EDID.

Figure 3-21 EDID loaded successfully

ſ		×
	C:\Users\Administrator\Desktop\1.txt EDID successfully loaded.	
	ок	

Step 10 Go back to Workstation > View system topology to check the EDID status. If the original EDID (Monitor) changes to EDID (File), the EDID is loaded successfully.

#### Figure 3-22 EDID loaded successfully

Edit Desktop Workstation Help				
Back 👻 🚱  🟠				
Task				
Settings View System	m lopology			
Adjust image settings with preview Manage 3D settings This page shows the displa				
-Set PhysX Configuration	ays and graphics cards connected within	this system.		
play				
-Change resolution -Adjust desktop color settings	resh			
Rotate display System topology	Status	Settings		
View HDCP status				
-Set up digital audio System Driver version		452.57		
-Set up multiple displays Vertical sync	0	3D Application cor	strolled	
eo	· · · · · · · · · · · · · · · · · · ·	Disabled	10.01100	
Adjust video color settings 3D Stereo	(1 of 7)	Disabled		
westation	(1014)	Connected DOI 1	(5 of 5)	
View system topology DisplayPort (4)	i i i i i i i i i i i i i i i i i i i	EDID (File) Multi-D	(5 of 5) <u>Display Cloning</u> (Disabled)	
-Set up Mosaic -Change ECC state DisplayPort (3)				
-Change ECC state DisplayPort (3) -Manage GPU Utilization		Connected DP1.2	(4 of 5) <u>Display Cloning</u> (Disabled)	
		A REAL PROPERTY AND A REAL PROPERTY AND A		
DisplayPort (2)		Connected DP1.2		
	-		Display Cloning (Disabled)	
DisplayPort (1)		Connected DP1.2		
		EDID (File), Multi-D	Display Cloning (Disabled)	
SLI Mode		Disabled		
Usage Mode		WDDM		
Total memory		21459 MB		
Memory free		4398 MB		More
🖂 🛄 DP1.2 (3 of	5)			
E Resolution,	refresh rate , color de	1920 × 1080 pixels	s, 60.00 Hz, SDR (24 位颜色)	
		Horizontal (4256)	Vertical (2205)	
Active		4096	2160	
Border		0	0	
Front po		48	3	
Sync wie		32	10	
Back po		80	32	
Polarity		Positive (+)	Positive (+)	
EDID source		File	103010(1)	
OS Screen I		3		
HDCP		Not supported		
E DP1.2 (2 of		Not supported		
		1020 - 1020	s, 60.00 Hz, SDR (24 位颜色)	
Resolution,	refresh rate , color de			
		Horizontal (4256)	Vertical (2205)	
Active		4096	2160	
Border		0	0	
Front po		48	3	
stem Information Sync wid	dth	32	10	

## **Unload EDID**

The procedure of how to unload the EDID is as follows.

- Step 1 On the NVIDIA Control Panel interface, go to Workstation > View system topology.
- Step 2 Click EDID (File) to show the EDID management window.

#### Figure 3-23 EDID (File)

Edit Desktop Workstation Help					
Back 👻 🔘 🕜					
a Task	View System Topology				
D Settings -Adjust image settings with preview	them bystem repeters)				
Manage 3D settings	This page shows the displays and graphics cards conne	cted within	this system.		
-Set PhysX Configuration					
-Change resolution					
-Adjust desktop color settings	Expand all 🕐 Refresh				
-View HDCP status	tem topology	Status	Settings		
-Set up digital audio	System				
-Adjust desktop size and position -Set up multiple displays	Driver version	-	452.57		
deo	Vertical sync	<b>S</b>	3D Application con	ntrolled	
Adjust video color settings	3D Stereo		Disabled		
-Adjust video image settings /orkstation	Quadro P2000 (1 of 2)				
View system topology	DisplayPort (4)		Connected: DP1.2 ( EDID (File) Multi-D	(5 of 5) Display Cloning (Disabled)	
-Set up Mosaic -Change ECC state	Display Rept (2)	10000			
Manage GPU Utilization	DisplayPort (3)		Connected DP1.2 ( EDID (File), Multi-D	(4 of 5) <u>Display Cloning</u> (Disabled)	
			Connected DP1.2		
	DisplayPort (2)			(2 of 5) Display Cloning (Disabled)	
	DisplayPort (1)		Connected DP1.2		
	DisplayFort (1)	۰		Display Cloning (Disabled)	
	SLI Mode	202	Disabled		
	Usage Mode		WDDM		
	Total memory		21459 MB		
	Memory free		4398 MB		More
	DP1.2 (3 of 5)				<b>S</b>
	Resolution, refresh rate , color de		1920 × 1080 pixels	s, 60.00 Hz, SDR (24 位颜色)	
			Horizontal (4256)	Vertical (2205)	
	Active		4096	2160	
	Border		0	0	
	Front porch		48	3	
	Sync width		32	10	
	Back porch		80	32	
	Polarity		Positive (+)	Positive (+)	
	EDID source		File		
	OS Screen Identifier		3		
	HDCP		Not supported		
	DP1.2 (2 of 5)				
	Resolution, refresh rate , color de		1920 × 1080 pixels	s, 60.00 Hz, SDR (24 位颜色)	
			Horizontal (4256)	Vertical (2205)	
	Active		4096	2160	
	Border		0	0	
	Front porch		48	3	
system Information	Sync width		32	10	

#### Step 3 Select the **Unload** tab and then select the desired connectors.

## Figure 3-24 Unload EDID

Quadro P2000(1)         Not Connected         VGA (Analog)           DisplayPort (1)         Not Connected         VGA (Analog)           DisplayPort (2)         Not Connected         VGA (Analog)           HDMI         LG Electronics         Monitor         DisplayPort (Digital)           DisplayPort (4)         Not Connected         VGA (Analog)	
DisplayPort (1)         Not Connected         VGA (Analog)           DisplayPort (2)         Not Connected         VGA (Analog)           HDMI         LG Electronics         Monitor         DisplayPort (Digital)	
DisplayPort (2) Not Connected VGA (Analog) HDMI LG Electronics Monitor DisplayPort (Digital)	
HDMI LG Electronics Monitor DisplayPort (Digital)	
DisplayPort (4) Not Connected VGA (Analog)	
Quadro RTX 5000(2)	
HDMI DP1.2 (2 of 3) Monitor DisplayPort (Digital)	
HDMI DP1.2 (3 of 3) Monitor DisplayPort (Digital)	
HDMI DP1.2 (1 of 3) Monitor DisplayPort (Digital)	
USB-C LG Electronics Monitor DisplayPort (Digital)	
DisplayPort (4) Not Connected VGA (Analog)	

- Step 4 Click Unload EDID.
- Step 5 After the EDID is unloaded successfully, click **OK** on the dialog box that appears.

Figure 3-25 EDID unloaded successfully



Step 6 Go back to Workstation > View system topology to check the EDID status. If the EDID (File) changes to EDID (Monitor), the EDID is unloaded successfully.

#### 3.4 Output Mosaic

The graphics card supports connector mosaic output. The output connector mosaic must observe the following rules.

- The graphics card does not support irregular mosaic layouts. The mosaic layout must be 1x2, 1x3, 1x4, 2x2, 2x1, 3x1 or 4x1.
- The output resolutions of the graphics card connectors that are used for mosaic must be the same.
- Step 1 Right click on your desktop and select NVIDIA Control Panel.

-igu	ire 3-26 NVIDI	A control pare	31
	View		>
	Sort by		$\rightarrow$
	Refresh		
	Paste		
	Paste shortcut		
	Intel® Graphic	s Settings	2
©.	NVIDIA Contro	l Panel	
	New		>
	Display settings	s	
	Personalize		

#### Figure 3-26 NVIDIA control panel

Step 2 On the NVIDIA Control Panel interface, go to Workstation > Set up Mosaic.

#### Figure 3-27 Set up mosaic

NVIDIA Control Panel		
<u>File Edit Desktop W</u> orkstation <u>H</u> elp		
Ġ Back 🔻 🜍 👫		
elect a Task	Set Up Mosaic	
3D Settings     Minute image settings with preview	Set op Mosaic	
Manage 3D settings	Mosaic technology creates a single desktop f	rom multiple displays and GPUs. Bezel correction is available to create a seamless image.
Set PhysX ConfigurationDisplay		
Change resolution Adjust desktop color settings		
Rotate display	Create new configuration	
View HDCP status Set up digital audio		
Adjust desktop size and position Set up multiple displays		
- Video		Identify displays
Adjust video color settings Adjust video image settings	Sync Capability Information	
- Workstation		
Set up Mosaic	GPU/ Displays Ouadro P2000	Sync capability
Change ECC state Manage GPU Utilization	1. LG Electronics LG FULL HD	
	Quadro RTX 5000	100 H
	2. DP 1.2	
	3. DP 1. 2	
	4. DP1.2 5. LG Electronics LG EUIL HD	
	5. LG Electronics LG FOLL HD	
	Conditions to set up Mosaic:	
	All displays must have at least one display timin	g (including all advanced timing parameters) in common.
	You may use NVIDIA approved adaptors to con	nect the GPUs to the displays.

Step 3 Click Create new configuration to show the mosaic settings window.

	_	
n		
lame		



- Step 4 Select the screen number from the drop-down list of **Number of displays**.
- Step 5 Select the screen mosaic layout from the drop-down list of Topology (rows x columns).
- Step 6 Select the screen orientation from the drop-down list of Orientation of displays.
- Step 7 Click Next to proceed.

#### Figure 3-29 Select displays

NVIDIA Mosaic set up			— [	×	
losaic Displays		Topology: 1 x 2			
Select topology 2. Select displays	3. Arrange displays	4. Adjust overlap and bezel correction			
Displays for Mosaic: (2 selected)		Refresh rate:			
Displays	Sync capability	60.00 Hz ~			
Quadro P2000	<b>1</b>	Resolution per display:			
1. LG Electronics LG FULL HD	Territor	1920 x 1080 ~			
Quadro RTX 5000		Total resolution:			
3. DP1.2		3840 x 1080 pixels			
4. DP1.2		2 displays are selected for Mosaic with	0.005		
5. LG Electronics LG FULL HD		Go to next step to provide information	about your display		
		arrangement.			
elected display sources:					
elected display sources:	_				
2					
4 3					
<sup>1,0</sup> 1,1					
			Back Ne	ext	

- Step 8 Select the connected displays and then select their refresh rate and resolution.
- Step 9 Click Next to proceed.



#### Figure 3-30 Arrange displays

📧 NVIDIA Mosaic set up	- 0	×	
Mosaic Displays Topology: 1 x 2			
1. Select topology     2. Select displays     3. Arrange displays     4. Adjust overlap and bezel correction			
Available display sources:			
21		L	
0, <sup>+</sup> 0,0		ι.	
Topology:			
		KC	
	<u> </u>		
Total Resolution: 3840 x 1080 pixels			
19	Back Next Finish		

Step 10 Arrange the displays according to the screen arrangement and structure by dragging the available displays to the corresponding topology areas.



#### Figure 3-31 Arrange displays

NVIDIA Mosaic set up		-		
Mosaic Displays	Topology: 1 x 2			
1. Select topology 2. Select displays 3. Arrange display	4. Adjust overlap and bezel correction			
i Display arrangement for Mosaic is complete. To e	enable Mosaic, dick 'Apply'.			
Topology:				
		_		
2	3			
1,0	1,1	0		
1,0	<b>1</b> , <b>1</b>	CL		
Total Resolution: 3840 x 1080 pixels		Apply	Cancel	
	Back	Next	Finish	
	Baux	MCX1	r nustr	

- Step 11 Click Apply and then click Yes on the confirmation window.
- Step 12 Click Next to proceed.

Figure	3-32	Adjust	overlap	and	bezel	correction

📧 NVIDIA Mosaic set u	ıp		– 🗆 X
Mosaic Displays		Topology: 1 x 2	~
1. Select topology 2. Sele	ect displays 3. Arrange displays 4. Adju	st overlap and bezel correction	
Select how overlap/bezel o	represtien is poplied		
	all vertical or horizontal edges v		
Select edges for overlap/b	ezel correction		
2		3	
1,0		1,1	
1,0		1,1	
		*	
Total resolution: 3840 x	< 1080 pixels		
Enter overlap/bezel correc	tion values for selected edges:		
Edges	Correction type	Correction value (pixels)	
All Vertical	Bezel Correctior $ \smallsetminus $	0 🚖	
<			>
			Back Finish
<pre>x</pre>			v

You can perform overlapping adjustment or bezel correction to the vertical or horizontal edges of the display as needed.

- 1. Select whether to use the same settings for all the vertical or horizontal edges of the display in the **Select** how overlap/bezel correction is applied area.
- 2. Select the desired edges and then enter the overlap or bezel correction values for the selected edges. Click **Apply** after the settings are done.
- Step 13 Click **Finish** to complete the mosaic settings.

#### Figure 3-33 Mosaic completed

INVIDIA Control Panel File Edit Desktop Workstation Help			- 🗆 X
	,		
Select a Task  So Settings  Adjust image settings with preview  Manage 30 settings  Display  L-Change resolution	Set Up Mosaic Mosaic technology creates a single desktop from r	ultiple displays and GPUs. Bezel correction is available to create a se	amless image.
-Adjust desktop color settings -Rotate display -View HDCP status -Set up digital audio -Set up multiple displays <b>Video</b>	Create new configuration		
Adjust video color settings Adjust video image settings			Identify displays
View system topologySet up Mosaic	Mosaic Displays- 1	Modify	Disable
Change ECC state Manage GPU Utilization	Topology Refresh Rate Resolution per display Total resolution	1 × 2 60Hz 1920 × 1080 3840 × 1080	
	1	2	5,
	1,0	1,1	
	Sync Capability Information	<u> </u>	
O System Information	GPU/ Displays	Sync capability	×

## 4 Software Operations

#### 4.1 Software Licensing

After the ET4000 is started, Kompass FX3 supports two authorization modes: temporary authorization and permanent authorization.

- When Kompass FX3 is temporarily authorized, the remaining days of temporary authorization is displayed at the top right.
- When Kompass FX3 is permanently authorized, no authorization message is displayed at the top right.
- When Kompass FX3 is not authorized, Trial is displayed at the top right.

If you want to obtain authorization, please contact our sales engineer for purchasing the dongle or registration code.

In trial mode, the Kompass FX3 text is displayed on the output.

Dongle detection rules are as follows:

- When the inserted dongle is recognized, **Trial** will disappear automatically and the output will not display the **Kompass FX3** text.
- Within 3 seconds after the dongle is removed, the software knows the dongle has been removed and prompts you that no dongles have been detected, and the software will again display the **Kompass FX3** text on the output in 5 seconds.

#### Figure 4-1 Dongle removed

Unauthorized
Kompass FX3
Please insert dongle or send QR to seller for getting serial. Serial
OK Cancel

• When the dongle is inserted and recognized normally, the above window and the **Kompass FX3** text on the output will disappear automatically.

## 4.2 User Interface Introduction

After the software is started, the main user interface is shown in Figure 4-2. The functions of each area are described in Table 4-1.

() Kompass FX3 Project Link	Settings Help	语言/Language	Menu Bar	New Project 1-Kom	ass FX3 V3.3.0-2022-09-23-0	19-16			ð - Ø
Media Library Output Control				Live P	e-Edit 🖁				
Media Library /	23 items	A							Output
	olutiorD							-00	):07:31 📘 🕴
-Output Control			Conce and the	Martin					
Land Contraction of Contraction	0x480 C	< <<====>>>		-				12.jpg	-00:07:31
	0x320 0	and a strength of the strength	La Kerb					A COLORED	
Date:	30x720 C							03.jpeg	-00:08:37 📘
	20×800 C				Stage Edit	ing Area			<b>4</b> 0
	20x1 C			- Charles - Charles				Media Proper	ties F
BAR A	20x1 (	BAR CAL	and the second	- And				▼ Basic	
	10×900 C	Security of Party of State	and the states	The sea				<b>∢</b> × ——	• 1
	20x1 (		and a subscription of the second	1 de 1 de 1 de 1				Stop Playing	
	40x900 C							Duration	.x
03 (2).jpg Picture 12	79x586(						D		
₽ <b>m</b>		Y 🕄 Width	Height Rotate		2 6		♥   ⊖ 100% €	Lock Aspe	ct Ratio
			a nome				• • • • • • • •	<ul> <li>Onarity</li> </ul>	© <b>9</b>
Program Management(2/50)			1999		1-2-2	1	-		
Program 1     Program	n 🕗 🕨 Program 🕃	Program 4	Program 5 Program 6	Program 7 P	ogram 8 🕨 Program 9	Program 10	Program 11	Program 12 Program 12	rogram 13 📄 Pro
ayer1 occessor of the	1								
12.jpg 03 (2).jpg									
ayer2		Program	n Management						
03.jpeg 09 (2).jpg		109.91	gomon						
ayer3	Mb								
ayer4									
		nk Status			Status	Rar CPU 35% M	emory 38% 🛗	C3 PPT	⊖ —•— I

Table 4-1	User interface	descriptions
-----------	----------------	--------------

Area	ltem	Description
Menu bar	Project	Project file operations include:
		• New: Create a new project.
		Open: Open a saved project.
		Save: Save the current project.
		<ul> <li>Save As: Save the current project as a new project.</li> </ul>
		<ul> <li>Package Project: Package the current project file and all media in it for easy use in the future.</li> </ul>



Area	ltem	Description	
	Link	• Link Settings: Set the primary/backup devices and master/slave devices.	
		• Update to Backup: Manually update the data on the primary device to the backup device.	
		• Update to Slave: Manually update the data on the master device to the salve device.	
		• Disconnect: Disconnect the backup/slave device from the primary/master device.	
	Settings	Settings include system, output, audio, display mode and external control settings.	
	Help • Use the transcoding assistant.		
		<ul> <li>View and export the playback logs.</li> </ul>	
		Open the user manual.	
		View the software information.	
	语言 /Language	Change the UI language. The options include English and Chinese.	
Media library & Output control		Add the desired media files, including videos, pictures, PowerPoint files, te pages, streaming media and texts, etc.	
	<ul> <li>Output control</li> </ul>	: Add the commands for controlling the splicers.	
Stage editing	Stage	Preview the real-time playback content.	
area		<ul> <li>Edit the position and size of the added media.</li> </ul>	
	A	Output control buttons	
		• • • Open the output editing window.	
		• 🗳 : Enable the output screen and display the playback content on the screen.	
	0	• Eisable the output screen.	
The second se	2	<ul> <li>Example 1 Close the test pattern and display the playback content.</li> </ul>	
<u> </u>		• 🕎 : Open and display the test pattern.	
1. O.		• 💻 : Disable the FTB function and display the playback content.	
		• 🖳 : Make the output fade to black.	
	В	Two editing modes are provided.	
		• Live: The playback editing process is displayed on the output screen in real time.	
		• Pre-Edit: The playback editing process will not be displayed on the	
		output screen. After you have completed the editing, click at the top right in the stage editing area to send the playback content to the output screen and play the content from the beginning.	
	С	Quickly adjust the layers.	
		• X: Set the initial horizontal coordinate of the layer.	
		• Y: Set the initial vertical coordinate of the layer.	
	1		
		<ul> <li>Width: Set the width of the layer.</li> </ul>	



Area	Item	Description
		Rotate: Set the angle by which the layer rotates clockwise.
		• -: Bring the selected layer forward.
		• Send the selected layer backward.
		• Sring the selected layer to front.
		• Control cont
		• 💽: Make the selected layer fill the output area.
		• Cock the stage editing area.
	D	Adjust the output area display.
		• 🖑 Pan the stage editing area.
		● \ominus 100% ⊕: Zoom in or out the stage editing area.
		• 💽 : Make the stage start at the origin and all layers locate within the visible range in the stage editing area.
	E	Control and view the playback progress.
		• C: Count up timer
		• 🕜: Count down timer
		• E: Start the playback.
		• <b>III</b> : Pause the playback.
		• E: Stop the playback.
		• Adjust the volume.
	10	<ul> <li>Update: View the progress of updating the data to the backup/slave device.</li> </ul>
	70	• Timecode: Set the timecode-based program playback list for the program control in shows and more applications. LTC and MTC both require external timecode reference devices.
	F	Set the media properties, including the layer basic info, opacity, color, cropping, transition effect and more.
Program management	n/50	Indicate the quantities of the edited programs and the total programs i the current group.
area		<ul> <li>N: Indicates the quantity of the edited programs or the programs that have media files.</li> </ul>
		<ul> <li>50: Indicates the default quantity of the total programs. When a new program is added, the value increases accordingly.</li> </ul>
	Program n	View the program name.
	Layer and layer status	<ul> <li>Layer n with/without audio: Displays the layer name and indicate whether the layer comes with audio or not.</li> </ul>
		• 💽: Turn off the layer audio.
		• 1 Play the layer audio.
		Icons on the layer:
		<ul> <li>This icon indicates the layer is the main media and the</li> </ul>



Area	ltem	Description
		timer in the <b>Playback</b> area is based on this layer.
		<ul> <li>After the playback of the media in the current layer is completed, the layer stops the playback and displays the last frame of the playback image.</li> </ul>
		<ul> <li>Within the timing period for the main media, the current layer media is in loop playback mode.</li> </ul>
		<ul> <li>         —          —          —</li></ul>
		<ul> <li>Lock: The layer is locked.</li> </ul>
Status bar		• • • • • • • • • • • • • • • • • • •
		• <b>PPT</b> : Enable the PowerPoint file playback mode. You can use the laser pointer buttons or keyboard buttons to move between slides.
		PPT: Disable the PowerPoint file playback mode.
		• C3 : Disable the C3 control.
		• C3 control is enabled.
		•: The scheduled playback is enabled.
		• The schedules playback is disabled.
		<ul> <li>Display the current CPU and memory usage.</li> </ul>
Link status		Name: The computer name by default
		• Backup/Salve: Show the statuses of the backup and slave devices. These items are shown on the primary/master end only.
		– E: Not set
		- E: Disconnected
		– E: Normal communication
	1010	
Project		

# 5 Project

Kompass FX3 allows you to add media files, edit the programs and set the program playback sequence and media properties. After all these are done, you can save those configuration as an independent project file to your local storage for future use.

## 5.1 Create New Projects

There are two methods to create a new project.

- Start Kompass FX3 and the software will create a new project automatically.
- Go to **Project** > **New** to create a new project.

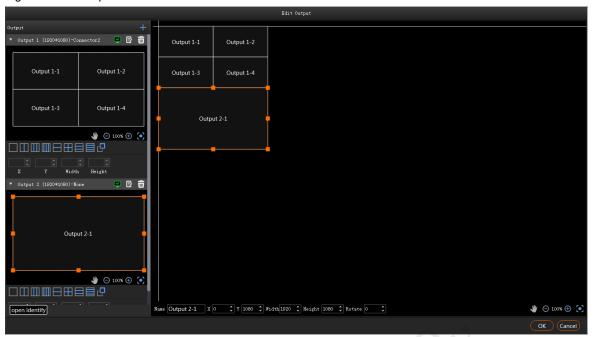
## 5.2 Edit Outputs

Kompass FX3 supports output editing, allowing you to partition the output screen and perform output connector mosaic, thus realizing a mosaic output of desired connectors and partitions.

Click to open the Edit Output window.



#### Figure 5-1 Edit output



#### 5.2.1 Add Outputs

#### Add and bind outputs automatically

After startup, Kompass FX3 will automatically detect the graphics card connectors and then complete the adding and binding of those detected connectors. All the connectors are displayed in the output list on the left.

When you need to change the binding relations between the output connectors and screens, click is change the output name, connector binding and resolution.

#### Add and bind outputs manually

When more graphics cards are installed on the control PC or you want to change the connector quantity in a saved project file, you can select to add the outputs manually.

Click + in the output list area to add an output.

Figure 5-2 Add and edit outputs

	Add Output
Main Screer	1. (1920x1080)
Name	Output 3
Connector	None
Resolution	Width 1920 🗘 Height 1080 🗘
	OK Cancel

- Name: Change the current output name.
- Connector: Select the desired output connector from the drop-down list or change the connector binding relation.
- Resolution: Set the desired output width and height.



# 5.2.2 Configure Regular Screens

- Step 1 Click to open the **Edit Output** window.
- Step 2 Organize the output connectors on the right via drag and drop operations to suit the loaded screen.

Figure 5-3 Connector layout				
		Edit Output		
Output + -		•		
Output 1-1	Output 1-1	Output 2-1		
X Y Width Height • Output 2 (1920*1080)-None				
Output 2-1				
J 100% (D) (C)				
	ame Output 2-1 X 1920 🗘 Y 0	Vidth1920 C Height 1080 C Rotate O		ٹ 🕑 🕑 100%
open identify I	ane Output 2-1 X [1920 ] Y [0	VIUTALIZZ V Height 1080 V Kotate 0	_ <b>_</b>	OK Cancel

Step 3 Click **OK** to complete the editing.

#### Note:

In the output editing area, click and drag to select multiple outputs to adjust them simultaneously.

# 5.2.3 Construct Irregular Screens

When you want to output an image of an irregular shape, you can partition the output and reorganize the suboutputs to suit the loaded screen.

### **Output Partitioning**

This function divides an output into several sub-outputs, breaks up and reorganizes the outputs, realizing easy reconstructing and management for irregular output images.

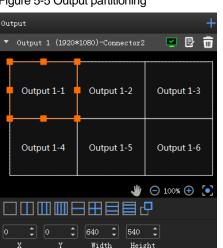
You can realize the output of an irregular image via the reorganizing of regular output connectors.

Figure 5-4 T-shape output image





Step 2 Select a partition layout in the output list area.



#### Figure 5-5 Output partitioning

- \_\_\_\_: 1x sub-output
- LL: 2x sub-outputs in horizontal position
- . 3x sub-outputs in horizontal position
- 111: 4x sub-outputs in horizontal position
- 2x sub-outputs in vertical position
- . 2x sub-outputs in both horizontal and vertical positions
- : 3x sub-outputs in vertical position
- \_\_\_\_: 4x sub-outputs in vertical position
- Custom layout
- Step 3 Select a sub-output and set its position and size.
  - Position:
    - X: Set the initial horizontal position of the sub-output area.
    - Y: Set the initial vertical position of the sub-output area.
  - Size:
    - Width: Set the width of the sub-output area.
    - Height: Set the height of the sub-output area.

# **Sub-Outputs Reorganizing**

The mosaic output of multiple graphics card connectors is supported.

After startup, Kompass FX3 will automatically detect the graphics card connectors and display all the connectors in the output list on the left.

: Enable the output.

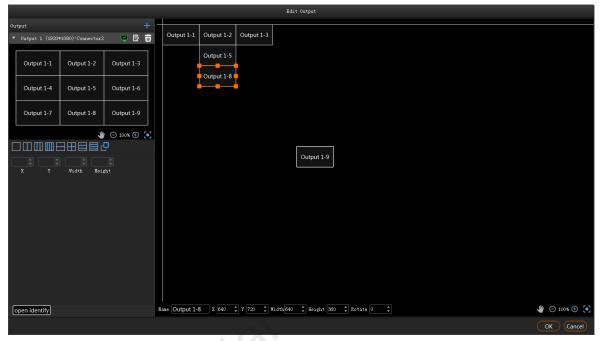


Disable the output.
Delete the output.

Click I to change the output name, connector binding relation and resolution.

Step 1 Click and drag the sub-outputs on the right to reorganize them.

Figure 5-6 Sub-outputs reorganizing



You can change the size and position of the sub-output at the bottom.

Figure 5-7 Output adjusting

Name	X	<b>*</b>	Y	<b>•</b>	Width	÷	Height	*	Rotate	<b>+</b>

- Name: Change the current output name.
- X: Set the initial horizontal position of the sub-output or output on the stage. The adjusting reference is the top left corner of the stage.
- Y: Set the initial vertical position of the sub-output or output on the stage. The adjusting reference is the top left corner of the stage.
- Width: Set the width of the sub-output or output.
- Height: Set the height of the sub-output or output.
- Rotate: Set the rotation angle (clockwise) of the sub-output or output.
- Step 2 Click OK to complete the reorganizing.

After the reorganizing, you can add the layer image to the stage area. The mapping between the sub-output and image is shown as follows.

Figure 5-8 Sub-output and in	nage mapping			
		Edit Output		
Output • Output 1 (1920*1080)-Sace • Output 1 (1920*1080)-Sace • Output 1-6 • Output 1-6	of put 1-5		Output 1-6	
open identify	Name X Vid	th . Height . Rotate .		ا ال
				OK Cancel

# 5.3 Manage Media

You can add the desired media files to the current media library. Kompass FX3 supports pictures, videos, PowerPoint files, audio media files, NDI, websites, streaming media and sources from data acquisition cards. The supported media formats are as follows:

- Video: mp4, avi, mkv, flv, mov, wmv, mpeg, m4v
- Picture: jpg, jpeg, bmp, png, gif, ico
- Audio: mp3, aac, flac, amr, ape, wav, wma
- Microsoft Office files: PowerPoint (1080p)

### Note:

Recommended video coding formats:

- 4K < resolutions ≤ 8K: H.265 (HEVC) or VP9 recommended
- Resolutions ≤ 4K: H.264 (AVC) recommended

For a better image quality experience, the following video bitrates are recommended.

Recommended video bitrates for SDR uploads:

Туре	Video Bitrate Standard Frame Rate (24 Hz, 25 Hz, 30 Hz)	Video Bitrate High Frame Rate (48 Hz, 50 Hz, 60 Hz)
4320 (8K)	75 to 90 Mbps	110 to 135 Mbps
2160p (4K)	35 to 45 Mbps	53 to 68 Mbps
1440p (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

### 5.3.1 Add Media Files

You can select to import a single media file or a folder including multiple media files.



### 5.3.1.1 Add Local Files

- Step 1 Click at the bottom left corner of the Media Library area, or right click the area to select Add Local File.
- Step 2 Select the target media files and click **Open**. Kompass FX3 will import the selected files to the media library automatically.
  - Importing a single file: Select the desired file and click **Open** to complete the importing.
  - Importing multiple files: Press the **Shift/Ctrl** key, select the desired files, and then click **Open** to complete the importing.
  - Drag and drop to import: Select one or multiple media files and drag them to the blank area of the media library to complete importing.
- 5.3.1.2 Add Local Folders
  - Step 1 Click at the bottom left corner of the Media Library area, or right click the area to select Add Local Folder.
  - Step 2 Select the target folder and click **Select Folder**. Kompass FX3 will import the folder and the media files in it to the media library automatically.

You can also select one or multiple folders and drag them to the blank area of the media library to complete importing folders quickly.

#### 5.3.1.3 Add Text

Kompass FX3 supports the text as a kind of media and can play the text media.

Step 1 Right click the Media Library area to show the context menu and then select Add Text.

#### Figure 5-9 Add text

		Add Text		×
Preview:			Text Width: 44	8px Text Height: 65px
F	Please e	enter the	text	
Text:				
Please enter the text				
B / <u>U</u> À 🗄	E≣∃T	<b>÷ ⊥</b>		
Name: Text01		Arial	▼ 48	
Color: Pure Color	▼ Å Pr	resets 🔲 📕 🔜 📕		
Moving: Static 🔻	Speed:			
Adaptive	Area W:	448		
	Area H:	65		
				OK Cancel

Step 2 Enter the desired content in the Text area.



Step 3 Adjust the text font and style.

You can set the following text attributes.

- **B** : Make the text bold or not.
- *I* : Italicize the text or not.
- $\underline{U}$ : Underline the text or not.
- $\equiv$  : Align the text to the left.

When the display area width is larger than the text width and the moving is set to **Static**, align the text to the left of the display area.

•  $\equiv$ : Center the text horizontally.

When the display area width is larger than the text width and the moving is set to **Static**, center the text horizontally to the display area.

•  $\equiv$ : Align the text to the right.

When the display area width is larger than the text width and the moving is set to **Static**, align the text to the right of the display area.

• <sup>†</sup> : Align the text to the top.

When the display area height is larger than the text height and the moving is set to **Static**, align the text to the top of the display area.

• ‡: Center the text vertically.

When the display area height is larger than the text height and the moving is set to **Static**, center the text vertically to the display area.

•  $\pm$  : Align the text to the bottom.

When the display area height is larger than the text height and the moving is set to **Static**, align the text to the bottom of the display area.

- Step 4 Enter a name for you text in the text box next to Name.
- Step 5 Set the text font and font size.

Select the desired font from the drop-down list and the default font is Arial.

Select the desired font size from the drop-down list and the default size is **48**. You can only select a number from the drop-down list and you cannot enter a number manually.

#### Step 6 Set the text font color.

Gradient and Pure Color are supported.

• Pure Color: Select **Pure Color** from the drop-down list and select the desired color block next to **Presets**.

When you are not interested in any of the preset colors, click A to open the **Select Color** window to customize your own color, and then click **OK** to complete the pure color settings.



Gradient: Select Gradient from the drop-down list and the default gradient color is displayed.

Click two color blocks at the both ends of the gradient color to customize your own gradient colors. Set the gradient angle to complete the gradient color settings.

Color: Gradient 🔹	Angle: 0	<b>2</b>
	· · · · · · · · · · · · · · · · · · ·	· · · · ·

- Step 7 Set the text moving effect and speed.
  - The moving effects include Static, From Left, From Right, From Top and From Bottom.
  - Speed: Set the moving speed of the text. This parameter is available when the moving effect is set to **Static**.



Step 8 Set the text display mode in the display area.

If **Adaptive** is selected, the text fills the display area; if **Adaptive** is deselected, the text is shown in its set size.

Note:

If the area width or area height is smaller than the text width or height, the text will be cropped.

Step 9 Set the display area color.

3. Click 🛳 to open the Select Color window.

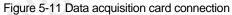
Figure	F 40	Calast	diamlas		
Flaure	5-10	Select	disdiav	/ area	COIOF

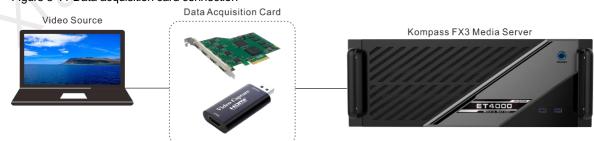
	Select Color	×
Basic colors		
Pick Screen Color	Ц	
<u>C</u> ustom colors	Hug: 0   Red: 0 Sat: 0   Green: 0 Yal: 0   Blue: 0	
Add to Custom Colors	Alpha channel: 0	
	OK Can	cel

- 4. The **Alpha channel** value indicates the color transparency. The value ranges from 0 (totally transparent) to 255 (opaque).
- 5. Click **OK** to complete the display area color settings.
- Step 10 Click **OK** to complete the whole text settings.

#### 5.3.1.4 Add Sources from Acquisition Devices

Kompass FX3 can obtain input sources via the data acquisition card.







#### Figure 5-12 Add acquisition equipment

	Acquisition Equipment
Name	Integrated Camera
Device Name	Integrated Camera 🔹
Resolution	1280 x 720 🔹
Frame Rate	<b></b>
	OK Cancel

- Step 3 On the displayed window, enter the capture device name next to Name.
- Step 4 Select a data acquisition card name next to Device Name.
- Step 5 The system will automatically read the collected resolution and frame rate.
- Step 6 Click **OK** to complete adding the capture device.

#### 5.3.1.5 Add NDI Input Sources

Before adding an NDI input source, you must configure the NDI source image size and position in NDI Sender and enable NDI so that Kompass FX3 can search and find the NDI source and add it.

#### Note:

The computers running the NDI Sender and Kompass FX3 must be on the same network segment.

### **Configurations in NDI Sender**

Step 1 Double click the NDI Sender shortcut on the desktop to open the NDI Sender software.

Figure 5-13 NDI Sender

NDI Sender	语言/Language: English 🔻 🗕 🗙
Name: GJSJ1054-P	Select ROI Show ROI
Screen: Screen:0(1920x1080)	x: 0
FPS: 25 Start Reset	w: 1920 📫 h: 1080 📫

- Step 2 Enter an NDI name.
- Step 3 Click Reset.

After the name is changed, you must click **Reset** to make the setting take effect.

Step 4 If there are multiple screens in NDI Sender, select the screen that you want to send.

If you want to send multiple screens, select the first screen that you want to send.

Step 5 Click Select ROI, click and drag the mouse to select the display area that you want to send.

In the **Sent ROI** area, you can see the position and size of the sent image. You can also change the **x**, **y**, **w** and **h** values to change the image position and size.



- x: The horizontal offset from the sent area to the selected screen's left edge
- y: The horizontal offset from the sent area to the selected screen's top edge
- w: The horizontal width of the sent area
- h: The vertical height of the sent area
- Step 6 Click **OK** to complete image settings in NDI Sender.
- Step 7 Click Start to complete NDI Sender settings.

#### Note:

After the settings, you can click Show ROI to see the image position and image size you have set.

### **Add NDI Sources**

- Step 1 Right click the blank area of Media Library in Kompass FX3 and select Add NDI Media.
- Step 2 The system will automatically search on the current network segment for all the devices with NDI enabled.

		Add NDI Media		
NDI :	List			¢
		Sender Name	Server Name	Status
	172.18.12.126:5961	zhangkui-P1		
				$C \rightarrow 1$
			ОК	Cancel

Figure 5-14 Add NDI sources

- Step 3 Select the NDI sources from the NDI list.
- Step 4 Click OK to complete NDI source adding.

#### Note:

After adding NDI sources, you can right click an NDI source and select Edit to change the NDI source name.

### 5.3.1.6 Add Website Input Sources

## **Prerequisites**

The computer running Kompass FX3 is connected to the network.

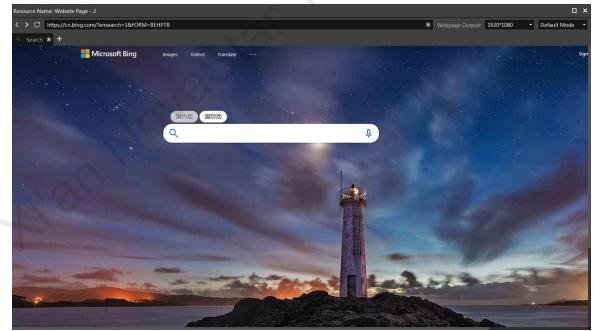
# **Operating Procedure**

- Step 1 Right click the blank area of Media Library and select Add Website.
  - Figure 5-15 Add website

Resource Name : Website Page - 1 Website URL : Add Tab Tab - 1 https://www.bing.com		Edit Website URL	×
Website URL : Add Tab	Resource Name :		
Tab - 1 https://www.bing.com ®	Website Page - 1		
	Website URL :		Add Tab
	Tab - 1	https://www.bing.com	
OK Cancel			OK Cancel

- Step 2 Enter the desired website name next to Resource Name.
- Step 3 Enter the tab name in the left text box next to Website URL.
- Step 4 Enter the complete website domain name in the right text box next to Website URL.
- Step 5 Click Add Tab to add a new tab page.
- Step 6 Enter the tab name and domain name of the new tab page.
- Step 7 Click OK to enter the added website.

#### Figure 5-16 Entered the added website



Step 8 Click the drop-down lists on the top right to change the webpage output resolution and mode.

Select your desired output resolution of the webpage from the first drop-down list next to **Webpage Output**. Select the webpage output mode from the second drop-down list next to **Webpage Output**. The options include **Default Mode**, **Screenshot Mode** and **Window Mode**.

- Default Mode: This is the default output mode of the webpage.
- Screenshot Mode: If there are monitoring contents on the webpage, it is recommended you adopt this mode; however this mode consumes more system resources.



- Window Mode: There is no output image preview in the stage editing area in Kompass FX3. The output image is displayed on the corresponding screen and can be controlled using the mouse.
- Step 9 Click x at the top right corner of the website to close the website and complete adding the website.

#### Notes:

- When multiple tabs are opened, the tab where you stay on before closing the website will be used as the input source.
- If you opened other website pages and the new page is displayed on the new tab, the system automatically adds the new tab page.

#### 5.3.1.7 Add Streaming Media

Kompass FX3 supports adding streaming media in rtsp and rtmp formats as input source.

Step 1 Right click the blank area of **Media Library** and select **Add Streaming Media** to open the window of adding a media network address.

Figure 5-17 Add streaming media	

Streaming Media Address	
Please enter a URL	
RTSP or RTMP format	
OK Cancel	Γ

Step 2 Enter the media path in the URL field.

The path must begin with "rtsp://" or "rtmp://".

- Step 3 Click OK to complete adding the media path
- 5.3.1.8 Add Media Collection

Multiple videos or videos and pictures can be combined with a specific order to form a new video source called media collection. The videos and pictures in the collection can be played automatically according to the set mode.

Note:

The PowerPoint files, NDI sources, websites and media paths cannot be added to the media collection.

Step 1 Right click the blank area of **Media Library** and select **Add Media Collection** to open its window.

### Figure 5-18 Add media collection

		Add Me	edia Coll	.ection				
AII I	Media					Collection M	edia	
	Se	elect All					Select All	Delete
Name	Type Resolution	Duration		Name	Туре	Resolution	Duration	Loop
Test Pattern				🛫 1.jpg	Pic	3840x2160	00:10:00	
🚾 1.jpg	Pic 3840x2160	00:10:00		📼 2.jpg	Pic	474x266	00:10:00	
🎫 2.jpg	Pic 474x266							
📼 3.jpg	Pic 314x187	00:10:00	>>					
📼 4.jpg	Pic 323x178	00:10:00						
🌌 5.png	Pic 274x180	00:10:00						
🜊 6.jpg	Pic 252x180	00:10:00						
C 7.jpg	Pic 286x180	00:10:00						
Name Collection 1		Transition	Fade			Playback	Sequential	•
							ОК	Cancel

- Step 2 In the All Media area, select the media files you want to add to the media collection
- Step 3 Click in the middle to add the selected files to **Collection Media**.

You can click and drag the media to adjust its order in the collection media.

- Step 4 Click and drag the media to change its order in the Collection Media area.
- Step 5 For picture media, select a picture in **Collection Media** and click the value in the **Duration** column to change the playback duration of the picture.

For video media, select a video in **Collection Media** and click the value in the **Loop** column to change the number of times that the video can be played consecutively.

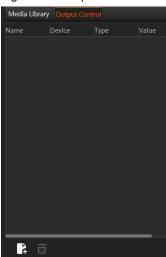
#### Notes:

- The duration of video media cannot be set.
- The number of playback times of picture media cannot be set.
- Step 6 In the **Name** filed, enter a name for the media collection.
- Step 7 In the Transition filed, select a media switching effect. Supported effects include Fade and Cut.
- Step 8 In the **Playback** field, select a playback order of media files in the media collection. Supported orders include **Sequential** and **Shuffle**.
- Step 9 Click OK to complete adding a media collection.
- 5.3.1.9 Add Control Commands

Kompass FX3 supports the control of the back-end splicers via the control commands. It is recommended the trained personnel use this function.

Step 1 Select the Output Control tab.

#### Figure 5-19 Output control



Step 2 Click at the bottom-left corner or right click the blank area and select Add to open the Edit Control Command window.

Figure 5-20 Ad	d control commands		
	Edit Control Command		×
Name:	Command01		
Select Device:	H Series Video Wall Splicers		
Device IP:	0. 0. 0. 0		
Port Number:	1025		
Command Type:	Play Presets	-	
Value:	0 0 0 1		
		ОК	Cancel

- Step 3 Enter the control command name next to Name.
- Step 4 Enter the splicer information.
  - 1. Select the connected splicer next to Select Device.
  - 2. Enter the splicer IP address next to Device IP.
  - 3. Enter the port number for the external control next to Port Number.
- Step 5 Configure the control command.
  - 4. Select the control command type next to **Command Type**.
  - 5. Enter the control command value next to **Value**. For the control command values, please refer the control protocol of the corresponding splicer.
- Step 6 Click **OK** to complete the settings.

#### Notes:

- Each control command is a media file.
- The playback duration of the command media is fixed to 3s. If a program has the command media only, the output will be black for 3s.



# 5.3.2 Manage Media Files

### Renaming

- Right click the media file or folder and select **Rename**. Enter a new name in the text box that appears.
- Click the media file or folder and press the **F2** key. Enter a new name in the text box that appears.

### Deleting

There are three methods to delete a media file.

- Select the desired media file and click .
- Right click the media file and select **Delete**.
- Click the media file and press the **Delete** key.

### Management

You can create folders to classify the added media files.

- Click at the bottom left corner in the Media Library area, and then select New Folder and name the folder.
- Right click the Media Library area, and then select New Folder and name the folder.
- Select the desired media files and drag them to the new folder for better classification and management.
- Change the order of the files or folders by simply dragging and dropping them.

### **Switching View**

Click the icon next to Media Library to switch the view mode.

- In list view mode, click to switch to the thumbnail view mode. All media files will be displayed in thumbnails and folders will not be displayed.
- In thumbnail view mode, click to switch to the list view mode. The media files will be displayed in folders.

# 5.4 Edit Programs

The playback unit of Kompass FX3 is a program. Each program supports at most eight layers and one audio.

### 5.4.1 Edit Layers

Click and drag a media file to the layer in a program, and then adjust the layer in the stage editing area, such as the layer size and position.

Step 1 Select a media file in Media Library and drag it to the desired layer or output area.

#### Figure 5-21 Edit programs

Aedia Library Out	put Control			🔄 🖳 🗇	Live	Pre-Edit		
Search		14 items						
iumbnail-Name								
Test Patte								
Cherry.mo	v Video	3840x2 00			Output 2-1			
Family.mo	v Video			and the state of the second second second				
Golf.mp4	Video	3849.2 00	a a a a a a a a a a a a a a a a a a a	The second s				
Grapes.mc	ov 🔑 Video	4096x2 00	t					
	s.mov Video		t:					
Panda.mo	v Video	3840x2 00	t:	Output 3-1	Output 4-1			
Pink Flow	ers.mov Video	3840x2 00	t					
Salad.mov	Video	4096x2 00	t:					
Shrinp.me	ov Video	3840x2 00	ta -					
Watermel	on.mov Video	3840x2 00	t:					
₽ <u>0</u>			x	🗘 Y 🗘 Width 🛟 Height	🕄 Rotate 📑 📲 📲	· Z 🔒		👋 🕒 ا ا
rogram Managen	nent(1/50)							
E Prog	iram 1 🕞	Program 2 🛛 🕨	Program :	3 🕨 🕨 Program 4	🕨 Program 6 📄 Program 7		Program 10	🕨 Program 11 🛛 🕨 F
ayer1	nov					Program 8		
iyer2 ≰×								
iyer3								

Step 2 Adjust the layer size, position, rotation and priority.

Figure 5-22 Adjust layers

X 1660 🗘 Y 66 🗘 Width 3332 🗘 Height 2074 🗘 Rotate 0 🔷 🗘 🗏 🗖 🔩 🧏 🛛 🜌

- Position adjustment: Drag and move the layer to adjust the layer position quickly, or fill in the values for the following parameters to precisely adjust the layer position.
  - X: Set the distance between the left edge of the layer and the left edge of the stage.
  - Y: Set the distance between the top edge of the layer and the top edge of the stage.
- Size adjustment: Drag the layer edge to adjust the layer size quickly, or fill in the values for the following
  parameters to precisely adjust the layer size.
  - Width: Set the layer width.
  - Height: Set the layer height.
- Rotate: Set the angle by which the layer rotates clockwise.
- Priority adjustment:
  - Ering the selected layer forward.
  - Send the selected layer backward.
  - Error Bring the selected layer to front.
  - Send the selected layer to back.
    - : Make the selected layer fill the output area.
- Step 3 Set whether to play the layer audio.

Click the audio icon in the Layer column on the left of the program columns to set whether to play the layer audio.

- Image: Play the audio that comes with the layer.
- **I** Do not play the audio that comes with the layer.

Step 4 Group the media.



6. In the stage editing area, select the target media.

Press the **CTRL** key and click the mouse to select multiple media.

- 7. Right click to open the context menu and select Create Group.
  - For the media in the same group, the same icon appears on the top left of each layer as shown below.
  - For the group media, you can perform the playback, fast forward, rewind, pause and stop operations on all the media in the group simultaneously.

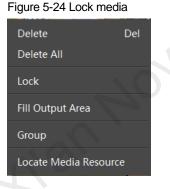
Figure 5-23 Layer group



#### Step 5 Lock the layer media.

After a layer is edited, you can lock the layer to avoid unexpected changes to the layer caused by misoperation.

8. In the stage editing area, right click the target media to open the context menu.



- 9. Select Lock to lock the selected media. After locked, the layer cannot be moved.
  - After the layer is locked, lock appears at the top right corner of the layer in the Program Management area.
  - After locked, the layer cannot be moved or re-sized, but the layer input source can be replaced.
  - Right click the locked layer and select **Unlock** to unlock the layer.

#### Notes:

- In the stage editing area, you can click and drag to select multiple layers.
- After you have completed all the editing in the stage editing area, click layout changes in the stage caused by misoperation.
- Select Locate Media Resource to quickly find out where the media file is in the media library.
- If the selected media is a webpage media that has multiple tab pages, you need to set the desired playback tab for each media respectively.



# 5.4.2 Set Program Properties

Right click a program to open the context menu as shown in the following, and you can set the program properties as needed.

Figure 5-25 Set program properties



- Rename: Give the program a new name for better management.
- Delete: Delete the current program. All the layers, layer settings and media properties will be deleted.
- Copy: Copy the layers, layer settings and media properties in the current program.
- Paste: Paste the copied program to a new program.
- Insert and Play: Play the currently-selected program. The program being played is paused until the playback of the inserted program ends.
  - If the main media is set to None, this function is not supported.
  - If the programs are scheduled, this function is not supported.
  - In link mode, the insert and play status is synchronized to the slave or backup terminal.
  - In pre-edit mode, this function is not supported.
  - During the playback of a media collection, after the playback of the inserted program ends, the paused
    program starts to play from the beginning rather than from the pausing point.
  - When there are continuous inserted programs, after the playback of those programs ends, the program before the last insertion rather than the program before the first insertion continues to play.
  - After the insertion, the paused program has a different label color for easy distinction.
- Add Columns to Left: Insert a specified number of program columns to the left of the currently selected program column.
- Add Columns to Right: Insert a specified number of program columns to the right of the currently selected program column.

#### Notes:

- To add program columns to left or right, click \$ to set the number of columns to be added first and then click Add Columns to Left or Add Columns to Right.
- When you perform the copy and paste operations on a program, the pasted program becomes a newlyadded program.
- Main KV: Set the current program as the main KV (key video).
  - After a KV program is set, if you add a layer in another no-layer program, the added-layer will
    automatically match the layer style and properties in the KV program.

For example, after you have set the position, size and rotation of the layer 1 in the KV program, if you add a layer in another empty program, the new layer will follow the same layer position, size and rotation with the layer 1 in the KV program.

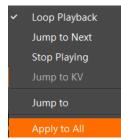


- If you set KV program after you add the layers to an empty program, the layers will not follow the layer style and properties in the KV program.
- Main Media: Set which layer is used as the main media. The playback timing and program switching are all based on the main media.

When **Main Media** is set to **None**, no program jumping is performed. All media in the program will be played completely and with a set ending action after the program playback ends.

Notes:

- If Main Media is set to None, the program does not support the insert and play function, but another
  program can be inserted before it.
- If Main Media is set to None in the pre-edit mode, click Take to make the setting take effect.
- If Main Media is set to None and then the program is added to the schedule list, the playback of the
  program is not limited by the set loop times and the program jump settings do not take effect.
- If you have added the program to the schedule list, Main Media cannot be set to None.
- After Program Ends: Set the actions after the current program playback ends.



- Loop Playback (default): The current program will be played circularly.
- Jump to Next: The next program will be played automatically after the current program is stopped.
- Stop Playing: The playback will be stopped after the current program is stopped.
- Jump to KV: The main KV program will be played automatically after the current program is stopped.
- Jump to: You can select the desired program and the specified program will be played automatically after the current program is stopped.
- Apply to All: Apply your selected option for After Program Ends to all the programs.
- Cache Program: Cache the next desired program in advance to improve program switching efficiency.

Before you set any program to be cached here, please go to **Settings** > **Output Settings** to enable the function first.

- None: Do no cache a program in advance.
- Auto Identify: The system will automatically identify the next program to be played and start to cache it.
- Program n: Select the desired program to be cached. If the next program and the cached program are not the same one, the next program will be played automatically and the cached program will not be played.
- Timecode: Set the timecode-based playback control for the current program, specifying the time to start, pause, resume and stop the program playback.

As shown in the below figure, (00:00:00:00 as the timing base) the program starts the playback at the 10<sup>th</sup> second, pauses the playback at the 30<sup>th</sup> second, resumes the playback at the 40<sup>th</sup> second and stops the playback at the 50<sup>th</sup> second.

- When the scheduled playback function is enabled, the timecode settings are not available.
- When the timecode function is enabled and the timecode settings are for a program being played, the insert and play function is not available.

### Figure 5-26 Timecode settings

				-9-		
	Т	imecoo	de S	ettings		
Program T	imecode List					+
Sequence	Timecode			Action		Delete
1	00:00:10:00			Start	•	ŵ
2	00:00:30:00			Pause	•	ŵ
3	00:00:40:00			Continue	•	Ŵ
4	00:00:50:00			Stop	•	ŵ
				Save	e) (c	ancel

### 5.4.3 Play Programs

After you have completed the program editing, play the programs through either of the following two methods.

- Click mext to the program name in the Program Management area.
- Click local next to the program name in the Playback area.
- Click 上 or 🛄 next to each media to play or pause the playback of the selected media.
- For the media of the same group, drag the progress bar of a single media to control the synchronous playback of all the media in the group.

#### Note:

If there are no PowerPoint files in the playlist and the PowerPoint file playback mode is disabled, you can use the arrow keys, **Page Up** and **Page Down** keys on the keyboard to switch programs, and press the space key to start the playback.

### 5.4.4 Set Media Playback Properties

You can set whether to mute the playing, status when playback stopped and playback duration.

- Step 1 Click the playing media in the Program Management area or in the Output area to select the media.
- Step 2 In the Media Properties area within the Output area, click Basic to set the basic properties of the media.

Figure 5-27 Basic properties
Media Properties
▼ Basic
<b>4) </b> 50
Stop Playing
Loop Playback
Duration
00:00:44 🗘
Lock Aspect Ratio
Accurate Frame Seek

- Volume adjustment: Adjust the output volume of the program media.
- Stop Playing: Set the status or action when the playback of the current media ends.
  - Hold on Last Frame: After the playback of the current media ends, the output displays the last frame of the playback media.



- Black Screen: After the playback of the current media ends, the output displays a black screen.
- Loop Playback: The current media will be played circularly after the playback ends.
- Stop Playing: The playback will be stopped after the playback ends. When the media file type is audio, this option is available.

#### Note:

The streaming media sources, sources from acquisition devices, text and NDI sources do not support the setting of the action after the playing stopped.

- Duration: View or set the playback duration of the media.
  - The default playback duration of pictures and websites is 10 minutes.
  - The default playback duration of texts is 1 hour.
  - The media collections, NDI sources and videos do not support duration settings.
- Lock Aspect Ratio: Keep the aspect ratio of the media file unchanged during the adjustment.
- Accurate Frame Seek: Enable this function to precisely seek at and play an exact frame in a video stream. Only videos supports this function.

Notes:

- When the media file type is a PowerPoint file, the basic property settings are unavailable.
- When the media file type is audio, Hold on Last Frame and Black Screen options are unavailable.
- When the accurate frame seek function is enabled for the layer in the main KV program, the setting does
  not apply to the layer in other newly-added programs.
- When the accurate frame seek function is enabled for a program, after the program copy and paste operations, the function is also enabled for the pasted program.

#### 5.4.5 Set Layer Opacity

You can set the overlapping effect of the output images by adjusting the layer opacity.

- Step 1 Click the playing media in the Program Management area or in the Output area to select the media.
- Step 2 In the **Media Properties** area within the **Output** area, click **Opacity** to set the nontransparent degree of the layer.

Figure 5-28 Set layer opacity

Media Properties	
► Basic	
<ul> <li>Opacity</li> </ul>	
	Reset

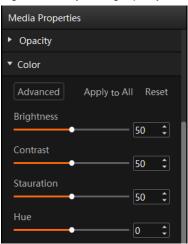
Step 3 Drag the slider to adjust the layer opacity degree, or enter a value in the text box below **Reset** to precisely adjust the layer opacity degree.

The value range is 0 to 100. 0 stands for totally transparent and 100 stands for nontransparent.

#### 5.4.6 Set Layer Color

You can adjust the layer color parameters to adjust the output image effect. The related parameters are shown below.

#### Figure 5-29 Layer image quality



# **Basic Color Settings**

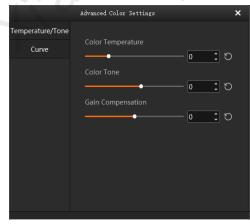
Table	5-1 Color	parameters
-------	-----------	------------

Parameter	Description
Brightness	Adjust the brightness or darkness of the image. The value ranges from 0 to 100 and defaults to 50.
Contrast	Adjust the difference in brightness between light and dark areas of the image. The value ranges from 0 to 100 and defaults to 50.
Saturation	Adjust the strength or purity of the colors of an input source image. The larger the saturation, the more vivid the input source image; the smaller the saturation, the larger the image grayscale.
	The value ranges from 0 to 100 and defaults to 50.
Hue	Adjust the distinction between colors.
	The value ranges from –180 to +180 and defaults to 0.
Apply to All	Apply all the parameter settings to all the layers.

# Advanced Color Settings

Step 1 Click Advanced to open the Advanced Color Settings window.

Figure 5-30 Advanced color settings



Step 2 Select **Temperature/Tone** to adjust the color temperature, color tone and gain compensation of the output image.



- Color Temperature: Adjust the cold or warm tendency of the image. The value range is [-3000, 10000] and the default value is 0. Move the slide block leftward, the color will be colder; move the slide block rightward, the color will be warmer.
- Color Tone: Adjust the color effect of the image. The value range is [-40, 30] and the default value is 0.
- Gain Compensation: Adjust the image output effect together with the color temperature and color tone. The value range is [-100, 100] and the default value is 0.

Step 3 Select **Curve** to adjust the image channel or overall effect using the curve.

The curve can help to adjust the brightness value of full grayscale images such as low gray, mid-tone, and high brightness. When the image is a low grayscale one and darker, you can raise the left half of the curve to improve the brightness of the low grayscale part of the image.

When you want to adjust the overall image effect, select RGB; when you want to adjust a single channel, select R, G and B and adjust the single channel, respectively.

When adjusting the curve, click on the curve to create an adjustment anchor point, and then simply drag the anchor point for adjustment.

Notes:

- At most 17 anchor points can be added for each channel.
- Limitations: The moving range of multiple anchor points on the Y axis is 0-256, and the moving range of multiple anchor points on the X axis is limited by the X values of other points. Between two points, a draggable anchor point X value is added. Its adjustable range is between the X values of the previous two points. If you drag it beyond this range, the anchor point will disappear.

### **Apply Color Settings**

Apply to All: Apply the basic and advanced color settings to all the layers. Reset: Reset all the color parameters to defaults.

### 5.4.7 Crop Layers

Crop a certain part of the layer image and make it display in the output area.

- Step 1 Click the playing media in the Program Management area or in the Output area to select the media.
- Step 2 In the Media Properties area within the Output area, click Crop to set the cropping parameters.

Figure 5-31 Crop layers
Media Properties
<ul> <li>Opacity</li> </ul>
► Color
▼ Crop
Reset
0 \$ 0 \$ 1920 \$ 1080 \$
X γ Width Height

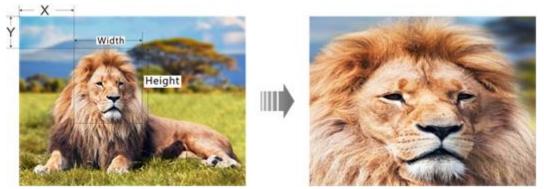
Step 3 Set the position and size of the cropped area.

- Position:
  - X: Set the distance between the left edge of the cropped area and the left edge of the layer.
  - Y: Set the distance between the top edge of the cropped area and the top edge of the layer.
- Size:
  - Width: Set the width of the cropped area.
  - Height: Set the height of the cropped area.



The cropping takes effect in real time and the cropping result is shown as follows.

Figure 5-32 Cropping



### 5.4.8 Set Layer Effects

Layer effect settings include blurring, keying, mask and inverting colors.

- Step 1 Click the playing media in the Program Management area or in the Output area to select the media.
- Step 2 In the Media Properties area within the Output area, click Effect to set the related parameters.

Media Properties
▼ Effect
🗌 Blur
• Reset
Color Keying
Reset
#000000 0 \$ 0 \$ 0 \$ Hex R G B
Mask
Invert Selection Reset
Template Rectangle
0 1 0 1 0 1 0 1 Top Bottom Left Right

Figure 5-33 Layer effect settings

### Blur

You can set whether to blur the layer image.

- Step 1 Select **Blur** to turn on the function.
- Step 2 Drag the slider to adjust the blurring degree.

The value range is 0 to 100, and it defaults to 0.

- 0: Do not blur the layer image.
- 100: Blur the layer image to the greatest extent.



## **Color Keying**

Color keying is used to key out a solid-color background and replace it with transparency.

- Step 1 Click Image: Step 1 Click Image: Step 2 Click </t
- Step 2 Pick the desired color.

After the color is selected, the picked color, the color Hex and RGB values are displayed next to  $\checkmark$ , or you can also set the Hex and RGB values to specify the color.

Step 3 Select Color Keying to turn on the function and remove the selected color in the layer image.

#### Mask

The mask function is used to remove the undesired part of the layer image.

- Step 1 Select Mask to turn on the function.
- Step 2 Select the layer mask template. The default option is None.
  - None: Do not mask the layer image.
  - Rectangle: Mask the layer image, and the cropped part is left as a rectangle.
- Step 3 Set the height of the mask area (top and bottom) and the width of the mask area (left and right).
  - Top: Set the height of the top mask area.
  - Bottom: Set the height of the bottom mask area.
  - Left: Set the width of the left mask area.
  - Right: Set the width of the right mask area.

#### Note:

After the mask settings are completed, only the central area is kept. If **Invert Selection** is selected, the central area will be masked and the originally masked area will be displayed.

### 5.4.9 Set Webpage Tabs

When you configure a webpage media for the layer of a program, this function is available. When there are multiple tab pages, you can configure different tabs for the programs or layers.

- Step 1 Select the desired webpage media in the stage or program area.
- Step 2 Click Webpage Tab to show the tab setting options.
- Step 3 Select the current webpage tab name next to Main Tab.

### 5.4.10 Set Sound Channel Mapping

You can configure the sound card for the layer media to output the media audio from different sound cards.

Step 1 Select the desired media from the program management area or the output editing area.

### Step 2 Select Sound Channel Mapping in the Media Properties area on the right side.

Only the media with audio information supports this function.



#### Figure 5-34 Sound channel mapping



Step 3 Select the desired sound card from the drop-down list.

The default option is the sound card used by Kompass FX3. Please refer to 7.5 Audio Settings for specific sound channel mapping settings.

- Step 4 Click the desired sound channel and sound track to configure the output channel for each track.
  - At most 8 sound channels are supported. The specific sound track number depends on the actual media.
  - If the media file does not contain any sound track information, the sound channel settings are not supported.

### 5.4.11 Set Scheduled Programs

After the program editing, you can realize automatic playback of the programs according to the scheduled time and times.

Step 1 Click **the bottom of the main user interface to open the Scheduled Playback** window.

Figure 5-35 Scheduled programs

Step 2 Click **New Task** at the top right of the window to create a new playback task.

#### Figure 5-36 Playback tasks

	Scheduled Playback	语言/Language: English 🝷 🗙
		New Task
✓ Task1		â
Effective:From 2022.01.06 : to 2022.01.06 :		
		OK Cancel

- Step 3 Set the start date and end date of the task in the **Effective** area.
- Step 4 Click 🕥 next to the effective time to add a new playback task.

10.Select the desired programs in the Program List area on the left.

11.Click  $\gg$  to add the selected programs to Plan List.

The programs will be played according to the sequence (from the top to the bottom) in the **Plan List** area. If you want to adjust the playback sequence, please select the programs based on your desired priority and then add them to the plan list. If you select and add multiple programs, the programs will be added to the plan list based on their original sequence in the program list.

12.Click **OK** to complete the settings.

Step 5 Click **OK** to show the tasks and plans.

#### Figure 5-38 Set playback tasks

Scheduled Playback	语言/Language: English 🔹 🗙
	New Task
Task1	ŵ
Effective:From 2022.01.06 : to 2022.01.00 : Plan1 + Mode Time From 00:00:00 to 23:59:59 Times 1 Date Every day Stop	FTB Const O
	OK Cancel

Step 6 Select the program playback mode next to Mode. The options include Time and Times.

- Time: The programs will be played by their own durations circularly.
- Times: The programs will be played according to the set playback times.
- Step 7 Set the start and end time within the schedule range.
  - 13.Set the automatic start time of the program in the From area.
  - 14.Set the automatic end time of the program in the **to** area.

When the playback mode is set to **Times**, the end time of the program is **23:59:59** by default and cannot be changed.

Step 8 Set the program playback times.

Click the number next to **Times** to activate the times setting function. Enter the desired times and then the program will be played automatically according to the set times. When the playback mode is set to **Time**, the playback times of the program is **1** by default and cannot be changed.

- Step 9 Set the program playback date. The options include Every day, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.
  - Every day: The plan will be played every day automatically according to the schedule within the effective time range.
  - Monday: The plan will be played every Monday automatically according to the schedule within the effective time range.
  - Tuesday: The plan will be played every Tuesday automatically according to the schedule within the effective time range.
  - Wednesday: The plan will be played every Wednesday automatically according to the schedule within the effective time range.
  - Thursday: The plan will be played every Thursday automatically according to the schedule within the effective time range.
  - Friday: The plan will be played every Friday automatically according to the schedule within the effective time range.
  - Saturday: The plan will be played every Saturday automatically according to the schedule within the effective time range.
  - Sunday: The plan will be played every Sunday automatically according to the schedule within the effective time range.

Step 10 Set the action after the program stops. The options include FTB and Current Frame.

• FTB: After the program playback ends or the playback time reaches the end time, the output image fades to black.



- Current Frame: FTB: After the program playback ends or the playback time reaches the end time, the output image displays the frame when the program stops.
- Step 11 Repeat Step 4 to Step 10 to add more plans under the current task.
- Step 12 Repeat Step 2 to Step 10 to add more tasks and plans.

#### Notes:

- Different plans cannot have the overlapping time slots.
- Different tasks cannot have the overlapping time slots.

### **Other Operations**

• Delete plans

In the Scheduled Playback window, click  $\Theta$  next to the desired plan to delete the plan.

Delete tasks

In the Scheduled Playback window, click III next to the desired task to delete the task.

Edit plans

Click L at the desktop taskbar to open the **Scheduled Playback** window and then add, edit or delete the desired plans or tasks.

# 5.5 Save Projects

You can save the project when you are satisfied with the project settings for easy use in future. Go to **Project** > **Save** or **Save As** to save the current project file (\*.fxsp) to your local storage. The project file includes the following information:

- Media files
- Output editing settings
- Programs and all layers in the programs

# 5.6 Package Projects

You can save the edited project and the imported media files as an independent project file for easy and convenient use on any computers in the future.

- Step 1 Go to Project > Package Project.
- Step 2 Enter the project file name, and select the save location and desired files in the displayed window.

Figure 5-39 Package projects

	Package Project		×
Project Name	New Project 1	_01-06_14-38	
Select Save Path Select Package File	C:/Users/Admi	in/Desktop • All	Browse
Project Size	1.41 M		
			Package



- Used: The media files that have been imported to the media library and added into the programs
- All: All the media files that have been imported to the media library

Step 3 Click Package.

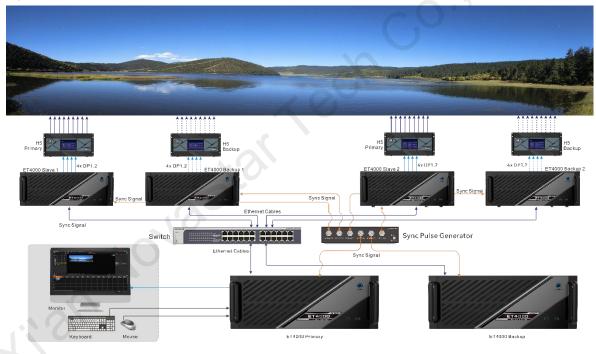


# 6.1 Link Settings

### **Application Scenarios**

- Kompass FX3 supports the primary and backup outputs. If the primary device fails or the cable connection
  of the primary device breaks, the backup device will take the responsibilities of the primary device
  seamlessly to ensure the output will not go black.
- Kompasss FX3 supports the master and slave outputs. If the master device cannot load the screen independently, one or multiple slave devices can help load the screen. You can configure the master and slave outputs on the master device to manage the playback images on the screen.

Figure 6-1 Applications



### **Prerequisites**

- The primary and backup devices or the master and slave devices must be on the same network segment.
- The sync card must be installed into the master and slave devices.

### **Operating Procedure**

Step 1 In the Kompass FX3 of the primary device, go to Link > Link Settings to open the link settings window.

The system will automatically search for the IP addresses of the devices where Kompass FX3 is enabled on the current network segment, and then show the IP addresses in the **Device List** area.



#### Figure 6-2 Link settings

	Online Settings	×
Device List 🗘		
<ul> <li>172.16.15.157</li> <li>DESKTOP-5BSO6B2</li> </ul>	Local/Master 17216.15.201	
• 172.16.15.19 • DESKTOP-5BSO6B2		
<ul> <li>172.16.15.136</li> <li>zhan66</li> </ul>		
• 172.16.15.4 • 16005779-P		Í
<ul> <li>172.16.15.226</li> <li>16004854-P</li> </ul>		
<ul> <li>172.16.15.174</li> <li>DESKTOP-1G0L7EB</li> </ul>		
<ul> <li>172.16.15.80</li> <li>DESKTOP-PNMGEIT</li> </ul>		
	🜒 Set as slave: Drag a device to the blank area. Set as backup: Drag a device to the device on the right side. One device supports one backup only.	
		ancel

Step 2 Add a backup device.

15. In the **Device List** area, select the IP address of the device that you want to add as a backup device.16. Click and drag the selected IP address to the device on the right side as shown in the following figure.

- Step 3 Add a slave device.
  - 17.In the Device List area, select the IP address of the device that you want to add as a slave device.
  - 18.Click and drag the selected IP address to the blank area on the right side as shown in the following figure. You can also add a backup device to the slave device. At this time, this slave device serves as the primary in its own primary and backup relation.

	Online Settings	×
		1
<ul> <li>172.16.15.157</li> <li>DESKTOP-5BSO6B2</li> </ul>	Local/Master Backup 172.16.15.201 172.16.15.4	
• 172.16.15.4 • 16005779-P		
• 172.16.15.136 • zhan66		
• 172.16.15.19 • DESKTOP-5BSO6B2		
<ul> <li>172.16.15.226</li> <li>16004854-P</li> </ul>	Slave 17216/15.19	
<ul> <li>172.16.15.174</li> <li>DESKTOP-1G0L7EB</li> </ul>	<b>k</b>	
• 172.16.15.80 DESKTOP-PNMGEIT		
<b>172.16.15.9</b> GJSJ2766-P		
• 172.16.15.50 DESKTOP-5BSO6B2		
	🗿 Set as slave: Drag a device to the blank area. Set as backup: Drag a device to the device on the right side. One device supports one backup only.	
	OK Car	ncel

Figure 6-3 Add backup or slave devices

Step 4 Manage the backup or slave device.

19.In the topology, select the backup or slave device.

20. Right click the device to open the context menu.

- Connect: If the primary and backup connection or the master and slave connection fails, select this
  option to manually connect the devices.
- Delete: Break the primary and backup connection or the master and slave connection.



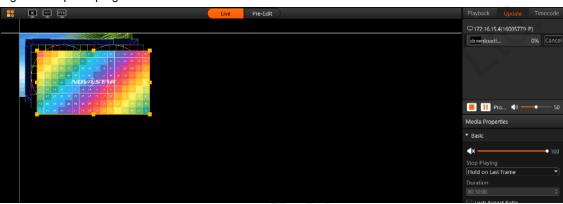
- Power On: Power on the backup or slave device remotely.
- Power Off: Power off the backup or slave device remotely.
- Restart: Restart the Kompass FX3 software on the backup or slave device.

Step 5 Click **OK** to complete the backup or slave device settings.

# 6.2 Update to Backup

In the Kompass FX3 of the primary device, go to Link > Update to Backup to manually update all the data on the primary device to the backup device.

On the main user interface, click **Update** on the top right to view the updating progress, i.e., the media transmission progress, as shown below.



#### Figure 6-4 Update progress

# 6.3 Update to Slave

Manually update all the data on the master device to the slave device.

- Step 1 In the Kompass FX3 of the master device, go to Link > Update to Slave.
- Step 2 Select the desired slave device from the window that appears.

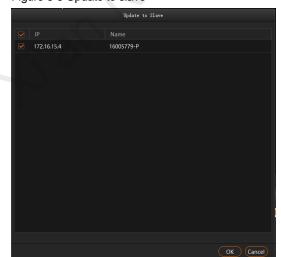


Figure 6-5 Update to slave

Step 3 Click OK.

On the main user interface, click **Update** on the top right to view the updating progress, i.e., the media transmission progress. If the slave device has a backup device, the **Update to Slave** action will also update the backup device data simultaneously.



# 6.4 Disconnect

In the Kompass FX3 of the backup or slave device, go to Link > Disconnect to break the connection between the primary and backup devices or the connection between the master and slave devices.

- In the Kompass FX3 of the primary or master device, this option is greyed out.
- In the Kompass FX3 of the primary or master device, go to Link > Link Settings to break the binding relation between the primary and backup devices or between the master and slave devices in the topology.

# 7 Settings

# 7.1 System Settings

Set the startup-related settings. Go to Settings > System Settings to open the System Settings window.

Figure 7-1 System settings

	System Settings		×	
Adapter	<ul> <li>Auto start after power on</li> <li>Open recent project after</li> <li>Play project after opened</li> <li>NVIDIA Quadro K620</li> </ul>	startup Please rest	art!	
Log Storage Duration Storage Path Fr		Browse Clear	Open	0
Cache Path Fr	D:/Media ee Space 719.9 GB	Browse Clear	Open	
			ОК	

- Auto start after power on:
  - Selected: Kompass FX3 will be started automatically when OS starts.
  - Deselected: Kompass FX3 will not be started when OS starts.
- Open recent project after startup:
  - Selected: The recently-opened project will be opened when Kompass FX3 starts.
  - Deselected: A new project will be created when Kompass FX3 starts.
- Play project after opened:
  - Selected: The recently played project will be played automatically when Kompass FX3 starts.
  - Deselected: No project will be played when Kompass FX3 starts.
- Adapter: Select the adapter for the video rendering of the software. After the selection, you must restart the server where Kompass FX3 is installed.
- Log Storage: Set the save duration for the playback logs. The supported options include 1 Month, 3 Months, 6 Months, 12 Months and Forever.
- Storage Path: Select the save location for the playback logs.
  - Click Browse to select the desired folder.
  - Click **Open** to open the folder where logs are saved.
  - Click Clear to clear the cache of the logs.



- Cache Path: Select the save location for the media files downloaded from the primary device.
  - Click Browse to select the desired folder.
  - Click **Open** to open the folder where the files are saved.
  - Click Clear to clear the cache of the files.

# 7.2 Output Settings

Set the program transition effect, transition duration, as well as the FTB status and duration. Go to **Settings** > **Output Settings** to open the **Output Settings** window.

### Figure 7-2 Output settings

0u1	tput Settings
	Mute FTB
FTB Duration	0.50 🗘 s
Program Transition	Fade 💌
Transition Duration	0.50 🗘 s
	MFPS EFPS
	Cache Program
After Program Ends	Loop Playback 💌
Office Type	Default
PowerPoint Playback	Animation O Picture
PowerPoint Resolution	<b>1920*1080</b>
	OK

- Mute FTB: Set whether to turn off the audio during the FTB process.
  - Selected: The audio will be turned off.
  - Deselected: The audio will be output as normal.
- FTB Duration: Set the time length the FTB process lasts. The value range is 0s to 2.00s and it defaults to 0.5s.
- Program Transition: Set the program transition effect. The options include Fade and Cut.
- Transition Duration: Set the time length the fade effect lasts. When **Program Transition** is set to **Fade**, this option is available. The value range is 0s to 2.00s and it defaults to 0.5s.
- MFPS/EFPS: The real-time frame rate
  - MFPS: After checked, the real-time frame rate will be displayed at the bottom left of the preview window.
  - EFPS: After checked, the real-time frame rate will be displayed at the bottom left of the output image.
- Cache Program: Set whether to enable the program cache function.
  - Selected: The function is enabled.
  - Deselected: The function is disabled.
- After Program Ends: Set the default playback action after the newly-added program stops playing. The setting here do not affect the existing programs.
  - Loop Playback: The newly-added program will be played circularly.
  - Jump to Next: When the newly-added program stops playing, the first program on its right will be played.
  - Stop Playing: When the playback of the newly-added program ends, the playing will be stopped.
- Office Type: Select the application program that will be used to open the PowerPoint files.



- Default: The PowerPoint files will be opened in the default tool of your media server.
- Microsoft Office: The PowerPoint files will be opened in Microsoft Office.
- WPS Office: The PowerPoint files will be opened in WPS Office.
- PowerPoint Playback: Set the switching mode for the PowerPoint slides.
  - Animation: The animation effects will be shown during the slide switching.
  - Picture: The slides are shown in pictures, without any transition effects.
- PowerPoint Resolution: Select the desired output resolution of the PowerPoint file.

### 7.3 Multiple Displays

When two or mode displays are connected, you can set to duplicate the desktop or set to show different content on each display, that is, extend mode. Go to **Settings** > **Multiple Displays** to select the desired mode.

- Duplicate: All the connected displays output the same content.
- Extend: The connected displays output the different contents. The extend mode is the default option.

# 7.4 External Control

Kompass FX3 supports remote control and control via a control device, allowing users to manage Kompass FX3 conveniently. For details on the commands and command writing rules of remote controlling and controlling via a control device, please see *Control Protocol of NovaStar Playback and Control Software*.

Go to Settings > External Control to open the External Control window.

Figure 7-3 External control

	External Control	
Network Ser	ial Port	
VDP		
Port	18959	Listen
✓ TCP/IP		
Port	19958	Listen
		Close

### 7.4.1 Control via Network

For control via a network, Kompass FX3 supports remote control via UDP and TCP/IP protocols. Go to **Settings** > **External Control** to open the **External Control** window shown in Figure 7-3.

### **Control via UDP Protocol**

- Step 1 Select UDP to enable UDP control.
- Step 2 In the text box next to Port, enter the UDP port number of Kompass FX3.

The UDP port number ranges from 1024 to 65535 and defaults to 18959.

Step 3 Click Listen. Kompass FX3 will automatically check whether the port number you entered in Step 2 is occupied.



- Occupied: Re-enter a port number and click Listen again to check.
- Not occupied: The UDP control settings are completed.

### **Control via TCP/IP Protocol**

- Step 1 Select **TCP/IP** to enable TCP/IP control.
- Step 2 In the text box next to **Port**, enter the TCP/IP port number of Kompass FX3.

The TCP/IP port number ranges from 1024 to 65535 and defaults to 19958.

- Step 3 Click Listen. Kompass FX3 will automatically check whether the port number you entered in Step 2 is occupied.
  - Occupied: Re-enter a port number and click Listen again to check.
  - Not occupied: The TCP/IP control settings are completed.

### 7.4.2 Control via Serial Port

To control Kompass FX3 via serial port, use a serial cable to connect the control device to the computer where Kompass FX3 is installed.

Step 1 Go to Settings > External Control > Serial Port to open the window shown in Figure 7-4.

Figure 7-4 Serial port control

	External Control	
Network Ser	ial Port	
Serial Port	Scan	
Baud Rate	<b>115200</b>	
Data Bits	8	
Parity	None -	
Stop Bits	1	
	Close Port Open Port	
		Close

- Step 2 Click Scan. The system will automatically scan the serial ports of the computer.
- Step 3 Click the drop-down box next to **Serial Port** and select the serial port currently connected to the control device.
- Step 4 Set Baud Rate, Data Bits, Parity, and Stop Bits.

#### Note:

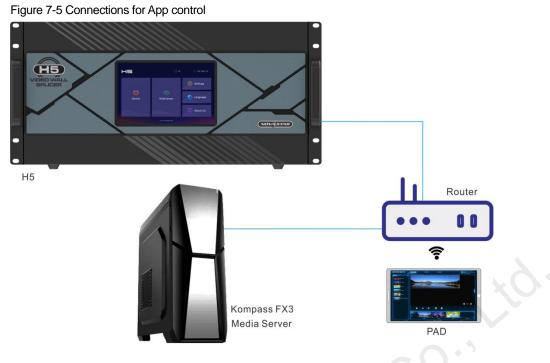
The parameter values of baud rate, data bits, parity and stop bits of the serial port on the control device must be the same as the values of those parameters you set in Kompass FX3.

- Step 5 Click **Open Port** to finish serial port settings.
- Step 6 Click Close to close the External Control window.

### 7.4.3 Control via App

Kompass FX3 built in a media server can be controlled via an App named VICP Visual Intelligent Control Platform. The connections for App control are as follows.





### **Connection Requirements**

The media server, H series device and Pad device with VICP installed must be on the same network segment.

### **Media Server Configuration**

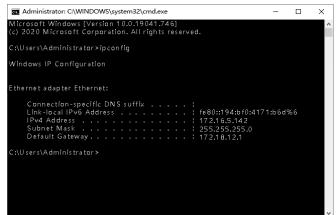
- Obtain the IP address of the media server.
  - a. On the media server, press Win and R keys simultaneously to open the Run command dialog window.

#### Figure 7-6 Run command window

🖾 Run			
	Type the name of a progr resource, and Windows w		
Open:		$\mathbf{O}$	~

- b. Type "cmd" in the search box and then press Enter to open the command prompt.
- c. Type "ipconfig" and then press Enter to show the device IP address.

Figure 7-7 Obtain the IP address of the media server





IPv4 address indicates the IP address of the media server.

- Configure the listening port of the media server.
  - 1. Run Kompass FX3 and then go to **Settings** > **External Control** to open the external control settings window.
  - 2. Select the Network tab.
  - 3. Check the box in front of TCP/IP to enable the TCP/IP control.
  - 4. Enter the port number in the text box next to Port.
  - 5. Click Listen to enable the listening for the external control.

If the port is occupied, a prompt saying "Listening failed: The port is being used." is shown. You must re-enter a port number and click Listen again.

If a prompt saying "Listening succeeded." is shown, the listening succeeds and the Listen button is highlighted. Click **OK** to complete the settings.

6. Click **Close** to complete the port settings.

Figure 7-8 Port settings

	External Control	1	
Network Ser	ial Port		
UDP			~ O · '
Port			
✓ TCP/IP			25
Port	19958	Listen	
		Close	
			-

## 7.5 Audio Settings

You can configure the correspondent relations between the sound cards and sound channel mappings. One sound card corresponds to one mapping only.

For example, if you select Map 01 for the layer media A, B and C at the same time, the audio information in these three media will be output via the sound card that Map 01 corresponds to. If you want to change the sound card for these three media, you only need to change the sound card that Map 01 corresponds to rather than set the sound card for each media respectively.

### Figure 7-9 Audio settings

rigule 7-9 Audio Sellings	
Audio Settings	×
Red indicates conflict. Clicking OK will not save the changes.	New
Map01: Local/Realtek Digital Output (Realtek Hic 🔻 Count: Default	
Map02 N/A  Count: Default	- <del>-</del>
Map03 N/A  Count: Default	-
	- II
	- II
	- II
	- U
	- II
	- II
	- U
ОК	Cancel

- Three mappings are displayed by default. You can click **New** at the top right to add a new mapping.
- The drop-down list shows all the sound card devices of the device.
  - Kompass FX3 supports the hot swapping of the sound card device and you do not need to restart the software after a new sound card is installed.
- Configure the sound channel count for the mapping. The supported options include **Default**, **2**, **4**, **6** and **8**. **Default** indicates the sound channel count of the corresponding sound card.

# 8 Help

# 8.1 Transcoding Assistant

Kompass FX3 supports the conversion of the video coding format, code rate, resolution and frame rate, to satisfy the requirements of different playback scenarios.

Step 1 Go to Help > Transcoding Assistant to open the transcoding settings window.

Figure 8-1	Transcoding	assistant
------------	-------------	-----------

Transcoding Assistant						语言/Language: English 🔻 🗙	
Import Path					Save To C:	/Users/Nova000932/AppData/Roa	
						Open Change	
						Self-Adaptive	
						Medium	
					Code Rate	Self-Adaptive	
					Frame Rate	Self-Adaptive	
					Resolution	W:1920 H:1080	
						ns greater than original will not .)	
						Кеер 💌	
					be optimiz	the videos and jpg pictures can ed to even resolutions only. iles only support resolution on)	
				Add Delete		Transcode	

Step 2 Click Add at the bottom to open the local folder where you can select the desired file.

You can also add multiple files by pressing the Ctrl key and selecting the files simultaneously.

- Step 3 Click Select File to add them into the assistant.
- Step 4 Select the target file for transcoding.

On the right side, set the parameters of Coding, Quality, Code Rate, Frame Rate, Resolution and Audio.

• Coding: Set the coding format of the transcoded video. The supported options include Adaptive, h264, h265, VP9 and hap.

When Self-Adaptive is selected, the video will be transcoded according to the original video coding.

- Quality: Set the quality of the transcoded video. The supported options include Low, Medium and High.
  - High: Keep the quality of the transcoded video the same as the original video quality.
  - Low: The quality of the transcoded video is relatively blurred compared to the original video quality.
  - Medium: The quality of the transcoded video is between the high and low qualities.
- Code Rate: Set the code rate of the transcoded video. The supported options include **Self-Adaptive** and **Custom**.
  - Adaptive: The code rates before and after the transcoding are the same.
  - Custom: Set the desired code rate and the video will be transcoded according to the set value.
- Frame Rate: Set the frame rate of the transcoded video. The supported options include Self-Adaptive, 24, 30, 60 and Custom.
  - Adaptive: The frame rates before and after the transcoding are the same.
  - 24/30/60: The frame rate after the transcoding will be 24 Hz, 30 Hz, and 60 Hz, respectively.
  - Custom: Set the desired frame rate and the video will be transcoded according to the set value.
- Resolution: Set the resolution of the transcoded video.
  - W: Set the horizontal size of the transcoded video. The value defaults to 1920 and can reach a maximum value of 16384.
  - H: Set the vertical size of the transcoded video. The value defaults to 1080 and can reach a maximum value of 16384.
- Audio: Set how to deal with the audio that comes with the video. The supported options include Keep and Remove.
  - Keep: The transcoded video retains the audio in the video before transcoding.



- Remove: The transcoded video display pure images without any audio.
- Step 5 Repeat Step 4 and Step 5 to set the transcoding parameters for other video files.
- Step 6 Click Transcode and the system will automatically start the transcoding process.

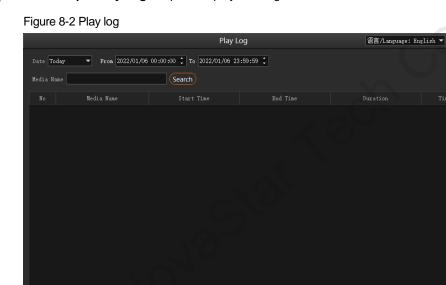
When the progress reaches 100% in the **Progress** column, the transcoding completes. After the transcoding, the video will be saved in the path specified in **Save Path**.

- Step 7 Click **Open** to open the local folder where you can view the transcoded files.
  - Click Change to change the save path.
  - Click Delete at the bottom to delete the selected video files.

## 8.2 Play Log

Kompass FX3 supports the automatic statistics of the playback logs. When you select a certain date, time period or media name, you can search for the desired logs. The log information includes the number, media name, start time, end time, total duration and playback times.

Step 1 Go to **Help** > **Play Log** to open the playback log window.



Step 2 Click **Date** and select the desired time period. The supported options include **Today**, **Recent 7 Days**, **Recent 1 Month** and **Recent 3 Months**.

#### Note:

Before you use this function, please set the value range of **Log Storage** greater than the time period range you set here.

- Step 3 Set the start and end time.
- Step 4 Enter the media file name in the text box next to **Media Name** to search for the payback logs of this single media, otherwise the playback logs of all media files will be searched and displayed.
- Step 5 Click Search to start the search and statistics.

Click **Export** to export the playback logs to your local computer.



Export

# 8.3 User Manual

On the menu bar, go to Help > User Manual, or press the F1 key on the keyboard to open the user manual.

# 8.4 About

On the menu bar, go to Help > About to view the software information.

### 9 Language

Kompass FX3 supports two interface languages: English and Chinese. You do not need to restart the software after the UI language is changed.

- Go to 语言/Language > English to set the UI language to English.
- " technologian Go to 语言/Language > 中文 to set the UI language to Simplified Chinese.

# 10 Specifications

Electrical Specifications	Power connector	100–240V~ 10–5A 47–63Hz				
	Power consumption	500 W				
Operating	Temperature	0°C to 40°C				
Environment	Humidity	0% RH to 80% RH, non-condensing				
Storage Environment	Temperature	-10°C to +60°C				
	Humidity	0% RH to 95% RH, non-condensing				
Physical Specifications	Dimensions	483 mm × 177 mm × 520 mm				
	Net weight	25.9 kg				
Packing	Packing box	690 mm × 570 mm × 300 mm				
		4x DP cables 1x DP to HDMI adapter 1x Type-C to HDMI converter cable* 1x Keyboard and mouse suit 1x DVD (OS included) 1x Quick Start Guide 1x Safety Manual 1x Certificate of Approval Note *When the HPG4000 graphics card is selected, the accessories include a Type-C to HDMI converter cable.				

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