

Kompass FX2

Multimedia Playback Software



User Manual

Contents

1 Overview	1
1.1 Introduction	1
1.2 Features.....	1
2 Software Installation and Activation.....	2
2.1 Software Installation.....	2
2.2 Software Licensing.....	2
3 User Interface Introduction	3
4 Applications	6
5 Project.....	6
5.1 Create New Projects	6
5.2 Edit Outputs	6
5.2.1 Add Outputs	7
5.2.2 Configure Regular Screens	8
5.2.3 Construct Irregular Screens	8
5.2.4 Manage Multiple Screens.....	11
5.3 Manage Media	12
5.3.1 Add Media Files.....	13
5.3.1.1 Add Local Files.....	13
5.3.1.2 Add Local Folders	13
5.3.1.3 Add Text	13
5.3.1.4 Add Digital Clocks	16
5.3.1.5 Add Sensors.....	17
5.3.1.6 Add Image Sequences	18
5.3.1.7 Create Media Copies.....	19
5.3.1.8 Add NDI Input Sources.....	19
5.3.1.9 Add Sources from Acquisition Devices	21
5.3.1.10 Add Website Input Sources	22
5.3.1.11 Add Streaming Media	23
5.3.1.12 Add Media Collections.....	24
5.3.1.13 Add Control Commands	25
5.3.2 Manage Media Files.....	26
5.3.2.1 Renaming.....	26
5.3.2.2 Deleting	26
5.3.2.3 Management	26
5.3.2.4 Switching View	26
5.4 Edit Programs	26
5.4.1 Edit Layers	27
5.4.2 Set Program Properties.....	29
5.4.3 Play Programs.....	30
5.4.4 Set Media Playback Properties	31
5.4.5 Flip Pages	32
5.4.6 Set Layer Opacity.....	33
5.4.7 Set Layer Color	34
5.4.8 Crop Layers.....	35
5.4.9 Set Layer Effects.....	35
5.4.10 Set Webpage Tabs	37
5.4.11 Set Sound Channel Mapping.....	37
5.4.12 Set Graphics Card Mapping	38
5.4.13 Set Scheduled Programs	38
5.5 Save Projects.....	41
5.6 Package Projects	42

6 Settings	42
6.1 System Settings	42
6.2 Output Settings	44
6.3 Multiple Displays	45
6.4 External Control	46
6.4.1 Control via Network	46
6.4.2 Control via Serial Port	46
6.4.3 Control via App	47
6.5 Audio Settings	49
7 Help	49
7.1 Transcoding Assistant	49
7.2 Play Log	51
7.3 User Manual	52
7.4 About	52
8 Language	52
9 Graphics Card Mosaic	52
9.1 Set Main Display	52
9.2 Change Resolutions	53
9.2.1 Set Standard Resolutions	53
9.2.2 Set Custom Resolutions	55
9.3 EDID Management	58
9.4 Output Mosaic	61

1 Overview

1.1 Introduction

Kompass FX2 is a professional multimedia playback software developed by NovaStar. Together with the video or image processing device, it allows for professional management for LED screen playback. Featuring a simplified and friendly user interface, Kompass FX2 makes operations as simple as possible.

Kompass FX2 takes full advantage of the hardware decoding and rendering technologies of the professional graphics card, realizing smooth playback of multiple 4K videos of different formats. Besides, separated live and pre-edit modes greatly enhance the convenience and safety of video playback and control management. Kompass FX2 supports multi-layer and multi-program management, fade transition effect, quick picture rotation, and dynamic playback of PowerPoint files, thus undoubtedly becoming the ideal choice for a variety of fixed installation applications such as multimedia exhibition halls, conference rooms, data centers and more.

1.2 Features

- Simultaneous playback of 4x layers and 1x audio
- 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, audios, website pages, streaming media and texts, etc
- Media file sorting
- Media file batch import
- NDI sources, website sources, sources from capture devices, streaming media sources and text sources supported
- Media collection configurations
- Custom on-screen text
- Resolution adjustment of PowerPoint files
- Using a laser pointer for moving between slides in PowerPoint
- Auto presentation of PowerPoint file when the program starts to play
- Playback of subtitled videos
- Playback progress management
- Program auto jump
- 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
- Inheritance of audio properties supported
 - The audio properties remain unchanged when you replace the layer audio media of the program
- Auto startup of built-in software on system power on
- Auto program playback on software startup
- Remote control via UDP or TCP/IP
- Controlled by a central control unit

- Auto saving of project file being edited
- Controlled in VICP (Visual Intelligent Control Platform) developed by NovaStar

2 Software Installation and Activation

2.1 Software Installation

Requirements of Software Operating Environment

- CPU: 9th Generation Intel® Core™ i5 or later
- RAM: 16GB or greater DDR4 2666
- Graphics card: T400 or later discrete graphics card recommended
- HD space: 250G or larger SSD
- OS: Windows 10 Pro (64-bit)

Installing Software

The installation procedure of Kompass FX2 is the same as that of other software applications.

- Step 1 Double click the program file (*.exe) and follow the instructions to proceed. On the **Select Additional Tasks** screen, select **Create a desktop shortcut** and click **Next**.
- Step 2 Proceed to **Ready to Install** window and click **Install** to start the installation. After the installation process ends, click **Finish**.

Two application programs are installed during the installation process:

- Kompass FX2: The video playback and control application program
- NDI Sender: The NDI sender end that provides NDI inputs for Kompass FX2

Notes:

- It is recommended you turn off the anti-virus software and firewall in advance.
 - During installation, if the anti-virus software or firewall prevents the installation, choose to allow the installation.
 - If the software prompts you to restart after the installation, it is recommended you restart the software for normal operation.
-

2.2 Software Licensing

Kompass FX2 supports two authorization modes: temporary authorization and permanent authorization.

- When Kompass FX2 is temporarily authorized, the remaining days of temporary authorization is displayed at the top right.
- When Kompass FX2 is permanently authorized, no authorization message is displayed at the top right.
- When Kompass FX2 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.

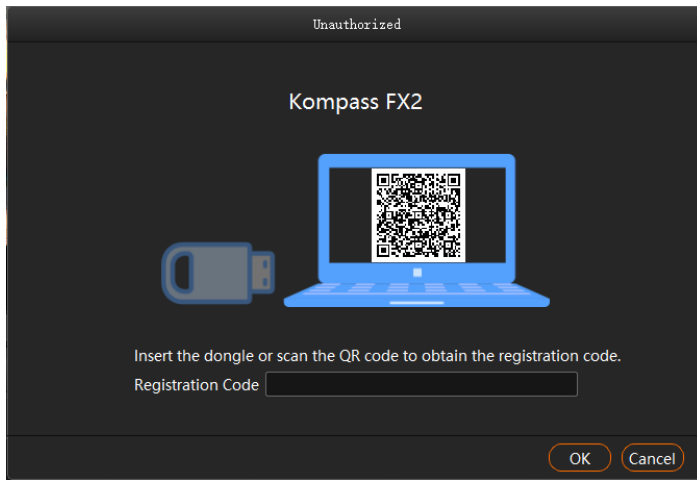
In trial mode, the **Kompass FX2** text is displayed on the output.

Dongle detection rules are as follows:

- When the inserted dongle is recognized, **Trial** will disappear automatically and the output will not display the **Kompass FX2** 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 FX2** text on the output in 5 seconds.

Figure 2-1 Dongle removed



- When the dongle is inserted and recognized normally, the above window and the **Kompass FX2** text on the output will disappear automatically.

3 User Interface Introduction

After the software is started, the main user interface is shown in [Figure 3-1](#). The functions of each area are described in [Table 3-1](#).

Figure 3-1 User interface

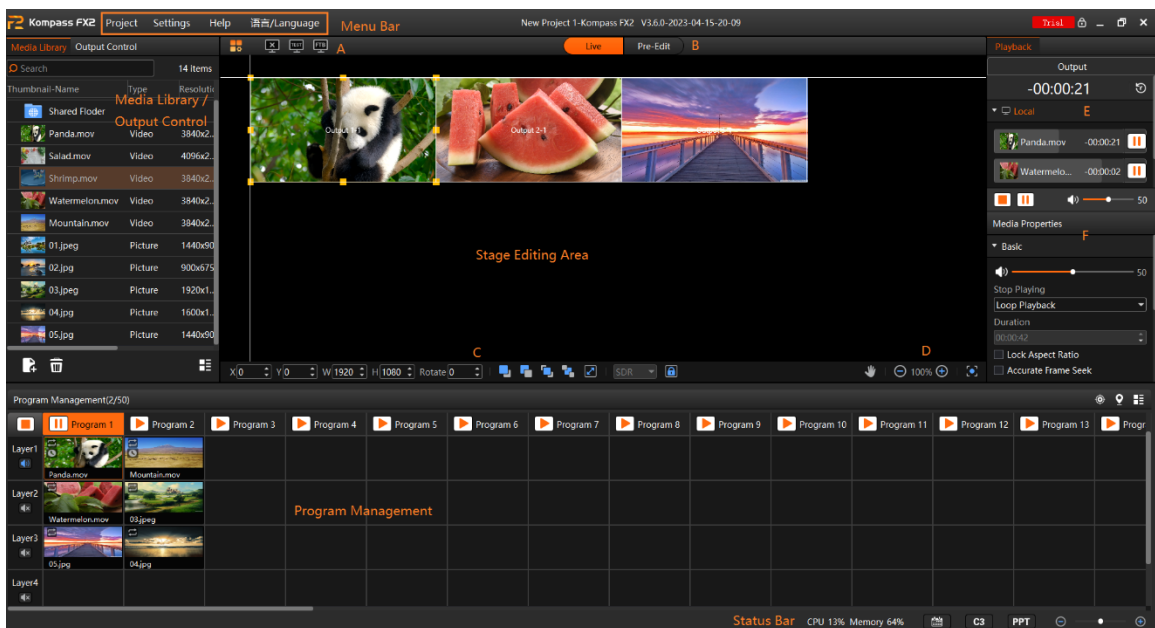
















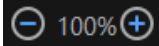






















Table 3-1 User interface area descriptions

Area	Item	Description
Menu bar	Project	Project file operations include: <ul style="list-style-type: none"> • New: Create a new project. • Open: Open a saved project. • Save: Save the current project. • Save As: Save the current project as a new project.

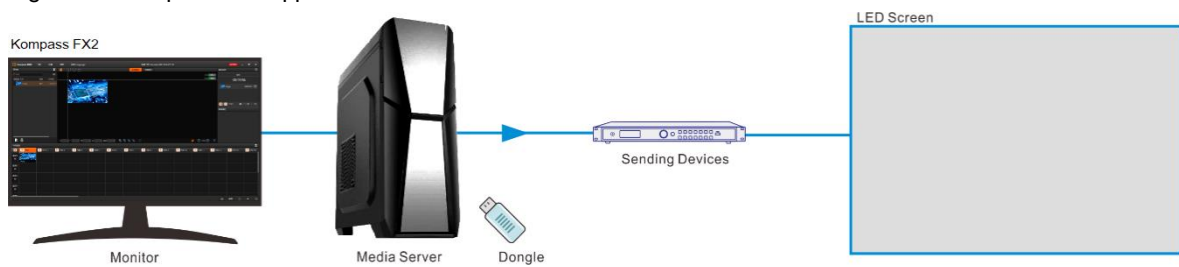
Area	Item	Description
		<ul style="list-style-type: none"> Package Project: Package the current project file and all media in it for easy use in the future.
	Settings	Settings include system, output, audio, display mode and external control settings.
	Help	<ul style="list-style-type: none"> Use the transcoding assistant. View and export the playback logs. 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		<ul style="list-style-type: none"> Media library: Add the desired media files, including videos, pictures, PowerPoint files, audios, website pages, streaming media, texts and digital clocks, etc. Go to Settings > System Settings to set the shared folder path, and then place the desired media files under this path. Kompass FX2 will automatically read the files and display them in the Media Library area. When you delete the media saved in the shared folder, this media will also be deleted in Kompass FX2. Output control: Add the commands for controlling the splicers.
Stage editing area	Stage	<ul style="list-style-type: none"> Preview the real-time playback content. Edit the position and size of the added media.
	A	<p>Output control buttons</p> <ul style="list-style-type: none"> : Pop up the output editing window. : Enable the output screen and display the playback content on the screen. (Shortcut key: Shift+H) : Disable the output screen. (Shortcut key: Shift+H) : Close the test pattern and display the playback content. : Open and display the test pattern. : Disable the FTB function and display the playback content. : Make the output fade to black.
	B	<p>Two editing modes are provided.</p> <ul style="list-style-type: none"> 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.
	C	<p>Quickly adjust the layers.</p> <ul style="list-style-type: none"> X: Set the initial horizontal coordinate of the layer. Y: Set the initial vertical coordinate of the layer. Width: Set the width of the layer. Height: Set the height of the layer. Rotate: Set the angle by which the layer rotates clockwise. : Bring the selected layer forward. : Send the selected layer backward. : Bring the selected layer to front.

Area	Item	Description
		<ul style="list-style-type: none"> : Send the selected layer to back. : Make the selected layer fill the output area. : Configure the rendering mode for the video played in the stage editing area. The options include SDR and HDR10. When HDR10 is selected, the monitor where the software is installed must support HDR10 and the HDR playback function is enabled, so that the HDR effect can be displayed. <hr/> <p>Note:</p> <p>Only 10th Gen Intel GPU or later supports HDR output.</p> <hr/> <ul style="list-style-type: none"> : Lock the stage editing area.
	D	<p>Adjust the output area display.</p> <ul style="list-style-type: none"> : Pan the stage editing area. : 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	<p>Control and view the playback progress.</p> <ul style="list-style-type: none"> : Count up timer : Count down timer : Start the playback. : Pause the playback. : Stop the playback. : Adjust the volume.
	F	<p>Set the media properties, including the layer basic info, opacity, quality, cropping, transition effect and more.</p>
Program management area	n/50	<p>Indicate the quantities of the edited programs and the total programs in the current group.</p> <ul style="list-style-type: none"> N: Indicates the quantity of the edited programs or the programs that have media files. 50: Indicates the default quantity of the total programs. When a new program is added, the value increases accordingly.
	Program n	<p>View the program name.</p>
	Layer and layer status	<ul style="list-style-type: none"> Layer n with/without audio: Displays the layer name and indicates whether the layer comes with audio or not. : Turn off the layer audio. : Play the layer audio. Icons on the layer: <ul style="list-style-type: none"> : This icon indicates the layer is the main media and the timer in the Playback Progress area is based on this layer. : 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. : Within the timing period for the main media, the current layer media is in loop playback mode.

Area	Item	Description
		<ul style="list-style-type: none"> – : Within the timing period for the main media, the audio media playback will be stopped after it is finished. – Lock: The layer is locked.
Status bar		<ul style="list-style-type: none"> • : Increase or decrease the program column width. • : Enable the PowerPoint file playback mode. You can use the laser pointer buttons or keyboard buttons to move between slides. • : Disable the PowerPoint file playback mode. • : Disable the C3 control. • : The C3 control is enabled. • : The scheduled playback is enabled. • : The schedules playback is disabled. • Display the CPU and memory usage.

4 Applications

Figure 4-1 Kompass FX2 applications



5 Project

Kompass FX2 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 the project 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 FX2 and the software will create a new project automatically.
- Go to **Project > New** to create a new project.

5.2 Edit Outputs

Kompass FX2 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

To synchronize output images, please refer to [9 Graphics Card Mosaic](#) to complete relevant configurations.

Add and bind outputs automatically

After startup, Kompass FX2 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.

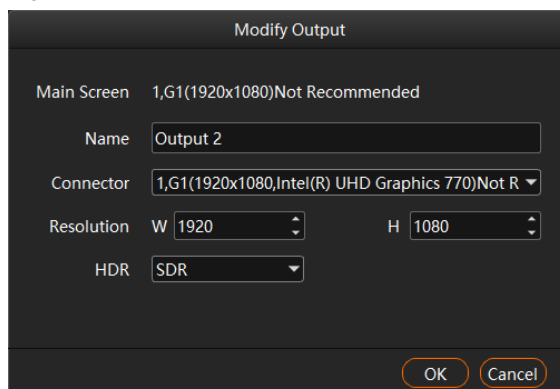
When you need to change the binding relations between the output connectors and screens, click  to change the output name, connector binding and resolution.

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



- Name: Change the current output name.
- Connector: Select the desired output connector from the drop-down list or change the connector binding relation. Here take [Figure 5-2](#) as an example to illustrate.
 - 1: Connector number of the graphics card (1 indicates the connector 1 of the graphics card.)
 - G1: Graphics card 1
 - 1920x1080: Output resolution of the current connector of the graphics card

- Intel(R) UHD Graphics 770: The graphics card name of the current device
- Resolution: Set the desired output width and height.
- HDR: Configure the output format for the video. The options include **SDR** and **HDR10**. When **SDR** is configured, the video will be output in **SDR** format.

Note:

Before you configure HDR, go to **Settings > Output Settings** to enable **HDR**.

5.2.2 Configure Regular Screens


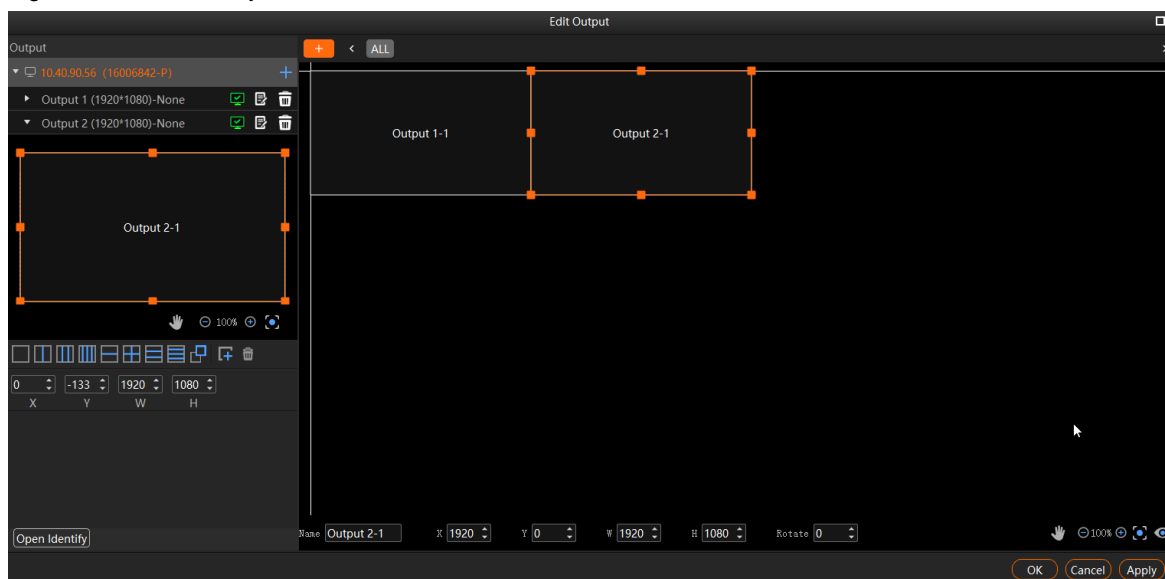
- Step 1 Click  to open the **Edit Output** window.
- Step 2 Organize the output connectors on the right via drag and drop operations to suit the loaded screen.

Figure 5-3 Connector layout



- 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 sub-outputs 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.

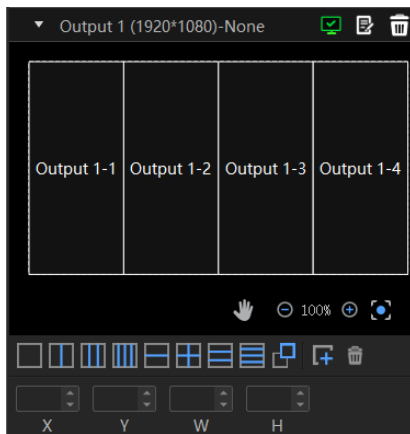
You can realize the output of an irregular image via the reorganizing of regular output connectors.












Figure 5-4 T-shape output image



Step 1 Select a partition layout in the output list area.

Figure 5-5 Output partitioning



-  : 1x sub-output
-  : 2x sub-outputs in horizontal position
-  : 3x sub-outputs in horizontal position
-  : 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
-  : Click once to add one sub-output of the same size as the first one.
-  : Delete the selected sub-output.




Step 2 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:
 - W: Set the width of the sub-output area.
 - H: Set the height of the sub-output area.

Sub-Outputs Reorganizing

The mosaic output of multiple graphics card connectors is supported.

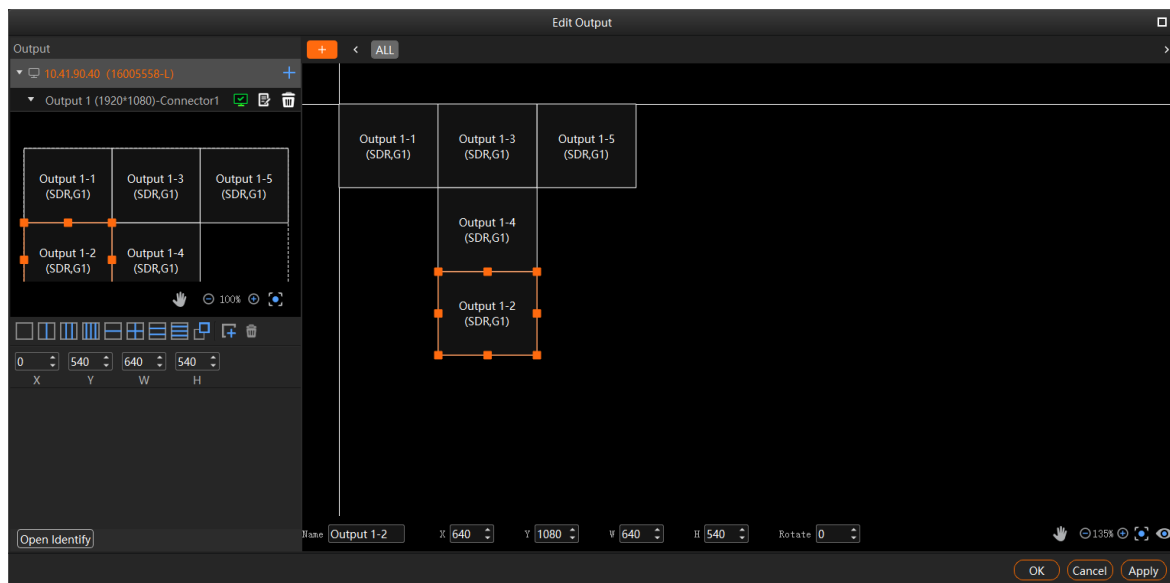
After startup, Kompass FX2 will automatically detect the graphics card connectors and display all the connectors in the output list on the left.

-  : Enable the output.
-  : Disable the output.
-  : Delete the output.

Click  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



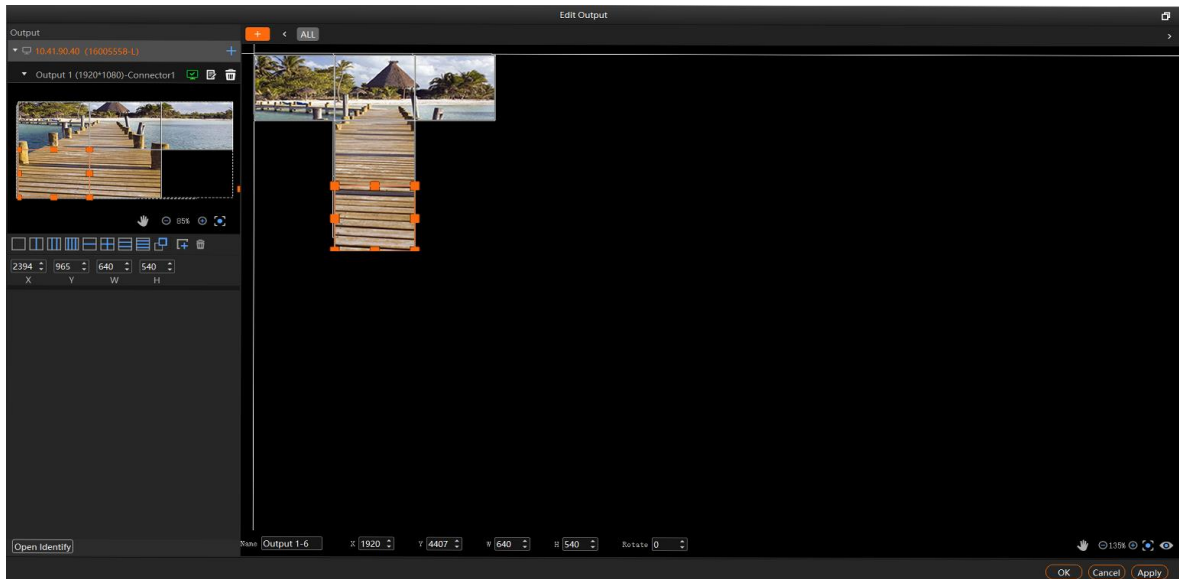
- Name: Change the current output name.
- X: Set the initial horizontal position of the sub-output or output on the stage. The adjusting reference is the top left corner of the stage.
- Y: Set the initial vertical position of the sub-output or output on the stage. The adjusting reference is the top left corner of the stage.
- W: Set the width of the sub-output or output.
- H: 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 image mapping



5.2.4 Manage Multiple Screens

Kompass FX2 supports the adding of multiple screens and grouping management of programs by screen. This feature facilitates the program switching by associating and linking it with the corresponding screen when VICP is used for device control.


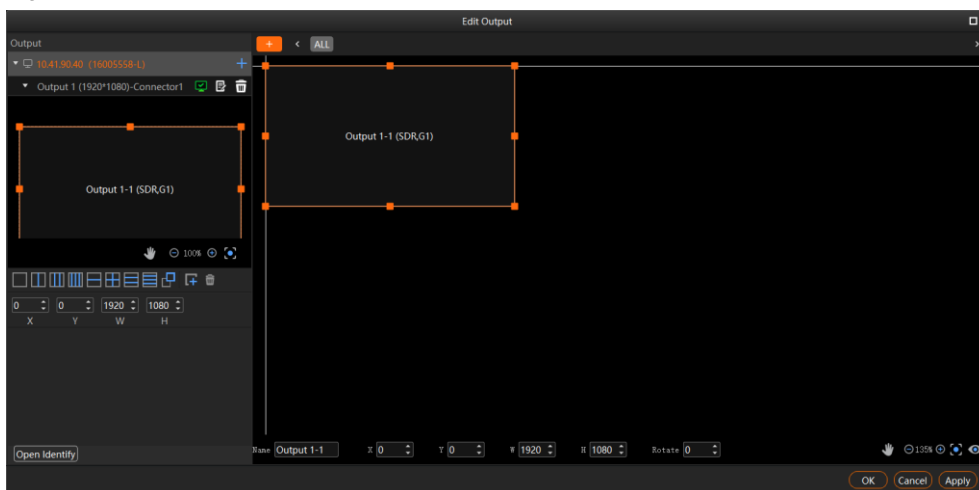
Click  on the main interface to open the **Edit Output** window.

Figure 5-9 Edit outputs




Click  to add a screen. The added screen does not affect the output, but only serves as a label for program grouping.

Figure 5-10 Add screens



5.3 Manage Media

You can add the desired media files to the current media library. Kompass FX2 supports pictures, videos, PowerPoint files, audios, NDI, websites and streaming media.

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
- Office files: ppt (1080p), pptx, xls, xlsx, pdf, doc, docx
- Other formats: exe, sensor, image sequence

Note:

Up to 15 PowerPoint files can be added to the media library.

Recommended video coding formats:

- 4K < resolutions ≤ 8K, width ≤ 8192 pixels and height ≤ 4320 pixels: 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 – single media server and single graphics card:

Type	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
2160 (4K)	35 to 45 Mbps	53 to 68 Mbps
1440 (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

- Recommended video bitrates for SDR uploads – multiple media servers and multiple graphics cards (frame synchronization required):

Type	Frame Rate	Video Bitrate	Video Coding
4320 (8K)	60 Hz	30 Mbps	H.265
2160 (4K)	60 Hz	30 Mbps	H.264


Note:

If frame synchronization output is not required in the application scenario that has multiple media servers and multiple graphics cards, please refer to the recommended video bitrates for SDR uploads – single media server and single graphics card.

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 FX2 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.

Notes:

When you add a media file whose size exceeds the processing capacity of the graphics card installed on the software server, the prompt "**Optimizable**" appears next to the added media file in the **Media Library** area. To render and play this media normally, go to **Help > Transcoding Assistant** to optimize it.

- When the value of the width x height x frame rate of a video is greater than the recommended value, or the value of the width or height is greater than 8192 pixels, the prompt "**Optimizable**" appears.
 - When the width or height of a picture is greater than 8192 pixels, the prompt "**Optimizable**" appears.
 - When a media file in hsp format exceeds the recommended maximum resolution, the prompt "**Optimizable**" does not appear.
-

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 FX2 will import the folder and the media files in it to the media library automatically.

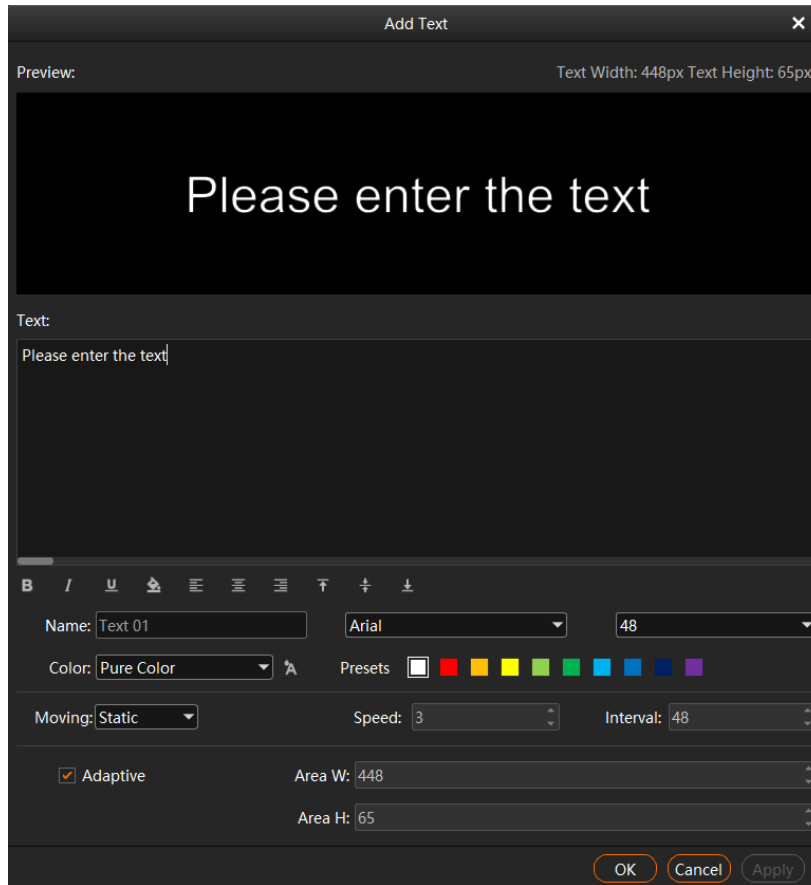
You can also select one or multiple folders and drag them to the blank area of the media library to complete importing folders quickly.

5.3.1.3 Add Text

Kompass FX2 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 5-11 Add text




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.
- U : Underline the text or not.
- ≡ : 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.
- ≡ : 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.
- ≡ : 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.
- ↑ : 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.

-  : 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**.

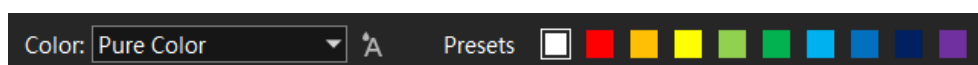
Select the desired font size from the drop-down list and the default size is **48**. You can only select a number from the drop-down list and you cannot enter a number manually.

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  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.



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**.
- Interval: Set the interval from the end character of the previous scrolling to the start character of the next scrolling.

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.


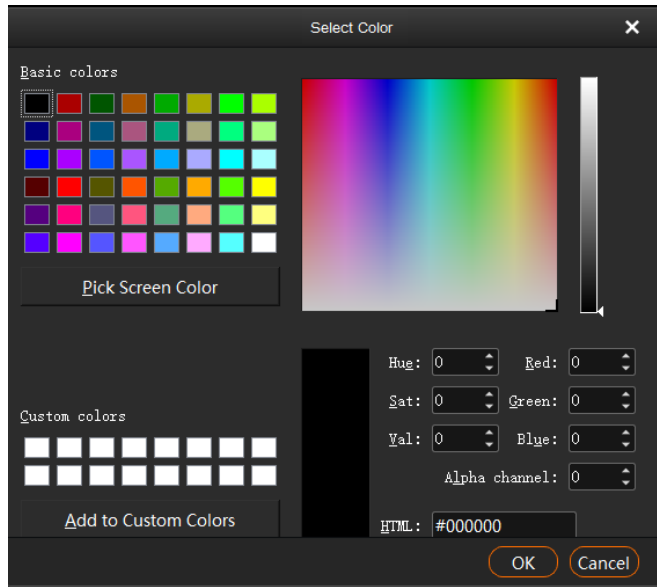
1. Click  to open the **Select Color** window.

Figure 5-12 Select display area color



2. Set the value of the background transparency next to **Alpha channel**. The value ranges from 0 (totally transparent) to 255 (opaque).
3. Click **OK** to complete the display area color settings.

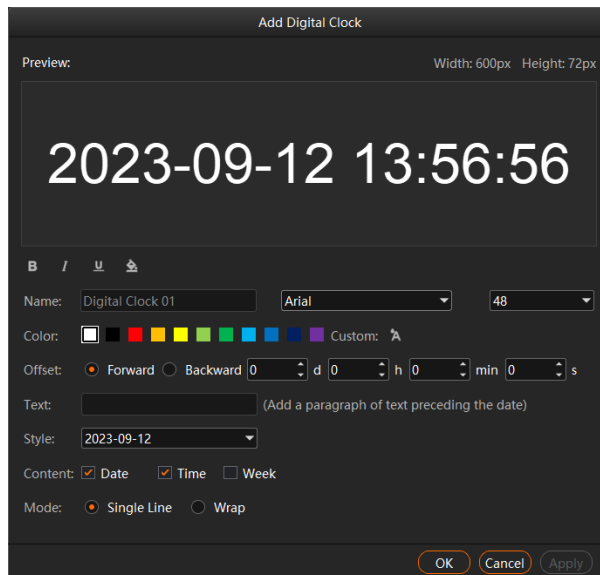
Step 10 Click **OK** to complete the whole text settings.

5.3.1.4 Add Digital Clocks

Kompass FX2 can set a digital clock as a media. You can view the details of the current date and time.

Step 1 Right click the blank area of **Media Library** and select **Add Digital Clock**.

Figure 5-13 Add digital clocks



Step 2 Enter the clock name and select the desired text font and size from the drop-down list next to **Name**.

Step 3 Select the desired color block next to **Color** to set the clock text color.

Click **A** next to **Custom** to open the **Select Color** window to customize your own color. Set the value of the background transparency next to **Alpha channel**. The value ranges from 0 (totally transparent) to 255 (opaque).

Step 4 Set the clock offset information, which includes the number of days, hours, minutes or seconds.

- Forward: Set the time to offset before the current time.
- Backward: Set the time to offset after the current time.

Step 5 Enter a paragraph of text which will be displayed preceding the date.

Step 6 Select the desired date format from the drop-down list next to **Style**. Three formats are provided.


Step 7 Select the clock content. The options are as follows.

- Date: After checked, the current date will be displayed.
- Time: After checked, the current time will be displayed.
- Week: After checked, the current week will be displayed.

Step 8 Set the desired clock display mode. The options include **Single Line** and **Wrap**.

Step 9 Set the style of the clock content below the **Preview** area.

You can set the following text attributes.

- **B** : Make the text bold or not.
- ***I*** : Italicize the text or not.
- **U** : Underline the text or not.
-  : Click this icon to open the **Select Color** window to change the background color of the clock text.

Set the value of the color transparency next to **Alpha channel**. The value ranges from 0 (totally transparent) to 255 (opaque).

Step 10 Click **OK** to complete the digital clock adding.

After the clock is added successfully, right click the added clock and select **Edit** to open the clock editing window. After you complete the editing, click **Apply** to change the clock display information of all the programs.

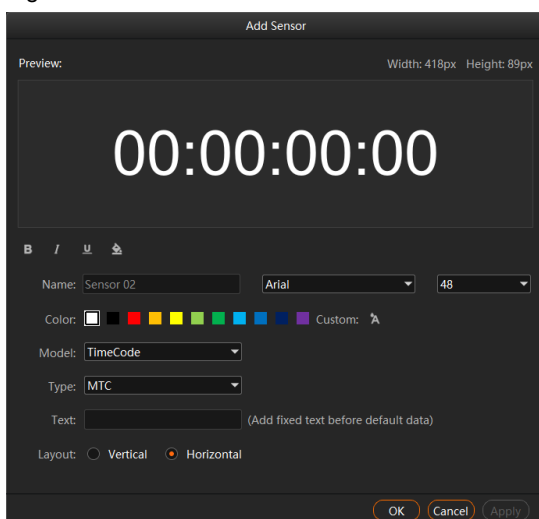
5.3.1.5 Add Sensors

Kompass FX2 supports adding the data acquired by the sensor, and can display the sensor data on the screen.

In order to use the time data generated by a timecode generator, the connection between the timecode generator and media server (built-in Kompass FX2) must be established in advance.


Step 1 Right click the blank area of **Media Library** and select **Add Sensor**.

Figure 5-14 Add sensors



Step 2 Enter the sensor name and select the desired text font and size from the drop-down list next to **Name**.

Step 3 Select the desired color block next to **Color** to set the sensor text color.

Click  next to **Custom** to open the **Select Color** window to customize your own color. Set the value of the background transparency next to **Alpha channel**. The value ranges from 0 (totally transparent) to 255 (opaque).

Step 4 Select the model of the connected sensor next to **Model**.

The sensor models are classified based on the physical quantity and measurement principles of the sensors.

Step 5 Select the sensor type of the current sensor model next to **Type**.

The sensor types are differentiated based on specifications and performance parameters of the sensor models.





When playing the timecode data, the data type set in **Type** must be consistent with the data type generated by the timecode.

Step 6 Enter certain text that needs to be displayed preceding the default data.

Step 7 Select the layout mode for the fixed text and sensor data next to **Layout**.

- Vertical: The fixed text and sensor data are displayed in two lines, with the fixed text on the first line and the sensor data on the second line.
- Horizontal: The fixed text and sensor data are displayed in one line, with the fixed text on the left and the sensor data on the right.

Step 8 Set the style of the sensor text below the **Preview** area.

-  : Make the text bold or not.
-  : Italicize the text or not.
-  : Underline the text or not.
-  : Click this icon to open the **Select Color** window to change the background color of the text.
Set the value of the color transparency next to **Alpha channel**. The value ranges from 0 (totally transparent) to 255 (opaque).

Step 9 Click **OK** to complete the sensor adding.

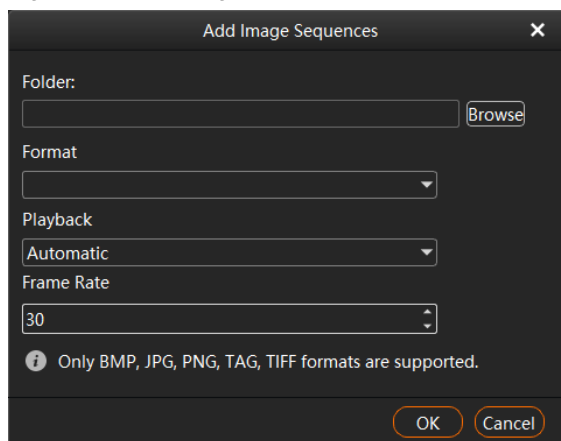
5.3.1.6 Add Image Sequences

Kompass FX2 supports adding the images in a folder, and automatically plays those images of the same format.

Currently, Kompass FX2 only supports BMP, JPG, PNG, TAG, and TIFF image files for image sequence playback.

Step 1 Right click the blank area of **Media Library** and select **Add Image Sequences**.

Figure 5-15 Add image sequences



Step 2 Click **Browse** to select the directory where the image files are located.

Step 3 Click the drop-down menu below **Format** to select the desired format for playback.

The system automatically reads the compatible formats in the current folder.

Step 4 Click the drop-down menu below **Playback** to select the desired playback mode.

- **Automatic:** When using the image sequences as media for playback, the images will play automatically.
- **Manual:** When using the image sequences as media for playback, the playback of the images will require manual activation, otherwise only the first image will be displayed.

Step 5 Set the image switching speed in the **Frame Rate** section, with a range of 1 to 60.

The smaller number, the slower the playback speed. This item is invalid when **Manual** playback is selected.

Step 6 Click **OK** to complete the adding.

Once the image sequences have been added into the media library, this media is automatically named after the folder where the images are located. If you want to rename the media, right click it and select **Rename** to give it a new name.

5.3.1.7 Create Media Copies

Kompass FX2 supports the creation of copies of the added texts, digital clocks, sensors, and media collections. After a copy is created, the copy can be edited to quickly complete the addition of a new media.

Step 1 Right click an added media and select **Create Copy**, and the system will automatically add a copy of the selected media.

The copied one is named with the original media name plus a number.

Step 2 Right click the copied media and select **Edit** to change the media properties.

Step 3 Click **OK** to complete the editing of the media copy.

5.3.1.8 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 FX2 can search and find the NDI source and add it.

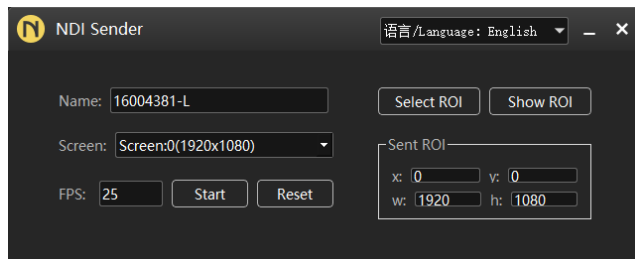
Note:

The computers running the NDI Sender and Kompass FX2 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 5-16 NDI Sender



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 you want to send.

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

Step 5 Click **Select ROI**, click and drag the mouse to select the display area 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:

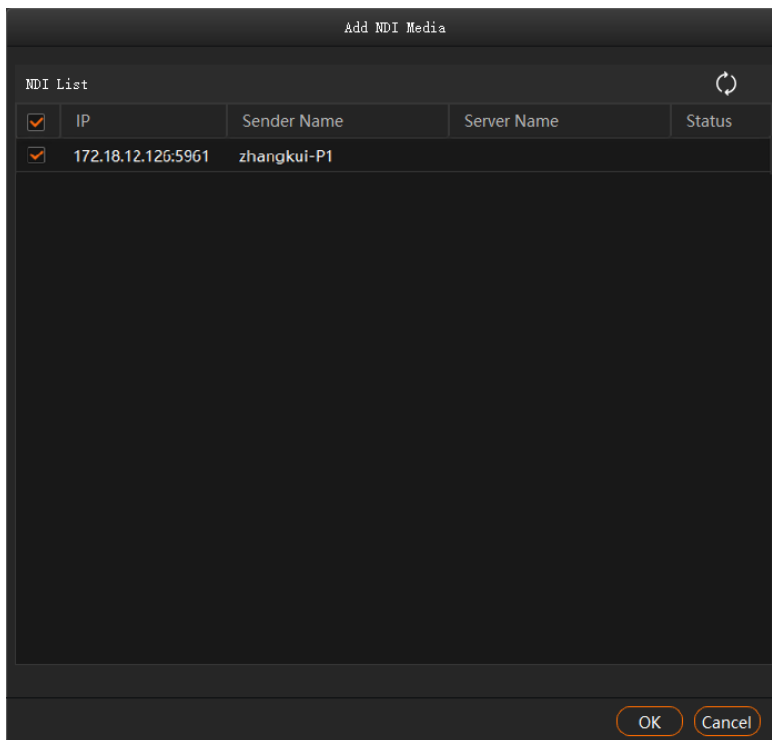
After the settings, you can click **Show ROI** to see the image position and image size you have set.

Add NDI Sources

Step 1 Right click the blank area of **Media Library** in Kompass FX2 and select **Add NDI Media**.

Step 2 The system will automatically search on the current network segment for all the devices with NDI enabled.

Figure 5-17 Add NDI media



Step 3 Select the NDI sources from the NDI list.

Step 4 Click **OK** to complete NDI source adding.

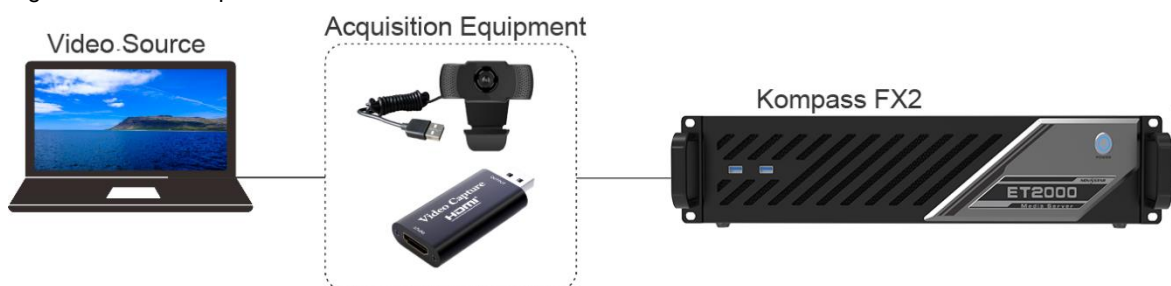
Note:

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

5.3.1.9 Add Sources from Acquisition Devices

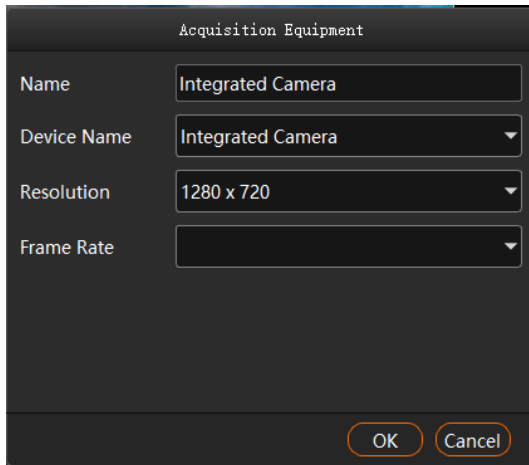
Kompass FX2 can obtain input sources via data acquisition equipment.

Figure 5-18 Data acquisition connection



Step 1 Right click the blank area of **Media Library** and select **Add Acquisition Equipment**.

Figure 5-19 Add acquisition equipment



- Step 2 On the displayed window, enter the capture device name next to **Name**.
- Step 3 Select a data acquisition card name next to **Device Name**.
- Step 4 The system will automatically read the resolution and frame rate.
- Step 5 Click **OK** to complete the device adding.

5.3.1.10 Add Website Input Sources

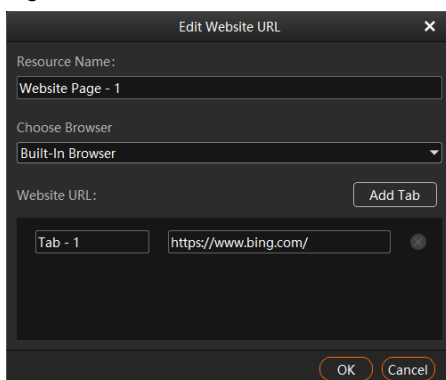
Prerequisites

The computer running Kompass FX2 is connected to the network.

Operating Procedure

- Step 1 Right click the blank area of **Media Library** and select **Add Website**.

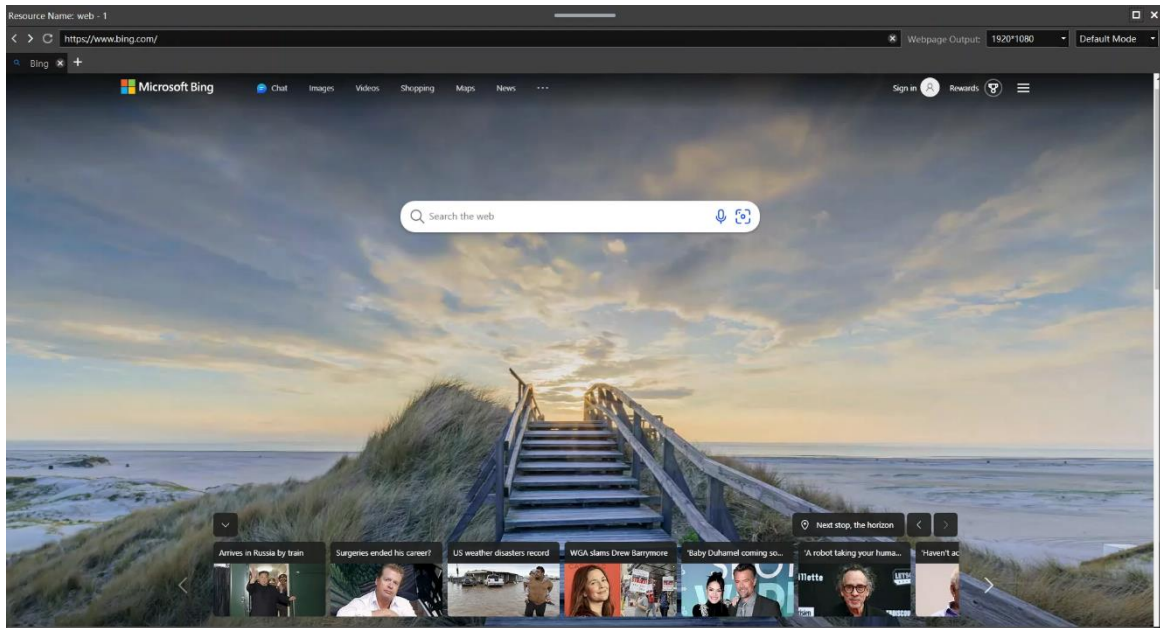
Figure 5-20 Add websites



- Step 2 Enter the desired website name next to **Resource Name**.
- Step 3 Select the browser mode from the drop-down list below **Choose Browser**.
 - **Extended Browser:** When the extended browser is selected, no image will be displayed in the stage editing area when you play the webpage. The webpage will be displayed on the output screen, and the output image can be controlled via the mouse.
 - **Built-In Browser:** When the built-in browser is selected, you can change the webpage output resolution and mode.
- Step 4 Enter the tab name in the left text box next to **Website URL**.
- Step 5 Enter the complete website domain name in the right text box next to **Website URL**.

- Step 6 Click **Add Tab** to add a new tab page.
- Step 7 Enter the tab name and domain name of the new tab page.
- Step 8 Click **OK** to enter the added website.

Figure 5-21 Website page (built-in browser)



- Step 9 When the built-in browser is selected, 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 FX2. The output image is displayed on the corresponding screen and can be controlled using the mouse.

- Step 10 Click **x** at the top right corner of the website to close the website and complete adding the website.

Notes:

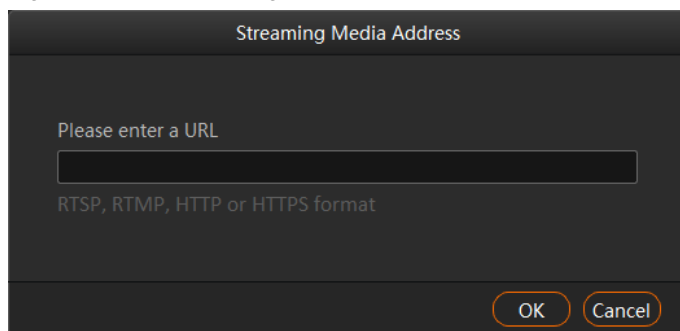
- When multiple tabs are opened, the tab where you stay on before closing the website will be used as the input source.
- If you opened other website pages and the new page is displayed on the new tab, the system automatically adds the new tab page.

5.3.1.11 Add Streaming Media

Kompass FX2 supports adding streaming media in rtsp, rtmp, http and https 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 5-22 Add streaming media



Step 2 Enter the media path in the URL field.

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

Step 3 Click **OK**.

5.3.1.12 Add Media Collections

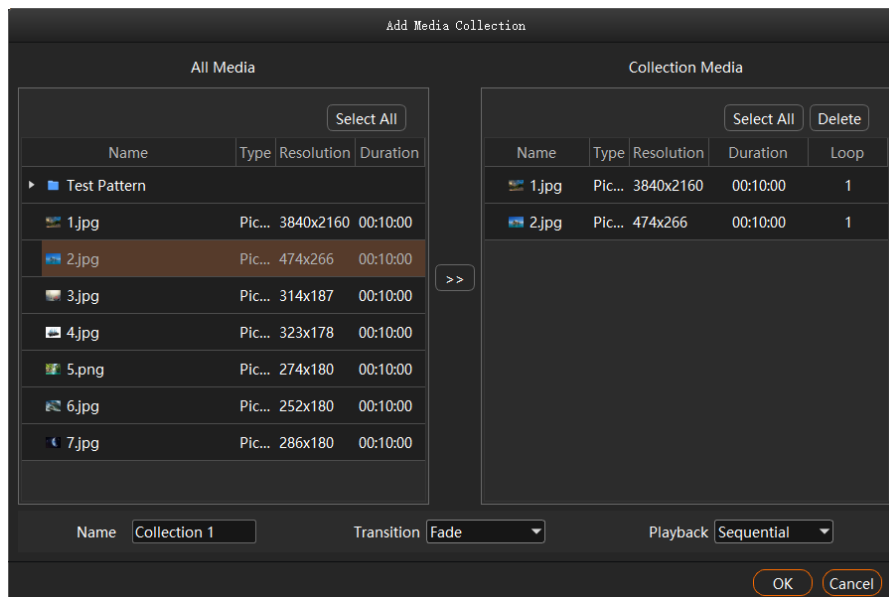
Multiple videos or videos and pictures can be combined with a specific order to form a new video source called media collection. The videos and pictures in the collection can be played automatically according to the set mode.

Note:

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

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

Figure 5-23 Add media collection



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**.

Click and drag the media to change its order in the **Collection Media** area.

Step 4 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 5 In the **Name** field, enter a name for the media collection.

Step 6 In the **Transition** field, select a media switching effect. Supported effects include **Fade** and **Cut**.

Step 7 In the **Playback** field, select a playback order of media files in the media collection. Supported orders include **Sequential** and **Shuffle**.

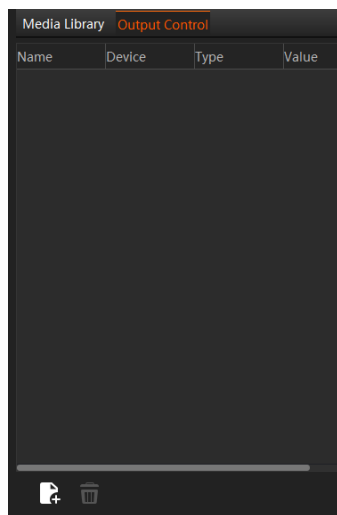
Step 8 Click **OK**.

5.3.1.13 Add Control Commands

Kompass FX2 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 5-24 Output control




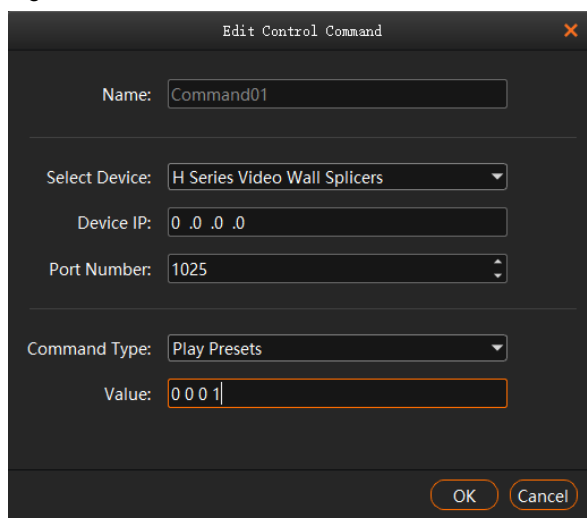
Step 2 Click  at the bottom-left corner or right click the blank area and select **Add** to open the **Edit Control Command** window.

Figure 5-25 Add control commands



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**. The supported devices include the video wall splicer and intelligent controller.
1. Enter the splicer IP address next to **Device IP**.
2. Enter the port number for the external control next to **Port Number**.

Step 5 Configure the control command.

1. Select the control command type next to **Command Type**.
2. 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

5.3.2.1 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.


5.3.2.2 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.



5.3.2.3 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.

5.3.2.4 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

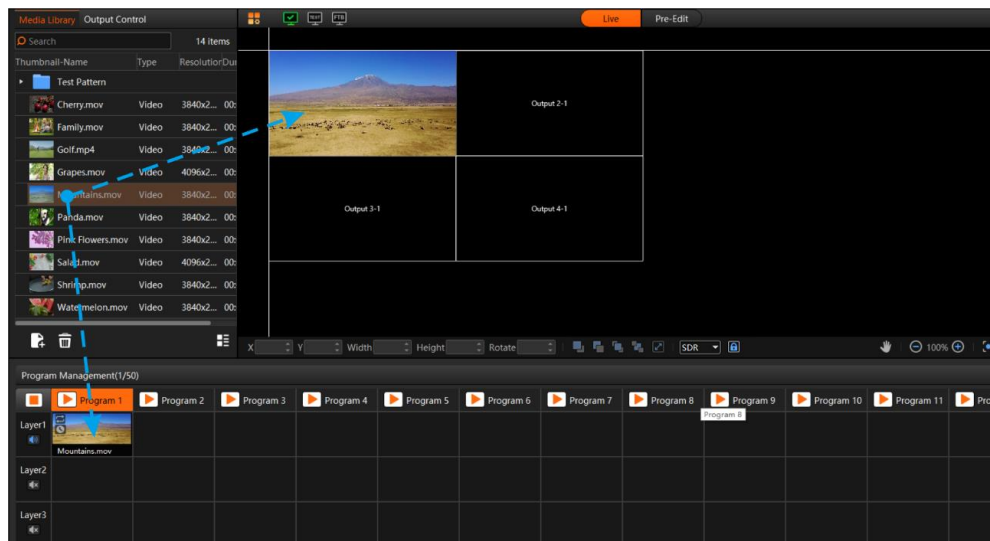
The playback unit of Kompass FX2 is a program. Each program supports at most four layers and one audio.

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 5-26 Edit programs



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

Figure 5-27 Adjusting layers



- 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:
 - : Bring the selected layer forward.
 - : Send the selected layer backward.
 - : Bring the selected layer to front.
 - : Send the selected layer to back.
 - : Make the selected layer fill the output area.

- Step 3 Set the rendering mode for the image displayed in the stage editing area.

Select the desired rendering mode below the stage area. The options include **SDR** and **HDR10**.



- SDR: Preview the output image displayed in the stage area in **SDR** format.
- HDR10: Preview the output image displayed in the stage area in **HDR10** format.

Notes:

- Before you configure the rendering mode, go to **Settings > Output Settings** to enable **HDR**.
- When **HDR10** is set, the monitor where the software is installed must support HDR and the HDR playback function is enabled.
- If the monitor does not support HDR and **HDR10** is set, the image may be displayed abnormally such as exposure, but the output will not be affected.

Step 4 Set whether to play the layer audio.

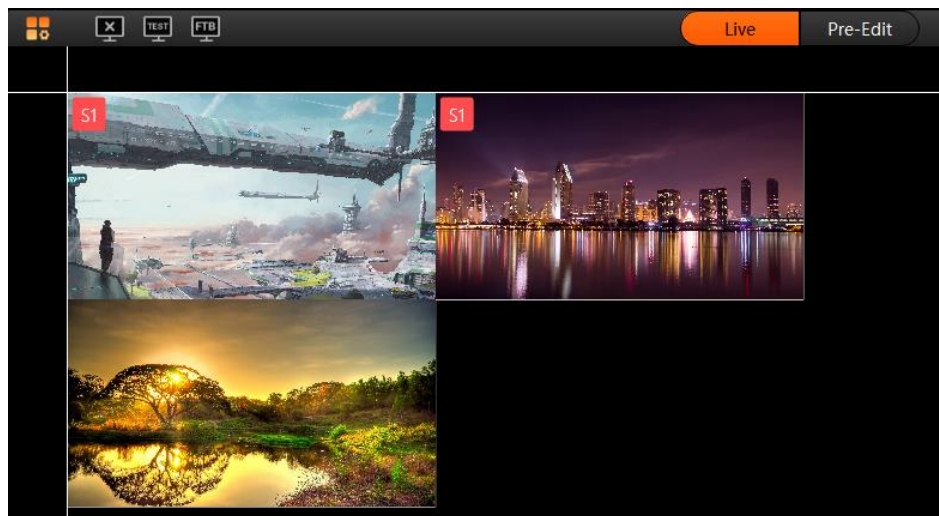
Click the audio icon in the **Layer** column on the left of the program columns to set whether to play the layer audio.

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

Step 5 Group the media.

1. In the stage editing area, select the target media.
Press the **CTRL** key and click the mouse to select multiple media.
2. 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 5-28 Layer group

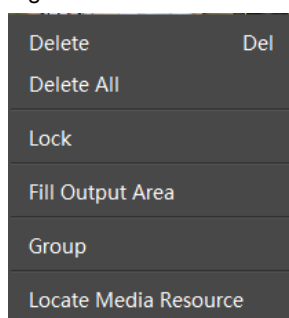


Step 6 Lock the layer media.

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


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

Figure 5-29 Lock media



4. 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, and the layer input source cannot be replaced.
 - Right click the locked layer and select **Unlock** to unlock the layer.

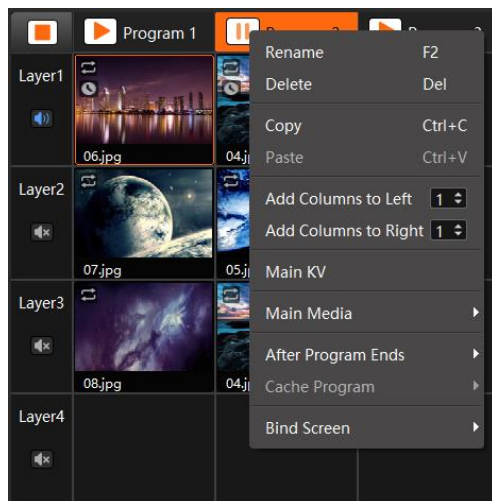
Notes:

- 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  to lock the stage to avoid the 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 pop up the context menu as shown in the following, and you can set the program properties as needed.

Figure 5-30 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.
- **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 newly-added 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, including the position, rotation,

locking, sound channel mapping, graphics card mapping, start playing and stop playing settings, and layer grouping of each layer in main KV.

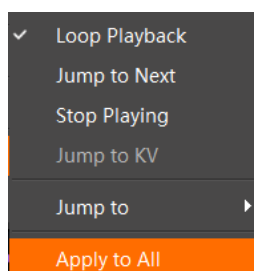
- If you set KV program after you add the layers to an empty program, the layers will not follow the layer style and properties in the KV program.
- **Main Media:** Set which layer is used as the main media. The playback timing and program switching are all based on the main media.

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** 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**.
 - **Main Media** does not support the cross program continuation function.
-

- **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.
 - Bind Screen: Associate the program with the screen.

After binding programs to the screen, in the VICP app, you can view different programs bound to different screens, and switch programs more swiftly.

5.4.3 Play Programs

After completing the program editing, play the programs through either of the following two methods.

- Click  next to the program name in the **Program Management** area.
- Click  next to the program name in the **Playback** area.
- Click  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:

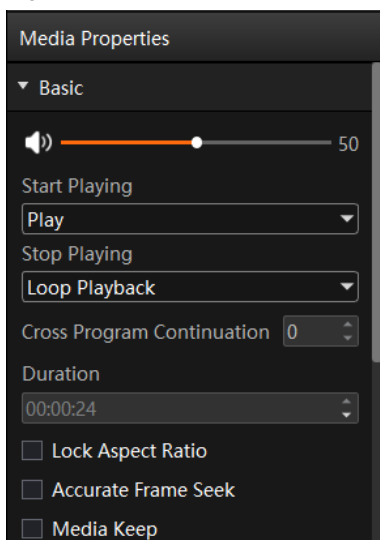
If there are no PowerPoint files in the playlist and the PowerPoint file playback mode is disabled, you can use the arrow keys, **Page Up** and **Page Down** keys on the keyboard to switch programs, and press the space key to start the playback.


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 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 5-31 Basic properties



- Volume adjustment: Adjust the output volume of the program media.
- Start Playing: Configure the state of the current media upon starting playback.
 - Play: The media enters directly into normal playback mode after the program begins.
 - Hold on First Frame: The media remains frozen at the first frame while the program starts playing, and can be resumed by clicking  next to the media name in the **Playback** area in the top right corner.
- 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. When the media file type is picture, this option is unavailable.
 - Stop Playing: The playback will be stopped after the playback ends. When the media file type is audio, this option is available.
- Cross Program Continuation: Enable the feature of cross program continuation, so that selected media will continue playing seamlessly when switching between programs. Once cross program continuation is set, the media will play according to its normal progress without restarting from the beginning due to program switching.

Input a numerical value in the text box to determine the number of programs in which the selected media will continue playing after its original program ends.
- Duration: View or set the playback duration of the media.
 - Go to **Settings** > **Output Settings** to set the default playback duration.
 - The media collections and videos do not support duration settings.

- Apply to All: Apply the set playback duration to all the media of the same type in the added programs, so that the playback duration of the media of the same type can be changed at a time.
- 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.
- Media Keep: Check or uncheck the box to enable or disable the function.
 - When enabled, the media will continue playing from the last position in the previous playback after program switching.
 - When disabled, the media will start playing from the beginning after program switching.

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.
-

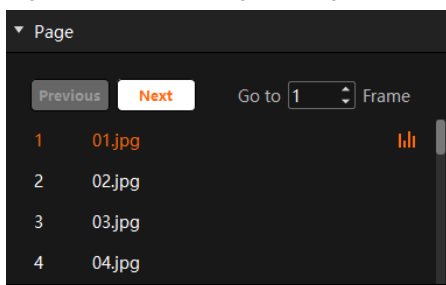
5.4.5 Flip Pages

When the media type is Word, Excel, PDF, PowerPoint, or image sequence with a manual playback mode, manual page flipping is required.

For Image Sequences

Select an image sequence with a manual playback mode, and click **Page** in the **Media Properties** area on the right side to expand the page flipping interface.

Figure 5-32 Manual page flipping



Page flipping can be done in the following ways:

- Click **Previous** or **Next** to view the previous or next image.
- Enter a number in the text box next to **Go to** to jump to and play the corresponding image.
- Double click the name in the list below to directly switch to and play the corresponding image.

For Excel Files

Select an Excel media, and click **Page** in the **Media Properties** area on the right side to expand the page flipping interface.

Figure 5-33 Excel page flipping



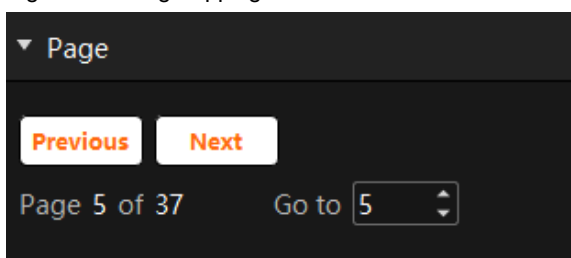
The functionality of the page flipping buttons differs depending on the playback mode set in **Settings > Output Settings**.

- When the Excel playback mode is set to **Native** or **Animation**, manual page flipping methods are as follows:
 - : Click it to move leftward, with each click moving one column.
 - : Click it to move rightward, with each click moving one column.
 - : Click it to move upward, with each click moving one row.
 - : Click it to move downward, with each click moving one row.
 - : Click it to flip up, with each click flipping one page up.
 - : Click it to flip down, with each click flipping one page down.
 - : Click it to switch the Sheet page of the Excel table, with each click moving to one Sheet page to the left.
 - : Click it to switch the Sheet page of the Excel table, with each click moving to one Sheet page to the right.
- When the Excel playback mode is set to **Picture**, manual page flipping methods are as follows:
 - / / : Each click flips one page up.
 - / / : Each click flips one page down.

For Other Files

When the media type is Word, PDF, or PPT, the page flipping interface appears as follows:

Figure 5-34 Page flipping



- Click **Previous** or **Next** to view the previous or next page.
- Enter a page number in the text box next to **Go to** to jump to the specified page.

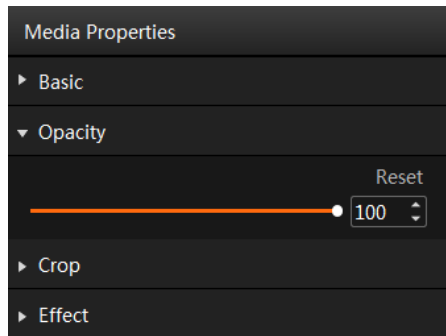
5.4.6 Set Layer Opacity

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 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 5-35 Set layer opacity



- 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.

5.4.7 Set Layer Color

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

Figure 5-36 Layer image quality

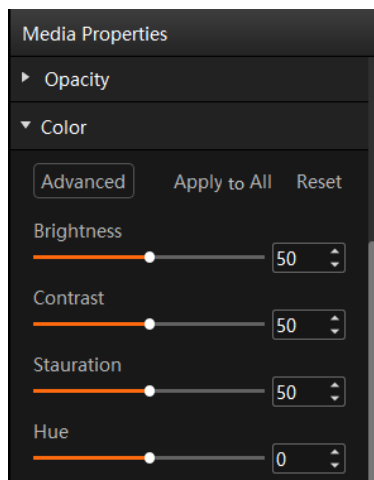


Table 5-1 Color parameters

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.
Reset	Reset all the color parameters to defaults.

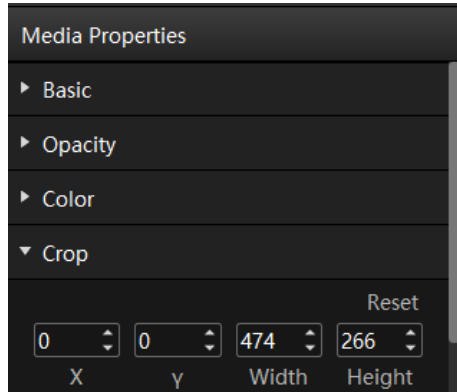
5.4.8 Crop Layers

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

Step 1 Click the playing media in the **Program Management** area or 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 5-37 Crop layers



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 input source image.
 - Y: Set the distance between the top edge of the cropped area and the top edge of the input source image.
- 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 5-38 Cropping



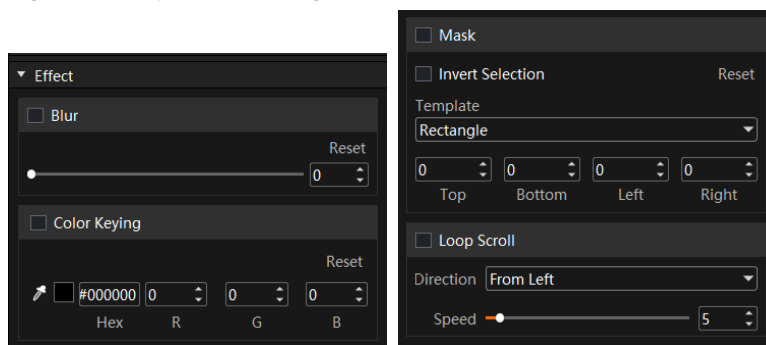
5.4.9 Set Layer Effects

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

Step 1 Click the playing media in the **Program Management** area or 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.

Figure 5-39 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  and select the color area to be removed.
- Step 2 Pick the desired color.

After the color is selected, the picked color, the color Hex and RGB values are displayed next to , 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.

Loop Scroll

Enable media scrolling in a continuous loop. Media will scroll in the specified direction with adjustable speed.

Step 1 Select the media that you want to configure for scrolling.

Step 2 In the **Effect** section of the media properties, check the box next to **Loop Scroll** to activate scrolling playback for the media.

Step 3 Specify the scrolling direction for the media.

Choose from four scrolling modes: **From Left**, **From Right**, **From Top** and **From Bottom**.

Step 4 Adjust the scrolling speed.

The value ranges from 1 to 100, with a default setting of 5.

You can manually drag the adjustment bar or enter the desired numerical value in the adjacent text box to set the scrolling speed.

5.4.10 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.

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**.

5.4.11 Set Sound Channel Mapping

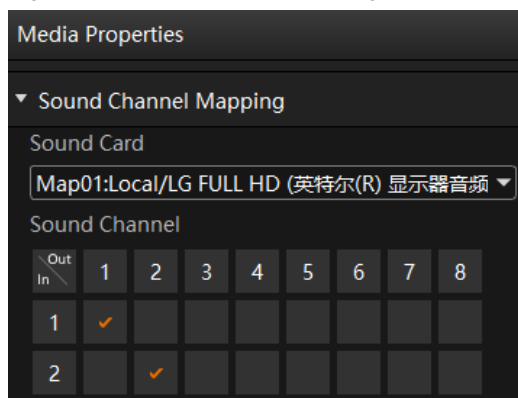
You can configure the sound card for the layer media to output the media audio from different sound cards.

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 5-40 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 FX2. Please refer to [6.5 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.

Note:

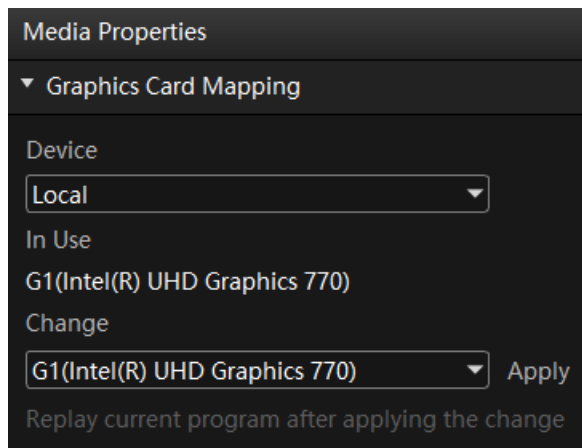
After you set the sound channel and re-install the sound card, the configured parameters of the sound card will be applied to a new card automatically.

5.4.12 Set Graphics Card Mapping

Set the rendering graphics card for the layer media.

- Step 1 Click the playing media in the **Program Management** area or in the **Output** area to select the media.
- Step 2 Select **Graphics Card Mapping** in the **Media Properties** area on the right side to set the related parameters.

Figure 5-41 Graphics card mapping



- Step 3 Select the media output device from the drop-down list below **Device**. The options include the local and slave device.
- Step 4 View the graphics card used by the current media below **In Use**.
- Step 5 Select the rendering graphics card from the drop-down list below **Change**.
- Step 6 Click **Apply** to complete the settings.

Notes:

- The media server where Kompass FX2 is installed has multiple graphics card, the rendering graphics cards will display at the bottom left corner of the layer, such as G1 and G2.
- The graphics card display area in green indicates that the layer rendering graphics card is the same as the graphics card of the output connector and the output is normal.
- The graphics card display area in red indicates that the layer rendering graphics card is not the same as the graphics card of the output connector and there is no output.
- When the media resolution is greater than that of the mosaic graphics cards and multiple graphics cards are required for mosaic output, you need to use the layer mosaic and configure the matched rendering graphics card for each layer.

5.4.13 Set Scheduled Programs

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


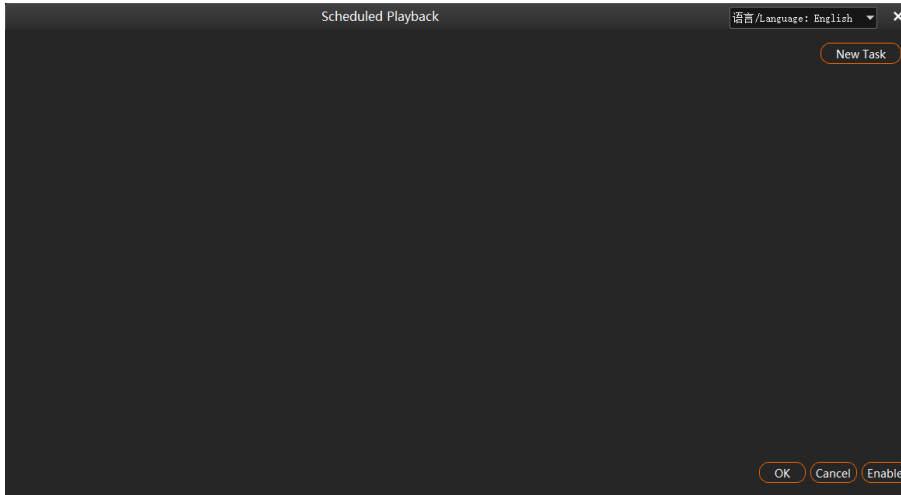
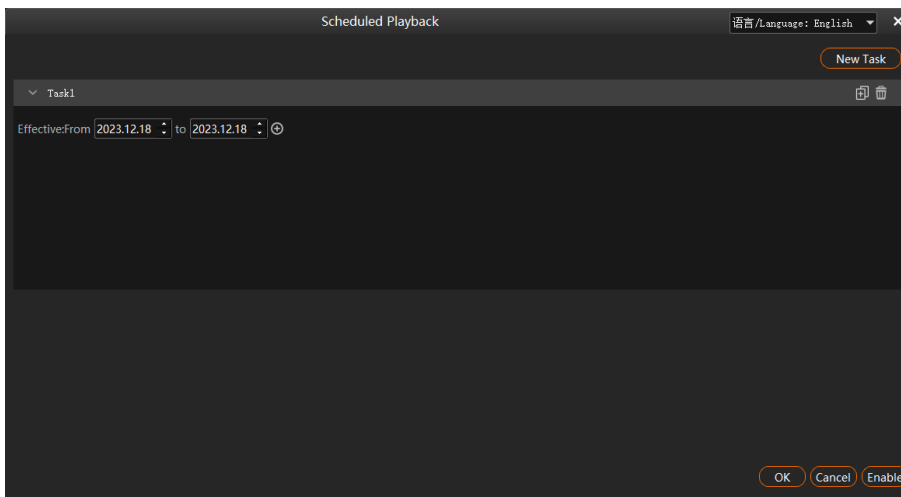
- Step 1 Click  > **Edit Scheduled Playback** at the bottom right of the main user interface to open the **Scheduled Playback** window.

Figure 5-42 Scheduled programs



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

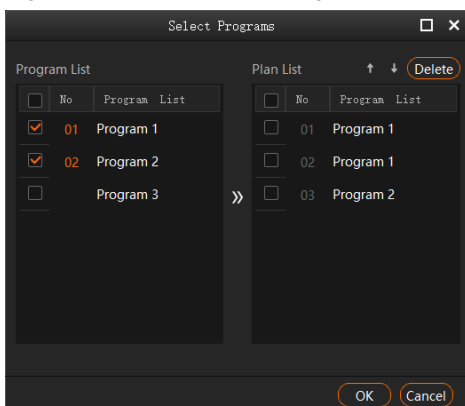
Figure 5-43 Playback tasks



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.



Figure 5-44 Set scheduled programs



1. Select the desired programs in the **Program List** area on the left.

2. Click **>>** to add the selected programs to **Plan List**.

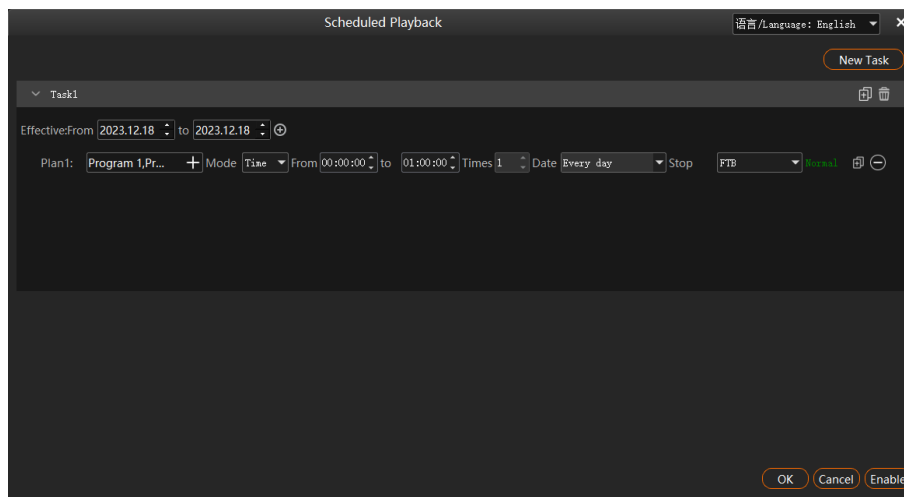
The programs will be played according to the sequence (from top to bottom) in the **Plan List** area.

If you want to adjust the playback sequence, check the box next to the desired program and click  or  to adjust the sequence of the selected program. Only one program sequence can be adjusted at a time.

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

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

Figure 5-45 Set playback tasks



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

- Time: The programs will be played by their 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.

1. Set the automatic start time of the program in the **From** area.
2. 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.
- Step 13 Click **OK** to finalize the program scheduling.
- Step 14 Go to  > **Enable Scheduled Playback** in the bottom right corner of the main interface to enable scheduled playback.

Notes:

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

Other Operations


- Delete plans

In the **Scheduled Playback** window, click  next to the desired plan to delete the plan.


- Delete tasks

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


- Edit plans

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


- Create task copies

Click  located on the right side of the task to quickly create a task copy. By expanding the copied task, you will be able to modify the related information.

- Create plan copies

Click  located on the right side of the plan to quickly create a plan copy. By expanding the copied plan, you will be able to modify the related information.

- Disable scheduled playbacks

Go to  > **Disable Scheduled Playback** in the bottom right corner of the main interface to halt the scheduled playback.

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 (*.ftsp) to your local storage.

The project file includes the following information:

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

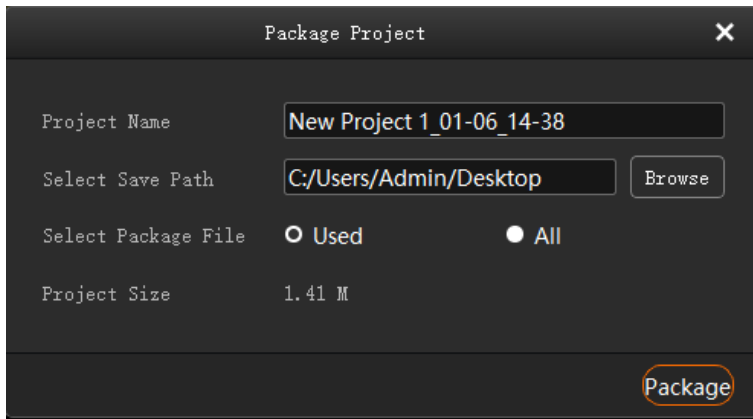
5.6 Package Projects

You can save the edited project and the imported media files as an independent project file for easy and convenient use on any computer 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 5-46 Package projects



- 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

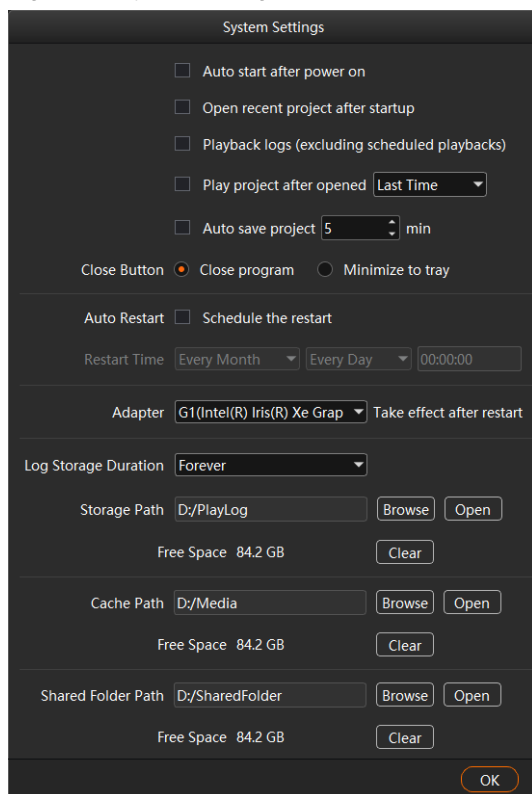
Step 3 Click **Package**.

6 Settings

6.1 System Settings

Set the startup-related settings. Go to **Settings > System Settings** to pop up the **System Settings** window.

Figure 6-1 System settings



- Auto start after power on:
 - Selected: Kompass FX2 will be started automatically when OS starts.
 - Deselected: Kompass FX2 will not be started when OS starts.
- Open recent project after startup:
 - Selected: The recently-opened project will be opened when Kompass FX2 starts.
 - Deselected: A new project will be created when Kompass FX2 starts.
- Playback logs: Set whether to record the playback logs.
 - Selected: The playback logs will be recorded automatically.
 - Deselected: If the scheduled playback is disabled, the playback logs will not be recorded. If enabled, the playback logs will be recorded.
- Play project after opened:
 - Selected with specified program: The specified played project will be played automatically when Kompass FX2 starts.
 - Last time: Play the program that was playing in Kompass FX2 before it was last closed.
 - Program n: Play the specified program when Kompass FX2 starts.
 - Deselected: No project will be played when Kompass FX2 starts.
- Auto save project:
 - Selected: The project file will be automatically saved according to the set time interval. The time interval ranges from 1 to 30 minutes and defaults to **5 minutes**.
 - Deselected: The project file will not be saved automatically and you need to save it manually.
- Close Button: The status of Kompass FX2 when you click **Close** at the top right
 - Close Program: You will directly exit the program and no image will be output.
 - Minimize to tray: The program will be minimized to tray and the image will be output normally. Click the program icon in the tray and then the program will be displayed on your desktop.
- Auto Restart: Schedule the restart time for Kompass FX2.
 - Selected: Kompass FX2 will be restarted automatically according to the set time.

A restart prompt appears 10 seconds before the restart time. You can restart the software or cancel the restart. If the software runs automatically for a long time, it is recommended to set the restart time to ensure that the software runs well.

- Deselected: Kompass FX2 will not be restarted automatically.
- Adapter: Select the adapter for the video rendering in the stage editing area. After the selection, you must restart the server where Kompass FX2 is installed to apply this configuration.
- Log Storage: Set the save duration for the playback logs. The supported options include **1Month**, **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.
- Shared Folder Path: Set a shared folder locally and share the folder to other users on the same network segment. The user can add the media to the folder and the added media will be automatically displayed in the **Media Library** area. Add the desired media to the **Program Management** area and play it. A remote shared folder can also be added.
 - Click **Browse** to select the shared folder path.
 - Click **Open** to open the shared folder.
 - Click **Clear** to clear the files under the shared folder.

Note:

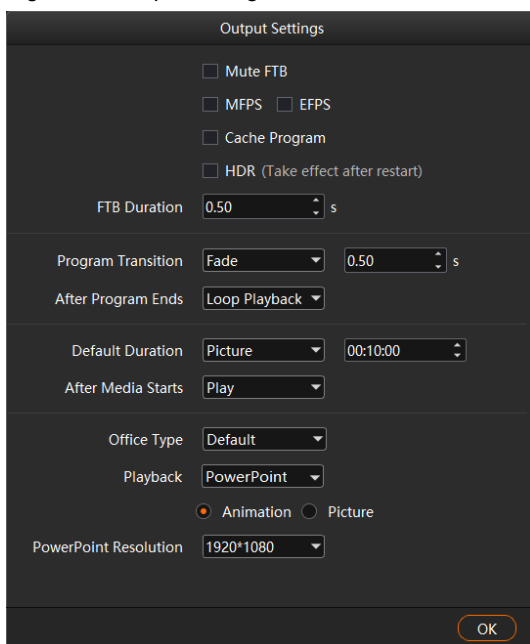
If the media under the shared folder is added to the program and media collections, after you delete the files under the shared folder path, the media saved in the program and media collections will also be deleted.

6.2 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 6-2 Output settings



- 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.

- 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 in the editing area.
 - 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.
- HDR: Set whether to support the HDR rendering.
 - Selected: The HDR rendering is supported. When the HDR rendering is performed, you need to enable **HDR10** below the stage editing area or in the output adding window.
 - Deselected: The HDR rendering is not supported.
- FTB Duration: Set the time length the FTB process lasts. The value range is 0.00 to 10.00s and it defaults to **0.50s**.
- 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 0.00 to 10.00s and it defaults to **0.50s**.
- 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.
- Default Duration: Select the desired media type, and then set the default playback duration for the media of the selected type.
- Office Type: Select the application program that will be used to open the PowerPoint or Excel files.
 - Default: The PowerPoint or Excel files will be opened in the default tool of your media server.
 - Microsoft Office: The PowerPoint or Excel files will be opened in Microsoft Office.
 - WPS Office: The PowerPoint or Excel files will be opened in WPS Office.
- Playback: Set the playback mode for the PowerPoint or Excel files.
 - Animation:
 - For the PowerPoint files, the animation effects will be shown during the slide switching.
 - For the Excel files, one can navigate between columns and rows by means of page flipping.
 - WPS Office does not support this mode.
 - Picture: The files are shown and switched as pictures.
 - Native: The default mode of Excel, exclusively supported by Excel, allows for switching between rows, columns, and sheet pages.
- PowerPoint Resolution: Select the desired output resolution of the PowerPoint file.

6.3 Multiple Displays

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

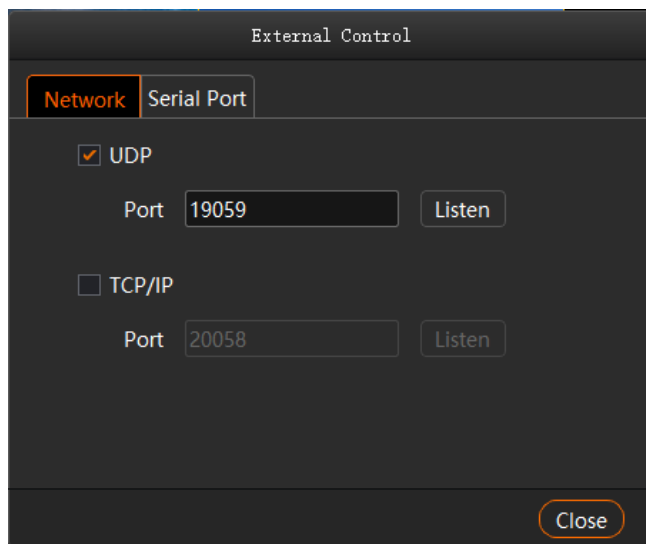
- Duplicate: All the connected displays output the same content.
- Extend: The connected displays output the different contents. The extend mode is the default option.

6.4 External Control

Kompass FX2 supports remote control and control via a control device, allowing users to manage Kompass FX2 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 6-3 External control



6.4.1 Control via Network

For control via a network, Kompass FX2 supports remote control via UDP and TCP/IP protocols.

Go to **Settings > External Control** to open the **External Control** window shown in [Figure 6-3](#).

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 FX2.
The UDP port number ranges from 1024 to 65535 and defaults to 19059.
- Step 3 Click **Listen**. Kompass FX2 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

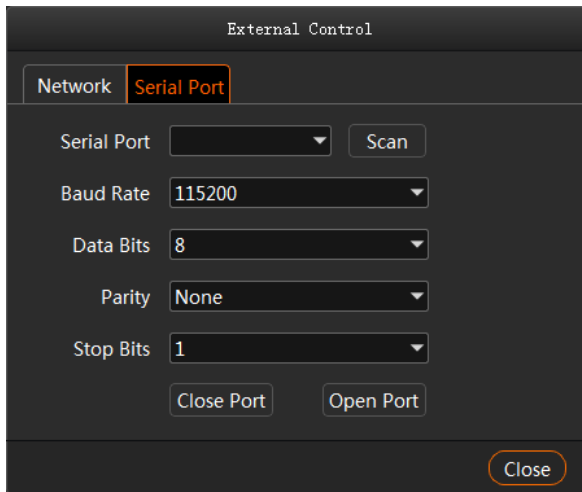
- Step 1 Select **TCP/IP** to enable TCP/IP control.
- Step 2 In the text box next to **Port**, enter the TCP/IP port number of Kompass FX2.
The TCP/IP port number ranges from 1024 to 65535 and defaults to 20058.
- Step 3 Click **Listen**. Kompass FX2 will automatically check whether the port number 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.

6.4.2 Control via Serial Port

To control Kompass FX2 via serial port, use a serial cable to connect the control device to the computer where Kompass FX2 is installed.

Step 1 Go to **Settings > External Control > Serial Port** to open the window shown in [Figure 6-4](#).

Figure 6-4 Serial port control



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 FX2.

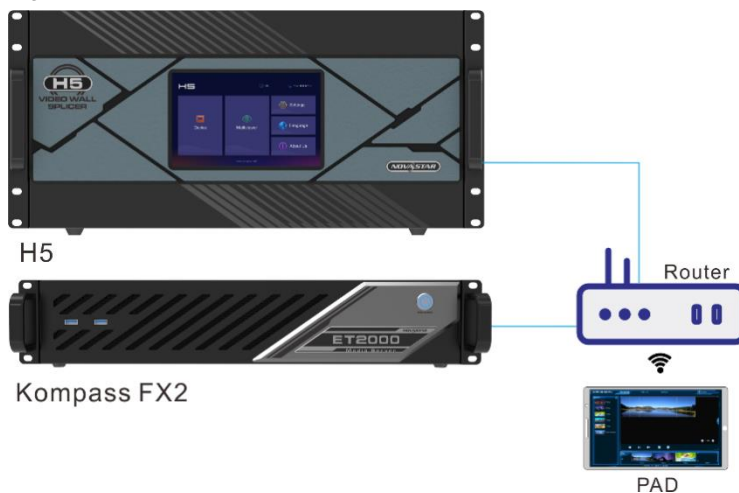
Step 5 Click **Open Port** to finish serial port settings.

Step 6 Click **Close** to close the **External Control** window.

6.4.3 Control via App

Kompass FX2 built in a media server can be controlled via an App named Visual Intelligent Control Platform (VICP). The connections for App control are as follows.

Figure 6-5 Connections for App control



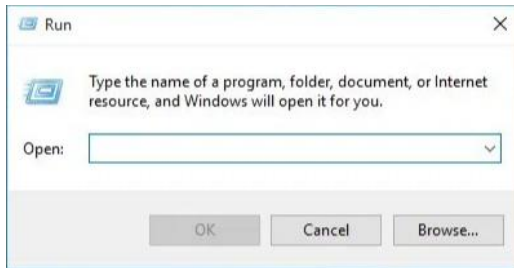
Connection Requirements

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

Media Server Configuration

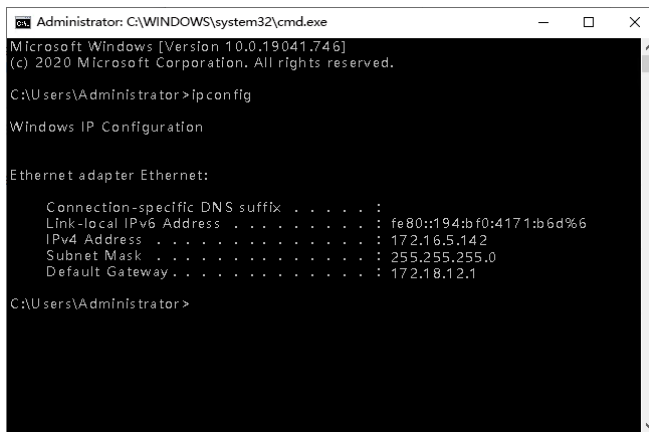
- Obtain the IP address of the media server.
 1. On the media server, press **Win** and **R** keys simultaneously to open the **Run** command dialog window.

Figure 6-6 Run command window



2. Type "cmd" in the search box and then press **Enter** to open the command prompt.
3. Type "ipconfig" and then press **Enter** to show the device IP address.

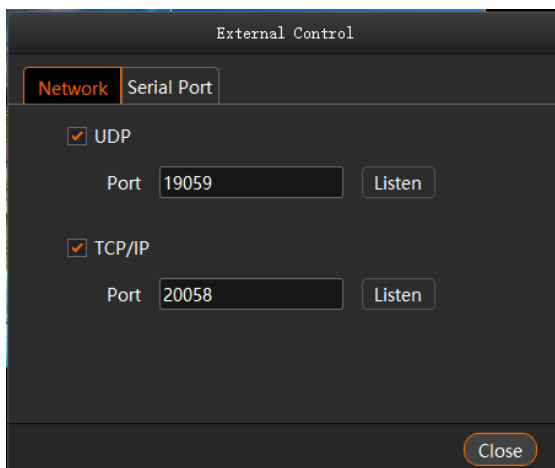
Figure 6-7 Obtain the IP address of the media server



IPv4 address indicates the IP address of the media server.

- Configure the listening port of the media server.
 1. Run Kompass FX2 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**.

Figure 6-8 Port settings



- 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.

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

Note:

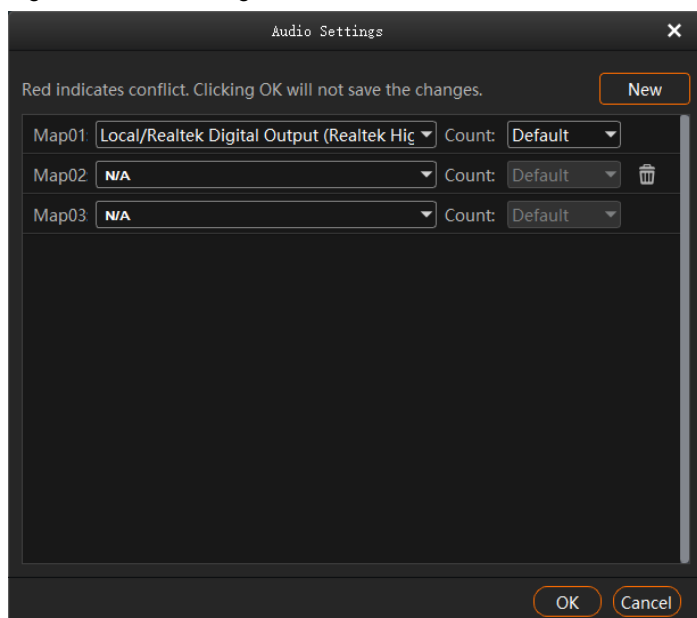
When you use the App for device control, please refer to the App user manual for operation details.

6.5 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 6-9 Audio settings



- 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 FX2 supports hot plugging of sound card devices without the need to restart the software.
- 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.

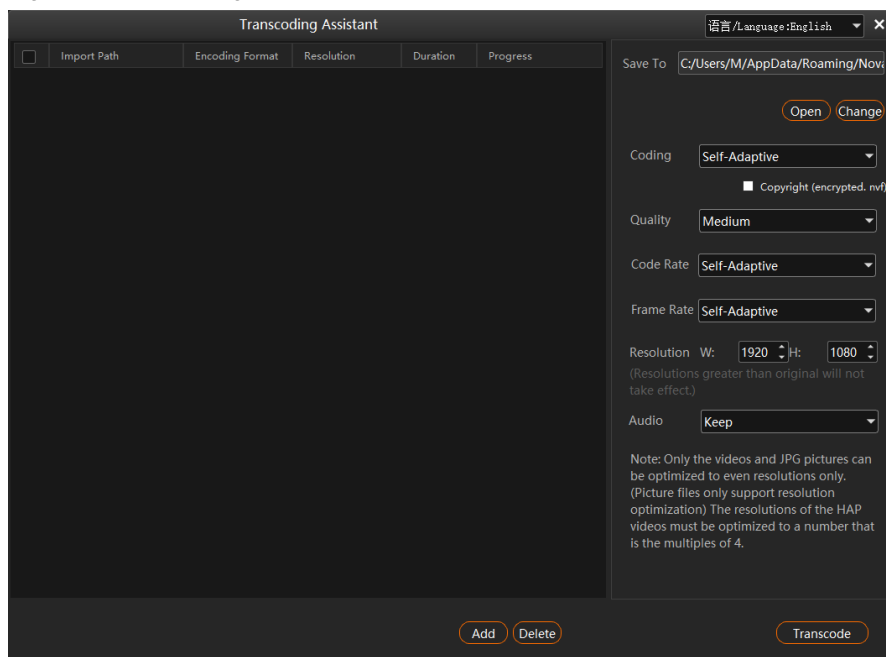
7 Help

7.1 Transcoding Assistant

Kompass FX2 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 7-1 Transcoding assistant



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 8192 (recommended).
 - H: Set the vertical size of the transcoded video. The value defaults to 1080 and can reach a maximum value of 8192 (recommended).
- **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.
- Keep Alpha Channel: Set whether to train the original alpha channel for the HAP videos.
 - Selected: Retain the alpha channel information for the HAP video.
 - Deselected: Do not retain the alpha channel information and the system will automatically fill in the alpha channel.

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.

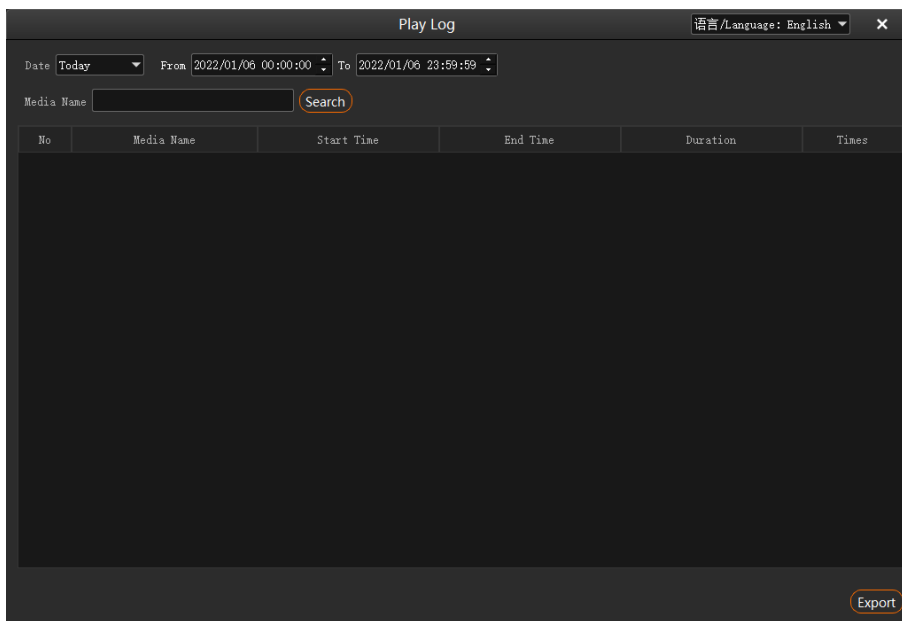
- Click **Change** to change the save path.
- Click **Delete** at the bottom to delete the selected video files.

7.2 Play Log

Kompass FX2 supports the automatic statistics of the playback logs. When you select a certain date, time 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.

Figure 7-2 Play log



Step 2 Click **Date** and select the desired time. 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 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.

7.3 User Manual

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

7.4 About

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

8 Language

Kompass FX2 supports two interface languages: English and Chinese. You do not need to restart the software after the UI language changes.

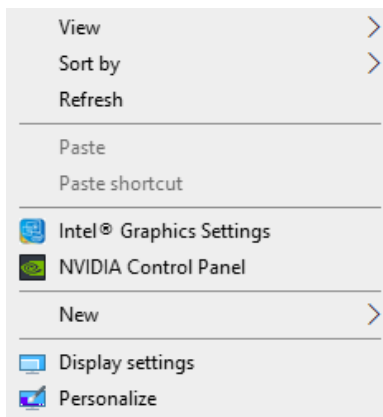
- Go to **语言/Language > English** to set the UI language to English.
- Go to **语言/Language > 中文** to set the UI language to Simplified Chinese.

9 Graphics Card Mosaic

9.1 Set Main Display

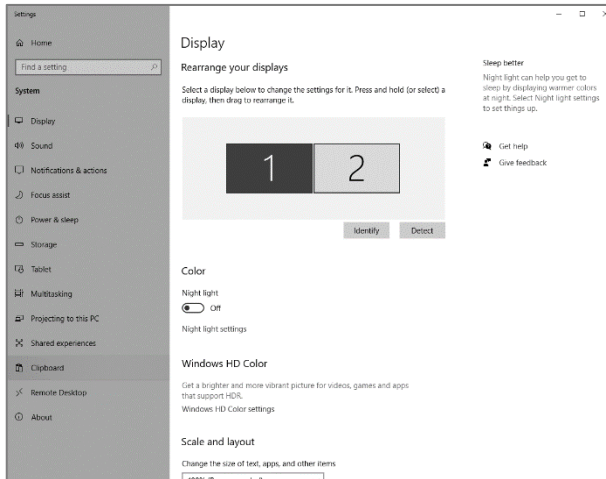
Step 1 Right click on your desktop and select Display settings.

Figure 9-1 Display settings



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

Figure 9-2 Multiple displays-1

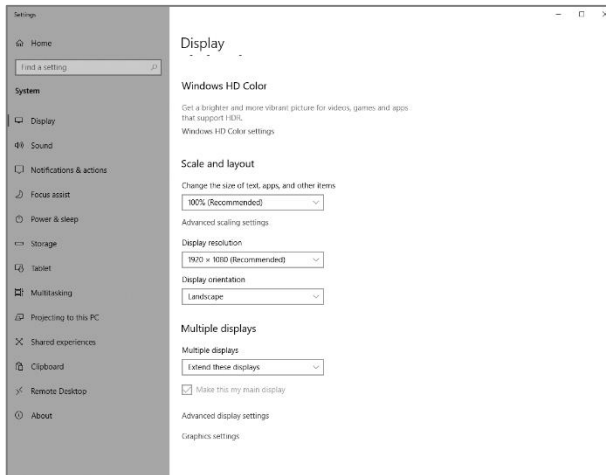


Note:

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

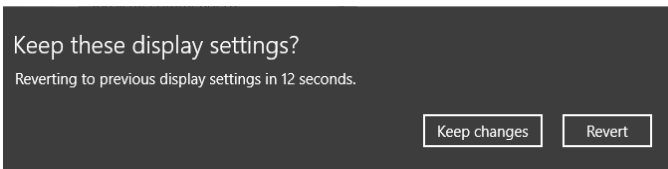
Step 3 For the Multiple displays item, select Extend these displays.

Figure 9-3 Multiple displays-2



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

Figure 9-4 Confirmation



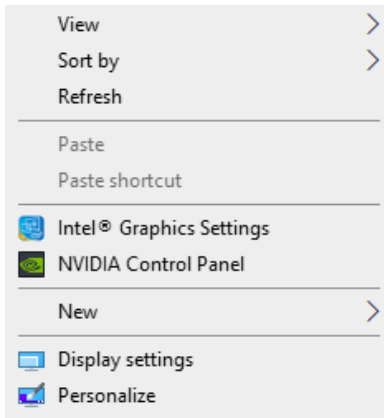
Step 5 Check the box next to Make this my main display.

9.2 Change Resolutions

9.2.1 Set Standard Resolutions

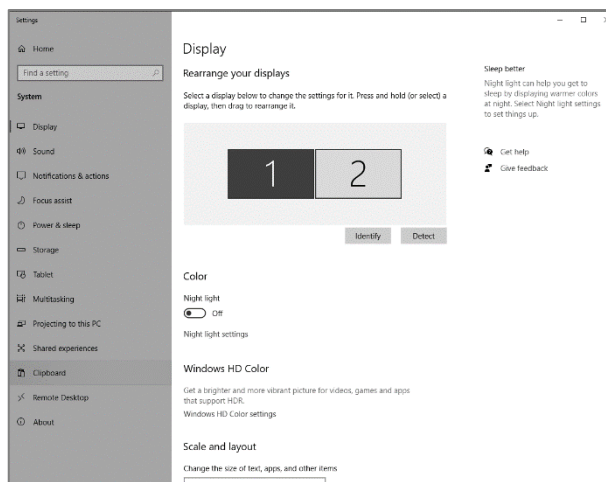
Step 1 Right click on your desktop and select **Display settings**.

Figure 9-5 Display settings



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

Figure 9-6 Multiple displays-1

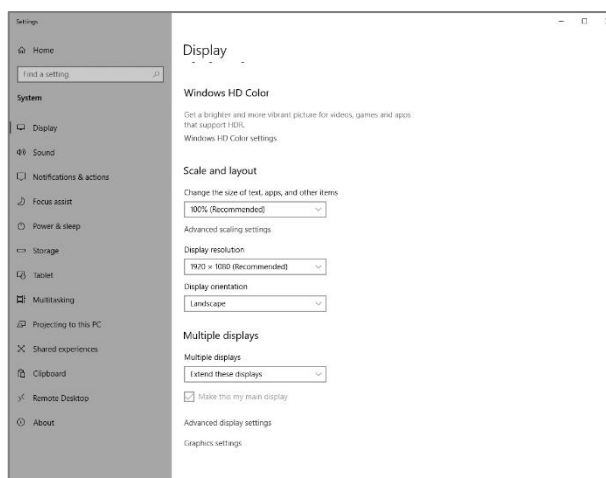


Note:

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

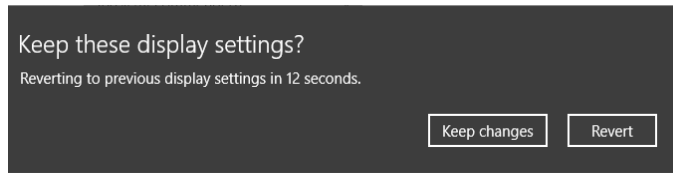
Step 3 For the **Display resolution** item, select the desired output resolution.

Figure 9-7 Multiple displays-2



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

Figure 9-8 Confirmation

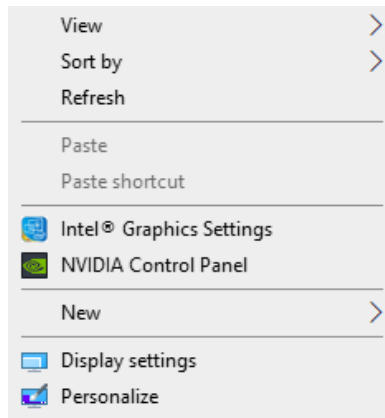


Step 5 Repeat [Step 2](#) to [Step 4](#) to complete the resolution settings for other displays.

9.2.2 Set Custom Resolutions

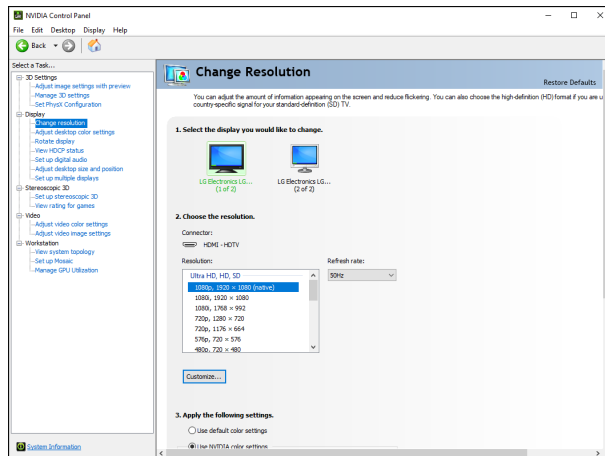
Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 9-9 NVIDIA control panel



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

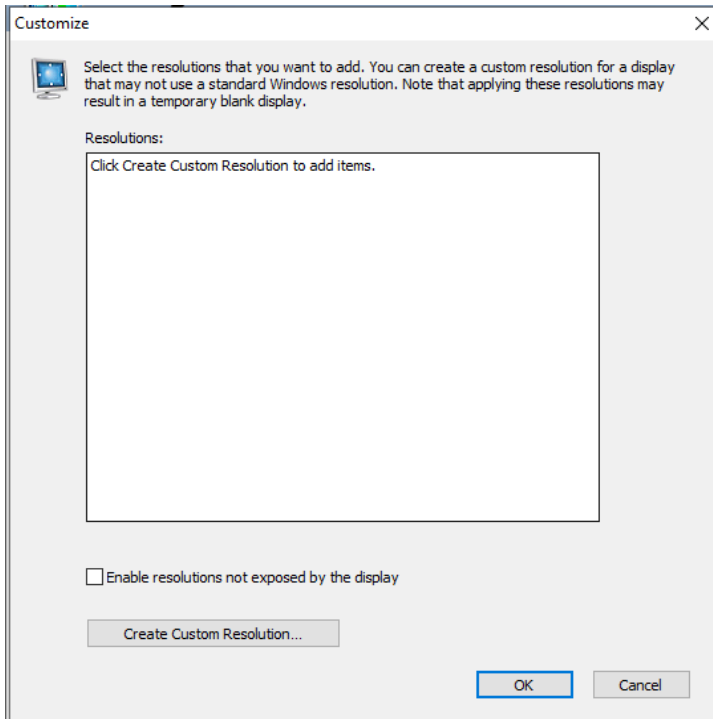
Figure 9-10 Change resolutions



Step 3 Select the desired display.

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

Figure 9-11 Custom resolution-1

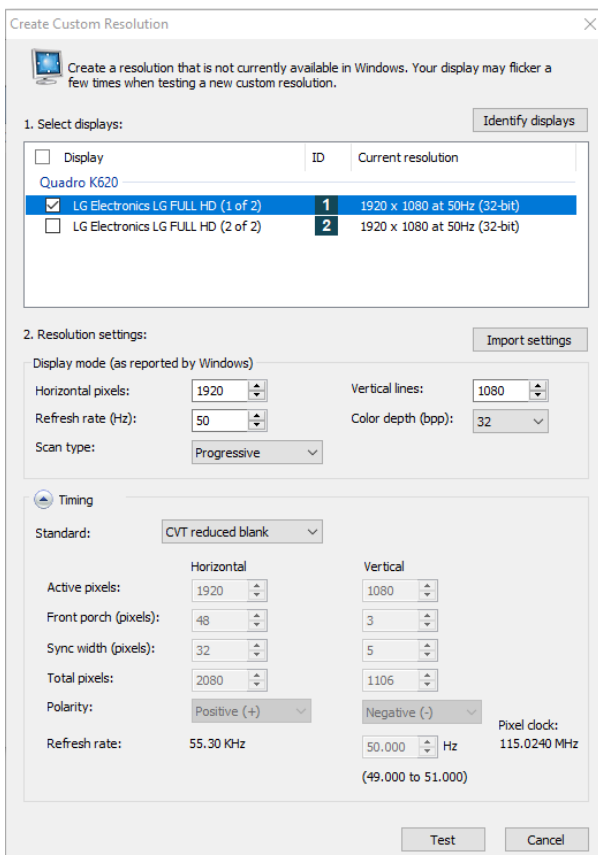


Step 5 Click Create Custom Resolution.

Step 6 Read the disclaimer information carefully and click **Accept** to show the **Create Custom Resolution** window.

Step 7 Select the desired display.

Figure 9-12 Custom resolution-2



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 9-13 Confirmation

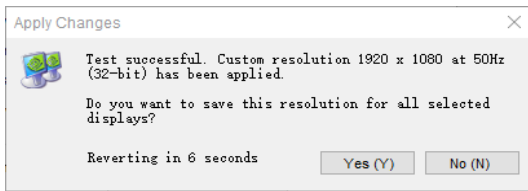
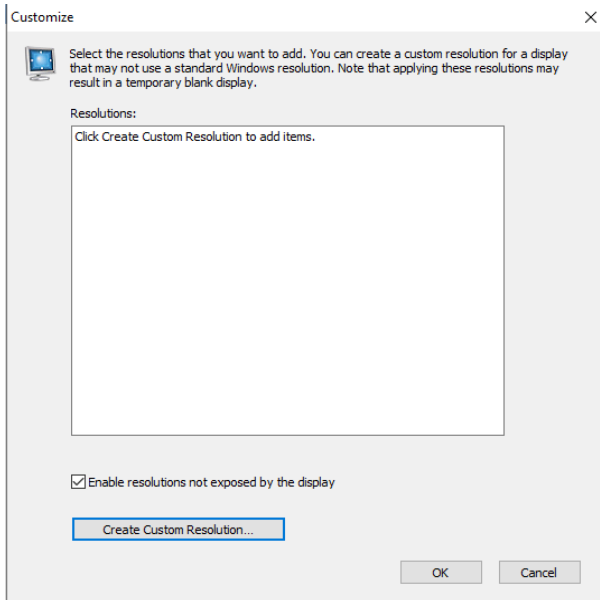


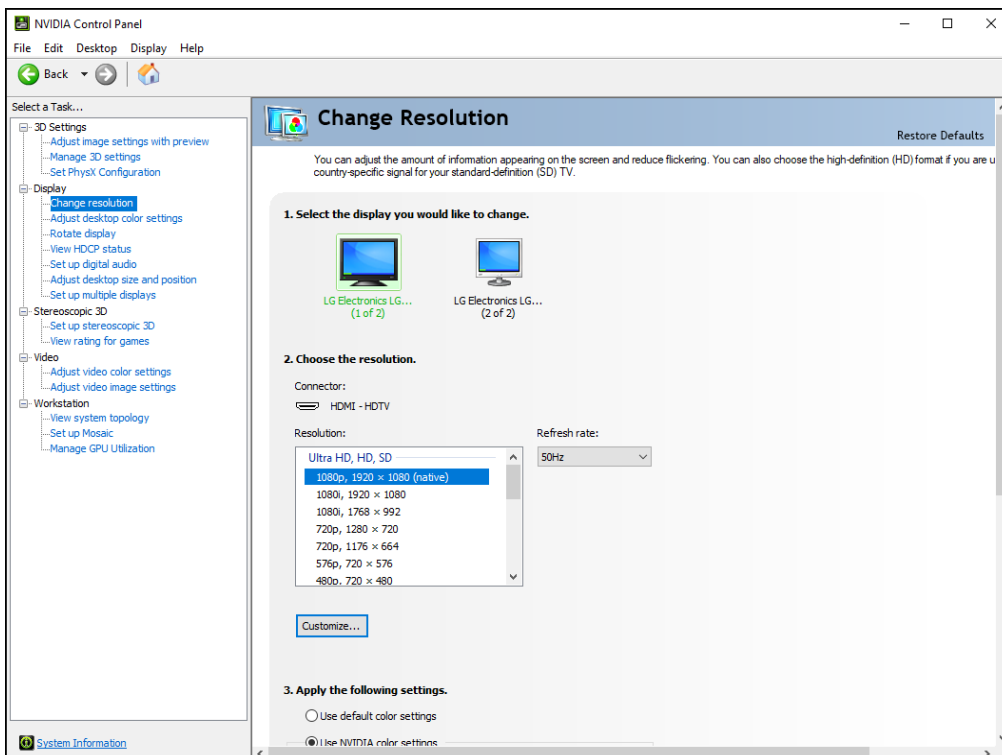
Figure 9-14 Custom resolution-3



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 9-15 Custom resolution-4



9.3 EDID Management

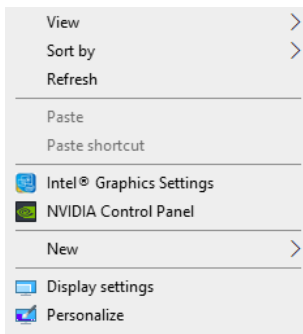
After the display resolution settings, you need to manage the EDID for precise identification of display properties and to avoid the on-site screen display disorder.

Load EDID

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

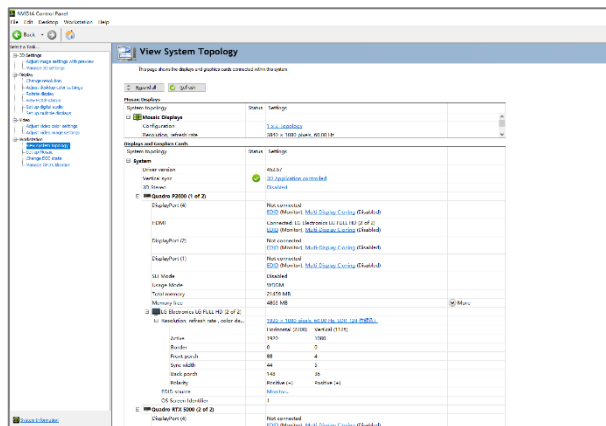
- Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 9-16 NVIDIA control panel



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

Figure 9-17 NVIDIA control panel



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

Figure 9-18 EDID (Monitor)

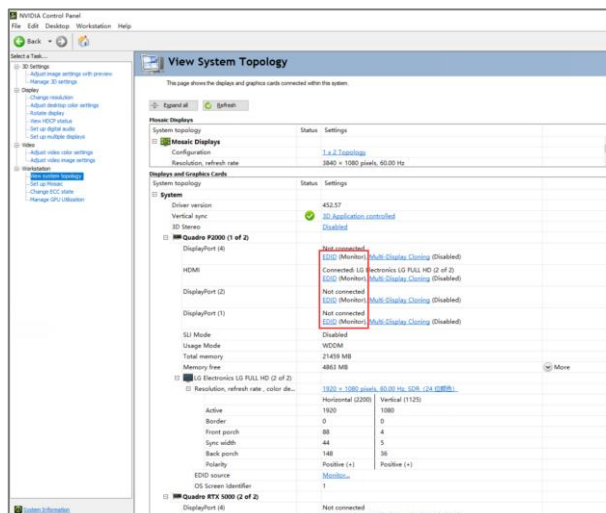
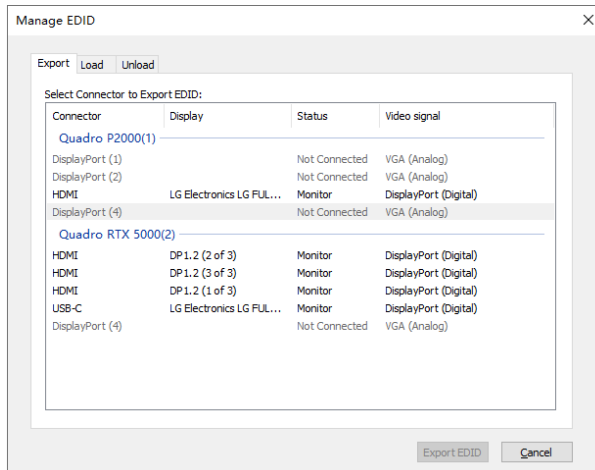


Figure 9-19 Manage EDID



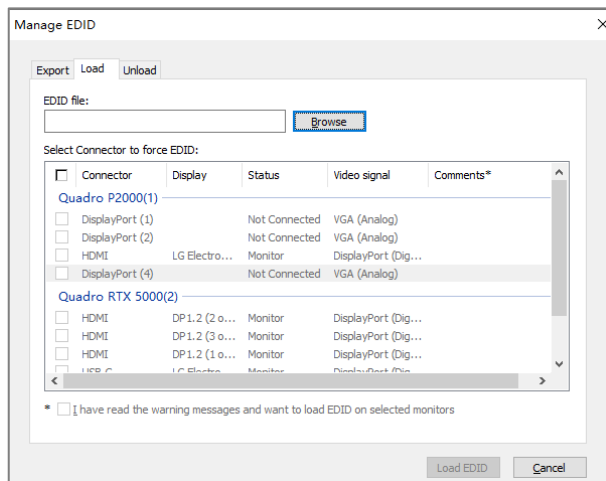
Step 4 Click **Export EDID** and then name the exported EDID file in the window that appears.

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 9-20 Load EDID



Step 8 Click **Load EDID**.

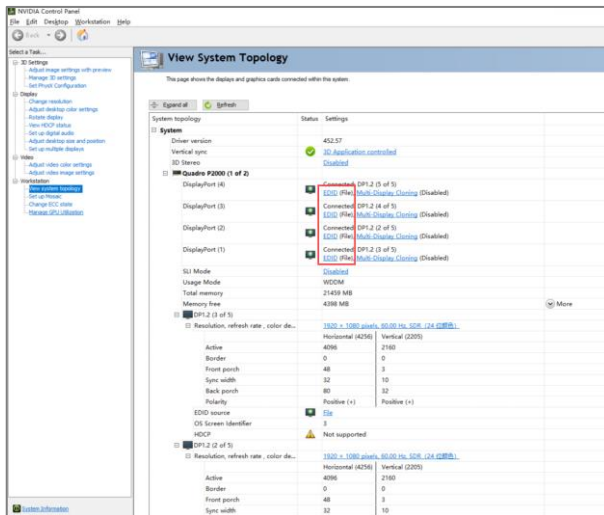
Step 9 On the dialog box that appears, click **OK** to complete loading the EDID.

Figure 9-21 EDID loaded successfully



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 9-22 EDID loaded successfully

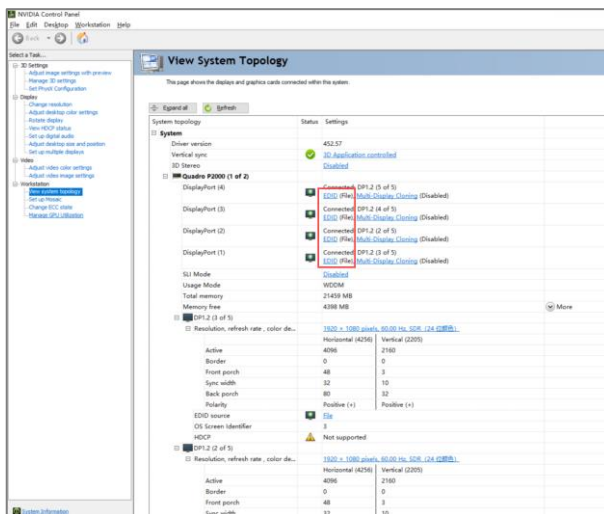


Unload EDID

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

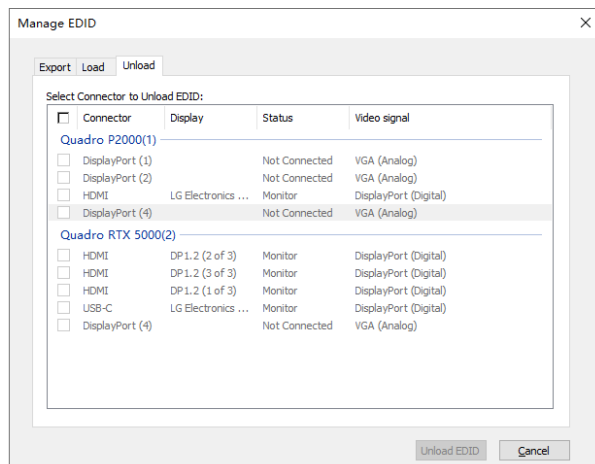
- Step 1 On the NVIDIA Control Panel interface, go to **Workstation > View system topology**.
- Step 2 Click **EDID (File)** to show the EDID management window.

Figure 9-23 EDID (File)



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

Figure 9-24 Unload EDID



Step 4 Click Unload EDID.

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

Figure 9-25 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.

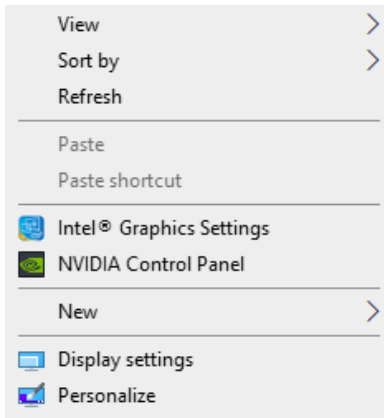
9.4 Output Mosaic

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, 2x1, or 3x1.
- The output resolutions of the graphics card connectors that are used for mosaic must be the same.
- Recommended total mosaic width or height: ≤ 8192 pixels

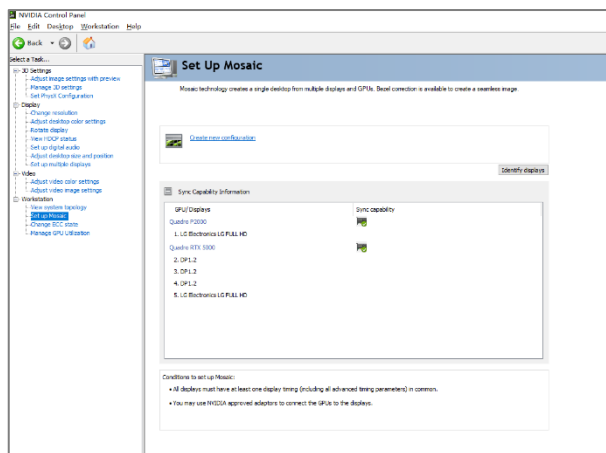
Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 9-26 NVIDIA control panel



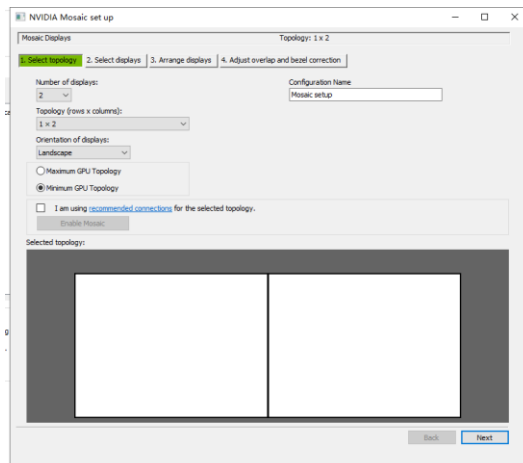
Step 2 On the NVIDIA Control Panel interface, go to **Workstation > Set up Mosaic**.

Figure 9-27 Set up mosaic



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

Figure 9-28 Mosaic settings



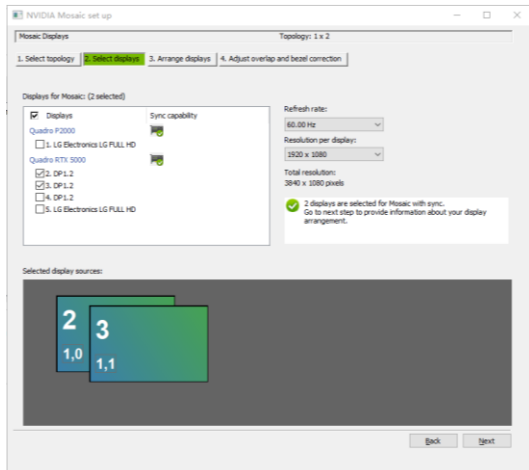
Step 4 Select the screen number from the drop-down list of **Number of displays**.

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.

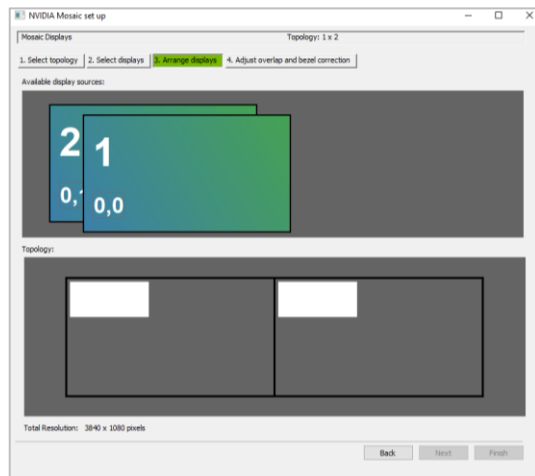
Figure 9-29 Select displays



Step 8 Select the connected displays and then select their refresh rate and resolution.

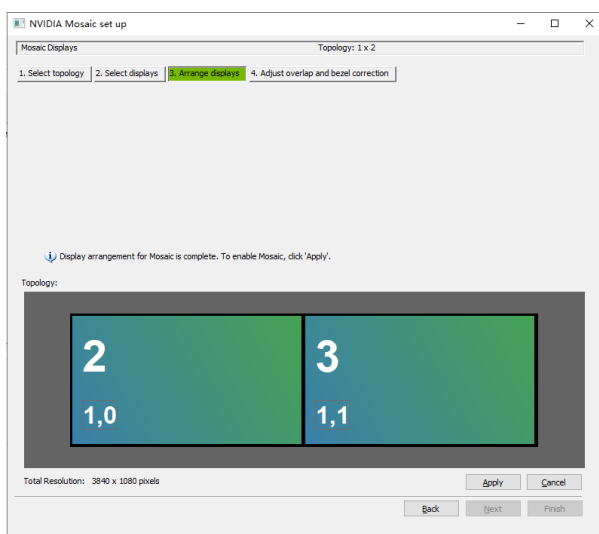
Step 9 Click **Next** to proceed.

Figure 9-30 Arrange displays



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

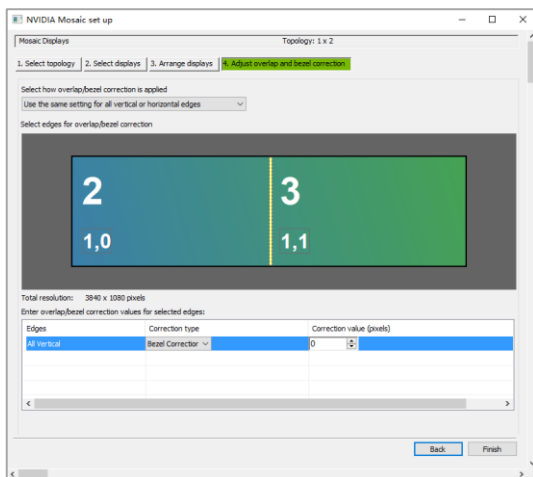
Figure 9-31 Arrange displays



Step 11 Click **Apply** and then click **Yes** on the confirmation window.

Step 12 Click **Next** to proceed.

Figure 9-32 Adjust overlap and bezel correction

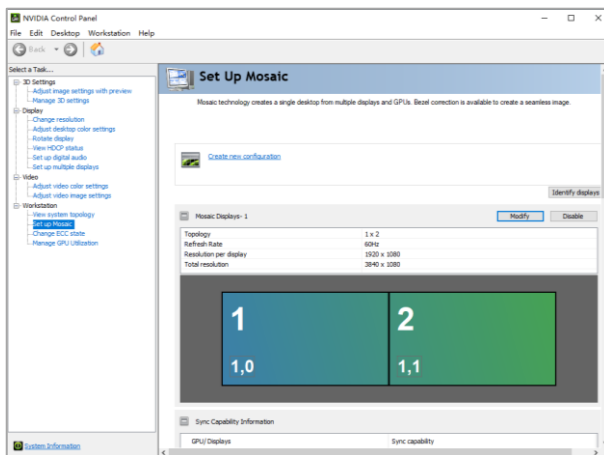


You can perform overlapping adjustment or bezel correction to the vertical or horizontal edges of the display as needed.

3. 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.
4. 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 9-33 Mosaic completed



Copyright © 2023 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

 is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

Thank you for choosing NovaStar's product. 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 contact us via the contact information given in this document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

[Official website](http://www.novastar.tech)
www.novastar.tech

[Technical support](mailto:support@novastar.tech)
support@novastar.tech