

Kompass FX3 Pro

Multimedia Playback Software
Advanced Edition



User Manual

Contents

1 Software Installation	4
1.1 Software Installation	4
1.2 Software Licensing	5
2 Applications	7
3 User Interface Introduction	8
3.1 User Interface	8
3.2 Menu Bar	8
3.2.1 Modify Layout	9
3.2.2 Load Layout	10
3.2.3 Lock User Interface	10
3.2.4 View System Messages	11
3.3 Global Control	12
3.4 Stage Editing Area	13
3.5 Program Management	14
3.6 Timeline	16
3.7 Playback Control	17
3.8 Media Library and Properties	18
3.9 Exit Software	20
4 Project	22
4.1 Create New Projects	22
4.2 Manage Media	22
4.2.1 Add Media	24
4.2.1.1 Import Files	24
4.2.1.2 Import Folders	24
4.2.1.3 Add Media Collections	25
4.2.1.4 Add Test Patterns	26
4.2.1.5 Media Optimization	27
4.2.2 Manage Media	29
4.2.2.1 Rename Media	29
4.2.2.2 Delete Media	29
4.2.2.3 Manage Media	29
4.2.3 Manage Input Sources	29
4.2.3.1 Add Capture Card Sources	29
4.2.3.2 Add Streaming Media	31
4.2.3.3 Add NDI Sources	31
4.2.3.4 Clear Input Sources	33
4.2.4 Output Control	33
4.2.4.1 Add Output Control	34
4.2.4.2 Edit Output Control	35
4.2.4.3 Delete Output Control	35
4.3 Edit Outputs	36

4.4 Split Outputs.....	38
4.4.1 Output Segmentation	38
4.4.2 Sub-Output Rearrangement	39
4.5 Configure Edge Blending	40
4.5.1 Geometry Adjustment	41
4.5.2 Blend Zone	43
4.5.3 Blend Templates	46
4.5.4 Edge Blending Shortcuts	46
4.5.5 3D Editing	47
4.6 Edit Program Layers	48
4.6.1 Add Program Media.....	48
4.6.2 Configure Program Media Properties	49
4.6.3 Configure Program Layer Properties.....	53
4.6.4 Context Menu of Program Layer Media	56
4.6.5 Configure Program Properties.....	57
4.6.6 Cross Program Continuation	59
4.6.7 Program Context Menu	59
4.7 Edit Timeline Layers.....	61
4.7.1 Add Timeline Media.....	61
4.7.2 Edit Control Commands	61
4.7.3 Configure Timeline Properties	62
4.7.4 Configure Timeline Media Properties.....	63
4.8 Edit Timeline.....	67
4.8.1 Edit Clips.....	67
4.8.2 Add Cue Tags.....	67
4.8.3 Configure Cue Tables	68
4.8.4 Configure Offset Time	69
4.8.5 Configure Clip Properties	69
4.8.6 Configure Timcode	70
4.9 Edit Output Slices.....	71
4.9.1 Add Slices.....	72
4.9.2 Slice Properties.....	73
4.10 Play Programs.....	75
4.11 Configure Scheduled Playbacks	77
4.12 Save Projects	83
5 Link.....	84
5.1 Link Settings.....	84
5.2 Update to Slave or Backup	87
5.3 Unlock	87
6 Settings.....	88
6.1 System Settings	88
6.1.1 General	88
6.1.2 Display	91
6.1.3 Office	92
6.1.4 Peripheral	93
6.1.5 Audio.....	95

6.2 Shortcut Binding.....	96
6.3 Clear Shortcuts.....	97
7 Tools	98
7.1 Playback Control Assistant	98
7.2 Play Log	100
7.3 Port Check	102
8 Help	103
8.1 User Manual	103
8.2 About Us	103
8.3 Language	103
9 AI Assistant.....	104
9.1 Register Account.....	104
9.2 Log In Account	106
9.3 AI Assistant Operations.....	106
9.3.1 AI Chat	106
9.3.2 Image Generation	107
9.3.3 View and Download Images.....	109
9.3.4 More Operations	110
10 Other Control Options	111
10.1 Event Controller Control	111
11 Graphics Card Mosaic	113
11.1 Set Main Display	113
11.2 Change Resolutions.....	114
11.2.1 Set Standard Resolutions.....	114
11.2.2 Set Custom Resolutions.....	116
11.3 EDID Management	119
11.4 Output Mosaic.....	124
12 Copyright.....	128

1 Software Installation

1.1 Software Installation

Running Environment

To ensure the optimal performance of Kompass FX3 Pro, the following minimum system requirements must be met:

- Processor: Intel i7 9th generation or above
- Memory: 16 GB or above DDR4 2666
- Graphics card: Recommend NVIDIA P2200 or higher-level discrete graphics card, or AMD W5100 or higher-level discrete graphics card
- Storage: 512 GB or larger SSD
- Operating system: Windows 10 Enterprise LTSC

Installation Procedure



Note

The following installation pictures are for illustration purposes only. The actual pictures may vary.

Step 1 Double click Kompass FX3 Pro installer, and the program will automatically enter the installation interface.

Step 2 Check **I've read and agreed to the NovaStar Software License Agreement**.

Click the installation path below to modify the software installation location.

Figure 1-1 Software installation



Step 3 Click **Install Now** to enter the software installation interface.

Figure 1-2 Automatic software installation



- Step 4 Once the software installation is complete, click **Try Now** to exit the installation interface and automatically launch the software.

Figure 1-3 Installation completed



Note

- It is recommended to disable the antivirus software and firewall in advance.
- During the installation process, if antivirus software or a firewall prompts to block the installation, please choose to allow it.
- After the software installation is complete and a restart is prompted, it is recommended to restart the system promptly.

1.2 Software Licensing

Kompass FX3 Pro supports two authorization modes: Temporary and permanent.

- Temporarily authorized: The remaining days of authorization is displayed at the top right.
- Permanently authorized: No authorization message is displayed at the top right.
- Not authorized: **Trial** is displayed at the top right.

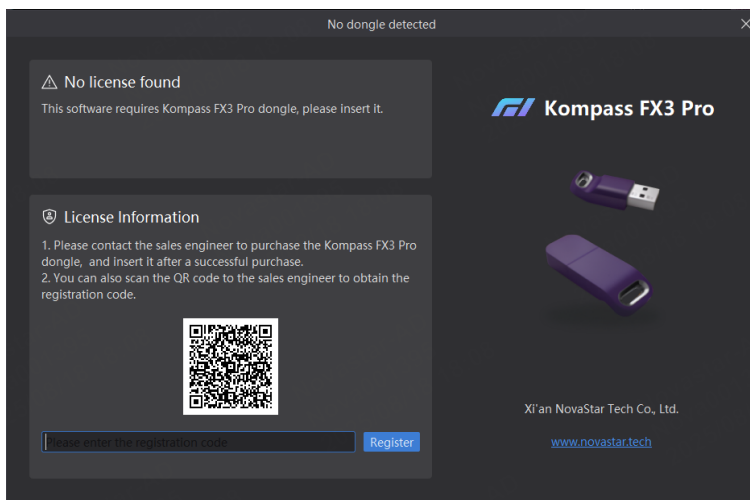
If you want to obtain authorization, please contact our sales engineer for purchasing the dongle or registration code.

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

Dongle detection rules are as follows:

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

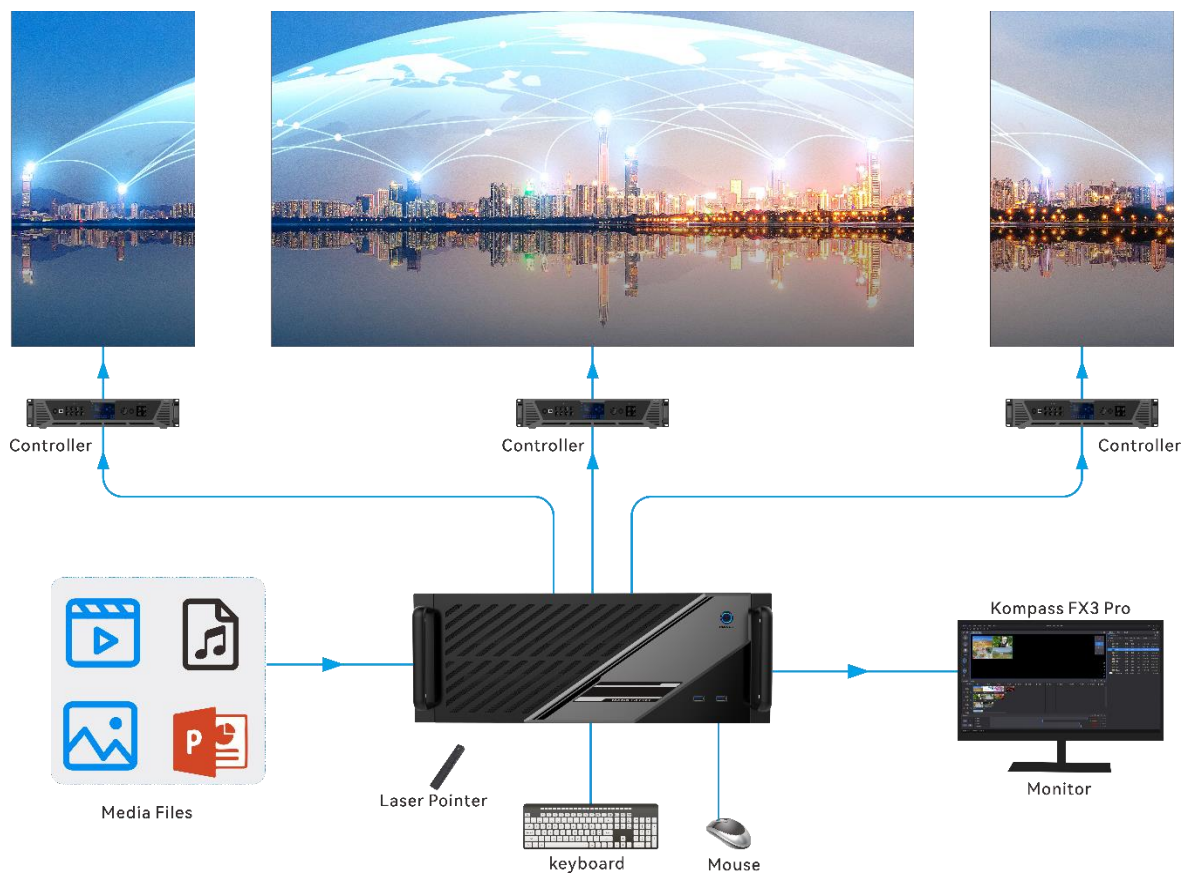
Figure 1-4 Dongle detection



Please scan the QR code and send the copied content to your sales representative to obtain the registration code. Once obtained, enter the registration code into the text box below the QR code and click **Register** to complete the software authorization.

2 Applications

Figure 2-1 Application scenarios

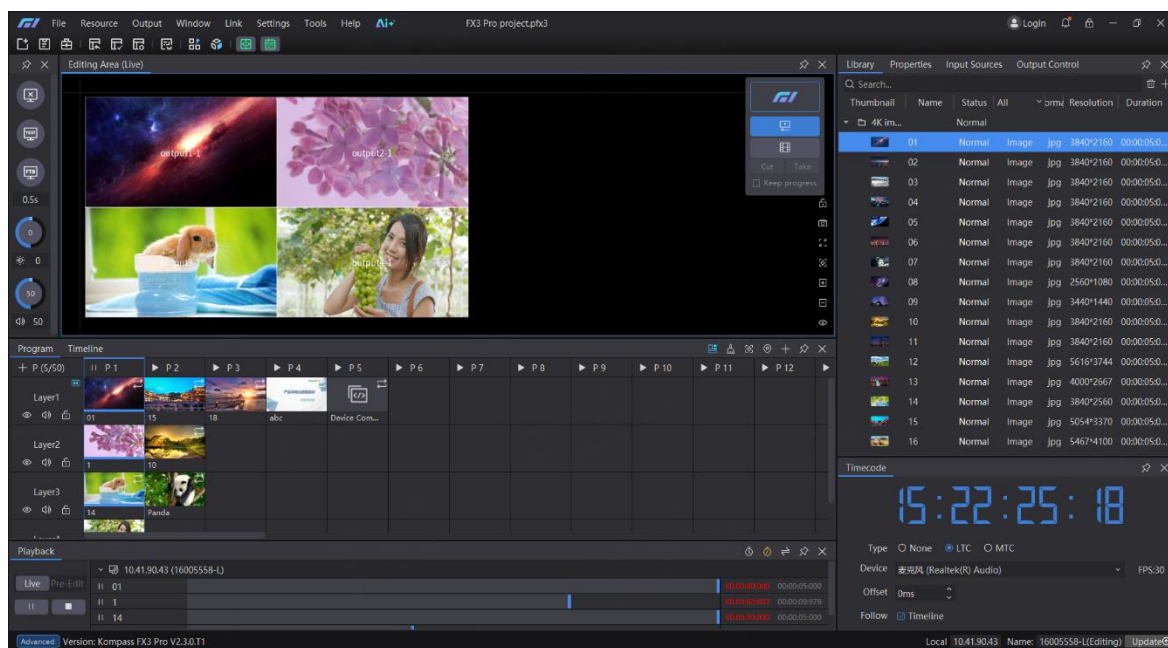


3 User Interface Introduction

3.1 User Interface

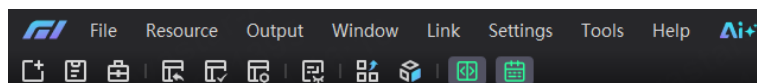
Run the software, and the main user interface is as shown below.

Figure 3-1 User interface



3.2 Menu Bar

Figure 3-2 Menu bar



- File: Perform the project-related operations.
 - New: Create a new project.
 - Open: Open the saved project file.
 - Save: Save the current project file.
 - Save As: Save the currently edited project file as a new project file.
 - Package Project: Package and store the used media files currently being edited or all media files in the project package.
 - Exit: Exit the software with the option to save the current project before exiting.
- Resource: Add and delete local media.
 - Add Local Media: Add the local media files.
 - Add Local folder: Add a local media folder and all supported media within the folder.
 - New Folder: Add an empty folder to the library.

- Clear Library: Delete all imported local media files.
- Output: Manage the output screens, link configurations, and edge blending settings. Click the shortcut icon  below to open the output management window.
- Window: Show or hide the specific user interface areas, including the media library, input sources, editing area, global control, timecode, properties, program management, playback progress, timeline, and output control.
- Link: Configure the master-slave or primary-backup connections.
- Settings: Configure the system settings, including general system settings and shortcuts.
- Tools: Use **Playback Control Assistant** for media transcoding, employ **Play Log** to view and export playback logs, and utilize **Port Check** to check system port information.
- Help: Check the software help documentation and software information, as well as switch preferred language.
- : Open AI Assistant to perform AI chat and text-to-image operations.
- : Create a new project.
- : Save the currently edited project.
- : Package the current project.
- : Restore the user interface layout to the default layout style.
- : Save the adjusted layout as a new layout.
- : Load or delete a saved layout.
- : Shortcuts are hidden. Click to show the shortcut keys.
- : Shortcuts are shown. Click to hide the shortcut keys.
- : Click to enter the output management interface.
- : Click to enter the 3D editing interface.
- : Click to access the page turning control and view its instructions; when enabled, the icon changes to .
- : Click to enter the scheduled playback interface; when activated, the icon changes to .

3.2.1 Modify Layout

The main interface can be adjusted according to user preferences.

Step 1 Click  at the top-left corner of the layout you wish to modify to unlock the layout.

- Step 2 Place the mouse cursor on the edge of any area. When the cursor changes to a double-headed arrow, hold down the left mouse button and drag to resize the area.
- Step 3 Position the mouse cursor on the title bar of any area. Hold down the left mouse button and drag to reposition the area.

- Step 4 Click  at the top-left corner of the layout to lock it. Once locked, the icon will change to .

 Note

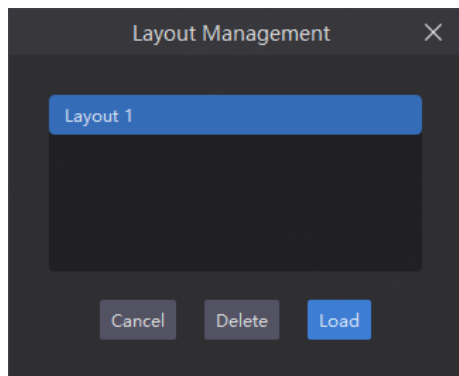
- Click  at the top left corner of the user interface to restore the adjusted layout to the default one.
- After completing the layout modification, click  and enter the new layout name in the pop-up dialog box to save the current layout.

3.2.2 Load Layout

You can quickly load and apply a layout style via this function, without needing to adjust each area individually.

- Step 1 Click  at the menu bar to open the layout management window.

Figure 3-3 Load layout



- Step 2 In the layout list, select the target layout.
- Step 3 Click **Load**.

Here, the following actions can also be performed.

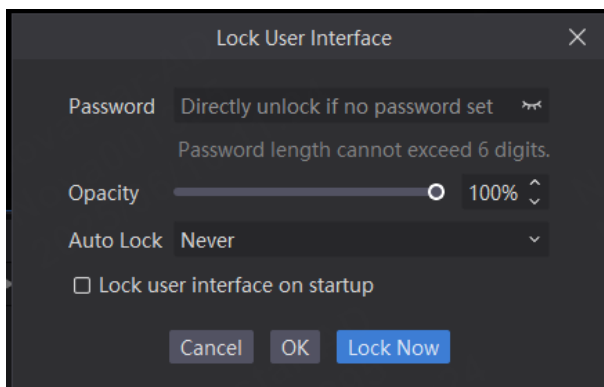
- Delete: Remove the selected layout template from the layout list.
- Cancel: Cancel layout loading and exit the layout loading interface.

3.2.3 Lock User Interface

Locking the user interface prevents unauthorized access to the editing environment, particularly when the operator is away.

Step 1 Click  at the top right of the main interface to open the UI locking window.

Figure 3-4 Lock user interface



Step 2 Enter the password in the text box next to **Password**.

Clicking  or  next to **Password** allows you to show or hide the password.

Step 3 Adjust the opacity of the lock screen.

An opacity setting of 100% means it is completely opaque, obscuring the editing interface and showing only the lock screen background.

Step 4 Define the duration of inactivity after which the system will automatically lock itself.

Options include **Never**, **3 minutes**, **5 minutes**, **10 minutes**, and **30 minutes**, with **Never** indicating no automatic screen locking.

Step 5 Decide whether to lock the user interface upon software launch.

- Select **Lock user interface on startup** to default to the lock screen when the software starts up.
- Deselect it to display the main software interface after startup.

Step 6 Confirm the settings by clicking **OK**.

By clicking **Lock**, the system enters to the lock screen mode, and the screen lock settings take effect.

Note

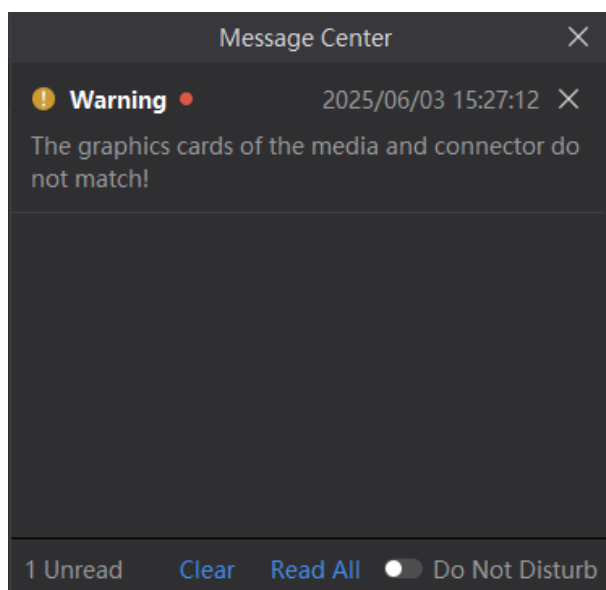
- To unlock, enter the previously set password and click  to access the software editing interface.
- If the password is forgotten, please contact our technical support engineer for assistance.

3.2.4 View System Messages

The system will provide alarms or messages in **Message Center**.

Click  at the top right corner to open the **Message Center** interface.

Figure 3-5 Message center

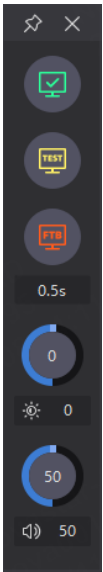


- Clear: Clear all messages.
- Read All: Set all messages as read.
- Do Not Disturb: Toggle message notifications on or off. When enabled, the system will not display message alerts, but will log them in the message center.
-  : Click the icon next to each message to delete it. Click  next to **Message Center** to close the message center window.

3.3 Global Control

Control the output display, volume and more.

Table 3-1 Global control descriptions

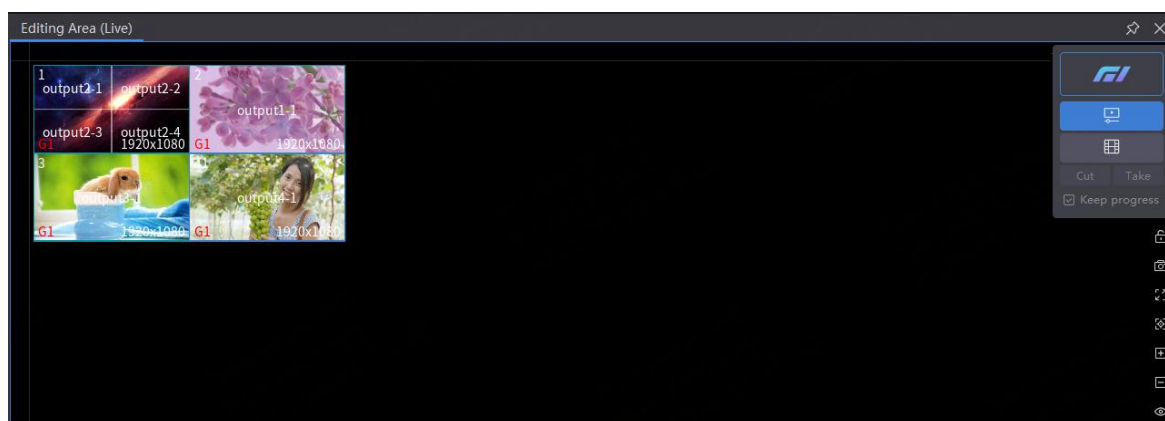
Area	Function	Description
	Output control	•  : Output connected. Click to disconnect the output. •  : Output disconnected. Click to restore the output connection.
	Test pattern	•  : Test pattern enabled. Click to close the test pattern. •  : Test pattern disabled. Click to open the test pattern. Once the test pattern is enabled, the screen will display the test pattern.
	FTB	•  : Normal output. Click to make the screen gradually fade to black. •  : FTB enabled. Click to gradually transition the black screen to normal display. • 0.5 s : The time duration from normal display to a black screen. This can be manually input with a range from 0 to 5, with a default value of 0.5 seconds.

Area	Function	Description
		Adjust the output brightness gain by moving the slider. The value ranges from -100 to 100.
		Adjust the output volume. Click to mute all outputs.

3.4 Stage Editing Area

Preview the output screen or output slices.

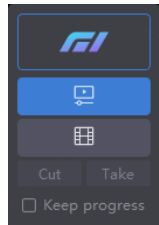
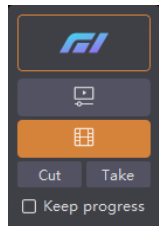
Figure 3-6 Stage editing area



- The sequence number in the upper left corner of the slice indicates the layer slice in program management. This number corresponds one-to-one with the layer number, which can be modified in the **Bind Input** section of the properties.
- The **Tx** number in the upper left corner of the slice, where **x** is a digit, represents the timeline layer slice. Slices on the timeline do not support layer binding modifications.

Control Mode

Click  in the top right corner of the editing area to select the control mode, which supports both **Live** and **Pre-Edit**.

Mode	Name	Description
	Live	After this mode is selected, the stage area displays the live image of the current program.
	Pre-Edit	After this mode is selected, the stage area displays a preview of the program to be played. Only after clicking Take can the playing program be output to the screen. • Cut: Send the currently previewed program to the screen using the direct cut mode. • Take: Send the currently previewed program to the screen using a fade-in, fade-out mode.

Mode	Name	Description
		- Keep progress: When sending programs, determine whether the program should play from the beginning of the media. - On: The program starts playing from the current progress in the preview area after you click Take or Cut. - Off: The program starts playing from the beginning after you click Take or Cut.

Editing Area Control

-  / : Unlock or lock the stage editing area. Once locked, any additions, modifications, or movements of slices are not allowed.
- : Capture the current playback frame of the selected slice and automatically add the captured image to the media library.
- : Fill the selected layer across the connectors.
- : When the screen is moved, click to automatically move the screen back to the origin.
-  / : Zoom in or zoom out the editing area.
-  / : Show or hide all text displays in the stage editing area or screen management interface.

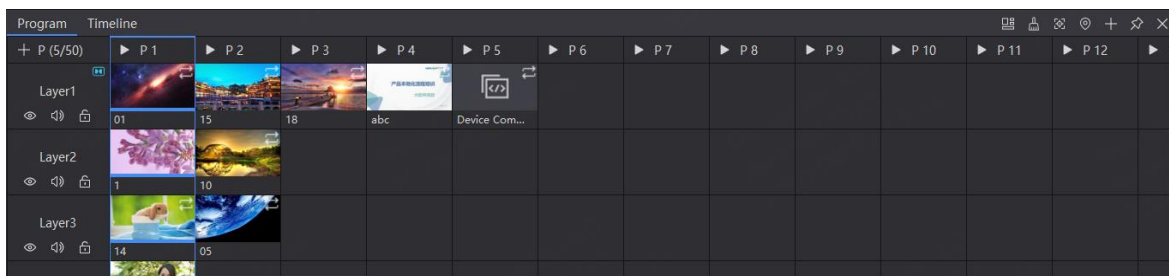
When hidden, only images are shown without any text on slices or sub-outputs. Click  to show text again.

After hiding text, press and hold the ALT key to temporarily display text, or release the ALT key to continue showing text.

3.5 Program Management

Manage the programs and layers.

Figure 3-7 Program management



- Program n/50: Displays the number of edited programs and the total number of programs in the current group.
 - n: Indicates the number of programs that contain media.
 - 50: The default number of programs in the system, which will increase as more programs are added.

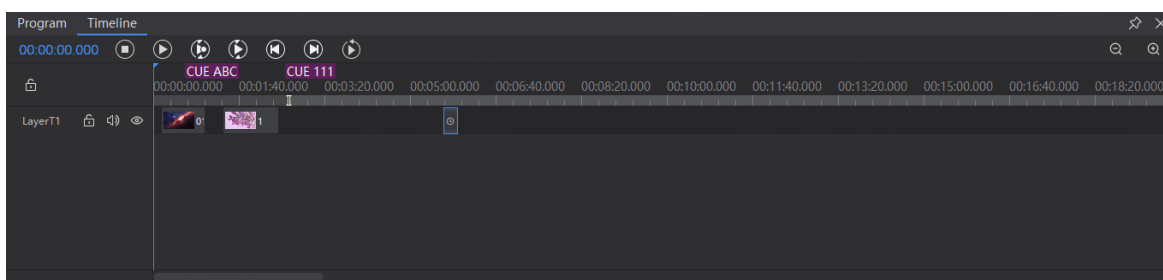
- Program: The program name
- Layer control: Manage the display image and output audio of the layers.
 -  : The layer image is displayed normally. Click to hide the layer image.
 -  : The layer does not display any image. Click to show the layer image.
 -  : The layer audio is output normally. Click to disable the layer audio.
 -  : The layer audio is disabled. Click to enable the layer audio.
 -  : The layer is not locked, allowing for adding media and other operations. Click to lock the layer.
 -  : The layer is locked. Once the layer is locked, you cannot add programs, delete media, or perform other operations on this layer. Click to unlock the layer.
 -  : Click  at the leftmost of the layer management area to add a layer. At most 40 layers are supported.
- Program media jump playback: When the media is set to jump playback, different status icons will be displayed in the upper right corner of the media in the program.
 -  : The media plays in a loop, and it loops before transitioning to the next media.
 -  : Before the media jumps, and after the media finishes playing, freeze on the last frame.
 -  : Before the media transitions, and after the media finishes playing, it stops.
 -  : After the current media loop, all media within the program will play on loop.
 -  : After the media finishes playing, switch to the next program for playback.
 -  : After the media finishes playing, it will switch to the designated program.
 -  : The media loops continuously and plays a specified number of times before it moves on.
- Program control: Includes the program positioning, program addition, and program playback control.
 -  : Click this icon on the left of the program name to start playing or resume the current program.
 -  : Click this icon on the left of the program name to stop playing the current program.
 -  : Click this icon to enable the layout retaining feature. When enabled, the icon changes to  and all slice information remains consistent across programs.
 -  : Click this icon to clear media from all programs.

-  : When the program moves left or right, click this icon and the program list will automatically position at the first program on the left side.
-  : Click to place the currently playing program as the first program on the left side of the program list.
-  : Add a program to the end of the program list.

3.6 Timeline

Manage the timeline and the layers on it.

Figure 3-8 Timeline management



- Add layers

In the **Library** on the right, select a media and drag it to the blank area of the timeline to create a layer and complete the media addition to the layer.
- Replace media

Replace the selected media on the timeline. In the media library, select the target media and drag it onto the media in the timeline to open the media replacement popup, allowing the following actions:

 - Keep: Retain the original media's properties, including start time and duration, when replacing.
 - Don't Keep: Replace the selected media on the timeline without retaining the original properties.
 - Cancel: Do not replace the media on the timeline.
- Delete layers

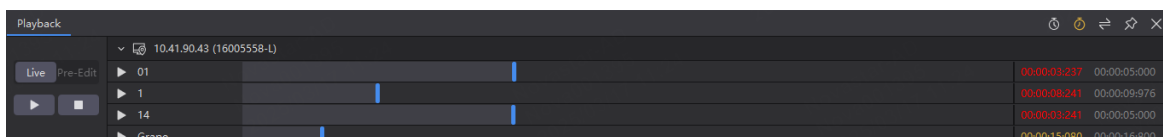
After all media on the timeline layer is deleted, the timeline layer will be automatically deleted.
- Lock timeline
 - Click  above all layers in the timeline area to lock all layers. Once locked, adding layers and media is not allowed.
 - Click  next to each timeline to lock it. Once locked, adding and removing media from the current timeline is not allowed.
- Control timeline playback
 -  : Stop the timeline playback.
 -  : Start the timeline playback.

- : When the playback position is within a clip, play it once, then pause at the end.
- : When the playback position is within a clip, loop the playback.
- : Click to jump to and play the previous clip.
- : Click to jump to and play the next clip.
- : Click to jump to the beginning of the timeline and restart the playback.
- : Turn on or turn off the layer media audio.
- : Click this icon next to the layer to lock the layer.
- : Hide the media image of the layer.
- : Click to zoom in the timeline.
- : Click to zoom out the timeline.
- Layer stacking order determines display priority. The topmost layers have the highest priority and appear foremost.

3.7 Playback Control

Control the playback of a single media or all media of the currently playing program.

Figure 3-9 Playback control

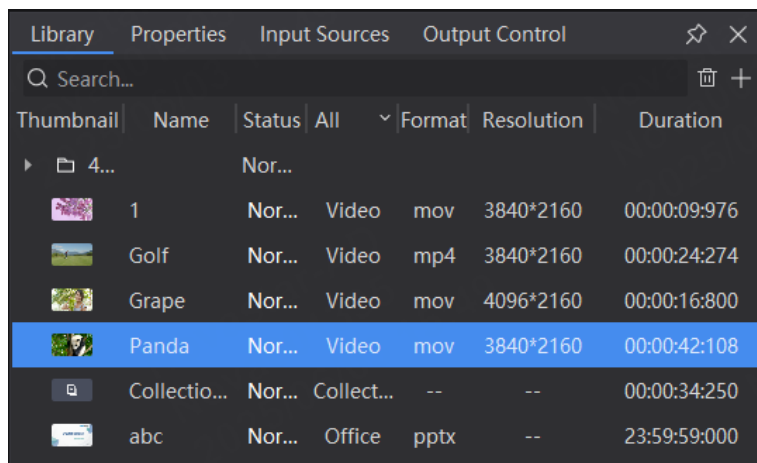


- Overall control: Manage the playback of all media in the current program.
 - : After the icon is clicked, all media start playing.
 - : After the icon is clicked, all media pause.
 - : After the icon is clicked, all media stop playing.
- Single media control: Control the playback for the selected media in the current program.
 - : Click this icon in front of the playing media to continue playing the media.
 - : Click this icon in front of the playing media to pause playback of the media.
- Playback timers: Counting up, counting down, and synchronized playback control for media
 - : Start the count up display, showing the duration of all media that has been played.
 - : Start the countdown display, showing the remaining playback time for all media.

-  : Start the synchronized playback control. Click and drag the media playback progress bar to synchronize the playback time.

3.8 Media Library and Properties

Figure 3-10 Media library and properties

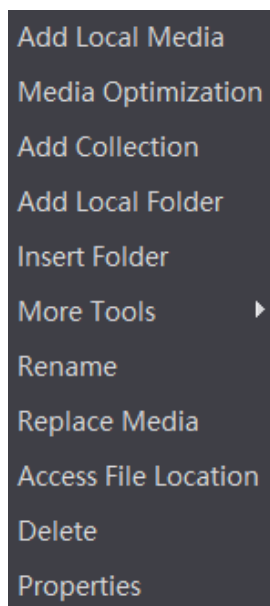


Media Library

Add and manage the added media.

- Delete media: After selecting the media that has not been added to any programs, click  in the top right corner to delete the selected media.
When selecting media, press and hold **Ctrl** or **Shift** to select multiple media.
- Manage media: Add and manage media in the media library.
 - Click  in the top right corner to enter the local media addition interface.
 - Right click a blank area in the media library to perform actions such as **Add Local Media**, **Add Local Folder**, **New Folder**, **Add Collection**, and **Clear Library**.
 - By dragging the added media into the newly created folder, you can categorize and manage the media.
 - By clicking **All** at the top and choosing different types, you can view the added media by categories.
- Single media operations: Right click a media in the media library to expand the media context menu.

Figure 3-11 Media context menu



- Add Local Media: Add the media files saved locally.
- Media Optimization: When the size of added media files exceeds the processing capability of the graphics card, the media type will display **Optimizable**. For the specific processing capability each graphics card supports, please refer to the table below. Once optimized, the media will display **Optimized**.

Graphics Card	Image	Video
P2200	Width or height > 16384 pixels	Width or height > 8192 pixels, or bandwidth > 8192×4320@60Hz
T400	Width or height > 8192 pixels	Width or height > 8192 pixels, or bandwidth > 8192×4320@30Hz
RTX 4000 RTX5000 RTX A4000 RTX A5000 RTX A5500 RTX A6000	Width or height > 16384 pixels	Width or height > 8192 pixels, or bandwidth > 8192×8192@60Hz
Other graphics cards	Width or height > 8192 pixels	Width or height > 8192 pixels, or bandwidth > 8192×4320@60Hz

Note

Media in hap format will not display **Optimizable** even if they exceed the maximum recommended resolution.

- Cancel Optimization: Reverts optimized media back to its pre-optimized state.
- Add Collection: Arrange and combine multiple videos or images to create a new video playlist, where the videos and images will automatically loop based on the set mode.
- Add Local Folder: Add the local folders and media within the folders.
- Insert Folder: Insert a new folder and add the selected media to the inserted folder.
- More Tools:

- Rename: Modify the name of the selected media.
- Replace Media: Replace the media in the material library and meanwhile replace this media in all programs together.
- Access File Location: Open the local storage location of the media file.
- Delete: Delete the selected media. If the media has already been added to the program, it cannot be deleted.
- Properties: View the basic properties of the selected media.

Properties

- Click the media in the program to view and modify the properties of the individual media in the program.
- Click the slice in the editing area to view and modify the output slice properties.
- Click the layer to view and modify the layer properties, and change the output of all media in the layer by adjusting the layer property values.
- Click the program to view and modify the program properties.

Input Sources

Add the capture device sources, streaming media, and NDI input sources.

Output Control

Manage the backend device by adding control commands.

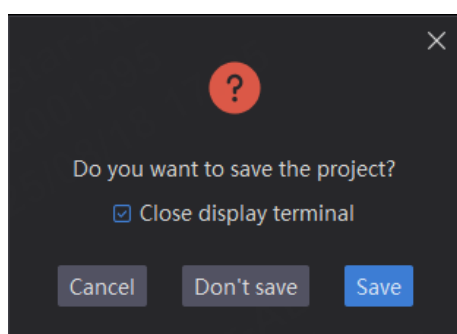
 Note

It is recommended that only personnel with professional training perform this operation.

3.9 Exit Software

Click  in the upper right corner of the software interface, or choose **File > Exit**. A confirmation dialog will appear.

Figure 3-12 Exit confirmation



Close Display Terminal

- Check **Close display terminal** to ensure the output interface closes with the main interface.
- Leave it unchecked to keep the output display running according to the program management even after the main interface is closed.

Save Project File

- Save: Save the current project file when the software closes.
- Don't save: Close without saving the current project file.
- Cancel: Cancel the software close.

4 Project

4.1 Create New Projects

There are three methods for creating a new project:

- After launching the software, click **New Project** on the startup screen, select the storage location for the new project, and then click **Save**. The system will automatically create a project file.
- Navigate to **File > New**, choose the new project's storage location, and click **OK** to create a new project file.
- Click  in the menu bar to create a new project file.

4.2 Manage Media

Kompass FX3 Pro supports processing and playing images, videos, PowerPoint files, and audio files.

The supported media formats are as follows:

- Video: mp4, avi, mkv, flv, mov, mpeg, mpg, ts, wmv, 3gp
 - Image: jpg, jpeg, bmp, png, gif, ico
 - Audio: mp3, aac, flac, amr, ape, wav, wma, ogg
 - Office: ppt, pptx
- ppt and pptx decoding supports up to a 4K resolution size.



Recommended video encoding formats:

- 4K < resolutions ≤ 8K, width and height ≤ 8192 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
2160p (4K)	35 to 45 Mbps	53 to 68 Mbps
1440p (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

- Recommended video bitrates for SDR uploads - multiple media servers and multiple graphics cards:

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.

Video Media Requirements

The video playback performance varies depending on the graphics card. To ensure optimal compatibility and smooth playback, please prepare and add media materials according to the following specifications:

- Requirements for single graphics card scenario:
 - 4K video: Resolution $\leq$ 4096 pixels (width/height), encoded in H.264
 - 8K video: Resolution $\leq$ 8192 pixels (width/height), encoded in H.265
 - Super 8K video: Resolution $>$ 8192 pixels and $\leq$ 16384 pixels (width/height), encoded in HAP
- Requirements for multi-graphics card scenario:
 - 4K video: Resolution $\leq$ 4096 pixels (width/height), encoded in H.264
 - 8K video: Resolution $\leq$ 8192 pixels (width/height), encoded in H.265
 - Super 8K video: Requires segmentation, with all segments of equal duration.

Note

Video playback must utilize hardware decoding, with a frame rate of 30/60 fps, and a recommended video bitrate under 200 Mbps to ensure synchronization.

Graphics Card	Resolution	Frame Rate	Encoding Format	Pixel Format	Bitrate Range
AMD	4096×4096	60	H.264	YUV4:2:0/YUV4:2:2	0 to 300 Mbps
	3840×2160	60	H.264 (HDR)	YUV4:2:0/YUV4:2:2	0 to 300 Mbps
MPGT400	8192×4320	60	H.265 (HDR)	YUV4:2:0/YUV4:2:2	0 to 300 Mbps
HPGA4000	8192×4800	60	H.265 (HDR)	YUV420/YUV422	0 to 450 Mbs
	7680×4320	60	Prores422 HQ	YUV420/YUV422	No requirements
	3840×2160	60	Prores422 HQ	YUV420/YUV422	No requirements
HPGA5000	8192×8192	60	H.265 (HDR)	YUV420/YUV422	0 to 150 Mbs
	3840×2160	60	Prores422 HQ	YUV420/YUV422	No requirements

Graphics Card	Resolution	Frame Rate	Encoding Format	Pixel Format	Bitrate Range
HPGA6000	8192×8192	60	H.265 (HDR)	YUV420/YUV422	0-150Mbs
	3840×2160	60	H.265 (HDR)	YUV420/YUV422	No requirements
HPGA4000 HGA5000 HPGA6000	16384×4320	60	HAP	YUV420/YUV422	No requirements

4.2.1 Add Media

Import a single media file or multiple media files.

4.2.1.1 Import Files

- Step 1 On the right pane, click the **Library** tab to enter the media library interface.
- Step 2 Right click the blank area and select **Add Local Media**.
- Step 3 Select the target media and click **Open**. The software will automatically import the selected media files into the media list.
- To import a single file, simply select the file and click **Open** to complete the import.
 - To import multiple files simultaneously, press and hold **Shift** or **Ctrl** click the target files, and then click **Open** to complete the import.

4.2.1.2 Import Folders

There are two methods for importing folders.

Import Folders

- Step 1 Right click the blank area in the media library area, and select **Add Local Folder**.
- Step 2 Select the folder where you save the media files and click **Open**.
- The system will automatically import the folder with its original name and the media files within the folder into the media library.

Replace Folders

- Step 1 Right click the blank area in the media library area, and select **Insert Folder**. The system will automatically create a new folder.
- Step 2 Right click the folder and select **Replace**.

Step 3 Select the folder you want to import in the pop-up dialog box.

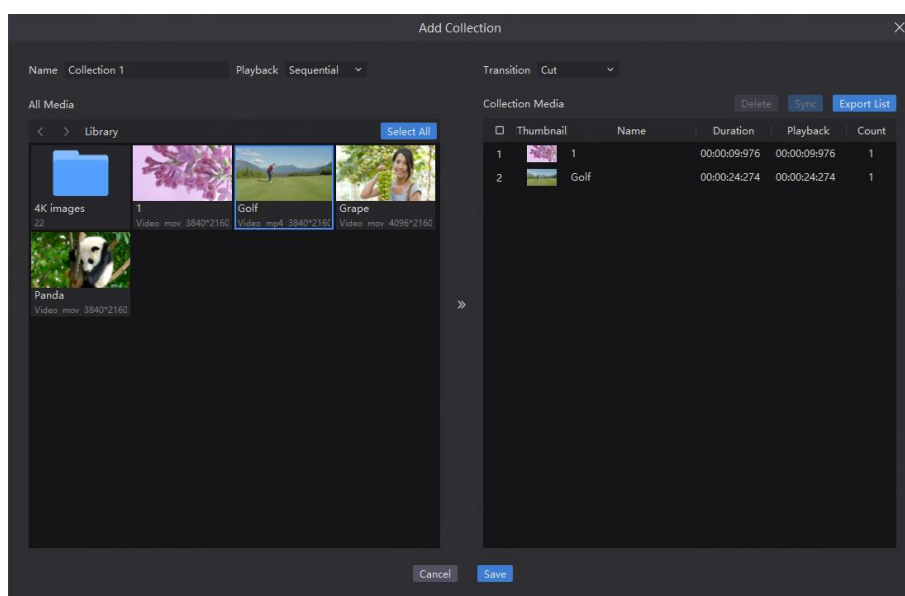
Step 4 Click **Open** to import the selected folder and its contents into the media library simultaneously.

4.2.1.3 Add Media Collections

This function allows you to sort and combine multiple videos or images to form a new kind of video source. Videos and images within the collection will automatically play in turn based on the set mode.

Step 1 In the **Library** area, right click and select **Add Collection**.

Figure 4-1 Add media collections



Step 2 Enter the name of the media collection in the **Name** section.

Step 3 In the **Playback** section, select the media playback order within the media collection. The options include **Sequential** and **Shuffle**.

- Sequential: The collection media is played sequentially according to the arrangement in the collection.
- Shuffle: The collection of media plays in a random order.

Step 4 In the **Transition** section, set the transition effect for the media in the collection.

Currently, only Cut is supported.

Step 5 Select the media for which you need to create a collection from **All Media**.

If the media have been organized into folders, the folder name will be displayed here. Double click the folder to expand it and show the media within.

Step 6 Click **>>** in the middle to add the selected media to the **Collection Media** on the right.

Step 7 In the **Collection Media** area, select the desired media.

Step 8 Set the playback duration.

Double click the playback duration section of the media to set the playback duration of the media in the collection.

- If the set playback duration is longer than the media duration, the media will automatically loop until the playback duration is complete.
- If the set playback duration is shorter than the media duration, the media will automatically stop playing once it reaches the playback duration.

Step 9 Set the number of media playbacks.

Double click the count section of the media to adjust the playback times of the media in the collection.

Step 10 Click **Save** to complete the media collection setup.

Other Operations

- Delete media

In the **Collection Media** area, select the media you want to delete, and then click the **Delete** button or press the Delete key on the keyboard to remove the selected media.

- Sync duration

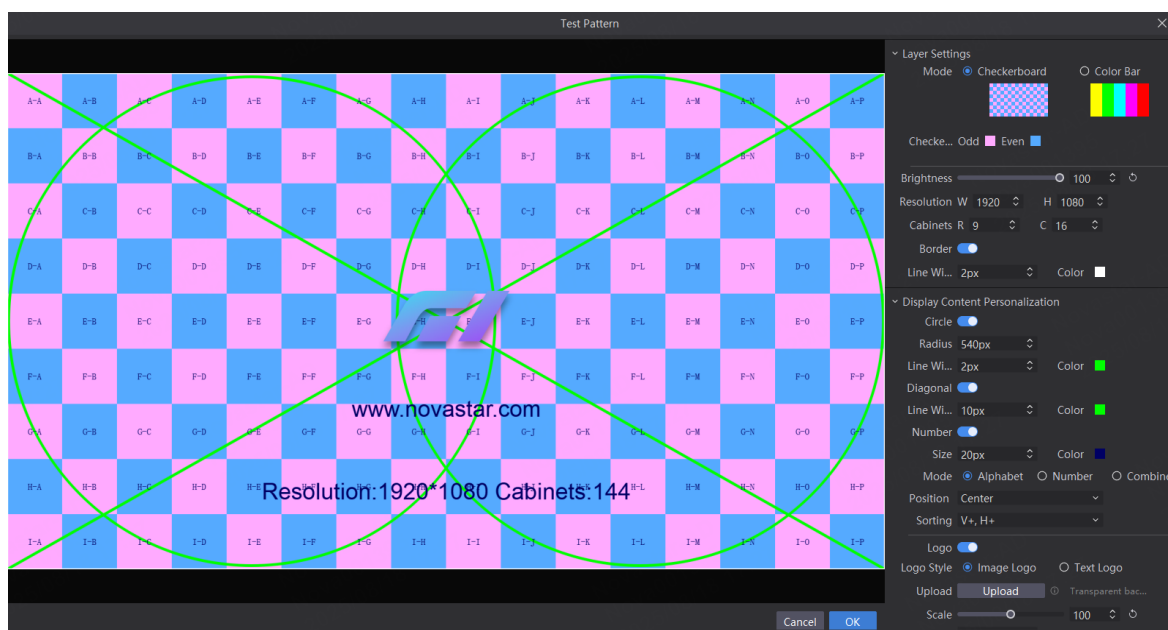
Select the media with a set playback duration, click **Sync** and you can set the playback of other media to match the selected media's duration.

4.2.1.4 Add Test Patterns

The Kompass FX3 Pro offers robust functionality for adding custom test patterns. Users can flexibly generate precise test patterns based on the actual condition of the current display. These patterns include precise geometric shapes (such as lines, grids, and circles), detailed color and brightness presentations, ideal for on-site screen debugging.

Step 1 In the media library area, right click the blank area or a specific media item, choose **More Tools > Add Test Pattern** to enter the test pattern addition interface.

Figure 4-2 Add test patterns



- Step 2 In the **Layer Settings** and **Display Content Personalization** sections on the right, you can configure the properties of the custom test pattern and change the style of the test pattern. Each setting will display a real-time test effect image on the left.
- Step 3 Click **OK** to complete the settings and add the custom test pattern. After the addition, the test pattern will appear in the media library.

4.2.1.5 Media Optimization

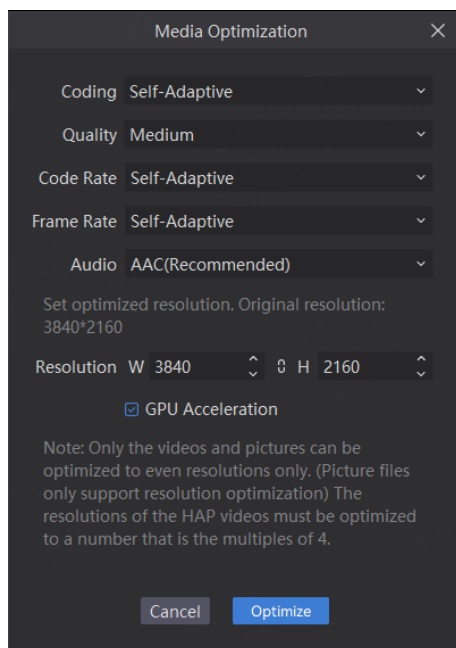
When the size of the added media file exceeds the graphics card processing capabilities, the media type will display as **Optimizable**. For convenience in subsequent use, you can use this function to modify the media resolution in advance.

Note

Only videos and images can be optimized, and the resolution must be even numbers.

- Step 1 In the media library, select the image or video you need to optimize.
- Step 2 Right click the media file and select **Media Optimization**.
- Step 3 Set the media optimization options based on the interface instructions.

Figure 4-3 Media optimization



- **Coding:** Set the video encoding format, supporting **Self-Adaptive**, **h264**, **h265**, **vp9**, and **hap** formats. When set to **Self-Adaptive**, transcoding follows the original video encoding.
- **Quality:** The image quality after video transcoding can be set to **Low**, **Medium**, or **High**.
 - Low: The transcoded video is more blurred compared to the original.
 - Medium: The transcoded video quality is between high and low.
 - High: The transcoded video is close to the original quality.
- **Code Rate:** Set the video bitrate after transcoding, supporting **Self-Adaptive** and **Custom**.
 - Self-Adaptive: Consistent with the original video bitrate
 - Custom: Input the desired bitrate for transcoding.
- **Frame Rate:** Set the frame rate of the media after optimization. The options include **Self-Adaptive**, **24**, **25**, **29.97**, **30**, **50**, **59.94**, **60**, and **120**.
 - **Self-Adaptive:** Matches the original video frame rate.
- **Audio:** Set the audio transcoding mode, supporting **AAC**, **Copy**, or **No Audio**.
 - AAC: Re-encode the original audio in AAC format.
 - Copy: Retain the original audio in the video.
 - No Audio: Output video without audio.
- **Resolution:** Set the resolution size of the transcoded video.
 - W: Set the horizontal size. Default: 1920; recommended maximum: 8192.
 - H: Set the vertical size. Default: 1080; recommended maximum: 8192.
 - If set resolution exceeds the original media, it defaults to the original resolution.
- **GPU Acceleration:** Toggle GPU acceleration during media optimization.

Step 4 Click **Optimize** to automatically perform optimization.

4.2.2 Manage Media

4.2.2.1 Rename Media

- Right click the media file or folder you want to rename, select **Rename** to activate the editing for the media or folder name, and enter a custom name.
- Double click the media or folder name area to activate the media or folder name editing, and enter a custom name.

4.2.2.2 Delete Media

There are the following ways to delete the media.

- In the media library, select the target media and click .
- In the media library, right click on the media you want to delete and select **Delete**.
- When deleting a folder, all media within the folder will be deleted as well.

4.2.2.3 Manage Media

You can create folders to categorize and manage the imported media.

- Right click the media library area, select **Insert Folder** and enter a folder name to create a folder.
- Select the media files and drag them into the folder to categorize and manage them.
- Hold down the **Shift** key or **Ctrl** key, select the files you want to manage in a new folder. Right click and select **Insert Folder**, and enter a name for the newly inserted folder to complete the file categorization and folder creation.
- Drag the file or folder to sort it.

4.2.3 Manage Input Sources

The input sources support streaming media sources, NDI input sources, and capture card input sources. The system automatically recognizes and adds capture card input sources, which can be disabled as needed.

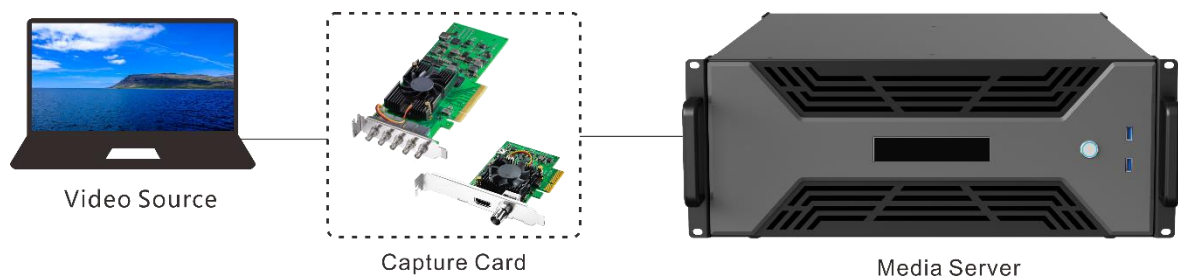
4.2.3.1 Add Capture Card Sources

The software supports acquiring input source images via capture cards. The capture cards listed in the following table have undergone rigorous compatibility testing to ensure a stable and reliable experience.

Table 4-1 Recommended capture cards

Brand	Model	Connector Type
Blackmagic Design (BMD)	DeckLink-8K-Pro-Mini	4x 12G-SDI
	DeckLink-Mini Recorder 4K	1x 6G-SDI, 1x HDMI 1.4, choose one
YUAN High-Tech	SC542N4	4x HDMI 1.3
Chuangshi Zhixing	CSZX-8002HDMI_20220430	2x HDMI 1.3
Tianchuang Hengda	TC-410N2	2x HDMI 1.4
	TC542N2	2x HDMI 1.3
Baoshi	SC0720	4x HDMI 2.0

Figure 4-4 Capture card connection



Prerequisites

- The capture card and its drivers are installed on the media server with Kompass FX3 Pro.
- Connect the input source to the capture card using the appropriate video cable.

Operating Procedure

Step 1 Select the **Input Sources** tab on the right pane to enter the input source interface.

Step 2 Click **Capture Device** to expand all input sources connected to the capture card.

The system will automatically recognize and name all connected input sources. You can double click the name to modify it.

Step 3 Click the video format dropdown below the name to modify the video format captured by the card.

Video format: 3840×2160@60.00, yuyv422, where 3840×2160@60.00 is the input resolution, and yuyv422 is the video sampling rate.

Table 4-2 Sampling rate description

Format	Description	Common Uses
yuyv422	YUV4:2:2 format, with interlaced storage of brightness (Y) and chroma (UV) components, sharing a set of UV values for every two pixels	Camera capture, video conferencing, video capture cards
rgb32	32-bit RGB format (with Alpha channel), where each pixel occupies 4 bytes (R, G, B, A)	Graphics processing, screen capture, image editing

Format	Description	Common Uses
rgb24	24-bit RGB format, with each pixel occupying 3 bytes (R, G, B), no Alpha channel	Image storage, video rendering, computer vision
nv12	YUV4:2:0 format, with separate storage of brightness (Y) and interlaced storage of UV components (half resolution)	Video codec H.264/H.265, GPU accelerated processing
uyvy422	YUV4:2:2 format, similar to YUYV422 but with a different byte order (UYVY instead of YUYV)	Video capture, digital video interfaces (e.g., HDMI capture)

Click  or  at the top right of the capture source to enable or disable the capture card thumbnail view. Click the icons next to **Capture Device** to enable or disable all capture card thumbnail views.

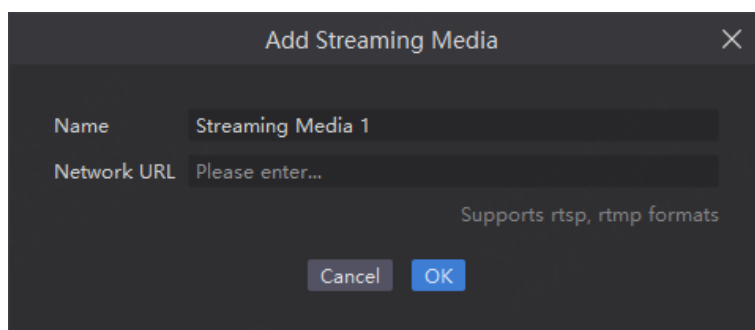
4.2.3.2 Add Streaming Media

The streaming media can be added as an input source. RTSP and RTMP formats are supported.

Step 1 Click the **Input Sources** tab on the right pane to enter the input source configuration interface.

Step 2 Click  next to **Streaming Media** or right click the blank area and select **Add Steaming Media** to pop up the streaming media adding dialog box.

Figure 4-5 Add streaming media



Step 3 Enter the name of the streaming media.

Step 4 Enter the media path.

The media path must start with rtsp:// or rtmp://.

Step 5 Click **OK** to complete adding the streaming media.

4.2.3.3 Add NDI Sources

After the successful installation of Kompass FX3 Pro, it includes the installation of the NDI configuration tool - NDI Sender. Once NDI Sender is enabled, Kompass FX3 Pro will automatically search for all computers with NDI senders enabled on the current network segment.

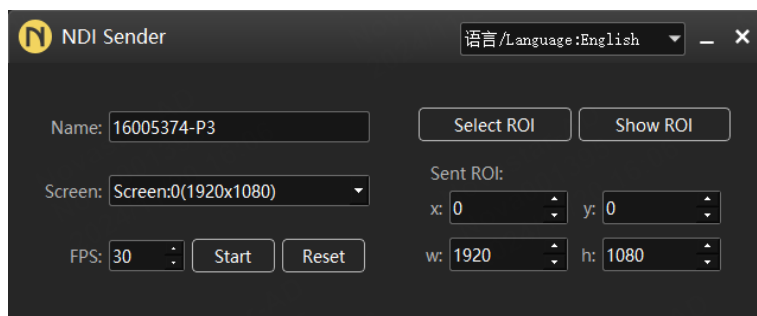
Prerequisites

- The computer with the NDI sending device must be on the same network segment as the media server or host where Kompass FX3 Pro is located.
- Ensure that the computer with the NDI sender can communicate normally with the media server or host where the Kompass FX3 Pro is located.

NDI Configuration

Step 1 Double click NDI Sender.exe to enable the NDI sender.

Figure 4-6 NDI Sender interface



Step 2 Set the position and size of the screen on the computer to be used as NDI.

There are two ways to set the position and size of the NDI image.

- Click **Select ROI** and hold down the left mouse button to make a selection on the screen.
- In the **Sent ROI** area, precisely set it using the region coordinates and region size.
 - x: The horizontal starting position of the top left corner of the NDI image relative to the screen.
 - y: The vertical starting position of the top left corner of the NDI image relative to the screen.
 - w: The horizontal width of the NDI image.
 - h: The vertical height of the NDI image.

After setting up, click **Show ROI** to view the NDI output screen.

Step 3 Enter the name of the NDI source in the **Name** section.

Step 4 When the computer outputs to multiple screens, select the screen you want to use as the NDI display from the dropdown menu in the **Screen** section.

Step 5 Enter the frame rate of the NDI image in the **FPS** section, with a default value of 25.

Step 6 Click **Start** to complete the NDI Sender configuration.

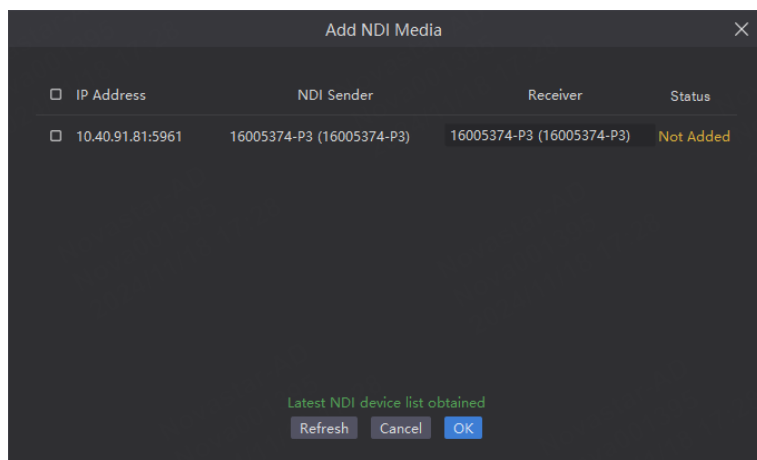
Add NDI Sources

Step 1 Click the **Input Sources** tab on the right pane to enter the input source configuration interface.

Step 2 Click  next to **NDI** or right click the blank area and select **Add NDI Media** to pop up the NDI adding dialog box.

The system will automatically search for all sources with NDI sending enabled on the current network and open the NDI network screen list.

Figure 4-7 NDI network screen



Step 3 Select the NDI network screen you want to add.

Step 4 Modify the name of the NDI source in the **Receiver** section.

Step 5 Click **OK** to complete adding the NDI input source.

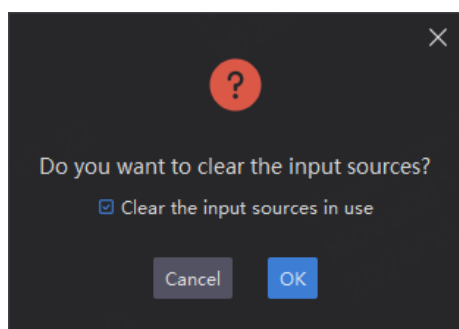
Click **Refresh** to retrieve the list of NDI sources on the current network segment again.

4.2.3.4 Clear Input Sources

Step 1 Click the **Input Sources** tab on the right pane to enter the source configuration interface.

Step 2 Right click the blank area and select **Clear Input Sources**.

Figure 4-8 Clear input sources



Step 3 (Optional) Select **Clear the input sources in use**.

Step 4 Click **OK** to clear all input sources except the capture card.

4.2.4 Output Control

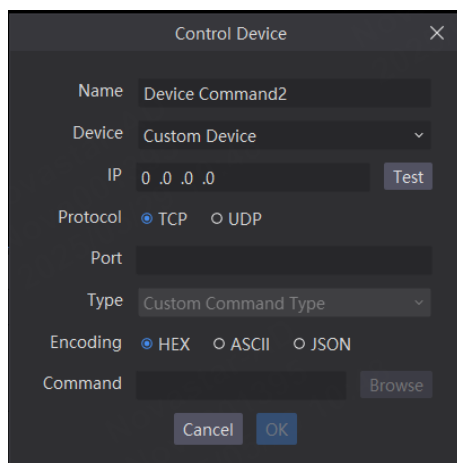
Kompass FX3 Pro allows backend device control through control commands. It is recommended that only trained professionals perform the operation.

4.2.4.1 Add Output Control

Step 1 Click the **Output Control** tab on the right pane.

Step 2 Click  in the upper right corner or right click in the blank area and select **Add Output Control**.  

Figure 4-9 Add output control



Step 3 Enter the command name in the text box next to **Name**.

Step 4 Choose the target device to be controlled in **Device**.

Step 5 Enter the IP address of the device to be controlled in **IP**.

After completing the entry, click **Test** to test the network connection and verify connectivity.  

- A green box indicates a normal network connection between Kompass FX3 Pro and the target device.  
- A red box indicates a network connectivity issue, necessitating troubleshooting of the network configuration or hardware.  

Step 6 Select the communication protocol, either **TCP** or **UDP**.

When **Custom Device** is selected, the communication protocol can be configured.

Step 7 Enter the external control port number in **Port**.

Step 8 Choose the command's control type in **Type**.

Step 9 Select the encoding format of the command in **Encoding**. Options include HEX, ASCII, and JSON.

When **Custom Device** is selected, the communication protocol can be configured.

- HEX: The command is in hexadecimal format.  
- ASCII: The command is text-based.  
- JSON: The command is in json format.  

Step 10 Enter the specific command corresponding to its type in **Command**.

For the JSON encoding type, click **Browse** to upload a JSON file.  

Step 11 Click **OK** to complete adding a command.  

Once added, drag the output control to the program or timeline to add and send commands.

4.2.4.2 Edit Output Control

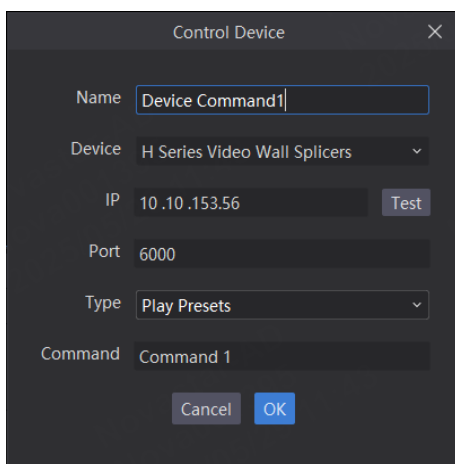
Once output control has been added, it can be edited and modified as needed. 

Modify Output Control Command Information

Step 1 Right click the output control command to be modified and select **Edit Output Control** to open the editing interface.

Alternatively, double click the control command to access the interface. 

Figure 4-10 Edit output control



Step 2 Make the necessary modifications to the information of the command. 

Step 3 Click **OK** to complete the command modification. 

Rename Output Control Commands

The name of an output control command can be changed in the following ways: 

- In the modification interface, give a new name in the **Name** field. 
- Right click the command to be renamed in the **Output Control** tab interface, select **Rename**, and enter the new name.

4.2.4.3 Delete Output Control

Delete Single Command

- Click the output control command to be deleted in the **Output Control** tab interface, then click  at the top right to delete it. 
- Right click the command and select **Delete** to delete it.

Delete Multiple Commands

- Right click the blank area in the **Output Control** tab interface and choose **Clear Output Control** to delete all added commands.
- Press and hold **Ctrl** or **Shift** while selecting multiple commands, then click  to delete the selected commands.

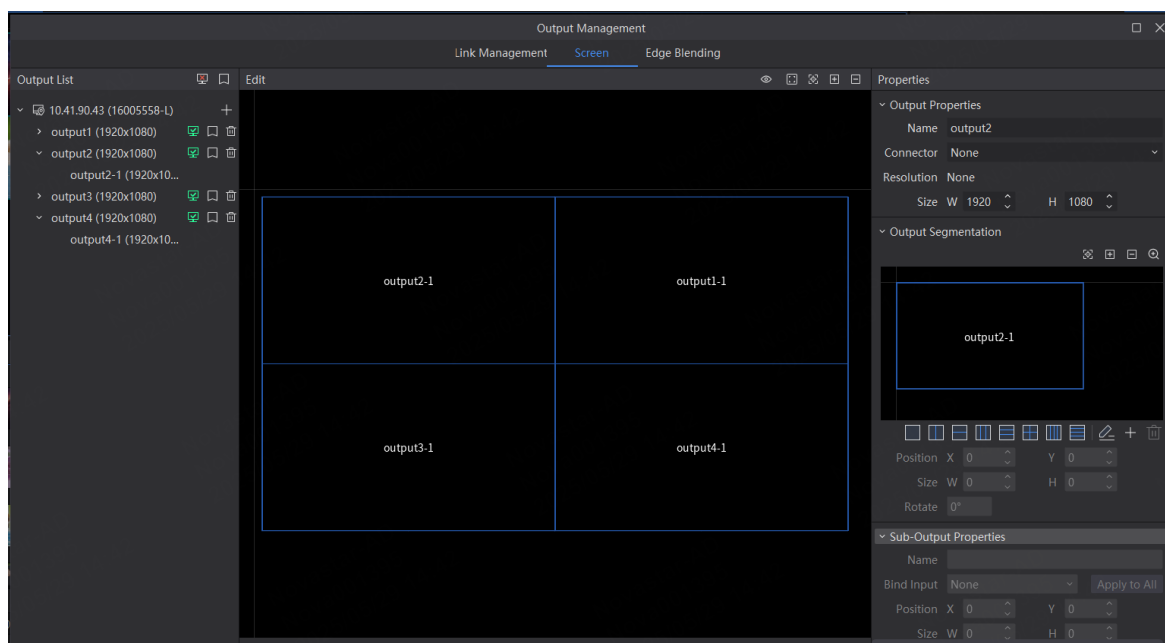
4.3 Edit Outputs

Before editing the outputs, in order to ensure synchronization of the outputs, please refer to the procedure described in [Graphics Card Mosaic](#) to complete the graphics card output mosaic configuration.

Kompass FX3 Pro supports output editing, allowing you to mosaic multiple output connectors for seamless output.

In the menu bar, navigate to **Output > Screen** to enter the output management interface.

Figure 4-11 Screen management



-  : The output connection for the selected connector is already enabled. Click to disconnect the current connector's output connection.
-  : The output connection of the selected connector is disabled. Click to connect the current connector.
-  : The output identify function is enabled. Click to disable it.
-  : The output identify function is disabled. Click to enable it.
-  : Delete the selected output.

- : Click to hide text display in the stage editing area or screen management. After hiding, the icon changes to . At this time, the slices in the stage editing area will only show images, with no text. Click it again to display the text information.
- : Click to display the output screens in the editing area with the best perspective.
- : Click to restore the editing area to the top left corner.
- : Click to zoom in the editing area.
- : Click to zoom out the editing area.
- Press and hold the mouse wheel and drag to move the canvas.

Add and bind outputs automatically

When the software starts, it automatically detects the graphics card connectors, automatically adds the corresponding outputs, and completes the output and connector binding in sequence, displaying them all in the **Output List** area on the left.

When changing the connection order of the computer output connectors and the backend devices, you can edit the output name, the binding relationship of the physical connector, and the output resolution in the **Properties** area on the right.

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.

Note

At most three screens can be bound.

Click  at the top right of the output list. After the output is added, modify the relevant information in the **Properties** section on the right.

- Name: Modify the current output name.
- Connector: Configure the binding relationship between the current output and the physical output connector of the actual device.

The connector will display the graphics card, graphics card connector, and connector output resolution.

- 1: Indicates the connector number of the graphics card. 1 is the connector 1 of this graphics card.
- G1: Indicates the graphics card 1.
- Graphics card model: Indicates the current device's graphics card model.
- Not recommended: Indicates the connector is being used for Kompass FX3 Pro interface display.
- Resolution: Configure the output resolution of the connector.
- Size: Modify the output size.

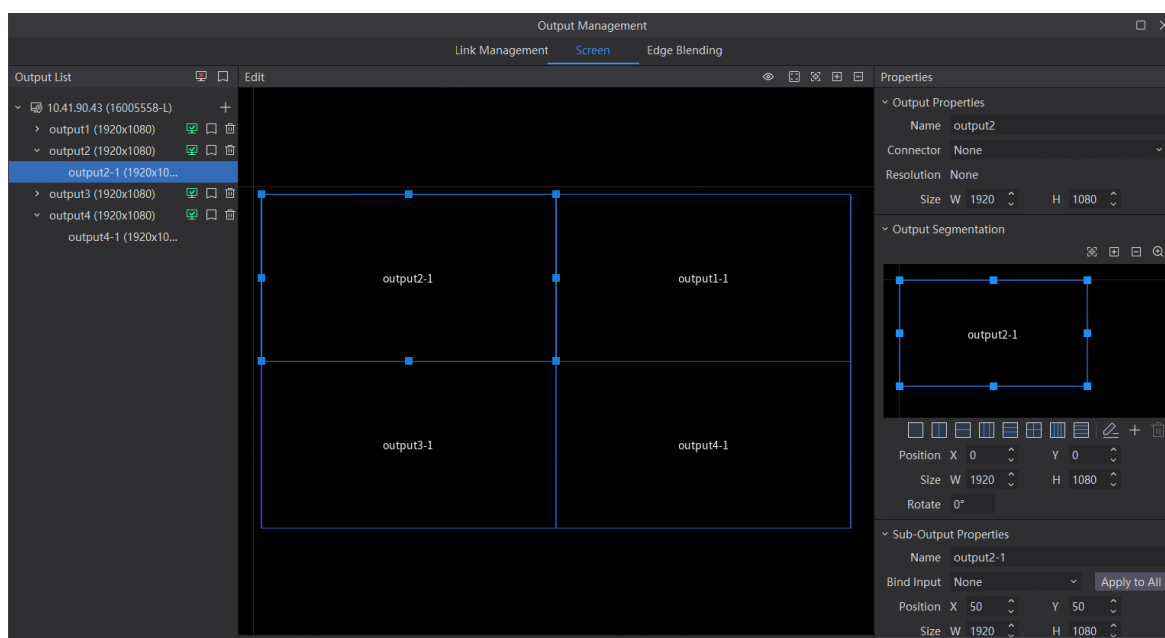
4.4 Split Outputs

4.4.1 Output Segmentation

Output segmentation divides an output into multiple sub-outputs, enabling the splitting and reassembly of the display image, which facilitates the construction and management of irregular screens.

- Step 1** Navigate to **Output > Screen**, then select the output in the output list on the left or click an output in the **Edit** area.
- Step 2** In the **Output Segmentation** section on the right, select the desired segmentation method from the listed ones.

Figure 4-12 Output segmentation



- Layout:

- : 1x sub-output
- : 2x sub-outputs in horizontal direction
- : 3x sub-outputs in horizontal direction
- : 4x sub-outputs in horizontal direction
- : 2x sub-outputs in vertical direction
- : 4x sub-outputs in a grid pattern
- : 3x sub-outputs in vertical direction

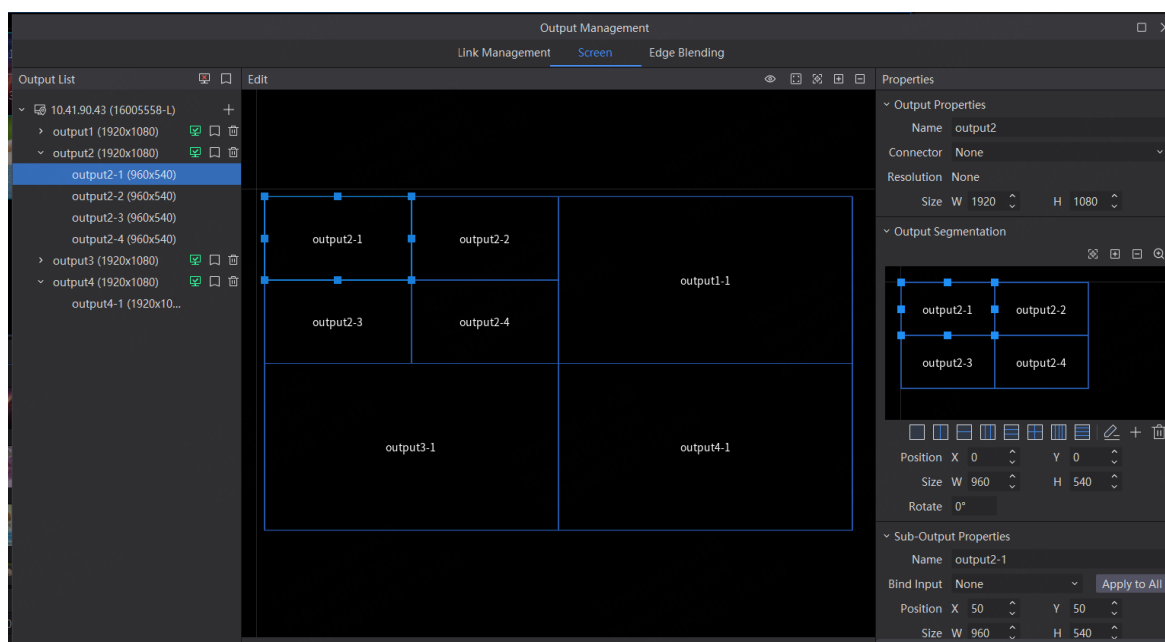
-  : 4x sub-outputs in vertical direction
-  : Custom sub-outputs
-  : Add a sub-output. Add one sub-output with each click, and use the size of the first sub-output for the addition.
-  : Delete the selected sub-output.
- Output segmentation control:
 -  : After moving the canvas, click this button to reset the canvas to the top-left corner.
 -  : Click to zoom in the output area display.
 -  : Click to zoom out the output area display.
 -  : Click to enlarge the sub-output and expand it to the editing area. After expansion, click  in the top-right corner of the editing area or click **Restore Canvas** to revert the zone.
- Press and hold the mouse wheel and drag to move the position of the canvas.

4.4.2 Sub-Output Rearrangement

Sub-output rearrangement refers to reorganizing the output segmentations as needed.

Under the **Screen** tab, drag the sub-outputs to rearrange them.

Figure 4-13 Rearrange sub-outputs



In the **Sub-Output Properties** section on the right, modify the relevant information for the selected sub-output.

- **Name:** Modify the sub-output name.
- **Bind Input:** Bind the current output or sub-output to the corresponding layer. Once bound, the sub-output will consistently display the content from the associated layer. 

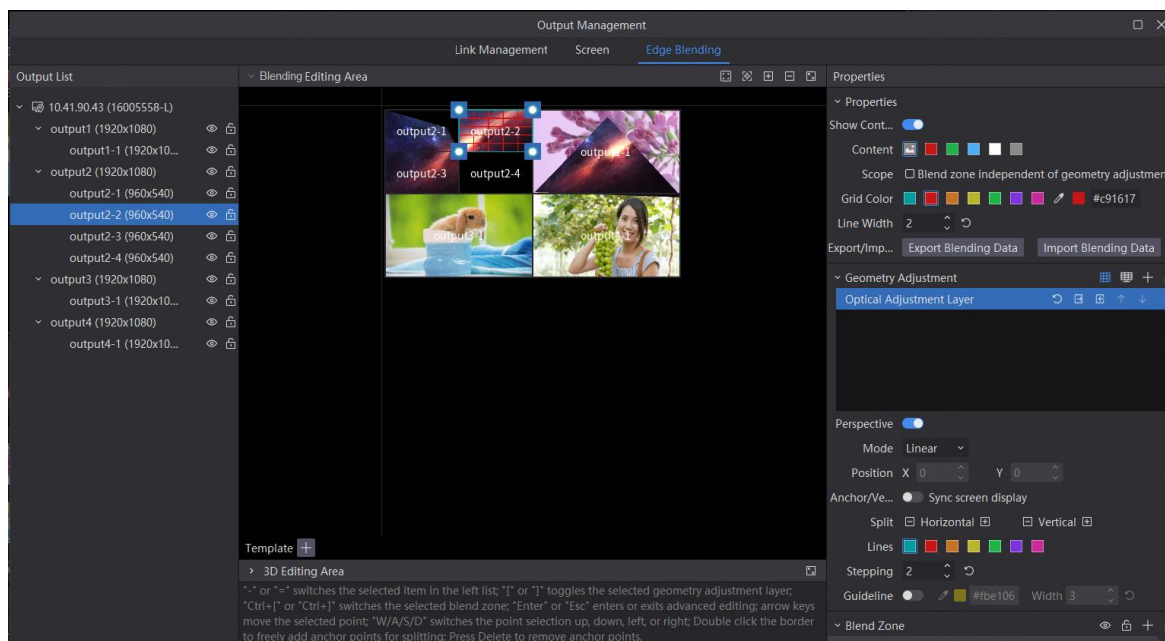
Apply to All: Apply the layer from the current bound input to all sub-outputs of the current output.
- **Position:** Adjust the position of the sub-output on the screen based on the top left corner of the stage.
 - **X:** The horizontal starting coordinate of the sub-output or output on the entire stage
 - **Y:** The vertical starting coordinate of the sub-output or output on the entire stage
- **Size:** Set the size of the sub-output.
 - **W:** The width of the sub-output or output
 - **H:** The height of the sub-output or output
- **Rotate:** Adjust the rotation angle of the sub-output or output in a clockwise direction.

4.5 Configure Edge Blending

Edge blending is the method of finely overlapping the projected images from multiple projectors at the edges, using software to blend the images to eliminate seams and adjust overall brightness and resolution.

Navigate to **Output > Edge Blending** to enter the edge blending interface.

Figure 4-14 Edge blending interface



Select the target output in the **Output List** area on the left or click the output connector in the **Edge Blending Editing** area in the middle.

 the **Properties** area on the right, configure the related parameters.

- **Show Content:** Show or hide the display of the current editing content.
- **Content:** Select the display content of the selected output. 
 - : The software interface shows the playback content of the current connector. 

- Solid color blocks: The software interface shows the selected solid color.
-  Scope: Configure whether the current blend zone configuration is applied base on the geometric adjustment.
 - Unchecked: Edit the blend zone based on geometry adjustment, with both the blend zone and geometry adjustment configuration effective.
 - Checked: Independently edit the blend zone, adjusting on the original image without the effects of the geometry adjustment layer.
- Grid Color: Configure the color of the grid on the output screen. You can choose from preset colors or click  on the right to select from the screen display.
- Line Width: Set the width of the grid lines on the output screen, ranging from 1 to 10. Click  to reset the line width setting.
- Export/Import: Export the blending configuration data into a separate file, or import the exported blending data file into the system.
 - Export Blending Data: Export the configured blending data in the current environment to your local computer.
 - Import Blending Data: Import the blending data into the system to quickly complete edge blending configuration.

4.5.1 Geometry Adjustment

Geometry adjustment solves the mismatch issue between projected images and the screen caused by improper projector placement, projection angle deviation, or lens distortion. Precise geometric adjustments ensure the image perfectly fits the screen, achieving clear, accurate projection that meets various display needs. Users can select the most suitable mode based on the actual projection environment and creative needs, even achieving perspective cropping for ideal visual presentation.

Step 1 Select the output in the **Output List** area on the left or click the output connector in the **Edge Blending Editing** area in the middle.

Step 2 In the **Properties** area on the right, click  next to **Geometry Adjustment**.

The supported adjustment types include **Linear** and **Curved**.

- **Linear**: A geometry adjustment method based on linear transformation. It deforms the image by simply moving vertices.
- **Curved**: A geometric deformation achieved through a non-linear mathematical model. It supports complex deformations in local areas and allows differentiated adjustments to different parts of the image.

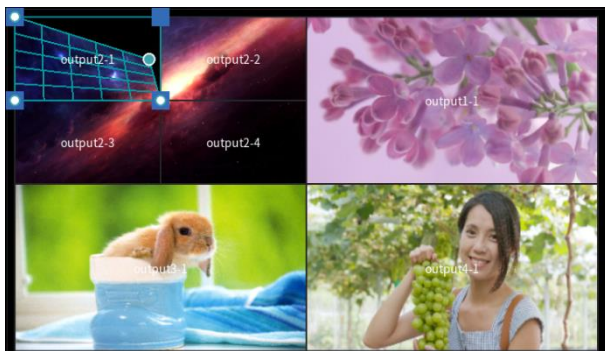
The system will add a **Geometry Adjustment Layer x** with adjustment parameters.

In the **Geometry Adjustment** area, click  and  on the right to add a grid to the canvas editing area and output image.

- : Add a grid to the selected output or sub-output in the canvas editing area.
- : Synchronize and display the grid lines of the current output on the screen.

Step 3 In the **Edge Blending Editing** area, click the vertex's anchor point and drag it to adjust the output image.

Figure 4-15 Anchor editing



On the right, set and edit anchor points in detail.

- Perspective: Enable or disable perspective mode during adjustments.
- Mode: Set the anchor point adjustment mode. Options include **Linear** and **Curved**.
- Position: Adjust the anchor point position.
 - X: Set the horizontal coordinate of the selected anchor point, relative to the horizontal distance from the origin of the screen.
 - Y: Set the vertical coordinate of the selected anchor point relative to the vertical distance from the origin of the screen.
- Anchor/Vertex: Set whether the anchor point editing process is simultaneously displayed on the output screen.
- Split: Split the connector screen horizontally and vertically, and after splitting, you can edit the anchor points in each direction respectively.
 - Horizontal: Click / to increase or decrease split points horizontally.
 - Vertical: Click / to increase or decrease split points vertically.
 - Double click the edge to freely add anchor points.
 - Select an added anchor point and press the **Delete** key to remove it.
- Lines: Set the color of the lines between the anchor points.
- Stepping: After selecting an anchor point, adjust its position using the arrow keys on the keyboard. Each keystroke moves the anchor point a distance ranging from 1 to 10, with a default value of 10.

Click on the right to restore the set value to its default.

- Guideline: After selecting an anchor point, enable or disable the guideline between the anchor point and its adjacent anchor points.

After enabling the guideline, you can set the line color using the following methods.

- Click to select the line color.
- Click the color block and choose a color from the pop-up color picker.
- Enter the color value in the text box to set it to the specified color.
- Width: Set the size of the guideline, with a value ranging from 3 to 10, and a default value of 3.

Step 4 Click the other anchors to make the necessary settings for them.

Press and hold the **Ctrl** key and click other anchor points to select multiple anchors at once. After holding the **Ctrl** key, drag the selected anchor points to modify multiple anchors simultaneously.

Step 5 Click  next to **Geometry Adjustment** to continue adding geometry adjustment layers. When there are multiple geometry adjustment layers, click  or  next to the layer name to adjust the order.

Other Operations

-  : Click to export the selected geometry adjustment parameters to a local file.
-  : Click to import geometry parameters saved locally, replacing the currently selected geometry parameters.
-  : Click to move the selected geometry adjustment layer up.
-  : Click to move the selected geometry adjustment layer down.

4.5.2 Blend Zone

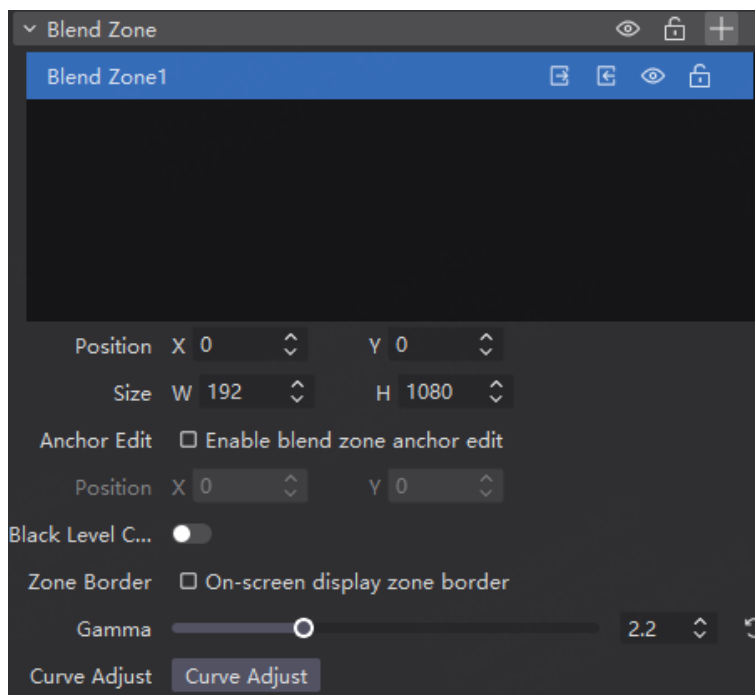
The blend zone is a transitional area formed by setting specific parameter when using multiple projectors to combine and project an image. It eliminates or reduces seams or overlaps at the edges between different projectors, ensuring a smooth transition between images for a more seamless and natural projection effect.

Step 1 Select the output in the **Output List** area on the left or click the output connector in the **Edge Blending Editing** area in the middle.

Step 2 In the **Properties** area on the right, click  next to **Blend Zone** and select the target position for the blend zone.

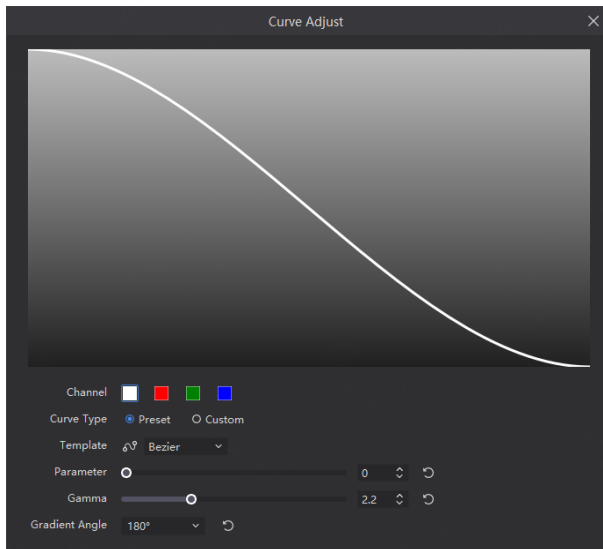
- Left: Add a blend zone to the left side of the selected area.
- Right: Add a blend zone to the right side of the selected area.
- Top: Add a blend zone at the top of the selected area.
- Bottom: Add a blend zone at the bottom of the selected area.
- Outer: Add a blend zone around the selected area.

Figure 4-16 Add blend zone



Step 3 Adjust the parameters of the blend zone as required.

- **Position:** Adjust the position of the blending zone using X and Y coordinates, relative to the origin of the image in horizontal and vertical directions.
In the **Edge Blending Editing** area, hover the mouse over the blend zone, hold the left mouse button and drag to quickly adjust the position of the blend zone.
- **Size:** Set the size of the blend zone.
 - W: The horizontal width of the blend zone
 - H: The vertical height of the blend zone
 - In the **Edge Blending Editing** area, place the mouse over the vertex of the blend band, click and hold the left mouse button, and drag to quickly edit the size of the blend zone.
- **Anchor Edit:** Enable or disable the anchor point editing function for the four vertices of the blend zone.
- **Position:** When **Anchor Edit** is enabled, this parameter can be configured to provide detailed position information for the four anchor points of the blend zone, using the top left corner of the output image as the reference.
- **Black Level Compensation:** Enable or disable the black level compensation function.
Black level compensation refers to enhancing the brightness of non-overlapping areas in a dark field environment to offset the overlapping bright zone, thereby unifying the brightness of the non-overlapping image with that of the overlapping bright zone for a visually smooth transition.
- **Zone Border:** Turn the display of the blend zone border on or off on the output screen.
- **Gamma:** Adjust the Gamma parameter of the blend zone, with a range of 1.0 to 5.0 and a default value of 2.2.
- **Curve Adjust:** Click **Curve Adjust** to open the blend curve adjustment interface.



- Channel: Select the blend channel to adjust. Options include White, Red, Green, and Blue.
White: Adjust the blend effect uniformly across all color channels.
Red, Green, Blue: Adjust the blend curves for red, green, and blue individually to address color differences in projections.
- Curve Type: Two modes are provided: **Preset** and **Custom**.
Preset: Predefined blend curve templates for quick adaptation to common projection needs. Templates include **Bezier**, **Triangle**, and **Exponential**, which can be fine tuned using the **Parameter** below.
Custom: Allow manual dragging of curve nodes for free adjustment. Click **Reset** next to **Template** to reset the curve.
- Gamma: Adjust the non-linear brightness response curve, affecting the curvature of brightness transitions in the blend zone. Range: 1.0–5.0 (default: 2.2).
- Gradient Angle: Define the transition direction of the blend zone.
- Click  next to a parameter to reset it.

More Operations

-  /  : Show or hide the blend zones.
 - Click the icon at the top of a blend zone to show or hide all blend zones.
 - Click the icon next to a specific blend zone to show or hide only the selected blend zone.
-  /  : Lock or unlock the blend zones.
 - Click the icon at the top of a blend zone to lock or unlock all blend zones.
 - Click the icon next to a specific blend zone to lock or unlock only the selected blend zone.
-  : Click to add a blend zone.
-  : Click to export the selected blend zone to a local file.
-  : Click to import a blend zone from a local file, replacing the currently selected blend zone.

4.5.3 Blend Templates

After completing the geometry adjustment and blend zone settings for an output or sub-output, save the parameters as a blend template. This template can be applied to other outputs or sub-outputs for quick adjustments.

Save Templates

- Step 1 Navigate to **Output > Edge Blending > Output List**, and select the target output or sub-output.
- Step 2 In the **Properties** section on the right, complete the geometry adjustment and blend zone settings for the selected output or sub-output.
- Step 3 Click **+** in the **Template** section below to add a blend template.

The template can save one or more settings from the geometry adjustment and blend zone configuration.

Rename Templates

Right click the added template, select **Rename**, enter the new name, and click elsewhere or press Enter to confirm.

Load Templates

- Step 1 Navigate to **Output > Edge Blending > Output List**, and select the target output or sub-output.
- Step 2 Click the template to apply the saved template to the selected output or sub-output.

Delete Templates

- Delete single template: Right click the added template and select **Delete** to remove the selected template.
- Clear all templates: Right click the added template and select **Clear Templates** to remove all added templates.

4.5.4 Edge Blending Shortcuts

The system provides preset shortcuts for edge blending operations.

Table 4-3 Edge blending shortcuts

Shortcut	Function	Description
~, =	Output list navigation	• -: Move up in the output list. • =: Move down in the output list.
[,]	Geometry adjustment layer navigation	• [: Cycle up through geometry adjustment layers. •]: Cycle down.

Shortcut	Function	Description
Ctrl+[, Ctrl+]	Blend zone navigation	• Ctrl+[,: Cycle up through blend zones. • Ctrl+] : Cycle down.
Enter, Esc	Advanced edit toggle	• Enter: Enter advanced edit mode. • Esc: Exit advanced edit mode.
Arrow keys	Anchor point movement	Move the selected anchor point up, down, left, or right in fixed stepping.
W, A, S, D	Anchor point selection	Move the selection of anchor points up, down, left, or right.

4.5.5 3D Editing

3D (three-dimensional) editing assists users in seamlessly adjusting the playback effect of panoramic content to fit various curved screens, such as domes, bowl-shaped, or curved screens. By simply adjusting the shape and mosaic position within the software, users can resolve image distortion without repeatedly altering the content. Adjustments can be previewed in real-time and directly output to projection or LED screens for an immersive experience. 

Step 1 Navigate to **Output > Edge Blending** to enter the edge blending interface. 

Step 2 In the output list on the left, select the desired output. 

Step 3 In the properties area on the right, click  next to **Geometric Adjustment** to enable the output grid display. 

Step 4 In the **Split** section, click  next to **Horizontal** and **Vertical** to increase anchor points.

More anchor points allow for more detailed adjustments, but require greater adjustment effort, depending on the complexity of the environment. 

Step 5 Once grid settings are complete, select the adjustment mode.

- If the output edge is a curved area, set the mode to **Curved**.
- If the output edge is a straight area, set the mode to **Linear**.

Step 6 Repeat [Step 2](#) to [Step 5](#) complete settings for other outputs. 

Step 7 Choose an optimal angle to photograph the output area to record the grid lines. 

Step 8 Click  next to **3D Editing Area** or  on the right to expand the 3D editing interface. 

Step 9 In the properties area on the right, click  next to **Grid Image** to add the photo taken in [Step 7](#).

Step 10 Select the photo image and click  to apply the grid image to the 3D editing area. 

If the photo is too large, click  to crop the image in the 3D editing area by dragging vertices. Click **OK** to finish cropping. 

Step 11 Select the output on the left and in the **Advanced** section on the right, toggle on the **Anchor Edit** function.

Step 12 In the 3D editing area, click and drag anchor points to modify their positions.

You can compare and modify according to the grid image. Anchor points can be modified in the following ways:

- Drag and edit the anchor points.
- In the **Advanced** section, fine tune the **X** and **Y** values of anchor points.
- If the **Curved** mode is set, select an anchor point and drag its handle to modify curvature.
- Auxiliary adjustment settings:
 - Anchor point line: Set the color of lines between anchor points.
 - Anchor point stepping: Adjust the stepping distance with keyboard arrow keys.
 - Guideline: Enable or disable boundary lines attached to selected anchor points. The guideline color and width settings are supported.

Step 13 Once one output connection is configured, click other outputs and adjust each one individually.

4.6 Edit Program Layers

Before starting program editing, media files need to be imported into the layers.

4.6.1 Add Program Media

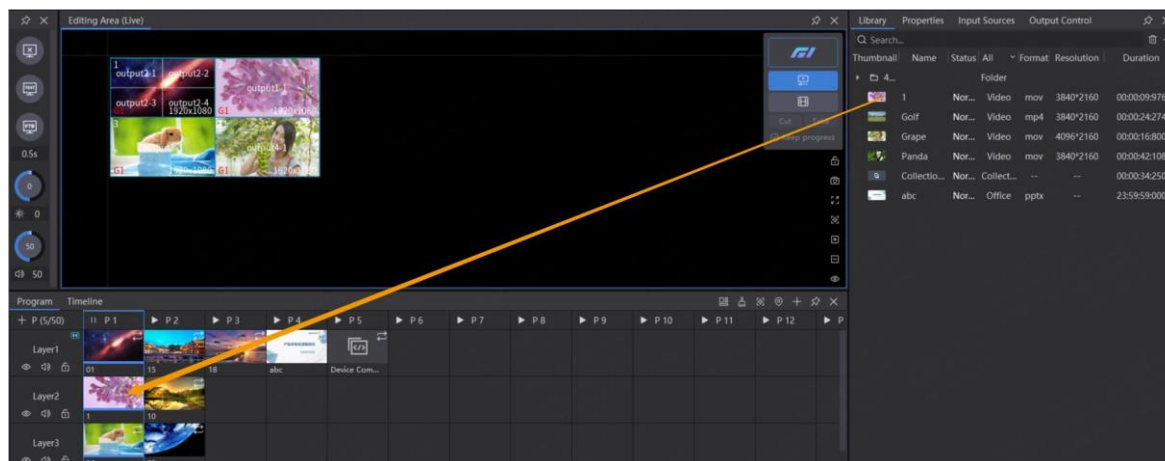
Layers are used to store media files in the program. Click  in the top right corner of the **Program** area to add a layer.

Note

At most 40 layers can be added.

Select the target media file in the media library, click and hold the left mouse button to drag it to the corresponding layer of the program to add the layer to the program.

Figure 4-18 Edit program layers



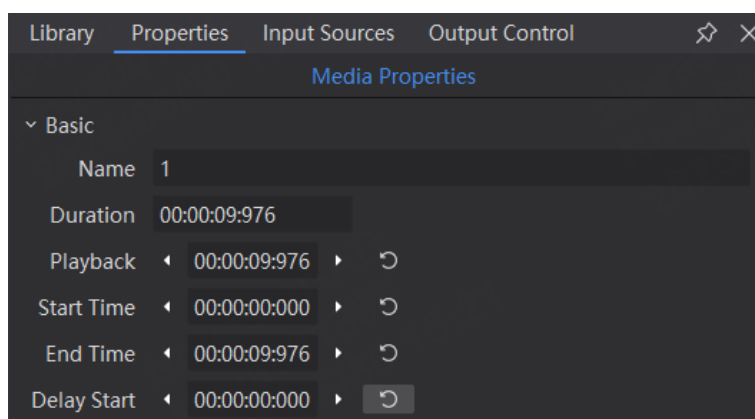
4.6.2 Configure Program Media Properties

Configure the basic media properties, playback method, display settings, and image quality parameters.

- Step 1 Click the media in the program to select it.
- Step 2 Select the **Properties** tab on the right pane to enter the media properties interface.

Basic

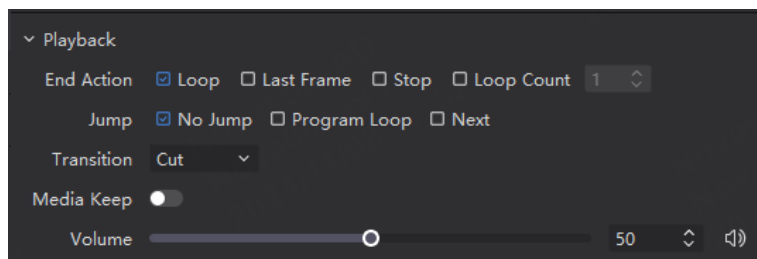
Figure 4-19 Media properties - basic



- Name: View or modify the media name.
- Media: View the media duration.
- Duration: Set the playback duration for this media.
 - If the playback duration is longer than the media duration, the media will automatically replay.
 - If the playback duration is shorter than the media duration, the media will play for the set duration, and any unplayed content will not be shown.
- Start Time: Set the start time for media playback. The start time value cannot be greater than the media duration value.
- End Time: Set the end time for media playback. The end time value must be greater than the start time value and cannot be greater than the media duration value.
- Delay Start: Set the delay duration for media playback, meaning how long after the program starts the media will begin to play.
- Click  next to each parameter to reset the value to default.

Playback

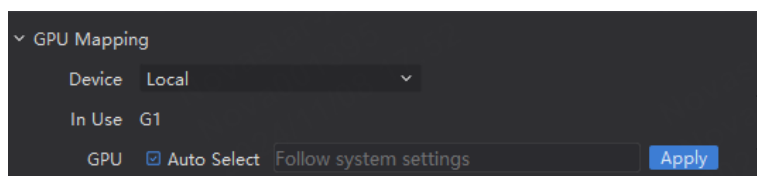
Figure 4-20 Media properties - playback



- End Action: Set how the current media plays after the program ends.
 - Loop: Loop the media in the current layer, with an icon  displayed in the top right.
 - Last Frame: Stop at the last frame after one playback, with an icon  displayed in the top right.
 - Stop: Stop playing after one playback, with an icon  displayed in the top right.
 - Loop Count: Set the loop count for the current media, with an icon  displayed in the top right.
- Jump: Set how the current media plays after finishing.
 - No Jump: Do nothing after the media finishes playing.
 - Program Loop: The media plays in a loop.
 - Next: Jump to the next program after playback, with an icon  displayed in the top right.
If a specific program is set for jumping, here the group's name and the program name after jumping will be displayed, with an icon  displayed in the top right of the media.
- Transition: Set the transition effect for switching media in the program layer. Currently only supports **Cut**.
- Media Keep: When on, the program resumes from the last played position; when off, the media restarts from the beginning.
- Volume: Adjust the output volume of the media. Click  to mute the media.

Graphics Card Mapping

Figure 4-21 Media properties – GPU mapping



- Device: The media is output from this device.
- In Use: View the graphics card currently used by the media.

- GPU: Set the graphics card for rendering the selected media.

Check **Auto Select** for the system to choose automatically, or uncheck to manually select a graphics card. Click **Apply** to complete the graphics card switching.

Image

Figure 4-22 Media properties - image



- Flip: Configure the media image flipping.
Uncheck the checkboxes for **H** and **V** and the output image will be displayed normally without flipping.
 - H: Flip the output image horizontally.
 - V: Flip the output image vertically.
- Fill: Select the way how the content of a layer is displayed.
 - Fill: The media image fills the entire layer.
 - Proportional: The layer image is scaled proportionally and displayed within the layer.
- Accurate Seek: Enable this feature to quickly jump to a specific time point in a video or audio file without needing to gradually drag the progress bar to search.
- Y/C Stretch: When enabled, the bright areas of the output image become brighter, and the dark areas become darker.

Color

Figure 4-23 Media properties - color

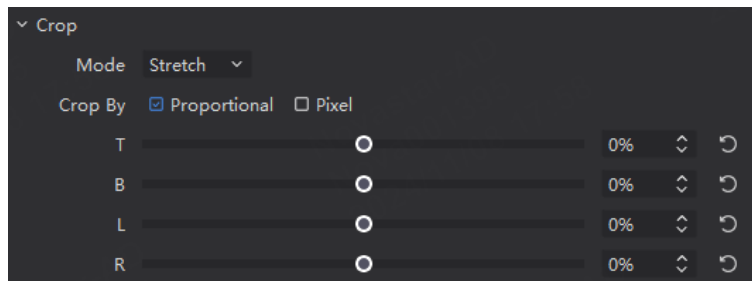


- Brightness: Adjust the overall brightness of the output image. The value range is -100 to 100, with a default value of 0.
- Contrast: Adjust the overall contrast of the output image. The range of values is -100 to 100, with a default value of 0.
- Opacity: Adjust the opacity of the output image, with 0% being completely transparent and 100% being opaque. The default value is 100%.
- Hue: Adjust the color offset of the output image. The range of values is -100 to 100, with a default value of 0.
- Saturation: Adjusts the vividness of colors of the output image. The value range is -100 to 100, with a default value of 0.

- Click  next to each parameter to reset the value to default.

Crop

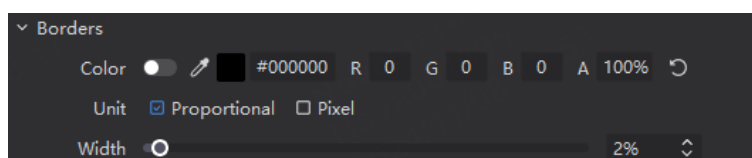
Figure 4-24 Media properties - crop



- Mode: Select the cropping method.
 - Stretch: Scale up or down the output image.
 - Crop: Crop the output image.
 - Proportional: Scale down the output image proportionally.
- Crop By: Set the parameter unit for cropping.
 - Proportional: The proportion of the image cropped from the entire image
 - Pixel: The pixel dimensions for cropping the image
- T: Set the size of the area at the top of the media image that is cropped.
- B: Set the size of the area at the bottom of the media image that is cropped.
- L: Set the size of the area at the left of the media image that is cropped.
- R: Set the size of the area at the right of the media image that is cropped.

Borders

Figure 4-25 Media properties - borders

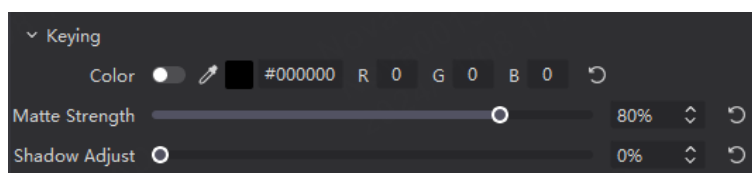


- Color: Configure the border color of the media.
 - Toggle the switch to activate the border function for the media.
 - Set the border color using the following four methods.
 - Click the color picker tool and click to select the desired color.
 - Click the color block and select a color in the pop-up box.
 - Enter the color code value after the # symbol.
 - Double click the values next the RGB values and enter the value for each RGB component to precisely specify the color.
 - Modify the value next to **A** to adjust the opacity of the borders.
100 is fully opaque, and 0 is completely transparent.

- Unit: Set the size unit of the border.
 - Proportional: The border size as a percentage of the media size
 - Pixel: The border size in pixels
- Width: Set the width of the borders.
 - Proportional: Adjust the border width by setting the border size as a percentage of the media size, ranging from 0% to 100%.
 - Pixel: Adjust the border by specifying how many pixels it occupies to set the border width, ranging from 0px to half the minimum of either the width or height of the media.

Keying

Figure 4-26 Media properties - keying

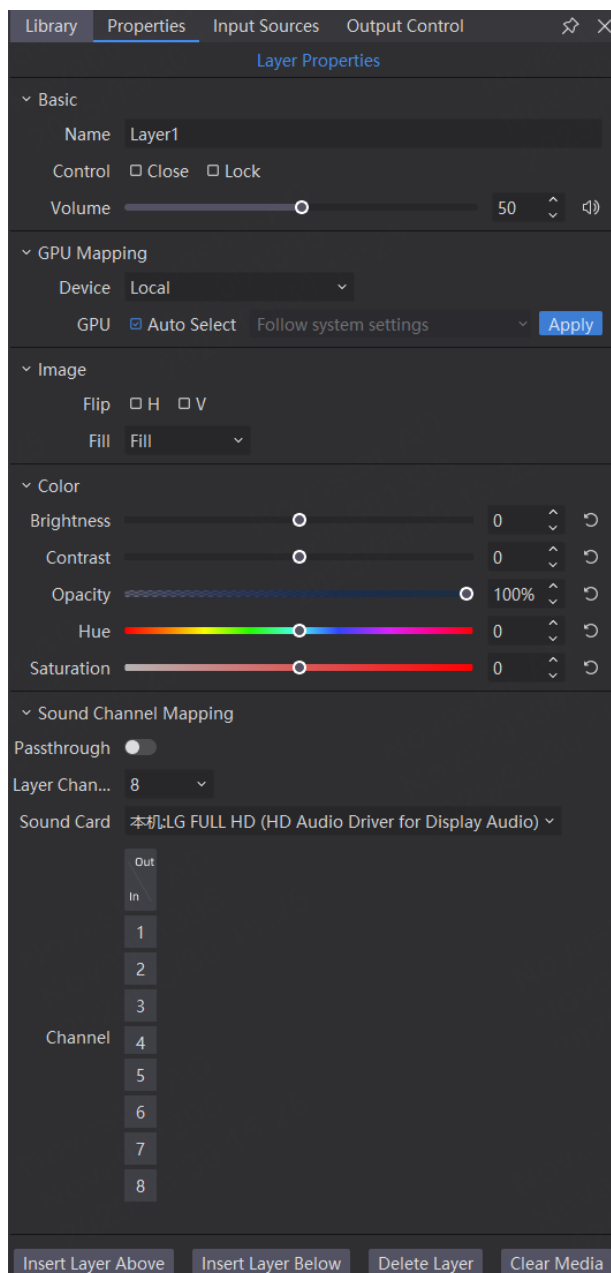


- Color: Key out the specified color from the selected media.
Toggle the switch to activate the keying function for the media.
There are four methods for specifying the keying color.
 - Click the color picker tool and click to select the desired color.
 - Click the color block and select a color in the pop-up box.
 - Enter the color code value after the # symbol.
 - Double click the values next the RGB values and enter the value for each RGB component to precisely specify the color.
- Matte Strength: The higher this value, the stronger the keying range/color correction. When you need to accurately key out a color in an image, it is recommended that this value is set to smaller than 10%; in other cases, more than 50% is recommended.
- Shadow Adjust: The higher this value, the cleaner the noise areas in the shadow of the foreground are keyed out.

4.6.3 Configure Program Layer Properties

Select a layer, and navigate to the **Properties** tab on the right side to configure the layer properties. In the layer properties, the properties of all media within the layer can be adjusted.

Figure 4-27 Layer properties



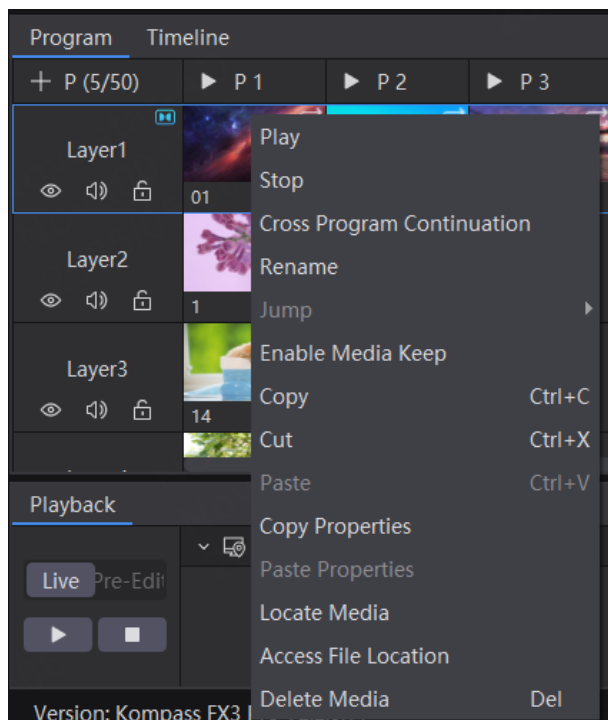
Area	Function	Description
Basic	Layer name	View and modify the layer name.
	Layer control	Set whether the layer is visible or locked - Close: Close all media visuals in the layer and only play the media audio. - Lock: Once the selected layer is locked, you cannot add programs to, delete media from, or perform other actions on that layer for other programs.
	Layer volume	Adjust the media output volume of this layer. Click  to mute the all media in that layer.
GPU Mapping	Device	The media is output from this device. 

Area	Function	Description
	GPU	Set the graphics card for rendering the selected media. Check Auto Select for the system to choose automatically, or uncheck to manually select a graphics card. Click Apply to complete the settings.
Image	Flip	Configure the all media image flipping within this layer. Uncheck the checkboxes for H and V and the media image will be displayed normally without flipping. • H: Flip the media image horizontally. • V: Flip the media image vertically.
	Fill	Select the way how the content of a layer is displayed. • Fill: The media image fills the entire layer. • Proportional: The layer image is scaled proportionally and displayed within the layer.
Color	Brightness	Adjust the overall brightness of the layer image. The value range is -100 to 100, with a default value of 0.
	Contrast	Adjust the overall contrast of the layer image. The range of values is -100 to 100, with a default value of 0.
	Opacity	Adjust the opacity of the layer image, with 0% being completely transparent and 100% being opaque. The default value is 100%.
	Hue	Adjust the color offset of the layer image. The range of values is -100 to 100, with a default value of 0.
	Saturation	Adjusts the vividness of colors of the layer image. The value range is -100 to 100, with a default value of 0.
Sound Channel Mapping	Passthrough	When the backend audio device is a surround sound system, Passthrough must be enabled. Once set, restart the software for changes to take effect. • On: In program management, select the media and choose the audio track under Properties > Sound Channel Mapping > Sound Track. Once turned on, non-Dolby audio media will be unable to output audio. • Off: No need to set the sound track, and audio output proceeds directly. In this case, Dolby audio media will not output properly through the surround sound system.
	Layer Channels	Set the number of audio signal tracks in the layer.
	Sound Card	Choose which sound card on the current device to use for audio output.
	Channel	Control the signal mapping and mixing between channels. Click the corresponding cells in the audio matrix to map input and output channels.
Insert Layer Above		Insert a layer above the current layer.
Insert Layer Below		Insert a layer below the current layer.
Delete Layer		Delete the current layer and the data within it.
Clear Media		Clear all data in the layer.

4.6.4 Context Menu of Program Layer Media

Right click the layer media to display the context menu.

Figure 4-28 Layer media context menu



- Play: Play the media in the current layer.
- Pause: Pause the media playback.
- Stop: Stop the media playback.
- Cross Program Continuation: The same media file plays on the same layer across multiple consecutive programs. When switching programs within the continuous program range, the media plays normally without interruption or restarting.
- Cancel Continuation: Once **Cross Program Continuation** is set, this function becomes available, cancel media continuation across programs.
- Rename: Change the name of the media in the program.
- Jump: Set the switch mode after the current media has finished playing.
 - Media Loop: Loop the media in the current layer, with an icon  displayed in the upper right corner of the layer.
 - Last Frame: When the current media playback is completed once, it stops at the last frame. After the setting is completed, an icon  is displayed in the upper right corner of the layer.
 - Stop: After the current media plays once, stop playback and display an icon  in the upper right corner of the layer.
 - Program Loop: When the media playback ends, the program restarts.

- Next Program: After the current media finishes playing, it will automatically jump to the next program, with an icon  displayed in the upper right corner of the layer.
- Jump to Specific Program: After the current media finishes playing, automatically jump to the specified program, with an icon  displayed in the upper right corner of the layer.
- Apply to All: Apply the current media jump mode to all other media in the current layer.

 Note

When a program has multiple media with different skip modes set, the skip mode of the media that finishes playing first will take precedence.

- Media Keep: Once enabled, when switching back to the program, this media will resume playing from where it left off.
- Cancel Media Keep: After cancelling the media keep, when switched to this program, the media will restart from the beginning.
- Copy: Copy the currently selected media and media properties. Shortcut key: **Ctrl+C**.
- Cut: Cut the currently selected media or media properties. After cutting, the layer media in this program will be deleted. Shortcut key: **Ctrl+X**.
- Paste: Paste the copied or cut media and media properties into the selected program. Shortcut key: **Ctrl+V**.
- Copy Properties: Copy the currently selected media properties, including media properties and media slice properties.
- Paste Properties: Quickly modify media properties in other programs by pasting the selected media properties to the media in other programs.
- Locate Media: Find the media in the media library.
- Access File Location: Open the storage location of the current media on the media server.
- Delete Media: Delete the currently selected media.

4.6.5 Configure Program Properties

In the program management area, select the desired program. On the right pane under **Properties**, you can modify the program properties.

Figure 4-29 Program properties

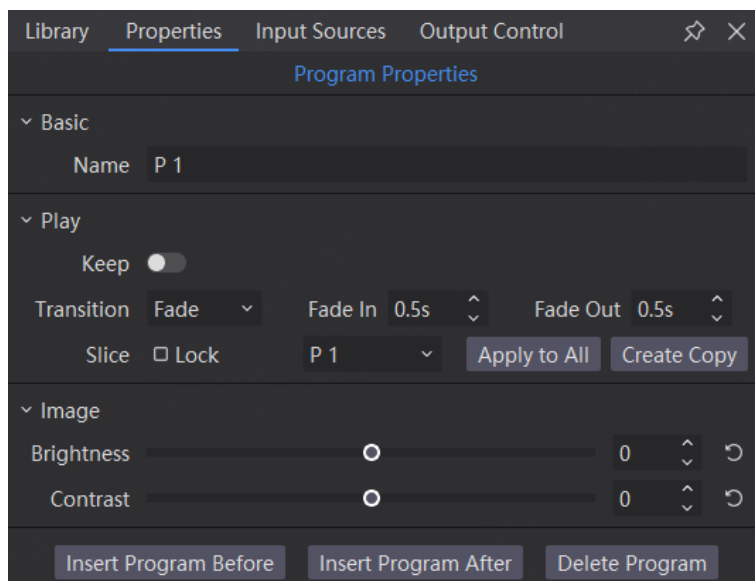


Table 4-4 Program properties

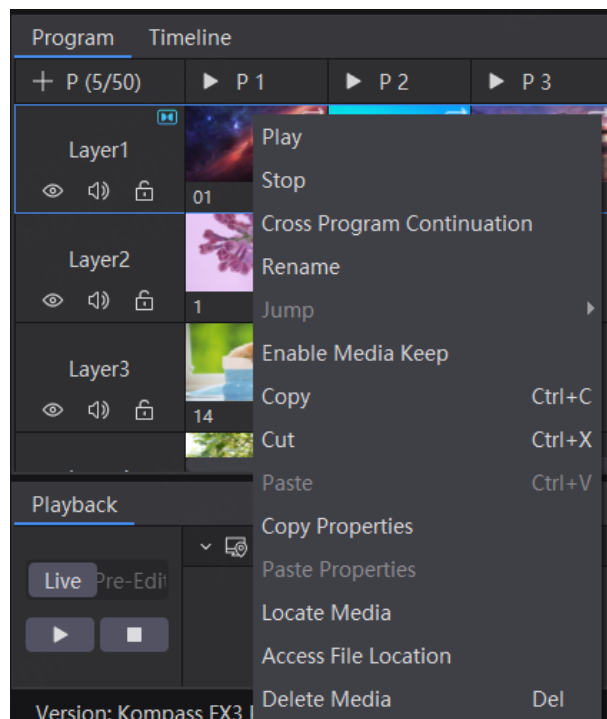
Area	Function	Explanation
Basic	Program name	View or modify the program name.
Play	Keep media	After enabled, when the program switches back, it will continue playing from the last position; after disabled, when the program switches back, the media will start playing from the beginning.
	Transition effect	Set the transition effect for program switching. The options include Cut and Fade . For the fade in and fade out transitions, you can set the fade duration, with the default value of 0.5s.
	Slice layout	• Lock: Lock the slice layout style in the selected program. • Apply to All: Apply the slice layout style from the selected program to all other programs. • Create Copy: Duplicate the slice properties from the current program, allowing other programs to load the slice by selecting the program.
Image	Brightness	Adjust the brightness of the output image in the program. The value range is -100 to 100, with a default value of 0.
	Contrast	Adjust the contrast of the output image in the program. The value range is -100 to 100, and the default value is 0.
Insert Program Before		Insert a program before the current program.
Insert Program After		Insert another program after the current program.
Delete Program		Delete the currently selected program.

4.6.6 Cross Program Continuation

When the same media needs to be played at the same layer position for multiple consecutive programs, adding the same media to each program individually will cause the media file to start over upon switching programs. By using this feature, this issue can be perfectly resolved, allowing the continued media to play normally without restarting when switching programs.

- Step 1 In the program management area, right click the media that needs to be continued, and select **Cross Program Continuation**.

Figure 4-30 Cross program continuation



- Step 2 Click and hold the left mouse button on the media, then slide left or right to the target program where you want to continue.



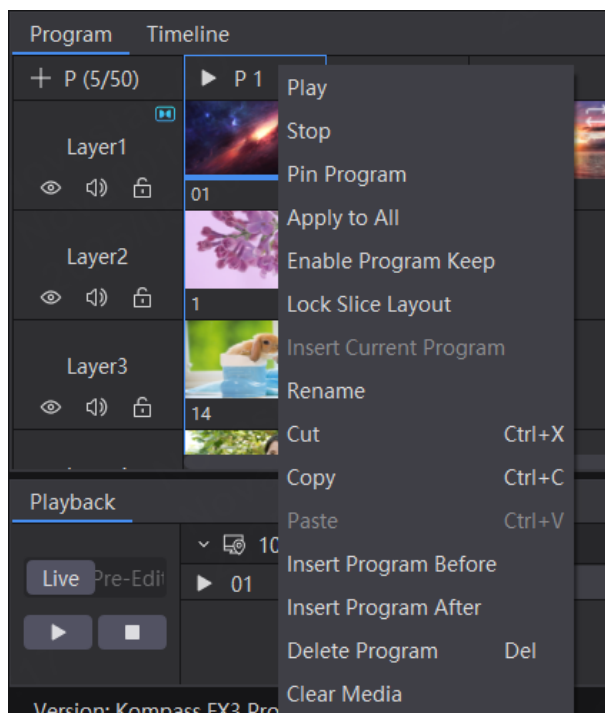
Note

After completing the media cross program continuation setup, right click the media across programs and select **Cancel Continuation** to remove the continuation setup.

4.6.7 Program Context Menu

Right click the program to display the program context menu.

Figure 4-31 Program context menu



- **Play:** Play the current program.
- **Stop:** Stop the program playback, and when played again, the media in the program will start from the beginning.
- **Pin Program:** Place the selected program on the left most of the program list. The pinned program always remains displayed on the left side of the program list.
- **Cancel Pin to Top:** Remove the current pinned program.
- **Apply to All:** Apply the configured properties of the current program to other programs.
- **Enable Program Keep:** After enabled, when switching back to the program, the program will continue playing from where it left off.
- **Disable Program Keep:** After disabled, when switching to this program, the program plays again from the beginning.
- **Lock Slice Layout:** Lock the current program's slice layout. Once locked, the slices in the editing area cannot be moved.
- **Unlock Slice Layout:** Unlock the slice layout in the current program, allowing the slice in the editing area to be freely moved once unlocked.
- **Insert Current Program:** Immediately play the current selected program and automatically pause the program that is currently playing. Once the interrupted program finishes, the paused program will automatically resume.
 - In the pre-edit mode, this function is not supported.
 - This function is not supported during media collection playback.
 - This function is not supported during cross program continuation playback.
 - When multiple insertions are made, after the interrupted program finishes, it resumes playing from the program just before the last insertion, rather than returning to the program before the first insertion.
 - After the insertion, the program will display the currently playing content and the program name area of the interrupted program will be marked with a different color.

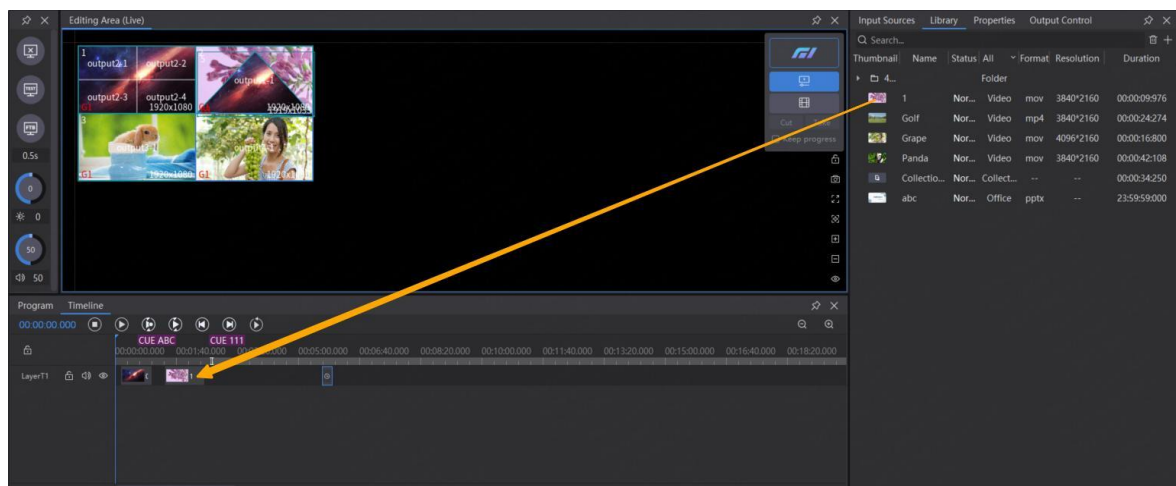
- **Rename:** Change the name of the program.
- **Cut:** Cut the currently selected program, including media from all layers within the program. Shortcut key: **Ctrl+X**.
- **Copy:** Copy the currently selected program, including media from all layers within the program. Shortcut key: **Ctrl+C**.
- **Paste:** Paste the copied or cut content into the selected program. Shortcut key: **Ctrl+V**.
- **Insert Program Before:** Insert a program on the left side of this program.
- **Insert Program After:** Insert a program on the right side of this program.
- **Delete Program:** Delete the currently selected program.
- **Clear Media:** Clear all media in the selected program.

4.7 Edit Timeline Layers

4.7.1 Add Timeline Media

- Step 1** Click **Timeline** to enter the timeline media management interface.
- Step 2** Select the target media file in the media library, click and hold the left mouse button, then drag it to the media area below the timeline to add the layer and media to the timeline.

Figure 4-32 Add timeline media



The timeline will show the current media start time. Drag leftward or rightward to quickly adjust the media playback start time.

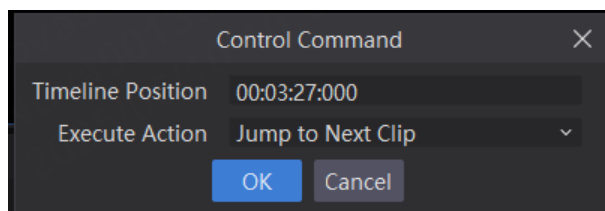
4.7.2 Edit Control Commands

Add Control Commands

Adding control commands allows timeline positions to trigger playback control command.

After adding timeline media, right click the timeline layer and select **Add Control Command** to open the control command interface.

Figure 4-33 Add control command



- Timeline Position: Set the specific time point on the timeline for the command trigger.
- Execute Action: When reaching the trigger point, initiate the next playback control. Options include **Jump to Next Clip**, **Jump to Specific Clip**, **Jump to Specific Time**, **Pause Playback**, **Loop Playback**, and **Play from Start**.

Modify Control Commands

After adding a control command, a shortcut icon appears on the timeline layer. Different actions show different icons. Right click the shortcut icon and select **Edit** to open the control command editing interface.

Modify command details and click **OK** to complete the changes.

Delete Control Commands

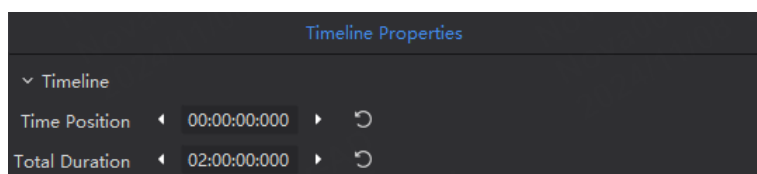
- Delete single command: Right click the shortcut icon and select **Delete** to delete the selected control command.
- Clear all commands:
 - Press and hold **Ctrl**, and select the shortcut icons on the timeline layer to select multiple command. Right click and select **Delete** to delete them.
 - Right click a shortcut icon on the timeline layer and select **Clear All Commands** to clear all commands.

4.7.3 Configure Timeline Properties

Step 1 Click **Timeline** to enter the timeline interface.

Step 2 In the **Properties** area on the right pane, configure the timeline properties.

Figure 4-34 Timeline properties



- Time Position: Set the start position for the first play in the timeline.
- Total Duration: Set the overall length of the timeline.
- : Reset the time value to default.

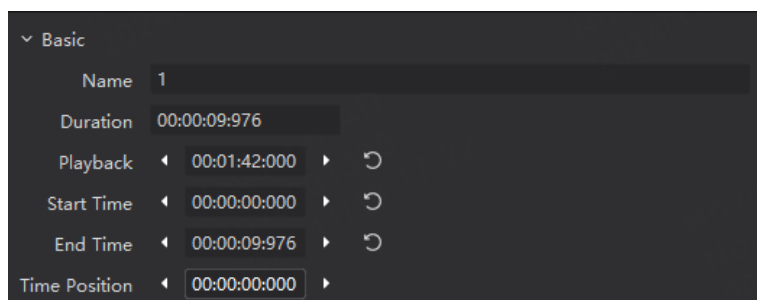
4.7.4 Configure Timeline Media Properties

Step 1 In the **Timeline** area, select the media.

Step 2 In the **Properties** area on the right pane, configure the timeline media properties.

Basic

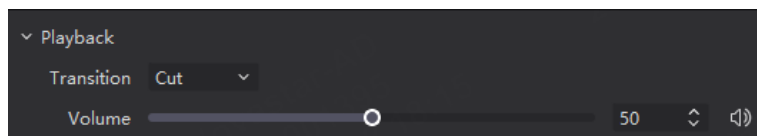
Figure 4-35 Media properties - basic



- Name: View or modify the media name.
- Duration: View the media duration.
- Playback: Set the playback duration for this media.
 - If the playback duration is longer than the media duration, the media will automatically replay.
 - If the playback duration is shorter than the media duration, the media will play for the set duration, and any unplayed content will not be shown.
- Start Time: Set the start time for media playback. The start time value cannot be greater than the media duration value.
- End Time: Set the end time for media playback. The end time value must be greater than the start time value and cannot be greater than the media duration value.
- Time Position: Set the start playback time for the media on the timeline.
- Click  next to each parameter to reset the value to default.

Playback

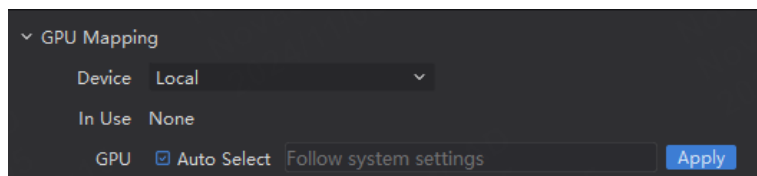
Figure 4-36 Media properties - playback



- Transition: Set the transition effect for switching media in the timeline layer. Currently only supports Cut.
- Volume: Adjust the output volume of the media. Click  to mute the media.

Graphics Card Mapping

Figure 4-37 Media properties - GPU mapping

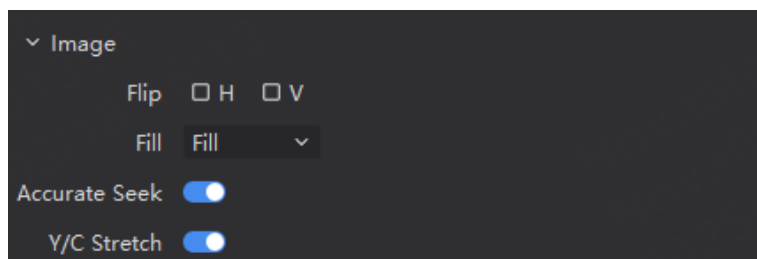


- Device: The media is output from this device.
- In Use: View the graphics card currently used by the media.
- GPU: Set the graphics card for rendering the selected media.

Check **Auto Select** for the system to choose automatically, or uncheck to manually select a graphics card. Click **Apply** to complete the graphics card switching.

Image

Figure 4-38 Media properties - image



- Flip: Configure the media image flipping.
Uncheck the checkboxes for **H** and **V** and the output image will be displayed normally without flipping.
 - H: Flip the output image horizontally.
 - V: Flip the output image vertically.
- Fill: Select the way how the content of a layer is displayed.
 - Fill: The media image fills the entire layer.
 - Proportional: The layer image is scaled proportionally and displayed within the layer.
- Accurate Seek: By enabling the function, users can quickly jump to a specific timestamp in a video or audio file without manually dragging the progress bar to search.
- Y/C Stretch: When enabled, the bright areas of the output image become brighter, and the dark areas become darker. It is turned off by default.

Color

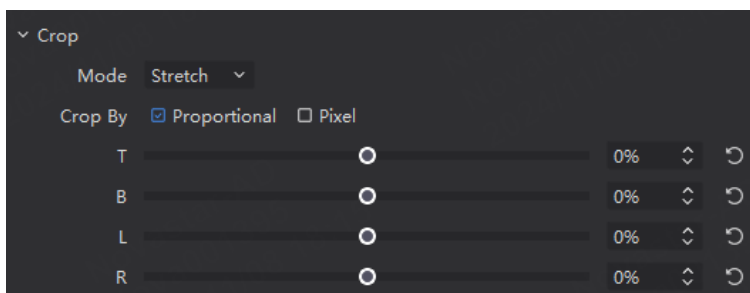
Figure 4-39 Media properties - color



- **Brightness:** Adjust the overall brightness of the layer image. The value range is -100 to 100, with a default value of 0.
- **Contrast:** Adjust the overall contrast of the layer image. The range of values is -100 to 100, with a default value of 0.
- **Opacity:** Adjust the opacity of the layer image, with 0% being completely transparent and 100% being opaque. The default value is 100%.
- **Hue:** Adjust the color offset of the layer image. The range of values is -100 to 100, with a default value of 0.
- **Saturation:** Adjusts the vividness of colors of the layer image. The value range is -100 to 100, with a default value of 0.
- Click  next to each parameter to reset the value to default.

Crop

Figure 4-40 Media properties - crop

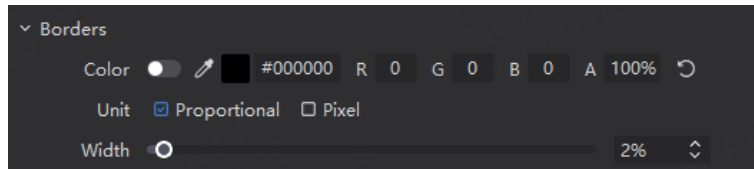


- **Mode:** Select the cropping method.
 - Stretch: Scale up or down the output image.
 - Crop: Crop the output image.
 - Proportional: Scale down the output image proportionally.
- **Crop By:** Set the parameter unit for cropping.
 - Proportional: The proportion of the image cropped from the entire image
 - Pixel: The pixel dimensions for cropping the image
- **T:** Set the size of the area at the top of the media image that is cropped.
- **B:** Set the size of the area at the bottom of the media image that is cropped.
- **L:** Set the size of the area at the left of the media image that is cropped.

- R: Set the size of the area at the right of the media image that is cropped.

Borders

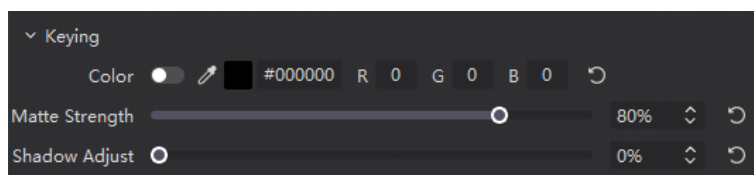
Figure 4-41 Media properties - borders



- Color: Configure the border color of the media.
Toggle the switch to activate the border function for the media.
Set the border color using the following four methods.
 - Click the color picker tool and click to select the desired color.
 - Click the color block and select a color in the pop-up box.
 - Enter the color code value after the # symbol.
 - Double click the values next the **RGB** values and enter the value for each RGB component to precisely specify the color.
 - Modify the value next to **A** to adjust the opacity of the borders.
100 is fully opaque, and 0 is completely transparent.
- Unit: Set the size unit of the border.
 - Proportional: The border size as a percentage of the media size
 - Pixel: The border size in pixels
- Width: Set the width of the borders.
 - Proportional: Adjust the border width by setting the border size as a percentage of the media size, ranging from 0% to 100%.
 - Pixel: Adjust the border by specifying how many pixels it occupies to set the border width, ranging from 0px to half the minimum of either the width or height of the media.

Keying

Figure 4-42 Media properties - keying



- Color: Key out the specified color from the selected media.
Toggle the switch to activate the keying function for the media.
There are four methods for specifying the keying color.
 - Click the color picker tool and click to select the desired color.
 - Click the color block and select a color in the pop-up box.
 - Enter the color code value after the # symbol.

- Double click the values next the **RGB** values and enter the value for each RGB component to precisely specify the color.
- **Matte Strength:** The higher this value, the stronger the keying range/color correction. When you need to accurately key out a color in an image, it is recommended that this value is set to smaller than 10%; in other cases, more than 50% is recommended.
- **Shadow Adjust:** The higher this value, the cleaner the noise areas in the shadow of the foreground are keyed out.

4.8 Edit Timeline

4.8.1 Edit Clips

Split Clips

Kompass FX3 Pro supports splitting the timeline for playback, with individual clip looping supported.

- Step 1 Place the mouse on the timeline, right click to select the start point, and choose **Split Clip** to set the clip start time.
- Step 2 Right click to select the end point, choose **Split Clip** to set the end time.
- Step 3 Repeat the above steps to split additional clips.

Merge Clips

Merge adjacent clips.

- **Merge Forward:** Right click the clip, and select **Merge Forward** to combine it with the previous clip.
- **Merge Backward:** Right click the segment, select **Merge Backward** to combine it with the next clip.

Lock Clips

Lock split clips. The clips cannot be merged after locked.

Right click the clip, select **Lock** to lock the clip.

4.8.2 Add Cue Tags

Kompass FX3 Pro allows adding Cue tags on the timeline for visualizing specific points or events, aiding in navigation and timing control.

- Step 1 Right click the timeline and select **Add Cue Tag** to enter the tag addition interface.

Figure 4-43 Add Cue tags

Step 2 Enter the start time for the tag in the **Time** field, configuring the Cue tag position. By default, the timeline time at the mouse-click position is displayed by default.

Step 3 Enter the tag name in the **Marker** field. The name can contain 1 to 10 characters. ^[P]_[SEP]

Step 4 Enter the comments in the **Comment** field. The comment support 1 to 50 characters. ^[P]_[SEP]

Note

- After adding a Cue tag, it appears on the timeline. Right click the tag and select **Edit** or **Delete** as needed.
- Press and hold the **Alt** key to move the tag left or right. Changes will sync automatically to the Cue table.
- The Cue table displays the tag type, marker, and comment in real time. ^[P]_[SEP]
- If the timeline is locked, tags cannot be deleted or moved.

4.8.3 Configure Cue Tables

Import and export tag configuration tables.

Import Cue Tables

Step 1 Right click the timeline, and select **Configure Cue Table** to access the Cue table interface.

Figure 4-44 Configure Cue tables

No	Tag Type	Marker	Comment	Remaining
1	CUE	ABC		00:00:37.000
2	CUE	111		00:02:34.000

Step 2 Click **Import**, choose a pre-existing configuration file (.txt), and click **Open** to import.

Export Cue Tables

In the Cue table interface, click **Export**, select the storage path and file (.txt), and **Save**.

Switch Cue Tags

In the Cue table interface, click  to switch playback between Cue tags. The Cue table provides real-time feedback, such as the remaining time.

 Note

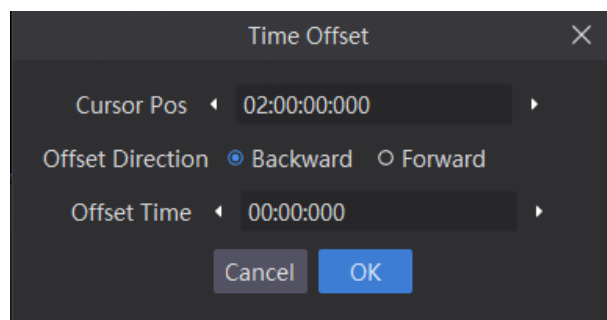
- Only one Cue table can be active per project file.
- Only one Cue table can be imported or exported at a time.

4.8.4 Configure Offset Time

Time offset allows adjusting a media's starting position on the timeline by specifying a time value and offset direction (left/right). This operation provides accurate control over media placement by increasing or decreasing the defined offset time.

Step 1 Right click the timeline, and select **Offset Time**.

Figure 4-45 Configure offset time



Step 2 Set the specific time in **Cursor Position**.

Step 3 Select **Backward** or **Forward** in the **Offset Direction** section.

- Backward: Media to the right of the cursor position moves to the right.
- Forward: Media to the left of the cursor position moves to the left.

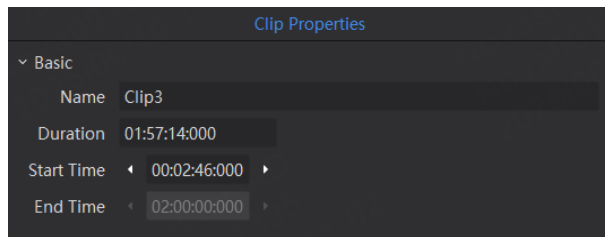
Step 4 Set the offset time.

Step 5 Click **OK** to apply the offset time settings.

4.8.5 Configure Clip Properties

Right click a clip, and select **Clip Properties** to view properties on the right.

Figure 4-46 Configure clip properties



- Name: Enter or change the clip name.
- Duration: View the clip duration time. The value updates automatically when the start time or end time of the clip is modified.
- Start Time: The start time of the clip
- End Time: The end time of the clip

Note

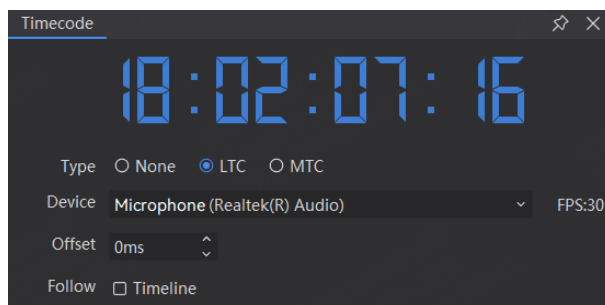
On the timeline, you can also drag the left or right ends of a clip to adjust its start time and end time.

4.8.6 Configure Timcode

The Kompass FX3 Pro supports external timecode for controlling timeline media playback, with LCT and MTC timecodes available.

Navigate to **Window > Timecode** to open the timecode configuration interface.

Figure 4-47 Configure timecode



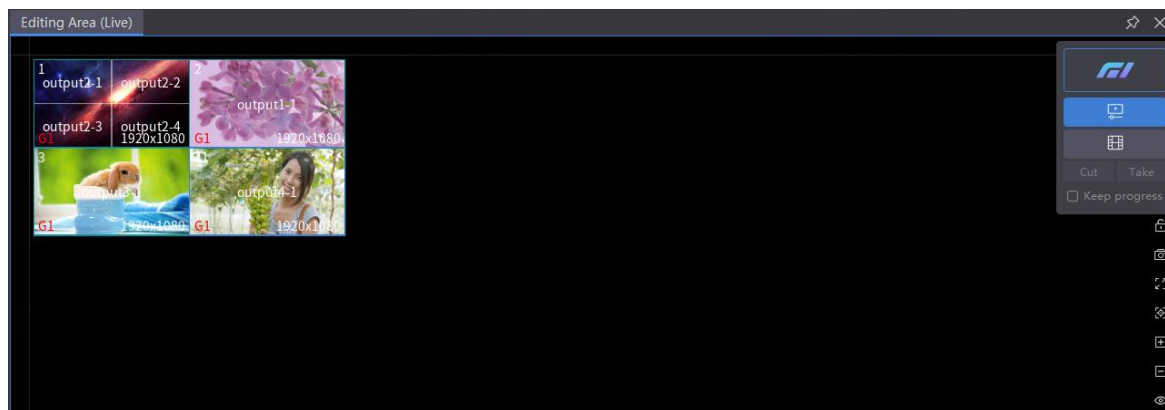
- Format: 00:00:00:00 represents HH:MM:SS:FF, meaning Hours: Minutes: Seconds: Frames.
- Type: Configure the timecode type, supporting **LTC** and **MTC**.
- Device: Choose the device in the system for playback control. After selection, the frame rate of the timecode will be automatically read.
- Offset: Set the timecode offset in milliseconds (ms).
- Follow: Enable or disable the follow function between the timecode and timeline.
 - When enabled, playback controls on the timeline are disabled, and the system automatically follows the timecode time for playback.
 - When disabled, playback and control via the timeline are possible.

4.9 Edit Output Slices

The output of Kompass FX3 Pro is in the form of slices, with the slice replicating the corresponding layer image for output.

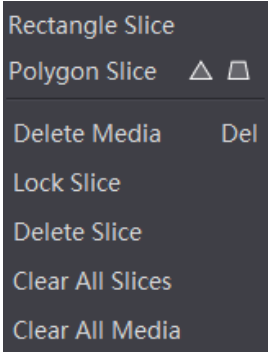
In the stage editing area, select the slice, and then you can make adjustments to it. Drag the slice to different outputs to adjust its output position.

Figure 4-48 Slices



- The top left corner number, such as 1, 2, or 3, indicating that this slice is a layer slice in the program.
- The top left corner identifier **T+number**, such as T1, T2, indicating that this slice is a layer slice in the timeline.
- The bottom left corner number, such as G1 or G2, indicating that this slice is bound to the layer. If the graphics card number is not displayed, it means the slice is not bound to the layer.
- Adjust the slice size: Hover the mouse over the slice edges, hold the left mouse button and drag to resize the slice.
- When the slice is within an output, click  in the bottom right corner or double click the slice, and the slice will fill the entire output connector.
- When the slice crosses multiple output connectors, click  in the bottom right corner, and the slice will fill the output connectors it crosses.
- When you select a slice, click  in the bottom right corner to capture the current playback image and save the captured image into the media library.
- Right click the slice to access the following options:

Context Menu	Menu Item	Description
	Rectangle Slice	Add a rectangular slice. Please refer to Add Slices for instructions.
	Polygon Slice	Add a polygon slice. Please refer to Add Slices for instructions.
	Delete Media	Delete the media on the current slice.
	Lock Slice	Lock the selected slice.
	Delete Slice	Delete the selected slice.
	Clear All Slices	Remove all slices from the editing area.

Context Menu	Menu Item	Description
	Clear All Media	Clear the media from all slices.

4.9.1 Add Slices

Note

- The slices can be added to the timeline automatically only, but cannot be manually added or removed.
- The slices added to the timeline will automatically bind to the timeline layer, and modifying the binding between the slices and the timeline layer is not supported.
- If all media in a timeline layer are deleted, the current timeline layer will be automatically removed, and the corresponding timeline layer slice will also be automatically deleted.

Add Rectangular Slices

Each time a layer is added, an output slice is automatically added. When a layer needs to be displayed on multiple output screens and the output needs to be synchronized, multiple output slices can be used for output.

- Step 1 In the stage editing area, right click the blank area and select **Rectangle Slice** to add a slice.
- Step 2 Select the newly added slice.
- Step 3 Select **Properties** on the right to enter the slice properties interface.
- Step 4 Select the layer for the slice from the drop-down menu next to **Bind Input**.

Add Polygon Slices

The editing area supports adding polygon slices, including triangular and trapezoidal slices, with a default size of 1920x1080. It also supports custom shapes using the mouse.

- Step 1 In the stage editing area, right click the blank area and select **Polygon Slice**.
 - Select the triangle or trapezoid next to **Polygon Slice** to directly add a polygon slice.
 - Click **Polygon Slice** and the cursor will change to . You can customize anchor points by clicking in the editing area, with a minimum of 3 anchor points.

- Step 2 After drawing a polygon, double click the left mouse button or press **Enter** to finish. The polygon will automatically close and display a bounding rectangle, with the slice number shown in the top-left corner.

Note

- Polygon slice drawing can be canceled by pressing the **Esc** key.
- Polygon slices support advanced editing, and advanced editing automatically exits when the mouse clicks the layer or non-editing area.
- During the advanced editing, double click the anchor line to add anchor points and press the **Delete** key to remove anchor points.
- During the advanced editing, press and hold the **Ctrl** key to select multiple anchor points, and drag the mouse to edit multiple anchors simultaneously.

4.9.2 Slice Properties

Select a slice and make precise adjustments in the **Properties** area on the right pane.

Figure 4-49 Slice properties

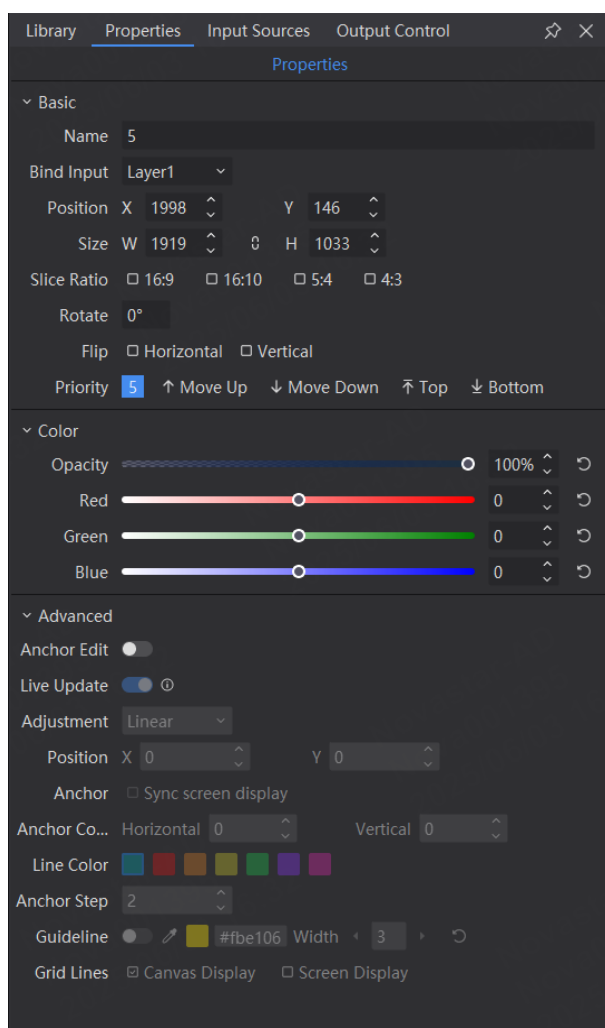


Table 4-5 Slice properties

Area	Function	Description
Basic	Slice name	View and modify the slice name.
	Bind input	Select the input source for the slice. The input sources only include the layer media in the current program.
	Position	Set the position of the output slice on the current screen using the top-left corner of the screen as the reference point. • X: The horizontal distance from the top-left corner of the slice to the top-left corner of the screen output area. • Y: The vertical distance from the top-left corner of the slice to the top-left corner of the screen output area.
	Size	Set the slice size. • W: The horizontal width of the slice • H: The vertical height of the slice
	Slice ratio	Quickly adjust the aspect ratio of the slice. The options include 16:9 , 16:10 , 5:4 , and 4:3 .
	Rotate	Rotate the slice clockwise, using the center point of the slice as the reference for rotation.
	Flip	Flip the output slice image. The options include Horizontal and Vertical . • Horizontal: The slice image is flipped horizontally. • Vertical: The slice image is flipped vertically. • If neither option is selected, the slice image is displayed without flipping, playing normally.
	Priority	View and adjust the slice priority. • View: Display the slice priority using a number. The larger the number, the higher the priority. Slices with higher priority are displayed first. • Adjustment: Click the arrow icons to adjust the slice priority.
Color	Opacity	Adjust the opacity of the output image. 0% is fully transparent, 100% is opaque, and the default value is 100%.
	Red	Adjust the output image quality by modifying the red color.
	Green	Adjust the output image quality by modifying the green color.
	Blue	Adjust the output image quality by modifying the blue color.
Advanced	Anchor edit	Enable or disable the anchor point editing function.
	Live update	Enable or disable the live update feature.  Note Only when Anchor edit is enabled, this function can be turned on or off.
	Adjustment	Set the adjustment mode of the polygon slice. The options include Flat and Linear .

Area	Function	Description
	Position	Set the coordinates of the currently selected anchor point, with X representing the horizontal coordinate and Y representing the vertical coordinate, and support four adjustment methods. • Select and drag the anchor point with the mouse. X, Y values change in real time. • Select the anchor point, and press the arrow keys on the keyboard. X, Y values change in real time, with stepping value consistent with the vertex stepping. • Select the anchor point, double click the values in the X, Y sections to manually input the coordinates, ranging from -65535 to 65535. • Select the anchor point, click  next to X, Y to adjust the coordinates, with stepping value consistent with the vertex stepping.
	Anchor	Enable or disable the on screen display function of anchors. Set whether the anchor point editing process is simultaneously displayed on the output screen.
	Anchor count	Split the connector screen horizontally and vertically, and after splitting, you can edit the anchor points in each direction respectively.
	Line color	Set the color of the lines between the anchor points. The default color is  , and the color switching takes effect in real time.
	Anchor step	Adjust its position using the arrow keys on the keyboard. Each keystroke moves the anchor point a distance ranging from 1 to 10, with a default value of 10.
	Guideline	Enable or disable the guideline between the anchor point and its adjacent anchor points. • Set the line color using the following methods. – Click the color block and select a color from the pop-up window. – Enter the color code value in the text box next to the color block. • Set the line width. The value range is 1 to 10 and with a default value of 1. One-click reset to default value is supported.
	Grid lines	Display the grid lines on the slice. The options include Canvas Display and Screen Display .

4.10 Play Programs

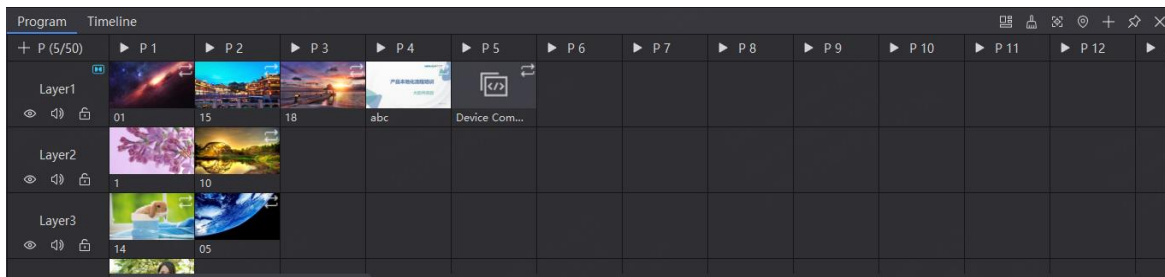
Once the program editing is completed, you can play the programs.

- Control the program playback

– Click  on the program name to start playing.

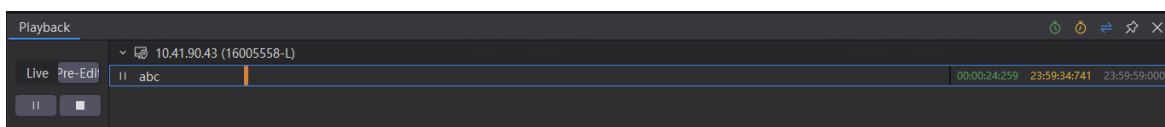
- After the program is being played, click  to pause the program, and  will show when the program is paused.
- Click  to resume playback from the paused position.
- During the program playback, it is possible to switch the content of the layers being played. For example, while program 1 is being played, you can switch the content of the layer by double clicking the media in Program 2 > Layer 2, as shown below.

Figure 4-50 Control program playback



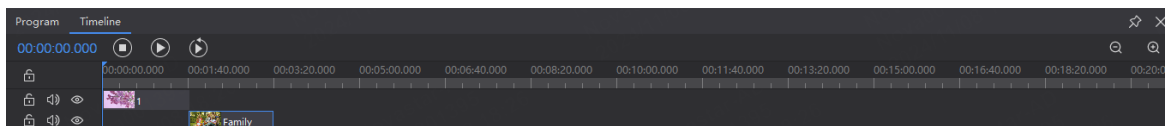
- In the playback control area, you can control the playback of individual media or the entire set.

Figure 4-51 Control media playback



- Click  or  on the left to play or pause all media in the program.
- Click  on the left to stop all media playback in the current program.
- Click  or  before each media name to play or pause the selected media playback.
- Click  in the top right corner, and the program media timer will display the playback in forward timing.
- Click  in the top right to display the program media timer countdown playback.
- Click  in the top right corner, select the programs you need to synchronize, drag the media progress bar, and complete the synchronized playback of the media.
- Control the timeline playback.

Figure 4-52 Control timeline playback



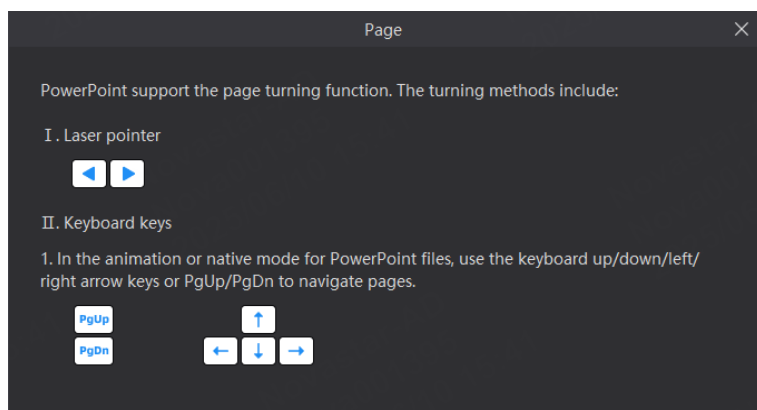
- : Click to stop timeline playback, and once stopped, the timeline position will automatically move to the start position on the far left.
- : Click to start timeline playback. Once the timeline is playing,  will be displayed, and you can click to pause playback.

- : Click to replay from the beginning of the timeline.
- Turn pages.

When media files such as PowerPoint slides are added to the program, you can control playback using keyboard arrow keys. Click  on the menu bar to enable keyboard page-turning playback; once enabled, the icon changes to .

Click  on the menu bar to view key prompt information for page-turning.

Figure 4-53 Page turning

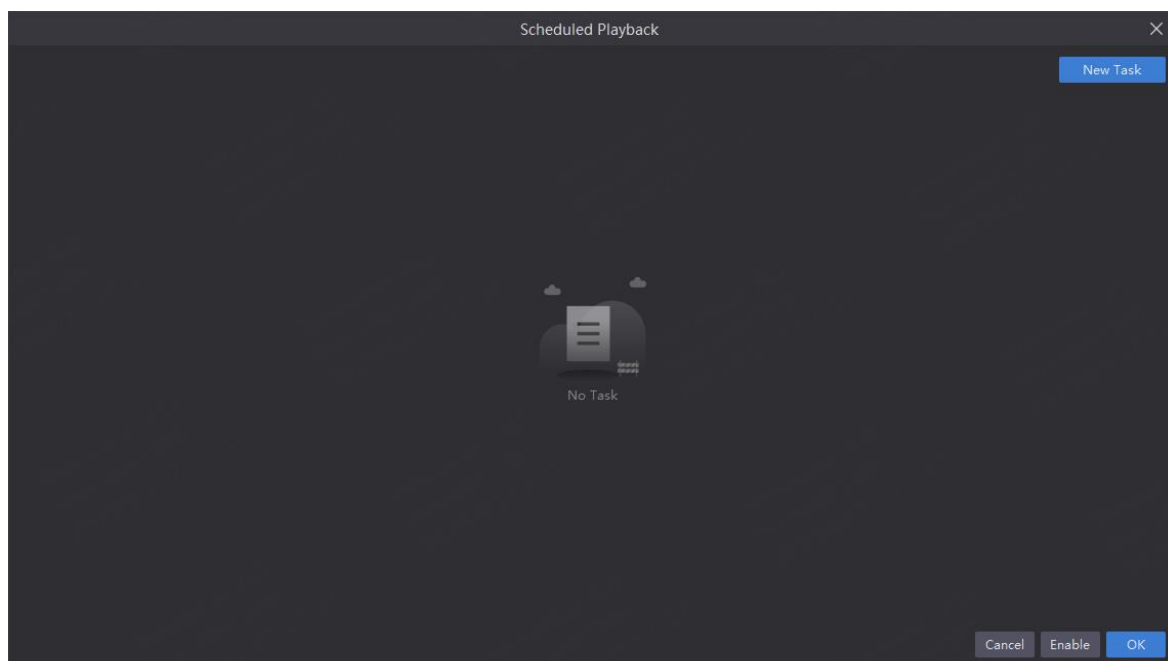


4.11 Configure Scheduled Playbacks

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

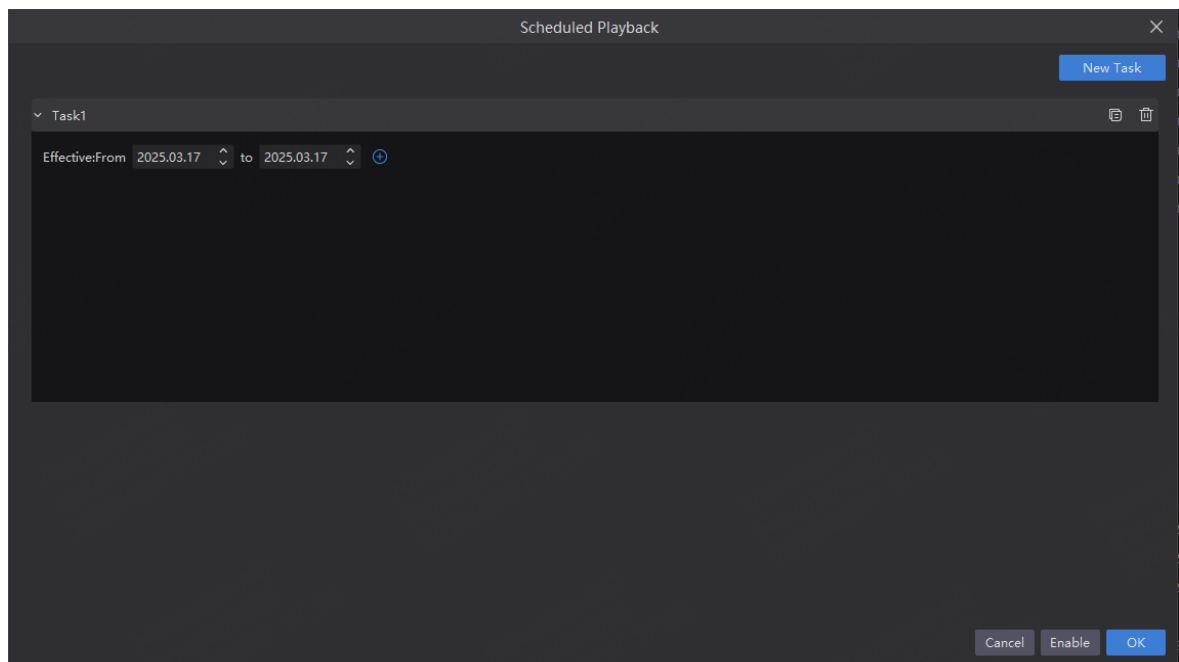
- Step 1 Navigate to  > **Edit Scheduled Playback** to open the scheduled playback interface.

Figure 4-54 Scheduled playbacks



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

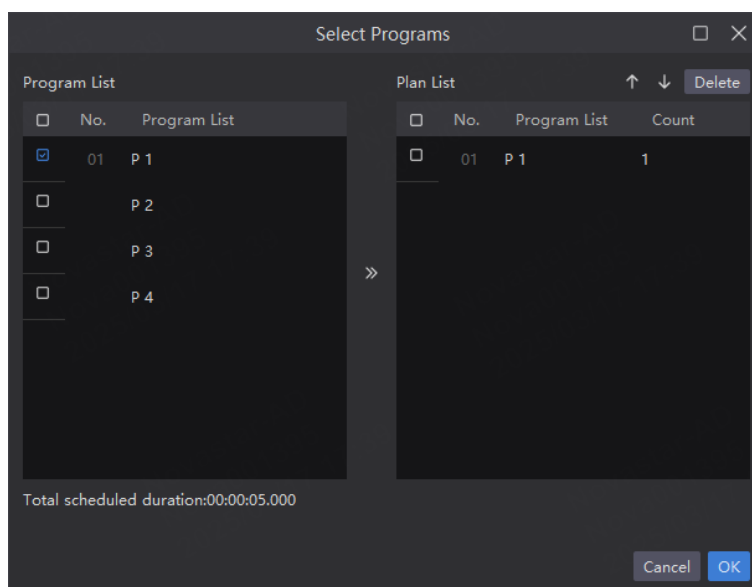
Figure 4-55 Playback tasks



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 4-56 Configure 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 the top to the 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. Double click the play count on the right side of the program to set the playback count.

After the setting, the software will automatically rearrange the program playback order according to the set count to minimize consecutive playbacks of the same program.

The play count range is 1 to 999.

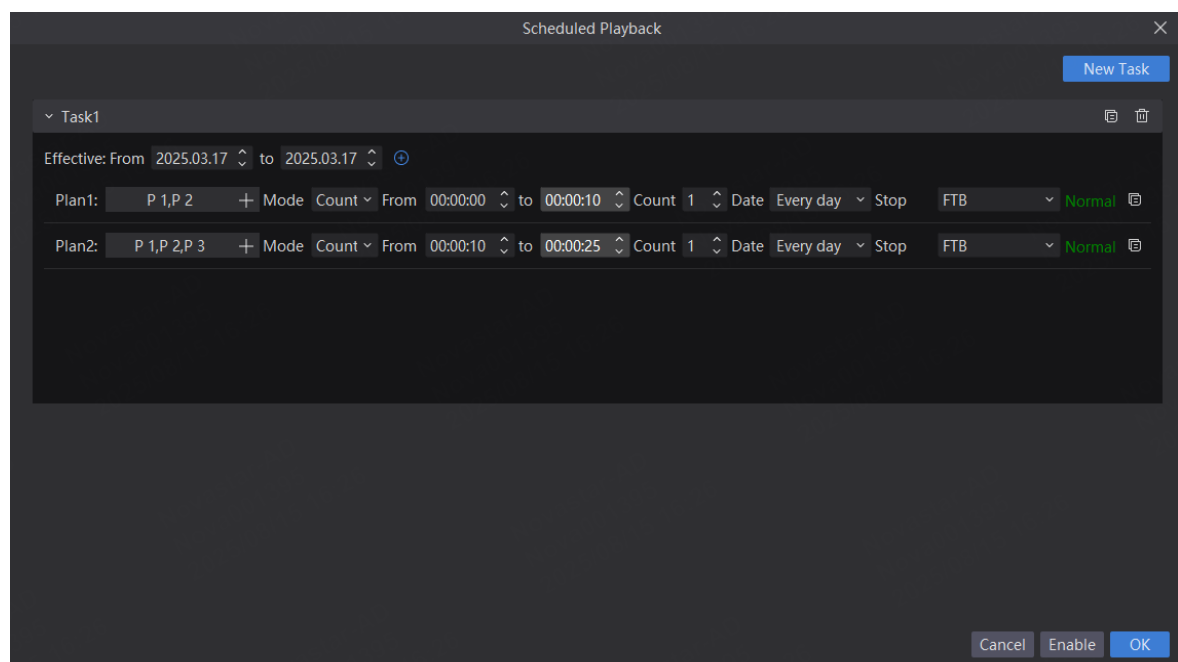
If a program play count exceeds 1, the system will first play programs in order. After completion, for programs with a play count greater than 1, the system will automatically loop through the list until the set play count is reached.

After the setting, the system will automatically calculate the total duration of the planned programs. If the total duration exceeds 24 hours, program configuration cannot be completed.

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

Step 5 Click **OK** to return to the scheduled playback interface.

Figure 4-57 Configure playback tasks



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

- Time: The programs will be played by the set duration circularly.
- Count: The programs will be played according to the set playback count.

Step 7 Set the start and end time within the schedule range.

1. Set the automatic start time of the program in the **From** section.
2. Set the automatic end time of the program in the **to** section.

When the playback mode is set to **Count**, the end time of the program playback is determined by the start time plus the total duration of the current scheduled program. This end time cannot be modified.

Step 8 Set the program playback count.

Click the number next to **Count** to activate the function. Enter the desired value and then the program will be played automatically according to the set count. When the playback mode is set to **Time**, the playback count 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 to Sunday: The plan will be active on the selected days of the week within the specified time range, and the content will be automatically played according to the configured schedule and playback plan.

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, the output image fades to black.
- Current Frame: FTB: After the program playback ends or the playback 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.

Click **Enable** to activate the current program schedule. Once the program schedule is enabled, the scheduled playback icon on the menu bar changes to .

Step 14 Navigate to  > **Enable Scheduled Playback** to enable the function.

Note

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

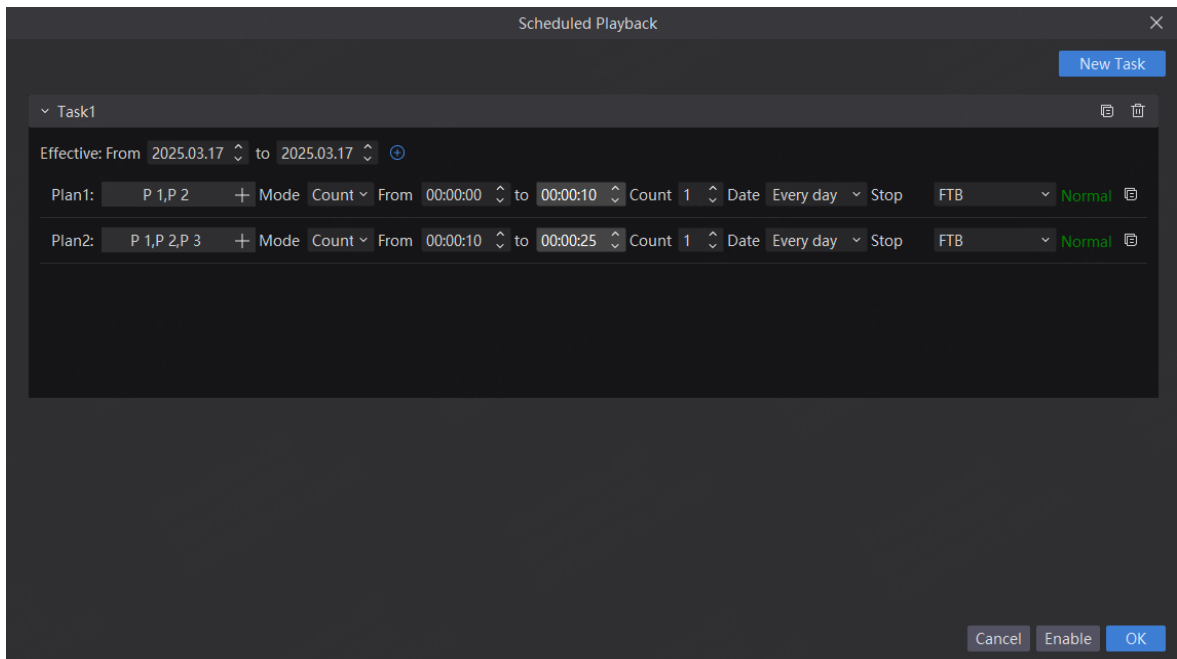
Insert Programs

Once the scheduled playback is activated, it supports the program insertion. This insertion can be executed either immediately or with a delay.

- Immediate Insert: Play the next selected program instantly.
- Delayed Insert: Wait for the current program to finish before playing the selected program.

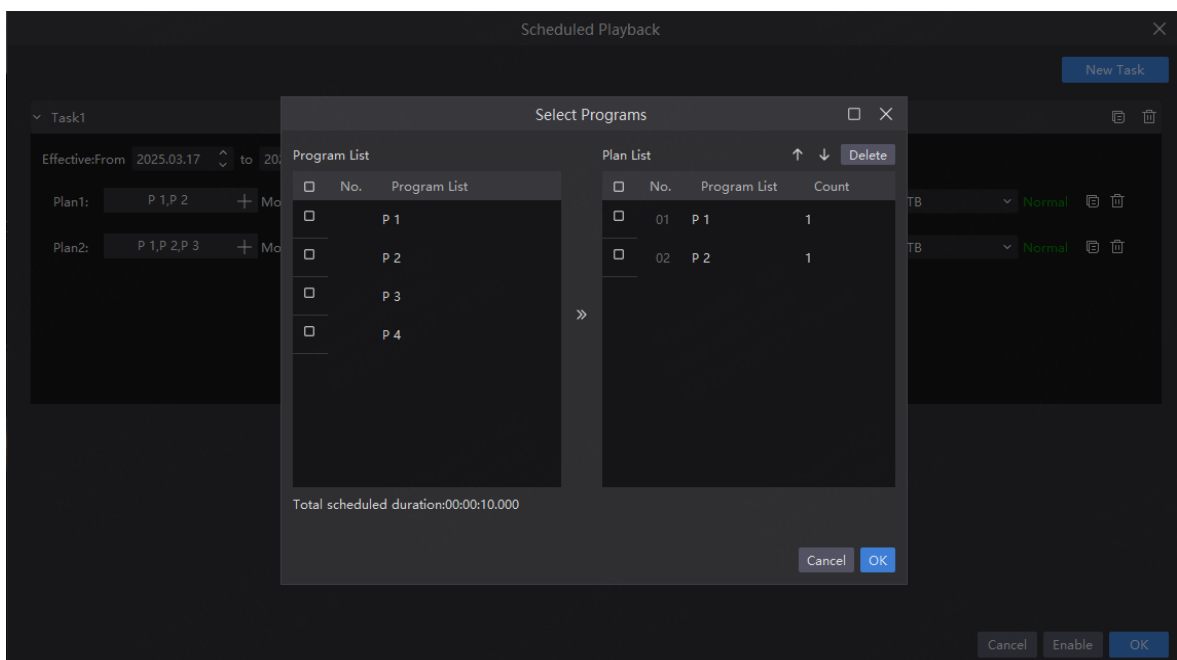
Step 1 Navigate to  > **Edit Scheduled Playback** to enter the scheduled playback interface.

Figure 4-58 Edit scheduled playbacks



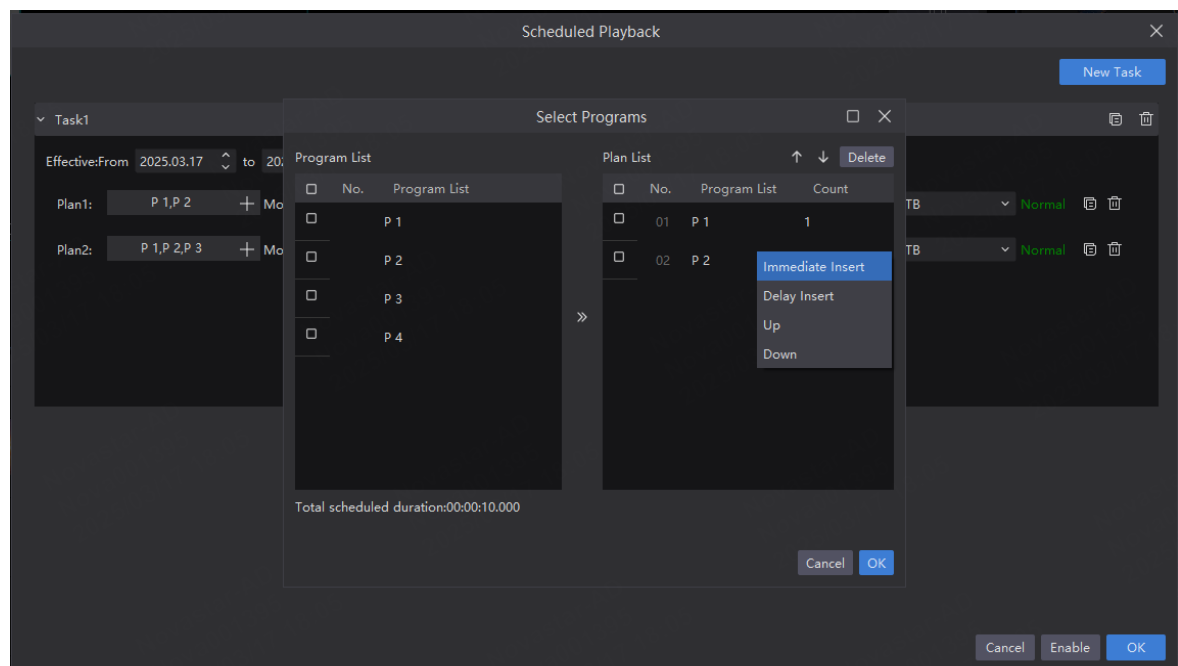
Step 2 Click the program name next to the plan that requires insertion to open the program selection window.

Figure 4-59 Select programs



Step 3 Right click the desired program name in **Plan List** and select either **Immediate Insert** or **Delay Insert** to proceed with the program insertion.

Figure 4-60 Insert programs



Rules for program insertion:

- Only programs that are currently being played or have not yet begun support program insertion. The programs that have already been played do not support insertion.
- For a schedule plan that is being played, the insertion can alter the order of the program sequence.
- If an insertion spans different plans, after the insertion, the playback will switch to the plan that contains the inserted program and continue until the end of the new plan.
- If an insertion spans different tasks, after the insertion, the inserted task will play first; once completed, the playback will revert back to the pre-insertion plan and continue.

More Operations

- Delete plans

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

- Delete tasks

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

- Edit plans

Navigate to  > **Edit Scheduled Playback**. You can add, edit or delete the plans or tasks in the pop-up.

- Create task copies

Click  next to the task to create a task copy. By expanding the copied task, you will be able to modify the related information.

- Create plan copies

Click  next to the plan to create a plan copy. By expanding the copied plan, you will be able to modify the related information.

- Disable scheduled playbacks

Navigate to  > **Disable Scheduled Playback** to halt the scheduled playback.

4.12 Save Projects

Once the project editing is complete, it can be saved as a separate file for easy access and use in future projects.

- Navigate to **File > Save/Save As** to save the current project file locally.

- Click  in the top left corner of the main interface to create a new project.

- Click  in the top left corner of the main interface to save the current project file.

- Click  in the top left corner of the main interface to package the media in use or all media and project files. The packaged project files can be used directly.

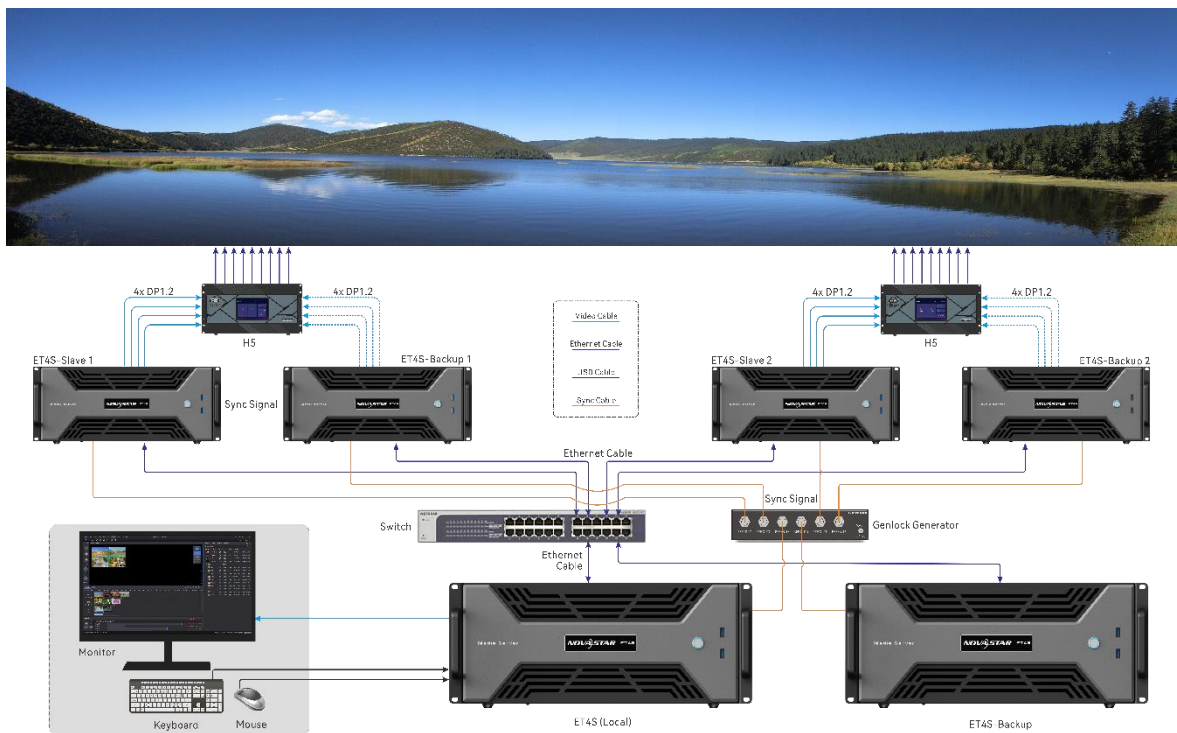
5 Link

5.1 Link Settings

Application Scenarios

- Primary and backup output: When the primary control device encounters issues or its connection lines fail, the backup device takes over the role, ensuring uninterrupted work and preventing anomalies such as a black screen.
- Master and slave output: If the master control device cannot independently drive the display, one or more slave devices can be configured to assist, with unified settings managed by the master device, ensuring seamless display management.

Figure 5-1 Application scenarios

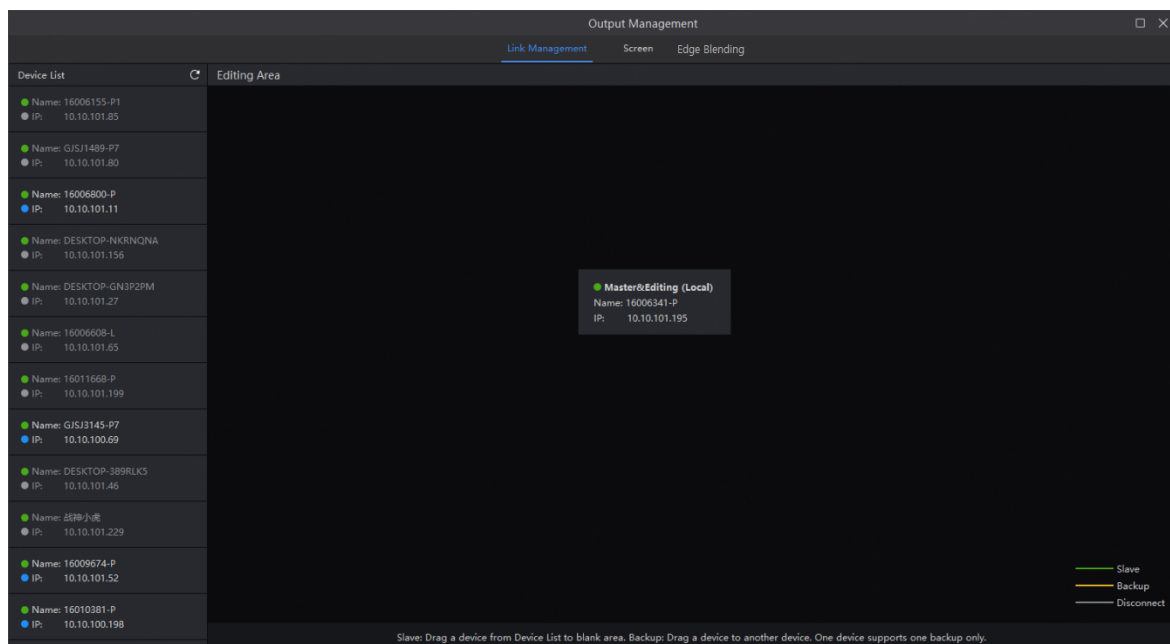


Prerequisites

- The devices (primary and backup, master and slave) must be on the same network segment.
- The sync card must be installed in all devices.

On the master device's Kompass FX3 Pro interface, navigate to **Link > Link Management** to access the link settings interface.

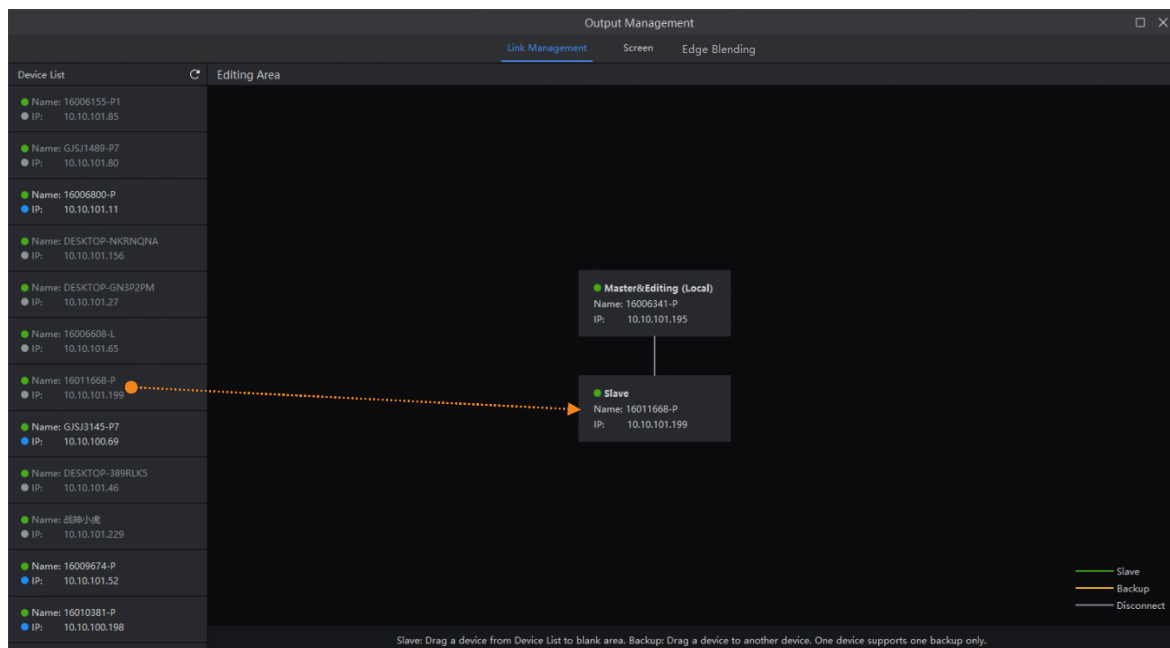
Figure 5-2 Link settings



Add Slave Devices

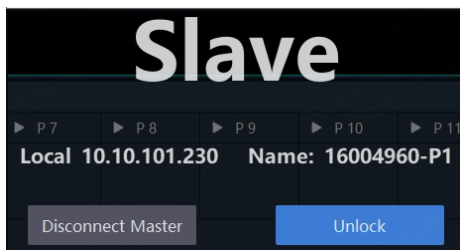
- Step 1 In the device list, select the IP address of Kompass FX3 Pro device to be used as the slave.
- Step 2 Click and drag the selected IP address to the blank area on the right to configure it as a slave device.

Figure 5-3 Add slave devices



Once added, the slave device's interface will display slave information, and the slave device will be locked from editing.

Figure 5-4 Slave device interface info

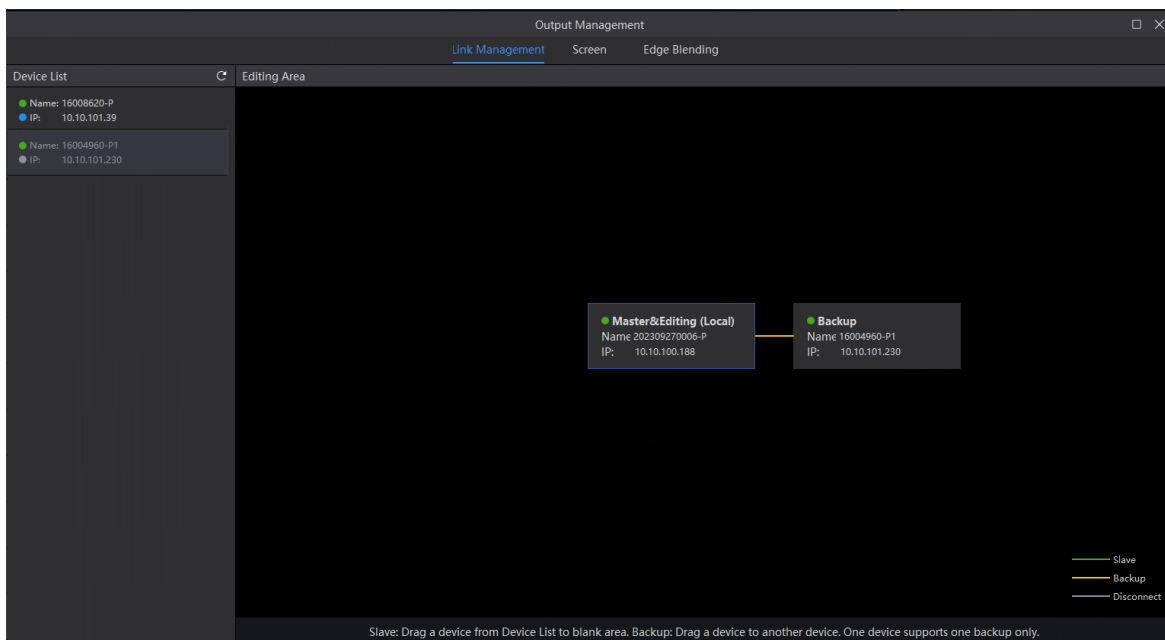


- **Disconnect:** Click to disconnect the master and slave devices.
- **Unlock:** Click to disable the current interface lock, allowing edits to the slave device's interface. To lock again, navigate to **Link > Lock**.

Add Backup Devices

- Step 1 In the device list, select the IP address of Kompass FX3 Pro device to be used as the backup.
- Step 2 Click and drag the selected IP address to the blank area on the right to configure it as a backup device.

Figure 5-5 Add backup devices



Once added, the backup device's interface will display backup information, and the backup device will be locked from editing.

Figure 5-6 Backup device interface info



- **Disconnect:** Click to disconnect the primary and backup devices.
- **Unlock:** Click to disable the current interface lock, allowing edits to the backup device's interface. To lock again, navigate to **Link > Lock**.

- Switch to Primary: Switch the backup device to the primary.

Manage Devices

On the topology, select the slave or backup device. Right click it to open the context menu.

- Connect: Manually connect the devices if they are not properly connected.
- Disconnect: Manually disconnect the devices as needed.
- Delete: Remove the binding relationship between the devices.



Note

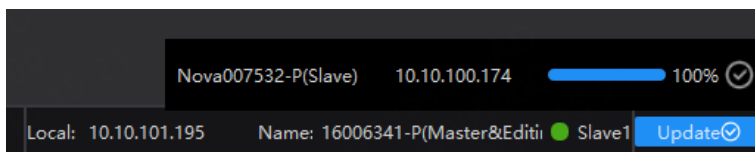
To disconnect all linked devices, right click **Editing (Local)** and select **Disconnect All**.

5.2 Update to Slave or Backup

On the master device's Kompass FX3 Pro interface, navigate to **Link > Update to Slave** or **Link > Update to Backup** to manually synchronize all data from the master and slave devices or the primary and backup devices.

At the bottom right of the master device's Kompass FX3 Pro interface, click **Update** to view the update progress.

Figure 5-7 Update progress



5.3 Unlock

Locking the local device secures the interfaces of both the slave and backup devices, making them inoperable.

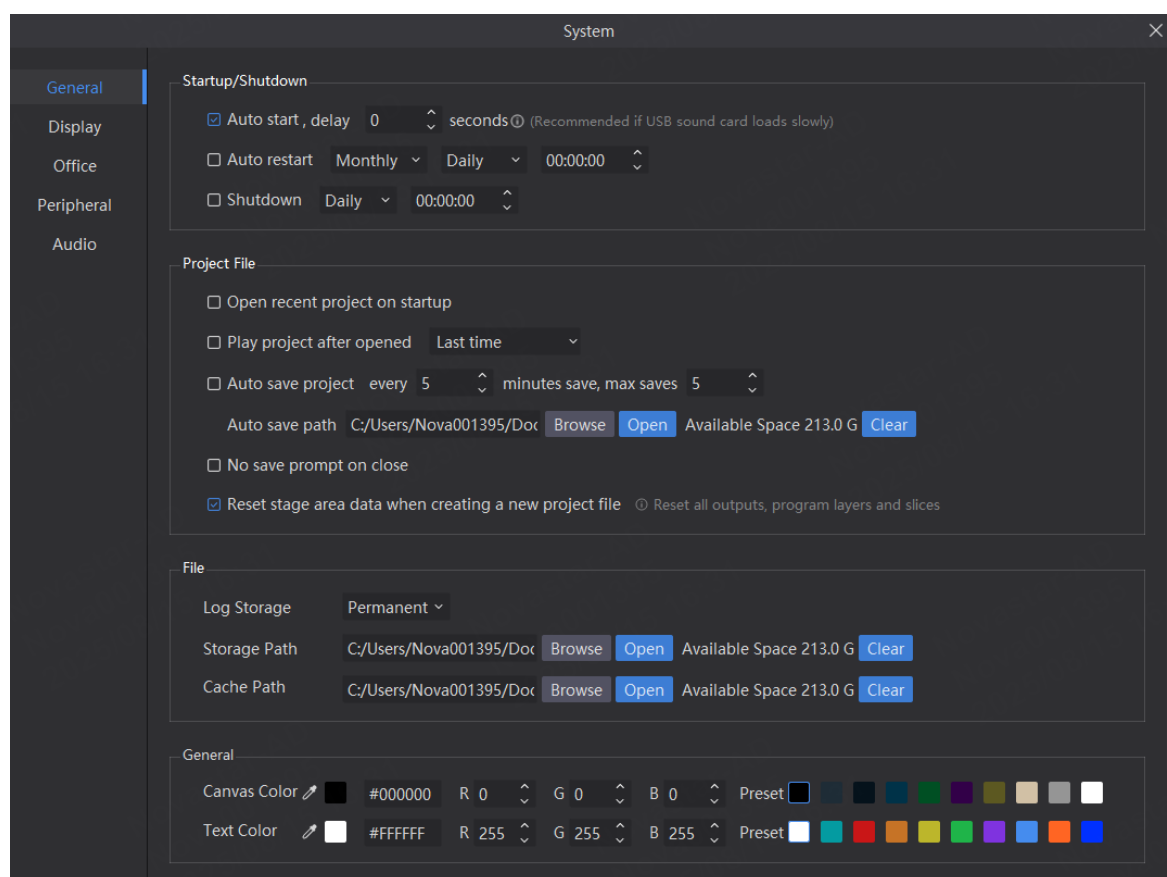
- Slave Device: Navigate to **Link > Lock**, and the main interface of the slave device will display the information seen in [Figure 5-4](#).
- Backup Device: Navigate to **Link > Lock**, and the main interface of the backup device will display the information seen in [Figure 5-6](#).

6 Settings

6.1 System Settings

Set the status after the system starts. Navigate to **Settings > System** to enter the system settings interface.

Figure 6-1 System settings



6.1.1 General

Startup/Shutdown

- Auto start
 - Checked: The software automatically starts after delay when the system boots. Set delay if USB sound card is added.
 - Unchecked: The software does not automatically start on boot.
- Auto restart: Set a time for the software to automatically restart. If the software runs for an extended period, it is recommended to schedule a restart to ensure its optimal long-term performance.

- Checked: The software automatically restarts at set time.
- Unchecked: The software does not automatically restart.
- Shutdown: Set the automatic shutdown time.^{[P]_{SEP}}
 - Checked: The software shuts down at the set time.^{[P]_{SEP}}
 - Unchecked: The software does not automatically shut down.

Project file

- Open recent project on startup
 - Checked: The software opens the last edited project on start.^{[P]_{SEP}}
 - Unchecked: The software shows default interface on start.
- Play project after opened
 - Checked: The software automatically plays content on opening the project file.^{[P]_{SEP}}
 - Last: The software plays last closed content.^{[P]_{SEP}}
 - Program List: The software plays selected content from the list.^{[P]_{SEP}}
 - Unchecked: Manual play required after software startup.
- Auto save project: Set the save interval and max number of auto-saved project files. The save interval ranges from 1 to 30 minutes and defaults to 5 minutes. The auto-saved files range from 1 to 20 and defaults to 5.
 - Checked: Enable auto-save at set intervals.^{[P]_{SEP}}
 - Unchecked: Disables auto-save.
- Auto save path: Set the path for auto-saved projects.^{[P]_{SEP}}
 - Browse: Select the save path.^{[P]_{SEP}}
 - Open: Access the save location.^{[P]_{SEP}}
 - Clear: Clear the save location info.
- No save prompt on close
 - Checked: The software closes without a save prompt.^{[P]_{SEP}}
 - Unchecked: The software prompts for save on close.
- Reset all outputs when creating a new project
 - Checked: Automatically reset the output configuration from the previous project to default parameters when creating a new project.^{[P]_{SEP}}
 - Unchecked: Automatically use the output configuration from the previous project when creating a new project.

File

- Log Storage: Set the storage duration for playback logs. Options include **Permanent**, **1 Month**, **3 Months**, **6 Months**, and **12 Months**.
- Storage Path: Set the storage location for playback logs.
 - Click **Browse** to select a storage location.
 - Click **Open** to open the folder where logs are stored.

- Click **Clear** to delete all cached playback logs.
- Cache Path: Set the storage location for media files downloaded from the master device.
 - Click **Browse** to select a storage location.
 - Click **Open** to open the folder where cache files are stored.
 - Click **Clear** to delete cached information.

Canvas Color

Configure the background and text color information for the stage editing area.

- In the **Canvas Color** section, modify the background color by selecting a preset color or customizing a color.
- In the **Text Color** section, modify the text color by selecting a preset color or customizing a color.
- For custom colors, you can set color information in the following ways:
 - Use the color picker next to **Canvas Color** to select a color from the screen.
 - Click the color block to open the color picker and choose a color.
 - Enter the hexadecimal color information in the text box on the right.
 - Input the color values in the **R**, **G**, and **B** text boxes to set the color.

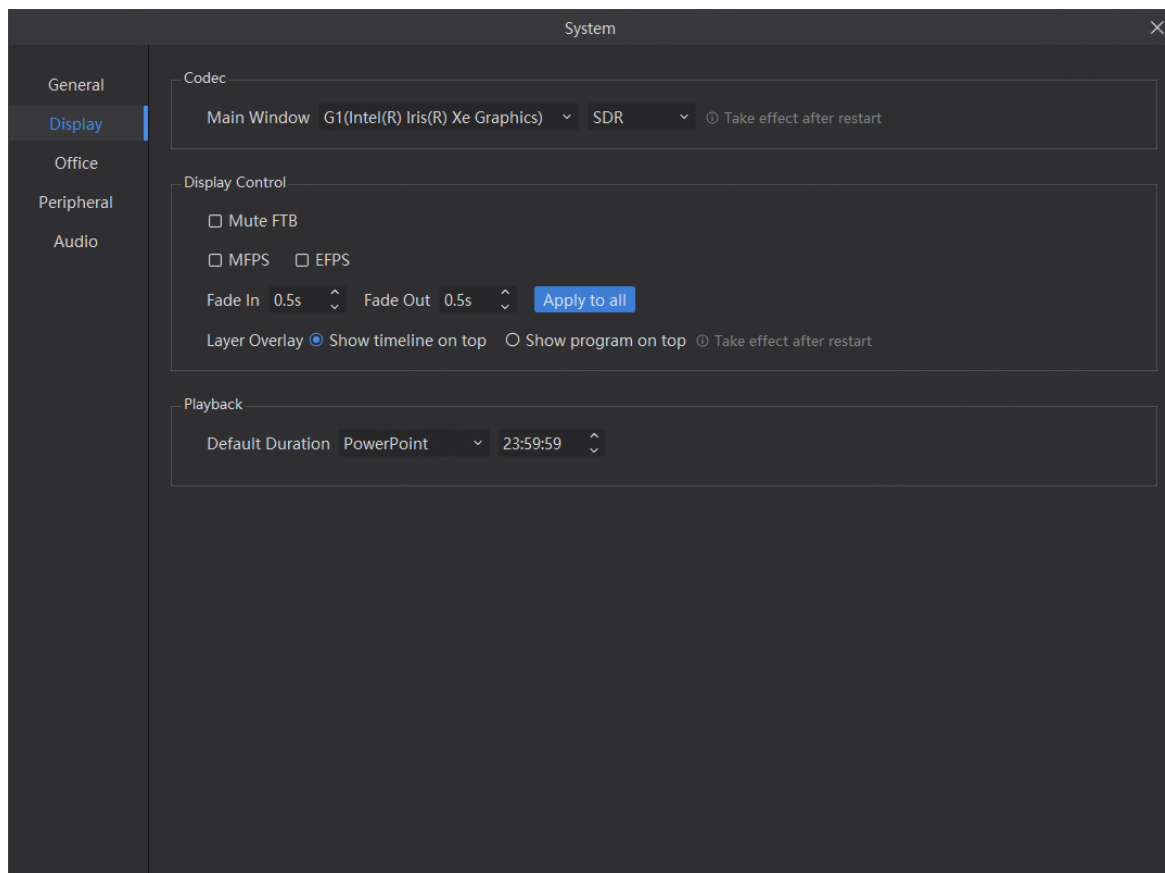
Link

Set whether the master device information automatically updates to the slave or backup devices.

- Checked: All configuration information on the master device is automatically synchronized to the slave and backup devices.
- Unchecked: After configuring the master device, the system will not automatically synchronize. Manual synchronization is required via **Link > Update to Slave/Update to Backup**.

6.1.2 Display

Figure 6-2 Display settings



Codec

Main Window: Set the graphics card for rendering the software main interface. After the configuration, a software restart is required.

Display Control

- **Mute FTB**
 - Checked: Mute all audio when the screen goes black.
 - Unchecked: Audio continues when the screen goes black.
- **MFPS:**
 - Checked: The software shows the real-time frame rate at bottom left of preview window in the stage editing area.
 - Unchecked: No frame rate display
- **EFPS:**
 - Checked: The frame rate is shown at bottom left of output.
 - Unchecked: No frame rate display

- **Fade In:** Set the time length for transitioning between programs, from the start of the transition to the full display of the program. The default is 0.5 seconds, with a range of 0 to 10 seconds. A value of 0 means a direct cut.
- **Fade Out:** Set the time length during the program transition, from the start of the program switch to the point where the program is no longer displayed. The default is 0.5 seconds, with a range of 0 to 10 seconds, where 0 represents a direct cut.
- **Apply to all:** Clicking this will apply the set fade in and fade out durations to all the programs. If you set the fade in and fade out durations and do not click **Apply to All**, it will only affect programs without added media; programs with added media will not be affected.
- **Layer Overlay:** Set the display order for program layer slices and timeline slices. Changes take effect after restarting the software.
 - **Show timeline on top:** Timeline slices are displayed over program layer slices.
 - **Show program on top:** Program layer slices are displayed over timeline layer slices.

Playback

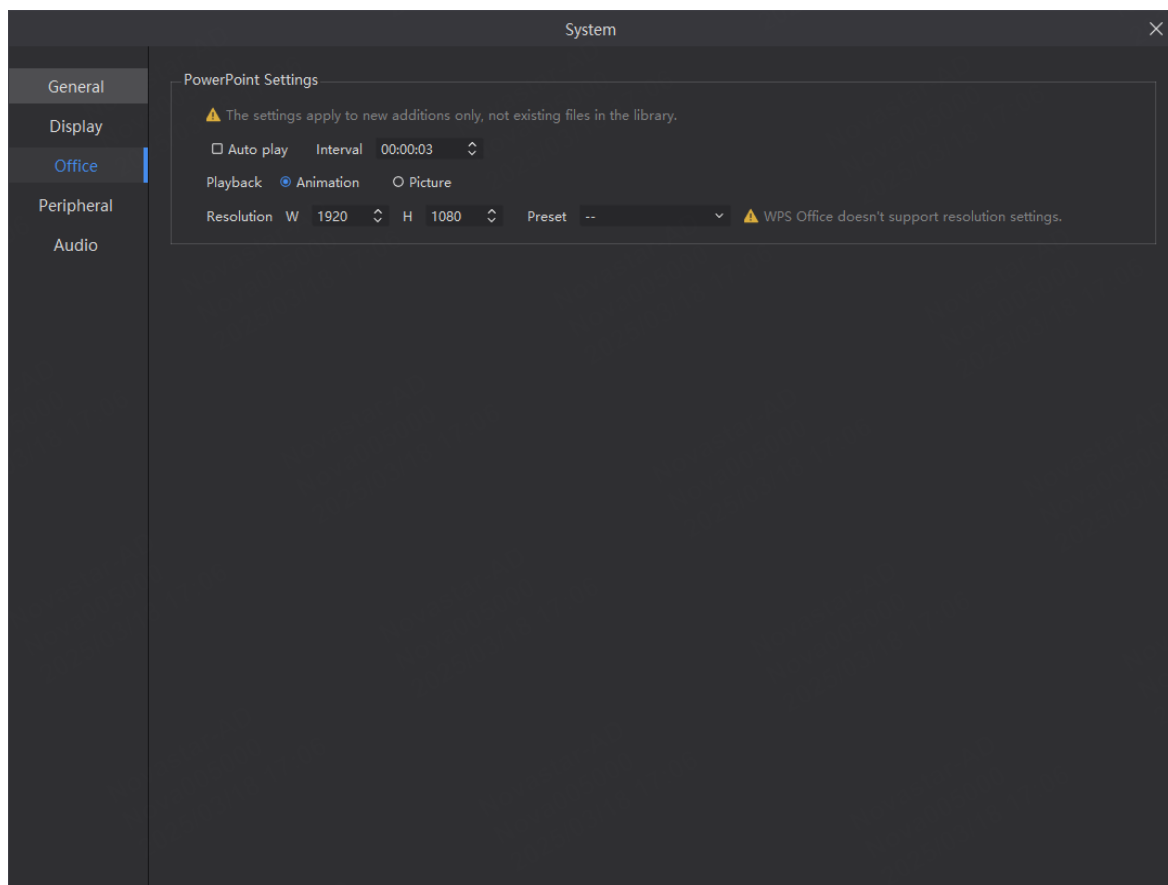
Default duration: Set different default playback durations for various media.

6.1.3 Office

The software supports the playback of PowerPoint documents, but you need to configure the basic information of the PowerPoint document before playing it.

In the **System** interface, click **Office** to enter the Office settings interface.

Figure 6-3 Office settings



PowerPoint Settings

- Auto play: Set whether the PowerPoint file in the program plays automatically.
- Interval: Set the time interval for automatic PowerPoint playback.
- Playback: Set the transition method for each slide in the file.
 - Animation: Display the animations within the slide during playback.
 - Picture: Do not display the animations within the slide, but display them during slide switching.
- Resolution: Configure according to the resolution displayed in the PowerPoint document, supporting individual width and height settings, or setting through preset resolutions.

Note

- After modifying the PowerPoint settings, the changes only apply to newly added files, and not to those already added to the program.
- If the media server has WPS Office, the resolution settings are not supported.

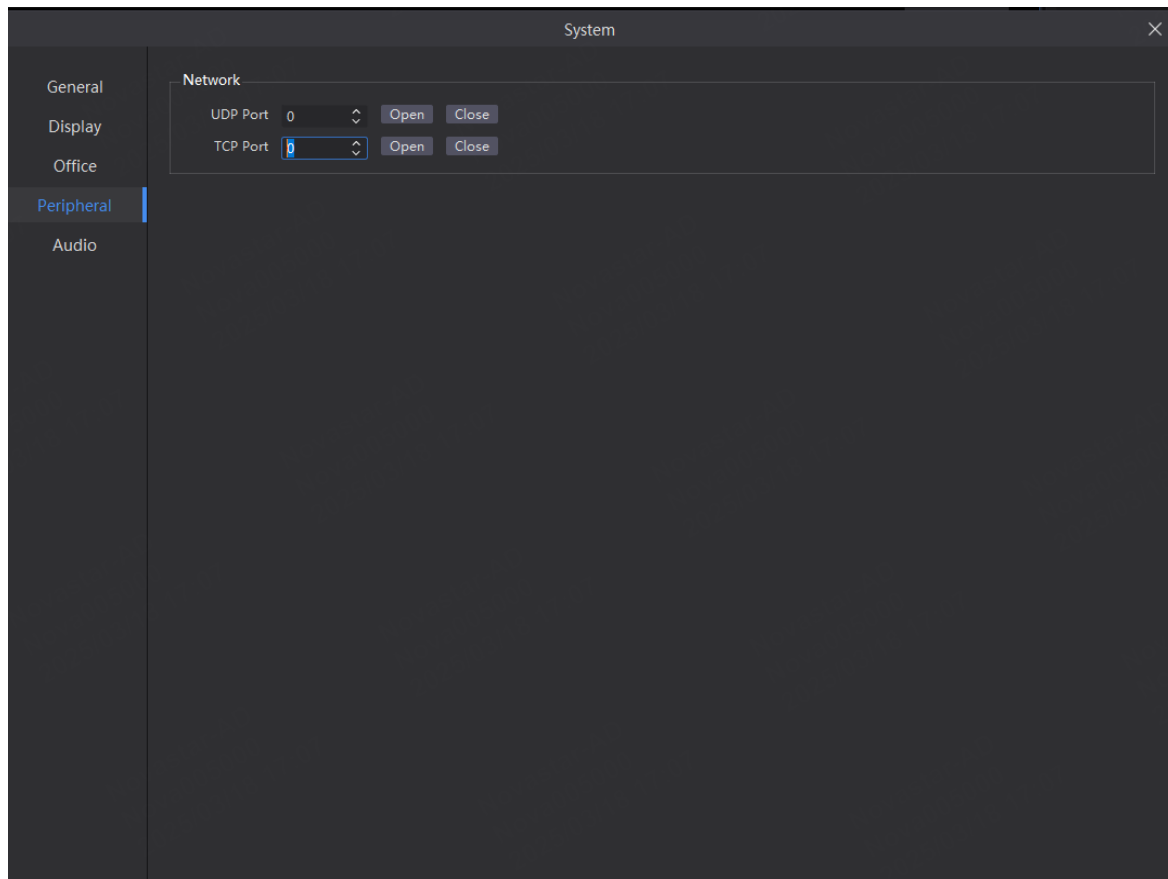
6.1.4 Peripheral

The software supports remote control or control through a central control device, allowing users to play and control the software more conveniently. For the control commands and the format for

writing control commands via central control or remote control, please refer to the Control Protocol for Multimedia Playback Software document.

Navigate to **Settings > System > Peripheral** to enter the control interface.

Figure 6-4 Peripheral control



Currently, UDP and TCP/IP protocols are supported for remote control.

Control Through UDP Protocol

Step 1 Enter the software UDP port number in the text box next to **UDP Port**.

The range of UDP port numbers is 0 to 65534, with a default value of 18960.

Step 2 Click **Open**, and the software will automatically detect if the port number you entered is already in use.

- Yes => Re-enter the port number and click **Open** again to check.
- No => UDP control is enabled successfully.

Control Through TCP/IP Protocol

Step 1 Enter the software TCP port number in the text box next to **TCP Port**.

The range of TCP port numbers is 0 to 65534, with a default value of 17613.

Step 2 Click **Open**, and the software will automatically detect if the port number you entered is already in use.

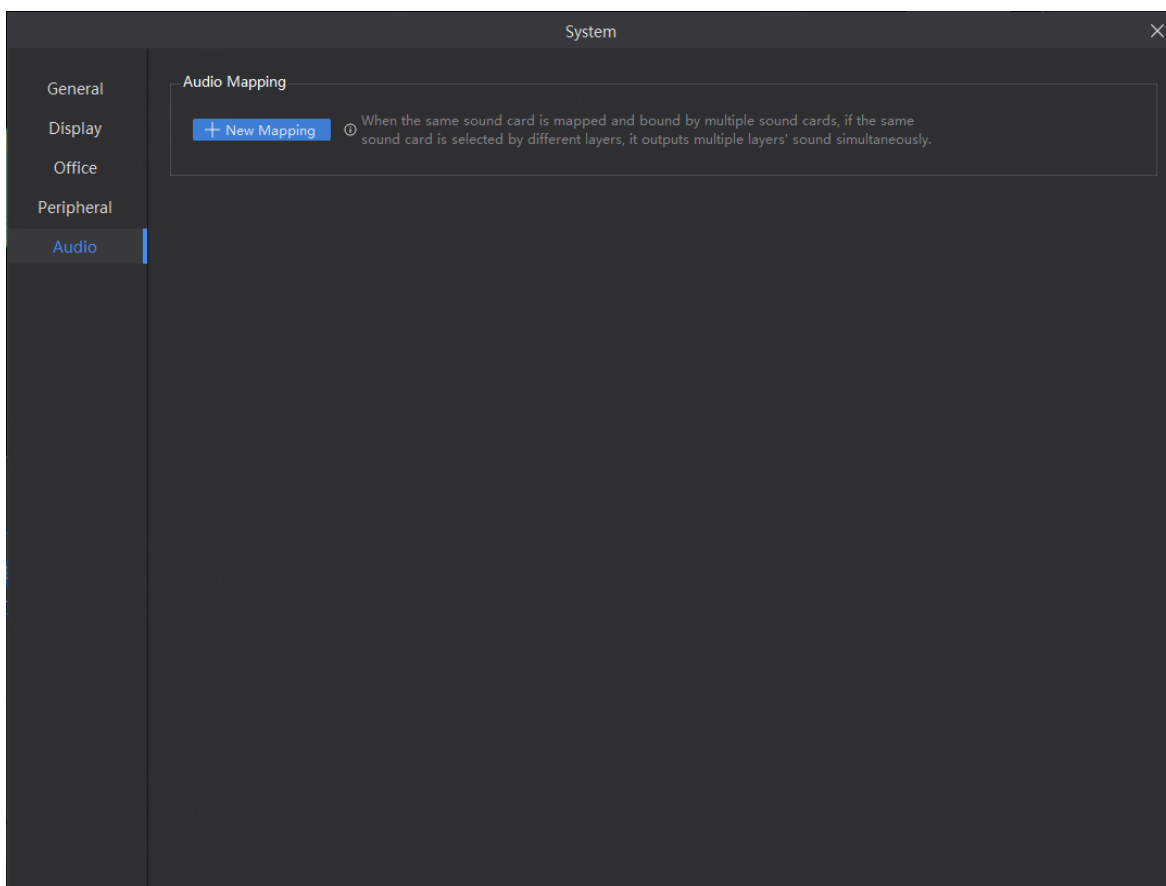
- Yes => Re-enter the port number and click **Open** again to check.
- No => UDP/IP control is enabled successfully.

6.1.5 Audio

Sound card mapping refers to creating a mapping relationship between virtual and physical sound cards. One virtual sound card (i.e., sound card mapping) can be bound to multiple physical sound cards, and the same physical sound card can be bound to multiple sound card mappings simultaneously.

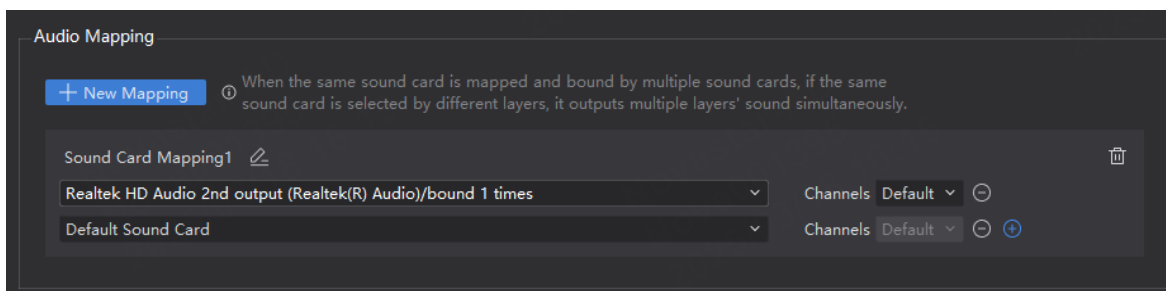
Step 1 Navigate to **Settings > System > Audio** to access the audio settings interface.

Figure 6-5 Audio settings



Step 2 Click **New Mapping** to create a new sound card mapping.

Figure 6-6 Add sound card mappings



- Step 3 Click  next to **Sound Card Mapping 1** to rename the sound card mapping.
- Step 4 Click the dropdown menu below the sound card mapping to select the corresponding sound card.
- Step 5 Select the number of channels for the current sound card in **Channels**.

- Click  on the right to add a sound card to the current mapping and configure its channel count.
- Click  next to an added sound card to delete it.

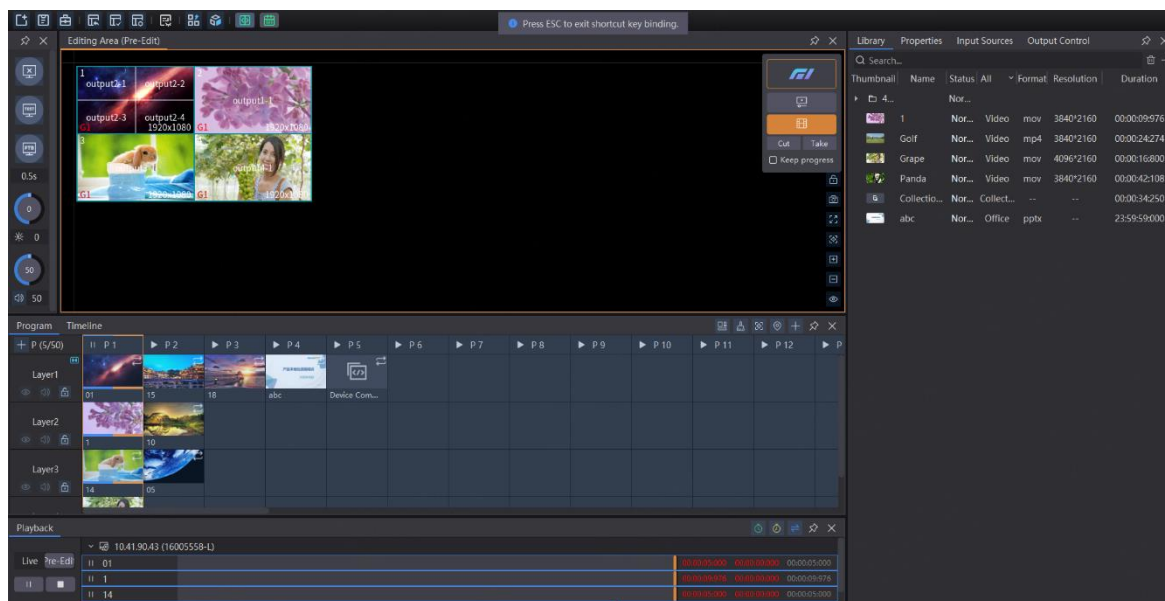
Once sound card mapping is configured, select a layer and choose the newly added sound card mapping in the **Sound Card Mapping** option in the layer properties.

Click  next to **Sound Card Mapping** to delete the added sound card mappings.

6.2 Shortcut Binding

The software supports adding custom shortcuts, allowing users to operate it quickly through personalized shortcuts. By navigating to **Settings > Shortcut Binding**, you can access the shortcut binding settings interface, and the function areas where shortcuts can be added will be highlighted.

Figure 6-7 Shortcut binding interface



- Click the target function area, then press the desired letter or number key combination on the keyboard to add the shortcut key.
- After adding the shortcut, navigate to **Settings > Complete Binding** or use the built-in shortcut **Ctrl+Shift+K** to activate the set shortcut and exit the shortcut binding interface.

Note

When setting function shortcuts, the system built-in global shortcuts cannot be used.

For example, set the shortcut for Program 1 to "w".

- In the shortcut binding interface, click **P 1** to select the program 1.

2. Pressing **W** on the keyboard will display the shortcut on the program 1.

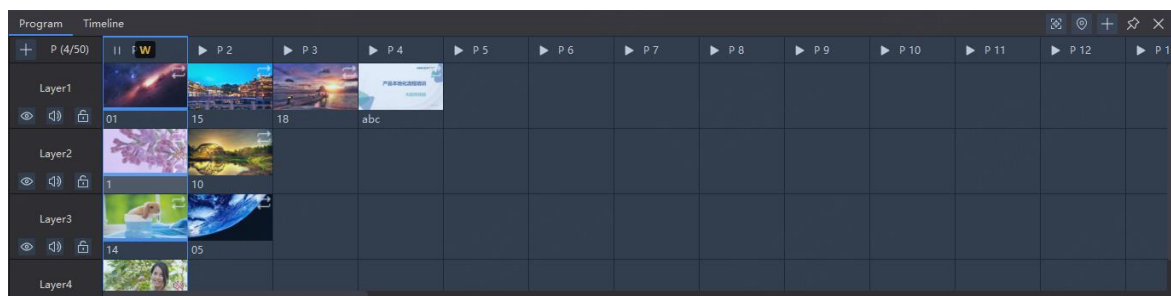


Table 6-1 Built-in shortcuts

Keys	Description
Ctrl+H	The mouse quickly returns to the center of the software interface.
Ctrl + Left/Right arrow keys	In the case of multiple monitors, adjust which monitor displays the main interface.
Arrow keys, PgUp, PgDn	When playing the PowerPoint slides, flip through the slides up and down.

6.3 Clear Shortcuts

Navigate to **Settings > Clear Shortcuts** to remove all assigned shortcuts with one click.

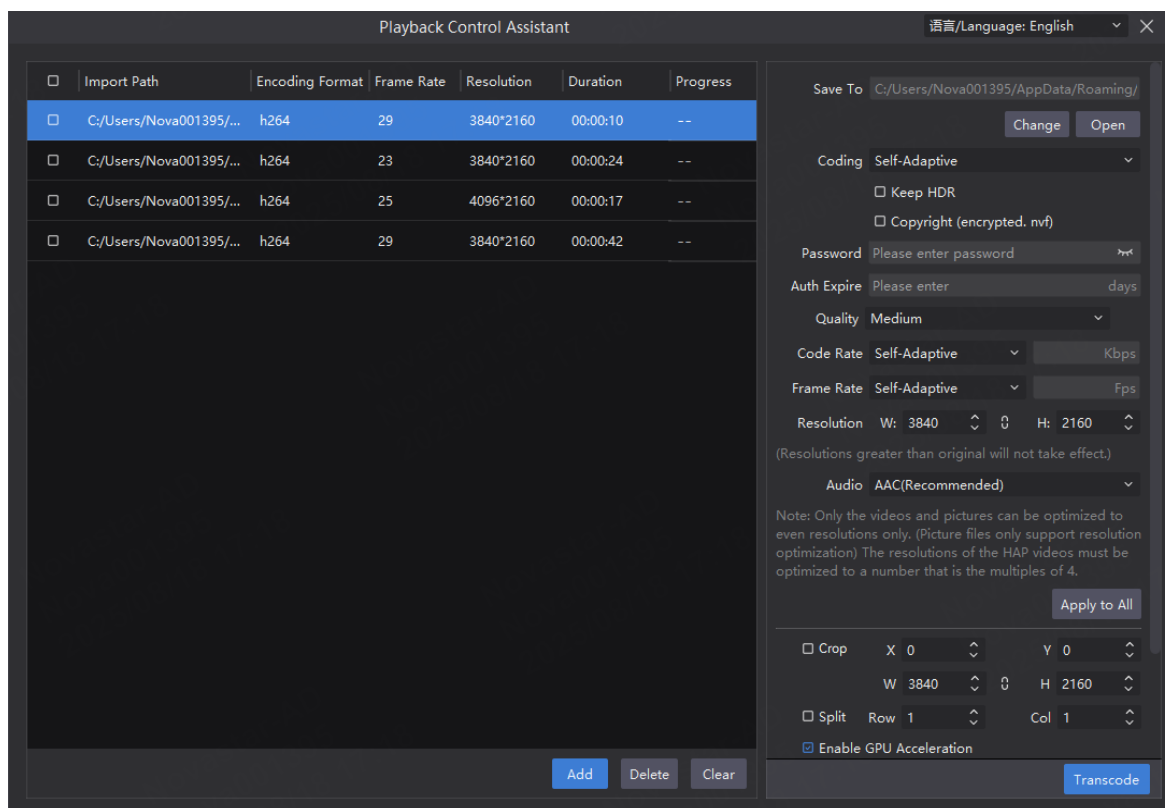
7 Tools

7.1 Playback Control Assistant

Kompass FX3 Pro supports converting the encoding, bitrate, resolution, and frame rate of imported videos, as well as encrypting videos to meet playback scenario requirements.

Step 1 Navigate to **Tools > Playback Control Assistant** to access the interface.

Figure 7-1 Playback control assistant



Step 2 Click **Add** at the bottom, and select the video or image files to be transcoded in the dialog box.

Hold the Ctrl key and click files to select multiple files.

Drag and drop selected files into the file list area of **Playback Control Assistant** to quickly add them.

Step 3 Select the file to add it for transcoding.

Step 4 Check the file to be transcoded.

Step 5 On the right, configure the following parameters:

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

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

- **Keep HDR:** Set whether to retain HDR in the converted video.

- Selected: The converted video retains the HDR of the original video.
- Deselected: The original video's HDR is not retained, and the converted video will be in SDR format.
- Keep Alpha Channel: Set whether to retain 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.
- Copyright: Encrypt the selected video, making it playable only in Kompass FX3 Pro.
 - Select **Copyright (encrypted. nvf)**: Enable video encryption and convert the video file to the .nvf encrypted one.
 - Password: Set a password for the encrypted video.
 - Auth Expire: Set the authorization duration for the encrypted video. The value ranges from 1 to 999. Once the authorization duration is exceeded, the encrypted videos will show as **Expired** in the media library.

Table 7-1 Copyright description

Password	Auth Expire	Description
Empty	Empty	The video is .nvf encrypted, but can be played directly without password decryption.
Non-empty	Empty	The video is .nvf encrypted, and requires password decryption in the media library to play.
Empty	Non-empty	The video is .nvf encrypted within the authorization duration, but can be played directly without password decryption.
Non-empty	Non-empty	The video is .nvf encrypted within the authorization duration, and requires password decryption in the media library to play.

- 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 the method for audio transcoding during video transcoding, with options for **AAC**, **Copy**, or **No Audio**.
 - AAC: Re-encode the original audio in AAC format after transcoding.
 - Copy: Retain the original audio in the video after transcoding.
 - No Audio: Transcode the video to contain only images, without any audio.

Step 6 Repeat [Step 4](#) and [Step 5](#) to set the transcoding parameters for other video files.

Once one transcoding is configured, if the transcoding parameters of other selected videos are identical, click **Apply to All** to apply the current transcoding settings to all selected media.

Step 7 Perform the video cropping or splitting.

The assistant allows the selected videos to be cropped and split.

- Crop: Check the box next to **Crop** to crop the selected video. Use **X** and **Y** to set the starting position, and **W** and **H** to set the crop size.
- Split: Check the box next to **Split** to divide the selected video into multiple segments by setting the number of **Rows** and **Cols**.
- Enable GPU Acceleration: Toggle GPU acceleration for the video transcoding process on or off.

Step 8 Click **Transcode** and the system will automatically start the transcoding process.

When the progress shows  in the **Progress**, the transcoding completes. After the transcoding, the video will be saved in the path specified in **Save Path**.

Step 9 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.

Note

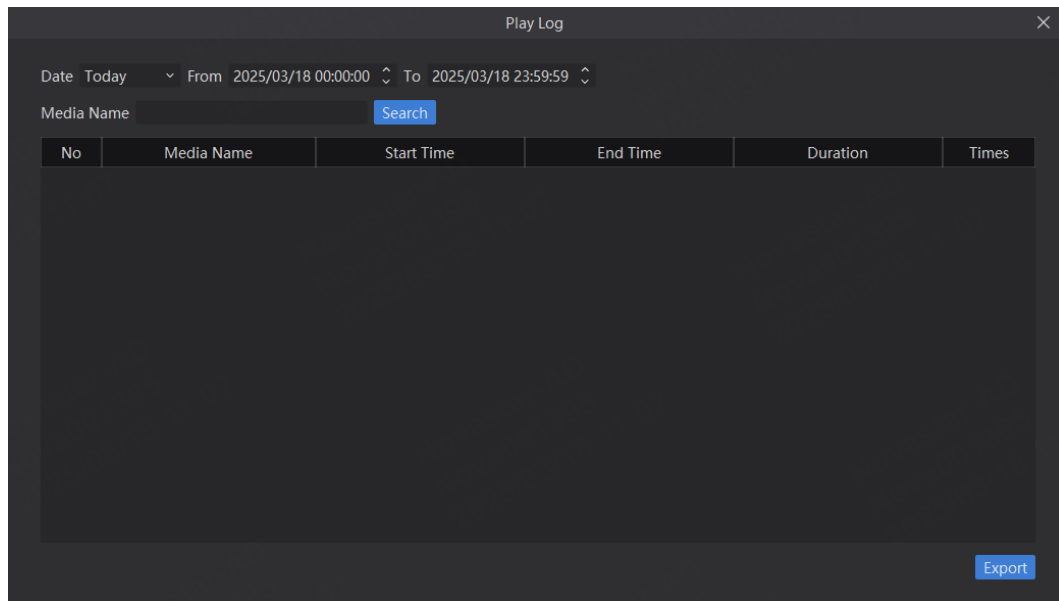
The playback control assistant and playback logs windows do not automatically close with the main user interface and require manual shutdown.

7.2 Play Log

Kompass FX3 Pro automatically logs media playback statistics, including start time, end time, total duration, and playback count for a selected period.

Step 1 Navigate to **Tools > Play Log** to open the interface.

Figure 7-2 Play log - 1



Step 2 Select a time range for log data statistics. Options include **Today**, **7 Days**, **1 Month**, and **3 Months**.

Note

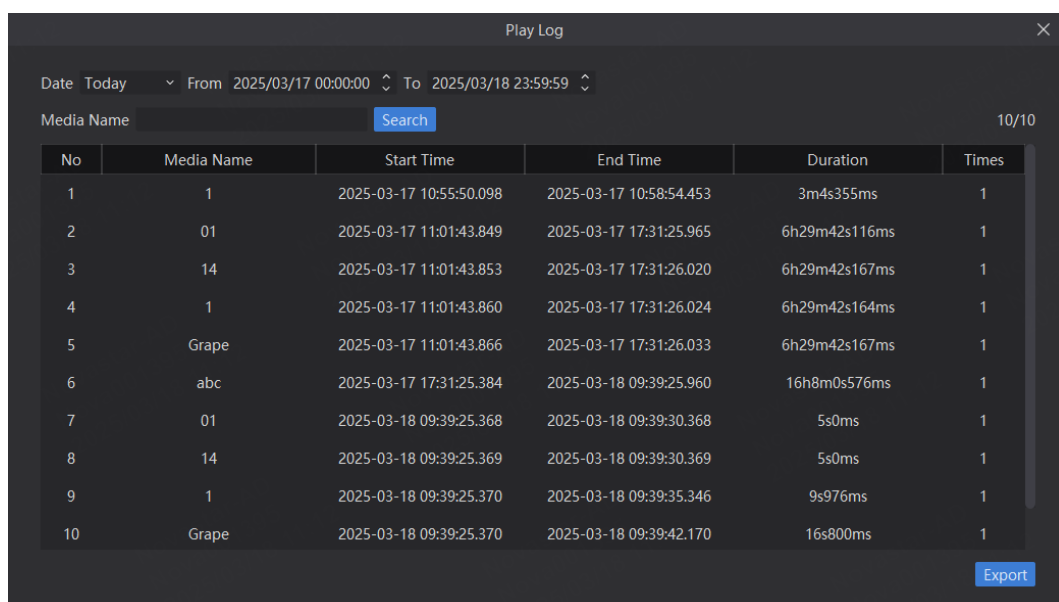
To ensure complete playback logs, set the **Log Storage** duration in **Settings > System** to a value greater than the selected time range.

Step 3 Set the start time and end time for the playback logs.

Step 4 Enter a media name in the **Media Name** field to query logs for a specific media file. Leave it blank to view all logs.

Step 5 Click **Search** to search and display the playback logs.

Figure 7-3 Play log - 2



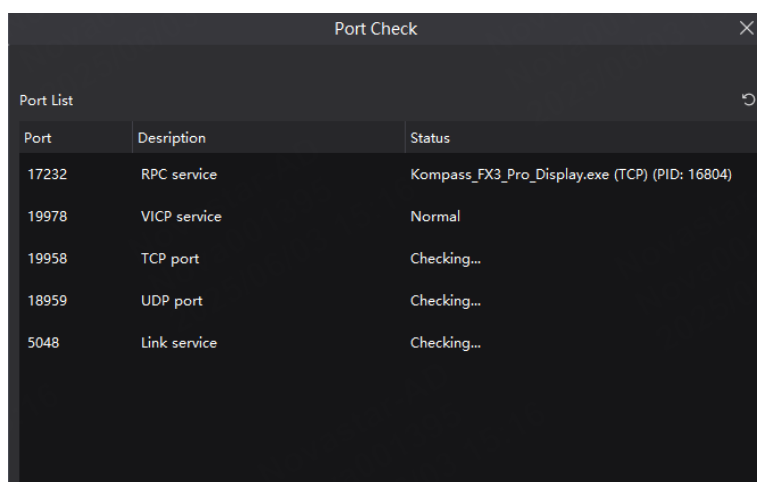
Step 6 Click **Export** to save the playback logs locally.

7.3 Port Check

The port check tool is used to scan and query the port information of Kompass FX3 Pro. 

Navigate to **Tools > Port Check** to enter the port check interface and view the port details of the software.

Figure 7-4 Port check



Port	Description	Status
17232	RPC service	Kompass_FX3_Pro_Display.exe (TCP) (PID: 16804)
19978	VICP service	Normal
19958	TCP port	Checking...
18959	UDP port	Checking...
5048	Link service	Checking...

TCP and UDP ports can be modified and configured in the **Settings > System > Peripheral**.

8 Help

8.1 User Manual

Navigate to **Help > User Manual** to open the software user manual.

8.2 About Us

Check the software version, license duration, licensing agreement, and more information.

8.3 Language

Switch the software UI language.

9 AI Assistant

AI Assistant is a versatile AI tool based on large models such as Nova and DeepSeek, providing accurate AI chat services to quickly answer questions and offer software operation guidance. Additionally, it allows users to generate personalized images by entering prompts, selecting image ratios, and styles. The integrated web search feature enables users to access real-time internet information, catering to diverse needs.

Prerequisites

- You have completed the software authorization.
- You have logged in the software.

Limitations

- Each account is limited to 100 AI chat operations and 10 image generation operations per day.
- Only one image is generated per operation, consuming one image generation count.

9.1 Register Account

Step 1 Click **Login** at the top right to open the login window.

Figure 9-1 Login window

Step 2 Click **Select Server** to enter the server selection interface.

Step 3 Choose a server node, then click **OK**.

Step 4 Click **Register Now** to enter the registration interface.

Figure 9-2 VNNOX registration

The screenshot shows the 'Sign Up' interface for VNNOX registration. At the top, there are three progress indicators: 1 Identity Verification (active), 2 Complete Account Information, and 3 Done. The main form area includes a 'Phone' dropdown menu, a country code dropdown (showing '0086') and a text input for the phone number, a 'Verification Code' input field, and a 'Send Code' button. Below these is a checkbox for 'I agree to the Terms of Service and Privacy Policy'. A large blue 'Next' button is at the bottom. At the very bottom, there is a link: 'Already have an account? Log in'.

Step 5 Choose the registration method. The options include **Phone** and **Email**.

Step 6 Enter your phone number or email.

Step 7 Check **I agree to Terms of Service and Privacy Policy**.

Step 8 Click **Send Code** and complete the slider verification in the pop-up.

Step 9 Enter the received verification code into the text box.

Step 10 Click **Next** to enter the **Complete Account Information** interface.

Figure 9-3 Complete account information

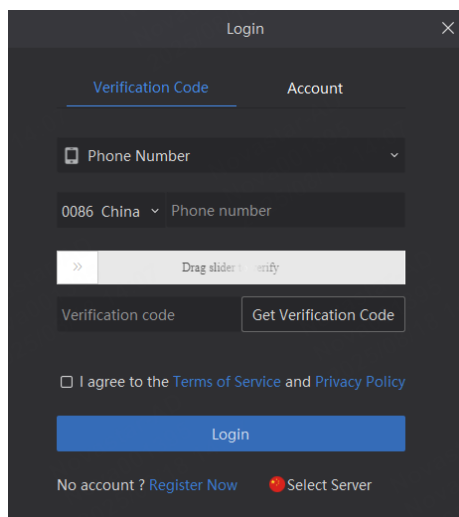
The screenshot shows the 'Sign Up' interface for VNNOX registration, now at Step 2: Complete Account Information. The progress indicators show Step 1 as completed and Step 2 as active. The form contains several required fields marked with an asterisk: 'User Name', 'Password', 'Confirm Password', 'Enterprise Name', 'Enterprise Address', 'Business Role', and 'Application Scenarios (Select all that apply.)'. Each field has a corresponding input box or dropdown menu. At the bottom, there are two buttons: 'Back' and 'Submit'.

Step 11 Fill in the user name, password, and enterprise information, then click **Submit** to complete registration.

9.2 Log In Account

Step 1 Click **Login** at the top right to open the login window.

Figure 9-4 Login interface



Step 2 Click **Select Server** to enter the VNNOX server selection interface.

Step 3 Choose a server node, then click **OK**.

Step 4 Click **Verification Code** or **Account** to select login method.

Step 5 Enter the account information.

For verification code login, after entering your email, drag the slider to the far right and get a code, and then enter the received code into the text box on the left.

For account login, after entering your user name and password, drag the slider to the far right to complete verification.

Step 6 Check **I agree to the Terms of Service and Privacy Policy**.

Step 7 Click **Login** to enter the device authorization verification interface.

Step 8 Drag the slider to the far right to receive the verification code by email or phone.

Step 9 Enter the received verification code in the text box.

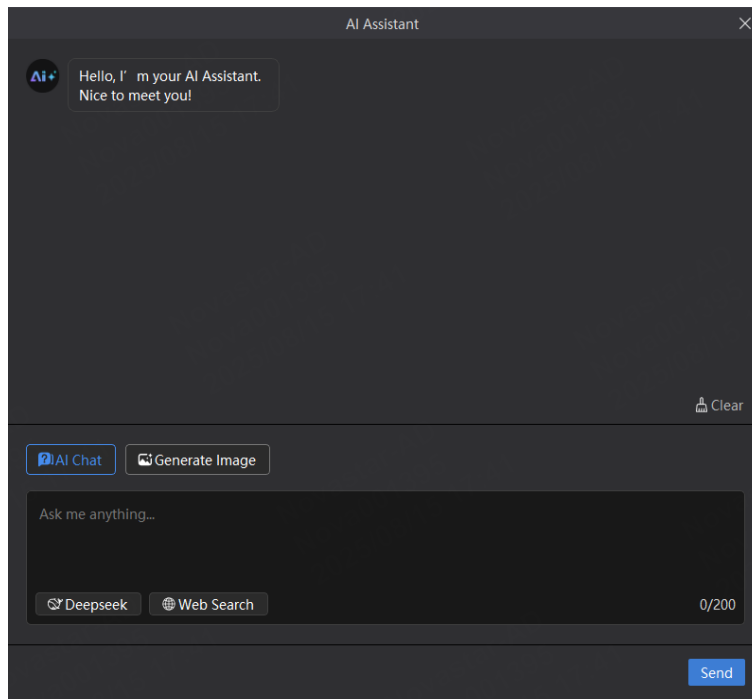
Step 10 Click **OK** to complete the login.

9.3 AI Assistant Operations

9.3.1 AI Chat

Step 1 Click  to open the **AI Assistant** interface.

Figure 9-5 AI assistant



Step 2 Click **AI Chat** to select the AI Q&A function.

Step 3 Enter your question in the text box below.

To ensure accurate answers, it is recommended to ask specific, clear, and unambiguous questions with sufficient context. A maximum of 200 characters is supported.

Step 4 Set the AI thinking mode, supporting **DeepSeek** and **Web Search** modes.

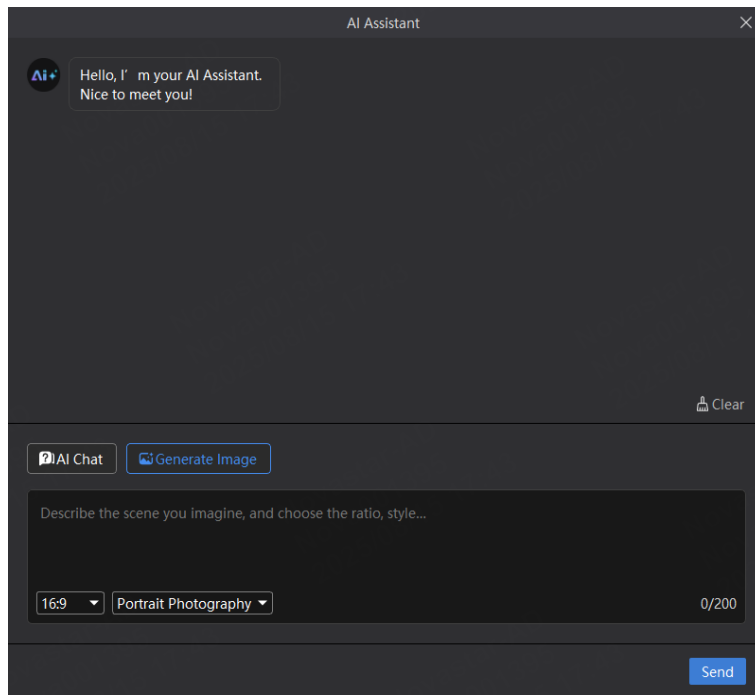
- DeepSeek:
 - On: If the user's question is not found in the current product knowledge base, the system will use the DeepSeek model to provide suggestions.
 - Off: If the user's question is not found in the current product knowledge base, the system will use the default Nova model to provide suggestions.
- Web Search:
 - On: Web search is enabled, and the system will search the internet based on the user's question to provide suggestions.
 - Off: The system will not perform a web search and will rely on the current product knowledge base and the selected large model for reasoning.

Step 5 Click **Send** to let the system process the question and provide an answer.

9.3.2 Image Generation

Step 1 In the **AI Assistant** interface, click **Generate Image** to enable the text-to-image function.

Figure 9-6 Image generation



Step 2 Enter the basic requirements for the image in the text box below.

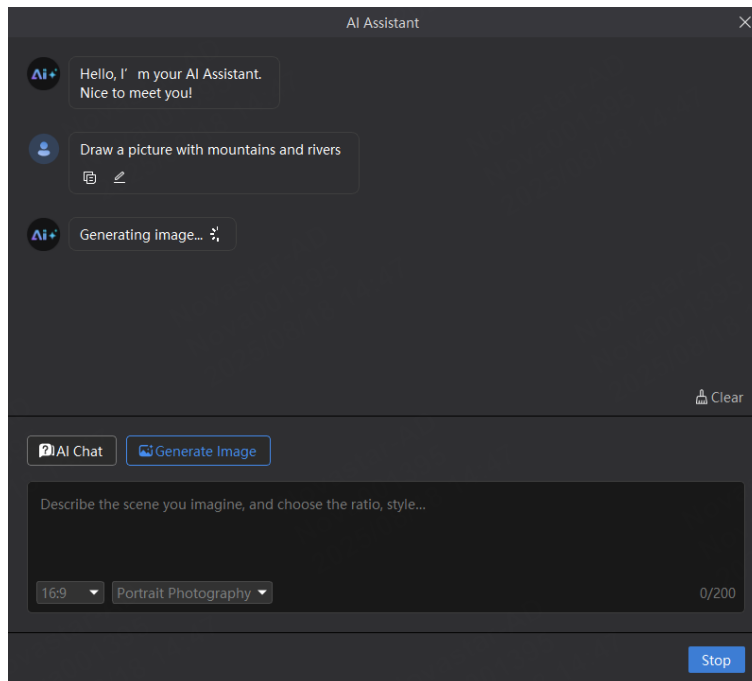
When using AI to generate images, please provide clear and detailed text descriptions, including the theme, details, style, emotion, and any specific requirements, to help the AI accurately understand and create images that meet expectations. A maximum of 200 characters is supported.

Step 3 Select the desired image aspect ratio from the default **16:9** options.

Step 4 Select the desired image style from the default **Portrait Photography** options.

Step 5 Click **Send** to let the system generate an image based on the input text. Only one image is generated per operation.

Figure 9-7 Generate images

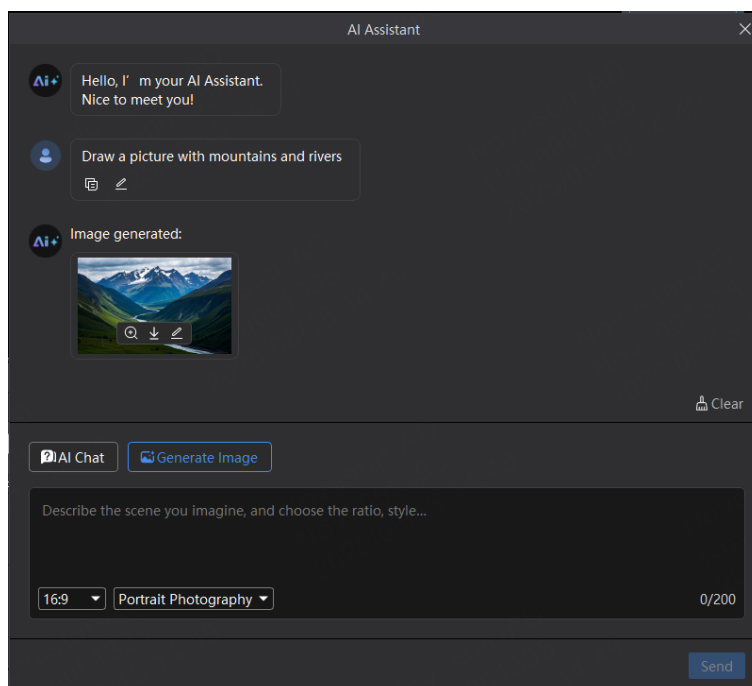


If generation is not needed, click **Stop**.

9.3.3 View and Download Images

After the image is generated, hover over the image to display the image tools.

Figure 9-8 View images



- : Click to zoom in the image, and click **Download Image to Media Library** to save the generated image to the media library.

- : Click to download the generated image directly to the media library.
- : Click to automatically fill the description used to generate the image into the text box below, allowing for modifications and regeneration.

9.3.4 More Operations

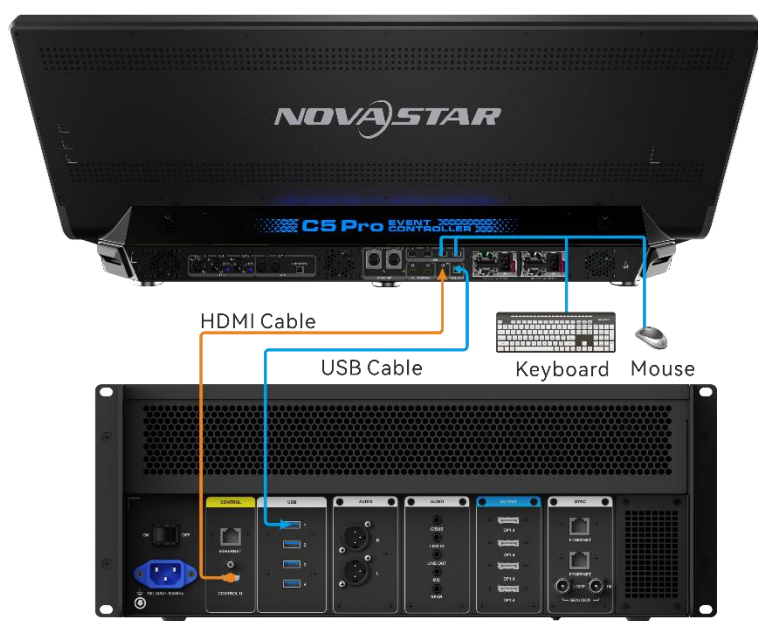
- Copy: Copy the question or AI result.
- Edit: Fill the description used to generate the image into the text box below.
- Try Again: If no result is received, click **Try Again** to reattempt the question.
- Clear: Clear all information in the dialog box.

10 Other Control Options

10.1 Event Controller Control

The Kompass FX3 Pro supports control via an event controller, where the event controller's screen serves as the editing interface for Kompass FX3 Pro.

Control Connections



- Video cable: Connect the **CONTROL UI** connector of the media server to the event controller's input connector with a video cable for displaying the software editing interface.
- USB cable: Use a USB Type-B to Type-A cable to connect the event controller and the media server.
 - Connect USB Type-B to the KVM connector on the event controller.
 - Connect USB Type-A to the media server's USB connector.
- Keyboard and mouse connections: Connect the mouse and keyboard to the USB connectors of the event controller.

Event Controller Operations

In the event controller's **FUNCTION** area, briefly press the **MVR** or **MEDIA** button, and the corresponding button lights turn green. At this time, the event controller screen functions as the editing interface for Kompass FX3 Pro.

Move the mouse to the editing interface to begin editing 

 Note

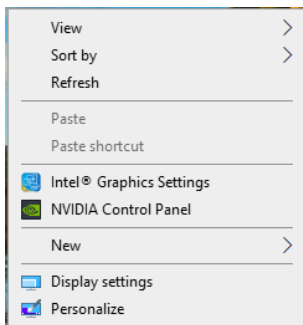
Control methods vary depending on the event controller. Please refer to the specific event controller user manual for detailed instructions.

11 Graphics Card Mosaic

11.1 Set Main Display

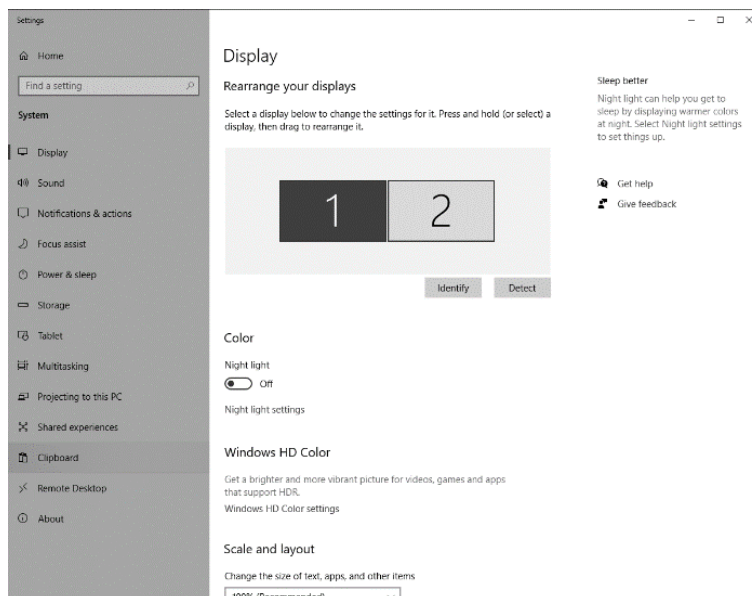
Step 1 Right click on your desktop and select **Display settings**.

Figure 11-1 Display settings



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

Figure 11-2 Multiple displays-1

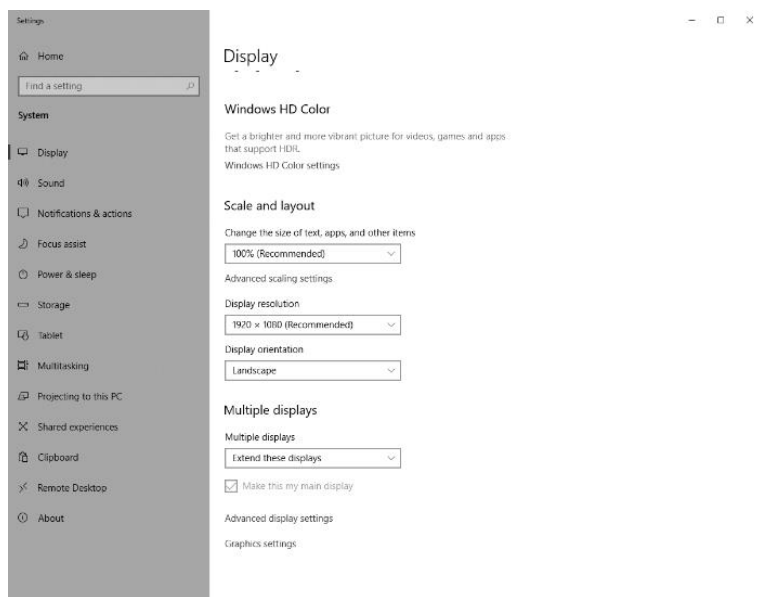


Note

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

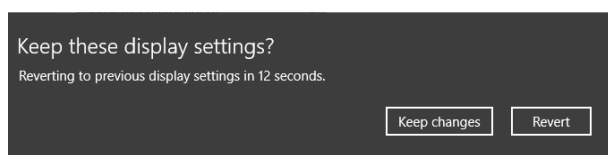
Step 3 For the **Multiple displays** item, select **Extend these displays**.

Figure 11-3 Multiple displays-2



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

Figure 11-4 Confirmation



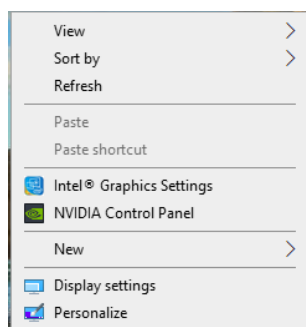
Step 5 Check the box next to **Make this my main display**.

11.2 Change Resolutions

11.2.1 Set Standard Resolutions

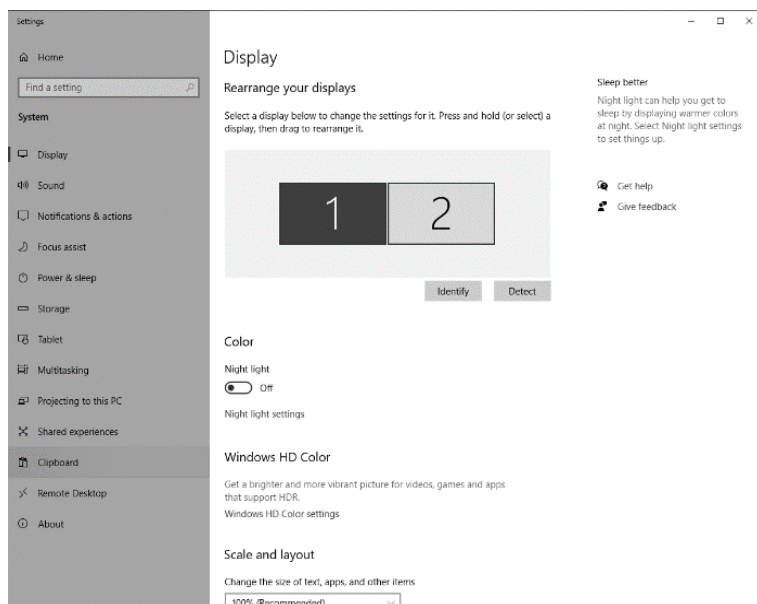
Step 1 Right click on your desktop and select **Display settings**.

Figure 11-5 Display settings



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

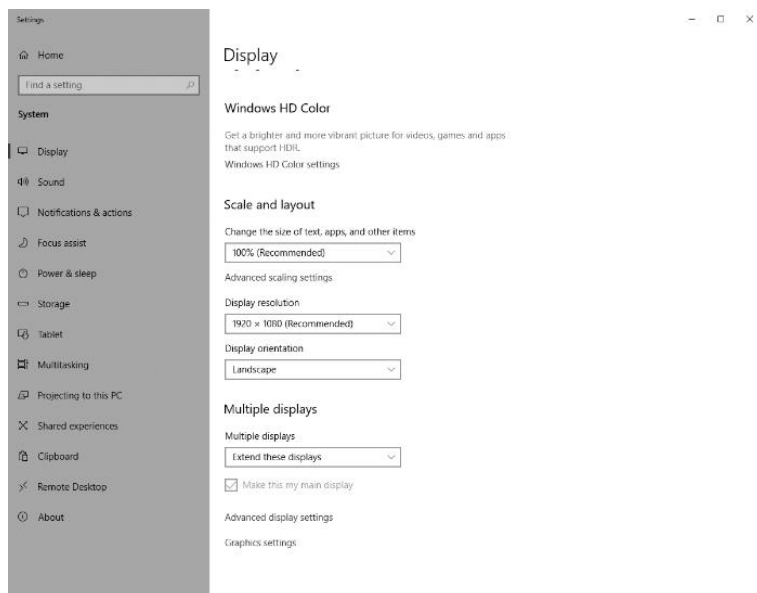
Figure 11-6 Multiple displays-1

**Note**

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

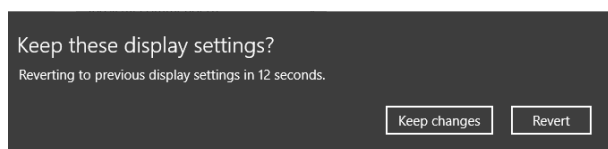
Step 3 For the **Display resolution** item, select the desired output resolution.

Figure 11-7 Multiple displays-2



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

Figure 11-8 Confirmation

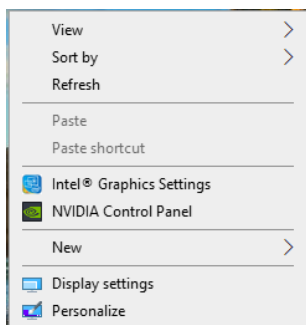


Step 5 Repeat the above steps to complete the resolution settings for other displays.

11.2.2 Set Custom Resolutions

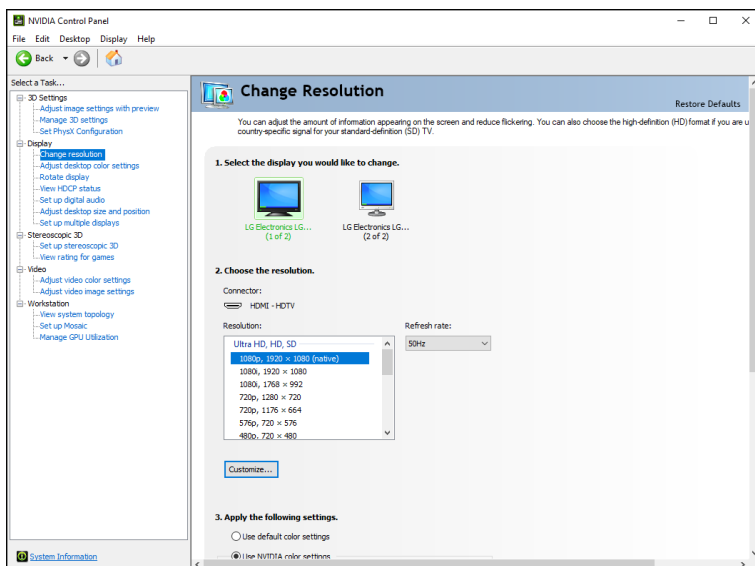
Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 11-9 NVIDIA control panel



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

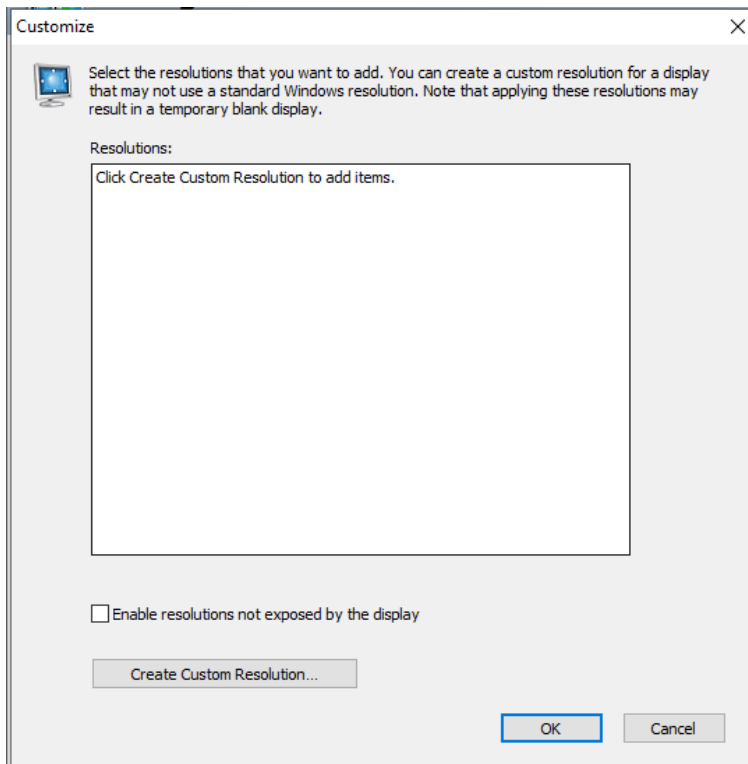
Figure 11-10 Change resolutions



Step 3 Select the desired display.

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

Figure 11-11 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 11-12 Custom resolution-2

Create Custom Resolution

Create a resolution that is not currently available in Windows. Your display may flicker a few times when testing a new custom resolution.

1. Select displays: Identify displays

Display	ID	Current resolution
Quadro K620		
☒ LG Electronics LG FULL HD (1 of 2)	1	1920 x 1080 at 50Hz (32-bit)
☐ LG Electronics LG FULL HD (2 of 2)	2	1920 x 1080 at 50Hz (32-bit)

2. Resolution settings: Import settings

Display mode (as reported by Windows)

Horizontal pixels: 1920 Vertical lines: 1080

Refresh rate (Hz): 50 Color depth (bpp): 32

Scan type: Progressive

Timing

Standard: CVT reduced blank

	Horizontal	Vertical
Active pixels:	1920	1080
Front porch (pixels):	48	3
Sync width (pixels):	32	5
Total pixels:	2080	1106
Polarity:	Positive (+)	Negative (-)
Refresh rate:	55.30 KHz	50.000 Hz

Pixel clock: 115.0240 MHz (49.000 to 51.000)

Test Cancel

Step 8 Set the horizontal pixels, vertical lines, refresh rate and scan type.

Step 9 Click **Test** and then click **Yes** on the window that appears.

Figure 11-13 Confirmation

Apply Changes

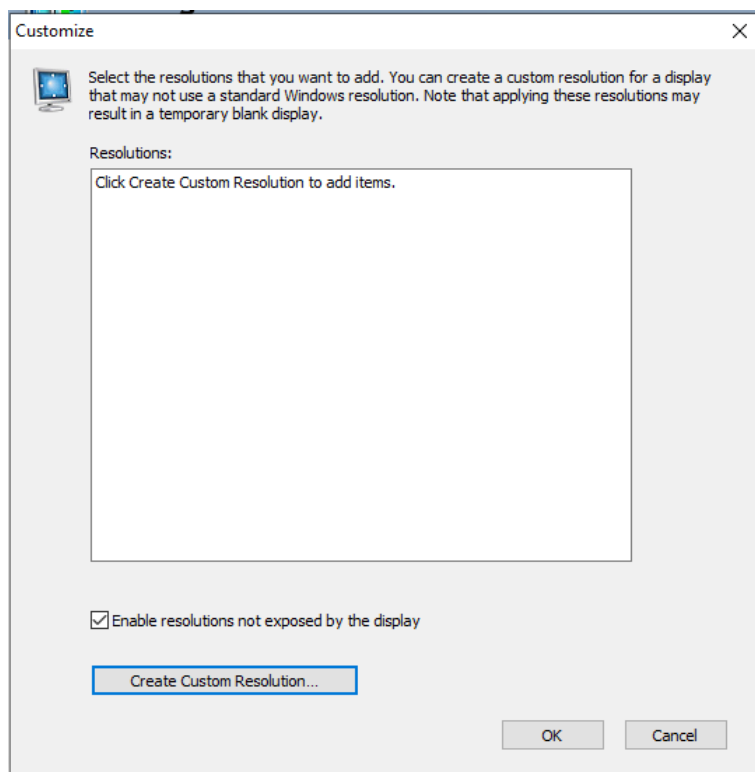
Test successful. Custom resolution 1920 x 1080 at 50Hz (32-bit) has been applied.

Do you want to save this resolution for all selected displays?

Reverting in 6 seconds

Yes (Y) No (N)

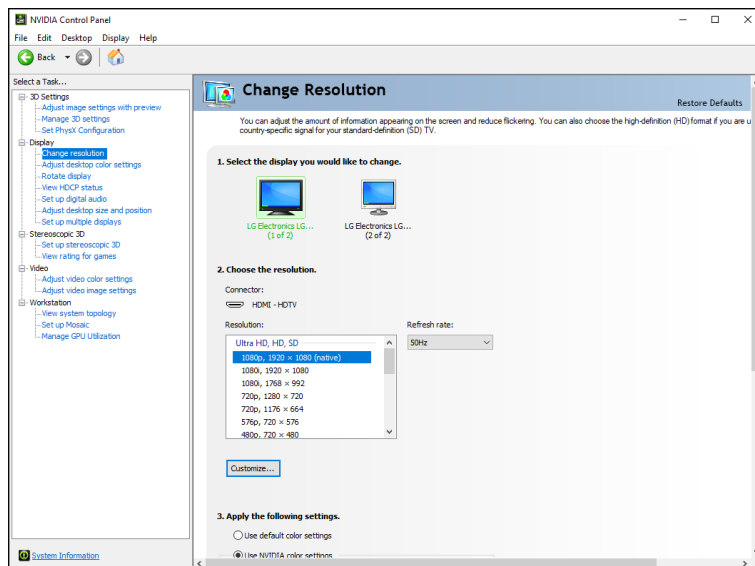
Figure 11-14 Custom resolution-3



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 11-15 Custom resolution-4



11.3 EDID Management

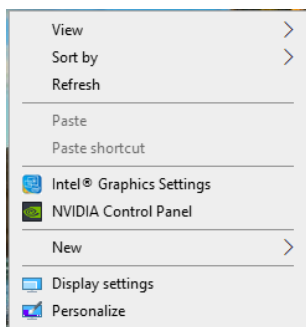
After the display resolution settings, you need to manage the EDID for precise identification of display properties and to avoid the on-site screen display disorder.

Load EDID

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

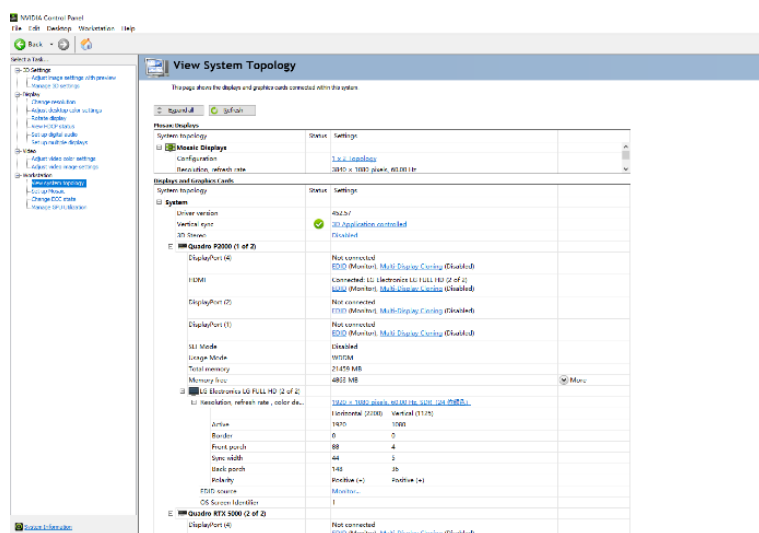
Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 11-16 NVIDIA control panel



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

Figure 11-17 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 11-18 EDID (Monitor)

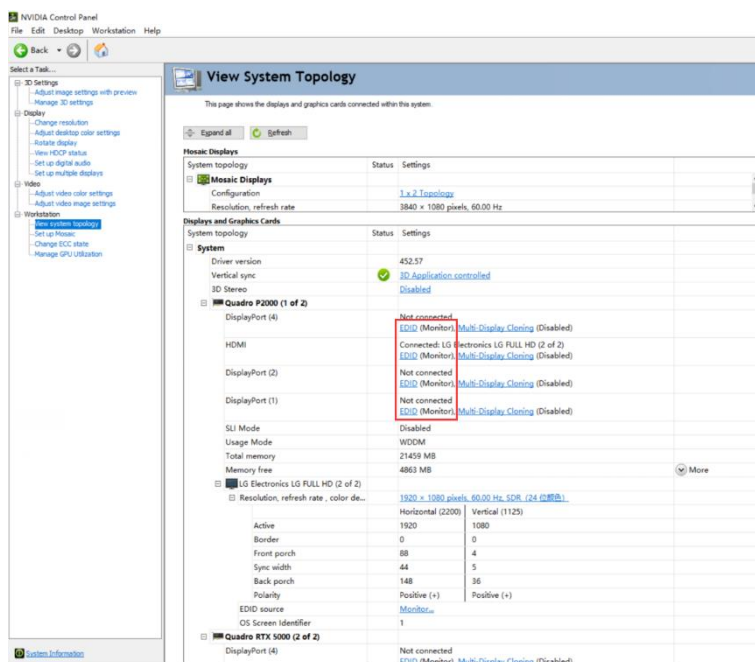
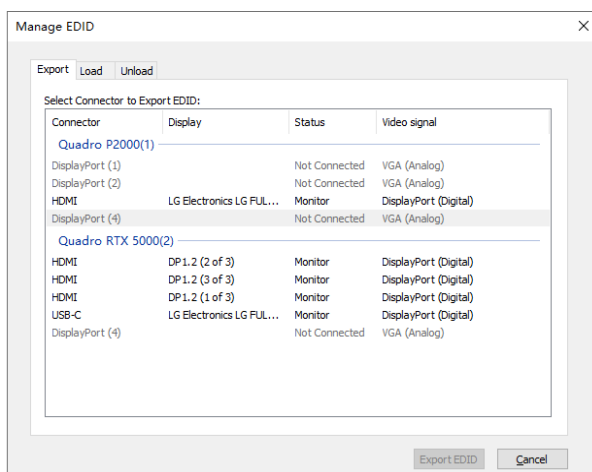


Figure 11-19 Manage EDID



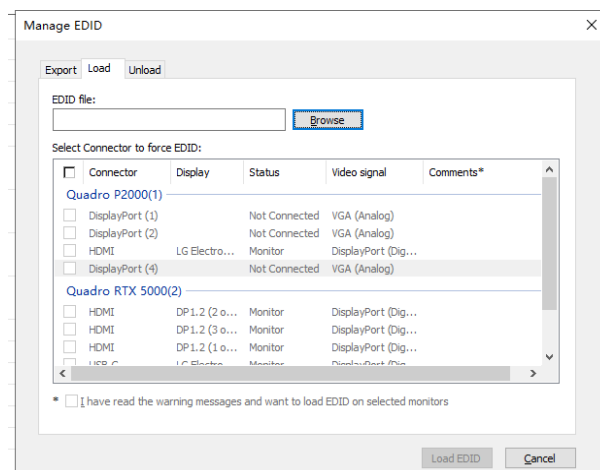
Step 4 Click **Export EDID** and then name the exported EDID file in the window that appears.

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.

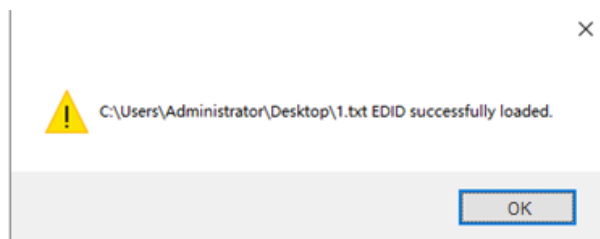
Figure 11-20 Load EDID



Step 8 Click **Load EDID**.

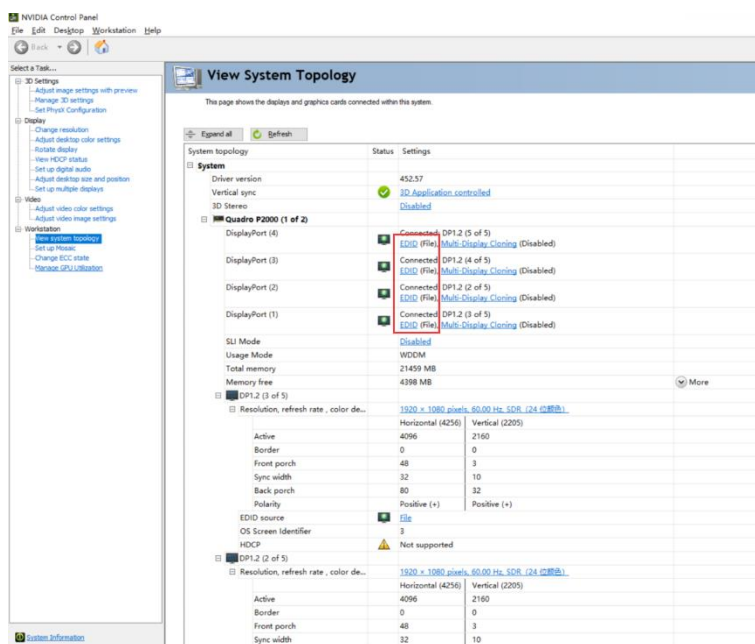
Step 9 On the dialog box that appears, click **OK** to complete loading the EDID.

Figure 11-21 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 11-22 EDID loaded successfully



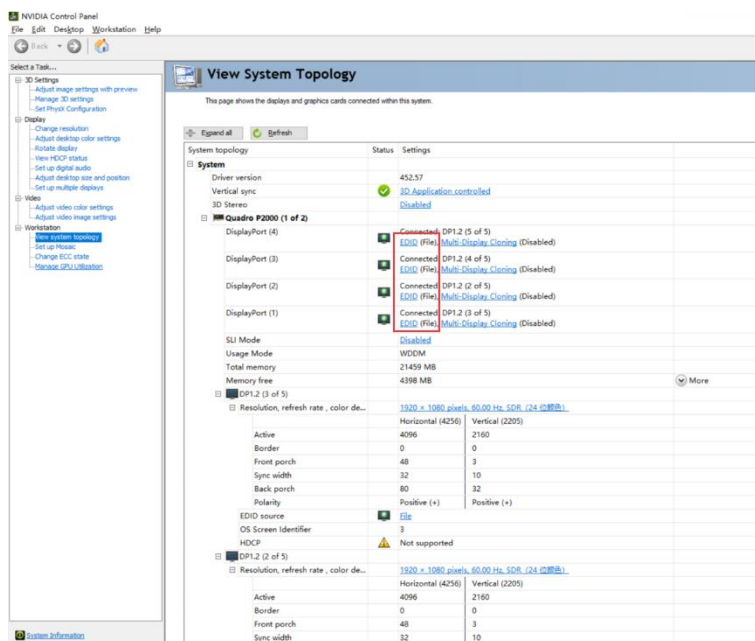
Unload EDID

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**.

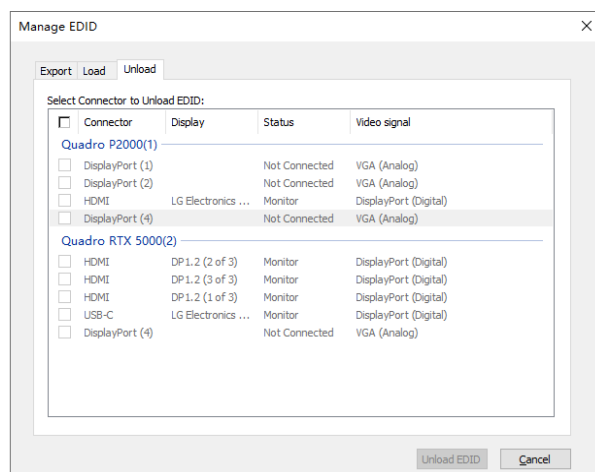
Step 2 Click **EDID (File)** to show the EDID management window.

Figure 11-23 EDID (File)



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

Figure 11-24 Unload EDID



Step 4 Click **Unload EDID**.

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

Figure 11-25 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.

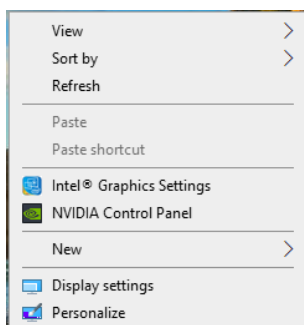
11.4 Output Mosaic

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 1×2, 1×3, 1×4, 2×2, 2×1, 3×1 or 4×1.
- The output resolutions of the graphics card connectors that are used for mosaic must be the same.

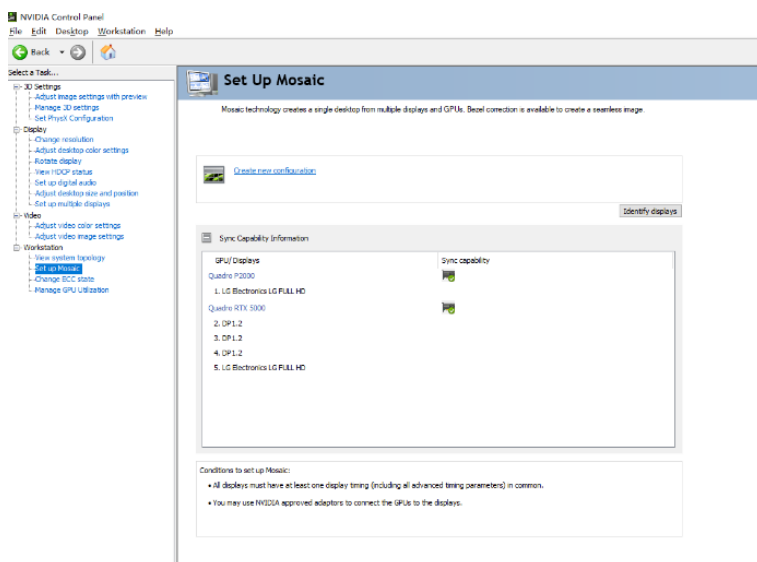
Step 1 Right click on your desktop and select **NVIDIA Control Panel**.

Figure 11-26 NVIDIA control panel



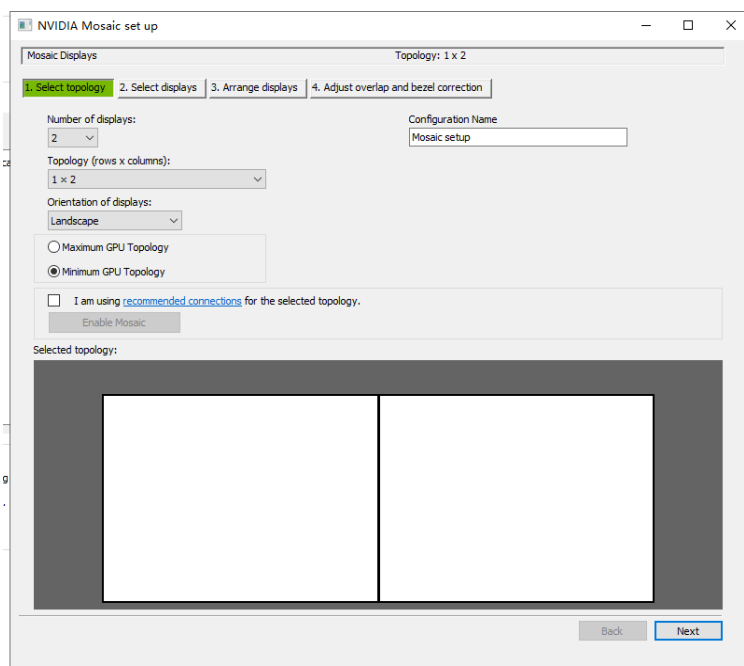
Step 2 On the **NVIDIA Control Panel** interface, go to **Workstation > Set up Mosaic**.

Figure 11-27 Set up mosaic



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

Figure 11-28 Mosaic settings



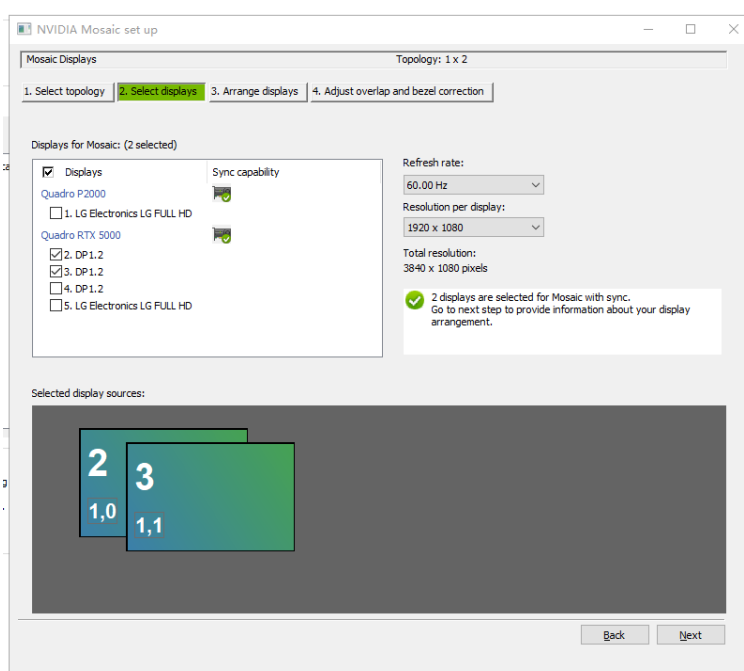
Step 4 Select the screen number from the drop-down list of **Number of displays**.

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.

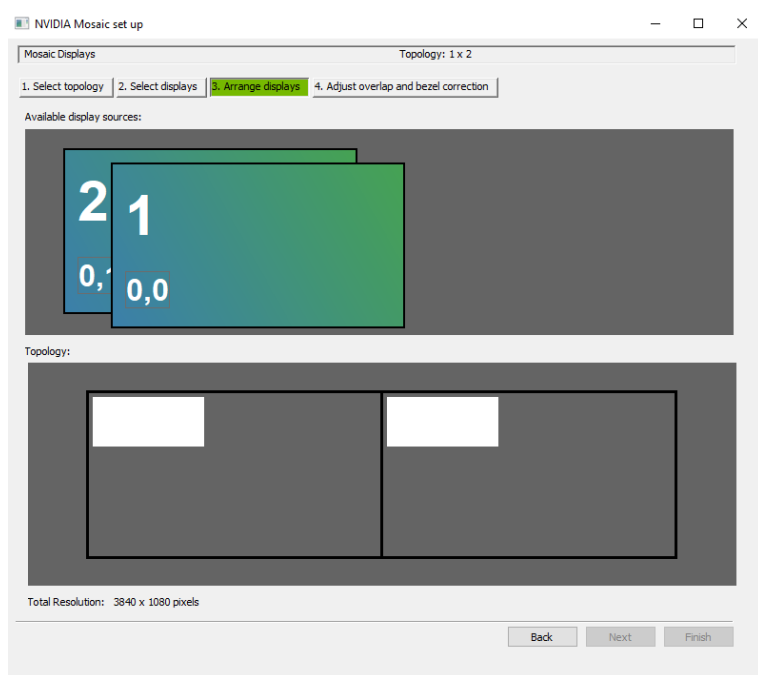
Figure 11-29 Select displays



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

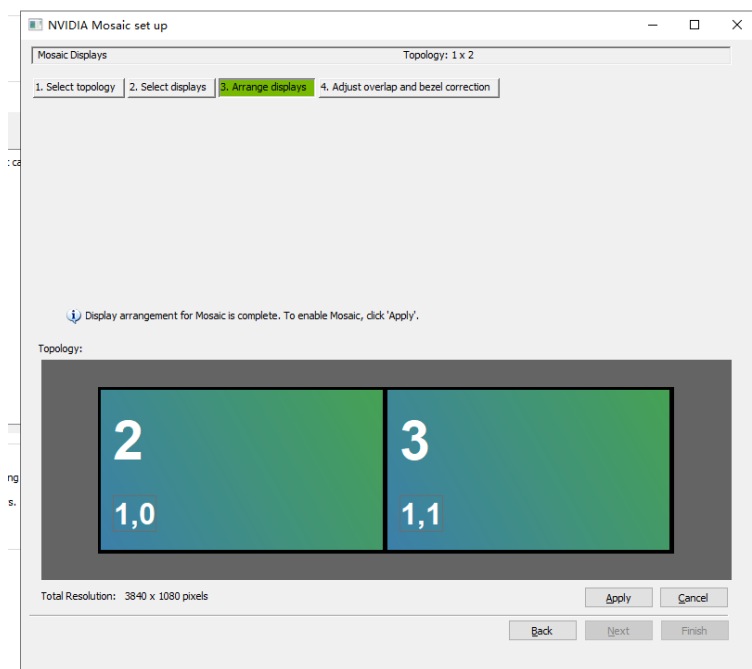
Step 9 Click **Next** to proceed.

Figure 11-30 Arrange displays



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

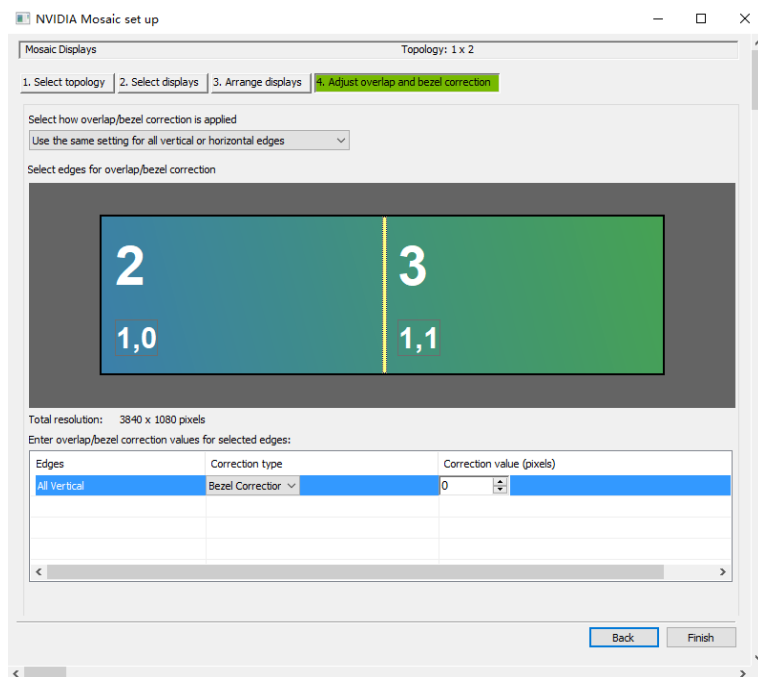
Figure 11-31 Arrange displays



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

Step 12 Click **Next** to proceed.

Figure 11-32 Adjust overlap and bezel correction

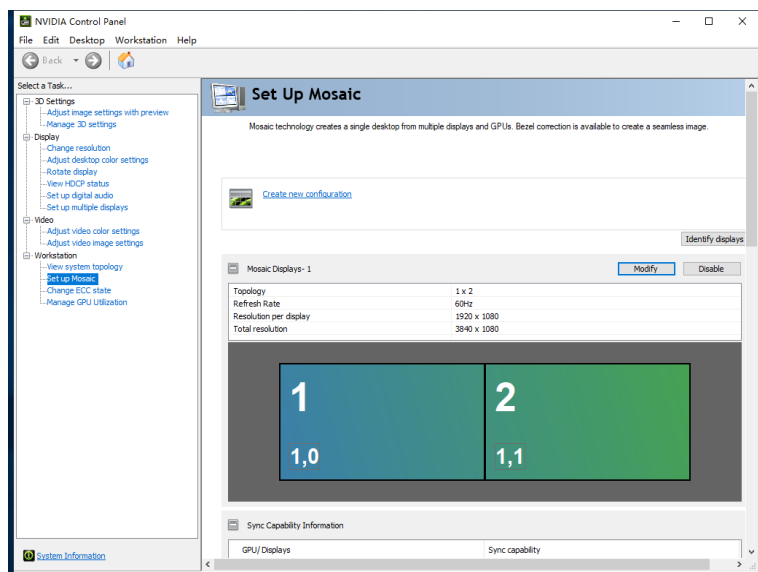


You can perform overlapping adjustment or bezel correction to the vertical or horizontal edges of the display as needed.

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

Step 13 Click **Finish** to complete the mosaic settings.

Figure 11-33 Mosaic completed



12

Copyright

Copyright © 2025 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