enlight 瀾景

Hirender S3 User Manual

V4.5.0

Contents

Introduction **1**

Hirender S3 Main Function Module **2**

Hirender S3 Operating system Environment **4**

Hirender S3 Operating mode **5**

Hirender S3 Features **6**

Installation and debugging method **6**

Operation interface **11**

Menu Bar **13**

File 13
Edit 21
Mode 22
Stage 24
Stage Preview 27
Media Resource 28
Program 34
Timeline 36
Lighting Library 47
Tool 50
Window 52
Help 53

Toolbar **54**

Media Resource Management **54**

Resource 54
List 69
AUX Timeline 71

Timeline Management **74**

Edit Layer 75

Program Management **82**

Program 82
Window Layer Management 87
Timeline 97
Output 100
Effect 101
Program Label 101

Stage **103**

Add display 104
Add virtual display 106

Geometry 108
Fusion Band 118
Slice application 121
Color and filter Settings 125
Connect 126
Standby 126
Preview 127

Properties 128

Playing status 129

Network Update Status 130

LTC Audio time code 130

Lock 131

Appendix 132

Appendix I: Hirender S3 Quick Start Guide 132
1.Window layout adjustment 132
2. Video projection 132
3.Windowed play mode 136
4.Window operation instructions: 137
5.Program switch: 139
6.Quickly switch programs 140
7.Modify the program name 142
8.Preview 143
9.Virtual screen 145
10.Video console switch 146
11.Timeline edit 147
12.Add NDI capture 148
13.LTC time code setting and use 149

Appendix II: Projection Fusion 150
Enter the grid debugging interface through the operation software: 150

Appendix III: Frequently Asked Questions 156
1.The video of large-size always gets stuck when broadcasting. 156
2.Open the software prompt without authorization information 157
3.Software timeline runs faster than normal time (sound card driver problem) 157
4.After the software is opened, the insertion window, media resource window, and stage editing window are gone. 157
5.Software opens prompts the maximum number of users. 158
6.Open the pop-up encryption lock interface and display CodeMeter 102541 error. 159
7.After the software is opened, the edited program cannot be played normally, and the resolution of all the materials in the media resource is 0. 160
8.The computer boot screen is on the display device, and the computer screen only display a desktop. 160

9.There are gaps in the splicing of multiple output stitching.....161
10.After debugging the software, turn it off and then on again, the output resolution is disordered.....161
11.The Dongle suddenly cannot be opened (the Dongle is locked).....161
12. Play video stuck and video out of sync solution.....161
13.Settings of master and backup and multiple machine-connected LANs. 162
14.Update fails in Master/standby mode and multiple online modes.....164
15. Recommended video encoding and format 164
16.Contact technical support 165
Appendix IV: How to link with the lighting console, etc. 166
MA2 lighting console settings.....166

Introduction

Thanks for your appreciation of Hirender S3. As a professional media server software, Hirender S3 can efficiently manage the entire video playback and control procedure through its powerful timeline management and window mode. The innovative program management module makes the switch simpler and more flexible. In addition, the multiple-channel can easily realize all the effects that need to be displayed, such as LED videowall, projector fusion and creative display.

Hirender S3 Main Function Module

- **Windows mode**
  Set the window position and size in advance, that is, click-to-play, flexible and fast, suitable for live scenes.
- **Timeline mode**
  Precise time control, powerful program effects and media arrangement are more suitable for conference applications. It can also be mixed with the window mode.
- **Support large resolution PPT**
  PPT can be directly added to Hirender S3 for playback and display, and supports high-resolution PPT.
- **Effect**
  Support frame, Gaussian blur, flash screen, color wheel and marquee, providing diversified choices for picture display and effect realization.
- **Support virtual screen**
  Ability to realize complex LED screen construction (any angle rotation, splicing, etc.), providing a convenient way for innovative LED display applications.
- **Slice**
  It can realize the segmentation and reorganization of arbitrary polygons, realize LED special-shaped splicing and creative display.
- **Support NDI capture**
  Up to 10 channels of 1920*1080 screen capture, extremely low latency and higher definition quality.
- **Support more video consoles and matrix control**
  The control instruction of the switchboard can be sent on the timeline to achieve precise synchronization of play and video console switching.
- **Support 4K capture card**
  Real-time capture of 4K PPT or video camera.
- **Powerful video decoding and 2D/3D rendering capabilities**
  Hirender has a powerful non-linear rendering engine and real-time high-performance 2D/3D graphics rendering, supporting OpenGL and DirectX. It supports almost all current video formats and more than 30 kinds of video codec including sequence frames and can play all of them smoothly.
- **Support for large resolution video**
  Support unlimited resolution (4K, 8K) video and image decoding, enabling point-to-point display of any resolution LED display and projector.
- **Humanized operation**
  Single server with multi-channel output perfectly combined with humanized unified stage management mode, timeline and window, as well as intuitive operation interface enables zero-based technicians to get started quickly, making flexible display screen layout and freely creative display easy to be implemented.

- **Preview mode**
  In the preview mode, the edited programs can be viewed in advance on the editing interface without affecting the normal output screen of the software.
- **Lighting library**
  The program window is directly connected with the light console, and the effect of the program can be adjusted in real time.
- **Time code**
  Support LTC and MTC time code control to realize audio, video and light Sync.

Hirender S3 Operating system Environment

Video input interface		
Signal Type	**Quantity**	**Input specification**
DVI/HDMI/SDI	optional	4 channels HDMI(SDI/DVI/VGA/HDMI/Ypbpr/CVBS to choose)
Supports a maximum of four 4K signal collection channels. The maximum resolution for a single channel is 3840x2160@60HZ.		
Video output interface		
Signal Type	**Quantity**	**Input specification**
DP	4	DP signal, The maximum supported resolution is 3840x2160@60HZ
Support 40-channel network HD signal acquisition		
Other ports		
USB3.0X2; USB2.0X2;RJ45(10M/100M/1000M)X1;COM Expansion Port X1(optional)		
Hardware Specifications		
Operating Voltage		100-240V 50/60Hz
Moderate work		30-75%
Support Protocols		TCP/IP, UDP/IP
Output Control		MTC,DMX512(ARTNET),IP
Chassis		4U Industrial PC box
Weight		15Kg
Chassis Size		482W*445D*178H(mm)
Operating System		Win10 64bit Pro

Original Microsoft Windows7 64-bit and above are recommended. Windows10 is preferred.

Hirender S3 needs to set your computer and output screen to the extended mode, which can be switched by [Win + P]. You can click the resolution setting to operate the display as the main display, and the screen or projector as the extended display.

Hirender S3 Operating mode

The software operation mode can be divided into single server mode and multiple server connection mode:

Single server mode

The usage of a single server—the operation interface and the video signal output are all performed on the same server. You can perform software operation, edit media effect, control output, and output video images to the display device. It does not need to carry out network data transmission, avoiding the influence of network error on the software. At the same time, real-time preview of the captured camera signal can be performed, making real-time preview, real-time editing and real-time rendering output become true. You can easily cope with application scenarios with fewer output channels as well.

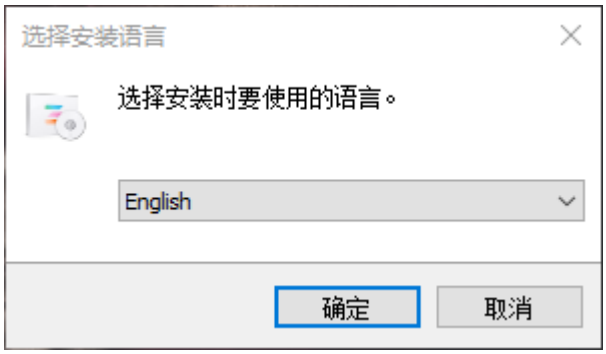
Multiple server connection mode

Multiple servers are cascaded—there is a separate console server for software operation, and other display servers are used for video signal output. As the number of display servers increases, the number of graphics interfaces that can be used for video signal output increases, and the number of connectable display devices increases. It satisfies the current market demand for more and more display devices and increasing resolution.

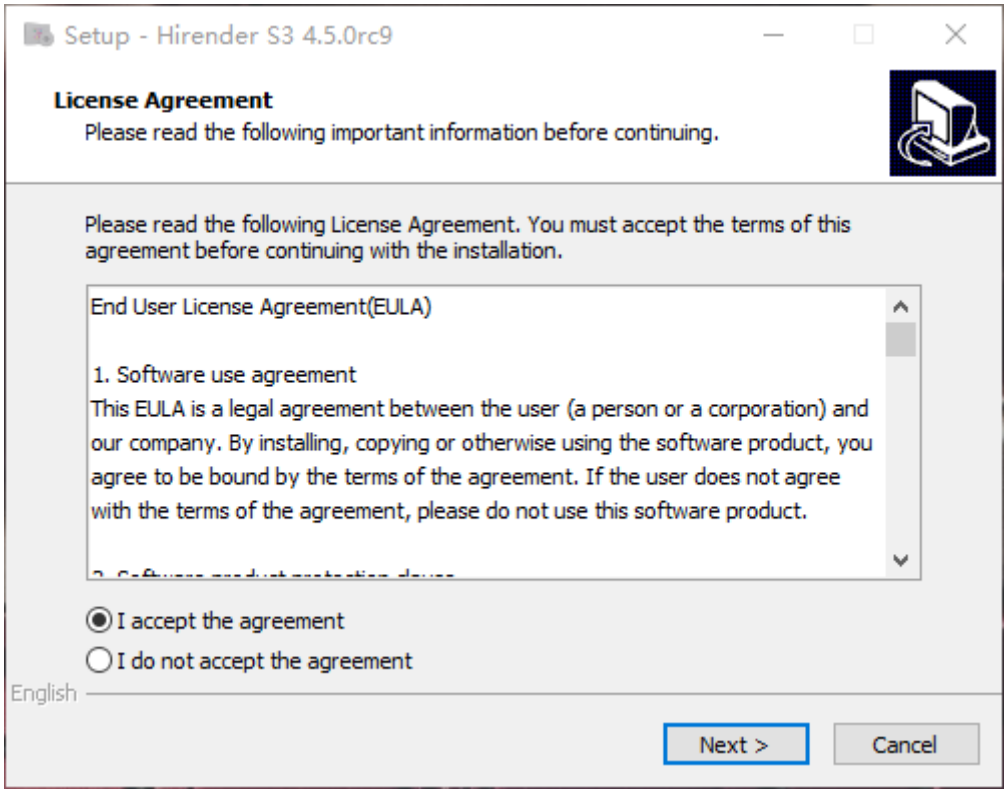
Hirender S3 Features

Installation and debugging method

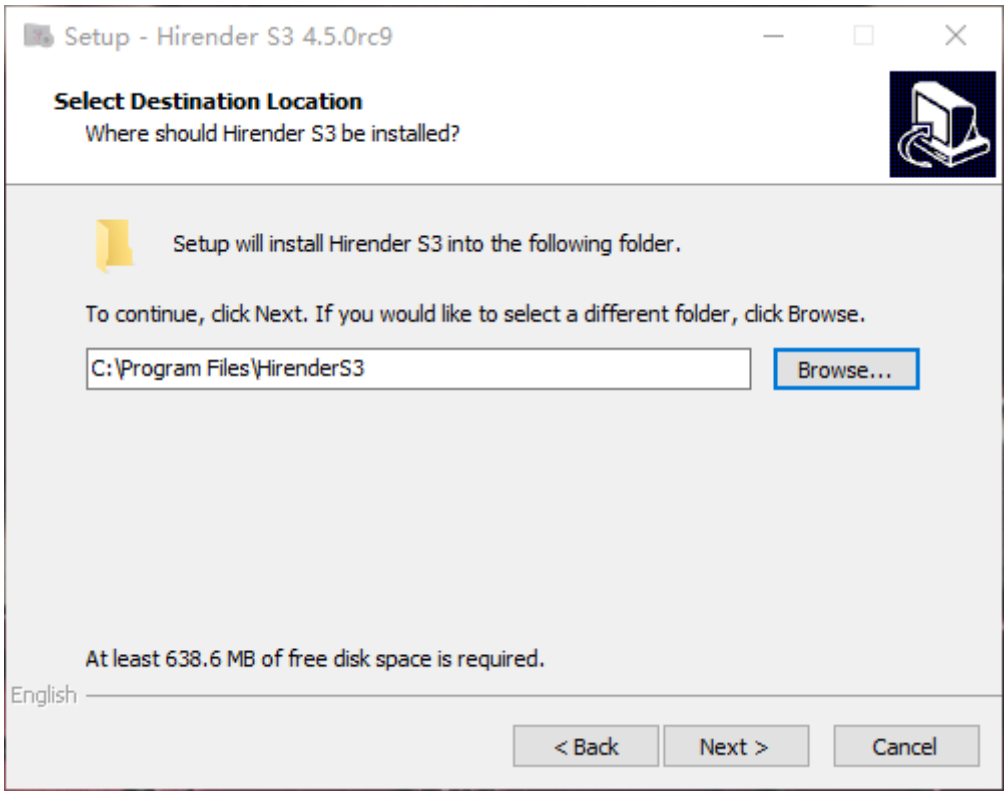
(1)Choose language according to personal situation:



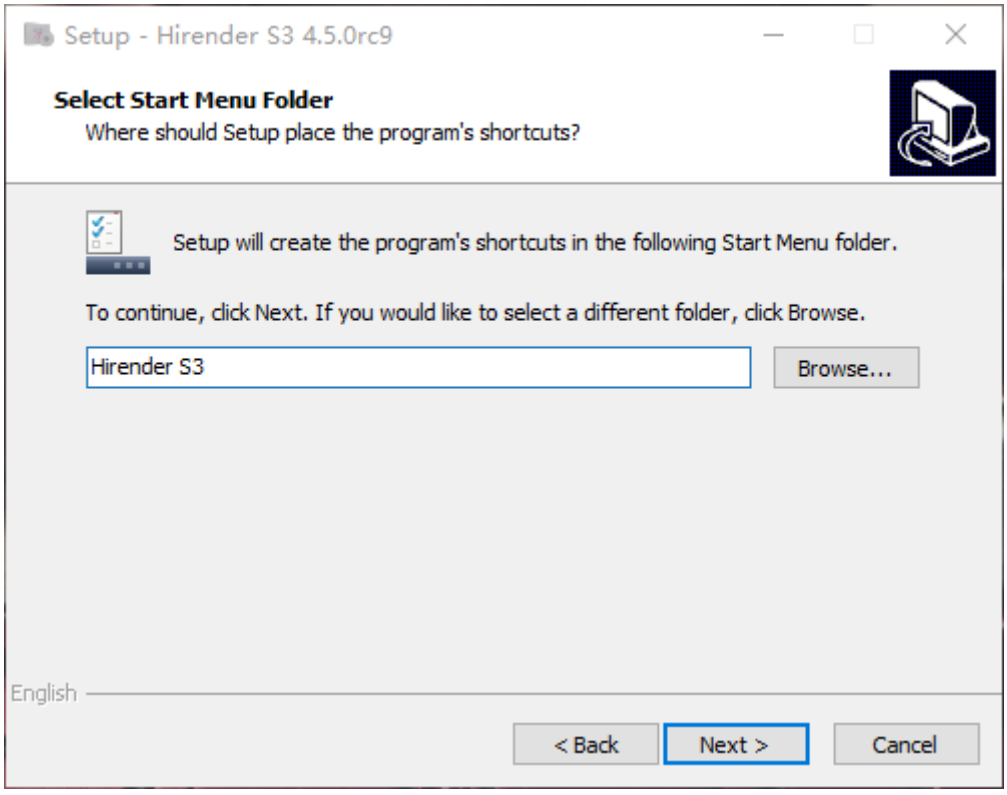
(2)Accept agreement-next step:

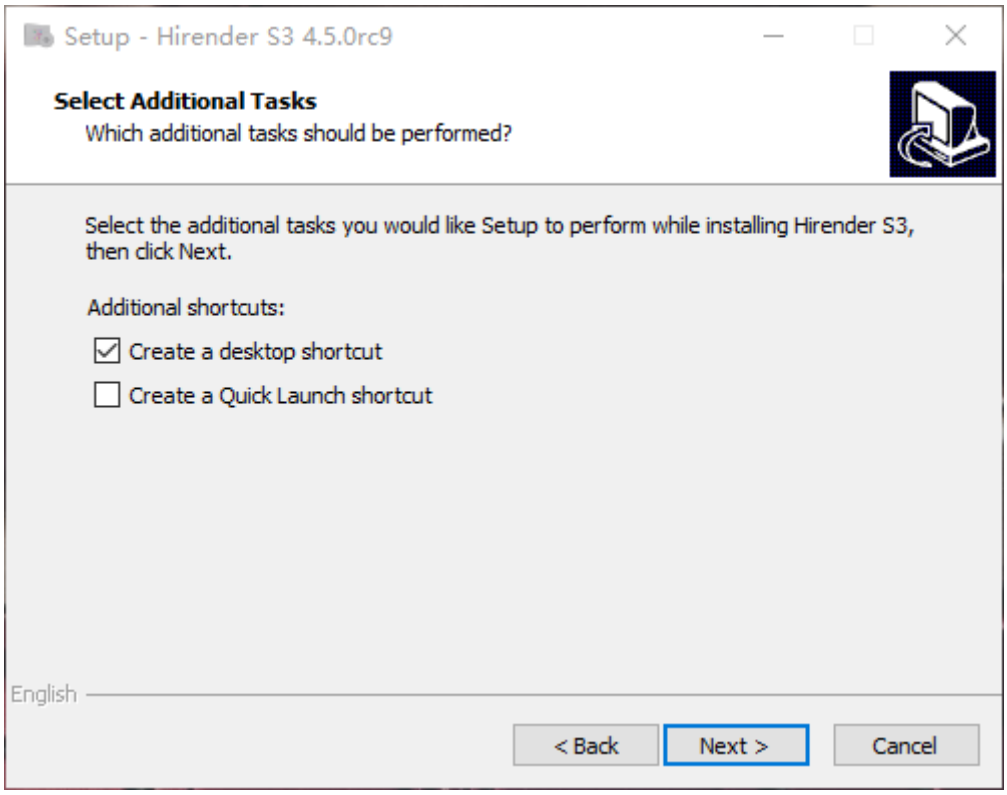


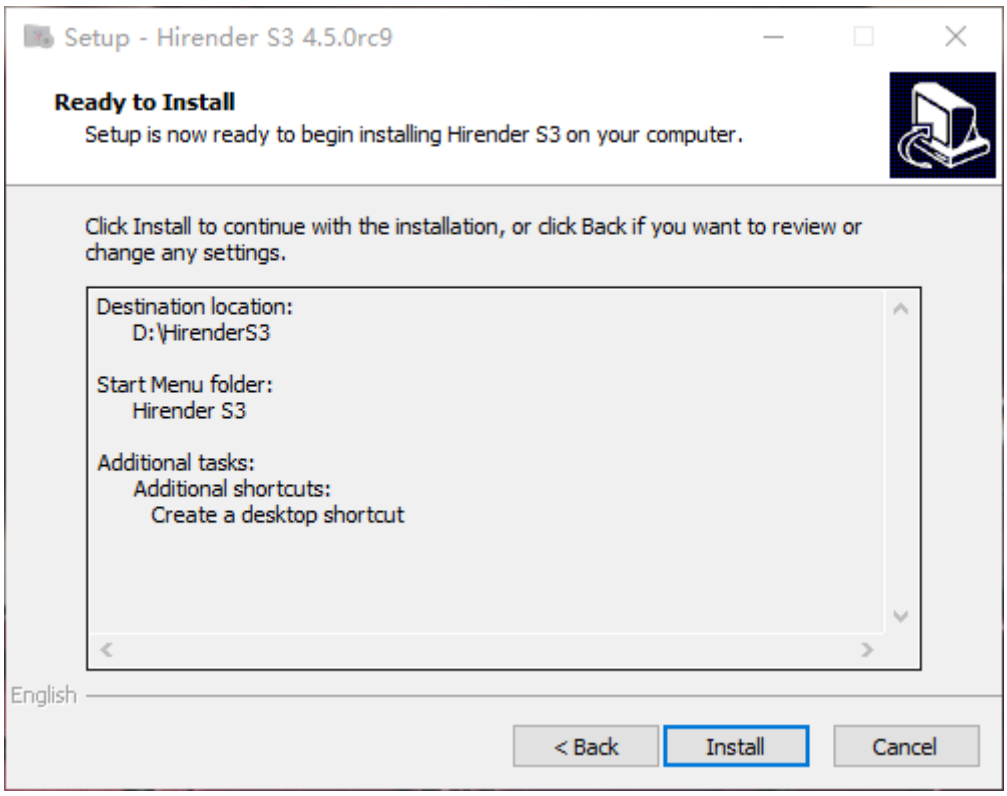
(3)Choose installation path:

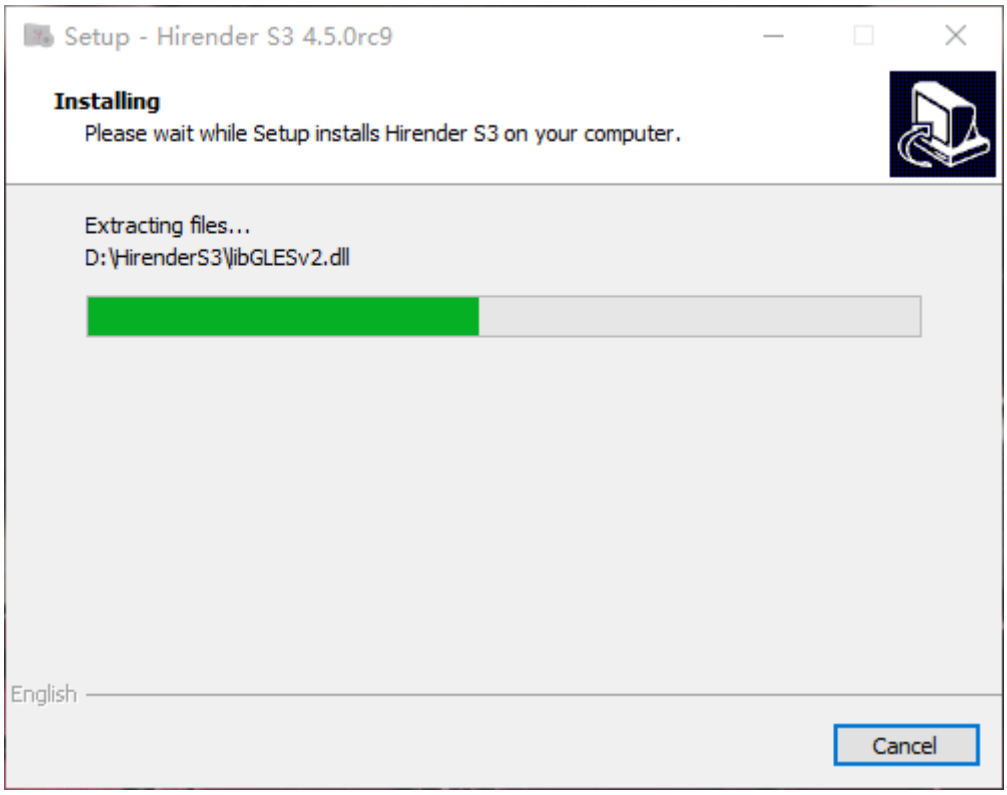


(4)The remaining part is installed by default, just select Next to continue:




Setup - Hirender S3 4.5.0rc9
Select Additional Tasks
Which additional tasks should be performed?
Select the additional tasks you would like Setup to perform while installing Hirender S3, then click Next.
Additional shortcuts:
Create a desktop shortcut
Create a Quick Launch shortcut
English
< Back
Next >
Cancel


Setup - Hirender S3 4.5.0rc9
Ready to Install
Setup is now ready to begin installing Hirender S3 on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
D:\HirenderS3
Start Menu folder:
Hirender S3
Additional tasks:
Additional shortcuts:
Create a desktop shortcut
English
< Back
Install
Cancel


Setup - Hirender S3 4.5.0rc9
Installing
Please wait while Setup installs Hirender S3 on your computer.
Extracting files...
D:\HirenderS3\libGLESv2.dll
English
Cancel

Setup - Hirender S3 4.5.0rc9
Completing the Hirender S3 Setup Wizard
Setup has finished installing Hirender S3 on your computer. The application may be launched by selecting the installed shortcuts.
Click Finish to exit Setup.
Launch Hirender S3
Finish

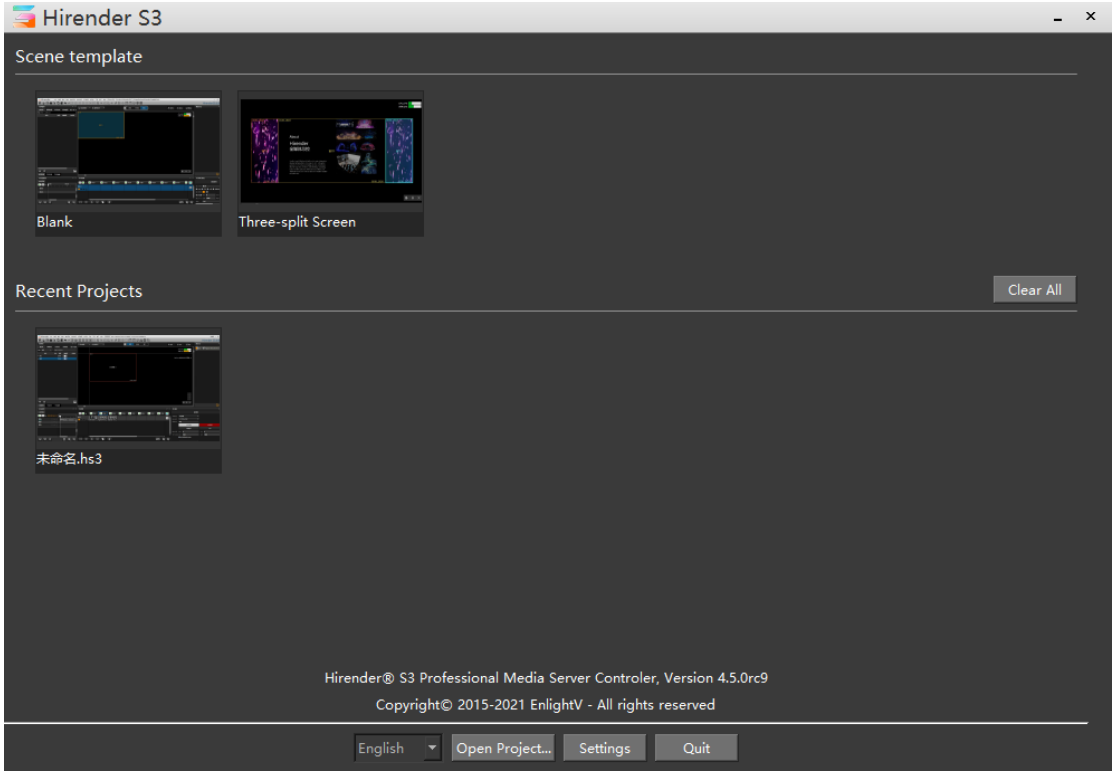
(5)After the installation is complete, the installer for the dongle driver will automatically pop up:

Follow the prompts to install the dongle.

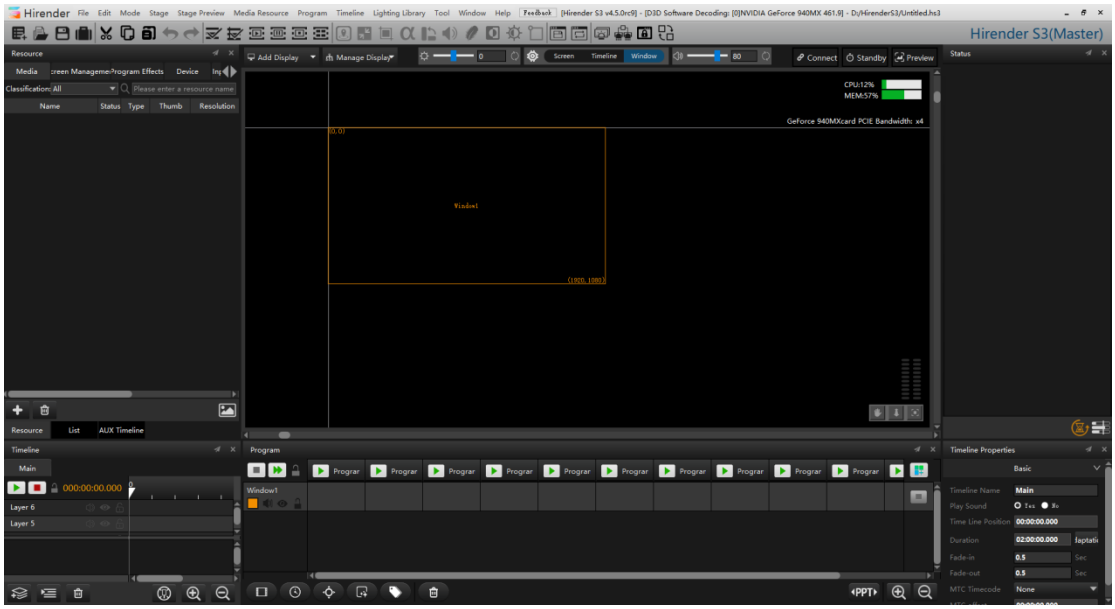
Operation interface

Open the software and enter the startup page:

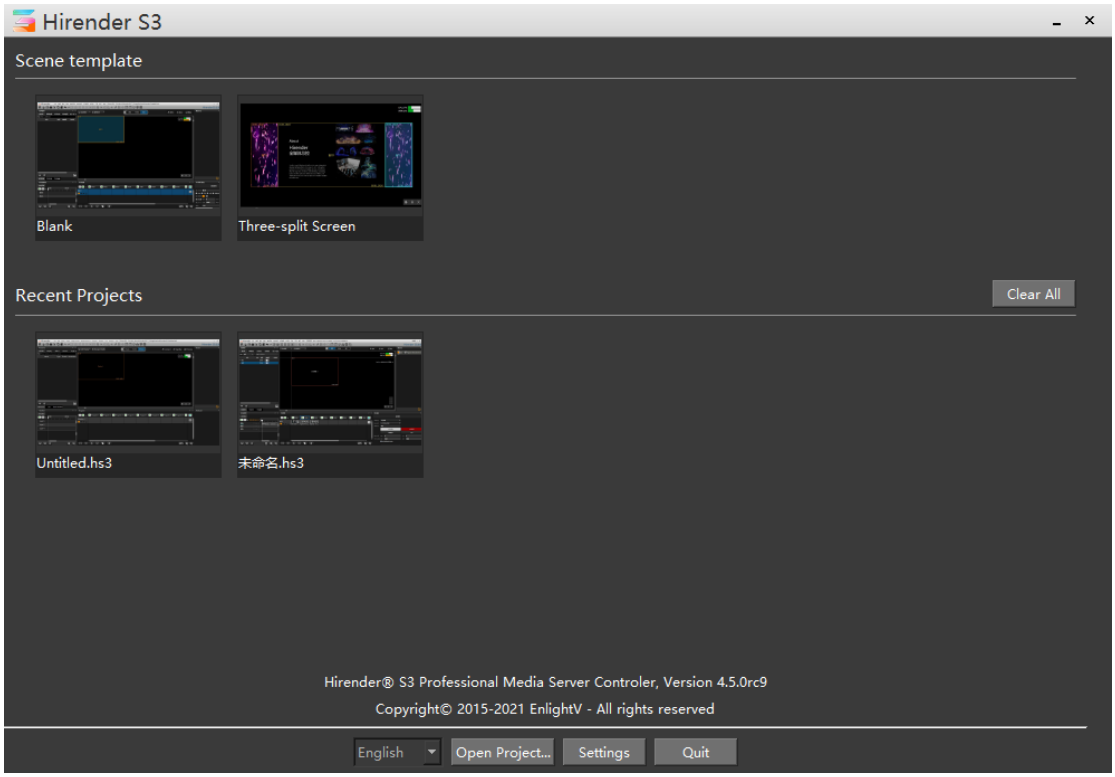
In the scenario template, you can choose to create the project with different templates. You can see the list of recently opened projects and open it. At the bottom, you can switch the language and click on the Settings screen to edit your preferences.



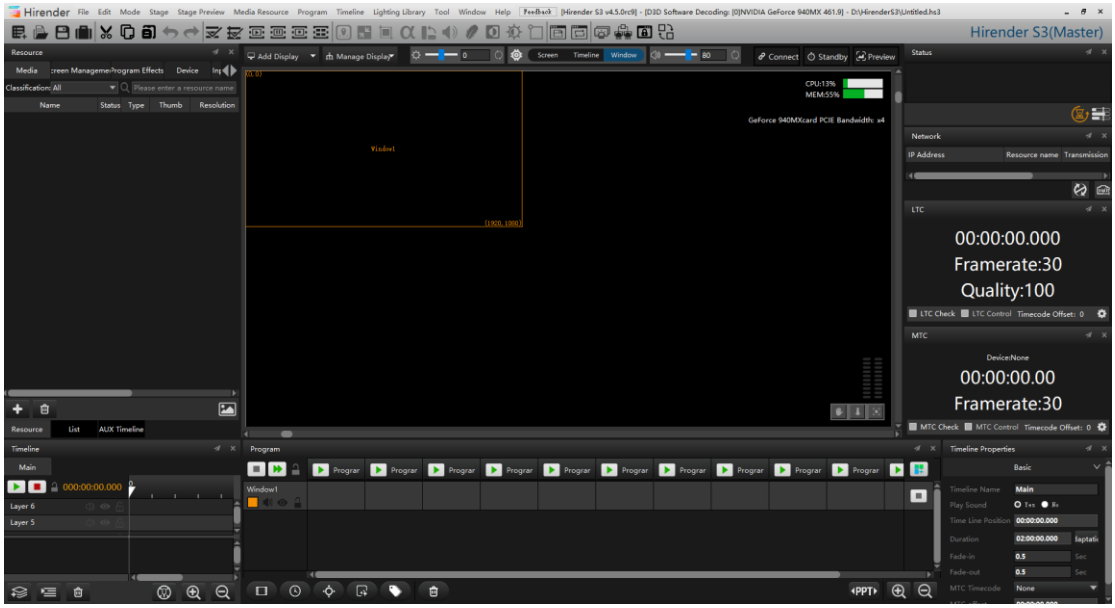
Users can set floating window in S3 according to their personal preferences. Click the hover button to set the window hover. Click the button again to cancel the hover state. The hover button makes the window easy to control.



Through the new program/open program, or click the template/project, into the software interface.

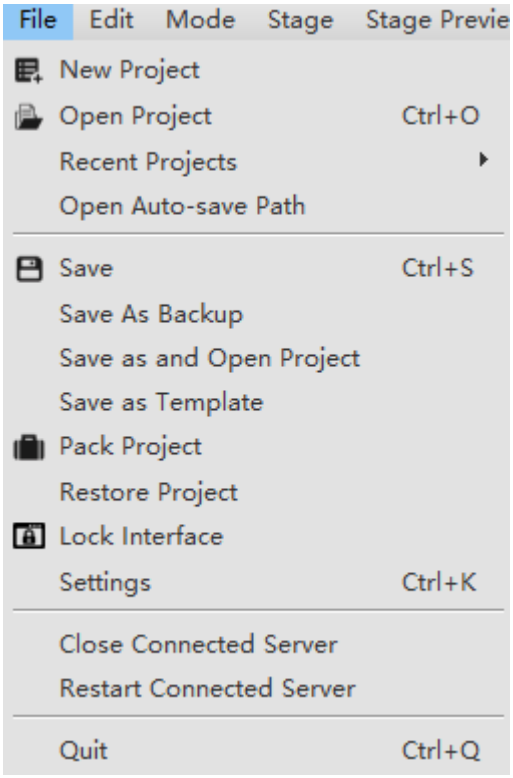


Interface introduction:

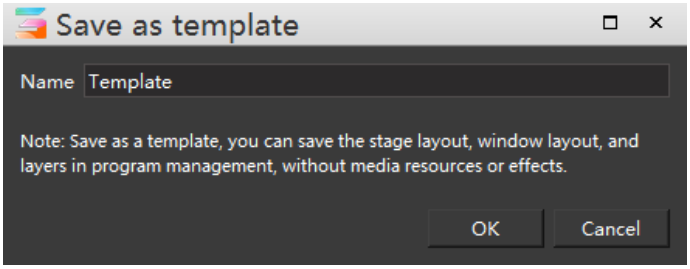


Menu Bar

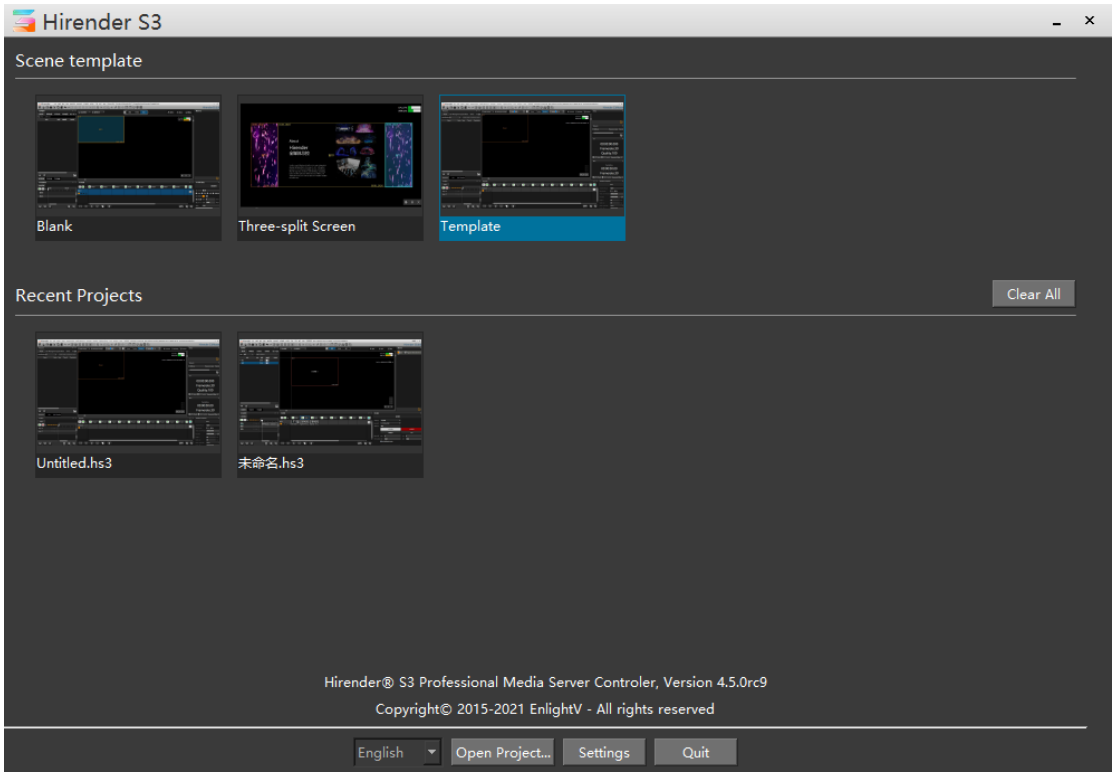
File



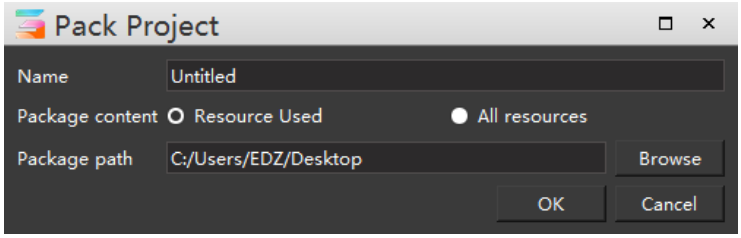
(1)New Project: Select the project storage path and project name to create a new project.
(2)Open Project: Open a Project.
(3)Recent Projects: Open several recently opened projects.
(4)Open Auto-save Path: Quickly open the directory where the project automatic backup files are saved.
(5)Save: Save the current project.
(6)Save As Backup: Save the current project to the path selected by the user.
(7)Save as and Open Project: Save the current project to the path selected by the user, and open the project under the new path.
(8)Save as Template: Save the current project as a template.



The template can be seen on the launch page.



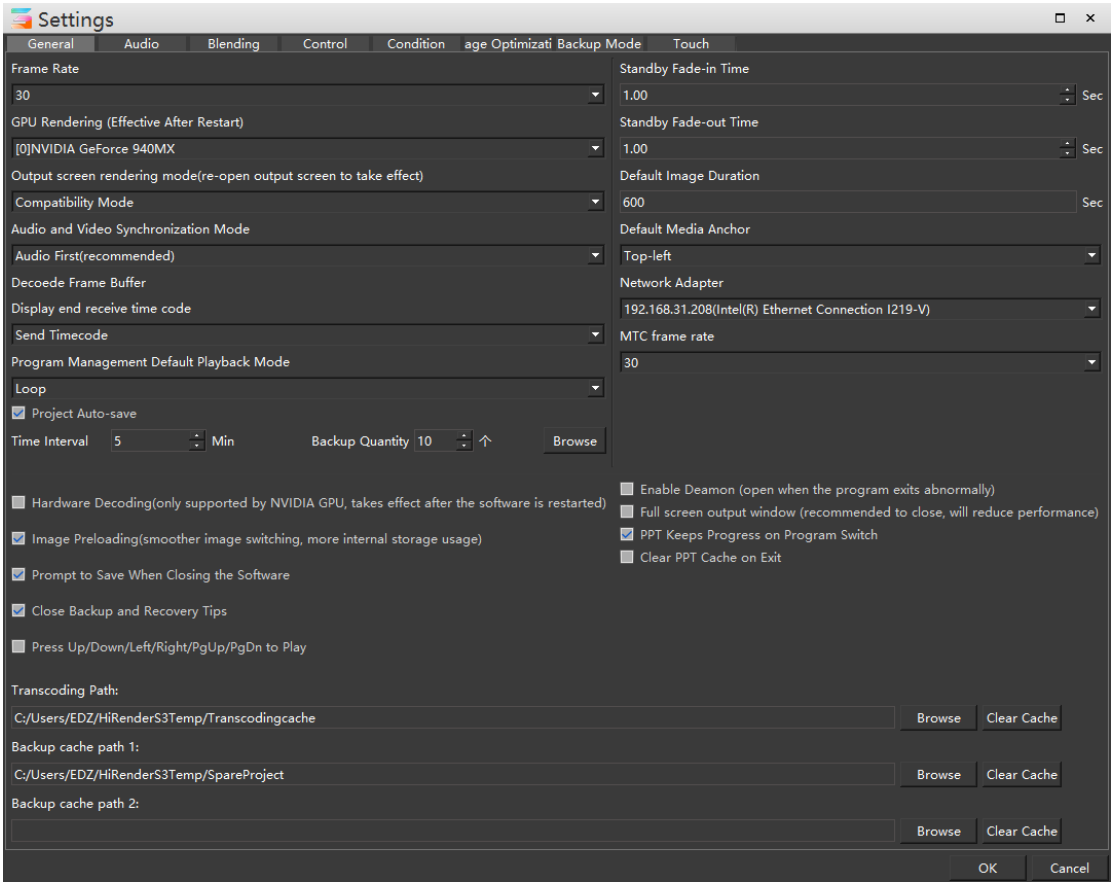
(9)Pack Project: Enter the packaging name, select the used resources or all resources, and then select the save path.



(10)Restore Project: Enter the data recovery page to restore the project automatically saved by the system.

(11)Close/Restart Connected Server: Close/restart the connected display server.

(12)Settings: Open the setting menu to set various basic functions and properties of the project and application.

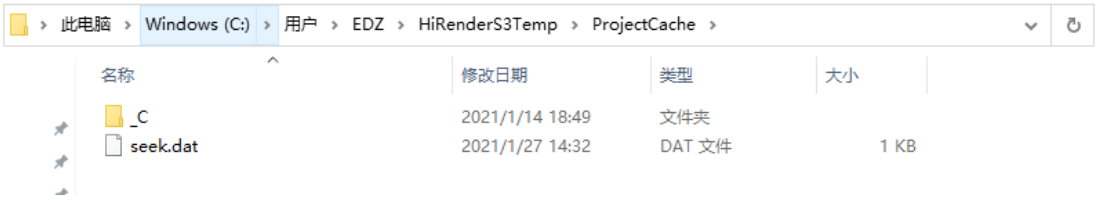


1)**Frame Rate:** The default is adaptive to ensure smooth and synchronous video playback. This setting is used to match the video frame rate used in the program and display device.

2)**Default Image Duration:** After this item set, the picture material added in resource management will have a default display time length. User can customize.

3)**Time Code:** Select the Master to send the network time code, which can ensure the synchronization of the screen when online.

4)**Project Auto-save**: For multimedia non-linear editing software, due to the various operations of users, some improper operations will inevitably lead to program flash back or no response. Therefore, the software is equipped with automatic saving function. The number and time of automatic saving can be modified in settings. The path of automatically saved project files is in by default C:\Users\user\HirenderS3Temp, the "user" here refers to the user's name, such as John, admin, etc. the user can also set the backup path in the backup cache path in the setting interface. If there is a problem with the software, the results of previous editing can also be found in the directory C:\Users\user\HirenderS3Temp\Project Cache . As represented in figure below:

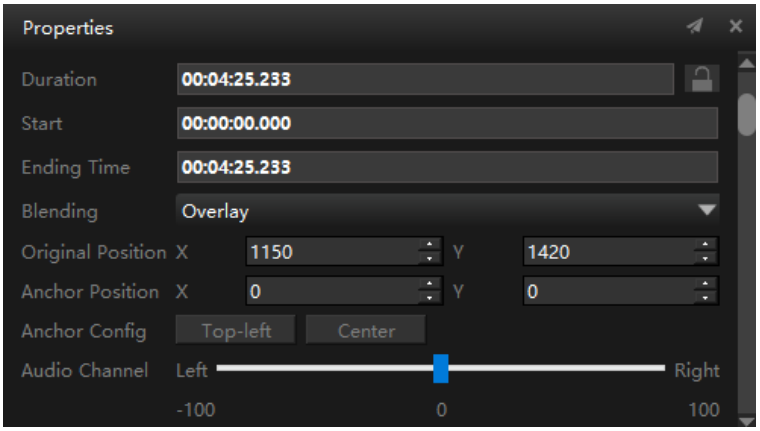


5)**Default Media Anchor:** Top-left or center.

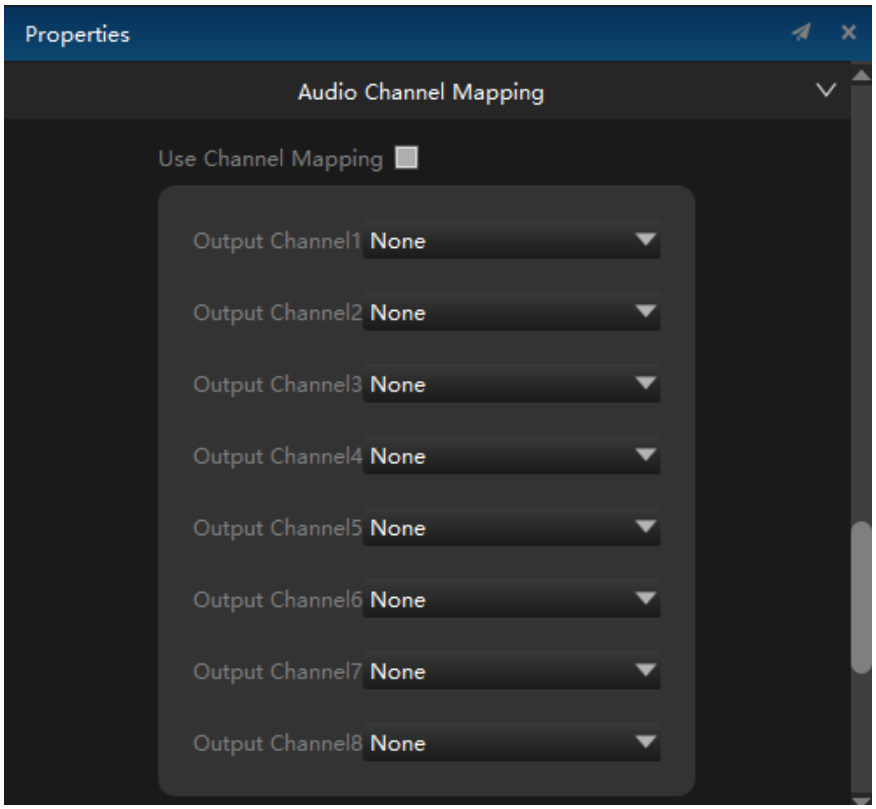
Top-left:

Centre:

It can also be set in media properties:



6)**Audio Channel:** S3 software supports 5.1 and 7.1 channels, can output surround sound audio, and can set channel mapping to map the audio of ordinary video to different sound tracks of sound card according to requirements, so as to realize the effect of the same host outputting different sounds at the same time. Change the channel option in file-settings, and there will be channel mapping option in the material properties in timeline and program management:

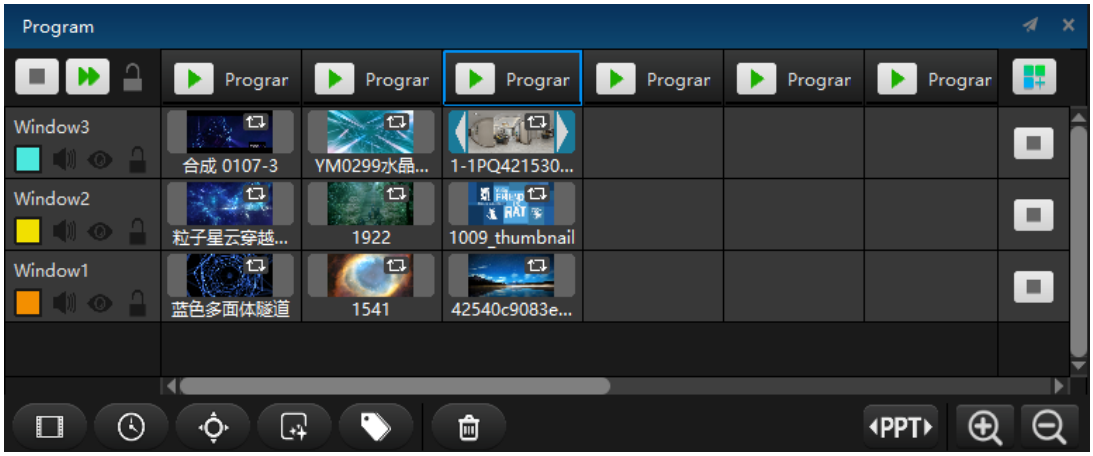


7)**Audio Devices:** In the drop-down option, the output audio output device of this computer will be displayed. Users can choose according to the situation. If there is no sound output when playing the program, you need to check whether the selected output device is valid here.

8)**Network Adapter:** For devices with two network cards, you can set the network card IP used here to facilitate selection when online.

9)**MTC frame rate:** The frame rate of MTC signal to be transmitted shall be set to be the same as that of the matched equipment.

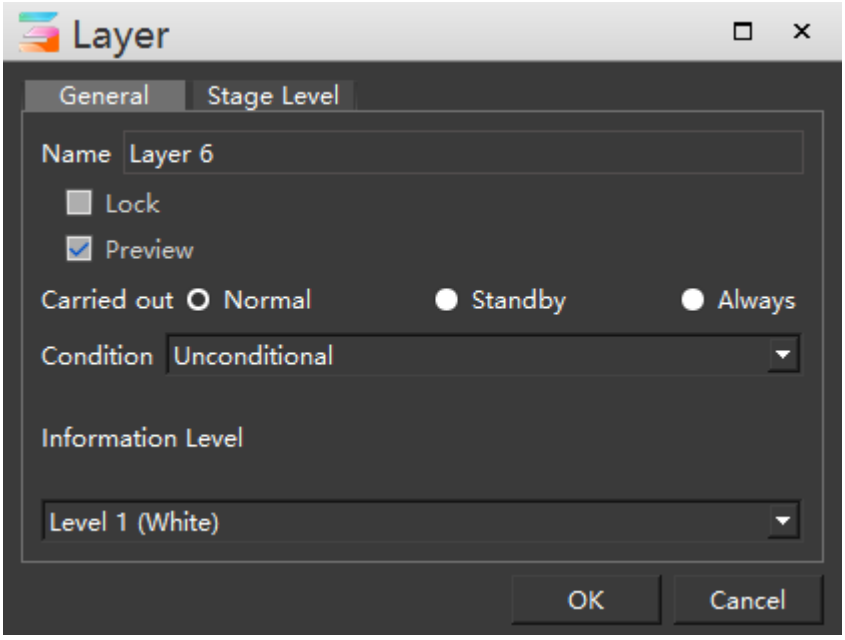
10)Press Up/Down/Left/Right/PgUp/PgDn to play: After this selected, it can be operated by press Up/Down/Left/Right/PgUp/PgDn to switch and play programs in programs management.



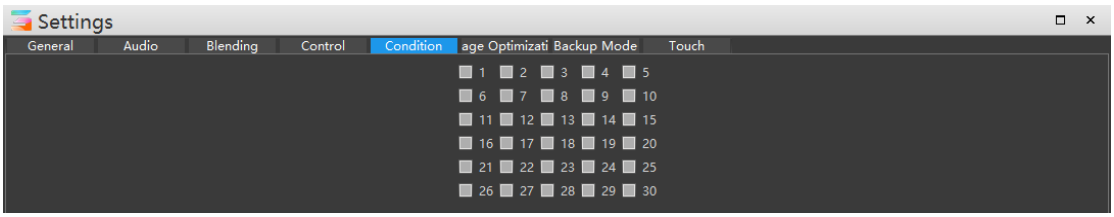
11)**Blending:** Sets the global adjustment curve parameters of the edge blend curve.

12)**Control:** External network control and Artnet control. When we need to use mobile devices to control the playback of programs, we need to use TCP / UDP protocol. When we use Lighting Library to control programs, we need to set the Artnet address of Hirender S3.

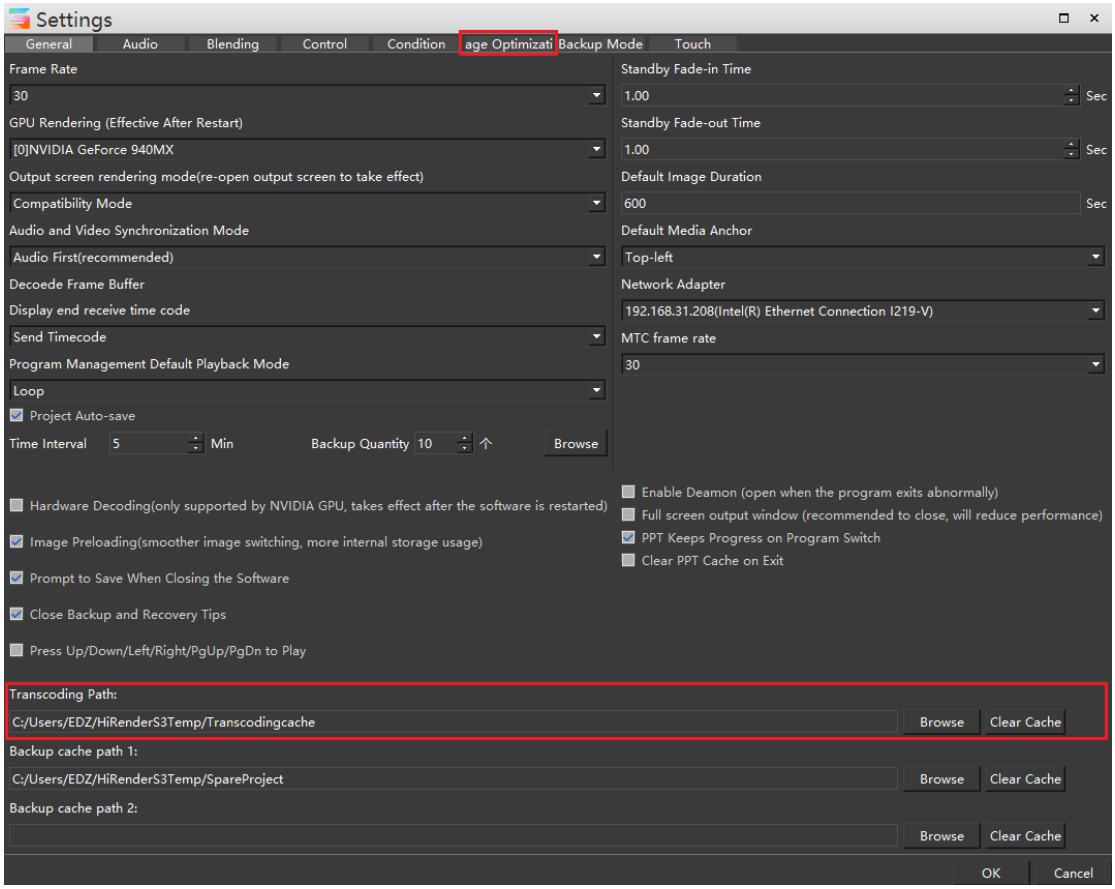
13)**Condition:** Set conditions for each layer in timeline layer settings. The maximum number of conditions is 30.



Check the number of conditions in the setting, and enable the condition layer in the stage preview to realize the program preview of specific conditions. If selecting an unconditional layer in the stage preview, only layers without editing conditions will be displayed. Select always display layers, and all layers will be displayed with or without conditions.



14)**Image Optimization:** Picture optimization is to optimize the picture resources added to the media resources, as shown in the figure below. Set the width and height of picture optimization in S3 software file - settings. The default picture optimization resolution does not exceed 7680 × 1080, which can be adjusted freely according to actual needs. If the added media exceeds the maximum resolution of picture optimization, the system will prompt the user to optimize the picture through the status bar. After the picture is optimized, there will be an underline under the material and the status bar icon will turn green to indicate that the material has been optimized. The storage path of the optimized picture can be set by selecting the transcoding file path.



Click whether to use the image optimization function. After using the image for optimization, all materials greater than the set resolution will be compressed to the set image optimization resolution.

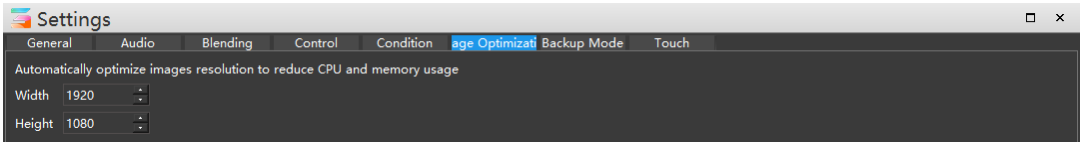
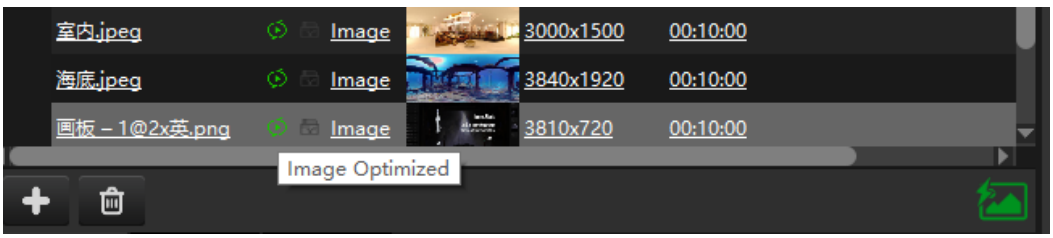
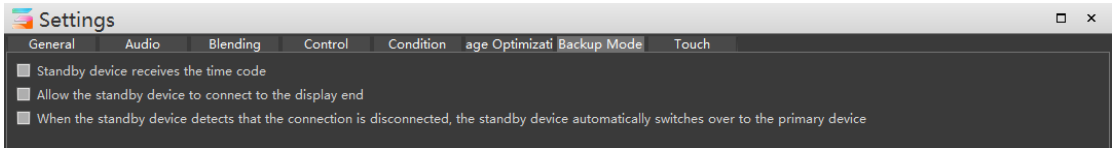


Image Optimized:

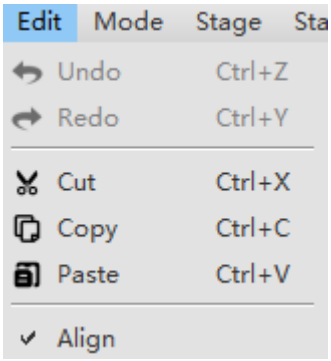


After setting the picture optimization resolution, the system will automatically optimize the added picture material. If the picture optimization resolution is modified again, the system will automatically optimize the picture again.

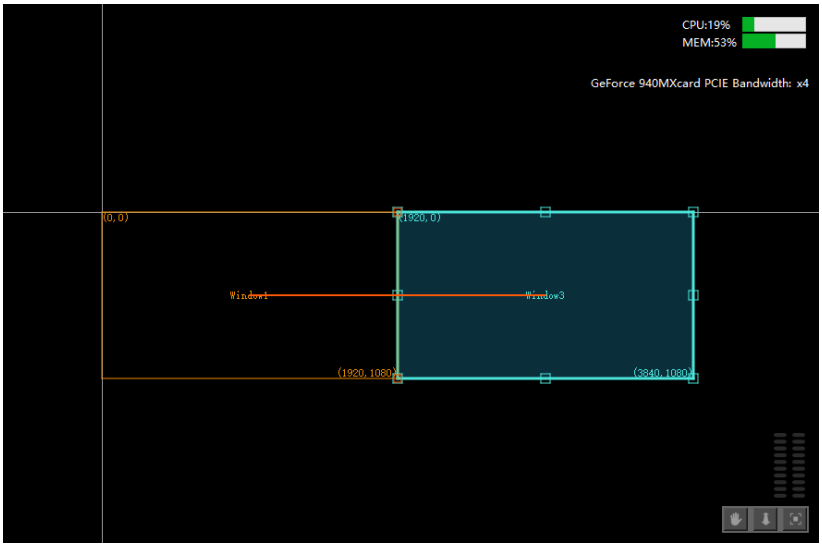
15)**Backup Mode:** Support single backup and dual backup modes, which can be switched at will. When the primary equipment fails, it will automatically switch to the standby equipment.



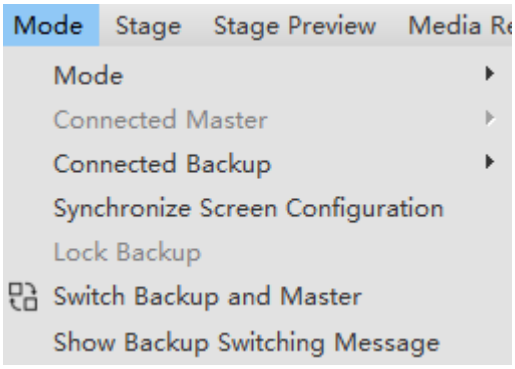
Edit



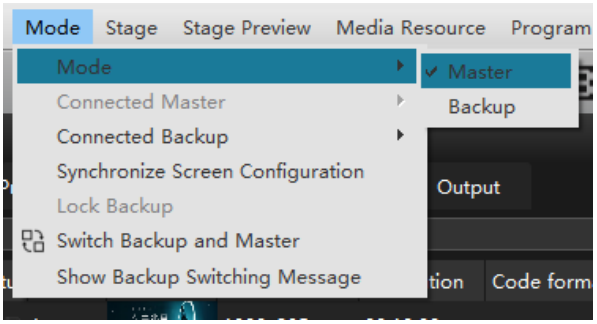
In the edit menu bar, it includes undo, redo, copy, paste and cut. These functions are the same as those in Microsoft office. After selecting alignment, when arranging windows, screens and materials in the stage, alignment and docking icons will appear to align them. As shown in the figure:



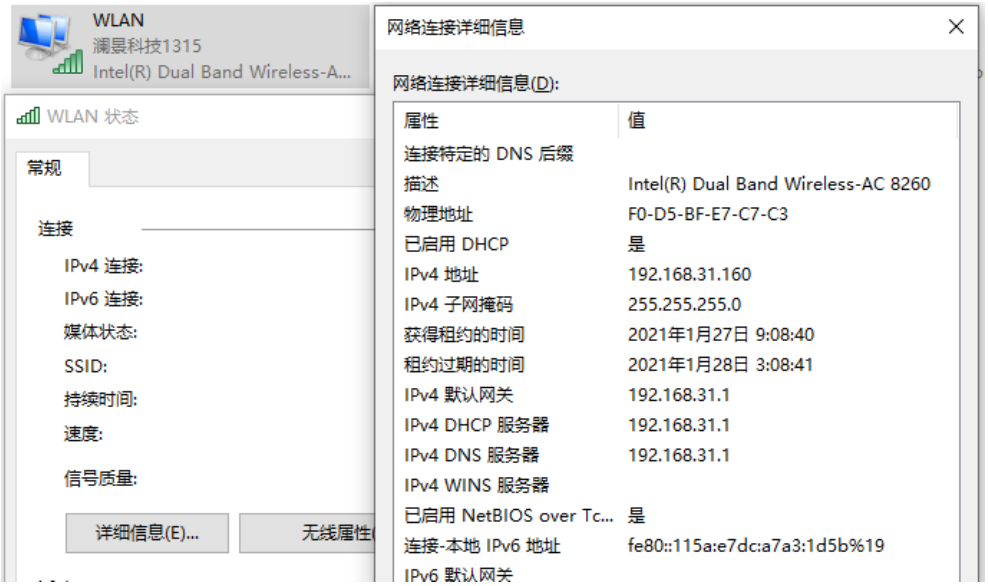
Mode



(1)**Mode:** The Master / Backup mode can be set in the mode selection. Set the two hosts to different fixed IP addresses, and the IP addresses need to be in the same network segment. For example, the host set IP is 192.168.1.2, and the Backup set IP is 192.168.1.3. One host is set as the Master server and the other as the Backup server.

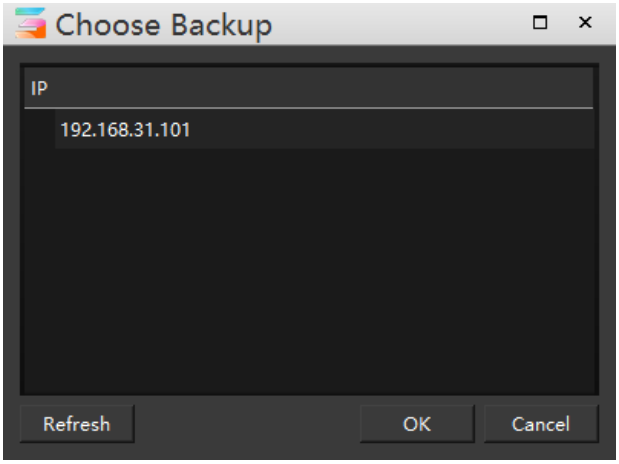


The local IP address can be viewed in network connection - details:



(2)**Connected Master:** If this host mode is the Master server, the connected Master will be displayed; Otherwise, the connected Backup will be displayed.

(3)**Connected Backup:** View the connected Backup or select an IP address to connect the Backup server.



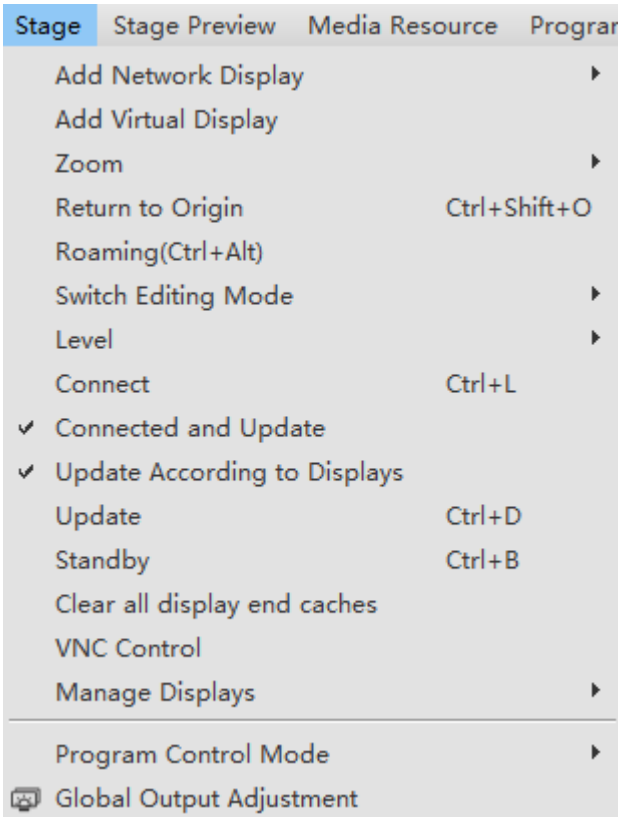
(4)**Synchronize Screen Configuration:** When this option is on, click Update (Ctrl+ D) to synchronize the current settings of the Master and Backup mode.

(5)**Lock Backup:** It can only be selected when the current host is the Backup Mode. After checking, the Backup mode will be locked and cannot carry out other operations. Click the exit button in the center of the screen to unlock the status.

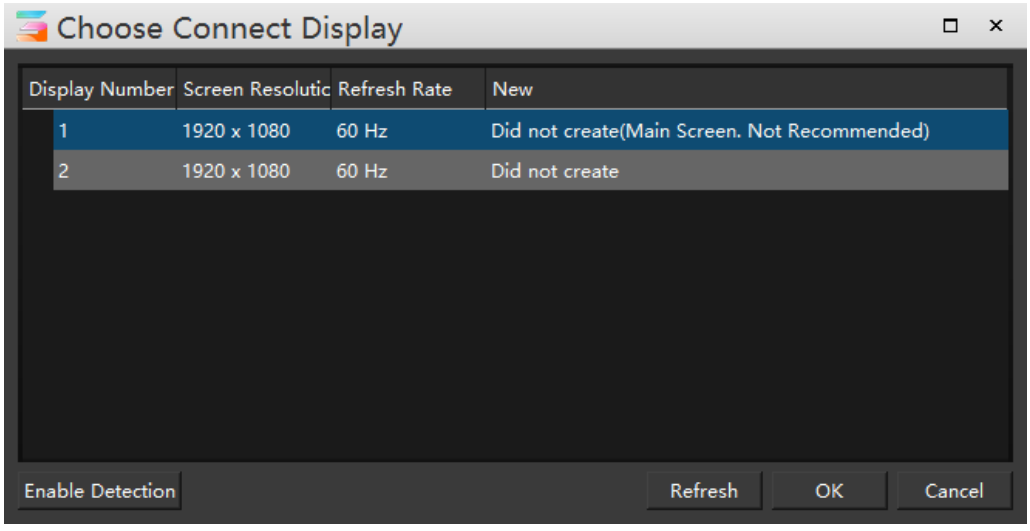
(6)Switch Backup and Master: It should be noted here that after the Backup is switched to the Master, it is necessary to reselect the appropriate IP address to match the Backup.

(7)**Show Backup Switching Message:** Select whether a pop-up window is required to prompt the Backup to switch.

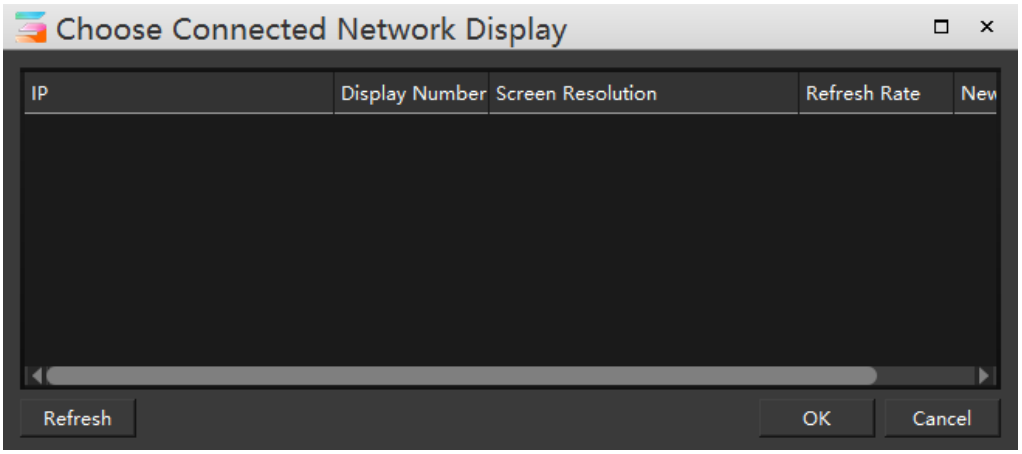
Stage



(1)**Add Local Display:** Click add local display - add local display, and the following dialog box will pop up. In the dialog box, the locally connected screen resolution and whether it has been created will be displayed. The user can select according to the displayed information:

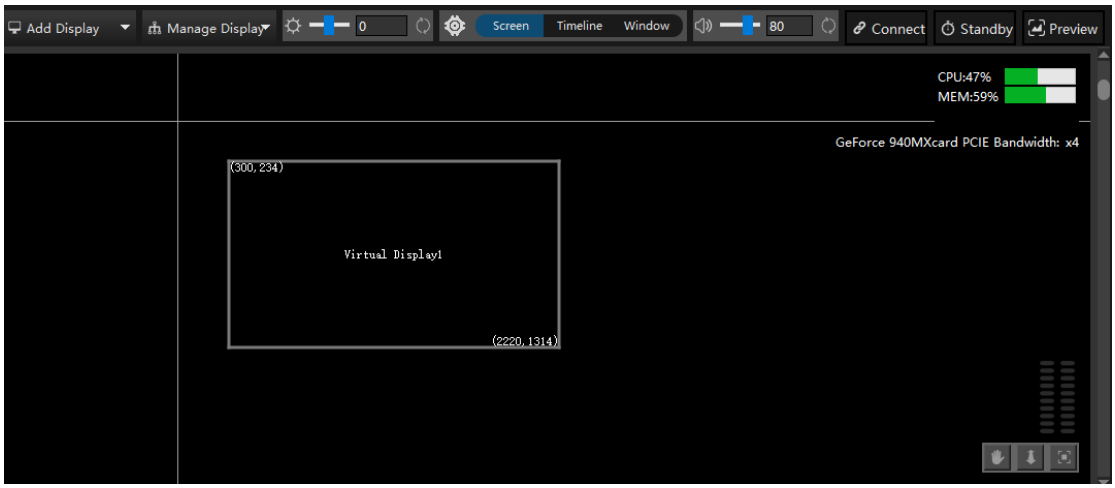


(2)**Add Network Display:** Click Add Network Display - add network is connected, and a dialog box will pop up, as shown below:



This dialog box displays the IP, Display number, Screen Resolution, refresh, new. Users can create and add as needed.

(3)**Add Virtual Display:** The Virtual Display collects and plays the programs in stage management in real time. The Virtual Display can be directly used as material to realize the functions of camera splicing, camera close-up, live interception, special-shaped screen playback and so on. Add the Virtual Display to the stage, as shown below:



(4)**Zoom:** Zoom in the stage, or select different zoom ratios with shortcut keys, or scroll the mouse wheel in the stage to zoom out and zoom in on the stage.

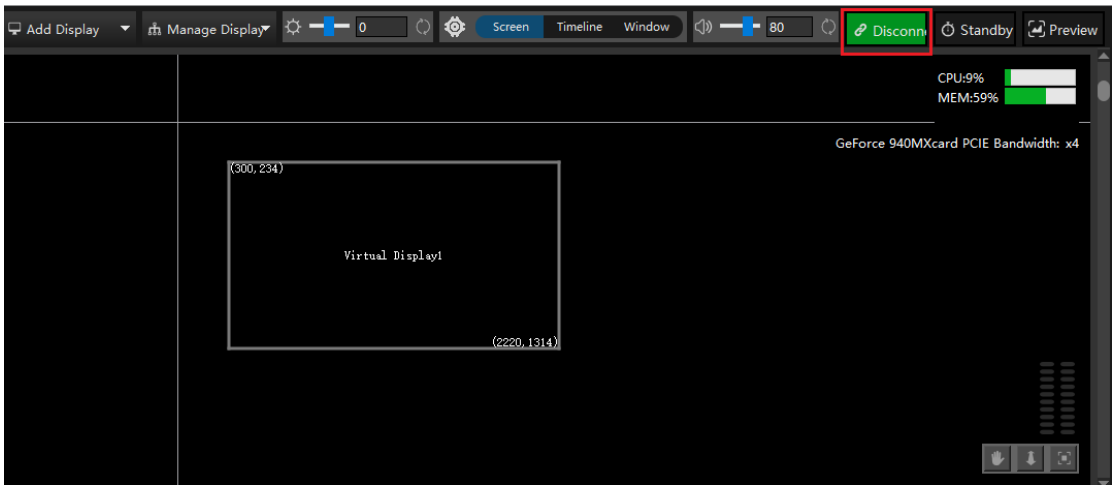
(5)**Return to Origin:** Return the stage position to the origin.

(6)**Switch Editing Mode:** Switch the editing mode among Display, Timeline and Window.

(7)**Level:** Similar to setting the number of conditions, after adding a level, during stage preview, the layer will be displayed on the display side only if the level of the layer matches the screen level. Only when the stage level matches the screen can it be selected and dragged. When there are many screens to operate, after setting the stage level, only the screen of this level can be moved, and other screens cannot be selected.

(8)**Connect:** Connection refers to connecting to the display device. Once the connection is successful, the edited material screen will be projected onto the display device, provided that the connected display screen has been added to the software and all connected displays are turned on. It can be also connected or disconnected by clicking the connect button in the upper right corner

of the stage.



(9)**Connected and Update:** Click Connect, and the connected Display / Backup will automatically update the data.

(10)**Update According to Displays:** In the connected state, when this command is selected, the changes and operations made in the program will be automatically updated to the display screen in time.

(11)**Update:** Update the changes made by the Master to the program on all connected display devices.

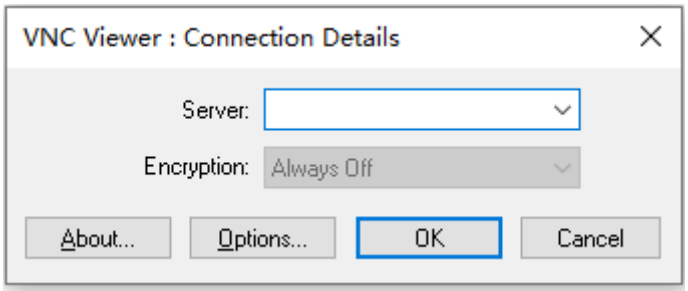
(12)**Standby:** Click Standby to display the Standby layer or black screen on the timeline. In this state, the program will continue to play without stopping.

(13)**Manage Displays:** Open or close all connected display.

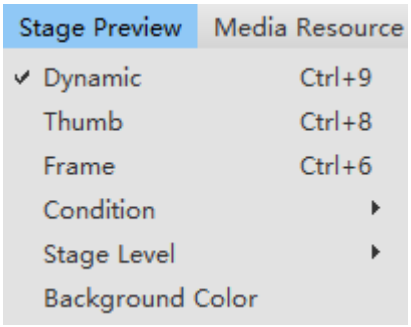
(14)**Program Control Mode:** Control stage mode switched between Playback and Preview.

(15)**Global Output Adjustment:** Controls the adjustment of global Brightness, Volume and Contrast.

(16)**VNC Control:** Add server to achieve remote control by VNC Viewer.



Stage Preview



(1)**Dynamic:** It can play and preview the stage in real time.

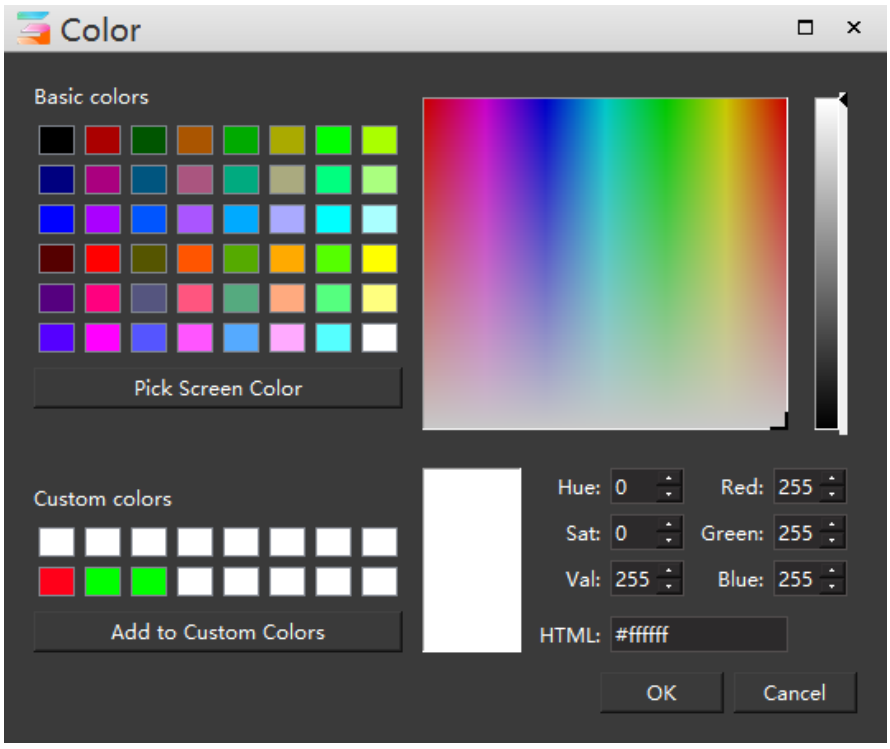
(2)**Thumb:** Using low resolution thumbnails as media preview can improve the efficiency of the editing interface when multiple large video clips are played simultaneously in the presentation program.

(3)**Frame:** All pictures and videos are displayed in a rectangular wireframe. The name and duration of the media will be displayed in the rectangular wireframe. The effect of using wireframe is the same as that of thumbnail, which can save memory space and improve the efficiency of editing interface.

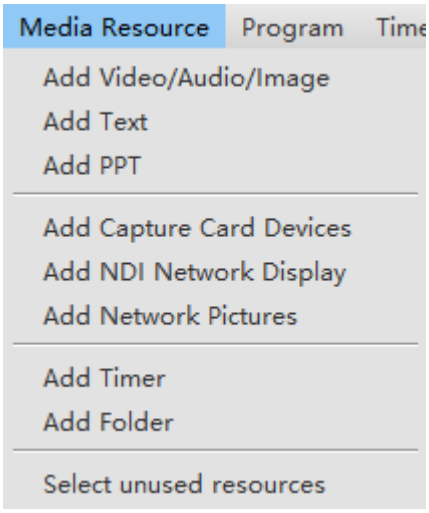
(4)**Condition:** Select whether to enable conditional layers. If conditional layers are not selected, only layers without editing conditions will be displayed. If all display layers are selected, all layers will be displayed regardless of conditions.

(5)**Stage Level:** Only when the stage level matches the screen can it be selected and dragged.

(6)**Background Color:** Choose different background colors according to preferences.

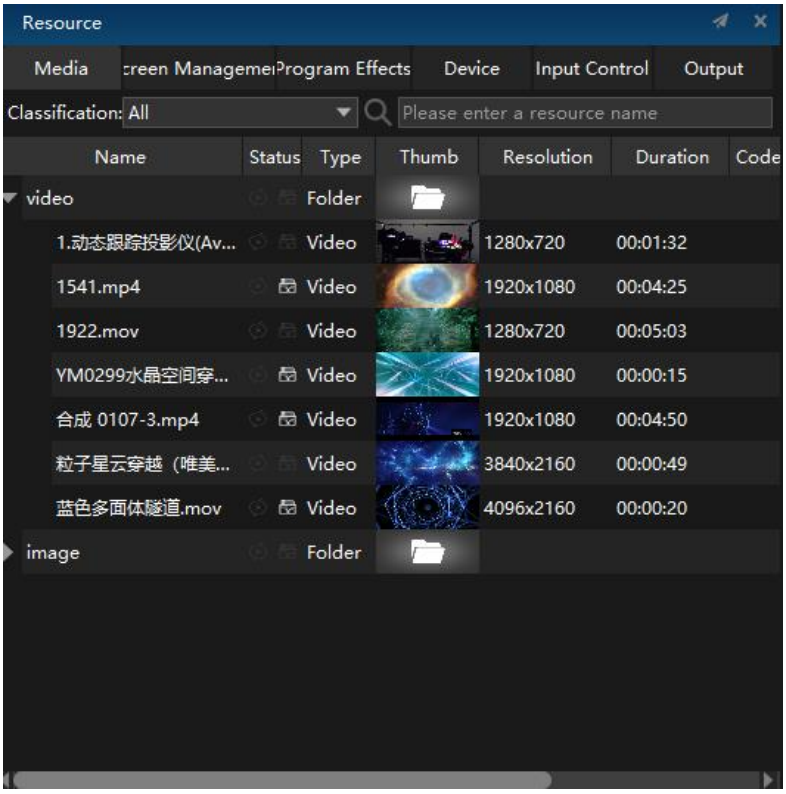


Media Resource

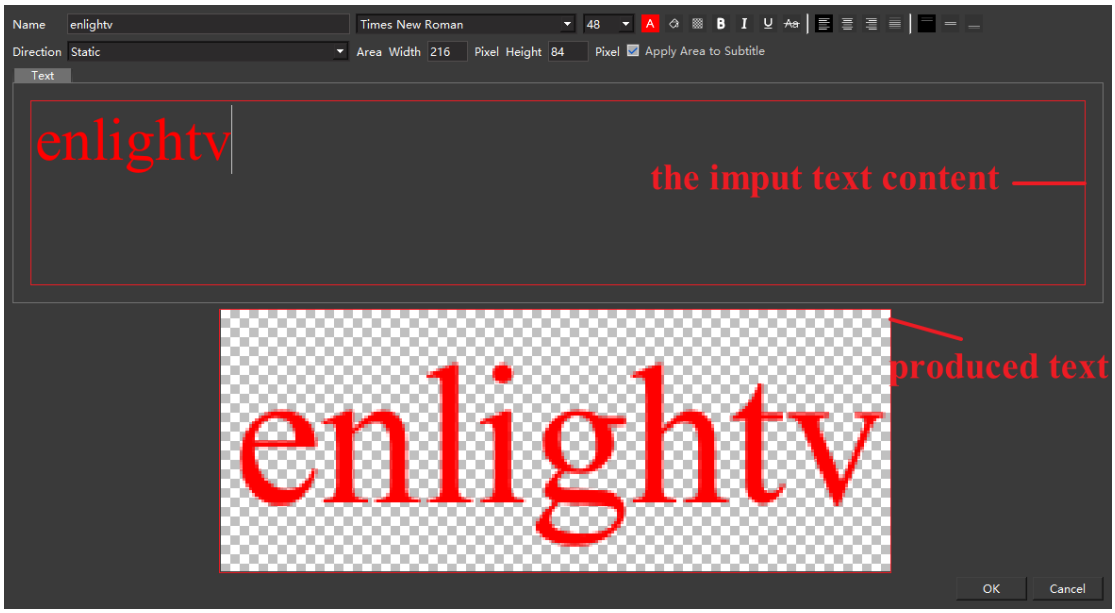


Click Media Resource, and select to add video / audio / image, text, PPT, capture card device, NDI network display, timer, web page and folder to media resource.

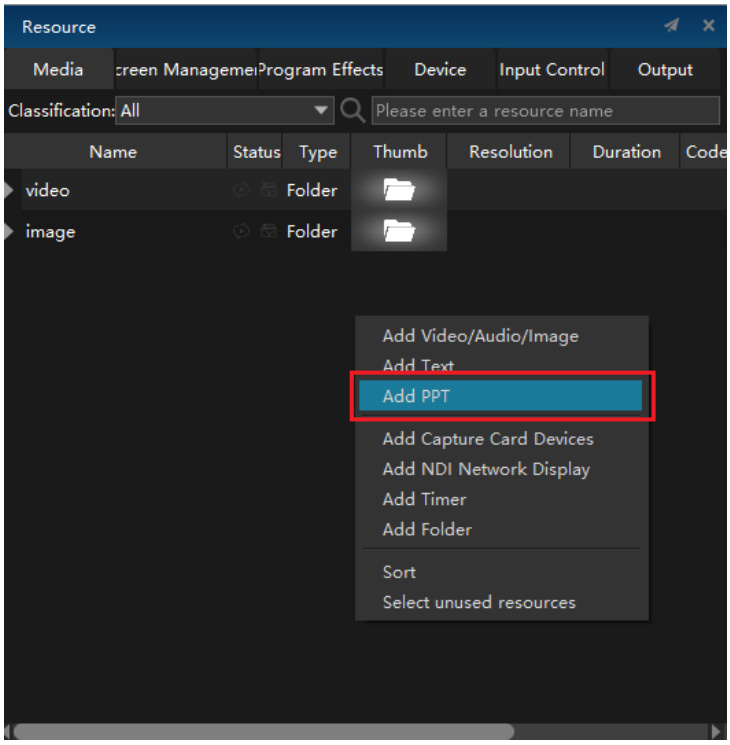
(1)**Add Video/Audio/Image:** With this command, media files can be added to the media resource from disk or media folder. The media resource displays the material name, material type, thumbnail, resolution, duration and other information.



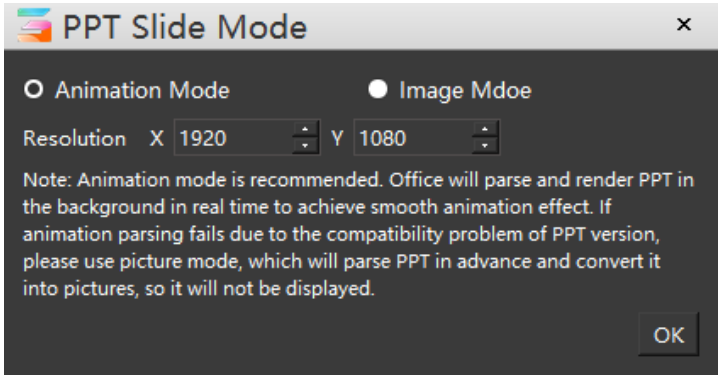
(2)**Add Text:** Use this command to add text to media and perform various adjustments like other media. The font style, size, color, subtitle background color, scrolling mode, etc. of the input text can be changed. The text in the text or paste the text to be displayed directly into the text box can be edited. Finally, the software will generate scrolling subtitles according to the settings. After canceling the fixation of the rolling area, the rolling speed, width and height of the rolling subtitle can be set.



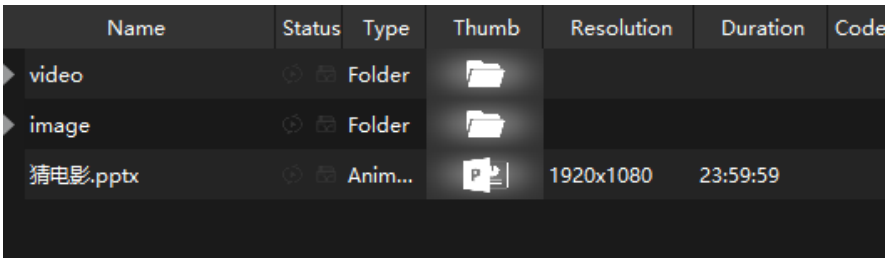
(3)**Add PPT:** For the added PPT, you can choose two different modes: animation mode and image mode. Set the resolution as needed. For the animation mode, it is required to install genuine office 2016 (64 bit) and above on the computer running Hirender S3 software (office365 is not supported), and ensure that the PPT is activated and can be opened and played normally.



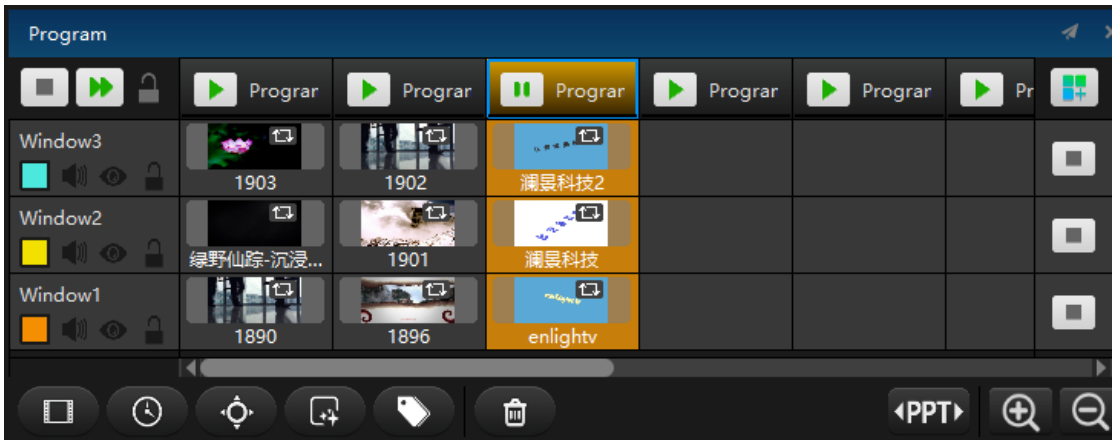
The resolution and playback mode of PPT can be set:



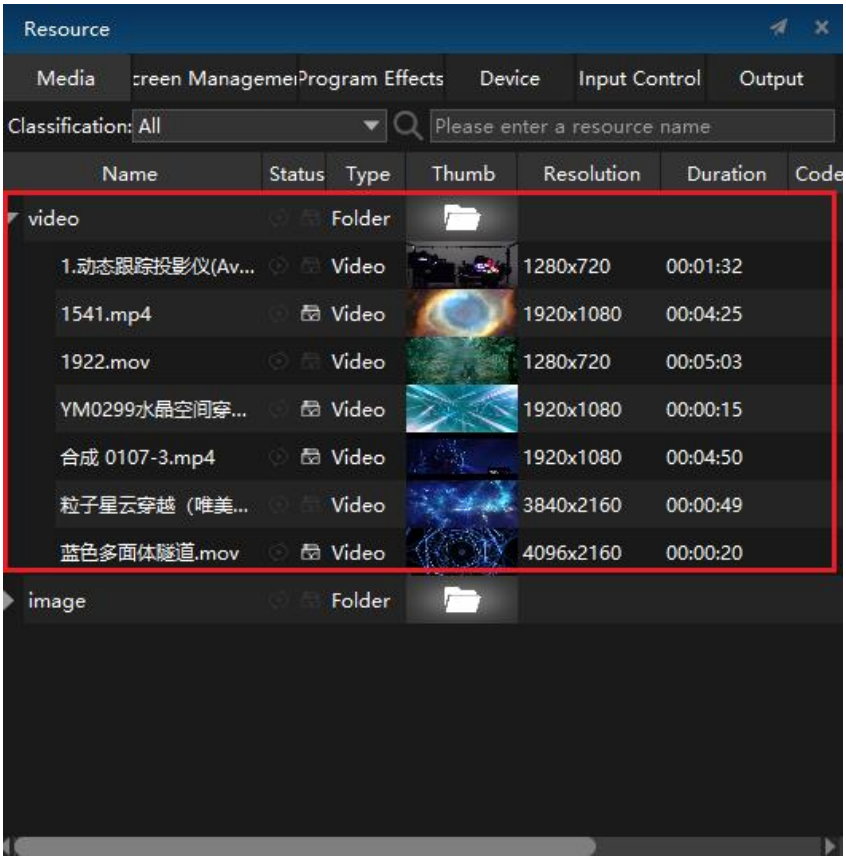
After set, the added PPT will be displayed in the media resource window:



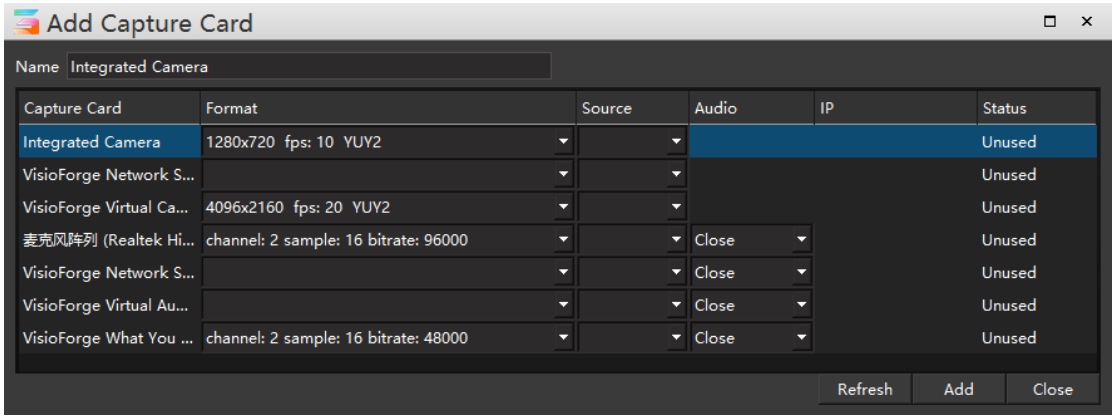
PPT material can be added to the program window and edited. Press the direction key of the keyboard to turn pages during PPT playback, which is consistent with the normal use of PPT. As the PPT button shown in the figure above, when the button is activated (green), PPT page turning playback is applicable to the whole world. No matter which window is selected by the software, the function of the direction key is used for PPT page turning playback. When the PPT button is inactive (black), play other programs without PPT files in the program management, and the direction key restores the program switching function.



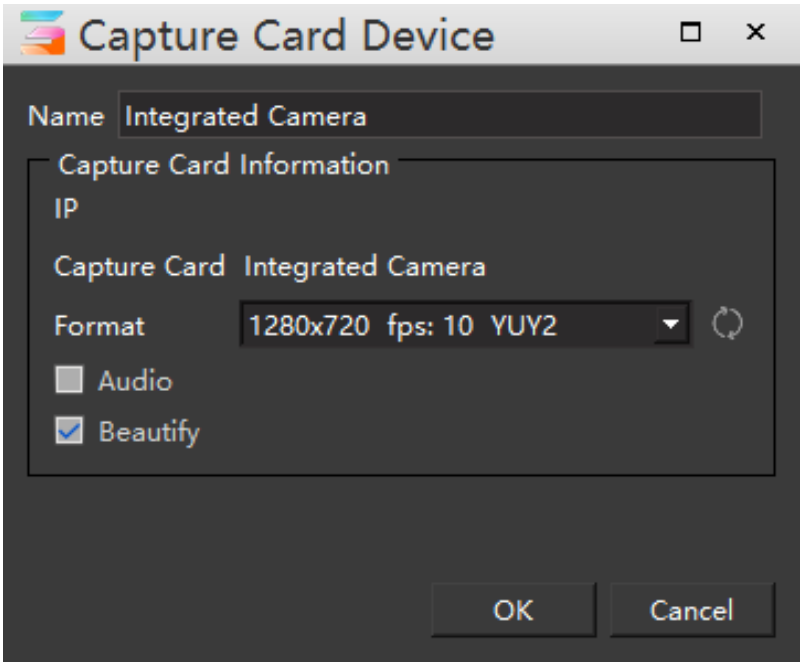
(4)**Add Folder:** By dragging materials to a folder or removing them, you can directly drag local materials into the media resources in the form of folder classification, or you can select a folder first and then drag media resources from the local file to the folder.



(5)**Add Capture Card Devices:** Through this command, the capture card can be added to achieve the effects of real-time acquisition of on-site video, and Hirender supports simultaneous capture cards and adjustment of captured video. The capture card is played independently by default and cannot be changed. In this state, when the timeline is within the range of the resource, the resource will be played continuously regardless of whether the timeline is in the playing state or not. Through customization, you can change the display format of the collected image. The added acquisition card can be directly used as resource and added to the timeline or program management window.

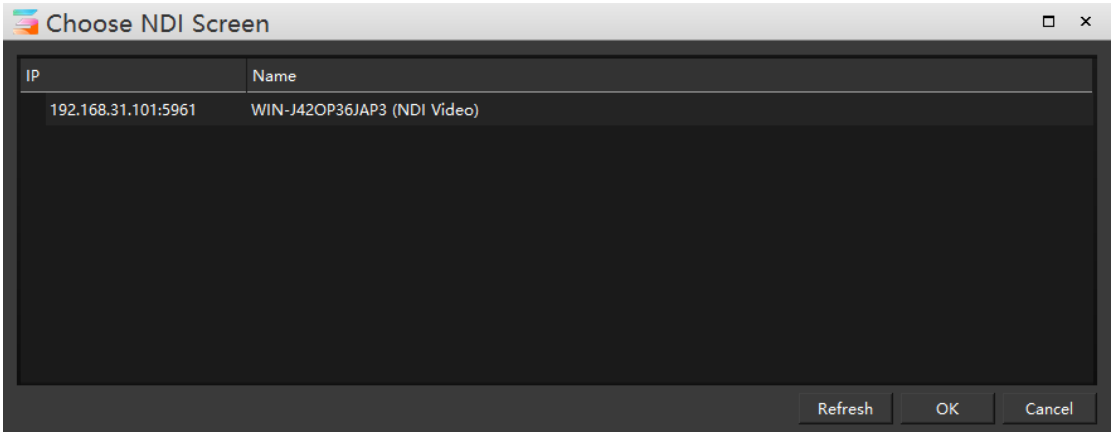


Double-click the added acquisition card and check the Beautify function to add beauty effect to the acquisition card screen:



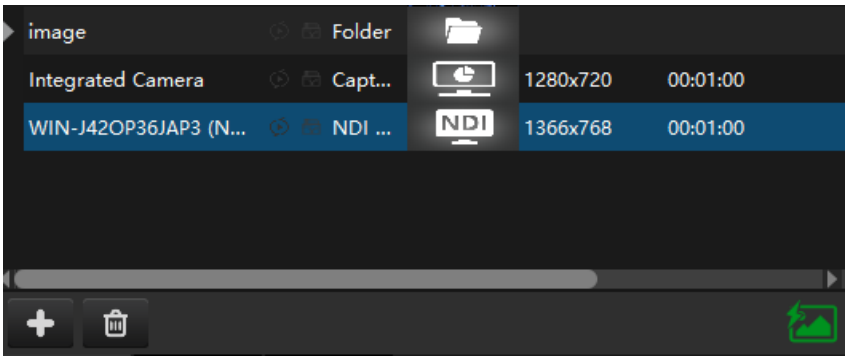
(6)**Add NDI Network Display:** Set the captured computer and the capture computer in the same LAN. NDI network display can be added through this command. NDI adopts digital high-definition Ethernet transmission technology, so as to achieve the transmission effect equivalent to SDI. Compared with coaxial cable transmission, NDI transmission will be more robust and have stronger anti-interference ability. Moreover, it can realize the transmission of real-time, two-way audio and two-way control signals while transmitting video signals. The added NDI network display can be directly used as resource and added to the timeline or program management window.

After selecting Add NDI device, a window pop-up (as shown below):

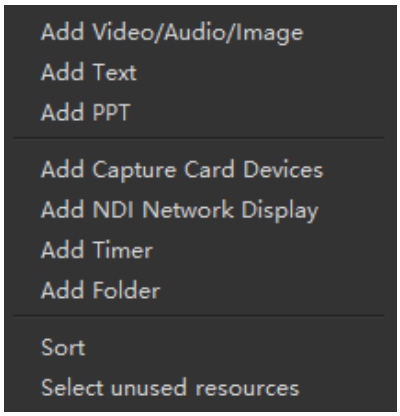


Click to select the device, the following figure will appear. Then add the corresponding NDI device according to the IP of the collected computer. Click OK to use the added NDI device as a resource.

The virtual display added in the stage can also be used as media resource and will be displayed in the media resource.

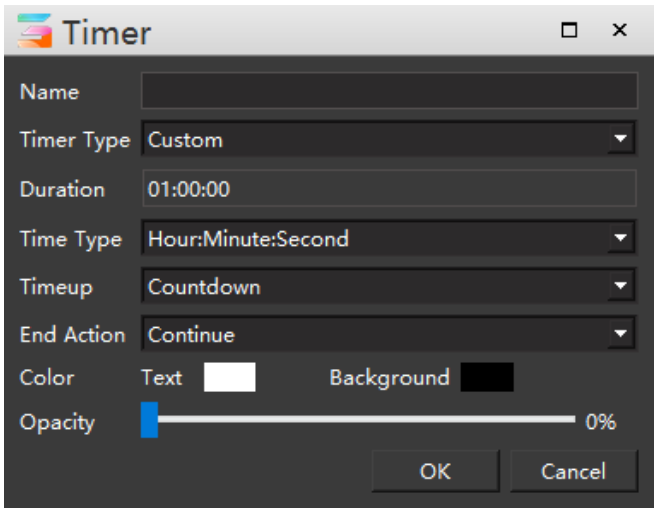


(7)**Add Timer:** Click the Add button in media resource, or right-click in the media resource window, and the pop-up menu will have the option of adding timer.



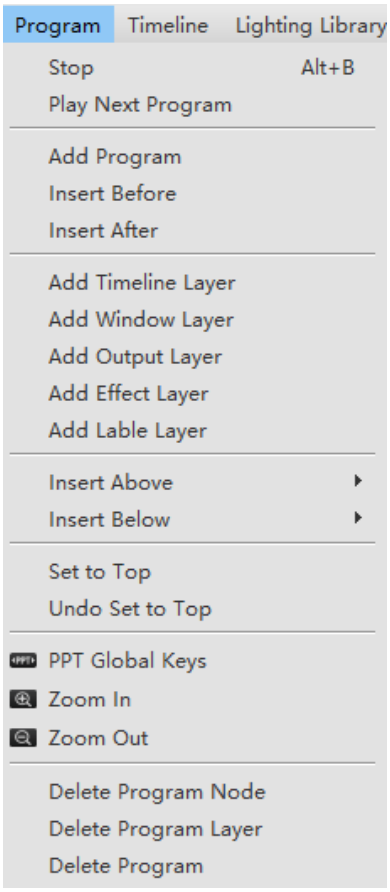
After selection, you can set parameters such as name, duration, timer type, timing type, time up, end action, or set color and opacity. After setting, click OK to add the timer to the media resource.

Timer can also be added in program as resources.

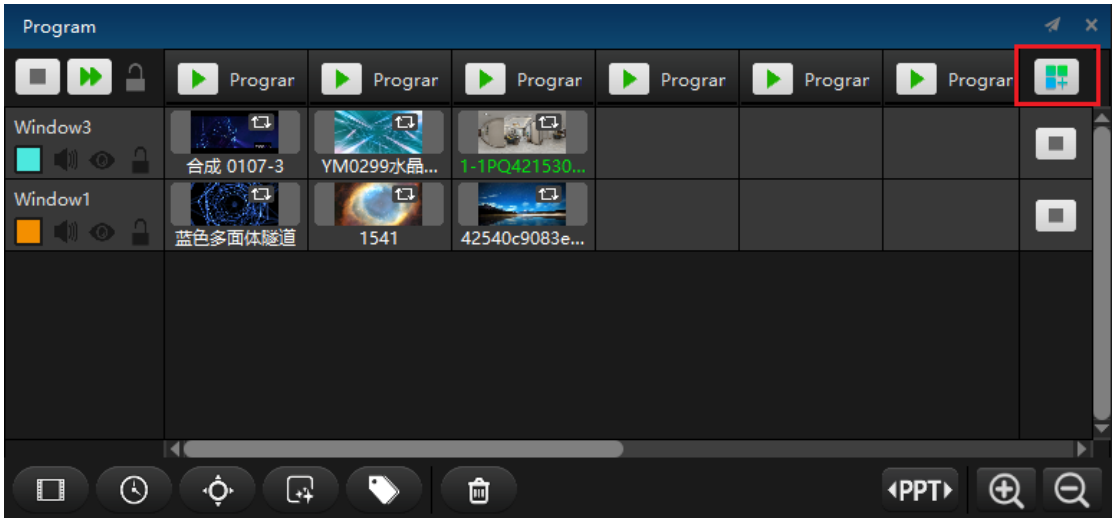


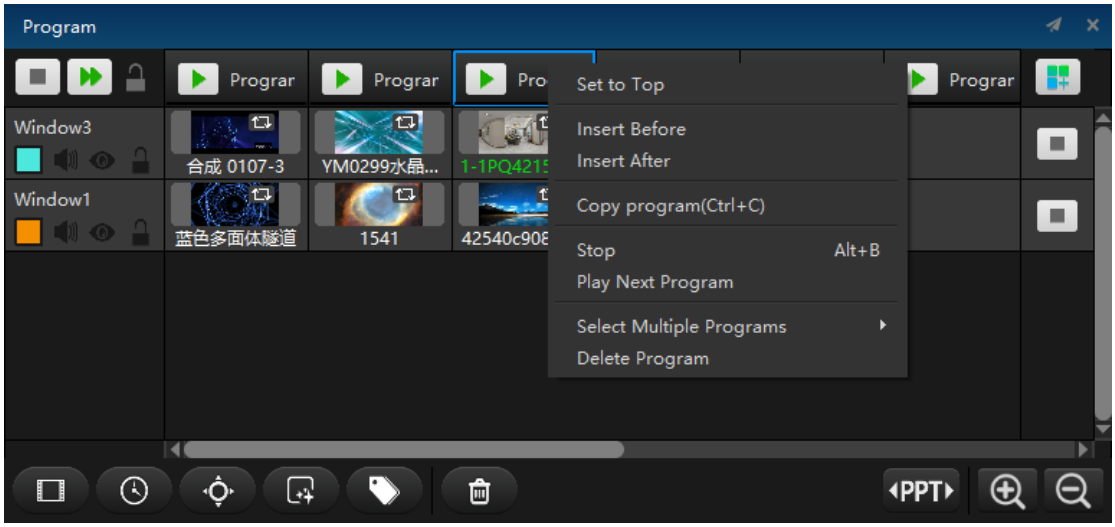
(8)**Select unused resources:** Click to select unused resources, and unused resources in the media resource will be selected.

Program

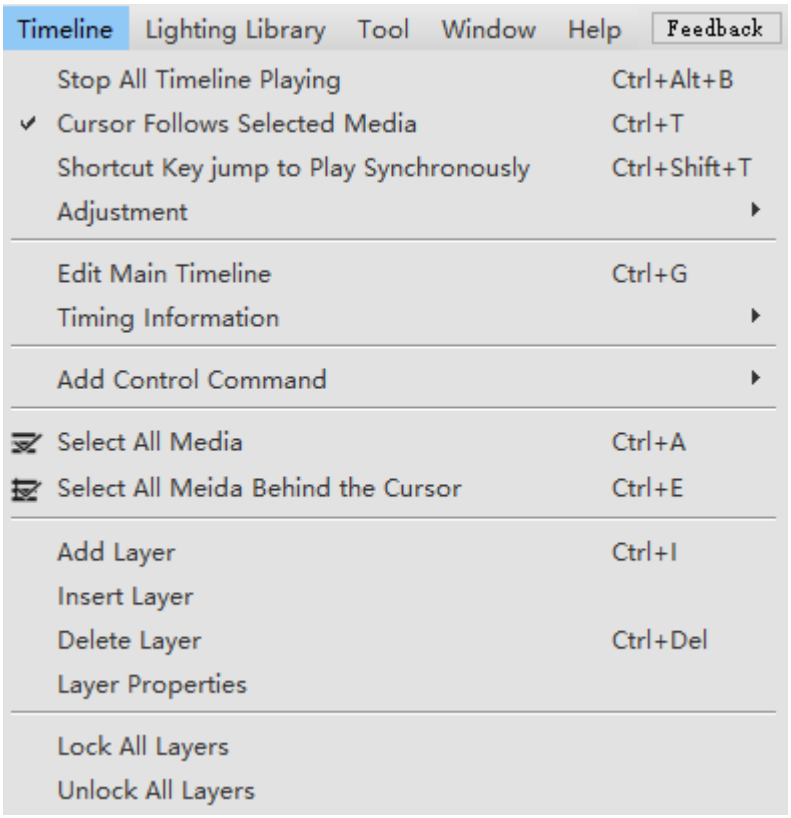


Select a program, then it can be used to stop the program, play the next program, insert the program (insert before / insert after), add the timeline layer (insert above / insert below), add the window layer (insert above / insert below), delete the program, etc. Select any program node or program layer, right-click, and select Delete in the pop-up menu.

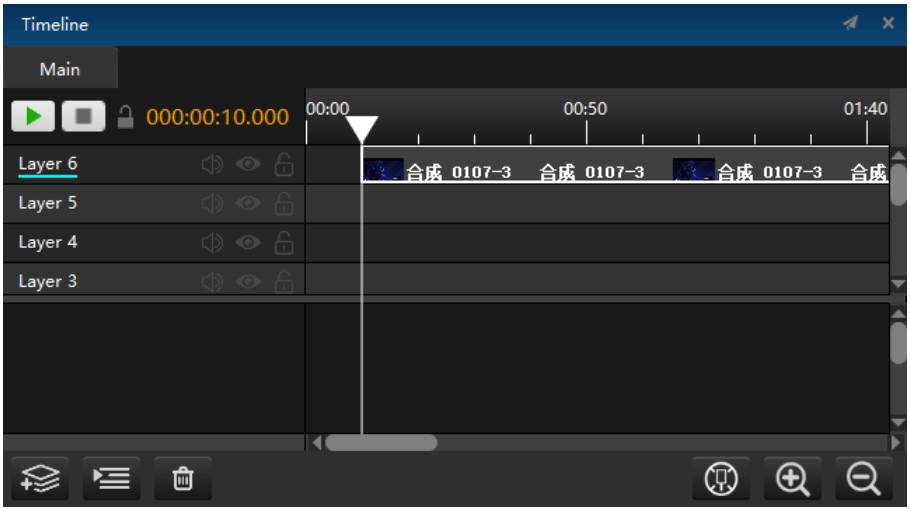



Program
Prograr
Prograr
Pro
Prograr
Window3
Window1
合成 0107-3
YM0299水晶...
1-1PQ4215
蓝色多面体隧道
1541
42540c908
Set to Top
Insert Before
Insert After
Copy program(Ctrl+C)
Stop Alt+B
Play Next Program
Select Multiple Programs
Delete Program
PPT

Timeline



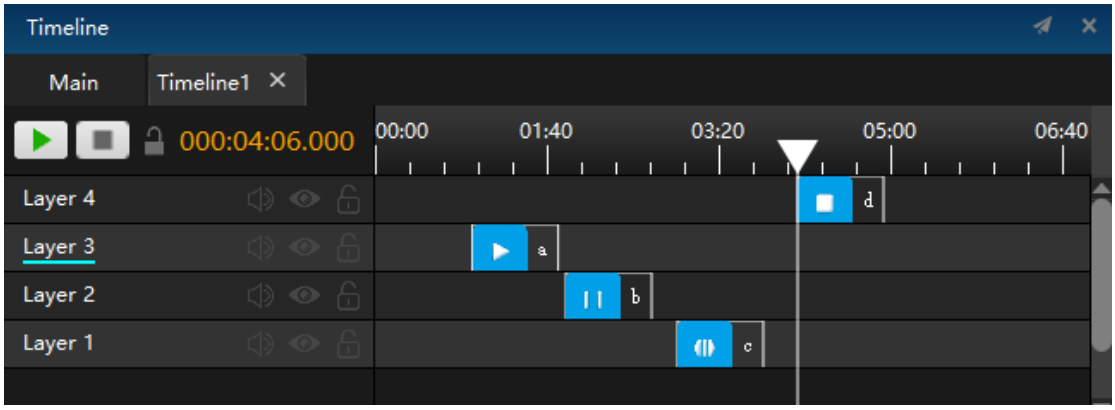
(1)**Cursor Follows Selected Media:** After selecting media material on the timeline, you do not need to manually move the time cursor to the material position, and the cursor will follow automatically to quickly obtain the time position of the resource. And you can click play to preview the resource in real time without moving the cursor.



When the cursor does not follow the selected media, the cursor is displayed in pink. When the cursor follows the selected media, the cursor is displayed in white. When the timeline is played, the cursor is displayed in green.

(2)**Shortcut Key jump to Play Synchronously:** Select the Shortcut Key jump to Play Synchronously, then press the shortcut key to jump to different commands and execute the

commands.

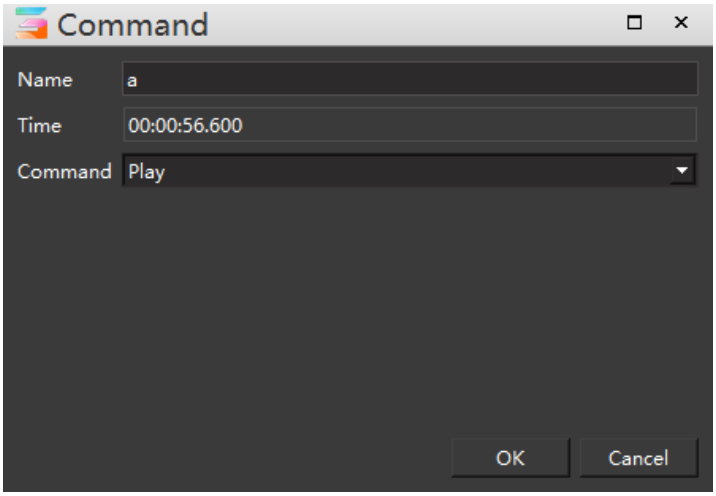


(3)**Jump Command:** There are two jump types: time and command;

Time: Jump to a certain time position, and then the cursor runs or pauses.

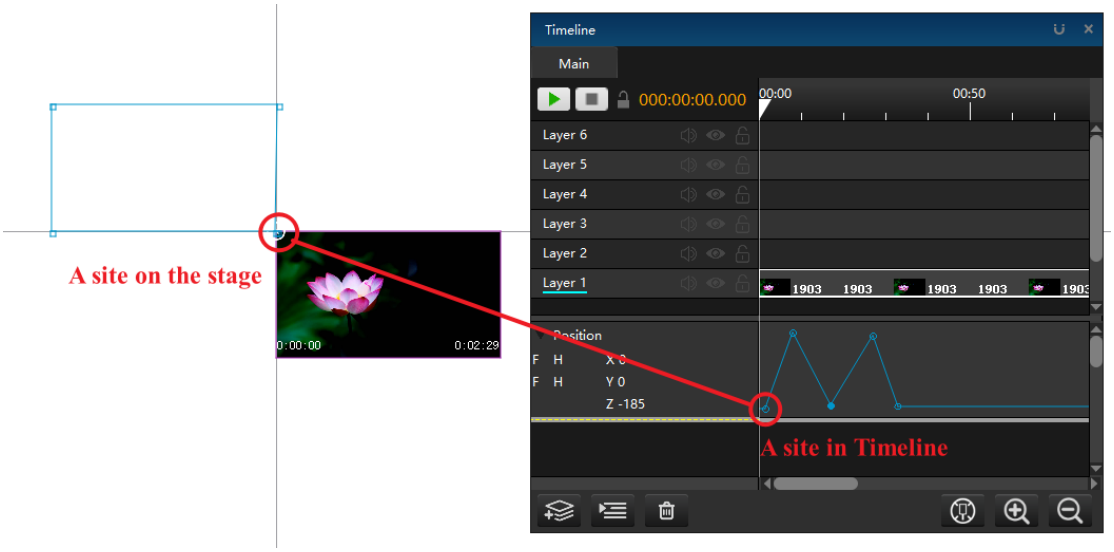
Command: Jump to the position of a command, and then the cursor runs or pauses.

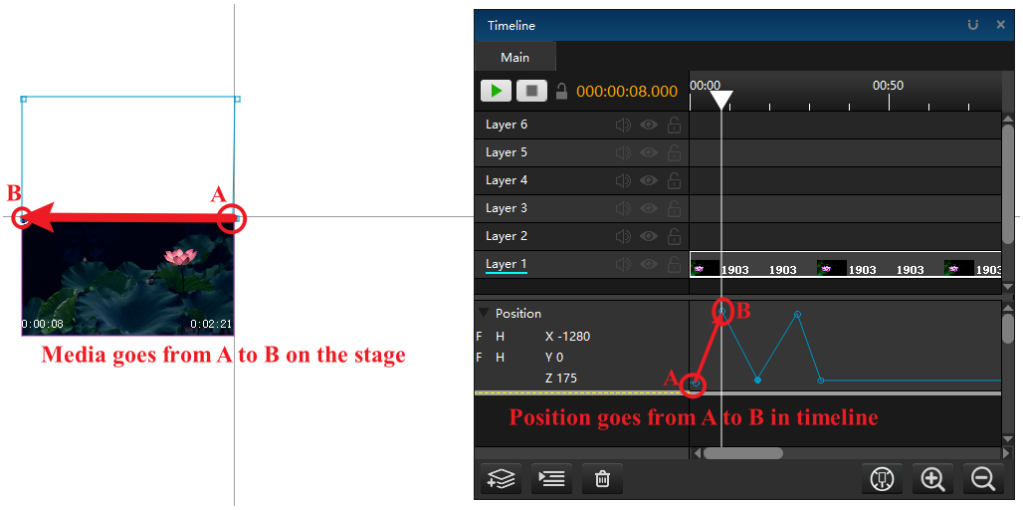
The operation is independent of the control command to which you jump.

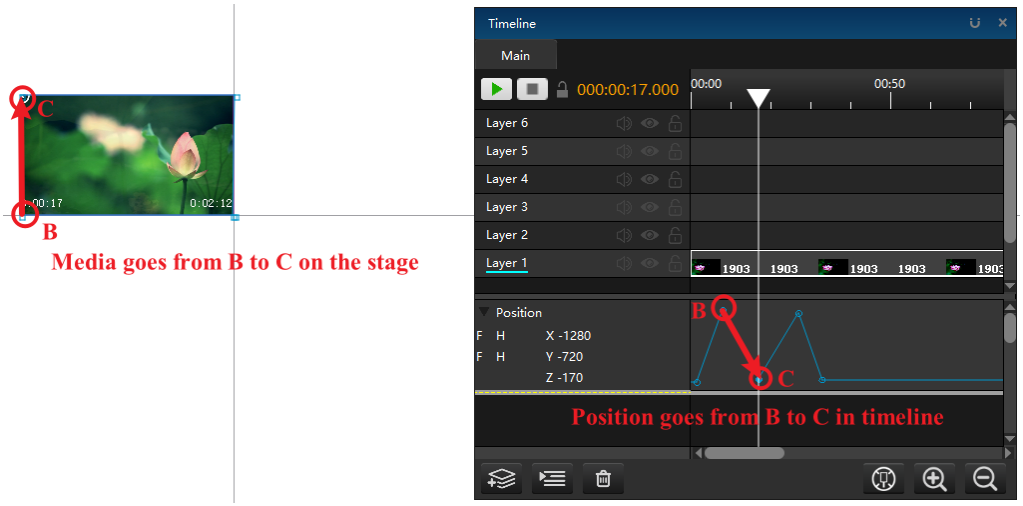


(4)**Adjustment:** Select the media resources on the timeline and select timeline effect. You can select the location, zoom, crop, opacity, volume and other edit mode. At the same time, the adjustment effect will be displayed at the bottom of the timeline interface.

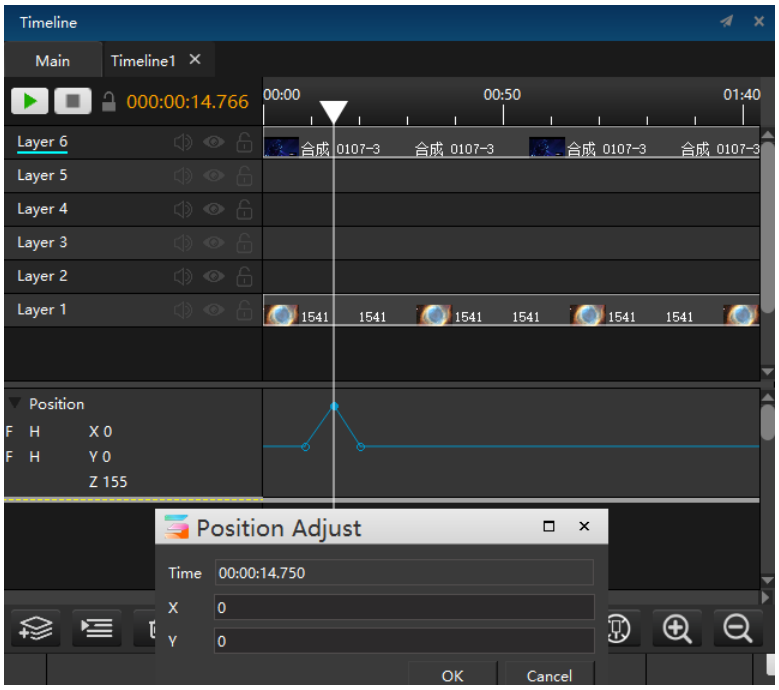
1)**Position:** Set the time cursor to the time point for editing the resource position information, and double-click the intersection of the position line and the cursor to pop up the position adjustment information. You can also left click the intersection and move the position of the resource in the stage window to realize the dynamic movement of the resource. The following figure shows the different display of resource location points in the timeline and stage.





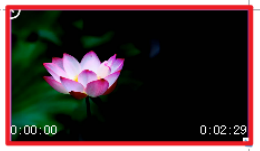


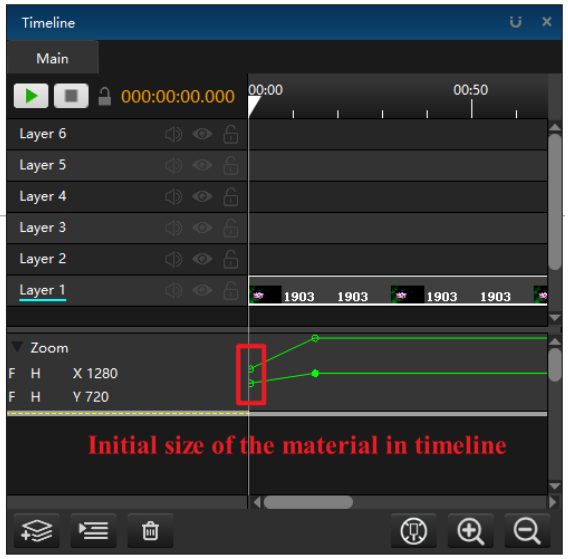
Double click the intersection to manually enter the precise setting value and setting time, which is applicable to each adjustment:



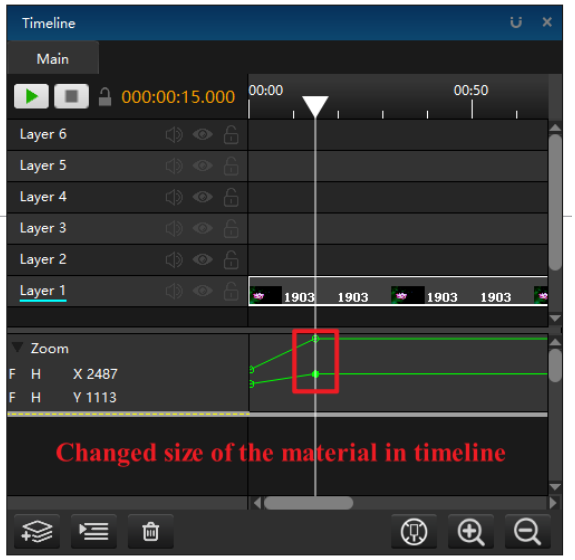
2)**Zoom:** Select the media resource on the timeline, select timeline - adjustment - zoom, or press Alt + s to see the zoom button in the stage editing window. Drag the zoom button. You can also left click the intersection of cursor and pixel in the window below the timeline to set the zoom in the pop-up dialog box. As shown below:

Initial size of the material on the stage



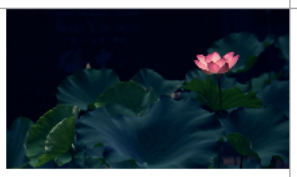


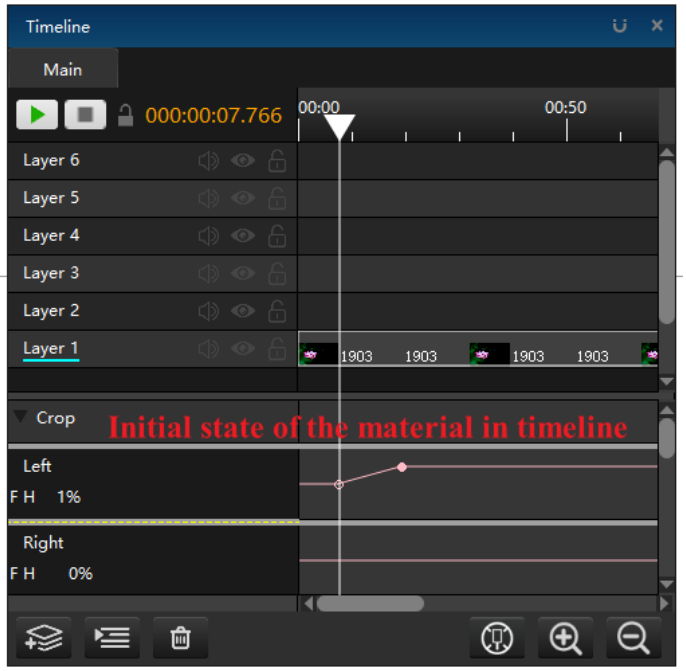
Changed size of the material on the stage



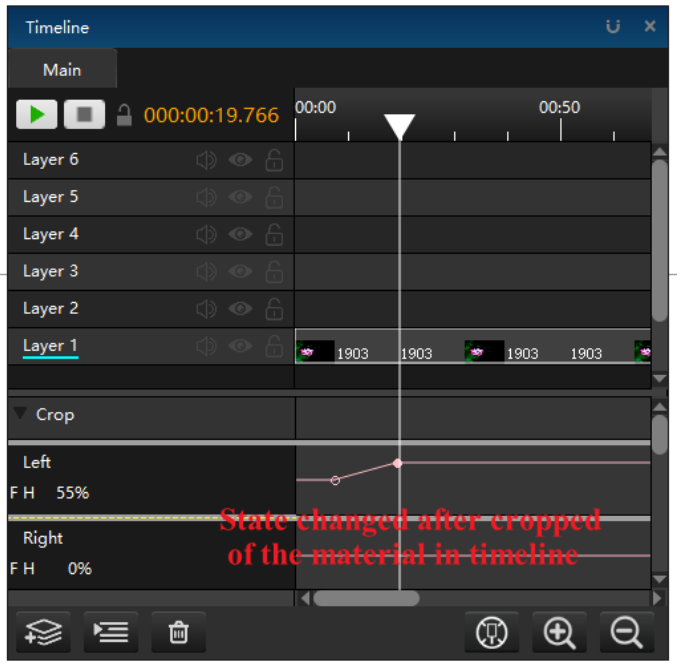
3)**Crop:** At the bottom of timeline management, cut left, right, top and bottom at different time points.

Initial state of the material on the stage

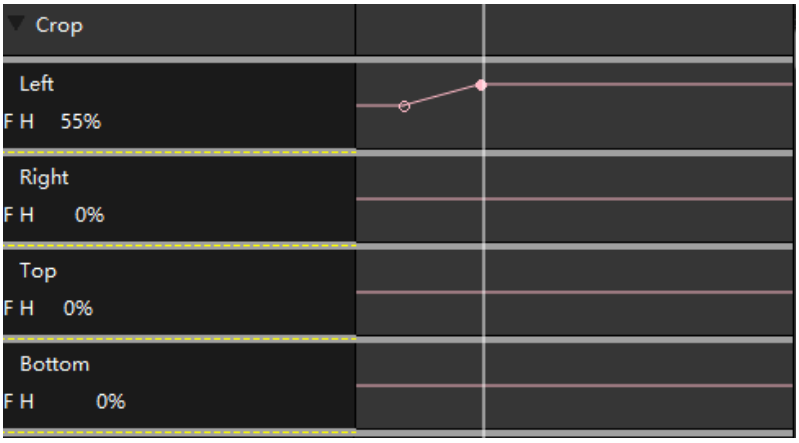




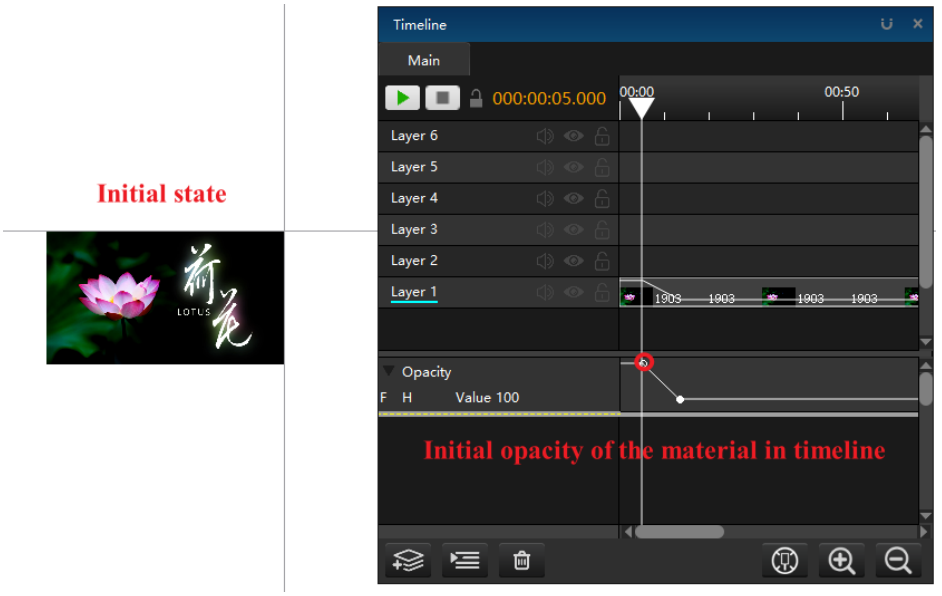
State changed after cropped of the material on the stage

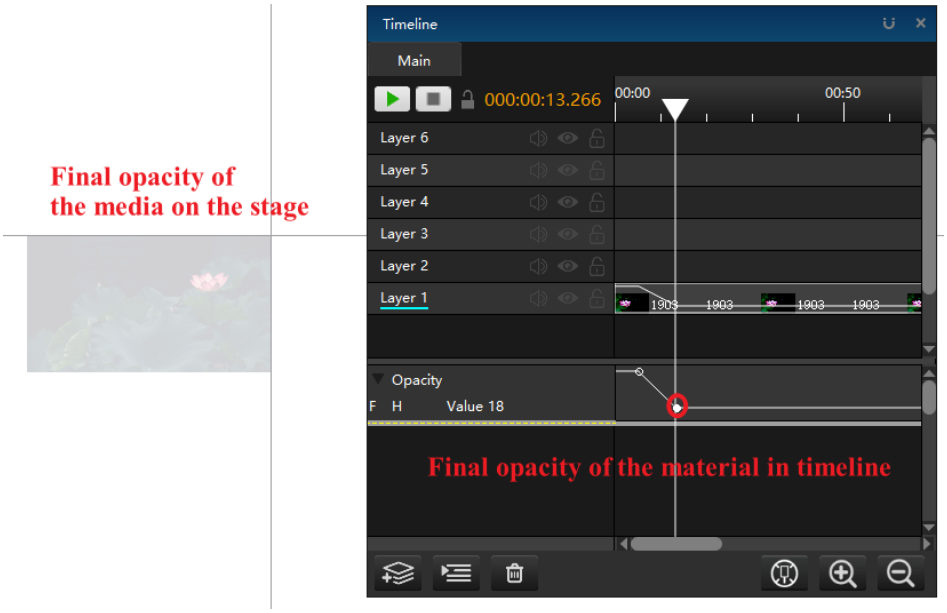


The same applies to the right, top and bottom.



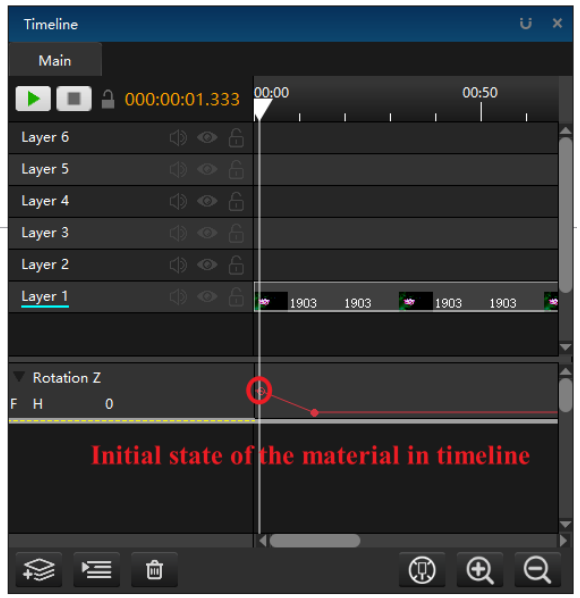
4)**Opacity:** Under timeline, slide the intersection of cursor and opacity up and down. Opacity value can be seen in real time on the left.

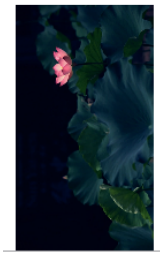




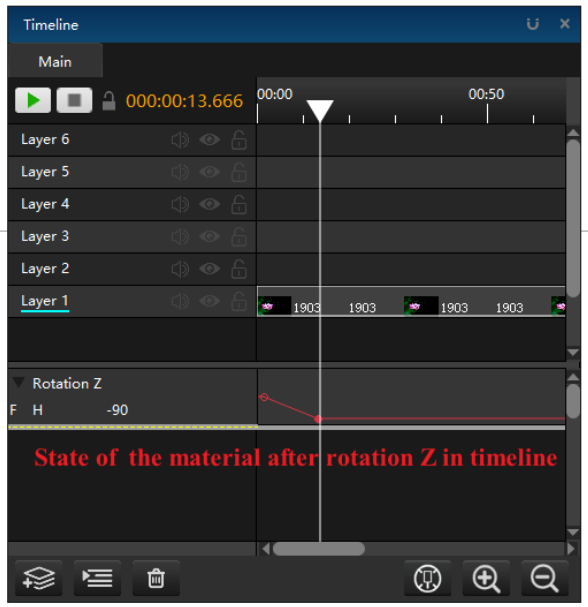
5)**Rotation Z:** Click timeline - adjustment- rotation Z, the rotation icon will appear in the stage editing window, and the rotation can be realized by dragging the icon with the mouse. You can also slide their intersection up and down below the timeline to see the degree of rotation on the left. You can also left-click the intersection to rotate in the pop-up window. As shown in the figure:

Initial state of the material on the stage





State of the material after rotation Z on the stage



Other adjustments such as volume, hue and saturation, contrast and brightness, feather, etc. are set in the same way as opacity.

6)**Fade in/out:** Set the material playback to fade in, fade out, or fade in and out. You can edit the time of fade in and fade out in properties.

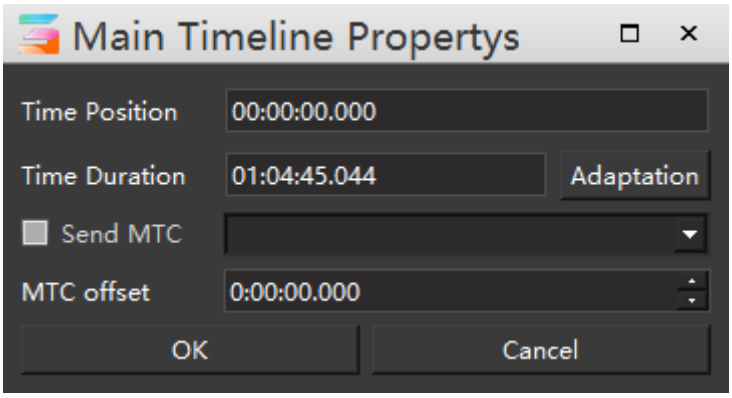
Tips:

Check Cancel the effect command to delete all adjustment actions. If you want to delete a single adjustment point, you can click the adjustment point first, and then press DEL to delete the adjustment point.

For various adjustment operations and action combinations added, you can cut and copy the

adjusted actions to other points by first selecting the name of the adjustment command at the front of the adjustment panel, and then pressing Ctrl + X to cut or Ctrl + C to copy, and Ctrl + V to paste.

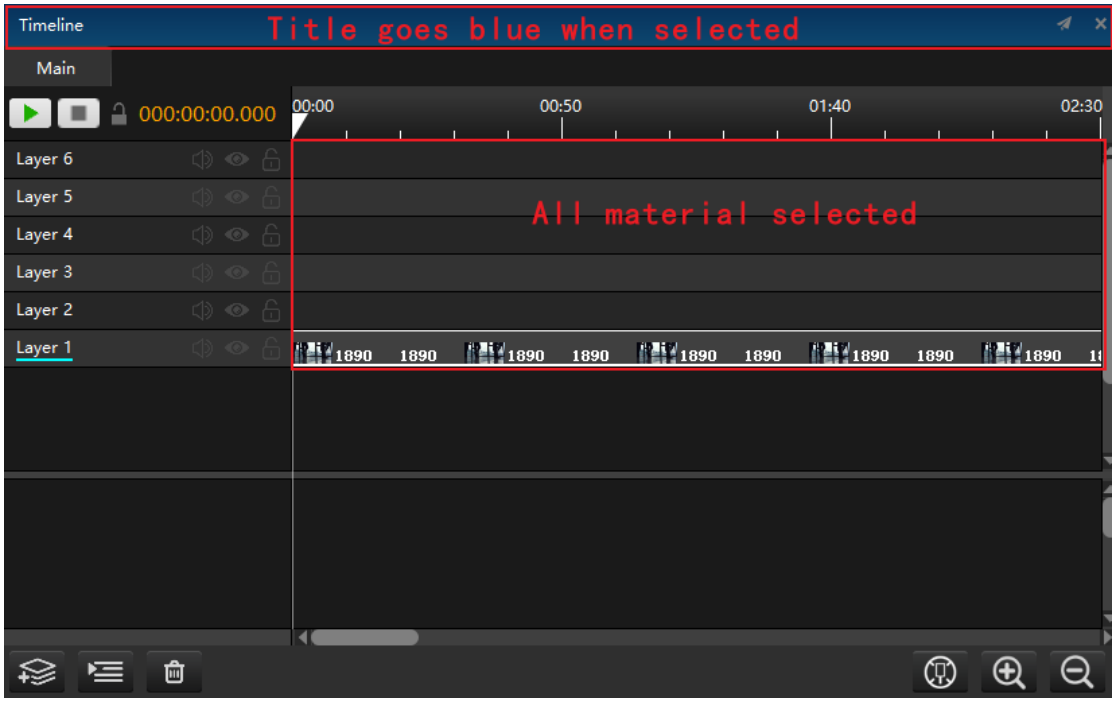
(5)**Edit Main Timeline:** Edit the cursor of the main timeline to initially display the time position and the length of the timeline. Select adaption to spread the timeline over the end position of the material.



(6)**Timing information:** Show or hide the media time information of the selected resources or all resources.

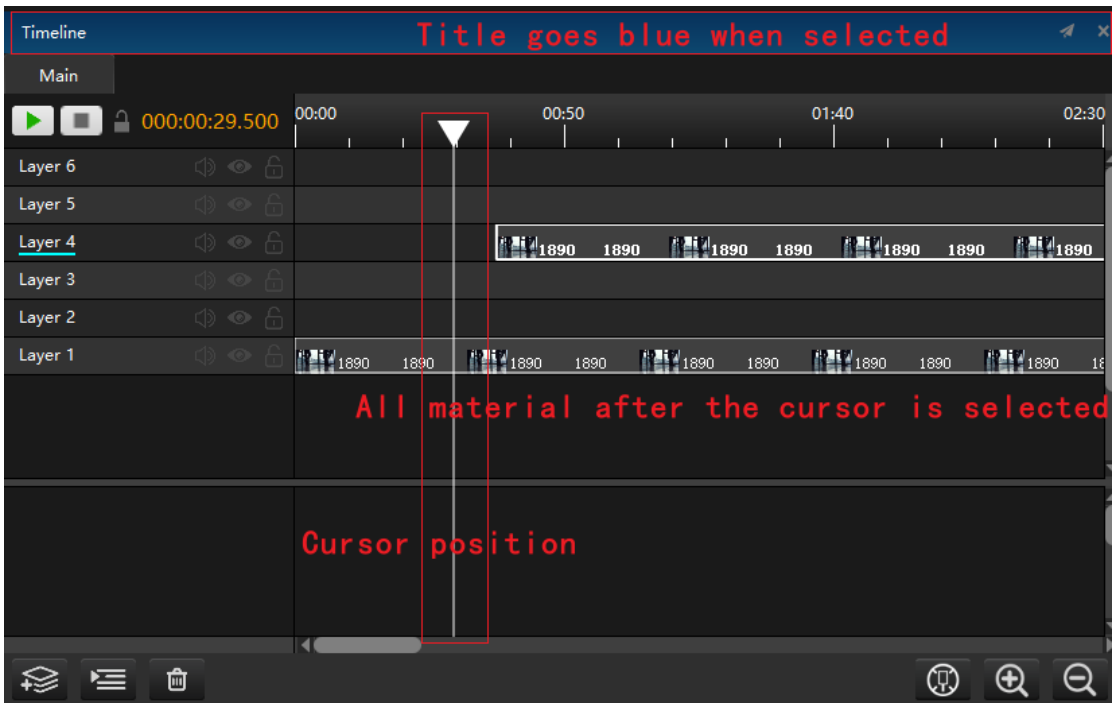
(7)**Add Control Command:** The play, pause and stop commands are for the timeline. The stop program command can stop the program being played in program management. This section will be described in detail in timeline management.

(8)**Select All Media:** Under this command, all media on the timeline can be dragged as a whole and cannot be edited. Click anywhere to deselect all media.

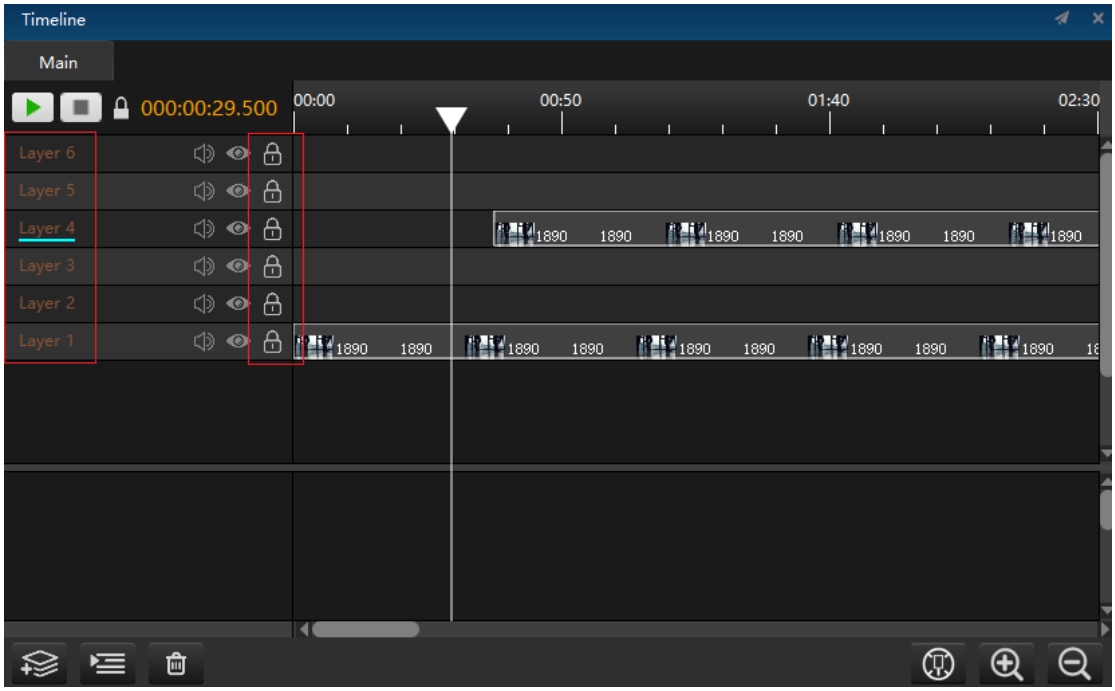


(9)**Select All Media Behind the Cursor:** Similar to selecting all media, under this command, all media and the cursor can be dragged as a whole and cannot be edited. Click anywhere to deselect media.

Tips: These two media selection commands can only be used when the timeline window is selected.

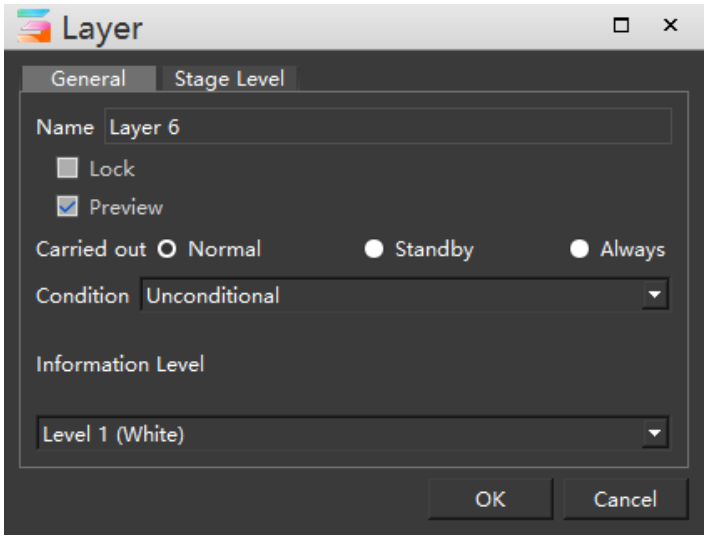


(10)**Lock All Layers:** All layers are locked. It is forbidden to edit all layers. Click the lock mark behind the layer to activate the layer.

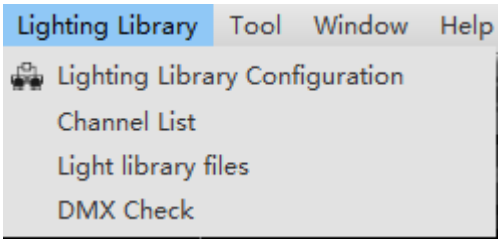


(11)Unlock All Layers: Instead of locking, all layers are allowed to be edited.

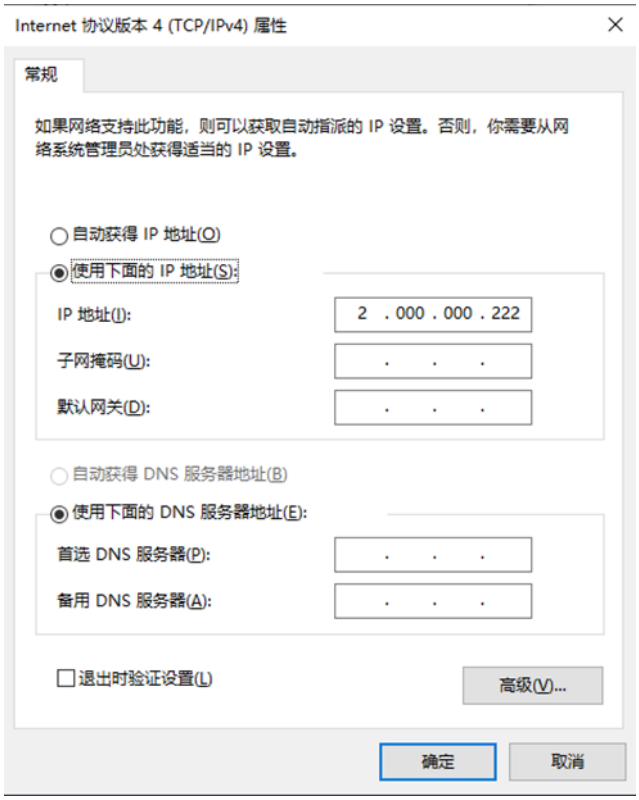
(12)Layers Properties: in timeline, add, insert, delete layers and edit layer properties. If the layer is set to standby, the layer will be displayed only when standby is executed. Right click the layer and select layer properties, which can also do the layer set.



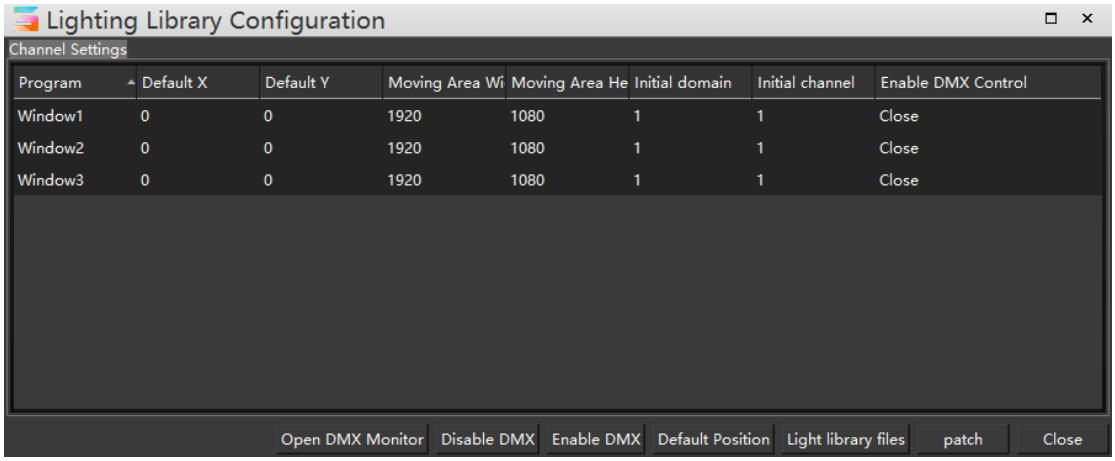
Lighting Library



The lighting library mode can directly associate the program window with the lighting console and adjust the properties of the program in real time. When using this mode, S3 server and Ma lighting console need to be set in the same network segment. It should be noted that the IP address should start with 2 and set the fixed IP. Some settings are made in S3 software after IP setting is completed.

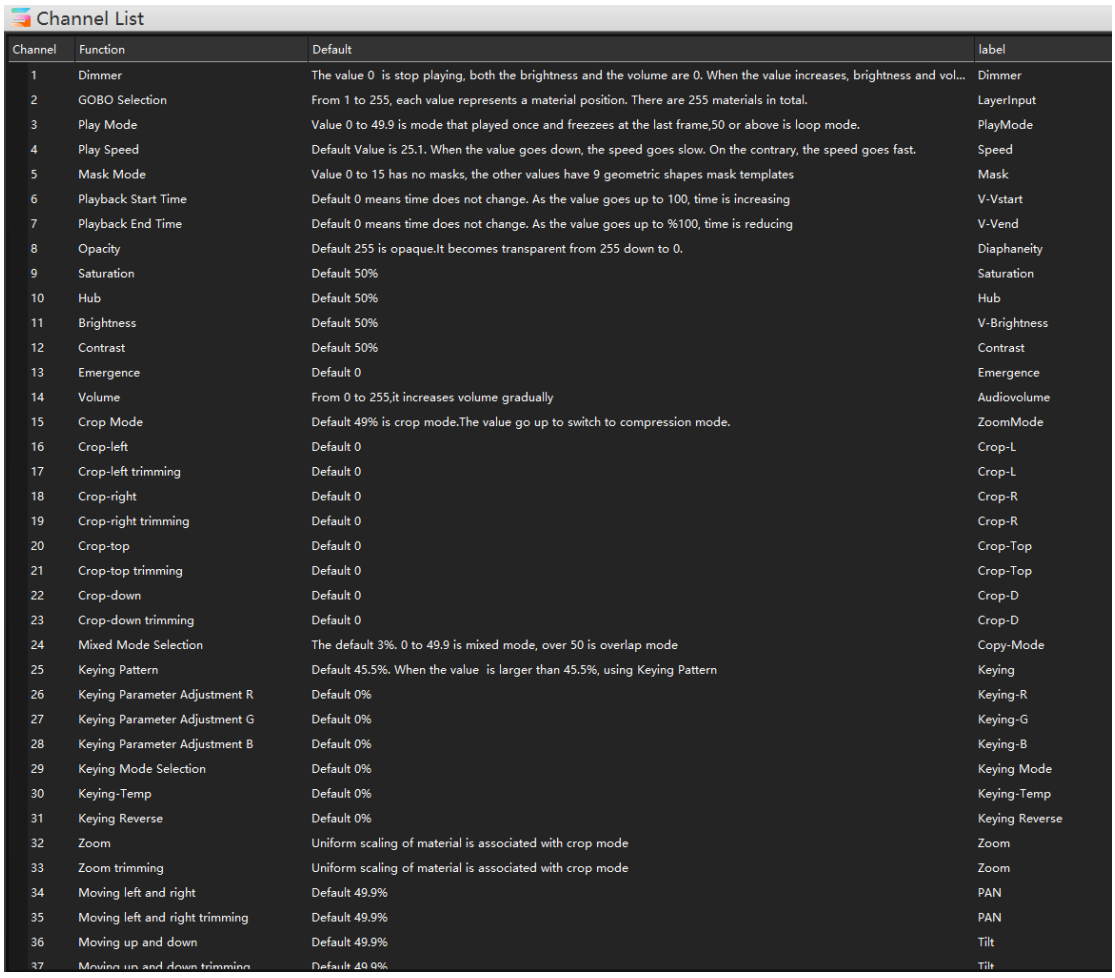


(1)**Lighting Library Configuration:**



In the lighting library configuration window, DMX can be turned on or off in batch, and completed the configuration automatically. When there are multiple windows, window 2 can set the starting channel to 43, because each window occupies 42 channels, and so on. Also set the default place of the window in this position. For detailed steps of setting Ma software, refer to "Appendix 3: connection with lamp console".

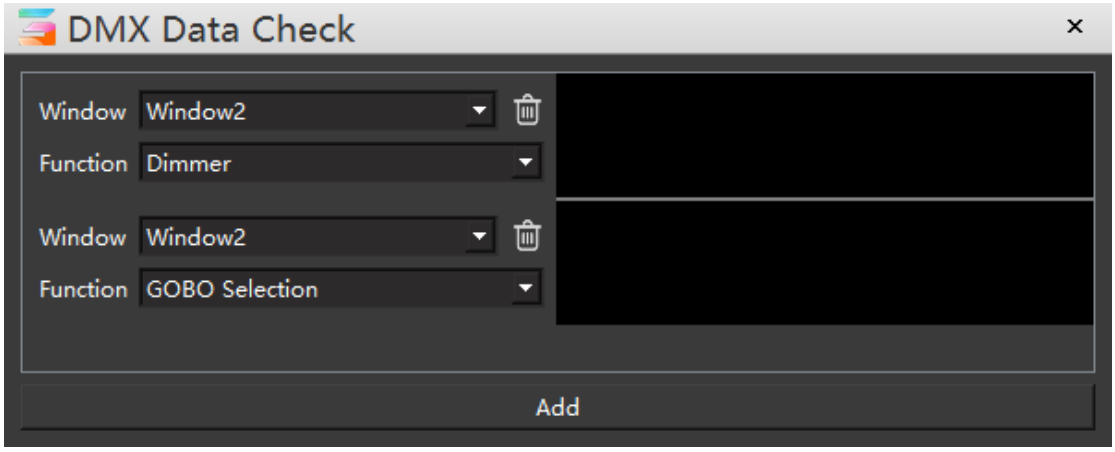
(2)**Channel List:** The channel list gives the details of 42 channels.



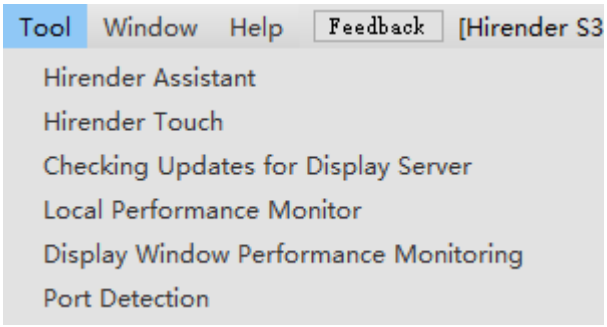
Channel	Function	Default	label
1	Dimmer	The value 0 is stop playing, both the brightness and the volume are 0. When the value increases, brightness and vol...	Dimmer
2	GOBO Selection	From 1 to 255, each value represents a material position. There are 255 materials in total.	LayerInput
3	Play Mode	Value 0 to 49.9 is mode that played once and freezees at the last frame,50 or above is loop mode.	PlayMode
4	Play Speed	Default Value is 25.1. When the value goes down, the speed goes slow. On the contrary, the speed goes fast.	Speed
5	Mask Mode	Value 0 to 15 has no masks, the other values have 9 geometric shapes mask templates	Mask
6	Playback Start Time	Default 0 means time does not change. As the value goes up to 100, time is increasing	V-Vstart
7	Playback End Time	Default 0 means time does not change. As the value goes up to %100, time is reducing	V-Vend
8	Opacity	Default 255 is opaque.It becomes transparent from 255 down to 0.	Diaphaneity
9	Saturation	Default 50%	Saturation
10	Hub	Default 50%	Hub
11	Brightness	Default 50%	V-Brightness
12	Contrast	Default 50%	Contrast
13	Emergence	Default 0	Emergence
14	Volume	From 0 to 255,it increases volume gradually	Audiovolume
15	Crop Mode	Default 49% is crop mode.The value go up to switch to compression mode.	ZoomMode
16	Crop-left	Default 0	Crop-L
17	Crop-left trimming	Default 0	Crop-L
18	Crop-right	Default 0	Crop-R
19	Crop-right trimming	Default 0	Crop-R
20	Crop-top	Default 0	Crop-Top
21	Crop-top trimming	Default 0	Crop-Top
22	Crop-down	Default 0	Crop-D
23	Crop-down trimming	Default 0	Crop-D
24	Mixed Mode Selection	The default 3%. 0 to 49.9 is mixed mode, over 50 is overlap mode	Copy-Mode
25	Keying Pattern	Default 45.5%. When the value is larger than 45.5%, using Keying Pattern	Keying
26	Keying Parameter Adjustment R	Default 0%	Keying-R
27	Keying Parameter Adjustment G	Default 0%	Keying-G
28	Keying Parameter Adjustment B	Default 0%	Keying-B
29	Keying Mode Selection	Default 0%	Keying Mode
30	Keying-Temp	Default 0%	Keying-Temp
31	Keying Reverse	Default 0%	Keying Reverse
32	Zoom	Uniform scaling of material is associated with crop mode	Zoom
33	Zoom trimming	Uniform scaling of material is associated with crop mode	Zoom
34	Moving left and right	Default 49.9%	PAN
35	Moving left and right trimming	Default 49.9%	PAN
36	Moving up and down	Default 49.9%	Tilt
37	Moving up and down trimming	Default 49.9%	Tilt

(3)**Light library files:** Open the configured light library files.

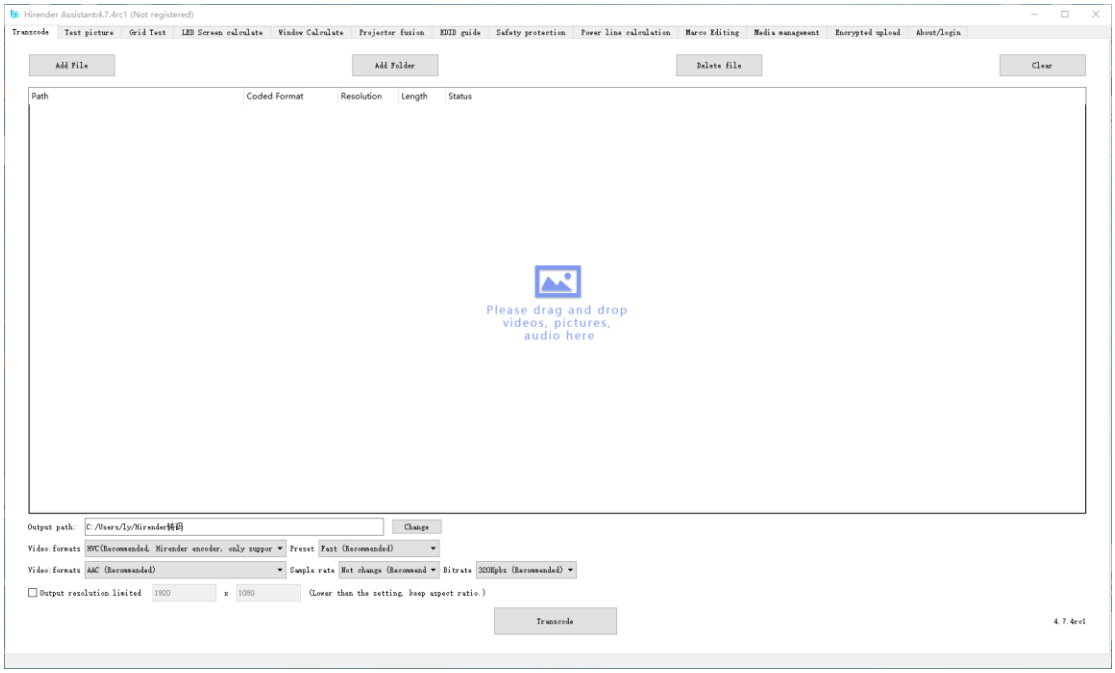
(4)**DMX Check:** Monitor DMX data for each channel.



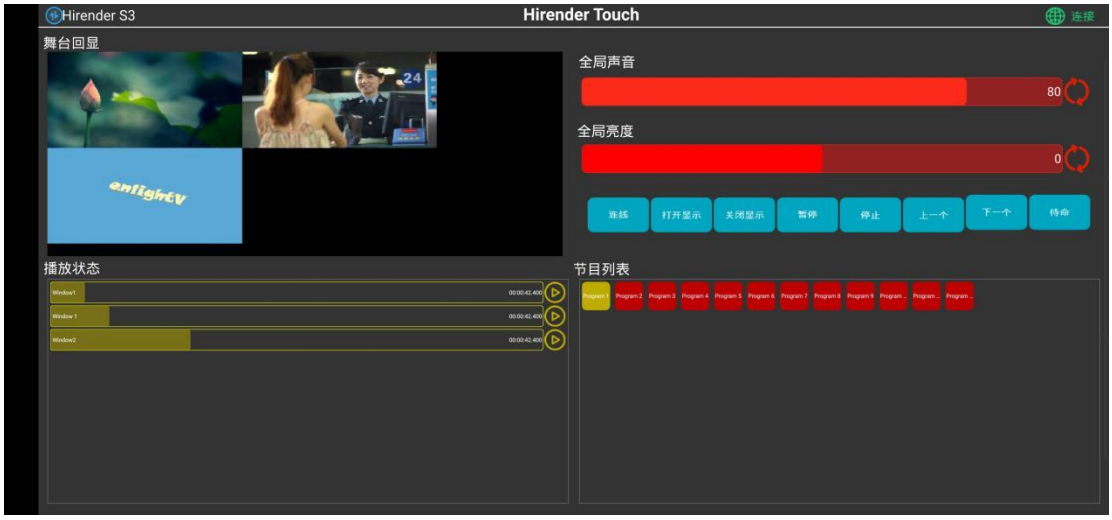
Tool



(1)**Hirender Assistant:** It can be used for video and image transcoding. More detailed transcoding project is provided in Hirender assistant.

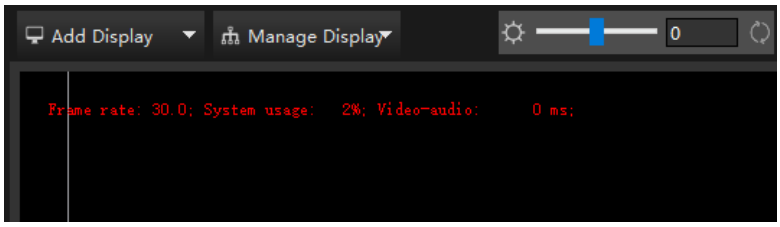


(2)**Hirender Touch:** Hirender Touch is a control software based on mobile devices specially developed by Enlightv Technology for Hirender S3. Hirender Touch has simple interface and simple operation. It only needs to connect to S3 through IP in the same LAN, and then get the program list in real time after connection. Realize the remote control and monitoring of S3 program management.



(3)**Checking Updates for Display Server:** The software version of the display side can be detected and updated online.

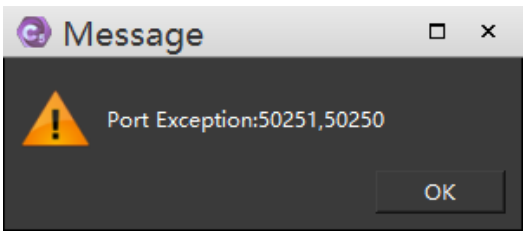
(4)**Local Performance Monitor:** Display performance information on stage.



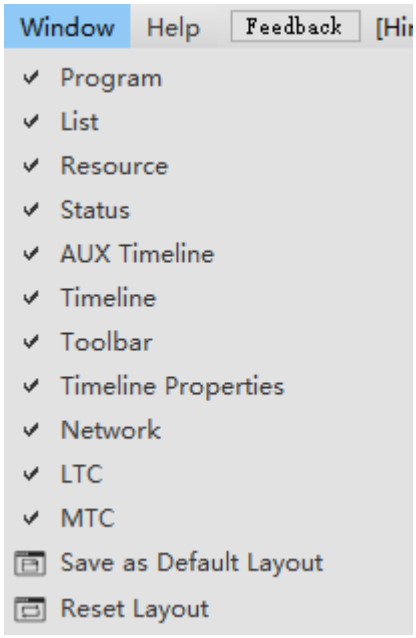
(5)**Display Window Performance Monitoring:** Display performance information on the display side.

(6)**Port Detection:**

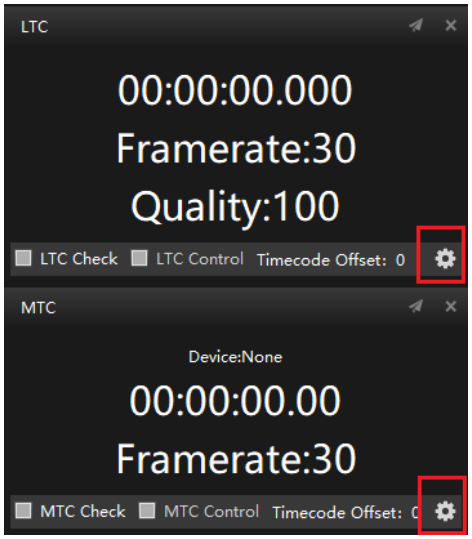
In port detection, you can monitor whether the port is occupied. If more than one Hirender software is opened, a port error will be displayed:



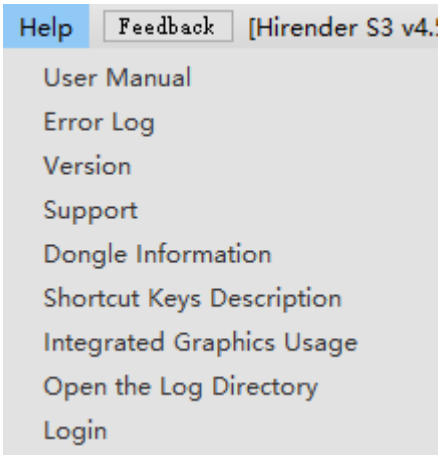
Window



The window menu mainly controls the display and layout adjustment of the window. You can check which window you want to display. You can also set your favorite window layout, “save as default layout”, and restart the program to use it. When the window layout is chaotic and the required window cannot be found, click Reset layout to restore the layout to the default state. If MTC or LTC time code needs to be used, you can check MTC or LTC in the window. At this time, the corresponding window will appear on the right side of the interface. Click the setting button in the lower right corner of the window to make specific settings:



Help



In the “help” menu, we provide user manuals to help users use our software. It also provides software version information, license and shortcut key information.

Toolbar

The toolbar designed by Hirender S3 is convenient for users to use quickly. These include:
(1)**File Tools:** New Project, Open Project, Save, Pack Project:

(2)**Editing Tools:** Cut，Copy，Paste，Undo, Redo.

(3)**Timeline Tools:** Select All Media，Select All Media Behind the Cursor，Add Play Order，Add Pause Order， Stop，Stop Program.

(4)**Timeline Adjustments:** Position，Zoom，Crop，Opacity，Rotation Z, Volume, Feather，Hue and Saturation，Contrast and Brightness，Vertex.

(5)**Window Tools:** Save as Default Layout，Reset Layout.

(6)**Program Management Tools:** Global Output Adjustment，Lighting Library Configuration，Lock Interface，Switch Backup and Master.

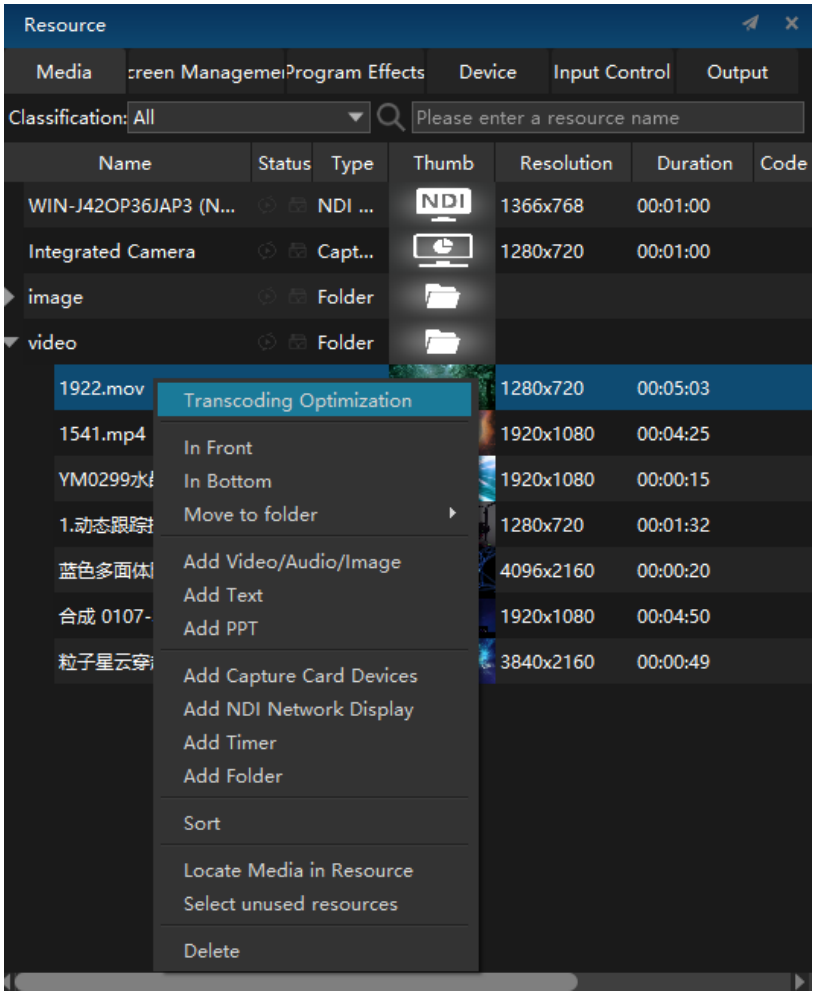
Media Resource Management

Resource

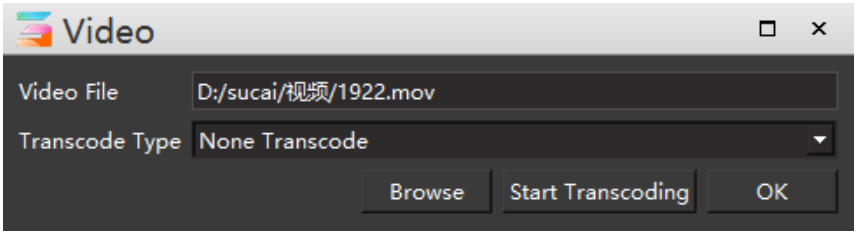
Including Media, Screen Management, Program Effects, Device, Input Control, Output, etc.

(1)Media

1)**Add and Edit**: Click the Add button in the lower left corner of the resource interface or the blank area to add media resources. The addition method is the same as that in the media resources menu. At the same time, we can also drag media material directly to the resource. Right click the media materials to continue adding materials and arranging orders of materials. You can find the resource location and edit it.

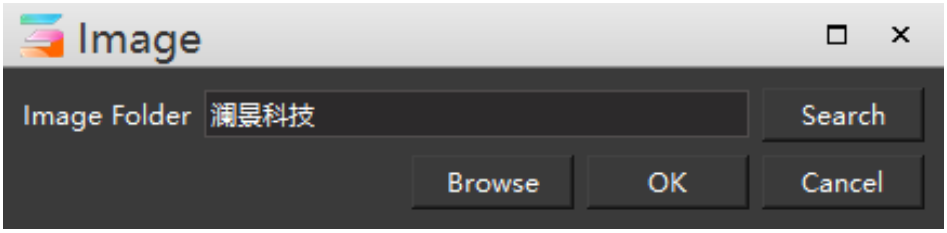


Select any video and right-click to enter the transcoding optimization pop-up window:

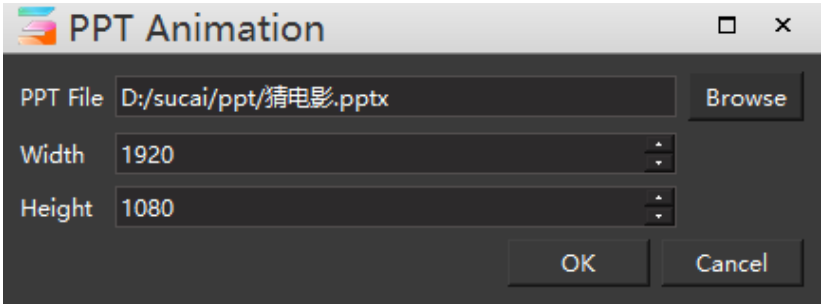


High quality, lossless and HAP can be selected to transcode the video. If video jam occurs, video can be transcoded to achieve smooth playback. Files can be replaced whether decoded or not, but cannot be replaced by different types of media files.

Select any image and right-click to enter the editing page to replace and find the file.



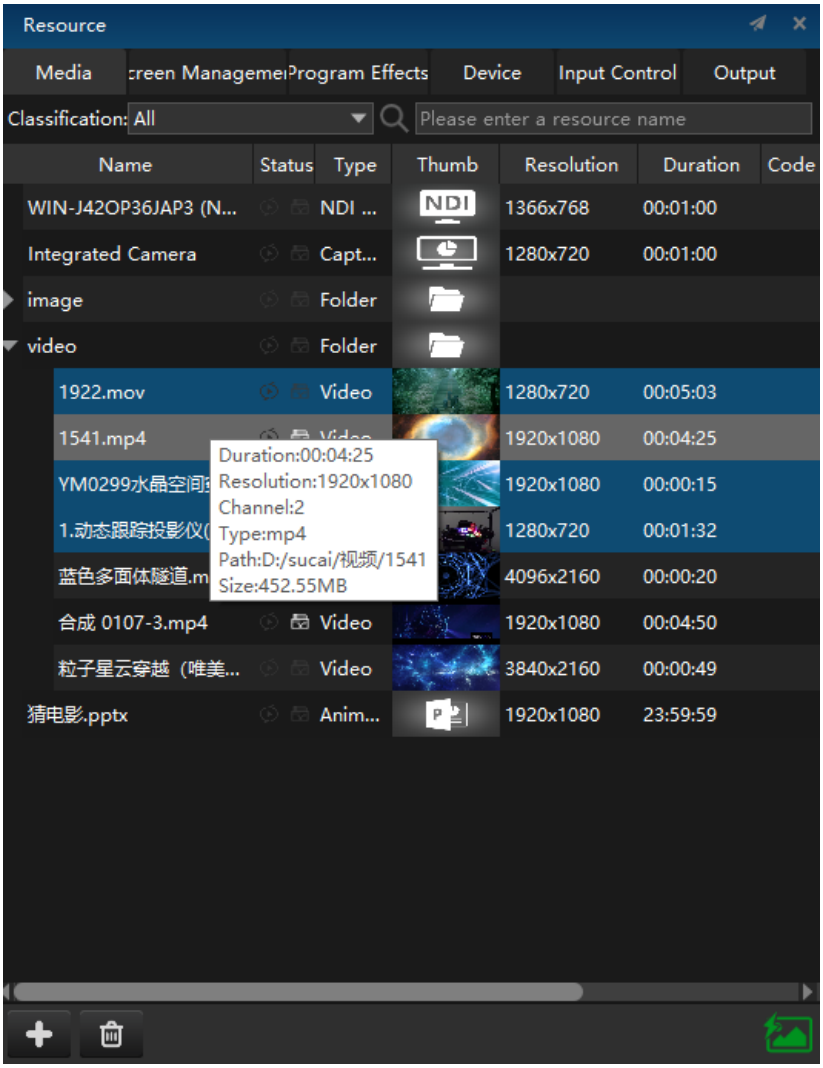
Select the PPT of the added animation mode to edit the height and width of the display.



For detailed adding methods of each resource, see stage preview and media resources.

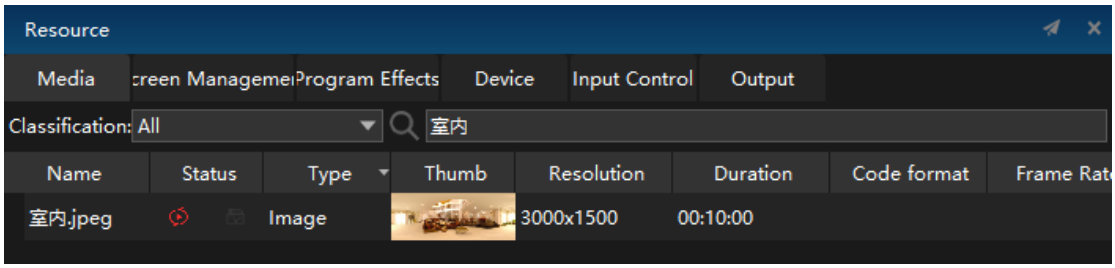
2)**Multiple Selection and Sorting of Materials:** Ctrl（Shift）+left mouse, click the material to select multiple materials and drag them into the program management window for editing, which cannot be dragged to the timeline for editing. They will be arranged in order in the window.

Multiple selected materials can also be dragged into the added folder.

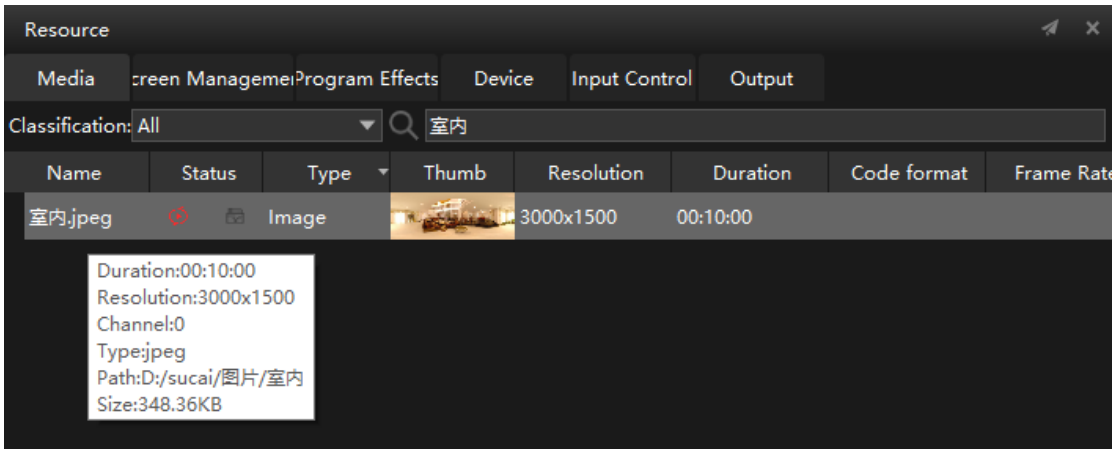


3)**Movement Up and Down:** Select single or multiple materials, hold the left mouse button, drag to the position you want to arrange, release the left button to move the materials. The materials in the folder can also be moved.

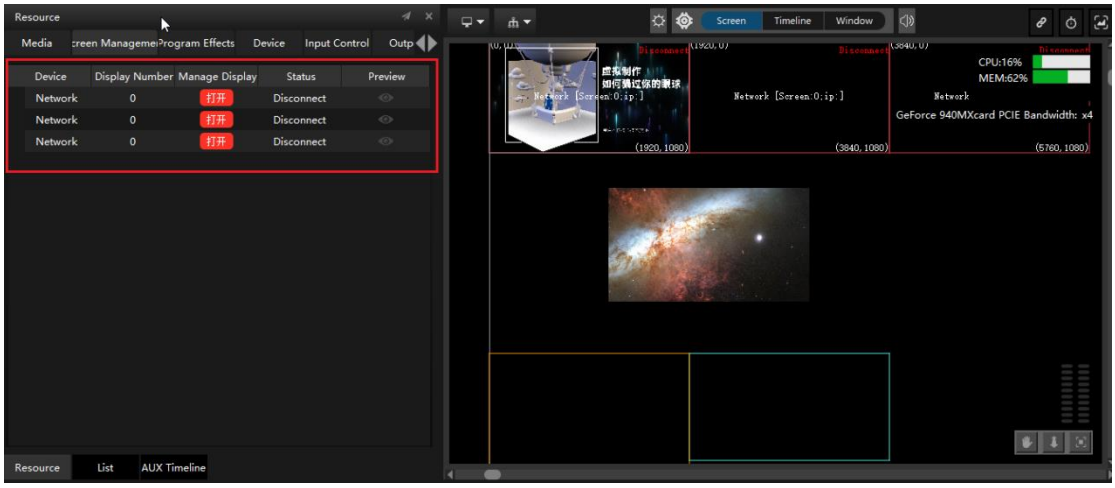
(2)**Quick Search:** Resource search can quickly find the target material from the Media. The search is not case sensitive. Enter the name of the media material to be found.



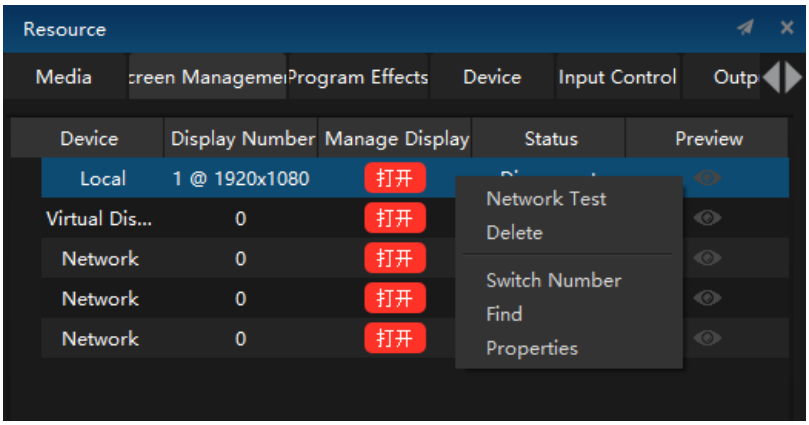
(3)**Quickly browse material information:** Point the mouse to the media material added locally, and the material information display box will appear. In the display box, the duration, resolution, channel, type, path and size of the material are displayed directly.



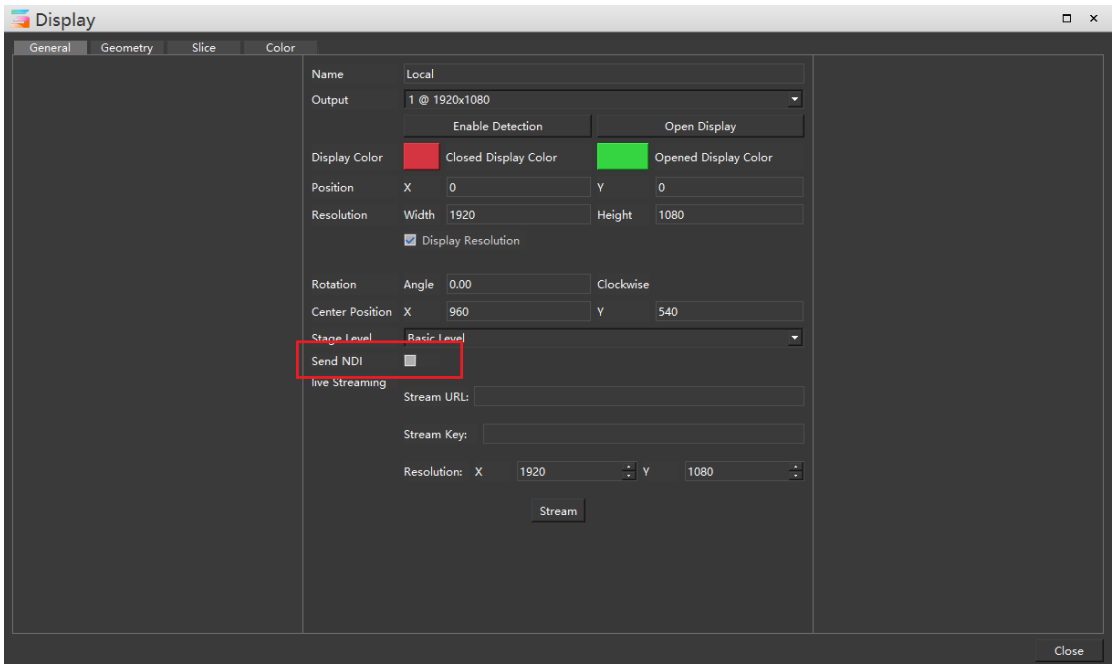
(4)**Screen Management:** The screen management interface displays all the screens added to the stage. The information of all the displayed screens is displayed on the screen management interface (including IP address, screen number, whether to use and network status).



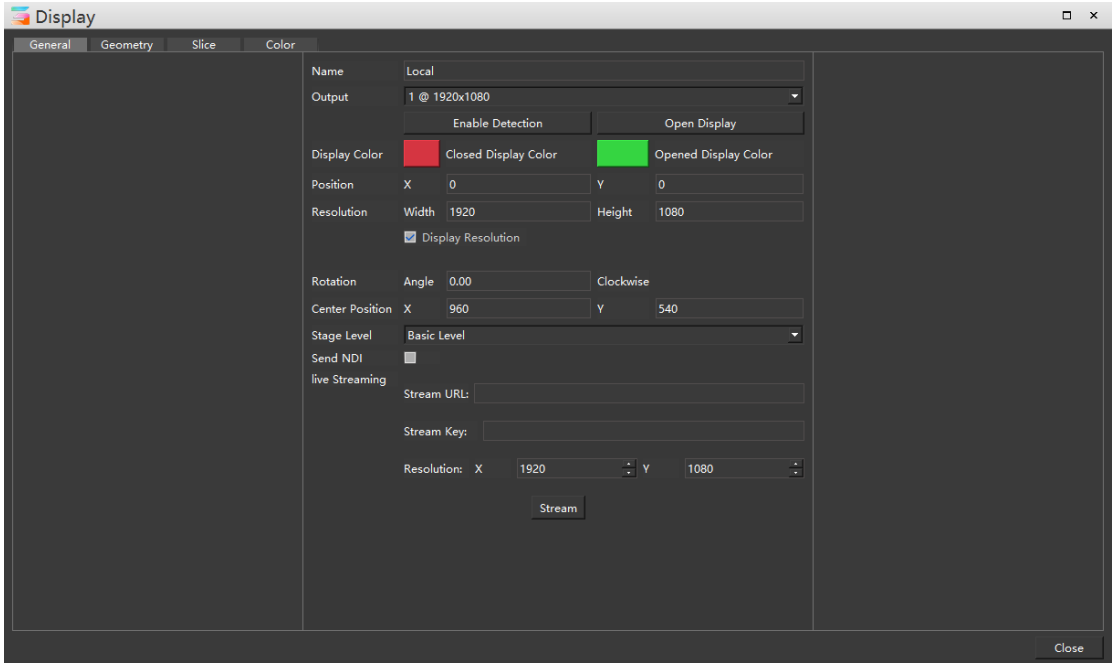
Right click to open the display column, choose to close the display of Network Test, Properties, etc.



As shown in the figure below, the local screen output supports NDI settings, and the screen can act as an NDI sender.



As shown in the following figure, double-click a screen in screen management to view and modify screen properties in the pop-up display box:



1)Show screen information, including name, IP address, screen number and name, which can be modified.

2)Open and close the display operation, and modify the display color in different states of the screen.

3)Show the position of the screen on the stage and the resolution of the screen. Remove the tick setting with the same width and height as the display resolution, and the resolution of the display box can be modified (generally, it is not modified, and the resolution software of the display device can automatically recognize it).

4)Sets the rotation and angle of the display screen.

5)Show the position of the screen on the stage.

6)The stage level of the display screen can be modified.

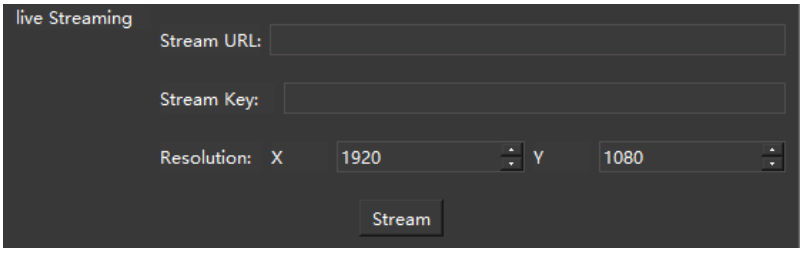
Special case: after setting the stage level, the screen that does not match the stage level cannot be selected and dragged in the stage. In this case, the screen can be edited in screen management.

7)Live Streaming: It supports the output of images in the screen and live broadcasting through a live platform.

Streaming URL: enter the address of the live broadcast platform

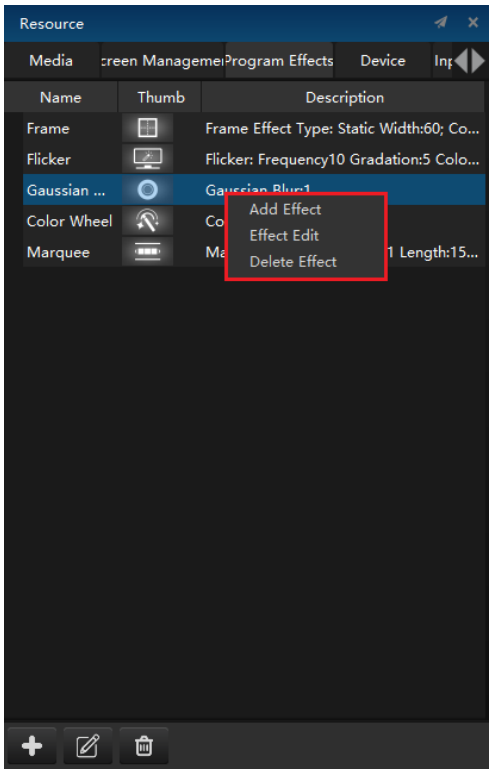
Streaming Key: enter the streaming code of the live broadcast platform

Resolution: adjust the output video resolution



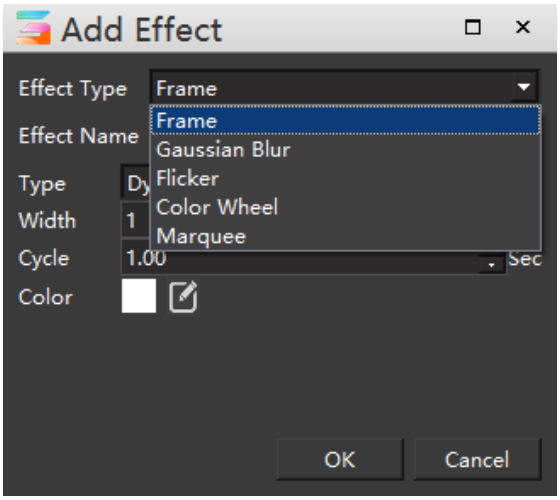
On the live broadcasting platform, click ‘Stream' to start streaming; Click ‘stop’ to end the whole streaming.

(5)**Program Effects:** The Program Effect can diversify the picture output and present a more gorgeous effect. Add a program effect layer in the program management window of S3. Different program effects can be added to the program effect layer corresponding to each program. The special effect layer will apply special effects to all programs and timeline layers below it (except PPT). Flexible special effect control and combination can be realized by adjusting the layer order. By default, Hirender S3 creates the following special effects: Frame, Gaussian blur, Flicker, Color Wheel and Marquee.

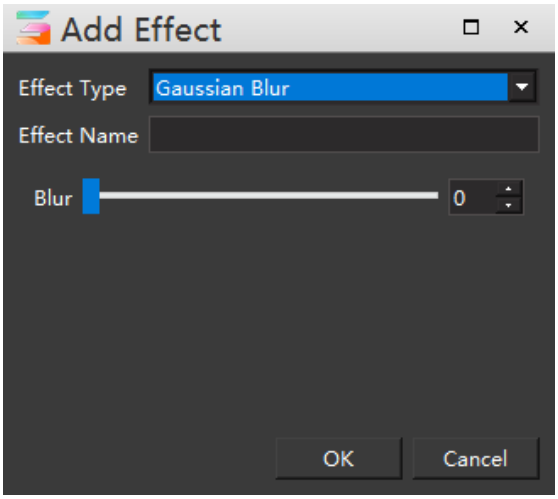


Users can create different program effects according to their usage.

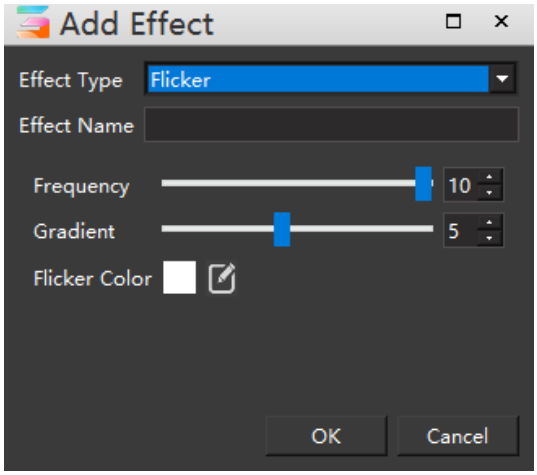
1)**Add/edit Frame:** Set the effect name, type, width, cycle and color.



2)**Add/edit Gaussian Blur:** Set the effect name and blur.

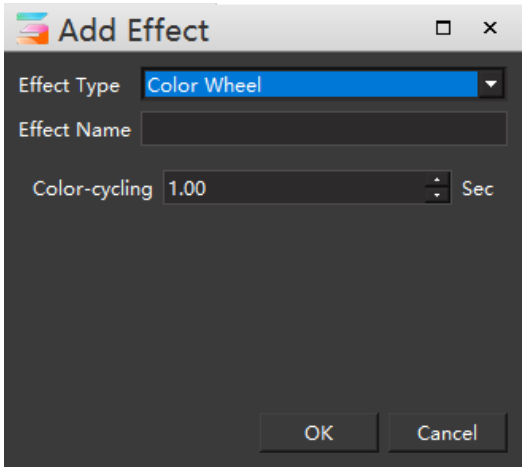


3)**Add/edit Flicker:** Set the effect name, frequency, gradient and flicker color.

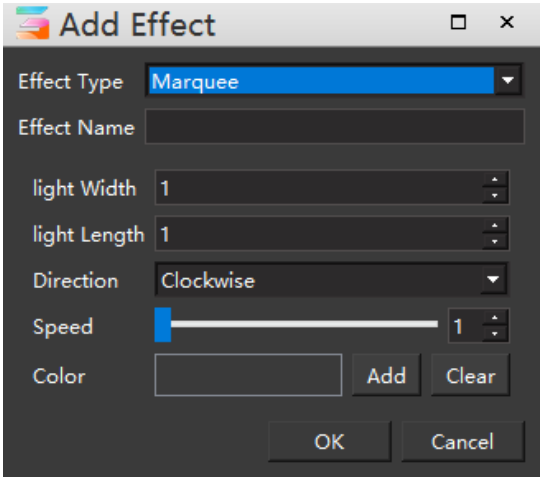


4)**Add/edit Color Wheel**: Set the effect name and color-cycling. The color wheel effect is rainbow

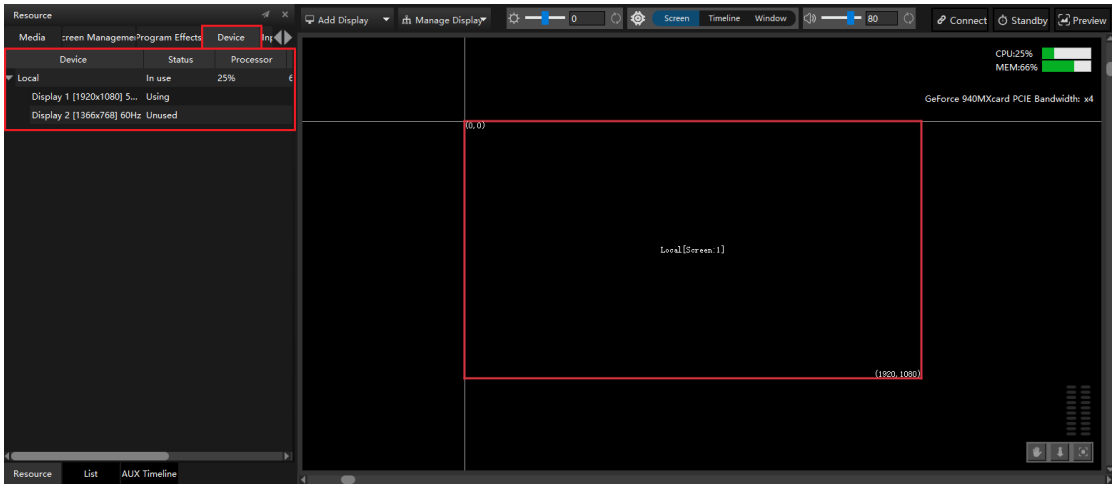
seven color rotation.



5)**Add/edit Marquee:** Set the effect name, light width/length, direction, speed and color.

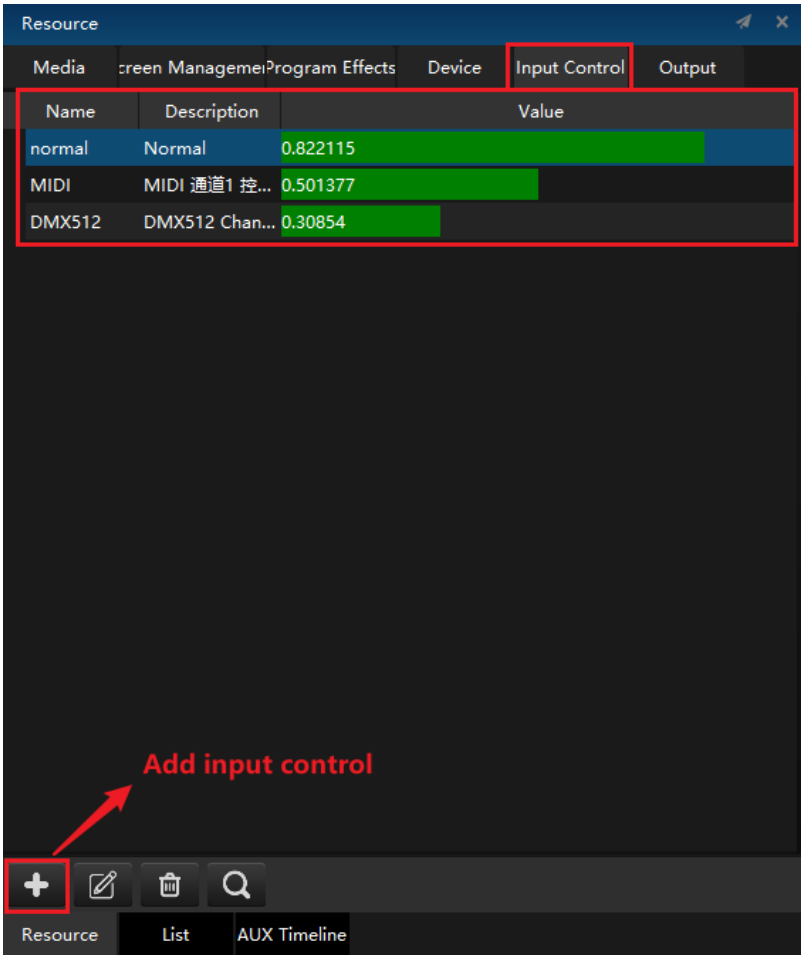


(6)Device Management: Device management shows the screens on all devices, including local display and network display.



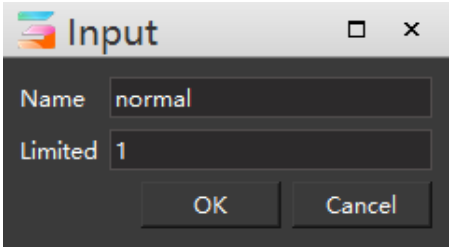
(7)Input Control: Click the Add button in the lower left corner of the input control interface to

add input controls: input, MIDI controller, DMX512 and sensor input. Input control can make Hirender accept external signals, and the introduced signal instructions can be used to control program playback and adjust program effect.



1)Input

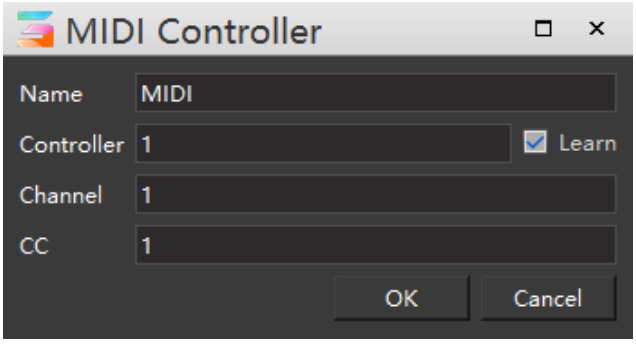
Name and restrictions are required. The limit option is 0-1 by default. You can set it to any positive number as needed.



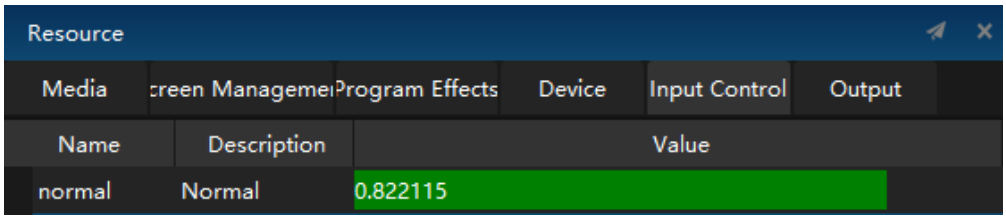
2)MIDI controller

A controller knob or slider will be introduced. Click "learn" and move the controller knob or slider. The system will automatically select the channel and MIDI controller number.

In the input box, when the input is normal, the value in the dialog box is any positive number. When the input is MIDI controller, the value in the dialog box ranges from 0 to 1.

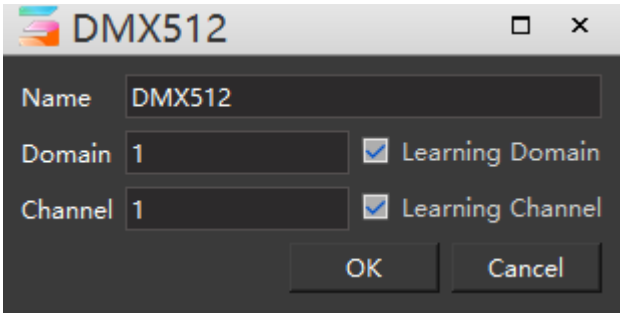


After setting, move the controller and pay attention to the bar indicators in the input box to determine the regular working.



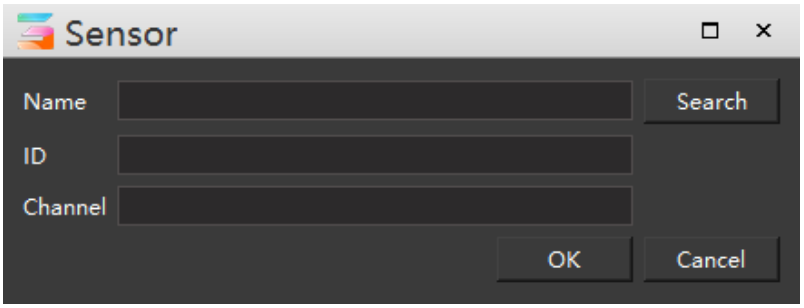
3)DMX512

Similar to MIDI devices, when DMX512 protocol controller is introduced, remote sensing of mobile console, clicking learning domain and learning channel can automatically match the domain and channel of console, so as to directly use the console to control program playback. Field and channel values can also be set manually..



4)Sensor

When adding a sensor as a control signal, you can automatically search for the sensor of the connected device by searching, or manually enter the sensor ID to complete the connection.

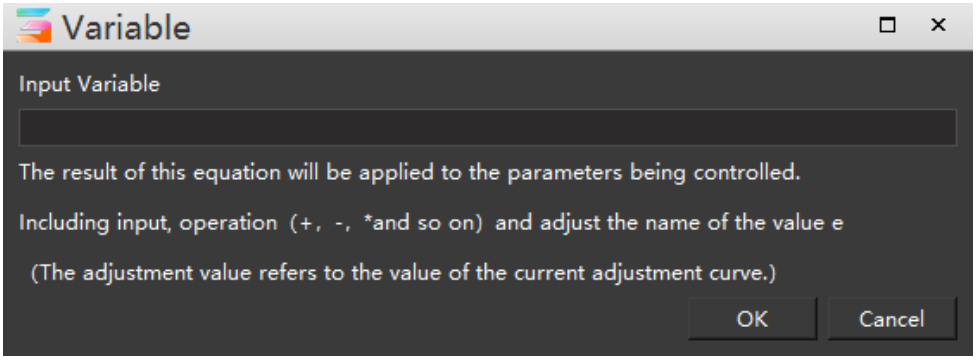


The values of input in the control interface and the influence of the media resource:

a)**Use the input control to adjust the effect of material in the timeline:**

Click the material in the layer, and then select the effect you want to adjust, and the effect editing will appear in the timeline management:

Click "F" in front and fill in the expression equation in the pop-up dialog box:



The expression of the input variable can be the name of a single input control or the addition, subtraction, multiplication and division of the names of all input controls. The result of this expression is applied to the controlled parameter value.

In position adjustment, the expression represents the pixel value.

In zoom adjustment, the expression represents the zoom percentage.

In crop adjustment, the expression represents the crop percentage.

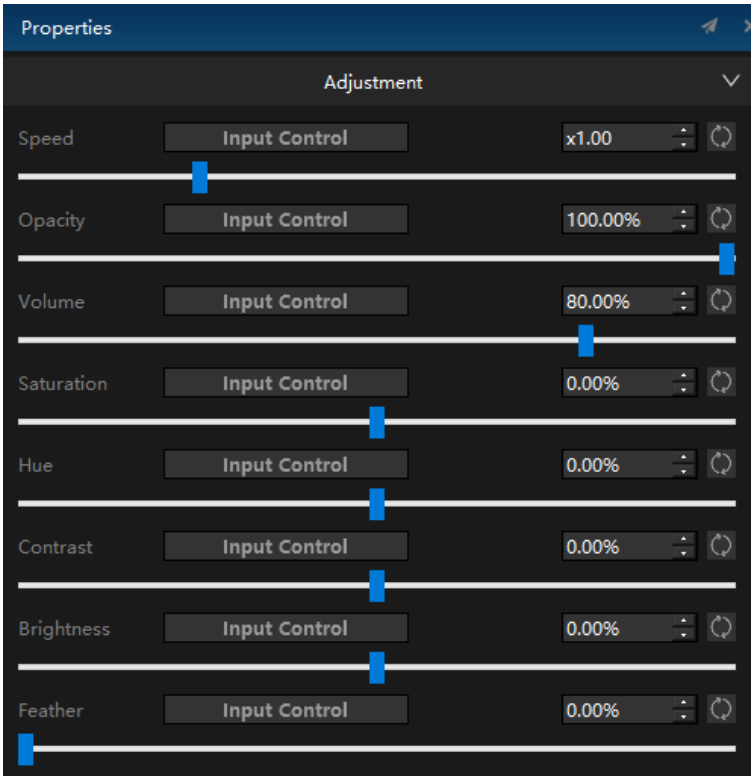
In opacity adjustment, the expression represents the opacity percentage.

In the rotation Z adjustment, the expression represents the number of clockwise turns, that is, when the expression result is 1, it means that the media rotates 360 degrees clockwise.

In volume adjustment, the expression represents the percentage of volume, etc.

"H" stands for HC64, and the setting method is the same as that of ordinary input.

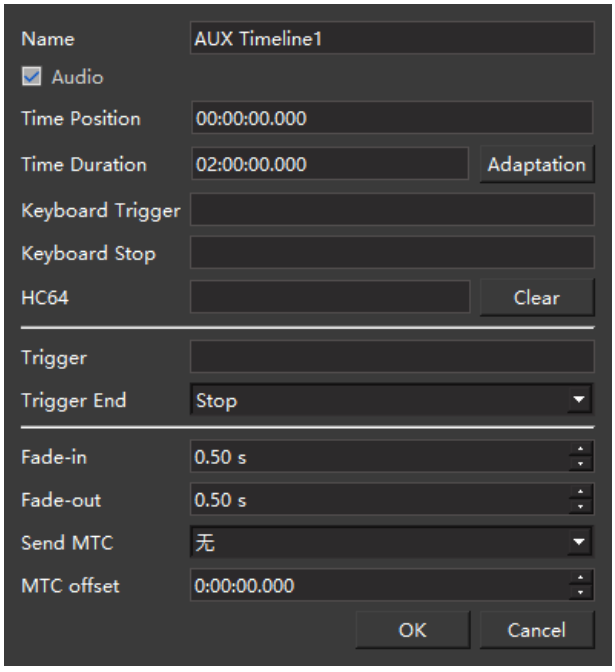
b)**Use input control to adjust the effect of program nodes in program management:**



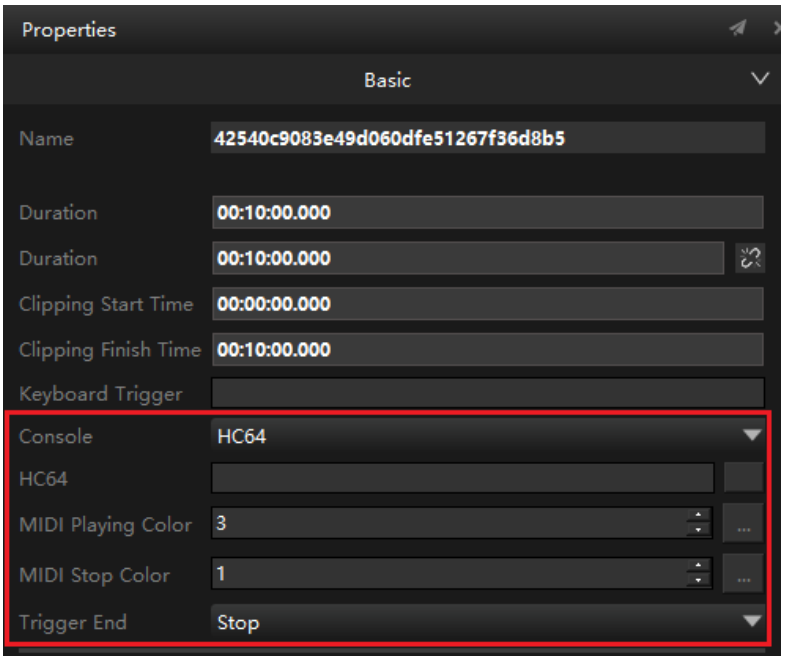
In the input control, add the name of the input control and adjust the value of the input control to adjust the effect of the material.

c)**Use input control to regulate the playback of programs:**

In the AUM Timeline and the AUM properties, there are the following settings:

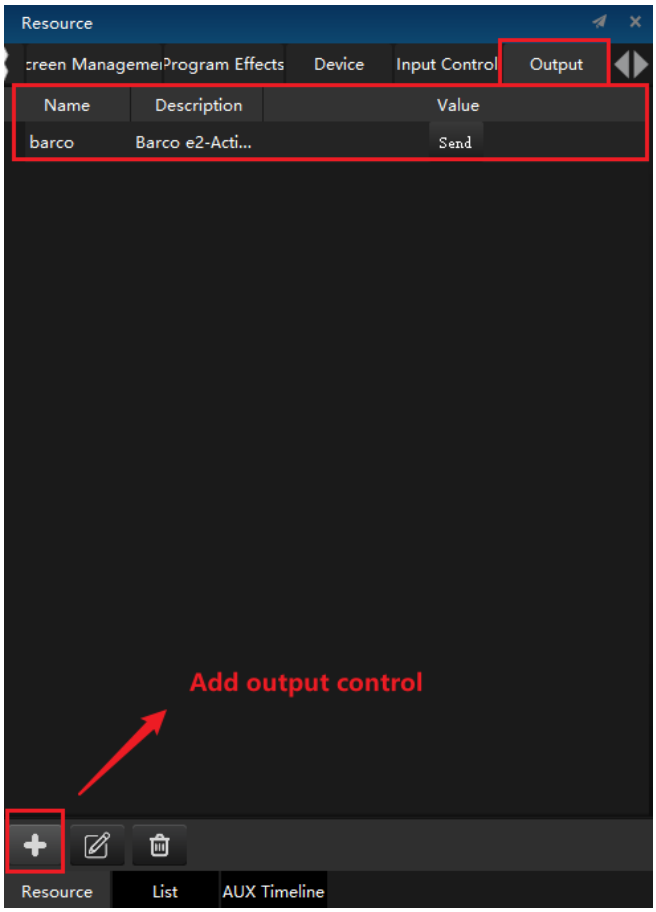


Trigger conditions can be added to the trigger, such as a > 0.5. When the trigger conditions are met, the program will be played. When the trigger ends, you can set the actions after the trigger ends: stop playing, pause playing, and do nothing. Similar to controlling the playback of programs, input control can also set the playback of program nodes.



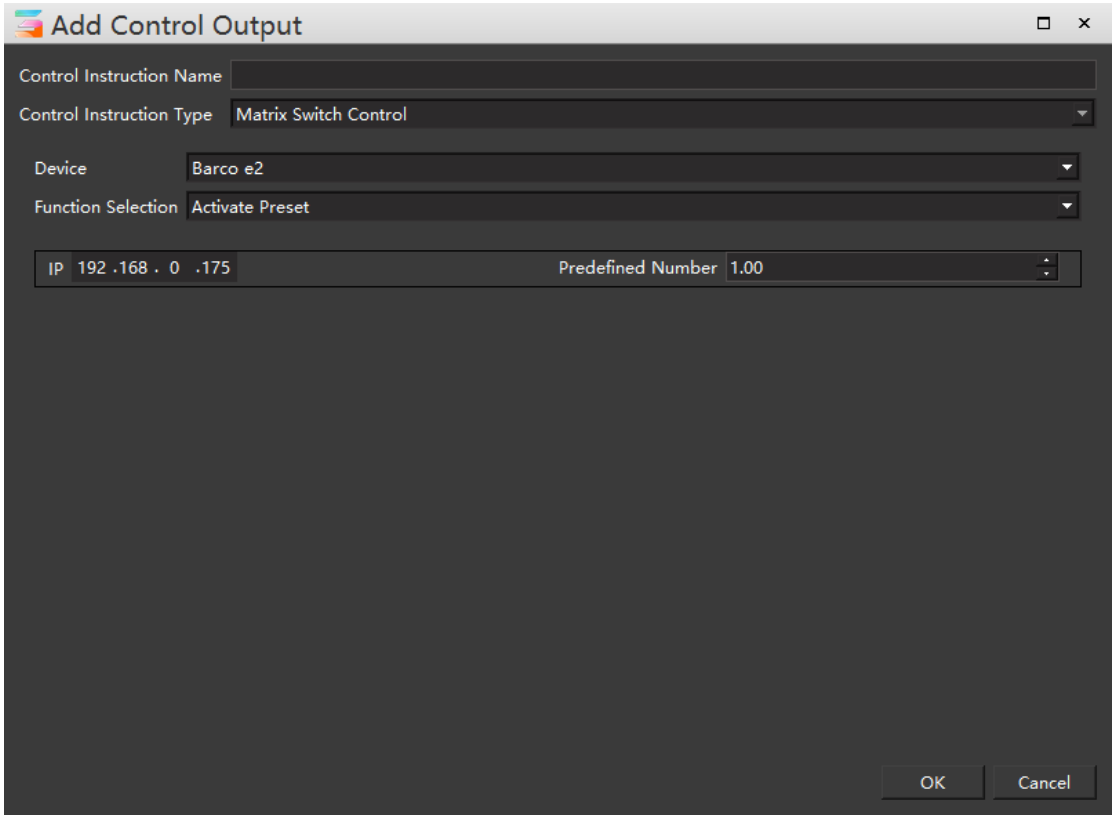
(8)Output

Output control allows the Hirender S3 software to directly control the console to call the preset or switch the console. Click the Add button in the lower left corner of the output control interface to add console switching. At present, the software supports 4Ktwo PRO, LVP9000 and Barco e2.



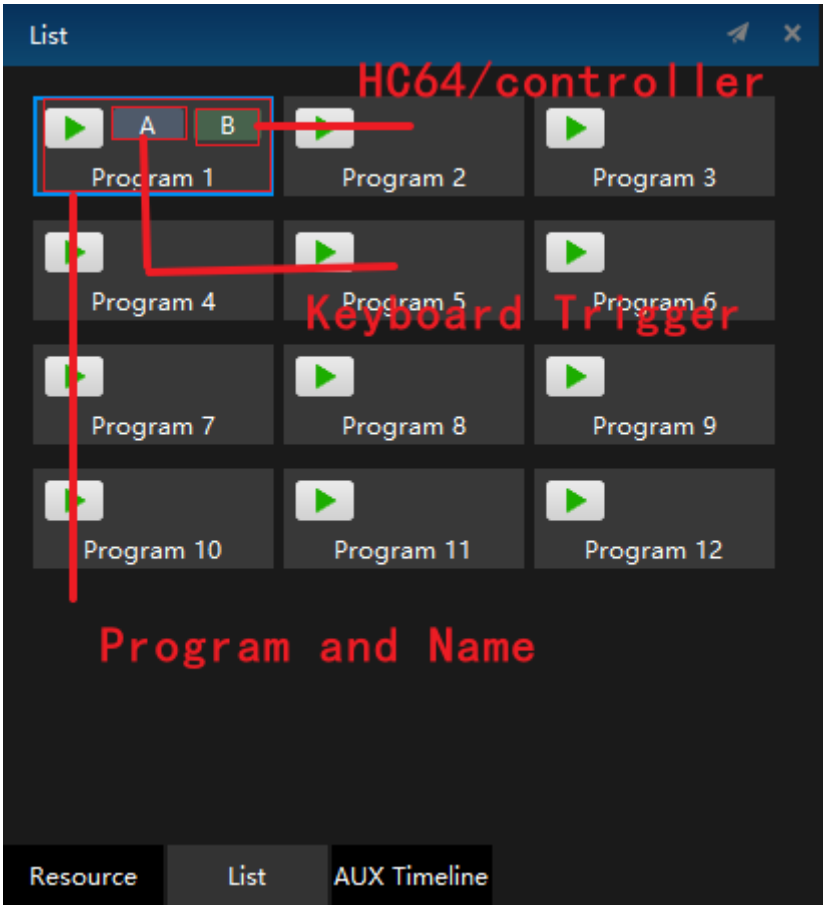
Add the output control command in the pop-up box of console switching, select the

equipment name and function selection. After setting, the added output control can be added to the main timeline or the timeline in the program as material.

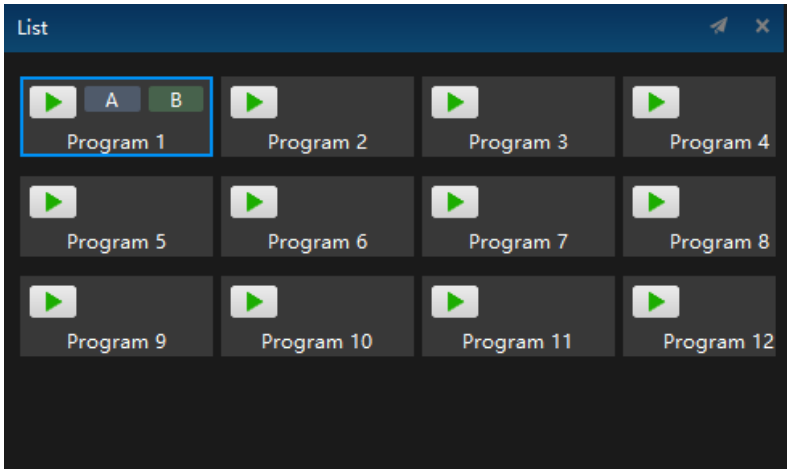


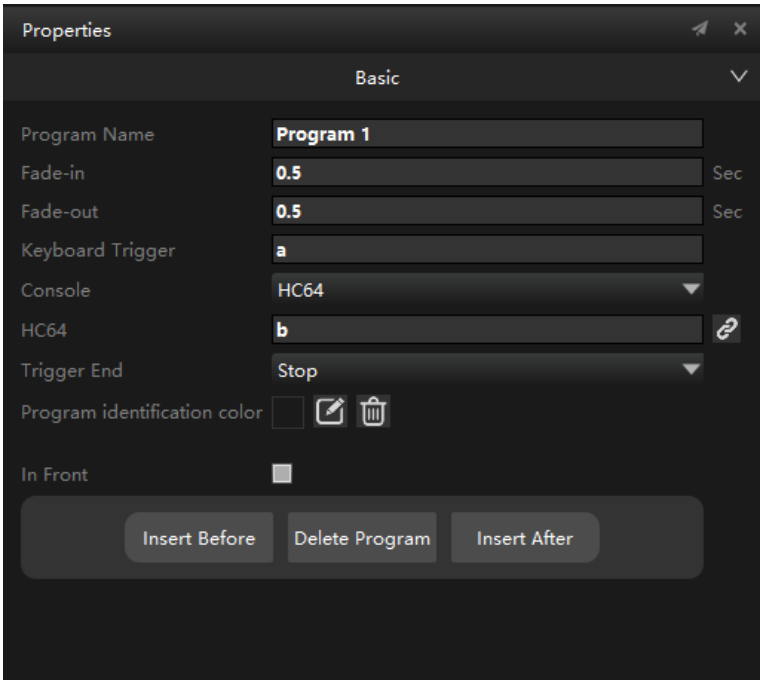
List

The program list shows all created programs in the form of palace grid. Users can play all programs on the floating window of the program list. As shown in the figure, the program represented by a single grid includes play button, keyboard trigger, program name, HC64 control, etc.



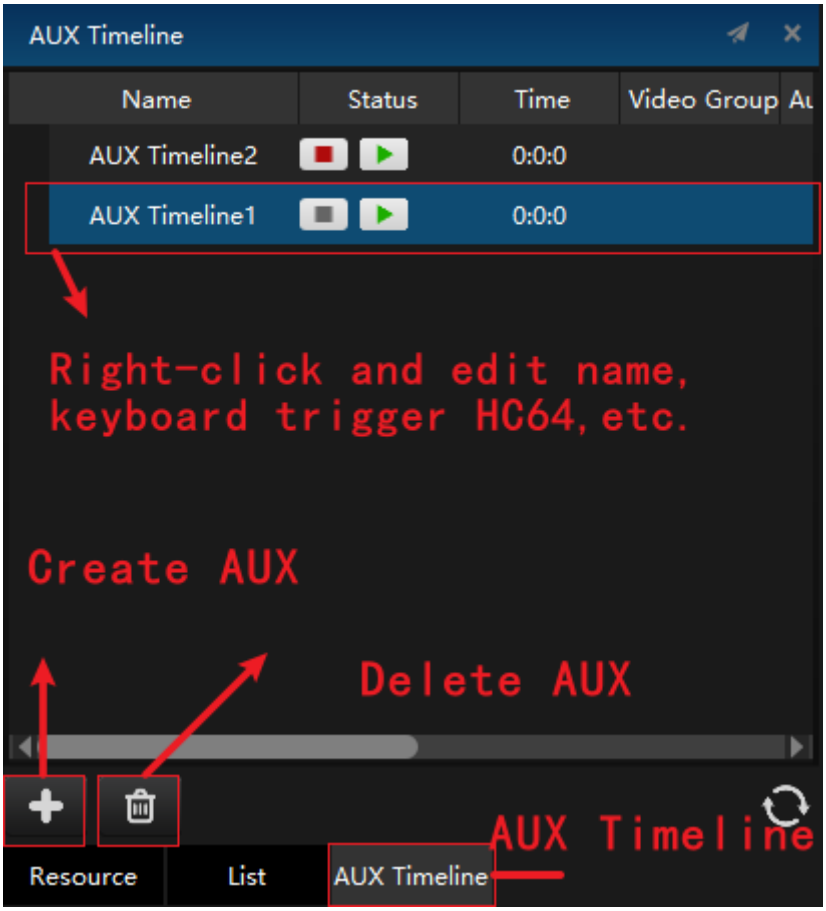
After clicking the program, all properties of the program will be displayed on the right side of program management.





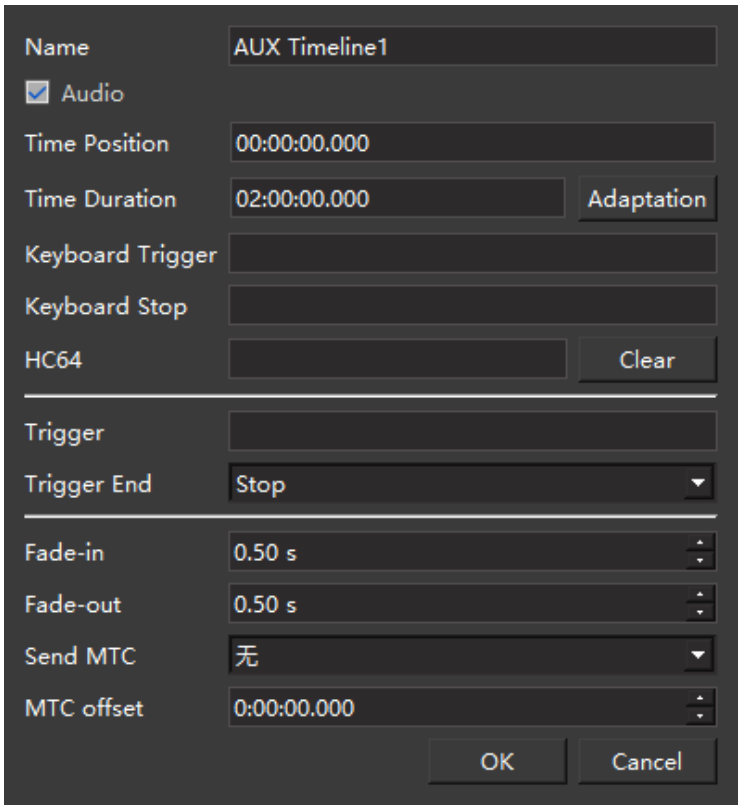
AUX Timeline

In the AUX Timeline window of Hirender S3 software, users can click the Add button at the bottom left to set multiple program insertion, and use expressions to specify their trigger conditions. The priority of AUX Timeline is higher than that of all programs in the main timeline and program management: when the content of program insertion is played, it will be displayed at the top of the screen to cover the video screen in the main timeline and program management.

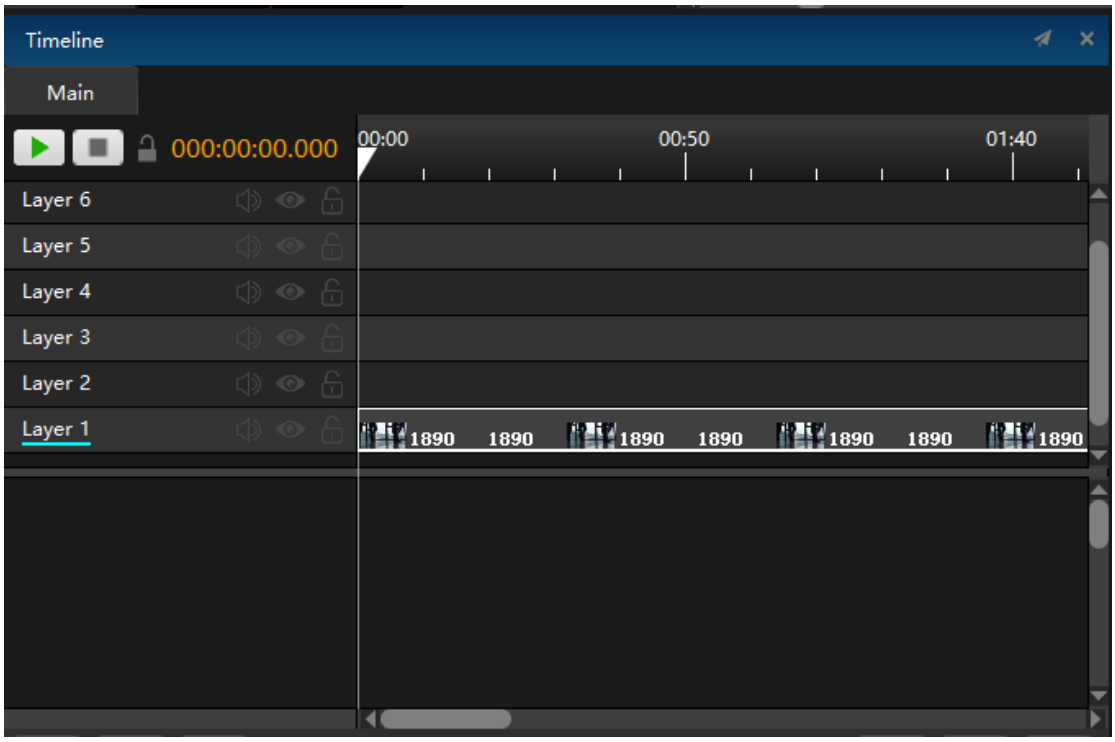


In the AUX Timeline interface, the name, status, time position and trigger mode of the program are displayed. In the status, click the play button, or the program insertion can be played by means of keyboard and HC64 trigger.

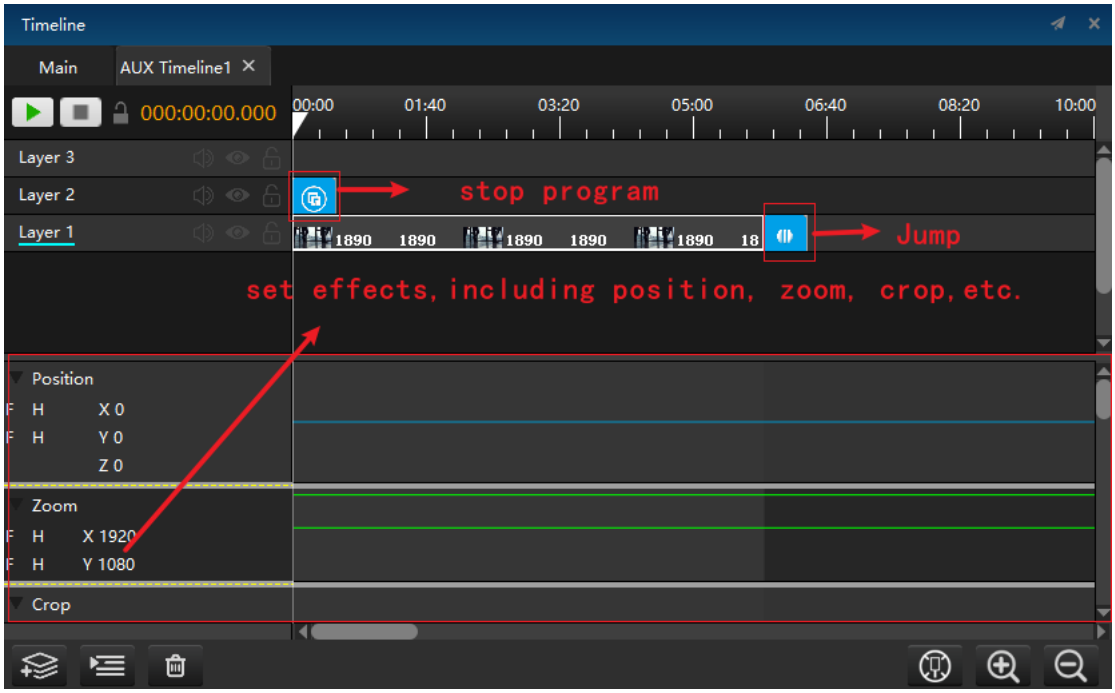
Right click any AUX Timeline to enter the AUX Timeline property page: set its name, time position in the main timeline, time duration, trigger mode, fade-in and fade-out time and MTC equipment.

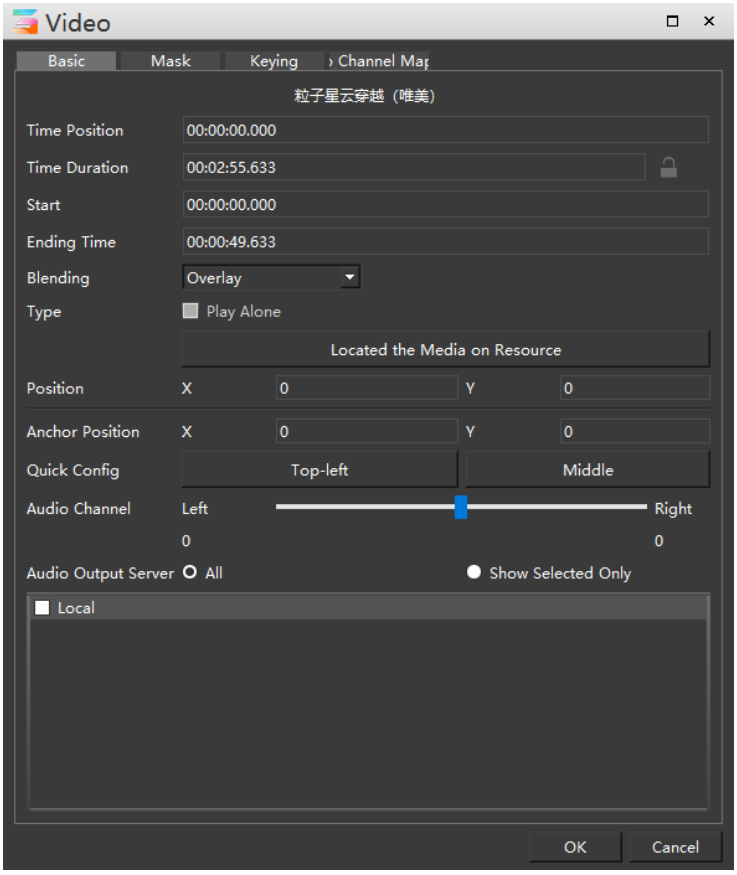


Right click the selected AUX Timeline, select edit or double-click the AUX Timeline, and the AUX Timeline will be displayed at the main timeline position. The editing method of AUX Timeline is the same as that of the main timeline.

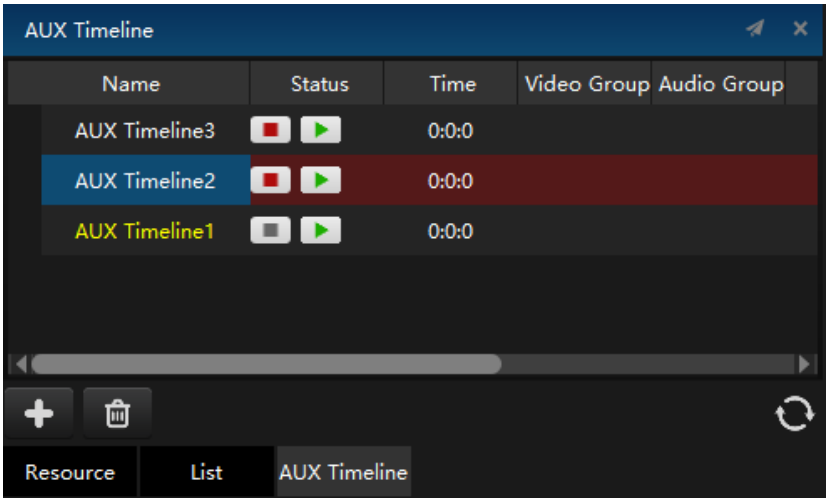


Edit the content of the AUX Timeline: Right click the selected AUX Timeline, select edit or double-click the AUX Timeline, and the timeline of the AUM Timeline will be displayed at the main timeline. The editing method of the AUM Timeline is the same as that of the main timeline. Select the timeline of AUM Timeline, add the display content on the timeline, and set the fade in, fade out, position, zoom, crop and other properties of the material added to the timeline. In addition, you can set the playback mode (Play, pause, jump, etc.):



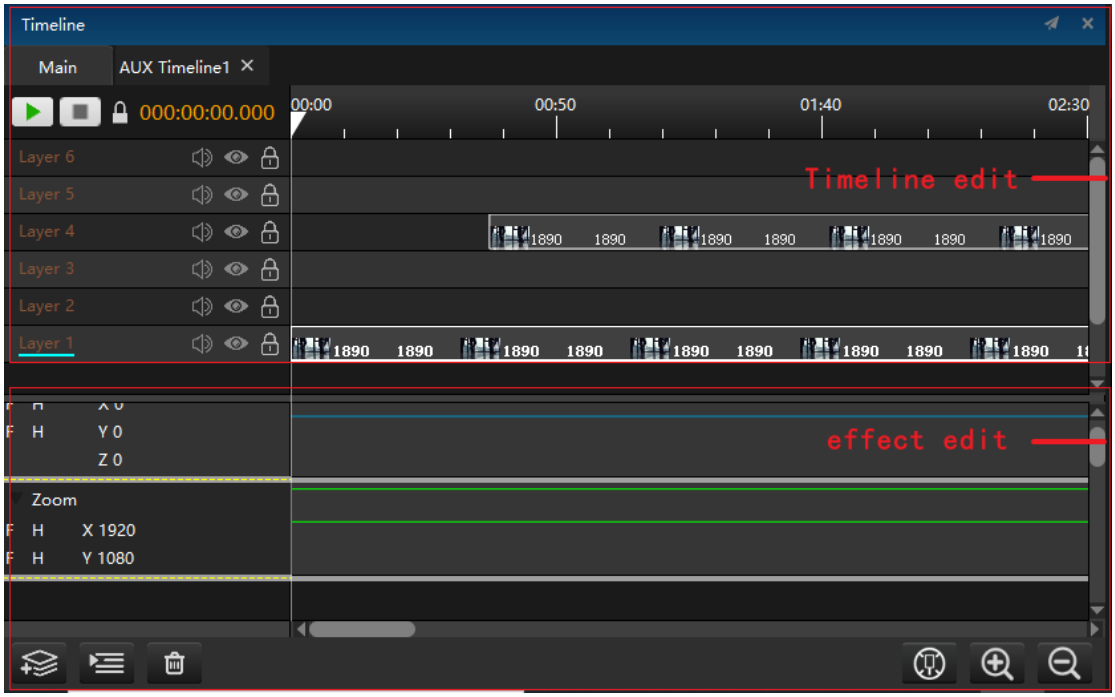


Hirender S3 distinguishes the playing state of the program in the AUX Timeline. The background color of the program that has been played is reddish brown, and the background color of the program that has not been played is black gray.



Timeline Management

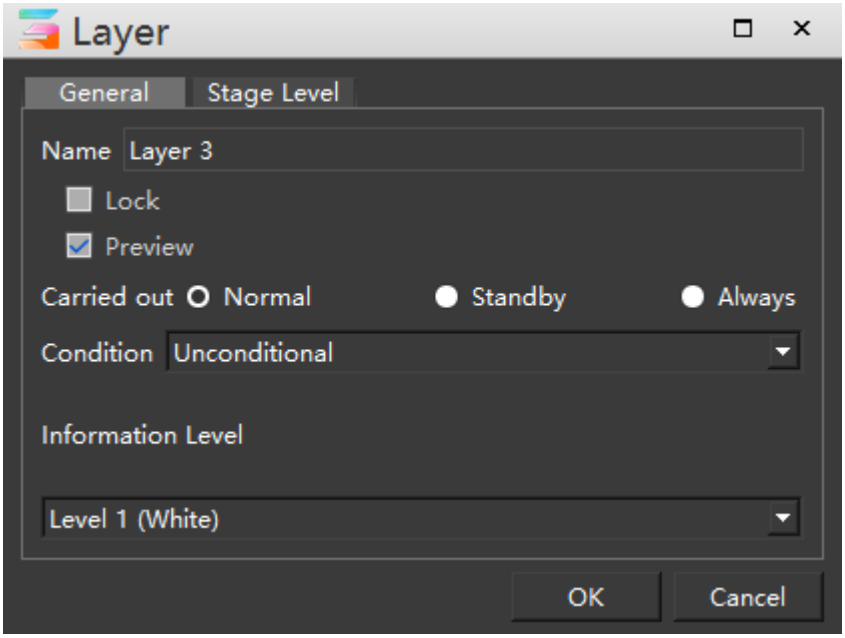
The timeline management interface includes timeline editing and effect editing.



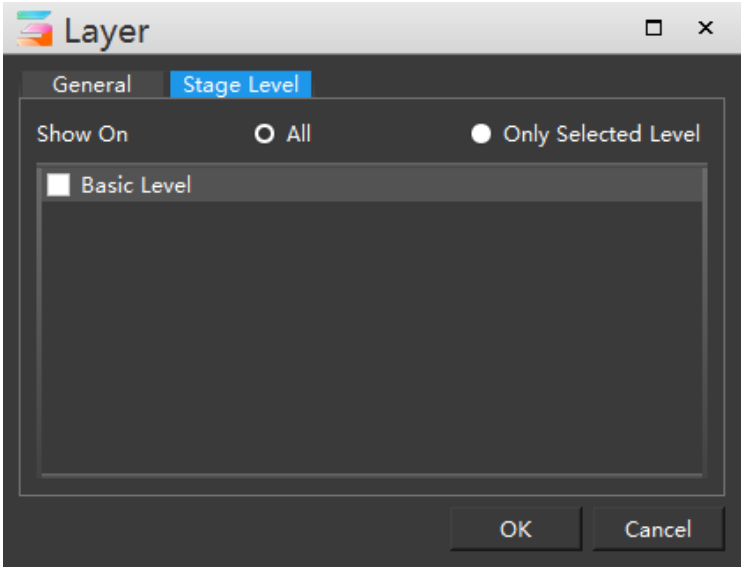
Edit Layer

The images on different layers can be superimposed. At the same time, the upper layer has higher priority than the lower layer, unless the transparency of the layer is adjusted or it is the material with transparent channel.

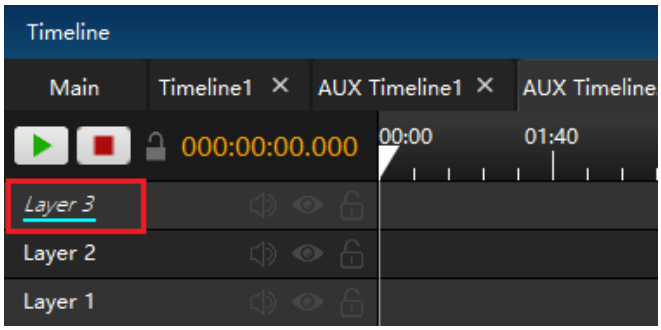
Right click the layer and select properties to enter the properties editing window, which will display the layer properties. In the layer properties window, you can edit the layer name, whether it is locked and whether it can be previewed; Execution mode; Whether conditions and stage level are adopted.



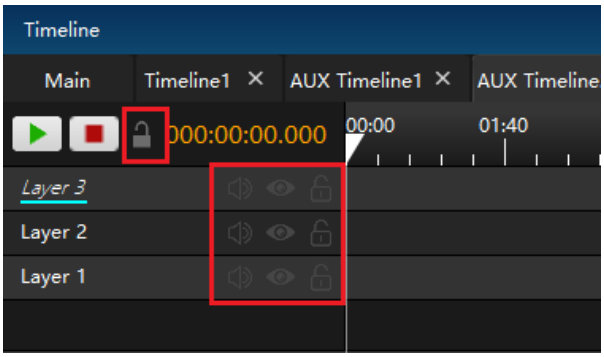
Select whether the layer is displayed on all stages or on the specified stage. The layer is displayed only under the specified stage conditions.



When the condition, standby status or stage level properties of the layer are changed, the layer name is tilted.



Click the layer drop-down button to display whether the layer outputs sound, whether it is visible, and lock the shortcut button. Next to the play pause button above the layer, you can lock all layers through the lock button.



(1)Add/insert/delete Layers

At the bottom left of the timeline management interface, you can quickly add a layer by clicking , insert a layer by clicking , or delete a layer by clicking . If a layer contains media materials, the layer cannot be deleted. The control commands added on the main timeline can be copied and pasted to other timelines.

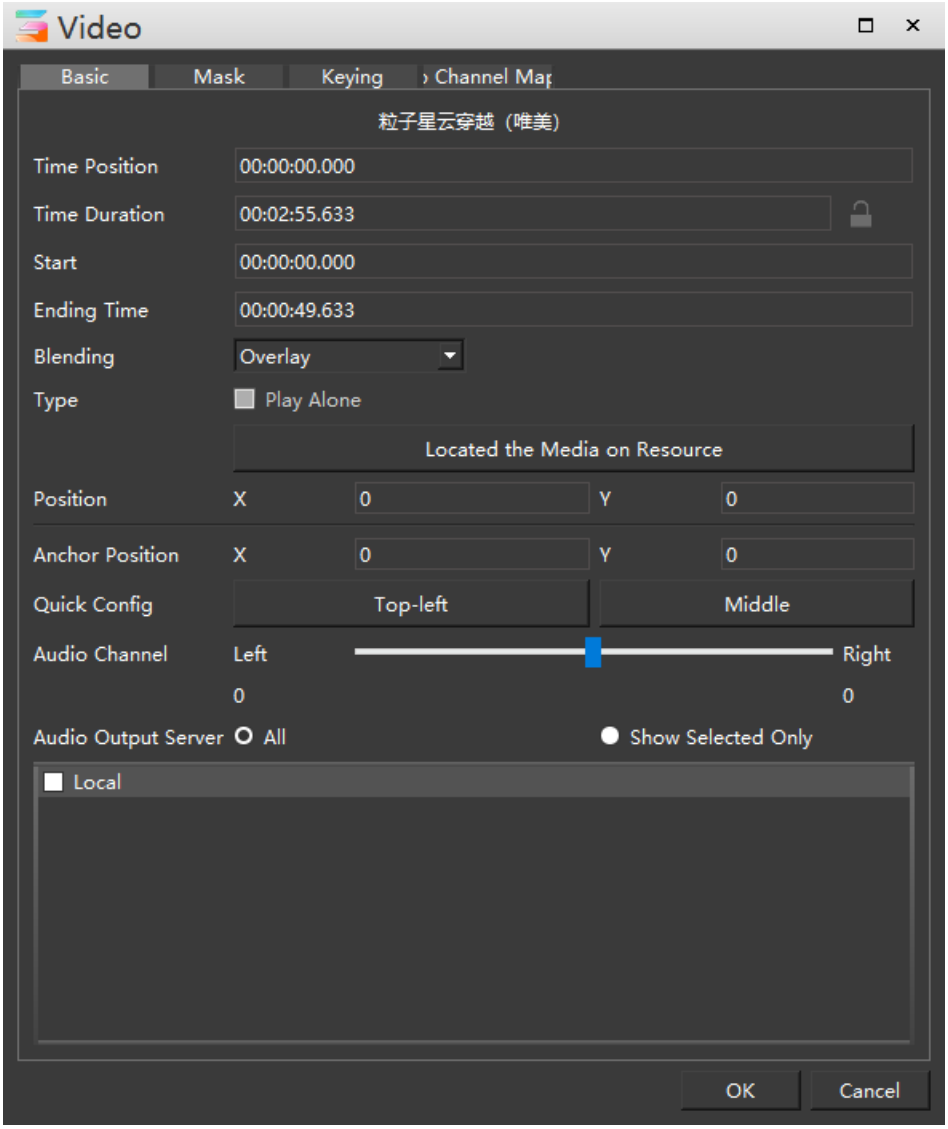
(2)Properties

Material on the timeline: place the mouse on the file in the shape of a single arrow, press and hold the left mouse button, drag left and right, and then the start time of the file can be changed. At this time, the duration of the media file does not change.

Place the mouse over the start or end time of the material, and a two-way arrow will appear. By stretching the material left and right, you can change the start time position and end time of the material; Dragging at the front end will only change the start time of the file and will not change the end time of the file. Dragging at the back end will only change the end time of the file and will not change the start time of the file. When changing the video file, if the duration of the video instruction is shortened, only the first part with the same duration as the instruction will be played

during playback. If the duration of the instruction is increased, the video will be played circularly until the end of the instruction.

Right click the material to enter property editing; Or directly edit the media properties in the properties interface.



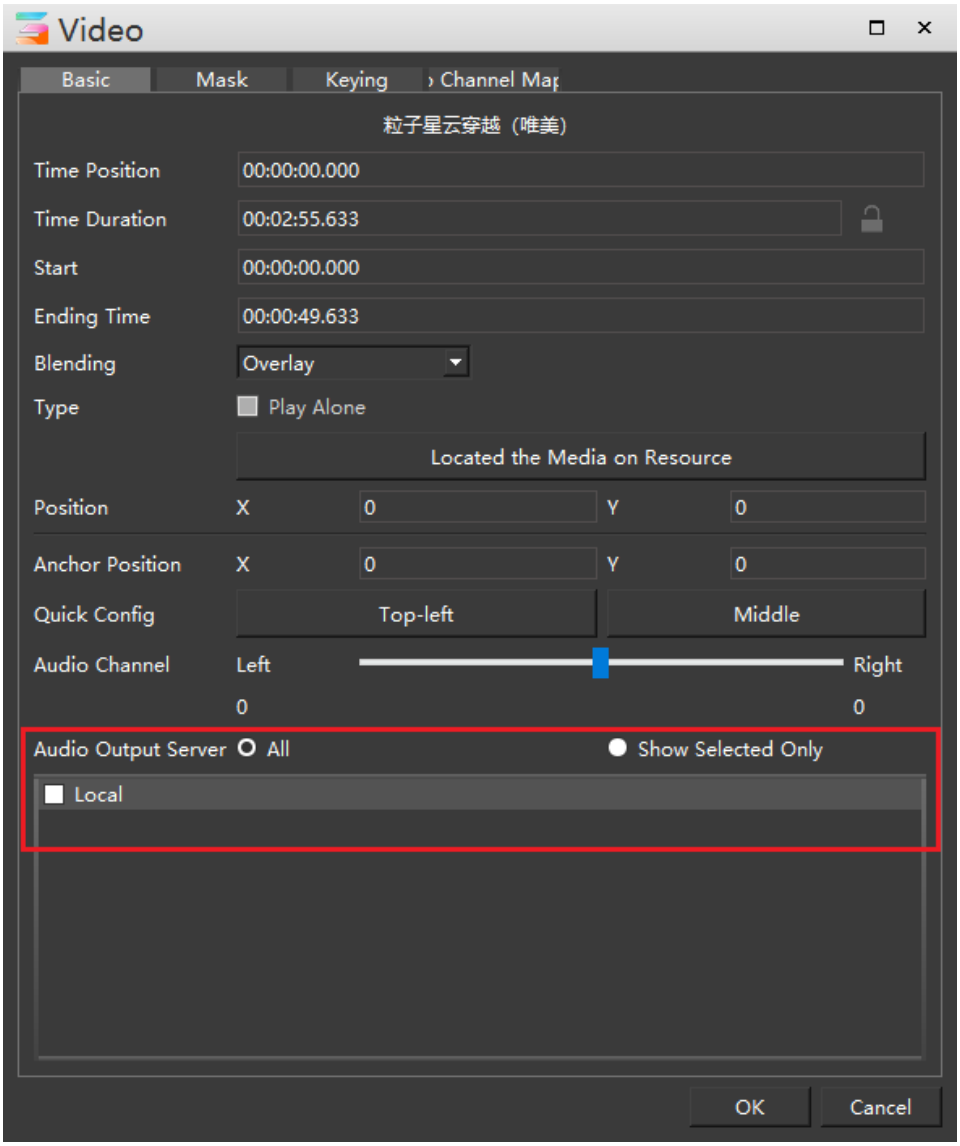
(3)Basic

Here edit the time position and time duration of the material, the time duration, and the time position of the first frame located the media on resource when the material is played, including position, anchor position, audio channel, etc. When the playback mode is Play Alone, it is not controlled by the playback button. In the blending mode, there are overlay and add. In overlay mode, the upper layer overrides the lower layer. In add mode, two layers will be added.

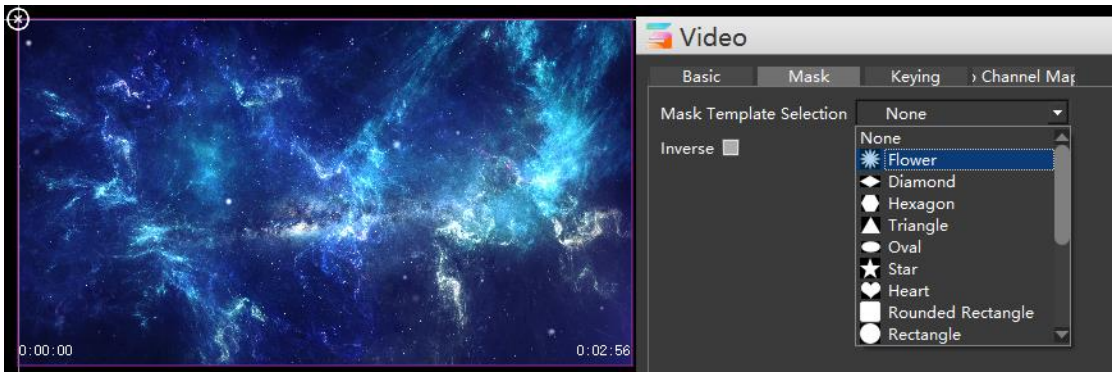
Overlay Mode:

Add mode:

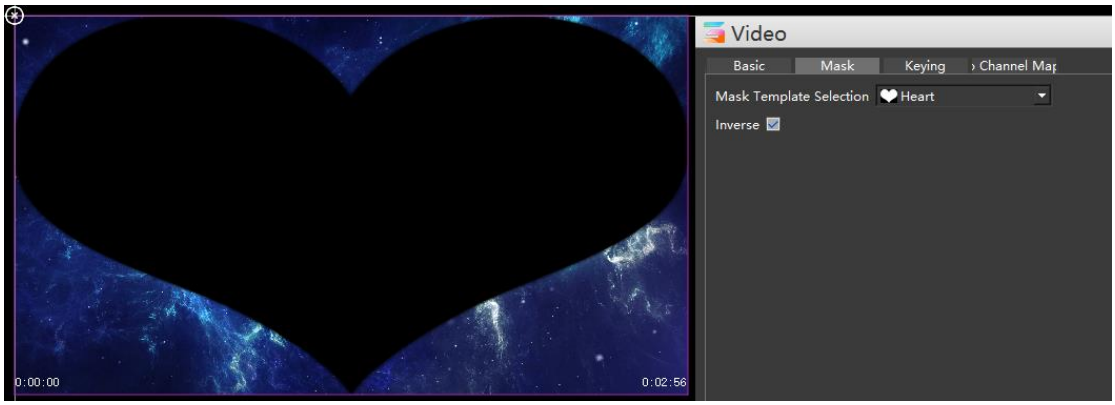
Audio Output Server: Different output devices can be selected.



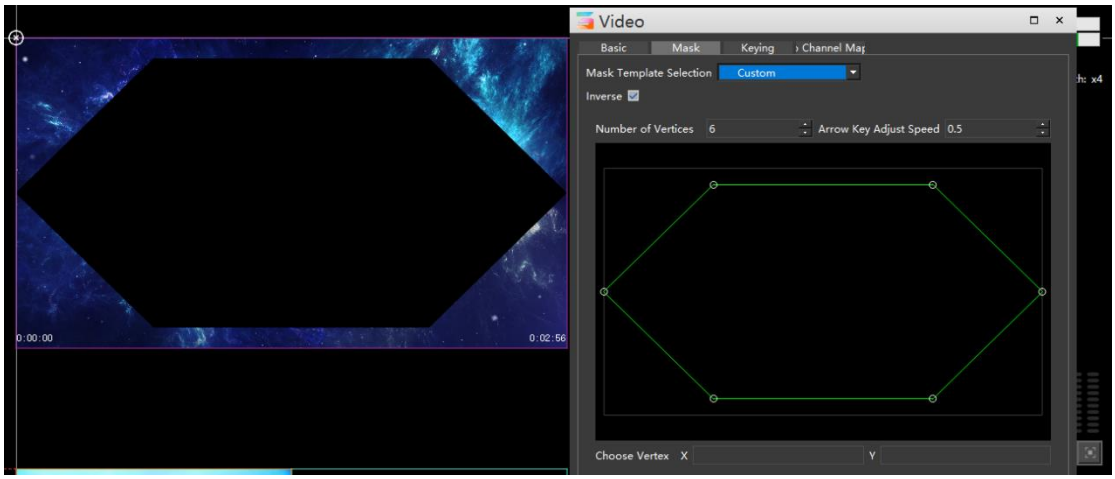
Mask: Nine templates can be selected in the mask properties, which can also be defined by the user. Press the direction key to move the vertex coordinates.



When inverse is checked, the part of the template will be covered and the part outside the template will be displayed:

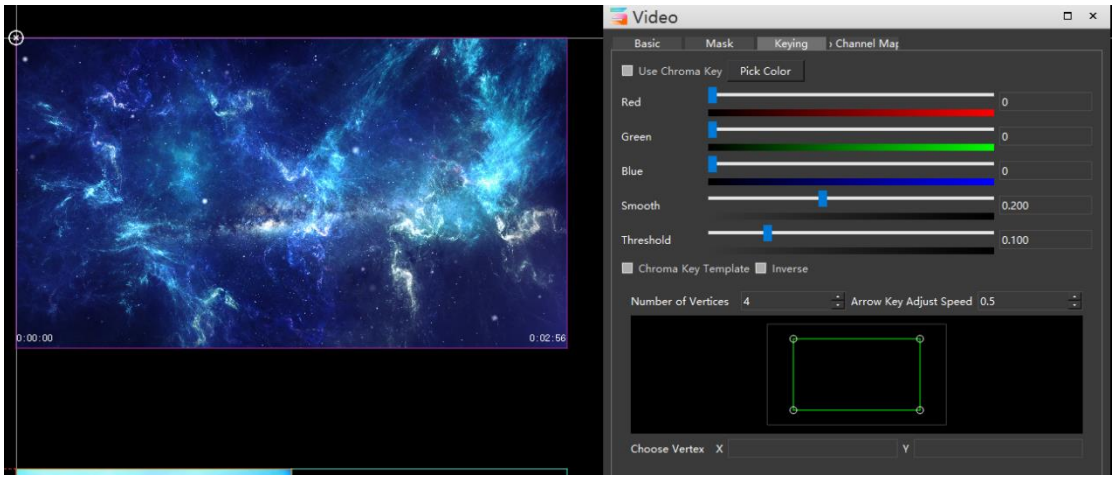


In Custom mode, you can create polygon mask templates by yourself. You can use the direction keys or drag the mouse directly to adjust the position of polygon vertices. You can customize the number of polygon vertices and the direction keys to adjust the speed.

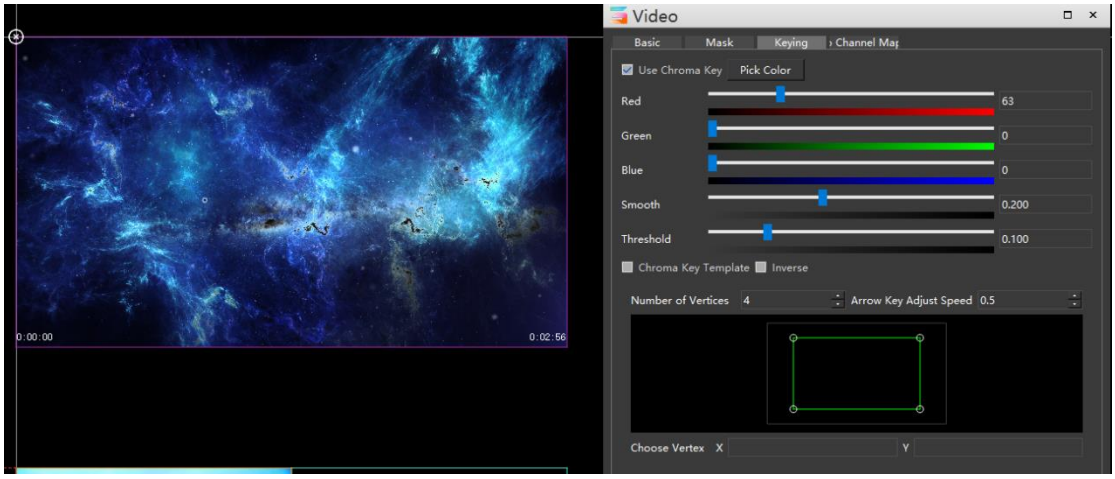


Keying: Users can customize the matting method. The matting is to deduct the specific color and the transparent color.

No use keying:



Some red deducted:

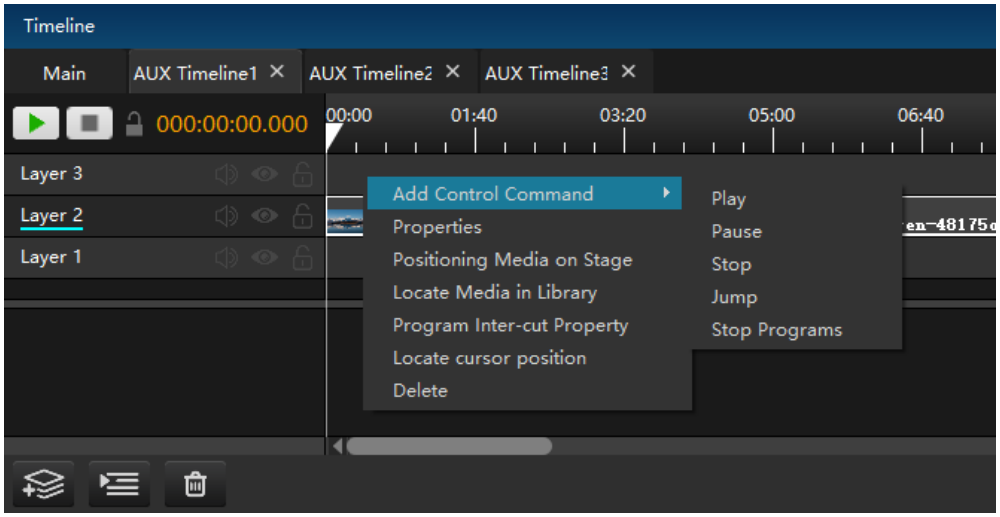


You can also customize the matting template. The operation is the same as the above customized mask template. Copy and paste the edited material to other locations, and the properties and effects of the material will also be copied.

(4)Control Command

Select the time position on the timeline to add control commands: play, pause, stop, jump and stop programs. The stop command is that the time cursor jumps to the starting point of 0 and the program stops. The jump command is to jump to a certain point in time or a certain command position (which can be used for circular playback. For example, set a play command at the start position and a jump to the start command at the end).

After adding a play command at a certain time, all media on all layers at that time are controlled by it. Generally, only one command is added at the same time.



Edit control command name: when using a single letter or a number of 1-9, you can use the corresponding keys on the keyboard to jump the command. Pause after jumping. If you want to continue playing, you must click the start or space again (the same numbers or subtitles used in program management and AUX timeline do not interfere, but you need to select the corresponding window when using); Time: the position of the playback command on the timeline.

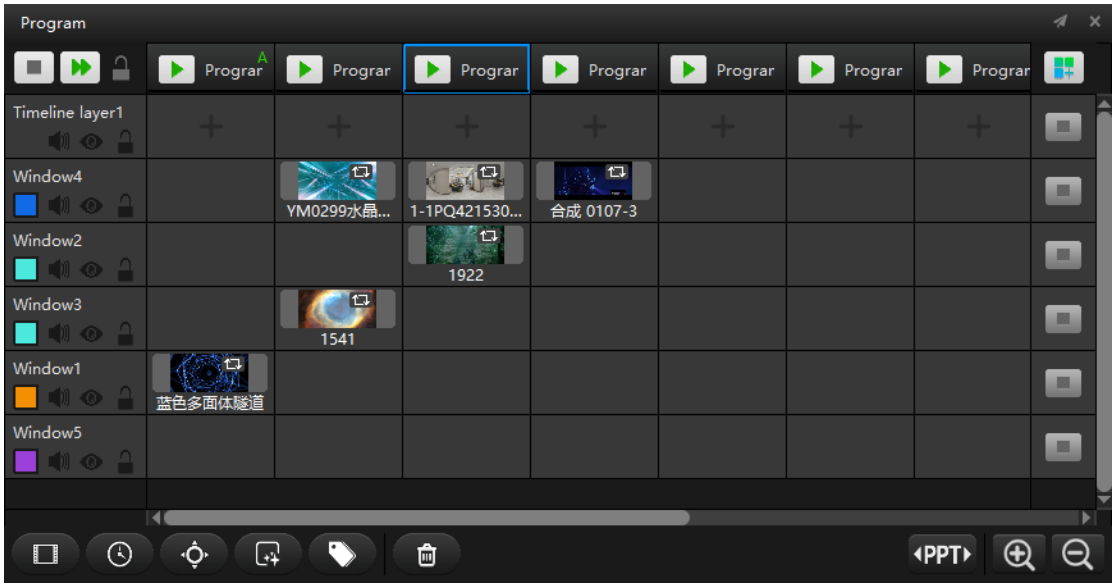
(5)Effects

Same as Timeline.

Program Management

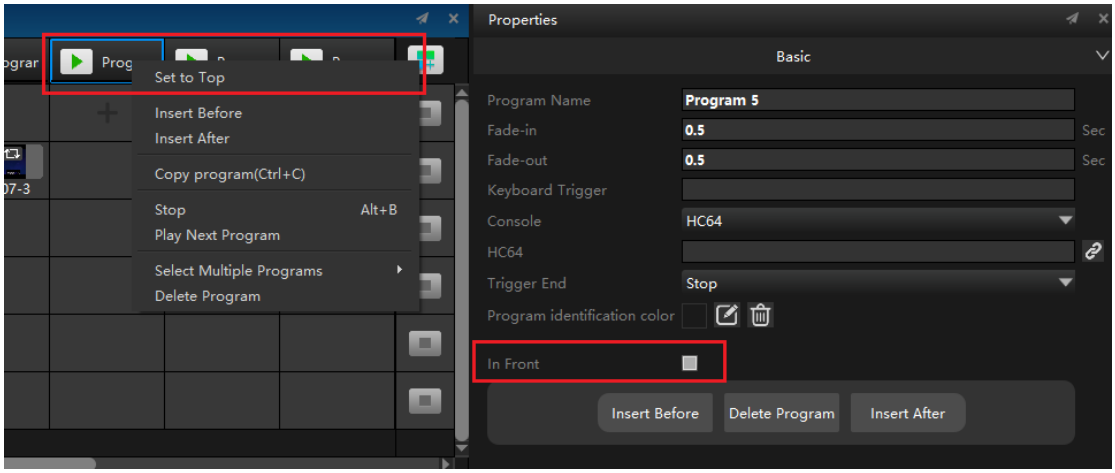
Program

In program management, you can add programs, windows, timelines, output and effects layers to arrange programs.

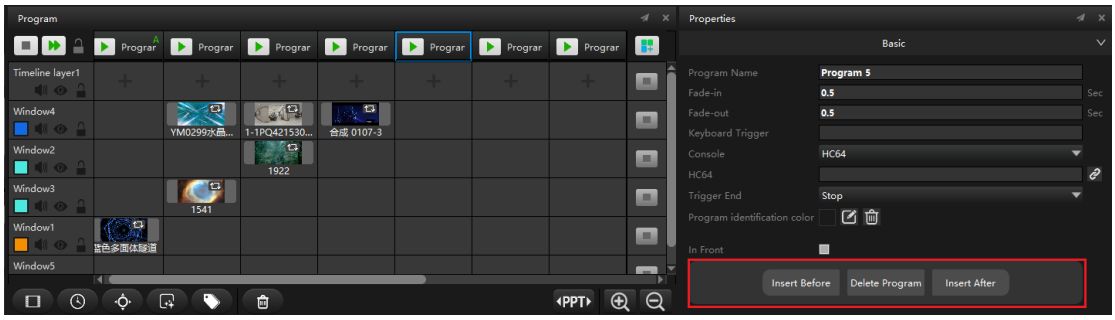


(1)**Add/delete Program**

In the upper right corner of program management, you can quickly add programs by clicking . Select a program, right-click and select Insert, then choose to insert a program before / after the program. Select program top to fix the selected group of programs on the leftmost side of the program management window.



Select a program, you can edit it in the program property, and you can also add / insert or delete layers here.



Keyboard trigger: a total of 36 keys with 26 English letters and numbers 0-9 on the keyboard can be bound to the program as shortcut keys (one key can only be bound to one program), and the program playback can be triggered through the keyboard.

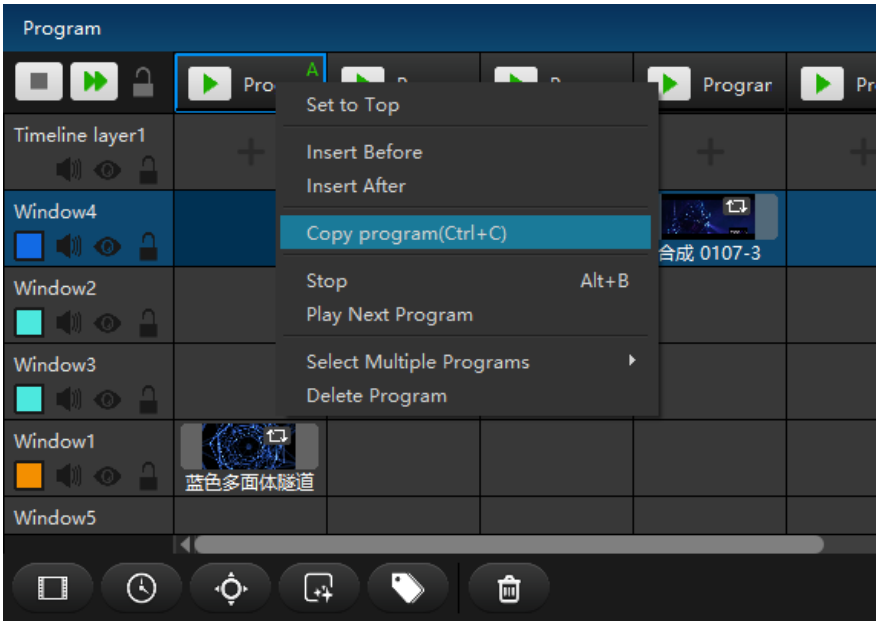
HC64: bind the A \ B \ C \ D \ E \ F push rod, key and program of HC64 to trigger program playback.

Trigger control: add HC64, input, MIDI controller, DMX512 and sensor input. The added input control names cannot be the same and the channels cannot be the same. In the trigger column, fill in the trigger conditions, bind them to the program and trigger the program playback.

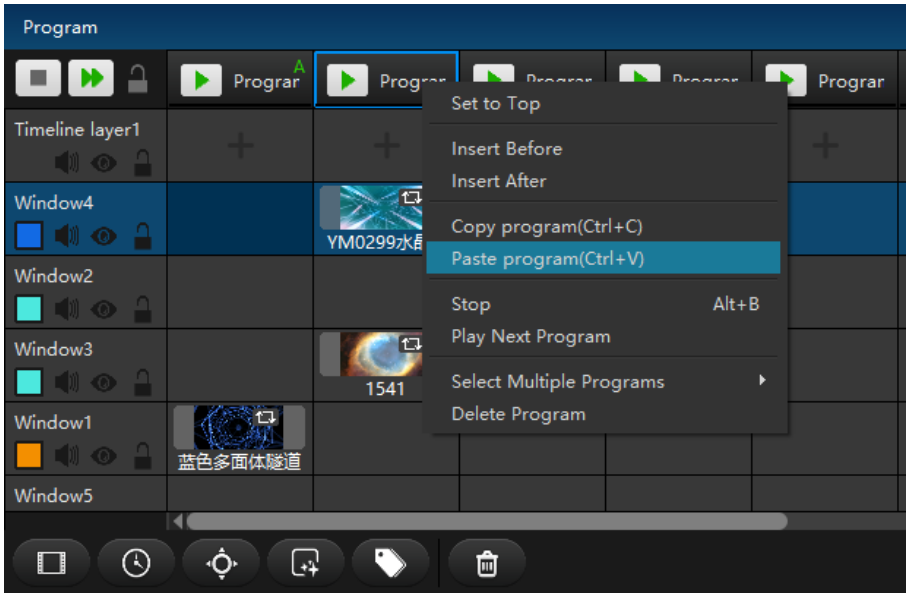
(2)**Copy program**

Use the shortcut keys Ctrl + C and Ctrl + V to copy the program. Select the program to be copied, press Ctrl + C to copy the program, and press Ctrl + V to paste the copied program to other programs. All materials and properties in this program will be copied to other programs, and the original materials and properties in other programs will be removed.

As shown in the figure, select program 1 to copy (press and hold Ctrl key to select multiple program groups):



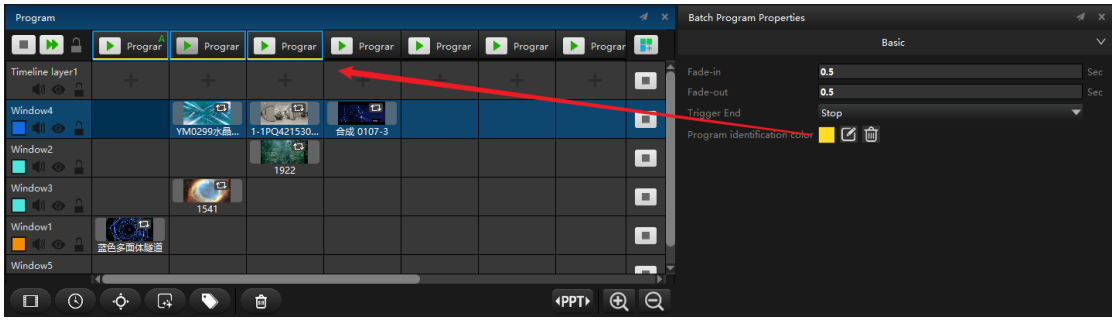
Select program 2 to paste, the material and properties of program 1 will be copied to program 2, and the original material and properties of program 2 will be removed:



You can also right-click the program title bar and select Copy Program to achieve the same effect.

(3)**Program identification color**

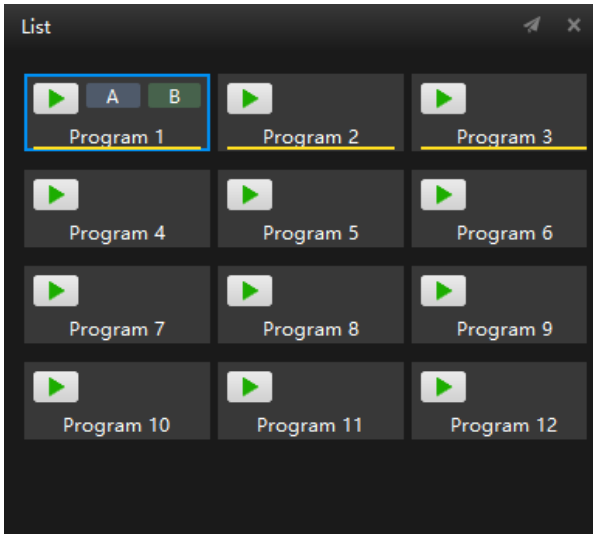
The program identification color function can set different color identification for each program. Select the program to set the color identification, and set the program color identification property in the program properties window. After setting, the corresponding color identification line will appear under the program name.



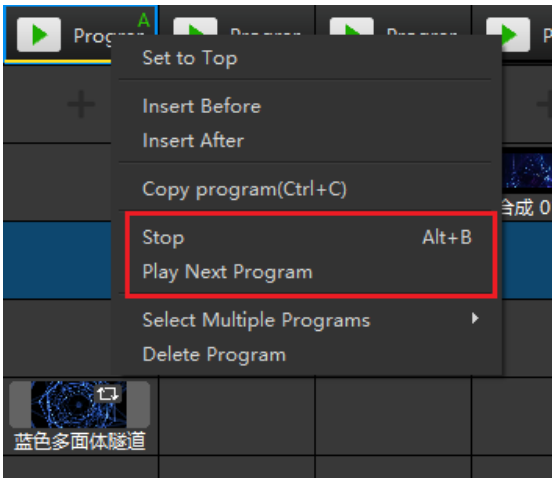
(4)**Program playback mode**

click the play button in front of the program name, the stop program button above the layer and the play next program button:

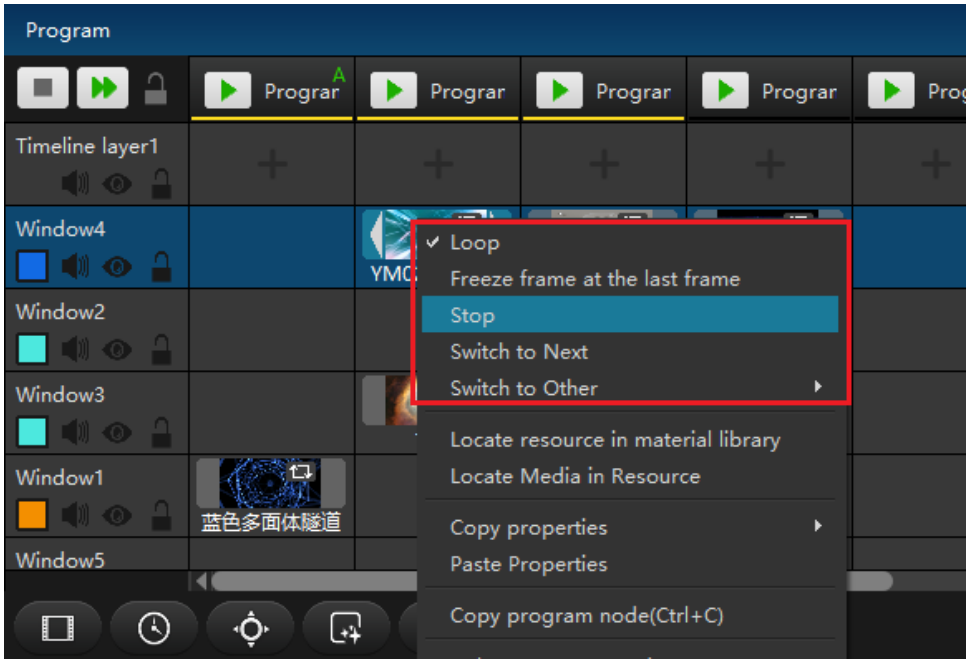
Click the play button in the list to play programs:



Right click the program and select stop and play next program:

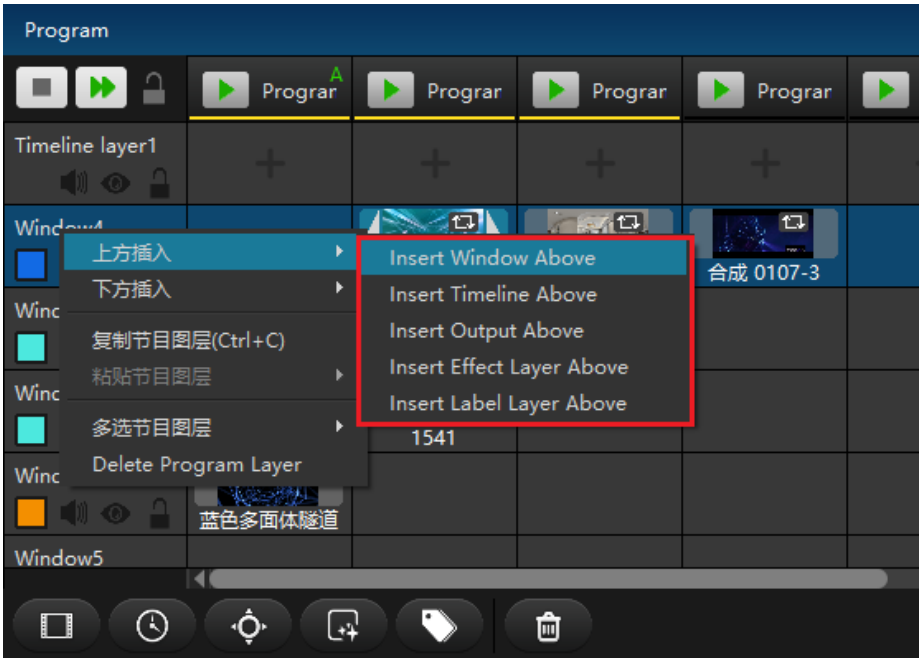


Select and right-click the program in the program management window, and switch to next program or other programs:

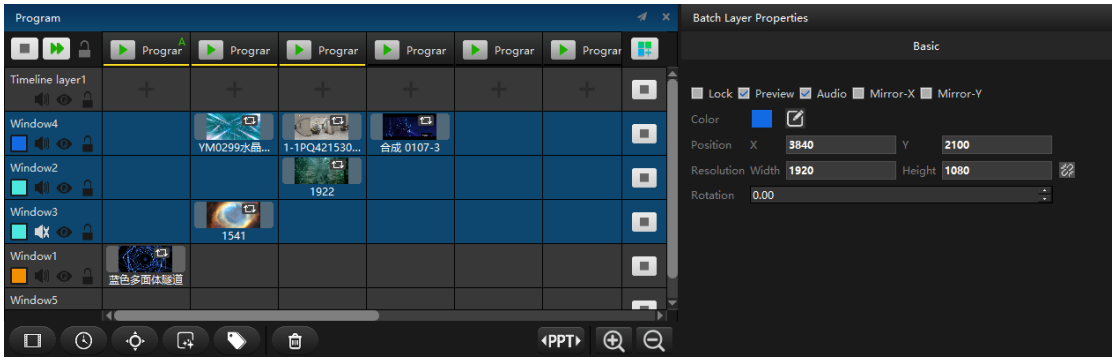


(5)**Program Layer**

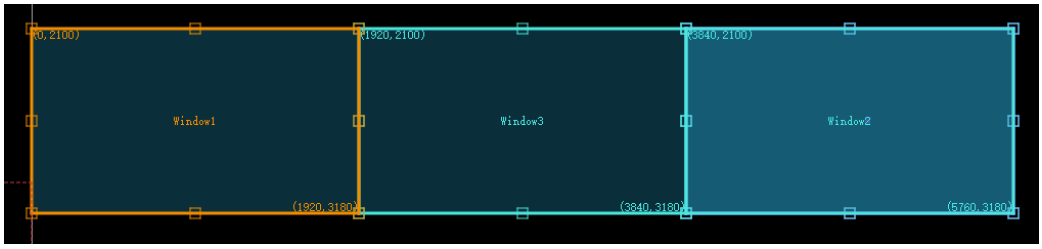
Select any window and right-click to select Insert window layer and delete program layer. You can also click the effects button under program management to add window / timeline / output / effects / program label layer.



Press Ctrl and click the left mouse button to select multiple program layers. You can edit the batch program layer properties in the property box on the right:



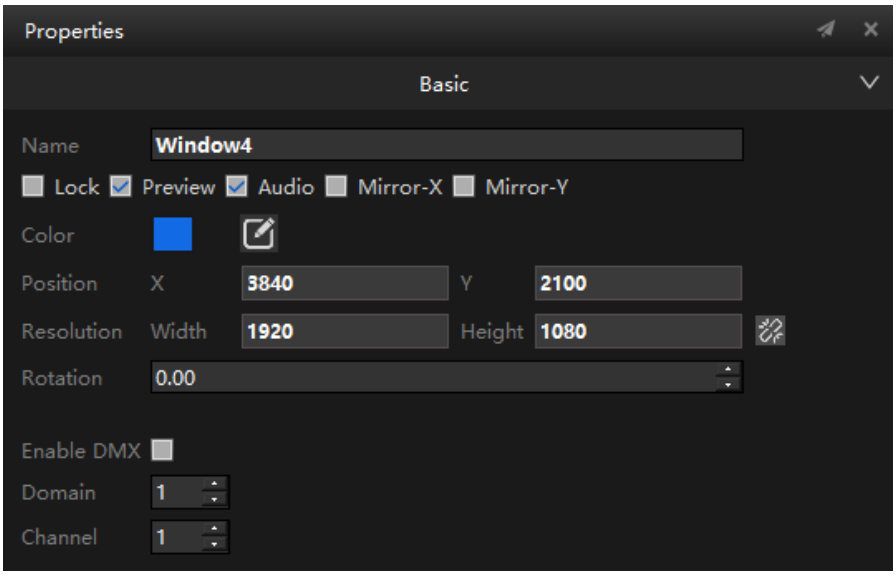
In program management, select multiple program layers to move up and down and delete multiple layers. In the stage, you can drag multiple windows to move as a whole:



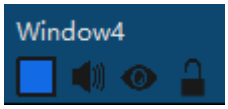
Window Layer Management

(1)Properties:

Click and select the window needed modified in the program management box to modify the window name, display color, position and size, rotation angle and other properties in the window properties box on the right.



You can also click the shortcut button in the window layer to set the window color, whether to output sound, whether to view, and lock the window.

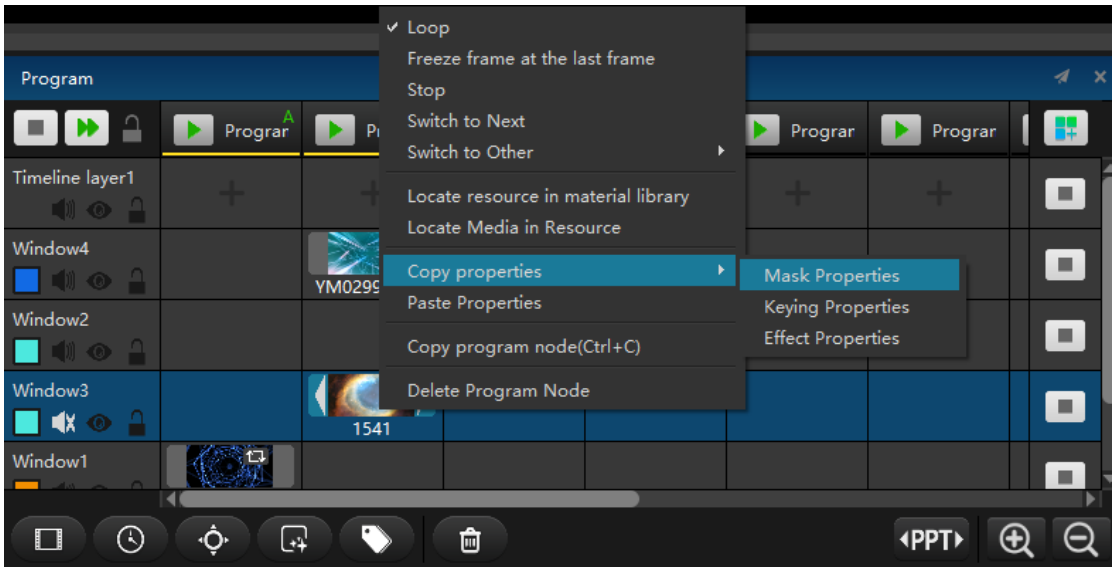


There is also a relationship of similar layers between window layers. If the window layer is above, it has higher priority.

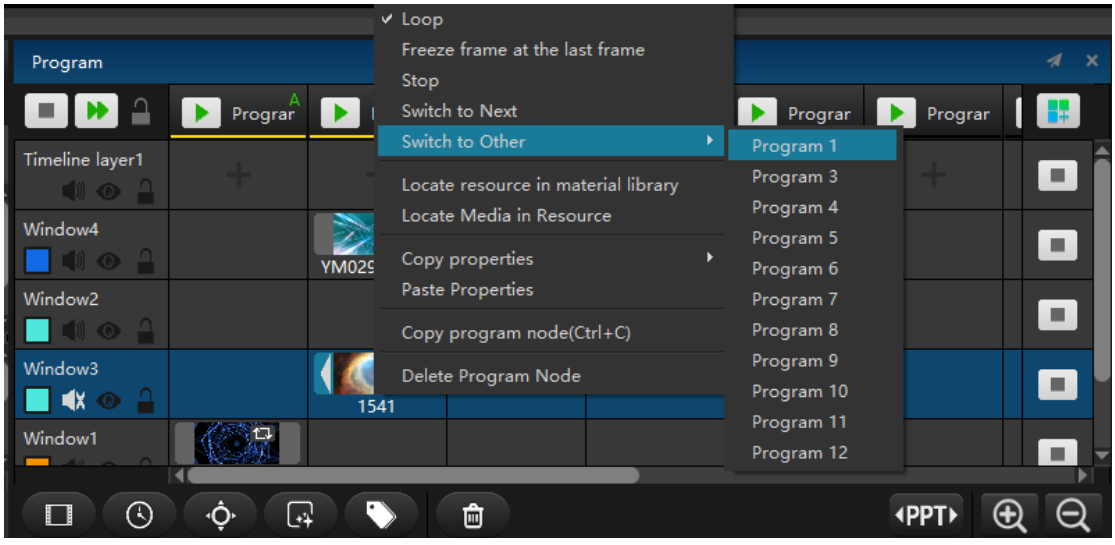
(2)The Program in Window Layer

Program materials can be copied by pressing Ctrl + C and pasted by pressing Ctrl + V. You can also press Alt + left key to select the program materials and drag it to the position you want to paste to quickly complete the copy of them.

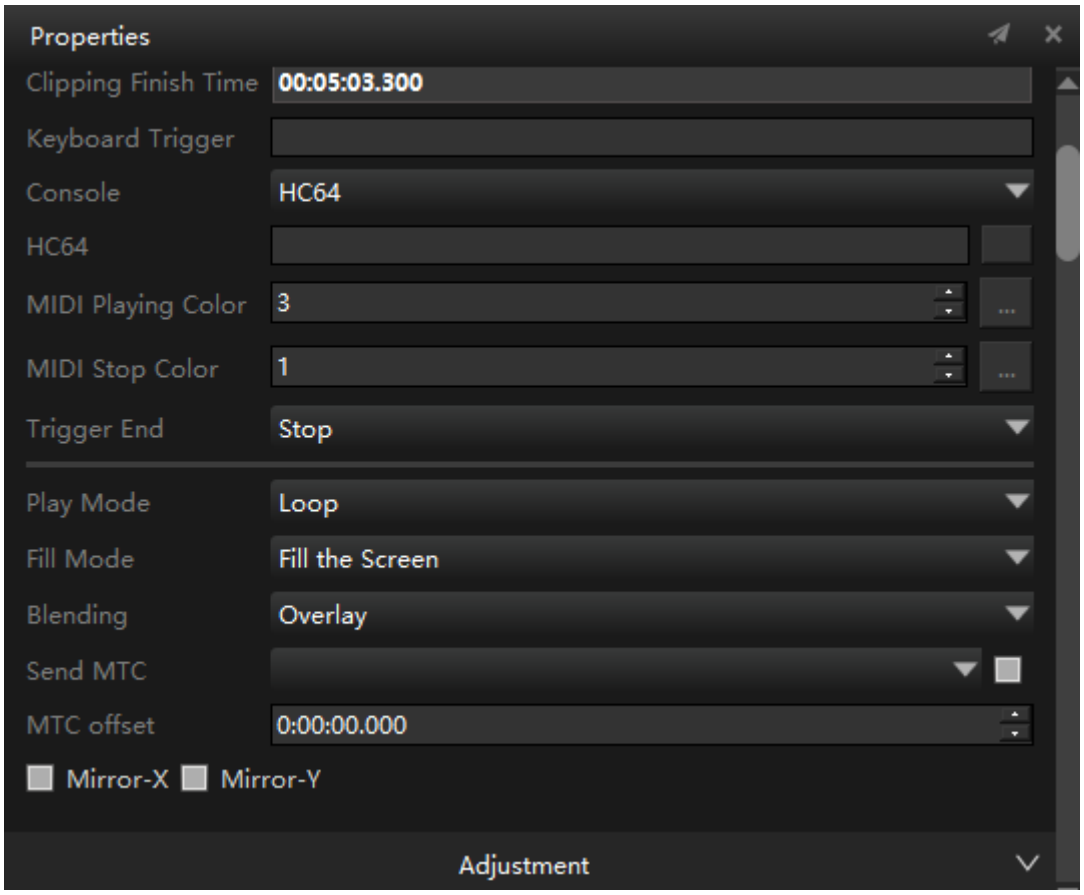
Select a program materials and right-click to view the resource location in material library and folder in PC, set the program mode of the program materials, or copy the matting, masking and effect properties of the program node and paste them on other program materials.



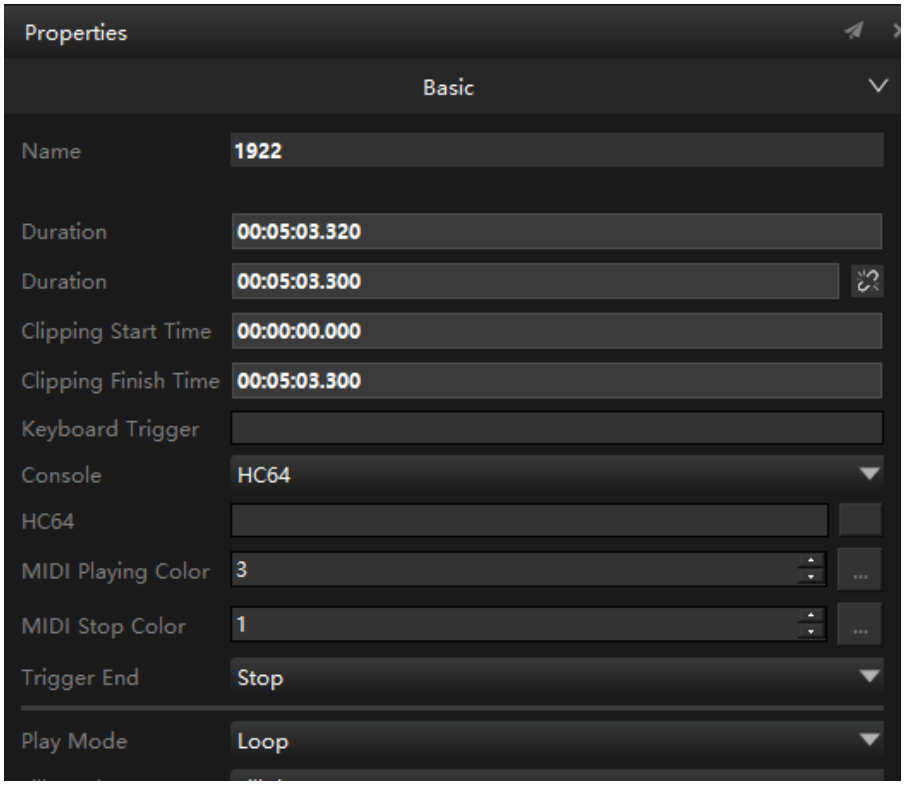
By choosing to switch to next or other, the program can jump to next program node or other program node to achieve program jumping effect, the auto-switch between programs.



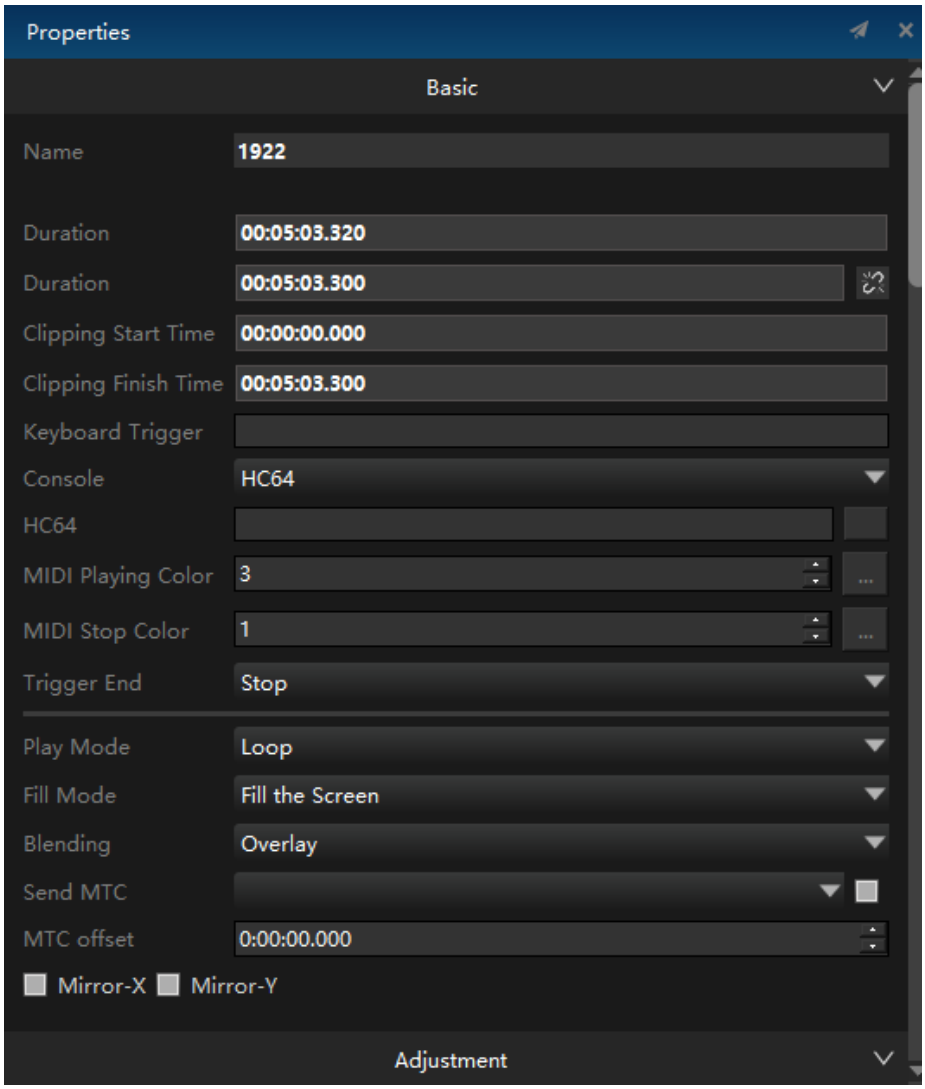
Program auto-switch can be set in the play mode in program properties as well:



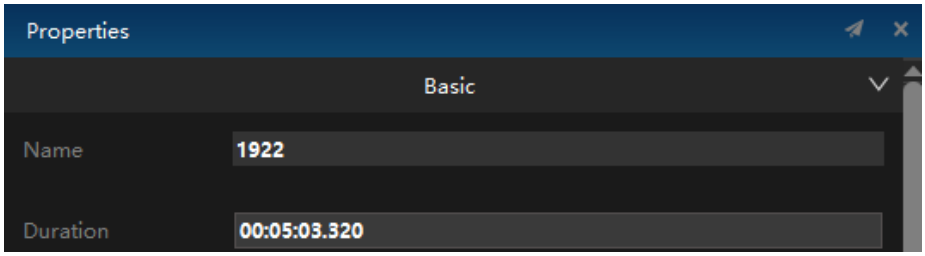
After selecting a program material, you can set each property in detail in the program node properties in the lower right corner:



1)Basic

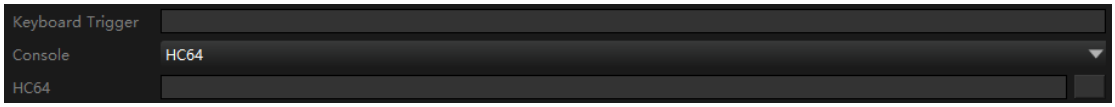


Name and duration cannot be modified:



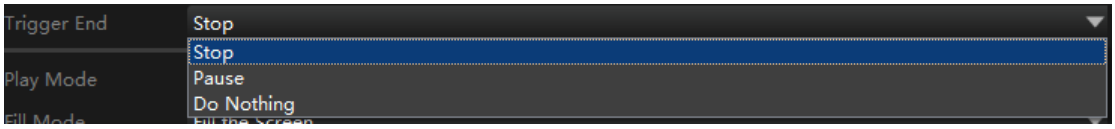
Setting the duration can intercept a section of the media for playback. The start time can set when the program starts broadcasting from the media resource, and the end time can set when the program ends broadcasting to the resource:

Keyboard trigger can be bound with keyboard shortcut keys to control the playback and stop of program node. The console can select HC64 or trigger, which needs to be bound with the corresponding trigger:

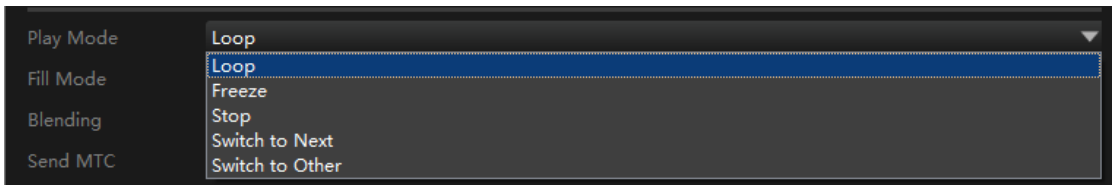


MIDI playing / stop color: you can set the color of MIDI console button when the program is played or stopped:

Trigger end action, set the action generated when the trigger starts, and do not affect the trigger effect of the keyboard:



Play mode: set the action when the program node is finished playing. When you choose to jump to other programs, you need to select the jump object:



The fill mode sets the way media materials fill the window. The Fill the Screen mode fills the screen space as much as possible without retaining the original proportion of materials:

Ratio Fill fills the window while retaining the original scale of the material:

2)**Blending:** Same as the blending in timeline management property.

3)**Mirror:**

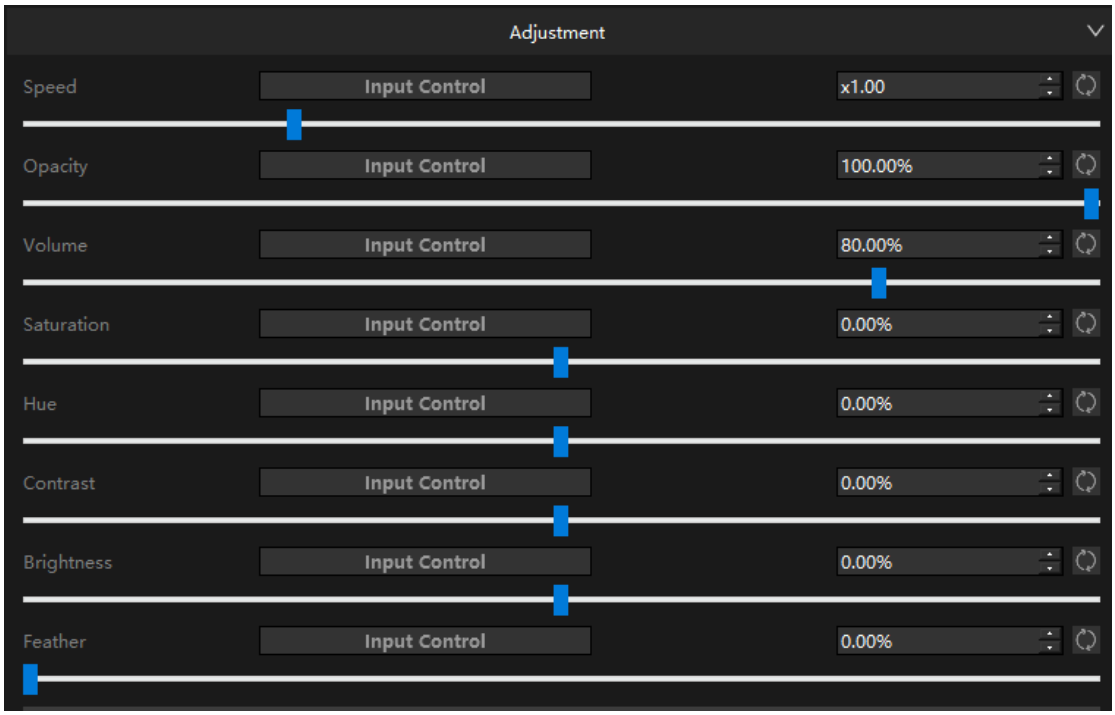
Mirror-X:

Mirror-Y:

4)Adjustment:

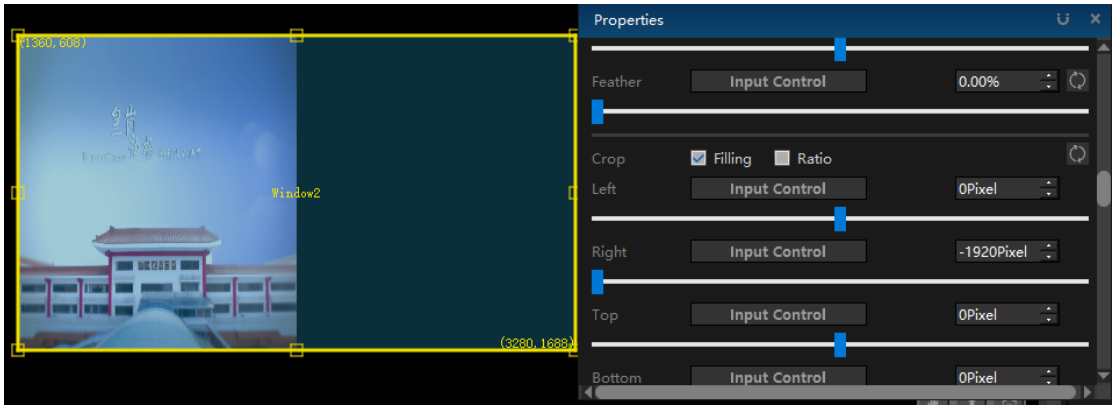
Edit speed, opacity, volume, saturation, hue, contrast, brightness, feather, etc.

When adjusting the volume of media, you need to control the speed to 1, no sound output otherwise.



5)Crop:

When the filling option is checked, cropping will stretch the material in one or more directions while retaining the original material picture, and the original material scale will change:



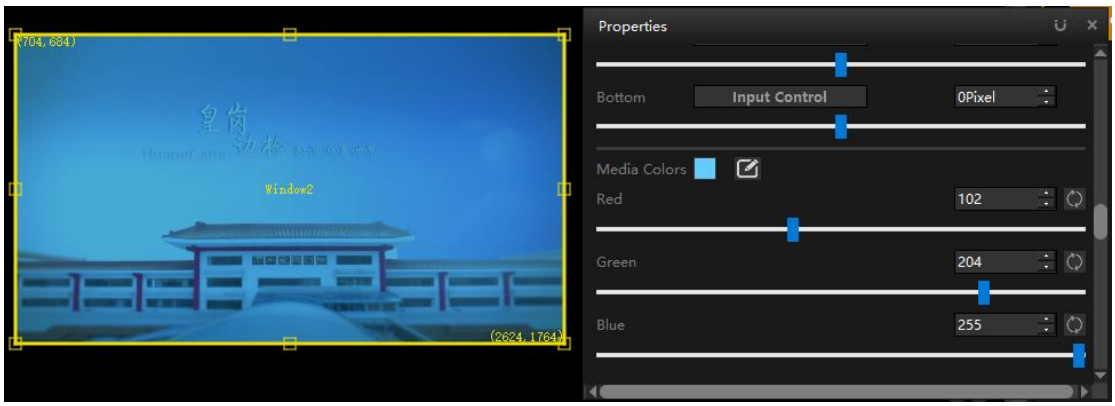
When the ratio option is checked, cropping will cut part of the screen while keeping the proportion of the original material unchanged:

6)Media Colors:

Setting the media color can change the overall tone of the media material. The following figure shows the effect comparison of pictures on the stage after setting the media color.

Original materials:

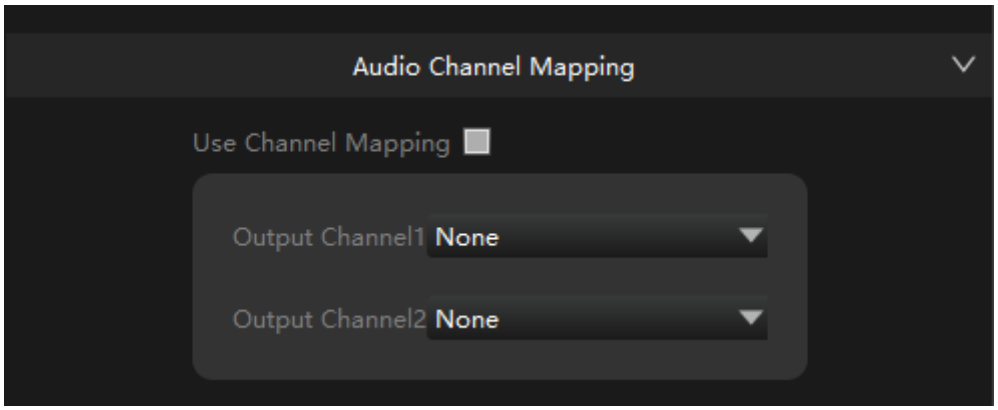
Set media colors “#66ccff”:



7)**Mask/keying:** Same as timeline management.

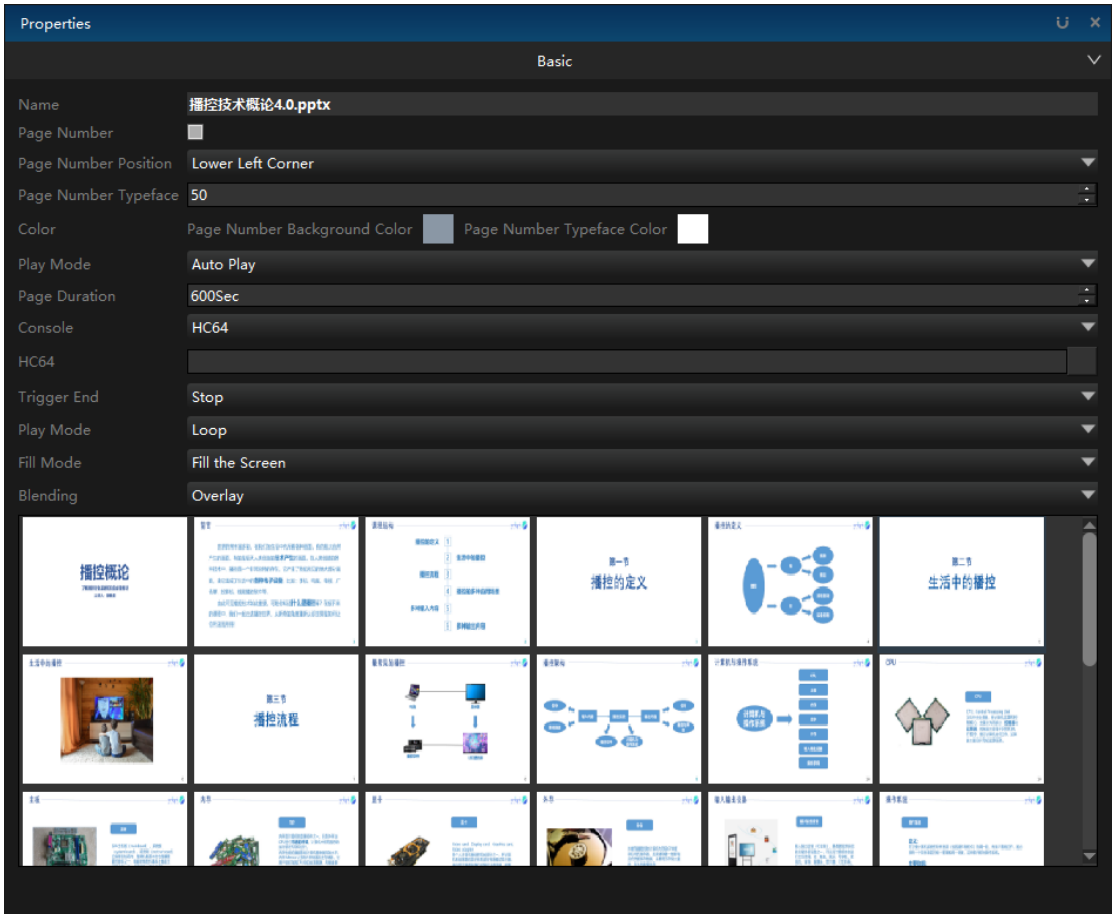
8)Audio Channel Mapping:

In file settings, after setting the channel, set the channel in the program node properties. The following figure shows the output channel selection displayed in the program node after selecting two channels:

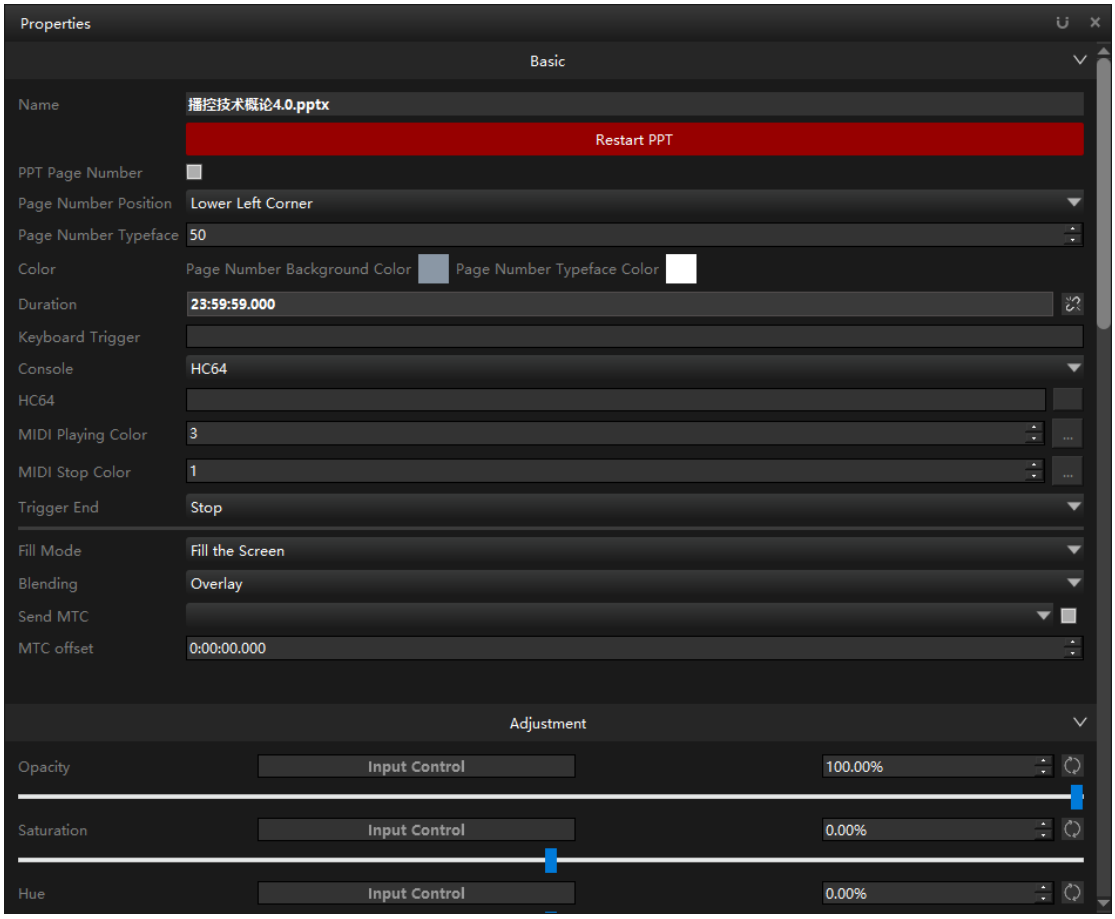


9)PPT properties:

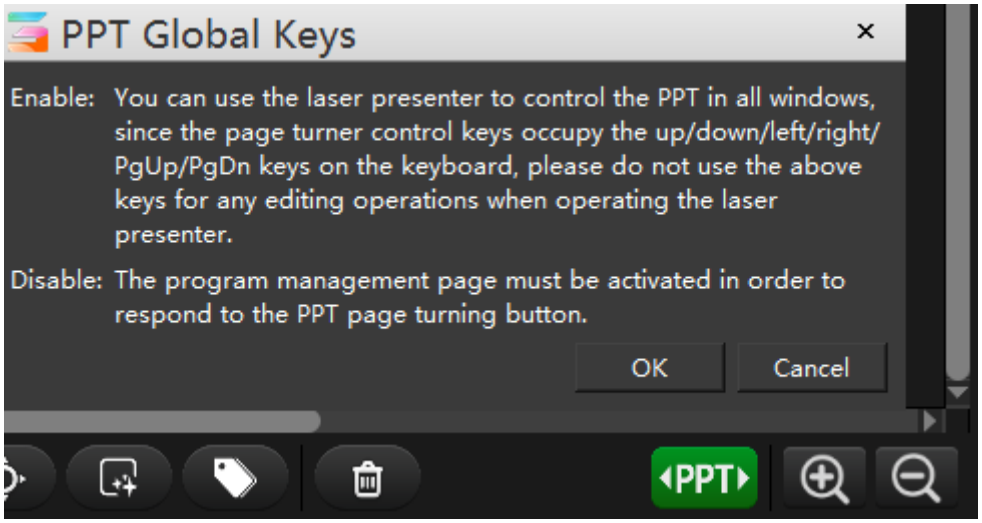
PPT can only be used in program management. In the PPT program node properties box in image mode, you can edit the playback mode of PPT: auto play and manual play. During auto play, set the single page playback duration in PPT playback. At the bottom of the property box, you can see all pages of the PPT. Double click any page and play the program to realize PPT playing from any page.



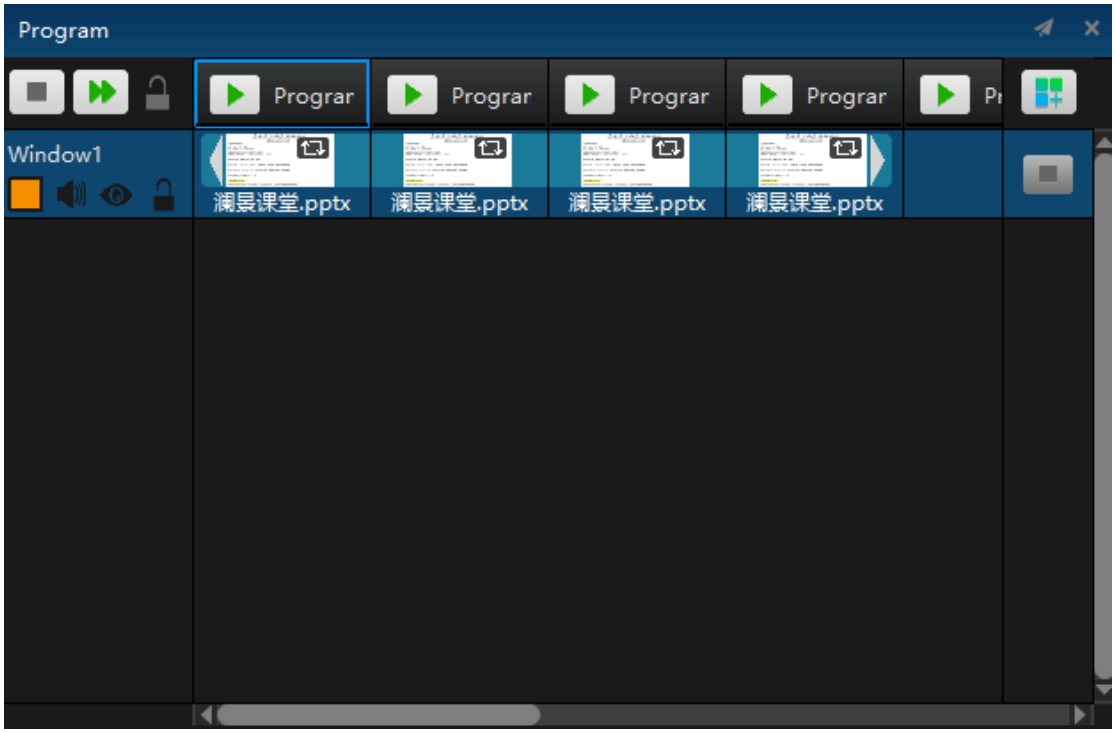
The properties of PPT in animation mode are basically the same as the program materials of media resources.



10)**PPT Global Keys:** Click the PPT button in lower right, and a pop-up window appear.



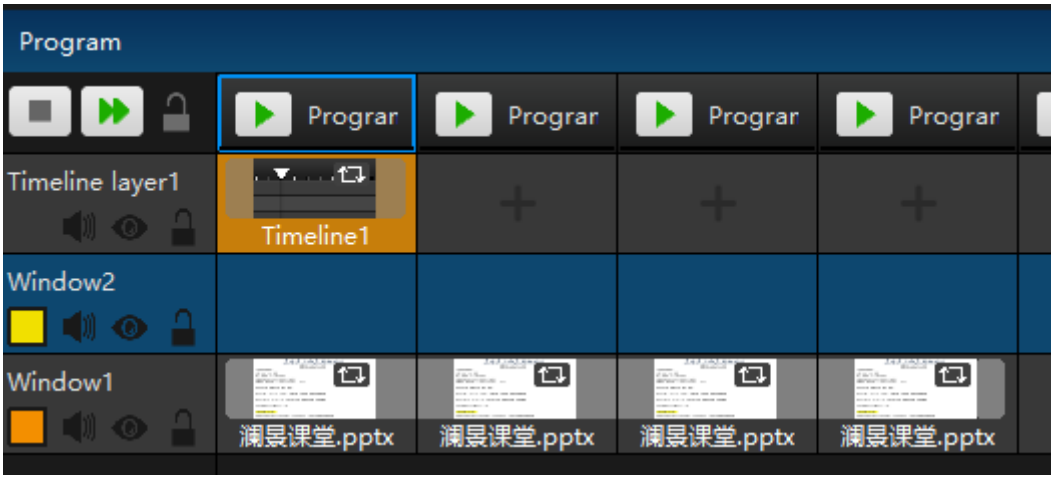
(3)Across node: In the program window, add material. Point the mouse to the edge of the material, and a two-way arrow will appear. Drag the arrow to span the material to the next program. When the program is played, the three materials are played at the same time. This node also belongs to another node, called a cross node. Copy the cross node to other programs, the cross node does not exist, only one program node.



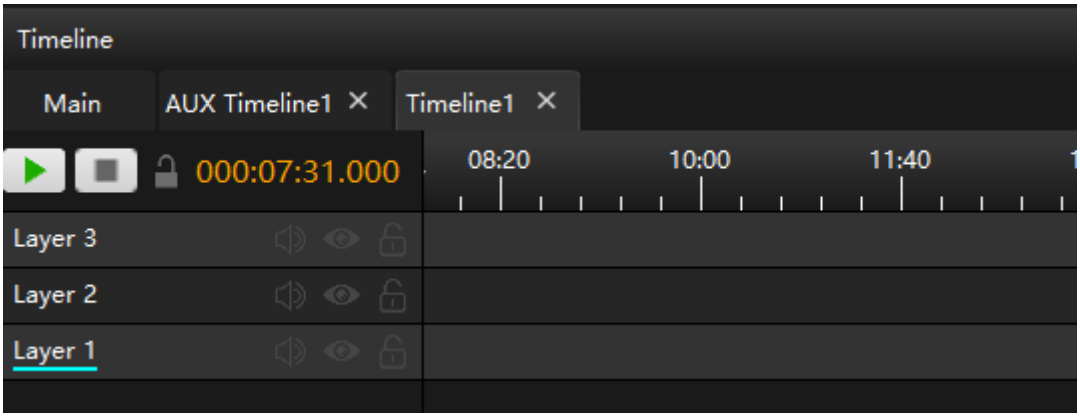
Timeline

(1)Timeline Layer

Click the Add button at the program node to add a timeline for the program. The added timeline can be edited in timeline management. When adding a multi-layer timeline, the timeline layer above has higher priority.

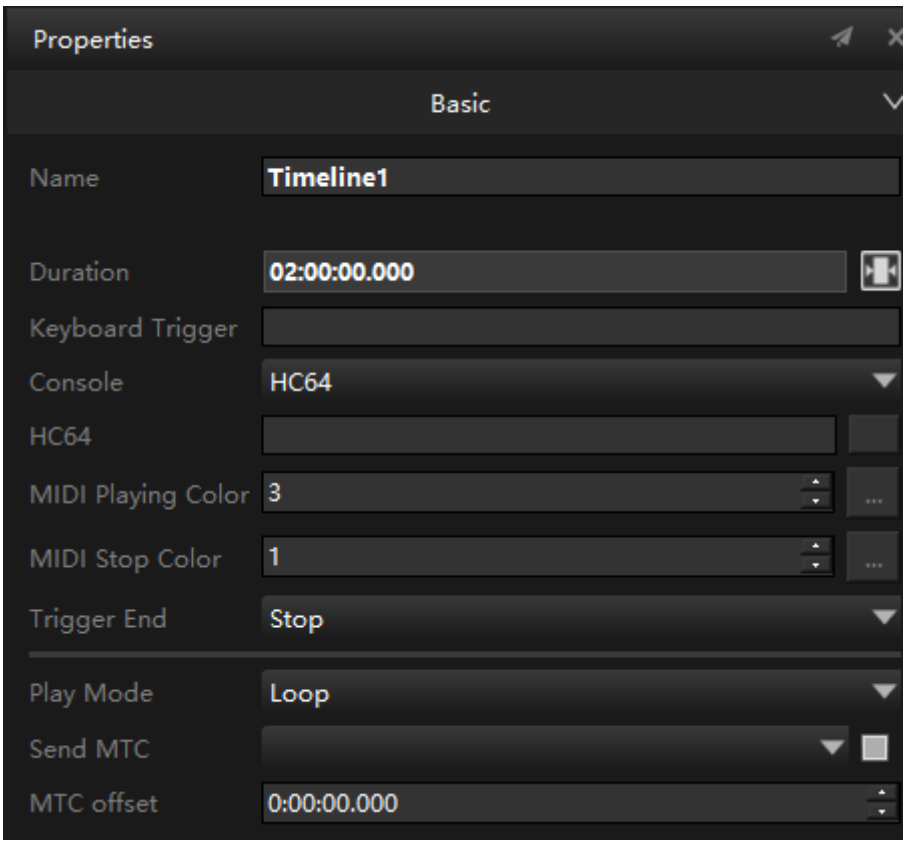


Edit timeline in timeline management:

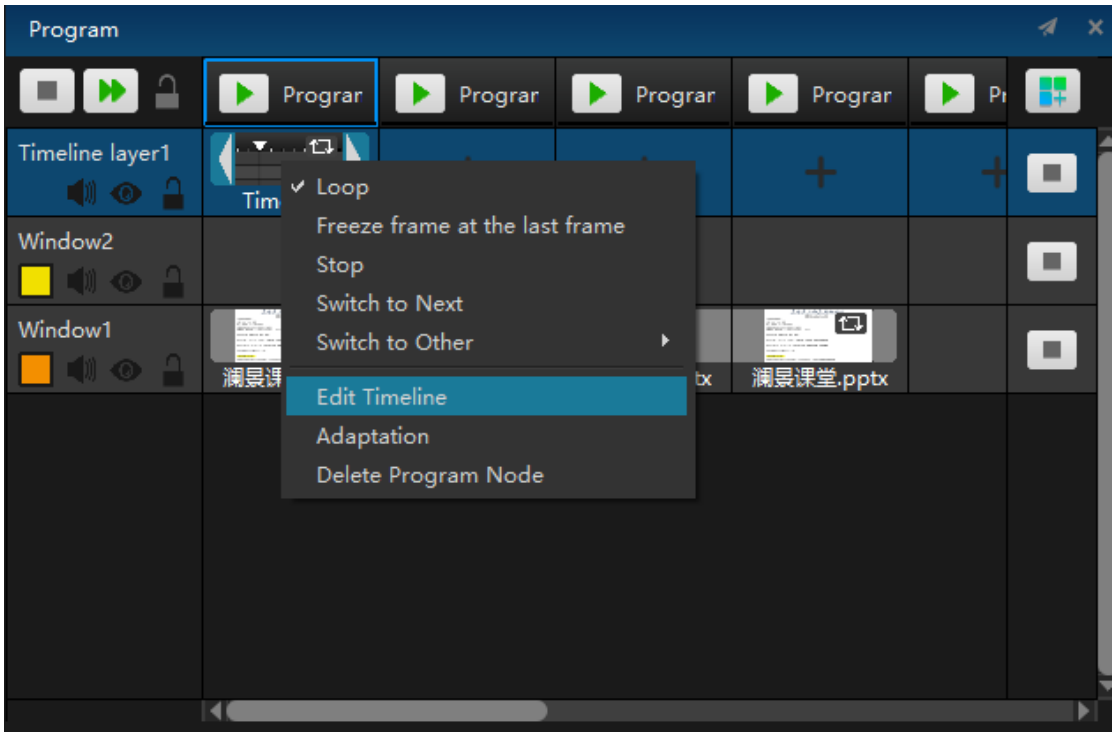


(2)Timeline node properties

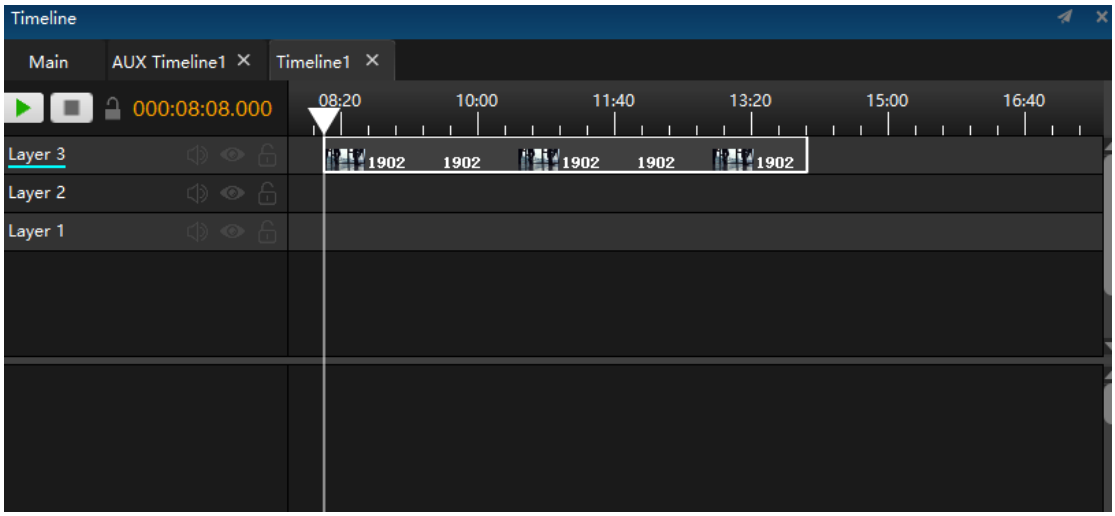
Properties: set like other properties.



Right click the program node. The timeline program node not only has the same playback mode selection as the window program node, but also has two options: editing the timeline and adapting to the material.



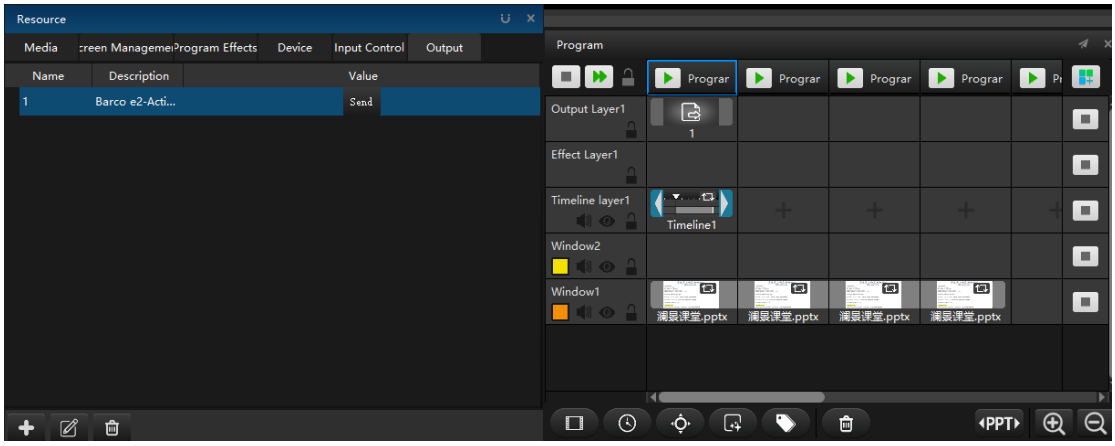
Select edit timeline, the timeline will appear in timeline management, and you can edit it.



Output

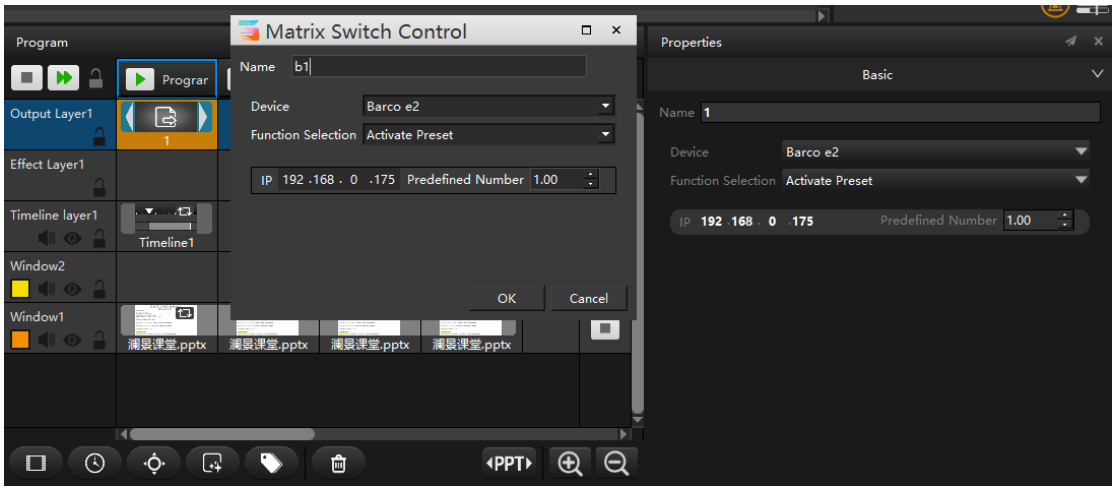
(1)Add Output Layer

Directly drag the output in resource to the output layer in program management:



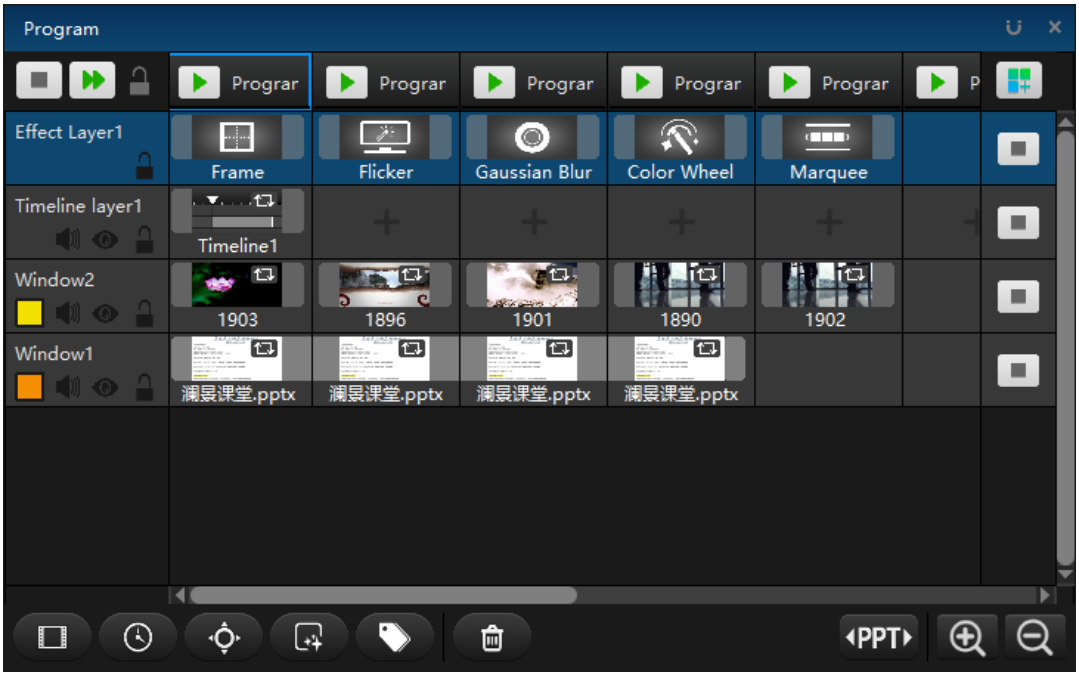
(2)Output node

Right click the output control node and click properties to pop up the console switching window, or select the node and edit the output control of the node at the property position of the program node in the lower right corner of the screen:



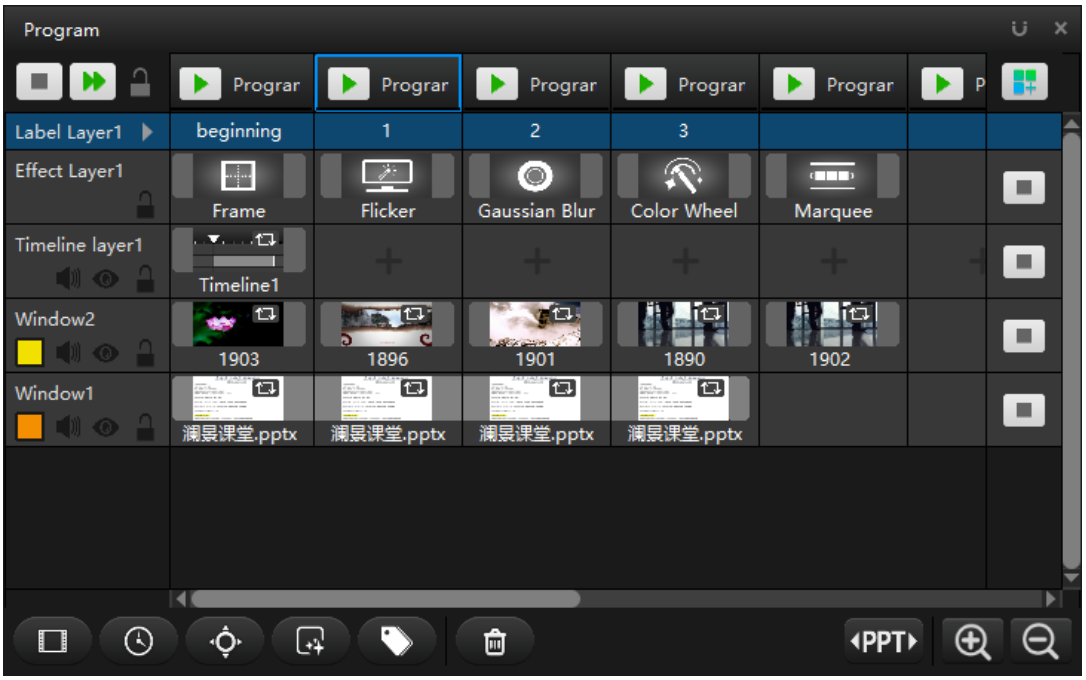
Effect

Create an effect layer in program management. Resource management - special effects in program effects can be directly dragged to the program node of the special effect layer. Select an effect node, in the program node properties in the lower right corner, you can edit the special effect. The special effect layer is only effective for the layer below it.

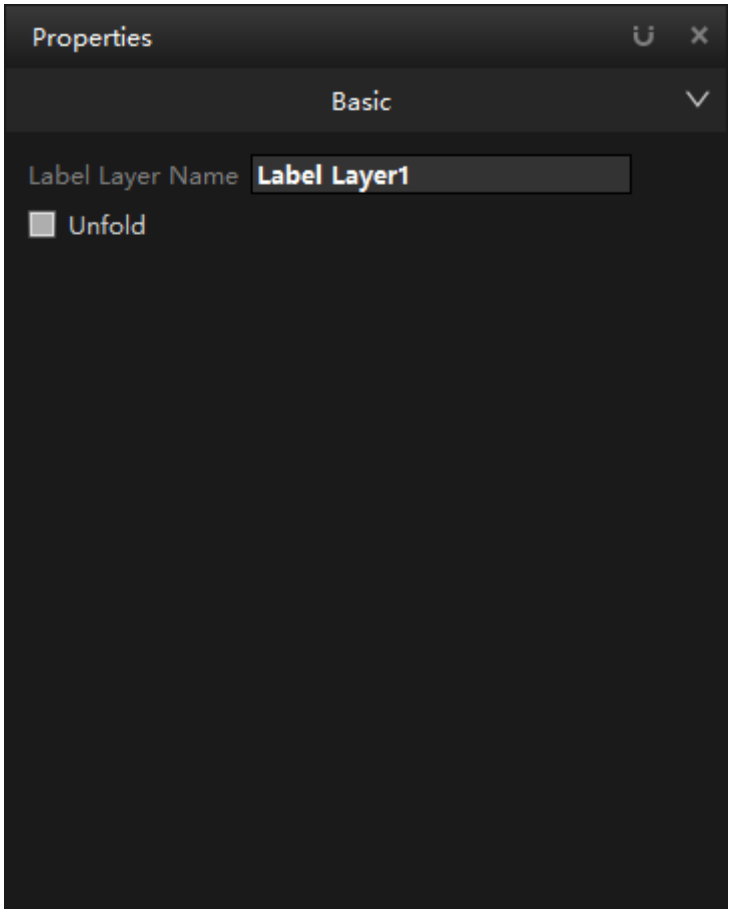


Program Label

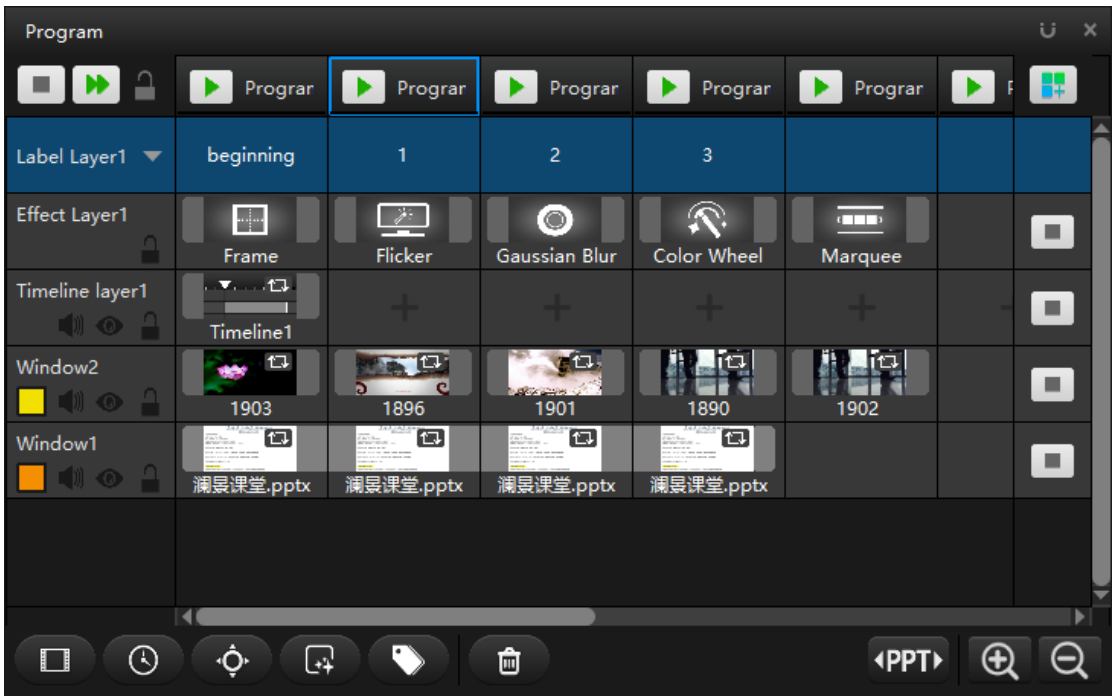
The program label is used to mark each program name or performance process, time node, etc. multiple process tag layers can be added to mark different contents or precautions.



In the properties, you can edit the label layer name and whether to unfold it.



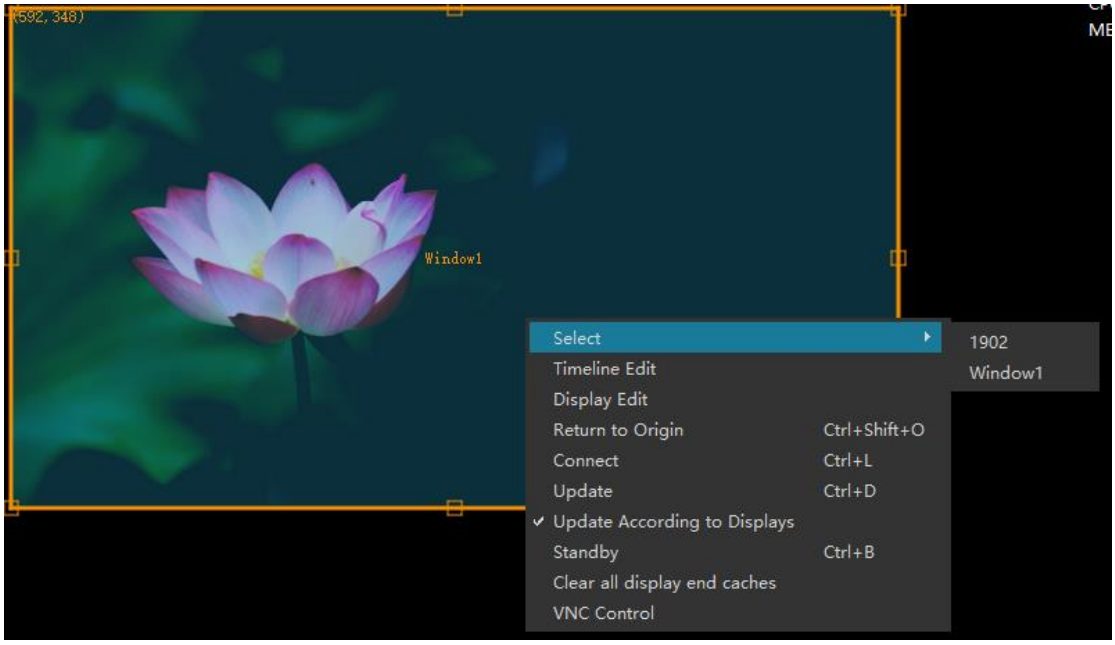
Unfold mode:



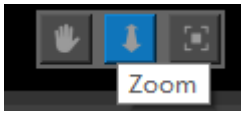
Stage

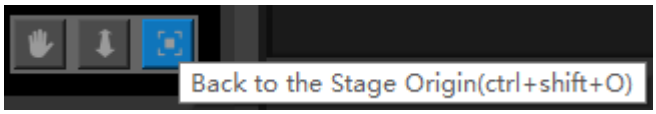
All added windows, timeline materials and screens are displayed on the stage. In screen mode, the screen can be moved freely; In Timeline mode, you can move timeline materials at will; In window mode, you can move the window at will. Special case: when the stage level of the screen does not match the current stage level, the screen is locked.

In the area with screen, timeline or window in the stage area, right click to select screen, timeline media or window, and select it to operate.



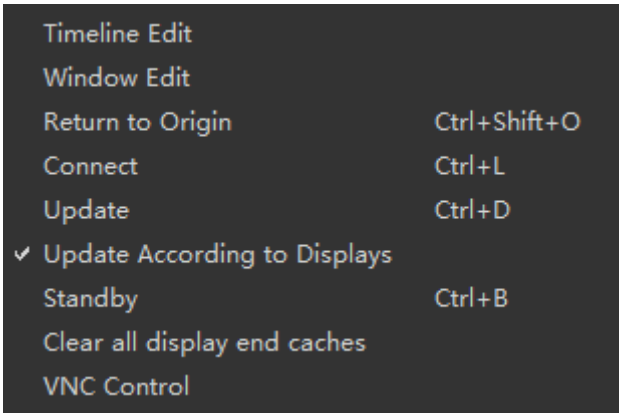
Click the roaming icon

to drag the stage casually. Click the zoom button 

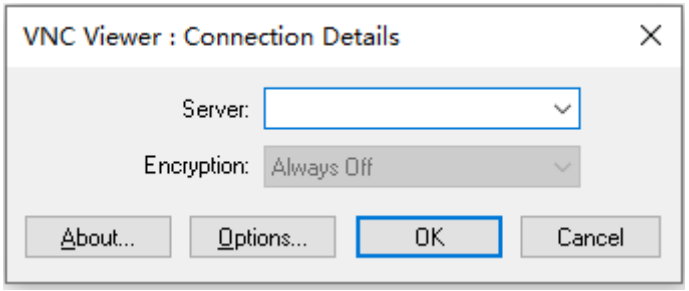
to select the scale to reduce and enlarge the stage. Click the button to return the stage 

to the (0,0,0) point, right-click any position of the stage, or choose to return to the stage origin. This command is mostly used when the stage position cannot be found due to wrong operation. Click the X (y) axis, drag or scroll the progress bar to move the stage position in one direction.

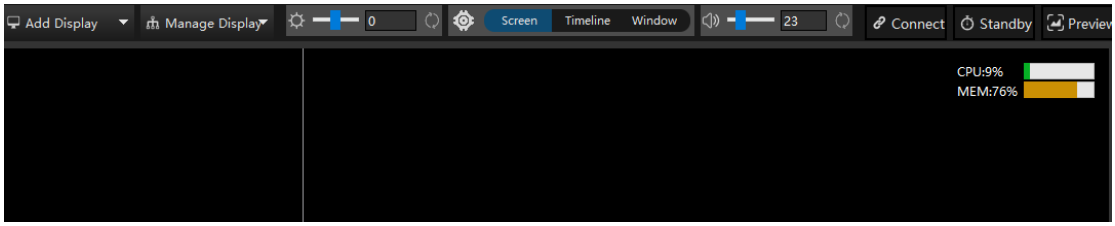
Right click any position on the stage to connect, update and update according to displays, return to the stage origin etc.



Select VNC control and add the address of the server to realize remote control:

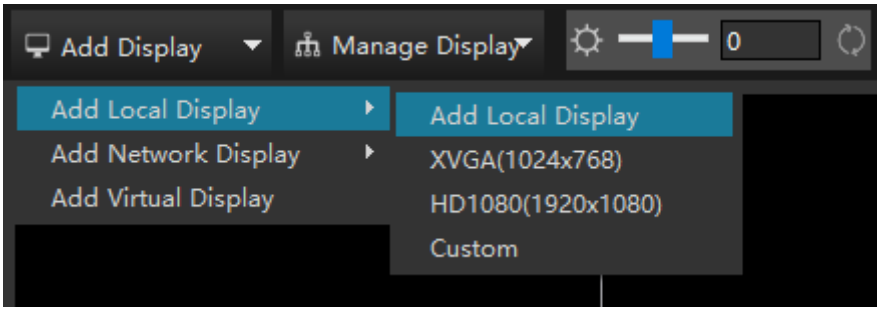


The global volume and brightness can be modified above the stage. After the window is reduced to 950 pixels, the button text at the top of the stage is hidden and only the icon is retained; After clicking the volume / brightness button, the adjustment lever and value are displayed below.

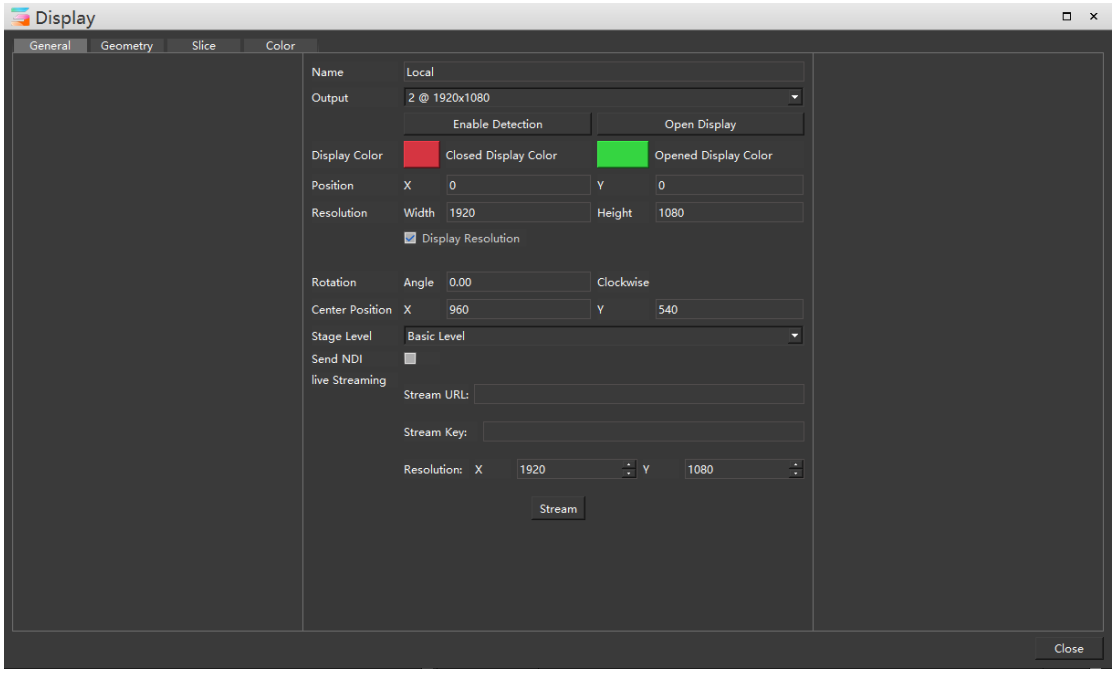


Add display

Click the add display option at the top left of the stage window to select add local display screen, network display or virtual display:

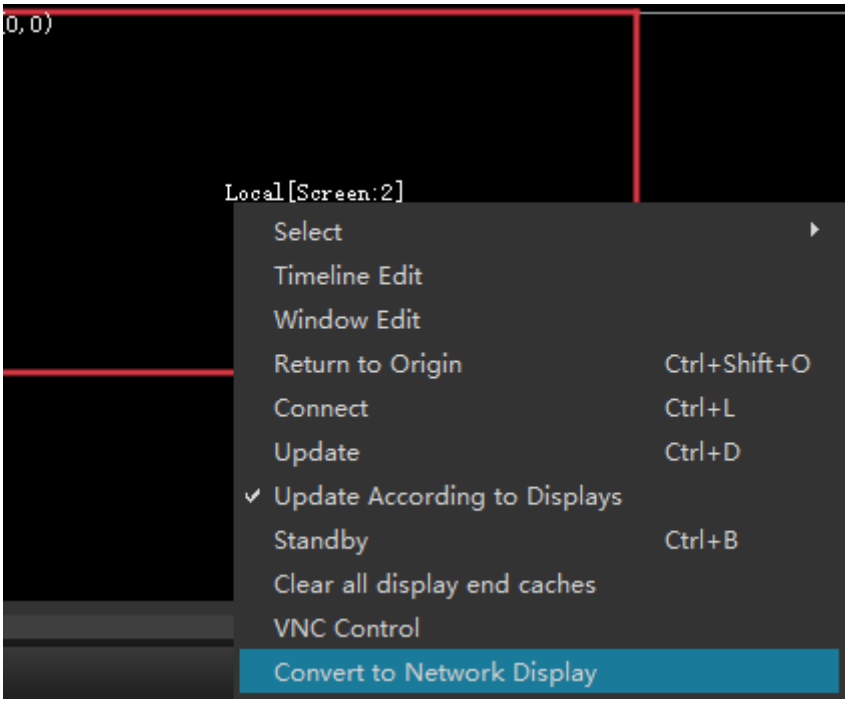


Display Properties: Double click the added display on the stage window to pop up the display window, where you can set the display properties. The editing of screen resolution, position and center position supports four operations.



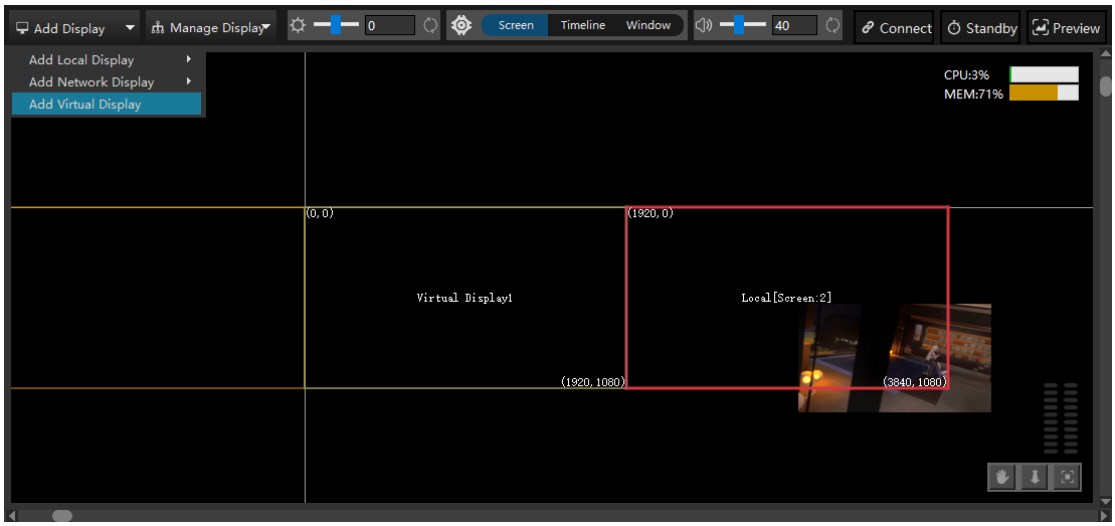
For the settings of various properties in the display window, see the display management section above.

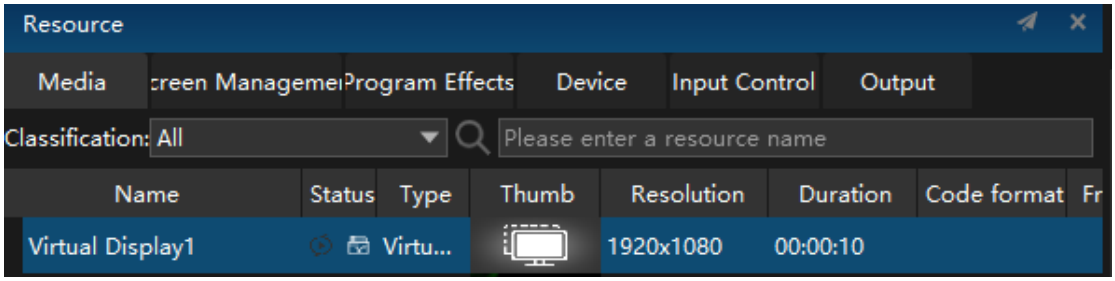
Right click on the added display to switch between network display and local display.



Add virtual display

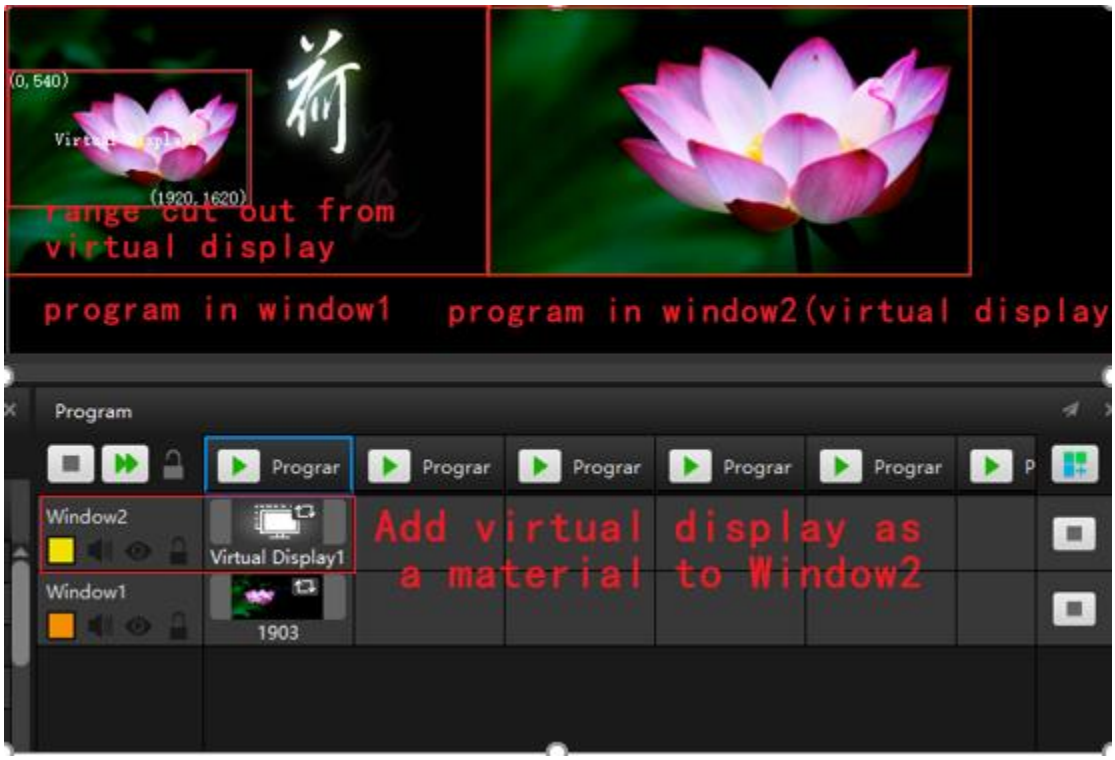
The virtual display collects and plays the programs in stage management in real time. The size and rotation of the virtual display screen can be adjusted casually, and supports the slicing function. It can realize various functions such as camera splicing, camera close-up, live interception, special-shaped screen playback, etc. Select ‘add virtual display’ on the stage window to create a virtual display screen. The created virtual display screen will be added to the material library as material and can be used as media resources:





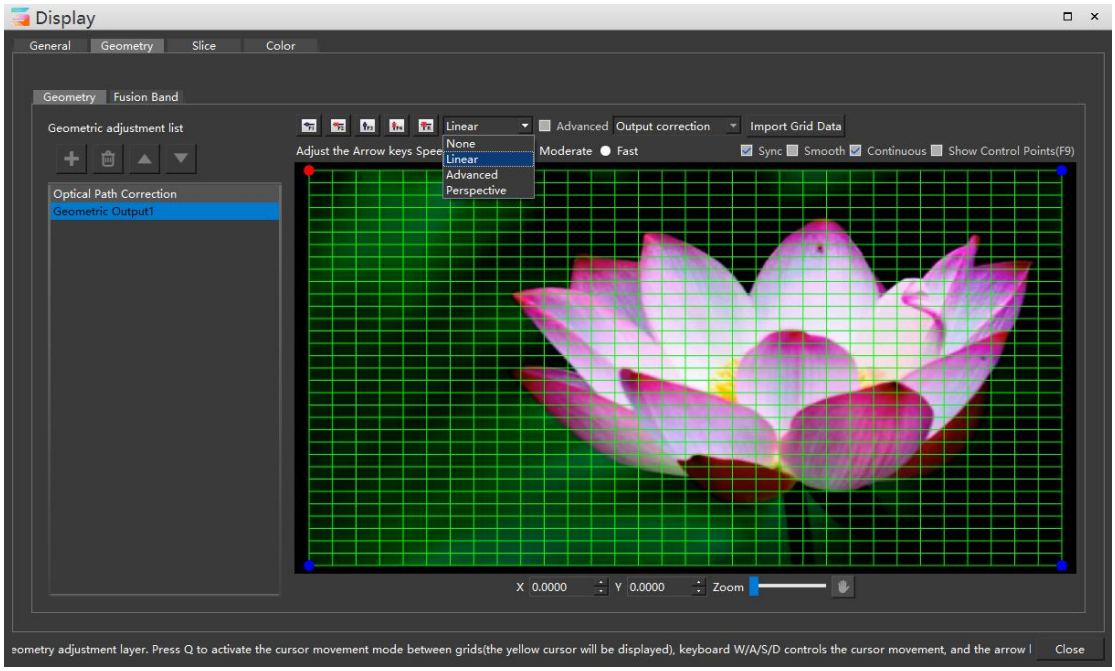
The gray virtual display box in the stage interface is the input source of virtual display materials. The virtual display will intercept the pictures within the current gray box to generate new material resources, which can be further added to the timeline or program management.

You can drag the position of the virtual screen directly in the display editing mode, or you can modify the size, position, angle and other parameters of the virtual screen through the property page or double-click the pop-up editing interface.

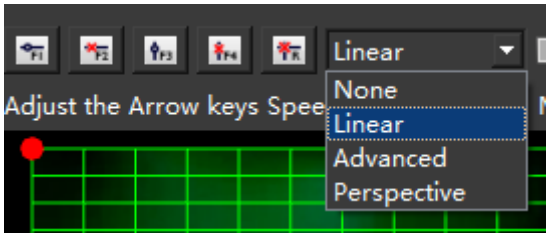


Geometry

Double click the added screen when all display lines are turned on, and select geometry deformation in the pop-up box to enter the mesh adjustment page.



Introduction to the whole operation interface: these five buttons represent, add vertical point, delete vertical node, add horizontal node, Delete horizontal node, Clear all.



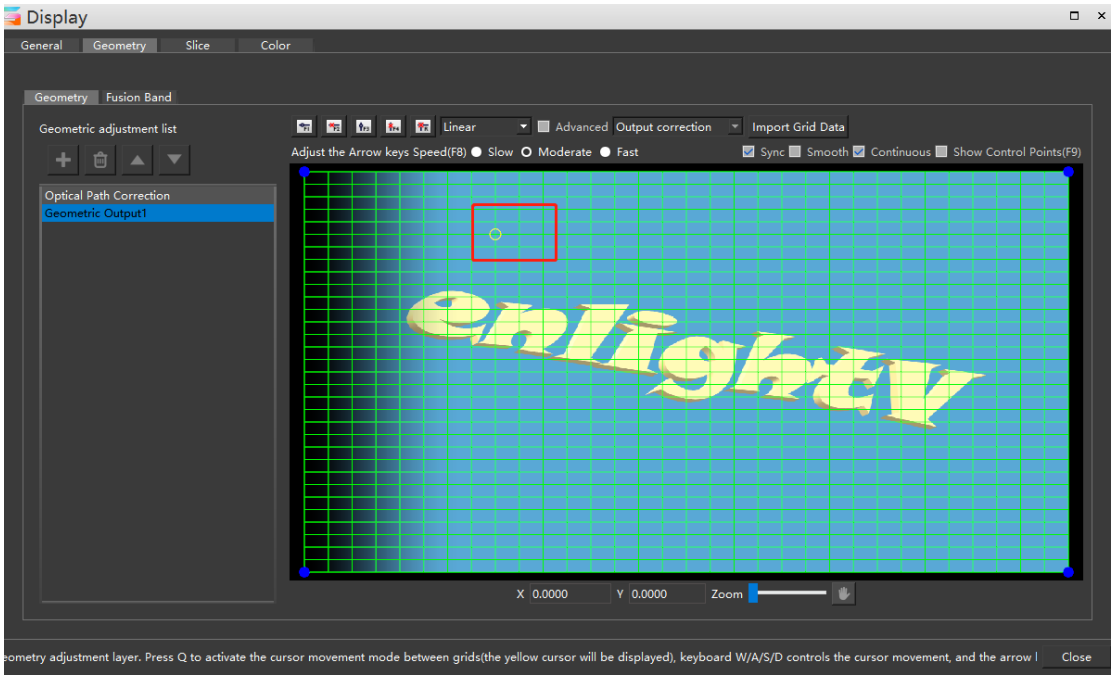
The mode selected in the figure above is used to switch the mode of grid operation, including linear mode, perspective mode and advanced mode. The geometric deformation operation of linear mode is applicable to special-shaped projection, plane projection, mountain projection, etc., and the details can be adjusted for each grid. Perspective mode is applicable to plane projection operation, and the whole picture can be adjusted while keeping the overall proportion of the picture unchanged. Comprehensive mode is suitable for arc projection operation.

(1) Support to add vertices and control vertex positions by keyboard when editing the grid:

1)Press the Q key to activate the grid adjustment cursor movement mode, and the yellow cursor is displayed. By default, the point in the upper left corner is selected;

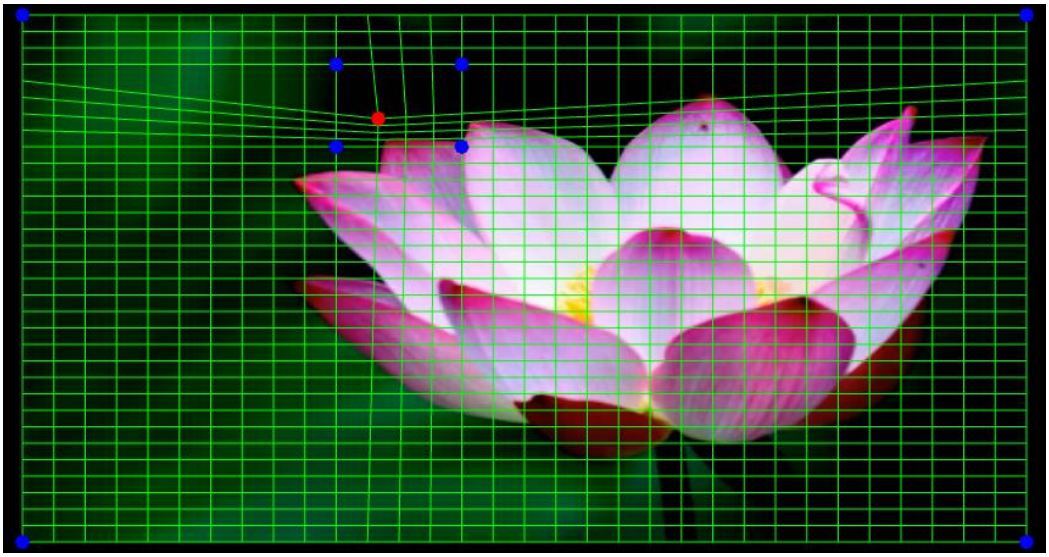
2)The keyboard W/A/S/D controls the cursor movement, and the arrow keys adjust the control points. In advanced mode, press Ctrl+ arrow key in red mode to select the control point between the cross handles to adjust the arrow key;

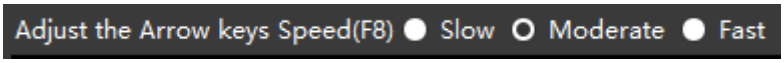
3)Support [and] button toggle geometry adjustment list.



(2) Linear:

The linear mode is applicable to the projection operating of special-shaped surface, plane and irregular surface. As shown in the figure below, click to add debugging points in batch. Right click the intersection of lines to add debugging points freely.



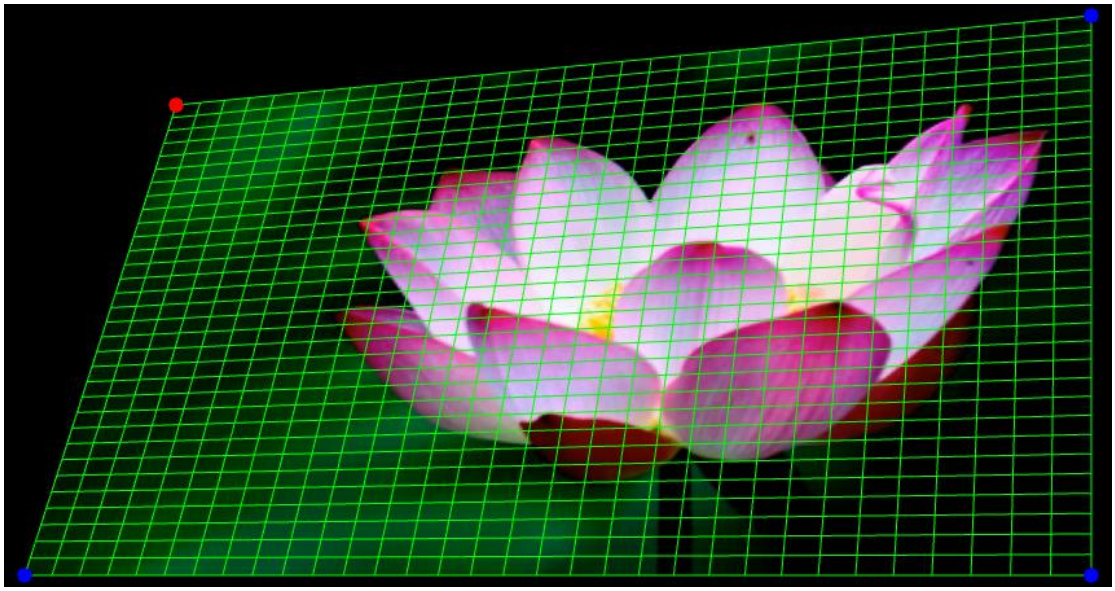
Left click or box select the blue debugging point, and the selected debugging point will turn red. Click the up, down, left and right buttons on the keyboard or left drag the selected debugging point to move the point. 

By selecting the Adjust the Arrow keys Speed, you can adjust the speed of the direction key moving points. You can also frame multiple points for displacement at the same time. If a location needs to add a separate debugging point for debugging, you can right-click the intersection of the green

grid to add the debugging point. Through the overall coordination and debugging of each debugging point, the picture output can achieve a perfect effect.

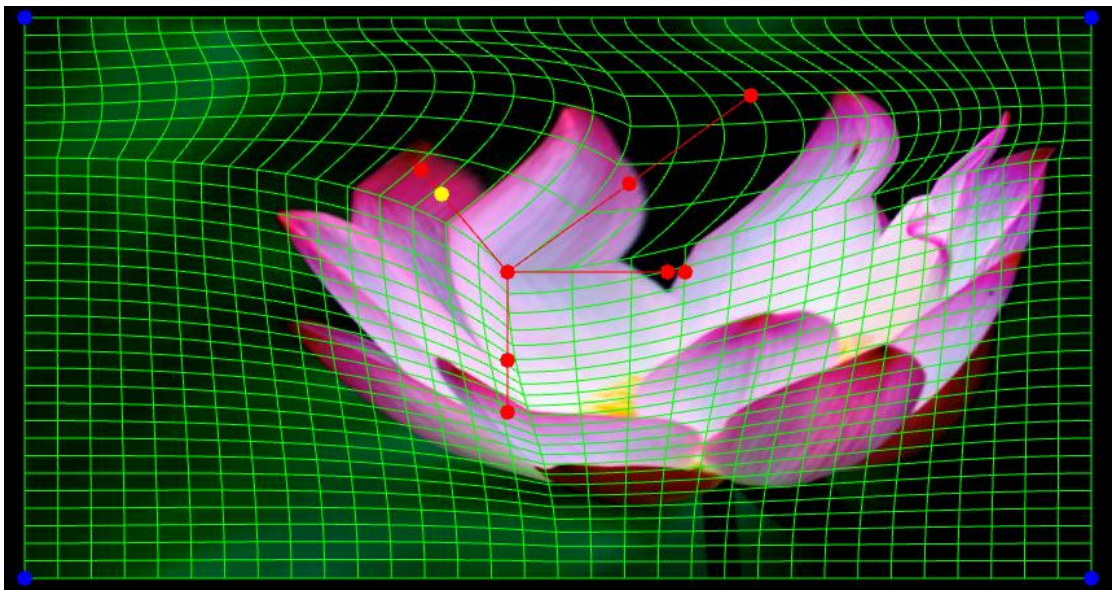
(3)Perspective:

Perspective mode is only applicable to the operating of plane projection. The perspective mode cannot add operating points, but can only adjust the picture as a whole through the four vertices of the screen. Left click or box select the blue operating point, click the up, down, left and right keys on the keyboard or left drag to move the point position, and adjust it according to the actual situation on site.



(4)Advanced:

Advanced mode is used to debug curved surfaces. After selecting an operating point in the advanced mode, the operating point like the cross handle will appear. Each point on the cross handle can be debugged by left clicking, and the outermost point can move up, down, left and right. After the operating point is moved, it will not change linearly like the linear mode and perspective mode, but will appear radian.

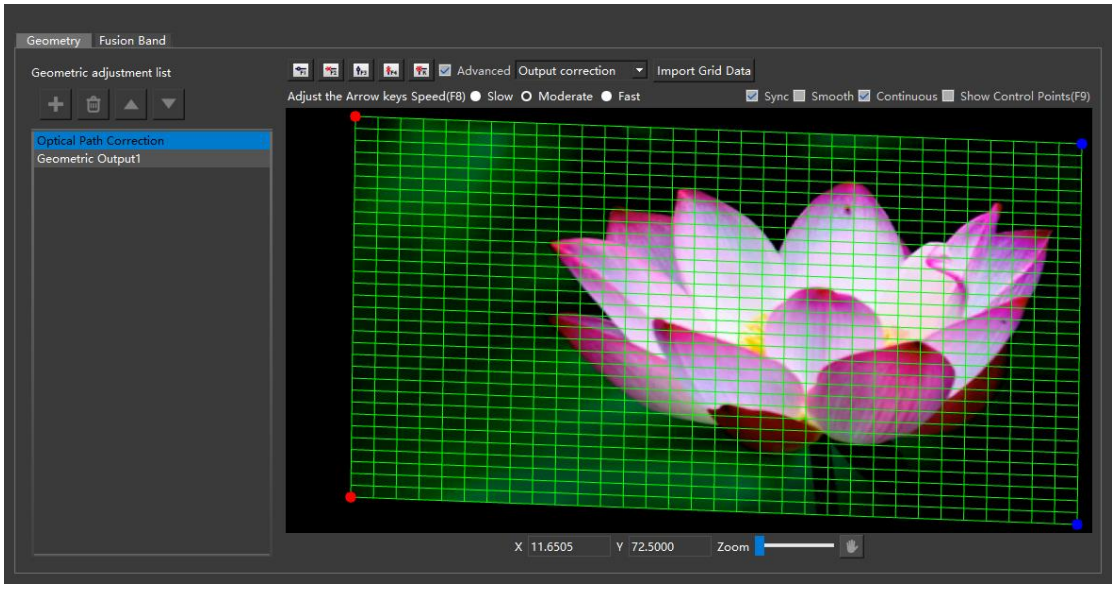


The center point and the outermost point of the cross handle can be moved in any direction by dragging with the direction key or left key, and the operating point in the middle can only be adjusted along the direction of the cross axis.

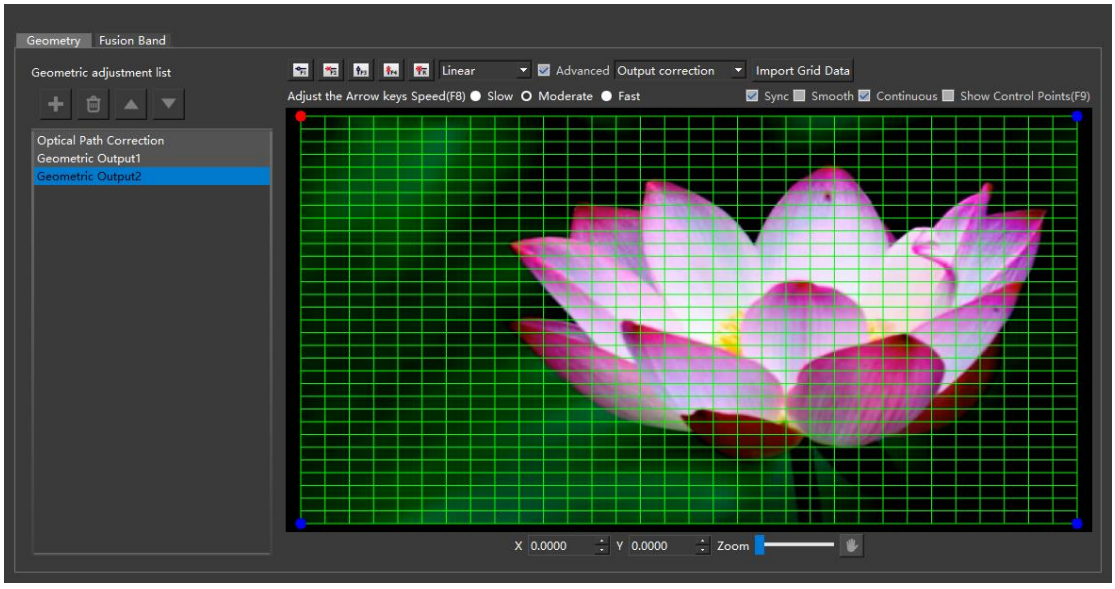
(5)Optical Path Correction:

The optical path correction layer can only use the perspective mode to adjust the picture as a whole. After adjusting the optical path correction layer, create another layer to adjust the details of the picture. In the new layer, the picture is still filled with the whole grid adjustment window, so as to adjust the details on the basis of the overall penetration adjustment of the picture.

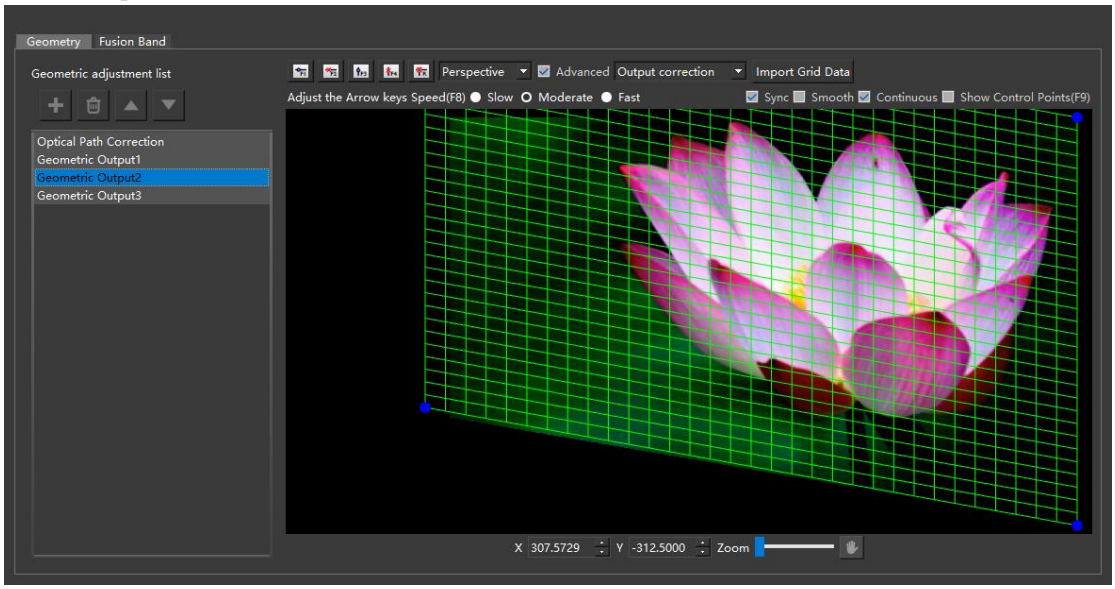
Use optical path correction to adjust the perspective of the torus as a whole:



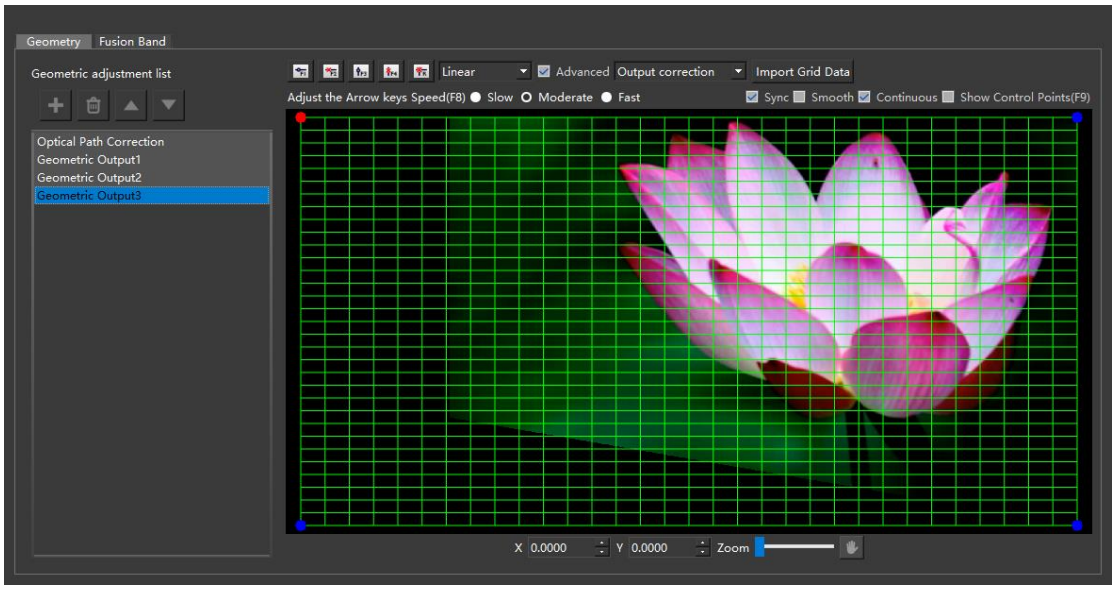
Create another layer and the screen will still fill the whole window:

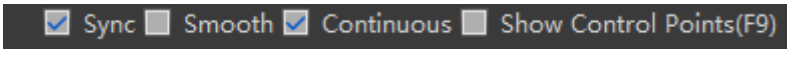


Without using the optical path correction layer, use the perspective mode in layer 1 to adjust the whole picture:



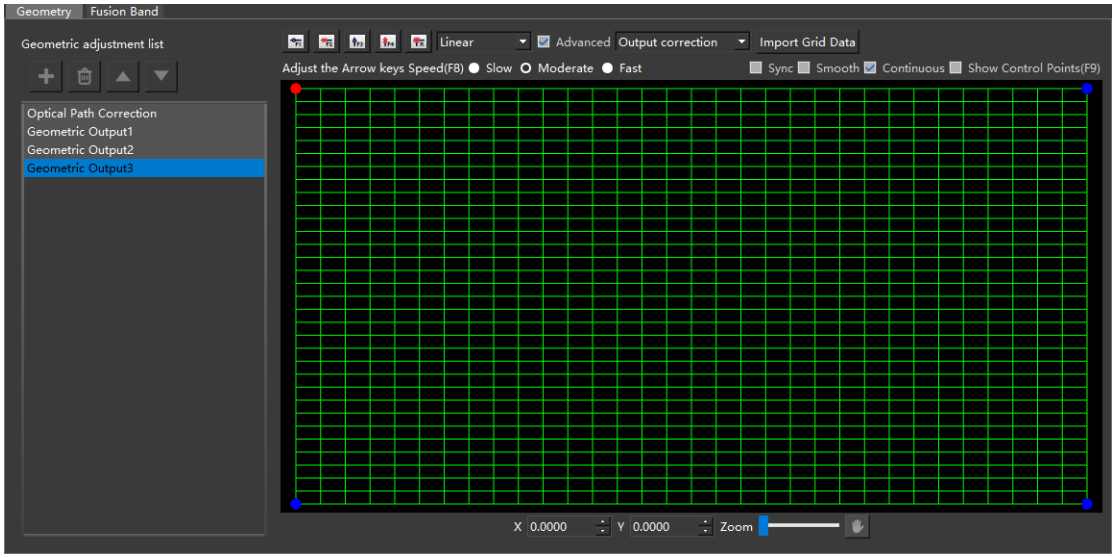
Create another layer. In the new layer, the picture is still in the shape adjusted in perspective mode:



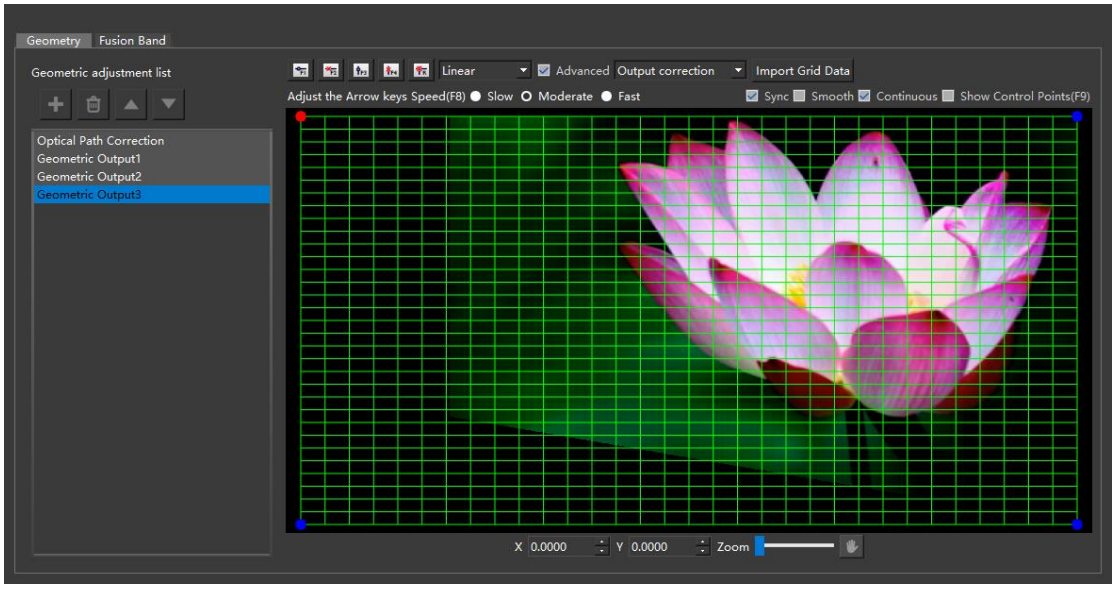
By checking the 

Sync, the material screen is synchronously displayed on the grid.

Without Sync:



Sync:

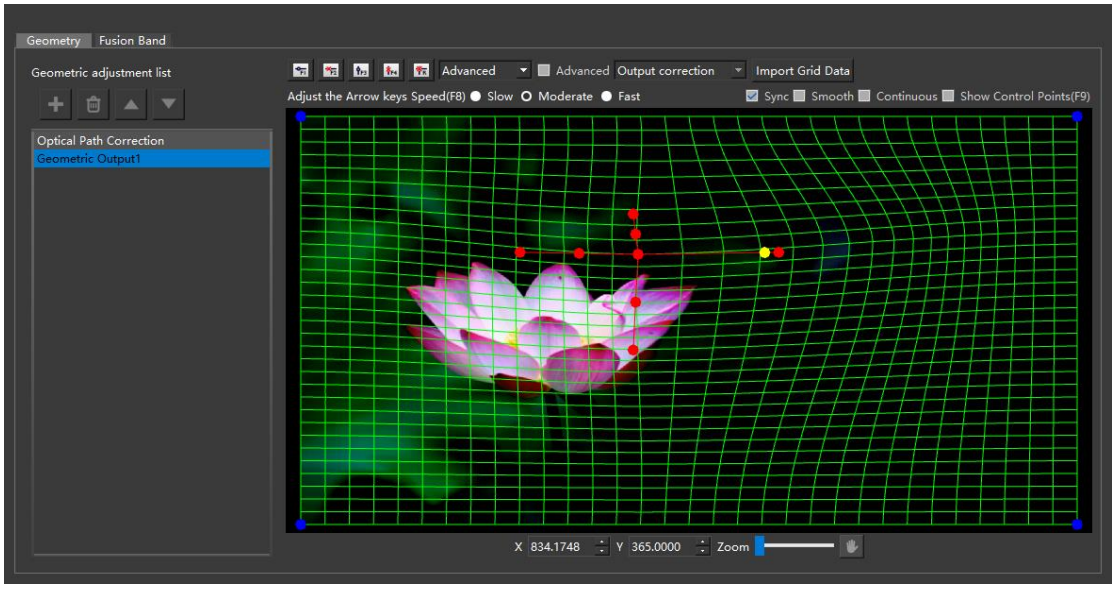


(6)Smooth: Used to eliminate jagged problems when moving debug points.

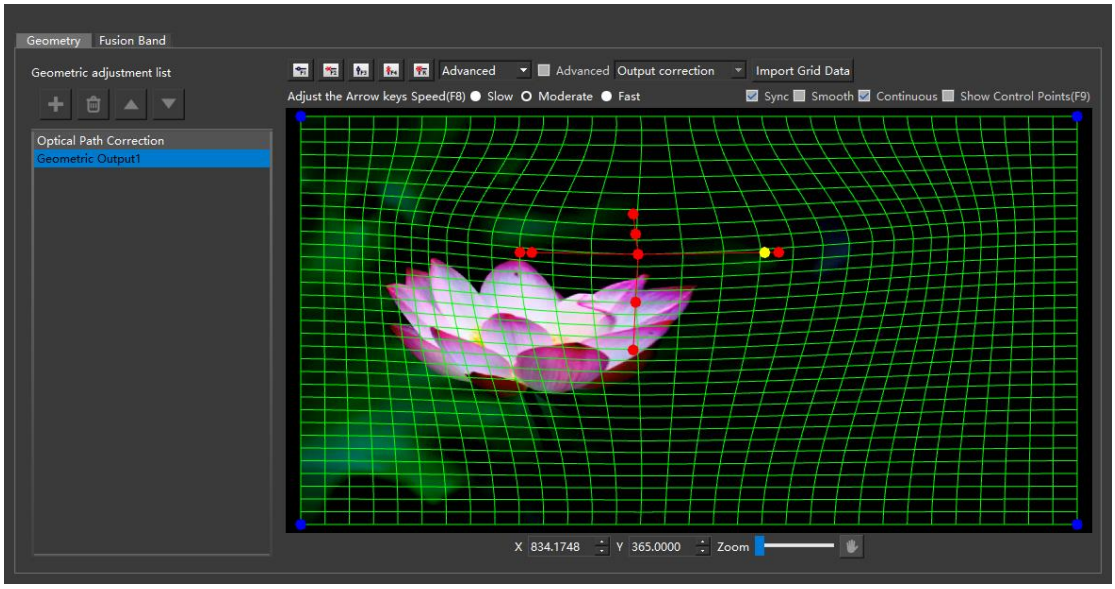
(7)Continuous:

It is used to perform symmetrical actions on the left and right sides when correcting the cross handle. For example, after checking the continuous, when the rightmost point of the cross handle is moved upward, the corresponding left handle will move downward. After removing the check state of curve smoothing, move the point on the right up and down, and only the handle on the right moves up and down.

Without continuous:



Continuous:



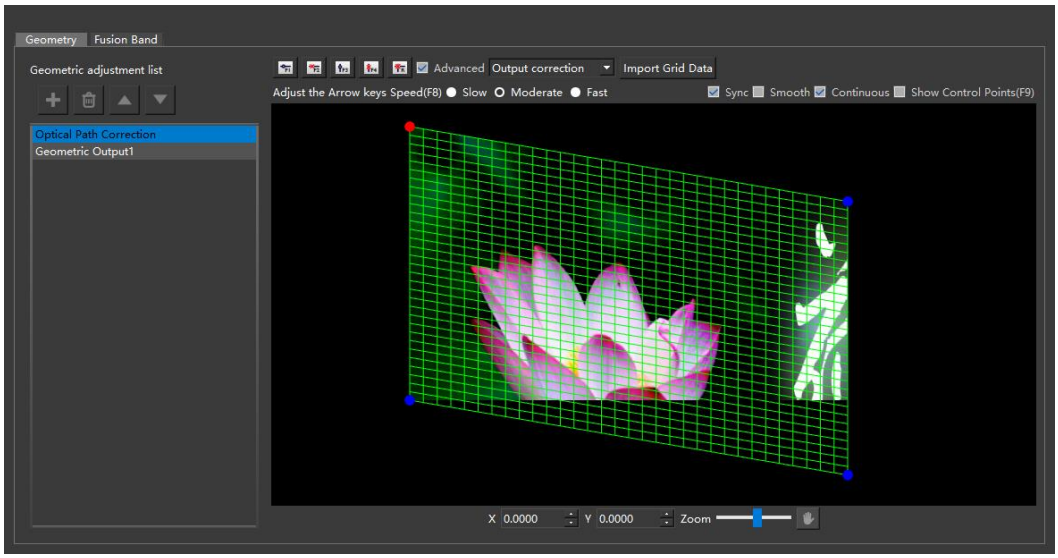
(8)Show Control Points:

Displays the control points of the current layer on the screen, which takes effect only when the screen properties adjustment window is opened:

(9)Advanced Output/Texture Correction:

The default is the output correction mode. In this mode, only the pictures of the screen intercepted part can be adjusted. When the grid at the edge of the screen moves, the screen may appear black edge.

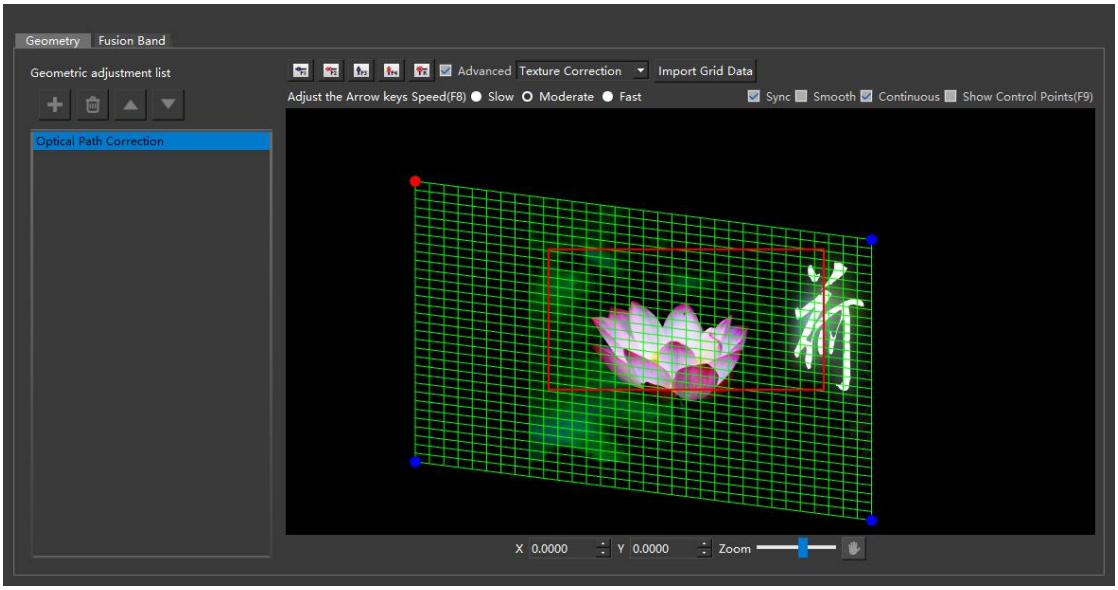
Perspective adjustment of the whole picture under output correction:



Screen display:

After the texture correction mode is turned on, you can not only adjust the intercepted part of the screen, but also adjust the whole picture of the material, including the non-intercepted part of the screen, so as to avoid black edges:

Check and turn on texture correction to adjust the whole material:



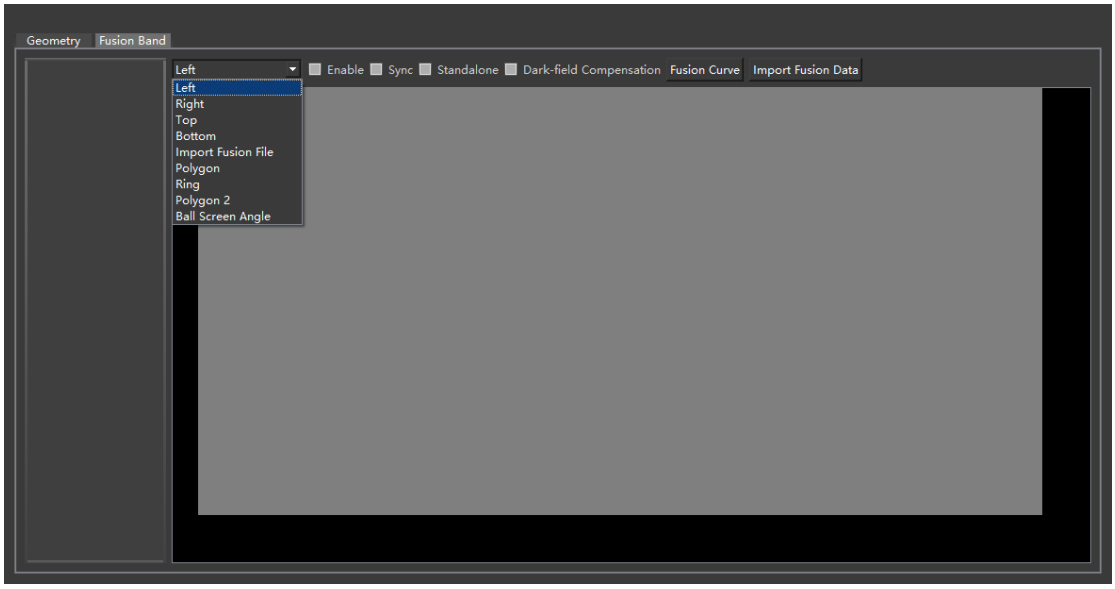
No black edges:

(10)Import Grid Data: Import mesh data from the edited project locally.

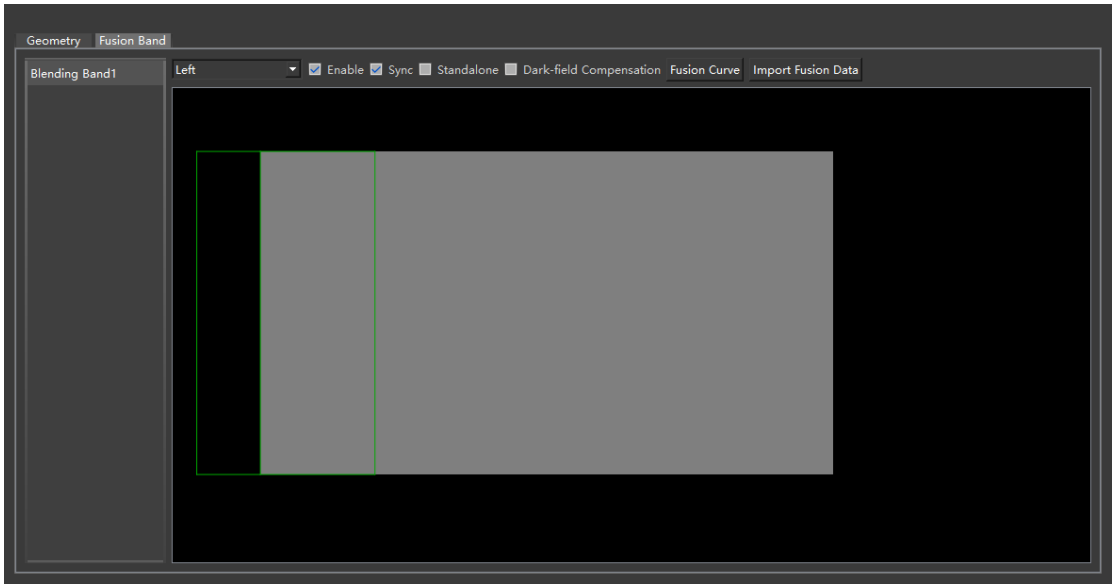
Fusion Band

Click the fusion band on the software operation interface and select geometry fusion band in the pop-up box. When adding the fusion band, the actual situation of the display frame corresponding to the projected fusion area shall be considered. If the two projectors are spliced and fused on the left and right, the left display box adds a right fusion band, and the right display box adds a left fusion band.

Select the part to add fusion band to create a new fusion band. The created fusion band will be displayed in the list on the left:



After adding the fusion band, as shown in the figure below: after checking the Sync button, the green border of the fusion band will be synchronously displayed on the projector screen.



(1)Enable:

Select the fusion zone, and you can choose to enable or disable it. If you choose not to enable it, the fusion band effect will not be displayed.

(2)Sync:

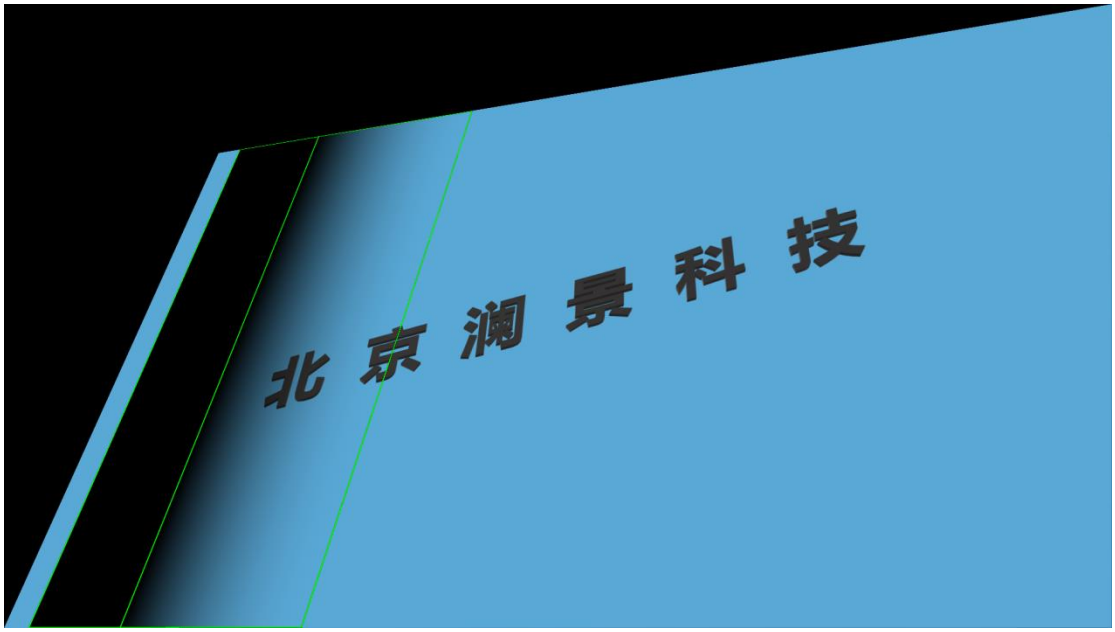
Make the added fusion band synchronously displayed on the screen.

Enable and Sync selected:

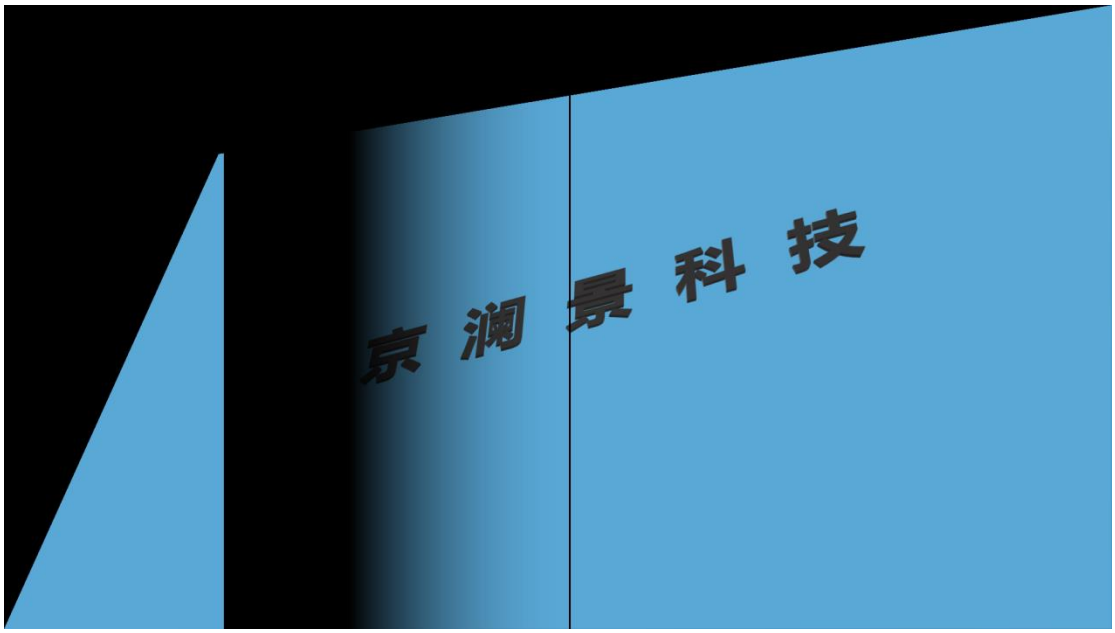
(3)Standalone:

If this command is checked, the fusion band will not follow the mesh adjustment. If it is not selected, the fusion band will adjust the overlay display with the grid.

Uncheck the fusion band, which is independent of geometric deformation, and the shape of the fusion band changes with the mesh:



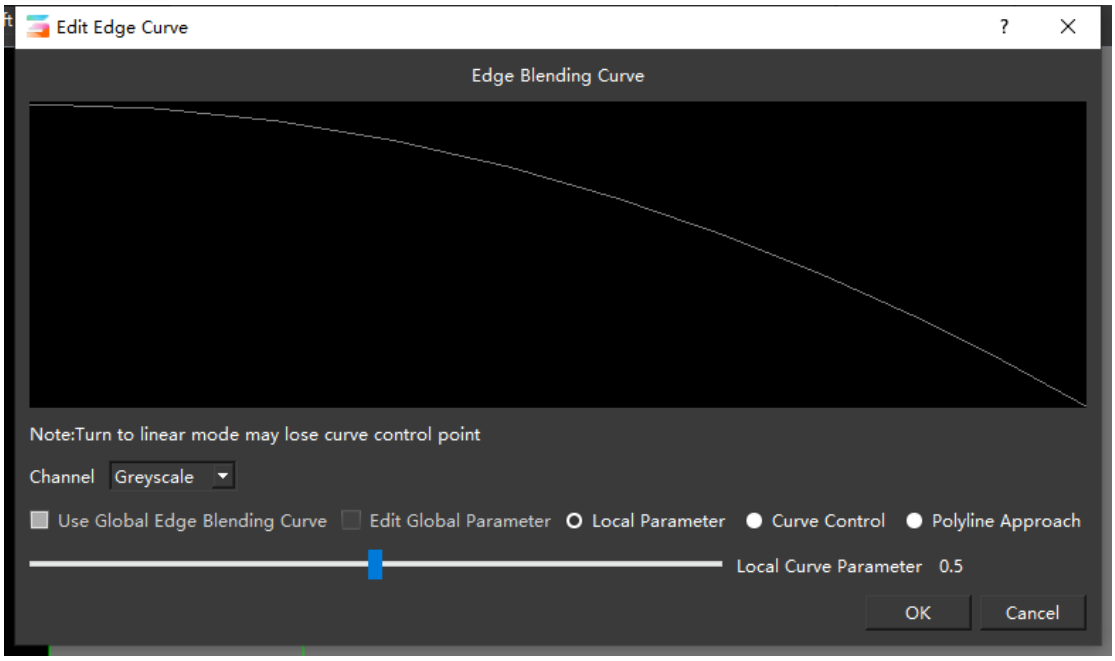
Check that the fusion band is independent of geometric deformation, and the shape of the fusion band is not affected by the mesh:



(4)Dark-field Compensation:

When checked, the fusion band turns white, which is applicable to the situation of insufficient brightness on site.

Click the fusion curve to adjust the fusion band in more detail:



Channel: Different colors of the fusion band in display.

Local Parameter: The adjustment parameters of the fusion band are displayed locally.

Curve Control: Adjust the brightness of the fusion band with a curve.

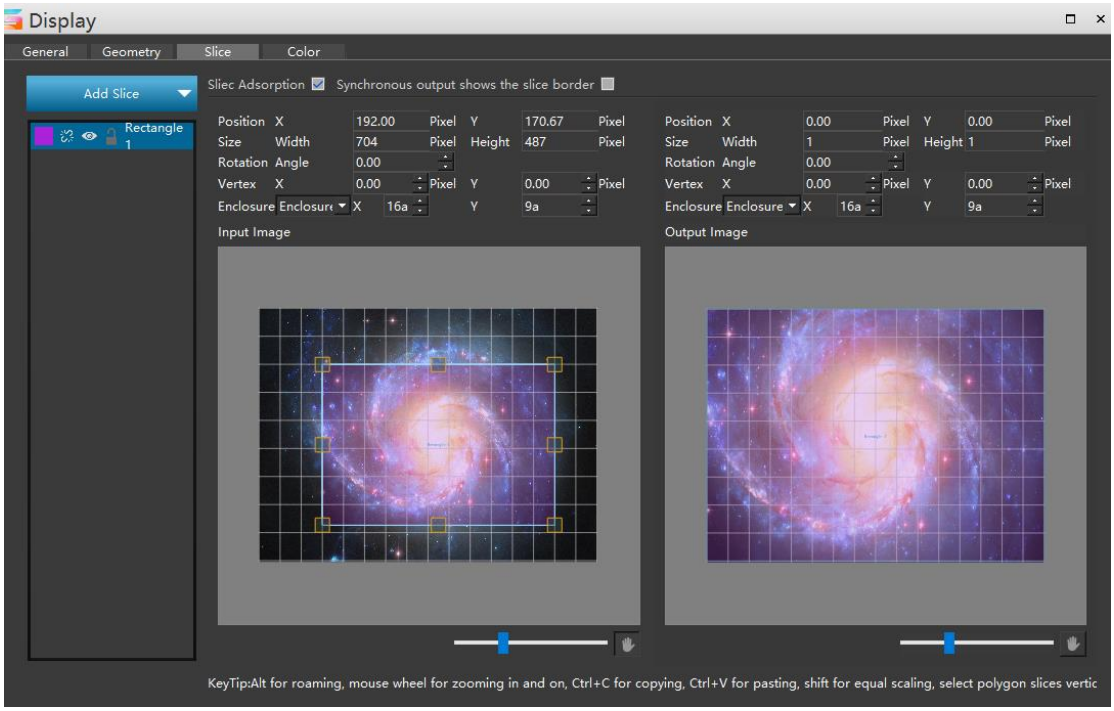
Polyline Approach: Select a point on the polyline to adjust the brightness of the fusion band.

Slice application

Go to the screen - Slices - Add Slices to add rectangular/polygon slices.

(1)Add rectangular Slice

Click on the left to add slices to add slices with specified shapes. You can adjust the position and size of slices by dragging with the left mouse button. You can also select a point on the slices and hold CTRL + arrow keys to adjust the size of slices, or select the slices and adjust the position of slices with arrow keys. Supports the box structure, can set the number of horizontal and vertical boxes, convenient for users to carry out the actual operation.

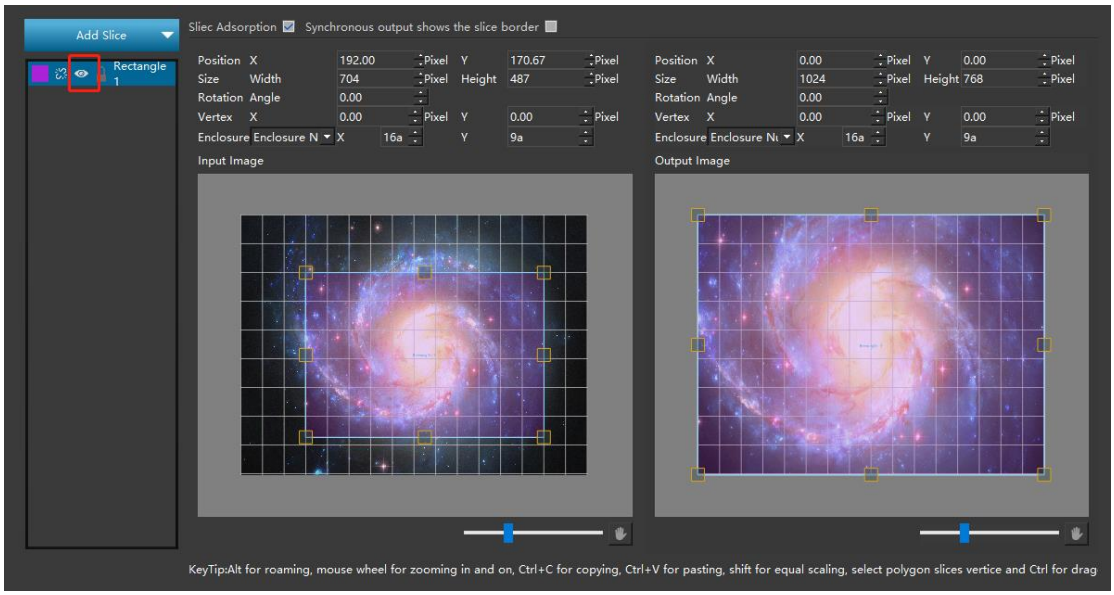


(2)Adsorption:

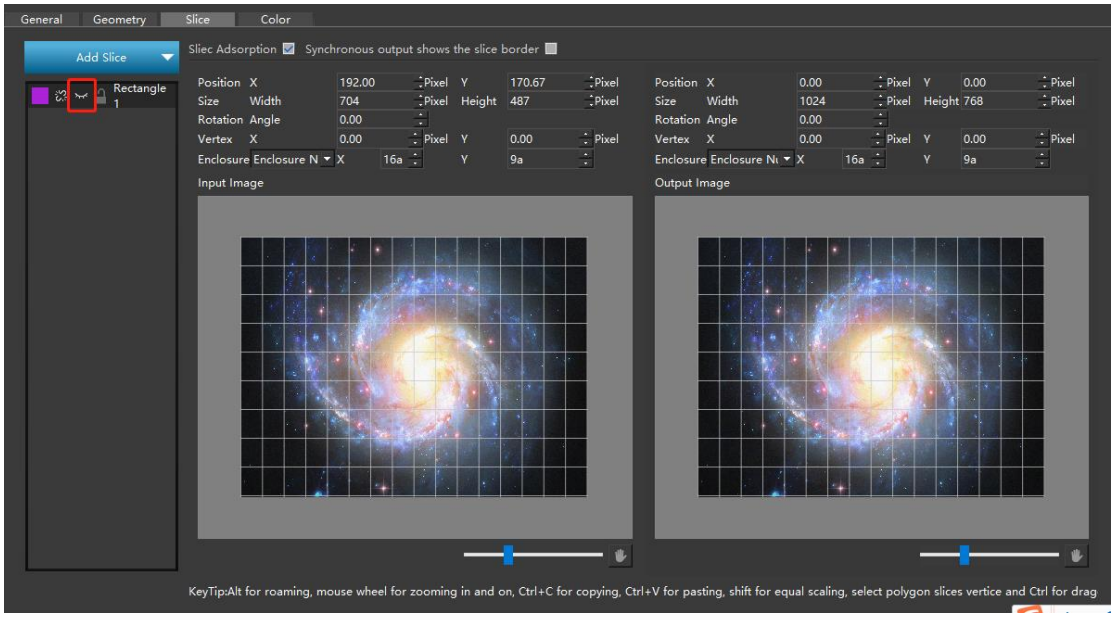
When multiple slices are added, the edges of the slices and vertices will be automatically attached together to facilitate the alignment operation.

(3)Synchronous: Display the slice border on the screen.

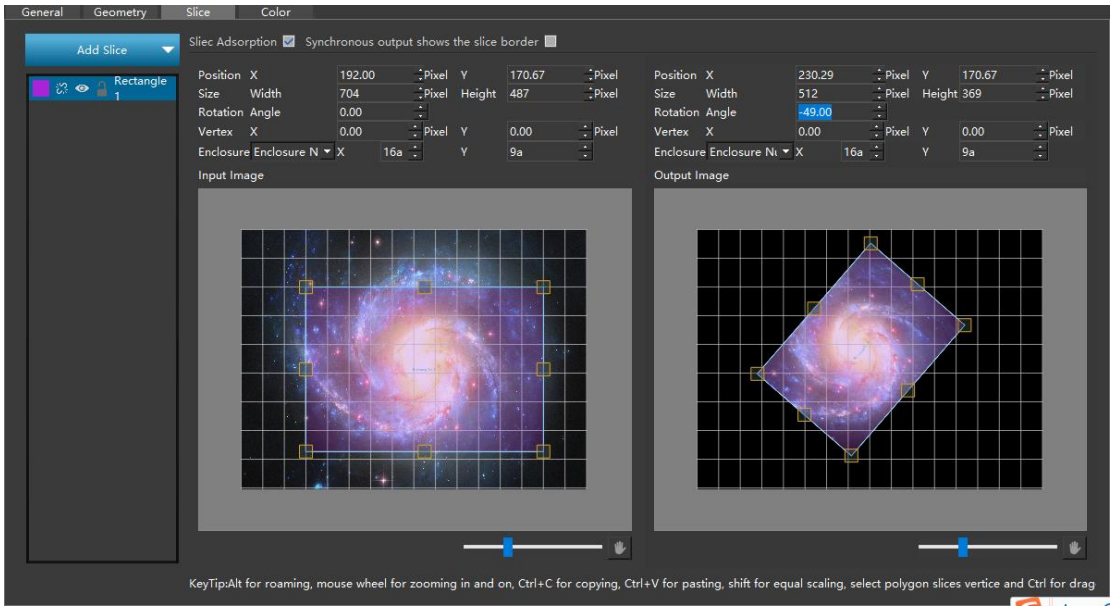
The left window can adjust the position, size and shape of each slice, and the right window displays the actual output screen. Click the eye icon in the left slice list to visualize the adjustable slice. In the case of slice binding visualization, the picture displayed by the slice in the right window is the same as the picture captured by the slice in the left window.



Without binding visualization, the slice is not visible and cannot be operated on.

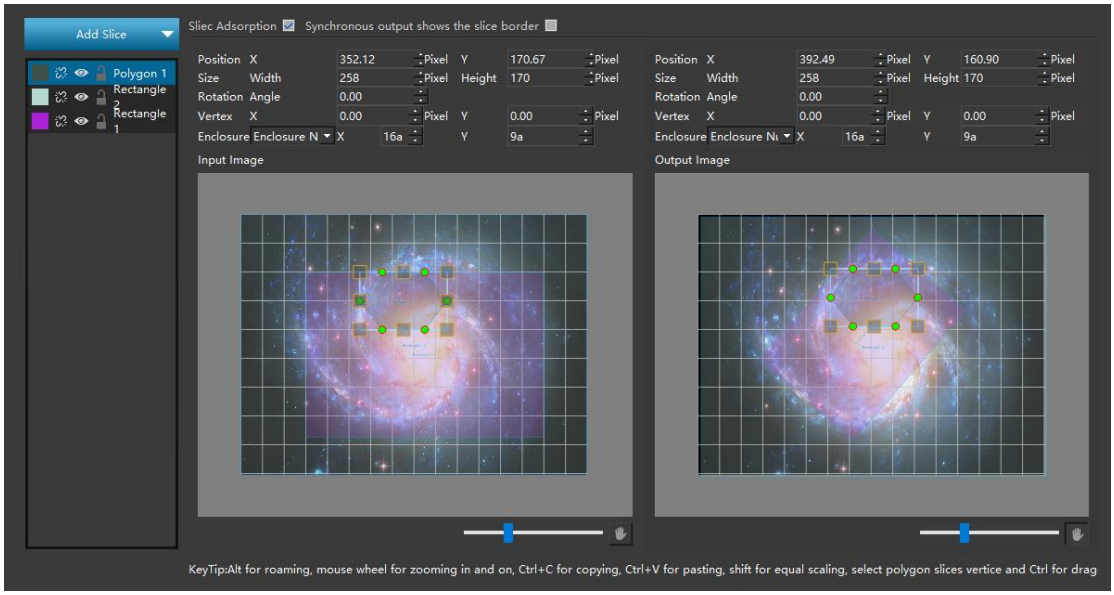


The position, size and rotation Angle of the slice can be set separately in the right display window without affecting the left slice.



(4)Add polygon slices

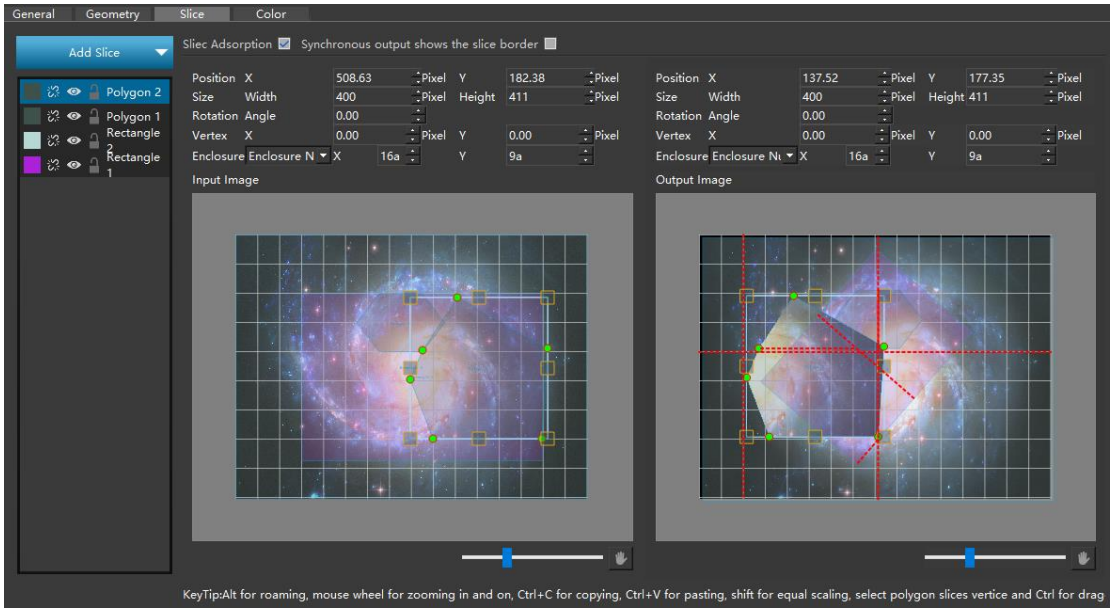
Select add Polygon Slice, in the left area, the mouse pointer will turn into the shape of a pen, click the point you want to select one by one (Backspace key can cancel the wrong point), and finally click the starting point to complete the creation of polygon slice. Press Esc to exit slice creation.



The operation of movement, adjustment and so on for polygon slice is the same as that for rectangular slice.

(5)Joint

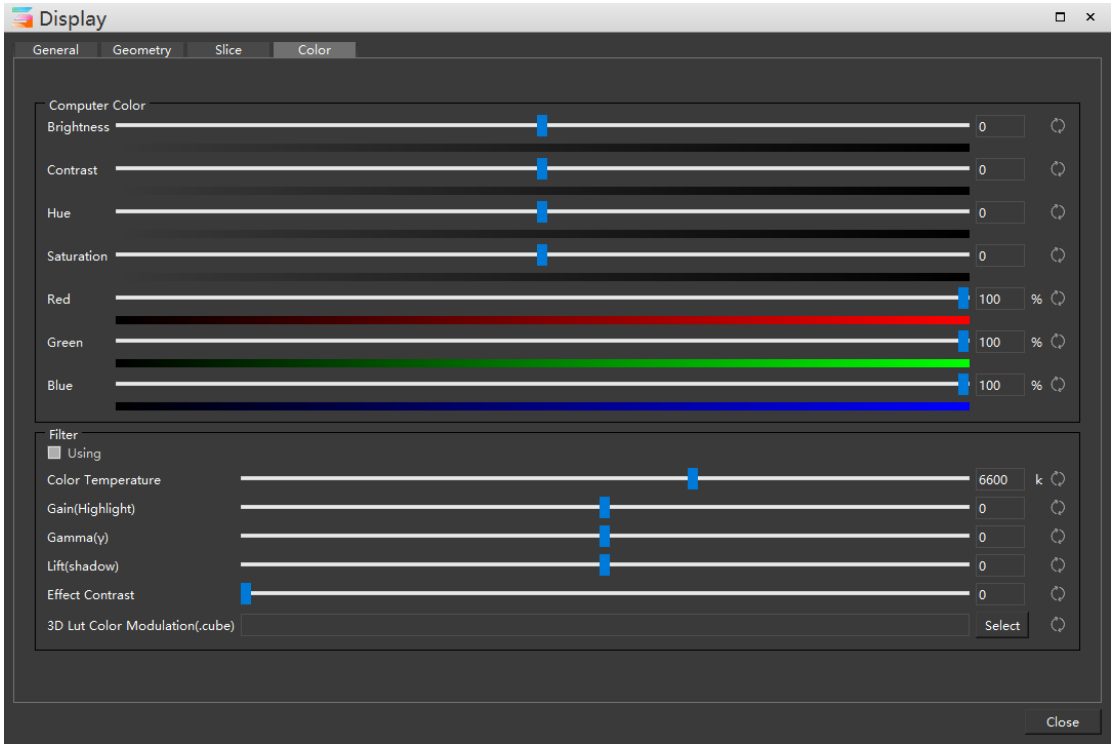
Multiple polygons can be selected at the same time for splicing display. Users can design according to their own needs to achieve a variety of creative stitching effects. When splicing, you can check the adsorption option, easy to adjust the slice position, to achieve a better splicing effect.



Color and filter Settings

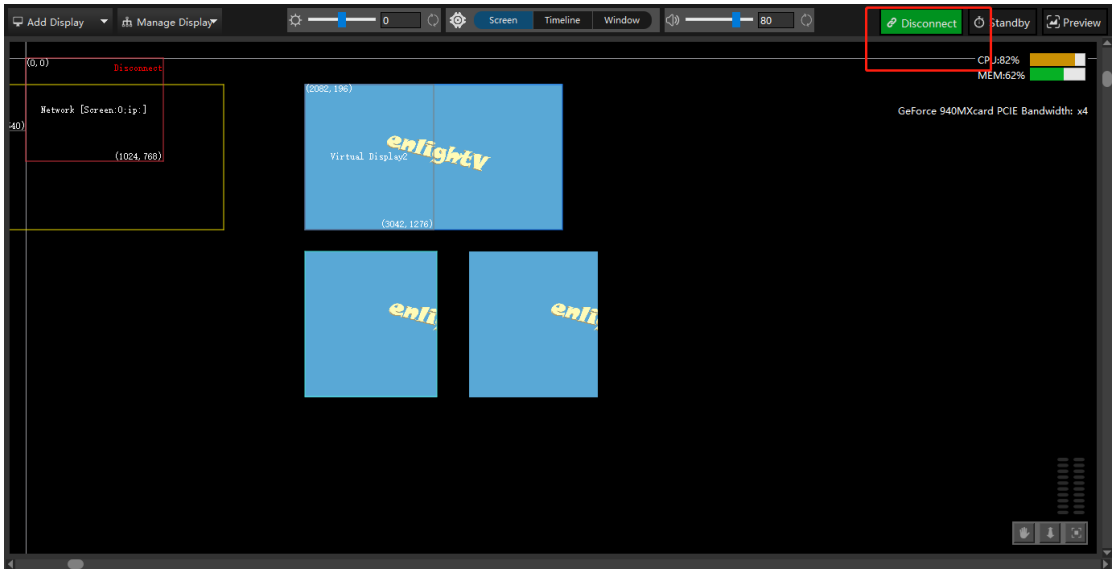
You can adjust the brightness, contrast, saturation, and color of the screen output, similar to the color effect of editing media material.

The filter function can be accurate for the light part, dark part, color temperature, gamma, effect contrast and other parameters of the video, so that each video can meet the color requirements.



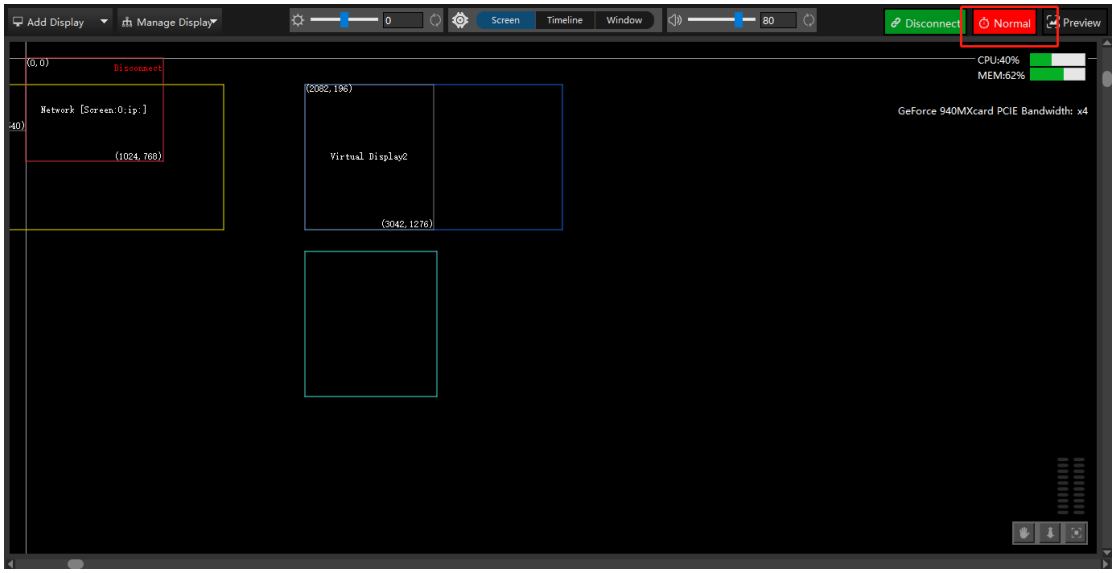
Connect

Connect means that to project edited media onto the display device, provided all added screens have been opened in the software. Connect or offline by clicking the button in the upper right corner of the figure. The screen in the stage interface cannot be moved by mouse holding to drag but Ctrl(shift)+arrow keys in connected mode.



Standby

The layer of the main timeline and the timeline in the program can be set as a standby layer, and the video material in the standby layer is not displayed on the display device in the normal state. When switching to the standby state, the media on the standby layer will be displayed on the display device. As shown in the upper right corner of the standby button, the standby state and the execution state are switched, and the shortcut key Ctrl + B can also be used for switching.



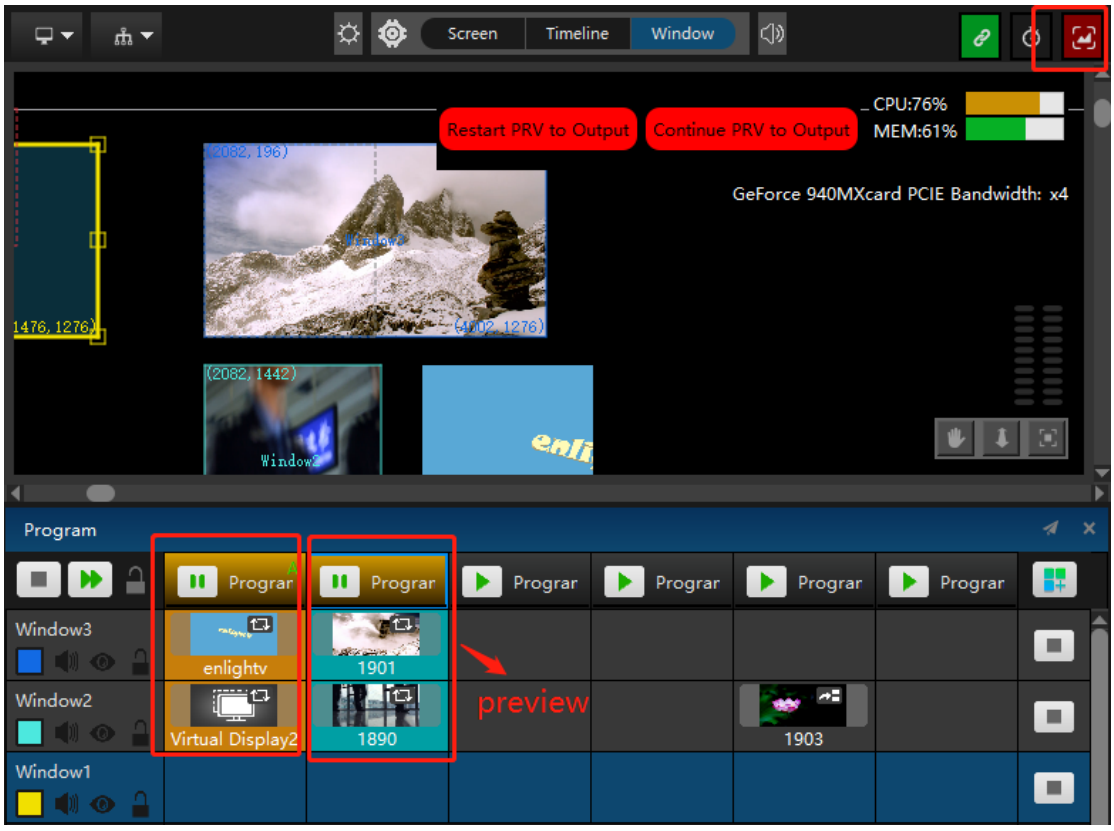
Preview

Monitor other programs to be broadcast in advance without affecting normal output. For example, if the connection is already made, the media has been played normally. When the next program is the SDI signal or other external signals, you can see whether the SDI and other signals are normal through the preview mode, or you can also use the preview mode to see if other programs to be played are normal. This can greatly reduce the problem that the signal is not normal after switching to the next program.

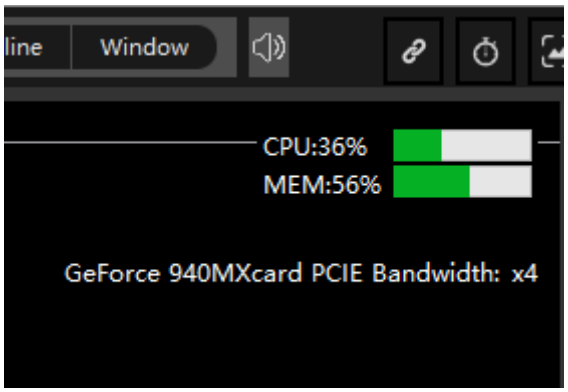
Preview usage:

In the play state, click the preview button in the stage management, or select the preview mode in the mode menu to open the preview mode. When the preview mode is turned on, it will be displayed in red flashing mode.

After the preview mode is turned on, you can click to preview and play other programs. The previewed program will only be played in the stage management. Before the preview mode is turned on, the media being played is played normally.



Hardware Performance Testing

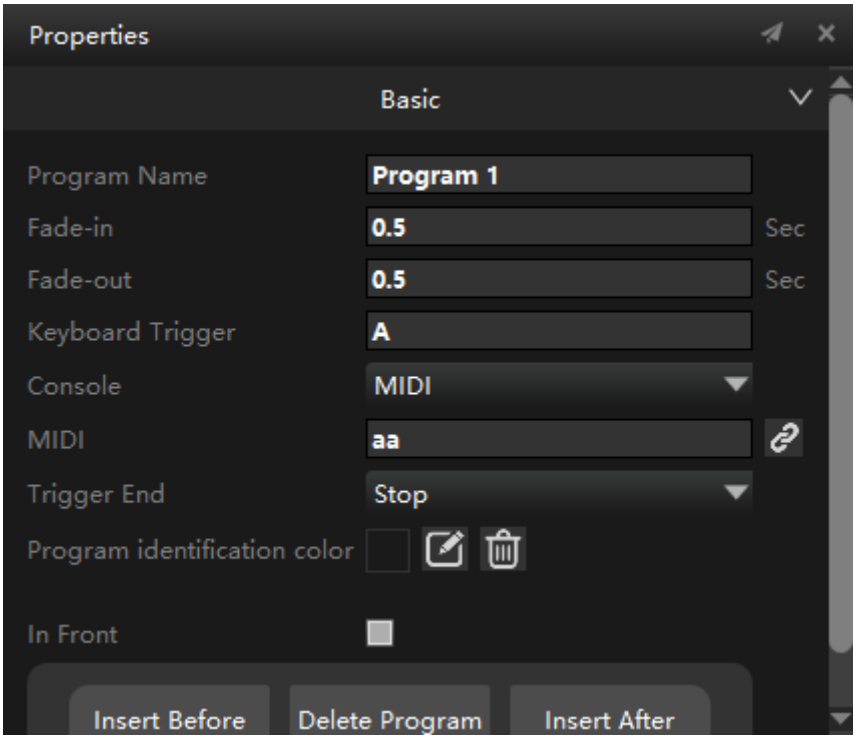


Hardware performance monitoring Monitors the hardware usage of the entire server at each point in time. If the output video screen is very slow when the software is being used, you can first check the CPU and memory usage. If the CPU and memory usage is very high, it will cause the video screen to be played to be stuck, it is necessary to transcode the video (the broadcast control assistant provided by Hirender is used to transcode the optimization), or change the preview status of the software to thumbnail or wireframe mode.

After optimization, the hardware detection usage is still high. It is recommended to improve the hardware configuration or use the Hirender professional multimedia server.

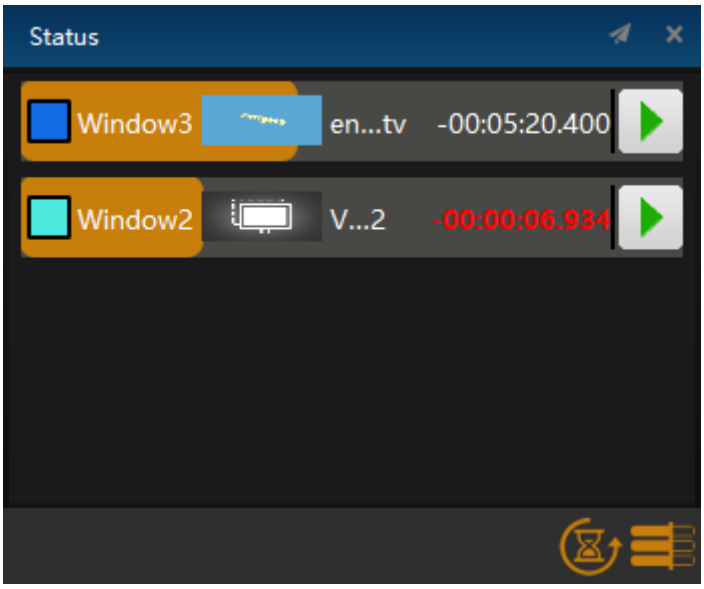
Properties

In the property interface, the properties of timeline layer, program node, program, AUX timeline, window and effects will be displayed. Users can edit them in the property box.

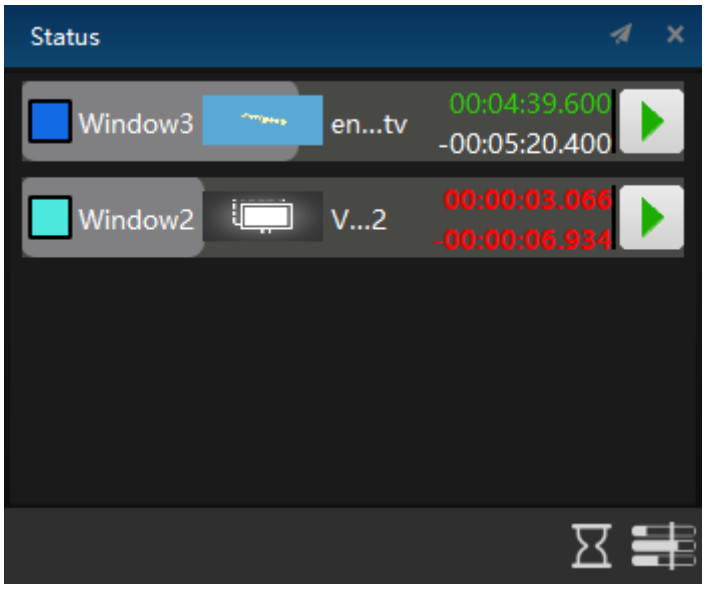


Playing status

The playing status interface will display all editing Windows and the playing situation of the time line. You can control the playing through the playing button on the right, and drag and drop the playing progress bar of the window to control the fast-forward playing of materials.



You can adjust the status bar to display the video timing, countdown, or display both timing. When the countdown is 10 seconds, the timing status will be displayed in red for reminding, As shown in the figure below:



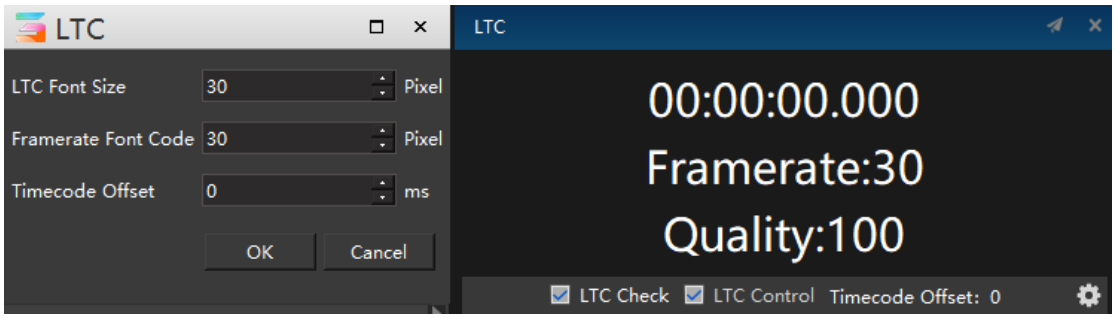
Network Update Status

The network update status shows the transmission and update status when the control server transfers all edited materials to the display server or the standby server in online mode or master and backup mode, As shown in the figure, four materials are transmitted on the display server whose IP address is 192.168.2.163, and the transmission is complete.

LTC Audio time code

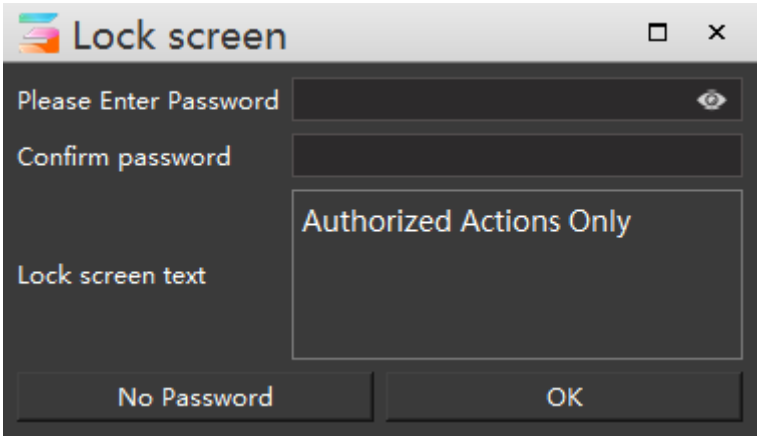
Select the primary timeline to accept the audio Timecode (LTC):The main timeline and light console of Hirender S3 software can accept LTC audio synchronization time code. The timeline is synchronized with the time code to realize the synchronized control of lighting, audio and video.

In the case that the master timeline accepts the audio timecode, the LTC timecode monitoring window displays the time position of the timecode, along with the frame rate and offset. When the primary timeline does not accept a time code, the time code is displayed in white. Upon receiving the time code, time code display for the green, if the interrupt, are shown in red. In the Settings, you can change the font size and the position of the offset correction time code.



Lock

Click the lock button in the toolbar to lock the software interface.



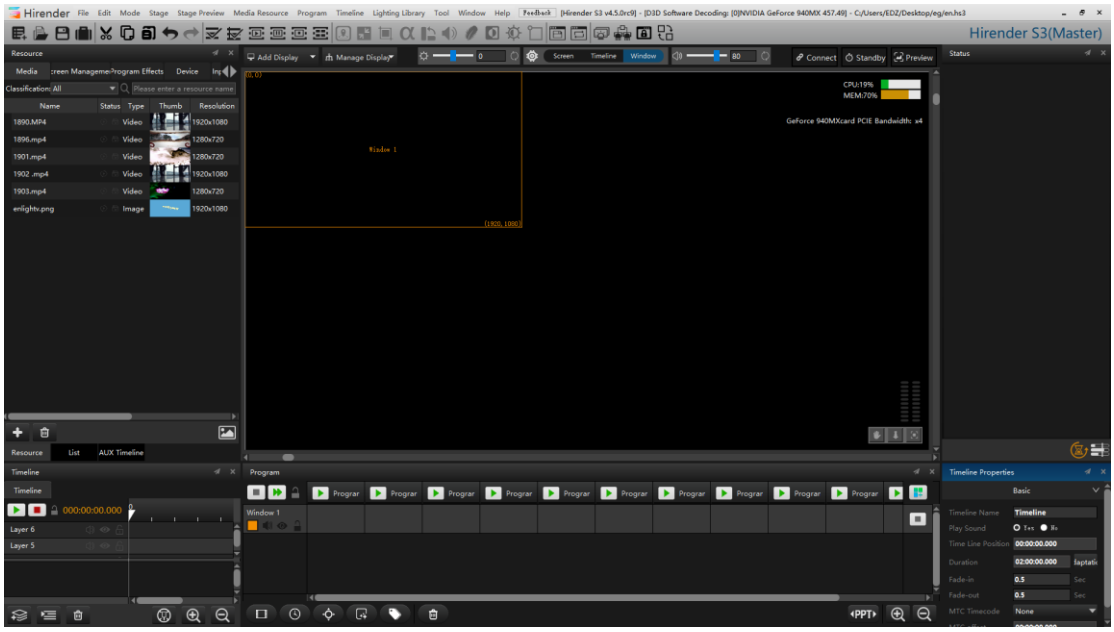
In the locked state, you can tap the lock symbol in the lower right corner or click the space to enter the unlock interface.

Appendix

Appendix I: Hirender S3 Quick Start Guide

1.Window layout adjustment

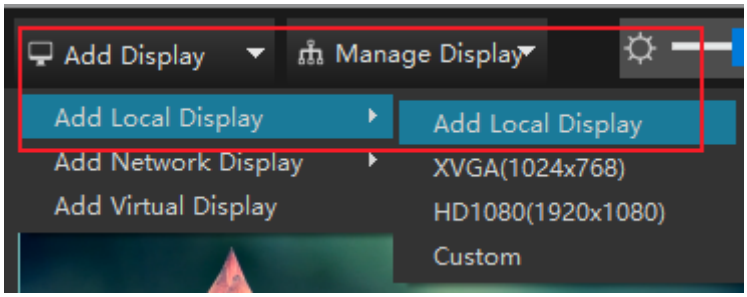
The window layout of the software operation interface can be adjusted according to personal preference. The size and position of program window management, play status, main program, timeline, program management, resource management, etc. can be adjusted. After adjustment, the adjusted layout can be saved by clicking the Save button.



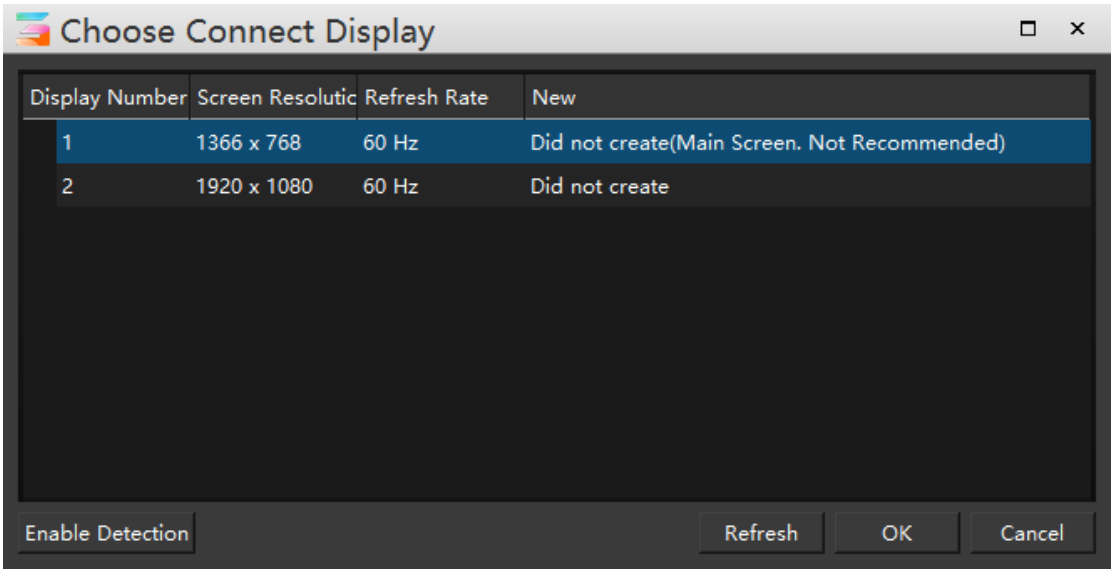
2. Video projection

Add and arrange display screens:

Add a display screen as shown ,add screen-add local display screen-add local connected screen.

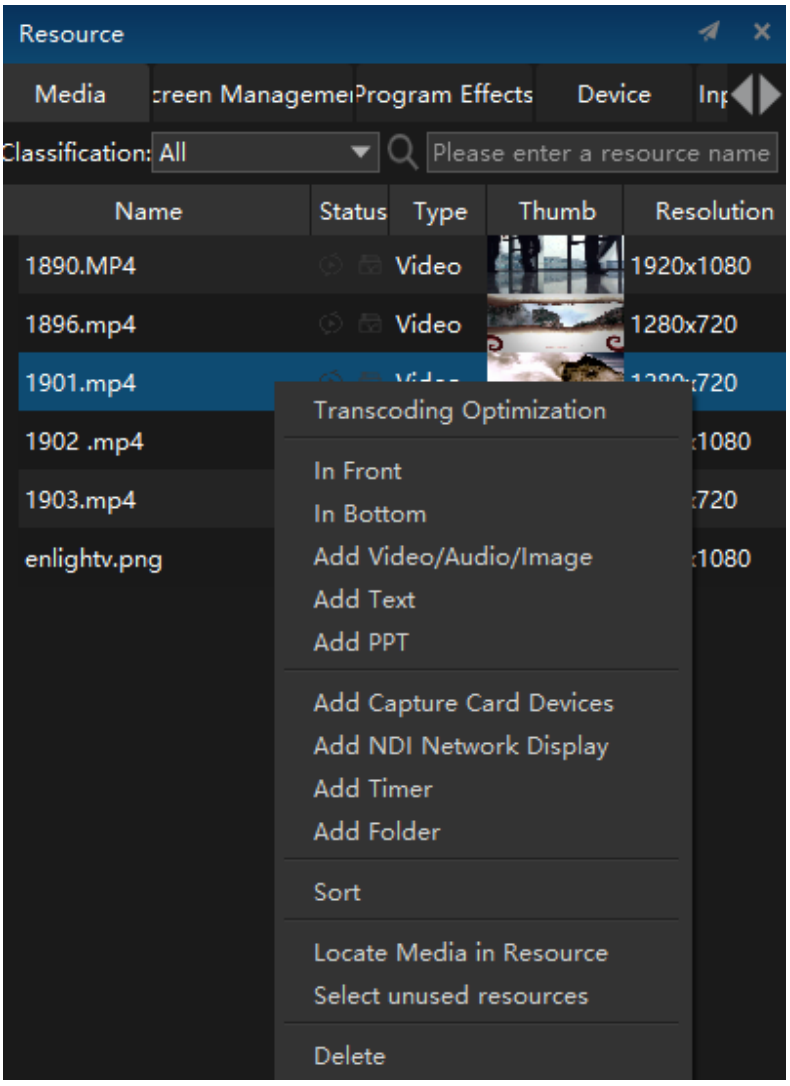


Select the "connected display screen" in the pop-up box，select and click OK to add.



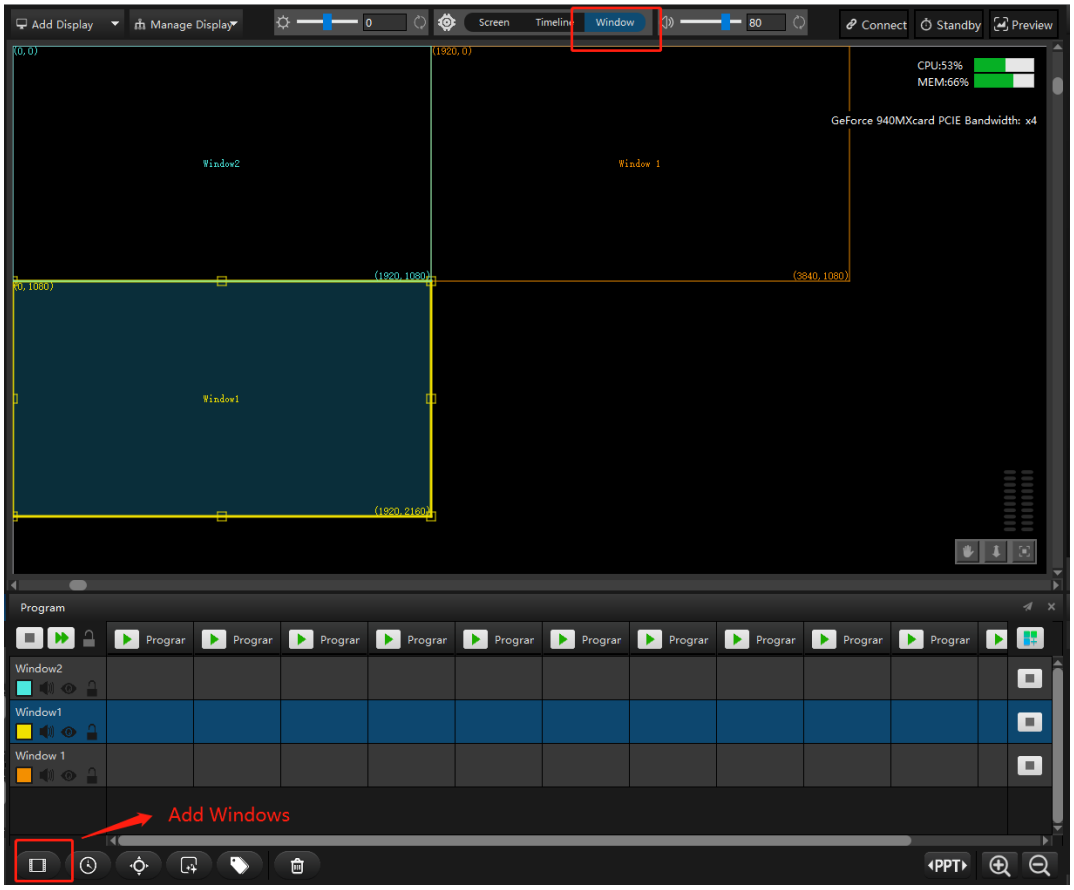
Add media:

Select " Resources Library" in the "Resource Management" window. Right click to select media.



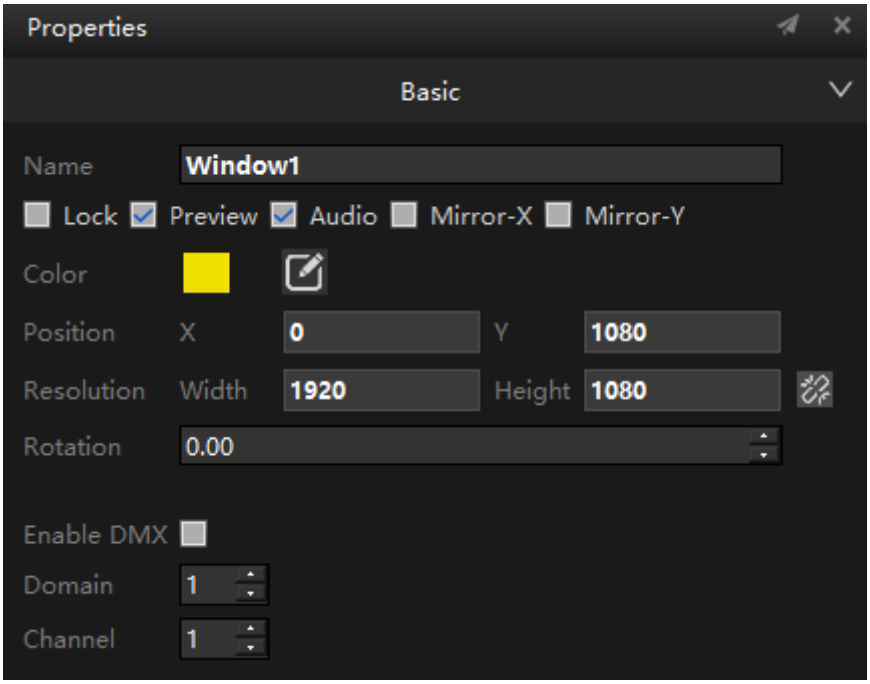
In the pop-up window, select your media, and click Open to add to the media resources library.

Add and arrange window:



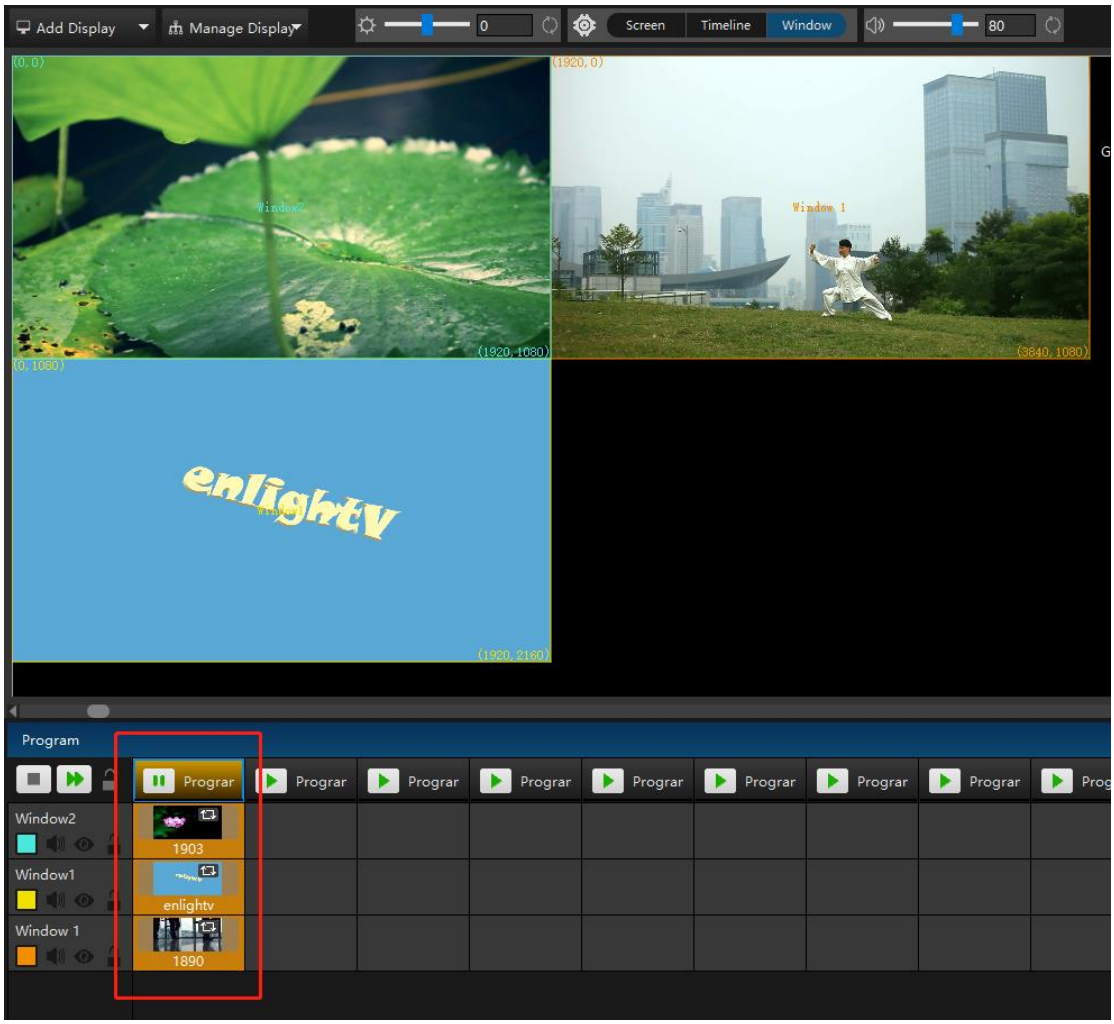
Set window size, color, position, etc.

Select the window and adjust it in the properties of the program window in the lower right corner:



Edit media:

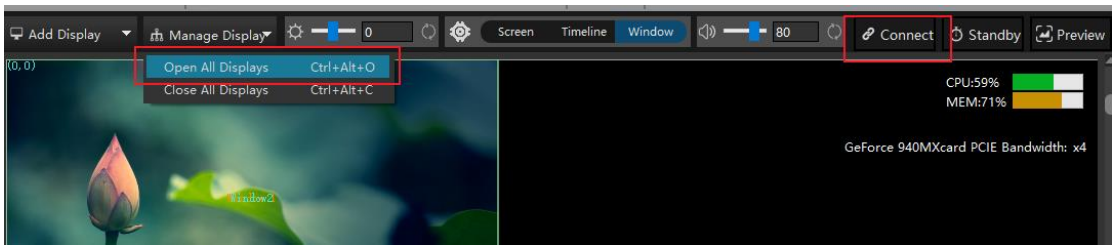
Add the media to the already arranged window for display.

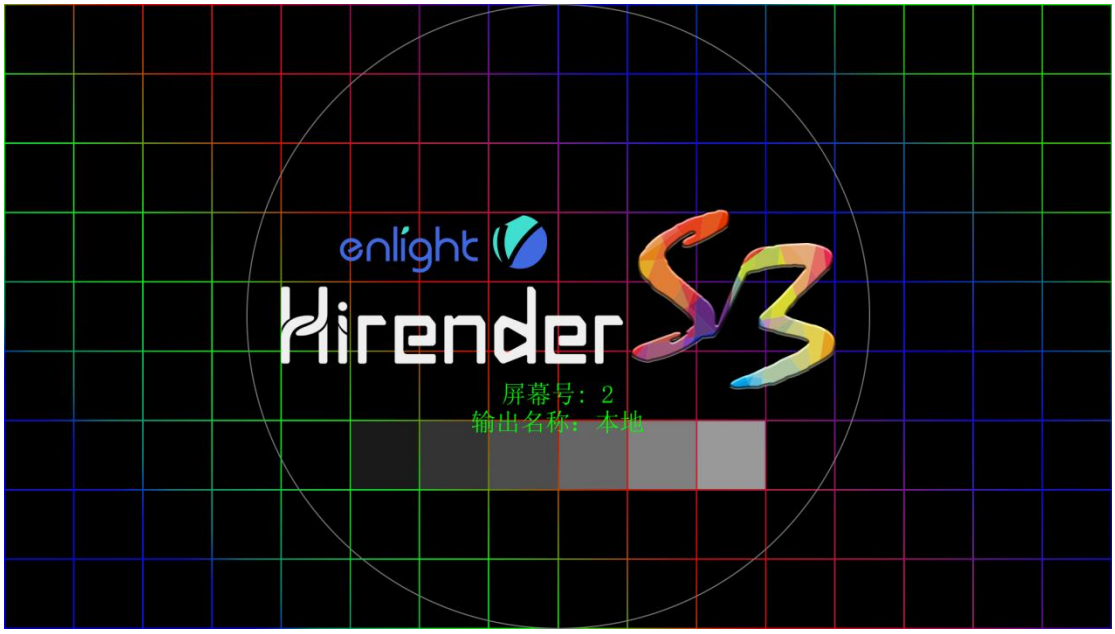


Output screen:

After the screen is added, the window is added and arranged, the media is added, and the media editing is completed, the edited media will be projected onto the display device.

First, click Open All Connected Devices as shown below, and the display device displays the logo of the Hirender software.





Execution Online to project the edited media onto the large screen.

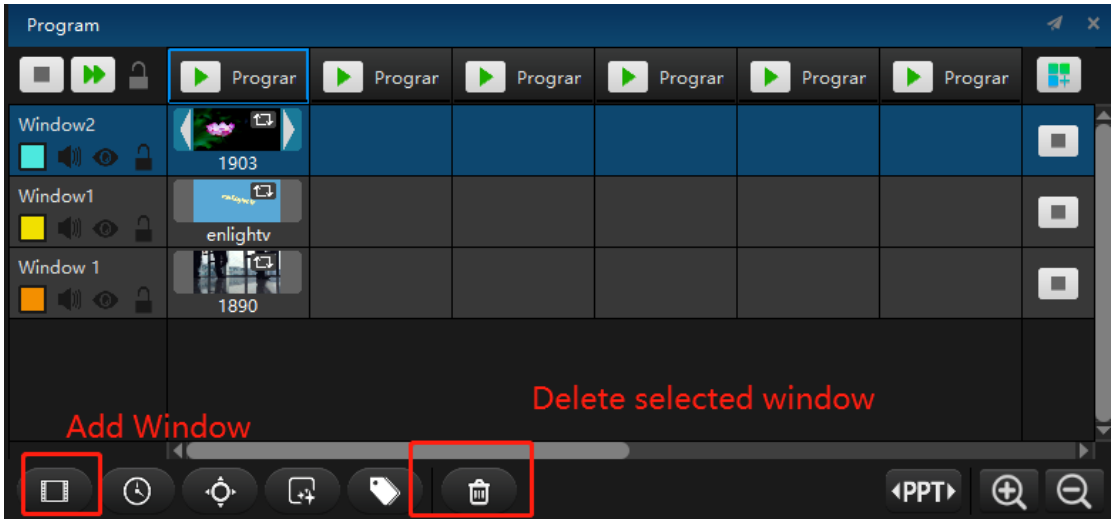
3.Windowed play mode

Window function description:

Custom window resolution, window random arrangement . Add the material to be played in the corresponding window in the program, and set the order in which the program is played. The media file is added at the window position of the corresponding program according to the program playing demand.

Add and delete window:

As shown in the figure below, click the "Add window layer" button to add a window. Each window has a default color, which can be customized. When the window is deleted, select the window that will be deleted, right click and then delete it after confirming again.



4.Window operation instructions:

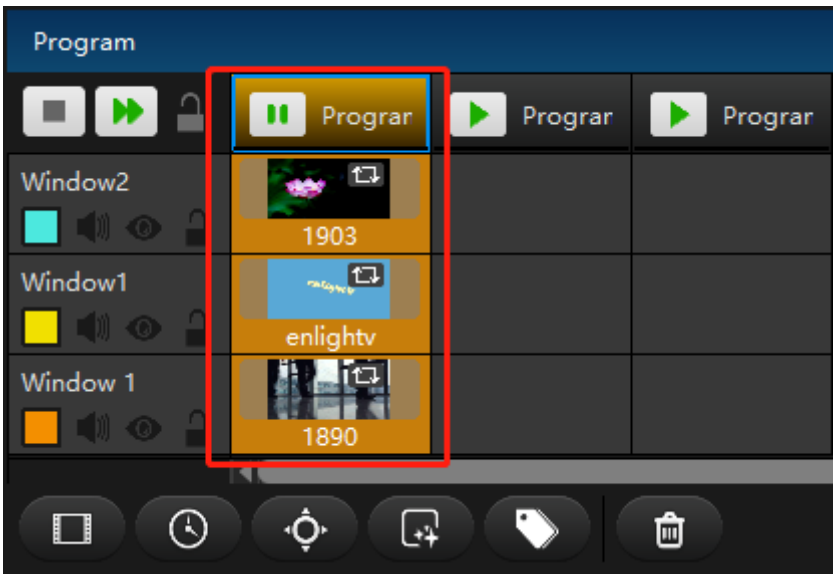
Select the window whose resolution will be changed, change the window resolution in the property box in the lower right corner, change the window output sound, and so on.

Arrange all added windows on the display device as needed.

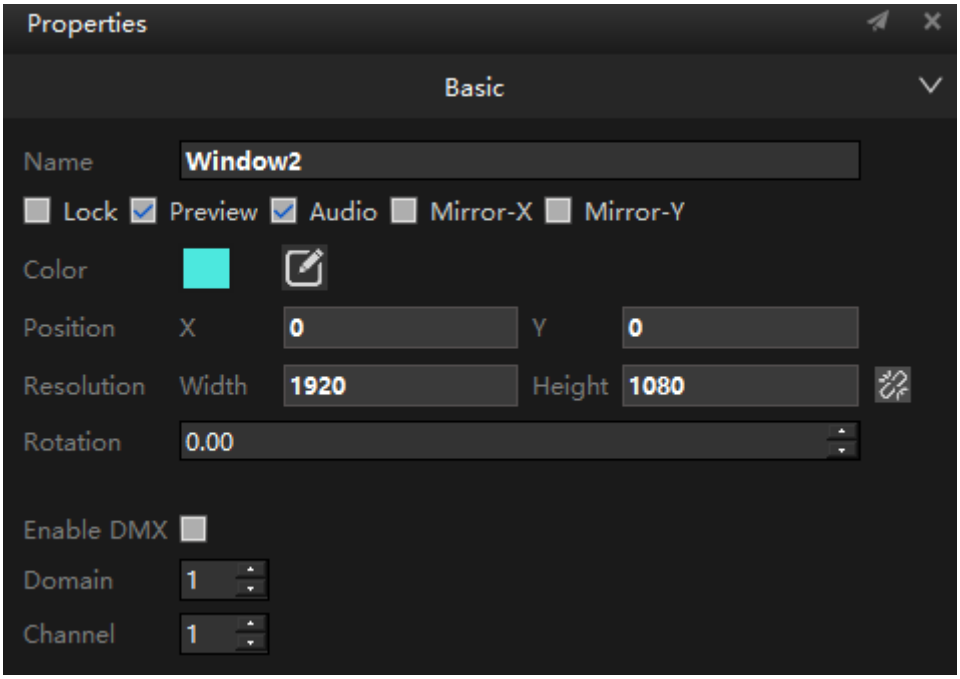
According to the program playback requirements, add media resource to the corresponding window in the program. Set the playback order, main KV, fade time, trigger end and other properties.

After selecting the media resource in the program management, set the effects in the property box in the lower right corner, such as crop, opacity, volume, hue, and saturation. In the play mode, you can also set the action after the clip is played, such as loop playback, stop playback, freeze in the last frame, switch to next program, and switch to other programs. Media clips can also be clipped by setting the start time and the finish time.

When the media is playing, the background color will turn yellow:

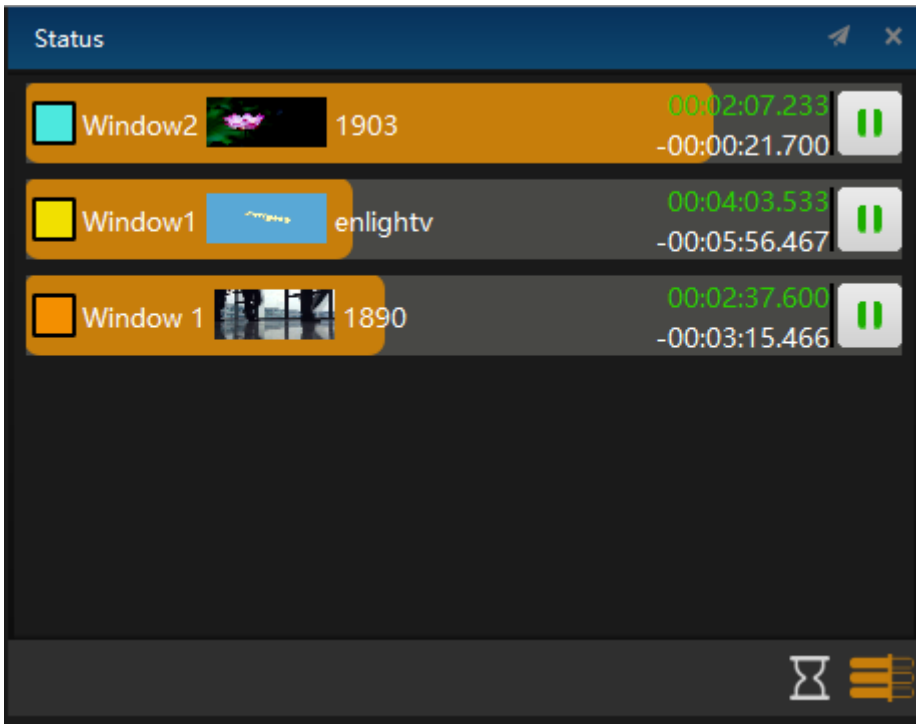


Set window properties: set preview, sound output, window default color, rotation, and more.



Playback status preview:

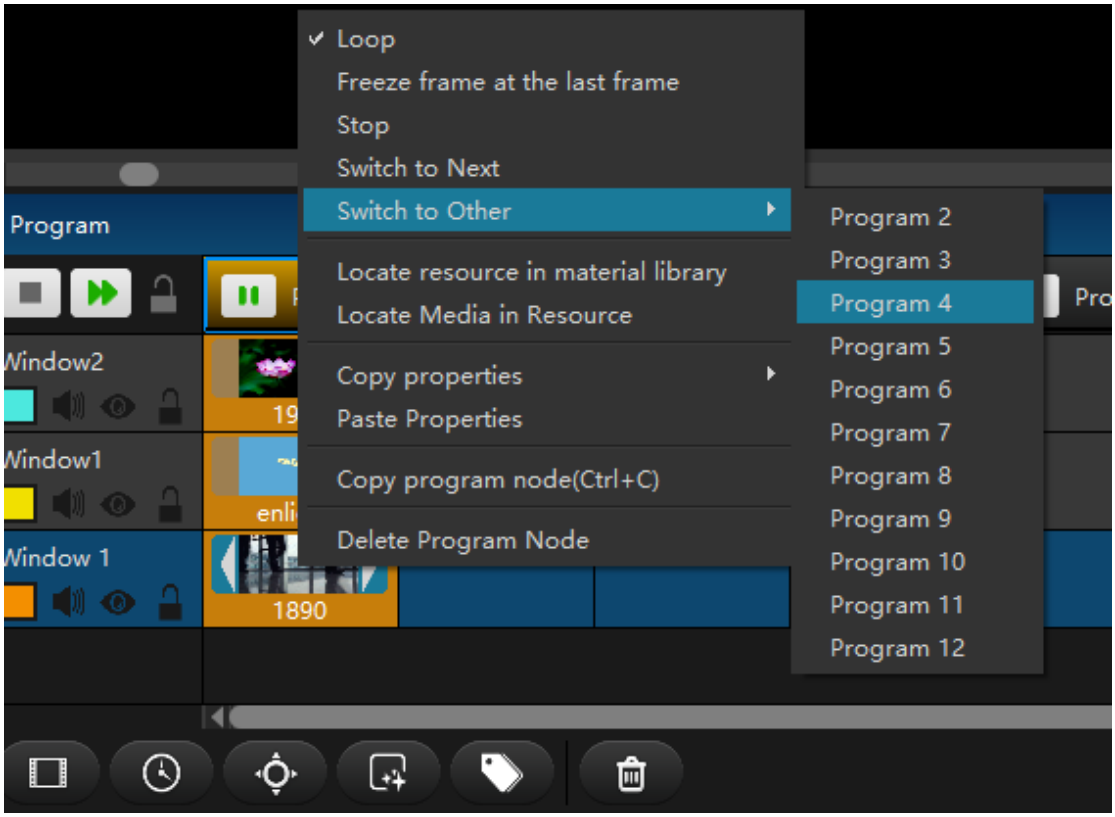
The playback status window displays all the windows in the currently playing program and the playback status of the timeline. The media resource playback pause can be controlled by the button at the end of each window. Drag and drop the window playback progress bar to control the fast forward playback of the media.



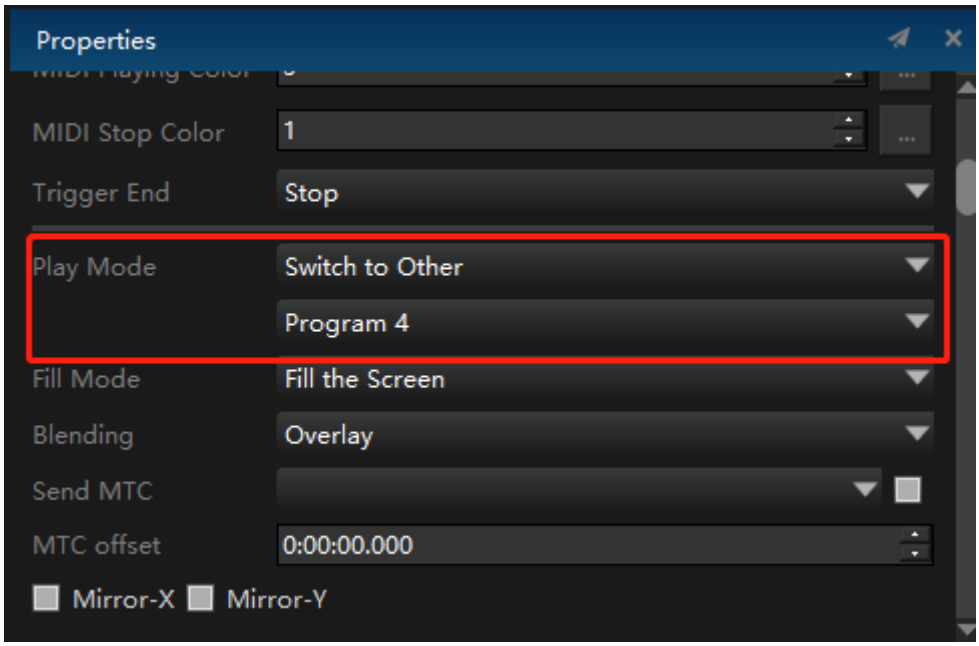
5.Program switch:

Hirender S3 can switch to any other program after the program is finished playing. Program jump requires two settings:

Select a video in the program as the time node for the program jump. The end of the playback of the video selected as shown in the red box is the time node for the program 1 to jump to the program 4.



(1) Click to select the media, and set the play mode to "Switch to Other" in the pop-up display interface. Then select "Program 4" in the dropdown box to the right of the playback mode.



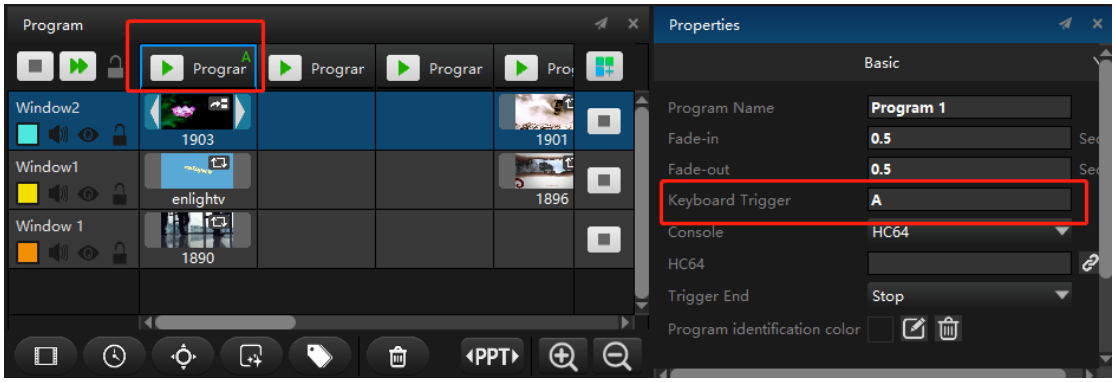
After the setting is completed, when the "d.mov" in the program 1 is finished, it will jump to the program 4 to play.

6.Quickly switch programs

Hirender S3 supports fast switching programs. Users can quickly switch programs by editing shortcut keys and binding console push pole.

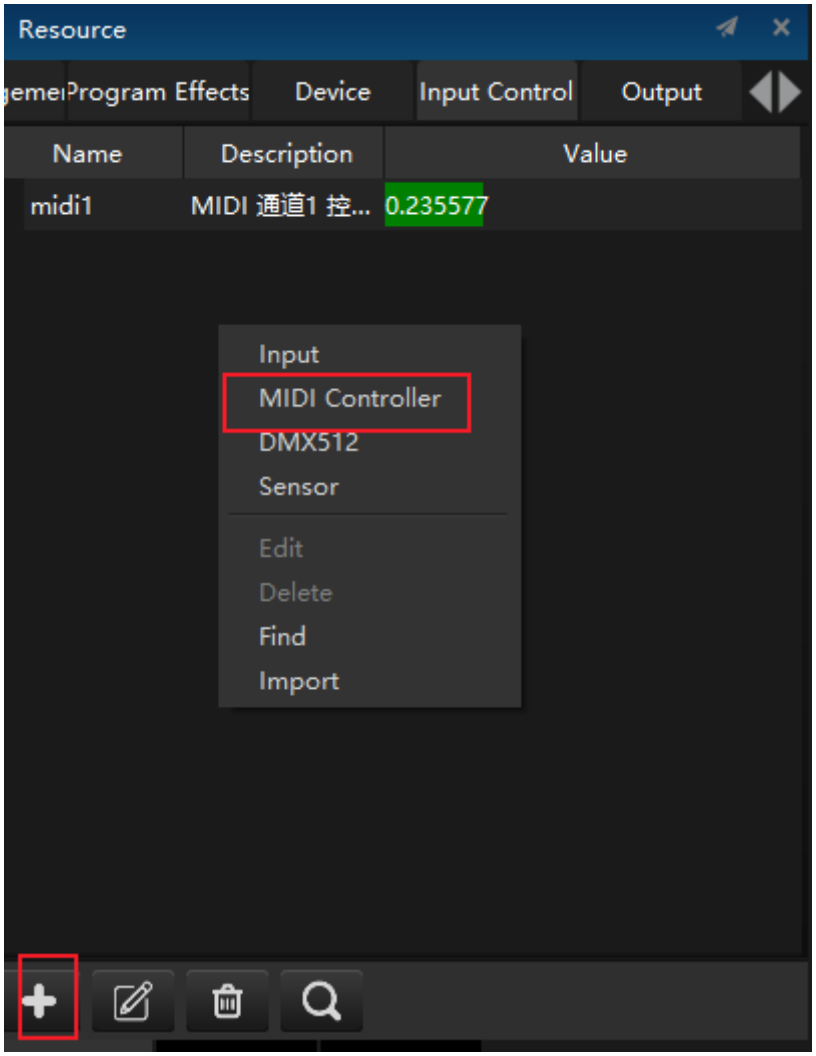
Set keyboard shortcuts to trigger program:

Click on the program, fill in the shortcut key in the keyboard trigger of the properties window, for example "a".

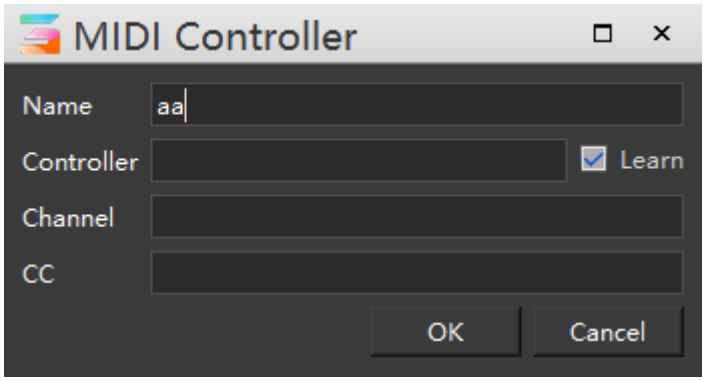


Set the console fader to trigger the program

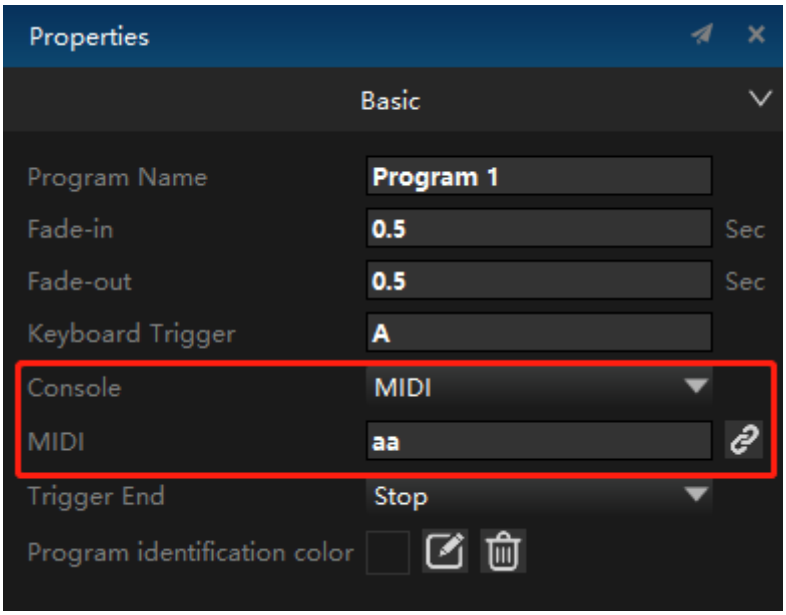
Take the MIDI console as an example. First, we need to add an input control. Click on the input control interface, then click the + sign in the lower left corner to add MIDI control.



Then fill in the name of the push pole such as "aa", in the pop-up interface. Push the MIDI console's push pole, then the push pole's channel and controller number will be automatically filled in.

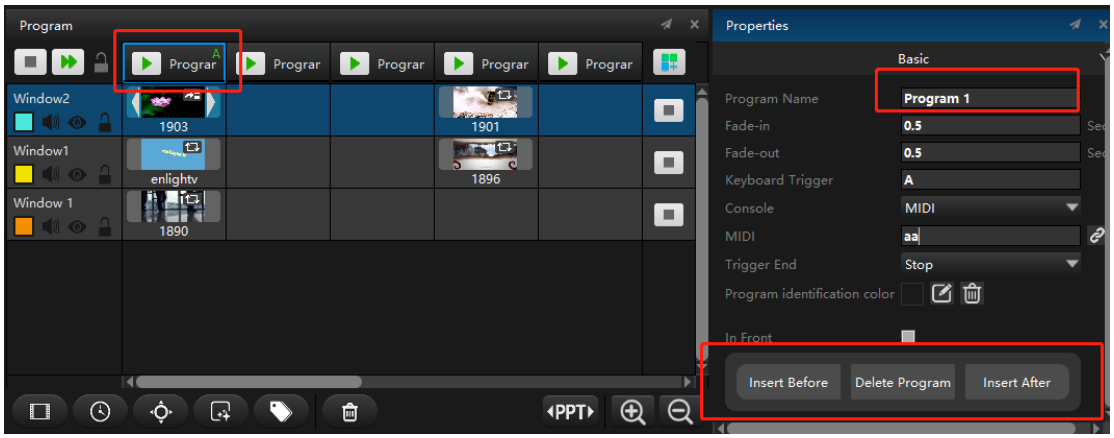


After adding the push pole, we only need to click the program again, then write the name of the push pole in the trigger input box of the program property interface.



7.Modify the program name

Select the program to be modified, and modify the program name and other properties in the lower right corner of the program property window.



8.Preview

Preview definition:

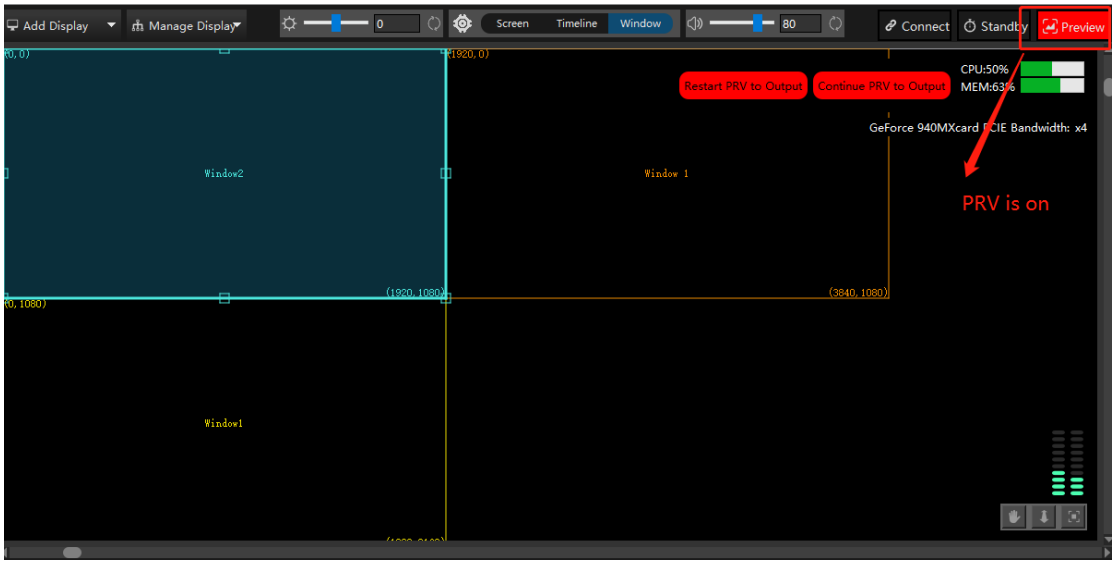
Monitor other programs to be broadcast in advance without affecting normal output. For example, if the connection is already made, the media has been played normally. When the next program is the SDI signal or other signals collected, you can see whether the SDI and other signals are normal through the preview mode, or you can also use the preview mode to see if other programs to be played are normal. This can greatly reduce the problem that the signal is not normal after switching to the next program.

Preview definition:

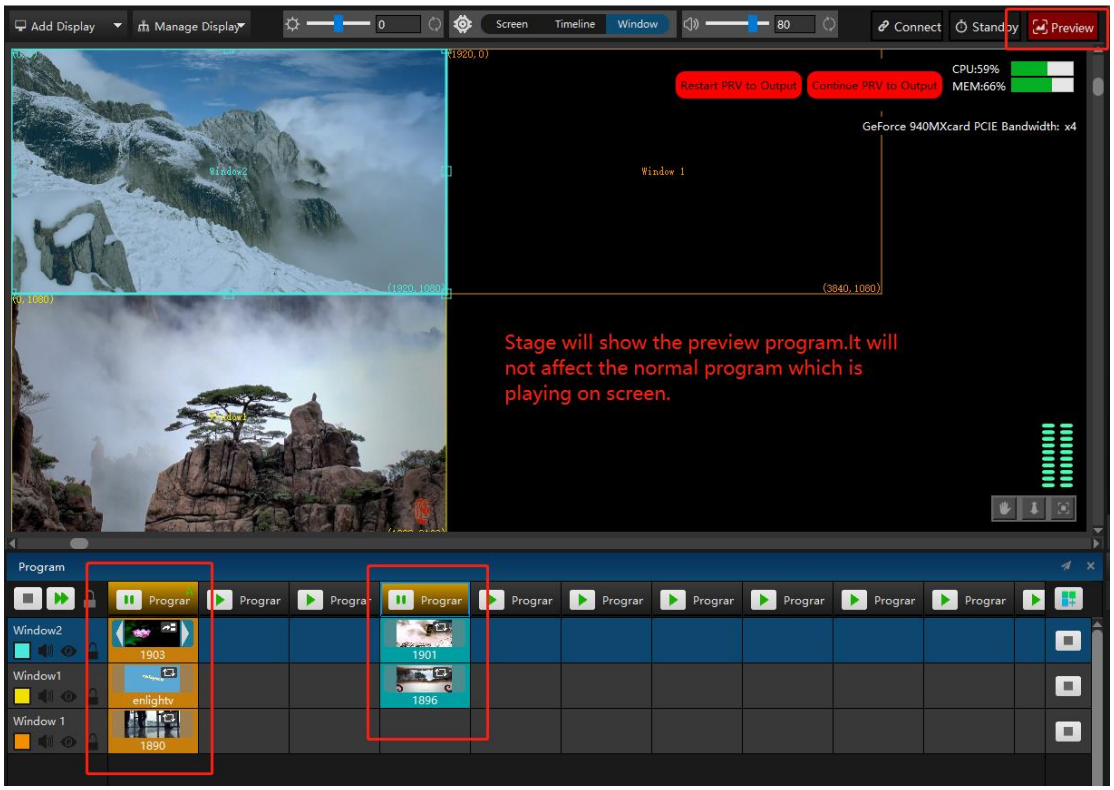
In the play state, click the preview button in the stage management, or select the preview mode in the mode menu to open the preview mode. When the preview mode is turned on, it will be displayed in red flashing mode.

After the preview mode is turned on, you can click to preview and play other programs. The previewed program will only be played in the stage management. Before the preview mode is turned on, the media being played is played normally.

The preview mode is turned on as shown below;



Browse the preview program as shown below:



Exit the preview mode: Click on the red box in the upper right corner to exit the preview status. The display screen on the stage also changes from the preview program screen to the screen that the display device is outputting.

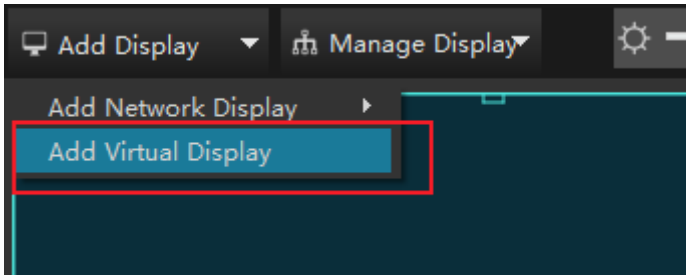
9.Virtual screen

Virtual screen description:

The virtual screen is to collect and play the programs in the stage management in real time. Virtual screen size, rotation and other effects can be adjusted freely, such as camera stitching, camera close-up, live capture, and special-shaped screen playback.

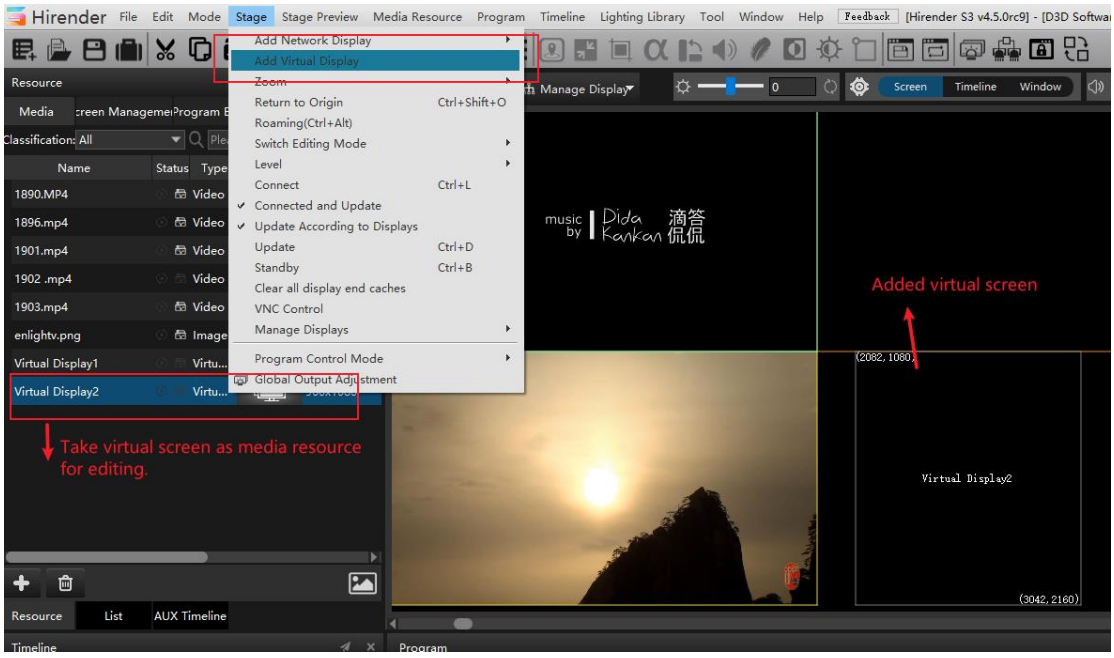
Add a virtual screen:

Add the virtual screen to the resource management window by selecting "Add Virtual Display" from the stage menu.

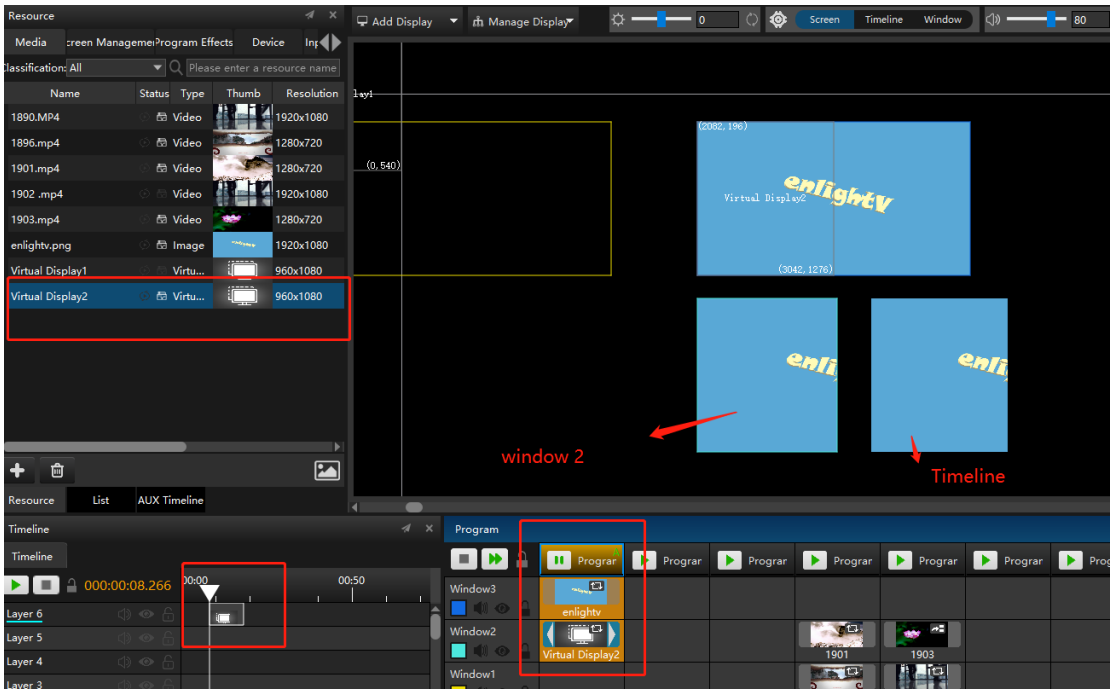


The virtual screen displayed in the stage management is a window for collecting media resources in real time.

Add the media you want to capture the live show to the stage management to the stage management. Then, in the stage editing state, double-click Virtual Screen in the stage management to set the parameters such as the size, position, and angle of the virtual screen.



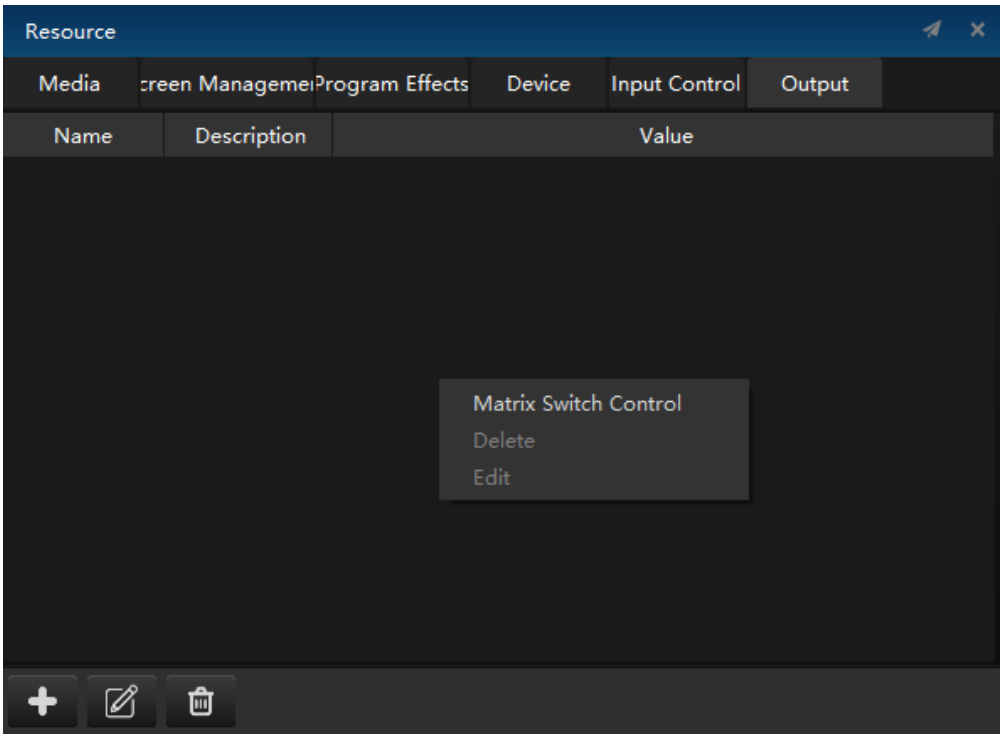
Material captured using virtual screen;



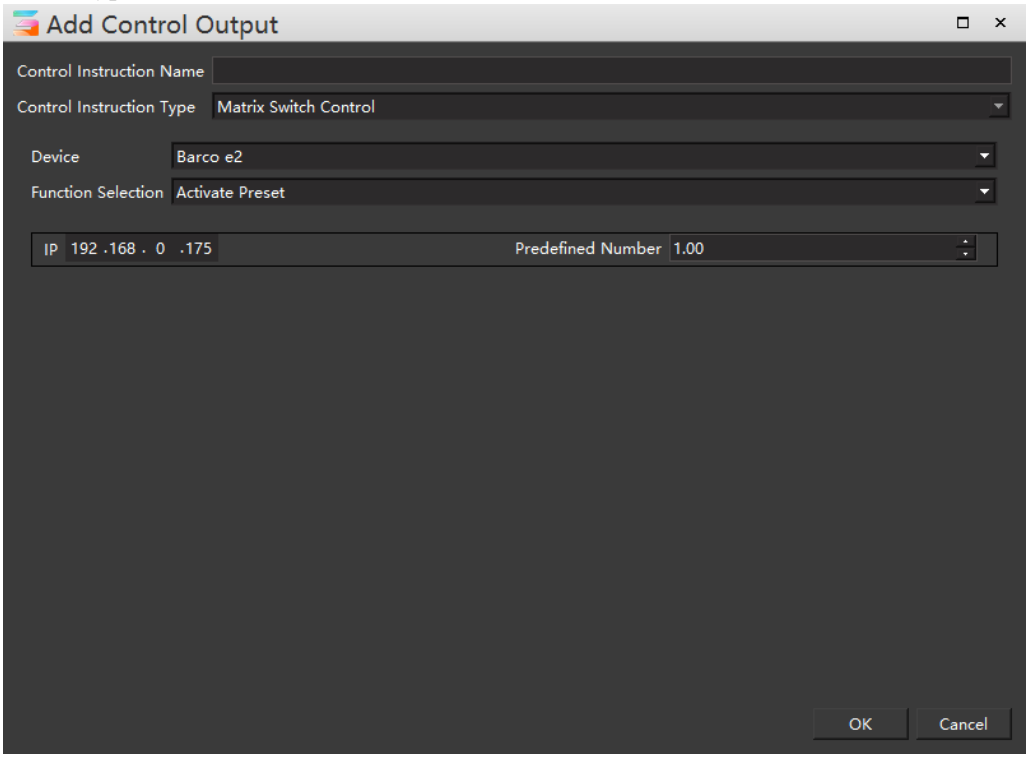
10.Video console switch

Hirender S3 can directly control video consoles, matrix and other hardware devices, by connecting the S3 server and other hardware devices in the same LAN. The steps are as follows:

Click the “Add” button below the output control interface to add an output control.

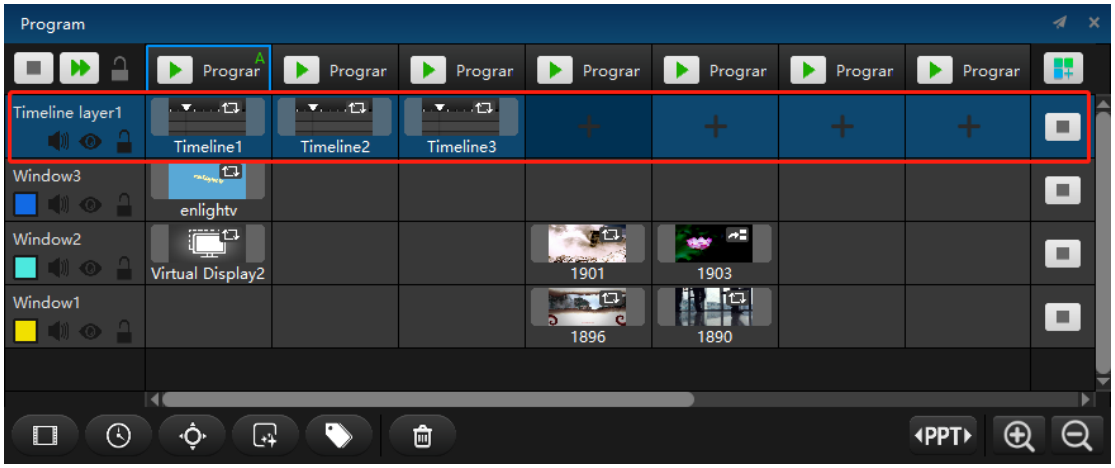


In the setting interface of output control command, set the command name, control instruction type, IP and function selection to be added:



11.Timeline edit

Multiple editable timeline layers can be added to the timeline layer. A timeline can be added to each show. Each timeline can be edited just like the main timeline, with media resources arrangement, control command addition, and material properties addition as required.

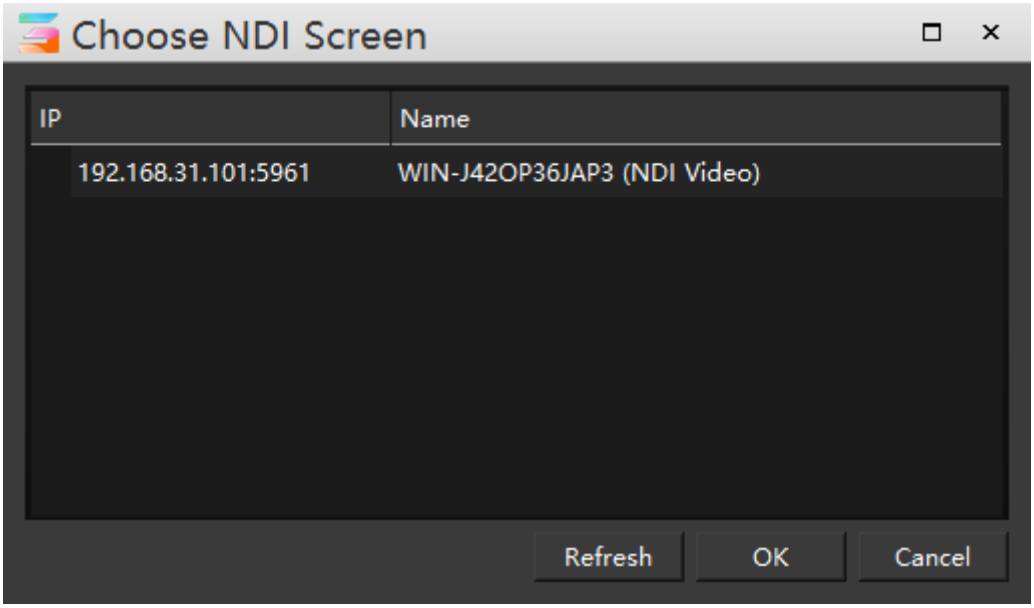


12.Add NDI capture

Install the Hirender NDI software on the computer being collected. After installation, open Hirender NDI in the start menu bar and select the screen video source and recording device, as shown below:

Click Settings, can be set to send frame rate, video source, etc.

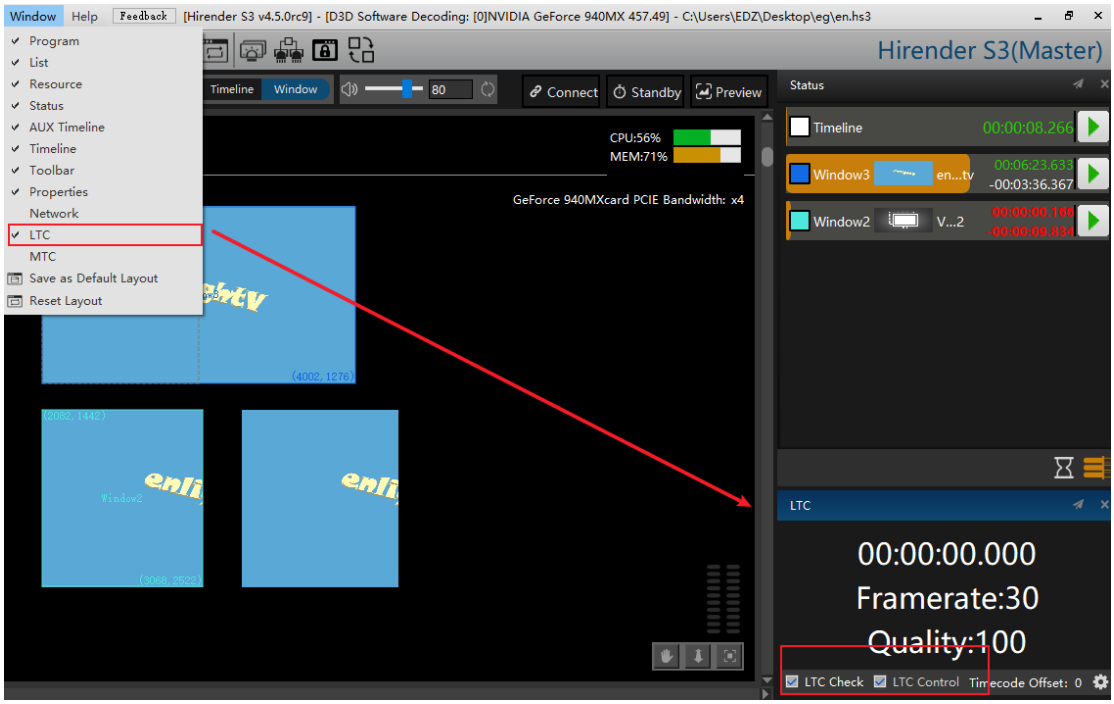
Click to “select the device”, then add the corresponding NDI device according to the IP address of the computer at the collection end. Click OK to use the added NDI device as a media resource:



13.LTC time code setting and use

The Hirender S3 software main program timeline supports external LTC synchronous time code control, which can be controlled synchronously by the sound console to achieve synchronized sound, picture and light playback.

Select LTC in the menu bar , and then select the LTC control option in the right LTC on the software interface to enable the LTC control function:

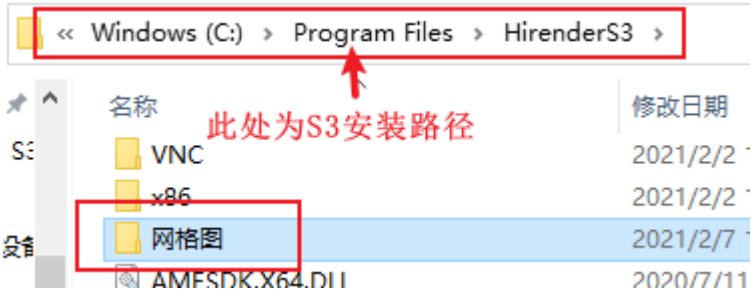


Perform material editing on the main program timeline, and add new programs in program management to realize program insertion and broadcast, and realize diversified dance effect.

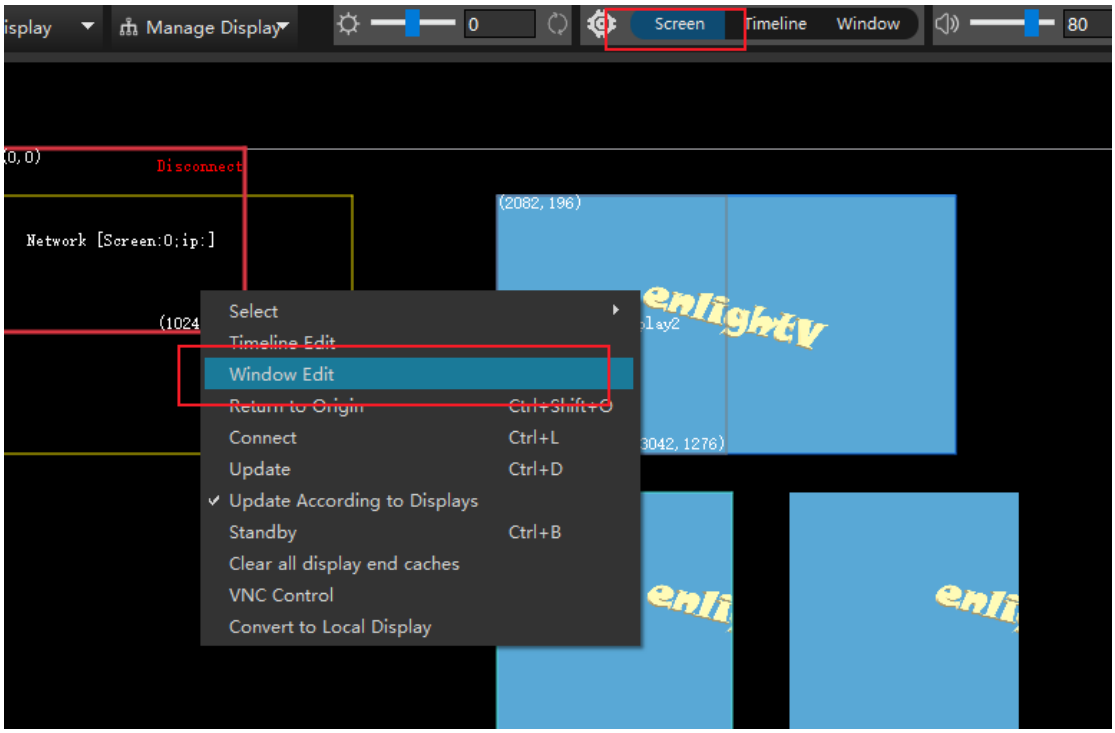
Appendix II: Projection Fusion

Enter the grid debugging interface through the operation software:

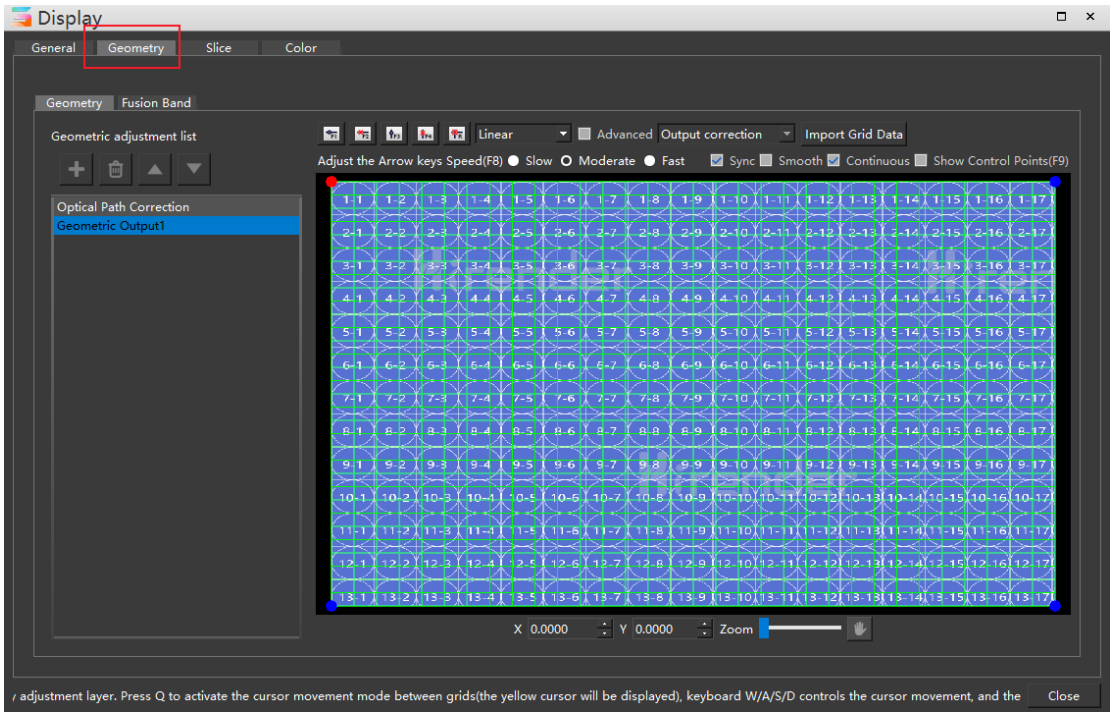
Add projection fusion debug grid: The grid material can be found in the S3 root directory. Note that if you add the grid material to the timeline, you need to switch to timeline editing mode when editing the grid material.

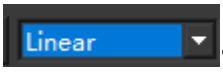


Enter the stage editing state: Right click on the stage editing interface, click to switch the editing stage status in the pop-up interface or click the stage editing button on the editing window.



Enter the grid debugging interface: In the state where all displays are displayed and connected, double-click the added screen display box and select the geometric deformation in the pop-up box.



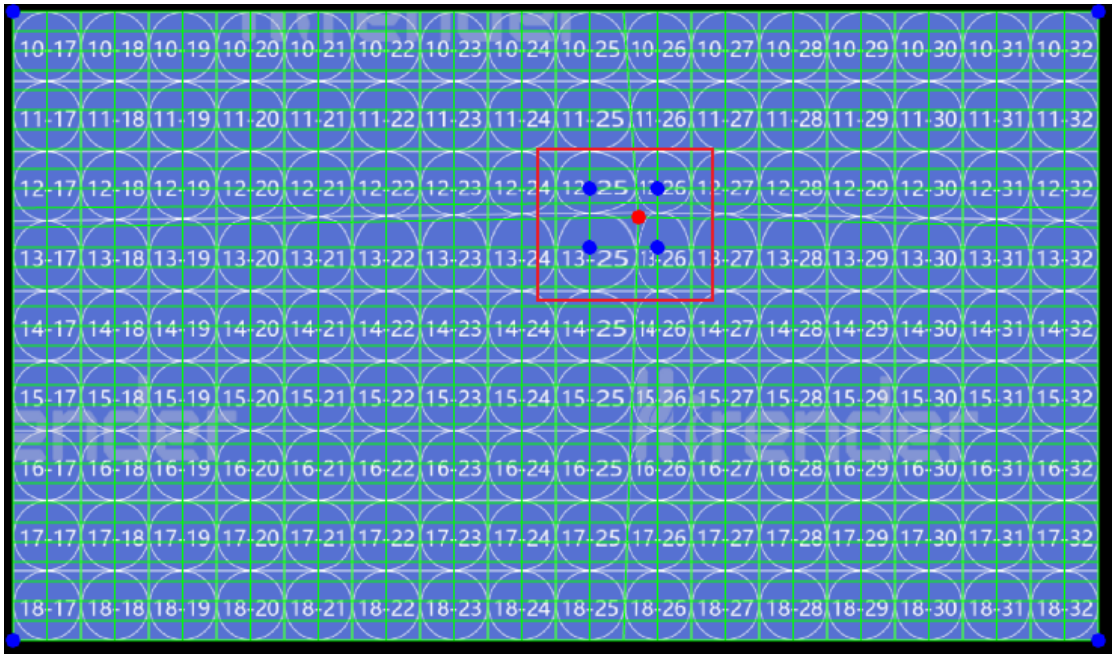
The entire debugging interface introduction: These five buttons：add vertical point, delete vertical node, add horizontal node, Delete horizontal node, Clear all.. 

The mode used to select grid debugging, including linear mode, perspective mode, and advanced mode. Linear mode geometric deformation debugging is suitable for profile projection, plane projection, mountain projection and so on. Perspective mode is suitable for flat projection debugging. The advanced mode is suitable for arc surface projection debugging.

Introduction of geometric deformation debugging:

(1)Linear mode:

Linear mode is suitable for projection and debugging of profiled surfaces and planes, irregular faces, etc. As shown below, in addition to clicking to add debug point in batches, all line intersections can be freely added to debug points for debugging.

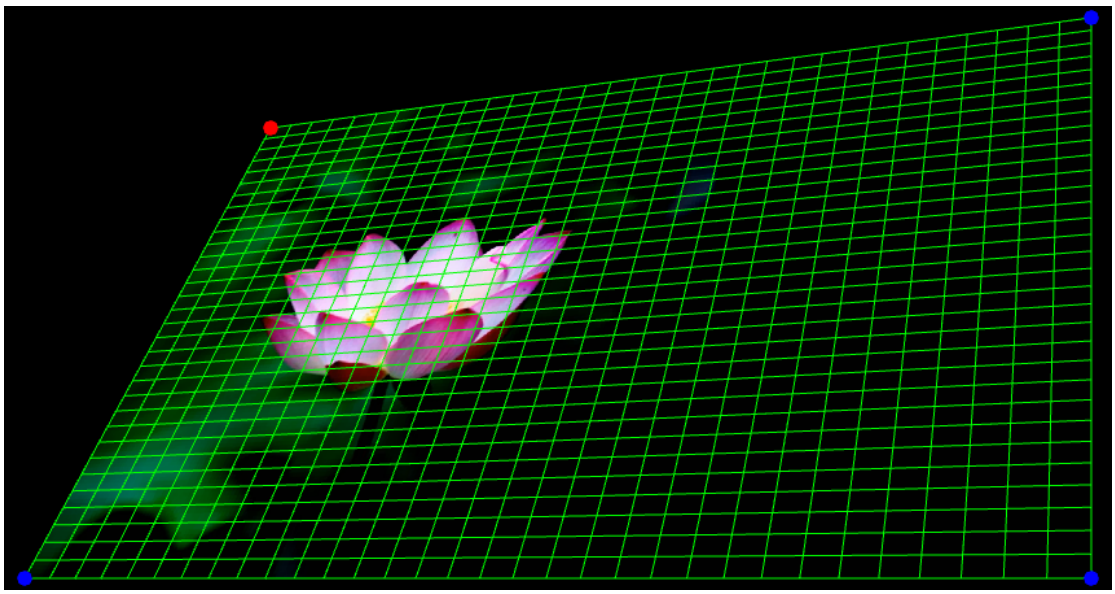


Left click or select the blue debug point, click the up, down, left and right buttons of the keyboard to move the point, and move to a certain position according to the actual situation on site.

By selecting the direction key to adjust the speed of the direction key movement point, you can also select multiple points at the same time to shift at the same time. When debugging a single debugging point, you can debug by right-clicking the green grid intersection to increase the debugging point. The overall debugging of each debugging point achieves the perfect effect of the projection screen output.

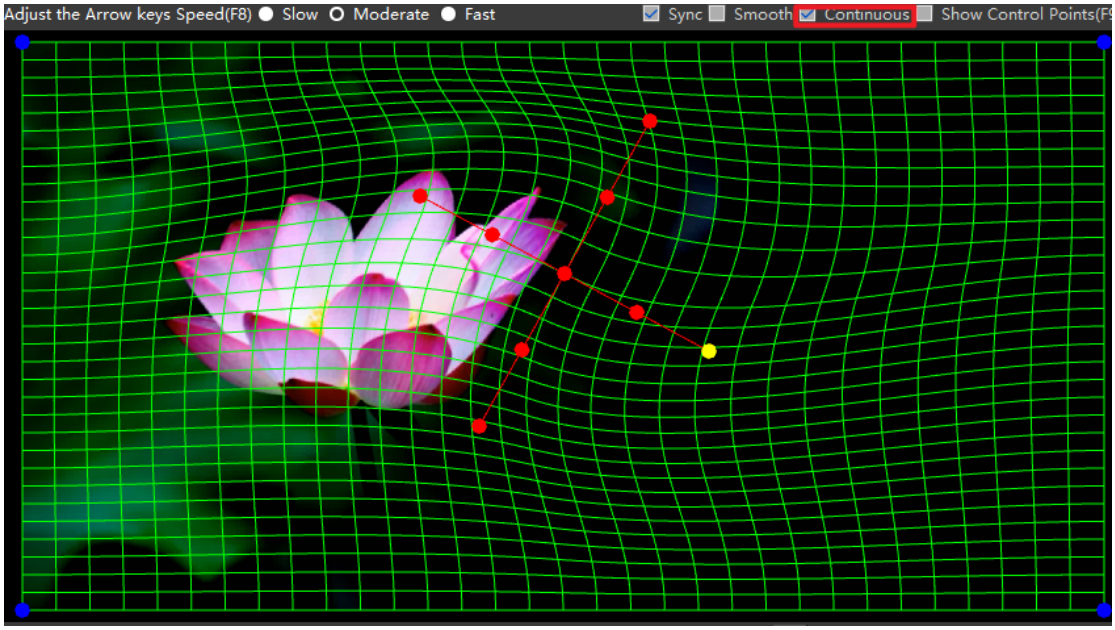
(2)Perspective mode:

Perspective mode is only available for debugging of planar projections. The perspective mode cannot increase the debug point, so only the four corners can be adjusted for debugging, and the output screen can be debugged according to the projection effect. Left click or select the blue debug point, click the up, down, left and right buttons of the keyboard to move the point, and move to a certain position according to the actual situation on site.



(3)Advanced mode:

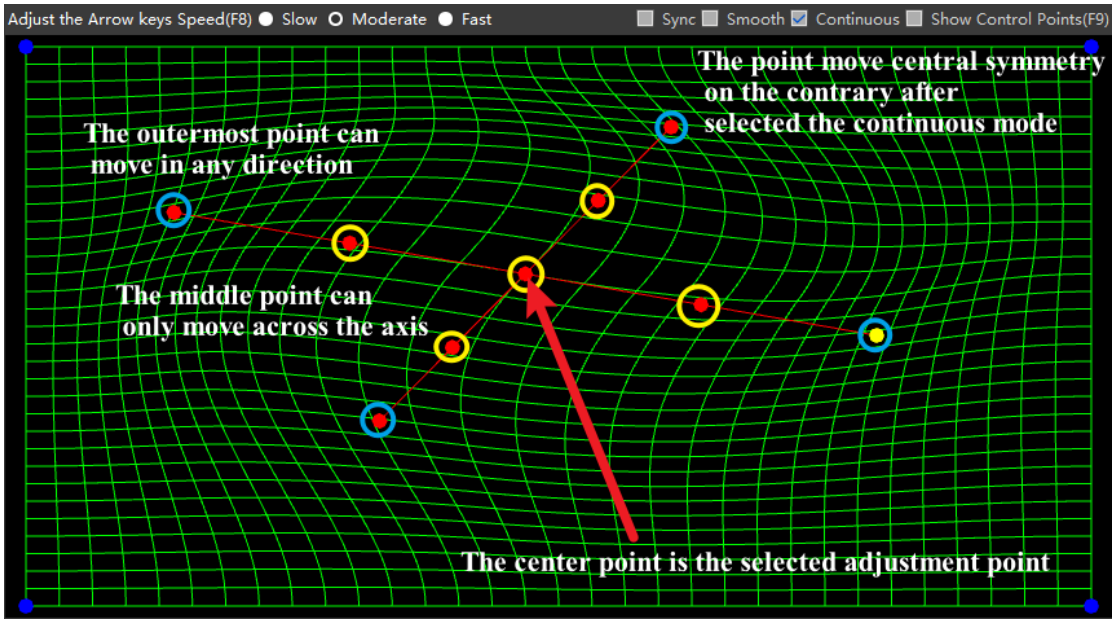
The advanced mode is suitable for arc surface projection. After the debug mode is selected in the advanced mode, the arc will appear after the debug point moves, as shown in the following figure.



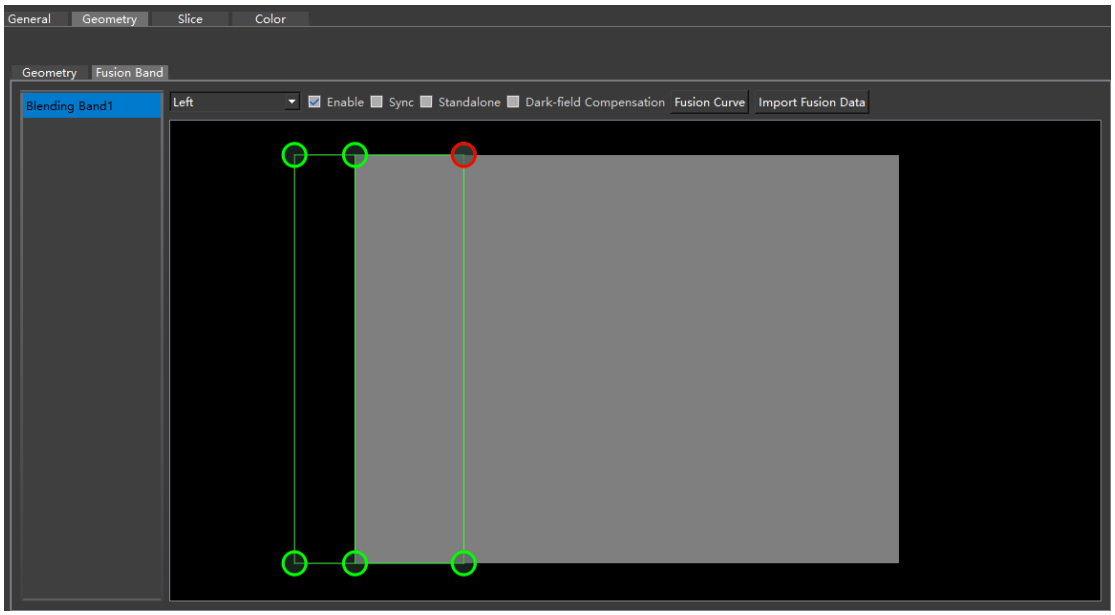
In advanced mode, a debug point like the cross handle will appear after selecting a debug point. Each point on the cross handle can be debugged by clicking the left button, and the outermost point can be moved up, down, left, and right. By selecting ,the synchronous display

image takes the picture to the projection surface, and the edge smoothing is used to eliminate the jagged problem that occurs when moving the debugging point， and the curve smoothing is used to perform symmetric motion on the left and right sides when debugging the cross handle. For example, when the curve is smoothed, when the rightmost point of the mobile cross handle is up, the corresponding left handle will move downward. After removing the smoothed check state of the curve, if the right point moves up and down, only the right handle moves up and down.

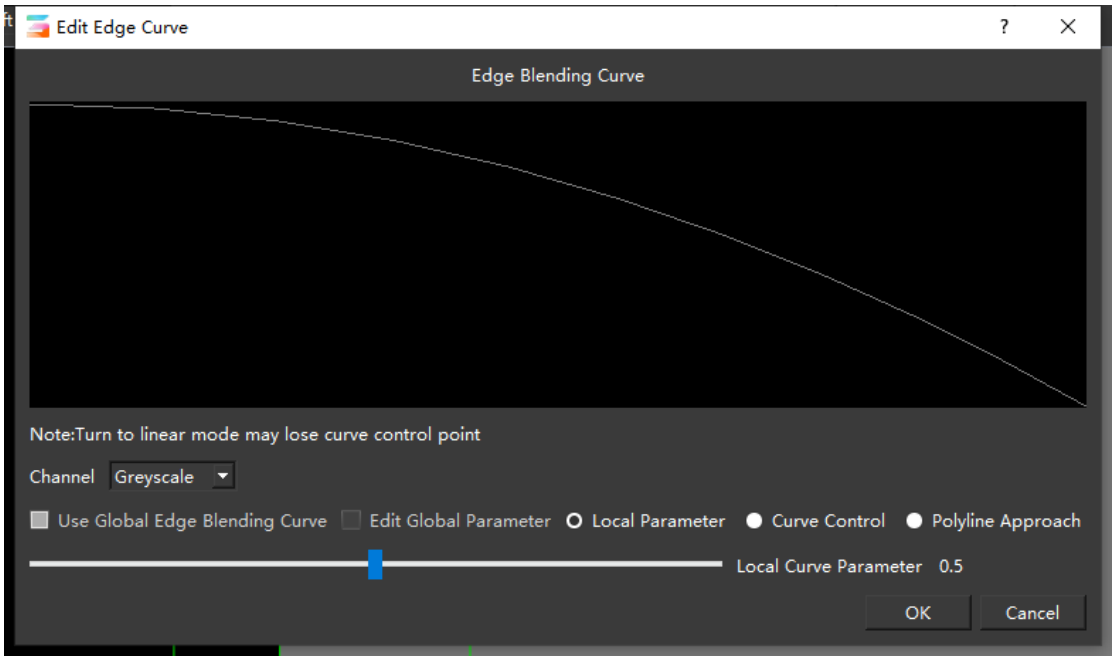
As shown in the figure below, the flat position can only move horizontally. The vertical position can only move in the vertical direction. Whether the smooth curve state is selected affects whether the crossing handle changes symmetrically.



Fusion band addition debug: In the software operation interface, click the fusion band, and add the fusion band in the red area frame selection box. If the two projectors are spliced to the left and right, the right display frame is added to the left display frame and the left fusion band is added to the right display frame.



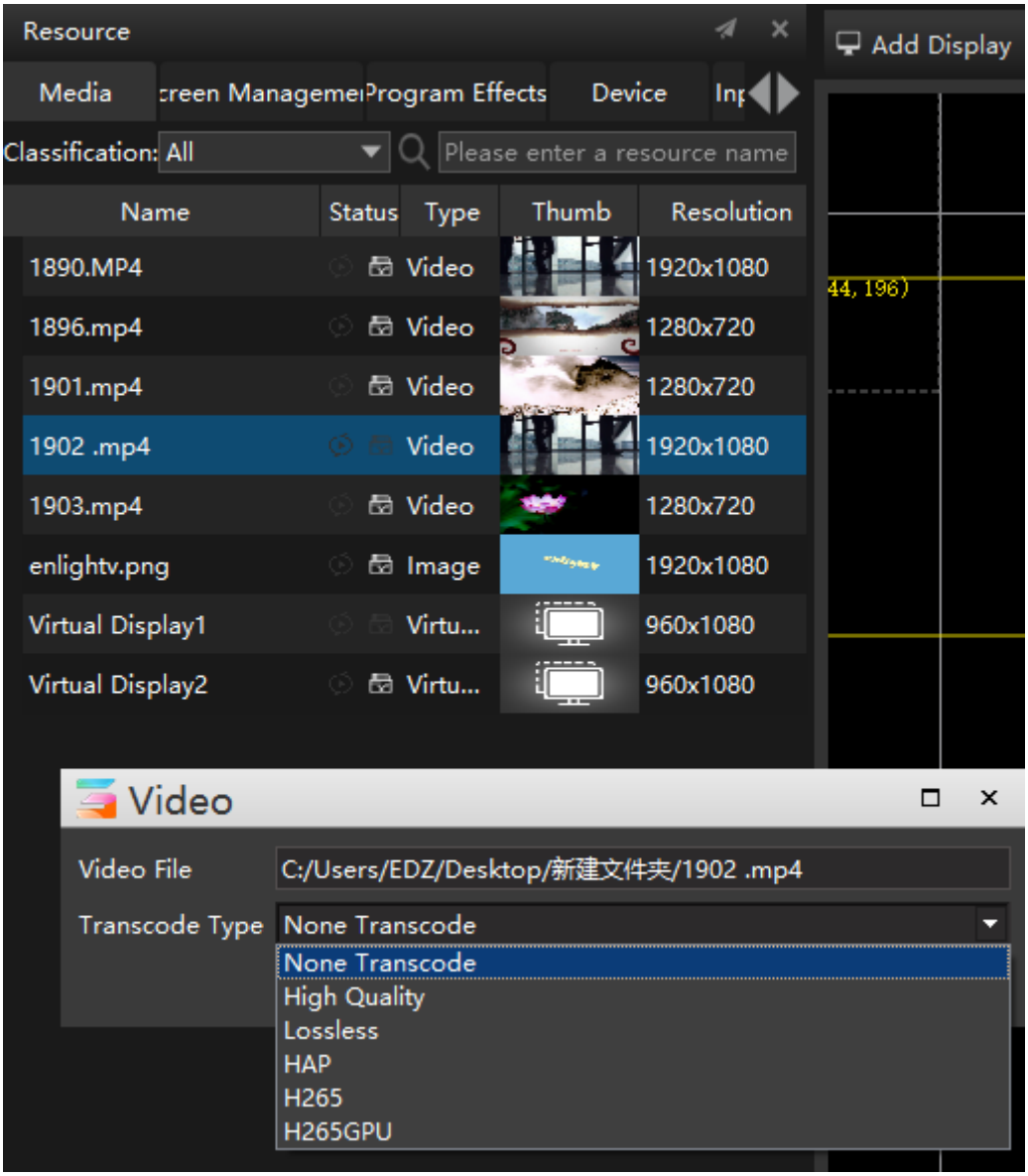
Left click on the green fusion band, click on the edge curve and select the local parameter in the pop-up box. Debug the fusion band brightness by sliding the blue pulley selected in the frame, and debug the overall effect of the two projectors.



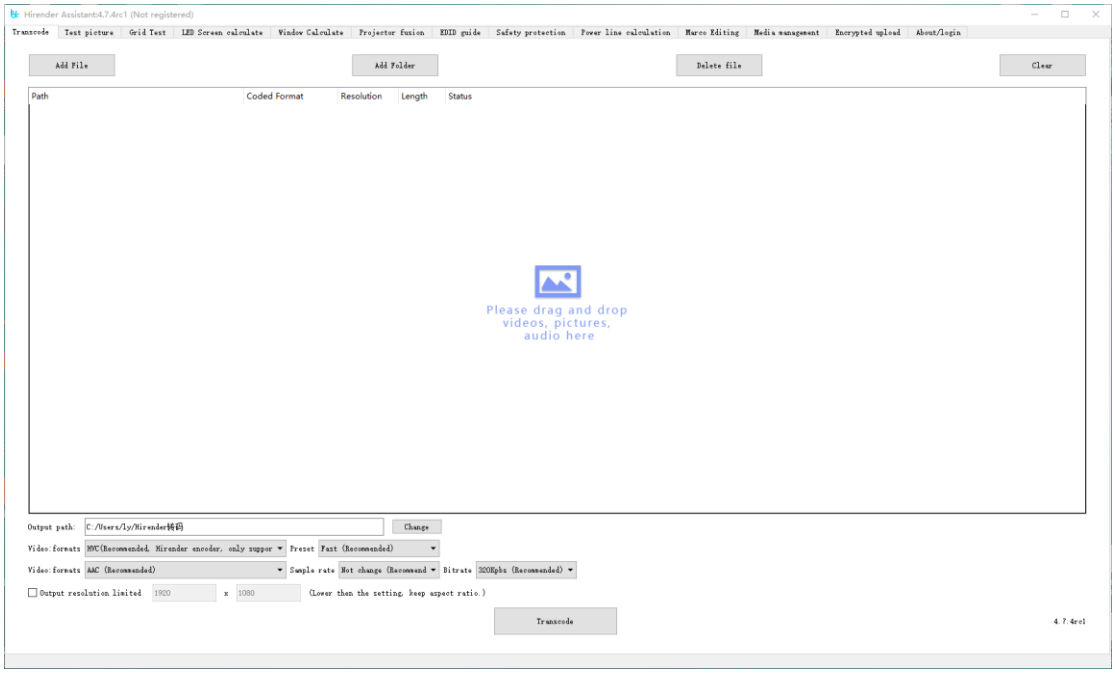
Appendix III: Frequently Asked Questions

1.The video of large-size always gets stuck when broadcasting.

If the video of large-size got stuck when broadcasting, you can transcode the video by using our broadcast assistant software, or double-clicking the media directly in the software resource list to select the decoding optimization. After optimization, check the use of the optimized file.



Also click Tool-Hirender Assistant to open Hirender Assistant to transcode:



2.Open the software prompt without authorization information

Check if the dongle is plugged into the host. If not, please plug in the dongle. If the dongle is plugged in, it still prompts that there is no authorization. You need to check whether the dongle driver is installed successfully. Check if there is this icon in the lower right corner of the desktop. Reinstall the dongle driver named CodeMeterRuntime.exe which is stored in the S3 folder. Double-click to install the software by default, or reinstall the S3 software.

3.Software timeline runs faster than normal time (sound card driver problem)

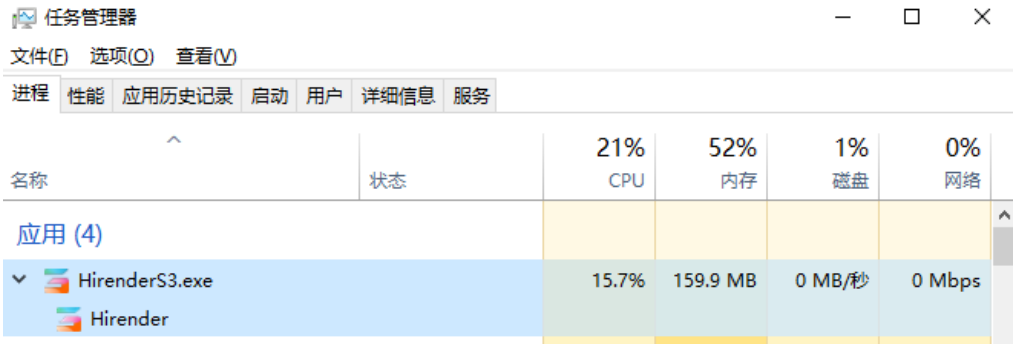
Download the driver wizard and update the sound card driver to the latest version.

4.After the software is opened, the insertion window, media resource window, and stage editing window are gone.

Click the window command in the menu to check the program insertion, media resources, and stage editing window.

5.Software opens prompts the maximum number of users.

This situation is a problem with software open duplicates. Solution: First check the system address bar to see if there is an S3 program open, if any, close all S3 programs, and then re-open the program. If there is no S3, right click on the address bar, click Task Manager, find Hirender S3.exe or HirenderS3Display.exe, then turn off the found program and reopen the software.



6.Open the pop-up encryption lock interface and display CodeMeter 102541 error.

This problem belongs to encryption lock. Authorization needs to be extracted and then re authorized.

Specific operation steps for extracting the sub lock information file: insert the sub lock, open the code meter control center in the lower right corner of the system, click the "license update" button, click "next" in the pop-up "welcome to CmFAS assistant" interface, select "create license request" in the next interface, and select "extend existing license" in the subsequent interface, Then, in the "please select developer" interface, check all company codes, select the file generation directory in the next interface, click the "submit" button, the file will be generated in the selected directory, and the generated file will be sent to the technical or business personnel for unlocking.

7.After the software is opened, the edited program cannot be played normally, and the resolution of all the materials in the media resource is 0.

Open the saved program and find that the media resources are all 0, and the resource path is red, indicating that the path has not found the file. At this point you need to relocate the show file to its original location.

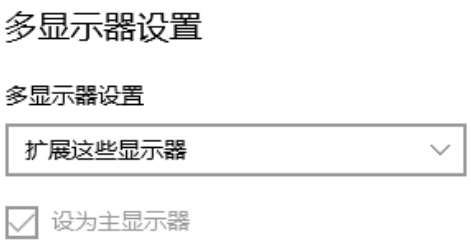
8.The computer boot screen is on the display device, and the computer screen only display a desktop.

This situation is caused by the system's main desktop settings on the display device, we need to set the system's main desktop to the display, the specific steps are as follows:

Right click on the blank area of the desktop and select the screen resolution or display settings.

Click the logo button in the settings screen to view the screen number of the monitor.

Click on the screen number, select the display, then check the settings below to set the current screen as the main desktop.



9.There are gaps in the splicing of multiple output stitching

Check whether the graphics card is set the stitching. If the graphics card is not set, you need to set the graphics card the stitching to ensure the synchronization of the graphics output. If there is still a gap in the graphics card splicing, you need to check whether the device such as the back-end processor has set the synchronization mode.

10.After debugging the software, turn it off and then on again, the output resolution is disordered.

The reason is:

1. The output sequence is disordered, resulting in sequential switching of output channels of different resolutions.

2. Line transmission causes an error in the EDID.

Solution: Lock the EDID

11.The Dongle suddenly cannot be opened (the Dongle is locked).

Reason: 1. The system has a virus.

2. The system is a pirate system.

3. Installed pirated WATCHOUT.

4. Antivirus software leads to.

Solution: After the original system image file is installed, the genuine activation is performed. The authorization file for extracting the Dongle is sent to the relevant sales personnel, who provide the new authorization file.

12. Play video stuck and video out of sync solution.

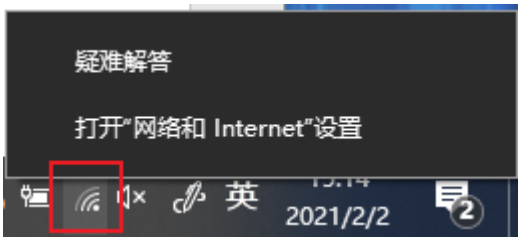
When the machine performance is sufficient, the host's system is optimized to ensure the optimal state of the machine. Perform transcoding optimization on the video, transcode the video into the most suitable encoding, stream, and format. If the card is still in the situation, it is recommended to split the video and then transcode it.

13.Settings of master and backup and multiple machine-connected LANs.

(1)Set the primary and backup machines to different fixed IP addresses, and the IP addresses need to be on the same network segment.

For example, the primary setting IP is 192.168.1.2, and the backup setting IP is 192.168.1.3.

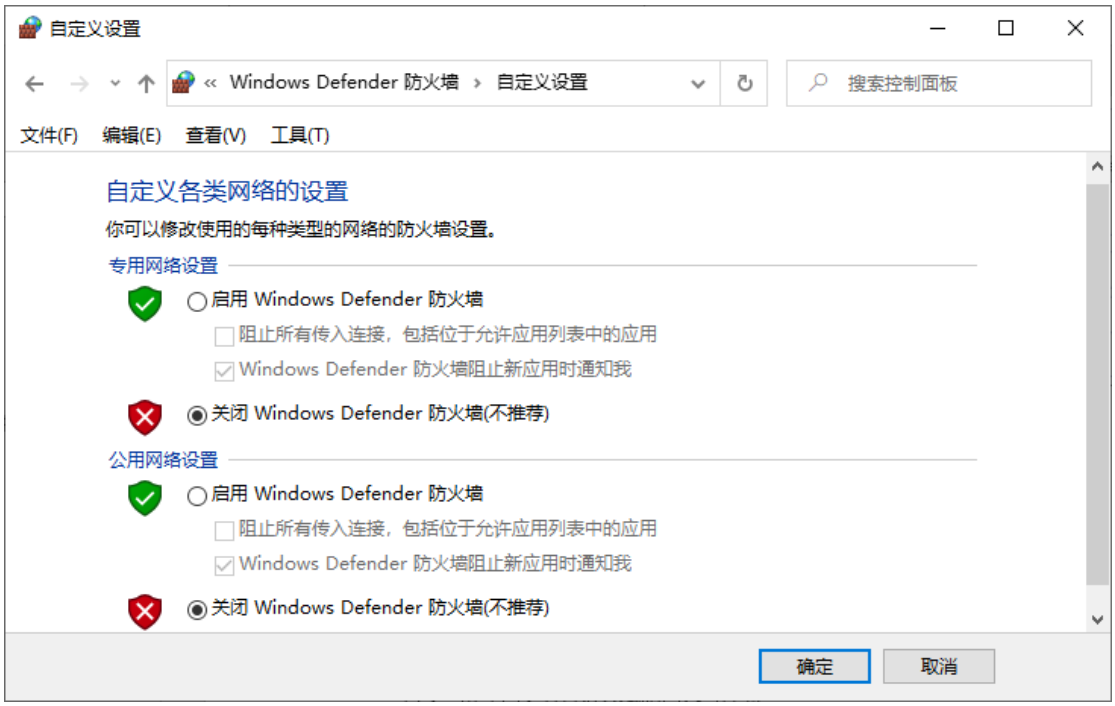
(2)Turn off the system's firewall. Right click on the network icon in the task bar and click on Open Network and Sharing Center.



Click on the Windows Firewall in the interface:

Then click to enable or disable the firewall:

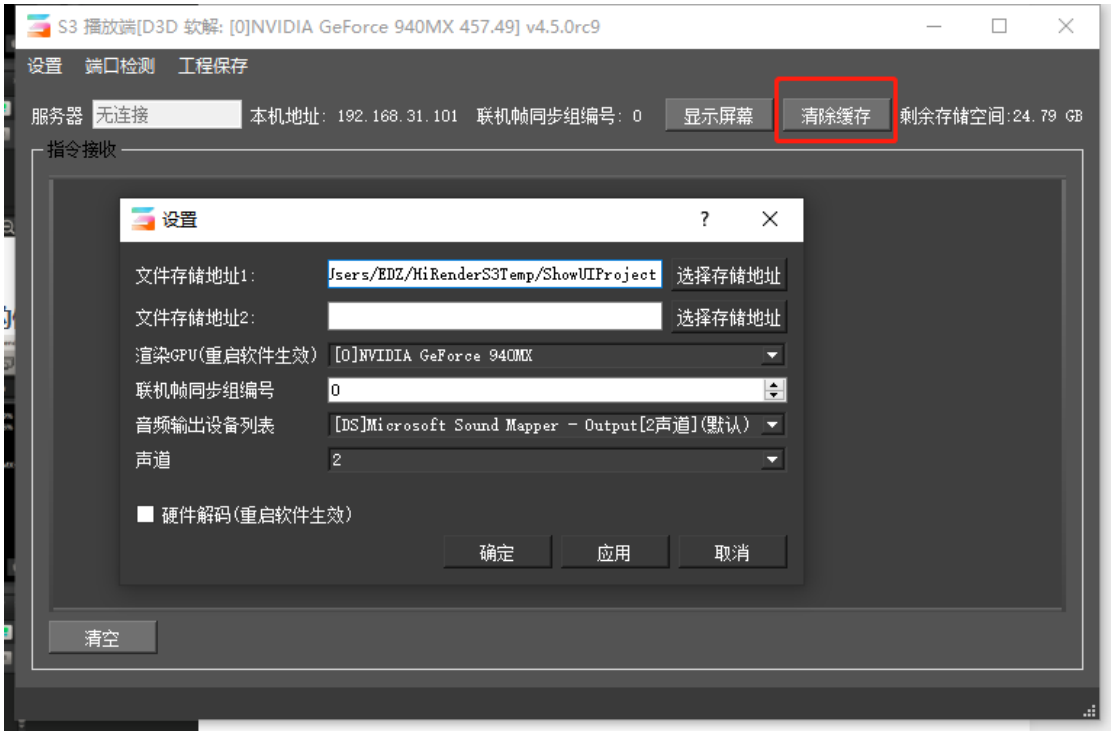
Set both the public and private networks to turn off the firewall.



14.Update fails in Master/standby mode and multiple online modes

Insufficient cache path space. Change the cache path of the active or backup device or clear the junk files on the disk, leaving enough space.

Steps: Click the setting button in the upper left corner of the S3 display. You can then choose to empty the cache or change the cached path to a different location.



Network error, check the network settings to see whether the active and standby networks are connected, and whether the IP is displayed correctly. You can reset the network according to the instructions in section 13.

15. Recommended video encoding and format

Resolution	Frame rate (frames /second)	Recommended bit rate (megabits/ second)	Encoding format	Encapsulation format
1280x720(720p30)	30	5	H.264|MPEG2	MP4/MOV/MKV|MPG
1920x1080(1080p30)	30	10-15	H.264|MPEG2	MP4/MOV/MKV|MPG
1920x1080(1080p60)	60	25-35	H.264|MPEG2	MP4/MOV/MKV|MPG
3840x2160(4K 30p)	30	50-70	H.264|MPEG2	MP4/MOV/MKV|MPG
3840x2160(4K 60p)	60	80-120	H.264|MPEG2	MP4/MOV/MKV|MPG
7680x4320(8K 30p)	30	130-160	H.264|MPEG2	MP4/MOV/MKV|MPG
7680x4320(8K 60p)	60	200	H.264|MPEG2	MP4/MOV/MKV|MPG

16.Contact technical support

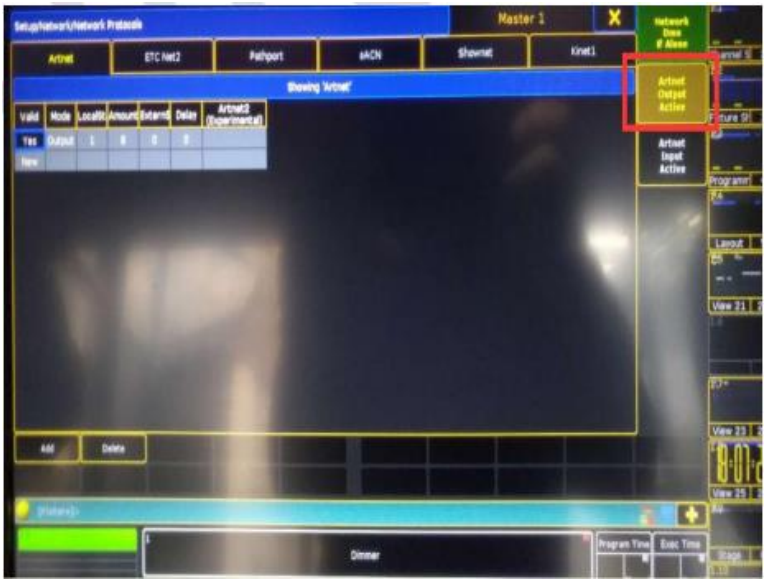
Hirender website: http://www.Hirender.cn/#/
Forum: https://www.artbook.top/live/index.html
Enlightv website: https://www.enlightv.com/
Sales Hot-line:400-600-1196
Company tel: +（86）010-53608556
email: admin@enlightv.com

Appendix IV: How to link with the lighting console, etc.

Hirender S3 supports DMX512 triggering and docking through ARTNET protocol. Any lighting console that supports ARTNET protocol can trigger S2/C3 program insertion through network connection. If the lighting console does not support ARTNET, it can also convert DMX512 to ARTNET through the transfer box.

MA2 lighting console settings

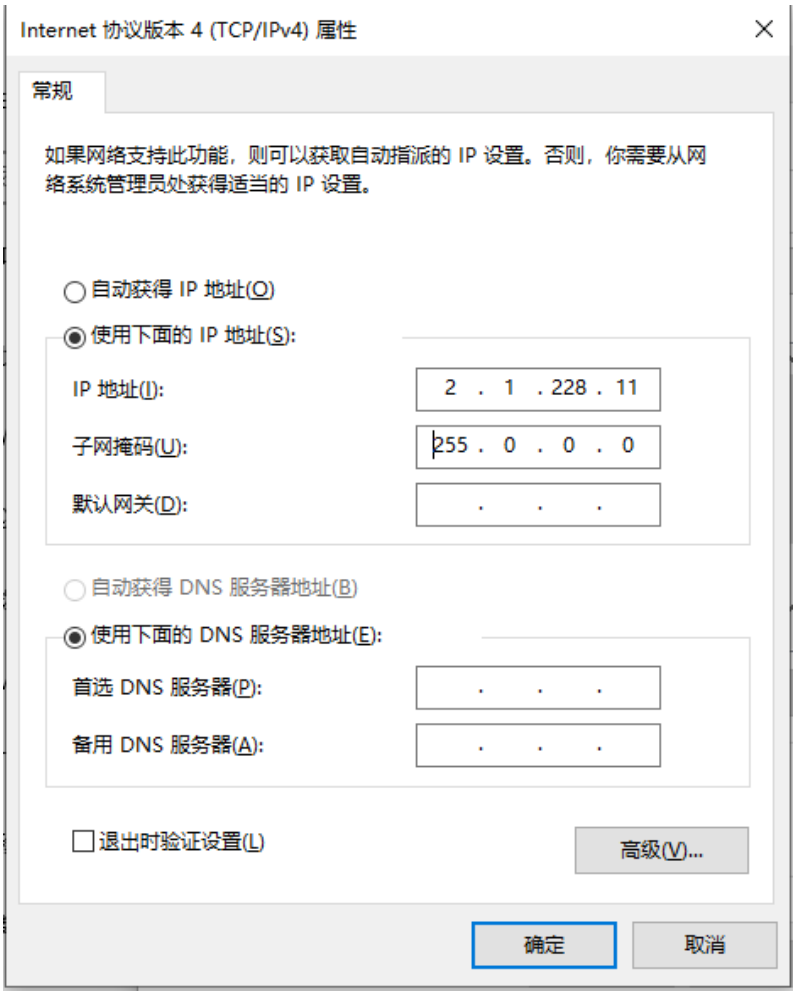
Open the ARTNET output of the MA2 console, click the ARTNET output active button to turn the ARTNET output on (the yellow is displayed after opening).



Check the IP address of the MA2 console. The IP address of the MA-Net is generally 192.168.1.x, and the IP address of ARTNET is generally 2.1.228.xx (the default IP address of the MA consoles of different brands may be different).

Note: The network port on the MA2 console must be plugged into the second network port.

Set the server IP address to the same network segment as the IP of ARTNET:



After the setup is complete, you can ping the IP of the MA2 console on the server to see if the network is connected.