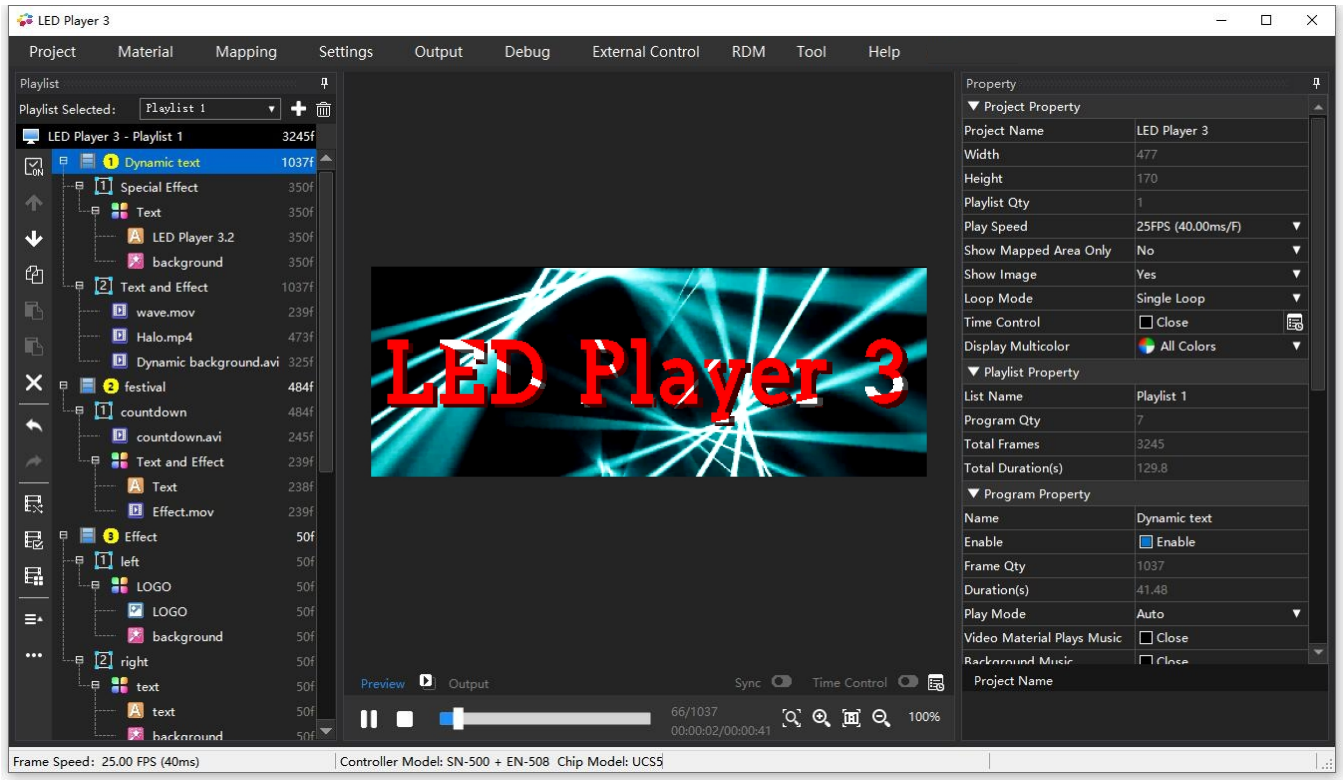


LED Player 3 MANUAL

Version: 3.2.5

2021-10

CONTNETS

1. SUMMARY..... 1
2. INTRODUCTION..... 2
2.1. SUPPORTED OPERATION ENVIRONMENT..... 2
2.2. INSTALLATION AND UNINSTALLATION..... 2
2.3. WORK INTERFACE INTRODUCTION..... 3
3. MAIN FUNCTIONS AND BASIC OPERATIONS..... 6
3.1. ANIMATION PLAYBACK FUNCTION AREA..... 6
3.2. PLAYLIST..... 6
3.3. PLAYBACK PREVIEW AREA..... 8
3.4. PROPERTY SETTING..... 9
3.5. STATUS BAR..... 10
3.6. EXPORT AND IMPORT THE PROGRAM LIST..... 11
4. ANIMATION EDITING..... 12
4.1. PREVIEW PLAYING..... 12
4.2. MATERIAL SETTING..... 12
4.3. COLOR SCROLL EDITOR..... 13
4.4. MATERIAL EDITOR..... 14
5. PROJECTS..... 17
6. MAPPING..... 18
6.1. CREATE A NEW MAP..... 18
6.2. QUICK MAPPING..... 18
6.3. IMPROT THE MAPPING.DAT FILE..... 19
6.4. IMPROT THE DXF FILE..... 19
6.5. IMPORT THE FORM FILE (POSI.TXT)..... 19
6.6. EDIT THE MAPPING BY MAP SOFTWARE..... 19
7. MATERIAL..... 20
7.1. THE PROPERTY OF MATERIAL..... 20
7.2. THE TEST AND BUILT-IN ANIMATIONS..... 21
7.3. INPUT VIDEO AND PICTURE..... 21
7.4. ADVANCED ANIMATION..... 21
7.5. THE SCREEN RECORDING AND THE FLASH RECORDING..... 22
7.6. TEXT..... 23
7.7. AUDIO CONTROL ANIMATION (ON-LINE)..... 24
7.8. THE CLOCK ON-LINE..... 25
8. SETTINGS..... 26
8.1. HARDWARE SETTINGS..... 26
8.1.1. PROJECT SETTINGS..... 26
8.1.2. CONTROLLER SETTINGS..... 26
8.1.3. CHIP SETTINGS..... 27
8.1.4. NETWORK..... 28
8.1.5. OUTPUT SETTINGS..... 28
8.1.6. ADVANCED SETTING..... 28
8.2. SOFTWARE SETTINGS..... 28
8.2.1. SOFTWARE BASIC SETTING..... 29
8.2.2. DISPLAY SETTINGS..... 29
8.2.3. ETHERNET SETTINGS..... 30

CONTNETS

8.2.4. AUDIO CONTROL SETTINGS....30
8.2.5. MORE - CHIP ANIMATION DELAY....31
8.3. THE ADVANCED SETUP OF CONTROLLER....31
8.3.1. CONTROLLER REPLICATION....31
8.3.2. PORT REPLICATION....32
8.3.3. THE CHANNEL SETTING OF SHIP....32
8.3.4. ASSIGN SN CONTROLLER....32
8.4. COM AND POINT PARAMETER ADJUSTMENT....33
8.5. THE CHIP SETTINGS....33
8.6. START UP....34
8.7. ADJUST THE SYNCHRONIZATION TIME....35
8.8. COLOR ADJUST....35
8.8.1. PROGRAM COLOR ADJUST....35
8.8.2. GLOBAL COLOR ADJUST....36
8.9. VIDEO CAPTURE....36
8.10. TIMING BRIGHTNESS TASK....37
8.11. SETTING OF TIME CONTROL....38
8.12. COLOR SETTING FOR THE FORTH CHANNEL....38
8.13. LANGUAGE....40
8.14. PROJECT ENCRYPTION....40
9. OUTPUT....41
9.1. OUTPUT SD FILE....41
9.2. OUTPUT MP FILE....41
9.3. VIDEO FILE....42
9.4. COPY THE SD FILE....42
9.5. OUTPUT THE MAP....42
9.6. CLOUD CONFIGURATION....43
10. DEBUG....44
10.1. ONLINE DEBUGGING....44
10.2. ADDRESSING....44
10.2.1. ADDRESS OPERATION....44
10.2.2. UCCESSFULLY ADDRESSED AND SET PARAMETERS....45
10.3. CHECK ON-LINE STATUS OF CONTROLLERS....47
10.4. NETWORK DIAGNOSIS....47
11. EXTERNAL CONTROL....48
11.1. CONTROL DMX512 CONSOLE....48
11.2. UDP CONTROL....48
11.3. CLOUD CONTROL....48
12. TOOLS....49
12.1. CONVERTING THE SIZE OF ANIMATION....49
12.2. CONVERTING THE FORMAT OF ANIMATION....50
12.3. CONVERTING THE COLOR OF ANIMATION....50
12.4. CONVERTING THE VEDIO....50
12.5. CONVERTING THE PROGRAM....51
12.6. THE CALCULATOR, NOTES AND PAINTING....51
13. HELP....52

CONTNETS

13.1. ABOUT LED PLAYER..... 52
13.2. SOFTWARE LICENSING..... 52
13.3. UPDATE.....52
13.4. HELP DOCUMENTS.....52
14. MAP TOOL.....53
14.1. FILE..... 53
14.2. TOOLS.....54
14.2.1. SELECT.....54
14.2.2. CABLING.....54
14.2.3. REGULAR CABLING AND SELECT.....55
14.2.4. DISTANCE..... 56
14.2.5. CLIPBOARD.....56
14.2.6. DELETE..... 56
14.2.7. CHANGE LINE DIRECTION..... 57
14.2.8. OVERTURN.....57
14.2.9. MODEL..... 57
14.3. IMAGE..... 59
14.4. IMPORT..... 59
14.5. TEXT.....60
14.6. EXPORT.....60
14.7. CONTROLLER SELECTION..... 60

1. SUMMARY

LED PLAYER is software used on LED Lighting Animation and project design. Friendly interface and easily operated.

MAIN FUNCTION:

- Animation:
  1. There are 17 different testing effects and 55 lists full color effects.
  2. Through the advanced special effects, can list the material change mode and color editing, to further meet the needs of the user gorgeous effect..
  3. It has a powerful text output function, a number of words.
  4. Direct import of mainstream video formats is supported.
- Playlist:
  Project -> Program -> Windows -> Material list/Material, clear operation logic, flexible setting of multi-screen, linkage effect.
- Material editor:
  User can adjust the playback time and overlay style of the material freely, edit the effect, list the mixing mode and so on, and software can produce a rich variety of combination and overlay effect.
- Project parameters:
  Open hardware setting, the user can list the controller model, chip model, network card and output type as required, which is convenient to relist and modify in one step.
- File editor:
  Arbitrarily adjust the size, grayscale, file format and color of the effect parameters.
- Control functions:
  Easy to list up and control the timing output of lamps, with a variety of collocation.

2. INTRODUCTION

2.1. SUPPORTED OPERATION ENVIRONMENT

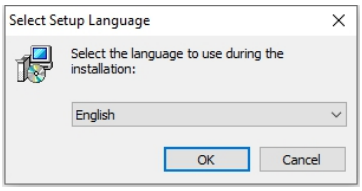
Operating system	Windows 7 SP1/ Windows 8.1/ Windows 10(32-bit / 64-bit).
Drive component	Microsoft.NET 4.7 or later, WinPcap 4.1.3 (must be installed to run the software).
Language support	Simplified Chinese, Traditional Chinese, English (all other languages are shown in English).
Running path	Only support [desktop] and non-system disk folders, do not support running on U disk.

2.2. INSTALLATION AND UNINSTALLATION

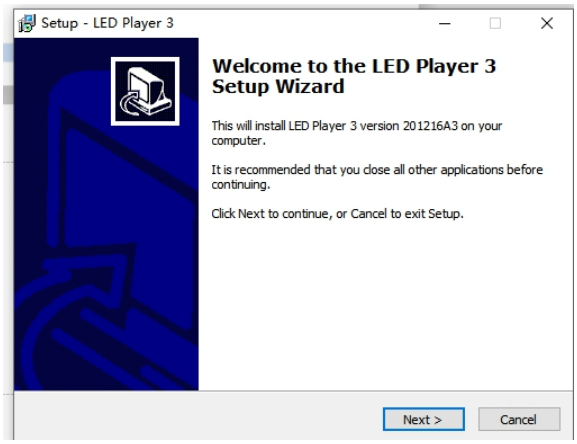
Contact us or get the LED Player software installation package directly from our official website.

1. Double-click to run the software installation package.

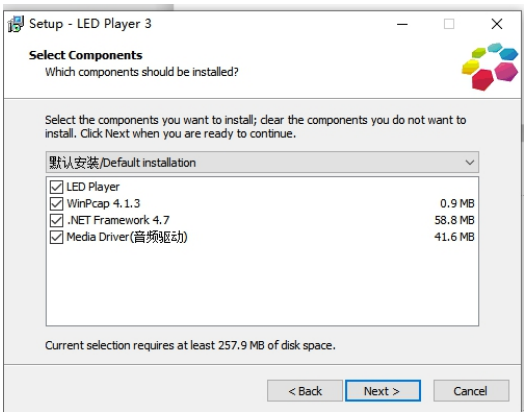
2. Select installation language.



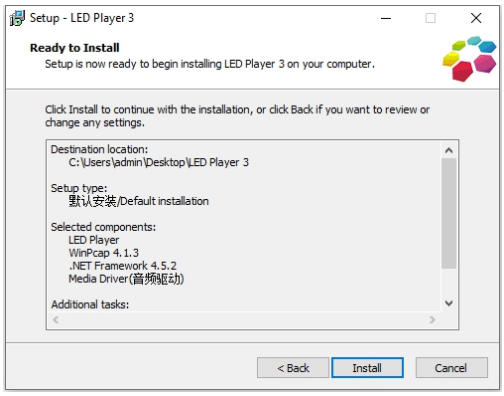
3. Follow the software installation wizard to continue the installation.



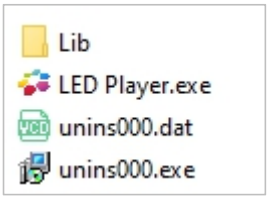
4. Select to install the driver components,please select installation by default to run the software normally.



5. Click “install”, the installation will be completed soon.

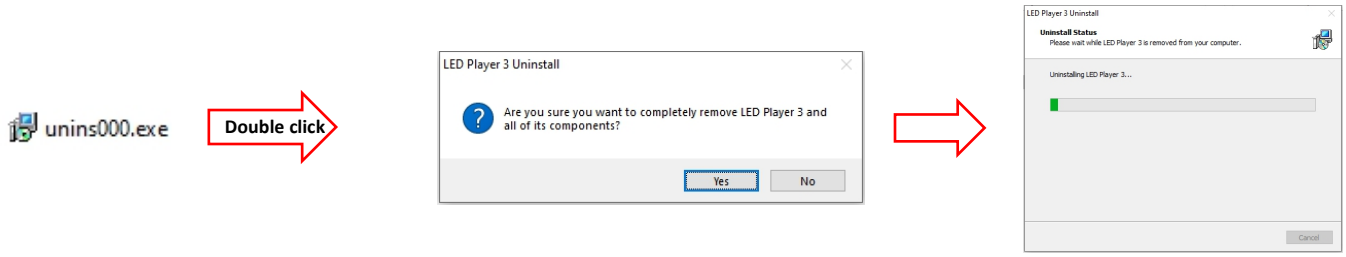


6. The installation is successful and a folder is generated.



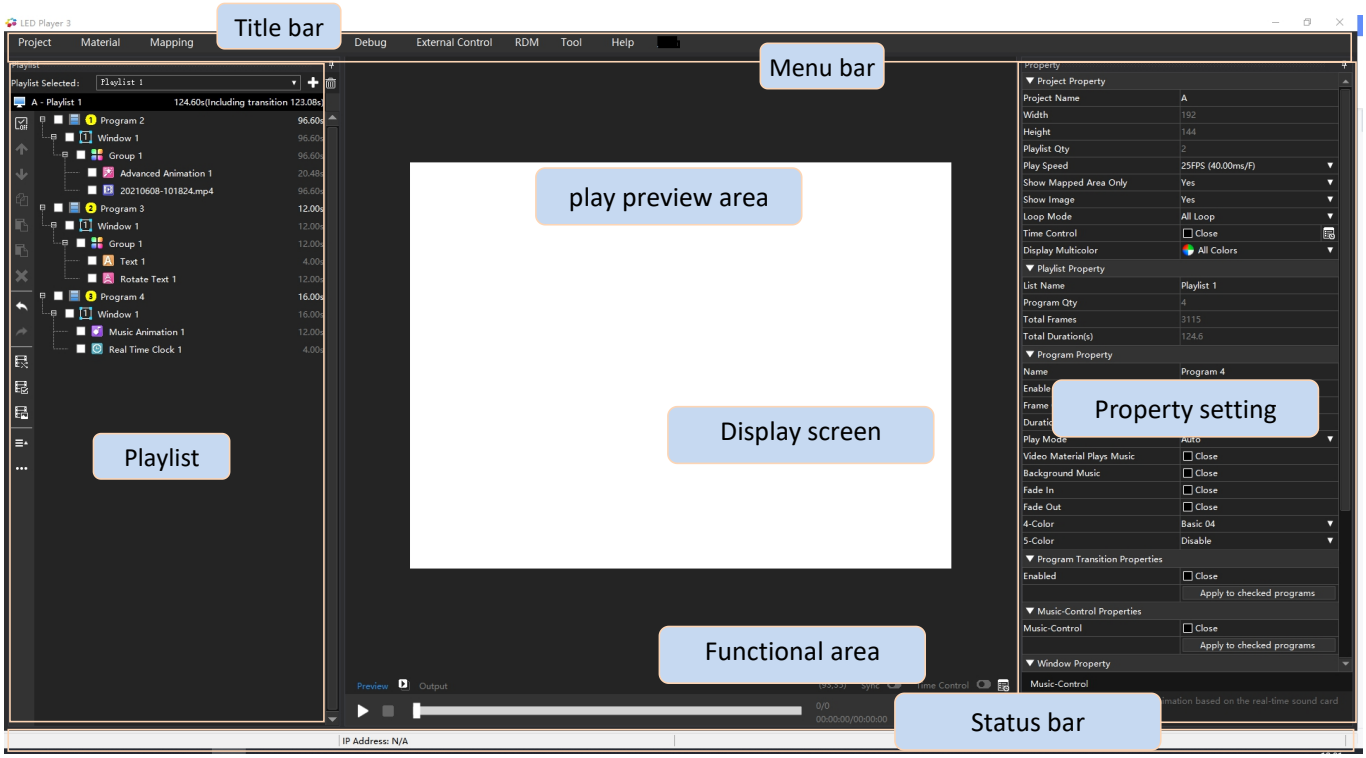
Double-click “LED Player.exe”  in the installation path to run the software.

Double-click “uninst LED Player.exe” to uninstall the software and all its components.



2.3. WORK INTERFACE INTRODUCTION

The working interface consists of seven functional areas:title bar,menu bar,playlist,play preview area,functional area ,property setting and status bar,as shown in the following figure.



Title bar: Shows LEDPlayer3.0.

Menu bar: There are 9 menus, including projects, cabling, materials, setting, output, debugging, external control, tools, and help. Click the corresponding sub-menu appears in the menu.Click the sub-menu to open the corresponding function.For more information, refer to Table 2-1 sub-menu function list.

Playlist: Display the playlist of the current project, which consists of projects, program, windows, and material lists/material levels. The toolbar is displayed at the bottom, including modifying the sequence of program, expanding or folding program list, and clearing cache files.

Play Preview Area: Display the “playback screen” of the actual project size, the effect of playing the “playlist”, and lists the multi-screen “window area”.

Functional area: Control the playback status and display proportion of the “preview area”, and operation item synchronization switch time control switch.

Property setting: Display and lists the level attributes of the current project, including project attributes, program attributes, window attributes, material attributes, and material property.

Status bar: Display and lists the level attributes of the current project, including project attributes, program attributes, window attributes, material attributes, and material property.

Table 2-1 sub-menu function list:

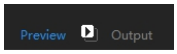
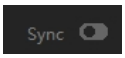
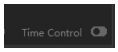
Menu	Order	Details
Project	New	Create a new project.
	Import	Import and open existing projects.
	Recently	Remember the most recently opened item, you can change it by selecting.
	More	Open the folder of the current project.
Mapping	New	Open the Map Cabling Tool and create a new empty Cabling File.
	Quick Mapping	Regular rectangular mapping, using 16 built-in S, Z type mapping fast mapping.
	Import Map	Import the layout diagram in map. dat format.
	Import DXF	Read the DXF files and import and convert them accordingly into cables that are recognized by the LED Player.
	Import Form	Advanced application, special mapping, list by our company.
	Edit Map	Open the Map cabling tool to modify the current cabling.
Material	Test Animation	Output 17 lists of test materials.
	Built-In Animation	Output of 55 lists of built-in full color pattern materials.
	Advanced Animation	Set and call the ribbon, free to edit the pattern material.
	Screen Record	Real-time capture of the screen image of the computer screen, and convert and save the inherent format of LED Player.
	Colorful Character	Set and call the ribbon, free to edit text material.
	Picture	Read the image and store it in the project.
	Flash Record	Read converted.swf files with saved LED Player native format.
	Media	Read converted video with saved LED Player native format.
	Audio Control	Set and call ribbon, edit audio control material at will.
	Rotate Text	Set a text animation that can run around a circle.
	Clock	Read the computer time and present it as a clock.
Settings	Hardware	Set the hardware parameters of the project, including controller type, chip type, etc.
	Software	Set the software parameters of the project, including buffer, display scale, network setting, chip delay setting, etc.
	Controller	Controller replication, port replication, list controller channel sequence, SN controller partition, etc.
	Com & Point Parameter Adjustment	Single port or single point brightness and channel order can be list.
	Chip	The built-in properties of the chip can be list, including power on, current, forwarding, automatic address parameters, etc.
	Start Play	Select a different mode to start running the LED Player.
	Synchronization	Adjust the synchronization time difference.
	Program Color Adjust	Adjust the brightness gamma of the RGBW to make the material more aesthetic.
	Global Color Adjust	Adjust the brightness gamma for the entire project.
	Video Capture	Using the video data of the switchboard to carry out multiple linkage.
	Brightness	Set the project to adjust the animation brightness on time to achieve different brightness in different time periods.
	Encrypt Project	Advanced application, can encrypt the project to protect the interests (with custom hardware).
	Unlock Project	Advanced application, to unlock the locked project to be able to continue access.
	Language	Change the display language of the LED Player.
	Angle Adjustment	Adjust the rotation Angle of the sky wheel screen.

Menu	Order	Details
Output	SD File	Converts the selected program compression into a "*.bin" file that can be read by the offline controller.
	MP File	To compress and divide the selected program into multiple segments of specified size.
	Video File	Convert the program material to.avi/.mp4 video files.
	Copy to Card	Copy the "*.bin" file to the SD card.
	Map	Output the direction indicator diagram of the lamp.
	LED Map	Output lamp position arrangement diagram.
	Cloud Config.	The cloud control configuration file is generated and uploaded to the cloud platform for download and update.
Debugging	Online Debug	Debugging the lamp layout on site, judging the connection and transmission status of lamp layout and signal.
	Lamps of addressing	Addressing DMX512 lamps in parallel.
	State detection	Check the connection status of the EN controller.
	SD Addressing	Suitable for specific master control, list and save the address and parameters of the chip, need to output to the SD controller.
	Network Diagnostic	The packet loss rate of communication between LED Player and master control was counted, and the communication situation between software and master control signal was judged.
External Control	Serial Port	Advanced application.
	DMX	When enabled, LED Player output animation and speed can be controlled through DMX512 console.
	UDP	Through UDP protocol, can realize any device control LED Player output animation and speed.
	Cloud	After the software is bound to the cloud platform, the LED Player software can be remotely controlled through the cloud platform.
	LAN	Advanced application.
RDM	RDM	Advanced application. After LED Player obtains the UID of the driver, it can use the UID code to query the status of its driver and monitor the current, temperature, setting DMX address and other information of all drivers in the whole system in real time, so as to realize the function of "remote device management" and provide a more convenient method for the maintenance of the project.
Tools	Size Converter	Convert effects of different sizes to each other.
	Format Converter	Effect files that convert to different formats.
	Color Converter	Set the color of the original effect material.
	Video Converter	Capture video parts, convert and store them in LED Player native format.
	Program Converter	Convert the specified program and store it as LED Player native format.
	Calculator	Call the calculator that opens the computer.
	Notes	Call to open the computer's notepad.
	Painting	Call the drawing tool that opens the computer.
	Firmware Update	Advanced application.
	MADRIX	Output the map file which used in the Madrix software.
Helps	About LED Player	Displays developer information and copyright information.
	Software Licensing	Advanced application.
	Update	Check and upgrade software versions.
	Document	Open our company's official website to get the software operation book.
	Reset Default	Restore the default layout of the main screen.

3. MAIN FUNCTIONS AND BASIC OPERATIONS

3.1. ANIMATION PLAYBACK FUNCTION AREA

Controls the playback status of the playback preview area and the display size of the playback screen.

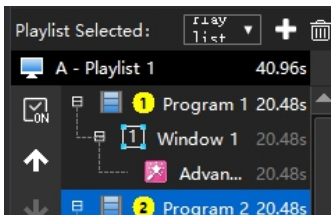
Icon	Designation	Comment
	Play	Play the animation. In the playback state, select the "Project" - "Program" - "Window" - "Material" in the "Playlist" to be played, and the corresponding animation can be played.
	Pause	Click to pause the playback, click  again, the current animation continues to play. Or switch other nodes to resume playback.
	Stop	Stop playing the animation. Click  again, and replay the animation.
	Play progress bar	The frame number and time of the animation currently played by the project, program, window, material list and material. Adjusting the playback progress bar in the non-synchronous state can jump to play in real time.
	Adaptive scaling	The playback screen adapts to the size of the "play preview area".
	Amplification	Click once, play the screen to increase the display scale.
	100% showed	Restore the size of the playback screen to the item size size display, that is, the 100% display scale.
	Narrow	Click once to play the screen and reduce the display scale.
	According to the proportion	Displays the current screen size ratio. The zoom limit is 50% and the zoom limit is based on the display resolution of the device on which the LED Player is currently running.
	Toggle preview play / output play	Switch the current play mode. [Preview] edit the preview effect, you can edit the properties while playing. [Output] real-time control lamp, does not support real-time editing program list.
	Control synchronous switch	Set the same effect and frame speed, connect the external GPS or BTS device, after activating the synchronization, it can realize the synchronous playback of multiple devices.
	Switch to real time control / timing control	Open this function, enter the timing control state, vice versa for real-time control. (Offline project does not have this setting.)
	Edit Time Playlist	Click and enter into the time control set window.
	Light point coordinates	Displays the coordinates of the current mouse pointer.

3.2. PLAYLIST

Set the playback content of the current project. You can choose to switch between “project”, “program”, “window”, “material list” and “material” for playback, and displays the animation duration / number of frames.

Click the material name enter [Animation Editing] edit materials on the page.

Project composition	A complete project consists of four levels: Project, Program, Windows, and Materials / Materials.
Level relationship	Project->Program->Window->(Material list)->Material.
Project	Only one item exists, play it in order.
Play list	Add multiple playlists to a project.

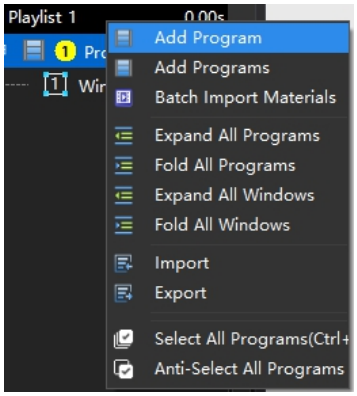


Show	Add programs under the project (up to 100) and play them in sequence.
Windows	Add Windows under a single program (up to 70), which can be played in multiple Windows simultaneously.
Material list	Add a list of fodder (up to 30) to a single window,At the same time, multiple materials can be added into a single material list (up to 30), which can be played in sequence.
Material	Add material (up to 30) to a single window and play it in sequence.

*The relationship between the material list and the material: the material list under the program is at the same level as a single material. At the same time, multiple materials are combined into one material list.

Level	Operation
Project	Right-click the Item name or the Playlist space to:

Add Program	Add a program under this item.
Batch Import materials	Select one or more material files and import them into the project for use (not in the material list). The supported file formats are avi, mp4, mov, bin, cel, tel, kel, wel, png, jpg, bmp, jpeg, gif.
Expand / Fold All Programs	Expand/Unfold all programs in the playlist.
Expand / Fold All Windows	Expand/Unfold all Windows under the playlist.
Import	Import the program list.
Export	Export the selected program to a specific file.

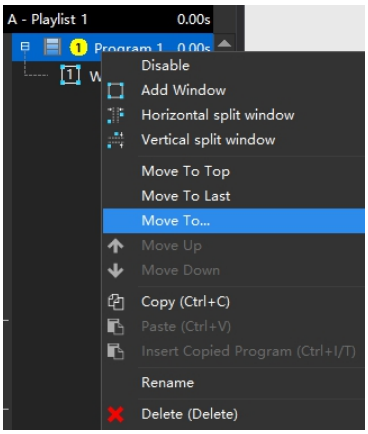


Program — Icon Description:

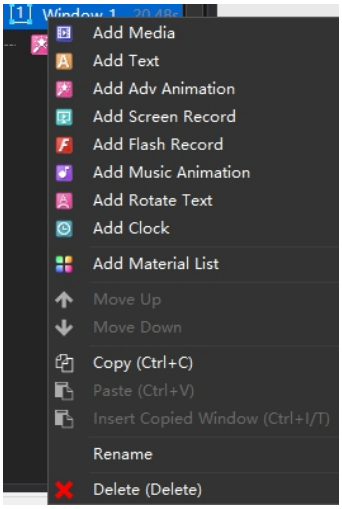
/ 	Program Enable/Program Disable. Click  under the playlist to show or hide.
	The brightness or gamma value of the program has been set.
	Time control command has been list for the program. Click the icon to enter the "Time Control setting" interface.

Right-click on the name of the program:

Add Window	Add a window under this program (default is project size).
Horizontal and vertical partition window	Divide all Windows under the program with one key.
Move	Set the sequence in which programs are played.
Copy / Paste / Insert	Copy and paste the selected program.
Rename/Delete	Rename or delete.

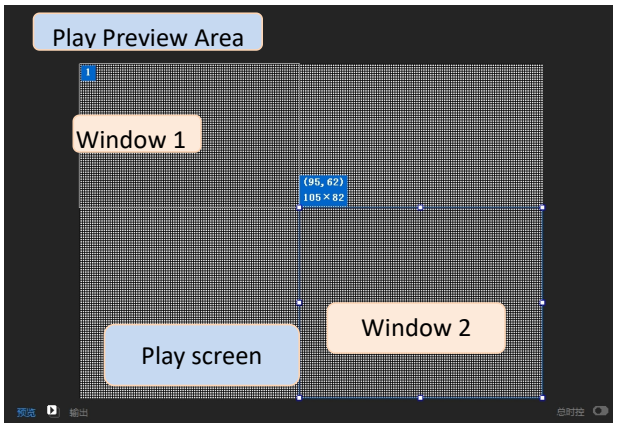


<table>
<tr><th>Level</th><th>Operation</th></tr>
<tr><td>Window & Material list & Material</td><td>Icon Description:
Window number
Right-click the window name to:
<table>
<tr><td>Add ***</td><td>Under this window/list for material editing operation. You can add video/material, colorful text, colorful special effects, advanced special effects, screen recording, flash recording, audio control special effects, material list.</td></tr>
<tr><td>Split to individual program</td><td>Divide the material in the list into separate programs.</td></tr>
<tr><td>Move</td><td>Set the layer relationship for Windows such that window 1 overrides window 2.</td></tr>
<tr><td>Copy / Paste / Insert</td><td>Copy and paste the selected window.</td></tr>
<tr><td>Rename / Delete</td><td>Rename or delete.</td></tr>
</table></td></tr>
<tr><td>Tools bar</td><td>Click it to show or hide the check box.
Set the broadcast order of the program.
Expand or Fold the programs and windows.
Optional operations such as importing or exporting the program list, clearing cache, and selecting programs.</td></tr>
</table>



3.3. PLAYBACK PREVIEW AREA

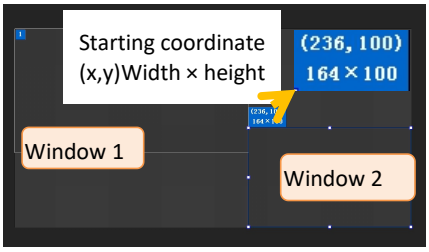
Display the screen size and writing position of the actual project, play the effect of “playlist”. You can list the region of “multi-screen” window freely.



Window size:

By default, a new window is created based on the project size. The position is adjusted as follows:

1. Click the name of the window or click the window in the play screen, and the window border turns blue.
2. Place the mouse on the edge to stretch directly, supports <Ctrl> key equal ratio stretching.



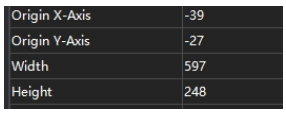
⬇ Multiple windows of different sizes can be list under the same program.

Window location :

Right-click the window to list the position of the window in multiple alignment modes.

You can enter a value in the properties field.

“Red Box” means locked, immovable position. “Locked Location” in “window properties”is enabled as blue box state, not locked bu default.



Preview of video file playback:

Click the play ► button or trigger the <space> key of the keyboard to play the effect of corresponding program / window / material. (The actual position selected in the playlist shall prevail.)

Similarly, ■ or the <space> key of the keyboard can stop playing.

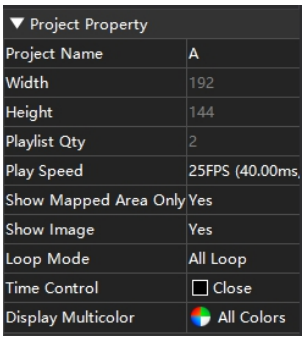
In project properties, you can list whether the mapping mask is enabled.

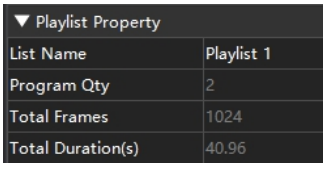
3.4. PROPERTY SETTING

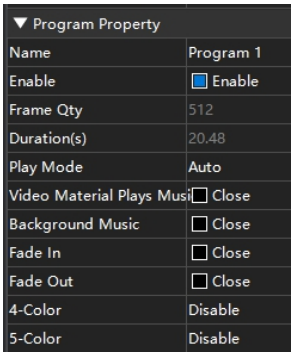
Display and list properties, including project properties, program properties, window properties, material list properties, and material properties.

Click different locations in the playlist to view and list properties.

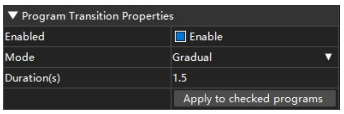
Level	Property	Instructions
Project	Width / Height	Size of the playback screen (project cabling).
	Playlist Qty	Total number of playlist.
	Play Speed	Set the playback rate of the item.
	Show Mapped Area	When enabled, the wired area displays images.
	Show Image	When enabled, it can be previewed when playing, otherwise the screen is black (it does not affect the output), which is enabled by default.
	Loop Mode	Set the project will loop through the playback material.
	Time Control	Set timing control switch animation command.
	Display Multi-color	Toggle the preview display of different channels.
Playlist	List Name	The name of the playlist, can be directly input text setting.
	Program Qty.	Total number of program.
	Total Frames	The total number of frames of all material effects for the project.
	Total Duration	The total duration (in seconds) of all material effects for the project.
Program	Name	The name of the program, can be directly input text setting.
	Enable	Highlight, that is to enable the program.
	Frame Qty	The number of frames of the program.
	Duration(s)	The duration of the program (in seconds).
	Play Mode	Set up different ways to play the program.
	Video material plays the music	When playing a video, output its audio synchronously.
	Background Music	Set the soundtrack of the material to synchronize the output music when the video is playing.
	Fade in / Out	Set the entry / exit states of the animation change process.

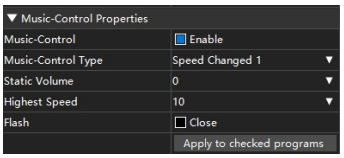


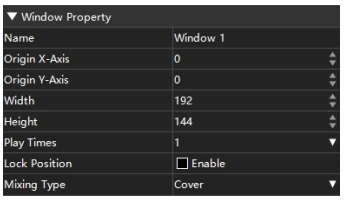


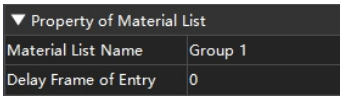


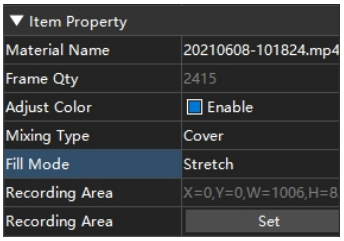
Level	Property	Instructions
	4/5/6-Color	Only be enabled and set under the 4/5/6-channel lighting fixture.
	Transition	Set the special effects and time of program cutscenes.
	Music-Control	Enable music to control the brightness or speed of the animation.
	Music-Control Type	Set the sound control mode (only support "frame extraction" and "speed change 1" offline). Frame Frame Skip by volume. Speed 1 Accelerating change by frequency. Speed 2 Accelerating change by volume. Brightness Lighten and dim according to the volume.
	Static Volume	The decibel value without sound.
	Highest Speed	The highest speed.
	Flash	Enable and the animation flashes the specified color at a set-interval and duration
window	Name	The name of the window, can be directly input text setting.
	Origin Axis	The upper-left corner coordinates of the window.
	Width / Height	The size of the window.
	Play Times	The number of times the current window animation loops.
	Lock Position	Lock the window so that it cannot be moved.
	Mixed Type	Sets the image effect when multiple Windows overlap. There are coverage, black transparent, darkening, lightening, multiply, screen, overlay, soft light, hard light, vivid light, transparent mask.
Material list & Material	Name	The name of the material list / material.
	Delay Frame of Entry	The number of frames of delayed approach.
	Frame Qty.	The frames of material.
	Adjust Color	Enable it to make the effect file more beautiful.
	Fill Mode	Set the file display mode, provide none, tile, center, stretch four options.
	Mixing Type	Set the material overlay blending material.
	Recording Area	Set the location and size of the material file to read.





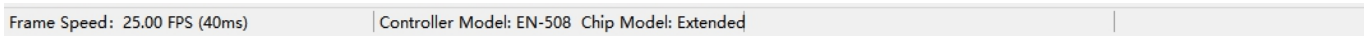






3.5. STATUS BAR

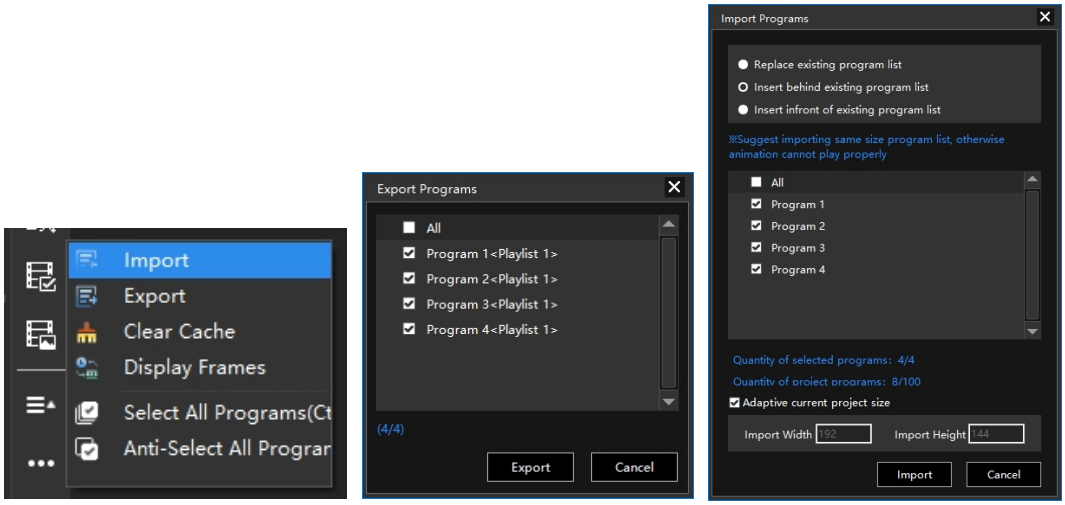
Display the setting status information of the project. Including displaying the frame speed, hardware information such as controllers and chips, IP addresses,and enabling the synchronization function.



Properties	Instructions
Frame Speed	The frame rate currently list for the project, in frames per second and ms/ frames.
Hardware Information	The data of controller model and chip model list by the project are derived from [Hardware setting].
IP Address	IP address of the control signal output network adapter.
GPS/BTS Time	It displays the current synchronization time, when the device detects a BTS/GPS module.

3.6. EXPORT AND IMPORT THE PROGRAM LIST

To avoid loss or error when copying programs, LED Player supports one-click output and import program list.



Operation is as follows.

Exporting program List.

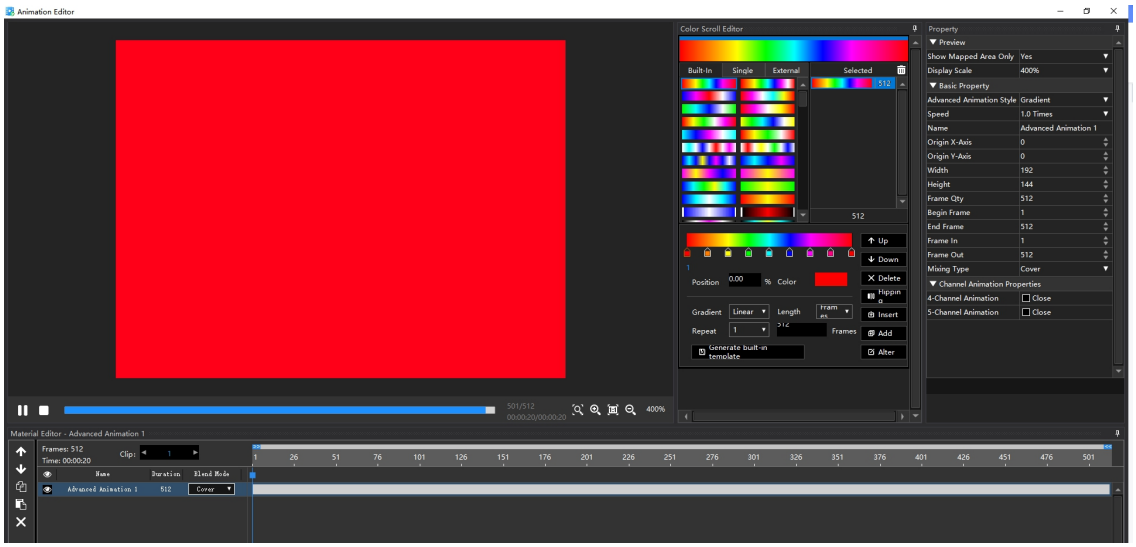
1. Select the programs you want to export.
2. Click Export to export the program list and save the *.swpl file in the project file.

Importing program List.

1. Select the programs you want to import.
2. Select whether to keep the original program list.
3. Select the programs you want to import.

4. ANIMATION EDITING

Double-click the playlist material or material name list to enter into the animation editor window. It consists of the four major regions of “preview”, “color scroll editor”, “property” and “material editor”.



Preview: Preview the effects of the footage in real time.

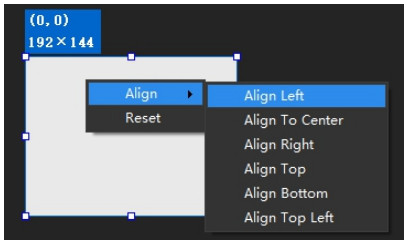
Color Scroll Editor: Set the color of material.

Property: View and set the material properties.

Material Editor: View the material or material list. Specific view a frame animation effect, free to adjust the playback time and material set overlay style.

4.1. PREVIEW PLAYING

Preview the effects of the footage in real time. The screen size is equal to the window size. In the stopped state, right mouse click on the screen to adjust the window position. Click [►] to play all the effects of the footage in the edit area by frame scale. In any playing state, double click on a material in the editing area to play the material in a loop only.

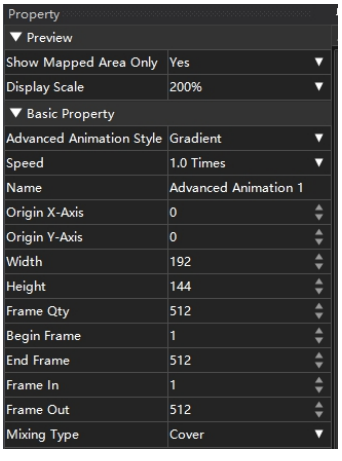


4.2. MATERIAL SETTING

View and set the material properties. The seven material types refer to "7 MATERIALS".

Click the "Material Name" in the edit area to view the properties. The seven materials have different attributes.

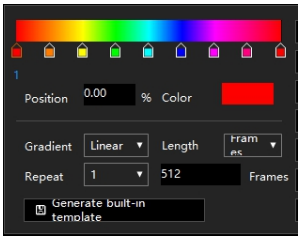
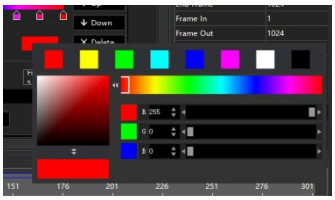
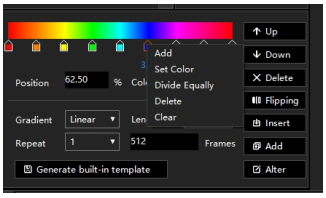
For materials of "Advanced Special Effects" and "Text", please refer to "7.3 Advanced Animations" and "7.5 Text" for specific effects production.



4.3. COLOR SCROLL EDITOR

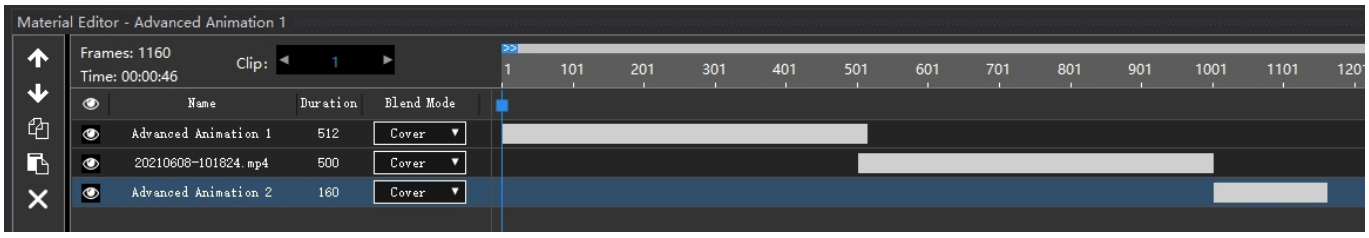
Customize the style and length of the color ribbon and apply it to the [Advanced Animations] and [Text] material.

The Color Ribbon Template	Built-In	Provide common built-in ribbon for users to quickly choose. Add method: 1. Double click the ribbon and directly add it into the "Selected". 2. Click the ribbon, the ribbon is displayed in the "Ribbon Editor", Edit it again and then add to the "Selected".
	Single	Provide professional "color selector", custom monochrome. 1. Pull the [white square] or change the color value to get any desired color. 2. add to the "Selected".
	External	Store the customized ribbon, easy to reuse, support editing and modification. Click [Generate built-in template] to generate the all edited ribbons and save in External template. Right-click the selected ribbon to delete it.
The Selected Ribbon		➢ Displays edited ribbon. ➢ Click the number on the right of the ribbon to list the ribbon length (up to 50000). ➢ Click the top right corner to delete the selected ribbon. ➢ Right click the ribbon to Flip, move, clear, copy, paste and other operations.
Color Ribbon		A preview of the total ribbons arranged in the order of the selected ribbons.

Ribbon Editor	Custom edit one color ribbon. Ribbon Bar: Displays the selected ribbon, and pulls the color code to change the color ratio. Position of code: Displays the position of the selected color standard as a percentage. Standard Color: Set the selected color code standard color. Gradient Mode: Provide linear, fixed color two modes, so that the transition more rich and diverse. Change length: Set the frame, second display, and length. Repeat: Append multiple identical currently edited ribbons. Generate: Click it to generate the all edited ribbons and save in External template. The hiding features of ribbon edit bar: Color code: Select and press the <←> or <→> key to adjust the position Click and shows the frame position by blue number. Double click and shows the RGB value. Set the value by disk also. Pull down and delete. Right click to add, list, average, delete, and empty the color code. The mouse stays on and shows the setting window. Ribbon: Double click to add directly the Selected Ribbon.	  
Function Button	The Selected Ribbon: Up / Down: Move the selected ribbon up or down. Delete: Delete the selected ribbon from Selected Ribbon. Flipping: Flip the selected ribbon. Insert: Insert new ribbon before existing ribbon. Add: Add new ribbon after existing ribbon. Alter: Replace the selected ribbon.	

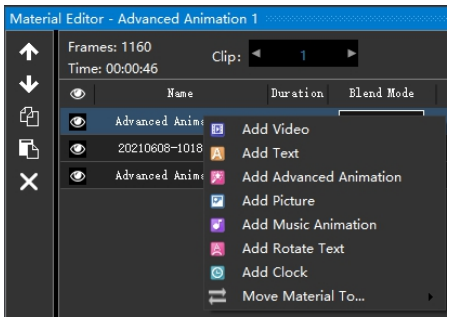
4.4. MATERIAL EDITOR

In the material list, you can view a frame animation of material. Freely adjust the playback time, the overlay style, edit, set the mixing mode, etc. to produce a rich variety of combination and overlay effects.



Material can be operated on:

Icon	Function
	Click to move the selected material.
	Click to copy and paste the selected material.
	Click to delete the selected material.
	Click to show or hide the material.

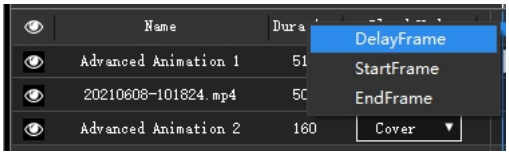


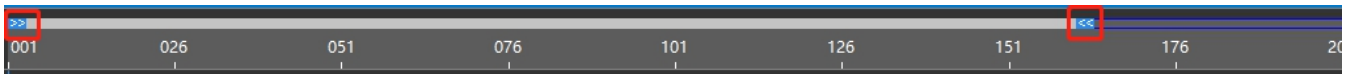
Right-click material to add Video, Text, Advanced Animation, Picture, Music Animation, Rotate Text, Clock.

Hidden features:

Long press the material name: feel free to move the material.

Right click the title bar: set delay frame, start frame, and end frame.

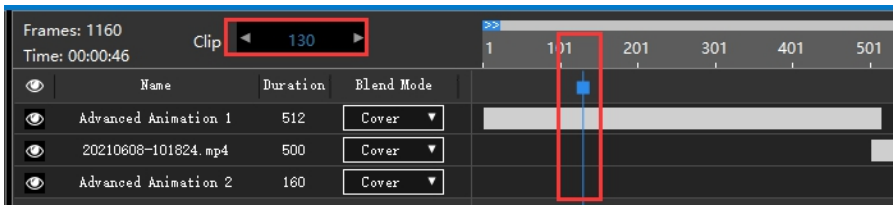




Frame scale: By scaling and moving the frame scale, you can more accurately locate and manipulate the frame number of the material.

Click  and move to scale the size of the frame count scale. The shorter  is, the smaller the frame count scale will show. The smallest frame can be precisely reduced to one frame.

Move  , can move a specific frame position near, and view the contents of a frame.



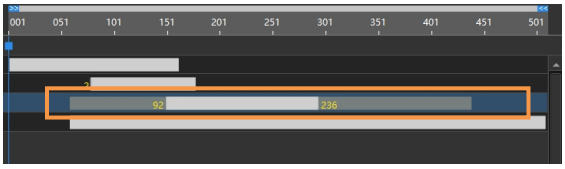
Axis: View the a frame animation.

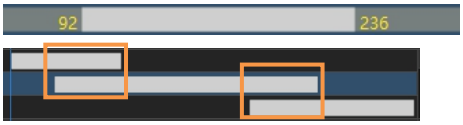
The operation is as follows:

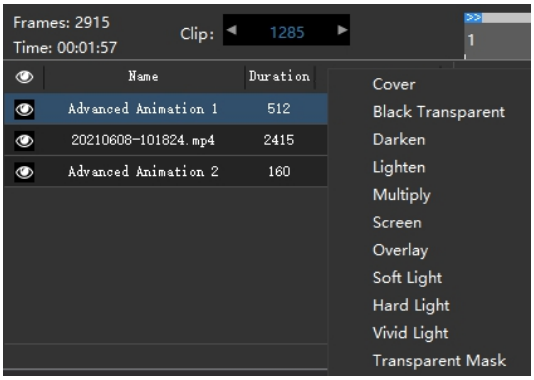
Move  to locate a certain frame, or input a certain frame into  to digital automatic positioning. And the animation of the corresponding frame will be seen in the Preview Window.

Priority: During the overall playback, move  and preview. Click  at this time, and it will continue directly from this frame.

Frame bar: shows the number of frames of the material.







Operation:

Move: Click and move the frame bar, that is, to change the playing time of the material. Hold down the <Ctrl> key to move the material, it can automatically welt (scale is 1).

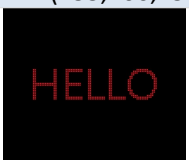
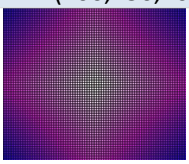
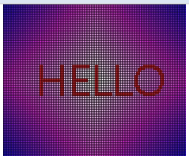
Editing: When the mouse stays over both ends of , it will turn into the arrow icon ↔. Click it to move the position of the clip. The white part is the retained content, and the gray part is the cut out content. The values represent the start and end frames. The clipping function affects the actual output.

Overlay: Free movement of the material position can make the overlapping parts between the materials form a superposition. with the blending mode, produce a rich variety of superposition effect.

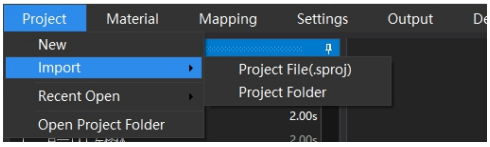
Blend: The color channel blending of the overlay between the materials produces a variety of variations.

P1 is the material layer 1, P2 is the material layer 2, and P3 is the blend effect of two materials. (R, G, B) values correspond to the red, green, blue channel values respectively.

Options	Instructions	Material P1 (255,100,150)	Material P2 (200,150,100)	Overlay Blend P3
Cover	Default option to show only its own layer.			

Options	Instructions	Material P1 (255,100,150)	Material P2 (200,150,100)	Overlay Blend P3
Black Transparent	Make the black layer transparent and hollow out.			
Darken	After comparing the channels of the two layers, take the minimum value.			 (255,200,100,100)
Lighten	After comparing the channels of the two layers, take the max value.			 (255,255,150,150)
Multiply	The product of two values divided by 255. So when you mix it with white, you take the primary color, X times 255/255 is equal to X			 (255,200,58,58)
Screen	Any color and black color filter, the primary color is not affected. Filter any color and white to get white. Filtering with other colors will produce a bleaching effect.			
Overlay	If the Next material channel value is more than 128, the enhanced version of the filter mode. Otherwise, the enhanced version of the Multiply mode.			
Soft Light	If the previous material channel value exceeds 128, the base image lights up. If it is below 128, it darkens.			
Hard Light	If the previous material channel value exceeds 128, the filter mode is executed. Otherwise it is executed.			
Vivid Light	If the previous material channel value exceeds 128, the color burn mode is executed. Otherwise it is executed.			

5. PROJECTS



New: Create a new project.

Import: Import an existing project file (.sproj) or a project folder that contains a list folder.

Recently opened: Displays the most recently opened project. Click to open the most recently opened project.

Open project folder: Open the current project folder to view file information.

When the LED Player software is opened for the first time, a new project window will pop up. Or click [New] under <Project> menu to open it.

Name: Set the name of the project.

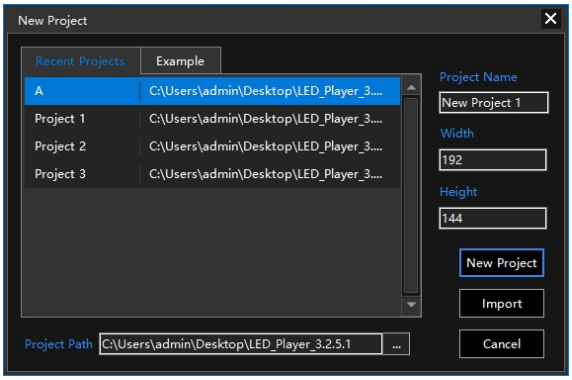
Width/Height: Size of the item (or size of the mapping).

Path: The location of the project files.

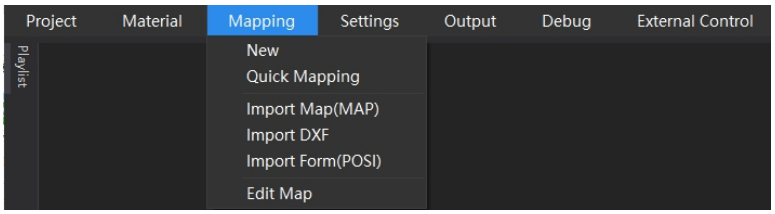
Recent projects: Displays the list of project paths that have been opened recently. Click to switch them on.

Import: Import other projects.

Example: We provides some built-in example projects. And through which users can better understand how to make LED Player software more colorful effect.



6. MAPPING



6.1. CREATE A NEW MAP

When special mapping screens (such as N-type mapping, phantom characters, cable-stayed Bridges) need to be applied, call up the MAP software for drawing. And the project can be imported in real time after mapping is completed. (For detailed operation, please refer to this manual "MAP TOOLS").

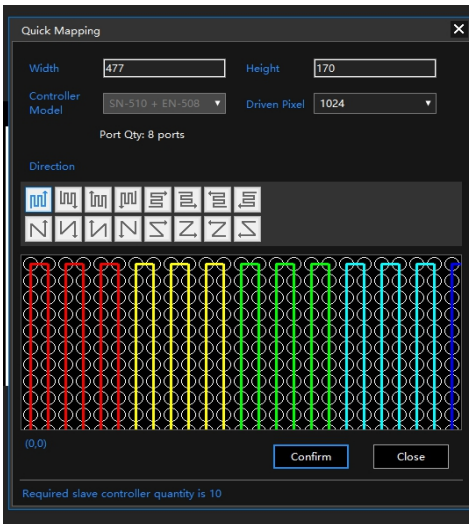
Click the menu [Mapping] - [New] to bring up the MAP software.

6.2. QUICK MAPPING

Regular rectangular wiring, providing 16 kinds of wiring methods commonly used in engineering for fast wiring.

Click [Mapping] - [Quick Mapping] to open the interface.

List according to the screen size of the actual project:



Width/Height: The dimension of the mapping.

Controller model: Only the controller model can be viewed. To modify the controller, click the menu [Settings] - [Hardware settings] to set.

Drive pixel: lists the number of drive points for a single port.

Direction: 16 kinds of conventional S and Z routing mode can be selected.
As shown in the "Wire distribution description" below. Applicable to regular screens only.

Preview: Intuitively see the size of the mapping, direction, each port with the drive points, etc.

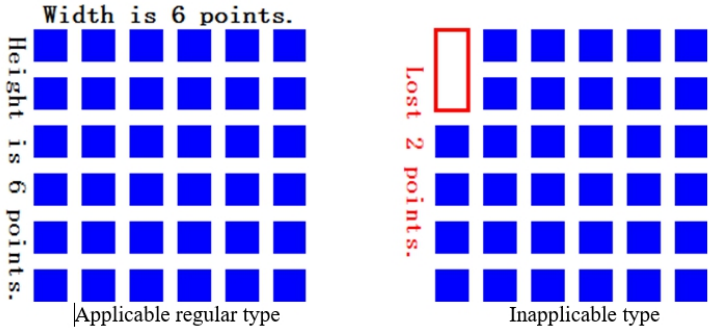
Mouse operation hide function:

Up/down rolling wheel to zoom in / out the mapping preview.

Press on the right button to move the location of the mapping preview.

Wire distribution description:

	Vertical				Level			
	left down	Left up	Right down	Right up	Left down	Left up	Right down	Right up
S type								
N type								



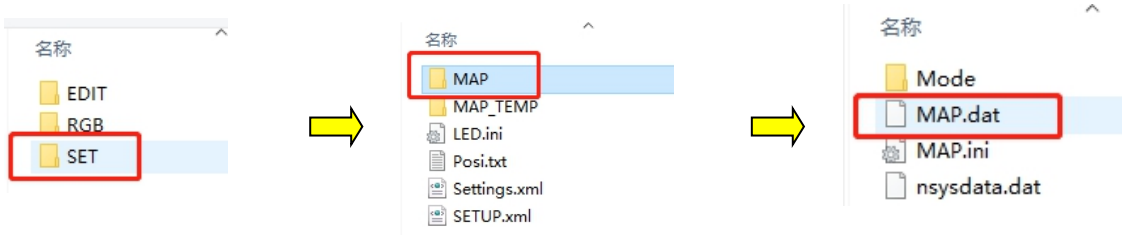
Examples of mapping:

Project	Size	Driver Pixels
10 pieces 1M tubes, 6 sections per meter	Width: 60 points (6 sections * 10 pieces) Height: 1 points (1 M tube)	60 pixels
5 lines, 6 pieces 1M 8 sections tubes of each line	Width: 5 points (5 lines) Height: 48 points (8 sections *6 pieces)	240 pixels

6.3. IMPROT THE MAPPING.DAT FILE

Import the “MAP.dat” file drawn by MAP software.

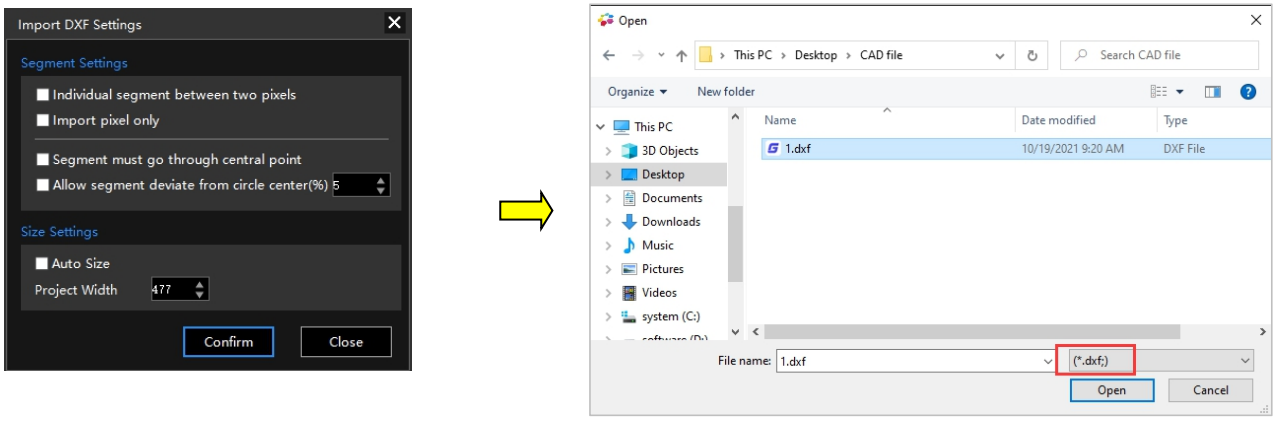
Click "Mapping" - "Import Map" to open.



6.4. IMPROT THE DXF FILE

Read the DXF file, and enter the MAP cabling software. Import and convert it into points that can be recognized by the LED Player accordingly.

Click [Mapping] - [Import DXF] to open. DXF import conditions need to be list before import.



6.5. IMPORT THE FORM FILE (POSI.TXT)

Advanced application, special mapping, list by our company.

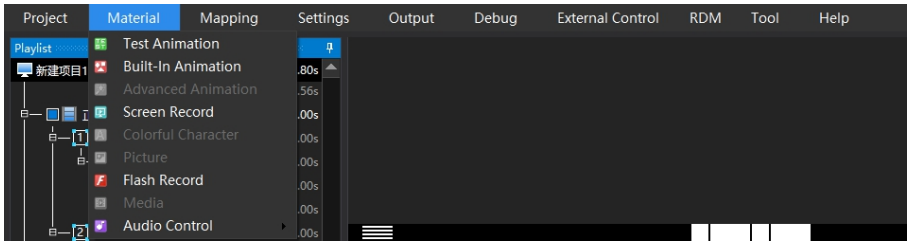
6.6. EDIT THE MAPPING BY MAP SOFTWARE

Jump into the MAP software to edit the current cabling.

Click [Mapping] - [Edit Map] to jump into the Map Software.

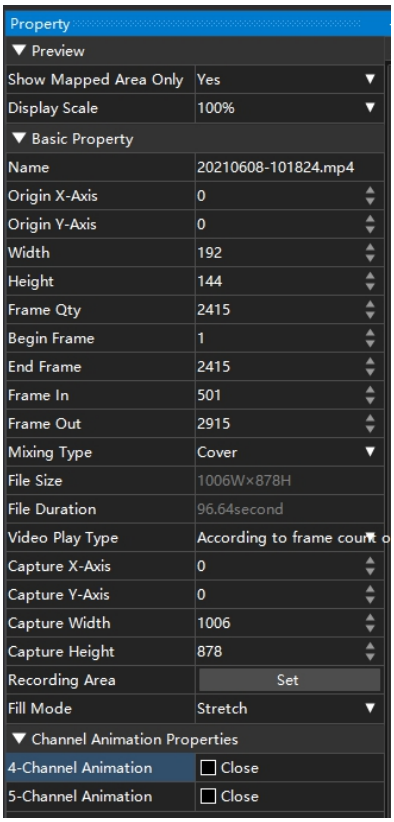
No matter the previous routing was done with MAP software or with quick routing, you can edit the mapping diagram again after open MAP software.

7. MATERIAL



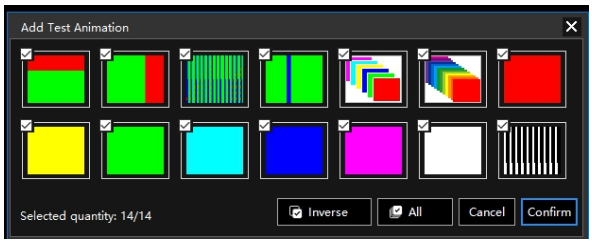
7.1. THE PROPERTY OF MATERIAL

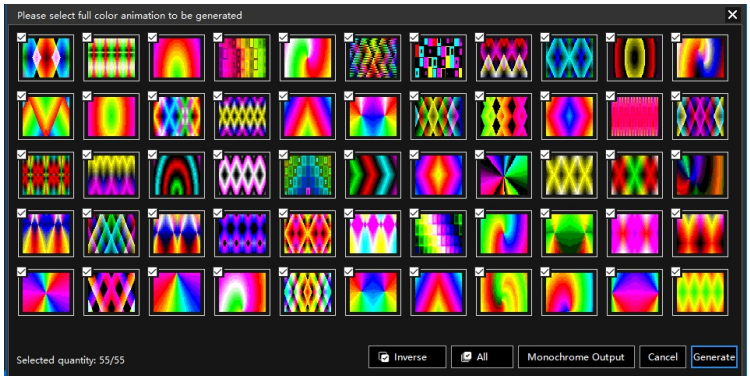
Property	Instructions
Mapped area	Public property, for the "material preview window" setting.
Display Scale	Sets the display scale to adjust the size of the preview.
Animation Style	Chooses different effects style.
Speed	Sets the playback speed of the effect. The larger the number, the faster the speed. the general default is 1 and the effect is the most smooth.
Name	Displays and modifies the name of the current animation.
Origin Axis (Coordinate)	Displays and modifies the starting coordinates of the preview screen where the current footage is located. It can also be changed by moving material in the stopped state.
Width / Height	Displays and sets the size of the footage. It can also be changed by moving material in the stopped state.
Frames Qty.	Displays the number of frames of the current animation.
Begin / End Frame	Sets the start and end frame order of the footage.
Frame In / Out	Sets the input and output frame sequence for the footage.
Play Type	Sets the number of times the effect appears to play.
Mixed type	The color channel blending of the overlay between the materials produces a variety of variations. The mixed result refer to “MATERIAL EDITOR”.
Mirror Mode	Set animations according to different mirroring modes, including None, Horizontal Mirroring, Vertical Mirroring, Quadrangle Mirroring, and Copy.
Transition Color	Background color before or after effect appears
Capture Axis (Coordinate)	Displays and sets the starting coordinate of the animation intercept.
Capture Size	Displays and sets the effect size for intercepting retention.
Fill Mode	Set the file display mode, provide none, tile, center, stretch four options.
4/5-Channel Animation	Only be enabled and set under the 4/5/6-channel lighting fixture.
Grayscale	After channel parameters are enabled, grayscale RGB ratio parameters can be adjusted.The larger the parameter, the closer the color to gray.The smaller the parameter, the closer the color is to black.

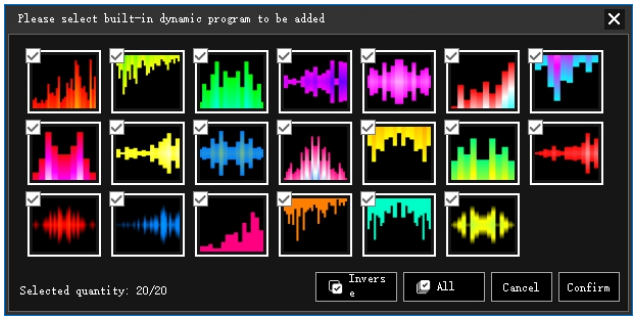


7.2. THE TEST AND BUILT-IN ANIMATIONS

Generate 14 set of test effects and 96 set of built-in effects for easy invocation.







Generate: Click the menu [Material] - [Test Animations] / [Built-in Animations] to open the selection box. Click the image of the corresponding animations to select ([Inverse] or [All] can be used). Click [OK], the material is previewed and generated in project RGB

Import to the playlist: Method 1: Right-click [Project] - select [Import Programs] and select what you want in the project's RGB folder.

Method 2: right-click “Windows” / ”materials”, select [Add Media], and select what you want in the project's RGB folder.

[Monochromatic output]: Click to see 96 set of pattern animations, convert the selected animations into monochromatic output. Select the color to be transformed and click [build].

After successfully importing the material to Play-List, double-click the material name to enter the Animation Edit interface. Set the material again in the "Properties Settings". Refer to “THE PROPERTY OF MATERIAL”.

7.3. INPUT VIDEO AND PICTURE

Input video or picture, and store to the specified RGB folder.

Supports "AVI, MP4, MOV" video format import, and "BMP, JPG, JPEG, GIF, PNG" image format import.

Two ways to open.

Method 1: In the "Playlist", right-click “Window” and select [Add Media] to pop the record window.

Method 2: In the "Playlist", right-click "Material Group" and select [Add Media] to pop the record window.

If the same program needs to play more than one HD video at the same time, it is recommended to use a high-performance computer with a memory of 8GB or above.

Set the material again in the "Properties Settings". Refer to “THE PROPERTY OF MATERIAL”.

7.4. ADVANCED ANIMATION

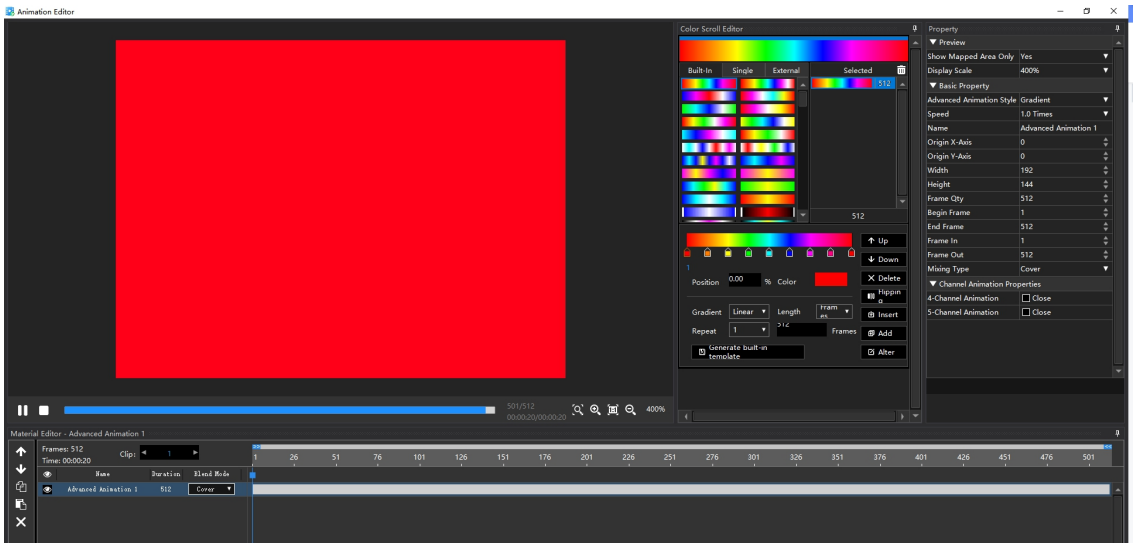
Users set their own special animations mode and other material properties, call ribbon editing, editing patterns at will.

Two ways to open.

Method 1: In the "Playlist", right-click “Window” and select [Add Adv Animation] to enter the "Animation Edit" interface.

Method 2: In the "Playlist", right-click "Material Group" and select [Add Adv Animation] to enter the "Animation Edit"

interface.



Ribbon editing: customize the style and length of the ribbon, and change the color of the material of advanced special effects in real time. Refer to "COLOR SCROLL EDITOR".

The "Properties Settings" of material refer to “THE PROPERTY OF MATERIAL”.

7.5. THE SCREEN RECORDING AND THE FLASH RECORDING

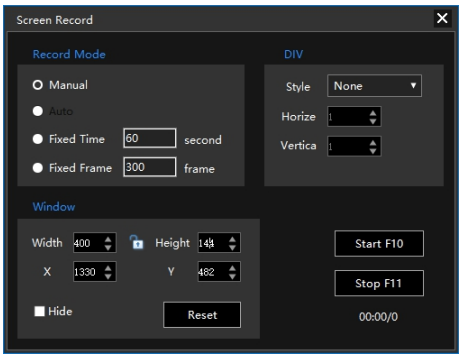
Easily capture images played on a computer, convert it to the LED Player format and store it in the specified RGB folder.

Two ways to open.

Method 1: In the "Playlist", right-click “Window” and select [Screen Record] to pop the record window.

Method 2: In the "Playlist", right-click "Material Group" and select [Screen Record] to pop the record window.

Function	Instructions	
Record Mode	Manual	Click "Start F10" and "Stop F11" to record the animation.
	Auto	Record the animation for a specified time.
	Fixed Time / Frame	Record the animation of specified number of time / frames.
DIV	Style	Set animations according to different mirroring modes, including None, Horizontal Mirroring, Vertical Mirroring, Quadrangle Mirroring, and Copy.
	Horizontal / Vertical	On the basis of setting mirror mode, copy again horizontally or vertically.
Window	Width / Height	Sets the size of the screenshot window.
	X / Y	Displays and modifies the starting coordinates of the preview screen where the current footage is located.
	Hide	Tick to hide the screenshot window.
	Reset	Click to reset the window size and position.
State	Start	Click to start recording animation.
	Stop	Click to stop recording.
	00:00 / 0	Displays the total time and frames of the recorded effect.



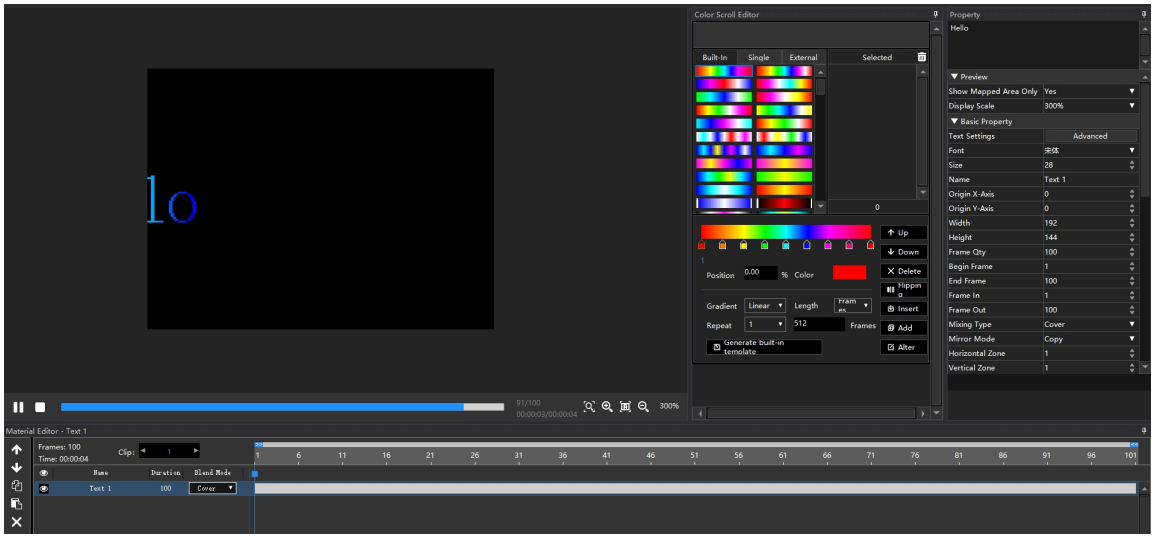
7.6. TEXT

Set text output to the playback screen, call ribbon editing, editing patterns at will.

Two ways to open.

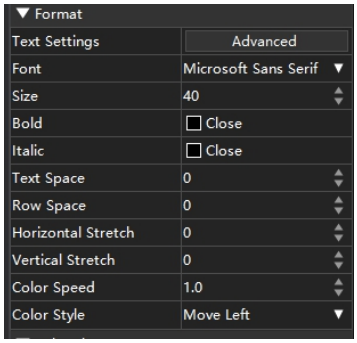
Method 1: In the "Playlist", right-click “Window” and select [Text] / [Rotate Text] to pop the record window.

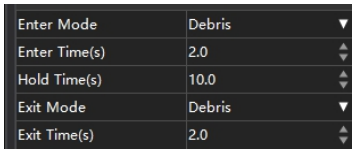
Method 2: In the "Playlist", right-click "Material Group" and select [Text] / [Rotate Text] to pop the record window.

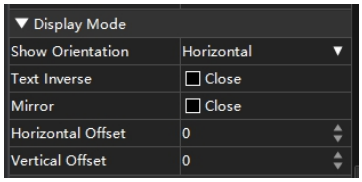


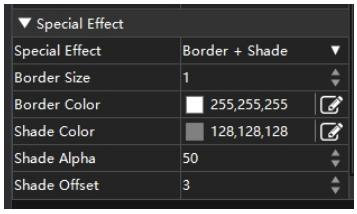
Ribbon editing: customize the style and length of the ribbon, and change the color of the material of advanced special effects in real time. Refer to "COLOR SCROLL EDITOR".

Property	Instructions	
Input box	Enter the text shown on the screen.	
Property	The "Properties Settings" of material refer to “THE PROPERTY OF MATERIAL”.	
Format	Font	Set the font according to system font library.
	Space	Sets the spacing between text or between lines of text.
	Stretch	Stretch font size horizontally.
	Color Speed	Sets the speed at which text fills the gradient.
	Color Style	Sets the direction of ribbon filling.
Animation	Enter / Exit Mode	The direction in which the text moves into the scene.
	Enter / Exit Time	The time in which the text moves into the scene.
	Hold Time	Sets the duration of the text in the scene.
Display	Orientation	Sets the way of the word.
	Text Inverse	The order in which text content appears.
	Mirror	The text appears after mirroring.
	Offset	The font position is offset horizontally/vertically in the playback screen area.
Special Effect	Special Effect	Design text bold and shadow.
	Border Size / Color	The width / color of the text stroke.
	Shade Color / Alpha / Offset	Color / Alpha / Offset of the text shadow.
	Radius	Sets the font distance from the center point.









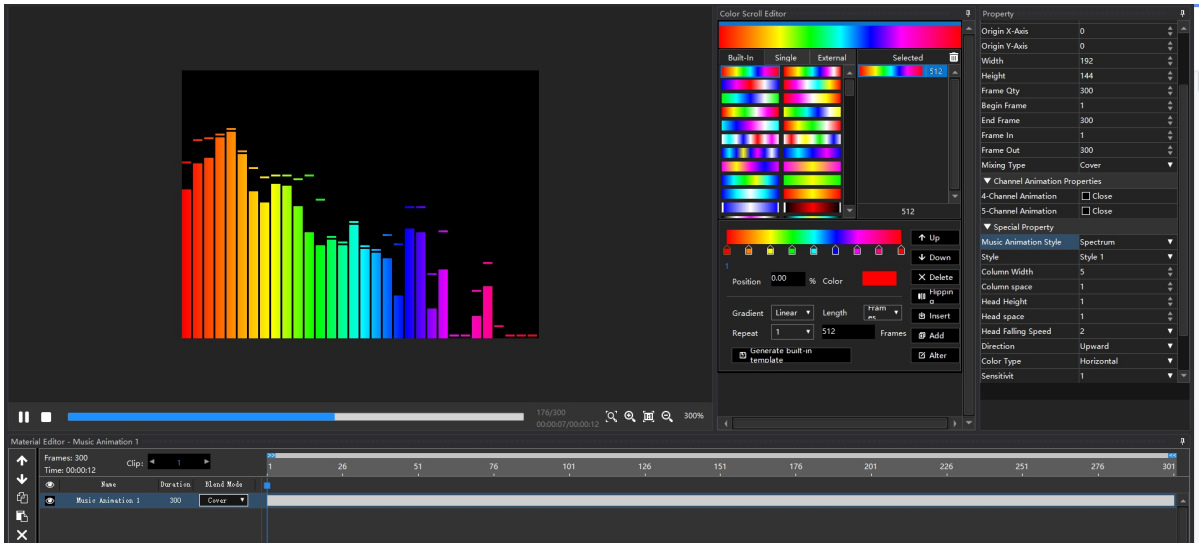
7.7. AUDIO CONTROL ANIMATION (ON-LINE)

Add and design the audio control animation.

Two ways to open.

Method 1: In the "Playlist", right-click “Window” and select [Music Animation] to pop the record window.

Method 2: In the "Playlist", right-click "Material Group" and select [Music Animation] to pop the record window.



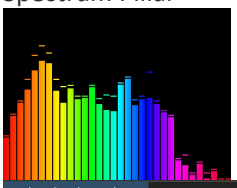
Ribbon editing: customize the style and length of the ribbon, and change the color of the material of advanced special effects in real time. Refer to "COLOR SCROLL EDITOR".

The "Properties Settings" of material refer to “THE PROPERTY OF MATERIAL”.

There are 6 animations for choose. The computer needs to enable the "sound card" and plays music. Led player will display the animation only when the audio control data is read.

Name

Spectrum Pillar

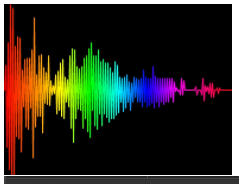


Music Animation Style	Spectrum
Style	Style 1
Column Width	5
Column space	1
Head Height	1
Head space	1
Head Falling Speed	2
Direction	Upward
Color Type	Horizontal
Sensitivit	1
Audio Data Type	Real-time
Grid	Close

Spectrum Wave

Special Property	
Music Animation Style	Spectrum Wave
Column Width	2
Column space	2
Max Amplitude	3.0
Attenuation radian%	11
Color Change Speed	1.0
Anti-Aliasing	Close
Color Expansion	Close
Halo	Enable
Halo Color	255,255,255
Halo transparency	96
Particle	Close
Circle	Close

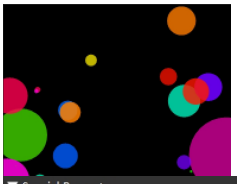
Beat Lines



Special Property	
Music Animation Style	Beat Lines
Magnification	0.5
Speed Of Change	10
Line Width	1
Space	1
Corner	Sharp Corner
Direction	Horizontal
Inverse	Close
Anti-Aliasing	

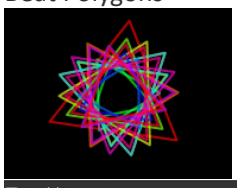
Name

Colorful Circles



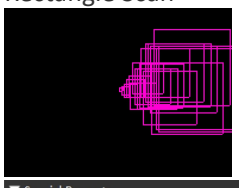
Special Property	
Music Animation Style	Colorful Circles
Magnification	0.35
Qty	32
Moving speed	1
Flicker	Medium
Anti-Aliasing	Enable

Beat Polygons



Special Property	
Music Animation Style	Beat Polygons
Magnification	0.6
Qty	20
Angle	10
Rotation speed	5
Line Width	2
Alpha	50
Corner	Filleted Corner
Anti-Aliasing	Enable

Rectangle Scan



Special Property	
Music Animation Style	Rectangle Scan
Size	0.5
Qty	20
Moving speed	50
Color Change Speed	1.0
Sensitivity	1.0

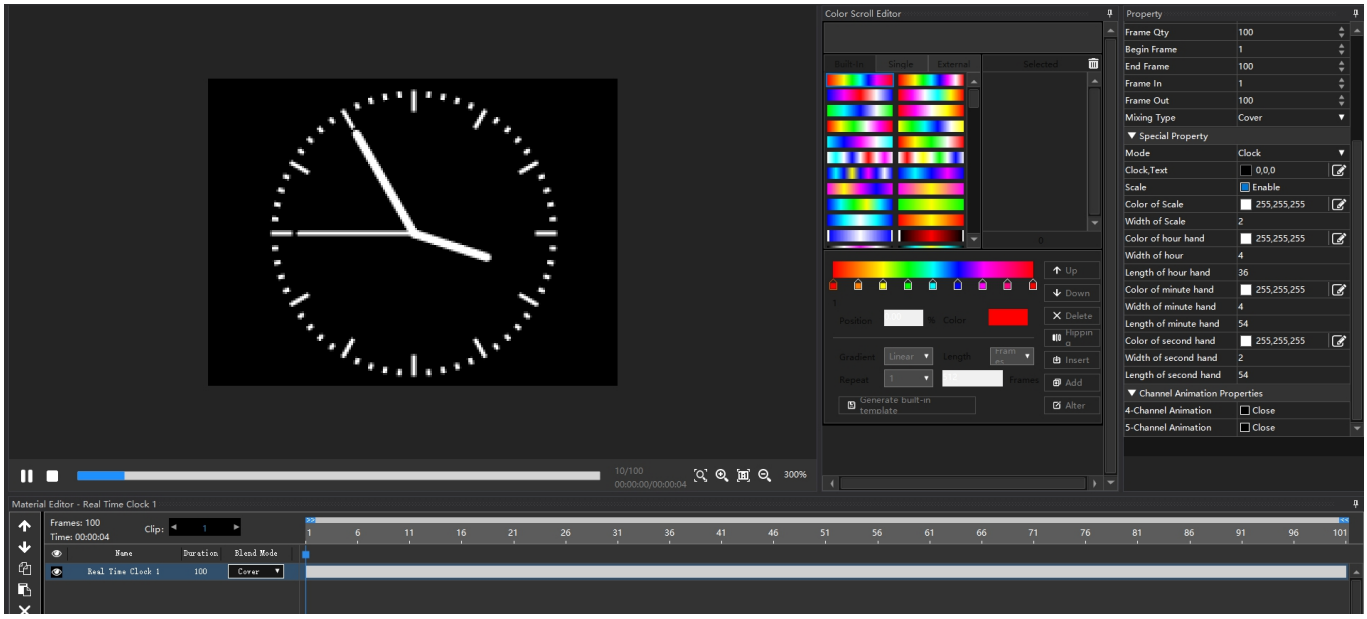
7.8. THE CLOCK ON-LINE

Read the computer time and present it as a clock, Only applicable to software real-time control projects.

Two ways to open.

Method 1: In the "Playlist", right-click “Window” and select [Clock] to pop the record window.

Method 2: In the "Playlist", right-click "Material Group" and select [Clock] to pop the record window.

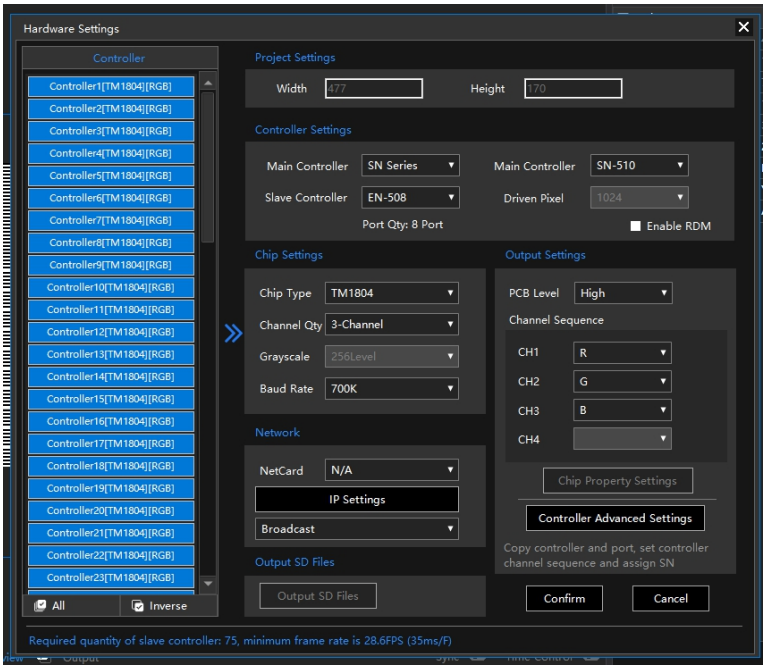


The "Properties Settings" of material refer to “THE PROPERTY OF MATERIAL”.

8. SETTINGS

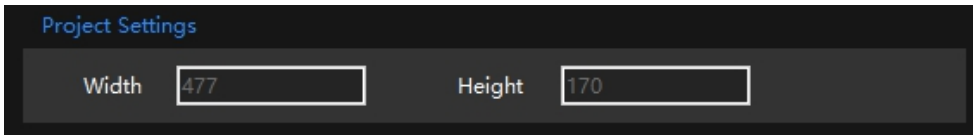
8.1. HARDWARE SETTINGS

View and list controller, chip, output and other hardware parameters, also includes network setting and output SD files and other options, convenient for users to list all information in one step.
Click [settings] - [Hardware] to open the window.



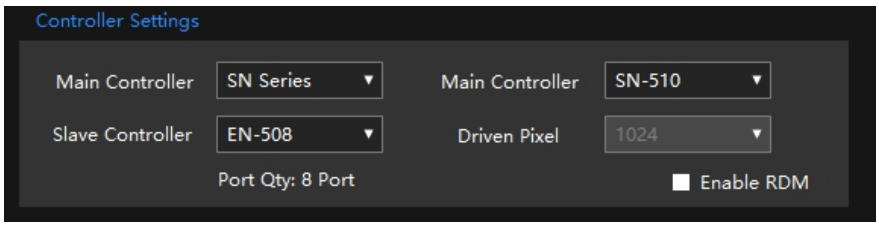
8.1.1. PROJECT SETTINGS

View and list the width and height of the project (the width and height of the mapping).
If you have used MAP cabling software or quick cabling, this is read-only and you cannot modify the width and height of the project.



8.1.2. CONTROLLER SETTINGS

View and list controller type, model and drive pixels each port.



Support master control and sub-control:

Series	Main controller	Slave Controller
PC series	PC	EN-401、EN-402、EN-408、EN-508、EN-608
MP series	MP-210	EN-401、EN-402、EN-408、EN-508、EN-608
	MP-260	EN-401、EN-402、EN-408、EN-508、EN-608
	MP-380	EN-401、EN-402、EN-408、EN-508、EN-608
SN series	SN-500	EN-401、EN-402、EN-408、EN-508
	SN-510	EN-401、EN-402、EN-408、EN-508
	SN-410	EN-401、EN-402、EN-408、EN-508
MQ series	MQ-300	EN-401、EN-402、EN-408、EN-508

Series	Main controller	Slave Controller
SY series	SY-302	
	SY-408	
	SY-418	
	SY-322	
	SY-324	
	SY-328	
	SY-202	
	SY-204	
	SY-208	
SW series	SW-301	
LoRa Series	LM-100	LR-101、LR-418

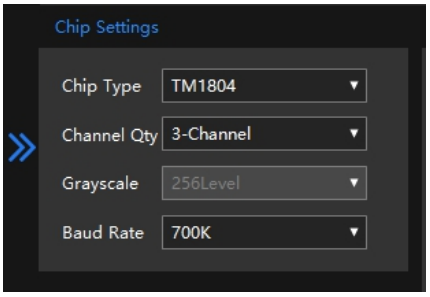
Driver points: lists the driver points of the single output of the project. The default value is 1024.

Only view cabling items in the MAP cabling software and need to access the MAP software to modify the items.

EN-608 controller does not support status detection, IP setting, controller replication, project encryption functions.

8.1.3. CHIP SETTINGS

Select the PCB type and gray according to the projects. Gray level combined with the chips and the project needs to be list. Generally the higher the gray level, the more delicate the color, but the main control of each road can take less points.



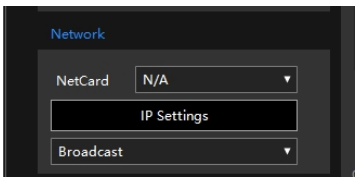
Chip list:

Manufacturer	Chip
Ssskway (SW)	SW-D
Titan (TM)	TM1804, TM512AD, TM512AC0, TM512AC2, TM512AC3, TM512AC4, TM512AB3, TM512AL1, TM1809, TM1812, TM1814, TM1913, TM1914/TM1914A, TM1914(Test Main Channel), TM1914(Test Slave Channel), TM1934D, TM1803
Szucs (UCS)	UCS512A, UCS512B, UCS512C, UCS512C4, UCS512CN, UCS512D, UCS512EH, UCS1903N, UCS1903B, UCS1904, UCS1909(B), UCS1912, UCS2903, UCS2904(B), UCS2909, UCS2912, UCS5603A, UCS5603B, UCS8903, UCS8904, UCS8912
Sunmoon (SM)	DMX512AP, SM16511, SM16512, SM16520(P), SM17512P, SM17500P, SM17522P, SM16500P, SM16703P, SM16709P, SM16712P, SM16704PB, SM16714P, SM16813(P), SM16823, SM16824, SM18522P, SM18522PH
Genesis (GS)	GS8512, GS8206, GS8205, GS8219, GS8513, GS8515
Hichips (Hi)	Hi512A0, Hi512A4, Hi512A6, Hi512D, Hi512E
Worldsemi (WS)	WS2811, WS2812, WS2818
Leixin (LX)	LX1003, LX3203
Teralane (TLS)	TLS3001
DMS (P)	P9883
Jercio (XT)	XT1506S
MXW	MT1809C, MT1806, MT1815
(QED)	QED512P
Others	BS0815, BS0825, BS0825(18mA), LPD1889, BS0901, GW6312
Common	Standard DMX (250K), Extended DMX (500K)

8.1.4. NETWORK

8.1.4 Network setting

Set the output net card, refer to “ETHERNET SETTINGS”..



8.1.5. OUTPUT SETTINGS

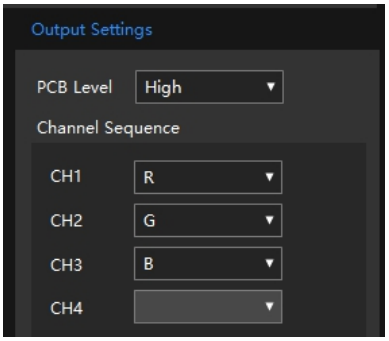
Set the effective output level and channel order.

PCB level: Default is high. Do not suggest changing the option by customer.

Channel Sequence: Select the correct color for the specific channel.

Controller advanced setting: This is advanced function. Please don’t change the setting arbitrarily, otherwise, it would cause the system out of control.

Before setting, please consult our technical.



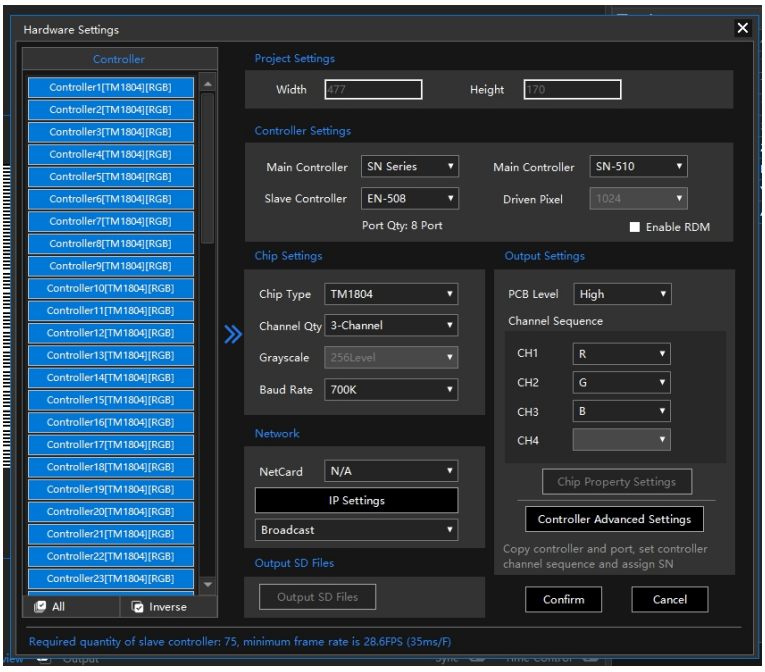
8.1.6. ADVANCED SETTING

In the same system, user can set the ID of controllers (item of controllers should be the same), PCB type and R/G/B Channel. (One controller only drive one type of lighting.)

Click the small button [«] on the left of the setting window to bring it up.

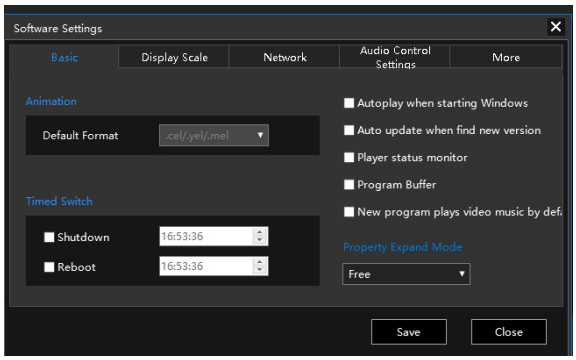
This is advanced function. Please don’t change the setting arbitrarily, otherwise, it would cause the system out of control.

Before setting, please consult our technical.

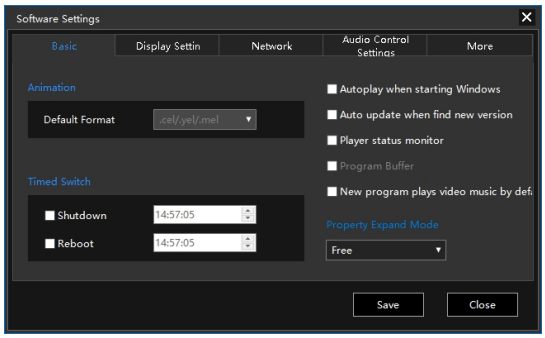


8.2. SOFTWARE SETTINGS

Set the software parameters of the project, including basic setting, display scale, network setting, audio control setting, more setting, etc.



8.2.1. SOFTWARE BASIC SETTING



Animation: Display and set the format of animation.

Timed Switch: Set computer shutdown or restart instruction, only access to the computer's project support.

Note: if set the time of Shutdown / Restart at the same time, the computer will not automatically restart after shutdown.

Autoplay when starting Windows: Once checked, the LED Player will be turned on automatically after the computer is logged into the system.

Note: Need to list computer to minimum security.

Auto update when find new version: After checking, the LED Player will be automatically detected and upgraded in the network.

Player's status monitor: After checking, the running state of LED Player will be monitored regularly.

Program Buffer: Converting a program to a buffer file specific to the LED Player can significantly improve playback performance.(If the parameters cannot be checked, please conduct project mapping first.)When ticked and buffering is completed, √ will appear in the lower left corner of the program icon and automatically start playing; Unchecked, play the program directly.

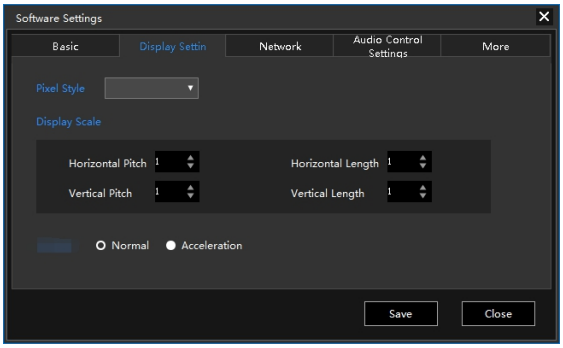
Plays video music by default: After checking, "Video Material Plays Music" will be enabled by default for subsequent imported video programs, and the original video sound effects will be played automatically.

Note:

1. Since changing the content of the program needs to be buffered again, please try to turn this function on after setting the playlist.
2. "Brightness" is invalid for buffered files.
3. If the effect files are replaced in the RGB folder, it is necessary to manually restart the software and re-buffer it.
4. When the project on the disk space less than 2G, can not be buffered.

Property Expand Mode: Set how the properties interface should be displayed.

8.2.2. DISPLAY SETTINGS



Adjust the size of the playing area according to needs. Generally, the software will adjust automatically according to installation. The player will show the enlargement times of points and the display points distance. The unit is Pixel.

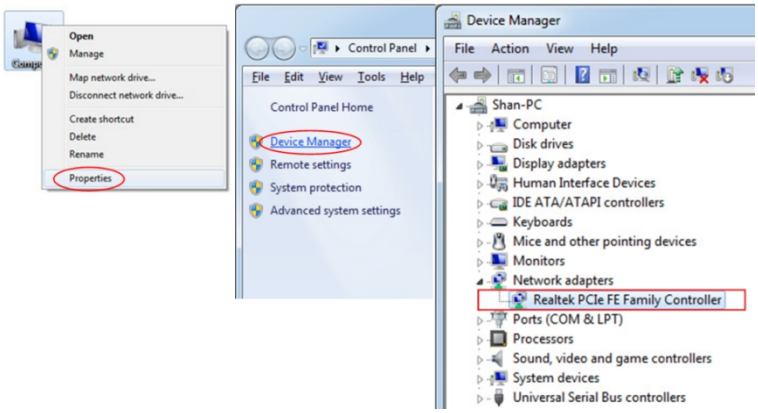
Points distance in level=level distance-level points width.

Vertical points distance=vertical distance-vertical points height.

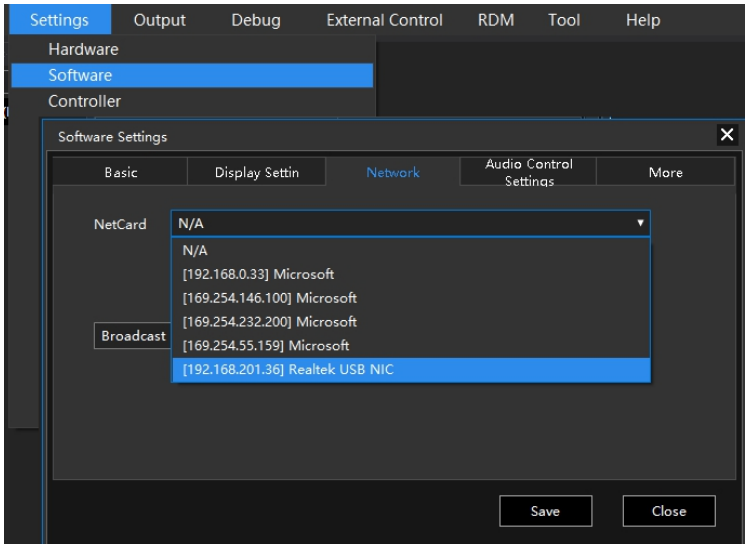
8.2.3. ETHERNET SETTINGS

Only be used in Ethernet PC on-line controller. You can realize synchronization playing effects via cables connected to computer and controller. The operation below.

1. Make sure the computer with network card with cable sort. Connect computer to controller via cables.
   Check the network: computer (right click) – Properties – Device Manager – Network adapters



2. Select network card.
   Software - Remind frame (if the software doesn't get the network card, this frame will pop.) – Confirm - Ethernet Setting - Single network card (network card set as "Realtek RTL8139/810x Family Fast Ethernet NIC") - Save to close.

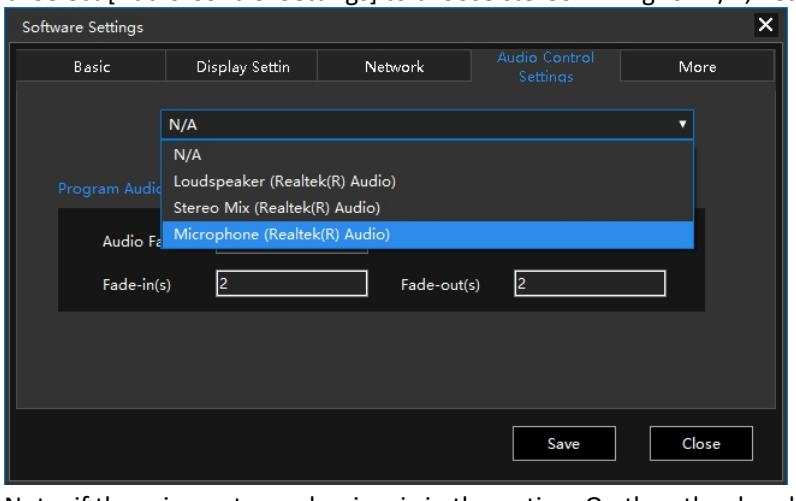


8.2.4. AUDIO CONTROL SETTINGS

1. Audio control port setting of player.

a. Open the player, and click the [Settings] - [Software].

b. Select [Audio Control Settings] to choose stereo mixing for N/A, Realtek High Definition Audio.

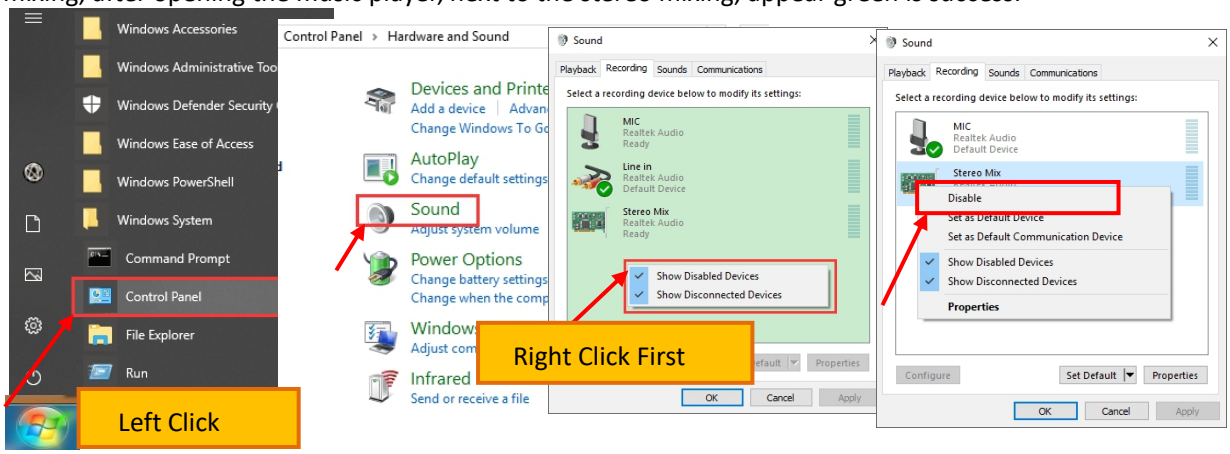


Microphone = sound control

Stereo mix = sound control

Note: if there is no stereophonic mix in the option, On the other hand: open the control panel → sound → recording →

press the right mouse button in the blank → make a “display of disabled devices” √→right button selection after stereo mixing, after opening the music player, next to the stereo mixing, appear green is success.



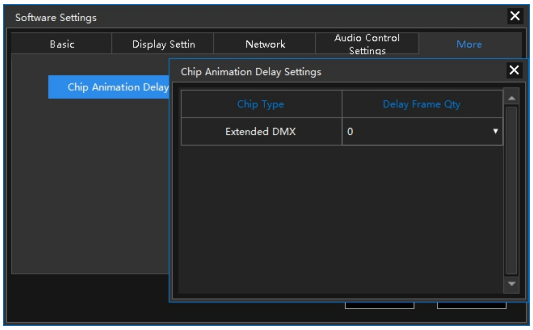
2. Play music in the computer, the music effects will show in the play area.

3.It will show the volume data if automatic switched with picture/music animation is enable. And if the volume is less than the setting, it will play the picture animations.

8.2.5. MORE - CHIP ANIMATION DELAY

If one project uses several PCB Types of lighting fixtures which drived by several controllers, then the effect would play incontinuous caused by its IC difference. In this moment, user can manual set the delay time for the specific IC which to obtain sync effect.

Note: After select this function, effects in the lightings would be N frame delay when compared to the effects in LED Player, but the effects in lightings are continuous.



8.3. THE ADVANCED SETUP OF CONTROLLER

Controller replication, port replication, list controller channel sequence, SN controller partition, etc.

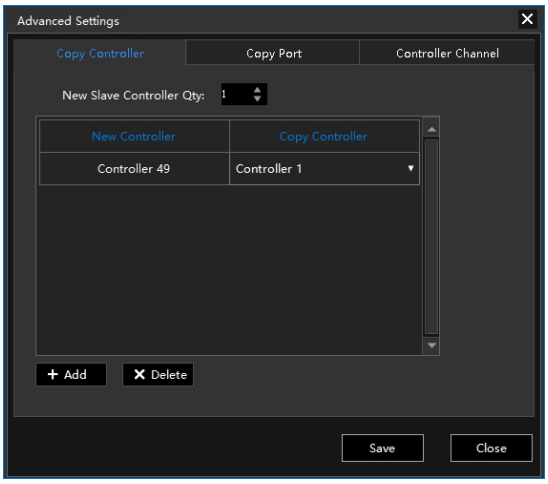
Click [setting] - [Controller Advanced setting] to open the interface.

8.3.1. CONTROLLER REPLICATION

Copy and use the data from the other controller to simplify LED Player design animation.

Click [setting] - [Controller Advanced setting] - [Controller Duplicate] to open the interface.

New Slave	Set the number of controllers that need to be copied.
New Controller	Add the maximum ID in the project. It will be starting from 6, if there are 5 controller in the wiring.
Copy Controller	Only for copying the ID in the wiring. 1 to 5 is valid if there are 5 controller in the wiring.



8.3.2. PORT REPLICATION

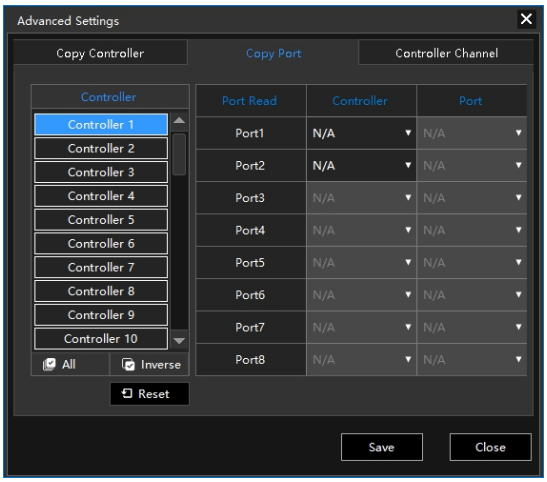
We can specify either port to copy data from other ports.

Click [setting] - [Controller Advanced setting] - [Port Replication] to open the interface.

For PC control system, click “Save” to copy the port.

For SD card controller system, ports cannot be copied. Animation should be generated to bin file first. Only insert the SD card with the new bin file to controller, controller could be in a normal operation.

Select the controller and the port that need to be copied.



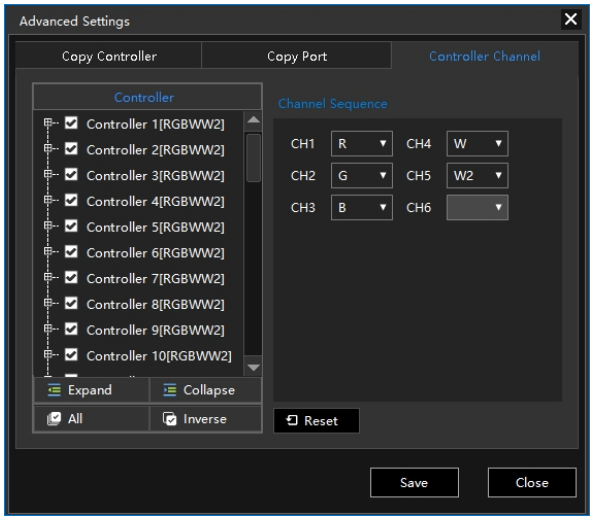
8.3.3. THE CHANNEL SETTING OF SHIP

Set the channel color of chip.

Click [setting] - [Controller Advanced setting] - [Controller Channel] to open the window.

The selected controller / port can be set in channel order.

If single point/single port setting is required, refer to "COM AND POINT PARAMETER ADJUSTMENT".



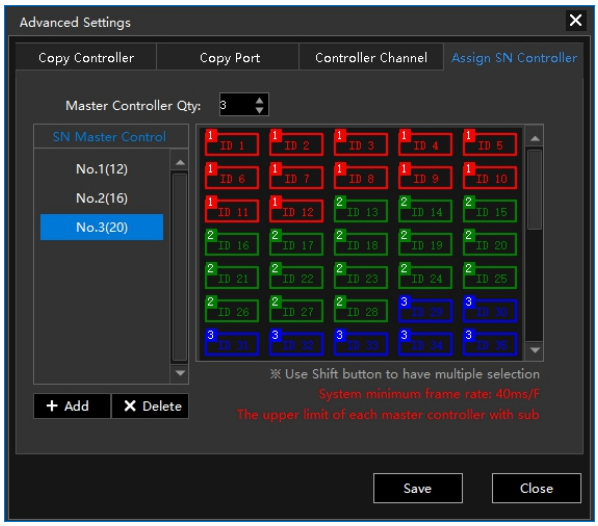
8.3.4. ASSIGN SN CONTROLLER

Sets the number of intelligent control master control slave controls.

Click [setting] - [Controller Advanced setting] - [SN Controller Partition] to open the interface.

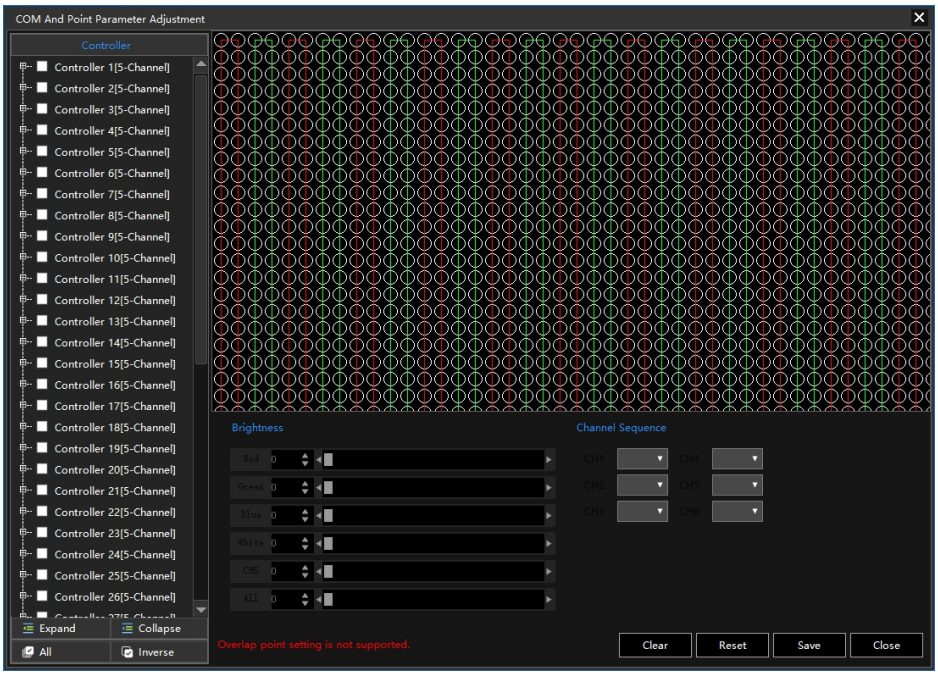
Operation:

1. list the total console number, click [+ increase] / [× delete], or click the small triangle ▲/▼ on the right of "the number of consoles", you can increase or decrease the total control number.
2. Divide control ID3 and ID4 to connect to the third master controller. After selecting the third master controller, click ID3 and ID4. The same goes for other operations.



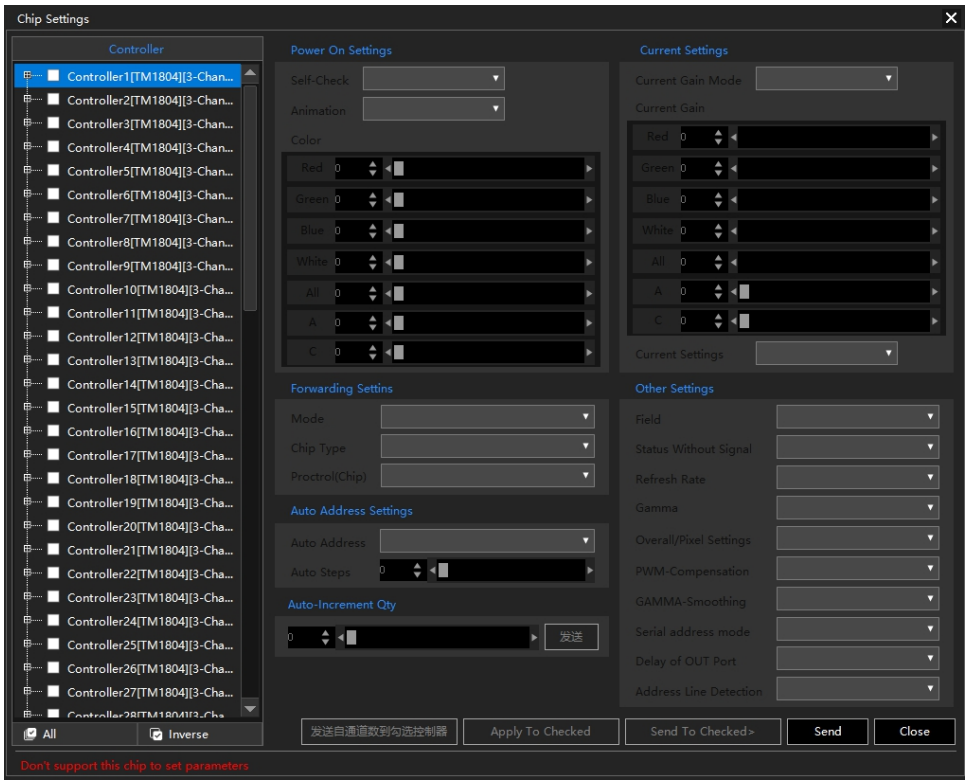
8.4. COM AND POINT PARAMETER ADJUSTMENT

Adjust the brightness and channel sequence of the single pixel / port.
Click [setting] - [Com and Point Parameter Adjustment] to open the window.



8.5. THE CHIP SETTINGS

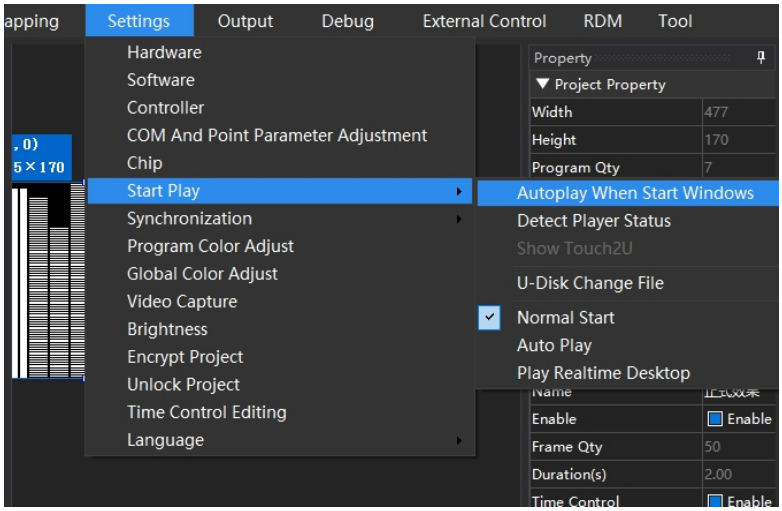
Some LED driver chips have built-in feature setting, you can specify the controller / port to list different chip parameters.
Click [settings] - [Chip] to open the window.
Different chips have different characteristic setting, including power on, current, forwarding, etc.
The white font on the interface indicates that it can be list. And while the gray font indicates that it can not be list, as if this parameter setting is not supported for some chips with no characteristics.
Note: for advanced applications, please do not list it at will to avoid abnormal engineering output. Or list up, first consult our technical personnel.

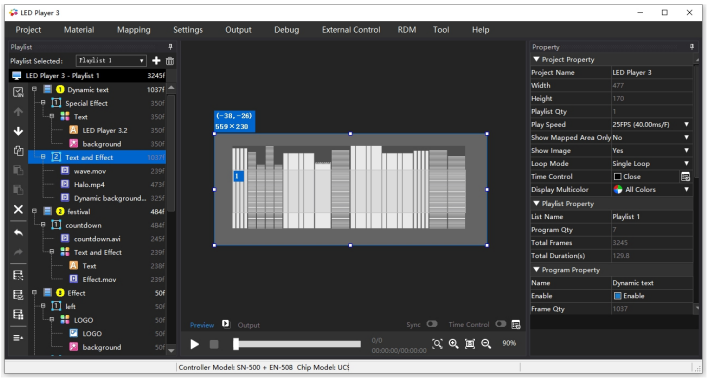
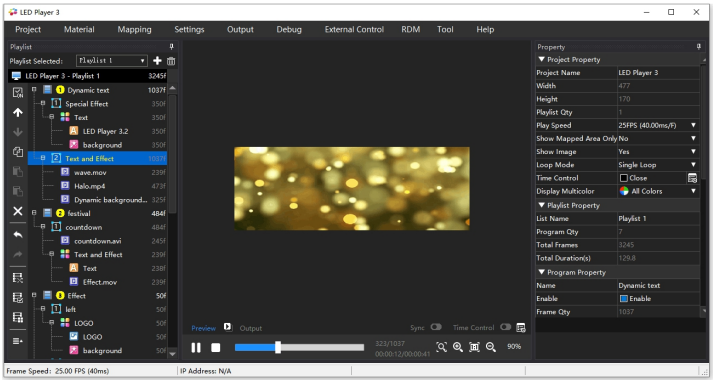


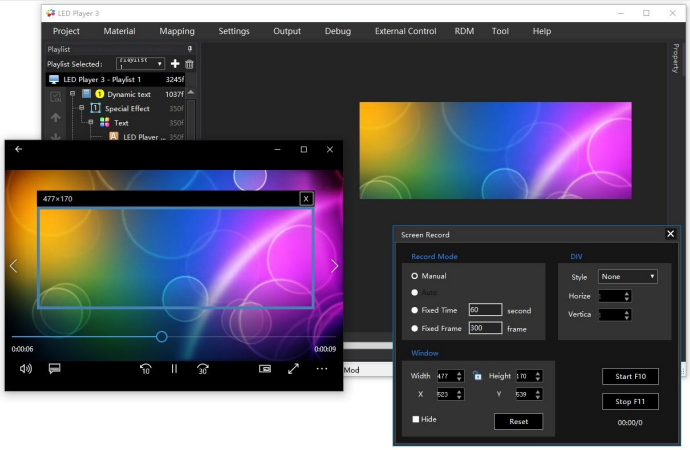
8.6. START UP

Select a different mode to start running the LED Player.

Click [setting]- [Start Play] to open it. In the drop-down menu that pops up, tick the desired way to run the software.



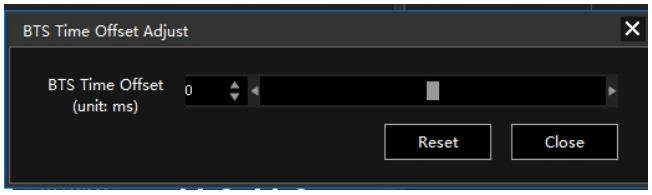
Boot Mode	Instructions
Auto play when start windows	After selection, software would auto run once open the computer.
Detect player status	After checking, open the LED Player to automatically monitor the status of the Player.
U disk for files	After selection, please run the LED Player and insert the U Disk that contain a SET of RGB folder. When the LED Player read the SET or RGB folder of the U Disk, the animation in the LED Player would stop to play and the LED Player will copy the SET or RGB folder of the U Disk to itself. When the new animation are copied completed, the computer would reboot, then the LED Player would run the new animation. It is suggested to copy the original SET and RGB folder before select this option. Normally, “Change File with U Disk” work with “Auto Play”, especially, when the host computer doesn’t connect with a monitor. (It would be convenience to change animation or project setting.)
Normal start	After select “Normal”, the display window would not show effect when open the software in the next time. 
Auto Play	After select “Auto Play”, effects would be auto play when open the software in the next time. 

Boot Mode	Instructions	
Play Realtime Desktop	After select “Real-time Play”, capture window will auto open when run the software in the next time, then the effect in the capture window will show in the software.	

8.7. ADJUST THE SYNCHRONIZATION TIME

Adjust the synchronization time difference.

Click [setting] -[Synchronization] to open the interface for setting. The setting is valid in real time.



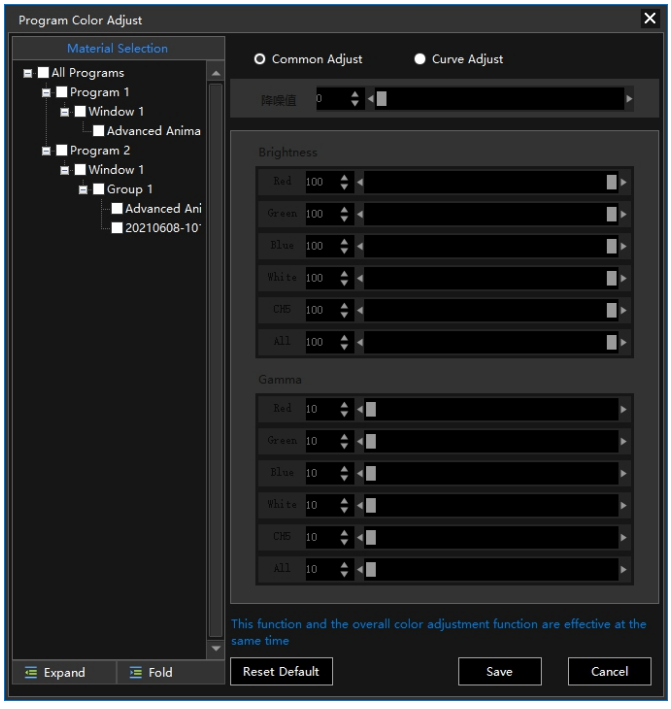
8.8. COLOR ADJUST

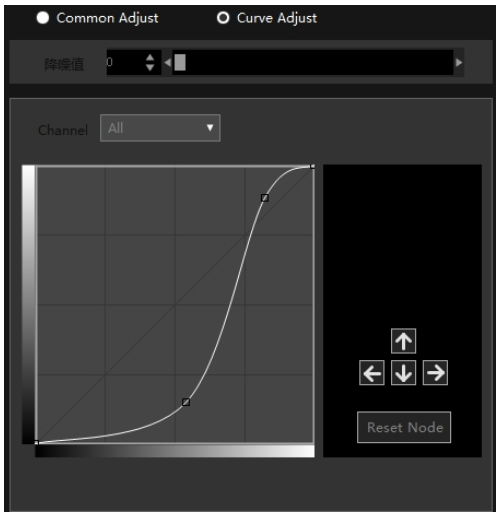
8.8.1. PROGRAM COLOR ADJUST

The brightness gamma of color can be list uniformly on the selected material to make the effect file more beautiful.

Turn this feature on in “Material Properties” - “Tune”. Adjust the material, the material name will be blue.

Click [settings] - [Program Color Adjust] to open it.





Common Adjust: Adjust brightness and gamma by dragging .

Curve Adjust: A total of four nodes of curve adjustment can be adjusted. Click the node in the figure and drag it for adjustment, or click [←] [↑] [→] [↓] for fine tuning.

8.8.2. GLOBAL COLOR ADJUST

Sets and converts the color of the animation file

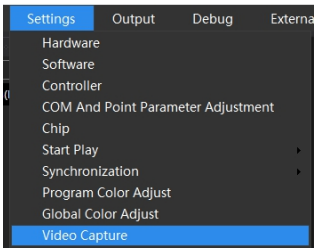
Click [setting] - [Global Color Adjust] to open it.

Can adjust the brightness and GAMMA according to the actual situation of the lighting fixtures. The on-line control system is [output] in real time and effective. And the SD card intelligent control system needs to synthesize SD.bin and replace the SD card files.

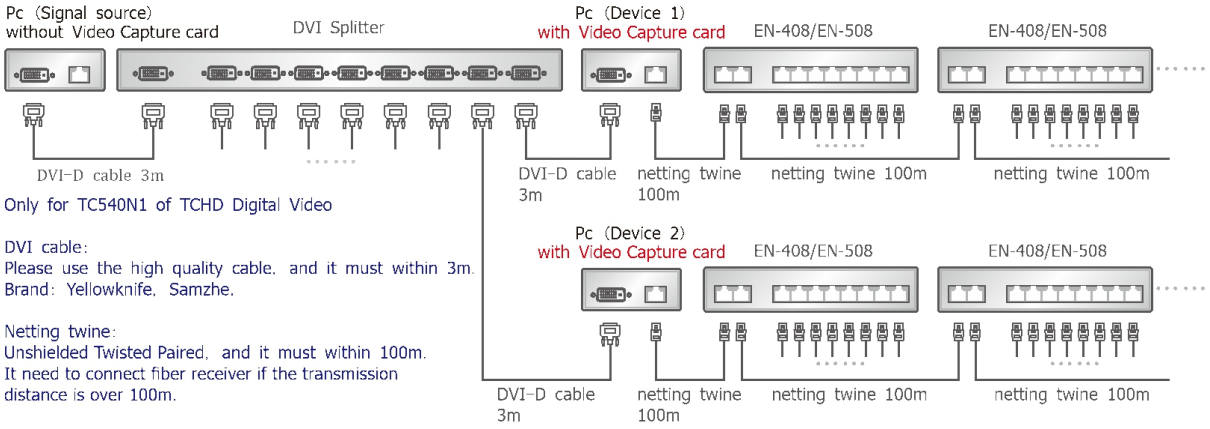
8.9. VIDEO CAPTURE

With Video Capture method, Animation, video or interaction in 1920x1080 high resolutions can be captured or output to the Device, then the multi-devices can show synchronous effect or continuous effect.

Click [Settings] - [Video capture] to open the setup window.



CONNECTION DIAGRAM:

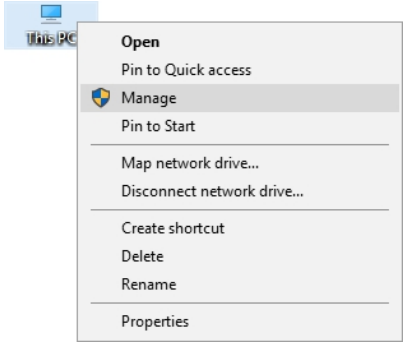


Operation:

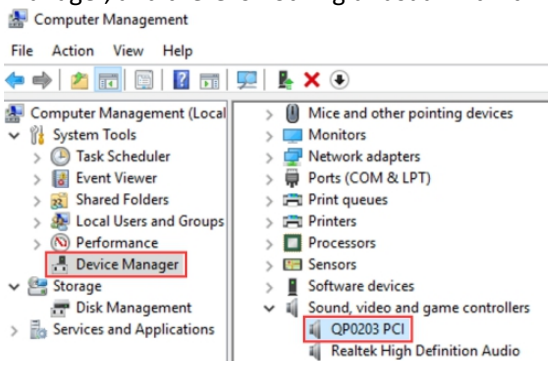
1. Please install “CODECS1.1.0.xxx.exe” and “DRIVER.QP0203.xxxx.exe” to the PC that have installed Video Capture card. After install the controls, please restart the PC.

2. After restart the PC, please inspect the Video Capture Card if in a proper installation. (The below settings are operated in WIN10-64bit.)

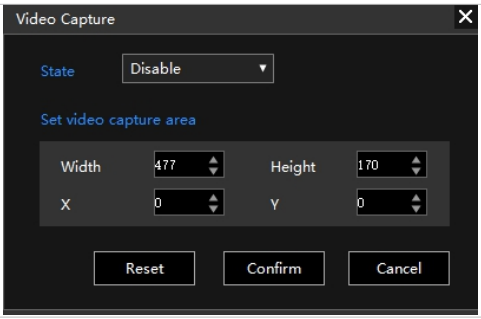
1) Right click “This PC” and select “Manage” to open the “Computer Management”.



2) Check the device: QP0203 PCI will be found in the Device Manager, and there is nothing unusual with it.



3. Click [Settings] - [Video capture] to open the setup window.



Width / Height: the width / height to read the signal source. In the initial used, the value is defaulted to be the size of LED Player.

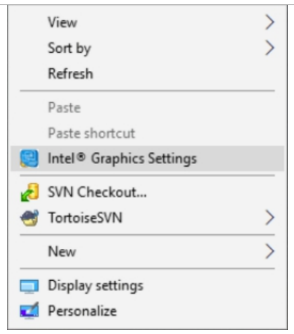
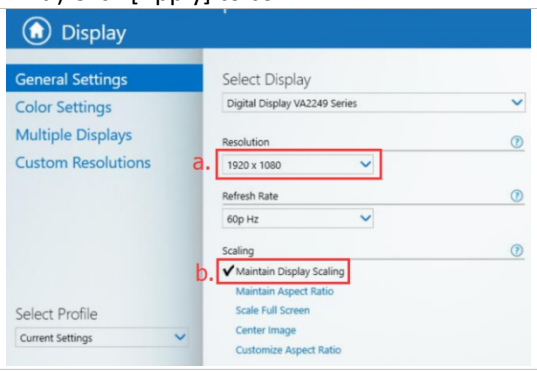
Suggestion: The size ratio should be in proper setting; otherwise the effect would be distorted.

X / Y: the initial position in the top left corner in horizontal to read the signal source. The default setting for the initial used is (0,0).

4. Click [Play], then play area would show signal source effect.

PC (signal source) support the format of video, picture and animation, etc. and multi-device can receive the image from signal source automatically and display it synchronously.

5. Please make sure the resolution of signal source (without connected the computer monitors) is the same as the resolution of the video card.

A. Right click the desktop in the PC (signal source) and select [Intel® Graphics Settings].	B. Select [Display].	C. Select [Resolution]. (Normally, the computer will self-adapt its own resolution.) Click "Maintain Display Scaling" (When without "Maintain Display Scaling", please select other resolution that support it.) Click [Apply] to confirm.
		

8.10. TIMING BRIGHTNESS TASK

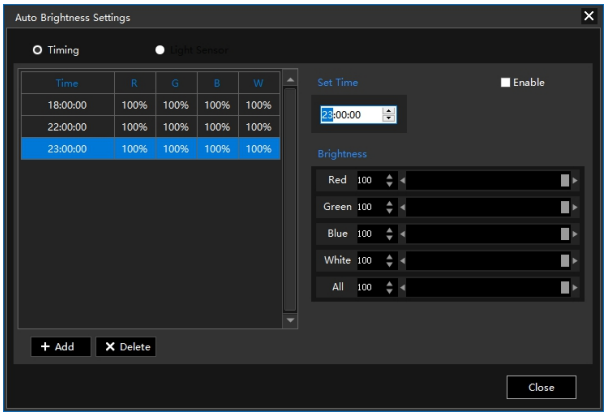
Set the output brightness value of the online control item in the specified time.

Click [setting] - [Brightness] to open the setup window.

Operation:

1. Click [+ Add] / [× Delete] to add or delete the current time list.
2. Click the time to manually enter/click the setting.
3. Drag to adjust the overall brightness value..
4. check "Enable" that is effective, the lighting fixtures in the specified time can be corresponding to change.
5. Click [Output] in the main interface to play, you can see the output effect of timing adjust of brightness.

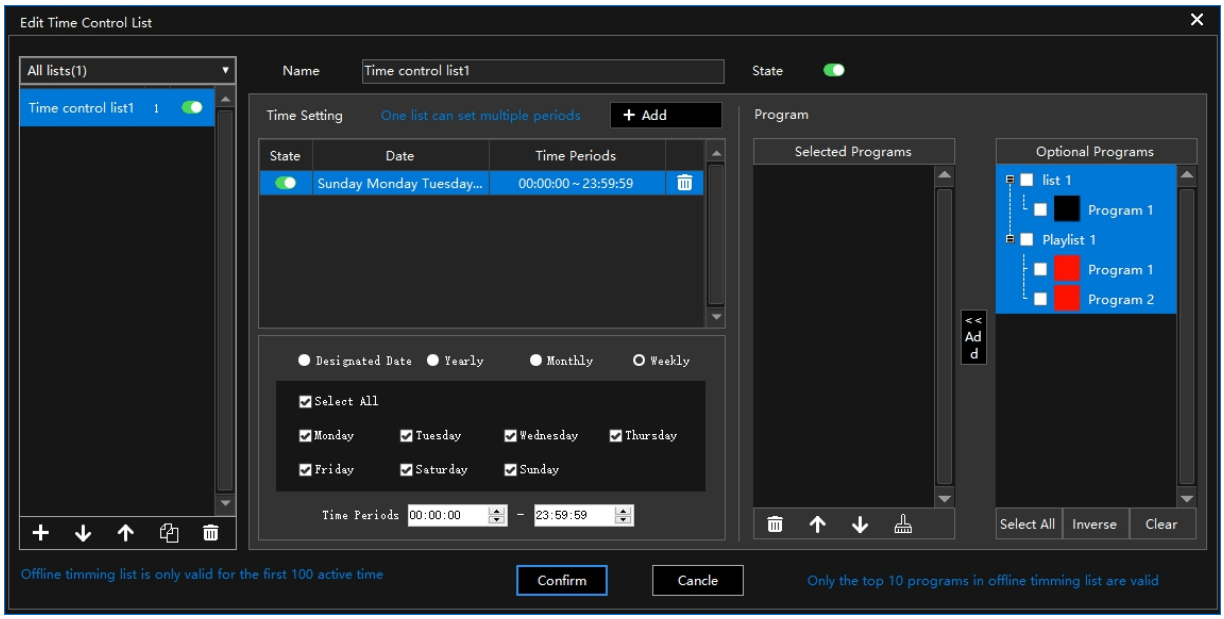
Note: The setup are only valid for online control items.



8.11. SETTING OF TIME CONTROL

Set a specific effect to be played at a specific time.

Click [Property settings] - [Program Properties] - [Time Control] to open the setup window.



Setup:

/	Click to add a new list. / Click to delete selected list.
	Click to move the list position.
	Click to copy selected list.
State	Enable or disable the list.
+ Add	Click to add a new time information。
Date	Set the time, Offers year, month, day, festival and other options
Program	Select the program to be broadcast at this time, Supports select all, inverse, and clear operations.
Confirm	Click to save the setup.

Enable program timing control:

Finishing the setup, click ■ change to ■.

When the setting finished in PC system, click to become in order to activate time control list. Click to run the effects in time control list only.

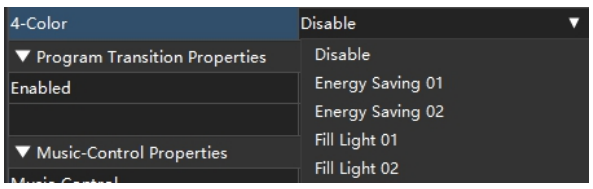
When the list is well set in SD card system, please just merge the SD.BIN file and copy it into SD card.

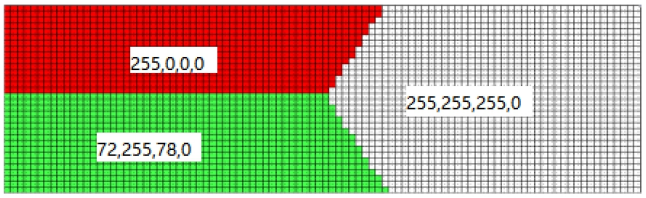
The priority: Program ranking determines the ranking of time control list, that is, it represents the actual priority of time control. The higher the ranking, the higher the priority.

Quantitative Restrictions: For SD card timing controller, maximum number of time control list will be 100 as well, but 10 types of effects can be set in each list.

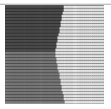
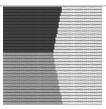
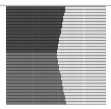
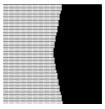
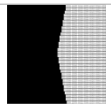
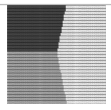
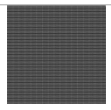
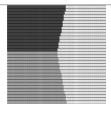
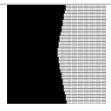
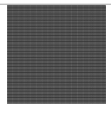
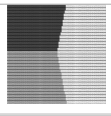
8.12. COLOR SETTING FOR THE FORTH CHANNEL

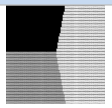
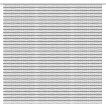
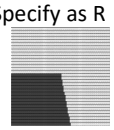
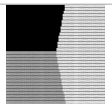
When the project lists the four-channel chip, the output effect of the fourth channel is list in the main interface [Program Properties] - [Four Color Mode] (both offline and online are supported). You can select the four-color display from "project properties" - "four-color display mode" to view the effect.





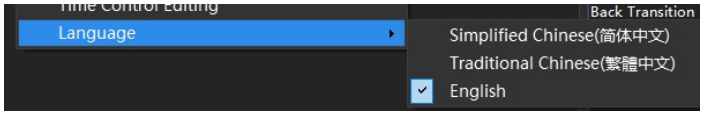
I.G.: Divide the screen into 3 areas. And set 3 color fixing areas, area 1 is red (255,0,0), area 2 is white (255,255,255), area 3 is green (72,255,78). Grayscale formula: Gray=R*0.299+G*0.587+B*0.114 as shown:

OPTION	EXPLAIN	CHANNEL 1st 2nd 3rd	CHANNEL 4th (Area 1,2,3)
Disable	All channels are original color.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 0 Area 3: 0
Energy Saving 01	If RGB exceeds the set value, RGB is light off and W takes the average value. (The standard value is 0.)	 Area 1: 0, 0, 0 Area 2: 0, 0, 0 Area 3: 0, 0, 0	 Area 1: 85 Area 2: 255 Area 3: 135
Energy Saving 02	If RGB exceeds the set value, RGB is light off and W takes the gray value. (The standard value is 0.)	 Area 1: 0, 0, 0 Area 2: 0, 0, 0 Area 3: 0, 0, 0	 Area 1: 76 Area 2: 255 Area 3: 180
Fill Light 01	W takes the average value of RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 85 Area 2: 255 Area 3: 135
Fill Light 02	If the light of RGB is insufficient (grayscale value is less than 120), W shall be compensated according to the graying formula.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	Only the area 1 is compensated as it is insufficient.  Area 1: 76 Area 2: 0 Area 3: 0
Basic 01	If two values in R, G and B are not the same, W is the minimum value in RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 0 Area 3: 72
Basic 02	If two values in R, G and B are not the same, W is the maximum value in RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	As R of the area 2 = G, so W is 0.  Area 1: 255 Area 2: 0 Area 3: 255
Basic 03	If two values in R, G and B are not the same (only need two of them to be different), W is the average value in RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	As R of the area 2 = G, so W is 0.  Area 1: 85 Area 2: 0 Area 3: 135
Basic 04	Only when RGB is equal, and W is equal to RGB too. Then RGB is light off.	The RGB of area 2 is equal, so it is light off.  Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 0, 0, 0	 Area 1: 0 Area 2: 255 Area 3: 0
White Light Animation	W is the gray value of RGB, and RGB is light off.	 Area 1: 0, 0, 0 Area 2: 0, 0, 0 Area 3: 0, 0, 0	 Area 1: 76 Area 2: 255 Area 3: 180
Lighting	Only W is bright, and the W value is specified externally	 Area 1: 0, 0, 0 Area 2: 0, 0, 0 Area 3: 0, 0, 0	 Area 1: 100 Area 2: 100 Area 3: 100
Special 01	When RGB is greater than the specified value, all channels will be bright. W is the gray value.(Standard value is 0.)	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 76 Area 2: 255 Area 3: 180
Same Gray Light	W is equal to RGB only if RGB values are equal.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 255 Area 3: 0
Fixed White Light	RGB keeps the same, and W takes a specified value.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 100 Area 2: 100 Area 3: 100
4-Color Mix	RGB keeps the same, and W takes the gray value.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 76 Area 2: 255 Area 3: 180

OPTION	EXPLAIN	CHANNEL 1st 2nd 3rd	CHANNEL 4th (Area 1,2,3)
4-Color Semi Mix	If R * G *B > 0, W takes the gray value.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 255 Area 3: 180
High Light	W takes the maximum value in RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 255 Area 2: 255 Area 3: 255
Low Light	W takes the minimum value in RGB	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 255 Area 3: 72
Designated Channel	W is specified to be equal to one of the RGB.	 Area 1: 255, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	Specify as R  Area 1: 255 Area 2: 255 Area 3: 72
All Color Needed	Work only if RGB values are bigger.	 Area 1: 0, 0, 0 Area 2: 255, 255, 255 Area 3: 72, 255, 78	 Area 1: 0 Area 2: 255 Area 3: 180
All Color Custom	RGBW are designated external.	Be 100.  Area 1: 100, 100, 100 Area 2: 100, 100, 100 Area 3: 100, 100, 100	Be 100.  Area 1: 100 Area 2: 100 Area 3: 100
All Color Disabled	RGBW set 0.	RGB Both are 0  Area 1: 0, 0, 0 Area 2: 0, 0, 0 Area 3: 0, 0, 0	 Area 1: 0 Area 2: 0 Area 3: 0

8.13. LANGUAGE

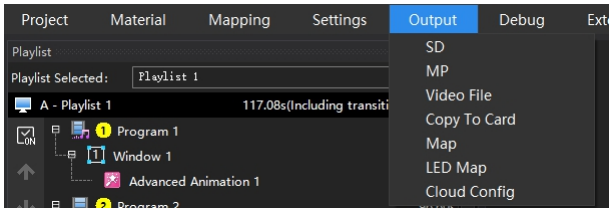
Set the display language for the LED Player, Simplified Chinese, Traditional Chinese and English are currently supported.



8.14. PROJECT ENCRYPTION

Encrypt the project to protect the project. This option is an advance application. If need more requirement, please contact our technical. In this option, the encrypted projects and the unencrypted projects cannot be used universally. If need us to program effects, please send the SET folder to us for arrangement.

9. OUTPUT

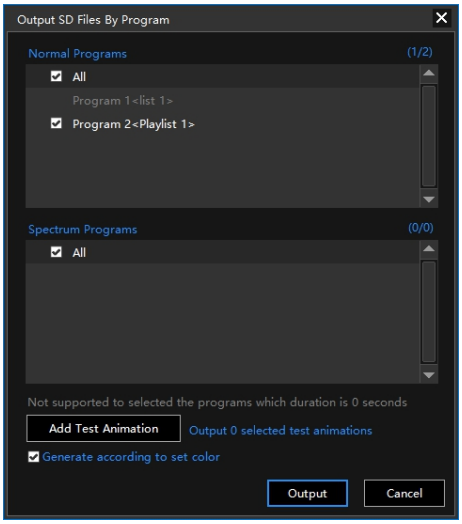


9.1. OUTPUT SD FILE

Generates SD.bin/N5.bin format effect file that the intelligent control controller can read. This file is encrypted which cannot open and modify directly.

Click [Output] - [SD File] to open the interface.

Options	instructions
Select	Please ☑ the required effect under status of playing effect and then convert into recording effect. The quantity of merged files must be less than 96 pieces.
Add Tests	When the SD file is output, the selected effect is also output (default in front of all program list). Refer to "Testing Effects".
Addressing / Chip Settings	It is applicable to the controller that supports one-key code writing. When the controller list by the project supports corresponding functions with the chip, it can be checked and output to the SD card. The controller using this SD card can address the lamp or write parameters by entering the write code interface. This function is an advanced application and will not be described in detail here.



9.2. OUTPUT MP FILE

Read the effect and cut it into multiple effects of the same or different size to save in the specified folder.

Click [Output] - [MP File] to open the window.

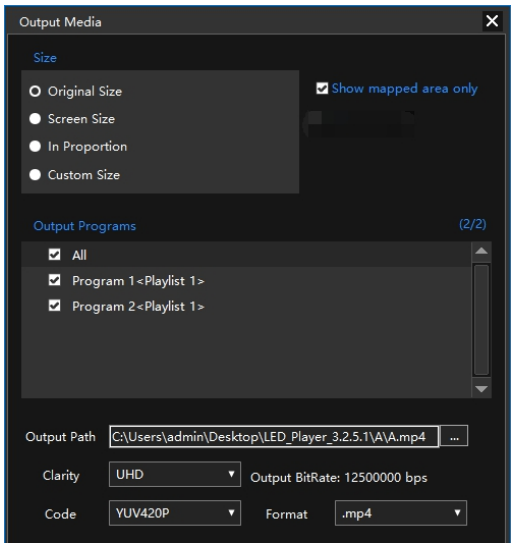
New	Open the video file which is needed to transfer.

Output	Click and jump in the Output MP file window refer to “OUTPUT MP FILE”.	
File Info.	File Name	Show the video file routes which is reading.
	Video size	Show the size of playing video.
	Frame Count	Length of video.
Record Settings	Set the starting / ending point of effect which needs to be converted; or move to set the point.	
Area Settings	Information	Display the width, height, position name and coordinates of the recording edit box, and support stretching in the preview box by hand with the mouse.
	Add / Delete	Add or delete recording areas.
Record Range	Width/height	Set the size of recording area.
	X / Y	Set the location of recording area.
	Path	Generate effect file in RGB specified location.

9.3. VIDEO FILE

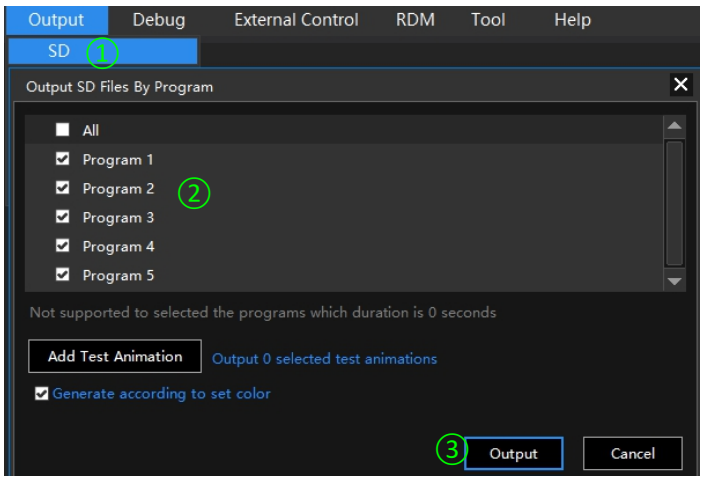
Select the animation file of the software, and output the video converted into AVI format.

Click [Output] - [Video File] to output.



9.4. COPY THE SD FILE

Copy the SD.bin /N5.bin file into SD Card. Click [Output] - [SD] and copy the file into SD card according to hints.



① Click “SD” of “Output” in LED Player.

② Select the program need to output.

③ Click “Output”.

9.5. OUTPUT THE MAP

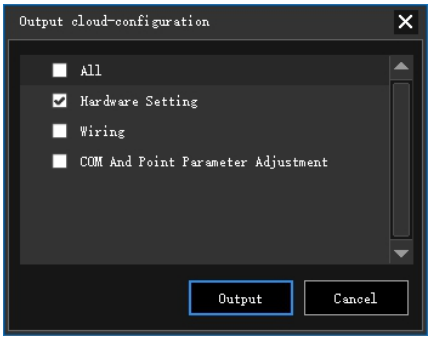
Output engineering installation and pixel map.

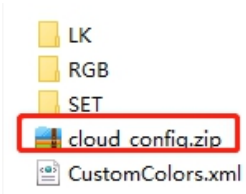
Click [Output] - [Map] or [LED Map], and the diagrams are save in the project folder.

9.6. CLOUD CONFIGURATION

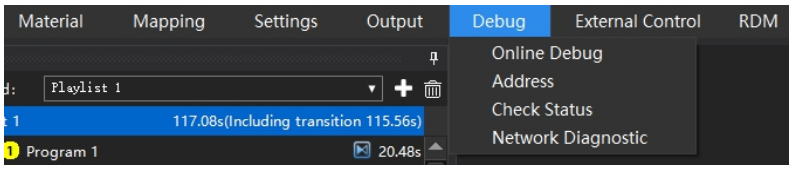
The cloud control configuration file is generated and uploaded to the cloud platform for download and update.

Click [Output] - [Cloud Config] to open the window and Select the required configuration information.





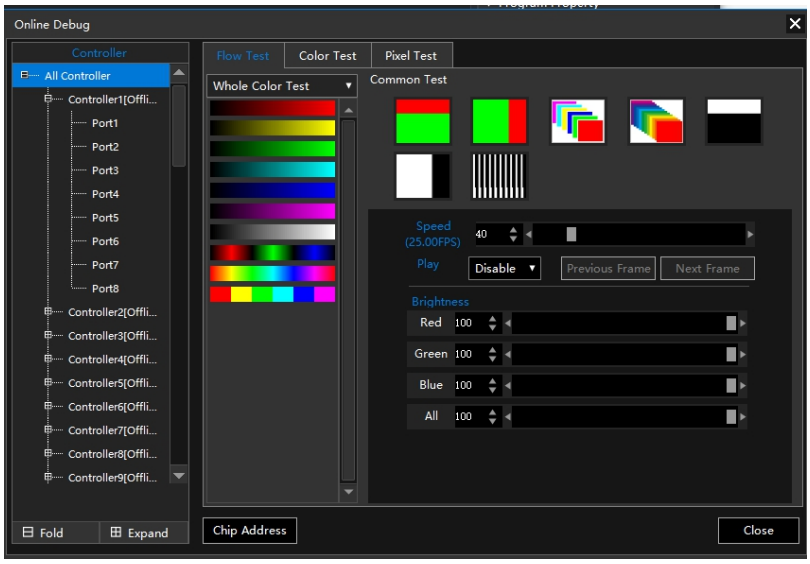
10. DEBUG



10.1. ONLINE DEBUGGING

In the on-line control project, debug the lighting fixtures on site and judge the connection and transmission status of the lamps and signals.

Click [Debug] - [Online Debug] to open the interface.

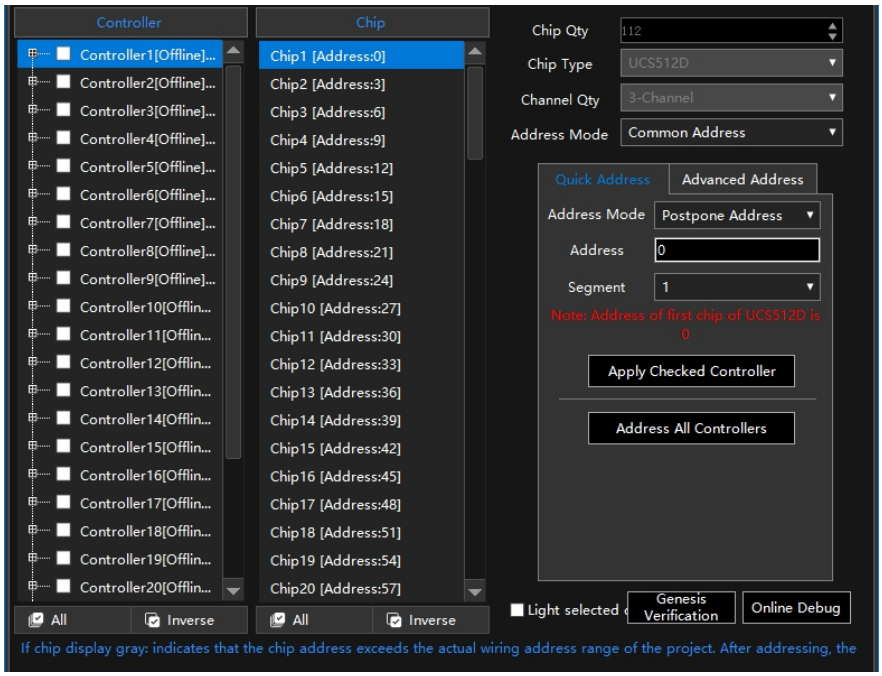


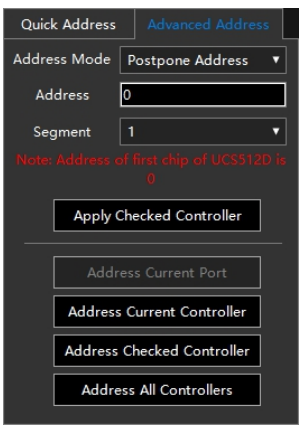
10.2. ADDRESSING

10.2.1. ADDRESS OPERATION

Access the controller correctly and open LED Player. Click [Debug] - [Address] to open the interface.

After setting the chip address drove by the controller, click "Address All Controllers" to save address data into controllers.





Hardware	Controller	Shows the number of controllers in the project. [Online] Indicates that the controller is connected properly. [Offline] Indicates that the controller will not be able to address the lighting fixtures. [Forbidden] Indicates that the driven chip is not DMX. It can be set at “Hardware” of “Settings”.
	Chip	Shows the number of chips and address information. Maximum 960 chips per port. If the chip address is beyond the actual wiring of project, the selected chip will not "light up".
	Online Debug	Click and jump into the One Debug interface.
Chip Address Settings	Chip Oty.	The number of single drive points set by Hardware Settings.
	Chip Type	The chip set by Hardware Settings.
	Channel Qty.	The channel set by Hardware Settings.
	Address Mode	“Common Address” and “Auto-Increment”
	Address Mode	“Unselect”, “Postpone Address”, “Use Same Address”. Unselect: When saving the current chip address parameter, the address of others will not change accordingly. Postpone Address: When saving the current chip address parameter, the subsequent will automatically change according to the original channel value. Use Same Address: When saving the current chip address parameter, all chips are set the same address.
	Address	Set the selected chip address. The chip list will be updated automatically after it is fill in the address. Note, Please do not fill in the value exceeding total chips to avoid abnormal output.
	Segment	Sets the number of pixels driven by the selected chip. The chip list is automatically updated after it be selected the number of segments.
Address Application	Address All Controllers	Send the address parameters to all controllers.
	Advanced Address	Apply Checked Controller: Click to save the address parameter of the checked controllers. Address Current Port: Click to address the lighting fixture of current port. Address Current Controller: Click to address the lighting fixture of current controllers. Address Checked Controller: Click to address the lighting fixture of the checked controllers. Address All Controllers: Click to address the lighting fixture of all controllers. It would be addressed correctly if the controller is offline.
Light-up	Check it and click the chip under a port. The chip will light up RGB (of RGBW). And the location of this chip can be seen in the LED Player preview area. Please ensure that the data of LED Player is consistent with the address of the actual lighting fixture. (It is recommended that the luminaire be addressed once before lighting up.)	

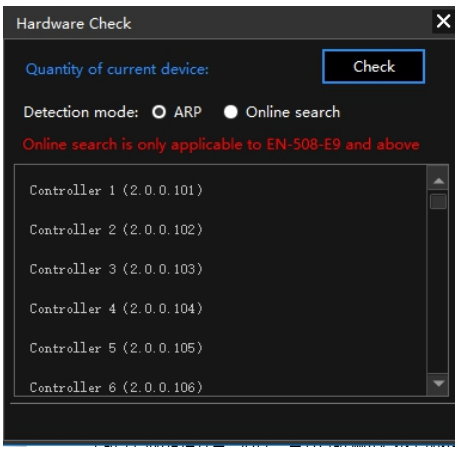
10.2.2. UCCESSFULLY ADDRESSED AND SET PARAMETERS

Chip	Lighting color after power on	Addressed		Byte + No signal + No signal		Current parameter		Self-Channel Setting	
		First chip	Other chip	First chip	Other chip	First chip	Other chip	First chip	Other chip
UCS512A	White	Blue	Blue	-	-	-	-	-	-
UCS512A1	White	Blue	Blue	-	-	-	-	-	-
UCS512A2	White	Blue	Blue	-	-	-	-	-	-
UCS512B3	White	Blue	Blue	-	-	-	-	-	-

Chip	Lighting color after power on	Addressed		Byte + No signal + No signal		Current parameter		Self-Channel Setting	
		First chip	Other chip	First chip	Other chip	First chip	Other chip	First chip	Other chip
UCS512C	Custom	White	White	-	-	-	-	-	-
UCS512C0	-	White	White	-	-	-	-	-	-
UCS512C3	Custom	White	White	Red	Red	-	-	-	-
UCS512C4	Custom	White	White	Red	Red	-	-	-	-
UCS512CN	Custom	Yellow	White	Yellow	Power on	-	-	-	-
UCS512D	Custom	Yellow	White	Yellow	Power on	Yellow	Red	-	-
UCS512E0	Custom	Yellow	White	Yellow	Power on	-	-	Yellow	Green
UCS512EH	Custom	Yellow	White	Yellow	Power on	Yellow	Red	Yellow	Green
UCS512G4	Custom	Yellow	White	White (Or custom)	White (Or custom)	White	White	-	-
UCS512G6	Custom	Yellow (Or custom)	White (Or custom)	White (Or custom)	White (Or custom)	White	White	-	-
DMX512AP	-	White	White	-	-	-	-	-	-
SM16512	-	Green	Green	-	-	-	-	-	-
SM16511	-	Green	Green	-	-	-	-	-	-
SM16520	-	Green	Green	-	-	-	-	-	-
SM16500	Custom	Red	Green	Red	Power on	-	-	-	-
SM17500	Custom	Red	Green	Red	Power on	Red	Yellow	Red	Purple
SM17512	Custom	Red	Green	Blue	Blue	-	-	-	-
SM17522	-	Red	Green	Red	Blue	Red	Yellow	-	-
SM18522P	-	Red	Green	Red	Blue	Red	Yellow	-	-
SM18522PH	-	Red	Green	Red	Blue	Red	Yellow	-	-
SW-D	-	Yellow	Green	-	-	-	-	-	-
Hi512A4	Custom	Red	Green	Red_	Green	-	-	-	-
Hi512A6	Custom	Red	Green	Red	Green	-	-	-	-
Hi512A0	-	White	White	White	White	-	-	-	-
Hi512D	-	Red	Green	Green	Green	Green	Green	-	-
Hi512E	-	Red	Green	Green	Green	Green	Green	-	-
TM512AB3	White	Blue	Blue	-	-	-	-	-	-
TM512AL1	White	Blue	Blue	-	-	-	-	-	-
TM512AC0	-	White	White	-	-	-	-	-	-
TM512AC2	Custom	White	White	-	-	-	-	-	-
TM512AC3	Blue	White	White	-	-	-	-	-	-
TM512AC4	Blue	White	White	-	-	-	-	-	-
TM512AD	Blue	Yellow	White	Yellow	Power on	Yellow	Red	-	-
GS8512	Custom	Red	Cyan	-	-	-	-	-	-
GS8513	Red+Cyan	Red	Cyan	-	-	-	-	-	-
GS8515	Red+Cyan	Red	Cyan	-	-	-	-	-	-

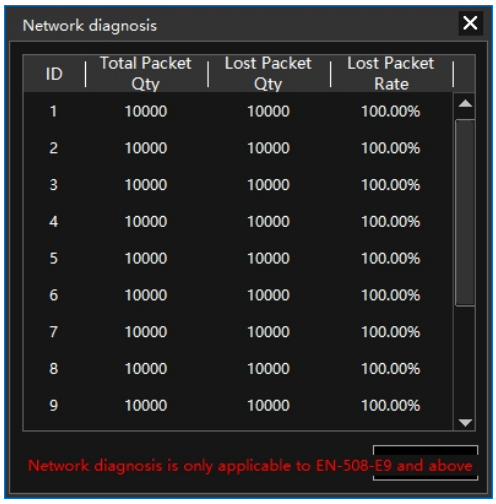
10.3. CHECK ON-LINE STATUS OF CONTROLLERS

Check the connection status of the EN controller.
Click [Debug] - [Check Status] to open the setup window.
Click "Check" to automatically detect the state of controllers.
The hardware that is properly connected is displayed in green. At the same time, the network segment of the computer network card is detected. If an invalid network segment is detected, the system prompts you to set a network adapter.
Note: Please confirm whether the IP of the computer has been set to the static IP address "2.0.0.98".

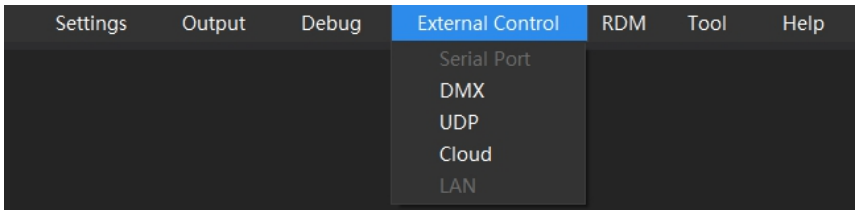


10.4. NETWORK DIAGNOSIS

Check the network status between computer and EN controller.
Click [Debug] - [Network Diagnosis] to check.
The lower the packet loss rate, the higher the communication quality.
Note: Please confirm whether the IP of the computer has been set to the static IP address "2.0.0.98".



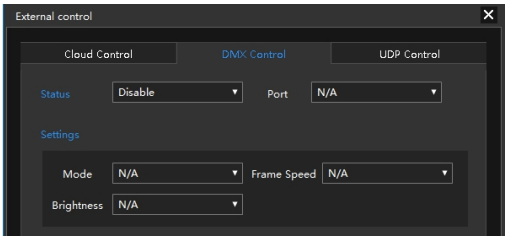
11. EXTERNAL CONTROL



11.1. CONTROL DMX512 CONSOLE

(With our customized hardware) When enabled, LED Player output animation and speed can be controlled through DMX512 console.

Click [External Control] - [DMX] to open the interface and set the channel corresponding function of DMX console.



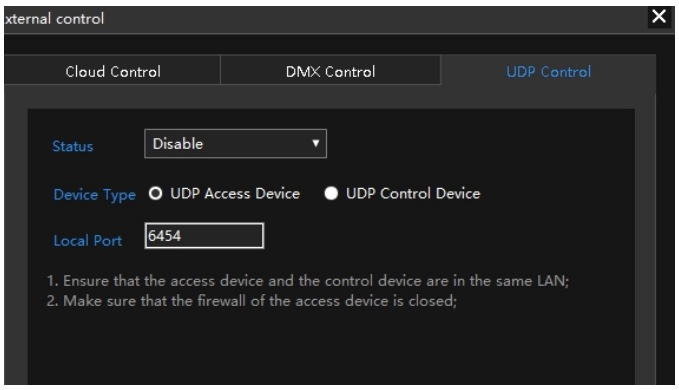
11.2. UDP CONTROL

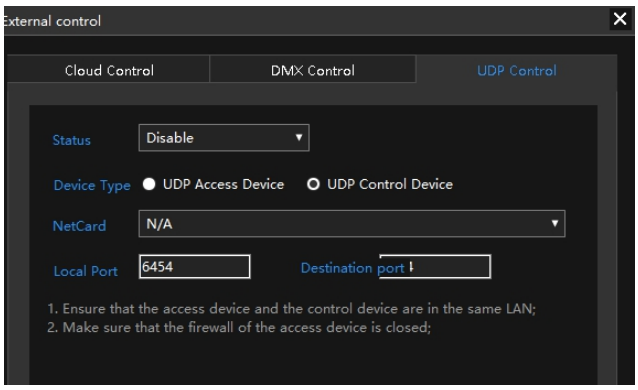
Through UDP protocol, can realize any device control LED Player output animation and speed.

Click [External Control] - [UDP] to open the interface and set.

Requirements:

1. All equipment should be in the same LAN.
2. Only one host can be configured on a LAN.
3. One device can only enable two LED players at the same time.
4. The number of frames and files of the effect need to be consistent.





11.3. CLOUD CONTROL

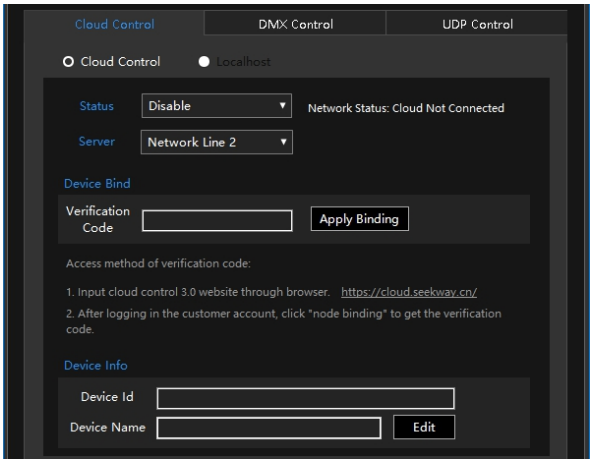
After the software is bound to the cloud platform, the LED Player software can be remotely controlled through the cloud platform.

Click [External Control] - [Cloud] to open the interface and set.

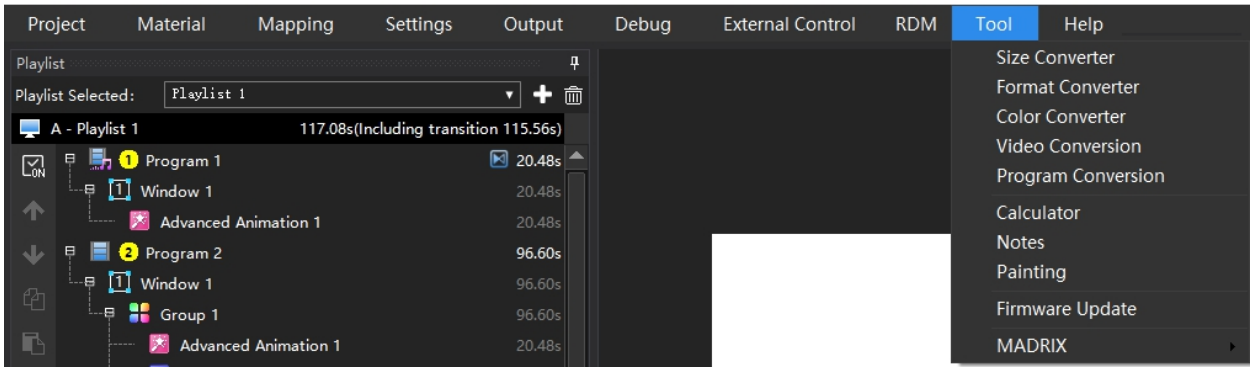
Only when enabled can the software be controlled by the cloud platform.

The server shall be selected according to the information provided by our company.

Enter the verification code provided by the cloud platform in the verification code. Click "Apply binding" to link.



12. TOOLS



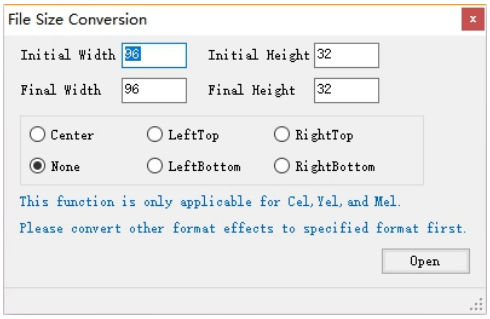
12.1. CONVERTING THE SIZE OF ANIMATION

Convert effects of different sizes to each other.

Click "Tools" - "Size Conversion" to open the convert window.

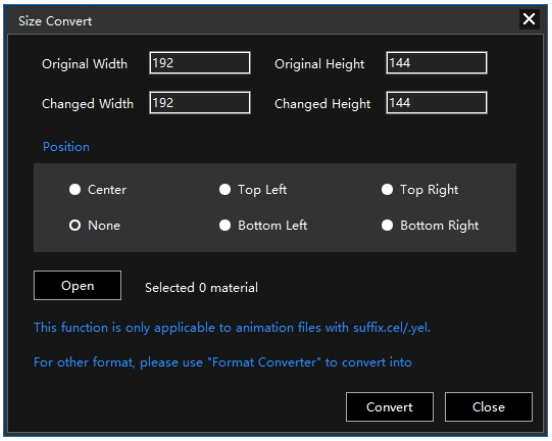
Note: Apply to *.cel/.yel/.mel file only, *.bin/.yin/.min will become messy code after transformation.

If the effect in *.bin/.yin/.min format requires to convert the size, please convert the effect file from *.bin/.yin/.min to *.cel/.yel/.mel by the player, then convert the size of effect.



Initial Width	It shows the effects' width on initial player.
Initial Height	It shows the effects' height on initial player.
Final Width	It shows the effects' width on the modified player.
Final Height	It shows the effects' height on the modified player.
Location	The effects moved location after transfer. **If the video file size is from small to big,** **no matter what location chose,** **the effects will be the same.**
Open	Click it, select the effects need to transfer. Open confirm. the effects automatically save to current RGB folder and rename it to "CTC**.cel". If need to transfer in large quantity, please multi-choose to transfer in the open dialogue.

Original width / Height	The width / height of the original effect file.
Changed width / Height	The width / height of the changed effect file.
Position	The effects moved location after transfer. If the video file size is from small to big, no matter what location chose, the effects will be the same.
Open	Click it and select the file to convert.
Convert	Click it, the effects automatically save to current RGB folder and rename it to "CTC**.cel".

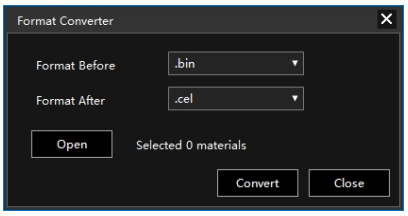


Tips: When doing this transfer in the 64W*64H player, please change the Final Width and Final Height to 32. Then copy the effects named first letter CTC***.cel in the RGB folder of the 64W*64H player into RGB folder of the 32W*32H player.

12.2. CONVERTING THE FORMAT OF ANIMATION

Effect files that convert to different formats. Be used in the different files format transfer.

Click "Tools" - "Format Conversion" to open the convert window.



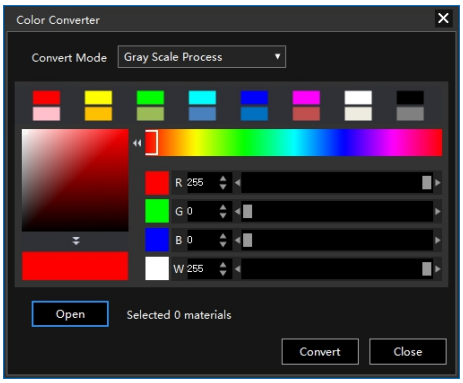
☆ Which application is suitable?

No relations with connection and PCB, the. cel file can be used good in the same size player. The PCB and Size of New Player is the same as the Old Player except the wire distribution. We can change the effects of the old player to. cel format. Generally, it is. cel, but .bin is special format.

12.3. CONVERTING THE COLOR OF ANIMATION

Removes and converts a color of the animation file.

Click “Tools” - “Color Conversion” to open the convert window.



Converted mode: The five conversion processing methods are shown in the table below.
Different conversion methods, color processing results are not consistent.

Color: Select a color in , or click (drag)  to select a color.

Open: Click “Open” to select the effect file that you want to change the color of (multiple options are supported).

Convert: Click and the new effect will be automatically renamed and stored in  in the project folder.

List of conversion modes:

Conversion Modes	Instructions
Gray Scale	The effect color after transformation will become corresponding single color grayscale according to ratio of original effect colors.
Solid Color	Except pure black, the color selected would be changed to 100% other color.
Color Rate	Except pure black, the color selected would be changed to other color in proportion.
Color Remove	Remove specific color in one animation.
Channel Color Remove	Remove red or green or blue at random.

12.4. CONVERTING THE VEDIO

Read and record the converted imported video.

Click “Tools” - “Video Conversion” to open the convert window.

Note:
Converted effect files support RGB 3 channels only, the 4th channel is not supported.
Only support the video formats in MJPEG, MPEG4, XVID and H264.
Please try to use lossless video for reading and converting.

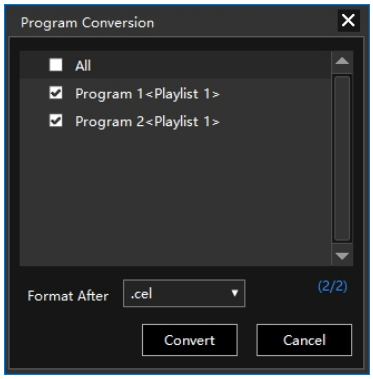
Function	Instruction	
New	Open the video file which is needed to transfer.	
Save	Click it and save automatically the video file into RGB folder.	
Output	Click and jump in the Output MP file window refer to “OUTPUT MP FILE”.	
File Info.	File Name	Show the video file routes which is reading.
	Video size	Show the size of playing video.
	Original Speed	Read the speed of video automatically.
	Frame Count	Length of video.
Video Scale	Scale the video in proportion.	
Duration	Set the starting / ending point of effect which needs to be converted; or move to set the point.	
Generate	Convert (FPS)	Change the value to make the converted effect faster or slower.
	Video Noise	Filter out the redundant video noise, and the default noise is 10.
	Quickly generate	The generated effect file is specified at RGB.
Record Range	Width/height	Set the size of recording area.
	X / Y	Set the location of recording area.
	Reset	Click it and the record area will be restored to the initial setting.
Capture window	You can stretch the screenshot window at will. Press the Ctrl key and stretch the screenshot window at the same time to achieve the same proportion of stretching	

12.5. CONVERTING THE PROGRAM

Output the program in the project to the LED Player format and store it in the specified RGB folder.

Click "Tools" - "Program Conversion" to open the convert window.

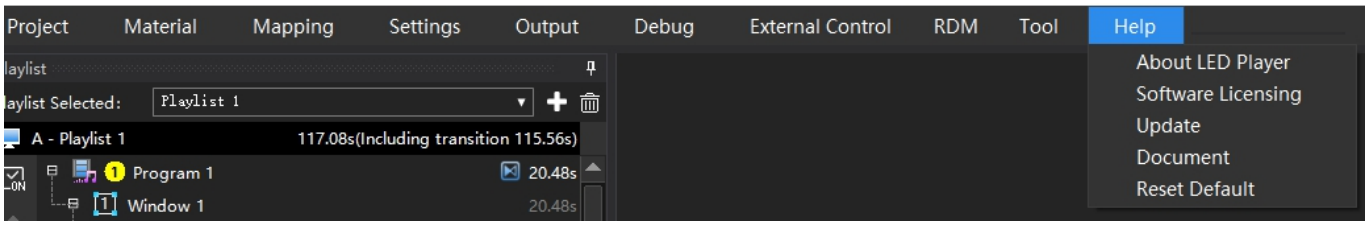
1. Check the program you want to convert.
2. Select the format want to convert.
3. Click “Convert” and start to save the new file in the RGB folder.



12.6. THE CALCULATOR, NOTES AND PAINTING

Call open the computer's calculator, notepad, drawing tools, convenient for users to use.

13. HELP



13.1. ABOUT LED PLAYER

Display the LED Player version, and the copyright of software.

13.2. SOFTWARE LICENSING

Advanced software application permissions.

13.3. UPDATE

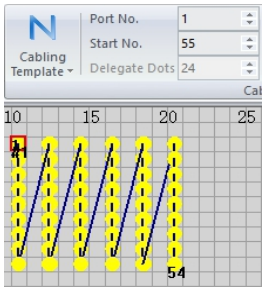
Detect software version and support online update.

13.4. HELP DOCUMENTS

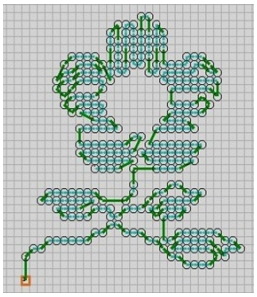
Jump to our official website, and download the LED Player manual.

14. MAP TOOL

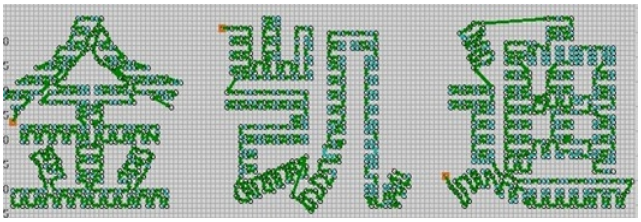
Apply to irregular arrangement projects such as colorful character, cable-stayed bridge, 3D sphere and etc.



case 1: N style

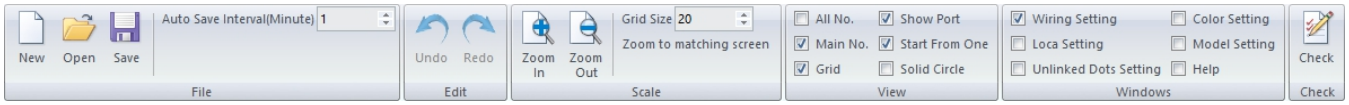


Case 2: Pattern style



Case 3: Text style

14.1. FILE



File　New, Open, Save.

Edit　Undo and Redo.

Scale　Zoom in or out the map. User can input value in the Grid Size to adjust the mapping size.
Click “Zoom to matching screen”, a complete mapping would display in the screen.

View　Display of grid in editing area, display of all number and main number of lighting fixture.

Windows　Software view setting.

mapping setting　Select to display information bar, pop up information bar of mapping setting.
Select it, controller No, port No, dot qty. Other options can be list “mapping setting” could be also open by double clicking the dot in the mapping.
It can check and alter the Controller (C) x, Port (P) y, Dot (D) z. And the information shows #x-y in the mapping area.

Loca setting　Select it, LED qty in each line segment can be revised. “Loca setting” could be also open by double clicking the line that does not snap to the grid.

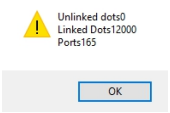
Unlinked Dots setting　Select it, the dots that haven’t be connected can be shown or hided.
“Unlinked Dots” window could be also open by double clicking the dots in the mapping haven’t been connected.
Select “select”, dots that haven’t be connected can be shown.
Select “skip”, dots that haven’t be connected would be hidden.

Color setting　Select it, the “Color setting” window will pop up. Color of dot and connection line can be list. After double click the color setting window, color disk will pop up. User can select the color for the corresponding pot.

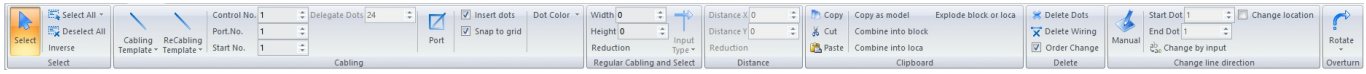
Model setting　Select it, the “Model setting” window will pop up.
Please refer to provided videos for operation or refer to the Model Chapter.

Help　Select it, the “Help” window will pop up. It is still under development.

Check　After the mapping is completed, click “Check” and to verify if the information from the prompt is correct.



14.2. TOOLS

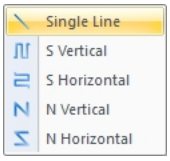
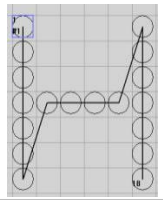
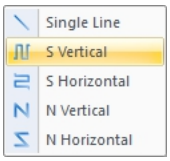
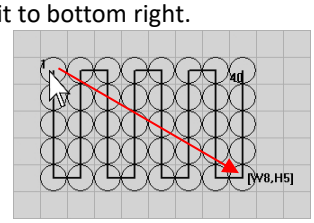
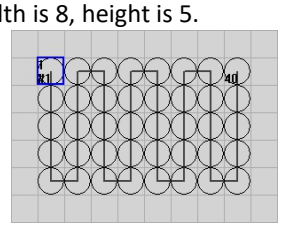
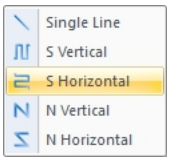
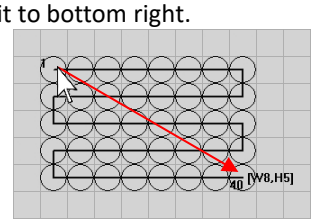
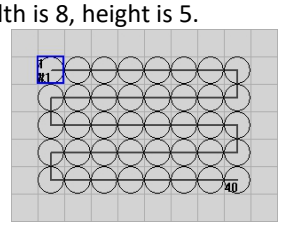
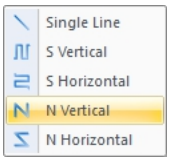
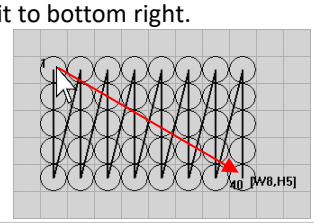
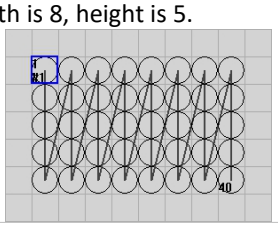
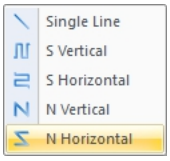
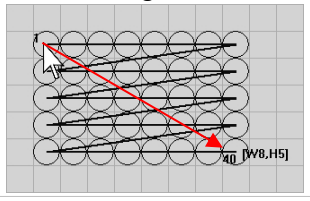
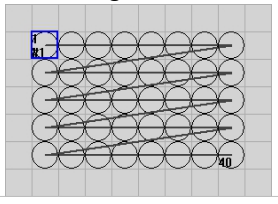


14.2.1. SELECT

Select, Select All and Deselect All. Select the dot matrix needs to be modified and get ready for further operations like copy, cut, paste, delete, etc.

14.2.2. CABLING

Set the position of LED and its layout. The initial position of the dot is the cable-in position of the lighting.

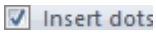
Mode	Figure		
Single Line	1. Select Single Line in Cabling Template. 	2. Move the cursors to any one bank grid, left click the mouse and drag it to required dot matrix. 	
S Vertical	1. Select S Vertical in Cabling Template. 	2. Move the cursors to any one bank grid, left click the mouse and drag it to bottom right. 	3. Drag to (W8, H5) and release the mouse, the wiring layout will be width is 8, height is 5. 
S Horizontal	1. Select S Horizontal in Cabling Template. 	2. Move the cursors to any one bank grid, left click the mouse and drag it to bottom right. 	3. Drag to (W8, H5) and release the mouse, the wiring layout will be width is 8, height is 5. 
N Vertical	1. Select N Vertical in Cabling Template. 	2. Move the cursors to any one bank grid, left click the mouse and drag it to bottom right. 	3. Drag to (W8, H5) and release the mouse, the wiring layout will be width is 8, height is 5. 
N Horizontal	1. Select N Horizontal in Cabling Template. 	2. Move the cursors to any one bank grid, left click the mouse and drag it to bottom right. 	3. Drag to (W8, H5) and release the mouse, the wiring layout will be width is 8, height is 5. 

Port No. Set the number of the port. If the dot capacity has reach maximum when under mapping, the dot capacity would be updated automatically.
After mapping, user can set the serial number and select “Port”. Left click the blank to confirm the initial position of dot, loose the mouse to reset a new port.

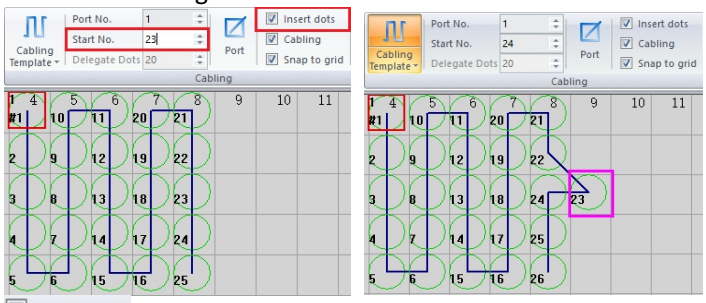
Start No. First number of lamp in cabling. It can input manual.

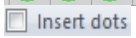
Delegate Dots It is used for the dot without in the grid. The line will be made the number of dot that are Delegate Dots.

Port Enter the required number in Port No. and select it, then click dot that needs to be modified.

Insert Dots 

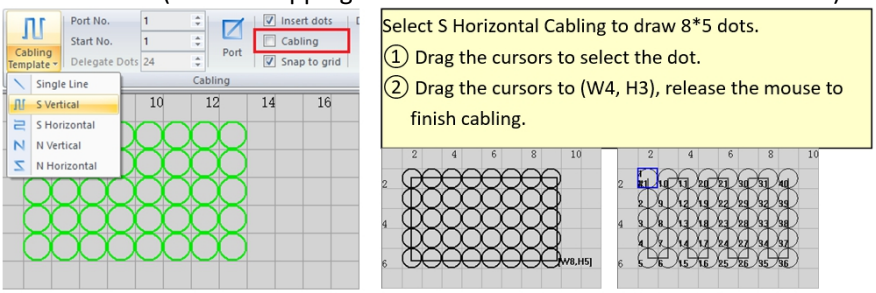
Regard as insert dot.



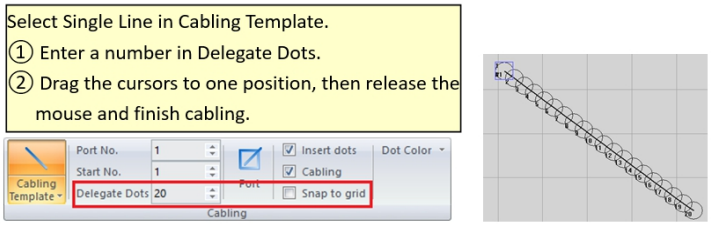


If the number of additional dots is the same as existed dot, it cannot be inserted.

Cabling It is selected as default option, draw the dots with lines. When unselect it, draw the dots without lines. (Do the mapping for the dots that haven’t been connected.)



Snap to grid When unselect it, the dot may not be in the grid. When enter a number in Delegate Dots with single line cabling, all the lines will be made with the number of dots set in delegate dots.



Dot Color Select one part of dots, click dot color to change the color for dots.

14.2.3. REGULAR CABLING AND SELECT

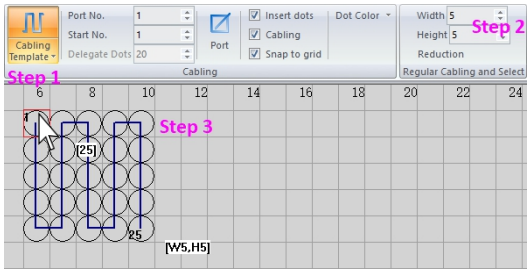
Input number to list the dot qty in width and length.

Click Select / Cabling Template, enter the numbers in width and height, click the corresponding position to list the dot number.

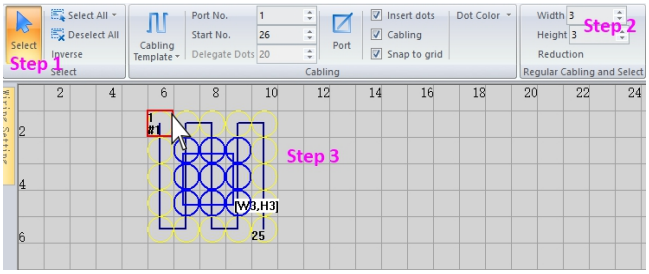
The size of the mapping can be used in conjunction with [Cabling Template].

Note: It must be valid when the data of Width/Height is greater than one.

For cabling.



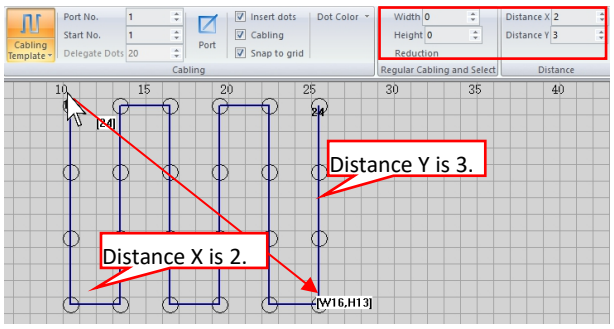
For select.

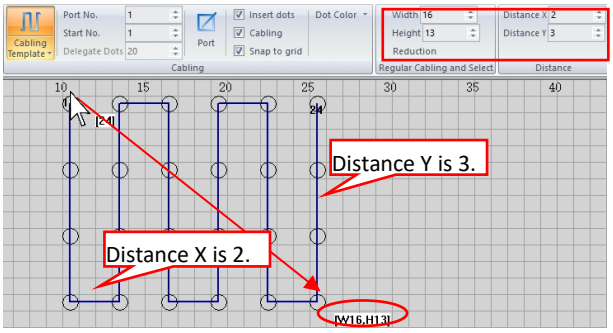


14.2.4. DISTANCE

According to the actual distance between two lightings, input the distance value to make an actual layout, so as the animation in a proper scale. Select “Cabling Template” and input value to make a distance between each dot.

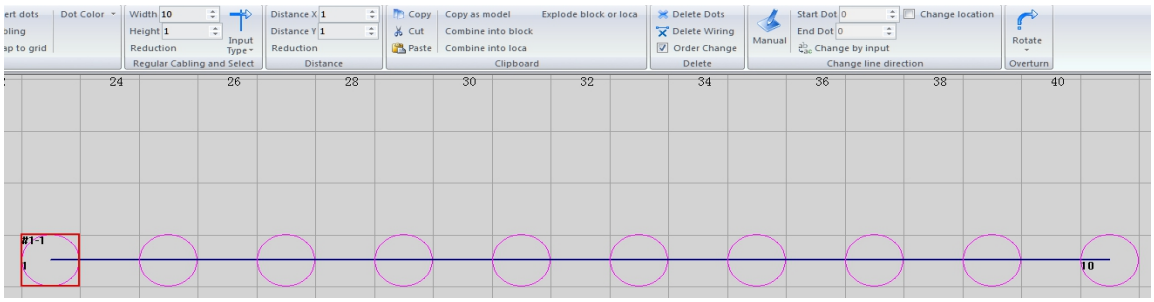
Note: the size of the width and length has included the dot distance.





The size of wiring = dot size + dot distance * (dot size - 1).

E.g. set the dot width is 10, height is 1 and distance X is 1, the wiring width is 19.



14.2.5. CLIPBOARD

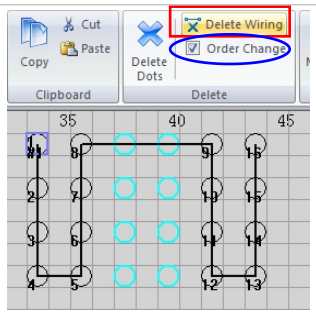
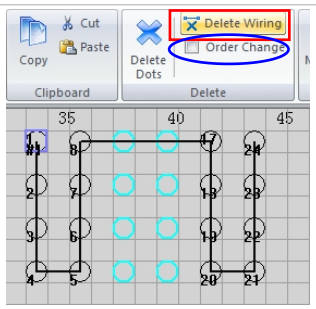
Copy, Cut, Paste, Copy as Model.

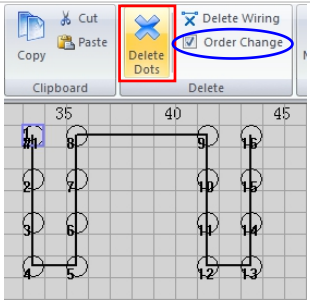
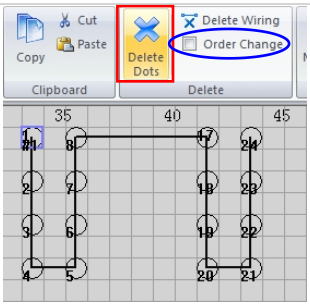
Must select the dot matrix first, then continue the functions of copy, cut, paste and build model.

Cut	Select LED dot matrix and click Cut in TOOLS / press <Ctrl> + <X> buttons, then paste in other positions. It can use with Insert Dots.
Copy	Select LED dot matrix and click Copy in TOOLS / press <Ctrl> + <C> buttons, then paste in other positions. It can use with Insert Dots.
Paste	Select LED dot matrix and click Paste in TOOLS. Operation is the same with cut LED dot.
Copy as Model	Select the dot and follow the prompt to operate. Please refer to Model chapter or videos for reference.
Combine into block	Click and create the selected dots into block (triangle is in the dot). And it is convenient for subsequent altering the dots.
Combine into Loca	Click and create the selected dots into Loca (square is in the dot). And it is convenient for subsequent altering the dots. It would be Loca if the dot is mapping without snap to grid.
Explode block or Loca	Break the block and Loca down. And it is convenient for altering the single dot.

14.2.6. DELETE

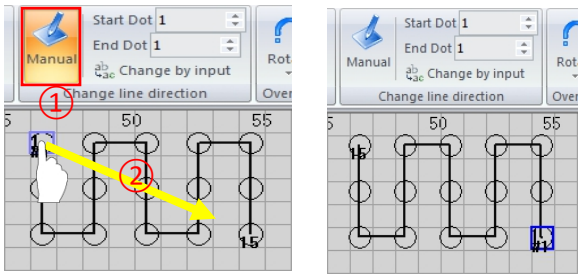
Delete Dots and Delete Wrings. Order Change is default selection. In general, Order Change is not selected for special lamps with virtual data.

Delete Lines	 Number will change automatically. Original number is 17, then becomes 9.	 Number will not change automatically. In this case, dot number remains unchanged.

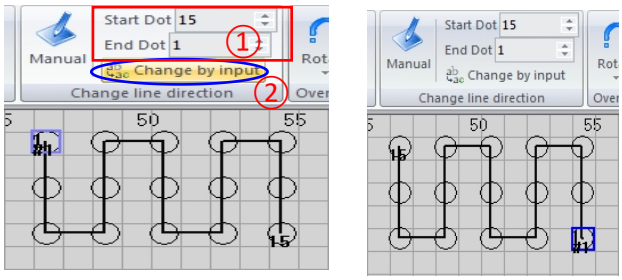
Delete Points	 Number will change automatically. Original number is 17, then becomes 9.	 Number will not change automatically. In this case, dot number remains unchanged.

14.2.7. CHANGE LINE DIRECTION

Use this option to revise the layout when the mapping reverses the direction.



Steps of changing direction of cabling manually.
① Select Manual.
② Click Start dot and drag it to the End dot; or do it inversely.



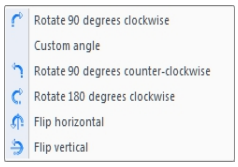
Steps of changing direction of cabling automatically.
① Enter the value of Start dot and End dot.
② Click Change by input to change the direction of cabling automatically.

14.2.8. OVERTURN

Rotate specific dos in different ways. Please select the dot matrix before rotation.

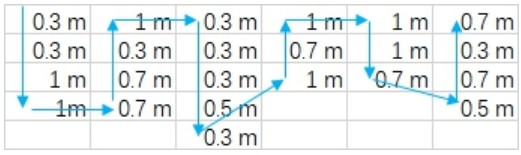
Drop-down list includes 6 options. The results of the 6 different screenshots are different.

Note: Custom angle (shortcut key Ctrl+Shift+6).



14.2.9. MODEL

For special connection of lightings. the following example operations.

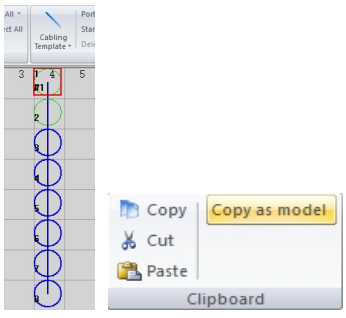


The red arrow refers to the direction.

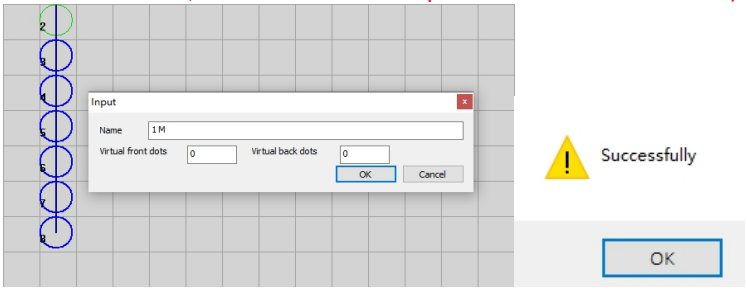
For the pixel composing of PCB is 6px/tube, if the lighting is shorter than 1m, we should set a virtual dot to be still 6px.

A. We could make models of 2px/0.3m, 3px/0.5m, 4px/0.7m, 6px/1m according to the actual size.

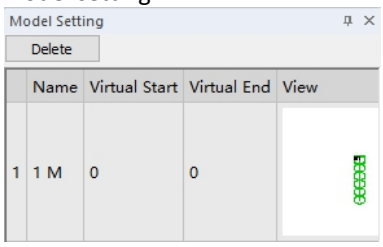
1. After draw 6px, then click Copy as model



2. Save the model in the Input. If the model is 2px/0.3m, we should set the virtual back dot to be 4, and then the pixel qty is still 6px. (If we use the 2px is in the back side, then the value 4 is input to the virtual front dots.)



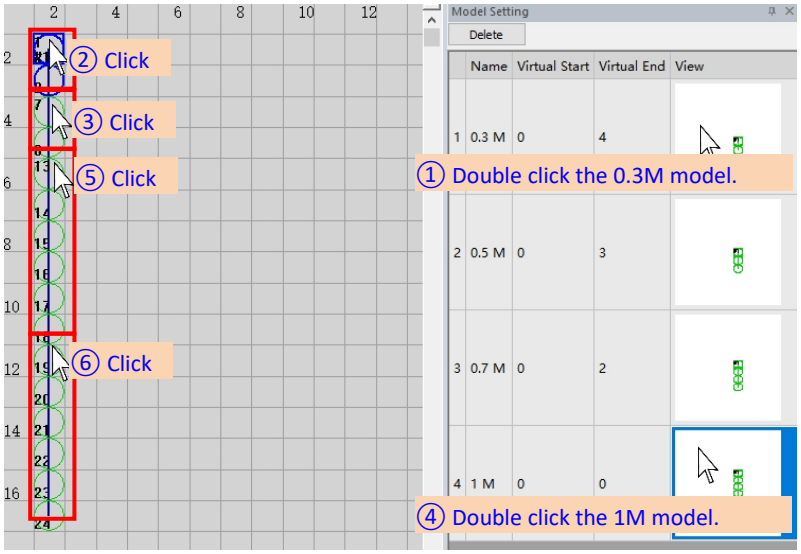
3. We could find the model in the model setting.



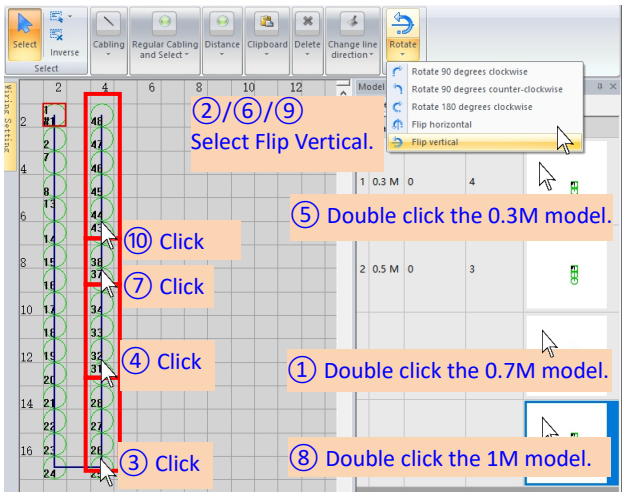
4. Use the same methods to save the 2px/0.3m, 3px/0.5m, 4px/0.7m model.

B. Apply the Template.

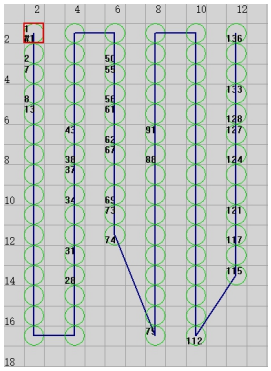
1. Double click to copy the model in the Model Setting, then apply the model to make the connection in the mapping according to the actual requirement.



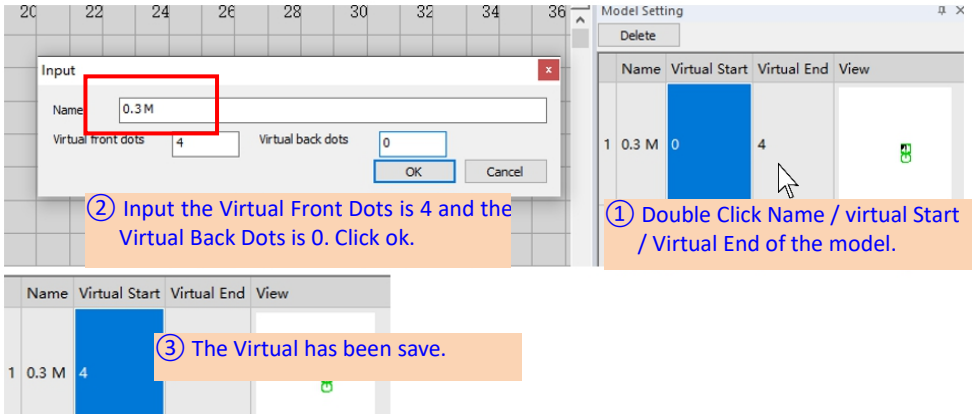
2. Double click to copy the model in the Model Setting. User can use the rotate function to make the model in a correct direction. (Each time to copy the model, rotate function should be selected once more.)



C. Follow the step 2 to complete the mapping.



D. If need to update the information in the model setting, user can double click the blank in the name/ virtual start/ virtual End, and input the value.



14.3. IMAGE

Import other photos in different shape and do the mapping according to the photos layout.

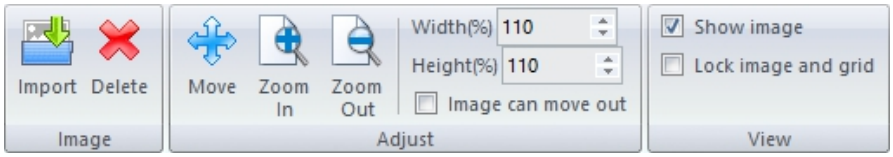
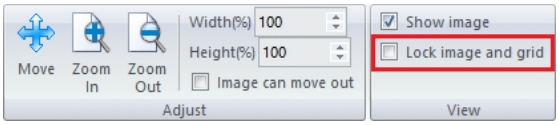


Image	Click Import then get the background image. Click Delete then delete the imported image.
Adjust	Arrange the image to make each dot locates in one grid. In this case the mapping will be more accurate and easier.
Move	Click to move the image. In general, “Image can move out” is not selected. If the white spaces are large when the image locates in the center of grid, then use this function to move the image out of the grid in order to decrease white spaces.
Zoom In / Out	Width and height of grids get 10 pixels bigger / smaller. Or enter the proportional value of width and height manually. ① Zoom in or Zoom out the background image if it is too big or too small. ② If the background image is appropriate, adjust the grid to operate. ☆ Suggestion: Zoom in or out in scale to avoid any distortion.
View	Image will show in the mapping with Show image. Image will be hiden with Show image.
Lock Image and Grid	After the background dot matrix and grids are well adjusted, please lock the image and grid in order to make the image zoom in or zoom out together with grid, which is convenient to draw single line cabling. For further adjust, please unlock it first then repeat previous step.

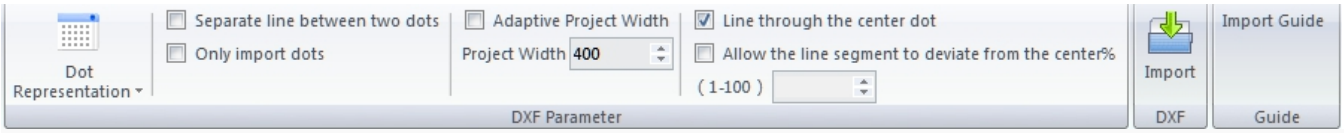
When lock image and grid, Zoom keys are disabled.

When unlock image and grid, Zoom keys are available.

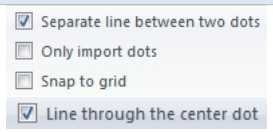
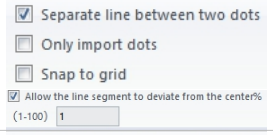
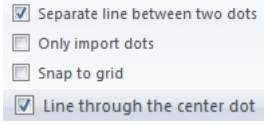
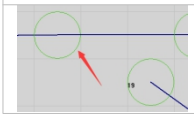
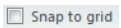


14.4. IMPORT

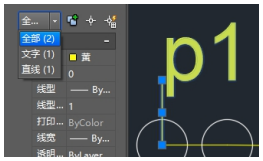
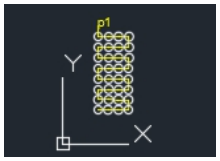
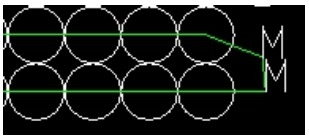
Import and convert the DXF file to the dots that RGBPlayer can read.



[Project Width] The total dots width of the dxf. file imported. If the dot size of DXF file is relative big or small, it is better to input the value to make a manual adjust.

DXF	Specification	Check the Option	Remarks
	Line between two dots is independent line or a polyline and it goes through the circle center.		
	Line between two dots is independent line segment, but it doesn't go through the circle center.		Please list the data to allow the line to deviate from the dot center. The data keeps no more than 50%.
	Only one line go through the starting point and end point. The center of the circles are on the line.		If select Separate line between 2 dots, after import the DXF to map, the Circle 2 and 3 would not have a connection line. Circle one and circle four would become a signal input port.
	The imported points will align the grid.		If checked, the imported points will align with the grid and the original position structure may be changed.

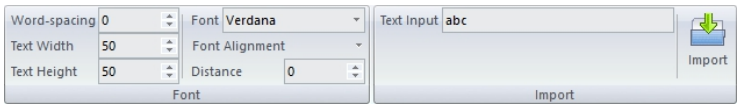
Notes on the .dxf file.

Py, x-y, CxPy represent the port and they must be DText its terminal and the line's terminal are totally overlap. It would be x-y in MAP tools. Note: there is controller mode in MAP.	The map should be placed in the left upper right of the coordinate.	In order to avoid to delete any unnecessary layer, the map only show the layer with circles and lines.	The virtual dot is represented by " M （Single line text)" . The M must be gone through two lines like picture.
			

Please clean up all unnecessary images after drawing and avoid errors in importing. Enter PU into the command bar in CAD to clean-up.

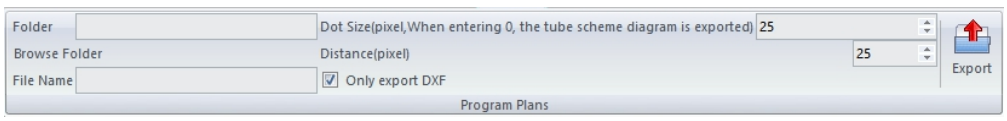
14.5. TEXT

Design and import the text rapidly. (No connection lines between the text.) User can use the Tool to do the connection.



14.6. EXPORT

Export the project mapping in .png and .dxf format for convenient installation.



14.7. CONTROLLER SELECTION

Select the master control and view the controller information.