Contents

P/N: 390521010122 Version: A

1.Product Introduction

The TEKMAND NANO console is a newly designed micro portable console by Guangzhou Caiyi Lighting Co., Ltd. It has a net weight of 1.1 kilograms and a length and width of only about A4 paper size. The interface is simple, the weight is particularly light, it is easy to carry, and the operation is more user-friendly. The integrated design of hardware configuration, software and network technologies, and the bidirectional combination of capacitive touch screen control interface and button functions enable complex real-time control through simple operations, making it more intuitive and fast to control the programming, input, and final playback of the entire lighting effect. Simple lighting effect diagrams can be seen through the built-in simulation stage module, supporting pre programming in offline mode, saving a lot of time, and improving work efficiency. The console itself can handle 2048 parameters and can control various types of lighting equipment, such as conventional lamps, moving head lights, LED lights, video and media digital lights, through external expanders. The product technology has reached the international leading level and can meet the needs of various small and medium-sized performances and events.

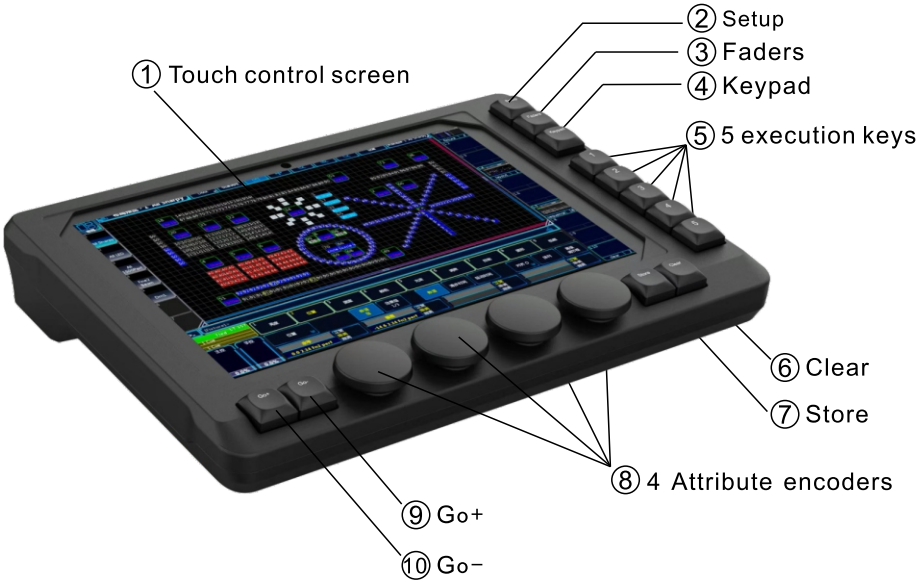
TEKMAND NANO has highly professional features, embedded multiple high-tech innovations, stylish exterior design, excellent interactive experience, and innovative working modes. Built in battery life, video camera, voice recognition, manual tracking, etc. Support access to various 3D simulation software, support cloud functionality, support audio and video control, intelligent speckle, etc.

1.1. Product specifications

- Each session connection extender can control up to 65536 parameters in real-time
- There can be a maximum of 32 workgroups
- The console itself can handle 2048 parameters
- Comes with 4 Dmx input/output ports
- The connection extender can reach 256 Dmx output ports
- 10.1-inch multi touch screen
- 5 execution buttons and 4 encoders
- 1 MIDI input port and 1 USB port
- 1 Ethernet interface (10/100/1000)
- 7 function buttons and 1 power on button
- Supports multiple operating languages
- Powerful and realistic stage 3D simulation effect, real-time simulation of live effects, convenient for offline programming
- Powerful layout management with multiple operation modes
- Supports multiple protocols: ArtNet, sACN, etc
- Support RDM remote lighting management
- Built in WiFi battery, Bluetooth camera, voice module
- Power supply: Type-C interface 12V/2A power adapter

2.Instructions for use

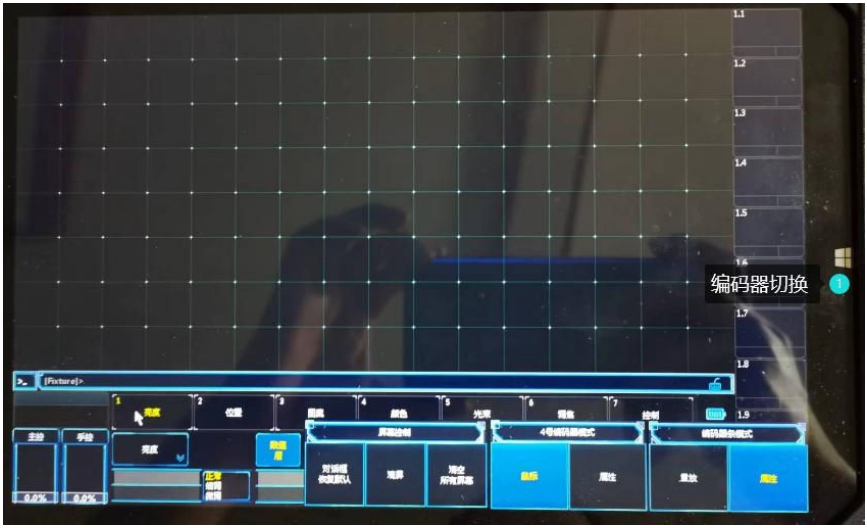
2.1. Key functions



①Touch control screen: Touch controls all functions of TEKMAND software.
②Setup: Pop up/close the settings menu.
③Faders: Pop up/close the executor page, used to quickly call the executor. (Faders+Keypad combined to form the lock screen function).
④Keypad: Pop up/close button panel (Faders+Keypad combination for lock screen function).
⑤Execution keys: used to execute actuators 1 to 5.
⑥Clear: Used to clear data. Press once to clear all selected states; Press twice to clear the activation status; Press 3 times to clear the entire editor.
⑦Store: Used to save data, long press to open the storage options window.
⑧4 Attribute encoders: used to adjust parameters, with the fourth encoder serving as a mouse.
⑨Go+: Perform the next step of the universal push rod.
⑩Go-: Perform the previous step of the universal push rod.

2.2. Quick Actions

2.2.1.LINUX NANO



① Click on the menu button: Pop up the encoder switching panel.

2.2.2.Windows NANO

① **Slide right from the left screen edge**: Pop up the screen switching panel.
② **Slide up from the bottom right screen edge**: Pop up the encoder switch panel.
③ **Slide left from the right screen edge**: Pop up the button panel. (Pressing the Keypad key can also be achieved).

2.3. Precautions

2.3.1.LINUX NANO

- Please use a dedicated charger for charging.
- Please try not to install other software on the desktop.
- Please do not operate the touch screen with metal or other sharp objects to avoid damaging the screen.
- Please do not disassemble the equipment. If there is a malfunction, please send it back to the manufacturer for maintenance.
- Please prevent the equipment from coming into contact with water and other liquids.

2.3.2.Windows NANO

- Please use a dedicated charger for charging.
- Please try not to install other software on the desktop.
- The default username is "TEKMAND NANO", and the default password is "37312222".
- Please do not operate the touch screen with metal or other sharp objects to avoid damaging the screen.
- Please do not disassemble the equipment. If there is a malfunction, please send it back to the manufacturer for maintenance.
- Please prevent the equipment from coming into contact with water and other liquids.

3.TEKMAND software teaching

3.1.Create a new show

1. Press **Backup**, Choose **Internal** -> **new show**, Change the name and setting options of the performance in the pop-up window;

2. Enter a name in the show name input box, ensure that all 6 options below are selected, then the default empty show was successfully created;

3. Press **Please**, Close the menu (click on the X symbol in the upper right corner of the window).

3.2. Configuration of conventional lights

1. Press Setup, Choose **Show** -> **Patch & Fixture Schedule**, Pop up a window for directory names, Input **Dimmer**, Press OK, As shown in the following figure:
(Blue font represents key or command input).

2. Press Please select fixturetype -> Fixture Types ->From Library, Import a fixture type from the fixture library;

3. There are many types of lamps in the fixture library, so it is necessary to use manufacturer filtering to limit the display content of the list. If you enter Generic, only the fixture of Generic will be displayed in the list. Then, if you enter dim in the fixture filtering, only the fixture of Generic with the "dim" field in the name will be displayed in the list. Finally, choose generic@dimmer@00.xmp;

4. Press OK, return to the previous interface. If you want to change the name of the fixture , you can press the name option to change it to Dim 1. This will name the fixture Dim 1, Dim 2 in order;

5. Enter the number of lighting fixtures: 20, then press Please;

6. Set the channel number, enter 1, and then press Please. That is to say, the ID of the first fixture is 1, the ID of the second fixture is 2, and so on;

7. Next, configure the address code of the lighting fixture, write 1.1, and then press Please. 1.1 represents the first lighting fixture configuration in the first line of channel 1 of the DMXs;

8. After the overall setup is completed, the window should be as shown in the following figure: Tekmand User Manual. Finally, press Apply to complete the addition and configuration of 20 conventional lights, and the operation method for computer lights is the same.

3.3. Control conventional lights

1. Lighting of conventional lights (blue font represents button or command input)

①There are many ways to light up the conventional lights in the console:
1 At 1 00 Please Quick method: 1 At At

②Correspondingly, there are two ways to set the brightness of a conventional light to 0: 1 At 0 Please shortcut: 1...

③After inputting the command, it can be observed that channel number 1 turns yellow, and the background color and value both turn red. Yellow indicates that the item is selected, while the red background color indicates that it is active. If Store is pressed, the value will be saved.

④Clear has three meanings based on the number of clicks:

1)Press once to clear the selected state.
2)Press twice to clear the activation status.
3)Press 3 times to clear the value in the programmer.

⑤If you want to light multiple fixture, you can use + and Thru to connect the fixture number. If you want to delete a certain fixture, you can use- to remove it.

1)**Example 1**: Channel 1-5&8, and set the brightness value to 50%.
Action: 1 Thru 5 + 8 At 5 0 Please

2)**Example 2**: Channel 1-5&8, except for 5, and set the brightness value to 15%.
Action:1 Thru 5 + 8 - 5 At 1 5

Of course, the size of the value can also be represented by + and - to indicate an increase or decrease.

3)**Example 3**: Channel 3 increases the brightness value by 35% on the original basis.

4)3 At 3 5 Please, it can be calculated that the brightness value of Channel 5 is 85%.

3.4. Control headmover lights

3.4.1.Attribute Type Control Module

- The attribute type control module mainly displays the currently available attribute types.

3.4.2. Use encoder for adjustment

1. 1 1 1 Please select the lamp with lamp number 111;

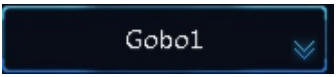
2. Give a brightness value, which can be entered by command or set by rotating the first wheel below the brightness;

3. Press the **position**, and the first and second wheels can adjust the horizontal and vertical values respectively. The normal/fine/fine adjustment on the right side can set the accuracy of the wheel rotation;

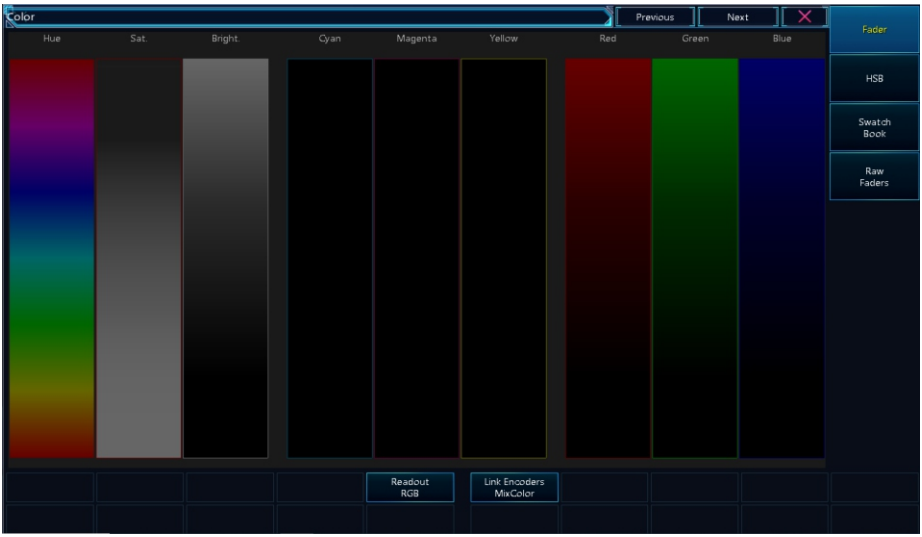
Note: *The red indicator bar in the upper right corner of the attribute type control module indicates that the value of the attribute type has been modified. If Store is pressed, the value will be saved.*

4. Press the **pattern** and click to pop up a window as shown in the figure:

- When the lamp has multiple pattern wheels, the switching method is to click to open the drop-down menu, as shown in the following figure:



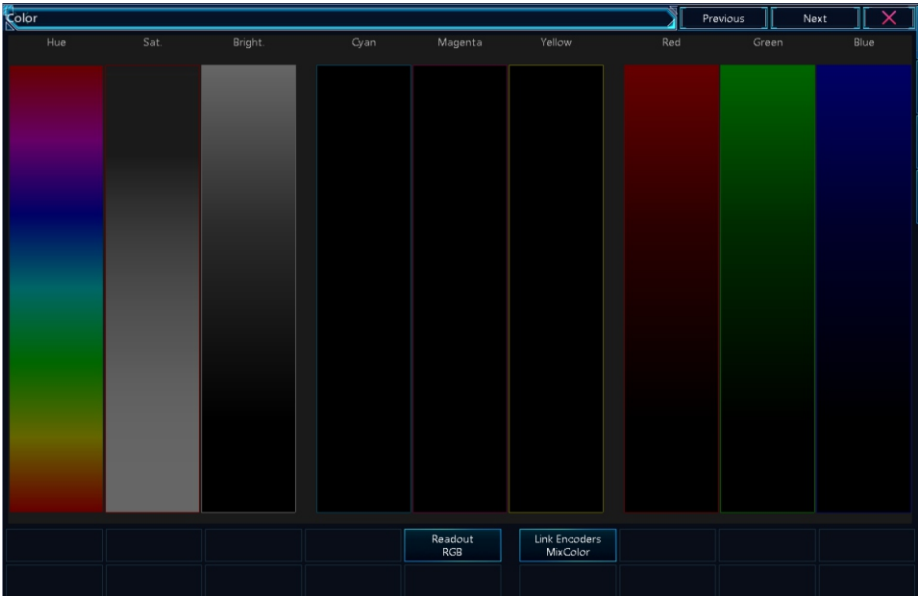
5. Press the **color**, and the attributes are Color1 and ColorMix in sequence. When ColorMix is selected, the three wheels can adjust the cyan, magenta, and yellow color attributes separately, blending them freely. At the same time, you can also adjust them by displaying the advanced adjustment box. Press the button to display the push bar mode on the screen, as shown in the following window:



① Default to Putter Window: There are three modes here, all connected. Manually adjust one of them, and the others will also follow the corresponding values.

1) HSB (Hue, Saturation&Brightness)
2) CMY (Cyan, Magenta&Yellow)
3) RGB (Red, Green&Blue)

② Press the color picker or U2 to enter the color picker mode, as shown in the following figure: You can choose any color in the color area, and of course, you can also switch to push mode to view the HSB, CMY, and RGB values corresponding to that color.


Color
Previous
Next
Hue
Sat.
Bright.
Cyan
Magenta
Yellow
Red
Green
Blue
Readout RGB
Link Encoders MixColor

3.5. Use of windows and screens

3.5.1.Command Feedback Window

① Through this window, you can see the response of the control console to commands, which is beneficial for learning various commands. Click anywhere on the screen, go to Open **Window -> Other -> Command Line**, and press.

② The feedback window constantly presents a large amount of information, and the window size can be adjusted by pressing and holding the bottom right corner of the window to move, or the window position can be moved by pressing and holding the window's title bar.

3.5.2.Save View

① For example, to store the current view on the first view button on the screen:

② Store, Press the position of the first view button on the right side of the screen again, and a window will pop up asking which screens need to be saved.

③ Select the screen number you want to save and press **OK**.

④ Successfully created, give the view a name: Assign Assign, then click the first view button, enter the name in the pop-up window, and confirm.

3.5.3.Call View

① There are two ways to call windows:
1) Directly click on the window button that contains the window;
2) Use the command line to directly call Window: View 1 Please: Call View 1.

3.5.4.Delete View

① Open the 'View' to view all saved windows.

② Press Del, then click the view button:
1) This does not delete the view, but simply clears the corresponding button. To truly delete a view, you need to delete it from the view or directly use the command;
2) Del View 1 Please: Delete view 1; After deleting the view , it also removes its link to the view button.

3.6. Group

1. Click in the free space on the screen and select **Library** -> **Group** in the open window to open the Group.

2. Store a group: For example, set all odd numbered fixture as one group and even numbered fixture as another group:

① 1 + 3 + 5 + 7 Please, Channel 1, 3, 5, 7 is selected;

② Press Store and click on the first empty position in the group;

③ Immediately enter the name Odd on the keyboard, or you can press Assign twice and click on the location of its group to modify its name;

④ According to the above method, even numbered fixture can be stored as another group, named Even;

⑤ After all operations are completed, the group should be as shown in the following figure:

3.7. World

1. The World, as the name suggests, is to limit the range of operations that can be performed.

2. Creating a World is similar to a group, except that there is a default World called Full in the World.

3. This default World cannot be modified or deleted, and is the maximum authorized operation range (that is, all fixture can be operated in this World).

① Channel 1 Thru 4 0 Please select the lamp to be set Channel 1-20

② Store and click on the second location of the world, named Dimmer

③ Fixture 1 1 1 Thru 1 1 9 Please

④ Store and click on the third location of the world, named Fixture

⑤ At this point, the world is shown in the following figure:

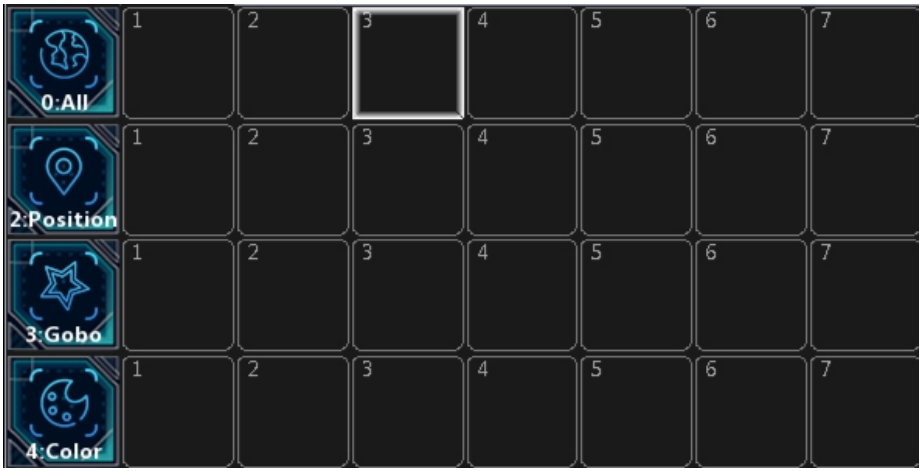
4. If the Dimmer world is selected and does not include Fixture 111, pressing Fixture 1 1 1 Please will not work. Regardless of the world , the data in the scene will be output as usual, but other operations only affect the lighting fixtures within the world.

3.8. Preset

3.8.1.Preset

● Preset is a method of storing preset values, with 10 types: All, Dimmer, Position, Gobo, Color, Beam, Focus, Control, Shapers, and Video. By default, only Presets of this type can be stored, for example, color information can only be stored in Color Presets.

● The only exception is the All option, which can store all types of Presets. Similar to the group, the first press selects the fixture using the Preset , and the second press applies the stored content of the Preset to the fixture. Due to the variety of Presets available, different border colors can be set through options to distinguish. As shown in the figure:



3.8.2. preparation

① Long press and hold Store for about 1 second to release, and a storage option window will pop up. Currently, only focus on the material column, as shown in the following figure:

② After setting it as shown in the above figure, you can press **Save as Default** to set it as the default setting. After completion, press Esc twice to exit the setting interface.

3.8.3.Create Preset

① Fixture 1 1 1 Thru Please select all computer lights and adjust their PAN and TILT parameters;

② Store and click on the first position in the Preset, and the value in the computer light list will change to P 2.1.
If the Preset stores a name, the value will become 2.1+name;

③ Adjust the PAN and TILT parameters to different positions, Store Preset 2 2 Please, "2." refers to Preset Position, similarly, "0." refers to All, "1." refers to Dimmer, and so on. Identify Preset in the order of 0-9, All, Dimmer, Position, Gobo, Color, Beam, Focus, Control, Shapers, Video;

④ Create other types of Preset :

3.9. Cue/Sequence

3.9.1.Store Cue

• Click in the free space on the screen (if there are many windows on the screen, you can directly press **Clear**), and select **Sheets->Sequence Executor** in the open window to open the Sequence Executor window. In this window, you can see the first **Cue** that is about to be saved.

• The specific operation steps are as follows:

① Select Exec 1 select Executor 1, and the background color in the upper half of the area will turn green, indicating that the actuator push rod 1 is the current default actuator;

② 1 At 3 0 Please set the brightness value of regular light 1 to 30%;

③ Store Please by default, it is stored in actuator pushrod 1, where the sequence will be displayed at the bottom of the green area and 1 will be displayed in the upper right corner, indicating that the current scene 1 is stored in sequence 1 and assigned to actuator pushrod 1;

④ The sequence executor window appears with the previously saved scene, modify the name of scene 1:

Assign Assign Cue 1 Please

3.9.2.Follow up operation of the Cue

① Example: Automatically run Cue 2 when Cue 1 ends.

1) Open the sequence executor window, right-click on the Cue 2 **trigger mode** or press Edit and then click here. In the pop-up selection trigger mode list, select **Follow** (there are 5 options for play, time, follow, sound, and BPM).

3.9.3.Update Cue

• Assuming you want the brightness value of the fixture in Cue 3 to brighten by 10%:

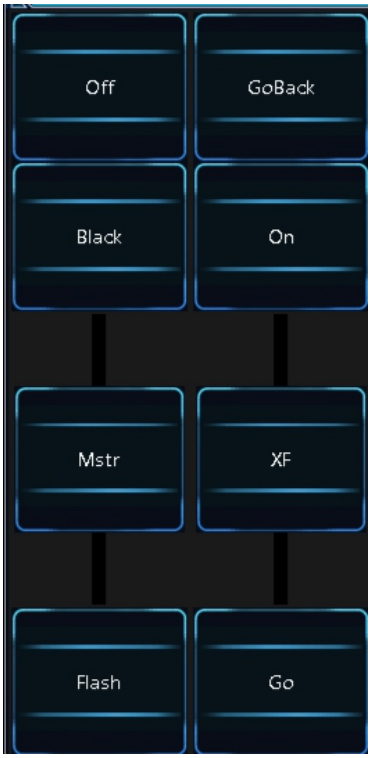
① Goto 3 Time 0 Please quickly loads Cue 3, and there will be a yellow outer border displayed in the sequence executor window Cue 3. Usually, Goto 3 Please can be used directly, and Time 0 is added to cover the original 5s fade time of Cue 3, so there is no need to wait.

② Group 2 At + 1 0 Please the Update button is highlighted, indicating that the currently active scene can be updated.

③ Update next, press U3 (or press on screen to track updates), the button will change to only track the scene, and finally press X6 (or press on screen to update the scene).

3.9.4.Set sequence in the allocation menu

● Press the green area of actuator push rod 1 to open the allocation menu, press X2 or width 2 to expand the control range of the actuator. Each button can configure its own related functions, and the final effect is shown in the figure:



① Close: Close the actuator
② Goback: Jump to the previous scene
③ Black: Press continuously to close the actuator and release the restore button
④ Open: Open the actuator
⑤ Master: brightness control
⑥ Crossfade: separate push rod, manually controlling the cross gradient between two scenes
⑦ Flash: Keep pressing, open the actuator, release and restore
⑧ Play: Execute the play command, using fade in time and delay time

3.10.Macro

● Macros are very useful features that can achieve almost any function.

3.10.1.create macros

● Example: Create a new macro, whose function is to clear all Dimmer values from programming.

● Specific steps

① Open a macro window;

② Press Edit, then click an empty position in the macro window;
-->Pop up the edit macro dialog box;

③ Click the add button to add an empty command line;

④ Right click on the cell under the "Command" column, enter: Off att 1, and press Enter to confirm;
-->In the table, you can see: Off Attribute 1;

⑤ Macro production completed;
-->At the same time, you can also set the time or add more macro commands;

⑥ Press Assign twice, then click on the newly created macro just now;
-->Rename this macro;

3.10.2. Execute Macro

● There are many ways to execute macros:

① Click the corresponding macro button directly in the macro window;

② Press the button: Macro 1 Please;

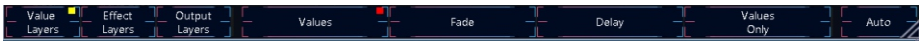
③ Use the command line: go ma 1, then Please.

3.11. Effect

● The effect operates in a periodic form, and the curve determines how the effect operates within the range of values, which can be a Sin curve or a Cos curve. In the effect editor, you can view the value range values 1 and 2. There are many ways to create effects, including using a programmer to create effects, using materials to create effects, creating effect templates, and so on.

3.11.1.Create an effect using a programmer

● Open the layer control bar in the computer light table, select the effect layer, and the interface shown in the following figure will appear:



● The effect wheel toolbar appears at the bottom of screen 2:

● The advanced adjustment box on the right is displayed, click to open it, as shown in the following figure:

• Operating steps:

① Choose the desired light, pay attention to the order of selection, Fixture Thru Please.

② Click on the effect layer, select a position in the effect wheel toolbar, and open the display advanced adjustment box. There are horizontal and vertical options on the right side, and yellow represents the currently selected item;

③ Set the horizontal and vertical rates separately, and select 15 BPM in the pop-up window to complete a cycle in 4 seconds. The relative option is the difference between relative and absolute values.

Example: Dim low is 10%, High is 50%. If the relative option is on, Dim=25%, and the operating range of the effect is 35% -75%; On the contrary, it is in an absolute value state, and regardless of the current Dim value, the range of Dim effect operation is still 10% -50%;

④ Select vertical separately and set it as another curve;

⑤ At At lights up and you can see the effect from the stage window;

⑥ Storage effect;

[Channel]>Store Effect 1 "Move Effect"

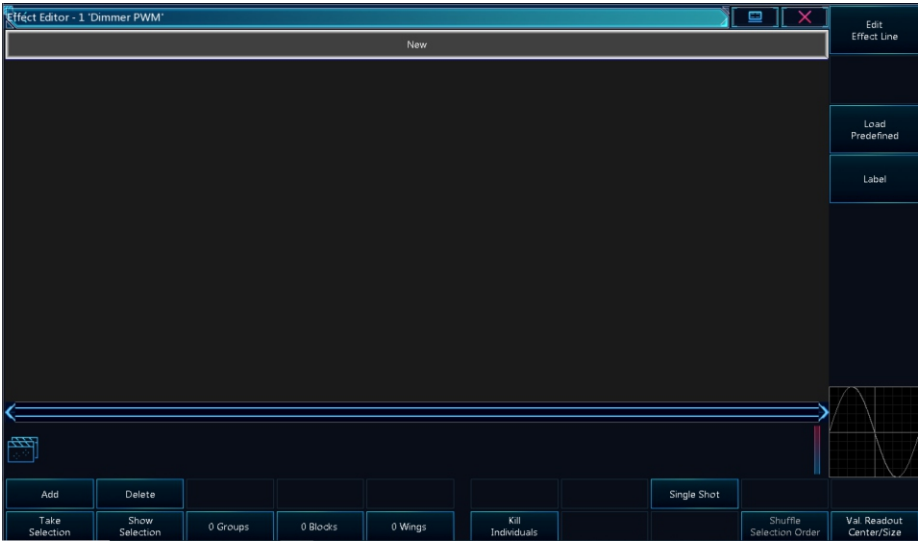
⑦ Clear Clear clears all the contents of the programmer, double-click on the first position of the effect library, and turn on the lighting fixture to view the effect.

3.11.2.Create Effect Template

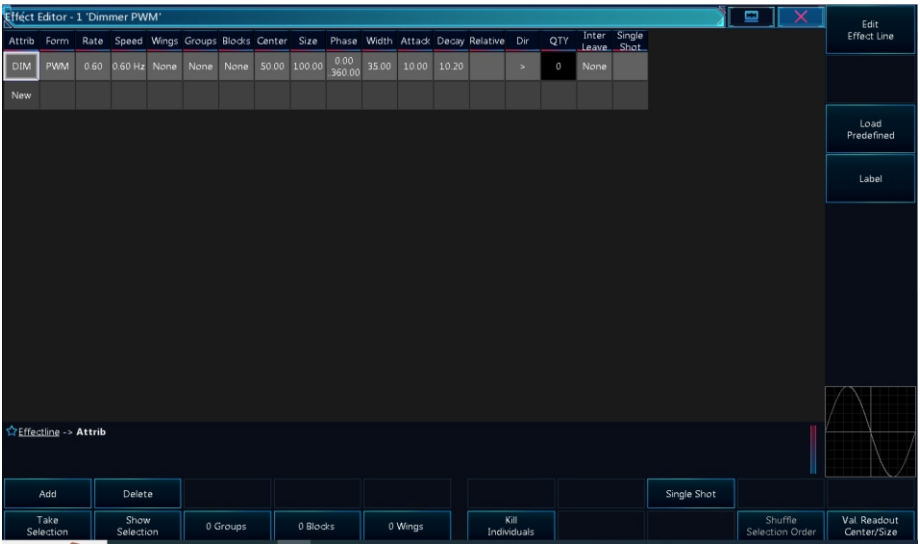
- Specific steps:

① Ensure that the programmer is empty, Clear Clear Clear;

② Press Edit and press the second position of the effect library. The effect editor is shown in the following figure:



③ Press **Add** and select 'Dimmer' in the pop-up selection effect attribute window (+represents the closing option, - represents the closing option) Starting option), you can set the values of each option in the window shown in the following figure.



④ Next, select the effect curve, PWM curve, set the rate to 1, the phase starting point to 0, and the ending point to 360 (in order to make each lamp in a different state). The default width is 100%, the default reduction is 0, and set to 100% to see the effect of light gradient.

⑤ Assign Assign and rename it to Dim Effect by clicking on the second position in the effect library.

⑥ Select all lighting fixtures and press Dim Effect to verify the effect. The lights gradually turn on and off in sequence.

3.11.3. Create effects using materials

- The above two methods apply specific values of value 1 and value 2, and here the material is used.

① Select the desired light, pay attention to the order of selection, Fixture Thru Please;

② Select the material category in the value 1 and press Yellow Material;

③ Similar operation at value 2, press the Blue material;

④ Set the phase starting point to 0 and ending point to 360 (in order to make each lamp in a different state), and perform similar operations for CM2 and CM3;

⑤ Store, then press the effect library position 3 and name it Color Effect; Turn on the light, double-click on the Color Effect, and observe the effect:

Green appears between the transition between yellow and blue, which is the result of a gradient between the two colors.

3.12. Bitmap

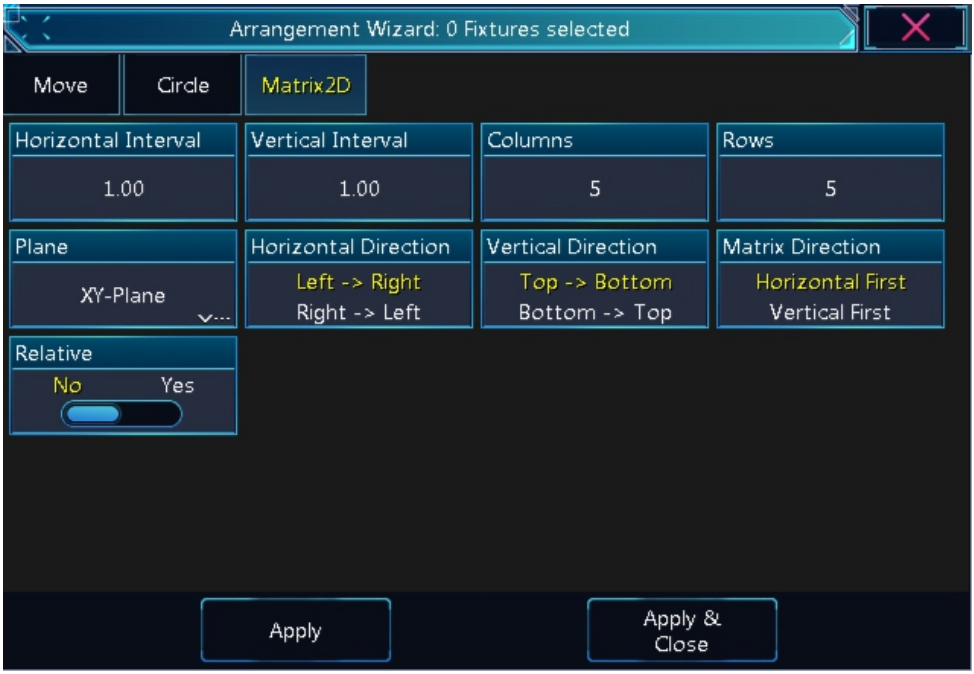
1. Create a performance called Bitmap and add generic@led+virtual_dimmer@.xml 300 LED lights, with channel number and lamp number ID set to 1, and address codes configured;

2. Open the stage window, select all LED lights, and press the **settings** above the window;

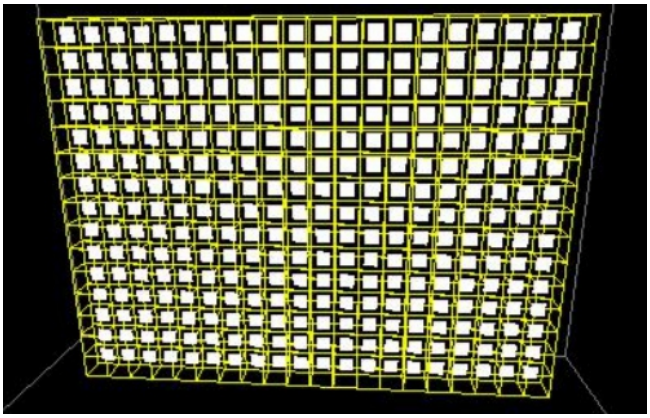
3. Rotate the LED light to face the audience, press the **position**, switch to **rotation**, set X=-90, turn it on, and the light in the diagram will turn into a small white block.

4. Switch to **position** again, set X=-7, Y=3, Z=4.5

5. Click on **Advanced Arrangement**, select the **square** in the pop-up arrangement wizard window, and set it as shown in the following figure:



6. Press **Apply and close** to see the stage window as shown in the following figure:



7. You also need to create a sequence containing brightness values

① Fixture 1 Thru At At Turn on all LED lights

② Store Exec 1 Please

8. Create a bitmap effect

● There is no need to clear the contents of the programmer. Based on the previous step, directly Store Effect Effect 1 Please and create a bitmap effect 1 (Effect is the Bitmap keyword by pressing twice).

● Bitmap effects can only be run by placing them on the actuator: Assign Effect Effect 1 Exec 2 Please. For the convenience of observing the effect, execute the bitmap effect, Go Exec 2 Please. Press Edit Exec 2 Please to open the Bitmap Effect Editor.

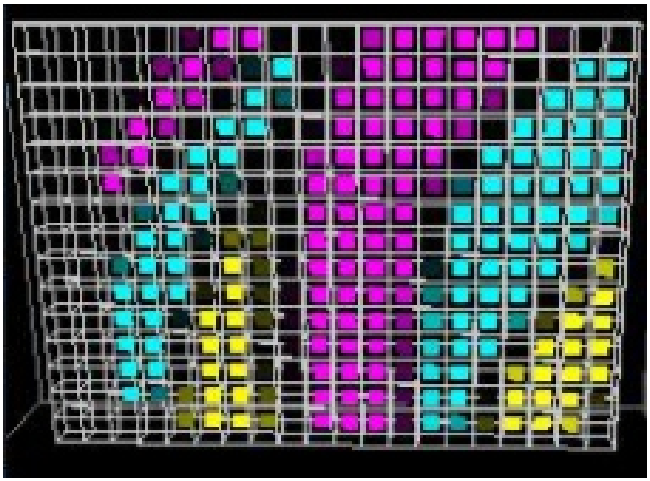
● The basic settings are as follows:

① Name: Enter the name of the bitmap effect Bitmap Scroll

② File: Click to open the file browser and select the desired image according to the path

③ Mode: Color

④ Width and height: both set to 128



● The current bitmap effect is static, only displaying an image. Press "Scroll Right" in the tool options to create a right scrolling effect for the bitmap effect. This effect can also be precisely designed through the slider of the regulator.

① Scroll left and set the horizontal scrolling of the adjuster slider to a value similar to -1.5

② Scroll to the right and set the horizontal scrolling of the adjuster slider to a value similar to 1.5

③ Scroll up and set the vertical scrolling of the adjuster slider to a value similar to -1.9

④ Scroll down and set the vertical scrolling of the adjuster slider to a value similar to 1.9

● Of course, it is also possible to set both horizontal and vertical scrolling values to scroll at a specific angle.

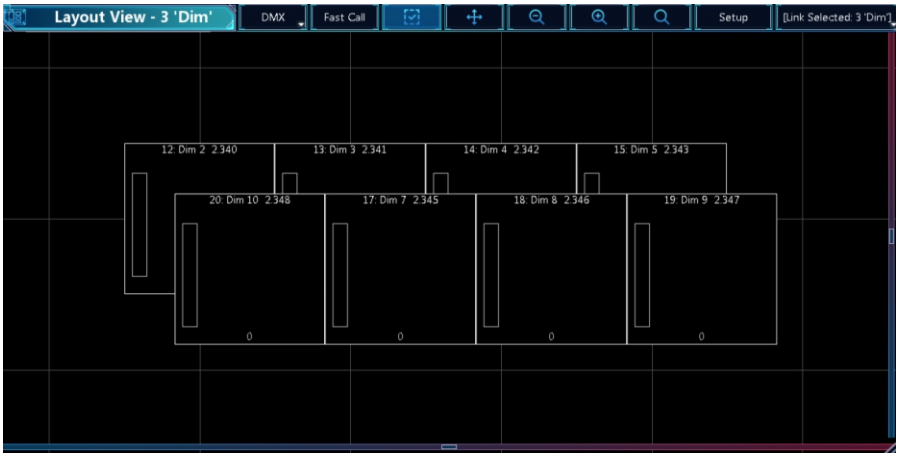
3.13. Layout

- If the bottom of the library button is green, it indicates that the layout is selected, and when the layout view window sets the associated selection, the layout editing window will display the layout. Example image:

- To view and edit a layout, you need to do so in the layout editing window.

3.13.1. Layout editing window

- The layout editing window has powerful functions to add lighting fixtures, light groups, effects, and materials, and can be arranged according to ideas.



- In the layout editing window, lighting fixtures are not necessary, they can only be arranged as light groups, macros, etc. In this window, you can select different symbols to represent objects. Some of them can see the color, brightness and pattern of lamps, and you can also add text and boxes. In setup mode, you can right-click on an object to add text to it.

• The gray box on the left side of the title bar displays the name of the current layout view, and the buttons on the right have the following functions:

① Quick call: The switch for quick call mode, which is turned on when the font is yellow

② Lasso: Active state can circle multiple targets

③ Move: Move the visible range of the layout

④ Zoom Out: Lens Zoom Out

⑤ Zoom in: lens zoomed in

⑥ Center: Adjust the layout until all objects are visible

⑦ Settings: When activated, the lighting fixtures can be configured on the layout toolbar.

⑧ Association selection: You can select the current layout to display. When the association selection option is selected, it will switch to the selected layout (i.e. the green button at the bottom of the layout window). If no layout is selected, the layout editing window will be empty.

Note: When the lasso icon is activated, you can also use the move icon. Double click to move the visible range. When the move icon is activated, you can also use the lasso, and double click to do the same.

3.13.2.Window Options Settings

• Click on the icon on the left side of the window to open the interface shown in the following figure:

① Grid X: The size of the X-axis grid. If the grid width is 0 or the grid height is 0, the view has no grid lines.

② Grid Y: Y-axis grid size. If the grid width is 0 or the grid height is 0, the view has no grid lines.

③ Snap Grid X: defines the range of sliding steps for object movement on the X-axis, which is valid when the jump mode is on.

④ Snap Grid Y: defines the range of the object's sliding steps on the Y-axis, which is valid when the jump mode is on.

⑤ Snap Always: Turns on or off the sliding function of the object's movement.

⑥ Background color: Click this item to open the editing color window, where you can set the background color for the editing window.

⑦ Display ID: Display or turn off the number of objects.

⑧ Dimmer bar: The brightness bar that displays or turns off lighting fixtures

⑨ Dimmer value: Display or turn off the brightness value of the lighting fixture (displayed as a percentage).

⑩ markers: When activated, the programmer, effects, materials, and other color markers can be seen in the view.

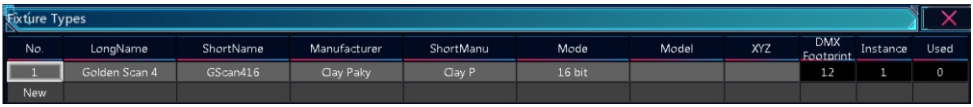
⑪ Fast call: The switch for quick call mode has the same effect as the button on the title bar.

3.14. Make a fixture library

- Before creating a lamp library, first understand the specifications of the DMX channel parameters for the fixtures.

① go to **Settings ->Show -> Patch& Fixture Schedule**.

② Click on **Fixture Types**, then click **Add** to create a new fixture library: set manufacturer, lamp name, and other information;

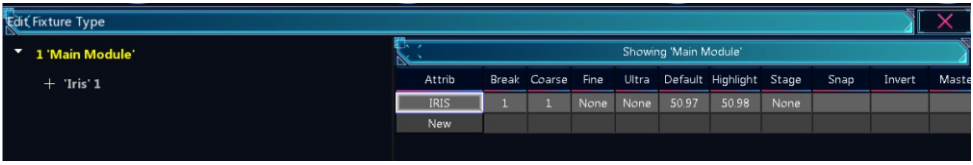


③ Set the model stretch to 1, leave the model code blank, and then click Edit to open the lamp library editing window.

④ Check the channel arrangement of the GoldenScans lighting fixture:

CHANNEL	FUNCTION
1	IRIS
2	COLOUR CHANGE
3	CTC/PRISMI/ FROST SELECTION
4	DIMMER/STOPPER/STROBE
5	PAN
6	TILT
7	GOBO CHANGE
8	GOBO ROTATION
9	GOBO FIXED CHANGE
10	RESET
11	PAN FINE(WITH OPTION 16B ON)
12	TILT FINE(WITH OPTION 16B ON)

⑤ Click **Add**, add the first channel Iris, select Beam ->Iris ->Iris in the pop-up dialog box, and the editing window will be as follows:



⑥ Continue to repeat the previous step and add the following attributes:

1) Color -> Color1 -> Color1
2) Beam -> Prisma -> Prisma1
3) Dimmer -> Dimmer -> Dim
4) Position -> Position -> Pan
5) Position -> Position -> Tilt
6) Gobo -> Gobo1 -> Gobo1
7) Gobo -> Gobo1 -> Gobo1_Pos
8) Gobo -> Gobo2 -> Gobo2
9) Control -> Control -> Reset

⑦ The last two functions, Pan Fine and Tilt Fine, do not need to be added (16bit channels do not need to be added). You only need to set the Fine channel number in the corresponding function in the table: the Coarse of each parameter in the table refers to the channel number, and Fine refers to the 16bit channel number of the corresponding parameter. If there is no 16bit channel, it defaults to None;

⑧ Next, set the initial value of each parameter (Default), which ranges from 0% to 100%, so the setting should be based on a percentage value; You can view the detailed description of the DMX channel for the lighting fixtures, view their initial values, and set:

1) Iris - Open -50%
2) Pan - Center -50%
3) Tilt - Center -50%

⑨ Next, set the Highlight value, which is a personalized feature that allows the lamp to emit white light directly without affecting the pattern, etc. Of course, you can also customize the style:

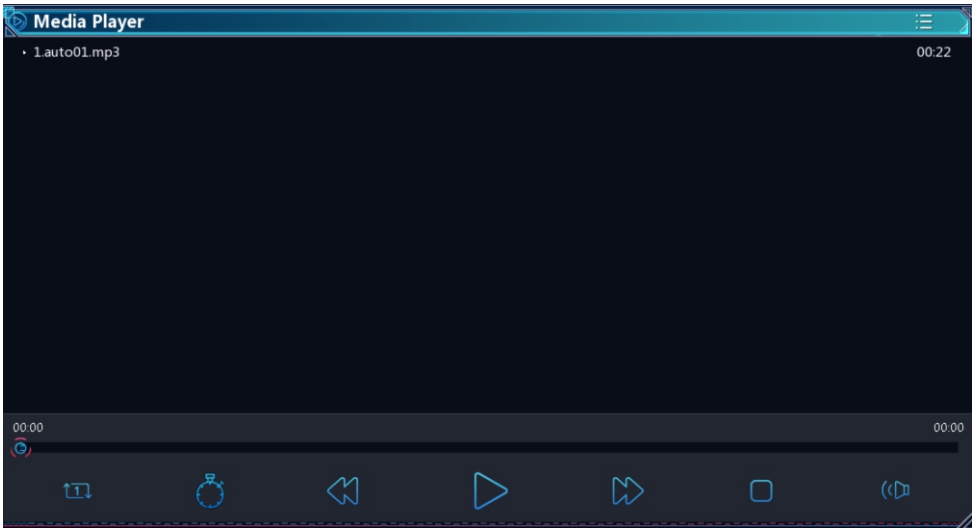
1) Color1- Open -0%
2) Prisma1- Open -0%
3) Dim - Open -0%

⑩ In this way, the lamp library is basically completed. Close the lamp library editing window, add lamps, and connect them to test whether the new lamp library can be used normally.

⑪ If there are no physical lighting fixtures, you can check whether the output Dmx value is correct through the Dmx window during control.

3.15. Media Player

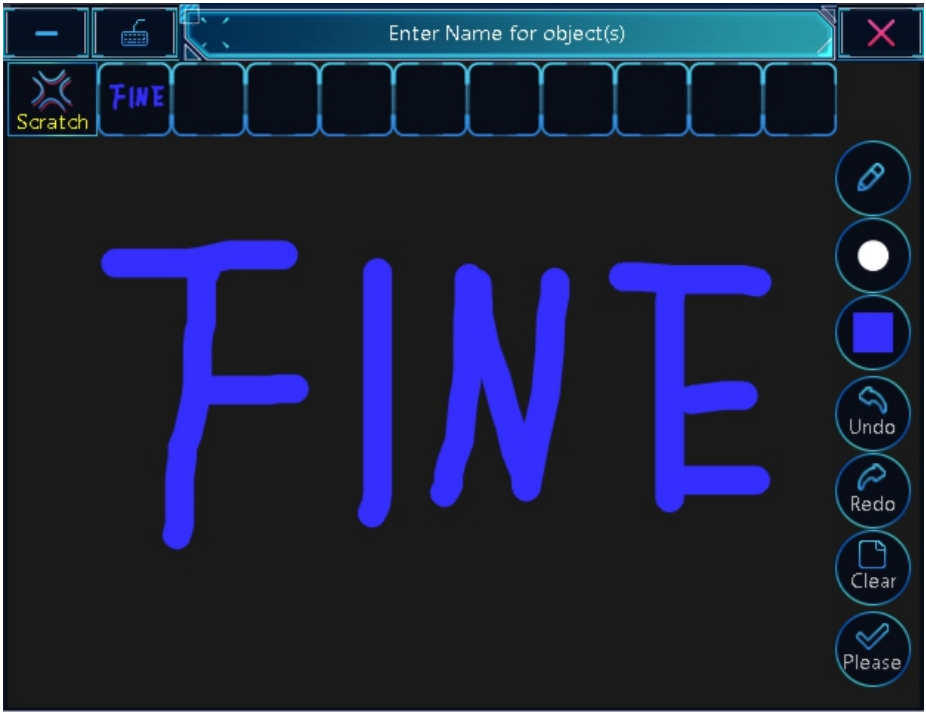
- Media players can play various audio and video formats, such as MP3, WMV, MP4, AVI, MPG, etc.
- Click on the blank space on the screen to open the window: Other ->Player, as shown in the figure:



- Click on the **add** icon button in the upper right corner to add the audio or video you want to play.
- While playing audio and video, you can also synchronize to the time code by simply opening the time code synchronization button (second from the left of the bottom button).

3.16. Scratch

- Scratch is an extension function for naming objects. When naming objects, you can choose to name them with Scratch, such as command sequences
- Enter the command: Assign Assign Seq 1 Please. In the pop-up input box, select the Scratch mode:

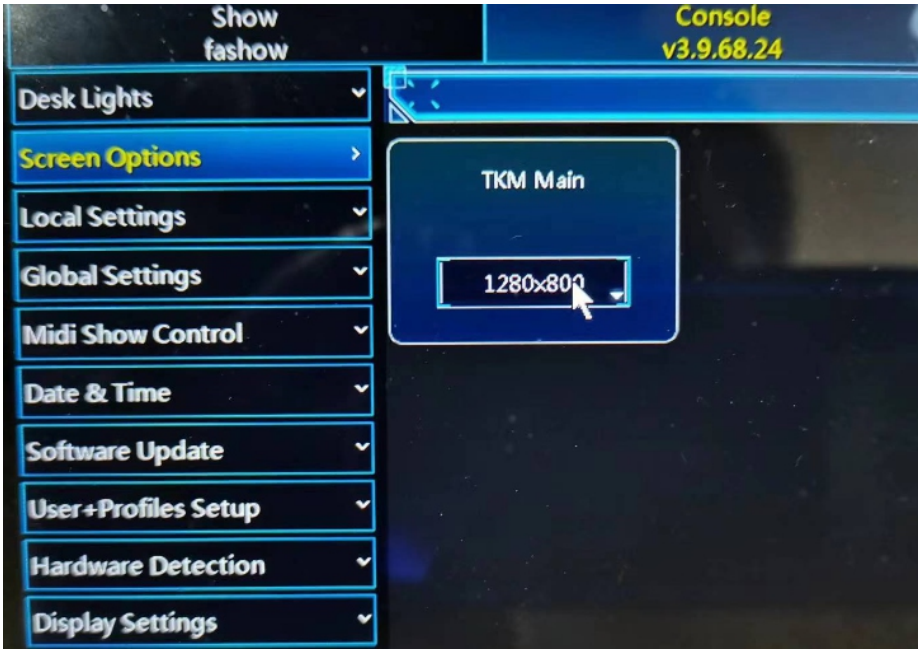


3.17. TEKMAND Multilingual Operating System

- Press Setup, select **Console->Local Settings->Language and Region**, and select the corresponding operating language.

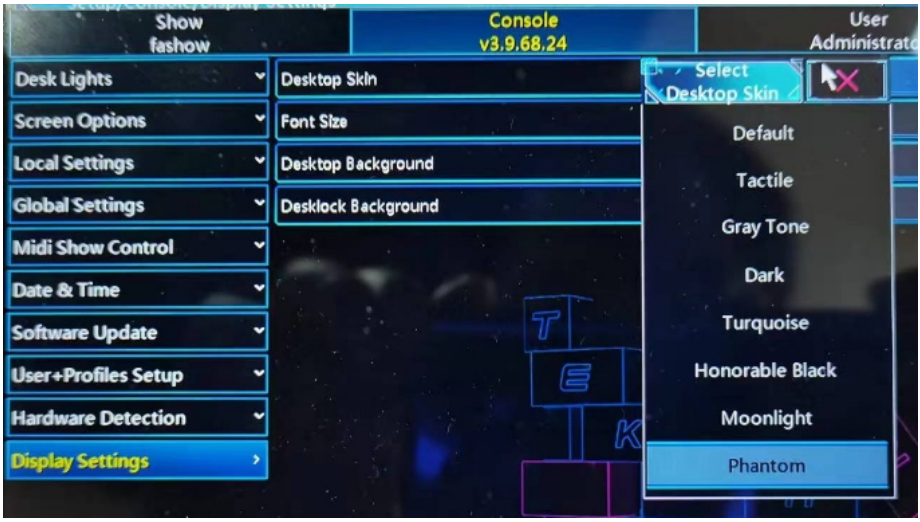
3.18. Resolution (LINUX NANO)

• Press Setup, select **Console** -> **Screen Options** -> **TKM Main**, and choose the corresponding resolution.



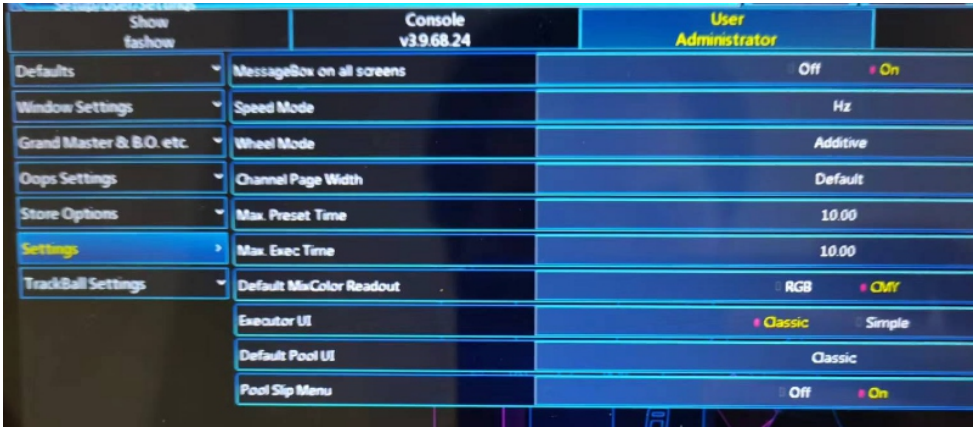
3.19. Desktop skin

• Press Setup, select **Console** ->**Display Settings** ->**Desktop Skin**, and choose the corresponding skin.

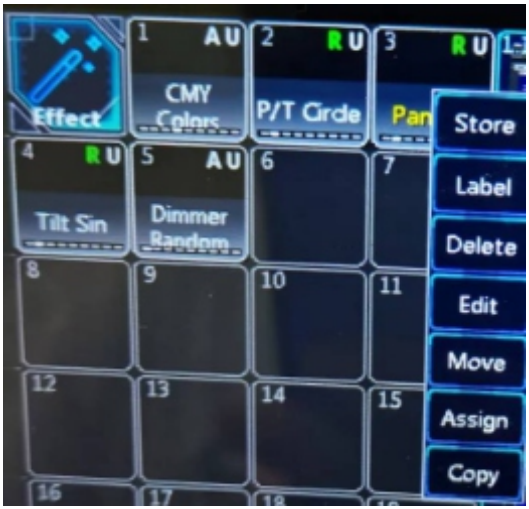


3.20. Pool slip menu

• Press Setup, select **User** -> **Settings** -> **Slip menu**, and turn on the slip menu function.



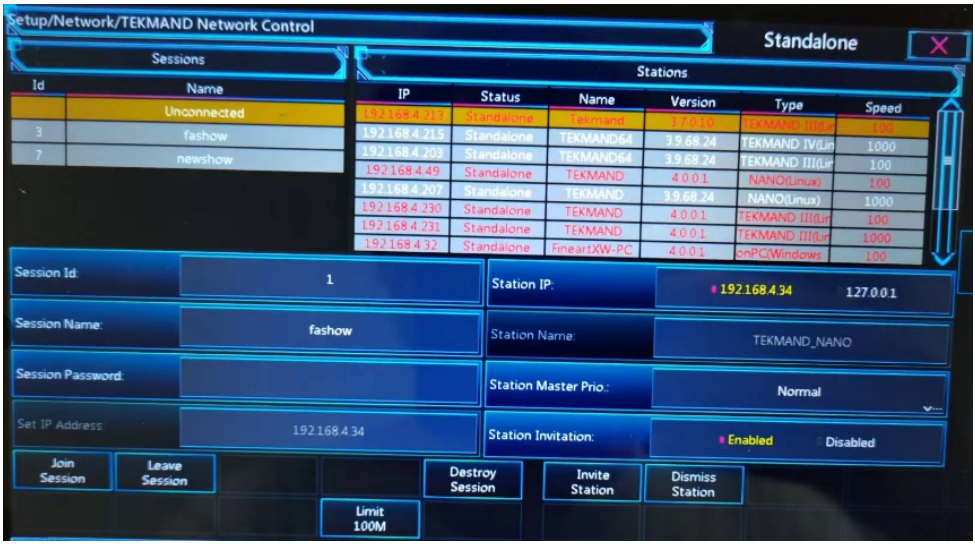
• In the user-defined area, open objects such as Pool Effects or Presets Dimmer. On the edited effects or saved presets, slide the mouse down to pop up a list, and select the desired function "Save - Command - Delete - Edit - Move - Assign - Copy".



4.TEKMAND network

4.1. TEKMAND network connection

• Press Setup and select **Network** -> **Tekmand Network Control**. This menu is mainly used to create or join workgroups, as well as invite or disconnect other workstations.



① Display the current status of the control console;

② Display the currently started Sessions, and "Not Connected" displays workstations that are not currently joined to the Sessions ;

③ Display the workstation of the currently selected Sessions. The Sessions list displays the number and name of the Sessions. The status of the control panel will only be "master", "slave", or "independent". Corresponding workstations in the Sessions, including IP address, status, name, version, type, and other information.

4.1.1.Setting options:

① Sessions number: Set the Sessions number between 1 and 32, and cannot set a number that is already in use;

② Name: Set the name of the Sessions ;

③ Password: Allow password setting;

④ IP: The IP address of this machine must be modified without connecting to the Sessions; After modifying the IP, it takes effect after restarting;

⑤ Name: Local name;

⑥ Priority: Priority setting; This determines who will be the host when the host is disconnected;

⑦ Invitation: When enabled, other Sessions can directly join this machine. If disabled, local operations must be performed to join the Sessions ;

⑧ Create/Join Sessions : Join the selected Sessions . If no Sessions is selected, create a new Sessions ;

⑨ Exit Sessions : Disconnect or exit the Sessions ;

⑩ Inviting Sessions : Inviting workstations to join the current Sessions ;

⑪ Disconnect Sessions : Remove the selected workstation from the current Sessions ;

⑫ Limit 100M: Limit the network speed of the console to 100M (commonly used for NANO's workgroup to unify the network speed to 100M) ;

⑬ Interface settings (LINUX NANO): View the console interface and wireless network connection.

1) View the console interface.

2) Wireless search window, wireless network connection.

4.1.2. Wireless connection

① Click the Wlan button to pop up a wireless search window.

② Click the open button.

③ Click on the name and enter the password.

④ The bottom of the name displays' connected ', and a check mark' √ 'at the end indicates a successful connection.

⑤ Select the refreshed IP from the IP list in the TEKMAND network control window, restart the console, and successfully apply.

4.2. Connection to DPU

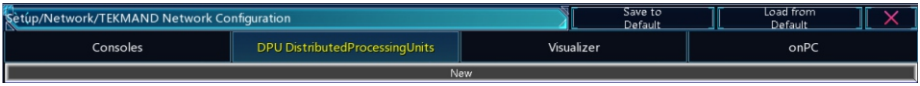
4.2.1.Connection to DPU

- The IP of the DPU and the IP of the control console must be in the same network segment, and the software version must be consistent in order to connect and use it normally.
- The DPU can expand parameters and output from the DMXs, and share the data processing of the control panel.

Specific steps:

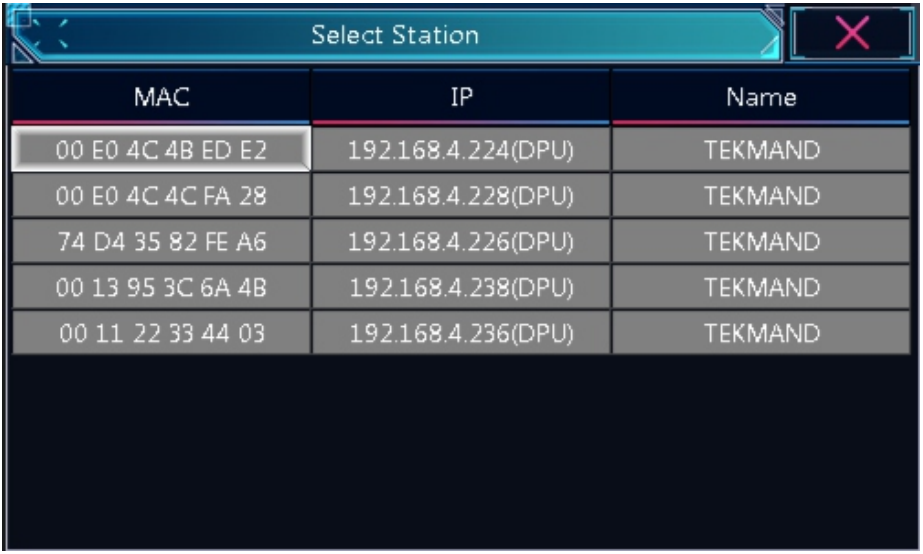
① From the console, enter **Settings->Tekmand Network Configuration->DPU**;

1) The open window is shown in the figure:



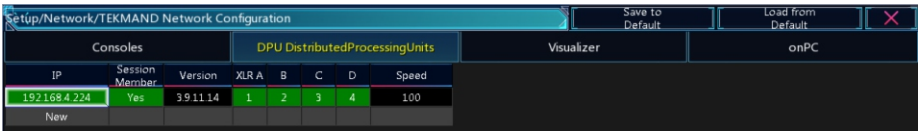
② Click the **Add** button, or right-click **New**;

1) Pop up a list of DPUs connected to the network, such as:



③ Click to select the DPU to add. If no DPU is displayed in the current list, it is possible that there is no Normal connection or IP address error;

1) After adding DPU, the window will display as shown in the figure:



④ Sessions members;

1) The console starts uploading data to the DPU, and then the row corresponding to the DPU in the table will turn green, indicating a successful connection.

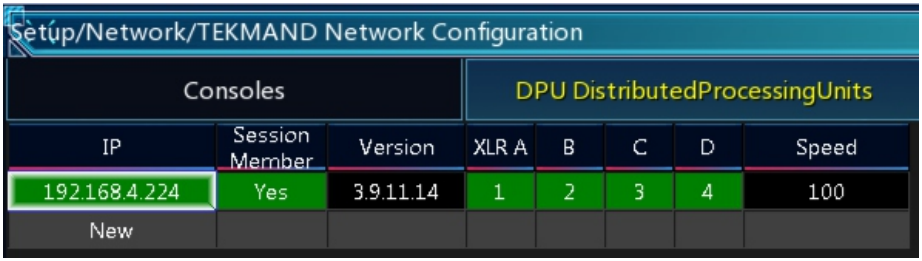
4.2.2. DPU Port Configuration

● The DPU has a total of 8/16 DMA ports, which can be configured as input or output.

● Specific steps:

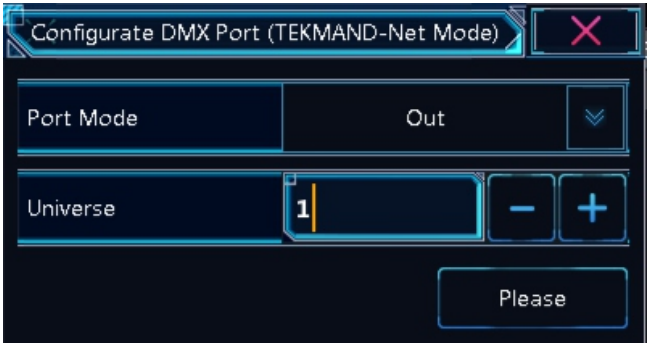
① From the console, enter **Settings->Tekmand Network Configuration->DPU**;

1) The open window is shown in the figure:



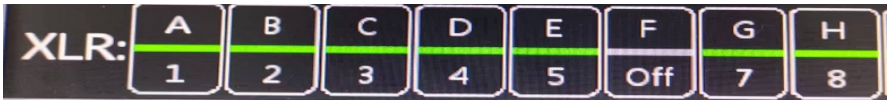
② In this window, the configuration information of each port can be displayed. Right click on any port to modify its configuration;

1) The open DMA port configuration window is shown in the figure:



③ Set "input, output, or off" in port mode, and set the corresponding matching line for the line number.

1) The status of each port can be seen on the DPU, as shown in the figure:



2) Green represents output, yellow represents input, and gray represents off.

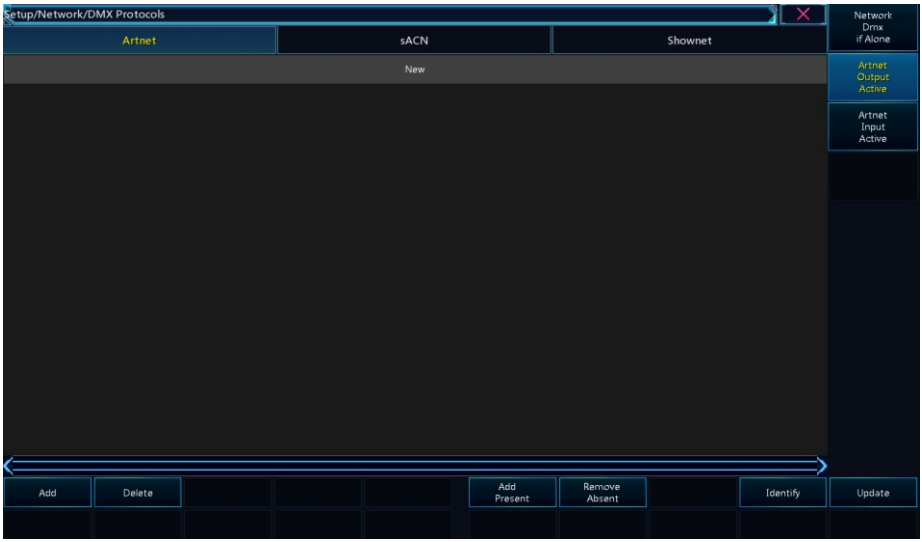
4.3. Art-Net Connection

4.3.1.Connection

- Specific steps:

① From the console, enter **Settings** -> **Network** -> **DMX Protocols** -> **Art-Net**

1) The open window is shown in the figure:

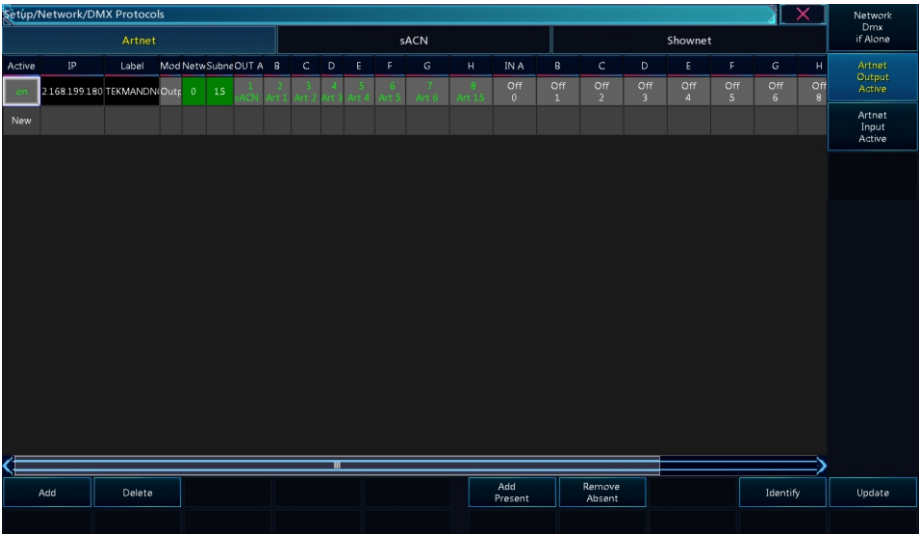


② Click the add button or right-click to create;

1) Pop up a list of Art Net connected to the network, such as

③ Click to select the Art Net device you want to add. If there are no Art Net devices displayed in the current list, it is possible that they are not connected properly;

1) After adding the Art Net device, the window will display as shown in the figure.



2) Set the console to "Master Section", activate Artnet to "yes", and Artnet output activate to "light up".

3) Mode: outputunicast or outputbroadcast mode can be set.

4) Upload data from the control panel.

4.3.2.Art Net Port Configuration

① The port configuration is normal, with the output port in **green font** and the input port in **yellow font**.

② The network configuration line is the same as the ARTNET device.

③ The subnet value ranges from 0 to 15 and remains the same as the ARTNET device.

④ Output/input port configuration, as shown in the figure:

1) Output/Input: divided into open and closed states.

2) Local universe: The line value of the lighting fixtures connected to the control panel, with a value range of 1-512.

3) Art Net universe: The port number of the TEKMAND Node device, with a numerical range of 0-15 (cannot have the same port value).

4) Protocol: divided into Art Net protocol and sACN protocol.

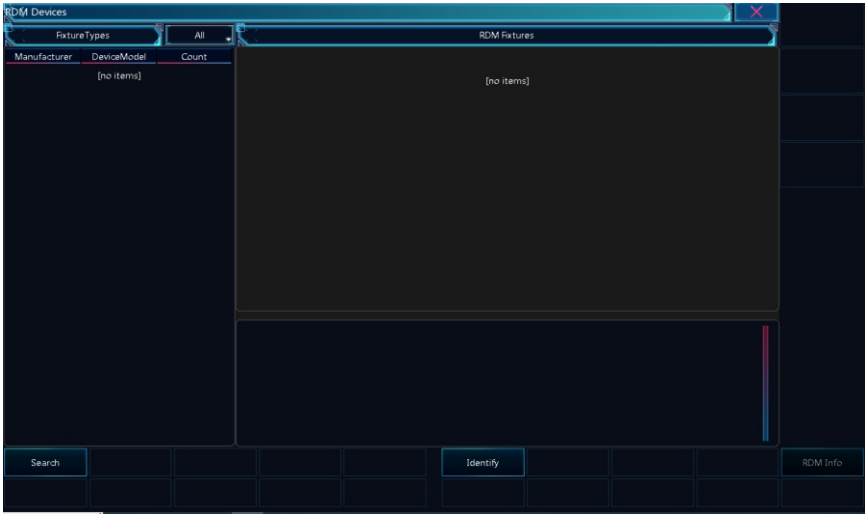
5) Merge mode: divided into HTP and LTP modes. Set the port mode to "input, output, or off", and set the corresponding line number to match the connection line.

Attention: Two local lines of the same device cannot be assigned to one Art Net line at the same time, which may cause conflicts with unclear message transmission.

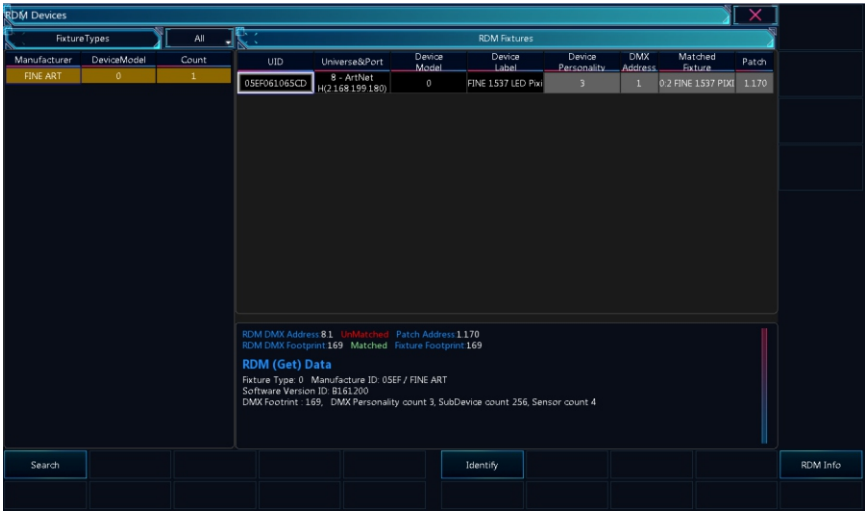
4.4. RDM Search

4.4.1.Open RDM Devices

- Click on Settings -> Patch & Fixture Schedule -> RDM Devices to open the RDM Devices window.



4.4.2.Use RDM Devices



1. Click on Settings -> Patch & Fixture Schedule -> RDM Devices, and the RDM Devices window will pop up.
2. Click search, and the FixtureType interface will display all RDM FixtureType by default.
3. Open the RDM device selection list, select the desired RDM device, and display the type of RDM FixtureType connected to the device.

4. Select the Fixture on the RDM Fixture interface, click on Identify, and the indicator light of the RDM Fixture will flash, indicating that the connection is normal.

5. Select the Fixture on the RDM Fixture interface.

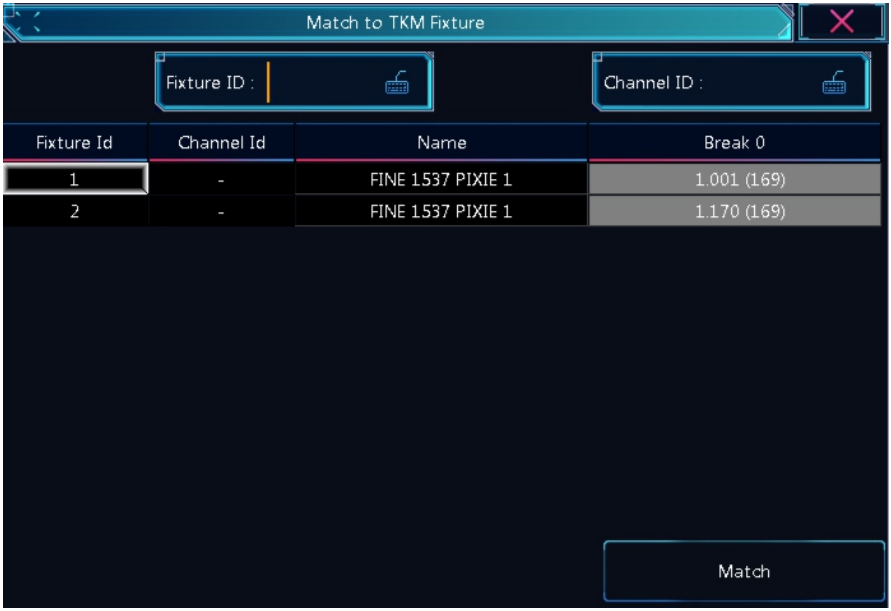
6. Edit channel mode and remotely change the channel mode of RDM fixtures.

7. Edit the DMX address and remotely change the DMX address of RDM fixtures.

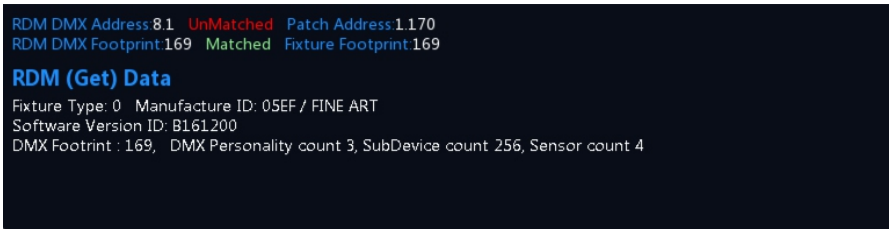
8. Edit the connection address and change the DMX address of the performance fixtures.

9. Edit matching fixtures to match the DMX address of RDM fixtures with the DMX address of performance fixtures.

10. Edit and match the fixtures, open the matching fixture window, select the DMX address that needs to be matched or fill in the fixture number/channel number, click match to match the DMX address of the RDM fixture with that of the performance fixture, as shown in the following figure.

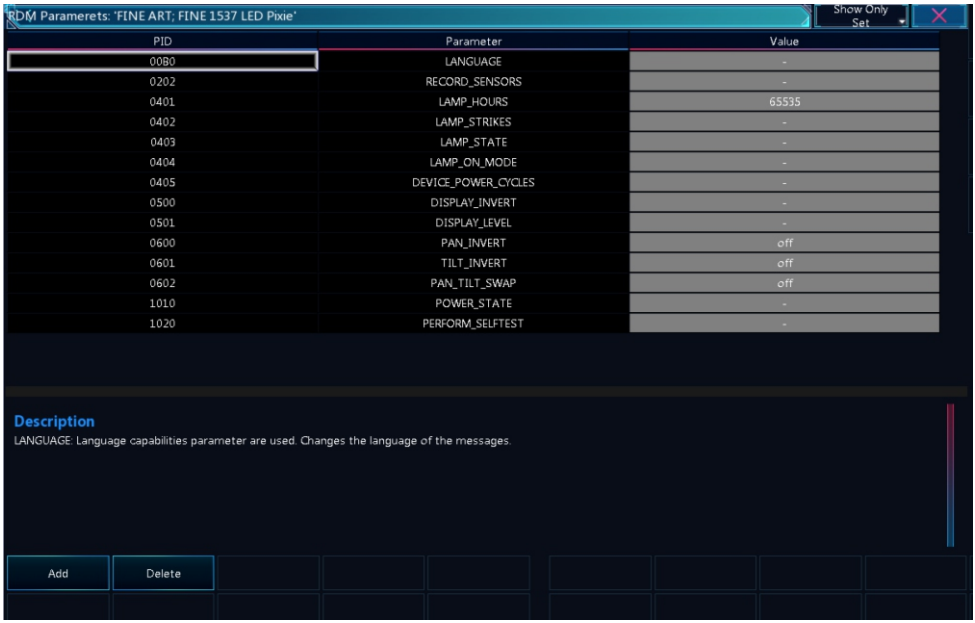


11. The bottom interface of the RDM fixture, where the address and number of channels are consistent, indicates a successful match and is displayed in green. Otherwise, it is displayed in red.

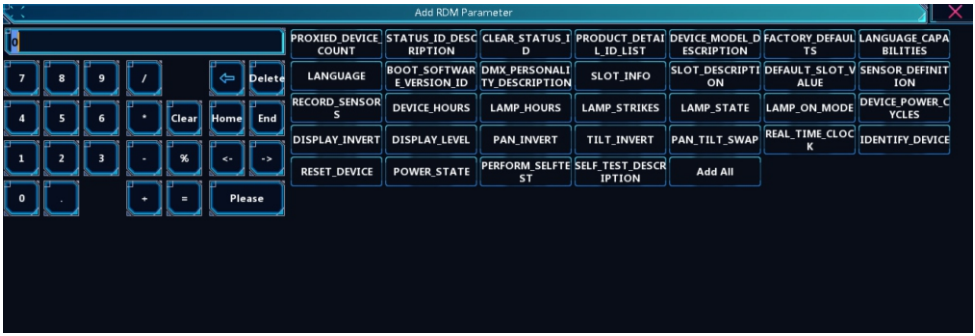


4.4.3.Use RDM Devices

- The steps for using the RDM parameter window are as follows.



1. Click on Settings -> Patch & Fixture Schedule -> RDM Devices -> RDM Info, and the RDM Parameters window will pop up.
2. Click 'Add' to bring up the window for adding RDM parameters. Select the parameters that need to be displayed, as shown in the following figure.



3. Click delete to remove parameters that do not need to be displayed.

4. Select the options that need to be classified and displayed in the display selection list.

① Show All: The RDM parameter window displays both modifiable and non modifiable parameter items.

② Show Only set: The RDM parameter window only displays modifiable parameter items.

③ Show Only Get: The RDM parameter window only displays unchangeable parameter items.

5. In the RDM parameter window, select the parameter whose value needs to be changed, and edit the value column to change the value.

4.5. More content

- More teaching content can be viewed in the TEKMAND software by opening a window -> system -> help as shown in the figure.