USER MANUAL

——1024 USER MANUAL

一. Overview

1.1. Description

1024 Lighting Console can control 96 Fixtures or 96 Dimmers at same time. With Fan mode, built-in graphic effect, it can easily achieve X/Y circle, Color built-in effect, Iris built-in effect, Focus built-in effect, RGB rainbow effect, and etc. Can run 10 playback, 10 Built-in shape simultaneously. Playback can run by playback fader or playback button. And its use R20 Format Library. Can also Read or backup data by U-disk.

1.2. Specification

DMX512 Channel	1024
Fixture	96
U-disk Format	FAT32
Swap Pan/Tilt	Support
Reverse Fixture Channel Output	Support
Fixture Channel Slide Model Switch	Support
MAX Channel	40 Primary+40 Fine
Library Format	R20
Master Fader	Global、Playback、Fixture
Immediately Blackout	Support
Built-in Shape	Total 134, including Dimmer, Pan/Tilt, RGB, CMY, Color,GOBO,Focus，Prism
Shapes run　Simultaneously	10
Playback run　Simultaneously	10
Scene	60
Scene Step	600
Scene Time	Fade in、Fade out、LTP Slide
Shapes for each scene	5
Channel Value by Wheel	Support
Channel Value by Fader	Support
Dimming by Fader	Support

二. **Install**

2.1 Product and Accessories

Standard		Optional
1024 Lighting Console	U-Disk	
Power Supply	Gooseneck Lamp	Flight Case
Dustproof Cover	User Manual	

Note：

1）Lighting Console must connect the protective ground wire

2）Ambient Temperature: -10℃-40℃。

3）Drinks and beverages don't placed on Lighting console

4）During transportation should package well

5）Pay attention to moisture and dust prevention

6）If it has not been used for a long time, please carefully check the equipment before reuse.

7）In case of any abnormality of the equipment, immediately unplug the power supply and stop use

2.2 Connect

1) 4 DMX512 Signal XLR Output,divided into 4 DMX512 Output AB/AB.All AB/AB are independent output signal interfaces, which are three-core XLR structure. The 1 pin of the XLR seat is the signal ground wire, the 2 pin is the signal negative end, and the 3 pin is the signal positive end. (The output interface can be changed to five-core output according to requirements)

2）DMX512 connecting cable adopts shielded twisted pair cable. The shielding net of the cable is connected to the first pin of the XLR plug, and the twisted pair (distinguished by different colors) is connected to the 2 and 3 pins of the XLR plug respectively. The positive and negative poles should not be connected in reverse.
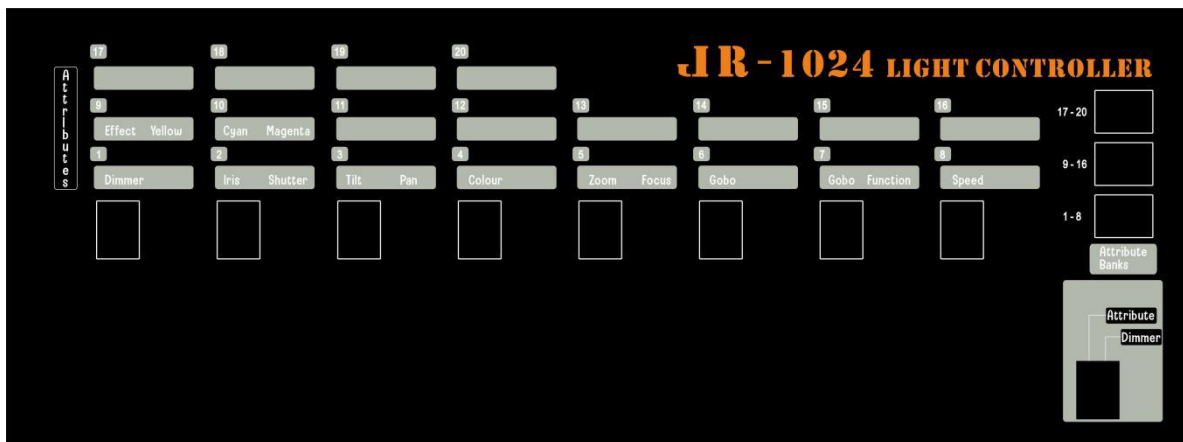

Lighting console

Socket Pin	Cable Core
1	Shielding Net
2	Signal Negative
3	Signal Positive

三. Operation

3.1 Panel Introduction

The console is mainly composed of seven functional areas.

1）Attribute Area： Including 8 Attribute Button and 3 page turning key of attributes

One Attribute button including 2 attribute, the 2 attribute is controled by wheel A&B. When fader model switch to "Fader Mode=Dimming(Program)",the attribute value can adjust by A/B wheel, can also adjust the brightness by fader.When fader model switch to"Fader mode=Attribute"， the attribute fader can be used to control the corresponding attribute. This console can control up to 40 attribute functions of a single fixture. The attribute functions are set according to the manufacturer's Fixture channel.

2）Fixture Area：16 fixture buttons、16 preset attribute fader and 6 turning page button of fixtures.
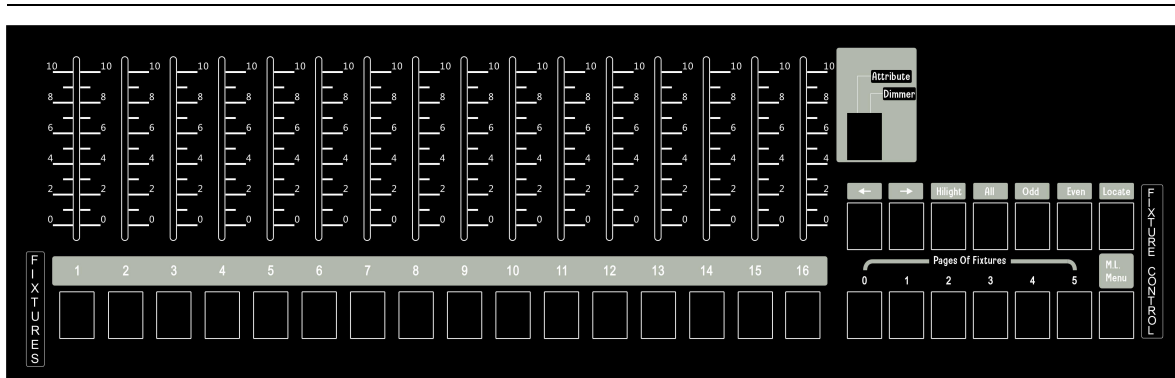
Can patch MAX 96 fixtures and 96 dimmers. Each page can patch 16 fixtures, more than 16 fixtures can turn to next page. The 16 preset faders can dim the corresponding fixtures below, and also can modify the corresponding attributes.The button to switch the function of　Attribute and Dimmer on the right of preset fader, which blue button with red and green double indicator light . When the "green" indicator light is on, the preset attribute fader is used for dimming, and the initial page of the menu will also prompt "Fader mode=dimming (performance)" or "Fader mode=dimming (programming)"; When the "red" indicator light is on, the preset attribute putter is used for attribute modification, and the menu initial page will also prompt "Fader mode=attribute".

3）Function Area：It can perform operations such as saving scene, copy/import, Patch Fixtures, built-in graphic , fan mode, scene time editing, scene deletion, etc.
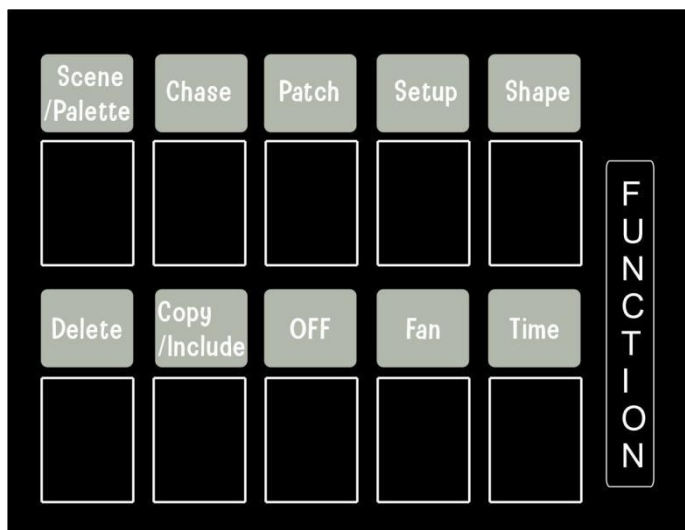
These buttons have indicator lights to indicate whether the key is activated. When the red indicator light is on, the function of the key is activated. When the red indicator light is off, the function of the key is deactivated.

❖ **Scene/Material:** Activate this button can save scene or material
❖ **Chase：** Activate this button can save chase or expand multi-step scene.
❖ **Patch：** Activate this button can patch fixture or dimmer, repatch fixtures, check patch information or modify　fixture parameters.
❖ **Setup ：** Activate this button can delete the performance files, update the version, manage the library, check the system information, backup or read the data and etc.

❖ **Built-in Shape**：Run built-in shapes(Pan/Tilt, RGB...), Modify effect parameters (such as speed, interval angle, wave, etc.)

❖ **Delete**：Activate this function can delete playback, material and related.Under patch manual,can delete fixtures or dimmers. Under Shape manual, can delete running built-in shapes. Under Chase manual, can delete one step in a multi-step chase.

❖ **Copy/Include**：Active this button can copy or include scene.

❖ **Cancel Programming**：Activate this button can cancel all Fixtures' attribute in programming area, to ensure that it is not recorded in or cancelled from the scene or material.

❖ **Fan**：Activate this button can   make the attribute data of a row of fixtures diverge or gather like a fan. This effect is not a continuous action, but can be used as a fixed modeling effect.

❖ **Time**：Activate this button can edit the fade in, fade out and LTP time of chase.

4）Fixture Control Area：Including buttons of <Previous>, <Next>, <HiLight>, <All>, <Odd>, <Even>, <Locate> and <ML Menu>, which are functions to control the fixtures.

5）Playback Area：Including 10 playback buttons, 10 material buttons, 10 playback fader,5turning page buttons, 3 master fader and 1 blackout button.
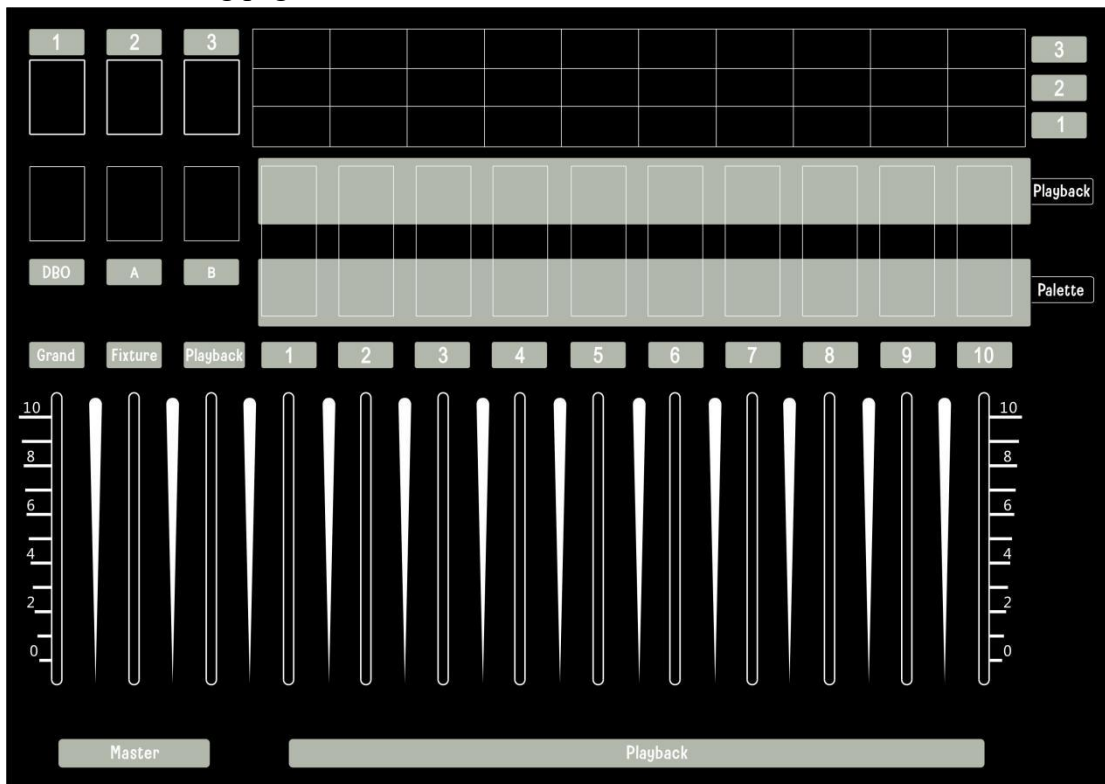

There are 6 pages of playback. Each page including 10 playback, total 60 playbacks.

✧ **Playback Fader**：Push the fader to run or close scene or chase. Up to 10 scene or chase can be output at the same time.

✧ **Playback Button**：This button can save or run scene or chase.

✧ **Material**：Use to save or use material.

❖ **Blackout**： When the blackout button is pressed and the red indicator light flashes, the data output on behalf of the console is 0. Press the blackout button again, and the red indicator light will be on and the data will return to normal output.

❖ **Master Fader**： This fader is used to control the dimming output of all fixtures on the console. When the fader is reset to zero, the dimming value output by the console is zero. Generally, this fader must be pushed to the MAX value. If it is not pushed to the MAX value, the red indicator light of the black field button will flash continuously.

❖ **Fixture Fader**： When the preset attribute fader mode is dimming, the fixture fader controls the output level of all attribute faders. Generally, this push rod should be pushed to the maximum value.

Playback Fader： This fader controls the output level of the playback.

6）Playback Control Area：Including 5 function button: Connect, Chase Parameter, Stop, GO+, GO-。
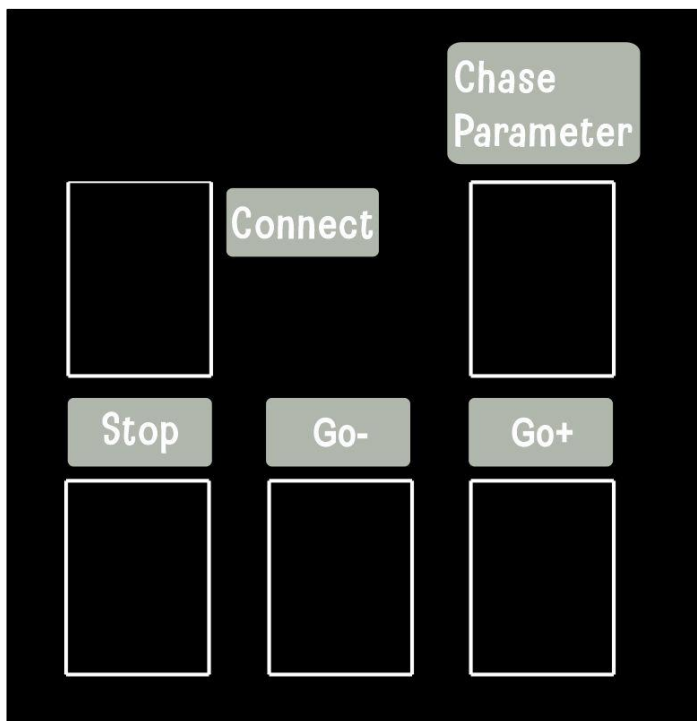
❖ **Connect**： It is used to connect multi-step chase, and can use A/B wheel to adjust the speed . When the multi-step chase is connected, the second line of the initial interface of the display screen will display the fader page and number of the currently connected multi-step chase.

❖ **Chase Parameter**：When   connected, the A/B wheel can be used to adjust the speed, direction, running mode and waiting time of the multi-step chase.

❖ **Stop**： When connected, the red indicator light of activating this button is on, the running chase can be suspended.

❖ **GO-**：When the connected chase is suspended, the running chase can run in reverse direction .

❖ **GO+**：When the connected chase is suspended, the running chase can run forward.
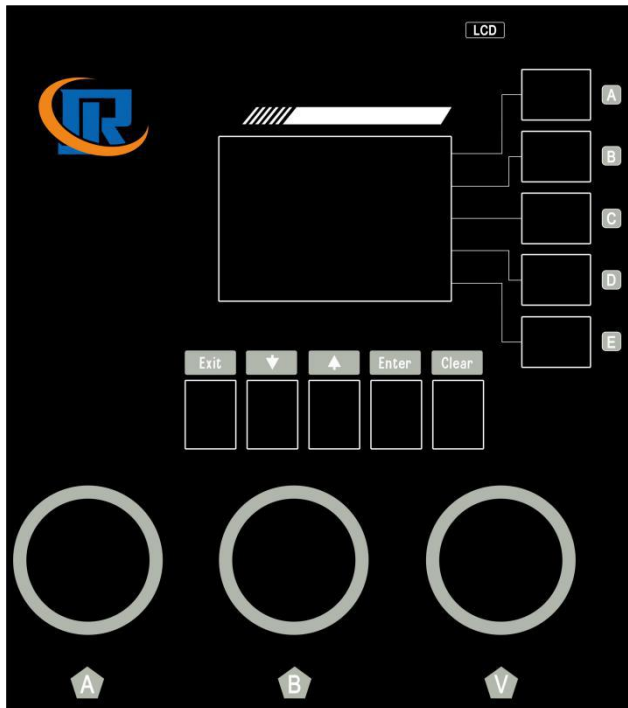
7）LCD Area： The LCD is to display the menu, implement the menu operations and clear the Programmer.

❖ **EXIT**：Exit or Cancel a function
❖ **↓**：Page Down.
❖ **↑**：Page Up
❖ **ENTER**：Save or Confirm function selection.
❖ **CLEAR**：After saving the programming data, press the Clear to clear the data in the programming area.
❖ **(A/B/C/D/E)**：Cooperate with other functions to perform the operation of option modification or selection.
❖ **Wheel A/B**：Modify the fixture attribute function, speed and etc.
❖ **Wheel V**：Modify data or parameters.

四． Setup

Press<Setup> enter Setup page, can read or backup data, update System, delete playback data, Switch Language, Manage Library and check Console Version.

4.1 Manage U-disk File

U-disk Format： FAT32
Use to Read or Save Console data.

1）Save Playback data to U-disk: After enter the Save Data menu, use the wheel V to modify the characters. The up and down buttons are used for cursor shift, and the<Delete> button is used for character deletion. After naming, insert the USB flash disk and press <Enter> to save.

2）Read data from U-disk: Insert the U-disk directly and select to read data.

3）Upgrade: Copy the upgrade file into the USB flash drive (under the root directory). Press the Setup button, select <A> for U-disk file management, and then press <C> to upgrade the console software from the USB disk. The console will automatically recognize whether there is an upgrade file in the USB disk. Find the upgrade file and prompt to confirm the upgrade console. After the upgrade, you can view the version in the system information.

4.2 Delete Data

Its used to delete all data, material data or playback data.

1）Delete Playback：Only delete Playback Area data, other data will be saved.

2）Delete Material：Only delete material Area data, other data will be saved.

3）Delete All: Will delete playback, material and patch information, only leave library files.

4.3 Switch Language

Press the corresponding <C> to switch between Chinese and English.

4.4 Library Management

Library：The console can save MAX 32 Library. If more than 32 library, need delete unnecessary library first.

1) Enter Library Management - delete a single fixture library.

2) If there are more than 5 libraries, use <↓> and <↑> to turn pages.

3) Use the corresponding option button on the right side of the display screen to delete the selected library.

4) Press <Enter> to delete.

5) Delete all libraries: enter the library   management - Delete all light libraries - <Enter>. The console will delete all libraries.

6) Update Library: Insert the U-disk, click<D> to select the corresponding option key to update the internal library.

4.5 System Information

Press<Setup>, than Click <E> to check the console version information.

4.6 Setup Startup LOGO

1）LOGO Picture Format: Mono-bitmaps （*.bmp.*dib）

2）Update Operation: Insert the U-disk with the updated files, press <↓> ,<↑> and

<Clear> at the same time before starting the console. Release the button after the words is displayed on the screen.

图一

图二
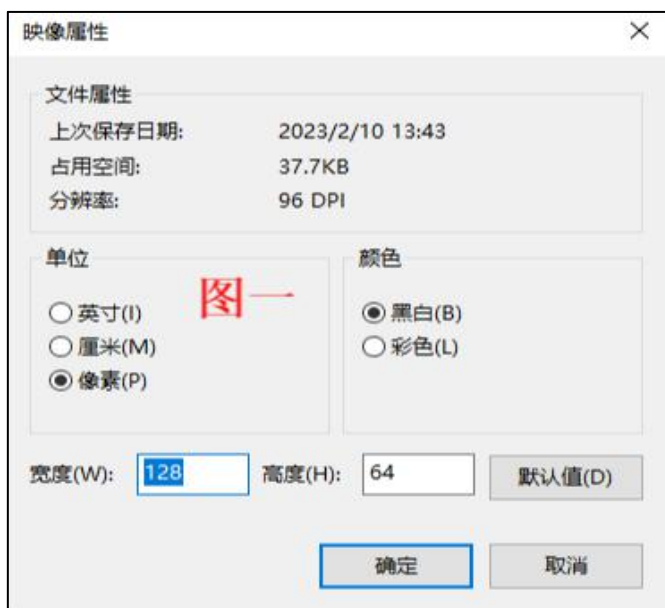
五． Patch

If need control fixture, need patch first.

5.1 Options of Patch Fixture

Some options can be set in advance when patch fixtures.

5.1.1 Channel Invert
Reverse an attribute of the fixture so that the output is full when it is set to zero.
Reverse function can be set for all properties of fixtures.
1) Press<Setup> enter menu
2) Press <D>, [Fixture Parameters]
3) Press <B>, [Set Invert]
4) Select fixture and select attribute, then press <C>or <D>to modify

5.1.2 Instant Mode
When the fades LTP (movement) channels between two memories, the LTP values normally

change smoothly. Can set Instant mode to make the channel snap instantly to the new value.
1) Press <Setup> enter menu.
2) Press <D>,[Fixture Parameters]
3) Press<C>, [Instant Mode]
4) Select fixture and select attribute, then press <C>or <D>to modify

5.1.3 Exchange Pan/Tilt

If some fixtures mounted sideways, it's can swap the pan and tilt channels.

1) Press <Setup> enter menu.
2) Press <D>,[Fixture Parameters]
3) Press <C>, [Exchange Pan/Tilt]

5.2 Patch Dimmer

Each Fixture button can patch one or more dimmers.

1) Press <Patch>,then choose [Patch Dimmer].
2) An address will be displayed at Line 2 on the screen for patching. Wheel <V> to change the address; Press [D] to automatically achieve a suitable address.
3) To patch a single dimmer, press a handle Fixture button. To patch a range of dimmers, hold down the Fixture button for the first dimmer in the range, then press the last Fixture button in the range. The range of dimmers will be patched to sequential DMX addresses.
4) To patch another dimmer to the same handle, enter the new DMX channel and press the button again

Users can patch multiple dimmer to the same Fixture button, choose the same Fixture button again after adjusting to the next address through wheel<V>.

5.3 Patch Fixture

Computer Fixture is more complex than dimmer. Dimmer have only one controllable attribute--Brightness. But Computer Fixture have many attributes, such as dimmer, color, Pan/Tilt and etc. Fixture with more than one DMX function channel.

1) Press <Patch>,then [Patch Fixtures].
If the libraries you need aren't inside the controller, copy the libraries files (*.R20) from computer to your u-disk root path.
2) Select a library from the controller or from a U-disk.
3) When the library in the U-disk is used, the selected fixture library will be automatically added or updated to the console.

4) DMX Address will be displayed at Line 2 on the screen for patching. Wheel <V> can change the address; Press [Auto calculate Addr.] to automatically achieve a suitable address.

5) Press fixture button to patch an   fixture. If need patch multi Fixture at same time, Press and hold a Fixture button, then press another fixture button.

✧ Different with Patch Dimmer, cannot patch Fixtures on same Fixture button.   If a fixture button already patch a fixture, the new patch will fail.

5.4 Patch Information

After patch, user can check patch information by following steps:

1) Press<Patch>
2) Press <E>, [Patch Information]
3) Will display Fixtures' Patch information.The first columns is the Location of Fixture, the second columns is the name of Library, the third columns is DMX Address.
4) On this page, can also press Fixture button to check related patch information.

5.5 Re-patch Fixture

Re-patch fixtures to different DMX address or different Output line, all the edited programs will not be affected and will be saved.

1) Press <Patch>
2) Press<C>, [Re-patch Fixture].
3) The screen will show the DMX address, can change by Wheel "V".The Output line can be changed by button <C>.
4) Press<Enter> to confirm.

5.6 Patch Prompt

1) Handle used：It indicates that the fixture button has patched a fixture already. Please re-select a fixture button for patching.
2) DMX used: The current DMX512 address has been used. Modify other unused DMX512 address.
3) Park：DMX512 address is used

5.7 Delete Patch

If patch information is wrong, all want to patch a new fixture on the button, can delete the patched fixture first.

1). If not in the Patch menu, press <Patch> to enter.

2). Press <Delete> to enter the Delete Patch menu.

3).Press a <Fixture> button to select a desired fixture or roll <Wheel Value> to select the desired address of the fixture, then, press <Enter> to confirm the deletion.

Note：

    1. Delete the fixture,related program information also be deleted. And after delete, its can not cancel.

    2. To delete the separate DMX channel function from the fixture, can enter the channel number instead of pressing the fixture button, and then press the<ENTER> to confirm the deletion.

六.   Fixture Control

6.1 Select Fixture

    1) **Select a single fixture**: Press the handle Fixture buttons for the fixtures you want. The LED in the Fixture button comes on for selected fixtures

    2) **Select a range of fixtures**: To select a range of fixtures, hold down the Fixture button for the first fixture then press the Swop button for the last fixture.

Note：

    1) **Stepping through selected fixtures one at a time**: If you have selected a range of fixtures, our console has functions to step through the selected fixtures one at a time. This can make it easier to program a range of fixtures because you don't have to select each one manually. Pressing <←> or <→> in "Fixture control area", it will select the fixtures in the range one at a time. If <HiLight> button is activated, The selected fixture from the range will light up, and the other fixtures will go out.

    2) **Activate previously selected fixtures**: To activate all the previously selected fixtures, press <All> in "Fixture control area".

    3) **Select fixtures at odd positions**: Press <Odd>, the fixtures at odd positions of the selected fixtures will keep selected, but, those at even positions will be de-selected. This is related to the order that you selected the fixtures before pressing <Odd>.

    4) **Select fixtures at even positions**: Press <Even>, the fixtures at even positions of the selected fixtures will keep selected, but, those at odd positions will be de-selected. This is related to the order that you selected the fixtures before pressing <Even>.

6.2 Modify Attribute

Fixture attribute refer to the functions of the fixture, such as PAN/TILT, color, dimmer, strobe, pattern and other functions. Use the button in the console attribute area to select. Adjust the attribute value through the A/B wheel under the console. The availability of fixture attribute depends on the fixture type. Regular lights have only dimming. The console can control up to 40 attributes for each fixture.

1）Select the fixture.
2）Select an attribute. Then, use Wheel A/ B to adjust the value. Or switch to Attribute mode to adjust the attribute value by fader.

6.3 Align and Flip

Can use Align function to copy the attribute of one fixture to another. The align function is very convenient for adjusting the attributes of multiple fixtures simultaneously. For example, set a row of fixtures to the same PAN or TILT position, or copy colors from one fixture to another.

6.3.1 Align Fixture
1)Select fixtures;
2) Press <Menu> in "Fixture control area"
3) Press <A>, all the attribute values of all the selected fixtures will be aligned to the first fixture.

6.3.2 Align Attribute
1）Select fixtures and select attributes;
2) Press <MENU> in "Fixture control area"
3) Then <B>, the currently selected attribute values of all the selected fixtures will be aligned to the values of the first fixture.

6.3.3 Flip Function

Flip function is mainly used for moving head light. "There are two possible positions for a computer light with a moving head at a certain point on the stage, horizontal and vertical, and the flip function is to alternate between the two.". This allows the fixture to move more freely without terminating horizontal movement

1) Select the fixture that needs to be flipped PAN/TILT
2) Click the "Menu" button in the fixture control area.
3) Click <C> to confirm the flip.

6.4 Fan Mode

Fan mode automatically spreads out the values on a selected range of fixtures. If used on pan and tilt, the result is spreading out "rays" of light beams. The first and last fixtures of the range are affected most, and the central fixtures are affected least. The amount of fan can be set using the wheels. As with shapes, the order in which you select the fixtures sets how the fan effect works. The fixtures you select first and last will be the ones which change most. If you use a group to select the fixtures, the order is that in which the fixtures in the group were selected when it was created. The fan effect, while normally used on pan or tilt attributes, can be applied to any attribute.

1) Select Fixture
2) Select fixture attribute (PAN/TILT, color, pattern, and so on).
3) Click <FAN> button in the function area. When the red indicator light flashes, the function is activated.
4) Set the value of fan divergence through the A/B wheel.
5) The controlled attributes are displayed at the bottom of the screen.
6) After completing, click <FAN> button again, and the red indicator light stops flashing to turn off the sector mode.

The Fan effect requires at least 4 fixture to achieve a better effect. If the number of fixture is singular, the middle lamps will not change in Fan mode.

❖ If you accidentally touch the button to turn on the Fan mode, causing abnormal adjustment of the fixture parameters, so turn it off as soon as possible after completion.

6.5 Fixture Menu

❖ Fixture   menu provides more convenient operation for fixtures

1）Align Fixture or Attribute： Check 6.3
2）Flip：   Check 6.3
3）Marco： Used to turn on or off lamps. This function requires preset switch bubbles and reset values in the fixture library.
4）Reverse ： Deselect the selected fixture without emptying the programming area.

七.　Scene

The console replay area can store up to 60 scenes or chase.
In the operation mode, the playback (scene or chase) can be run using the playback fader or button.
In programming mode, use the button in playback area to edit fixture attributes.

7.1 Record Scene

When selecting to control one or more fixtures, the console will record the modifications made. Can use wheel or material to modify the attributes of fixture, and the modified content will be stored in the editing area. When scene is saved, the contents of the editing area are stored in the single step scene. Other inactive attribute functions on the console will not be saved.
The console has two editing modes, "Save as Fixture" and "Save as Channel". When saving a scene, can modify the storage mode by pressing the<C> button on the right side of the screen.

Differences between the two modes:

　　(1) **Save by Fixture** – When any attribute of fixture is activated, all other attributes of the fixture will also be recorded in the editing area.
　　(2) **Save by Channel** – Only activated fixture attributes are recorded in the programming area. Save as channel has great flexibility and requires more pre programming work, as multiple single step scenes need to be combined to achieve results. Therefore, it is necessary to record relevant programs during the programming process in order to better access applications.

Note：
（1）Click <Clear> button, and all fixture data will be cleared from the editing area. Before scene editing, it is necessary to get used to pressing <Clear>button to avoid saving unnecessary lighting data. After finishing editing, you should also press the<Clear>button, as any function in the editing area will take precedence over the playback of the scene.

Save Scene：

1) Press <Clear> to clear the programmer.
2) Edit a stage effect of the fixtures. Built-in shapes can be added. A scene can record five shapes. Only those fixtures that have been edited can be included in the

Programmer;

3) Press <Scene>. At this time, the LED indicators of the <Playback> buttons without any scene stored will keep flashing; those with a scene will keep always on; and, those with a chase will be off;

4) Press <C> to select store by channel or store by fixture. Press <B>, if necessary, to highlight [Stage];

5) Press an empty <Playback> button to store. If you press a <Playback> button with a single step scene already stored, then, if will be overwritten by pressing <Enter>.

Note：

❖ Press the option <B>[Save Stage] to save the entire output of the console. When Save Stage is selected, this option will be highlighted

❖ The space area above the scene corresponds to each playback button and fader below, facilitating the user to label and identify.

7.1.1 Add Built-in Shape

Any built-in shape effects can be saved as part of a scene.

If the reference point of the built-in shape is not in the programming area (such as circle, PAN/TILT position...), and the built-in shape is a reference point, when saving a scene, only the built-in shape will be saved but the current reference point will not be saved. When run a scene, the built-in shape uses the current position of the fixture as a reference value, creating more different graphics. You can also use the "Save by Channel" mode without saving the reference point, or use the "Cancel Programming" function to achieve the same effect.

7.1.2 HTP & LTP

❖ The dimmer or brightness channel operates according to the principle of "High priority" (HTP). If multiple different scenes are opened in the HTP channel, the highest level value will be output. When the program push rod is pulled down, the HTP channel fades out

❖ Other channels operate according to the "latter first" (LTP) principle. The last modified value replaces any other values, so that the recently run single step program has output. When the program fader is pulled down, the LTP channel will not fade out normally. When the program begins to fade in, the LTP channel reaches its full value and remains until other values appear.

The fixture library   reflects whether the channel of a fixture is HTP or LTP. Generally, only the dimmer attribute is HTP, and the other attributes are LTP.

7.1.3 Playback Scene

Can run a scene by playback fader or button. (Before running scene, should be

accustomed to pressing the<Clear>button to avoid having fixture data in the editing area, as previous data may affect the effect of the scene data to be run.)

❖ Can run multiple scene simultaneously
❖ HTP (brightness) of scene fade in and out with the fader. The LTP (action) channel is executed immediately after the fader leaves zero.

7.1.4 Turn Page

When switching pages, the already running playback will continue to run. If need to stop the current page's running playback, can reset the playback fader to zero, and then restart to run a new program.

7.2 Edit Scene

Can edit any part of a saved scene, change the effect of the scene.

1) Click <Clear>button at the bottom of the display screen to clear the editing area.
2) Open the scene which want to edit and close other scenes.
3) Select the fixture and its attributes that need to be modified.
4) Click the<Scene/Material> button.
5) Click the<Scene>button of the scene being edited.
6) The display screen will display "A merges scene, and B replace scene.".
7) Click the option key<A>[Merge Scene] to modify the saved scene. Information that has not been modified will not be affected.
8) Click the option key<B>[Replace Scene] to replace the original scene. The scene will be deleted and the current edit area content saved as a new scene.

❖ "Save by Fixture", all fixture attributes that have been modified will be saved to scene with the current settings. If only need to save some attributes of the fixture,you need to select "Save by Channel "
❖ If a scene has used built-in shape, now select another built-in shape, and the original built-in shape will be deleted. If you need to avoid deleting the original built-in graphical effects, need to use the import function in the original one-step scene to load the new built-in shape into the editing area.
❖ When importing a scene, ensure that the playback fader of the scene is reset to zero.

7.2.1 Include

Import function can load a scene into the editing area. (Generally, only manually modified fixtures will be placed in the editing area.). Can recreate a new scene or use some of the data inside to avoid re-editing. This is very useful for editing similar scenes.

(1) Click <Copy/Include> Button

(2) Choose the Scene which need to edit

(3) Click <Enter>,import data into the editing area

7.2.2 OFF

<OFF> button can remove an attribute that has been stored in a scene, as if it had never been activated.

For example, a scene has been saved and the color has been adjusted to red. To cancel the red color in the scene, can use <OFF>button to turn off the red color in the scene. Can also use the<OFF> to remove other fixture attributes from scene.

1) Open the scene which want to edit, and close other scene.

2) Select the fixture want to modify.

3) Click the<OFF> button to enter the Cancel Channel application interface.

4) To cancel all editing data for the selected fixture, press the option <B>[Cancel Selected Fixture].

5) To cancel editing data for the selected attribute, press the corresponding attribute key, and then use the option<C>and<D>to cancel editing the attribute.

6) Click the "Scene/Material" button.

7) Press the<Scene> of the scene being edited to save the changes. Unchanged fixture attribute data will not be affected.

❖ Cancel program attribute will show on screen.

❖ Cancel program attribute can be restored by selecting them and setting value.

❖ Can also use this function to turn off material or attributes of the fixture.

7.2.3 Copy Scene

(1)Click <Copy/ Include> Button

(2)Click corresponding playback button which want to Copy

(3)Click an empty playback button to save the scene.

7.2.4 Delete Scene

1) Click <Delete>

2) Double click the corresponding playback button to confirm delete.

7.2.5 Time

Fade in, fade out and time can be set independently for a scene. The fader only functions on the HTP channel. The action time can be set for a separate LTP. The LTP channel is set to have no sliding steps and ignore the LTP fade in and out time when matching fixtures.

1) Click <Time>

2) Choose the scene which need edit time
3) Use Wheel V to adjust the value
4) Double Click<Enter> to confirm and <Exit> to cancel setting.
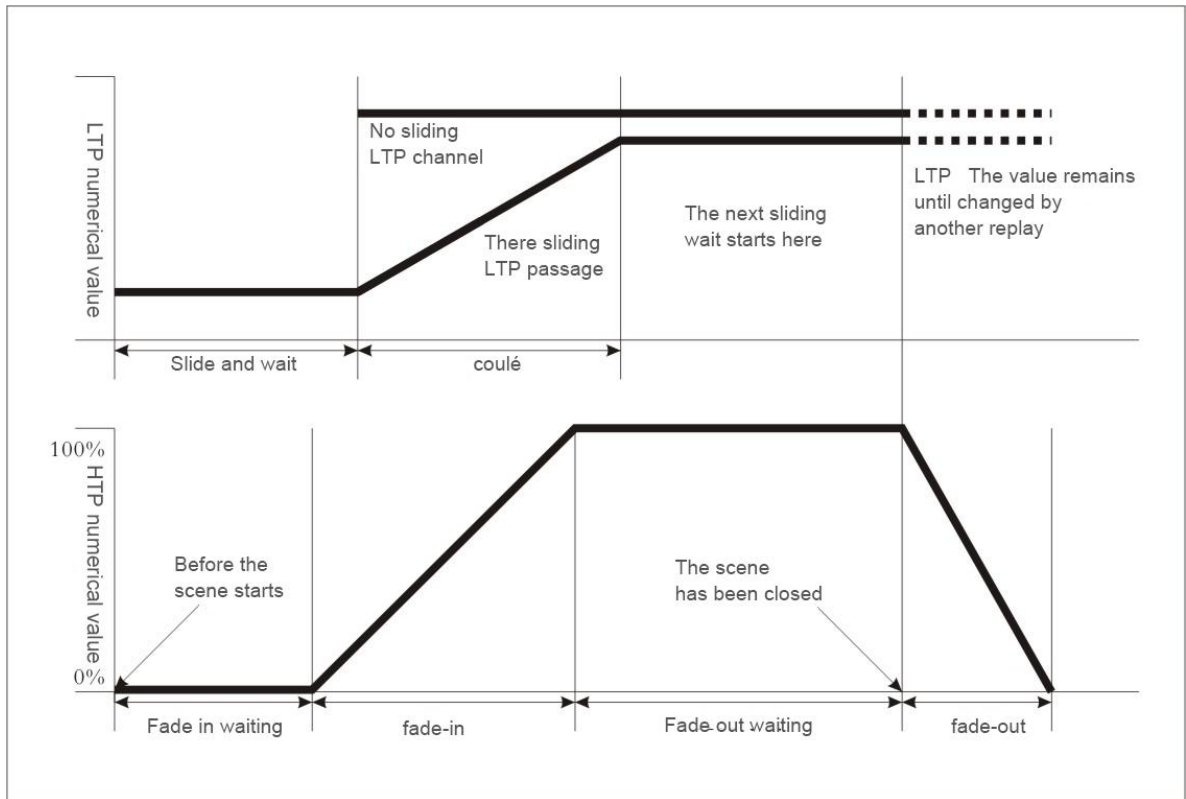
The time is affected by the scene operation mode:

1) **Mode 0** – No timing information is used. The HTP channels faded with the 0-100% position with playback faders.

2) **Mode 1 -** Channels fade as set by the HTP and LTP fade times (except Instant LTP channels). If you enter times for a Mode 0 memory, it will automatically change to Mode 1. If HTP times are set to zero, the HTP levels will fade with the fader

3) **Mode 2 -** HTP channels fade as set by the HTP times, or with the fader if times are set to zero. LTP channels are controlled by the fader position (except Instant channels). Set the LTP fade time to 0 to use this mode.

八. Chase

One Chase can contain up to 600 single steps.

8.1 Create Chase

Create chase need to edit a multi step program, build the lighting effects of each step in the multi step program, and then save it. The editor records the scene content at each step.Can manually set the lights to edit each step, or you can use the import function to load information from the edited single step scene

1) Click <Chase>
2) Edit the lighting effect
3) Choose empty playback button to save
4) Click <C> to save that step
5) Click <D> save as last step
6) Click <Clear>, then edit new lighting effect and save
7) After save Chase， click <Chase> to exit

Note：
1）After saving the scene, click the<Clear>button. Otherwise, when running the scene, the lighting effects retained in the programming area will overlap the scene, causing the scene to not be seen correctly.
2）The current number of chase steps will be displayed on the screen
3）When more than 10 playback, can turn page
4）Chase can use built-in shapes. If do not Clear the data when edit next step,the built-in will exit.

8.1.1 Run the Chase

Click playback button or push playback fader can run the chase.

1）Can run max 10 chase simultaneously.
2）All HTP (brightness) for a chase are controlled by fader. The LTP (action) channel executes a program action according to the sliding time after the fader leaves zero.

8.1.2 Connect

When a chase is added to run, it will connect automatically.

If the current connected chase is not the one that you want to connect, you can press <Connect> then <Playback> to connect.

If don't want to connect any chases, then, can press <Connect> twice to clear all the connections. Once the chase are connected, they can be controlled with <Stop>, <Go+> and <Go->. <Go+> and <Go-> are to control the playback direction. To store the running speed, press <Playback Parameters> then <B>[Save Speed & Dir].

8.1.3 Setup Speed, Slide and Direction

After running a chase, Wheel A/B are used to control the speed and slide of the chase.

1）**Speed**：In a chase, this speed refers to the time between steps. This time is a global time, and individual times for each step can be set in multiple steps

2）**Slide**： In a chase, the slide refers to the ratio of waiting time to sliding time within the time interval between steps. The three sets of data displayed on the screen are the fade in, fade out , and LTP slide. FF represents sliding time for the entire time, while the waiting time is 0; When the data is 50, 50% of the total time represents sliding time, and the remaining time is waiting time. Other values are similar.

✧ **Waiting Time**：For example, a fixture needs to run from point A to point B. If the waiting time is set to 5s, the fixture will stay at point A for 5s before starting running.

Slide Time：For example, if a fixturw needs to move from point A to point B, if the sliding time is set to 5s, the fixture will move from point A to point B in 5 seconds.

1) Use wheel A to adjust the time
2) Click <Chase Parameter>, then choose <A>to save

Note：

1) If running a chase and modify attribute of the fixture (such as changing the color or position of the fixture), click the<Connect>, and then click the option button<E>[Change mode of wheel A/B].

2) Set the speed at which the chase is restored to the programmed time, press the<Connect>, and then press the option key<D>[Clear Temporary Time].

3) The running direction of chase can be saved by click the<Chase Parameters>, and then click the option key<B>[Save Direction].

4) The running direction of chase can be manually controlled using<Go+>and<Go>.

8.2 Edit Chase

The console has chase editing system. After click <Chase>button, select a chase, expand its steps onto the playback button, and turn each step into a single step scene that can be run and edited separately.

1) Click <Chase>, then choose the playback button to edit
2) If chase more than 10 steps, need turn page.
3) After edit, can click the related playback button to save.
4) Then press <Chase> to exit.

8.3 Delete Chase

The operation of delete chase s same as delete scene. Click <Delete> first, the double click the playback button.

8.4 Time

8.4.1 Global Time

1）Click <Time> button, then click playback button
2）Can turn page by <↑>&<↓>， Click the corresponding A-E key to select the modified option, and use the wheel V to modify the data.
3）The time page has the option of a "link" function. When "Link=On", the multi-step scenario will automatically run step by step in sequence. When "Link=Off" is completed, you need to manually press<Go+>or<Go>to continue running
4 ） Click <Enter> to confirm save and exit. Click<Exit> will not save the change.
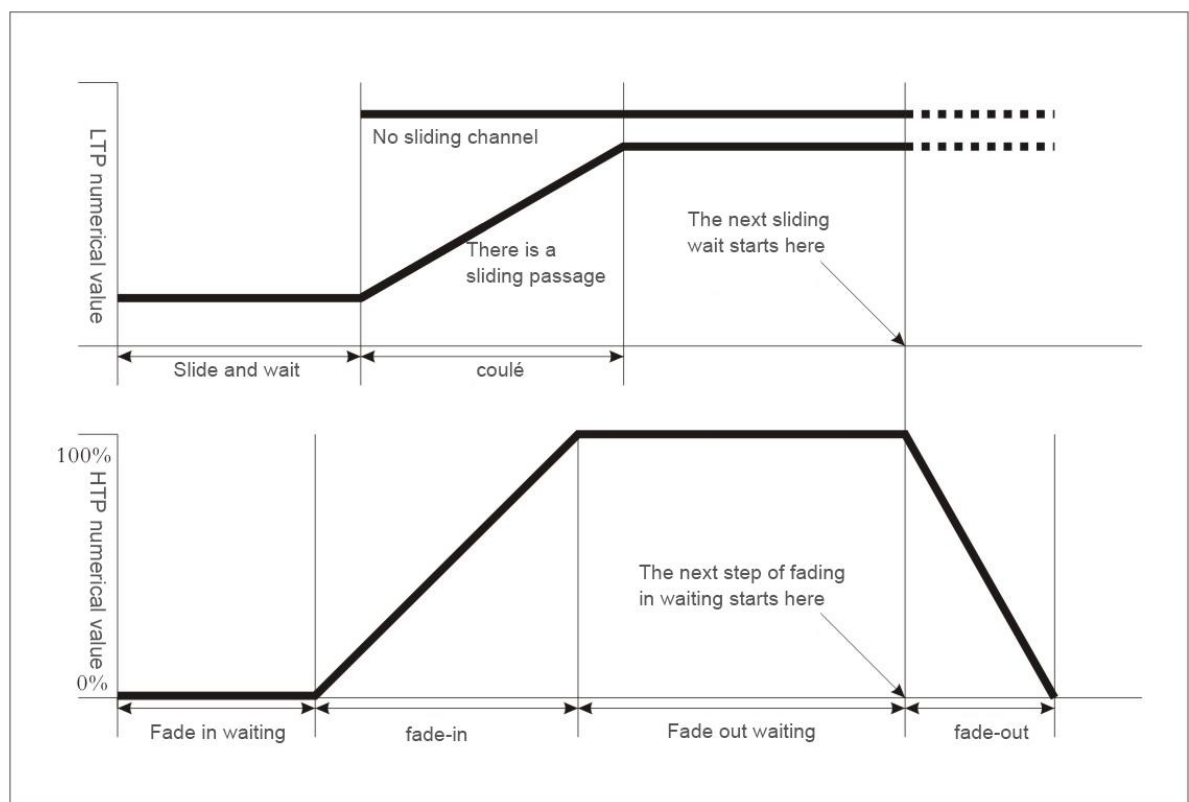
Time Setup：
[Wait Fade In] – The wait time before an HTP channel fading in
[Wait Fade Out] –The wait time before an HTP channel fading out

[Fade In] –The fade in time of an HTP channel

[Fade Out] – The fade out time of an HTP channel

[LTP Slope] – The fading time of an LTP channel

[LTP Wait] – The wait time before an LTP channel fading

[Connect] – If close the connection, then, the scene running will be paused at this step until <Go+> or <Go-> is pressed.

[Simple Step] – The global time of using multi-step scene

[Complex Step] – The special time for its own

8.4.2 Set Independent Time

Set the fade in and fade out times separately for each step. Each step of a chase can have an independent time. Can use the ability to expand chase to set the time for each step individually.

1) Click<Chase>, then click the playback button to expand the chase.
2) Click <Time>, then choose the scene which need setup time.
3) Can turn page by <↑>&<↓> ，Click the corresponding A-E key to select the modified option, and use the wheel V to modify the data.
4) Double click<Enter> to save.

8.5 Advanced Option

Each chase has options which can be set to affect the way it runs. Press <Chase Parameter>.

The options are:

[Save Speed] – saves the current speed of the chase (Adjust value by wheel A).

[Save Direction] - save the direction of the chase.

[Loop Playback/Bounce/Stop on final step] - makes the chase stop on the final step.
   If the final step is a blackout, the chase will appear to turn itself off, so you can just press Go whenever you want to make it happen again.

[Slide Time Options] - Allows to skip the first wait and/or fade of a chase.
   Skip first wait time (The wait time is missed when the chase is first turned on)
   Skip first wait and fade time (Both wait and fade times are missed when the chase is first turned on)

九. Palette

When programming, use the attributes of the fixture, such as Pan and Tilt, color, pattern, etc. Can quickly call up the saved material, without having to search through selecting attributes and adjusting by wheels each time. This console can save up to 60 materials.

9.1 Save Palette

1) Press <Clear> to clear the programmer.
2) Select the fixtures for which you want to store palette values.
3) Using the attribute buttons and wheels, set the attributes which want in the palette entry. Only attributes have changed will be recoded.
4) Press <Scene/Palette>, Then choose material button to save.

Note：
When saving materials, it is generally used to "save by channel". Only activated fixture attributes are placed in the programming area, and a scene containing only a single attribute information can be saved.

9.2 Recall Palette

1) Select the fixtures you want to apply palette value.
2) Press <Palette> to recall value.
● If you press <Palette> while there are not fixture has been selected, the controller will recall all the data of the palette.

9.3 Delete Material

Click <Delete> button, then double click corresponding palette button.

十. Built-in Shape

The built-in shape on the console allows users to quickly create colorful lighting effects in a short time. The built-in shape is to apply multiple data to the attributes of a fixture. For example, the effect of "Circle" applies Pan and Tilt attributes, causing the light beam to draw a circle. It can also set the center, radius, and movement speed of a circle.

There are a number of built-in shape in the console. Built-in shapes define specific attributes, such as color, dimming, patterns, and so on. Some built-in shapes cannot be used for certain fixtures: for example, the "RGB" can only be used for LED colored fixture or CMY shaking head fixture, and cannot be used for beam and others.

When more than one fixture uses a built-in shape, can synchronously apply the built-in effect to all fixtures, or offset it to each fixture, allowing the built-in effect to run along them, creating waves or one after another. This is called a built-in effect wave.

10.1 Select Built-in Shape

Using a built-in shape is very similar to selecting a material. When a built-in shape is selected, it will be applied to all selected fixtures.

1) Select fixtures;
2) Press <Shape> in "Function area";
3) Press <A> [Playback a shape];
4) Press <↑> or <↓> to select a shape type and confirm;
5) Press<↑> or <↓> to select a shape and confirm .

❖ Most built-in shapes are based on the current settings of the fixture, so a circular motion will move around centered around the current Pan/Tilt point of the fixture.
❖ If the description of the built-in effect has "parity" or "average", it indicates the effect of the waveform. So that its corresponding parameters can be modified at any time.
❖ The reference point of the built-in shape can be modified through the wheel.
❖ MAX 5 built-in shapes can be run simultaneously.
❖ Press <B>[Edit built-in shapes] under <Shape> menu to view the operation of the built-in shapes.
❖ Each built-in shape is applied to the specified attribute; If the fixture does not have this attribute, built-in effects will not be applied to the fixture.

10.2　Edit Build-in Shape

1) Press <Shape> in "Function area";
2) Press <B> [Edit a shape];
3) Highlight the shape that you want to edit with a soft key; then, press <Exit> to exit this menu;
4) Press <C> [Shape Parameters];
5) Highlight the parameter that you want to modify with a soft key; then, change the value with <Wheel Value>.

● Size: The amplitude.
● Speed: The running speed of the shape.
● Repeat: Repeats pattern after repeat number of fixtures.
● Spread: How the instruments are spread across the pattern, 0=even spread.
● Direction: The shape has 2 directions, including "<-" and "->"

10.3 Delete Shape

1) Click <Shape>.
2) Click the<Delete>button.
3) Use the corresponding A-E option keys to select the shape to delete.
4) Click <Enter> to confirm the deletion

十一.　Update

1) Startup the console
2) Copy the upgrade file to a USB drive (under the root directory) and insert it into the USB interface on the console.
3) Press the <Setup> button, select <A>,U-disk file management, then press<C> to upgrade the console software from the USB disk. The console will automatically recognize whether there are upgrade files in the USB disk.
4) After the upgrade is completed, can check the version in the system information.

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