Operation Instructions of USB-DMX512 system



System introduce

USB-DMX512 controller connect with the USB interface of computer, through the friendly operation interface of computer, in order to achieve the aim of controlling lamps, It has a lot of advantages such as easy operation and simplicity to use .

The hardware composed of 3 parts: PC，USB-DMX and kinds of DMX equipment.

Identity:：

- ◆ Normal DMX512 channels output, adopt DC/DC power insulation and photoelectricity insulation.
- ◆ Normal DMX512 channels input, adopt DC/DC power insulation and photoelectricity insulation.
- ◆ Support windows XP /2000 /98se operation system, windows XP identify automatically, Plug-and-play without installing drivers.
- ◆ USB interface connect with computer, computer interface supply power directly,the maximum working current is 135mA.
- ◆ Build random storage, data transfer smoothly.
- ◆ PC lamp control software adopt powerful PC FreeStyle lamp control software, it can upgrade Constantly.

Products parts and Technical Parameters

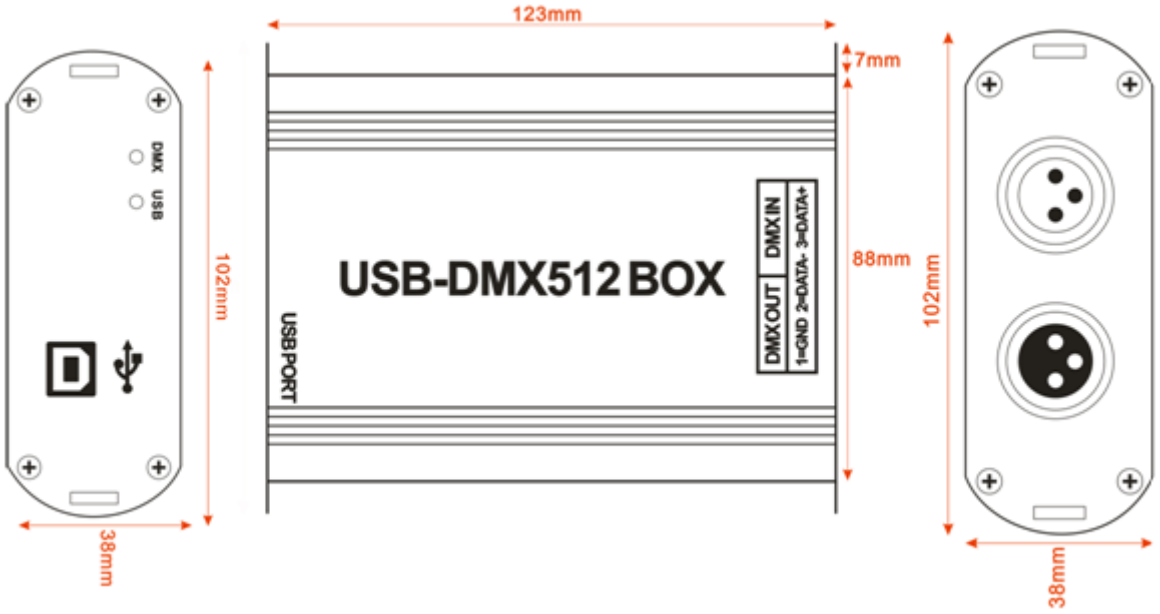
1.one piece of DMX adapter
2.one piece of interface wire.
3.A suit of FreeStyler light control software(CD)
4.Working temperature: 0-60 ℃
5.Supply voltage: DC5V
6.External dimension: L128XW100XH40mm

7.Packing size: L180XW150XH60mm
8.Net weight: 350g
9.Gross weight: 450g

The lowest configuration of computer

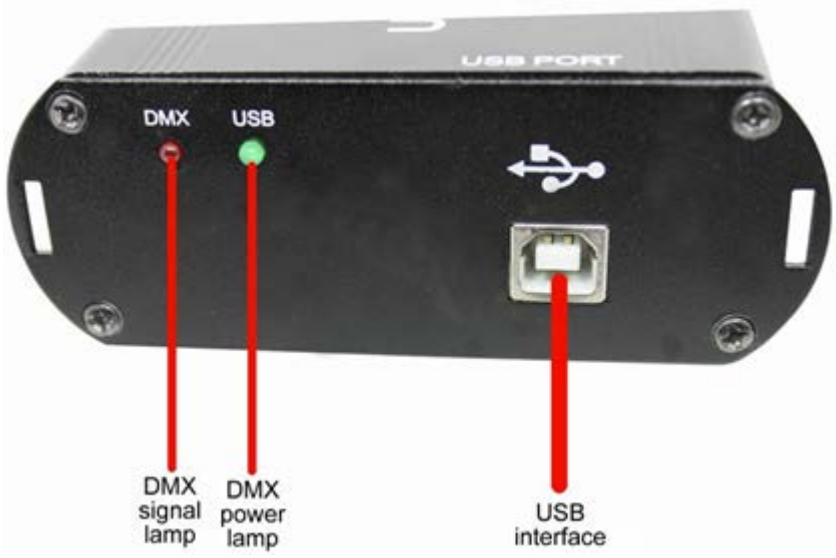
1.CPU above PII300.
2.Hard disk above 1G
3.Memory 32M above.
4.Display 1024*768, 24-bit true color.
5.Windows98 /Me/2000/XP operation system.
6.CD-ROM.

External Dimension



Interface Specifications





Direction for use

Ⅰ. Installation of system software:

- **Software installation**

1.Put the software CD into CD-ROM drive.

2.Double-click the English original edition FSsetup.exe, then start to install, choose“next step”，when prompt if or not restart computer after installation finished, choose not, the installation finished.(the progress of installation will show several mistakes, click “ignore” ,continue to install is ok.) , after total installation finished, reset up computer.

- **Software used for the first time**

Click FreeStyler in the program, set up software, into program interface, need to set up DMX512 interface, choose “Digital Enlightenment”，press save, exit. If no interface at present, can choose to exit directly, select later，choose installation 1 on the top left corner of software .

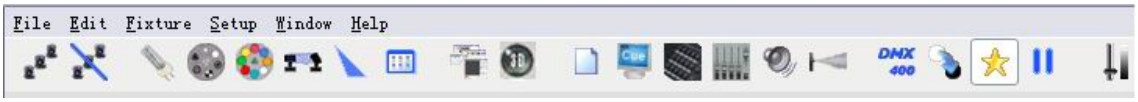


If have chosen DMX interface, and have USB wire to connect DMX interface, such as USB-DMX512 interface,reset FreeStyler software，when schedule bar process to 80％，if the blue LED light of interface bright , means the software recognize the interface, DMX signal could output at this moment.

Ⅱ. Detailed Description

1. The manual of Software interface function:

Toolbar icon as follow：



Icon  is group of choosing lamp, grouped with lamp,can choose one group of lamps or all.If need to choose several lamps of one group, can choose through mouse clicking.

Icon  is group of cancelling chosen lamp, click once with mouse in blank ,effect is the same.

Icon  is lamp dimmer and Shutter control.

Icon  is lamp pattern piece control, mouse pull value change color, if your lamp house have pattern set in advance, could click the pattern you need.

Icon  is lamp color piece and CMY color-chip control, mouse pull value change color, if your lamp house have pattern set in advance, could click the pattern you need. CMY can be directly stained with palette.

Icon is lamp X and Y axes control, and built-in X-axis and Y-axis lights take calls, and take the light distribution of lamps fan control, as well as custom X and Y axis light control and so on.

Icon  Is the focus, zoom, water chestnut mirror control

Icon is macro control.

Icon is all control windows open up to control.

Icon is demo software of startup 3D scene.

Icon is program set up in advance.

Icon is program list.

Icon save and fetch material and on-site access material point control.

Icon  is program playback(Dimmer control scene lamp brightness)

Icon  Voice controlled lighting

Icon is smoke machine control

Icon is build-in silicon route routine lamp process program control.

Icon  is all dark field.

Icon is custom value.

Icon  is pause in whole.

Icon is overall control output.

2．Lamp base produced:

The easiest way to creat light treasury:

Click system start->procedure->FreeStyler->fixture Creator,the production of light emerging library interface



According to MAC500M4 as the example，lamp base access refer to the file of the AVOLITES,Download database AVOLITES lights，

Found the lamp base what you want, open with WordPad. find the following form：

DMX			A								
2	61	L	1	100	1N	O	1	"Shutter"	35	35	35
1	1	H	2	100	1N	H	1	"Dimmer"	255	255	255
4	1	I	3	100	1N	A	1	"Colour1"	0	0	96
4	61	I	4	100	1N	N	1	"Colour2"	0	0	48
6	61	I	5	100	1N	J	1	"Gobo2"	0	0	0
7	61	I	6	100	1N	M	1	GoboRot.	0	0	0
6	1	I	7	100	1N	I	1	"Gobo1"	0	0	0
5	61	L	8	100	1N	L	1	"Focus"	70	70	70
2	1	L	9	100	1N	G	1	"Iris"	0	0	0
9	1	I	10	50	1N	P	1	"Prism"	0	0	0
3	61	S	11	100	1N	E	1	"Pan"	128	-1	-1
0	0	L	12	100	1N	E	1	"Pan Low"	128	-1	-1
3	1	S	13	100	1N	F	1	"Tilt"	128	-1	-1
0	0	L	14	100	1N	F	1	"Tilt Low"	128	-1	-1
8	1	I	15	100	1N	O	1	"Speed_p/t"	0	0	0
8	61	I	16	100	1N	O	1	"Speed"	0	0	0

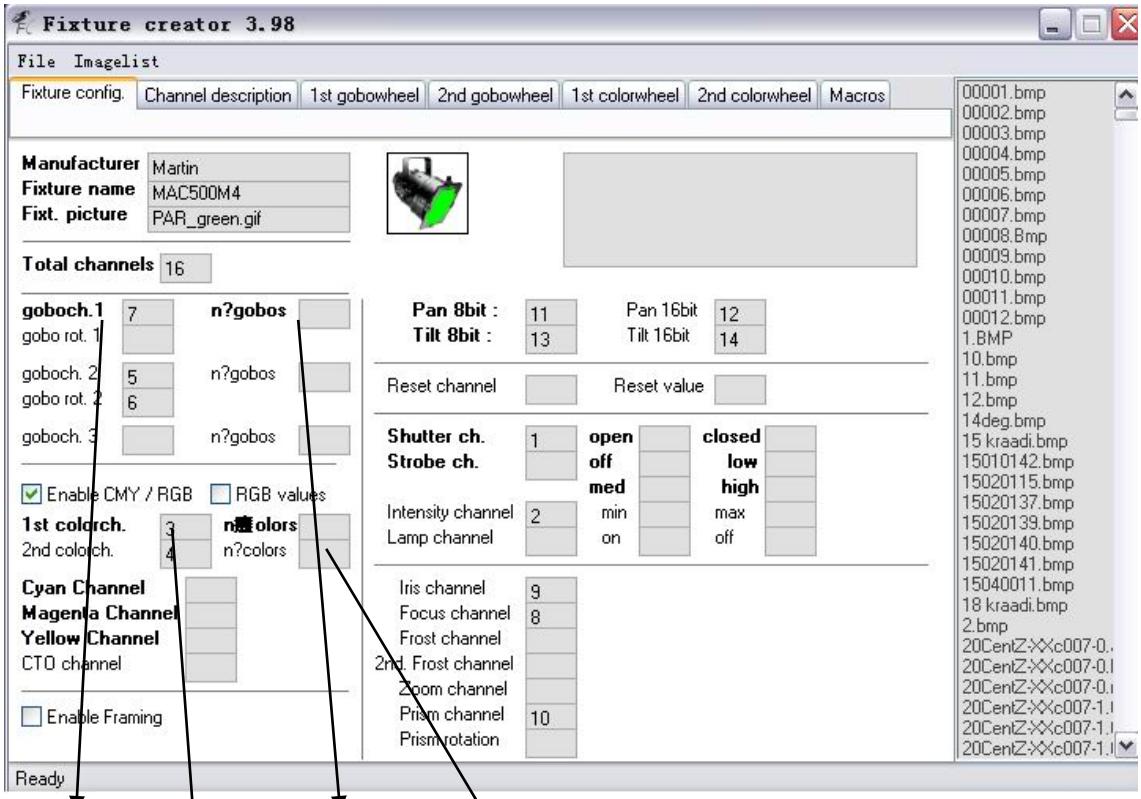
Down from above, A is the corresponding channel corresponds to 1-16.

The following as an example for the production of MAC500M4 Description

Click scan/computer lighting，fill in as follows：

Lamp picture

optional picture



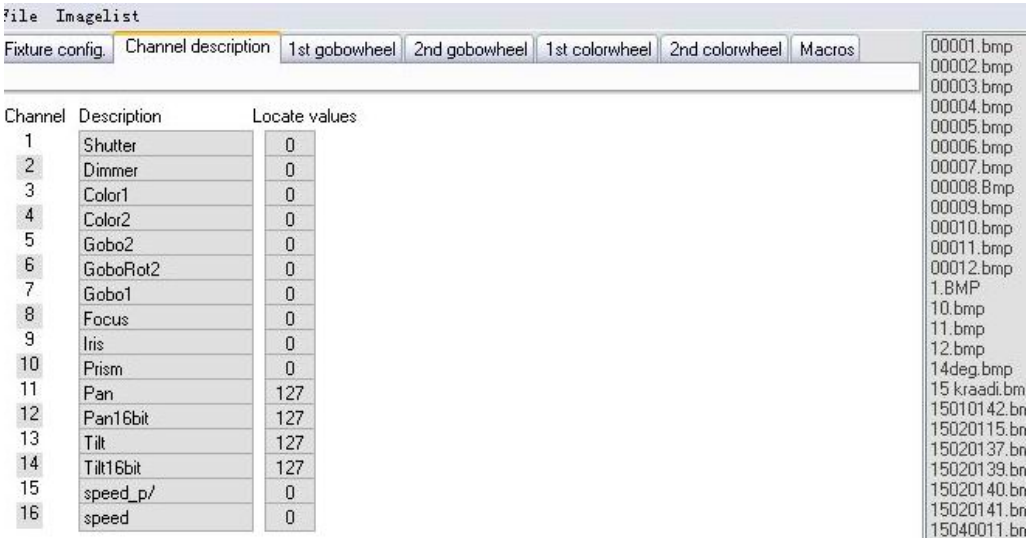
The first patten address　the numbers of the patten

The channel address of the first color　the numbers of the color

When you select the picture, also can not use the picture that you already have, find the actual lamp picture to c:\Program Files\FreeStyler\Fixtures folder, than select .

Click the interface “channel description”, can see the corresponding channel’s name from 1-14 only 15.16 blank, at AVOLITES MAC500M4 lamp base,15 is speed_p/,16 is speed。

fill in as follows：



Click the main interface document　->saved as, Named Mac500M4.fxt.(saved in c:\Program Files\FreeStyler\Fixtures file).

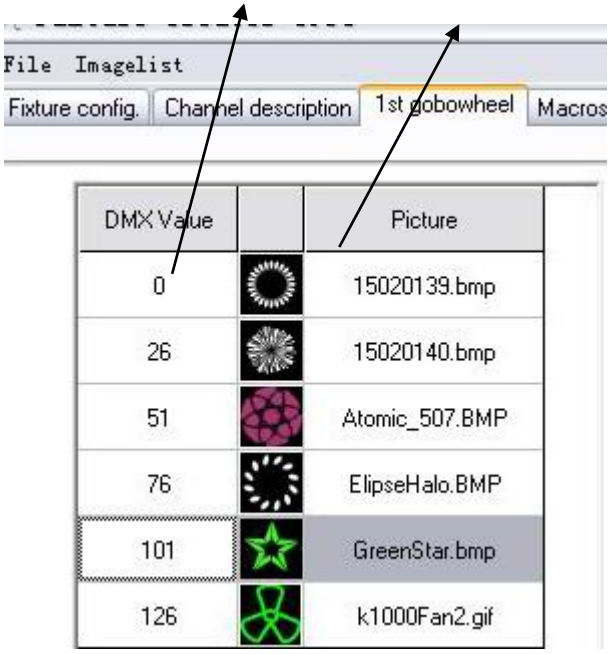
if you do not know their own channel, as well as the function of the lamp can see at AVOLITES,if can not find out, manufacturers unknow you can connect DMX512 interface, channel-by-test, in the production of light to fill in the corresponding channel address

Supplementary Description:

The above picture has gobo，that is open the value if known, can fill in the figures, if fill in the numbers, in the main interface will be more than one option ->gobo piece configure or color number, after click, can see, if the lamp Gobo1 has six design, fill in 6 pieces, and than has 6 need to setup, click DMX address fill in open value, for example the first pattern is between 0-25 to control, fill in 0,click photo column, select the right patterns, the second pattern is between 26-50 to control, fill in 26, click photo column, select the right patterns.

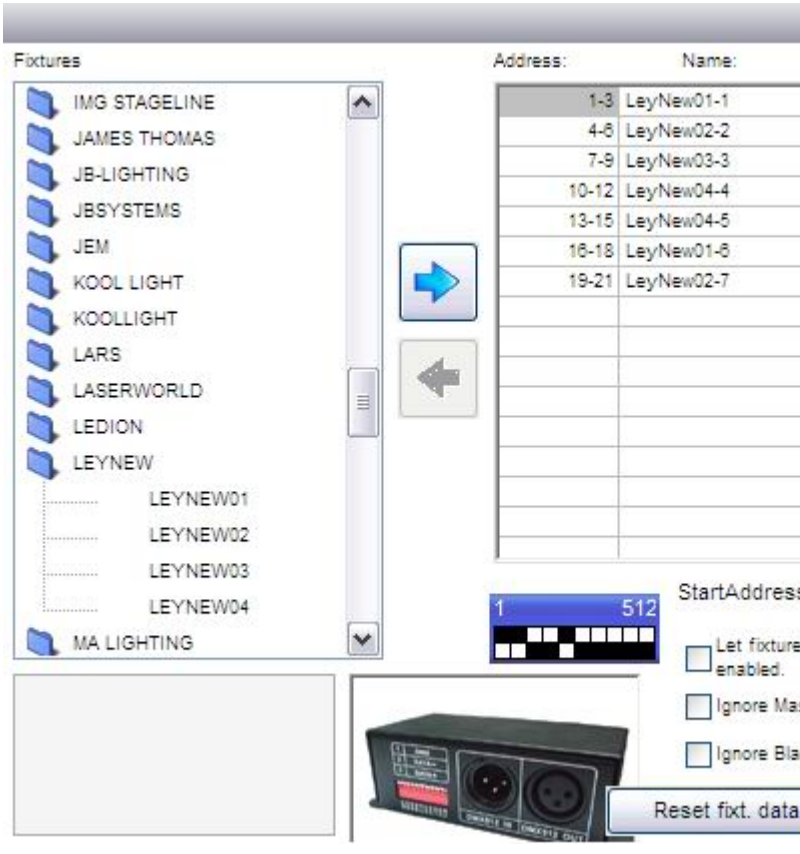
the same setup of the color piece

As follows: open the number value. pattern



At FreeStyler software, when the operation of controlling the lamp, can point the pattern and color what you need directly, directly to complete of course, do not set these open value just pull on the mouse. if it is external MIDI control, Through the knob or handspiker channel lighting control, then simply do not need to set the open value.

3 . The illustrate of lamp house manager interface：

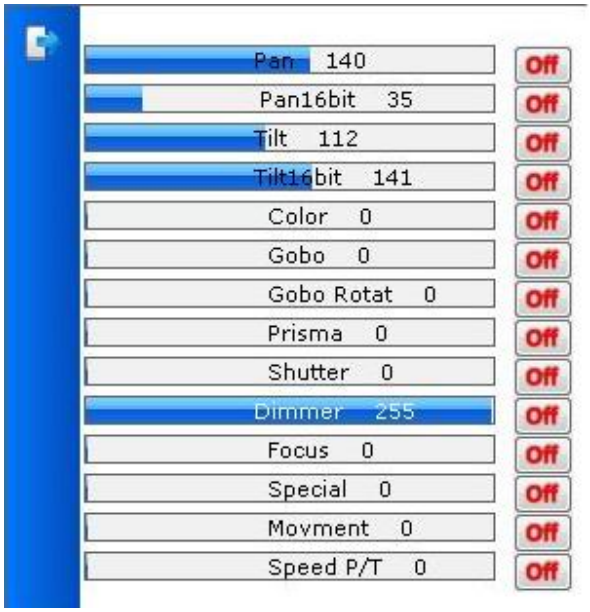


icon “add”，as the chart left bank to find the lamp you need to add to the right.

Icon“delete”，select the lamp you do not need from the right side list of the lamp form, delete.

StartAddress : 9 set can set or modify the first address of the lamp.select a lamp it will appear a slider at the right side, as follows, by dragging the slider you can freely choose the value of channel and slider

After each slider button has two functions, depends on the process of running



To create a scene/organization: through this button you can set the channel characteristics: fade，snap，off

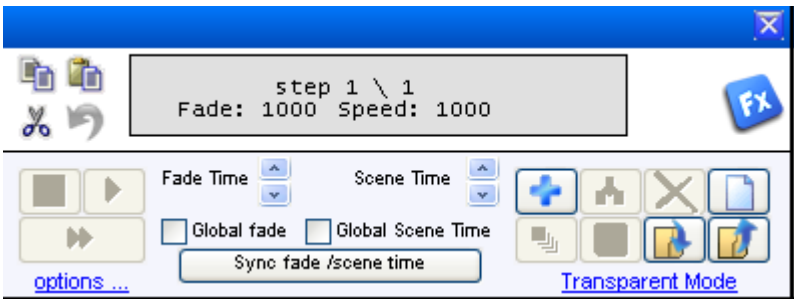
Fade：channel will take some time to arrive at the value of the next step

Snap：immediate access to reach the next value

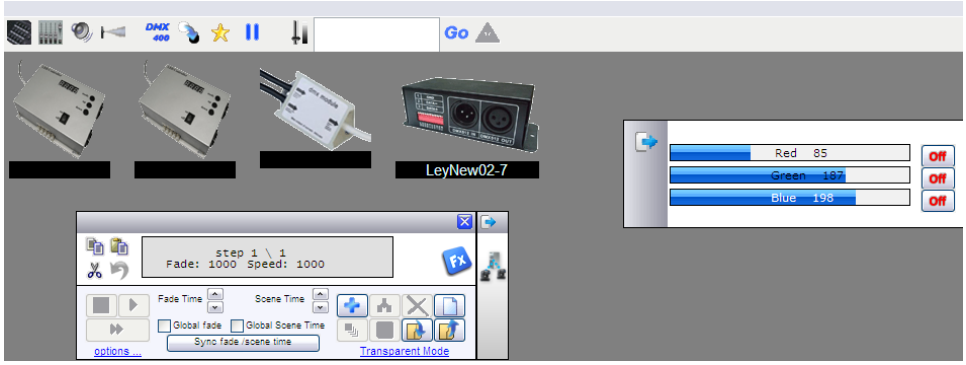
Off：channel is not available.

4. Procedure facture and play method:

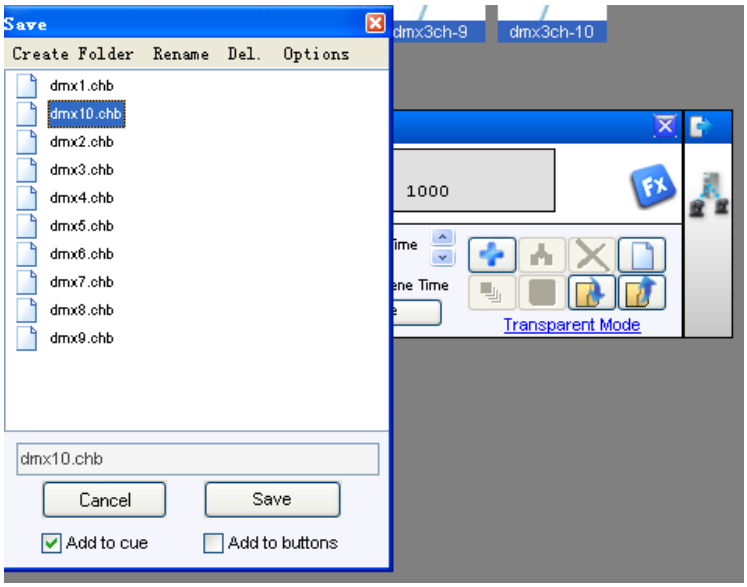
1. point the ico on the menu （Create sequence ）, The procedure beginning to establish circumstances, jumps out of the following window.



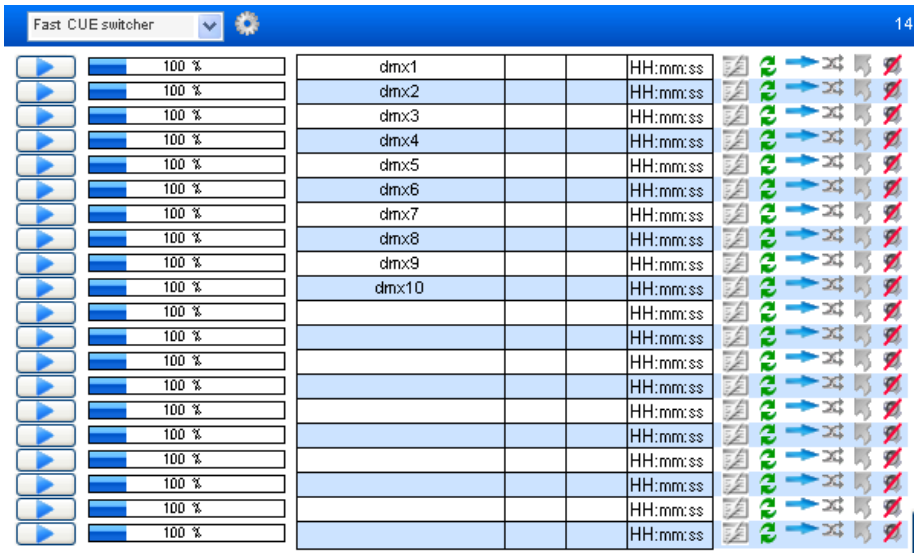
2. The procedure programming according to the “step”, chooses the lamp needing to setup first , and then gives every “step” to allocate one kind of colour the specific button function may consult the “help” document.



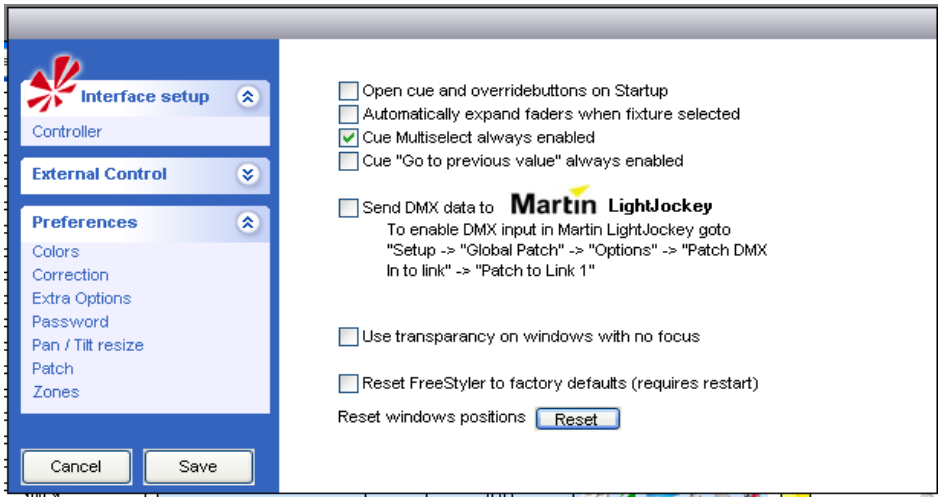
After add and finishing setting up step,press ico (save as) jumps out of the following window fill in the document needing to preserve, at the same time choose “add to cue” frame ,press the button of “save to preserve it ,and then exit.



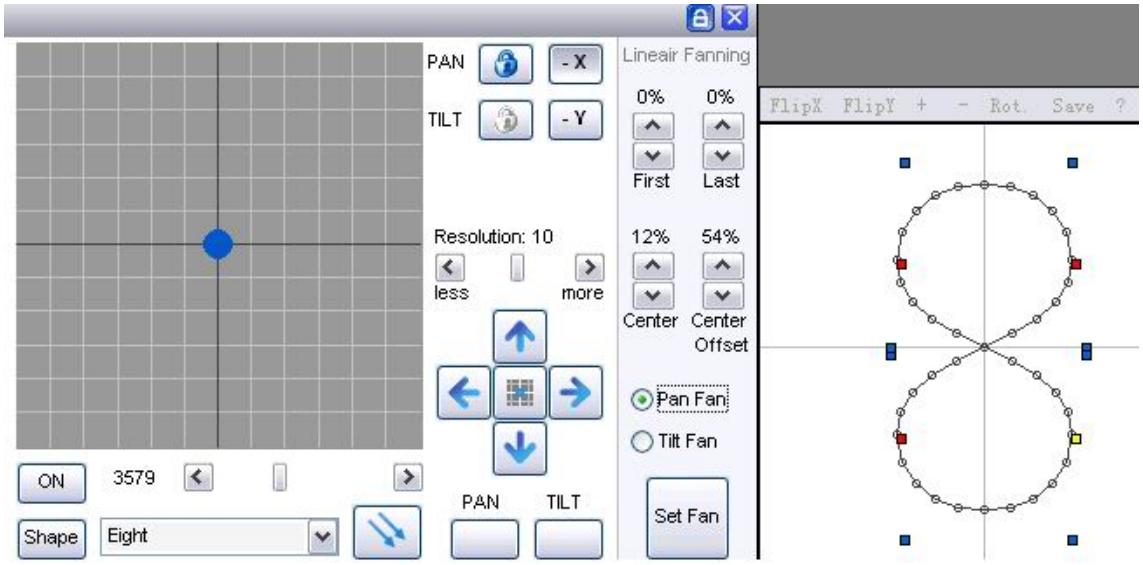
3. point the ico on the menu  (cue),open the following windows,point the ico on the left  can play circumstances procedure of this group,can play one of the circumstances document, and also can play multi-circumstances document. Please look over the help document of other button function.



When play multi-circumstances document at the same time. For avoiding procedure overlap playing. Must insure that choose “Cue Multiselect always enabled” check box, this option can find in the “Fixture steup---Preferences---Extra Options ”.



5．XY scan direction setting window:





Select the shape to move, there are moving around, moving preceding，blossom and 6 kinds of shapes.

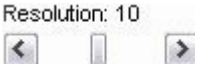
Remark：（click “shape” button will appear the shape what the picture show. User can since the definition of you want. Right click the mouse to change the angle of the addition and subtraction. Mouse keep click and push the point red, yellow and blue can change shape. Mouse click the add and minus button in the top can change the moving area, then click ”save” to save it.）



adjust speed（all kind of computer speed is different each other. Reduce a little speed first, move will reach accurately place. According the Lamp performance to add speed quickly.）



Adjust the lighting of the X and Y axis  Adjust the X and Y axis slightly.



Setting resolution



Fan-shaped distribution of walk-controlled setting.

6．Make material-type program:

Choose lamps，click ，open dimmer and light brake light，so that we can see white, then click “OFF”。So we just make material now, must turn off all program what production of action about kinds of mobile program just now. This replay can be superimposed on, rather than the latter program run priority.

First of all, make a white material and design with white and blank:

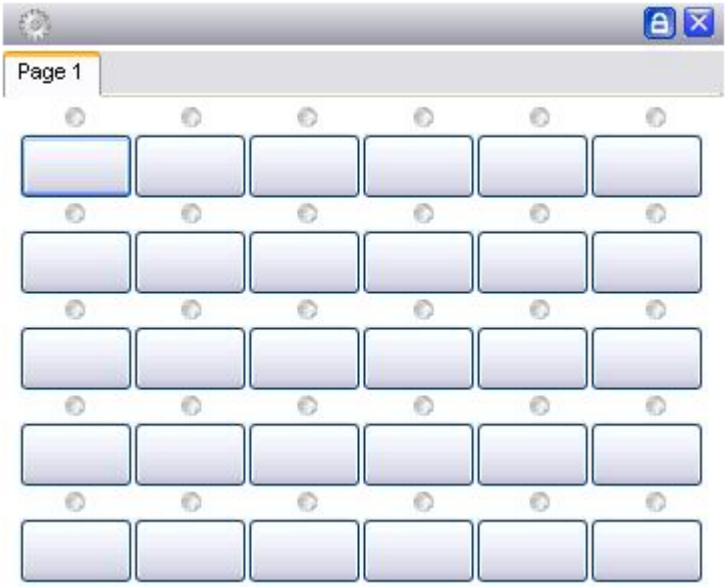
push color and Logo pattern. CMY channels must be the minimum value (0)

，then click “＋”at the pre-program setting，save a procedure and delete the first procedure. Saved as a file sequence as 1.chr.

And then do or CMY color staining, only open color and CMY channel adjustable what you want color，save as color－1 and continue what you want color saved.

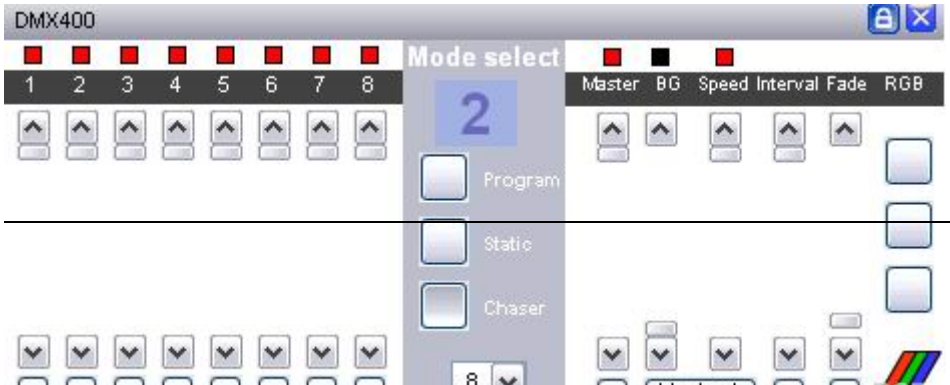
Then do gobo，just only open the gobo of channel，adjust what you want design, save as gobo －1.Continue what you want design saved.

Now，turn off the pre-program window, click .As the follow picture show:



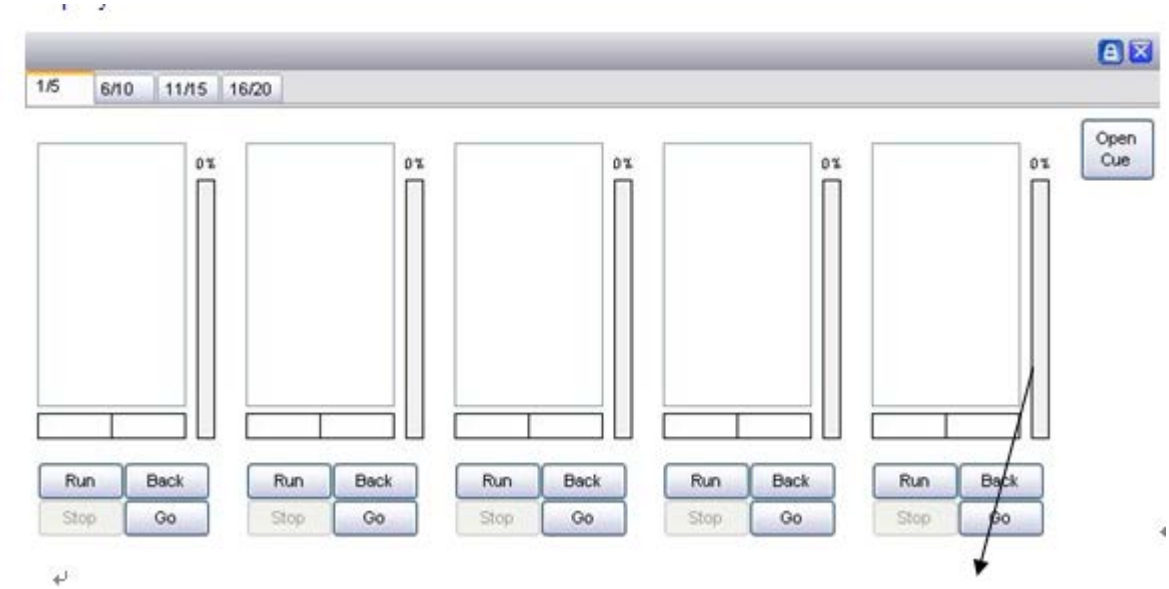
7．Routine lamp, operation of smoke machine control and playback:

Usually lights address code matched as computer lights, Need to take the light of conventional lights. Can be produced go step program in the pre-program lights. Saving it and control in replay. This program operation as computer lights. The follow will describe details. We can also click DMX400 on the main interface, run the go lights inside programs directly. (Using DMX400 control the conventional lights is no need of matching.)



Choose of the go light program style, then click go light, the program will begin.

As show as above picture. Choose some go lights, there are 4 ways you can choose (4.6.8.12). If you needn't to go lights, you can pull down handspike to close the channel.
The right side is the brightness, speed, black scene control and so on. If you needn't program to go lights, such as the surface light and smoking control, you can pre-production program, in the replay control (you can control brightness).
Or made material to click turn on/off（brightness is not adjustable, you always keep the value of programming channels），or there is external controller then control by handspike directly.
Replay interface：

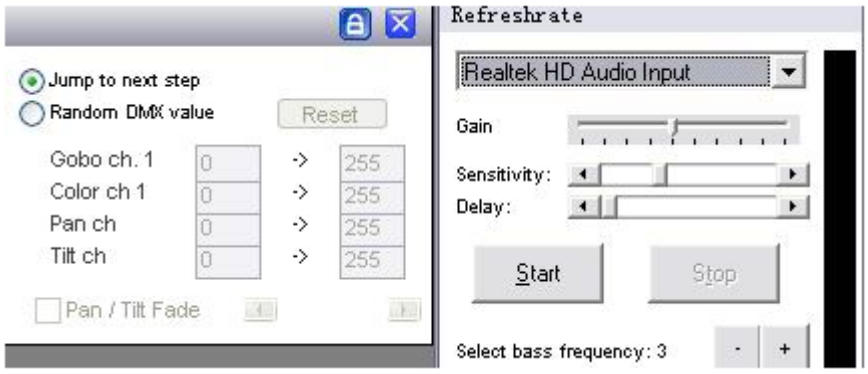


Open the program, Click "run"， the beginning of the proceedings go lights，pull the corresponding handspike in windows ，the handspike control Dimmer. It need to change the moving program，directly double-click the mouse then the program name can be completed. Need to change the speed at the present，adjustable at the sequence widow.

A total 5X4＝20 replay control.

8.Voice-controlled lighting:

1，select voice card 2，click begin
3，select task so that jump the nest scene or setting any value between 0~255.
4，select accuracy value and delay what you can set he maximum or minimum value to limit any value.(It's very useful among of black channel 、gobo and color channel when the same channel.）



9．External MIDI control：

There are several kinds way if you need adopt exterior MIDI control ， you can click to install in the main interface - "Freestyler install -" external control. Desktop or notebook computer can be directly controlled using the keyboard. Controlling more complete is the MIDI control .such as pre-program，and many reply operations can be controlled in the MIDI controller。

The way to control MIDI ：

1. Connected to the MIDI controller，This software compatibility is strong，MEIKE control，Logic control and can click handspike's MIDI controller user-defined also can control freestyler the lamplight software，for instance we usually used Bailingda and BCF2000,specific electric handspike，If you just want to use as a replay, Then it is cheaper to be completed on the MIDI controller.

Click install in the main interface—》Freestyler install—》exterior control—>MIDI control.

When pop-up MIDI setting widow, If the MIDI controller to connect to normal, The MIDI equipment connected option will be watched input ,pitch it on, Output here recommended not to select the MIDI equipment .Some MIDI equipment select Output will appear data error. Because we just need control software now, Output data needn't software to MIDI equipment.

Then click Start, click on "Enter the value" at this moment. It can be preset your MIDI equipment of button and handspike. Control Freestyler lamplight software of function.

Notice, Can be controlled by putting the control and buttons to distinguish very clearly, basically, In terms of software, there are 0-255 variable control, handspike can both preset.

Points you want to preset a lighting software Freestyler. Click of a button or gently push you handspike on the MIDI controller, MIDI equipment will be the allocation of the corresponding values in the MIDI settings window shows. After preset completed, click save button . Now MIDI equipment can control Freestyler lighting software to operate at the scene or lighting or 3D dummy scene software.

Some of handspike about MIDI equipment, Can also be set to control a single DMX channel, Specific settings like this, click start, then click "Input Evaluate", pull up and down, to MIDI to DMX 1 to 24, such as click MIDI to DMX 1, push the MIDI equipment's handspike lightly, make sure handspike is ok, then at the right numerical "Extra" input DMX channel numerical what you control. For instance 511,then this handspike will direct control the channel alone.

This setting to control smoking, the number for color, and surface light, and so on.

For some description in MIDI setting window, There are flip option. That is to say, a handspike or a button, you can repeat the configuration. Such as For example, select the configuration page 1, effective on the first page, select page 2, in the second page of effective. Select the configuration page 0, in page 0 of effective. Handspike or button will not be affected by the change page. No matter which page, we can control. Then you can pre-program the button with the handspike to the first page, replay to the second page, main control to page 0.
In this way, a handspike and a button can be used as a preset in the use of two as a replay.
Pre-configured MIDI button or handspike, then you can click "export" to save.
When you want to reshipment the software or system in the future, you can click ”import”, input configuration can be used directly instead of configure again.

Typical Applications

