

# A17 FULL COLOR ANIMATION PRODUCT MANUAL



Thank you very much for purchasing the full-color animation series laser performance device. For your personal safety and better use of the product, please read this manual carefully and operate according to the procedures, so as to avoid personal safety and lamp damage caused by misuse.

## ● Packing list:

Please check whether there are the following items when you open the packing box of the laser show:

.....A set of full color animation laser performance machine

.....A power line for full color animation laser performance

.....A full color animation laser performance manual

## ● Introduction of product and function effect:

The light laser generator which meets the international standard for laser generator.

source of full color animation series laser performance adopts

semiconductor The laser source has long service life and high stability

Effect features: built in 500 latest laser performance effect patterns, with space effect,

projection effect, laser dimming effect, laser stroboscopic effect, space-time

shuttle effect, 3D laser effect and other latest laser performance effects.

Classic effects: three dimensional laser effects, such as beam optical network, vast sea of clouds, light, rotation, zooming in and out, time and space tunnel, etc.。

## technical parameter:

Rated voltage: AC110V / AC230V  $\pm$  10%

Rated frequency: 50 Hz ~ 60 Hz

Rated power: 90W

Laser power: 3W /5W

Laser source: semiconductor laser generator

Laser modulation signal: analog modulation signal

Laser color: full color

Laser pattern: 500 laser effect patterns

Scanning system: 15kpps galvanometer scanning system

Scanning angle of galvanometer:  $\pm$  60 degrees

Control channel: 16 signal channels

Control signal: international standard signal of DMX-512, international standard signal of ILDA, voice control, self-propelled

Control mode: signal control, voice control, self-propelled and master-slave mode

Cooling system: fan forced cooling system

Working environment: Indoor

STARSHINE  
— LIGHTS —



STARSHINE LIGHTS  
PRODUCT MANUAL





# STARSHINE LIGHTS PRODUCT MANUAL

● **instructions:**

After opening the packing box, carefully check whether the laser performer is damaged due to transportation, such as whether the screw is loose, whether the reflector is broken, etc. After checking that everything is normal, select the right position, hang the lamp, adjust the angle, and connect the power supply and ground wire before power on. This equipment belongs to class 1 protection equipment, so the yellow green conductor must be grounded

New functions: when the second channel is less than 128, the second channel is normal self-propelled and voice control; when the second channel is more than 128, the third channel selects the effect, the fourth channel controls the color, and the fifth channel controls the speed.

Debugging channel list

Channel	Function	DMX Value	Control Content
CH1	Main Switch	0~9	Laser off
		10~255	Laser on / dimming control
CH2	Color	0~69	Fixed color selection: white, red, blue, pink, green, yellow-green
		70~79	Overall color change, flow speed controlled by CH3
		80~89	Initial pattern color, flow speed controlled by CH3
		90~92	Rainbow colors, flow speed controlled by CH3
		93~110	2-segment color selection, 2-value steps, flow speed controlled by CH3
		111~131	3-segment color selection, 2-value steps, flow speed controlled by CH3
		132~149	4-segment color selection, 2-value steps, flow speed controlled by CH3
		150~182	8-segment color selection, 2-value steps, flow speed controlled by CH3
		183~218	16-segment color selection, 4-value steps, flow speed controlled by CH3
		219~253	32-segment color selection, 4-value steps, flow speed controlled by CH3
CH3	Color Flow Rate	0~1	Color flow off / no smooth color flow
		10~127	Forward color flow, speed increases from slow to fast
		128~255	Reverse color flow, speed increases from slow to fast





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CH4	Graphic Group Selection	0~24	Built-in static graphic group 1: basic geometric patterns
		25~49	Built-in static graphic group 2: basic geometric patterns
		50~74	Built-in static graphic group 3: edge highlight patterns
		75~99	Built-in static graphic group 4: dotted graphics
		100~124	Built-in static graphic group 5: Christmas graphics
		125~149	Built-in animation category 1
		150~174	Built-in animation category 2
		175~199	Reserved
		200~224	Reserved
		225~255	Reserved
CH5	Graphic Selection	0~255	Pattern selection, pattern group controlled by CH4
CH6	Built-in Dynamic Effects	0~1	No function
		2~206	Built-in dynamic effect selection, one effect every 2 values; color controlled by CH2, default color when CH2=0, speed controlled by CH7
		207~216	Random playback of line effects; color controlled by CH2, default color when CH2=0, speed controlled by CH7
		217~226	Random playback of animation effects; color controlled by CH2, default color when CH2=0, speed controlled by CH7
		227~236	Random playback of Christmas effects; color controlled by CH2, default color when CH2=0, speed controlled by CH7
		237~246	Random playback of outdoor effects; color controlled by CH2, default color when CH2=0, speed controlled by CH7
		247~255	Random playback of all effects; color controlled by CH2, default color when CH2=0, speed controlled by CH7
CH7	Built-in Dynamic Effect Speed	0~1	System default speed
		2~255	Manual speed adjustment for built-in effects, from slow to fast
CH8	Pattern Size	0~255	Manual pattern size adjustment



CH9	Automatic Pattern Scaling	0~15	Pattern size selection
		16~55	Scaling speed from small to large
		56~95	Scaling speed from large to small
		96~135	Pattern size scaling speed selection
		136~175	Two-point irregular cyclic scaling
		176~215	Three-point irregular cyclic scaling
		216~255	Four-point irregular cyclic scaling
CH10	Pattern Center Rotation	0~127	Rotation angle selection
		128~191	Forward rotation speed selection
		192~255	Reverse rotation speed selection
CH11	Pattern X-Axis Rotation	0~127	Horizontal flip position selection
		128~255	Horizontal flip speed selection
CH12	Pattern Y-Axis Rotation	0~127	Vertical flip position selection
		128~255	Vertical flip speed selection
CH13	Horizontal Movement	0~127	Horizontal position selection
		128~255	Horizontal cyclic movement, speed increases from fast to slow
CH14	Vertical Movement	0~127	Vertical position selection
		128~255	Vertical cyclic movement, speed increases from fast to slow
CH15	X-Direction Waves	0~1	No wave effect
	X-Direction Waves	2~255	Wave amplitude and speed adjustment; amplitude from small to large, speed from slow to fast, every 32 values as one level, 8 levels in total
CH16	Pattern Gradual Drawing	0~1	No gradual drawing
		2~63	Manual gradual drawing 1
		64~127	Manual gradual drawing 2
		128~153	Automatic gradual drawing: increasing
		154~179	Automatic gradual drawing: decreasing
		180~205	Automatic gradual drawing: increase first, then decrease — reverse direction
		206~255	Automatic gradual drawing: increase first, then decrease — same direction



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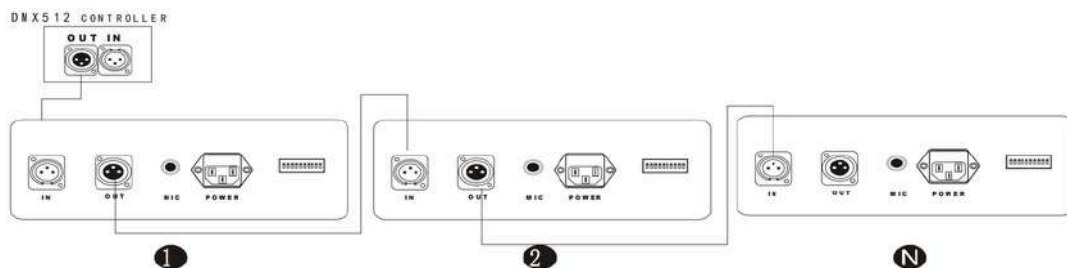
## Menu Description

No.	Menu	Value / Option	Function Description
1	ADDR	1-512	Address code setting, DMX mode / slave mode
2	SHOW	SHOW 0	All programs shuffle playback
		SHOW 1	Line effect program playback
		SHOW 2	Animation effect program playback
		SHOW 3	Built-in text program playback
		SHOW 4	Christmas and New Year program playback
		SHOW 5	Outdoor landmark program playback
		SHOW 6	Personalized programming program playback
		SHOW 7	AUTO 3-AUTO 9 wedding effect single program
3	SPEED	SP 0-SP 9	SHOW 7 hand-painted graffiti program playback speed
4	SOUND	S_ON	Voice control on. The program plays in voice-control mode. Only SHOW 0, SHOW 1, SHOW 2, SHOW 4, and SHOW 5 support voice control.
		S_OFF	Voice control off. When voice control is off, the program plays in automatic mode.
5	SENSE	SE 0-SE 9	Voice sensitivity adjustment from low to high
6	ILDA	ILDA	ILDA mode / network port mode

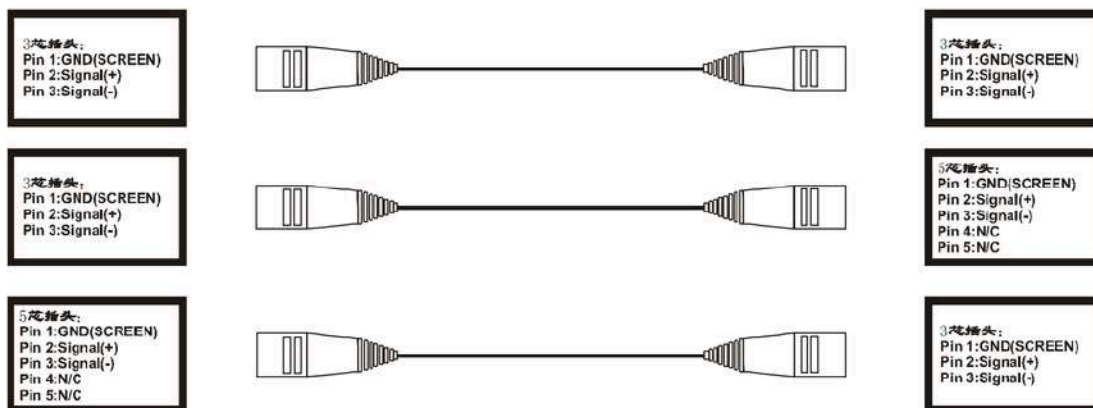
**Hide menu description (press and hold the menu button for 3 seconds to enter, and press and hold the menu button for 3 seconds to exit)**

No.	Menu	Value / Option	Function Description
1	PHASE	PH-XX	Phase and XY displacement settings
		n1: X+ Y+	Normal XY, no axis interchange
		n2: X+ Y-	Normal XY, no axis interchange
		n3: X- Y-	Normal XY, no axis interchange
		n4: X- Y+	Normal XY, no axis interchange
		C1: X+ Y+	XY axis interchange
		C2: X+ Y-	XY axis interchange
		C3: X- Y-	XY axis interchange
		C4: X- Y+	XY axis interchange

2	SIZE-XY	S.10-S.100	Scan range adjustment / pattern size adjustment
3	Protect	P.ON	Galvanometer abnormal protection is turned on. When the galvanometer X/Y does not move at the same time, the laser output will be turned off.
3	Protect	P.OFF	Galvanometer abnormal protection is turned off.
4	LASER	LR1	Monochromatic light source
4	LASER	LR3	Full-color light source
5	Default	DEFT	Factory reset. Press and hold the Down button for more than 3 seconds to restore factory settings.
6	V.xxx	V001-V999	Bluetooth number of the lamp, used to distinguish different Bluetooth devices.
7	VERSION	VA1.X	Software version number of the light.



If 5-core XLR socket (head) is used in your signal console, you must use a conversion line from 5-core to 3-core. The specific conversion method is as follows:



When the control signal of the console is input to the seven color animated laser performers, all the seven color animated laser performers must first set the address code. So that the corresponding control signal works. In this way, when using any controller, each lamp must have its own address code. Therefore, when the address of the first lamp is set to 1, the address code of the second lamp is set to 23 (address code 1 of the first lamp plus 22 channels), and the third lamp is set to 55. And so on (this setting method also needs to be determined according to different console, now only according to the general rules). The specific setting of the address code switch of the signal control mode of the DMX-512 is shown in the figure below:

Light signal	Starting address	Binary dialing (ON)
1	1	1
2	23	1、2、3、5
3	55	1、2、3、5、6



**How to use ILDA interface control function mode:**

When the standard ILDA interface signal line is connected, it will automatically switch to ILDA interface control mode.

Note: first disconnect the power supply, and then plug in the signal line of ILDA interface to avoid damaging the lamp.

**Notes on master slave synchronization function:**

1. When the lamp is the host, the lamp will send DMX-512 signal, and cannot be connected to the DMX-512 console at this time, otherwise it will interfere with each other and cannot run synchronously.
2. Multiple lamps are operated simultaneously, only one is the main unit and the other is slave. Otherwise, it cannot be run synchronously.

The master-slave synchronous connection diagram is as follows:

● Safety instructions:



! Before the installation and maintenance of the lamp, please make sure that the power supply of the lamp body is disconnected.

! Please make sure that the fan mouth of the lamp is unblocked and the surrounding environment is well ventilated. Do not use this product in humid environment for a long time.

! When the lamp is used indoors or maintained, please prevent the lamp from contacting with water drops. If it is used outdoors, please take sufficient waterproof measures.

! Installation, operation and maintenance personnel must be familiar with the performance of the lamp before they start to operate, otherwise the lamp will be damaged.

! Please do not use other different specifications of power supply voltage and laser generator.

! Do not look directly at the laser source to avoid eye injury.

! Do not use this product with shaking.

● maintain:

1. Try to prevent dust, dirt and smoke oil from artificially laying or even flowing into the lamp body, and try to keep the grating effect series of laser performers clean;

2. Please use professional glass cleaning agent regularly every month and clean the reflector with flannelette, so as to ensure the maximum brightness output of the laser and prolong the service life of the light source

**LightElf (WeChat Mini Program & App) User Manual**

**一、 Software installation (WeChat mini program /Android APP)**

**(\*\* You need to grant the software permission to access Bluetooth and positioning, otherwise it cannot be used normally. \*\*)**

1.

WeChat mini program:

Open WeChat,

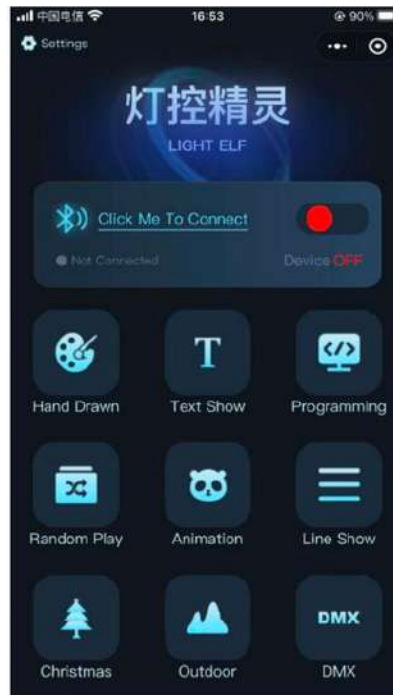
in the mini program scan the QR code below to use it



2. Android App  
APP Download address :  
<https://pan.baidu.com/s/1b1u-g0RXZcgcRLBKteJozA?pwd=nhrd> Or log in to the Google Play Store and search for "LightElf" to install it
3. Apple App: Search for **LightElf** on the official App Store and download to use.

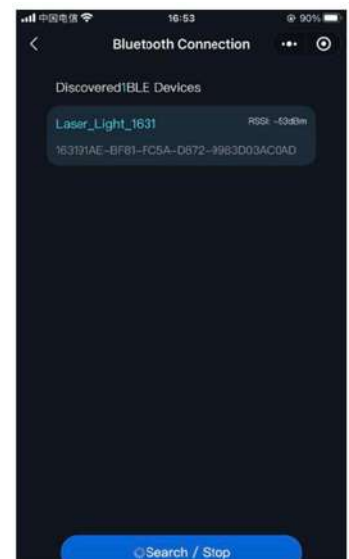


4. The main interface after the software is started is as shown in the figure



Connect laser light equipment

1. Please turn on the laser light equipment before use
2. Open the software and click "Click Me To Connect" on the main interface.
3. Select Laser\_Light\_xxxx in the Bluetooth list
4. Successfully connected to device



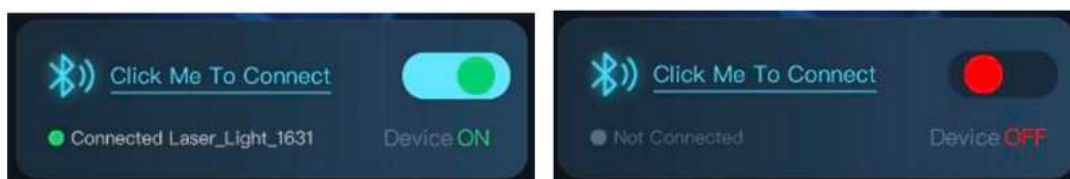
### Software settings

1. The address code, display range and XY related parameters of the laser light device can be set
2. The menu language of the software can be changed at the bottom



### Turn the laser on and off

1. Click the switch button on the right side of the main interface. After turning it on, the words "Device ON" will be displayed.
2. Click the switch button on the right side of the main interface. After closing, the words "Device OFF" will be displayed.





### Introduction to hand-drawn graffiti function

Click the hand-drawn graffiti menu in the main interface to enter. Here you can control the display effect of the device by manually drawing patterns, entering text, or selecting built-in patterns.


A. Selection of color: The upper part of the interface is the color selection area. Click the different color buttons to select the color of the laser drawing.

B. Draw patterns: The middle part of the interface is the pattern control area. In this area you can do the following operations

#### 1. Manually draw patterns

- 1) Click the icon  to switch to the manual pattern drawing function
- 2) Use your finger to draw the pattern you want on the middle large screen area
- 3) You can also click the icon  to add a picture background to make drawing easier

#### 2. Text input

- 1) Click the icon  to switch to text input function
- 2) Enter text in the input box
- 3) Use your finger to drag and drop in the middle of the screen
- 4) You can also choose different fonts on the left side of the input box (Note: The font library of the mini program version is limited, and some texts or symbols may not



be included. If you need a more complete font library, it is recommended to choose the app version)



### 3. Select the built-in pattern

- 1) Swipe the pattern list to view all built-in patterns
- 2) Click on the pattern and drag it with your finger in the middle of the screen



#### C. Graphic operation and parameter configuration

- 1) The clear and back buttons can be used to delete the drawn pattern. After deletion, the pattern can be redrawn.
- 2) Click the configuration button to configure parameters, configure the size, rotation angle, flip, and horizontal and vertical movement of the graphics. Click on the left side to select the parameters to be configured, slide up and down on the right side to change the parameter value, and click the OK button to save the parameters.
- 3) After the pattern is drawn, click the send button to display the pattern effect on the device.



#### Introduction to text playback function

Click the text playback menu in the main interface to enter. Here you can set the text display effect, which can support up to 50 characters.

1. The upper part is the color selection area. Click the corresponding button to select the color of the text.
2. The middle part sets the area for text
  - 1) Click on the left to select a font
  - 2) In the middle is the text input box
  - 3) The number on the left side of the text input box indicates the current text group
  - 4) Click the "+" on the right side of the input box to add a new text group. Up to 4 groups are supported.
  - 5) Click the playback duration of the group to modify the time
  - 6) After completing the text input, click the preview button in the lower left corner to generate a preview effect in the middle of the screen.
  - 7) Click the send button to display text effects on your device



**3. There are three configuration parameters in the following section**

- 1) Text size: Adjust text size to change the size of text displayed on your device
- 2) Display viewing distance: adjust the size of the display area (use to adjust the projection distance)
- 3) Water flow speed: Adjust the water flow speed to change the speed at which text moves from left to right. When set to 0, the text remains stationary and does not move.

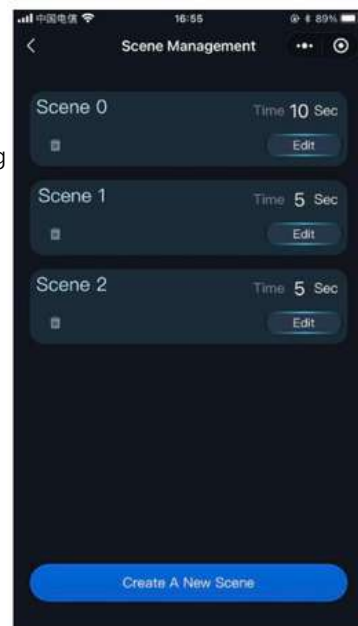
**Personalized programming**

Click the personalized programming menu in the main interface to enter. By editing the pattern

of each scene, the laser light device can play in sequence according to the programmed scenes to meet your personalized needs. It can support up to 20 scene editing.

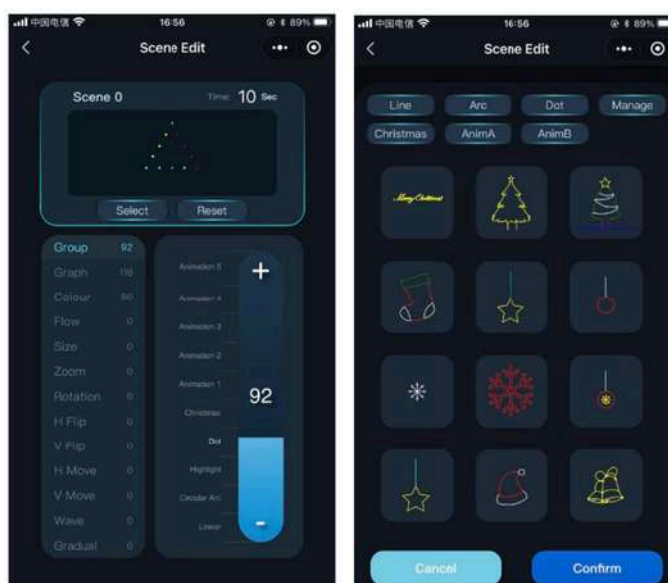
**A. Scene management**

1. Click the New Scene button at the bottom of the page to add a new scene
2. Click the delete icon on the left in the scene list to delete the scene
3. Click the number on the right in the scene list to modify the playback duration of the scene.
4. Click the corresponding edit button in the scene list to enter the scene editing page



**B. Scene editing**

1. Click the Select Graphics button at the top of the page to pop up a selection interface for various graphics, with a total of 7 groups including dynamic graphics. Click on a graphic to see the effect of the graphic in real time on the device. After selecting, click the OK button to save.
2. You can also select graphics by modifying the channel parameters below, select graphics groups or graphics in the channel menu on the left, and slide up and down on the right skateboard to select
3. In addition to graphic selection, you can also set different display effects. Just select the parameters on the left and slide up and down the skateboard on the right.





# STARSHINE LIGHTS PRODUCT MANUAL



## Built-in program playback

The system has built-in hundreds of lighting programs for you to choose from, and they can be played without any editing clicks. All built-in programs can be played randomly or specified programs can be played.

### A. Random play: all programs are played randomly

1. Click on the random play menu in the main interface to enter
2. Click the color button above to select the color of the laser
3. The playback mode supports two modes: self-propelled and voice-controlled. The slider below can adjust the self-propelled speed and voice-controlled sensitivity.

### B. Line playback, animation playback, Christmas playback, outdoor program playback

1. Click the corresponding program menu in the main interface to enter
2. For the color and play mode settings in the program, please refer to the random play page
3. Selecting loop means that the 50 programs under this category will be played in order.
4. You can also check the box to play some of the programs and just click to play the program

