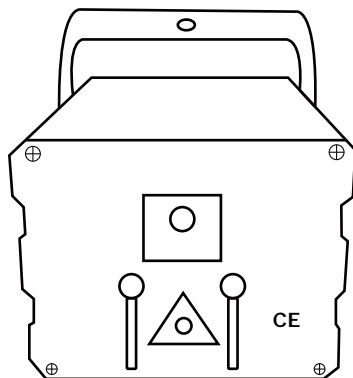


EYTS3

Users' Manual

EY001-L



Remote control instructions:

Introduction of remote control function		
ON/OFF	ON/OFF	
AUTO	Macro Function, single press to change	
DMX PRO	DMX PRO	
SOUND	Sound Control	
DMX STD	DMX STD	
Light beam	Light beam change	
Animation	Animation change	
Light beam Animation	Light beam Animation	
RGB	Full Color Laser	
W	White color Laser	
Red	Red color Laser	
Green	Green color Laser	
Blue	Blue color Laser	
R G	R G color Laser	
G B	G B color Laser	
R B	R B color Laser	
Invert X	Invert X	
Invert Y	Invert Y	
Swap XY	Swap XY	

1. Product parameter

1.Working voltage:AC100V-240V/50Hz
2.Laser power: Green---350mw(520nm) Red---450mw(638nm) Blue---1200mw(450nm)
3.Control mode:international DMX512, 34 channels
4.Overall power consumption:20W
5.Availability environment:50~86°F indoor
6.Control model: Manual、 DMX512 、 Remote And APP control
7.Products size:23*17*12CM
8.Net weight: 1.7KG

2.Menu

ADDR	1-512	Address code settings, DMA mode/slave mode
SHOW	SHOW 0	Show 0 Randomly play all programs
	SHOW 1	Show 1 line effect program playback
	SHOW 2	Show 2 Animation Effects Program Playback
	SHOW 3	SHOW 3 built-in text program playback
	SHOW 4	Show 4 Christmas and New Year program airing
	SHOW 5	Show 5 outdoor landmark program broadcast
	SHOW 6	Show 6 Personalized Programming Program Playback
	SHOW 7	Show 7 Hand drawn Graffiti Program Plays
SPEED	SP 0-SP 9	Sp 0-9 program playback speed from slow to fast
SOUND	S_ON	(N: Voice control is turned on, and the program playback is in voice control mode (only Show 0, Show 1, Show 2, Show 4, and Show 5 support voice control))
	S_OFF	Off: Voice control is turned off, After the voice control is turned off, the program will play in automatic mode
SENSE	SE 0-SE 9	SE 0-9 voice control sensitivity from low to high

3. Debug channel list

		DMX512 numerical value	control content
CH1	Main switch	0-9	Laser shutdown
		10-255	Laser switch(dimming)
		0-69	White Red Blue Pink Blue Yellow Green(fixed color selection)
		70-79	Overall color change(flow rate controlled by CH3)
		80-89	Initial color of the pattern(flow rate controlled by CH3)
		90-92	Seven Rainbow Colors(water flow speed controlled by CH3)
		93-110	2 segment color selection 4 numerical step(flow speed controlled by CH3)

CH2	Colour	111-131	3-segment color selection with 4 numerical steps (flow speed controlled by CH3)
		132-149	4 segmented color selection with 4 numerical steps (flow speed controlled by CH3)
		150-182	8-segment color selection with 4 numerical steps (flow speed controlled by CH3)
		182-218	16 segmented color selection with 4 numerical steps (flow speed controlled by CH3)
		219-253	32 segmented color selection with 4 numerical steps (flow speed controlled by CH3)
		254-255	Color gradient(flow rate controlled by CH3)
CH3	Color flow speed	0-1	Color does not flow
		10-127	Color flowing forward, speed changing from slow to fast
		128-255	Color reverse flow, speed changes from slow to fast
CH4	Selection of graphic groups	0-24	Built in static graphics group 1(basic geometric patterns)
		25-49	Built in static graphics group 2(basic geometric patterns)
		50-74	Built in static graphic group 3(edge highlight pattern)
		75-99	Built in static graphics group 4(dot graphics)
		100-124	Built in static graphics group 6(Christmas graphics)
		125-149	ILDA Animation Group 1
		150-174	ILDA Animation Group 2
		175-199	ILDA Animation Group 3(temporarily reserved)
200-224	ILDA Animation Group 4(temporarily reserved)		
		225-255	ILDA Animation Group 5(temporarily reserved)
CH5	Shape selection	0-255	Pattern selection(pattern grouping controlled byH4)
CH6	Built in dynamic effects	0-1	No function
		2-206	Built in dynamic effect radio selection, one effect every 2 values (color CH2 control, CH2=0 default color speed CH7 control)
		207-216	Random playback of line effects(color CH2 control,CH2=0 default color, speed CH7 control)
		217-226	Animation effect random playback (color CH2 control, CH2=0 default color, speed CH7 control)
		227-236	Christmas effect random playback (color CH2 control, CH2=0 default color, speed CH7 control)
		237-246	Random playback of outdoor effects (color CH2 control, CH2=0 default color, speed CH7 control)
		247-255	Randomly play all effects (color CH2 controlCH2=0 default color,speed CH7 control)
CH7	Built in dynamic effect speed	0-1	System default speed
		2-255	Manually adjust the built-in effect speed from slow to fast
CH8	Pattern Size	0-255	Manual selection of pattern size
	Automatic	0-15	Pattern size selection
		16-55	Speed selection from small to large
		56-95	Choose from high to low speed

CH9	scaling of patterns	96-135	Size scaling speed selection
		136-175	Two point irregular loop scaling
		176-215	Triple irregular loop scaling
		216-255	Quadruple irregular loop scaling
CH10	Pattern rotates around the center	0-127	Rotation angle selection
		128-191	Positive rotation speed selection
		192-255	Reverse rotation speed selection
CH11	Pattern rotates around the X-axis	0-127	Horizontal flip position selection
		128-255	Horizontal flipping speed selection
CH12	Pattern rotates around the Y-axis	0-127	Vertical flip position selection
		128-255	Vertical flipping speed selection
CH13	Horizontal	0-255	Circles horizontally in a positive direction, with speed increasing from fast to slow
CH14	Vertical movement	205-255	Circles in the opposite vertical direction, with n speed from slow to fast
CH15	X-direction waves	0-1	No waves
		2-255	Wave amplitude
CH16	Gradually drawing	0-1	No gradient drawing
		2-63	Manual gradient 1
	patterns	64-127	Manual gradual drawing 2
		128-153	Automatic Gradual Drawing(Increase)
		154-179	Automatic gradient (subtraction)
		180-205	Automatic gradient (increase first,decrease later-reverse)
		206-255	Automatic gradient (increase first,decrease later-same direction)

If you have any questions please contact us :

Email:customer@eytse.com

Security matters-----

The product is a class IIIB laser products, should avoid the eyes close to the hole position by the laser irradiation, or may cause eye discomfort.

Do not allow children to operate the product alone, other people before the operation, please check the safety tips

This product is suitable for indoor use, and its protection level is IP20. Apply to dry conditions, please avoid use in wet, hot, dusty environment. Products should maintain good heat dissipation, away from flammable objects or liquids.

LightElf (WeChat Mini Program & Android App) User Manual

A、 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. **)

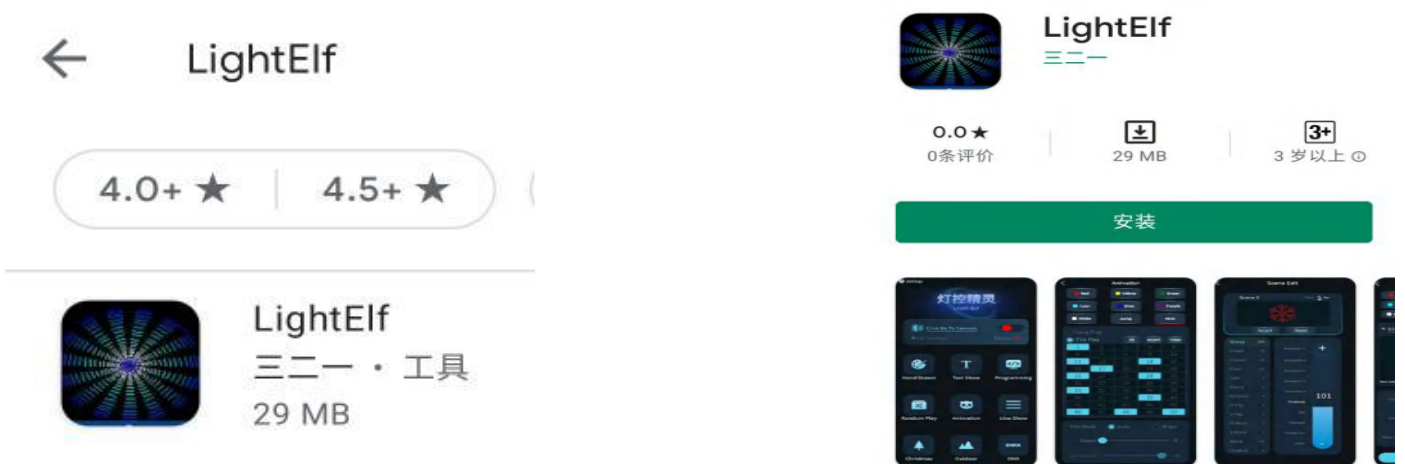
1. WeChat mini program:

Open WeChat, search for "灯控精灵" in the mini program or scan the QR code below to use it

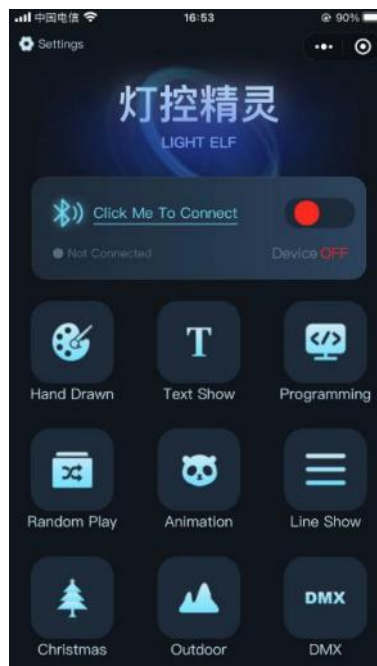


2. Android App

APP Download address: www.eytse.com Or log in to the Google Play Store and search for "LightElf" to install it

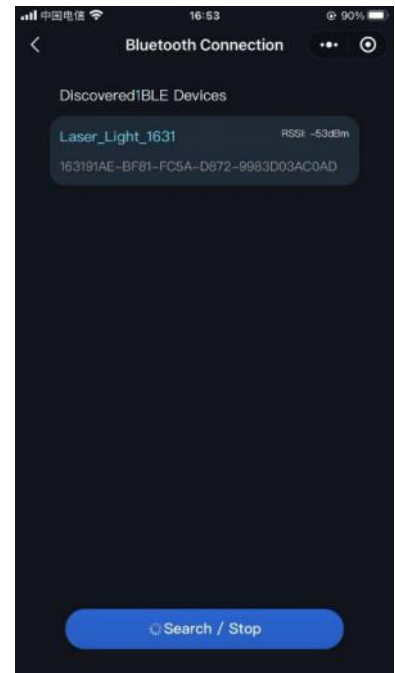


3. The main interface after the software is started is as shown in the figure



B、 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



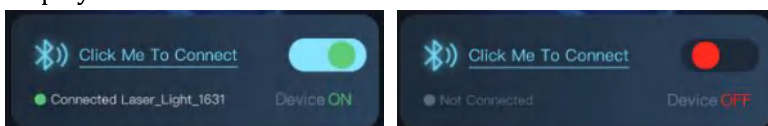
C、 Software settings

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



D、 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.

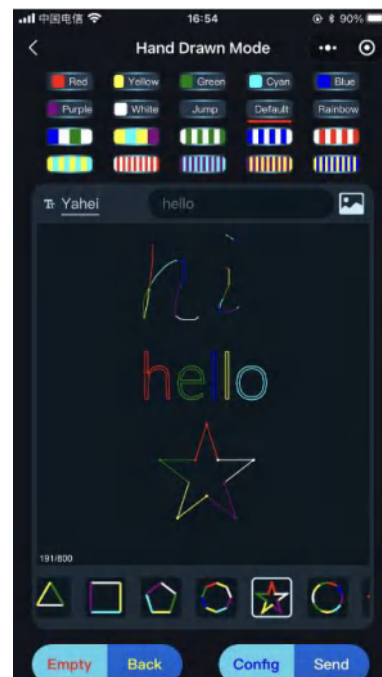


E、 Introduction to hand-drawn graffiti function



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

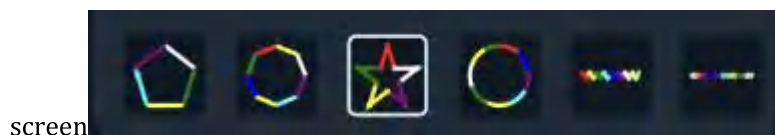
- 1) Click the icon  to switch to the manual pattern drawing function
- 2) Use your finger to draw the pattern you want on the middle large screen area
- 3) You can also click the icon  to add a picture background to make drawing easier

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

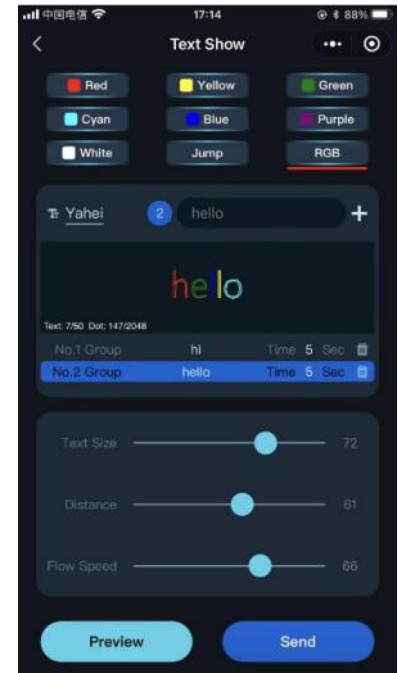
- 1) The clear and back buttons can be used to delete the drawn pattern. After deletion, the pattern can be redrawn.
- 2) Click the configuration button to configure parameters, configure the size, rotation angle, flip, and horizontal and vertical movement of the graphics. Click on the left side to select 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.

F. 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

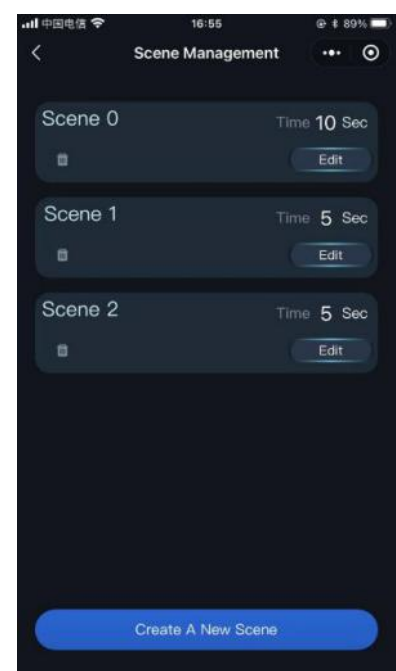
- 1) Text size: Adjust text size to change the size of text displayed on your device
- 2) Display viewing distance: adjust the size of the display area (use to adjust the projection distance)
- 3) Water flow speed: Adjust the water flow speed to change the speed at which text moves from left to right.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

G、 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.

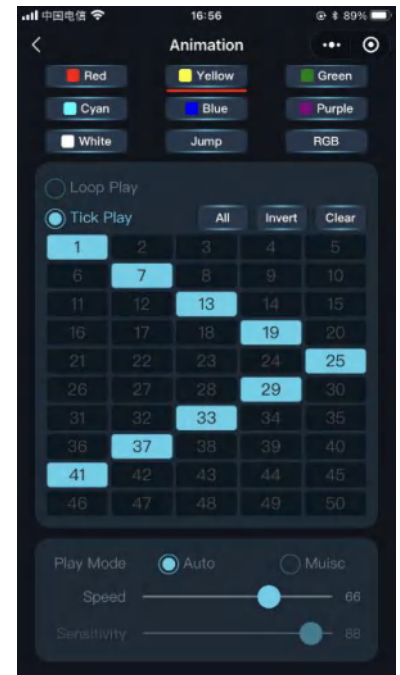
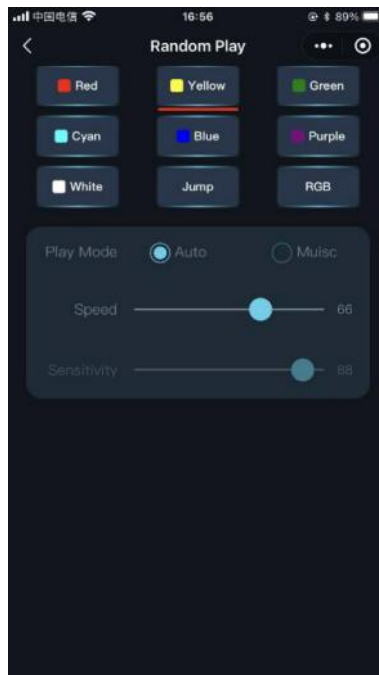


H. Built-in program playback

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.