LED Super Beam 500
User Manual

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TECHNICAL PARAMETERS

Light source

Input voltage: AC100V-240V / 50-60Hz

Light source specification: LED 500W

Optical

Optical device: combined optical lens

Dimming: 0-100 dimming

Controls

Channel mode : 16ch

Working mode: DMX512 control, auto mode, master/slave mode, with RDM function

Display: 2.8 inch touch screen, bilingual operating system, can reverse 180°display

Signal line: signal line three-core cannon head input, signal line three-core cannon base output

Power cord: aviation plug input, output

Effect

Color :12 colors + white light

Frost system: 1 independent frost effect + rainbow effect, soft and natural light spot

Fixed gobos : 15 fixed gobos + white light

Prisms: 1pc 8 prisms, 1pc 8+8+8 prism, each prism can be independently forward and reverse

Strobe: super fast strobe effect

Construction

Pan/Tilt movement: 540/280°(16bit precision scan), with automatic return function

Protection degree: IP20, overheat protection

Weight&Dimension
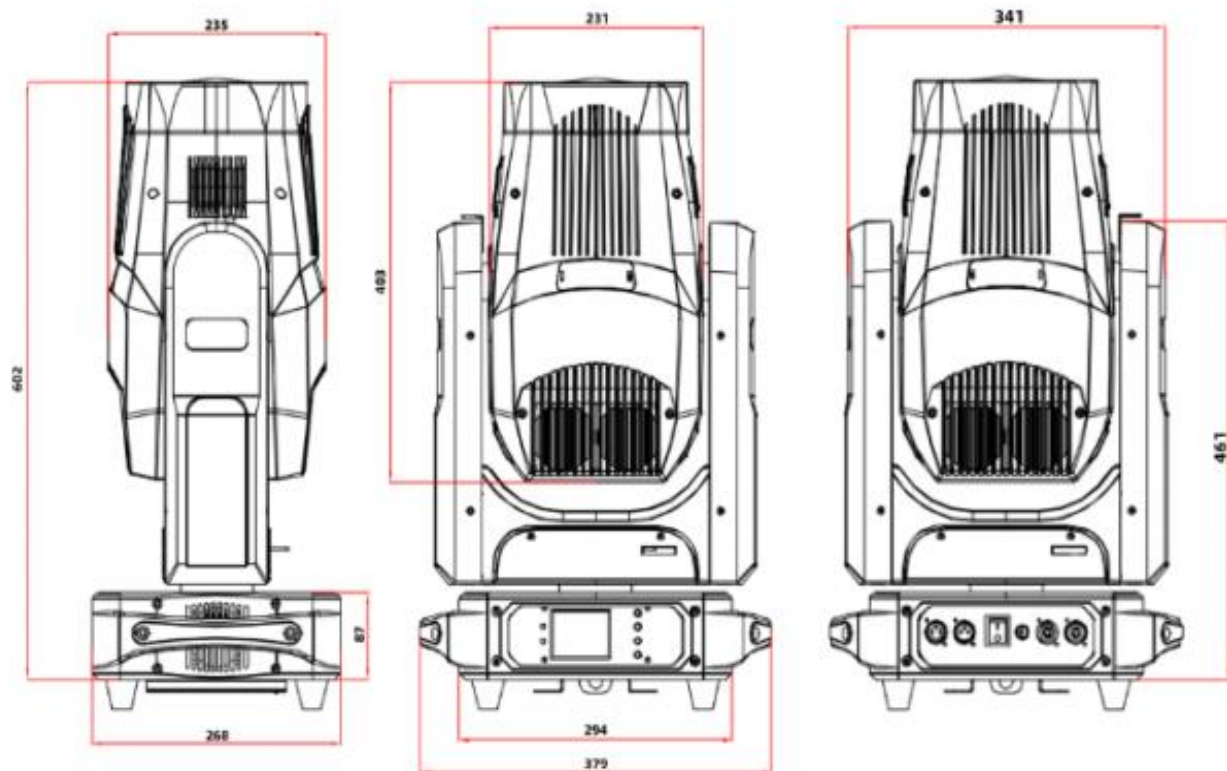
Product size: 38*27*64.5CM

Product net weight: 21KG

Carton packing size: 75*36*47CM

G.W.(CTN): 24.8KG

Flight case packing size: 101*48*79cm/2PCS

G.W.(Flight case): 82.5KG/2PCS

SIZE DRAWING

1. Precautions and installation Precautions and installation

1.1 DISCLAImer

Thank you for choosing our products! 8, This product is in good condition and the package is complete when it leaves the factory. For your safe and effective use of this product, before you use this product, please read this manual carefully and completely. This manual contains important information for installation and use. Please install and operate according to the requirements of the manual. At the same time, please keep this manual properly for use at any time. Our company does not assume all responsibility for damage to lamps or other performance due to individuals not operating in accordance

with the instructions during installation, use and maintenance.

This manual is subject to technical changes without prior notice.

1.2 Maintenance

- Disconnect the power supply before performing maintenance.
- This lamp should be kept dry and avoid working in wet environment.
- Intermittent use will effectively extend the life of the luminaire.
- In order to obtain good ventilation and lighting effects, pay attention to cleaning the fan and fan net as well as the lens often.
- Do not rub the luminaires housing with organic solvents such as alcohol to avoid damage.

1.3 Product Precautions

● This lamp is for professional use only.

● Ensure that the power supply voltage matches the required power supply voltage of the equipment before operation.

● Do not place this product in a place that is easy to loose or shake.

● During use, if the lamp is abnormal, stop using the lamp in time.

● In order to ensure the service life of the product, this product should not be placed in a humid   or leaking place, and should not work in an environment where the temperature exceeds 60 degrees.

● When the lamp is used, the power supply voltage change should not exceed ±10％, the voltage is too high, will shorten the life of the lamp, the voltage is too low, it will affect the light color of the lamp.

● After the power off, it takes 20 minutes to use the lamp to cool down fully before it can be used again.

● The rotating parts of the lamp and the attaching accessories must be checked regularly, and the loosening and shaking should be reinforced in time to prevent accidents.

● In order to ensure the normal use of this product, please read this instruction carefully.

1.4 Signal cable connection

Light fixtures feature standard DMX input and output 3-core or 5-core XLR sockets. Use a twisted-pair signal cable shielded specifically for DMX 512; The signal line is generally

connected at a distance of 150 meters, and the DMX512 signal amplifier must be added for long distance signal transmission.

Use a shielded twisted-pair signal line from the DMX outlet of the controller to the DMX input of the first device, and from the DMX outlet of the first device to the DMX input of the second device, and so on, until all the lamps are connected. Then install a terminal plug   on the last 3-pin connector of the connecting luminaire output on each line. (Weld a 4/1W, 120Ω resistor between the 2 and 3 pins of the 3-pin pin cannon plug).

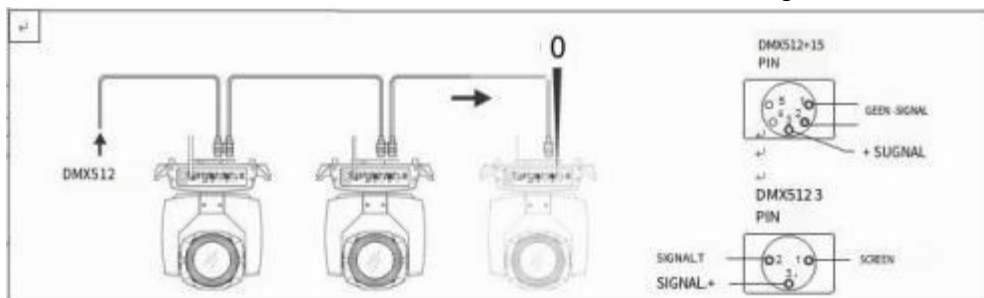Important: The wires should not touch each other or the metal housing.

Figure 1 Schematic diagram of DMX signal wire connection

➢   The calculation method of the starting address code of the lamp:
The initial address code of the current luminaire is equal to (the initial address code of the previous luminaire)+(the number of channels of the luminaire) 1: The initial address code value of the first luminaire A001.

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2: The basic channel number of the controller should be greater than or equal to the total number of channels used by the luminaire.

3: Note: when using any controller, each luminaire should have its own starting address code, if the first luminaire's starting address code is set A001, the number of luminaire

channels is 16CH; Then the starting address code of the second lamp is set to A017; The starting address code of the third lamp is set to A033; And so on,(this setting also needs to be determined according to different consoles)

1.5   Luminaire installation

Luminaires can be placed horizontally, hung diagonally, and hung upside down. Be sure to pay attention to the installation method when hanging diagonally and upside down.

As shown in Figure 2, before positioning the luminaire, it is necessary to ensure the stability of the installation site. During the reverse hanging installation, it is necessary to ensure that the luminaire does not fall down on the support frame. It is necessary to use the safety rope to pass through the support frame and the luminaire handle for auxiliary hanging to ensure safety. Prevent the luminaire from falling and sliding.

During the installation and debugging of the lamps, pedestrians are forbidden to pass under the lamps. Regularly check whether the safety rope is worn and whether the hook screws are loose.

If the hanging installation is not stable, resulting in all consequences caused by the fall of the lamp, our company does not assume any responsibility.
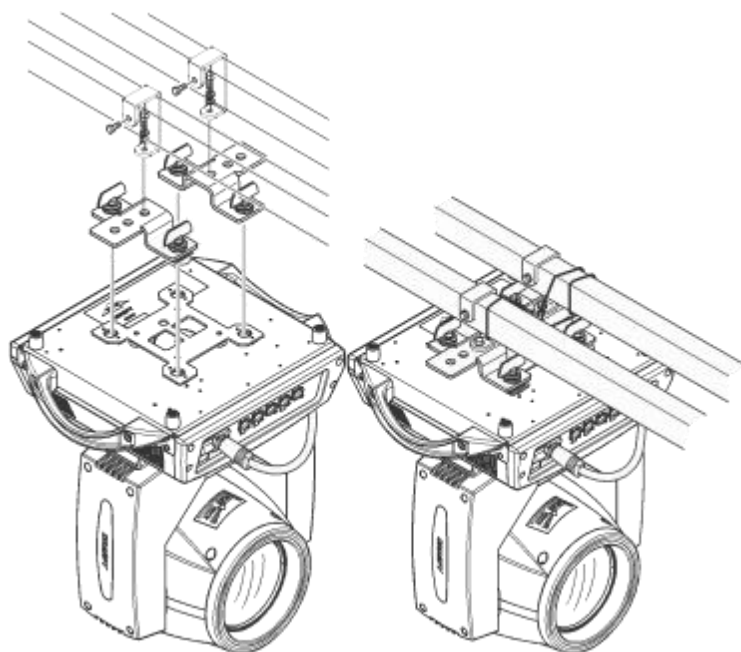

Figure 2 Schematic diagram of the lamp hanging upside down

2. Control panel

2.1 Key Instructions

LED display
DMX signal
error signal

001

"Up" key
"OK" key
"Right" key
"Left" key
"down" key

The function of the "left" and "right" keys is the same: return to the previous screen

"Up" and "Down" keys: Select and edit

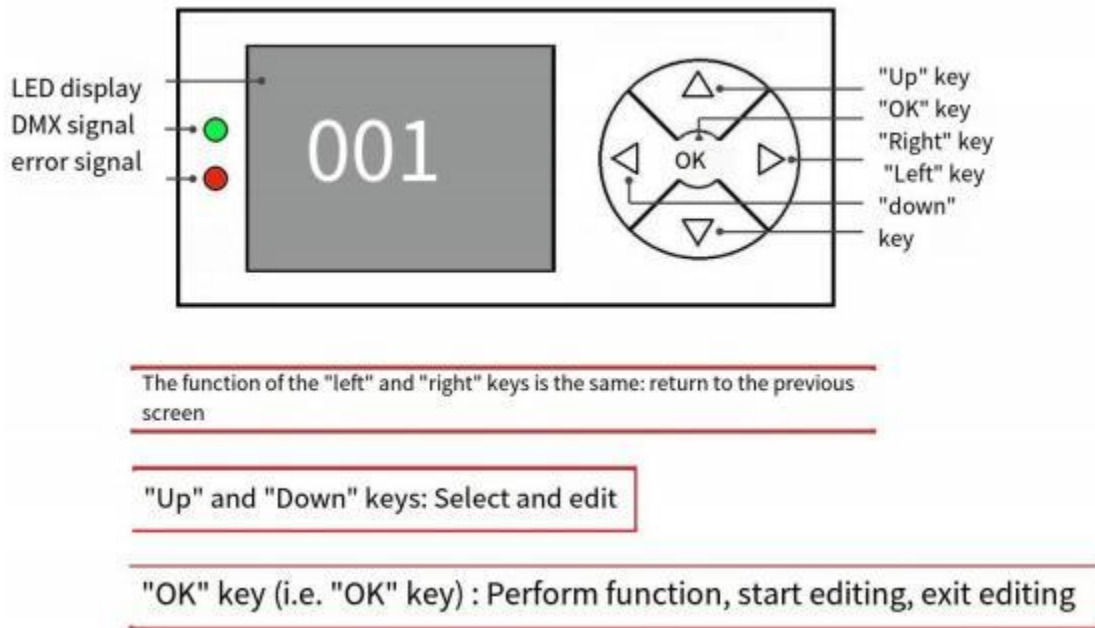"OK" key (i.e. "OK" key) : Perform function, start editing, exit editing

Figure 3 Schematic diagram of key description on the panel

The following describes the use of keys:

1, if the current is not the main screen, press the "left" key (one or more times) to return to the main screen

2, in the home screen, press the "up" key or "down" key to select the "Settings" button

3. Press the "OK" key to enter the "Settings" interface

4, in the "Settings" interface, press the "up" key or "down" key to select "Menu"

5, press the "OK" key to enter the editing state

6, press the "up" key or "down" key to modify the "menu"

7, press the "OK" key to exit the editing state

2.2 Menu Description
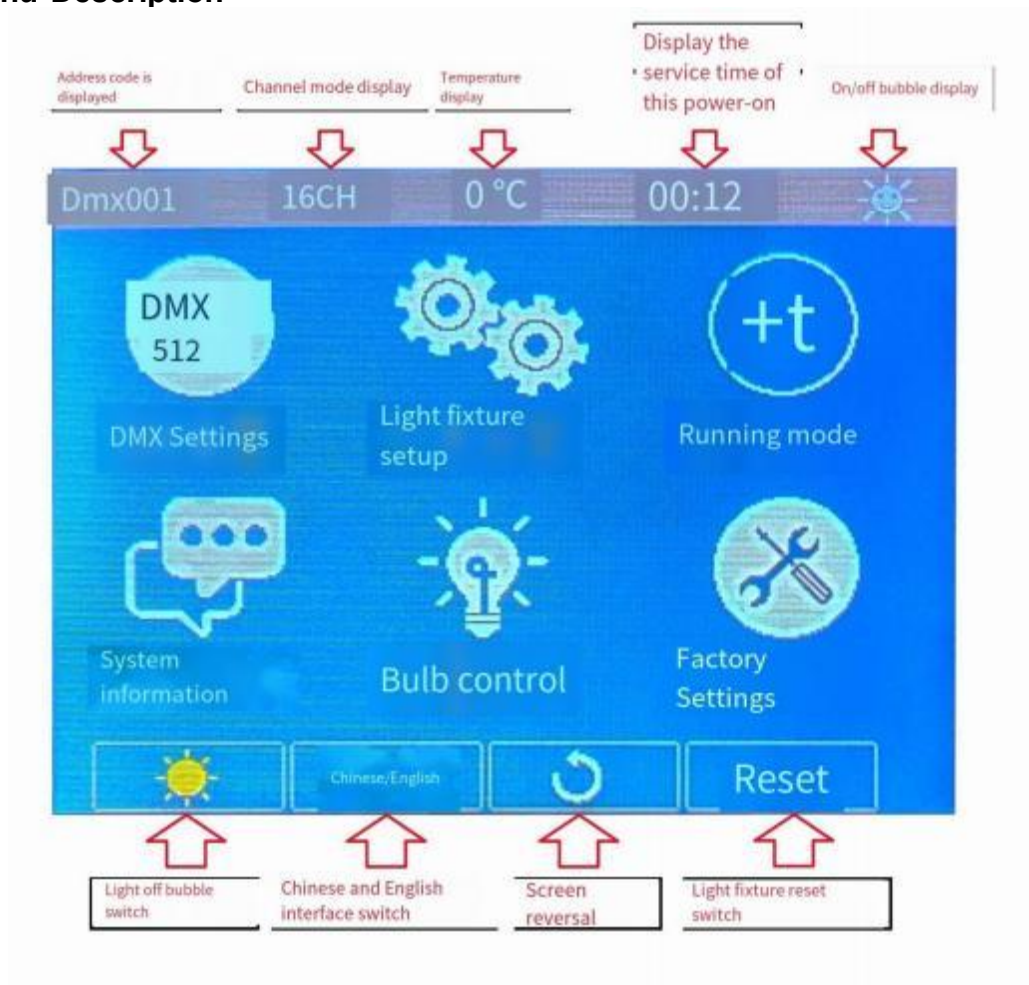
Figure 4 Schematic diagram of main menu

2.2.1 DMX Settings

DMX address	001 ~ 512	Button description: Press up or down is +1 or -1 mode; Press the right button is the next one; Left button is the previous one; Confirm is Save and exit.
		Manual instructions: Enter the hundreds place first, then the tens place, and finally the one place. (For example: enter the 286 address code, it will first point 2, then point 8, and finally point 6)

2.2.2 Lighting Settings

DMX channel	16CH	16 channel mode
RDM function	open	Has RDM function
	close	No RDM function
Language	Chinese	Set to the Chinese interface
	English	Set to English interface
Screen flip	close	Front display
	open	Screen inverted display
DMX signal	Hold	Disconnect the console signal and the luminaire will keep the data from the original console
	Clear	Disconnect the console signal and clear the console data
Screensaver	open	Have screensaver
	close	No screen protection
X Inversion	close	
	open	X Motor direction rotation 540 degrees
Y reversal	close	
	open	Y Turn the motor 270 degrees in the direction
XY switching	close	
	open	Channel to swap XY axes (incl. trims)
XY encoder	open	Use an encoder (optocoupler) to judge out of step and automatically correct the position
	close	Correct position without using an encoder (optocoupler)
Color linearity	open	The color wheel changes linearly
	close	Color wheel nonlinear change, half-color change
Restore default		Press "OK" to see the confirmation dialog box, press "OK" again to restore the default Settings

2.2.3 Run Mode

Options		Instructions
Self-walking pattern	DMX	Slave state: Receives DMX signals from the console or host
	Bootstrap	Host status: Self-drive and send DMX signal to slave
Manual control		This interface is used to control the current luminaire (does not receive DMX signals), corresponding to the channel. Refer to the channel table for details
Luminaire reset		All motors reset
XY reset		XY motor reset
MT reset		Small motor reset

2.2.4 System information

Options	Instructions	
System version	Ver	Show software version
	DIS	Display board software version
	MT	Motor board software version
Temperature information		Displays the current temperature of the luminaire
System time	Displays total light bubble time	
	Displays the time of this brightening bubble	
	Displays total usage time	
	Displays the current usage time	
	Permission Duration	9999 means no encryption and can be used for a long time; Other values indicate the remaining use time, with encryption;
Sensor monitoring	X Hall Y Hall Color hall Pattern Hall Focusing Hall X-coded state Y code state	Optocoupler Hall status view; 0 when magnetic is detected, 1 otherwise;
	X encodes the step value Y encodes the step value	XY encoding step value: the step value should be increased in the forward direction and decreased in the reverse direction. Every turn to the same point when the value is the same as normal;
System error		Shows which function of the light fixture is faulty
DMX Monitoring		Detect console data

Common Error Messages	Instructions
The MT board fails to be connected	Motor board not responding. There is a problem with the serial communication line connecting the display board to the motor board, or there is a problem with the motor board.
X-axis reset failed	There is a problem with the X-axis photoelectric switch, or the X-axis motor or motor board
Y-axis reset failed	Y-axis photoelectric switch, or Y-axis motor or motor board problem
X-axis Hall error	X-axis Hall, or a problem with the motor board
Y-axis Hall error	Y-axis Hall, or a problem with the motor board
Color disk reset failed	Color disk Hall, or there is a problem with the color disk motor
The pattern plate failed to reset	Pattern plate Hall, or pattern plate motor has a problem
The focus reset failed	Focusing Hall, or a problem with the focusing motor
Bulb control failure	Failure to light or extinguish bubbles, lamplighter or bulb problem

2.2.5 Bulb control

Options		Instructions
Dimming curve	SCurve (sine)	The dimming curve is linear by default, refer to the dimming curve diagram
	InSquare (logarithm)	
	Square (exponent)	
	Linear (straight line)	

Dimmin

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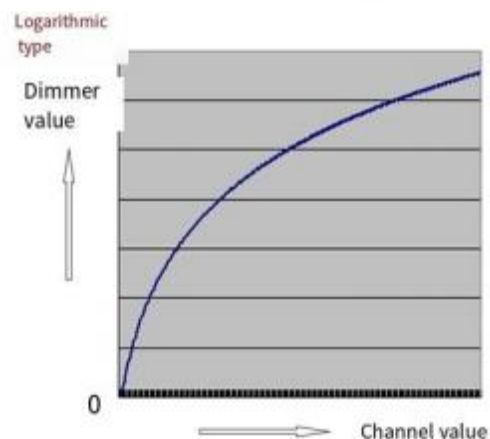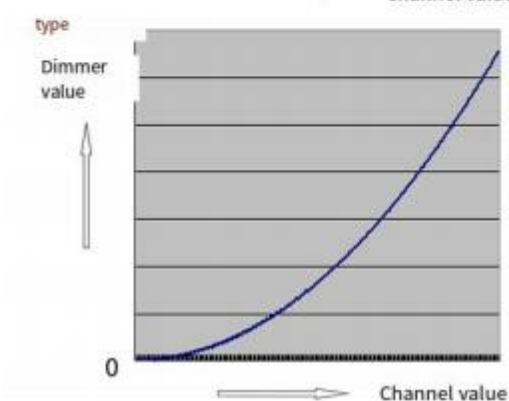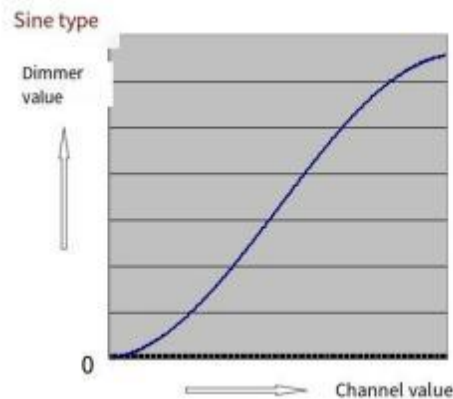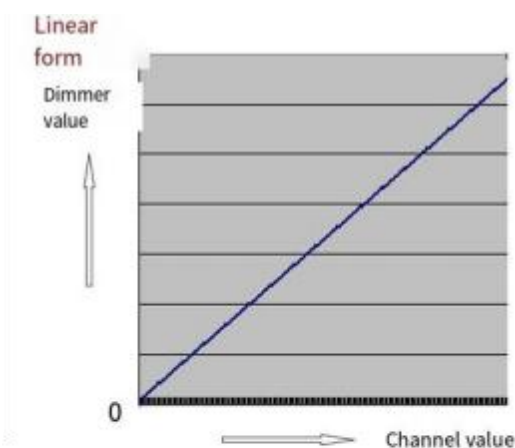
2.2.6 Factory Settings

Motor Calibration	Data download	After changing the display board, download the calibration data of the original display board from the motor board
	X-axis	After entering the sub-interface, the reset position of the motor such as X axis and Y axis can be adjusted to make up for the error on the hardware installation. The adjustment range is -128~+127, and +0 indicates no adjustment.
	Y-axis	
	Colors	
	Patterns	
	Focusing	
	Dimming	
	Prism 1 Zero	
	Prism 1 Stroke	
	Prism 2 Zero	
	Prism 2 Stroke	
	Fogging zero	
	Atomizing stroke	
	Colorful mirror stroke	
	Zeroing	
XY speed adjustment	X-axis velocity	
	Y-axis speed	000-255.
X Hall	On/Off	Off, X Hall to report wrong off
		On, X Hall reports the wrong off
Y Hall	On/Off	Off, Y Hall reports wrong off
		On, Y Hall reports an error
LED POWER	0-255.	Dark to light

Channel description

1.   Channel table

This channel can be viewed in scene mode in order, channel mode is set in the "Address Settings" page, specific details of the data as follows:

CHANNEL TABLE

passage	Channel mode
	16
1	Color Wheel
2	Cut light/stroboscopic
3	Dimming
4	Pattern plate
5	Prism 1

6	Prism Rotation 1
7	Prism 2
8	Prism Rotation 2
9	Focusing
10	X
11	X Fine tuning
12	Y
13	Y Fine tuning
14	XY speed
15	Atomizing & colorful mirror
16	Bulb Control & Reset

Channel parameter values (full version)

Channel	Features	Channel values	Effects
1	Color plate	000-004. 005-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064	White Light White light + Color 1 Color 1 Color 1+ Color 2 Color 2 Color 2+ Color 3 Color 3 Color 3+ Color 4 Color 4 Color 4+ Color 5 Color 5 Color 5+ Color 6 Color 6
		065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-200 201-255	Color 6+ Color 7 Color 7 Color 7+ Color 8 Color 8 Color 8+ color 9 Color 9 Color 9+ color 10 Color 10 Color 10+ color 11 Color 11 Color 11+ Color 12 Color 12 Color 12+ white light Forward flow (fast to slow) Backward flow (slow to fast)

2	Stroboscopic	000-003.	Light brake open
		004-103.	Stroboscopic from slow to fast
		104-107.	Light gate on → (controlled by dimmer channel) Pulse stroboscopic from slow to fast
		108-207.	
		208-212.	Light gate open → (controlled by dimmer channel)
		213-251.	
		252-255.	Random stroboscopic from slow to fast
			Light gate on → (controlled by dimmer channel)
3	Dimming	000-255.	Dark to light
4	Pattern plate	000-004	Solid Figure 1
		005-009	Solid Figure 2
		010-014	Solid Figure 3
		015-019	Solid Figure 4
		020-024	Fixation Figure 5 Solid
		025-029	Figure 6
		030-034	Solid Figure 7
		035-039	Fixation Figure 8
		040-044	Fixation Figure 9 Solid
		045-049	Figure 10 Solid
		050-054	Figure 11 Solid
		055-059	Figure 12 Solid
		060-064	Figure 13 Solid
		065-069	Figure 14 Solid
		070-074	Figure 15 Solid
		075-079	Figure 16
		080-084	Solid Figure 1 Jitter (from slow to fast) Solid
		085-089	Picture 2 Jitter (slow to fast)
		090-094	Solid Figure 3 Jitter (from slow to fast) Solid
		095-099	Figure 4 Jitter (from slow to fast)
		100-104	Solid Figure 5 Jitter (slow to fast)
		105-109	Solid Figure 6 Jitter (from slow to fast)
		110-114	Solid Figure 7 Jitter (from slow to fast)
		115-119	Fixed Figure 8 Jitter (from slow to fast)
		120-124	Fixed Figure 9 Jitter (from slow to fast)
		125-129	Solid Picture 10 Jitter (from slow to fast)
		130-134	Fixed Figure 11 Jitter (from slow to fast)
		135-139	Fixed Figure 12 Jitter (from slow to fast)
		140-144	Fixed Figure 13 Jitter (from slow to fast)
		145-149	Fixed Figure 14 Jitter (from slow to fast)
		150-154	Fixed Figure 15 Jitter (from slow to fast)
		155-159	Fixed Figure 16 Jitter (from slow to fast)
		160-200	Backward running water (from fast to slow) Forward flow (slow to fast)
		201-255	
5	Prism 1	000-127.	Prism 1 ejection
		128-255.	Prism 1 Cut in

6	Prism 1 Rotate	000-127. 128-190. 191-192. 193-255.	Prism Angle adjustment Reverse rotation (from fast to slow) Stop Forward rotation (slow to fast)
7	Prism 2	000-127. 128-255.	Prism 2 ejection Prism 2 Cut
8	Prism 2 Rotate	000-127. 128-190. 191-192. 193-255.	Prism Angle adjustment Reverse rotation (from fast to slow) Stop Forward rotation (slow to fast)
9	Focusing	000-255.	Pattern clarity from far to near
10	X-axis	000-255.	Horizontal 540 degree scan
11	X-axis trims	000-255.	Horizontal 1.2 degree fine tuning
12	Y-axis	000-255.	Vertical 270 degree scan
13	Y-axis fine-tuning	000-255.	Vertical 1.2 degree fine trim
14	XY speed	000-255.	Speed from fast to slow
15	Fogging & Colorful mirrors	000-127. 128-191. 192-255.	There is no Multicolor mirror cut Atomizing slice cut
16	Bulb control	000-025. 026-050. 061-085. 251-255.	None, there is no action in the area with no specified function Small motor reset XY motor reset All motor reset

REMARK

The product has perfect performance and intergrity packing.

All users should be strictly comply with the warning and operating instructions as stated.

Or we aren 't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company 's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.