



operation instructions

Please read the manual carefully and keep it
properly before ussing the product



1. Main functions

- **Input voltage:** AC 100V-240V/50-60HZ
- **Power consumption** 500W
- **Module type:** LED
- **Control mode:** DMX512 control/built-in self-propelled/voice controlled self-propelled/master-slave machine
- **Channel mode:** 23 channels
- **A color palette with 8 colors and white light, a fixed image palette with 12 patterns and white light, and a dynamic image palette with 7 patterns and white light. The color palette has a flowing scrolling half color effect. The pattern wheel has a scrolling and shaking effect with flowing water.**
- **Equipped with CMY and CTO functions**
- **Two prisms, each with arbitrary angle positioning and positive and negative rotation effects.**
- **The strobe has multiple strobe functions, and the gradual opening and closing of light is smooth without shaking**
- **Protection level:** IP20
- **Size:** 60X54X45 CM
- **Net weight:** 27Kg

2. DMX Channel table

23 channels			
passage	Function	numerical value	Description
1	X-axis	0 - 255	0-540 degrees
2	X-axis fine-tuning	0 - 255	16bit
3	Y-axis	0 - 255	0-270 degrees
4	Y-axis fine-tuning	0 - 255	16bit
5	XY speed	0 - 255	From fast to slow
6	Dimming	0 - 255	0% -100% linear dimming
7	stroboscopic	0 - 3	Dimming
		4 - 100	Ordinary strobe light
		101-150	Slow on, fast off
		151-200	Fast on, slow off
		201-250	Lightning flicker
		251-255	Dimming

0 - 6	white light
7 - 13	White light+color 1
14 - 20	Color 1
21 - 27	Color 1+Color 2
28 - 34	Color 2
35 - 41	Color 2+Color 3
42 - 48	Color 3
49 - 55	Color 3+Color 4
56 - 62	Color 4
63 - 69	Color 4+Color 5
70 - 76	Color 5
77 - 83	Color 5+Color 6
84 - 90	Color 6
91 - 97	Color 6+Color 7
98 - 104	Color 7
105 - 111	Color 7+Color 8
112 - 118	Color 8
119 - 125	Color 8+White Light
126 - 188	Clockwise rotation from fast to slow
189 - 192	white light
193 - 255	Rotate counterclockwise from slow to fast

9	CT0	0 - 255	Color from light to dark
10	cyan(C)	0 - 255	Color from light to dark
11	magenta(M)	0 - 255	Color from light to dark
12	yellow(Y)	0 - 255	Color from light to dark
13	Fixed disk diagram	0 - 4	round hole
		5 - 9	Pattern 1
		10 - 14	Pattern 2
		15 - 19	Pattern 3
		20 - 24	Pattern 4
		25 - 29	Pattern 5
		30 - 34	Pattern 6
		35 - 39	Pattern 7
		40 - 44	Pattern 8
		45 - 49	Pattern 9
		50 - 54	Pattern 10
		55 - 59	Pattern 11
		60 - 64	Pattern 12
		65 - 127	Rotate counterclockwise from slow to fast
		128 - 132	round hole

13	Fixed disk diagram	65 - 127	Rotate counterclockwise from slow to fast
		128 - 132	round hole
		133 - 195	Clockwise rotation from fast to slow
		196 - 200	Pattern 1 Shake
		201 - 205	Pattern 2 Shake
		206 - 210	Pattern 3 Shake
		211 - 215	Pattern 4 Shake
		216 - 220	Pattern 5 Shake
		221 - 225	Pattern 6 Shake
		226 - 230	Pattern 7 Shake
		231 - 235	Pattern 8 Shake
		236 - 240	Pattern 9 Shake
		241 - 245	Pattern 10 Shake
		246 - 250	Pattern 11 Shake
		251 - 255	Pattern 12 Shake
14	Magnify	0 - 255	0% -100% linear amplification
15	focusing	0 - 255	0% -100% linear focusing

16	Dynamic diagram disk	0 - 14	White light hole
		15 - 29	Pattern 1
		30 - 44	Pattern 2
		45 - 59	Pattern 3
		60 - 74	Pattern 4
		75 - 89	Pattern 5
		90 - 104	Pattern 6
		105 - 119	Pattern 7
		120 - 129	Pattern 1 Shake
		130 - 139	Pattern 2 Shake
		140 - 149	Pattern 3 Shake
		150 - 159	Pattern 4 Shake
		160 - 169	Pattern 5 Shake
		170 - 179	Pattern 6 Shake
		180 - 189	Pattern 7 Shake
		190 - 221	Rotate counterclockwise from slow to fast
		222 - 223	White light hole
		224 - 255	Clockwise rotation from slow to fast

17	Rotating diagram motion	0 - 127	any angle
		128 - 189	Clockwise rotation from fast to slow
		190 - 193	Stop rotating
		194 - 255	Rotate counterclockwise from slow to fast
18	Prism 1	0 - 127	No effect
		128 - 255	Cut in Prism 1
19	Prism 1 rotation	0 - 127	any angle
		128 - 191	Rotate counterclockwise from fast to slow
		192 - 255	Clockwise rotation from slow to fast
20	Prism 2	0 - 127	No effect
		128 - 255	Cut in Prism 2
21	Prism 2 rotation	0 - 127	any angle
		128 - 191	Rotate counterclockwise from fast to slow
		192 - 255	Clockwise rotation from slow to fast
22	atomization	0 - 127	No effect
		128 - 255	Cut into atomization
23	Reset	0 - 25	No effect
		26 - 75	Small motor reset
		77 - 127	XY motor reset
		128 - 255	Reset all motors



LEFT and RIGHT keys work the same: return to the previous menu.

UP and DOWN keys: select and edit.

ENTER key (OK key): run functions, confirm editing, and exit editing.

- **MENU :** Loop through the top-level menu or return to the previous menu
- **ENTER:** Enter the next level menu or confirm and save the selected parameters
- **UP:** Up the menu, switch the selected parameter or increase the value
- **DOWN:** Go down the menu and switch to the selected parameter or decrease the value

Menu Structure

Settings		Function
address code	1 - 512	Set address code
passage	<u>23CH</u>	Set channel
Operation Mode	<u>DMX512/self-propelled/voice controlled/manual</u>	Set operating mode
Automatic Address Code	open/Close	Automatically calculate the address code, for example, if the current address code is 1 and the channel mode is 16CH, after turning on the automatic address code, pressing the set address code will automatically increase it by 16, that is, the address code will become 17
Signal retention	open/Close	After activation, if there is no signal, the original action will be maintained
XY exchange	open/Close	Exchange of X and Y channels
X-axis reversal	open/Close	X-axis reversal
Y-axis reversal	open/Close	Y-axis reversal
Encoder error correction	open/Close	Encoder error correction
Hall error correction	open/Close	Hall error correction
Restore settings	Yes/No	Restore factory settings (but do not restore fine tuning data)

manual		Function
01. X-axis	0-255	
02. Fine adjustment of X-axis	0-255	
03. Y-axis	0-255	
04. Y-axis fine-tuning	0-255	
05. XY speed	0-255	
06. Dimming	0-255	
07. Strobe	0-255	
08. Color palette	0-255	
09. CTO	0-255	
10. cyan 【C】	0-255	
11. magenta 【M】	0-255	
12. yellow 【Y】	0-255	
13. Fixed diagram disk	0-255	
14. Magnify	0-255	
15. Focus adjustment	0-255	
16. Dynamic diagram disk	0-255	
17. Rotating motion diagram	0-255	
18. Prism 1	0-255	
19. Prism 1 Rotation	0-255	
20. Prism 2	0-255	
21. Prism 2 Rotation	0-255	
22. atomization	0-255	
23. Reset	0-255	

Calibration	effect
Please enter a 4-digit password to use this feature	
password	

display	effect
Screen saver time	15 seconds/30 seconds/60 seconds/off After the time arrives, return to the desktop
backlight time	15 seconds/30 seconds/60 seconds/off When the time is up, the screen will turn off
Screen Flip	open/Close Screen forward and reverse control
Language	Chinese/English Choose Chinese or English

Reset	effect
reset all	Yes/No Reset all motors
XY reset	Yes/No XY motor reset
Head reset	Yes/No Reset the small motor on the head

DMX data monitoring	effect
Monitor the DMX512 data values of each channel	

Reset information	effect
If the system reset is normal, it will be displayed as normal. If there is a reset error, the corresponding reset error message will be prompted	

sensor information		effect
X encoder	****	Current encoder count value
Y encoder	****	Current encoder count value
X encoder status	00/11	Encoder A and B signal line status
Y encoder status	00/11	Encoder A and B signal line status
X Hall	0/1	Hall state, Hall at magnet position is 1, otherwise it is 0
Y Hall	0/1	Hall state, Hall at magnet position is 1, otherwise it is 0
Color dial Hall	0/1	Hall state, Hall at magnet position is 1, otherwise it is 0
Pattern disk Hall	0/1	Hall state, Hall at magnet position is 1, otherwise it is 0
Focusing Hall	0/1	Hall state, Hall at magnet position is 1, otherwise it is 0

Usage Log	effect
Usage frequency, usage time, flashing time, etc	

system version	effect
System hardware version, software version number	

Instructions:

1. When restoring factory settings, only the underlined parameters in the menu are restored, and other parameters will not be automatically restored or reset to zero.
2. 【Send local parameters】 The menu allows for the parameter settings with underlined items in this device to be sent to another or multiple lighting fixtures through a DMX data cable, avoiding duplicate setup work. When the received light fixture receives the correct parameters, a reset will occur.

1.

Troubleshooting

Fault	Solution
The lighting fixture is not powered and has no response at all	• Check if the fuse is damaged • Check if the AC voltage is normal • The internal switch power supply of the lamp body may be damaged • The internal control board of the lamp body may be damaged
Uncontrolled lighting fixtures	• Check if the DMX signal is normal. When it is normal, the display board's DMX signal indicator light will flash • Check if the address code is set correctly • Check if the channel mode is set correctly • Check if the DMX signal cable is too long or if there are too many light fixtures connected in series
XY axis displacement is abnormal	• The optocoupler sensor may be damaged or improperly installed, causing it to correct its original position. Set it to 'No' in the 'XY Error Correction Enable' option of the menu. Or adjust the optocoupler sensor circuit board to the appropriate position, or replace this circuit board