CY-PM StagePro7

User Manual



Please read the instructions carefully before use

Orders to record

I. Precautions and installation	. 1
1.1 Statement	. 1
1.2 Maintenance	.1
1.3 Product Precautions	. 1
1.4 Product Introduction	. 1
1.5 Connecting Signal Cables	.2
1.6 Installation of Lamps	.2
2. Control Panel	. 4
2.1 Key Description	.4
2.2 Main Menu	.5
2.2.1 DMX Settings	. 5
2.2.2 Switching between Medium and En	.5
2.2.3 Lamp Information	.6
2.2.4 Lighting setup	.7
2.2.5 Running Mode	. 8
2.2.6 Factory Settings	.9
3. Channel function	10
3.1 Table of channels	10
4. Common faults	13

1. Precautions for Installation Precautions for installation

1.1 The statement

Thank you for choosing our products! This product at the factory, the performance is intact, the package is complete. For your safe and effective use of this product, please read this manual carefully and completely before you use this product. This instruction manual contains important information for installation and use. Please install and operate according to the instructions. Meanwhile, please keep this instruction manual properly for use at any time. Our company does not assume any responsibility for the damage of lamps or other performance due to the failure of individuals to follow the instructions during installation, use or maintenance.

This manual is subject to technical change without prior notice.

1.2 Maintenance and maintenance

- Please disconnect the power supply before maintenance.
- The lamp should be kept dry and avoid working in wet environment.
- Intermittent use will effectively extend the life of the lamp.
- For good ventilation and lighting, take care to clean the fan and fan net as well as the lens frequently.
- Do not rub the lamp shell with alcohol and other organic solvents to avoid damage.

1.3 Product Precautions

- This lamp is for professional use only.
- Before running, ensure that the power supply voltage is consistent with the required power supply voltage.
- Do not place the product in a place that is easy to loosen or vibrate.
- In the process of use, if the lamp is abnormal, it should stop using the lamp in time.
- In order to ensure the service life of the product, the product should not be placed in a damp or leaking place, and should not work in an environment where the temperature exceeds 60 degrees.
- When the bulb is used, the power supply voltage should not be more than $\pm 10\%$. If the voltage is too high, the life of the bulb will be shortened. If the voltage is too low, the light color of the bulb will be affected.
- After power failure, it takes 20 minutes for the lamp to be fully cooled before it can be powered on again.
- The rotating part of the lamp and the sticking parts must be checked regularly. If loose or shaking occurs, it should be reinforced in time to prevent accidents.
- To ensure the normal use of this product, please read the instructions carefully.

1.4 Product Introduction

- Input voltage: AC100-240V, 50/60Hz
- Rated power: 980W
- Light source: W LED module
- LED life: 20,000 hours

- Color temperature: 6800K
- Caliber: 138mm Frontal lens for greater performance
- Color rendering index: Standard mode Ra>75, high CRI mode Ra>90
- Luminous flux: 28000LM
- Signal interface: three-pin XLR (five-pin XLR optional)
- Control mode: DMX512, RDM, Auto Mode, master-slave, Sound activation
- Channel mode: 36CHs
- Display system: 2.7-inch touch LCD display, Chinese and English display, 180-degree rotation
- Fixed color: 7 colors + open position
- Color mixing system: independent CMY color mixing system
- Color temperature adjustment: independent CTO 2700K-7000K linear adjustment
- Prisms: Rotating 3-faced prism+6-faced linear prism, two prisms can be overlaid
- Effect wheel: dynamic effects such as stunning simulated dynamic flames, gurgling water, etc.
- Fixed Gobo wheel: 8 fixed gobos+open position
- Rotating gobo Wheel: 6 gobos (pluggable), outer diameter 27.9mm, effective diameter 16.5mm, thickness 1.1mm+Open position
- Framing system: 4 Individually positionable Shutter Blades, each piece can be closed separately and can be rotated +/- 90°
- Frost system: 0~100% linear atomization
- Iris system: 5%~100% smooth adjustment
- Beam Aperture: 4.5°~50° fast motorized linear zoom
- Dimming system: 0-100% linear adjustment
- Strobe system: the highest frequency can reach 25Hz, and random strobe and pulse strobe can be selected
- Pan: 540° (16 bit precision scanning)
- Tilt: 270° (16 bit precision scanning)
- Pan/Tilt: Five-phase motor with magnetic encoding positioning function
- Protection rate: IP20
- Working environment: 0-45°C
- Product size: 510*345*800(mm)
- Carton size: 730*690*590 (mm)
- Product net weight: 40KG
- Product gross weight:48.5KG
- Product appearance: flame retardant, high temperature resistance, folding clamp

1.5 Signal wire connection

Lamps feature standard DMX input and output 3-core or 5-core XLR sockets.Please use DMX 512 shielded twisted-pair signal cable;The signal line is generally connected at a distance of 150 meters, and the DMX512 signal amplifier must be added when the long-distance signal is transmitted.

Connect 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 input of the first device to the DMX input of the second device, and so on, until all lights are connected. Then install a terminal plug on the last connecting 3-core jack of the light fixture output in each row.(Weld a 4/1W, 120 Ω resistance

between pins 2 and 3 of the 3-core pin cannon plug).

Important: Wires should not touch each other or the metal case.

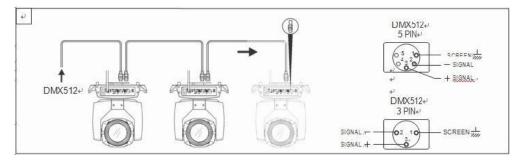


Figure 1 Schematic diagram of DMX signal cable connection

> Calculation method of initial address code of lamps:

The initial address code of the current lamp is equal to (the initial address code of the previous lamp)+(the number of channels of the lamp)

1: The starting address code of the first lamp is A001.

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

3: Note: when using any controller, each lamp should have its own initial address code, if the first lamp's initial address code is set A001, the lamp channel number is 16CH; Then the initial 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 mode also needs to be determined according to different console)

1.6 Installation of lamps

Lamps can be placed horizontally, slanted or hung upside down.Pay attention to the installation method when hanging it slanting or upside down.

As shown in Figure 2, before positioning the lamp, the stability of the installation site should be ensured. During the reverse hanging installation, the lamp must not fall down on the support frame, and the safety rope should be used to pass through the support frame and the lamp handle for auxiliary hanging to ensure safety. Prevent lamps from falling and sliding.

When the lamp is installed and adjusted, pedestrians are not allowed to pass under it. Periodically check whether the safety rope is worn and whether the hook screw is loose.

Our company does not assume any responsibility for all the consequences caused by the fall of the lamp due to the unstable installation of the hanging.

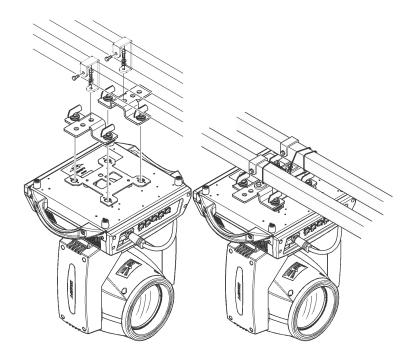


Figure 2. Schematic diagram of hanging lamps upside down

2. Control panel

2.1 Key Description

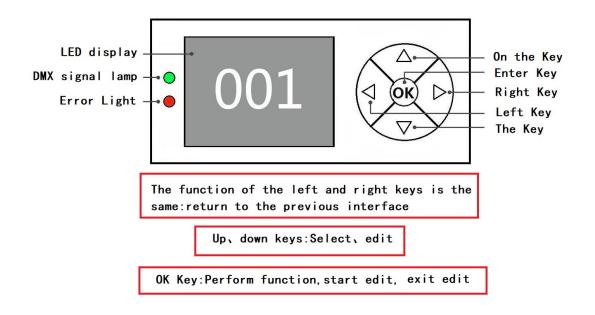


Figure 3. Description of panel keys

The following takes "Modify DMX address code" as an example to describe the use of keys:

1. If the current home screen is not displayed, press the Left key (one or more times) to return to the home screen

2. On the home screen, press the Up or Down key to select the Settings button

3. Press the OK key to enter the Settings screen $% \left({{{\left[{{{K_{{\rm{B}}}} \right]}}}} \right)$

4. In the "Settings" interface, press the "Up" key or "Down" key to select "DMX Address"

- 5. Press "OK" to enter the editing state
- 6. Press the "Up" key or "Down" key to modify the DMX address code

7. Press the "OK" key to exit the editing state

8. Press the right button on the main interface to enter the calibration menu.

2.2 Menu Description



Figure 4 Main menu diagram

2.2.1 DMX Settings

Key description: Press up or down to +1 or -1 mode;Press one or the next, quickly adjust the address code mode;Press the Confirm key to return Manual instruction: Enter the hundreds place, then the tens place, and then the last place. (For example, if you enter 286, click 2, then 8, and finally 6)

2.2.2 Medium /En

English and Chinese interface switch;

options	instructions	
System	DIS	Display board software version
version	MT	Motor board software version
Temperature		Display bead temperature
information		

2.2.3 System Information

Fan	Fan speed	Displays fan speed information
Information	*	
System time	Total bright bubble	Cumulative brightening time (accurate to minutes)
	This brightening	The brightening time (accurate to minute)
	bubble	
	Total service time	Cumulative usage time (accurate to minutes)
	Time of use	Usage time since this startup (accurate to minutes)
	Date of manufacture	
	Permission Duration	9999 indicates no encryption and can be used
		for a long time.
		Other values represent the remaining use
		time, encrypted;
Sensor	X Hall	0 when magnetic is detected, 1 otherwise
monitoring	Y Hall	0 when magnetic is detected, 1 otherwise
	Color plate hall	0 when magnetic is detected, 1 otherwise
	CMY Hall	0 when magnetic is detected, 1 otherwise
	CTO Hall	0 when magnetic is detected, 1 otherwise
	Fixed pattern pan	0 when magnetic is detected, 1 otherwise
	Glass pattern	0 when magnetic is detected, 1 otherwise
	hall	
	Glass pattern	0 when magnetic is detected, 1 otherwise
	rotation Hall	
	Focus hall	0 when magnetic is detected, 1 otherwise
	Enlarge Hall	0 when magnetic is detected, 1 otherwise
	Prism 1 rotary	0 when magnetic is detected, 1 otherwise
	hall	
	X Code disk status	Two digits, each corresponding to a
		photoelectric switch in the code disc
	Y Code disk status	Two digits, each corresponding to a
	V	photoelectric switch in the code disc
	X-axis encoding	The number of steps should increase when walking in the forward direction and
	disk step value	walking in the forward direction and decrease when walking in the opposite
		direction. Every time you go to the same
		point, the value is normal
	Y-axis encoding	The number of steps should increase when
	disk step value	walking in the forward direction and
		decrease when walking in the opposite
		direction. Every time you go to the same
		point, the value is normal
System	l	If the red ERR indicator lights up, it
error		indicates that the lamp is running
		incorrectly. You can enter the

	sub-interface to check the details.After
	viewing, you can press the "Clear" key to
	clear the error record
DMX channel	The sub-screen displays the channel value in
value	numerical and percentage terms for viewing
monitoring	

Common Error	instructions
Messages	
Failed to	The motor board is not responding. The serial communication
connect the MT	line connecting the display board and the motor board is
board.	faulty, or the motor board is faulty.
Procedure	
X-axis reset	X-axis photoelectric switch, or X-axis motor or motor board
failed	has a problem
Y-axis reset	Y-axis photoelectric switch, or Y-axis motor or motor board
failed	is faulty
X axis Hall	There is a problem with X shaft Hall or motor board
error	
Y-axis Hall	Y-shaft Hall, or motor board problem
error	
Description	Color plate hall, or color plate motor has a problem
Failed to	
reset the	
color disk	
Description	Pattern plate hall, or pattern plate motor problem
The pattern	
disk failed to	
reset	
Failed to	The focusing hall, or the focusing motor has a problem
reset the	
focus	

2.2.4 Lighting setup

options	instructions		
DMX channel	36CH 36 channel mode		
language	Chinese	Set the interface to Chinese	
	English Set the interface to English		
Screen flip	guan	Front face display	
	open	open The screen is displayed in reverse	
Automatic screen	guan Disable the automatic flip function		
flip	open	Gravity sensing automatically reverses	

Dimming curve	Square	index	
Dimining curve			
	linear	A straight line	
	SCurve	sine	
	InSquare	logarithmic	
RDM Function	guan	The RDM function is enabled	
	open	Disable the RDM function	
DMX signal	keep	Continue running in the original state	
	reset	The motor turns back and stops running	
Screen saver	guan	Turn off the screensaver	
	open	Open the screensaver	
	guan	Shut down	
Light tracing mode	Mode 1	XY has no power in light pursuit mode	
	Mode 2	Very low intensity in XY mode	
X reversal	guan	The default	
	open	The starting point and the ending point are switched	
Reversal of YguanThe defaultopenThe starting p		The default	
		The starting point and the ending point are switched	
XY exchange	guan	The default	
	open	Exchange XY axis channel (including fine tuning)	
XY encoder	open	Use an encoder (optocoupler) to determine the out-of-step and	
		automatically correct the position	
	guan	No encoder (optocoupler) is used to correct the position	
Restore Default		After you press the OK key, the confirmation dialog box is	
Settings displayed. Press the OK key again to restore		displayed. Press the OK key again to restore the default	
		Settings	

2.2.5 Running Mode

Self walking mode	DMX	Slave state: Receives DMX signals from the console or
		host
	Since the go	Host state: Self-drive and send DMX signal to slave
	Voice control	
	Scenario 1, 2, 3	Turn on scene self - walk
	Program 1, 2, 3	Call console programming program to walk
Scenario Running	all	All open scenarios run sequentially
	From 1 to 5	Call a scene run individually
Scene Setting	Scene channel	Edit number Press the "Confirm" button to save (display:
	Saving	saving)
	Multi-step	1, 2, 3;There are three groups
	scenario group	
	Scene step	Under the current group, switch to the number of steps
	selection	you want to edit
	Scene time (s)	1-100.Total time for each step to run

		-
	Scene delay (%)	0-100;Gradient percentage, 0 is direct jump;
	Scenario	Open, running mode all can be called; Closing can only be
	Running	invoked separately
	1 to 36 Channel	
	values	
Console	Program 1, 2, 3	Switch the program position to record, press the
programming		"Confirm" button to enter the programming record
		interface, need to connect to the console
	Time (S)	Set the running time for each step
	They count	Current step of program
	Clearing Data	Clear all data of the current program
Console programming >> Programming		Adjust the number of steps up and down, connect the
interface		console to save;

Manual control (Click the operation mode menu on the main interface, select the item manual control, and press "Confirm" to enter manual control)

This interface is used to control the current lamp and automatically enter the host state (no DMX signal is received, in self-walking mode is the host, and sends DMX signal to the bus to the slave machine).

The manual menu displays 36 channels according to the standard 36 channels set in the Settings menu.

options		instructions
1CH. X	$0 \sim 255$	Press the "OK" key to enter the editing
	$0 \sim 255$	state.Select the hundreds digit and press
35CH. Aperture	$0 \sim 255$	the Up and Down keys to change the channel
		value.Press OK again to select the tens
		edit.Press "OK" again to select the ones bit
		edit.Press again to exit the editing state
36CH. Reset		Press the "OK" button and see the
		confirmation dialog box. Press the "OK"
		button again to enter the reset interface
		and reset all the motors

Reset ALL	Press the "OK" button and see the confirmation
	dialog box. Press the "OK" button again to enter
	the reset interface and reset all the motors
XY reset	Press the "OK" button to see the confirmation
	dialog box. Press the "OK" button again to enter
	the reset interface and reset XY
MT reset	Press the "OK" button and see the confirmation
	dialog box. Press the "OK" button again to enter
	the reset interface and reset the small motor

2.2.6 Factory Settings

options		instructions
Calibration	The X axis	After entering the sub-interface, you can
of motor	Y	adjust the reset position of X axis, Y axis
	Disk of color	and other motors to make up for the error in
	Fixed pattern	hardware installation. The adjustment range
	plate	is -128 to +127, and +0 indicates no
	Glass pattern	adjustment.
	plate	
	Glass pattern	
	rotation	
	Effect plate zero	
	point	
	Stroke of effect	
	plate	
	Apparent zero	
	point	
	Apparent	
	indicative stroke	
	Color temperature	
	cyan	
	magenta	
	yellow	
	focusing	
	amplification	
	Prism 1 zero point	
	Prism 1 stroke	
	Prism 2 zero point	
	Prism 2 stroke	
	Prism 1 rotation	
	Prism 2 rotation	
	Zero point of	
	atomization	
	Stroke of	
	atomization	
	Cutting rotary	
	plate	
	The aperture	
	Cut 1	
	Cut 2	
	Cut 3	
	Cut 4	
	Cut 5	

	Cut 6			
	Cut 7			
	Cut 8			
XY speed	X axis velocity	000-255, speed slow to fast adjustment		
adjustment	Y axis velocity			
Regulation Regulation of fan		Only do temporary adjustment, power does not		
of fan	Fan speed	save		

3. Function of channel

3.1 Table of channels

	Channel mode						
	Channel 36		Channel 42	(Channel 60		
1	Х	1	Х	1	Х		
2	X fine tuning	2	X fine	2	X fine		
			tuning		tuning		
3	Y	3	Y	3	Y		
4	Y fine tuning	4	Y fine	4	Y fine		
			tuning		tuning		
5	XY velocity	5	XY velocity	5	XY velocity		
6	Cut	6	Cut	6	Cut		
	light/strobo		light/strob		light/strob		
	scopic		oscopic		oscopic		
7	The dimmer	7	The dimmer	7	The dimmer		
8	С	8	Dimming fine	8	Dimming fine		
			tuning		tuning		
9	М	9	amplificati	9	amplificati		
			on		on		
10	Y	10	Magnificati	10	Magnificati		
			on and		on and		
			fine-tuning		fine-tuning		
11	СТО	11	focusing	11	focusing		
12	Disk of color	12	Focus tuning	12	Focus tuning		
13	Slice of value	13	Auto focus	13	Auto focus		
14	Fixed	14	Auto focus	14	Auto focus		
	pattern		fine tuning		fine tuning		
	plate						
15	Pattern of	15	Disk of	15	Disk of		
	glass		color		color		
16	Glass	16	Slice of	16	Color disk		

	pattern		value		fine-tuning
	rotation				
17	Disc of	17	С	17	Slice of
	effect				value
18	Effect	18	М	18	Fine tuning
	spiral turn				of the
					display
					piece
19	focusing	19	Y	19	С
20	Focus tuning	20	СТО	20	C Fine
					tuning
21	amplificatio	21	pattern	21	M
	n				
22	Prism one	22	Pattern of	22	M fine
	plus two		glass		tuning
23	Prism 1	23	Glass	23	Y
	rotation		pattern		
			rotation		
24	Prism 2	24	Fine	24	Y fine
	rotation		adjustment		tuning
			of rotation		
25	atomization	25	Effect	25	СТО
			insertion		
26	Section 1	26	Disc of	26	СТО
			effect		fine-tuning
27	Section 2	27	The aperture	27	pattern
28	Section 3	28	Prism 1	28	Pattern of
					glass
29	Section 4	29	Rotation of	29	Glass
			prism 1		pattern
			-		rotation
30	Section 5	30	Prism 2	30	Fine
					adjustment
					of rotation
31	Section 6	31	Rotation of	31	Effect
			prism 2		insertion
32	Section 7	32	atomization	32	Disc of
					effect
33	Section 8	33	Section 1	33	The aperture
34	Cutting disc	34	Section 2	34	Fine tuning
					of aperture
35	The aperture	35	Section 3	35	Prism 1
36	function	36	Section 4	36	Prism 1
-		-	~	-	· · · · · ·

	-		_	ng
	37	Section 5	37	Prism 1
				rotation
				fine-tuning
	38	Section 6	38	Prism 2
	39	Section 7	39	Prism 2
				self-rotati
				ng
	40	Section 8	40	Prism 2
				rotation
				fine-tuning
	41	Cutting disc	41	atomization
	42	function	42	Section 1
			43	Section 1
				Fine tuning
			44	Section 2
			45	Section 2
				Fine tuning
			46	Section 3
			47	Section 3
				Fine tuning
			48	Section 4
			49	Section 4
				Fine tuning
			50	Section 5
			51	Section 5
				Fine tuning
			52	Section 6
			53	Section 6
				Fine tuning
			54	Section 7
			55	Section 7
				Fine tuning
			56	Section 8
			57	Section 8
				Fine tuning
			58	Cutting disc
			59	Cutting disc
				fine-tuning
			60	function
			60	function

Channel parameter values (full

version):

Channel	Channel	Channel	The name of	The	describe
36	42	60	the	numerical	
CH1	CH1	CH1	X	0-255.	0-540 degrees
CH2	CH2	CH2	X fine tuning	0-255.	0-2 degrees
СНЗ	CH3	CH3	Y	0-255.	0-270 degrees
CH4	CH4	CH4	Y fine tuning	0-255.	0-1 degrees
CH5	CH5	CH5	XY velocity	0-255.	From fast to slow
				0-3	GuanGuang
			Cut	4-127.	From slow to fast pulse stroboscopic
CH6	CH6	CH6	light/strobos	128-191.	It goes from slow to fast
			copic	192-251.	From slow to fast random stroboscopic
				252-255.	medallion
CH7	CH7	CH7	The dimmer	0-255.	0-100% dimming
	CH8	CH8	Dimming fine tuning	0-255.	0-100% dimming
	CH9	CH9	amplification	0-255.	From small to big
			Magnification		
	CH10	CH10	and		
			fine-tuning		
	CH11	CH11	focusing	0-255.	From far to near
	CH12	CH12	Focus tuning		
			-	0-63.	There is no
	CH13	CH13	Auto focus	64-127.	7.5 meters
				128-255.	15 meters
	CH14	CH14	Auto focus	0-255.	
			fine tuning	0 107	Linear color
				0 1211	
				128-137.	Color 1
			0.1.00	138-146.	Color 2
	CH15	CH15	color	147-155.	Color 3
				156-164.	Color 4
				165-173.	Color 5
			15	174–182.	Color 6

				183-191.	Color 7
				192-222.	From fast to slow forward water
				223-224.	stop
				225-255.	From slow to fast reverse flow
		CH16	Fine tuning of color		
	CUIC	CH17	Slice of value	0	There is no
	CH16	CHI7	Since of value	1-255.	0-100% linear insertion
			Fine tuning of		
		CH18	the display		
			piece		
CH8	CH17	CH19	C	0-255.	
		CH20	C Fine tuning		
CH9	CH18	CH21	М	0-255.	
		CH22	M fine tuning		
CH10	CH19	CH23	Y	0-255.	
		CH24	Y fine tuning		
CH11	CH20	CH25	СТО	0-255.	
		CH26	СТО		
		01120	fine-tuning		
				0-9	The white light
				10-19	Pattern 1
			-	20 to 29	Pattern 2
				30-39	Pattern 3
				40-49	Pattern 4
				50 to 59	Pattern 5
				60-69.	Pattern 6
				70-79.	Pattern 7
			Fixed	80-89.	Pattern 8
	CH21	CH27	pattern	90-99.	From slow to fast jitter pattern
			plate		1
				100-109.	From slow to fast jitter pattern 2
				110-119.	From slow to fast jitter pattern 3
				120-129.	From slow to fast jitter pattern 4
			130-139.	From slow to fast jitter pattern 5	

				140-149.	From slow to fast jitter pattern
				110 110.	6
				150-159.	From slow to fast jitter pattern 7
				160-169.	From slow to fast jitter pattern 8
				170-212.	From fast to slow forward water
				213-215.	stop
				216-255.	From slow to fast reverse flow
				0-9	The white light
				10-19	Pattern 1
				20 to 29	Pattern 2
				30-39	Pattern 3
				40-49	Pattern 4
				50 to 59	Pattern 5
				60-69.	Pattern 6
			Pattern of glass	70-79.	From slow to fast jitter pattern 1
	CH22	CH28		80-89.	From slow to fast jitter pattern 2
	0122	Cn26		90-99.	From slow to fast jitter pattern 3
				100-109.	From slow to fast jitter pattern 4
				110-119.	From slow to fast jitter pattern 5
				120-129.	From slow to fast jitter pattern 6
				130-190.	From fast to slow forward water
				191-192.	stop
				193-255.	From slow to fast reverse flow
				0-127.	Switch of angles
			Glass pattern	128-190.	From fast to slow forward water
	CH23	CH29	rotation	191-192.	stop
				193-255.	From slow to fast reverse flow
			Fine		
	CH24	CH30	adjustment of		
			rotation	0.107	
CH12			Disk of	0-127.	Linear color
			color	128-137.	Color 1

	1	I	1
		138-146.	Color 2
		147-155.	Color 3
		156-164.	Color 4
		165-173.	Color 5
		174-182.	Color 6
		183-191.	Color 7
		192-222.	From fast to slow forward water
		223-224.	stop
		225-255.	From slow to fast reverse flow
	Finger	0-255.	Linear insertion
CH13	display		
	plate		
		0-9	The white light
		10-19	Pattern 1
		20 to 29	Pattern 2
		30-39	Pattern 3
		40-49	Pattern 4
		50 to 59	Pattern 5
		60-69.	Pattern 6
		70-79.	Pattern 7
		80-89.	Pattern 8
		90-99.	From slow to fast jitter pattern 1
	Fixed	100-109.	From slow to fast jitter pattern 2
CH14	pattern plate	110-119.	From slow to fast jitter pattern 3
		120-129.	From slow to fast jitter pattern 4
		130-139.	From slow to fast jitter pattern 5
		140-149.	From slow to fast jitter pattern
		150-159.	From slow to fast jitter pattern
		160-169.	From slow to fast jitter pattern 8
		170-212.	From fast to slow forward water
		213-215.	stop

				216-255.	From slow to fast reverse flow
				0-9	
					The white light
				10-19	Pattern 1
				20 to 29	Pattern 2
				30-39	Pattern 3
				40-49	Pattern 4
				50 to 59	Pattern 5
				60-69.	Pattern 6
				70–79.	From slow to fast jitter pattern 1
				80-89.	From slow to fast jitter pattern
CH15			Pattern of		2
			glass	90-99.	From slow to fast jitter pattern 3
				100-109.	From slow to fast jitter pattern 4
				110-119.	From slow to fast jitter pattern 5
				120-129.	From slow to fast jitter pattern 6
				130-190.	From fast to slow forward water
				191-192.	stop
				191-192.	From slow to fast reverse flow
				0-127.	Switch of angles
				100 100	
CH16			Glass pattern		From fast to slow forward water
			rotation	191-192.	stop
				193-255. 0 to 10	From slow to fast reverse flow
CH17	CH25	CH31	Effect entry		Remove the
				11-255.	Linear insertion
				0-2	stop
CH18	CH26	CH32	Disc of	3-128.	From fast to slow forward water
			effect	129-255.	From slow to fast reverse flow
	CH27	СНЗЗ	The	0-127.	From big to small
			aperture	128-255.	Function of contraction
		C110.4	Fine		
		CH34	tuning of aperture		
	CH28	СНЗ5	Prism 1	0-127.	Remove the prism
				128-255.	Prism 1

				0-127.	Switch of angles
	CH29	CH36	Rotation	128-187.	From fast to slow forward water
	01120	CHO	of prism 1	188-195.	stop
				196-255.	From slow to fast reverse flow
			Prism 1		
		CH37	rotation		
			fine-tuni		
			ng	0.107	
	СНЗО	CH38	Prism 2	0-127.	Remove the prism
				128-255.	Prism 2
				0-127.	Switch of angles
	CH31	CH39	Rotation	128-187.	From fast to slow forward water
			of prism 2	188-195.	stop
				196-255.	From slow to fast reverse flow
			Prism 2		
		CH40	rotation		
			fine-tuni		
СН19			ng	0-255.	From far to near
0119			focusing Focus	0-255.	From far to near
CH20			tuning		
			amplifica	0-255.	From small to big
CH21			tion		
				0-63.	Remove the prism
				64-127.	Prism 1
CH22			A prism	128-191.	Prism 2
				192-255.	Prism 1+ Prism 2
				0-127.	Switch of angles
avoo			Rotation of	128-187.	From fast to slow forward water
CH23			prism 1	188-195.	stop
				196-255.	From slow to fast reverse flow
				0-127.	Switch of angles
				128-187.	From fast to slow forward water
CIIO A			Rotation of	188-195.	stop
CH24			prism 2	196-255.	From slow to fast reverse flow
				0-127.	There is no
CH25	CH32	CH41	atomizati on	128-255.	atomization
CH26	СНЗЗ	CH42	Section 1	0-255.	Linear insertion

Section 1 Fine tuningSection 2 Fine tuningInear insertionCH27CH34CH44Section 2 Prine tuning0-255.Linear insertionCH28CH35CH46Section 3 Prine tuning0-255.Linear insertionCH28CH35CH46Section 3 Prine tuning0-255.Linear insertionCH29CH36CH48Section 4 Prine tuning0-255.Linear insertionCH29CH36CH48Section 4 Prine tuning0-255.Linear insertionCH30CH37CH50Section 5 Prine tuning0-255.Linear insertionCH30CH37CH50Section 5 Prine tuning0-255.Linear insertionCH31CH38CH52Section 6 Prine tuning0-255.Linear insertionCH31CH38CH52Section 7 Prine tuning0-255.Linear insertionCH32CH39CH54Section 7 Prine tuning0-255.Linear insertionCH33CH40CH56Section 8 Prine tuning0-255.Linear insertionCH34CH41CH58Cutting disc frime <tuning< td="">0-255.Linear insertionCH34CH41CH58Section 8 Prine tuning0-255.Linear insertionCH35CH59Cutting disc frime<tuning< td="">0-255.Linear insertionCH34CH41CH58Cutting disc frime<tuning< td="">0-255.Angle of sliceCH36CH459<th></th><th></th><th>I</th><th>1</th><th>1</th><th></th></tuning<></tuning<></tuning<>			I	1	1	
CH27CH34CH44Section 20-255.Linear insertionCH28CH35CH46Section 20-255.Linear insertionCH28CH35CH46Section 30-255.Linear insertionCH28CH35CH46Section 40-255.Linear insertionCH29CH36CH48Section 40-255.Linear insertionCH29CH36CH48Section 40-255.Linear insertionCH30CH37CH50Section 50-255.Linear insertionCH30CH37CH50Section 50-255.Linear insertionCH30CH37CH50Section 60-255.Linear insertionCH31CH38CH52Section 60-255.Linear insertionCH32CH39CH54Section 70-255.Linear insertionCH33CH40CH56Section 80-255.Linear insertionCH34CH41CH58Cutting disc0-255.Linear insertionCH34CH41CH58Cutting disc0-255.Linear insertionCH34CH41CH59Fine tuning0-255.Linear insertionCH35CH40CH56Section 8 Fine tuning0-255.Linear insertionCH34CH41CH59Cutting disc0-255.Linear insertionCH35CH40CH56Section 18 Fine tuning0-255.Linear insertionCH34CH41CH58Cutting dis				Section 1		
CH27 CH34 CH44 Section 2 Fine tuning Linear insertion CH28 CH35 CH46 Section 3 CH47 0 255. Linear insertion CH28 CH35 CH46 Section 3 Fine tuning 0 255. Linear insertion CH29 CH36 CH48 Section 4 CH49 0 255. Linear insertion CH29 CH36 CH48 Section 4 CH49 0 255. Linear insertion CH30 CH37 CH50 Section 5 Fine tuning 0-255. Linear insertion CH30 CH37 CH50 Section 5 Fine tuning 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 8 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH34 CH41 CH56 Section 8 Fine tuning 0-255. Linear insertion CH34 <t< th=""><th></th><th></th><th>CH43</th><th>Fine</th><th></th><th></th></t<>			CH43	Fine		
CH28 CH35 Section 2 Fine tuning Fine tuning CH28 CH35 CH46 Section 3 CH47 0-255. Linear insertion CH29 CH36 CH48 Section 4 tuning 0-255. Linear insertion CH29 CH36 CH48 Section 4 CH49 0-255. Linear insertion CH30 CH37 CH50 Section 5 Tine tuning 0-255. Linear insertion CH30 CH37 CH50 Section 5 Fine tuning 0-255. Linear insertion CH30 CH37 CH50 Section 5 Fine tuning 0 100 fine CH31 CH38 CH52 Section 6 Fine tuning 100 fine 100 fine CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tunin g 0-255. Angle of slice CH35 CH41 CH58 Cutting disc fine-tunin g 0-127. From big to small CH35 CH49 Fine tuning 0-100. Light tracking defau				tuning		
CH28 CH35 CH46 Section 3 0-255. Linear insertion CH28 CH35 CH46 Section 3 0-255. Linear insertion CH29 CH36 CH48 Section 4 0-255. Linear insertion CH29 CH36 CH48 Section 4 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 Fine tuning Inear insertion CH31 CH38 CH52 Section 6 Fine tuning Inear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH58 CH51 Bine tuning 0-255. Linear insertion CH33 CH40 CH58 CH51 Bine tuning 0-255. Linear insertion	CH27	CH34	CH44	Section 2	0-255.	Linear insertion
CH28 CH35 CH46 Section 3 0-255. Linear insertion CH29 CH36 CH47 Section 3 Fine tuning 0-255. Linear insertion CH29 CH36 CH48 Section 4 CH49 0-255. Linear insertion CH30 CH37 CH50 Section 5 CH51 0-255. Linear insertion CH30 CH37 CH50 Section 5 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 6 Fine tuning 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH34 CH41 CH58 CH59 0-255. Angle of slice CH35 CH59 CH59 Giac fine-tunin 8 -127. From big to small CH35 CH40 CH59 Funet aperture				Section 2		
CH28 CH35 CH46 Section 3 0-255. Linear insertion CH29 CH36 CH48 Section 4 0-255. Linear insertion CH29 CH36 CH48 Section 4 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of			CH45	Fine		
CH29 CH36 CH47 Section 3 Fine tuning Fine tuning CH29 CH36 CH48 Section 4 0 255. Linear insertion CH30 CH37 CH50 Section 5 0 -255. Linear insertion CH30 CH37 CH50 Section 5 0 -255. Linear insertion CH31 CH38 CH52 Section 6 0 -255. Linear insertion CH31 CH38 CH52 Section 6 0 -255. Linear insertion CH31 CH38 CH52 Section 7 0 -255. Linear insertion CH32 CH39 CH54 Section 7 0 -255. Linear insertion CH33 CH40 CH56 Section 8 0 -255. Linear insertion CH33 CH40 CH56 Section 8 0 -255. Linear insertion CH33 CH40 CH56 Section 8 0 -255. Linear insertion CH34 CH41 CH58 Cutting disc 0 -255. Angle of slice CH34 CH41 CH58 Cutting disc 0 -255. Angle of slice CH35 The aperture 0 -127. From big to small 128 -255. CH35 The aperture 0 -10				tuning		
CH29 CH36 CH47 Fine tuning O-255. Linear insertion CH29 CH36 CH48 Section 4 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH56 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting dise Inear insertion CH34 CH41 CH58 Cutting dise Inear insertion CH35 CH41 CH58 Cutting dise Inear insertion CH36 CH41 CH59 The aperture 0-127.	CH28	CH35	CH46	Section 3	0-255.	Linear insertion
CH29 CH36 CH48 Section 4 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc Ining Ining CH34 CH41 CH58 Cutting disc Ining Ining CH34 CH41 CH59 Fine Ining Ining CH35 CH41 CH58 Fine Inin				Section 3		
CH29 CH36 CH48 Section 4 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tuning Interview CH34 CH41 CH58 Cutting disc fine-tunin Interview Interview CH35 CH59 The aperture 0-127. Fro			CH47	Fine		
CH30 CH37 CH50 Section 4 Fine tuning Linear insertion CH30 CH37 CH50 Section 5 Section 5 CH51 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 CH57 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tunin 0-255. Angle of slice CH34 CH41 CH58 Cutting disc fine-tunin 0-127. From big to small CH35 CH49 CH40 Fine tuning 0-100. Light tracking default (follow				tuning		
CH30 CH37 CH50 Section 5 0-255. Linear insertion CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-127. From big to small CH35 The aperture 0-100. Light tracking default (follow	CH29	СН36	CH48	Section 4	0-255.	Linear insertion
CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine				Section 4		
CH30 CH37 CH50 Section 5 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH56 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small CH35 CH49 CH60 function of contraction			CH49	Fine		
CH31 CH51 Section 5 Fine tuning Section 6 0-255. Linear insertion CH31 CH38 CH52 Section 6 CH53 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 CH57 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small 128-255. Function of contraction				tuning		
CH31 CH38 CH52 Section 6 tuning 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH33 CH40 CH56 Section 8 Fine tuning 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tunin g 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small CH35 CH49 CH49 0-100. Light tracking default (follow	CH30	СН37	СН50	Section 5	0-255.	Linear insertion
CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tunin 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small CH35 CH59 The aperture 0-100. Light tracking default (follow				Section 5		
CH31 CH38 CH52 Section 6 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Fine tuning 0-255. Linear insertion CH32 CH39 CH54 Section 7 Section 7 CH55 0-255. Linear insertion CH33 CH40 CH56 Section 8 Section 8 CH57 0-255. Linear insertion CH34 CH41 CH58 Cutting disc fine-tunin g 0-255. Angle of slice CH34 CH41 CH58 Cutting disc fine-tunin g 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small 128-255. Function of contraction			CH51	Fine		
CH32 CH39 CH54 Section 6 Fine tuning Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small CH35 CH40 CH60 funct 0-100. Light tracking default (follow				tuning		
CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 The aperture 0-127. From big to small CH35 CH49 CH59 The aperture 0-100. Light tracking default (follow	CH31	CH38	CH52	Section 6	0-255.	Linear insertion
CH32 CH39 CH54 Section 7 0-255. Linear insertion CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc 0-255. From big to small CH35 The aperture 0-107. From big to small CH35 CH40 CH50 funct 0-100. Light tracking default (follow				Section 6		
CH32 CH39 CH54 Section 7 0-255. Linear insertion CH33 CH40 CH55 Fine tuning CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc fine-tunin g 0-127. From big to small CH35 The aperture 0-100. Light tracking default (follow			CH53	Fine		
CH33 CH40 CH56 Section 7 Fine tuning Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc fine-tunin 0-255. From big to small CH35 The aperture 0-127. From big to small CH36 CH42 CH60 funct 0-100.				tuning		
CH33 CH40 CH56 Fine tuning Inear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Fine tuning 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH59 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc 0-255. Fine-tunin g 0-255. CH35 CH59 Cutting disc 0-127. From big to small CH35 CH36 CH40 CH59 0-127. From big to small CH36 CH36 CH40 CH59 0-127. From big to small	CH32	СН39	CH54	Section 7	0-255.	Linear insertion
CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 0-255. Linear insertion CH34 CH41 CH58 Fine tuning 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc disc 0-127. From big to small CH35 CH49 CH59 The aperture 0-100. Light tracking default (follow				Section 7		
CH33 CH40 CH56 Section 8 0-255. Linear insertion CH33 CH40 CH56 Section 8 Image: CH57 Section 8 Image: CH57 CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc Image: Cutting disc Image: Cutting disc CH59 CH59 Gisc Image: Cutting disc Image: Cutting disc Image: Cutting disc CH35 CH35 CH59 The aperture 0-127. From big to small CH35 CH40 CH60 fmatt 0-100. Light tracking default (follow			CH55	Fine		
CH34 CH41 CH58 Section 8 Fine tuning O-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc fine-tunin g 0-127. From big to small CH35 The aperture 0-100. Light tracking default (follow				tuning		
CH34 CH41 CH58 Fine tuning 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc fine-tunin g 0-127. From big to small CH35 The aperture 0-100. Light tracking default (follow	CH33	CH40	CH56	Section 8	0-255.	Linear insertion
CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc 0-255. Angle of slice CH35 CH59 Cutting disc 0-127. From big to small CH35 The aperture 0-127. From big to small CH36 CH40 CH60 funct 0-100.				Section 8		
CH34 CH41 CH58 Cutting disc disc 0-255. Angle of slice CH34 CH41 CH58 Cutting disc fine-tunin g Angle of slice CH59 CH59 Cutting disc fine-tunin g Cutting disc fine-tunin g CH35 The aperture 0-127. From big to small CH35 CH40 CH60 0-100. Light tracking default (follow			CH57	Fine		
CH34 CH41 CH58 disc CH59 Gutting disc fine-tunin g Cutting disc fine-tunin g Cutting disc CH35 CH59 The aperture 0-127. From big to small 128-255. Function of contraction CH36 CH60 funct				tuning		
CH34 CH41 CH58 disc CH59 Cutting disc fine-tunin g Cutting disc fine-tunin Cutting disc CH35 CH59 The aperture 0-127. From big to small 128-255. Function of contraction CH36 CH60 funct				Cutting	0-255.	Angle of slice
CH35 CH59 disc fine-tunin g CH35 The aperture 0-127. From big to small 128-255. Function of contraction CH36 CH60	CH34	CH41	CH58	disc		
CH35 CH59 fine-tunin g g CH35 The aperture 0-127. From big to small 128-255. Function of contraction CH36 CH60 Guardian 0-100. Light tracking default (follow				Cutting		
CH35 CH42 CH60 fine-tunin g The aperture 0-127. From big to small 128-255. Function of contraction CH36 CH60 funct			CUED	disc		
CH35 The aperture 0-127. From big to small CH36 CH60 funct 0-100. Light tracking default (follow			Снээ	fine-tunin		
CH35 aperture 128-255. Function of contraction CH36 CH42 CH60 0-100. Light tracking default (follow				g		
aperture 128-255. Function of contraction CU26 CU60 0-100. Light tracking default (follow				The	0-127.	From big to small
	CH35			aperture	128-255.	Function of contraction
					0-100.	Light tracking default (follow
	CH36	CH42	CH60	funct		

ion	101–110.	Turn off the light chase and keep it for 5s without changing the interface Settings
	111-120.	Optical tracing mode 1: Hold for 5s without changing the interface Settings
	121–130.	Optical pursuit mode 2: Hold for 5s without changing the interface Settings
	210-215.	Reset XY for more than 6 seconds
	220-235.	More than 6 seconds reset effect motor
	240-255.	Reset all after 6 seconds

4. Common Faults

In view of some common faults, the corresponding solutions are put forward. Any problems that cannot be resolved should be dealt with by professionals. Disconnect the lamp before maintaining it.

- 1. Light bulb doesn't work
- Check that the voltage is installed to match the luminaire;
- Check whether the lamp power supply connection or control switch is in bad contact;
- Check for insufficient power supply;
- Check whether the DMX512 controller is sending instructions.
 - 2. The lamp will not be controlled by the console after normal reset
- Check whether the digital starting address value and function options of the lamp are correct;
- Check whether the communication control line is connected correctly, the communication line is too long or has been interrupted;
- Check the failure of the control equipment, check the failure of the serial access signal amplifier;
- Check whether the communication line is too long or other equipment interferes with each other;
- Optimize the wiring, shorten the length of the control signal line, and separate the high-voltage and low-voltage lines;
- Add signal amplifier;

- The signal line adopts high quality shielded twisted pair wire;
- Connect the signal terminal resistor (120 ohms) at the end of the lamp.

3. Light fixture fails to start

- Check whether the power supply parameters are consistent with the lamp;
- Check the lamps in the long distance transportation process due to extrusion deformation, internal parts vibration, damp and other reasons, resulting in poor contact Or fall off.
- Please check whether the internal wire integration plug is loose or loose.
- Check whether the electronic components of the lamp (such as electronic transformer, PCB board, motor control board, etc.) are loose, short circuit and burned out.

4. When working, the action of X or Y axis of the lamp is abnormal

- Follow the previous step to check one by one;
- Check whether the transmission belt corresponding to the X and Y axis in the lamp falls off or breaks;
- Check whether the data feedback receiver (optocoupler) corresponding to the X and Y directions in the lamp is damaged;
- Restart the machine and reset it once.