

# MT Wash 1940 IP

## User Manual



**Guangzhou Mitek Light Co.,LTD**

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# TECHNICAL PARAMETERS

## Light source

Voltage: AC 90-240V 50-60HZ

Total power: 760W

Light source: 194-in-140W high-brightness LED chips

LED lifespan: ≥50,000 hours

## Optical

Beam Angle: 4-60°

Optical System: High-definition optical system combined with high-temperature resistant glass light guide column and fast, smooth electric zoom system, providing uniform and soft color mixing effects;

## Controls

Control Channels: Built-in 7 channel modes: 29CH/17CH/32CH/37CH/46CH/94CH/379;

Control Methods: DMX512, RDM, master/slave, voice control or automatic operation;

Display System: 1.8-inch TFT color LCD screen with touch buttons, 4 function buttons, 180°

LCD screen rotation, 60-second automatic screen-off design, DMX signal indicator,

Chinese/English switching;

## Effect

Linear Dimming: 0-linear dimming system, built-in 6 static and dynamic macro effects, adjustable speed;

High-Speed Strobe: 1-25 times/second high-speed LED dimming/strobe effect, adjustable speed, various preset/random strobe/dimming pulse strobe effects;

## Construction

Exterior Material: National standard lightweight die-cast aluminum high-end material shell! Made entirely of plastic, suitable for use in harsh outdoor environments including rain, high altitudes, sandstorms, seaside locations, and extreme temperatures.

Waterproof Rating: Withstands 360° impact from massive waves, achieving a true IP65 waterproof rating.

Horizontal Scan: 540° (16-bit precise scan)

Vertical Scan: 270° (16-bit precise scan)

Maximum Number of Units Connected:

220V: Up to 4 units, requires 2.5 sq mm cable

220V: Up to 2 units, requires 2.5 sq mm cable

## Weight&Dimension

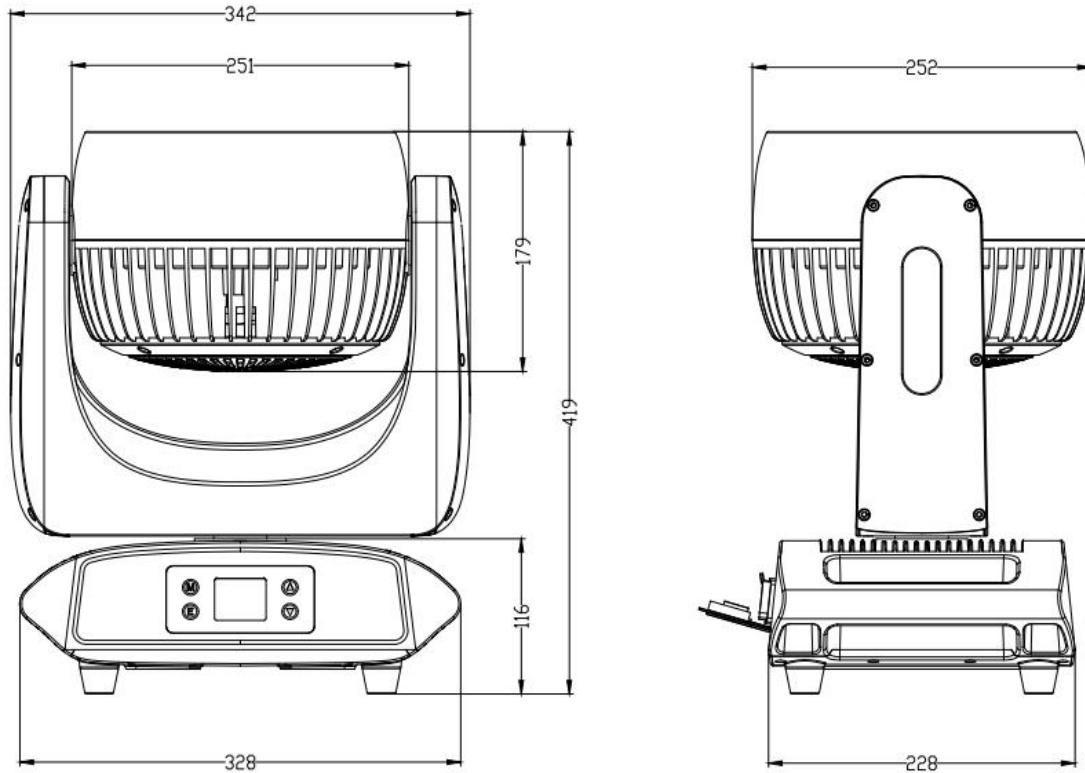
Product Dimensions: 328\*252\*419mm

Net Weight: 14kg

Carton Packaging: 428\*352\*519cm

Gross Weight: 16.5kg

## SIZE DRAWING



### Remove packaging

To ensure proper and safe use of this product, please read the instructions carefully before installation and use. This manual contains important installation and application information. Please strictly follow the steps in the manual when installing and operating the product. Also, please keep this manual properly.

The 19-focal-control units are rigorously designed and manufactured to CE standards, complying with the internationally recognized DMX512 signal protocol. These units support both standalone operation and networked control, featuring rapid rotation, low noise, and robust functionality. They are ideal for small to medium-sized venues including concert halls, theaters, studios, nightclubs, and bars.

This product features 19 high-brightness, stable 40W 4-in-1 LEDs. Handle the packaging with care. After opening, inspect for any damage during transport and ensure all components are intact.

### Security Notice

pay attention to !

Please exercise caution before operating this product. This is a high-voltage product. Contact with wires may cause electric shock.

This product is shipped in pristine condition. To maintain its integrity and ensure safe operation, users must strictly follow the safety guidelines and warnings in this manual. Important: Any damage resulting from

failure to comply with these instructions will not be covered under warranty. The manufacturer assumes no liability for product issues arising from such non-compliance. If the product has been exposed to extreme temperature fluctuations (e.g., after transportation), do not immediately connect it to power. Temperature-induced condensation may cause damage. Always wait until the product has returned to normal temperature before use.

This indoor appliance operates within a 90-240V voltage range. Ensure the ground voltage does not exceed the product's rated capacity. The power plug must be connected to a Class I socket with proper protection. The green or tea-colored conductor must be properly grounded.

Always inspect the power cord of this product. Ensure the cord is not folded, damaged, or scratched, and do not connect it to other wires. Exercise special care when connecting the power cord or related cables. Always unplug the power cord when not in use or before cleaning.

Before using the product, familiarize yourself with its operation and functions. Do not let children or unqualified personnel touch the product.

Do not shake this product. Do not use excessive force when installing or operating the product. Do not let unqualified personnel operate the product. Most damage is caused by unqualified operation.

The product does not include any spare parts. Maintenance and repair should only be performed by professionals.

Do not modify this product without authorization, as it may cause damage, which is not covered by the warranty. Furthermore, improper operation may lead to short circuits, burns, or electric shocks.

## Operation Instructions

This product is a head-shaking colored light beam lamp, used to create colored performance effects.

If the product has been exposed to a significant temperature change (e.g., after transportation), avoid turning it on immediately due to thermal shock. Wait until the device reaches room temperature before activation.

--Be cautious of shock. Avoid strong impacts during installation.

Do not lift the entire product by the lamp head, as this may damage the mechanical parts of the device.

When selecting an installation location, ensure the product is not exposed to overheating, excessive humidity, or dust. Do not place any wires on the floor, as this may pose an electric shock hazard.

--Ensure the installation site is secure before installing the product

--Secure the product with a safety rope and verify all screws are properly installed during installation

--Ensure the lens is in good condition. Replace the lens if it is damaged or scratched.

It is recommended that this product be operated by a technician familiar with it. Non-technical personnel are prohibited from operating this equipment, as many losses are caused by non-professional operation.

--Keep the packaging materials properly for secondary transportation if needed.

Do not change the product without the guidance of the manufacturer or distributor.

Any equipment failure caused by improper operation of this device as specified in the manual is not covered by warranty. Additionally, any accidents resulting from short circuits, injuries, electric shocks, UV-induced damage, or bulb explosions caused by improper use are also not covered by warranty.

## Product hanging and installation

Note: For safety, hang this product away from walkways, seating areas, or within reach.

Before hanging this product, make sure the mounting point can support 10 times the weight of the final product.

The product must be installed with a double protection device, such as a safety rope.

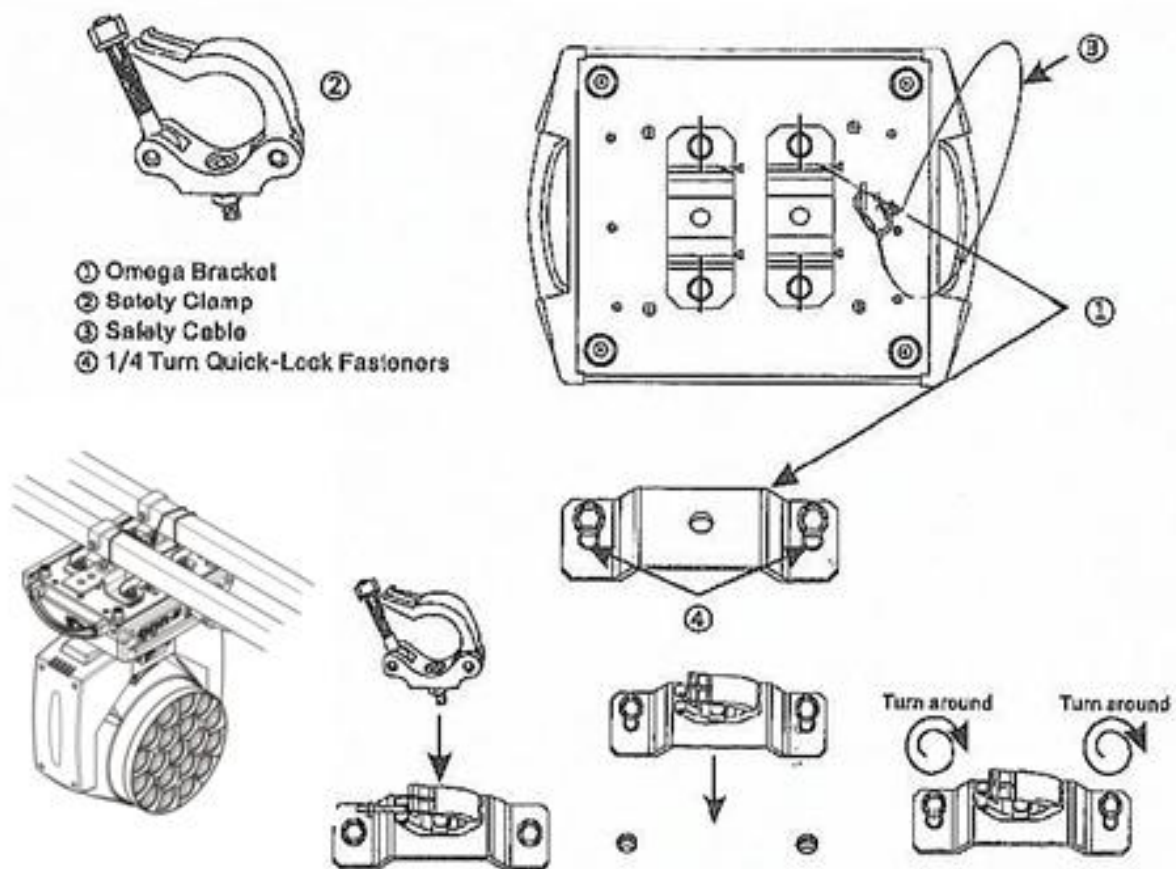
It is forbidden to stand under the installation point when hanging, removing or repairing this product. Ensure that this product is installed at least 0.5 meters away from flammable materials. Remember to use a safety rope as a safety guarantee in case the fast lock loosens and an accident occurs.

**Hanging Requirements:** The top suspension requires experienced installers who can calculate load-bearing capacity, select appropriate materials, and conduct regular safety inspections. If you lack these skills, do not attempt installation yourself. Improper operation may result in serious consequences, including personal injury.

Before powering on the product, make sure to complete all required hanging and installation steps.

**Quick-lock hanger:** The bottom of this product has a specially designed professional hanger, including quick-lock hanger and safety rope hanger point (please refer to the figure below).

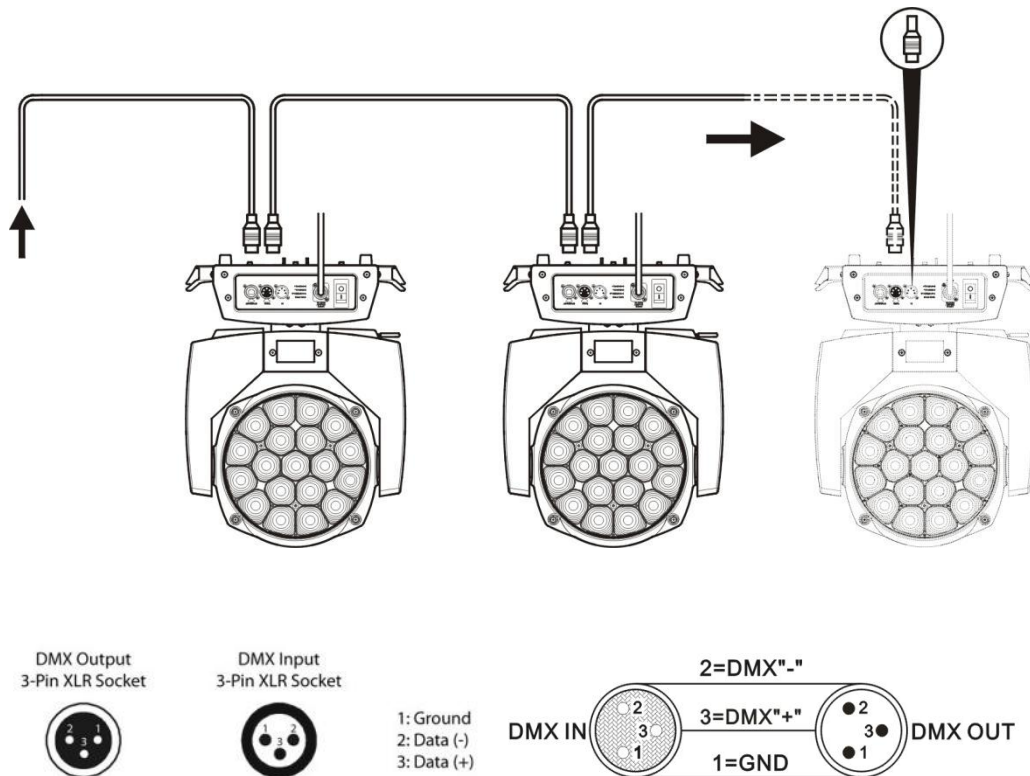
When installing this product on the truss, ensure you use the appropriate quick-release lock to secure it at the designated hanging point, then fasten it with an M10 screw. For added safety, attach the safety rope to the product's bottom attachment point and secure it to the truss.



Regardless of the hanging method you choose, always use the safety rope. The product has a dedicated safety rope attachment point at the bottom (see the image above). Remember to use the provided attachment point and never install the safety rope on the handle.

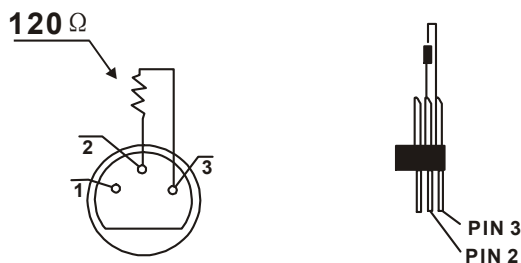
## DMX-512 linkage

Connect the male XLR connector to the controller's signal output port and the female connector to the signal input port on the rear panel. You can connect multiple units in series, provided the signal cable is three-core, shielded, and equipped with XLR input/output connectors. Refer to the diagram below.



DMX-512 connection requires a terminator (loop connection)

During installation, if signal cables are routed over long distances or in noisy environments like karaoke bars, we recommend using DMX terminators (loop connections) to prevent digital control signal interference caused by electrical noise. A DMX terminator consists of a simple XLR connector with 2 or 3 cores connected to a 120-ohm resistor. Insert the terminator into the XLR output port of the final device, as shown in the figure below.



## Menu

main interface	description	explain
temperature	32°C	The panel temperature is 32°C Temperature effect on power: Start to reduce power at 70 degrees; Power increase only when temperature is below 68 degrees (not including 68 degrees); The power does not rise or fall from 68 to 69 degrees; The lamp is extinguished at 85 degrees.
	**°C	Temperature detection error

electric fan	whack	1) The fan rotates for 15 seconds when turned on 2) The fan starts when the lamp board temperature reaches 48°C and stops when it drops below 45°C.
	Keep rotating	1) Temperature not detected 2) Communication error
address	001 - 512	Add or subtract 1 from the address code each time
signal lamp	blue	DMX signal
	red	report an error

primary menu	Submenu	Three-level menu/parameter	
System Settings	running mode	DMX/voice control/autonomous 1/autonomous 2	
	channel pattern	29CH/17CH/32CH/37CH/46CH/94CH/379CH	
	Horizontal Flip	Turn on/off	
	Vertical Flip	Turn on/off	
	Reservation		
	Coupler Error Correction	Turn on/off	
	Signal on	Turn on/off	
	Screen Protector	Turn on/off	
	Flip screen	Turn on/off	
	Sync updates	Turn on/off This feature requires offline DMX operation when unplugged.	
	language	centre /EN	
	factory data reset		
manual mode	Manually control channel values	000-255	
system calibration	enter password	Light Calibration	
system reset	Effect motor reset	Reset all effects except XY	
	Reset scanner	Reset only the XY axis	
	Reset all motors	Lamp Reset	
system info	Reset information	Show details	
	DMX data detection	Display specific DMX detection content	

	sensor information	Display the specific information of the optocoupler and Hall sensor
	Hardware version	Show hardware version number
	software release	Show software version

## System Settings

option	explain	
running mode	The light supports three operating modes: DMX mode, self-drive mode, and voice-activated mode.	
	DMX pattern	Console mode, receives DMX signal, RDM signal
	Auto mode 1	The light automatically runs according to the built-in program 1
	Auto mode 2	The light automatically runs according to the built-in program 2
	Voice control mode	When the light detects a strong sound, it automatically runs a scene according to the built-in program; otherwise, it maintains the last scene.
channel pattern	You can select the following channel values: 29CH/17CH/32CH/37CH/46CH/94CH/379CH	
Horizontal Flip	Set X-axis rotation direction	
	close	Do not reverse
	open	opposite direction
Vertical Flip	Set the Y-axis rotation direction	
	close	Do not reverse
	open	opposite direction
Reservation		
Coupler Error Correction	Check if XY is out of sync and correct it	
	close	Do not correct position after losing steps
	open	Auto-correct position after step loss
Signal on	The output status of the light when there is no DMX signal	
	close	No signal, so the motor and light source return to their original positions and states.
	open	No signal. Keep the last frame of DMX data output.
Screen Protector	Screen time	
	close	Always on
	open	Turn off the screen at set times in a static environment
Flip screen	Set the screen orientation	

	close	Do not reverse display
	open	Reverse display
Sync updates	Sync the setup or calibration parameters of multiple lights	
	close	Sync update is off.
	open	Connect multiple lights with DMX cables to synchronize updates on the calibration interface. (Note: Disconnect the DMX signal cable.)
language	Switch between Chinese and English menus	
	centre	the Chinese language
	EN	English menu
factory data reset	Lighting parameters return factory settings	
	cancel	res sic stantibus
	affirm	Restore the light fixture to factory settings

◆ **manual control**

This interface controls the current lighting. See the channel table for details.

Press OK to enter edit mode. Use the up and down keys to change the channel value. Press OK again to save the changes and exit edit mode. Press Exit to exit without saving the changes.

◆ **system calibration**

Set a password "8888" here to prevent unauthorized access. Confirm the password by pressing OK.

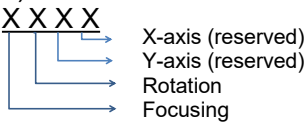
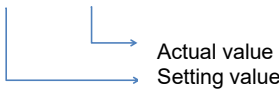
option	explain
Initial position calibration	After entering the sub-interface, you can adjust the reset positions of motors for the X-axis, Y-axis, focus, and rotation to compensate for hardware installation errors. The adjustment range is 0 to 255, with 127 indicating no adjustment.
white balance CAL	You can adjust the power of LED1-19 and the overall LED. The adjustment range is 0 to 255, where 255 means no adjustment.
calibration of power	You can adjust the maximum power of the whole lamp. The adjustment range is 0 to 255.200 means no adjustment.
MIC sensitivity calibration	Adjust voice sensitivity.
change password	Set the system calibration password.

◆ **reset**

Press the up and down keys to switch between reset modes. Press OK to reset immediately.

option	explain
Effect motor reset	Reset focus and rotate motor
Reset scanner	Reset only the XY axis
Reset all motors	Lamp Reset

◆ system info

option	explain
Reset error message	If the red ERR indicator light is on, the lamp is operating with an error. 1) MCU1 Communication Failure (Motor-Display Board Communication Failure) 2) MCU2 Communication Failure (Motor Board-Lamp Board Communication Failure) 3) X/Y coupler error 4) Failed to rotate or reset focus
DMX Data Monitoring	Enter the sub-interface to view channel values numerically. You can flip pages.
sensor information	1) Hall: X X X X  2) sensor : <u>X/Y optical coupler: XXXX--XXXX</u> 
Hardware version number	Hardware information of the device XX      XX      XX      XX      XX      XX XX ↓    XX ↓    XX ↓    XX    XX    XX XX      XX      XX      XX Display board version. Motor version. Light board version.
Software version	Lamp software version XX      XX      XX      XX      XX      XX XX ↓    XX ↓    XX ↓    XX    XX    XX XX      XX      XX      XX Display board version. Motor version. Light board version.

**Channel Table**

Refer to the original Bachi channel for the channel table

29CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 24	Turn on dimmer
		25 - 64	Flashlight 1 (Fast Slow)
		65 - 69	open
		70 - 84	Flash 2: Turn on the pulse (fast slow)
		85 - 89	open
		90 - 104	Flash 3: Off pulse (fast slow)
		105 - 109	open
		110 - 124	Flash 4: Random Flash (Fast Slow)
		125 - 129	open
		130 - 144	Flash 5: Randomly turn on pulses (fast slow)

		145 - 149	open
		150 - 164	Flash 6: Random pulse shutdown (fast slow)
		165 - 169	open
		170 - 184	Strobe 7: Sudden pulse (fast slow)
		185 - 189	open
		190 - 204	Flash 8: Random burst pulses (fast slow)
		205 - 209	open
		210 - 224	Flash 9: Sinusoidal wave (fast slow)
		225 - 229	open
		230 - 244	Shutter 10: Continuous shooting (fast slow)
		245 - 255	open
2	aiming	0-255	Linear dimming from dark to light 0-100%
3	amplify	0-255	Zoom from large to small
4	X axle	0-255	horizontal control
5	X-axis fine-tune	0-255	Horizontal control fine-tuning
6	Y axle	0-255	vertical control
7	Y-axis fine-tuning	0-255	Vertical fine-tuning control
8	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
9	Color macro	0-9	NF
		9-255	Color macro
10	red	0-255	Red from dark to light with linear dimming 0-100%
11	green	0-255	Green dimmed from dark to light 0-100%
12	blue	0-255	Blue linearly dim from dark to light 0-100%
13	white	0-255	White from dark to light with linear dimming 0-100%
14	colour temperature	0-9	NF
		10-255	8000K-2500K
15	Halo Flash	0-4	NF
		5-250	Slow to fast flash
		251-255	NF
16	Halo Light Dimmer	0-255	Linear dimming from dark to light 0-100%
17	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 14	LEE 790-Moroccan Pink
		15 - 19	LEE 157-Pink
		20 - 24	LEE 332-Special Rose Pink
		25 - 29	LEE 328-Fool's Powder
		30 - 34	LEE 345-Purple Pink

		35 - 39	LEE 194-Surprise Pink
		40 - 44	LEE 181-Congo Blue
		45 - 49	LEE 071-Tokyo Blue
		50 - 54	LEE 120-Dark Blue
		55 - 59	LEE 079-Blue
		60 - 64	LEE 132-Medium Blue
		65 - 69	LEE 200-Double CT Blue
		70 - 74	LEE 161-Slate Blue
		75 - 79	LEE 201-Full CT Blue
		80 - 84	LEE 202-Half CT Blue
		85 - 89	LEE 117-Steel Blue
		90 - 94	LEE 353-Light Blue
		95 - 99	LEE 118-Light Blue
		100 - 104	LEE 116-Medium Blue Green
		105 - 109	LEE 124-Dark Green
		110 - 114	LEE 139-Light green
		115 - 119	LEE 089-Moss green
		120 - 124	LEE 122-Fern Green
		125 - 129	LEE 738-JAS Green
		130 - 134	LEE 088-Lemon Green
		135 - 139	LEE 100-Spring Yellow
		140 - 144	LEE 104-Dark Amber
		145 - 149	LEE 179-Chrome Orange
		150 - 154	LEE 105-Orange
		155 - 159	LEE 021-Golden Amber
		160 - 164	LEE 778-Thousand Gold
		165 - 169	LEE 135-Dark Gold Amber
		170 - 174	LEE 164-Flame Red
		175 - 179	open
		180 - 201	Clockwise, slow to fast
		202 - 207	cease
		208 - 229	Counterclockwise, slow to fast
		230 - 234	open
		235 - 239	Random Quick
		240 - 244	Random medium speed
		245 - 249	Random slow
		250 - 255	open
18	Red Halo	0 - 255	Red 0-100%
19	Green halo light	0 - 255	Green 0-100%
20	Blue Halo	0 - 255	Blue 0-100%

21	Highlight effect	0 - 7	inaction
		8 - 255	The halo effect has color control for effects 1-32, while effects 33-64 are not color-controlled (4 numbers per effect).
22	Halo light effect speed	0 - 255	Halo effect speed (fast    slow)
23	Light strip flicker	0-4	NF
		5-250	Sync flash from slow to fast
		251-255	NF
24	Light Strip Dimmer	0-255	Linear dimming from dark to light
25	The light is red	0-255	Linear dim from dark to light
26	Green light	0-255	Linear dim from dark to light
27	Blue light strip	0-255	Linear dim from dark to light
28	Light strip effect	0-51	Light Strip Dimming Mode
		52-255	Light strip effect (4 numbers per effect)
29	Light strip effect speed	0-255	Light strip effect speed from slow to fast

17CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 49	Turn on dimmer
		50 - 200	Sync flash (slow    fast)
		201 - 209	Turn on dimmer
		210 - 255	Random Blink
2	aiming	0-255	Dim from dark to light in linear 0-100%
3	Dimmer Fine Tune	0-255	Dim the light from dark to bright in linear 0-100%
4	red	0-255	Red from dark to light with linear dimming 0-100%
5	Red fine-tuning	0-255	Red fine-tuning from dark to light for linear dimming 0-100%
6	green	0-255	Green dimmed from dark to light 0-100%
7	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
8	blue	0-255	Blue linearly dim from dark to light 0-100%
9	Blue fine-tuning	0-255	Blue fine-tune from dark to light for linear dimming 0-100%
10	colour temperature	0-9	NF
		10-255	8000K-2500K
11	Color macro	0-9	NF
		9-255	Color macro
12	amplify	0-255	Zoom from large to small
13	X axle	0-255	horizontal control
14	X-axis fine-tuning	0-255	Horizontal control fine-tuning
15	Y axle	0-255	vertical control

16	Y-axis fine-tuning	0-255	Vertical fine-tuning control
17	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All resets are valid for 5 seconds

32CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 49	Turn on dimmer
		50 - 200	Sync flash (slow fast)
		201 - 209	Turn on dimmer
		210 - 255	Random Blink
2	aiming	0-255	Dim from dark to light in linear 0-100%
3	Dimmer Fine Tune	0-255	Dimming fine-tune from dark to bright for linear dimming 0-100%
4	red	0-255	Red from dark to light with linear dimming 0-100%
5	Red fine-tuning	0-255	Red fine-tuning from dark to light for linear dimming 0-100%
6	green	0-255	Green dimmed from dark to light 0-100%
7	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
8	blue	0-255	Blue linearly dim from dark to light 0-100%
9	Blue fine-tuning	0-255	Blue fine-tune from dark to light for linear dimming 0-100%
10	colour temperature	0-9	NF
		10-255	8000K-2500K
11	Color macro	0-9	NF
		9-255	Color macro
12	amplify	0-255	Zoom from large to small
13	X axle	0-255	horizontal control
14	X-axis fine-tune	0-255	Horizontal control fine-tuning
15	Y axle	0-255	vertical control
16	Y-axis fine-tuning	0-255	Vertical fine-tuning control
17	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
18	Beam mixing mode	0-255	continue to have
19	FX1 (Effect 1)	0-9	NF
		10-255	Effect 1-5 (50 numbers per effect)

20	Effect 1 Speed	0-126	Pattern effect from fast to slow counterclockwise
		127-129	Pattern freeze
		130-255	Pattern effect moves clockwise from slow to fast
21	FX2 (Effect 2)	0 - 7	inaction
		8 - 255	Effect 2: Color-controlled effects (1-32 are color-controlled, 33-64 are not) (4 numbers per effect)
22	Effect 2 Speed	0 - 255	Effect 2 Speed (Fast    Slow)
23	Run mode	0 - 5	continue to have
24	Halo Flash	0-4	NF
		5-250	Slow to fast flash
		251-255	NF
25	Halo Light Dimmer	0-255	The halo backlight dimmer adjusts linearly from dark to bright (0-100%).
26	Halo Light Dimmer Fine Tune	0-255	The halo backlight dimmer allows linear dimming from dark to bright (0-100%).
27	Red Halo	0 - 255	Red 0-100%
28	Green halo light	0 - 255	Green 0-100%
29	Blue Halo	0 - 255	Blue 0-100%
30	Halo Hue Temperature	0-9	NF
		10-255	8000K-2500K
31	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 249	Highlight color
		250 - 255	open
32	Glow Mix	0-255	continue to have

37CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 24	Turn on dimmer
		25 - 64	Flashlight 1 (Fast    Slow)
		65 - 69	open
		70 - 84	Flash 2: Turn on the pulse (fast    slow)
		85 - 89	open
		90 - 104	Flash 3: Off pulse (fast    slow)
		105 - 109	open
		110 - 124	Flash 4: Random Flash (Fast    Slow)
		125 - 129	open
		130 - 144	Flash 5: Randomly turn on pulses (fast    slow)
		145 - 149	open
		150 - 164	Flash 6: Random pulse shutdown (fast    slow)
		165 - 169	open

		170 - 184	Strobe 7: Sudden pulse (fast slow)
		185 - 189	open
		190 - 204	Flash 8: Random burst pulses (fast slow)
		205 - 209	open
		210 - 224	Flash 9: Sine wave (fast slow)
		225 - 229	open
		230 - 244	Shutter 10: Continuous shooting (fast slow)
		245 - 255	open
2	aiming	0-255	Dim from dark to light in linear 0-100%
3	Dimmer Fine Tune	0-255	Dim the light from dark to bright in linear 0-100%
4	amplify	0-255	Zoom from large to small
5	X axle	0-255	horizontal control
6	X-axis fine-tuning	0-255	Horizontal control fine-tuning
7	Y axle	0-255	vertical control
8	Y-axis fine-tuning	0-255	Vertical fine-tuning control
9	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
10	Color macro	0-9	NF
		9-255	Color macro
11	red	0-255	Red from dark to light with linear dimming 0-100%
12	Red fine-tuning	0-255	Red fine adjustment from dark to light for linear dimming 0-100%
13	green	0-255	Green dimmed from dark to light 0-100%
14	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
15	blue	0-255	Blue linearly dim from dark to light 0-100%
16	Blue fine-tuning	0-255	Blue fine-tune from dark to light for linear dimming 0-100%
17	white	0-255	White from dark to light with linear dimming 0-100%
18	White fine-tuning	0-255	Linear dimming from dark to light (0-100%)
19	colour temperature	0-9	NF
		10-255	8000K-2500K
20	effect	0-9	NF
		10-255	Effect 1-5 (50 numbers per effect)
21	Effect speed	0-63	Pattern freeze
		64-158	Pattern effect from fast to slow counterclockwise
		159-160	Pattern freeze
		161-255	Pattern effect moves clockwise from slow to fast

22	Effect faded	0-255	Pattern effect faded
23	Halo Flash	0-4	NF
		5-250	Slow to fast flash
		251-255	NF
24	Halo Light Dimmer	0-255	Linear dimming from dark to light 0-100%
25	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 14	LEE 790-Moroccan Pink
		15 - 19	LEE 157-Pink
		20 - 24	LEE 332-Special Rose Pink
		25 - 29	LEE 328-Fool's Powder
		30 - 34	LEE 345-Purple Pink
		35 - 39	LEE 194-Surprise Pink
		40 - 44	LEE 181-Congo Blue
		45 - 49	LEE 071-Tokyo Blue
		50 - 54	LEE 120-Dark Blue
		55 - 59	LEE 079-Blue
		60 - 64	LEE 132-Medium Blue
		65 - 69	LEE 200-Double CT Blue
		70 - 74	LEE 161-Slate Blue
		75 - 79	LEE 201-Full CT Blue
		80 - 84	LEE 202-Half CT Blue
		85 - 89	LEE 117-Steel Blue
		90 - 94	LEE 353-Light Blue
		95 - 99	LEE 118-Light Blue
		100 - 104	LEE 116-Medium Blue Green
		105 - 109	LEE 124-Dark Green
		110 - 114	LEE 139-Light green
		115 - 119	LEE 089-Moss Green
		120 - 124	LEE 122-Fern Green
		125 - 129	LEE 738-JAS Green
		130 - 134	LEE 088-Lemon Green
		135 - 139	LEE 100-Spring Yellow
		140 - 144	LEE 104-Dark Amber
		145 - 149	LEE 179-Chrome Orange
		150 - 154	LEE 105-Orange
155 - 159	LEE 021-Golden Amber		
160 - 164	LEE 778-Thousand Gold		
165 - 169	LEE 135-Dark Gold Amber		
170 - 174	LEE 164-Flame Red		
175 - 179	open		

		180 - 201	Clockwise, slow to fast
		202 - 207	cease
		208 - 229	Counterclockwise, slow to fast
		230 - 234	open
		235 - 239	Random Quick
		240 - 244	Random medium speed
		245 - 249	Random slow
		250 - 255	open
26	Red Halo	0 - 255	Red 0-100%
27	Green halo light	0 - 255	Green 0-100%
28	Blue Halo	0 - 255	Blue 0-100%
29	Highlight effect	0 - 7	inaction
		8 - 255	The halo effect has color control for effects 1-32, while effects 33-64 are not color-controlled (4 numbers per effect).
30	Halo light effect speed	0 - 255	Halo effect speed (fast slow)
31	Light strip flicker	0-4	NF
		5-250	Sync flash from slow to fast
		251-255	NF
32	Light Strip Dimmer	0-255	Linear dimming from dark to light
33	The light is red	0-255	Linear dim from dark to light
34	Green light	0-255	Linear dim from dark to light
35	Blue light strip	0-255	Linear dim from dark to light
36	Light strip effect	0-51	Light Strip Dimming Mode
		52-255	Light strip effect (4 numbers per effect)
37	Light strip effect speed	0-255	Light strip effect speed from slow to fast

46CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 24	Turn on dimmer
		25 - 64	Flashlight 1 (Fast Slow)
		65 - 69	open
		70 - 84	Flash 2: Turn on the pulse (fast slow)
		85 - 89	open
		90 - 104	Flash 3: Off pulse (fast slow)
		105 - 109	open
		110 - 124	Flash 4: Random Flash (Fast Slow)
		125 - 129	open
		130 - 144	Flash 5: Randomly turn on pulses (fast slow)

		145 - 149	open
		150 - 164	Flash 6: Random pulse shutdown (fast slow)
		165 - 169	open
		170 - 184	Strobe 7: Sudden pulse (fast slow)
		185 - 189	open
		190 - 204	Flash 8: Random burst pulses (fast slow)
		205 - 209	open
		210 - 224	Flash 9: Sine wave (fast slow)
		225 - 229	open
		230 - 244	Shutter 10: Continuous shooting (fast slow)
		245 - 255	open
2	aiming	0-255	Dim from dark to light in linear 0-100%
3	Dimmer Fine Tune	0-255	Dimming fine-tune from dark to bright for linear dimming 0-100%
4	amplify	0-255	Zoom from large to small
5	X axle	0-255	horizontal control
6	X-axis fine-tune	0-255	Horizontal control fine-tuning
7	Y axle	0-255	vertical control
8	Y-axis fine-tuning	0-255	Vertical fine-tuning control
9	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
10	Color macro	0-9	NF
		9-255	Color macro
11	red	0-255	Red from dark to light with linear dimming 0-100%
12	Red fine-tuning	0-255	Red fine-tuning from dark to light for linear dimming 0-100%
13	green	0-255	Green dimmed from dark to light 0-100%
14	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
15	blue	0-255	Blue linearly dim from dark to light 0-100%
16	Blue fine-tuning	0-255	Blue fine-tune from dark to light for linear dimming 0-100%
17	white	0-255	White from dark to light with linear dimming 0-100%
18	White fine-tuning	0-255	Linear dimming from dark to light (0-100%)
19	colour temperature	0-9	NF
		10-255	8000K-2500K
20	effect	0-9	NF
		10-255	Effect 1-5 (50 numbers per effect)
21	Effect speed	0-63	Pattern freeze

		64-158	Pattern effect from fast to slow counterclockwise
		159-160	Pattern freeze
		161-255	Pattern effect moves clockwise from slow to fast
22	Effect faded	0-255	Pattern effect faded
23	Halo Blink	0-4	NF
		5-250	Slow to fast flash
		251-255	NF
24	Halo Light Dimmer	0-255	Linear dimming from dark to light 0-100%
25	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 14	LEE 790-Moroccan Pink
		15 - 19	LEE 157-Pink
		20 - 24	LEE 332-Special Rose Pink
		25 - 29	LEE 328-Fool's Powder
		30 - 34	LEE 345-Purple Pink
		35 - 39	LEE 194-Surprise Pink
		40 - 44	LEE 181-Congo Blue
		45 - 49	LEE 071-Tokyo Blue
		50 - 54	LEE 120-Dark Blue
		55 - 59	LEE 079-Blue
		60 - 64	LEE 132-Medium Blue
		65 - 69	LEE 200-Double CT Blue
		70 - 74	LEE 161-Slate Blue
		75 - 79	LEE 201-Full CT Blue
		80 - 84	LEE 202-Half CT Blue
		85 - 89	LEE 117-Steel Blue
		90 - 94	LEE 353-Light Blue
		95 - 99	LEE 118-Light Blue
		100 - 104	LEE 116-Medium Blue Green
		105 - 109	LEE 124-Dark Green
		110 - 114	LEE 139-Light green
		115 - 119	LEE 089-Moss Green
		120 - 124	LEE 122-Fern Green
		125 - 129	LEE 738-JAS Green
		130 - 134	LEE 088-Lemon Green
		135 - 139	LEE 100-Spring Yellow
		140 - 144	LEE 104-Dark Amber
145 - 149	LEE 179-Chrome Orange		
150 - 154	LEE 105-Orange		
155 - 159	LEE 021-Golden Amber		
160 - 164	LEE 778-Thousand Gold		

		165 - 169	LEE 135-Dark Gold Amber
		170 - 174	LEE 164-Flame Red
		175 - 179	open
		180 - 201	Clockwise, slow to fast
		202 - 207	cease
		208 - 229	Counterclockwise, slow to fast
		230 - 234	open
		235 - 239	Random Quick
		240 - 244	Random medium speed
		245 - 249	Random slow
		250 - 255	open
26	Red Halo	0 - 255	Red 0-100%
27	Green halo light	0 - 255	Green 0-100%
28	Blue Halo	0 - 255	Blue 0-100%
29	Highlight effect	0 - 7	inaction
		8 - 255	The halo effect has color control for effects 1-32, while effects 33-64 are not color-controlled (4 numbers per effect).
30	Halo light effect speed	0 - 255	Halo effect speed (fast slow)
31	Halo Aperture 1 Red	0 - 255	Halo Aperture 1 Red 0-100%
32	Halo Aperture 1 Green	0 - 255	Halo Aperture 1 Green 0-100%
33	Halo Aperture 1 Blue	0 - 255	Halo Aperture 1 Blue 0-100%
34	Halo Aperture 2 Red	0 - 255	Halo Aperture 2 Red 0-100%
35	Halo Aperture 2 Green	0 - 255	Halo Aperture 2 Green 0-100%
36	Halo Aperture 2 Blue	0 - 255	Halo Aperture 2 Blue 0-100%
37	Halo Aperture 3 Red	0 - 255	Halo Aperture 3 Red 0-100%
38	Halo Aperture 3 Green	0 - 255	Halo Aperture 3 Green 0-100%
39	Halo 3 Blue	0 - 255	Halo Aperture 3 Blue 0-100%
40	Light strip flicker	0-4	NF
		5-250	Sync flash from slow to fast
		251-255	NF
41	Light Strip Dimmer	0-255	Linear dimming from dark to light
42	The light is red	0-255	Linear dim from dark to light
43	Green light	0-255	Linear dim from dark to light
44	Blue light strip	0-255	Linear dim from dark to light
45	Light strip effect	0-51	Light Strip Dimming Mode
		52-255	Light strip effect (4 numbers per effect)

46	Light strip effect speed	0-255	Light strip effect speed from slow to fast
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94CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 24	Turn on dimmer
		25 - 64	Flashlight 1 (Fast Slow)
		65 - 69	open
		70 - 84	Flash 2: Turn on the pulse (fast slow)
		85 - 89	open
		90 - 104	Flash 3: Off pulse (fast slow)
		105 - 109	open
		110 - 124	Flash 4: Random Flash (Fast Slow)
		125 - 129	open
		130 - 144	Flash 5: Randomly turn on pulses (fast slow)
		145 - 149	open
		150 - 164	Flash 6: Random pulse shutdown (fast slow)
		165 - 169	open
		170 - 184	Strobe 7: Sudden pulse (fast slow)
		185 - 189	open
		190 - 204	Flash 8: Random burst pulses (fast slow)
		205 - 209	open
		210 - 224	Flash 9: Sinusoidal wave (fast slow)
		225 - 229	open
230 - 244	Shutter 10: Continuous shooting (fast slow)		
245 - 255	open		
2	aiming	0-255	Dim from dark to light in linear 0-100%
3	Dimmer Fine Tune	0-255	Dimming fine-tune from dark to bright for linear dimming 0-100%
4	amplify	0-255	Zoom from large to small
5	X axle	0-255	horizontal control
6	X-axis fine-tune	0-255	Horizontal control fine-tuning
7	Y axle	0-255	vertical control
8	Y-axis fine-tuning	0-255	Vertical fine-tuning control
9	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
10	Color macro	0-9	NF

		9-255	Color macro
11	red	0-255	Red from dark to light with linear dimming 0-100%
12	Red fine-tuning	0-255	Red fine-tuning from dark to light for linear dimming 0-100%
13	green	0-255	Green dimmed from dark to light 0-100%
14	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
15	blue	0-255	Blue linearly dim from dark to light 0-100%
16	Blue fine-tuning	0-255	Blue fine-tune from dark to light for linear dimming 0-100%
17	white	0-255	White from dark to light with linear dimming 0-100%
18	White fine-tuning	0-255	Linear dimming from dark to light (0-100%)
19	colour temperature	0-9	NF
		10-255	8000K-2500K
20	effect	0-9	NF
		10-255	Effect 1-5 (50 numbers per effect)
21	Effect speed	0-63	Pattern freeze
		64-158	Pattern effect from fast to slow counterclockwise
		159-160	Pattern freeze
		161-255	Pattern effect moves clockwise from slow to fast
22	Effect faded	0-255	Pattern effect faded
23	Halo Flash	0-4	NF
		5-250	Slow to fast flash
		251-255	NF
24	Halo Light Dimmer	0-255	Linear dimming from dark to light 0-100%
25	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 14	LEE 790-Moroccan Pink
		15 - 19	LEE 157-Pink
		20 - 24	LEE 332-Special Rose Pink
		25 - 29	LEE 328-Fool's Powder
		30 - 34	LEE 345-Purple Pink
		35 - 39	LEE 194-Surprise Pink
		40 - 44	LEE 181-Congo Blue
		45 - 49	LEE 071-Tokyo Blue
		50 - 54	LEE 120-Dark Blue
		55 - 59	LEE 079-Blue
		60 - 64	LEE 132-Medium Blue
		65 - 69	LEE 200-Double CT Blue
		70 - 74	LEE 161-Slate Blue
		75 - 79	LEE 201-Full CT Blue
80 - 84	LEE 202-Half CT Blue		

		85 - 89	LEE 117-Steel Blue
		90 - 94	LEE 353-Light Blue
		95 - 99	LEE 118-Light Blue
		100 - 104	LEE 116-Medium Blue Green
		105 - 109	LEE 124-Dark Green
		110 - 114	LEE 139-Light green
		115 - 119	LEE 089-Moss Green
		120 - 124	LEE 122-Fern Green
		125 - 129	LEE 738-JAS Green
		130 - 134	LEE 088-Lemon Green
		135 - 139	LEE 100-Spring Yellow
		140 - 144	LEE 104-Dark Amber
		145 - 149	LEE 179-Chrome Orange
		150 - 154	LEE 105-Orange
		155 - 159	LEE 021-Golden Amber
		160 - 164	LEE 778-Thousand Gold
		165 - 169	LEE 135-Dark Gold Amber
		170 - 174	LEE 164-Flame Red
		175 - 179	open
		180 - 201	Clockwise, slow to fast
		202 - 207	cease
		208 - 229	Counterclockwise, slow to fast
		230 - 234	open
		235 - 239	Random Quick
		240 - 244	Random medium speed
		245 - 249	Random slow
		250 - 255	open
26	Red Halo	0 - 255	Red 0-100%
27	Green halo light	0 - 255	Green 0-100%
28	Blue Halo	0 - 255	Blue 0-100%
29	Highlight effect	0 - 7	inaction
		8 - 255	The halo effect has color control for effects 1-32, while effects 33-64 are not color-controlled (4 numbers per effect).
30	Halo light effect speed	0 - 255	Halo effect speed (fast    slow)
31	Red Accent Light 1	0 - 255	Red light 10-100%
32	Green Accent Light 1	0 - 255	Green backlight 0-100%
33	Accent 1 Blue	0 - 255	Highlight 1 Blue 0-100%
...			
85	Guangfu 19 Red	0 - 255	Guangfu 19 Red 0-100%

86	Guangshu 19 Green	0 - 255	Guangfu 19 Green 0-100%
87	Guangshu 19 Blue	0 - 255	Guangfu 19 Blue 0-100%
88	Light strip flicker	0-4	NF
		5-250	Sync flash from slow to fast
		251-255	NF
89	Light Strip Dimmer	0-255	Linear dimming from dark to light
90	The light is red	0-255	Linear dim from dark to light
91	Green light	0-255	Linear dim from dark to light
92	Blue light strip	0-255	Linear dim from dark to light
93	Light strip effect	0-51	Light Strip Dimming Mode
		52-255	Light strip effect (4 numbers per effect)
94	Light strip effect speed	0-255	Light strip effect speed from slow to fast

379CH	function	DMX numeric value	function
1	Light Flash	0 - 19	Turn off dimming
		20 - 24	Turn on dimmer
		25 - 64	Flash 1 (Fast Slow)
		65 - 69	open
		70 - 84	Flash 2: Turn on the pulse (fast slow)
		85 - 89	open
		90 - 104	Flash 3: Off pulse (fast slow)
		105 - 109	open
		110 - 124	Flash 4: Random Flash (Fast Slow)
		125 - 129	open
		130 - 144	Flash 5: Randomly turn on pulses (fast slow)
		145 - 149	open
		150 - 164	Flash 6: Random pulse shutdown (fast slow)
		165 - 169	open
		170 - 184	Strobe 7: Sudden pulse (fast slow)
		185 - 189	open
		190 - 204	Flash 8: Random burst pulses (fast slow)
		205 - 209	open
		210 - 224	Flash 9: Sine wave (fast slow)
		225 - 229	open
230 - 244	Shutter 10: Continuous shooting (fast slow)		
245 - 255	open		
2	aiming	0-255	Dim from dark to light in linear 0-100%

3	Dimmer Fine Tune	0-255	Dimming fine-tune from dark to bright for linear dimming 0-100%
4	amplify	0-255	Zoom from large to small
5	X axle	0-255	horizontal control
6	X-axis fine-tune	0-255	Horizontal control fine-tuning
7	Y axle	0-255	vertical control
8	Y-axis fine-tune	0-255	Vertical fine-tuning control
9	macro	0-25	NF
		26-76	Head reset in 5s
		77-127	XY reset is valid for 5s
		128-255	All reset is valid for 5s
10	Color macro	0-9	NF
		9-255	Color macro
11	red	0-255	Red from dark to light with linear dimming 0-100%
12	Red fine-tuning	0-255	Red fine-tuning from dark to light for linear dimming 0-100%
13	green	0-255	Green dimmed from dark to light 0-100%
14	Green fine-tuning	0-255	Green fine-tuning from dark to light for linear dimming 0-100%
15	blue	0-255	Blue linearly dim from dark to light 0-100%
16	Blue fine-tuning	0-255	Blue fine-tuning from dark to light for linear dimming 0-100%
17	white	0-255	White from dark to light with linear dimming 0-100%
18	White fine-tuning	0-255	Linear dimming from dark to light (0-100%)
19	colour temperature	0-9	NF
		10-255	8000K-2500K
20	effect	0-9	NF
		10-255	Effect 1-5 (50 numbers per effect)
21	Effect speed	0-63	Pattern freeze
		64-158	Pattern effect from fast to slow counterclockwise
		159-160	Pattern freeze
		161-255	Pattern effect moves clockwise from slow to fast
22	Effect faded	0-255	Pattern effect faded
23	Halo Blink	0-4	NF
		5-250	Dim flash from slow to fast
		251-255	NF
24	Halo Light Dimmer	0-255	Linear dimming from dark to light 0-100%
25	Highlight color	0 - 9	Open. Enable RGBW color mixing
		10 - 14	LEE 790-Moroccan Pink
		15 - 19	LEE 157-Pink
		20 - 24	LEE 332-Special Rose Pink

		25 - 29	LEE 328-Fool's Powder
		30 - 34	LEE 345-Purple Pink
		35 - 39	LEE 194-Surprise Pink
		40 - 44	LEE 181-Congo Blue
		45 - 49	LEE 071-Tokyo Blue
		50 - 54	LEE 120-Dark Blue
		55 - 59	LEE 079-Blue
		60 - 64	LEE 132-Medium Blue
		65 - 69	LEE 200-Double CT Blue
		70 - 74	LEE 161-Slate Blue
		75 - 79	LEE 201-Full CT Blue
		80 - 84	LEE 202-Half CT Blue
		85 - 89	LEE 117-Steel Blue
		90 - 94	LEE 353-Light Blue
		95 - 99	LEE 118-Light Blue
		100 - 104	LEE 116-Medium Blue Green
		105 - 109	LEE 124-Dark Green
		110 - 114	LEE 139-Light green
		115 - 119	LEE 089-Moss Green
		120 - 124	LEE 122-Fern Green
		125 - 129	LEE 738-JAS Green
		130 - 134	LEE 088-Lemon Green
		135 - 139	LEE 100-Spring Yellow
		140 - 144	LEE 104-Dark Amber
		145 - 149	LEE 179-Chrome Orange
		150 - 154	LEE 105-Orange
		155 - 159	LEE 021-Golden Amber
		160 - 164	LEE 778-Thousand Gold
		165 - 169	LEE 135-Dark Gold Amber
		170 - 174	LEE 164-Flame Red
		175 - 179	open
		180 - 201	Clockwise, slow to fast
		202 - 207	cease
		208 - 229	Counterclockwise, slow to fast
		230 - 234	open
		235 - 239	Random Quick
		240 - 244	Random medium speed
		245 - 249	Random slow
		250 - 255	open
26	Red Halo Light	0 - 255	Red 0-100%

27	Green halo light	0 - 255	Green 0-100%
28	Blue Halo	0 - 255	Blue 0-100%
29	Highlight effect	0 - 7	inaction
		8 - 255	The halo effect has color control for effects 1-32, while effects 33-64 are not color-controlled (4 numbers per effect).
30	Halo light effect speed	0 - 255	Halo effect speed (fast    slow)
31	Red Accent Light 1	0 - 255	Red light 10-100%
32	Green Accent Light 1	0 - 255	Green backlight 0-100%
33	Accent 1 Blue	0 - 255	Highlight 1 Blue 0-100%
...			
370	Guangshu 114 Red	0 - 255	Guangfu 19 Red 0-100%
371	Green 114	0 - 255	Guangfu 19 Green 0-100%
372	Guangshu 114 Blue	0 - 255	Guangfu 19 Blue 0-100%
373	Light strip flicker	0-4	NF
		5-250	Sync flash from slow to fast
		251-255	NF
374	Light Strip Dimmer	0-255	Linear dimming from dark to light
375	The light is red	0-255	Linear dim from dark to light
376	Green light	0-255	Linear dim from dark to light
377	Blue light strip	0-255	Linear dim from dark to light
378	Light strip effect	0-51	Light Strip Dimming Mode
		52-255	Light strip effect (4 numbers per effect)
379	Light strip effect speed	0-255	Light strip effect speed from slow to fast

## Product maintenance and cleaning

Please note the following when testing this product:

- 1.All screws and parts of the installed product must be tightly connected and not rusted.
- 2.The housing, lens, fasteners and mounting location (e.g. ceiling, bracket, truss, etc.) must not deform.
- 3.The moving parts of the machine shall not be worn or unbalanced.
- 4.The power cord should not be damaged, broken or scarred.

The installation and use of the product must be carried out by trained professional technicians to ensure the elimination of safety risks.

**Note: Please unplug the power before performing product maintenance!!**

To keep the product in good condition and prolong its service life, we recommend regular cleaning of the product.

1. Clean the external and internal lenses of the product every week to prevent the light output of the product from being weakened due to dust accumulation on the lenses.
2. Clean the fan every week.
3. Every three months, the professional electrical engineer will carry out a detailed circuit inspection of the product to ensure that the circuit contact is good to prevent the aging of the circuit contact caused by overheating.

We recommend that the product be cleaned regularly. Please do not use wet or linen cloth. Do not use alcohol or solvent for cleaning.

This product does not include replacement parts. Refer to the "Installation Instructions" section.

If you need any spare parts, please purchase them from your local dealer.

#### **REMARK**

The product has perfect performance and integrity 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.