

B-EYE 3740

User Manual



Guangzhou Mitek Light Co.,LTD

Email: info@miteklight.com

Website: www.miteklight.com

Add: No. 21 Dongfeng Avenue, Automobile Industry Base, Huadu District, Guangzhou

TECHNICAL PARAMETERS

Light source

Rated voltage: AC100V~240V 50/60Hz Input power: 1500W

LED: 37*40W 4in1 RGBW LEDs

Authorized life: 30,000 hours

Optical

Color: red, green, blue and white

Focus: 2°-60° DMX linear focus, with auto-focus function

Color temperature control: built-in CTO DMX linear dimming

Electronic strobe, 0.3 ~ 25 times / sec, can choose synchronous, asynchronous random strobe

Dimming: electronic dimming 0 ~ 100%~linear adjustment, with a flickering, using a stable constant current driver and power supply, suitable for video shooting

Controls

Control interface: DMX512 interface (3-core / optional 5-core), power cord hand socket

Hibernation function: using advanced technology to realize the remote hibernation function, when the lamps and lanterns are

disconnected from the signal automatically enter the hibernation state, so that the lamps and lanterns are more stable and more secure

Display function: 2.8-inch touch screen, Chinese and English bilingual menu, sensor failure display, temperature display

Effect

Effect Mode: (Swirl, Kaleidoscope, Coloring, Beam)

Front mirror plate variable infinitely rotatable, seamless splicing

mirror plate, aspheric lens structure, lamp beads single point

control control light with effect: strobe, running horse effect, with built-in programs

Construction

Rotation angle: XY axis adopts high-speed silent 60 thickened three-phase motor drive, with high-precision imported magnetic encoding positioning device, so that the operation and positioning is more accurate, when the occurrence of misalignment can be

automatically returned to the position of the horizontal, vertical

speed is adjustable; XY axis rotation function and take the function of the reverse

Heat dissipation system: high conductivity copper tube radiator,

fan intelligent monitoring technology according to the temperature of the lamps and lanterns automatically adjust the fan speed,

built-in overheating protection intelligent system / intelligent temperature and noise balance module

Protection class: IP22

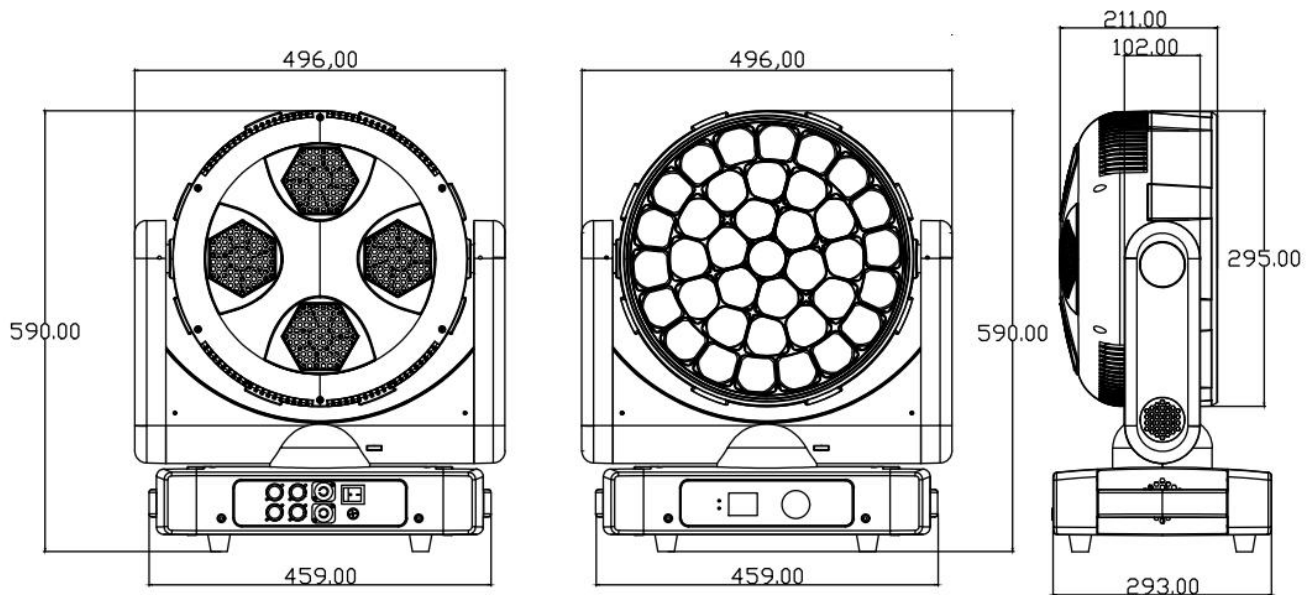
Weight&Dimension

Net weight: 35kg

Features

1. Screen auto-rotate function, the system can automatically rotate the screen according to the direction of gravity, no need to rotate manually! You can also turn off the automatic rotation function

SIZE DRAWING



1. Unpacking

For proper and safe use of this product, please read the

instruction manual carefully before installing and using the product. This manual contains important installation and application

information. When installing and operating the product, please

strictly follow the operating procedures in the manual. Please keep this manual in a safe place.

37 pcs of 40W bee's eyes strictly follow the CE standard for design and production, in line with the international standard

DMX512 signal protocol, can be used individually to control, can also be used inline, with fast rotation, low noise, powerful features, suitable for small and medium-sized concerts, theaters, studios, nightclubs and bars and other venues.

Please remove the package carefully and check this product for any damage during transportation after the package has been removed, and check that the following is complete.

37pcs 40W bee's eyes----1 units Signal cable----1 pcs Instruction manual----1 book Power cord----1 strip

2. Security instructions

Attention!

Be careful before handling this product. This is a high-voltage product and you may receive an electric shock if it comes into contact with an electric wire!

This product is shipped in perfect condition. To maintain the product in good condition and to ensure safe operation, the user should follow the safety precautions and warnings in this manual.



IMPORTANT: Damage caused by failure to follow this instruction manual is not covered by the warranty. The supplier is not responsible for problems with the product caused by this.

If the product has been exposed to extreme and unstable temperatures (e.g. after transportation), do not connect the product to the power supply right away, as water droplets due to temperature changes may damage the product. Please use the product after it has returned to normal temperature.

This product can be used in the voltage range of 90-240V and is for indoor use.

Please make sure that the ground voltage used is not higher than the product can withstand! The power plug must be plugged into a protected Class I outlet. The green or teal conductor must be grounded.

Please check this product level power cord frequently. Make sure that the power cord is not folded or scratched, and that it is not connected to other cords! Take special care when connecting the power cord or related cables. Be sure to unplug the product when not in use or before cleaning.

Please familiarize yourself with the operating functions of the product before using it. Do not allow children or unprofessionals to touch the product.

Do not shake the product. Do not use brute force when installing or operating the product. Do not allow unprofessionals to operate the product. Most damage is caused by unprofessional operation.

The product is not equipped with relevant maintenance accessories. Maintenance and repair of the product should only be carried out by professionals!

Please do not alter this product without authorization, otherwise it may damage the product, and the damage thus caused is not covered by the warranty. Moreover, unprofessional operation may result in short circuit, burns or electric shock, etc.

3. Operating instructions

--This product is a moving head dye beam light used to create dye show effects.

-If the product has been subjected to a large temperature difference (e.g. after transportation), do not start the product immediately, as the product may be damaged by the thermal contraction. Wait until the unit reaches normal room temperature before starting the product.

--Pay attention to shockproof. Avoid strong collision during product installation.

--Do not lift the entire product through the lamp head, as the mechanics of the unit may be damaged.

--When selecting a location for installation, please make sure that the product is not exposed to excessive heat, too much humidity, or dusty areas. Do not place any wires on the ground as you may be exposed to the risk of electric shock.

-Before installing the product, make sure the mounting point is safe.

--Please attach the product to a safety harness and check that all screws are correct during installation

--Please make sure the lens is in good condition. Replace the lens when it is damaged or scratched.

--It is recommended that this product be operated by a technician familiar with the

product. Operation of this equipment by non-technical personnel is prohibited, as many losses are the result of unprofessional operation.

--Please keep the packing materials in case secondary transportation is required. -Do not make unauthorized changes to the product without guidance from the manufacturer or distributor.

--Any equipment failure caused by the use of this equipment not in accordance with the instructions is not covered by the warranty. And any resulting accidents due to short circuits, injuries, electrocution, injuries caused by UV rays, bulb explosions, etc. are not covered by the warranty.

4. Product hanging and installation

Note: For greater safety, please hang the product away from aisles, seating areas, or areas within reach. Before hanging this product, please make sure that the mounting point can support 10 times the weight of the product.

The product must be installed with a dual protection device, e.g. a safety cord.

It is prohibited to stand under the mounting point when hanging, removing or servicing this product.

Make sure that this product is installed at least 0.5 meters away from flammable materials.

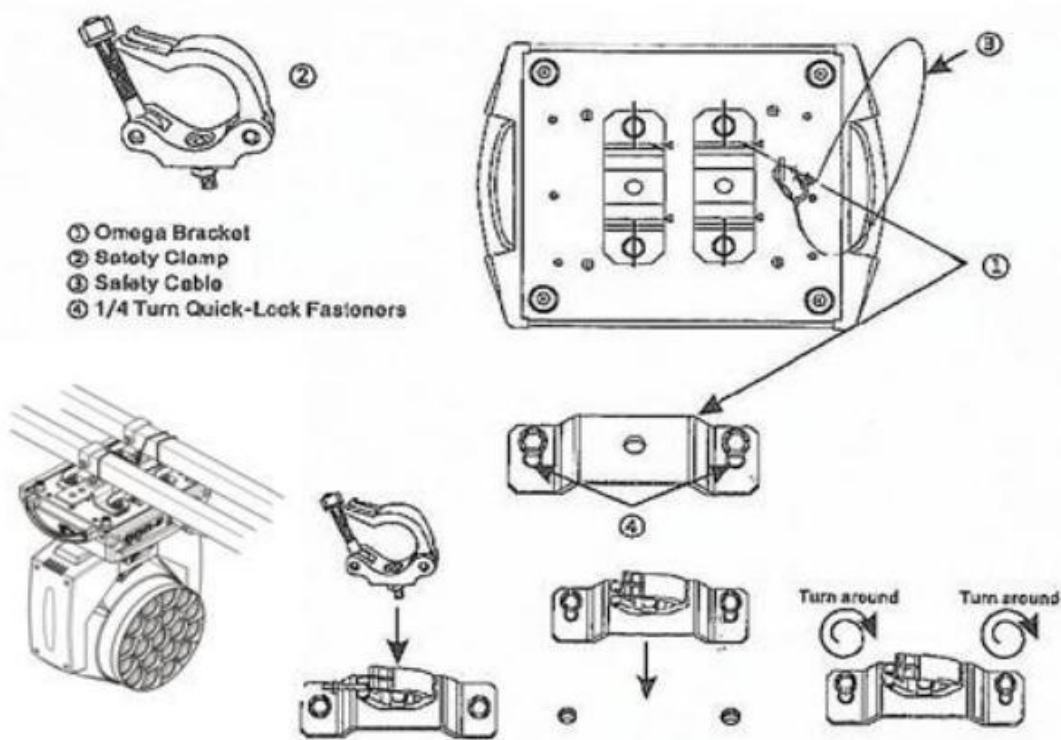
Please remember to use the safety rope as a safety guarantee to prevent accidents from occurring if the lock comes loose at the top.

HANGING POINTS: Top hanging requires an experienced installer, including calculating load-bearing requirements, mounting materials to be used, and periodically inspecting the mounting materials and products for safety. If you lack this knowledge, do not attempt to install it yourself. Improper operation may result in serious consequences such as personal injury. Always ensure that all required hanging and installation steps are completed before the product is energized.

QUICK LOCK HANGING: There are specially designed professional hanging parts on the bottom of this product, including quick lock hanging parts and safety rope hanging points (please refer to the picture below).

When hanging the product from the truss, please remember to use the appropriate quick release locks, attach them to the product's quick release lock hanger locations, and use

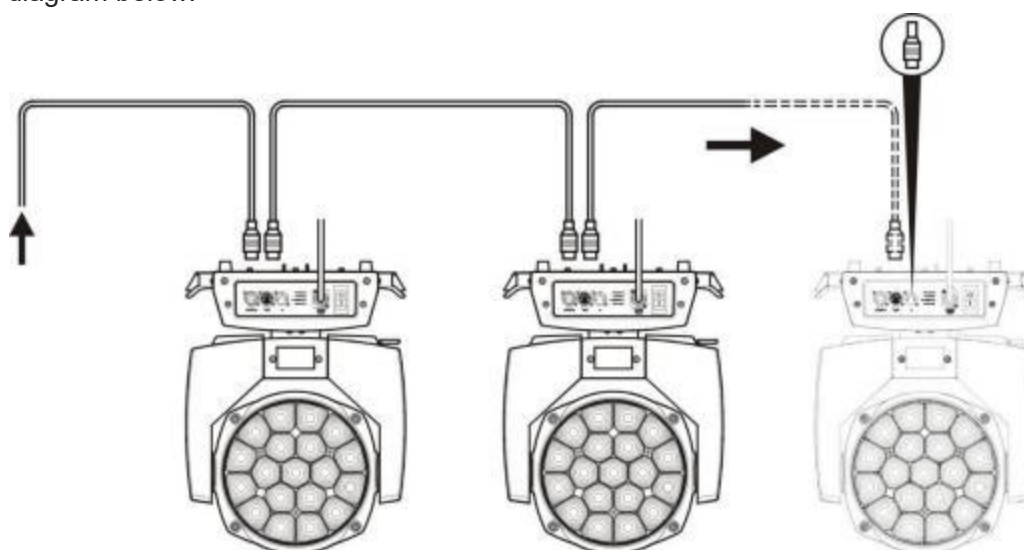
M10 screws to hang it. To further ensure safety, attach a safety rope to the safety rope hanging point on the bottom of the product and secure it to the truss.



Regardless of the type of suspension you choose, please remember to always use a safety rope. The bottom of the product is equipped with a special hanging point for the safety rope, please refer to the picture above, and please remember to use the specially provided hanging point for the safety rope, and never install the safety rope in the carrying handle position.

6. DMX-512 connectivity

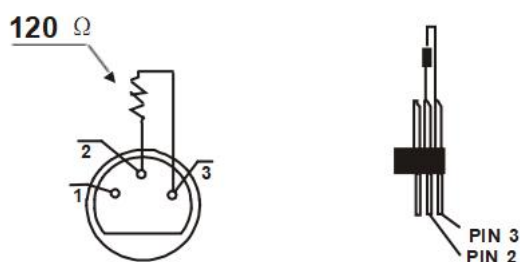
Please plug the male end of the XLR signal cable into the signal output port of the controller and the female end into the signal input port on the rear panel of the product. You can connect more than one product in series, the signal cable needs to be three-core, shielded, with XLR input and output connectors. Please refer to the diagram below.





DMX-512 connection with terminator required (loop connection)

During installation, it is recommended to use a DMX terminator (loop connection) if the signal cable is laid over a long distance or in an environment with noisy electrical appliances, such as a cabaret. This will avoid muddy digital control signals caused by noisy electrical appliances. The DMX terminator consists of a simple XLR connector 2- pole and 3-pole connectors connected to a 120 ohm resistor. Please plug the terminator into the XLR output port of the last product, please refer to the figure below.



7. Menu

menu	secondary menu	Three-level menu/parameters
Shortcut menu interface	come (or go) back	Return to the main screen
	Medium/EN	Chinese/English
	outstanding	Display Interface Flip
	set up	Entering the Settings screen
	operating mode	Artnet/DMX/Artnet+DMX/Self-propelled 1/Self-propelled 2/Voice-activated
	channel mode	22ch/36ch/133ch/147ch/170ch
	X-axis default position	000-255
	Y-axis default position	000-255
	X-axis reversal	On/Off

Setting interface	System settings	Y-axis reversal	On/Off
		XY axis exchange	On/Off
		XY axis fast mode	On/Off
		Signal Holding	On/Off
		Optocoupler error correction	On/Off
		Hall's error correction (physics)	On/Off
		Fast dimming	On/Off
		Backlighting time	15 sec/30 sec/60 sec/normal light
		Dimming Curve	Curves 1-4
		Lighting Mode	Off/750W/1000W/1200W/2000W/2500W
		Restore Factory Settings	Confirmation/Cancellation
	manual mode	Manual control of channel values	000-255
	System Calibration	enter a password	Lamp Calibration
	high level	Return to previous level	
		Network (IP/MS)	Increase, decrease, determination
		Packets (Net(0-127))/Sub_Uni	Increase, decrease
		Lamp head reset	
		XY Reset	
		Full reset	

	System Information	reset message	Display specific information content
		DMX Data Detection	Display of specific DMX tests
		Sensor Information	Displays photocoupler and Hall specific information
		hardware version	Display hardware version number
		software version	Show software version number

➤ Auto Screen Rotation Function

The system can automatically rotate the screen according to the direction of gravity, eliminating the need for manual rotation. The auto-rotate function can also be turned off.

➤ manual control

This screen is used to control the current fixture, as described in the channel table.

Press "OK" to enter the editing state. Press "Up" or "Down" key to change the channel value. Press "OK" again to save the modified value and exit the editing; press "Exit" to exit the editing directly without saving the modified value.

➤ System Calibration

A layer of password is set here to prevent misuse by non-professionals. Press OK to verify the password.

options (as in computer software settings)	clarification
Initial position calibration	After entering the sub-interface, you can adjust the reset position of the motors of X-axis, Y-axis, focusing and rotating to make up for the error in hardware installation, the adjustment range is 0~ 255, 127 means no
White balance calibration	Adjustable lamp and LED1-37 red, green, blue and white power, adjustment range 0~ 255, 255 means no adjustment.

power calibration	Adjustable whole lamp maximum power, adjustment range 0~255, 255 means no adjustment.
voice-activated sensitivity	Adjusts the acoustic sensitivity.
modify a password	Set the system calibration password.

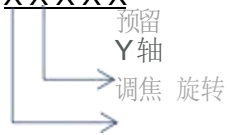
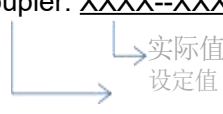
➤ high level

Press "Up" and "Down" to switch the reset mode, and press "OK" to reset directly.

options (as in computer software settings)	clarification
Network (IP/MS)	Increase, decrease, determination
Packets (Net(0-127))/Sub_Uni	Increase, decrease
Lamp head reset	Focus, rotary motor reset
XY Reset	XY axis reset
Full reset	Lamp reset

System Information

options (as in computer software settings)	clarification
reset error message	If the red ERR indicator glows, the fixture is operating in error: 1) IC1 communication failure (motor and display board communication failure) 2) X/Y optocoupler error 3) Focus and rotation reset failure
DMX Data Monitoring	This leads to a sub-screen that displays the channel values numerically for viewing, with the ability to page through them.

Sensor Information	<p>1) Hall:</p> <p><u>XXXXX</u></p>  <p>2) Sensors:</p> <p>X, Y photocoupler: <u>XXXX--XXXX</u></p> 
Hardware version number	<p>Lamp Hardware Information</p> <p><u>XX.</u> <u>XX.</u> <u>XX.</u></p> <p>↓ ↓ ↓</p> <p>Display board version . Motor version . Lamp board version</p>
software version number	<p>Luminaire Software Version <u>XX.</u></p> <p><u>XX.</u> <u>XX.</u></p> <p>↓ ↓ ↓</p> <p>Display board version . Motor version . Lamp board version</p>

21 channels (21CH)	21+ RGB channels (133CH)	21+ RGBW channels (170CH)	functionality	DMX Values	descriptive
1	1	1	red (color)	0-255	Red color dims linearly from dark to light
2	2	2	Red fine-tuning	0-255	Linear fine-tuning of the red color from dark to light
3	3	3	greener	0-255	Linear dimming of green from dark to light

4	4	4	Green fine-tuning	0-255	Linear fine-tuning of green from dark to light
5	5	5	blue (color)	0-255	Blue color dims linearly from dark to bright
6	6	6	Blue fine-tuning	0-255	Blue color is linearly fine-tuned from dark to light
7	7	7	fig. reactionary	0-255	White color dims linearly from dark to bright
8	8	8	White fine-tuning	0-255	Linear fine-tuning of white from dark to light
9	9	9	color temperature	0-255	Linear color temperature adjustment
10	10	10	discolour	0-255	Built-in color gradient
11	11	11	strobe	0-3	lights out
				4-103	Synchronized strobe rate from slow to fast (1HZ-25HZ)
				104-107	light up
				108-207	Tied strobe speed from slow to fast (1HZ-25HZ)
				208-212	light up
				213-225	Low-speed random strobe
				226-238	Medium-speed random strobe

				239-251	High-speed random strobe
				252-255	light up
12	12	12	total dimming	0-255	Linear dimming from dark to light
13	13	13	Dimming trims	0-255	Dimming trim control
14	14	14	X-axis	0-255	0-540 degrees
15	15	15	X-axis fine tuning	0-255	16bit adjustable
16	16	16	Y-axis	0-255	0-205 degrees
17	17	17	Y-axis fine tuning	0-255	16bit adjustable
18	18	18	functionality	0-255	reserve
19	19	19	reset (a dislocated joint, an electronic device etc)	0-25	functionless
				26-76	Lamp head reset 5s effective
				77-127	XY reset 5s effective
				128-255	All reset 5s effective
20	20	20	focus	0-255	Linear adjustment of angle from small to large
21	21	21	revolve	0-127	0 to 60 degrees
				128-188	Counterclockwise from fast to slow infinitely rotating
				189-193	rotation stop
				194-255	Clockwise from slow to fast stepless rotation

22	22 22		frequency	0-31	1K frequency
				32-63	1.5K frequency
				64-95	2K frequency
				96-127	2.5K frequency
				128-159	3K frequency
				160-191	4K frequency
				192-223	6K frequency
				224-255	10K frequency
	23	23	R1 LED dimming	0-255	R1 LED dimming
	24	24	G1 LED dimming	0-255	G1 LED Dimming
	25	25	B1 LED Dimmin g	0-255	B1 LED Dimming
		26	W1 LED Dimmin g	0-255	W1 LED dimming

	131	167	R37 LED Dimmin g	0-255	R37 LED Dimming
	132	168	G37 LED Dimmin g	0-255	G37 LED Dimming
	133	169	B37 LED Dimmin g	0-255	B37 LED Dimming
		170	W37 LED Dimmin g	0-255	W37 LED Dimming

8. Channelization table

35 channels	35+ RGB channels (147)	functionality	DMX Values	descriptive
1	1	red (color)	0-255	Red color dims linearly from dark to light
2	2	Red fine-tuning	0-255	Linear fine-tuning of the red color from dark to light
3	3	greener	0-255	Linear dimming of green from dark to light
4	4	Green fine-tuning	0-255	Linear fine-tuning of green from dark to light
5	5	blue (color)	0-255	Blue color dims linearly from dark to bright
6	6	Blue fine-tuning	0-255	Blue color is linearly fine-tuned from dark to light
7	7	fig. reactionary	0-255	White color dims linearly from dark to bright
8	8	White fine-tuning	0-255	Linear fine-tuning of white from dark to light
9	9	color temperature	0-255	Linear color temperature adjustment
10	10	discolour	0-255	Built-in color gradient
11	11		0-3	lights out
			4-103	Synchronized strobe rate from slow to fast (1HZ-25HZ)
			104-107	light up
			108-207	Tied strobe speed from slow to fast (1HZ-25HZ)

		strobe	208-212	light up
			213-225	Low-speed random strobe
			226-238	Medium-speed random strobe
			239-251	High-speed random strobe
			252-255	light up
12	12	total dimming	0-255	Linear dimming from dark to light
13	13	Dimming trims	0-255	Dimming trim control
14	14	X-axis	0-255	0-540 degrees
15	15	X-axis fine tuning	0-255	16bit adjustable
16	16	Y-axis	0-255	0-205 degrees
17	17	Y-axis fine tuning	0-255	16bit adjustable
18	18	functionality	0-255	reserve
19	19	reset (a dislocated joint, an electronic device etc)	0-25	functionless
			26-76	Lamp head reset 5s effective
			77-127	XY reset 5 s effective
			128-255	All reset 5 s effective
20	20	focus	0-255	Linear adjustment of angle from small to large
21	21	revolve	0-127	0 to 60 degrees
			128-188	Counterclockwise from fast to slow infinitely rotating
			189-193	rotation stop

			194-255	Clockwise from slow to fast stepless rotation
22	22	Dynamic Effects (with effect colors)	0-7	not have
			8	Static effect 1
			9	Static effect 2
			10	Static effect 3
			11	not have
			12	Static effect 4
			13	Static effect 5
			14	not have
			15	Dynamic effect 1
			16	Dynamic effect 2
			17	Dynamic effect 3
			18	Dynamic effect 4
			19	Single color random
			20	Full Color Random
			21	Rainbow effect 1
			22	Rainbow Effect 2
			23	Dynamic Effects 5
			24	Dynamic effect 6
			25	Dynamic effect 7
			26	Dynamic Effect 8
			27	Dynamic effect 9
			28	Dynamic effect 10

			29	Dynamic Effects 11
			30	Dynamic effects12
			31	Dynamic effect 13
			32	Dynamic Effects 14
			33	not have
			34	not have
			35	Dynamic Effects 15
			36	Dynamic Effects 16
			37	Dynamic effect 17
			38	Dynamic Effects 18
			39	Dynamic effect 19
			40	Dynamic Effects 20
			41	not have
			42	Dynamic Effects 21
			43	not have
			44	Dynamic effect 22
			45	Dynamic Effects 23
			46	Dynamic Effects 24
			47	Dynamic Effects 25
			48	Dynamic Effects 26
			49	Dynamic Effects 27
			50	Dynamic Effects 28
			51	Dynamic Effects 29
			52	Dynamic Effects 30

			53	Dynamic Effects 31
			54	Dynamic Effects 32
			55	Dynamic Effects 33
			56	Dynamic Effects 34
			57	Dynamic Effects 35
			58	Dynamic Effects 36
			59	Dynamic Effects 37
			60	Dynamic Effects 38
			61	Random location 1
			62	Random location 2
			63	Random location 3
			64	not have
			65	Random location 4
			66	Random location 5
			67	Dynamic Effects 39
			68	Dynamic Effects 40
			69	not have
			70	Dynamic Effects 41
			71-255	not have
23	23	Dynamic effect speed	0-63	Effect Static
			64-158	Forward from fast to slow
			159-160	rest
			161-255	Reverse slow to fast

24	24	diminish the effect	0-255	Dynamic Effects Fade
25	25	Effect Red	0-255	Dynamic Effect Red
26	26	Effect Green	0-255	Dynamic Effects Green
27	27	Effect Blue	0-255	Dynamic Effects Blue
28	28	Effect White	0-255	Dynamic effect white
29	29	Effect Dimmer	0-255	Pattern 0-100% dimming
30	30	Background dimming	0-255	Background 0-100% dimming
31	31	Effects Transition	0-255	Pattern change control
32	32	Effects Offset	0-255	Dynamic effects panning
33	33	strobe in the foreground	0-255	Foreground strobe (same as 11 channels)
34	34	background strobe	0-255	Background strobe (same as 11 channels)
35	35	Background Selection	0-255	Background Selection
36	36	frequency	0-31	1K frequency
			32-63	1.5K frequency
			64-95	2K frequency
			96-127	2.5K frequency
			128-159	3K frequency
			160-191	4K frequency
			192-223	6K frequency
			224-255	10K frequency

	37	R1 LED dimming	0-255	R1 LED dimming
	38	G1 LED dimming	0-255	G1 LED Dimming
	39	B1 LED Dimming	0-255	B1 LED Dimming

	145	R37 LED	0-255	R37 LED Dimming
		Dimming		
	146	G37 LED Dimming	0-255	G37 LED Dimming
	147	B37 LED Dimming	0-255	B37 LED Dimming

9. Product care and cleaning

Please note the following when testing this product:

1. All screws and parts for mounting the product must be tightly attached and not rusted.
2. Housings, lenses, fixtures and mounting locations (e.g. ceilings, hangers, trusses, etc.) must not be deformed.
3. Mechanical moving parts must not show wear or rotate unbalanced.
4. The power cord must not have any damage, broken or scarred material, etc.

The installation and use of the product must be carried out by trained professional technicians, who must ensure that safety hazards are eliminated.

Note: Please unplug the power cord before performing product maintenance.

To keep the product in good condition and to prolong its life, we recommend routine 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 diminished due to the accumulation of dust on the lenses.
2. Clean the fan every week.
3. Every three months by professional electrical engineers to carry out a detailed inspection of the product circuit, to ensure that

the circuit contacts are good, in order to prevent overheating caused by the aging of the circuit contacts.

We recommend that the product should be cleaned regularly, please note that damp or linen cloths should not be used and alcohol or solvents should never be used for cleaning.

This product is not equipped with replacement parts, please refer to the "Installation Instructions" section.

If the user needs 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.