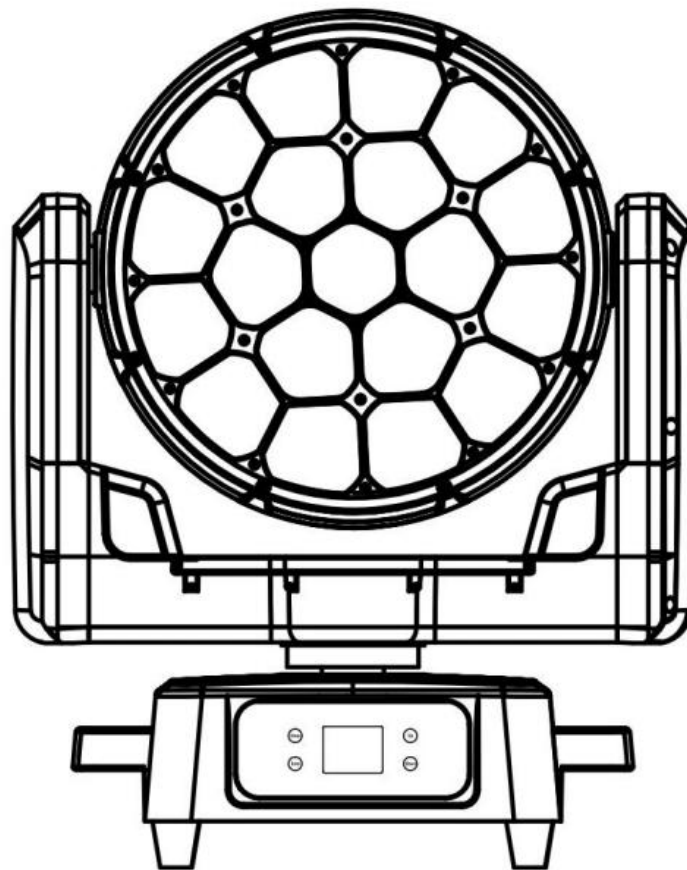


B-EYE 1940 IP

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

AC100V-240V/50-60Hz

Power consumption: 850W

19*40W 4in1 RGBW High brightness LEDs +LED RING

Individual LED control

Average life: 50,000 hrs

Optical

Zoom angle: 4-45 °;

Strobe: 1-25 hz, random and pulse flash

Controls

Control mode: DMX512/RDM/Master Slave DMX channels: 21/35/78/92/97/30/42/ 106

1.77 inch OLED display avoiding signal bothering with display flip, the password: 1111

Magnetic code for highest precision positioning

Software updating by DMX connector Seetronic powercon ture1 IP

XLR in & out: 3-pin & optional 5-pin

Effect

Wash/Beam/Graphic/Effects function Front lens can rotated infinity

LED halo ring with rainbow effect

With“vortex ”and “kaleidoscope ” effects Variable built-in dynamic effects

4 Liner dimming curves

2 color mode (RGBW)

Body

Pan/Tilt: 540/216 °

Aluminium die casting with fire-proof housing in IP65

Intelligent cooling system with overheating protection and speed adjustable fans

Optional folding clamp for easy installation

Weight&Dimension

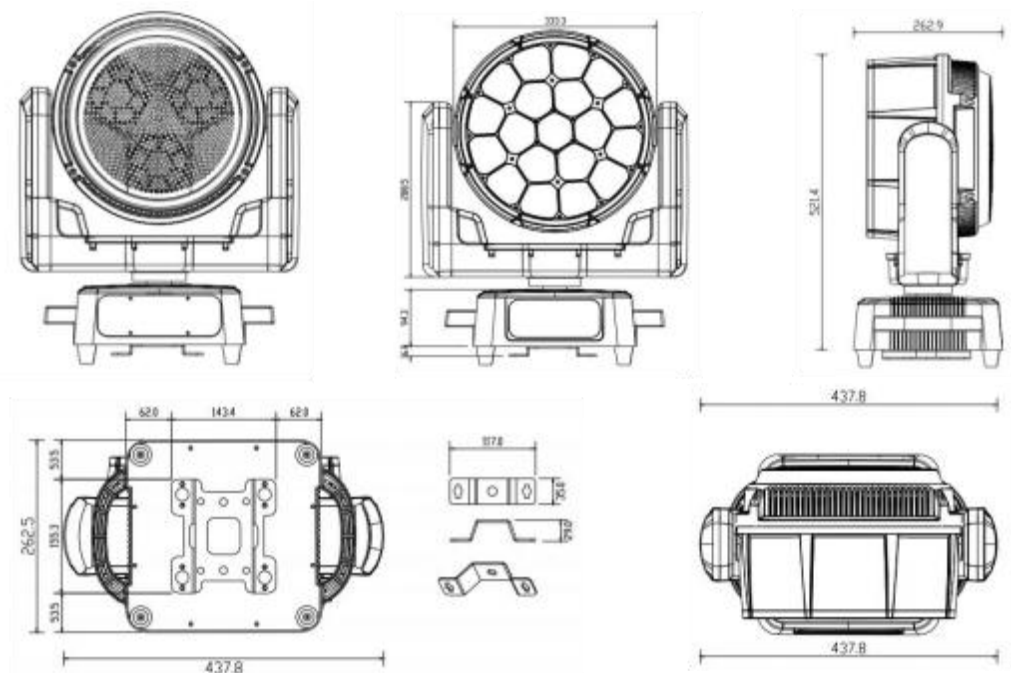
Net weight: 19.8kg

Gross weight: 23.2kg

Fixture size: 432*333*485mm

Cartbox size: 610*530*450mm

SIZE DRAWING



Thank you for your patronage!

We are confident that our excellent products and service can satisfy you.

For your own safety, please read this user manual carefully before installing the device. In order to install, operate, and maintain the lighting safety correctly.

We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.



CAUTION!

Keep this device away from rain and moisture!



CAUTION!

Unplug mains lead before device's installation, cleaning and maintenance!

Every person involved with the installation, operation and maintenance of this device has to: -be qualified

-follow carefully the instructions of this manual

INTRODUCTION

Thank you for having chosen this professional moving head. You will see you have acquired a

powerful and versatile device. Unpack the device.

Inside the carton box you should find:

1. One power in cable
2. One 3 Pin DMX cable(5 Pin optional)
3. Two mounted brackets
4. One safety rope
5. One English user manual
(Flight case, Clamps are optional, please contact your dealer)

Please check carefully that there is no damage caused by transportation. Should there be any questions, please consult your dealer and don't install this device.

GENERAL GUIDELINES

This device is a lighting effect for a professional use on stages, TV, in discotheques, theaters, etc., The device was designed for indoor use only.

This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in 6th page of this manual.

Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

Please use the original packaging if the device is to be transported.

For safety reasons, please be aware that all modifications on the device are forbidden. If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, crash, etc.

SAFETY INSTRUCTIONS



CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

1. In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.

2. Always mount this unit in safe and stable matter.

The qualified professionals are allowed to carry out the lamp installation, operation and maintenance, but they must guarantee to operate in strict accordance with the instructions referred to

▲ Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperatures.

This device falls under protection-class I.

Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.



CAUTION!

Never touch the device during operation! The housing may heat up!



CAUTION!

Never look directly into the light source, As sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to be the device are not subject to warranty. Keep away from children and non-professionals.

CLEANING AND MAINTENANCE

1. To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
2. Do not spill water or other liquids into or on to your unit.
3. During long periods of non-use, disconnect the unit's main power.

4. It should be installed in a well-ventilated place, at a distance of 50 centimeters or more with the walls. At the same time, please check if the fan and ventilation holes are unobstructed.

The following points have to be considered during the inspection

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing. Fixations and installations spots(ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



CAUTION!

Disconnect from mains before starting maintenance operation!

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents.

MOUNTING AND INSTALLATION

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel.

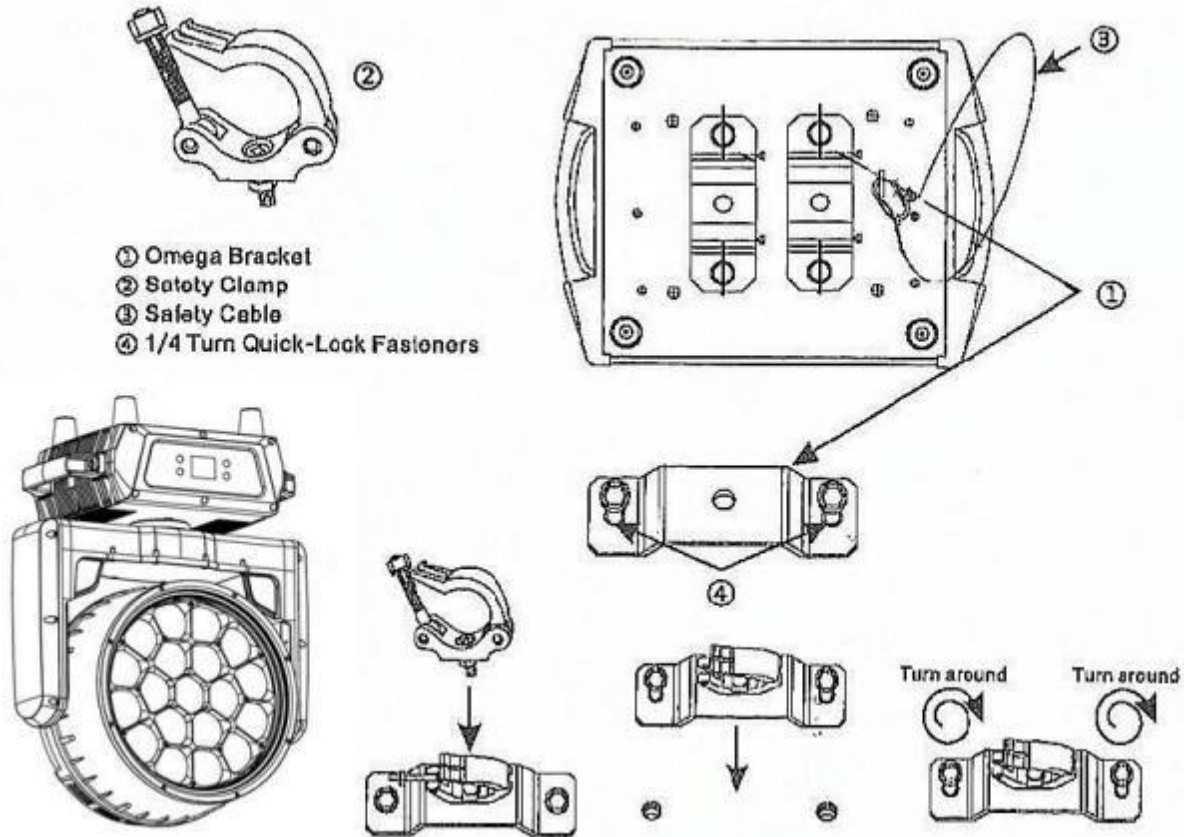
Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture from a periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting: The B-Eye provides a unique mounting bracket assembly that integrates the bottom of the base, the included “Omega Bracket,” and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the “omega bracket” . As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly

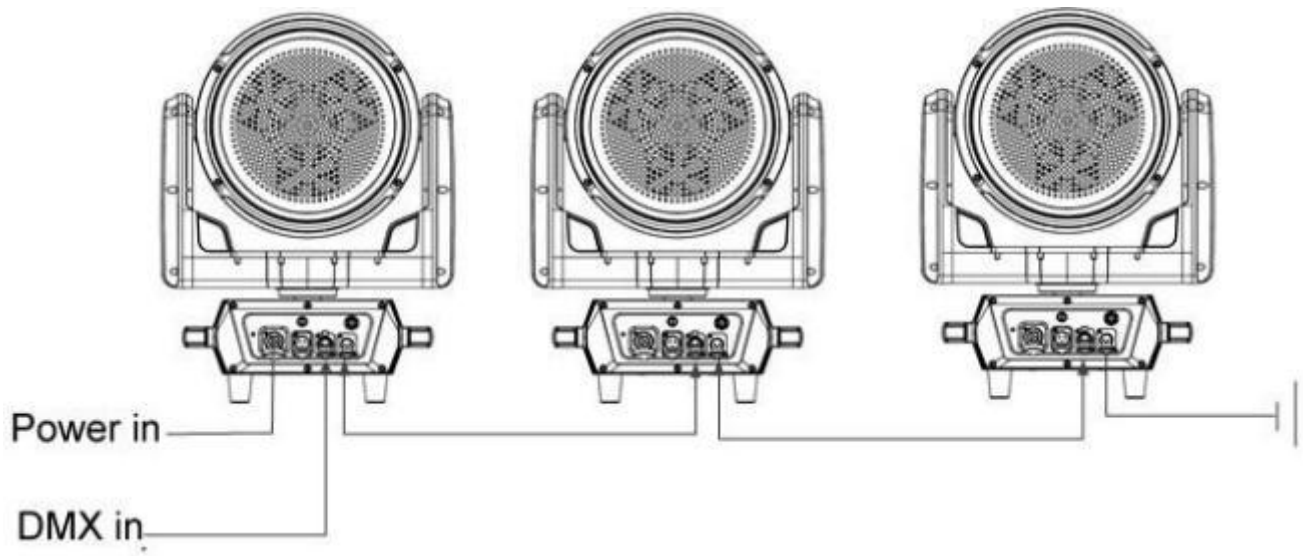


Regardless of the rigging option you choose for your B-Eye, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

DMX-512 CONTROL CONNECTIONS

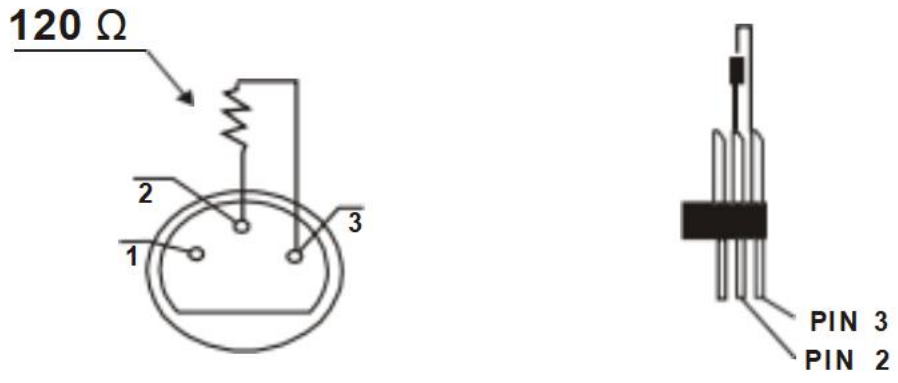
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving heads be connected together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator:



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise.

The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



MENU FUNCTION: Press menu for 3seconds to unlock

Menu	Function	Parameters
System settings	Operation mode	DMX/Voice Control/Auto 1/Auto 2
	Channel mode	CH21/CH30/CH35/CH78/CH92/CH97/CH106/CH42
	Horizontal inversion	On/Off
	Vertical inversion	On/Off
	Hall error correction	On/Off
	Optical coupler error correction	On/Off
	Signal hold	On/Off
	Screen saver	On/Off
	Screen flip	On/Off/Auto
	Synchronous update	On/Off (Please unplug the DMX cable to operate this function)
	Language	Medium/EN
	Screen lock	On/Off
	Dimming curve	Curve 1 / Curve 2 / Curve 3 / Curve 4
	Dimming speed	Fast/Standard
	Silent mode	On/Off
Restore factory settings		
Manual mode	Manual control channel value	000-255
System calibration	Enter password	Lighting calibration
System reset	Effect motor reset	Reset the effect panel except XY
	Scan motor reset	Reset only XY axis
	All motors reset	Lighting reset
	Reset information	Display detailed information
	DMX data detection	Display detailed DMX detection content

System information	Sensor information	Display detailed information of optocoupler and Hall
	Hardware version	Display hardware version number
	Software version	Display software version number

CHANNEL MODE

CH30	CH106	Function	Value	Description
1	1	Pan	0-255	Horizontal control
2	2	Pan fine	0-255	Horizontal fine-tuning control
3	3	Tilt	0-255	Vertical control
4	4	Tilt fine	0-255	Vertical fine-tuning control
5	5	P/T Speed	0-255	Horizontal/vertical speed from fast to slow
6	6	Zoom	0-255	Focus
7	7	Zoom Rotation	0-127	0~60 degrees
			128-188	Counterclockwise from fast to slow infinitely
			189-193	Stop
			194-255	Clockwise from slow to fast infinitely
8	8	Dimmer	0-255	Linear dimming from dark to bright
9	9	Strobe	0-3	Light on
			4-200	Synchronous strobe speed from slow to fast (1HZ-25HZ)
			201-215	Low-speed random strobe
			216-234	Medium-speed random strobe
			235-255	High-speed random strobe
10	10	R	0-255	Red from dark to bright linear dimming
11	11	G	0-255	Green from dark to bright linear dimming
12	12	B	0-255	Blue from dark to bright linear dimming
13	13	W	0-255	White from dark to bright linear dimming
14	14	Linear CTO	0-255	Linear color temperature adjustment
15	15	Macro color	0-255	Built-in color gradient
16	16	Static Effects	0-9	None
			10-14	Static effect 1
			15-19	Static effect 2
			20-24	Static effect 3
			...	
			5 numbers for one effect	
			...	
			175-179	Static effect 34
			180-184	Static effect 35
			185-255	Static effect 36
			0-9	None
			10-14	Effect 1
			15-19	Effect 2

17	17	Dynamic Effects	20-24	Effect 3
		
			5 numbers for one effect	
			220-224	Effect 43
			225-229	Effect 44
			230-255	Effect 45
18	18	Dynamic Effects Speed	0-126	Forward from fast to slow
			127-128	Stationary
			129-255	Reverse from slow to fast
19	19	Background red	0-255	Effect background red from dark to bright with linear dimming
20	20	Background green	0-255	Effect background green from dark to bright with linear dimming
21	21	Background blue	0-255	Effect background blue is linearly dimmed from dark to bright
22	22	Background white	0-255	Effect background white is linearly dimmed from dark to bright
23	23	Reset	0-26	None
			27-76	Lamp head reset is valid for 5s
			77-127	XY reset is valid for 5s
			128-255	All reset is valid for 5s
24	24	LED Ring Dimmer	0-255	Light strip is linearly dimmed from dark to bright
25	25	LED Ring Strobe	0-4	Light on
			5-250	Synchronous strobe from slow to fast
			251-255	Light on
26	26	LED Ring R	0-255	Light strip red is linearly dimmed from dark to bright
27	27	LED Ring G	0-255	Light strip green is linearly dimmed from dark to bright
28	28	LED Ring B	0-255	Light strip blue is linearly dimmed from dark to bright
29	29	LED Ring marco	0-51	No function
			52-255	Light strip effect (one effect for 4 numbers)
30	30	LED Ring speed	0-255	Light strip effect speed from slow to fast
/	31	R1 LED dimmer	0-255	R1 LED dimming
	32	G1 LED dimmer	0-255	G1 LED dimming
	33	B1 LED dimmer	0-255	B1 LED dimming
	34	W1 LED dimmer	0-255	W1 LED dimming

	103	R19 LED dimmer	0-255	R19 LED dimmer
	104	G19 LED dimmer	0-255	G19 LED dimmer
	105	B19 LED dimmer	0-255	B19 LED dimmer
	106	W19 LED dimmer	0-255	W19 LED dimmer

Function	CH21	CH35	CH78	CH92	CH97	CH42	Function		
Red	1	1	1	1	1	1	Red		
Red fine	2	2	2	2	2	2	Red fine		
Green	3	3	3	3	3	3	Green		
Green fine	4	4	4	4	4	4	Green fine		
Blue	5	5	5	5	5	5	Blue		
Blue fine	6	6	6	6	6	6	Blue fine		
White	7	7	7	7	7	7	White		
White fine	8	8	8	8	8	8	White fine		
Linear CTO	9	9	9	9	9	9	Linear CTO		
Macro color	10	10	10	10	10	10	Macro color		
Strobe	11	11	11	11	11	11	Strobe		
Dimmer	12	12	12	12	12	12	Dimmer		
Dimmer fine	13	13	13	13	13	13	Dimmer fine		
Pan	14	14	14	14	14	14	Pan		
Pan fine	15	15	15	15	15	15	Pan fine		
Tilt	16	16	16	16	16	16	Tilt		
Tilt fine	17	17	17	17	17	17	Tilt fine		
Function	18	18	18	18	18	18	Function		
Reset	19	19	19	19	19	19	Reset		
Zoom	20	20	20	20	20	20	Zoom		
Zoom Rotation	21	21	21	21	21	21	Zoom Rotation		
Shape selection	/	22	/	22	/	22	Shape selection		
Shape speed		23		23		23	Shape speed		
Shape fade		24		24		24	Shape fade		
Shape R		25		25		25	Shape R		
Shape G		26		26		26	Shape G		
Shape B		27		27		27	Shape B		
Shape W		28		28		28	Shape W		
Shape dimmer		29		29		29	Shape dimmer		
Background dimmer		30		30		30	Background dimmer		
Shape transition		31		31		31	Shape transition		
Shape offset		32		32		32	Shape offset		
Foreground strobe		33		33		33	Foreground strobe		
Background strobe		34		34		34	Background strobe		
Background selection		35		35		35	Background selection		
R1 LED dimmer		/		22		36	22	36	LED Ring Dimmer
G1 LED dimmer				23		37	23	37	LED Ring Strobe
B1 LED dimmer				24		38	24	38	LED Ring R
W1 LED dimmer				25	39	LED Ring G			
R2 LED dimmer	25		39	26	40	LED Ring B			
...	...				41	LED Ring marco			
R19 LED dimmer	76		91	94	42	LED Ring speed			
G19 LED dimmer	77		90	95					
B19 LED dimmer	78		92	96					

NOTE: On conclusion of resetting in case of absence of DMX signal, Pan & Tilt move to the "Home" position (Pan 128 bit - Tilt 128 bit) all the others channels stay at 0 bit.

• RED
GREEN
BLUE
WHITE



BIT	EFFECT
165	LED ON
0	LED OFF

• RED FINE
GREEN FINE
BLUE FINE
WHITE FINE



BIT	EFFECT
255	UP
0	LOW

• LINEAR CTO

BIT	EFFECT
255	2500 K
...	...
224	3200 K
...	...
188	4000 K
...	...
144	5000 K
...	...
117	6000 K
...	...
89	8000 K
...	...
54	7000 K
...	...
10	8000 K
0-9	UNUSED RANGE

Note: If CTO channel is active, the WHITE channel is disabled.

•MACRO COLOUR

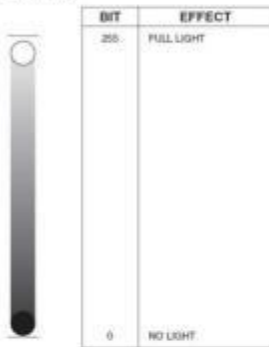
BIT	LEE REFERENCE	COLOUR	BIT VALUE			
			R	G	B	W
209-255	-	White	255	235	66	255
208	-	Dirty White	255	255	122	255
207	197	Alice Blue	128	255	143	0
191-206	181	Congo Blue	77	0	255	0
184-190	174	Dark Steel Blue	181	255	95	0
180-183	170	Deep lavender	255	168	64	0
179	169	Lilac Tint	255	199	49	0
175-178	165	Daylight Blue	82	214	90	0
174	164	Flame Red	255	46	2	0
172-173	162	Bastard Amber	255	181	28	0
168-171	158	Deep Orange	222	84	0	0
162-167	152	Pale Gold	253	171	26	0
157-161	147	Apricot	255	143	13	0
151-156	141	Bright Blue	0	255	87	0
149-150	139	Primary Green	77	255	0	0
147-148	137	Special lavender	219	197	79	0
146	136	Pale Lavender	255	197	61	0
145	135	Deep Golden Amber	255	58	0	0
142-144	132	Medium Blue	0	255	143	0
138-141	128	Bright Pink	255	53	36	0
136-137	126	Mauve	227	41	56	0
134-135	124	Dark Green	84	255	13	0
131-133	121	Leaf Green	206	255	0	0
129-130	119	Dark Blue	0	186	255	0
128	118	Light Blue	74	255	82	0
127	117	Steel Blue	206	255	56	0
126	116	Med Blu Green	206	255	56	0
125	115	Peacock Blue	51	255	51	0
123-124	113	Magenta	255	20	15	0
121-122	111	Dark Pink	255	109	33	0
120	110	Middle Rose	217	130	28	0
119	109	Light Salmon	255	138	31	0
118	108	English Rose	255	148	23	0
117	107	Light Rose	255	141	31	0
115-116	105	Orange	255	122	0	0
114	104	Deep Amber	255	166	0	0
113	103	Straw	230	160	0	68
112	102	Light Amber	237	163	0	0
110-111	100	Spring Yellow	245	202	0	0
100-109	90	Dark yellow green	41	219	0	0
89-99	79	Just Blue	0	194	130	0
78-88	68	Sky Blue	0	255	135	0
68-77	58	Lavender	243	117	130	199
62-67	52	Light Lavender	243	117	99	197
49-61	39	Pink Carnation	255	107	0	130
46-48	36	Medium Pink	255	87	0	107
45	35	Light Pink	255	112	0	141
35-44	25	Sunrise Red	255	83	2	0
32-34	22	Dark Amber	255	65	0	0
31	21	Gold Amber	255	100	0	0
30	20	Medium Amber	255	135	0	0
29	19	Fire	255	55	0	0
27-28	17	Surprise Peach	198	114	9	0
23-26	13	Straw Tint	152	115	9	0
20-22	10	Medium Yellow	156	126	0	0
19	-	Black	0	0	0	0
18	-	White 5000 K	255	137	0	193
17	-	White 3700 K	255	201	25	255
16	-	White 7000 K	216	237	61	255
15	-	Magenta	255	0	255	0
14	-	Yellow	255	255	0	0
13	-	Cyan	0	255	255	0
12	-	Blue	0	0	255	0
11	-	Green	0	255	0	0
10	-	Red	255	0	0	0
0-9	-	Macro color OFF	-	-	-	-

• STOP STROBE - FOREGROUND STROBE - BACKGROUND STROBE

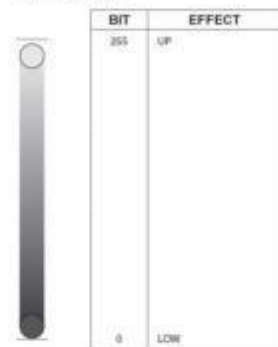


BIT	EFFECT
252 - 255	OPEN
239 - 251	RANDOM FAST STROBE
226 - 236	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
204 - 212	OPEN
207	FAST PULSATION (25 Refresh)
108	SLOW PULSATION (2.5 Refresh)
104 - 107	OPEN
103	FAST STROBE (25 Refresh)
4	SLOW STROBE (1 Refresh)
0 - 3	CLOSED

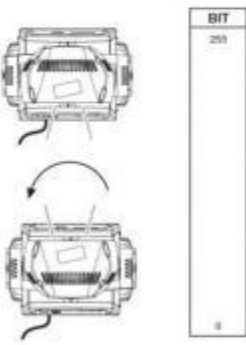
• DIMMER



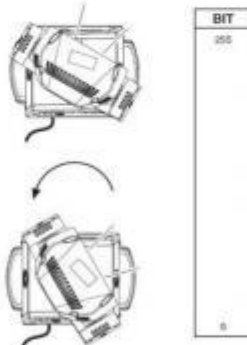
• DIMMER FINE



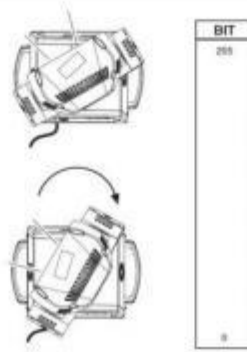
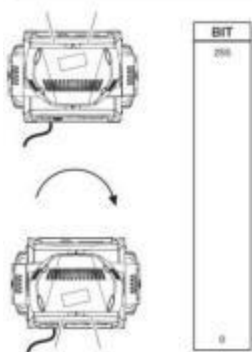
• PAN



• PAN FINE

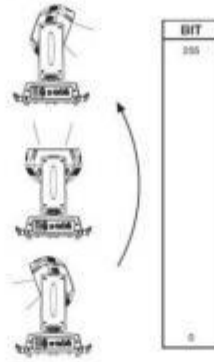


Operation with option InvertPan : Off
(Tilt conventionally represented at 35 bit and option Invert Tilt : Off)

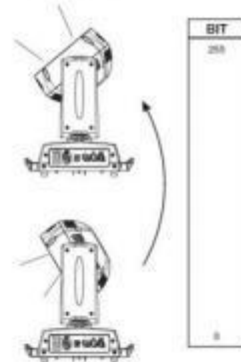


Operation with option InvertPan : On
(Tilt conventionally represented at 35 bit and option Invert Tilt : Off)

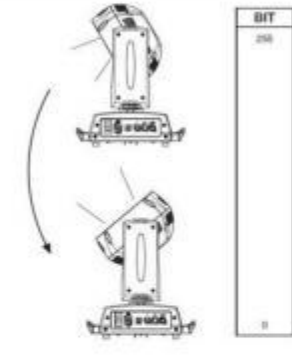
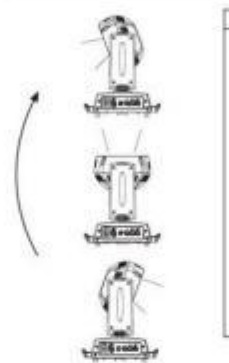
• TILT



• TILT FINE



Operation with option InvertPan : Off
(Tilt conventionally represented at 35 bit and option Invert Tilt : Off)



Operation with option InvertPan : On
(Tilt conventionally represented at 35 bit and option Invert Tilt : Off)

• FUNCTION

BIT	EFFECT
103 - 255	Reserved
98 - 102	Halogen Lamp Simulation, type 5 (2500 W) Linear CTO @ 0 bit
83 - 97	Halogen Lamp Simulation, type 4 (2000 W) Linear CTO @ 0 bit
65 - 82	Halogen Lamp Simulation, type 3 (1200 W) Linear CTO @ 0 bit
83 - 87	Halogen Lamp Simulation, type 2 (1000 W) Linear CTO @ 0 bit
78 - 82	Halogen Lamp Simulation, type 1 (750W) Linear CTO @ 0 bit
73 - 77	Halogen Lamp Simulation OFF (Default)
66 - 72	RGBW Gamma curve 3 - gamma = 2.0
63 - 67	RGBW Gamma curve 2 - gamma = 1.5
58 - 62	RGBW Gamma curve 1 - gamma = 1.0
52 - 57	Dimmer Curve 4
48 - 52	Dimmer Curve 3
43 - 47	Dimmer Curve 2
38 - 42	Dimmer Curve 1
24 - 37	Pan Tilt Normal
12 - 24	Pan Tilt Fast (Default)
0 - 11	Function off - retained

The functions are activated passing through the "unused range" and staying 5 seconds in necessary level.
Last selected function still active. Enable setting a new function.

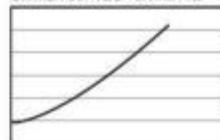
DIMMER CURVE 1 - GAMMA 1 LINEAR



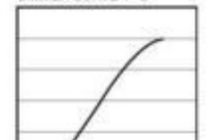
DIMMER CURVE 3 - GAMMA 2.0



DIMMER CURVE 2 - GAMMA 1.5



DIMMER CURVE 4 - S



• RESET

BIT	EFFECT
255	COMPLETE RESET Complete reset is activated passing through the unused range and staying 5 seconds in complete reset levels.
128	COMPLETE RESET PAN / TILT RESET Pan / Tilt reset is activated passing through the unused range and staying 5 seconds in Pan / Tilt reset levels.
127	
77	PAN / TILT RESET ZOOM RESET Effects reset is activated passing through the unused range and staying 5 seconds in Effects reset levels.
76	
26	ZOOM RESET
25	
0	UNUSED RANGE

• ZOOM



BIT	EFFECT
254	WIDE BEAM
0	NARROW BEAM

• ZOOM ROTATION



BIT	EFFECT
255	FAST ROTATION
193	SLOW ROTATION
191 - 192	STOP
190	SLOW ROTATION
128	FAST ROTATION
127	LINEAR ROTATION
0	

• ZOOM ROTATION (available on zoom channel from 0 bit to 42 bit)

BIT	MACRO EFFECT
193-255	CCW Rotation, speed from 3 RPM to 30 RPM
191-192	Stop rotation
128-190	CW Rotation, speed from 10 RPM to 3 RPM
127	Indexed zone, Lens angle = 60.00
126	Indexed zone, Lens angle = 55.52
...	
3	Indexed zone, Lens angle = 1.42
2	Indexed zone, Lens angle = 0.94
1	Indexed zone, Lens angle = 0.47
0	Indexed zone, Lens angle = 0

• ZOOM ROTATION (available on zoom channel at 255 bit only)

BIT	MACRO EFFECT
128-255	Lens offset angle: 0.00 degree
127	Lens offset angle: +4.00 degree
126	Lens offset angle: +3.94 degree
125	Lens offset angle: +3.87 degree
...	
1	Lens offset angle: +0.06 degree
0	Lens offset angle: 0.00 degree

- RED LED 1 to...
- GREEN LED 1 to...
- BLUE LED 1 to...
- WHITE LED 1 to...



BIT	EFFECT
255	LED ON
0	LED OFF

SHAPE

MODE DESCRIPTION

CONCEPTS: FOREGROUND AND BACKGROUND

The powerful shapes engine allows the user to set all the possible parameters relating to the pixels of the light in an organic way, with a distinction between the pixels affected by a selected "image" and the ones that are not affected by that specific image (more properly called SHAPE from now on).

The macro called "ring 2" will, as an example, involve all the pixels that compose the ring of the unit, while the middle pixel and the 1 smaller ring will not be affected by the shape. The involved pixels will belong to the "Foreground" layer, while all the remaining pixels will belong to the "Background" layer.

Pixels on the foreground take the colour the user will select specifically for them using the dedicated channels, while the remaining pixels will all maintain the colours related to the washlight.

SHAPE PARAMETERS DESCRIPTION

SHAPE SELECTION	Allows to choose the kind of shape to be visualized amongst the 63 available ones. Each shape can be composed of a multitude of frames or be a single, static image.
SHAPE SPEED	Allows to set the speed at which the different frames of the selected shape are played by the unit.
SHAPE FADE	In case of shapes with multiple frames, it allows to select a snap or faded variation from frame to frame of the same shape.
SHAPE RGBW	Allows to select the colour of the pixels composing the selected shape, if all are left at 000 no shape will be visualized (unless the background dimmer and normal RGBW attributes of the unit are given a value, in which case a "negative" of the macro will be shown)
SHAPE DIMMER	Allows to select the overall brightness of the pixels involved in the selected shape.
BACKGROUND DIMMER	Allows to select the overall brightness of the pixels NOT involved by the selected shape. The relevant colour is set using the normal RGBW channels of the washlight.
SHAPE TRANSITION	Internal fade time between a shape and another one set via DMX. Using this "channel" when you change from a shape to a different one as if it was the console fade time will avoid the scrolling effect normally visible when having fades between eg. gobo changes is traditional lights. Fade time on the console should be set to 0.
SHAPE OFFSET	Depending on the selected shape the channel sets the "density" of the involved pixels (few random pixel, many random pixels) or enables an internal algorithm that will distribute the macro between a multitude of lights on a specific DMX line basing on their DMX starting address.
BACKGROUND STROBE	Allows to set a strobe rate for the pixels NOT involved in a macro.
BACKGROUND STROBE	Allows to set a strobe rate for the pixels NOT involved in a macro.
BACKGROUND SELECT	Allows to reduce, if needed, the background to a lower amount of "rings". With selected macros this allows to mirror the image between the two halves of the fixture's head (in this case the RGBW channels of the washlight will set the colour of the mirrored half and the background will remain black).

Note of Foreground Shape Effect:

Shapes will be available while (**Dimmer CH12**), (**Strobe CH11**), (**Shape dimmer CH29**), (**Foreground strobe CH33**), (**Shape color CH25/26/27/28**) turned on then selecting the Shapes on (**Shape Selection CH22**) with different speed on (**Shape Speed CH23**).

Background Effect: Meanwhile the (**BG dimmer CH30**), (**BG strobe CH34**), (**Color RGBW CH1/3/5/7**) turned on.

(CH value mentioned above is based on SHAPE 35/SHAPE RING 43)

Vortex effect: With **Shape slot 3**(Ring 2 on Shape Selection Value 10) and **Zoom rotation** turned on.

SHAPE SELECTION*SHAPE SPEED*SHAPE OFFSET*SHAPE FADE*BACKGROUND SELECT

Shape Selection	Shape Slot	Shape Name	Random Colors *1	Shape Speed	Shape Offset	Shape Fade	Background Select(*3)(*4)
0-7		Macro OFF	No	No	No	No	No
8	1	Pixel 1	No	No	No	0=snap effect 1-255=Fade effect	0-7=Wash 8-15=Bgrings 16-255 wash
9	2	Ring 1					
10	3	Ring 2					
11	4	Reserved					
12	5	Pixel 1+ring1					
13	6	Pixel 1+ring2					
14	7	Reserved					
15	8	Single ring (Ramp -/+)	Yes	0-63 = Radius size, static 64-158 = max to min speed, Closing effect 159-160 = STOP 161-255 = min to max speed, Opening effect	0-9 → continuous 10-255 → random Distribution of flash From 2 to 20 fixtures	0=snap effect 1-255=Fade effect	0-7=Wash 8-15=Bgrings 16-255 wash
16	9	Filled ring (Ramp -/+)	Yes				
17	10	Open/Close 1	Yes				
18	11	Open/Close 2	Yes				
19	12	Random pixels 1	Yes	0-63 = STOP 64-158 = max to min speed, Instant-on + fadeout.	0-255 → select random distribution from 2 up to 20 fixtures	0=snap effect 1-255=Fade effect	0-7=Wash 8-15=Bgrings 16-255

20	13	Random pixels 2	Yes	159-160 = STOP. 161-255 = min to max speed, FadeIn + FadeOut.	0-255 Select pixel density		55 wash All fixtures : 255=Mirror effect
21	14	Rainbow 1 (Variable speed)	NO	0-63 = Angle 0-360°, static. 64-158 = max to min speed, c.cw rotation 159-160=STOP 161-255 =min to max speed, Cw rotation	0-255 angle offset from 0 to 360	0=snap effect 1-255=Fade effect	0-7=Wash 8-15 =Bgrings 16-255 wash
22	15	Rainbow 2 (Fixed speed with variable color offset)	NO	0-63 = STOP 64-158 = c.cw rotation 159-160 = STOP 161-255 = cw rotation The value 64-158 or 161-255 change the rainbow angle (the orange offset starting angle).	NO	0=snap effect 1-255=Fade effect	0-7=Wash 8-15 =Bgrings 16-255=wash
23	16	Fan	NO	0-63 = Angle 0-360°, static. 64-158 = max to min speed, c.cw rotation 159-160=STOP 161-255 =min to max speed, Cw rotation	0-255 → angle offset from 0 to 360°	0=snap effect 1-255=Fade effect	0-7=Wash 8-15 =Bgrings 16-255 wash For all fixtures: Marco 25 26 255=Mirror Effect with bkgnd color Macro 27 28 29 255= Show Alternative Color
24	17	Bar 1					
25	18	Half moon					
26	19	Triangle					
27	20	Segment 1					
28	21	Arc 1					
29	22	Arc 2					

Shape Selection	Shape Slot	Shape Name	Random Colors *1	Shape Speed	Shape Offset	Shape Fade	Background Select (*3)(*4)
30	23	Bar 2 (Variable size)	NO	0-63 = STOP, indexed speed 64-158 = max to min speed, c.cw rotation. 159-160 = STOP. 161-255 = min to max speed cc rotation.	0-255 → select shape width	0 = Snap effect 1-255 = Fade effect	0-7 = wash 8-15 = Bkgnd rings selection 16-254 = wash 255 = Mirror effect with bkgnd color Note: Mirror effect unavailable for macro 31. Macro 67,68,69:the mirror
31	24	Rando explosion	Yes		0-255 → select Random distribution	0=Snap effect 1-255=select the wake of the faded macro	
32	25	Segment 2	NO		0-255 → select shape width	0=Snap effect	
33	26	Reserved					
34	27	Reserved					
35	28	Bumping Selection			0-255 → select macro offset	0=Snap effect	
36	29	Ramp by 6					
37	30	Ramp by 4					
38	31	Left/Right scrolling bar			0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
39	32	Up/Down scrolling bar					
40	33	Bar 3					
41	34	Reserved					
42	35	Vertical arc 2			0-255 → select macro offset	0 = Snap effect 1-255 = Fade effect	
43	36	Reserved					
44	37	Horizontal arc 2					
45	38	Mirrored pixel					
46	39	Pixel animation 1			0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
47	40	Pixel animation 2					
48	41	Pixel animation 3					
49	42	Pixel animation 4					
50	43	Pixel animation 5					
51	44	Semi arc (Ramp -/+)					

52	45	Bumping arc section			0-255 → select shape offset	0 = Snap effect 1-255 = Fade effect	effect is available only for options 1,3,9
53	46	Pixel animation 6					
54	47	Vertical ramp by 2			0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
55	48	Following pixel by2					
56	49	Syncopation			0-255 → select macro offset	0 = Snap effect 1-255 = Fade effect	
57	50	Bumping 1					
58	51	Bumping 2					
59	52	Bumping 3					
60	53	Vertical pixel scrolling			0-255 → select macro width	0=Snap effect 1-255=select the wake of the faded macro	
61	54	Vertical pixel scrolling					
62	55	Random central section	Yes		0-255 → select random distribution	0 = Snap effect 1-255 = Fade effect	
63	56	Random ring 2					
64	57	Reserved					
65	58	Random ring 1+2					
66	59	Random ring 2					
67	60	Single pixel ring 1	NO		0-255→select the NO.of led:1,2,3,6,9	0=Snap effect 1-255=select	
68	61	Single pixel ring 2					
69	62	Reserved			this NO. depends on the ring size	the wake of the faded macro	
70	63	Spiral			0-255 → select macro width		

• SHAPE FADE

BIT	EFFECT
246-255	Smooth, fading curve with automatic gamma *
245	Smooth, fading curve gamma 2
243	Smooth, fading curve gamma 1,999
244	Smooth, fading curve gamma 1,993
...	...
18	Smooth, fading curve gamma 0.513
17	Smooth, fading curve gamma 0.506
16	Smooth, fading curve gamma 0.5
0-15	Snap

• SHAPE TRANSITION

BIT	EFFECT
255	4 sec
216	3 sec
171	2 sec
113	1 sec
73	0,5 sec
5	100 ms
0-4	No fade

• SHAPE RGBW
SHAPE DIMMER
BACKGROUND DIMMER



BIT	EFFECT
255	LED ON
0	LED OFF

• BACKGROUND SELECT

BIT	EFFECT
16-255	No selection
...	...
15	Ring 2 + Ring 3
14	Pool 1 + Ring 2 + Ring 3
13	Pool 1 + Ring 2
12	Pool 1 + Ring 3
11	Ring 3
10	Ring 2
9	Pool 1
8	No selection

LED RING MACRO

BIT	EFFECT
0-1	No fuction
2-51	Static color on every
52-54	2 dmx ch The 1st
55-25	dynamic effect
0	
251-255	Dynamic effect on every 4 dmx ch
55	The 51th dynamic effect

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.