FOS Hydor Wash

19x40W 4-in-1
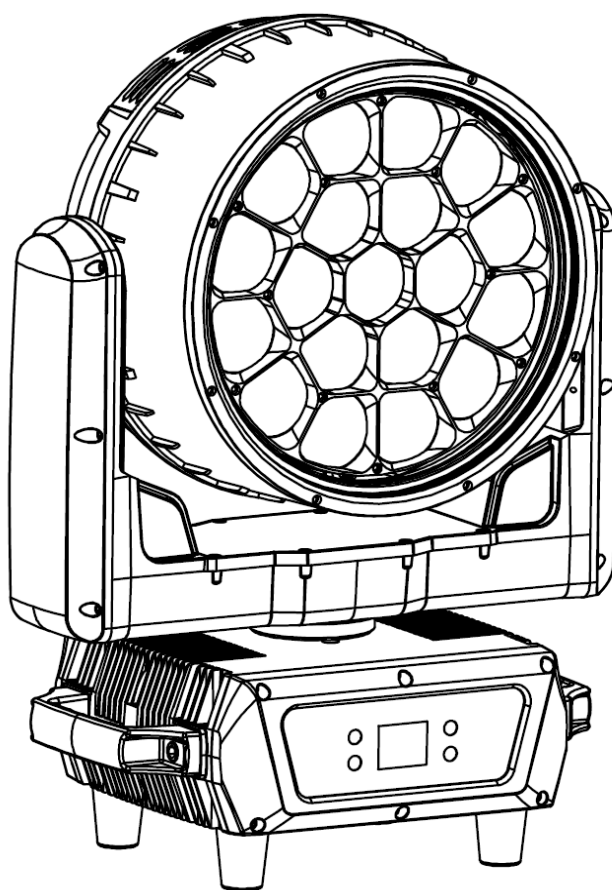
CE ▽ ⏚ IP65 LED ⏽---0.2m ta 40℃ tc 150℃
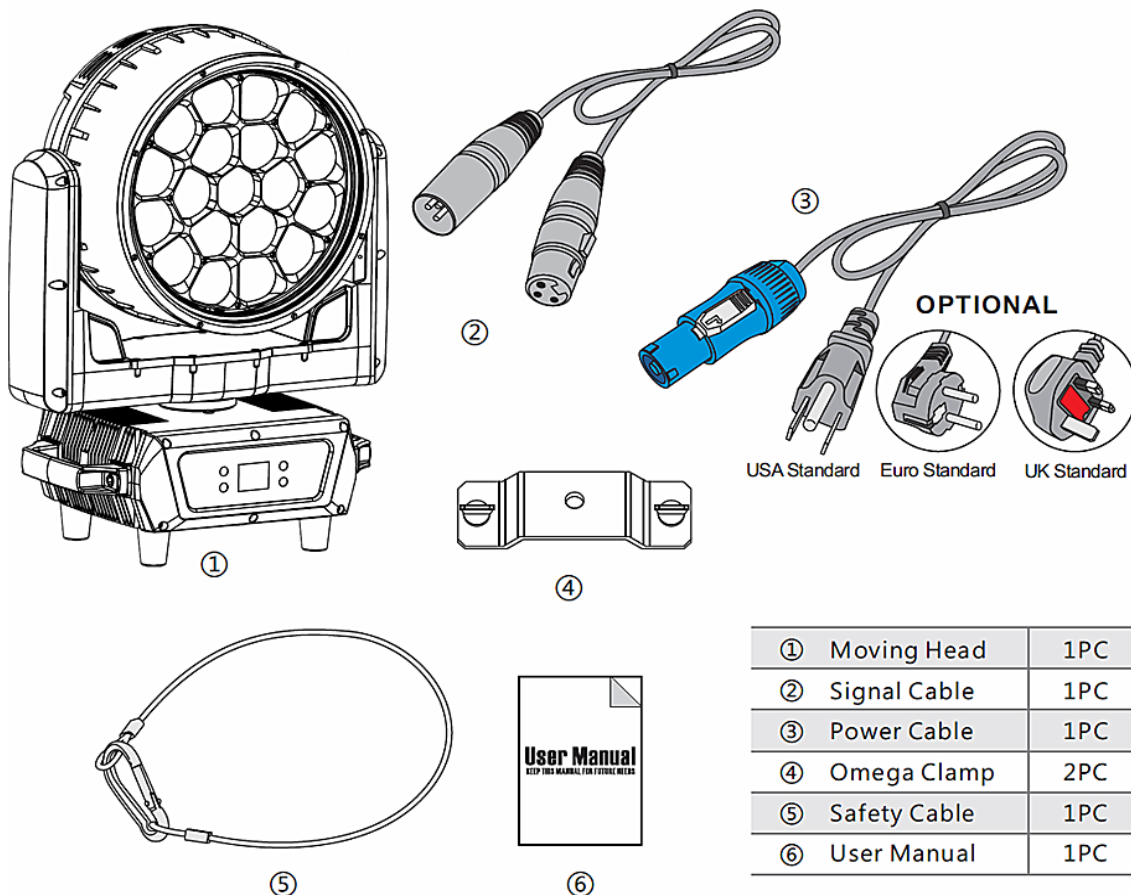
USER MANUAL

KEEP THIS MANUAL FOR FUTURE NEEDS

1. Unpacking

Thank you for choosing our fixture. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

This fixture is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

4-IN-1 LEDs(RGBW) which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

	Item	Qty
①	Moving Head	1PC
②	Signal Cable	1PC
③	Power Cable	1PC
④	Omega Clamp	2PC
⑤	Safety Cable	1PC
⑥	User Manual	1PC

2. Product dimension （mm）
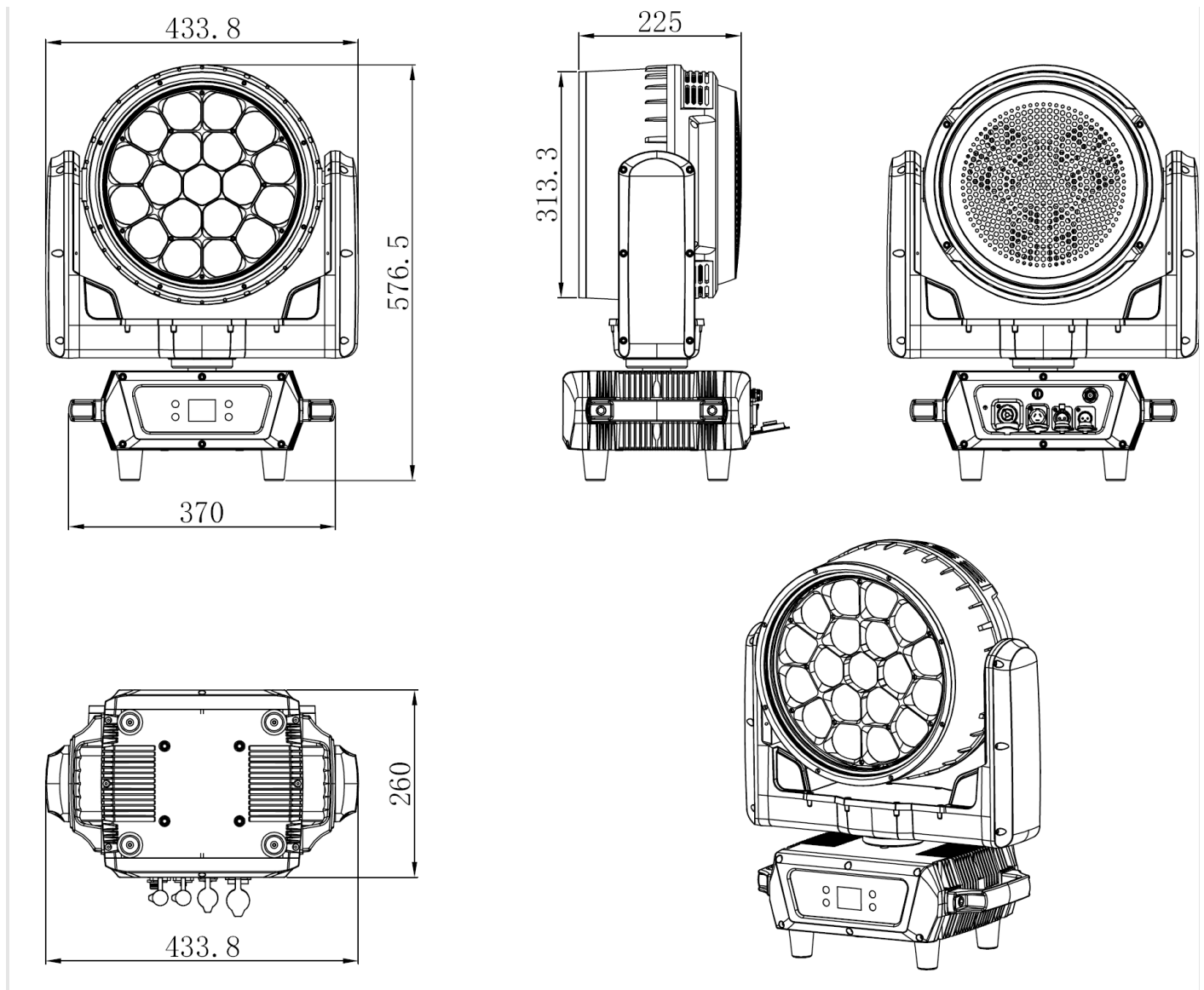
3. Safety Instructions

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 necessary for the user to follow the safety instructions and warning notes written in this user manual.

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 temperature.

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.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

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.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

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.

4. Operation Instructions

-The fixture is for beam wash and effect use.

-Don't turn on the fixtureif it's beenthrough severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.

-This light should be kept away from strong shaking during any transportation or movement.

-Don't pull up the light by only the head, or it might cause damages to the mechanical

parts.

-Don't expose the fixture in overheat, moistureor environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.

-Make sure the installation place is in good safety condition before installing the fixture.

-Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.

-Make sure the lens is in good condition. It's recommended to replace the units if there are any damages or severe scratch.

-Make sure the fixture is operated by qualified personnel who knows the fixture before using.

-Keep the original packages if any second shipment is needed.

-Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.

-It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

5. 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 product 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 one of the safety cable rigging points integrated in the base assembly.

① Omega Bracket
② Safety Clamp
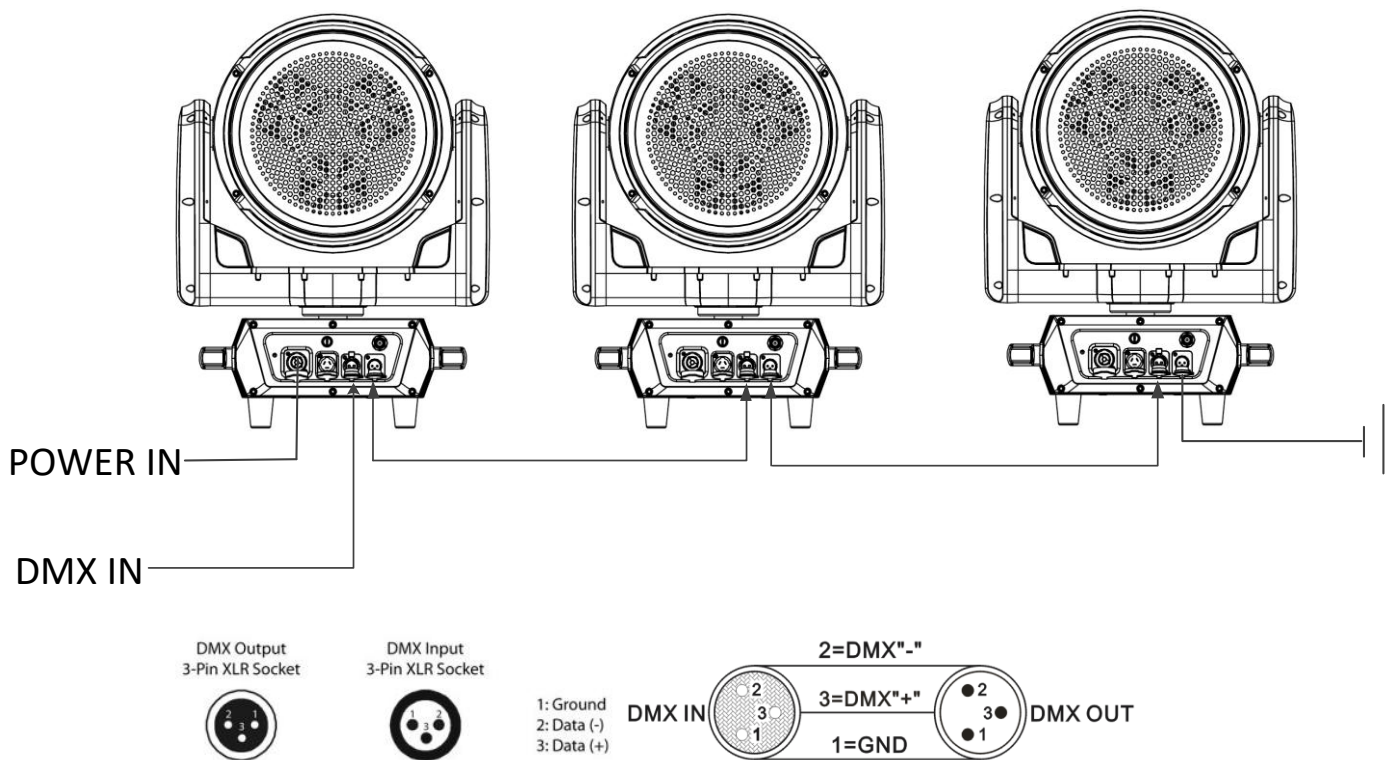③ Safety Cable
④ 1/4 Turn Quick-Lock Fasteners
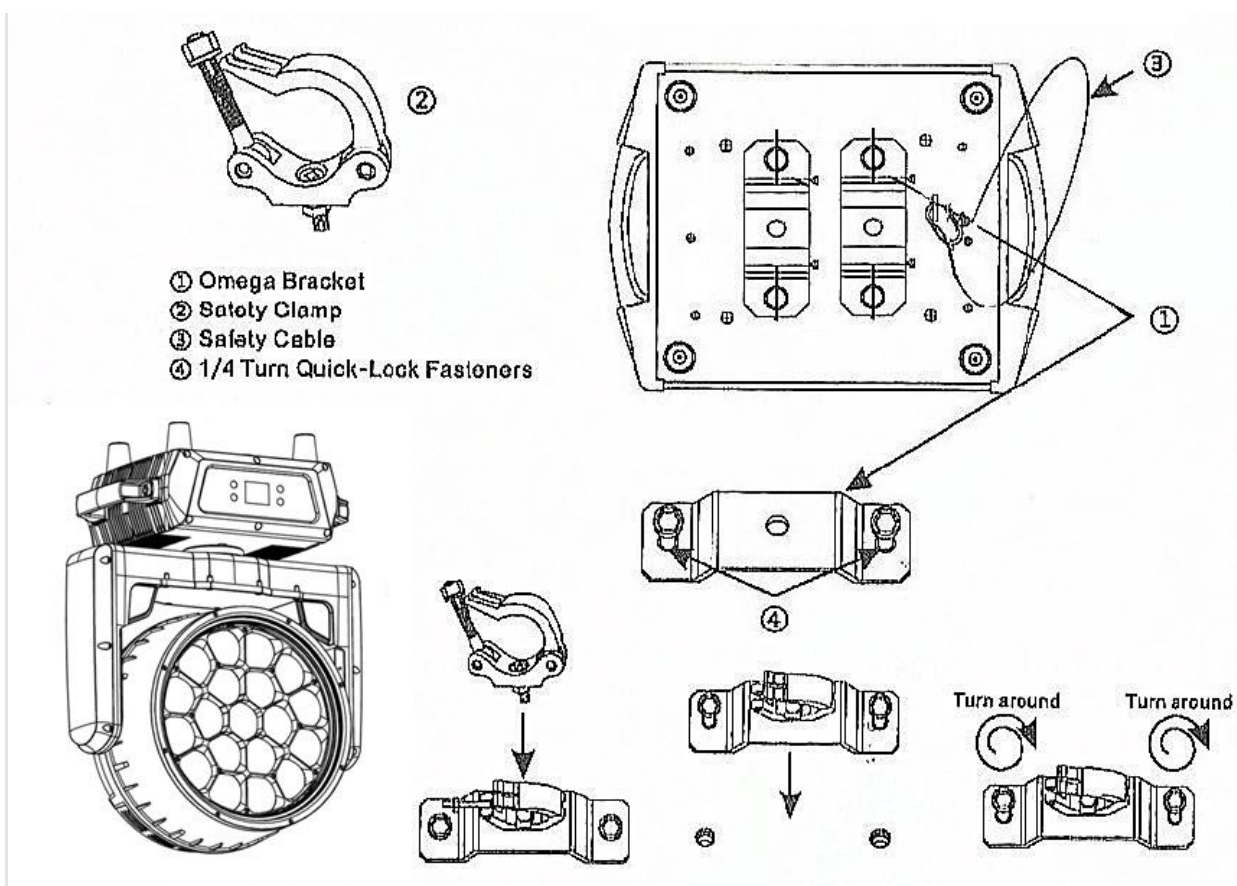
Regardless of the rigging option you choose for our fixture, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

6. 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 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

POWER IN

DMX IN

DMX Output
3-Pin XLR Socket

DMX Input
3-Pin XLR Socket

1: Ground
2: Data (-)
3: Data (+)

2=DMX"-"

3=DMX"+"

1=GND

DMX IN

DMX OUT

For installations where the DMX cable must 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.

120Ω

PIN 3
PIN 2
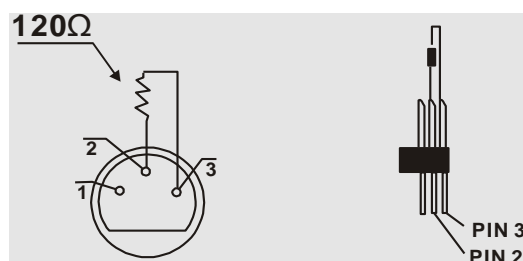
7.Key Features

Voltage: AC100V ~ 240V 50-60HZ

Rated Power: 760W

LED Source: 19x40W high power RGBW 4 in 1 LEDs

Zoom: 1:6 zoom range from 7 to 42 degree

Strobe: 0-25Hz

Control Mode: DMX512,Sound-activated,Master/slave

DMX Channels: 21/35/43/78/92/97 six channel mode

Dimmer: 0-100% linear dimmer with 4 kinds of dimmer curve.

Pan: 540°+16bit fine

Tilt: 250°+16bit fine

Display: LCD display with touch buttons.

IP: IP65

Fixture dimension: 434*260*577mm

N.W:22 Kg

G.W: 26 Kg(1pc/ctn)

G.W: 75 Kg(2pcs/case)

Package dimension: 61*53*45 CM (1pc/ctn)

Flight case size: 91*49*77 CM(2pcs/case)

Special Points.

1. Each LED can be controlled individually. With unique honeycomb designed lens

2. The front lens can rotate without limitation in forward and reverse direction to create amazing effects

3. Can be used as beam, wash or effect light use (Kaleido effects)

4. With a extra LED ring for eye-candy effect， LED ring with macro effect

5. Pure aluminum casting waterproof housing, suitable for all kinds of environment.

8. Photometric Data:

LUX Data of 7 degree beam angle:

R	27700 lux@2m	7330 lux@4m	3490 lux@6m	1890 lux@8m	1210 lux@10m
G	68800 lux@2m	18560 lux@4m	8720 lux@6m	4750 lux@8m	3010 lux@10m
B	103400 lux@2m	33800 lux@4m	16000 lux@6m	8770 lux@ 8m	5650 lux@10m
W	80300 lux@2m	23100 lux@4m	10940 lux@6m	5970 lux@8m	3860 lux@10m
RGBW	160400 lux@2m	68500 lux@4m	33800 lux@6m	18600 lux@8m	12040 lux@10m
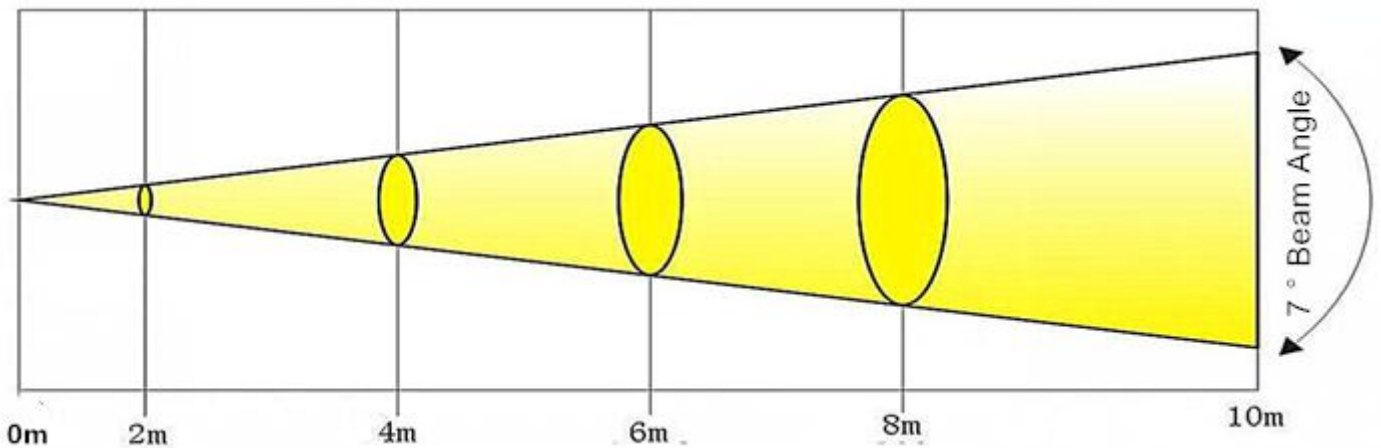
LUX Data of 42 degree beam angle:

R	3470 lux@2m	909 lux@4m	425 lux@6m	237 lux@8m	155 lux@10m
G	9060 lux@2m	2350 lux@4m	1110 lux@6m	625 lux@8m	403 lux@10m
B	17720 lux@2m	4650 lux@4m	2200 lux@6m	1230 lux@8m	795 lux@10m
W	11000 lux@2m	2830 lux@4m	1350 lux@6m	750 lux@ 8m	488 lux@10m
RGBW	35900 lux@2m	9290 lux@4m	4500 lux@6m	2450 lux@8m	1610 lux@10m
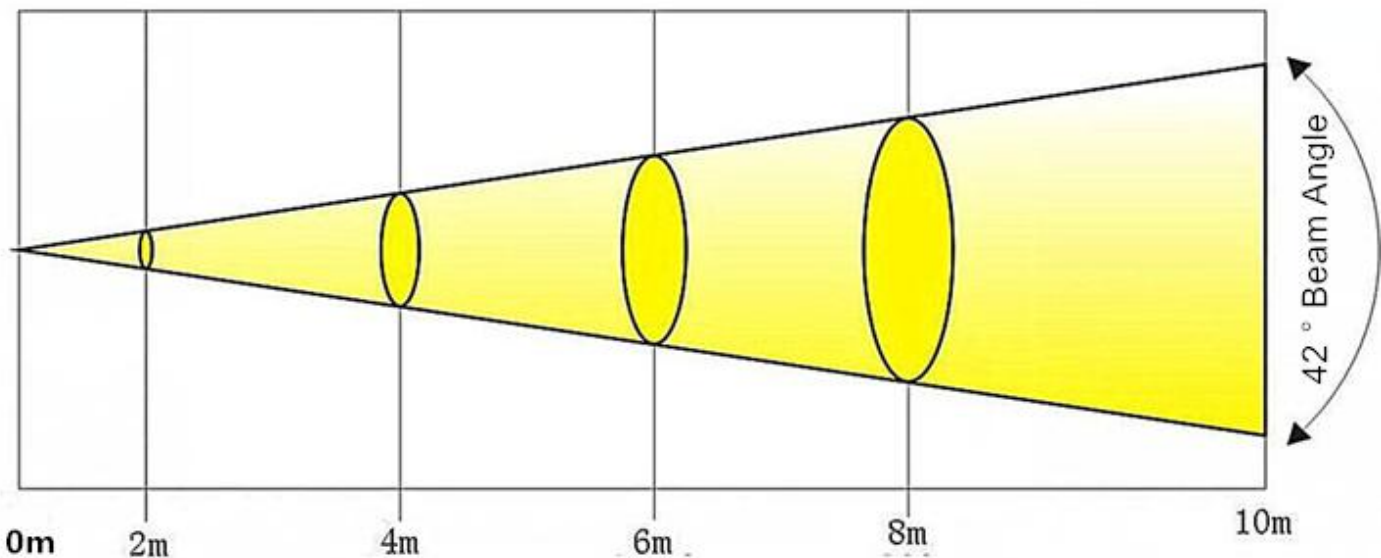
9.MENU FUNCTION: Press menu for 3seconds to unlock

Menu	Sub-Menu	Secondary submenu	Function
Address	001-512		DMX address
Run mode	DMX	21CH	Same as B-EYE K10 CH
		35CH	Same as B-EYE K10 CH
		78CH	Same as B-EYE K10 CH
		92CH	Same as B-EYE K10 CH
		97CH	Same as B-EYE K10 CH
		43CH	Shape + LED Ring
	Auto Test		System detection
	Manual Test		Manual test
	Auto		Auto run
	Channel Test		Manual control each channel
Setting	Pan Reverse	YES/NO	Pan reverse
	Tilt Reverse	YES/NO	Tilt reverse
	Screen Reverse	YES/NO	Screen reverse
	Screen Lock	YES/NO	Screen Lock
	No Signal Hold	YES/NO	No DMX mode
	Pan Angle	540/360/180	Pan angle
	Tilt Angle	250/180/90	Tilt angle
	Arefaction Time	0-255	Arefaction Time
	Language	EN/CH	Language
	Dimmer Speed	Smooth	Smooth dimmer mode
		Fast	Fast dimmer mode
	Dimmer Curve	Linear	Linear dimmer
		SCurve	S curve dimmer
		Square	Square dimmer
		I Square	I Square dimmer
	Reset Functions	Pan/Tilt	Pan/Tilt reset
		Zoom	Zoom reset
		All	All reset
	Factory Reset	YES/NO	Factory mode
Sys Info	Ver: V1.2		
	Running Mode: DMX		
	Dmx Address: 001		
	Temperature: xx		
	Fixture Hours		

10.CHANNEL MODE

CH	STANDARD-21	CH	SHAPE-35	CH	EXTENDED-78	CH	EXTENDED RGBW-92	CH	EXTENDED RGBW-97	CH	SHAPE RING-43
1	Red	1	Red	1	Red	1	Red	1	Red	1	Red
2	Red fine	2	Red fine	2	Red fine	2	Red fine	2	Red fine	2	Red fine
3	Green	3	Green	3	Green	3	Green	3	Green	3	Green
4	Green fine	4	Green fine	4	Green fine	4	Green fine	4	Green fine	4	Green fine
5	Blue	5	Blue	5	Blue	5	Blue	5	Blue	5	Blue
6	Blue fine	6	Blue fine	6	Blue fine	6	Blue fine	6	Blue fine	6	Blue fine
7	White	7	White	7	White	7	White	7	White	7	White
8	White fine	8	White fine	8	White fine	8	White fine	8	White fine	8	White fine
9	Linear CTO	9	Linear CTO	9	Linear CTO	9	Linear CTO	9	Linear CTO	9	Linear CTO
10	Marco color	10	Marco color	10	Marco color	10	Marco color	10	Marco color	10	Marco color
11	Strobe	11	Strobe	11	Strobe	11	Strobe	11	Strobe	11	Strobe
12	Dimmer	12	Dimmer	12	Dimmer	12	Dimmer	12	Dimmer	12	Dimmer
13	Dimmer fine	13	Dimmer fine	13	Dimmer fine	13	Dimmer fine	13	Dimmer fine	13	Dimmer fine
14	Pan	14	Pan	14	Pan	14	Pan	14	Pan	14	Pan
15	Pan fine	15	Pan fine	15	Pan fine	15	Pan fine	15	Pan fine	15	Pan fine
16	Tilt	16	Tilt	16	Tilt	16	Tilt	16	Tilt	16	Tilt
17	Tilt fine	17	Tilt fine	17	Tilt fine	17	Tilt fine	17	Tilt fine	17	Tilt fine
18	Function	18	Function	18	Function	18	Function	18	Function	18	Function
19	Reset	19	Reset	19	Reset	19	Reset	19	Reset	19	Reset
20	Zoom	20	Zoom	20	Zoom	20	Zoom	20	Zoom	20	Zoom
21	Zoom Rotation	21	Zoom Rotation	21	Zoom Rotation	21	Zoom Rotation	21	Zoom Rotation	21	Zoom Rotation
		22	Shape selection	22	Red Led 1	22	Shape selection	22	Red Led 1	22	Shape selection
		23	Shape speed	23	Green Led 1	23	Shape speed	23	Green Led 1	23	Shape speed
		24	Shape fade	...	Blue Led 1	24	Shape fade	24	Blue Led 1	24	Shape fade
		25	Shape R	...	Red Led...	25	Shape R	25	White Led 1	25	Shape R
		26	Shape G	...	Green Led...	26	Shape G	26	Red Led 2	26	Shape G
		27	Shape B	75	Blue Led...	27	Shape B	27	Green Led2	27	Shape B
		28	Shape W	76	Red Led19	28	Shape W	28	Blue Led2	28	Shape W
		29	Shape dimmer	77	Green Led19	...	....	...	White Led2	29	Shape dimmer
		30	Background dimmer	78	Blue Led19	...	....	...	Red Led...	30	Background dimmer
		31	Shape transition			90	Red dimmer 19	...	Green Led...	31	Shape transition
		32	Shape offset			91	Green dimmer 19	...	Blue Led...	32	Shape offset
		33	Foreground strobe			92	Blue dimmer 19	93	White Led...	33	Foreground strobe
		34	Background strobe					94	Red Led19	34	Background strobe
		35	Background select					95	Green Led19	35	Background select
								96	Blue Led19	36	Reversed
								97	White Led19	37	LED ring dimmer
										38	LED ring strobe
										39	LED ring red
										40	LED ring green
										41	LED ring blue
										42	LED ring macro
										43	LED ring speed

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
255	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	5600 K
...	...
99	6000 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	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	69
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	133	199
62-67	52	Light Lavender	243	117	39	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	56	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 - 238	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
208 - 212	OPEN
207	FAST PULSATION (25 flash/sec)
108	SLOW PULSATION (0,5 flash/sec)
104 - 107	OPEN
103	FAST STROBE (25 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	CLOSED

• DIMMER
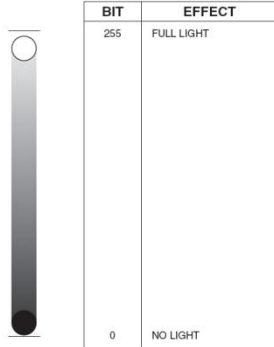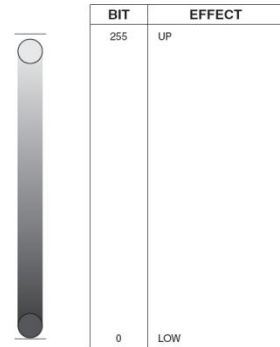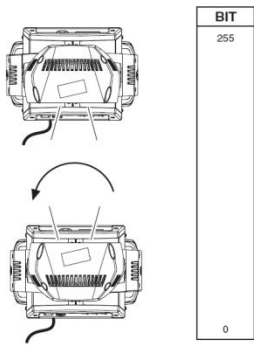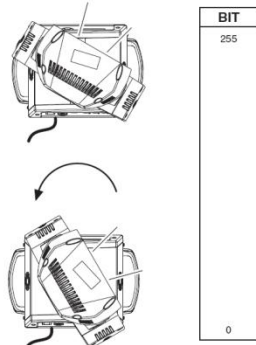
BIT	EFFECT
255	FULL LIGHT
0	NO LIGHT

• DIMMER FINE

BIT	EFFECT
255	UP
0	LOW

• PAN

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

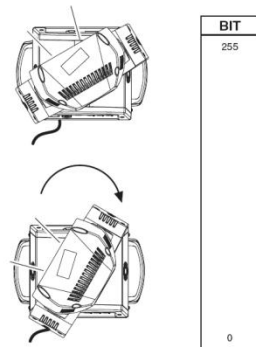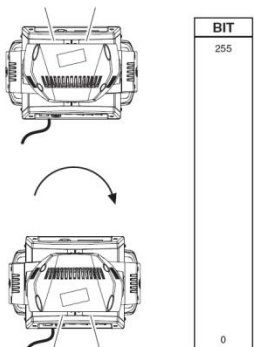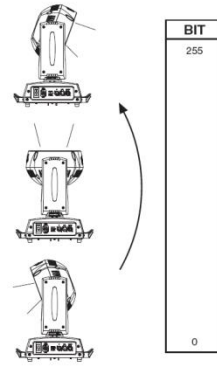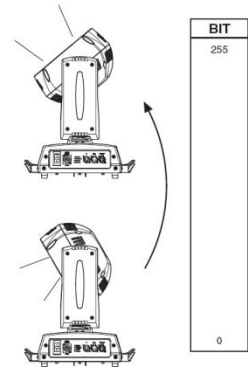## • PAN FINE

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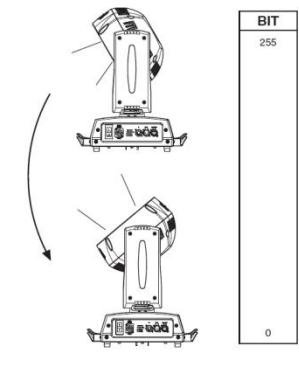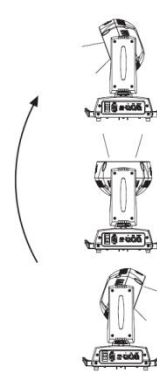*(Tilt conventionally represented at 35 bit and option Invert Tilt ◊ Off)*

• 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

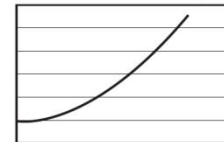| BIT	EFFECT	
103 – 255	Reserved	
98 – 102	Halogen Lamp Simulation, type 5 (2500 W)	Linear CTO @ 0 bit
93 – 97	Halogen Lamp Simulation, type 4 (2000 W)	Linear CTO @ 0 bit
88 – 92	Halogen Lamp Simulation, type 3 (1200 W)	Linear CTO @ 0 bit
83 – 87	Halogen Lamp Simulation, type 2 (1000 W)	Linear CTO @ 0 bit
78 – 82	Halogen Lamp Simulation, type 1 (750W)	Linear CTO @ 0 bit
73 – 77	Halogen Lamp Simulation OFF (Default)	
68 – 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 – rearmed	

The functions are actived passing through the "unused range" and staying 5 seconds in necessary level.
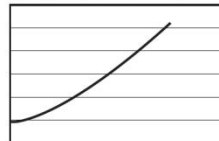Last selected function still active. Enable setting a new function.
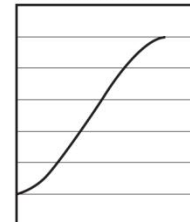
DIMMER CURVE 1 - GAMMA 1 LINEAR
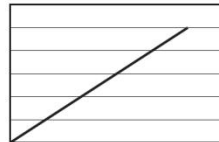
DIMMER CURVE 3 - GAMMA 2,0

DIMMER CURVE 2 - GAMMA 1,5

DIMMER CURVE 4 - S

• RESET

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

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

BIT	EFFECT
255	LED ON
0	LED OFF

• ZOOM

BIT	EFFECT
255	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	

STOP

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

BIT	MACRO EFFECT
193-255	CCW Rotation, speed from 3 RPH to 10 RPM
191-192	Stop rotation
128-190	CW Rotation, speed from 10 RPM to 3 RPH
127	Indexed zone. Lens angle = 60.00
126	Indexed zone. Lens angle = 59.52
....	
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

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 one sthat 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 tothe"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 wash light.

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 asingle, 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 backgrounddimmer 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 RGBWchannels 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 adifferent one as if itwas the console fade time will avoid the scrolling effect normally visible when having fades between eg. gobo changes is traditional lights. Fadetime 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 aninternal algorithm that will distribute the macro between a multitude of lights on a specific DMX line basing on their DMX starting address.
FOREGROUND STROBE	Allows to set a strobe rate for the pixels 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 twohalves 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 remainblack.

Note of Foreground Shape Effect:
Shapes will be available while (**_Dimmer_**CH12),(**_Strobe_**CH11), (**_Shapedimmer_**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					
9	2	Ring 1					0-7=Wash
10	3	Ring 2				0=snapeffect	8-15=Bgrings
11	4	Reserved	No	No	No	1-255=Fade effect	16-255 wash
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 minspeed,Closing effect 159-160 = STOP 161-255 = min to max speed,Opening effect	0-9 → continuous 10-255→ random Distributionof flash From2 to 20 fixtures	0=snapeffect 1-255=Fadee ffect	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. 159-160 = STOP. 161-255 = min to max speed,FadeIn + 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 wash
20	13	Random pixels 2	Yes		0-255Selectpi xel density		All fixtures: 255=Mirror effect
21	14	Rainbow 1 (Variablespeed)	N0	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 offest from 0 to 360°	0=snapeffect 1-255=Fade effect	0-7=Wash 8-15=Bgrings 16-255 wash
22	15	Rainbow 2 (Fixed speed withvariable color offset)	N0	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 offset (the orange starting angle).	N0	0=snapeffect 1-255=Fade effect	0-7=Wash 8-15=Bgrings 16-255=wash
23	16	Fan					0-7=Wash 8-15=Bgrings 16-255 wash
24	17	Bar 1					
25	18	Half moon		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=snapeffect 1-255=Fade effect	For all fixtures: Marco 25 26 255=Mirror Effect with bkgnd color
26	19	Triangle	N0				
27	20	Segment 1					Macro 27 28 29 255= Show Alternative Color
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 (Variablesize)	N0		0-255 → select shape width	0 = Snap effect 1-255 = Fade effect	
31	24	Randoexplosion	Yes		0-255 → select Randomdistribution	0=Snap effect 1-255=select the wake of the faded macro	
32	25	Segment 2			0-255 → select shape width		
33	26	Reserved			0-255 → select macro offset	0=Snap effect	
34	27	Reserved					
35	28	Bumping Selection					
36	29	Ramp by 6			0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
37	30	Ramp by 4					
38	31	Left/Right scrolling bar					
39	32	Up/Down scrolling bar					
40	33	Bar 3			0-255 → select macro offset	0 = Snap effect 1-255 = Fade effect	
41	34	Reserved					
42	35	Vertical arc 2					
43	36	Reserved					
44	37	Horizontal arc 2		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.			0-7 = wash 8-15 = Bkgnd rings selection 16-254 = wash 255 = Mirror effet withbkgnd color
45	38	Mirrored pixel	N0		0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
46	39	Pixel animation 1					
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 - /+)			0-255 → select shape offset	0 = Snap effect 1-255 = Fade effect	Note: Mirror effect unavailable for macro 31. Macro 67,68,69:the mirror effect is available only for options 1,3,9
52	45	Bumpingarcsection					
53	46	Pixel animation 6					
54	47	Verticalrampby2			0-255 → select shape width	0=Snap effect 1-255=select the wake of the faded macro	
55	48	Followingpixelby2					
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 pixelscrolling			0-255 → select macro width	0=Snap effect 1-255=select the wake of the faded macro	
61	54	Vertical pixel scrolling			0-255 → select random distribution	0 = Snap effect 1-255 = Fade effect	
62	55	Randomcentrasection	Yes				
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 this NO. depends on the ring size	0=Snap effect 1-255=select the wake of the faded macro	
68	61	Single pixel ring 2					
69	62	Reserved					
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 1,986
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	Pixel 1 + Ring 2 + Ring 3
13	Pixel 1 + Ring 2
12	Pixel 1 + Ring 3
11	Ring 3
10	Ring 2
9	Pixel 1
8	No selection

▪LED RING MACRO

BIT	EFFECT
0-1	No fuction
2-51	Static color on every 2 dmx ch
52-54	The 1st dynamic effect
55-250	Dynamic effect on every 4 dmx ch
251-255	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.

11. Maintenance and Cleaning

The following points must be considered during the inspection:

1. All screws for installing the devices or parts of the device must be tightly connected and must not be corroded.2. There must not be any deformations on the housing, color lenses, fixations and installation 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 must 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 lifetime, 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. There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions". Should you need any spare parts, please order genuine parts from your local dealer.