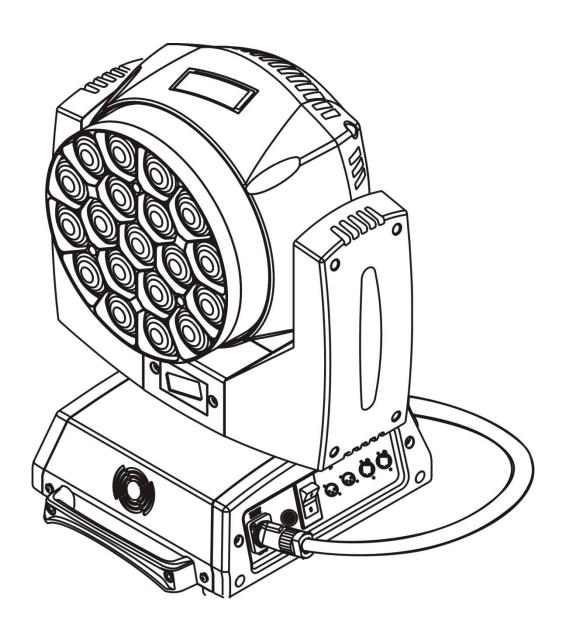
# LED MOVING HEAD

## **USER MANUAL**



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#### 1. Before Using

#### What is include

- Equipment x 1
- Power cable with Plug x 1
- User manual x 1
- Iron holder x 2

#### **General Instruction**



Help preserve the environment! Ensure that this product is recycled at the end of its life. Your supplier can give details of local arrangements for the disposal of products.

Please carefully read and understand the instructions in this manual thoroughly before attempting to operate this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit for future reference.

#### **AC Power Supply**

The equipment power supply is able to adapt to the wide input voltage. Please confirm the input voltage is in the scale of rated voltage. The equipment can adapt to 100V-240V AC voltage, Frequency 50-60HZ. It can not run a rheostat(variable resistor) or dimmer circuits.

#### **Safety Instruction**

This product is I level protection equipment, so it is must be connected well and connected by the professional people.

- Make sure the voltage don't be above or below which the user manual rated values.
- Confirm the power cord is not a sword cut or damaged.
- Must be cut off the power supply in the condition of no using or cleaning.
- Only allowed with the power cord plug connection. Please do not force when unplug the power cord to pull the plug.
- Be careful in the process of installation of equipment. Avoid touching the bare wire, otherwise it will suffer fatal shocks.

- Don't look the light source directly, otherwise it will hurts the eyes.
- When choosing installation position of equipment and the equipment must be more than 0.5m distance between objects.
- Please use the equipment wires appropriate.
- Without the manufacturer's authorization or laypeople don't remove, repair and modification of equipment.
- The maximum operating temperature is  $40^{\circ}$ C,don't operate the equipment when it is over  $40^{\circ}$ C
- Do not connect the equipment to the dimmer equipment.
- Under the condition of 120V, output power don't series more than 10pcs equipments, under the condition of 230V, output power don't series more than 20pcs.

#### 2. Introduction

#### **Specification**

- Rated Voltage: AC100V ~ 240V 50-60HZ
- Rated Power: 450W
- LED Qty: 19x15W high power 4 in 1 LEDs
- LED Drive Current: 1000mA
- Beam Angle: 4-60 Zoom
- IP: IP20
- DMX Mode: 21CH(Standard) /35CH(Shapes) /78CH(Extend) /96CH(Extend RGBW) /92CH(Full)
- Net weight: 15 Kg
- Gross weight: 18.2Kg

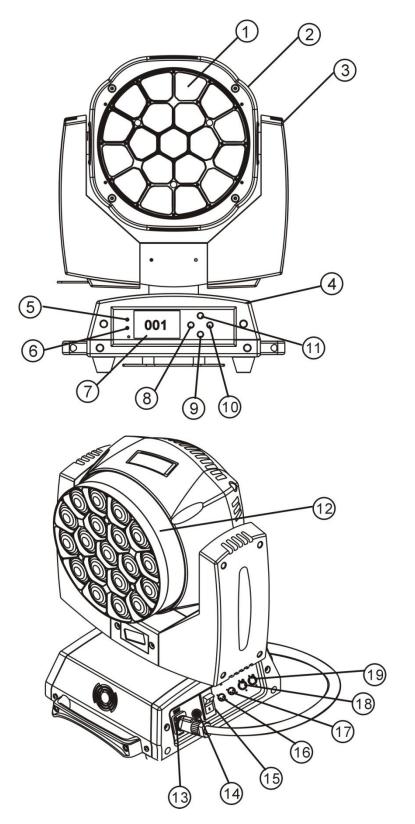
#### **Product feature**

- XLR sockets input/output 3Pin
- Power input/output
- 4 kinds of control model: DMX512, Auto ,Sound active, Master/slave
- LCD display screen

- Display screen can be turned upside down with 180° to fit the installation in different place
- Indoor operation temperature: -20 ℃~+40 ℃
- 5 DMX channels: 21/35/78/96/92CH
- Dimmer: 0-100% linear dimmer
- Pan/tilt:
- ➤ 16bit fine pan/tilt control
- > Smooth and accurate locating
- > Pan: 540 °Tilt:210 °
- Motor rotation in forward and reverse can be setting up
- Each LED can be controlled individually, rich color
- > Smooth and accurate positioning
- > Tilt:540 Pan270 Potation
- > Tilt, Pan high-speed infinite rotation, speed can be adjusted
- ➤ The scanning position can be memory it will be automatically reset without expected movement after rotation.
- 0-20Hz Strobe, pulse strobe, Asynchronous stroboscopic effect.
- Super mixed color and rainbow effect.
- All the color can be for the total dimmer.
- 7 programmable program is invoked by controller.
- Fan cooling(fan will be change the speed with the temperature variation.

Temperature detecting system (If the temperature detection error, the light doesn't work).

#### 3. Product Introduction

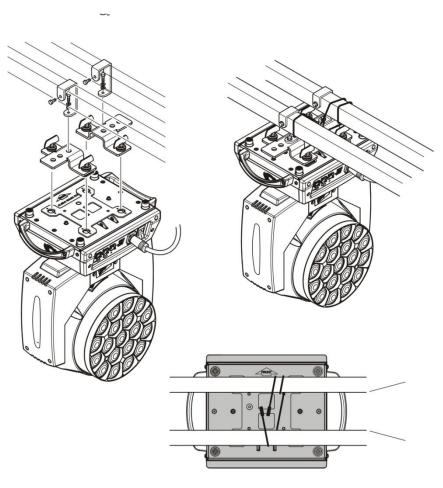


- (1) Lens
- 2 Head
- 3 Arm
- (4) Botton
- (5) Dmx signal LED
- 6 Artnet signal LED
- 7 LCD Display
- (8) Menu-button
- 9 Down-button
- 10 Enter-button
- (1) UP-button
- 12 Lens plate
- 13 Power in
- 14) Fuse
- (15) Power switch
- (6) DMX in
- (7) DMX out
- 18 Rj45 in
- 19 Rj45 out

#### 4. Installation

#### **Installation Requirements**

- This equipment can be used in many places, it can hang and put on the ground.
- Choosing a suitable place to put or hang the equipment when installation. Must be use the special screws and hook to make sure the lamp's weight is in the weight range.
- When installing the equipment, ensure no flammable and explosive goods at 0.5 meter distance.
- Please ask the professionals to install the equipment, any improper installation will cause personal injury or material damage.
- To prevent others entering the working area below, the installation or maintenance of equipment with suitable and stable platform.
- The equipment must be placed in ventilated place, at least 50 cm from the ground, please ensure that the vent without clogging.



#### **Power supply connection**

The equipment can be used in the wide voltage input. Please make sure the voltage is the scale of rated voltage when connecting the power. The equipment can adapt to 100V to 240 V AC voltage and 50-60 Hz.

- The front lens may be infinite rotation in forward and reverse
- 0-20HZ strobe

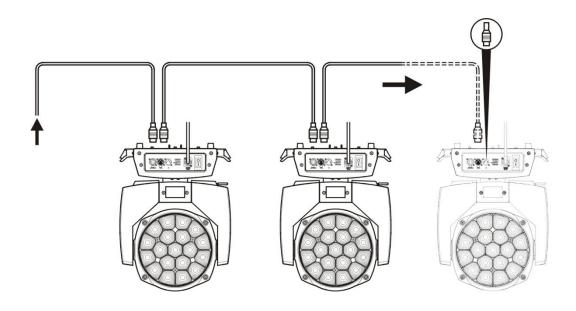
 $\bullet$  Zoom range : 4 °-60 °

S	Connection	Pin
Brown	AC Live	1
Blue	AC Neutral	2
Green/Yellow	AC Ground	3

#### **DMX Signal Connection**

- 1. Use DMX512 controller, use the DMX signal ( male ) to plug into the first lamp (female ) 3 pin.
- 2. Put out of the equipment of the first signal wire(head), connected to the equipment of the next 3 pin plug(female), so on. See below pictures.



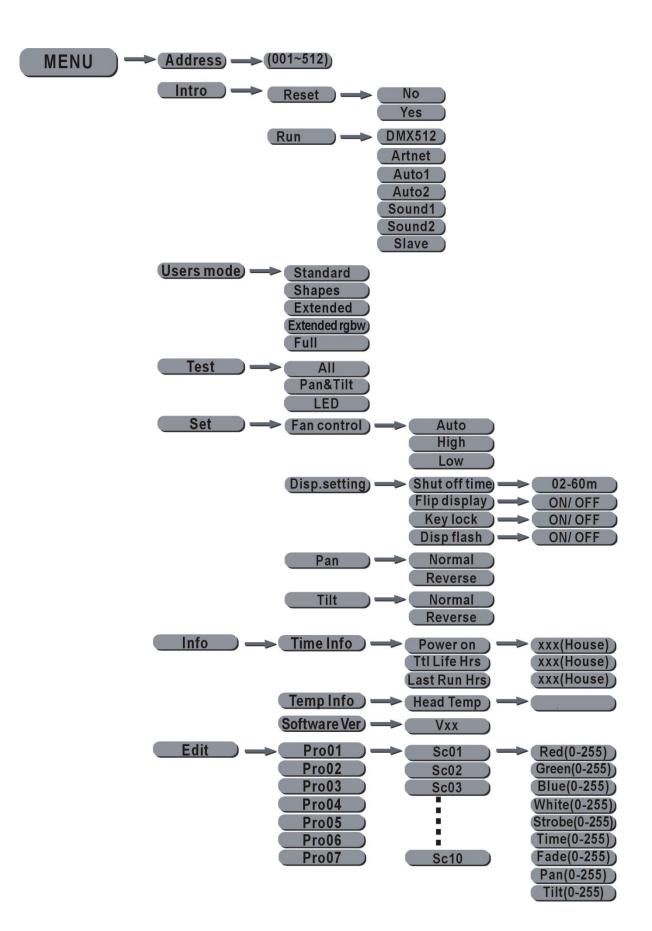


## **5. Operating Instruction**

#### **Control board function**

Button	Function
MENU	Choose Menu or function exit
ENTER	Current show menu or enter into the current selected function
UP	Increase the value
DOWN	Decrease the value

#### Menu Map

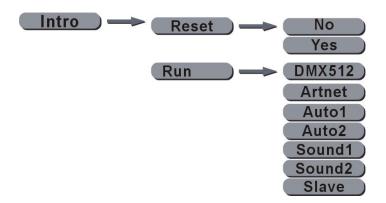


#### **Menu Instruction:**



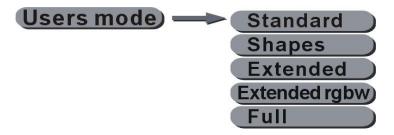
#### [DMX address setting]

- Press MENU when it shows [Address]then press ENTER.
- Change the DMX address by UP or DOWN.



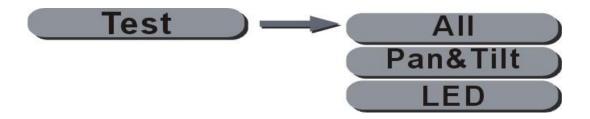
#### [Function selection]

- Press MENU until it shows [Intro, press] ENTER
- Press UP or DOWN to choose [Reset], [Run].
- When choosing Reset, press ENTER, and press UP or DOWN to choose [YES] or [NO]. When choosing [YES], press ENTER, the equipment reset, restore factory sett
- When choosing Run, press ENTER, press UP or DOWN to choose [DMX512], [Artnet], [Auto1], [Auto2], [Sound1], [Sound2], [Slave]. When choosing [DMX512], the DMX controller sending the signal(3 pin or 5 pin signal is valid),the corresponding display board DMX 512LED flashing. When selecting [Artnet], use Artnet function,RJ45 interface valid, it received RJ45 signal, the corresponding display board Artnet LED flashing.
- When choosing [Auto1], [Auto2], [Sound1] or [Sound2], [Auto1], [Auto2], [Sound1], [Sound2], choose Auto or Sound mode, it can be used as the master. When choosing [Slave], it is Slave, receive the Master signal. Choose the Slave need to quit to the main menu can be controlled.



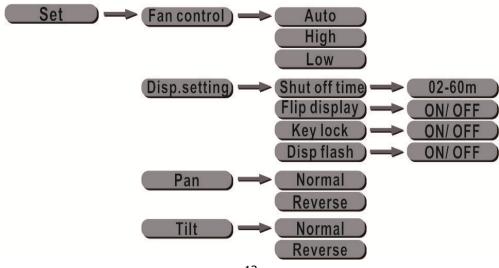
#### [ DMX Mode selection]

- Press MENU until it shows [Users mode], press ENTER.
- Choose CH mode by pressing UP or DOWN:[Stand mode], [Basic mode] or [Extend mode].



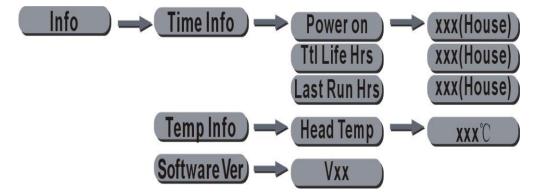
#### [Test Procedure]

- Press MENU, until it shows [Test], and then press ENTER.
- Press UP or DOWN to choose [All], [Pan& Tilt] and [LED]. When selecting [All], it is testing the motor and LED, When selecting [Pan& Tilt] to test the motor, choose [LED] it is only LED operated.



#### [Adaptive function setting]

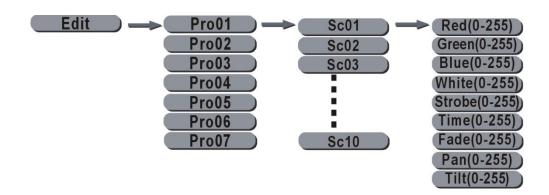
- Press MENU, until it shows[Set], and then press ENTER.
- Press UP or DOWN to choose [Fan control], [Disp. setting], [Pan], [Tilt].
- When selecting [Fan control], press ENTER, press UP or DOWN to choose the 3 kinds of Fan control.[Auto]mode will according the lamp's head to auto control the fan's speed. [High]mode is the fan's high speed operation,[Low] mode is fan's low speed operation.
- When selecting [Disp. setting], press ENTER, press UP or DOWN to choose [Shut off time], [Flip display], [Key lock] or [Disp flash], If selecting [Shut off time], press ENTER, operate UP or DOWN, it can be set LCD backlight close from 2-60 mins. If selecting [Flip display], press ENTER, operate UP or DOWN, press [ON/OFF] to choose [ON], the screens can rotate 180°. When selecting [Key lock], press ENTER, operate UP or DOWN, press [ON/OFF] to choose [ON], when the backlight closed, the button key is locked, the operation is invalid at this time. It must be entered Up, Down, Up, Down, press ENTER to confirm the unlock. When selecting [Disp flash], press ENTER, operate UP or DOWN, it can be choosed [ON/OFF], choose [ON], the screen's backlight begin to blink when the equipment received the DMX signal, that means it is received the DMX signal. The screen's backlight closed when there is no signal.
- When selecting[Pan] or [Tilt], press ENTER, operate UP or DOWN, Choose[Normal] or [Reverse] to set the forward any reverse operation.



#### [Check equipment information]

- Press MENU, until it shows[Info], press ENTER.
- Operate UP or DOWN to choose [Time Info], [Temp Info], [Software Ver].
  - When selecting [Time Info], press ENTER, operate UP or DOWN to choose [Power on], [Ttl Life hrs] or [Last Run Hrs], If choosing [Power on], press ENTER to enter into the equipment "XXXX" hours. If selecting [Ttl Life hrs], press ENTER to enter into the equipment total operation time "XXXX" hours, If selecting [Last Run Hrs], press ENTER to show the LED's last operation "XXXX" hours.

- When selecting[Temp Info], press ENTER to show[Head Temp], and then press ENTER, it will show the head temperature "XXX°C".
- When selecting[Software Ver], press ENTER, it will show the equipment' software version.



#### [Adaptive Program]

This function can edit 7 program, each program can edit 10 step

- Press MENU, until it shows [Edit], and then press ENTER.
- Operate UP or DOWN to choose the needed edit program[Pro01]-[Pro07], when selecting one needed edit program, press ENTER, choose each edit step[Sc01]-[Sc10], enter each step can choose [Red 0-255], [Green 0-255], [Blue 0-255], [White 0-255], [Strobe 0-255], [Time 0-255], [Pan 0-255], [Tilt 0-255].

Remarks: Every step in the editing program[ Time 0-255]can not be 0.

#### 6. DMX Channel Table

#### **STANDARD**

CHANNEL	CHANNEL MODE
1	Red
2	Red fine
3	Green
4	Green fine
5	Blue

6	Blue fine
7	White
8	White fine
9	Linear CTO
10	Macro color
11	Strobe
12	Dimmer
13	Dimmer Fine
14	PanPan
15	PanPan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation

#### **SHAPES**

CHANNEL	CHANNEL MODE
1	Red
2	Red fine
3	Green
4	Green fine
5	Blue
6	Blue fine
7	White
8	White fine
9	Linear CTO

10	Macro color
11	Strobe
12	Dimmer
13	Dimmer Fine
14	PanPan
15	PanPan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation
22	Shape Selection
23	Shape Speed
24	Shape Fade
25	Shape R
26	Shape G
27	Shape B
28	Shape W
29	Shape Dimmer
30	Background Dimmer
31	Shape Transition
32	Shape Offset
33	Foreground Strobe (reserved)
34	Background Strobe (reserved)
35	Background Select (reserved)

#### **EXTENDED**

CHAN-NEL	CHANNEL MODE
1	Red

2	Red fine
3	Green
4	Green fine
5	Blue
6	Blue fine
7	White
8	White fine
9	Linear CTO
10	Macro color
11	Strobe
12	Dimmer
13	Dimmer Fine
14	PanPan
15	PanPan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation
22	Red LED 1
23	Green LED 1
24	Blue LED 1
	Red LED
	Green LED
	Blue LED
76	Red LED 19
77	Green LED 19
78	Blue LED 19
	•

#### EXTENDED RGBW

CHANNEL	CHANNEL MODE
1	Red

2	Red fine
3	Green
4	Green fine
5	Blue
6	Blue fine
7	White
8	White fine
9	Linear CTO
10	Macro color
11	Strobe
12	Dimmer
13	Dimmer Fine
14	PanPan
15	PanPan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation
22	Red LED 1
23	Green LED 1
24	Blue LED 1
25	White LED 1
	Red LED
	Green LED
••••	Blue LED
	10

	White LED
90	Red LED 18
91	Green LED 18
92	Blue LED 18
93	White LED 18
94	Red LED 19
95	Green LED 19
96	Blue LED 19
97	White LED 19

#### **FULL**

CHAN-NEL	CHANNEL MODE
1	Red
2	Red fine
3	Green
4	Green fine
5	Blue
6	Blue fine
7	White
8	White fine
9	Linear CTO
10	Macro color
11	Strobe

12	Dimmer
13	Dimmer Fine
14	PanPan
15	PanPan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation
22	Shape Selection
23	Shape Speed
24	Shape Fade
25	Shape R
26	Shape G
27	Shape B
28	Shape W
29	Shape Dimmer
30	Background Dimmer
31	Shape Transition
32	Shape Offset
33	Foreground Strobe (reserved)
34	Background Strobe ( reserved )
35	Background Select ( reserved )
36	Red LED 1
37	Green LED 1
38	Blue LED 1

	Red LED
	Green LED
	Blue LED
90	Red LED 19
91	Green LED 19
92	Blue LED 19

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.



BIT	EFFECT
255	LED ON
0	LED OFF

• RED FINE

GREEN FINE

BLUE FINE

BIT	EFFECT
255	UP
	22
0	LOE

#### WHITE FINE

#### • LINEAR CTO

BIT	EFFECT
255	2500K
••••	••••
224	3200K
••••	••••
188	4000K
••••	••••
144	5000K
••••	••••
117	6000K
••••	••••
99	7000K
••••	••••
54	8000K
	UNUSED RANGE
10	
0-9	

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

#### • MACRO COLOR

BIT	LEE	COLOR	BIT	VALU	E	
	REFERENCE		R	G	В	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	255	58	0	0
142-144	132	Amber	0	255	143	0
138-141	128	Medium Blue	255	53	36	0
136-137	126	Bright Pink	227	41	56	0
134-135	124	Mauve	84	255	13	0
131-133	121	Dark Green	206	255	0	0
129-130	119	Leaf Green	0	186	255	0
128	118	Dark Blue	74	255	82	0
127	117	Light Blue	206	255	56	0
126	116	Steel Blue	206	255	56	0
125	115	Med Blue Green	51	255	51	0

123-124	113	Peacock Blue	255	20	15	0
121-122	111	Magenta	255	109	33	0
120	110	Dark Pink	217	130	28	0
119	109	Middle Rose	255	138	31	0
118	108	Light Salmon	255	148	23	0
117	107	English Rose	255	141	31	0
115-116	105	Light Rose	255	122	0	0
114	104	Orange	255	166	0	0
113	103	Deep Amber	230	160	0	69
112	102	Straw	237	163	0	0
110-111	100	Light Amber	245	202	0	0
100-109	90	Spring Yellow	41	219	0	0
89-99	79	Dark yellow green	0	194	130	0
78-88	68	Just Blue	0	255	135	0
68-77	58	Sky Blue	243	117	133	199
62-67	52	Lavender	243	117	39	197
49-61	39	Light Lavender	255	107	0	130
46-48	36	Pink Carnation	255	87	0	107
45	35	Medium Pink	255	112	0	141
35-44	25	Light Pink	255	83	2	0
		Sunrise Red				

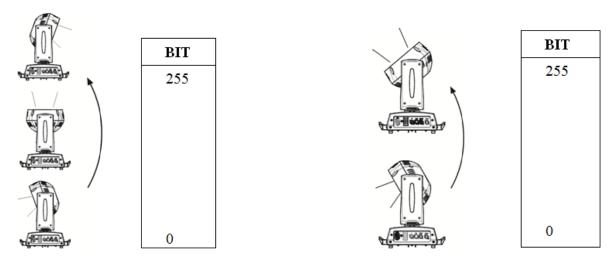
32-34	22	Dark Amber	255	65	0	0
31	21	Gold Amber	255	100	0	0
30	20	Medium Amber	255	135	0	0
29	19	Fire	255	56	0	0
27-28	17	Surprise Peach	198	114	9	0
23-26	13	Straw Tint	152	115	9	0
20-22	10	Medium Yellow	156	126	0	0
19	-	Black	0	0	0	0
18	-	White 5000 K	255	137	0	193
17	-	White 3700 K	255	201	25	255
16	-	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	-	-	-	ı

#### • STOP STROBE - FOREGROUND STROBE - BACKGROUND STROBE



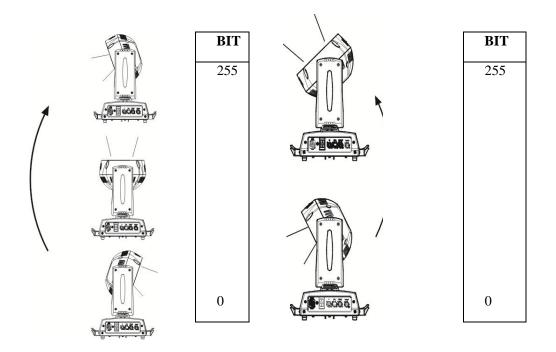
BIT	EFFECT
252-252	OPEN
239-251	RANDOM FAST STROBE
226-238	RANDOM MEDIUM STROBE
213-225	RANDOM SLOW STROBE
208-212	OPEN
207	FAST PULSATION (25 flash/sec)
108	SLOW PULSATION (0,5 flash/sec)
104-107	OPEN
103	FAST STROBE (25 flash/sec)
4	SLOW STROBE (1 flash/sec)
0-3	CLOSED
0-3	CLOSED

#### -TILT



Operation with option Invert Pan

(Tilt conventionally represented at 35 bit and option Invert Tilt



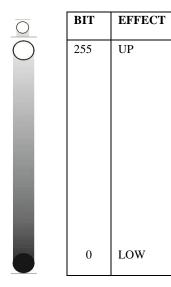
### Operation with option Invert Pan 《》 GOff

(Tilt conventionally represented at 35 bit and option Invert Tilt **⟨⟨⟩** GOff)

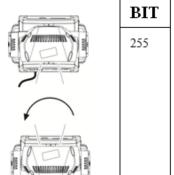
#### • DIMMER

#### • DIMMER FIN

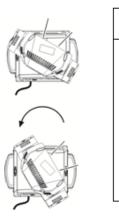
$\bigcirc$	BIT	EFFECT
	255	
	255	FULL
		LIGHT
_		
	0	
	l ~	



• PAN



• PAN FINE



BIT

255

#### Operation with option Invert Pan 《》 GOff

(Tilt conventionally represented at 35 bit and option Invert Tilt 《》 GOff)



Operation with option Invert Pan 《》 GOn

(Tilt conventionally represented at 35 bit and option Invert Til  $\langle\!\langle \rangle\!\rangle$  tGOff)

#### •FUNCTION

BIT	EFFECT
103 – 255	Reserved
98 – 102	Halogen Lamp Simulation, type 5 (2500 W) Linear CTO @ 0 bi
93 – 97	
88 – 92	tHalogen Lamp Simulation, type 4 (2000 W) Linear CTO @ 0 bit
83 – 87	Halogen Lamp Simulation, type 3 (1200 W) Linear
78 – 82	CTO @ 0 bit
73 – 77	Halogen Lamp Simulation, type 2 (1000 W) Linear CTO @ 0 bi
68 – 72	Halogen Lamp Simulation, type 1 (750W) Linear
63 – 67	CTO @ 0 bit
58 – 62	Halogen Lamp Simulation OFF (Default) RGBW Gamma curve 3 – gamma = 2.0 RGBW = 2.0RGBW
	RGBW Gamma curve 2 – gamma = 1.5 RGBW

52 – 57	=2.0RGBW
48 – 52	RGBW Gamma curve 1 – gamma = 1.0 RGBW
43 – 47	=2.0RGBW
38 – 42	Dimmer Curve 4
	Dimmer Curve 3
24 – 37	Dimmer Curve 2
12 – 24	Dimmer Curve 1 Pan Tilt Normal xy
0 – 11	
	Pan Tilt Fast (Default) XY
	Function off – rearmed

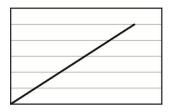
The functions are active passing through the "unused range" and staying 5 seconds in necessary level.

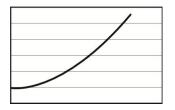
Last selected function still active. Enable setting a new function.

**17** 

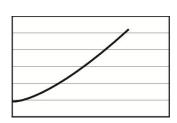
DIMMER CURVE 1 - GAMMA 1 LINEAR

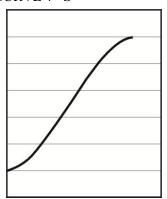
DIMMER CURVE 3 - GAMMA 2,





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
127	PAN / TILT RESET
	Pan / Tilt reset is activated passing through the unused range and staying 5 seconds in
	Pan / Tilt reset levels
•	
•	
77	PAN / TILT RESET
76	
	ZOOM RESET
	Effects reset is activated passing through the unused range and staying 5 seconds in
	Effects reset levels.
26 25	ZOOM RESET
0	UNUSED RANGE

## -ZOOM



BIT	EFFECT
255	WIDE BEAM
	•
	•
	•
	•
	•
	•
0	NARROW
	BEAM

## •ZOOM ROTATION



BIT	EFFECT
255	FAST ROTATION
	SLOW ROTATIONPAN / TILT RESET
193	STOP
191-192	SLOW ROTATION
190	
128	FAST ROTATION
127	PAST ROTATION
:	LINEAR ROTATION
.	
i	

#### •ZOOM ROTATION(available on zoom

#### channel from 0 bit to 42 bit)

# | BIT | EFFECT | 193-255 | CCW Rotation, speed from 3 RPH to 10 | RPM CCW | CW Rotation, speed from 10 RPM to 3 RPH | 128-190 | Indexed zone. Lens angle = 60.00 | Indexed zone. Lens angle = 59.52 | 127. | 126 | ..... | 3 | Indexed zone. Lens angle = 1.42 | Indexed zone. Lens angle = 0.94 | Indexed zone. Lens angle = 0.47 | Indexed zone. Lens angle = 0.47 | Indexed zone. Lens angle = 0

#### •ZOOM ROTATION(available)

BIT	EFFECT
128-255	Lens offset angle: 0.00 degree
127. 126	Lens offset angle: +4.00 degree 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 SELECTION-SHAPE SPED-SHAPE OFFSET

BI T	SHAPE- SELECTION	On k10	Description	PANDOM COLORS 1	SHAP E SPEED	SHAPE OFFSET
0-7	Macro OFF	Yes		N.a	N.a	N.a
8	Ring 1	Yes				
9	Ring 2	Yes	Static effects. The ring or			
10	Ring 3	Yes	rings used by the macro are			
11	Ring 4	Yes		N.a	N.a	N.a
12	Ring 1+2	Yes	turned-on with			
13	Ring 1+3	Yes	the foreground color.			
14	Ring 1+4	Yes				
15	Ring Opening (Closing)	Yes		Yes	0-63 = Radius size, static. 64-158 = max to min	
	(Closing)				speed, Closing effect	
16	Ring Opening (Closing) Filled	Yes		Yes	159-160 =STOP  161-255 = min to max  speed, Opening effect	0-9 → continuous  10-255→ random distribution of flash from
					0-63 = Radius size,	2 to 20
17	Ring Opening (Close/open)	Yes		Yes	static.  64-158 = max to min	fixtures
18	Ring Opening (Close/open) Filled	Yes		Yes	speed, Closing effect 159-160 = STOP.	

		,	т	-		
					$161-255 = \min to$	
					max	
					speed, Opening	
					effect	
					0-63 = STOP	0-255 →
19	Random pixels	Yes	Ye	es	$64-158 = \max to$	select random
	distributed on many				min	distribution
	fixtures					from 2 up to
					speed, Instant-on	20 fixtures
					+fadeout.	
20	Random pixels with	Yes	Ye	es	159-160 = STOP.	
	variable density and				$161-255 = \min to$	0-255
	speed				max	→select
					max	pixel density
					speed, Fade In +	
					Fade	
					Out.	
					Todo on anon	
					Fade or snap depending on fade	
					channel	
					0-63 = Angle  0-	
					360°, static.	0-255 →
					$64-158 = \max to$	angle offset
21	Rainbow 1 Variable	Yes	N.	.a	min	from 0 to
	speed				1	360°
					speed, c. cw rotation	
					159-160 = STOP	
					$161-255 = \min to$	
					max	
					speed, cw	
					rotation,cw	
					0-63 = STOP	
					64 159	
					64-158 = c.cw rotation c. cw	
22	Rainbow 2 Fixed	Yes	N.	.a	iolation c. cw	
	speed with variable				159-160 = STOP	
	color offset				161 255 – aw	
					161-255 = cw	

				rotation cw  The value64-158 or 161-255 change the rainbow angle offset (the orange starting angle).	N.a
23	Fan (3 ams)	Yes		0-63 = angle offset,	
24	Bar (2 ams)	Yes		0-360°	
25	Half moon	Yes	N a	N.a 64-158 = max to min	0-255 $\rightarrow$ angle offset from 0 to 360 °
26	Triangle	Yes	11.4		
27	Two rotating bars of different colors	Yes		speed, c.cw rotation, c,cw	
28	Two rotating arcs of different colors	Yes		61-255 = min to	
29	Two rotating arcs of different colors and direction	Yes		speed, cw rotation,	
30- 255	Reserved	Yes	N.a	N.a	

#### **Macro Off**

DMX channel value: from 0 to 7

No shape effects activated Turns off any previously selected shape

#### **Static Rings**

DMX channel value: from 8 to 14

The ring or ring used by the macro are turned on with the foreground color (Shape Red+Shape Green+Shape blue+Shape White)

Available combinations: Ring 1 On, Ring 2 On, Ring 3 On (Aleda K10 only), Ring 4 On Ring 1+2 On, Ring 1+3 On (Aleda K10 only)

**Dynamic Rings** 

DMX channel DMX

#### **Dynamic Ring**

DMX channel value: From 15 to 18

The ring used by the macro are turned on sequentially, simulating an opening, closing or both.

The Shape Speed channel increases the speed from 126 (min speed ) to 0 (max speed) for the

Closing and closing/opening effects and from 129 (min speed) to 255 (max speed) for the opening and opening/closing effects, With DMX value=127 or 128the macro stays still

The Shape Offset channel defines the macro effect diction over a number of fixtures (affects also the behavior of a single fixture)

Dmx values from 0 to 9:continous distribution.

Dmx values from 10 to 255 random distribution of flash from 2 to 20 fixtures.

If foreground colors are all set to 0, the Random-Colors mode is activated

#### Rings with variable radius

DMX channel value:19-20.

The Shape Speed channel defines the ring radius: 0=min, 255=,ax

Random pixels

#### Random pixels

DMX channel value: 21-22.

Leds are turned and off randomly

The Shape Speed channel increases the speed and defines the fade effect for the leds: from 126(min speed) to 0(max speed) with a Instant-on/fade-out led effect and from 129 (min speed) to 255 (max speed)with a fade-in +fade-out led effect, At a DMX value of 127 and 128 the macro stays still.

For macro 21 the Shape Offset channel defines leds random distribution from 0 (2 fixtures) to 255 over a set of fixtures (20 fixtures)

For macro 22 the Shape Offset channel defines define pixels density from 0 (min density) to 255 (max density)

If foreground colors are all set to 0 the Random-Colors mode is activated.

The Shape Smoothing channel adjusts the fading effect applied to the macro movement

The color used by the macro changes at every restart.

#### **Rainbows**

DMX channel value:23-24

Lt simulates a rainbow effect.

The Shape Speed channel increases the speed and defines the rotation: from 126 (min speed) to 0 (max speed) counter clock wise rotation and from 129 (min speed) to 255 (max speed) clock wise rotation. With DMX value 127 or 128 the macro stays still.

For the macro 24 (Rainbow with fixed) the Shape Speed channel also defines angle offset (the orange sector starting angle)

#### **Rotating shapes**

DMX channel value: from 25 to 31

Shapes available: Fan(3 arms), Bar (2 arms), Half Moon, Triangle, Two rotating bars of different colors, Two rotating arcs of different colors, Two rotating arcs of different colors and direction

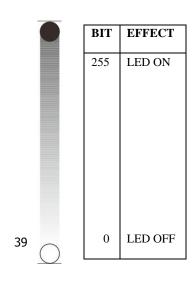
The Shape Speed channel increases the speed and defines the rotation: from 126 (min speed) to 0 (max speed) counter clock wise rotation and from 129 (min speed) to 255 (max speed) clock wise rotation With DMX value 127 or 128 the macro stays still. The Shape Offset channel defines the angle offset from 0 (0 degree) to 255 (360 degree).

#### • SHAPE FADE

BIT	EFFECT
246-255	Smooth, fading curve with
245	automatic gamma*
243	Smooth, fading curve gamma 2
244	Smooth, fading curve gamma 1,986
•	Smooth, fading curve gamma 1,993
•	
•	Smooth, fading curve
18	gamma 0,513
17	Smooth, fading curve gamma 0,506
16	Smooth, fading curve
0-15	gamma 0,5 Snap

#### •SHAPE RGBW

SHAPE DIMMER BACKGROUND DIMMER



#### • SHAPE TRANSITION

# LED reference number for pixel mapping

TILT: channel 16 @ 200 bit

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

