K25 37x40W RGBW 4in1 Led Moving Head Light

Operation Manual

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Greetings:

This manual contains important information on how to use and install safely, please read all operating instructions and the following safety information first. When the device leaves the factory, it is fully functional and fully packaged. The operator should strictly abide by the warnings and operating instructions stated in the manual. Any faults and problems caused by misuse or neglect of the operation manual are not within the scope of responsibility and warranty of the company.

Security Information：

WARNING: Be Safe

WARNING: Beware of Electric Shock
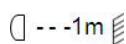
WARNING: Hot Surface, Do Not Touch

WARNING: Be Safe

Indoor Use Only

Suitable For Direct Mounting On Non-combustible Surfaces

The Shortest Distance From The Object To Be Illuminated

Rupture Shield

ta……℃ **Rated Maximum Ambient Temperature**

tc……℃ **Maximum Surface Temperature At Work**

1. Safety Warning Information ⚠

➢ This product is for professional use, not for other use.

➢ After receiving the lamp, please check whether the package is complete, and unpack to check whether the equipment is damaged due to transportation. In case of damage caused by transportation, please do not use this lamp, and contact the local technician or manufacturer as soon as possible.

⌂ The protection level of this product is IP20, suitable for indoor use.

➢ Lamps should be kept clean, avoid prolonged use in overheated or dusty environments, and prevent lamps from coming into contact with chemical liquids.

➢ Pay attention when using the product: avoid serious or fatal injuries caused by fire, heat, electric shock, and ultraviolet radiation. Read the instruction manual before power on or installation. Follow the operation safety precautions and pay attention to the instructions and warning signs on the equipment.

➢ Do not install the lamp directly on combustible objects.

➢ The minimum distance between all outer surfaces of lamps and combustibles is 0.5.
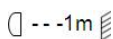
⌷ ‒ ‒ -1m ▤ Please keep the distance between the lamp and the object to be illuminated at more than 1 meter.

➢ **t**a=45℃ When the lamp is working normally, the ambient temperature should not exceed 45°C. When the ambient temperature exceeds 45°C, please stop using the device immediately.

➢ **tc=70**℃ The maximum surface temperature of the lamp is 70°C when it reaches a stable state.

➢ When replacing any components and accessories in the equipment, make sure the power supply is disconnected to prevent injury caused by electric shock.

⊗-⊙ The protective shell, lens and display screen or light source on the device should be replaced if there is visible damage, that is, damaged to the point of failure, such as cracks and deep marks.

When hanging lamps, it must be verified that the hanging equipment can bear more than 10 times the weight of the lamps. Verify lamp cover after installation

And the lamp hook is firm without damage, and the safety safety rope is used as the auxiliary safety of the lamp, and it is fixed on the truss.

➢ Only professionals can carry out the installation, operation and maintenance of lamps and lanterns, and strictly abide by the procedures stated in the operation manual.

⚠ The eyes cannot face up to the luminous body for a long time.

➢ Before installation, please confirm that the power supply voltage used matches the voltage marked on the lamp. Each lamp should be properly grounded, and electrical installation should be carried out in accordance with relevant standards. Do not connect the lamp power supply to any other dimming device.

➢ Please do not place any filters or other items in the light outlet; do not replace non-original parts.

➢ If the external flexible cable or cord of this device is damaged, the cord shall be replaced by the manufacturer, its agent or a similarly qualified person in order to avoid

a hazard.

2. Machine Package List

Name	QTY	Unit	Remark
Manual	1	pcs	
Clamp	2	set	
Safe Rope	1	pcs	
Power Cable	1	pcs	
Signal Cable	1	pcs	

3. Packing And Transportation

3.1 Transport Lock

In order to transport safety lamps, there are protective locks on the horizontal/vertical (pan/tilt) rotation axis;

There are 4 locking points on the horizontal axis, and the locking position is at the center point of the four directions of the horizontal axis travel of the lamp. The vertical axis has no locking points.

3.2 Unpacking

1. Note: After receiving the lamp, please unpack and check whether there is any damage caused by transportation. If there is any damage caused by transportation, please do not use this lamp and contact the local technician or manufacturer as soon as possible
2. 1. Air box: open the top cover of the air box, and unpack the plastic bag; please grasp the handle of the device, and gently lift the lamp vertically out of the air box;
3. Carton: Open the carton, carefully take out the whole set of foam together; then remove 1 foam vertically, take out the accessories, and then lift out the lamps packed in plastic bags.
4. 2. Check whether the horizontal axis protection lock and the vertical axis protection lock are open before the lamp is powered on;

3.3 Equipment Packaging

1. Before packaging the lamps, disconnect the power supply to cool the lamps completely, at least 5 minutes;

2. Lock the horizontal axis protection lock and the vertical axis protection lock;

3. Flight case: put the plastic bag on it, hold the handle and turn the lamp upside down, and gently put it vertically into the flight case; after installing the lamp, put the lamp accessories into the flight case accessories box, and cover the flight case Cover and then lock the buckle; the flight case can only be stacked in two layers, and it is forbidden to put it upside down.

4. Carton: Set up the plastic bag, put the lamp into one foam, then put the accessories, and then cover the other foam,

Finally put the whole foam into the carton.

4. Description of Installation Requirements

4.1 Light Clamp Installation

The device can be installed on the stage or on the truss in any direction, and the quick lock system can be quickly and easily locked on the truss. warn!
The lamp must use 2 light hooks to install and fix the equipment, and fasten the light hook with 1/4 rotation, and add 1 safety rope to connect to the base hole, and be careful not to connect it to the carrying handle.

4.2 Device Installation

1. Before installation, it must be verified that the light hook and safety rope are not damaged.
2. The lamp hook is installed on the base of the lamp body. Insert the lamp hook evenly into the mounting hole of the base, rotate clockwise 1/4 turn to lock it, and install the second lamp hook in the same way. (The shape of the lamp hook is subject to the actual object.)
3. Check whether the horizontal and vertical locks have been opened before power on.

5. Power Cable & Signal Cable Connection

5.1 Power Cable Connection

connection method：

L(Fire wire) Brown wire;

(⊕ (Ground wire) yellow/green two-color wire;

N (zero line) blue line;

Note: When connecting the power supply, the ground wire (yellow/green double-colored wire) must be grounded safely and comply with all relevant standards for electrical installation.

5.2 Signal Cable Connection

The lamps have standard DMX input and output 3-core signal lines. Use a shielded twisted pair signal cable to connect the DMX output port of the controller to the DMX input port of the first device, and connect the DMX output port of the first device to the DMX port of the second device Input port, and so on, until all lamps are connected

After that, install a terminal plug on the last 3-core socket connected to the lamp output of each link. (Weld a 4/1W, 120Ω resistor between pins 2 and 3 of the 3-pin XLR plug).
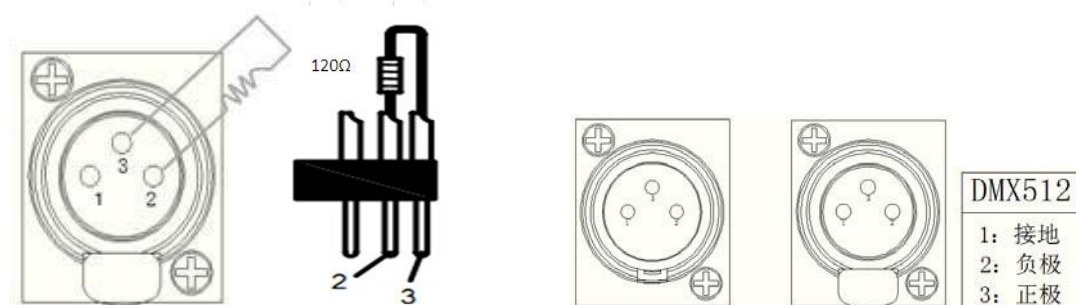
The connection method is as follows：
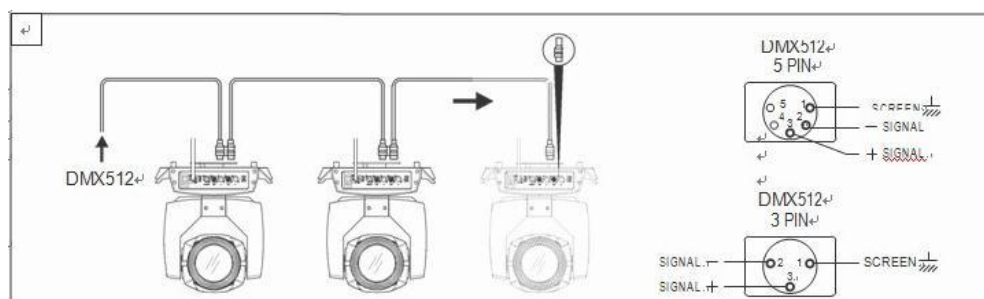
5.3 Device Status Inspection

After the power cable and signal cable are connected, the lamp is powered on, the lamp beads are normally bright, and the stand-alone controllable, the lamp can be put into use

6. Main Parameters

Rated voltage: AC110-240V, 50/60Hz;

Rated power: 1250W;

Light source: 37*40W RGBW four-in-one LED;

Light source lifetime: 50000 hours;

Zoom: 4°-60° electronic zoom range;

EFFECTS:

3 Effect Modes: Digital Wall Wash, Beam, FX (kaleidoscope effect);

Two-way rotating front lens;

Beam softening control;

Pixel-patterned macros for enhanced control;

0-100% linear electronic dimming;

Speed adjustable stop/strobe effect, instant light off;

Dedicated color temperature channel, white CT simulation 2500-8000K, RGBW automatically adjusts to light CT simulation;

Simulated tungsten light bulb;

Slow strobe: 1 flash/s; High speed strobe: 25 flashes/s

CONTROL:

Control mode: DMX512 and RDM control, can support Ethernet interface;

Control channels: 22/36/111/148 channels;

Display: color 2.8-inch display screen, Chinese and English can be switched;

Horizontal/vertical resolution: 16 bits, dimming resolution: 16 bits

Motion Control: Vector;

DMX signal connection: 3 and 5 pin XLR input and output;

STRUCTURE:

Die-cast aluminum + plastic cover;

Movement by three-phase stepper motors. After an accidental misoperation, the horizontal and vertical can be automatically retrieved and reset;

Horizontal: 540° Vertical: 270°

ELECTRONIC:

Optional long-life battery, automatic charging;

Macros for preset colors and graphic effects;

Reset function can be controlled by a central controller;

Menu-driven built-in self-test function;

Each parameter is electronically checked and an alarm is generated for parameter errors;

DMX level monitoring throughout each channel;

Automatic internal data transfer diagnostic error;

Net weight: 26KG.

7. DMX Channel List

BASIC ENGINE

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 colour
11	Strobe
12	Dimmer
13	Dimmer Fine
14	Pan
15	Pan Fine
16	Tilt
17	Tilt Fine
18	Function
19	Reset
20	Zoom
21	Zoom Rotation
22	Frequency (if standard + frequency mode is selected)

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 colour
11	Strobe
12	Dimmer
13	Dimmer Fine
14	Pan
15	Pan 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
34	Background Strobe
35	Background Select
36	Frequency (if shape + frequency mode is selected)

PIXEL ENGINE

Pixel Engine need to be enabled through the FUNCTION channel (bit 103-105).

RGB

CHANNEL	CHANNEL MODE
1	Red LED 1
2	Green LED 1
3	Blue LED 1
...	Red LED ...
...	Green LED ...
...	Blue LED ...
109	Red LED 37
110	Green LED 37
111	Blue LED 37

RGBW

CHANNEL	CHANNEL MODE
1	Red LED 1
2	Green LED 1
3	Blue LED 1
4	White LED 1
...	Red LED ...
...	Green LED ...
...	Blue LED ...
...	White LED ...
145	Red LED 37
146	Green LED 37
147	Blue LED 37
148	White LED 37

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	MAX BRIGHTNESS
0	NO LIGHT
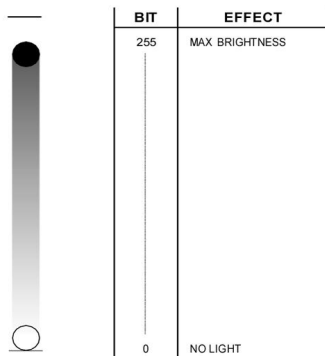
- RED FINE
  GREEN FINE
  BLUE FINE
  WHITE FINE

BIT	EFFECT
255	UP
0	LOW
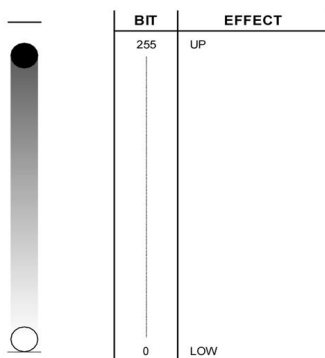
- LINEAR CTO

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	LED ON
239 - 251	RANDOM FAST STROBE
226 - 238	RANDOM MEDIUM STROBE
213 - 225	RANDOM SLOW STROBE
208 - 212	LED ON
207	FAST PULSATION (25 flash/sec)
108	SLOW PULSATION (0,5 flash/sec)
104 - 107	LED ON
103	FAST STROBE (25 flash/sec)
4	SLOW STROBE (1 flash/sec)
0 - 3	NO LIGHT

MACRO

• DIMMER

BIT	EFFECT
255	MAX INTENSITY
0	NO LIGHT

• DIMMER FINE

BIT	EFFECT
255	UP
0	LOW

• TILT

BIT 255 — 0

• TILT FINE

BIT 255 — 0

Operation with option InvertTilt G Off

BIT 255 — 0
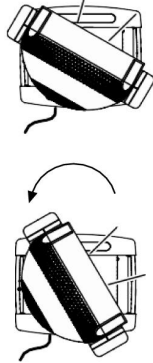
BIT 255 — 0

Operation with option InvertTilt G On

• PAN
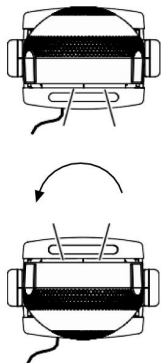
BIT 255 — 0

• PAN FINE
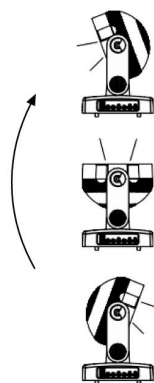
BIT 255 — 0

Operation with option InvertPan G Off
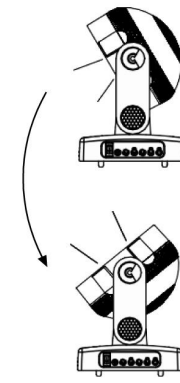
BIT 255 — 0

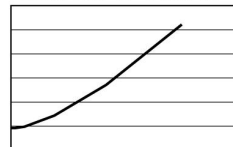BIT 255 — 0

Operation with option InvertPan G On

• FUNCTION

BIT	EFFECT
185 – 186	Theather
183 – 184	Silent
181 – 182	Standard
179 – 180	Emulate K10/K20 ON
177 – 178	Emulate K10/K20 OFF
173	Base frequency=43700Hz
172	Base frequency=31000Hz
171	Base frequency=21400Hz
170	Base frequency=15100Hz
169	Base frequency=9400Hz
168	Base frequency=5600Hz
167	Base frequency=3700Hz
166	Base frequency=2400Hz
165	Base frequency=1500Hz (Default)
164	Base frequency=1000Hz
103 – 105	Pixel map enabled
98 – 102	Halogen Lamp Simulation - Linear CTO @ 0 bit - 2500 W
93 – 97	Halogen Lamp Simulation - Linear CTO @ 0 bit - 2000 W
88 – 92	Halogen Lamp Simulation - Linear CTO @ 0 bit - 1200 W
83 – 87	Halogen Lamp Simulation - Linear CTO @ 0 bit - 1000 W
78 – 82	Halogen Lamp Simulation - Linear CTO @ 0 bit - 750 W
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 (Default)
58 – 62	RGBW Gamma curve 1 – gamma = 1.0
53 – 57	Dimmer Curve 4
48 – 52	Dimmer Curve 3 (Default)
43 – 47	Dimmer Curve 2
38 – 42	Dimmer Curve 1
25 – 37	Pan Tilt Normal
12 – 24	Pan Tilt Fast (Default)
0 – 11	Unused Range

The functions are activated / selected passing through the " unused levels range " and staying in the necessary range for 5 seconds (except for the "Pixel map enabled" which is immediate). The last selected function remains active.
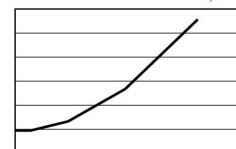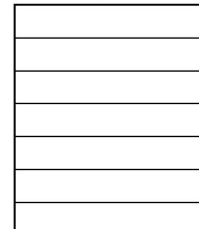
DIMMER CURVE 1 - GAMMA 1 LINEAR

DIMMER CURVE 3 - GAMMA 2,0

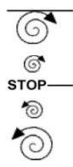DIMMER CURVE 2 - GAMMA 1,5

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	MAX BRIGHTNESS
0	NO LIGHT

• 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	

• ZOOM ROTATION (available on zoom channel from 0 bit to 28 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 0 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 SPEED - SHAPE OFFSET - SHAPE FADE - BACKGROUND SELECT

Shape Selection	Shape Slot	Macro Name	On K15	On K25	Description	Random colors *1	SHAPE SPEED	SHAPE OFFSET	SHAPE FADE	BACKGROUND SELECT (*3)(*4)
0-7		Macro OFF	Yes	Yes		N.a.	N.a.	N.a.	N.a.	N.a.
8	1	Pixel 1	Yes	Yes	Static effects. The ring or rings used by the macro are turned-on with the foreground colour.	N.a.	N.a.	N.a.	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-255 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-255 = wash
9	2	Ring 1	Yes	Yes						
10	3	Ring 2	Yes	Yes						
11	4	Ring 3	No	Yes						
12	5	Pixel 1+Ring 1	Yes	Yes						
13	6	Pixel 1+Ring 2	Yes	Yes						
14	7	Pixel 1+Ring 3	No	Yes						
15	8	Single ring (Ramp -/+)	Yes	Yes		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	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-255 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-255 = wash
16	9	Filled rings (ramp -/+)	Yes	Yes		Yes				
17	10	Open/Close 1	Yes	Yes		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			
18	11	Open/Close 2	Yes	Yes		Yes				
19	12	Random pixels 1	Yes	Yes		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	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-254 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-254 = wash All Fixtures: 255 = Mirror Effect
20	13	Random pixels 2	Yes	Yes		Yes		0-255 → select pixel density		
21	14	Rainbow 1 (Variable speed)	Yes	Yes		N.a.	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°	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-255 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-255 = wash
22	15	Rainbow 2 (Fixed speed with variable color offset)	Yes	Yes		N.a.	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).	N.a.	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-255 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-255 = wash
23	16	Fan	Yes	Yes		N.a.	0-63 = angle offset, 0-360° 64-158 = max to min speed, c.cw rotation 159-160 = STOP 161-255 = min to max speed, cw rotationt	0-255 → angle offset from 0 to 360°	0-15 = Snap effect 16-255 = Fade effect and gamma selection	For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-255 = wash For K25: 0-7 = wash 8-23 = Bkgnd rings selection 24-255 = wash For all fixtures: - Macro 25, 26 255 = Mirror Effect with bkgnd color - Macro 27, 28, 29 255 = Show Alternative Color
24	17	Bar 1	Yes	Yes						
25	18	Half moon	Yes	Yes						
26	19	Triangle	Yes	Yes						
27	20	Segment 1	Yes	Yes						
28	21	Arc 1	Yes	Yes						
29	22	Arc 2	Yes	Yes						

*1: Random colors activation with foreground R,G,B,W = 0

*2: K15: macro 65 = Random on ring 1+3; macro 66 = Random on ring 2+3

*3: See K15 Background Rings Selection table

*4: See K25 Background Rings Selection table

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Shape Selection	Shape Slot	Macro Name	On K15	On K25	Description	Random colors *1	SHAPE SPEED	SHAPE OFFSET	SHAPE FADE	BACKGROUND SELECT (*3)(*4)
30	23	Bar 2 (Variable size)	Yes	Yes		N.a.		0-255 → select shape width	Linear fade	
31	24	Random explosion	Yes	Yes		Yes		0-255 → select random distribution	Linear fade and wake length	
32	25	Segment 2	Yes	Yes				0-255 → select shape width		
33	26	x Bump	No	Yes				0-255 → select macro offset	Linear fade	
34	27	Image	No	Yes						
35	28	Bumping section	Yes	Yes						
36	29	Ramp by 6	Yes	Yes				0-255 → select shape width		
37	30	Ramp by 4	Yes	Yes					Linear fade and wake length	
38	31	Left/Right scrolling bar	Yes	Yes						
39	32	Up/Down scrolling bar	Yes	Yes						
40	33	Bar 3	Yes	Yes				0-255 → select macro offset		
41	34	Vertical arc 1	No	Yes					Linear fade	
42	35	Vertical arc 2	Yes	Yes						
43	36	Horizontal arc 1	No	Yes						
44	37	Horizontal arc 2	Yes	Yes						
45	38	Mirrored pixel	Yes	Yes		N.a.		0-255 → select shape width		For K15: 0-7 = wash 8-15 = Bkgnd rings selection 16-254 = wash 255 = Mirror effect with bkgnd color
46	39	Pixel animation 1	Yes	Yes						
47	40	Pixel animation 2	Yes	Yes					Linear fade and wake length	
48	41	Pixel animation 3	Yes	Yes						For K25: 0-7 = wash 8-23 = Bkgnd rings selection
49	42	Pixel animation 4	Yes	Yes			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.			24-254 = wash 255 = Mirror effect with bkgnd color
50	43	Pixel animation 5	Yes	Yes						
51	44	Semi arc (Ramp /+)	Yes	Yes						
52	45	Bumping arc section	Yes	Yes				0-255 → select macro offset	Linear fade	Note: Mirror effect unavailable for macro 31.
53	46	Pixel animation 6	Yes	Yes						
54	47	Vertical ramp by 2	Yes	Yes				0-255 → select shape width	Linear fade and wake length	Macro 67, 68, 69: the mirror effect is available only for options 1, 3, 9
55	48	Following pixel by 2	Yes	Yes				0-255 → select macro offset		
56	49	Syncopation	Yes	Yes						
57	50	Bumping 1	Yes	Yes					Linear fade	
58	51	Bumping 2	Yes	Yes						
59	52	Bumping 3	Yes	Yes						
60	53	Vertical pixel scrolling	Yes	Yes				0-255 → select macro width	Linear fade and wake length	
61	54	Random vertical section	Yes	Yes				0-255 → select random distribution		
62	55	Random central section	Yes	Yes		Yes				
63	56	Random ring 2	Yes	Yes		Yes			Linear fade	
64	57	Random ring 3	No	Yes		Yes				
65	58	Random ring 1+3	Yes (*2)	Yes		Yes				
66	59	Random ring 2+3	Yes (*2)	Yes		Yes				
67	60	Single pixel ring 1	Yes	Yes				0-255 → select the number of rotating		
68	61	Single pixel ring 2	Yes	Yes					Linear fade and wake length	
69	62	Single pixel ring 3	No	Yes		N.a.				
70	63	Spiral	Yes	Yes				0-255 → select macro width	Linear fade and wake length	
71-255	64					N.a.	N.a.	N.a.	N.a.	

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• 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	MAX BRIGHTNESS
0	NO LIGHT

• BACKGROUND SELECT

K15 - Background select

BIT	EFFECT
255	Mirror effect
16-254	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

K25 - Background select

BIT	EFFECT
255	Mirror effect
24-254	No selection
23	Pixel 1 + Ring 2 + Ring 4
22	Pixel 1 + Ring 3 + Ring 4
21	Ring 2 + Ring 4
20	Pixel 1 + Ring 3
19	Ring 2 + Ring 3
18	Pixel 1 + Ring 4
17	Ring 3 + Ring 4
16	Ring 2 + Ring 3 + Ring 4
15	Pixel 1 + Ring 2 + Ring 3 + Ring 4
14	Pixel 1 + Ring 2 + Ring 3
13	Pixel 1 + Ring 2
12	Ring 4
11	Ring 3
10	Ring 2
9	Pixel 1
8	No selection

• FREQUENCY
0-255 Fine adjusting of frequency Base selected from the Function channel

Base Frequency setting	Value at 128 bit	Min value at 0 bit	Max value at 255 bit
1000 Hz	1000 Hz	746 Hz	1254 Hz
1500 Hz (Default)	1500 Hz	1246 Hz	1754 Hz
2400 Hz	2400 Hz	1765 Hz	3035 Hz
3700 Hz	3700 Hz	3065 Hz	4335 Hz
5600 Hz	5600 Hz	4330 Hz	6870 Hz
9400 Hz	9400 Hz	6860 Hz	11940 Hz
15100 Hz	15100 Hz	11925 Hz	18275 Hz
21400 Hz	21400 Hz	18225 Hz	24575 Hz
31000 Hz	31000 Hz	24650 Hz	37350 Hz
43700 Hz	43700 Hz	37350 Hz	50050 Hz

After-Sales Service：

Attention! When the lamps leave the factory, they have passed strict quality inspection, and the packaging is in good condition. Please operate according to the instruction manual. Machine failure caused by human factors is not covered by the warranty.

1. The company provides technical consultation for customers throughout its life.

2. If the product breaks down and needs to be repaired, please show the product warranty card and fill in the relevant content truthfully. At the same time, we also hope that customers will give us feedback on the problems of the product in time, so that we can improve the product as soon as possible. When maintenance is required, please show the product warranty card and fill in the relevant content truthfully. At the same time, we also hope that customers will give us feedback on the problems of the product in time, so that we can improve the product as soon as possible.