

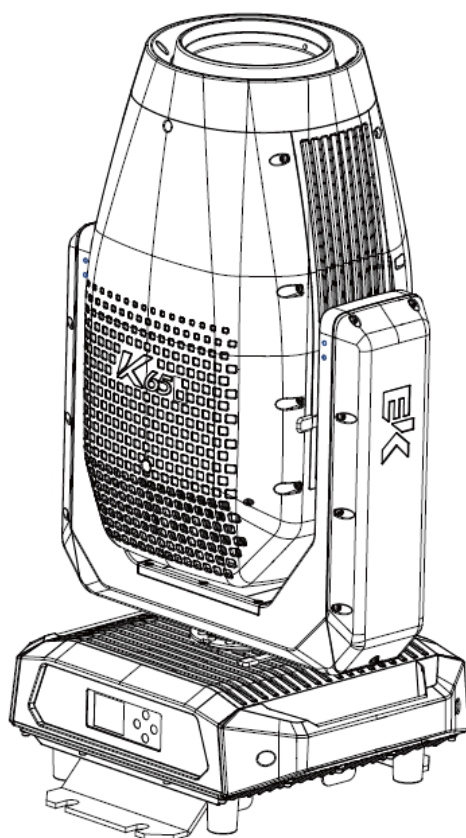
SHOWPRO

EK

K65 IP

LEDMOV600

USER MANUAL



K65 IP

SAFETY

WARNING! Before carrying out any operations with the unit, carefully read this instruction manual and keep it with care for future reference, it contains important information about the installation, use and maintenance of the unit.

General instruction

- The products referred to in this manual conform to the European Community Directives and are therefore marked with CE.
- The unit is supplied with hazardous network voltage (230V~). Leave servicing to skilled personnel only. Never make any modifications on the unit not described in this instruction manual, otherwise you will risk an electric shock.
- Connection must be made to power supply system fitted with efficient earthing (Class I appliance according to standard EN60598-1). It is recommended to protect the supply lines of the units from indirect contact and/or shorting to earth by using appropriately sized residual current devices.
- The connection to the main network of electric distribution must be carried out by a qualified electrical installer. Check that the main frequency and voltage correspond to those for which the unit is designed as given on the electrical data label.
- This unit is not for home use, only professional applications.
- Never use the fixture under the following conditions:
 - in places subject to vibrations or bumps
 - in places with a temperature of over 40°C
- Make certain that no flammable liquids, water or metal objects enter the fixture.
- Do not dismantle or modify the fixture.
- All work must always be carried out by qualified technical personnel. Contact the nearest sales point for an inspection or contact the manufacturer directly.
- If the unit is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

Warnings and installation precautions

- If this device will be operated in any way different to the one described in this manual, it may suffer damage and the guarantee becomes void. Furthermore, any operation may lead to dangers like short circuit, burns, electric shock, etc.
- Before starting any maintenance work or cleaning the fixture, cut off power from the main supply.
- Always additionally secure the fixture with a safety cable. When carrying out any work, always comply scrupulously with all the regulations (particularly regarding safety) currently in force in the country in which the fixture is being used.
- Install the fixture in a well-ventilated place.
- Keep any flammable materials at a safe distance from the fixture.
- Shields, lenses, or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- The lamp (LED) shall be changed if it has become damaged or thermally deformed.
- Never look directly at the light beam. Please note that fast changes in lighting, e.g., flashing light, may trigger epileptic seizures in photosensitive persons or persons with epilepsy.
- Do not touch the product's housing when operating because it may be very hot.

INTRODUCTION

Features

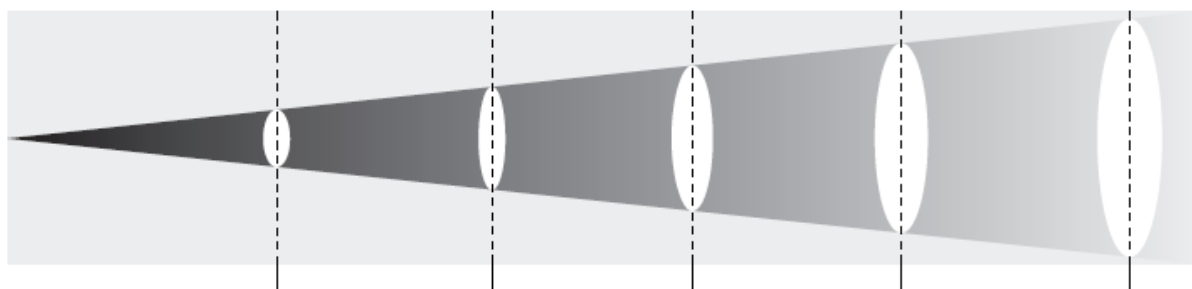
- 1000W 6700K LED engine
- IP65-rated tour-grade construction
- Compact body, light weight, and quiet operation
- Super high output of 36k lumen
- Wide zoom range from 5°~50°
- Linear CMY + colour wheel/split colours
- White colour temperature presets from 3200K~6700K
- Extremely even spot with flawless field consistency
- Flawless 16-bit dimmer with SPWM control
- Smooth 540°/270° pan/tilt movement
- DMX RDM control

Specifications

Light Source	1000W LED engine
Colour Temperature	6700K
Lumen Output	Up to 36000lm
Lux Output	90000lux@5M
CRI	68
TM-30-15rg/rf	95/69
TLCI	45
LED Life	Over 60K hrs
Beam Angle	5°~50°
PAN	540°
TILT	270°
Colour System	CMY + CTO (2600K~6200K, linear) + Colour Wheel (6+open)
Gobo System	1 * rotating gobo wheel (7 interchangeable glass gobo + open) 1 * fixed gobo wheel (8 interchangeable glass gobo + open) 1 * animation wheel
Framing System	4 independent blades, each with +/-35° rotation, complete system with +/-60° rotation
Iris	15-leaf, motorized iris, 15~100% adjustable
Zoom	5° ~ 50°(10x) motorized zoom
Frost	Light 1° frost with 0~100% linear adjustment
Strobe	1~30Hz
LED Frequency	40K Hz
Dimmer	4 dimming curves
Prism	Bi-directional 4-facet prism with variable speed
Mains	100~240V AC, 50~60Hz
Consumption	1260W @ 230VAC
Power Connection	PowerCON True One In
Power Factor	0.96@230VAC
Protocol	DMX512/RDM
DMX Channel	39CH/41CH

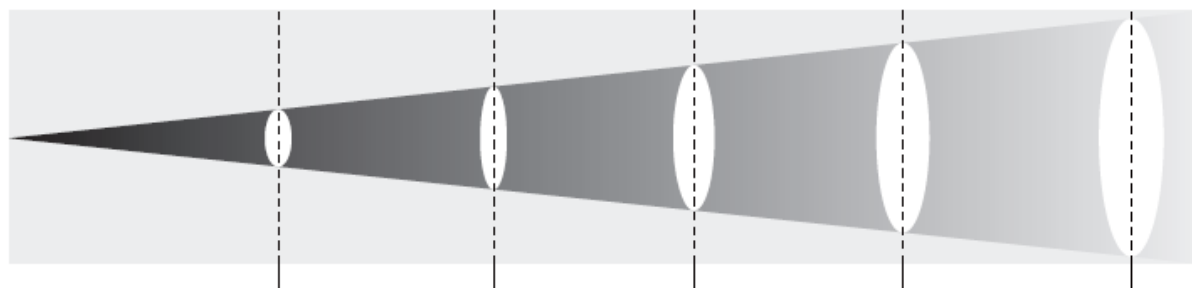
Display	2.83inch TFT disply
Data Connection	Seetronic 3Pin (or 5Pin) XLR for DMX, linking up to 32pcs
Housing	Die-cast magnesium with matt black finishing
Cooling	Low noise waterproof fan with heat pipe
IP Rating	IP65
Operating Ambient Tempt.	-10~45°C
Dimension	390*334*762mm
Weight	38.5KG

PHOTOMETRICS



5°

Distance(m)	5	10	15	20	30
Illuminance(lux)	90000	22500	10000	5625	2500
Diameter(cm)	0.43	0.87	1.3	1.74	2.58



51°

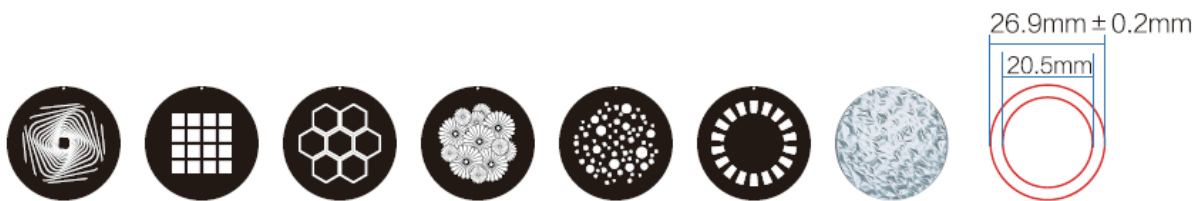
Distance(m)	5	10	15	20	30
Illuminance(lux)	2000	500	222	125	56
Diameter(cm)	4.66	9.34	13.9	18.6	27.9

COLOUR & GOBO

Colour System



Rotating Gobo



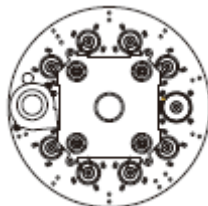
Fixed Gobo



Animation



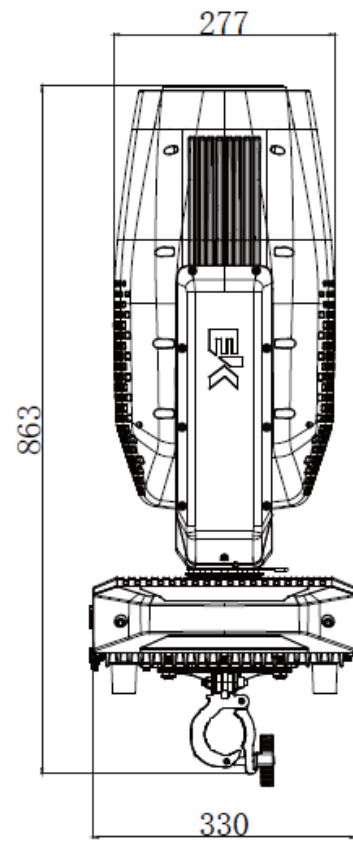
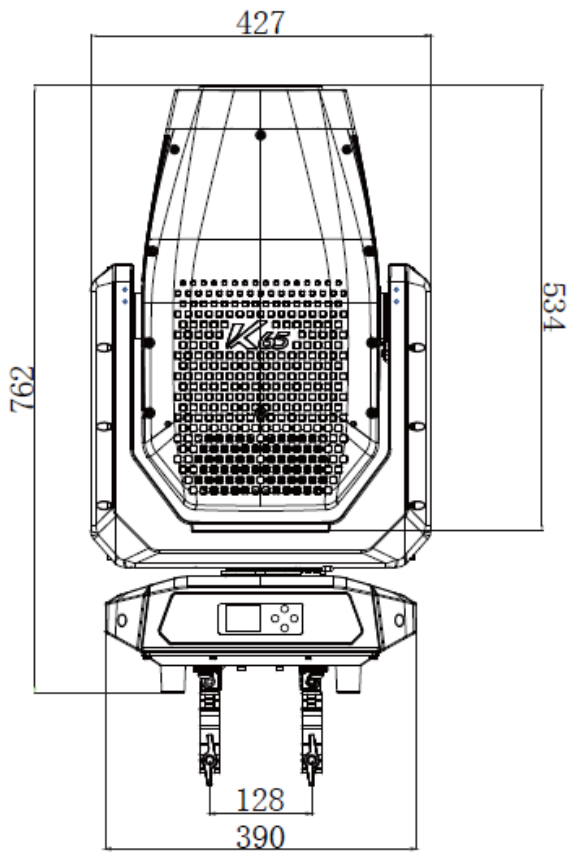
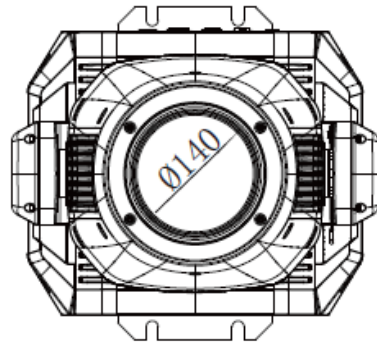
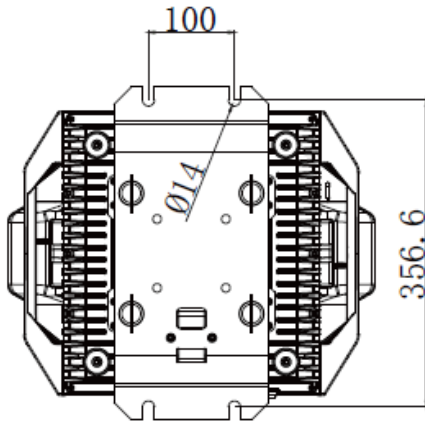
Framing/Shutter



4-Facet Prism

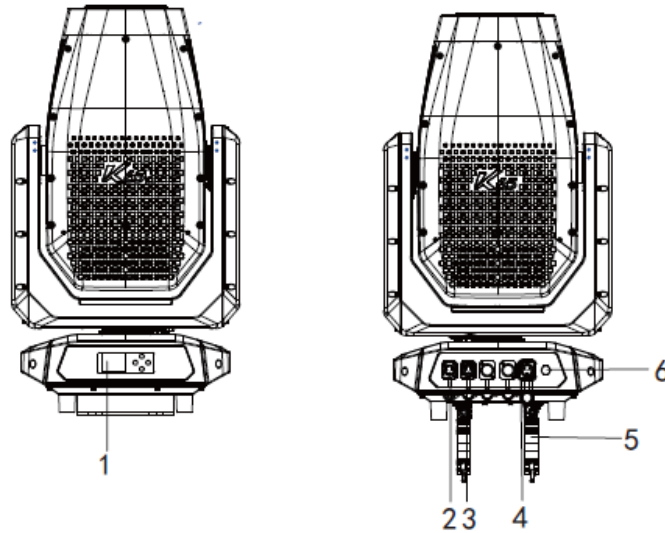


DIMENSIONS



OVERVIEW

Fixture Illustration



- 1. CONTROL PANEL
- 2. 3Pin(or 5Pin) DMX In
- 3. 3Pin(or 5Pin) DMX Out

- 4. PowerCon True One In
- 5. Clamp
- 6. Breathing Valve

Control Panel

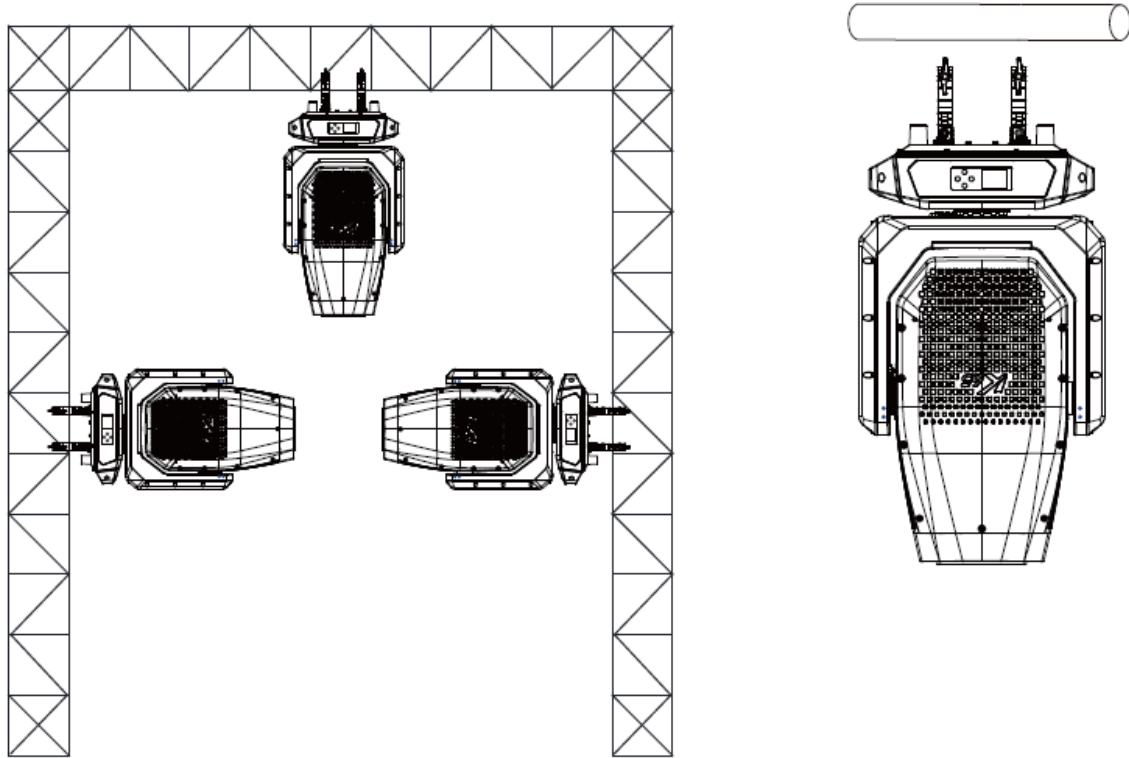


MODE	FUNCTION	EFFECT
MENU	Enter the menu	Menu operation
UP	Scroll up	Increase the numeric value
DOWN	Scroll down	Decrease the numeric value
ENTER	Confirm	Save the function
OK	Confirm	Save the function

If the panel is password-protected, go to the Advanced menu, in the Menu locking submenu, enter the unlock code using the navigation buttons: **1234**

If you want to flip the display, hold **UP + DOWN** buttons for 3 seconds to set display orientation.

INSTALLATION



We recommend the following general guidelines below:

1. Always mount this product in a safe position and make sure there is adequate room for ventilation, configuration, and maintenance.
2. Keep any inflammable materials at a safe distance from the fixture, as indicated in the safety notes.
3. Make sure that the device is not exposed to extreme heat, moisture, or dust.
4. Make sure that the structure to which you are hanging the modules can support the weight.

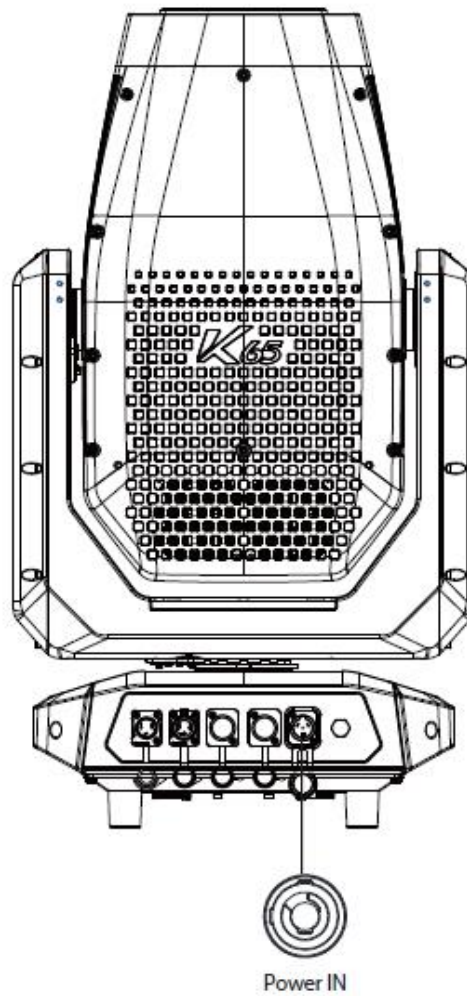
The K65 IP may be set up on a solid and even surface. The unit can also be mounted upside down to a cross arm. For fixing, stable mounting clips are required. The mounting place must have sufficient stability and be able to support a weight of 10 times of the unit's weight.

When carrying out any installation, always comply scrupulously with all the regulations (particularly regarding safety) currently in force in the country in which the fixture's being used.

- Install the fixture at a suitable location by means of the mounting bracket
- Always additionally secure the fixture with the safety rope from falling down. For this purpose, fasten the safety rope at a suitable position so that the maximum fall of the fixture will be 20 cm.
- Adjust the fixture and use the knob to slightly release or tighten the locking mechanism of the bracket if is necessary

CONNECTION

Power Connection



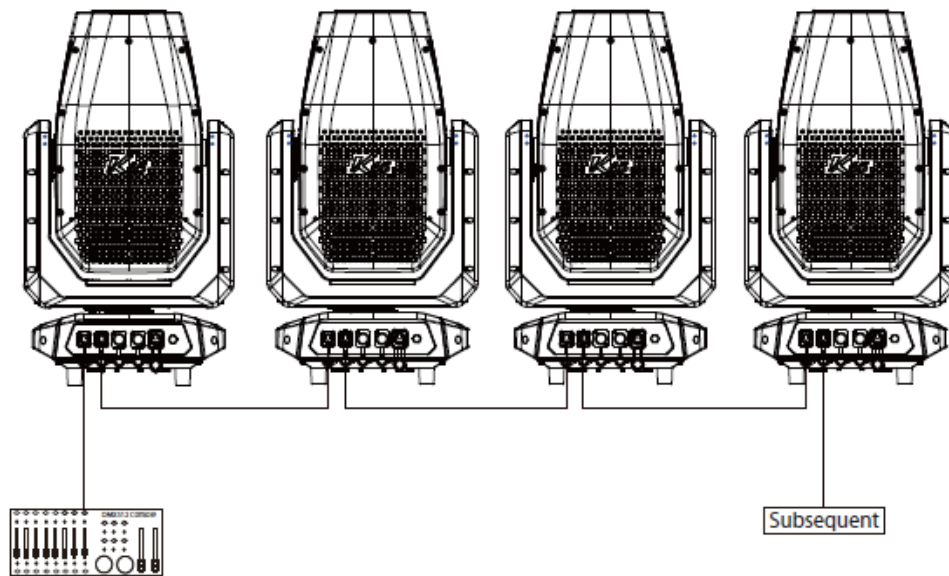
Attention: due to power rating, one 1.5mm² power cable can connect 1 unit maximum

Do not connect more than one unit in series with one power cable

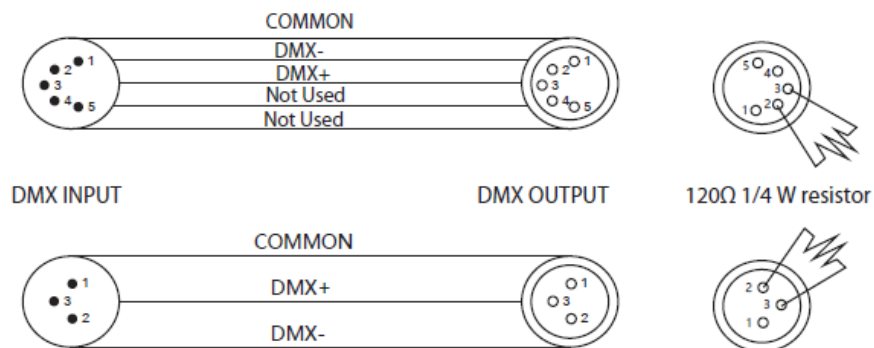
Do not use damaged power cable

Power off the fixture when not in use

Data Connection



- Depending on the length of the DMX cable run, or other factors, it may be advisable to install a terminator at the last fixture in the run.
- The illustration below shows the correct placement of a 120Ω 0.25W resistor in a terminator, as well as the standard DMX signal pin-outs



Example of DMX Addressing

The below table shows an example of starting addresses for four fixtures assuming a first fixture with starting address of 001. The actual starting addresses will be determined by the operator as needed to match external controller settings.

MODE	ALLOCATION	FIXTURE 1 ADDRESS	FIXTURE 2 ADDRESS	FIXTURE 3 ADDRESS	FIXTURE 4 ADDRESS
39CH	001 – 039	001	040	079	118
41CH	001 – 041	001	042	083	124

MENU

NO.	Main Menu	Menu Level 1	Menu Level 2	Menu Level 3	Default
1	CONNECT	DMX Address	CH39 1-474		1
			CH41 1-472		
		DMX Mode	Standard – 39CH		39CH
			Extended – 41CH		
2	SETUP	Movement	Pan Reverse	No	No
				Yes	
			Tilt Reverse	No	No
				Yes	
			Encoder Pan/Tilt	No	Yes
				Yes	
		Screen	Back Light	On	No
				10s	
				20s	
				30s	
			Flip Display	No	No
				Yes	
				Auto	
			Warn Cue	No	No
		Yes			
		Key Lock	No	No	
			Yes		
		Fixture	Dimmer Mode	Dimmer 1	Dimmer 1
				Dimmer 2	
				Dimmer 3	
				Dimmer 4	
			Dimmer Curve	Linear	Logarithmic
				Exponential	
				Logarithmic	
S-Curve					
Fan Mode	Auto		Auto		
	Silent				
	High				
	Off				
Temperature Unit	°C	°C			
	°F				
Auto Test	Auto Test				
Manual Test	Pan	0 – 255			
	Pan Fine	0 – 255			
	Tilt	0 – 255			
	Tilt Fine	0 – 255			
	P/T Speed	0 – 255			
	Shutter	0 – 255			

			Dimmer	0 – 255	
			Dim Fine	0 – 255	
			Dim Fade	0 – 255	
			Cyan	0 – 255	
			Magenta	0 – 255	
			Yellow	0 – 255	
			CTO	0 – 255	
			Colour	0 – 255	
			Gobo 1	0 – 255	
			RGobo	0 – 255	
			Gobo 2	0 – 255	
			Prism	0 – 255	
			Rot Prism	0 – 255	
			Frost	0 – 255	
			Focus	0 – 255	
			Focus Fine	0 – 255	
			Zoom	0 – 255	
			Zoom Fine	0 – 255	
			Effect	0 – 255	
			Rot Effect	0 – 255	
			Iris	0 – 255	
			Fr. Shutter 1 Mov	0 – 255	
			Fr. Shutter 1 Swiv	0 – 255	
			Fr. Shutter 2 Mov	0 – 255	
			Fr. Shutter 2 Swiv	0 – 255	
			Fr. Shutter 3 Mov	0 – 255	
			Fr. Shutter 3 Swiv	0 – 255	
			Fr. Shutter 4 Mov	0 – 255	
			Fr. Shutter 4 Swiv	0 – 255	
			Shutter Rot	0 – 255	
			Fr Macros	0 – 255	
			Macro Speed	0 – 255	
			Control	0 – 255	
3	ADVANCED	Reset	All		
			Pan/Tilt		
			Head		
		Adjust	Pan	0 – 255	
			Tilt	0 – 255	
			Cyan	0 – 255	
			Magenta	0 – 255	
Yellow	0 – 255				
CTO	0 – 255				

			Colour	0 – 255	
			Gobo 1	0 – 255	
			RGobo	0 – 255	
			Gobo 2	0 – 255	
			Prism	0 – 255	
			R Prism	0 – 255	
			Effect	0 – 255	
			Focus	0 – 255	
			Zoom	0 – 255	
			Frost	0 – 255	
			Iris	0 – 255	
			Fr. Shutter Rot	0 – 255	
			Fr. Shutter 1 M1	0 – 255	
			Fr. Shutter 1 M2	0 – 255	
			Fr. Shutter 2 M1	0 – 255	
			Fr. Shutter 2 M2	0 – 255	
			Fr. Shutter 3 M1	0 – 255	
			Fr. Shutter 3 M2	0 – 255	
			Fr. Shutter 4 M1	0 – 255	
		Fr. Shutter 4 M2	0 – 255		
		Factory Reload	Default Preset	Reset to Default	
				Go Back	
			User Preset 1	Load Preset 1	
				Save to Preset 1	
			User Preset 2	Load Preset 2	
				Save to Preset 2	
			User Preset 3	Load Preset 3	
		Save to Preset 3			
		4	INFORMATION	Fixture Hours	0 – 9999
Fans Speed	100%				
Software Version	DISP – V1				
	CTR1-XY – V1				
	CTR2-MOTOR – V1				
	CTR3-MOTOR – V1				
	CTR3-MOTOR – V1				
RDM UID	03oFoA7*****				
View DMX	Pan			0 – 255	
	Pan Fine			0 – 255	
	Tilt			0 – 255	
	Tilt Fine			0 – 255	
	P/T Speed			0 – 255	
	Shutter			0 – 255	
	Dimmer			0 – 255	
	Dim Fine	0 – 255			
	Dim Fade	0 – 255			
	Cyan	0 – 255			
Magenta	0 – 255				

			Yellow	0 – 255	
			CTO	0 – 255	
			Colour	0 – 255	
			Gobo 1	0 – 255	
			RGobo	0 – 255	
			Gobo 2	0 – 255	
			Prism	0 – 255	
			Rot Prism	0 – 255	
			Frost	0 – 255	
			Focus	0 – 255	
			Focus Fine	0 – 255	
			Zoom	0 – 255	
			Zoom Fine	0 – 255	
			Effect	0 – 255	
			Rot Effect	0 – 255	
			Iris	0 – 255	
			Fr. Shutter 1 Mov	0 – 255	
			Fr. Shutter 1 Swiv	0 – 255	
			Fr. Shutter 2 Mov	0 – 255	
			Fr. Shutter 2 Swiv	0 – 255	
			Fr. Shutter 3 Mov	0 – 255	
			Fr. Shutter 3 Swiv	0 – 255	
			Fr. Shutter 4 Mov	0 – 255	
			Fr. Shutter 4 Swiv	0 – 255	
			Shutter Rot	0 – 255	
			Fr Macros	0 – 255	
			Macro Speed	0 – 255	

DMX CHART

39CH	41CH	Function	Value	Percent/Setting
1	1	Pan	000 – 255	Pan coarse
2	2	Pan Fine	000 – 255	Pan fine
3	3	Tilt	000 – 255	Tilt coarse
4	4	Tilt Fine	000 – 255	Tilt fine
5	5	P/T Speed	000 – 250	Fast to slow
			251 – 255	Movement with blackout
6	6	Shutter	000 – 010	Shutter open
			011 – 082	Pulse effect, from slow to fast
			083 – 093	Shutter open
			094 – 163	Pulse effect in sequences
			164 – 174	Shutter open
			175 – 243	Random shutter effect, slow to fast
7	7	Dimmer	000 – 255	0 – 100%
8	8	Dim Fine	000 – 255	0 – 100%
9	9	Dimmer Mode	000 – 051	No Function
			052 – 101	Dimmer 1
			102 – 152	Dimmer 2
			153 – 203	Dimmer 3
			204 – 255	Dimmer 4
10	10	Cyan	000 – 255	0 – 100%
11	11	Magenta	000 – 255	0 – 100%
12	12	Yellow	000 – 255	0 – 100%
13	13	CTO	000 – 255	0 – 100%
14	14	Colour	000 – 004	Open
			005 – 009	Open + colour 1
			010 – 013	Colour 1
			014 – 018	Colour 1 + colour 2
			019 – 022	Colour 2
			023 – 027	Colour 2 + colour 3
			028 – 031	Colour 3
			032 – 036	Colour 3 + colour 4
			037 – 040	Colour 4
			041 – 045	Colour 4+ colour 5
			046 – 049	Colour 5
			050 – 054	Colour 5 + colour 6
			055 – 058	Colour 6
			059 – 063	Colour 6 + open
			064 – 095	Stop to fast (forward spin)
096 – 127	Stop to fast (reverse spin)			
128 – 255	Indexing from 0-360°			
15	15	Rotating Gobo	000 – 005	Open
			006 – 010	Position 1
			011 – 015	Position 2

			016 – 020	Position 3
			021 – 025	Position 4
			026 – 030	Position 5
			031 – 035	Position 6
			036 – 040	Position 7
			041 – 055	Position 1 shake from slow to fast
			056 – 070	Position 2 shake from slow to fast
			071 – 085	Position 3 shake from slow to fast
			086 – 100	Position 4 shake from slow to fast
			101 – 115	Position 5 shake from slow to fast
			116 – 130	Position 6 shake from slow to fast
			131 – 145	Position 7 shake from slow to fast
			146 – 201	Indexing from 0-360°
			202 – 255	Slow to fast (reverse spin)
16	16	Gobo Rotation	000 – 191	Indexing from 0-360°
			192 – 221	Slow to fast (forward spin)
			222 – 225	Stop
			226 – 255	Fast to slow (reverse spin)
	17	Gobo Rotation Fine	000 – 255	
17	18	Fixed Gobo	000 – 007	Open
			008 – 015	Position 1
			016 – 023	Position 2
			024 – 031	Position 3
			032 – 039	Position 4
			040 – 047	Position 5
			048 – 055	Position 6
			056 – 063	Position 7
			064 – 071	Position 8
			072 – 113	Fast to slow (reverse spin)
			114 – 117	Stop
			118 – 159	Slow to fast (forward spin)
			160 – 171	Position 1 shake from slow to fast
			172 – 193	Position 2 shake from slow to fast
			184 – 195	Position 3 shake from slow to fast
			196 – 207	Position 4 shake from slow to fast
			208 – 219	Position 5 shake from slow to fast
			220 – 231	Position 6 shake from slow to fast
			232 – 243	Position 7 shake from slow to fast
			244 – 255	Position 8 shake from slow to fast
18	19	Prism	000 – 127	Open
			128 – 255	Insertion
19	20	Prism Rotation	000 – 127	Indexing from 0-360°
			128 – 188	Slow to fast (forward spin)
			189 – 193	Stop
			194 – 255	Fast to slow (reverse spin)
	21	Prism Rotation Fine	000 – 255	
20	22	Frost	000 – 255	Dual frost inserted linearly
21	23	Focus	000 – 255	Focus coarse
22	24	Focus Fine	000 – 255	Focus fine
23	25	Zoom	000 – 255	Zoom coarse

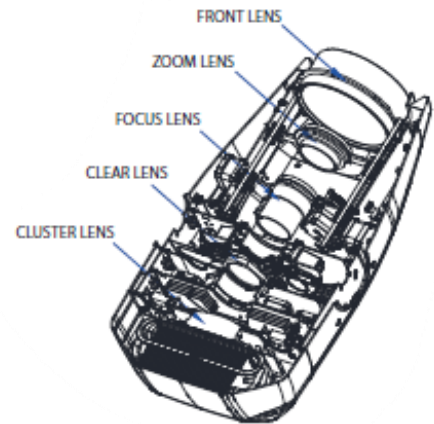
24	26	Zoom Fine	000 – 255	Zoom fine
25	27	Effect	000 – 255	
26	28	Effect Rotation	000 – 004	Open
			005 – 127	Slow to fast (forward)
			128 – 132	Stop
			133 – 255	Slow to fast (reverse)
27	29	Iris	000 – 063	From large to small
			064 – 127	Close from slow to fast
			128 – 191	Open from slow to fast
			192 – 255	Random open and close
28	30	Framing Shutter 1 Movement	000 – 255	Movement from outward to inward
29	31	Framing Shutter 1 Swivel	000 – 127	Swivelling from -25° - 0°
			128	0°
			129 – 255	Swivelling from 0° - 25°
30	32	Framing Shutter 2 Movement	000 – 255	Movement from outward to inward
31	33	Framing Shutter 2 Swivel	000 – 127	Swivelling from -25° - 0°
			128	0°
			129 – 255	Swivelling from 0° - 25°
32	34	Framing Shutter 3 Movement	000 – 255	Movement from outward to inward
33	35	Framing Shutter 3 Swivel	000 – 127	Swivelling from -25° - 0°
			128	0°
			129 – 255	Swivelling from 0° - 25°
34	36	Framing Shutter 4 Movement	000 – 255	Movement from outward to inward
35	37	Framing Shutter 4 Swivel	000 – 127	Swivelling from -25° - 0°
			128	0°
			129 – 255	Swivelling from 0° - 25°
36	38	Framing Shutters Rotation	000 – 127	Rotation from left to centre
			128	Centre
			129 – 255	Rotation from centre to right
37	39	Shutter Macros	000 – 003	No Function
			004 – 011	Macro 1
			012 – 018	Macro 2
			019 – 025	Macro 3
			026 – 032	Macro 4
			033 – 039	Macro 5
			040 – 047	Macro 6
			048 – 054	Macro 7
			055 – 061	Macro 8
			062 – 068	Macro 9
			069 – 075	Macro 10
			076 – 082	Macro 11
			083 – 090	Macro 12
			091 – 097	Macro 13
			098 – 104	Macro 14
			105 – 111	Macro 15
			112 – 118	Macro 16
			119 – 125	Macro 17
			126 – 133	Macro 18
			134 – 140	Macro 19
			141 – 147	Macro 20

			148 – 155	Macro 21
			156 – 161	Macro 22
			162 – 168	Macro 23
			169 – 176	Macro 24
			177 – 183	Macro 25
			184 – 190	Macro 26
			191 – 197	Macro 27
			198 – 204	Macro 28
			205 – 211	Macro 29
			212 – 219	Macro 30
			220 – 226	Macro 31
			227 -233	Macro 32
			234 – 240	Macro 33
			241 – 247	Macro 34
			248 – 255	Macro 35
38	40	Shutter Macro Speed	000 – 255	Speed from slow to fast
39	41	Control	000 – 025	No Function
			026 – 076	Head reset
			077 – 127	Pan and Tilt reset
			128 – 255	Reset all

MAINTENANCE

Maintenance and Cleaning the Unit

- Make sure the area below the installation place is free from unwanted persons during setup.
- Switch off the unit, unplug the main cable and wait till the unit has cooled down.
- All screws used for installing the device and any of its parts should be tightly fastened and should not be corroded.
- Housings, fixings and installation spots (ceiling, trusses, suspensions) should be totally free from any deformation.
- The main cables must be in impeccable condition and should be replaced immediately even when a small problem is detected.
- It is recommended to clean the front lens at regular intervals, from impurities caused by dust, smoke, or other particles to ensure that the light is radiated at maximum brightness. For cleaning, disconnect the main plug from the socket. Use a soft, clean cloth moistened with a mild detergent. Then carefully wipe the parts dry.
- For cleaning other housing parts use only a soft, clean cloth. Never use a liquid, it might penetrate the unit and cause damage to it.



Fuse Replacement

1. Disconnect this product from the power outlet.
2. Using a screwdriver, unscrew the fuse holder cap from the housing.
3. Remove the blown fuse and replace with a good fuse of the same type and rating.
4. Screw the fuse holder cap back in place and reconnect power.



TROUBLESHOOTING

Problem	Possible Causes	Checks and Remedies
Fixture does not light up	-No mains supply -Dimmer fader set to 0 -Faulty LED -Faulty LED board	-Check power supply voltage -Increase value of the dimmer channel -Replace the LED board -Replace the LED board
General low light intensity	-Dirty lens assembly -Misaligned lens assembly	-Clean the fixture regularly -Install lens assembly properly
Fixture does not power up	-No power -Loose or damaged power cord -Faulty internal power supply	-Check for power on outlet -Check power cord -Replace internal power supply

Contact an authorized service centre in case of technical problems or not reported in the above table cannot be resolved by the procedure given in the table.