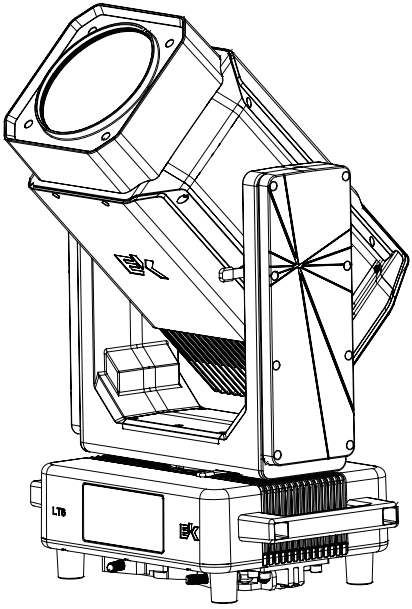


LT6

USER MANUAL

CONTENTS

1 Safety Information ---- 01

2 Dimension ---- 02

3 Control ---- 03

4 Fixture Specifications ---- 04

4.1 Technical datasheet ---- 04

4.2 Color system/Gobo system/Animation system ---- 06

4.3 Photometrics ---- 07

5 Fixture Setting ---- 08

5.1 Menu function ---- 08

6 Installation and Connection ---- 11

6.1 Installation & Notes ---- 12

6.2 Power connection ---- 13

6.3 Data Connection ---- 14

6.4 DMX Chart ---- 16

7 Error Information ---- 19

1.Safety Information

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,user 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~). Service should be undertaken by 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.

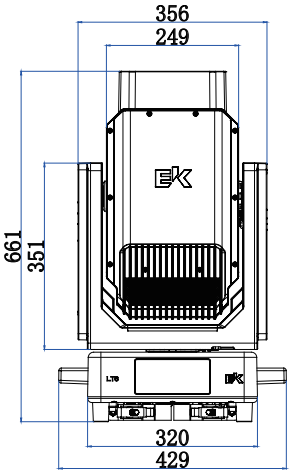
- The connection to the main network of electric distribution must be carried out by a qualified electrical installer. Check that the main frequency and voltage correspond to those for which the unit is designed as given on the electrical data label.
- This unit is not for home use,only professional applications.
- Never use the fixture under the following conditions:
  - in places subject to vibrations or bumps;
  - in place with a temperature of over 40 C.

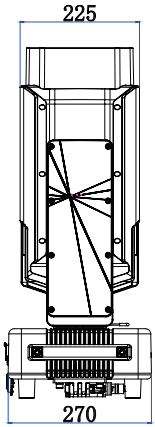
- Make certain that no Flammable liquids,water or metal objects enter the fixture.
- Do not dismantle or modify the fixture.
- All work must always be carried out by qualified technical personnel. Contact the nearest sales point for an inspection or contact the manufacturer directly.
- If the unit is to be put out of operation definitively, ensure you dispose of the unit responsibly in accordance with local recycling laws.

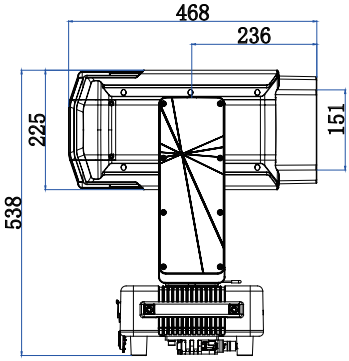
Warnings and installation precautions

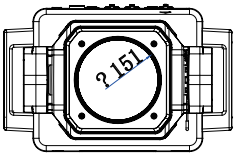
- If this device will be operated in any way different to the one described in this manual,it may suffer damage and the guarantee becomes void. Furthermore,any operation may lead to dangers like short circuit,burns,electric shock,etc.
- Before starting any maintenance work or cleaning the fixture,cut off power from the main supply.
- Always additionally secure the fixture with the safety rope. 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's 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.

2DIMENSION

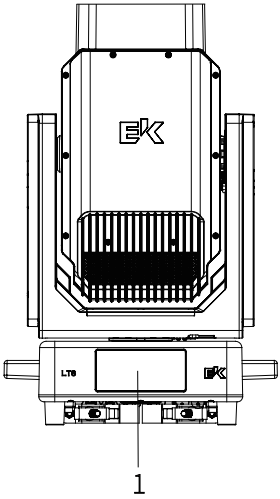


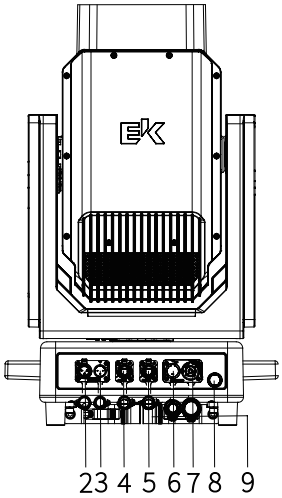






3. CONTROL





1.Control panel

2.5pin(or 3pin) DMX In

3.5pin(or 3pin) DMX Out

4/5. Artnet

6.Power In

7.Power Out

8.breather valve

9.Omega bracket with clamp

Menu Display

Function	Illustration	Description	Function
MODE（Left）	Menu Option	Enter Menu	Menu Operation
UP	UP	Scroll Up	Increase Numberic Value
DOWN	DOWN	Scroll Down	Decrease Numberic Value
ENTER（Right）	Confirm	Confirm	Save Setting

4. FIXTURE SPECIFICATION

4.1 TECHNICAL DATASHEET

LT6 datasheet	
PHOTOMETRICS	
Light Source	600W white LED module
Colour Temperature	6200 ± 100k
Output	ALL:28000Lm
CCI	0.1M~0.1G
CRI	>70
R9	>-25
DUV	0.004
TM-30-15rg/rf	95/67
TLCI	>40
LED Life	30000H
Beam angle	3.3° -52°
KEY FEATURES	
PAN	540°
TILT	270°
Color system	CW+CMY/CTO+Color Wheel(6+open)
Gobo System	Rotating gobo wheel (7 gobos+open)
Fixed gobo	Fixed gobo wheel (9 gobos+open)
Animation	Animation wheel with variable speed
Framing System	Single blade ± 35° , Whole rotation angle ± 60°
Focus	1° +5° 0 ～ 100% linear frost
Strobe	1~30HZ
Dimming	0~100% linear dimming,4 dimming curves,22Bit
Prism	Bi-directional adjustable-speed 4-facet+4 linear prism
POWER	
Mains	100-240V,50/60Hz
Consumption	230V@800W
Power connections	Seetronic power in/out,linking up to 2pcs
Power Factor	230V@0.98
Ambient	-10 ～ 45℃
Power supply	Input voltage AC 100 ～ 240VAC（50/60HZ）1000W
PHYSICAL	
Dimension	429*270*635mm(Omega bracket with clamp) 429*270*661mm(Intergated-Foldable-Clamp)
Weight	Fixture:29.3kg
IP Rating	IP66

TECHNICAL DATASHEET

Cooling	Heat sink cooling system with low noise fan
Housing	Magnesium alloy, matte black finish
Installation	Sit-flat floor mounting, side hanging and flown mounting
CONTROL	
Protocol	DMX512/RDM/sACN/Artnet/Bluetooth/APP/NFC
DMX channel	37CH/38CH
Data connections	3pin (or 5pin) XLR In/Out, linking up to 32pcs
Display	240RGB*320 2.8-inch TFT display
Built-in programs	YES
Pixel Control	Whole control

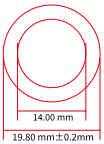
4.2 COLOR SYSTEM/GOBO SYSTEM/ANIMATION SYSTEM

COLOR WHEEL

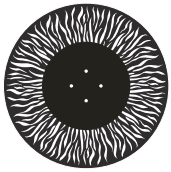
CMY

ROTATING GOBO

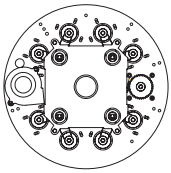
FIXED GOBO



ANIMATION WHEEL

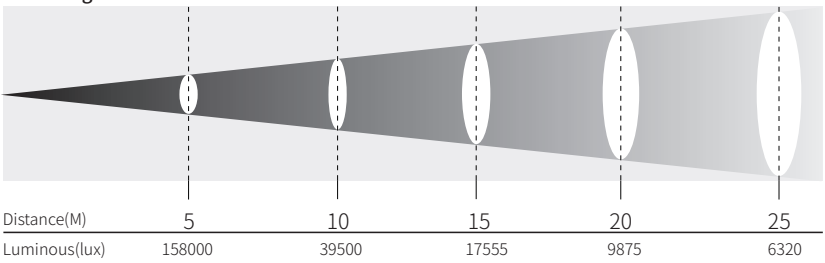


FRAMING SHUTTER



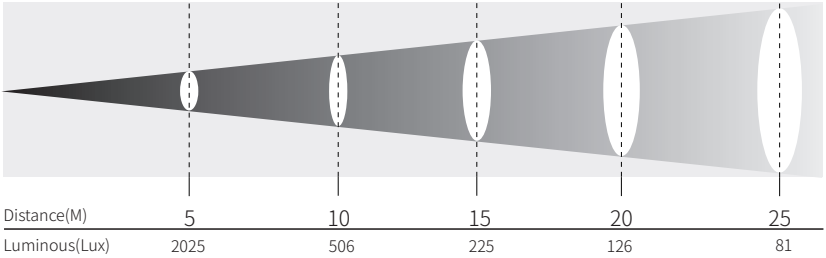
4.3 Photometrics

Beam Angle：3.3°



Distance(M)	5	10	15	20	25
Luminous(lux)	158000	39500	17555	9875	6320

Beam Angle：52°



Distance(M)	5	10	15	20	25
Luminous(Lux)	2025	506	225	126	81

5 FIXTURE SETTING

5.1 MENU FUNCTION

\	Main Menu	Menu level 2	Menu level 3	Menu level 4	Menu level 5	Menu level 6	Remark
1	DMX Setting	DMX Address	1~512				1
		DMX Channel	37CH				37CH
			38CH				
2	Ethernet Setting	Protocol	Artnet				Artnet
			sACN				
		IP Address	xxx.xxx.xxx.xxx				/
		IP Mask	xxx.xxx.xxx.xxx				/
		Universe	0-65535 (Artnet) 1-65535 (sACN)				0
		Net To DMX	Off				Off
			On				
3	Settings	Movement Setting	Invert Pan	Off			Off
				On			
			Invert Tilt	Off			Off
				On			
			Swap Pan /Tilt	Off			On
				On			
			Encoder Pan/Tilt	Off			Off
				On			
			Absolute Encoder	Off			On
				On			
		Framing Shutter Mode	Independent Mode				Mixed Mode
			Mixed Mode				
		Frost Mode	Independent Mode				Independent Mode
			Mixed Mode				
		Dimmer Setting	Dimmer Mode	Auto			Auto
				Dimmer 1			
				Dimmer 2			
				Dimmer 3			
				Off			
			Dimmer Curve	Linear			Square
				Square			
				Inverse Square			
				S Curve			
		LED Setting	LED Frequency	600Hz			2000 Hz
				1200 Hz			
				2000 Hz			
				4000 Hz			
				6000 Hz			
				25KHz			
		Fan Mode	Auto				Auto
			On				
			Off				
			Silent				
		Reset Setting	All				/
			P/T				/
			Head				/
		Display Setting	Back Light	Off			Off
				On			
			Flip Display	No			No
				Yes			
				Auto			

5.2 MENU FUNCTION

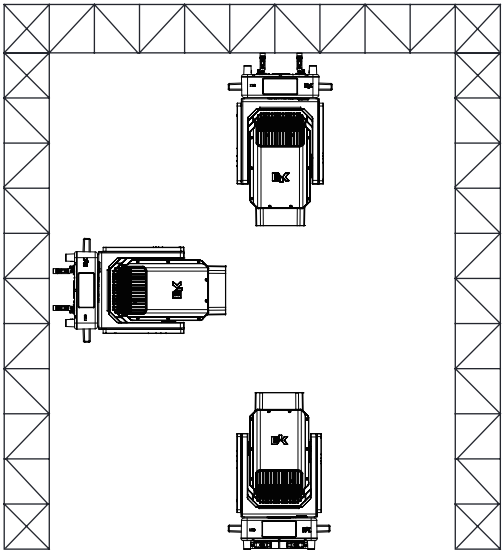
3	Settings	Display Setting	Warn Cue	Off			On
				On			
			Key Lock	No			Yes
				Yes			
			Temperature Unit	℃			℃
				°F			
4	TEST	Channel	According to the current channel mode				/
							/
							/
		AUTO	Pan/Tilt				
			Head				
			All				
5	Advanced	Access code	Calibration	Pan Offset			128
				Tilt Offset			128
				Cyan Offset			128
				Magenta Offset			128
				Yellow Offset			128
				CTO Offset			128
				Color Offset			128
				Gobo Offset			128
				RGobo Offset			128
				Gobo2 Offset			128
				Effect Offset			128
				Iris Offset			128
				Shutters Rot. Offset			128
				Fr.shutter 1 M1 Offset			128
				Fr.shutter 1 M2 Offset			128
				Fr.shutter 2 M1 Offset			128
				Fr.shutter 2 M2 Offset			128
				Fr.shutter 3 M1 Offset			128
				Fr.shutter 3 M2 Offset			128
				Fr.shutter 4 M1 Offset			128
				Fr.shutter 4 M2 Offset			128
				Prism1 Offset			128
				RPrism1 Offset			128
				Prism2 Offset			128
				RPrism2 Offset			128
				Focus Offset			128
				Zoom Offset			128
				Frost2 Offset			128
				Frost1 Offset			128
			Factory Reset	No			/
				Yes			

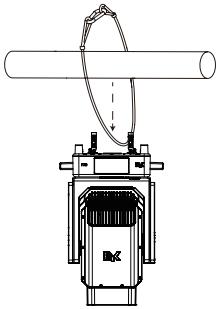
5.3 MENU FUNCTION

6	Information	System Errors					/
		Time	Fixture Hours	65535H			0
			Led Hours	65535H			0
		Version	DISP-V1.0	CTR4-MOTOR-V1.0			/
			CTR1-XY-V1.0	CTR5-MOTOR-V1.0			/
			CTR2-MOTOR-V1.0	CTR6-MOTOR-V1.0			/
			CTR3-MOTOR-V1.0				/
		Temperature	LED1：40°C				/
			LED2：40°C				/
		Humidity	25%				/
		Pressure	80kpa				/
		UID:	030F0CC*****				/
		Bluetooth Version	V0.0.X				

6. INSTALLATION AND CONNECTION

6.1.1 NSTALLATION INSTRUCTION





1.Professional installation required. Mount away from walkways, seating areas, or unauthorized access.

2.Never stand directly beneath the fixture during assembly, disassembly, or maintenance.

3.Ensure secure mounting to prevent vibration or slippage during operation.

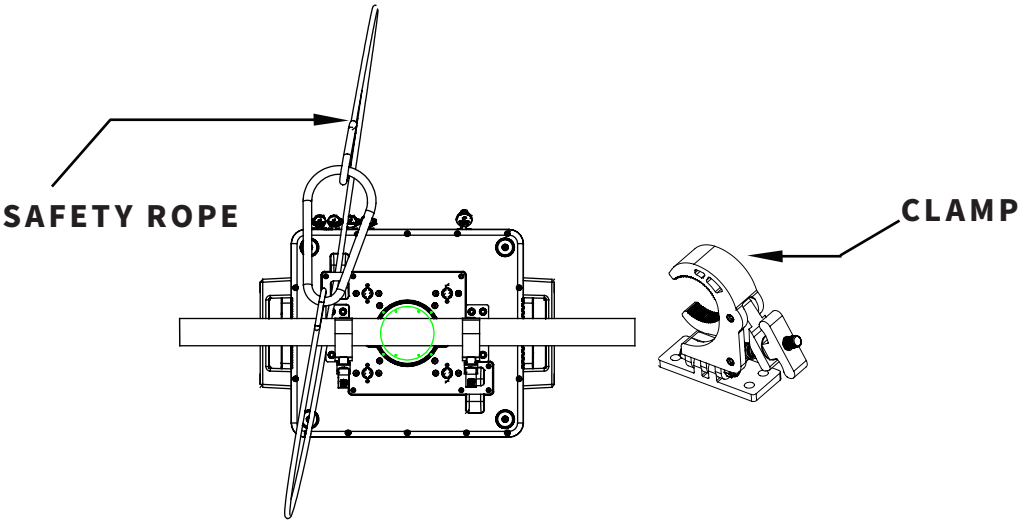
4.The supporting structure must withstand 10x the fixture’ s weight without deformation. Always use a safety cable rated for 12x the fixture’ s weight to prevent falls if the clamp fails.

5.Operational in 3 positions: Sit-flat floor mounting, vertically hanging or horizontal mounting.

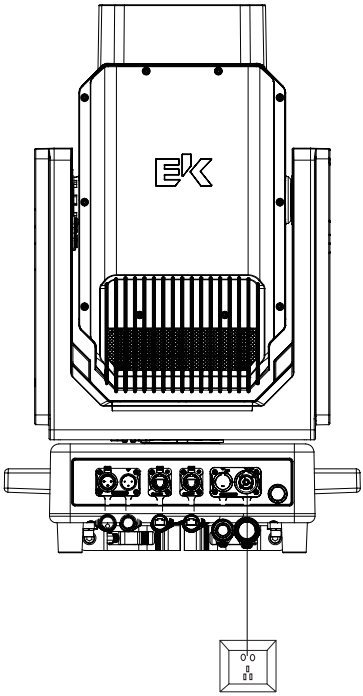
6.LT6 is IP66（indoor & Outdoor use）,ensuring: Dustproof – Prevents significant dust ingress, so that it will not interfere with its normal operation. Water-resistant – Protects against water jets from any direction.

6.1.2FLOWN MOUNTING

1.During installation, maintain a minimum distance of 0.5 meters between the fixture and any flammable materials .
2.When flown mounting, a safety cable rated for at least 10 times the fixture's weight must be installed.
3.For overhead mounting, the supporting structure must have a load capacity of at least 10 times the fixture's weight.
4.As shown in the diagram, the safety cable must pass through both the fixture's safety cable eyelet and the mounting structure to ensure a secure connection.



6.2POWER CONNECTION



POWER CONNECTION INSTRUCTION

Power out

Power In

POWER CONNECTION INSTRUCTION

Notes: For power reasons,using 1.5mm² power cable can link up to 2 units(230V) maximum.

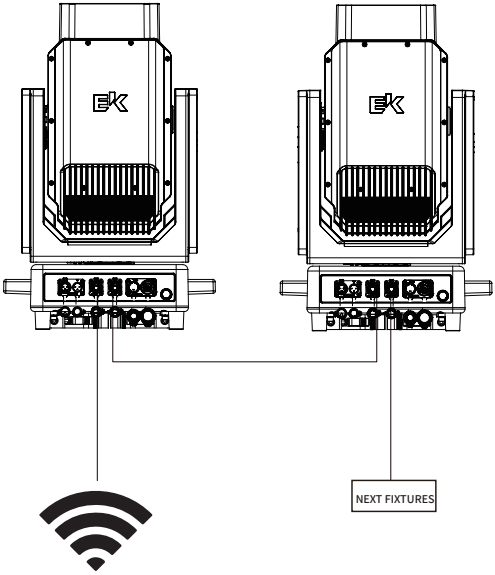
Do not connect more than 2 units with one power cable, or overload the work.

Do not use the power cable if the insulation layer has been damaged,

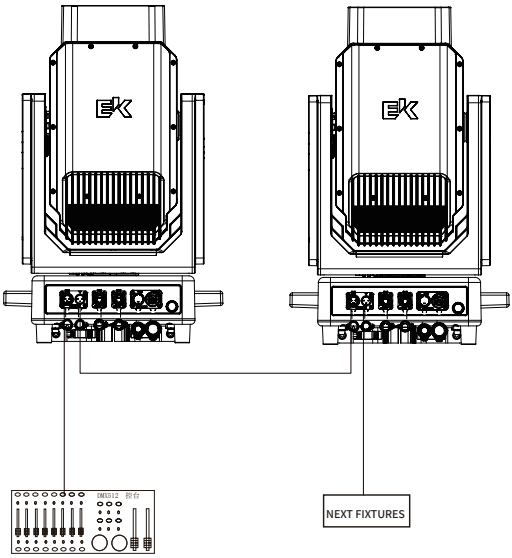
Do not put the power cable on other wires. When the LT6 is not in use or clean, please remove the power cable.

Do not vigorously plug in or drag the power cable.

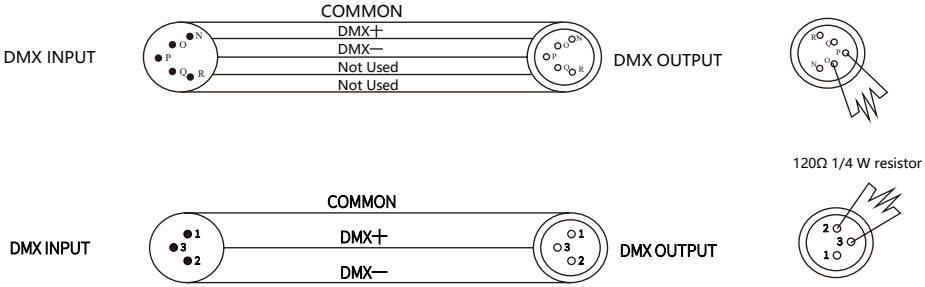
ARTNET CONNECTION



DMX CONNECTION



DMX CONNECTION



- To minimize signal errors and prevent signal degradation/interference, connect a 120 Ω 1/4W resistor between 2 pins and 3 pins at the last fixture's DMX output.
- Use XLR cables to link fixtures - connect from the output of one fixture to the input of the next. DMX must be wired in series, not parallel.
- Signal integrity is critical due to DMX512's high speed. Damaged cables, poor solder joints, or loose connections can disrupt transmission and cause system failure.
- The DMX connection is bypassed when a unit loses power to maintain signal continuity.
- Each fixture requires a unique address to receive console commands.
- Always install a terminator at the end of the DMX512 chain to reduce transmission errors.

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

RELATION BETWEEN DMX AND ADDRESS

MODE	ADDRESS	1ST FIXTURE	2nd FIXTURE	3rd FIXTURE	4th FIXTURE
37CH	001-037	001	038	075	112

Follow above method for subsequent fixtures, calculating starting addressed as indicated

6.4.1 DMX CHART

37CH	38CH	Function	Value	Description
1	1	Pan	000-255	
2	2	Pan Fine	000-255	
3	3	Tilt	000-255	
4	4	Tilt Fine	000-255	
5	5	Shutter	000-010	Close
			011-082	Shutter effect slow to fast
			083-093	Open
			094-163	Pulse-effect in sequences
			164-174	Open
			175-244	Random Shutter effect slow to fast
			245-255	Open
6	6	Dimmer	000-255	Dimmer 0%-100%
7	7	Dimmer Fine	000-255	Dimmer Fine
8	8	Cyan	000-255	0%-100%
9	9	Magenta	000-255	0%-100%
10	10	Yellow	000-255	0%-100%
11	11	CTO	000-255	0%-100%
12	12	Color	000-010	Open
			011-019	Open+Color1
			020-028	Color 1
			029-037	Color 1 + Color 2
			038-046	Color 2
			047-055	Color 2 + Color 3
			056-064	Color 3
			065-073	Color 3 + Color 4
			074-082	Color 4
			083-091	Color 4 + Color 5
			092-100	Color 5
			101-109	Color 5 + Color 6
			110-118	Color 6
			119-127	Color 6 + OPEN
			128-190	Fast to Slow(Forward Spin)
			191-192	Stop (Stop Rotation)
			193-255	Slow to Fast(Revers Spin)
13	13	Gobo1	000-008	Open
			009-017	Gobo1
			018-026	Gobo2
			027-035	Gobo3
			036-044	Gobo4
			045-053	Gobo5
			054-062	Gobo6
			063-071	Gobo7
			072-113	Fast to Slow(Revers Spin)
			114-117	Stop (Stop Rotation)
			118-159	Slow to Fast(Forward Spin)
			160-172	Gobo1 Shaking Slow to Fast
			173-185	Gobo2 Shaking Slow to Fast
			186-198	Gobo3 Shaking Slow to Fast
			199-211	Gobo4 Shaking Slow to Fast
			212-224	Gobo5 Shaking Slow to Fast
			225-237	Gobo6 Shaking Slow to Fast
			238-255	Gobo7 Shaking Slow to Fast
14	14	RGobo1	000-127	0 - 540 Position
			128-190	Fast to Slow(Forward Spin)
			191-192	Stop (Stop Rotation)
			193-255	Slow to Fast(Revers Spin)

6.4.2 DMX CHART

15	15	Gobo2	000-008	Open
			009-015	Gobo1
			016-022	Gobo2
			023-029	Gobo3
			030-036	Gobo4
			037-043	Gobo5
			044-050	Gobo6
			051-057	Gobo7
			058-064	Gobo8
			065-071	Gobo9
			072-113	Fast to Slow(Revers Spin)
			114-117	Stop (Stop Rotation)
			118-159	Slow to Fast(Forward Spin)
			160-170	Gobo1 Shaking Slow to Fast
			171-180	Gobo2 Shaking Slow to Fast
			181-191	Gobo3 Shaking Slow to Fast
			192-201	Gobo4 Shaking Slow to Fast
			202-212	Gobo5 Shaking Slow to Fast
			213-222	Gobo6 Shaking Slow to Fast
			223-233	Gobo7 Shaking Slow to Fast
			234-244	Gobo8 Shaking Slow to Fast
			245-255	Gobo9 Shaking Slow to Fast
16	16	Prism 1	000-127	Prism Excluded
			128-255	Prism Inserted
17	17	Rprism 1	000-127	0 - 540 Position
			128-190	Fast to Slow(Forward Spin)
			191-192	Stop (Stop Rotation)
			193-255	Slow to Fast(Revers Spin)
18	18	Prism 2	000-127	Prism Excluded
			128-255	Prism Inserted
19	19	Rprism 2	000-127	0 - 540 Position
			128-190	Fast to Slow(Forward Spin)
			191-192	Stop (Stop Rotation)
			193-255	Slow to Fast(Revers Spin)
20	20	Frost 1/2	000-255	Frost 0->100%
/	21	No function		
/	20	Frost 1	000-255	Frost 0->100%
/	21	Frost 2	000-255	Frost 0->100%
21	22	Effect	000-127	Effect Excluded
			128-255	Effect Inserted
22	23	REffect	000-003	Effect Inserted
			004-127	Fast to Slow(Forward Spin)
			128-132	Stop (Stop Rotation)
			133-255	Slow to Fast(Revers Spin)
23	24	Iris	000-127	Maximum to Minimum Aperture
			128-131	Maximum Aperture
			132-171	Slow to Fast Pulsation
			172-211	Slow to Fast Pulsation,Fast Opening
			212-251	Slow to Fast Pulsation,Fast Closing
			252-255	Maximum Aperture
24	25	Focus	000-255	
25	26	Focus Fine	000-255	
26	27	Zoom	000-255	
27	28	Zoom Fine	000-255	
28	29	Framing Shutter 1 movent	000-255	Movement from outward to inward
		Framing Shutter 1_1 movent	000-255	Movement from outward to inward
29	30	Framing Shutter 1 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees
			128	0 degrees
			129-255	Swivelling from 0 degrees to +25 degrees
		Framing Shutter 1_2 movent	000-255	Movement from outward to inward

6.4.3 DMX CHART

30	31	Framing Shutter 2 movent	000-255	Movement from outward to inward
		Framing Shutter 2_1 movent	000-255	Movement from outward to inward
31	32	Framing Shutter 2 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees
			128	0 degrees
			129-255	Swivelling from 0 degrees to +25 degrees
		Framing Shutter 2_2 movent	000-255	Movement from outward to inward
32	33	Framing Shutter 3 movent	000-255	Movement from outward to inward
		Framing Shutter 3_1 movent	000-255	Movement from outward to inward
33	34	Framing Shutter 3 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees
			128	0 degrees
			129-255	Swivelling from 0 degrees to +25 degrees
		Framing Shutter 3_2 movent	000-255	Movement from outward to inward
34	35	Framing Shutter 4 movent	000-255	Movement from outward to inward
		Framing Shutter 4_1 movent	000-255	Movement from outward to inward
35	36	Framing Shutter 4 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees
			128	0 degrees
			129-255	Swivelling from 0 degrees to +25 degrees
		Framing Shutter 4_2 movent	000-255	Movement from outward to inward
36	37	Framing Shutters Rotation	000-127	Rotation from left to center
			128	Center
			129-255	Rotation from center to right
37	38	Control (Hold 3 sec.)	000-005	None
			006-010	Dimmer Mode Auto
			011-015	Dimmer Mode 1
			016-020	Dimmer Mode 2
			021-025	Dimmer Mode 3
			026-030	Linear
			031-035	Square
			036-040	Inverse Square
			041-045	S Curve
			046-050	Led Frequency=600Hz
			051-055	Led Frequency=1200Hz
			056-060	Led Frequency=2000Hz
			061-065	Led Frequency=4000Hz
			066-070	Led Frequency=6000Hz
			071-075	Led Frequency=25000Hz
			076-080	Pan Inverse Off
			081-085	Pan Inverse On
			086-090	Tilt Inverse Off
			091-095	Tilt Inverse On
			096-100	Swap Pan Tilt Off
			101-105	Swap Pan Tilt On
			106-110	Auto
			111-115	On
			116-120	Off
			121-125	Silent
			126-160	Reserve
			161-165	Framing Shutter Independent Mode
			166-170	Framing Shutter Mixed Mode
			171-175	FrostIndependent Mode
			176-180	Frost Mixed Mode
			181-185	Dimmer Mode Off
			186-240	Reserve
			241-245	Head Reset
			246-250	Pan/Tilt Reset
			251-255	Complete Reset

7.ERROR INFORMATION

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 until 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, Fixations 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 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 part 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.

TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Fixture does not light up	• No mains supply • Dimmer fader set to 0 • All color faders set to 0 • Faulty LED • Faulty LED board	• Check the power supply voltage • Increase the value of the dimmer channels • Increase the value of the color channels • Replace the LED board • Replace the LED board
General low light intensity	• Dirty lens assembly • Misaligned lens assembly	• Clean the fxture 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 power outlet • Check power cord • Replace internal power supply
Fixture does not respond to DMX	• Wrong DMX addressing • Damaged DMX cables • Bouncing signals	• Check control panel and unit addressing • Check DMX cables • Install terminator as suggested

Contact an authorised service centre in case of technical problems that are not reported in the table, or problems cannot be resolved by procedure given in the table

EKINC.
Address: NO.55 Zhongzhun Road, Cuiheng New District, Zhongshan City, Guangdong Province
Phone: 0086 (0760) 88280099
www.eklights.com