

LT15

USER MANUAL

CONTENTS

1.SAFETY INFORMATION.....	01
2.FIXTURE SPECIFICATION.....	03
3.PHOTOMETRICS.....	04
4.COLOR&GOBO	05
5.DIMENSION.....	06
6.OVERVIEW	07
7.CONNECTION	08
8.INSTALLATION	11
9.MENU	13
10.DMX CHART.....	15
11.EXPLODED VIEW	19
12.MAINTENANCE	20
13.TROUBLESHOOTING	20

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

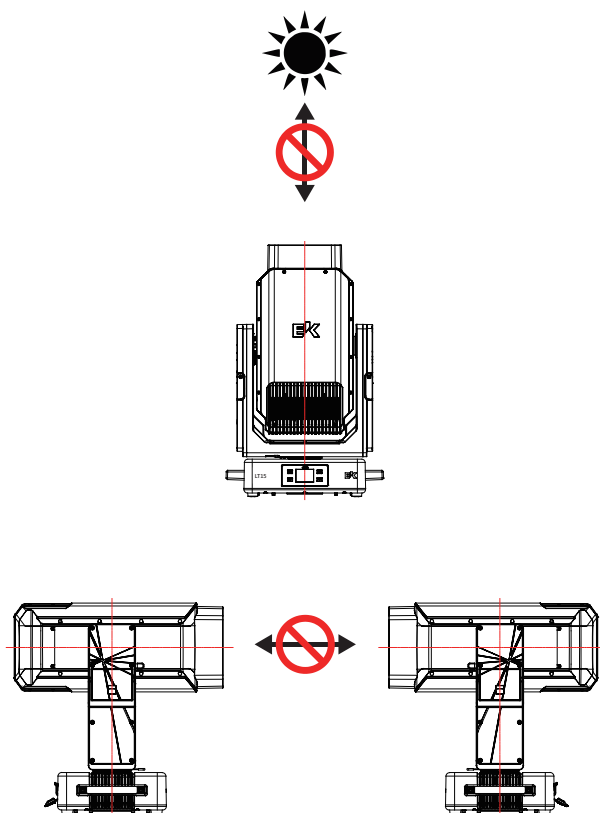
- The products referred to in this manual conform to the European Community Directives and are therefore marked with CE.
- The unit is supplied with hazardous network voltage (230V~). Service should be undertaken by skilled personnel only. Never make any modifications on the unit not described in this 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.

- Do not expose the front of a fixture to sunlight or any other strong light source. Avoid pointing other high-powered beam lights directly at the fixture.
- Do not focus a light beam from one lighting fixture directly towards another.
- For outdoor applications during daylight, make sure that the front face of any fixture is shielded or points away from the sun, even when not in use.
- Do not expose the product to heat (from other lighting fixtures for example).

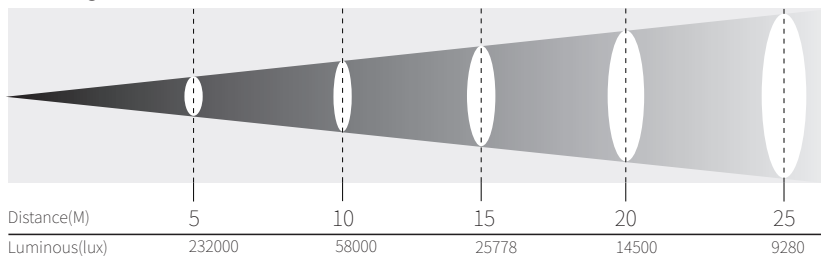


2.FIXTURE SPECIFICATION

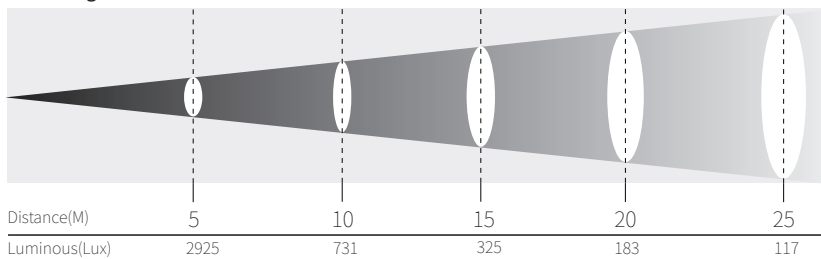
LT15	
PHOTOMETRICS	
Light source	1500W white LED module
Color Temperature	6000 ± 200k
Output	49000 lm @40° (± 5%)
CCI	0.1M~0.1G
CRI	≥ 70
LED Life	30000H(luminance falloffs 70%, IF=3.8A)
Beam Angle	3.7-52°
KEY FEATURES	
PAN	540°
TILT	270°
Color System	CMY+CTO +color wheel
Color Wheel	6 color filter+ open
Gobo System 1	Rotating gobo wheel(7gobos+open)
Gobo System 2	Rotating gobo wheel(7gobos+open)
Animation	Animation wheel with v ariable speed
Framing System	Single blade ± 35° ,complete rotatable ± 90°
Iris	16 fins, 15%- 100% motorized linear iris
Frost	1° +5° 0% - 100% linear frost
Prism	Indexable 4 f acet prism+linear prism with variable speed
Strobe	1-30Hz
Dimming	Linear/Square/In-verse square/S-curve+4 dimming modes(22bit)
CONTROL	
Protocol	DMX512/RDM/sACN/Artnet/Bluetooth/APP/NFC
DMX Channel	40CH
Data Connections	DMX In/Out, linking up to 32pcs
Display	40RGB*320, 2.8 inch TFT display
Frequency	600Hz/1.2KHz/2KHz/4KHz/6KHz/25KHz
Built-in Programms	Yes
POWER	
Mains	100-240V,50/60Hz
Consumption	230V@1550W
Power connection	Seetronic IP Power In, linking up to 1 pc
Power Factor	230V@0.98
Ambient	-20 ~ 55°C
PHYSICAL	
Dimension	479*300*792mm
Weight	40kg
IP Rating	IP66
Cooling	Heat pipe cooling system with low noise fan

3.PHOTOMETRICS

Beam Angle: 3.7°



Beam Angle: 52°



4.COLOR&GOBO

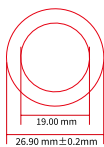
COLOR WHEEL



ROTATING GOBO

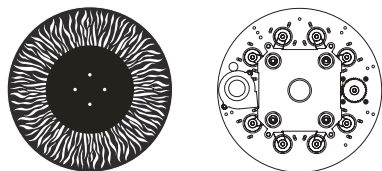


ROTATING GOBO 2

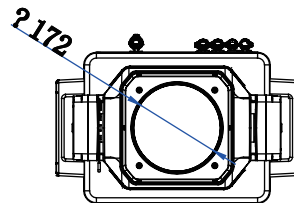
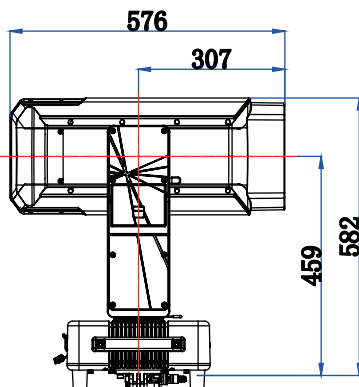
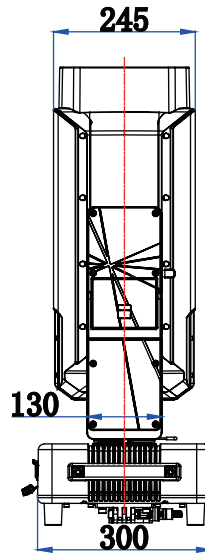
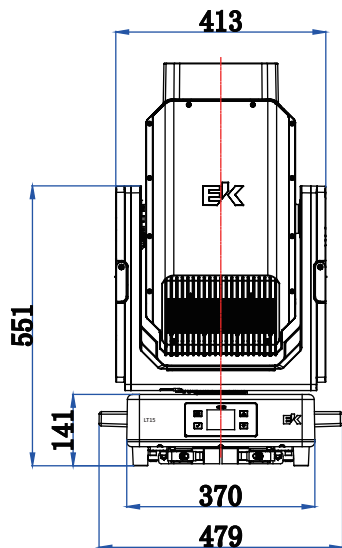


ANIMATION WHEEL

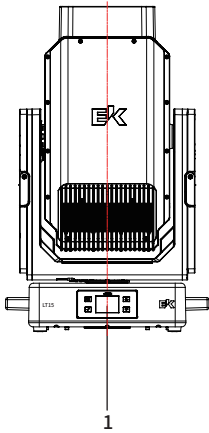
FRAMING SHUTTER



5. DIMENSION



6.OVERVIEW

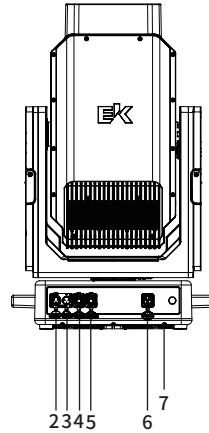


1.Control panel

2.DMX In

3.DMX Out

4/5. Artnet



6.Power In

7.Omega bracket

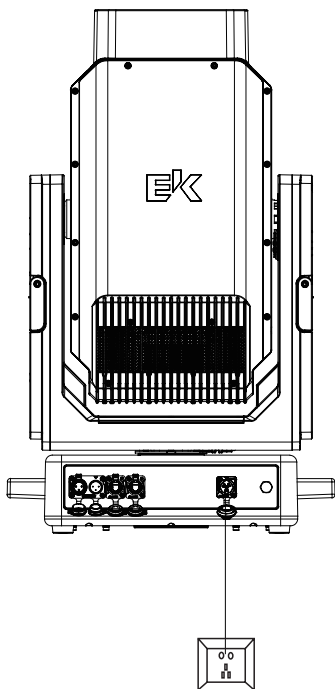
Menu Display

Icon	Illustration	Description	Function
	Menu Option	Enter Menu	Menu Operation
	UP	Scroll Up	Increase Numeric Value
	DOWN	Scroll Down	Decrease Numeric Value
	Confirm	Confirm	Save Setting

Initialization: +

If you want to flip the display, hold UP + DOWN buttons for 3seconds to set display orientation.
Without external power source, long press or 3 seconds, enter the menu to set parameters.

7.CONNECTION



POWER CONNECTION INSTRUCTION



Connect 2.5mm² Power cable with Power TrueCon In to mains.

Attention:

Power In Due to the power rating, one power cable can connect 1 unit maximum.

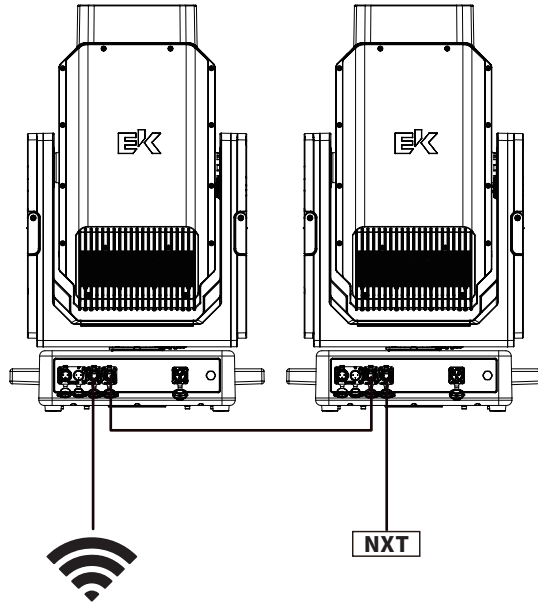


Do not connect more than 1 unit in series with one power cable

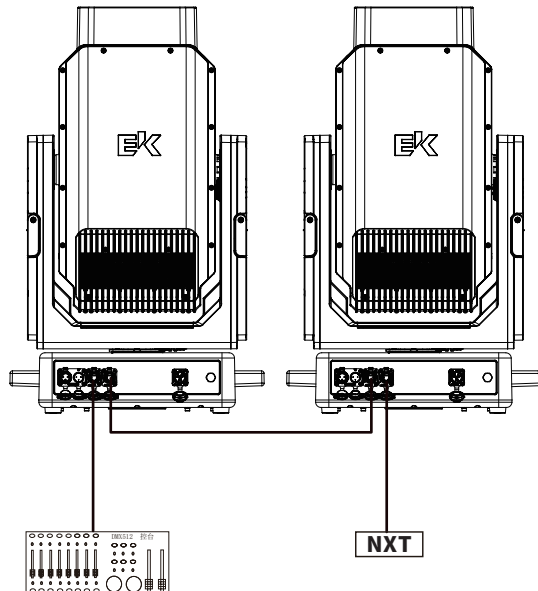
Do not use damage power cable

Power off the fixture when not in use

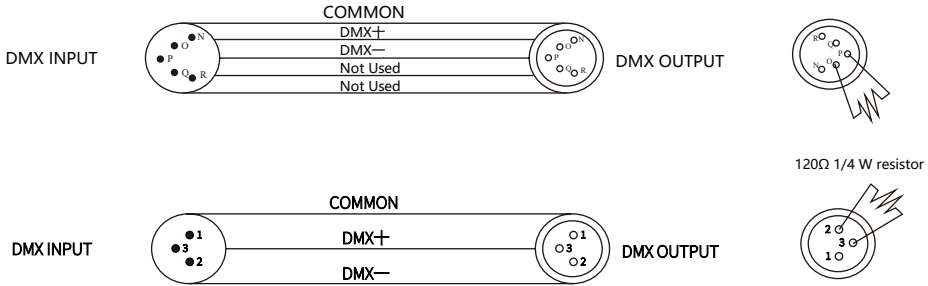
NETWORK CONNECTION



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.

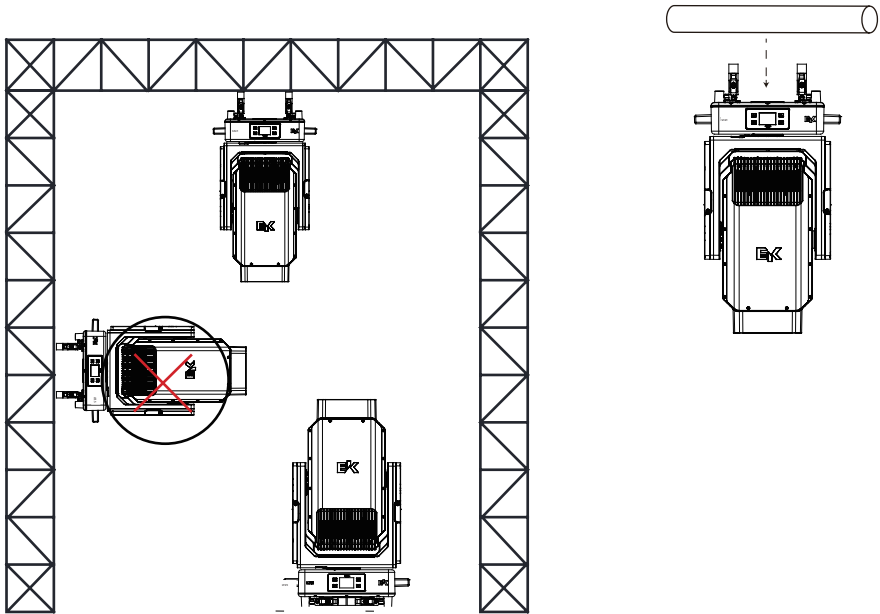
The actual starting addresses will be determined by the operator as needed to match external controller settings

RELATION BETWEEN DMX AND ADDRESS

MODE	ADDRESS	1ST FIXTURE	2nd FIXTURE	3rd FIXTURE	4th FIXTURE
40CH	001-040	001	041	081	121

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

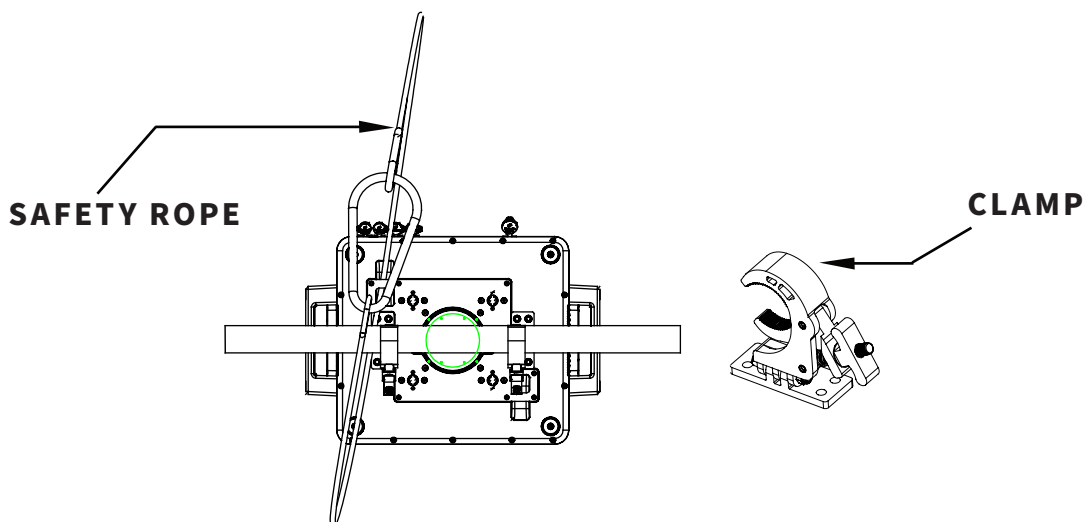
8. INSTALLATION



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 two positions: Sit-flat floor mounting and flown mounting.
6. LT15 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.

6.1.2 FLOWN 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.



9.MENU

\	Main Menu	Menu Level 2	Menu Level 3	Menu Level 4	Remark	
1	DMX Setting	DMX Address	1~512		1	
		DMX Channel	40CH		40CH	
2	Ethernet Setting	Protocol	Artnet sACN		Artnet	
		IP Address	xxx.xxx.xxx.xxx		/	
		IP Mask	xxx.xxx.xxx.xxx		/	
		Universe	0-255 (Artnet) 1-256 (sACN)		0	
		Net To DMX	Off			
			On			Off
3	Settings	Movement Setting	Invert Pan	Off		
				On	Off	
			Invert Tilt	Off		
				On	Off	
			Swap Pan/Tilt	Off		
				On	Off	
		Encoder Pan/Tilt	Off			
			On	On		
		Absolute Encoder	Off			
			On	On		
		Framing Shutter Mode	Independent Mode			
			Mixed Mode		Mixed Mode	
		Frost Mode	Independent Mode			
			Mixed Mode		Mixed Mode	
		Dimmer Setting	Dimmer Mode		Off	
				Dimmer 1		Off
				Dimmer 2		
			Dimmer 3			
			Dimmer Curve		Linear	
					Square	
				Inverse Square		
				S Curve		
		LED Setting	LED Frequency		600Hz	
					1200 Hz	
					2000 Hz	
					4000 Hz	
					6000 Hz	
					25KHz	
		Fan Mode		Auto		
				On		
				Off		
				Silent		Auto
Reset Setting		All		/		
		P/T		/		
		Head		/		
Display Setting	Back Light		Off			
			On	Off		
	Flip Display		No			
			Yes			
			Auto	No		
	Warn Cue		Off			
		On	On			
Key Lock		No				
		Yes	Yes			
Temperature Unit		°C				
		°F	°C			

4	TEST	Channel	(per current channel)		/
					/
					/
		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
				Gobo1 Offset	128
				RGobo1 Offset	128
				Gobo2 Offset	128
				RGobo2 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
				RPrism Offset	128
				Prism2 Offset	128
			RPrism2 Offset	128	
Focus Offset	128				
Zoom Offset	128				
Frost1 Offset	128				
Frost2 Offset	128				
		Factory Reset	No		
			Yes	/	
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	LED: 40°C		/
			LED2: 40°C		/
		Humidity	25%		/
		Pressure	80kpa		/
		UID:	030F0CE*****		/
Bluetooth Version	V0.0.X				

10.DMX CHART

40CH	Function	Value	Description	Remark
1	Pan	000-255		
2	Pan Fine	000-255		
3	Tilt	000-255		
4	Tilt Fine	000-255		
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	Dimmer	000-255	Dimmer 0%-100%	
7	Dimmer Fine	000-255	Dimmer Fine	
8	Cyan	000-255	0%-100%	
9	Magenta	000-255	0%-100%	
10	Yellow	000-255	0%-100%	
11	CTO	000-255	0%-100%	
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	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	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)	

10.2 DMX CHART

15	Gobo2	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			
16	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)	
17	Prism1	000-127	Prism1 Excluded	
		128-255	Prism1 Inserted	
18	RPrism1	000-127	0 - 540 Position	
		128-190	Fast to Slow(Forward Spin)	
		191-192	Stop (Stop Rotation)	
19	Prism2	193-255	Slow to Fast(Revers Spin)	
		000-127	Prism2 Excluded	
		128-255	Prism2 Inserted	
20	RPrism2	000-127	0 - 540 Position	
		128-190	Fast to Slow(Forward Spin)	
		191-192	Stop (Stop Rotation)	
		193-255	Slow to Fast(Revers Spin)	
21	Frost 1/2	000-255	Frost 0->100%	Mixed Mode
22	No Function	/	/	
21	Frost 1	000-255	Frost 0->100%	Independent Mode
22	Frost 2	000-255	Frost 0->100%	
23	Effect	000-127	Effect Excluded	
		128-255	Effect Inserted	
24	REffect	000-003	Effect Inserted	
		004-127	Fast to Slow(Forward Spin)	
		128-132	Stop (Stop Rotation)	
		133-255	Slow to Fast(Revers Spin)	
25	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	
26	Focus	000-255		
27	Focus Fine	000-255		
28	Zoom	000-255		
29	Zoom Fine	000-255		

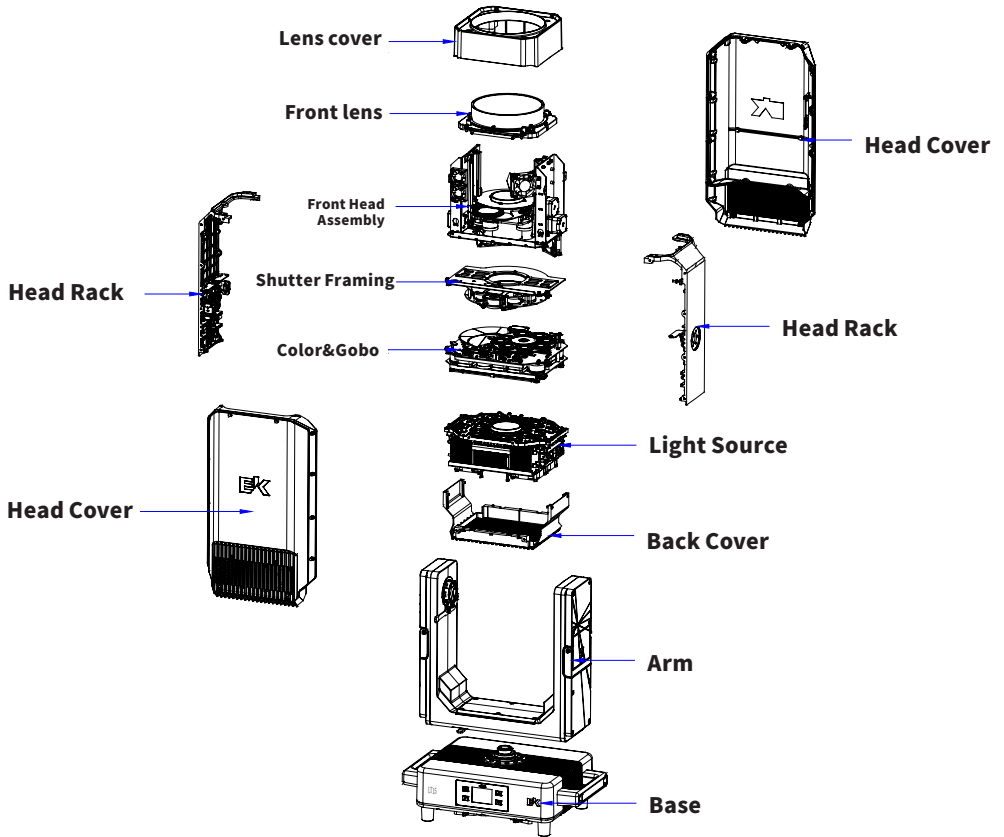
10.3 DMX CHART

30	Auto Focus	000-010	Auto Focus OFF	Hole	
		011-020	4 - 6 metres		
		021-030	6 - 8 metres		
		031-040	8 - 10 metres		
		041-050	10 - 12 metres		
		051-060	12 - 14 metres		
		061-070	14 - 16 metres		
		071-080	16 - 18 metres		
		081-090	18 - 20 metres		
		091-100	4 - 6 metres		RGobo1
		101-110	6 - 8 metres		
		111-120	8 - 10 metres		
		121-130	10 - 12 metres		
		131-140	12 - 14 metres		
		141-150	14 - 16 metres		
		151-160	16 - 18 metres		
		161-170	18 - 20 metres		
		171-180	4 - 6 metres		
		181-190	6 - 8 metres	RGobo2	
		191-200	8 - 10 metres		
		201-210	10 - 12 metres		
		211-220	12 - 14 metres		
		221-230	14 - 16 metres		
		231-240	16 - 18 metres		
		241-250	18 - 20 metres		
251-255	Auto Focus OFF				
31	Framing Shutter 1 movent	000-255	Movement from outward to inward		Framing Shutter Mixed Mode
	Framing Shutter 1_1 movent	000-255	Movement from outward to inward		Framing Shutter Independent Mode
32	Framing Shutter 1 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees	Framing Shutter Mixed Mode	
		128	0 degrees		
		129-255	Swivelling from 0 degrees to +25 degrees		
33	Framing Shutter 1_2 movent	000-255	Movement from outward to inward	Framing Shutter Independent Mode	
	Framing Shutter 2 movent	000-255	Movement from outward to inward	Framing Shutter Mixed Mode	
33	Framing Shutter 2_1 movent	000-255	Movement from outward to inward	Framing Shutter Independent Mode	
	34	Framing Shutter 2 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees	Framing Shutter Mixed Mode
128			0 degrees		
129-255			Swivelling from 0 degrees to +25 degrees		
34	Framing Shutter 2_2 movent	000-255	Movement from outward to inward	Framing Shutter Independent Mode	
	35	Framing Shutter 3 movent	000-255	Movement from outward to inward	Framing Shutter Mixed Mode
Framing Shutter 3_1 movent		000-255	Movement from outward to inward	Framing Shutter Independent Mode	
36	Framing Shutter 3 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees	Framing Shutter Mixed Mode	
		128	0 degrees		
		129-255	Swivelling from 0 degrees to +25 degrees		
36	Framing Shutter 3_2 movent	000-255	Movement from outward to inward	Framing Shutter Independent Mode	
	37	Framing Shutter 4 movent	000-255	Movement from outward to inward	Framing Shutter Mixed Mode
Framing Shutter 4_1 movent		000-255	Movement from outward to inward	Framing Shutter Independent Mode	

10.4 DMX CHART

38	Framing Shutter 4 swivelling	000-127	Swivelling from -25 degrees towards 0 degrees	Framing Shutter Mixed Mode
		128	0 degrees	
		129-255	Swivelling from 0 degrees to +25 degrees	
	Framing Shutter 4_2 movent	000-255	Movement from outward to inward	Framing Shutter Independent Mode
39	Framing Shutters Rotation	000-127	Rotation from left to center	
		128	Center	
		129-255	Rotation from center to right	
40	Control (keep 3 seconds)	000-005	None	
		006-010	Dimmer Mode Off	
		011-015	Dimmer Mode 1	
		016-020	Dimmer Mode 2	
		021-025	Dimmer Mode 3	
		026-030	Dimmer curve Linear	
		031-035	Dimmer curve Exponential	
		036-040	Dimmer curve Logarithmic	
		041-045	Dimmer curve S	
		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 PanTilt Off	
		101-105	Swap PanTilt 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	Frost Independent Mode	
		176-180	Frost Mixed Mode	
		181-240	Reserve	
241-245	Head Reset			
246-250	Pan/Tilt Reset			
251-255	Complete Reset			

11.Exploded View



12. MAINTENANCE

- 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.

13. TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Fixture does not light up	<ul style="list-style-type: none"> • No mains supply • Dimmer fader set to 0 • All color faders set to 0 • Faulty LED • Faulty LED board 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Dirty lens assembly • Misaligned lens assembly 	<ul style="list-style-type: none"> • Clean the fixture regularly • Install lens assembly properly
Fixture does not power up	<ul style="list-style-type: none"> • No power • Loose or damaged power cord • Faulty internal power supply 	<ul style="list-style-type: none"> • Check for power on power outlet • Check power cord • Replace internal power supply
Fixture does not respond to DMX	<ul style="list-style-type: none"> • Wrong DMX addressing • Damaged DMX cables • Bouncing signals 	<ul style="list-style-type: none"> • 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