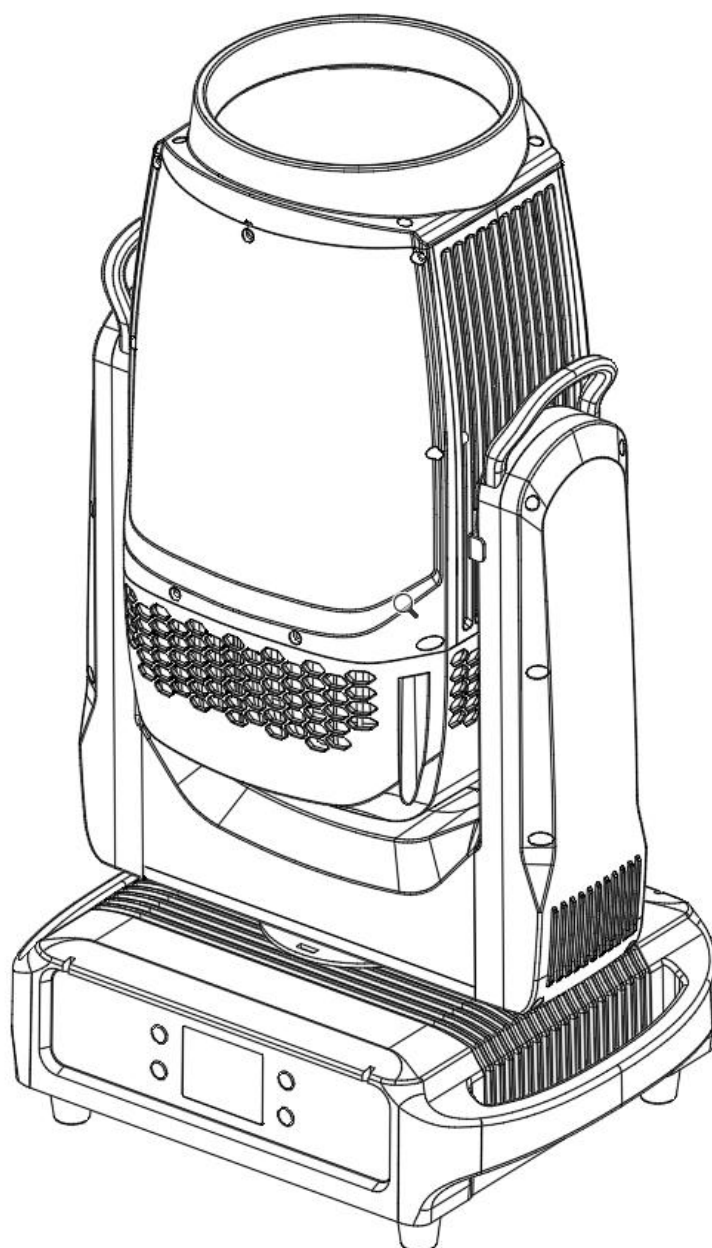




User Manual

Please read the instructions carefully before use

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1. Safety Instructions

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

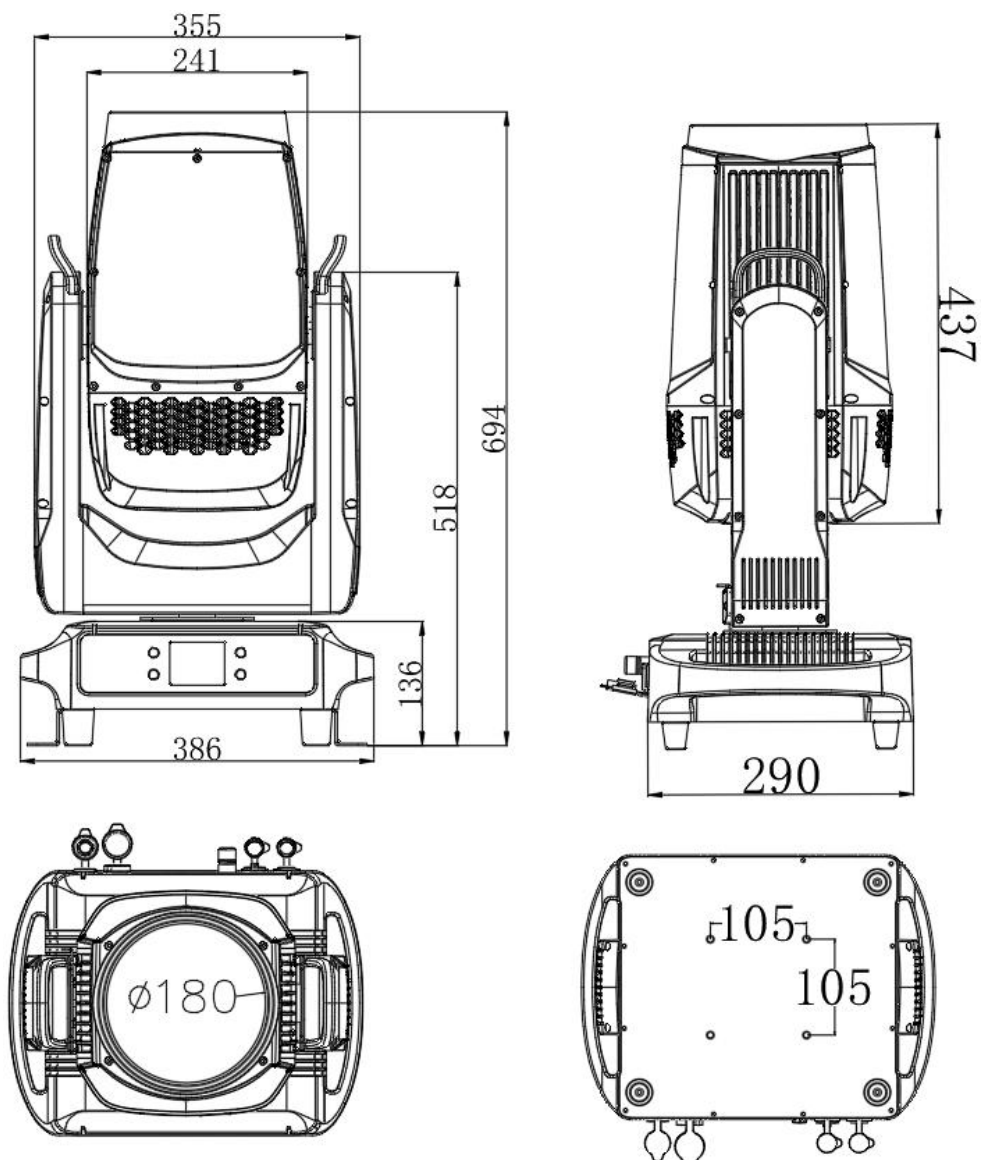
- Unpack and check carefully to ensure that there is no transportation damage before using the unit
- The equipment is suitable for dry and humid environments, with a protection grade of IP66. The lamps should be kept clean and should be cleaned and maintained regularly.
- Eligible professionals may install, operate, and maintain lighting equipment, and ensure that operations are strictly carried out in accordance with the procedures described in this manual.
- When securing equipment, use safe ropes. When moving lighting fixtures, please also support the bottom.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Make sure the power voltage before operation matches the power voltage required by the device.
- Each lighting fixture should be safely grounded and installed in accordance with relevant standards to prevent electric shock.
- Minimum ambient temperature TA: -10°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- Do not place flammable items next to the lighting when in operation to prevent fire hazards.
- Do not use power cables with damaged insulation, and do not place the power cable on other conductors. When the lighting is not in use or being cleaned, please unplug the power cable, do not pull or tug the power cable forcefully.
- Unit's surface temperature may reach up to 85°C. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

- Do not touch the wires when the lighting is operating to prevent electric shock.
- The distance between the lighting and the illuminated surface should be greater than 12 meters.
- No available parts inside the lighting fixture,do not open the fixture shell arbitrarily.
- Machine failure occurred, please stop using it immediately. Non-professional technicians are not allowed to repair it themselves
- Please use the original packaging materials when transportation is required again.
- Replace the light bulb in a timely manner when it is damaged,warped due to heat, or exceeds its service life.
- Do not stare directly at the lights when they are in operation.

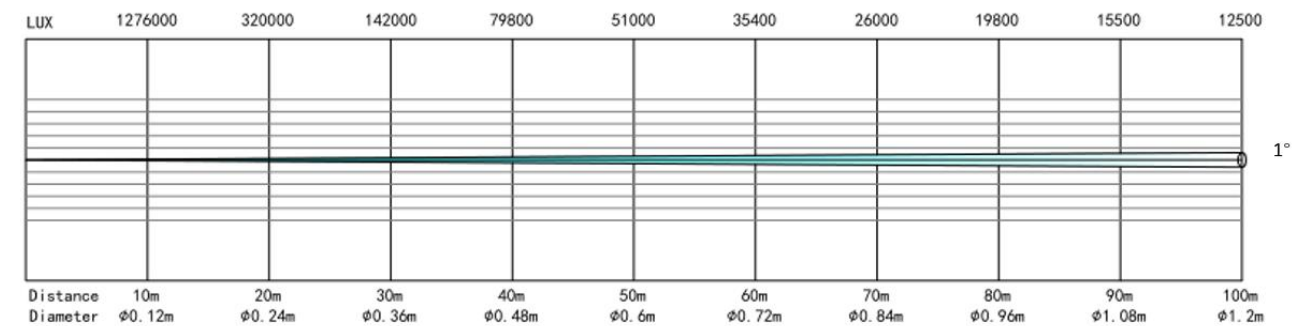
2. Product Introduction

Technical specification table	
Power Voltage	AC100V-240V 50/60HZ
Power Consumption	450W
Light Source	300W White Laser
Color temperature	7000±500K
Light source lifespan	30000 hours
Beam angle	1°
Outcoating diameter	180mm
PAN scan	540°
TILT scan	270°
Color	Linear CMY color mixing; 2 Color Wheels with 12 Colors
Gobo Wheel	1 Static Gobo Wheel 17gobos, plus open
Focus	0-100% Electronic High-Definition Focus
Frost	1 Frost Filter
Strobe	1-25Hz, various strobe effects
Dimming	0-100% smooth dimming
Prism	8-facet prism, 24-facet prism 6 facet linear prism
Power connection	Waterproof power connector in/out
DMX connection	3-pin/5-pin XLR Connector
Working temperature	-10℃～+40℃
Dimensions	694*386*290mm
Weight	24.5kg
Protection Rating	IP66
Shell	All-magnesium alloy body with black baked finish
Control Mode	DMX512, Master-Slave, Auto Run, RDM
DMX Channel	21CH/22CH
Display	2.8-inch Display Screen with Automatic Flip Function

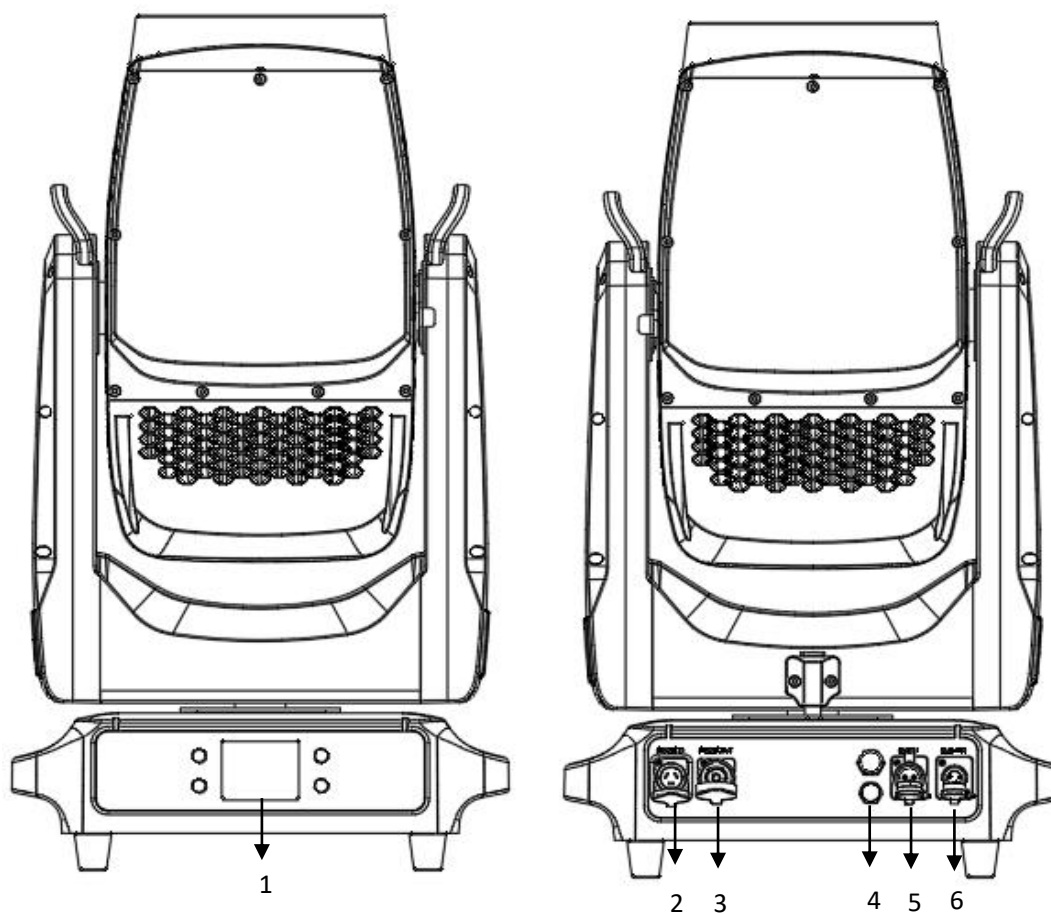
2.1 Product Dimension



2.2 Photometric Diagram



3. Control Panel



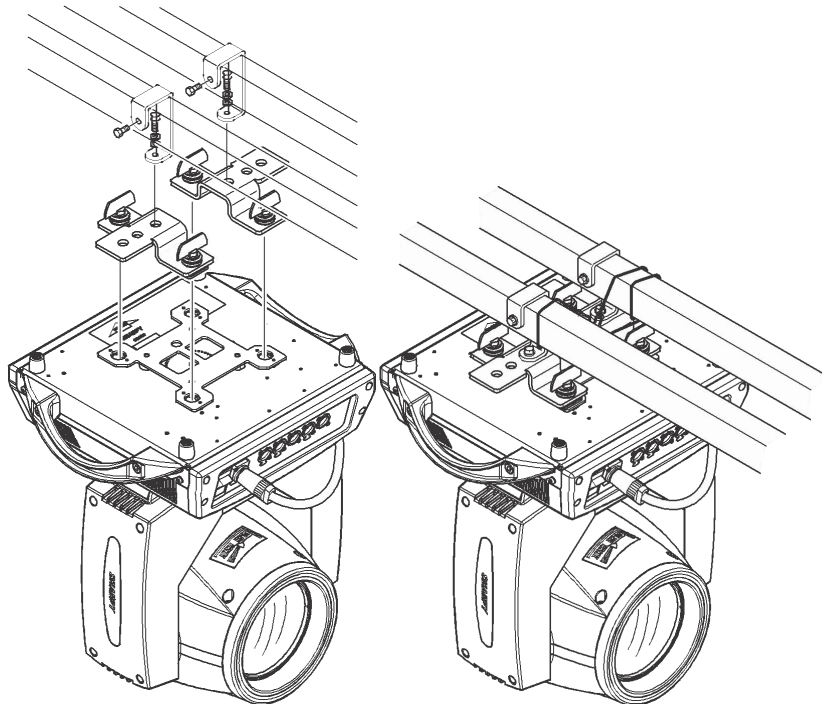
1. Display panel	MENU	Enter the menu function	
	▲UP	UP	To go backward to move up in the menu
	▼DOWN	DOWN	To go forward to move down in the menu
	ENTER	ENTER	To perform the desired functions
2. Power In	To connect to supply power		
3. Power Out	To connect to the next fixture		
4.RELEASE VALVE			
5.DMX In	For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller		
6.DMX Out	For DMX512 link, use 3-pin XLR cable to link the next units		

This product uses IP65 waterproof power cable IN/OUT

Note: Due to power reasons, a 1.5 square millimeter power cable can only power a maximum of 4 units (230V), and 120V can only power a maximum of 2 units

4. Lighting installation

1. The installation of the equipment should be carried out by professionals, and the area where the lighting fixtures may be accessible to unauthorized personnel should be kept away. Do not stand directly below the lighting fixtures when assembling, disassembling, or repairing them.
2. When installing lighting fixtures, make sure they are securely installed to prevent them from shaking and falling off during operation. Also, ensure that the structure used to fix the lighting fixtures can support 10 times the weight of the fixtures without deforming. At the same time as installing the lighting fixtures, use a safety rope that can support 12 times the weight of the fixtures to ensure that the fixtures will not fall off if the clamp fails.
3. This lamp is fully operable in three different installation positions: suspended, hanging, or placed on a flat horizontal surface. Always use and install the attached safety rope as a safety measure to prevent the lamp from being accidentally damaged or causing personal injury when the fixture fails.



5. Lighting setup

Menu function

- First use requires unlocking the menu, press the [▲UP] and [▼DOWN] buttons twice, then press the [ENTER] key to unlock.
- Use the [ENTER],[▲UP], and [▼DOWN] buttons to navigate the menu.
- Press the [ENTER] button to select menu options or confirm the selected settings.
- Return to the previous menu without making any changes. Press the [MENU] button to return and exit.
- Long-time inactivity will automatically lock the screen of the lighting equipment, which needs to be unlocked by pressing the [▲UP] and [▼DOWN] buttons twice in sequence and then pressing the [ENTER] key.

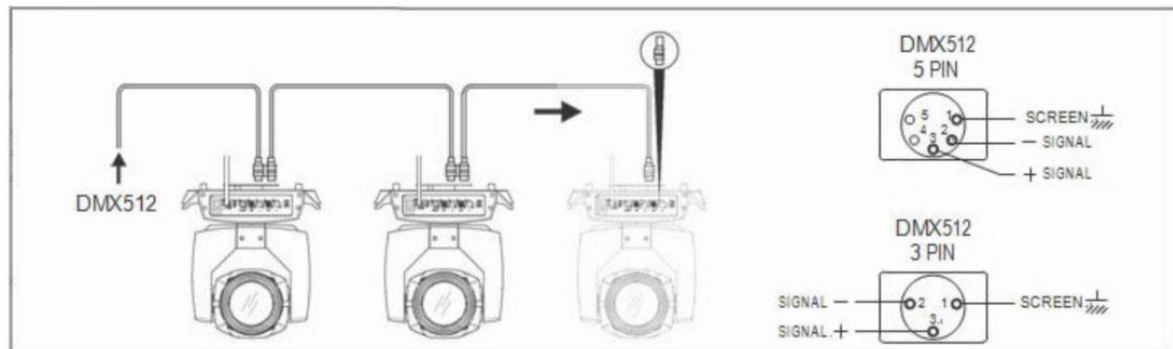
Menu functions as follows

Level 1 Menu	Level 2 Menu	Level 3 Menu	Level 4 Menu	Level 5 Menu	
DMX Setup	Dmx Address	1 - 512			
	Channel Mode	21CH/22CH			
	Run Mode	DMX			
		Auto			
		Scene			
Personality	Pan Inverse	No			
		Yes			
	Tilt Inverse	No			
		Yes			
	Pan/Tilt Feedback	Off			
		On			
	No Data Mode	Blackout			
		Hold			
	M/S Mode	Slave			
		Master			
	Lamp Mode	Manual			
		Reset			
	Lamp	Off			
		On			
Display	Display Rotate	Normal			
		Rotate 180			
	Screen Lock	Off			
		On			
	Language	English			
		Chinese			

Motor Reset	All	No			
		Yes			
	Pan/Tilt	No			
		Yes			
	Effect	No			
		Yes			
Manual Control	◦ ◦ ◦	0 - 255			
Scene Editing	Scene1	Scene state			
		Hold time			
		◦ ◦ ◦			
	Scene2				
	Scene3				
DMX Live	◦ ◦ ◦	0 - 255			
Service	Password	Calibration	Motor	Pan	-128 -> 127
				◦ ◦ ◦	-128 -> 127
		Factory Default	No		
			Yes		
		Clear Power On Time	No		
			Yes		
		Clear Lamp Hours	No		
			Yes		
Information	Power On Time	xxxxxH			
	Lamp Hours	xxxxxH			
	SW Version	1U: Vx.x.x			
		2U: Vx.x.x			
		3U: Vx.x.x			
	RDM UID	0XXXXX-XXXX XXXX			

6. Control By Universal DMX Controller

6.1 DMX512 Connection



DMX signal line connection diagram

- At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
- Connect the unit together in a “daisy chain” by XLR plug cable from the output of the unit to the input of the next unit. The cable can only be used in series and cannot be connected in parallel. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
- The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units’ power is disconnected.
- Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
- Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
- 3 pin XLR connectors are more popular than 5 pins XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button to enter the main menu, select DMX settings, press the ENTER button to confirm, use the UP/DOWN buttons to select the address code (1-512), and press the ENTER button to save.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.=

Channel	Address	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
21CH	001-021	001	022	043	064
22CH	001-022	001	023	045	067

6.3 DMX Channel

21CH	Channel Name	value	Function
1	Cyan	000 - 255	From shallow to deep
2	Magenta	000 - 255	From shallow to deep
3	Yellow	000 - 255	From shallow to deep
4	CTO	000 - 255	From shallow to deep
5	Colour1	000 - 007	OPEN
		008 - 016	Color 1
		017 - 025	Color 2
		026 - 034	Color 3
		035 - 043	Color 4
		044 - 052	Color 5
		053 - 063	Color 6
		064 - 067	OPEN
		068 - 071	White light + Color 1
		072 - 075	Color 1
		076 - 079	Color 1 + Color 2
		080 - 083	Color 2
		084 - 087	Color 2 + Color 3
		088 - 091	Color 3
		092 - 095	Color 3 + Color 4
		096 - 099	Color 4
		100 - 103	Color 4 + Color 5
		104 - 107	Color 5
		108 - 111	Color 5 + Color 6
		112 - 115	Color 6
		116 - 255	Rotation, Slow to Fast
6	Colour2	000 - 007	OPEN
		008 - 016	Color 1
		017 - 025	Color 2
		026 - 034	Color 3
		035 - 043	Color 4
		044 - 052	Color 5
		053 - 063	Color 6
		064 - 067	OPEN
		068 - 071	White light + Color 1
		072 - 075	Color 1
		076 - 079	Color 1 + Color 2
		080 - 083	Color 2
		084 - 087	Color 2 + Color 3
		088 - 091	Color 3

		092 - 095	Color 3 + Color 4
		096 - 099	Color 4
		100 - 103	Color 4 + Color 5
		104 - 107	Color 5
		108 - 111	Color 5 + Color 6
		112 - 115	Color 6
		116 - 255	Rotation, Slow to Fast
7	Strobe	000 - 003	Close
		004 - 103	Pulse Strobe from Slow to Fast
		104 - 107	OPEN
		108 - 207	Strobe from Slow to Fast
		208 - 212	OPEN
		213 - 251	Random Strobe
		252 - 255	OPEN
8	Dimmer	000 - 255	DIMMER 0%-100%
9	FixGobo	000 - 004	OPEN
		005 - 009	GOBO 1
		010 - 014	GOBO 2
		015 - 019	GOBO 3
		020 - 024	GOBO 4
		025 - 029	GOBO 5
		030 - 034	GOBO 6
		035 - 039	GOBO 7
		040 - 044	GOBO 8
		045 - 049	GOBO 9
		050 - 054	GOBO 10
		055 - 059	GOBO 11
		060 - 064	GOBO 12
		065 - 069	GOBO 13
		070 - 074	GOBO 14
		075 - 079	GOBO 15
		080 - 084	GOBO 16
		085 - 089	GOBO 17
		090 - 094	Gobo 1 Shaking, Slow to Fast
		095 - 099	Gobo 2 Shaking, Slow to Fast
		100 - 104	Gobo 3 Shaking, Slow to Fast
		105 - 109	Gobo 4 Shaking, Slow to Fast
		110 - 114	Gobo 5 Shaking, Slow to Fast
		115 - 119	Gobo 6 Shaking, Slow to Fast
		120 - 124	Gobo 7 Shaking, Slow to Fast
		125 - 129	Gobo 8 Shaking, Slow to Fast

		130 - 134	Gobo 9 Shaking, Slow to Fast
		135 - 139	Gobo 10 Shaking, Slow to Fast
		140 - 144	Gobo 11 Shaking, Slow to Fast
		145 - 149	Gobo 12 Shaking, Slow to Fast
		150 - 154	Gobo 13 Shaking, Slow to Fast
		155 - 159	Gobo 14 Shaking, Slow to Fast
		160 - 164	Gobo 15 Shaking, Slow to Fast
		165 - 169	Gobo 16 Shaking, Slow to Fast
		170 - 174	Gobo 17 Shaking, Slow to Fast
		175 - 214	Counter-Clockwise Rotation, Fast to Slow
		215 - 215	Stop
		216 - 255	Clockwise Rotation, Slow to Fast
10	Prism	000 - 127	No function
		128 - 191	Prism 1
		192 - 255	Prism 2
11	R-PRISM	000 - 127	Index 0°- 360°
		128 - 190	Clockwise Rotation, Fast to Slow
		191 - 192	Stop
		193 - 255	Counter-Clockwise Rotation, Slow to Fast
12	Prism2	000 - 127	No function
		128 - 255	Prism 3
13	R-PRISM 2	000 - 127	Index 0°- 360°
		128 - 190	Clockwise Rotation, Fast to Slow
		191 - 192	Stop
		193 - 255	Counter-Clockwise Rotation, Slow to Fast
14	Focus	000 - 255	0-100%
15	Pan	000 - 255	0-100%
16	Pan Fine	000 - 255	0-100%
17	Tilt	000 - 255	0-100%
18	Tilt Fine	000 - 255	0-100%
19	Frost	000 - 255	Frost
20	Reset	250 - 255	Rest ALL
21	None		

22CH	Channel Name	value	Function
1	Pan	000 - 255	0-540°
2	Pan Fine	000 - 255	0-2°
3	Tilt	000 - 255	0-270°
4	Tilt Fine	000 - 255	0-1°

5	Pan/Tilt Speed	000 - 255	From Fast to Slow
6	Cyan	000 - 255	0-100%
7	Magenta	000 - 255	0-100%
8	Yellow	000 - 255	0-100%
9	CTO	000 - 255	0-100%
10	Colour1	000 - 007	OPEN
		008 - 016	Color 1
		017 - 025	Color 2
		026 - 034	Color 3
		035 - 043	Color 4
		044 - 052	Color 5
		053 - 063	Color 6
		064 - 067	OPEN
		068 - 071	White light + Color 1
		072 - 075	Color 1
		076 - 079	Color 1 + Color 2
		080 - 083	Color 2
		084 - 087	Color 2 + Color 3
		088 - 091	Color 3
		092 - 095	Color 3 + Color 4
		096 - 099	Color 4
		100 - 103	Color 4 + Color 5
		104 - 107	Color 5
		108 - 111	Color 5 + Color 6
		112 - 115	Color 6
		116 - 255	Rotation, Slow to Fast
11	Colour2	000 - 007	OPEN
		008 - 016	Color 1
		017 - 025	Color 2
		026 - 034	Color 3
		035 - 043	Color 4
		044 - 052	Color 5
		053 - 063	Color 6
		064 - 067	OPEN
		068 - 071	White light + Color 1
		072 - 075	Color 1
		076 - 079	Color 1 + Color 2
		080 - 083	Color 2
		084 - 087	Color 2 + Color 3
		088 - 091	Color 3
		092 - 095	Color 3 + Color 4

12	FixGobo	096 - 099	Color 4
		100 - 103	Color 4 + Color 5
		104 - 107	Color 5
		108 - 111	Color 5 + Color 6
		112 - 115	Color 6
		116 - 255	Rotation, Slow to Fast
		000 - 004	OPEN
		005 - 009	GOBO 1
		010 - 014	GOBO 2
		015 - 019	GOBO 3
		020 - 024	GOBO 4
		025 - 029	GOBO 5
		030 - 034	GOBO 6
		035 - 039	GOBO 7
		040 - 044	GOBO 8
		045 - 049	GOBO 9
		050 - 054	GOBO 10
		055 - 059	GOBO 11
		060 - 064	GOBO 12
		065 - 069	GOBO 13
		070 - 074	GOBO 14
		075 - 079	GOBO 15
		080 - 084	GOBO 16
		085 - 089	GOBO 17
		090 - 094	Gobo 1 Shaking, Slow to Fast
		095 - 099	Gobo 2 Shaking, Slow to Fast
		100 - 104	Gobo 3 Shaking, Slow to Fast
		105 - 109	Gobo 4 Shaking, Slow to Fast
		110 - 114	Gobo 5 Shaking, Slow to Fast
		115 - 119	Gobo 6 Shaking, Slow to Fast
		120 - 124	Gobo 7 Shaking, Slow to Fast
		125 - 129	Gobo 8 Shaking, Slow to Fast
		130 - 134	Gobo 9 Shaking, Slow to Fast
		135 - 139	Gobo 10 Shaking, Slow to Fast
		140 - 144	Gobo 11 Shaking, Slow to Fast
		145 - 149	Gobo 12 Shaking, Slow to Fast
		150 - 154	Gobo 13 Shaking, Slow to Fast
		155 - 159	Gobo 14 Shaking, Slow to Fast
		160 - 164	Gobo 15 Shaking, Slow to Fast
		165 - 169	Gobo 16 Shaking, Slow to Fast
		170 - 174	Gobo 17 Shaking, Slow to Fast

		175 - 214	Counter-Clockwise Rotation, Fast to Slow
		215 - 215	Stop
		216 - 255	Clockwise Rotation, Slow to Fast
13	Prism	000 - 127	No function
		128 - 191	Prism 1
		192 - 255	Prism 2
14	R-PRISM	000 - 127	Index 0°- 360°
		128 - 190	Clockwise Rotation, Fast to Slow
		191 - 192	Stop
		193 - 255	Counter-Clockwise Rotation, Slow to Fast
15	Prism2	000 - 127	No function
		128 - 255	Prism 3
16	R-PRISM 2	000 - 127	Index 0°- 360°
		128 - 190	Clockwise Rotation, Fast to Slow
		191 - 192	Stop
		193 - 255	Counter-Clockwise Rotation, Slow to Fast
17	Frost	000 - 007	No Effect
		008 - 255	Frost
18	Focus	000 - 255	0-100%
19	Strobe	000 - 003	Close
		004 - 103	Pulse Strobe from Slow to Fast
		104 - 107	OPEN
		108 - 207	Strobe from Slow to Fast
		208 - 212	OPEN
		213 - 251	Random Strobe
		252 - 255	OPEN
20	Dimmer	000 - 255	DIMMER 0%-100%
21	Dimmer Fine	000 - 255	DIMMER 0%-100%
22	Function Channel	000 - 099	No Function
		100 - 105	No Function
		106 - 199	No Function
		200 - 205	No Function
		206 - 209	No Function
		210 - 215	XY Motor Reset After 3s
		216 - 219	No Function
		220 - 235	Effect Motor Reset After 3s
		236 - 239	No Function
		240 - 255	Reset All After 3s

7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for troubleshooting:

- A. The unit does not work, no light and the fan does not work.
- ◆ Check the connected power and main fuse.
 - ◆ Measure the voltage.
 - ◆ Check the power indicator to see whether it can be lit up or not.
- B. Not responding to the DMX controller.
- ◆ Check whether the DMX connectors and the DMX cables are connected correctly.
 - ◆ Check whether the DMX address is correctly set.
 - ◆ If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
 - ◆ Try it with another DMX controller.
 - ◆ Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

8. Equipment cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- ◆ A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- ◆ Always dry the parts carefully.
- ◆ Clean the external optical lens at least every 20 days