

USER MANUAL

Able Spot 600S



Version 1.2

PLEASE READ OVER THIS MANUAL BEFORE OPERATING THE LIGHT FIXTURE

1. SAFETY INSTRUCTION

The fixture is designed and manufactured to meet the requirements of People's Republic of China and international safety regulations. Modifications to the product could affect safety and render the product non-compliant to relevant safety standards.

Instructions pertaining to continued protection against fire, electric shock, and injury to persons are found throughout this manual. Please read all instructions prior to assembling, mounting, and operating this equipment.

IMPORTANT

ALWAYS READ THE USER MANUAL BEFORE OPERATION. PLEASE CONFIRM THAT THE POWER SUPPLY STATED ON THE PRODUCT IS THE SAME AS THE MAINS POWER SUPPLY IN YOUR AREA.

- This product must be installed by a qualified professional.
- Always operate the equipment as described in the user manual.
- A minimum distance of 1m must be maintained between the equipment and combustible surface.
- The product must always be placed in a well ventilated area.
- Always make sure that the equipment is installed securely.
- DO NOT stand close to the equipment and stare directly into the LED light source.
- Always disconnect the power supply before attempting and maintenance.
- Always make sure that the supporting structure is solid and can support the combined weight of the products.

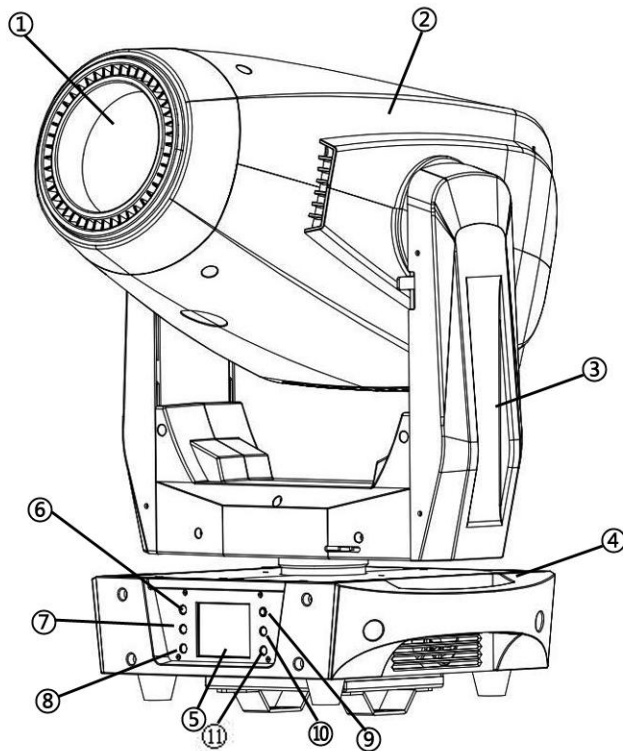
ATTENTION



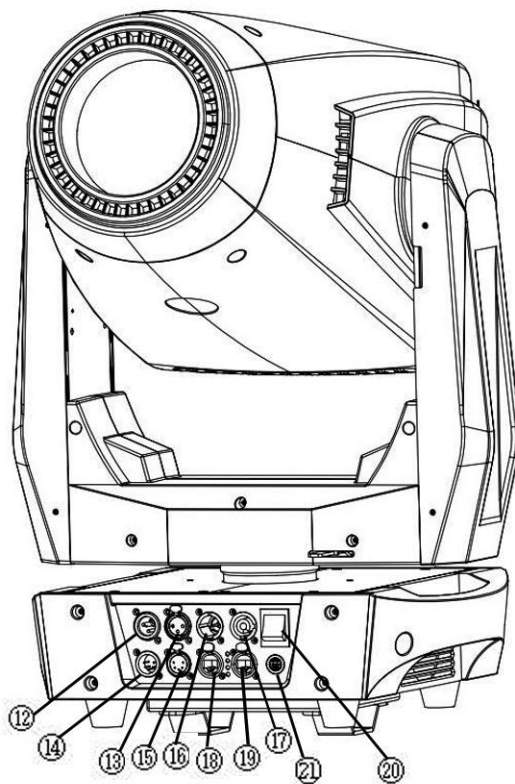
This product left the place of manufacturer in perfect condition. In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.

- Avoid shaking or strong impacts to any part of the equipment.
- Make sure that all parts of the equipment are kept clean and free of dust.
- Always make sure that the power connections are connected correct and secure.
- If there is any malfunction of the equipment, contact us immediately.
- When transferring the product, it is advisable to use the original packaging in which the product left the factory.
- Shields, lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is not conformable.

2. PRODUCT INTRODUCTION



- ① Lens
- ② Head
- ③ Arm
- ④ Bottom
- ⑤ LCD Display
- ⑥ Up-button
- ⑦ Menu-button
- ⑧ Down-button
- ⑨ Left-button
- ⑩ Enter-button
- ⑪ Right-button
- ⑫ DMX IN(3-pin)
- ⑬ DMX OUT(3-pin)
- ⑭ DMX IN(5-pin)
- ⑮ DMX OUT(5-pin)
- ⑯ POWER IN
- ⑰ POWER OUT
- ⑱ NETWORK IN
- ⑲ NETWORK OUT
- ⑳ TURN ON/OFF
- ㉑ FUSE 8A



3. SPECIFICATION

SOURCE

- Light Source: 500W Color White LED
- Color Temperature: 6500K
- Average LED Life: 20,000 Hour

POWER

- Input Voltage: 100-240VAC, 50/60Hz
- Power Consumption: 850W max. at full output

OPTICAL SYSTEM

- Zoom: 10° - 40° linear motorized
- Prism: 3-facet circular & 4 facet linear rotating prisms, independent control
- Frost: Frost filter hybrid wash effect
- Iris: Linearly Iris with macro function
- Strobe: 0-25Hz variable speed, pulse and random strobe
- Dimmer: 0-100% variable linear dimming curves
- CRI Filter: CRI>97

FRAMING SHUTTER

- Shutters: 4 independent framing shutters
- System Rotation: +/- 90°

COLOR

- 6 Dichoric Colors plus open, Index / Bi-directional rotating rainbow effect
- CMY + CTO Colormix system

FIXED GOBOS

- 1 fixed gobo wheels with 8 metal gobos plus open
- Shake / Bi-directional flow effect

ROTATING GOBOS

- 1 rotation gobo wheels with 6 interchangeable glass gobos plus open
- Interchangeable rotating / Shake / Bi-directional variable-speed rotation effect

ANIMATION WHEEL

- 1 Fire effect wheel

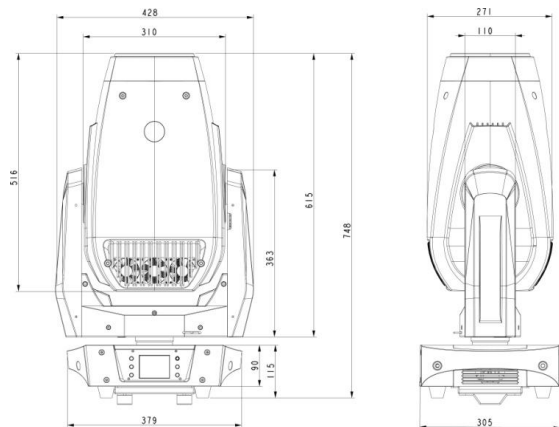
CONTROL / CONNECTION

- DMX Channel: 36CHs / 52CHs
- Control Mode: DMX, Manual
- Control Protocol: DMX, WDMX, ArtNet, sACN
- Full Color 180° Reversible LCD
- 3 pin and 5pin DMX In/Out
- PowerCON Power In

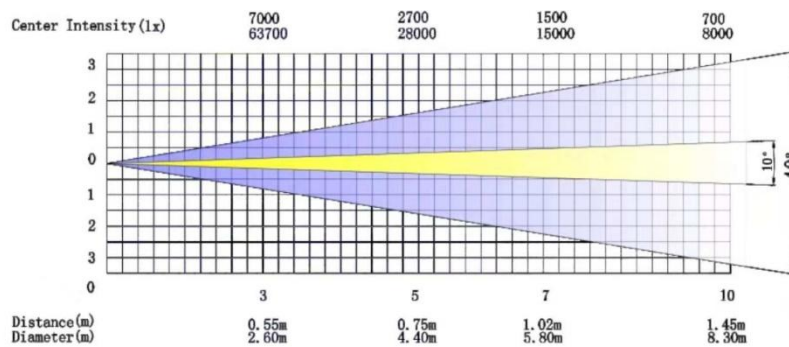
WEIGHT & DIMENSION

- Net Weight: 29.85kg
- Dimension: 428x305x748mm

4. DIMENSION (MM)

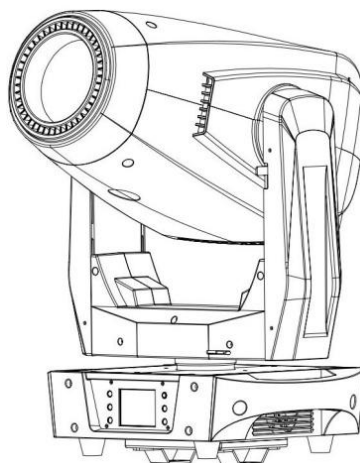


5. PHOTOMETRIC DATA

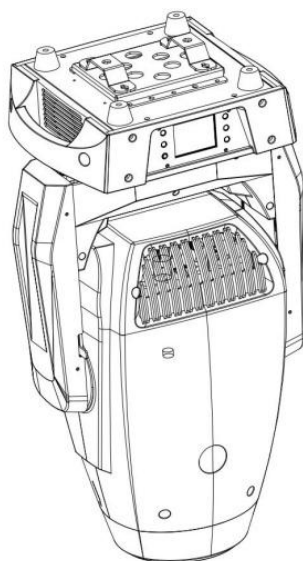


6. MOUNTING AND INSTALLATION

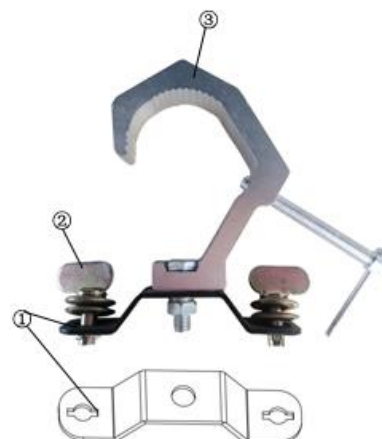
- The fixture can be mounted in any position.
- Always ensure that mounting surface can withstand 10 times the weight of the fixture.
- Always use a safety cable when mounting the fixture in any elevated position.



Upright



Hanging



- ① Omega Bracket
- ② Quick Lock
- ③ Safety Clamp

IMPORTANT SAFETY NOTE!!

Always use a safety cable when installing this unit!

Be sure that the safety cable is connected to a solid load-bearing structure!

7. DISPLAY PANEL INTRODUCTION

Using the display panel to set the starting DMX address or make other settings. The functions provided are described in the following sections.

【 Up 】 Scroll “Up” through the menu list or increase the value of the current function.

【 Menu 】 Scroll through the main menu or exit from the current sub-menu.

【 Down 】 Scroll “Down” through the menu list or decrease the value of the current function.

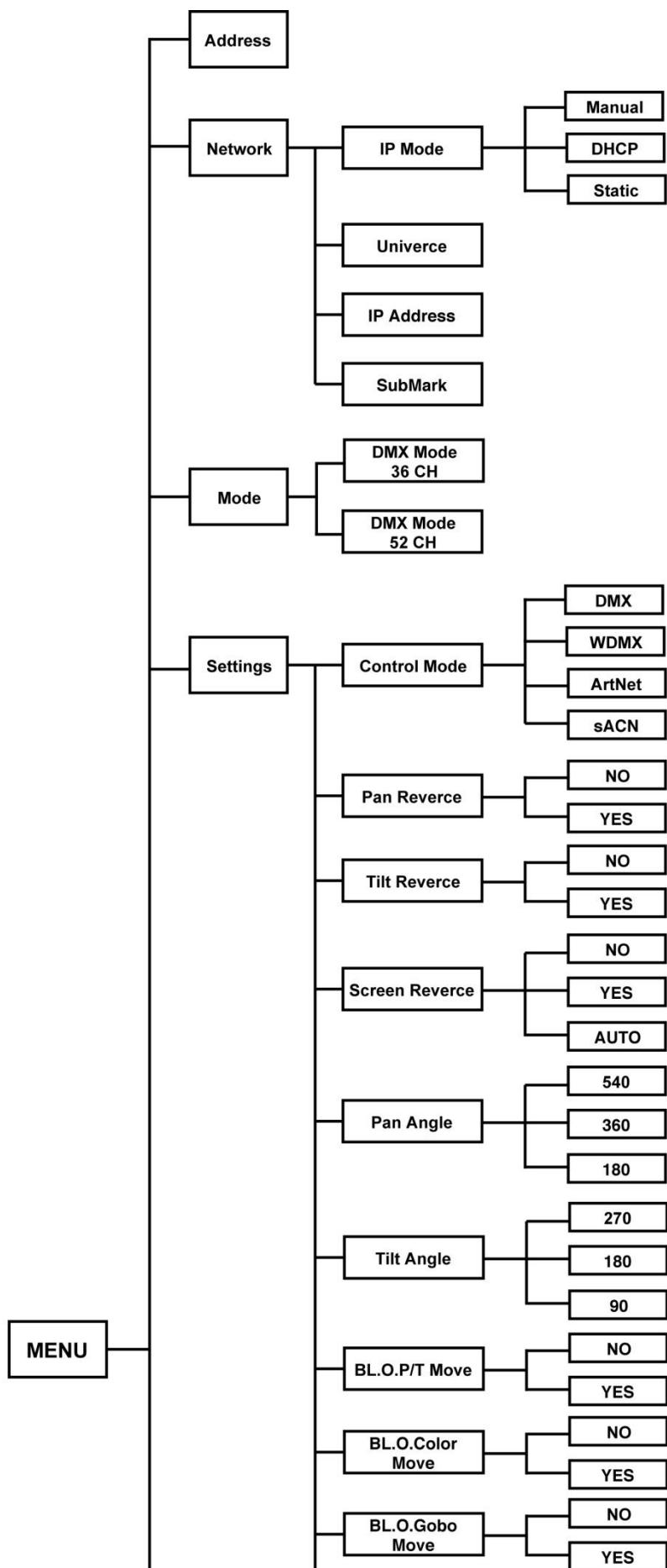
【 Left 】 Scroll “Left” through the main menu or sub-menu.

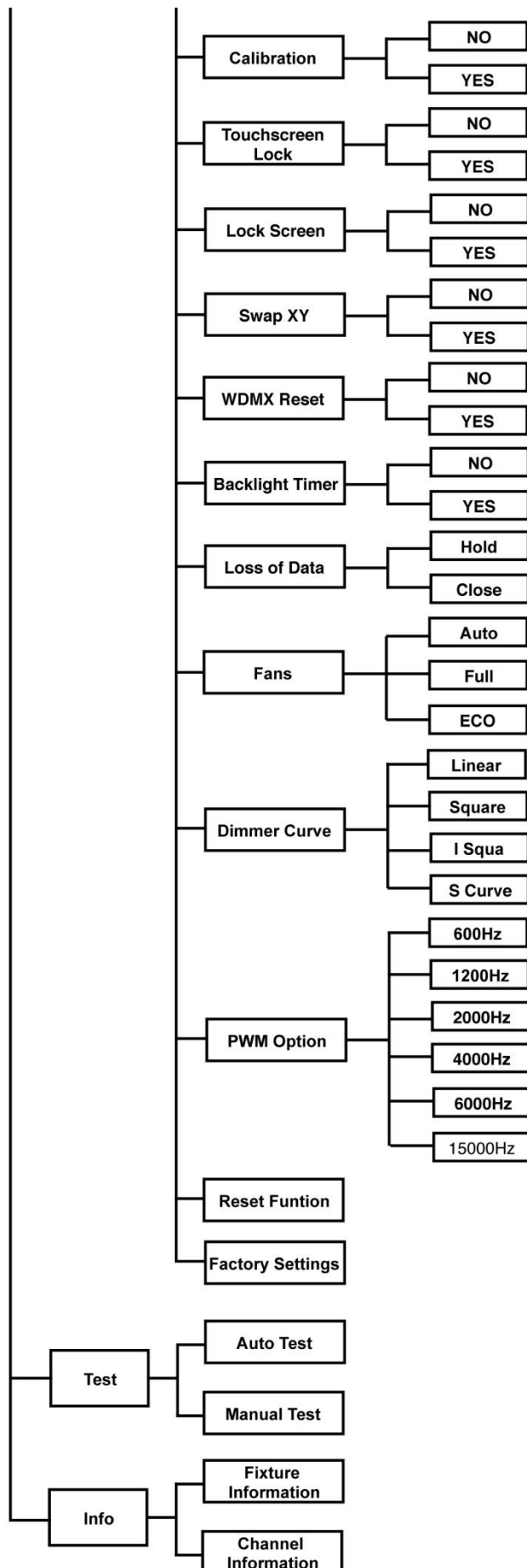
【 Enter 】 Enter the currently selected menu or confirm the current function value.

【 Right 】 Scroll “Right” through the main menu or sub-menu.



The classes of each menu are listed in the diagram as below:





8. DMX CHANNEL ASSIGNMENTS

This product has 36/52 DMX channels as below:

36 Channels mode

CH	Function	DMX	Details
1	Pan	0-255	0 to 540 degree
2	Pan Fine Tuning 16bit	0-255	16bit adjustabe
3	Tilt	0-255	0 to 270 degree
4	Tilt Fine Tuning 16bit	0-255	16bit adjustabe
5	Pan/Tilt Speed	0-255	From fast to slow
6	Dimming	0-255	Linear dimmer from dark to bright
7	Strobe	0-3	Light off
		4-7	Light up
		8-76	Strobe with the same step from slow to fast
		77-145	Strobe with pulse from slow to fast
		146-215	Strobe with random from slow to fast
		216-255	Light up
8	C	0-255	Cyan, from light to dark
9	M	0-255	Magenta, from light to dark
10	Y	0-255	Yellow, from light to dark
11	CMY CTO	0-255	CTO, from light to dark
12	Color Wheel	0-7	Open
		8-15	Color 1
		16-23	Color 2
		24-31	Color 3
		32-39	Color 4
		40-47	Color 5
		48-59	Color 6
		60-187	Color position/Index
		188-219	Clockwise rotation, from fast to slow
		220-223	Stop
13	Rotating Gobo Wheel	224-255	Anti-clockwise rotation, from slow to fast
		0-8	Open
		9-17	Gobo 1
		18-26	Gobo 2
		27-35	Gobo 3
		36-44	Gobo 4
		45-53	Gobo 5
		54-63	Gobo 6
		64-73	Gobo 6 shake
		74-82	Gobo 5 shake
		83-91	Gobo 4 shake
		92-100	Gobo 3 shake
		101-109	Gobo 2 shake
		110-118	Gobo 1 shake
		119-127	Open
		128-191	Anti-clockwise rotation, from slow to fast
14	Gobo Rotation	192-255	Clockwise rotation, from slow to fast
		0-63	Gobo rotation orientation
		64-145	Anti-clockwise rotation, from fast to slow
		146-149	Stop
		150-231	Clockwise rotation, from fast to slow
		232-255	Gobo rotation, Bi-directional rainbow effect

CH	Function	DMX	Details
15	Fixed Gobo Wheel	0-6	Open
		7-13	Gobo 1
		14-20	Gobo 2
		21-27	Gobo 3
		28-34	Gobo 4
		35-41	Gobo 5
		42-48	Gobo 6
		49-55	Gobo 7
		56-63	Gobo 8
		64-69	Open
		70-75	Gobo 8 shake
		76-81	Gobo 7 shake
		82-87	Gobo 6 shake
		88-93	Gobo 5 shake
		94-99	Gobo 4 shake
		100-105	Gobo 3 shake
		106-111	Gobo 2 shake
		112-117	Gobo 1 shake
		118-127	Open
		128-191	Anti-clockwise rotation, from slow to fast
		192-255	Clockwise rotation, from slow to fast
16	Animation Wheel	0-255	Animation wheel effect
17	Animation Wheel Rotation	0-124	Anti-clockwise rotation, from fast to slow
		125-130	Stop
		131-255	Clockwise rotation, from slow to fast
18	Framing System 1 Motor 1	0-255	0-100%
19	Framing System1 Motor 2	0-255	0-100%
20	Framing System 2 Motor 1	0-255	0-100%
21	Framing System 2 Motor 2	0-255	0-100%
22	Framing System 3 Motor 1	0-255	0-100%
23	Framing System 3 Motor2	0-255	0-100%
24	Framing System 4 Motor 1	0-255	0-100%
25	Framing System 4 Motor 2	0-255	0-100%
26	Framing System Rotation	0-255	0-100%
27	Focus	0-255	From far to near
28	Zoom	0-255	10°-40°linear motorized zoom
29	Prism 1	0-4	No function
		5-255	Prism 1 effect
30	Prism 1 Rotation	0-127	Rotation position of Prism 1
		128-189	Anti-clockwise rotation, from fast to slow
		190-193	Stop
		194-255	Clockwise rotation, from slow to fast
31	Prism 2	0-4	No function
		5-255	Prism 2 effect
32	Prism 2 Rotation	0-127	Rotation position of Prism 12
		128-189	Clockwise rotation, from fast to slow
		190-193	Stop
		194-255	Anti-clockwise rotation, from slow to fast
33	IRIS	0-63	IRIS from big to small
		64-127	Automatic zoom, from slow to fast
		128-191	Slow Zoom in and fast Zoom out, from slow to fast
		192-255	Slow Zoom out and fast Zoom in, from slow to fast

CH	Function	DMX	Details
34	Frost Filter	0-255	Frost filter effect
35	CRI Filter	0-4	No function
		5-255	CRI Filter effect
36	Function Channels	0-7	No function
		8-15	Cut off XY
		16-23	Cut off C
		24-31	Cut off G
		32-39	Cut off XYZ
		40-47	Cut off XYZ
		48-55	Cut off XYZ
		56-95	No function
		96-103	X reset
		104-111	Y reset
		112-119	Color reset
		120-127	Fixed gobo and rotating gobo rotation reset
		128-131	No function
		132-135	No function
		136-143	Prism reset
		144-151	Framing system reset
		152-159	All channels reset
		160-167	IRIS reset
		168-175	Frost reset
		176-183	Zoom reset
		184-191	CMY reset
		192-199	Fan works with low speed
		200-207	Fan works with full speed
		208-215	Fan speed control according to temperature
		216-220	No function
		221-225	No function
		226-230	No function
		231-235	Exchange XY, turn on
		236-240	Exchange XY, turn off
		241-245	No function
		246-250	No function
		251-255	No function

52 Channels mode

CH	Function	DMX	Details
1	Pan	0-255	0 to 540 degree
2	Pan Fine Tuning 16bit	0-255	16bit adjustabe
3	Tilt	0-255	0 to 270 degree
4	Tilt Fine Tuning 16bit	0-255	16bit adjustabe
5	Pan/Tilt Speed	0-255	From fast to slow
6	Dimming	0-255	Linear dimmer from dark to bright
7	Dimming 16bit	0-255	16bit adjustabe
8	Strobe	0-3	Light off
		4-7	Light up
		8-76	Strobe with the same step from slow to fast
		77-145	Strobe with pulse from slow to fast
		146-215	Strobe with random from slow to fast
		216-255	Light up
9	C	0-255	Cyan, from light to dark
10	M	0-255	Magenta, from light to dark
11	Y	0-255	Yellow, from light to dark
12	CMY CTO	0-255	CTO, from light to dark
13	Color Wheel	0-7	Open
		8-15	Color 1
		16-23	Color 2
		24-31	Color 3
		32-39	Color 4
		40-47	Color 5
		48-59	Color 6
		60-187	Color position/Index
		188-219	Clockwise rotation, from fast to slow
		220-223	Stop
		224-255	Anti-clockwise rotation, from slow to fast
14	Rotating Gobo Wheel	0-8	Open
		9-17	Gobo 1
		18-26	Gobo 2
		27-35	Gobo 3
		36-44	Gobo 4
		45-53	Gobo 5
		54-63	Gobo 6
		64-73	Gobo 6 shake
		74-82	Gobo 5 shake
		83-91	Gobo 4 shake
		92-100	Gobo 3 shake
		101-109	Gobo 2 shake
		110-118	Gobo 1 shake
		119-127	Open
		128-191	Anti-clockwise rotation, from slow to fast
		192-255	Clockwise rotation, from slow to fast
15	Gobo Rotation	0-63	Gobo rotation orientation
		64-145	Anti-clockwise rotation, from fast to slow
		146-149	Stop
		150-231	Clockwise rotation, from fast to slow
		232-255	Gobo rotation, Bi-directional rainbow effect

CH	Function	DMX	Details
16	Gobo Rotation 16bit	0-255	16bit adjustabe
17	Fixed Gobo Wheel	0-6	Open
		7-13	Gobo 1
		14-20	Gobo 2
		21-27	Gobo 3
		28-34	Gobo 4
		35-41	Gobo 5
		42-48	Gobo 6
		49-55	Gobo 7
		56-63	Gobo 8
		64-69	Open
		70-75	Gobo 8 shake
		76-81	Gobo 7 shake
		82-87	Gobo 6 shake
		88-93	Gobo 5 shake
		94-99	Gobo 4 shake
		100-105	Gobo 3 shake
		106-111	Gobo 2 shake
		112-117	Gobo 1 shake
		118-127	Open
		128-191	Anti-clockwise rotation, from slow to fast
		192-255	Clockwise rotation, from slow to fast
18	Animation Wheel	0-255	Animation wheel effect
19	Animation Wheel Rotation	0-124	Anti-clockwise rotation, from fast to slow
		125-130	Stop
		131-255	Clockwise rotation, from slow to fast
20	Framing System 1 Motor 1	0-255	0-100%
21	Framing System 1 Motor 1 16bit	0-255	16bit adjustabe
22	Framing System 1 Motor 2	0-255	0-100%
23	Framing System 1 Motor 2 16bit	0-255	16bit adjustabe
24	Framing System 2 Motor 1	0-255	0-100%
25	Framing System 2 Motor 1 16bit	0-255	16bit adjustabe
26	Framing System 2 Motor 2	0-255	0-100%
27	Framing System 2 Motor 2 16bit	0-255	16bit adjustabe
28	Framing System 3 Motor 1	0-255	0-100%
29	Framing System 3 Motor 1 16bit	0-255	16bit adjustabe
30	Framing System 3 Motor 2	0-255	0-100%
31	Framing System 3 Motor 2 16bit	0-255	16bit adjustabe
32	Framing System 4 Motor 1	0-255	0-100%
33	Framing System 4 Motor 1 16bit	0-255	16bit adjustabe
34	Framing System 4 Motor 2	0-255	0-100%
35	Framing System 4 Motor 2 16bit	0-255	16bit adjustabe
36	Framing System Rotation	0-255	0-100%
37	Framing System Rotation 16bit	0-255	16bit adjustabe
38	Focus	0-255	From far to near
39	Focus 16bit	0-255	16bit adjustabe
40	Focus Fine	0-10	No function
		11-127	Automatic focus gobo 2
		128-255	Automatic focus gobo 1
41	Zoom	0-255	10°-40°linear motorized zoom
42	Zoom 16bit	0-255	16bit adjustabe
43	Prism 1	0-4	No function
		5-255	Prism 1 effect

CH	Function	DMX	Details
44	Prism 1 Rotation	0-127	Rotation position of Prism 1
		128-189	Anti-clockwise rotation, from fast to slow
		190-193	Stop
		194-255	Clockwise rotation, from slow to fast
45	Prism 2	0-4	No function
		5-255	Prism 2 effect
46	Prism 2 Rotation	0-127	Rotation position of Prism 12
		128-189	Clockwise rotation, from fast to slow
		190-193	Stop
		194-255	Anti-clockwise rotation, from slow to fast
47	IRIS	0-63	IRIS from big to small
		64-127	Automatic zoom, from slow to fast
		128-191	Slow Zoom in and fast Zoom out, from slow to fast
		192-255	Slow Zoom out and fast Zoom in, from slow to fast
48	Frost Filter	0-255	Frost filter effect
49	CRI Filter	0-4	No function
		5-255	CRI Filter effect
50	CMY Macro Function	0-9	No function
		10-255	CMY Macro function
51	CMY Macro Function Speed	0-255	CMY color exchange function, from fast to slow
52	Function Channels	0-7	No function
		8-15	Cut off XY
		16-23	Cut off C
		24-31	Cut off G
		32-39	Cut off XYZ
		40-47	Cut off XYZ
		48-55	Cut off XYZ
		56-95	No function
		96-103	X reset
		104-111	Y reset
		112-119	Color reset
		120-127	Fixed gobo and rotating gobo rotation reset
		128-131	No function
		132-135	No function
		136-143	Prism reset
		144-151	Framing system reset
		152-159	All channels reset
		160-167	IRIS reset
		168-175	Frost reset
		176-183	Zoom reset
		184-191	CMY reset
		192-199	Fan works with low speed
		200-207	Fan works with full speed
		208-215	Fan speed control according to temperature
		216-220	No function
		221-225	No function
		226-230	No function
		231-235	Exchange XY, turn on
		236-240	Exchange XY, turn off
		241-245	No function
		246-250	No function
		251-255	No function

9. CLEANING

In order to make the fixture in good condition and extend the life time, we suggest a regular cleaning to the fixture.

- Clean the inside and outside lens each week to avoid the weaknesses of the fixture due to accumulation of the dust.
- Clean the fan each week.
- A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents. There are no serviceable parts inside the device. Should you need any spare parts, please order genuine parts from us.