

# **ALED BSW 500 CMY**

## **User Manual**



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## **TECHNICAL PARAMETERS**

### **Light source**

Input voltage: AC110V-240V/50-60HZ

Light source specification: 450W

Light source life: 20000 hours

Rated power: 600W

### **Optical**

Dimming system: 0-100% linear adjustment

Focusing system: linear adjustment from 4 meters to 50 meters

Zoom system: 1 independent zoom effect, soft and natural light spot Magnification angle: 4-50 degree

### **Controls**

Channel mode: 23/25/34/39 channels

Macro function: console reset function, self-propelled mode, master-slave mode Display mode: LCD display, key + touch dual operation mode

Control signal: International standard DMX512. With RDM function, online software upgrade is available, dial address code

### **Effect**

High-speed strobe: 0-30 times/sec. Adjustable speed strobe effect. Strobe macro function

Color: 8 colors + white light. Color half-color function

Color mixing system: linear CMY+CTO color mixing system. Fixed patterns: 11 fixed patterns + white light

Rotating pattern: 7 glass patterns, each glass pattern can be independently forward and reverse

Prism system: standard single 6 facet prism and 8 facet prism, each prism can be independently forward and reverse

### **Construction**

Horizontal scan: 540 degrees (16bit precision scan) electronic error correction

Vertical scanning: 270 degrees (16bit precision scanning) electronic error correction

Cooling method: Adopt axial fan to enhance cooling

Safety device: with electronic temperature control overheating protection, electronic temperature control automatic power-off protection when the overheating system fails

Appearance material: high temperature resistant plastic Working environment: -20 degrees - 40 degrees

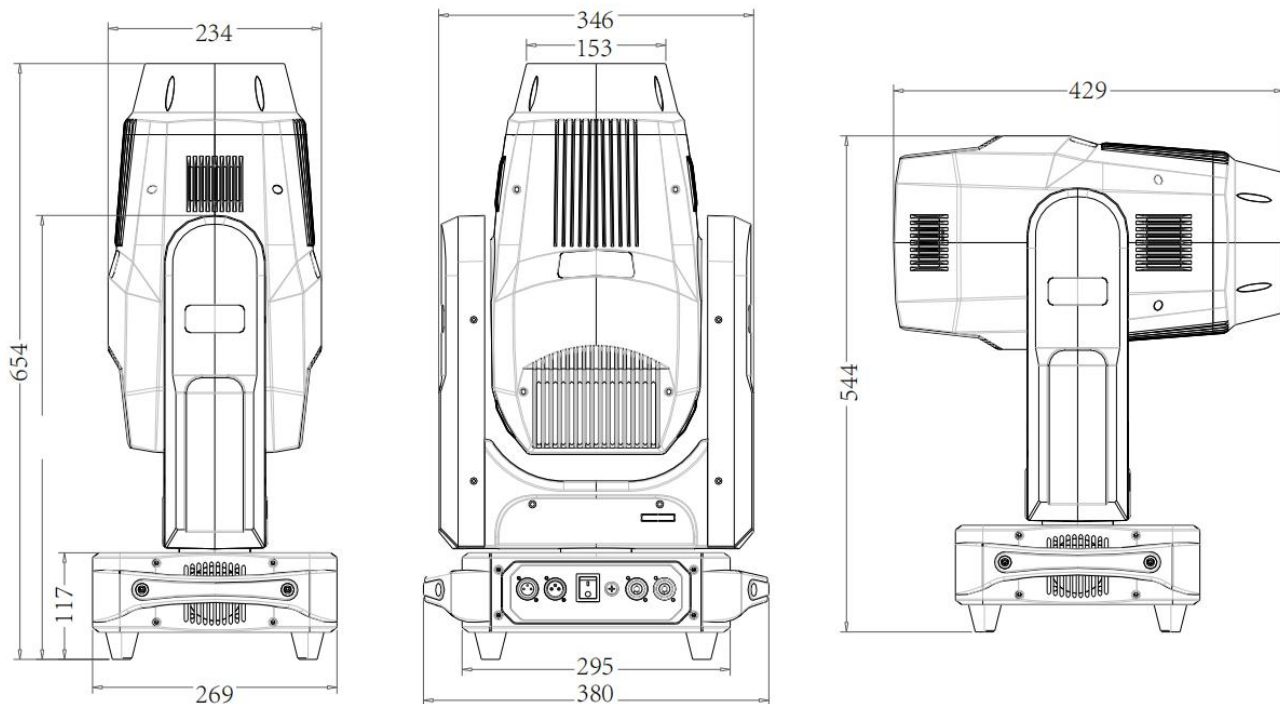
Protection level: IP20

### **Weight&Dimension**

Product net weight: 23KG

Product size: 38\*27\*65CM (L\*W\*H)

## SIZE DRAWING



## Chapter 1 Installation and attention

### 1.1 Maintenance

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Intermittently using will extend this item's service life.
- Please clear the fan ,fan net , and optical lens in order to keep good work state.
- Do not use the alcohol or any other organic solvent to wipe the shell.

### 1.2 Statement

The product has perfect performance and integrity packing. All users should be strictly complying with the warning and operating instructions as stated. Or we aren't in charge of any result by misusing. Any damage resulting by misuse is not within the Company's warranty. Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Note: All information is subject to change without prior notice.

### 1.3 Safety Precaution

- In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.
- Always mount this unit in safe and stable matter.

- Install or dismantle should operate by professional engineer.
- Using lamp,the change rate of power voltage should be within $\pm 10\%$ ,If the voltage is too high,it will shorten the light's life; If it's not enough, will influence the effect.
- Please restart it 20 minutes later after turning offlight , until full-cooling. Frequent switching will reduce the life span of lamps and bulbs; intermittent using will improve the life of bulbs and lamps.
- In order to make sure the product is used well, please read the Manual carefully.

#### 1.4 Cable connection (DMX)

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24AWG,low capacity. Do not use microphone cable or other cable withcharacteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plugmust be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and3.

**IMPORTANT:** Thewiresmustnot makecontact with eachotheror with the metalcasing ofthe connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

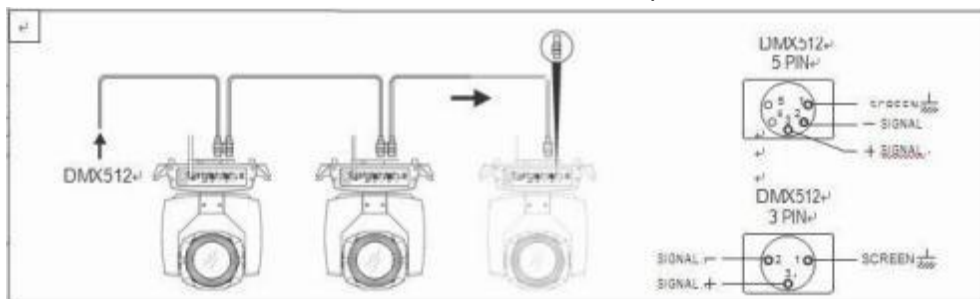


Figure 1 DMX Cable connection

#### 1.5 Rigging (Optional)

This equipment can be positioned and fixed by clamp in every direction of the stage. Locking system makes it easy to fasten to the bracket.

Attention! Two clamps is needed to fix the equipment. Every clamp is locked by fastener of 1/4 kind.

Fastener can only be locked clockwise.

Attention! Fasten a safety string to the additional hole of side aluminum piece. The secondary accessory can not hang on the delivery handle. Nip the equipment on bracket.

- Check if rigging clamp (not including the one inside) damaged or not? If stand ten times weight as the equipment. Make sure the architecture can stand ten times weight as all the equipments, clamps, wirings and other additional fixtures.
- Screws for clamping must be fixed firmly. Take one M12 screw (Grade 8.8 or higher) to clamp bracket, and then screw the nuts.
- Level the two hanging points at the bottom of clamp. Insert fastener to the bottom, lock the two levers by 1/4 rotating clockwise; then install another clamp.
- Install on safety string which stands at least ten times weight as equipment. Terminal of the accessory is designed for clamps.
- Make sure pan/tilt lock unlocked or not. Keep the distance more than 1M from equipment to flammable material or lighting source.

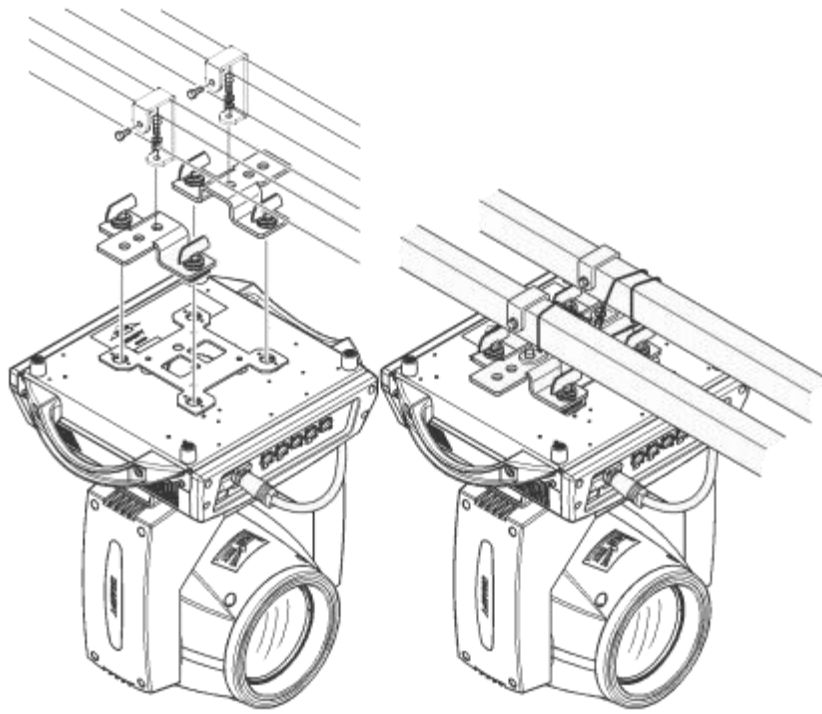


Figure 2 Installation

## Chapter 2 Panel operation

### 2.1 Brief

The light panel diagram show as Figure 3, Left area is TFT Displayer, support touch, and right area is KEY, both of touch and KEY can operate light and setting.

Display & operation just like 'Android operation system', touch the item will set or modify setting.

Note: Prevent damage the touch or TFT displayer, Can not use sharp objects chick displayer.



Figure 3 Panel diagram

## 2.2 Operation

### 2.2.1 Operate light with touch or KEY

- The left area is TFT Displayer and touch, click item or value with finger will to complete operation of set light setting(parameters) or view light state.
- The area on the right hand side is 4 KEY, As auxiliary input interface, if disable touch function,, the KEYr can be choose to set the parameter.

### 2.2.2 Parameter value setting

When the selected item is value need to be modified, the dialog shown in Figure 4 will popup.



Figure 4 Dialog of value setting

- **Modify value** : Can quickly modify value via pull the slider to the desired position, or click the button of 'up' or 'down' whit finger on the right side to set the exact desired value, another way is roll encoder on the right hand side ofpanel.
- **Apply value** : When Value had been modified, Then press the bottom of 'apply' in the left corner to apply to the light, but hav't saved;
- **Save Value** : Any time, click on the lower right corner of the "OK" button, the setting will be saved into internal memory.

### 2.2.3 Boolean parameter setting

- when the selected parameters is a Boolean value (such as ON or OFF), can directly modify setting by chick corresponding item, the setting will be saved right now.
- When the parameter is a key item, chick corresponding item, a dialog shown in Figure 5 will be popup ask for the confirm. Chick 'sure ' to confirm.



Figure 5 Dialog of confirm

### 2.2.4 Sub Menu (Parameter)

Click item of main menu, enter corresponding sub menu, shown in Figure 6, total 6 sub menu, includes class of parameter and status:

- ADDRESS: Set light DMX address.
- WORKMOD: Set light work mode, master or slave mode when in auto run mode.
- DISPLAY: Set display parameter, eg. select language.
- TEST : Used for test light, modify DMX channel data to test function , the corresponding function of reference channel function table.
- ADVANCE: Set light running parameter.
- STATUS: view light current status.

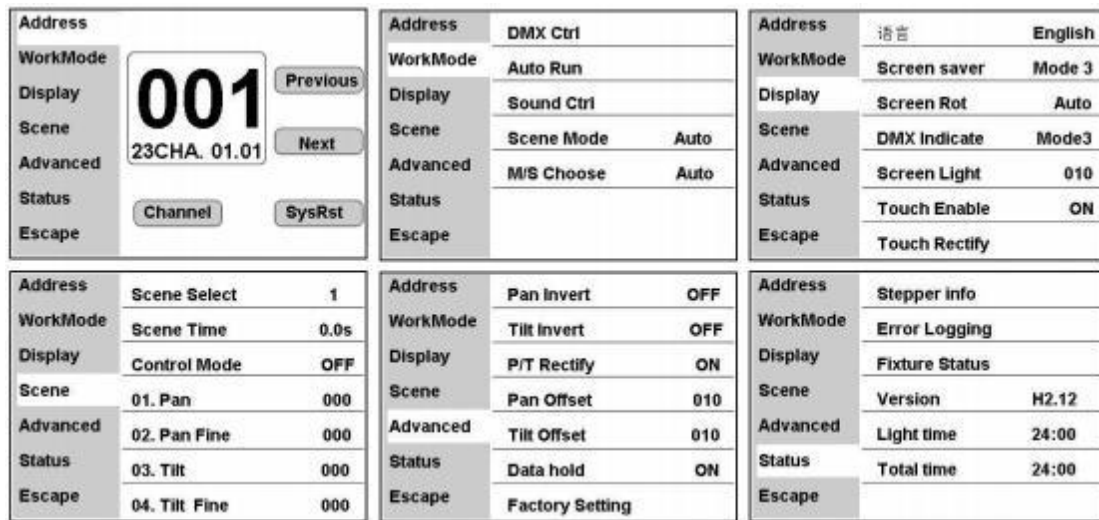


Figure 6 Parameter menu

## 2.3 Operation and parameter instruction

Via following operation, enter sub menu(parameter menu) shown in Figure 6

- In main menu, click 1/6 function button into corresponding parameter menu.
- In sub menu(page), click main item on the left side of display, can shift to corresponding sub menu(page) quickly.

### 2.3.1 ADDR--> Address: Set DMX Address

Click and select the "ADDR", can enter the page of DMX address setting, range from 1 to 512, the address code shouldn't is not greater than (512- channels quantity), otherwise the light will not be controlled. Following is the operation:

Enter the page of DMX address, as shown in Figure 7, click the blank area in right side of display will pop-up diglog as in Fig. 4, modify value, then click 'ENTER' to confirm and save DMX address code.

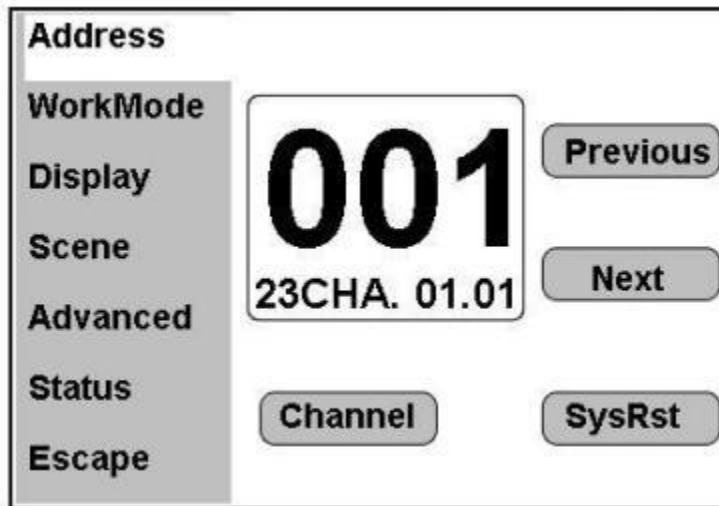


Figure 7 page of DMX Address

### 2.3.2 MODE--> WorkMode: Set Light work mode

Enter the page of 'WorkMode' as shown in Figure 8 and modify setting. Can set light work mode, control lamp and DMX channel mode.

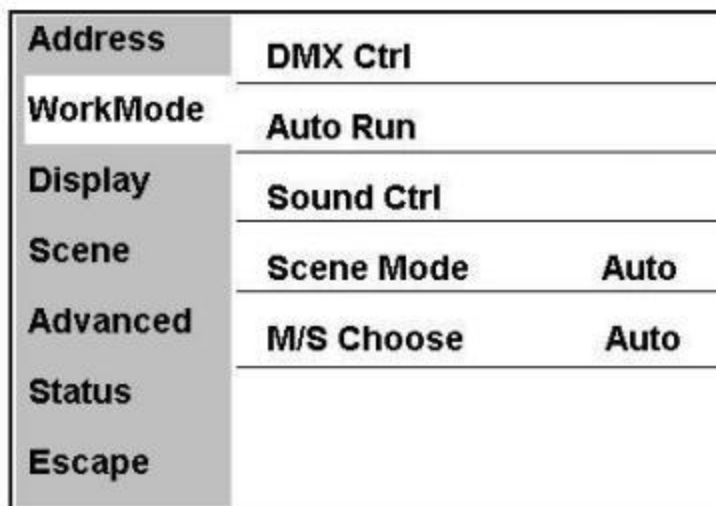


Figure 8 page of work mode

- ◆ **DMX Ctrl:** Choose to set DMX Mode,
- ◆ **Auto Run:** Choose to set Auto Mode,
- ◆ **Sound Ctrl:** Choose to set Sound Mode,
- ◆ **M/S Choose:** Available just in 'AUTO RUN' or 'SOUND Ctrl' mode. ON--> Master. (Data will be send to other slave lamp immediately.)  
OFF--> Slaver.(NOT send data to other lamp via DMX Cable).(Default)
- ◆ **Light Switch:**  
ON--> Turn on the light,  
OFF--> Turn off the light.
- ◆ **Channel Qty:** Light support 2 DMX Channel mode: sample or extend。 Simple --> 16CH.(Default)  
Expand--> 20CH(or null).

### 2.3.3 DISP-->DISPLAY: Set display

Light support 2 language, rotation display , Enter page as shown in Figure9 to set parameter following:

<b>Address</b>	语言	<b>English</b>
<b>WorkMode</b>	<b>Screen saver</b>	<b>Mode 3</b>
<b>Display</b>	<b>Screen Rot</b>	<b>Auto</b>
<b>Scene</b>	<b>DMX Indicate</b>	<b>Mode3</b>
<b>Advanced</b>	<b>Screen Light</b>	<b>010</b>
<b>Status</b>	<b>Touch Enable</b>	<b>ON</b>
<b>Escape</b>	<b>Touch Rectify</b>	

Figure9 page of display

- ◆ **Language:** English / Chinese.
- ◆ **Screen Saver:** when panel is idle(these is no operation in 10 second), displayer will enter saver status.
  - OFF--> No screen saver.
  - Mode1--> Power-saving mode, turn off the display. Mode2--> Displays the current address.
  - Mode3--> Displays the icon and the current working mode.(Default)
- ◆ **Screen Rotion: To turning display. ON-->**
  - Normal display.(Default)
  - OFF--> 180° turning display.
- ◆ **Touch enable:** Disable or enable touch function,. ON-->
  - Enable touch function.(Default)
  - OFF--> Dosable touch function.
- ◆ **Touch adjust:** Adjust touch function. Normally, not enter this item.

### 2.3.4 TEST--> Test Mode

Enter the page as shown in Figure 10, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

<b>Address</b>	<b>Scene Select</b>	<b>1</b>
<b>WorkMode</b>	<b>Scene Time</b>	<b>0.0s</b>
<b>Display</b>	<b>Control Mode</b>	<b>OFF</b>
<b>Scene</b>	<b>01. Pan</b>	<b>000</b>
<b>Advanced</b>	<b>02. Pan Fine</b>	<b>000</b>
<b>Status</b>	<b>03. Tilt</b>	<b>000</b>
<b>Escape</b>	<b>04. Tilt Fine</b>	<b>000</b>

Figure 10 page of Test

- ◆ **PAN:** range for 0 to 255;
- ◆ **TILT:** range for 0 to 255;
- ◆ **FOCUS:** range for 0 to 255;
- ◆ **COLOR:** range for 0 to 255;
- ◆ **GOBO:** range for 0 to 255;
- ◆ **PRISM:** range for 0 to 255;
- ◆ **FROST:** range for 0 to 255;;
- ◆ **STROBE:** range for 0 to 255;

### 2.3.5 ADVA-->Advanced: Set light run parameter

Enter the page as shown in Figure 10, set the parameter of light:

<b>Address</b>	<b>Pan Invert</b>	<b>OFF</b>
<b>WorkMode</b>	<b>Tilt Invert</b>	<b>OFF</b>
<b>Display</b>	<b>P/T Rectify</b>	<b>ON</b>
<b>Scene</b>	<b>Pan Offset</b>	<b>010</b>
<b>Advanced</b>	<b>Tilt Offset</b>	<b>010</b>
<b>Status</b>	<b>Data hold</b>	<b>ON</b>
<b>Escape</b>	<b>Factory Setting</b>	

Figure 11 page of run parameter

- ◆ **Pan Invert:**      **Reverse PAN move**  
OFF--> Pan Normal move.(**Default**) ON-->  
Reverse PAN move.
- ◆ **Tilt Invert:**      **Reverse TILT move**  
OFF--> Tilt Normal move.(**Default**) ON-->  
Reverse Tilt move.
- ◆ **P/T Rectify: Disable or enable position rectify function.**  
OFF--> Disable P/T rectify  
ON--> Enable P/T rectify-(**Default**)
- ◆ **Pan Offset:**              Set PAN original position. **Default: 10**
- ◆ **Tilt Offset:**              Set TILT original position. **Default: 10**
- ◆ **Lamp when:**  
PowerON--> Turn on the lamp when power on.(**Default**) RstDone-->  
Turn on the lamp after reset.  
Manual--> Manually turn on the lamp.
- ◆ **Data hold:**  
OFF--> When no DMX signal,return to middle position.(**Default**) ON--> When  
no DMX signal,stop in the final position.
- ◆ **Factory Setting:**      Restore all parameter to factory setting.

### 2.3.6 STAT-->Status: View status

Enter the page as shown in Figure 12:

<b>Address</b>	<b>Stepper info</b>	
<b>WorkMode</b>	<b>Error Logging</b>	
<b>Display</b>	<b>Fixture Status</b>	
<b>Scene</b>	<b>Version</b>	<b>H2.12</b>
<b>Advanced</b>	<b>Light time</b>	<b>24:00</b>
<b>Status</b>	<b>Total time</b>	<b>24:00</b>
<b>Escape</b>		

Figure 12      page of status

- ◆ **Work Mode:**              Show the current working mode.
- ◆ **Address:**                  Show the current address.
- ◆ **Version:**                  Show the version of the lamp.
- ◆ **Elapse:**                    Working hours after turn on.
- ◆ **Tatol:**                      Cumulative hours of operation

## Chapter 3 Channel description

### 3.1 Channel table

23CH	25CH	FUNCTION	VALUE	DESCRIPTION
CH1	CH1	PAN	0-255	0-540 Degrees
CH2	CH2	PAN FINE	0-255	0-2 Degrees
CH3	CH3	TILT	0-255	0-270 Degrees
CH4	CH4	TILT FINE	0-255	0-1 Degree
CH5	CH5	P/T SPEED	0-255	From fast to slow
CH6	CH6	DIMMER	0-255	0-100% Dimmer
CH7	CH7	STROBE	0-3	Dark
			4-103	Pulse strobe slow to fast
			104-107	Open
			108-155	Gradual strobe slow to fast
			156-207	Random strobe slow to fast
			208-212	Open
			213-251	Random strobe slow to fast
			252-255	Open
CH8	CH8	COLOR	0-127	Linear colour
			128-131	Red
			132-135	Green
			136-139	Dark Blue
			140-143	Orange
			144-147	Peach Red
			148-151	Yellow
			152-155	Light Blue
			156-159	Purple Pink
			160-163	White+Red
			164-167	Red+Green
			168-171	Green+Dark Blue
			172-175	Dark Blue+Orange
			176-179	Orange+Peach Red
			180-183	Peach Red+Yellow
			184-187	Yellow+Light Blue
			188-191	Light Blue+Purple Pink
			192-220	Forward water effect from fast to slow
			221-225	Stop
			226-255	Backward water effect from slow to fast

CH9	CH9	CTO	0-255	CTO
CH10	CH10	C	0-255	C
CH11	CH11	M	0-255	M
CH12	CH12	Y	0-255	Y
CH13	CH13	FIXED GOBO	0-4	White
			5-9	Gobo1
			10-14	Gobo2
			15-19	Gobo3
			20-24	Gobo4
			25-29	Gobo5
			30-34	Gobo6
			35-39	Gobo7
			40-44	Gobo8
			45-49	Gobo9
			50-54	Gobo10
			55-59	Gobo11
			60-64	Shake White Light
			65-69	Shake slow to fast Gobo2
			70-74	Shake slow to fast Gobo3
			75-79	Shake slow to fast Gobo4
			80-84	Shake slow to fast Gobo5
			85-89	Shake slow to fast Gobo6
			90-94	Shake slow to fast Gobo7
			95-99	Shake slow to fast Gobo8
			100-104	Shake slow to fast Gobo9
105-109	Shake slow to fast Gobo10			
110-127	Gobo11			
128-190	Backward water effect from fast to slow			
191-192	Stop			
			193-255	Forward water effect from slow to fast
CH14	CH14	ZOOM	0-255	From big to small
CH15	CH15	FOCUS	0-255	From far to near
	CH16	FOCUS FINE	0-255	Focus fine
			0-9	White
			10-19	Gobo 1
			20-29	Gobo 2
			30-39	Gobo 3

CH16	CH17	ROTATING GOBO	40-49	Gobo 4
			50-59	Gobo 5
			60-69	Gobo 6
			70-79	Gobo 7
			80-89	Shake slow to fast Gobo1
			90-99	Shake slow to fast Gobo2
			100-109	Shake slow to fast Gobo3
			110-119	Shake slow to fast Gobo4
			120-129	Shake slow to fast Gobo5
			130-139	Shake slow to fast Gobo6
			140-149	Shake slow to fast Gobo7
			150-200	Forward water effect from fast to slow
			201-205	Stop
			206-255	Backward water effect from slow to fast
CH17	CH18	GOBO AUTOROTATION	0-127	0-360 degrees
			128-190	Rotate forward fast to slow
			191-192	Stop
			193-255	Rotate backward slow to fast
	CH19	GOBO FINE	0-255	GOBO fine
CH18	CH20	8 FACET PRISMS	0-127	None
			128-255	Insert 8 facet prisms
CH19	CH21	8 FACET PRISMS AUTOROTATION	0-127	0-360 degrees
			128-187	Rotate forward fast to slow
			188-195	Stop
			196-255	Rotate backward slow to fast
CH20	CH22	6 FACET PRISMS	0-127	None
			128-255	Insert 6 facet prisms
CH21	CH23	6 FACET PRISMS AUTOROTATION	0-127	0-360 degrees
			128-187	Rotate forward fast to slow
			188-195	Stop
			196-255	Rotate backward slow to fast
CH22	CH24	FROST	0-127	None
			128-255	Frost
CH23	CH25	RESET	0-209	None
			210-215	Reset XY motor over 4 seconds
			216-219	None
			220-235	Reset Effect motor over 4 seconds

		236-239	None
		240-255	Reset all after 4 seconds

34CH	39CH	FUNCTION	VALUE	DESCRIPTION
[ CH1 ]	[ CH1 ]	Pan	0-255	0-540(degree)
[ CH2 ]	[ CH2 ]	Pan Fine	0-255	0-2(degree)
[ CH3 ]	[ CH3 ]	Tilt	0-255	0-270(degree)
[ CH4 ]	[ CH4 ]	Tilt Fine	0-255	0-1(degree)
[ CH5 ]	[ CH5 ]	PT Spd	0-255	Fast to slow
[ CH6 ]	[ CH6 ]	Reset	0-139	None
			140-149	Reset XY motor over 4 second
			150-199	Reset Effect motor over 4 second
			200-209	Reset fxiture over 4 second
			210-255	None
[ CH7 ]	[ CH7 ]	Cyan	0-255	C
[ CH8 ]	[ CH8 ]	Magenta	0-255	M
[ CH9 ]	[ CH9 ]	Yellow	0-255	Y
[ CH10 ]	[ CH10 ]	Colour	0-127	Linear colour
			128-129	White
			130-134	Colour1
			135-138	Colour2
			139-143	Colour3
			144-147	Colour4
			148-152	Colour5
			153-157	Colour6
			158-161	Colour7
			162-166	Colour8
			167-189	CTO
			190-215	Rotate forward (fast to slow)
			216-217	Stop
			218-255	Rotate reverse (slow to fast)
[ CH11 ]		Colour F	0-255	
[ CH12 ]	[ CH11 ]	Colour3	1-2	Colour1
			3-4	Colour2
			5-6	Colour3
			7-8	Colour4
			9-10	Colour5
			11-12	Colour6
			13-14	Colour7
			15-16	Colour8
			17-18	Colour9

			19-20	Colour10
			21-22	Colour11
			23-24	Colour12
			25-26	Colour13
			27-28	Colour14
			29-30	Colour15
			31-32	Colour16
			33-34	Colour17
			35-36	Colour18
			37-38	Colour19
			39-40	Colour20
			41-42	Colour21
			43-44	Colour22
			45-46	Colour23
			47-48	Colour24
			49-50	Colour25
			51-52	Colour26
			53-54	Colour27
			55-56	Colour28
			57-58	Colour29
			59-60	Colour30
			61-62	Colour31
			63-64	Colour32
			65-66	Colour33
			67-68	Colour34
			69-70	Colour35
			71-72	Colour36
			73-74	Colour37
			75-76	Colour38
			77-78	Colour39
			79-80	Colour40
			81-82	Colour41
			83-84	Colour42
			85-86	Colour43
			87-88	Colour44
			89-90	Colour45
			91-92	Colour46
			93-94	Colour47
			95-96	Colour48
			97-98	Colour49
			99-100	Colour50
			101-102	Colour51
			103-104	Colour52

			105-106	Colour53
			107-108	Colour54
			109-110	Colour55
			111-112	Colour56
			113-114	Colour57
			115-116	Colour58
			117-118	Colour59
			119-120	Colour60
			121-122	Colour61
			123-124	Colour62
			125-126	Colour63
			127-128	Colour64
			129-130	Colour65
			131-132	Colour66
			133-255	White light
[ CH13 ]	[ CH12 ]		0-255	
[ CH14 ]	[ CH13 ]	Color Spd	0-255	
[ CH15 ]	[ CH14 ]	Focus Spd	0-255	
[ CH16 ]	[ CH15 ]	CTO	0-255	
[ CH17 ]	[ CH16 ]	None	0-255	
[ CH18 ]	[ CH17 ]	None	0-255	
[ CH19 ]	[ CH18 ]	Gobo		
			0-3	Gobo1
			4-9	White
			10-15	Gobo2
			16-21	Gobo3
			22-27	Gobo4
			28-33	Gobo5
			34-39	Gobo6
			40-45	Gobo7
			46-51	Gobo8
			52-57	Gobo9
			58-63	Gobo10
			64-87	Gobo11
			88-95	Shake slow to fast Gobo1
			96-103	Shake slow to fast Gobo2
			104-111	Shake slow to fast Gobo3
			112-119	Shake slow to fast Gobo4
			120-127	Shake slow to fast Gobo5
			128-135	Shake slow to fast Gobo6
			136-143	Shake slow to fast Gobo7
			144-151	Shake slow to fast Gobo8
			152-159	Shake slow to fast Gobo9
			160-167	Shake slow to fast Gobo10

			168-175	Shake slow to fast Gobo10	
			176-183	Shake slow to fast Gobo10	
			184-191	Shake slow to fast Gobo10	
			192-199	Shake slow to fast Gobo10	
			200-201	Gobo1	
			202-222	Rotate reverse (fast to slow)	
			223-255	Rotate forward (slow to fast)	
[ CH20 ]	[ CH19 ]	Rot Gobo	0-4	White	
			5-7	Gobo1	
			8-10	Gobo2	
			11-13	Gobo3	
			14-16	Gobo4	
			17-19	Gobo5	
			20-22	Gobo6	
			23-31	Gobo7	
			32-34	Gobo1	
			35-37	Gobo2	
			38-40	Gobo3	
			41-43	Gobo4	
			44-46	Gobo5	
			47-49	Gobo6	
			50-59	Gobo7	
			60-67	Shake slow to fast Gobo1	
			68-75	Shake slow to fast Gobo2	
			76-83	Shake slow to fast Gobo3	
			84-91	Shake slow to fast Gobo4	
			92-99	Shake slow to fast Gobo5	
			100-107	Shake slow to fast Gobo6	
			108-129	Shake slow to fast Gobo7	
			130-137	Shake slow to fast Gobo1	
			138-145	Shake slow to fast Gobo2	
			146-153	Shake slow to fast Gobo3	
			154-161	Shake slow to fast Gobo4	
			162-169	Shake slow to fast Gobo5	
			170-177	Shake slow to fast Gobo6	
			178-199	Shake slow to fast Gobo7	
			200-201	White	
			202-222	Rotate forward (fast to slow)	
			223-255	Rotate reverse (slow to fast)	
[ CH21 ]	[ CH20 ]	Gobo.Rot	0-255	0-360 degrees	In coordination with the rotating gobo 5-31
			0	Stop	
			1-127	Rotate	In coordination with the rotating

				forward from fast to slow	gobo 32-59
			128	Stop	
			129-255	Rotate backward from slow to fast	
[ CH22 ]		Gobo.R F	0-255		
[ CH23 ]	[ CH21 ]	6 FACET PRISMS	0-3	None	
			4-255	Insert 6 FACET PRISMS	
[ CH24 ]	[ CH22 ]	6 FACET PRISMS1.R	0-127	0-360(degree)	
			128-190	Rotate forward (fast to slow)	
			191-192	Stop	
			193-255	Rotate reverse (slow to fast)	
[ CH25 ]	[ CH23 ]	8 FACET PRISMS	0-3	None	
			4-255	Inert 8 FACET PRISMS	
[ CH26 ]	[ CH24 ]	8 FACET PRISMS.R	0-127	0-360(degree)	
			128-190	Rotate forward (fast to slow)	
			191-192	Stop	
			193-255	Rotate reverse (slow to fast)	
[ CH27 ]	[ CH25 ]	Prism Macro	0-3	No function	
			4-67	Prism Macro function	
			68-255	No function	
[ CH28 ]	[ CH26 ]		0-255		
[ CH29 ]	[ CH27 ]		0-255		
[ CH30 ]	[ CH28 ]		0-255		
[ CH31 ]	[ CH29 ]	Frost	0-0	None	
			1-255	Linear frost	
[ CH32 ]	[ CH30 ]	Zoom	0-255	Large to small	
[ CH33 ]		Zoom F	0-255		
[ CH34 ]	[ CH31 ]	Focus	0-255	Far to near	
[ CH35 ]		Focus F	0-255		
[ CH36 ]	[ CH32 ]	Macro	0-255		
[ CH37 ]	[ CH33 ]	Strobe	0-31	Dark	
			32-63	Open	
			64-95	Pluse strobe slow to fast	
			96-127	Open	
			128-143	FadeIn strobe slow to fast	
			144-159	FadeOut strobe slow to fast	
			160-191	Open	
			192-223	Rand strobe slow to fast	
			224-255	Open	
[ CH38 ]	[ CH34 ]	Dimmer	0-255	0-100% dimmer	

[ CH39 ]		Dimmer Spd	0-255	
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## Common faults and use attention

### 1. Common fault handling

The lamp contains professional components such as microcomputer circuit board and high-voltage power supply. For your safety and product life, non-professionals should not disassemble the lamp and related accessories without authorization.

#### 1. The bulb does not light up (except LED light source)

Possible cause: The bulb is not completely cooled, or the bulb has reached the end of its life, the treatment is as follows:

- Due to abnormal operation, the bulb is not completely cooled down, so let the lamp body cool down for more than 10 minutes to make the inside completely return to normal state, and then turn on the power again.;
- Check whether the bulb has reached the end of its life, and replace it with a new one;
- Check whether the bulb and the lighter circuit are leaking, falling off, or having poor contact;
- Replace with a new lighter.

#### 2. The light beam appears dim

Possible cause: The bulb has been used for a long time or the light path is not clean, the treatment is as follows:

- Check whether the bulb has reached the end of its life, and replace it with a new one;
- Check whether the optical components or bulbs are clean, and whether there is dust on the bulbs and other optical components. Regular cleaning and maintenance of the bulbs and components in the lamps are required.

#### 3. Fuzzy pattern projection

- Check whether the electronic focus channel value is suitable for the current projection distance.

#### 4. The lamps work intermittently

Possible cause: The internal circuit enters the protection state, and the treatment is as follows:

- Check whether the fan is operating normally or whether it is dirty, causing the internal temperature of the lamp to rise;
- Check whether the internal temperature control switch is closed;
- Check whether the bulb has reached the end of its service life, and replace it with a new one.

#### 5. After the lamp is reset normally, it does not accept the control of the console

Possible cause: signal line failure or abnormal lamp parameter setting, the treatment is as follows:

- Check the start address code and check the connection of the DMX signal line (whether the signal line cable is intact, and whether the connection of the head is loose);
- Add signal amplifier, add 120 ohm terminal resistance;

#### 6. The lamp can't start

Possible cause: bad power line, the treatment is as follows:

- Check whether the fuse on the power input socket is fused, replace the fuse;
- Lamps have poor line contact due to vibration during -distance transportation
- Check the input power, computer board and other plloug-in devices.

## 2. Precautions for use

- Check whether the local power supply meets the requirements of the rated voltage of the product, and the leakage protector, overcurrent protector, etc. meet the requirements of the load;
- Do not use power cords with damaged insulation, and do not overlap power cords with other wires;
- The lamp adopts strong air cooling, which is easy to accumulate dust. It must be cleaned once a month, especially the heat dissipation vent, otherwise it will be blocked by the accumulation of dust, resulting in poor heat dissipation and abnormalities in the lamp.
- When installing the lamp, the fixing screws must be fastened, with safety cables, and regular inspections;
- When installing and positioning the luminaire, keep a minimum distance of 10 meters between any point on the surface of the luminaire and any flammable and explosive object, and the distance from the irradiated object is 2.5 meters. Please do not install the luminaire directly on the surface of combustible materials.;
- It is recommended that the continuous working time of the lamp should not exceed 10 hours, and the interval between continuous starting of the lamp should not be less than 10 minutes, otherwise it will not be triggered normally due to the lamp overheating protection;
- The closing time using the on-off valve should not exceed 5 minutes. If you need to close the light for a long time, you should use the console (lighting control channel) to turn off the light.;
- In order to ensure that multiple luminaires better comply with the scene effect, the luminaire should not be in the unfinished current scene all the time, that is, start the next scene action, it is best not to exceed 3 minutes in this state to ensure that multiple luminaires can run simultaneously;
- During use, if there is an abnormality in the lamp, stop using the lamp in time to prevent other malfunctions.

## 3. Precautions for using RDM

RDM is an extended version of the DMX512-A protocol. It is a remote device management protocol. The traditional DMX512 protocol communication is one-way communication. The protocol is based on the RS-485 bus. RS-485 is a time-sharing multi-point, half-duplex protocol. Only allowed at the same time One port is the output of the host, so, pay attention to the following points when using RDM:

- To use a console or host device that supports the RDM protocol host;
- To use a two-way signal amplifier, the traditional one-way signal amplifier is not suitable for the RDM protocol, because the RMD protocol requires feedback data, and the use of a one-way amplifier will block the returned data, resulting in the search for lamps and lanterns;
- All lamps must be set to DMX mode to ensure that there is only one host on the signal line;
- A 120ohm impedance matching resistor must be inserted between terminals 2 and 3 of the terminal plug. When the signal line is relatively long, the use of differential signals will be more stable when the signal line is relatively long, which is conducive to the quality of communication;

When it appears that the lamp accepts DMX control, but cannot search for the lamp by RDM, first check the signal amplifier, and then check whether there is a bad connection between the 2 and 3 lines of the signal line.

**REMARK**

The product has perfect performance and integrity packing.

All users should be strictly comply with the warning and operating instructions as stated.

Or we aren 't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company 's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.