Contents

P/N: 390395000296 Version: B

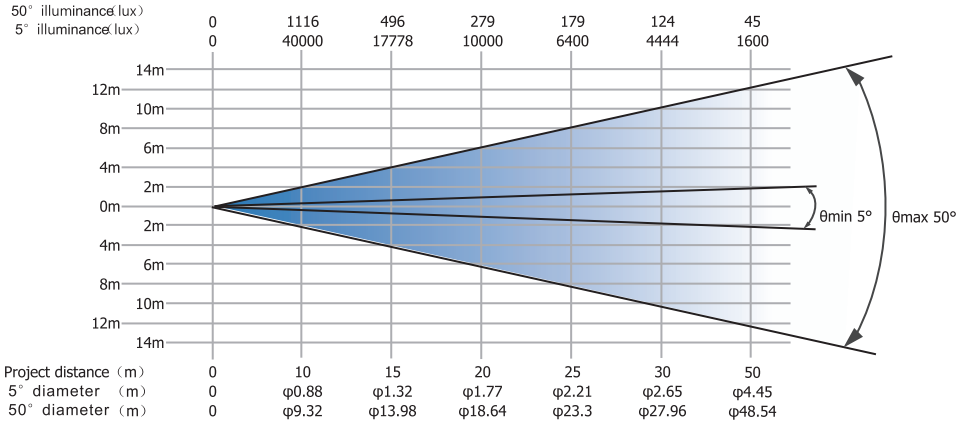
1/ Technical feature

Technical feature	FINE 1700LB BSWF IP
Light source	1500W white LED module
Input voltage	100-240V~ 50/60Hz
Input current	17A
Input power	1700W
Power factor	PF≥0. 98
Beam angle	5°~50°
CRI	High luminance mode: Ra>70, High CRI mode: Ra>95
Initial luminous flux	43000 lm
Efficiency	27 lm/W
Color temperature	6200K
Color system	CMY infinity color mixing+CTO color temperature linear adjustment+1 color filters(6 color filters+white light)
Gobo system	2 rotating gobo wheels(12 glass gobos)+ 1 animation wheel
cutting system	1 set of full directional framing system, support ±90°rotation
Effect equipment	1 rotating 4-facet prism+1 rotating gradient prism+ 2 frost+Electronic dimmer+Electronic strobe+Electronic iris
Pan	Pan 540°, precision 2.11°/step, pan fine 0.008°
Tilt	Tilt 270 °, precision 1.05°/step, tilt fine 0. 004°
Safety protection	Over current, over voltage and overheating protection
Control mode	DMX512
Work environment	-10℃~40℃
Fixture dimension	485x344x837mm
Packing dimension	685x575x862mm
Weight	Net weight: 49.5kg, Gross weight: 87kg
Packing	1PCS/filght case
IP rade	IP 66

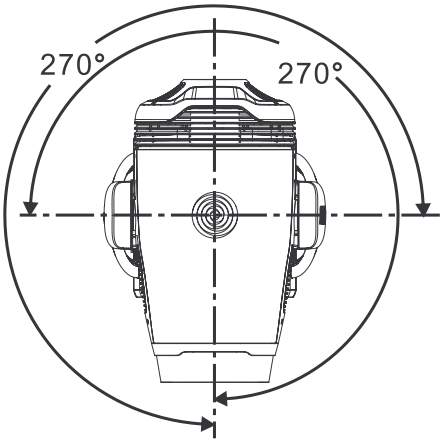
Note: The lamp light source is a non-user replacement light source. In case of damage or thermal deformation, please replace!

2/ Light output and beam angle range

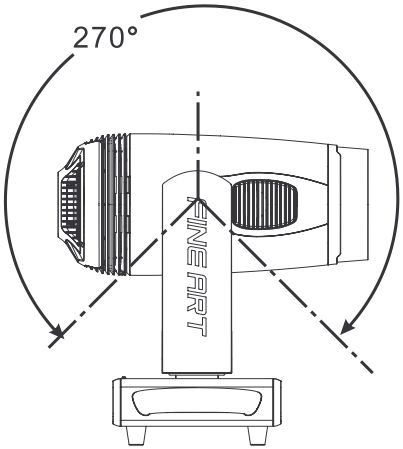
Photometric diagram



Pan/tilt scan



[Pan]



[Tilt]

3/ Control channel

3.1 Menu control channel

Channel	STND	16BT	EXTN
1	Strobe	Strobe	Strobe
2	Dimmer	Dimmer	Dimmer
3	Dimmer Fine	Dimmer Fine	Dimmer Fine
4	Pan	Pan	Pan
5	Pan Fine	Pan Fine	Pan Fine
6	Tilt	Tilt	Tilt
7	Tilt Fine	Tilt Fine	Tilt Fine
8	Gobo1	Gobo1	Gobo1
9	Gobo1 Rot	Gobo1 Rot	Gobo1 Rot
10	Gobo2	Gobo1 Rot Fine	Gobo1 Rot Fine
11	Gobo2 Rot	Gobo2	Gobo2
12	Anime	Gobo2 Rot	Gobo2 Rot
13	Cyan	Gobo2 Rot Fine	Gobo2 Rot Fine
14	Magenta	Anime	Anime
15	Yellow	Cyan	Cyan
16	CTO	Magenta	Magenta
17	Color	Yellow	Yellow
18	Prism	CTO	CTO
19	Prism Rot	Color	Color
20	Focus	Prism	Prism
21	Zoom	Prism Rot	Prism Rot
22	Frost1	Focus	Focus
23	Frost2	Focus Fine	Focus Fine
24	Iris	Zoom	Zoom
25	Frame1 Position	Zoom Fine	Zoom Fine
26	Frame1 Angle	AutoFocus Distance	AutoFocus Distance
27	Frame2 Position	AutoFocus Adjustment	AutoFocus Adjustment
28	Frame2 Angle	Frost1	Frost1
29	Frame3 Position	Frost2	Frost2
30	Frame3 Angle	Iris	Iris
31	Frame4 Position	Frame1 Position	Frame1 Position
32	Frame4 Angle	Frame1 Angle	Frame1 Angle

33	Frame Rotation	Frame2 Position	Frame2 Position
34	Fixture Control	Frame2 Angle	Frame2 Angle
35		Frame3 Position	Frame3 Position
36		Frame3 Angle	Frame3 Angle
37		Frame4 Position	Frame4 Position
38		Frame4 Angle	Frame4 Angle
39		Frame Rotation	Frame Rotation
40		Frame Macro	Frame Macro
41		CRI/R9	CRI/R9
42		Fixture Control	Fixture Control
43			Pan-tilt Time
44			Color Time
45			Beam Time
46			Gobo Time

3.2 DMX通道

Specific	STND	16BT	EXTN	Value	Function
Strobe	1	1	1	000~005	Closed
				006~010	Open
				011~105	Strobe at linearly variable frequency from slow to fast(0~20Hz)
				106~110	Open
				111~179	Thunder Strobe from slow to fast
				180~185	Open
				186~253	Random Strobe
				254~255	Open
Dimmer	2	2	2	000~255	0%->100%
Dimmer Fine	3	3	3	000~255	0%->100%
Pan	4	4	4	000~255	Movement positioning from 0° to 540°
Pan Fine	5	5	5		
Tilt	6	6	6	000~255	Movement positioning from 0° to 252°
Tilt Fine	7	7	7		
Gobo1	8	8	8	000~009	Open
				010~019	Gobo1
				020~029	Gobo2
				030~039	Gobo3
				040~049	Gobo4
				050~059	Gobo5
				060~071	Gobo6
				072~094	Gobo1 shake from slow to fast (0.4Hz~6.6Hz)
				095~117	Gobo2 shake from slow to fast (0.4Hz~6.6Hz)
				118~140	Gobo3 shake from slow to fast (0.4Hz~6.6Hz)
				141~163	Gobo4 shake from slow to fast (0.4Hz~6.6Hz)
				164~186	Gobo5 shake from slow to fast (0.4Hz~6.6Hz)
				187~209	Gobo6 shake from slow to fast (0.4Hz~6.6Hz)
				210~231	Continuous gobo wheel clockwise rotation from fast to slow(15.6rpm~10rph)
				232~233	Stop
				234~255	Continuous gobo wheel counter-clockwise rotation from slow to fast(10rph~15.6rpm)
Gobo1 Rot	9	9	9	000~127	0°~360°
				128~190	Continuous gobo wheel clockwise rotation from fast to slow (145rpm~8.7rpm)
				191~192	Stop
				193~255	Continuous gobo wheel counter-clockwise rotation from slow to fast (8.7rph~145rpm)
Gobo1 Rot Fine	-	10	10		
Gobo2	10	11	11	000~009	Open
				010~019	Gobo1
				020~029	Gobo2
				030~039	Gobo3
				040~049	Gobo4

Gobo2	10	11	11	050~059	Gobo5
				060~071	Gobo6
				072~094	Gobo1 shake from slow to fast (0.4Hz~6.6Hz)
				095~117	Gobo2 shake from slow to fast (0.4Hz~6.6Hz)
				118~140	Gobo3 shake from slow to fast (0.4Hz~6.6Hz)
				141~163	Gobo4 shake from slow to fast (0.4Hz~6.6Hz)
				164~186	Gobo5 shake from slow to fast (0.4Hz~6.6Hz)
				187~209	Gobo6 shake from slow to fast (0.4Hz~6.6Hz)
				210~231	Continuous gobo wheel clockwise rotation from fast to slow(15.6rpm~10rph)
				232~233	Stop
				234~255	Continuous gobo wheel counter-clockwise rotation from slow to fast(10rph~15.6rpm)
Gobo2 Rot	11	12	12	000~127	0°~360°
				128~190	Continuous gobo wheel clockwise rotation from fast to slow (145rpm~8.7rpm)
				191~192	Stop
				193~255	Continuous gobo wheel counter-clockwise rotation from slow to fast (8.7rph~145rpm)
Gobo2 Rot Fine	-	13	13		
Anime	12	14	14	000~002	None
				003~126	Continuous gobo wheel clockwise rotation from fast to slow (75rpm~2.8rph)
				127~129	Stop
				130~252	Continuous gobo wheel counter-clockwise rotation from slow to fast (2.8rph~75rpm)
				253~255	Stop
Cyan	13	15	15	000~255	0%->100% Linear Cyan movement
Magenta	14	16	16	000~255	0%->100% Linear Magenta movement
Yellow	15	17	17	000~255	0%->100% Linear Yellow movement
CTO	16	18	18	000~255	0%->100%
Color	17	19	19		Linear Movement
				000~119	From Open to (6th Color+Open) Linearity Movement
				18	Color1 (Red)
				35	Color2 (Green)
				54	Color3 (Blue)
				70	Color4 (Orange)
				86	Color5 (Pink)
				104	Color6 (Deep Green)
				120~120	Open
					Full Color
				121~126	Color1 (Red)
				127~132	Color2 (Green)
				133~138	Color3 (Blue)
				139~144	Color4 (Orange)
				145~150	Color5 (Pink)
				151~156	Color6 (Deep Green)
				157~160	Open

Color	17	19	19		Continuous Rotation
				161~200	Continuous color wheel clockwise rotation from fast to slow (46.7rpm->3.67rpm)
				201~203	Stop
				204~243	Continuous color wheel counter-clockwise rotation from slow to fast 3.67rpm->46.7rpm)
					random full color
				244~247	Fast
				248~251	Medium
				252~255	Slow
Prism	18	20	20	000~010	Open
				011~138	Prism1 Inserted
				139~255	Reserved
Prism Rot	19	21	21	000~127	0°~360°
				128~190	Continuous gobo wheel clockwise rotation from fast to slow (78rpm~2.32rph)
				191~192	Stop
				193~255	Continuous gobo wheel counter-clockwise rotation from slow to fast (2.32rph~78rpm)
Focus	20	22	22	000~255	Infinity -> Near
Focus Fine	-	23	23		
Zoom	21	24	24	000~255	Narrow beam -> Wide beam
Zoom Fine	-	25	25		
AutoFocus Distance	-	26	26	000~005	AutoFocus Off
				006~031	Reserved
				032~057	Reserved
				058~083	Reserved
				084~109	Reserved
				110~255	Reserved
AutoFocus Adjustment	-	27	27	000~127	Reserved
				128~128	Reserved
				129~255	Reserved
Frost1	22	28	28	000~127	Open
				128~255	Light Frost
Frost2	23	29	29		open
				000~255	0~100% Linear Movement
Iris	24	30	30	000~131	Open->Closed
				132~151	Iris pulsation from slow to fast speed (0.1~5Hz)
				152~171	Iris pulsation from slow to fast speed with fast closing (0.1~5Hz)
				172~191	Iris pulsation from slow to fast speed with fast opening (0.1~5Hz)
				192~255	Reserved
Frame1 Position	25	31	31	000~255	Out -> In
Frame1 Angle	26	32	32	000~255	Angle- --> Parallel --> Angle+
Frame2 Position	27	33	33	000~255	Out -> In
Frame2 Angle	28	34	34	000~255	Angle- --> Parallel --> Angle+
Frame3 Position	29	35	35	000~255	Out -> In
Frame3 Angle					Angle- --> Parallel --> Angle+
Frame4 Position	31	37	37	000~255	Out -> In

Frame4 Angle	32	38	38	000~255	Angle- --> Parallel --> Angle+
Frame Rotation	33	39	39	000~255	From 0° -> 180° rotation
Frame Macro	-	40	40	000~009	None
				010~019	Square
				020~029	Rectangle
				030~039	Triangle
				040~049	Rhombus
				050~059	Trapezium
				060~255	Reserved
CRI/R9	-	41	41	000~255	Reserved
Fixture Control	34	42	42	000~009	None
				010~014	Entire Fixture Reset, staying in this range for 5 seconds.
				015~029	Effects Reset, staying in this range for 5 seconds.
				030~034	Pan/Tilt Reset, staying in this range for 5 seconds.
				035~049	Reserved
				050~054	Led Module Out Frequency 1.2KHz --3s
				055~059	Led Module Out Frequency 2.4KHz --3s
				060~064	Led Module Out Frequency 12KHz --3s
				065~069	Led Module Out Frequency 24KHz --3s
				070~074	S-curve Dimmer curve --3s
				075~079	Square Law Dimming curve --3s
				080~084	Inverse Square Law Dimming curve --3s
				085~089	Linear Dimming Cuve --3s
				090~094	Reserved
				095~099	Color Rendering Filter Excluded --3s
				100~104	Color Rendering Filter Inserted --3s
				105~124	Reserved
				125~129	High light Mode (LED Out Power) --3s
				130~134	Standard Mode (LED Out Power-- default setting) --3s
				135~139	Theater Mode (LED Out Power) --3s
				140~144	CMY Liner --3s
				145~149	CMY parabola --3s
				150~159	CCI Enable
				160~169	CCI Disable
				170~179	Fast dimmer
				180~189	Slow dimmer
				190~255	Reserved
Pan-tilt Time	-		43	000~254	Slope Time from Fast to Slow
				255~255	Follow Cue Data
Color Time	-		44	000~254	Slope Time from Fast to Slow
				255~255	Follow Cue Data
Beam Time	-		45	000~254	Slope Time from Fast to Slow
				255~255	Follow Cue Data
Gobo Time	-		46	000~254	Slope Time from Fast to Slow
				255~255	Follow Cue Data

4/ Operation chart for the display panel function

MENU1	MENU2	MENU3	MENU4	(DEFAULT)
DMX Addr	001-XXX			
Options	Pan Invert	On/Off		Off
	Tilt Invert	On/Off		Off
	Pan/Tilt Swap	On/Off		Off
	DMX Mode	Stnd/16 b/Extn		16b
	Lum Calibrate	0-100		100
	CCI Calibrate	0-100		
	Dim Control	On/Off		Off
	Short Path	On/Off		On
	CMY Invert	On/Off		Off
	CMY Curve	Opti/VRMS		VRMS
	Dimming Curve	Opti/VRMS/Squa/InvS		Squa
	Frame Mode	On/Off		Off
	Fan Control	Bost/Norm/Sile		Norm
	Exit			
Speed Settings	P/T Speed	High/Fast/Norm/Slow		Fast
	P/T Smooth	000-007		
	G/C Speed	Fast/Norm		Fast
	Exit			
MANUAL CONTROL	Strobe	000-xxx		000
	Dimmer	000-xxx		000
	Dimmer fine	000-xxx		000
	Pan	000-xxx		000
	Pan fine	000-xxx		000
	Tilt	000-xxx		000
	Tilt fine	000-xxx		000
	Gobo1	000-xxx		000
	Gobo1 rot	000-xxx		000
	Gobo2	000-xxx		000
	Gobo2 rot	000-xxx		000
	Anime	000-xxx		000
	Cyan	000-xxx		000
	Magenta	000-xxx		000
	Yellow	000-xxx		000
	CTO	000-xxx		000
	Color	000-xxx		000
	Prism C	000-xxx		000
	Prism rot	000-xxx		000
	Focus	000-xxx		000
	Zoom	000-xxx		000
	Frost 1	000-xxx		000
	Frost 2	000-xxx		000
	Iris	000-xxx		000
	Blade1Pos	000-xxx		000
	Blade1Ang	000-xxx		000
	Blade2Pos	000-xxx		000
	Blade2Ang	000-xxx		000

MANUAL CONTROL	Blade3Pos	000-xxx		000
	Blade3Ang	000-xxx		000
	Blade4Pos	000-xxx		000
	Blade4Ang	000-xxx		000
	FrameRotat	000-xxx		000
	Fixture control	000-xxx		000
	Exit	000-xxx		000
Calibration	Pan	0000-XXX0		0000
	Tilt	0000-XXX0		0000
	Cyan	0000-XXX0		0000
	Magenta	0000-XXX0		0000
	Yellow	0000-XXX0		0000
	CTO	0000-XXX0		0000
	Color	0000-XXX0		0000
	Zoom	0000-XXX0		0000
	Focus	0000-XXX0		0000
	Iris	0000-XXX0		0000
	FrameRotat	0000-XXX0		0000
	Gobo1	0000-XXX0		0000
	Gobo1 rot	0000-XXX0		0000
	Gobo2	0000-XXX0		0000
	Gobo2 rot	0000-XXX0		0000
	AnimD C	0000-XXX0		0000
	AnimD rot	0000-XXX0		0000
	Prism1	0000-XXX0		0000
	Prism1 Rot	0000-XXX0		0000
	Prism2	0000-XXX0		0000
	Prism2 Rot	0000-XXX0		0000
	Frost 1	0000-XXX0		0000
	Frost 2	0000-XXX0		0000
	Iris	0000-XXX0		0000
	BladeUp 1	0000-XXX0		0000
	BladeUp 2	0000-XXX0		0000
	BladeDw 1	0000-XXX0		0000
	BladeDw 2	0000-XXX0		0000
	BladeLf 1	0000-XXX0		0000
	BladeLf 2	0000-XXX0		0000
	BladeRg 1	0000-XXX0		0000
	BladeRg 2	0000-XXX0		0000
	Exit			
DMX Values	Channel - 01	000-xxx		000
	Channel - 02	000-xxx		000
	Channel - 03	000-xxx		000
	Channel - 04	000-xxx		000
	Channel - 05	000-xxx		000
	Channel - 06	000-xxx		000
	Channel - 07	000-xxx		000
	Channel - 08	000-xxx		000
	Channel - 09	000-xxx		000
	Channel - 10	000-xxx		000

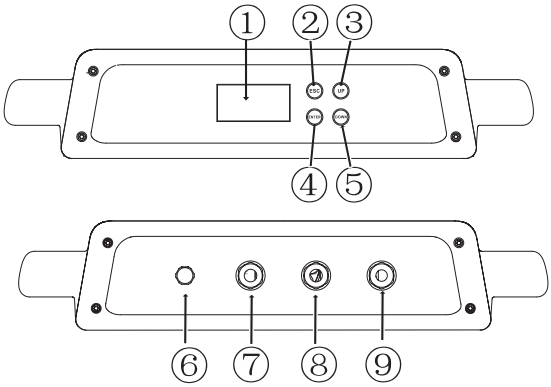
DMX Values	Channel – 11	000-xxx		000
	Channel – 12	000-xxx		000
	Channel – 13	000-xxx		000
	Channel – 14	000-xxx		000
	Channel – 15	000-xxx		000
	Channel – 16	000-xxx		000
	Channel – 17	000-xxx		000
	Channel – 18	000-xxx		000
	Channel – 19	000-xxx		000
	Channel – 20	000-xxx		000
	Channel – 21	000-xxx		000
	Channel – 22	000-xxx		000
	Channel – 23	000-xxx		000
	Channel – 24	000-xxx		000
	Channel – 25	000-xxx		000
	Channel – 26	000-xxx		000
	Channel – 27	000-xxx		000
	Channel – 28	000-xxx		000
	Channel – 29	000-xxx		000
	Channel – 30	000-xxx		000
	Channel – 31	000-xxx		000
	Channel – 32	000-xxx		000
	Channel – 33	000-xxx		000
	Channel – 34	000-xxx		000
	Channel – 35	000-xxx		000
	Channel – 36	000-xxx		000
	Channel – 37	000-xxx		000
	Channel – 38	000-xxx		000
	Channel – 39	000-xxx		000
	Channel – 40	000-xxx		000
	Channel – 41	000-xxx		000
	Channel – 42	000-xxx		000
	Channel – 43	000-xxx		000
	Channel – 44	000-xxx		000
	Channel – 45	000-xxx		000
	Channel – 46	000-xxx		000
	Channel – 47	000-xxx		000
	Channel – 48	000-xxx		000
	Return			
Password	Code--01	000-xxx		000
	Code--02	000-xxx		000
	Code--03	000-xxx		000
	Code--04	000-xxx		000
	Code--05	000-xxx		000
	Code--06	000-xxx		000
	Code--07	000-xxx		000
	Code--08	000-xxx		000
	Code--09	000-xxx		000
	Code--10	000-xxx		000

Password	Code--11	000-xxx		000
	Code--12	000-xxx		000
	Code--13	000-xxx		000
	Code--14	000-xxx		000
	Code--15	000-xxx		000
	Code--16	000-xxx		000
	Return			
Personality	Display	Keep/60s		60s
	Display Int	10-100		100
	Display Inv	On/Off		Off
	Language	Chin/Eng		Eng
	Receive Mode	DMX/WDMX/ANET/ADMX /sACN		DMX
	Universe	000-255		000
	IP Address A	002		002
	IP Address B	168		168
	IP Address C	000		000
	IP Address D	002		002
	Load Config 1	Save		Save
	Load Config 2	Save		Save
	Factory Set	Save		Save
	Firmware Upd	On/Off		Off
	WDMX Unlink	On/Off		Off
	Fixture Type	1700IP		1700IP
	Sleep Mode	On/Off		Off
	Error Disp	On/Off		Off
	Error Code	00		00
	sACN-Uni	001		001
	Exit			
Information	Fixture Hours	xxxx		0000
	Lamp Hours	xxxx		0000
	Dim Hours	xxxx		0000
	Manu ID	05EF		05EF
	Device ID	62908262		XXXXXXXX
	Panel Ver	Vx. xx		Vx. xx
	Panel Temp	xxx xxx		xxx xxx
	Panel Fan	xxxx xxxx		xxxx xxxx
	0:XY Ver	Vx. xx		Vx. xx
	0:XY Temp	xxx xxx		xxx xxx
	0:XY Fan	xxxx xxxx		xxxx xxxx
	1:SP Ver	Vx. xx		Vx. xx
	1:SP Temp	xxx xxx		xxx xxx
	1:SP Fan	xxxx xxxx		xxxx xxxx
	2:LED Ver	Vx. xx		Vx. xx
	2:LED Temp	xxx xxx		xxx xxx
	2:LED Fan	xxxx xxxx		xxxx xxxx
	Exit			

Sensor Monitor	Pan	Norm/Eror		Norm
	Tilt	Norm/Eror		Norm
	Cyan	Norm/Eror		Norm
	Magenta	Norm/Eror		Norm
	Yellow	Norm/Eror		Norm
	CTO	Norm/Eror		Norm
	Colour	Norm/Eror		Norm
	Zoom	Norm/Eror		Norm
	Focus	Norm/Eror		Norm
	Iris	Norm/Eror		Norm
	FrameRotat	Norm/Eror		Norm
	Gobo 1	Norm/Eror		Norm
	Gobo1 Rot	Norm/Eror		Norm
	Gobo 2	Norm/Eror		Norm
	Gobo2 Rot	Norm/Eror		Norm
	AnimD C	Norm/Eror		Norm
	AnimD rot	Norm/Eror		Norm
	Prism1	Norm/Eror		Norm
	Prism1 Rot	Norm/Eror		Norm
	Prism2	Norm/Eror		Norm
	Prism2 Rot	Norm/Eror		Norm
	Exit	Norm/Eror		Norm
Reset	Canc/Exec			Canc
Test Sequence	Stop/PT/Efct/All			Stop
Exit				

5/ Control panel

5.1 Control panel introduction



As shown in the pictureon the left:
1.Dispaly
2.ESC
3.UP
4.ENTER
5.DOWN
6.Respirator
7.DMX output
8.DMX input
9.Power input

Figure（5. 1-1）

5.2 Control panel Operation introduction

1. Password is required to enter the menu:UP DOWM UP DOWM;When the menu does not operate for 10 seconds, the control interface automatically enters the lock screen interface, requiring a new password to enter the menu.
2. Exit button (ESC): Exit the modification status or return to the previous menu.
3. Confirm button (Enter): enter the menu / save revised value, long press to return to the upper menu.
4. Up button (UP): Scroll up the menu to select the cursor / increase the modified parameter value.
5. Down button (DOWN): Scroll down the menu to select the cursor / reduce the modified parameter value.
6. Menu parameter setting: When the lamp is not connected to the power supply, the menu parameter setting can also be performed. Press and hold the “Exit button” and “OK knob” to start the battery working mode, then you can enter the main menu interface. For details, see the figure (5.2-1)

Main Menu Interface

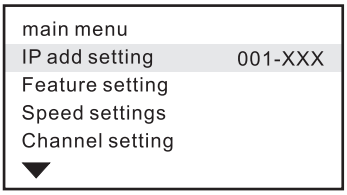


Fig.(5.2-1)

Notice: After entering the menu, the chosen menu is in grey color. Press relative function button to confirm (or by clicking “confirmation” button), then the user can enter in the next menu to edit the value. The user can scroll the function button to the next page (or by choosing up /down).

7. Display Turned: When the lamp is connected to the power supply. First press and hold the “Exit button”,then press the “Enter butter” , then you can turned the main menu reverse 180°.

6/ Function description

6.1 Gobo specification and replacement

■ Rotating gobo wheel

All designs can use circular glass pattern , for the best effect, please use the original factory pattern, do not use other patterns.

Rotating gobo1	
Material gobo	gorilla glass
Thickness	1. 1mm
Outer diameter	φ32+0/-0.2mm(φ24mm for gobo area)

Rotating gobo 2	
Material gobo	Corning glass
Thickness	1. 1mm
Outer diameter	φ32+0/-0.2mm(φ26mm for gobo area)

2 rotating gobo wheel whith 12 gobos(pluggable) + white.Fig.(6.1-1)(6.1-2).

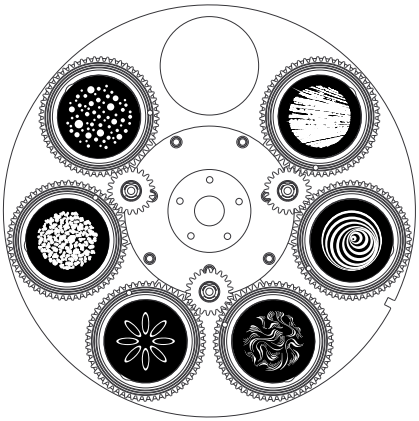


Fig.(6.1-1).

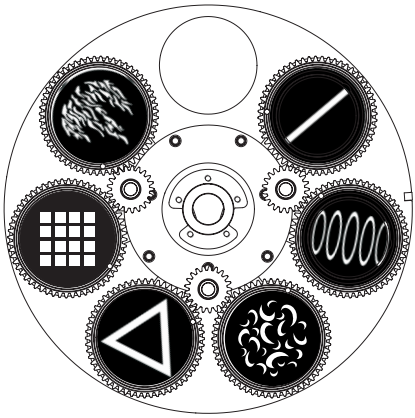


Fig.(6.1-2).

Gobo replacement

Warning

1. If the equipment is powered off, it must be cooled for 15 minutes before replacement.
2. For the best effect, please use the original factory pattern, do not use other patterns.

1. Pick the spring ring and gobos, place the new gobo, and then replace the spring ring in the slot as follows(6.1-3).
2. Place the gobo wheel under the 2pieces of shrapnel clips of corresponding installing hole, and then push the wheel to the original place, or you can use the screwdriver or some other similar tools to pry up the shrapnel clips.

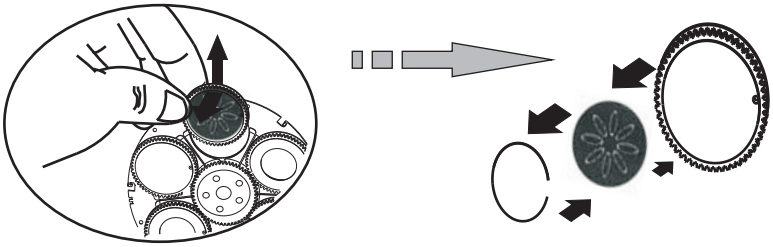


Fig.(6. 1-3)

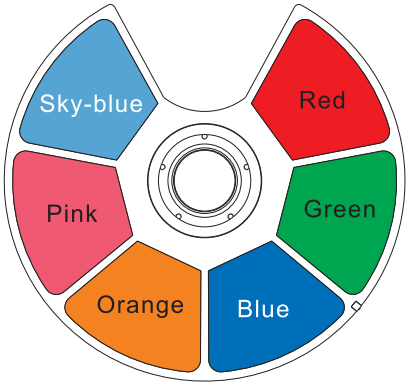
Notice!

The white side should be faced with the light source when installing the color filters.

6.2 Color System

Color filter

The color filter is composed of 6 fixed colors, if use the color filter with the gobos, you can create a colorful gobo effect.



Color filter
(Fig6. 2-1)

Tips: The coating side should be faced with the lamp if installing the color filters.

6.3 CMY color mixing

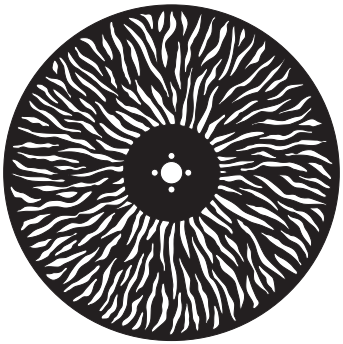
With Subtractive Color Mixture, using Cyan, Magenta and Yellow color filters, our color mixing system achieve CMY most smoothly color transition and extreme reducibility.

6.4 Gobo effect

1 rotating 4-facet prism, 1 rotating 4-facet gradient prism, 2 frost can overlay with each other, prisms can rotate bidirectional.

6.5 Animation wheel system

Has a rotatable and movable animation effect wheel system, which can be combined with the gobos to achieve rotation, water flow, and jiggle effects.



Animation wheel
Fig6.5-1

6.6 Cutting system

With synchronous gear wheel, the whole wheel is available for 180° rotation movement meanwhile the light spot can be cut into kinds of shapes when the blades move in & move out interlacement controlled by designed cutting system. As shown in (Fig.6.6-1) and (Fig.6.6-2)

Linear shape fig.(6.6-1)

Blading fig.(6.6-2)

7/ Routine maintenance

This fixture requires routine cleaning. The service life depends on the operating environment heavily. Please kindly contact GUANGZHOU CHAIYI LIGHT CO., LTD for more maintenance information not included in this user's manual.
Notice: Excessive dust, smoke fluid and particulate buildup will degrade performance and cause over heating or damage to the fixture that is not covered by the warranty.
Warning: Please unplug the fixture before you open any covers.

Cleaning
Optical components should be cleaned carefully and lightly. Coating face is easily damaged, do not use harmful solvent so as to avoid damage to plastic parts or coating parts.

Cleaning optical components
1. Switch off the fixture and keep it cool completely, then open the cover.
2. Clean the floats by dust collector or compressed.
3. Use cotton paper without smell or cotton cloth soaked with the water, distilled water to wipe the granular thing, don't wipe the surface, float things should be blown away by the pressure gas.
4. Use the cotton cloth or cotton paper without smell soaked with isopropyl alcohol to remove the smoke and other residues. A commercial glass cleaner may be used, but residues must be removed with distilled water. Clean with a slow circular motion from center to edge. Dry with a clean, soft and lint-free cloth or compressed air.

Cleaning fan and air vents
Remove dust from the fans and air vents with a soft brush, cotton paper, vacuum, or compressed air.

8/ Safety information

The following symbols are used to identify important safety information on the product and in this manual:

DANGER!
Safety hazard. Risk of severe injury or death.

DANGER!
Refer to manual before installing, powering or servicing.

DANGER!
Hazardous voltage. Risk of severe or lethal electric shock.

Warning!
Fire hazard.

Warning!
Burn hazard. Hot surface. Do not touch.

Warning!
Risk of eye injury. Safety glasses must be worn.

Warning!
Do not stare at the bulb which is still on.

Warning!
Risk of hand injury. Safety gloves must be worn.

Replace any cracked protective shield.

Minimum distance from lighted objects is 4.1m.

Do not direct lens to sun ray or strong light!

Do not actuate during operating.

Luminaries not suitable for direct mounting on normally flammable surfaces (suitable only for mounting on non-combusible surfaces)

The surface's temperature is 87°C.

Rated maximum ambient temperature is 40°C.

Protection against explosion

Protection screen must be replaced if they have become visible damaged to such an extent that their effectiveness is impaired.

Protection against burning or fire

Keep flammable materials far away from the fixture. Minimum distance from the flammable materials is 0.5m.

9/ Product connection

9.1 Package parts

The fixture is packed with flight case. One single standard flight case carries one fixtures. The parts listed below (Shown as table 9.1-1) .

Accessories	QTY	UNIT
User manual	1	PCS
Warranty card	1	PCS
Suspension fasteners	2	SET
Signal cable	1	PCS
Safety wire	1	PCS
Fuse	2	PCS

Table(9.1-1)

9.2 Power Connection

Notice: Type Y attachment for power supply connection. Method of attachment of the cable or cord such that any replacement can only be made by the manufacturer, his service agent or similarly qualified person.
The person must have the relevant qualification to connect the power supply.
The AC power voltage shall be suitable to the lamp provided with over-loading or creepage protection.

1. Connecting the equipment to the power supply, do not connect to silicon box system, or else, it will destroy the equipment.
   The fixture is provided with standard 3-pin socket. Please according to table (9.2-1) connect to power supply, Yellow/green line must be earthed. If you still have any question to the installation, please consultant with the experienced electrician.
2. When power is supplied, put the base switch to the position “I”.

Color	Wire	Mark
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	⏚

Table(9.2-1)

9.3 Signal Connection

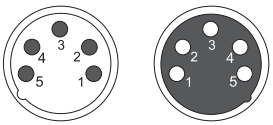
Date linkage for the fixture may be provided by DMX512 connection, Ethernet connection, Ethernet/DMX512 connection and wireless linkage.

DMX connection

Note: The signal cable was type X connection.

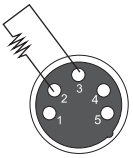
Type X connection—if the external flexible cable or cord of this fixture is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or his service agent.

3-pin or 5pin XLR connecters are provided for fixture DMX input and output.Pin1 is for earthing, pin2 is for minus signals, and pin 3 is for plus signals. To prevent and absorb the reflection and interference of the signals, each data link must be ended by a respective terminator.



5-pin XLR connector

Pin1: GND
Pin2: Signal(-)
Pin3: Signal(+)
Pin4/5:empty



Terminator

Terminator specification: a 120Ω plug-in resistor with rated power of 0.25W, soldered between pin 2 and pin 3 at the end of respective data link.

Fig.(9.3-1)

Connect the fixtures with Max.11 pieces. Make sure to insert the “signal in” terminal in the last connecting fixture. shown in Fig.(9.3-2).

Note: Make sure the fixture vertically upwards when it is placed horizontally, the safe distance between two adjacent fixtures must be≥720mm.

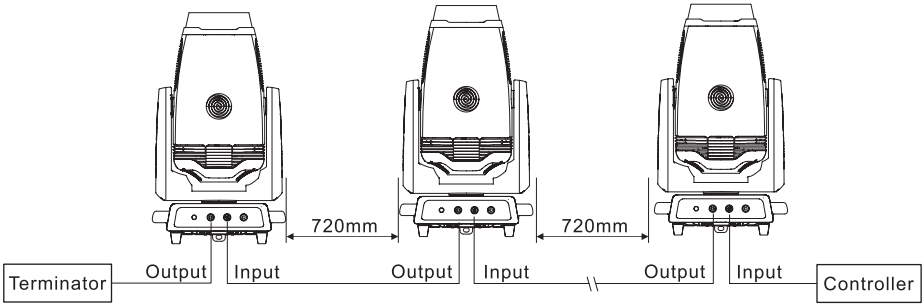


Fig.(9.3-2)

If long-distance data transfer occurs, a DMX512 signal amplifier is necessary. The added amplifier is inserted between the lighting controller and the first fixture on the basis of a normal data link.

Notice:

1. No more than one signal input or output can occur in one fixture.
2. Don’t split a data link via output ports on the fixture, use a DMX512 signal amplifier instead, if necessary.
3. Use only shielded-pair cables, and standard microphone cable is not reliable for long-distance data transfer.

Ethernet/DMX512 connection

The first fixture in the serial link, which is directly connected to the Ethernet network, should be such that the “fixture receiving mode” is set as “ENET→DMX”, The rest fixtures in the link should be set as “DMX” receiving mode. Then connect the output of the said first fixture to the input of a next fixture. Similarly, repeat the above connection till the DMX data link is completed. Shown as Fig.(9.3-5).

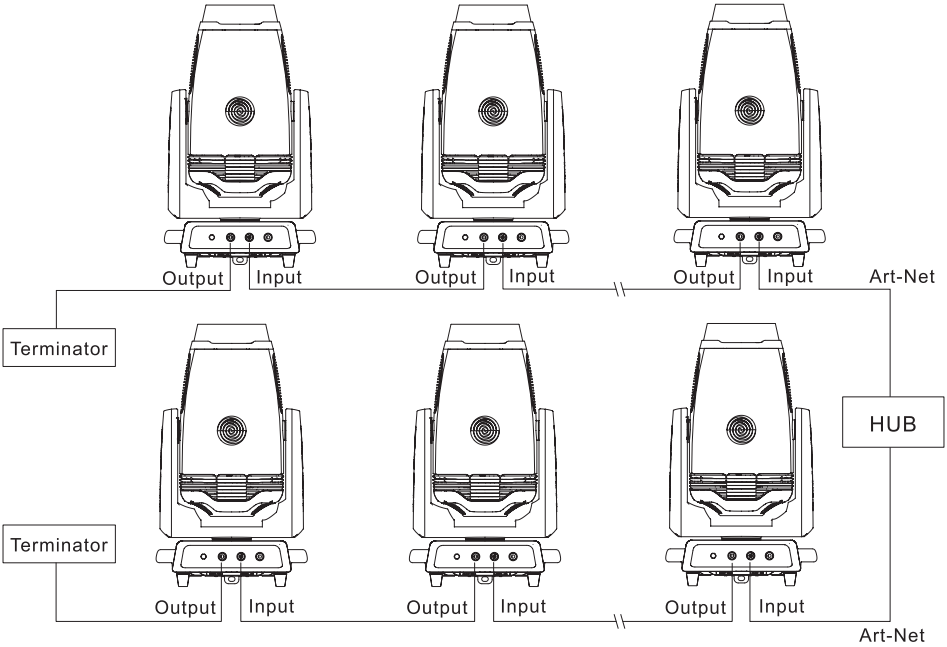


Fig.(9.3-5)

Notice: Apply a plug-in terminator to end the DMX data link.

Wireless transmission (optional)

1. Customer might choose wireless edition fixture which supports wireless data transmission. Wireless signal control is pretty reliable within a 225m radius empty space, thus no need for physical connection for data transmission. All has to be done is to set up corresponding addresses.
2. 2.4GHz worldwide free frequency band available in wireless control. Such huge frequency band favors users with variable band options.
   (a) Wireless receiving mode setup:
   "Personality"→"Receive Mode"→"WDMX"
   (b) Press emitter button to search preset address within a fixture. When it's done, remotely control a fixture through a controller, Shown as Fig.(9.3-6).

Notice:

1. Emitter location: Distribute the antenna higher than any barrier on floor as possible.
2. Antenna direction: Emitting antenna points to receiving antenna.
3. Antenna position: Keep away from EMI source as possible, such as WLAN antenna.

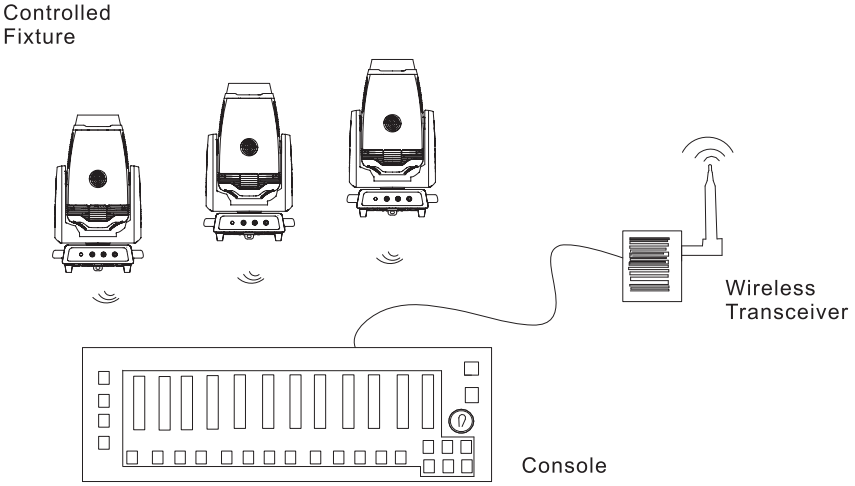
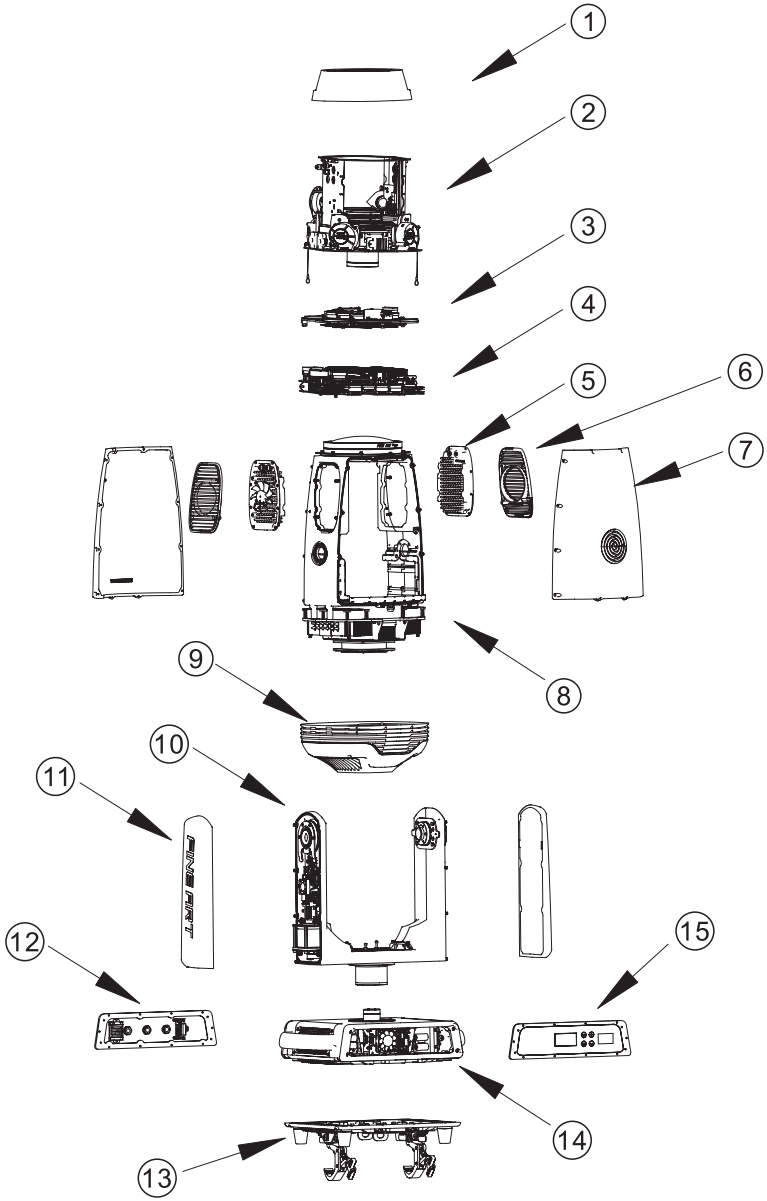


Fig.9.3-6

10/ Parts code

NO	Item	Specification	Ording index
1	Light source	—	280202000424
2	Display board	—	330397100197
3	CMY board	—	330395100293
4	Focusing six board	—	330395100296
5	XY board	—	330395100297
6	Cut ten loop board	—	330395100294
7	FAN module signal board	—	330395100261
8	5 LED driver boards	—	330395100259
9	4 LED driver boards	—	330395100260
10	Switching power supply	—	330001200149
11	Three phase stepper motor	—	140103000060
12	Switching power fan	—	150101000221
13	Base waterproof fan	—	159901101259
14	Tetraprism	—	200709000046
15	Four-sided gradient mirror	—	200709000049
16	Magnifing glass	—	200395000221
17	Focusing mirror	—	200395000222
18	IP evener	—	200395000298
19	R52.5 Uniform piece	—	200395000299
20	Out light mirror	—	200395000271
21	Gobo1	Pattern area：φ26	190320000074
22	Gobo2	Pattern area：φ26	190320000154
23	Gobo3	Pattern area：φ26	190320000155
24	Gobo4	Pattern area：φ26	190320000156
25	Gobo5	Pattern area：φ26	190320000157
26	Gobo6	Pattern area：φ24	190320000169
27	Gobo7	Pattern area：φ24	190320000170
28	Gobo8	Pattern area：φ24	190320000171
29	Gobo9	Pattern area：φ24	190320000172
30	Gobo10	Pattern area：φ24	190320000173
31	Gobo11	Pattern area：φ24	190320000174
32	Orange Filter	1.1mm , 69,07x56	220395000137
33	Red Filter	1.1mm , 69,07x56	220395000141
34	Blue Filter	1.1mm , 69,07x56	220395000142
35	Pink Filter	1.1mm , 69,07x56	220395000144
36	Green Filter	1.1mm , 69,07x56	220395000145
37	Blackish Green Filter	1.1mm , 69,07x56	220395000176
38	CMY(0°) cyan	1.1mm , 73X70,5	220395000123
39	CMY(45°) cyan	1.1mm , 73X70,5	220395000125
40	CMY(0°) CTO	1.1mm , 73X70,5	220395000126
41	CMY(45°) CTO	1.1mm , 73X70,5	220395000130
42	CMY magenta	1.1mm , 73X70,5	220395000249

Attached 1: Fixture exploded drawing



1、Head cover
2、Focus module
3、Cutting module
4、CMY module
5、Side cover radiator
6、Upper side cover
7、Body cover
8、Rear body module
9、lower body cover
10、Arm Pan module
11、Arm cover
12、Power panel assembly
13、Base lower cover assembly
14、Base upper cover assembly
15、Display panel assembly