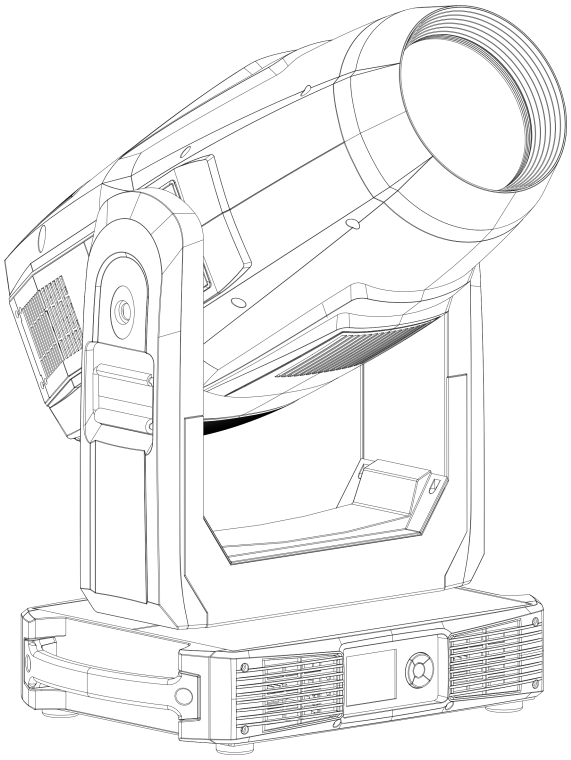


XRLED 2500-W Framing

PR-8157

This product manual contains important information about the safe installation and use of this projector. Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

PR LIGHTING LTD.
http://www.pr-lighting.com

INDEX

The following items are supplied with the projector and please check:

Name	Quantity	Unit	Remark
G clamp	2	Pcs	
XLR connector	1	Set	Male and female
Safety cord	2	Pcs	
User manual	0	Pc	QR Code
Ω clamp	2	Pcs	Optional

Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of the manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

Any future technical changes are not subject to further notice.

Note: For the products made by Guangzhou PR lighting Ltd, the warranty for the whole product is one year starting from the delivery date but the light source is not within the warranty.

1. SAFETY AND WARNINGS

NOTE

Before a projector's installation, power-on, operation and maintenance, please carefully read the safety information hereinafter!

The following safety signs are used in the user manual.

						
Warning	**User Manual**	**Electrical shock**	**Goggles**	**Protective Gloves**	**Flames**	**High Temperature**

● When unpacking , check if there is transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use it.

●The manufacture is not responsible for loss caused by the user not following the manual or changing the projector as he/she likes.

●Please be noted that the damage caused by changing the projector at will is not warranted.

● Do not hesitate to contact the dealer or the manufacturer if any questions or advice.

● The projector is for indoor use only, IP20.

● Use only in dry locations. Keep this unit away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

●The projector should be kept away from high temperature, fire, electrical surge, vibration and strong light while being operated.

●The projector is only intended for installation, operation and maintenance by qualified personnel. And the operation must strictly follow the procedures in the manual.

●The projector is not for a user for any replacements and the user shouldn't open the projector for repair and maintenance.

●Don't look straightly into the light sources especially for epileptics, otherwise eyes will be burned..

●Do not connect this device to any type of dimmer pack.

●If the lamp, lens and screen protective cover of the a lighting fixture have obvious damage, i.e., to the extent that it hurts the performance like cracking or deformation. Please stop use it and replace them with the original parts, otherwise its performance will be compromised.

● For the location of a lighting fixture, it shouldn't be seen in the distance of less than 4 meters.

●Before operation, please confirm that all covers(housing) are on and screws tightened. It's forbidden to use a projector while covers(housing)are off .

●Keep the lamp clean and do not touch it with bare hands.

●While operating it, wear protective items.

●Any electrical connection must be carried out by a qualified person .

●Before installation, please confirm the voltage supplied matches what is required for the projector.

●Each projector must be properly earthed and installed as per related electrical standards.

●Do not use power cord with its insulator damaged and connect the power cord with other cables.

●If the projector is not used or under cleaning,, please hold the plug and unplug it. Do not unplug it forcefully or by pulling the power cable.

●All power cords must conform to related safety and regulations.

●While being operated, the projector should not be under rains or in humidity.
●Do not switch on and off the projector constantly in very short intervals, otherwise the light source's and other electrical parts' life will be shortened .

●There are safety cord holes at the bottom of the base of a projector. In view of safety, please run the safety cord supplied through the safety cord holes for safety support.
●Before any installation, maintenance and cleaning work, please ensure the projector is disconnected from power mains.

●.After stable operation under normal ambient temperature ,the temperature of the external surface of the housing of the LED lighting fixture (the surface of the heat sink) is 65℃ at maximum after the stable running.
●.While the lamp is stricken for the first time, there will be smoke and strange smell. It's normal and does not mean the projector has some defects.
●While a lighting fixture works properly under normal ambient temperature, the maximum temperature of the external surface of the control device (The integrated control device means the external surface of the housing of the lighting fixtures electric chamber)allowed is 65 Celsius degrees.

●Do not mount the projector directly on inflammable surface.
●Do not project the beam straightly on combustible items and the minimum distance between the projector and illuminated items is 10m.
●A projector should be installed with good ventilation and the minimum distance between the projector and walls is 50cm. At the same time, please ensure the fans and air inlets and outlets are workable.

●The product meets The General Technical Requirements and Standards for Recycle and Use Of Expired Appliance and Electronic Products.
●When the product meets disposal standards and needs to be disposed, a client needs to dispose and recycle it.

2. INSTRUCTIONS

●CLEANING AND MAINTENANCE

If a projector can't start. Please check if the fuse is blown up. If it does, replace it with a new fuse with same ratings. And the projector has over-temperature protective device. If the temperature is too high, the protective device will be triggered to shut the projector off. When it happens, please check if the fans run normally or fan shield is blocked by dust. After the issue is solved, restart the projector.

The accumulation of oil, smoke and dust on the lens will compromise the light output and cooling efficiency. Cleaning a projector is very necessary to ensure a reliable use of it. Cooling fans need to be cleaned every 15 days. Internal lens, reflector and hot mirror need to be cleaned periodically to optimize light output. Use plastic\rubber fiber and fur (non-metallic) tools for cleaning. And the tools can't scratch or deform the heat sink.

Cleaning frequency is to be decided by operations and its environment. Use soft cloth and normal detergent for glass for cleaning work. It's advised external optical system be cleaned every 20days and internal optical systems every 30/60days. Keep lens clean and do not touch optical parts with bare hands.

●Before any maintenance and cleaning, please ensure the projector is off the power.
●Only qualified person is allowed to do maintenance.
●During maintenance and before maintenance, the projector must be off power.

●To avoid sunlight or other light penetrating into the head via the front lens, resulting in high temperature internally causing damages to the projector. Before power-off, please use Tilt channel to move the head and make it facing downward.

● Do not use alcohol or other organic solvent to clean the housing to avoid damage.

● Do not use any solvent with chemical elements to clean color filters or hot mirror.

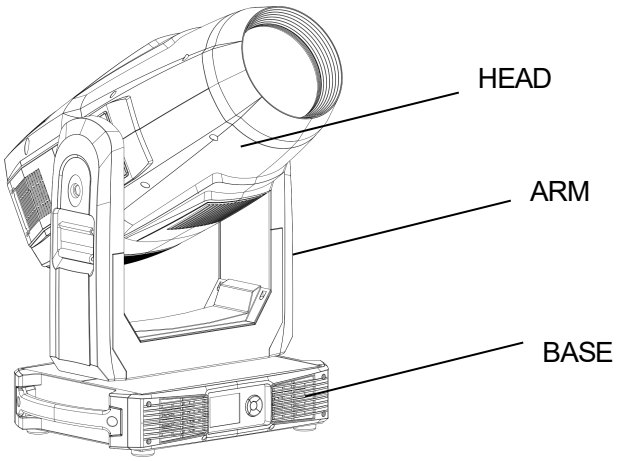
●LUBRICATION

To ensure smooth movement of gobos and zoom and focus lens, it's advised rotators' bearings and 2 sliding bars for zoom and focus lens be lubricated every 2 months. High quality and high temperature lubricant/grease is advised..

●TROUBLESHOOTING

PROBLEM	ACTION
The projector can't be switched on	➢ Check if the fuse is burned ➢ Check if the power cord is connected well ➢ Check if the switching power supply is bad or not connected well. A professional technician is required for the repair ➢ Check if the control board is connected well. .A professional technician is required for the repair
The projector can be switched on , but the LED lamp's brightness can't be controlled	➢ Check if the LED driver board is connected well. A professional technician is required for the repair
The projector can be switched on normally, but not controlled by the DMX controller	➢ Make sure that the fixture's start address is right ➢ Replace or repair the XLR signal cable.
The beam is not bright and its brightness decreases sharply	➢ Make sure the fans are working well or fans and their shields are not blocked by dust. ➢ Make sure that the internal optics is clean.
The project image appears to have a halo	➢ Carefully clean the LED lamp, optical lenses and other components.
Heavily Defective Beam	➢ Check if lens are in good condition(not cracked) ➢ Clean dust or grease on the lens.

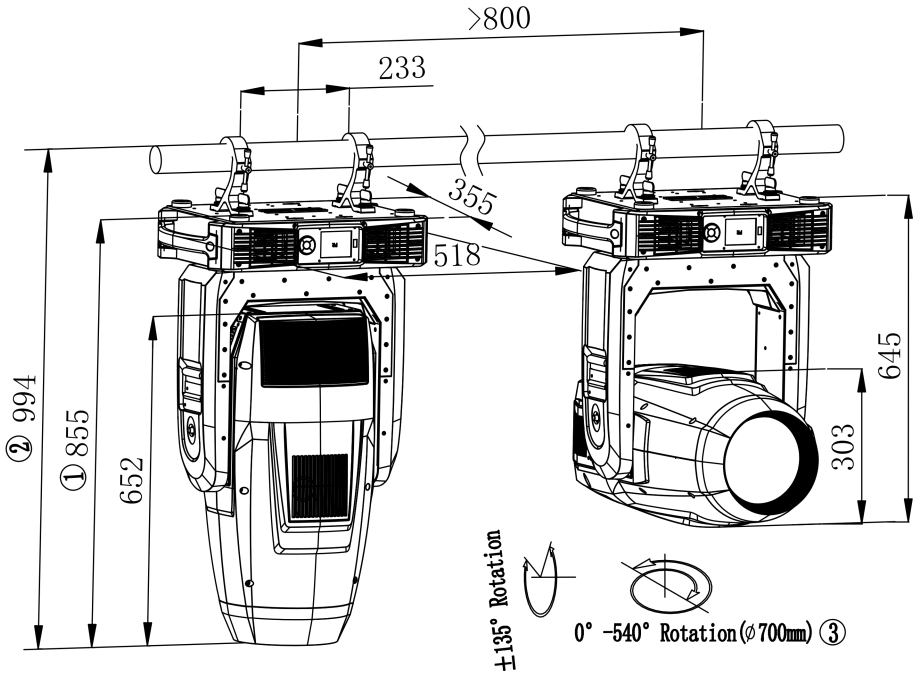
3. APPEARANCE



4. INSTALLATION

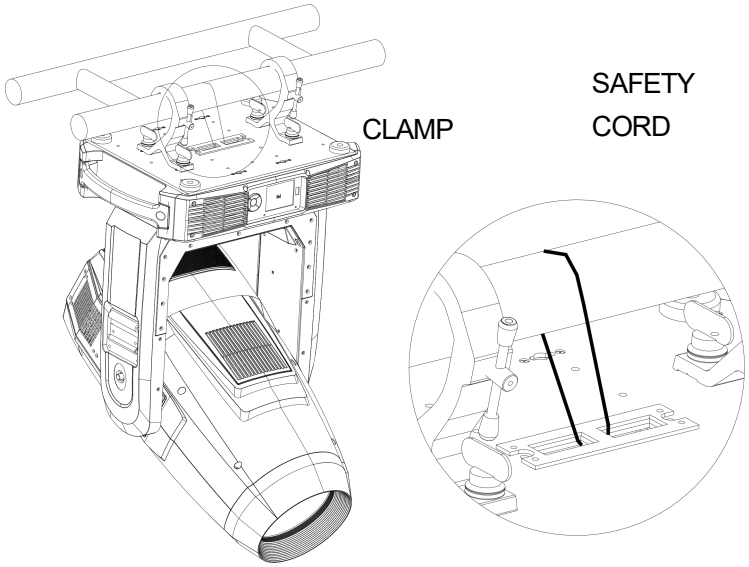
•RIGGING

During transportation, please lock the projector well; Before the use of projector please unlock the head. It's forbidden to run the projector without unlock Pan and Tilt



Note:

1. Distance between feet and top of the head
2. Distance between mounting bar and top of the head
3. Fixture rotating diameter（minimum spacing between fixtures）



WARMING

Please run safety cord through the safety hole circled in the diagram for safety

Take 2 clamps and 1 safety cords out from the package and mount 2 clamps on the underside of fixture with 4 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) Always ensure that the projector is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure that you are going to mount the projector is secure and is strong enough to support the weight of the fixture.

WARNING:

•The projector MUST be lifted or carried by the HANDLES instead of clamps.

•.For safety the safety cord should afford 10 times the Projector's weight.

•.For safety, it should not be hung by its sides.

• POWER CONNECTIONS

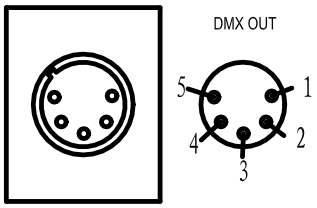
Connect the power cord as follows:
L (live) =brown
E (earth) =yellow/green
N (neutral) =blue

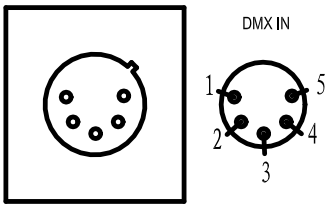
Before power connection, please ensure the power supplied must match what the nameplate says. It is recommended that each projector be connected with power separately so that they may be individually switched on and off.

•The earth wire(yellow/green) must be connected to the ground. And electrical connection must be in accordance with the standards concerned.
•If any questions about the electrical installation, do not continue but consult a qualified electrician.
• The lighting fixture is with waterproof power socket, it should be equipped with same IP rating power plug.

•DMX CONTROL CONNECTION

5-PIN



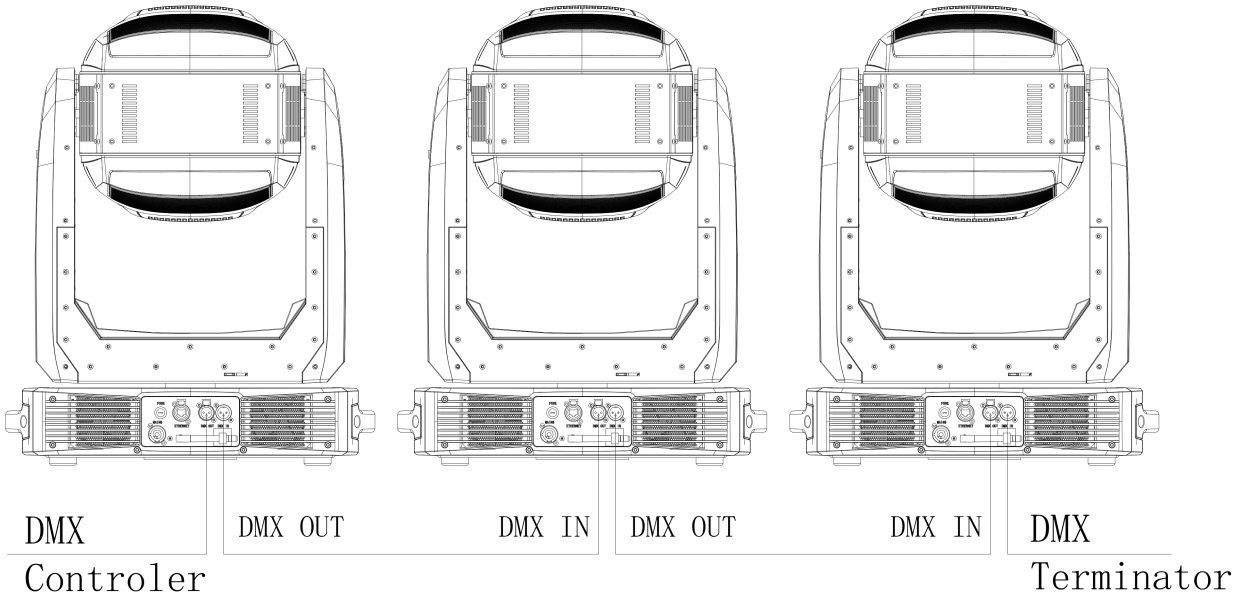


DMX 512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between controller and projector and between one projector and another must be made with a twin-screened cable, with each wire having at least a 0.5mm in diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 5 pin XLR plugs and sockets. The XLR's are connected as shown in the figure above.

Note: care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. XLR plugs and sockets mustn't be connected in any way other than mentioned in the above figure. The projector accepts digital control signals in protocol DMX512 (1990).

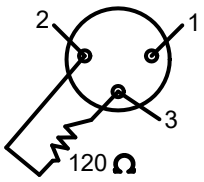
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



•DMX TERMINATOR

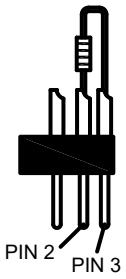
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below



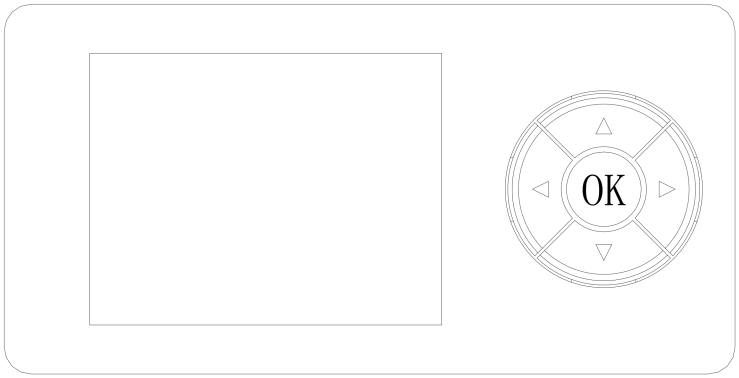
DMX TERMINATOR CONNECTION

Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.



5. SETUP AND CONFIGURATION

•FRONT PANEL OPERATION



The configuration and start address can be set conveniently via push button and color touch screen.

To view or change its setup, touch any white area of the screen or push the key OK for more than 3 seconds to unlock the display(While only on battery, push OK key). After the unlocking, push ► key to enter into function menus. Each main menu has its submenus and each submenu has a specific function. For details, please see the "OPERATION MENU" with following the 6th point..

1. In the page of function setup, push any key of ◄, ►, ▲ and ▼ or icon for the function desired.
2. At 2nd ,3rd and 4th level menus, key ◄ means ESCAPE, key ► won't function, key OK means ENTER. Push key OK to save any changes o enter into submenus. Push key ▲or ▼ to change numbers(plus or minus) or tap any item required for changes.

Push the left key or shortcut key X to go back to the upper level menu. If none pushed, the system will go back to initial display automatically.

Shortcut keys: after the interface of FUNCTION MENU, the upper part is with menus for many functions. On the right, there are 4 shortcut keys, which are ←,→,lamp control or English/Chinese menus.

• DMX START ADDRESS

Each projector must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The projector has 3 DMX modes. There are short mode ,standard mode and extended mode. For example standard mode has 42 **c**hannels, so set the No. 1 projector's address 001, No. 2 projector's address 043, No. 3 projector's address 085, No. 4 projector's address107, and so on.

Launch the projector. Press key OK more than 3seconds to unlock the display. After the unlocking, push key ▶ to enter into menus.
After selecting the sign of DMX setting, push OK key or tap the screen directly and select DMX address at 2nd level menus.
Push key ▲ or ▼ or tap sign < or > to set the number desired.
Push OK key to confirm.
Push key ◀ and it will return to the upper menu

.

The projector has wireless control function with wireless receiver module and antenna for remote control.

The setup of it is below:

1. Enter into the projector's menu. Select the menu "Config Settigns" via the keys of ▲ and ▼
2. Select **DMX control Mode---- Wireless First** (Note: Do not select **XLR ONLY).** The DMX wireless control function is activated.

Only after the projector is linked with a transmitter, can it receive wireless signal sent by the transmitter. If unlinking it, Press "Enter" for the menu of Unlink Wireless under the upper level menu of Config Settigns.

•STAND-ALONE MODE

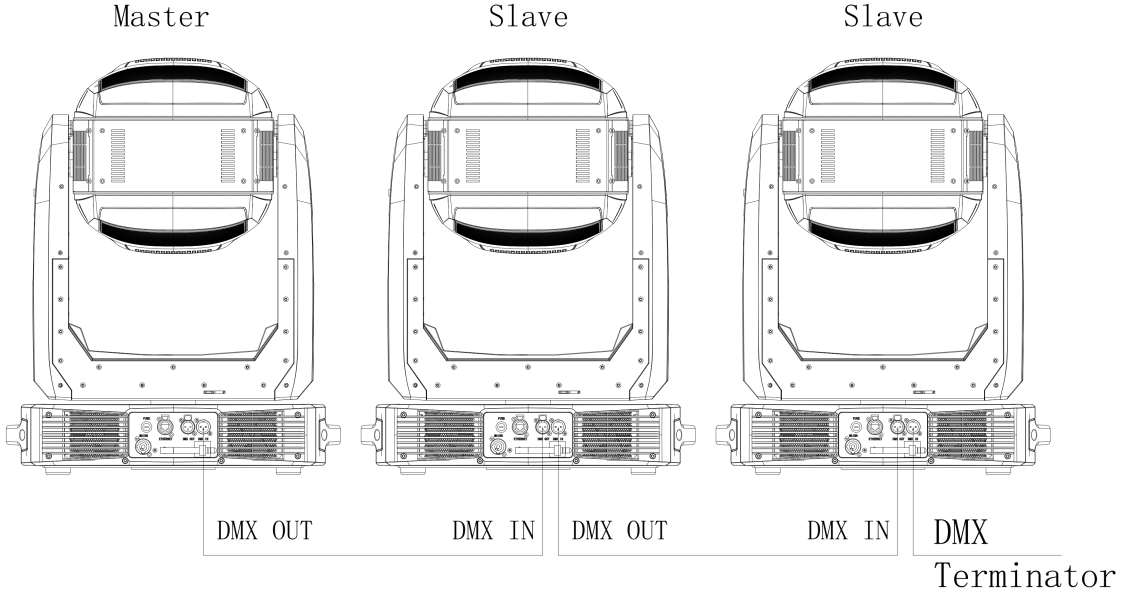
Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically.
DMX address can be set at any number within 512.

•MASTER/SLAVE MODE

Many projectors can run synchronously in the Master/Slave mode by linking them with each other. First, connect the first fixture's DMX output to the second fixture's DMX input using XLR-XLR control cable and then connect the second fixture's DMX output to the third fixture's DMX input, and so on until all projector are connected in this way. Eventually connect the last fixture's DMX output to a DMX terminator. Set 1st projector as the master and others are Slaves.

Start Addresses of all Slaves are 001; Operation mode of the Master can be set any mode for a Master' and Slaves' operation mode can be set accordingly.

After Powered on, the group will run in Master/Slave Mode



6. OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL	5th LEVEL
Address	DMX Address	1-475（Short Mode） 1-471（Standard Mode） 1-456（Extended Mode）		
	IP Address	Default IP Address	2.X.X.X /10.X.X.X	
		Custom IP Address	X.X.X.X	
	SubNet Mask	X.X.X.X		
	ArtNet ArtNet Universe	0-255		
	sACN Universe	1-63999		
Reset	Total Reset	Really Reset?	Confirm/ Cancel	
	Pan&Tilt Reset	Really Reset?	Confirm/ Cancel	
	Colour System Reset	Really Reset?	Confirm/ Cancel	
	Gobo Reset	Really Reset?	Confirm/ Cancel	
	Zo.Fo.Fr.Pr. Reset	Really Reset?	Confirm/ Cancel	
	Other Reset	Really Reset?	Confirm/ Cancel	
Config Settings	DMX Channel Mode	Short Mode 38CH		
		Standard Mode 42CH		
		Extended Mode 57CH		
		View Selected Mode	Strobe …..	
	Signal Select	XLR Only		
		XLR First		
		Wireless Only		
		Wireless First		
		Wireless In/XLR Out		
		Artnet Only		
		Artnet In/XLR Out		
		sACN Only		
		sACN In/XLR Out		
	Loss of DMX	Normal time out		
		Hold last Value		
	Display Config	Display Mode	Off After Delay	
			On Always	
		Display Invert	Invert OFF	
			Invert ON	
			Invert Auto	
		Language Setting	English	
			Chinese	
		Touch screen calibration	XXX	
	Temperature Unit	Celsius Degree		
		Fahrenheit Degree		
	Un-Link Wireless	Really Un-Link?	Confirm/ Cancel	
	Defaults	Restore Defaults?	Confirm/ Cancel	
Option Settings	Pan/Tilt Settings	Pan DMX Invert	OFF/ ON	
		Tilt DMX Invert	OFF/ ON	
		Pan Tilt Swap	OFF/ ON	
		XY Feedback	OFF/ ON	
		Pan/Tilt mode	Speed/Time	
	Invert Settings	Iris Invert	OFF/ ON	
		Zoom Invert	OFF/ ON	
		CMY Invert	OFF/ ON	
		CTO Invert	OFF/ ON	

	Dimmer Settings	Gamma Curve	Gamma 2.0/2.2/2.4/2.6	
		LED Refresh Rate	1200/2400/4800/10000/12000/15000/20000/25000Hz	
		Dimmer Speed	Fast/Medium/Slow Speed	
	Fan Settings	Standard/Theatre		
	Defaults	Factory Restore Defaults?	Confirm/ Cancel	
Information	View DMX Values	DMX channel Vlaue Strobe XXX Dimmer XXX Dimmer Fine XXX CMY macro XXX Cyan XXX Yellow XXX Magenta XXX CTO XXX Color Wheel XXX Color wheel Fine XXX Iris XXX Iris macro XXX Fixed gobo wheel XXX Rota. Gobo wheel XXX Gobo Rota. XXX Gobo Rota. Fine XXX Framing Blade 1 left XXX Framing Blade 1 right XXX Framing Blade 2 left XXX Framing Blade 2 right XXX Framing Blade 3 left XXX Framing Blade 3 right XXX Framing Blade 4 left XXX Framing Blade 4 right XXX Framing module Rota. XXX Framing module Rota. Fine XX Prism XXX Prism Rota. XXX Effect Wheel XXX Effect Wheel Rota. XXX Frost XXX Focus XXX Zoom XXX Auto Focus XXX Auto Focus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan & Tilt Speed XXX CRI Mode XXX Control Function XXX		
	Lamp Hours	XXX Reset Lamp Hours		
	Total Hours	XXX		
	Temperature	Display Board XX℃/F		
		Pan and Tilt Board XX℃/F		
		Driver Board 1 XX℃/F		
		Driver Board 2 XX℃/F		

		Driver Board 3 XX℃/F		
		Blade Board XX℃/F		
		Fan Board XX℃/F		
		LED XX℃/F LED Sensor XX°C/F		
	Software Version	Display Board	System= XXX Boot =XXX	
		Pan and Tilt Board	System= XXX Boot =XXX	
		Driver Board 1	System= XXX Boot =XXX	
		Driver Board 2	System= XXX Boot =XXX	
		Driver Board 3	System= XXX Boot =XXX	
		Blade Board	System= XXX Boot =XXX	
		Fan Board	System= XXX Boot =XXX	
	Electronic SN	Electronic SN= **********		
	RDM Device Label	XRLED 2500-W Framing ANSI E1.20 RDM Version X.X		
	Fan status	Fan Speed Status Base Fan 1 XXX XXX Base Fan 2 XXX XXX Gobo Fan XXX XXX Prism Fan XXX XXX Framing module Fan1 X X Framing module Fan2 X X LED Fan1 XXX XXX LED Fan2 XXX XXX LED Fan3 XXX XXX LED Fan4 XXX XXX LED Driver Fan1 XX XX LED Driver Fan2 XX XX		
Service	Manual Effect Control	Strobe XXX Dimmer XXX Dimmer Fine XXX CMY macro XXX Cyan XXX Cyan Fine XXX Yellow XXX Yellow Fine XXX Magenta XXX Magenta Fine XXX CTO XXX CTO Fine XXX Color Wheel XXX Color wheel Fine XXX Iris XXX Iris fine XXX Iris macro XXX Fixed gobo wheel XXX Rota. Gobo wheel XXX Gobo Rota. XXX Gobo Rota. Fine XXX		

		Framing Blade 1 left XXX Framing Blade 1 left Fine XXX Framing Blade 1 right XXX Framing Blade1 Right Fine XXX Framing Blade 2 left XXX Framing Blade 2 left Fine XXX Framing Blade 2 right XXX Framing Blade2 Right Fine XXX Framing Blade 3 left XXX Framing Blade 3 left Fine XXX Framing Blade 3 right XXX Framing Blade3 Right Fine XXX Framing Blade 4 left XXX Framing Blade 4left Fine XXX Framing Blade 4 right XXX Framing Blade4 Right Fine XXX Framing module Rota. XXX Framing module Rota. Fine XX Prism XXX Prism Rota. XXX Effect Wheel XXX Effect Wheel Rota. XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Auto Focus XXX Auto Focus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan & Tilt Speed XXX CRI Mode XXX		
	Firmware update			
	Factory Test			
Operation Mode	DMX Mode	Change Operation Mode?	Confirm/ Cancel	
	Master Mode	Preset Memory	Change Operation Mode?	Confirm/ Cancel
		User Memory 1	Change Operation Mode?	
		User Memory 2	Change Operation Mode?	
	Stand-Alone Mode	Preset Memory	Change Operation Mode?	
		User Memory 1	Change Operation Mode?	
		User Memory 2	Change Operation Mode?	
	Static Scene	Change Operation Mode?		
User Memories	Edit User Memory	Edit User Memory 1 / Edit User Memory 2	Scene XX （1~200 Scenes）	Strobe XXX Dimmer XXX Dimmer Fine XXX CMY macro XXX Cyan XXX Cyan Fine XXX Yellow XXX Yellow Fine XXX Magenta XXX Magenta Fine XXX CTO XXX CTO Fine XXX Color Wheel XXX Color wheel Fine XXX

				Iris XXX Iris fine XXX Iris macro XXX Fixed gobo wheel XXX Rota. Gobo wheel XXX Gobo Rota. XXX Gobo Rota. Fine XXX Framing Blade 1 left XXX Framing Blade 1 left Fine XXX Framing Blade 1 right XXX Framing Blade1 Right Fine XXX Framing Blade 2 left XXX Framing Blade 2 left Fine XXX Framing Blade 2 right XXX Framing Blade2 Right Fine XXX Framing Blade 3 left XXX Framing Blade 3 left Fine XXX Framing Blade 3 right XXX Framing Blade3 Right Fine XXX Framing Blade 4 left XXX Framing Blade 4left Fine XXX Framing Blade 4 right XXX Framing Blade4 Right Fine XXX Framing module Rota. XXX Framing module Rota. Fine XX Prism XXX Prism Rota. XXX Effect Wheel XXX Effect Wheel Rota. XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Auto Focus XXX Auto Focus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan & Tilt Speed XXX CRI Mode XXX Fade Time XXX Hold time XXX Delay unit ms/s/min Link to next scene XXX
		Edit Static Scene	Strobe XXX Dimmer XXX Dimmer Fine XXX CMY macro XXX Cyan XXX Cyan Fine XXX Yellow XXX Yellow Fine XXX Magenta XXX Magenta Fine XXX CTO XXX CTO Fine XXX Color Wheel XXX	

			Color wheel Fine XXX Iris XXX Iris fine XXX Iris macro XXX Fixed gobo wheel XXX Rota. Gobo wheel XXX Gobo Rota. XXX Gobo Rota. Fine XXX Framing Blade 1 left XXX Framing Blade 1 left Fine XXX Framing Blade 1 right XXX Framing Blade1 Right Fine XXX Framing Blade 2 left XXX Framing Blade 2 left Fine XXX Framing Blade 2 right XXX Framing Blade2 Right Fine XXX Framing Blade 3 left XXX Framing Blade 3 left Fine XXX Framing Blade 3 right XXX Framing Blade3 Right Fine XXX Framing Blade 4 left XXX Framing Blade 4left Fine XXX Framing Blade 4 right XXX Framing Blade4 Right Fine XXX Framing module Rota. XXX Framing module Rota. Fine XX Prism XXX Prism Rota. XXX Effect Wheel XXX Effect Wheel Rota. XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Auto Focus XXX Auto Focus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan & Tilt Speed XXX CRI Mode XXX	
	Init User Memory	Reset User Memory 1	Reset User Memory?	Input Password 123
		Reset User Memory 2	Reset User Memory?	Input Password 123
		Reset Static Scene	Reset Static Scene?	Input Password 123

7. DMX PROTOCOL

Short mode	Standard mode	Extended mode	Function Description	Decimal Low	Decimal High
1	1	1	Strobe		
			Close	0	
			Pulse strobe speed from slow to fast	1	127
			Strobe speed slow to fast	128	255

2	2	2	Dimmer		
			Close	0	0
			Non-linear dimmer from dark to light (0-100%)	1	255
	3	3	Dimmer Fine		
			Dimmer in 16 bit	0	255
3	4	4	CYM Macro		
			The following functions will disable CMY ,CTO		
			No Function	0	7
			Color Temperature 2700K	8	9
			Color Temperature 3000K	10	11
			Color Temperature 3500K	12	13
			Color Temperature 4000K	14	15
			Color Temperature 4500K	16	17
			Color Temperature 5000K	18	19
			Color Temperature 5700K	20	21
			Colour Macro 1	22	23
			Colour Macro 2	24	25
			Colour Macro 3	26	27
			Colour Macro 4	28	29
			Colour Macro 5	30	31
			Colour Macro 6	32	33
			Colour Macro 7	34	35
			Colour Macro 8	36	37
			Colour Macro 9	38	39
			Colour Macro 10	40	41
			Colour Macro 11	42	43
			Colour Macro 12	44	45
			Colour Macro 13	46	47
			Colour Macro 14	48	49
			Colour Macro 15	50	51
			Colour Macro 16	52	53
			Colour Macro 17	54	55
			Colour Macro 18	56	57
			Colour Macro 19	58	59
			Colour Macro 20	60	61
			Colour Macro 21	62	63
			Colour Macro 22	64	65
			Colour Macro 23	66	67
			Colour Macro 24	68	69
			Colour Macro 25	70	71
			Colour Macro 26	72	73
			Colour Macro 27	74	75
			Colour Macro 28	76	77

Colour Macro 29	78	79
Colour Macro 30	80	81
Colour Macro 31	82	83
Colour Macro 32	84	85
Colour Macro 33	86	87
Colour Macro 34	88	89
Colour Macro 35	90	91
Colour Macro 36	92	93
Colour Macro 37	94	95
Colour Macro 38	96	97
Colour Macro39	98	99
Colour Macro 40	100	101
Colour Macro 41	102	103
Colour Macro 42	104	105
Colour Macro 43	106	107
Colour Macro 44	108	109
Colour Macro 45	110	111
Colour Macro 46	112	113
Colour Macro 47	114	115
Colour Macro 48	116	117
Colour Macro 49	118	119
Colour Macro 50	120	121
Colour Macro 51	122	123
Colour Macro 52	124	125
Colour Macro 53	126	127
Colour Macro 54	128	129
Colour Macro 55	130	131
Colour Macro 56	132	133
Colour Macro 57	134	135
Colour Macro 58	136	137
Colour Macro 59	138	139
Colour Macro 60	140	141
Colour Macro 61	142	143
Colour Macro 62	144	145
Colour Macro 63	146	147
Colour Macro 64	148	149
Colour Macro 65	150	151
Colour Macro 66	152	153
Colour Macro 67	154	155
Colour Macro 68	156	157
Colour Macro 69	158	159
Colour Macro 70	160	161
Colour Macro 71	162	163

			Colour Macro 72	164	165
			Colour Macro 73	166	167
			Colour Macro 74	168	169
			Colour Macro 75	170	171
			Colour Macro 76	172	173
			Colour Macro 77	174	175
			Colour Macro 78	176	177
			Colour Macro 79	178	179
			Colour Macro 80	180	181
			Colour Macro 81	182	183
			Colour Macro 82	184	185
			Colour Macro 83	186	187
			Colour Macro 84	188	189
			Colour Macro 85	190	191
			Colour Macro 86	192	193
			Colour Macro 87	194	195
			Colour Macro 88	196	197
			Colour Macro 89	198	199
			CMY colour mixing from slow to fast	200	255
4	5	5	Cyan		
			Cyan (Linear 0-100%)	0	255
		6	Cyan Fine		
			Cyan in 16 Bit precision	0	255
5	6	7	Yellow		
			Yellow (Linear 0-100%)	0	255
		8	Yellow Fine		
			Yellow in 16 Bit precision	0	255
6	7	9	Magenta		
			Magenta (Linear 0-100%)	0	255
		10	Magenta Fine		
			Magenta in 16 Bit precision	0	255
7	8	11	CTO		
			Linear adjust from high to low	0	255
		12	CTO Fine		
			CTO in 16 Bit precision	0	255
8	9	13	Colour Wheel		
			Continual positioning		
			index 0-360°	0	63
			positioning		
			White	64	67
			White/Color1(Red)	68	71
			Color1(Red)	72	75
			Color1(Red)/Color 2(Green)	76	79

			Color 2(Green)	80	83
			Color 2(Green)/Color 3(Blue)	84	87
			Color 3(Blue)	88	91
			Color 3(Blue)/ Color 4(Orange)	92	95
			Color 4(Orange)	96	99
			Color 4(Orange) /Color 5(Pink)	100	103
			Color 5(Pink)	104	107
			Color 5（Pink）/Color 6（Light Cyan）	108	111
			Color 6(Light Cyan)	112	115
			Color6 (Light Cyan)/ Open	116	119
			Open	120	127
			Clockwise rainbow effect rotation speed from slow to fast	128	191
			Anti-clockwise rainbow effect rotation speed from slow to fast	192	255
	10	14	Color Wheel Fine		
			Color Continual positioning in 16 Bit precision	0	255
9	11	15	Iris		
			Linear Iris from small to big 0-100%	0	255
		16	Iris in 16 bit		
			Iris in 16 bit precision	0	255
10	12	17	Iris Macro		
			Iris Macro disabled	0	10
			Iris Macro1: from big to small with speed from slow to fast	11	74
			Iris Macro2: from small to big with speed from slow to fast	75	138
			Iris Macro3: Iris contracts from slow to fast	139	202
			Iris Macro4(Macro1 at random) with speed from slow to fast	203	210
			Iris Macro5(Macro2 at random) with speed from slow to fast	211	218
			Iris Macro6(Macro3 at random) with speed from slow to fast	219	226
			Open	227	255
11	13	18	Fixed gobo wheel		
			Open	0	15
			Gobo1	16	31
			Gobo2	32	47
			Gobo3	48	63
			Gobo4	64	79
			Gobo5	80	95
			Gobo6	96	111
			Gobo7	112	127
			Clockwise rotation from slow to fast	128	149
			Anti-clockwise rotation from slow to fast	150	171
			Gobo1 shake from slow to fast	172	183
			Gobo2 shake from slow to fast	184	195

			Gobo3 shake from slow to fast	196	207
			Gobo4 shake from slow to fast	208	219
			Gobo5 shake from slow to fast	220	231
			Gobo6 shake from slow to fast	232	243
			Gobo7 shake from slow to fast	244	255
12	14	19	Rotating gobo wheel		
			Open	0	31
			Gobo1	32	47
			Gobo2	48	63
			Gobo3	64	79
			Gobo4	80	95
			Gobo5	96	111
			Gobo6	112	127
			Clockwise rotation from slow to fast	128	143
			Anti-clockwise rotation from slow to fast	144	159
			Gobo1 shake from slow to fast	160	175
			Gobo2 shake from slow to fast	176	191
			Gobo3 shake from slow to fast	192	207
			Gobo4 shake from slow to fast	208	223
			Gobo5 shake from slow to fast	224	239
			Gobo6 shake from slow to fast	240	255
13	15	20	Rotating gobo wheel rotation		
			Indexing 0-360°	0	128
			Clockwise rotation from slow to fast	129	188
			Stop	189	195
			Anti-clockwise rotation from slow to fast	196	255
	16	21	Rotating gobo wheel rotation in 16 bit		
			Rotating gobo wheel fine rotation	0	255
14	17	22	Framing blade 1 left		
			Framing blade 1 left linearly closing from big to small	0	255
		23	Framing blade 1 left in 16 bit		
			Framing blade 1 left fine adjustment	0	255
15	18	24	Framing blade 1 right		
			Framing blade 1 right linearly closing from big to small	0	255
		25	Framing blade 1 right in 16 bit		
			Framing blade 1 right fine adjustment	0	255
16	19	26	Framing blade 2 left		
			Framing blade2 left linearly closing from big to small	0	255
		27	Framing blade 2 left in 16 bit		
			Framing blade 2 left fine adjustment	0	255
17	20	28	Framing blade 2 right		
			Framing blade 2 right linearly closing from big to small	0	255
		29	Framing blade 2 right in 16 bit		

			Framing blade 2 right fine adjustment	0	255
18	21	30	Framing blade 3 left		
			Framing blade 3left linearly closing from big to small	0	255
		31	Framing blade 3 left in 16 bit		
			Framing blade 3 left fine adjustment	0	255
19	22	32	Framing blade 3 right		
			Framing blade 3 right linearly closing from big to small	0	255
		33	Framing blade 3right in 16 bit		
			Framing blade 3right fine adjustment	0	255
20	23	34	Framing blade 4 left		
			Framing blade 4left linearly closing from big to small	0	255
		35	Framing blade 4left in 16 bit		
			Framing blade 4 left fine adjustment	0	255
21	24	36	Framing blade 4 right		
			Framing blade 4 right linearly closing from big to small	0	255
		37	Framing blade 4right in 16 bit		
			Framing blade 4right fine adjustment	0	255
22	25	38	Framing module rotation		
			Framing module indexing(0-360degrees)	0	127
			Stop	128	
			Framing module clockwise rotation from slow to fast	129	188
			Stop	189	195
			Framing module anti-clockwise rotation from slow to fast	196	255
	26	39	Framing module rotation in 16 bit		
			Framing module fine rotation	0	255
23	27	40	Prism		
			No Prism	0	16
			Prism	17	255
24	28	41	Prism rotation		
			Prism index	0	127
			Prism stops	128	
			Rotation speed from slow to fast	129	191
			Stop rotating	192	
			Reverse rotation speed from slow to fast	193	255
25	29	42	Effect Wheel		
			No effect wheel	0	19
			Effect wheel in	20	255
26	30	43	Effect Wheel Rotation		
			Clockwise rotation from slow to fast	0	127
			Anti-clockwise reverse rotation from slow to fast	128	255
27	31	44	Frost		
			Light Frost from 0% to 100%	0	255
28	32	45	Focus		

			Linearly focusing	0	255
		46	Focus Fine		
			Focus in 16 precision	0	255
29	33	47	Zoom		
			Linearly zooming	0	255
		48	Zoom Fine		
			Zoom in 16 Bit precision	0	255
30	34	49	Autofocus		
			While channels for Iris, Rotating Gobo Wheel and Framing blades are in use, the projector has automatic focus function at some distance. Use "Autofocus Calibrations" channel (31/35/50) to focus the image. Priority: Rotating Gobo Wheel >Fixed Gobo Wheel > Iris>Framing module		
			The following functions will disable the focus channel (28/32/45) is disabled.		
			Autofocus Off	0	19
			Autofocus for 5M	20	39
			Autofocus for 10M	40	59
			Autofocus for 15M	60	79
			Autofocus for 20M	80	255
31	35	50	Autofocus Calibrations		
			focus calibrations up	0	127
			focus calibrations down	128	255
32	36	51	Pan		
			Pan movement	0	255
33	37	52	Pan Fine		
			Pan movement in 16 bit precision	0	255
34	38	53	Tilt		
			Tilt movement	0	255
35	39	54	Tilt fine		
			Tilt movement 16 bit precision	0	255
36	40	55	Pan/Tilt speed		
			Fast Speed Mode	0	1
			Pan &Tilt speed from fast to slow	2	255
37	41	56	CRI MODE		
			Normal mode	0	127
			High CRI mode	128	255
38	42	57	Power/Special functions		
			No function:	0	4
			Reserved	5	19
			To activate following functions, stay in DMX value for at least 5 s		
			Graphic display On	20	24
			Graphic display Off	25	29

			Reserved	30	46
			Fan standard mode	47	48
			Fan theater mode	49	50
			Reserved	51	52
			Fast speed dimmer	53	54
			Mid speed dimmer	55	56
			Slow speed dimmer	57	58
			Gamma curve 2.0	59	60
			Gamma curve 2.2	61	62
			Gamma curve 2.4	63	64
			Gamma curve 2.6	65	66
			LED refresh rate 1200Hz	67	68
			LED refresh rate 2400Hz	69	70
			LED refresh rate 4800Hz	71	72
			LED refresh rate 10000Hz	73	74
			LED refresh rate 12000Hz	75	76
			LED refresh rate 1500Hz	77	78
			LED refresh rate 20000Hz	79	80
			LED refresh rate 25000Hz	81	82
			Reserved	83	89
			Pan/Tilt speed mode	90	94
			Pan/Tilt time mode	95	99
			Reserved	100	129
			Reserved	130	139
			Pan/Tilt reset	140	149
			Colour system reset	150	159
			Gobo wheels reset	160	169
			Reserved	170	179
			Zoom/focus/frost/prism reset	180	189
			Others(Iris/ Effect wheel/Framing module) reset	190	199
			Total reset	200	209
			Reserved	210	229
			Reserved	240	255

****DMX channels from high to low in priority: Zoom, Focus

****While the channel in higher priority is in use, the other won't work.

8. SIGNS ON THE TOUCH SCREEN

	Config Settings		Option Settings
	Address		Information
	Error Messages		Service
	Reset		Operation Mode
	User Memories		

9.ERROR MESSAGES

The system can detect some errors during the reset, if  displayed, touch  to view the error.
The error messages are as follows:

Name	Type	Correction
Pan	Timeout/magnet Sensor/Encoder	Check if wiring, positioning parts and motors are normal
Tilt	Timeout/magnet Sensor/Encoder	Check if wiring, positioning parts and motors are normal
Cyan	Timeout	Check if wiring, positioning parts and motors are normal
Yellow	Timeout	Check if wiring, positioning parts and motors are normal
Magenta	Timeout	Check if wiring, positioning parts and motors are normal
CTO	Timeout	Check if wiring, positioning parts and motors are normal
Color Wheel	Timeout	Check if wiring, positioning parts and motors are normal
Fixed gobo wheel	Timeout	Check if wiring, positioning parts and motors are normal
Rot. Gobo Wheel	Timeout	Check if wiring, positioning parts and motors are normal
Gobo Rota.	Timeout	Check if wiring, positioning parts and motors are normal
Dimmer	Timeout	Check if wiring, positioning parts and motors are normal
Prism	Timeout	Check if wiring, positioning parts and motors are normal
Prism Rotat.	Timeout	Check if wiring, positioning parts and motors are normal
Focus	Timeout	Check if wiring, positioning parts and motors are normal
Zoom	Timeout	Check if wiring, positioning parts and motors are normal
Effect Wheel	Timeout	Check if wiring, positioning parts and motors are normal
Effect Wheel Rota.	Timeout	Check if wiring, positioning parts and motors are normal
Pan Board	Error	Check signal wire
Tilt Board	Error	Check signal wire
Driver Board 1	Error	Check signal wire
Driver Board 2	Error	Check signal wire
Driver Board 3	Error	Check signal wire
Framing module board	Error	Check signal wire
Fan board	Error	Check signal wire
Lamp Off[Fan Error]	Error	Check if all fans are normal
Time IC	Error	Contact the manufacturer

10. TECHNICAL DATA

ELECTRICAL PARAMETERS

Input voltage: 100V-240V AC，50/60Hz

Input power: 1450W @ 220V

1600W @ 100V

Power factor: PF>0.95

Current at Maximum: 6.6A @ 220V

OPTICAL SYSTEM

Light sources : 1000W white LED module

Colour Temperature : 6900K

CRI: Ra≥95 、R9≥95 (Optional highly bright version: Ra≥70)

Manufacturers Rated Lamp Life : >20000hrs

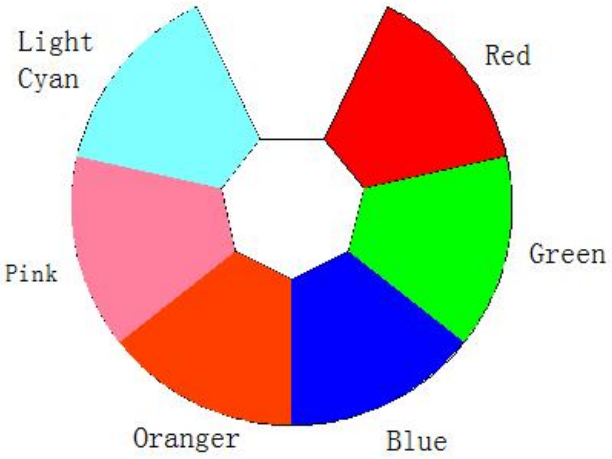
COLOR S

CMY linear coloring mixing system with macros

1 Color Wheels: 6 colors+Open

Full color/half color/linear color

Bi-directional rainbow effect with variable speeds



CTO

Linear CTO system(0-100%, 1800K-6500K)

FRAMING

Framing module: 4 framing blades to make graphics with different sizes and shapes Each blade to make full curtain effect

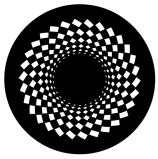
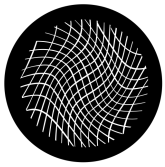
Continual and bi-directional rotation for the whole module

GOBOS

1 rotating gobo wheel: 6 exchangeable+ open

Bi-directional rotation, indexing, shake with varied speeds

bi-directional scrolling with varied speeds

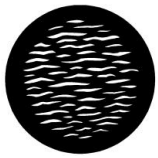
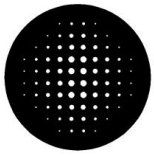
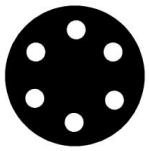
					
1#:120150185	2#:120150186	3#:120150187	4#:120150188	5#:120150189	6#:120150190

Gobo outer diameter :32 mm Image size: 24 mm

1 fixed gobo wheel

7 exchangeable gobos+ open

Shake effect with varied speeds and bi-directional rotation with varied speeds

						
1#:110010483	2#:110010484	3#:110010485	4#:110010486	5#:110010487	6#:110010488	7#:110010489

Gobo outer diameter :32 mm Image size: 25mm

EFFECT WHEEL

1 animation effect wheel, bi-directional rotation with varied speeds

IRIS

Linear iris 5-100% with macros

PRISM

1 pc of 4-facet circular prism, bi-directional rotation with varied speeds with indexing function

FROST

1 heavy frost filter (0-100% linear)

BEAM ANGLE

Linear zoom 6°～ 54° with 16 bit precision

FOCUS

Linear focus with auto-focus function

DIMMER

Linear electronic dimmer 0-100% with 16 bit control

3 dimmer speeds

4 dimmer gamma curves

Dimmer frequency adjustable between 1.2K and 25K

STROBE

Electronic strobe, 0.3~25 F.P.S

HEAD MOVEMENT

Pan 540º, Tilt 270º with auto position correction and 16 bit control

CONTROL

International standard DMX512 signal and RDM function

38channels in short mode, 42channels in standard mode,57channel in extended mode

DMX512 wireless reciever

DMX512 Transmitter （Optional)
ArtNet and sACN （Optional)

CONTROL INTERFACE

DMX512 ports（5-pin）

Ethernet port RJ45

OTHER FUNCTIONS

Pan and Tilt speeds adjustable

Pan and Tilt swappable and invertible

High precision magnet sensor for positioning

3.2-inch touch color screen, Chinese and English menus, Screen automatic lock –up while standby

Error diagnostic system with sensors

Smart fan cooling system

Display of fixture hours and software versions

Modular construction for easy maintenance

Isolated input signals

Firmware update via DMX cable

DMX512 wireless reciever

DMX512 Transmitter （Optional)
ArtNet and sACN （Optional)

IP RATING

IP20

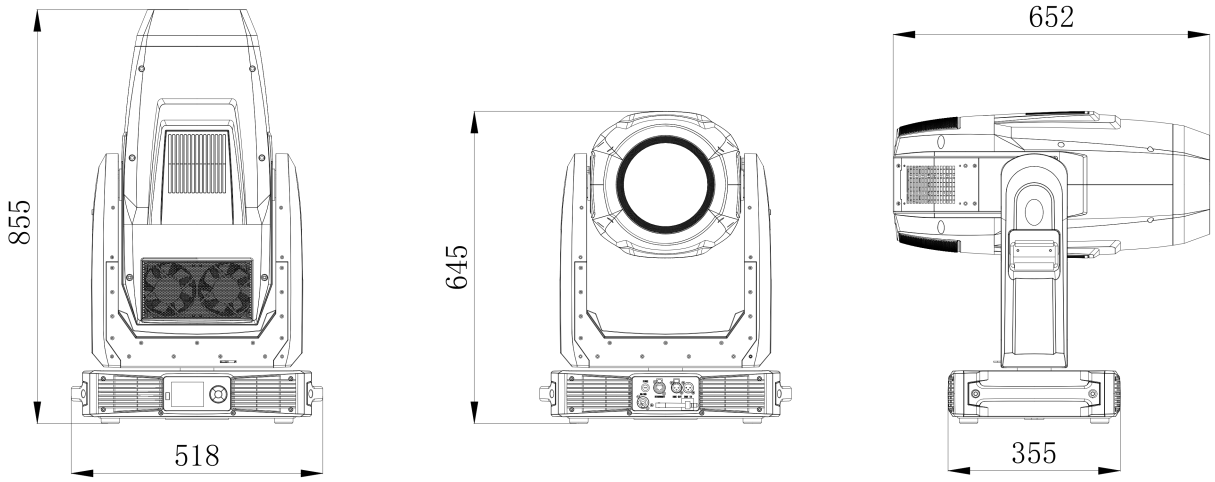
OPERATION TEMPERATURE

Ambient temperature 45°C at maximum

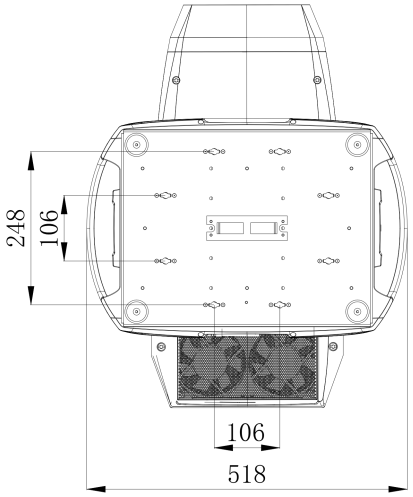
WEIGHT

Net weight 45 Kg

SIZES (unit: mm)

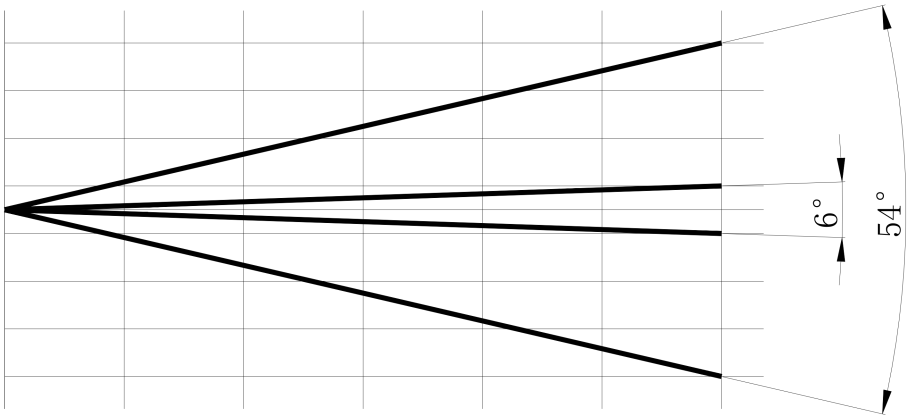


INSTALLATION DIAGRAM viewed from the bottom (unit: mm)



LIGHT OUTPUT：High CRI version:

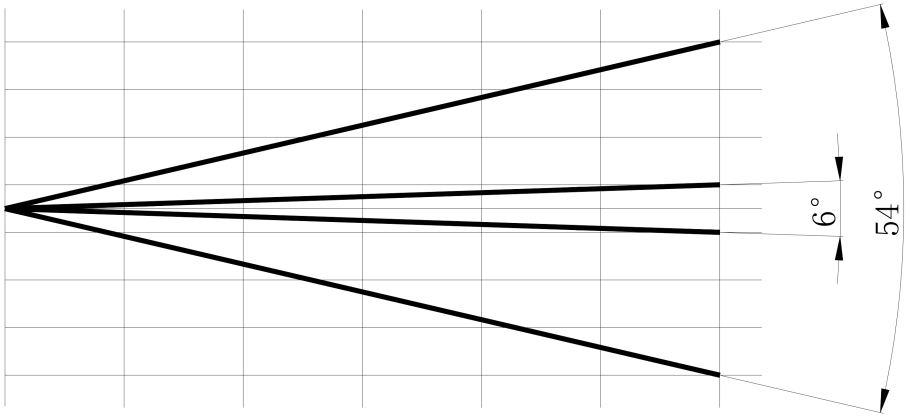
54° (lux)	1659	415	184	104	66	46
6° (lux)	51746	12936	5750	3234	2070	1437



DISTANCE (m)	5m	10m	15m	20m	25m	30m
6° DIAMETER (m)	∅ 0.56	∅ 1.12	∅ 1.68	∅ 2.24	∅ 2.80	∅ 3.36
54° DIAMETER (m)	∅ 4.72	∅ 9.45	∅ 14.17	∅ 18.90	∅ 23.62	∅ 28.35

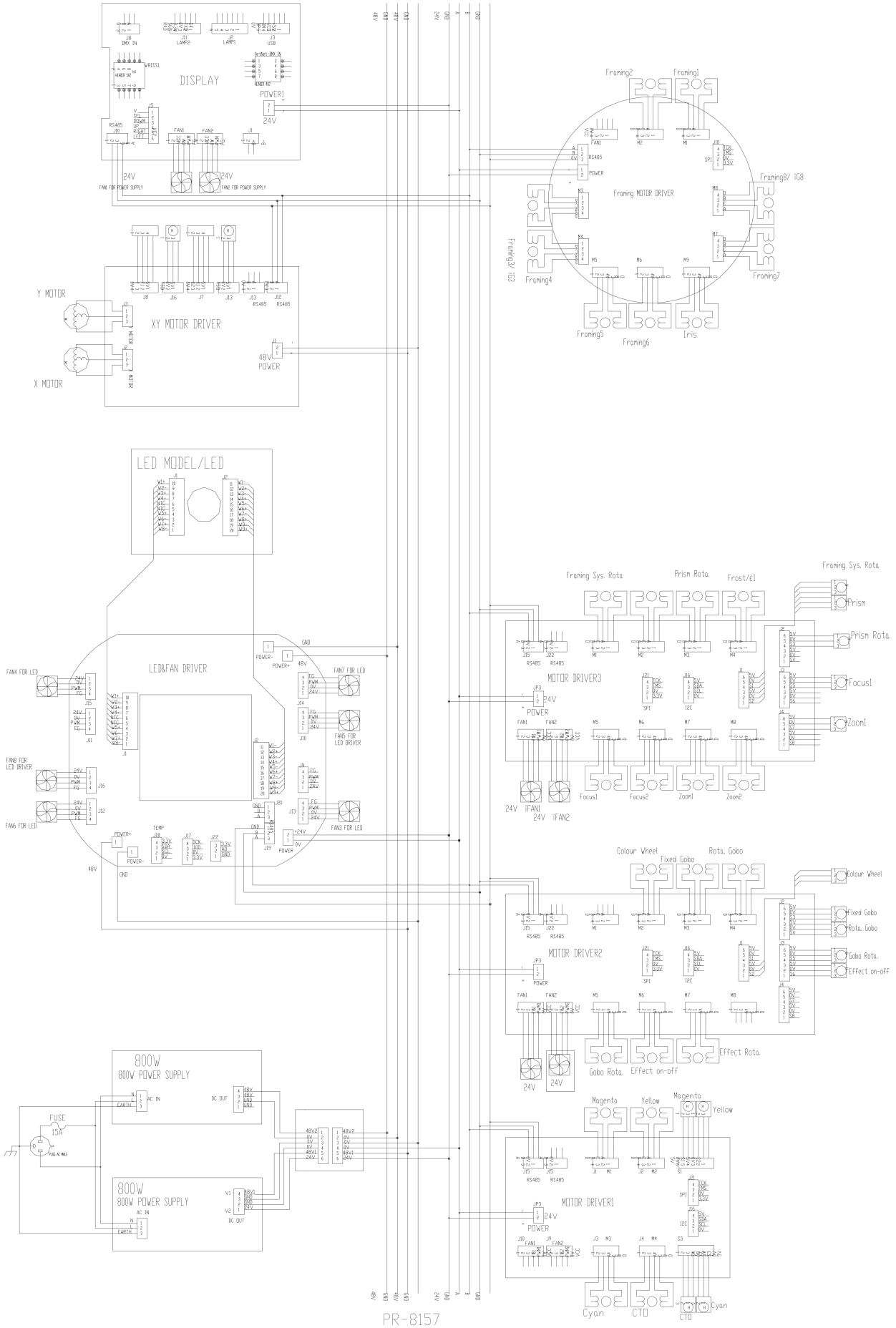
High bright version

54° (lux)	2504	626	278	158	102	71
6° (lux)	73889	18472	8210	4622	2955	2592



DISTANCE (m)	5m	10m	15m	20m	25m	30m
6° DIAMETER (m)	∅0.55	∅1.10	∅1.64	∅2.19	∅2.74	∅3.29
54° DIAMETER (m)	∅4.83	∅9.66	∅14.49	∅19.31	∅24.14	∅28.97

11. CIRCUIT DIAGRAM


DISPLAY
POWER1
24V
FAN1 FOR POWER SUPPLY
FAN2 FOR POWER SUPPLY
Framing2
Framing1
Framing MOTOR DRIVER
Framing8/ IG8
Framing3/ IG3
Framing4
Framing7
Framing5
Framing6
Iris
Y MOTOR
X MOTOR
XY MOTOR DRIVER
48V
POWER
LED MODEL/LED
LED&FAN DRIVER
FAN4 FOR LED
FAN8 FOR LED DRIVER
FAN6 FOR LED
FAN7 FOR LED
FANS FOR LED DRIVER
FAN3 FOR LED
Framing Sys. Rota
Prism Rota.
Frost/el
Framing Sys. Rota
Prism
Prism Rota.
Focus1
Zoom1
MOTOR DRIVER3
Focus1
Focus2
Zoom1
Zoom2
24V iFAN1
24V iFAN2
Colour Wheel
Fixed Gobo
Rota. Gobo
Colour Wheel
Fixed Gobo
Rota. Gobo
Gobo Rota.
Effect on-off
MOTOR DRIVER2
Gobo Rota.
Effect on-off
Effect Rota.
24V
24V
800W
800W POWER SUPPLY
AC IN
DC OUT
FUSE
15A
800W
800W POWER SUPPLY
AC IN
DC OUT
Magenta
Yellow
Magenta
Yellow
MOTOR DRIVER1
Cyan
CTO
CTO
Cyan
PR-8157

12. COMPONENT ORDER CODES

NAME	CODE NUMBER	QTY	REMARK
SWITCHING POWER SUPPLY	192010228A	1	
SWITCHING POWER SUPPLY	192010215B	1	
LED LIGHT SOURCE	150020328	1	
PAN MOTOR	030040262	1	
TILT MOTOR	030040262	1	
PRISM IN/OUT MOTOR	030040221A	1	
PRISM ROTATING MOTOR	030040289	1	
FROST IN/OUT MOTOR	030040073D	1	
EFFECT WHEEL IN/OUT MOTOR	030040236A	1	
EFFECT WHEEL ROTATING MOTOR	030040220A	1	
GOBO WHEEL MOTOR	030040125A	3	
GOBO ROTATOR MOTOR	030040220A	1	
COLOR WHEEL MOTOR	030040220A	1	
CMY MOTOR	030040210A	2	
	030040211A	2	
FOCUS MOTOR	030040291	2	
ZOOM MOTOR	030040261A	2	
FRAMING MODULE ROTATING MOTOR	030040158	1	
FRAMING BLADE MOTOR	030040283	8	
IRIS MOTOR	030040283	1	
BASE FAN	030060104	2	
LED FAN	030060116	4	
DRIVER FAN	030060122	2	
GOBO FAN	030060115	1	
FRAMING MODULE FAN	030060120	2	

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