XRLED 3000-W Framing
PR-8137

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

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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℃ 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.

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. Cleaning a projector is very necessary to ensure a reliable use of it. Cooling fans need to be cleaned every 15days. Internal lens, reflector and hot mirror need to be cleaned periodically to optimize light output.

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 project 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

HEAD

ARM
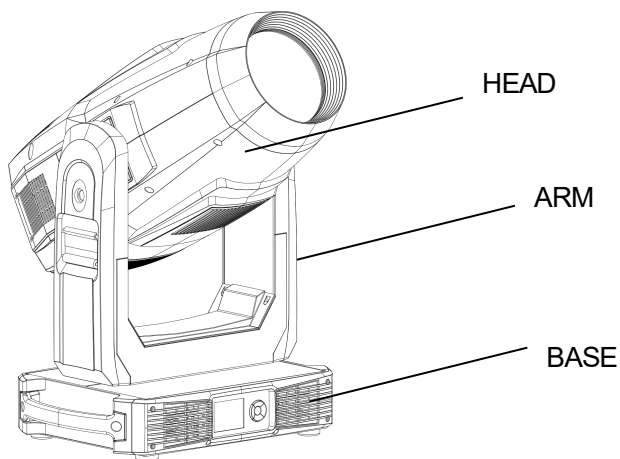
BASE

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

>800

233

355

518

② 994

① 855

652

645

303

±135° Rotation

0° –540° Rotation(∅700mm) ③
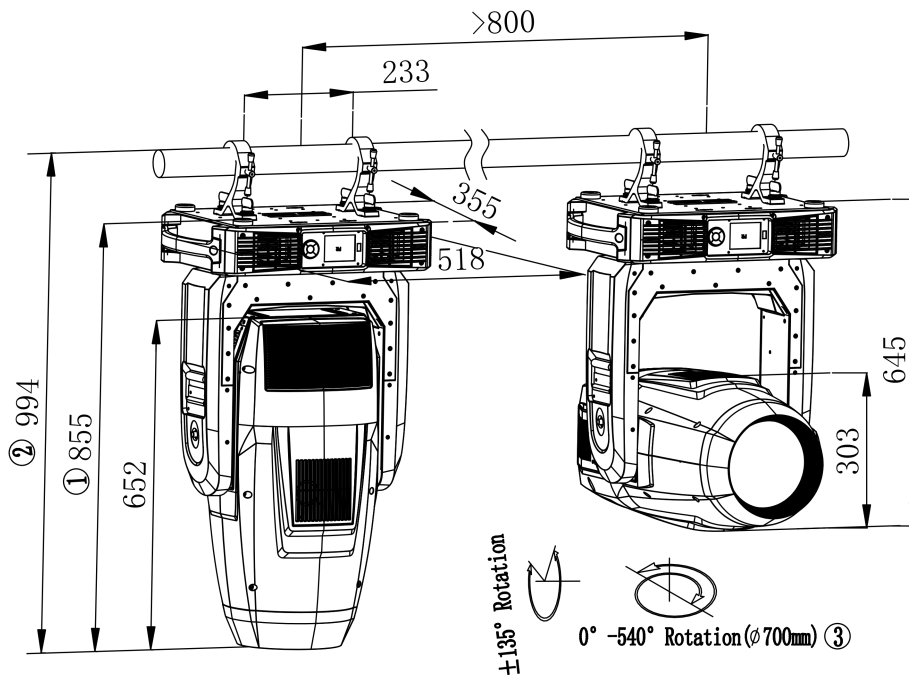
Note:
1. the distance between the foot of the base and the front lens cover(the head facing downward)
2. the distance between mounting truss and the front lens cover(the head facing downward)
3. The maximum diameter of the rotating head (minimum spacing between fixtures)
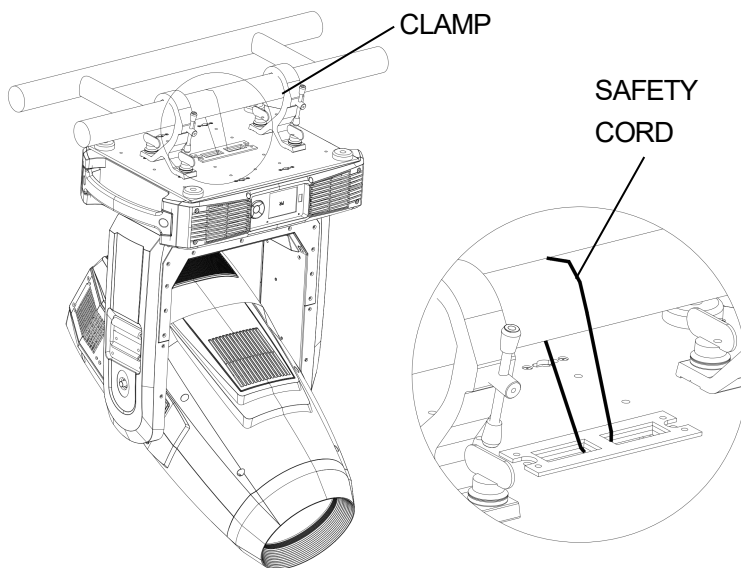
CLAMP

SAFETY CORD

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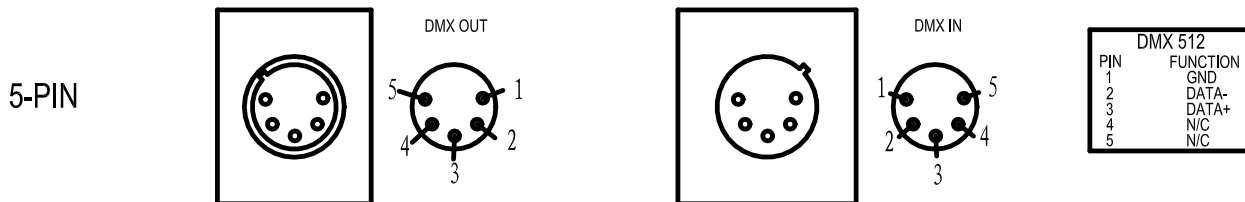
Connection between controller and projector and between one projector and another must be made with a twin-screened cable, with each wire having at least a 0.5mm in diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 5 pin XLR plugs and sockets.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

DMX OUT   DMX IN   DMX OUT   DMX IN

DMX
Terminator
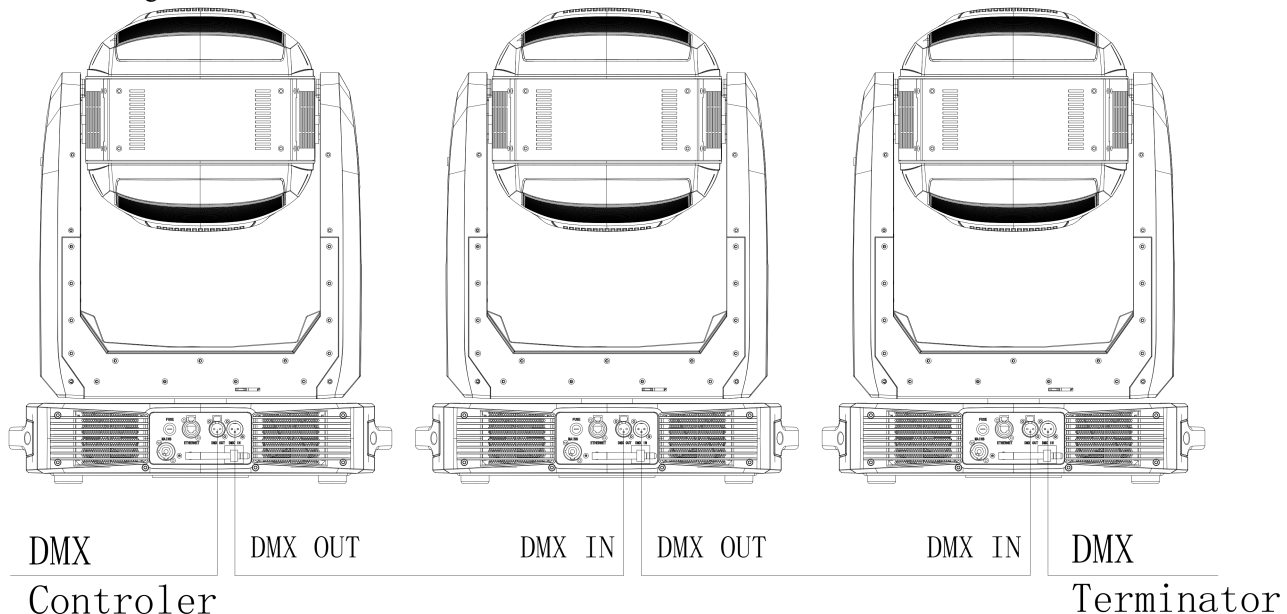
•**DMX TERMINATOR**

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.
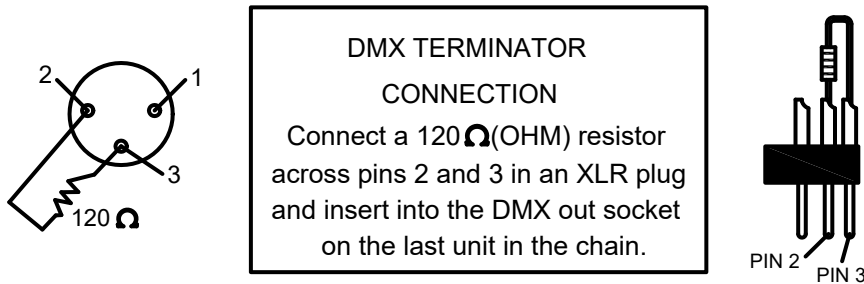
5. SETUP AND CONFIGURATION
•FRONT PANEL OPERATION

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 46 channels, so set the No. 1 projector's address 001, No. 2 projector's address 047, No. 3 projector's address 093, No. 4 projector's address139, 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
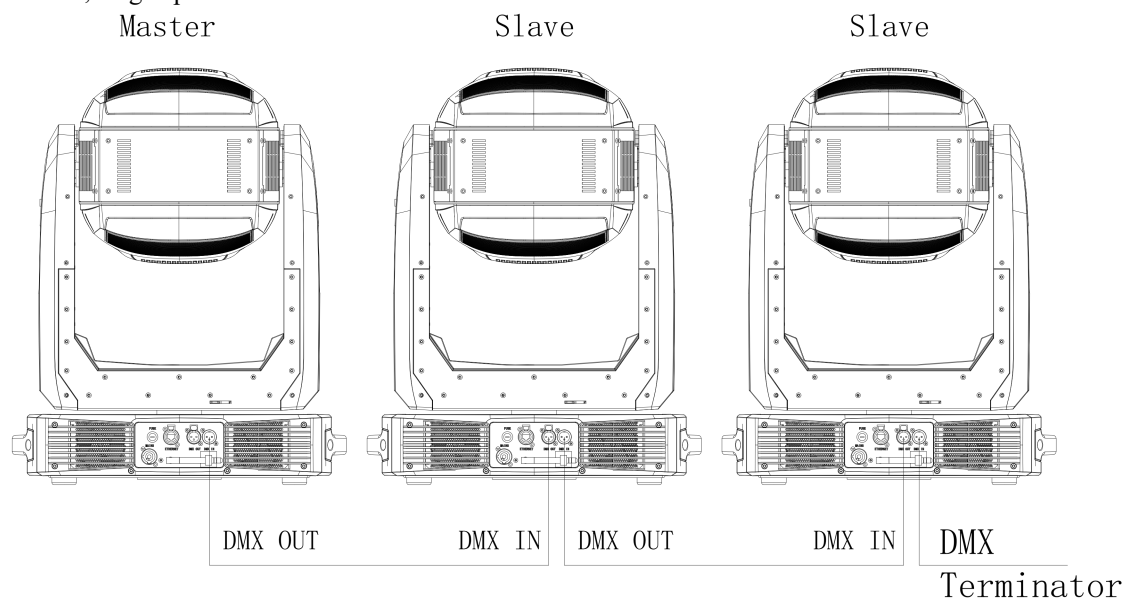
6.   **OPERATION MENU**

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL	5th LEVEL
Address	DMX Address	1-471（Short Mode） 1-466（Standard Mode） 1-451（Extended Mode）		
	IP Address	Default IP Address	2.X.X.X/10.X.X.X	
		Custom IP Address	X.X.X.X	
	Sub Net Mask	X.X.X.X		
	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 42CH		
		Standard 47CH		
		Extended 62CH		
		View Selected Mode	CH01 Strobe CH02 Dimmer ... CHXX XXX	
	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 Calibration		
	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	lris Invert	OFF/ON	

		Zoom Invert	OFF/ ON	
		CYM 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		
	LED Fan Error	LED Off LED Not Off		
	Defaults	Factory Restore Defaults?	Confirm/Cancel	
Information	View DMX Values	Channel Value Strobe XXX Dimmer XXX Dimmer Fine XXX CYM Macro XXX Cyan XXX Yellow XXX Magenta XXX CTO XXX Colour Wheel 1 XXX Colour Wheel 1 Fine XXX Colour Wheel 2 XXX Colour Wheel 2 Fine XXX Iris XXX Iris Macro XXX Fix Gobo Wheel XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F XXX Framing Blade 1 A XXX Framing Blade 1 B XXX Framing Blade 2 A XXX Framing Blade 2 B XXX Framing Blade 3 A XXX Framing Blade 3 B XXX Framing Blade 4 A XXX Framing Blade 4 B XXX Framing Rotation XXX Framing Rotation Fine XXX Prism 1 XXX Prism 1 Rotation XXX Prism 2 XXX Prism 2 Rotation XXX Effect Wheel XXX Effect Wheel R. XXX Frost 1 XXX Frost 2 XXX Focus XXX Zoom XXX Autofocus XXX Autofocus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan/Tilt Speed & Time XXX CRI Mode XXX Power/Special Fun. XXX		
	Lamp Hours	Lamp Hours = XXX H Reset Lamp Hours		
	Total Hours	Total Hours = XXX H		
	Temperature	Display Board XX°C/F		
		Pan and Tilt BoardXX℃/F		

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		Driver Board 1 XX°C/F		
		Driver Board 2 XX℃/F		
		Driver Board 3 XX°C/F		
		Driver Board 4 XX℃/F		
		Blade Board XX°C/F		
		Fan Board XX℃/F		
		Led Sensor XX℃/F		
	Software Version	Display Board	Sys= XXX Boot =XXX	
		Pan and Tilt Board	Sys= XXX Boot =XXX	
		Driver Board 1	Sys= XXX Boot =XXX	
		Driver Board 2	Sys= XXX Boot =XXX	
		Driver Board 3	Sys= XXX Boot =XXX	
		Driver Board 4	Sys= XXX Boot =XXX	
		Blade Board	Sys= XXX Boot =XXX	
		Fan Board	Sys= XXX Boot =XXX	
	Electronic SN	Electronic SN= ***********		
	RDM Device Label	XRLED 3000-W Framing ANSI E1.20 RDM		
	Fan Status	Fan Speed Status Base Fan 1 XXX XXX Base Fan 2 XXX XXX Head Fan 1 XXX XXX Head Fan 2 XXX XXX Gobo Fan XXX XXX Driver Fan 1 XXX XXX Driver Fan 2 XXX XXX CMY Fan 1 XXX XXX CMY Fan 2 XXX XXX LED Fan 1 XXX XXX LED Fan 2 XXX XXX LED Fan 3 XXX XXX LED Fan 4 XXX XXX		
Service	Manual Effect Control	Strobe XXX Dimmer XXX Dimmer Fine XXX CYM Macro XXX Cyan XXX Cyan Fine XXX Yellow XXX Yellow Fine XXX Magenta XXX Magenta Fine XXX CTO XXX CTO Fine XXX Colour Wheel 1 XXX Colour Wheel 1 Fine XXX Colour Wheel 2 XXX Colour Wheel 2 Fine XXX Iris XXX Iris Fine XXX Iris Macro XXX Fix Gobo Wheel XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX		

		Rot. Gobo Rotation F.　　XXX Framing Blade 1 A　　XXX Framing Blade 1 A Fine　X XX Framing Blade 1 B　　XXX Framing Blade 1 B Fine　XXX Framing Blade 2 A　　XXX Framing Blade 2 A Fine　X XX Framing Blade 2 B　　XXX Framing Blade 2 B Fine　XXX Framing Blade 3 A　　XXX Framing Blade 3 A Fine　X XX Framing Blade 3 B　　XXX Framing Blade 3 B Fine　XXX Framing Blade 4 A　　XXX Framing Blade 4 A Fine　X XX Framing Blade 4 B　　XXX Framing Blade 4 B Fine　XXX Framing Rotation　　XXX Framing Rotation Fine　XXX Prism 1　　XXX Prism 1 Rotation　　XXX Prism 2　　XXX Prism 2 Rotation　　XXX Effect Wheel　　XXX Effect Wheel R.　　XXX Frost 1　　XXX Frost 2　　XXX Focus　　XXX Zoom　　XXX Autofocus　　XXX Autofocus Calibration　XXX Pan　　XXX Pan Fine　　XXX Tilt　　XXX Tilt Fine　　XXX Pan/Tilt Speed & Time　XXX CRI Mode　　XXX		
	USB Update Software			
	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 CYM Macro　　XXX Cyan　　XXX Cyan Fine　　XXX Yellow　　XXX Yellow Fine　　XXX Magenta　　XXX Magenta Fine　　XXX CTO　　XXX CTO Fine　　XXX Colour Wheel 1　　XXX Colour Wheel 1 Fine　XXX Colour Wheel 2　　XXX Colour Wheel 2 Fine　XXX Iris　　XXX

				Iris Fine XXX
				Iris Macro XXX
				Fix Gobo Wheel XXX
				Rot. Gobo Wheel XXX
				Rot. Gobo Rotation XXX
				Rot. Gobo Rotation F. XXX
				Framing Blade 1 A XXX
				Framing Blade 1 A Fine X XX
				Framing Blade 1 B XXX
				Framing Blade 1 B Fine XXX
				Framing Blade 2 A XXX
				Framing Blade 2 A Fine X XX
				Framing Blade 2 B XXX
				Framing Blade 2 B Fine XXX
				Framing Blade 3 A XXX
				Framing Blade 3 A Fine X XX
				Framing Blade 3 B XXX
				Framing Blade 3 B Fine XXX
				Framing Blade 4 A XXX
				Framing Blade 4 A Fine X XX
				Framing Blade 4 B XXX
				Framing Blade 4 B Fine XXX
				Framing Rotation XXX
				Framing Rotation Fine XXX
				Prism 1 XXX
				Prism 1 Rotation XXX
				Prism 2 XXX
				Prism 2 Rotation XXX
				Effect Wheel XXX
				Effect Wheel R. XXX
				Frost 1 XXX
				Frost 2 XXX
				Focus XXX
				Focus Fine XXX
				Zoom XXX
				Zoom Fine XXX
				Autofocus XXX
				Autofocus Calibration XXX
				Pan XXX
				Pan Fine XXX
				Tilt XXX
				Tilt Fine XXX
				Pan/Tilt Speed & Time XXX
				CRI Mode XXX
				Fade Time XXX
				Hold Time XXX
				Delay Unit MS/S/MIN
				Link to Step XXX
		Edit Static Scene	Strobe XXX	
			Dimmer XXX	
			Dimmer Fine XXX	
			CYM Macro XXX	
			Cyan XXX	
			Cyan Fine XXX	
			Yellow XXX	
			Yellow Fine XXX	
			Magenta XXX	
			Magenta Fine XXX	
			CTO XXX	
			CTO Fine XXX	
			Colour Wheel 1 XXX	
			Colour Wheel 1 Fine XXX	
			Colour Wheel 2 XXX	
			Colour Wheel 2 Fine XXX	
			Iris XXX	
			Iris Fine XXX	
			Iris Macro XXX	
			Fix Gobo Wheel XXX	

			Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F. XXX Framing Blade 1 A XXX Framing Blade 1 A Fine X XX Framing Blade 1 B XXX Framing Blade 1 B Fine XXX Framing Blade 2 A XXX Framing Blade 2 A Fine X XX Framing Blade 2 B XXX Framing Blade 2 B Fine XXX Framing Blade 3 A XXX Framing Blade 3 A Fine X XX Framing Blade 3 B XXX Framing Blade 3 B Fine XXX Framing Blade 4 A XXX Framing Blade 4 A Fine X XX Framing Blade 4 B XXX Framing Blade 4 B Fine XXX Framing Rotation XXX Framing Rotation Fine XXX Prism 1 XXX Prism 1 Rotation XXX Prism 2 XXX Prism 2 Rotation XXX Effect Wheel XXX Effect Wheel R. XXX Frost 1 XXX Frost 2 XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Autofocus XXX Autofocus Calibration XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan/Tilt Speed & Time XX CRI Mode XXX	
	Init User Memory	Reset User Memory 1	Reset User Memory?	Input Password123
		Reset User Memory 2	Reset User Memory?	Input Password123
		Reset Static Scene	Reset Static Scene?	Input Password123

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
			Colour Temperature 2700K	8	9
			Colour Temperature 3000K	10	11
			Colour Temperature 3500K	12	13
			Colour Temperature 4000K	14	15
			Colour Temperature 4500K	16	17
			Colour Temperature 5000K	18	19
			Colour 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 1		
			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)/ White	116	119
			White	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 1 Fine		
			Color Continual positioning in 16 Bit precision	0	255
9	11	15	Colour Wheel2		
			Continual positioning		
			index 0-360°	0	63
			positioning		
			White	64	67
			White/Color1(Deep Red)	68	71
			Color1(Deep Red)	72	75
			Color1(Deep Red)/Color 2(Amber)	76	79
			Color 2(Amber)	80	83
			Color 2(Amber)/Color 3(Tea red)	84	87
			Color 3(Tea red)	88	91
			Color 3(Tea red)/ Color 4(Apple Green)	92	95
			Color 4(Apple Green)	96	99
			Color 4(Apple Green) /Color 5(Dark magenta)	100	103
			Color 5(Dark magenta)	104	107
			Color 5（Dark magenta）/Color 6（UV）	108	111
			Color 6(UV)	112	115
			Color6(UV)/ White	116	119
			White	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
	12	16	Color Wheel 2 Fine		
			Color Continual positioning in 16 Bit precision	0	255
10	13	17	Iris		
			Linear Iris from small to big 0-100%	0	255
		18	Iris in 16　bit		

			Iris in 16 bit precision	0	255
11	14	19	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
12	15	20	Fixed gobo wheel		
			White	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
13	16	21	Rotating gobo wheel		
			White	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
14	17	22	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
	18	23	Rotating gobo wheel rotation in 16 bit		
			Rotating gobo wheel fine rotation	0	255
15	19	24	Framing blade 1 left		
			Framing blade 1 left linearly closing from big to small	0	255
		25	Framing blade 1 left in 16 bit		
			Framing blade 1 left fine adjustment	0	255
16	20	26	Framing blade 1 right		
			Framing blade 1 right linearly closing from big to small	0	255
		27	Framing blade 1 right in 16 bit		
			Framing blade 1 right fine adjustment	0	255
17	21	28	Framing blade 2 left		
			Framing blade2 left linearly closing from big to small	0	255
		29	Framing blade 2 left in 16 bit		
			Framing blade 2 left fine adjustment	0	255
18	22	30	Framing blade 2 right		
			Framing blade 2 right linearly closing from big to small	0	255
		31	Framing blade 2 right in 16 bit		
			Framing blade 2 right fine adjustment	0	255
19	23	32	Framing blade 3 left		
			Framing blade 3left linearly closing from big to small	0	255
		33	Framing blade 3 left in 16 bit		
			Framing blade 3 left fine adjustment	0	255
20	24	34	Framing blade 3 right		
			Framing blade 3 right linearly closing from big to small	0	255
		35	Framing blade 3right in 16 bit		
			Framing blade 3right fine adjustment	0	255
21	25	36	Framing blade 4 left		
			Framing blade 4left linearly closing from big to small	0	255
		37	Framing blade 4left in 16 bit		
			Framing blade 4 left fine adjustment	0	255
22	26	38	Framing blade 4 right		
			Framing blade 4 right linearly closing from big to small	0	255
		39	Framing blade 4right in 16 bit		
			Framing blade 4right fine adjustment	0	255
23	27	40	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
	28	41	Framing module rotation in 16 bit		
			Framing module fine rotation	0	255
24	29	42	Prism1		
			No Prism	0	16
			Prism	17	255
25	30	43	Prism1 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
26	31	44	Prism2		
			No Prism	0	16
			Prism	17	255
27	32	45	Prism2 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
28	33	46	Effect Wheel		
			No effect wheel	0	19
			Effect wheel in	20	255
29	34	47	Effect Wheel Rotation		
			Clockwise rotation from slow to fast	0	127
			Anti-clockwise reverse rotation from slow to fast	128	255
30	35	48	Frost1		
			Light Frost from 0% to 100%	0	255
31	36	49	Frost2		
			Light Frost from 0% to 100%	0	255
32	37	50	Focus		
			Linearly focusing	0	255
		51	Focus Fine		
			Focus in 16 precision	0	255
33	38	52	Zoom		
			Linearly zooming	0	255
		53	Zoom Fine		
			Zoom in 16 Bit precision	0	255
34	39	54	Autofocus		

			While channels for Iris, Rotating Gobo Wheel and Rotating Gobo Wheel are in use, the projector has automatic focus function at some distance. Use "Autofocus Calibrations" channel (35/40/55) to focus the image. Priority: Rotating Gobo Wheel >Fixed Gobo Wheel > Iris>Framing module		
			The following functions will disable the focus channel (32/37/50) 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
35	40	55	Autofocus Calibrations		
			focus calibrations up	0	127
			focus calibrations down	128	255
36	41	56	Pan		
			Pan movement	0	255
37	42	57	Pan Fine		
			Pan movement in 16 bit precision	0	255
38	43	58	Tilt		
			Tilt movement	0	255
39	44	59	Tilt fine		
			Tilt movement 16 bit precision	0	255
40	45	60	Pan/Tilt speed		
			Fast Speed Mode	0	1
			Pan &Tilt speed from fast to slow	2	255
41	46	61	CRI MODE		
			Normal mode	0	127
			High CRI mode	128	255
42	47	62	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 OF THE TOUCH SCREEN

⚙	Config Settings	☰	Option Settings
◉	Address	ℹ	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
Color temperature	Timeout	Check if wiring, positioning parts and motors are normal
Color Wheel1	Timeout	Check if wiring, positioning parts and motors are normal
Color Wheel2	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
Rot. Gobo1Rotation	Timeout	Check if wiring, positioning parts and motors are normal
Dimmer	Timeout	Check if wiring, positioning parts and motors are normal
Prism 1	Timeout	Check if wiring, positioning parts and motors are normal
Prism 1 Rotation	Timeout	Check if wiring, positioning parts and motors are normal
Prism 2	Timeout	Check if wiring, positioning parts and motors are normal
Prism 2 Rotation	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 Rotation	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 Board2	Error	Check signal wire
Driver Board 3	Error	Check signal wire
Driver Board 3	Error	Check signal wire
Driver Board 4	Error	Check signal wire
Framing 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: 1550W @ 220V

1700W @ 100V

Current max. 7.1A @ 220V

Power factor: PF>0.95

OPTICAL SYSTEM

|	
Light sources	1200W white LED module
Colour Temperature	6900K
CRI:	Ra≥95、R9≥95 (Optional high out version: Ra≥70)
Manufacturers Rated Lamp Life	>20000hrs

COLOR S

CMY linear coloring mixing system with macros

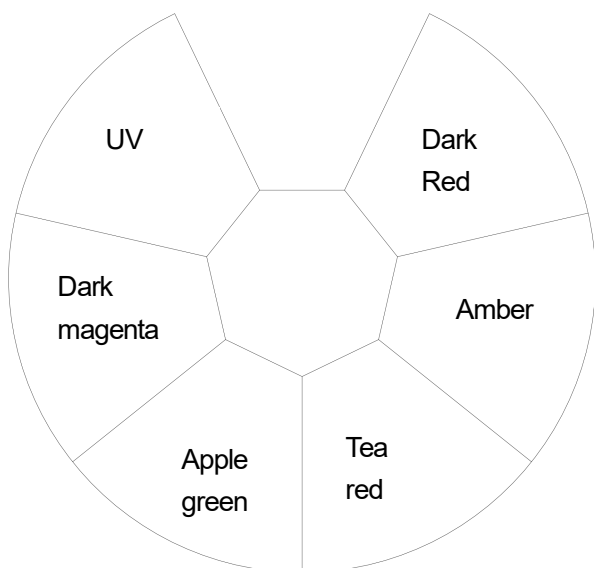2 Color Wheels：

Color Wheels 1：Red, Green, Blue, Orange ,Pink, Light cyan,+ open

Color Wheels 2：Dark Red, Amber, Tea red, Apple green, Dark magenta,UV+ open

Full color/half color/linear color

Bi-directional rainbow effect with variable speeds
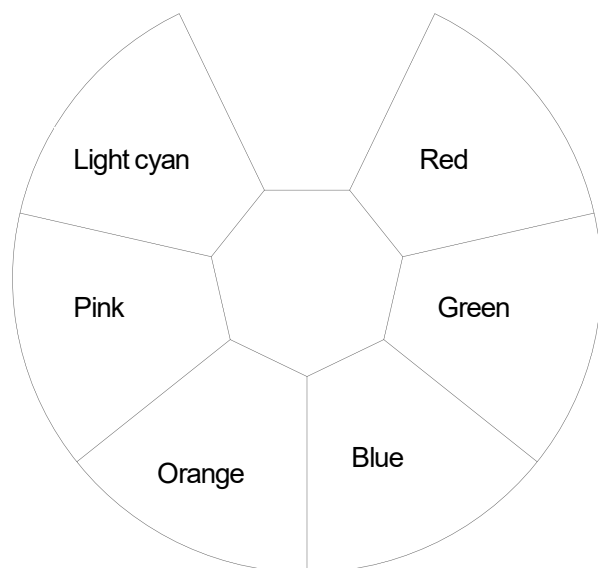
Color Wheels 1

Color Wheels 2

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
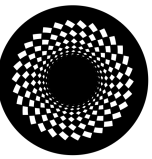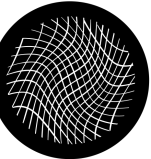
GOBOS

1 rotating gobo wheel: 6 exchangeable+ open

Bi-directional rotation, indexing, shake with varied speeds

bi-directional scrolling with varied speeds

Rotating gob wheel:

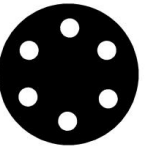|					
1#:120150185	2#:120150186	3#:120150187	4#:120150188	5#:120150189	6#:120150190
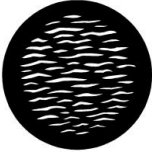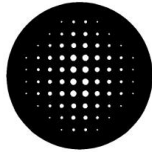
Gobo external size: 32mm

Image size: 24mm

1 fixed gobo wheel:7 exchangeable gobos+ open

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

Fixed gobo wheel

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

Gobo external size: 32mm

Image size: 25mm

EFFECT WHEEL

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

IRIS

Linear iris 5-100% with macros

PRISM

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

FROST

2 frost filters: 1 heavy frost filter + 1 light 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(1.2K-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

42channels in short mode, 47channels in standard mode,62channel in extended mode

Art Net protocol and sCAN protocol(optional), DMX512 wireless control

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 or USB port
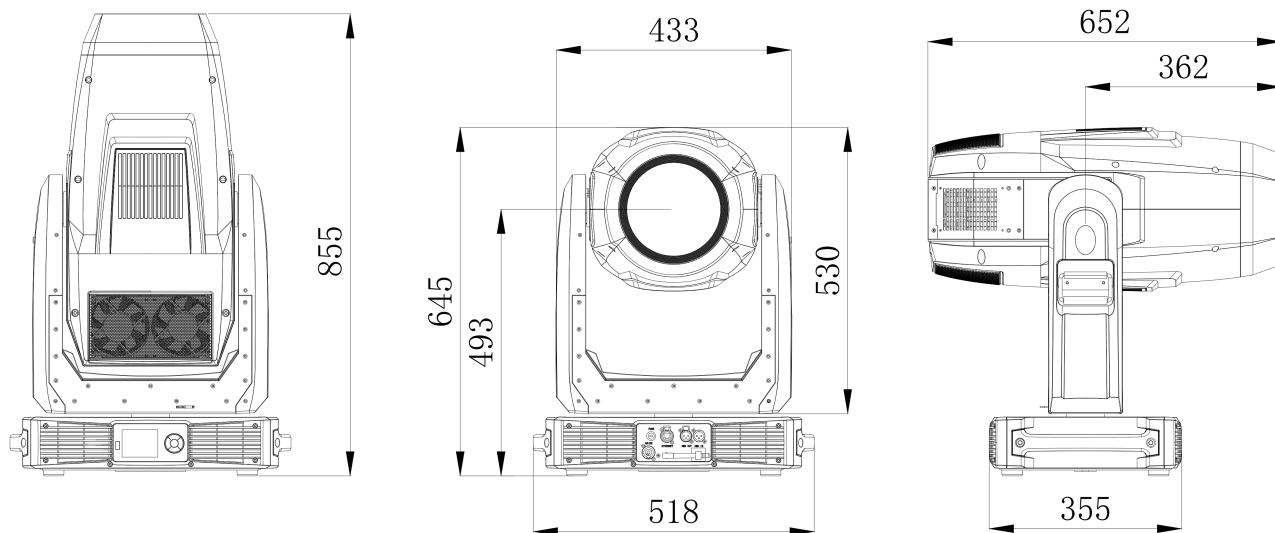
IP RATING

IP20

OPERATION TEMPERATURE
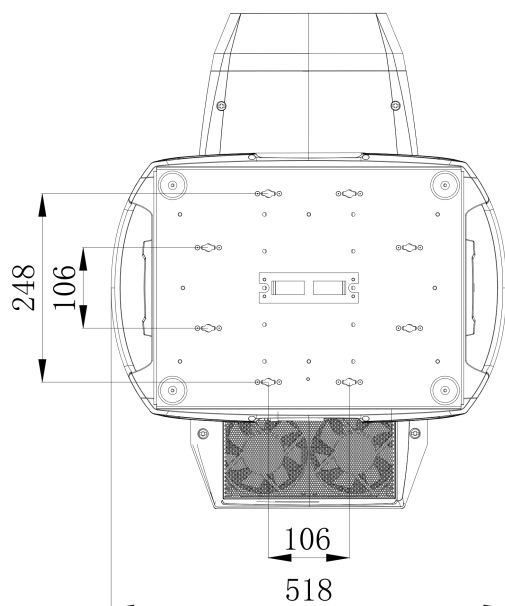
Ambient temperature at maximum：45°C
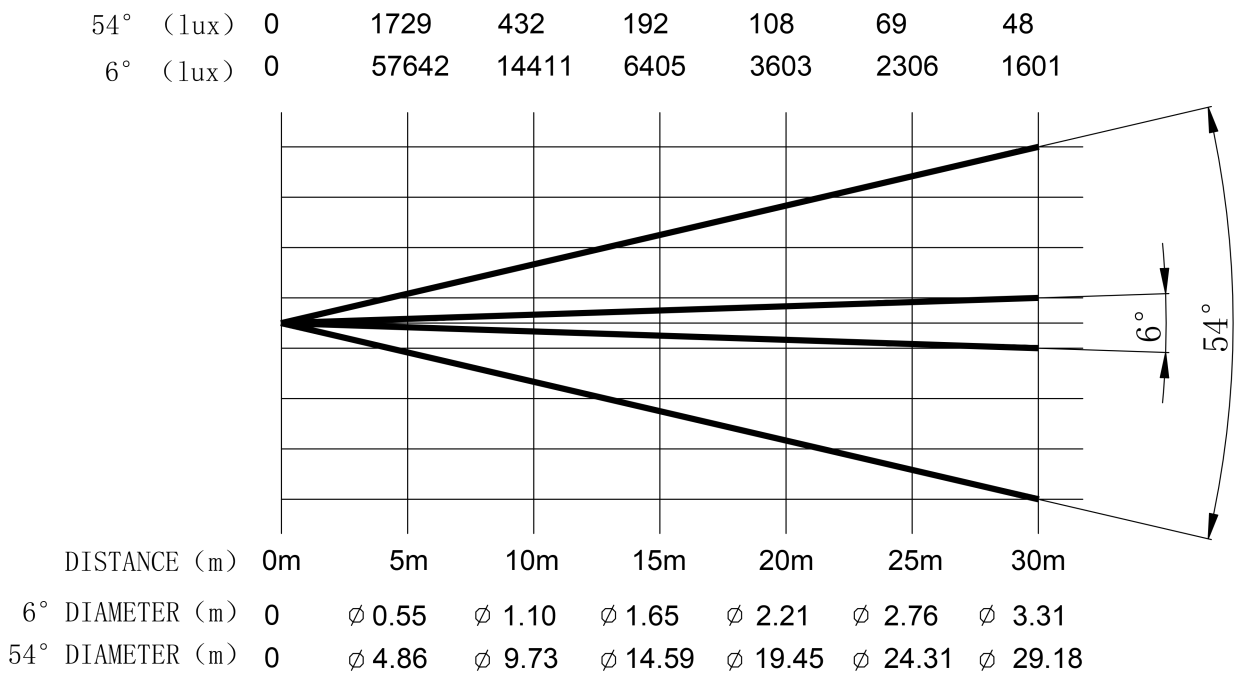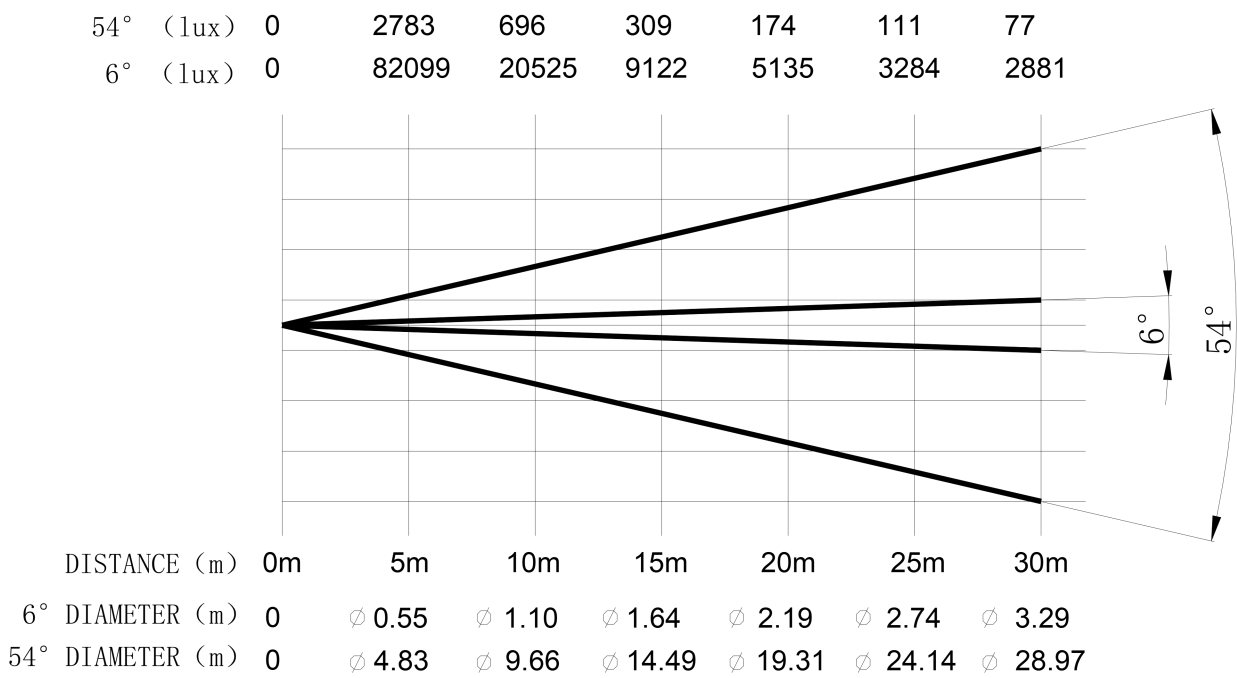
WEIGHT

Net weight 45K

SIZES

855

433

645

493

530

518

652

362

355

INSTALLATION DIAGRAM(BOTTOM VIEW)

248

106

106

518

LIGHT OUTPUT

High CRI version

54° （lux）	0	1729	432	192	108	69	48
6° （lux）	0	57642	14411	6405	3603	2306	1601

DISTANCE （m）	0m	5m	10m	15m	20m	25m	30m
6° DIAMETER （m）	0	∅ 0.55	∅ 1.10	∅ 1.65	∅ 2.21	∅ 2.76	∅ 3.31
54° DIAMETER （m）	0	∅ 4.86	∅ 9.73	∅ 14.59	∅ 19.45	∅ 24.31	∅ 29.18

High out version

54° （lux）	0	2783	696	309	174	111	77
6° （lux）	0	82099	20525	9122	5135	3284	2881

DISTANCE （m）	0m	5m	10m	15m	20m	25m	30m
6° DIAMETER （m）	0	∅ 0.55	∅ 1.10	∅ 1.64	∅ 2.19	∅ 2.74	∅ 3.29
54° DIAMETER （m）	0	∅ 4.83	∅ 9.66	∅ 14.49	∅ 19.31	∅ 24.14	∅ 28.97

11. CIRCUIT DIAGRAM

PR-8137

31
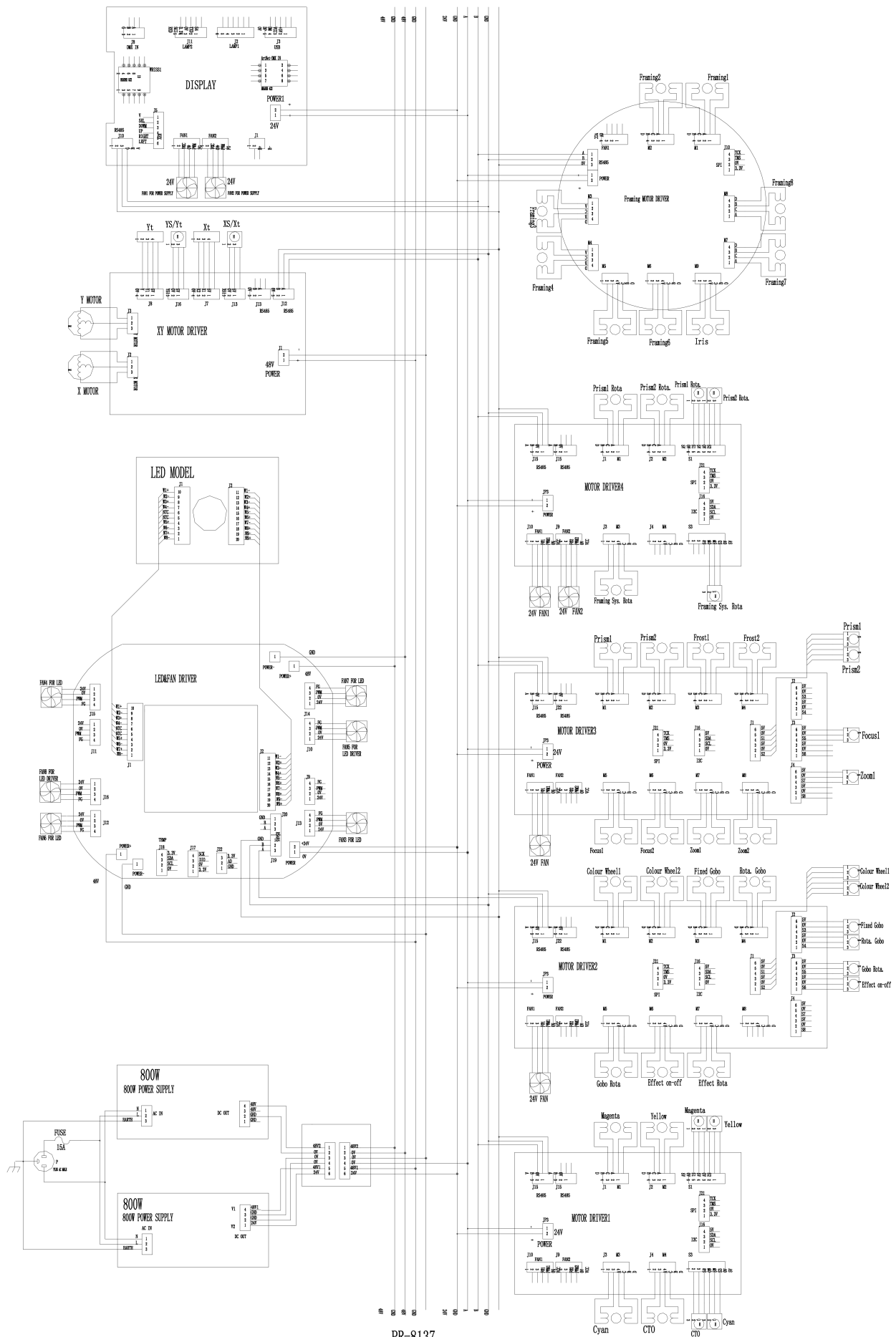
12. COMPONENT ORDER CODES

NAME	CODE NUMBER	QTY	REMARK
SWITCHING POWER SUPPLY	192010228A	1	
SWITCHING POWER SUPPLY	192010215B	1	
LED LIGHT SOURCE	150020326	1	
PAN MOTOR	030040262	1	
TILT MOTOR	030040262	1	
PRISM IN/OUT MOTOR	030040221A	2	
PRISM ROTATING MOTOR	030040289	2	
FROST IN/OUT MOTOR	030040073D	2	
EFFECT WHEEL IN/OUT MOTOR	030040236A	1	
EFFECT WHEEL ROTATING MOTOR	030040220A	1	
GOBO WHEEL MOTOR	030040125A	3	
GOBO ROTATING MOTOR	030040220A	1	
COLOR WHEEL MOTOR	030040220A	2	
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	030060130	4	
DRIVER/CMY FAN	030060122	2	
GOBO FAN	030060115	1	
FRAMING FAN	030060120	2	

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