



XRLED 700-W BWSF

PR-8174

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

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

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ACCESSORIES

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

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

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.
- No repairable parts in the projector and do not open covers for maintenance by yourself.



- 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.
- lens and other optical parts shall be replaced immediately if they have deformed or been damaged, otherwise the light output 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 75°C after the stable running.
- While the LED is lit for the first time, there will be smoke and strange smell. It's normal and does not mean the projector has some defects.
- While projector running, do not touch the metal housing with bare hand, otherwise get burned.
- Under normal ambient conditions, the housing's temperature should be less than 75°C.



- 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.
- 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.



- 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. 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.

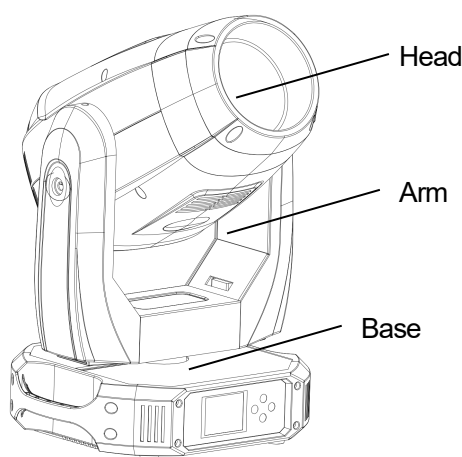
•LUBRICATION

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.

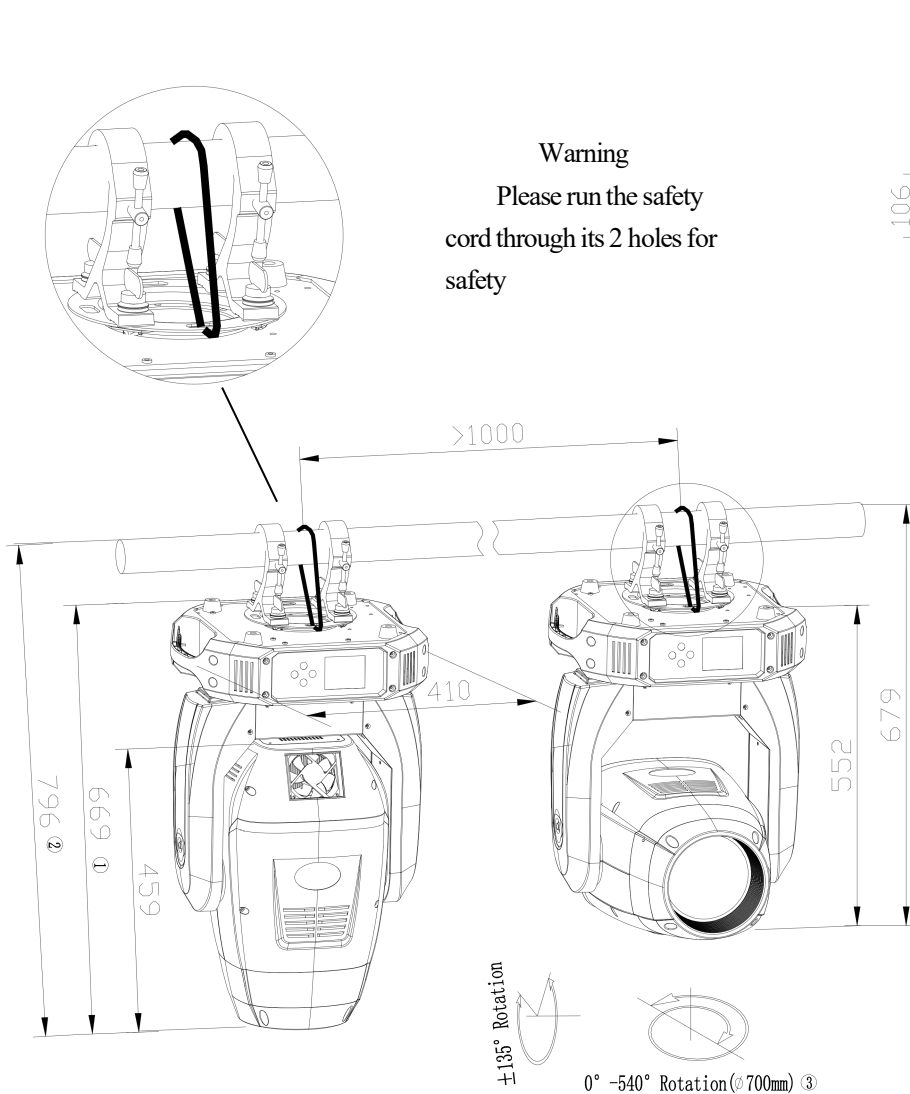
3. APPEARANCE



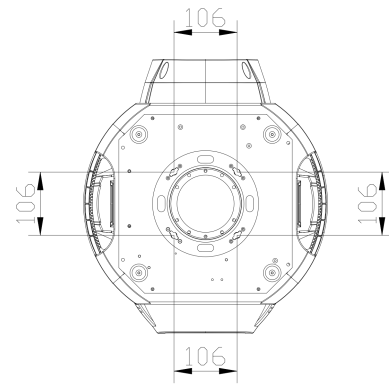
4. INSTALLATION

•RIGGING

Before moving a projector, Please lock Pan and Tilt. Before its operation, please unlock them. It's forbidden to run a projector with power while it is locked.



Warning
Please run the safety
cord through its 2 holes for
safety



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)

Take 2 clamps and the safety cord out from the package and mount 2 clamps on the underside of fixture with 2 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) **To pass the SAFETY CORD through the HOLES for safety!** 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 to is secure and strong enough to support the weight of a projector.



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.

• POWER CONNECTION

Connect the power cord as follows:

- L (live) = brown
- E (earth) = yellow/green
- N (neutral) = blue

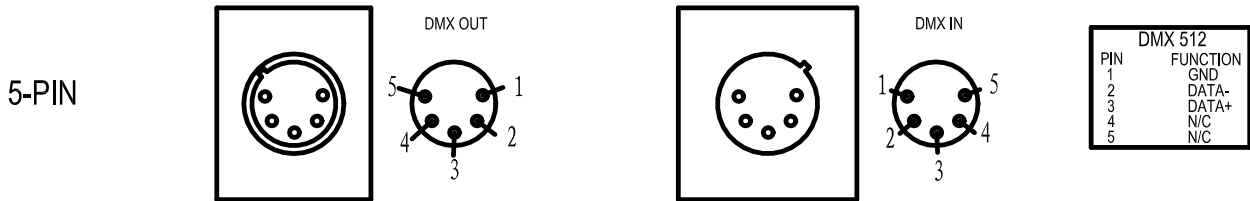
Before power connection, please ensure the power supplied must match what the nameplate says. It is recommended that each projector be connected with power separately so that they may be individually switched on and off.



- 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.

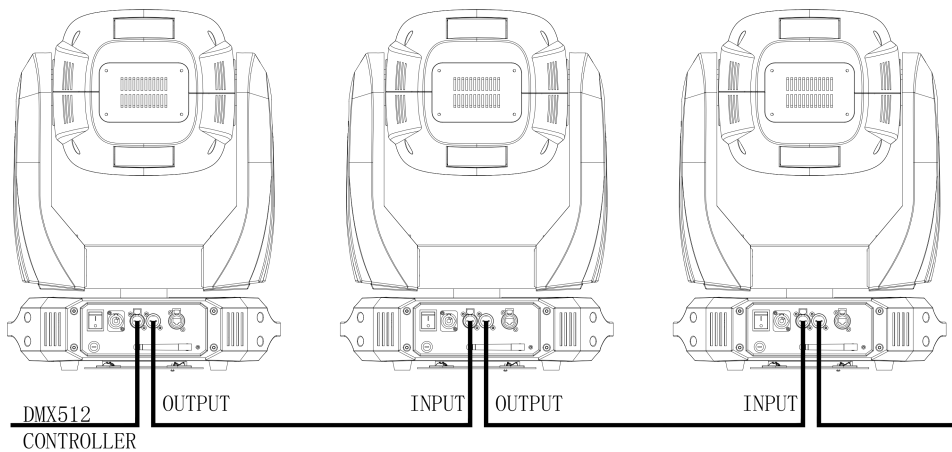
•DMX CONTROL CONNECTION:



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 XR330BWS accepts digital control signals in protocol DMX512 (1990).

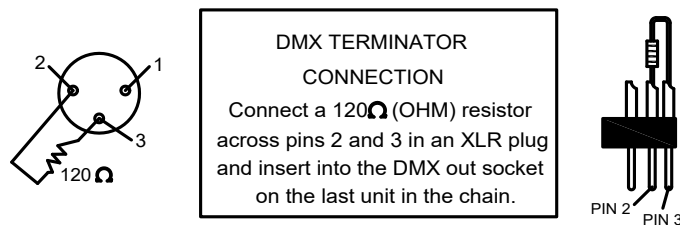
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



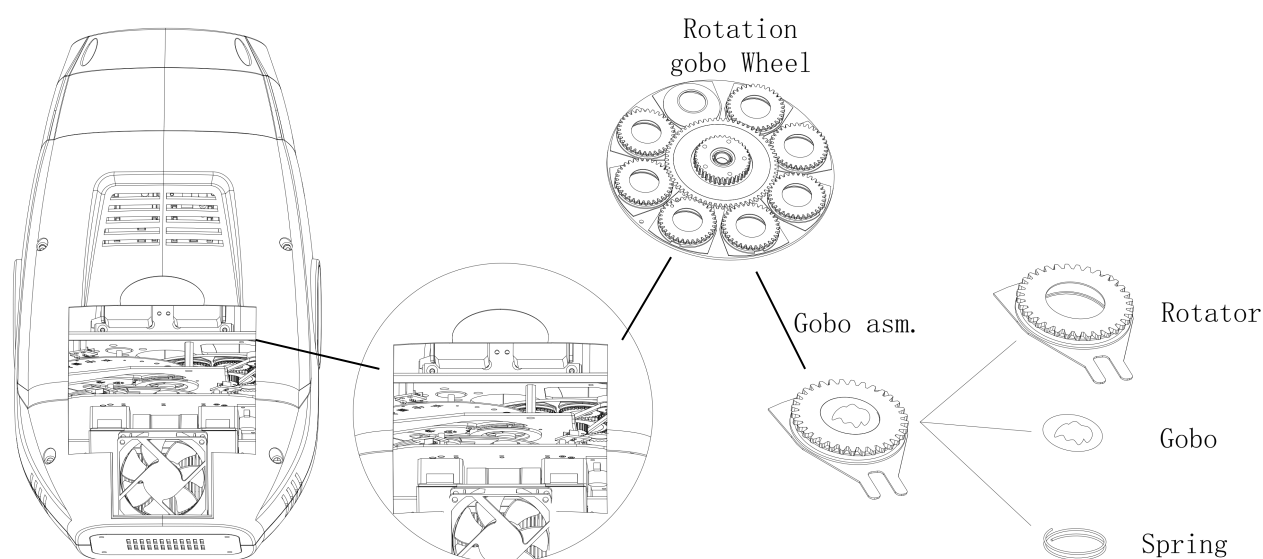
•DMX TERMINATOR

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.



• GOBO REPLACEMENT



Open the head cover after locking the Tilt and loosening 6 fast-fit screws of the cover and the structures as illustrated by the above figures will be seen.

For the rotating gobos: Take out the rotators by hand and remove the spring and gobo. Place a new gobo into the rotator and put back the spring. Ensure the spring is in the narrower side of the rotator, i.e. inner circle of the rotator, and flatten it. At last, use proper tool to compress the spring and with the help of the other hand place the rotator back to its original place in the wheel.

Note: Do not touch the color filter and gobos by hand. Clean and soft paper or cloth must be between hands and gobos or color filters. Tighten the 6 fast-fit screws after the head cover is on. Unlock the Tilt.

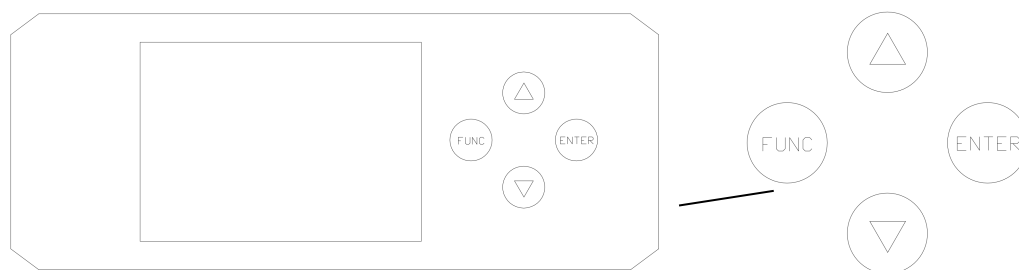


DANGER!

Before replacement of gobos, the projector must be off the power.

5. SETUP AND CONFIGURATION

• FRONT PANEL OPERATION



The projector configuration can be set conveniently via push buttons and color touch screen.

To browse through or change the projector's settings, touch the white area of the touch screen or press ENTER button for more than 3s (Only powered by the battery, pressing the ENTER button) to unlock the screen, then press ENTER key to enter the projector's function menus. Each main menu has its sub-menus. And each menu stands for special function. For the details, please see the following 6th point "Operation Menu":

1. At the page to set the fixture's functions, press FUNC, ENTER,   keys or their respective icons to select the functions desired.
2. While at 2nd, 3rd and 4th level of menus, the FUNC key is for ESCAPE, but ENTER key won't work, and ENTER key is used for ENTER. Press ENTER key to save the changes or enter into the sub menus. Press  or  keys to change the numbers(minus or plus). Or touch the option needed for change.
Push the left key or X on the top right to go back to the upper level menu. Otherwise, the system will go back to initial status.
Shortcut keys: After the Function Menu is entered into, there are all options for the functions on the top of the screen. On the right there are 4 shortcut keys like   Lamp Control and English/Chinese.

•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 standard mode ,short mode and extended mode. For example standard mode has 40 channels, so set the No. 1 projector's address 001, No. 2 projector's address 041, No. 3 projector's address 081, and so on.

Switch on the Projector . Press ENTER key more than 3 seconds to unlock panel, then press ENTER key to enter into the fixture's operation menus.

Select DMX Address icon and press ENTER key or touch the icon directly on the display and select DMX address at the 2nd level menu for the address setting.

Press  or  keys or touch < , > displayed for the DMX address desired.

Press ENTER key to confirm.

Press the FUNC key to go back to the upper level menu.

•DMX WIRELESS CONTROL (Optional)

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

The setup of it is below:

1. Press  and  keys to enter into the operation menu and select "Config Settings".
2. Select "Wireless First" or "Wireless Only" from the menu of "Signal Select".

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 Un-link Wireless under the upper level menu of Config Settigns , then the fixture is unlinked with the wireless transmitter.

•FAN SPEED MODES

It has standard and theater modes. Theater mode is quiet mode.

Its setups are as follows:

1. Hold the "ENTER" button for more than 3s to unlock the control panel and then push  ,  button to enter into the menus and select "Option Settings".
2. Select either of Standard and theater modes after the menu of Fan Settings.

•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.

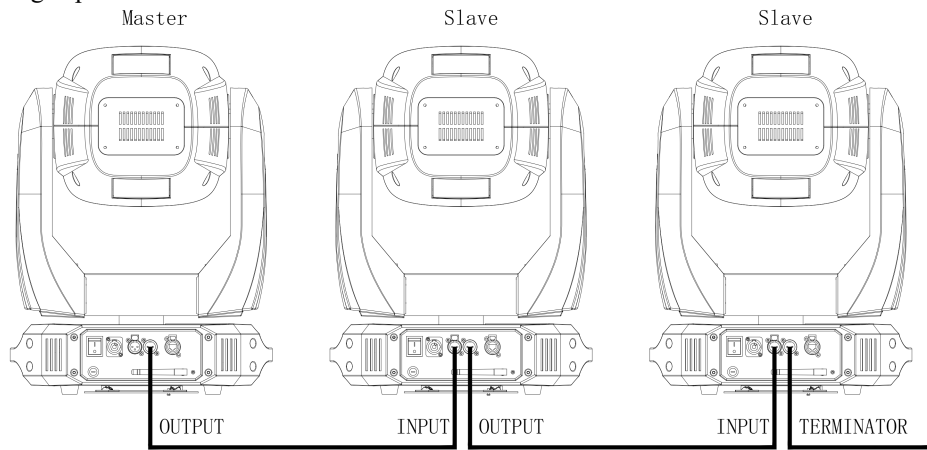
DMX address can be set at any number within 512.

•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	1-478 (short mode) 1-473 (STD mode) 1-460 (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 Universe	0-255		
	sACN Universe	1-63999		
Reset	Total Reset	Really Reset? Confirm or Cancel		
	Pan&Tilt Reset	Really Reset? Confirm or Cancel		
	Colour System Reset	Really Reset? Confirm or Cancel		
	Gobo Reset	Really Reset? Confirm or Cancel		
	Fo. Zo. Fr. Pr. Reset	Really Reset? Confirm or Cancel		
	Other Reset	Really Reset? Confirm or Cancel		
	DMX Channel Mode	Short 35CH		
		Standard 40CH		
		Extended 53CH		
		View Selected Mode	. Ch.01 Strobe Ch.02 Dimmer ...	

Config Settings			Ch.XX Control Function	
	Signal Select (Wireless control only for the projector with wireless receiver)	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 (Wireless control only for the projector with wireless receiver)	Really Un-Link? Confirm or Cancel		
	Factory Defaults	Restore Defaults? Confirm or 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	"Speed Mode" means Pan and Tilt will move from Point A to Point B at their respective maximum speeds. "Time Mode" means both Pan and Tilt will arrive at designated point at the same time. It's advised Time Mode be used if the projector runs circles or in oblique lines.
	Dimmer Settings	Gamma Curve	2.0/2.2/2.4/2.6	
		LED Refresh rate	1200/2400/4800/10000/12000/15000/20000/25000Hz	
		Dimmer speed	Fast/Medium/Slow	
	Fan Settings	Standard/Theatre		
	Invert Settings	Iris Invert	ON/OFF	
		Zoom Invert	ON/OFF	
		CYM Invert	ON/OFF	
		CTO Invert	ON/OFF	
	Defaults			
Information	View DMX Values	Channel Value Strobe XXX Dimmer XXX Dimmer Fine XXX CYM Macro XXX Cyan XXX Yellow XXX Magenta XXX CTO XXX Color Wheel XXX Color Wheel Fine XXX Iris XXX Iris Macro XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F. XXX Prism XXX Prism Rotation XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Autofocus XXX Focus calibrations XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan/Tilt speed & time XXX Power/Special Fun. XXX		
	Lamp Hours	Lamp Hours=XXX H Reset Lamp Hours		

	Total Hours	Total Hours=XXX H		
	Temperature	Display Board=xxx°C Pan & Tilt Board=xxx°C Driver Board1=xxx°C Driver Board2=xxx°C Blade board=xxx°C LED Sensor=XXXC		
	Software Version	PCB Sys Boot Display Board xxx xxx Pan & Tilt board xxx xxx Driver Board1 xxx xxx Driver Board 2 xxx xxx Blade Board xxx xxx		
	Electronic SN	XXXXXXX		
	RDM Device Label	XXXXXXX ANSI E1.20 RDM		
	Fan Status	Fan Speed Status Base Fan1 xxx on/off Base Fan2 xxx on/off LED Fan1 xxx on/off LED Fan2 xxx on/off LED Fan3 xxx on/off		
Service	Manual Effect Control	Channel Value 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 Color Wheel XXX Color Wheel Fine XXX Iris XXX Iris Fine XXX Iris Macro XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F. XXX Blade1 left XXX Blade1 right XXX Blade4 left XXX Blade4 right XXX Blade board rotation XXX Prism XXX Prism Rotation XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Autofocus XXX Focus calibrations XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan /Tilt speed & time XXX Power/Special Fun XXX		

	Factory Test	XXX	...	
Operation Mode	DMX Mode	Change Operation Mode? Confirm or Cancel		
	Master Mode	Preset Memory	Change Operation Mode? Confirm or Cancel	
		User Memory 1	Change Operation Mode? Confirm or Cancel	
		User Memory 2	Change Operation Mode? Confirm or Cancel	
	Stand-Alone Mode	Preset Memory	Change Operation Mode? Confirm or Cancel	
		User Memory 1	Change Operation Mode? Confirm or Cancel	
		User Memory 2	Change Operation Mode? Confirm or Cancel	
	Static Scene	Change Operation Mode? Confirm or Cancel		
User Memories	Edit User Memory	Edit User Memory 1 / Edit User Memory 2	Scene XX (1~200Scenes)	Paste? Confirm/Cancel
				Channel Value 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 Color Wheel XXX Color Wheel Fine XXX Iris XXX Iris Fine XXX Iris Macro XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F. XXX Blade1 left XXX Blade1 right XXX ... Blade4 left XXX Blade4 right XXX Blade board rotation XXX Prism XXX Prism Rotation XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Autofocus XXX Focus calibrations XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan/Tilt speed & time XXX Power/Special Fun XXX Fade Time XXX Hold Time XXX Delay Unit ms/s/min Link to Step XXX

		Edit Static Scene	Paste? Confirm/Cancel	Channel Value 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 Color Wheel XXX Color Wheel Fine XXX Iris XXX Iris Fine XXX Iris Macro XXX Rot. Gobo Wheel XXX Rot. Gobo Rotation XXX Rot. Gobo Rotation F. XXX Blade1 left XXX Blade1 right XXX Blade4 left XXX Blade4 right XXX Blade board rotation XXX Prism XXX Prism Rotation XXX Frost XXX Focus XXX Focus Fine XXX Zoom XXX Zoom Fine XXX Autofocus XXX Focus calibrations XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan /Tilt speed & time XXX Power/Special Fun XXX	
	Init User Memory	Reset User Memory 1	Reset User Memory? Confirm or Cancel		
		Reset User Memory 2	Reset User Memory? Confirm or Cancel		
		Reset Static Scene	Reset Static Scene? Confirm or Cancel		

NOTE: SIGNS OF THE TOUCH SCREEN

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

7. DMX PROTOCOL

Short mode	Standard mode	Extended Mode	FUNCTION	DMX	DESCRIPTION
1	1	1	Strobe	000	Close
				001-127	Pulse strobe speed from slow to fast
				128-255	Strobe from slow to fast
2	2	2	Dimmer	000-255	Linear dimming (0-100%)
	3	3	Dimmer Fine	000-255	Dimmer in 16 bit
3	4	4	CYM Macro	000-007	Open
				008-009	Color Temperature 2700K
				010-011	Color Temperature 3000K
				012-013	Color Temperature 3500K
				014-015	Color Temperature 4000K
				016-017	Color Temperature 4500K
				018-019	Color Temperature 5000K
				020-021	Color Temperature 5700K
				022-023	Color Macro 1
				024-025	Color Macro 2
				026-027	Color Macro 3
				028-029	Color Macro 4
				030-031	Color Macro 5
				032-033	Color Macro 6
				034-035	Color Macro 7
				036-037	Color Macro 8
				038-039	Color Macro 9
				040-041	Color Macro 10
				042-043	Color Macro 11
				044-045	Color Macro 12
				046-047	Color Macro 13
				048-049	Color Macro 14
				050-051	Color Macro 15
				052-053	Color Macro 16
				054-055	Color Macro 17
				056-057	Color Macro 18
				058-59	Color Macro 19
				060-061	Color Macro 20
				0620-63	Color Macro 21
				064-065	Color Macro 22
				066-067	Color Macro 23
				068-069	LEE 004 (Medium Bastard Amber)
				070-071	LEE 010 (Medium Yellow)
				072-073	LEE 019 (Fire)

			074-075	LEE 026 (Bright Red)
			076-077	LEE 058 (Lavender)
			078-079	LEE 068 (Sky Blue)
			080-081	LEE 071 (Tokyo Blue)
			082-083	LEE 079 (Just Blue)
			084-085	LEE 088 (Lime Green)
			086-087	LEE 090 (Dark Yellow Green)
			088-089	LEE 100 (Spring Yellow)
			090-091	LEE 101 (Yellow)
			092-093	LEE 102 (Light Amber)
			094-095	LEE 103 (Straw)
			096-097	Lee 104 (Deep Amber)
			098-099	LEE 105 (Orange)
			100-101	LEE 106 (Primary Red)
			102-103	LEE 111 (Dark Pink)
			104-105	LEE 115 (Peacock Blue)
			106-107	LEE 116 (Medium Blue-Green)
			108-109	LEE 117 (Steel Blue)
			110-111	LEE 118 (Light Blue)
			112-113	LEE 119(Deep Blue)
			114-115	LEE 120 (Dark Blue)
			116-117	LEE 121 (LEE Green)
			118-119	LEE 128 (Bright Pink)
			120-121	LEE 131 (Marine Blue)
			122-123	LEE 132 (Medium Blue)
			124-125	LEE 134 (Golden Amber)
			126-127	LEE 135 (Deep Golden Amber)
			128-129	LEE 136 (Pale Lavender)
			130-131	LEE 137 (Special Lavender)
			132-133	LEE 138 (Pale Green)
			134-135	LEE 139 (Primary Green)
			136-137	LEE 141 (Bright Blue)
			138-139	LEE 147 (Apricot)
			140-141	LEE 148 (Bright Rose)
			142-143	LEE 152 (Pale Gold)
			144-145	LEE 154 (Pale Rose)
			146-147	LEE 157 (Pink)
			148-149	LEE 158 (Deep Orange)
			150-151	LEE 162 (Bastard Amber)
			152-153	LEE 164 (Flame Red)
			154-155	LEE 165 (Daylight Blue)
			156-157	LEE 169 (Lilac Tint)
			158-159	LEE 170 (Deep Lavender)
			160-161	LEE 172 (Lagoon Blue)

				162-163	LEE 179 (Chrome Orange)
				164-165	LEE 180 (Dark Lavender)
				166-167	LEE 181 (Congo Blue)
				168-169	LEE 197 (Alice Blue)
				170-171	LEE 201 (Full C.T. Blue)
				172-173	LEE 202 (Half C.T. Blue)
				174-175	LEE 203 (Quarter C.T. Blue)
				176-177	LEE 204 (Full C.T. Orange)
				178-179	LEE 205 (Half C.T. Orange)
				180-181	LEE 206 (Quarter C.T. Orange)
				182-183	LEE 247 (LEE Minus Green)
				184-185	LEE 248 (Half Minus Green)
				186-187	LEE 281 (Three Quarter C.T. Blue)
				188-189	LEE 285 (Three Quarter C.T. Orange)
				190-191	LEE 352 (Glacier Blue)
				192-193	LEE 353 (Lighter Blue)
				194-195	LEE 715 (Cabana Blue)
				196-197	LEE 778 (Millennium Gold)
				198-199	LEE 793 (Vanity Fair)
				200-255	CYM 混色变换效果速度由慢到快
4	5	5	Cyan	000-255	Cyan (linear 0~100%)
		6	Cyan Fine	000-255	Cyan in 16 Bit
5	6	7	Yellow	000-255	Yellow (linear 0~100%)
		8	Yellow Fine	000-255	Yellow in 16 Bit
6	7	9	Magenta	000-255	Magenta (linear 0~100%)
		10	Magenta Fine	000-255	Magenta in 16 Bit
7	8	11	CTO	000-255	CTO(linear 0~100%)
		12	CTO Fine	000-255	CTO in 16 bit
8	9	13	Color Wheel	000-063	Indexing(0-360degrees)
				064-087	Open
				088-091	Open / (Red)
				092-095	Red
				096-099	Red /Light Green
				100-103	Light Green
				104-107	Light Green / Blue
				108-111	Blue
				112-115	Blue / Cyan
				116-119	Cyan
				120-123	Cyan / Yellow
				124-127	Yellow
				128-131	Yellow /Magenta
				132-135	Magenta
				136-139	Magenta /Orange
				140-143	Orange

				144-147	Orange /Green
				148-151	Green
				152-155	Green /Dark Blue
				156-159	Dark Blue
				160-163	Dark Blue /UV
				164-167	UV
				168-171	UV /Light Yellow
				172-175	Light Yellow
				176-179	Light Yellow /Dark Yellow
				180-183	Dark Yellow
				184-187	Dark Yellow/Open
				188-191	Open
				192-223	Rotation ,Clockwise from slow to fast
				224-255	Rotation, Anti-clockwise from fast to slow
	10	14	Color Wheel Fine	0000-255	Color Wheel in 16 Bit
9	11	15	Iris	000-255	Linear Iris from small to big 0-100%
		16	Iris Fine	000-255	Iris in 16 bit precision
10	12	17	Iris Macro	000-010	Iris Macro disabled
				011-074	Iris Macro1: from big to small with speed from slow to fast
				075-138	Iris Macro2: from small to big with speed from slow to fast
				139-202	Iris Macro3: Iris contracts from slow to fast
				203-210	Iris Macro4(Macro1 at random) with speed from slow to fast
				211-218	Iris Macro5(Macro2 at random) with speed from slow to fast
				219-229	Iris Macro6(Macro3 at random) with speed from slow to fast
				230-255	Open
11	13	18	Rotating Gobo Wheel	000-015	Open
				016-031	Gobo1
				032-047	Gobo 2
				048-063	Gobo 3
				064-079	Gobo 4
				080-095	Gobo 5
				096-111	Gobo 6
				112-127	Gobo 7
				128-156	Rotation (clockwise From slow to Fast)
				157-185	Reverse Rotation (anti-clockwise From slow to Fast)
				186-195	Shake of Gobo 1 from slow to fast
				196-205	Shake of Gobo 2 from slow to fast
				206-215	Shake of Gobo 3 from slow to fast

				216-225	Shake of Gobo 4 from slow to fast
				226-235	Shake of Gobo 5 from slow to fast
				236-245	Shake of Gobo 6 from slow to fast
				246-255	Shake of Gobo 7 from slow to fast
12	14	19	Gobo Rotation	000-128	Gobo Indexing(0~360 degrees)
				129-188	Rotation (Clockwise From slow to Fast)
				189-195	Stop
				196-255	Rotation (Anti-Clockwise From slow to Fast)
13	15	20	Gobo Rotation Fine	000-255	Gobo Rotation in 16 Bit
14	16	21	Framing Blade1left	000-255	Framing blade 1 left 0-100%
		22	Framing Blade1left Fine	000-255	Framing blade 1 left fine control
15	17	23	Framing Blade 1right	000-255	Framing blade 1 right 0-100%
		24	Framing Blade1 right Fine	000-255	Framing blade 1 right fine control
16	18	25	Framing Blade2left	000-255	Framing blade 2 left 0-100%
		26	Framing Blade2left Fine	000-255	Framing blade 2 left fine control
17	19	27	Framing Blade2right	000-255	Framing blade 2 right 0-100%
		28	Framing Blade2 right Fine	000-255	Framing blade 2 right fine control
18	20	29	Framing Blade3left	000-255	Framing blade 3 left 0-100%
		30	Framing Blade3left Fine	000-255	Framing blade 3 left fine control
19	21	31	Framing Blade3right	000-255	Framing blade 3 right 0-100%
		32	Framing Blade3 right Fine	000-255	Framing blade 3 right fine control
20	22	33	Framing Blade4left	000-255	Framing blade 4 left 0-100%
		34	Framing Blade4left Fine	000-255	Framing blade 4 left fine control
21	23	35	Framing Blade4right	000-255	Framing blade 4 right 0-100%
		36	Framing Blade4 right Fine	000-255	Framing blade 4 right fine control
22	24	37	Framing module rotation	000-128	Framing module indexing(0-360degrees)
				129-188	Clockwise rotation from slow to fast
				189-195	Stop
				196-255	Anti-clockwise rotation from slow to fast
	25	38	Framing module rotation fine	000-255	Framing module in 16 bit control (0-360 degrees)
23	26	39	Prism	000-016	Open
				128-255	Prism
24	27	40	Prism Rotation	000-127	Prism Indexing
				128	Stop
				129-191	Rotation(Clockwise from slow to fast)
				192	Stop
				193-255	Rotation(Anti- Clockwise from slow to fast)
25	28	41	Frost	000-09	No
				010-255	Frost In
26	29	42	Focus	000-255	Linear Focus
	30	43	Focus Fine	000-255	Focus in 16 bit precision
27	31	44	Zoom	000-255	Linear Zoom
	32	45	Zoom Fine	000-255	Zoom in 16 bit precision

28	33	46	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 (28/33/46) to focus the image. Priority: Rotating Gobo Wheel > Fixed Gobo Wheel > Iris > Framing module
					The following functions will disable the focus channel (26/29/42) is disabled.
				000-019	Autofocus Off
				020-039	Autofocus for 5M
				040-059	Autofocus for 10M
29	34	47	Focus calibrations	060-255	Autofocus for 15M
				000-127	Focus calibrations up
30	35	48	Pan	128-255	Focus calibrations down
31	36	49	Pan Fine	000-255	Pan(0°~540°)
32	37	50	Tilt	000-255	Pan in 16 bit
33	38	51	Tilt Fine	000-255	Tilt(0°~270°)
34	39	52	Pan & Tilt Speeds	000-255	Tilt in 16 bit
35	40	53	Control	000-019	Pan & Tilt Speed from Fast to Slow
				000-019	Reserved
				Keep in the DMX range for more than 5S to activate the following functions. If power-off, the following are invalid.	
				020-024	Graphic Display On
				025-029	Graphic Display Off
				030-046	Reserved
				047-048	Fan standard mode
				049-050	Fan theater mode
				051-052	Reserved
				053-054	Fast dimmer
				055-056	Medium dimmer
				057-058	Slow dimmer
				059-060	Gamma curve 2.0
				061-062	Gamma curve 2.2
				063-064	Gamma curve 2.4
				065-066	Gamma curve 2.6
				067-068	LED refresh rate 1200Hz
				069-070	LED refresh rate 2400Hz
				071-072	LED refresh rate 4800Hz
				073-074	LED refresh rate 10000Hz
				075-076	LED refresh rate 12000Hz
				077-078	LED refresh rate 15000Hz
				079-080	LED refresh rate 20000Hz
				081-082	LED refresh rate 25000Hz

				083-089	Reserved
				090-094	Pan & Tilt Speed Mode
				095-099	Pan & Tilt Time Mode
				100-139	Reserved
				140-149	Pan & Tilt Reset
				150-159	Color System Reset
				160-169	Gobo Wheel Reset
				170-179	Reserved
				180-189	Zoom/Frost/Focus/Prism Reset
				190-199	Other Reset (Blade / Iris)
				200-209	Total Reset
				210-255	Reserved

Remarks:

1. Fan error can cause lamp-off.
2. "Speed Mode" means Pan and Tilt will move from Point A to Point B at their respective maximum speeds. "Time Mode" means both Pan and Tilt will arrive at designated point at the same time. It's advised Time Mode be used if the projector runs circles or in oblique lines.

8. 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/magnet Sensor	Check if wiring, positioning parts and motors are normal
Yellow	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Magenta	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
CTO	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Color Wheel	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Framing module Rot.	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Rot. Gobo Wheel	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Rot. Gobo Rotation	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Prism	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Prism Rotation	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Focus	Timeout/magnet Sensor	Check if wiring, positioning parts and motors are normal
Zoom	Timeout	Check if wiring, positioning parts and motors are normal
Fan	Error	Check if fan and its wiring are normal
Pan and Tilt Board	Error	Check signal wire
Driver Board 1	Error	Check signal wire
Driver Board2	Error	Check signal wire
Framing module board	Error	Check signal wire
LED Off[Fan Error]	Error	Check if all fans are normal
Time IC	Error	

9. TECHNICAL DATA

ELECTRIC PARAMETERS

Input voltages : 100V~240V AC, 50/60Hz

Input Power : 550W @ 220V

Power factor : PF > 0.95

Max. Current: 2.5 A @ 220V

LIGHT SOURCE SPECIFICATIONS

Power consumption : 350W, White LED module

Color Temperature : 9000K

Manufacturers Rated Lamp Life : 20000hour

CRI : Ra≥70

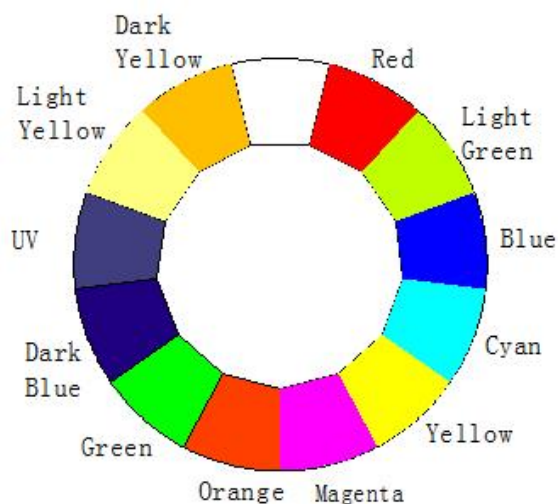
COLORS

CMY color mixing system with macros

1 Color wheel: 12colors+ Open,

rainbow effect with bi-directional and variable speeds,

Stepping/linear color changing



CTO

Linear CTO system(0-100%, 9000K-1800K)

FRAMING

1 Framing Module: 4 Framing Blades

Framing Module continual rotation with many graphics of different sizes and shapes

4 Framing blades to make full curtain effect

ROTATING GOBO WHEEL

1 Rotating gobo wheel: 7 Rotating Gobos +Open

Bi-directionally rotatable, and shakable at variable speeds

Gobo Replaceable, Gobo diameter: Φ22.5mm ,Gobo image diameter: Φ12mm

Gobo1	Gobo 2	Gobo 3	Gobo 4	Gobo 5
Gobo 6	Gobo 7			

PRISM

1pc, 3-facet circular prism, bi-directional rotation at variable speeds, indexing. Other optional prisms are available.

FROST

Wash effect

FOCUS

DMX linear focus

ZOOM

DMX linear focus

DIMMER

0-100% linear with dimming

IRIS

5-100% linear with macros

STROBE

Electronic strobe 0.2~25 F.P.S, optional pulse, synchronized or non-synchronized strobe at slow, medium and fast speeds

HEAD MOVEMENT

Pan 540°, Tilt 270° with auto position correction

BEAM ANGLE

Beam/Spot Mode : 4°- 40° Linear Adjustment

Wash Mode 5°- 45° Linear Adjustment

With 16 bit control function

FAN MODE

Standard mode and theater modes. Theater mode is quiet mode

CONTROL

DMX512, 5 pin interfaces

RDM protocol and DMX wireless control(optional sACN protocol)

Ethernet Protocol

35channels in short mode, 40channels in standard mode ,53channels in extended mode

Master/Slave mode

Stand-Alone mode

Master mode

OTHER FUNCTIONS

Adjustable Pan & Tilt speeds

Pan and Tilt invertible and swappable

Lamp's and fixture's hours displayed

Color touch Chinese/English screen, display invertible and touch keys

Intelligently controllable fans

Sensor diagnostic system

Input signal isolated, modular construction for easy maintenance, DMX channel voltages monitoring

Non-touchable magnetic sensor for positioning, signal feedback, absolute position memory, auto-positioning after power-off or DMX signal disruption

Firmware upgrade via DMX cable

Optional ethernet port

HOUSING

High temperature ABS, IP20

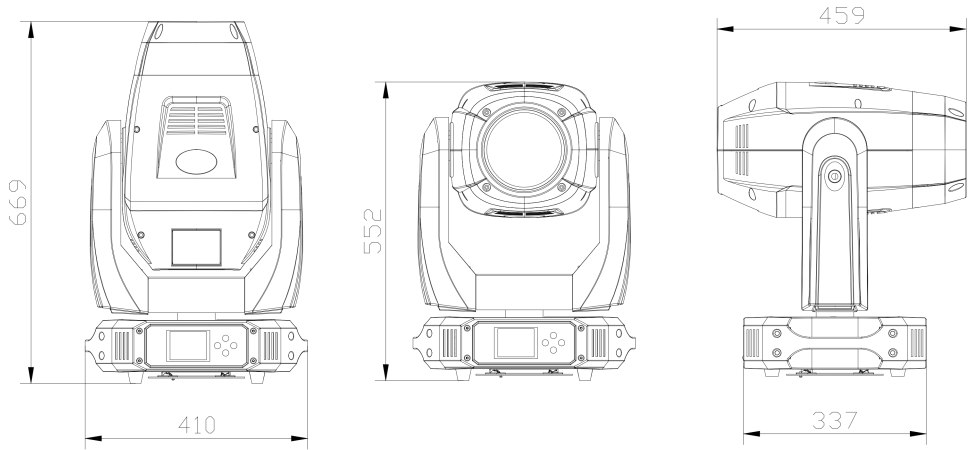
NETWEIGHT

22.6Kg

AMBIENT TEMPERATURE

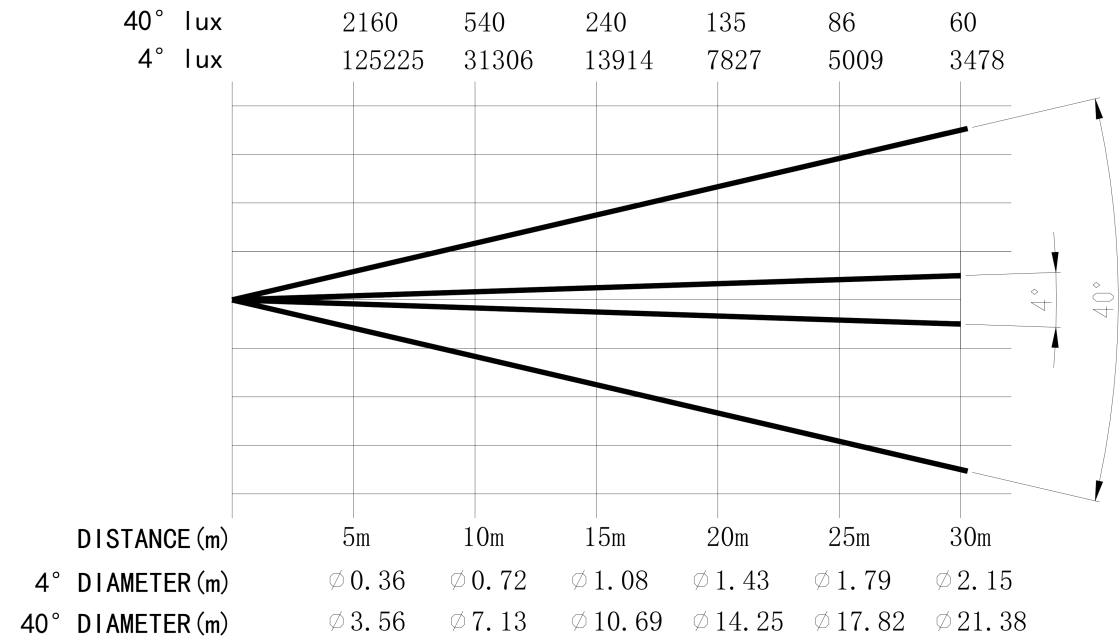
Temperature at maximum 45°C

SIZES

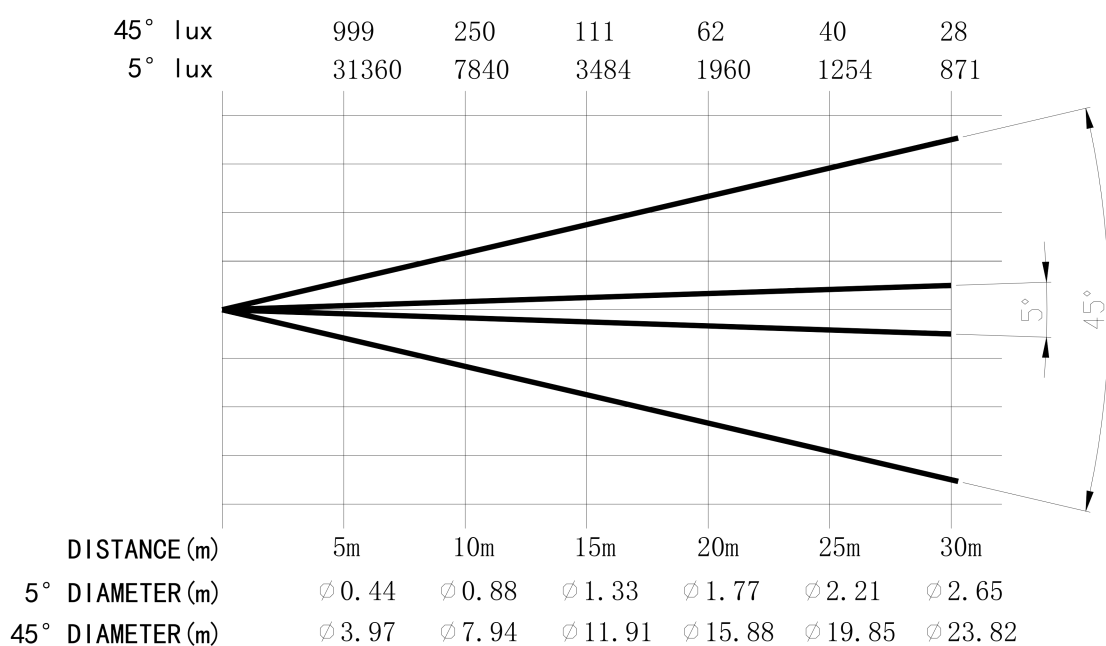


LIGHT OUTPUT

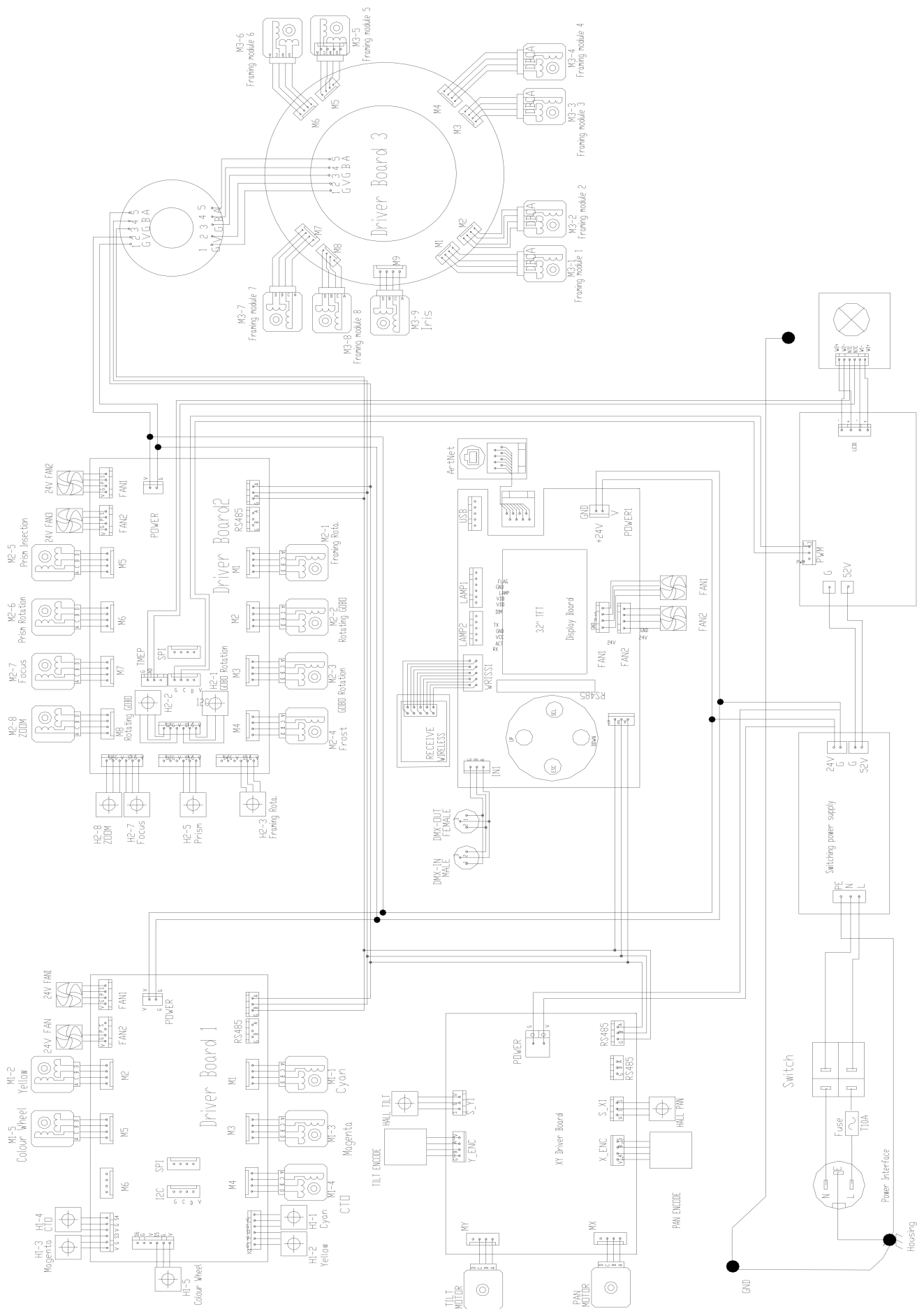
Beam & Spot mode



Wash mode



10. CIRCUIT DIAGRAM



11.COMPONENT ORDER CODES

NAME	CODE NUMBER	QTY	REMARK
Switching power supply	6190000017	1	
Light source	150020344	1	
Base fan 1	030060118	1	
Base fan 2	030060122	1	
LED fan 1	030060121	1	
LED fan 2	030060122	1	
LED fan 3	030060122	1	
Pan motor	030040276	1	
Tilt motor	030040276	1	
Focus motor	030040213B	1	
Zoom motor	030040213B	1	
Fix gobo wheel motor	030040073A	1	
Gobo rotation motor	030040221C	1	
Rotating gobo wheel motor	030040224C	1	
CMY motor	030040292	3	
CTO motor	030040292	1	
Frost motor	030040254A	1	
Color wheel motor	0300402298	1	
Prism motor	030040295	1	

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PR lighting will try its best to offer accurate and overall information about a product's technical data. Any changes won't be notified if necessary. Patented Products.
Counterfeiting Will be Prosecuted!

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Version : 20240628