

XLED 1537

PR-8120L

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

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ACCESSORIES

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

Name	Quantity	Unit	Remark
G Clamp	2	Pcs	
XLR Connectors	1	Set	Male and Female
Safety Cord	1	Pc	
User Manual	1	Pc	
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.

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

	<p>NOTE</p> <p>Before a projector's installation, power-on, operation and maintenance, please carefully read the safety information hereinafter!</p>
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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
- After lamp switched on, the minimum distance between the projector and illuminated surface is 10m
- lens and other optical parts shall be replaced immediately if they have deformed or been damaged, otherwise the light output will be compromised.



- 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 , the housing(the surface of heatsink) of the LED fixture has its temperature of 55°C.
- 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.



- Do not mount the projector directly on inflammable surface.
- Do not project the beam straightly on combustibile items and the minimum distance between the LED projector and illuminated items is 10m. For discharge lamp, it's more than 18m.
- 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 the sunlight or other light beam penetrates through the front lens into the head, which results in high temperature internally and damaging the projector accordingly. Before power-ff, please use the Tilt channel to let the head face down.**
- 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 (BASED ON ACTUAL CONSTRUCTION)

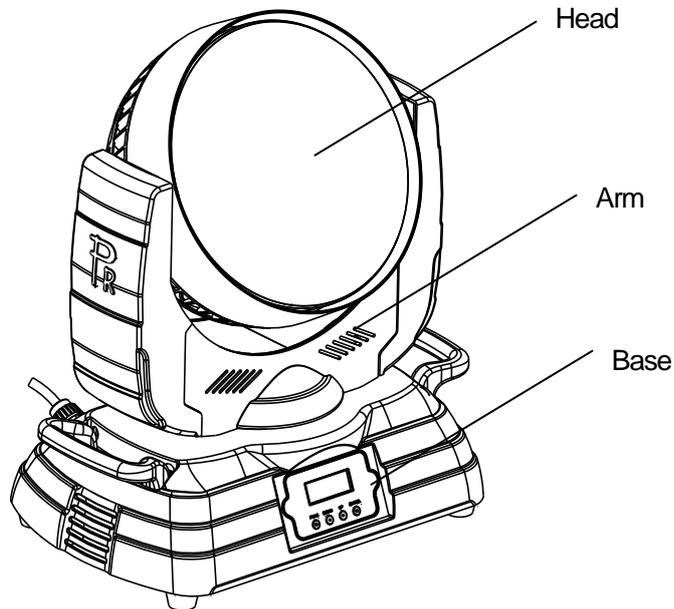
To ensure smooth movement of gobos and zoom and focus lens, it's advised rotators' bearings and 2 sliding bars for zoom and focus lens be lubricated every 2 months. High quality and high temperature lubricant/grease is advised..

•TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn't switch on	<ul style="list-style-type: none"> ➤ Check the fuse on the power socket. ➤ Check the lamp.
The lamp is on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> ➤ Make sure that the fixture's start address is right ➤ Replace or repair the XLR signal cable.
The projector functions intermittently	<ul style="list-style-type: none"> ➤ Make sure the fan is working well or fans and their shields are not blocked
Beam appears dim, Low in brightness	<ul style="list-style-type: none"> ➤ Make sure the lamp is within its lifespan

	➤ Remove dust or grease from the lenses.
The project image appears to have a halo	➤ Carefully clean the 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



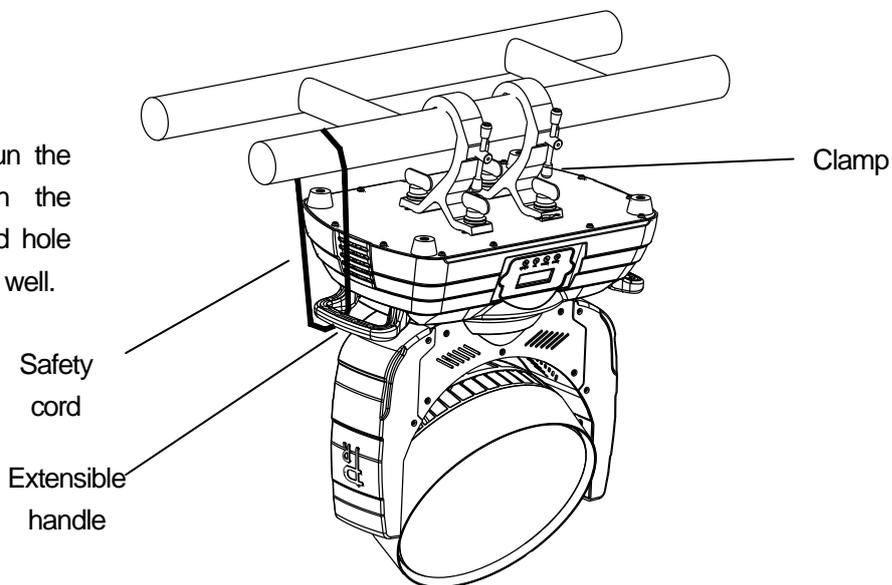
4. INSTALLATION

•RIGGING

During transportation, please lock the projector well. While the projector in use, please unlock it. It's forbidden to run the projector while it locked.

Notice!

For safety, please run the safety cord through the handle or safety cord hole in the base and lock it well.



Take 2 clamp and 1 the safety cord out from the package and mount 1 clamp on the **BOTTOM** of fixture with 4 retainers attached to 2 clamps. Hang the fixture on the steel truss and fasten the retainers attached to the clamp. Always ensure that the location that you are going to mount the unit is secure and is strong enough to support the weight of the unit (See the **WARNING** as shown above) **To pass SAFETY CORD through the SAFETY HOLE on the back cover of the base of the fixture for safety!** Always ensure that the unit is firmly anchored to avoid vibration and slipping whilst functioning.



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

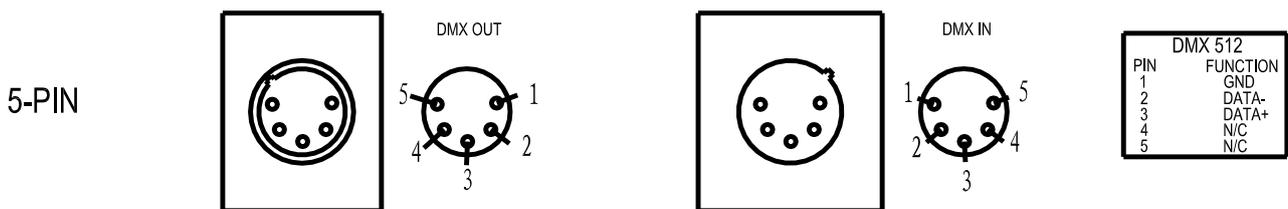
Before power connection, please ensure the power supplied must match what the nameplate says. It is recommended that each projector be connected with power separately so that they may be individually switched on and off.

Note: If projectors are connected in series, please connect POWERIN port of the 1st projector with the Power Mains, then connect its POWER OUT with POWER IN of the 2nd projector, and so on till all fixtures are connected. If the voltage supplied is 200V-240V, the maximum projectors connected is 8pcs, if it is 100V-120V, the maximum is 4pcs. The diameter of the cores of the wires for the Power in/out cables must be equal or bigger than 2.5mm².



- 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.

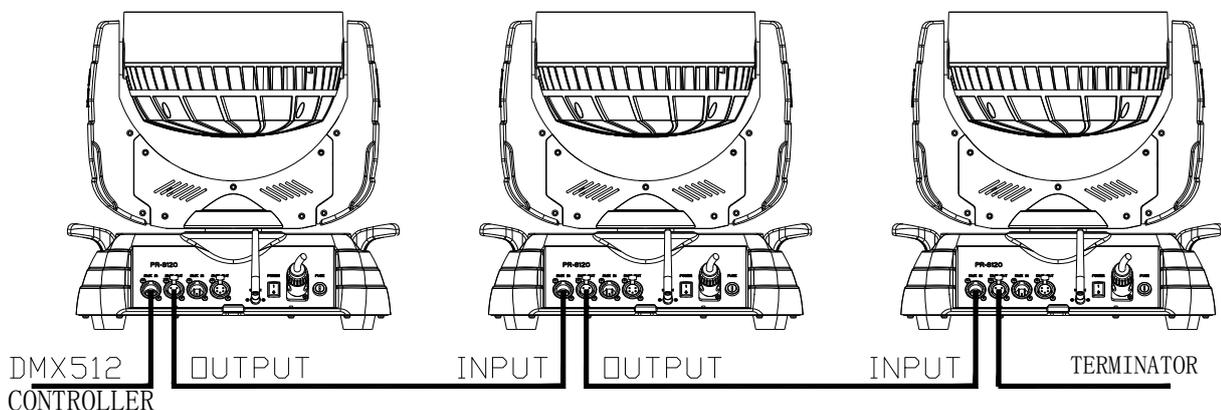
•**DMX CONTROL CONNECTION**



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

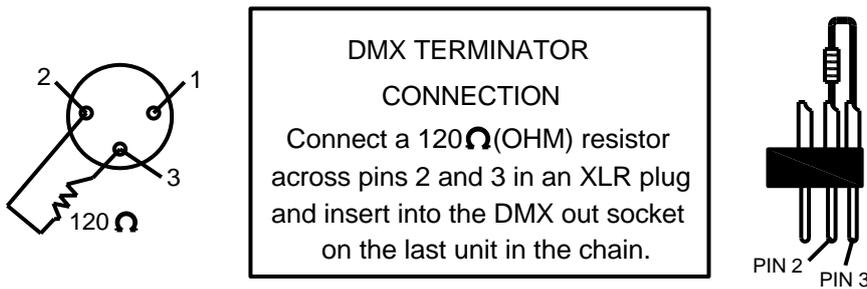
Connect the controller’s DMX output to the first fixture’s DMX input, and connect the first fixture’s DMX output to the second fixture’s DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture’s DMX output to a DMX terminator as shown in the figure below.



•**DMX TERMINATOR**

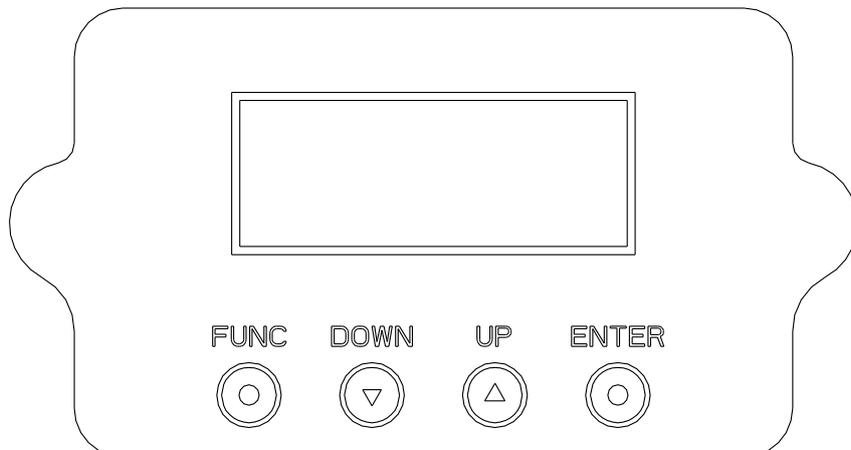
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

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.



5. SETUP AND CONFIGURATION

•FRONT PANEL OPERATION



Projector configuration can be set conveniently via gentle press of button switch and LCD display.

To browse or change its setup options, after button **ENTER** has been pressed for more than 2 seconds to unlock panel, the DMX Address will be displayed, which means the menus have been entered into.

Press button **UP** or **DOWN** to browse or change through the various Setup Options.

Press button **ENTER** to save your settings or enter the next menu while currently displayed parameters flashing.

Press button **UP** or **DOWN** to change values.(Add or subtract)

Press **FUNC** key to go back to the upper level menu. If it not pressed, the system will automatically go back to initial status.

• 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 have short mode, standard mode and extended mode. For example standard mode has 29 channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 030, No. 3 projector’s address 059, No. 4 projector’s address 088 and so on.

Launch the projector. Press button **ENTER** more than 3 seconds to unlock the display to enter into menus.

Press button **ENTER** to display flashing DMX address;

Press button **UP** and **DOWN**, you can set the address;

Press button **ENTER** to confirm it while LED Indication stops from flashing and the projector enters into the upper menu, which means the projector has saved the Start Address .When powered on next time, it will display the value saved last time.

Press button **FUNC**, it will return to the upper menu

•DMX WIRELESS CONTROL

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 Settings" via the bottoms of **UP** and **DOWN**
2. Select **DMX control Mode**--- **Wireless First** (Note: do not select **XLR ONLY**), then wireless indication in the front panel will be on, meaning 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 Settings .

.STAND-ALONE MODE

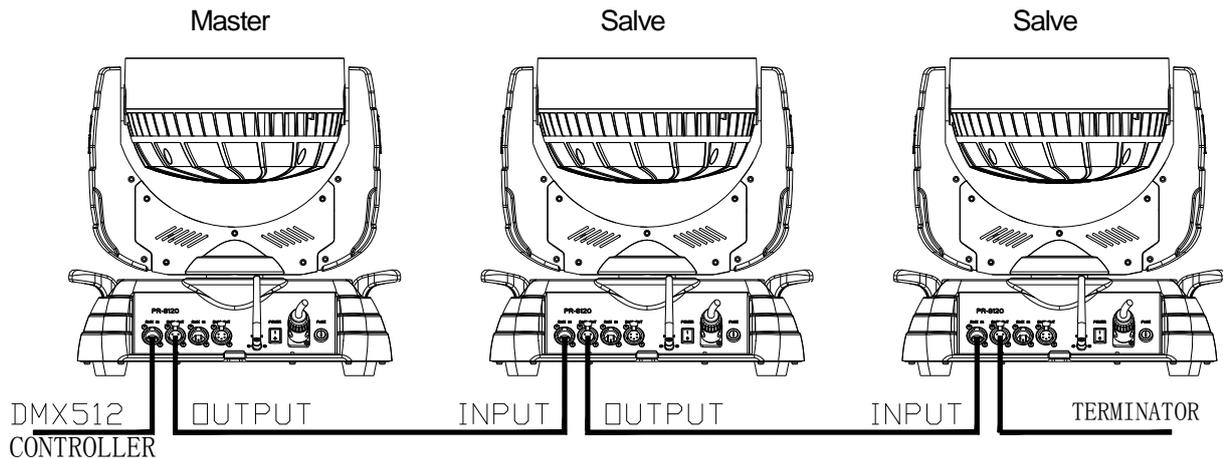
Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically. DMX address can be set at any number within 512.

.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	五 5th LEVEL
Fixture Model Address: XXX				
Signal Mode Channel Mode				
DMX Setting	DMX Address	Short mode 1-488 Standard mode 1-484 Extended mode 1-472		
Reset	Total Reset	Really Reset?	Confirm/Cancel	
	Pan and Tilt	Really Reset?	Confirm/Cancel	
	Zoom Rest	Really Reset?	Confirm/Cancel	
Config Set	DMX Channel	Short Mode		
		Standard Mode		

		Extended Mode		
		View Channel	001 Strobe	
	Signal Select	XLR Only		
		XLR First		
		Wireless Only		
		Wireless First		
		Wireless → XLR		
	Loss of DMX	Normal timeout		
		Hold Last		
	Disp. Config	Display Mode	Off Delay	
			On Always	
		Display Inv.	Invert OFF	
			Invert ON	
		Language Set	English	
Chinese				
Temp. Unit	Celsius			
	Fahrenheit			
Un-Link WDMX	Really Unlink?	Confirm/Cancel		
Factory Reset	Factory Reset?	Confirm/Cancel		
Option Set	XY Settings	X Invert	OFF/ ON	
		Y Invert	OFF/ ON	
		XY Swap	OFF/ ON	
		XY Feedback	OFF/ ON	
		XY Mode	Speed/ Time	
	Dimmer Set	Gamma Curve	Gamma 2.0/2.2/2.4/2.6	
		LED Ref. Rate	1200/2400/4800/10000/12000/15000/20000/25000Hz	
		Dimmer Speed	Fast/Medium/Slow Speed	
	Fan Set	Standard/Theatre		
	Information	View DMX		
Total Hours		XXXXXH		
Temperature		Display XXX		
		XY Driver XXX		
		LED Driver XXX		
		LED XXX		
Software Ver.		Display	X.X.X	
		XY Driver	X.X.X	
	LED Driver	X.X.X		
Electronic SN	Electronic SN			

	RDM Label	RDM Device Label ANSI E1.20 RDM			
	Fan Status	Basic Fan XXX×/√			
Head Fan XXX×/√					
Service	Manual Ctrl	Strobe XXX			
		Dimmer XXX			
	...				
	Factory Test				
Operation	DMX Mode	Change Mode?	Confirm/Cancel		
	Master Mode	Preset Memory	Change Mode?	Confirm/Cancel	
		User Memory 1	Change Mode?		
		User Memory 2	Change Mode?		
	Stand-Alone	Preset Memory	Change Mode?		
		User Memory 1	Change Mode?		
		User Memory 2	Change Mode?		
Static Scene	Change Mode?				
User Memory	Edit Memory	Edit Memory 1 / Edit Memory 2	Scene XXX (1~16 Scenes)	Strobe XXX	
				Dimmer XXX	
				...	
				Fade Time XXX	
				Hold Time XXX	
				Delay Unit	
	Next Step XXX				
	Init Memory	Edit Static Scene			Strobe XXX
					Dimmer XXX
					...
Init Memory				Reset Memory 1	
				Reset Memory 2	
				Reset Scene	
				Reset Memory?	
				Reset Memory?	
				Reset Scene?	
				Input Password 123	
				Input Password 123	
				Input Password 123	

7. DMX PROTOCOL

Short Mode	Standard Mode	Extended Mode	Functions	DMX	Descriptions
1	1	1	Strobe	000-007	No Strobe
				008-127	Pulse from slow to fast
				128-135	No Strobe
				136-177	Fast Close and Slow Open
				178-185	No Strobe
				186-227	Fast Open and Slow Close
				228-235	No Strobe
				236-249	Strobe at Random (Fixtures and lamps at random)
				250-255	No Strobe
2	2	2	Dimmer	000-255	Linear Dimming from dark to Bright
3	3	3	Color Temp	000	No
				001-255	Linear Color temperature (2700K-10000K)
4	4	4	Color macros	000	No

				001-255	Fading rainbow effect from slow to fast
5	5	5	Colors	000	No colors
				001-255	255 colors
6	6	6	Area 1 Red	000-255	Linear adjustment(0-100%)
7	7	7	Area 1 Green	000-255	Linear adjustment(0-100%)
8	8	8	Area 1 Blue	000-255	Linear adjustment(0-100%)
9	9	9	Area 1 White	000-255	Linear adjustment(0-100%)
6	6	10	Area 2 Red	000-255	Linear adjustment(0-100%)
7	7	11	Area 2 Green	000-255	Linear adjustment(0-100%)
8	8	12	Area 2 Blue	000-255	Linear adjustment(0-100%)
9	9	13	Area 2 White	000-255	Linear adjustment(0-100%)
6	6	14	Area 3 Red	000-255	Linear adjustment(0-100%)
7	7	15	Area 3 Green	000-255	Linear adjustment(0-100%)
8	8	16	Area 3 Blue	000-255	Linear adjustment(0-100%)
9	9	17	Area 3 White	000-255	Linear adjustment(0-100%)
6	6	18	Area 4 Red	000-255	Linear adjustment(0-100%)
7	7	19	Area 4 Green	000-255	Linear adjustment(0-100%)
8	8	20	Area 4 Blue	000-255	Linear adjustment(0-100%)
9	9	21	Area 4 White	000-255	Linear adjustment(0-100%)
10	10	22	Zoom	000-255	Linear Zooming (0%~100%)
	11	23	Zoom Low	000-255	Zooming in 16 bit precision
11	12	24	Pan	000-255	Pan (0°~540°)
	13	25	Pan Low	000-255	Pan in 16 bit Precision
12	14	26	Tilt	000-255	Tilt (0°~270°)
	15	27	Tilt Low	000-255	Tilt in 16 bit Precision
	16	28	Pan & Tilt Speeds	000-255	Pan and Tilt Speeds from fast to slow
13	17	29	Animation	000-008	No effect
				009-255	N macros If without front color and back color, the macro's colors are defaulted; If with them, the macro's colors are defined by users(Front colors and back colors are described in the following channels) If the effect works, dimmers of areas from 1 to 6 won't work, but the dimmer for all still works.
14	18	30	Front color dimmer	000-255	Front color brightness(0-100%)(User macro needs the channel)
15	19	31	Back color dimmer	000-255	Back color brightness(0-100%)(User macro needs the channel)
16	20	32	Animation	000-255	Animation running from fast to slow
17	21	33	Animation speed	000-255	Macro running from slow to fast
18	22	34	Front color-red	000-255	Front red color dimmer (0-100%)
19	23	35	Front color-green	000-255	Front green color dimmer (0-100%)

20	24	36	Front color-blue	000-255	Front blue color dimmer (0-100%)
21	25	37	Front color-white	000-255	Front white color dimmer (0-100%)
22	26	38	Back color-red	000-255	Back red color dimmer (0-100%)
23	27	39	Back color-green	000-255	Back green color dimmer (0-100%)
24	28	40	Back color-red	000-255	Back blue color dimmer (0-100%)
17	21	33	Back color-white	000-255	Back white color dimmer (0-100%)
25	29	41	Control Function	000-004	No function
				The following functions can work only stay in the DMX value range for more than 5s.	
				005-019	Reserved
				020-024	Display on
				025-029	Display off
				030-046	Reserved
				047-048	Fan standard mode
				049-050	Fan theater mode
				051-052	Reserved
				053-054	Fast dimmer speed
				055-056	Medium dimmer speed
				057-058	Slow dimmer speed
				059-060	Gamma 2.0
				061-062	Gamma 2.2
				063-064	Gamma 2.4
				065-066	Gamma 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 and tilt mode : speed
				095-099	Pan and tilt mode : time
				100-139	Reserved
				140-149	Pan and tilt reset(Stay for 3s to reset)
				150-179	Reserved
180-189	Zoom reset(Stay for 3s to reset)				
190-199	Reserved				
200-209	Reset(Stay for 3s to reset)				
210-255	Reserved				

Note: Priority sequences of the DMX channel: Animation > Color temperature > Color Macro > Color effect > single color dimmer of RGBW

8. ERROR MESSAGES AND THE CORRECTIONS

The software control system can detect any errors during reset. If the screen shows , please use ENTER key to see the errors displayed

ERRORS	CORRECTION
PAN	Check if wiring, positioning part and motor work properly
TILT	Check if wiring, positioning part and motor work properly
ZOOM	Check if wiring, positioning part and motor work properly
XY DRIVER	Check signal wire
LED DRIVER	Check signal wire
BASE FAN	Check signal wire
HEAD FAN	Check if head fans work properly
IIMES IC	

9. TECHNICAL DATA

ELECTRIC PARAMETERS

Input voltage 100V~240V AC,50/60Hz

Input power 650W @ 100V

620W @ 220V

Power factor: PF> 0.9

LIGHT SOURCE

LED lamp RGBW 15W

Qty 37pcs

Average life: 50000hrs

PAN AND TILT

Pan: 540°; Tilt: 270°with auto-positioning correction

COLORS

RGBW linear color mixing, with color macros

DIMMER

0-100% linearly adjustable

COLOR TEMPERATURE

Color temperature linearly adjustable(2700K ~10000K)

STROBE

Electronic strobe:0.3-25 F.P.S.

BEAM ANGLE

Beam Angle(1/2 peak) $\theta_{1/2}$: 13 °~52 °

Field Angle(1/10 Peak) θ : 27 °~70 °

CONTROL

DMX512, 5 pins interfaces

RDM protocol

25 in short mode,29channels in standard mode, and 41 channels in extended mode

Master/Slave Synchronous Control Mode

Static scene

Standalone mode

Self-test mode

OTHER FUNCTIONS

Pan and Tilt speed adjustable

Auto-adjusting fan speed

Auto power off if LED board temperature too high

Display brightness and contrast adjustable

LED lamp-ON hours and power on hours displayed

DMX512 channels displayed

Display inverted

HOUSING

High temperature ABS+ cast aluminum , IP20

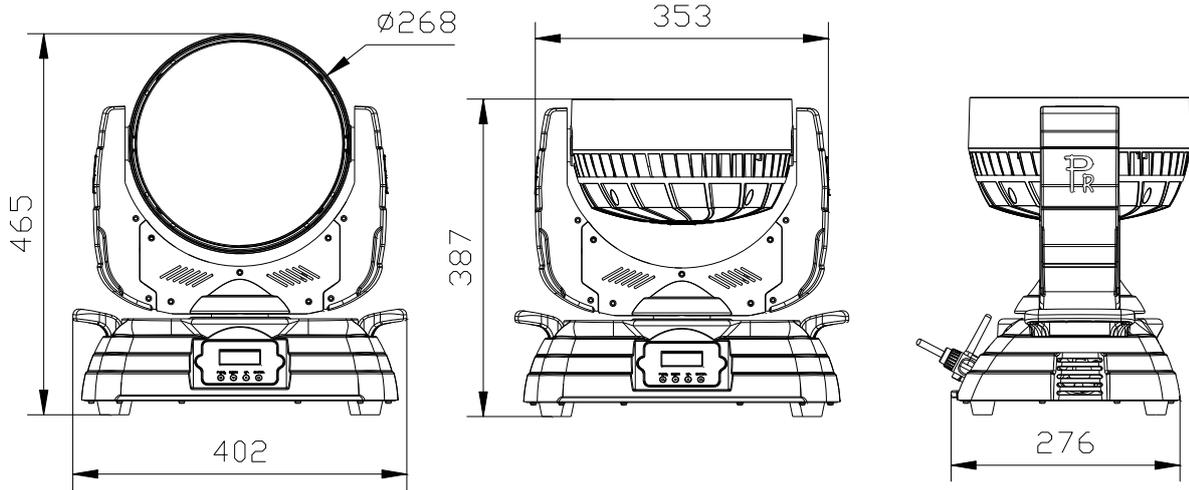
WEIGHT

Net weight 12.4 Kg; Gross weight 16.5Kg

AMBIENT TEMPERATURE

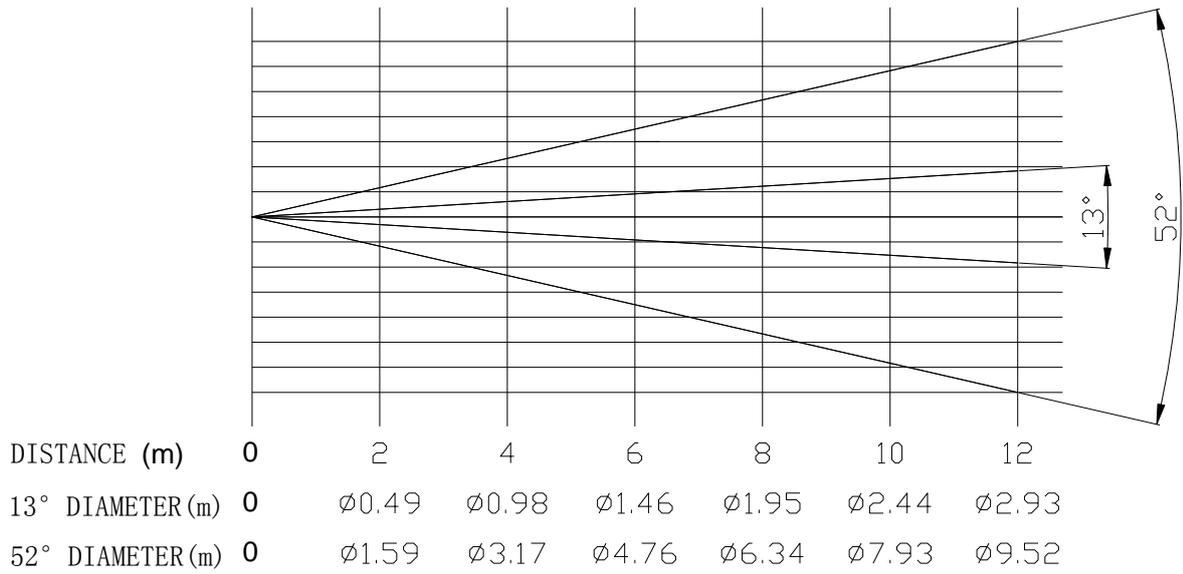
Max. Ambient temperature : 45 °C

SIZES

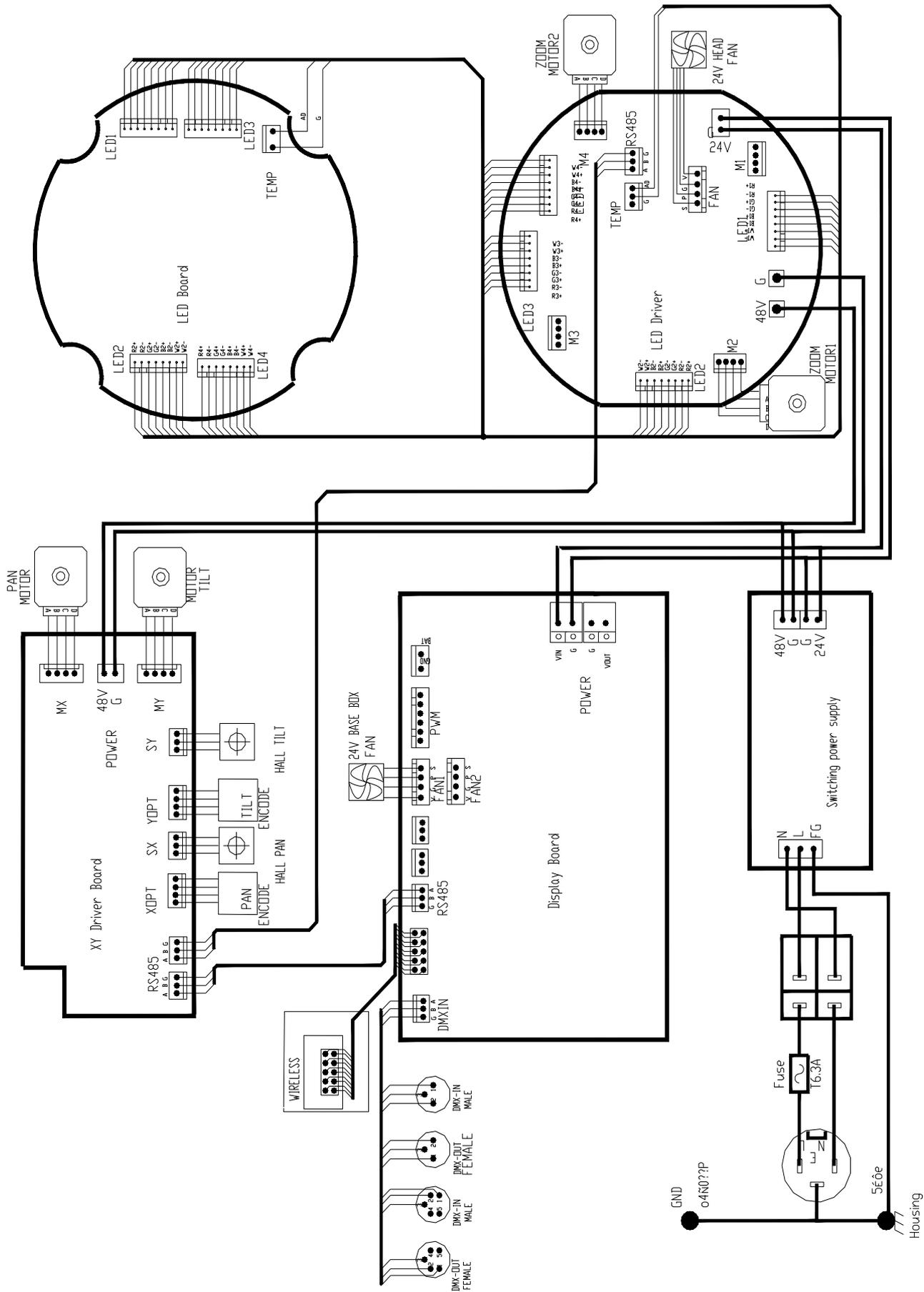


LIGHT OUTPUT

52° Lux	0	6073	1518	675	380	273	169
13° Lux	0	37294	9323	4144	2331	1492	1036



10. CIRCUIT DIAGRAM AND PCB CONNECTIONS
.CIRCUIT DIAGRAM



11. COMPONENT ORDER CODES

NAME	CODE NUMBER	QTY	REMARKS
FIRST LENS	070070052	37	
SECONDARY LENS	070070053	37	
MOTOR	030040162	4	
MOTOR	030040174	2	
FAN	030060118	1	
PWM SPEED ADJUSTING FAN	030060074C	1	

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