



XPar 150 Zoom

PR-8203

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.

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ACCESSORIES

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

Name	Quantity	Unit	Remark
G clamps	1	Pc	
Power cord	1	Pc	With plug and socket
XLR connector	1	Set	Male and female
Safety cord	1	Pc	
User manual	1	Pc	
Transparent Cover+ seal+ screws ×6	1	Set	Optional
Barn Door	1	Set	Optional
Frost panel(Barn Door + Frost panel)	1	Set	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.

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.



- 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 1.5m
- 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 running for 5minutes at constant temperature environment, the temperature of the housing of the projector is 45°C.After stable operation , its temperature is70°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.
- While operated, do not touch the metallic housing. It is very hot during operation.



- Do not mount the projector directly on inflammable surface.
- Do not project the beam straightly on combustibile 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

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. Without the permission by a qualified person for internal part replacement, it is forbidden to dismantle a unit.

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. Keep lens clean and do not touch optical parts with bare hands.

Special Reminder:

It's a normal phenomenon to see any slight vapour on the surface of the front glass, during the using of the outdoor waterproof unit.



- 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.



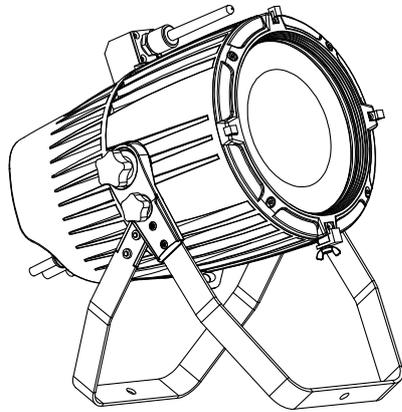
- To avoid internal damage, sun light or other light mustn't penetrate into the projector via front lens whether it runs or not
- Do not use alcohol or other organic solvent to clean the housing to avoid damage.
- Do not use any solvent with chemical elements to clean color filters or hot mirror.

●TROUBLESHOOTING

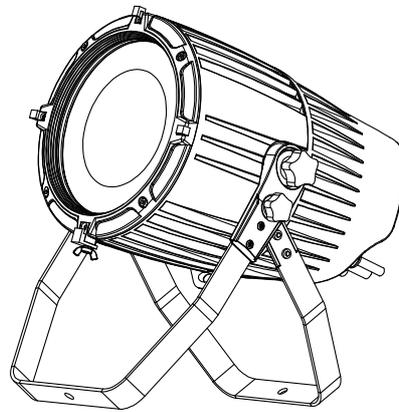
PROBLEM	ACTION
The projector doesn't switch on	<ul style="list-style-type: none"> ➤ Check the fuse on the power socket. ➤ Check the lamp.
The lamp is on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> ➤ Make sure that the fixture's start address is right ➤ Replace 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	<ul style="list-style-type: none"> ➤ Carefully clean the lamp, optical lenses and other components.
Heavily Defective Beam	<ul style="list-style-type: none"> ➤ Check if lens are in good condition(not cracked) ➤ Clean dust or grease on the lens.

3. APPEARANCE

(The unit has two different settings. One is with wireless control function and the other version without it. After either version leaves the factory, they can't be changed in between as you like)

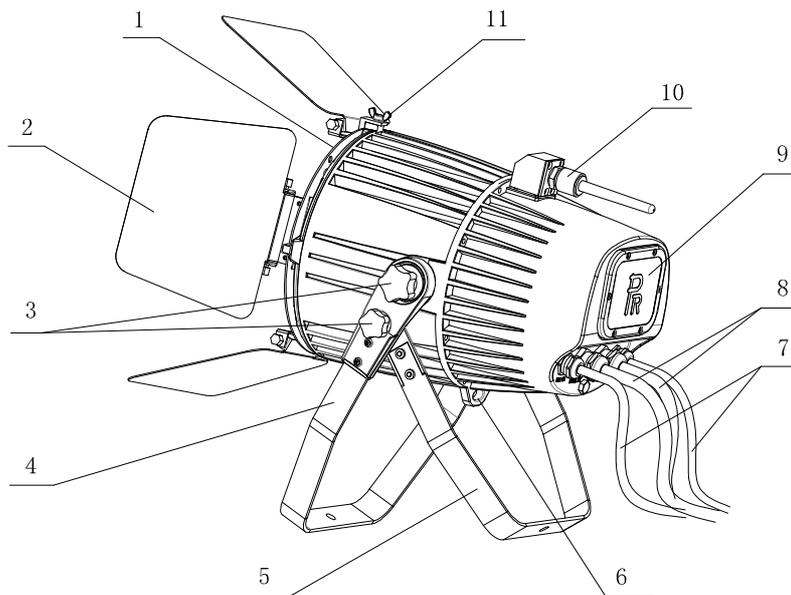


With wireless control function



Without wireless control function

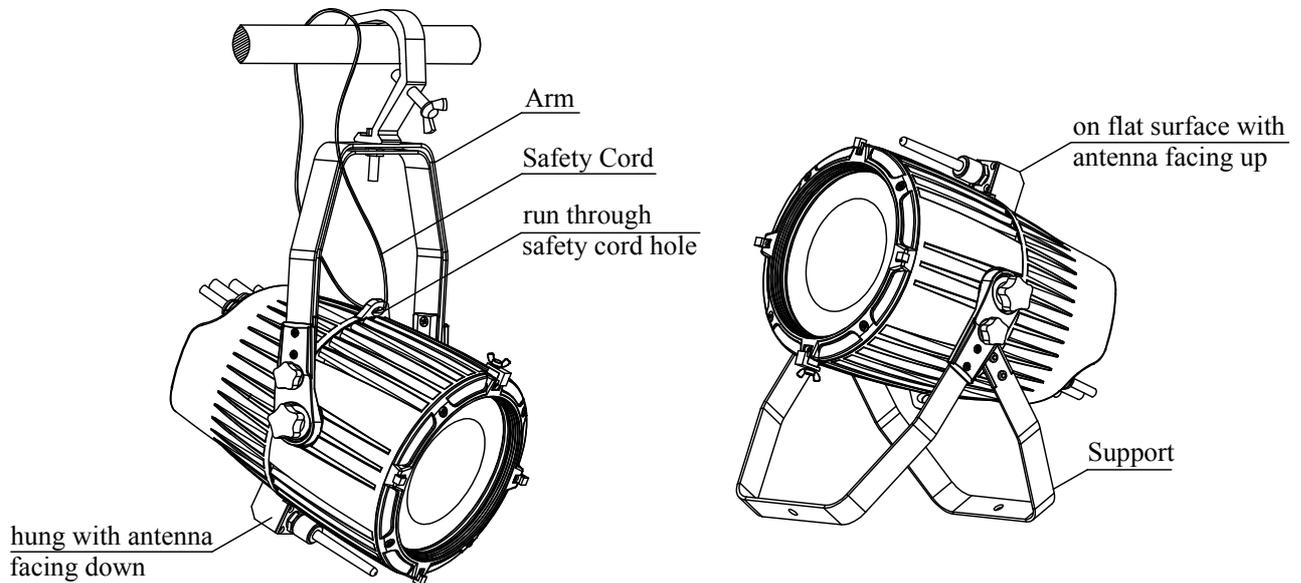
Product's External Functional Sketch:



No.	Name	Remarks
1	Frost panel (Optional)	Other components should be selected if frost panel selected
2	Barn Door (Optional)	
3	Knob	
4	Arm	
5	Support	
6	Safety cord hole	
7	XLR cable	Small
8	Power Cord	Big
9	Transparent Display Cover (Optional)	Used in harsh environment like dusty area or being under water

10	Wireless Antenna	Only Supplied with the version with Wireless control function
11	Butterfly screws	Installation and dismantlement of barn door

4. INSTALLATION



●RIGGING

Before moving the unit, lock the adjusting knob.

Take 1 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 the unit (if the unit is without wireless control function, while being hung, the antenna should face down)

●PLACE A UNIT ON A FLAT SURFACE

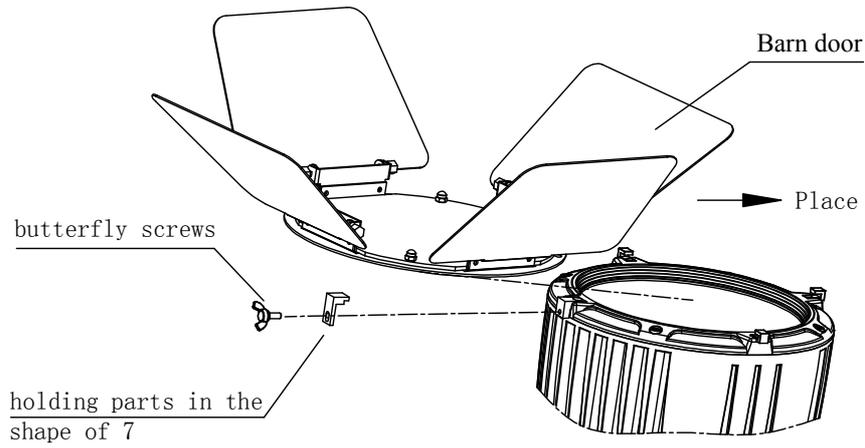
Before placing a unit on a flat surface, loosen the small knob with the support and make the angle between the arm and the support 60degrees. Tighten the small knob. Loosen the big knob and adjust the angle between the arm and unit as desired and then tighten it.(If the unit is with wireless control function, after the unit is placed on a flat surface the antenna should face up)

●INSTALLATION OF BARN DOOR

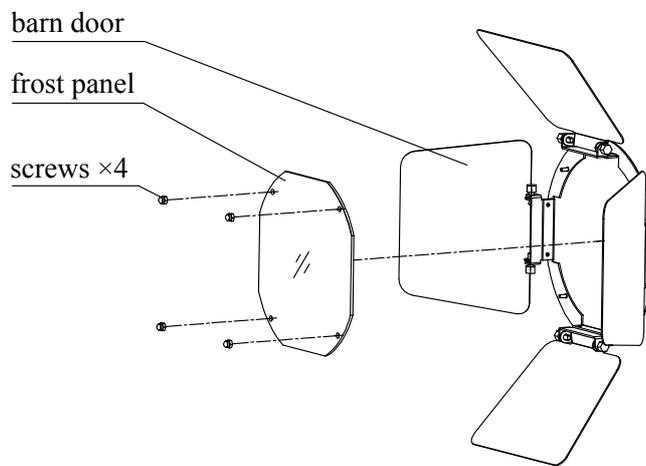
(Two different accessory options: a. Barn Door ; b. Barn door +Frost panel)

If only barn door, its installation is illustrated in the diagram below:

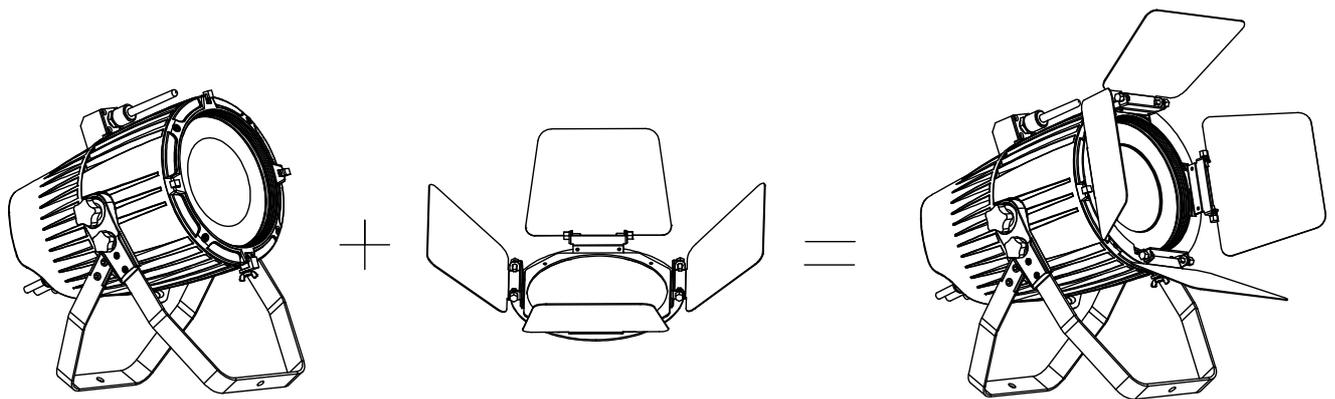
After loosening the butterfly screws(just loosen them, needn't remove them) in the front of the head and rotating the holding components in the shape of 7 by 90 degrees, place the barn door into the holding parts in the shape of 7. The installation is completed after the holding components are rotated backwards , butterfly screws are tightened, and **the safety cord with the barn door is run through the hole in the middle of the head**. The light closing effect can be reached by moving the barn door blades.



If the frost panel is also selected, it must be used in combination of the barn door. Its Installation and Dismantlement is illustrated in the diagrams below:



The unit with a barn door is as follow:



● **TRANSPORTATION**

Before transportation, tighten both knobs after the arm and support are overlapped.



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:

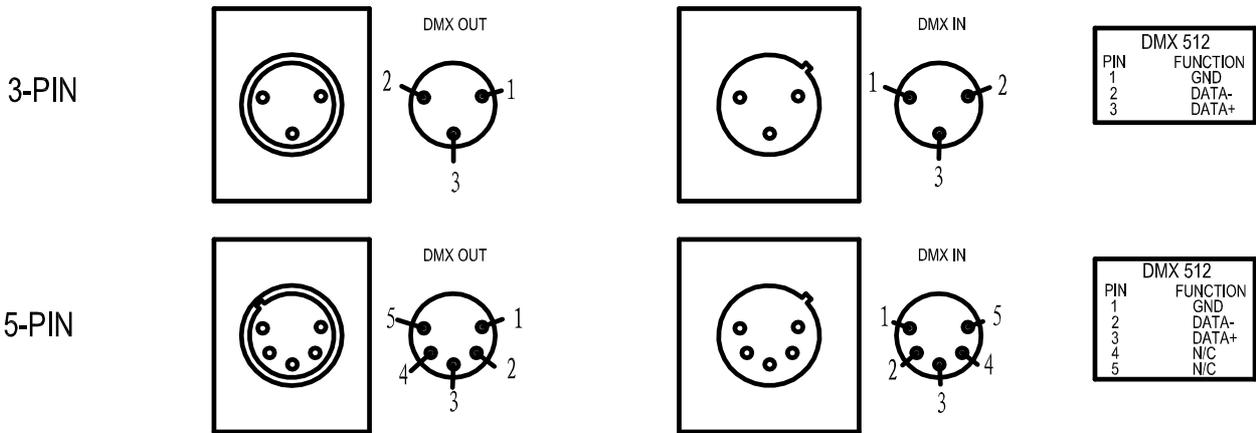
- L (live) =brown
- E (earth) =yellow/green
- N (neutral) =blue

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.



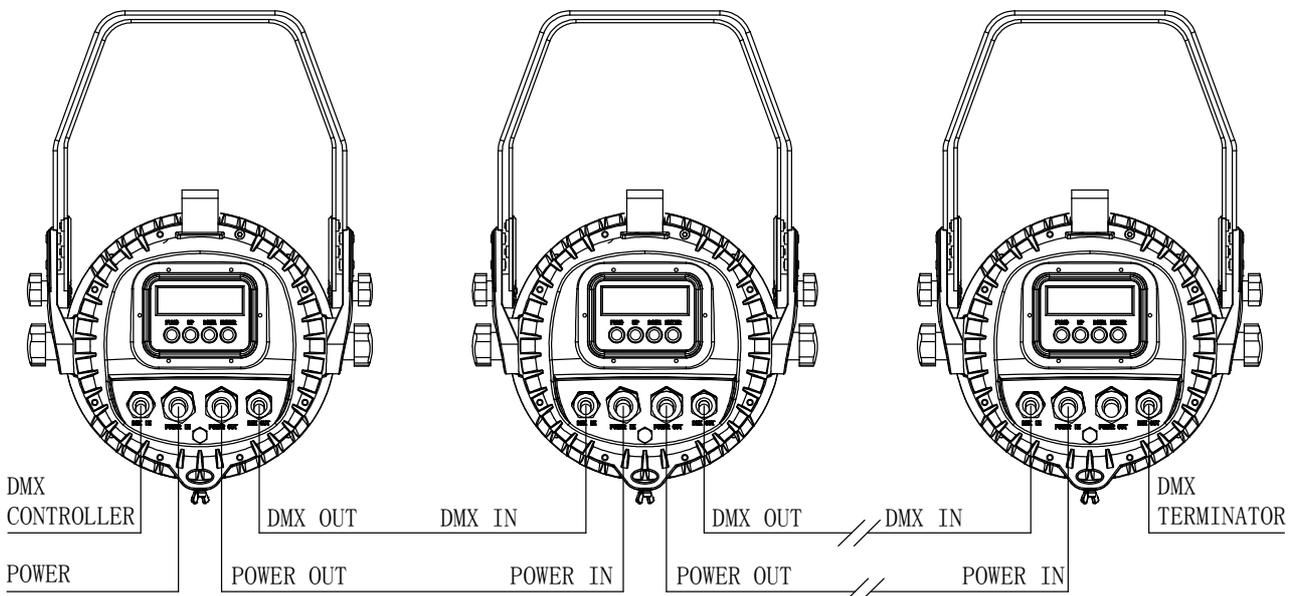
- The earth wire(yellow/green) must be connected to the ground. And electrical connection must be in accordance with the standards concerned.
- If any questions about the electrical installation, do not continue but consult a qualified electrician.
- DMX CONTROL CONNECTION:



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

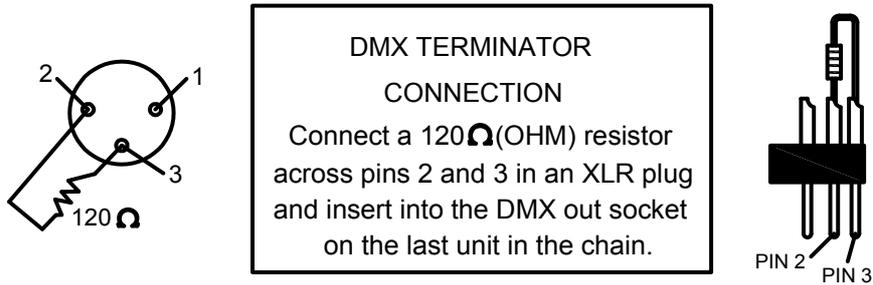
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



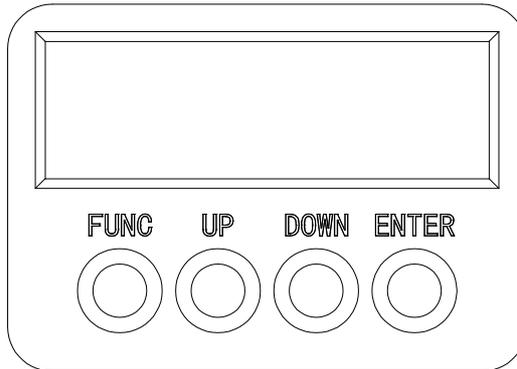
●**DMX TERMINATOR**

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 push button and LCD display.

Launch the projector and press button **ENTER** for more than 3 seconds to unlock the panel, the LCD will show the function menu of the projector, each main menu has its submenus and each submenu has a specific function. For details, please see the “OPERATION MENU” section.

Press button **UP** or **DOWN** if you want to browse through the various Setup Options.

Press button **ENTER** to save your settings or enter the submenu.

Press button **UP** or **DOWN** to change values(plus or minus)

Press button **FUNC**, it will return to the upper menu. If button **FUNC** not pressed, the default will show display status automatically.

●**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 Unit has 2 DMX modes. There are standard mode and extended mode. For example standard mode has 7channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 008, No. 3 projector’s address 014, No. 4 projector’s address 020, and so on.

Launch the projector. Press button **ENTER** more than 2seconds to unlock panel.

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

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

Press button **ENTER** to confirm; after powered on next time, the default will be last value saved

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

●**DMX WIRELESS CONTROL** (If the projector has the function)

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 (Those contents within the black box are only for the version with wireless control function)

1 st level menu	2 nd level menu	3 rd level menu	4 th level menu
DMX Address	Standard:001-506 Extended:001-501		
Config Settings	DMX Channel Mode (Default: STD6)	Standard 7 Extended 12	Default: Standard 7
	DMX Mode (Default: XLR First) (The version without wireless control does not have the function)	XLR First	Default: XLR First
		XLR Only	
		Wireless Only	
		Wireless First	
		Wireless To XLR	
	Unlink Wireless (The version without wireless control does not have the function)	Yes	
	LED OuptControl (Default: No)	No	
		Brightness	
		Timer Control	
	Master/Slave (Default: Slave)	Slave	Default: Slave
		Master	
	Color Offset	Red	128-255
		Green	128-255
		Blue	128-255
Language (Default: English)	English	Default: English	
	Chinese		
Lcd Light Setup	On	Backlight off 3 minutes after no button pushed	
	Off		
Display Invert	Yes		
	No		
Factory Settings	Yes		
Parameter Transm	Yes		
Clean Prgra	Yes		
Information	LED Temperature	Display of Lamp board temperature	
	Fixture use Time	Display of Fixture time	
	Software Ver.	X.X.X Display of Software Version	
Test Mode	Red		
	Green		
	Blue		
	White		

	RGB			
	RWB			
	RGBW			
	Zoom	000-255		
Operation Mode	DMX Mode	Yes		
	User Memory	Yes		
	Preset Memory (PR01~PR16)			
	User Progra Edit (ET01~ET16)	Dimmer		0-255
		Strobe		0-255
		Red		0-255
		Green		0-255
		Blue		0-255
		White		0-255
Zoom			0-255	
	Keep Time		0-255	

Note:

1. In one DMX chain, only one unit can be made as the master. Before master works, unplug its XLR cable connected with the console.
2. The parameters transmitted from the master include after several units are synchronized: DMX channel mode, display settings(display contrast excluded),operation mode(including user memory).During parameter transmission, set the unit transmitting data as master and others as slave

7. DMX PROTOCOL

Standard mode	Extended mode	Function	DMX	Description
1	1	Zoom	000-255	Linear Zoom (22° -55°)
2	2	Dimming	000-255	Linear Dimming 0%-100%
	3	Color Temperature	000-255	Linear adjustment
	4	Color Macros	000-016	No
			017-024	White(10000K)
			025-032	White(7200K)
			033-040	White(5600K)
			041-048	White(3200K)
			049-056	Cyan
			057-064	Yellow
			065-072	Magenta
			073-080	Red
			081-088	Green
			089-096	Blue
			097-104	Light blue
			105-112	Amber
			113-120	Orange
121-128	Pink			
129-255	Rainbow effect with speed from slow to fast between			
3	5	Red	000-255	Linear change from light to dark
4	6	Green	000-255	Linear change from light to dark

5	7	Blue	000-255	Linear change from light to dark
6	8	White	000-255	Linear change from light to dark
7	9	Strobe	000-007	No
			008-255	Strobe from slow to fast
10	Preset memory	000	No	
		001-015	Preset memory 1	
		016-031	Preset memory 2	
		032-047	Preset memory 3	
		048-063	Preset memory 4	
		064-079	Preset memory 5	
		080-095	Preset memory 6	
		096-111	Preset memory 7	
		112-127	Preset memory 8	
		128-143	Preset memory 9	
		144-159	Preset memory 10	
		160-175	Preset memory 11	
		176-191	Preset memory 12	
		192-207	Preset memory 13	
		208-223	Preset memory 14	
		224-239	Preset memory 15	
240-255	Preset memory 16			
11	User Memory	000	No	
		001-015	User Memory1	
		016-031	User Memory2	
		032-047	User Memory3	
		048-063	User Memory4	
		064-079	User Memory5	
		080-095	User Memory6	
		096-111	User Memory7	
		112-127	User Memory8	
		128-143	User Memory9	
		144-159	User Memory10	
		160-175	User Memory11	
		176-191	User Memory12	
		192-207	User Memory13	
		208-223	User Memory14	
		224-239	User Memory15	
240-255	User Memory16			
12	Preset Memory Speed	000-015	Speed 1, fastest	
		016-031	Speed 2	
		032-047	Speed 3	
		048-063	Speed 4	
		064-079	Speed 5	
		080-095	Speed 6	
		096-111	Speed 7	

		112-127	Speed 8
		128-143	Speed 9
		144-159	Speed 10
		160-175	Speed 11
		176-191	Speed 12
		192-207	Speed 13
		208-223	Speed 14
		224-239	Speed 15
		240-255	Speed 16, slowest

Note: DMX channel priority: Preset memory> user memory >Macros>RGBW dimming
While higher priority channels are in use, lower priority channels don't work.

8. TECHNICAL DATA

INPUT VOLTAGES: 100V~240V AC, 50/60Hz

RATED POWER :200W@220V

LIGHT SOURCE SPECIFICATIONS:

Qty	Single COB light source (RGBW)
Power Consumption	150W
Manufacturers Rated Lamp Life	50000hours

COLORS :

R/G/B/W linear color mixing with macros

DIMMING:

Linear Dimming from 0-100%

STROBE:

Electronic Strobe 0.5-33FPS.

ZOOMING:

DMX linear zooming

BEAM ANGLE:

22° -55°

CONTROL:

DMX512, 3 pin interfaces
6channels in standard mode and 11channels in extended mode
Master/Slave Mode
3 Operation Modes(DMX Mode, Preset Memory, user Memory)
Test Mode

OTHER FUNCTIONS:

LED lamp board temperature and fixture time available in the menus
DMX channel mode and settings displayed
LCD and inverted display
Display backlight automatically shut off after delay
Parameters like operation mode and etc. transmitted under synchronization
DMX512 wireless receiver
DMX512 wireless transmitter (optional)

HOUSING:

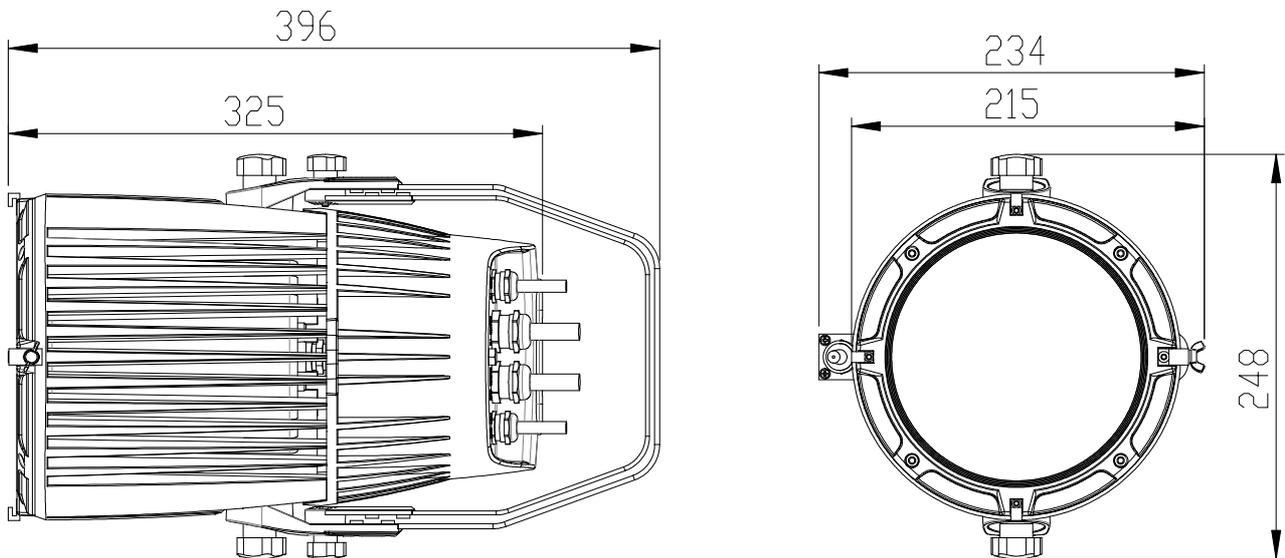
High tensile cast Aluminum alloy , IP67

Net Weight: 7.5kg Gross Weight(in Carton): 10.8kg

OPERATION TEMPERATURE:

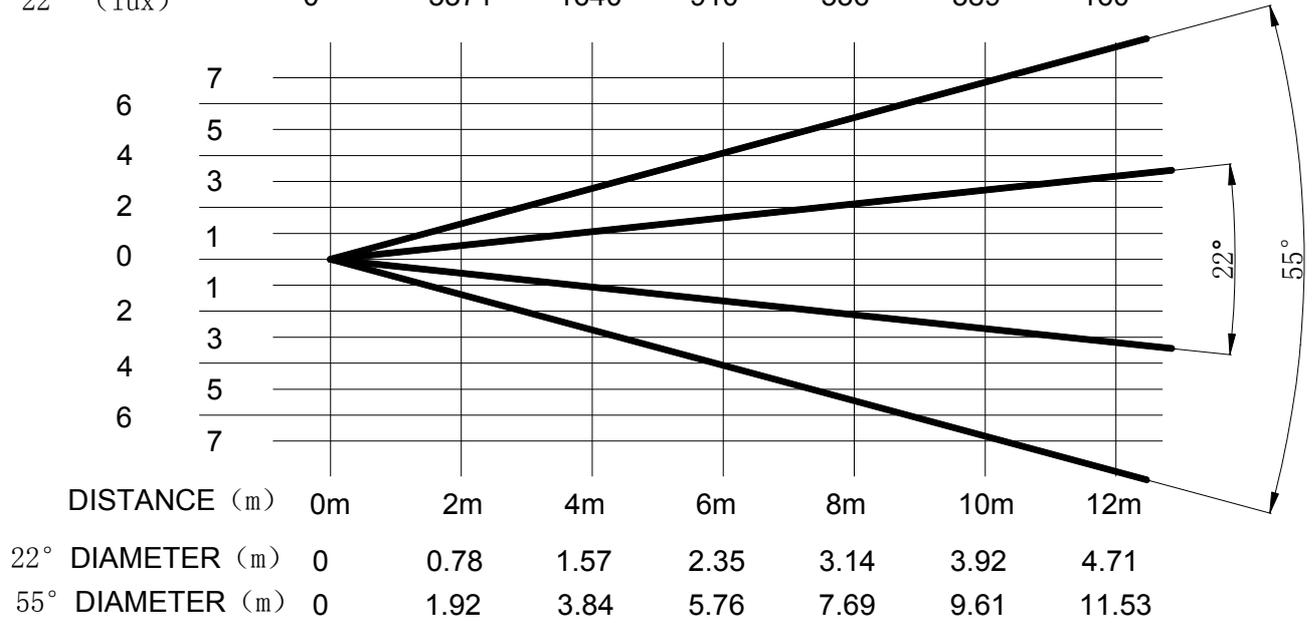
-20°C~40°C

SIZES:



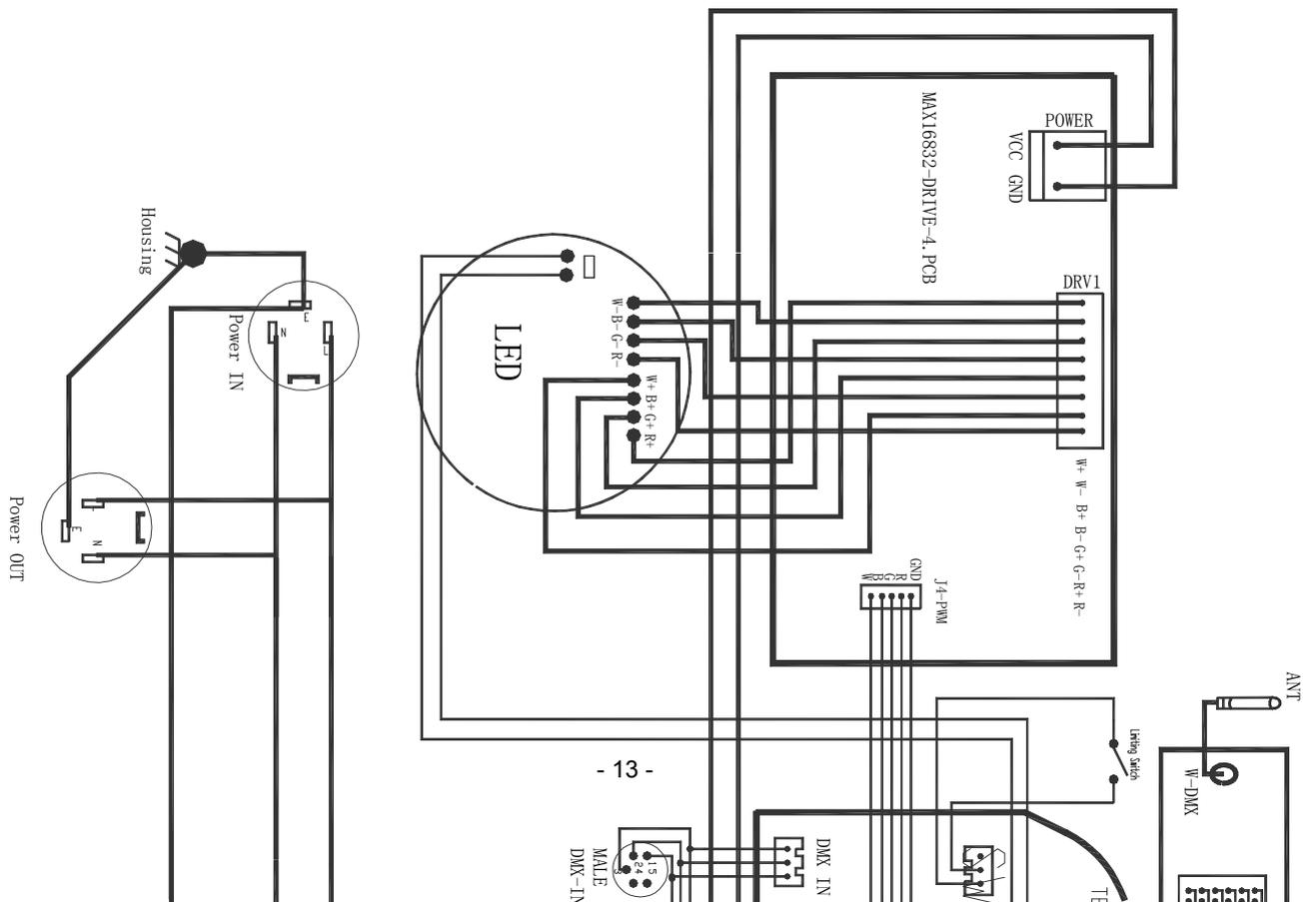
LIGHT OUTPUT:

55° (lux)	0	2447	612	272	153	98	68
22° (lux)	0	5371	1640	910	536	389	160



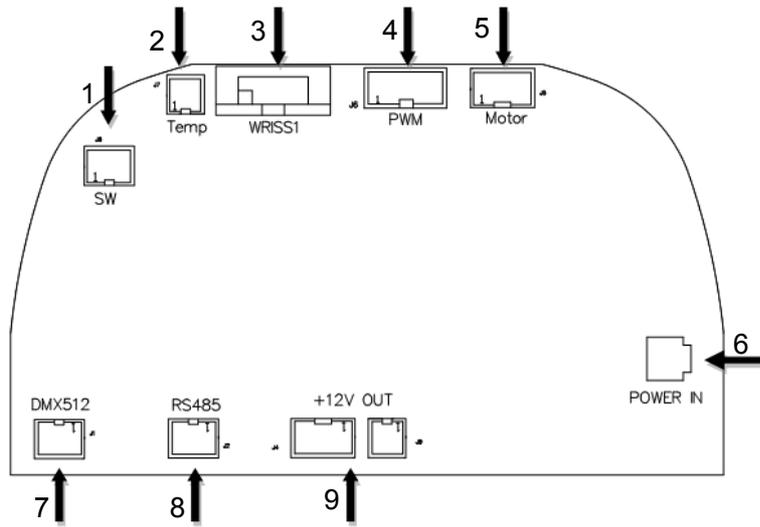
9. CIRCUIT DIAGRAM AND PCB CONNECTIONS

●CIRCUIT DIAGRAM



●PCB CONNECTIONS

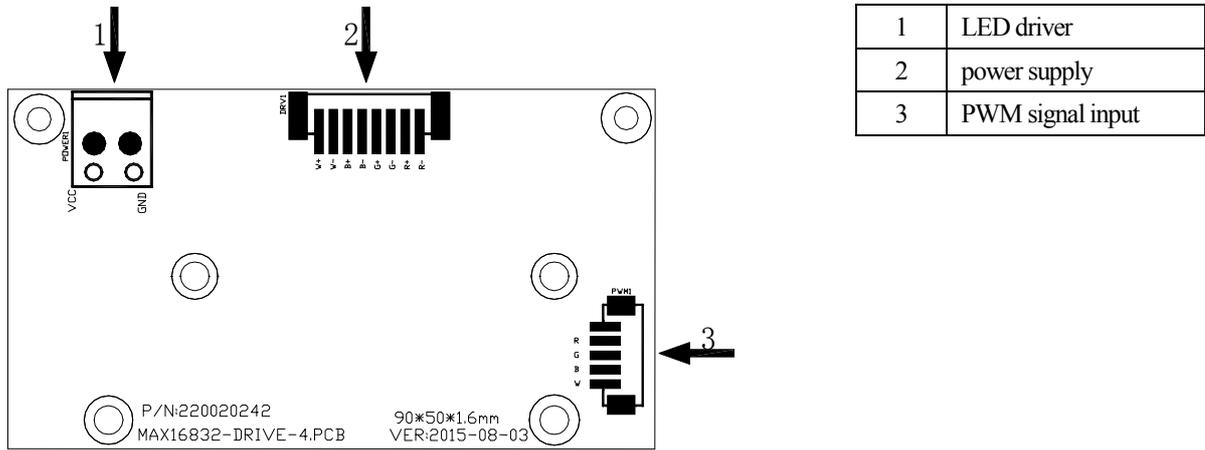
Master Board



Slaves

No.	Name
1	Travel Switch for stepping motor
2	Thermal switch
3	Wireless board
4	PWM signal
5	Stepping Motor
6	Power supply
7	Signal input
8	Signal output (Reserved)
9	Fan (Reserved)

No.	Name
-----	------



10. COMPONENT ORDER CODES

No.	Name	Code No.	Qty	Remarks
1	Power Switch	192010201	1	
2	LED light source	150020300	1	
3	LED Driver Board	230060486	1	
4	LCD master board	230060494	1	Only for version with wireless control
		230060496	1	Only for version without wireless control
5	Reflector	060060071	1	
6	Front Glass Panel	080090114	1	
7	Transparent Display Cover	290190109	1	Optional
8	Seal for Transparent Display Cover	290019142	1	Optional
9	Wireless Antenna	W006506	1	Only for version with wireless control
10	Wireless Receiver	W006511	1	Only for version with wireless control

PR LIGHTING LTD.

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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: 20170904