

ARC LED 372

PR-8805

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
Barn Door	1	Set	Optional
G clamps	2	Pcs	
XLR connector	1	Set	Male and female
Safety cord	1	Pc	
User manual	1	Pc	
Transparent Water proof panel + seal+ screws X8	1	Set	Optional for harsh environment installation like underwater, dusty area

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

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

Any future technical change in the user manual won't be with any notice.

Note: For the products made by Guangzhou PR lighting Ltd, the warranty for the whole product is one year starting from the delivery date but the projector 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 unit can be used indoors and outdoors and for its IP rating .please refer to Technical Data section of this user manual

•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

•If projector's lamp, lens and screen's protective cover have obvious damage, i.e., the extent to which its performance has been compromised, like cracking or deformation. Please stop operation and contact the manufacture for the replacement with original parts, otherwise the normal operation will be affected.



•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 5 minutes at constant temperature environment, the temperature of the housing of the projector is 55°C. After stable operation, its temperature is 70°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  flammable surface.
- Do not project the beam straightly on combustible items and the minimum distance between the projector and illuminated items is 5m.
- 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 20 days. Keep lens clean and do not touch optical parts with bare hands.

Special note:

For any waterproof projector, it's normal if there is some mild mist on the lens while in use.



- 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.

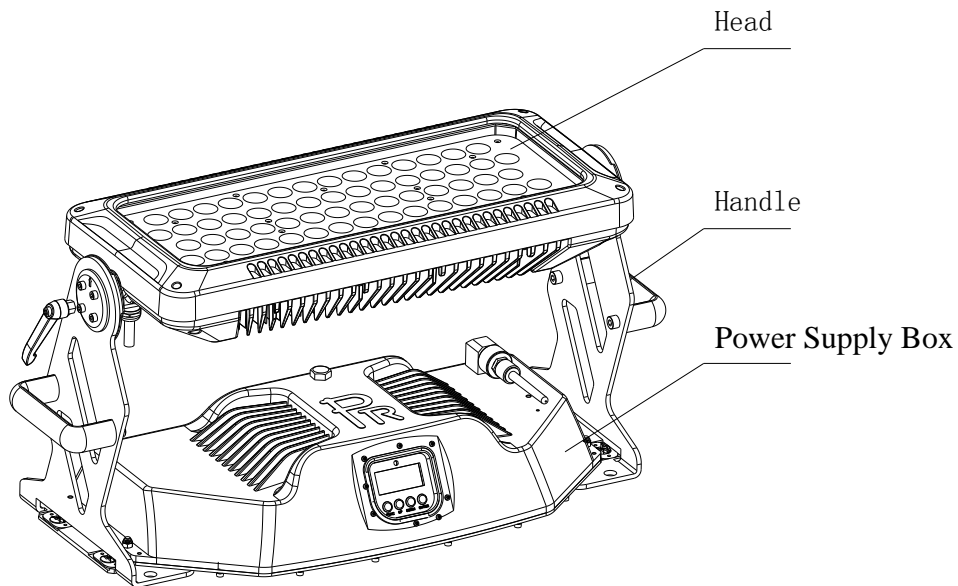


- To avoid internal damage, sun light or other light mustn't penetrate into the projector via front lens whether it runs or not
- Do not use alcohol or other organic solvent to clean the housing to avoid damage.
- Do not use any solvent with chemical elements to clean color filters or hot mirror.

•TROUBLESHOOTING

PROBLEM	ACTION
The projector can't be switched on	<ul style="list-style-type: none">➤ Check if the power cord is connected well➤ Power Supply damaged or not connected well, a qualified technician needed➤ Control Board is not connected well and a qualified technician needed
The projector can be switched on, but the LED lamp can't be turned on and controllable	<ul style="list-style-type: none">➤ LED lamp board is not connected well and a qualified technician needed
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.
Beam appears dim, Low in brightness	<ul style="list-style-type: none">➤ Environment is too hot, thus making the projector very hot. Necessary cooling measures needed

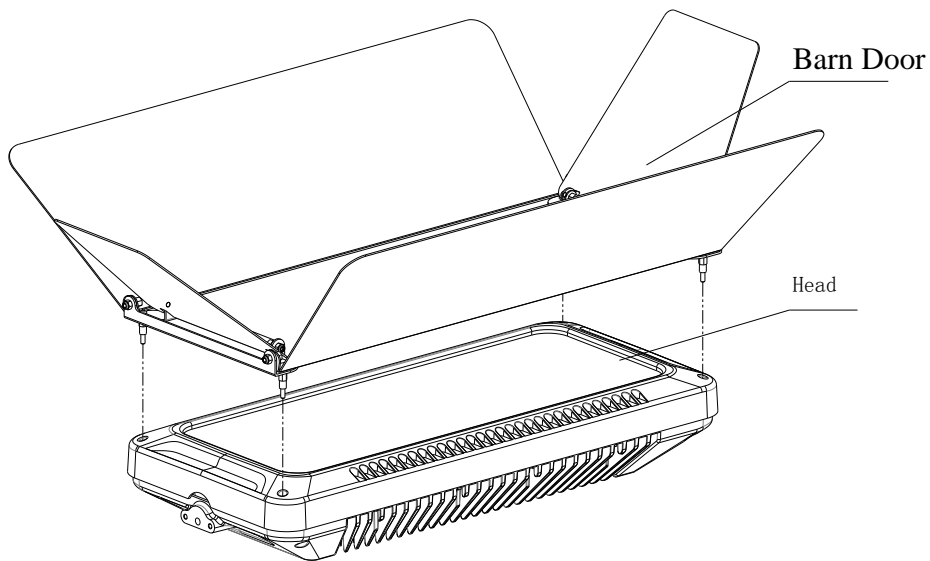
3. APPEARANCE



4. INSTALLATION OF BARN DOOR

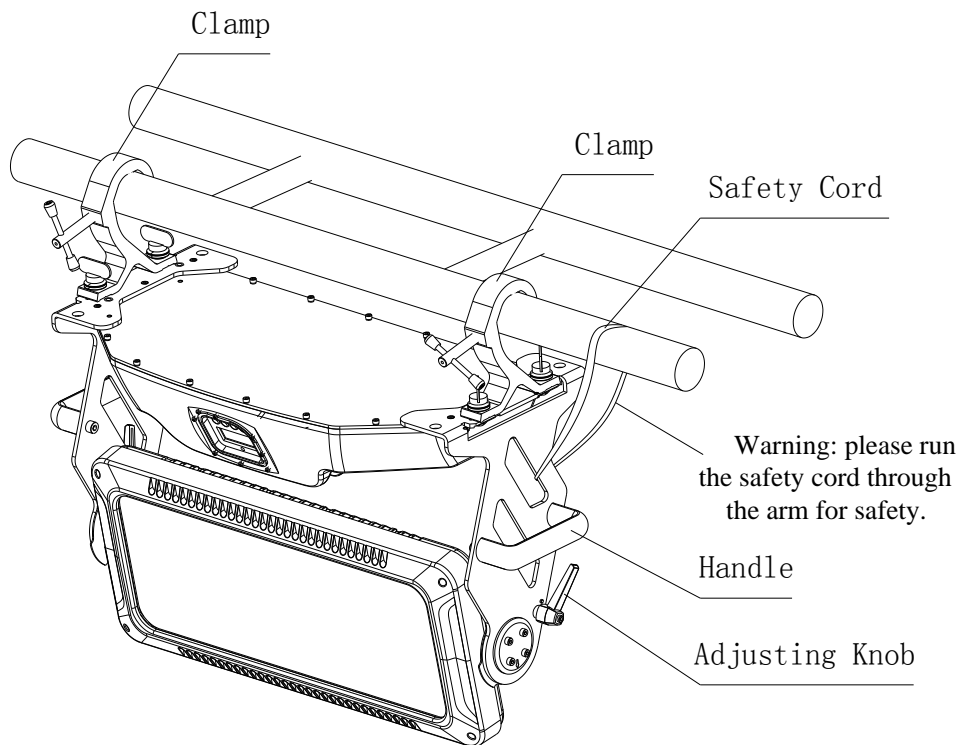
If the barn door is supplied, its installation is as follows:

Place barn door support 14 via threads in the head 15, then use 4 screws 12 to mount the barn door on the barn door support to complete its completion. To achieve light closing effect desired, adjust the angle of the barn door blades.



5. INSTALLATION(For reference only)

•RIGGING



Before moving the unit, lock the adjusting knob.

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 unit.



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

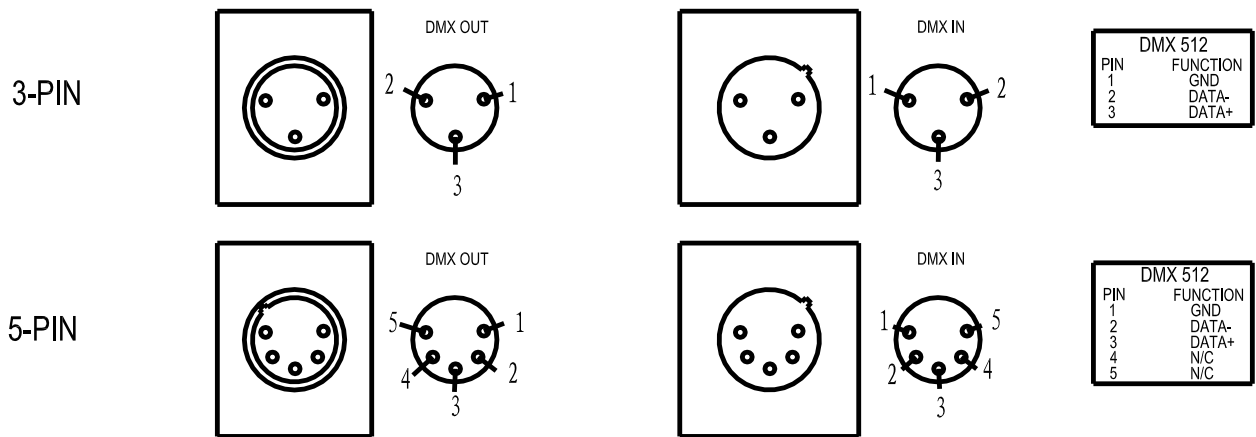
N (neutral) =blue

Note: Before power connection, please ensure the power supplied must match what the nameplate says.



- 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.

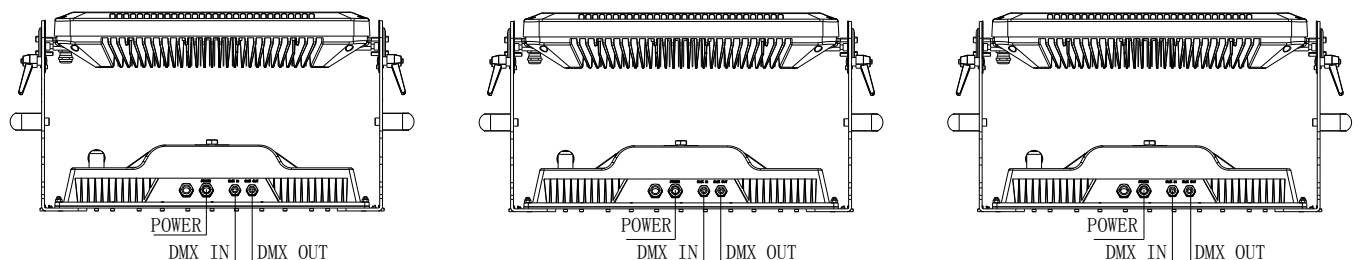
DMX CONTROL CONNECTION:



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 3 pin (which are included with the projector) or 3 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).

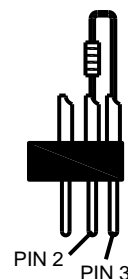
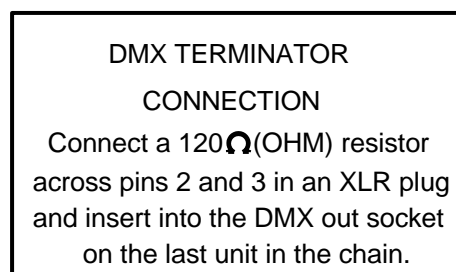
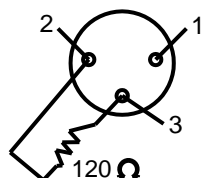
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



DMX TERMINATOR

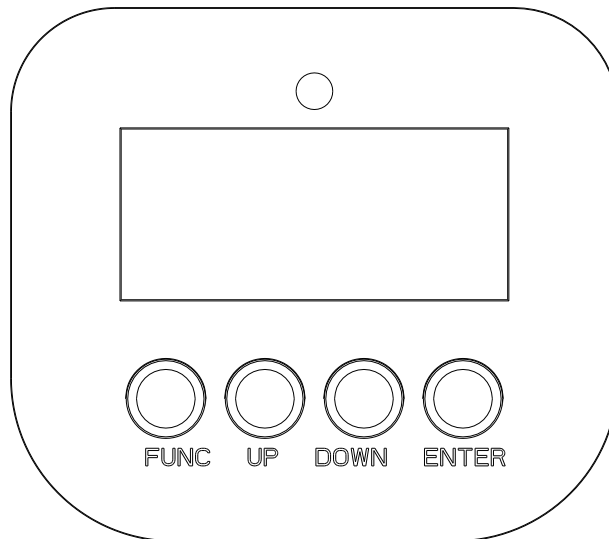
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

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.



6. 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 6 channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 007, No. 3 projector’s address 013, No. 4 projector’s address 019, 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 Settigns” 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 Settigns .

•STAND-ALONE MODE

Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically.

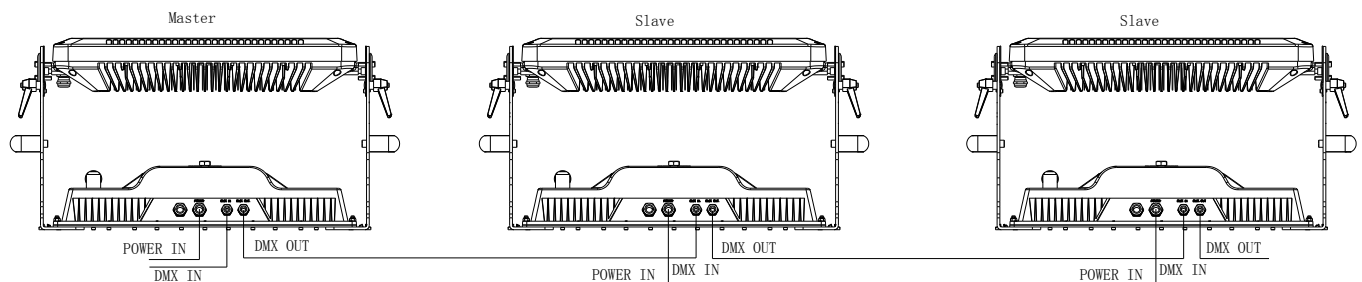
DMX address can be set at any number within 512.

•MASTER/SLAVE MODE

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

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

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



7. OPERATION MENU

1 st level menu	2 nd level menu	3 rd level menu	4 th level menu
DMX Address	Standard mode:001 – 507 Extended: 001-502 HSI:001-508 HSIC:001-507		
Config Setup	DMX Channel Mode	Standard 6	Default: Standard 6
		Extended 11	
		HSI 5	
		HSIC 6	
	DMX Mode	XLR Only	Default: XLR First
		Wireless Only	
		XLR First	
		Wireless First	
		Wireless To XLR 出	
	Unlink Wireless	Yes	
	LED OuptControl	No	Default:NO
		Brightness	
		Timer control	
	MasterSlave	Slave	Default: Slave
		Master	
	Color Offset	Red	128-255
		Green	128-255

		Blue	128-255
	Language Setup	English	Default: English
		Chinese	
	Lcd Light Setup	On	Backlight off 3 minutes after no button pushed
		Off	
	Display Invert	Yes	
		No	
	Factory Setting	Yes	
	PRM Transmit	Yes	
	clean Progra	Yes	
INFO	LED Temperature	XXX Display of Lamp board temperature	
	Fixture use Time	XXXX Display of Fixture time	
	RDM Device Lab.	RDM ANSI E1.20	
	Software Ver.	X.X.X Display of Software Version	
Test Mode	Red		
	Green		
	Blue		
	White		
	RGB		
	RG		
	RB		
	GB		
	RWB		
	RGBW		
Operation Mode	DMX Mode	Yes	
	User Memory	Yes	
	Preset Memory (PR01~PR16)		
	User Progra Edit (ET01~ET16)	Dimmer	000 - 255
		Strobe	000 - 255
		Red	000 - 255
		Green	000 - 255
		Blue	000 - 255
		White	000 - 255
		Hue	000 - 255
		Saturation	000 - 255
		Keep Time	000 - 200 (0-20S)
	Current time	Hour	0-23
		Min	0-59
Timer brightness	LED on time	Hour	0-23
		Min	0-59
	LED off time	Hour	0-23
		Min	0-59
	LED on by bri.	001-100	
	LED off by bri.	001-100	
	Check Brightness	001-101	

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 slaves

[1] If the unit is set as controlled by the timer, unit-on time is set as t1,unit-of as t2 and current time as t3

If $t2 > t1$, when $t1 \leq t3 < t2$, the unit is on, otherwise off

If $t2 < t1$, when $t2 \leq t3 < t1$, the unit is off, otherwise on

If $t2 = t1$, the unit is on

[2] if the unit is set as controlled by environment brightness: the brightness that turns the unit on is set as b1 and the one that turns it off is b2, the current environment brightness is b3

If $b1 \leq b3 < b2$, the unit is on, otherwise off , the program has set $b3 \geq b1$

If $b1 = b2$ the unit is on

8. DMX PROTOCOL

Standard mode	Extended mode	HSI	HSIC	Function	DMX	Description
		1	1	Hue	000-255	8bit
		2	2	Hue Fine	000-255	16bit
		3	3	Saturation	000-255	
1	1	4	4	Dimmer	000-255	Linear Dimmer (0%-100%),16bit
	2		5	Color Macros	000	Linear adjustment
					001-255	CT linear adjustment
	3				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
2	4			Red	000-255	Linear change from light to dark
3	5			Green	000-255	Linear change from light to dark
4	6			Blue	000-255	Linear change from light to dark
5	7			White	000-255	Linear change from light to dark
6	8	5	6	Strobe	000-007	No
					008-255	Strobe from slow to fast
	9			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
	10			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
	11			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.

9. LED INDICATION

Red LED indication	On	DMX signal OK
	Off	No DMX signal
Blue LED indication	On	Linked with a transmitter
	Off	Not linked with any transmitter
	Flash	Being linked with a transmitter or losing link with it or without any wireless signal

Note: Because Red and Blue LED indications are in one, it becomes purple if both are on,

10. TECHNICAL DATA

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

RATED POWER :230W@220V

LIGHT SOURCE SPECIFICATIONS:

Qty	72pcs of LED light sources (18pcs for each of R,G,B and W)
Power Consumption	3W
Manufacturers Rated Lamp Life	50000hours

COLORS

RGBW with macros

Linear color temperature adjustment

DIMMER

Linear Dimmer from 0-100%

STROBE

Electronic Strobe 0.5-33.FPS.

BEAM ANGLE

Beam Angle(1/2peak) $\theta_{1/2}$: 4.5 °

CONTROL:

International Standard DMX512 Signal, 3 pin DMX512 interfaces

Standard mode 6 channels, extended mode 11 channels, HSI color phase saturation mode 5 channels, HSIC color phase saturation color temperature mode 6 channels.

6channels in standard mode and 11channels in extended mode

Wireless DMX Signal Control

Master/Slave Synchronized control 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 invertible display

Display backlight automatically shut off after delay

Parameters like operation mode and etc. transmitted under synchronization

Environment brightness and timer controllable

RDM Function

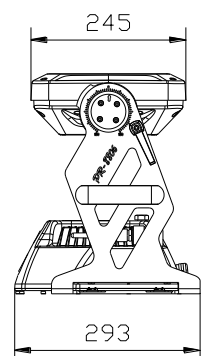
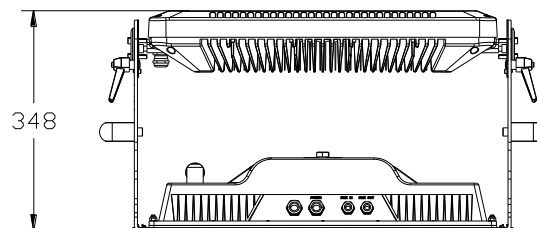
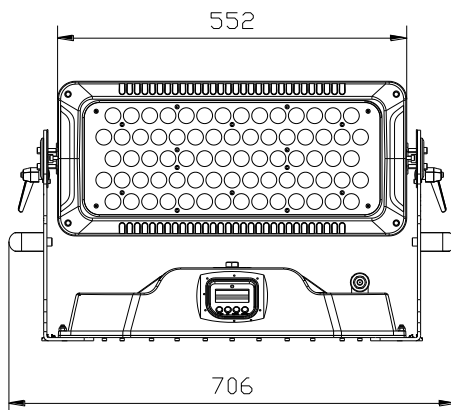
HOUSING: High tensile cast Aluminum alloy , IP67

NET WEIGHT: 18Kg

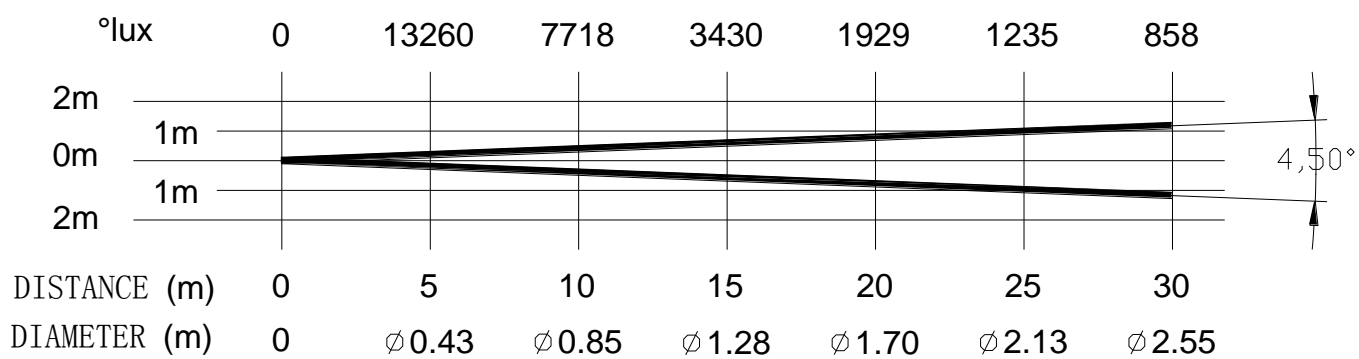
OPERATION TEMPERATURE:

45 °C at maximum

SIZES:



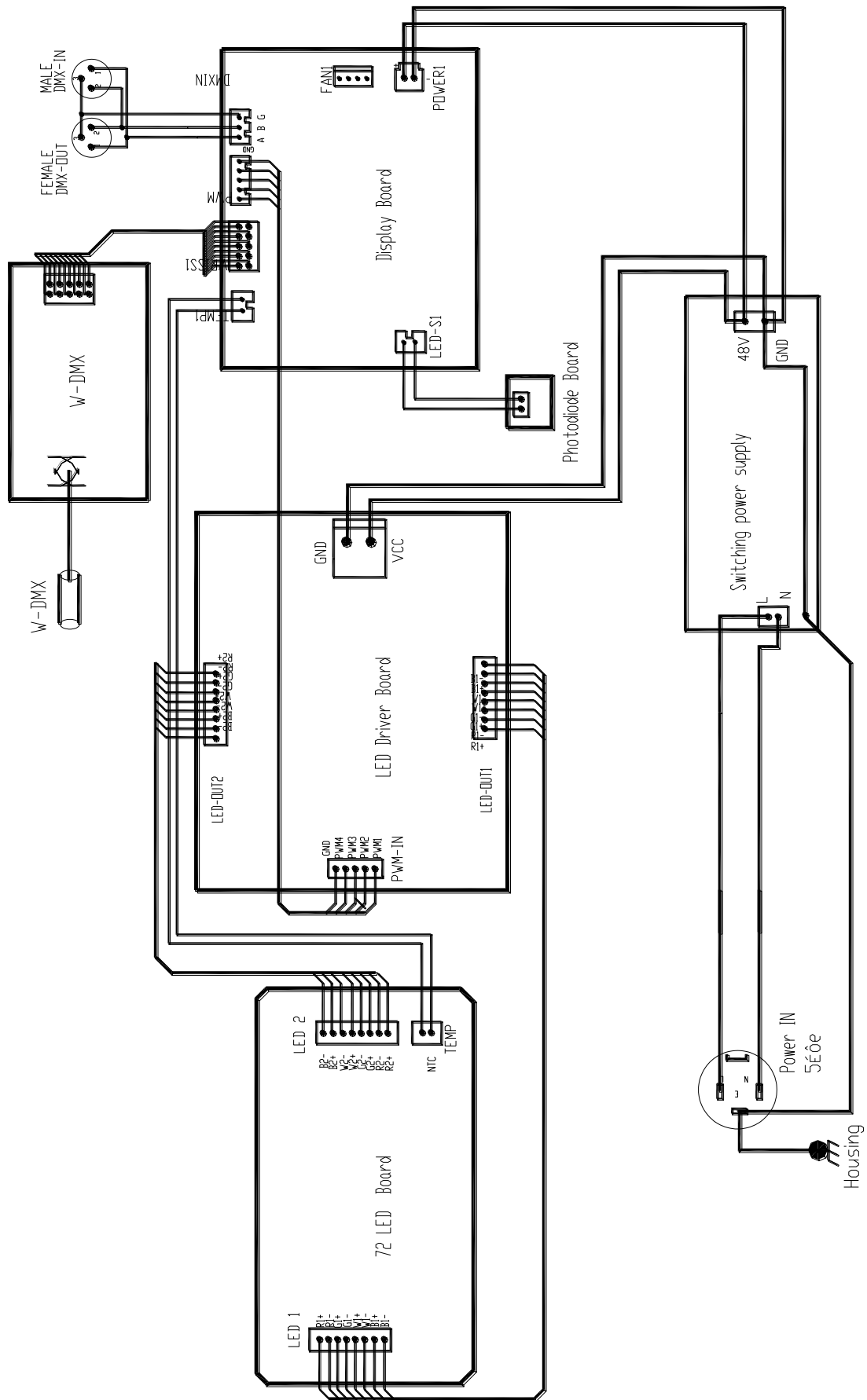
LIGHT OUTPUT(45 lens)



11. CIRCUIT DIAGRAM AND PCB CONNECTIONS

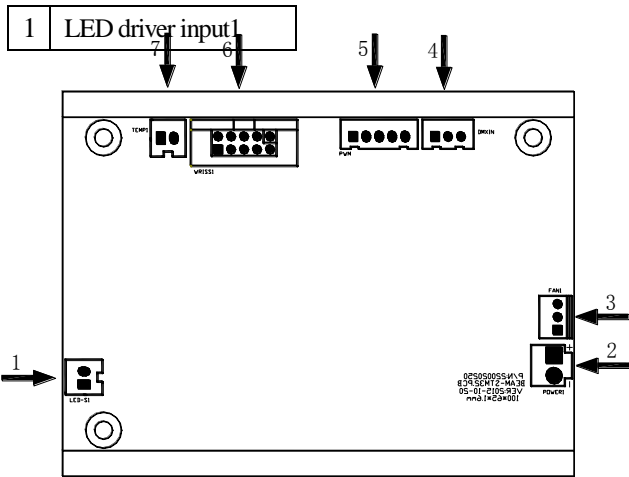
.CIRCUIT DIAGRAM

PCB CONNECTIONS



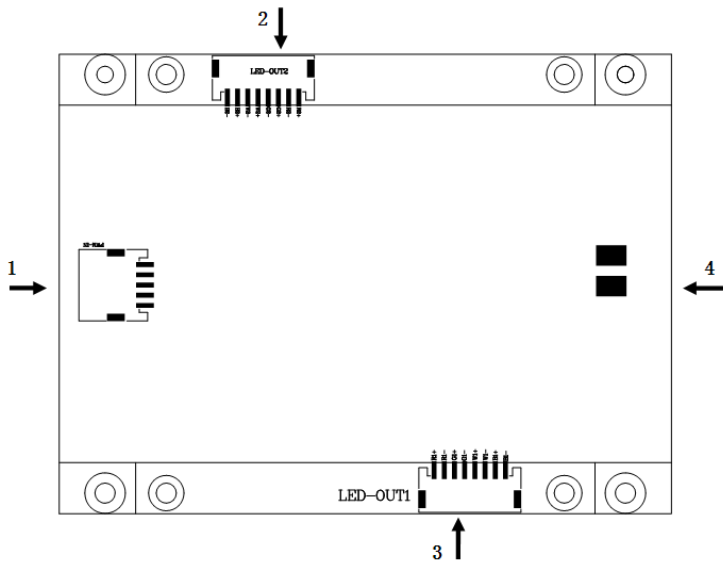
PR-8805

•PR-8805-MASTERBOARD



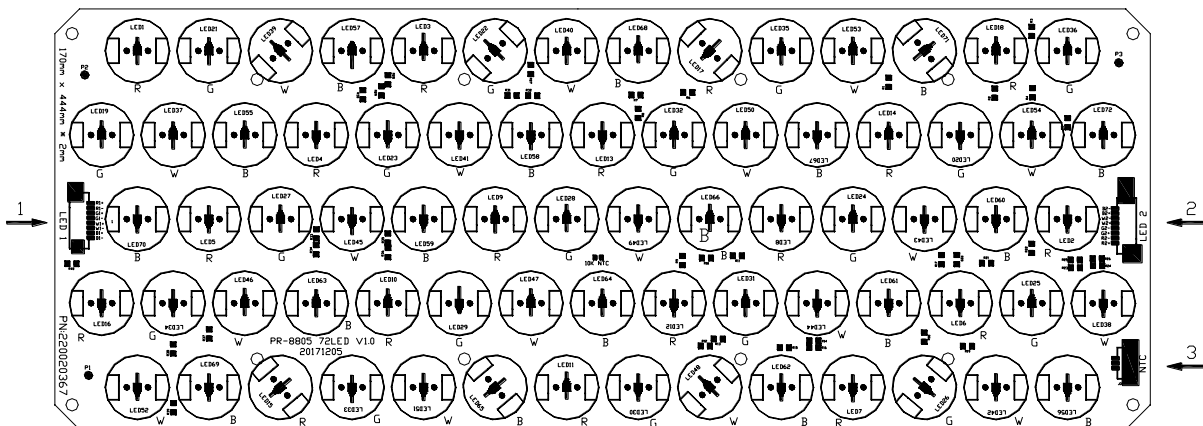
1	Optical sensor
2	Power supply
3	Fan
4	Signal input
5	PWM signal
6	Wireless board
7	Thermal switch

•PR-8805-DRIVER BOARD



1	PWM signal input
2	LED driver output2
3	LED driver output1
4	Power input

•PR-8805-LED LAMP BOARD:



2	LED driver input2
3	Thermal switch

12. COMPONENT ORDER CODES

NO	NAME	CODE NO.	QTY	REMARKS
1	Toughened glass	080090052A	1	Size same as 080090052 toughened glass bran- zuoming
2	PR-8800 driver board	230060476	1	
3	Transparent waterproof board	290010190	1	98.4×90.4×5
4	Power switch	192010213	1	
5	PR-8805 LED lamp board	230060843	1	
6	PR-8805 main board	230060844	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!

P/N: 320020614
Version: 20171124