

XPar 1012

PR-8208

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	
XLR Cable	2	Pcs	
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 + Frost panel(Optional)	1	Set	Optional
Shading barrel	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 units 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

	<h2>NOTE</h2> <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.

 <p>Warning</p>	 <p>User Manual</p>	 <p>Electrical shock</p>	 <p>Goggles</p>	 <p>Protective Gloves</p>	 <p>Flames</p>	 <p>High Temperature</p>
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- 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 with lower protection level is only used indoors, for those with IP65, they can be used both indoors and outdoors.
- 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.
- It’s forbidden to make the unit with lower protection level directly or indirectly contact water or 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
- If the lamp, lens and screen protective cover of the a lighting fixture have obvious damage, i. e., to the extent that it hurts the performance like cracking or deformation. Please stop use it and replace them with the original parts, otherwise its performance will be compromised.



- 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.



- Under normal temperature, after being stable, the unit's surface (the surface of the heat sink) temperature will be 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.
- 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 combustible items and the minimum distance between the projector and illuminated items is 10m.
- A projector should be installed with good ventilation and the minimum distance between the projector and walls is 50cm. At the same time, please ensure the fans and air inlets and outlets are workable.



2. INSTRUCTIONS

•CLEANING AND MAINTENANCE

Before the normal use of the unit, its protecting device needs to be periodically checked. For example, check if the fuse is blown up. If yes, replace it with a fuse with same ratings. Please be noted that it must be a fuse with exactly same ratings.

The unit has over-temperature protection device(if over-temperature, the device will shut off the power supply). Please periodically check cooling system. The cooling system includes cooling fans, heat sink and other cooling components; please check if the fans run normally. Check if the fans and air vents are free of blockage, making sure air vents are not blocked. The fans need to be cleaned every 15day periodically.

For the units with optical lens, reflector and hot mirror, because of the accumulation of the smoke, oil and dust on the lens, the light output will be compromised. For the reliable use of the unit, it is very necessary to keep it clean. Internal and external optical lens, glass panels, reflectors and hot mirrors need to be cleaned periodically for the optimized light output.

The unit has water-proof function at some level. Unless it is confirmed by a qualified person for the replacement of some internal components, dismantlement of it is forbidden. For the unit of this type, if without any cooling fan, just keep it clean. If with fans, please refer descriptions above for cleaning.

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.

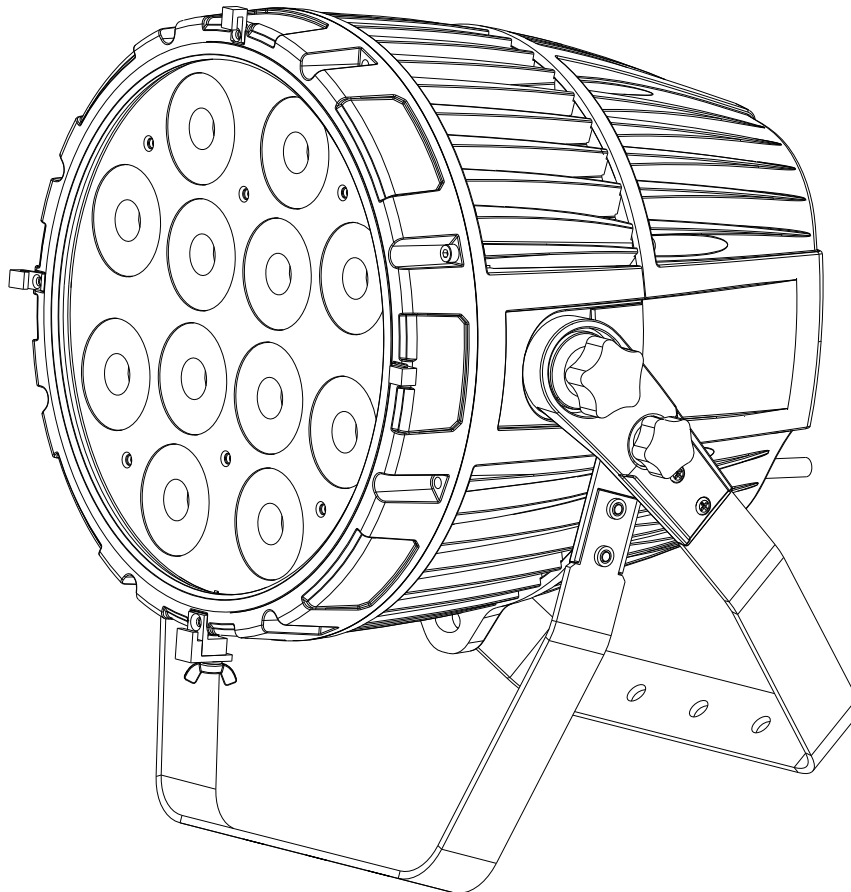


- To avoid internal damage, sun light or other light mustn't penetrate into the projector via front lens whether it runs or not
- Do not use alcohol or other organic solvent to clean the housing to avoid damage.
- Do not use any solvent with chemical elements to clean color filters or hot mirror.

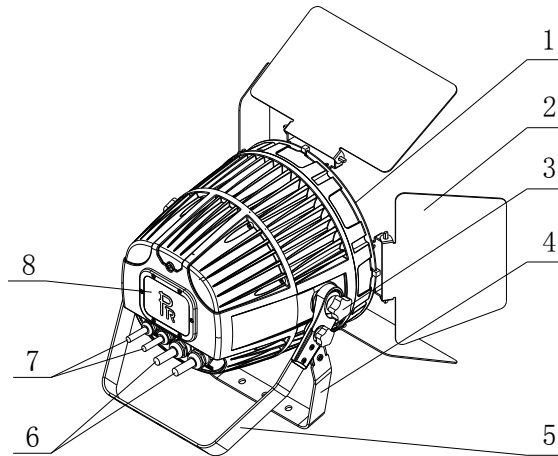
●TROUBLESHOOTING

PROBLEM	ACTION
The projector doesn't switch on	<ul style="list-style-type: none"> ➤ Check the power cord connection. ➤ Power Switch fails or is not connected well, call a professional technician for repairing and checking. ➤ Control board is not connected normally, call a professional technician for repairing and checking .
The project can be turned on, but the LED lamps can't be on	<ul style="list-style-type: none"> ➤ LED lamp board is not connected well, call a professional technician for repairing and checking.
The LED lamps can be on, but not controlled by DMX	<ul style="list-style-type: none"> ➤ Check DMX Start Address. ➤ Check if XLR cable fails or not.
The brightness decreases obviously	<ul style="list-style-type: none"> ➤ Ambient temperature is too hot which makes the projector too hot, please take appropriate ventilation measures.

3. APPEARANCE

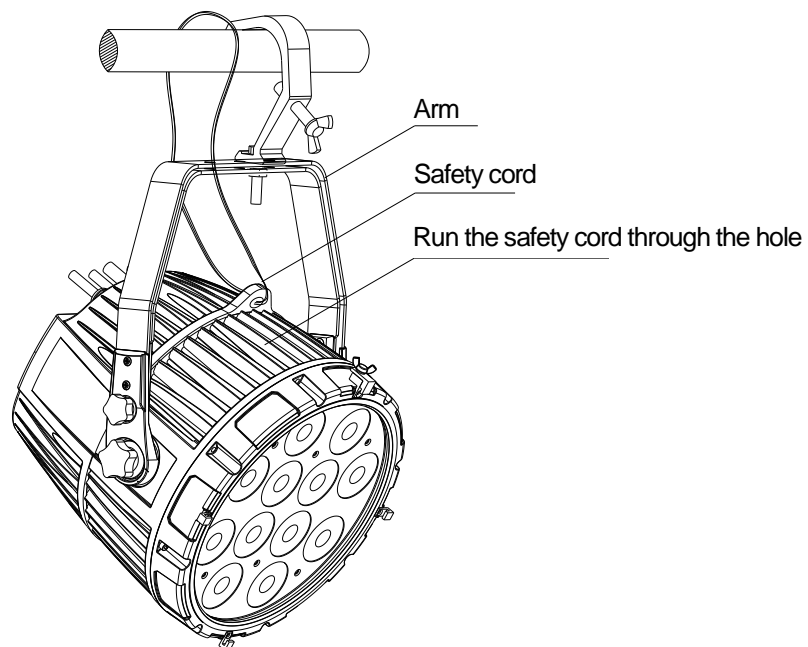


Product's External Functional Sketch:



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

4. INSTALLATION



●**RIGGING**

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 Loosen the bigger knob and adjust the head's angle for the effect desired and then tighten it. The installation is completed.

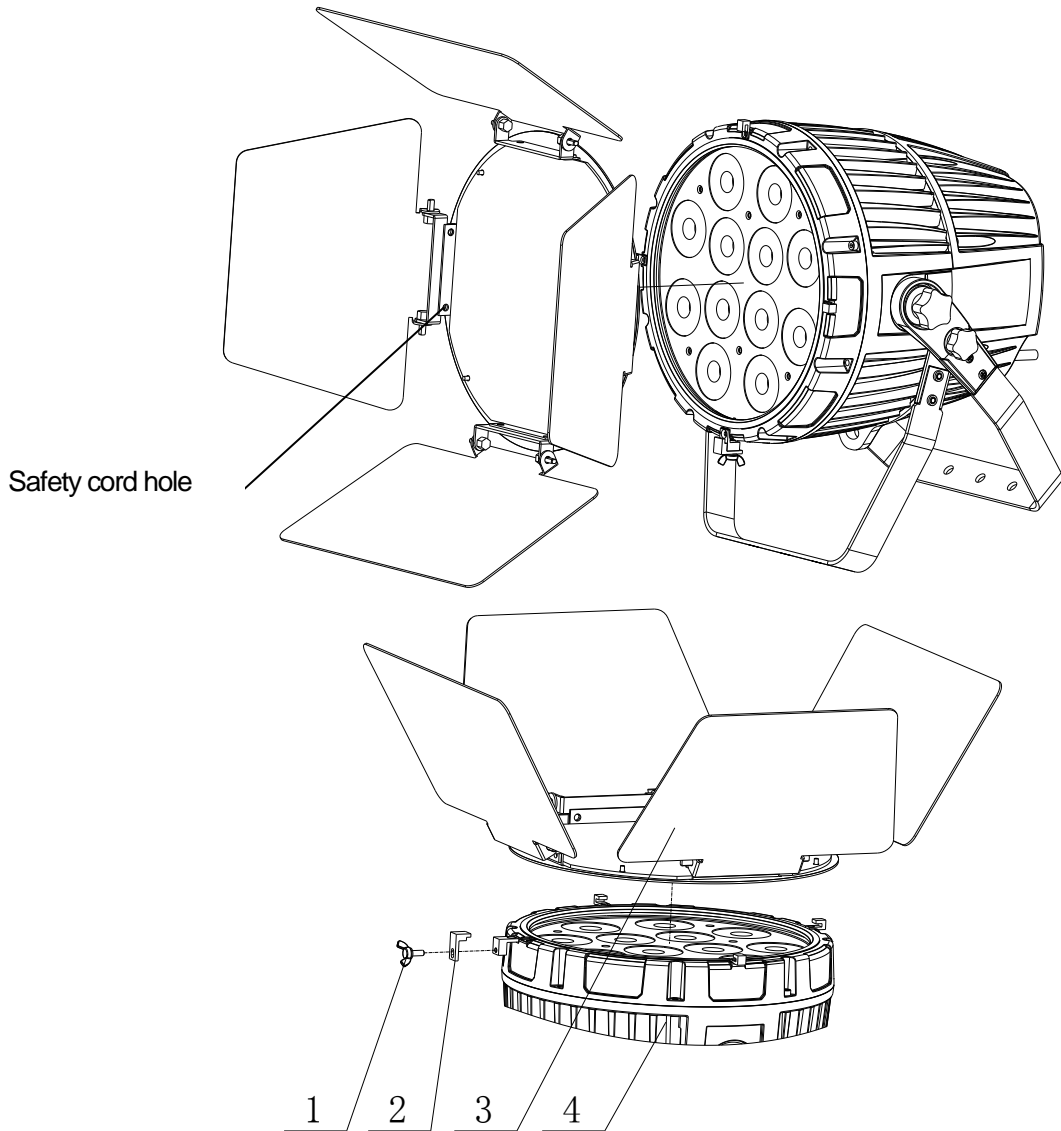
●**PLACE A UNIT ON A FLAT SURFACE**

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.

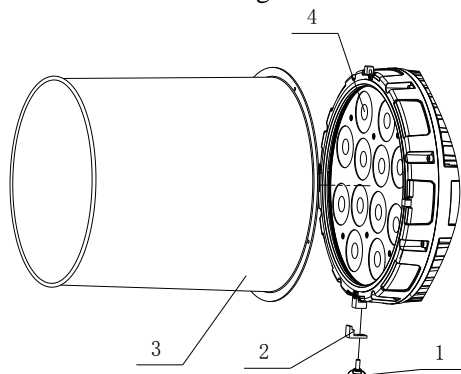
●**INSTALLATION OF THE ACCESSORIES**

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

Loosen the screw in the shape of a butterfly(1) in the front part of the unit(4), turn the clipping component in the shape of 7 by a little amount, then place the barn door(3). Turn the clipping component backward and tighten the butterfly screws. Run one end of the safety cord through safety cord hole on the unit's body and the other end of it through the safety cord hole on the barn door to finish the installation of the barn door. Turn the barn door, and open or close the barn door blades to reach the effect desired.

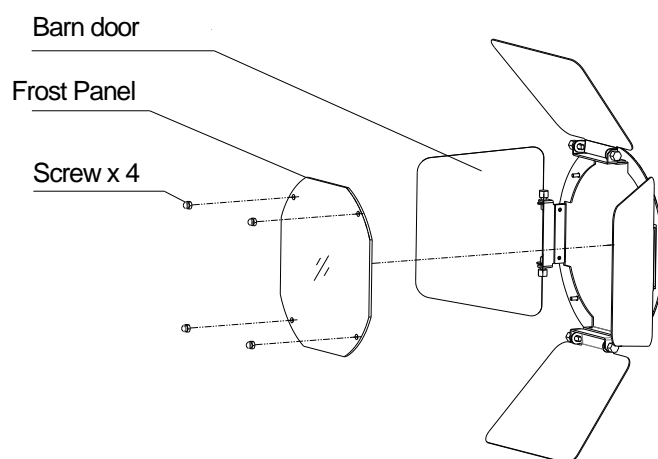


If the Top Hat is selected, Its Installation is illustrated in the diagrams below:



Loosen the screw in the shape of a butterfly(1) in the front part of the unit(4), turn the clipping component(2) in the shape of 7 by a little amount, then place the Top Hat (3). Turn the clipping component(2) backward and tighten the butterfly screws(1). Run one end of the safety cord through safety cord hole on the unit's body and the other end of it through the safety cord hole on the Top Hat to finish the installation of the Top Hat.

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



●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.

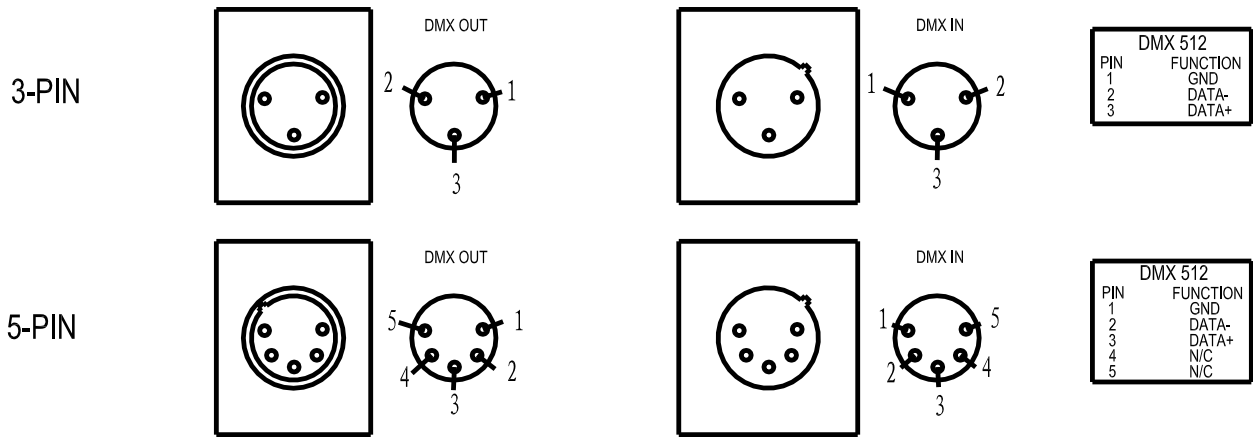
Note: If projectors are connected in series, please connect POWERIN port of the 1st projector with the Power Mains, then connect its POWER OUT with POWER IN of the 2nd projector, and so on till all fixtures are connected. If the voltage supplied is 200V-240V, the maximum projectors connected is 8pcs, 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.

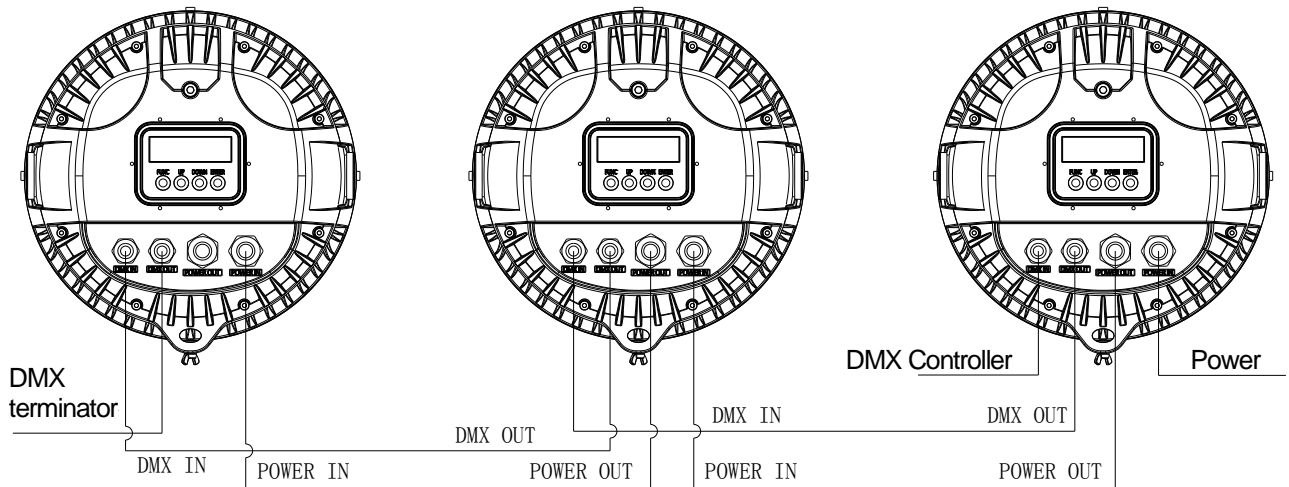
●DMX CONTROL CONNECTION:



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).

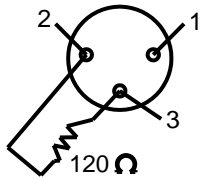
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



●DMX TERMINATOR

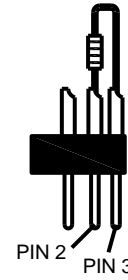
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

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.

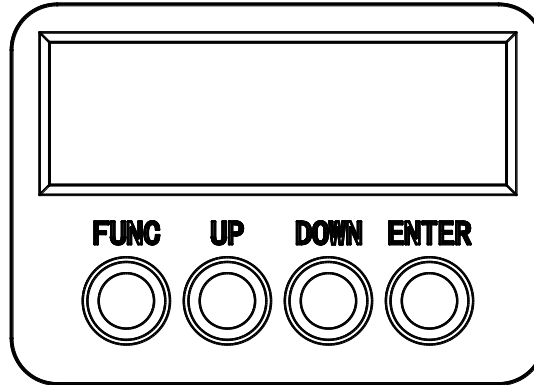


**DMX TERMINATOR
CONNECTION**

Connect a 120Ω(OHM) resistor
across pins 2 and 3 in an XLR plug
and insert into the DMX out socket
on the last unit in the chain.



5. SETUP AND CONFIGURATION



●FRONT PANEL OPERATION

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

●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

1 st level menu	2 nd level menu	3 rd level menu	4 th level menu
DMX Address	Standard mode:001 – 507		
	Extended mode:001-502		
Config Settings	DMX Channel Mode (Default: STD6)	Standard 6	
		Extended 11	
	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	LED temperature XX°C	
	Fixture use Time	Fixture time XXX	
	RDM Device Lab.	RDM ANSI E1. 20	
	Software Ver.	Software Ver. X.X.X	
Test Mode	Red		
	Green		
	Blue		
	White		
	RGB		
	RWB		
	RGBW		
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		

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	Dimming	000-255	Linear Dimming 0%-100%
	2	Color Temperature	000	No
			001-255	Linear adjustment
	3	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		
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	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.

8. TECHNICAL DATA

ELECTRICAL PARAMETER

Input Voltages : 100V/120V/200V/220V /230V/240V AC, 50/60Hz

Rated Power : 114W@230V

MAX. Current: 1.52 A

Power Factor: PF>90%

LIGHT SOURCE SPECIFICATIONS:

Qty 12pcs of RGBW LED lamp

Power Consumption 120 W (12X10W)

Manufacturers Rated Lamp Life 50000hours

COLORS

R/G/B/W

DIMMING

Linear Dimming from 0-100%

STROBE

Electronic Strobe 0.5-33FPS.

BEAM ANGLE

Beam Angle(1/2peak) $\theta_{1/2}$: 14° (Optional: 10°, 20°, 40°)

CONTROL:

International standard DMX512, 3 pin and 5 pin interfaces

6channels in standard mode and 11channels in extended mode

Master/Slave synchronized control Mode

3 operation mode(DMX mode, User Memory Mode, Preset Memory mode)

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

RDM Function

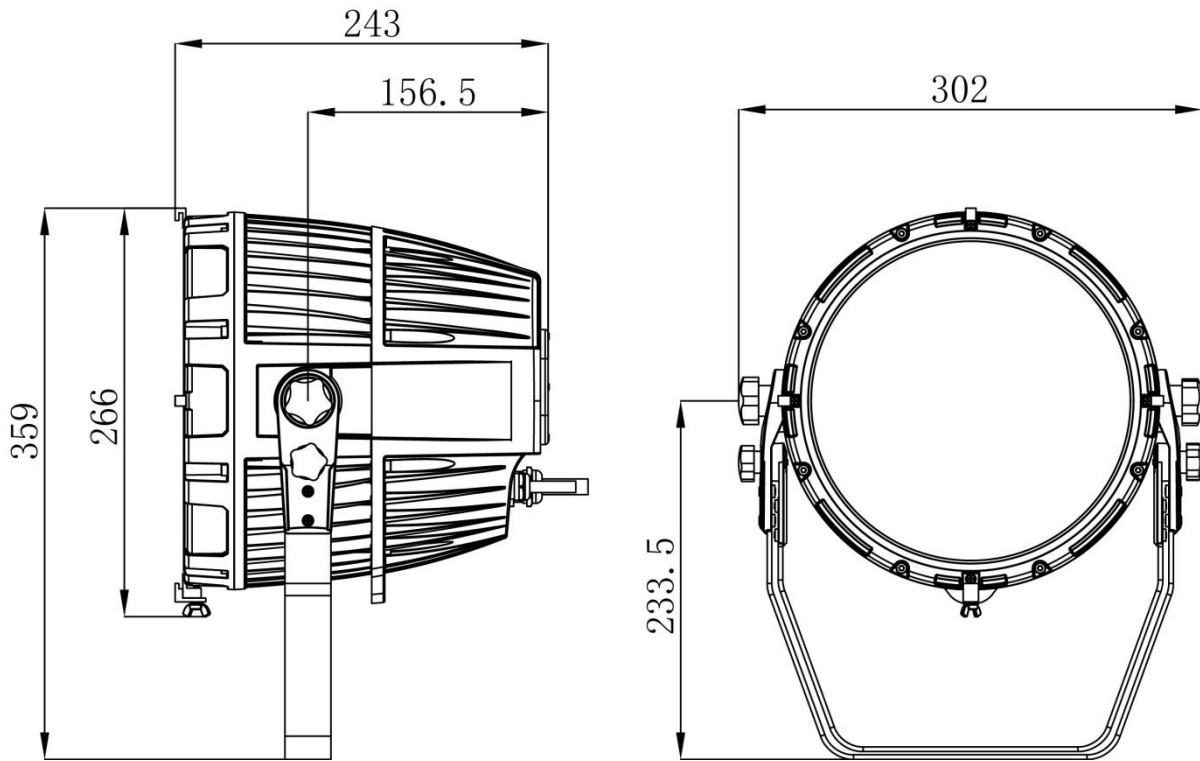
HOUSING: High tensile cast Aluminum alloy , IP67

NET WEIGHT: 10Kg

OPERATION TEMPERATURE:

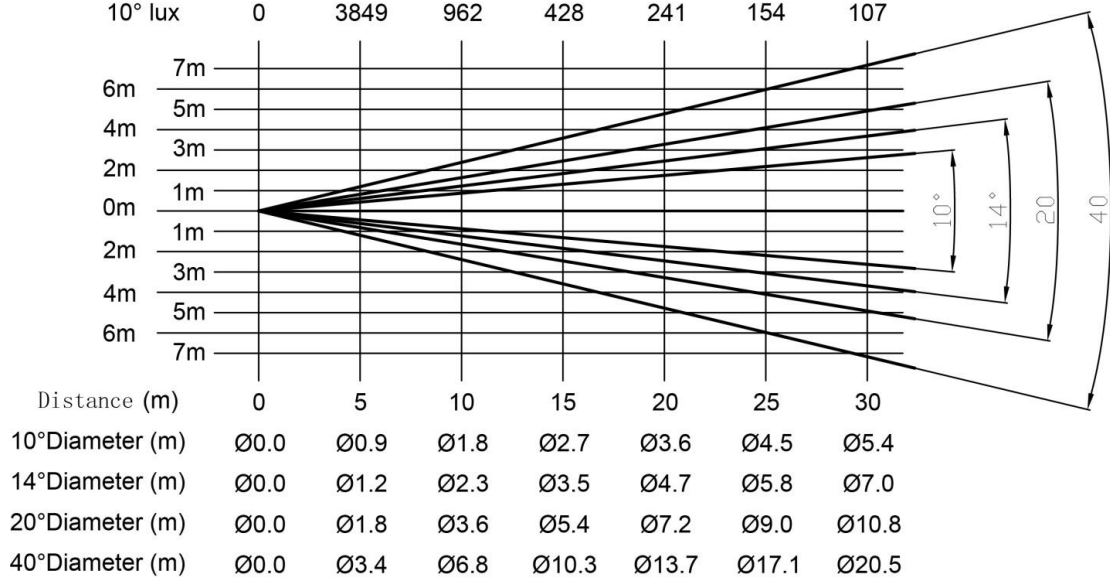
-20 °C~40 °C

SIZES:



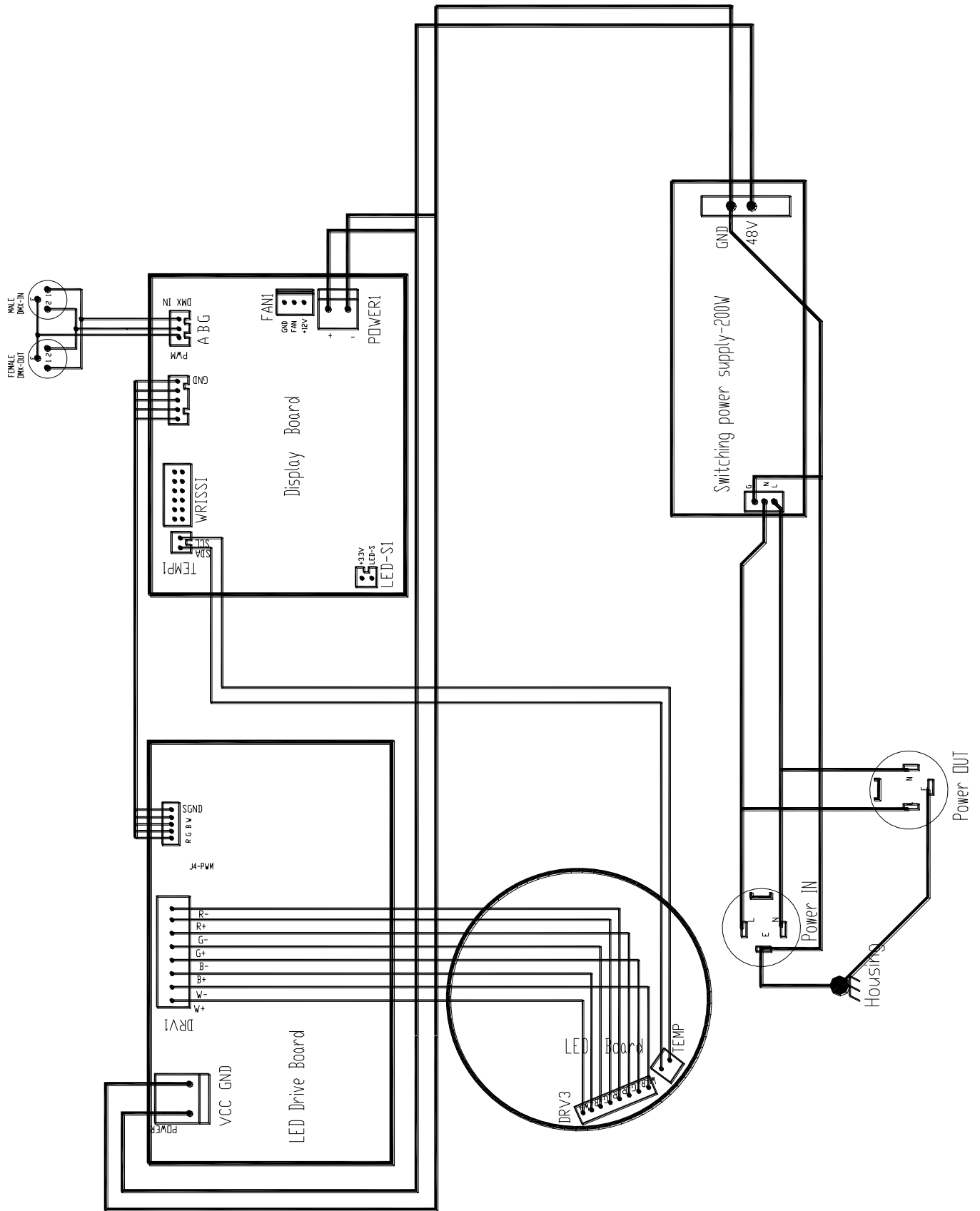
LIGHT OUTPUT:

40° lux	0	214	53	24	13	9	6
20° lux	0	891	223	99	56	36	25
14° lux	0	2027	507	225	127	81	56
10° lux	0	3849	962	428	241	154	107



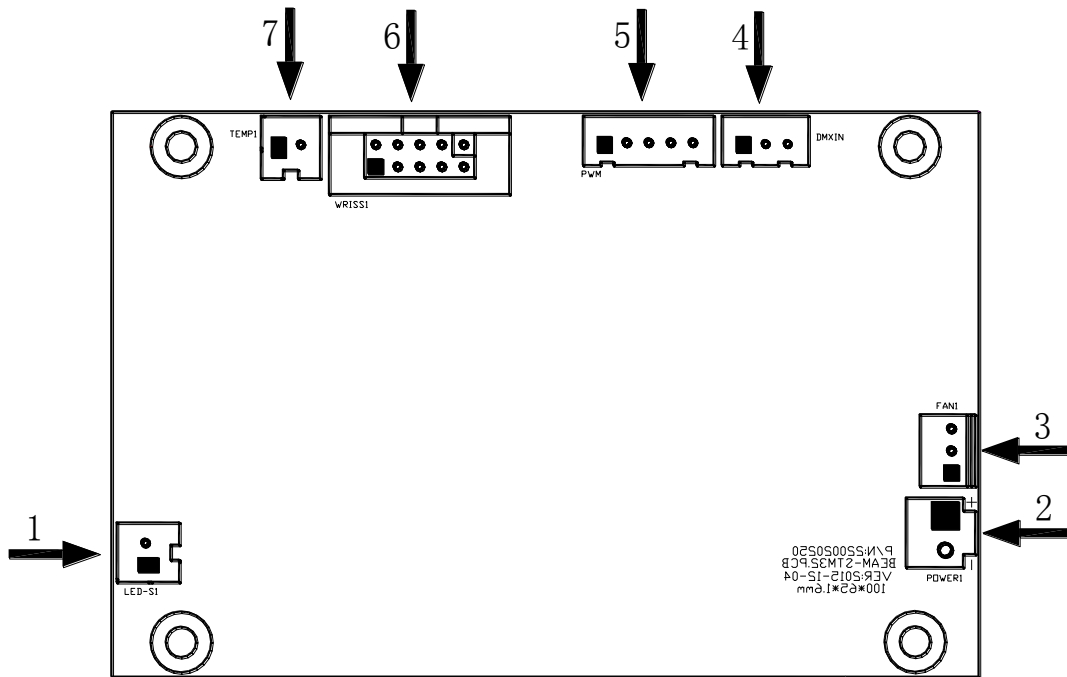
9. CIRCUIT DIAGRAM AND PCB CONNECTIONS

●CIRCUIT DIAGRAM



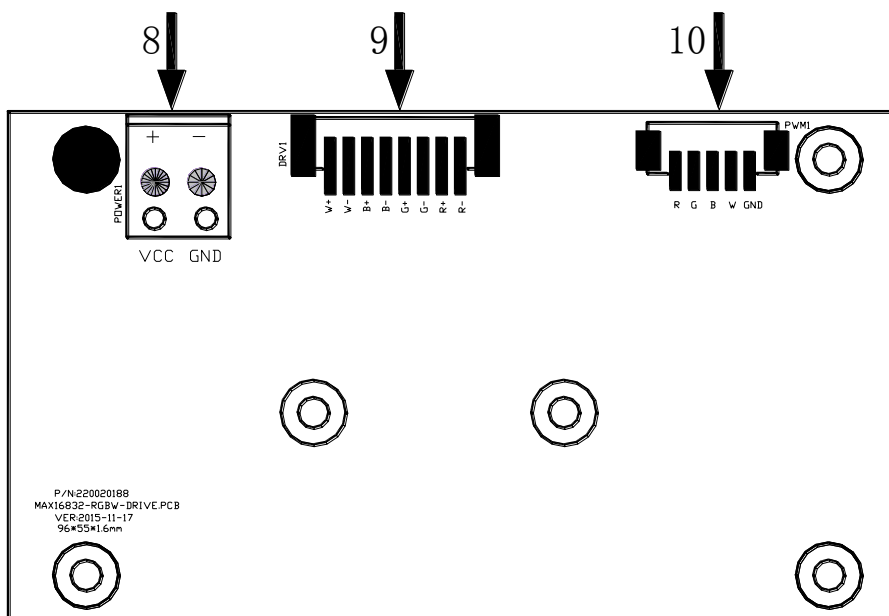
●PCB CONNECTIONS

Master Board (250020250)



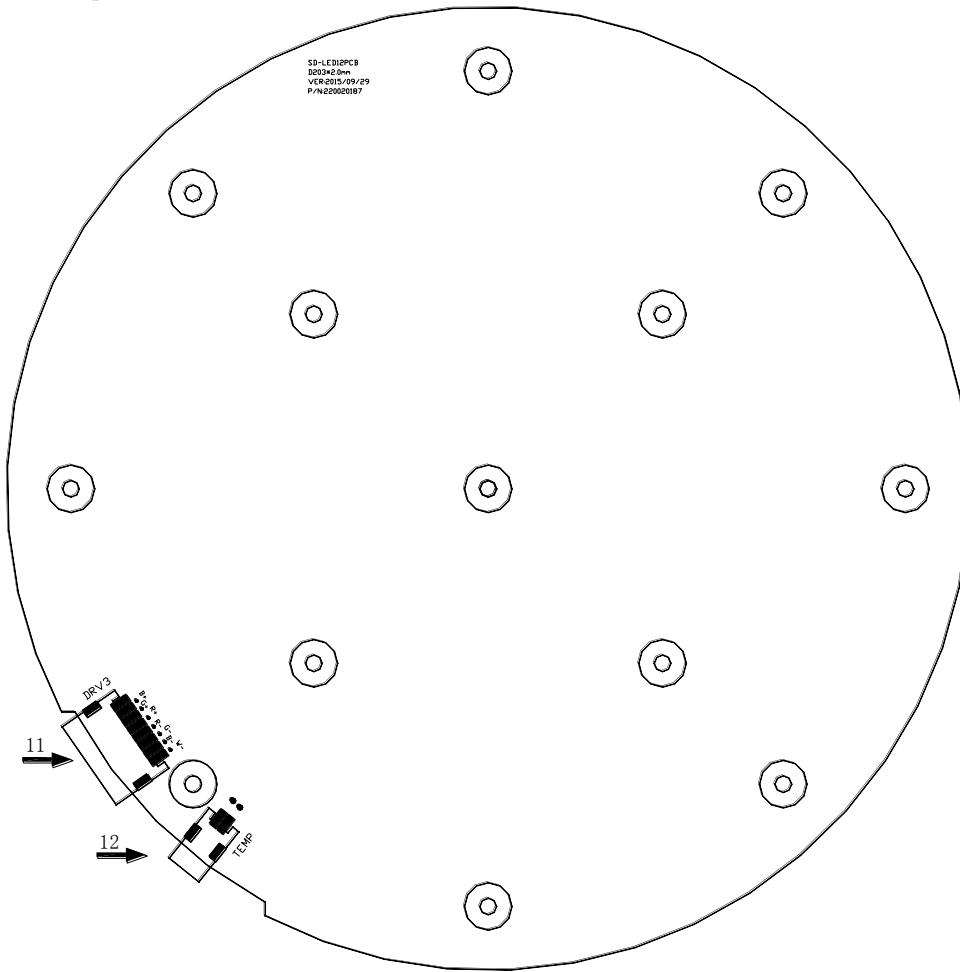
No.	Name
1	Optical sensor
2	power supply
3	Fan
4	signal input
5	PWM signal
6	Wireless board
7	thermal switch

LED Diver (230060213)



No.	Name
8	power supply
9	LED Driver
10	PWM signal input

LED lamp Board (230060327):



No.	Name
11	LED Lamp
12	Thermal Switch

10.COMPONENT ORDER CODES

No.	Name	Code No.	Qty	Remarks
1	Power Switch	192010188	1	
2	LED light source	230060327	1	
3	LED Driver Board	230060213	1	
4	LCD master board	230060120	1	
5	Front Glass Panel	080090115	1	
6	Transparent Display Cover	290190109	1	Optional
7	Seal for Transparent Display Cover	290019142	1	Optional

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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