PR

XLED 1037
PR-8120

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

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

INDEX

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 this 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.

ACCESSORIES

These items are packed together with the projector:

| Name	Quantity	Unit	Remark
G clamp	2	Pcs	
Ω clamp	2	Pcs	Optional
XLR cable	1	Pc	With Plug & Socket
Safety cord	1	Pc	
This manual	1	Pc	

SAFE USAGE OF THE PROJECTOR

When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

DO NOT mount the projector directly onto inflammable surface

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is   5m.   5m

Avoid direct exposure to the light from the lamp. The light is harmful to the eye.

Do not attempt to dismantle and/or modify the projector in any way.

Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.

It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep a projector's optical system clean. Do not touch LED lens with bare hands.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.
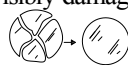
LED lamps should be replaced if damaged or having reached life limit.

Exterior surface temperatures of the luminaire after 5 minutes operation is55℃, when steady state is achieved 70℃,

There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

Always disconnect a projector from the POWER when not in use or before cleaning or any maintenance work!
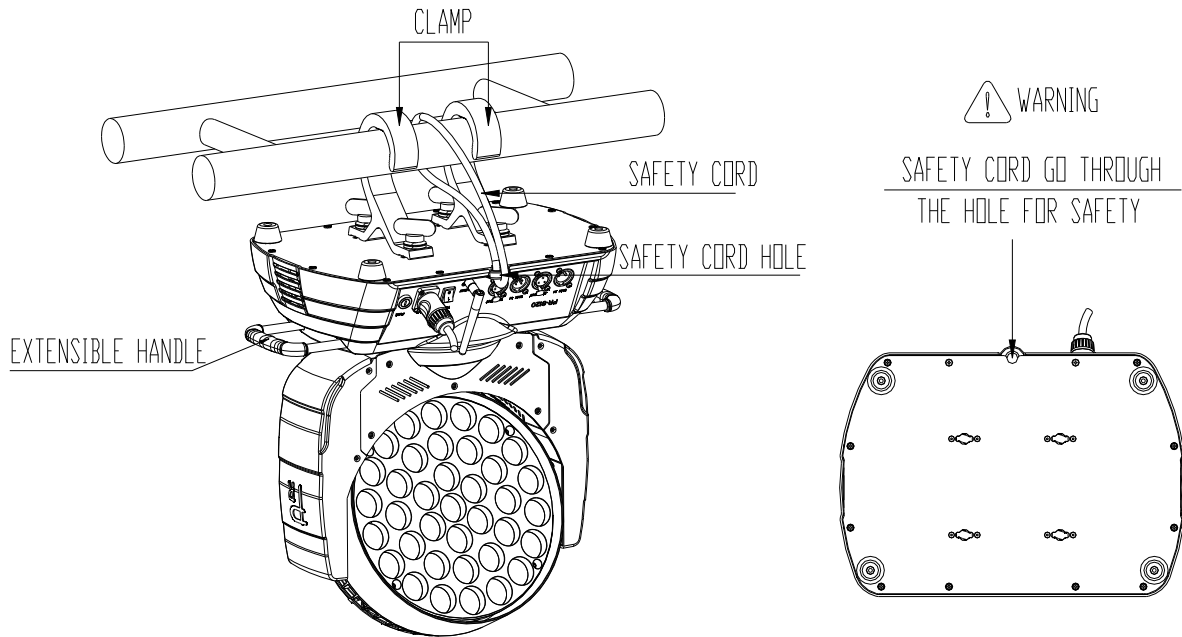
Take 2 clamps and 1 safety cord out from the package and mount 2 clamps on the underside of fixture with 2 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) Always ensure 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 is secure and is strong enough to support a weight of each projector.

WARNING:

1.   The projector MUST be lifted or carried by the HANDLES instead of clamps.

2. For safety the safety cord should afford 10 times of the unit's weight.

# POWER SUPPLY-MAINS

Connect the power cord as follows:

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

Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

IMPORTANT
It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.

CONTROL CONNECTION
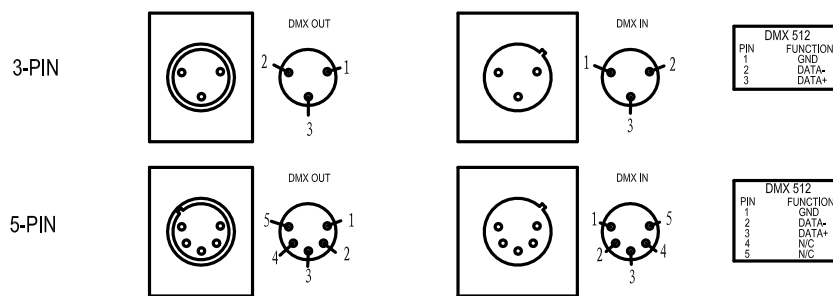
Connection between controller and projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 3 pin XLR plugs and sockets. 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. The body of the plug is not connected in any way. The projector accepts digital control signals in protocol DMX512 (1990).
Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.
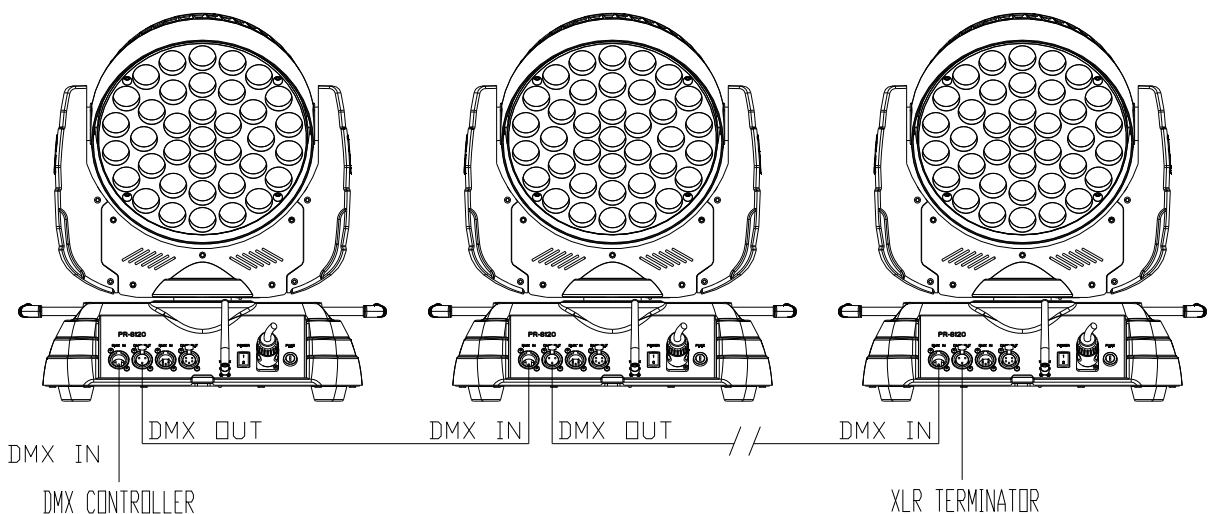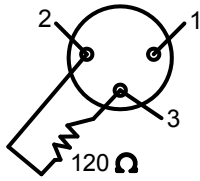

DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents

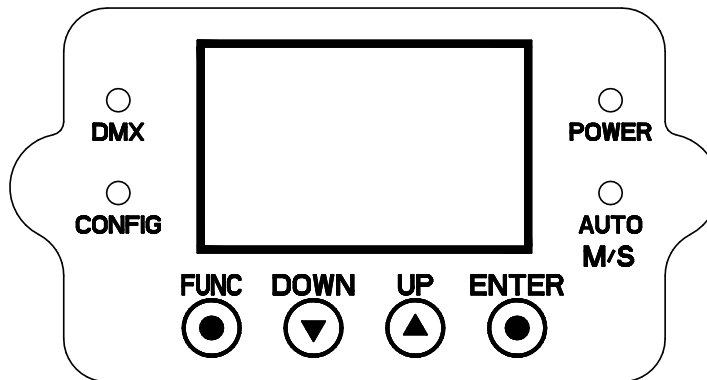electrical noise from disturbing and corrupting the DMX control signals.

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.
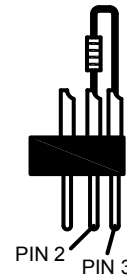
SETUP OPTIONS-PROJECTOR CONFIGURATION

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

To browse or change its setup options,   Press button ENTER more than 5 seconds to unlock panel. Menu will be displayed on the screen, each menu has it own sub-menu. Each menu has specific function, Please refer to "Operation Menu" for details.

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

Press button ENTER to save your settings or enter the next menu.

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

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

TO SET THE 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 fixture have 2 DMX modes. There are standard mode and extended mode. For example standard mode has 15 channels, so set the No. 1 projector's address 001, No. 2 projector's address 016, No. 3 projector's address 031, No. 4 projector's address 046 and so on.

Launch the projector. Press button ENTER more than 5 seconds 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 while Green Indication flashes, which means the projector has saved the Start Address automatically, when powered on next time, it will display the value saved last time.

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

OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL
AddR (DMX address)	XXX （XXX:1~512）		
CNFG (Config settings)	dmX (DMX mode，Default: STD)	STd (Standard mode)	
		EXT (Extended mode)	
	dISP (Display settings Default: ON)	ON	
		OFF (Shut off digital CRT without pressing buttons in 5 minutes)	
	xyCH Pan and Tilt Swap (Default: OFF)	OFF	
		ON	
	xyCP Pan and Tilt Invert (Default: OFF)	OFF	
		ON	
	DMXS DMX signal Source Options (default: PRCA)	PRCA Cable Signal First	
		ONCA Cable Signal Only	
		ONwR Wireless Signal Only	
		PRwR Wireless Signal First	
		wTOC Change From Wireless to Cable	
	mORS (Master /Slave Settings, Default: SLV)	SLAV (Slave)	
		mAST Master(1)	
	PAIR Pair disabled	yES	
	FACT (Reset factory setup)	yES	
	TRmd (Transmit parameters)	yES	
INFO (Information)	TImE (Fixture usage time)	XXXX	
	VER (Software Version)	X.X.X	
TEST (Test mode)	LAMP	OFF	
		R (red)	
		G (green)	
		B (blue)	
		W (white)	
		RG (Yellow)	
		GB (Cyan)	
		RB (Purple)	
		RGB (White)	
		RGBW (All On)	
	Zoom	000-255	
	Pan	000-255	

	Tilt	000-255	
	RESE	Yes	
mENU (Operation mode)	dmx (DMX mode)		
	PRUN (Preset memory)		
	ERUN (User memory)		
	ET XX (User memory,ET01~ET16)	CH01 Strobe	000-255
		CH02 Red Dimming	000-255
		CH03 Green Dimming	000-255
		CH04 Blue Dimming	000-255
		CH05 White Dimming	000-255
		CH06 Zoom	000-255
		CH07 Pan	000-255
		CH08 Tilt	000-255
		CH09 Pan and Tilt Speed	000-255
		CH10 Static Scene Hold Time	000-255 Time=X*40ms

Note:

1. There is only one Projector to be set as a Master in a signal Cable. If Master's functions used, Please disable DMX control signal.

2. When multiple projectors' work together in synchronous control state, Parameters can be transmitted from the master projector to the slave projectors such as DMX channel mode, Display setting status and operation mode (User memory data is included). Before parameters transmitted, the projector which will send parameters should be set as a Master and others be as Slaves.

DMX PROTOCOL

Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION
1	1	Strobe	000-015	No Strobe
			016-255	Speed form Slow to Fast
2	2	Dimmer	000-255	Linear Dimming from Dark to Bright
	3	Dimmer Fine	000-255	Dimmer in 16Bit
3	4	Color Macros	000-031	NO
			032-063	Red
			064-095	Green
			096-127	Blue
			128-159	Yellow
			160-191	Cyan
			192-223	Purple
			224-255	White
4	5	Area 1 RED	000-255	Area 1 Red- Linear adjustment from Light to Dark
	6	Area 2 RED	000-255	Area 2 Red- Linear adjustment from Light to Dark
	7	Area 3 RED	000-255	Area 3 Red- Linear adjustment from Light to Dark
5	8	Area 1 Green	000-255	Area 1 Green- Linear adjustment from Light to Dark
	9	Area 2 Green	000-255	Area 2 Green- Linear adjustment from Light to Dark
	10	Area 3 Green	000-255	Area 3 Green- Linear adjustment from Light to Dark
6	11	Area 1 Blue	000-255	Area 1 Blue- Linear adjustment from Light to Dark
	12	Area 2 Blue	000-255	Area 2 Blue- Linear adjustment from Light to Dark
	13	Area 3 Blue	000-255	Area 3 Blue- Linear adjustment from Light to Dark
7	14	Area 1 White	000-255	Area 1 White- Linear adjustment from Light to Dark
	15	Area 2 White	000-255	Area 2 White- Linear adjustment from Light to Dark
	16	Area 3 White	000-255	Area 3 White- Linear adjustment from Light to Dark
8	17	Zoom	000-255	Linearly Zooming(0°-100 °)
9	18	Zoom Fine	000-255	Zoom in 16 Bit
10	19	PAN	000-255	Pan(0°~540°)
11	20	Pan Fine	000-255	Pan in 16bit precision
12	21	Tilt	000-255	Tilt(0°~270°)
13	22	Tilt Fine	000-255	Tilt in 16bit precision
14	23	Pan and tilt Speed	000-255	Pan & Tilt Speed from Fast to Slow
15	24	Control	000-048	Reserved
			049-255	Reset

INDICATION OF LED DIGITAL TUBE

	On	DMX signal OK
Decimal point of the first digital tube	Off	No DMX signal
Decimal point of the third digital tube	On	Master / slave signal is OK
	Off	No master / slave signal
Decimal point of the fourth digital tube	On	When setting master mode
	Off	When setting slave mode
Parameters that LED digital tubes display	Flash	Parameters not saved, press "ENTER" to save them

MAINTENANCE

To prolong a Projector's life, Regular maintenance should be done for its LED optical System to ensure that the system be in best operational condition. If the projector does not function, check the fuses on the power socket of the projector, if burned, they should only be replaced by fuses of the same specification. Should these be damaged call a qualified technician before replacement. The projector has thermal protection device that will switch off the projector in case of overheating, should this occur, check if the fans work normally or fan and fan shield are blocked by dust. If the projector not operational, call a qualified technician. After cleaned and repaired, the projector can be restarted.

Any maintenance work should only be carried out by qualified technicians.

KEEPING THE PROJECTOR CLEAN

It definitely necessary to keep a projector clean for its reliable use. Cooling fans and their shield should be cleaned every 15days. LED lamps' lens and cover should be cleaned regularly for optimized light output.

Cleaning frequency depends on how often a projector is used and its operational environment.   A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean t housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The projector can't be started	➢ Power Cable not connected well ➢ Power supply damaged or not connected well, a qualified Technician should be required ➢ Control board not connected well and a qualified Technician should be required.
The lamp can be started, but LED lamps are off and not controlled	➢ LED boards not connected properly, a qualified technician is needed
A projector's lamps are on but it doesn't respond to the controller	➢ Make sure that the projector's start address is correctly set ➢ Replace or repair the DMX cable.
The beam appears dim and its brightness slows sharply	➢ Ambient temperature too high which result in a projector overheating, necessary ventilating measures needed.

TECHNICAL DATA

VOLTAGES:

100V~240V   AC，50/60Hz

POWER CONSUMPTION:

450W@220V

LED:

Model	CREE (MCE4CT-A2-KPEK-A3LWC0000)
Power consumption	10W(RGBW)
Quantity	37pcs
Manufacturers Rated LED Life	50000 Hours

COLOURS:

RGBW linear color mixing with Macro

COLOR TEMPERATURE CORRECTION

Linear color temperature correction from 3200K to 10000K

DIMMER:

0-100% linearly adjustable

STROBE:

Electronic Strobe 0 ~25F.P.S

PAN AND TILT

PAN(0°~540°) and   TILT(0°~270) with Auto Position Correction Function

LIGHT ANGLE

Linearly Zooming (12°~54°)

CONTROL:

DMX512, 3 pins and 5 pins interfaces

RDM Control Protocol

15channels in standard mode, and 24 channels in extended mode

Master/Salve Synchronous Control Mode

Static Scene Mode

Single Mode

Self Test Mode

OTHER FUNCTIONS:

Pan &   Tilt Speed adjustable

Auto speed adjustment of Fans

LED Lamp Overheating Protection

Display's Brightness and Contrast adjustable

Lamp/Projector use Time display

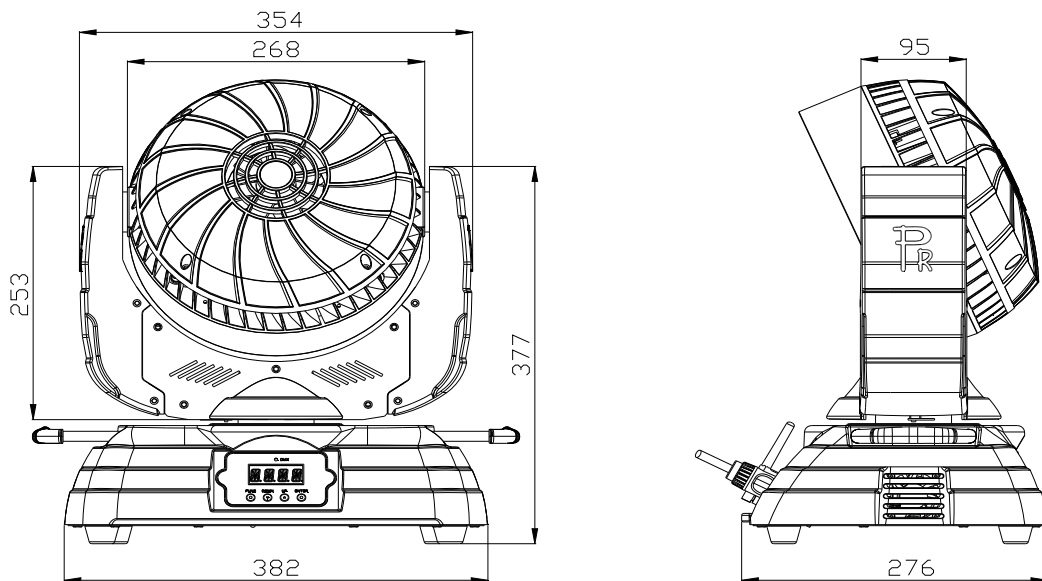DMX512 Channel Value Display

Menu Invert

HOUSING:

High temperature   ABS +die-casting aluminum, IP20
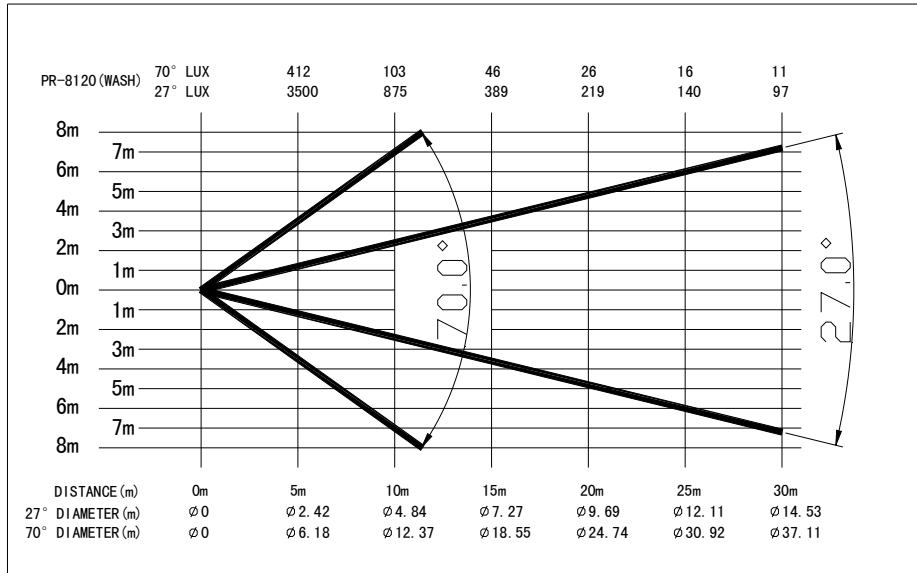
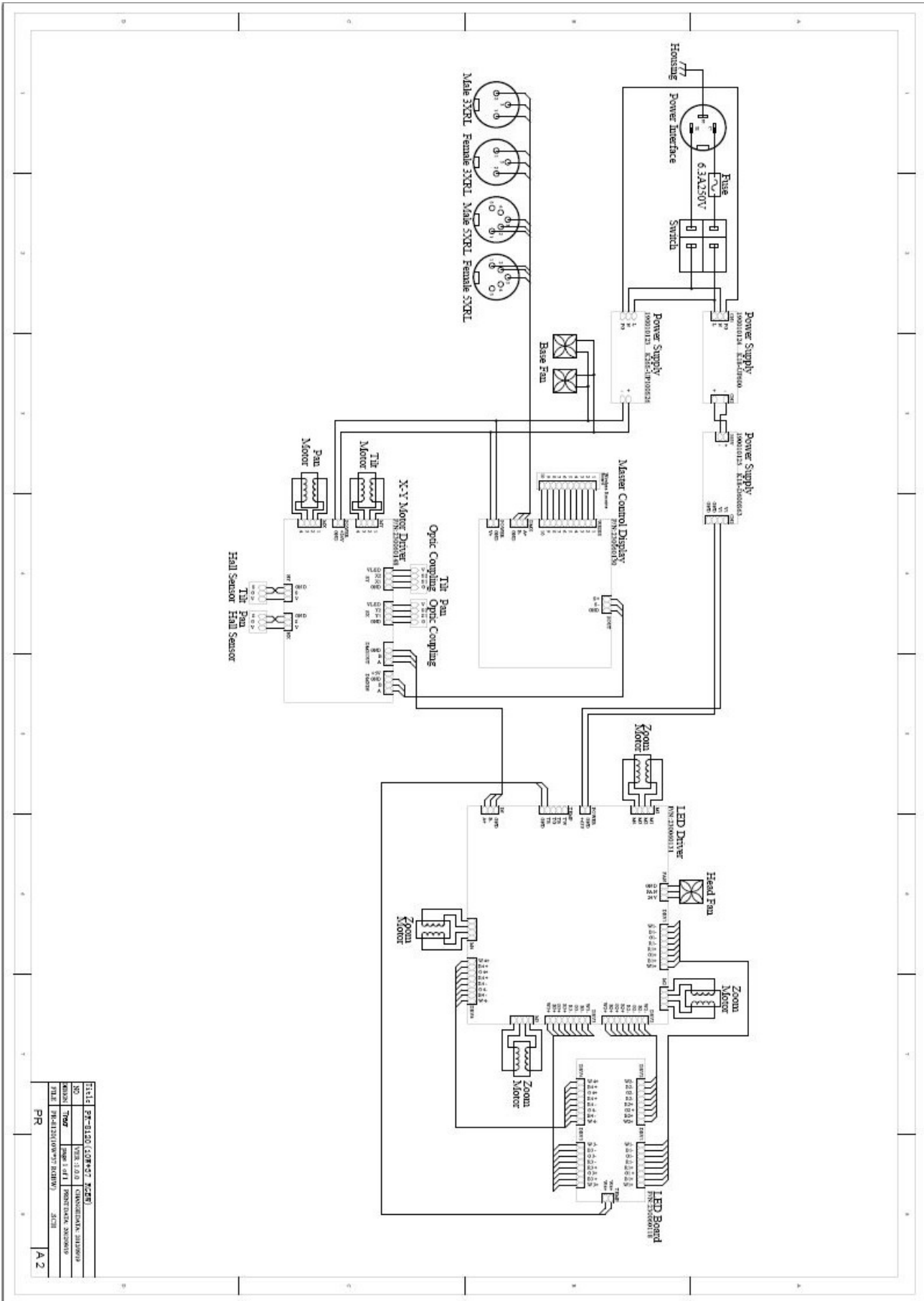**WORK ENVIRONMENT TEMPERATURE:**

-20°C~40°C

WEIGHT:

Net weight :12.85Kg   Gross Weight: 16.9 Kg

LIGHT OUTPUT:

| PR-8120 (WASH) | 70° LUX | 412 | 103 | 46 | 26 | 16 | 11 |
| | 27° LUX | 3500 | 875 | 389 | 219 | 140 | 97 |

```
8m
   7m
6m
   5m
4m
   3m
2m
   1m
0m
   1m
2m
   3m
4m
   5m
6m
   7m
8m
```

70.0°   27.0°

DISTANCE (m)	0m	5m	10m	15m	20m	25m	30m
27° DIAMETER (m)	∅0	∅2.42	∅4.84	∅7.27	∅9.69	∅12.11	∅14.53
70° DIAMETER (m)	∅0	∅6.18	∅12.37	∅18.55	∅24.74	∅30.92	∅37.11

COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
Wireless Antenna	W006503	1	A40501 360*360
Wireless Receiver	W006502	1	A40901G4
Fuse(VDE Certificate)	270041037	1	
Magnet Couple Board on the Right(with sockets)	230020113	2	
10W LED lamps(CREE)	150020237	37	
Belt	290151352	1	HTD447-3M, 8MM Wide
Belt	290151351	1	HTD348-3M ,8MM Wide
Secondary Lens	290010173	37	
First Lens	090010172	37	
Stepper Motors	030040174	2	
Stepper Motors	030040162	4	20DAM10D2B-K(Portescap)
Cooling Fans(Bi-Sonic)	030060052	2	
PWM Speed variable Fan	030060074	1	

PR LIGHTING LTD.

1582 Xingye Avenue, Nancun Panyu
Guangzhou, 511442 China
TEL: +86-20-3995 2888
FAX: +86-20-3995 2330

P/N: 320020108
Version: 20121120   (Preliminary）