PR

PR-8935　　Pro Stage 150 RGBW 19 °

PR-8936　　Pro Stage 150 RGBW 26 °

PR-8937　　Pro Stage 150 RGBW 5 °

PR-8938　　Pro Stage 150 RGBW 10 °

This product manual contains important information about the safe installation and use of this unit. 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

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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 unit:

Name	Quantity	Unit	Remark
Safety Cord	1	Pc	
DMX Signal Cable	1	Pc	
Power Cord	1	Pc	
Power Cord Between Projectors	1	Pc	
User's Manual	1	Pc	
Gobo Holder	1	Pc	
Clamp	1	Pc	

SAFE USAGE OF THE UNIT

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

The unit can be only used indoors, IP20. The fixture should be kept in dry place without excessive dampness, heat, dust and contact with water or other liquids.

The unit is not designed or intended to be mounted directly on to inflammable surfaces.

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

Do not project the beam onto inflammable surfaces, minimum distance is 2m.　2m

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

Do not attempt to dismantle and/or modify the unit 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 unit.

It is essential that each unit 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.

When the unit is hanged to a high place, please use a safety cord provided to pass through the unit's support as a secondary safety fixing for safety seasons. For details, refer to "INSTALL THE UNIT "section.
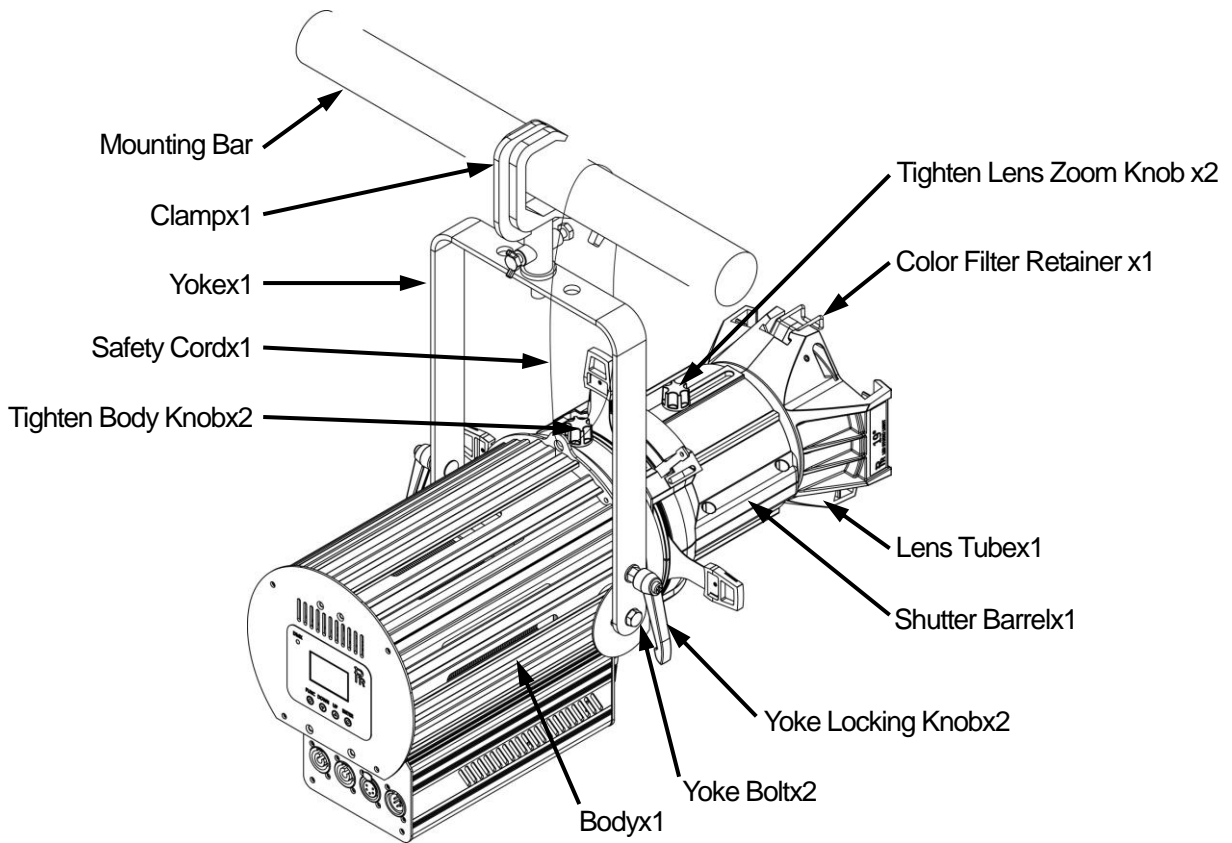
Exterior surface temperatures of the unit after 5 minutes' operation is 45℃, when achieving steady state it is 55℃.

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

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

Always disconnection from the power, when the device is not in use or before cleaning or any maintenance work !

INSTALL THE UNIT

Mounting Bar

Clampx1

Yokex1

Safety Cordx1

Tighten Body Knobx2

Tighten Lens Zoom Knob x2

Color Filter Retainer x1

Lens Tubex1

Shutter Barrelx1

Yoke Locking Knobx2

Yoke Boltx2

Bodyx1

一. Fixture installation:

1. The unit works while being hung, but not suitable for being hung by its side. It can be manually rotated within 90 °; To adjust the fixture's angle, loosen the Yoke locking knob and move the fixture to the angle desired. Tighten the knob to fix the fixture.

2. Only under maintenance, repairing and other special circumstances, can the Yoke locking knob of the fixture be loosened.

3. Before installation, please tighten the knobs for body and lens zoom.

4. Take 1 clamp and 1 safety cord out from the package and mount 1 clamp on the axis of the support with 1 retainer. Hang the fixture on the structure and fasten the screws attached to the clamp. Always ensure that the unit is firmly anchored to avoid vibration and slipping whilst functioning. Always ensure that the structure to which you are attaching the unit to is secure and strong enough to support the weight of the fixture. For safety the unit should have a secondary fixing with a safety cord(1.2m) through the support of the unit to ensure safe mounting as the figure above.

二. Installation of Lens tube:
.

Move lens Tube

1. Push lens tube into shutter barrel as above.

2. Tighten zoom lens knob.

Shutter Barrel

Tighten Zoom Lens Knob
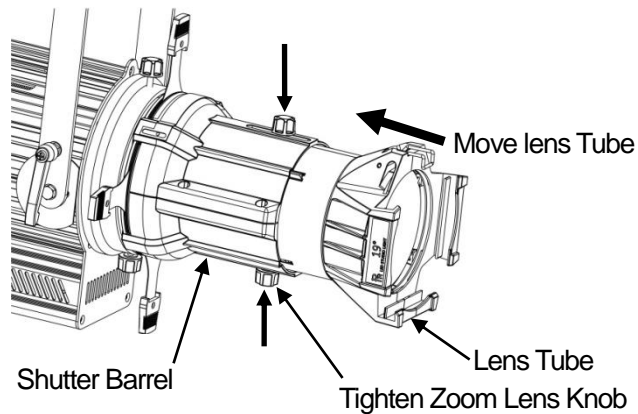
Lens Tube

3. Optional Lens tubes for different beam angles:

19°   26°   5°   10°
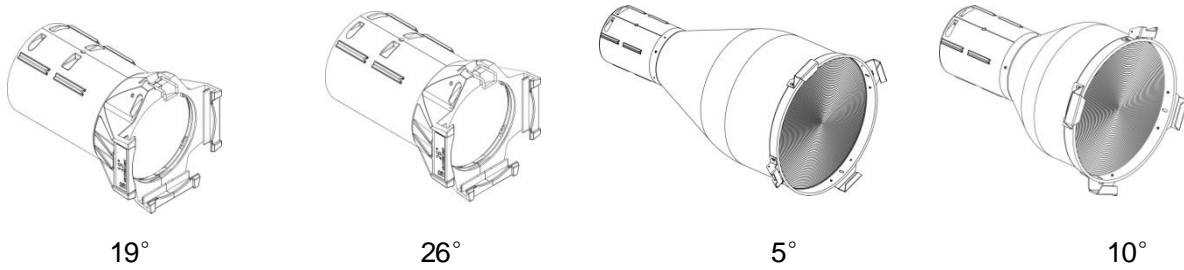
三. Installation of Shutter Barrel, replacement of lens Tube and adjustment of Focal Length

Tighten Body Knob x2
Shutter Barrel x1
Tighten Zoom Lens Knob x2
Lens Tube x1
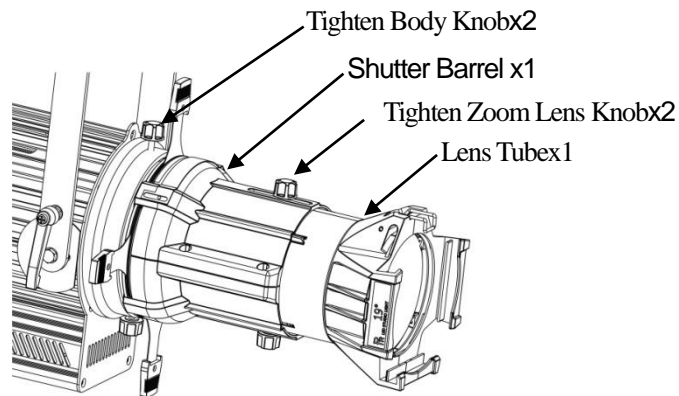
1. Adjustment of Lens Tube: loosen the Zoom Lens Knob till the Lens Tube can move along the fixture's axis, but not let the knob be removed easily; To replace the lens tube, loosen the Zoom lens knob after the lens tube is held well to avoid the tube moving out of the shutter barrel.
2. To adjust the angle of the shutter barrel: the body knob has functions for tightening and positioning. While the knob is loosened, don't let shutter barrel rotate freely(positioning function lost). The shutter barrel can rotate along the central axis of the fixture within the range of 56 degrees.

Note: While adjustment of the shutter barrel angle and its normal use, it's prohibited to rotate to the point that it's aligned with reinforcement bar and body knob as the figure below:

Body Knob

Don't make it aligned with reinforcement bar and the body knob

Reinforcement bar of Shutter barrel
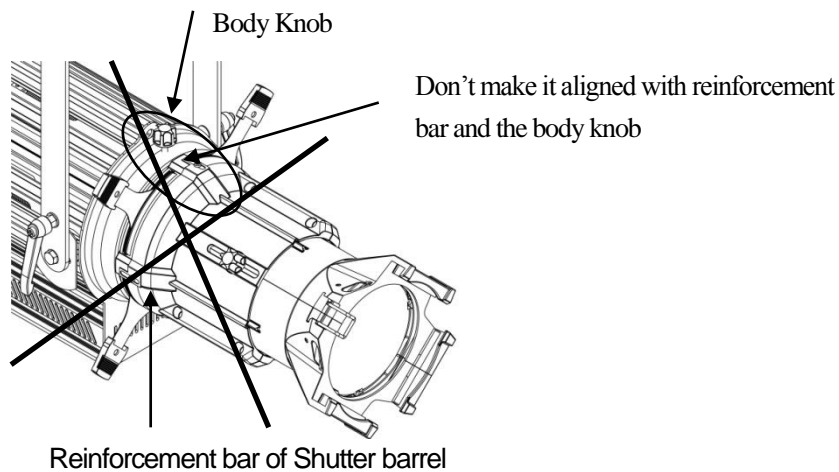
Warning:
1. **Clamp is only used for installation. The unit MUST be lifted or carried via supporting frame instead of clamps.**
2. **For safety the safety cord should afford 10 times of the unit's weight.**
3. **Please install, maintain and use the fixture as per user manual.**

CONTROL CONNECTION

DMX OUT   DMX IN

5PIN

DMX512

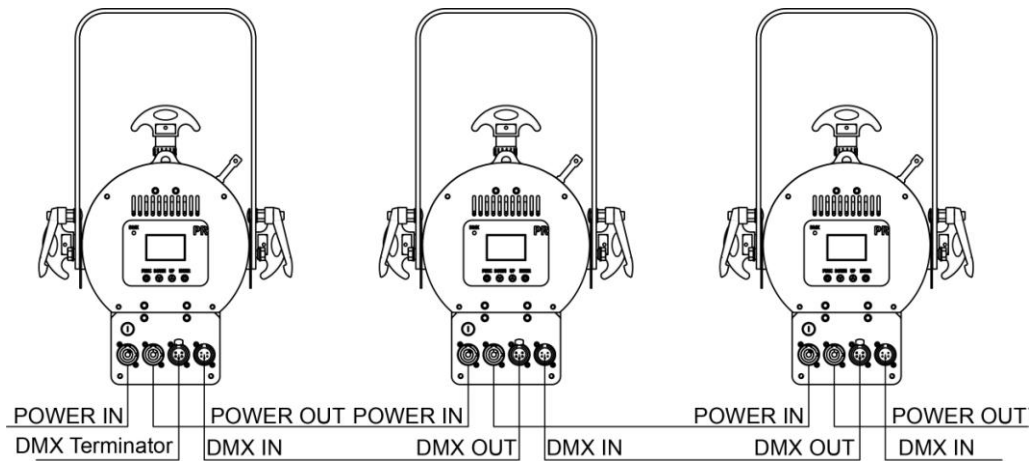| PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C
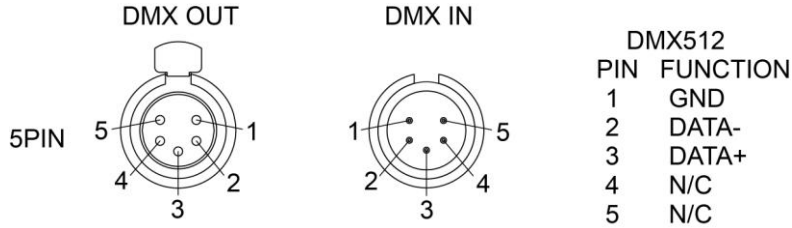
Connection between the controller and a unit and between one unit and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Please use the unit's cannon 5- pin signal input and output cables as connection. The 5-pin signal connections are connected as shown 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 unit accepts digital control signals in protocol DMX512 (1990).

The maximum of units in parallel for operation is 32 pcs. Connect the controller's output to the first fixture's input using 5-pin XLR cable, 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. Note: for synchronous control, the start addresses of all slaves should be same.

Each unit should be connected to power supply individually and the voltage and frequency of the power supply should match those indicated on nameplate. 12 pieces of fixtures at maximum can be connected in parallel for one installation.

POWER IN   POWER OUT POWER IN   POWER IN   POWER OUT
DMX Terminator   DMX IN   DMX OUT   DMX IN   DMX OUT   DMX IN

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 unit in the chain. The connections are illustrated below.

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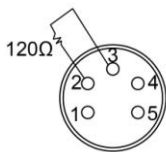
DMX TERMINATOR CONNECTION
Connect a 120   (OHM) resistor
across pins 2 and 3 in an XLR plug
and insert into the DMX out socket
on the last unit in the chain.

PIN2   PIN3
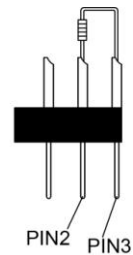
Operations Menu

1st level menu	2nd level menu	3rd level menu	Remarks
DMX Address	001 - 512		DMX Address
Config Setup	Color Mode	R:000-255	
		G: 000-255	
		B: 000-255	
		W: 000-255	
	Fade Mode	1-10	1: fastest; 10: slowest
	Color Offset	Red	128-255
		Green	128-255
		Blue	128-255
	LCD Light Setup Backlight Auto-off	No-Yes	On (off after 3minutes after the exit of the menus without any buttons being pressed , LCD backlight's setup)
	Language Setup	English/Chinese	Language Options
	Display Invert	Yes-No	Display Inversion
Information	LED Temperature	XXXX	LED lamp Temperature
	Fixture use Time	V.X.X	Fixture Hours
	Software Version	V.X.X	Software Version
Test Mode	Auto Test		
	Manual Test	R:000-255	
		G: 000-255	
		B: 000-255	
		W: 000-255	

DMX PROTOCOL

CHANNEL	FUNCTION	DMX	DESCRIPTION
1	Dimmer	000-255	From dark to bright
2	Strobe	000 - 007	NO strobe
		008 - 255	Strobe speed from slow to fast
3	CT	000-255	CT Adjustment
4	Macros	000-016	Nil
		017-024	White(CT 10000K)
		025-032	White(CT 7200K)
		033-040	White(CT 5600K)
		041-048	White(CT 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	Shift between colors of Red, Green and Blue
5	R	000-255	
6	G	000-255	
7	B	000-255	
8	W	000-255	

INDICATION OF LED DIGITAL TUBE

DMX Signal LED Indication	ON	DMX signal
	OFF	NO DMX signal
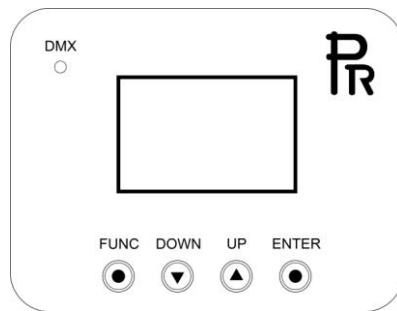
Explanations for Control Panel

After power-on, LCD display displays the company's LOGO "PR", then the fixture is at initial display status showing information about company's name including LOGO "PR", fixture's model and DMX address(if the start address is 001, it displays as "address=001") and at the same time the display is locked.

To browse through or change a fixture's configuration, after ENTER button has been pressed for about 3 seconds, the display of AddR means the entrance of the menu. To set or browse through a fixture's settings, press buttons of UP and DOWN. After button ENTER is pressed, a sub-menu is entered showing current parameters while parameters flashing. Press button UP or DOWN to change values. Press button ENTER to save your settings and enter into the upper level menu.Press FUNC to enter into the upper level menu(parameters not saved).

After FUNC is pressed for more than 1second or buttons not pressed for more than 1 minute, it will go back to LCD display initial stage.

If no DMX signal, the brightness of the LED lamp is the one saved last time via menu.

Dimming Priority Sequence: Dimmer by Menu > Dimmer by DMX console

After the LCD display enters into menus, DMX dimmer does not work and the fixture's brightness is the one set under the sub-menu of LED Brightness

The projector's configuration

1.   Setup of Start Address:

While the display is locked(initial display status), press button ENTER for more than 3s to unlock it and enter into 1st level menus. Then the menu of "DMX Address" is shown, press ENTER button to enter into its sub-menus, and Current Address flashes, press the button of   DOWN or UP to change its value, then press ENTER to confirm and save it and go back to the 1st level menu. If the display not locked, press the button of FUNC to go back to the 1st level menu, then press the button of DOWN or UP to find the option for setup of DMX address. To use DMX console to control multi- projectors, each projector must be set its DMX start address to receive signals sent by the console and respond to them. The unit has 8 DMX channel, so set the No. 1 unit's address 001, No. 2 unit's address 009, No. 3 unit's address 017, and so on.

2. Configuration Setup

While the display is locked(initial stage of the display), press the ENTER for more than 3 seconds to unlock it and enter into 1st level menus, then press UP or DOWN to find the menu of Config Setup and press ENTER to enter sub-menus. Press UP or DOWN to find secondary submenus of Color Mode, Fade Mode , Color Offset, LCD Light Setup, Language and Display Invert. Press ENTER if any submenu is desired, then change the parameters after pressing UP or DOWN. At last press ENTER to save it and go back to the upper level menu. Press the button FUNC   to go back to the upper level menu.

3. Information

While the display is locked(initial stage of the display), press the ENTER for more than 3 seconds to unlock it, then press UP or DOWN to find the menu of Information and press ENTER to enter sub-menus. Press UP or DOWN to find secondary submenus of

LED Temperature, Fixture Time and Software Version. Press ENTER if the information is desired.

Press the button FUNC to go back to the upper level menu.

4. Test Mode

While the display is locked(initial display status),Press ENTER button for more than 3s to unlock it, then press the button of DOWN or UP till the menu TEST MODE appears, press ENTER button to enter into its submenus. Press DOWN or UP button to show the 2nd level menus of AUTO TEST or MANUAL TEST. If either of the two is desired, press ENTER for confirmation. If AUTO TEST is selected, there is not 3rd menus. If MANUAL TEST is selected, press the button ENTER to enter into the 3rd level menus, then press UP or DOWN to select the color options. Press ENTER to enter the menu of color option and change its value by press the button of DOWN or UP. Press ENTER to confirm and save it and go back to the upper level menu. Press FUNC button to go back to 1st level menu.

MAINTENANCE

To prolong the life of the unit, it is very important to do the maintenance work. If the unit is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its cover and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from being corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates. Soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean unit at least once every 20 days.
Do not use any organic solvent, e.g. alcohol, to clean housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The unit doesn't switch on	➢ Power connection is not correct. ➢ Power supply is damaged or abnormal. Call a qualified personnel to fix it. ➢ Connection of control board is not correct. Call a qualified personnel to fix it.
The unit can be turned on, but LEDs do not emit light and are out of control.	➢ Connection of LED board is not correct. Call a qualified personnel to fix it.
The lamp comes on but the unit doesn't respond to the controller	➢ Make sure that the unit is correctly configured. ➢ Replace or repair the DMX cable.
The beam appears dim	➢ The unit is too hot. Take ventilation measures to make it cool.

TECHNICAL DATA

VOLTAGES:

100V-240V　AC，50/60Hz

Power Factor:

PF≥0.90

POWER CONSUMPTION:

150W@220V

LED:

Power consumption   150W

Quantity   1pc

Manufacturers Rated LED Life   50000 Hours

COLOUR TEMPERATURE:

Linear Adjustment between 2700K and 10000K

Luminous Flux：

PR-8935(19°): 1920 lm

PR-8936(26°): 2500 lm

PR-8937(5°): 1300 lm

PR-8938(10°): 1850 lm

DIMMER:

0-100% linearly adjustable

BEAM ANGLE:

19°/26°/5°/10°

CONTROL:

DMX512, 5 pin interfaces

HOUSING:

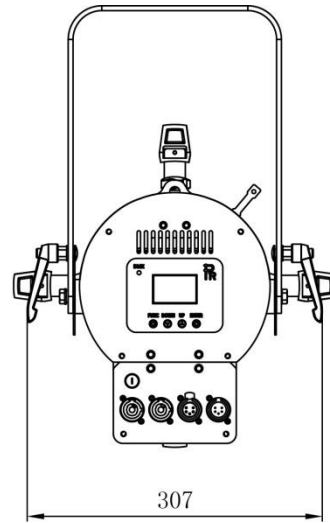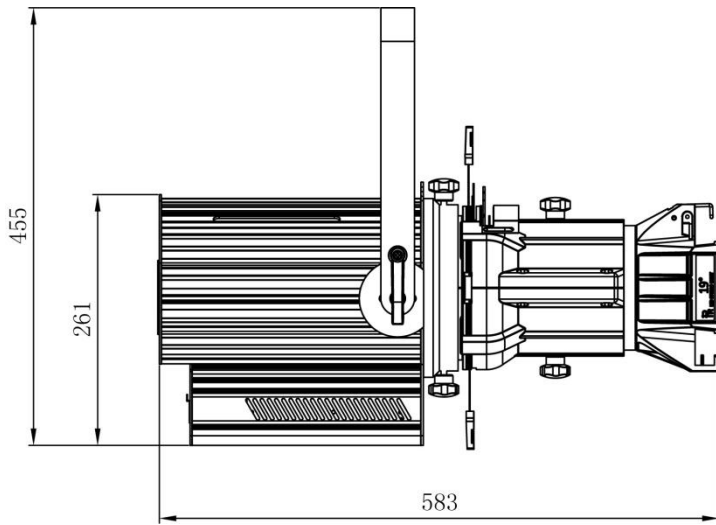High-intensity   aluminum alloy, IP20
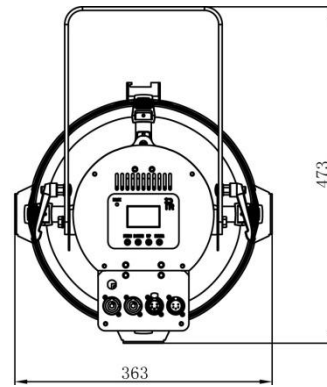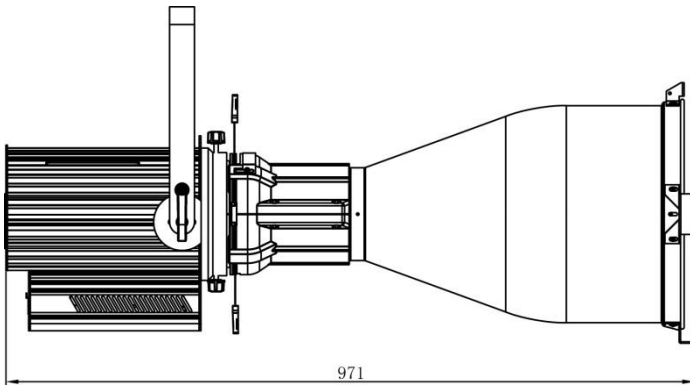
WORK ENVIRONMENT TEMPERATURE:
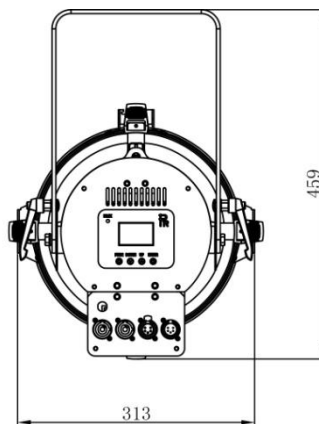
-20℃~40℃
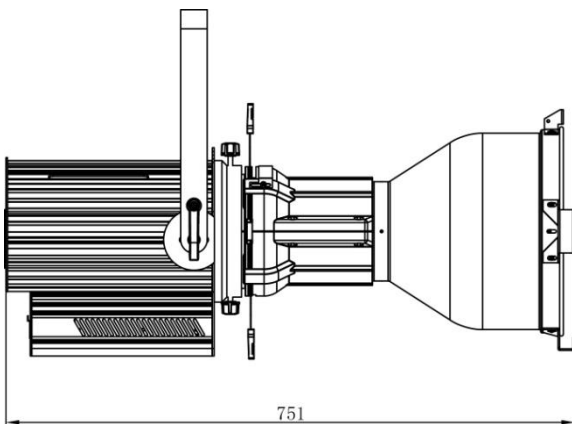
WEIGHT:

12KG

SIZE

SIZES for PR-8935/PR-8936 :

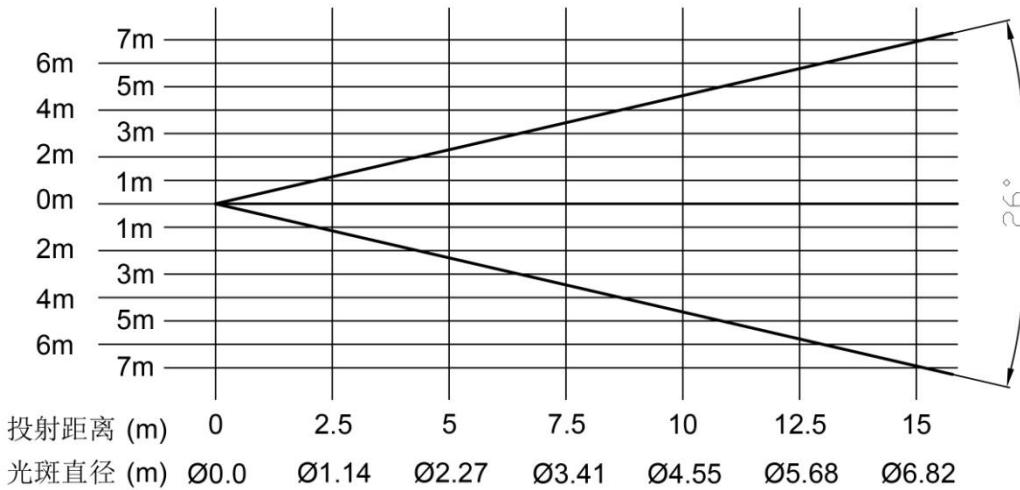**SIZE for** PR-8937

SIZE for PR-8938

LIGHT OUTPUT

Light Output for **PR-8935 (19°)**
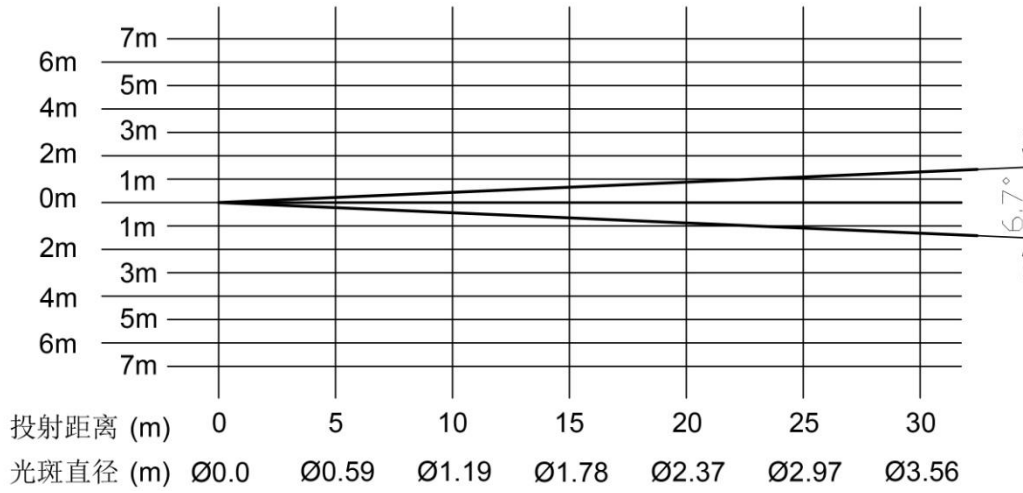
RGBW全亮(lux)　　0　　　3678　　920　　409　　230　　147　　102

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

18.2°

投射距离 (m)　　0　　　2.5　　　5　　　7.5　　　10　　12.5　　15

光斑直径 (m)　Ø0.0　　Ø0.8　Ø1.61　Ø2.41　Ø3.21　Ø4.01　Ø4.82
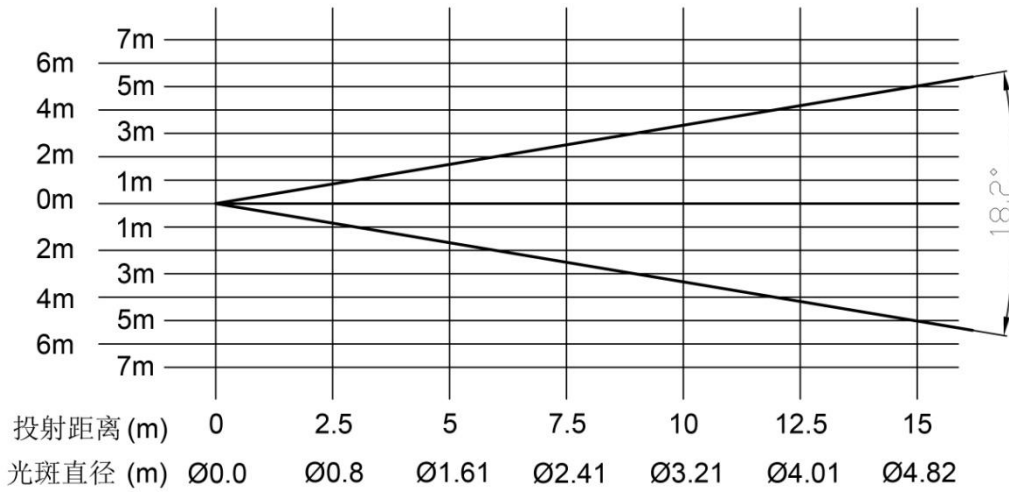
Light Output for **PR-8936(26°)**

RGBW全亮(lux)　　0　　　3502　　875　　389　　219　　140　　97

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

26°

投射距离 (m)　　0　　　2.5　　　5　　　7.5　　　10　　12.5　　15

光斑直径 (m)　Ø0.0　　Ø1.14　Ø2.27　Ø3.41　Ø4.55　Ø5.68　Ø6.82

Light Output for **PR-8937(5°)**

RGBW全亮(lux)　　0　　4525　　1131　　502　　283　　181　　126

| 7m |
| 6m 5m |
| 4m 3m |
| 2m 1m |
| 0m |
| 1m 2m |
| 3m 4m |
| 5m 6m |
| 7m |

6.7°

投射距离 (m)　　0　　5　　10　　15　　20　　25　　30

光斑直径 (m)　　Ø0.0　Ø0.59　Ø1.19　Ø1.78　Ø2.37　Ø2.97　Ø3.56

Light Output for **PR-8938(10°)**

RGBW全亮(lux)　　0　　2451　　613　　272　　153　　98　　68

| 7m |
| 6m 5m |
| 4m 3m |
| 2m 1m |
| 0m |
| 1m 2m |
| 3m 4m |
| 5m 6m |
| 7m |

10°

投射距离 (m)　　0　　5　　10　　15　　20　　25　　30

光斑直径 (m)　　Ø0.0　Ø0.9　Ø1.81　Ø2.71　Ø3.61　Ø4.52　Ø5.42
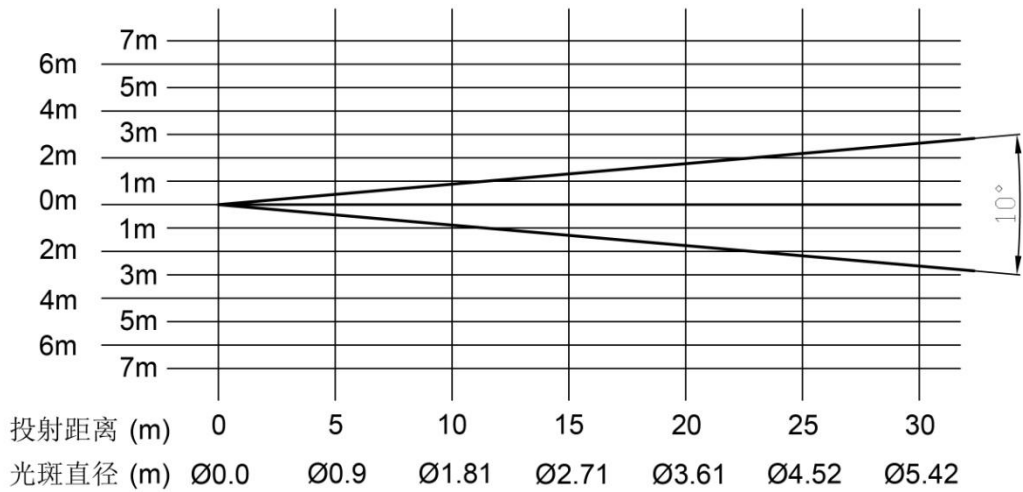
ELECTRICAL DIAGRAM
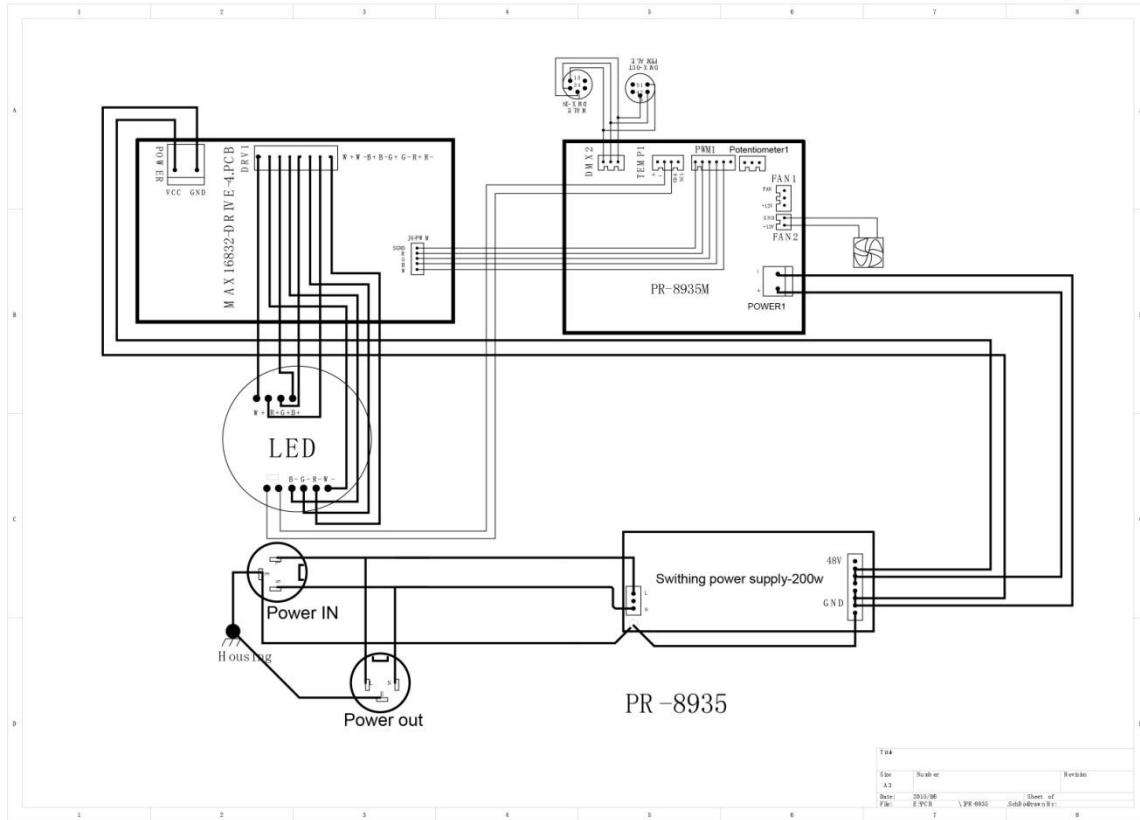
COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
SIGNAL CABLE	230090003	1	5M
POWER SWITCH	192010190	1	
MASTER BOARD OF PR-8935	230060485	1	
LED LIGHTSOURCE OF PR-8935	150020299	1	
DRIVER BOARD OF PR-8935	230060486	1	
19˚LENS TUBE	120110741	1	
26˚LENS TUBE	120110742	1	
5˚LENS TUBE	12010751	1	
10˚LENS TUBE	12010752	1	

PR LIGHTING LTD.

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Version: 20150818