

**PR**

**PR-8800**

## INDEX

SAFE USAGE OF THE PROJECTOR	3
INSTALLING THE PROJECTOR	4
CONTROL SYSTEM AND POWER CONNECTIONS	4
DMX TERMINATOR	5
SETUP OPTIONS-PROJECTOR CONFIGURATION	6
TO SET THE DMX START ADDRESS	6
OPERATION MENU	7
DMX PROTOCOL	9
INDICATION OF LED DISPLAY	12
MAINTENANCE	12
TROUBLESHOOTING	12
TECHNICAL DATA	13
ELECTRICAL DIAGRAM	16
COMPONENT ORDER CODES	17

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
Bam door	1	Pc	
Clamps	2	Pcs	
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 can be used indoors and outdoors, IP67.

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



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

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 eyes.

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.

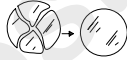
It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.

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

When the projector is hanged to a high place, please use a safety cord provided to pass through as a secondary safety fixing for safety reasons. For details, refer to "INSTALL THE PROJECTOR" section.

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.

LED lens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.



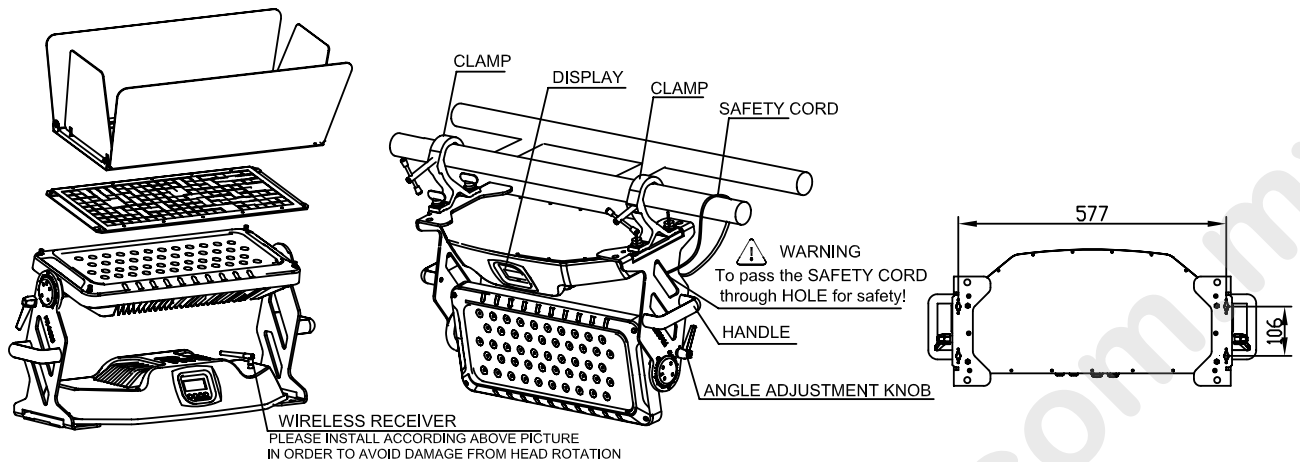
Exterior surface temperatures of the projector after 5 minutes operation is 55°C, when achieving steady state it is 70°C.

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

**Always disconnect from the mains, when the device is not in use or before cleaning it or before attempting any maintenance work !**

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

## INSTALL THE PROJECTOR

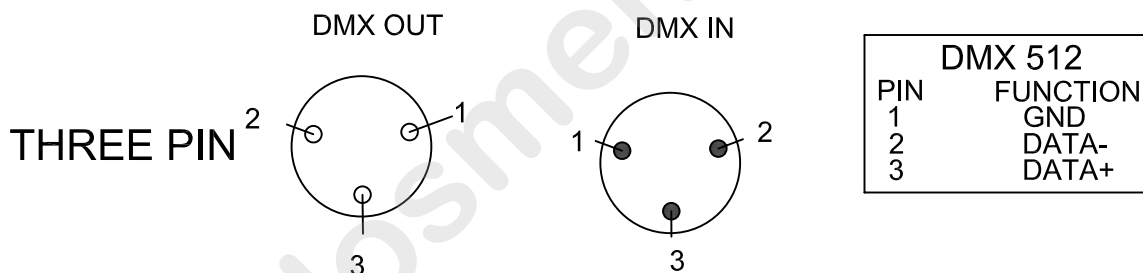


Take 2 clamps and safety cord out from the package and mount 2 clamps on the underside of fixture with 2 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. Always ensure that the projector is firmly anchored to avoid vibration and slipping 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 PR-8800.

**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.

## CONTROL SYSTEM AND POWER CONNECTION



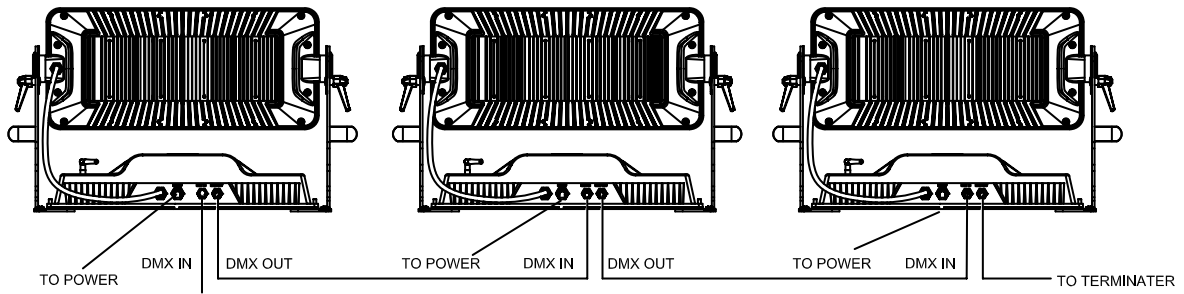
Connection between the controller and a projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Please use the projector's cannon 3- pin signal input and output cables as connection. The 3-pin signal connections are connected 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 fixture accepts digital control signals in protocol DMX512 (1990).

The amount of projectors connected in parallel is not more than 32. Connect the controller's output to the first fixture's input cable with a 3-pin signal cable, connect the first fixture's output cable to the second fixture's input cable and connect the rest fixtures in the same way. Eventually, connect the last fixture's output cable to a DMX terminator. Note: Only when all the start addresses of fixtures are set the same, synchronous control could be achieved.

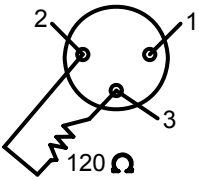
When the first fixture is not connected to the controller, and all the other connections are the same as above, it is master / slave mode connection. To achieve master / slave mode, set the first fixture master, the others slave( slave is default).

As for power connections, each projector has to be supplied separately by external power. Use the power cord of each projector to connect the mains power directly, paying attention to the voltage and frequency marked on the panel of the projector.



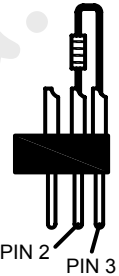
## DMX TERMINATOR

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.

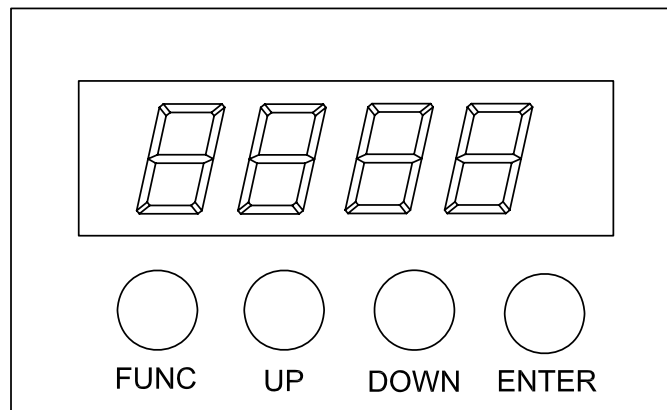


**DMX TERMINATOR CONNECTION**

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.



## SETUP OPTIONS-PROJECTOR CONFIGURATION



Projector configuration can be set conveniently via push-button switch and LED display.

Launch the projector and press button **ENTER** for more than 5 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 next menu. Press button **UP** or **DOWN** to shift.

Press button **FUNC**, it will return to the upper menu one by one or browse through the main menu.

## TO SET THE DMX START ADDRESS

Each unit 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 PR-8800 have 3 DMX modes, which are standard mode, extended mode and short mode. For example, the standard mode has 11 channels, so set the No. 1 projector's address 001, No. 2 projector's address 012, No. 3 projector's address 023, No. 4 projector's address 034, and so on.

Launch the projector. Press button **ENTER** for more than 5 seconds to unlock the panel.

Press button **FUNC**, **UP** or **DOWN** to find "AddR" menu.

Then press **ENTER** to show DMX address and press **UP** or **DOWN** to set DMX address.

At this time, the address will flash continuously. Press button **ENTER** to confirm and it means the setting has been enabled.

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)	
		SHRT (Short mode)	
	dISP (Display setting) (Default: ON)	ON	
		OFF (Shut off digital CRT without pressing buttons in 5 minutes)	
	b-C Brightness level control setting (Default: OFF)	OFF (Brightness control is OFF)	
		ON (Brightness control is ON)	
	T-C Timer control setting (Default: OFF)	OFF (Timer control is OFF)	
		ON (Timer control is ON)	
	DMXS DMX setting (Default: ONCA)	ONCA (Only XLR)	
		ONWR (Only wireless)	
		PPCA (XLR first)	
		PRWR (wireless first)	
		WTOC (wireless to XLR)	
mORS (Master /Slave Setting) (Default: SLAVE)	SLAV (Slave)		
	mAST <sup>[1]</sup> (Master)		
PAIR Unlink wireless	yES		
FACT (Reset factory setup)	yES		
TRmd <sup>[2]</sup> (Transmit parameters)	yES		
INFO (Information)	TimE (Power on hours)	XXXX	
	TEmP (LED board temperature)	XX	
	VER (Version)	X.X.X	
TEST (Test mode)	R (Red)		
	G (Green)		
	B (Blue)		
	W (White)		
	RGb (Red/green/blue)		
	Rwb (Red/white/blue)		
	RGbw (Red/green/blue/white)		
mENU (Operation mode)	dmx (DMX mode)		
	PR XX (Preset memory, PR01~PR16)		

		COL1 (Colour 1)	XX (Number: 0~14 <sup>[3]</sup> )
	ET XX (User memory,ET01~ET16)	COL2 (Colour 2)	XX (Number: 0~14)
		COL3 (Colour 3)	XX (Number: 0~14)
		COL4 (Colour 4)	XX (Number: 0~14)
T*B Timer value and brightness value setting	T-S Current time setting <sup>[4]</sup>	HOUR	
		MINU	
	T-ON Power on time setting <sup>[4]</sup>	HOUR	
		MINU	
	T-OFF Power off time setting	HOUR	
		MINU	
	B-ON Power on by brightness setting <sup>[5]</sup>	1-100	
B-OFF Power off by brightness setting	1-100		
B-EN Check brightness	1-101		

Note:

- [1]. There can only be one main unit set as master at the same single circuit. Please remove DMX single when main unit function is working.
- [2]. When multiple projectors' work together in synchronous control state, Parameters can be transmitted from the master projector to the slave projectors in the following conditions, such as DMX channel mode, display setting status brightness level setting, timer control setting, DMX setting, brightness value setting, timer value setting, current time value and operation mode (User memory data is included). Please set main unit as master and others as slave while carrying on transmitting parameters.
- [3]. Colour number in user's memory represents refer to the following table

Number	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Colour	R	G	B	W	RG	RB	RW	GB	GW	BW	RGB	RGW	RBW	GBW	RGBW

- [4]. When timer control setting (T-C) is set to ON: Power on time is set to t1, Power off time is set to t2, current time is set to t3.  
 If  $t2 > t1$ , when  $t1 \leq t3 < t2$ , the projector is power on, In addition time of the projector is power off.  
 If  $t2 < t1$ , when  $t2 \leq t3 < t1$ , the projector is power off, In addition time of the projector is power on.  
 If  $t2 = t1$ , the projector is power on.
- [5]. When brightness level control (b-C) is set to ON: Power on by brightness is set to b1, power off by brightness is set to b2, current brightness is set to b3.  
 If  $b2 > b1$ , when  $b1 \leq b3 < b2$ , the projector is power on, in addition brightness of the projector is power off.  
 If  $b2 < b1$ , when  $b2 \leq b3 < b1$ , the projector is power off, in addition brightness of the projector is power on.  
 If  $b2 = b1$ , the projector is power on.
- [6]. Brightness level control setting and timer control is a logic and or relationship, if one of them to conform the off condition, the LED lights turn off.



## DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION
1	1	1	Dimmer	000-255	Dimming from dark to light
		2	Dimmer Fine	000-255	Dimmer in 16 Bit precision
2	2	3	Colour Temperature	000	No effect
				001-255	Colour temperature adjustment from 3200K to 10000K
			Macros	000	No effect
				001-015	Colour Temperature 3200K
				016-031	Colour Temperature 5600K
				032-047	Colour Temperature 7200K
				048-063	Colour Temperature 10000K
				064-079	Red
				080-095	Green
				096-111	Blue
				112-127	Purple
				128-143	Blue and White
				144-159	Red and White
				160-175	Green and White
				176-191	White
				192-207	Yellow and White
				208-223	Purple and White
			224-239	Effect 1	
			240-255	Effect 2	
3	4	5	Red	000-255	Dimming from dark to light
4	5	6	Green	000-255	Dimming from dark to light
5	6	7	Blue	000-255	Dimming from dark to light
6	7	8	White	000-255	Dimming from dark to light
		9	Hue	000-255	Hue selection
		10	Saturation	000-255	Saturation from shallow to deep
		11	Value	000-255	From dark to light
7	8	12	Strobe	000-009	No effect
				010-255	Strobe speed from slow to fast
			Preset memory	000	No effect
				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
	9	13			

				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	14	User Memory	000	No effect
				001-015	User memory 1
				016-031	User memory 2
				032-047	User memory 3
				048-063	User memory 4
				064-079	User memory 5
				080-095	User memory 6
				096-111	User memory 7
				112-127	User memory 8
				128-143	User memory 9
				144-159	User memory 10
				160-175	User memory 11
				176-191	User memory 12
				192-207	User memory 13
				208-223	User memory 14
				224-239	User memory 15
				240-255	User memory 16
	11	15	Memory Speed	000	No effect
				001-015	Speed 1,the 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	Speed14
				224-239	Speed 15

				240-255	Speed 16, the slowest
--	--	--	--	---------	-----------------------

Note:

\*\*\*\* Channel priority from high to low is as the following: preset memory, user memory, RGBW dimming, HSV dimming, macro channel;

\*\*\*\*When high priority channel is used, low priority channel is no effect.

www.carlosmendoza.com.mx

## INDICATION OF LED DISPLAY

Decimal point of the first character	On	DMX signal is OK
	Off	No DMX signal
Decimal point of the third character	On	Master / slave signal is OK
	Off	No master / slave signal
Decimal point of the fourth character	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
Blue LED	On	DMX signal of wireless is OK
	Off	No connection to any transmitter
	Flash	Lost contact with transmitter or contacting transmitter

## MAINTENANCE

To prolong the life of the projector, it is very important to do the maintenance work. The environment is harsh outdoors, or if the projector 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 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 projector 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 projector doesn't switch on	<ul style="list-style-type: none"> <li>➤ Power connection is not correct.</li> <li>➤ Power supply is damaged or abnormal. Call qualified personnel to fix it.</li> <li>➤ Connection of control board is not correct. Call a qualified personnel to fix it.</li> </ul>
The projector can be turned on, but LEDs do not emit light and are out of control.	<ul style="list-style-type: none"> <li>➤ Connection of LED board is not correct. Call a qualified personnel to fix it.</li> </ul>
The lamp comes on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> <li>➤ Make sure that the projector is correctly configured.</li> <li>➤ Replace or repair the DMX cable.</li> </ul>
The beam appears dim	<ul style="list-style-type: none"> <li>➤ The projector is too hot. Take ventilation measures to make it cool.</li> </ul>

**VOLTAGES:**

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

**POWER CONSUMPTION:**

350W@220V

**LED:**

Power consumption	3W
Quantity	108 (27R+27G+27B+27W)
Manufacturers Rated LED Life	50000 Hours

**COLOURS:**

RGBW colours mixing  
Linearly colour temperature correction

**DIMMER:**

0-100% linearly adjustable

**STROBE:**

1~20F.P.S

**LENS ANGLE:**

14° (Optional 8°, 45°)

**BEAM ANGLE:**

28° (Optional 26°, 56°)

**CONTROL:**

DMX512, 3 pin interfaces  
7 channels in short mode, 11 channels in standard mode, and 15 channels in extended mode  
Wireless DMX signal transmission  
Master /Slave mode  
16 preset memories  
16 user memories  
preset memories and user memories can be load by control channels, 16 level speeds adjustable  
Self-test mode

**OTHER FUNCTIONS:**

LED board temperature display  
Fixture usage time display  
Brightness level control  
Timer control  
DMX mode, setting status, operation mode and user memory data can be transmitted by synchronous control

**HOUSING:**

High-intensity die-casting aluminum, IP67

**WORK ENVIRONMENT TEMPERATURE:**

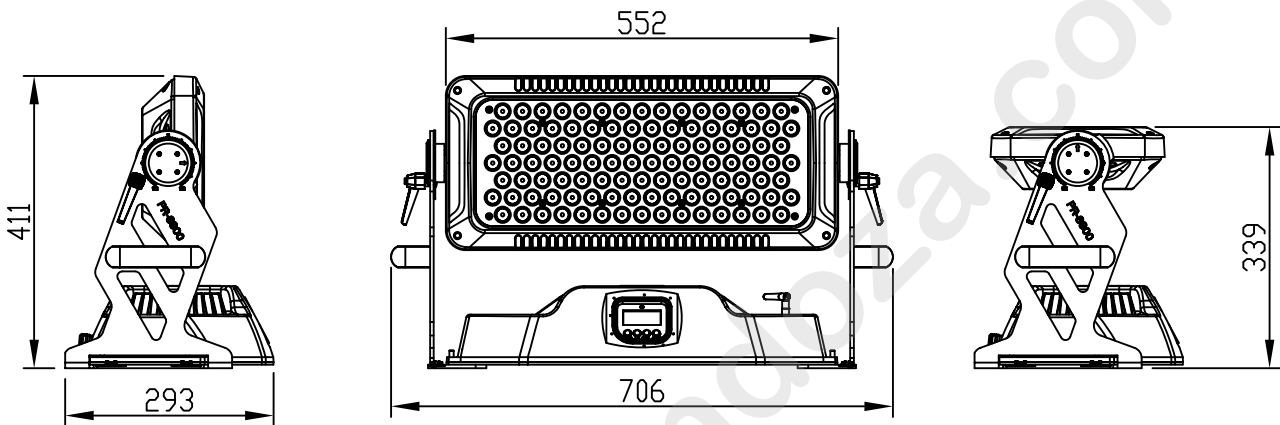
-20°C~40°C

**WEIGHT:**

17kg

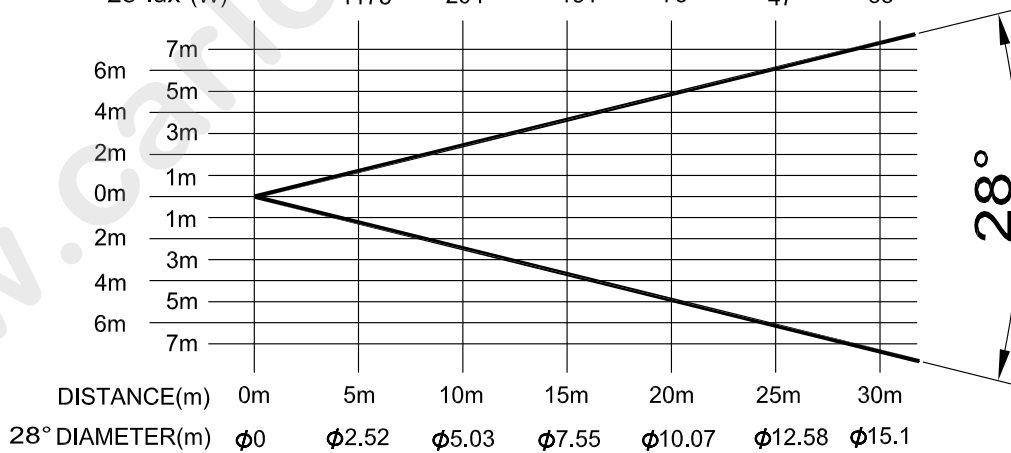
**SIZES:**

See it below

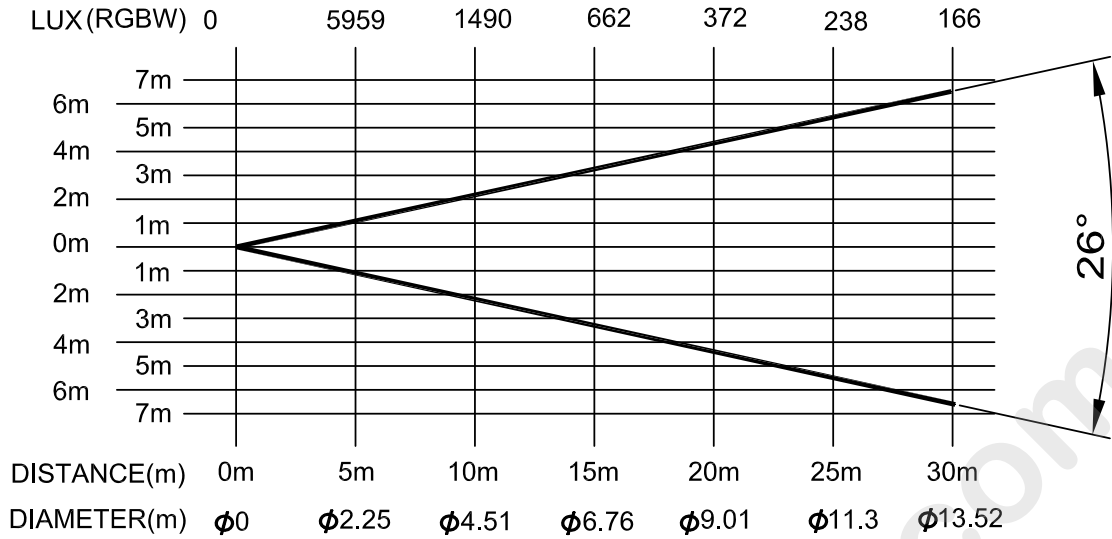


**LIGHT OUTPUT:**

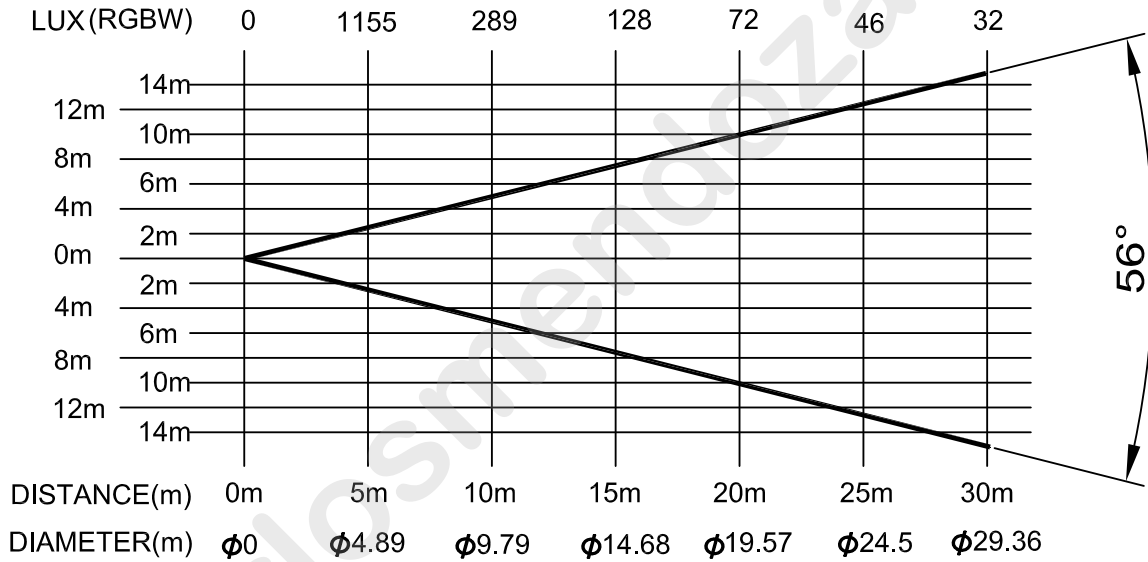
28°lux (RGBW)	4502	1125	500	281	180	125
28°lux (R)	304	76	34	19	12	8
28°lux (G)	1846	461	205	115	74	51
28°lux (B)	1025	256	114	64	41	28
28°lux (W)	1175	294	131	73	47	33

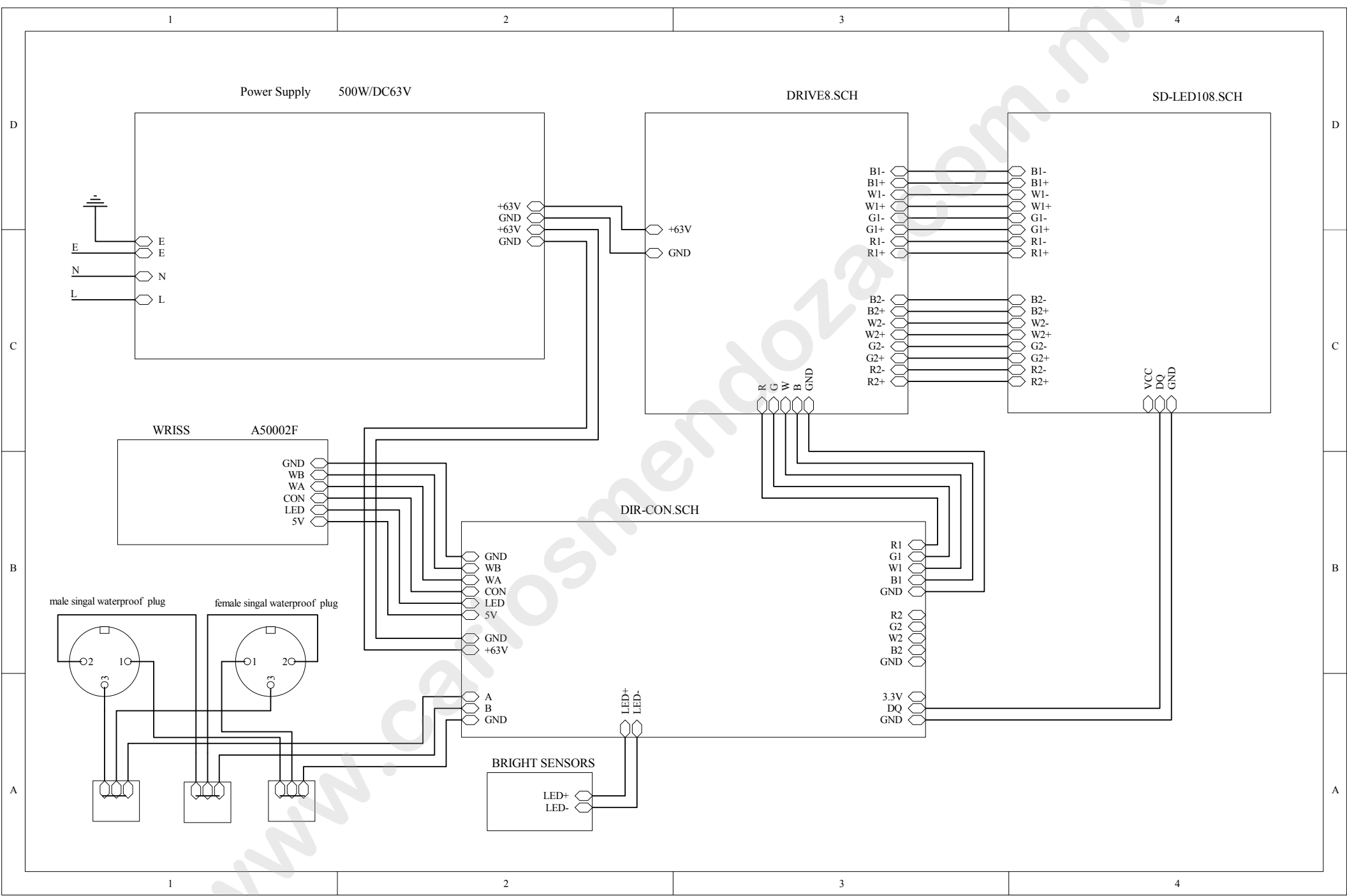


**Optional lens 8°:**



**Optional lens 45°:**





www.carlosmendoza.com.mx



**COMPONENT ORDER CODES**

<b>NAME</b>	<b>PART NO.</b>	<b>QUANTITY</b>	<b>REMARK</b>
LED LENS	070070040	108	14°
LED LENS	070070015	108	8° (optional)
LED LENS	070070041	108	45° (optional)
SIGNAL CABLE	120080030B	1	1.7m,male
SIGNAL CABLE	120080031B	1	1.7m,female
SIGNAL CABLE	120080032	1	0.3m,male
SIGNAL CABLE	120080033	1	0.3m,female
POWER CORD	120080034A	1	1m,female
POWER SUPPLY	192010142	2	
LED CONTROL BOARD	230060083	1	
LED BOARD	230060085	2	
LED DRIVE BOARD	230060086	2	

## PR LIGHTING LTD.

---

PR New Hi-tech Science Park, 1582 Xingye Avenue  
Nancun Panyu, Guangzhou, 511442 China  
TEL: +86-20-3995 2888  
FAX: +86-20-3995 2330

---

P/N: 321030014  
Version: 20110110