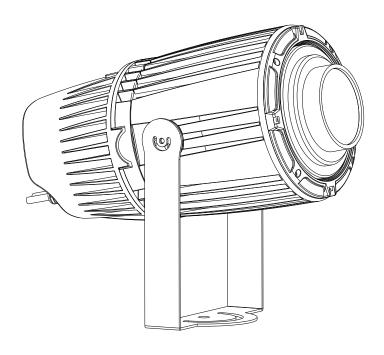
# R 珠江灯光



# CUBIX300

PR-6803

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

# **INDEX**

1. SAFETY AND WARNINGS	3
2. INSTRUCTIONS	4
3. INSTALLATION	5
4. SETUP AND CONFIGURATION	6
5.OPERATION MENU	8
6. DMX PROTOCOL	9
7.TECHNICAL DATA	10

# **ACCESSORIES**

The following items are supplied with the projector and please check:

Name	Quantity	Unit	Remark
Clamp	1	Pc	
Power cord	1	Pc	
XLR loop cable	2	pcs	
Safety cord	1	Pc	
User manual	1	Pc	

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 further 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 light 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

re 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 with IP65.
- 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 a projector to any type of dimmer pack.
- If the lamp, lens and screen protective cover of the a projector have obvious damage, i.e., to the extent that it hurts the performance like cracking or deformation. Please stop using it and replace them with the original parts, otherwise its performance will be compromised.
- For the installation location of a projector, it shouldn't be seen in the distance of less than 4 meters for a long time



- •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
- •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.



- $\bullet$  While the ambient temperature is stable, the highest temperature of the housing will be 70°C
- 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.
- •Do not let the front lens under sunlight or other strong light sources at any angle, otherwise the danger of fire can be caused by the focused beam by the lens inside a projector.

# 2. INSTRUCTIONS

## •CLEANING AND MAINTENANCE

For the units with optical lens, because of the accumulation of the smoke, oil and dust on lens, the light output will be compromised. For the reliable use of the unit, it is very necessary to keep it clean. The unit is IP65 rating waterproof device. Unless approval by some professional technician for necessary internal component replacement, it's forbidden to dismantle the 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 20days. 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	
	➤ Check the power cord connection	
	Power Switch fails or is not connected well, call a professional	
The projector doesn't switch on	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	LED lamp board is not connected well, call a professional technician for	
can't be on	repairing and checking	
The LED lamps can be on, but not controlled	Check if DMX Start Address is properly set	
by DMX	➤ Check if XLR cable fails or not	
The buildeness decreases obviously	Ambient temperature is too hot which makes the projector too hot,	
The brightness decreases obviously	please take appropriate ventilation measures	

## 3. INSTALLATION

#### •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 he big knob and adjust the angle between the arm and unit as desired and then tighten it.(if the version is with wireless control, the antenna should face up if the fixture is placed on flat surface)

## •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.

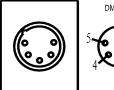
**Note:** If projectors are connected in series, please connect POWER IN port of the 1<sup>st</sup> projector with the Power Mains, then connect its POWER OUT with POWER IN of the 2<sup>nd</sup> projector, and so on till all fixtures are connected. If the voltage supplied is 200V-240V, the maximum projectors 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 2.5mm<sup>2</sup>.



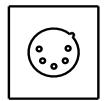
- •The earth wire(yellow/green) must be connected to the ground. And electrical connection must be in accordance with the standards concerned.
- •If any questions about the electrical installation, do not continue but consult a qualified electrician.

#### •DMX CONTROL CONNECTION

5-PIN







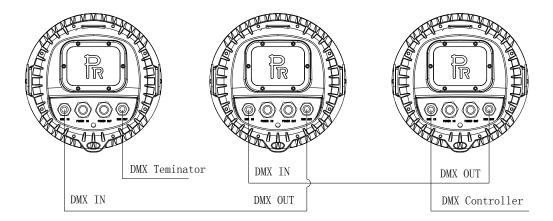




Connection between controller and projector and between one projector and another must be made with a twin-screened cable, with each wire having at least a 0.5mm in diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 5 pin XLR plugs and sockets. 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).

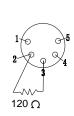
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



#### •DMX TERMINATOR

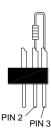
In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a  $120\Omega$  (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.

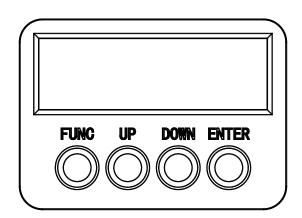


# DMX TERMINATOR CONNECTION

Connect a 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.



# 4. SETUPAND CONFIGURATION



## •FRONT PANEL OPERATION

To browse through or modify the projector's functions, press key ENTER for more than 3 seconds to unlock the control panel and enter the menus. To set or browse through the projector's functions, press key UP or DOWN. Press the key ENTER to enter the submenus and the current parameters will be displayed while flashing. Press key UP or DOWN to change values(plus or minus)

Press key ENTER to save your changes and enter into the upper level menu while flashings stop;

Press key FUNO, it will return to the upper menu(parameters not saved) or browse through 1<sup>st</sup> level menus;

Press key FUNG for 1 second or none key is pushed for 1 minute, the menu will be escaped and current operation mode displayed.

#### •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 1 DMX mode. For example standard mode has 9 channels, so set the No. 1 projector's address 001, No. 2 projector's address 010, No. 3 projector's address 019, No. 4 projector's address 028, and so on.

Launch the projector. Press button ENTER more than 3 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; after powered on next time, the default will be last value saved

Press button FUNC, it will return to the upper menu

If DMX signal is available, LED indication is on. Otherwise it is off.

#### •WIRELESS CONTROL OPERATION

The optional version of the projector has wireless control function with DMX wireless receiver module and DMX wireless antenna for remote control.

The operation details are as follows:

- 1. Enter into the menu, then enter into "Config Set" after UP or DOWN is pushed;
- 2.Select "Wireless mode" ——"Wireless first" (Note: do not select" XLR only); Then the wireless control is activated. Only after the project and wireless transmitter are connected, can the it receive wireless signal. If wireless control is deactivated, press "Yes" under "Unlink wireless" under "config Set". Then the projector will disconnect wit the wireless transmitter.

#### •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.

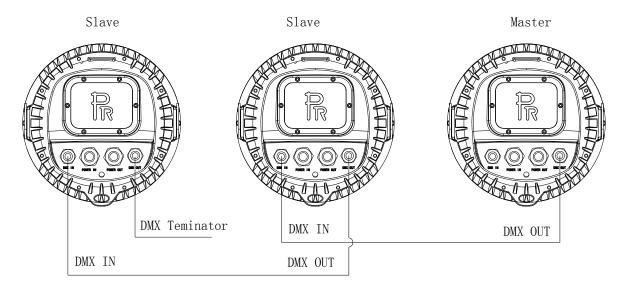
DMX address can be set at any number within 512.

#### •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 1<sup>st</sup> 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



# 5. OPERATION MENU

1 <sup>st</sup> level menu	2 <sup>nd</sup> level menu	3 <sup>rd</sup> level menu	4 <sup>th</sup> level menu	
Address	001 - 512		DMX Address	
		Slave		
	MasterSlave		Default: Slave	
		Master	Delault: Slave	
		7 111		
	Language Setup	English	Default: English	
		Chinese	8	
	T 17' 1. C .	On	Backlight will be off	
	Lcd Light Setup	Off	3mintues after no key is	
		Off	pushed.	
	Display Invert	Yes		
	Display livert	No		
	Factory Setting	Yes		
	Tactory Setting	ies		
	PRM Transmit	Yes		
		165		
	clean Progra	Yes		
Config Setup				
		Color		
		Gobo		
	Moto Offset	RGobo		
		Focus		
		Zoom		
Moto Reset	Yes/No	200111		
	LED Temperature	XX		
Information	Fixture use Time	XXXX		
mormation	Tixtuic use Time	AAA		
	Software Version	VA X. X. X		
	Software version	VA A. A. A VB X. X. X		
	Auto Test	VD A. A. A		
	Auto Test			
	Dimmer			
		000 - 255	LED brightness	
	Color	000 055	3.5	
		000 - 255	Motor position	
Test Mode	Gobo	000 055	M-4 '.'	
		000 - 255	Motor position	
	RGobo	000 - 255	Motormosition	
			Motor position	
	Focus	000 - 255	Motor position	
		000 - 255	MOIOI POSITIOII	
	Zoom	000 - 255	Motor position	
			1710tor position	
	DMX Mode	Yes		
	77. 7.5	+		
	User Memory	Yes		
Operation Mode	D (3.5			
1	Preset Memory	PR01~PR16		
	(PR01~PR16)		000 255	
	User Progra Edit	Dimmer	000 - 255	
	(ET01~ET16)	Strobe	000 - 255	
		Color	000 - 255	

Gobo	000 - 255
RGobo	000 - 255
Focus	000 - 255
Zoom	000 - 255
Keep Time	000 – 200 (0- 20S)

# 6. DMX PROTOCOL

	Function	DMX Value	Description
1	Dimmer	000-255	0-100% linear dimmer
2	Dimmer Fine	000-255	Dimmer in 16 bit
2		000-007	No
3	Strobe	008-255	Strobe from slow to fast
		000-009	Color1
		010-019	Color1 - Color2
		020-029	Color2
		030-039	Color2 - Color3
		040-049	Color3
		050-059	Color3 - Color4
		060-069	Color4
4	4 Color Wheel	070-079	Color4 - Color5
		080-089	Color5
		090-099	Color5 - Color6
		100-109	Color6
		110-119	Color6 - Color1
		120-127	Color1
		128-191	Clockwise rotation from slow to fast
		192-255	Anti-clockwise rotation from slow to fast
		000-015	Gobo1
		016-031	Gobo 2
		032-047	Gobo 3
		048-063	Gobo 4
		064-079	Gobo 1 shake
5	Rotating Gobo Wheel	080-095	Gobo 2 shake
		096-111	Gobo 3 shake
		112-127	Gobo 4 shake
		128-189	Clockwise rotation from fast to slow
		190-193	Stop
		194-255	Anti-clockwise rotation from fast to slow
	Rotating Gobo	000-127	Gobo position
		128-189	Clockwise rotation from fast to slow
6		190-193	Stop
		194-255	Anti-clockwise rotation from fast to slow

7	Focus	000-255	Linear focusing
8	Zoom	000-255	Linear zooming
		000-199	No
9	Function	200-209	Motor reset
		210-255	No

# 7. TECHNICAL DATA

#### **ELECTRIC SPECIFICATIONS**

Input voltage: 100V~240V AC, 50/60Hz

Input power: 170W @ 220V Maximum current:0.9A Power factor: PF>0.95

#### LIGHT SOURCE SPECIFICATIONS

Qty TX-3636W150FC120-NUVENG-A01 150W LED

Manufacturers Rated Lamp Life 50000hours

Power consumption 150W,1pc,White

Color temperature 7500K

#### **COLORS**

1 color wheel(5 fixed colors+ open), continual rotation, magnet sensor for positioning

# ROTATING GOBO WHEEL

1 rotating gobo wheel,4 Gobos

#### **DIMMER**

Linear Dimmer from 0-100%

#### **STROBE**

Electronic Strobe 0.3 -25FP.S with pulse macros

## **BEAM ANGLE**

Beam Angle 15 \(^45\) \(^1\) linear dimming

## **CONTROL**

International standard DMX512 signal control protocol, 5-pin DMX 512 interfaces

Master/Slave synchronized Mode

Stand alone mode, preset memory, self test mode, static scene mode

3 operation modes(DMX mode, user memory, preset memory)

## **OTHER FUNCTIONS**

Wireless receiver

LCD display invertible

DMX512 interface for firmware upgrade, quick and convenient

Over-temperature protection

# HOUSING

High tensile cast Aluminum alloy, IP65

# **NET WEIGHT**

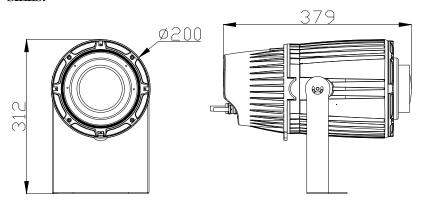
Net weight 9.5Kg

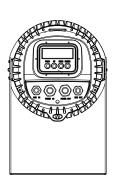
Gross weight 12.8 Kg in cardboard box

# **OPERATION TEMPERATURE**

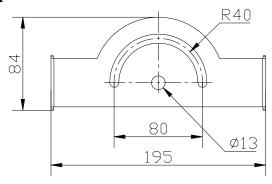
Maximum ambient temperature: 40  $^{\circ}\mathrm{C}$ 

# SIZES:





# ARM INSTALLATION DIAGRAM



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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: 6320000096A Version:20200928