R Pure Reliability lighting



XRLED 700 Spot

PR-8163

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.

 $\label{eq:problem} \begin{array}{ll} PR\ LIGHTING\ LTD. \\ http://www.pr-lighting.com.cn \end{array}$

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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 projector:

Name	Quantity	Unit	Remark
G clamps	2	Pcs	
XLR cable	1	Pc	with plug and socket
Safety cord	2	Pcs	
This manual	1	Pc	
Power cord	1	Pc	
Ω clamps	2	Pcs	Optional
XLR terminator	1	Pc	Optional

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.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately.

Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.

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 1.3m. 4 1.3m

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. The maximum ambient temperature 45 °C must never be exceeded.

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.

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. To apply power, first check that the head pan and tilt locks are released.

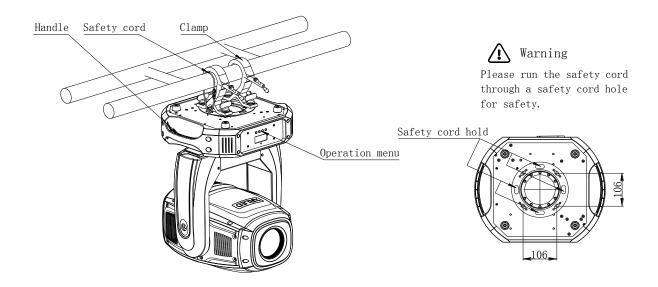
Exterior surface temperatures of the luminaire after 5 minutes operation is 45 °C, when steady state is achieved 50 °C,

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 disconnection from Power before a device's installation ,cleaning and maintenance!

INSTALL THE PROJECTOR



Take 2 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 <u>WARNING</u> on the underside of the base as shown above) <u>To pass SAFETY CORD through 1 HOLE for safety!</u> 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. A device MUST be lifted or carried by its HANDLES instead of clamps.
- 2. For safety the safety cord should afford 10 times the unit's weight.

POWER SUPPLY-MAINS

Connect the power cord as follows:

L(live) =brown

E (earth) = yellow/green

N (neutral) =blue



Fixtures must be installed by a Qualified electrician in accordance with all national and local electrical and construction codes and regulation.

If you install a cord cap on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions.

To apply power, first check that the head pan and tilt locks are released.

The cores in the power cable are coloured according to the following table.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

The earth has to be connected!

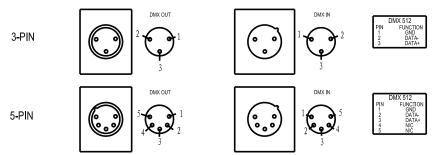
If you have any doubts about proper installation, consult a qualified electrician.

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.

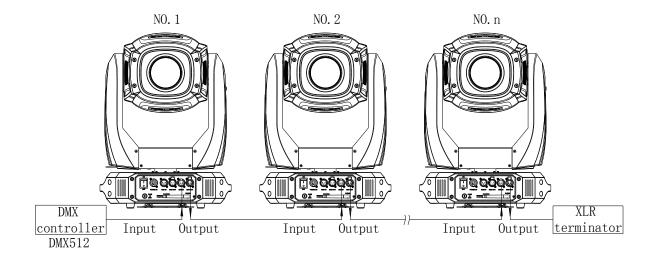
CONTROL CONNECTION



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). 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.



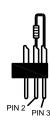
DMX TERMINATOR

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.

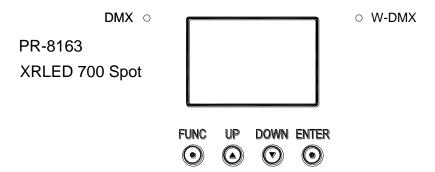
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



DMX TERMINATOR
CONNECTION
Connect a 120 Ω(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



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

Launch the projector. Press button ENTER more than 5 seconds to unlock panel, LCD display shows functional menus which have their own sub-menus for designated functions, the below is the details

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. If you stay for minutes defaulted will show display status automatically.

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 3 DMX modes. There are standard mode, extended mode and short mode. For example standard mode has 19 channels, so set the No. 1 projector's address 001, No. 2 projector's address 020, No. 3 projector's address 039, No. 4 projector's address 058, and so on.

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

Press button FUNC to display **DMX address**;

Press button UP and DOWN, you can set the address;

Press button ENTER to confirm, after powered next time, the last saved settings will be showed.

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

STAND-ALONE MODE

Operate the projector without connecting a controller, enable the master mode in the operation panel, the projector will run in Stand-Alone mode automatically.

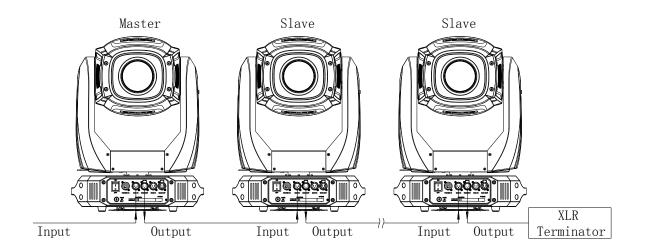
DMX address can be set without limitations.

MASTER/SLAVE MODE

Many projectors can run synchronously in the Master/Slave mode by linking them with each other. Select one projector as the master with setting options at any mode of master's modes enabled and make the other projectors as the slaves with setting options slave mode enabled and their DMX start address "001".

Using XLR-XLR cables, Connect the first fixture's output to the second fixture's input, and connect the second fixture's output to the third 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.

After powered, the group will run in synchronous Master/Slave Mode.



TECHNICAL DATA

1. VOLTAGES:

100V~240V AC, 50/60Hz

2. Light Source:

Power:320W Color: White

Color Temperature: 8000K±500K

3. POWER CONSUMPTION:

400W@220V

4. **COLOURS:**

1+6Colors(Orange, Magenta, Deep Blue, Red, Green, Yellow)



With variable speed bi-directional rainbow effect

5. GOBOS:

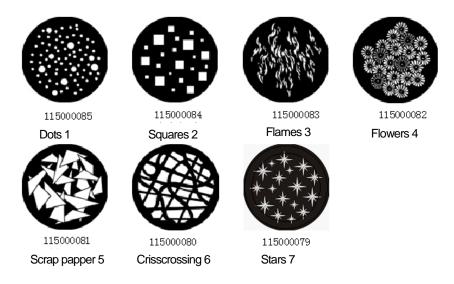
1 Rotating gobo wheel:7 interchangeable gobos+ white, glass or metal gobos can be fixed Indexable, bi-directionally rotatable and Wheel Scrolling at variable speeds, shakable at variable speeds

Gobo Diameter: Φ27.8mm Gobo image diameter: Φ23mm Thickness: 1.1mm, high float glass or better



1 Fixed gobo wheel: 7 interchangeable gobos+ white

Gobo diameter: Φ27.8mm Gobo image diameter: Φ23mm Thickness: 0.4mm



6. PRISM

1x3 facet prism, bi-directionally rotatable at variable speeds

7. Iris

Linearly adjusted with Macros
Electronic iris for different size beam

8. Frost Filter

1 pc Independent Frost Filter

9. FOCUS:

linearly focusing controlled by DMX

10. DIMMER:

0-100% linearly adjustable

11. Strobe:

Electronic strobe, 0.3~20 F.P.S

12. **HEAD MOVEMENT:**

Pan 0 °~540°, Tilt 0 °~270° with auto position correction

Swap and Invert functions of Pan and Tilt

13. **BEAM ANGLE:**

12 [∞]36 ¶inear adjustment

14. CONTROL:

DMX512, 3 pin, 5 pin interfaces

15channels in short mode, 19 channels in standard mode, and 23 channels in extended mode.

Master/slave mode

Stand-alone mode (Presets procedure, User procedure)

Self-test mode and Manual control test mode

15. OTHER FUNCTIONS:

Adjustable Pan & Tilt speed

Fixture usage time display

Software version display

DMX512 wireless available

Optional DMX512 wireless remitter

16. HOUSING:

Composite plastic, IP20

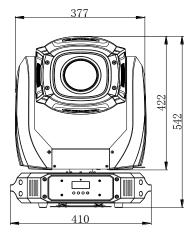
17. **WEIGHT:**

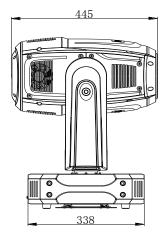
Net: 24Kg

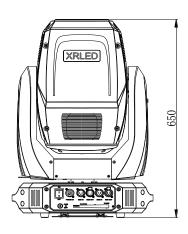
Gross Weight: 29.5Kg, in Carton(1pc/ctn)) including accessories supplied; 52KG in flight case including accessories supplied

18. SIZES:

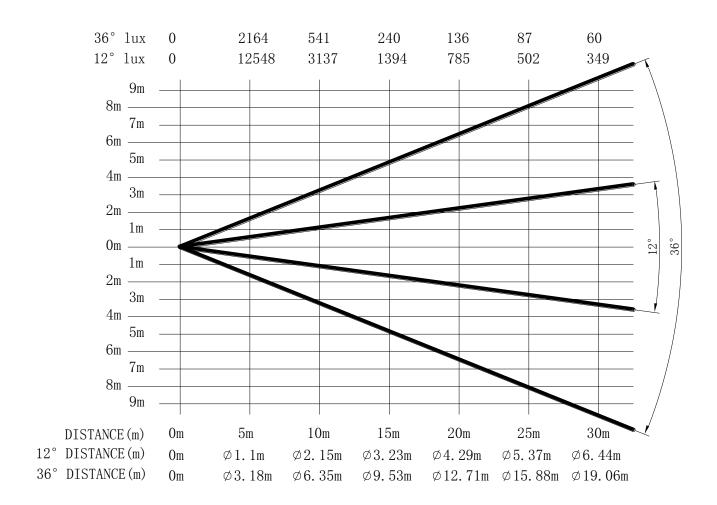
See at below







19. LIGHT OUTPUT:



OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL
AddR DMX Address	XXX (XXX:1~512)		
Reset	Are You Sure		
CNFG Config Settings		Standard 19 STD 19,Maximm Address:494	
	DMX Channel mode (Default is: STD)	Short 15 Short 15,Maximm Address:498	
		Extended 23 Extended 23,Maximm Address:490	
	Pan Tilt Swap	OFF	
	(Default is OFF)	ON	

		OFF	
	Pan Tilt Invert (Default is OFF)	ON	
	Pan Correction	0~127 (default:64)	
	Tilt Correction	0~127 (default:64)	
		XLR First	
	DMX Mode	XLR ONLY	
	(Default is XLR)	Wireless Only	
		Wireless First	
	Unlink Wireless	Wireless to XLR Yes	
	Offinia Wheless		
	Master/Slave Options (Default is slave)	Slave	
	(Detault is slave)	Master	
	Restore ex-factory Defaults	Yes	
	parameters Transmission	Yes	Remarks hereinafter
		Language (default:English)	English/Chinese
	Display Options	Display Mode	Off after delay/ Always on
	Display Options	Display Invert	OFF/ON
		Display Contrast (default:9)	0~18
INFO	Power-on Time	XXXX	
(Information)	Software version	1.0.0	
	Slef-Test	Yes (Projector procedure)	
TEST Test Mode		LED (default:ON)	ON
Test Wode		(**************************************	OFF
	Manual Test	Colour Wheel	White Colour 1 ~ Colour 6 Color1: Orange Color2: Pink Color3: Blue Color4: Magenta Color5: Green Color6: Yellow
			Forward Rotation
			Stop
			Reverse Rotation
			NO
		Iris	Effect 1- Beam from big to small(slow)
		пь	Effect 2- Beam from big to small(medium)
			Effect 3- Beam from big to small(Fast)

		NO Gobo
		Gobo 1 ∼ Gobo 7 Gobo1: Dots Gobo2: Squares Gobo3: Flames Gobo4: Flowers
		Gobo5: Paper Scrap Gobo6: Crisscrossing Gobo7: Stars
	F-Gobo wheel	Forward Rotation
		Reverse Rotation
		Shake 1 ~ 6 Effect1: Pattern Crisscrossing shake Effect2:Pattern paper scrap shake Effect3: Pattern Flowers shake Effect4: Pattern Flames Shake Effect5: Pattern Squares shake Effect6: Pattern Dots shake
	Rotating Gobo	NO Gobo Gobo 1 ~ Gobo 7 Gobo 1: Beehive Gobo 2: Pockets Gobo 3: Curves Gobo 4: Snows Gobo 5: Swirls Gobo 6: Dots Gobo 7: plum blossom
		Forward Rotation
		Reverse Rotation Shake 1 ~ 6 Gobo1: Pattern Dots Shake Gobo2: pattern Swirls Shake Gobo3: pattern Snows Shake Gobo4: Pattern Curves Shake Gobo5;:Pattern Pockets Shake Gobo6: Pattern Beehive Shake
	Gobo rotation	Stop Reverse Rotation
		Forward Rotation
		No
	Frost Effect	Frost Panel
		NO
	Prism	Prism In
	Prism Rotation	Stop

			Reverse Rotation
			Forward Rotation
		Focus	0-255 Linear Focusing
		ZOOM	0-255 Linear Zooming
		Pan Location	0-255 (0 %540 °)
		Tilt Location	0-255 (0 %270 °)
		Pan & Tilt Speed	0-255 Rotation Speed from Fast to Slow
	DMX mode	"D" displayed on top-right of the display	
	Run preset memory	"I" displayed on top-right of the display	
	Run user memory	"U" displayed on top-right of the display	
	Static Scene 1~16 Single Scene 1~16	CH1 Strobe	0-255 1-15 No 16-127 Pulse Strobe 128-255 Strobe from slow to fast
		CH2 Dimmer	0-255 linear Diming from dark to bright
		CH3 Color wheel	0-255 0-31 White 32-47 Orange 48-63 Pink 64-79 Blue 80-95 Magenta 96-111 Green 112-159 Reverse rotation from slow to fast 160-223 Stop 224-255 Forward Rotation from slow to fast
Operation Mode		CH4 Iris	0-255 0-207 Beam from big to small 208-255 Beam size change from slow to fast
Operation wode		CH5 Fixed Gobo Wheel	0~255 Gobo1~Gobo7 0-15 Open White 16-31 Gobo1: Dots 32-47 Gobo2: Squares 48-63 Gobo3: Flames 64-79 Gobo4: Flowers 80-95 Gobo5: Paper Scrap 96-111 Gobo6: Crisscrossing 112-127 Gobo7: Stars 128-143 Forward Rotation from slow to fast

160175 Pattern Criscrossing shake from first to slow 176-191 Pattern scrap paper shake from fist to slow 192-207 Pattern Browers stake from fist to slow 208-228 Pattern Planzes shake from fist to slow 204-225 Pattern Doss shake from fist to slow 204-225 Pattern Doss shake from fist to slow 205-25 Pattern Doss shake from fist to slow 205-25 Cobod-Gobo? 16-31 Gobod: Bechive 16-31 Gobod: Bechive 16-32 Gobod: Curves 16-34 Gobod: Curves 16-35 Gobod: Curves 106-25 Cobod-Sowink 106-25 Cobod-Sowink 107-25 Pattern Doss shake from fist to slow 176-19 Pattern Strows shake from fist to slow 176-19 Pattern Strows shake from fist to slow 176-20 Pattern Strows shake from fist to slow 176-20 Pattern Strows shake from fist to slow 224-239 Pattern Dickres shake from fist to slow 224-239 Strop 240-255 Pattern Bechives shake from fist to slow 224-239 Strop 240-255 Pattern Bechives shake from fist to slow 224-239 Strop 240-255 Cobo Reverse Rotation From slow to fast 224-239 Strop 240-255 Frost Effect 0-255 0-10 No 0-255 0-265 O-10 No 0-255 0-265 O-10 No 0-255 O		
176-19 Pattern scrap paper shake from fast to show 192-207 Pattern Flowers shake from fast to show 208-223 Pattern Hames shake from fast to show 224-239 Pattern Squares shake from fast to show 240-255 Pattern Doss shake from fast to show 240-257 Pattern Doss shake from fast to show 240-257 Pattern Sovies Swirts 324-7 Gobol: Beetive 324-7 Gobol: Prockets 48-63 Gobol: Swirts 36-111 Gobol: Doss 360-311 Gobol: Do		
192-207 Pattern Flowers shake from fast to slow		176-191 Pattern scrap paper shake from
208-223 Pattern Flames shake from fast to slow		192-207 Pattern Flowers shake from fast
224-239 Pattern Squares shake from fast to slow		208-223 Pattern Flames shake from fast
240-255 Pattern Dots shake from fast to slow 10-15 Open White 16-31 Gobot-Rechive 32-47 Gobot-Scroves 48-63 Gobot-Scroves 64-79 Gobot-Scrowes 64-112 Gobot-Scrowes 64-79 Gobot-Scrowes 64-112 Gobot-Scrowes		224-239 Pattern Squares shake from fast
0-255 Gobo1-Gobo7		240-255 Pattern Dots shake from fast to
16-31 Gobo : Bechive 32-47 Gobo : Pockets Gobo :		
32-47 Gobo2: Pockets 48-63 Gobo3: Curves Gobo4: Snows Gobo4: Snows Gobo4: Snows Gobo4: Snows Gobo4: Snows Gobo5: Snows Gobo5: Swits 96-111 Gobo6: Dots 112-127 Gobo7: plum blossom: 128-143 Forward Rotation from slow to fast 144-159 Reverse Rotation from slow to fast 160-175 Pattern Dots shake from fast to slow 176-191 Pattern Snows shake from fast to slow 192-207 Pattern Snows shake from fast to slow 208-223 Pattern Curves shake from fast to slow 224-239 Pattern Pockets shake from fast to slow 224-239 Pattern Enchrose shake from fast to slow 220-225 Pattern Bechives shake from fast to slow 220-225 Gobo Reverse Rotation From slow to fast 224-239 Stop Reverse Rotatio		
48-63 Gobo3: Curves		16-31 Gobo1: Beehive
Gobos: Snows Gobos: Octoos: Swirds Gobos: Octoos: Gobos: Octoos: Gobos: Octoos: Gobos: Octoos: Gobos:		
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96-111 Gobo6: Dots 12-127 Gobo7: plum blossom: 128-143 Forward Rotation from slow to fast 144-159 Reverse Rotation from slow to fast 144-159 Reverse Rotation from slow to fast 160-175 Pattern Dots shake from fast to slow 176-191 Pattern Swirds shake from fast to slow 192-207 Pattern Sows shake from fast to slow 208-223 Pattern Curves shake from fast to slow 224-239 Pattern Pockets shake from fast to slow 240-255 Pattern Beehives shake from fast to slow 240-255 Pattern Beehives shake from fast to slow 208-223 Gobo Reverse Rotation From slow to fast 224-239 Stop 240-255 Gobo Forward Rotation From slow to fast 224-239 Stop 240-255 Gobo Forward Rotation From slow to fast 224-239 Stop 240-255 Frost Effect 0-255 0-19 No 20-255 Prism In 0-255 0-63 Stop 64-127 Reverse rotation from slow to fast 182-191 Stop 192-255 Forward Rotation from slow to fast 182-191 Stop 192-255 Forward Rotation from slow to fast 20-255 Forward Rotation from slow to fast 20-2		
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CH6 Rotating Gobo Wheel		
160-175	CH6 Rotating Gobo Wheel	
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O-255		
O-207		
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CH7 Gobo Rotation Slow to fast 224-239 Stop 240-255 Gobo Forward Rotation From slow to fast		
224-239 Stop 240-255 Gobo Forward Rotation From slow to fast	CU7 Coho Pototion	
240-255 Gobo Forward Rotation From slow to fast	CH/ GODO KOTATION	
Slow to fast		-
O-255		
CH8 Frost Effect		
20-255 Frost Effect	CH8 Frost Effect	
CH10 Prism Rotation CH10 Prism Rotation CH10 Prism Rotation CH11 Focus O-19 No 20-255 Prism In 0-255 0-63 Stop 64-127 Reverse rotation from slow to fast 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus O-255 Linear Focusing		
20-255 Prism In 0-255 0-63 Stop 64-127 Reverse rotation from slow to fast 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus 0-255 Linear Focusing		
CH10 Prism Rotation 64-127 Reverse rotation from slow to fast 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus 0-255 Linear Focusing	CH9 Prism	
CH10 Prism Rotation O-63 Stop 64-127 Reverse rotation from slow to fast 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus O-255 Linear Focusing		20-255 Prism In
CH10 Prism Rotation 64-127 Reverse rotation from slow to fast 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus 0-255 Linear Focusing		
CH10 Prism Rotation 128—191 Stop 192-255 Forward Rotation from slow to fast CH11 Focus 0-255 Linear Focusing		*
CH11 Focus 128—191 Stop 192-255 Forward Rotation from slow to fast 0-255 Linear Focusing	CH10 Prism Rotation	
CH11 Focus fast CH11 Focus CH11 Focus CH11 Focus CH11 Focus CH11 Focus		_
CH11 Focus Linear Focusing		
Linear Focusing	CU11 Fears	
CH12 Zoom 0-255	CHII FOCUS	Linear Focusing
	CH12 Zoom	0-255

	Linear Zooming
CHI2 P	0-255
CH13 Pan	0 °-540 Forward Rotation
CH14 Tilt	0-255
	0 °~270 °
CH15 Pan & Tilt Speed	0-255
	Speed from fast to slow
CH16 Pan & tilt Time mode	0-25 Second

Remark:

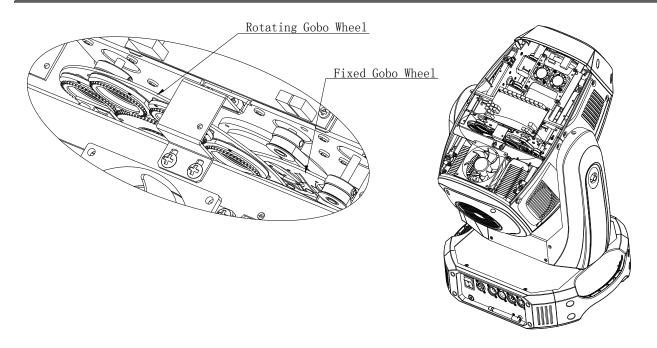
- 1. In the synchronous control of multiple projectors parameters can be transmitted from the master including: DMX mode, display setting, operation mode(user memory data included);
- 2. All projectors Accepting parameters will automatically be set to slave mode.

Explanations for the logos on top-right of the display

S: Slave M: Master
D: DMX 512 I: Preset Memory
U: User's Memory T: Test Mode

Lock Logo: all buttons are locked, press "ENTER" button for more than 5 seconds till lock logo disappears and buttons are unlocked.

REPLACING GOBOS



Disconnect the fixture from power. Carefully lift off the cover by undoing the 4 fast-fit screws.

Before the replacement of fixed gobos, take leaf spring out using finger, push the gobos out carefully and insert new gobos.

For rotating gobos: take rotating gobo wheel out by hand, push gobos out after pulling out leaf springs. Insert new gobos into gobo holders, then insert leaf spring back and make sure it is in narrow ring groove in the holder, i.e. internal ring groove in the holder, then flatten it. At last, use appropriate tool to push tightening spring back, then put the holder back into the wheel by another hand.

Note: If the gobo is a glass one, it should be touched with glabrous, clean and soft tissue or cloth matted between hand and glass instead of with bare hand. Close the rear cover and fasten 4 fast-fit screws.

DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION		
				000-015	No Strobe		
1	1	1	Strobe	016-127	Pulse Effect		
				128-255	Strobe speed from slow to fast		
2	2	2	Dimmer	000-255	Dimming from dark to light (0-100%)		
		3	Dimmer Fine	000-255	Dimmer in 16 Bit precision		
				000-031	White		
				032-047	Orange		
				048-063	Magenta		
				064-079	Blue		
				080-095	Red		
3	3	4	Color Wheel	096-111	Green		
				112-127	Yellow		
				128-159	Forward Rotation(Speed From Slow to Fast)		
				160-223	White		
				224-255	Reverse Rotation(Speed From Slow to Fast)		
				000-207	From big to Small		
4	4	5	Iris	208-223	Iris effect 1 of size change(slow)		
4	4		, , , , , , , , , , , , , , , , , , ,	3	1115	224-239	Iris effect 2 of size change(medium speed)
				240-255	Iris effect 3 of size change(fast)		
		6	Iris Fine	0-255	Iris in 16 Bit precision		
				000-015	White		
				016-031	Gobo1 Pattern Dots		
				032-047	Gobo 2 Pattern Squares		
				048-063	Gobo 3 Pattern Flames		
				064-079	Gobo 4 Pattern Flowers		
5	5	7	Fixed Gobo Wheel	080-095	Gobo 5 Pattern Scrap Paper		
				096-111	Gobo 6 Pattern Crisscrossing		
				112-127	Gobo 7 Pattern Stars		
				128-143	Forward Rotation from slow to fast		
				144-159	Reverse rotation from slow to fast		
				160-175	Gobo shake 1 from fast to slow(pattern Crisscrossing)		

				176-191	Gobo shake 2 from fast to slow(Pattern
				192-207	Scrap Paper) Gobo shake 3 from fast to slow(Pattern
				208-223	Flowers) Gobo shake 4 from fast to slow(Pattern
				224-239	Flames) Gobo shake 5 from fast to slow(Pattern
					Squares) Gobo shake 6 from fast to slow(pattern
				240-255	Dots)
				000-015	No Gobo
				016-031	Gobo1 Pattern Beehive
				032-047	Gobo 2 Pattern Pockets
				048-063	Gobo 3 Pattern Curves
				064-079	Gobo 4 Pattern Snows
				080-095	Gobo 5 Pattern Swirls
				096-111	Gobo 6 Pattern Dots
			D. C.	112-127	Gobo 7 Pattern Plum blossom
6	6	8	Rotating Gobo Wheel	128-143	Reverse Rotation speed from slow to fast
				144-159	Forward rotation from slow to fast
				160-175	Gobo shake 1 from fast to slow(Pattern Dots)
				176-191	Gobo shake 2 from fast to slow(Patten Swirls)
				192-207	Gobo shake 3 from fast to slow(Pattern Snows)
				208-223	Gobo shake 4 from fast to slow(Pattern Curves)
				224-239	Gobo shake 5 from fast to slow(Patten Pockets)
				240-255	Gobo shake 6 from fast to slow(Pattern Beehives)
				000-207	Rotation Indexing 0~540 °
_	_			208-223	Reverse rotation from slow to fast
7	7	9	Gobo rotation	224-239	Stop
				240-255	Forward rotation from slow to fast
	8	10	Gobo rotation Fine	000-255	Gobo rotation in 16 Bit precision
		4.4		000-019	No
8	9	11	Frost Filter	020-255	Frost Effect
	10	12		000-019	White
9	10	12	Prism	020-255	Prism
			000-063	Stop	
10 11 13	Prism rotation	064-127	Reverse rotation from slow to fast		
10	11				

				192-255	Forward rotation from slow to fast
11	12	14	Focus	000-255	Linearly focusing
		15	Focus Fine	000-255	Focus in 16 precision
12	13	16	Zoom	000-255	Linearly focusing
		17	Zoom Fine	000-255	Focus in 16 precision
13	14	18	Pan	000-255	Forward rotation 0 °~ 540 °
	15	19	Pan Fine	000-255	Pan rotation in 16 precision
14	16	20	Tilt	000-255	Tilt rotation 0 °~270 °
	17	21	Tilt Fine	000-255	Tilt rotation in 16 precision
	18	22	Pan & Tilt speed	000-255	Pan &Tilt speed from fast to slow
15	19	23	Control	000-048	Reserved
13	19	23	Control	049-255	Reset

Note:

****While prior Channel is used, lower channel is invalid

INDICATION OF LCD Display

Green LED indication	On	DMX signal OK
Green LED indication	Off	No DMX signal
	On	Linked with Wireless Transmitter
Blue LED indication	Off	Not linked with transmitter
	Flash	Being linked with a transmitter or losing link

MAINTENANCE

If the projector does not function, check the fuses on the power socket of the projector, 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 either of these operate, check that the fans are not blocked, and if they are dirty clean them before switching on the projector again. Check that the fans are operational, if not call a qualified technician.

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

LUBRICATION

To ensure the continuous rotation of the rotating gobos and linear motion of the lens for focusing, it is recommended that the bearings for the rotating gobos and the 2 shafts for the focusing lens holder be lubricated periodically, preferably every two months. Use only high quality, high-temperature resistant grease instead of any type of oil. When lubricating

the bearings, a syringe with a fine needle is the easiest way to introduce the grease to the bearings around each gobo.

KEEPING THE PROJECTOR CLEAN

To ensure the reliability of the projector it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output. **Do NOT use any type of solvent on dichroic colour filters.**

Cleaning frequency depends on the environment in which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. 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 and clean the internal optics at least once every 30/60 days.

 $Do \ not \ use \ any \ organic \ solvent, \ e.g. \ alcohol, \ to \ clean \ the \ reflector \ mirror, \ dichroic \ colour \ filters \ or \ housing \ of \ the \ apparatus.$

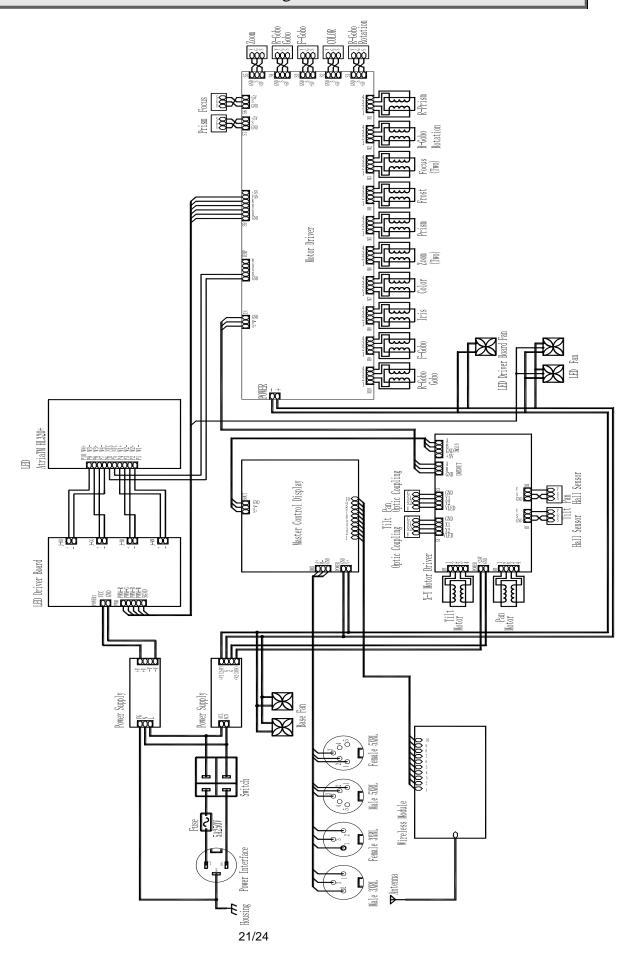
TROUBLESHOOTING

PROBLEM	ACTION	
The projector doesn't switch on	Check the fuse on the power socket.	
	Replace the lamp.	
The lamp comes on but the projector doesn't	Make sure that the projector is correctly configurated. DMX	
respond to the controller	 Replace or repair the XLR cable. 	
The projector only functions intermittently	Make sure the fan is working and not dirty.	
Defection and institute	Check the lenses are not broken.	
Defective projection	Remove dust or grease from the lenses.	
	Make sure the lamp is installed correctly.	
The project image appears to have a halo	Carefully clean the optical group lenses and the projector components.	
The beam appeared in	Check the optics is clean.	
The beam appears dim	Replace with a new lamp of the specified type and rating.	

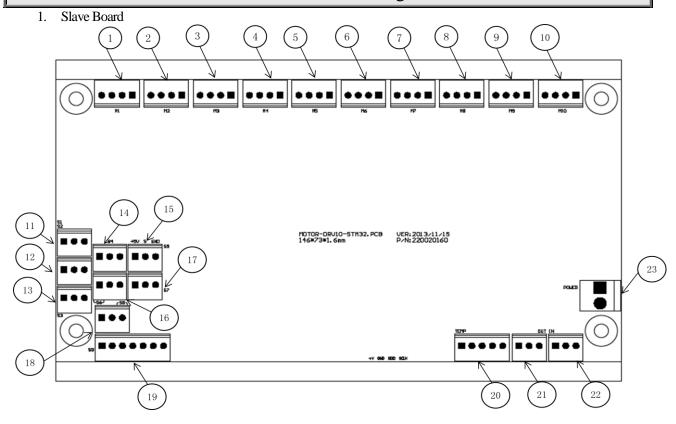
COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
400W POWER SUPPLY	192010191	1	
230W POWER SUPPLY	192010192	1	
LED WHITE LIGHT SOURCE	150020279	1	
5A FUSE	270041045	1	5X20 5A, 250V
TILT BELT	290151378	1	HTD-684-3M
PAN BELT	290151343	1	HTD-447-3M
TAIL FAN	030060074	2	92X92X25
BASE FAN	030060080	2	60X60X20
PAN MOTOR	030040190	1	
TILT MOTOR	030040190	1	
IRIS MOTOR		1	
ROTATING GOBO WHEEL MOTOR	030040125	1	
PRISM ROTATION MOTOR		1	
PRISM MODULE MOTOR	030040230	1	
COLOR WHEEL MOTOR	030040155	1	
GOBO ROTATION MOTOR	030040166A	1	
FOCUS MOTOR	030040154A	2	
ZOOM MOTOR	030040134A	2	
FIXED GOBO WHEEL MOTOR	030040213	1	
FROST FILTER MOTOR	030040210	1	
CONSTANT CURRENT SUPPLY	230060314	1	
PAN/TILT DRIVE PCB	230060193	1	
MOTOR DRIVER PCB	230060145	1	
LCD DISPLAY PCB	230060228	1	

Circuit Diagram

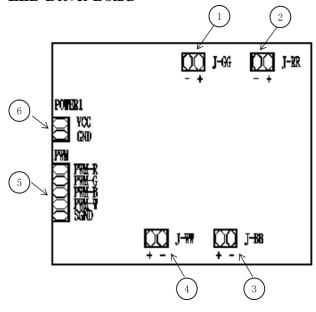


PCB Connection Diagram

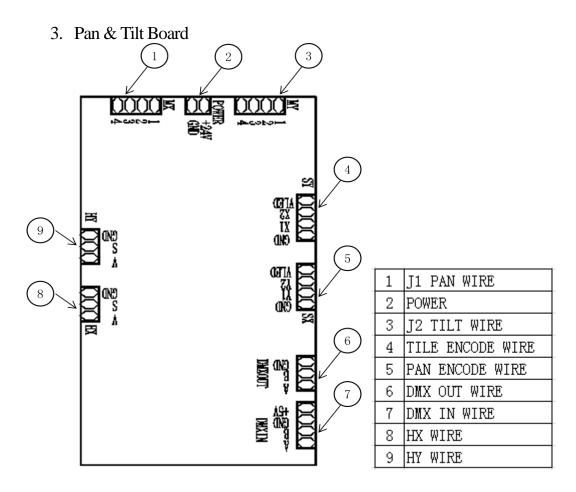


-							
1	M1-1MOTOR	7	M2-1MOTOR	13	HALL1-3MAGNET SENSOR	19	S9
2	M1-2MOTOR	8	M2-2MOTOR	14	HALL1-4MAGNET SENSOR	20	TEMP
3	M1-3MOTOR	တ	M2-3MOTOR	15	HALL1-5MAGNET SENSOR	21	RESERVED
4	M1-4MOTOR	10	M2-4MOTOR	16	HALL1-6MAGNET SENSOR	22	DMX IN
5	M1-5MOTOR	11	HALL1-1MAGNET SENSOR	17	HALL2-1MAGNET SENSOR	23	POWER
6	M1-6MOTOR	12	HALL1-2MAGNET SENSOR	18	RESERVED		

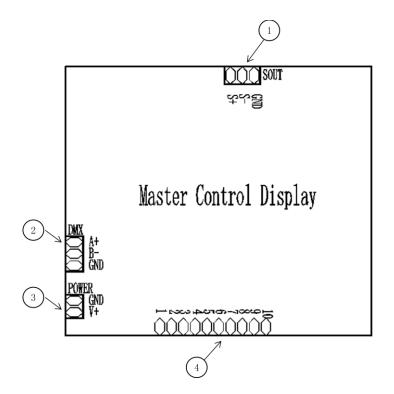
2. LED Driver Board



_		
	1	G LED WIRE
	2	R LED WIRE
	3	B LED WIRE
	4	W LED WIRE
	5	POWER
	6	PWM WIRE



4. Master Board



1	S OUT signal
2	DMX cable
3	POWER
	10-wire cable for
	wireless control

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Version: 20151123 (Preliminary)