

XL 575 PR-2590/PR-2590M

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

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

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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	3-pin plug
Safety cord	2	Pcs	
Spare gobos	4	Pcs	
This manual	1	Pc	
Ω clamps	2	Pcs	Options

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.

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

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

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

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

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

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

Electrical connection must only be carried out by qualified personnel.

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

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

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

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

Keep the lamp clean. Do not touch the lamp glass with bare hand.

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.

The lamp used in this projector is a discharge lamp. After switching off don't attempt to restart the projector until lamp has cooled, this will require approx 15 minutes. Switching the lamp on and off at short intervals will reduce the life of both the lamp and the projector. But occasional breaks will prolong the life of the lamp and projector.

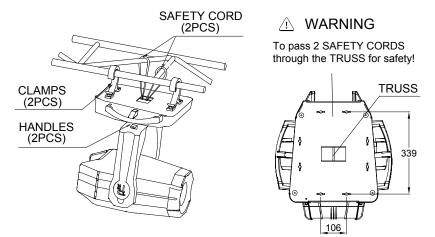
Never run the projector without a lamp.

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.

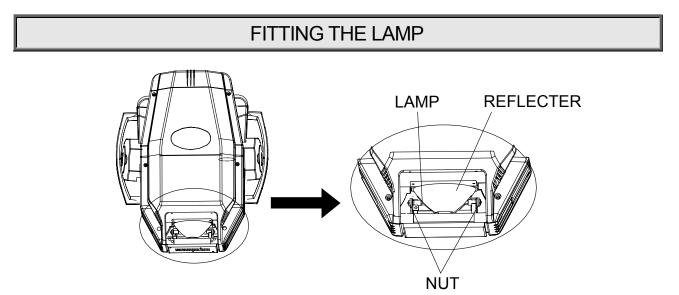
INSTALL THE PROJECTOR



Take 2 clamps and 2 safety cords out from the package and mount 2 clamps on the underside of fixture with 2 retainers attached to each clamp. Hang the fixture on the structure and fasten the screws attached to each clamp. (See the **WARNING** on the underside of the base as shown above) To pass 2 SAFETY CORDS through the TRUSS for safety! 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 XL 575.

WARNING:

- 1. Unlock the PAN and TILT before the 1st application of projector for safety.
- 2. The projector MUST be lifted or carried by the HANDLES instead of clamps.
- 3. For safety the safety cord should afford 10 times of the unit's weight.



Lock the yoke before fitting/replacing the lamp.

Loosen 4 screws and open the back covers, you can see the structure as shown in the figure above.

Loosen 2 nuts at the both ends of lamp and take out the wom-out lamp. Suggest to free one end after another.

Fit new lamp and fasten 2 screws at the both ends of lamp. **Note:** don't touch the bulb of the new lamp with bare hand so as not to influence the beam output; the PST (pumping stem tip off) on the bulb facing the rear cover with fans perpendicularly and being not in the beam's way is a must and aids cooling.

Close the rear cover and fasten 4 screws.

NOTE: The convex of the nuts should face to the side when fitting the lamp.

WARNING: The MSI series are high-pressure lamps with external igniters (Lambda). Care should always be taken when handling these lamps. Always read the manufacturers "Instructions for use" enclosed with the lamp.

POWER SUPPLY-MAINS

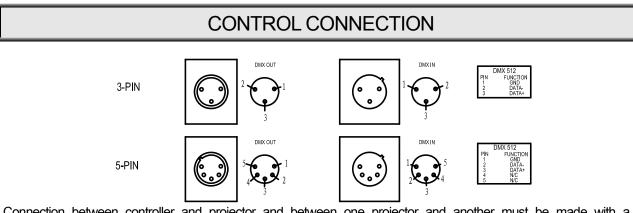
Connect the power cord as follows:

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

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

IMPORTANT

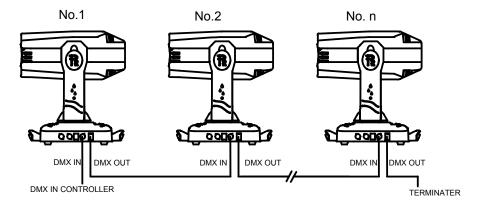
It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.



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 3 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. The body of the plug is not connected in any way. The XL 575 accepts digital control signals in protocol DMX512 (1990).

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

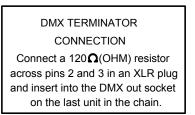


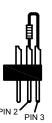
DMX TERMINATOR

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

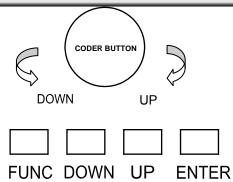
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.







SETUP OPTIONS-PROJECTOR CONFIGURATION



Projector configuration can be set conveniently via pressbutton switch and LCD display. Turn the projector on and the LCD display will show DMX address you set and save last time and it can be reset and saved again as you please. Launch the projector. Press button ENTER more than 5 seconds to unlock panel.

Press button UP or DOWN if you want to browse through the various Setup Options. There are 8 option codes from DMX Address to Lamp Manual Control, and each code has a specific function. If you turn the coder knob clockwise, the function like as button UP. On the contrary, the function like as button DOWN.

Press button ENTER to save your settings or enter the next menu. There is same function if you push the coder knob. 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 XL 575 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 XL 575 has 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 or coder knob 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; In the same time. The GREEN LED will flash one time. 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		
PR LIGHTING XL SERIES XL 575	DMX Address=001				
DMX Address	DMX Address (001-512)				
Reset	Reset Are You Sure?				
	DMX Mode	DMX Mode Standard 16 DMX Mode Extended 16 DMX Mode Short 8			
	Lamp Control	Lamp Control By Control Channel Lamp Control By Power On Lamp Control By DMX Present			
Config Settings	Factory Settings (Press button DOWN/UP/ENTER at the same time to enter the sub-menu)	Fixture type (WARNING: Never change the fixture type or the system will be damaged!)	Fixture type= XL 1200 Fixture type= XL 700 Fixture type= XL 575 Fixture type= XL 1200 FS Fixture type= XL 1200 Wash Fixture type= XL 700 Wash Fixture type= XL 1800		
Option Settings	Colour Positions	Colour Positions STEPPED Colour Positions			
	F-Gobo Positions	LINEAR F-Gobo Positions STEPPED F-Gobo Positions LINEAR			
	Pan DMX Invert	Pan DMX Invert OFF Pan DMX Invert ON			
	Tilt DMX Invert	Tilt DMX Invert OFF Tilt DMX Invert ON			
	Pan Tilt Swap	Pan Tilt Swap OFF Pan Tilt Swap ON			
	Dimmer Invert	Dimmer Invert OFF Dimmer Invert ON			
	Iris Invert	Iris Invert OFF Iris Invert ON			
	Zoom Invert	Zoom Invert OFF Zoom Invert ON			
	Defaults	Defaults OFF			

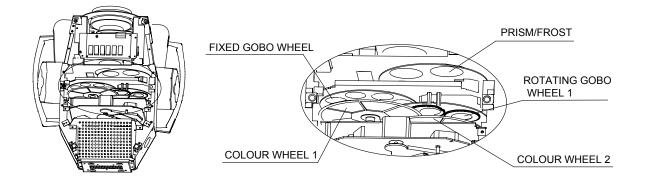
		Defaults	
		Restore Defaults	
		Display On Always	
	Display Mode	Display	
_		Off After Delay	
		Disp Dim Level Min	
		Disp Dim Level	
		1 Disp Dim Level	
		2	
		Disp Dim Level 3	
		Disp Dim Level	
		4 Dian Dian Laval	
	Display Dimming	Disp Dim Level 5	
Display Options		Disp Dim Level	
		6 Disp Dim Level	
		7	
		Disp Dim Level 8	
		Disp Dim Level	
		9 Disp Dim Level	
		Full	
	Display Contrast	Display Contrast	
	Display Contrast	XXX(1~36, Default is 16)	
		Language = English	
	Display Language	Language =	
		Chinese Lamp Hours =	Reset Lamp Hours
	Lamp Hours	XX	Are You Sure?
	Total Hours	Total Hours = XX	
		Display Board	Display Board =
			XX℃ Driver Board 1 =
	Temperature	Driver Board 1	XX °C
		Driver Board 2	Driver Board 2 = XX °C
		Pan and Tilt	Pan and Tilt =
			<u>XX</u> ℃ Head Sensor=
Information		Head Sensor	XX °C Display Board =
		Display Board	Display Board = X.X.X
		Driver Board 1	Driver Board 1 =
			X.X.X Driver Board 2 =
	Software Version	Driver Board 2	X.X.X Pan and Tilt =
		Pan and Tilt	Pan and Tilt =
		Power Board	X.X.X Power Board =
-		DMX Channel	X.X.X
	View DMX values	1=0	
		Factory Setup OFF	
	Factory Setup	Factory Setup	
Test Modes		ÓN Self Test	
	Self Test	OFF	
		Self test ON	
	Lamp Status	Status = XXX	
Lamp Manual Control	Lamp Status	Control = X	
	Turn Lamp On Turn Lamp Off		

ERROR MESSAGES

In the course of launch, XL 575 examines automatically whether there are errors and if there are, it will display information as follows:

Display	у	Message
Sensor Err S1-	-M1	Colour wheel 1 (1# drive board motor 1) error
Sensor Err S1-	-M2	Prism (1# drive board motor 2) error
Sensor Err S1-	-M3	Prism rotation (1# drive board motor 3) error
Sensor Err S1-	-M4	Colour wheel 2 (1# drive board motor 4) error
Sensor Err S2-	2-M1	Rotating Gobo wheel 1 (2# drive board motor 1) error
Sensor Err S2-	2-M2	Gobo rotation 1 (2# drive board motor 2) error
Sensor Err S2-	2-M3	Fixed Gobo wheel (2# drive board motor 3) error
Sensor Err S2-	2-M5	Focus (2# drive board motor 5) error
Sensor Err S2-	2-M6	Zoom (2# drive board motor 6) error

REPLACING GOBOS



Disconnect the fixture from power. Lock Tilt. Carefully lift off the cover by undoing the 6 screws.

For gobos replacement on the fixed gobo: Remove the gobo and insert the new one into the position by hands.

For gobos replacement on the rotating gobo wheel: Remove the gobo holder with gobo from gobo wheel by hands.

Pull out the spring and drop the old gobo out of the holder.

Insert the new gobo into the holder, and then insert the spring with the narrow end against the gobo.

Push the end of the spring in under lip of the holder.

Pick the spring clip up and put the gobo holder back into the position, if necessary, a small screwdriver will be helped.

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 6 screws.

DMX PROTOCOL

Short mode	Standard mode	Extended mode	FUNCTION	DMX	DESCRIPTION	
				000-010	Black	
1	1		4	Otrobo	011-025	Open
1		I	Strobe	026-225	Strobe speed from slow to fast	
				226-255	Open	
0	0	2	Dimmor	000-007	Black	
2	2	2	Dimmer	008-255	Dimming from dark to light (0-100%)	
		3	Dimmer Fine	000-255	Dimmer in 16 Bit precision	
3	3	4	Colour Wheel 1	000-016	White	
				017-024	White/colour 1	
				025-032	Colour 1	
				033-040	Colour 1/colour 2	
				041-048	Colour 2	
				049-056	Colour 2/colour 3	
				057-064	Colour 3	
				065-072	Colour 3/colour 4	
				073-080	Colour 4	
				081-088	Colour 4/colour 5	
				089-096	Colour 5	
				097-104	Colour 5/colour 6	
				105-112	Colour 6	
				113-120	Colour 6/colour 7	
				121-127	white	
				128-133	Rainbow rotation speed 1 (slowest)	
				134-139	Rainbow rotation speed 2	
				140-145	Rainbow rotation speed 3	
				146-151	Rainbow rotation speed 4	
				152-157	Rainbow rotation speed 5	
				158-163	Rainbow rotation speed 6	
				164-169	Rainbow rotation speed 7	
				170-175	Rainbow rotation speed 8	
				176-181	Rainbow rotation speed 9	
				182-187	Rainbow rotation speed 10	
				188-195	Stop in current position	
				196-201	Rainbow reverse rotation speed 1(slowest)	
				202-207	Rainbow reverse rotation speed 2	
				208-213	Rainbow reverse rotation speed 3	
				214-219	Rainbow reverse rotation speed 4	
				220-225	Rainbow reverse rotation speed 5	
				226-231	Rainbow reverse rotation speed 6	

				232-237	Rainbow reverse rotation speed 7			
				238-243	Rainbow reverse rotation speed 8			
				244-249	Rainbow reverse rotation speed 9			
				250-255	Rainbow reverse rotation speed 10			
				000-016	White			
				017-024	White/colour 1			
				025-032	Colour 1			
				033-040	Colour 1/colour 2			
				041-048	Colour 2			
				049-056	Colour 2/colour 3			
				057-064	Colour 3			
				065-072	Colour 3/colour 4			
				073-080	Colour 4			
				081-088	Colour 4/colour 5			
				089-096	Colour 5			
				097-104	Colour 5/colour 6			
				105-112	Colour 6			
				113-120	Colour 6/colour 7			
						121-127	white	
	4 4 5			128-133	Rainbow rotation speed 1 (slowest)			
		Colour Wheel 2	134-139	Rainbow rotation speed 2				
			140-145					
4			140-145	Rainbow rotation speed 3				
				Rainbow rotation speed 4				
					152-157	Rainbow rotation speed 5		
				158-163	Rainbow rotation speed 6			
				164-169	Rainbow rotation speed 7			
				170-175	Rainbow rotation speed 8			
				176-181	Rainbow rotation speed 9			
				182-187	Rainbow rotation speed 10			
				188-195	Stop in current position			
							196-201	Rainbow reverse rotation speed 1(slowest)
			ľ	202-207	Rainbow reverse rotation speed 2			
				208-213	Rainbow reverse rotation speed 3			
				214-219	Rainbow reverse rotation speed 4			
				220-225	Rainbow reverse rotation speed 5			
				226-231	Rainbow reverse rotation speed 6			
				232-237	Rainbow reverse rotation speed 7			
				238-243	Rainbow reverse rotation speed 8			
				244-249	Rainbow reverse rotation speed 9			
				250-255	Rainbow reverse rotation speed 10			
				000-135	Iris from large to small (0-100%)			
5	5	6	Iris	136-231	Macro			
				232-255	Minimal			
6	6	7 8	Iris Fine Fixed Gobo	000-255	Iris n 16 Bit precision Clear			
U	U	0	Wheel	017-032	Gobo1			
	1	1	11/24	011 00L				

				033-048	Gobo 2
				049-064	Gobo 3
				065-080	Gobo 4
				081-096	Gobo 5
				097-112	Gobo 6
				113-127	Gobo 7
				128-132	Reverse rotation speed 1 (slowest)
				133-135	Reverse rotation speed 2
				136-138	Reverse rotation speed 3
				139-141	Reverse rotation speed 4
				142-144	Reverse rotation speed 5
				145-147	Reverse rotation speed 6
				148-150	Reverse rotation speed 7(fastest)
				151-153	Rotation speed 1 (slowest)
				154-156	Rotation speed 2
				157-159	Rotation speed 3
				160-162	Rotation speed 4
				163-165	Rotation speed 5
				166-168	Rotation speed 6
				169-171	Rotation speed 7(fastest)
				172-174	Gobo 1 shake 1(slowest)
				175-177	Gobo 1 shake 2
				178-180	Gobo 1 shake 3
				181-183	Gobo 1 shake 4 (fastest)
				184-186	Gobo 2 shake 1(slowest)
				187-189	Gobo 2 shake 2
				190-192	Gobo 2 shake 3
				193-195	Gobo 2 shake 4 (fastest)
				196-198	Gobo 3 shake 1(slowest)
				199-201	Gobo 3 shake 2
				202-204	Gobo 3 shake 3
				205-207	Gobo 3 shake 4 (fastest)
				208-210	Gobo 4 shake 1(slowest)
				211-213	Gobo 4 shake 2
				214-216	Gobo 4 shake 3
				217-219	Gobo 4 shake 4 (fastest)
				220-222	Gobo 5 shake 1(slowest)
				223-225	Gobo 5 shake 2
				226-228	Gobo 5 shake 3
				229-231	Gobo 5 shake 4 (fastest)
				232-234	Gobo 6 shake 1(slowest)
				235-237	Gobo 6 shake 2
				238-240	Gobo 6 shake 3
				241-243	Gobo 6 shake 4 (fastest)
				244-246	Gobo 7 shake 1(slowest)
				247-249	Gobo 7 shake 2
				250-252	Gobo 7 shake 3
				253-255	Gobo 7 shake 4 (fastest)
7	7	9	Rotating Gobo	000-021	white
			Wheel	022-042	Gobo1
				043-064	Gobo 2
				065-085	Gobo 3
				086-106	Gobo 4
				107-127	Gobo 5
				128-134	Rotation speed 1 (slowest)
				135-142	Rotation speed 2
				143-149	Rotation speed 3
				150-156	Rotation speed 4 (fastest)
				157-163	Reverse rotation speed 1 (slowest)
				164-170	Reverse rotation speed 2
		ļl			

8 8 10 Gobo rotation Gobo rotation 171-177 Reverse rotation speed 178-184 Reverse rotation speed 178-184 Reverse rotation speed 185-191 Gobo 1 shake slow 192-198 Gobo 1 shake slow 192-198 Gobo 2 shake fast 199-205 Gobo 2 shake fast 206-212 Gobo 3 shake slow 220-226 Gobo 3 shake slow 220-226 Gobo 3 shake slow 220-226 Gobo 4 shake fast 227-233 Gobo 4 shake fast 227-233 Gobo 4 shake fast 227-233 Gobo 5 shake slow 248-255 Gobo 5 shake slow 248-255 Gobo 5 shake fast 211-127 Rotation speed 1 (slowe 128-135 Rotation speed 1 (slowe 128-135 Rotation speed 3 144-151 Rotation speed 4 152-159 Rotation speed 4 152-159 Rotation speed 5 160-167 Rotation speed 7 176-183 Rotation speed 6 168-175 Rotation speed 6 184-191 Stop rotating 192-199 Reverse rotation speed 7	4(fastest)
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8 8 10 Gobo Totation 184-191 Stop rotating	;t)
	9
	1 (slowest)
200-207 Reverse rotation speed	
208-215 Reverse rotation speed	
216-223 Reverse rotation speed	
224-231 Reverse rotation speed 232-239 Reverse rotation speed	
240-247 Reverse rotation speed	
248-255 Reverse rotation speed	8 (tastest)
9 11 Gobo rotation 000-255 Gobo rotation in 16 Bit p	recision
Fine -	
000-051 Clear	
052-102 CTO	
9 10 12 Prism / Frost <u>103-153 Frost</u>	
154-204 Prism 1	
205-255 Prism 2	
000-120 Prism index (0~540°)	
121-127 Reverse rotation speed	1 (slowest)
128-135 Reverse rotation speed	2
136-143 Reverse rotation speed	3
144-151 Reverse rotation speed	4
152-159 Reverse rotation speed	5
160-167 Reverse rotation speed	6
168-175 Reverse rotation speed	
176-183 Reverse rotation speed	
184-191 Stop in current position	
10 11 13 Prism rotation 192-199 Rotation speed 1 (slower	st)
200-207 Rotation speed 2	017
200-207 Rotation speed 2 208-215 Rotation speed 3	
206-213 Rotation speed 3 216-223 Rotation speed 4	
224-231 Rotation speed 5	
232-239 Rotation speed 6	
240-247 Rotation speed 7	4)
248-255 Rotation speed 8 (fastes	
021-255 Wheel full into beam gra	dually
126-141 Stop in current position	
142-255 Reverse rotation speed	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	From large to small		
		17	Zoom Fine	000-255	Zoom in 16 precision		
13	14	18	Pan	000-255	Pan rotation 450°		
	15	19	Pan Fine	000-255	Pan rotation in 16 precision		
14	16	20	Tilt	000-255	Tilt rotation 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		
						000-048	Reserved
				049-080	Reset		
				081-112	Reserved		
15	19	23	Control	113-144	Lamp off (stop in DMX value for 10 s)		
15	19	25	CONTROL	145-168	Reserved		
				169-200	Lamp power reduced to 50%		
				201-223	Reserved		
			-	224-255	Lamp on (See remark below)		

Remark:

If you intend to turn on/off the lamp via the last channel of the controller, don't attempt to push the channel to value 224-255 immediately after turning it off, or push the slide bar to value 224-255 to wait it cooling. Under these 2 circumstances, the lamp can not be turned on. The right operation is: turn it off---cool down---push the slide bar to turn it on.

LED INDICATION

	On	DMX signal OK
Green	Off	No DMX signal
	Flash	DMX signal error
Yellow	On	Setting the panel
Blue	On	Power
Red/Green	Red	Running self test mode
Red/Gleen	Green	Reserved

MAINTENANCE

If the projector's lens becomes damaged or broken it should be replaced. If the lamp becomes damaged or deformed in any way it must be replaced. If the light from the lamp appears dim this would normally indicate that it is reaching the end of its life and it should be changed at once, aged lamps run to the extremity of their life might explode. 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	 Make sure that the projector is correctly configurated. 		
doesn't respond to the controller	 Replace or repair the DMX cable. 		
The projector only functions intermittently	 Make sure the fan is working and not dirty. 		
Defective projection	 Check the lenses are not broken. 		
	 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 beau and the	Check the optics is clean.		
The beam appears dim	 Replace with a new lamp of the specified type and rating. 		

TECHNICAL DATA

VOLTAGES:

Electronical ballast (PR-2590):	100V/120V/200V/220V/230V/240V AC, 50/60Hz
Magnetic ballast (PR-2590M):	100V/120V/200V/220V/230V/240VAC, 50/60Hz

POWER CONSUMPTION:

Electronical ballast (PR-2590):	650W@220V
Magnetic ballast (PR-2590M):	710W@220V

LAMP:

PHILIPS	MSI 575 HR		
Colour Temperature	6000°K		
Socket	SFc10-4, double ended		
Manufacturers Rated Lamp Life	750 Hours replacement		
Or			
OSRAM	HMI 575 W/GS		
Colour Temperature	6000°K		
Socket	SFc10-4, double ended		
Manufacturers Rated Lamp Life	1000 Hours replacement		

COLOURS:

2 wheels each with 6 dichroic colour filters plus white With variable speed bi-directional rainbow effect Step/linear colour changing is available

GOBOS:

1 Rotating gobo wheel:

5 interchangeable gobos+ white, glass or metal gobos can be fixed Indexable, bi-directionally rotatable at variable speeds

1 Fixed gobo wheel :

7 interchangeable gobos+ white bi-directional wheel scrolling at variable speeds Gobo diameter: Φ36.3mm Gobo image diameter: Φ31.5mm

PRISM/ FROST:

1x linear lens, 1x3 facet prism, indexable, bi-directionally rotatable at variable speeds 1xfrost, 1xCTO

FOCUS:

DMX controlled focus

DIMMER: 0-100% linearly adjustable

SHUTTER: Double shutter blades, 0.3~12 F.P.S Macros

HEAD MOVEMENT: Pan 450°, Tilt 270° with auto position correction

BEAM ANGLE: $12^{\circ} \sim 34^{\circ}$, linearly adjustable

CONTROL:

DMX512, 3 pin interface 15 channels in short mode, 19 channels in standard mode, and 23 channels in extended mode. Self-test mode

OTHER FUNCTIONS:

Adjustable Pan & Tilt speed Fixture and lamp usage time display LCD display with English and Chinese language menu Energy saving function of the ballast Built-in analyzer for easy fault finding, error messages Built-in demo sequences Setup options by chargeable battery inside without power connection. Input signal isolating protection Network interface (Reserved)

HOUSING:

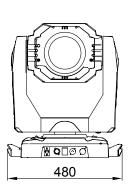
Composite plastic, IP20

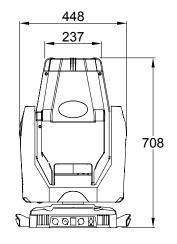
WEIGHT:

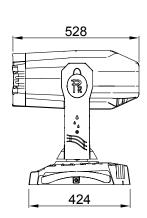
Electronical ballast (PR-2590):	29Kg
Magnetic ballast (PR-2590M):	34Kg

SIZES:

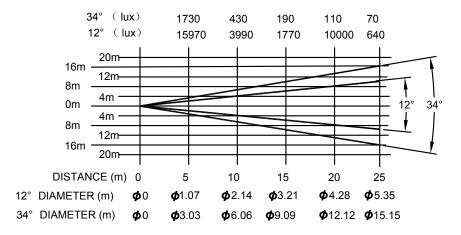
See at below

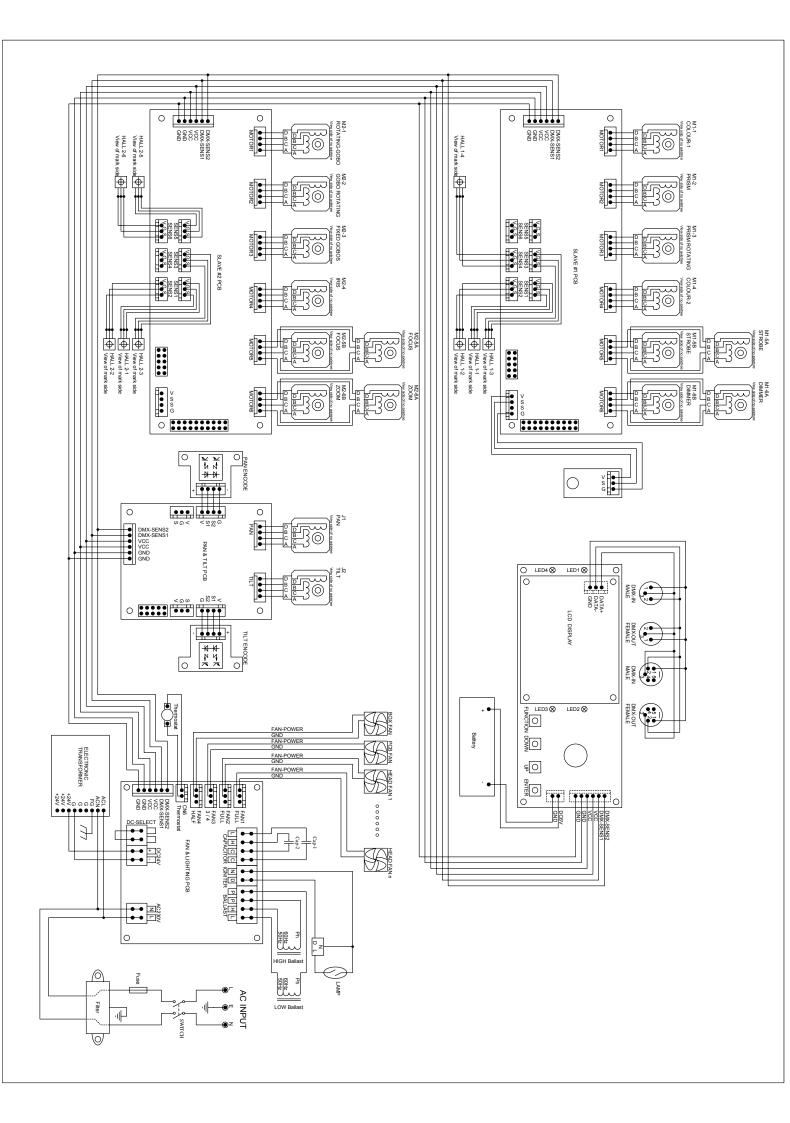


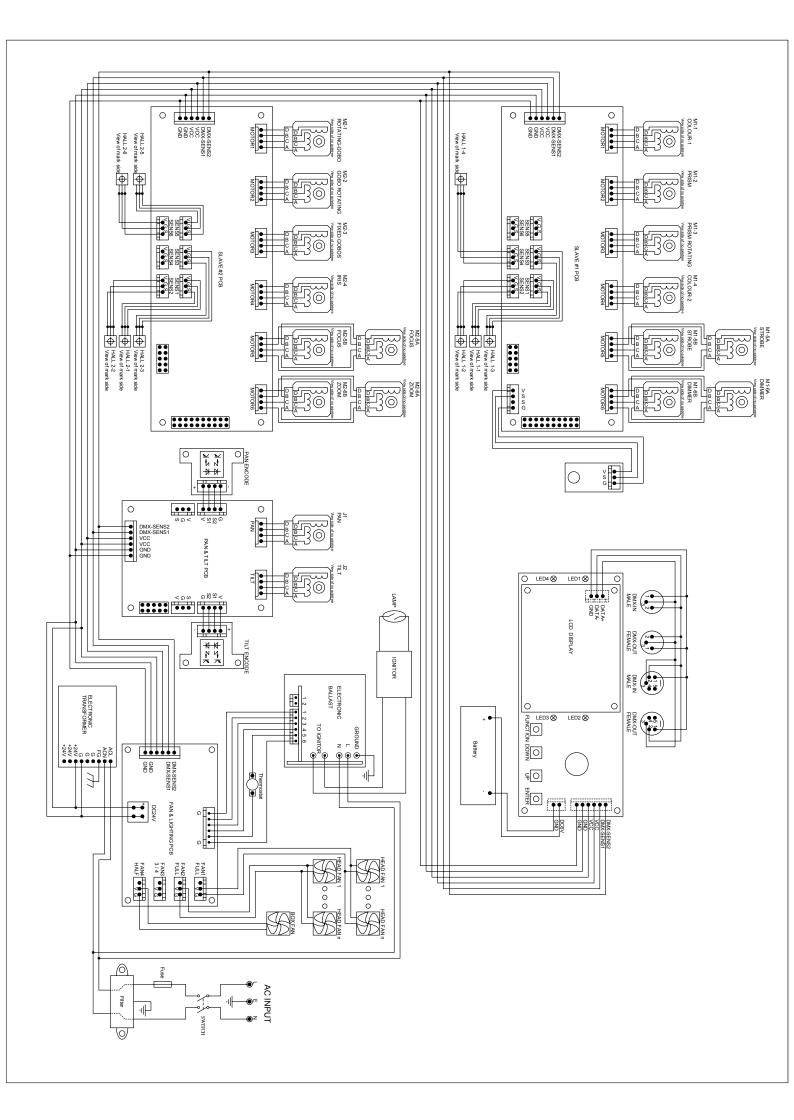




LIGHT OUTPUT:







COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
POWER SUPPLY	190010098	1	24V
MAINS FILTER	193020008	1	20A 115/250VAC
THERMOSTAT	190010073	1	95°C 5A 125/250V
SWITCH	190010050	1	16A 250V/20A 125VAC
CAPACITOR****	140010042	2	32µF/370V
BALLAST****	040070049	2	300W/95V 3.6A
BALLAST	040070078	1	575W 90~264V AC
IGNITOR****	040090045	1	575~1200W 6~8KV
IGNITOR	040090043	1	575~1200W
LAMP	100050062	1	MSI 575 HR
TILT DRIVE BELT	290151241	1	HTD-750-3M
PAN DRIVE BELT	290151234	1	HTD501-3M
FAN IN FRONT SIDE	030060053	2	DC 24V/0.21A
FAN NEAR THE LAMP	030060054	2	DC 24V/0.20A
FAN IN BASE****	030069005	1	DC 24V/1.4W
FAN IN BACK SIDE	030060055	2	DC 24V/0.16A
FAN NEAR THE COLOUR WHEEL	030060052	1	DC 24V/0.09A
PAN MOTOR	030040089	1	221 1820201 6 25*25
TILT MOTOR	030040089	1	- 23HS2039L 6.35*25
PRISM ROTATION MOTOR	030040131	1	16HY0002-02L 5*24
ROTATING GOBO WHEEL MOTOR	030040092	1	- 17HD0013-32L 5*7
PRISM/FROST MOTOR	030040092	1	- 17HD0013-32L 5 7
FOCUS MOTOR	030040073	2	17HS5003-09L 5*20
ZOOM MOTOR	030040073	2	17HS5003-09L 5 20
COLOUR WHEEL MOTOR1		1	- 17HD0013-31L 5*23
COLOUR WHEEL MOTOR2	030040132	1	
DIMMER MOTOR	030040132	2	1711D0013-31E 5 25
GOBO ROTATION MOTOR		1	
FIXED GOBO WHEEL MOTOR	030040136	1	16HS7002 5*17
SHUTTER BLADE MOTOR	030040116	2	16HY7001-32L 5*15
IRIS MOTOR	030040088	1	39BYG501-4A 5*24
PAN/TILT DRIVE PCB	230020177	1	
MOTOR DRIVE PCB 1	230020210	1	
MOTOR DRIVE PCB 2	230020211	1	
DISPLAY PCB	230020220	1	
POWER PCB	230020223	1	
POWER PCB****	230020227	1	

NOTE:

**** Only apply to Magnetic ballast.

PR LIGHTING LTD.

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

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