



XR330 Framing

PR-2357

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 Signal Cable	1	Set	with plug and socket
Safety cord	1	Pc	
User's manual	1	Pc	
Ω clamps	2	Pcs	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.

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.

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 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.

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.

Shields and 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.

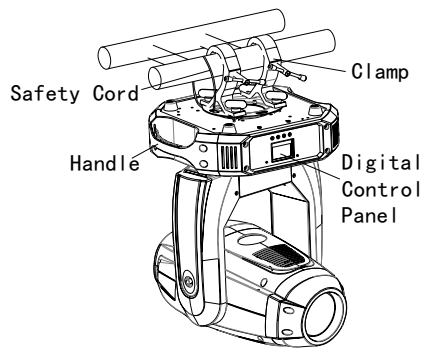
Exterior surface temperatures of the luminaire after 30 minutes operation is 45°C, when steady state is achieved 60°C,

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

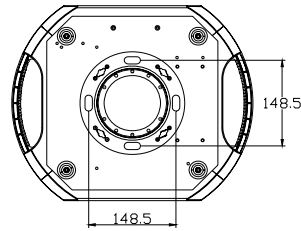
If you have any questions or suggestions, don't hesitate to consult your dealer or manufacturer

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

INSTALL THE PROJECTOR



Warning
Please run the safety cord through two holes for safety.



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 **WARNING** on the underside of the base as shown above) **To pass the SAFETY CORD through the HOLES 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 to is secure and strong enough to support the weight of a XR 1000 Framing

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 the Projector's weight.

FITTING THE LAMP

Lock the yoke before fitting/replacing

the lamp. Just as Shown by Figure 1, after Opening the cover at the rear of the projector by loosening 8 fastfit screws, you can open the head. To adjust the lamp as per Figure 2. Take out the lamp as per the figure 3.

Before lamp installation, tighten its power wires well. Lamp in and out are opposite orders

Note: don't touch the internal surface of the reflector and the burner of the lamp with bare hands so as not to impair the beam output.

Important: Always read "Instructions for use" enclosed with the lamp.

Figure 1: 8 pcs of fastfit screws

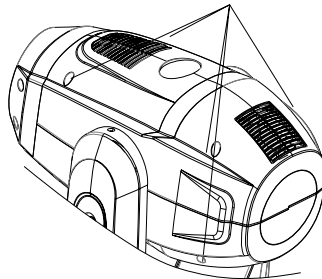
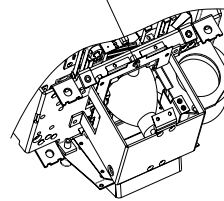


Figure3: Removal of Lamp
1.unfasten the tightening screw on one side of the lamp



2. Take the lamp out after pushing it downward after removing two lamp wires on its other side.

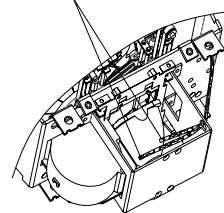
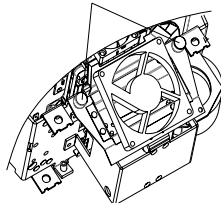
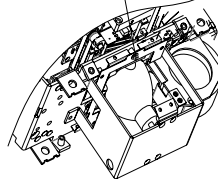


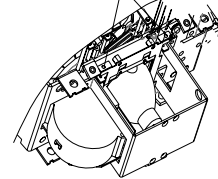
Figure2: lamp adjustment
1. open the fan after unfastening four screws on both sides of the fan.



2. use cross screw driver to loosen the tightening screw on one side of the lamp



3. use cross screw driver to adjust two screws to adjust the lamp's position



POWER SUPPLY-MAINS

Connect the power cord as follows:

L (live) =brown

E (earth) =yellow/green

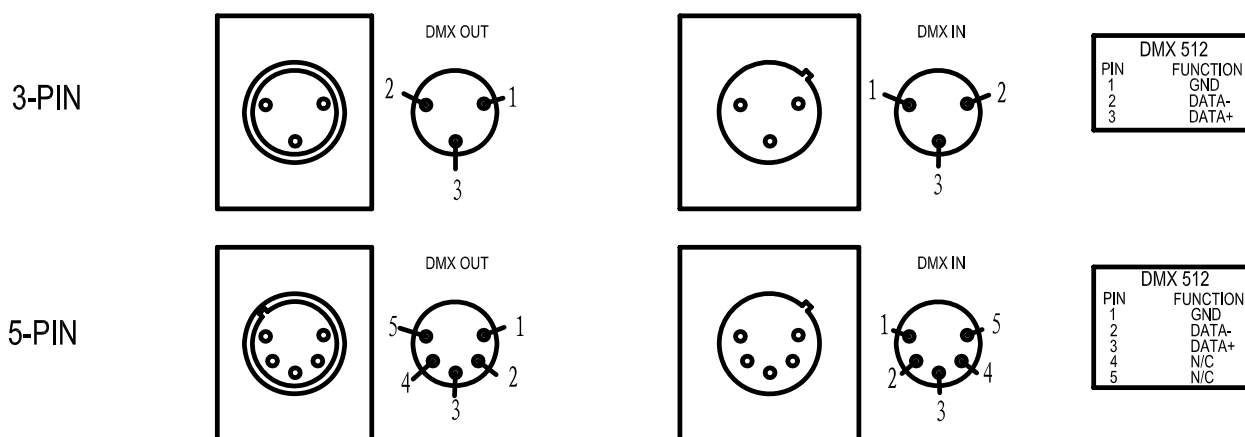
N (neutral) =blue

Before connection with mains power, make sure that the voltage and frequency marked on the rating plate of the projector match what are supplied. 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(yellow/green twin wire) and the electrical installation conforms to all relevant standards.

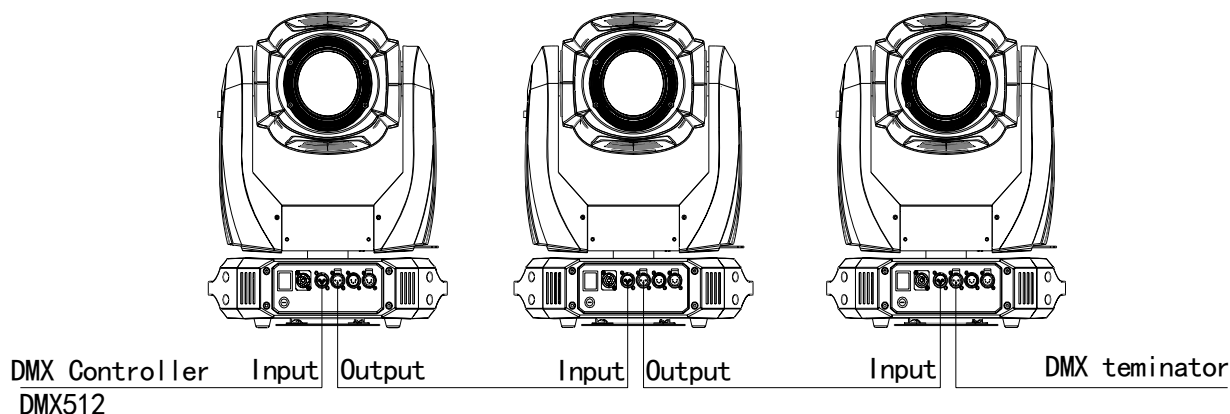
CONTROL CONNECTION



Connection between controller and projector and between one projector and another must be made with a 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 XR330Framing accepts digital control signals in protocol DMX512 (1990).

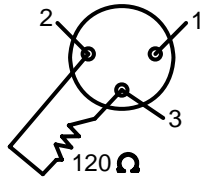
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



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.

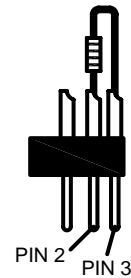
The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



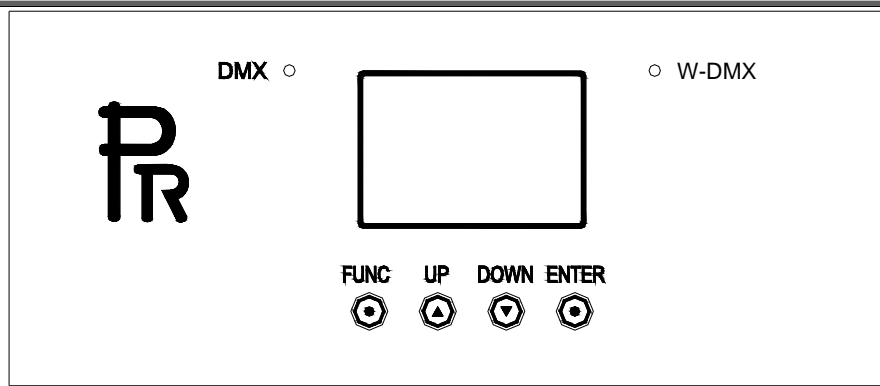
DMX TERMINATOR

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 and LCD display.

Launch the projector and press button **ENTER** for more than 2 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 submenu.

Press button **UP** or **DOWN** to change values(plus or minus)

Press button **FUNC**, it will return to the upper menu. If button **FUNC** not pressed, the default will show display status automatically.

TO SET THE DMX START ADDRESS

Each XR 330 Framing 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 XR 330 Framing has 3 DMX modes. There are standard mode, short mode and extended mode. For example standard mode has 34 channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 035, No. 3 projector’s address 051, No. 4 projector’s address 069, and so on.

Launch the projector. Press button **ENTER** more than 2 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.

STAND-ALONE MODE

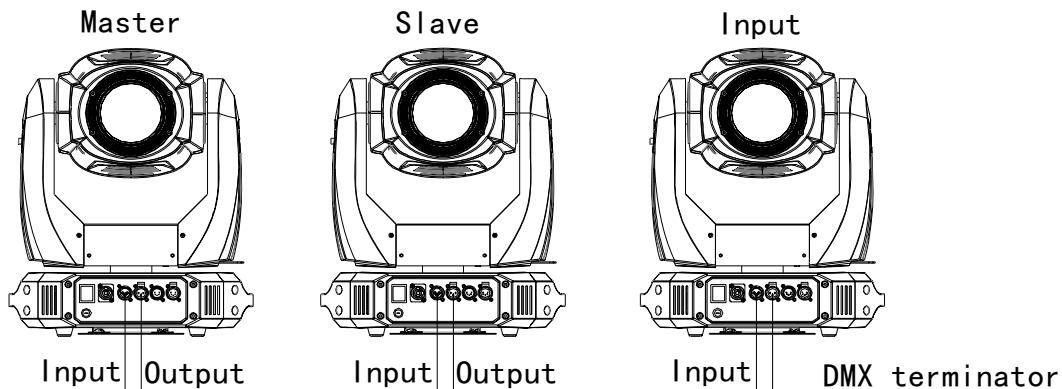
Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically.
DMX address can be set at any number within 512.

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 1st 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



OPERATION MENU

First Menu	Secondary Menu	Third Menu	Fourth Menu
DMX Address	DMX Address=XXX		
Reset	Are You Sure		
Config Settings	DMX Mode	Standard	
		Extended	
		Short	
	Lamp Control	By Control Channel	
		By Power On	
		By DMX Present	
	Loss of DMX	When DMX is Lost Normal time out	
		When DMX is Lost Hold Last Value	
	Fan Operate Mode	Fan Operate Mode Normal	
		Fan Operate Mode Quieter	
		Fan Operate Mode Hot Environment	
	Factory Settings (Press button DOWN/UP/ENTER at the same time to enter the sub-menu)	Fixture Type (WARNING: Never change the fixture type ,otherwise the system will be damaged!)	
Option Settings	Color Positions	Color Positions STEPPED	
		Color Positions LINEAR	
	F-Gobo Positions	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	

Display Options	Zoom Invert	Zoom Invert OFF	
		Zoom Invert ON	
	CYM Invert	CYM Invert OFF	
		CYM Invert ON	
	Defaults	Defaults OFF	
		Defaults Restore Defaults	
	Display Mode	Display On Always	
		Display Off After Delay	
	Display Invert	Display Invert OFF	
		Display Invert ON	
Information	Display Dimming	Disp Dim Level Min	
		Disp Dim Level 1	
		Disp Dim Level 2	
		Disp Dim Level 3	
		Disp Dim Level 4	
		Disp Dim Level 5	
		Disp Dim Level 6	
		Disp Dim Level 7	
		Disp Dim Level 8	
		Disp Dim Level 9	
		Disp Dim Level Full	
	Display Contrast	Display Contrast XX(1~21)	
	Lamp Hours	Lamp Hours= XX	Reset Lamp Hours Are You Sure(UP/DOWN)
	Total Hours	Total Hours= XX	
	Temperature	Display Board	Display Board= XX°C
		Driver Board 1	Driver Board 1= XX°C
		Driver Board 2	Driver Board 2= XX°C
		Driver Board 3	Driver Board 3= XX°C
		Driver Board 4	Driver Board 4= XX°C
		Pan and Tilt	Pan and Tilt= XX°C
		Head Sensor	Head Sensor= XX°C
	Software Version	Display Board	Display Board= X.X.X

		Driver Board 1		Driver Board 1= X.X.X	
		Driver Board 2		Driver Board 2= X.X.X	
		Driver Board 3		Driver Board 3= X.X.X	
		Driver Board 4		Driver Board 4 = X.X.X	
		Pan and Tilt		Pan and Tilt= X.X.X	
	View DMX Values	DMX Channel 1=XXX			
	Electronic SN	Electronic SN= *****			
	RDM Device Label	RDM Device Label ANSI E1.20 RDM Version X.X			
	Pan Encoder	Wiring Normal Pan Err 0 Count 50880			
	Tilt Encoder	Wiring Normal Tilt Err 0 Count 28080			
	Driver Faults	X Over Temp 0 Y Over Temp 0 X Fault 0 Y Fault 0			
	Test Modes	Factory Setup	Factory Setup OFF		
			Factory Setup ON		
		Self Test	Self Test OFF		
			Self Test ON		
Lamp Manual Control	Lamp Status	On Command Sent S= X C= X Lamp On			
	Turn Lamp On				
	Turn Lamp Off				
Wireless Options	Wireless Mode	Wireless Mode XLR First			
		Wireless Mode Wireless Only			
		Wireless Mode XLR Only			
		Wireless Mode Wireless To XLR			
		Wireless Mode Wireless First			
	Un-Link Wireless	Really Un-Link Enter=Yes			
Operation Mode	Operation Mode= DMX Mode				
	Operation Mode= Master Mode	User's Memory 1			
		User's Memory 2			
		Preset Memory 1			
		Preset Memory 2			

		Preset Memory 3			
	Operation Mode= Slave Mode	User's Memory 1			
		User's Memory 2			
		Preset Memory 1			
		Preset Memory 2			
		Preset Memory 3			
	Operation Mode= Standalone Mode				
User's memory	Edit user's memory	User's memory 1	Scene XX (1~200scenes)	Shutters	Shutters XXX
				Dimmer	Dimmer XXX
				Slow Dimmer	Slow Dimmer XXX
				CYM Macro	CYM Macro XXX
				Cyan	Cyan XXX
				Yellow	Yellow XXX
				Magenta	Magenta XXX
				Color Wheel	Color Wheel XXX
				Iris	Iris XXX
				Iris Macro	Iris Macro XXX
				Fixed G-Wheel	Fixed G-Wheel XXX
				Rotating G-Wheel	Rotating G-Wheel XXX
				Gobo Rotation	Gobo Rotation XXX
				G-Rotation slow	G-Rotation slow XXX
				Prism Out	Prism Out XXX
				Prism Rotation	Prism Rotation XXX
				Frost	Frost XXX
				Focus	Focus XXX
				Zoom	Zoom XXX
				Pan	Pan XXX
				Pan Fine	Pan Fine XXX
				Tilt	Tilt XXX
				Tilt Fine	Tilt Fine XXX
				Motors' Speeds	Motors' Speeds XXX (000~255)
				Delay	Delay XX s (0.25s~100min)
				Shift to next scene	Shift to scene XXX (1~200)
		User's memory 2	Scene XX (1~200scenes)	Shutters	Shutters XXX
				Dimmer	Dimmer XXX
				Slow Dimmer	Slow Dimmer XXX
				CYM Macro	CYM Macro XXX
				Cyan	Cyan XXX
				Yellow	Yellow XXX
				Magenta	Magenta XXX
				Color Wheel	Color Wheel XXX
				Iris	Iris XXX
				Iris Macro	Iris Macro XXX
				Fixed G-Wheel	Fixed G-Wheel XXX
				Rotating G-Wheel	Rotating G-Wheel XXX
				Gobo Rotation	Gobo Rotation XXX
				G-Rotation slow	G-Rotation slow XXX
				Prism Out	Prism Out XXX
				Prism Rotation	Prism Rotation XXX

				Frost	Frost XXX	
				Focus	Focus XXX	
				Zoom	Zoom XXX	
				Pan	Pan XXX	
				Pan Fine	Pan Fine XXX	
				Tilt	Tilt XXX	
				Tilt Fine	Tilt Fine XXX	
				Motors' Speeds	Motors' Speeds XXX (000~255)	
				Delay	Delay XX s (0.25s~100min)	
				Shift to next scene	Shift to scene XXX (1~200)	
		Single Scene	Shutters	Shutters XXX		
			Dimmer	Dimmer XXX		
			Slow Dimmer	Slow Dimmer XXX		
			CYM Macro	CYM Macro XXX		
			CMY Cyan	Cyan XXX		
			CMY Yellow	Yellow XXX		
			CMY Magenta	Magenta XXX		
			Color Wheel	Color Wheel XXX		
			Iris	Iris XXX		
			Iris Macro	Iris Macro XXX		
			Fixed G-Wheel	Fixed G-Wheel XXX		
			Rotating G-Wheel	Rotating G-Wheel XXX		
			Gobo Rotation	Gobo Rotation XXX		
			G-Rotation slow	G-Rotation slow XXX		
			Prism Out	Prism Out XXX		
			Prism Rotation	Prism Rotation XXX		
			Frost	Frost XXX		
			Focus	Focus XXX		
			Zoom	Zoom XXX		
			Pan	Pan XXX		
			Pan Fine	Pan Fine XXX		
			Tilt	Tilt XXX		
			Tilt Fine	Tilt Fine XXX		
			Motors' Speeds	Motors' Speeds XXX (000~255)		
Clear User's memory		User's memory 1	Clear User's memory 1? (Press buttons 2,3,4,ie buttons UP/DOWN/ENTER to execute the function)	User's memory 1 cleared		
		User's memory 2	Clear User's memory 2? (Press buttons 2,3,4,ie buttons	User's memory 2 cleared		

			UP/DOWN/ENTER to execute the function)		
		Clear Single Scene	Clear single scene 1 ? (Press buttons 2,3,4,ie buttons UP/DOWN/ENTER to execute the function)	Single Scene 1 cleared	

ERROR MESSAGES

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

Sensor Err S1-M1	Color wheel (1# drive board motor 1) error
Sensor Err S1-M2	CYM-Cyan (1# drive board motor 2) error
Sensor Err S1-M3	CYM-Yellow (1# drive board motor 3) error
Sensor Err S1-M4	CYM-Magenta(1# drive board motor 4) error
Sensor Err S2-M1	Rotating Gobo wheel (2# drive board motor 1) error
Sensor Err S2-M2	Gobo rotation (2# drive board motor 2) error
Sensor Err S2-M3	Framing module rotation- In (2 drive board motor 3) error
Sensor Err S3-M1	Focus (3# drive board motor 1) error
Sensor Err S3-M2	Zoom 1(3# drive board motor 2) error
Sensor Err S3-M4	Prism rotation (3# drive board motor 4) error
Over Temp Error	Over Temp Error
Temp Sense Error	Temp Sense Error
Head Fan 1 Fail	Lamp Fan Fail
Head Fan2 Fail	Head Fan1 Fail
Head Fan 3 Fail	Gobo Fan Fail
Head Fan 4 Fail	CMY Fan Fail
Pan Encoder Err	Pan Encoder Err
Tilt Encoder Err	Tilt Encoder Err
Pan Enc T Out	Pan Enc T Out
Tilt Enc T Out	Tilt Enc T Out
Pan Sensor Error	Pan Sensor Error
Tilt Sensor Error	Tilt Sensor Error
Pan Over Temp	Pan Over Temp
Pan Driver Fault	Pan Driver Fault
Tilt Over Temp	Tilt Over Temp
Tilt Driver Fault	Tilt Driver Fault
Pan Enc Rev Err	Pan Enc Rev Err
Tilt Enc Rev Err	Tilt Enc Rev Err

REPLACING GOBOS

Replacement of rotating gobos:
disconnect from power, loosen the
four fastfit screws of the side cover
like figure 1, pull out the rotators
by finger as figure 2.

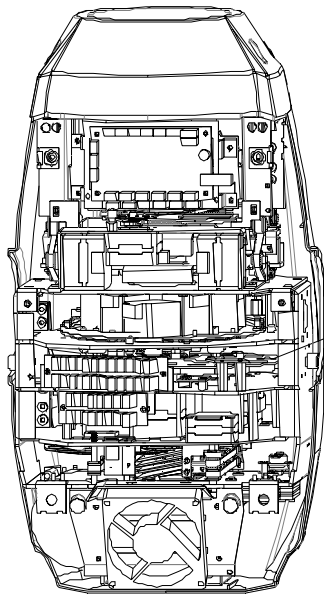


figure 1

rotator

garter spring
gobo

rotating gobo wheel

rotator

figure 2

DMX PROTOCOL

SHORT MODE	STANDARD MODE	EXTENDED MODE	FUNCTION	DMX	DESCRIPTION
1	1	1	Strobe	000-010	Close
				011-025	Open
				026-225	Strobe speed from slow to fast
				226-239	Macro 1
				240-241	Macro 2
				242-246	Macro 3
				247-255	Open
2	2	2	Dimmer	000-003	Close
				004-255	Linear dimming (0-100%)
	3	3	Dimmer Fine	0-255	Dimmer in 16 bit
3	4	4	CYM Macro	000-016	White
				017-035	Yellow+ Magenta=Red
				036-054	Yellow
				055-073	Yellow +Cyan=Green
				074-092	Cyan
				093-110	Cyan + Magenta= Violet
				111-128	Magenta
				129-255	CYM color mixing from slow to fast
4	5	5	Cyan	000-255	Cyan (linear 0~100%)
		6	Cyan in 16 Bit	000-255	Cyan 16 Bit
5	6	7	Yellow	000-255	Yellow (linear 0~100%)
		8	Yellow in 16 Bit	000-255	Yellow in 16 Bit
6	7	9	Magenta	000-255	Magenta (linear 0~100%)
		10	Magenta in 16 Bit	000-255	Magenta in 16 Bit
7	8	11	Color Wheel	000-008	White
				009-016	Color 1
				017-024	Color 2
				025-032	Color 3
				033-040	Color 4
				041-048	Color5
				049-056	Color6
				057-064	Color7
				065-073	Color8
				074-082	Color9
				083-091	Color10
				092-100	Color11
				101-109	Color12
				110-118	Color13
				119-128	CTO
				129-191	Rotation ,Clockwise from slow to fast
				192-255	Rotation, Anti-clockwise from slow to fast

8	9	12	Iris	000-255	From Big to Small In size
		13	Iris Fine	000-255	Iris in 16 Bit
9	10	14	Iris Macro	000-010	White
				011-072	Iris Effect 1
				073-136	Iris Effect 2
				137-198	Iris Effect 3
				199-214	Iris Effect 4
				215-222	Iris Effect 5
				223-230	Iris Effect 6
				231-255	Fully Open
10	11	15	Rotating Gobo Wheel 1	000-012	White
				013-025	Gobo 1
				026-037	Gobo 2
				038-050	Gobo 3
				051-062	Gobo 4
				063-075	Gobo 5
				0760-88	Gobo 6
				089-101	Gobo 7
				102-114	Gobo 8
				115-127	Gobo 9
				128-155	Rotation (clockwise From slow to Fast)
				156-183	Reverse Rotation (anti-clockwise From slow to Fast)
				184-191	Shake of Gobo 1
				192-199	Shake of Gobo 2
				200-207	Shake of Gobo 3
				208-215	Shake of Gobo 4
				216-223	Shake of Gobo 5
				224-231	Shake of Gobo 6
				232-239	Shake of Gobo 7
				240-247	Shake of Gobo 8
				248-255	Shake of Gobo 9
11	12	16	Gobo Rotation	000-128	Gobo Indexing(0~540degrees)
				129-188	Rotation (Clockwise From slow to Fast)
				189-195	Stop
				196-255	Rotation (Anti-Clockwise From slow to Fast)
	13	17	Gobo Rotation Fine	0-255	Gobo Rotation in 16 Bit
12	14	18	Framing Blade1 (Left)	000-255	Linear light spot from big to small(blade 1/left)
		19		000-255	Light spot 16 bit precision(blade 1/left)
13	15	20	Framing Blade1 (right)	000-255	Linear light spot from big to small(blade 1/right)
		21		000-255	Light spot 16 bit precision(blade 1/right)
14	16	22	Framing Blade2 (Left)	000-255	Linear light spot from big to small(blade 2/left)
		23		000-255	Light spot 16 bit precision(blade 2/left)

15	17	24	Framing Blade2 (right)	000-255	Linear light spot from big to small(blade 2/right)
		25		000-255	Light spot 16 bit precision(blade 2/right)
16	18	26	Framing Blade3 (Left)	000-255	Linear light spot from big to small(blade 3/left)
		27		000-255	Light spot 16 bit precision(blade 3/left)
17	19	28	Framing Blade3 (right)	000-255	Linear light spot from big to small(blade 3/right)
		29		000-255	Light spot 16 bit precision(blade 3/right)
18	20	30	Framing Blade4 (Left)	000-255	Linear light spot from big to small(blade 4/left)
		31		000-255	Light spot 16 bit precision(blade 4/left)
19	21	32	Framing Blade4 (right)	000-255	Linear light spot from big to small(blade 4/right)
		33		000-255	Light spot 16 bit precision(blade 4/right)
20	22	34	Framing module 0°~90°rotation	000-255	Framing module 0°~90°rotation
	23	35		000-255	Rotation 16 bit precision
21	24	36	Three-Facet Prism	000-016	White
				017-255	Prism
22	25	37	Prism Rotation	000-128	Prism Indexing
				129-191	Rotation(Clockwise from slow to fast)
				192	Stop
				193-255	Rotation(Anti- Clockwise from slow to fast)
23	26	38	Frost Filter	000-255	Linear Frost
24	27	39	Focusing	000-255	Linear Focusing
		40	Focusing Fine	000-255	Focusing in 16 bit precision
25	28	41	Zoom	000-255	Linear Zooming
		42	Zooming Fine	000-255	Linear Zooming in 16 bit precision
26	29	43	Pan	000-255	Pan(0°~540°)
	30	44	Pan Fine	000-255	Pan in 16 bit precision
27	31	45	Tilt	000-255	Tilt(0°~270°)
	32	46	Tilt Fine	000-255	Tilt in 16 bit precision
	33	47	Pan & Tilt Speeds	000-255	Pan & Tilt Speed from Fast to Slow
28	34	48	Control	000-047	Reserved
				048-080	Reset
				081-112	Reserved
				113-144	Lamp Off (Delay for 3 s)
				145-168	Reserved
				169-200	Lamp Half Power
				201-223	Reserved
				224-255	Lamp Full Power

Remark: Prism is prior to Frost

LED INDICATION

Green	On	DMX signal OK
	Off	No DMX signal
	Flash	DMX signal error
Yellow	On	Setting the panel
Blue	On	Power
Red/Green	Red	Slave mode or Self-Test Mode

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. The projector has overheat protection device that will switch off the projector in case of overheating. Should it happen, check if the fans are blocked or not, or if they are dirty, clean them before switching on the projector again.

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

LUBRICATION

To ensure the smooth rotation of the rotating gobos and movement of the lens for focusing, it is recommended that the bearings for the rotating gobos and the 2 sliding tracks for the focusing lens holder be lubricated every two months. Use only high quality, high-temperature grease .

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 containing chemical elements on dichroic colour filters.**

Cleaning frequency depends on the environment in which the fixture operates. 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	<ul style="list-style-type: none"> ➤ Check the fuse on the power socket. ➤ Check the lamp.
The lamp is on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> ➤ Make sure that the fixture's start address is right ➤ Replace or repair the XLR signal cable.
The projector functions intermittently	<ul style="list-style-type: none"> ➤ Make sure the fan is working well or fans and their shields are not blocked
Beam appears dim, Low in brightness	<ul style="list-style-type: none"> ➤ Make sure the lamp is within its lifespan ➤ Remove dust or grease from the lenses.
The project image appears to have a halo	<ul style="list-style-type: none"> ➤ Carefully clean the lamp, optical lenses and other components.
Heavily Defective Beam	<ul style="list-style-type: none"> ➤ Check if lens are in good condition(not cracked) ➤ Clean dust or grease on the lens.

TECHNICAL DATA

VOLTAGES:

100V~240V AC, 50/60Hz

POWER CONSUMPTION:

450W@220V

LAMP:

OSRAM	SIRIUS HRI 330W XL
Colour Temperature	7500K
Manufacturers Rated Lamp Life	1500 hours

COLORS:

CMY linear mixing system with macros

1 color wheel: 14colors+ open

Rainbow effect with bi-directional and variable speeds

Stepping/Linear color changing

FRAMING MODULE:

1 Framing module: 4 framing blades

0°~90°rotation ,images at different sizes and shapes, curtain effect.

ROTATING GOBO WHEEL:

1 Rotating gobo wheel:

9 interchangeable gobos+1white

Bi-directionally rotatable, and shakable at variable speeds

Gobo diameter: $\Phi 14.8\text{mm}$

Gobo image diameter: $\Phi 8\text{mm}$

IRIS:

5-100% linearly adjustable with Macros

PRISM:

1pc,3-facet rotating Prism(bi-directional with variable speeds)

FROST:

1pc frost filter

FOCUSING:

DMX linear Focusing

ZOOMING:

DMX linear Zooming

DIMMER/STROBE:

0-100% linearly adjustable/ Double shutter blades, 0.3~25 F.P.S

HEAD MOVEMENT:

Pan 540°, Tilt 270° with auto position correction

BEAM ANGLE:

3.8°-35°, Linear Adjustment

CONTROL:

DMX512, 3 pins and 5 pins interfaces

28channels in short mode, 34channels in standard mode and 48channels in extended mode

Self-test mode

OTHER FUNCTIONS:

Adjustable Pan & Tilt speed

Modular Structure for easy maintenance

DMX512 wireless signal

Optional DMX512 Transmitter

HOUSING:

High temperature ABS, IP20

NET WEIGHT:

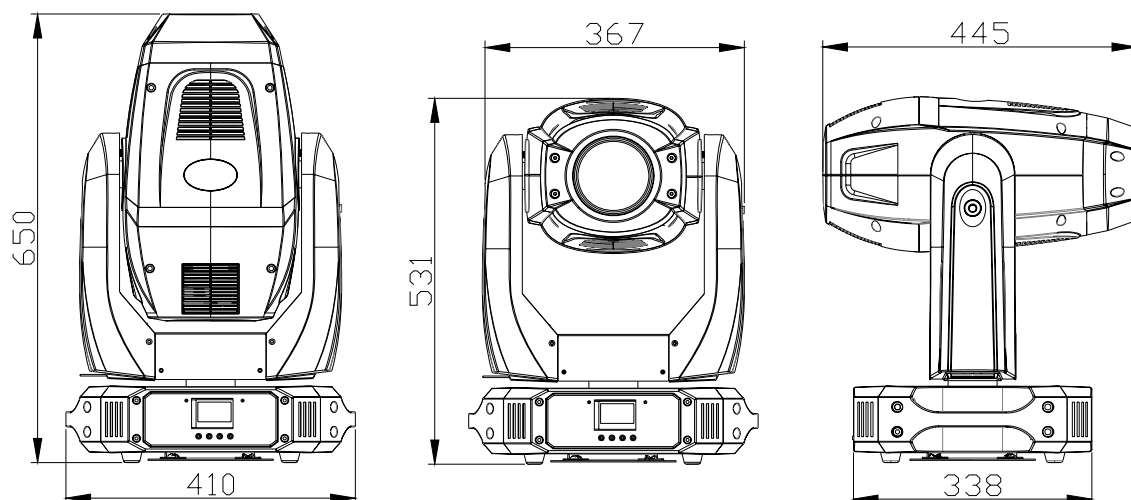
22.5Kg

GROSS WEIGHT(in Flight Case):

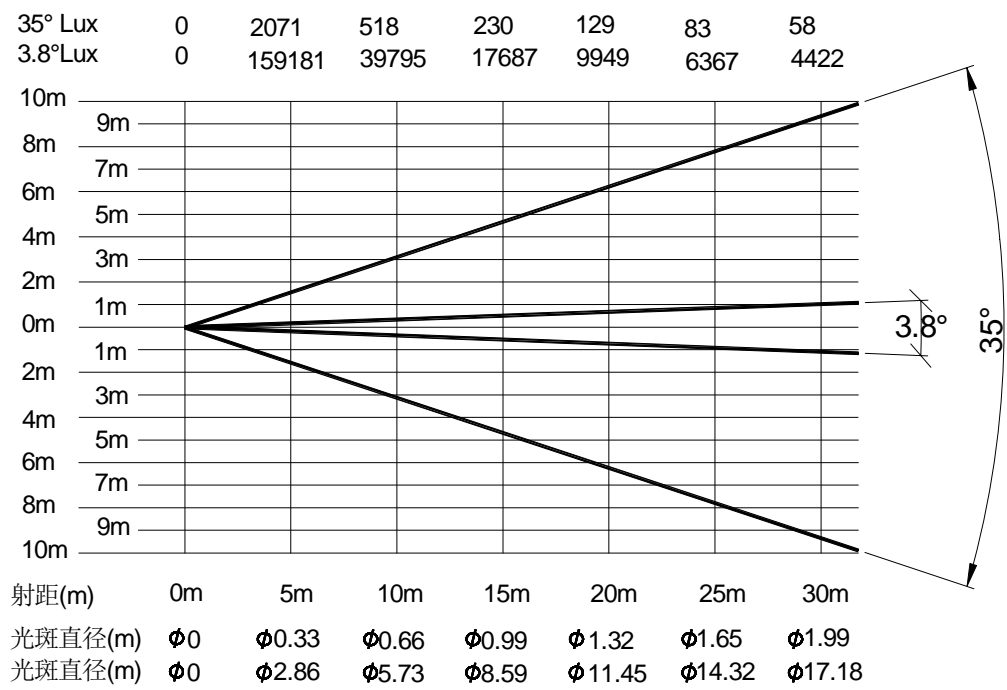
80Kg in flight case(2pcs/case) and accessories

27Kg in carton(1pc/ctn) and

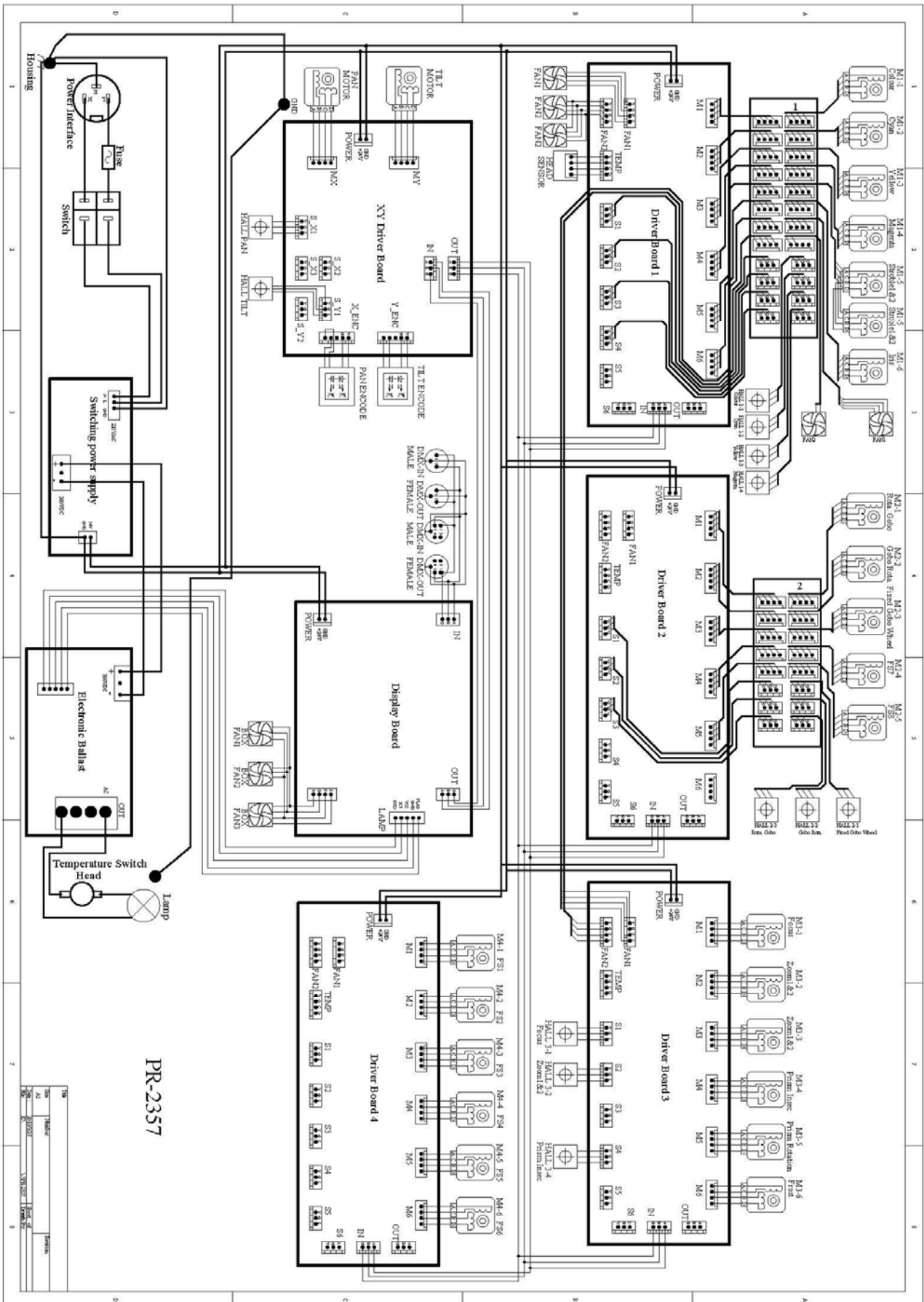
SIZES:



LIGHT OUTPUT:



Circuit Diagram



Component Order Code

NAME	PART NO.	QUANTITY	REMARK
PAN MOTOR	030040233	1	
TILT MOTOR	030040233	1	
DIMMER/STROBE MOTORS	030040213A	2	
CYM MOTOR	030040228A	3	
ROTATING GOBO WHEEL MOTOR	030040231A	1	
GOBO ROTATION MOTOR	030040219	1	
COLOR WHEEL MOTOR	030040221A	1	
IRIS MOTOR	030040081A	1	
FRAMING MODULE ROTATION MOTOR	030040155	1	
FRAMING BLADE MOTOR	030040236	8	
FOCUS MOTOR	030040232A	1	
FROST MOTOR	030040221A	1	
ZOOM MOTOR	030040215A	2	
PRISM ROTATION MOTOR	030040220A	1	
PRISM-IN MOTOR	030040217A	1	
FAN	030060095	4	TO THE BOTTOM OF THE HEAD AND BASE BOX
TURBO- FAN	030060064	1	LAMP FAN
TURBO-FAN	030060072	1	TO COOL MIXING ROD, GOBOS AND FRAMING BLADES
FAN	030060088	1	MID-AREAS OF THE HEAD
FAN	030060089	1	BASE BOX
LAMP BALLAST	040070115	1	
LAMP	100070031	1	
ROTATING GOBO WHEEL ACCESSORY	120110615	1	
COLOR WHEEL ACCESSORY	120110609	1	
POWER SWITCH	192010171	1	
LCD MASTER BOARD	230060385	1	
6 CHANNEL DRIVER BOARD1	230060387	1	
6 CHANNEL DRIVER BOARD2	230060388	1	
6 CHANNEL DRIVER BOARD3	230060389	1	
6 CHANNEL DRIVER BOARD3	230060390		
XY DRIVER BOARD	230060386	1	
FUSE	270041079	1	
TILT BELT	290151415	1	
ZOOMING BELT	290151313	2	
CYM BELT	290151382	3	
PRISM IN BELT	290151355	1	
GOBO ROTATION BELT	290151260	1	
PAN BELT	290151392	1	
PRISM ROTATION BELT	290151414	1	
FOCUSING BELT	290151313	2	

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