

AQUA 350 BEAM

PR-2368A

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.

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ACCESSORIES

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

Name	Quantity	Unit	Remark
G clamp	2	Pcs	
XLR connector	1	Set	Male and female
Safety cord	1	Pc	
This manual	1	Pc	
Ω clamp	2	Pcs	Optional

Please note that as part of our ongoing commitment to continuous product development, specifications are subject to change without notice. Whilst every care is taken in the preparation of the manual we reserve the right to change specifications in the course of product improvement. The publishers cannot be held responsible for the accuracy of the information herein, or any consequence arising from them.

Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and / or the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer and / or dealer.

Any future technical changes are not subject to further notice.

Note: For the products made by Guangzhou PR lighting Ltd, the warranty for the whole product is one year starting from the delivery date but the light source is not within the warranty.

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1. SAFETY AND WARNINGS



NOTE

Before a projector's installation, power-on, operation and maintenance, please carefully read the safety information hereinafter!

The following safety signs are used in the user manual.

Warning	User Manual	Electrical shock	Goggles	Protective Gloves	Flames	High Temperature



•When unpacking , check if there is transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use it.

- The manufacture is not responsible for loss caused by the user not following the manual or changing the projector as he/she likes
- Please be noted that the damage caused by changing the projector at will is not warranted.
- Do not hesitate to contact the dealer or the manufacturer if any questions or advice.



•The projector is for indoor and outdoor use, IP66.

- It can be used in humid and dusty areas. And it can contact water and other non-corrosive liquids.
- The projector should be kept away from high temperature, fire, electrical surge, vibration and strong light while being operated
- The projector is only intended for installation, operation and maintenance by qualified personnel. And the operation must strictly follow the procedures in the manual
- No repairable parts in the projector and do not open covers for maintenance by yourself.



•Don't look straightly into the light sources especially for epileptics, otherwise eyes will be burned.

•Do not connect this device to any type of dimmer pack

•If there are visible damages on the lamp, lens and protective cover for the screen, i.e., to the extent which affects its performance like cracking or deformation, please stop using it and contact the manufacture for their replacement with original parts, otherwise its performance will be compromised



•Before operation, please confirm that all covers(housing) are on and screws tightened. It's forbidden to use a projector while covers(housing)are off

•Keep the lamp clean and do not touch it with bare hands.

•While operating it, wear protective items.



•Any electrical connection must be carried out by a qualified person .

•Before installation, please confirm the voltage supplied matches what is required for the projector

•Each projector must be properly earthed and installed as per related electrical standards.

•Do not use power cord with its insulator damaged and connect the power cord with other cables.

•If the projector is not used or under cleaning,, please hold the plug and unplug it. Do not unplug it forcefully or by pulling the power cable.

•All power cords must conform to related safety and regulations

•Do not switch on and off the projector constantly in very short intervals, otherwise the light source's and other electrical parts' life will be shortened .



- There are safety cord holes at the bottom of the base of a projector. In view of safety, please run the safety cord supplied through the safety cord holes for safety support.
- Before any installation, maintenance and cleaning work, please ensure the projector is disconnected from power mains.



- After running for 5 minutes, the temperature of the housing of the projector is 35°C. After stable operation, its temperature is 55°C.
- While the lamp is stricken for the first time, there will be smoke and strange smell. It's normal and does not mean the projector has some defects.
- Don't touch the covers of the working projector (They are very hot!)



- Do not mount the projector directly on inflammable surface.
- Do not project the beam straightly on combustible items and the minimum distance between the projector and illuminated items is 18m.
- A projector should be installed with good ventilation and the minimum distance between the projector and walls is 50cm. At the same time, please ensure the fans and air inlets and outlets are workable.

2. INSTRUCTIONS

•CLEANING AND MAINTENANCE

The projector's protective devices should be periodically checked. For example, check if the fuse is blown or not. If true, replace it with a new fuse with same rating. Please be advised they be of same rating.

Please periodically check the cooling devices with the projector having protective unit for over-temperature (If over-temperature occurs, the protective unit will trigger power-off automatically). The cooling devices include cooling fan, heat sink and other cooling components. Please check if the fan runs normally and the fan and the air-inlet and outlet are blocked by dust. Please ensure that the air inlet and outlet are clean and clear. The cooling fan must be cleaned once every 15 days.

For those projector with optical lens, reflector and coated color filters, it is necessary to make it clean for reliable operation because of easy accumulation of smoke, oil and dust on the lens, thus decreasing the light output. Then internal optical lens, flat glass, reflector and coated color filters must be periodically cleaned for optimal light output.

For the projector with some IP rating, unless approved by professional service people and internal parts requiring to be replaced, it's prohibited to dismantle it. For this type of projector, if without any fan, please keep it clean; if yes, please refer the above mentioned method for cleaning.

The cleaning intervals depend on how often it's used and its running environment. Use soft clothing and normal glass detergent for cleaning. It's advised the external optical system be cleaned once every 20 days, internal optical system once every 30/60 days at least. For the projector with higher IP rating, if there is no damage inside, just clean the projector's surface in principle. Keep the lens clean and don't touch the optical parts with bare hands.

Special note:

It's normal phenomena that there will be mild water mist on the lens while the waterproof product is in use.



- Before any maintenance and cleaning, please ensure the project is off the power
- Only qualified person is allowed to do maintenance
- During maintenance and before maintenance, the projector must be off power.



- To avoid internal damage, sun light or other light mustn't penetrate into the projector via front lens whether it runs or not
- Do not use alcohol or other organic solvent to clean the housing to avoid damage.
- Do not use any solvent with chemical elements to clean color filters or hot mirror.

•LUBRICATION

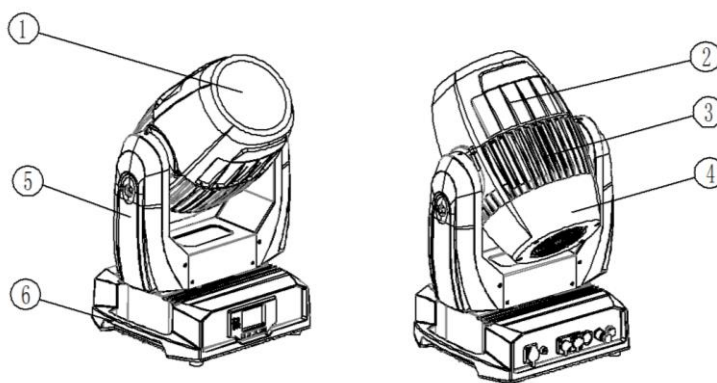
To ensure smooth movement of gobos and focus lens, it's advised rotators' bearings and 2 sliding bars for focus lens be lubricated every 2 months. High quality and high temperature lubricant/grease is advised..

.TROUBLESHOOTING

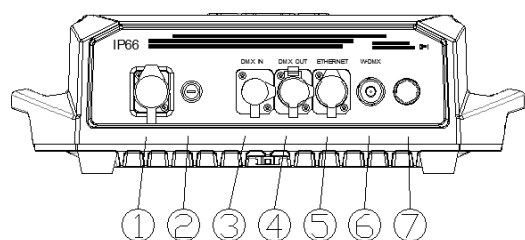
PROBLEM	ACTION
The projector doesn't switch on	<ul style="list-style-type: none"> ➤ Check the fuse on the power socket. ➤ Check the lamp.
The lamp is on but the projector doesn't respond to the controller	<ul style="list-style-type: none"> ➤ Make sure that the fixture's start address is right ➤ Replace or repair the XLR signal cable.
The projector functions intermittently	➤ 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	➤ 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.

3. APPEARANCE

1. Front Glass
2. Waterproof Front Cover
3. Waterproof Back Cover
4. Airflow Cover
5. Arm Cover
6. Handle

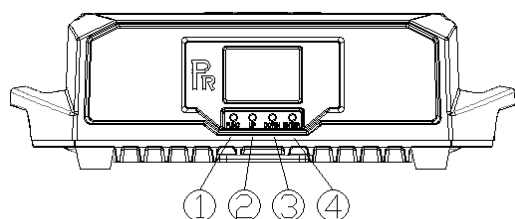


Rear Panel of the Base



1. Waterproof Power Socket
- 2.5-Pin Waterproof XLR Socket(Male)
- 3.5-Pin Waterproof XLR Socket(Female)
4. Waterproof Wireless Receiver

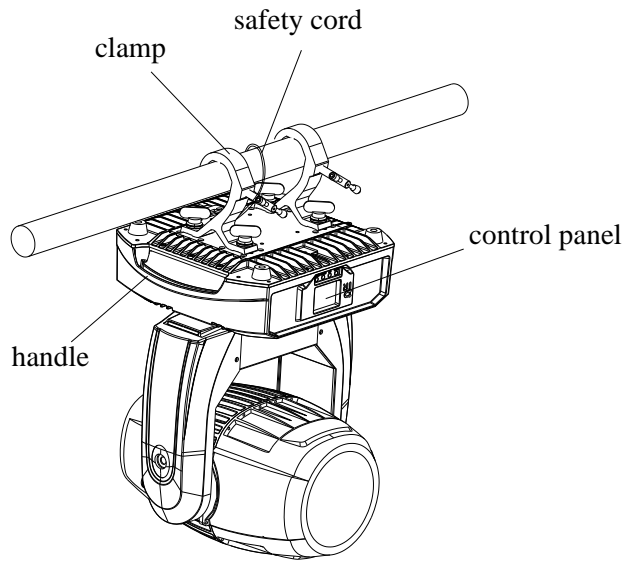
Front Panel of the Base



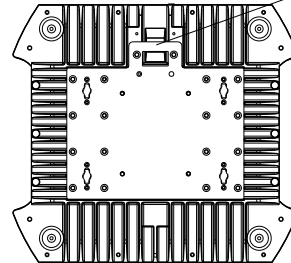
1. Escape Key
2. Up Key
3. Down Key
4. Enter Key

4. INSTALLATION

•RIGGING



Please run the safety cord through safety cord hole for safety



Take 2 clamps and 1 safety cords out from the package and mount 2 clamps on the underside of fixture with 4 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) 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 the weight of the fixture.



WARNING:

- The projector **MUST** be lifted or carried by the **HANDLES** instead of clamps.
- For safety the safety cord should afford 10 times the Projector's weight.

• POWER CONNECTION

Connect the power cord as follows:

L (live) =brown

E (earth) =yellow/green

N (neutral) =blue

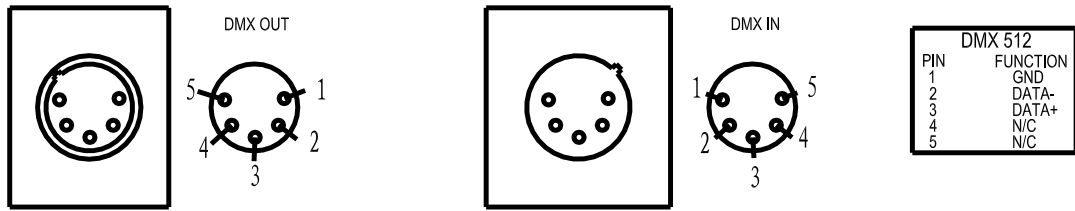
Before power connection, please ensure the power supplied must match what the nameplate says. It is recommended that each projector be connected with power separately so that they may be individually switched on and off.

Note: If projectors are connected in series, please connect POWERIN port of the 1st projector with the Power Mains, then connect its POWER OUT with POWER IN of the 2nd projector, and so on till all fixtures are connected. If the voltage supplied is 200V-240V, the maximum projectors connected is 8pcs, if it is 100V-120V, the maximum is 4pcs. The diameter of the cores of the wires for the Power in/out cables must be equal or bigger than 2.5mm².



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

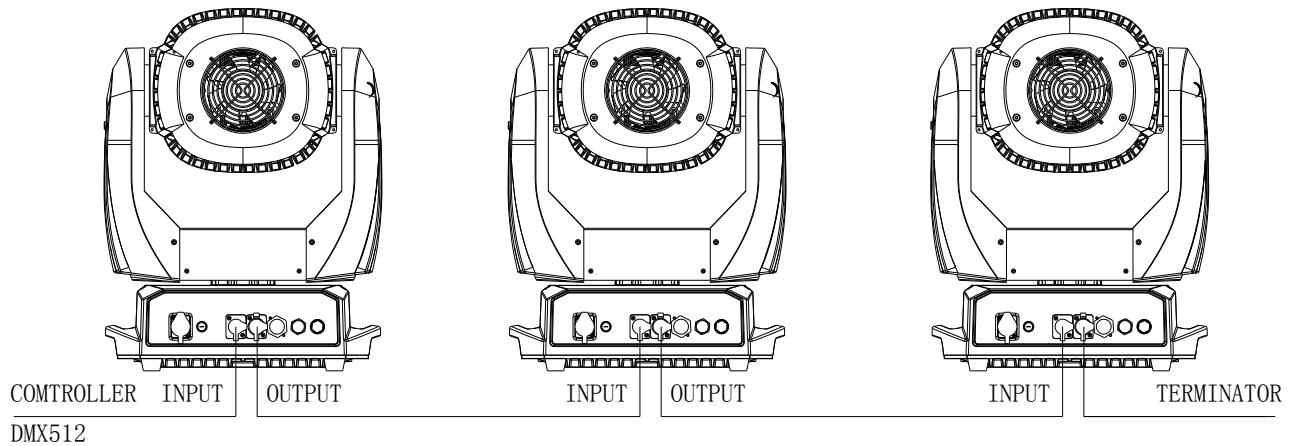
.DMX CONTROL CONNECTION



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 projector accepts digital control signals in protocol DMX512 (1990).

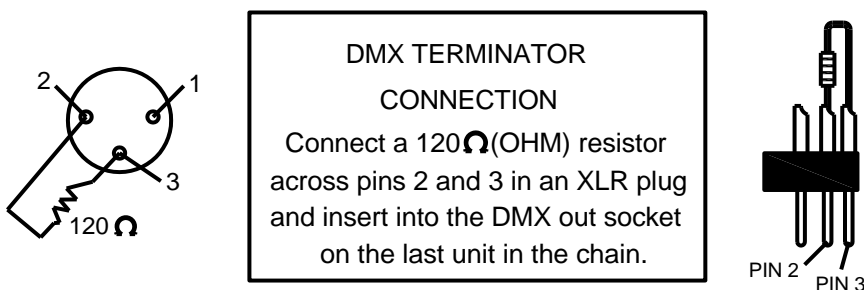
Connect the controller's DMX output to the first fixture's DMX input, and connect the first fixture's DMX output to the second fixture's DMX input and connect the rest fixtures in the same way. Eventually connect the last fixture's DMX output to a DMX terminator as shown in the figure below.



.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.



•INSTALLATION/REPLACEMENT OF A LAMP

Lock the yoke before fitting/replacing the lamp.

Just as Shown by Figure 1, after Opening the airflow cover as shown by loosening 4 tightening screws, the structure like figure 2 will be seen.

Just as shown by the figure 2, loosen the 4 tightening screws of the bob-weight block, take it down and the structure like figure 3 will be seen.

Just as shown by figure 3, loosen the 8 tightening screws of lamp cover , open the cover and structure like the figure 4 will be seen.

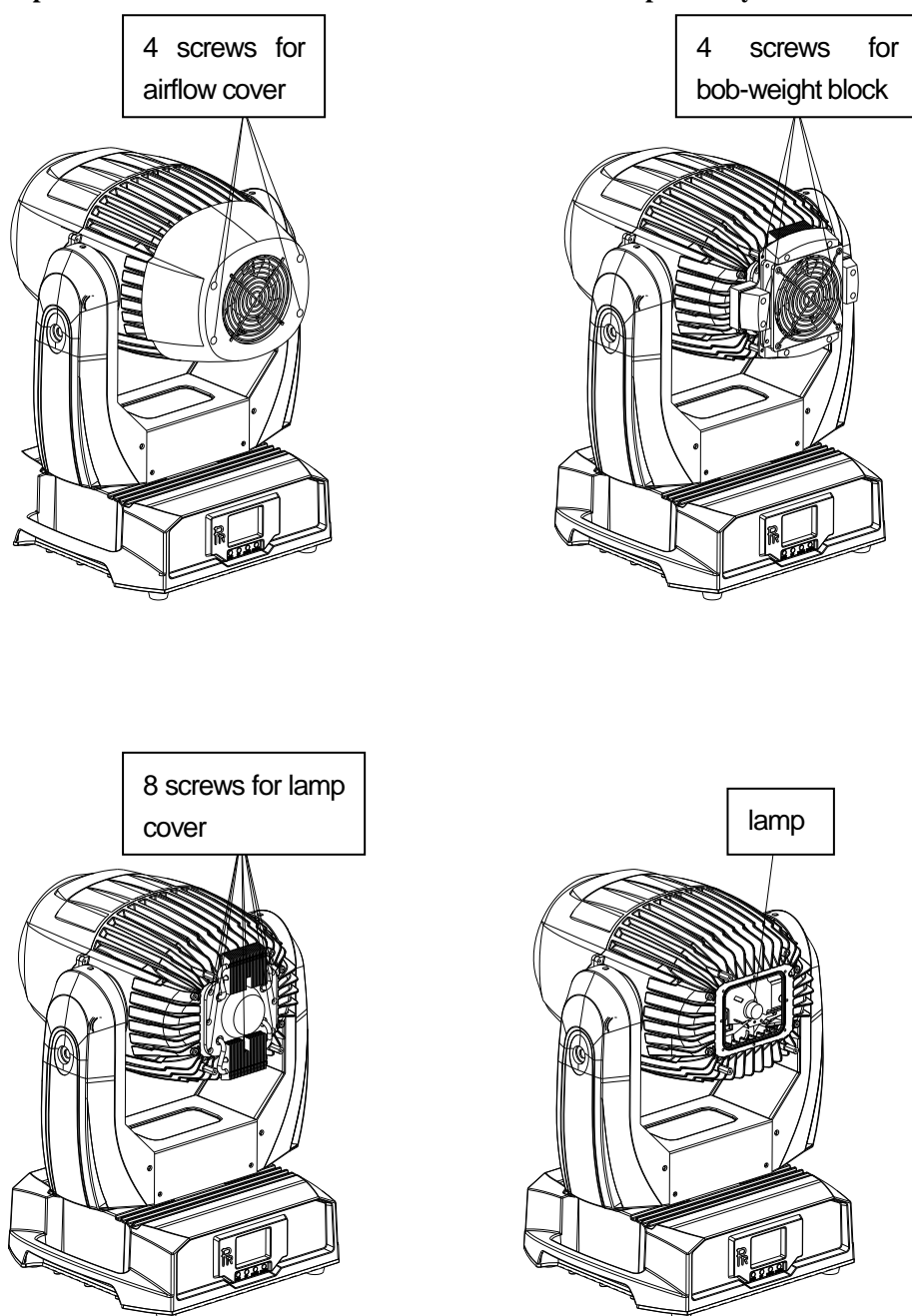
Unplug the lamp with power wires, hold the bottom of the lamp by hand and move it as directed by the arrow using force to make the other end of the lamp off the holder. At last take the lamp out of the bottom of the head. Before placing a new lamp inside , plug the lamp with power wires tightly. Lamp placement and its removal are in 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.

While lamp's installation, do not damage the metal wire around the burner.

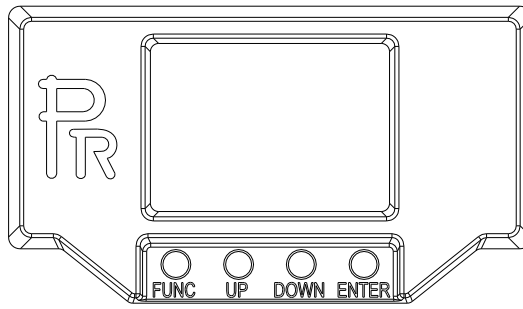
Put back the lamp cover, bob-weight block, airflow cover and tighten all screws.

Important: Please read "Instructions " enclosed with the lamp carefully before its use.



5. SETUP AND CONFIGURATION

•Front Panel Operation



Projector configuration can be set conveniently via push button and LCD display.

Launch the projector and press button **ENTER** for more than 3 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.

•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 projector has 3 DMX modes. There are short mode ,standard mode and extended mode. For example standard mode has 20 channels, so set the No. 1 projector’s address 001, No. 2 projector’s address 021, No. 3 projector’s address 041, No. 4 projector’s address061, and so on.

Launch the projector: Press button **ENTER** more than 3seconds 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

.

•DMX WIRELESS CONTROL

The projector has wireless control function with wireless receiver module and antenna for remote control.

The setup of it is below:

1. Enter into the projector’s menu. Select the menu “Config Settigns” via the bottoms of **UP** and **DOWN**
2. Select **DMX control Mode--- Wireless First** (Note: Do not select **XLR ONLY**),then wireless indication in the front panel will be on, meaning wireless control function is activated.

Only after the projector is linked with a transmitter, can it receive wireless signal sent by the transmitter. If unlinking it, Press “Enter” for the menu of Unlink Wireless under the upper level menu of Config Settigns.

•STAND-ALONE MODE

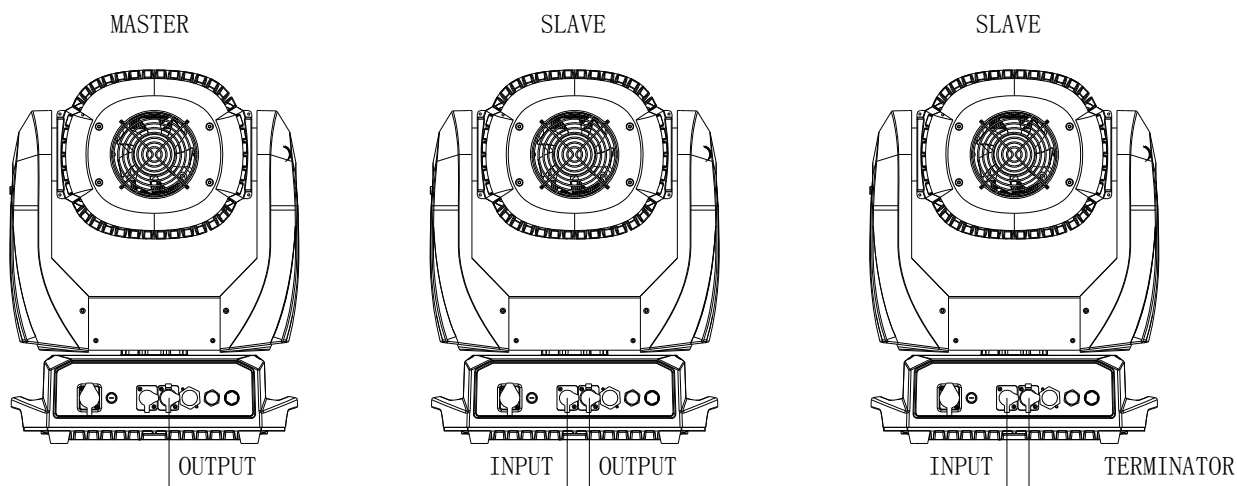
Operate the projector without connecting with a controller, enable the master mode through the operation panel, the projector will run in Stand-Alone mode automatically.
DMX address can be set at any number within 512.

•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






6. OPERATION MENU

1st LEVEL	2nd LEVEL	3rd LEVEL	4th LEVEL	5th LEVEL
Address 	DMX Address	1-496(Short Mode) 1-492(Standard Mode) 1-491(Extend Mode)		
Reset 	Total Reset	Really Reset? Confirm or Cancel		
	Pan&Tilt Reset	Really Reset? Confirm or Cancel		
	Colour System Reset	Really Reset? Confirm or Cancel		
	Gobo Reset	Really Reset? Confirm or Cancel		
	Dimmer/Strobe reset	Really Reset? Confirm or Cancel		
	Fo. Ef. Pr. Reset	Really Reset? Confirm or Cancel		

<div>Config Settings</div> 	DMX Channel Mode	Short Mode		
		Standard Mode		
		Extended Mode		
		View Selected Mode	Ch.01 Strobe Ch.02 Dimmer Ch XX Power/special Fun	
	Lamp Control	Lamp Control	OFF/ ON	
		On By Power On	OFF/ ON	
		Control By DMX	OFF/ ON	
	Signal Select (Only for the projectors with wireless receiver assembly)	XLR Only		
		XLR First		
		Wireless Only		
		Wireless First		
		Wireless In/XLR Out		
	Loss of DMX	Normal time out		
		Hold Last Value		
	Display Config	Display Mode	Off After Delay	
			On Always	
		Display Invert	Invert OFF	
			Invert ON	
			Invert Auto	
		Language Setting	English\Chinese	
	Temperature Unit	Celsius Degree		
		Fahrenheit Degree		
	Un-Link Wireless (Only for the projectors with wireless receiver assembly)	Really Un-Link? Confirm or Cancel		
	Factory defaults	Restore Defaults? Confirm or Cancel		

Option Settings 	Pan/Tilt Settings	Pan DMX Invert	OFF/ ON	
		Tilt DMX Invert	OFF/ ON	
		Pan Tilt Swap	OFF/ ON	
		XY Feedback	OFF/ ON	
		Pan/Tilt mode	Speed/Time	Note: "Speed Mode" means Pan and Tilt will move from Point A to Point B at their respective maximum speeds. "Time Mode" means both Pan and Tilt will arrive at designated point at the same time. It's advised Time Mode be used if the projector runs circles or in oblique lines.
	Invert Settings	Dimmer Invert	OFF/ ON	
Information 	View DMX Values	Channel Value Strobe XXX Dimmer XXX Dimmer Fine XXX Color Wheel XXX Color Wheel Fine XXX Fixed Gobo Wheel XXX Rot. Gobo Wheel1 XXX Rot. Gobo1 Rotation XXX Rot. Gobo1 Rotation F.XXX Effect Wheel XXX Effect Wheel Rotation XXX Prism XXX Prism Rotation XXX Focus XXX Pan XXX Pan Fine XXX Tilt XXX Tilt Fine XXX Pan/Tilt Speed & Time XXX Power/Special Fun.		
	Lamp Hours	Lamp Hous=XXX H Reset Lamp Hours		
	Total Hours	Total Hous ××××H		
	Temperature	Display Board=×××C Pan board=×××C Tilt board=×××C Driver Board1=×××C Driver Board 2=×××C Head sensor=×××C		
	Software Version	PCB Board Sys Boot Display Board xxx xxx Pan board xxx xxx Tilt board xxx xxx Driver Board1 xxx xxx Driver Board 2 xxx xxx		

	Electronic SN	XXXXXXX		
	RDM Device Label	AQUA 350 BEAM ANSI E1.20 RDM		
	Fan Status	Fan Speed Status Lamp Fan xxx on/off Color Fan xxx on/off Head Fan xxx on/off		
	Acceleration Sensor	X Axis: XXX Y Axis: XXX Z Axis: XXX Position : XXX		
	Information Tast	Fan Speed Status Lamp Fan xxx on/off Color Fan xxx on/off Head Fan xxx on/off Head Temperature xxx Power Level xxx xxxx Power xxx xxxxxxx		
Service 	Manual Effect Control	Strobe XXX		
		Dimmer XXX		
		Dimmer Fine XXX		
		Colour Wheel XXX		
		Colour Wheel Fine XXX		
		Fixed Gobo Wheel XXX		
		Rot. Gobo1 Wheel 1 XXX		
		Rot. Gobo1 Rotation XXX		
		Rot. Gobo1 Rotation F. XXX		
		Effect Wheel XXX		
		Effect Wheel Rotation XXX		
		Prism XXX		
		Prism Rotation XXX		
		Focus XXX		
		Focus Fine XXX		
		Pan XXX		
		Pan Fine XXX		
		Tilt XXX		
		Tilt Fine XXX		
		Pan/Tilt Speed & Time		
	Factory mode	XXX		
			...	
Operation Mode 	DMX Mode	Change Operation Mode? Confirm or Cancel		
	Master Mode	Preset Memory	Change Operation Mode? Confirm or Cancel	
		User Memory 1	Change Operation Mode? Confirm or Cancel	
		User Memory 2	Change Operation Mode? Confirm or Cancel	
	Stand-Alone Mode	Preset Memory	Change Operation Mode? Confirm or Cancel	

		User Memory 1	Change Operation Mode? Confirm or Cancel	
		User Memory 2	Change Operation Mode? Confirm or Cancel	
	Static Scene	Change Operation Mode? Confirm or Cancel		
<div>User Memories</div> 	Edit User Memory	Edit User Memory 1 / Edit User Memory 2	(1~200Scenes) Scene XX (1~200 Scenes)	Strobe XXX
				Dimmer XXX
				Dimmer Fine XXX
				Colour Wheel XXX
				Colour Wheel Fine XXX
				Fixed Gobo Wheel XXX
				Rot. Gobo Wheel 1 XXX
				Rot. Gobo 1 Rotation XXX
				Rot. Gobo 1 Rotation F. XXX
				Effect Wheel XXX
				Effect Wheel Rotation XXX
				Prism XXX
				Prism Rotation XXX
				Focus XXX
				Focus Fine XXX
				Pan XXX
				Pan Fine XXX
				Tilt XXX
				Tilt Fine XXX
				Pan/Tilt Speed & Time XXX
				Fade Time XXX
				Hold time XXX
				Delay Time XXX
				Delay unit (msec/s/m)
				Link to Step XXX
	Edit Static Scene			Strobe XXX
				Dimmer XXX
				Dimmer Fine XXX
				Colour Wheel XXX
				Colour Wheel Fine XXX
				Fixed Gobo Wheel XXX
				Rot. Gobo Wheel 1 XXX
				Rot. Gobo 1 Rotation XXX
				Rot. Gobo 1 Rotation F. XXX
				Effect Wheel XXX
				Effect Wheel Rotation XXX
				Prism XXX
				Prism Rotation XXX
				Focus XXX
				Focus Fine XXX
				Pan XXX
				Pan Fine XXX
				Tilt XXX
				Tilt Fine XXX
				Pan/Tilt Speed & Time XXX
				Fade Time XXX
				Hold time XXX
				Delay Time XXX
				Delay unit (msec/s/m)
				Link to Step XXX
	Init User Memory	Reset User Memory 1	Reset User Memory? Confirm or Cancel	
		Reset User Memory 2	Reset User Memory? Confirm or Cancel	
		Reset Static Scene	Reset Static Scene? Confirm or Cancel	

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);
2. all projectors Accepting parameters will automatically be set to slave mode.
Specifications for the SIGN on the top right:

7. 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
				226-246	Random strobe from slow to fast
				247-255	Open
2	2	2	Dimmer	000-010	Close
				011-255	Linear dimming (0-100%)
	3	3	Dimmer Fine	000-255	Dimmer in 16 bit
3	4	4	Color Wheel	000-063	Indexing(0-360degrees)
				064-073	White
				074-075	White/color1
				076-077	Color1
				078-079	Color1/color2
				080-081	Color2
				082-083	Color2/color3
				084-085	Color3
				086-087	Color3/color4
				088-089	Color4
				090-091	Color4/color5
				092-093	Color5
				094-095	Color5/color6
				096-097	Color6
				098-099	Color6/color7
				100-101	Color7
				102-103	Color7/Color8
				104-105	Color8
				106-107	Color8/color9
				108-109	Color9
				110-111	Color9/color10
				112-113	Color10
				114-115	Color10/color11
				116-117	Color11
				118-119	Color11/CTO
				120-121	CTO

				122-123	CTO/color12
				124-125	Color12
				126-127	Color12/white
				128-191	Rotation ,Clockwise from slow to fast
				192-255	Rotation ,Anti-Clockwise from fast to slow
	5	5	Color wheel Fine	0-255	Color Wheel in 16 Bit
4	6	6	Fixed Gobo Wheel	000-008	White
				009-015	Gobo1
				016-022	Gobo2
				023-029	Gobo3
				030-036	Gobo4
				037-043	Gobo5
				044-050	Gobo6
				051-057	Gobo7
				058-064	Gobo8
				065-071	Gobo9
				072-078	Gobo10
				079-085	Gobo11
				086-092	Gobo12
				093-099	Gobo13
				100-106	Gobo14
				107-113	Gobo15
				114-120	Gobo16
				121-127	White
				128-159	Clockwise rotation from slow to fast
				160-191	Anti Clockwise rotation from slow to fast
				192-195	Gobo 1 shake effect from fast to slow
				196-199	Gobo 2 shake effect from fast to slow
				200-203	Gobo 3 shake effect from fast to slow
				204-207	Gobo 4 shake effect from fast to slow
				208-211	Gobo 5 shake effect from fast to slow
				212-215	Gobo 6 shake effect from fast to slow
				216-219	Gobo7 shake effect from fast to slow
				220-223	Gobo 8 shake effect from fast to slow
				224-227	Gobo9 shake effect from fast to slow
				228-231	Gobo 10 shake effect from fast to slow
				232-235	Gobo 11 shake effect from fast to slow
				236-239	Gobo 12 shake effect from fast to slow
				240-243	Gobo 12 shake effect from fast to slow
				244-247	Gobo 14shake effect from fast to slow
				248-251	Gobo 15 shake effect from fast to slow
				252-255	Gobo 16shake effect from fast to slow
				000-007	White



5	7	7	Rotating Gobo Wheel	008-017	Gobo 1
				018-027	Gobo 2
				028-037	Gobo 3
				038-047	Gobo 4
				048-057	Gobo 5
				058-067	Gobo 6
				068-077	Gobo 7
				078-087	Gobo 8
				088-097	Gobo 9
				098-107	Gobo 10
				108-117	Gobo 11
				118-127	Gobo 12
				128-143	Rotation (clockwise From slow to Fast)
				144-159	Reverse Rotation (anti-clockwise From slow to Fast)
				160-167	Shake of Gobo 1 from slow to fast
				168-175	Shake of Gobo 2 from slow to fast
				176-183	Shake of Gobo 3 from slow to fast
				184-191	Shake of Gobo 4 from slow to fast
				192-199	Shake of Gobo 5 from slow to fast
				200-207	Shake of Gobo 6 from slow to fast
				208-215	Shake of Gobo 7 from slow to fast
				216-223	Shake of Gobo 8 from slow to fast
				224-231	Shake of Gobo 9 from slow to fast
				232-239	Shake of Gobo 10 from slow to fast
				240-247	Shake of Gobo 11 from slow to fast
				248-255	Shake of Gobo 12 from slow to fast
6	8	8	Gobo Rotation	000-128	Gobo Indexing(0~360degrees)
				129-188	Rotation (Clockwise From slow to Fast)
				189-195	Stop
				196-255	Rotation (Anti-Clockwise From slow to Fast)
	9	9	Gobo Rotation Fine	000-255	Gobo Rotation in 16 Bit
7	10	10	Effect Wheel	000-063	No
				064-127	Linear prism
				128-191	Frost
				192-255	Circular prism
8	11	11	Effect Wheel Rotation	000-127	Circular prism indexing
				128	Stop rotating
				129-191	Clockwise rotation from slow to fast
				192	Stop rotating
				193-255	Anti-Clockwise rotation from slow to fast
9	12	12	Prism	000-016	Open
				017-255	Prism

10	13	13	Prism Rotation	000-127	Prism Indexing
				128	Stop
				129-191	Rotation(Clockwise from slow to fast)
				192	Stop
				193-255	Rotation(Anti- Clockwise from slow to fast)
11	14	14	Focus	000-255	Linear frost
		15	Focus Fine	000-255	Focus in 16 bit precision
12	15	16	Pan	000-255	Pan(0 °~540 °)
13	16	17	Pan Fine	000-255	Pan in 16 bit precision
14	17	18	Tilt	000-255	Tilt(0 °~270 °)
15	18	19	Tilt Fine	000-255	Tilt in 16 bit precision
	19	20	Pan & Tilt Speeds	000-255	Pan & Tilt Speed from Fast to Slow
16	20	21	Control	000-019	Reserved
				The following functions will be activated after the DMX value has been held for more than 5s.	
				020-024	Display On
				025-029	Display Off
				030-034	Reserved
				035-039	Reserved
				040-044	Lamp Full Power
				045-089	Reserved
				090-094	Pan & Tilt Speed Mode
				095-099	Pan & Tilt Time Mode
				100-129	Reserved
				130-139	Lamp On
				140-149	Pan & Tilt Reset
				150-159	Color System Reset
				160-169	Gobo Wheels Reset
				170-179	Dimmer/Shutter Reset
				180-189	Frost/Focus/Prism Reset
				190-199	Reserved
				200-209	Total Reset
				210-229	Reserved
				230-239	Lamp Off
				240-255	Reserved

Note:

1. The projector can't be turned on within 1 minute after the lamp-off.
2. Fan error can cause lamp-off.
3. Note: "Speed Mode" means Pan and Tilt will move from Point A to Point B at their respective maximum speeds."Time Mode" means both Pan and Tilt will arrive at designated point at the same time. It's advised Time Mode be used if the projector runs circles or in oblique lines.
- 4.If both prism and frost are to be used, prism is prior to frost.

8. ERROR INFORMATION

The system can detect some errors during the reset, if  displayed, touch the logo  to view the error.
The error messages are as follows:

Name	Type	Correction
Pan	Timeout/magnet Sensor/Encoder	Check if wiring, positioning parts and motors are normal
Tilt	Timeout/magnet Sensor/Encoder	Check if wiring, positioning parts and motors are normal
Color Wheel	Timeout	Check if wiring, positioning parts and motors are normal
Fixed gobo wheel	Timeout	Check if wiring, positioning parts and motors are normal
Rot. Gobo Wheel	Timeout	Check if wiring, positioning parts and motors are normal
Rot. Gobo1Rotation	Timeout	Check if wiring, positioning parts and motors are normal
Dimmer	Timeout	Check if wiring, positioning parts and motors are normal
Prism	Timeout	Check if wiring, positioning parts and motors are normal
Prism Rotation	Timeout	Check if wiring, positioning parts and motors are normal
Effect wheel	Timeout	Check if wiring, positioning parts and motors are normal
Effect wheel Rotation	Timeout	Check if wiring, positioning parts and motors are normal
Focus	Timeout	Check if wiring, positioning parts and motors are normal
Lamp Fan	Error	Check if fan and its wiring are normal
Color Fan	Error	Check if fan and its wiring are normal
Head Fan	Error	Check if fan and its wiring are normal
Pan and Tilt Board	Error	Check signal wire
Driver Board 1	Error	Check signal wire
Driver Board2	Error	Check signal wire
Acceleration Sensor	Error	Check signal wire
Lamp on	Timeout	Check if the lamp is damaged
Lamp Life	Timeout Warning	
Lamp Off[Fan Error]	Error	Check if all fans are normal
Time IC	Error	

9. TECHNICAL DATA

ELECTRICAL PARAMETERS

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

Input power: 550W @220V

Maximum current: 6.7A

Power factor: PF >0.9

SPECIFICATIONS OF LIGHT SOURCE

Lamp	USHIO NSL-350A
Colour Temperature	6800K
Manufacturers Rated Lamp Life	1500hrs

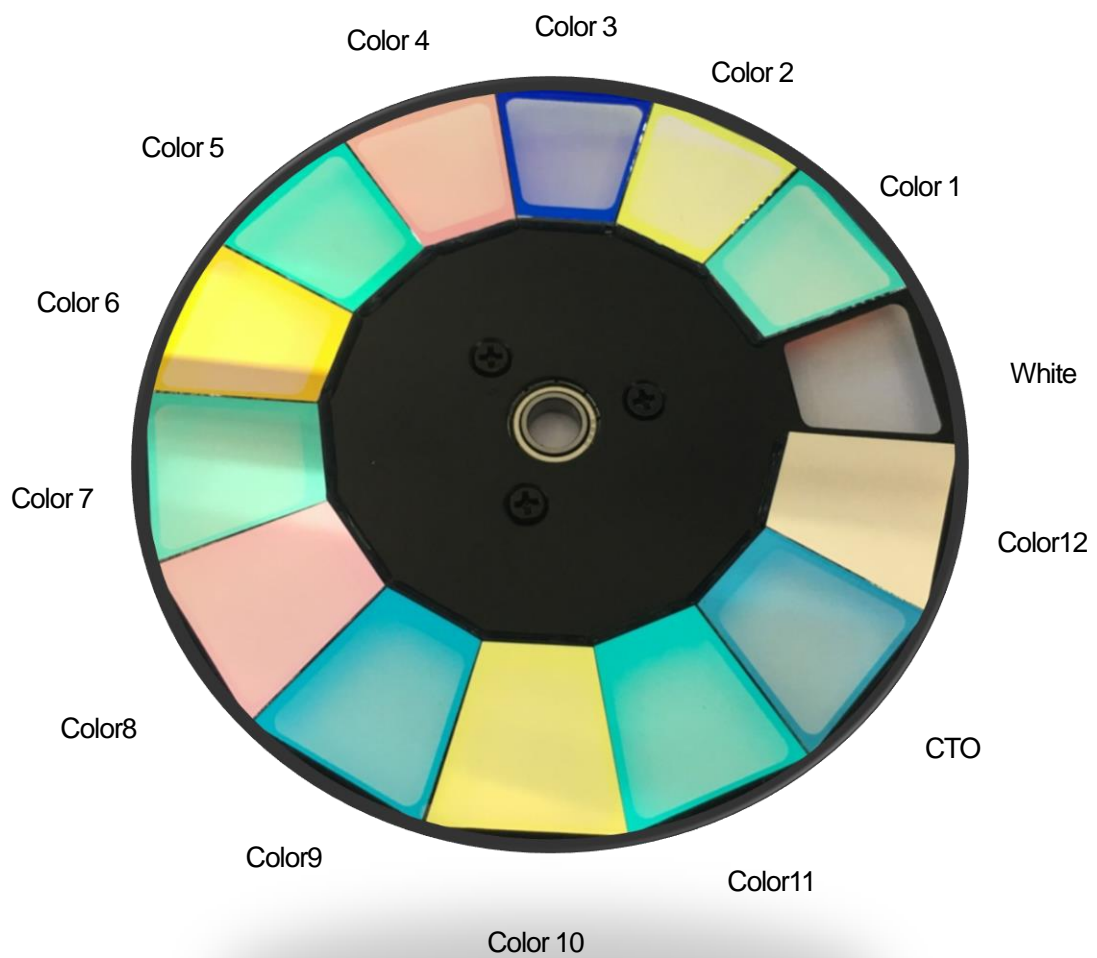
COLOR S

1 Color Wheel

12Dichroic colour filters +CTO+ white

Variable speed and bi-directional rainbow effect

Linear colour changing is available

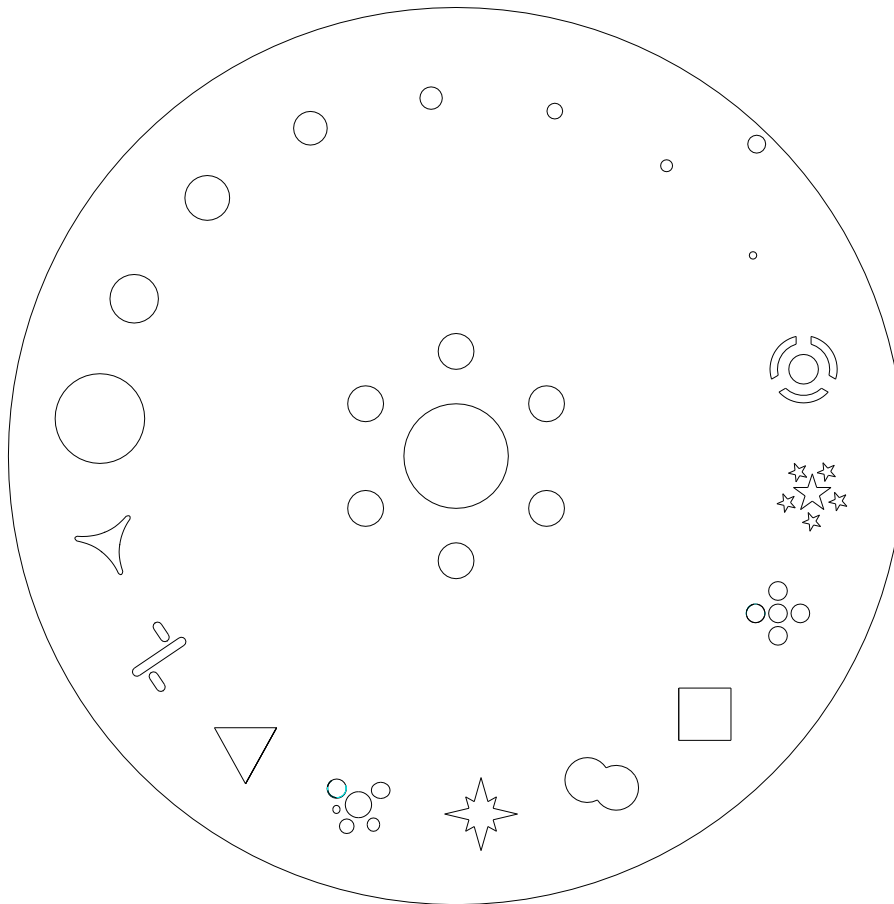


GOBOS

1 Fixed gobo wheel

16 static gobos+ white + Open hole of rotating gobo wheel

Shaking and bi-directional wheel scrolling at variable speeds



Rotating Gobo Wheel

1 Rotating gobo wheel: 12 gobos+ White

Shaking and bi-directional wheel scrolling at variable speeds

Gobo changeable. Gobo outer size: $\Phi 12\text{mm}$, image size $\Phi 6\text{mm}$

Gobo 1	Gobo 2	Gobo 3	Gobo 4	Gobo 5	Gobo 6	Gobo 7
Gobo 8	Gobo 9	Gobo 10	Gobo 11	Gobo 12		

PRISM/EFFECT WHEEL

3Prisms(standard 8facet prism+16facet prism+ linear prism) (bi-directional rotation with variable speeds) + Frost+ Open
(Optional 3-16 facet prism or gradient prism)

FOCUS

0-100% linearly adjustable by DMX

STROBE

Double shutter blades, 0.3~20 FPS

HEAD MOVEMENT

Pan 540 °,Tilt 240 °with auto position correction

CONTROL

International standard DMX512 signal , 3 pin and 5 pin interfaces

16channels in short mode, 20channels in standard mode,21channel in extended mode

Adjustable mode

OTHER FUNCTIONS

Adjustable Pan & Tilt speed

Fixture and lamp hours' display

Modular construction for easy maintenance

DMX512 wireless receiver

DMX512 wireless transmitter (optional)

HOUSING

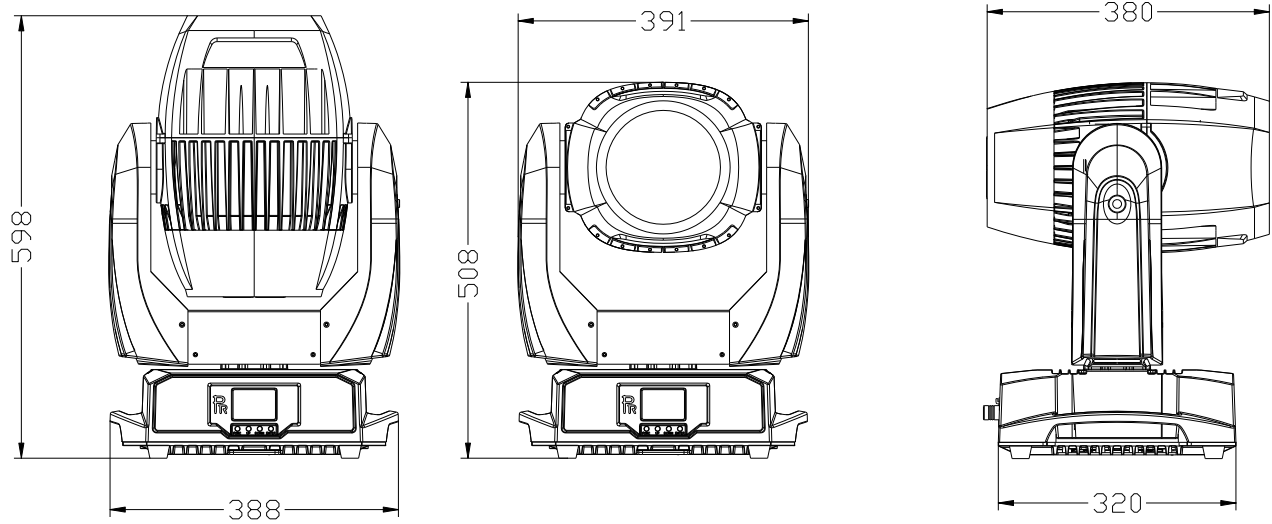
Cast Aluminum, high temperature resistant/anti-UV ABS, IP66

WEIGHT

30.6 Kg

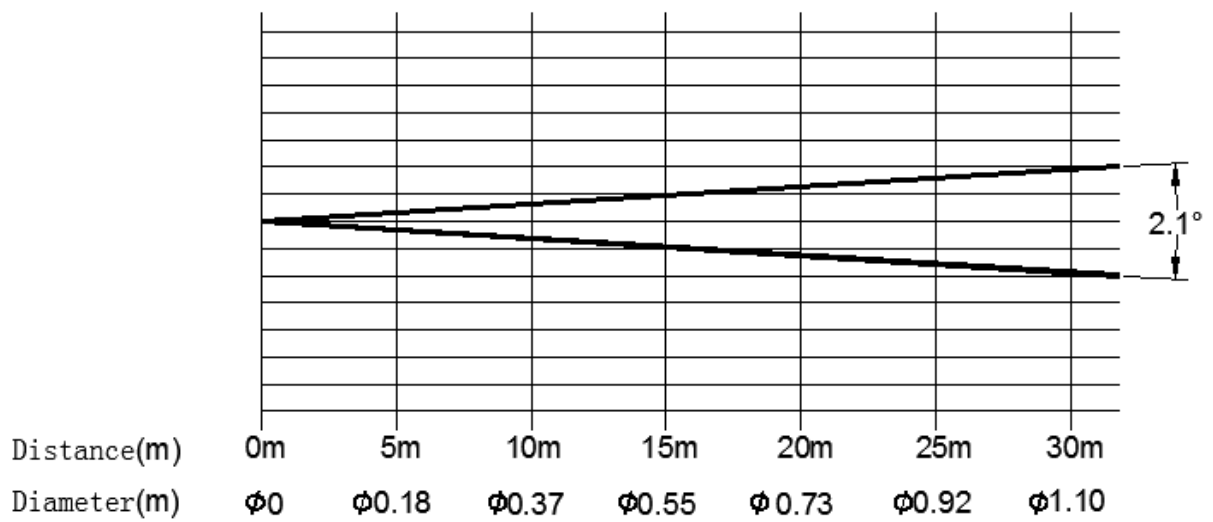
SIZES:

See figures below:

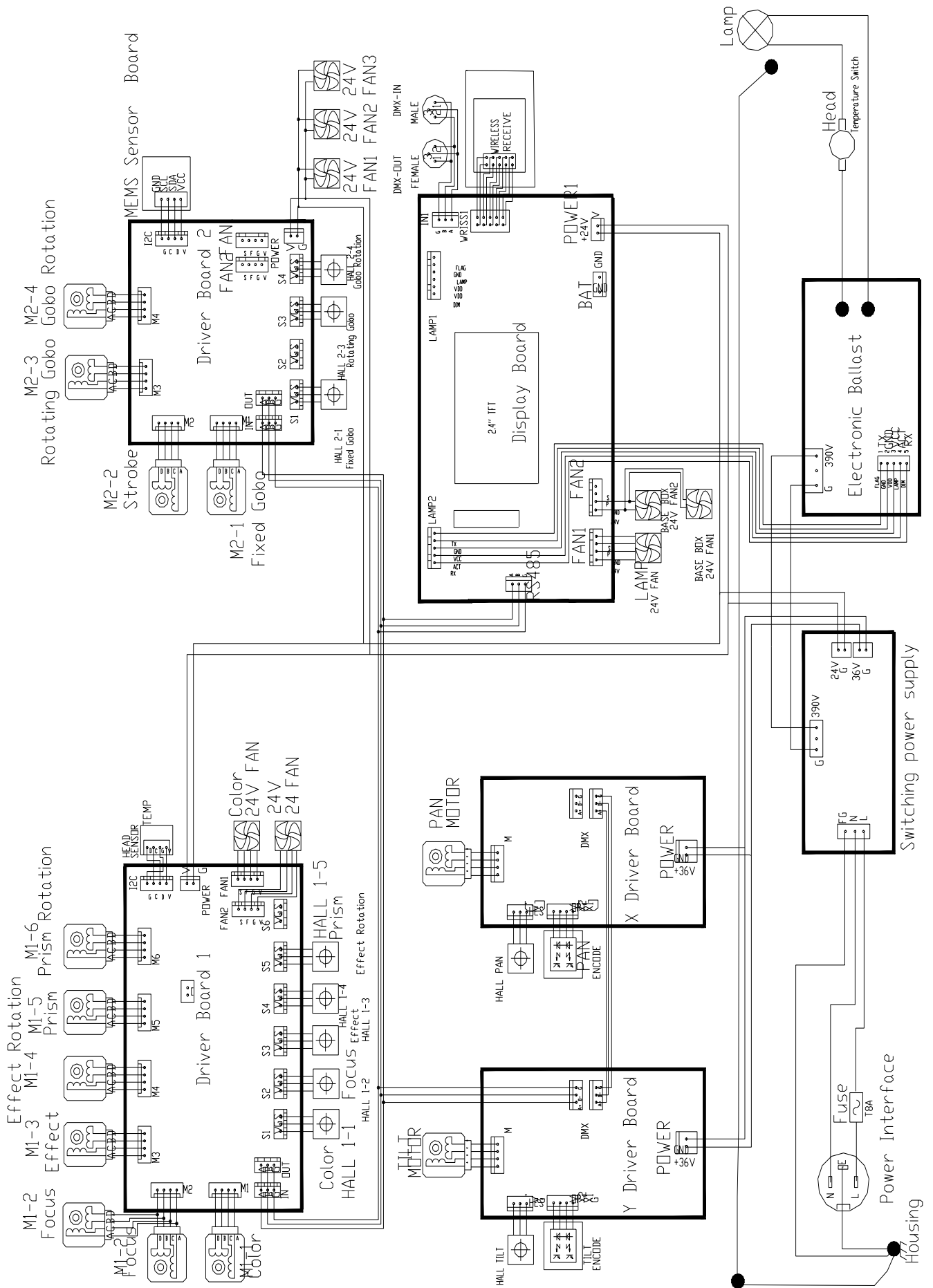


LIGHT OUTPUT:

Luminous Flux (Lux) 0 1624072 406018 180452 101505 64963 45113



10. CIRCUIT DIAGRAM



11. COMPONENT ORDER CODES

NAME	PART NO.	QUANTITY	REMARK
350W BALLAST	040070138	1	
USHIO NSL-350A	100070046A	1	
350W POWER SWITCH	192010223	1	
FUSE	270031095	1	
TILT DRIVER BELT1	290151438	1	
TILT DRIVER BELT2	290151439	1	
PAN DRIVER BELT	290151456	1	
EFFECT WHEEL BELT	290151420	1	
8-FACET PRISM BELT	290151434	1	
COLOR WHEEL BELT	290151419	1	
FIXED GOBO WHEEL BELT		1	
ROTATING GOBO WHEEL BELT	290151245	1	
WATER-PROOF FAN	030060116	1	
TURBO-FAN	030060094A	2	
TURBO-FAN	030060117	1	
TURBO-FAN	030060072A	2	
BASE BOX FAN	030060075	3	
PAN MOTOR	030040265	1	
TILT MOTOR	030040174A	1	
GOBO ROTATION MOTOR	030040224A	1	
EFFECT WHEEL IN MOTOR	030040154A	1	
8-FACET PRISM IN MOTOR		1	
FIXED GOBO WHEEL MOTOR		1	
STROBE MOTOR		1	
8-FACET PRISM ROTATION MOTOR	030040073B	1	
COLOR WHEEL MOTOR		1	
ROTATING GOBO WHEEL MOTOR	030040073D	1	
EFFECT WHEEL ROTATION MOTOR	030040220C	1	
FOCUS MOTOR	030040263	2	
PAN DRIVER BOARD	230061291	1	
TILT DRIVER BOARD	230061436	1	
6 CHANNEL DRIVER BOARD	230061026	1	
4 CHANNEL DRIVER BOARD	230061027	1	
MASTER BOARD (LEE)	230061082E	1	
POWER ADAPTING BOARD	230060689	1	
COLOR WHEEL ACCESSORIES	120110851	1	
ROTATING GOBO WHEEL ACCESSORIES	120110950	1	
EFFECT WHEEL ACCESSORIES	120110864	1	
8-FACET PRISM ACCESSORIES	120110863	1	

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PR lighting will try its best to offer accurate and overall information about a product's technical data. Any changes won't be notified if necessary.
Patented Products. Counterfeiting Will be Prosecuted!

P/N: 320020965
Old Version: 20200807
New Version: 20200915