

DLW

Product Manual

DLW J300B IP

Contents

Safety Information	1/2
Package&Transportation	3
Fixture Package	3
Transport protection lock	3
Unpacking	3
Accessories with fixture	3
Product Technical Specifications	4
Elctrical parameters	4
Light source parameters	4
Optics parameters	4
Effect configuration	4
Fixture movement	4
Electronic Control	4
Color system	5
Gobo system	6
Fixed Gobo wheel	6
Size&Weight	7
Operation Panel Instruction	7
Panel instruction	7
Detailed Operation Table of the Display Panel	8/9/10
Signal Connection	11
Power Connection	12
Connection type	12
Installation Instruction&Requirement	13
G-clamp Installation	13
Fixture Installation	13
Fixture Placement	14
DMX Channel Sheet(Brief)	15
DMX Specific Channel Sheet	16/17/18
Maintenance&cleaning of the fixture	19

Troubleshooting	19/20
Attachment1:Angle range and the measurement figure of the	21/22
Attachment2:Electrical Diagram	23

Safety Information



Note: Please check the complete package after received , and please unpack and check if the fixture is damaged during shipping.
If the fixture is damaged during shipping, please do not use it and contact the manufacturer/local technicians as soon as possible.

The following identifications are used to identify the product and identify the important safety information in the user manual.

Warning!	Warning! See user documentation.	Warning! Hazardous voltage.Risk of lethal or severe electric shock.	Properly grounded	Warning! Intense light emission.	Warning! High surface temperature Don't touch!	Warning! Must wear gloves!
Warning! Fire hazard.	Do not stare at the operating light source	Do not interfere with the track of the operating fixture	Minimum distance of illuminated objects(m)	Rated maximum ambient temperature!	Don't install the fixture on the surfact of combustible materials!	Replace any cracked protective shields

Notes:

- The fixture is used professionally only, please don't used it for any other purposes.
- Please refer to the latest user manual before using the fixture.The fixture is out of warranty if problems are caused by any incorrect use or negligence of the user manual.
- The fixture is used indoor only; the protection level rate is IP66. Please keep the fixture dry and avoid to use the fixture under the environment of damp, overheating or dusty. Please keep the fixture away from water or any other liquids.
- In order to avoid damage the fixture, it is required more than 1 person when moving the fixture. When hanging the fixture, the hanging device must be tested. The hanging device should be able to bear more than 6 times of weight of the fixture.
Please make sure the housing and G-clamp are fixed and do not have damage after installed. Please use the safety chain to keep the fixture fixed on the truss safely.
- The fixture should be installed in a well-ventilated place. Keep the distance of the fixture and the obstacles more than 0.6 meter,and please check the fans and ventilation hole sare not blocked.

- Please don't install the fixture on the surfaces of the inflammable goods directly.
- Please check the voltage before the professional technicians install the fixture.
The voltage must be the same with the voltage which marked on the fixture.
Overloading protection or leakage protection are also required.
- When replacing the fuse of a fixture, please check whether the fuse meets the specified technical requirements. Do not replace or short-circuit it without allowed. Please confirm whether the input voltage meets the specified technical requirements and is correctly grounded before powering on.
- Please cut off the power supply when replacing the fuse. ()
- Rated maximum ambient temperature when the fixture is working: $t_a = 40^{\circ}\text{C}$.
- The safe/shortest distance to the illuminate object: 20m.
- when the fixture working stably, the maximum surface temperature: $t_c = 75^{\circ}\text{C}$.
- The shortest safety distance to combustible material: 0.7m.
- Please don't touch the fixture when it is working stably. It's highest surface temperature can reach 75°C .
- The fixture must be positioned in such a way that it is not subjected to prolonged observation from a distance of less than 15 meters.
- Please don't stare at the working fixture directly without any eye protection.
- Please replace the protective cover and lens if any visible damage happened or the damage has reached the malfunction level. ()
- The fixture must be installed, operated, and maintained by professionals strictly according to the user manual.
- All the information of the user manual is for your reference only. All fixtures should be subject to the actual product, which is subject to change without prior notice.

Package & Transportation

Fixture package

- Please cut off the power supply and cool it down for over 15minutes before packing the fixture.
- Lock the protection lock for tilt well.
- Please place the fixture in the plastic bag, and then carefully put it into the flight case vertically, the accessories are placed at special area in flight case, then close the lid and lock the flight case. Please don't put it upside down.

Transport protection lock

- Protective locks for tilt movement are installed in the fixture for safe transportation.

Unpacking

- Open the packing box, and then open the inner packing bag.
- Grasp the handle of the fixture, take it out from the case carefully.
- Unlock the protective lock before power on the fixture.

Notice: Please check the complete package after received the fixture, please check whether the fixture is damaged or not during shipping after opened the packing. If the fixture is damaged during shipping, please don't use it first, and contact the manufacture/local technicians as soon as possible.

Accessories with fixture

Accessories	Qty
User Manual	1
Warranty Card	1
Safety Chain	1
Signal Cable	1
Power Cable	1

Product Technical Specifications

Electrical parameters

AC100 - 240V 50 / 60 Hz

Input Power:390W rated electrical current:3.9 A,PF≥0.98

Light Source parameters

- light source:260W Laser white module,.
- Laser module expected lifespan:12000Hrs.

Optics parameters

- Lens:High-definition lens with anti-reflective film.260mm
- Output range: 0.6°

Effect configuration

- 1 Frost effect.
- Fast strobe device, multiple strobe effects optional,pulse/asynchronous/synchronous/slow-medium-fastat random.
- 6prism+24prism+6 color discs,can be stacked out of the multi-layer beam effect, can be Bi-directional rotation combination,Bi-directional rotation.

Fixture movement

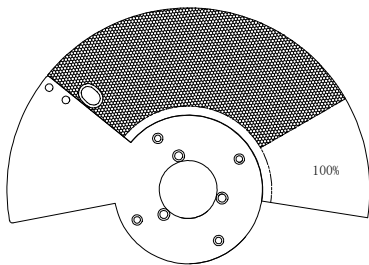
- PAN=540°, 16bit.
- TILT=270°, 16 bit.

Electronic Control

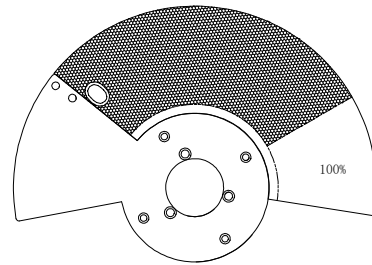
- Channel:20Ch/24Ch/28Ch.
- Control Protocols:DMX512,RDM,Art-Net,sACN,wireless function(optional).
- Menu display:2.4 LCD color touch screen;choice of Chinese and English language, menu available to be displayed 180° reversely.
- Intelligent control,electronic sensor stesting,fan intelligent detection and control.
- Built-in self-recharging battery, menu edited without power(optional).

Color System

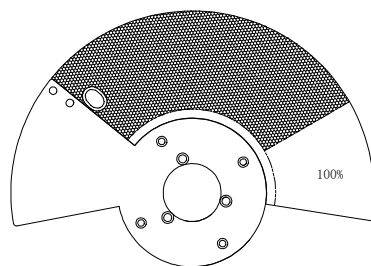
- CMY induction color mixing.



C.Cyan



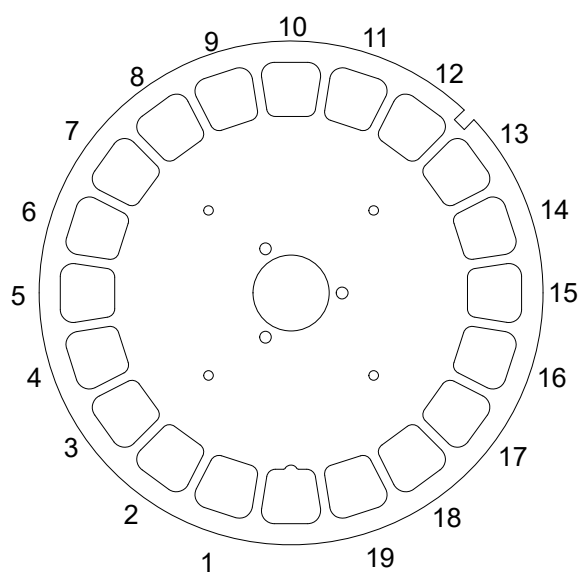
M. Magenta



Y. Yellow

Pic1

- 1 color wheels with 19color chips+1 white light,which can realize two-way color rainbow,step and sliding gradient color mode.



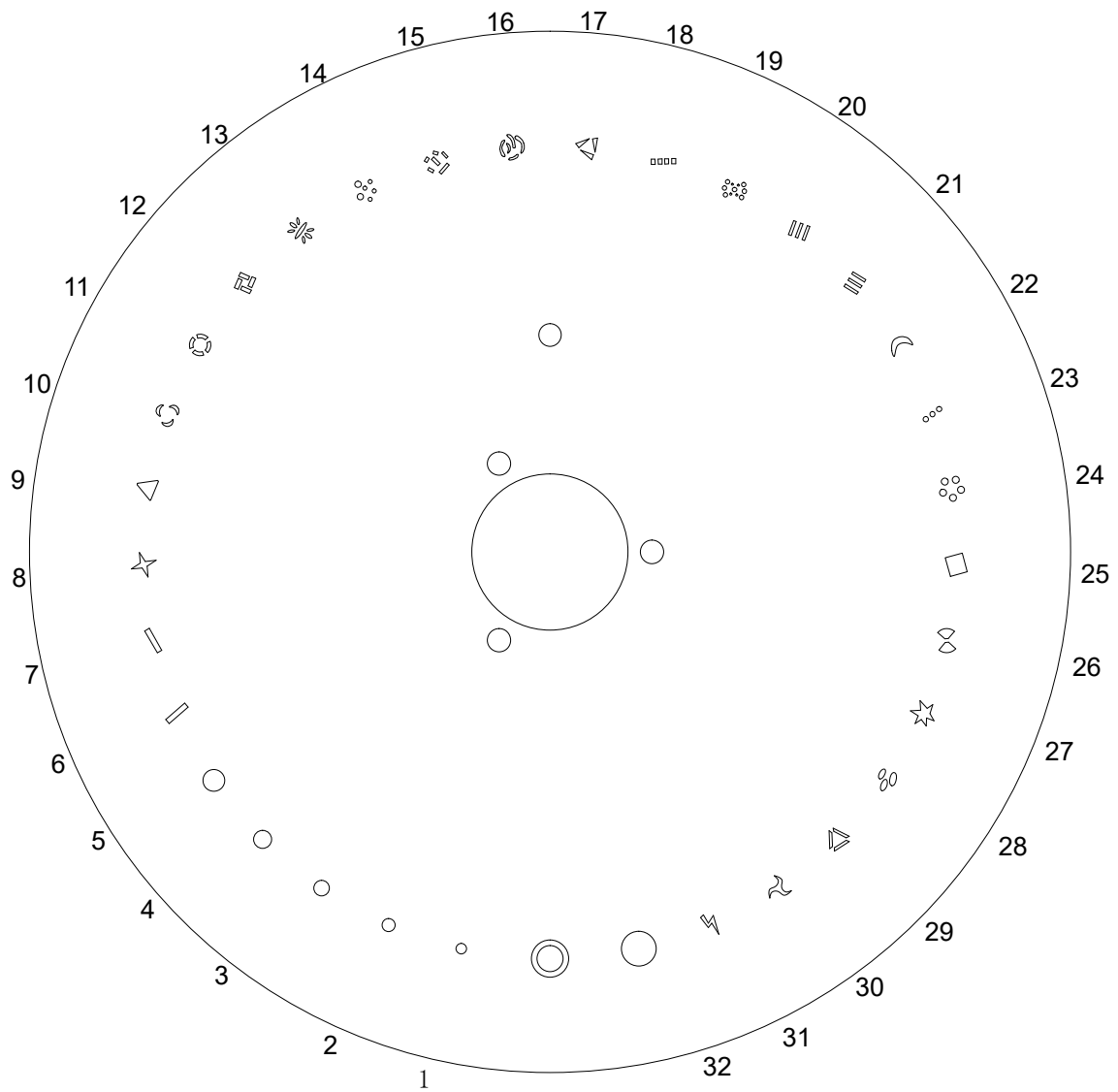
- | | |
|------------------|---------------------|
| 1. Red | 12. Dark red |
| 2. Yellow | 13. Blue |
| 3. Plum red | 14. Orange-yellow |
| 4. Yellow-green | 15. Shallow blue |
| 5. Pink | 16. light green |
| 6. Orange | 17. Copious cooling |
| 7. green | 18. Deep blue |
| 8. Cooling | 19. Ultraviolet |
| 9. 2500K | |
| 10. Deep yellow | |
| 11. Fluorescence | |

Pic2

Gobo System

Fixed Gobo Wheel

- 1 fixed gobo wheel with 26 gobos+ 7 white to make water running, and shaking effect. (Pic 3)

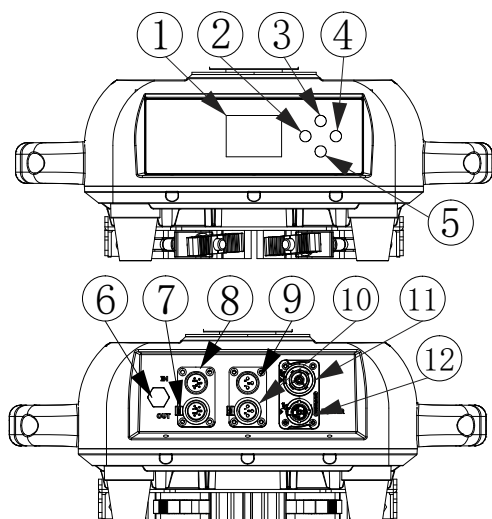


Pic3

Size& Weight:

- Fixture size:443X443X797.5mm
- Net weight:48Kg
- Working environment temperature: -20°C~40°C
- IP Grade:IP66

Operation Panel Instruction



Pic5

① Display contents



Address



Manual



Specification



Test



Advanced



Information

Pic6

As shown in pic 5:

- | | | | |
|----------------|--------------|--------------------|---------------------|
| 1.LCD display | 4.Enter | 7.5-XLR DMX output | 10.3-XLR DMX output |
| 2.Menu(Return) | 5.Down | 8. 5-XLR DMX input | 11.Power output |
| 3.Up | 6. Air valve | 9.3-XLR DMX input | 12.Power input |

Panel Instruction

- Up Direction key:Select Sub-menu cyclically(upward).Circulate downward to adjust data value.
- Down Direction key: Select Sub-menu cyclically (downward). Circulate downward to adjust data value.
- Left Direction key(Back):Back to menu.
- Right Direction key(Confirm):Confirm the selected data value reselect cyclical data window.

Detailed Operation Table of Display panel

Specification 	1.Pan Inverse	Off, On	
	2.Tilt Inverse	Off, On	
	3.PT Encoder	Off, On	
	4.PT Speed	FAST,NORMAL,SLOW	
	5.Dim Curve	Curve 1,Curve 2, Curve 3,Curve 4	
	6.LED PWM	1.2KHz, 6KHz,12KHz,24KHz,25KHz	
	7.Dim Speed	Speed1,Speed2,Speed3,Speed4	
	8.FAN mode	LOW,NORMAL,HIGH,AUTO	
	9.Display blackout	Off, On	
	10.display inverse	Off, On	
	11.Language	English,Chinese	
	12.Sleep Mode	Off, On	
	13.Fixture		
	EXIT		
Manual 	1.Channel	1.Pan	000~255
		2.Tilt	000~255
		3.Strobe	000~255
		4.Dimmer	000~255
		5.Focus	000~255
		6.Cyan	000~255
		7.Magenta	000~255
		8.Yellow	000~255
		9.Color Wheel	000~255
		10.Fixed GOBO	000~255
		11.Prism1	000~255
		12.Prism2	000~255
		13.R-Prism1	000~255
		14.Effect	000~255
		15. Frost	000~255
		16. CONTROL	000~255
		EXIT	
	2.Fixture Reset	NO,YES	
	EXIT		
Address 	1.DMX512 Address	001~512	
		EXIT	
	2.Channel Mode	Basic	
		Standard	
		Extend	
		EXIT	
	3.No DMX Mode	Dmx hold	
		Black out	

		EXIT	
	EXIT		
Information 	1.Fixture Hour	Fixture Hour	XXXXXX
		LED Hour	XXXXXX
		EXIT	
	2.Version	PANEL Ver :	XXXX
		XY Ver:	XXXX
		DRV1 Ver :	XXXX
		DRV2 Ver :	XXXX
		DRV3 Ver :	XXXX
		DRV4 Ver :	XXXX
		EXIT	
	3.Temperature	PANEL Temperature :	XXX-XXX
		XY Temperature:	XXX-XXX
		DRV1 Temperature:	XXX-XXX
		DRV2 Temperature:	XXX-XXX
		DRV3 Temperature:	XXX-XXX
		DRV4 Temperature:	XXX-XXX
		EXIT	
	4.Fan Speed	PANEL Fan :	XXXX-XXXX
		XY Fan:	XXXX-XXXX
		DRV1 Fan :	XXXX-XXXX
		DRV2 Fan :	XXXX-XXXX
		DRV3 Fan :	XXXX-XXXX
		DRV4 Fan :	XXXX-XXXX
		EXIT	
	5.RDM ID	XXXXXXXXX	
		EXIT	
	6.System Error	NONE	
		EXIT	
	EXIT		
Advanced 	1.Factory Reset	NO	
		YES	
		EXIT	
	2.Fixture Time Reset	NO	
		YES	
		EXIT	
	3.LED Time Reset	NO	
		YES	
		EXIT	
	4.Calibration		
		EXIT	
	EXIT		

Test 	1.Auto test		
		NO	
		YES	
		EXIT	
	EXIT		

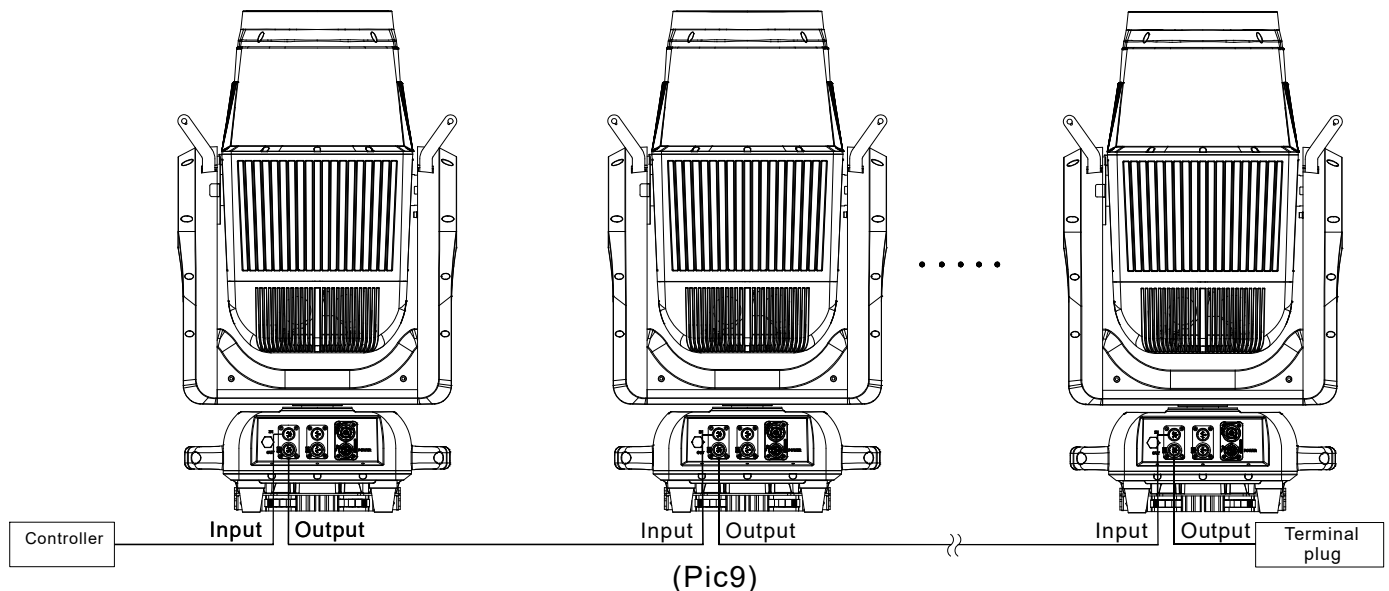
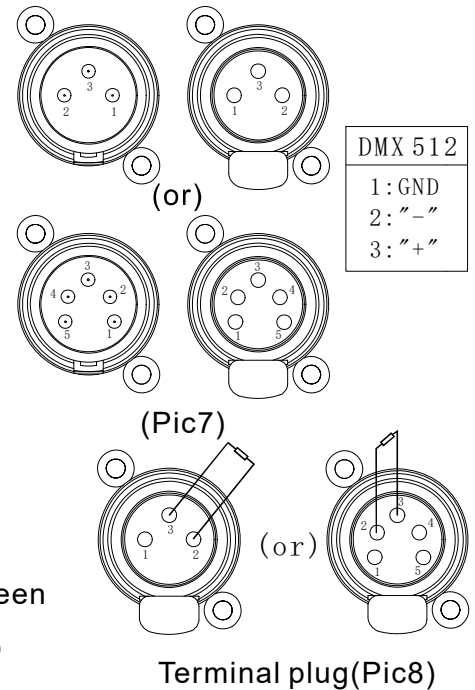
Signal connection

The fixture adopts 3pin/5pin socket to control DMX input and output, Pin1 is connected to grounded, Pin2 is connected to"-", Pin3 is connected to"+"(Pic7).

Please adopt professional DMX512 STP signal cable, usually its effective range is within 150m. When long distance signal transmission is required, please add DMX 512 signal amplifier.

To avoid the signal reflection during the transmission, please add a terminal which is 120Ω 1/4W resistance between DMX output pin2 and pin 3 of the last fixture. Plug the pin to the DMX output connector of the last fixture. (Pic8)

Connect the fixture from the DMX output of controller to DMX input of the first fixture, and then connect the first fixture's DMX output to the second fixture's DMX input and so on, until all fixtures are being connected. Then please install a terminal plug in DMX output of the last fixture. (Pic 8) The method of connection as show bellow. (Pic 9)



Notice: ● Don't use multi- output connector for connecting separately, It must connect the branch with DMX512 signal amplifier to separate them if it is required.

● Standard amplifier cable is not reliable for long-distance data transmission; Please adopt professional DMX 512 STP signal cable.

● The signal of the fixture only has one input and one output. Two input/output for each fixture are not available.

Power connection

Input voltage and frequency must be identical to the voltage and frequency marked on the fixture. When many fixtures are working at the same time, it is strongly recommended to control each fixture on/off individually.

Connection type

	Live or L	Neutral or N	Earth, Ground or ⊕
US system	Black	White	Green
EU system	Brown	Blue	Yellow/green

Notice:

- When connect power supply, please make sure the E line (yellow & green.) is properly connected. And it is corresponded with the relative electrical installation standards.
- Insulation class between LV power supply and controlling conductor: I
- Please confirm the voltage of the power supply is corresponded to the voltage on the fixture's identifications before professionals install it. Please also make sure it has overload or leakage protection.
- If the external cable is damaged, don't change it by yourself, please contact the manufacture/local as soon as possible.
- AC220V: Lighting fixture connection not surpass 6 units(2.5mm²).
- AC110V: Lighting fixture connection not surpass 3 units(12AWG).

Installation instruction& Requirement

The user need to arrange regular safety inspection for the fixtures and parts that are connected to the fixture. Please have professionals to operate if operating conditions and professional instructions are insufficient. Incorrect installation by non-professionals may leading to property loss or life danger.

Make sure there is no damage to rigging and clamps and they can bear at least 6 times weight of the fixture. Check if the truss or pipe construction can bear at least 6 times total weight of all equipment, like clamps, cables and other accessories.

G-clamp Installation

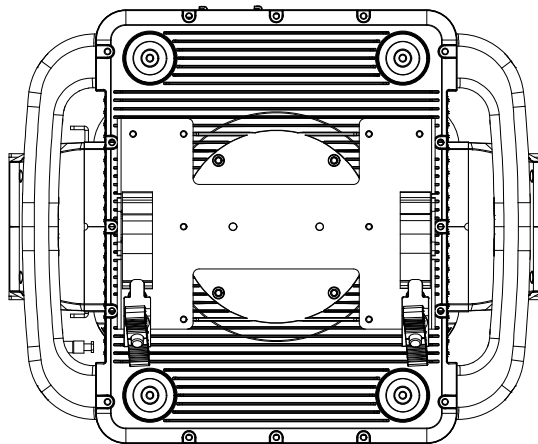
The G-clamp is integrated with the fixture. (Pic10)

Fixture Installation

Fixture is installed on the stage or truss, and the G-clamp can be locked on the truss tightly and quickly. (Pic 11)

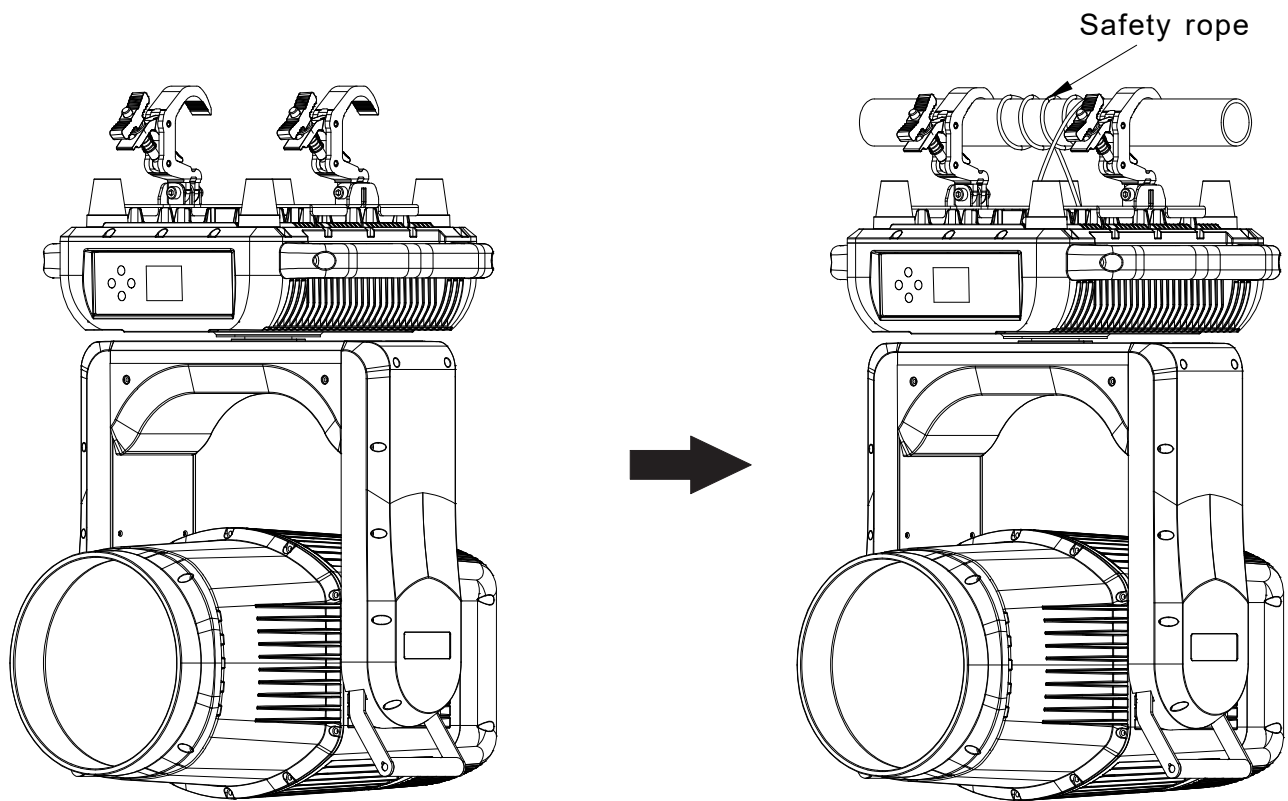
Notice:

- User must check if the G-clamp and safety chain are damaged or not.
- The fixture must be fixed by 2 G-clamps, clockwise turning them to fast-lock tightly, and adding a safety chain to connect the hole in the base, don't connect it to the handle.
- Please unlock the lock of tilt before power on.
- Side hanging for long time is not recommended.



Pan position

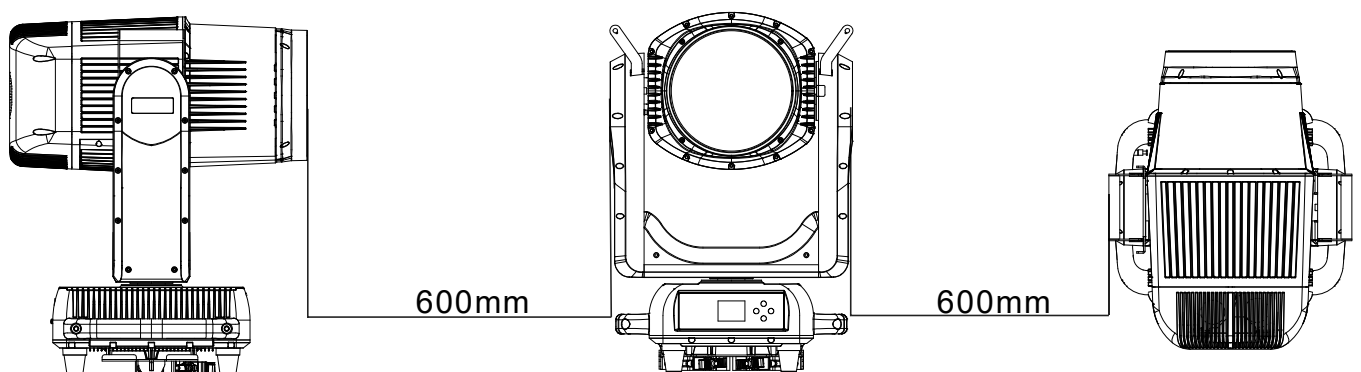
Pic10



Pic11

Fixture Placement

When place the fixture, please check there is no inflammable object or inflammable material around the fixture. Then place the fixture vertically upward. The shortest safety distance for adjacent fixtures is ≥ 0.6 m when they are working. Fixtures installation show as follow (pic 12).



Pic12

DMX Channel Sheet (Brief)

Channel	20CH	24CH	28CH
1	Pan	Pan	Pan
2	Pan Fine	Pan Fine	Pan Fine
3	TiLT	TiLT	TiLT
4	Tilt Fine	Tilt Fine	Tilt Fine
5	Strobe	Strobe	Strobe
6	Dimmer	Dimmer	Dimmer
7	Dimmer Fine	Dimmer Fine	Dimmer Fine
8	Focus	Focus	Focus
9	Cyan	Focus Fine	Focus Fine
10	Magenta	Cyan	Cyan
11	Yellow	Cyan Fine	Cyan Fine
12	Color Wheel	Magenta	Magenta
13	Fixed Gobo Wheel	Magenta Fine	Magenta Fine
14	Fixed Gobo Wheel Fine	Yellow	Yellow
15	Prism1	Yellow Fine	Yellow Fine
16	Prism2	Color Wheel	Color Wheel
17	Prism.R	Fixed Gobo Wheel	Fixed Gobo Wheel
18	Seven Color mirrors	Prism1	Prism1
19	Frost	Prism2	Prism2
20	Fixture Control	Prism.R	Prism.R
21	–	Prism.R Fine	Prism.R Fine
22	–	Seven Color mirrors	Seven Color mirrors
23	–	Frost	Frost
24	–	Fixture Control	Fixture Control
25	–	–	Pan-Tilt Speed
26	–	–	Color Speed
27	–	–	Auto Focus&Zooming Speed
28	–	–	Gobo Speed

DMX Specific Channel Sheet

20CH	24CH	28CH	Features	DMX Value	Function
1	1	10	Pan	0-255	0° ->540°
2	2	11	Pan Fine		
3	3	12	Tilt	0-255	0° ->252°
4	4	13	Tilt Fine		
5	5	3	Strobe	0-19	Off
				20-49	On
				50-200	Strobe, slow->fast
				201-210	On
				211-255	Random strobe, slow->fast
6	6	4	Dimmer	0-255	0%->100% Off->On
7	7	-	Dimmer Fine		
8	8	8	Focus	0-255	Far->near
-	9	9	Focus Fine		
9	10	10	Cyan	0-255	
-	11	11	Cyan Fine		
10	12	12	Magenta	0-255	
-	13	12	Magenta Fine		
11	14	14	Yellow	0-255	
-	15	15	Yellow Fine		
12	16	16	Color Wheel	0-127	0%->100%
				128-190	Anticlockwise Rotation,fast->slow
				191-192	Stop
				193-255	Clockwise Rotation,slow->fast
				0-3	Open
				4-5	Gobo 1
				6-7	Gobo 2
				8-9	Gobo 3
				10-11	Gobo 4
				12-13	Gobo 5
				14-15	Gobo 6
				16-17	Gobo 7
				18-19	Gobo 8
				20-21	Gobo 9
				22-23	Gobo 10
				24-25	Gobo 11
				26-27	Gobo 12
				28-29	Gobo 13
				30-31	Gobo 14

13	17	17	Fixed Gobo Wheel	32-33	Gobo 15
				34-35	Gobo 16
				36-37	Gobo 17
				38-39	Gobo 18
				40-41	Gobo 19
				42-43	Gobo 20
				44-45	Gobo 21
				46-47	Gobo 22
				48-49	Gobo 23
				50-51	Gobo 24
				52-53	Gobo 25
				54-55	Gobo 26
				56-57	Gobo 27
				58-59	Gobo 28
				60-61	Gobo 29
				62-63	Gobo 30
				64-65	Gobo 31
				66-67	Gobo 32
				68-86	Clockwise Rotation,slow→fast
				87-105	Anticlockwise Rotation,fast→slow
				106-110	Gobo 1 shake,slow→fast
				111-115	Gobo 2 shake,slow→fast
				116-120	Gobo 3 shake,slow→fast
				121-125	Gobo 4 shake,slow→fast
				126-130	Gobo 5 shake,slow→fast
				131-135	Gobo 6 shake,slow→fast
				136-140	Gobo 7 shake,slow→fast
				141-145	Gobo 8 shake,slow→fast
				146-150	Gobo 9 shake,slow→fast
				151-155	Gobo 10 shake,slow→fast
				156-160	Gobo 11 shake,slow→fast
				161-165	Gobo 12 shake,slow→fast
				166-170	Gobo 13 shake,slow→fast
				171-175	Gobo 14 shake,slow→fast
				176-180	Gobo 15 shake,slow→fast
				181-185	Gobo 16 shake,slow→fast
				186-190	Gobo 17 shake,slow→fast
				191-195	Gobo 18 shake,slow→fast
				196-200	Gobo 19 shake,slow→fast

				201-205	Gobo 20 shake,slow→fast
				206-210	Gobo 21 shake,slow→fast
				211-215	Gobo 22 shake,slow→fast
				216-220	Gobo 23 shake,slow→fast
				221-225	Gobo 24 shake,slow→fast
				226-230	Gobo 25 shake,slow→fast
				231-235	Gobo 26 shake,slow→fast
				236-240	Gobo 27 shake,slow→fast
				241-245	Gobo 28 shake,slow→fast
				256-250	Gobo 29 shake,slow→fast
				251-255	Gobo 30 shake,slow→fast
14	–	–	Fixed Gobo Wheel Fine		
15	18	18	Prism1	0-127	Open
				128-255	Prism1 Insert
16	19	19	Prism2	0-127	Open
				128-255	Prism2 Insert
17	20	20	Prism.R	0-127	0-360°
				128-190	Anticlockwise Rotation,fast→slow
				191-192	Stop
				193-255	Clockwise Rotation,slow→fast
–	21	21	Prism1&2.R Fine		
18	22	22	Seven Color mirrors	0-127	Null
				128-255	Effect insert
19	23	23	Frost	0-127	Null
				128-255	Frost insert
20	24	24	Lamp Control	0-10	Null
				10-14	Fixture rest
				15-29	Specification rest
				30-34	Pan-tilt rest
				35-255	reserved
–		25	Pan-Tilt Speed	0-255	Stepping time from fast to slow
–		26	Color Speed	0-255	Stepping time from fast to slow
–		27	Auto Focus&Zooming	0-255	Stepping time from fast to slow
–		28	Gobo Speed	0-255	Stepping time from fast to slow

Maintenance & cleaning of the fixture

The fixture needs to be maintained and cleaned daily, because its lifespan depends on working environment and daily maintenance. Please contact our company engineer for any questions and feedback which are out of this user manual to our professional engineer.

Notes as bellow: 

- The power supply must be cut off before open the shell.
- Please open the shell after the fixture cooled completely
- Cleaning the optics components gently to avoid scratching the surface coating,
To avoid damaging plastic and scratching the surface coating,
Please don't use any harmful liquid or hard objects.
- Wiping the particulate Matter with tasteless tissue-paper or cotton cloth with clean,
distilled water. Don't wipe the surface, but blow away floating things with pressure gas,
any residues must be cleaned with distilled water from center to edge, and then dry it
with soft cotton cloth.
- Please change the lens in time when it cracks or has other damages
- It is out of warranty any damage caused by fan with overmuch dust, smoke fluidity and
abnormal using fixture.
- There is temperature protection device of the fixture, when the temperature is too high
the LED module will be off automatically. When this happens, please check if the fan is
working well or not. Plus, checking if the fan filter is blocked by dust. Please only reset the
fixture after the qualified professional technicians finish troubleshooting.
- Weekly cleaning and maintenance for the fan filters and lens is recommended. Please
do a complete maintenance half a year.

Troubleshooting

The following are some problems in process of operation, and there are some suggestions for troubleshooting:

Fixture doesn't response, when power on

- Check if power input is normal.
- Check if power switch is on.
- Check if fuse is burned.

Console losing control:

- Check if the display is flicker, if yes, check if DMX signal connector and signal cable are connected well.
- If the display is not flickering, but the fixture is still have no response to the control channel instructions, please check if IP address is correctly set.
- If DMX signal is not stable, please check XLR socket and signal cable are connected well.
- Change another console for testing.

Channel failure:

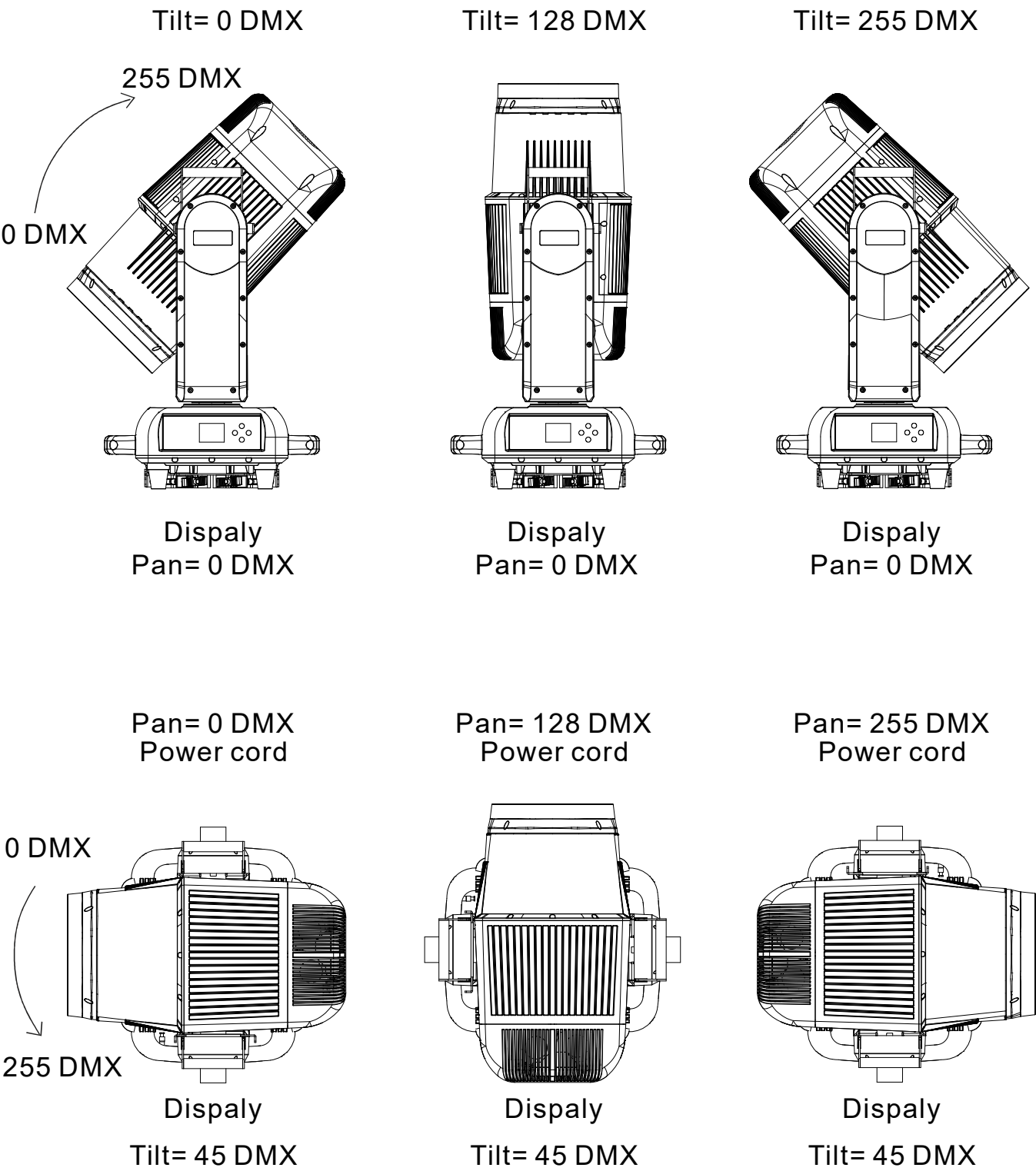
- Step motor or motor leading wire Maybe damaged.
- Drive circuit of motor may be damaged.

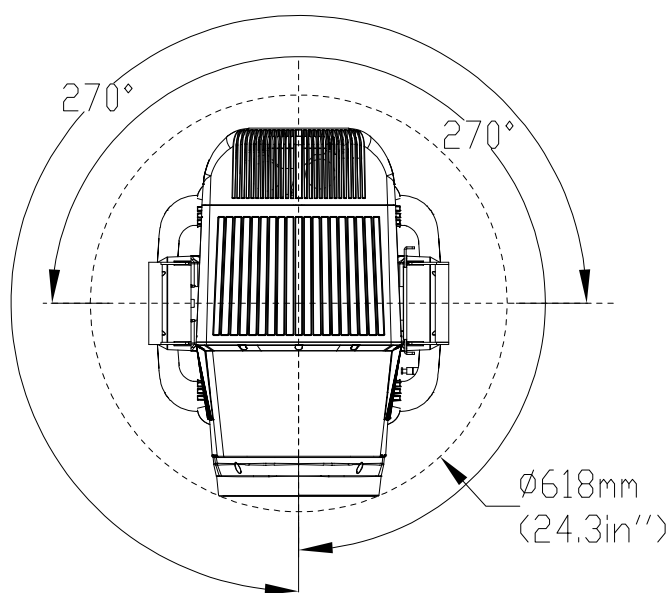
Lamp blinking:

- Check if the voltage is too high or too low, when the lamp is abnormal lighting.
- It is necessary to change the fan if the inner temperature is too high.

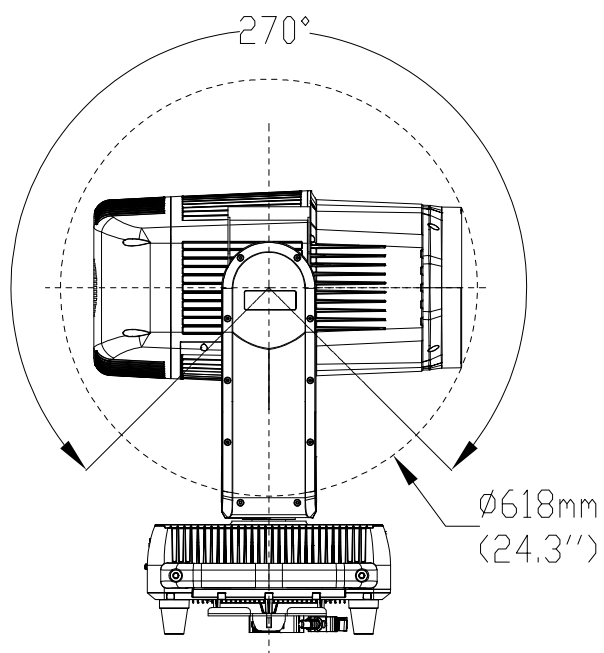
Attachment 1: Angle range and the measurement figure of the fixture

● Angle range of the fixture



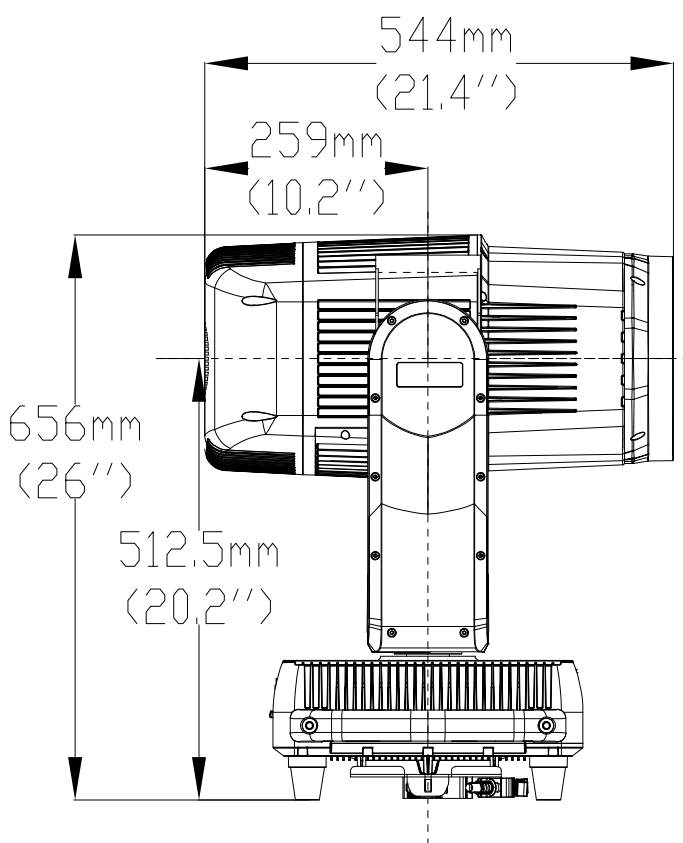
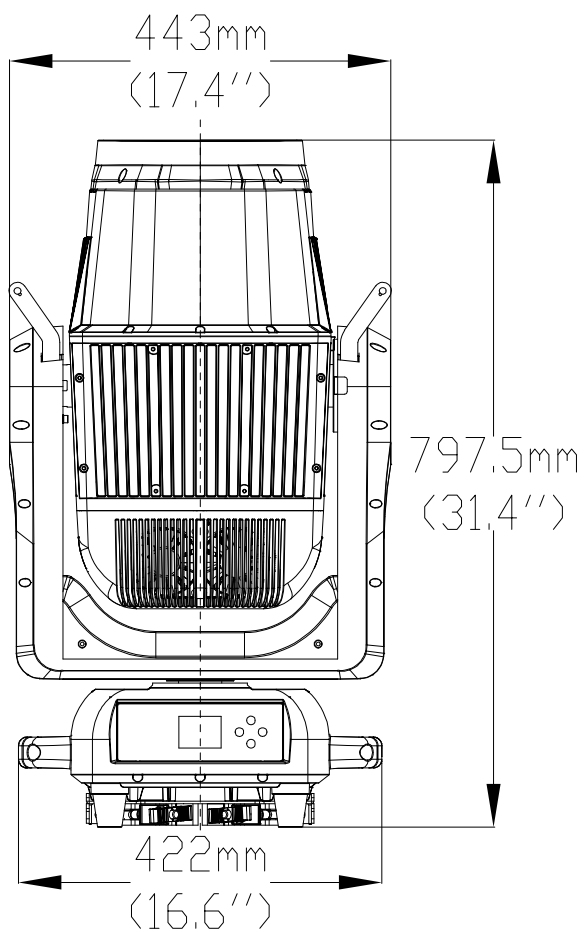


Horizontal direction

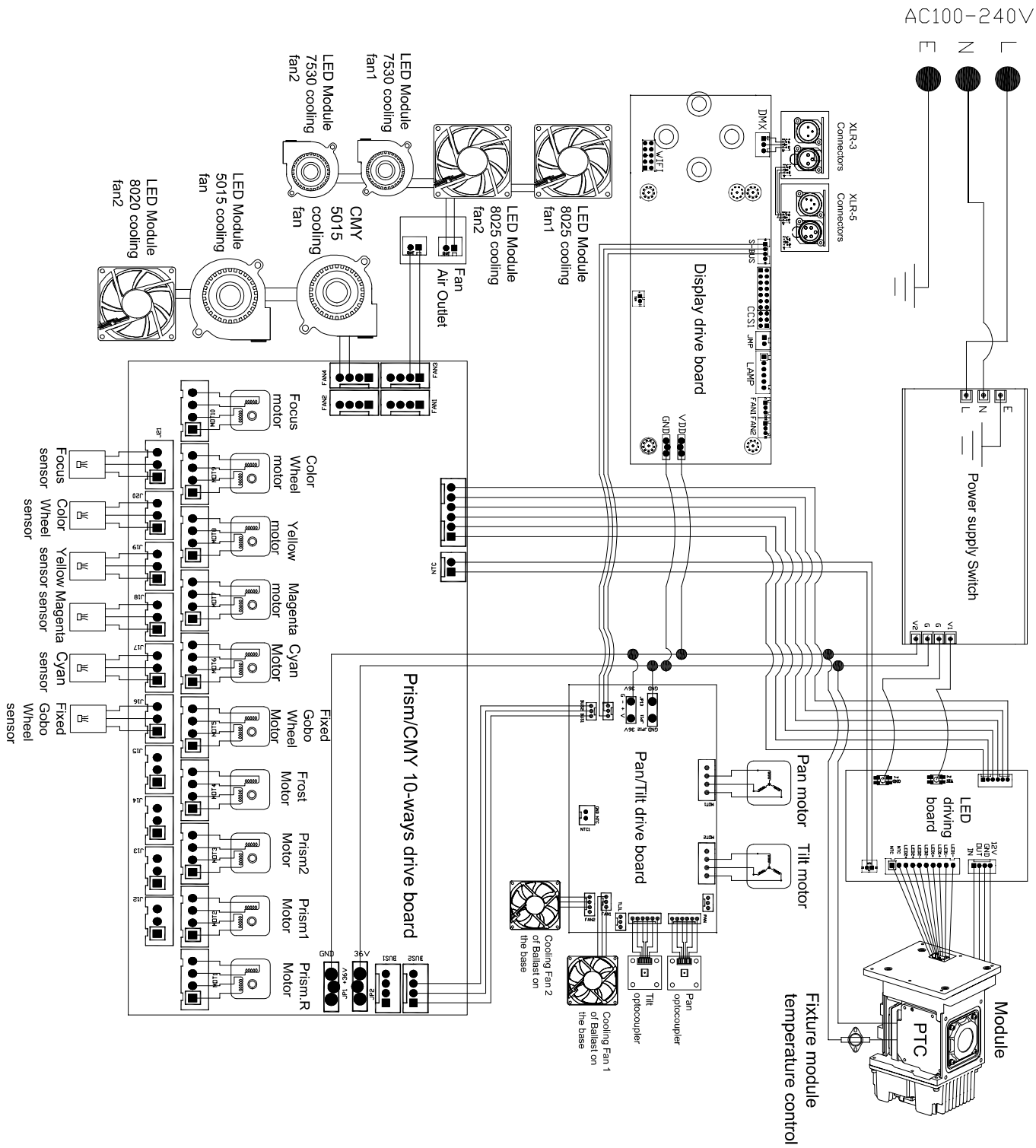


Vertical direction

● Outline and Installation Size



Attachment 2:Electrical Diagram



ADD. No.21,Ruixiang Road,Xinhua Industrial Zone.Huadu District,Guangzhou

Tel. 020 - 8161 2345

Fax. 020 - 3686 6631

Website: www.dlw-lighting.com

