



POSEIDON BEAM

MANUAL

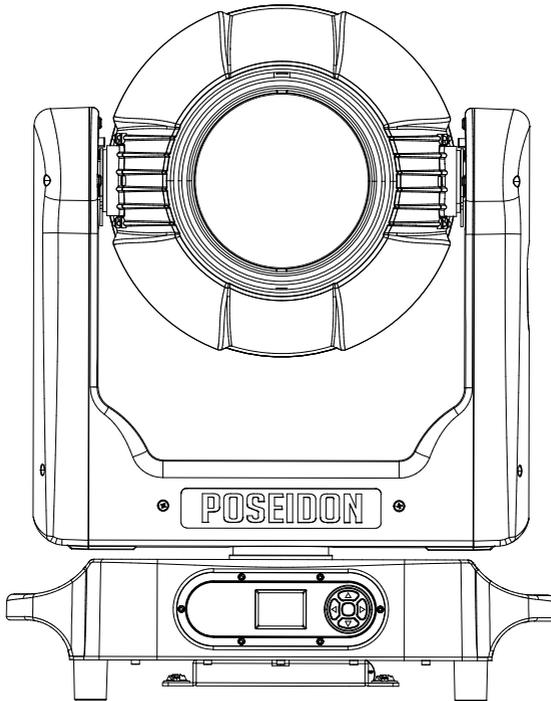
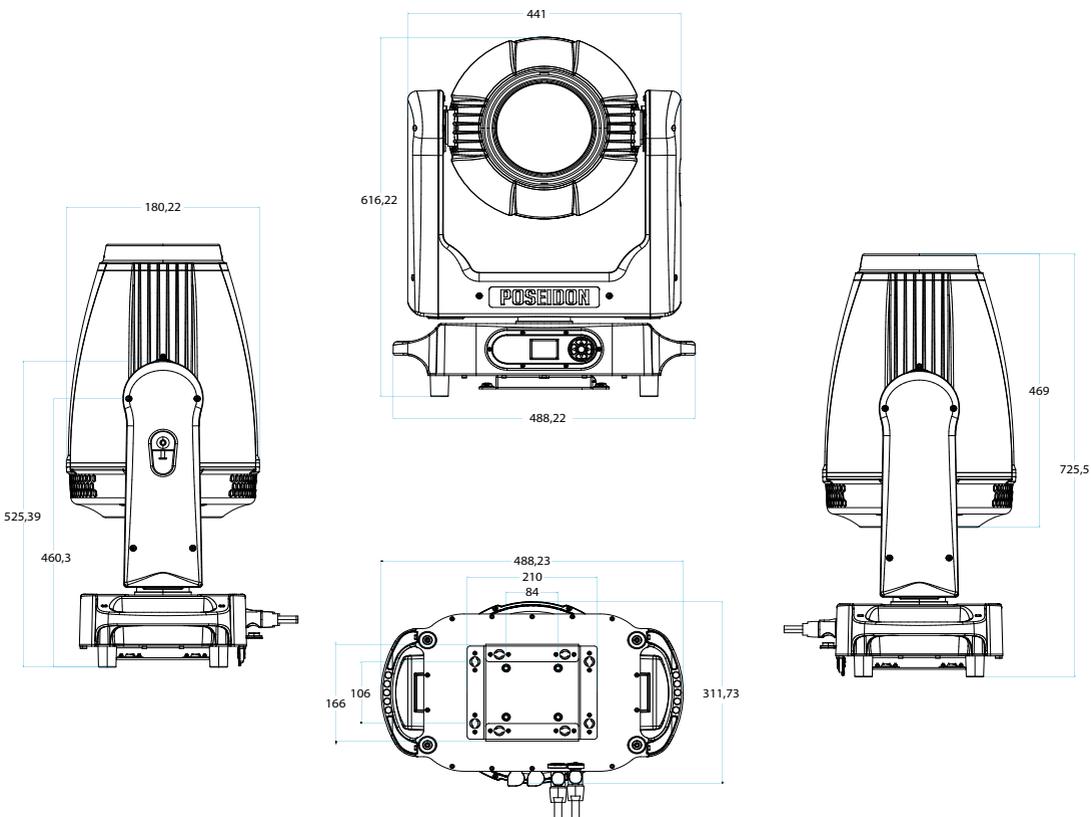


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DIMENSIONS

ALL DIMENSIONS ARE IN MILLIMETERS



SAFETY INSTRUCTION



WARNING!

Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:



DANGER!
Safety hazard.
Risk of severe injury or death.



DANGER!
Hazardous voltage. Risk of lethal or severe electric shock.



WARNING!
Fire hazard.



WARNING!
Burn hazard. Hot surface. Do not touch.



WARNING!
Wear protective eyewear.



WARNING!
Refer to user manual.



This product is for professional use only. It is not for household use.

This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.

Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have questions about how to operate the fixture safely, please contact your supplier.



PROTECTION FROM ELECTRIC SHOCK



- Disconnect the fixture from AC power before removing or installing any cover or part.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.
- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Power input and throughput cables must be rated 20A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm. Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90°C minimum.
- Use only PowerCON TRUE1[®] cable connectors to connect to power input sockets. Use only PowerCON TRUE1[®] cable connectors to connect to power throughput sockets.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other component is damaged, defective, deformed, wet or showing signs of overheating. Do not reapply power until repairs have been completed.
- Refer any service operation not described in this manual to a qualified technician.
- Socket outlets used to supply fixture fixtures with power or external power switches must be located near the fixtures and easily accessible so that the fixtures can easily be disconnected from power.

PROTECTION FROM BURNS AND FIRE



- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials. Allow the fixture to cool for at least 5 minutes before handling.
- Keep all combustible materials (e.g. fabric, wood, paper) at least 1 metres away from the fixture.
- Keep flammable materials well away from the fixture.



- Ensure that there is free and unobstructed airflow around the fixture.
- Do not illuminate surfaces within 8 metres of the fixture.
- Do not attempt to bypass thermostatic switches or fuses.
- If you relay power from one fixture to another using power throughout sockets, do not connect more than five fixtures in total to each other in an interconnected chain.
- Connect only other fixtures to fixture power throughout sockets.
- Do not stick filters, masks or other materials onto any optical component.
- Do not modify the fixture in any way not described in this manual.

PROTECTION FROM INJURY



- Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.



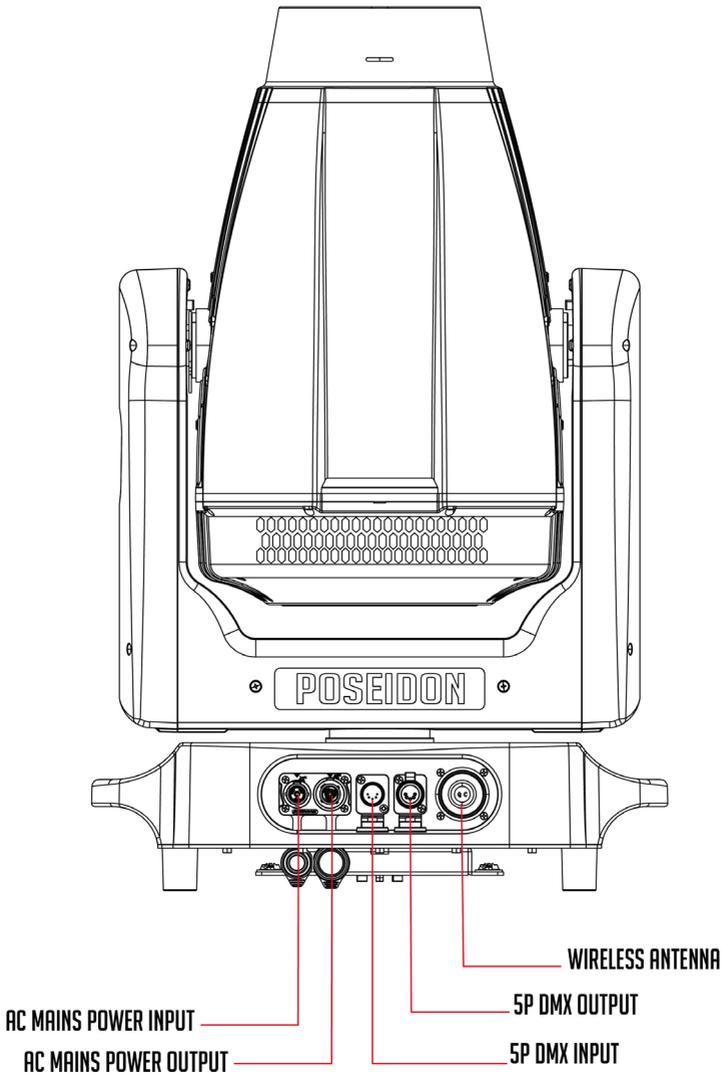
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.

LAMP LIFE



- Lamp life can vary, caused by many factors. For example external temperature, humidity, lamp strikes, dimming or power/voltage.

FIXTURE OVERVIEW



INTRODUCTION

POWERFUL OUTDOOR BEAM

- SMOOTH CMY COLOR MIXING
- IP65 RATING
- GOBO WHEEL WITH ANIMATION RANGE
- DOUBLE PRISM
- FROST
- 190MM WIDE LENS

USING FOR THE FIRST TIME

Warning! Read “Safety Information” before installing, powering, operating or servicing the fixture. Before applying power to the fixture:

Check that the local AC mains power source is within the fixture's power voltage and frequency ranges.

See “Power cables and power plug” on page 6. Install a PowerCON TRUE1 ® power input connector power cable.

AC POWER



Warning! Read “Safety Information” starting on before connecting the fixtures to AC mains power.

Warning! For protection from electric shock, the fixture must be grounded (earthed). The power distribution circuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.

Warning! Socket outlets or external power switches used to supply the fixture with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.



Important! Do not insert or remove live PowerCON TRUE1 ® connectors to apply or cut power, as this may cause arcing at the terminals that will damage the connectors.

Important! Do not use an external dimming system to supply power to the fixture, as this may cause damage to the fixture that is not covered by the product warranty.

The fixture can be hardwired to a electrical installation if you want to install it permanently, or a power plug that is suitable for the local power outlets can be installed on the power cable.



POWER VOLTAGE

Warning! Check that the voltage range specified on the fixture serial number label matches the local AC mains power voltage before applying power to the fixture.

The fixtures accepts AC mains power at 100-240V nominal, 50/60 Hz. Do not apply AC mains power to the fixture at any other voltage than specified.

POWER CABLES

Power input and throughput cables must be rated 16A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm. Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90°C minimum. In the EU the cable must be HAR approved or equivalent.

If you install a power plug on the power cable, install a grounding-type (earthed) plug that is rated 16A minimum. Follow the plug manufacturer's instructions. Table 1 shows standard wire color-coding schemes and some possible pin identification schemes; if pins are not clearly identified.

Wire Color (EU models)	Wire Color (US models)	Conductor	Symbol
Brown	Black	Live	L
Blue	White	Neutral	N
Yellow/Green	Green	Ground (earth)	 or 

Table 1: Wire color-coding and power connections

RELAYING POWER TO OTHER DEVICES

Warning! Do not connect more than five fixtures in total in one interconnected chain. Power can be relayed to another device via the PowerCON TRUE1 ® throughput socket.

If you daisy chain the fixtures in a chain so that they all draw AC mains power via the first fixture, certain points must be respected:

A heavy duty, three-conductor, 16 AWG or 1.5 mm² cable with SJT or equivalent cable jacket must be used to connect the first fixture to AC mains power. PowerCON TRUE1 ® connectors must be used to draw AC mains power from the power throughput socket and yellow PowerCON TRUE1 ® connectors must be used to supply power at the fixture's power input sockets.

DATA LINK

A DMX 512 data link is required in order to control a fixture via DMX. The fixture has 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 = cold (-), and pin 3 = hot (+) Pins 4 and 5 in the 5-pin XLR connectors are not in use.

TIPS FOR RELIABLE DATA TRANSMISSION

To connect the fixture to data:

1. Connect the DMX data output from the controller to the 5-pin XLR connector of the nearest fixture.
2. Connect the DMX output of the first fixture to the DMX input of the next fixture and continue connecting fixtures.

PHYSICAL INSTALLATION



Warning! The fixture must be either fastened to a flat surface such as a stage or wall, or clamped to a truss or similar structure in any orientation using a rigging clamp.

Warning! Always attach an approved safety cable to one of the safety cable attachment points on the base.

Do not illuminate surfaces within 6 meters of the fixture. Ensure that flammable materials (wood, fabric, paper, etc.) are minimum 1 meters from the fixture and allow a free airflow around the fixture.

FASTENING THE FIXTURE TO A FLAT SURFACE

The fixture can be fastened to a fixed flat surface that is oriented at any angle. Check that the surface can support at least 10 times the weight of all fixtures and equipment to be installed.

Warning! The supporting surface must be hard and flat or cooling may be blocked, which will cause overheating. Fasten the fixture securely. Do not place it on unstable surfaces. Always attach a securely anchored safety cable to the safety cable attachment point.



Block access under the construction area. Work from a stable platform, hang the fixture on a truss with the arrow on the base towards the area to be illuminated. Tighten the rigging clamp.

OUTDOOR IP-RATED FIXTURES

CLF products are applied to official classified IP norm levels. For this product the IP rate is IP65 when using the covers for the chassis parts. IP65 means according classified norm: shielded against dust and pressurized water from any side. Typical use for outdoor rated stage events with normal weather acceptance. So no heavy rain, because then the water pressure over exceeds the IP norm.

SOLID OBJECT

1	Protected against a solid object greater than 50mm such as a hand.
2	Protected against a solid object greater than 12.5mm such as a finger.
3	Protected against a solid object greater than 2.5mm such as a screwdriver.
4	Protected against a solid object greater than 1mm such as a wire.
5	Dust protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment.
6	Dust tight. No ingress of dust.

MOISTURE

1	Protected against vertical falling drops of water. Limited ingress permitted.
2	Protected against vertical falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.
3	Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted.
4	Protected against water splashes from all directions. Limited ingress permitted.
5	Protected against jets of water. Limited ingress permitted.
6	Protected against powerful jets of water. Limited ingress permitted.
7	Protected against the effects of immersion in water between 15cm and 1m for 30 minutes.
8	Protected against the effects of immersion in water under pressure for long periods.

IP 65
Ingress Protection

CONDENSATION/MOISTURE INSIDE HOUSING

Because of high humidity levels during production condensation can occur inside the housing. This is mostly visible on the coldest parts of the fixture, like the front glass or display. To prevent this problem we work with special conditioned areas for outdoor fixtures. Because of the breathing air valves it is still possible to get humidity inside the fixture. This will evaporate slowly. Do not put wet fixtures in a flightcase, this will help humidity enter the fixture.

FIXTURES TEMPERATURE SPECIFICATION

Make sure the fixture is used within its working temperature range. Outside this range we cannot guarantee correct operation.

TEMPORARY USAGE:

Stage event equipment is designed with temporary use in mind. Our product purpose is for theatre, festival, (disco) clubs and indoor & outdoor concerts. Long term use is possible but keep in mind that it can bring damage to aging materials and affect the coated surface (i.e. stainless steel). Rubber sealings will be negatively affected after long-term UV exposure and should be checked by qualified service technicians over time.

Tighten screws too hard will also affect the IP-rating.

SETUP

Warning! Read "Safety Information" before installing, powering, operating the fixture.

CONTROL PANEL AND MENU NAVIGATION

The onboard control panel and backlit graphic display are used to adjust the DMX address, fixture settings (personality), service utilities. See "Onboard control menus" for a complete list of menus and commands.

Using the control buttons

- To enter the menu select [ENTER].
- Press [UP], [DOWN], [LEFT] AND [RIGHT] to scroll within a menu or adjust values.
- To enter a menu, select a function or apply a selection, press [ENTER].
- To escape a function or move back one level in the menu structure, press [LEFT].

DMX ADDRESS SETTING

The DMX address is the first channel used to receive instructions from the controller. For independent control, each fixture must be assigned to a separate channel. The DMX address can be configured by using the DMX ADDRESS menu in the control panel.

- NO DMX: Display flashes and shows at 'DMX: X'.
- DMX: Display backlight turns off and shows 'DMX: V'.
- The fixture is fully RDM ready. For RDM functions please refer to the ANSI/ESTA E1.20-2006 standard.

ONBOARD CONTROL MENUS

Main menu	Menu level 1	Menu level 2	Menu level 3	Menu level 4
DMX Settings	001 - 512			
	DMX signal mode	Wired		
		Wireless		<i>Don't use two sources at the same time</i>
	Return (ESC)			
Information	Power hours	Total Hours: ****H		
		Rst Hours: ****H		
	Lamp Hours	Total Hours: ****H		
		Rst Hours: ****H		
	Lamp Strikes	Total Strikes: ****H		
		Rst Strikes: ****H		
	Temperature	E-ballast: 000.0		
		Out TEMP: 000.0		
		In TEMP: 000.0		
	Logged temperature	E-ballast		Cur TEMP: ***
				Max TEMP: ***
				Min TEMP:***
		Out temperature		Cur TEMP: ***
				Max TEMP: ***
				Min TEMP:***
		In temperature		Cur TEMP: ***
				Max TEMP: ***
				Min TEMP:***
	Fan information	Return (ESC)		
		Lamp fan		1. Power: **. *V
			2. Speed: **. *%	
			3. Speed: ****R	
Out fan			1. Power: **. *V	
			2. SP-Fan 1: **. *%	
			3. SP-Fan 2: **. *%	
			4. SP-Fan 1: ****R	
			5. SP-Fan 2: ****R	
In fan			1. Power: **. *V	
			2. SP-Fan 1: **. *%	
			3. SP-Fan 2: **. *%	
			4. SP-Fan 1: ****R	
			5. SP-Fan 2: ****R	
		Return (ESC)		

Information

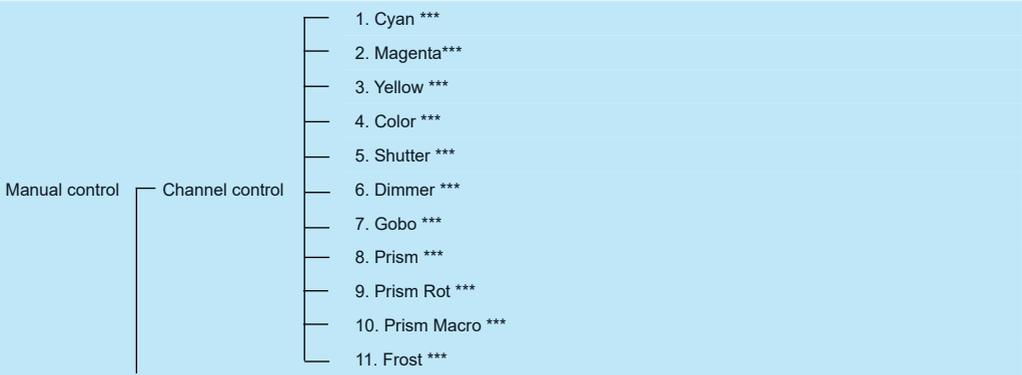
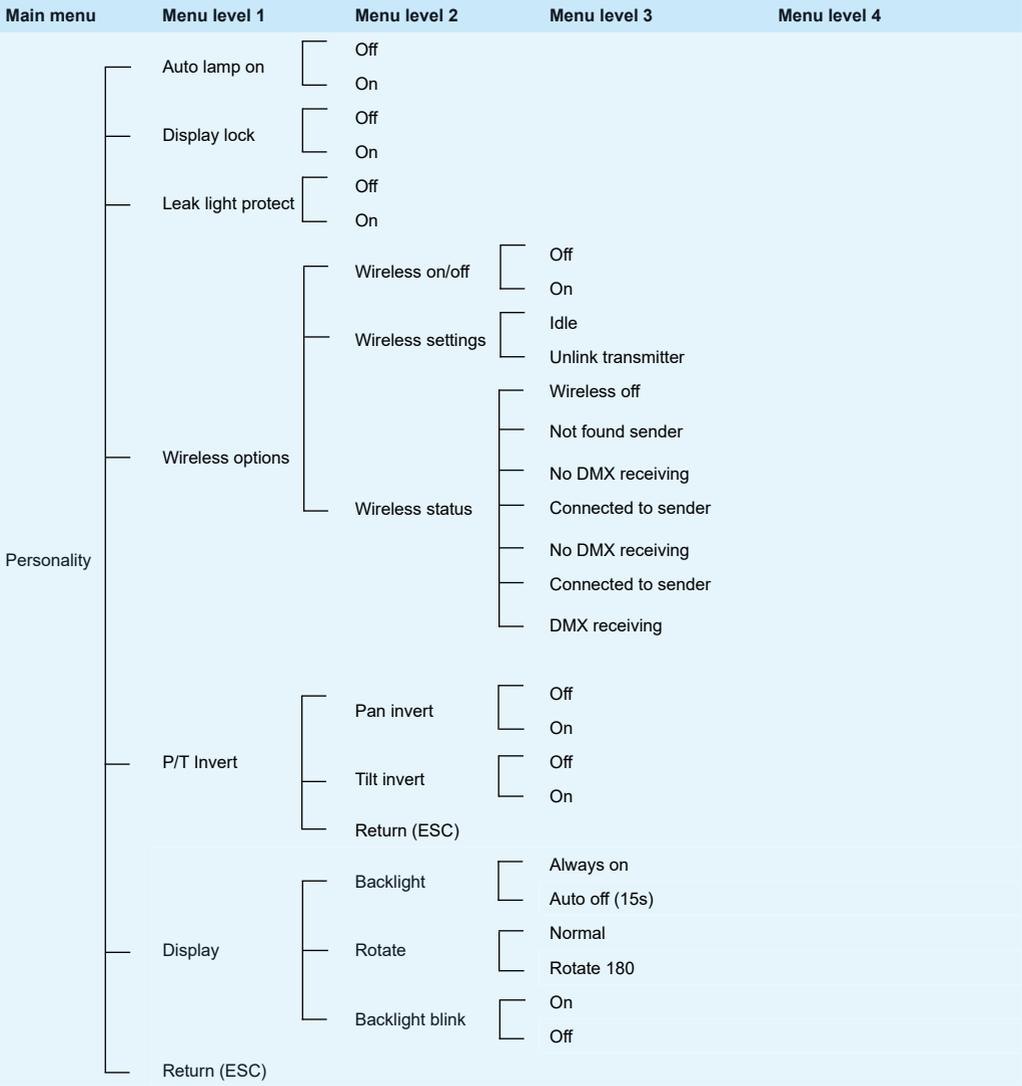
DMX Live

- 1. Cyan***
- 2. Magenta ***
- 3. Yellow ***
- 4. Color ***
- 5. Shutter ***
- 6. Dimmer ***
- 7. Gobo***
- 8. Prism***
- 9. Prism Rot ***
- 10. Prism Macro ***
- 11. Frost ***
- 12. Focus ***
- 13. Pan ***
- 14. Pan Fine***
- 15. Tilt ***
- 16. Tilt Fine ***
- 17. Functions ***

System version

- XY Board: V*.**
- Color Board: V*.**
- Zoom Board: V*.**
- Prism Board: V*.**
- Display Board: V*.**

Return (ESC)



Manual control

- 12. Focus ***
- 13. Pan ***
- 14. Pan Fine***
- 15. Tilt ***
- 16. Tilt Fine ***
- 17. Functions ***
- Return (ESC)

Program editor

Editor

Scene edit

Sequence ***

1. Cyan ***

2. Magenta ***

3. Yellow ***

4. Color ***

5. Shutter ***

6. Dimmer ***

7. Gobo ***

8. Prism ***

9. Prism Rot ***

10. Prism Macro ***

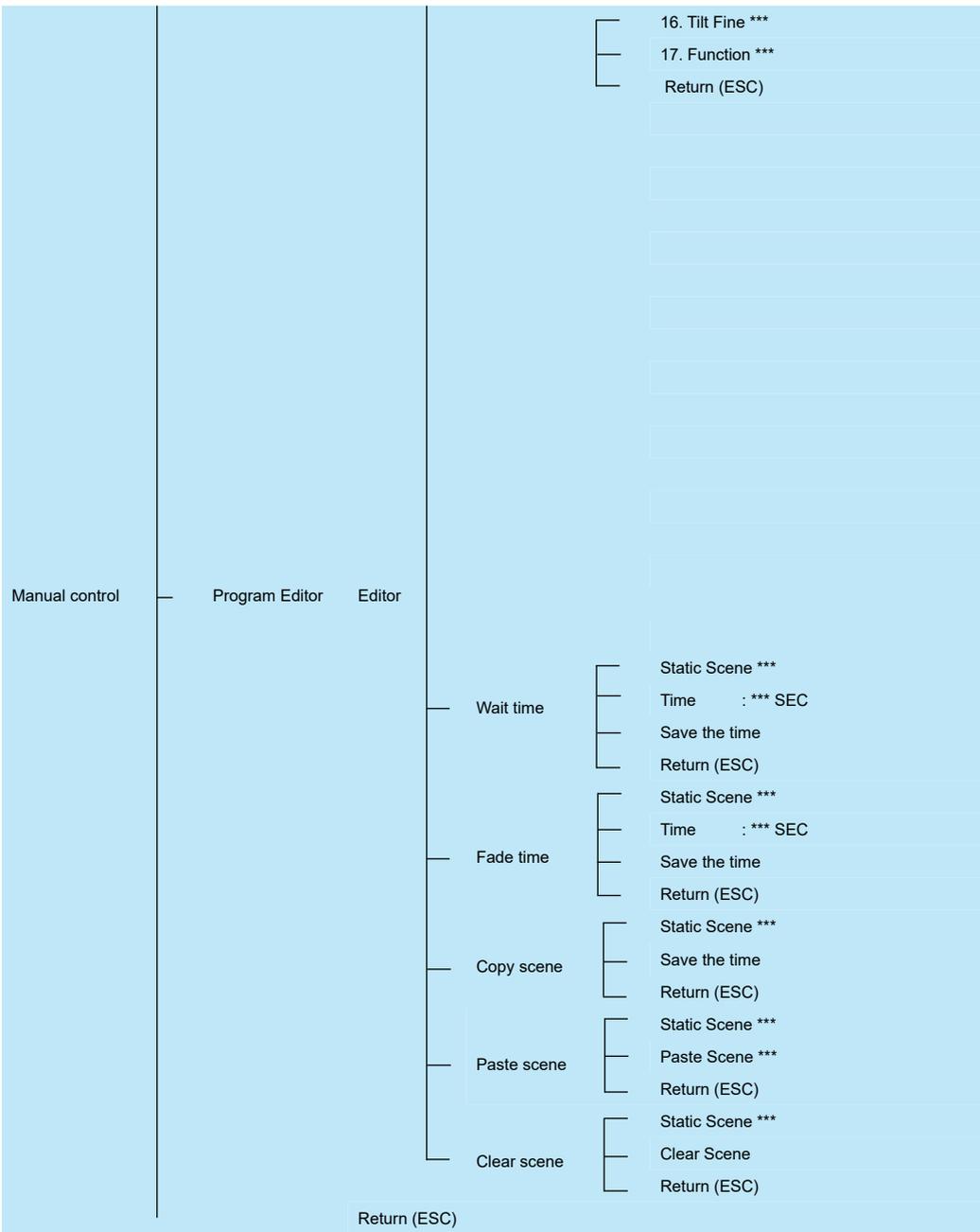
11. Frost ***

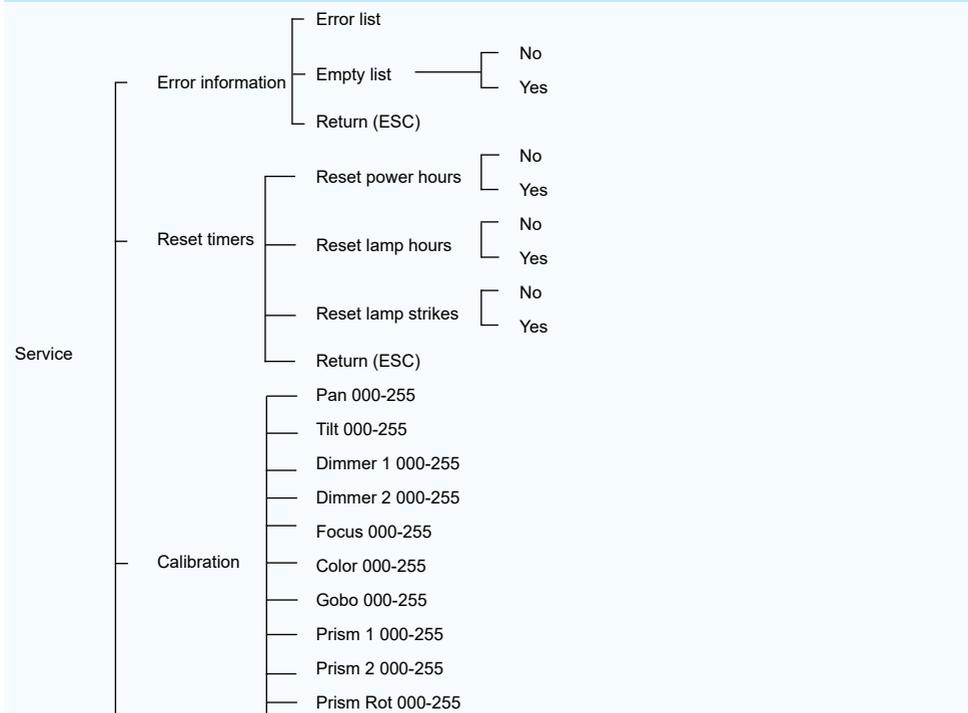
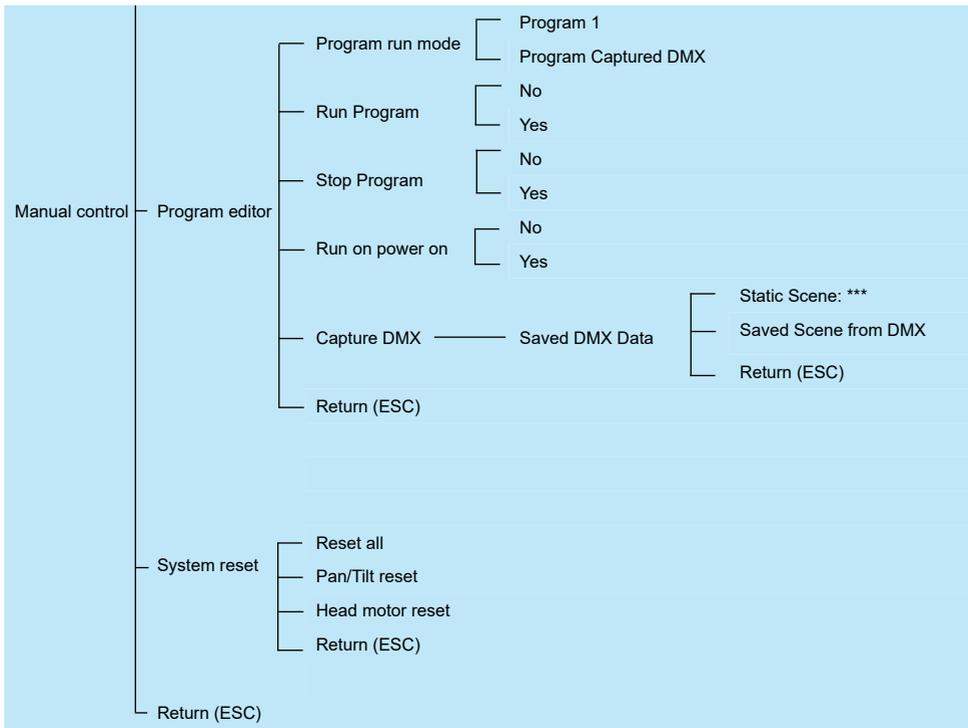
12. Focus ***

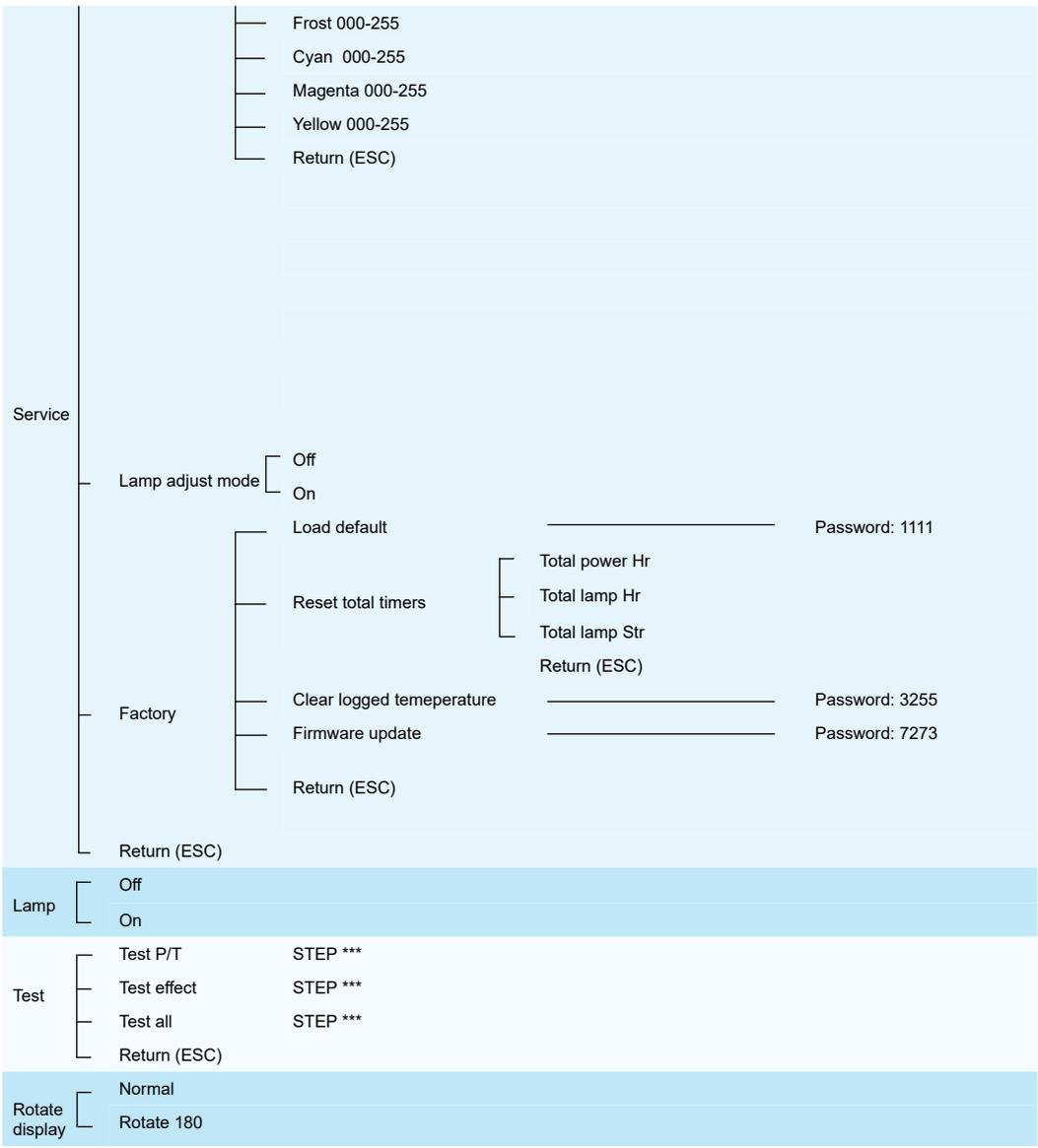
13. Pan ***

14. Pan Fine ***

15. Tilt ***







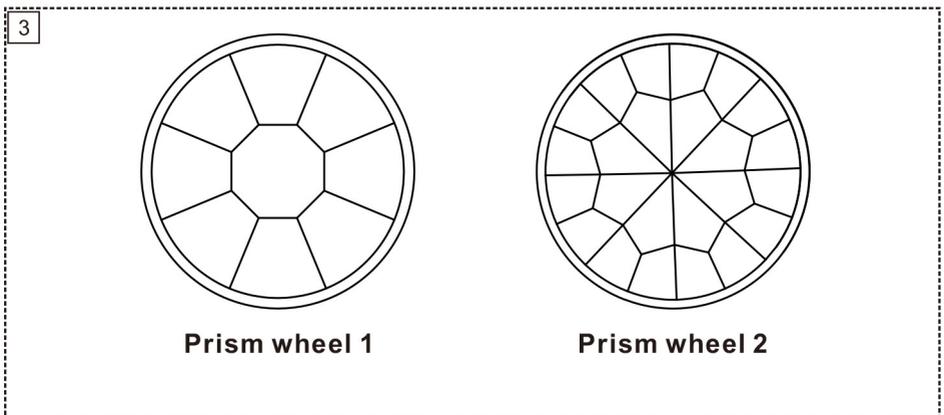
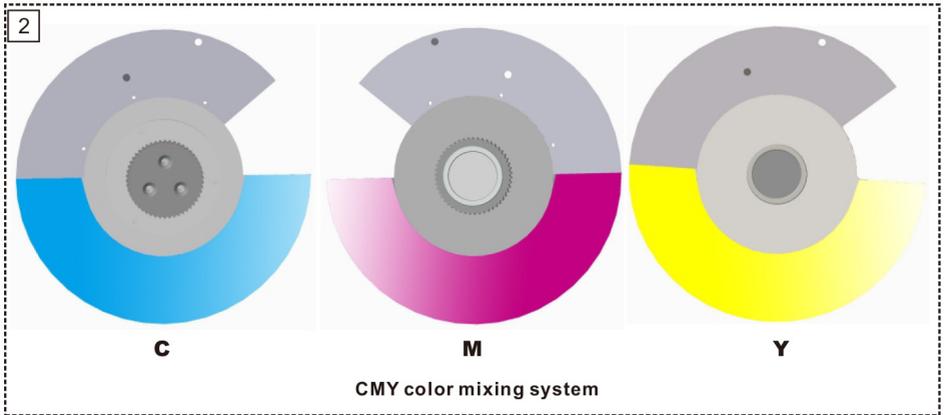
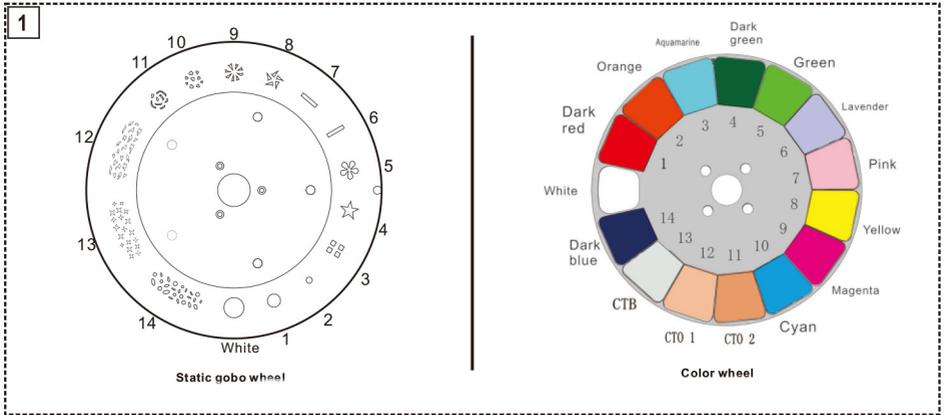
DMX PROTOCOL

CHANNEL	FUNCTION	VALUE	SETTING	REMARK
1	Cyan	0-255	Cyan from min. saturation --> full cyan	
2	Magenta	0-255	Magenta from min. saturation --> full magenta	
3	Yellow	0-255	Yellow from min. saturation --> full yellow	
4	Color wheel	0-4	Open / White	
		5-8	White + Red	
		9-12	Red	
		13-17	Red + Orange	
		18-21	Orange	
		22-25	Orange + Aquamarine	
		26-29	Aquamarine	
		30-34	Aquamarine + Green	
		35-38	Green	
		39-42	Green + Light Green	
		43-46	Light Green	
		47-51	Light Green + Lavender	
		52-55	Lavender	
		56-59	Lavender + Pink	
		60-63	Pink	
		64-68	Pink + Yellow	
		69-72	Yellow	
		73-76	Yellow + Magenta	
		77-81	Magenta	
		82-85	Magenta + Cyan	
		86-89	Cyan	
		90-93	Cyan + CTO 260/ + CTO2	
		94-98	CTO 260/CTO2	
		99-102	CTO 260 + CTO 190/CTO2 + CTO1	
		103-106	CTO 190/CTO1	
107-110	CTO 190 + CTB 8000/CTO1 + CTB			
111-115	CTB 8000/CTB			
116-119	CTB 8000 + Blue/CTB			
120-123	Blue			
124-127	Blue + White			
128-191	Forwards rainbow effect from fast to slow			
192-255	Backwards rainbow effect from slow to fast			

CHANNEL	FUNCTION	VALUE	SETTING	REMARK
5	Shutter / Strobe	0-3	Shutter closed	
		4-103	Strobe-effect from slow to fast	
		104-107	Shutter open	
		108-157	Opening pulse in sequences from slow to fast	
		158-207	Closing pulse in sequences from slow to fast	
		208-212	Shutter open	
		213-251	Random strobe-effect from Slow to Fast	
		252-255	Open	
6	Dimmer intensity	0 - 255	Dimmer intensity from 0% to 100% (0=default)	
7	Static gobo wheel	0-3	Open/Hole (0=default)	
		4-7	Gobo1	
		8-11	Gobo2	
		12-15	Gobo3	
		16-19	Gobo4	
		20-23	Gobo5	
		24-27	Gobo6	
		28-31	Gobo7	
		32-35	Gobo8	
		36-39	Gobo9	
		40-43	Gobo10	
		44-47	Gobo11	
		48-51	Gobo12	
		52-55	Gobo13	
		56-59	Gobo14	
		60-69	Gobo1	
	70-79	Gobo2		
	80-89	Gobo3		
	90-99	Gobo4		
	100-109	Gobo5		
	110-119	Gobo6		
	120-129	Gobo7		
	130-139	Gobo8		
	140-149	Gobo9		
150-159	Gobo10			
160-169	Gobo11			
170-179	Gobo12			
180-189	Gobo13			
	Shaking gobos from slow to fast			

CHANNEL	FUNCTION	VALUE	SETTING	REMARK
7	Shaking gobos from slow to fast	190-199	Gobo14	
		200-225	Forwards gobo wheel rotation from Fast to Slow	
		226-229	Stop	
		230-255	Backwards gobo wheel rotation from slow to fast	
8	Prism wheel	0-63	Unused range	
		64-127	Prism1	
		128-191	Prism2	
		192-255	Prism1+Prism2	
9	Prism wheel indexing/ rotation	0	Unused range	
		1-63	Angle linear adjustment	
		64-127	Forwards Prism rotation from fast to slow	
		128-191	Backwards Prism rotation from slow to fast	
		192-207	90° bounce forwards / backwards from slow to fast/0-90°	
		208-223	180° bounce forwards / backwards from slow to fast/0-180°	
		224-239	270° bounce forwards / backwards from slow to fast/0-270°	
10	Prism Macro	240-255	360° bounce forwards / backwards from slow to fast/0-360°	
		0-15	Unused range	
		16-55	From fast to slow, 8 prism bump	
		56-95	From fast to slow, 16 prism bump	
		96-135	From fast to slow, 8 prism+16 prism at the same time bump	
		136-175	8 prism + 16 prism bump from fast to slow	
		176-215	16 prism + 8 prism bump from fast to slow	
216-255	From fast to slow, 8 prism and 16 the prism bump			
11	Frost	0-255	Frost from 0% to 100% (0=default)	
12	Focus	0-255	Continuous adjustment from far to near(128=default)	
13	Pan	0-255	Pan movement by 540°(128=default)	
14	Pan Fine	0-255	Fine control of pan movement(0=default)	
15	Tilt	0-255	Tilt movement by 265°(128=default)	
16	Tilt Fine	0-255	Fine control of tilt movement(0=default)	
17	Function	0-25	Unused range	
		26-30	Cyan/Magenta/Yellow/Shutter/Strobe/Colour/Gobo/Prism/ Frost/Focus reset (head motor reset)	
		31-35	Pan/Tilt reset	
		36-40	System reset	
		41-180	Unused range	
		181-200	Lamp Off	
		201-220	Unused range	
221-255	Lamp On			

GOBO OVERVIEW

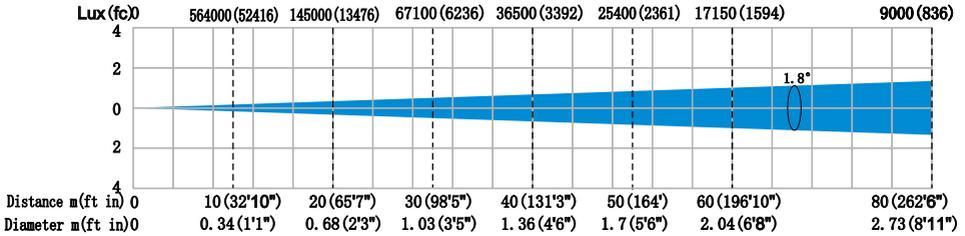


PHOTOMETRICS

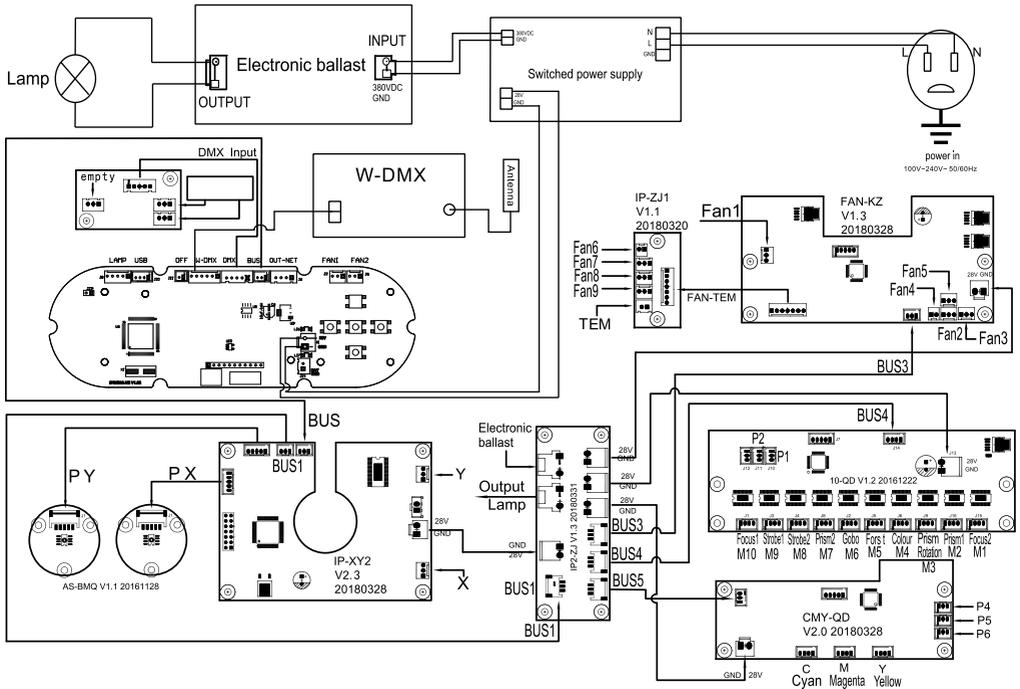
Poseidon distance, spot diameter and illumination diagram

Standard (1.8°)

Lamp: USHIO NSL400L Lamp Total Output: 28000 lumens



CIRCUIT CONNECTION DIAGRAM



SPECIFICATIONS

Power

Input voltage	100-240VAC, 50/60Hz
Standby power	82W
Total power consumption	650W
Typical current	2.83A
Cos ϕ	-
Power plug type	Seetronic Powercon TRUE 1

Source

Lamp	Ushio 400W LL (CLF Poseidon Lamp Kit)
Lamp life expectancy	6000 hours
Color temperature	7300K

Optical

Beam angle	1.8°
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Photometric

Output @10M	525000 Lux
Output @50M	22400 Lux

Effects

Color	CMY
	14 + open color wheel
Gobo	14 + open fixed gobo wheel
Prism	8-facet round, 16-facet round
Zoom	-
Frost	6° Linear
Dimmer	0-100%
Shutter	12Hz / second, random
Pan	540°
Tilt	240°
Focus	Motorized

Heat Management

Cooling type	Regulated Fans
MAX ambient temp (Ta max)	Ta max=40°C

MIN ambient temp (Ta min)	Ta min =-20°
Control	
Control protocol	USITT DMX512/1990
DMX Channels	17
RDM	Yes
sACN	No
DMX input	5-pin
Data input (artnet, SACN)	No
Hardware	
Interface	LCD Display
Software upload method	DMX, via upload tool
Installation	
IP rating	IP65 (Use rubber power & data cover)
Mounting orientation	Any
Housing	
Safety attachment point	Yes
Lock	Tilt
Physical	
Net product weight	35kg
Dimensions	488 x 312 x 726mm (l x w x h)
Accessories	
Included items	Manual, Power cable, safety
Approvals	
Approved certifications	CE and RoHs
Information	
Article number	160030
EAN CODE	8719189163995



CLF POSEIDON BEAM