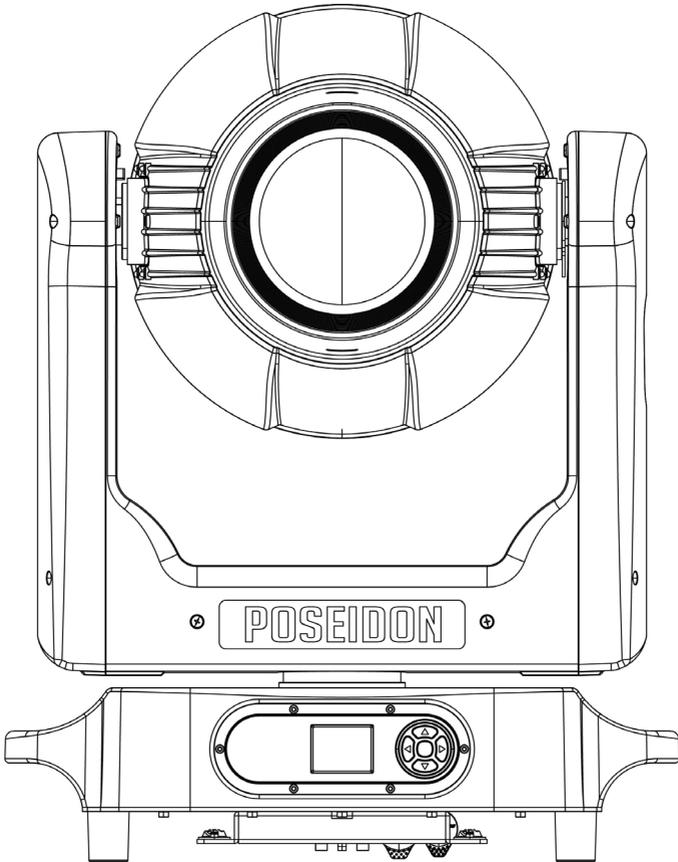




# POSEIDON HYBRID

# MANUAL

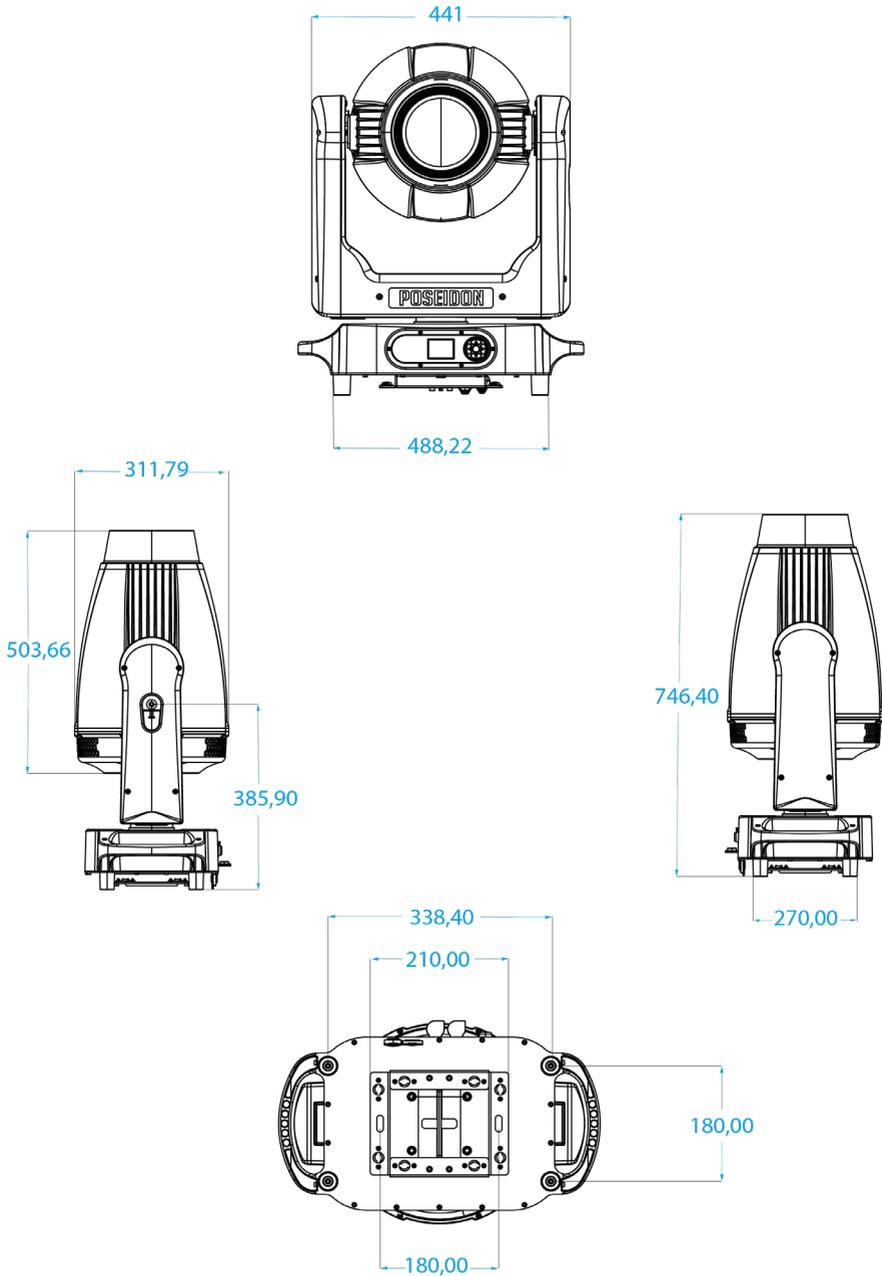


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# DIMENSIONS

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 mm<sup>2</sup> (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 TRUE 1 ® cable connectors to connect to power input sockets. Use only PowerCON TRUE 1 ® 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.



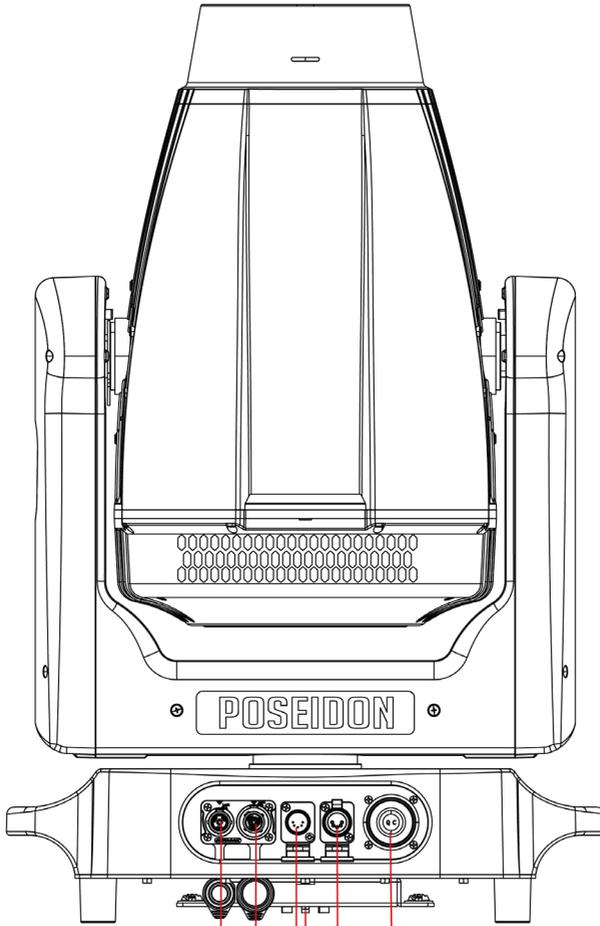
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.

## LAMP LIFE



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

# FIXTURE OVERVIEW



AC MAINS POWER INPUT

AC MAINS POWER OUTPUT

SAFETY ATTACHMENT POINT

WIRELESS ANTENNA

5P DMX OUTPUT

5P DMX INPUT

# INTRODUCTION

## POWERFUL OUTDOOR HYBRID

- SMOOTH CMY COLOR MIXING
- FIXED COLOR WHEEL
- 2 GOBO WHEELS
- 3 PRISMS (LINEAR, 4-FACET & 8-FACET)
- FROST
- 2° – 45° ZOOM WITH AUTOFOCUS
- ANIMATION EFFECT

## 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 TRUE 1 ® 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 hard wired 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 mm<sup>2</sup> (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 TRUE 1 ® 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 mm<sup>2</sup> 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 fixtures power throughput socket and yellow PowerCON TRUE 1 ® 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

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

### MOISTURE

<b>1</b>	Protected against vertical falling drops of water. Limited ingress permitted.
<b>2</b>	Protected against vertical falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted.
<b>3</b>	Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted.
<b>4</b>	Protected against water splashes from all directions. Limited ingress permitted.
<b>5</b>	Protected against jets of water. Limited ingress permitted.
<b>6</b>	Protected against powerful jets of water. Limited ingress permitted.
<b>7</b>	Protected against the effects of immersion in water between 15cm and 1m for 30 minutes.
<b>8</b>	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 for temporary outdoor use. Materials are not designed for long-term exposure to heavy weather conditions. Rubber covers will be negatively affected by long-term UV exposure and should be checked by qualified service technicians over time. Tightening screws too hard will negatively 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	Checksum error				
	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)			

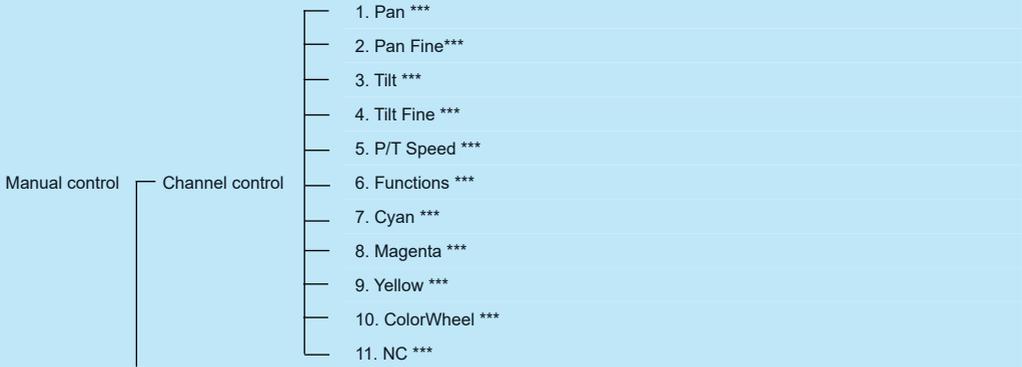
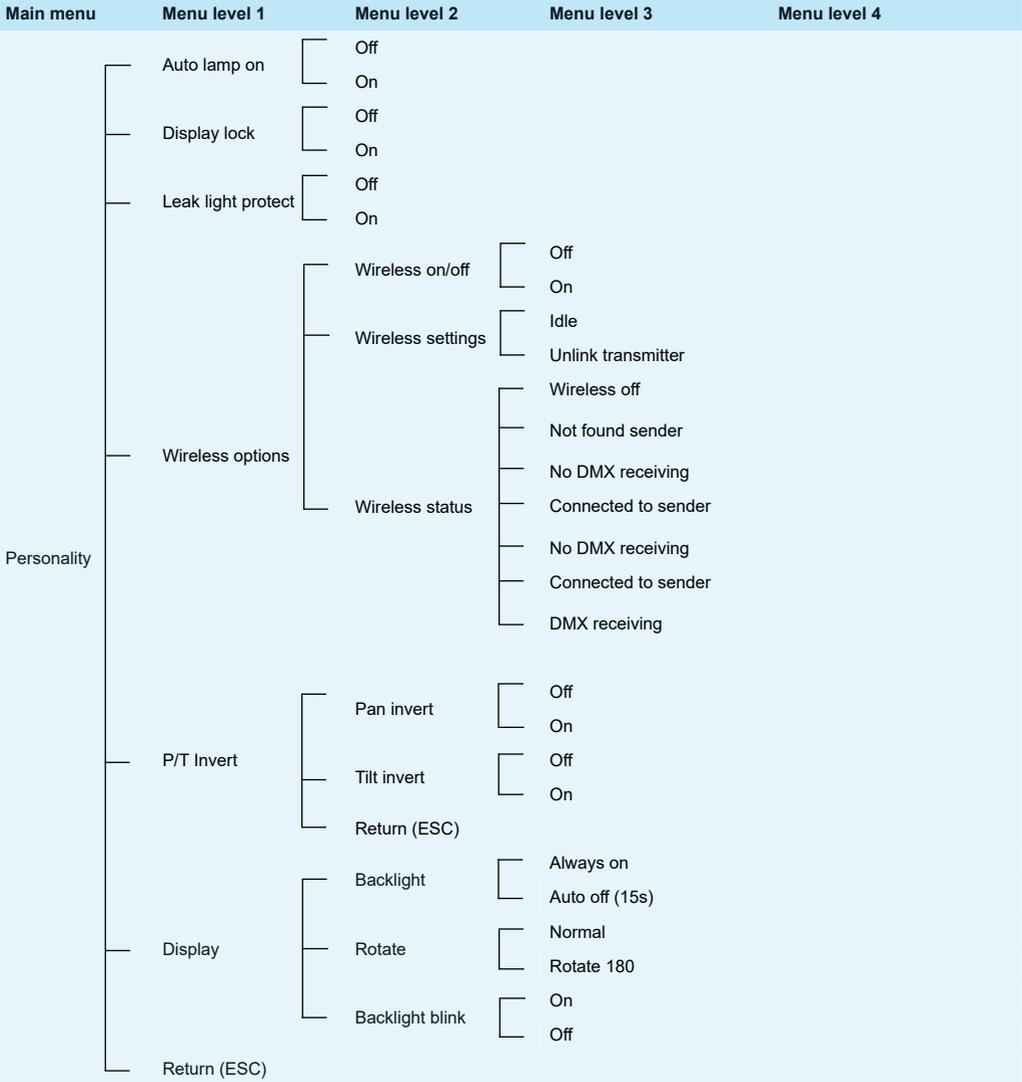
Information

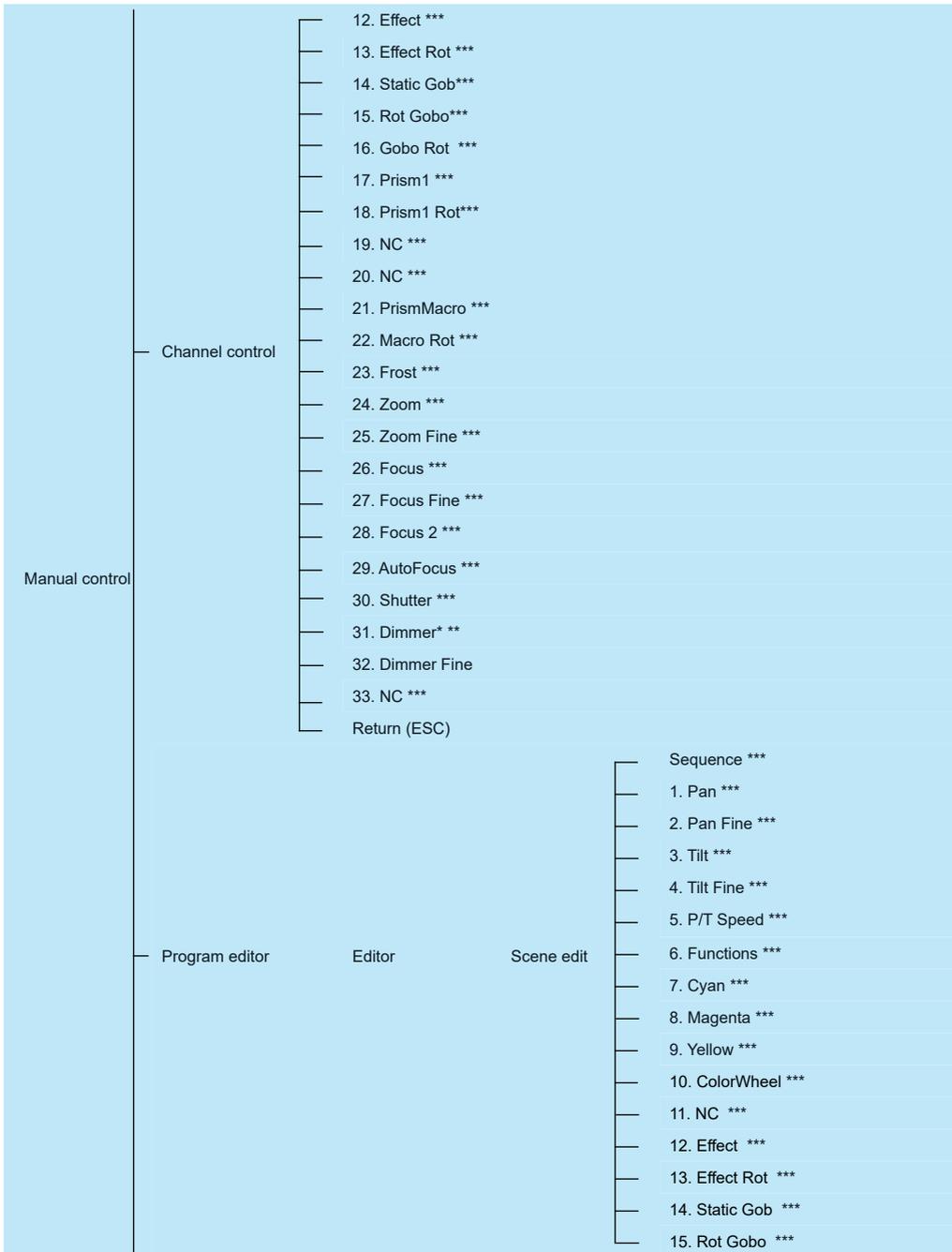
DMX Live

System version

Return (ESC)

1. Pan\*\*\*
2. Pan Fine \*\*\*
3. Tilt \*\*\*
4. Tilt Fine \*\*\*
5. P/T Speed \*\*\*
6. Functions \*\*\*
7. Cyan\*\*\*
8. Magenta\*\*\*
9. Yellow \*\*\*
10. ColorWheel \*\*\*
11. NC \*\*\*
12. Effect \*\*\*
13. Effect Rot \*\*\*
14. Static Gob\*\*\*
15. Rot Gobo \*\*\*
16. Gobo Rot \*\*\*
17. Prism 1 \*\*\*
18. Prims1 Rot \*\*\*
19. NC \*\*\*
20. NC \*\*\*
21. PrismMacro \*\*\*
22. Macro Rot \*\*\*
23. Frost \*\*\*
24. Zoom \*\*\*
25. Zoom Focus \*\*\*
26. Focus \*\*\*
27. Focus Fine \*\*\*
28. Focus 2 \*\*\*
29. AutoFocus \*\*\*
30. Shutter \*\*\*
31. Dimmer \*\*\*
32. DimmerFine \*\*\*
33. NC \*\*\*
- XY: V\*.\*\*
- Fan: V\*.\*\*
- Gobo: V\*.\*\*
- CMY: V\*.\*\*
- Prism: V\*.\*\*
- Display: V\*.\*\*





Manual control

Program Editor

Editor

Scene Edit

Wait time

Fade time

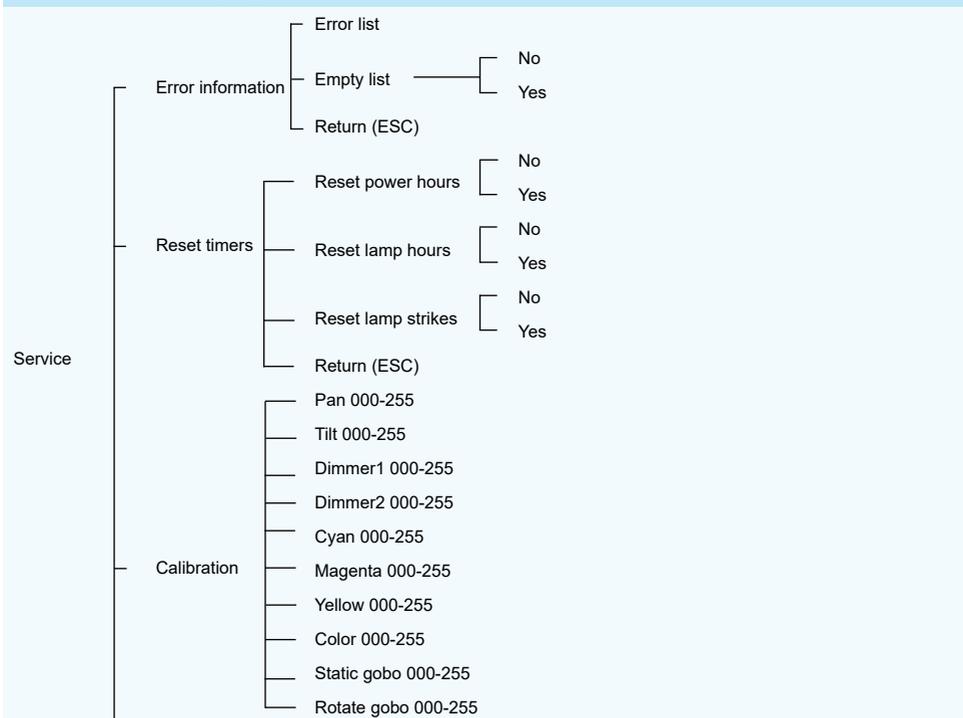
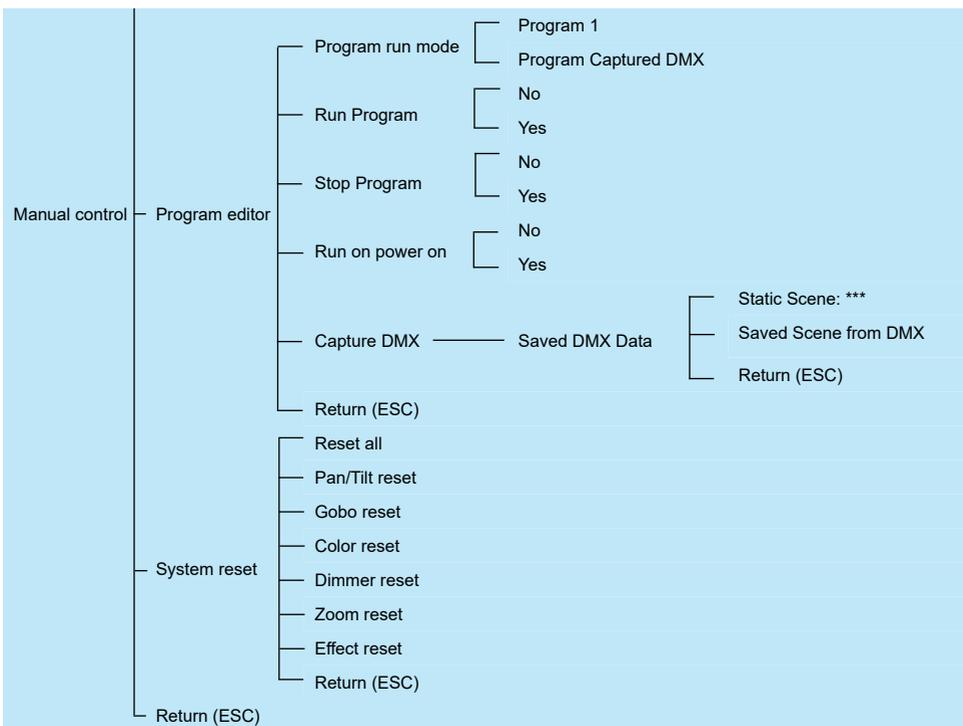
Copy scene

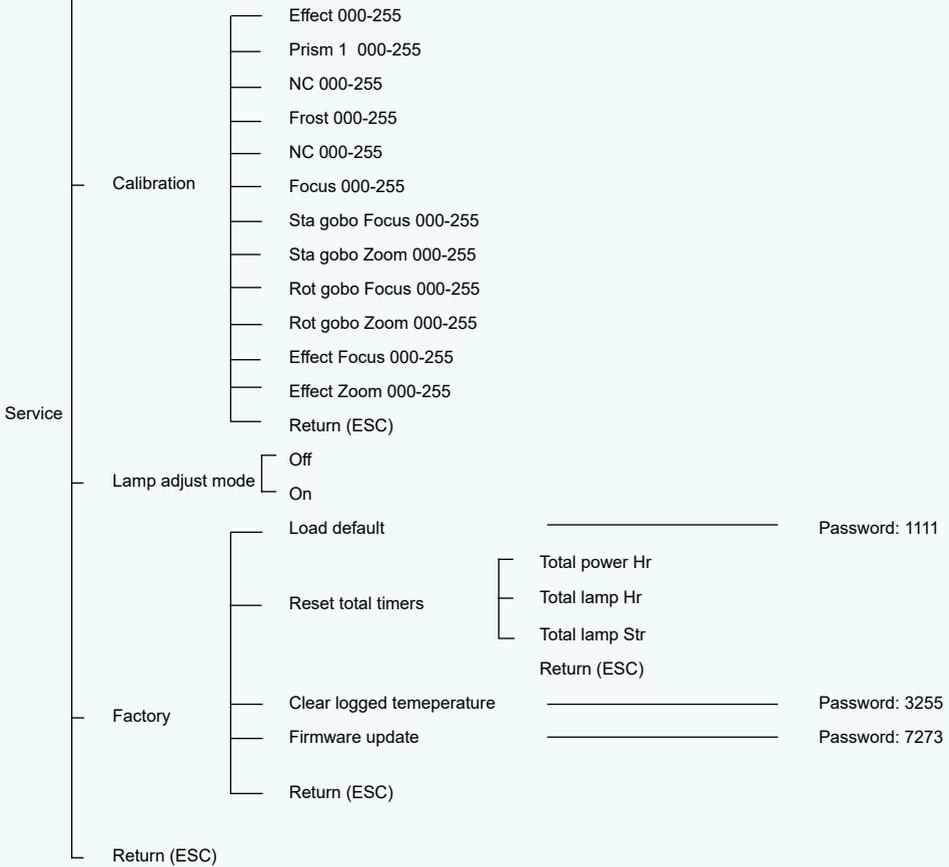
Paste scene

Clear scene

- 16. Gobo Rot \*\*\*
- 17. Prism 1 \*\*\*
- 18. Prism 1 Rot \*\*\*
- 19. NC
- 20. NC
- 21. PrismMacro
- 22. Macro Rot
- 23. Frost
- 24. Zoom
- 25. Zoom Fine
- 26. Focus
- 27. Focus Fine
- 28. Focus 2
- 29. Autofocus
- 30. Shutter
- 31. Dimmer
- 32. DimmerFine \*\*\*
- 33. NC \*\*\*
- Save the scene
- Return
- Static Scene \*\*\*
- Time : \*\*\* SEC
- Save the time
- Return (ESC)
- Static Scene \*\*\*
- Time : \*\*\* SEC
- Save the time
- Return (ESC)
- Static Scene \*\*\*
- Save the time
- Return (ESC)
- Static Scene \*\*\*
- Paste Scene \*\*\*
- Return (ESC)
- Static Scene \*\*\*
- Clear Scene
- Return (ESC)

Return (ESC)





- Lamp
  - Off
  - On

- Test
  - Test P/T           STEP \*\*\*
  - Test effect       STEP \*\*\*
  - Test all           STEP \*\*\*
  - Return (ESC)

- Rotate display
  - Normal
  - Rotate 180

# DMX PROTOCOL

Channel	Function	Value	Setting	Remark	
1	Pan	0-255	0-100%		
2	Pan Fine	0-255	0-100%		
3	Tilt	0-255	0-100%		
4	Tilt Fine	0-255	0-100%		
5	Pan/Tilt Speed	0	Standard mode (0=Default)		
	Pan/Tilt Time	1	Max. Speed Mode		
6	Power/Special Functions	2-255			
		0-9			
		10-14			
		15-19			
					* function is active only 10 seconds after switching the fixture on
		20-24			
		25-29			
		30-34			
		35-39			
		40-44			
		45-49			
		50-54			
		55-59			
		60-64			
		65-69			
		70-74			
		75-79			
		80-84			
		85-89			
		90-94			
95-99					
100-101					
102-103					
104-105					
106-107					
108-119					
120-124					
125-129					
130 - 139					
140 - 149					
150 - 159					
160 - 169					

6	Power/Special Functions	170 - 179		
		180 - 189		
		190 - 199		
		200 - 209		
		210 - 229		
		230 - 239		
		240 - 244		
		245 - 249		
250 - 255				
7	Cyan	0-255	0-1.2	min. to full cyan (0=default)
8	Magenta	0-255	1.6-40.4	min. to full magenta (0=default)
			40.8-42.0	
9	Yellow	0-255	42.4-61.6	min. to full yellow (0=default)
			62.0-81.2	
10	Color Wheel	0-4	0-1.56	White
		5-8	1.96-3.14	White+Red
		9-12	3.53-4.71	Red
		13-17	5.10-6.67	Red+Orange
		18-21	7.06-8.24	Orange
		22-25	8.63-9.80	Orange+Aquamarine
		26-29	10.2-11.4	Aquamarine
		30-34	11.8-13.3	Aquamarine+Green
		35-38	13.7-14.9	Green
		39-42	15.3-16.5	Green+Light Green
		43-46	16.9-18.0	Light Green
		47-51	18.4-20.0	Light Green+Lavender
		52-55	20.4-21.6	Lavender
		56-59	22.0-23.1	Lavender+Pink
		60-63	23.5-24.7	Pink
		64-68	25.1-26.7	Pink+Yellow
		69-72	27.0-28.2	Yellow
		73-76	28.6-29.8	Yellow+Magenta
		77-81	30.2-31.8	Magenta
		82-85	32.2-33.3	Magenta+Cyan
86-89	33.7-34.9	Cyan		
90-93	35.3-36.5	Cyan+CTO 260		
94-98	36.9-38.4	CTO 260/CTO2		
99-102	38.8-40.0	CTO 260+CTO CTO2+CTO1	190/	
103-106	40.4-41.6	CTO 190/CTO1		

10	Color Wheel		107-110	42.0-43.1	CTO 190+CTB CTO1+CTB	8000/
			111-115	43.5-45.1	CTB 8000/CTB	
			116-119	45.5-46.7	CTB 8000+Blue	
			120-123	47.1-48.2	Blue	
			124-127	48.6-49.8	Blue+White	
			128-191	50.2-74.9	CCW Fast→Slow Rotation	
			192-255	75.3-100	CW Slow→Fast Rotation	
11	Reserved					
12	Effect Wheel Positioning		0-19		No function (0=default)	
			20-255		Full Effect	
13	Effect Wheel Rotation		0		No rotation	
			1-127		Forwards rotation from fast to slow	
			128		No rotation (128=default)	
			129-255		Backwards rotation from slow to fast	
14	Static Wheel	Gobo	0-3		Open/Hole (0=default)	
			4-9		Positioning	Beam reducer 1
			10-15			Beam reducer 2
			16-21			Beam reducer 3
			22-27			Beam reducer 4
			28-33			Gobo 1
			34-39			Gobo 2
			40-45			Gobo 3
			46-51			Gobo 4
			52-57			Gobo 5
			58-63			Gobo 6
			64-69			Gobo 7
			70-75			Gobo 8
			76-81			Gobo 9
			82-87			Gobo 10
						Shaking Gobos from slow to fast
						Beam reducer 1
						Beam reducer 2
						Beam reducer 3
						Beam reducer 4
			Gobo 1			
			Gobo 2			
			Gobo 3			
			Gobo 4			
			Gobo 5			

14	Static Wheel	Gobo	160-167	Gobo 6	
			168-175	Gobo 7	
			176-183	Gobo 8	
			184-191	Gobo 9	
			192-199	Gobo 10	
			200-201	Open/hole	
			202-222	Forwards gobo wheel rotation from fast to slow	
			223-228	No rotation	
			229-249	Backwards gobo wheel rotation from slow to fast	
		250-255	Auto random gobo selection from fast to slow		
Index - set indexing on channel 16					
15	Rotating Gobo Wheel	0	Open/Hole (0=default)		
		1-4	Hole (flat field)		
		5-16	Gobo 1		
		17-28	Gobo 2		
		29-40	Gobo 3		
		41-52	Gobo 4		
		53-64	Gobo 5		
		65-76	Gobo 6		
		77-88	Gobo 7		
		89-100	Gobo 8		
		101-112	Gobo 9		
			Shaking gobo from slow to fast		
			Index - set indexing on channel 16		
				113-124	Gobo 1
				125-136	Gobo 2
				137-148	Gobo 3
				149-160	Gobo 4
				161-172	Gobo 5
				173-184	Gobo 6
		185-196	Gobo 7		
		197-208	Gobo 8		
		209-220	Gobo 9		
		221-249	Open/hole		
		250-255	Auto random gobo selection from fast to slow		
16	Rot. Indexing Rotation	Gobo and	0 - 127	Gobo indexing	
			128 - 187	Forwards gobo rotation from fast to slow	
			188-195	No rotation	
			196 - 255	Backwards gobo rotation from slow to fast	

17	Prism Wheel 1	This wheel is blocked If Rotating gobo wheel >0 DMX	
		0-3	Open position/hole (0=default)
		Index - set indexing on channel 18	
		4-15	Prism 3 - 6-facet linear
		16-27	Prism 2 - 4-facet 12° circular
		28-39	Prism 1 - 8-facet 12° circular
		Rotation - set rotation on channel 18	
		40-51	Prism 3 - 6-facet linear
		52-63	Prism 2 - cylindrical
64-75	Prism 1 - 8-facet 12° circular		
18	Prism Wheel 1 Indexing/Rotation	Prism indexing - set position on channel 17	
		0 - 255	Prism 1 indexing
		Prism 1 rotation - set position on channel 17	
		0	No rotation
		1 - 127	Forwards prism rotation from fast to slow
128	No rotation (128=default)		
129-255	Backwards prism rotation from slow to fast		
19	Reserved		
20	Reserved		
21	Pattern Selection	0-3	Open position/hole (0=default)
		Index - set indexing on channel 22	
		4-14	Prism macro Index 1
		15-25	Prism macro Index 2
		26-36	Prism macro Index 3
		37-47	Prism macro Index 4
		48-58	Prism macro Index 5
		59-69	Prism macro Index 6
		70-80	Prism macro Index 7
		Rotation - set rotation on channel 22	
		81-91	Prism macro rotation 1
		92-102	Prism macro rotation 2
		103-113	Prism macro rotation 3
		114-124	Prism macro rotation 4
		125-135	Prism macro rotation 5
		136-146	Prism macro rotation 6
		147-157	Prism macro rotation 7
158-168	Prism macro rotation 8		
169-179	Prism macro rotation 9		
180-190	Prism macro rotation 10		
191-255	Raw DMX		

The channels are blocked: Prism Wheel 1/2, Prism Wheel 1/2 rot  
 Pattern indexing - set position on channel 21

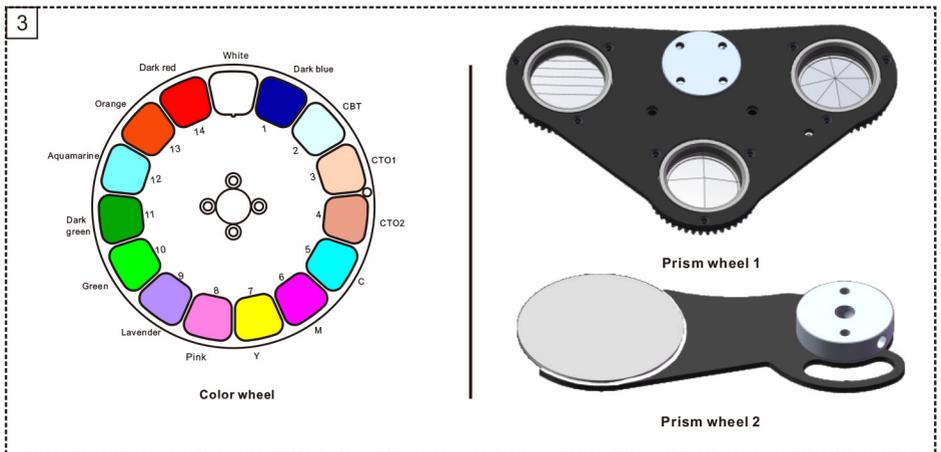
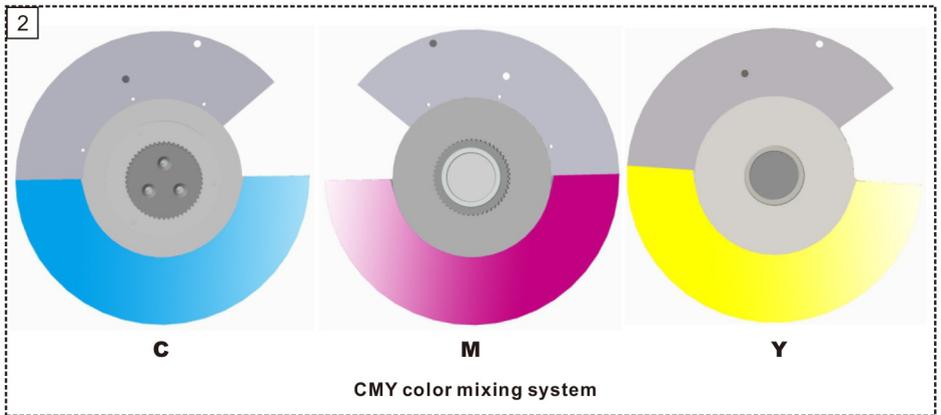
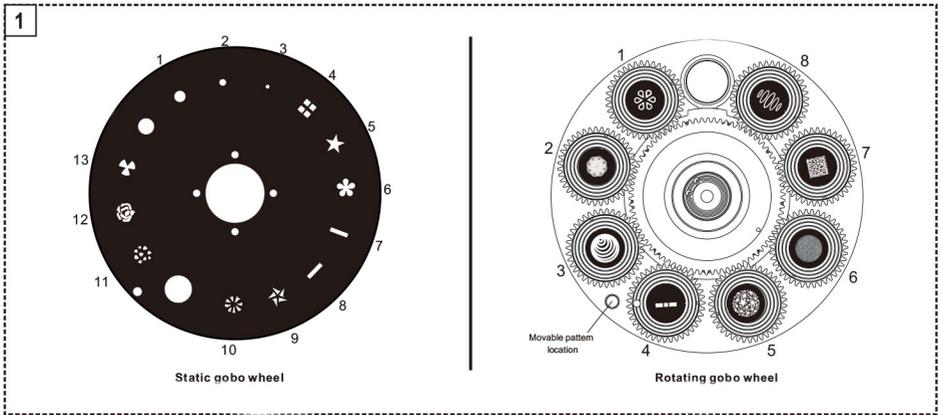
		0 - 255		Pattern indexing
				Pattern rotation - set position on channel 21
22	Pattern rotation and indexing	0		No rotation
		1-127		Forwards pattern rotation from fast to slow
		128		No rotation (128=default)
		129-255		Backwards pattern rotation from slow to fast
		0-19		Open (0=default)
		20-128		100% Light Frost
23	Frost	129-169		Pulse closing from slow to fast
		170-210		Pulse opening from fast to slow
		211-255		Ramping from fast to slow
24	Zoom	0 - 255		Zoom from max. to min.beam angle (128=default)
25	Zoom - Fine	0 - 255		Fine zooming (0=default)
26	Focus	0 - 255		Continuous adjustment from far to near (128=default)
27	Focus - Fine	0 - 255		Fine focusing (0=default)
28	AutoFocus	0-255		AutoFocus
				Select desired distance and effect on which you need to focus and use "Focus2" channel (27) to focus the image
		0-15	0-5.69	Autofocus Off
		16-55	5.69-21.37	10 metres
		56-95	21.37-37.06	15 metres
		96-135	37.06-52.75	20 metres
		136-175	52.75-68.43	30 metres
		176-215	68.43-84.12	40 metres
		216-255	84.12-100	50 metres
29	Autofocus (priority & distance selection)			
30	Shutter/ strobe	0 - 31		Shutter closed
		32 - 63		Shutter open (32=default)
		64 - 95		Strobe-effect from slow to fast
		96 - 127		Shutter open
		128 - 143		Opening pulse in sequences from slow to fast
		144 - 159		Closing pulse in sequences from fast to slow
		160 - 191		Shutter open
		192 - 223		Random strobe-effect from slow to fast
		224 - 255		Shutter open, Full lamp power
31	Dimmer	0 - 255		Dimmer intensity from 0% to 100% (0=default)



32	Dimmer Fine	0 - 255	Dimmer intensity from 0% to 100% (0=default)
33	Reserved		

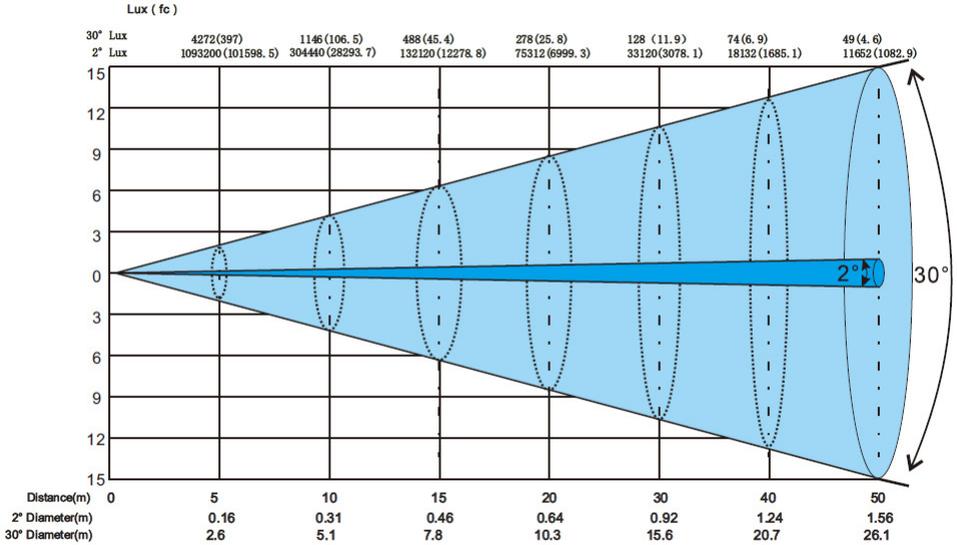
CHANNEL	FUNCTION	VALUE	SETTING	REMARK
7	Shaking gobos from slow to fast	190-199	Gobo14	
		200-225	Forwards gobo wheel rotation from Fast to Slow	
		226-229	Stop	
		230-255	Backwards gobo wheel rotation from slow to fast	
8	Prism wheel	0-63	Unused range	
		64-127	Prism1	
		128-191	Prism2	
		192-255	Prism1+Prism2	
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

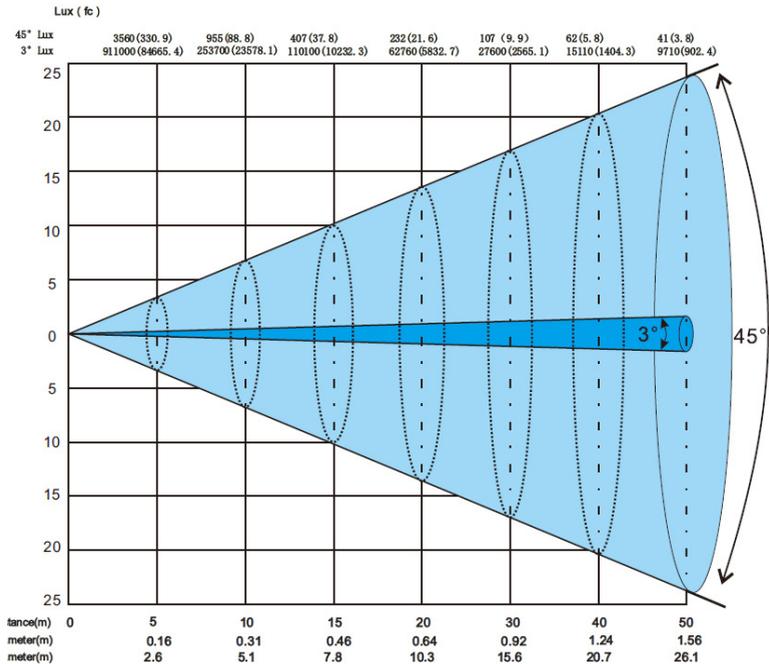


# PHOTOMETRICS

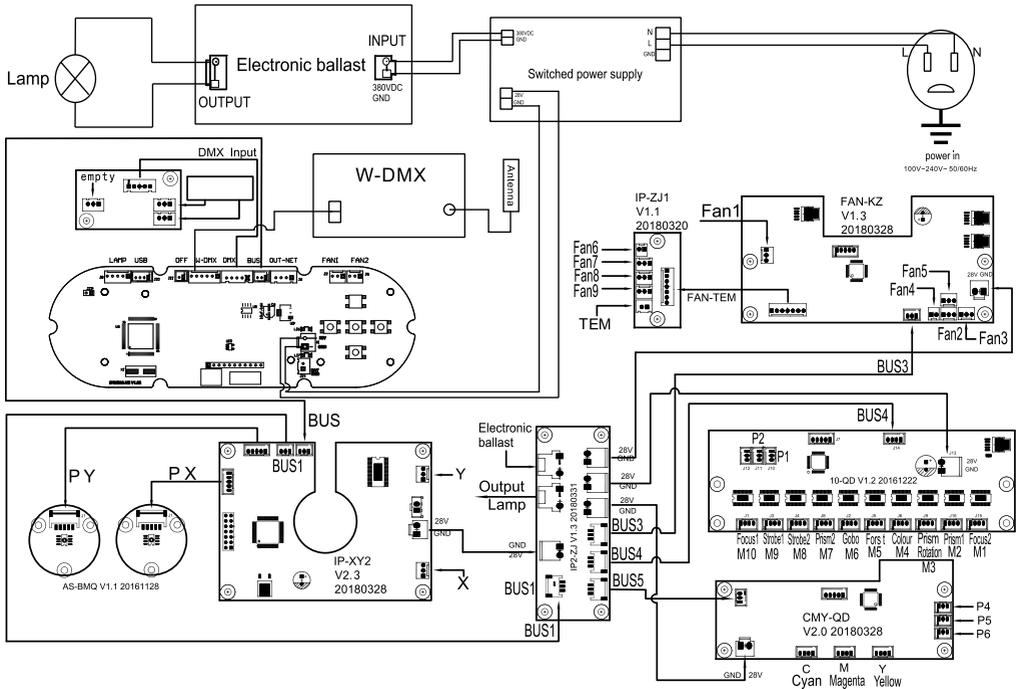
## distance, spot diameter and illumination diagram (Beam model)



## distance, spot diameter and illumination diagram (Spot model)



# CIRCUIT CONNECTION DIAGRAM



# SPECIFICATIONS

## Power

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

## Source

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

## Optical

Zoom range	2° - 45°
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## Photometric

Output @10M (Beam)	304440 lux
Output @50M (Beam)	11652 lux
Output @10M (Spot)	253700 lux
Output @50M (Spot)	9710 lux

## Effects

Color	CMY 14 + open color wheel
Gobo (static)	14 + open
Gobo (rotating)	8 + open
Prism	8-facet round, 16-facet round, linear
Animation	Two way rotating
Zoom	2° - 45°
Frost	6°
Dimmer	0-100% 16 bit
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	33
RDM	Yes
WDMX	Yes
DMX input	5-pin
sACN	No

## Hardware

Interface	LCD Display
Software upload	DMX, via upload tool

## Installation

IP rating	IP65
Orientation	Any

## Housing

Safety attachment point	Bottom
Position lock	Tilt lock

## Physical

Net product weight	35Kg
Dimensions	488 x 312 x 747mm (l x w x h)

## Accessories

Included items	Manual, Power cable, Safety
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## Approvals

Approved certifications	CE and RoHs
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## Information

Article number	160040
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**POSEIDON HYBRID**