elumen8

Evora CMY470 Hybrid
User Manual

Order codes: ELUM702

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.

CAUTION!
KEEP THIS EQUIPMENT AWAY FROM RAIN, MOISTURE AND LIQUIDS

CAUTION!
TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not connect this equipment to a dimmer pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available mains supply voltage is between 100~240V AC, 50/60Hz.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not connect power or switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.

- Only use fuses of same type and rating.
- We recommend this fixture should be serviced at least once every 3 months to prevent build-up of dust, dirt and debris that could affect the fixtures operation.
- Repairs, servicing and power connection must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- This lighting fixture is for professional use only - it is not designed for or suitable for household use. The product must be installed by a qualified technician in accordance with local territory regulations. The safety of the installation is the responsibility of the installer. The fixture presents risks of severe injury or death due to fire hazards, electric shock and falls.
- High power lighting fixtures are capable of producing powerful, concentrated beams of light that can create a fire hazard or a risk of eye injury if the safety precautions are not followed.
- WARRANTY: Two years from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc. Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

This fixture falls under Protection Class 1, therefore it has to be connected to a mains socket with a protective earthing connection.

Risk group 2, RG-2: CAUTION!
Do not stare at exposed lamp in operation as it may damage/be harmful to the eyes. Avoid looking directly into the light source.

WARNING!
The minimum distance between the light output and illuminated objects/surfaces must be equal to or greater than 12 meters (40ft).

CAUTION!
The maximum ambient temperature (Ta) of 40° must not be exceeded.

CAUTION!
If the lens gets damaged ie. cracks or deep scratches so the output is impaired then it must be replaced.

CAUTION!
The lamp must be replaced if damaged or deformed!

CAUTION!
Turning the fixture on and off in short intervals will reduce the lamp life.

CAUTION!
To avoid damage to internal parts ie. optics, colour filters, gobos, prisms, frost filters, iris, shutters, motors, belts, wiring or lamps. Never expose the lens to direct sunlight, lighting fixtures or lasers even when the fixture is not in use.

UV RADIATION NOTICE!
This fixture emits intense UV radiation, which is harmful to the eyes and skin. The intense luminescence of the lamp can cause severe damage to the retina. NEVER operate this fixture with any of the protective casing removed.

Evora CMY470 Hybrid

The Evora CMY470 Hybrid is a feature packed 3-in-1 moving head boasting an intense Osram® SIRIUS HRI 471W discharge lamp. Crystal clear optics paired with an adjustable zoom from 1.8° to 42° allows for super tight beams through to wide washes to be achieved. The CMY470 offers both static and rotating gobo wheels, 8 rotating prisms, 2 variable frost filters, animation wheel and motorised focus. Endless colours can be achieved with CMY colour mixing, along with its colour wheel and CTO filter. Suited to rental, stage and touring the fixture is equipped with TRUE1 connections and has battery backup for offline configuration. Control is via DMX, RDM, Kling-Net, Art-NET and sACN protocols, and for further convenience wireless DMX is on-board via W-DMX Sweden.

- 1 x Osram® SIRIUS HRI 471W SN discharge lamp (7500K)
- Adjustable beam angle:
  1.8° - 21° beam mode, 3° - 42° spot mode, 7° - 46° wash mode
- Lumens – Source: 23,900
- Lumens – Output: 12,699
- Beam mode: 1.8° - 431,000 Lux @ 10m, 21° - 3,620 Lux @ 10m
- Spot mode: 3° - 180,000 Lux @ 10m, 42° - 840 Lux @ 10m
- Wash mode: 7° - 12,000 Lux @ 10m, 46° - 608 Lux @ 10m
- Motorised zoom and focus
- 8 rotating indexable prisms placed across 2 wheels
- Wheel 1: dynamic effects prism, 6 facet circular prism, 5 facet linear prism and 4 facet circular prism
- Wheel 2: 6 facet linear prism, 8 facet circular prism, 16 facet circular prism and 24 facet circular prism
- Frost 1: Medium variable frost filter (0-100%)
- Frost 2: Heavy variable frost filter (0-100%)
- CRI: 80
- High CRI filter (CRI: 90)
- Gobo wheel 1: 9 rotating, indexable, replaceable gobos + open
- Gobo wheel 2: 13 static gobos + open
- Animation wheel
- CMY colour mixing:
  Cyan 0-100%, Magenta 0-100% and Yellow 0-100%
- Colour wheel: 12 colours + CTO filter + open
- Control protocols: DMX, Kling-net, Art-net and sACN
- DMX channels: 35
- Wireless control (W-DMX Sweden transceiver)
- Manual control and master/slave modes plus built-in programs
- RDM (Remote Device Management)
- Pan/tilt transit lock and auto correction
- 16-Bit pan/tilt positioning
- Pan: 540° or 630° selectable, Tilt: 270°
- 0 – 100% dimming
- Variable strobe
- Supplied with quick release omega clamps
- 6 button menu with 2.7" LCD touch screen display
- Display battery backup for offline configuration
- USB port (firmware updates)
- powerCON TRUE1, 5-Pin XLR and etherCON inputs/outputs
- Temperature controlled fans

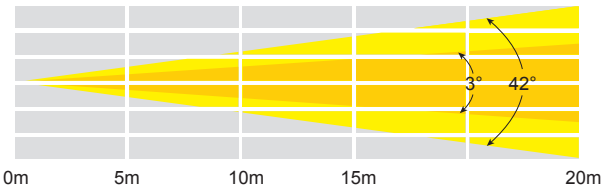| Specifications	Evora CMY470 Hybrid
Power consumption	728W
Fuse	T8A 250V
Power supply	100~240V, 50/60Hz
Noise level	Noise level: 50dBA @ 1m (auto speed)
Dimensions (H x W x D)	670 x 390 x 288mm
Weight	25.8kg
Order code	ELUM702

Beam mode

	0m	5m	10m	15m	20m
1.8° - Lux	1724000	431000	191556		107750
21° - Lux	14480	3620	1609		905

1.8° 21°
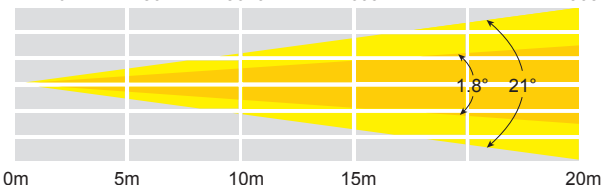
Spot mode

	0m	5m	10m	15m	20m
3° - Lux	720000	180000	80000		45000
42° - Lux	3360	840	373		210

3° 42°

Wash mode

	0m	5m	10m	15m	20m
7° - Lux	48000	12000	5333		3000
46° - Lux	2432	608	270		152

7° 46°

235mm

108mm

112mm

288mm

382mm

290mm

390mm

670mm

466mm

470mm

530mm
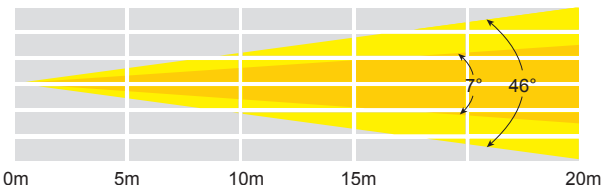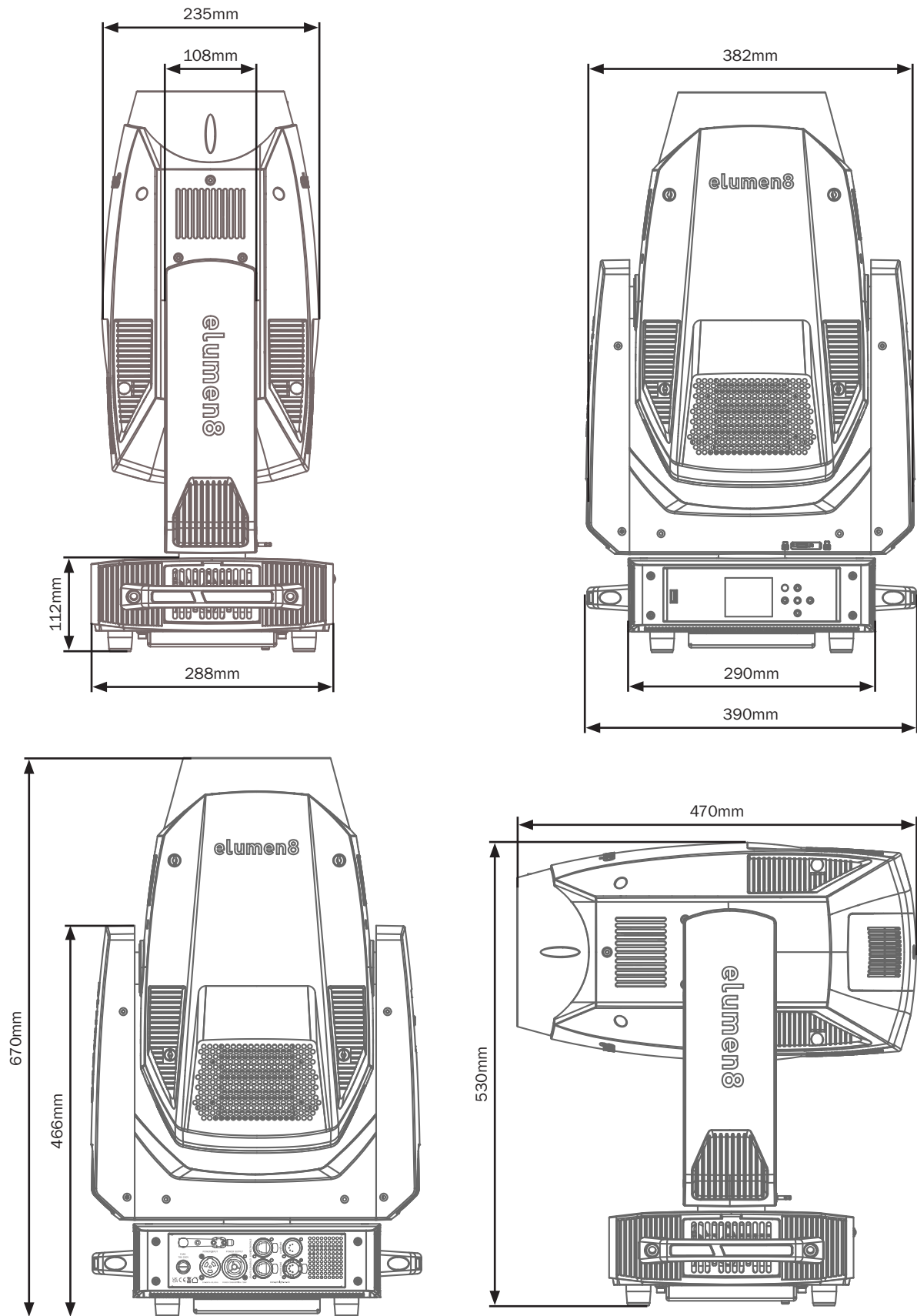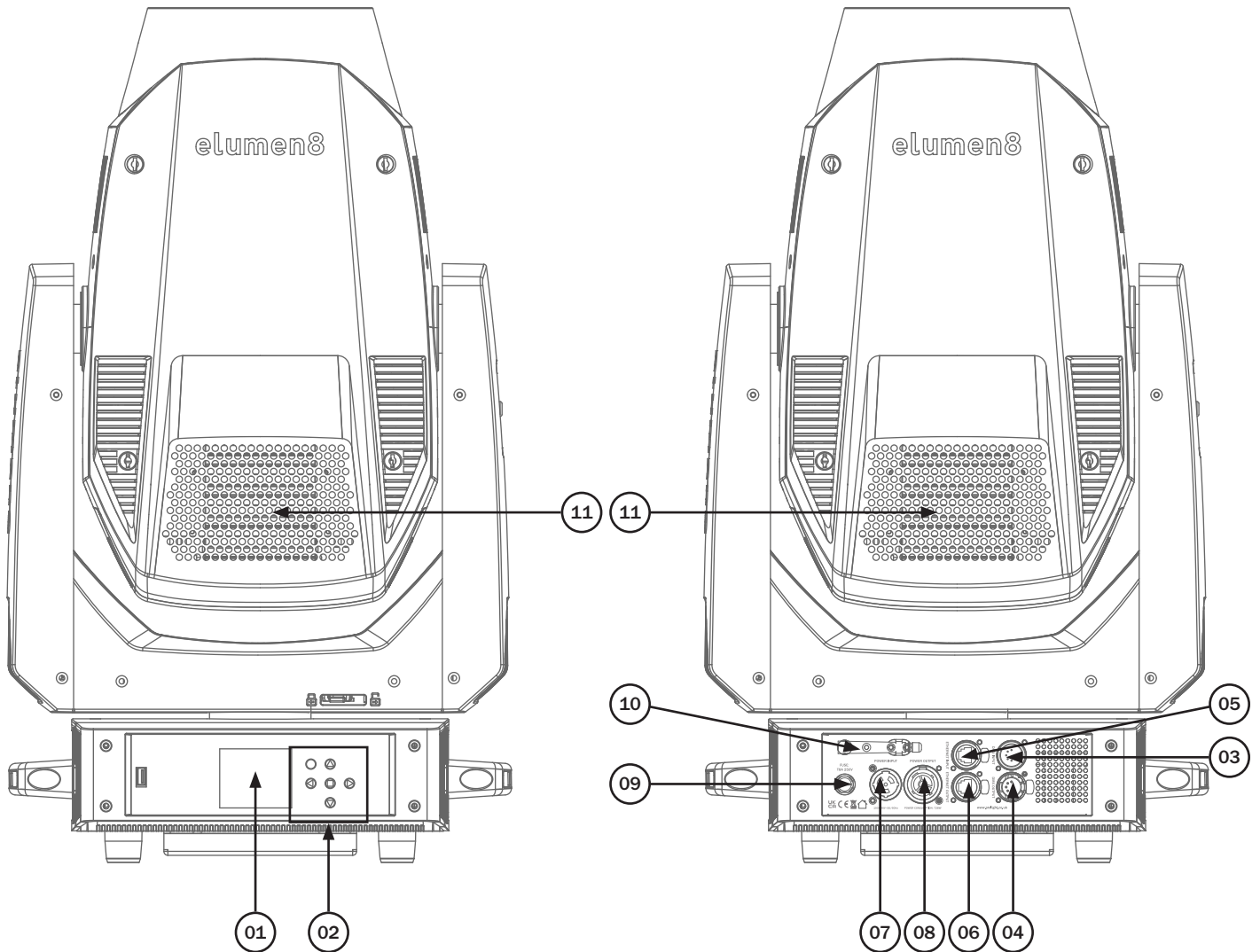
01 - LCD display
02 - Function buttons
03 - 5-Pin DMX input
04 - 5-Pin DMX output

05 - EtherCON input
06 - EtherCON output
07 - PowerCON TRUE1 input
08 - PowerCON TRUE1 output

09 - Fuse T8A 250V
10 - Wireless DMX Antenna
11 - Fans

In the box: **1 x fixture,
2 x omega clamps
& 1 x power cable**

Before installing the fixture, the supporting structure (ie. truss) must be able to hold a minimum of 10 times the fixtures weight without any deformation (eg. 15kg - 150kg point load). The fixture must be secured with a secondary safety attachment when being installed (ie. an appropriate safety cable). Never stand directly below the fixture when mounting, removing, and/or servicing.

Overhead installation requires experience and qualifications to calculate working load limits, the material being used at the installation area and periodic safety inspections of the fixture and installation material. If you do not have the relevant experience and/or qualifications please do not attempt the installation yourself. The installation should be checked annually by a qualified person.
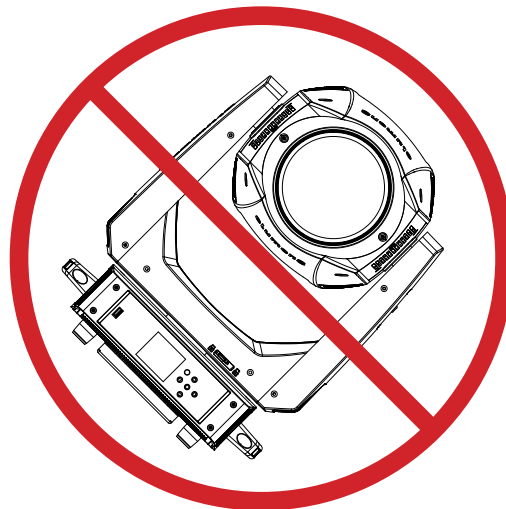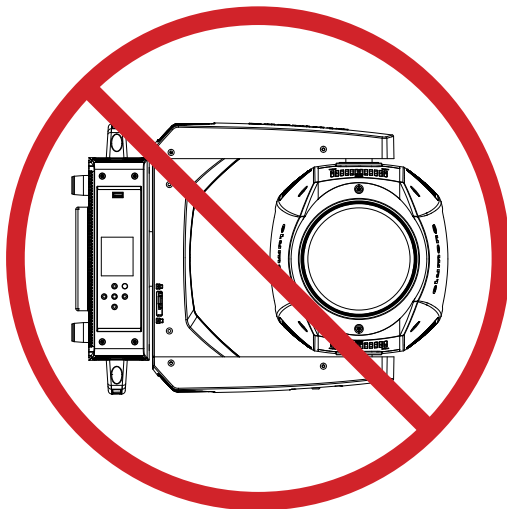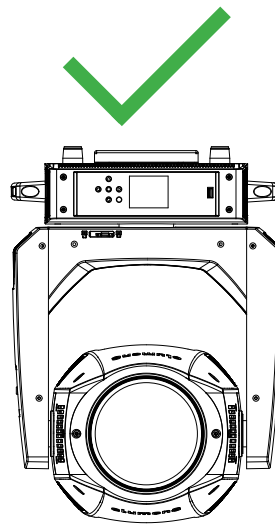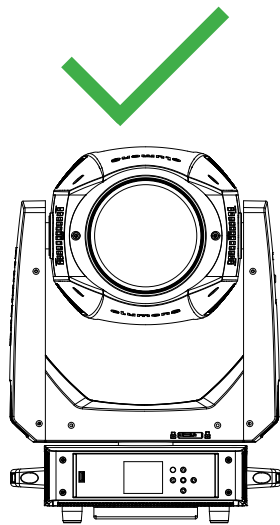
The eLumen8 Evora CMY470 Hybrid can be operated where the base of the fixture is horizontally orientated, this includes standing the fixture upright on a flat, level surface or hanging the fixture upside down. Do NOT install the fixture in a sideways position or in a position where the base of the fixture is orientated vertically or at an angle. Always use a safety wire as an extra safety precaution to prevent damage/injury in the event a clamp fails (see the next page for clamp installation). Never use the carry handles for secondary attachments.

<u>Installation:</u>

1. Fasten each clamp to the omega clamps with a bolt and lock nut through the hole in the omega clamp.

2. Align and insert the omega clamp quick-lock fasteners with the respective holes on the bottom of the unit.

3. Tighten both locking fasteners clockwise on each omega clamp ensuring they're fully secure.

4. Mount the fixture onto your truss system via the clamps and tighten to ensure secure.

5. Pull the safety cable through the safety cable holes located on the metal base plate on the underside of the fixture and around the truss.

Pan mechanism lock and release every 45°

45° 45° 45° 45° 45° 45° 45° 45°

UNLOCKED

LOCKED

Tilt mechanism lock and release every 45°

45° 45° 45° 45° 45° 45°

LOCKED

UNLOCKED
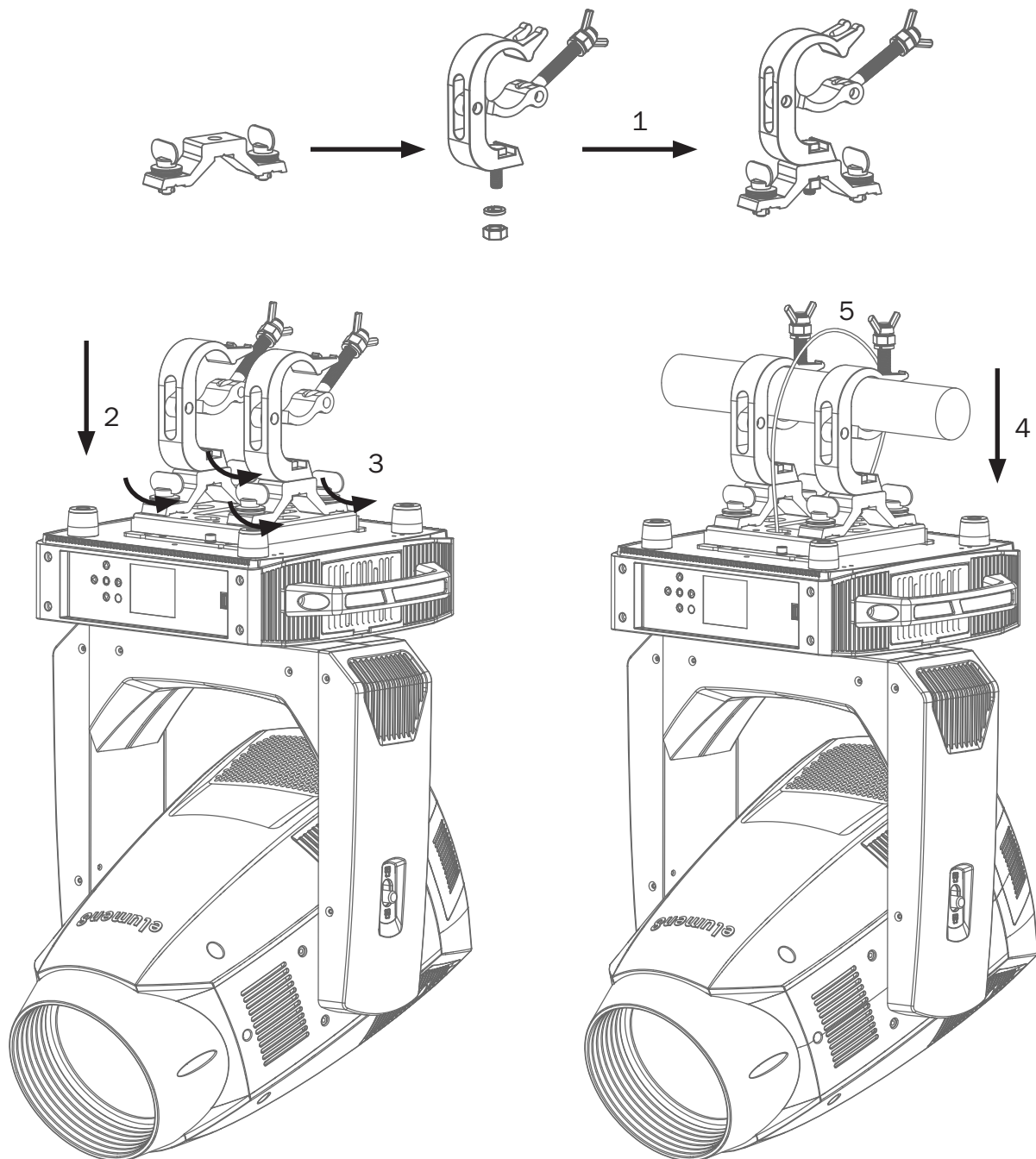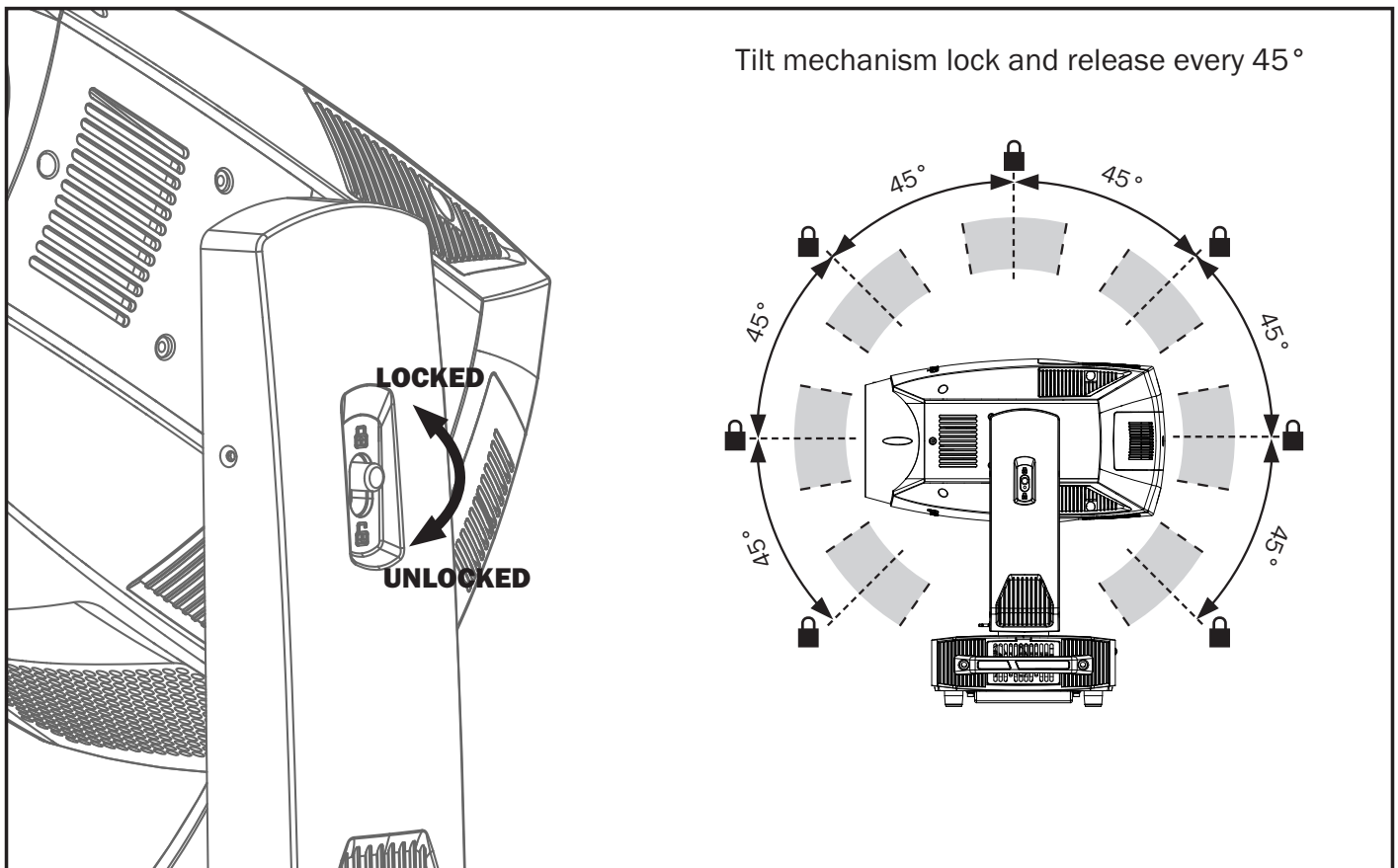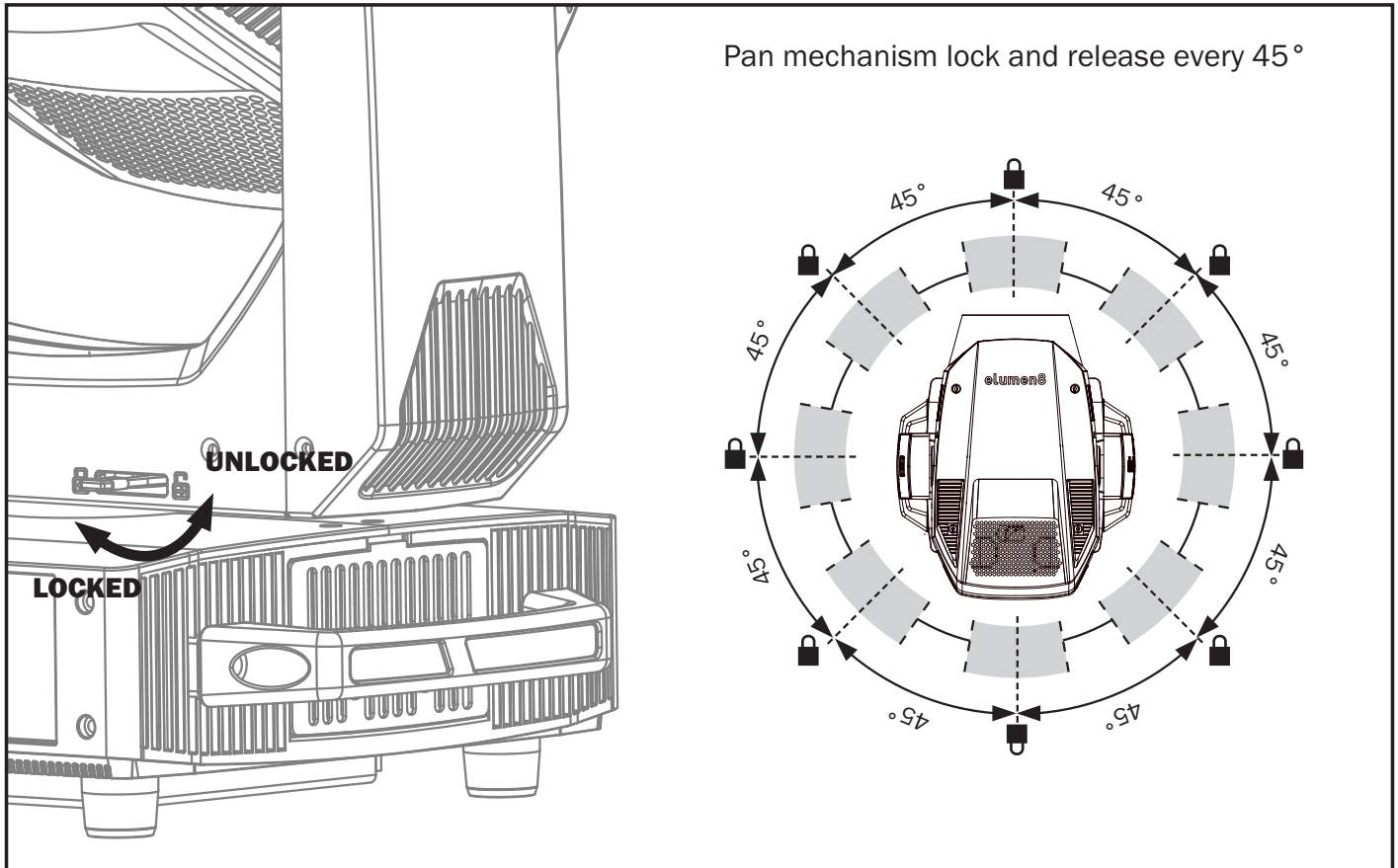
Discharge Lamp Warning:

This fixture is fitted with a Osram® SIRIUS HRI 471W SN Discharge Lamp, which is highly prone to damage if improperly handled. **NEVER** touch the lamp with your bare hands, as the oil from your hands will shorten the life of the lamp. **NEVER** move the lamp until the unit has had the appropriate time to cool. Discharge lamps are **NOT** covered under the warranty that comes with this fixture. Avoid switching the fixture **ON** and **OFF** repeatedly in short durations as this will reduce the lamps life and intensity. To achieve the intensity discharge lamps are renowned for, the lamp uses gas sealed in a high pressure environment.

Due to this high pressure involved with the manufacture of the lamp, it **MAY EXPLODE DURING PROLONGED EXTENSIVE USE**. This risk is increased with age and we recommend extra care is taken when dealing with older lamps. The lamp must be replaced at the end of its recommended duty cycle. Extreme caution should be taken when operating this or any fixture fitted with a discharge lamp.

Lamp replacement:

To ensure a safe lamp change please read the following instructions carefully.

When the lamp reaches 66 hours before its service time, the display will flash the message "**Replace Lamp Soon**" for up to 5 minutes. During this period, the fixture will still work normally. This will repeat again when the lamp reaches 20 hours before its service time. When the lamp reaches its service time, the display will flash the message "**Lamp Timeout Use**", "**Replace Lamp Now**" for up to 5 minutes. After 5 minutes, the fixture will return to normal operation. When the lamp is continuously used passed its service time, the display will flash the message "**Lamp Timeout Use, Replace Lamp Now**" for up to 5 minutes. After 5 minutes, the fixture will return to normal operation. See page 11 for instructions on changing the lamp.

Attention: Damages caused by the failure to replace the bulb in time are not subject to warranty.

Disconnect the fixtures power supply before replacing the lamp. Let the fixture cool for a minimum of 60 minutes before replacing the lamp.

Never touch the lamp with bare hands, always wear gloves as oil from hands will shorten the lamps life.

Make sure all covers/casings are replaced/secured before operating the fixture to prevent risk and/or damage to the eyes retina.

Only use GENUINE Osram® Lamps. Other branded lamps will cause damage and will void the fixtures warranty.

Discharge Lamp Installation:
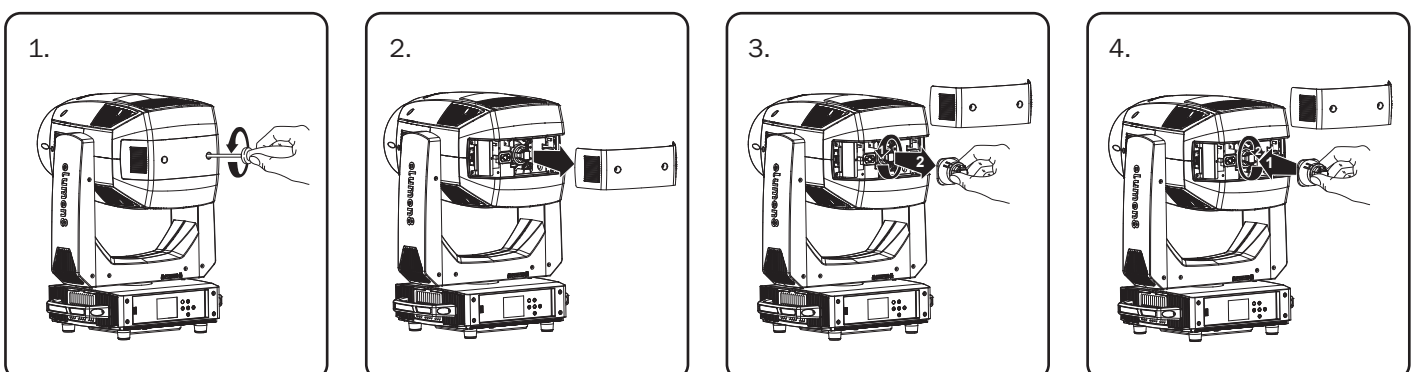
> **DANGER!**
> Unplug the fixture from the mains before replacing the lamp!
> Never operate this fixture without the lamp!
> Do not operate this fixture without all external covers!

Inserting a new lamp:

1. Disconnect the fixture from the mains and allow it to cool for a minimum of 60 minutes.

2. Loosen the 2 screws (1) on the lamp cover and remove the lamp cover (2) to access the lamp compartment.

3. Remove both Fastons (terminal connectors) (3) from the flat blades of the lamp base.

4. Holding the lamp by the ceramic base (4), gently rotate the lamp anti-clockwise and pull out from the recess.

5. Holding the new lamp by its ceramic base (4), gently inset the lamp into the lamp compartment, and rotate the lamp clockwise into the recess.

Only use the recommended lamp. Damages caused by not following the guidelines outlined in this manual are not subject to warranty. Please follow the lamp manufacturers notes.

Warning! Do not touch the lamp envelope with bare hands. Should this happen the bulb must be cleaned with a cloth soaked in alcohol and dried once cleaned.

6. Slide both Fastons (3) onto the lamp.

7. Re-insert the lamp cover (2) and tighten the 2 screws (1) on the lamp cover.

8. Connect the fixture to the mains.

9. Reset the 'Lamp Hours' in the fixtures menu.
(See page 23 'Lamp Hours Reset' for instructions on how to clear the lamp hours.)

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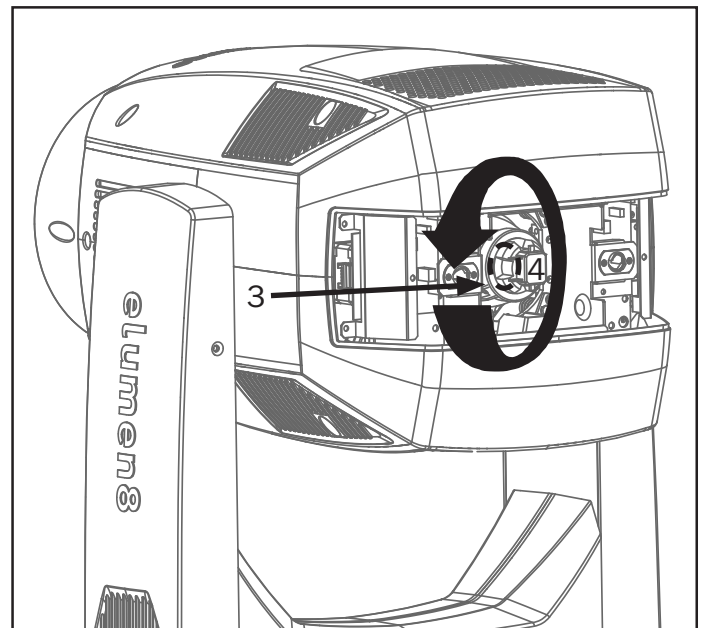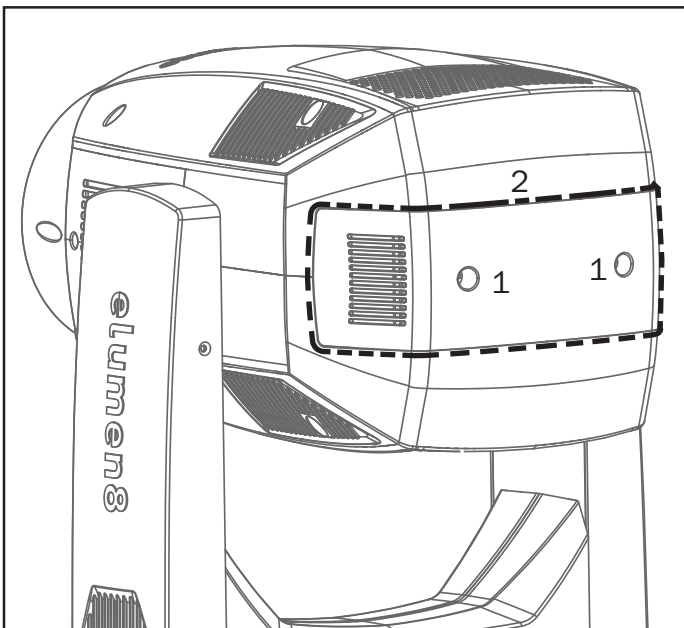
<u>**Lamp adjustment:**</u>

The lamp holder is aligned at the factory. Due to slight differences between lamps, the fine adjustment of a lamp may improve the light performance.

For lamp adjustment please use the 4 screws on the lamp assembly plate marked A and the adjustment screws marked B.

Image on the wall

Centred Lamp

To adjust the lamp in the fixture:

1. Connect the fixture to the mains and switch on the lamp, open the shutter (strobe) and dimmer and set the focus. Colour wheel and gobo wheel should be open and check the image on the wall.
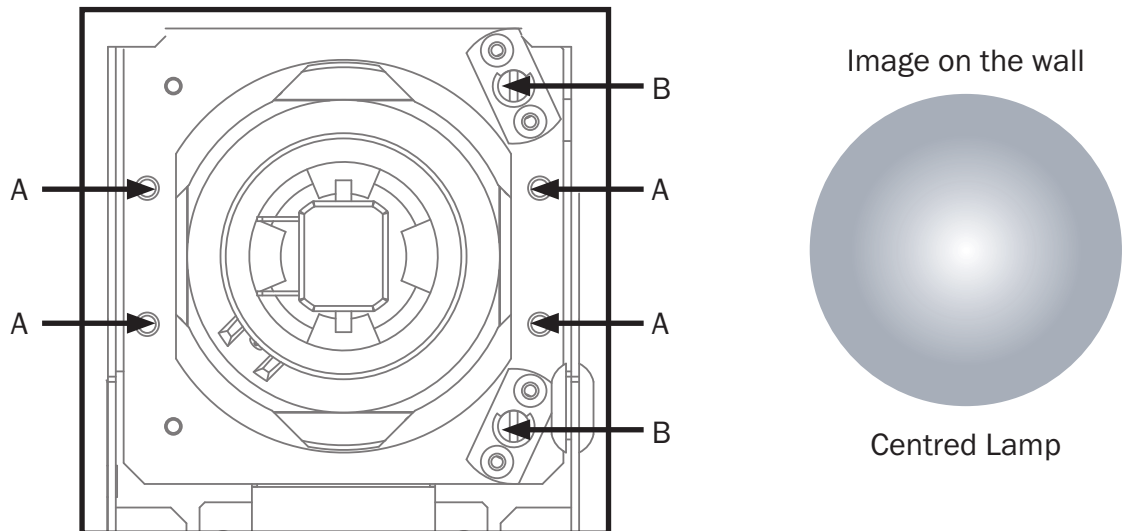
2. Disconnect the fixture from the mains.

3. Loosen the 2 screws (1) on the lamp cover and remove the lamp cover (2) to access the lamp compartment.

4. Loosen the 4 screws on the lamp assembly plate labelled (A).
(Do not remove these totally, a half turn will suffice.)

5. Move the lamp into the required position (left/right) by using a suitable flat headed screwdriver inserted into the adjustment screws labelled B and rotate clockwise (lamp moves left)/anti-clockwise (lamp moves right) until the lamp has been adjusted to your requirements.

6. Tighten the 4 screws on the lamp assembly plate (A).

7. Re-insert the lamp cover (2) and tighten the 2 screws (1) on the lamp cover.

8. Connect the fixture to the mains and check the adjustment is now correct.

9. If the fixture needs further adjustment repeat steps 2-8.

Please note: If you need to adjust the lamp up/down please use the gobo offset adjustment on page 22.

The lamp MUST be adjusted with the fixture disconnected from the mains!
Do not operate this fixture without all external covers!

Lamp adjustment continued:

Due to light refraction, the lamp should be moved in the direction of the hotspot to centralise it. Please see diagram below.

Image on the wall

Move the lamp
to the left

Image on the wall

Move the lamp
to the right
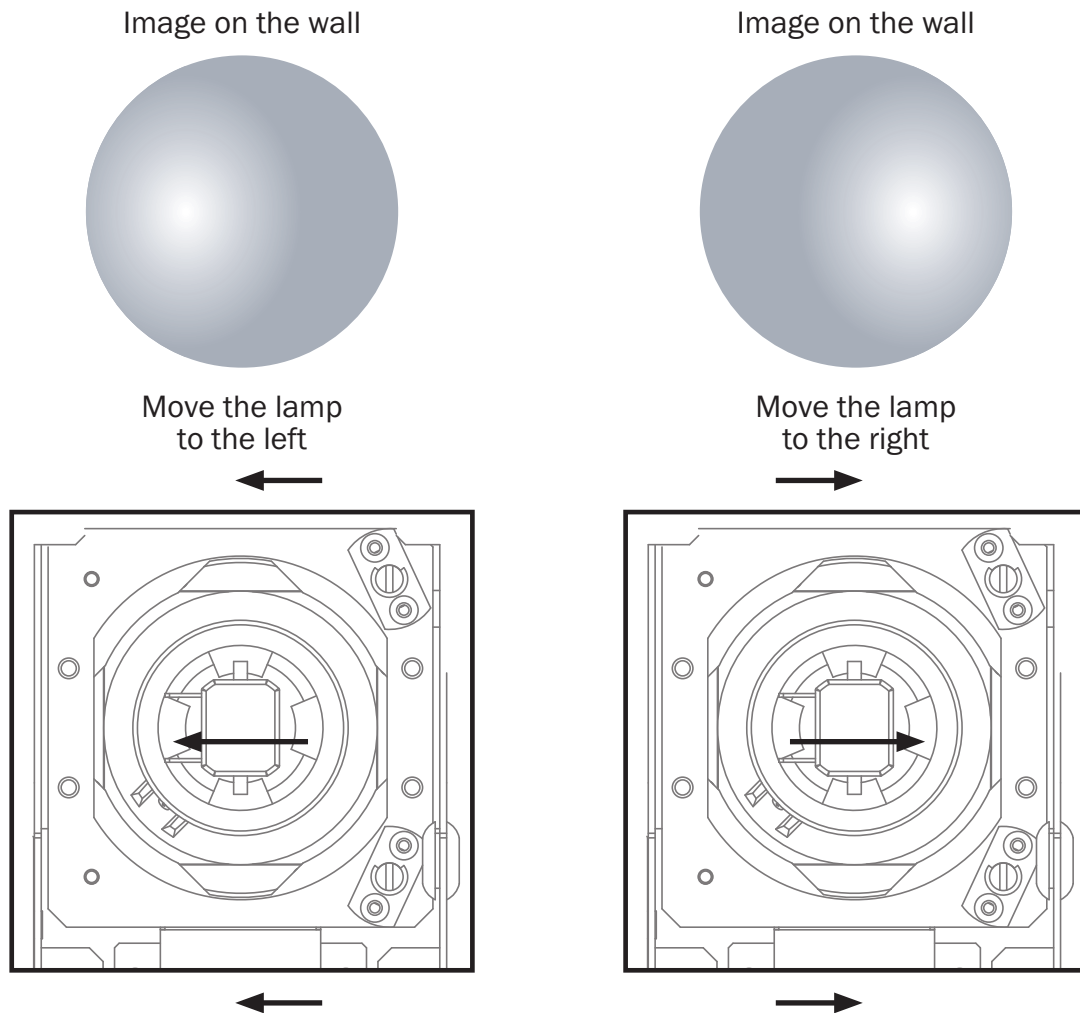
Please note: The adjusted hotspot may move during the first 100 hours of lamp operation as the lamp stabilises whilst its burning. Please adjust the lamp if the hotspot moves out of the centre.

Rotating Gobo Replacement:

The fixture is supplied with 9 rotating, replaceable gobos. See below for installation instructions.

1) Place the fixture on a stable, flat surface ensuring you are indoors in a dust free location. Disconnect and isolate from power and let the unit cool for at least 15 minutes. Engage the pan and tilt locks (shown above).

2) Use a Phillips head screwdriver to loosen the four screws on each side of the head casing. These are twist lock screws and do not come free of the casing.

3) Remove the safety clips securing the casings to the head chassis.
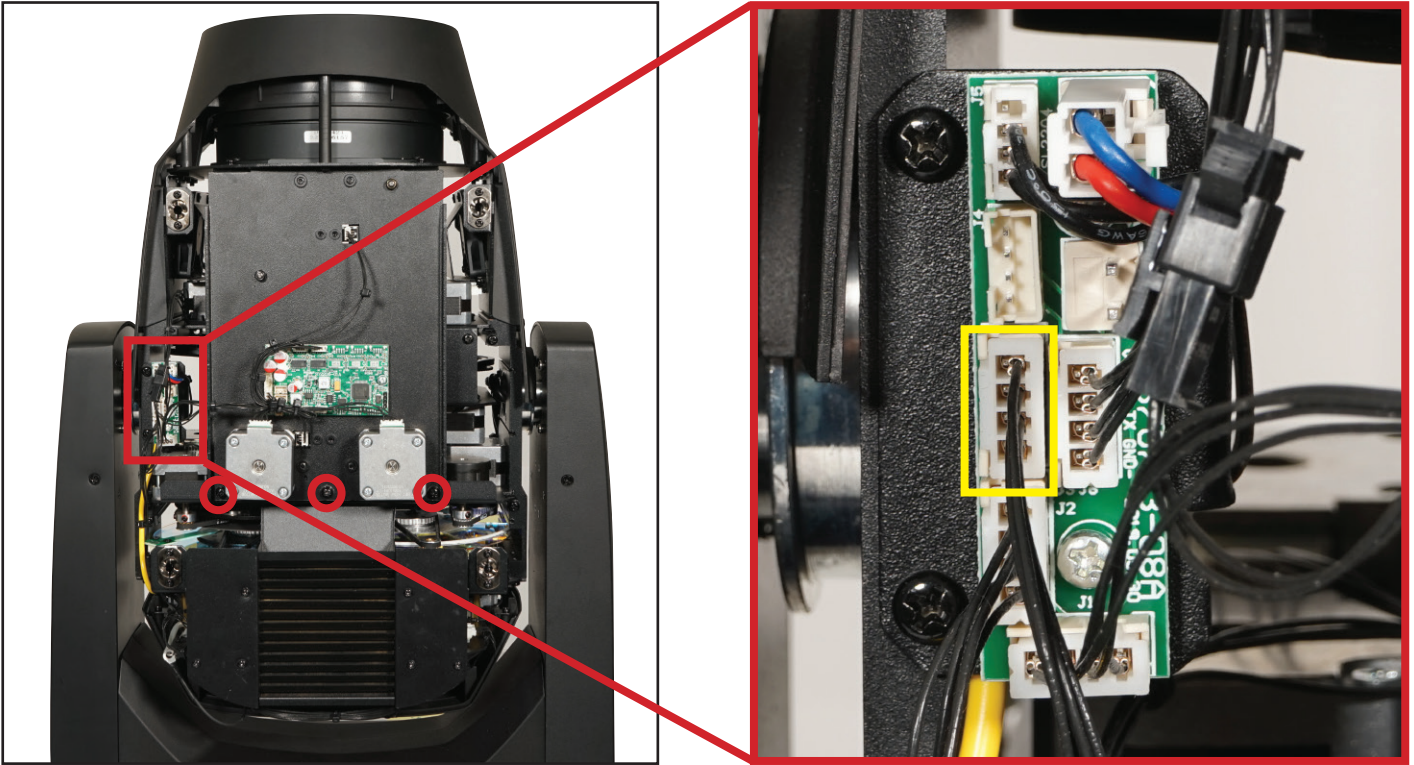
4) On the prism module, find the 4-pin connector located to the left of the motor driver PCB. Disconnect this connector. This will help improve access to the gobo wheel module.

5) On the zoom/focus motor plate unscrew the 3 screws that hold this plate to the gobo wheel module.
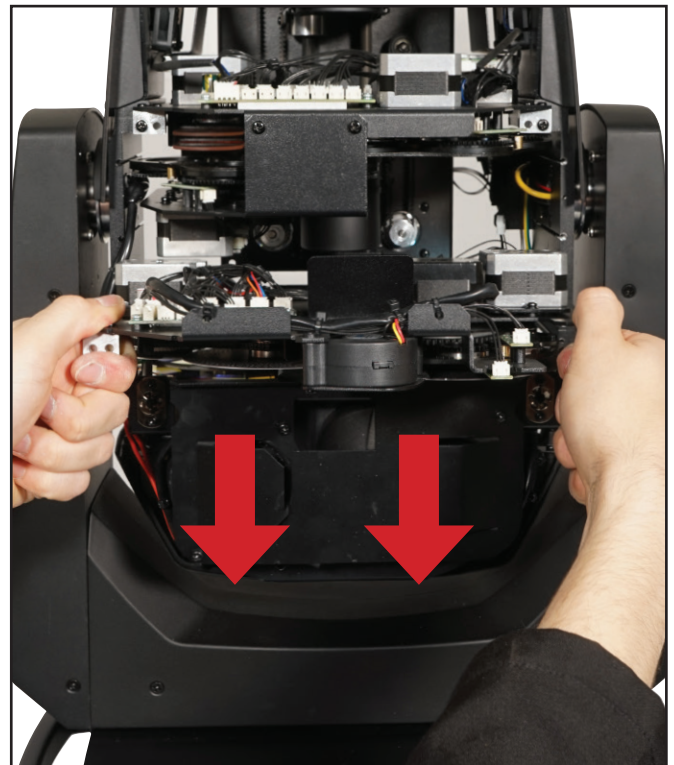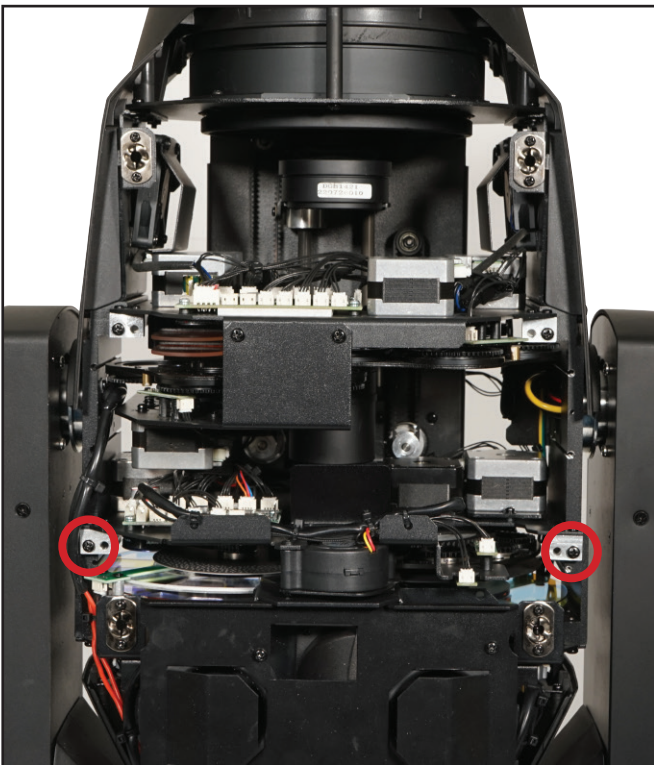
6) Turn the head round and unscrew the screws on the gobo wheel module. Carefully slide the gobo wheel module out of its runners. Place the gobo wheel module to on a flat surface ensuring you are indoors in a dust free location.
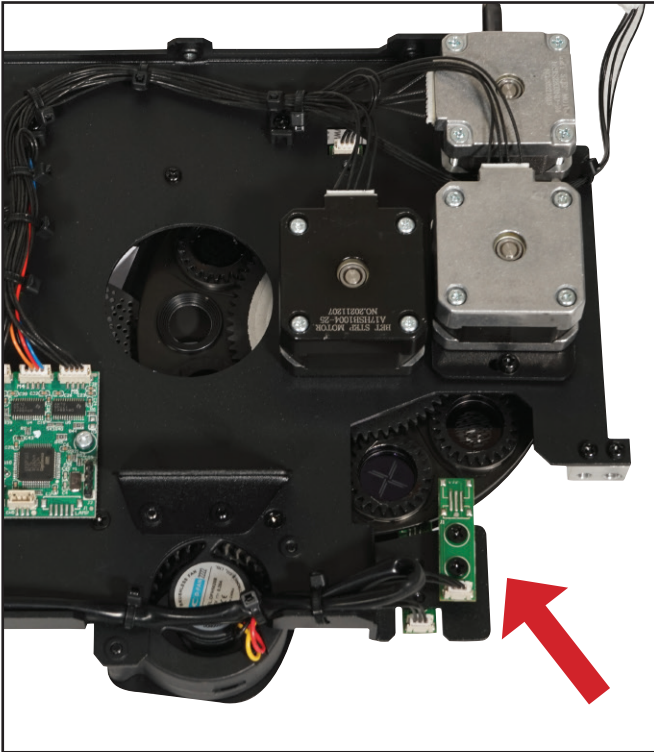
7) Unscrew the 2 screws from the hall effects sensor located over the rotating gobo wheel. Move this out the way before continuing.
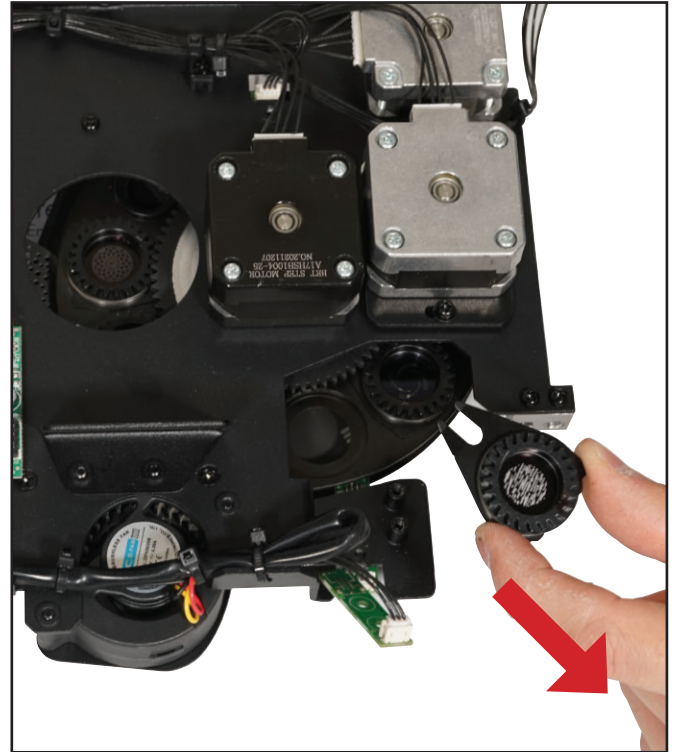
8) Locate the gobo that will be replaced. Grip the edges of the gobo holder and carefully lift the holder until is raised from the surface of the gobo wheel Pull the gobo holder towards you, away from the gobo wheel.
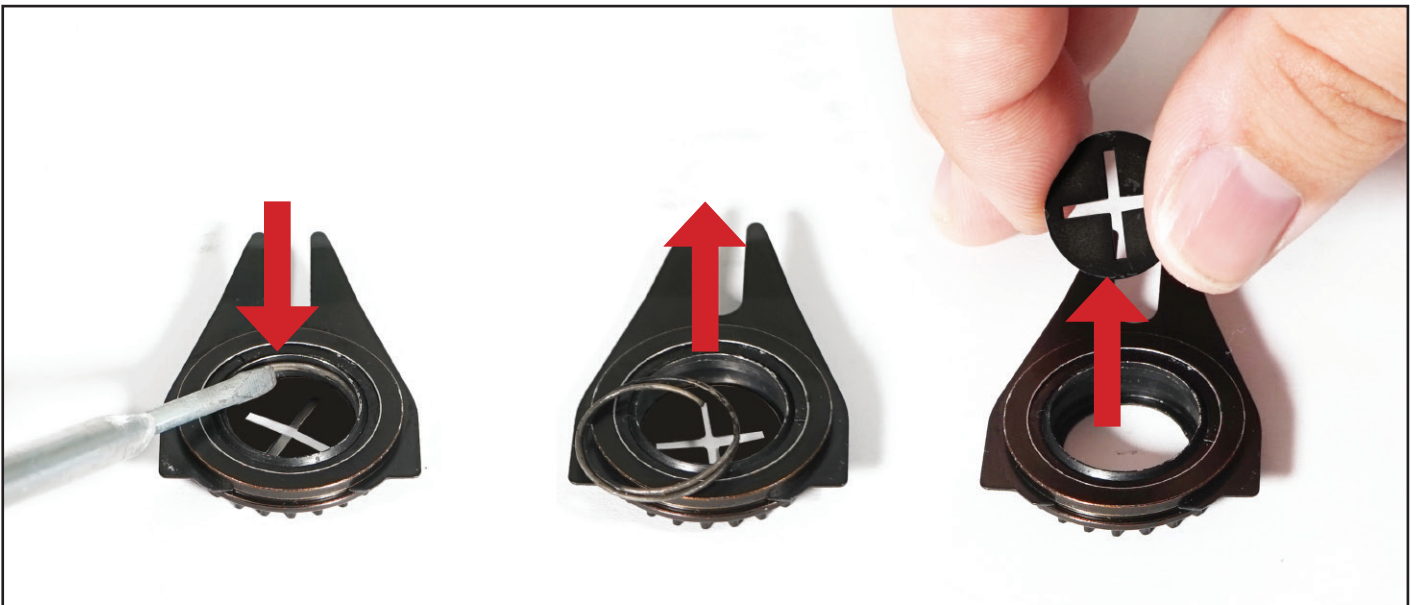
9) Place the gobo on a flat surface with the gear side down. Locate the tab of the spring clip using a precision pick (or similar) and push the spring clip inwards to release it and remove the spring clip. Carefully remove the gobo from the holder avoiding scratching the gobo. Install the new gobo and follow the previous steps in reverse order.

<u>Control Panel Menu:</u>

The LCD control panel situated on the front of the fixture allows the user to access the menu system to adjust the fixtures settings.

When the unit has been powered on the display will show "**Software Update**" followed by "**eLumen8 Evora CMY470 Hybrid**" and then "**Ethernet Reset Please Wait...**" followed by "**Motor Reset Please Wait...**". The fixture will then return to its home screen.

Pressing the "**MENU**" button once will take the user to the fixtures main menu. Using the "**UP**" and "**DOWN**" buttons you can then navigate between the different options in the main menu. Pressing the "**ENTER**" button on one of these options allows you to access the sub menu where you can use the "**LEFT**" and "**RIGHT**" buttons to select option/value required. Once the option/value has been selected press the "**ENTER**" button once more to confirm the setting.
To exit out of any of the above options, press and hold the "**MENU**" button.

The LCD control panel can be used via the internal battery. To access this press and hold the "**MENU**" button for 5 seconds until the fixtures home screen is displayed. The LCD display will automatically shut off after 20 seconds of inactivity.

<u>Error Codes:</u>

When the unit is powered on the unit will automatically perform a motor reset. If there is a problem with any of the motors the display will flash and display "**Error:**" along with a list of motor errors on the LCD control panel. Please power the unit off and on to reset the motors again.
(The full list of errors codes can be found on the next page).

Error Code	Description
Pan	The movement is not located in the default position after the reset. This message will appear if the sensor has failed or magnet is missing, or if there is a motor failure (defective motor or a defective motor IC drive on the main PCB). This error may also be displayed if the yoke was blocked during a reset function.
Tilt	
Cyan	The movement is not located in the default position after the reset. This message will appear if the sensor has failed or magnet is missing, or if there is a motor failure (defective motor or a defective motor IC drive on the main PCB).
Magenta	
Yellow	
Colour	
RotGobo	
RotGoboInd	
Gobo	
Animation	
Prism1	
Prism1Rot	
Prism2	
Prism2Rot	
Focus	
Zoom	
HeadTemp	This message will appear if the sensor or fan has failed or the fixtures temperature is too hot.
HeadFan1	
HeadFan2	
GoboFan	
BaseTemp	
BaseFan	
BallastFan	
Blower1	
Blower2	
Blower3	

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
DMX Address		**001**-512		DMX Address Setting
Network	Input	OFF		Activate/deactivate network input
		ON		
	Protocol	**ArtNET**		Network Protocol Setting
		sACN		
	Address	ServicePIN	**000**-255 (PIN = 050)	Pin to enter Address Menu
		Universe	**000**-255	Universe Setting (PIN Required)
		IP Address	xxx.xxx.xxx.xxx **(002.000.000.002)**	IP Address Setting (PIN Required)
		Subnet Mask	xxx.xxx.xxx.xxx **(255.000.000.000)**	IP Subnet Mask Setting (PIN Required)
	DMX Output	**OFF**		Output network signal via DMX
		ON		
Wireless	W-DMX	**OFF**		Activate/deactivate W-DMX
		ON		
	Transmit/ Receive	Transmit		Configure W-DMX as a transmitter/receiver
		Receive		
	W-DMX Protocol	G3		G3 Transmission Standard
		G4S		G4S Transmission Standard
	Tx/Rx Link	Link		Link with W-DMX devices. W-DMX must be active for all devices and the link with a transmitter must be suspended (Receive Reset)
		UnLink		Unlink all devices
	Rx Reset	NO		Do not suspend link with transmitter
		YES		Suspend link with transmitter

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
Stand Alone	Manual Control	Pan	**000-255**	Manual Control Settings
		Pan Fine		
		Tilt		
		Tilt Fine		
		Colour		
		Macros		
		CMY Mode		
		Cyan		
		Cyan Fine		
		Magenta		
		Magenta Fine		
		Yellow		
		Yellow Fine		
		High CRI		
		Rot Gobo		
		Gobo Index		
		Index Fine		
		Fixed Gobo		
		Strobe		
		Dimmer		
		Dimmer Fine		
		Zoom		
		Zoom Fine		
		Focus		
		Focus Fine		
		Frost 1		
		Frost 2		
		Prism 1		
		Prism 1 Rot		
		Prism 2		
		Prism 2 Rot		
		Animation		
	Programs	Program 1	Speed (000-255)	Internal Programs
			Fade (000-255)	
		Program 2	Speed (000-255)	
			Fade (000-255)	
		Program 3	Speed (000-255)	
			Fade (000-255)	
		...		
		Program 16	Speed (000-255)	
			Fade (000-255)	

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
Stand Alone	Slave Mode	OFF		Slave Mode
		ON		
Settings	Lamp Control	**OFF**		Lamp Setting
		ON		
	Lamp On Power	**OFF**		Lamp turns on when the unit is powered on
		ON		
	Power Mode	**Full Power Mode**		Power Mode Setting
		Eco Mode		
	Split Colour	**OFF**		Split Colour Setting
		ON		
	Display	Backlight	02M-60M **(06M)**	LCD Backlight Setting
		Rotate 180°	**OFF**	LCD Display Inverse Setting
			ON	
		Key Lock	**OFF**	Control Panel Lock Setting (Press and hold MODE for 3 seconds to unlock)
			ON	
		DispFlash	**OFF**	Display Flash Setting When No DMX Signal
			ON	
	Power Saver	Hibernation	**OFF**	Hibernation Setting
			01M-099M	
	DMX Fail	Blackout		DMX Fail Setting
		Hold		
		Programs		
		Manual		
	Pan/Tilt	Pan Inverse	**OFF**	Pan Inverse Setting
			ON	
		Tilt Inverse	**OFF**	Tilt Inverse Setting
			ON	
		Pan Angle	540	Pan Angle setting
			630	
Service	Calibrate (PIN = 050)	Pan		Calibration Settings
		Tilt	000-255	
		Cyan		
		Magenta		
		Yellow		
		High CRI		
		Colour		
		Colour 0-1		
		Colour 2-3		
		Colour 3-4		
		Colour 4-5		
		Colour 5-6		
		Colour 6-7		
		Colour 7-8		

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
		Colour 8-9		
		Colour 9-10		
		Colour 10-11		
		Colour 11-12		
		Colour 12-13		
		Colour 13-0		
		Gobo		
		GoboRot. 1		
		GoboRot. 2		
		GoboRot. 3		
		GoboRot. 4		
		GoboRot. 5		
		GoboRot. 6		
		GoboRot. 7		
		GoboRot. 8		
		GoboRot. 9		
		Focus Spot Mode		
		FocusGoboR1		
		FocusGoboR2		
		FocusGoboR3		
Service	Calibrate (PIN = 050)	FocusGoboR4	000-255	Calibration Settings
		FocusGoboR5		
		FocusGoboR6		
		FocusGoboR7		
		FocusGoboR8		
		FocusGoboR9		
		Fixed Gobo		
		FocusFixG1		
		FocusFixG2		
		FocusFixG3		
		FocusFixG4		
		FocusFixG5		
		FocusFixG6		
		FocusFixG7		
		FocusFixG8		
		FocusFixG9		
		FocusFixG10		
		FocusFixG11		
		FocusFixG12		
		FocusFixG13		
		Prism1		
		Prism1 Rot1		

elumen8

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
Service	Calibrate (PIN = 050)	Prism1 Rot2	000-255	
		Prism1 Rot3		
		Prism1 Rot4		
		Prism2		
		Prism2 Rot1		
		Prism2 Rot2		
		Prism2 Rot3		
		Prism2 Rot4		
		Focus		
		Zoom		
		Animation		
		Frost 1		
		Frost 2		
		Flat		
		Shutter 1		Calibration Settings
		Shutter 2		
	Auto Test	Testing...		Auto Test
	Motor Reset	All		Motor Reset
		Pan & Tilt		
		Head		
	USB Update	**OFF**		USB Update
		ON		
	Factory	**OFF**		Factory Settings
		ON		
Information	Runtime	Total Time		Runtime Information
		CurrentTime		
		LampTime		
		Password (PIN = 050)		
		Reset		
	Temperature	Head	xxx°	Temperature Information
		Base	xxx°	
		Units	C°/ F°	
	Fan Speed	Base Fan: xxxxRPM		Fan Speed Information
		Blower 1: xxxxRPM		
		Blower 2: xxxxRPM		
		...		
	Model	eLumen8 Evora CMY470 Hybrid		Model Information
	RDM UID	0x09A5-xxxxxxxx		RDM UID
	Firmware	1U: Vx.x.xx 2U: Vx.x.xx 3U: Vx.x.xx ...		Software Version
	Error. Info	NONE/Pan, Tilt... (See page 18)		Current Fixture Errors

DMX channel modes:

Channel	Value	Function	Default Value
1	000-255	Pan movement (8 bit)	127
2	000-255	Pan fine (16 bit)	127
3	000-255	Tilt movement (8 bit)	127
4	000-255	Tilt fine (16 bit)	127
		Colour Wheel (split colour disabled)	
5 (when split colour is disabled in the menu - see page 5)	000-005	Open	000
	006-011	Colour 1	
	012-017	Colour 2	
	018-023	Colour 3	
	024-029	Colour 4	
	030-035	Colour 5	
	036-041	Colour 6	
	042-047	Colour 7	
	048-053	Colour 8	
	054-059	Colour 9	
	060-065	Colour 10	
	066-071	Colour 11	
	072-077	Colour 12	
	078-083	Colour 13	
	084-191	Colour wheel indexing	
	192-222	Scroll clockwise (fast-slow)	
	223-225	Stop	
	226-255	Scroll anti-clockwise (slow-fast)	
		Colour Wheel (split colour enabled)	
5 (when split colour is enabled in the menu - see page 5)	000-015	Open	000
	016-019	Open/Colour 1	
	020-023	Colour 1	
	024-027	Colour 1/Colour 2	
	028-031	Colour 2	
	032-035	Colour 2/Colour 3	
	036-039	Colour 3	
	040-043	Colour 3/Colour 4	
	044-047	Colour 4	
	048-051	Colour 4/Colour 5	
	052-055	Colour 5	
	056-059	Colour 5/Colour 6	
	060-063	Colour 6	
	064-067	Colour 6/Colour 7	
	068-071	Colour 7	
	072-075	Colour 7/Colour 8	

Channel	Value	Function	Default Value
		Colour Wheel (split colour enabled)	
5 (cont.) (when split colour is enabled in the menu - see page 5)	076-079	Colour 8	000
	080-083	Colour 8/Colour 9	
	084-087	Colour 9	
	088-091	Colour 9/Colour 10	
	092-095	Colour 10	
	096-099	Colour 10/Colour 11	
	100-103	Colour 11	
	104-107	Colour 11/Colour 12	
	108-111	Colour 12	
	112-115	Colour 12/Colour 13	
	116-119	Colour 13	
	120-123	Colour 13/Open	
	124-127	Open	
	128-187	Scroll clockwise (fast-slow)	
	188-195	Stop	
	196-255	Scroll anti-clockwise (slow-fast)	
		Colour Macros (See page 23)	
6	000-005	No function	000
	006-030	Macro 1	
	031-055	Macro 2	
	056-080	Macro 3	
	081-105	Macro 4	
	106-130	Macro 5	
	131-155	Macro 6	
	156-180	Macro 7	
	181-205	Macro 8	
	206-230	Macro 9	
	231-255	Macro 10	
		CMY Mix Mode	
7	000-127	Full	000
	128-255	Effect Macros	
		Cyan	
		Full	
	000-255	Cyan (0-100%)	000
8		Effect Macros	
	000-170	Cyan (0-100%)	000
	171-189	Cyan (100%-open)	
	190-221	Scroll clockwise (fast-slow)	
	222-223	Stop	
	224-255	Scroll anti-clockwise (fast-slow)	

Channel	Value	Function	Default Value
9	000-255	Cyan Fine	000
	Magenta		
	Full		
	000-255	Magenta (0-100%)	000
	Effect Macros		
10	000-170	Magenta (0-100%)	
	171-189	Magenta (100%-open)	
	190-221	Scroll clockwise (fast-slow)	000
	222-223	Stop	
	224-255	Scroll anti-clockwise (fast-slow)	
11	000-255	Magenta Fine	000
	Yellow		
	Full		
	000-255	Yellow (0-100%)	000
	Effect Macros		
12	000-170	Yellow (0-100%)	
	171-189	Yellow (100%-open)	
	190-221	Scroll clockwise (fast-slow)	000
	222-223	Stop	
	224-255	Scroll anti-clockwise (fast-slow)	
13	000-255	Yellow Fine	000
14	000-255	High CRI filter (0-100%)	000
	Rotating Gobo Wheel		
15	000-002	Open	
	003-008	Open Gobo	
	009-019	Rotating Gobo 1	
	020-029	Rotating Gobo 2	
	030-039	Rotating Gobo 3	
	040-049	Rotating Gobo 4	
	050-059	Rotating Gobo 5	
	060-069	Rotating Gobo 6	
	070-079	Rotating Gobo 7	000
	080-089	Rotating Gobo 8	
	090-099	Rotating Gobo 9	
	100-109	Rotating Gobo 1 Shake (slow-fast)	
	110-119	Rotating Gobo 2 Shake (slow-fast)	
	120-129	Rotating Gobo 3 Shake (slow-fast)	
	130-139	Rotating Gobo 4 Shake (slow-fast)	
	140-149	Rotating Gobo 5 Shake (slow-fast)	
	150-159	Rotating Gobo 6 Shake (slow-fast)	
	160-169	Rotating Gobo 7 Shake (slow-fast)	

Channel	Value	Function	Default Value
15 (cont.)	170-179	Rotating Gobo 8 Shake (slow-fast)	000
	180-189	Rotating Gobo 9 Shake (slow-fast)	
	190-221	Scroll clockwise (fast-slow)	
	222-223	Stop	
	224-255	Scroll anti-clockwise (slow-fast)	
16	**Rotating Gobo Wheel Index**		000
	000-127	Rotating Gobo Indexing	
	128-189	Scroll clockwise (fast-slow)	
	190-193	Stop	
	194-255	Scroll anti-clockwise (fast-slow)	
17	000-255	Rotating Gobo Indexing Fine	000
18	**Fixed Gobo Wheel**		000
	000-029	Open	
	030-035	Gobo 1	
	036-041	Gobo 2	
	042-049	Gobo 3	
	048-053	Gobo 4	
	054-059	Gobo 5	
	060-065	Gobo 6	
	066-071	Gobo 7	
	072-077	Gobo 8	
	078-083	Gobo 9	
	084-089	Gobo 10	
	090-095	Gobo 11	
	096-101	Gobo 12	
	102-107	Gobo 13	
	108-113	Gobo 1 Shake (slow-fast)	
	114-119	Gobo 2 Shake (slow-fast)	
	120-125	Gobo 3 Shake (slow-fast)	
	126-131	Gobo 4 Shake (slow-fast)	
	132-137	Gobo 5 Shake (slow-fast)	
	138-143	Gobo 6 Shake (slow-fast)	
	144-149	Gobo 7 Shake (slow-fast)	
	150-155	Gobo 8 Shake (slow-fast)	
	156-161	Gobo 9 Shake (slow-fast)	
	162-167	Gobo 10 Shake (slow-fast)	
	168-173	Gobo 11 Shake (slow-fast)	
	174-179	Gobo 12 Shake (slow-fast)	
	180-185	Gobo 13 Shake (slow-fast)	
	186-217	Scroll clockwise (fast-slow)	
	218-223	Stop	
	224-255	Scroll anti-clockwise (fast-slow)	

Channel	Value	Function	Default Value
	Strobe (shutter)		
19	000-031	Shutter Closed	000
	032-063	Shutter Open	
	064-095	Strobe (slow-fast)	
	096-127	Shutter Open	
	128-159	Pulse strobe (slow-fast)	
	160-191	Shutter Open	
	192-223	Random strobe (slow-fast)	
	224-255	Shutter Open	
20	000-255	Dimmer (0-100%)	000
21	000-255	Dimmer fine (16 bit)	000
22	000-255	Zoom (narrow-wide)	000
23	000-255	Zoom fine	000
24	000-255	Focus (near-far)	000
25	000-255	Focus fine	000
26	000-255	Frost 1 (0-100%)	000
27	000-255	Frost 2 (0-100%)	000
	Prism 1		
28	000-005	No function	000
	006-067	Prism 1	
	068-129	Prism 2	
	130-191	Prism 3	
	192-255	Prism 4	
	Prism 1 Indexing / Rotation		
29	000-127	Prism 1 Indexing	000
	128-189	Clockwise Prism Rotation (fast-slow)	
	190-193	Prism 1 rotation stop	
	194-255	Anti-clockwise Prism Rotation (slow-fast)	
	Prism 2		
30	000-005	No function	000
	006-067	Prism 1	
	068-129	Prism 2	
	130-191	Prism 3	
	192-255	Prism 4	
	Prism 2 Indexing / Rotation		
31	000-127	Prism 1 Indexing	000
	128-189	Clockwise Prism Rotation (fast-slow)	
	190-193	Prism 1 rotation stop	
	194-255	Anti-clockwise Prism Rotation (slow-fast)	

Channel	Value	Function	Default Value
32	000-255	Pan/tilt speed	000
		Animation Indexing / Rotation	
33	000-127	Animation Indexing	000
	128-189	Clockwise Animation Rotation (fast-slow)	
	190-193	Animation rotation stop	
	194-255	Anti-clockwise Animation (slow-fast)	
34	000-255	Animation fine	000
35	000-029	No function	000
	030-044	Blackout while P/T on (hold 3s)	
	045-059	Blackout while P/T off (hold 5s)	
	060-074	Invert pan on (hold 3s)	
	075-089	Invert pan off (hold 5s)	
	090-104	Invert tilt on (hold 3s)	
	105-119	Invert tilt off (hold 5s)	
	120-134	Fan auto (hold 3s)	
	135-149	Fan low (hold 3s)	
	150-164	Fan high (hold 3s)	
	165-179	Lamp on (hold 3s)	
	180-194	Lamp off (hold 3s)	
	195-209	Reset pan/tilt (hold 3s)	
	210-224	Reset head only (hold 3s)	
	225-240	Reset all motors (hold 3s)	
	241-255	No function	

Macro	Example	Cyan	Magenta	Yellow	Colour Wheel
1		50% split	50% split	0%	Open
2		100%	50% split	0%	Open
3		50% split	100%	0%	Open
4		33% split	33% split	0%	Open
5		0%	50% split	50% split	Open
6		0%	50% split	100%	Open
7		0%	100%	50% split	Open
8		0%	33% split	33% split	Open
9		50% split	50% split	50% split	Open
10		33% split	33% split	0%	Yellow

Rotating gobos:

Gobo size: 17mmØ   Image size: 12mmØ
Gobo thickness: 1.1mm
(Max. thickness if replaced 1.1mm)
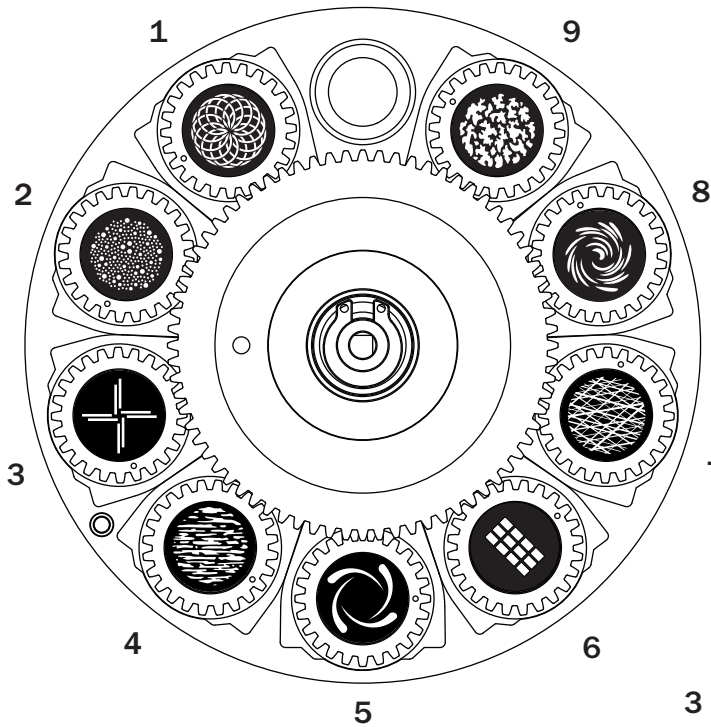
Colour wheel:
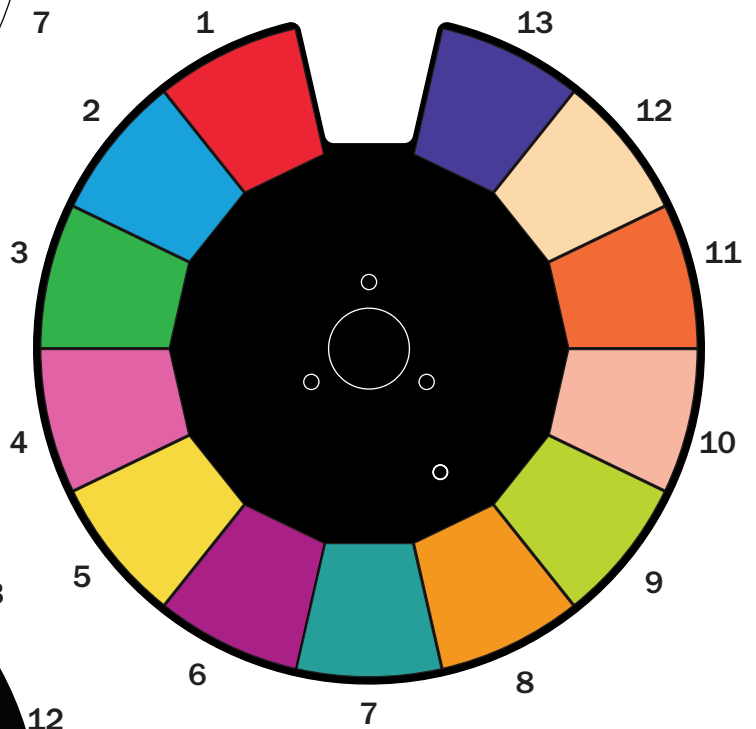
Static gobos:
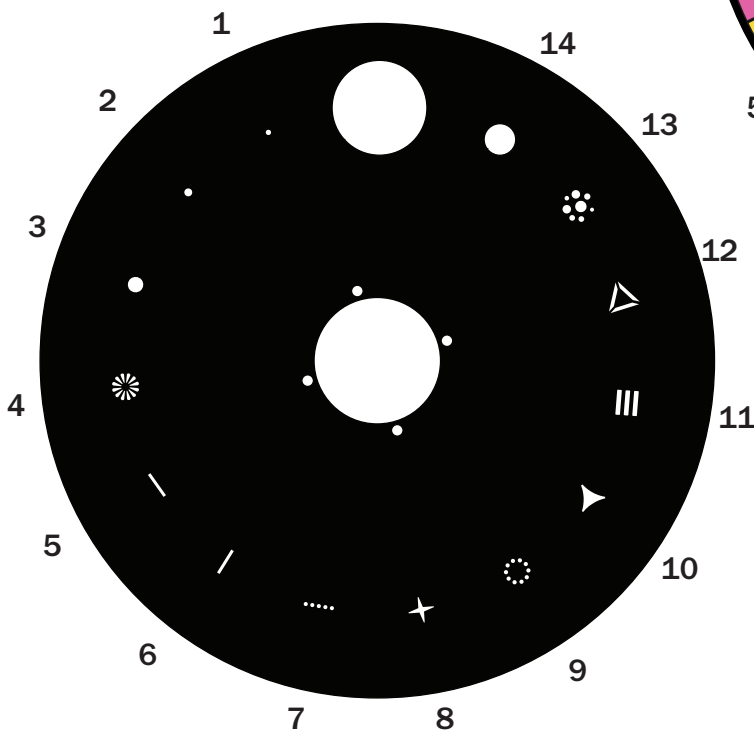
Setting the DMX address:

The DMX mode enables the use of a universal DMX controller. Each fixture requires a "start address" from 1- 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose a start address so that the channels used do not overlap. E.g. the next unit in the chain starts at 107.

DMX 512:

DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions form the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a data "out" terminal).

DMX linking:

DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned to a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

DATA cable (DMX cable) requirements (for DMX operation):

This fixture can be controlled via DMX-512 protocol. The DMX address is set on the back of the unit. Your unit requires either a standard 3-pin or 5-pin XLR connector for data input/output, see images below.

Further DMX cables can be purchased from all good sound and lighting suppliers or Prolight Concepts dealers.

Please quote:	3-Pin:	CABL10 – 2m	CABL11 – 5m	CABL12 – 10m
	5-Pin:	CABL185 – 2m	CABL187 – 5m	CABL188 – 10m

Also remember that DMX cable must be daisy chained and cannot be split.

Notice:

Be sure to follow the diagrams below when making your own cables. Do not connect the cables shield conductor to the ground lug or allow the shield conductor to come in contact with the XLRs outer casing. Grounding the shield could cause a short circuit and erratic behaviour.

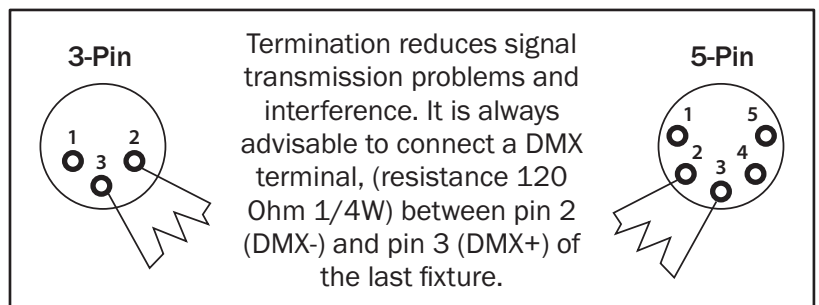| Pin Configuration	
3-Pin	5-Pin
Pin 1 - Ground	
Pin 2 - Negative	
Pin 3 - Positive	
–	Pin 4 - N/C
–	Pin 5 - N/C
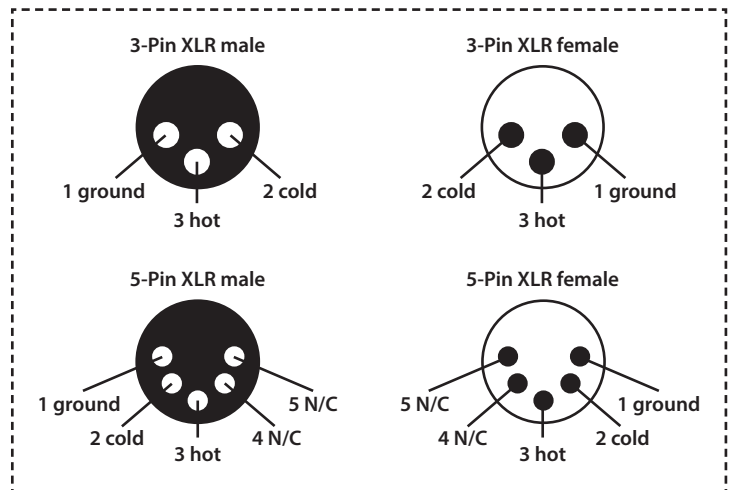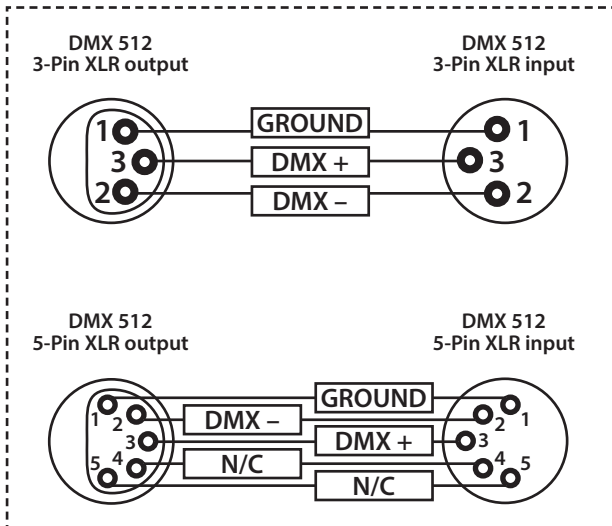
Line termination:

When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

Using a cable terminator will decrease the possibilities of erratic behaviour.
(3-pin - Order ref: CABL90,
5-pin - Order ref: CABL89)

Termination reduces signal transmission problems and interference. It is always advisable to connect a DMX terminal, (resistance 120 Ohm 1/4W) between pin 2 (DMX-) and pin 3 (DMX+) of the last fixture.


5-pin XLR DMX connectors:

Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.
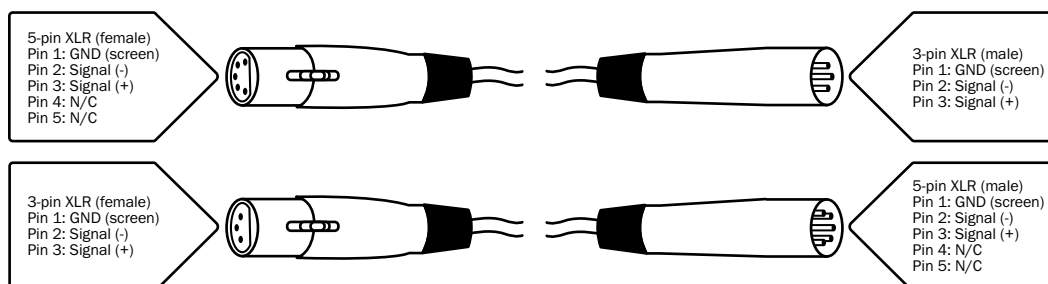
Power linking:

This fixture provides power linking via the power output on the rear allowing multiple units to be connected together. The maximum number of fixtures that can be connected via a 13A mains input is 2 fixtures @ 240V or 1 fixtures @ 120V (including the first fixture). After the maximum number of fixtures are connected a new power run will need to be started.

Please note: Caution should be used when power linking other fixtures to the Evora CMY470 Hybrid as the power consumption of other fixtures will vary. Fixtures fitted with lamps often require 2/3 times more current on startup, these may require their own power source.
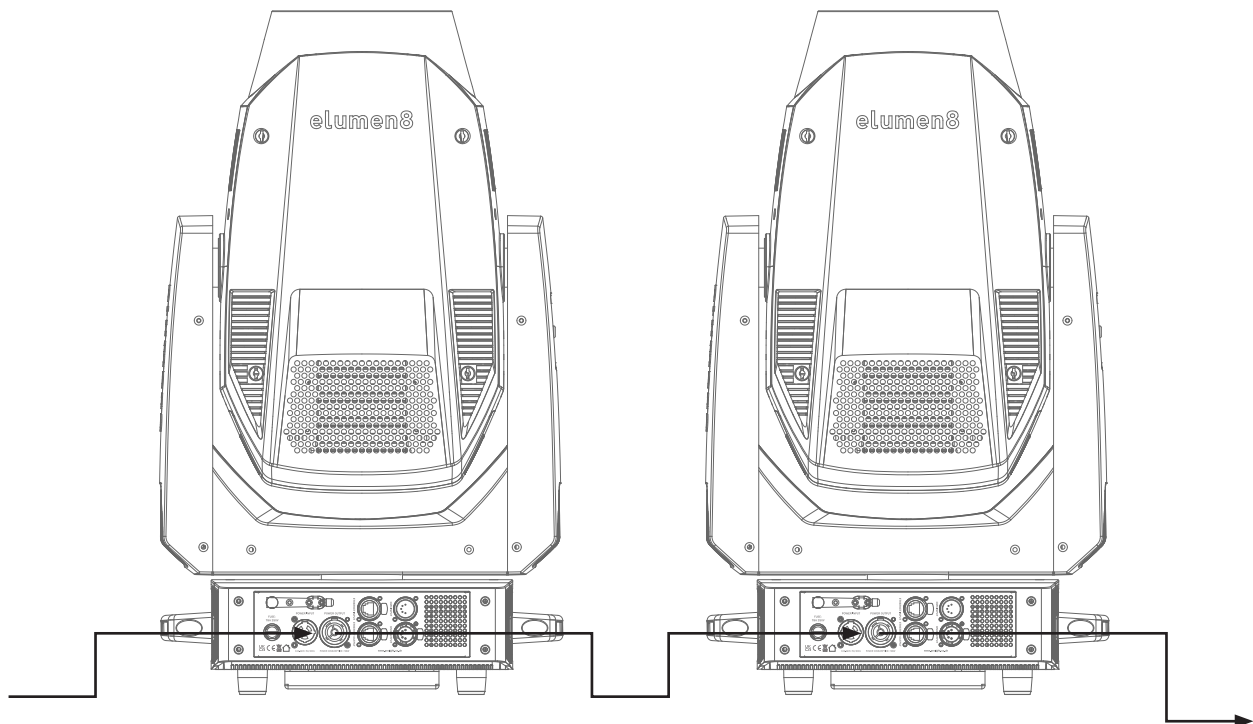
Correct Disposal of this Product
(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.