EQUINOX

Fusion Patriot 500 Beam

User Manual

Order codes: EQLED470

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!
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.
- 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 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.
- Never touch the fixture during operation as it may be hot.
- 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 your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Pro Light dealer for service.
- Only use fuses of same type and rating.
- 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.
- WARRANTY: One year 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.

Please note: These fixtures are intended for stage lighting and entertainment applications only, and are not intended for extended periods of use, including but not limited to house-light, industrial or architectural applications and should only be operated with short duty cycles.

LASER SAFETY WARNINGS

This product uses **laser diodes** as its light source. It is classified as a **Class 1 Laser Product** under **IEC 60825-1:2014, edition 3 "part 4.4: Laser products designed to function as conventional lamps"**.

When evaluated under **IEC 62471-5:2015**, **"Photobiological safety of lamps and lamp systems"** it is classified as **Risk Group 3 (RG3).**

CAUTION!
LASER LIGHT - AVOID DIRECT EYE EXPOSURE
CLASS 1 LASER

Hazard Information:

- **Class 1 Laser Products** are considered safe during normal operation according to IEC / EN 60825-1:2022 chapter C.2.1.
- **Risk Group 3 (High Risk)**: This luminaire is classified as a Risk Group 3 product according to IEC / EN 62471-5:2015. That means, that the high intensity of the output can potentially cause various hazards to people and objects.

Required Minimum Distances

- **From people:**
  - **47m**
  - **Shorter distances only when using prisms/effects and never exceed the MPE.**
- **From objects:**
  - **10m to heat-insensitive, non-flammable, non-reflective materials**
  - **20m to easily flammable or reflective materials**
  - **Do not point at aircraft or vehicles at any distance.**
- **Maintenance**

  CAUTION! - The user must not modify the unit or remove protective covers or housings except as required for service. No maintenance is required or allowed by the user. Only qualified and trained personnel to open and service the fixture! Never open the fixture while in use! Consult service manual for laser safety procedures before opening unit. Wear laser safety eyewear when servicing.

Operational Safety

The laser product is never to be operated if the unit is defective or the cover or seal is damaged. If the luminaire is operated with the housing of the device opened, laser radiation of Laser Class 3B can be emitted.

Avoid all eye and skin exposure to direct or scattered radiation. All laser operations must be under the direct control of trained, competent operators. Immediately terminate emission if unsafe conditions occur or, for outdoor use, if requested by air-traffic control.

CAUTION: Laser radiation

This product is a Class 1 laser and should only be installed and used by persons who are trained in the management of laser radiation and are able to operate in accordance with the guidance given by the Health and Safety Executive (HSE) in "The Safety of Laser Lighting Displays". Information on this guidance can be found on the following website: https://www.hse.gov.uk/pubns/indg224.htm

Laser Parameters

- Embedded laser wavelength: 450–460nm
- Maximum laser power: 15 W (at light engine aperture)
- Beam diameter: 20mm
- Emission: 11.7kHz, duty cycle 0–100%
- Luminaire output wavelength: 443–730nm
- Beam divergence: 1°

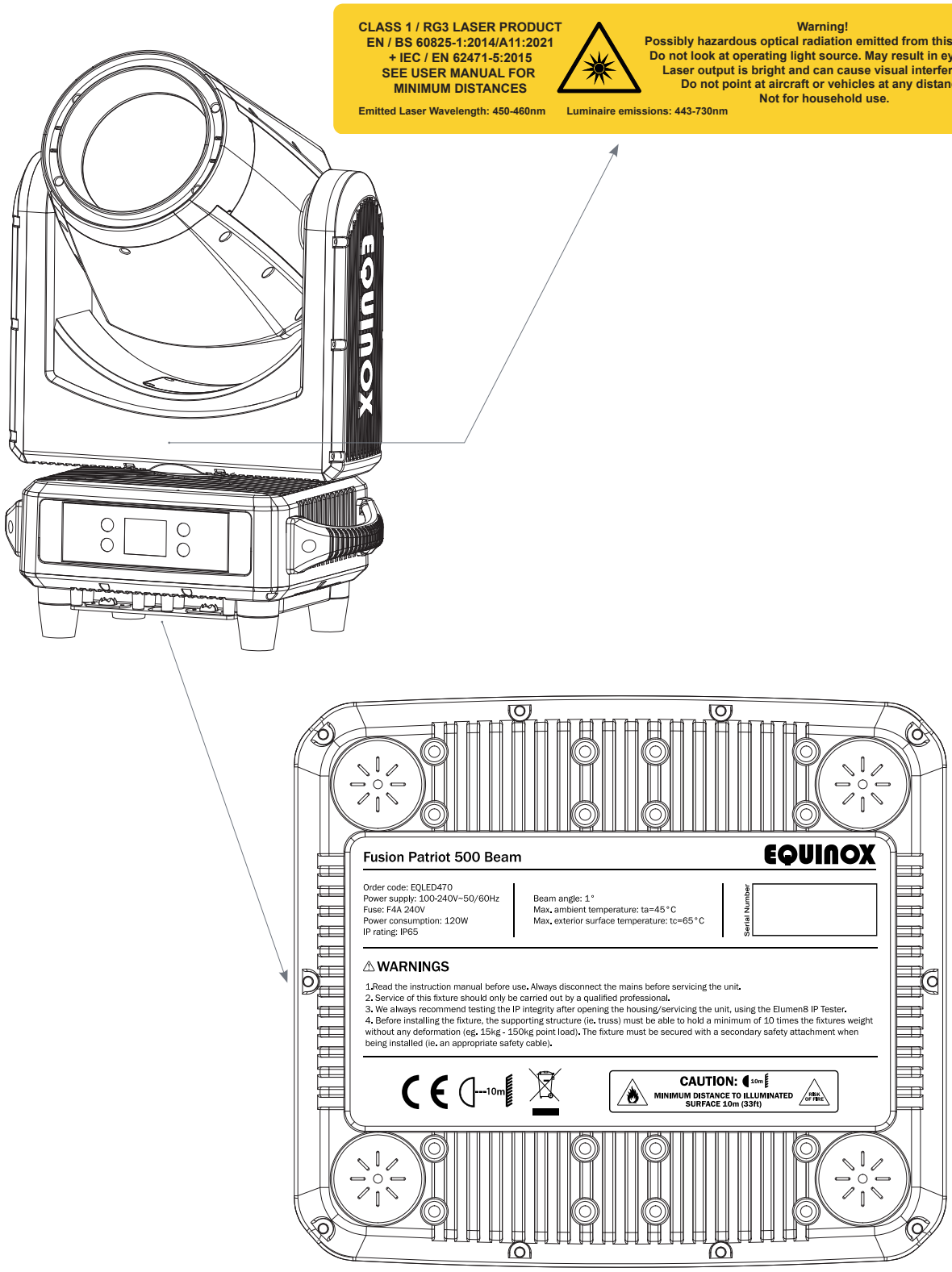
General Warnings

- Do not look directly at the operating light source. May cause eye injury.
- Do not expose personnel closer than the required minimum distances.
- Not for household use.

WARNING: **Hazardous optical radiation may be emitted. Use only as directed.**

Placement of labels

Please check and read carefully the labels on the fixture before using!



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

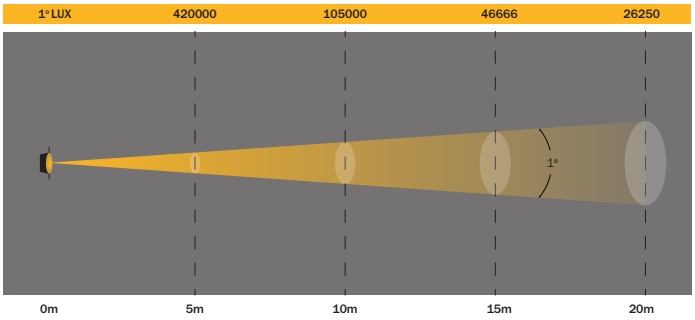
CAUTION!
The maximum ambient temperature (Ta) of 40° must not be exceeded.

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

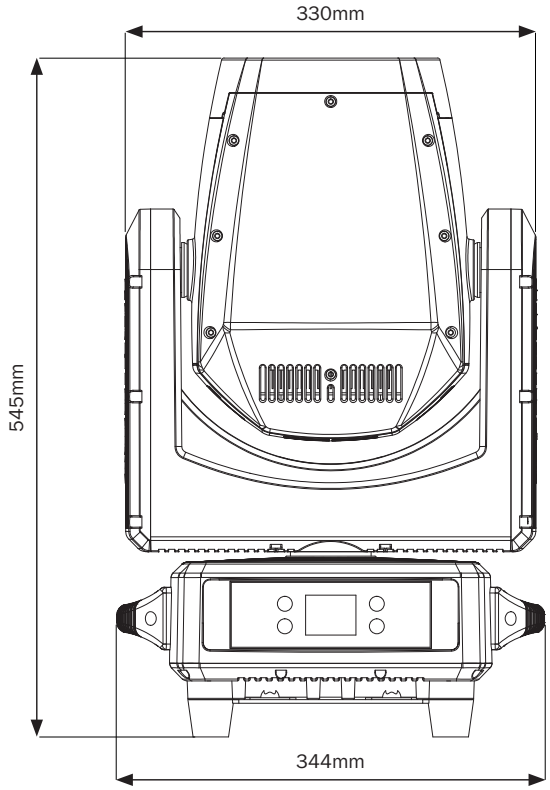
Fusion Patriot 500 Beam

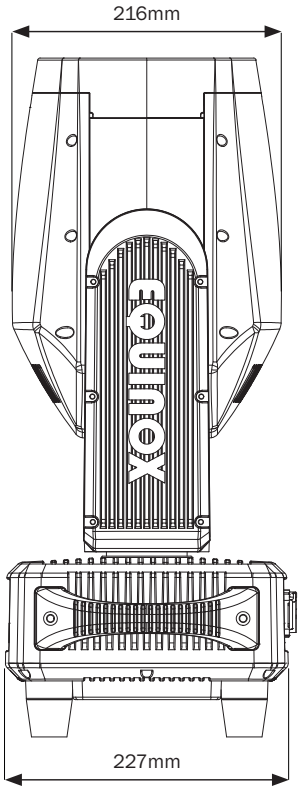
The Equinox Fusion Patriot 500 Beam is a compact yet powerful IP65-rated moving head beam designed to thrive in the toughest environments. Powered by a 50W white laser source (7000K), it delivers an intense 105,000 Lux at 10 metres through a sharp 1° beam. Packed with creative tools including 19 static gobos, a 12-colour wheel plus a rainbow effect, and two rotating prism wheels for layered aerial visuals, this fixture is ideal for professional stage and event applications. Additional features include motorised focus, frost filter, 16-bit pan/tilt with auto-correction, and selectable 14 or 18-channel DMX control. With 3/5-pin DMX, PowerTwist TR1, and quick-release omega clamps, this versatile fixture integrates seamlessly into any rig.

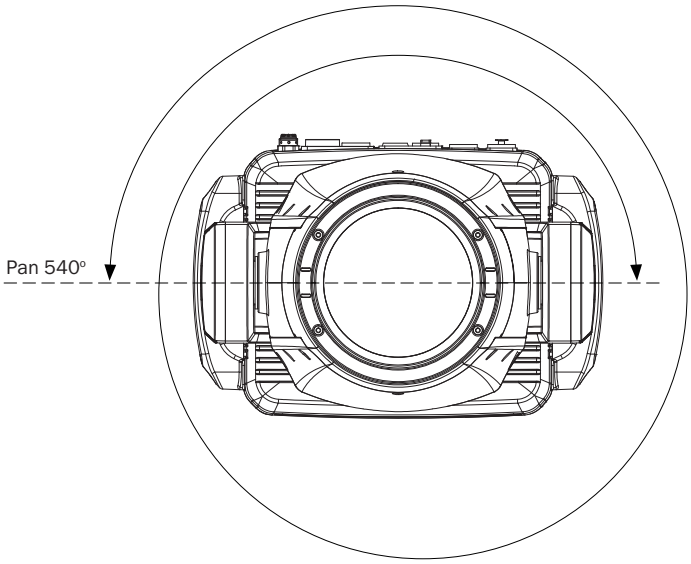
- 1 x 50W white laser source (7,000K)
- Light source rated life: up to 12,000 hours
- Beam angle: 1°
- 105,000 Lux @ 10m
- Refresh rate: 650Hz–25kHz (5 presets)
- Motorised focus
- 2 prism wheels with 4 rotating prisms
- Wheel 1: 8 facet circular prism
- Wheel 2: 8 facet circular, 18 facet circular, 5 facet linear
- Frost filter
- Gobo wheel: 19 static gobos + open
- Colour wheel: 12 colours + open
- 6 colour rainbow effect wheel
- DMX channels: 14 or 18 selectable
- Wireless control (W-DMX Sweden compatible transceiver)
- Manual control & master/slave modes
- Pan/tilt auto correction
- 16-bit pan/tilt: Pan 540°, Tilt 220°
- 0–100% dimming
- Variable strobe
- Quick release omega clamps included
- 4-button menu with 1.7” LCD display
- PowerTwist TR1 input/output
- 3-Pin & 5-Pin XLR input/output
- Fan cooled

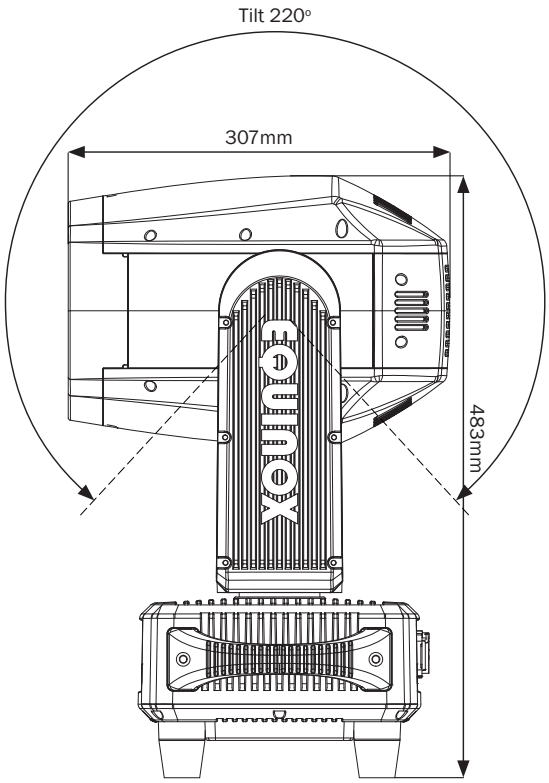


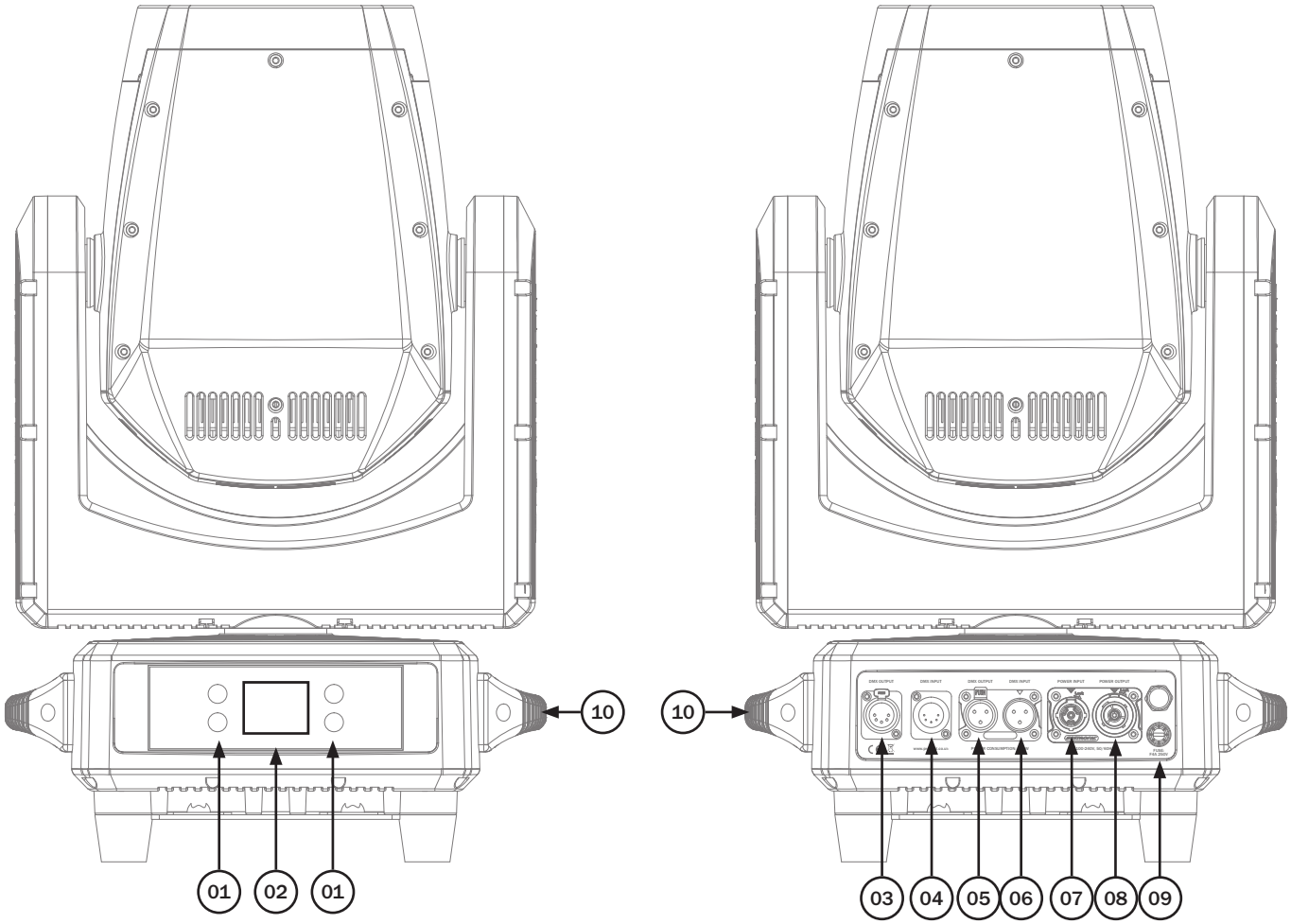
Specifications	Fusion Patriot 500 Beam
Power consumption	120W
Power supply	100~240V, 50/60Hz
Fuse	F4A 250V
Dimensions	545 x 344 x 227mm
Weight	11.5kg
Order code	EQLED470


330mm
545mm
344mm


216mm
227mm


Pan 540°


Tilt 220°
307mm
483mm

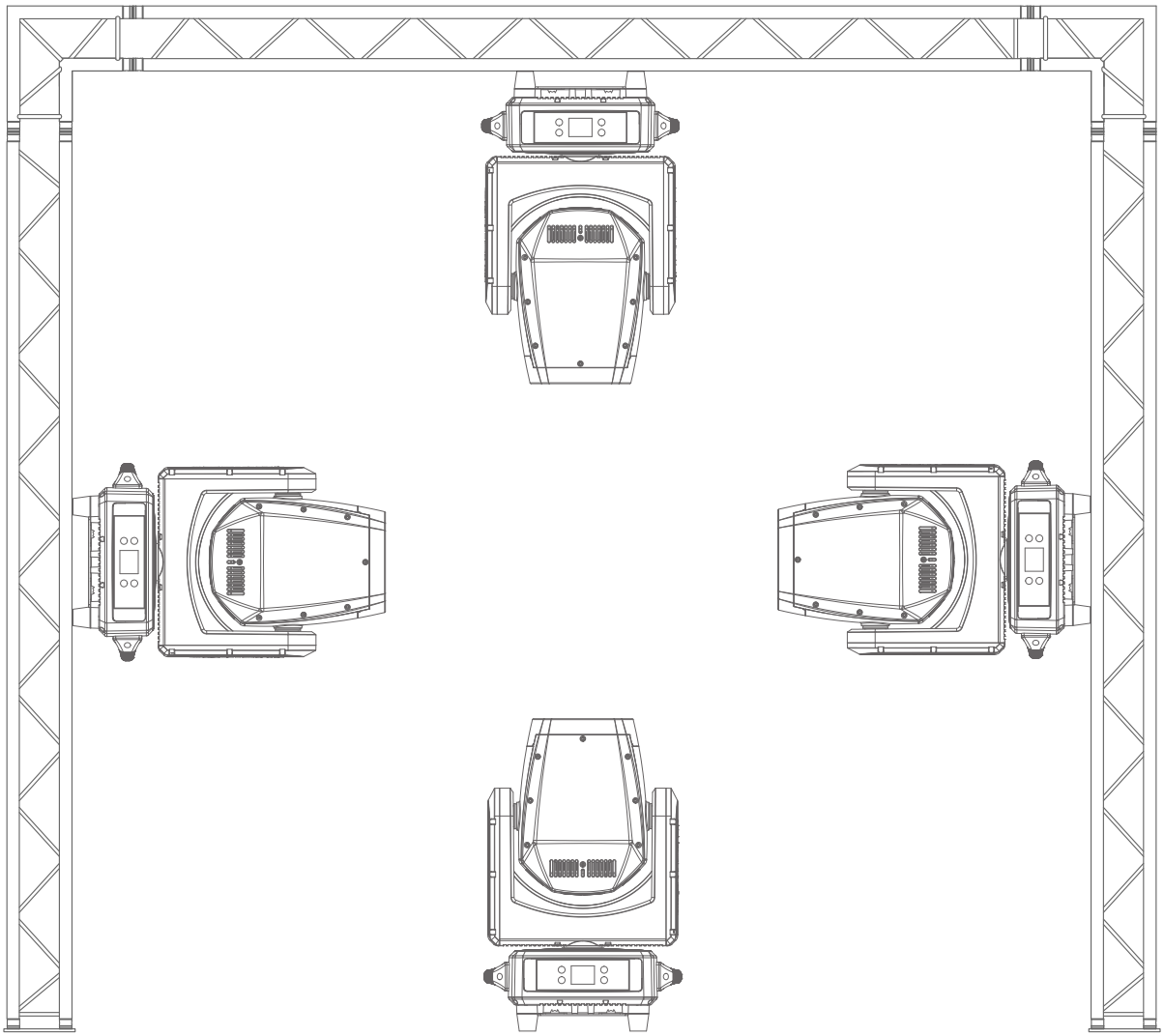


01 - Function buttons
02 - LCD display
03 - 5-Pin DMX output
04 - 5-Pin DMX input
05 - 3-Pin DMX output
06 - 3-Pin DMX input
07 - PowerTwist TR1 input
08 - PowerTwist TR1 output
09 - Fuse F4A 250V
10 - Carry handles

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 Equinox Fusion Patriot 500 Beam can be operated in a number of mounting positions as shown in the diagram above, hanging upside-down from the ceiling or truss, mounting sideways on truss or stood upright on a flat level surface. 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.

Installation:

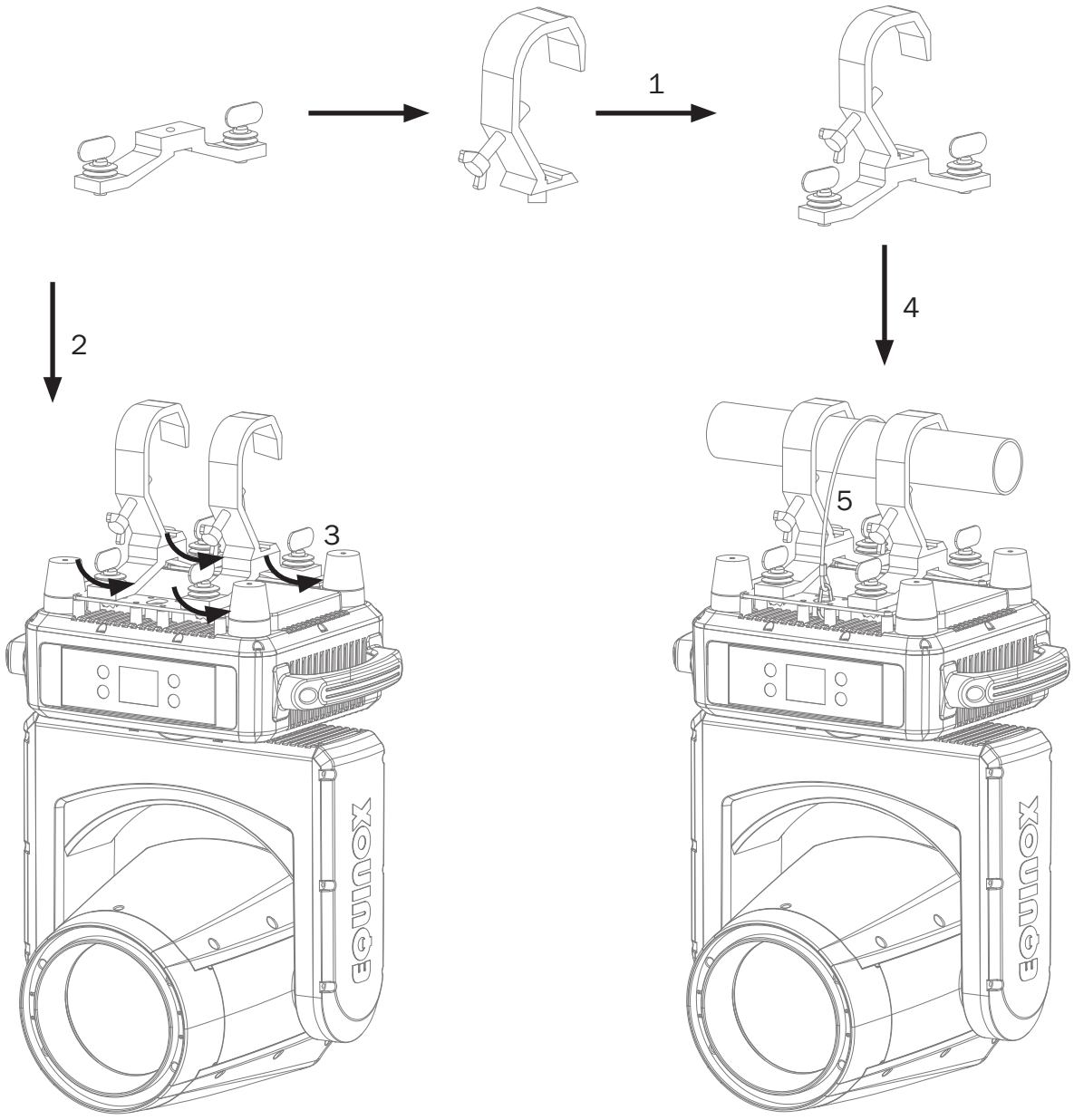
1. Fasten each clamp to the omega clamps with a bolt and lock nut through the hole in the omega clamp.

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.



Control Panel Menu:

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

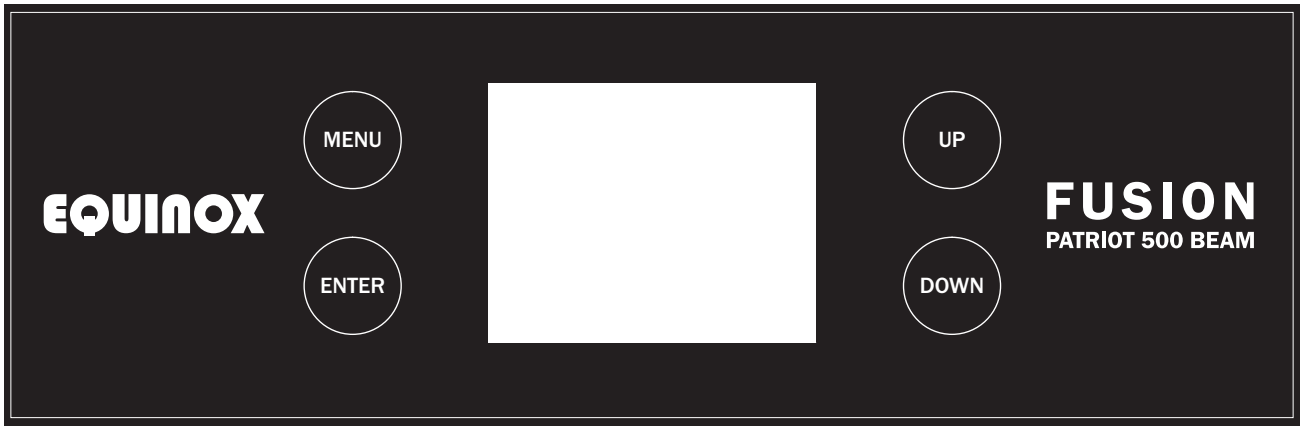
When the unit has been powered on the display will show "**Motor Reset... Please Wait...**" whilst the unit performs its motor reset.

The fixture will then return to its home screen.

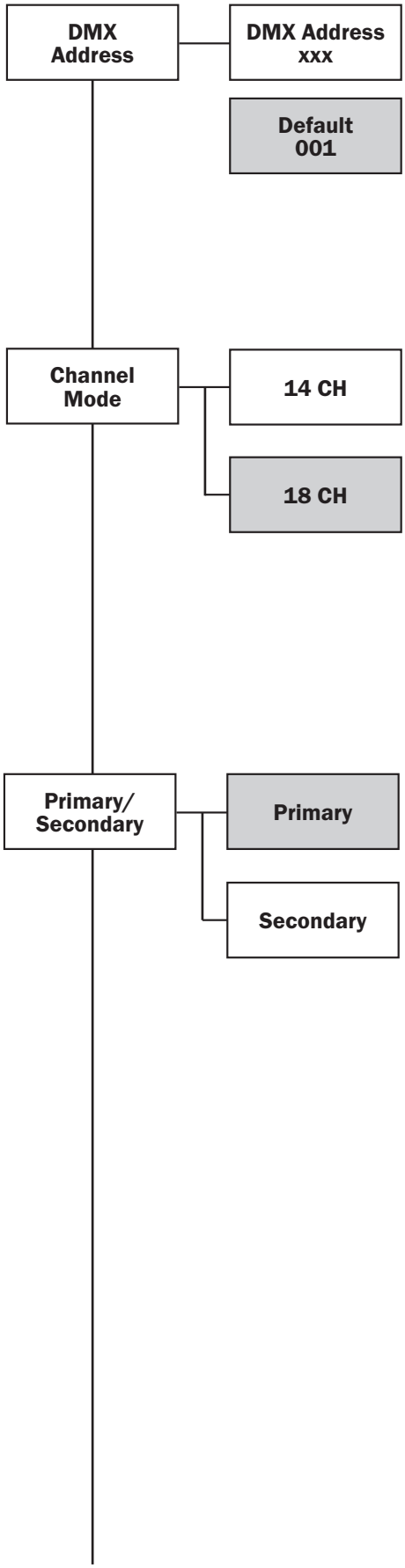
Press and hold the "**MENU**" button to unlock the display.

Pressing the "**ENTER**" 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 "**UP**" and "**DOWN**" 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 the "**MENU**" button.



Main Menu - Defaults are in grey



DMX address:

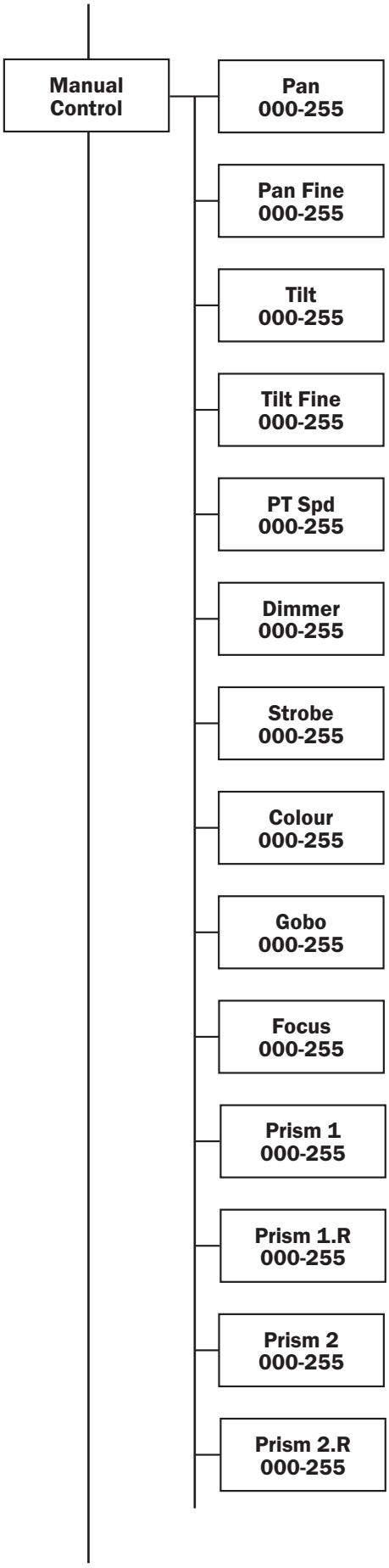
To access the DMX address mode, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**DMX Address**" on the LCD display. Now press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to set the required DMX address. Press the "**ENTER**" button to confirm the setting.

DMX channel mode:

To access the DMX channel mode, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Channel Mode**" on the LCD display. Now press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to set the required DMX channel. Press the "**ENTER**" button to confirm the setting.

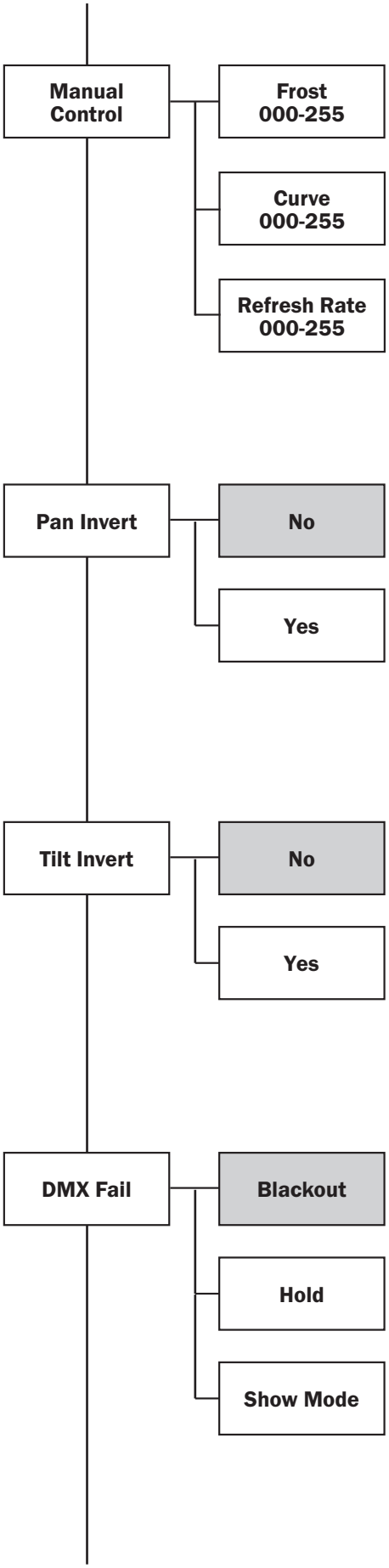
Primary/secondary mode:

To access the primary/secondary modes, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Primary/secondary**" on the LCD display. Now press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to set the required mode. Press the "**ENTER**" button to confirm the setting.



Manual control:

To access manual control mode, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Manual Control**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select the various options. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**000**" - "**255**". Press the "**ENTER**" button to confirm the setting.



Pan invert:

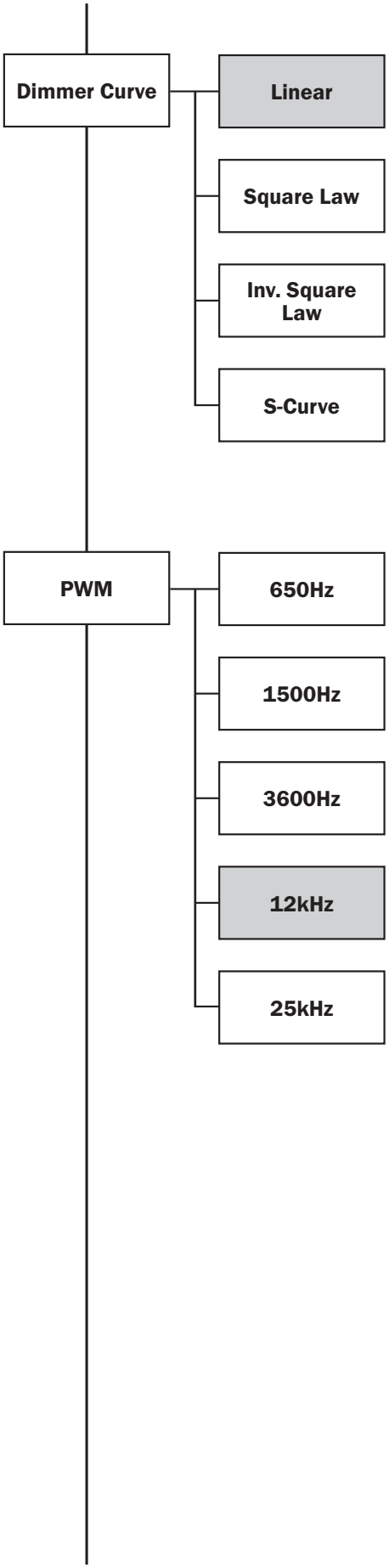
To access the pan invert setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Pan Invert**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**No**" and "**Yes**". Press the "**ENTER**" button to confirm the setting.

Tilt invert:

To access the tilt invert setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Tilt Invert**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**No**" and "**Yes**". Press the "**ENTER**" button to confirm the setting.

DMX fail:

Sets what the fixture does when the DMX signal is lost. To access the DMX fail setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**DMX Fail**" on the LCD display. Now press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to choose between "**Blackout**", "**Hold**" or "**Show Mode**". Press the "**ENTER**" button to confirm the setting.

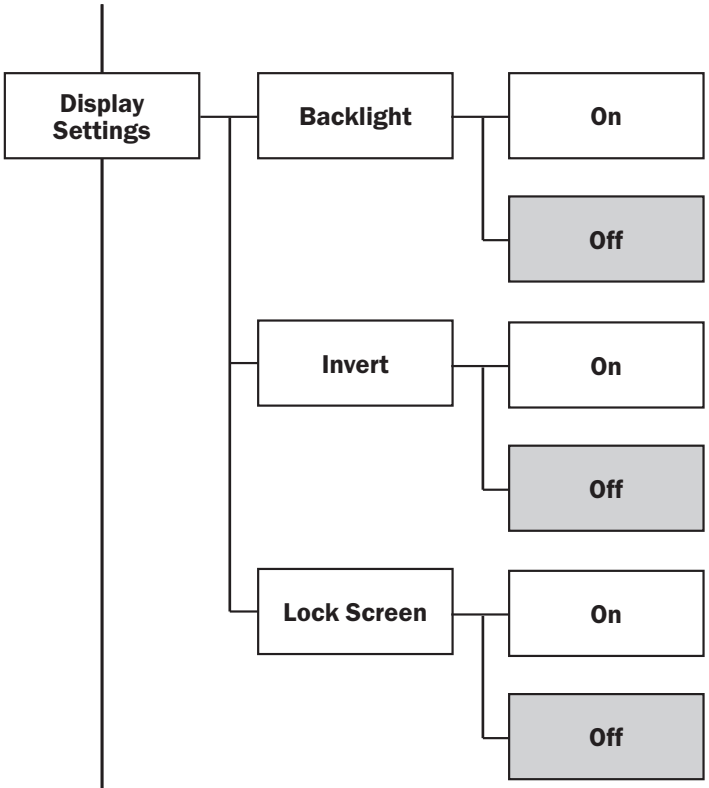


Dimmer curve:

To access dimmer curve mode, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Dimmer curve**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select the various options. Press the "**ENTER**" button to confirm the setting.

Refresh rate:

To access the refresh rate setting, use the "**UP**" and "**DOWN**" buttons to select "**PWM**". Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**650Hz**", "**1500Hz**", "**3600Hz**", "**12kHz**", and "**25kHz**". Press the "**ENTER**" button to confirm the setting.



Display backlight:

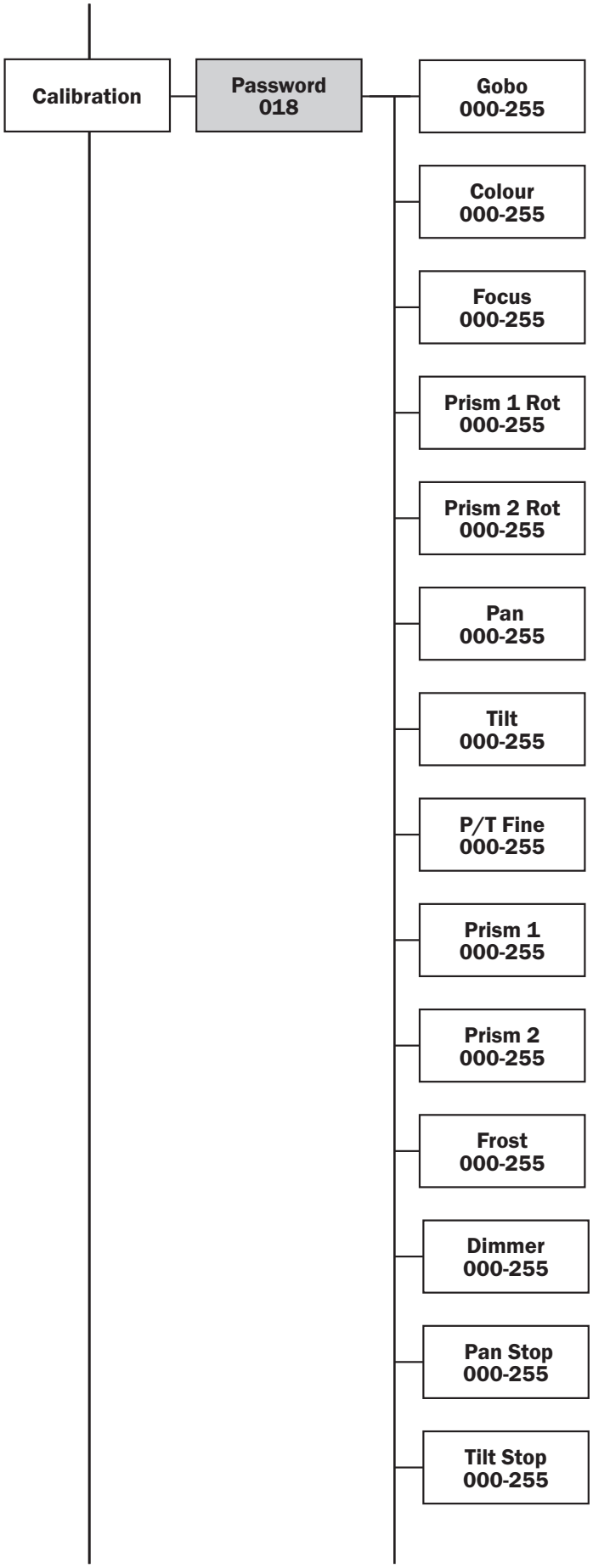
To access the display backlight setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Display Settings**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select "**Backlight**".Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**Off**" and "**On**". Press the "**ENTER**" button to confirm the setting.

Display invert:

To access the display invert setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Display Settings**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select "**Invert**".Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**No**" and "**Yes**". Press the "**ENTER**" button to confirm the setting.

Display lock screen:

To access the display lock screen setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Display Settings**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select "**Lock Screen**".Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**No**" and "**Yes**". Press the "**ENTER**" button to confirm the setting.



Calibration:

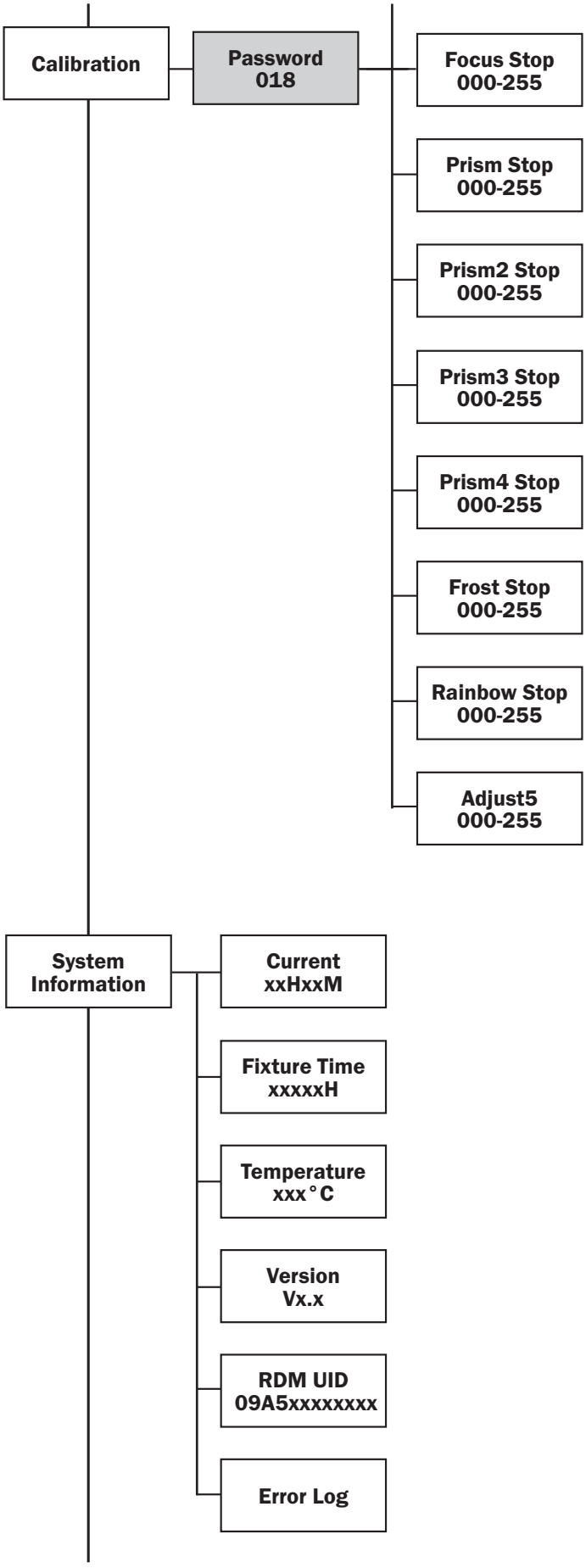
Calibration settings for the fixture.

To access the units calibration menu press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Calibration**". Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to type the password: "**018**".

Use the "**UP**" and "**DOWN**" buttons to select the various options. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**000**" - "**255**".

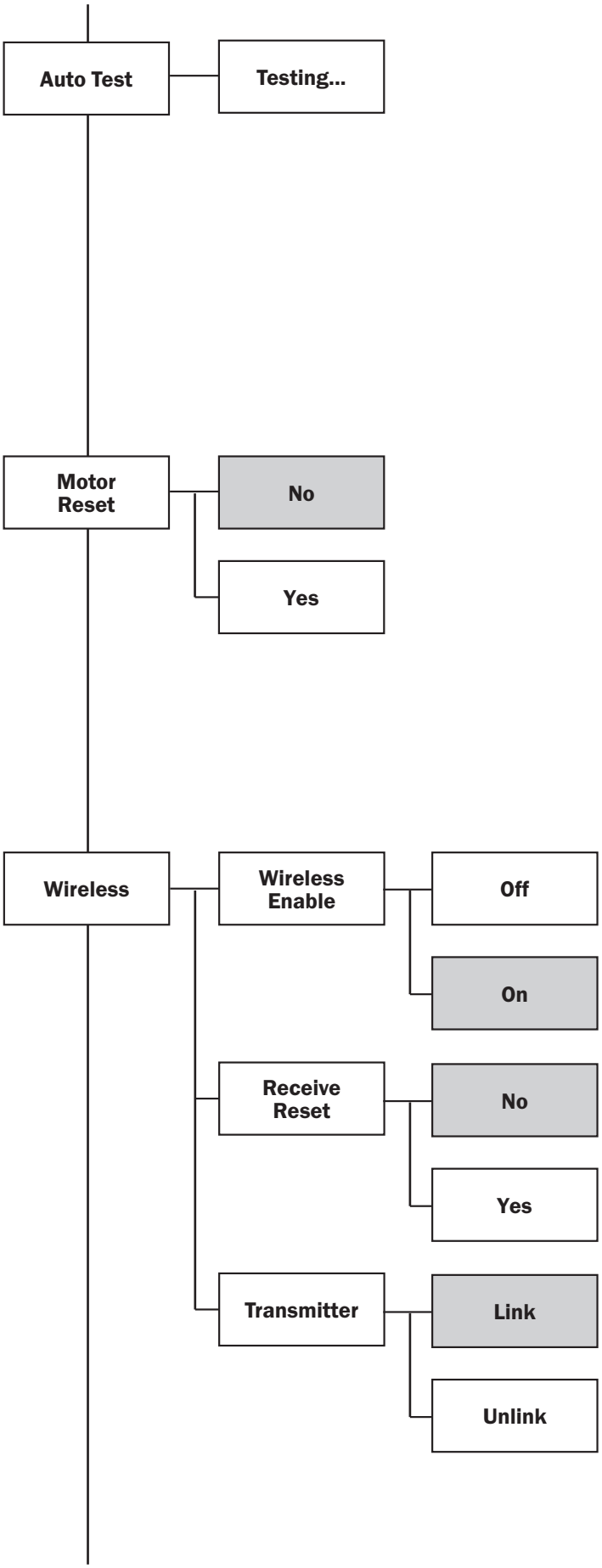
Press the "**ENTER**" button to confirm the setting.

Please note: Calibration settings are set when the fixture is manufactured. This can be changed manually for home position adjustment. Performing a factory reset will not change these settings.



System information:

To display the fixtures system information, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**System Information**" on the LCD display. You are now able to select the fixtures current run time, fixture time, temperature, software version, RDM UID and error log.



Auto test:

Tests all functions and motors in the fixture.

To access the auto test mode, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Auto Test**" on the LCD display. Press the "**ENTER**" button and the fixture will initiate auto test.

Please note: Auto test will automatically stop when exiting the auto test menu.

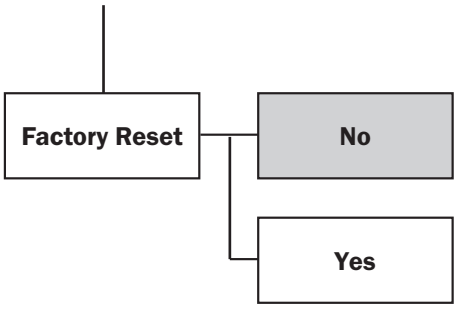
Motor reset:

Resets all the fixtures motors.

To access the motor reset setting, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Motor Reset**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**Yes**" and "**No**". Press the "**ENTER**" button to perform the motor reset when yes is selected.

Wireless mode:

To access the wireless modes, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Wireless**" on the LCD display. Now press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to set the required mode. Press the "**ENTER**" button to confirm the setting.



Factory Reset:

Resets all the fixtures factory settings.

To access the factory setting reset, press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to show "**Factory Reset**" on the LCD display. Press the "**ENTER**" button and use the "**UP**" and "**DOWN**" buttons to select between "**Yes**" and "**No**". Press the "**ENTER**" button to perform the factory reset when yes is selected.

Channel modes:

Channel		Value	Function
CH14	CH18		
CH1	CH1	000-255	Pan (540°)
-	CH2	000-255	Pan Fine
CH2	CH3	000-255	Tilt (270°)
-	CH4	000-255	Tilt Fine
CH3	CH5	000-255	Pan/Tilt Speed
CH4	CH6	000-255	Master dimmer (0-100%)
CH5	CH7	000-004	No function
		005-250	Strobe (slow-fast)
		251-255	Open
CH6	CH8	000-004	Open
		005-009	Red
		010-014	Yellow
		015-019	Cyan
		020-024	Green
		025-029	Orange
		030-034	Pink
		035-039	Lemon Yellow
		040-044	Lime Green
		045-049	Blue
		050-054	3000K
		055-059	7000K
		060-064	Deep Blue
		065-069	Deep Blue/7000K
		070-074	7000K/3000K
		075-079	3000K/Blue
		080-084	Blue/Lime Green
		085-089	Lime Green/Lemon Yellow
		090-094	Lemon Yellow/Pink
		095-099	Pink/Orange
		100-104	Orange/Green
		105-109	Green/Cyan
		110-114	Cyan/Yellow
		115-119	Yellow/Red
		120-124	Red/Open
		125-192	Colour wheel rotation, clockwise (fast-slow)
		193-255	Colour wheel rotation, anti-clockwise (slow-fast)
CH7	CH9	000-004	Open
		005-009	Gobo 1
		010-014	Gobo 2
		015-019	Gobo 3

Channel modes:

Channel		Value	Function
CH14	CH18		
CH7	CH9	020-024	Gobo 4
		025-029	Gobo 5
		030-034	Gobo 6
		035-039	Gobo 7
		040-044	Gobo 8
		045-049	Gobo 9
		050-054	Gobo 10
		055-059	Gobo 11
		060-064	Gobo 12
		065-069	Gobo 13
		070-074	Gobo 14
		075-079	Gobo 15
		080-084	Gobo 16
		085-089	Gobo 17
		090-094	Gobo 18
		095-099	Gobo 19
		100-104	Gobo 1 shake (slow-fast)
		105-109	Gobo 2 shake (slow-fast)
		110-114	Gobo 3 shake (slow-fast)
		115-119	Gobo 4 shake (slow-fast)
		120-124	Gobo 5 shake (slow-fast)
		125-129	Gobo 6 shake (slow-fast)
		130-134	Gobo 7 shake (slow-fast)
		135-139	Gobo 8 shake (slow-fast)
		140-144	Gobo 9 shake (slow-fast)
		145-149	Gobo 10 shake (slow-fast)
		150-154	Gobo 11 shake (slow-fast)
		155-159	Gobo 12 shake (slow-fast)
		160-164	Gobo 13 shake (slow-fast)
		165-169	Gobo 14 shake (slow-fast)
		170-174	Gobo 15 shake (slow-fast)
		175-179	Gobo 16 shake (slow-fast)
		180-184	Gobo 17 shake (slow-fast)
		185-189	Gobo 18 shake (slow-fast)
		190-194	Gobo 19 shake (slow-fast)
		195-225	Gobo wheel rotation, anti-clockwise (fast-slow)
		226-234	Gobo Wheel rotation stop
		235-255	Gobo wheel rotation, clockwise (slow-fast)
CH8	CH10	000-255	Focus

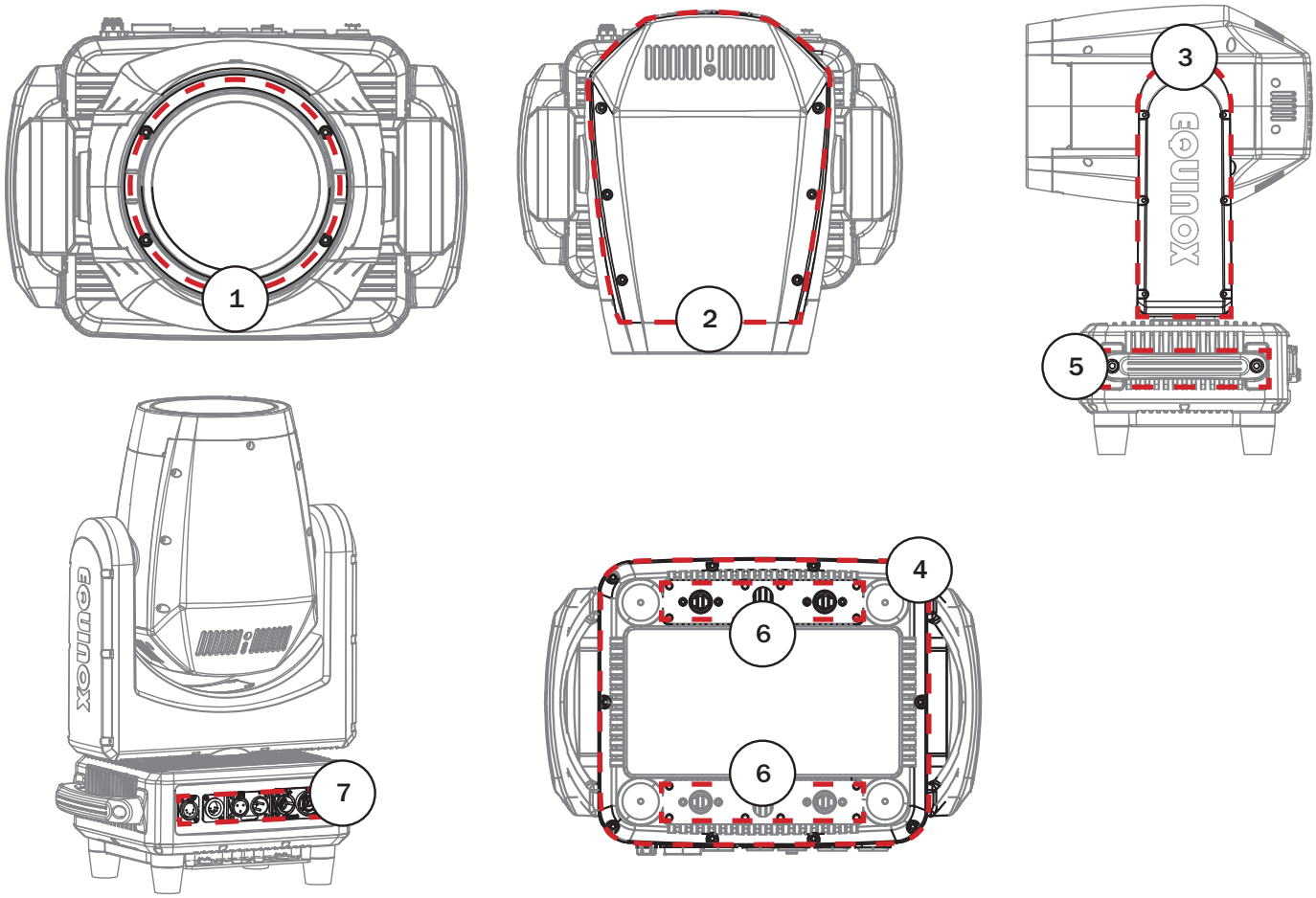
Channel modes:

Channel		Value	Function
CH14	CH18		
CH9	CH11	000-127	No function
		128-255	Prism 1
CH10	CH12	000-127	Prism 1 index
		128-190	Prism 1 rotation, clockwise (fast-slow)
		191-192	Prism 1 rotation stop
		193-255	Prism 1 rotation, anti-clockwise (slow-fast)
CH11	CH13	000-063	No function
		064-127	Prism 2
		128-191	Prism 3
		192-255	Prism 4
CH12	CH14	000-127	Prism 2 Index
		128-190	Prism 2 rotation, clockwise (fast-slow)
		191-192	Prism 2 rotation stop
		193-255	Prism 2 rotation, anti-clockwise (slow-fast)
CH13	CH15	000-127	No function
		128-192	Rainbow wheel
		193-255	Frost
-	CH16	000-055	No function
		056-105	Linear
		106-155	Square Law
		156-205	Inv. Square Law
		206-255	S-Curve
	CH17	000-042	As set in Menu
		043-085	650Hz
		086-128	1500Hz
		129-171	3600Hz
		172-214	12kHz
		215-255	25kHz
CH14	CH18	000-199	No function
		200-215	Pan/Tilt Reset (Hold for 3 seconds)
		220-235	Effect motors Reset (Hold for 3 seconds)
		240-255	Full Reset (Hold for 3 seconds)

Torque settings for EQLED470:

All screws must be tightened with a torque driver. All screws are hex head screws. Please see below table and diagram on the following page for screw locations, quantities and torque settings.

Position	Part of Head (Number of Screws)	Torque (Size of Screw)
1	Lens Cover	0.7-1.0 Nm (4mm Hex)
2	Head Cover	0.7-1.0 Nm (4mm Hex)
3	Arm Cover	1.0-1.3 Nm (4mm Hex)
4	Base Cover	1.0-1.3 Nm (4mm Hex)
5	Handle	1.0-1.5 Nm (4mm Hex)
6	Quick Lock Mounting Plate	1.0-1.5 Nm (4mm Hex)
7	Waterproof Power Connector	0.3-0.6 Nm (4mm Hex)



Torque Drivers (recommended): UTICA TS-30 (shown below).

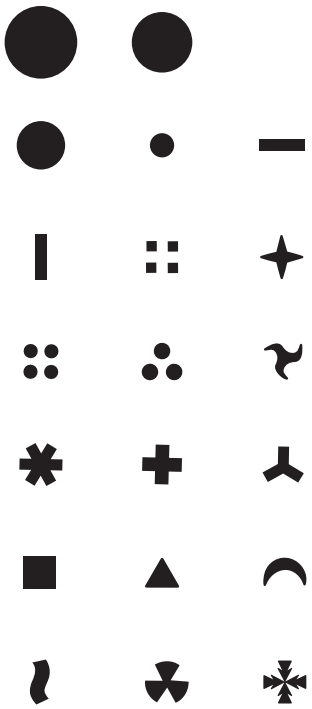
CAUTION!
DO NOT OVER TORQUE SCREWS AS THIS CAN CAUSE LEAKAGE ISSUES!
WE ALWAYS RECOMMEND TESTING THE IP INTEGRITY AFTER LAMP REPLACEMENT/OPENING THE HOUSING, USING THE ELUMEN8 IP TESTER.
CONTACT PROLIGHT SERVICE FOR MORE INFORMATION.

IP Testing Parametersfor for EQLED470:

IP Testing Parameters			
Type Test	**Target Value**	**Acceptable Change due to Leakage**	**Hold Time (s)**
Vacuum Test	-2.9 psi (-20 KPa)	0.58 psi (4 KPa)	30 seconds
Pressure Test	2.6 psi (18 KPa)	0.58 psi (4 KPa)	30 seconds

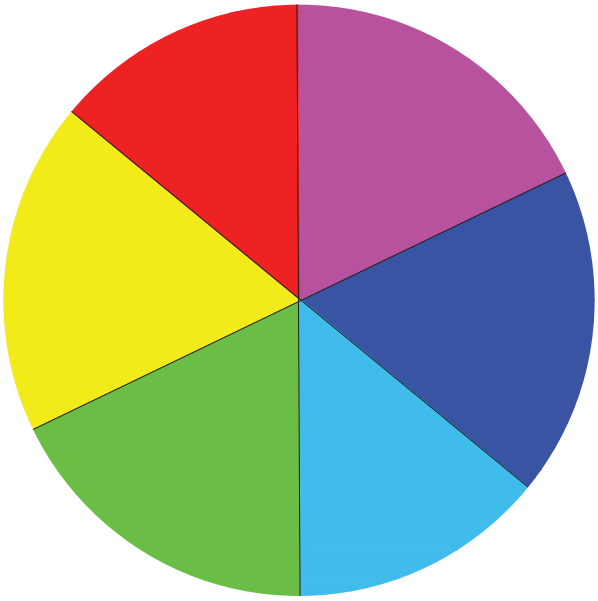
Elumen8 IP Tester
sold separately
(Order code: ELUM699)

Static gobos:



Colour wheel:

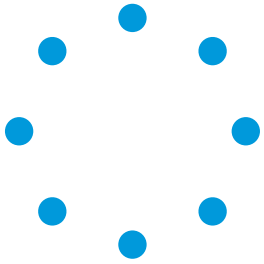
Rainbow:



Frost:

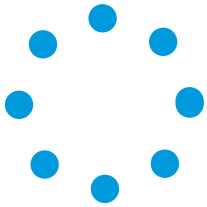
Prism:

WHEEL 1

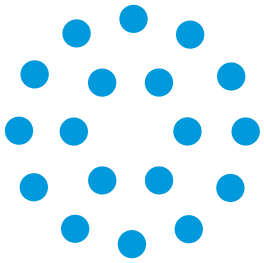


8 facet circular

WHEEL 2



8 facet circular



18 facet circular

5 facet linear

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.

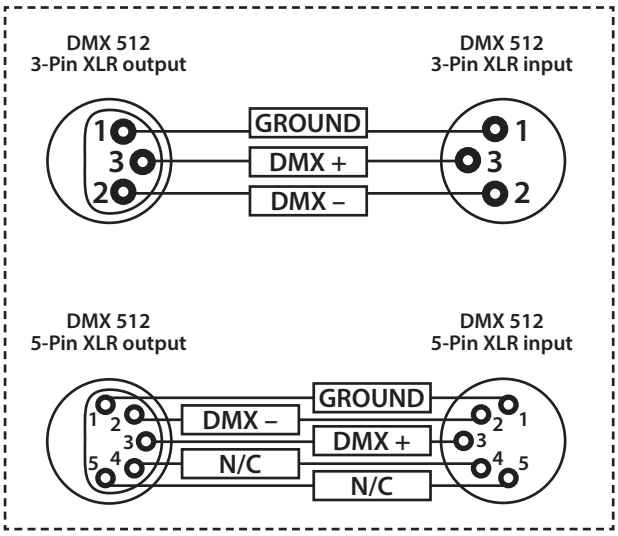
Please quote:	3-Pin:	**CABL10 – 2m**	**CABL11 – 5m**	**CABL12 – 10m**
	5-Pin:	**CABL185 – 2m**	**CABL187 – 5m**	**CABL188 – 10m**

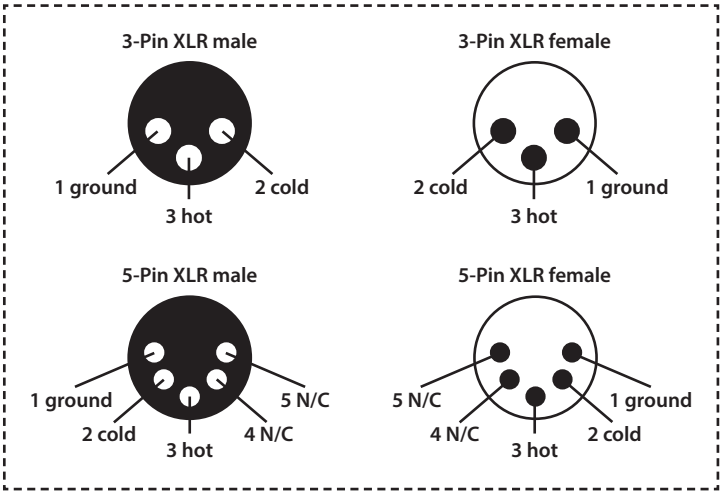
Also remember that DMX cable must be daisy chained and cannot be split.

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

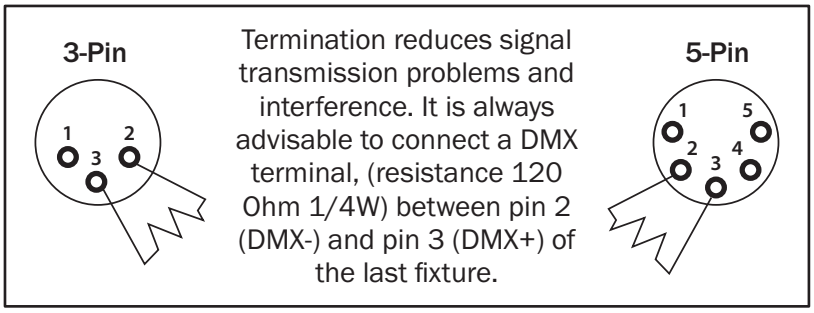




Line termination:

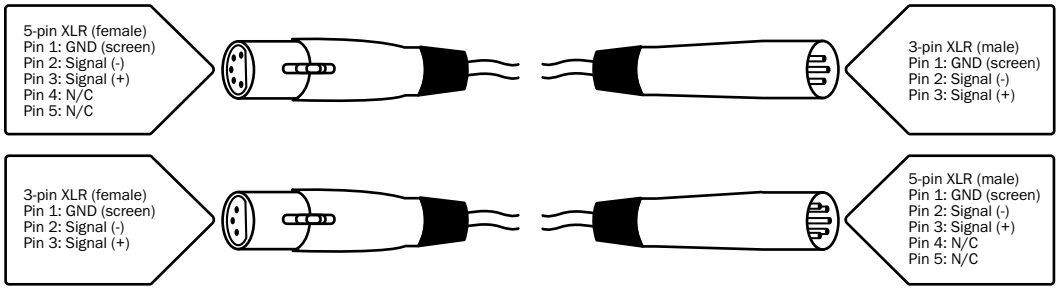
When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behaviour.

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



5-pin XLR DMX connectors:

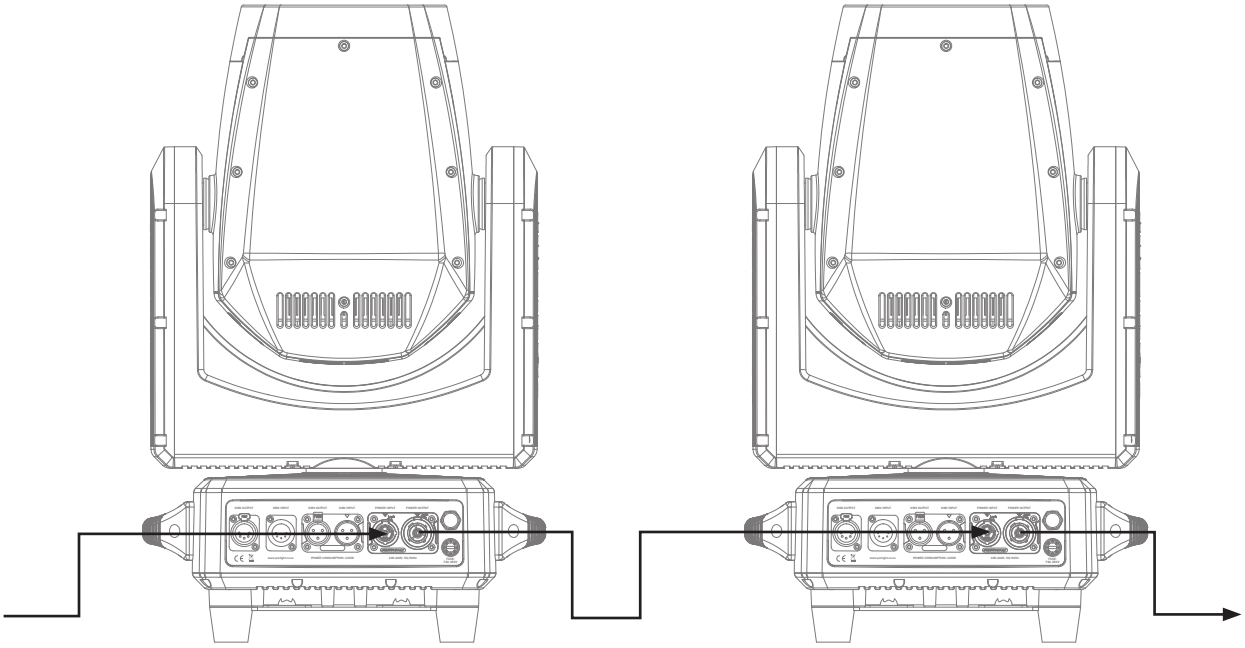
Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.



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 is 8 fixtures @ 240V or 4 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 Fusion Patriot 500 Beam 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.

CE