

EQUINOX

Fusion Patriot 1940FXP **Pixel Zoom Wash** User Manual



Order codes: EQLED471

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.



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 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.
- Warning! Risk Group 2 LED product according to EN 62471. Do not view the light output with optical instruments or any device that may concentrate the beam.
- 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.

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 LED in operation as it may damage/be harmful to the eyes. Avoid looking directly into the light source.

CAUTION!

The maximum ambient temperature (T_a) 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!

To avoid damage to internal parts ie. optics, motors, belts, wiring or LEDs never expose the front lens to direct sunlight, lighting fixtures or lasers even when the fixture is not in use.

Fusion Patriot 1940FXP Pixel Zoom Wash

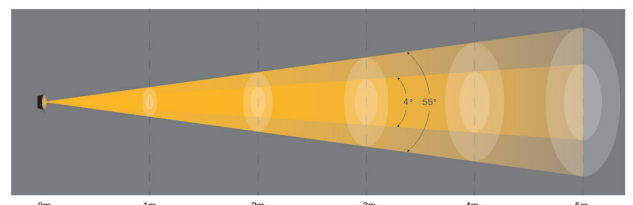
The Equinox Fusion Patriot 1940FXP is a powerful IP65-rated moving head beam designed to thrive in the toughest environments. Featuring 19 x 40W quad-colour LEDs (RGBW) and full pixel mapping capabilities allows for stunning eye candy effects to be created. The motorised zoom from a narrow 4 degree beam angle to a wider 55 degree paired with front-lens rotation, allows the user to create superb mid-air multibeam effects along with wide washes of colour. The fixture also features colour temperature presets, DMX, auto, manual control and primary/secondary modes all accessible via the onboard 4 button menu. With 3/5-pin DMX, PowerTwist TR1, and quick-release omega clamps, this versatile fixture integrates seamlessly into any rig.

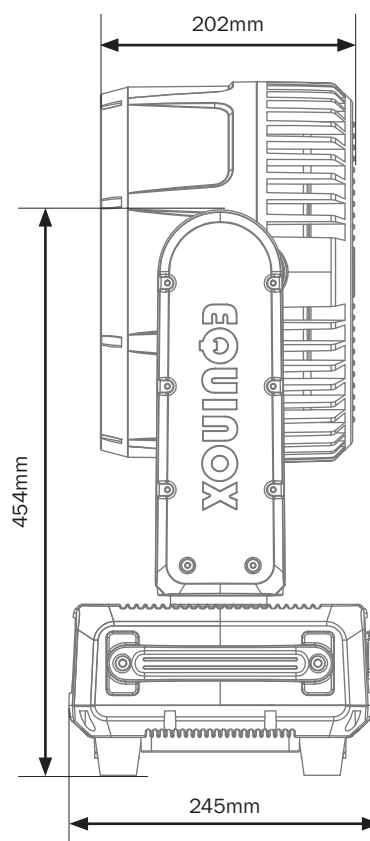
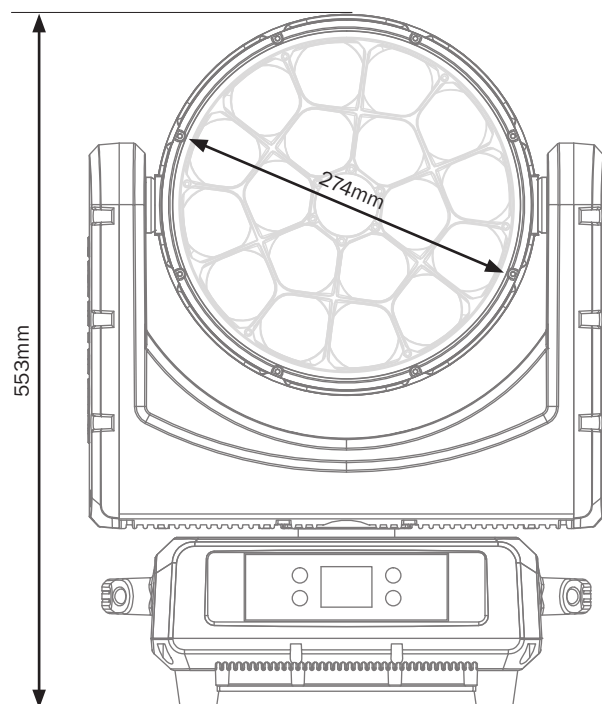
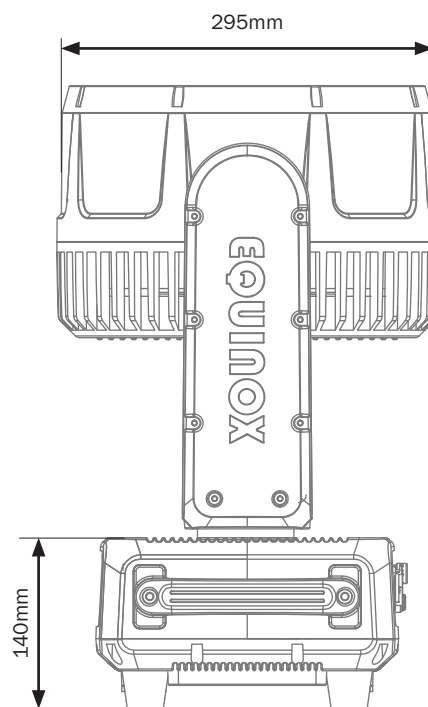
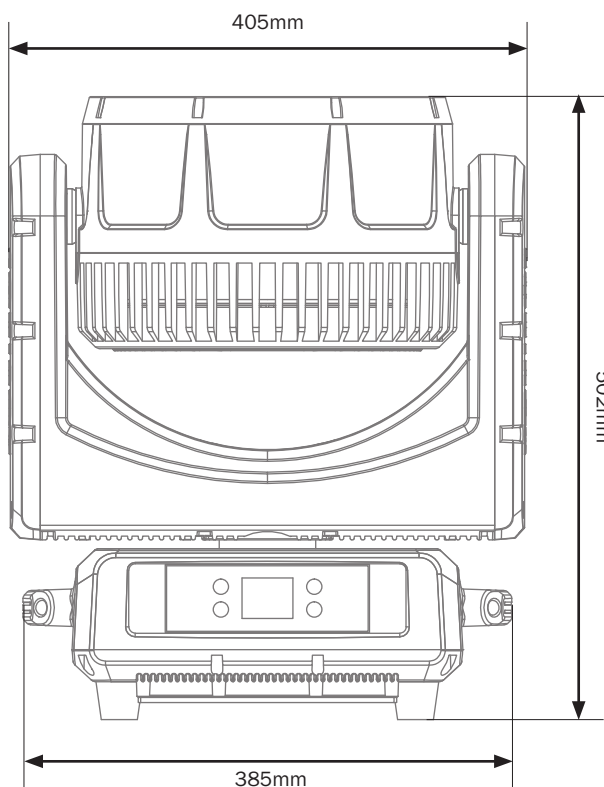
- 19 x 40W quad-colour LEDs (RGBW)
- Adjustable beam angle: 4° - 55°
- 4° - 110,743 Lux @ 2m (full on), 55° - 14,522 Lux @ 2m (full on)
- CRI: 70
- Refresh rate: 5 selectable presets between 650Hz-25kHz
- Motorised zoom
- Full pixel mapping capabilities
- Front lens rotation
- DMX channels: 18/21/35/96 or 111 selectable
- Wireless control (W-DMX Sweden compatible transceiver)
- RDM (Remote Device Management)
- Auto, manual control and primary/secondary modes
- Colour temperature presets
- Forward facing show mode
- Pan/tilt auto correction
- 16-Bit pan/tilt positioning
- Pan: 540°, Tilt: 220°
- 0 - 100% dimming
- 4 dimming curves: Linear, square law, inverse square law and S-curve
- Variable strobe
- Quick release omega clamps included
- 4 button menu with 1.8" LCD display
- PowerTwist TR1 input/output
- 5-Pin XLR input/output
- 3-Pin XLR input/output
- Temperature controlled fans

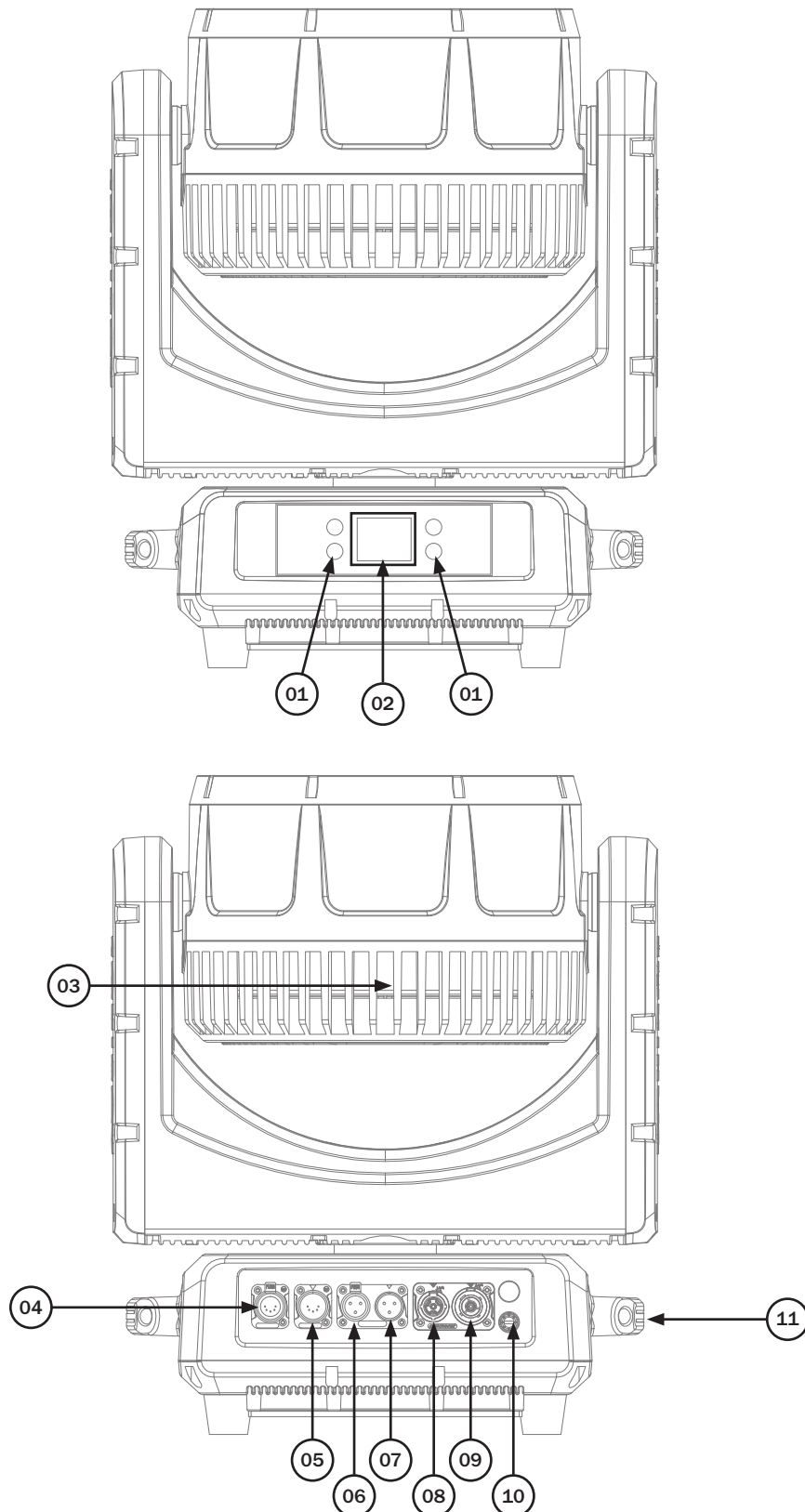


Specifications	Fusion Patriot 1940FXP Pixel Zoom Wash
Power consumption	813W
Fuse	T10A 250V
Power supply	100~240V, 50/60Hz
IP rating	IP65
Dimensions (H x W x D)	553 x 405 x 245mm
Weight	23kg
Order code	EQLED471

4° LUX	72204	18054	8023	4513	2586
55° LUX	9844	2461	1094	615	394
4° LUX	178480	44020	19831	11105	7139
55° LUX	21676	5419	2408	1355	867
4° LUX	21040	5260	2338	1315	842
55° LUX	4028	1007	448	252	161
4° LUX	275144	68786	30572	17196	11006
55° LUX	27216	6804	3024	1701	1089
4° LUX	442972	110743	49219	27686	17719
55° LUX	58088	14522	6454	3630	2324







01 - Function buttons
 02 - LCD display
 03 - Fans
 04 - 5-Pin DMX output

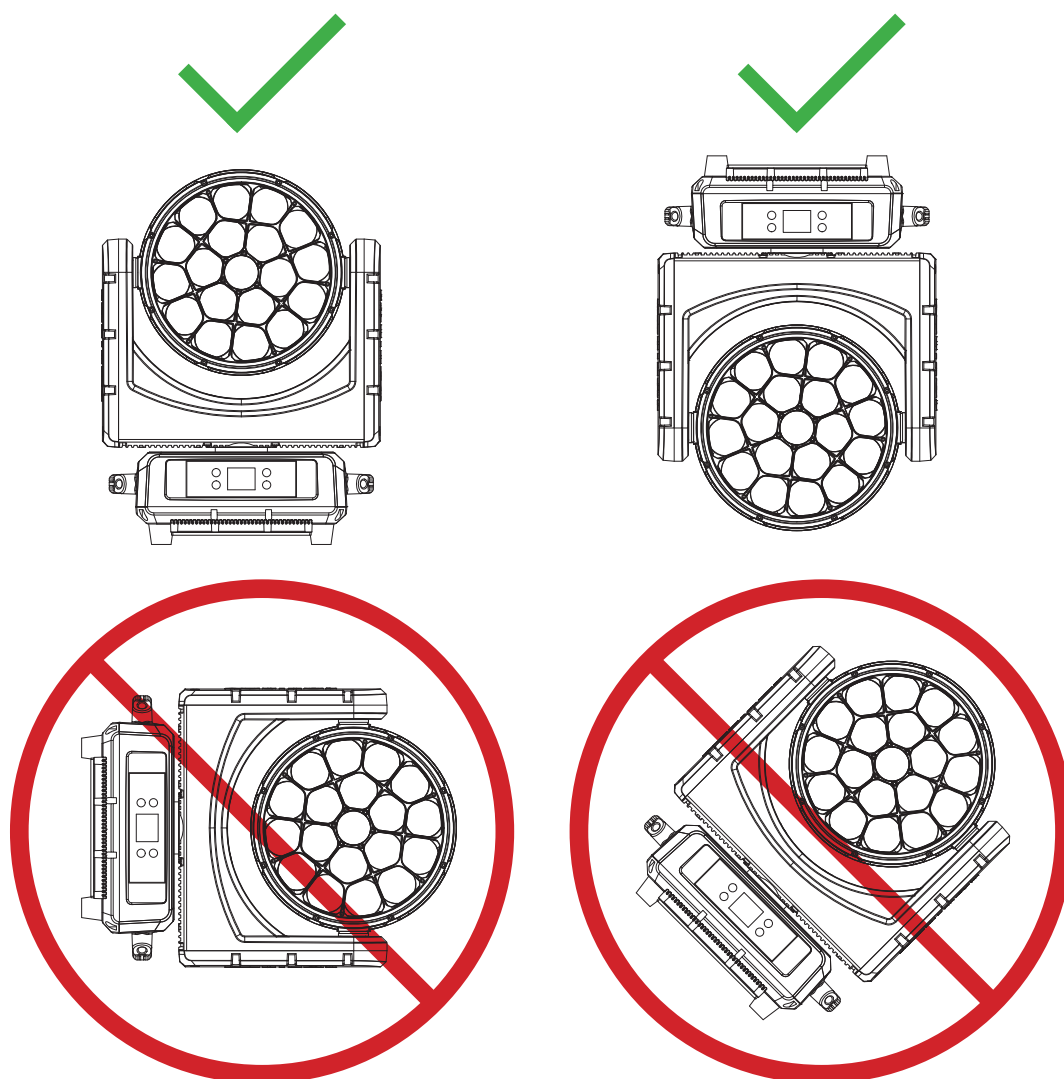
05 - 5-Pin DMX input
 06 - 3-Pin DMX output
 07 - 3-Pin DMX input
 08 - PowerTwist TR1 input

09 - PowerTwist TR1 output
 10 - Fuse: T10A 250V
 11 - Carry handle

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.



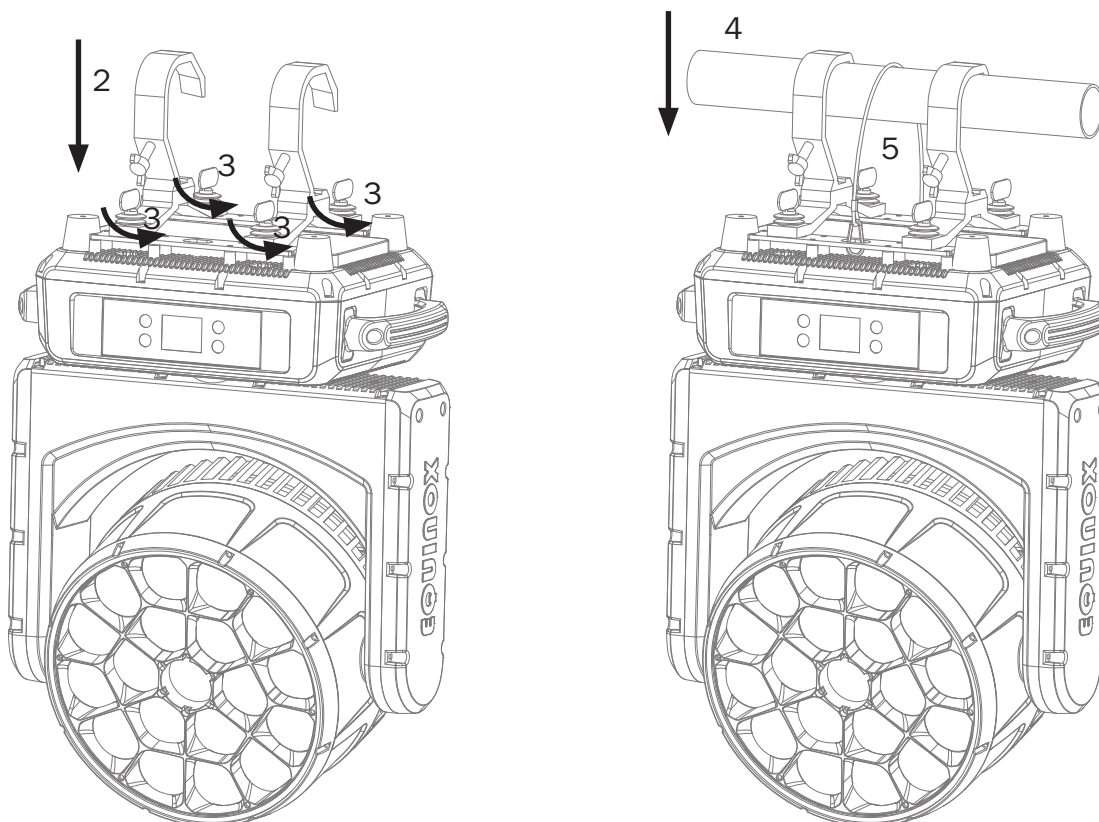
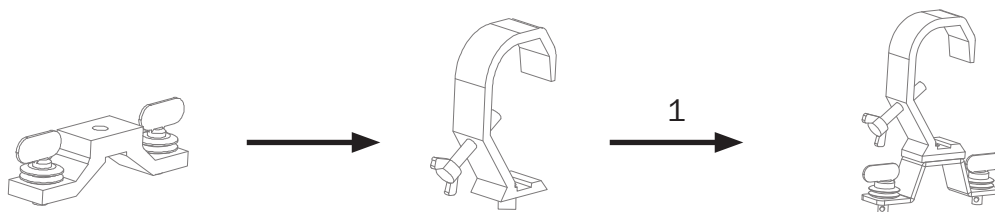
The Fusion Patriot 1940FXP Pixel Zoom Wash can be operated where the base of the fixture is horizontally orientated, this includes standing the fixture upright on a flat, level surface or hanging the fixture upside down.

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.

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.



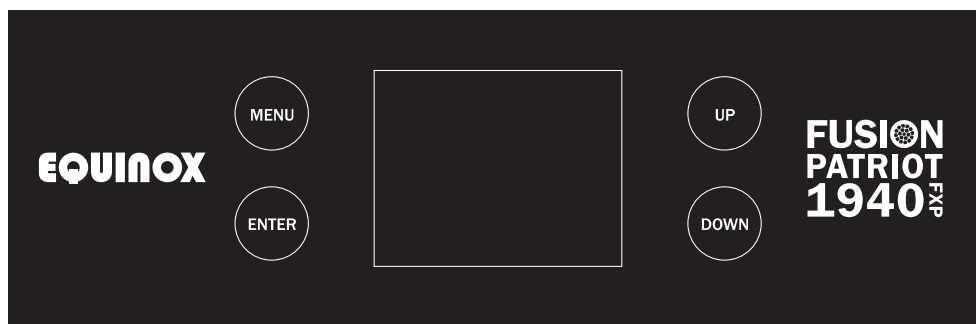
Control Panel Menu:

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 “**Software Update**” followed by “**Please Wait...**” than “**Equinox**” and followed by “**Motor Reset Please Wait...**”. The fixture will then return to its home screen.

Press and hold the “**MENU**” button for 5 seconds to unlock the screen, than press “**ENTER**” 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 and hold the “**MENU**” button.

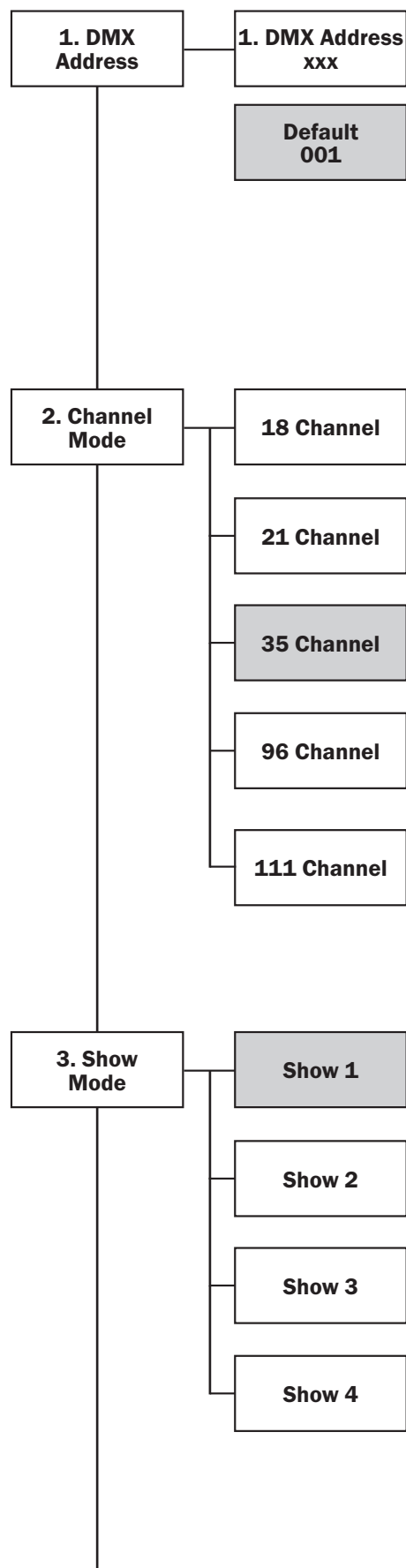


Error Codes:

When the unit is powered on the unit will automatically perform a motor reset. If there is a problem with any of the motors these will be displayed under the Error Log in the menu (see page 14).

Please power the unit off and back on to reset the motors again.

Main Menu - Defaults are in grey



DMX address:

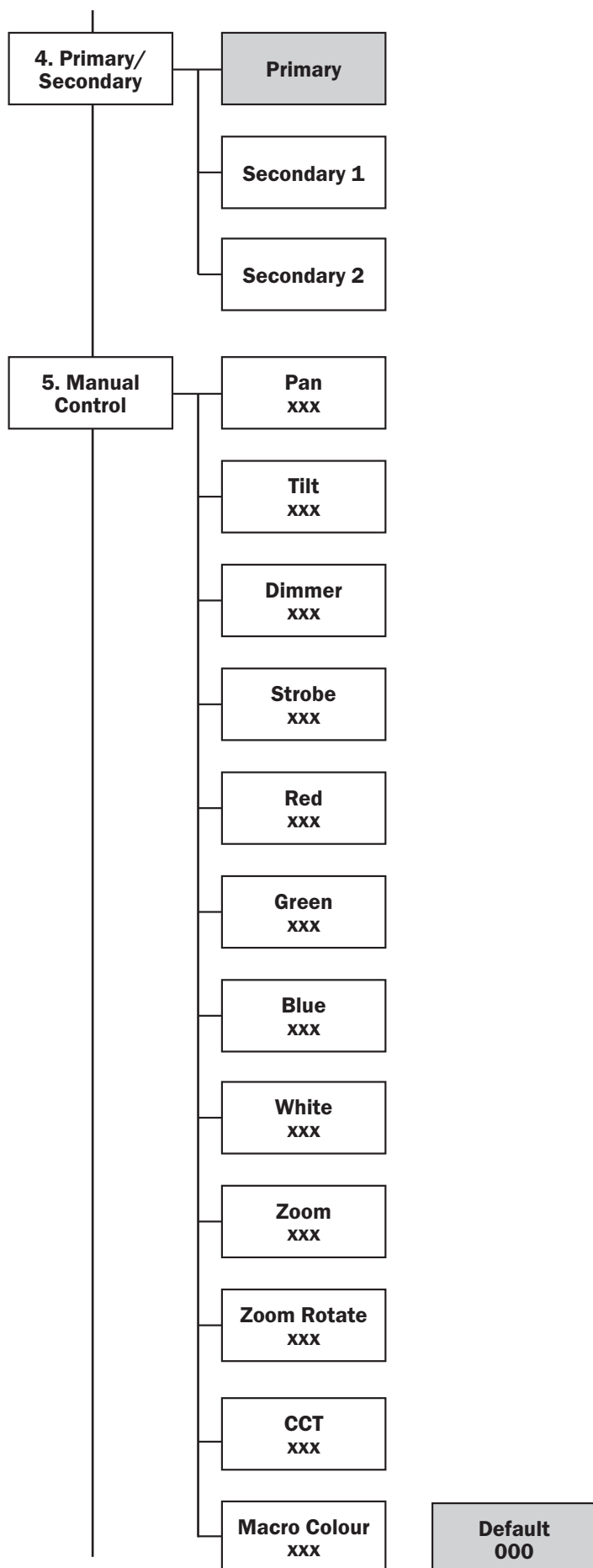
To access the DMX address mode, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “DMX Address” on the LCD display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to set the required DMX address. Press the “ENTER” button to confirm the setting.

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.

Show mode:

To access the show modes, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “Show Mode” on the LCD display. Now press the “ENTER” button and use the “UP” and “DOWN” buttons to set the required show mode. Press the “ENTER” button to confirm the setting. Show 3 & 4 are forward facing show modes.

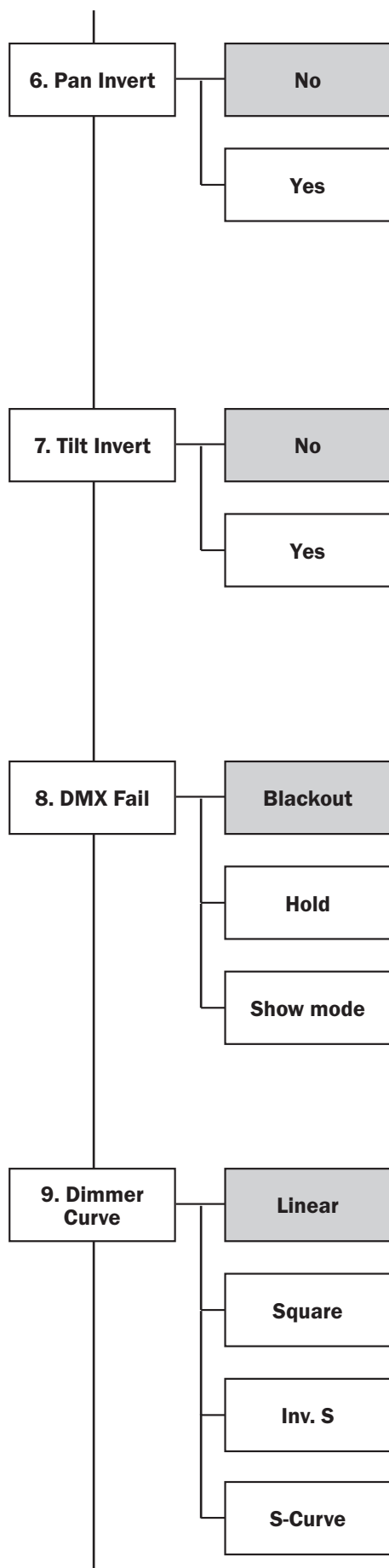


Primary/secondary mode:

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:

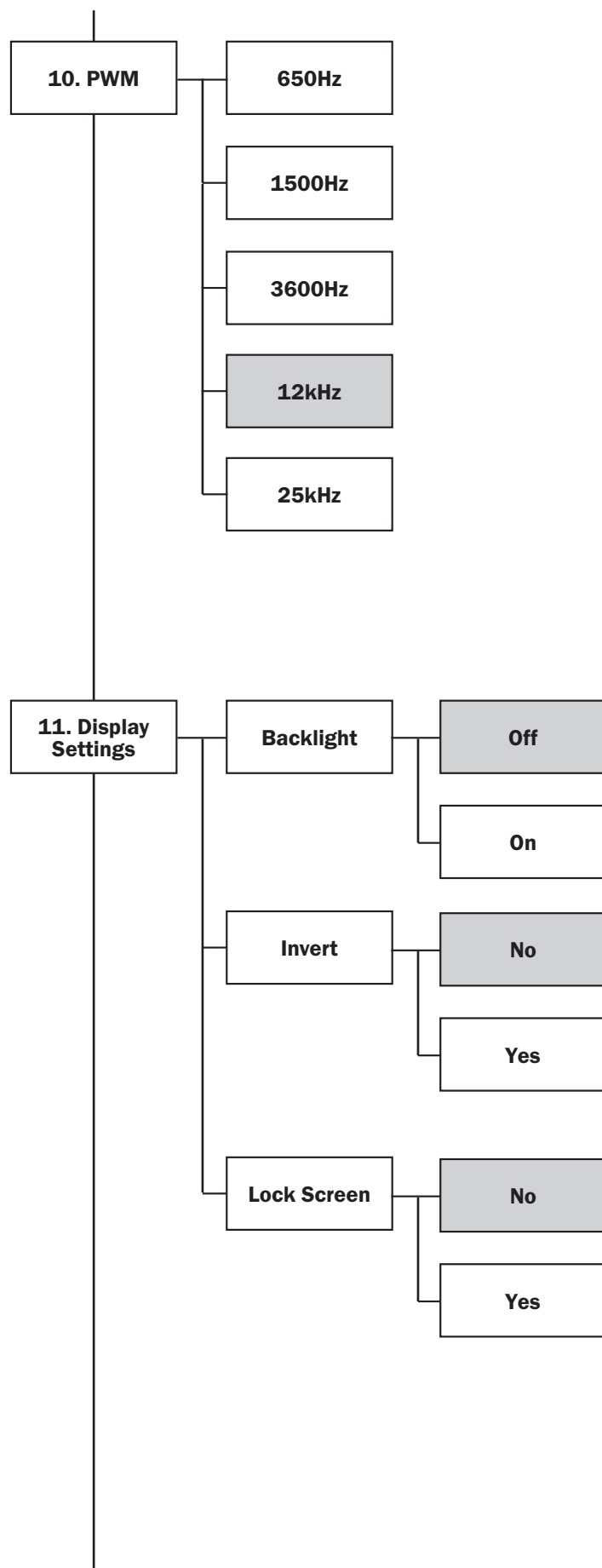
To access the tilt invert setting, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “**Tilt Invert**” on the LCD display. Press the “ENTER” button and use the “UP” and “DOWN” buttons to select between “**No**” and “**Yes**”. Press the “ENTER” button to confirm the setting.

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 setting:

To access the dimmer curve setting, 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 choose between “**Linear**”, “**Square**”, “**Inv. S**” or “**S-Curve**”. Press the “ENTER” button to confirm the setting.



Refresh rate setting:

To access the refresh rate setting, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “PWM” on the LCD display. Press the “ENTER” button and use the “UP” and “DOWN” buttons to choose between “650Hz”, “1500Hz”, “3600Hz”, “12kHz” or “25kHz”. Press the “ENTER” button to confirm the setting.

Display backlight:

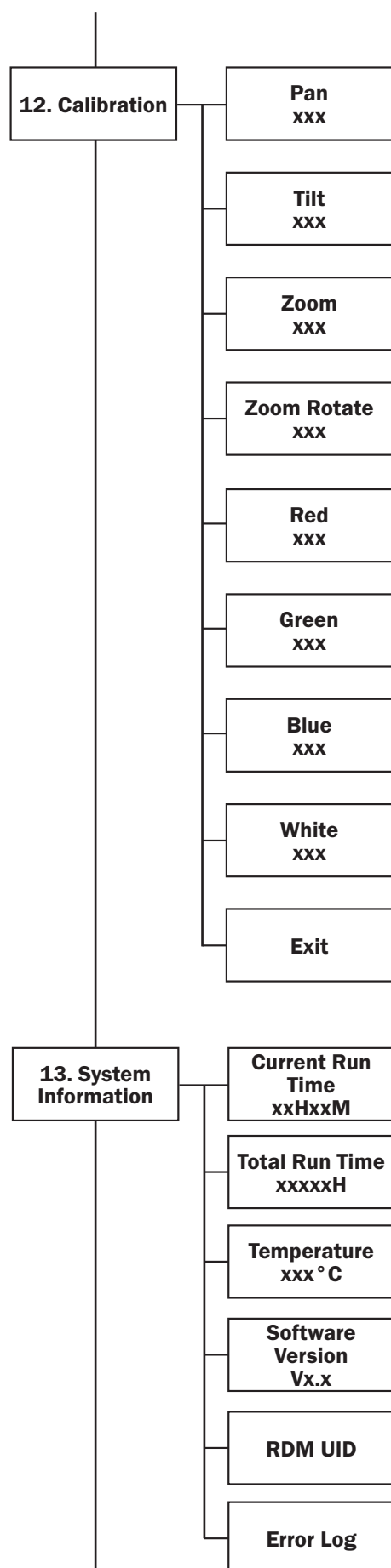
To access the display backlight setting, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “Display Settings” on the LCD display. Press the “ENTER” button and use the “UP” and “DOWN” buttons to select “Backlight”. Press the “ENTER” button and use the “UP” and “DOWN” buttons to select 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.

Lock Screen:

To access the 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 select the various options. Press the “**ENTER**” button and use the “**UP**” and “**DOWN**” buttons to select between “**000**” - “**255**”.

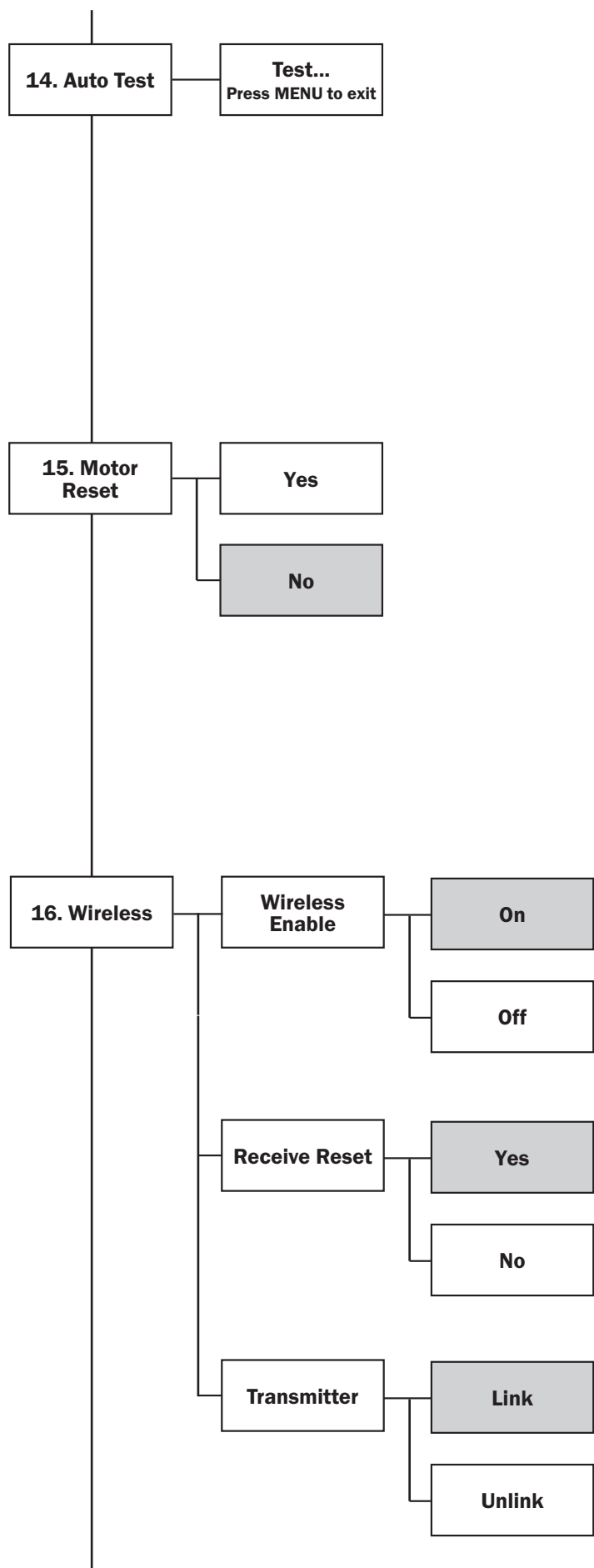
Press the “**ENTER**” button to confirm the setting.

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. The unit will now display the fixtures current run time, total run 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.

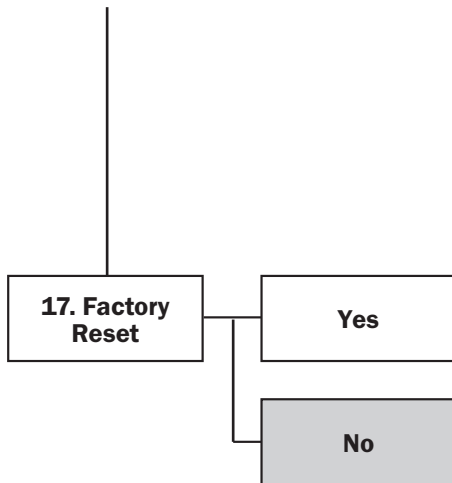
Motor reset:

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:

To access wireless setting, press the “ENTER” button and use the “UP” and “DOWN” buttons to show “Wireless” on the LCD display. Press the “ENTER” button and use the “UP” and “DOWN” buttons to select between “Wireless Enable”, “Receive Reset” and “Transmitter”. 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.

DMX channel modes:

18CH	96CH	Value	Function	Default Value
1	1	000-255	Pan adjustment 0-540°	000
2	2	000-255	Pan fine adjustment	000
3	3	000-255	Tilt adjustment 0-270°	000
4	4	000-255	Tilt fine adjustment	000
5	5	000-255	Pan/tilt speed (fast-slow)	000
6	6	000-255	Zoom (narrow-wide)	000
7	7	Zoom rotation		000
		000-127	Rotation index	
		128-190	Clockwise rotation (fast-slow)	
		191-192	Rotation stop	
		193-255	Anti-clockwise rotation (slow-fast)	
8	8	000-255	Master dimmer (0-100%)	000
9	9	Strobe		000
		000-003	LED off	
		004-103	Strobe (slow-fast)	
		104-107	LED on	
		108-207	Pulse strobe (slow-fast)	
		208-212	LED on	
		213-251	Random strobe (slow-fast)	
		252-255	LED on	
10	10	000-255	Red dimmer (0-100%)	000
11	11	000-255	Green dimmer (0-100%)	000
12	12	000-255	Blue dimmer (0-100%)	000
13	13	000-255	White dimmer (0-100%)	000
14	14	Colour temperature presets		000
		000	No function	
		001-027	2800K	
		028-055	3200K	
		056-083	3600K	
		084-111	4500K	
		112-139	5000K	
		140-167	5600K	
		168-195	6200K	
		196-223	6800K	
		224-251	7500K	
		252-255	8500K	
15	15	Colour macros		000
		000-009	No function	
		010	Red	
		011	Green	

DMX channel modes:

18CH	96CH	Value	Function	Default Value
15 (cont.)	15 (cont.)	Colour macros (cont.)		
		012	Blue	000
		013	Cyan	
		014	Yellow	
		015	Magenta	
		016	7000K	
		017	5000K	
		018	3700K	
		019	Green	
		020-022	Medium Yellow	
		023-026	Straw Tint	
		027-028	Surprise Peach	
		029	Fire	
		030	Medium Amber	
		031	Gold Amber	
		032-034	Dark Amber	
		035-044	Sunrise Red	
		045	Light Pink	
		046-048	Medium Pink	
		049-061	Pink Carnation	
		062-067	Light Lavender	
		068-077	Lavender	
		078-088	Sky Blue	
		089-099	Just Blue	
		100-109	Dark Yellow Green	
		110-111	Spring Yellow	
		112	Light Amber	
		113	Straw	
		114	Deep Amber	
		115-116	Orange	
		117	Light Rose	
		118	English Rose	
		119	Light Salmon	
		120	Middle Rose	
		121-122	Dark Pink	
		123-124	Magenta	
		125	Peacock Blue	
		126	Medium Blue Green	
		127	Steel Blue	
		128	Light Blue	

DMX channel modes:

18CH	96CH	Value	Function	Default Value	
15 (cont.)	15 (cont.)	Colour macros (cont.)			000
		129-130	Dark Blue		
		131-133	Leaf Green		
		134-135	Dark Green		
		136-137	Mauve		
		138-141	Bright Pink		
		142-144	Medium Blue		
		145	Deep Golden Amber		
		146	Pale Lavender		
		147-148	Special Lavender		
		149-150	Primary Green		
		151-156	Bright Blue		
		157-161	Apricot		
		162-167	Pale Gold		
		168-171	Deep Orange		
		172-173	Bastard Amber		
		174	Flame Red		
		175-178	Daylight Blue		
		179	Lilac Tint		
		180-183	Deep Lavender		
		184-190	Deep Steel Blue		
		191-206	Congo Blue		
		207	Alice Blue		
		208	Dirty White		
		209-255	White		
16	16	Dynamic effects (use channels 10-13 to select the colour)			000
		000-009	No function		
		010-014	Dynamic effect 1		
		015-019	Dynamic effect 2		
		020-024	Dynamic effect 3		
		025-029	Dynamic effect 4		
		030-034	Dynamic effect 5		
		035-039	Dynamic effect 6		
		040-044	Dynamic effect 7		
		045-049	Dynamic effect 8		
		050-054	Dynamic effect 9		
		055-059	Dynamic effect 10		
		060-064	Dynamic effect 11		
		065-069	Dynamic effect 12		

DMX channel modes:

18CH	96CH	Value	Function	Default Value
16 (cont.)	16 (cont.)	Dynamic effects (use channels 10-13 to select the colour)		
		070-074	Dynamic effect 13	000
		075-079	Dynamic effect 14	
		080-084	Dynamic effect 15	
		085-089	Dynamic effect 16	
		090-094	Dynamic effect 17	
		095-099	Dynamic effect 18	
		100-104	Dynamic effect 19	
		105-109	Dynamic effect 20	
		110-114	Dynamic effect 21	
		115-119	Dynamic effect 22	
		120-124	Dynamic effect 23	
		125-129	Dynamic effect 24	
		130-134	Dynamic effect 25	
		135-139	Dynamic effect 26	
		140-144	Dynamic effect 27	
		145-149	Dynamic effect 28	
		150-154	Dynamic effect 29	
		155-159	Dynamic effect 30	
		160-164	Dynamic effect 31	
		165-169	Dynamic effect 32	
		170-174	Dynamic effect 33	
		175-179	Dynamic effect 34	
		180-184	Dynamic effect 35	
		185-189	Dynamic effect 36	
		190-194	Dynamic effect 37	
		195-199	Dynamic effect 38	
		200-204	Dynamic effect 39	
		205-209	Dynamic effect 40	
		210-214	Dynamic effect 41	
		215-219	Dynamic effect 42	
		220-224	Dynamic effect 43	
		225-229	Dynamic effect 44	
		230-234	Dynamic effect 45	
		235-239	Dynamic effect 46	
		240-244	Dynamic effect 47	
		245-249	Dynamic effect 48	
		250-254	Dynamic effect 49	
		255	Dynamic effect 50	

DMX channel modes:

18CH	96CH	Value	Function	Default Value
17	17	000-255	Dynamic effect speed (fast-slow)	000
-	18	Dimming curves		
		000-100	Linear	
		101-150	Square Law	
		151-200	Inv. Square Law	
		201-255	S-Curve	
-	19	Refresh rate		000
		000-050	650Hz	
		051-100	1500Hz	
		101-150	3600Hz	
		151-200	12kHz	
		201-255	25kHz	
-	20	000-255	Red 1 dimmer (0-100%)	000
-	21	000-255	Green 1 dimmer (0-100%)	000
-	22	000-255	Blue 1 dimmer (0-100%)	000
-	23	000-255	White 1 dimmer (0-100%)	000
-	24	000-255	Red 2 dimmer (0-100%)	000
-	25	000-255	Green 2 dimmer (0-100%)	000
-	26	000-255	Blue 2 dimmer (0-100%)	000
-	27	000-255	White 2 dimmer (0-100%)	000
-	28	000-255	Red 3 dimmer (0-100%)	000
-	29	000-255	Green 3 dimmer (0-100%)	000
-	30	000-255	Blue3 dimmer (0-100%)	000
-	31	000-255	White 3 dimmer (0-100%)	000
-	32	000-255	Red 4 dimmer (0-100%)	000
-	33	000-255	Green 4 dimmer (0-100%)	000
-	34	000-255	Blue 4 dimmer (0-100%)	000
-	35	000-255	White 4 dimmer (0-100%)	000
-	36	000-255	Red 5 dimmer (0-100%)	000
-	37	000-255	Green 5 dimmer (0-100%)	000
-	38	000-255	Blue 5 dimmer (0-100%)	000
-	39	000-255	White 5 dimmer (0-100%)	000
-	40	000-255	Red 6 dimmer (0-100%)	000
-	41	000-255	Green 6 dimmer (0-100%)	000
-	42	000-255	Blue 6 dimmer (0-100%)	000
-	43	000-255	White 6 dimmer (0-100%)	000
-	44	000-255	Red 7 dimmer (0-100%)	000
-	45	000-255	Green 7 dimmer (0-100%)	000
-	46	000-255	Blue 7 dimmer (0-100%)	000
-	47	000-255	White 7 dimmer (0-100%)	000

DMX channel modes:

18CH	96CH	Value	Function	Default Value
-	48	000-255	Red 8 dimmer (0-100%)	000
-	49	000-255	Green 8 dimmer (0-100%)	000
-	50	000-255	Blue 8 dimmer (0-100%)	000
-	51	000-255	White 8 dimmer (0-100%)	000
-	52	000-255	Red 9 dimmer (0-100%)	000
-	53	000-255	Green 9 dimmer (0-100%)	000
-	54	000-255	Blue 9 dimmer (0-100%)	000
-	55	000-255	White 9 dimmer (0-100%)	000
-	56	000-255	Red 10 dimmer (0-100%)	000
-	57	000-255	Green 10 dimmer (0-100%)	000
-	58	000-255	Blue 10 dimmer (0-100%)	000
-	59	000-255	White 10 dimmer (0-100%)	000
-	60	000-255	Red 11 dimmer (0-100%)	000
-	61	000-255	Green 11 dimmer (0-100%)	000
-	62	000-255	Blue 11 dimmer (0-100%)	000
-	63	000-255	White 11 dimmer (0-100%)	000
-	64	000-255	Red 12 dimmer (0-100%)	000
-	65	000-255	Green 12 dimmer (0-100%)	000
-	66	000-255	Blue 12 dimmer (0-100%)	000
-	67	000-255	White 12 dimmer (0-100%)	000
-	68	000-255	Red 13 dimmer (0-100%)	000
-	69	000-255	Green 13 dimmer (0-100%)	000
-	70	000-255	Blue 13 dimmer (0-100%)	000
-	71	000-255	White 13 dimmer (0-100%)	000
-	72	000-255	Red 14 dimmer (0-100%)	000
-	73	000-255	Green 14 dimmer (0-100%)	000
-	74	000-255	Blue 14 dimmer (0-100%)	000
-	75	000-255	White 14 dimmer (0-100%)	000
-	76	000-255	Red 15 dimmer (0-100%)	000
-	77	000-255	Green 15 dimmer (0-100%)	000
-	78	000-255	Blue 15 dimmer (0-100%)	000
-	79	000-255	White 15 dimmer (0-100%)	000
-	80	000-255	Red 16 dimmer (0-100%)	000
-	81	000-255	Green 16 dimmer (0-100%)	000
-	82	000-255	Blue 16 dimmer (0-100%)	000
-	83	000-255	White 16 dimmer (0-100%)	000
-	84	000-255	Red 17 dimmer (0-100%)	000
-	85	000-255	Green 17 dimmer (0-100%)	000
-	86	000-255	Blue 17 dimmer (0-100%)	000
-	87	000-255	White 17 dimmer (0-100%)	000

DMX channel modes:

18CH	96CH	Value	Function	Default Value
-	88	000-255	Red 18 dimmer (0-100%)	000
-	89	000-255	Green 18 dimmer (0-100%)	000
-	90	000-255	Blue 18 dimmer (0-100%)	000
-	91	000-255	White 18 dimmer (0-100%)	000
-	92	000-255	Red 19 dimmer (0-100%)	000
-	93	000-255	Green 19 dimmer (0-100%)	000
-	94	000-255	Blue 19 dimmer (0-100%)	000
-	95	000-255	White 19 dimmer (0-100%)	000
18	96	000-250	No function	000
		251-255	Reset (hold for 5 seconds)	

DMX channel modes:

21CH	Value	Function	Default Value
1	000-255	Pan adjustment 0-540°	000
2	000-255	Pan fine adjustment	000
3	000-255	Tilt adjustment 0-270°	000
4	000-255	Tilt fine adjustment	000
5	000-255	Pan/tilt speed (fast-slow)	000
6	000-255	Zoom (narrow-wide)	000
7	Zoom rotation		000
	000-127	Rotation index	
	128-190	Clockwise rotation (fast-slow)	
	191-192	Rotation stop	
	193-255	Anti-clockwise rotation (slow-fast)	
8	000-255	Master dimmer (0-100%)	000
9	000-255	Dimmer fine (0-100%)	000
10	Strobe		000
	000-003	LED off	
	004-103	Strobe (slow-fast)	
	104-107	LED on	
	108-207	Pulse strobe (slow-fast)	
	208-212	LED on	
	213-251	Random strobe (slow-fast)	
	252-255	LED on	
11	000-255	Red dimmer (0-100%)	000
12	000-255	Red fine (0-100%)	000
13	000-255	Green dimmer (0-100%)	000
14	000-255	Green fine (0-100%)	000
15	000-255	Blue dimmer (0-100%)	000
16	000-255	Blue fine (0-100%)	000
17	000-255	White dimmer (0-100%)	000
18	000-255	White fine (0-100%)	000
19	Colour temperature presets		000
	000	No function	
	001-027	2800K	
	028-055	3200K	
	056-083	3600K	
	084-111	4500K	
	112-139	5000K	
	140-167	5600K	
	168-195	6200K	
	196-223	6800K	
	224-251	7500K	

DMX channel modes:

21CH	Value	Function	Default Value
19 (cont.)	Colour temperature presets (cont.)		
	252-255	8500K	000
20	Colour macros		
	000-009	No function	000
	010	Red	
	011	Green	
	012	Blue	
	013	Cyan	
	014	Yellow	
	015	Magenta	
	016	7000K	
	017	5000K	
	018	3700K	
	019	Green	
	020-022	Medium Yellow	
	023-026	Straw Tint	
	027-028	Surprise Peach	
	029	Fire	
	030	Medium Amber	
	031	Gold Amber	
	032-034	Dark Amber	
	035-044	Sunrise Red	
	045	Light Pink	
	046-048	Medium Pink	
	049-061	Pink Carnation	
	062-067	Light Lavender	
	068-077	Lavender	
	078-088	Sky Blue	
	089-099	Just Blue	
	100-109	Dark Yellow Green	
	110-111	Spring Yellow	
	112	Light Amber	
	113	Straw	
	114	Deep Amber	
	115-116	Orange	
	117	Light Rose	
	118	English Rose	
	119	Light Salmon	
	120	Middle Rose	
	121-122	Dark Pink	

DMX channel modes:

21CH	Value	Function	Default Value
20 (cont.)	Colour macros (cont.)		
	123-124	Magenta	000
	125	Peacock Blue	
	126	Medium Blue Green	
	127	Steel Blue	
	128	Light Blue	
	129-130	Dark Blue	
	131-133	Leaf Green	
	134-135	Dark Green	
	136-137	Mauve	
	138-141	Bright Pink	
	142-144	Medium Blue	
	145	Deep Golden Amber	
	146	Pale Lavender	
	147-148	Special Lavender	
	149-150	Primary Green	
	151-156	Bright Blue	
	157-161	Apricot	
	162-167	Pale Gold	
	168-171	Deep Orange	
	172-173	Bastard Amber	
	174	Flame Red	
	175-178	Daylight Blue	
	179	Lilac Tint	
	180-183	Deep Lavender	
	184-190	Deep Steel Blue	
	191-206	Congo Blue	
	207	Alice Blue	
	208	Dirty White	
	209-255	White	
21	000-250	No function	000
	251-255	Reset (hold for 5 seconds)	

DMX channel modes:

35CH	111CH	Value	Function	Default Value
1	1	000-255	Pan adjustment 0-540°	000
2	2	000-255	Pan fine adjustment	000
3	3	000-255	Tilt adjustment 0-270°	000
4	4	000-255	Tilt fine adjustment	000
5	5	000-255	Pan/tilt speed (fast-slow)	000
6	6	000-255	Zoom (narrow-wide)	000
7	7	Zoom rotation		000
		000-127	Rotation index	
		128-190	Clockwise rotation (fast-slow)	
		191-192	Rotation stop	
		193-255	Anti-clockwise rotation (slow-fast)	
8	8	000-255	Master dimmer (0-100%)	000
9	9	000-255	Dimmer fine (0-100%)	000
10	10	Strobe		000
		000-003	LED off	
		004-103	Strobe (slow-fast)	
		104-107	LED on	
		108-207	Pulse strobe (slow-fast)	
		208-212	LED on	
		213-251	Random strobe (slow-fast)	
		252-255	LED on	
11	11	000-255	Red dimmer (0-100%)	000
12	12	000-255	Red fine (0-100%)	000
13	13	000-255	Green dimmer (0-100%)	000
14	14	000-255	Green fine (0-100%)	000
15	15	000-255	Blue dimmer (0-100%)	000
16	16	000-255	Blue fine (0-100%)	000
17	17	000-255	White dimmer (0-100%)	000
18	18	000-255	White fine (0-100%)	000
19	19	Colour temperature presets		000
		000	No function	
		001-027	2800K	
		028-055	3200K	
		056-083	3600K	
		084-111	4500K	
		112-139	5000K	
		140-167	5600K	
		168-195	6200K	
		196-223	6800K	
		224-251	7500K	

DMX channel modes:

35CH	111CH	Value	Function	Default Value
19 (cont.)	19 (cont.)	Colour temperature presets (cont.)		
		252-255	8500K	000
20	20	Colour macros		
		000-009	No function	000
		010	Red	
		011	Green	
		012	Blue	
		013	Cyan	
		014	Yellow	
		015	Magenta	
		016	7000K	
		017	5000K	
		018	3700K	
		019	Green	
		020-022	Medium Yellow	
		023-026	Straw Tint	
		027-028	Surprise Peach	
		029	Fire	
		030	Medium Amber	
		031	Gold Amber	
		032-034	Dark Amber	
		035-044	Sunrise Red	
		045	Light Pink	
		046-048	Medium Pink	
		049-061	Pink Carnation	
		062-067	Light Lavender	
		068-077	Lavender	
		078-088	Sky Blue	
		089-099	Just Blue	
		100-109	Dark Yellow Green	
		110-111	Spring Yellow	
		112	Light Amber	
		113	Straw	
		114	Deep Amber	
		115-116	Orange	
		117	Light Rose	
		118	English Rose	
		119	Light Salmon	
		120	Middle Rose	
		121-122	Dark Pink	

DMX channel modes:

35CH	111CH	Value	Function		Default Value	
20 (cont.)	20 (cont.)	Colour macros (cont.)				000
		123-124	Magenta			
		125	Peacock Blue			
		126	Medium Blue Green			
		127	Steel Blue			
		128	Light Blue			
		129-130	Dark Blue			
		131-133	Leaf Green			
		134-135	Dark Green			
		136-137	Mauve			
		138-141	Bright Pink			
		142-144	Medium Blue			
		145	Deep Golden Amber			
		146	Pale Lavender			
		147-148	Special Lavender			
		149-150	Primary Green			
		151-156	Bright Blue			
		157-161	Apricot			
		162-167	Pale Gold			
		168-171	Deep Orange			
		172-173	Bastard Amber			
		174	Flame Red			
		175-178	Daylight Blue			
		179	Lilac Tint			
		180-183	Deep Lavender			
		184-190	Deep Steel Blue			
		191-206	Congo Blue			
		207	Alice Blue			
		208	Dirty White			
		209-255	White			
21	21	Shape selection				000
		000-003	No function	Use channels 24-27 to select the main colour and channels 11-18 to select the background colour		
		004-008	Static Shape 1			
		009-013	Static Shape 2			
		014-017	Static Shape 3			
		018-022	Static Shape 4			
		023-027	Static Shape 5	Use channel 22 to select position/ speed, channels 24-27 to select the main colour and channels 11-18 to select the background colour		
		028-031	Dynamic shape 1			
		032-036	Dynamic shape 2			

DMX channel modes:

35CH	111CH	Value	Function		Default Value			
21 (cont.)	21 (cont.)	Shape selection (cont.)				000		
		037-041	Dynamic shape 3	Use channel 22 to select position/ speed, channels 24-27 to select the main colour and channels 11-18 to select the background colour				
		042-045	Dynamic shape 4					
		046-050	Dynamic shape 5					
		051-055	Dynamic shape 6					
		056-059	Dynamic shape 7					
		060-064	Dynamic shape 8					
		065-069	Dynamic shape 9					
		070-073	Dynamic shape 10					
		074-078	Dynamic shape 11					
		079-083	Dynamic shape 12					
		084-087	Dynamic shape 13					
		088-092	Dynamic shape 14					
		093-096	Dynamic shape 15					
		097-101	Dynamic shape 16					
		102-106	Dynamic shape 17					
		107-110	Dynamic shape 18					
		111-115	Dynamic shape 19					
		116-120	Dynamic shape 20					
		121-124	Dynamic shape 21					
		125-129	Dynamic shape 22					
		130-134	Dynamic shape 23					
		135-138	Dynamic shape 24					
		139-143	Dynamic shape 25					
		144-148	Dynamic shape 26					
		149-152	Dynamic multi-colour shape 1				Use channel 22 to select position/speed	
		152-157	Dynamic multi-colour shape 2					
		158-162	Dynamic multi-colour shape 3					
		163-166	Dynamic multi-colour shape 4					
		167-171	Dynamic multi-colour shape 5					
		172-175	Dynamic multi-colour shape 6					
		176-180	Dynamic multi-colour shape 7					
		181-185	Dynamic multi-colour shape 8					
		186-189	Dynamic multi-colour shape 9					
		190-194	Dynamic multi-colour shape 10					
195-199	Dynamic multi-colour shape 11							
200-203	Dynamic multi-colour shape 12							
204-208	Dynamic multi-colour shape 13							
209-213	Dynamic multi-colour shape 14							
214-217	Dynamic multi-colour shape 15							

DMX channel modes:

35CH	111CH	Value	Function		Default Value	
21 (cont.)	21 (cont.)	Shape selection (cont.)				000
		218-222	Dynamic multi-colour shape 16	Use channel 22 to select position/speed		
		223-227	Dynamic multi-colour shape 17			
		228-231	Dynamic multi-colour shape 18			
		232-236	Dynamic multi-colour shape 19			
		237-241	Dynamic multi-colour shape 20			
		242-245	Dynamic multi-colour shape 21			
		246-250	Dynamic multi-colour shape 22			
		251-254	Dynamic multi-colour shape 23			
		255	Dynamic multi-colour shape 24			
22	22	Shape speed/position				000
		000-009	Position 1			
		010-018	Position 2			
		019-027	Position 3			
		028-036	Position 4			
		037-045	Position 5			
		046-054	Position 6			
		055-063	Position 1			
		064-158	Clockwise rotation (fast-slow)			
		159-160	Rotation stop			
		161-255	Counter-clockwise rotations (slow-fast)			
23	23	000-255	Shape fade	000		
24	24	000-255	Shape red dimmer (0-100%)	000		
25	25	000-255	Shape green dimmer (0-100%)	000		
26	26	000-255	Shape blue dimmer (0-100%)	000		
27	27	000-255	Shape white dimmer (0-100%)	000		
28	28	000-255	Shape master dimmer (0-100%)	000		
29	29	000-255	Background master dimmer (0-100%)	000		
30	30	000-255	Shape starting position	000		
31	31	Shape Strobe				000
		000	LED on			
		001-255	Strobe (slow-fast)			
32	32	Background Strobe				000
		000	LED on			
		001-255	Strobe (slow-fast)			

DMX channel modes:

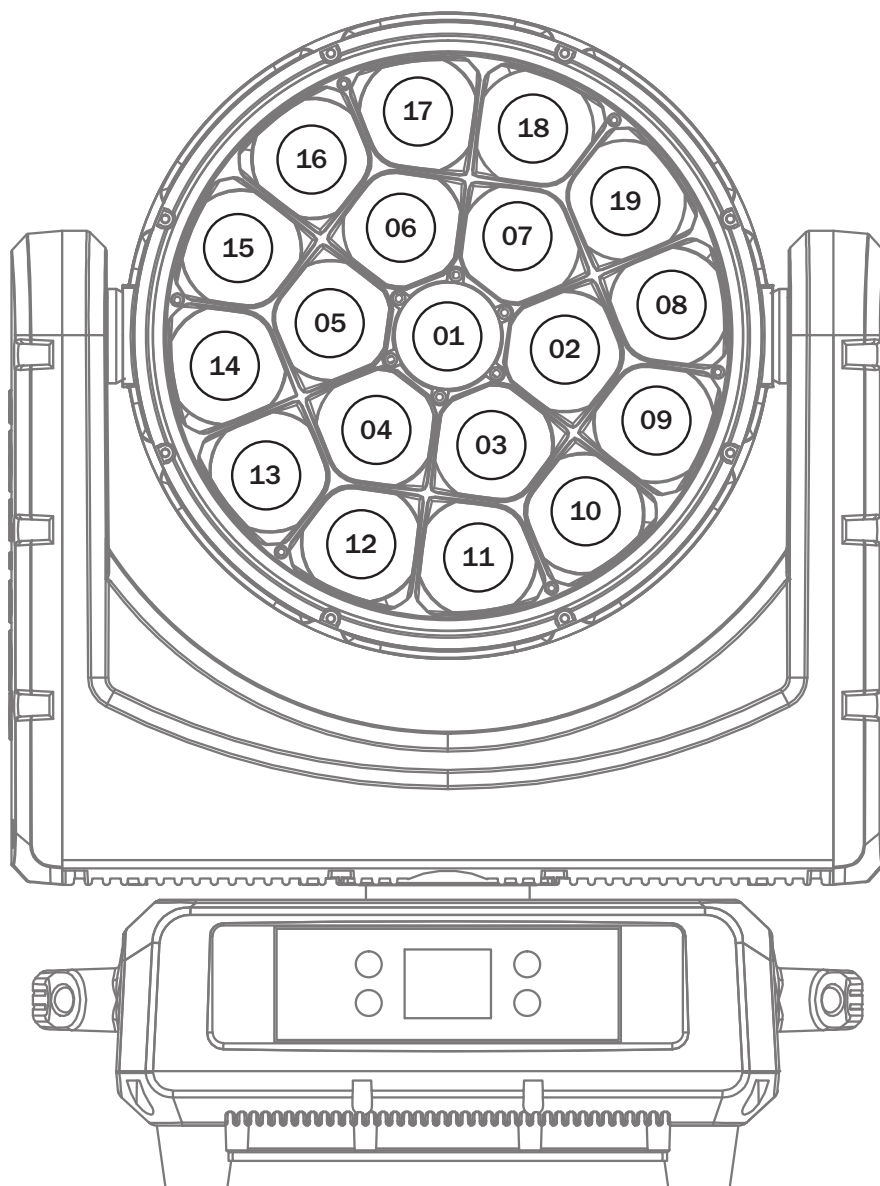
35CH	111CH	Value	Function	Default Value
33	33	Dimming curves		
		000-100	Linear	
		101-150	Square Law	
		151-200	Inv. Square Law	
		201-255	S-Curve	
34	34	Refresh rate		
		000-050	650Hz	000
		051-100	1500Hz	
		101-150	3600Hz	
		151-200	12kHz	
		201-255	25kHz	
-	35	000-255	Red 1 dimmer (0-100%)	000
-	36	000-255	Green 1 dimmer (0-100%)	000
-	37	000-255	Blue 1 dimmer (0-100%)	000
-	38	000-255	White 1 dimmer (0-100%)	000
-	39	000-255	Red 2 dimmer (0-100%)	000
-	40	000-255	Green 2 dimmer (0-100%)	000
-	41	000-255	Blue 2 dimmer (0-100%)	000
-	42	000-255	White 2 dimmer (0-100%)	000
-	43	000-255	Red 3 dimmer (0-100%)	000
-	44	000-255	Green 3 dimmer (0-100%)	000
-	45	000-255	Blue3 dimmer (0-100%)	000
-	46	000-255	White 3 dimmer (0-100%)	000
-	47	000-255	Red 4 dimmer (0-100%)	000
-	48	000-255	Green 4 dimmer (0-100%)	000
-	49	000-255	Blue 4 dimmer (0-100%)	000
-	50	000-255	White 4 dimmer (0-100%)	000
-	51	000-255	Red 5 dimmer (0-100%)	000
-	52	000-255	Green 5 dimmer (0-100%)	000
-	53	000-255	Blue 5 dimmer (0-100%)	000
-	54	000-255	White 5 dimmer (0-100%)	000
-	55	000-255	Red 6 dimmer (0-100%)	000
-	56	000-255	Green 6 dimmer (0-100%)	000
-	57	000-255	Blue 6 dimmer (0-100%)	000
-	58	000-255	White 6 dimmer (0-100%)	000

DMX channel modes:

35CH	111CH	Value	Function	Default Value
-	59	000-255	Red 7 dimmer (0-100%)	000
-	60	000-255	Green 7 dimmer (0-100%)	000
-	61	000-255	Blue 7 dimmer (0-100%)	000
-	62	000-255	White 7 dimmer (0-100%)	000
-	63	000-255	Red 8 dimmer (0-100%)	000
-	64	000-255	Green 8 dimmer (0-100%)	000
-	65	000-255	Blue 8 dimmer (0-100%)	000
-	66	000-255	White 8 dimmer (0-100%)	000
-	67	000-255	Red 9 dimmer (0-100%)	000
-	68	000-255	Green 9 dimmer (0-100%)	000
-	69	000-255	Blue 9 dimmer (0-100%)	000
-	70	000-255	White 9 dimmer (0-100%)	000
-	71	000-255	Red 10 dimmer (0-100%)	000
-	72	000-255	Green 10 dimmer (0-100%)	000
-	73	000-255	Blue 10 dimmer (0-100%)	000
-	74	000-255	White 10 dimmer (0-100%)	000
-	75	000-255	Red 11 dimmer (0-100%)	000
-	76	000-255	Green 11 dimmer (0-100%)	000
-	77	000-255	Blue 11 dimmer (0-100%)	000
-	78	000-255	White 11 dimmer (0-100%)	000
-	79	000-255	Red 12 dimmer (0-100%)	000
-	80	000-255	Green 12 dimmer (0-100%)	000
-	81	000-255	Blue 12 dimmer (0-100%)	000
-	82	000-255	White 12 dimmer (0-100%)	000
-	83	000-255	Red 13 dimmer (0-100%)	000
-	84	000-255	Green 13 dimmer (0-100%)	000
-	85	000-255	Blue 13 dimmer (0-100%)	000
-	86	000-255	White 13 dimmer (0-100%)	000
-	87	000-255	Red 14 dimmer (0-100%)	000
-	88	000-255	Green 14 dimmer (0-100%)	000
-	89	000-255	Blue 14 dimmer (0-100%)	000
-	90	000-255	White 14 dimmer (0-100%)	000
-	91	000-255	Red 15 dimmer (0-100%)	000
-	92	000-255	Green 15 dimmer (0-100%)	000
-	93	000-255	Blue 15 dimmer (0-100%)	000
-	94	000-255	White 15 dimmer (0-100%)	000
-	95	000-255	Red 16 dimmer (0-100%)	000
-	96	000-255	Green 16 dimmer (0-100%)	000
-	97	000-255	Blue 16 dimmer (0-100%)	000
-	98	000-255	White 16 dimmer (0-100%)	000

DMX channel modes:

35CH	111CH	Value	Function	Default Value
-	99	000-255	Red 17 dimmer (0-100%)	000
-	100	000-255	Green 17 dimmer (0-100%)	000
-	101	000-255	Blue 17 dimmer (0-100%)	000
-	102	000-255	White 17 dimmer (0-100%)	000
-	103	000-255	Red 18 dimmer (0-100%)	000
-	104	000-255	Green 18 dimmer (0-100%)	000
-	105	000-255	Blue 18 dimmer (0-100%)	000
-	106	000-255	White 18 dimmer (0-100%)	000
-	107	000-255	Red 19 dimmer (0-100%)	000
-	108	000-255	Green 19 dimmer (0-100%)	000
-	109	000-255	Blue 19 dimmer (0-100%)	000
-	110	000-255	White 19 dimmer (0-100%)	000
35	111	000-250	No function	000
		251-255	Reset (hold for 5 seconds)	



Display Position: PAN = 000, TILT = 018

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:

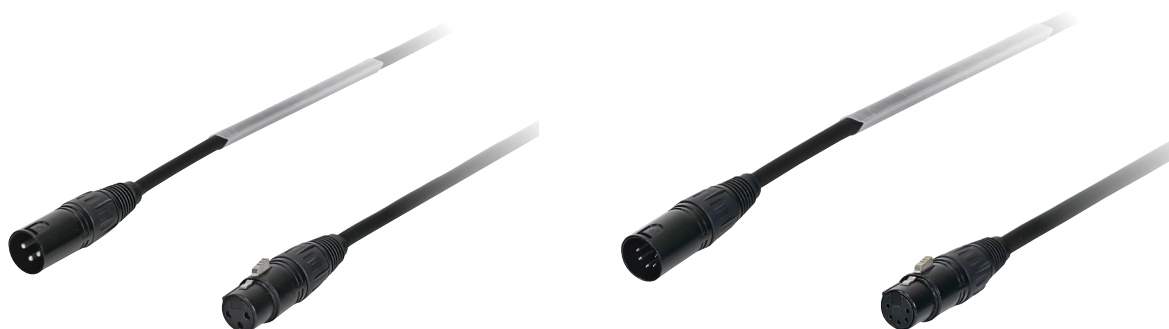
DMX (Digital Multiplex) is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “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.

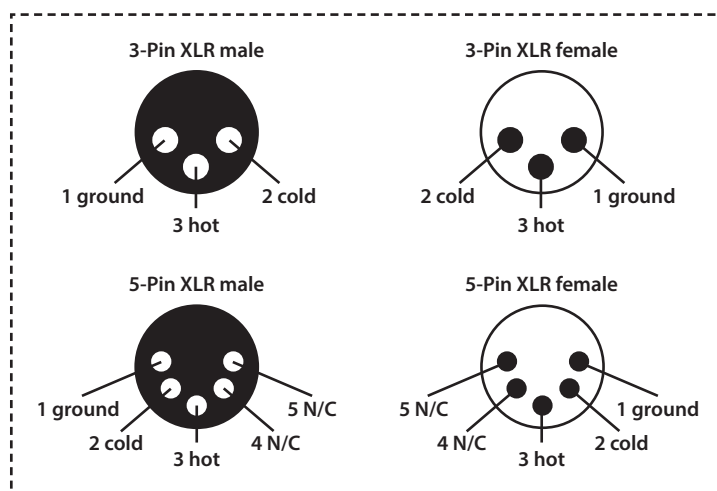
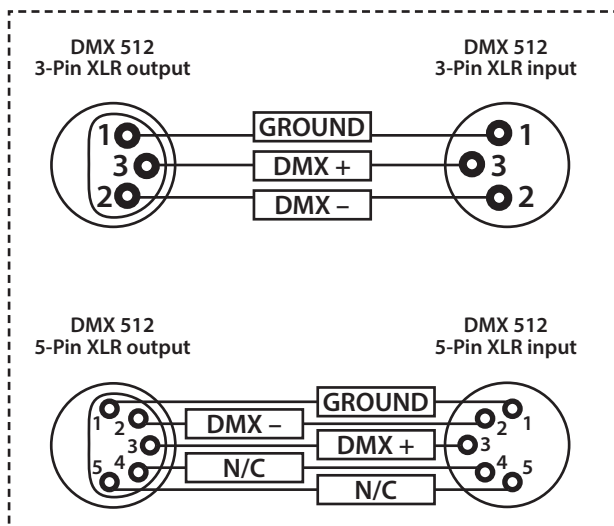
Please quote:	3-Pin:	CABL10 – 2m	CABL11 – 5m	CABL12 – 10m
	5-Pin:	CABL185 – 2m	CABL187 – 5m	CABL188 – 10m

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



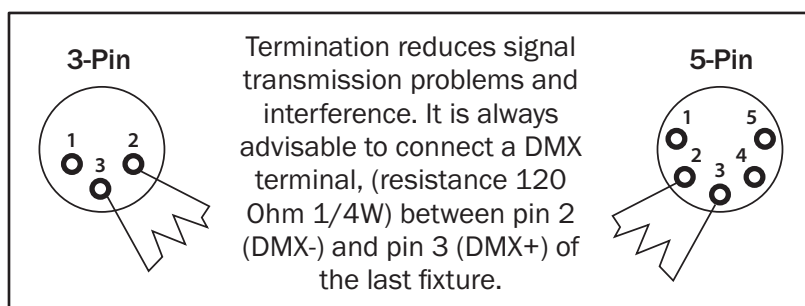
Line termination:

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.

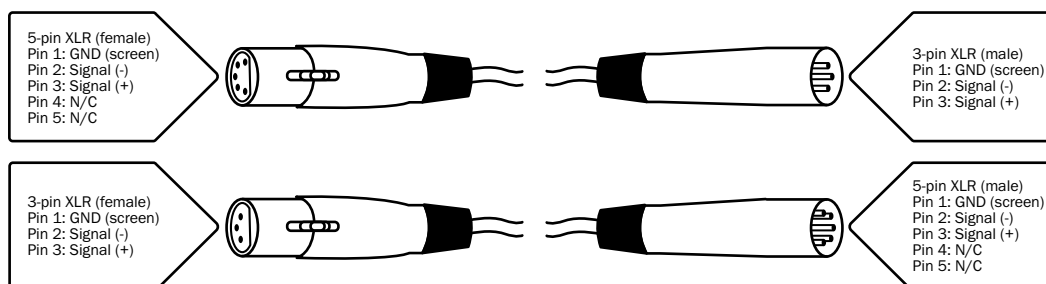
(3-pin - Order ref: CABL90,

5-pin - Order ref: CABL89)



5-pin XLR DMX connectors:

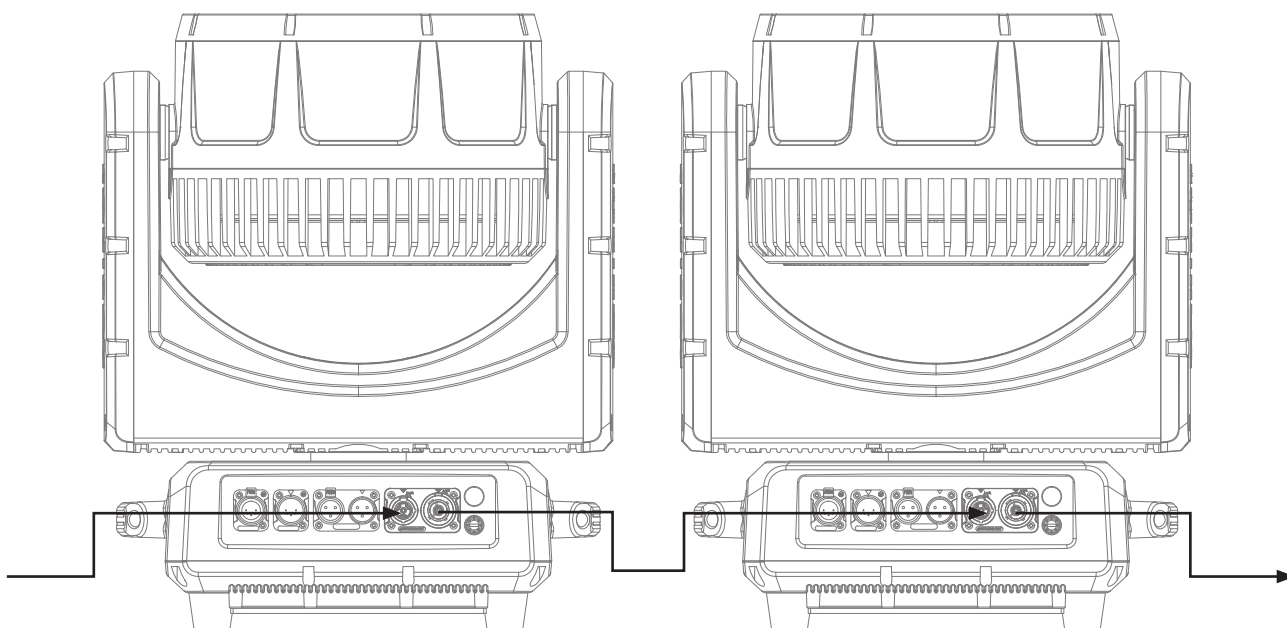
Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.



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 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 Fusion Patriot 1940FXP Pixel Zoom Wash 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.

