

elumen8

Titan Zoom Wash T1

User Manual



Order codes: ELUM417

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 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.
- Never touch the fixture during operation as it may be hot.
- 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.
- This product is only suitable for temporary outdoor installation.
- 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.

PLEASE READ THE BELOW CAREFULLY BEFORE USING THE FIXTURE IN OUTDOOR/EXTREME ENVIRONMENTS



IP Rating:

The IP (International Protection) rating classifies and rates the degree of protection provided against intrusion of foreign objects such as dust and water into housings and electrical enclosures.

The rating consists of the letters IP followed by two digits (i.e. IP65) where the numbers define the level of protection. The first digit (solids) stands for the level of protection the enclosure provides against solid bodies, whilst the second digit (liquids) stands for the degree of protection of the equipment inside the enclosure against water.

An IP65 rated fixture is one which has been designed and tested to protect from all ingress of dust (6) and water projected by low pressure jets (6.3mm) from any angle (5).



Marine/Coastal Installations:

Although this fixture has an IP rating it is NOT suitable for installation in a coastal/marine environment. Installing this fixture in a coastal/marine environment could cause corrosion and excessive wear to the internal and/or external components. Any damages, faults or performance issues resulting from the installation in one of the environments listed above will void the manufacturers warranty and will NOT be subject to any warranty claims, parts or repairs.



IMPORTANT INFORMATION!

If this fixture is installed in extreme outdoor and/or wet conditions, it **MUST** be powered ON and operated for a minimum of 30 minutes every 1-2 weeks. Excessive usage in extreme outdoor and/or wet conditions without a consistent usage cycle as described above can lead to component damage and/or a reduced fixture lifetime. Any damage to the fixture found to be a direct result of not following the above guidelines will void the manufacturers warranty and will NOT be subject to any warranty claims, parts or repairs.

Please **ENSURE** all connections are sealed with the rubber caps if provided and the correct cables are used and connected correctly to prevent dust and/or water ingress, condensation and/or corrosion.

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.

Titan Zoom Wash T1

Further expanding the Titan range, the Zoom Wash T1 is an IP65 rated fixture with a lightweight, compact, durable housing specifically designed for wet, dusty, and sandy conditions. Designed for both rental and installation applications, the fixture is equipped with 7 x 40W RGBL LEDs along with super-fast and quiet motors for precision movements. When used at its narrowest 3.5 degree zoom, sharp mid-air effects can be created whilst at its widest 44 degrees wide washes can bathe venues and stages in rich colours. The addition of lime in the LEDs produces a high CRI of 85Ra, and the central LED can be controlled separately to the outer LEDs, whilst an the RGB halo produces a range of eye-candy effects. The Titan Zoom Wash T1 has an adjustable refresh rate perfect for TV and film, it also features 3 selectable fan speeds including a studio mode with a 32.7dB noise level for noise sensitive applications. A range of preset colour macros, ring programs along with colour temperature presets further bolsters this fixtures offering.

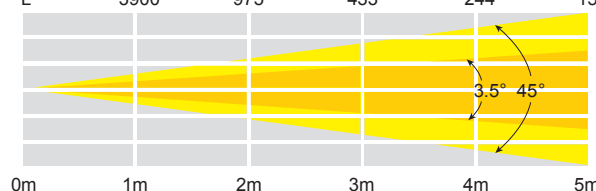
- 2 year warranty
- 7 x 40W quad-colour LEDs (RGBL)
- 46 x tri-colour 3535 SMD LEDs (RGB)
- Adjustable beam angle: 3.5° - 45°
- 3.5° - 82,723 Lux @ 2m (full on), 45° - 2,040 Lux @ 2m (full on)
- CRI: >85Ra
- Refresh rate: 5 selectable presets between 1.2kHz-25kHz
- Motorised zoom
- Pixel zone mapping
- DMX channels: 9/13/14/20/28/32 or 37 selectable
- Wireless control (W-DMX Sweden transceiver)
- Auto, manual control and master/slave modes
- Built-in colour macros and patterns
- Colour temperature presets
- 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
- PowerTwist TR1 input/output
- 5-Pin XLR input/output
- 3-Pin XLR input/output
- RDM (Remote Device Management)
- 4 button menu with 2.4" TFT display
- Display battery backup for offline configuration
- Supplied with quick release omega clamps
- Square hole spacing on omega clamp receivers allows for clamps to be mounted in all orientations
- USB-C port (firmware updates)
- 3 selectable fan modes (live, power and studio)

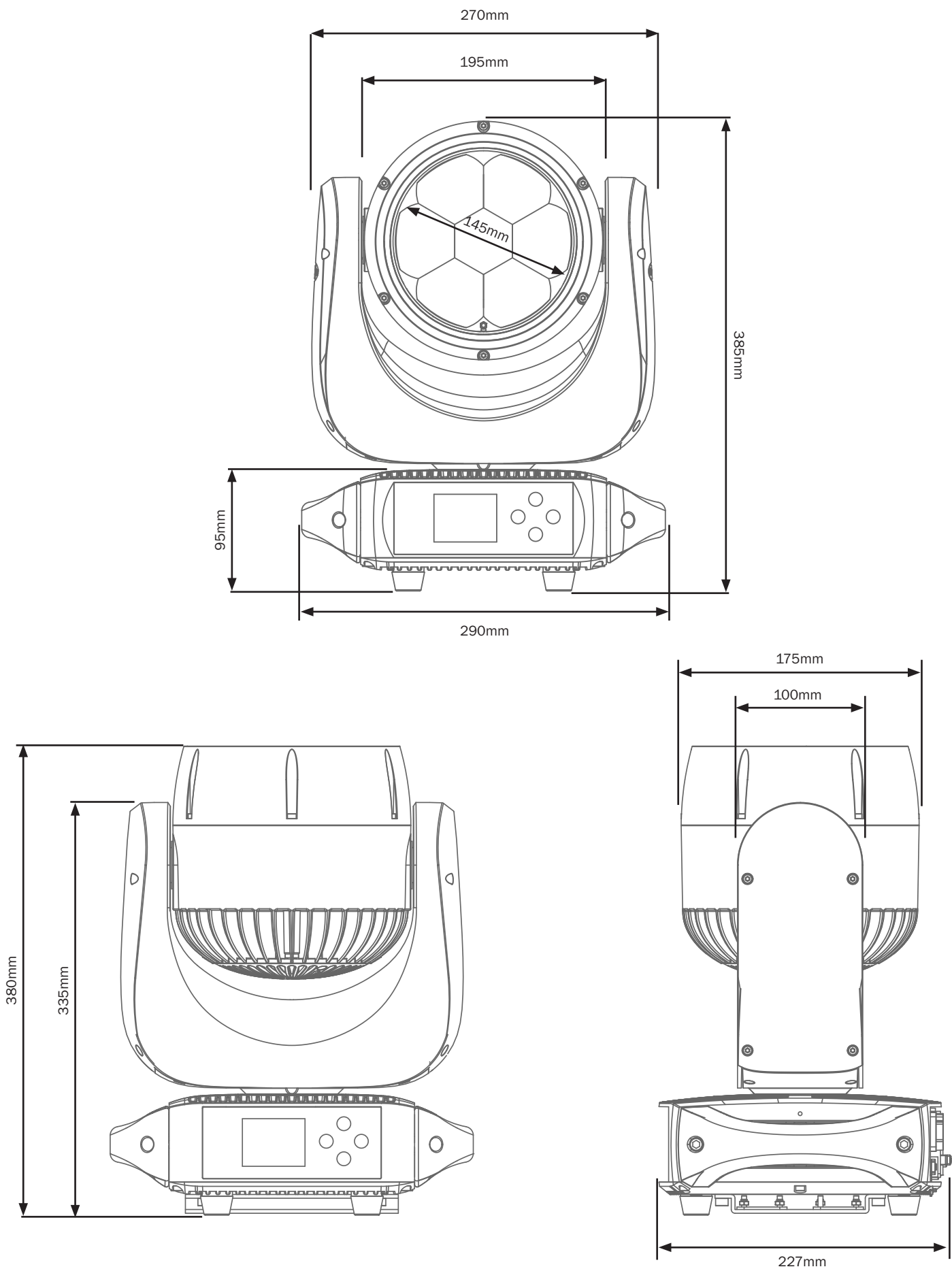


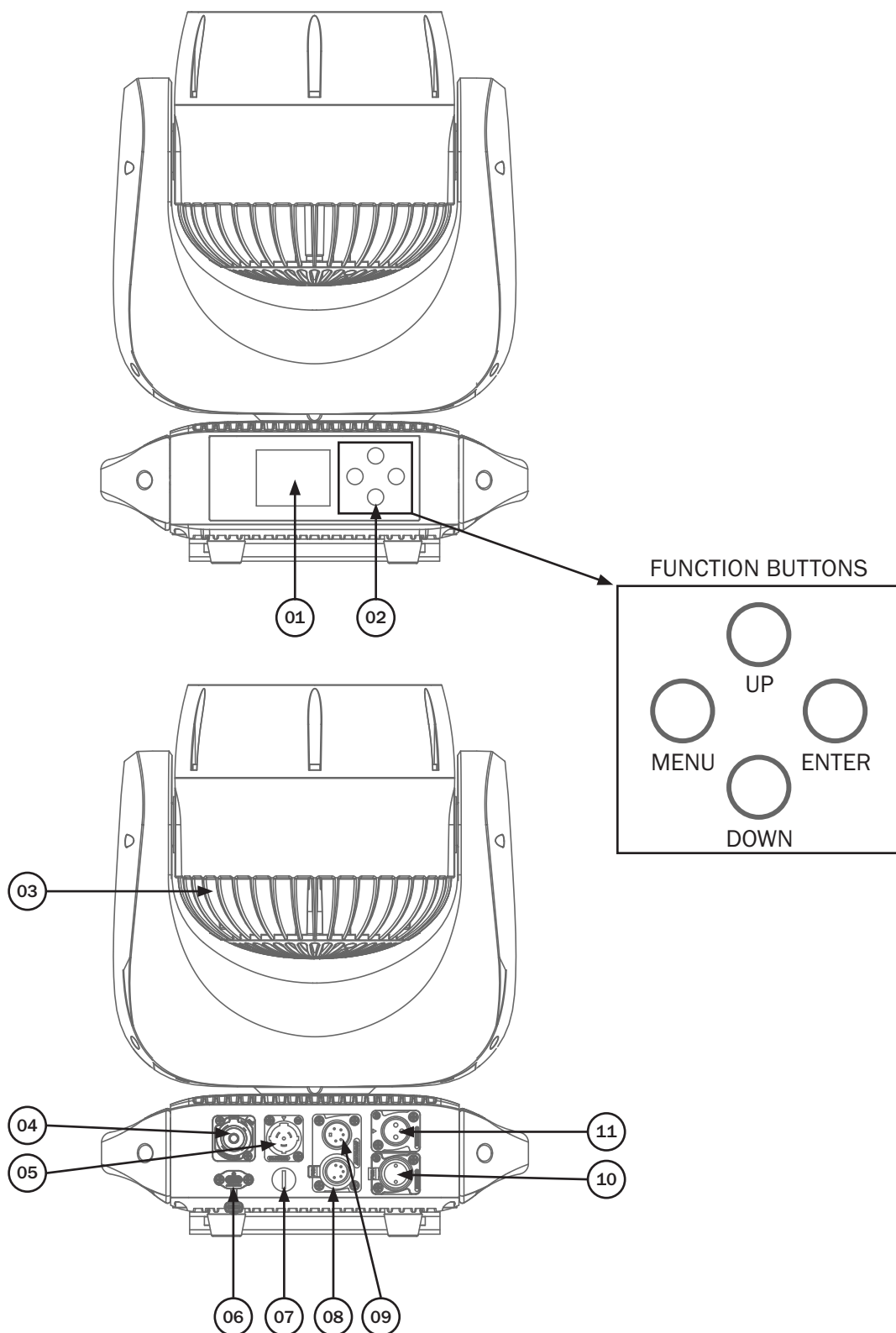
Specifications	Titan Zoom Wash T1
Power consumption	320W
Power supply	100~240V, 50/60Hz
Fuse	T6.3A 250V
IP rating	IP65
Noise level @ 1m	No movement: Studio – 32.7dB, Power – 41.6dB, Live – 41dB With movement: Studio – 47.7dB, Power – 50.8dB, Live – 50.5dB
Dimensions	385 x 290 x 227mm
Weight	10.1kg
Order code	ELUM417

3.5° - Lux					
FULL ON	330892	82723	36766	20680	13235
R	54800	13700	6088	3425	2192
G	121600	30400	13511	7600	4864
B	18088	4522	2009	1130	723
L	161300	40325	17922	10081	6452

45° - Lux					
FULL ON	8160	2040	907	510	326
R	1320	330	147	82	52
G	3144	786	349	196	126
B	632	158	70	39	25
L	3900	975	433	244	156







- 01 - TFT display
- 02 - Function buttons
- 03 - Fan
- 04 - PowerTwist TR1 output

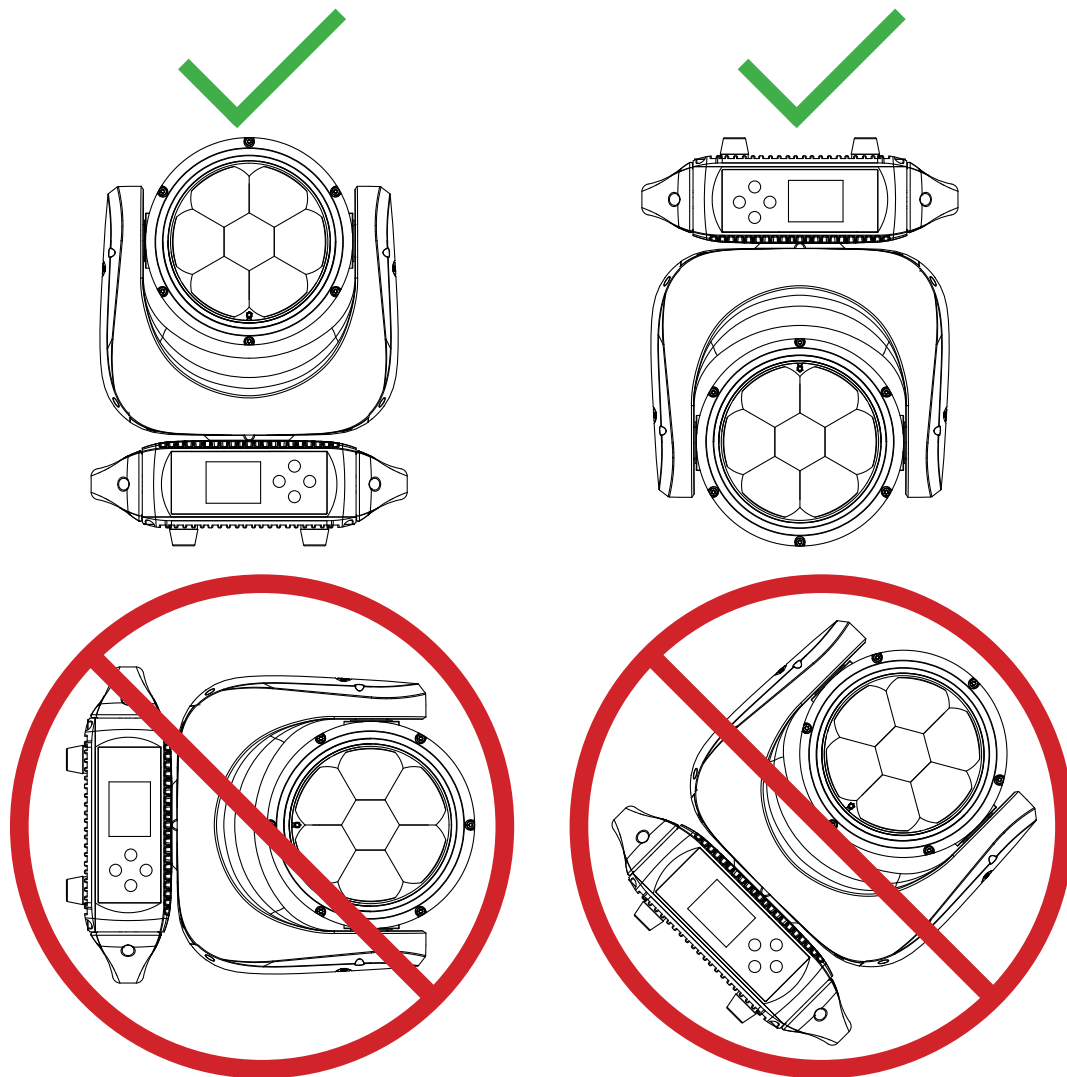
- 05 - PowerTwist TR1 input
- 06 - USB port
- 07 - Fuse T6.3A 250V
- 08 - 5-Pin DMX output

- 09 - 5-Pin DMX input
- 10 - 3-Pin DMX output
- 11 - 3-Pin DMX input

In the box: **1 x fixture,**
2 x omega clamps,
1 x safety wire &
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.

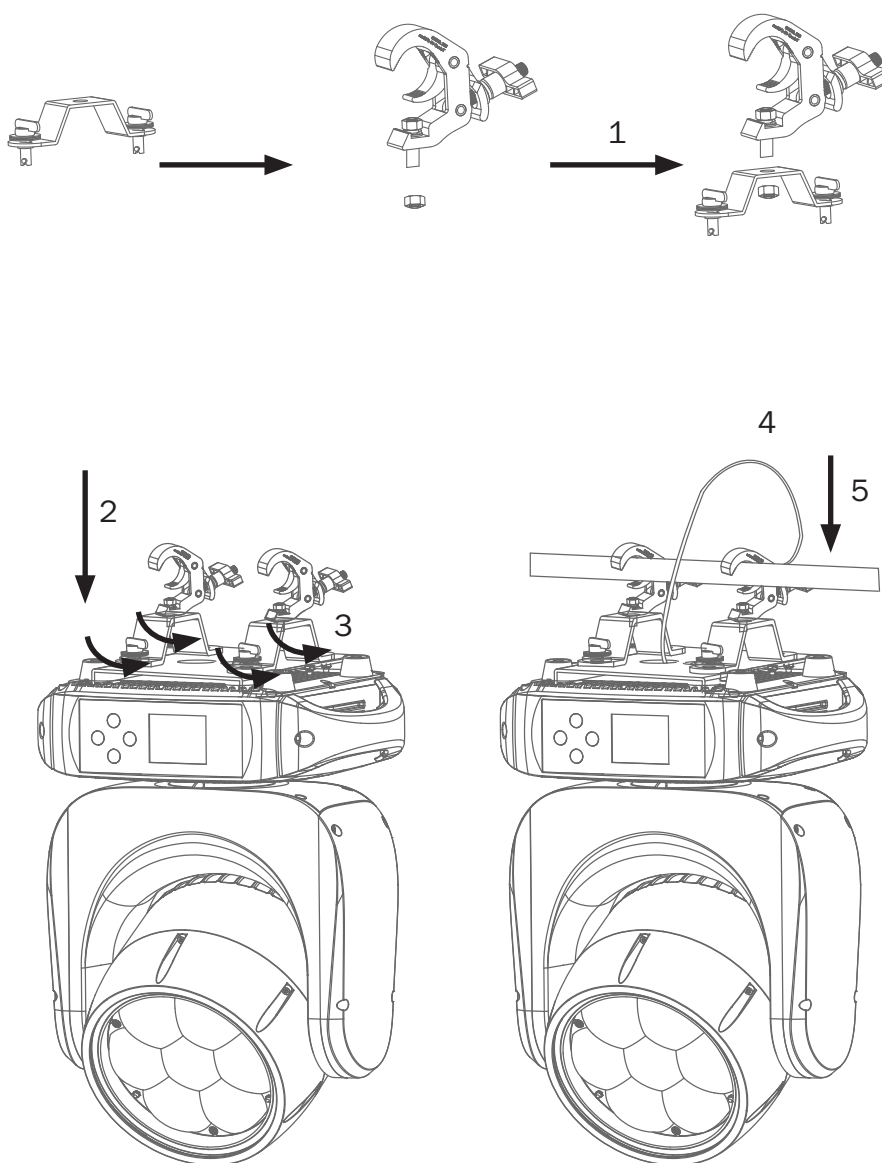
Overhead installation requires experience and qualifications to calculate working load limits, the material being used at the installation area and periodic safety inspections of the fixture and installation material. If you do not have the relevant experience and/or qualifications please do not attempt the installation yourself. The installation should be checked annually by a qualified person.



The Titan Zoom Wash T1 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.



CAUTION!
WE ALWAYS RECOMMEND TESTING THE IP INTEGRITY AFTER LAMP REPLACEMENT/OPENING THE HOUSING, USING THE ELUMEN8 IP TESTER.
CONTACT PROLIGHT SERVICE FOR MORE INFORMATION.

Titan Zoom Wash T1 IP Testing Parameters							
Type Test	Min. Pressure	Max. Pressure	Target Value	Filling Time	Stable Time	Testing Time	Acceptable Change due to Leakage
Pressure Test	1.01 psi (7 KPa)	1.3 psi (9 KPa)	1.16 psi (8 KPa)	15 seconds	8 seconds	15 seconds	0.01 psi (<0.1 KPa)

Elumen8 IP Tester
sold separately
(Order code: ELUM699)



Control Panel Menu:

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

To unlock the menu system first press and hold menu for 10-15 seconds to wake the menu system, then use the password “UP, DOWN, UP, DOWN, ENTER” to access the menu system.

When the unit has been powered on the display will show “**Elumen8 Reset...**”. 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 TFT 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 TFT display will automatically shut off after 20 seconds of inactivity.



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 you can find the error in the menu. See page 14 for details. Please power the unit off and on to reset the motors again.

Error Code
Memory IC
Angle Sensor
Pan Sensor
Pan Encoder
Pan Drive IC
Tilt Sensor
Tilt Encoder
Tilt Drive IC
Temperature

To unlock the menu system first press and hold menu for 10-15 seconds to wake the menu system, then use the password “UP, DOWN, UP, DOWN, ENTER” to access the menu system.

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)	Description
DMX Address		001-512	DMX Address Setting
Personality		Basic (9 channel mode)	DMX Channel Modes
		Basic Plus (13 channel mode)	
		Standard (14 channel mode)	
		Standard Plus (20 channel mode)	
		Standard Fine (28 channel mode)	
		Extend (32 channel mode)	
		Extend Plus (37 channel mode)	
Run Mode	DMX512		Run Modes
	Auto		
	Custom 1		
	Custom 2		
Option	Pan Invert	Normal	Pan Settings
		Invert	
	Tilt Invert	Normal	Tilt Settings
		Invert	
	Perform	Studio	Perform Mode
		Power	
		Live	
	Blackout	Off	Blackout Settings
		On	
	Zoom Range	Ultra Narrow	Zoom Settings
		Regular	
	Dimmer	DIMM 4	Dimmer Speed Setting (Halogen Emulation)
		Off	
	Dimmer Curve	Linear	Dimming Curve Settings
		Square Law	
		Inv. Square Law	
		S-Curve	
	LED PWM	1200Hz	LED Refresh Rate Settings
		2400Hz	
		4000Hz	
		6000Hz	
		25000Hz	
	DMX Error	Save	DMX Error
		Black	

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)			Description
Option (cont.)	Display Time	On			Display Time
		30s			
		1min			
		2min			
	Display Lock	Off			Display Lock
		On			
	Load Settings	Off			Load Settings
		On			
	Setting Reset	Factory	**** (<UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)		Factory Reset
		Custom 1	**** (<UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)	Pressing the password, it can delete the data in CUSTOM 1	
		Custom 2	**** (<UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)	Pressing the password, it can delete the data in CUSTOM 2	
	PT Feedback	Off			Feedback Settings
		On			
	WDMX Reset	No			WDMX Reset
		Yes			
	Signal	Only XLR DMX			Signal Settings
		Only WDMX			
		WDMX to XLR DMX			
Colour Cali	Off			Calibration Settings	
	User Calibration	Red	0-255		
		Green	0-255		
		Blue	0-255		
		Lime	0-255		
	Factory Calibration				
Edit	Edit 1-2	Step 1-10	Pan	0-255	Custom Program Settings
			Tilt	0-255	
			Zoom	0-255	
			Red	0-255	
			Green	0-255	
			Blue	0-255	
			Lime	0-255	
			Strobe	0-255	
			Preset Colour	0-255	
			CCT	0-255	
			Red Ring	0-255	
			Green Ring	0-255	
			Blue Ring	0-255	
			Time (step length in secs)	0-255	
			Use	Yes/No	

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description	
Edit (cont.)	Edit 1-2	Step 1-10	Pan	0-255	Custom Program Settings
			Tilt	0-255	
			Zoom	0-255	
			Red	0-255	
			Green	0-255	
			Blue	0-255	
			Lime	0-255	
			Strobe	0-255	
			Preset Colour	0-255	
			CCT	0-255	
			Red Ring	0-255	
			Green Ring	0-255	
			Blue Ring	0-255	
			Time (step length in secs)	0-255	
			Use	Yes/No	
Manual	Auto Test			Auto test	
	Channel	Pan	0-255	Manual Control Settings	
		Tilt	0-255		
		Zoom	0-255		
		Red	0-255		
		Green	0-255		
		Blue	0-255		
		Lime	0-255		
		Strobe	0-255		
		Preset Colour	0-255		
		CCT	0-255		
		Red Ring	0-255		
		Green Ring	0-255		
		Blue Ring	0-255		
	Reset	All Reset		Reset Options	
		PT Reset			
		Other			
	Service	**** (<UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)	Pan	±127	Service Settings
			Tilt	±127	

Main Menu	Sub Menu	Options/Values (Default Settings in BOLD)		Description
Info	Fixture Hours	xxx		Runtime Information
	LED Use Hours	xxx		LED Information
	Temperature	xxx °		Temperature Information
	Version	Vx.x.xx		Software Version
	RDM	UID		RDM Settings
		Label		
	System Error	Memory IC		System Errors
		Angle Sensor		
		Pan Sensor		
		Pan Encoder		
		Pan Drive IC		
		Tilt Sensor		
		Tilt Encoder		
		Tilt Drive IC		
Temperature				
Update Software				Software Update
CCT	1800K		RGBW	CCT Mode
	2200K			
	2700K			
	3000K			
	3200K			
	4000K			
	4500K			
	5000K			
	5600K			
	6000K			
	6500K			
	7000K			
	8000K			
	10000K			
Preset Colour	Colour 1		RGBW	Colour Preset
	Colour 2			
	...			
	Colour 24			
CMY	Cyan			CMY Mode
	Magenta			
	Yellow			
	C+M			
	C+Y			
	M+Y			

DMX channel modes:

Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
1	1	1	1	1	1	1	000-255	Pan movement (8 bit)	000
-	-	-	-	2	2	2	000-255	Pan fine (16 bit)	
2	2	2	2	3	3	3	000-255	Tilt movement (8 bit)	
-	-	-	-	4	4	4	000-255	Tilt fine (16 bit)	
-	-	-	-	5	5	5	000-255	Pan/tilt speed (fast-slow)	
3	3	3	3	6	6	6	000-255	Master dimmer (0-100%)	
-	-	-	-	7	7	7	000-255	Master dimmer fine	
4	4	4	4	8	8	8	Strobe		000
							000-031	LED off	
							032-063	LED on	
							064-095	Strobe (slow-fast)	
							096-127	LED on	
							128-159	Pulse strobe (slow-fast)	
							160-191	LED on	
							192-223	Random strobe (slow-fast)	
224-255	LED on								
5	5	5	5	9	-	-	000-255	Red dimmer (0-100%)	000
-	-	-	-	10	-	-	000-255	Red dimmer fine (0-100%)	
6	6	6	6	11	-	-	000-255	Green dimmer (0-100%)	
-	-	-	-	12	-	-	000-255	Green dimmer fine (0-100%)	
7	7	7	7	13	-	-	000-255	Blue dimmer (0-100%)	
-	-	-	-	14	-	-	000-255	Blue dimmer fine (0-100%)	
8	8	8	8	15	-	-	000-255	Lime dimmer (0-100%)	
-	-	-	-	16	-	-	000-255	Lime dimmer (0-100%)	
-	-	-	-	-	9	9	000-255	Red 1 dimmer (0-100%)	
-	-	-	-	-	10	10	000-255	Red 1 dimmer fine (0-100%)	
-	-	-	-	-	11	11	000-255	Green 1 dimmer (0-100%)	
-	-	-	-	-	12	12	000-255	Green 1 dimmer fine (0-100%)	
-	-	-	-	-	13	13	000-255	Blue 1 dimmer (0-100%)	
-	-	-	-	-	14	14	000-255	Blue 1 dimmer fine (0-100%)	
-	-	-	-	-	15	15	000-255	Lime 1 dimmer (0-100%)	
-	-	-	-	-	16	16	000-255	Lime 1 dimmer (0-100%)	
-	-	-	-	-	17	17	000-255	Red 2 dimmer (0-100%)	
-	-	-	-	-	18	18	000-255	Red 2 dimmer fine (0-100%)	
-	-	-	-	-	19	19	000-255	Green 2 dimmer (0-100%)	
-	-	-	-	-	20	20	000-255	Green 2 dimmer fine (0-100%)	
-	-	-	-	-	21	21	000-255	Blue 2 dimmer (0-100%)	
-	-	-	-	-	22	22	000-255	Blue 2 dimmer fine (0-100%)	

DMX channel modes:

Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
-	-	-	-	-	23	23	000-255	Lime 2 dimmer (0-100%)	000
-	-	-	-	-	24	24	000-255	Lime 2 dimmer (0-100%)	
9	9	9	9	17	25	25	000-255	Zoom	
-	-	-	-	18	26	26	000-255	Zoom Fine	
-	-	-	10	19	-	27	CCT		000
							000-009	No function	
							010-024	1800K	
							025-039	2200K	
							040-054	2700K	
							055-069	3000K	
							070-084	3200K	
							085-099	4000K	
							100-114	4500K	
							115-129	5000K	
							130-144	5600K	
							145-159	6000K	
							160-174	6500K	
							175-189	7000K	
							190-204	8000K	
							205-255	10000K	
-	-	-	11	20	-	28	Colour Presets		000
							000-009	No function	
							010-014	Red	
							015-019	Green	
							020-024	Blue	
							025-029	Yellow	
							030-034	Magenta	
							035-039	Cyan	
							040-044	White	
							045-049	Violet Blue	
							050-054	Light Blue	
							055-059	Wine Red	
							060-064	May Green	
							065-069	Reseda Green	
							070-074	Blue Lilac	
							075-079	Moss green	
							080-084	Signal violet	
							085-089	Red lilac	

DMX channel modes:

Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
-	-	-	11	20	-	28	Colour Presets (cont.)		
							090-094	Purple Red	000
							095-099	Green Brown	
							100-104	Pale Green	
							105-109	Ruby Red	
							110-114	Flame Red	
							115-119	Red Orange	
							120-124	Rose	
							125-129	Honey Yellow	
							130-134	Light Pin	
							135-139	Deep Orange	
							140-144	Lemon	
							145-149	Golden Yellow	
							150-154	Pastel Orange	
							155-159	Cream	
							160-164	Melon Yellow	
							165-169	Luminous Orange	
							170-174	Luminous Yellow	
							175-179	Colour scroll forwards (slow-fast)	
							180-248	Colour scroll stop	
							249-255	Colour scroll backwards (fast-slow)	
-	-	10	12	21	27	29	000-255	Ring Dimmer	
-	-	11	13	22	28	30	Strobe		
							000-031	LED off	000
							032-063	LED on	
							064-095	Strobe (slow-fast)	
							096-127	LED on	
							128-159	Pulse strobe (slow-fast)	
							160-191	LED on	
							192-223	Random strobe (slow-fast)	
							224-255	LED on	
-	-	12	14	23	29	31	000-255	Red dimmer (0-100%)	
-	-	13	15	24	30	32	000-255	Green dimmer (0-100%)	
-	-	14	16	25	31	33	000-255	Blue dimmer (0-100%)	
-	10	-	17	26	-	34	Colour Presets (Ring)		
							000-009	No function	000
							010-014	Red	
							015-019	Green	

DMX channel modes:

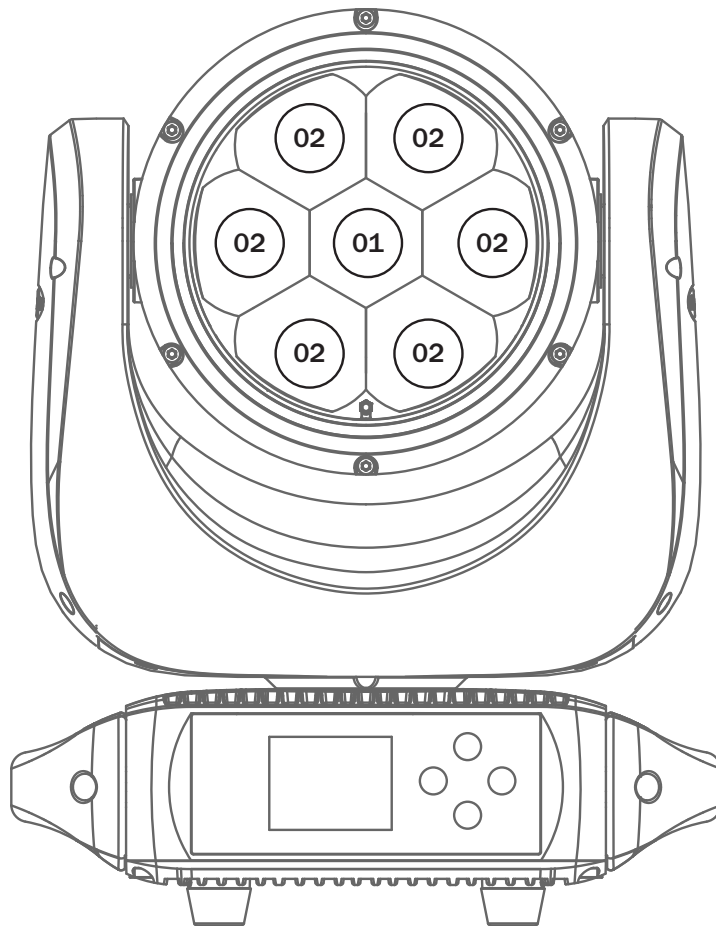
Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
-	10	-	17	26	-	34	Colour Presets (Ring) (cont.)		
							020-024	Blue	000
							025-029	Yellow	
							030-034	Magenta	
							035-039	Cyan	
							040-044	White	
							045-049	Violet blue	
							050-054	Light blue	
							055-059	Wine red	
							060-064	May green	
							065-069	Reseda green	
							070-074	Blue lilac	
							075-079	Moss green	
							080-084	Signal violet	
							085-089	Red lilac	
							090-094	Purple red	
							095-099	Green brown	
							100-104	Pale green	
							105-109	Ruby red	
							110-114	Flame red	
							115-119	Red orange	
							120-124	Rose	
							125-129	Honey yellow	
							130-134	Light pin	
							135-139	Deep orange	
							140-144	Lemon	
							145-149	Golden yellow	
							150-154	Pastel orange	
							155-159	Cream	
							160-164	Melon yellow	
							165-169	Luminous orange	
							170-174	Luminous yellow	
							175-179	Colour scroll forwards (slow-fast)	
							180-248	Colour scroll stop	
							249-255	Colour scroll backwards (fast-slow)	
-	11	-	18	27	-	35	Ring Macros		
							000-009	No function	000
							010-023	FX1	

DMX channel modes:

Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
-	11	-	18	27	-	35	Ring Macros (cont.)		
							024-037	FX2	000
							038-051	FX3	
							052-065	FX4	
							066-079	FX5	
							080-093	FX6	
							094-107	FX7	
							108-121	FX8	
							122-135	FX9	
							136-149	FX10	
							150-163	FX11	
							164-177	FX12	
							178-191	FX13	
							192-205	FX14	
							206-219	FX15	
							220-233	FX16	
							234-247	FX17	
							248-255	No function	
-	12	-	19	28	-	36	000-255	Ring speed	
-	13	-	20	-	32	37	Control (Hold for 3 sec)		
							000	No function	000
							001-010	Pan/Tilt black activated	
							011-020	Pan/Tilt black deactivated	
							021-030	Pan invert	
							031-040	Tilt invert	
							041-050	Pan/Tilt invert off	
							051-060	Live	
							061-070	Studio	
							071-080	Power	
							081-090	Reserved	
							091-100	Dimmer linear	
							101-110	Dimmer square law	
							111-120	Dimmer inv. square law	
							121-150	Dimmer S-Curve	
							151-160	Dimmer selected by menu	
							161-170	1200Hz	
							171-180	2400Hz	
							181-190	4000Hz	

DMX channel modes:

Channel							Value	Function	Default Value
9CH Basic	13CH Basic Plus	14CH Standard	20CH Standard Plus	28CH Standard Fine	32CH Extend	37CH Extend Plus			
-	13	-	20	-	32	37	Control (Hold for 3 sec) (cont.)		
							191-200	6000Hz	000
							201-210	25000Hz	
							211-220	All reset	
							221-230	XPan/tilt reset	
							231-255	Zoom reset	



Display Position: PAN = 000, TILT = 000

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.

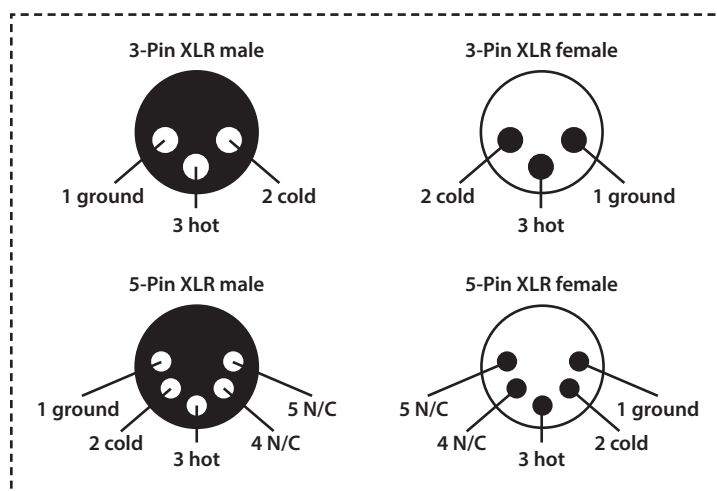
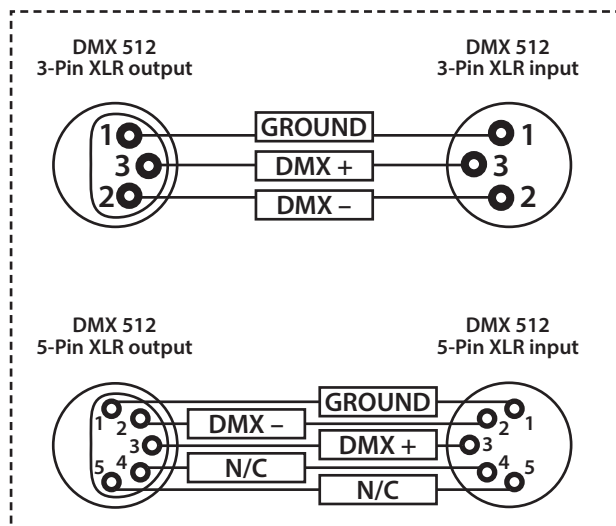
Please quote:	3-Pin:	CABL10 – 2m	CABL11 – 5m	CABL12 – 10m
	5-Pin:	CABL185 – 2m	CABL187 – 5m	CABL188 – 10m

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



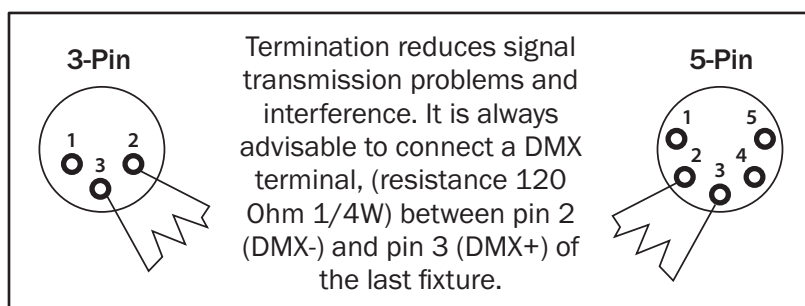
Line termination:

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.

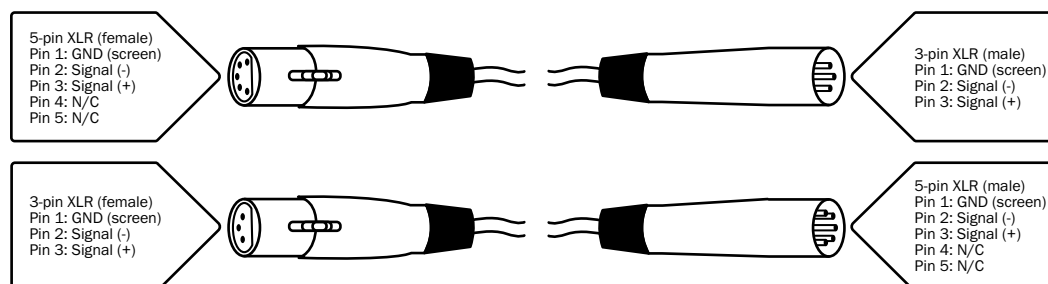
(3-pin - Order ref: CABL90,

5-pin - Order ref: CABL89)



5-pin XLR DMX connectors:

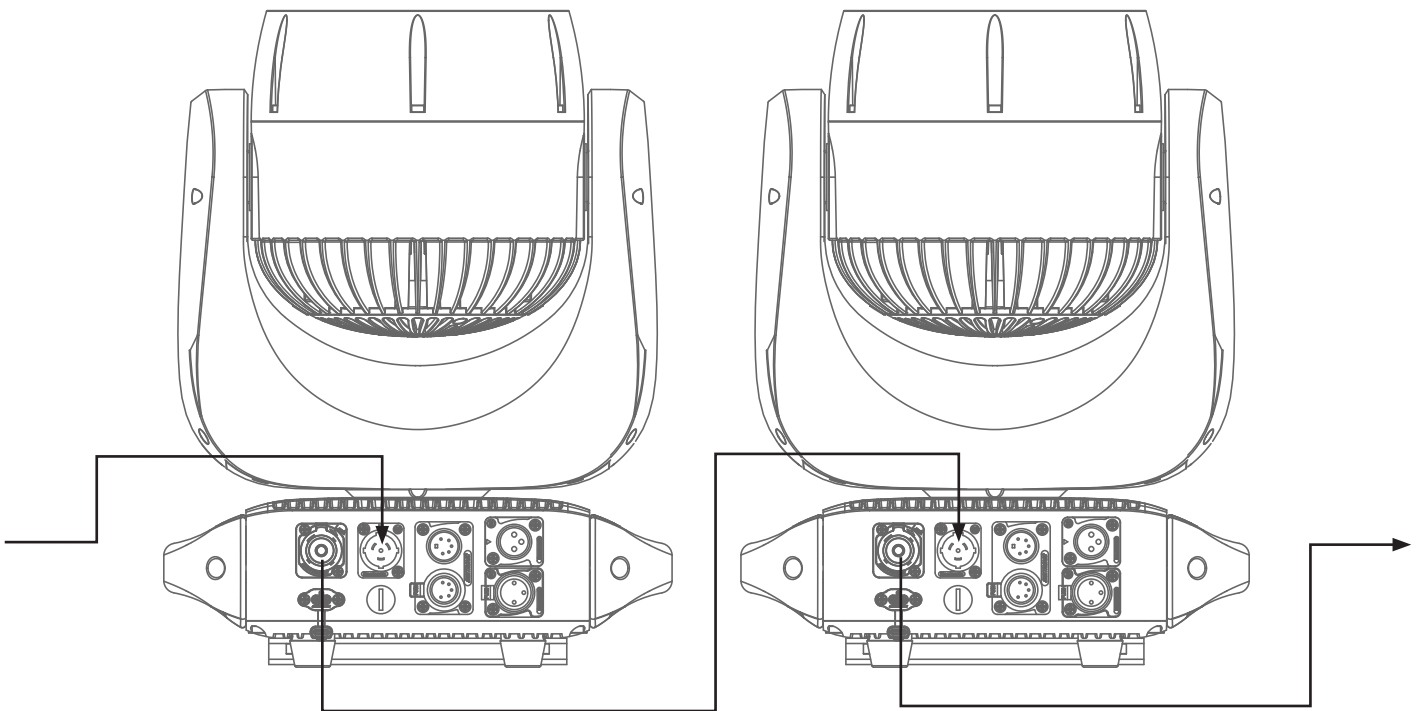
Some manufactures use 5-pin XLR connectors for data transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used. The diagram below details the correct cable conversion.



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 4 fixtures @ 240V or 2 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 Titan Zoom Wash T1 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.

