

ACME[®]

PULSAR PLUS S2



User Manual

Please read the instruction carefully before use

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01/ Safety Information



Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

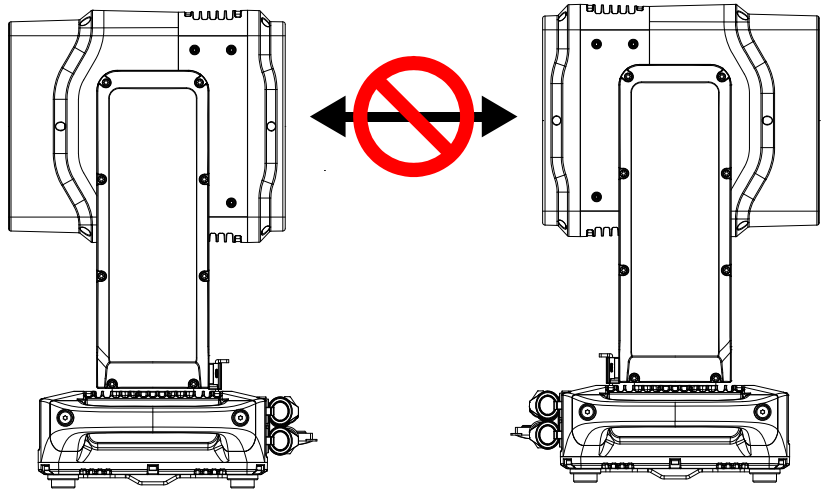
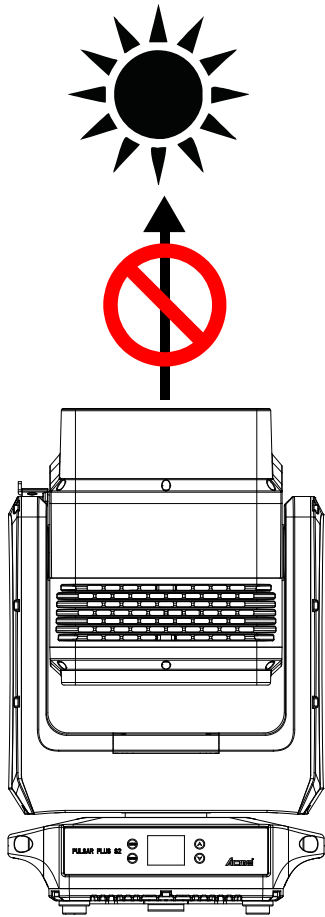
Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of the head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation holes are blocked, otherwise the unit could over heat.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -20°C. Maximum ambient temperature TA: 45°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 70°C. DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the unit. If it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wiring during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 0.5 meters.
- In the event of an operating problem, stop using the unit immediately.
- Never turn the unit off and on repeatedly.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging or suitable road case if the device is to be transported.
- Check that the head tilt lock is released before packing for transportation.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.
- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.



01/ Informations de sécurité



AVERTISSEMENT

Veillez lire attentivement les instructions, car elles contiennent des informations importantes concernant l'installation, l'utilisation et la maintenance.

Veillez conserver ce manuel d'utilisation pour consultation future. Si vous vendez l'appareil à un autre utilisateur, assurez-vous qu'il reçoive également ce manuel d'instructions.

Important:

Les dommages causés par le non-respect de ce manuel d'utilisation ne sont pas couverts par la garantie. Le revendeur n'acceptera aucune responsabilité pour les défauts ou problèmes qui en résulteraient.

- Déballer et vérifier soigneusement qu'il n'y a pas de dommages dus au transport avant d'utiliser l'appareil.
- Ce produit est destiné à une utilisation en intérieur uniquement. Utilisez-le uniquement dans un endroit sec.
- FAIRE installer et utiliser par un opérateur qualifié.
- NE PAS laisser les enfants manipuler l'appareil.
- Utiliser une chaîne de sécurité lors de la fixation de l'appareil. Manipuler l'appareil en portant sa base et non uniquement par la tête.
- L'appareil doit être installé dans un endroit bien ventilé, à au moins 50 cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente de ventilation n'est obstruée, sinon l'appareil surchauffera.
- Avant utilisation, assurez-vous de connecter ce produit à la tension appropriée conformément aux spécifications de ce manuel ou à l'étiquette des spécifications du produit.
- Il est important de mettre le conducteur jaune/vert à la terre pour éviter tout risque de choc électrique.
- Température ambiante minimale (TA): -20°C. Température ambiante maximale (TA): 45°C. Ne pas utiliser ce produit à une température inférieure ou supérieure.
- NE PAS connecter l'appareil à un gradateur (dimmer pack).
- Éloigner les matériaux inflammables de l'appareil pendant son fonctionnement pour éviter tout risque d'incendie.

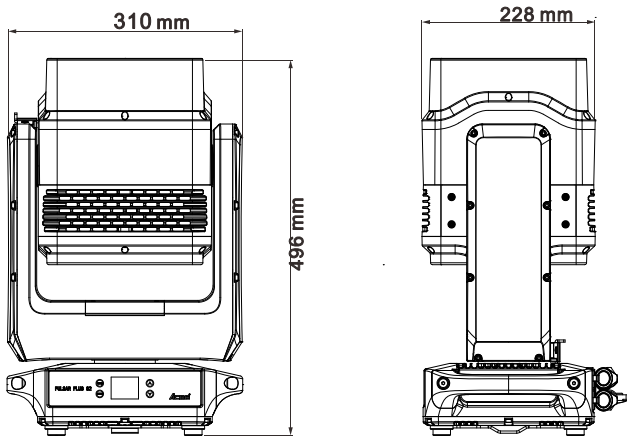
- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 70°C. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou des objets métalliques ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation électrique.
- NE PAS utiliser l'appareil dans un environnement sale ou poussiéreux. Nettoyez régulièrement l'appareil.
- NE PAS toucher de fils pendant le fonctionnement, car cela pourrait présenter un risque de choc électrique.
- Évitez que le cordon d'alimentation ne s'emmêle avec d'autres fils.
- La distance minimale par rapport aux objets/surfaces doit être de plus de 0.5 mètres.
- En cas de problème de fonctionnement grave, cessez immédiatement d'utiliser l'appareil.
- Ne jamais allumer et éteindre l'appareil à plusieurs reprises.
- Le boîtier, les lentilles ou le filtre ultraviolet doivent être remplacés s'ils sont visiblement endommagés.
- NE PAS ouvrir le boîtier, car il ne contient aucune pièce pouvant être réparée par l'utilisateur.
- NE PAS tenter d'utiliser cet appareil s'il est endommagé. NE PAS tenter de réparations vous-même. Les réparations effectuées par des personnes non qualifiées peuvent entraîner des dommages ou un dysfonctionnement. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez l'appareil de sa source d'alimentation avant toute maintenance.
- UTILISEZ l'emballage d'origine si l'appareil doit être transporté.
- Vérifiez que le verrou d'inclinaison de la tête est libéré avant l'emballage pour le transport.
- Évitez une exposition directe des yeux à la source lumineuse lorsque l'appareil est allumé.
- NE PAS utiliser ce produit si vous constatez des dommages sur le boîtier, les protections ou les câbles. Faites remplacer les pièces endommagées par un technicien agréé immédiatement.

- Les sources externes de rayons lumineux, comme la lumière directe du soleil ou toute autre source lumineuse intense, qui pénètrent à travers la lentille frontale des appareils d'éclairage, peuvent causer des dommages internes graves. NE PAS exposer la lentille frontale de l'appareil à des rayons lumineux provenant de la lumière directe du soleil ou de toute autre source lumineuse intense, sous quelque angle que ce soit, lors du déballage, de l'installation, de l'utilisation ou de périodes d'inactivité prolongées à l'extérieur. NE PAS diriger un faisceau lumineux d'un appareil d'éclairage directement vers un autre.

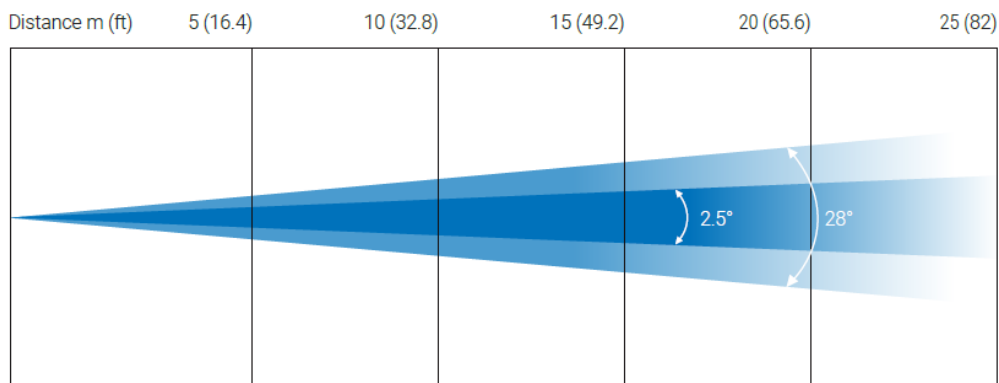
02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	1200W	
Light Source	Beam Section	4x150W RGBW LEDs
	Strobe Section	160x3W CW LEDs
		192 x 0.5W RGB LEDs
	10W Beam Section	16 x10W CW LEDs
Beam Angle	3.5°-24°	
Field Angle	5°-30°	
Movement	Pan	Infinity
	Tilt	Infinity
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
	Mechanical pan/tilt lock for safe transportation and maintenance	
Control and Programming	DMX Channels	42/194/152/26+
	Protocols	DMX512
		RDM
		Art-Net
		sACN
Firmware Update	via DMX	
Construction	Display	LCD display
	DMX and RDM Data In/Out	3-pin XLR (optional with 5-pin XLR)
		RJ45 Connectors
	Power In/Out	Power Connector in/out
Protection Rating	IP66	
Dynamic Effects	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	DMX Controllable Smart Glass technology for Pixel and 10W Beam Sections	
	Motorized linear zoom system	
	Built-in macro effects	
	Wash Section: 4 x 150W RGBL LEDs with individual control	
	Strobe Section: 160 x 3W CW LED zones with individual control 192 x 0.5W RGB LED zones with individual control	

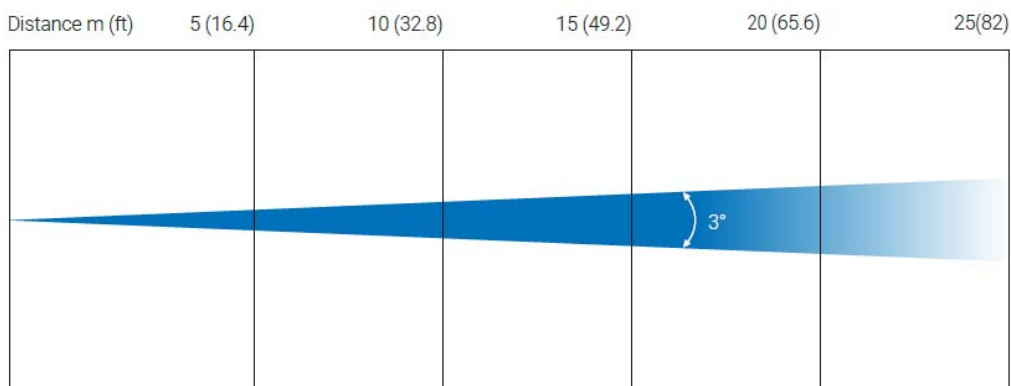
Dimensions	310x228x496mm	12.20" × 8.98" × 19.53"
Weight	20.5KG	45.2 lbs



Photometric Diagram (Beam Angle):

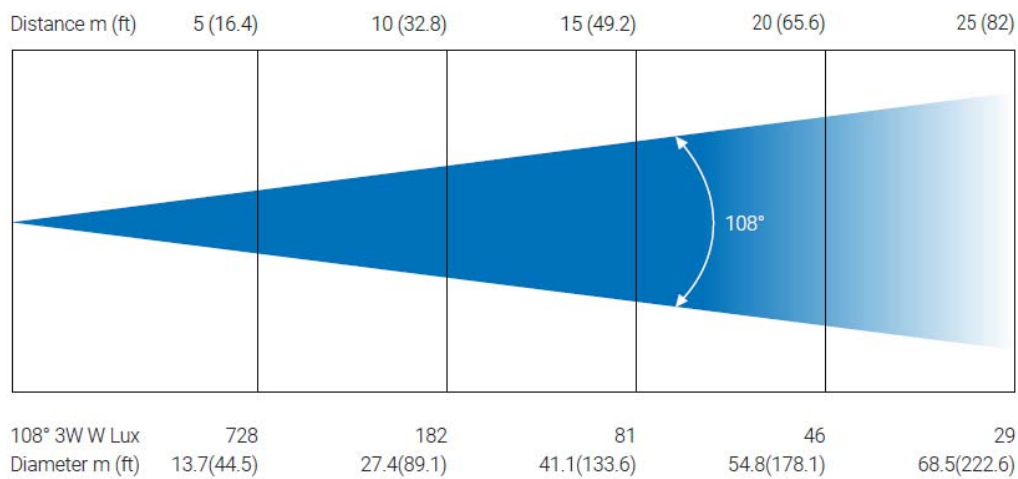
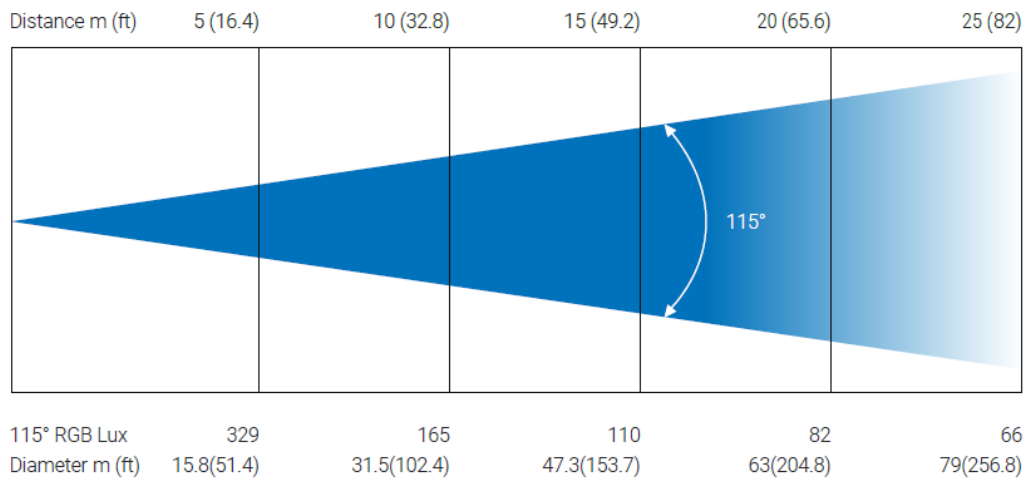


2.5° RGBL Lux	80,800	20,200	8,978	5,050	3,232
Diameter m (ft)	0.6(2)	1.2(3.9)	1.8 (5.9)	2.4 (7.8)	3(9.8)
28°RGBL Lux	3,768	942	419	236	151
Diameter m (ft)	2.6(8.5)	5.2 (16.9)	7.8 (25.4)	10.5 (34.1)	13.1 (42.6)

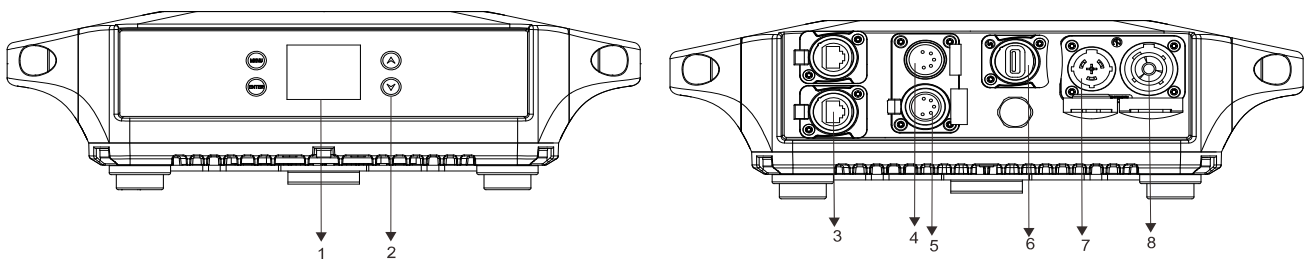


3° 10W W Lux	31,720	7,930	3,524	1,982	1,268
Diameter m (ft)	0.6(2)	1.1(3.6)	1.7 (5.5)	2.2 (7.2)	2.8(9.1)

Photometric Diagram (Field Angle):



03/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into, move backward or leave the menu
	▲ UP	To go backward or move up in the menu

	▼ DOWN	To go forward or move down in the menu
	ENTER	To perform the desired functions
3. ETHERNET	For use with sACN or Art-Net controls	
4. DMX IN	For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 5-pin XLR)	
5. DMX OUT	For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin XLR)	
6. FIRMWARE UPGRADE	Updating Software	
7. POWER IN	To connect to supply power	
8. POWER OUT	To connect to the next fixture	

04/ Connecting Power and Data

4.1 Connecting Power

To apply power, first check that the head pan and tilt locks are released.

This fixture can operate on any 100-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 1200W.

The fixture must be grounded/earthed and able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

Wiring and connection work must be carried out by a qualified electrician.

The power cable color coding is given in the figure below:

Wire	Color (US)	Wire	Color (EU)	Symbol	Conductor
	black		brown	L	live
	white		blue	N	neutral
	green		yellow/green	⊥ or ⊕	ground (earth)

Power cord set should be used: Listed SJT flexible cord with rating: 300V, 105°C, 16AWGx3C, molded with 5-20P attachment plug and terminated with cord connector model SAC3FX with rating 250V, 16A by NINGBO SEETRONIC ELECTRONIC TECHNOLOGY CO., LTD. The power cord shall be at least 914mm (It is to be measured from the face of the attachment plug to the face of connector).

CAUTION!

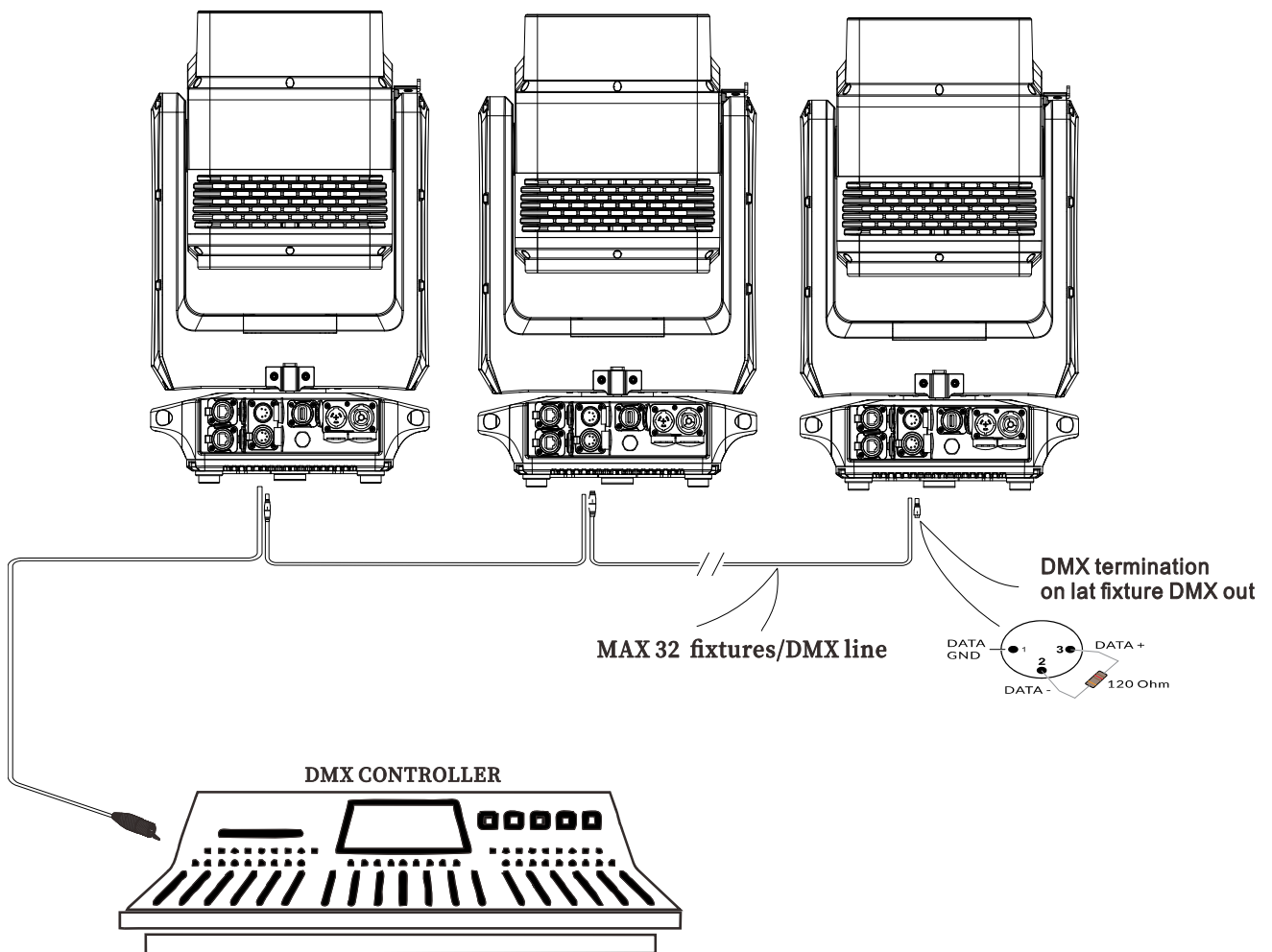
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAG

4.2 Connecting Data

The fixture is equipped with 3-pin (or 5-pin) XLR sockets for DMX input and output. Use a high-quality DMX cable designed for RS-485 and 3-pin (or 5-pin) XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

Building a serial DMX chain:

Connect the DMX data output from the controller to the fixture's data input socket. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected to the same DMX link. Terminate the DMX out cable of the last fixture in the data link with a 120 ohm DMX terminator.

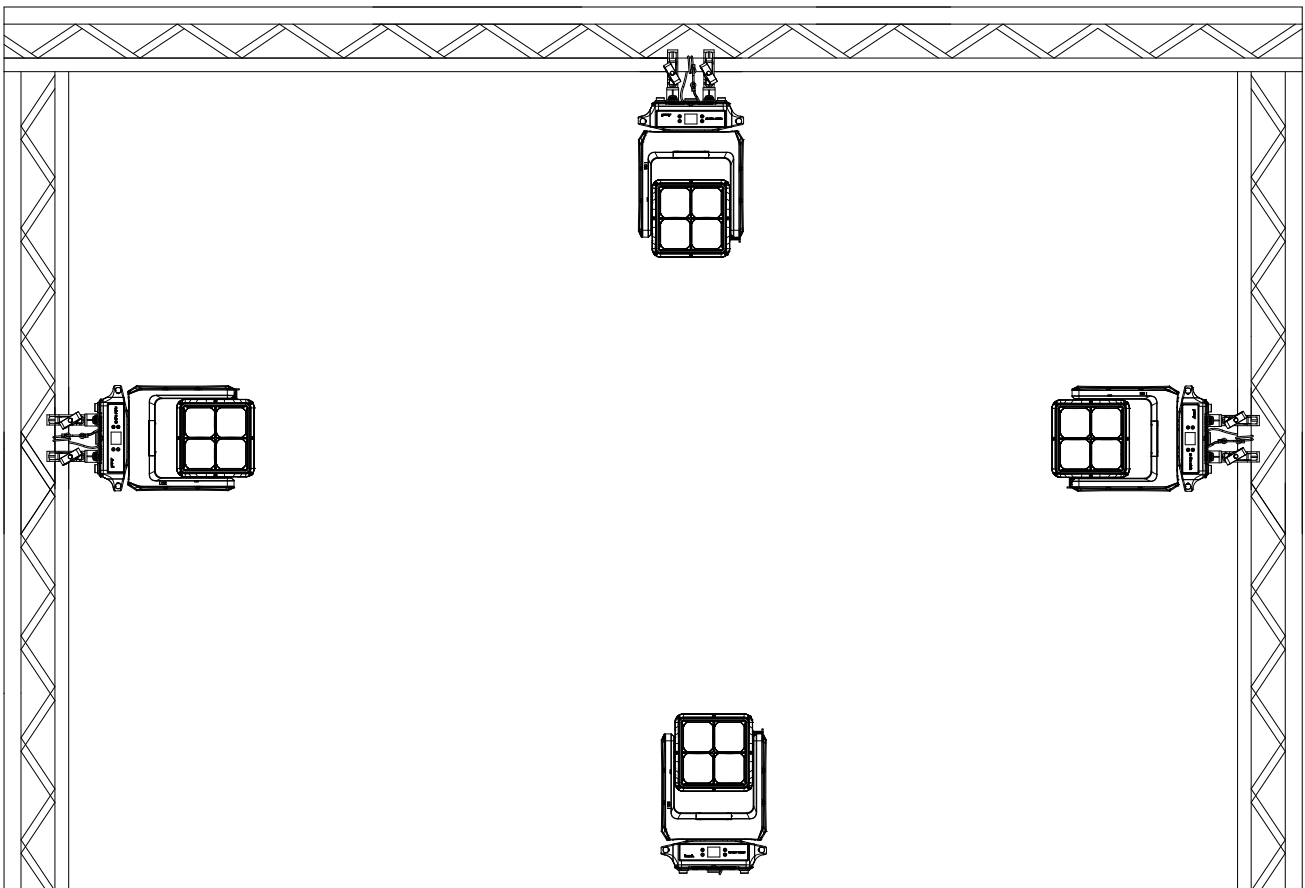


05/ Fixture Installation

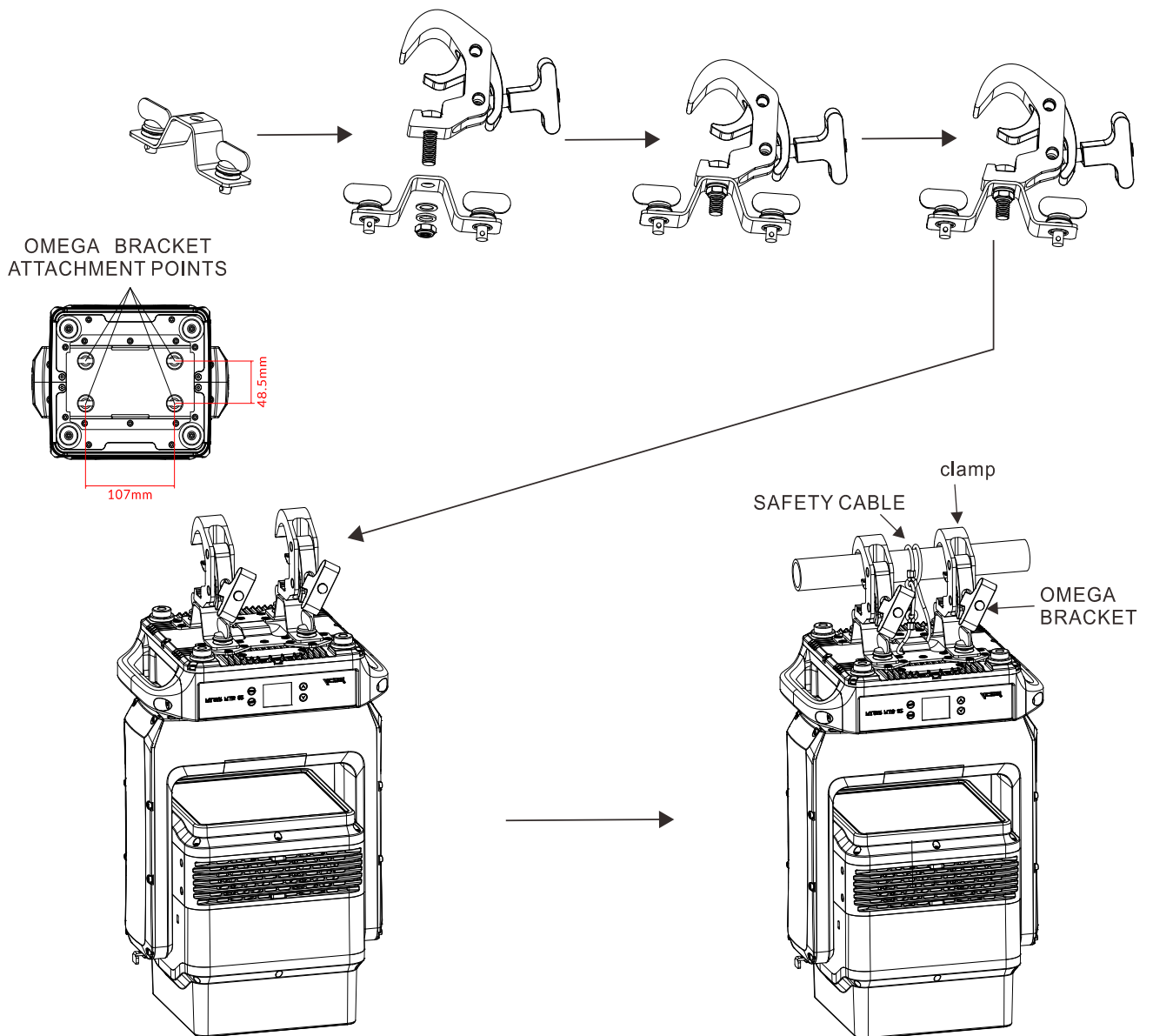
- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging,

removing or servicing.

- ▶ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable (made of steel, min. diameter 2.0mm) that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.
- ▶ This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on truss, or base positioned on floor. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



Steps for installing omega brackets to the fixture:



06/ Operation

6.1 Control Menu

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES		
DMX Settings	DMX Address	1-512	(Default=1)	
		Port A Address	(Default=1)	
		Port B Address	(Default=1)	
	DMX Channel Mode	Mode 1 (42)		
		Mode 2 (194)		
		Mode 3 (152)		
		Mode 4 (26+)		
	No DMX Status	Blackout		
		Hold		
		Manual		
	View DMX Value			
	Connect Option	Auto		
		DMX		
		Art-Net		
		sACN		
		Auto		
		DMX+Art-Net		
		DMX+sACN		
		Art-Net+Art-Net		
		sACN+sACN		
Network	IP Address	Default 1		
		Default 2		
		Manual		
	Subnet Mask	XXX.XXX.XXX.XXX		

MAIN MENU	SUBMENU	CHOICES/VALUES		
	Art-Net Settings	Net	0-127	(Default=0)
		Sub-Net	0-15	(Default=0)
		Universe	0-15	(Default=0)
		Net	0-127	(Default=0)
		Sub-Net	0-15	(Default=0)
		Universe A	0-15	(Default=0)
		Universe B	0-15	(Default=0)
	sACN Settings	Universe	1-32000	(Default=1)
		Priority	0-200	(Default=100)
		Universe A	0-15	(Default=0)
		Universe B	0-15	(Default=0)
	Network To DMX	No		
		Yes		
Fixture Settings	Pan Invert	No		
		Yes		
	Tilt Invert	No		
		Yes		
	P/T Feedback	No		
		Yes		
	Dimmer Curve	Linear		
		Square Law		
		Inv SQ Law		
		S Curve		
	Dimmer Speed	Fast		
		Smooth		
	White Balance	Wash Red	125-255	
		Wash Green	125-255	
		Wash Blue	125-255	
		Wash Red 1	125-255	
		Wash Green 1	125-255	
		Wash Blue 1	125-255	
		Wash Red 2	.....
		Wash Green 2	125-255	
		Wash Blue 2	125-255	
.....		125-255		
Zone Red 16		125-255		
Zone Green 16		125-255		
Zone Blue 16		125-255		

MAIN MENU	SUBMENU	CHOICES/VALUES				
	LED Refresh Rate	900Hz				
		1000Hz				
		1100Hz				
		1200Hz				
		1300Hz				
		1400Hz				
		1500Hz				
		2500Hz				
		4000Hz				
		5000Hz				
		6000Hz				
		10KHz				
		15KHz				
		20KHz				
	25KHz					
		Fan Mode	Standard			
			Quiet			
		Invert Pixel	No			
			Yes			
		Line Power Mode	Off			
	On					
	Sun Protection Mode	On				
		Off				
	Dimming Start Mode	High				
		Low				
Display Settings	Display Invert	No				
		Yes				
	Backlight Intensity	1-10				
	Temperature Unit	°C				
		°F				
Fixture Test	Auto Test	Single				
		Cycle				
	Manual Test	Mode 1		Mode 2		
		Clear	No/Yes	Clear	No/Yes	
		Pan	0-255	Pan	0-255	
		Tilt	0-255	Tilt	0-255	
Pan Infinity	0-255	Pan Infinity	0-255			

MAIN MENU	SUBMENU	CHOICES/VALUES			
		Tilt Infinity	0-255	Tilt Infinity	0-255
		Pan/tilt speed	0-255	Pan/tilt speed	0-255
		Zoom	0-255	Zoom	0-255
		Frost	0-255	Frost	0-255
		Effect	0-255	Effect	0-255
		Wash Dimmer	0-255	Wash Dimmer	0-255
		Wash Strobe	0-255	Wash Strobe	0-255
		Beam Dimmer	0-255	Beam Dimmer	0-255
		Beam Strobe	0-255	Beam Strobe	0-255
		Zone Dimmer	0-255	Zone Dimmer	0-255
		Zone Strobe	0-255	Zone Strobe	0-255
		Line Dimmer	0-255	Line Dimmer	0-255
		Line Strobe	0-255	Line Strobe	0-255
		Wash Red	0-255	Wash Red 1	0-255
		Wash Green	0-255	Wash Green 1	0-255
		Wash Blue	0-255	Wash Blue 1	0-255
		Wash Lime	0-255	Wash Lime 1	0-255
		Wash CTO	0-255	.....	0-255
		Wash Color Macro	0-255	Wash Red 4	0-255
		Beam CW	0-255	Wash Green 4	0-255
		Beam Macro	0-255	Wash Blue 4	0-255
		Beam Macro Speed	0-255	Wash Lime 4	0-255
		Zone Red	0-255	Wash CTO	0-255
		Zone Green	0-255	Wash Color Macro	0-255

MAIN MENU	SUBMENU	CHOICES/VALUES			
		Zone Blue	0-255	Beam CW 1	0-255
		Zone Color Macro	0-255	Beam CW 2	0-255
		Zone Macro	0-255	.....	0-255
		Zone Macro Speed	0-255	Beam CW 15	0-255
		Line CW	0-255	Beam CW 16	0-255
		Line Macro	0-255	Zone Red 1	0-255
		Line Macro Speed	0-255	Zone Green 1	0-255
				Zone Blue 1	0-255
				.....	0-255
				Zone Red 16	0-255
				Zone Green 16	0-255
				Zone Blue 16	0-255
				Line CW 1	0-255
				Line CW 2	0-255
				... ..	0-255
		Line CW 39	0-255		
		Line CW 40	0-255		
Information	Fixture Use Hour				
	LED Use Hour	Total LED Hour			
		LED On Hour			
		LED Hours Reset	No		
			Yes	Password=050	
	Temperature	LED's	Current		
			LED 1	Max temp	
LED 2					
LED 3					
LED 4					
LED 5					

MAIN MENU	SUBMENU	CHOICES/VALUES		
		LED 6		
		LED 7		
	Fan State	B_A_FAN 1		
		B_A_FAN 2		
		H_C_FAN 1		
		H_C_FAN 2		
		H_D_FAN 1		
		H_D_FAN 2		
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Log	No	
			Yes	Password=050
Reset Functions	Pan/Tilt Reset	No		
		Yes		
	Effect Reset	No		
		Yes		
	All Reset	No		
		Yes		
Special Function	USB Upgrade	No		
		Yes		
	Send Upgrade	No		
		Yes		
	Firmware Restore	No		
		Yes		
	Factory Settings	No		
		Yes		

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **Port A Address**, **Port B Address**, **DMX CH Mode**, **No DMX Status**, **View DMX Value**, **Connect Option**, **Network**, **Art-Net Settings**, **sACN Settings** or **Network To DMX**.

Port A Address

Select **Port A Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Port B Address

Select **Port B Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER. To exit the menu, press MENU, or wait 30 seconds.

DMX CH Mode

Select **DMX CH Mode**, press ENTER.

Use UP/DOWN button to select between **Mode 1 (42)**, **Mode 2 (194)**, **Mode 3 (152)** and **Mode 4 (26+168)**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

CHANNEL MODE	DMX ADDRESS
Mode 1 (42)	1-471
Mode 2 (194)	1-319
Mode 3 (152)	1-361
Mode 4 (26+)	1-319

No DMX Status

Select **No DMX Status**, press ENTER.

Use UP/DOWN button to select one of the following status:

Blackout (Fixture blacks out if DMX signal stops)

Hold (The device continues to operate in the current mode with the last active DMX values until the signal returns)

Manual (The device accepts the DMX value stored in the 'Manual Test' menu)

Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

View DMX Value

Select **View DMX Value**, press ENTER.

Use UP/DOWN button to select the desired DMX channel, for which the value is to be displayed.

To exit the menu, press MENU, or wait 30 seconds.

Connect Option

Select **Connect Option**, press ENTER.

Use UP/DOWN button to select **Auto, DMX, Art-Net** or **sACN**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Network

Select **Network**, press ENTER.

Use UP/DOWN button to select **IP Address** or **Subnet Mask**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Art-Net Settings

Select **Art-Net Settings**, press ENTER.

Use UP/DOWN button to select **Net, Sub-Net, Universe A** or **Universe B**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

sACN Settings

Select **sACN Settings**, press ENTER.

Use UP/DOWN button to select **sACN Universe** or **sACN Priority**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Network to DMX

Select **Network to DMX**, press ENTER.

Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Pan Invert, Tilt Invert, P/T Feedback, Dimmer Curve, Dimmer Speed, White Balance, LED Refresh Rate, Fan Mode, Invert Pixel, Line Power Mode, Sun Protection Mode, Dimming start Mode**.

Pan Invert

Select **Pan Invert**, press ENTER.

Use UP/DOWN button to select **No** (pan invert deactivated) or **Yes** (pan invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Tilt Invert

Select **Tilt Invert**, press ENTER.

Use UP/DOWN button to select **No** (tilt invert deactivated) or **Yes** (tilt invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

P/T Feedback

Select **P/T Feedback**, press ENTER.

Use UP/DOWN button to select **No** (pan/tilt feedback deactivated) or **Yes** (pan/tilt feedback activated), confirm your selection with ENTER.

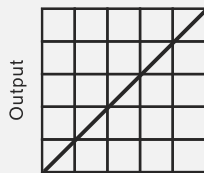
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

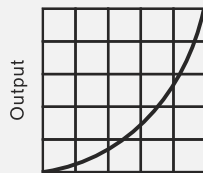
Select **Dimmer Curve**, press ENTER.

Use UP/DOWN button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

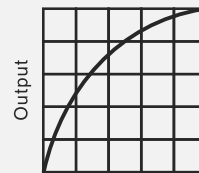
Dimmer Modes



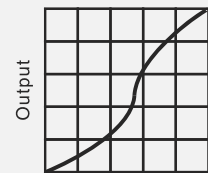
Optically Linear



Square Law



Inverse Square Law



S-curve

To exit the menu, press MENU, or wait 30 seconds.

Dimmer Speed

Select **Dimmer Speed**, press ENTER.

Use UP/DOWN button to select **Fast** or **Smooth**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

White Balance

Select **White Balance**, press ENTER.

Use UP/DOWN button to select **Wash Red, Wash Green, Wash Blue, Red 1, Green 1, Blue 1.....** or **Zone Red 9, Zone Green 9, Zone Blue 9**, confirm your selection with ENTER.

Use UP/DOWN button to select a value between **125** and **255**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

LED Refresh Rate

Select **LED Refresh Rate**, press ENTER.

Use UP/DOWN button to select **900Hz, 1000Hz, 1100Hz, 1200Hz, 1300Hz, 1400Hz, 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz** or **25KHz**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fan Mode

Select **Fan Mode**, press ENTER.

Use UP/DOWN button to select **Standard, Quiet** or **Theatre**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Invert Pixel

Select **Invert Pixel**, press ENTER.

Use UP/DOWN button to select **No** or **Yes**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Line Power Mode

Select **Line Power Mode**, press ENTER.

Use UP/DOWN button to select **Off** or **On**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Sun Protection Mode

Set the '**Sun Protection Mode**' to '**On**' when using the fixture outdoors.): Select Sun Protection Mode, press ENTER.

Use UP/DOWN button to select **Off** (sun protection mode deactivated) or **On** (The fixture will turn off the light source and automatically turn its head to a horizontal position when no signal is detected, preventing damage to optical components or internal parts from prolonged direct sunlight exposure.), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Dimming Start Mode

Select Dimming Start, press ENTER.

Use UP/DOWN button to select a value between 0 and 9999, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Display Settings

Enter the control menu and select **Display Settings**, press ENTER. Use the UP/DOWN button to select **Display Invert**, **Temperature Unit** or **Language**.

Display Invert

Select **Display Invert**, press ENTER.

Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Backlight Intensity

Select **Backlight Intensity**, press ENTER.

Use UP/DOWN button to select a value between **1 (dark)** and **10 (bright)**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Temperature Unit

Select **Temperature Unit**, press ENTER.

Use UP/DOWN button to select °C or °F, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Language

Select **Language**, press ENTER.

Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Fixture Test

Enter the control menu and select **Fixture Test**, press ENTER. Use the UP/DOWN button to select **Auto Test** or **Manual Test**.

Auto Test

Select **Auto Test**, press ENTER.

The device immediately performs an automatic self-test.

To end the automatic self-test and exit the menu, press MENU.

Manual Test

Select **Manual Test**, press ENTER.

Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the menu, press MENU.

(The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

Information

Enter the control menu and select **Information**, press ENTER. Use the UP/DOWN button to select **Fixture Use Hour**, **LED Use Hour**, **Temperature**, **Fan State**, **Firmware Version**, **RDM UID** or **Error Logs**.

Fixture Use Hour

Select **Fixture Use Hour**, press ENTER.

The operating hours is displayed.

To exit the menu, press MENU, or wait 30 seconds.

LED Use Hour

Select **LED Use Hour**, press ENTER.

Use UP/DOWN button to select **Total LED Hour** (total time) or **LED On Hour** (current switch-on time), confirm your selection with ENTER.

The total time or current switch-on time is displayed.

Use UP/DOWN button to select **LED Hours Reset**, confirm your selection with ENTER.

If you wish to reset the LED operating hours, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The LED operating hours is reset.

To exit the menu, press MENU, or wait 30 seconds.

Temperature

Select **Temperature**, press ENTER.

The device temperature is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Fan State

Select **Fan State**, press ENTER.

The fan status is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version**, press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

RDM UID

Select **RDM UID**, press ENTER.

The RDM UID is displayed.

To exit the menu, press MENU, or wait 30 seconds.

Error Logs

Select **Error Logs**, press ENTER.

Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.

The error list is displayed.

Use UP/DOWN button to select **Reset Error Log**, confirm your selection with ENTER.

If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.

To exit the menu, press MENU, or wait 30 seconds.

Reset Functions

Enter the control menu and select **Reset Functions**, press ENTER. Use the UP/DOWN button to select **Pan/Tilt Reset**, **Effect Reset** or **All Reset**.

Pan/Tilt Reset

Select **Pan/Tilt Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset pan/tilt to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Effect Reset

Select **Effect Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset effect to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

All Reset

Select **All Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **USB Upgrade**, **Send Upgrade**, **Firmware Restore** or **Factory Settings**.

USB Upgrade

Select **USB Upgrade**, press ENTER.

The upgrade files are displayed. (See the 'Updating Software' section for details.)

To exit the menu, press MENU, or wait 30 seconds.

Send Upgrade

Select **Send Upgrade**, press ENTER.

If you wish to send upgrade files from this fixture to other fixtures to upgrade their firmware, select Yes. Then use UP/DOWN button to select DMX (send upgrade via DMX) or NET (send upgrade via Ethernet), confirm your selection with ENTER. Once selected, the display of this fixture will show "Sending Packet, Please Wait..." while the display of other fixtures will show "Upgrading, Please Wait...". A percentage bar will also be displayed. After the update is complete, fixtures will perform a reset (this can take some time).

If you do not wish to send anything, select No. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Firmware Restore

(After replacing fixture's vice board(s), this function allows you to synchronize the main board's software to all vice board(s), as the software version of the replaced vice board(s) may not consistent with that of the main board.): Select **Firmware Restore**, press ENTER.

If you wish to restore fixture's firmware, select **Yes**. Once **Yes** is selected, the display will show "Upgrading, Please Wait...". A percentage bar will also be displayed. After the update is complete, the fixture will perform a reset (this can take some time).

If you do not wish to restore anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

Factory Settings

Select **Factory Settings**, press ENTER.

If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

RDM functions: Certain menus of the device and functions can be called up via the RDM protocol.

The parameter IDs are implemented as follows for different commands:

Standard RDM Parameter IDs

PID	Parameter IDs	Command 'Discovery'	Command 'Set'	Command 'Get'
0x0001	DISC_UNIQUE_BRANCH	√		
0x0002	DISC_MUTE	√		
0x0003	DISC_UN_MUTE	√		
0x0050	SUPPORTED_PARAMETERS			√
0x0051	PARAMETER_DESCRIPTION			√
0x0060	DEVICE_INFO			√
0x0080	DEVICE_MODEL_DESCRIPTION			√

0x0081	MANUFACTURER_LABEL			✓
0x0082	DEVICE_LABEL		✓	✓
0x0090	FACTORY_DEFAULTS		✓	✓
0x00C0	SOFTWARE_VERSION_LABEL			✓
0x00C1	BOOT_SOFTWARE_VERSION_ID			✓
0x00C2	BOOT_SOFTWARE_VERSION_LABEL			✓
0x00E0	DMX_PERSONALITY		✓	✓
0x00E1	DMX_PERSONALITY_DESCRIPTION			✓
0x00F0	DMX_START_ADDRESS		✓	✓
0x0120	SLOT_INFO			✓
0x0121	SLOT_DESCRIPTION			✓
0x0200	SENSOR_DEFINITION			✓
0x0201	SENSOR_VALUE			✓
0x0343	CURVE		✓	✓
0x0344	CURVE_DESCRIPTION			✓
0x0400	DEVICE_HOURS			✓
0x0401	LAMP_HOURS			✓
0x0600	PAN_INVERT		✓	✓
0x0601	TILT_INVERT		✓	✓
0x1000	IDENTIFY_DEVICE		✓	✓
0x1001	RESET_DEVICE		✓	✓

✓ -Command implemented for the respective parameter ID

6.2 Home Position Adjustment

- ▶ To access the control menus, press the [MENU] button.
- ▶ To access the offset menus, long-press the [ENTER] button.
- ▶ Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

OFFSET MENU	VALUES
Frequency(1200Hz)	1072~1327
Pan	-128~127
Tilt	-128~127
Zoom	-128~127
Effect	0~1000
Wash R	0~1000
Wash G	0~1000
Wash B	0~1000
Wash L	0~1000
Beam CW	0~1000
Zone R	0~1000
Zone G	0~1000
Zone B	.....
Line CW	0~1000
Wash R 1	0~1000
Wash G 1	0~1000
Wash B 1	0~1000
Wash L 1	0~1000
...	0~1000
Wash R 4	0~1000
Wash G 4	0~1000
Wash B 4	0~1000
Wash L 4	0~1000
Beam CW 1	0~1000
Beam CW 2	0~1000
Beam CW 3	0~1000
....	0~1000
Beam CW 14	0~1000
Beam CW 15	0~1000
Beam CW 16	0~1000
Zone R 1	0~1000
Zone G 1	0~1000
Zone B 1	0~1000
....	0~1000
Zone R 16	0~1000

Zone G 16	0~1000
Zone B 16	0~1000
Line CW 1	0~1000
Line CW 2	0~1000
Line CW 3	0~1000
.....	0~1000
Line CW 38	0~1000
Line CW 39	0~1000
Line CW 40	0~1000

Frequency(Hz)

Select **Frequency(Hz)**, press ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Frequency	VALUES
900Hz	772~1027
1000Hz	872~1127
1100Hz	972~1227
1200Hz	1072~1327
1300Hz	1172~1427
1400Hz	1272~1527
1500Hz	1372~1627
2500Hz	2372~2627
4000Hz	3872~4127
5000Hz	4872~5127
6000Hz	5872~6127
10000Hz	9872~10127
15000Hz	14872~15127
20000Hz	19872~20127
25000Hz	24872~25127

Pan

Select **Pan**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Tilt

Select **Tilt**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zoom

Select **Zoom**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Effect

Select **Red**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash R

Select **Wash R**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash G

Select **Wash G**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash B

Select **Wash B**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash L

Select **Wash L**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW

Select **Beam CW**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone R

Select **Zone R**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone G

Select **Zone G**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone B

Select **Zone B**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW

Select **Line CW**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash R 1

Select **Wash R 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash G 1

Select **Wash G 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash B1

Select **Wash B1**, press ENTER.

Use UP/DOWN button to select a value between -75 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash L1

Select **Wash L1**, press ENTER.

Use UP/DOWN button to select a value between -75 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

.....

Wash R 4

Select **Wash R 4**, press ENTER.

Use UP/DOWN button to select a value between -75 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash G 4

Select **Wash G 4**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone Green

Select **Zone Green**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash B 4

Select **Wash B 4**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Wash L 4

Select **Wash L 4**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW 1

Select **Beam CW 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW 2

Select **Beam CW 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW 3

Select **Beam CW 3**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

.....

Beam CW 14

Select **Beam CW 14**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW 15

Select **Beam CW 15**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Beam CW 16

Select **Beam CW 16**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone R 1

Select **Zone R 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone G 1

Select **Zone G 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone B 1

Select **Zone B1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

.....

Zone R16

Select **Zone R16**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone G16

Select **Zone G16**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Zone B16

Select **Zone B16**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW 1

Select **Line CW 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW 2

Select **Line CW 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW 3

Select **Line CW 3**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

.....

Line CW 38

Select **Line CW 38**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW 39

Select **Line CW 39**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

Line CW 40

Select **Line CW 40**, press ENTER.

Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

07/ Configuring the Device for DMX Control

7.1 Address Setting

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. Incorrect settings will result in unpredictable responses from the lighting controller.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will “listen” starting at the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, if the first fixture is set to 42 CH DMX mode with a start DMX address of 1, the

following fixture in the DMX chain should then be set to a DMX address of 43. As the first fixture uses all the first 42 DMX channels, the next available channel is 43 ($22+1=43 >> 43$).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
42channels	1	43	85	127	.....
194channels	1	195	389		
152channels	1	153	305	457	
26+168channels (Controlled by DMX)	1	195	389		

7.2 DMX Protocol

Valid from firmware version: V1.1

42 CH(Mode 1) / 194 CH (Mode 2) / 152 CH (Mode 3)/ 26+168CH(Mode 4)

CHANNEL				VALUE	FUNCTION
42CH	194CH	152CH	26+168CH		
1	1	1	1	000-255	PAN 0°→540°
2	2	2	2	000-255	PAN FINE
3	3	3	3	000-255	TILT 0°→450°
4	4	4	4	000-255	TILT FINE
5	5	5	5	000-127 128-189 190-193 194-255	PAN INFINITY Null Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
6	6	6	6	000-127 128-189	TILT INFINITY Null Clockwise Rotation, Fast to Slow

				190-193 194-255	Stop Counter-Clockwise Rotation, Slow to Fast
7	7	7	7	000-255	PAN/TILT SPEED Fast to Slow
8	8	8	8	000-255	ZOOM Wide→Narrow
9	9	9	9	000-255	ZOOM FINE 0%→100%
10	10	10	10	000-255	FROST 0%→100%
11	11	11	11	000-019 020-039 040-059 060-093 094-147 148-167 168-187 188-221 222-255	EFFECT None Effect Effect1 with Zoom Effect2 with Zoom Effect1 with Zoom Shaking None Effect Effect1 without Zoom Effect2 without Zoom Effect1 without Zoom Shaking None Effect
12	12	12	12	000-255	Wash Dimmer 0%→100%
13	13	13	13	000-255	Wash Dimmer Fine 0%→100%
14	14	14	14	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Wash Strobe Close Open Strobe Slow->Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Slow >Fast Open
15	15	15	15	000-255	BEAM_DIMMER 0%→100%
16	16	16	16	000-255	Beam Dimmer Fine 0%→100%
17	17	17	17	000-007 008-015 016-131 132-139 140-181 182-189	Beam Strobe Close Open Strobe Slow->Fast Open Fast Open Slow Close Open

				190-231 232-239 240-247 248-255	Fast Close Slow Open Open Random Strobe Slow >Fast Open
18	18	18	18	000-255	ZONE DIMMER 0%→100%
19	19	19	19	000-255	Zone Dimmer Fine 0%→100%
20	20	20	20	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Zone Strobe Close Open Strobe Slow->Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Slow >Fast Open
21	21	21	21	000-255	LINE DIMMER 0%→100%
22	22	22	22	000-255	Line Dimmer Fine 0%→100%
23	23	23	23	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Line Strobe Close Open Strobe Slow->Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Slow >Fast Open
29	89	89	24	001- 004 005- 009 010- 013 014- 018 019- 022 023- 027 028- 031 032- 036 037- 040 041- 045 046- 049 050- 054	Wash CTO 8000K 7900K 7800K 7700K 7600K 7500K 7400K 7300K 7200K 7100K 7000K 6900K

				055- 058	6800K
				059- 063	6700K
				064- 067	6600K
				068- 072	6500K
				073- 076	6400K
				077- 081	6300K
				082- 085	6200K
				086- 090	6100K
				091- 094	6000K
				095- 099	5900K
				100- 103	5800K
				104- 108	5700K
				109- 112	5600K
				113- 117	5500K
				118- 121	5400K
				122- 126	5300K
				127- 130	5200K
				131- 135	5100K
				136- 139	5000K
				140- 144	4900K
				145- 148	4800K
				149- 153	4700K
				154- 157	4600K
				158- 162	4500K
				163- 166	4400K
				167- 171	4300K
				172- 175	4200K
				176- 180	4100K
				181- 184	4000K
				185- 189	3900K
				190- 193	3800K
				194- 198	3700K
				199- 202	3600K
				203- 207	3500K
				208- 211	3400K
				212- 216	3300K
				217- 220	3200K
				221- 225	3100K
				226- 229	3000K
				230- 234	2900K
				235- 238	2800K
				239- 243	2700K
				244- 247	2600K
				248- 255	2500K
30	90	90	25	000-007 008-009	Wash Color Macro Open Medium Yellow

010-011	Fire
012-013	Gold Amber
014-015	Sunset Red
016-017	Medium Pink
018-019	Light Lavender
020-021	Lavender
022-023	Sky Blue
024-025	Just Blue
026-027	Lime Green
028-029	Moss Green
030-031	Dark Yellow Green
032-033	Spring Yellow
034-035	Yellow
036-037	Light Amber
038-039	Straw
040-041	Deep Amber
042-043	Orange
044-045	Dark Pink
046-047	Peacock Blue
048-049	Medium Blue-Green
050-051	Steel Blue
052-053	Light Blue
054-055	Deep Blue
056-057	LEE Green
058-059	Fern Green
060-061	Dark Green
062-063	Mauve
064-065	Bright Pink
066-067	Medium Blue
068-069	Deep Golden Amber
070-071	Pale Lavender
072-073	Special Lavender
074-075	Pale Green
076-077	Primary Green
078-079	Bright Blue
080-081	Apricot
082-083	Pale Gold
084-085	Pink
086-087	Bastard Amber
088-089	Flame Red
090-091	Daylight Blue
092-093	Deep Lavender
094-095	Congo Blue
096-097	Surprise Pink
098-099	Alice Blue
100-101	Full C.T. Blue
102-103	Half C.T. Blue
104-105	Lighter Blue

				106-107 108-255	Millennium Gold NULL
					SPECIAL FUNCTION (To activate following functions, stop in DMX value for at least 3 seconds.)
				000-009	No Function
				010-019	No Function
				020-029	No Function
				030-039	Dimmer Curve Linear
				040-049	Dimmer Curve Square Law
				050-059	Dimmer Curve Inv Square Law
				060-069	Dimmer Curve S
				070-079	Fan Mode Standard
				080-089	Fan Mode Quiet
				090-099	No Function
				100-109	LED Frequency Setting Enable
				110-119	LED Frequency Setting Disable
				120-122	No Function
				123	900Hz
				124	1000Hz
				125	1100Hz
				126	1200Hz
				127	1300Hz
24	24	24	26	128	1400Hz
				129	1500Hz
				130	2500Hz
				131	4000Hz
				132	5000Hz
				133	6000Hz
				134	10000Hz
				135	15000Hz
				136	20000Hz
				137	25000Hz
				138-139	No Function
				140-149	Pan/tilt Reset
				150-159	Effect Reset
				160-161	Invert Pixel Order :Yes
				162-163	Invert Pixel Order :No
				164-165	Color Calibration: On
				166-167	Color Calibration: Off
				168-169	Calibration Mode: Hi CRI
				170-171	Calibration Mode: Hi Output
				172-179	No Function
				180-181	Sun Protection Mode: On
				182-183	Sun Protection Mode: Off
				184-199	No Function

				200-209 210-219 220-229 230-241 242-243 244-245 246-247 248-249 250-255	Reset all Dimmer Speed Fast Dimmer Speed Smooth No Function Line Power Mode: Off Line Power Mode: On Dimming Start Mode: High Dimming Start Mode: Low No Function
25				000-255	Wash Red 0%→100%
26				000-255	Wash Green 0%→100%
27				000-255	Wash Blue 0%→100%
28				000-255	Wash Lime 0%→100%
	25	25	1	000-255	Wash Red 1 0%→100%
	26	26	2	000-255	Wash Red Fine 1 0%→100%
	27	27	3	000-255	Wash Green 1 0%→100%
	28	28	4	000-255	Wash Green Fine 1 0%→100%
	29	29	5	000-255	Wash Blue 1 0%→100%
	30	30	6	000-255	Wash Blue Fine 1 0%→100%
	31	31	7	000-255	Wash Lime 1 0%→100%
	32	32	8	000-255	Wash Lime Fine 1 0%→100%
	.....	.....	.....	000-255	.....
	81	81	57	000-255	Wash Red 8 0%→100%
	82	82	58	000-255	Wash Red Fine 8 0%→100%
	83	83	59	000-255	Wash Green 8 0%→100%
	84	84	60	000-255	Wash Green Fine 8 0%→100%
	85	85	61		Wash Blue 8

				000-255	0%→100%
	86	86	62	000-255	Wash Blue Fine 8 0%→100%
	87	87	63	000-255	Wash Lime 8 0%→100%
	88	88	64	000-255	Wash Lime Fine 8 0%→100%
31				000-255	Beam CW 0%-100%
32				000-007	Beam Macro NULL
				008-015	EFFECT 1
				016-023	EFFECT 2
				024-031	EFFECT 3
				032-039	EFFECT 4
				040-047	EFFECT 5
				048-055	EFFECT 6
				056-063	EFFECT 7
				064-071	EFFECT 8
				072-079	EFFECT 9
				080-087	EFFECT 10
				088-095	EFFECT 11
				096-103	EFFECT 12
				104-111	EFFECT 13
				112-119	EFFECT 14
				120-127	EFFECT 15
				128-135	EFFECT 16
				136-143	EFFECT 17
				144-151	EFFECT 18
				152-159	EFFECT 19
				160-167	EFFECT 20
168-175	EFFECT 21				
176-183	EFFECT 22				
184-191	EFFECT 23				
192-199	EFFECT 24				
200-207	EFFECT 25				
208-215	EFFECT 26				
216-223	EFFECT 27				
224-231	EFFECT 28				
232-239	EFFECT 29				
240-247	EFFECT 30				
248-255	EFFECT 31				
33				000	Beam Macro Speed Stop
				001-127	Slow to fast without fade
				128-255	Slow to fast With fade

	91	91	65	000-255	Beam CW 1 0%-100%
	92	92	66	000-255	Beam CW 2 0%-100%
	93	93	67	000-255	Beam CW 3 0%-100%
	.....	.....	.....	000-255	.....
	104	104	78	000-255	Beam CW 14 0%-100%
	105	105	79	000-255	Beam CW 15 0%-100%
	106	106	80	000-255	Beam CW 16 0%-100%
	107		81	000-255	Zone Red 1 0%-100%
	108		82	000-255	Zone Green 1 0%-100%
	109		83	000-255	Zone Blue 1 0%-100%
	.....		.....	000-255	.....
	152		126	000-255	Zone Red 16 0%-100%
	153		127	000-255	Zone Green 16 0%-100%
	154		128	000-255	Zone Blue 16 0%-100%
34		107		000-255	Zone Red 0%-100%
35		108		000-255	Zone Green 0%-100%
36		109		000-255	Zone Blue 0%-100%
37		110		000-007 008-009 010-011 012-013 014-015 016-017 018-019 020-021 022-023 024-025	Zone Color Macro Open Medium Yellow Fire Gold Amber Sunset Red Medium Pink Light Lavender Lavender Sky Blue Just Blue

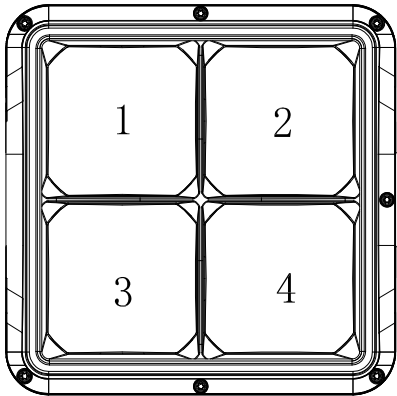
				026-027	Lime Green
				028-029	Moss Green
				030-031	Dark Yellow Green
				032-033	Spring Yellow
				034-035	Yellow
				036-037	Light Amber
				038-039	Straw
				040-041	Deep Amber
				042-043	Orange
				044-045	Dark Pink
				046-047	Peacock Blue
				048-049	Medium Blue-Green
				050-051	Steel Blue
				052-053	Light Blue
				054-055	Deep Blue
				056-057	LEE Green
				058-059	Fern Green
				060-061	Dark Green
				062-063	Mauve
				064-065	Bright Pink
				066-067	Medium Blue
				068-069	Deep Golden Amber
				070-071	Pale Lavender
				072-073	Special Lavender
				074-075	Pale Green
				076-077	Primary Green
				078-079	Bright Blue
				080-081	Apricot
				082-083	Pale Gold
				084-085	Pink
				086-087	Bastard Amber
				088-089	Flame Red
				090-091	Daylight Blue
				092-093	Deep Lavender
				094-095	Congo Blue
				096-097	Surprise Pink
				098-099	Alice Blue
				100-101	Full C.T. Blue
				102-103	Half C.T. Blue
				104-105	Lighter Blue
				106-107	Millennium Gold
				108-255	NULL
					Zone Macro
				000-007	NULL
				008-015	EFFECT 1
				016-023	EFFECT 2
				024-031	EFFECT 3
38		111			

				032-039	EFFECT 4
				040-047	EFFECT 5
				048-055	EFFECT 6
				056-063	EFFECT 7
				064-071	EFFECT 8
				072-079	EFFECT 9
				080-087	EFFECT 10
				088-095	EFFECT 11
				096-103	EFFECT 12
				104-111	EFFECT 13
				112-119	EFFECT 14
				120-127	EFFECT 15
				128-135	EFFECT 16
				136-143	EFFECT 17
				144-151	EFFECT 18
				152-159	EFFECT 19
				160-167	EFFECT 20
				168-175	EFFECT 21
				176-183	EFFECT 22
				184-191	EFFECT 23
				192-199	EFFECT 24
				200-207	EFFECT 25
				208-215	EFFECT 26
				216-223	EFFECT 27
				224-231	EFFECT 28
				232-239	EFFECT 29
				240-247	EFFECT 30
				248-255	EFFECT 31
39		112		000	Zone Macro Speed
				001-127	Stop
				128-255	Slow to fast without fade
					Slow to fast With fade
40				000-255	Line WW
					0%-100%
41				000-007	Line Macro
				008-015	NULL
				016-023	EFFECT 1
				024-031	EFFECT 2
				032-039	EFFECT 3
				040-047	EFFECT 4
				048-055	EFFECT 5
				056-063	EFFECT 6
				064-071	EFFECT 7
				072-079	EFFECT 8
				080-087	EFFECT 9
				088-095	EFFECT 10
					EFFECT 11

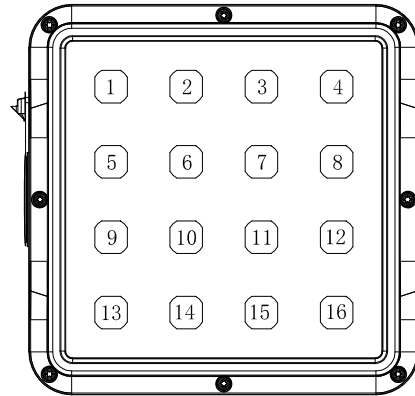
				096-103	EFFECT 12
				104-111	EFFECT 13
				112-119	EFFECT 14
				120-127	EFFECT 15
				128-135	EFFECT 16
				136-143	EFFECT 17
				144-151	EFFECT 18
				152-159	EFFECT 19
				160-167	EFFECT 20
				168-175	EFFECT 21
				176-183	EFFECT 22
				184-191	EFFECT 23
				192-199	EFFECT 24
				200-207	EFFECT 25
				208-215	EFFECT 26
				216-223	EFFECT 27
				224-231	EFFECT 28
				232-239	EFFECT 29
				240-247	EFFECT 30
				248-255	EFFECT 31
42				000	Line Macro Speed
				001-127	Stop
				128-255	Slow to fast without fade
					Slow to fast With fade
	155	113	129	000-255	Line WW 1
					0%-100%
	156	114	130	000-255	Line WW 2
					0%-100%
	157	115	131	000-255	Line WW 3
					0%-100%
	.....	.....	.....	000-255	.....
	193	151	167	000-255	Line WW 39
					0%-100%
	194	152	168	000-255	Line WW 40
					0%-100%

LED PIXEL ZONES:

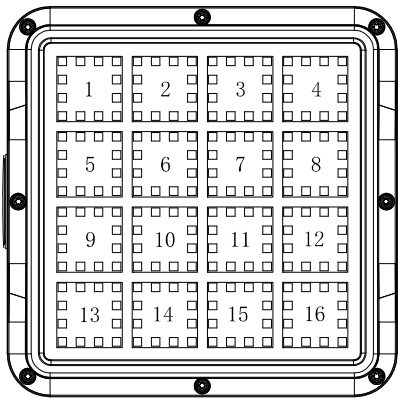
WASH R/G/B/L



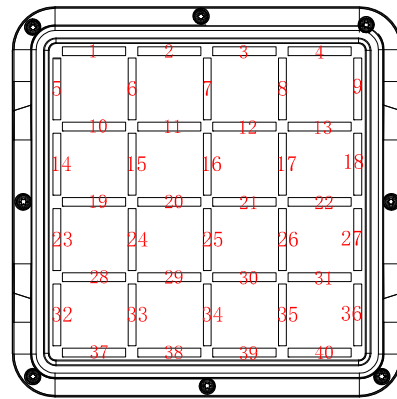
BEAN WHITE



ZONE R/G/B



LINE WHITE



08/ Error Information

Error codes are shown continuously in the display when the fixture fails and they will not disappear until the fixture is repaired.

CPU-B/C/D/E/F/G/H/I Error

Check whether the 485 (DATA) leads on the PCB board are installed in place or disconnected.

Check whether the related 485 (DATA) signal circuit on the PCB board is damaged.

Network Error

Check whether the net model is installed in place.

Check whether the net model is damaged.

Check whether the network is normal.

LED Temp. Error

Check whether the temperature detecting board is normal.

Check whether the components of the temperature detecting board are damaged.

Check whether the lead on the temperature detecting board is installed in place or disconnected.

LED Timeout Use

LED Too Hot Off

When the fixture temperature reaches 85°C, it will automatically turn off to protect the fixture.

Pan Reset Error

Check whether the position of the pan where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the pan operating range.

Check whether the Hall element on the pan is damaged.

Check whether the lead connecting the Hall element on the pan and the PCB board is in poor contact or disconnected.

Check whether the motor on the pan is damaged.

Check whether the related circuit of the motor drive board on the pan is damage.

Pan Encode Error

Check whether the encoder on the pan is damaged.

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

Pan Encode No Find

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

Pan Encode Disable

Check whether the encoder on the pan is damaged.

Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.

Check whether the motor on the tilt is damaged.

Check whether the related circuit of the motor drive board on the tilt is damage.

Tilt Encode Error

Check whether the encoder on the tilt is damaged.

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

Tilt Encode No Find

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

Tilt Encode Disable

Check whether the encoder on the tilt is damaged.

Zoom Reset Error

Check whether the position of the zoom where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the zoom operating range.

Check whether the Hall element on the zoom is damaged.

Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.

Check whether the motor on the zoom is damaged.

Zoom Error

Check whether the position of the zoom where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the zoom operating range.

Check whether the Hall element on the zoom is damaged.

Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.

Check whether the motor on the zoom is damaged.

Check whether the related circuit of the motor drive board on the zoom is damage.

Base Fan 1/2 Start Error

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Head Fan 1/2/3/4 Error

Check whether the fan is not running.

Check whether the fan leads are installed in place or disconnected.

Check whether the fan is damaged.

Check whether there are obstacles in the fan operating range.

Head Humi. Too High

Disassemble the housing of the fixture to dehumidify.

Base Humi. Too High

Disassemble the housing of the fixture to dehumidify.

Head Humidity Error

Check whether the humidity sensor is faulty.

Check whether the lead connecting the humidity sensor is installed in place or disconnected.

NTC Error

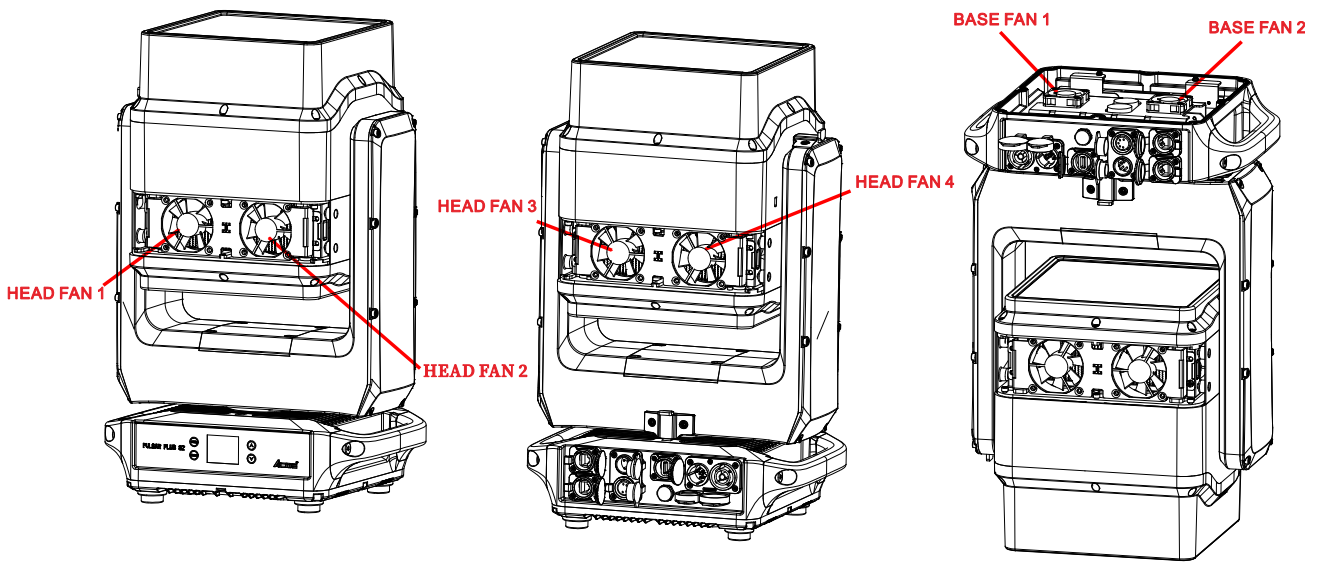
Check the NTC Sensor Connection whether is disconnected.

Check for Environmental Overheating is not covered or surrounded by other heat sources.

memory error

When the memory IC keeps reporting errors, please replace the motherboard.

Position of cooling fans:



Cooling Fans	PCB Printing	Part Number	V	W	Position	Print Error Message
Base Fan 1	FAN1	3014001183	DC 24V	2.2W	Base - A	Base Fan 1 Start Error
Base Fan 2	FAN2					Base Fan 2 Start Error
Head Fan 1	FAN1	3014001440	DC 24V	3.4W	Head - C	Head Fan 1 Start Error
Head Fan 2	FAN2					Head Fan 2 Start Error
Head Fan 3	FAN3					Head Fan 3 Start Error
Head Fan 4	FAN4					Head Fan 4 Start Error

09/ Troubleshooting

Problem	Potential cause(s)	Remedies
Fixture does not respond or appears to be off.	No power to the fixture.	Confirm that the power is switched on and cables are plugged in.
	No output from PSU.	Replace the PSU.
Fixture suddenly turned off.	Power was turned off.	Check the power supply, switches and breakers.
Light output cuts out intermittently.	Fixture is too hot.	Check fixture's stored error messages for more information. Allow fixture to cool. Clean fixture. Reduce ambient temperature.
Fixture suddenly stopped responding.	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly / abnormal.	Incorrect DMX address or DMX mode.	Inspect and enter the correct DMX address or mode.
	DMX link is not terminated.	Install a XLR 120ohm DMX termination at the end of the DMX link.
	Bad data link.	Replace or repair defective cables and/or connections.
	One of the fixtures is defective and is disturbing data transmission on the link.	Track and isolate the corrupted fixture. Have the fixture serviced by a qualified technician.
Pan / tilt is skipping / shuddering	Pan/ tilt locks are not released.	Release the pan / tilt locks.
	Obstacles are within the required pan / tilt clearance.	Inspect and remove any obstacles constraining free operation of the pan / tilt.
	The Hall element is damaged.	Replace the Hall element.
	The magnetic steel fell out.	Replace the magnetic steel.

10/ Fixture Cleaning

Regular cleaning is very important for fixture life and performance. Buildup of dust, dirt, smoke particles, fog fluid residues, etc. degrades the fixture's light output and cooling ability. Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. It is therefore impossible to specify precise cleaning intervals for the fixture. Environmental factors that may result in a need for frequent cleaning include:

- ▶ Use of smoke or fog machines.
- ▶ High airflow rates (near air conditioning vents, for example).
- ▶ Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first few hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Follow these precautions when cleaning the fixture:

- ▶ Work in a clean, dry, well-lit area.
- ▶ Use gentle pressure only. A soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used! Use care when cleaning optical components: surfaces are fragile and easily scratched.

11/ Approvals and Certifications

This product has been tested and found to comply with the following standards:

- 2014/30/EU - Electromagnetic Compatibility (EMC)
- 2014/35/EU - Low Voltage Directive (LVD)
- cETLus Approved (Control #5000057)
- UK SI 2016 No. 1091: Electromagnetic Compatibility Regulations 2016
- UK SI 2016 No. 1101: The Electric Equipment (Safety) Regulations 2016



The information in this document is subject to change without notice.

For the latest information, visit www.acmelighting.com.



www.acmelighting.com