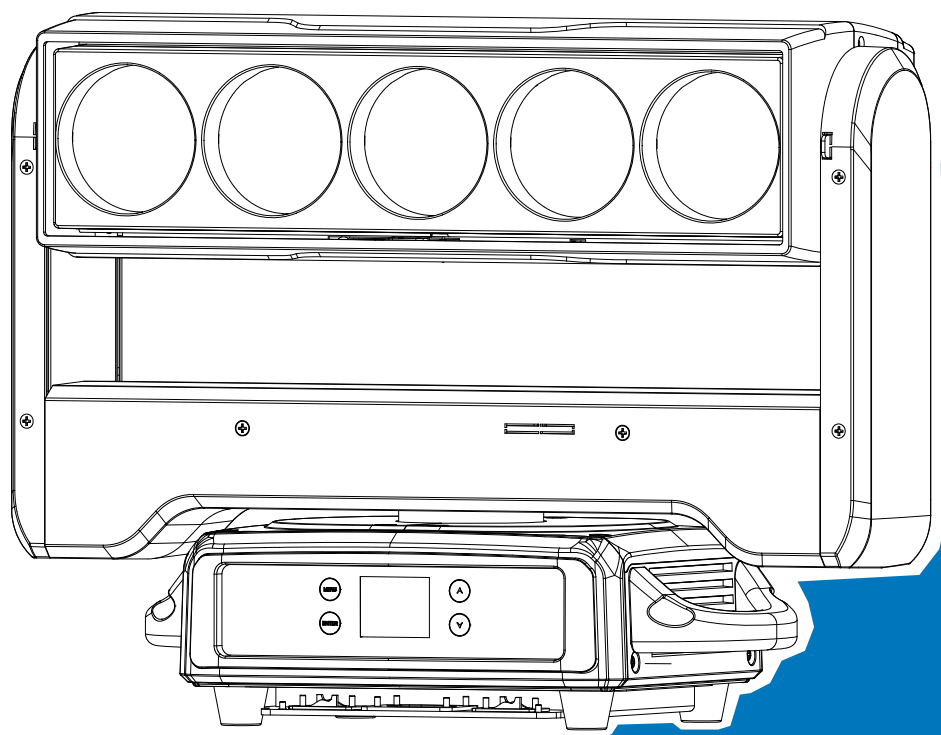


Acme®

GEMINI



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.

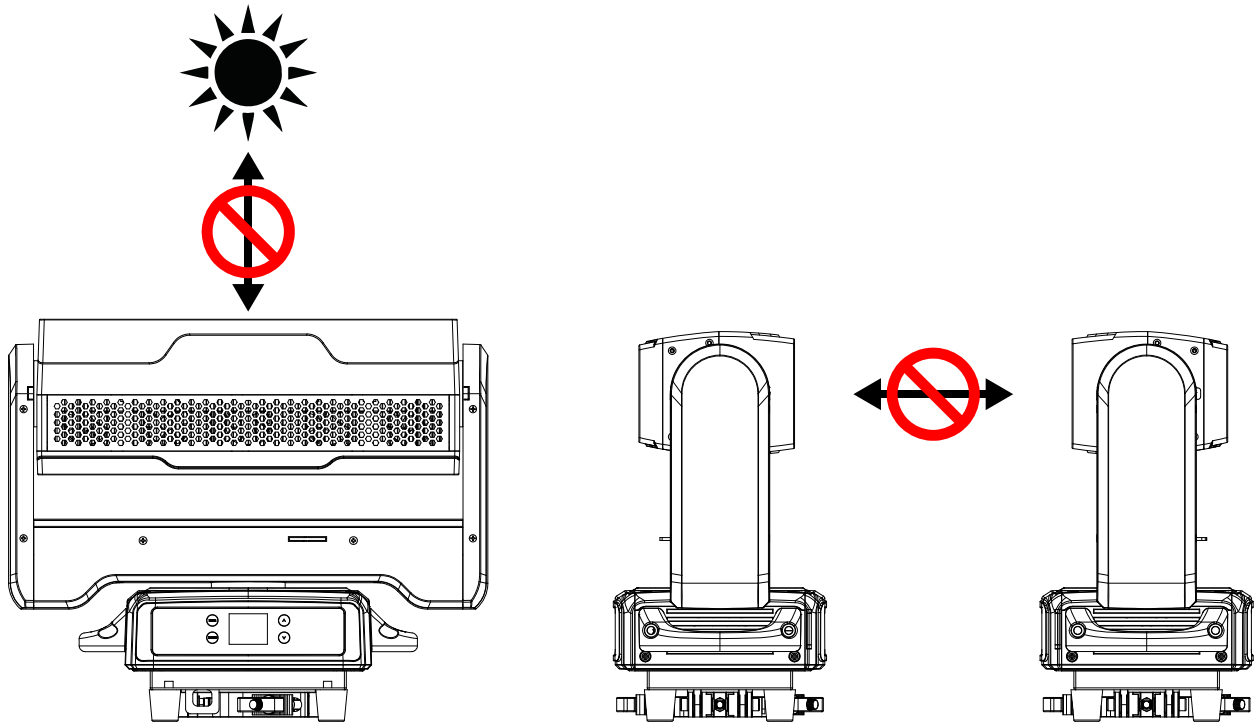
Important:

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 (made of steel, min. diameter 2.0mm) when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- 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: 0°C. Maximum ambient temperature TA: 40°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 75°C. DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the unit. Once 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 wire 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.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- 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 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): 0°C. Température ambiante maximale (TA): 40°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.

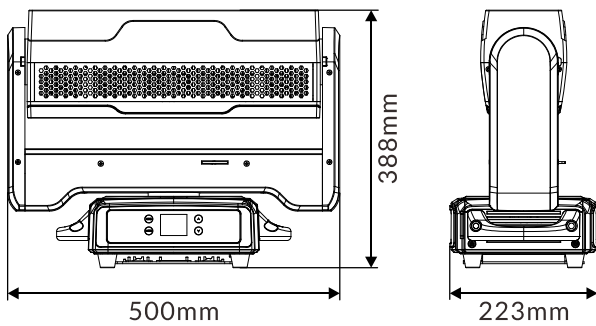
- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 75°C. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau 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.
- Débranchez l'alimentation électrique avant de remplacer le fusible ou d'effectuer toute maintenance.
- Remplacez le fusible uniquement par un modèle de même type.
- 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.

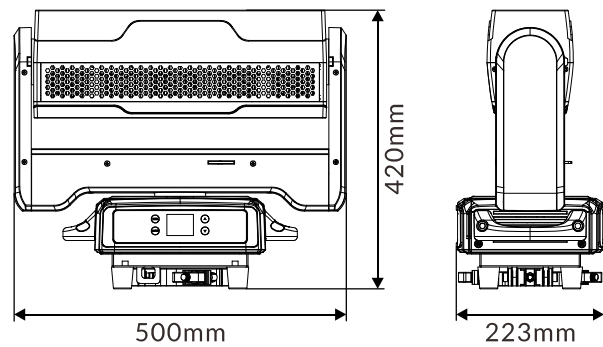
02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	1240W	
Light Source	5x60W RGBW LED	
	36x18W CW LED	
Beam Angle	2.8°-31° (beam section)	
	96° (strobe section)	
Field Angle	5°-46° (beam section)	
	116° (strobe section)	
Movement	Pan	Infinite
	Tilt	Infinite
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
	Mechanical pan/tilt lock for safe transportation and maintenance	
Control and Programming	DMX Channels	58/25/23/35+/27/70/55
	Protocols	DMX512
		RDM
		Art-Net
		sACN
Firmware Update	via DMX	
Construction	Display	LCD display
	Battery backup for user setup without mains connection	
	DMX and RDM Data In/Out	5-pin XLR (optional with 3-pin XLR)
		RJ45 Connectors
	Power In/Out	Power Connector in/out
Protection Rating	IP20	
Dynamic Effects	With zoom and strobe functions	
	Beam section: 5 x RGBW LEDs with individual control	
	Strobe section: 18 x CW LED zones with individual control	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	Variable color temperature control	
	Outstanding color mixing	
Supplied with two omega brackets (optional with two fixed foldable		

	clamps)	
Dimensions	500x223x388mm (version with omega bracket holes)	19.7"x8.8"x15.3"
Dimensions	500x223x420mm (version with fixed foldable clamps)	19.7"x8.8"x16.5"
Weight	19.5 kg (version with omega bracket holes)	43 lbs
Weight	20.5 kg (version with fixed foldable clamps)	45.2 lbs



version with omega bracket holes

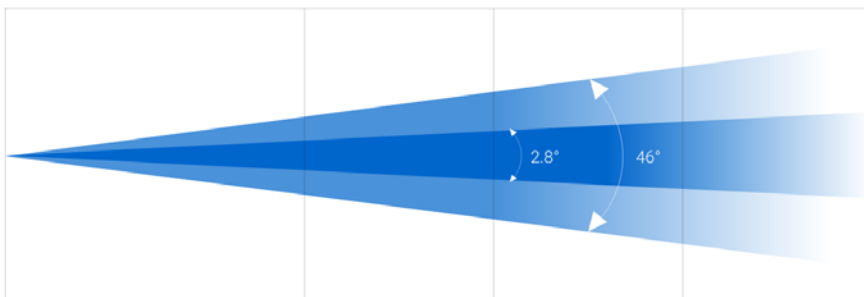


version with fixed foldable clamps

Photometric Diagram:

WASH:

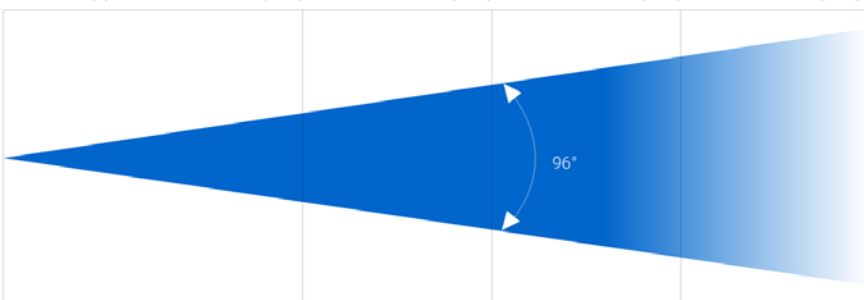
Distance m (ft) 5 (16.4) 10 (32.8) 15 (49.2) 20 (65.6)



2.8° Lux	16,754	4,189	1,862	1,047
Diameter m (ft)	0.2 (0.7)	0.4 (1.3)	0.6 (2)	0.8 (2.6)
46° Lux	552	138	61	38
Diameter m (ft)	3.3 (10.8)	6.5 (21.3)	9.8 (32.2)	13 (42.7)

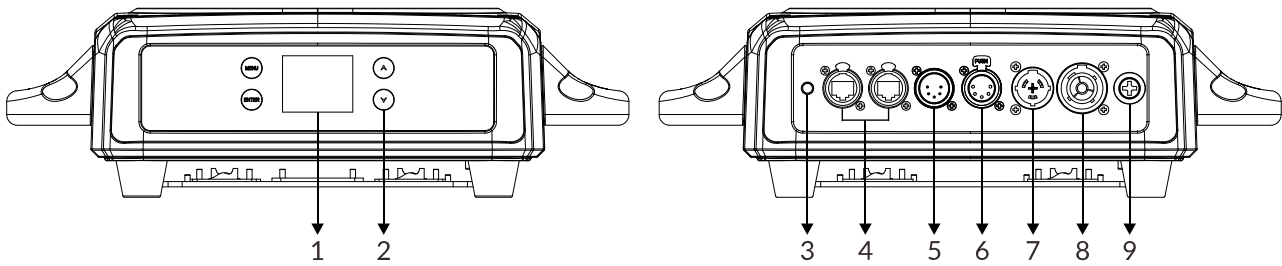
Strobe:

Distance m (ft) 5 (16.4) 10 (32.8) 15 (49.2) 20 (65.6)



96° Lux	1,030	258	114	64
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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 to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. BATTERY DISPLAY		
4. ETHERNET	Transfers fixture's information to a main controller	
5. DMX IN	For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin XLR)	
6. DMX OUT	For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (optional with 3-pin XLR)	
7. POWERCON IN	To connect to supply power	
8. POWERCON OUT	To connect to the next fixture	
9. FUSE(T 15A)	Protects the unit from damage of over current or short circuit	

3.1 Battery Power

This product contains a rechargeable battery.

Battery type: 18650 Lithium-ion battery (3.7V, 2200mAh, 8.14Wh), compliant with the new EU battery regulation EU2023/1542.



Do not expose the fixture or battery to excessive temperatures.

Be aware of the risk of terminals of the battery-operated fixture or battery being short-circuited by metal objects.

This fixture contains battery that is only replaceable by skilled persons.

Different types of batteries or new and used batteries are not to be mixed.

Exhausted batteries are to be removed from the fixture and safely disposed of.

If the fixture is to be stored unused for a long period, the batteries should be removed.

Do not use non-rechargeable batteries in place of rechargeable batteries.

Do not use modified or damaged batteries.

Replacing the battery with an incorrect type can defeat a safeguard and pose a risk of fire or explosion.

Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.

Using the control panel with battery power:

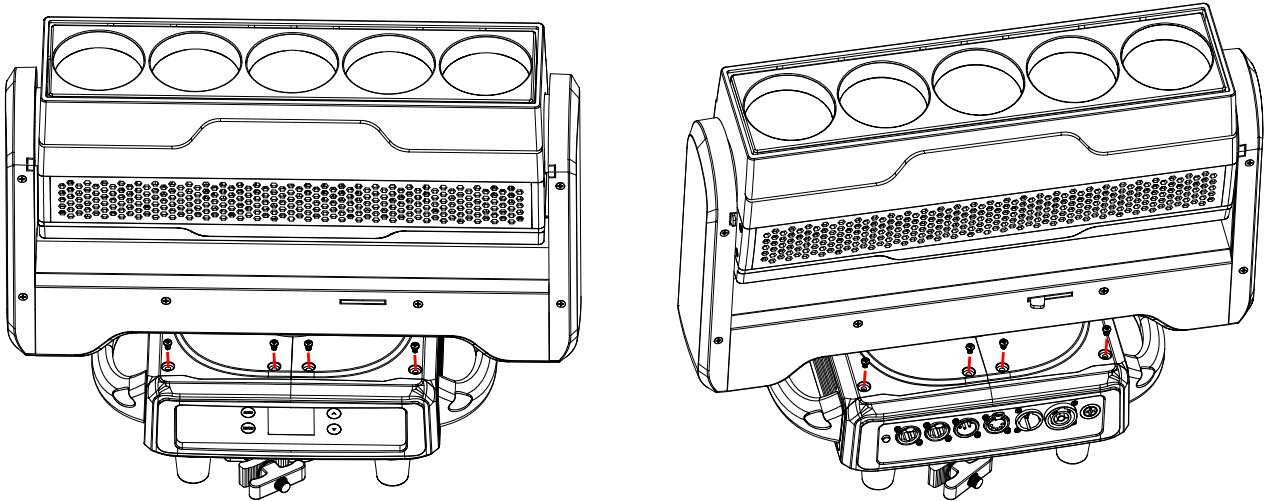
The fixture contains a battery that enables you to use the control panel to set up the fixture even when it is not connected to the main power supply. The battery charges during fixture operation. All of the main setup options in the control panel are accessible on battery power, but the 'Fixture Test' and 'Reset Function' are not available.

To activate the display when the fixture is not connected to power, press and hold the 'BATTERY DISPLAY' button in the rear panel for 3 seconds. The display extinguishes after 30 seconds with no user input. Press and hold the 'BATTERY DISPLAY' button for 3 seconds again to re-activate.

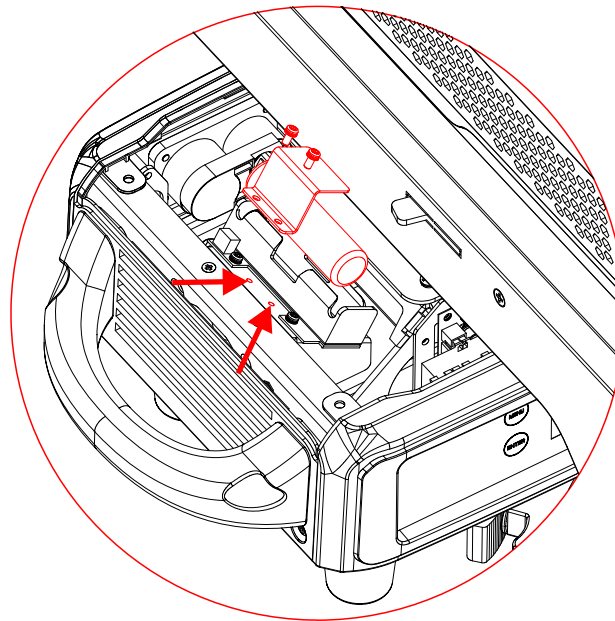
Battery Replacement:

Warning! Disconnect the fixture from AC power before replacing its battery. Replace the battery with one of the same type only.

1. Disconnect the fixture from AC mains power and allow to cool.
2. Remove eight screws in the top covers of the fixture base and remove the top covers.



3. Remove two screws of the battery bracket that holds the battery in place and remove the battery bracket.
4. Remove the exhausted battery and insert a new one (only the same type) into the battery holder (Negative (-) towards the spring, Positive (+) away from the spring).



5. Reinstall the battery bracket and the top covers and check that it is close securely before reapplying power.

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 1240W.

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	\perp or \oplus	ground (earth)

Power cord set should be used: Listed SJT flexible cord with rating: 300V, 105°C, 16AWG x 3C, 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 attachment plug to the face of connector).

CAUTION!

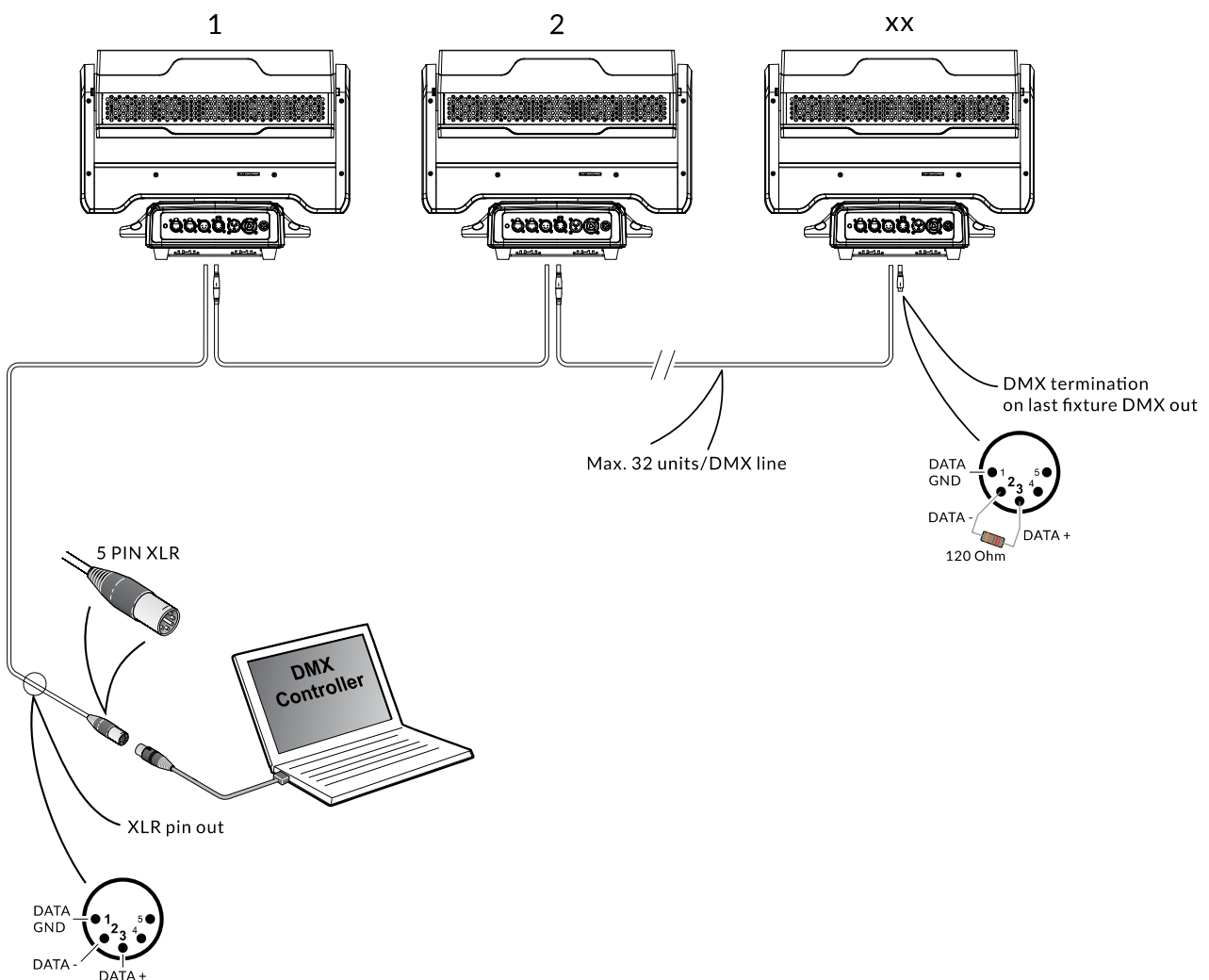
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

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

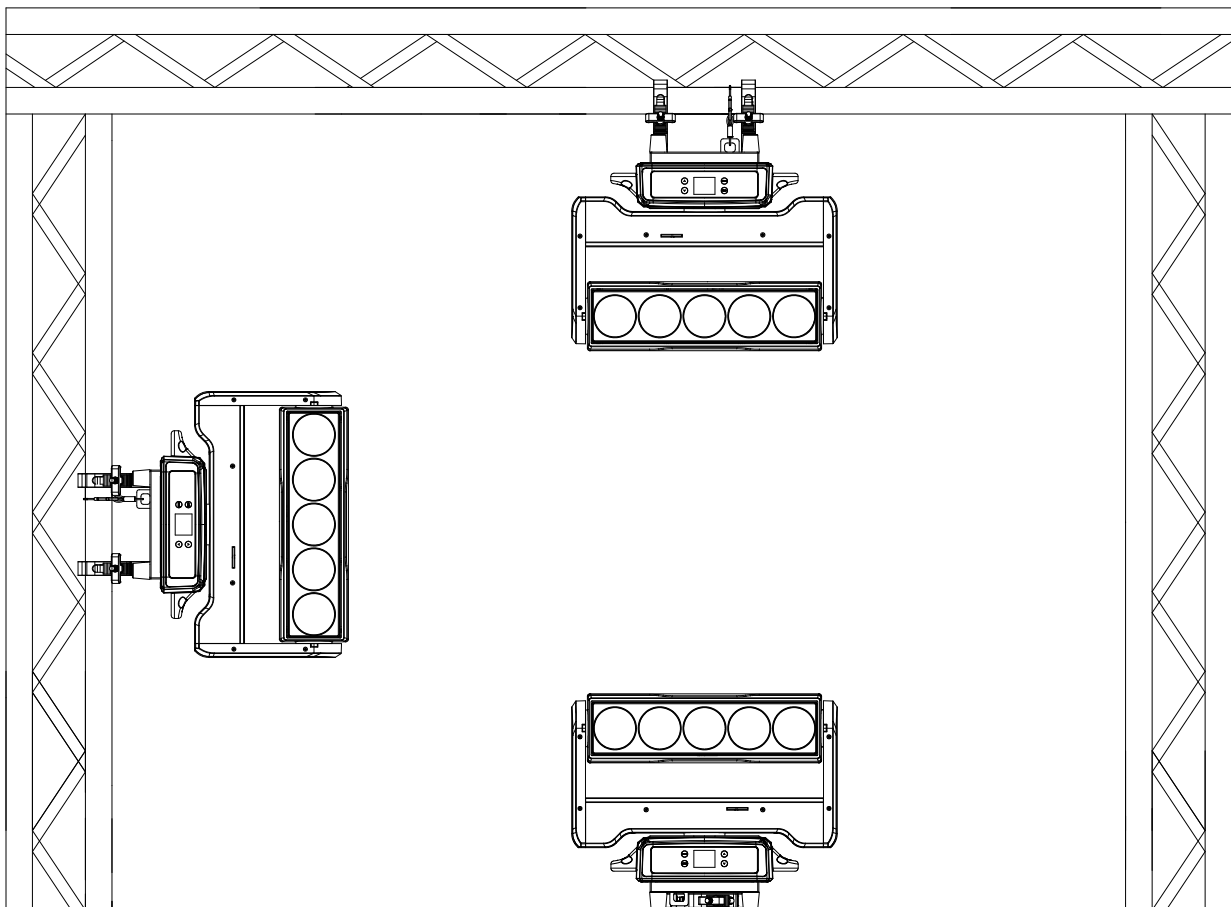
Building a serial DMX chain:

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.

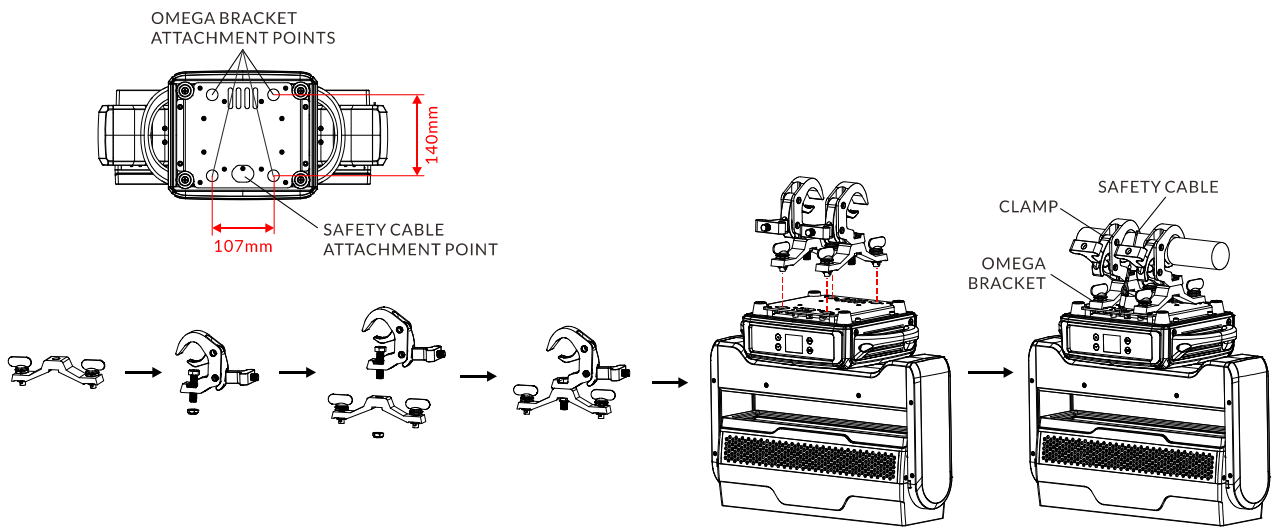


05/ Fixture Installation

- ▶ 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 trussing, or standing on the 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	1-455 (58 CH)	(Default=1)
		1-488 (25 CH)	
		1-490 (23 CH)	
		1-478 (35+ CH)	
		1-486 (27 CH)	
		1-443 (70 CH)	
		1-458 (55 CH)	
	Mode 4 ART Addr	1-493 (35+ CH)	(Default=1)
	DMX Channel Mode	58 CH	
		25 CH	
		23 CH	
		35+ CH	
		27 CH	
		70 CH	
		55 CH	
	No DMX Status	Blackout	
		Hold	
		Manual	
	View DMX Value		
	Connect Option	Auto	
DMX			
Art-Net			
sACN			

MAIN MENU	SUBMENU	CHOICES/VALUES		
	Network	IP Address	Default 1:002.xxx.xxx.xxx	
			Default 2:010.xxx.xxx.xxx	
			Manual:xxx.xxx.xxx.xxx	
		Subnet Mask	xxx.xxx.xxx.xxx	
	Art-Net Settings	Net	0-127	(Default=0)
		Sub-Net	0-15	(Default=0)
		Universe	0-15	(Default=0)
	sACN Settings	Universe	1-32000	(Default=1)
		Priority	0-200	(Default=100)
	Network to DMX	No		
Yes				
Fixture Settings	Pan Invert	No		
		Yes		
	Tilt Invert	No		
		Yes		
	Pan Disable	No		
		Yes		
	P/T Feedback	No		
		Yes		
	Dimmer Curve	Linear		
		Square Law		
		Inv SQ Law		
		S Curve		
	Dimmer Speed	Fast		
		Smooth		
	White Balance	Red	125-255	
		Green	125-255	
		Blue	125-255	
		Red 1	125-255	
		Green 1	125-255	
		Blue 1	125-255	
		
		Red 5	125-255	
		Green 5	125-255	
		Blue 5	125-255	
	Invert Pixel Order	Disable		
		Enable		
	Line Power Mode	Off		
		On		

MAIN MENU	SUBMENU	CHOICES/VALUES			
Display Settings	Display Invert	No			
		Yes			
	Backlight Intensity	1-10	(Default=10)		
	Temperature Unit	°C			
		°F			
	Language	English			
Chinese					
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
		Tilt Infinity	0-255	Tilt Infinity	0-255
		R LED 1	0-255	R LED	0-255
		G LED 1	0-255	G LED	0-255
		B LED 1	0-255	B LED	0-255
		W LED 1	0-255	W LED	0-255
		.....	.....	CTO	0-255
		R LED 5	0-255	Color Macro	0-255
		G LED 5	0-255	Zoom	0-255
		B LED 5	0-255	Strobe	0-255
		W LED 5	0-255	Dimmer	0-255
		LED W 1	0-255	Intensity	0-255
		.....	.....	Duration	0-255
		LED W 18	0-255	Rate	0-255
		Intensity	0-255	Effects	0-255
		Duration	0-255		
		Rate	0-255		
		Effects	0-255		
		Zoom	0-255		
		Strobe	0-255		
		Dimmer	0-255		

MAIN MENU	SUBMENU	CHOICES/VALUES				
Fixture Information	Fixture Use Hour					
	LED Use Hour	Total LED Hour				
		LED On Hour				
		LED Hours Reset	Password=050			
	Temperature	LED's			Cur	Max
			LED 1			
			LED 2			
		PCBA	CPU-A			
			CPU-B			
			CPU-C			
			CPU-D			
	Fan State	B_FAN 1-2				
		H_FAN 1-5				
	Firmware Version					
RDM UID						
Error Logs	Fixture Errors					
	Reset Error Log	No				
		Yes	Password=050			
Reset Function	Pan/Tilt Reset	No				
		Yes				
	Effect Reset	No				
		Yes				
	All Reset	No				
		Yes				
Special Function	Factory Restore	No				
		Yes				

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address, Mode 4 ART Addr, DMX Channel Mode, No DMX Status, View DMX Value, Connect Option, Network, Art-Net Settings, sACN Settings** or **Network to DMX**.

DMX Address

Select **DMX Address**, press ENTER.

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

CHANNEL MODE	DMX ADDRESS
58 CH	1-455
25 CH	1-488
23 CH	1-490
35+ CH	1-478
27 CH	1-486
70 CH	1-443
55 CH	1-458

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

Mode 4 ART Addr

Select **Mode 4 ART Addr**, press ENTER.

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

CHANNEL MODE	ADDRESS
35+ CH	1-493

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

DMX Channel Mode

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

Use UP/DOWN button to select between **58 CH**, **25 CH**, **23 CH**, **35+ CH**, **27 CH**, **70 CH** and **55 CH**, confirm your selection with ENTER.

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

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** or **Universe**, 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 **Universe** or **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**, **Pan Disable**, **P/T Feedback**, **Dimmer Curve**, **Dimmer Speed**, **White Balance**, **Invert Pixel Order** or **Line Power 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.

PAN Disable

Select **PAN Disable**, press ENTER.

Use UP/DOWN button to select **No** (pan disable) or **Yes** (pan enabled), 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.

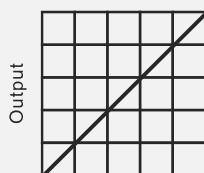
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

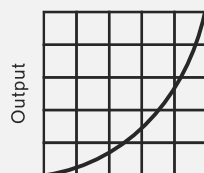
Select **Dimmer Curve**, press ENTER.

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

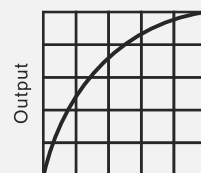
Dimmer Modes



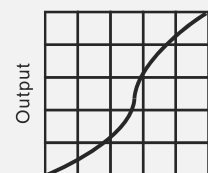
Optically Linear



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 **Red, Green, Blue, Red 1, Green 1, Blue 1.....** or **Red 5, Green 5, Blue 5**, 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.

Invert Pixel Order

Select **Invert Pixel Order**, press ENTER.

Use UP/DOWN button to select **Disable** or **Enable**, 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.

Display Settings

Enter the control menu and select **Display Settings**, press ENTER. Use the UP/DOWN button to select **Display Invert, Backlight Intensity, 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.

Use UP/DOWN button to select **Single** (the device immediately performs a single automatic self-test) or **Cycle** (the device immediately performs a cyclic automatic self-test), confirm your selection with ENTER.

To 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.)

Fixture Information

Enter the control menu and select **Fixture 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.

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 Function

Enter the control menu and select **Reset Function**, 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 **Factory Restore**.

Factory Restore

Select **Factory Restore**, 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:

Parameter ID	Command 'Discovery'	Command 'Set'	Command 'Get'
DISC_UNIQUE_BRANCH	✓		
DISC_MUTE	✓		
DISC_UN_MUTE	✓		
DEVICE_INFO			✓
SUPPORTED_PARAMETERS			✓
SOFTWARE_VERSION_LABEL			✓
DMX_START_ADDRESS		✓	✓
IDENTIFY_DEVICE		✓	✓
DEVICE_MODEL_DESCRIPTION			✓
PARAMETER_DESCRIPTION			✓
MANUFACTURER_LABEL			✓
DEVICE_LABEL		✓	✓
FACTORY_DEFAULTS		✓	✓
BOOT_SOFTWARE_VERSION_ID			✓
BOOT_SOFTWARE_VERSION_LABEL			✓
DMX_PERSONALITY		✓	✓
DMX_PERSONALITY_DESCRIPTION			✓

SLOT_INFO			✓
SLOT_DESCRIPTION			✓
SENSOR_DEFINITION			✓
SENSOR_VALUE			✓
DEVICE_HOURS			✓
PAN_INVERT		✓	✓
TILT_INVERT		✓	✓
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(Hz)	19872~20127
Pan	-128~127
Tilt	-128~127
Zoom	-128~127
Red 1	0~255
Green 1	0~255
Blue 1	0~255
White 1	0~255
.....
Red 5	0~255
Green 5	0~255
Blue 5	0~255

White 5	0~255
LED White 1	0~255
.....
LED White 18	0~255

Frequency(Hz)

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

Use UP/DOWN button to select a value between 19872 and 20127, confirm your selection with ENTER.

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

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.

Red 1

Select **Red 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

Green 1

Select **Green 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

Blue 1

Select **Blue 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

White 1

Select **White 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

.....

Red 5

Select **Red 5**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

Green 5

Select **Green 5**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

Blue 5

Select **Blue 5**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

White 5

Select **White 5**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

LED White 1

Select **LED White 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

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

.....

LED White 18

Select **LED White 18**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, 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 58 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 59. As the first fixture uses all the first 58 DMX channels, the next available channel is 59 ($58+1=59 \gg 59$).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
58 channels	1	59	117	175	.....
25 channels	1	26	51	76	.....
23 channels	1	24	47	70	.....
35+ channels (Controlled by DMX)	1	36	71	106	.....
35+ channels (Controlled by Art-Net)	1	21	41	61	.....
27 channels	1	28	55	82	.....
70 channels	1	71	141	211	.....
55 channels	1	56	111	166	.....

7.2 DMX Protocol

58/25/23/27/70/55 Channels:

CHANNEL						VALUE	FUNCTION
58ch	25ch	23ch	27ch	70ch	55ch		
1	1	1	1	1	1	000-255	PAN 0°→540°
2	2	2	2	2	2	000-255	PAN FINE
3	3	3	3	3	3	000-255	TILT 0°→450°
4	4	4	4	4	4	000-255	TILT FINE
5	5	5	5	5	5	000-127 128-189 190-193 194-255	PAN INFINITY Null CCW Rotation, Fast to Slow Stop CW Rotation, Slow to Fast
6	6	6	6	6	6	000-127 128-189 190-193 194-255	TILT INFINITY Null CW Rotation, Fast to Slow Stop CCW Rotation, Slow to Fast
7	7	7	7	7	7	000-255	PAN/TILT SPEED Fast to Slow
	8	8	8			000-255	RED ALL 0%→100%
	9	9	9			000-255	GREEN ALL 0%→100%
	10	10	10			000-255	BLUE ALL 0%→100%
	11	11	11			000-255	WHITE ALL 0%→100%
8				8	8	000-255	RED 1 0%→100%
9				9	9	000-255	GREEN 1 0%→100%
10				10	10	000-255	BLUE 1 0%→100%
11				11	11	000-255	WHITE 1 0%→100%
				12		000-007 008-015 016-131 132-139 140-181 182-189 190-231	STROBE 1 Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast

						232-239 240-247 248-255	Open Random Strobe from Slow to Fast Open
				13		000-255	DIMMER 1 0%→100%
				14		000-255	DIMMER FINE 1
12				15	12	000-255	RED 2 0%→100%
13				16	13	000-255	GREEN 2 0%→100%
14				17	14	000-255	BLUE 2 0%→100%
15				18	15	000-255	WHITE 2 0%→100%
				19		000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE 2 Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
				20		000-255	DIMMER 2 0%→100%
				21		000-255	DIMMER FINE 2
16				22	16	000-255	RED 3 0%→100%
17				23	17	000-255	GREEN 3 0%→100%
18				24	18	000-255	BLUE 3 0%→100%
19				25	19	000-255	WHITE 3 0%→100%
				26		000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE 3 Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
				27		000-255	DIMMER 3 0%→100%
				28		000-255	DIMMER FINE 3

20				29	20	000-255	RED 4 0%→100%
21				30	21	000-255	GREEN 4 0%→100%
22				31	22	000-255	BLUE 4 0%→100%
23				32	23	000-255	WHITE 4 0%→100%
				33		000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE 4 Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
				34		000-255	DIMMER 4 0%→100%
				35		000-255	DIMMER FINE 4
24				36	24	000-255	RED 5 0%→100%
25				37	25	000-255	GREEN 5 0%→100%
26				38	26	000-255	BLUE 5 0%→100%
27				39	27	000-255	WHITE 5 0%→100%
				40		000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE 5 Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
				41		000-255	DIMMER 5 0%→100%
				42		000-255	DIMMER FINE 5
28				43	28	000-255	LED WHITE 1 0%→100%
29				44	29	000-255	LED WHITE 2 0%→100%
30				45	30	000-255	LED WHITE 3 0%→100%

31				46	31	000-255	LED WHITE 4 0%→100%
32				47	32	000-255	LED WHITE 5 0%→100%
33				48	33	000-255	LED WHITE 6 0%→100%
34				49	34	000-255	LED WHITE 7 0%→100%
35				50	35	000-255	LED WHITE 8 0%→100%
36				51	36	000-255	LED WHITE 9 0%→100%
37				52	37	000-255	LED WHITE 10 0%→100%
38				53	38	000-255	LED WHITE 11 0%→100%
39				54	39	000-255	LED WHITE 12 0%→100%
40				55	40	000-255	LED WHITE 13 0%→100%
41				56	41	000-255	LED WHITE 14 0%→100%
42				57	42	000-255	LED WHITE 15 0%→100%
43				58	43	000-255	LED WHITE 16 0%→100%
44				59	44	000-255	LED WHITE 17 0%→100%
45				60	45	000-255	LED WHITE 18 0%→100%
	12	12	12			000 001-004 005-009 010-013 014-018 019-022 023-027 028-031 032-036 037-040 041-045 046-049 050-054 055-058 059-063 064-067 068-072 073-076 077-081 082-085 086-090	CTO(8000K-2500K) Null 8000K 7900K 7800K 7700K 7600K 7500K 7400K 7300K 7200K 7100K 7000K 6900K 6800K 6700K 6600K 6500K 6400K 6300K 6200K 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
							COLOR MACRO
						000-009	Open
						010-014	LEE 790-Moroccan Pink
						015-019	LEE 157-Pink
						020-024	LEE 332-Special Rose Pink
						025-029	LEE 328-Follies Pink
						030-034	LEE 345-Fuchsia Pink
						035-039	LEE 194-Surprise Pink
	13	13	13			040-044	LEE 181-Congo Blue
						045-049	LEE 071-Tokyo Blue
						050-054	LEE 120-Deep Blue
						055-059	LEE 079-Just Blue
						060-064	LEE 132-Medium Blue
						065-069	LEE 200-Double CT Blue
						070-074	LEE 161-State Blue
						075-079	LEE 201-Full CT Blue
						080-084	LEE 202-Half CT Blue
						085-089	LEE 117-Steel Blue

						090-094 LEE 353-Lighter Blue 095-099 LEE 118-Light Blue 100-104 LEE 116-Medium Blue Green 105-109 LEE 124-Dark Green 110-114 LEE 139-Primary Green 115-119 LEE 089-Moss Green 120-124 LEE 122-Fern Green 125-129 LEE 738-JAS Green 130-134 LEE 088-Lime Green 135-139 LEE 100-Spring Yellow 140-144 LEE 104-Deep Amber 145-149 LEE 179-Chrome Orange 150-154 LEE 105-Orange 155-159 LEE 021-Gold Amber 160-164 LEE 778-Millennium Gold 165-169 LEE 135-Deep Gold Amber 170-174 LEE 164-Flame Red 175-179 Open 180-201 CW Rotation, Fast to Slow 202-207 Stop 208-229 CCW Rotation, Slow to Fast 230-234 Open 235-239 Random Color: Fast 240-244 Random Color: Medium 245-249 Random Color: Slow 250-255 Open
						PIXEL EFFECT SELECT 000-004 Open 005-009 LED1 010-014 LED2 015-019 LED3 020-024 LED4 025-029 LED5 030-034 LED1+2 035-039 LED2+3 040-044 LED3+4 045-049 LED4+5 050-054 LED1+3 055-059 LED2+4 060-064 LED3+5 065-069 LED1+4 070-074 LED2+5 075-079 LED1+2+5 080-084 LED1+2+4 085-089 LED1+2+3 090-094 LED2+3+4 095-099 LED3+4+5 100-104 LED1+4+5 105-109 LED1+2+5 110-114 LED1+2+4+5 115-119 LED1+2+3+4 120-124 LED2+3+4+5 125-129 LED1+3+4+5 130-134 LED1+2+3+4+5
46	14		14	61		

						135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-184 185-189 190-194 195-199 200-204 205-209 210-214 215-219 220-224 225-229 230-234 235-239 240-244 245-255	Built-in Mode 1 Built-in Mode 2 Built-in Mode 3 Built-in Mode 4 Built-in Mode 5 Built-in Mode 6 Built-in Mode 7 Built-in Mode 8 Built-in Mode 9 Built-in Mode 10 Built-in Mode 11 Built-in Mode 12 Built-in Mode 13 Built-in Mode 14 Built-in Mode 15 Built-in Mode 16 Built-in Mode 17 Built-in Mode 18 Built-in Mode 19 Built-in Mode 20 Randomly Light Up a Pixel Randomly Light Up two Pixels Null
47	15		15	62		000-127 128-189 190-193 194-255	PIXEL EFFECT SPEED Null Fast to Slow Stop Slow to Fast
48				63		000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129	BACKGROUND COLOR Open LEE 790-Moroccan Pink LEE 157-Pink LEE 332-Special Rose Pink LEE 328-Follies Pink LEE 345-Fuchsia Pink LEE 194-Surprise Pink LEE 181-Congo Blue LEE 071-Tokyo Blue LEE 120-Deep Blue LEE 079-Just Blue LEE 132-Medium Blue LEE 200-Double CT Blue LEE 161-State Blue LEE 201-Full CT Blue LEE 202-Half CT Blue LEE 117-Steel Blue LEE 353-Lighter Blue LEE 118-Light Blue LEE 116-Medium Blue Green LEE 124-Dark Green LEE 139-Primary Green LEE 089-Moss Green LEE 122-Fern Green LEE 738-JAS Green

						130-134 135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-201 202-207 208-229 230-234 235-239 240-244 245-249 250-255	LEE 088-Lime Green LEE 100-Spring Yellow LEE 104-Deep Amber LEE 179-Chrome Orange LEE 105-Orange LEE 021-Gold Amber LEE 778-Millennium Gold LEE 135-Deep Gold Amber LEE 164-Flame Red Open CW Rotation, Fast to Slow Stop CCW Rotation, Slow to Fast Open Random Color: Fast Random Color: Medium Random Color: Slow Open
49	16	19	16	64	46	000-005 006-255	INTENSITY Blackout Flash Intensity, minimum to maximum
50	17	20	17	65	47	000-255	DURATION Flash Duration, minimum to maximum
51	18	21	18	66	48	000-005 006-255	RATE No Flash Flash Rate, Slow to Fast
52	19	22		67	49	000-005 006-050 051-100 101-150 151-200 201-255	EFFECTS Null Ramp Up Ramp Down Ramp Up-Down Lightning Random
			19			000-005 006-050 051-100 101-150 151-200 201-255	EFFECTS 1 Null Ramp Up Ramp Down Ramp Up-Down Lightning Random
			20			000-004 005-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059	EFFECTS 2 Null Show 1 Show 2 Show 3 Show 4 Show 5 Show 6 Show 7 Show 8 Show 9 Show 10 Show 11

						060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-184 185-189 190-194 195-199 200-204 205-209 210-214 215-219 220-224 225-229 230-234 235-239 240-244 245-255	Show 12 Show 13 Show 14 Show 15 Show 16 Show 17 Show 18 Show 19 Show 20 Show 21 Show 22 Show 23 Show 24 Show 25 Show 26 Show 27 Show 28 Show 29 Show 30 Show 31 Show 32 Show 33 Show 34 Show 35 Show 36 Show 37 Show 38 Show 39 Show 40 Show 41 Show 42 Show 43 Show 44 Show 45 Show 46 Randomly Light Up a Pixel Randomly Light Up two Pixels Null
			21			000-127 128-189 190-193 194-255	EFFECTS 2 SPEED Null Fast to Slow Stop Slow to Fast
53	20	14	22	68	50	000-255	ZOOM Wide→Narrow
54	21	15	23	69	51	000-255	ZOOM FINE
55	22	16	24		52	000-007 008-015 016-131 132-139 140-181 182-189	STROBE Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open

						190-231 232-239 240-247 248-255	Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
56	23	17	25		53	000-255	DIMMER 0%→100%
57	24	18	26		54	000-255	DIMMER FINE 0%→100%
58	25	23	27	70	55	000-029 030-039 040-049 050-059 060-069 070-079 080-089 090-099 100-109 110-119 120-139 140-149 150-159 160-199 200-209 210-219 220-229 230 231 232-255	FUNCTION (To activate following functions, stop in DMX value for at least 3 seconds.) Null Dimmer Curve Linear Dimmer Curve Square Law Dimmer Curve Inv SQ Law Dimmer Curve S Line Power Mode: Off Line Power Mode: On Null Led Frequency Setting Enable Led Frequency Setting Disable Null Pan/Tilt Reset Effect Reset Null Reset All Dimmer Speed: Fast Dimmer Speed: Smooth Pan Enable Pan Disable Null

35+ Channels:

CHANNEL	VALUE	FUNCTION
Controlled by DMX		
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→450°
4	000-255	TILT FINE
5	000-127 128-189 190-193 194-255	PAN INFINITY Null CCW Rotation, Fast to Slow Stop CW Rotation, Slow to Fast
6	000-127	TILT INFINITY Null

	128-189 190-193 194-255	CW Rotation, Fast to Slow Stop CCW Rotation, Slow to Fast
7	000-255	PAN/TILT SPEED Fast to Slow
8	000-255	LED WHITE 1 0%→100%
9	000-255	LED WHITE 2 0%→100%
10	000-255	LED WHITE 3 0%→100%
11	000-255	LED WHITE 4 0%→100%
12	000-255	LED WHITE 5 0%→100%
13	000-255	LED WHITE 6 0%→100%
14	000-255	LED WHITE 7 0%→100%
15	000-255	LED WHITE 8 0%→100%
16	000-255	LED WHITE 9 0%→100%
17	000-255	LED WHITE 10 0%→100%
18	000-255	LED WHITE 11 0%→100%
19	000-255	LED WHITE 12 0%→100%
20	000-255	LED WHITE 13 0%→100%
21	000-255	LED WHITE 14 0%→100%
22	000-255	LED WHITE 15 0%→100%
23	000-255	LED WHITE 16 0%→100%
24	000-255	LED WHITE 17 0%→100%
25	000-255	LED WHITE 18 0%→100%
26	000-005 006-255	INTENSITY Blackout Flash Intensity, minimum to maximum
27	000-255	DURATION Flash Duration, minimum to maximum
28	000-005 006-255	RATE No Flash Flash Rate, Slow to Fast
29		EFFECTS

	000-005 006-050 051-100 101-150 151-200 201-255	Null Ramp Up Ramp Down Ramp Up-Down Lightning Random
30	000-255	ZOOM Wide→Narrow
31	000-255	ZOOM FINE
32	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE Close Open Strobe from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Slow to Fast Open
33	000-255	DIMMER 0%→100%
34	000-255	DIMMER FINE 0%→100%
35	000-029 030-039 040-049 050-059 060-069 070-079 080-089 090-099 100-109 110-119 120-139 140-149 150-159 160-199 200-209 210-219 220-229 230 231 230-255	FUNCTION (To activate following functions, stop in DMX value for at least 3 seconds.) Null Dimmer Curve Linear Dimmer Curve Square Law Dimmer Curve Inv SQ Law Dimmer Curve S Line Power Mode: Off Line Power Mode: On Null Led Frequency Setting Enable Led Frequency Setting Disable Null Pan/Tilt Reset Effect Reset Null Reset All Dimmer Speed: Fast Dimmer Speed: Smooth Pan Enable Pan Disable Null
Controlled by Art-Net		
1	000-255	RED 1 0%→100%
2	000-255	GREEN 1 0%→100%

3	000-255	BLUE 1 0%→100%
4	000-255	WHITE 1 0%→100%
5	000-255	RED 2 0%→100%
6	000-255	GREEN 2 0%→100%
7	000-255	BLUE 2 0%→100%
8	000-255	WHITE 2 0%→100%
9	000-255	RED 3 0%→100%
10	000-255	GREEN 3 0%→100%
11	000-255	BLUE 3 0%→100%
12	000-255	WHITE 3 0%→100%
13	000-255	RED 4 0%→100%
14	000-255	GREEN 4 0%→100%
15	000-255	BLUE 4 0%→100%
16	000-255	WHITE 4 0%→100%
17	000-255	RED 5 0%→100%
18	000-255	GREEN 5 0%→100%
19	000-255	BLUE 5 0%→100%
20	000-255	WHITE 5 0%→100%

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 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.

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 damaged.

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.

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.

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.

LED Temp. 1/2 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 of beam mode reaches 75°C, it will automatically turn off to protect the fixture.

When the fixture temperature of strobe mode reaches 100°C, it will automatically turn off to protect the fixture.

Base Fan1/2 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 1/2/3/4/5 Start Error

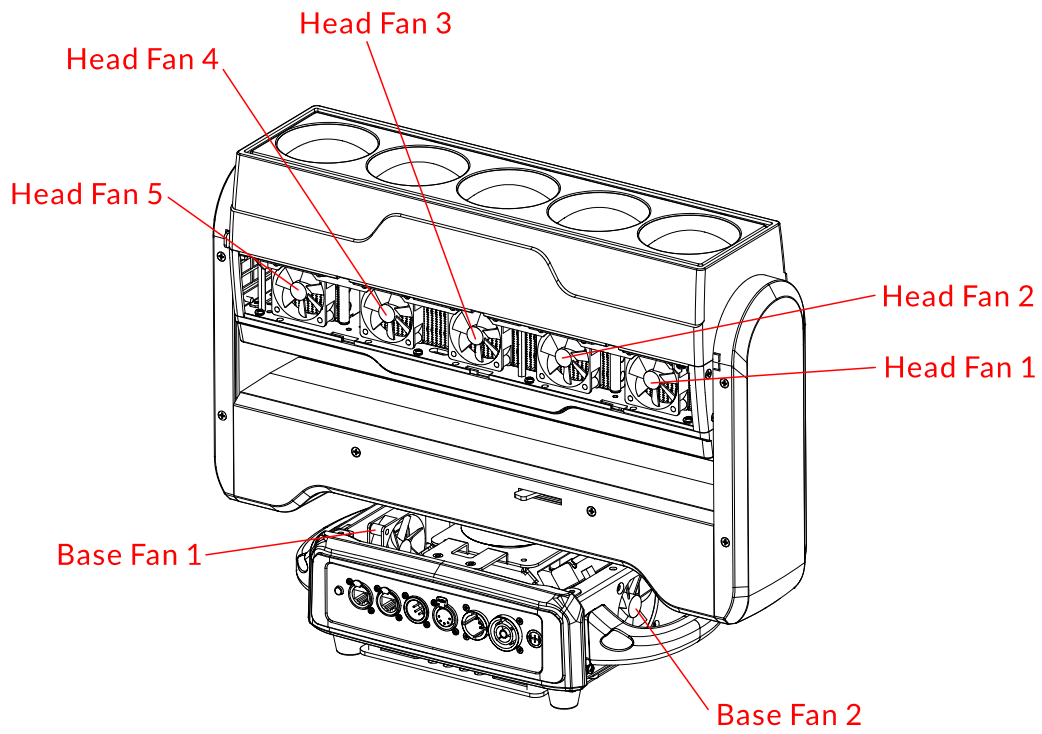
Check whether the fan is not running.

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.

Position of cooling fans:



Cooling Fans	Part Number	V	W	Position
Base Fan 1	3014001330	DC 24V	4.1W	Base - A
Base Fan 2				
Head Fan 1	3014001322	DC 24V	2.4W	Head - D
Head Fan 2				
Head Fan 3				
Head Fan 4				
Head Fan 5				

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.