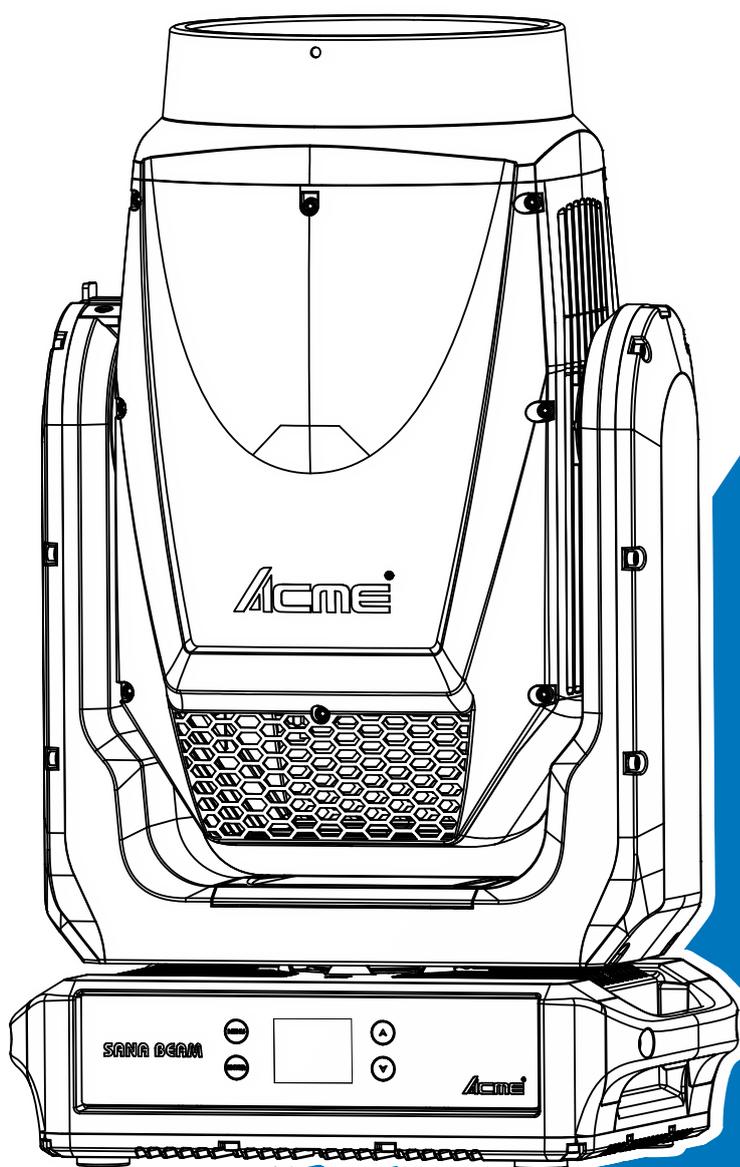


# Acme®

## SANA BEAM



### 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.

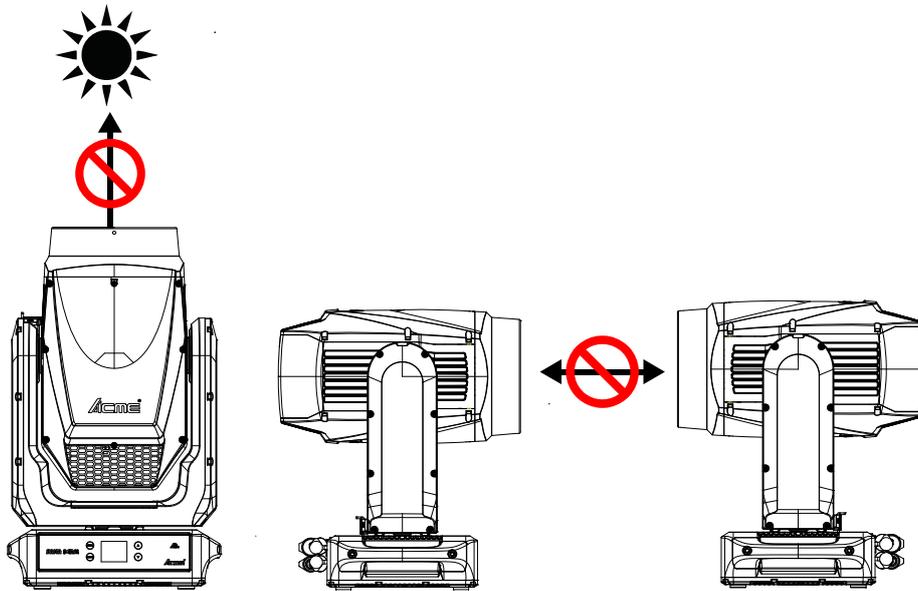
#### Important:

**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 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: -20°C. Maximum ambient temperature TA: 50°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 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): -20°C. Température ambiante maximale (TA): 50°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.

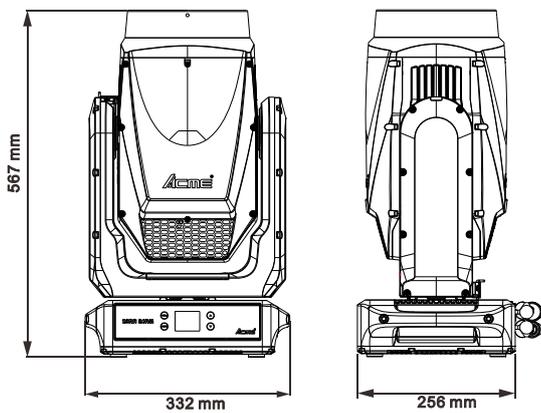
- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 75°C. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau 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 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.

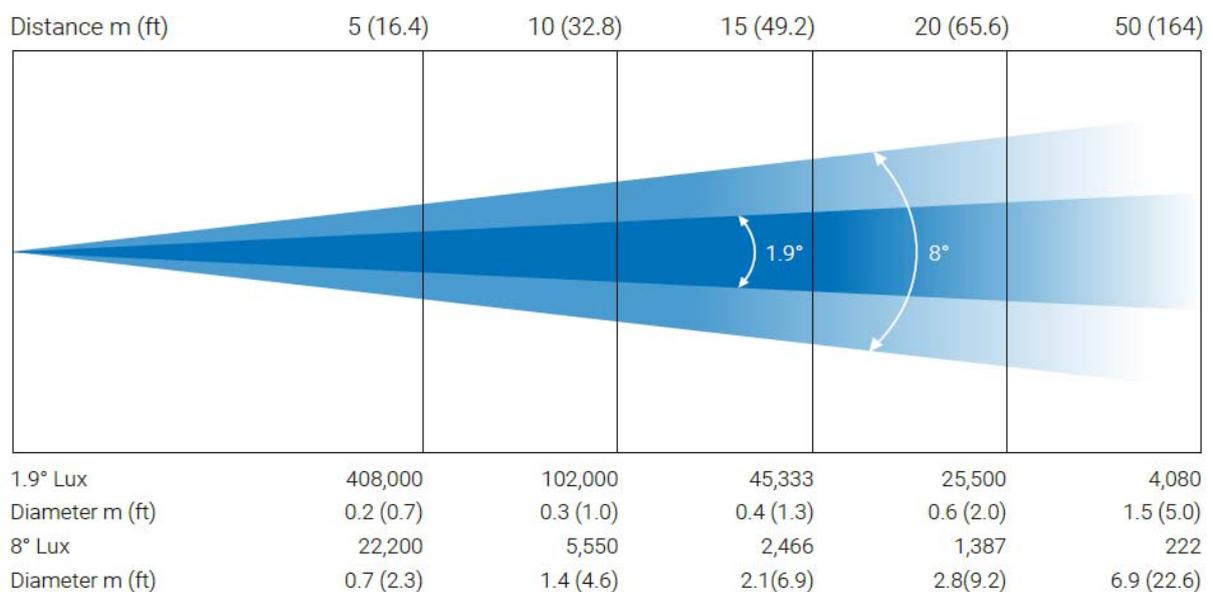
## 02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	465W	
Light Source	DCL330N-2C-R00-001	
Color Temperature	7000K	
Beam Angle	1.9°-8°	
Color Wheel	Color Wheel 1: 6 colors + Cyan + open	
	Color Wheel 2: 6 colors + Magenta + open	
Gobo Wheels	Static Gobo Wheel	17 gobos + open
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	16/27/27/29
	Protocols	DMX512
		RDM
		Art-Net
		sACN
		NFC
Firmware Update	via DMX or USB memory device	
Construction	Display	LCD display
	Battery backup for user setup without mains connection	
	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	CMY color mixing	
	Variable color temperature control	
	Prisms: two indexing/rotating prisms (8-facet circular prism and	

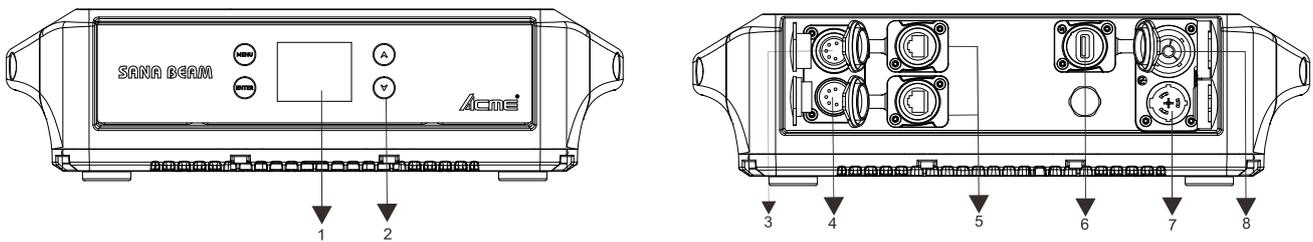
	6-facet linear prism)	
	Flicker-free management	
	Motorized zoom	
	Motorized focus	
	With NFC functionality, the fixture allows quick and easy setup and management	
<b>Included Items</b>	Power Cable	
	Two omega brackets with 1/4-turn fasteners	
	User Manual (this document)	
<b>Dimensions</b>	567x332x256mm	22.32" x 13.07" x10.08"
<b>Weight</b>	24 kg	52.91 lbs



**Photometric Diagram:**



## 03/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into menu 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. DMX OUT	For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin XLR)	
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. ETHERNET	Transfers fixture's information to a main controller	
6. FIRMWARE UPGRADE	Used to upgrade the fixture's firmware	
7. POWER IN	To connect to supply power	
8. POWER OUT	To connect to the next fixture	

### 3.1 Battery Power

This product contains a rechargeable battery.

Battery type: 14500 Lithium-ion battery (3.7V, 800mAh, 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:**

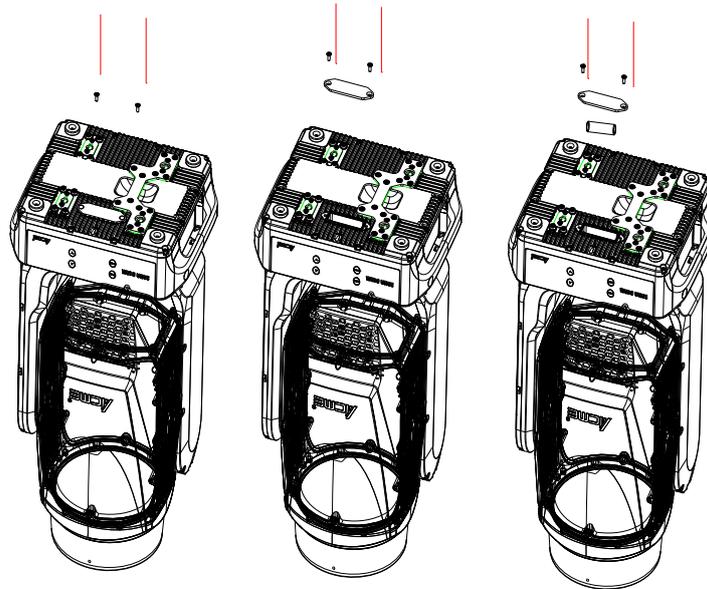
The fixture contains a battery that enables you to use the control panel to set up the fixture even when it is not connected to the main power supply. The battery charges during fixture operation. All of the main setup options in the control panel are accessible on battery power, but the 'Fixture Test'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

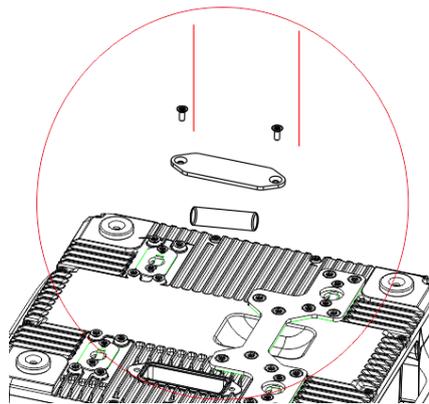
#### **Battery Replacement:**

***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 at the bottom of the fixture base and remove the bottom 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 465W.

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 L6-15P plug, minimum rating: 300V, 90°C, VW-1, 16AWG x 3C, and terminated with cord connector model SAC3FX with rating 250V, 16A by NINGBO HAISHU DISTRICT SEETRONIC ELECTRONIC CO., LTD. The length of power cord shall be at least 914mm (It is to be measured from the face of attachment plug to the face of connector).

#### **CAUTION!**

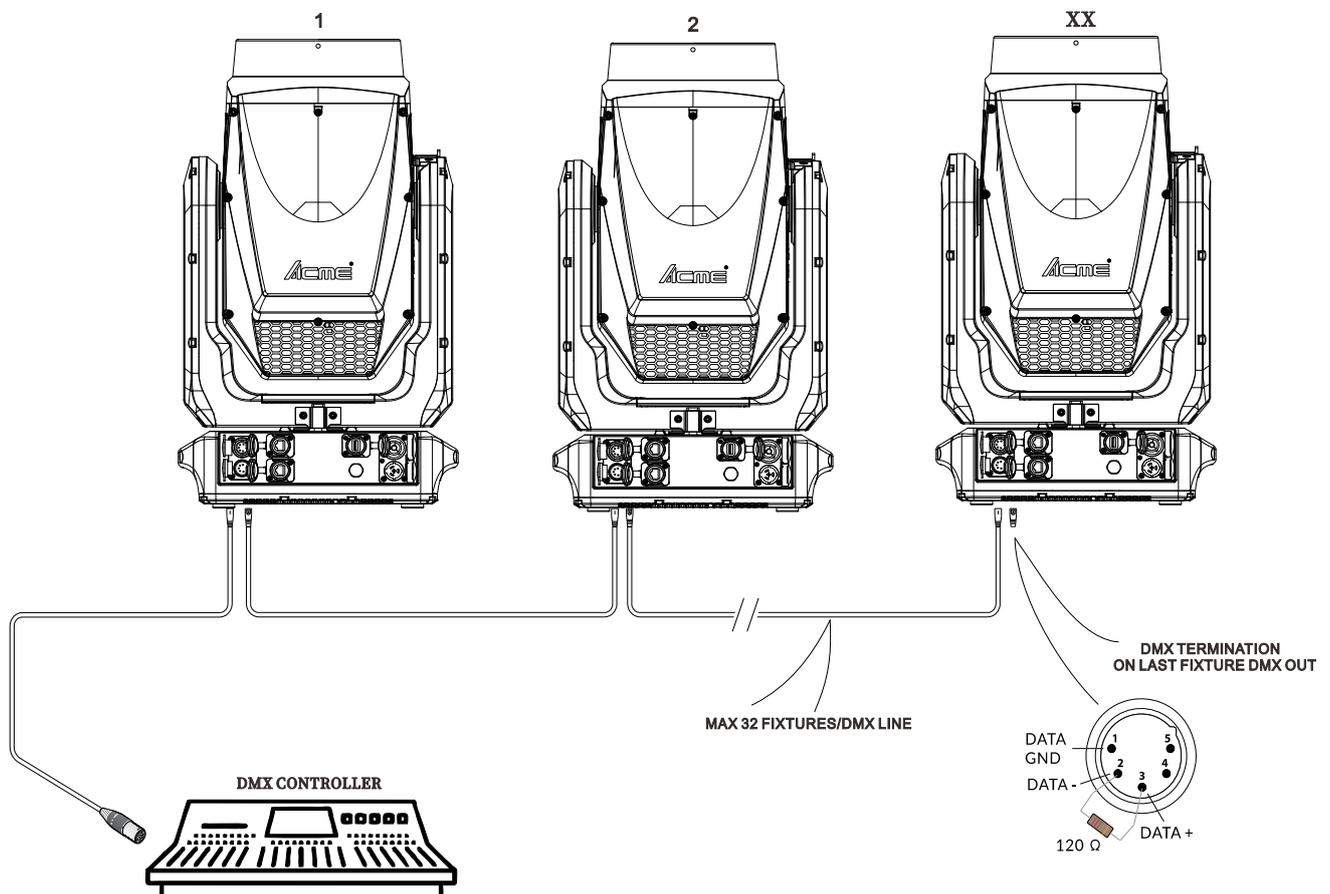
**DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.**

## 4.2 Connecting Data

The fixture is equipped with 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.

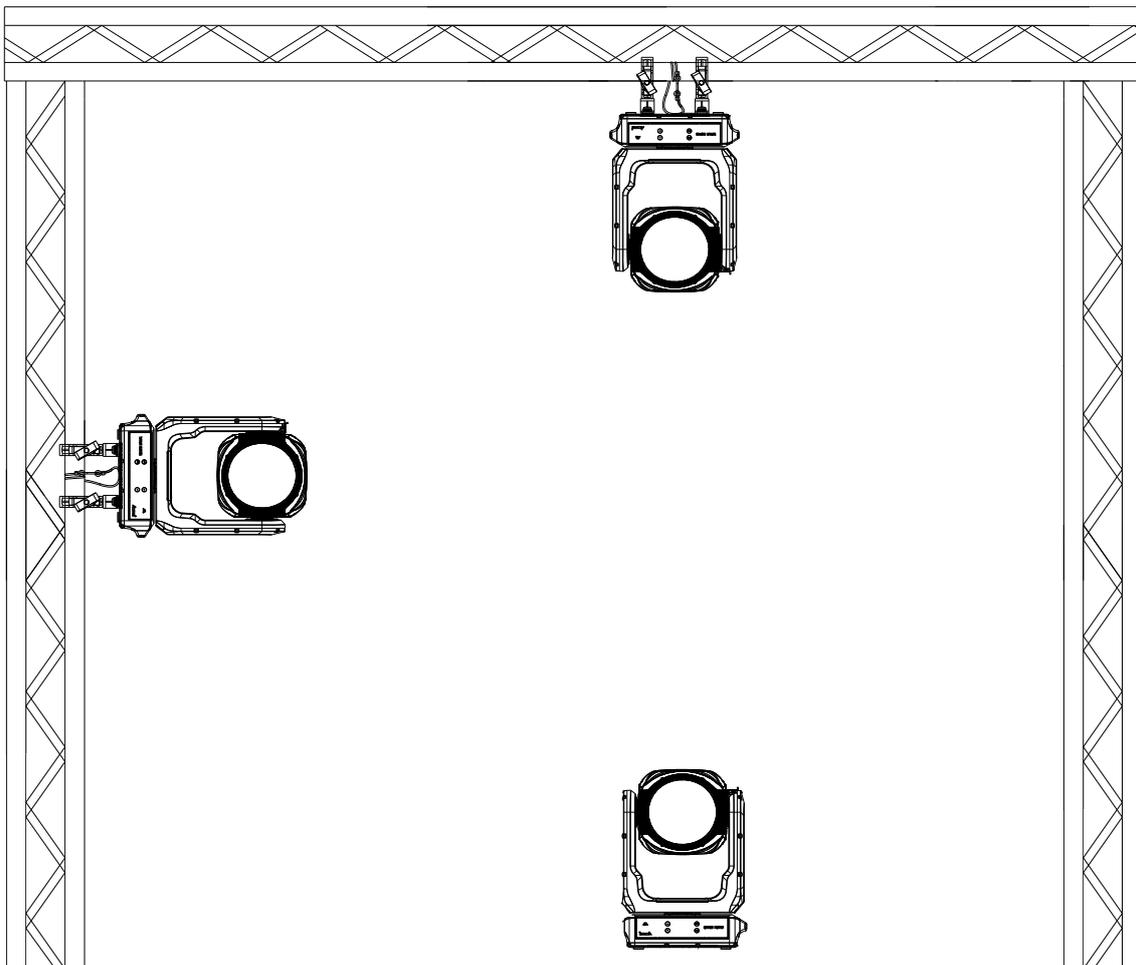
### Building a serial DMX chain:

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.

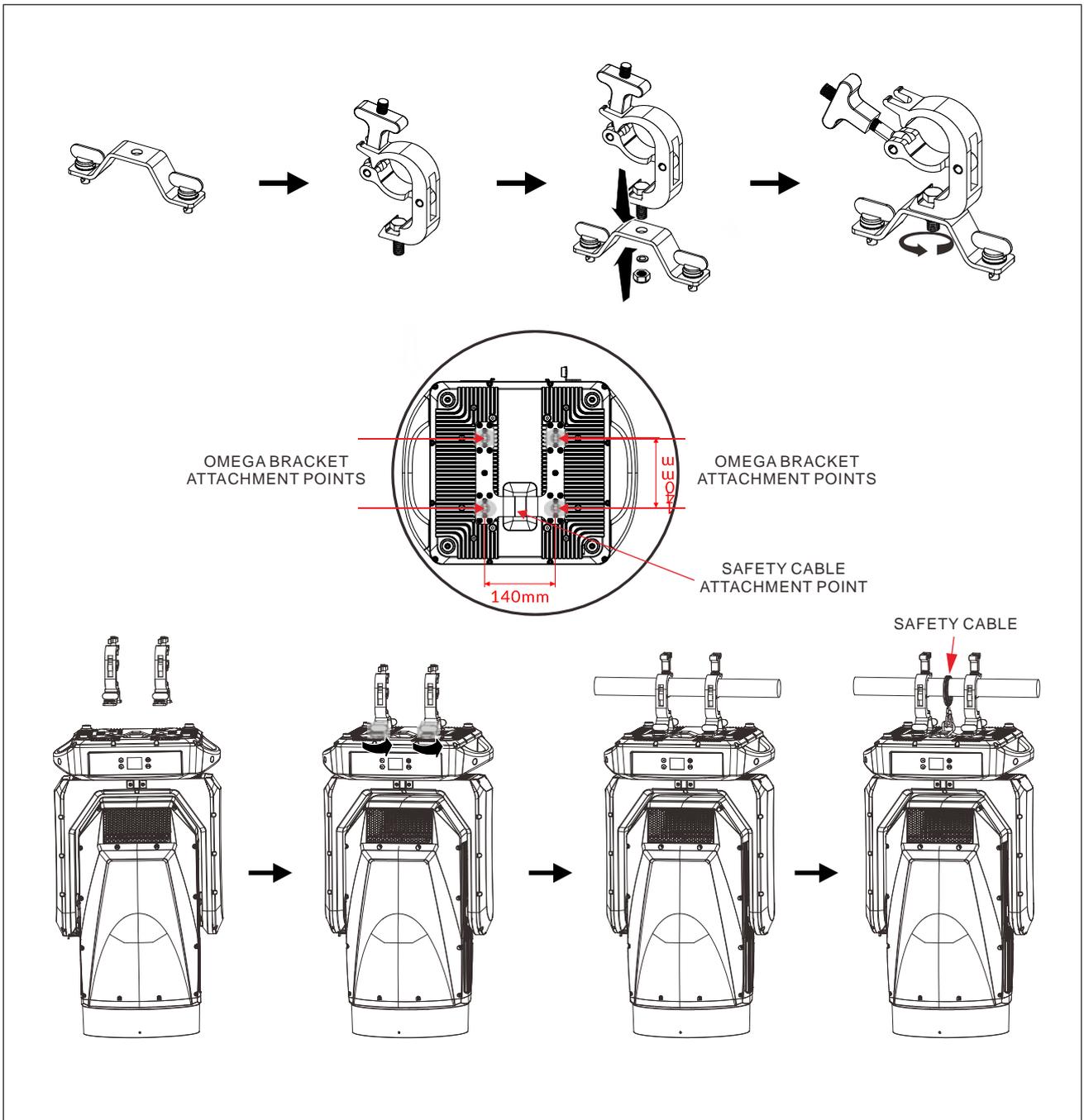


## 05/ Fixture Installation

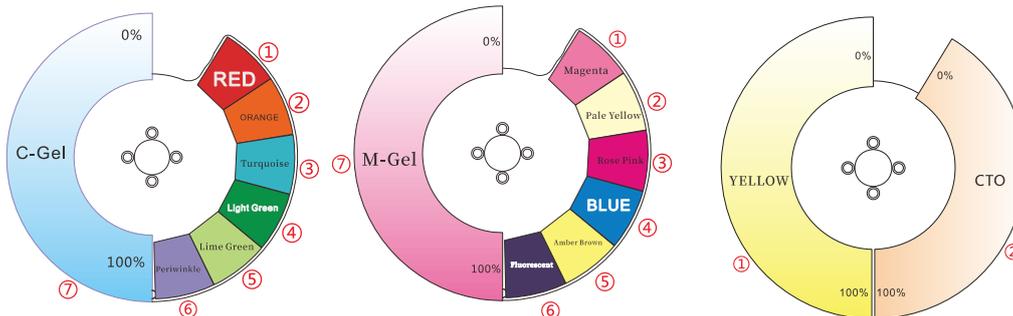
- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- ▶ Always ensure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

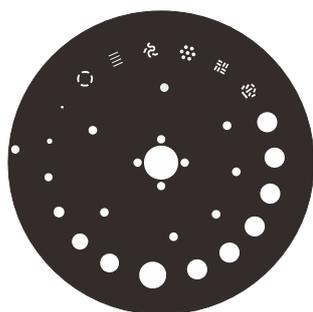


## 06/ Effect Wheels

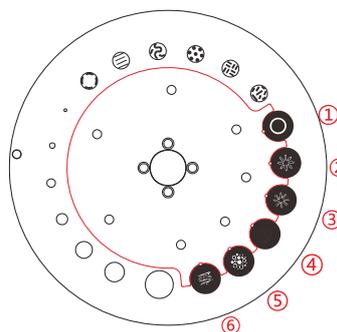


Color Wheel 1

Color Wheel 2



Static Gobo Wheel



Gobo Wheel

**DANGER!**  
 Replace the rotating gobos with the device switched off only.  
 Unplug from mains before replacing the rotating gobos!

Gobo Wheel		
Slot	Name	Part Number
1	Circle	3011001800
2	Starburst	3011001738
3	Cross Star	3011001739
4	Grid Texture	3011001740
5	Bubble Cluster	3011001741
6	Scratch Texture	3011001742

Size of Rotating Gobos				
Slot	Gobo Diameter	Image Area Diameter	Gobo Thickness	Material
1~6	11mm+0/-0.2mm	6mm	1.1mm	boro of Glass

## 07/ Operation

### 7.1 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)	
	DMX Channel Mode	Mode 1 (29 CH)		
		Mode2 ( 27CH)		
		Mode3 ( 16 CH)		
		Mode4 ( 27 CH)		
	No DMX Status	Blackout		
		Hold		
		Manual		
	View DMX Value			
	Connect Option	Auto		
		DMX		
		Art-Net		
		sACN		
	Network	IP Address	Def 1:002.xxx.xxx.xxx	
			Def 2:010.xxx.xxx.xxx	
			Man: xxx.xxx.xxx.xxx	
		Sub-Net Mask	xxx.xxx.xxx.xxx	
	Art-Net Settings	Net		(Default=0)
		Sub-Net		
		Universe		
sACN Settings	Universe	1-32000	(Default=1)	
	Priority	0-200	(Default=100)	
Network to DMX	No			
	Yes			
Fixture	Pan Invert	No		

MAIN MENU	SUBMENU	CHOICES/VALUES	
Settings		Yes	
	Tilt Invert	No	
		Yes	
	P/T Feedback	No	
		Yes	
	Pan &Tilt Reset mode	Standard	
		Sequence	
	Focus Compensate	Disable	
		Near (10m)	
		Medium(20m)	
		Far(30m)	
	Dimmer Speed	Fast	
		Smooth	
	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	
	Fan Mode	Standard	
		Quiet	
		Theatre	
	Bright Calibration	50-100	Default=100
	LED Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10KHz	
		15KHz	
		20KHz	
	25KHz		
	Gobo Short Cut	Enable	
		Disable	
	Sun Protection Mode	On	
		Off	

MAIN MENU	SUBMENU	CHOICES/VALUES			
Display Settings	Display Invert	No			
		Yes			
	Backlight Intensity	1-10		(Default=10)	
		Temperature Unit			
		°C			
		°F			
Fixture Test	Auto Test	Single			
		Cycle			
	Manual Test	Clear		No/Yes	
		Pan		0-255	
		Tilt		0-255	
		Pan Infinity		0-255	
		Tilt Infinity		0-255	
		LED Blue		0-255	
		LED Yellow		0-255	
		Cyan		0-255	
		Magenta		0-255	
		Yellow		0-255	
		CTO		0-255	
		Color		0-255	
		Gobo		0-255	
		Prism 1		0-255	
		R-Prism 1		0-255	
		Prism 2		0-255	
		R-Prism2		0-255	
		Frost1		0-255	
Zoom		0-255			
Focus		0-255			
Strobe		0-255			
Dimmer		0-255			
Fixture Information	Fixture Use Hour				
	Light Source Use Hour	Total Hour			
		Light On Hour			
		Reset Hours	Password=050		
	Humidity	Head			
		Base			
	Temperature		Current	Max temp	
		Light Source			
	Fan State	Base Fan 1-2			
		Head Fan 1-7			

MAIN MENU	SUBMENU	CHOICES/VALUES		
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Logs	No	
Reset Function	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	Password=050	

## DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address**, **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
Mode 1 (29 CH)	1-484
Mode2 ( 27CH)	1-486
Mode3 ( 16 CH)	1-497
Mode4 ( 27 CH)	1-486

## DMX Channel Mode

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

Use UP/DOWN button to select **Mode 1 (29 CH)**, **Mode2 ( 27CH )** ,  
**Mode3 ( 16CH )**and **Mode4 ( 27CH )** 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**, **P/T Feedback**, **Pan / Tilt Reset mode**, **Focus Compensate**, **Dimmer Speed**, **Dimmer Curve**, **Fan Mode**, **Bright Calibration**, **LED Refresh Rate**, **Gobo Short Cut** or **Sun Protection 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.

## Pan / Tilt Reset mode

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

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

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

## Focus Compensate

Select **Focus Compensate**, press ENTER.

Use UP/DOWN button to select **Disable**, **Near(10m)**, **Medium(20m)**, **Far(30m)** confirm your selection with ENTER.

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.

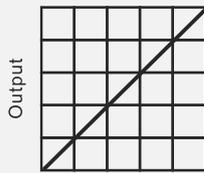
To exit the menu, press MENU, or wait 30 seconds.

## Dimmer Curve

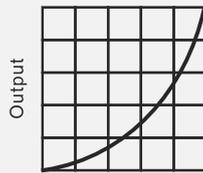
Select **Dimmer Curve**, press ENTER.

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

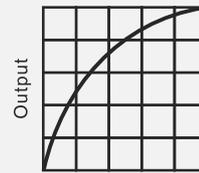
### Dimmer Modes



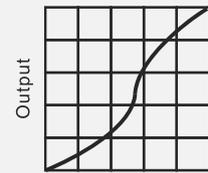
DMX %  
Optically Linear



DMX %  
Square Law



DMX %  
Inverse Square Law



DMX %  
S-curve

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.

## Bright Calibration

Select **Bright Calibration**, press ENTER.

Use UP/DOWN button to select a value between **50** and **100**, confirm your selection with ENTER.

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

## Gobo Short Cut

Select **Gobo Short Cut**, press ENTER.

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

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

## Sun Protection Mode

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.

## Display Settings

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

### 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.

## 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**, **Light Source Use Hour**, **Humidity**, **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.

## Light Source Use Hour

Select **Light Source Use Hour**, press ENTER.

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

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

Use UP/DOWN button to select **Reset Hours**, 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.

## Humidity

Select **Humidity**, press ENTER.

The device humidity is displayed.

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 Logs**, 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 **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.

### 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.

## Send Upgrade

Select **Send Upgrade**, press ENTER.

If you wish to send upgrade files from this fixture to next fixtures to upgrade their firmware, select **Yes**. Once Yes is selected, the display of this fixture will show “**Sending Packet, Please Wait...**” while the display of next 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...**”. 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.

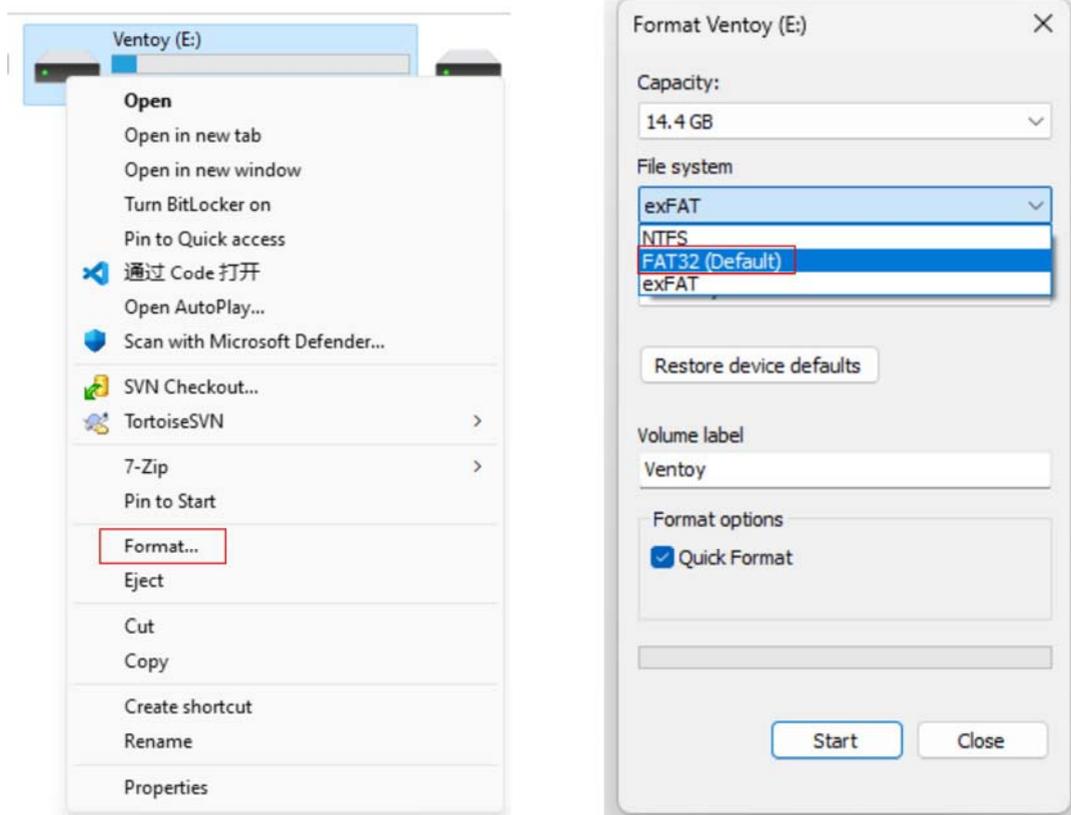
## 7.2 Updating Software

Only qualified technicians should perform this function! Note all menu settings before updating software! Please note, up to 32 fixtures can be connected together and updated at the same time.

Note: Before using the USB flash drive to update the software, please ensure that the USB flash drive is formatted with the FAT32 file system. Otherwise, you will need to reformat the USB flash drive to FAT32 before transferring the .yfu files, as the fixture will only recognize the files stored on a FAT32 formatted drive.

### Format the USB flash drive:

- ▶ Connect the USB flash drive to the computer.
- ▶ Right-click on the USB flash drive disk.
- ▶ Click "Format".
- ▶ Select the "FAT32" file system and click "Start".



### Updating Software:

1. Download the software update files from the ACME website.
2. Copy the software files to a compatible USB flash drive.

**Note: To avoid the risk of uploading the wrong file to the fixture, make sure that there are no other files on your flash drive.**

3. Disconnect DMX and Ethernet connections and power the fixture on.
4. Insert the USB flash drive into the **FIRMWARE UPGRADE** port located on the rear panel of the fixture.
5. Locate **“Special Function”** within the system menu and press ENTER. Scroll to the **“USB Upgrade”** submenu and press ENTER.
6. Two software files will be displayed as downloaded earlier. Highlight the first file (V00) and press ENTER. Select **“Yes”** to begin the first of two updating processes. Once Yes is selected, the display will show **“Copying Files, Please Wait...”**. After copying is complete, the display will show **“Upgrading, Please Wait...”**. A percentage bar will also be displayed.
7. After the first update is complete, the fixture will perform a reset (this can take some time).
8. Once the reset is complete, scroll to the **“Special Function”** menu again and press ENTER. Scroll to the **“USB Upgrade”** submenu and press ENTER.
9. Highlight the second file (Vxx) this time and press ENTER. Select **“Yes”** to begin the second and final updating process. Once Yes is selected, the display will show **“Copying Files, Please Wait...”** again. After copying is complete, the display will show **“Upgrading, Please Wait...”**. A percentage bar will also be displayed.
10. After the second update is complete, the fixture will perform another reset (this can take some time as well).
11. Remove the USB flash drive.
12. After the reset process is complete, check the new software version to confirm it is updated to the most recent software.

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	✓		
SUPPORTED_PARAMETERS			✓
PARAMETER_DESCRIPTION			✓
DEVICE_INFO			✓
DEVICE_MODEL_DESCRIPTION			✓
MANUFACTURER_LABEL			✓
DEVICE_LABEL		✓	✓
FACTORY_DEFAULTS		✓	✓
SOFTWARE_VERSION_LABEL			✓
BOOT_SOFTWARE_VERSION_ID			✓
BOOT_SOFTWARE_VERSION_LABEL			✓
DMX_PERSONALITY		✓	✓
DMX_PERSONALITY_DESCRIPTION			✓
DMX_START_ADDRESS		✓	✓
SLOT_INFO			✓
SLOT_DESCRIPTION			✓
SENSOR_DEFINITION			✓
SENSOR_VALUE			✓
CURVE		✓	✓
CURVE_DESCRIPTION			✓
DEVICE_HOURS			✓
LAMP_HOURS			✓
PAN_INVERT		✓	✓
TILT_INVERT		✓	✓
IDENTIFY_DEVICE		✓	✓

✓ -Command implemented for the respective parameter ID

## 7.2 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)	1072~1327
Dimming Start	-500~500
Dimming Offset 1	-500~500
Dimming Offset 2	-500~500
Dimming Offset 3	-500~500
Dimming Offset 4	-500~500
Pan	-128~127
Tilt	-128~127
Cyan	-128~127
Magenta	-128~127
Yellow	-128~127
CTO	-128~127
Color	-128~127
Gobo	-128~127
Frost	-128~127
Prism 1	-128~127
R-Prism 1	-128~127
Prism 2	-128~127
R-Prism2	-128~127
Zoom	-128~127
Focus	-128~127

## 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
10KHz	9872~10127
15KHz	14872~15127
20KHz	19872~20127
25KHz	24872~25127

## Dimming Start

Select **Dimming Start**, press ENTER.

Use UP/DOWN button to select a value between -500 and 500, confirm your selection with ENTER.

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

## Dimming Offset 1/2/3/4

Select **Dimming Offset 1/2/3/4**, press ENTER.

Use UP/DOWN button to select a value between -500 and 500, 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.

**Cyan**

Select **Cyan**, 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.

**Magenta**

Select **Magenta**, 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.

**Yellow**

Select **Yellow**, 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.

**CTO**

Select **CTO**, 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.

**Color**

Select **Color**, 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.

**Gobo**

Select **Gobo**, 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.

**Frost**

Select **Frost**, 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.

**Prism 1**

Select **Prism 1**, 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.

**R-Prism 1**

Select **R-Prism 1**, 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.

**Prism 2**

Select **Prism 2**, 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.

**R-Prism 2**

Select **R-Prism 2**, 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.

**Focus**

Select **Focus**, 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.

## 08/ Configuring the Device for DMX Control

### 8.1 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 29 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 30. As the first fixture uses all the first 29 DMX channels, the next available channel is 30 ( $29+1=30 \gg 30$ ).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
29 channels	1	30	59	88	.....
27 channels	1	28	55	82	.....
16 channels	1	17	33	49	.....
27 channels	1	28	55	82	.....

## 8.2 DMX Protocol

CHANNEL				VALUE	FUNCTION
29ch	27ch	16ch	27ch		
1	18	10	10	000-255	<b>PAN</b> 0°→540°
2	19	11	11	000-255	<b>PAN FINE</b> 0% →100%
	20		25	000 001 - 255	<b>ENDLESS PAN</b> Unused range Pan rotation from Slow to Fast
	21		26	000-127 128-255	<b>PAN DIRECTION</b> CCW CW
3	22	12	12	000-255	<b>TILT</b> 0°→270°
4	23	13	13	000-255	<b>TILT FINE</b> 0% →100%
5				000-127 128-189 190-193 194-255	<b>PAN INFINITY</b> No Function Counter-Clockwise rotation, fast to slow Stop Clockwise rotation, slow to fast
6				000-127 128-189 190-193 194-255	<b>TILT INFINITY</b> No Function Counter-Clockwise rotation, fast to slow Stop Clockwise rotation, slow to fast
7	24		27	000-255	<b>PAN/TILT SPEED</b> Fast to Slow
8	1		17	000-255	<b>CYAN</b> 0% →100%
9	2		18	000-255	<b>CYAN FINE</b> 0% →100%
10	3		19	000-255	<b>MAGENTA</b> 0% →100%
11	4		20	000-255	<b>MAGENTA FINE</b> 0% →100%
12	5		21	000-255	<b>YELLOW</b> 0% →100%
13	6		22	000-255	<b>YELLOW FINE</b> 0% →100%
14				000-255	<b>CTO</b>

					0% →100%
					<b>COLOR WHEEL</b>
				000	White
				005	White+Color1
				009	Color1
				013	Color1+Color2
				018	Color2
				022	Color2+Color3
				026	Color3
				30	Color3+Color4
				35	Color4
				39	Color4+Color5
				43	Color5
				47	Color5+Color6
	7	1	1	52	Color6
				56	White + Color7
				60	Color7
				64	Color7+Color8
				69	Color8
				73	Color8+Color9
				77	Color9
				82	Color9+Color10
				86	Color10
				90	Color10+Color11
				94	Color11
				99	Color11+Color12
				103-127	Color12
				128 - 255	Slow rotation to fast rotation
					<b>STOP/STROBE</b>
				000 - 003	Closed
				004 - 103	Strobe linear from slow
				104 - 107	Open
				108 - 207	Pulsation linear from slow
				208 - 212	Open
				213 - 225	Random Strobe at low frequency
				226 - 238	Random Strobe at medium frequency
				239 - 251	Random Strobe at high frequency
				252 - 255	Open
					<b>COLOR</b>
				000-007	Open
				008-011	Color 1
				012-015	Color 2
				016-019	Color 3
				020-023	Color 4
				024-027	Color 5
				028-031	Color 6
				032-035	Color 7
15					

				036-039	Color 8
				040-043	Color 9
				044-047	Color 10
				048-051	Color 11
				052-063	Color 12
				064-065	White
				066-067	White+Color1
				068-069	Color1
				070-071	Color1+Color2
				072-073	Color2
				074-075	Color2+Color3
				076-077	Color3
				078-079	Color3+Color4
				080-081	Color4
				082-083	Color4+Color5
				084-085	Color5
				086-087	Color5+Color6
				088-089	Color6
				090-091	White + Color7
				092-093	Color7
				094-095	Color7+Color8
				096-097	Color8
				098-099	Color8+Color9
				100-101	Color9
				102-103	Color9+Color10
				104-105	Color10
				106-107	Color10+Color11
				108-109	Color11
				110-111	Color11+Color12
				112-113	Color12
				114-127	White
				128-255	Slow rotation to fast rotation
					<b>GOBO</b>
				000-010	OPEN
				011-013	GOBO1
				014-016	GOBO2
				017-019	GOBO3
				020-022	GOBO4
				023-025	GOBO5
				026-028	GOBO6
				029-031	GOBO7
				032-034	GOBO8
				035-037	GOBO9
				038-040	GOBO10
				041-043	GOBO11
				044-046	GOBO12
				047-049	GOBO13
16					

				050-052 053-055 056-058 059-066 067-069 070-072 073-075 076-078 079-081 082-084 085-087 088-090 091-093 094-096 097-099 100-102 103-105 106-108 109-111 112-114 115-127 128-189 190-193 194-255	GOBO14 GOBO15 GOBO16 Null GOBO1 Shaking Slow->Fast GOBO2 Shaking Slow->Fast GOBO3 Shaking Slow->Fast GOBO4 Shaking Slow->Fast GOBO5 Shaking Slow->Fast GOBO6 Shaking Slow->Fast GOBO7 Shaking Slow->Fast GOBO8 Shaking Slow->Fast GOBO9 Shaking Slow->Fast GOBO10 Shaking Slow->Fast GOBO11 Shaking Slow->Fast GOBO12 Shaking Slow->Fast GOBO13 Shaking Slow->Fast GOBO14 Shaking Slow->Fast GOBO15 Shaking Slow->Fast GOBO16 Shaking Slow->Fast Null Counter-Clockwise rotation, fast to slow Stop Clockwise rotation, slow to fast
17	12	5	5	000-007 008-255	<b>PRISM1</b> Close Open
18	13	6	6	000-127 128-189 190-193 194-255	<b>R-PRISM1</b> Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
19	14		23	000-007 008-255	<b>PRISM 2</b> Close Open
20	15		24	000-127 128-189 190-193 194-255	<b>R-PRISM2</b> Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
21	16	8	8	000-007 008-255	<b>FROST</b> Close Open
22				000-255	<b>ZOOM</b> 0% →100%

23				000-255	<b>ZOOM FINE</b> 0% → 100%
24	17	9	9	000-255	<b>FOCUS</b> 0% → 100%
25				000-255	<b>FOCUS FINE</b> 0% → 100%
26				000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	<b>STROBE</b> Closed Open Strobe Slow->Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Slow >Fast Open
27	9	3	3	000-255	<b>DIMMER</b> 0% → 100%
28	10			000-255	<b>DIMMER FINE</b> 0% → 100%
	11	4	4	000 - 007 008 - 011 012 - 015 016 - 019 020 - 023 024 - 027 028 - 031 032 - 035 036 - 039 040 - 043 044 - 047 048 - 051 052 - 055 056 - 059 060 - 063 064 - 067 068 - 071 072 - 113 114 - 117 118 - 159 160 - 166 167 - 172 173 - 179 180 - 185 186 - 191	<b>STATIC GOBO</b> White Gobo1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 11 Gobo 12 Gobo 13 Gobo 14 Gobo 15 Gobo 16 Counter-Clockwise rotation, fast to slow <b>STOP</b> Clockwise rotation, slow to fast GOBO1 Shaking Slow->Fast GOBO2 Shaking Slow->Fast GOBO3 Shaking Slow->Fast GOBO4 Shaking Slow->Fast GOBO5 Shaking Slow->Fast

				192 - 198 199 - 204 205 - 211 212 - 217 218 - 223 224 - 230 231 - 236 237 - 243 244 - 249 250 - 255	GOBO6 Shaking Slow->Fast GOBO7 Shaking Slow->Fast GOBO8 Shaking Slow->Fast GOBO9 Shaking Slow->Fast GOBO10 Shaking Slow->Fast GOBO11 Shaking Slow->Fast GOBO12 Shaking Slow->Fast GOBO13 Shaking Slow->Fast GOBO14 Shaking Slow->Fast GOBO15 Shaking Slow->Fast
	25	14	14	000 - 050 051 - 055 056 - 060 061 - 065 066 - 070 071 - 200 201 - 205 206 - 210 211 - 220 221 - 225 226 - 230 231 - 255	<b>FUNCTION</b> (IMPORTANT: Functions are activated/selected staying in the necessary range for 3 seconds) No Function Pan invert OFF (default) Pan invert: ON Tilt invert OFF (default) Tilt invert: ON No Function Dimmer Curve Linear (default) Dimmer Curve Square No Function Sun Protection Mode: Off Sun Protection Mode: On No Function
	26	15	15	000 - 203 204 - 205 208 - 213 214 - 215 216 - 217 218 - 219 220 - 221 222 - 223 224 - 227 228 - 229 230 - 231 232 - 233 234 - 235 236 - 237 238 - 249 250 - 251 252 - 255	<b>RESET</b> IMPORTANT: Reset sequence is activated staying in the range for 3 seconds No Function Reset CMY No Function Reset Gobo1 No Function Reset Prism No Function Reset Frost1 No Function Reset Focus No Function Reset Pan Reset Tilt Reset P/T No Function Reset Effects Reset ALL
	27	16	16	000	NULL
		7	7	000	NULL

				<b>FUNCTION</b>	
29			000-029	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	Fan Mode Theatre	
			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	
			128	1400Hz	
			129	1500Hz	
			130	2500Hz	
			131	4000Hz	
			132	5000Hz	
			133	6000Hz	
			134	10KHz	
			135	15KHz	
			136	20KHz	
			137	25KHz	
			138-139	No Function	
			140-149	Pan/tilt Reset	
			150-159	Effect Reset	
			160-171	No Function	
			172-173	Focus Compensate Disable	
			174-175	Focus Compensate Near(10m)	
		176-177	Focus Compensate Medium(20m)		
		178-179	Focus Compensate Far(30m)		
		180-181	Sun Protection Mode: On		
		182-183	Sun Protection Mode: Off		
		184-199	No Function		
		200-209	Reset all		
		210-219	Dimmer Speed Fast		
		220-229	Dimmer Speed Smooth		
		230-231	GOBO Short Cut Enable		
		232-233	GOBO Short Cut Disable		
		234-255	No Function		

## 09/ 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 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.

### External Flash 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.

**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.

## Cyan Reset Error

Check whether the position of the cyan color wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the cyan color wheel operating range.

Check whether the Hall element on the cyan color wheel is damaged.

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

Check whether the motor on the cyan color wheel is damaged.

Check whether the related circuit of the motor drive board on the cyan color wheel is damage.

## Magenta Reset Error

Check whether the position of the magenta color wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the magenta color wheel operating range.

Check whether the Hall element on the magenta color wheel is damaged.

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

Check whether the motor on the magenta color wheel is damaged.

Check whether the related circuit of the motor drive board on the magenta color wheel is damage.

## Yellow Reset Error

Check whether the position of the yellow color wheel where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the yellow color wheel operating range.

Check whether the Hall element on the yellow color wheel is damaged.

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

Check whether the motor on the yellow color wheel is damaged.

Check whether the related circuit of the motor drive board on the yellow color wheel is damage.

## CTO Reset Error

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

Check whether there are obstacles in the CTO wheel operating range.

Check whether the Hall element on the CTO wheel is damaged.

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

Check whether the motor on the CTO wheel is damaged.

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

## Color Reset Error

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

Check whether there are obstacles in the color wheel operating range.

Check whether the Hall element on the color wheel is damaged.

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

Check whether the motor on the color wheel is damaged.

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

## Fixed Gobo Reset Error

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

Check whether there are obstacles in the fixed Gobo wheel operating range.

Check whether the Hall element on the fixed gobo wheel is damaged.

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

Check whether the motor on the gobo wheel is damaged.

Check whether the related circuit of the motor drive board on the fixed gobo wheel is damaged.

### Prism1/2 Reset Error

Check whether the position of the prism 1/2 where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the prism 1/2 operating range.

Check whether the Hall element on the prism 1/2 is damaged.

Check whether the lead connecting the Hall element on the prism 1/2 and the PCB board is in poor contact or disconnected.

Check whether the motor on the prism 1/2 is damaged.

Check whether the related circuit of the motor drive board on the prism 1/2 is damage.

### R-Prism1/2 Reset Error

Check whether the position of the prism 1/2 where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the prism 1/2 operating range.

Check whether the Hall element on the prism 1/2 is damaged.

Check whether the lead connecting the Hall element on the prism 1/2 and the PCB board is in poor contact or disconnected.

Check whether the motor on the prism 1/2 is damaged.

Check whether the related circuit of the motor drive board on the prism 1/2 is damage.

### Focus Reset Error

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

Check whether there are obstacles in the focus operating range.

Check whether the Hall element on the focus is damaged.

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

Check whether the motor on the focus is damaged.

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

### 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.

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

### 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.

**Base Fan A 1/2 Start Err**

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 G 1/2/3/4 Start Err**

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 F 5/6 Start Err**

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 D 7/8 Start Err**

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.

**LED Timeout Use****LED Too Hot Off**

When the fixture temperature reaches 70°C, it will automatically turn off to protect the fixture.

### **Base Humidity Error**

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

### **Head Humidity Error**

Check whether there is any obvious moisture or condensation inside the lens or optical assembly.  
Check whether the humidity sensor in the head is faulty or contaminated.

### **Memory Error**

When the memory IC keeps reporting errors, please replace the motherboard. Do not attempt to restart the fixture until the error is confirmed to have cleared and the interior is fully dry.

### **Head Humi. Too High**

Disassemble the housing of the fixture to dehumidify.

### **Base Humi. Too High**

Disassemble the housing of the fixture to dehumidify.

## Network Error

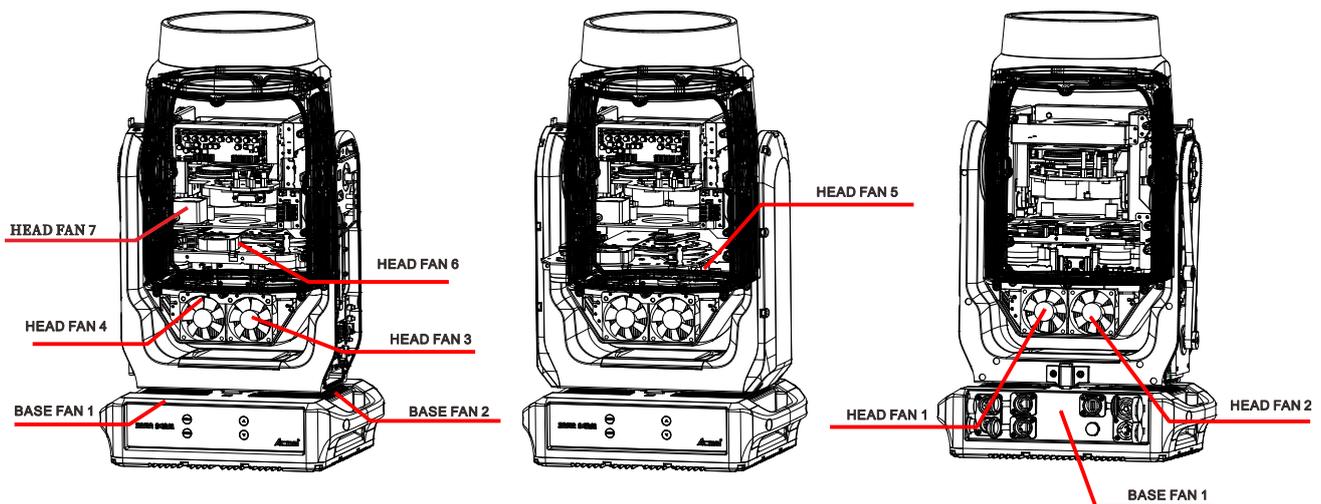
Check whether the network cable is correctly inserted and undamaged.

Verify that the fixture's IP address and network settings match the control system configuration.

Check whether the switch or network router is functioning properly and has sufficient available ports.

Verify that the control software's network protocol settings (e.g., Art-Net, sACN) are compatible with the fixture.

## Position of cooling fans:



Cooling Fans	Part Number	V	W	Position
Base Fan 1	3014001422	DC 24V	3.6W	A-FAN1
Base Fan 2	3014001428	DC 24V	7.2W	A-FAN2
Head Fan 1	3014001440	DC 24V	3.4W	F-FAN1
Head Fan 2				F-FAN2
Head Fan 3				F-FAN3
Head Fan 4				F-FAN4
Head Fan 5	3014001422	DC 24V	3.6W	E-FAN1
Head Fan 6	3014001300	DC 24V	2.9W	E-FAN2
Head Fan 7	3014001428	DC 24V	7.2W	D-FAN2

## 10/ 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.

## 11/ Fixture Cleaning

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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.

## 12/ Approvals and Certifications

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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)



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