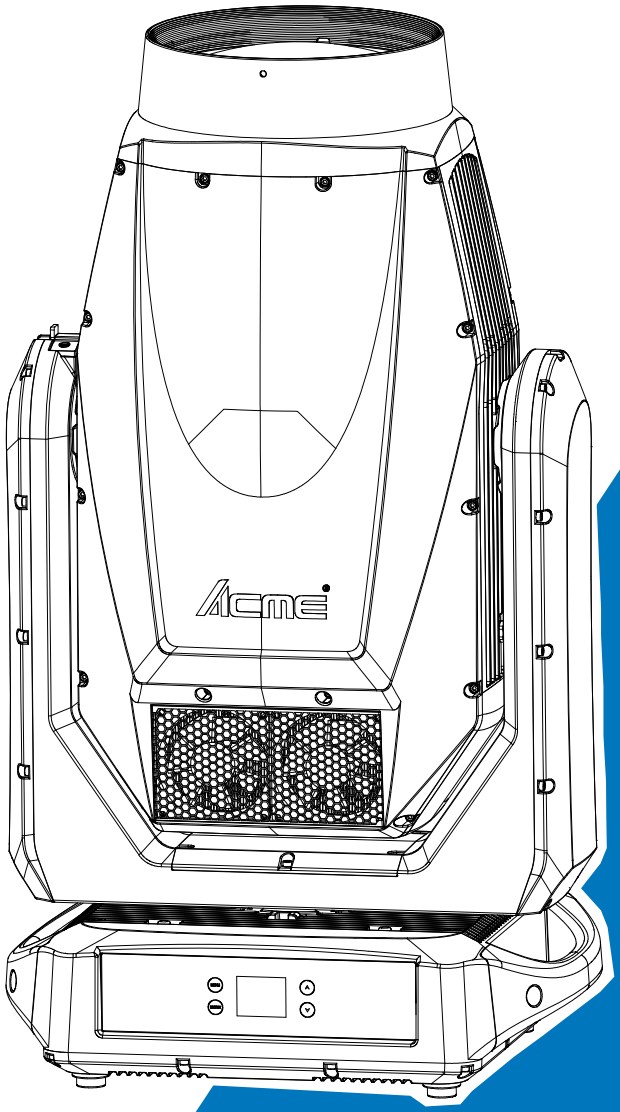
ACME

AECO 30 IP



User Manual

Please read the instruction carefully before use

CONTENTS

01/ Safety Information 2
02/ Technical Specifications 8
03/ Overview 10
3.1 Battery Power 11
04/ Connecting Power and Data 13
4.1 Connecting Power 13
4.2 Connecting Data 14
05/ Fixture Installation 14
06/ Effect Wheels 19
07/ Operation 24
7.1 Control Menu 24
7.2 Updating Software 38
7.3 Home Position Adjustment 42
08/ Configuring the Device for DMX Control 50
8.1 Address Setting 50
8.2 DMX Protocol 51
09/ Error Information 56
10/ Troubleshooting 67
11/ Fixture Cleaning 68
12/ Approvals and Certifications 69

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 fixture to another user, be sure that they also receive this instruction manual.

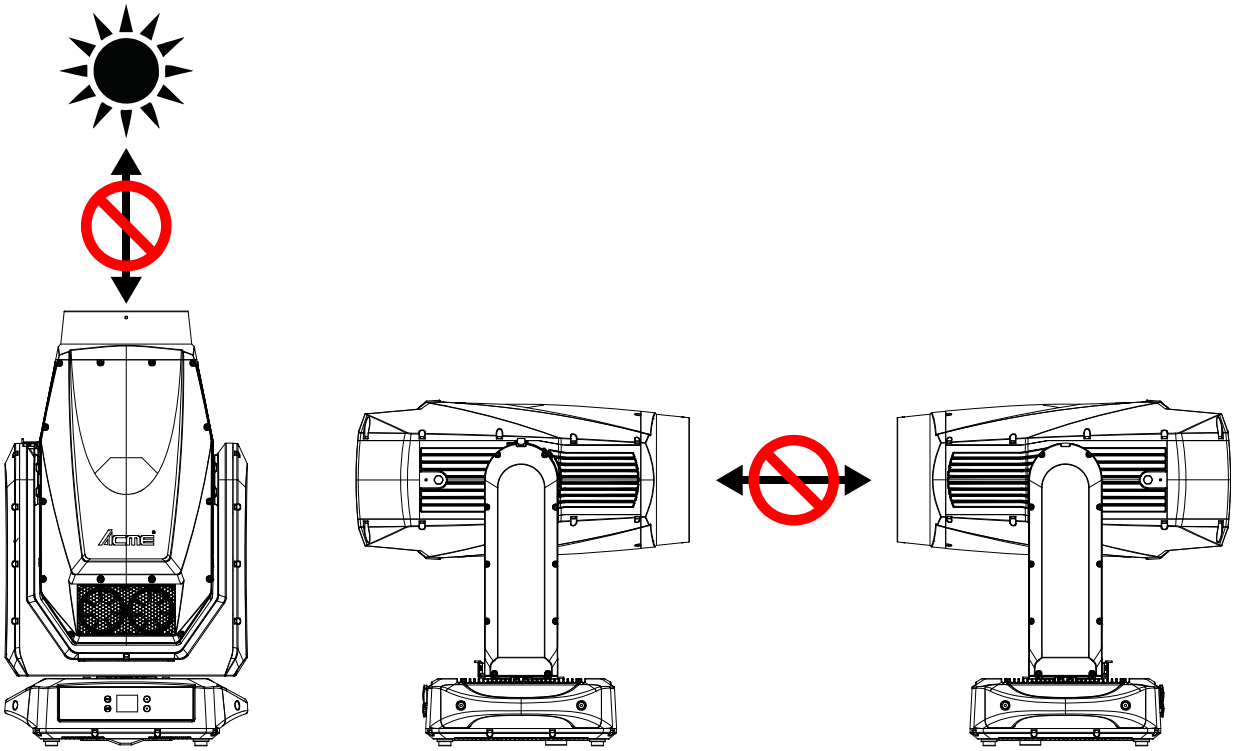
Important:

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 fixture.
- This product is suitable for wet locations. Do not immerse in water.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety cable (made of steel, min. diameter 4.0mm) when fixing the fixture. Handle the fixture by carrying its base instead of the head only.
- The fixture must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation holes are blocked, otherwise the fixture could over heat.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -10˚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.
- Fixture's surface temperature may reach up to 70 ˚C . DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the fixture. If it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wiring during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 4 meters.
- In the event of a serious operating problem, stop using the fixture immediately.
- Never turn the fixture off and on repeatedly.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this fixture if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging or suitable road case if the device is to be transported.
- Check that the head tilt lock is released before packing for transportation.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.
- The device MUST NOT be switched on immediately if it has been exposed to strong temperature fluctuations (e.g. after transport) as condensation may occur inside. Please leave the device switched off until it has reached to ambient temperature.

- 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

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

Veuillez 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 adapté aux endroits humides. Ne pas immerger dans l'eau.
- 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): -10˚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.

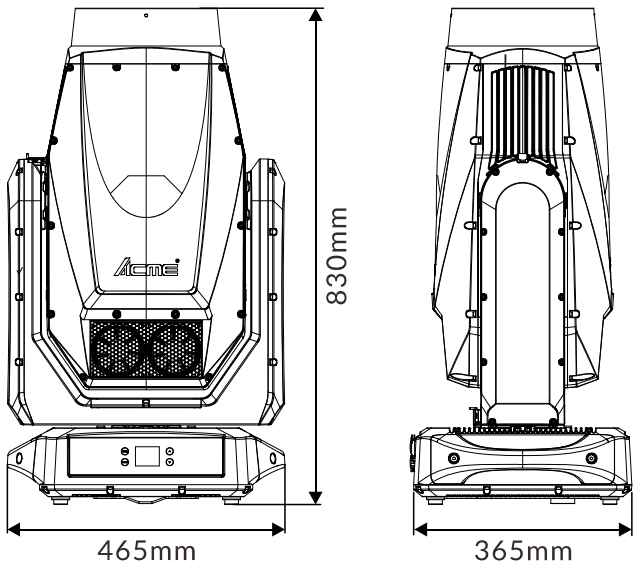
- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 70℃. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau 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 4 mètres.
- En cas de problème de fonctionnement grave, cessez immédiatement d'utiliser l'appareil.
- Ne jamais allumer et éteindre l'appareil à plusieurs reprises.
- Le boîtier, les lentilles ou le filtre ultraviolet doivent être remplacés s'ils sont visiblement endommagés.
- NE PAS ouvrir le boîtier, car il ne contient aucune pièce pouvant être réparée par l'utilisateur.
- NE PAS tenter d'utiliser cet appareil s'il est endommagé. NE PAS tenter de réparations vous-même. Les réparations effectuées par des personnes non qualifiées peuvent entraîner des dommages ou un dysfonctionnement. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez l'appareil de sa source d'alimentation avant toute maintenance.
- UTILISEZ l'emballage d'origine si l'appareil doit être transporté.
- Vérifiez que le verrou d'inclinaison de la tête est libéré avant l'emballage pour le transport.
- Évitez une exposition directe des yeux à la source lumineuse lorsque l'appareil est allumé.
- NE PAS utiliser ce produit si vous constatez des dommages sur le boîtier, les protections ou les câbles. Faites remplacer les pièces endommagées par un technicien agréé immédiatement.

- L'appareil NE DOIT PAS être allumé immédiatement s'il a été exposé à de fortes variations de température (par exemple après un transport), car de la condensation pourrait se former à l'intérieur. Veuillez laisser l'appareil éteint jusqu'à ce qu'il ait atteint la température ambiante.
- 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.

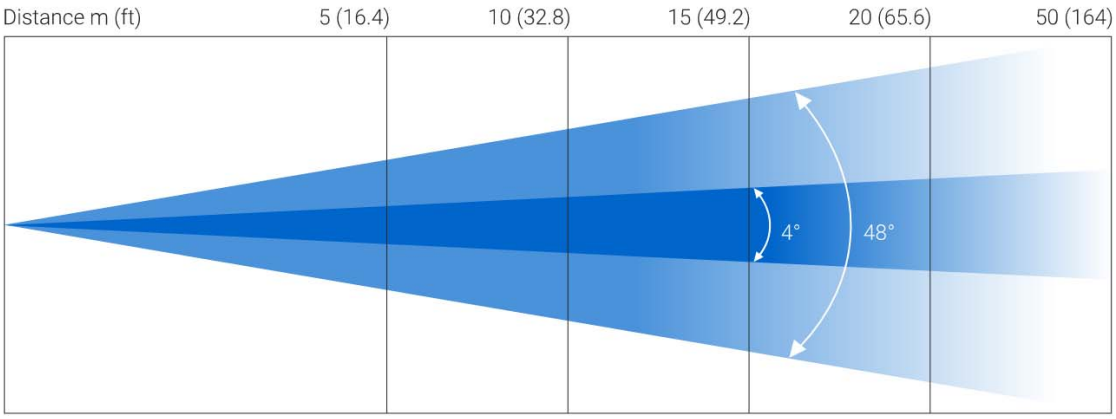
02/ Technical Specifications

AC Power	180-240Vac; 50/60Hz	
Max. Power Consumption	2265W	
Light Source	SCL1800F-65-R95	
Color Temperature	6200K	
Zoom Range	4°-48°	
Color Wheels	Color Wheel 1	5 colors + open
	Color Wheel 2	2 colors + CTB + Minus Green + open
Gobo Wheels	Rotating Gobo Wheel 1	6 replaceable gobos + open
	Rotating Gobo Wheel 2	6 replaceable gobos + open
Movement	Pan	540°
	Tilt	270°
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
	Mechanical pan/tilt lock for safe transportation and maintenance	
Control and Programming	DMX Channels	43/34/32/23
	Protocols	DMX512
		RDM
		Art-Net
		sACN
	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	5-pin IP XLR (optional with 3-pin IP XLR)
		RJ45 Connectors
	Power In/Out	Waterproof Power Connector in
	Protection Rating	IP66
Dynamic Effects	Color Rendering: Ra≥95; R9≥95; R15≥95; TLCI≥95; TM-30 Rf: 91; TM-30 Rg: 99	
	0-100% continuous dimming and strobe effects	
	CMY color mixing	
	Variable color temperature control	
	Animation wheel: continuous rotation with variable speed and direction	

	Iris: Variable 0-100%	
	Prisms: two indexing/rotating prisms (4-facet circular prism and 4-facet linear prism)	
	Frost: soft frost effect and heavy frost effect	
	Motorized zoom	
	Motorized focus	
	Framing: rotatable framing module, +/-60°, 4 x individually controllable full framing blades with variable angle and position	
Included Items	Power Cable with Neutrik true1 power connector	
	Two omega brackets with 1/4-turn fasteners	
	User Manual (this document)	
Dimensions	465x365x830mm	18.3"x14.4"x32.7"
Weight	52.5 kg	115.7 lbs

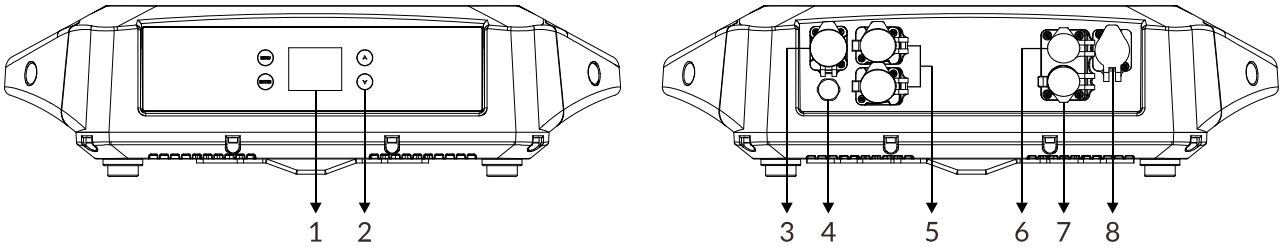


Photometric Diagram:



4° Lux	101,600	25,400	11,288	6,350	1,016
Diameter m (ft)	0.4 (1.3)	0.7 (2.3)	1 (3.3)	1.4 (4.6)	3.5 (11.5)
48° Lux	4,560	1,140	506	285	45
Diameter m (ft)	4.5 (14.8)	8.9 (29.2)	13.3 (43.6)	17.8 (58.4)	44.5 (146)

03/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into, move backward or leave the menu
	▲ UP	To go backward or move up in the menu
	▼ DOWN	To go forward or move down in the menu
	ENTER	To perform the desired functions
3. FIRMWARE UPGRADE	Used to upgrade fixture's firmware	
4. RELEASE VALVE		
5. ETHERNET	For use with sACN or Art-Net controls	
6. DMX IN	For DMX512 link, use 5-pin IP XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin IP XLR)	
7. DMX OUT	For DMX512 link, use 5-pin IP XLR cable to link the next units to output DMX signal (optional with 3-pin IP XLR)	
8. POWER IN	To connect to supply power	

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:

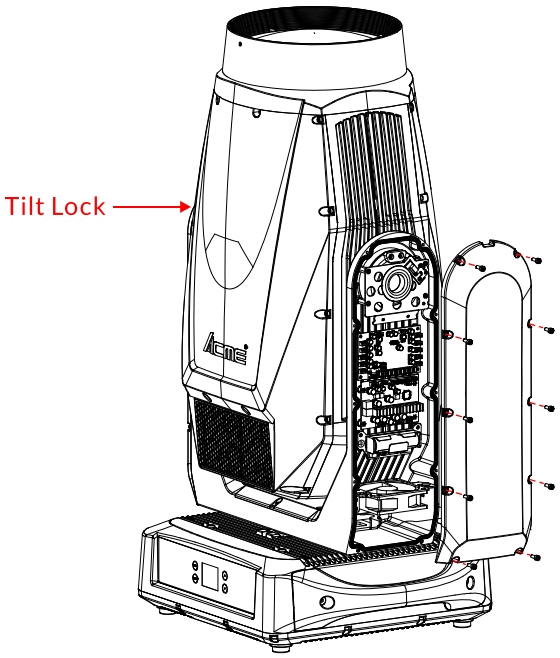
The fixture contains a battery that enables you to use the control panel to set up the fixture even when it is not connected to the main power supply. The battery charges during fixture operation. All of the main setup options in the control panel are accessible on battery power, but the 'Fixture Test'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

To activate the display when the fixture is not connected to power, press and hold the [▲ UP] button for 3 seconds. The display extinguishes after 30 seconds with no user input. Press and hold the [▲ UP] button for 3 seconds again to re-activate.

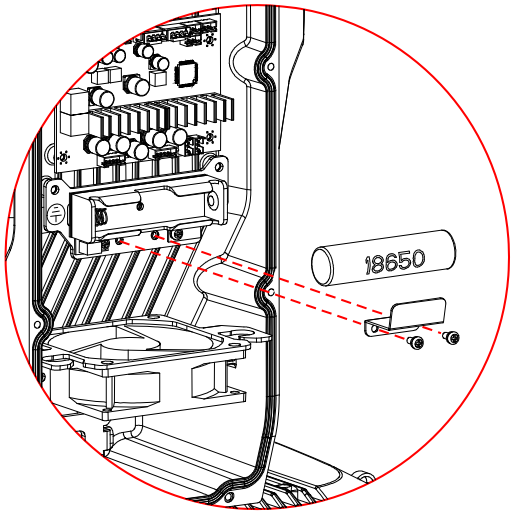
Battery Replacement:

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 ten screws in the arm cover of the fixture and remove the arm cover.



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 arm cover 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 180-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 2265W.

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

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

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

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

Power cord set should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1, 14AWG x 3C, molded with 5-20P attachment plug and terminated with cord connector model RCAC3F-X-000-01 with rating 250V, 16A by Neutrik Technology (Ningbo) 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).

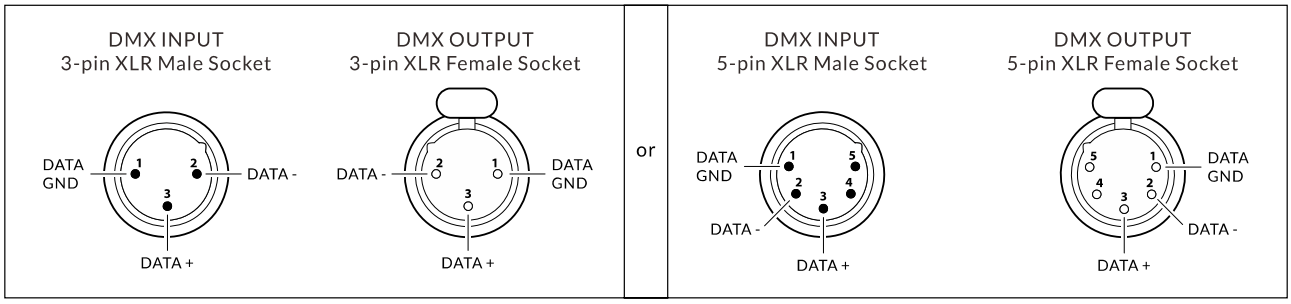
CAUTION!

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 shielded twisted-pair high-quality DMX cable designed for RS-485 fixtures in order to connect the controller with the fixture and one fixture with another. For outdoor installations, use only waterproof DMX cables suitable for outdoor use.

The default pin-out on XLR sockets is as the following diagram:



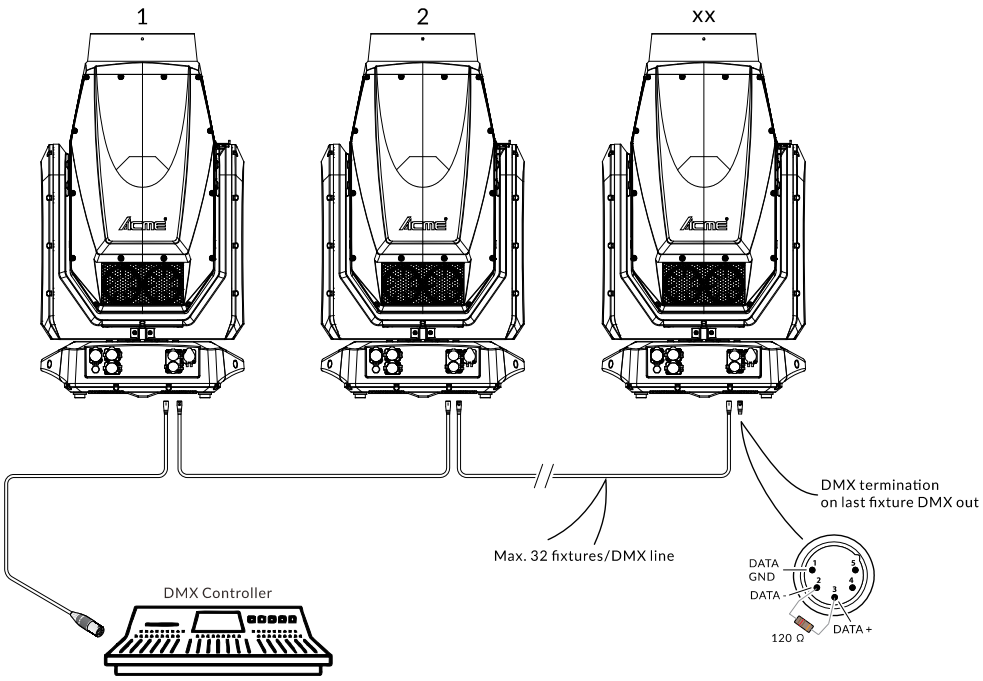
Building a serial DMX chain:

1. Connect the DMX data output from the controller to the fixture's data input socket.

2. 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.

Note: Up to 32 fixtures can be connected to the same DMX link.

3. Terminate the DMX output of the last fixture in the data link with a DMX terminator which is an XLR plug with a 120 Ω, 1/4 watt resistor connected between pins 2 and 3.



05/ Fixture Installation

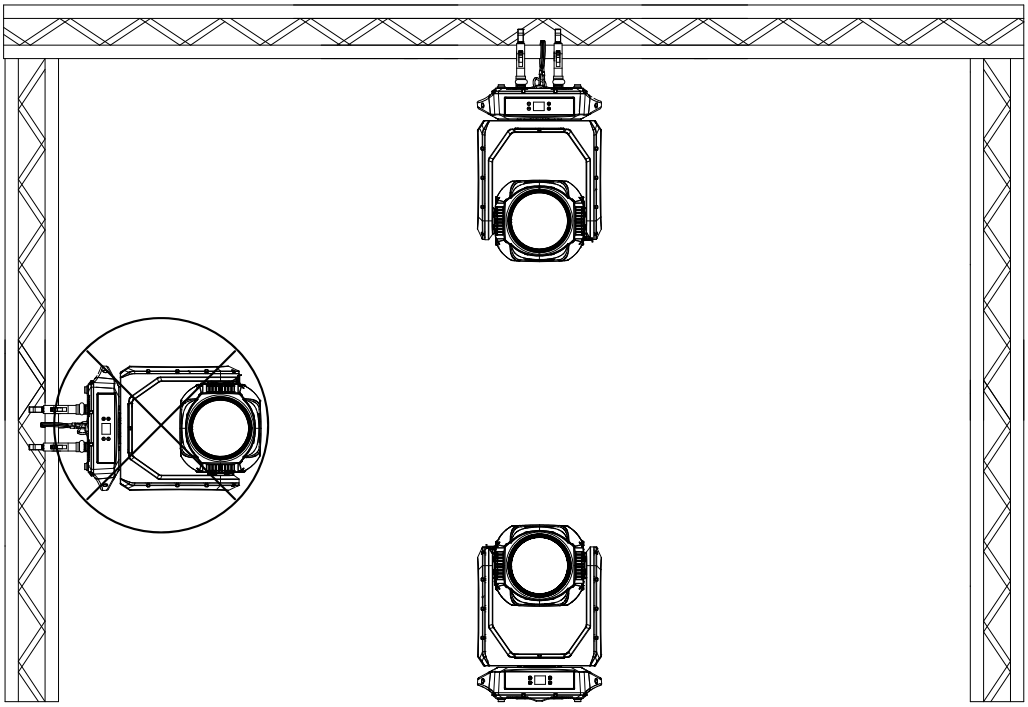
The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

- Dust, to the degree that dust cannot enter the device in sufficient quantities as to interfere with its operation.
- Water jets from any direction.

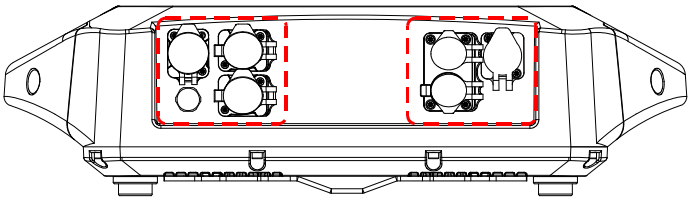
DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

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.

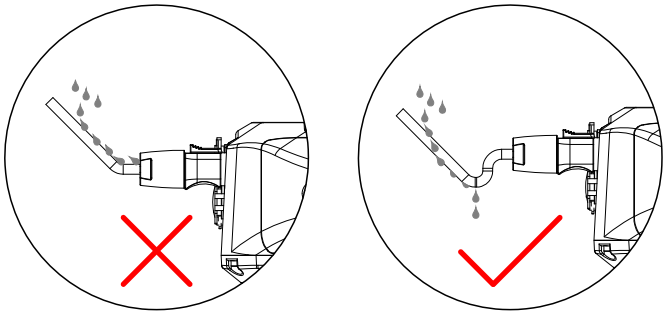
This fixture is fully operational in two different mounting positions: hanging upside-down, or base positioned on floor. DO NOT mount this fixture sideways on truss. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



- Use only waterproof power cords and connectors suitable for outdoor use.
- Visually check panel connectors on accidental water leaks and dust before connecting related cable connectors. If some water appears in panel connectors, do not connect cable connectors, especially power!
- Fixtures require regular maintenance. Carefully check panel connectors for corrosion and scorching, and replace them promptly if damaged.
- All power and data connectors are equipped with rubber caps to prevent water ingress.
  All unused panel connectors have to be sealed by the rubber caps to avoid contact with water, especially seawater.

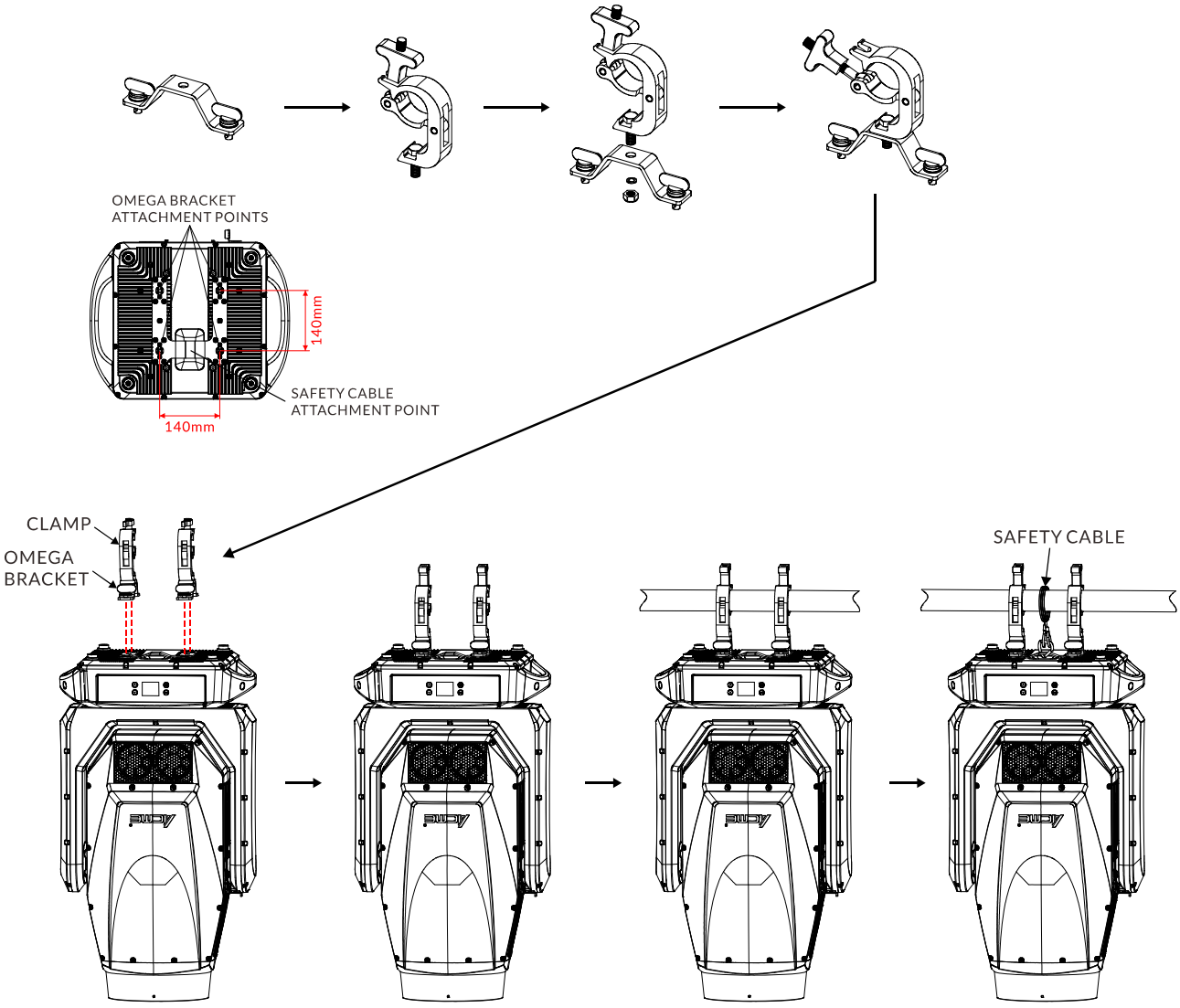


- When routing cables, always bring them into connectors from below. Form a service loop where needed, allowing gravity to divert condensation and water droplets away from the connectors.

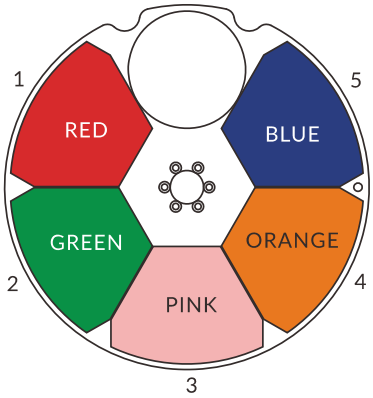


- To ensure the long-term reliable performance of the fixture, it is recommended to perform external cleaning and maintenance every one to two months. Promptly remove corrosive residues such as acidic substances and sea salt deposits attached to the surface of the fixture to slow down the oxidation process of the housing. Additionally, inspect and clean protective grilles and other structures to prevent small organisms like insects from entering the interior, avoiding functional abnormalities or fan blockages caused by the accumulation of insect remains.

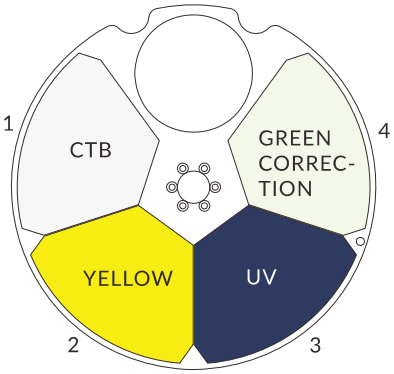
Steps for installing omega brackets to the fixture:


OMEGA BRACKET
ATTACHMENT POINTS
140mm
140mm
SAFETY CABLE
ATTACHMENT POINT
CLAMP
OMEGA
BRACKET
SAFETY CABLE

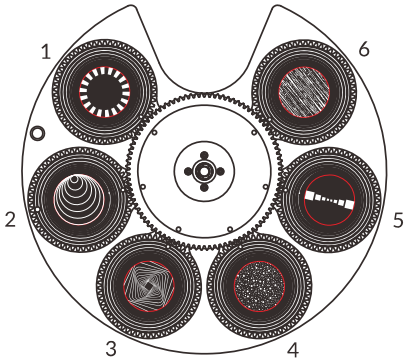
06/ Effect Wheels



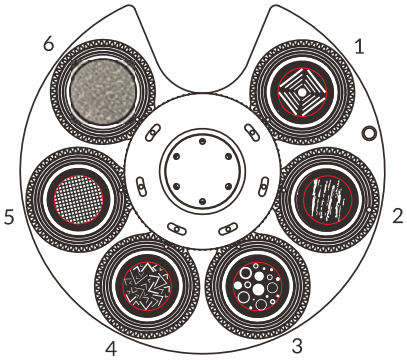
Color Wheel 1



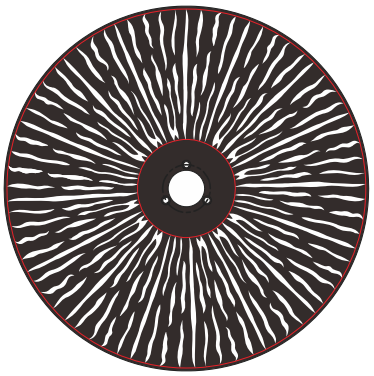
Color Wheel 2



Rotating Gobo Wheel 1



Rotating Gobo Wheel 2



Animation Wheel
3011001473

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

Rotating Gobo Wheel 1		
Slot	Name	Part Number
Open	Empty	/
1	Broken Circle	3011001474
2	Eccentric Circles	3011001475
3	Dream Tunnel	3011001476
4	Tiny Bubbles	3011001477
5	Square Bar	3011001478
6	Linear Breakup	3011001479

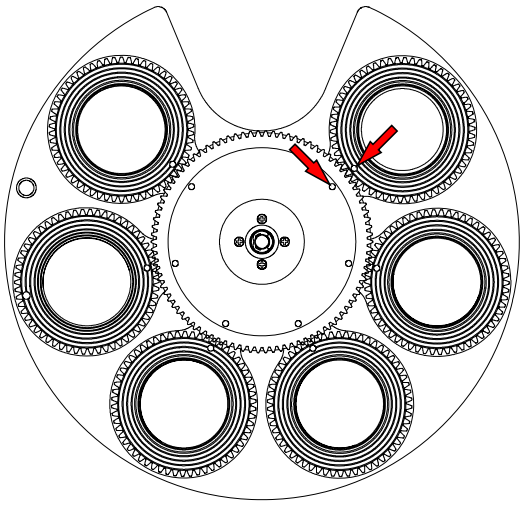
Rotating Gobo Wheel 2		
Slot	Name	Part Number
Open	Empty	/
1	Square Tunnel	3011001481
2	Clouds	3011001482
3	Mixed Beams	3011001483
4	Multiple Angles	3011001484
5	Grid	3011001480
6	Diamond Glass A	3015001218

Size of Rotating Gobos (Rotating Gobo Wheel 1)				
Slot	Gobo Diameter	Image Area Diameter	Gobo Thickness	Material
1~6	34mm+0/-0.2mm	27.5mm	1.1mm	Borofloat Glass
Size of Rotating Gobos (Rotating Gobo Wheel 2)				
Slot	Gobo Diameter	Image Area Diameter	Gobo Thickness	Material
1~5	34mm+0/-0.2mm	26.5mm	1.1mm	Borofloat Glass
6	31mm+0/-0.2mm	/	2.7mm	Borosilicate Glass

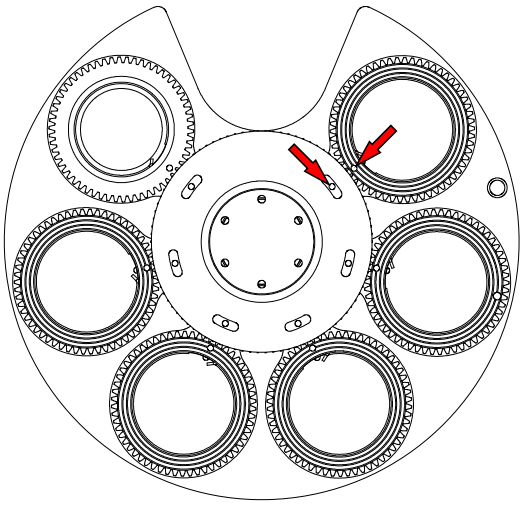
Follow these precautions when using and handling rotating gobos:

- Original gobos have a special coating designed specifically to resist to high temperatures. Must use high temperature Borofloat or better glass. Replacement gobos must match the dimensions, construction, materials and quality as the gobos supplied as standard. Using gobos that do not meet this requirement can cause damage that is not covered by the product warranty.
- Do not use gobos with dark coatings on either side, as these will absorb heat – either directly from the light source or reflected back from other optical components – and will not be durable.
- Wear clean nitrile cleanroom gloves when handling gobos.
- Avoid scratching coated and uncoated sides.
- Correct gobo orientation is critical. Note the position of the reference marks (arrowed) in the gobo drive wheel and gobo holder. Each time you remove a gobo holder from the wheel, turn the drive wheel (twice if necessary) until the marks exactly line up. We recommend that you only remove one gobo holder at a time. Avoid turning the drive wheel while a gobo holder is out of the gobo wheel. This will keep the gobos in their correct orientation, avoiding the need to reprogram cues or adjust gobo positions in the fixture because a gobo orientation has changed during service.

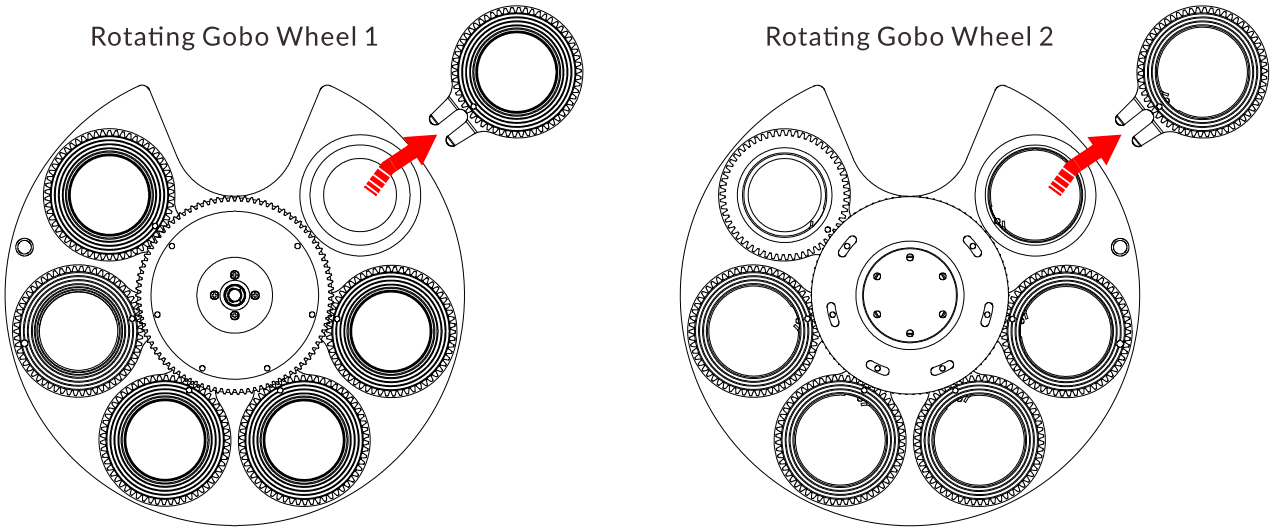
Rotating Gobo Wheel 1



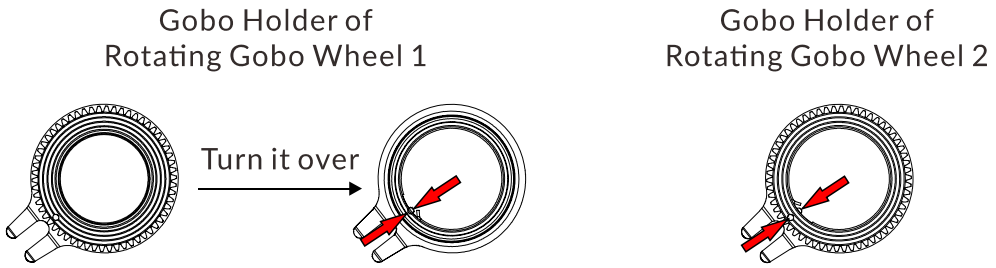
Rotating Gobo Wheel 2



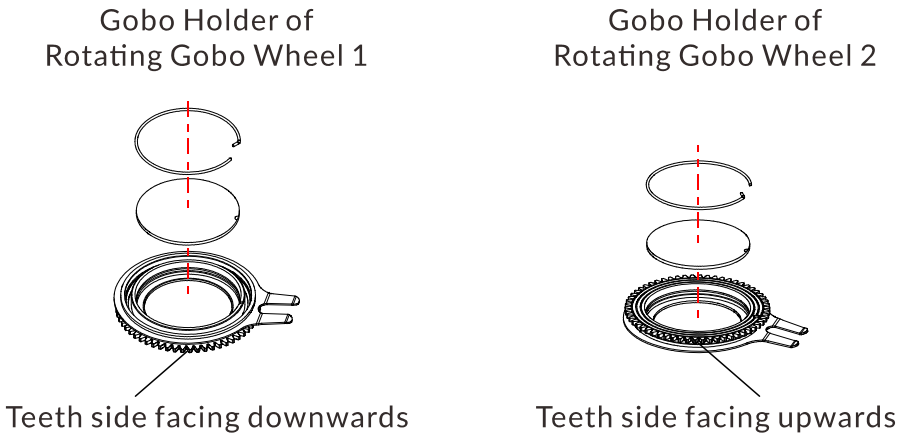
- Note how the gobo holder tongue engages in a recess in the gobo drive wheel when pulling the gobo holder out of the gobo wheel. You will need to reinstall the gobo holder with the tongue in the same position in the drive wheel.



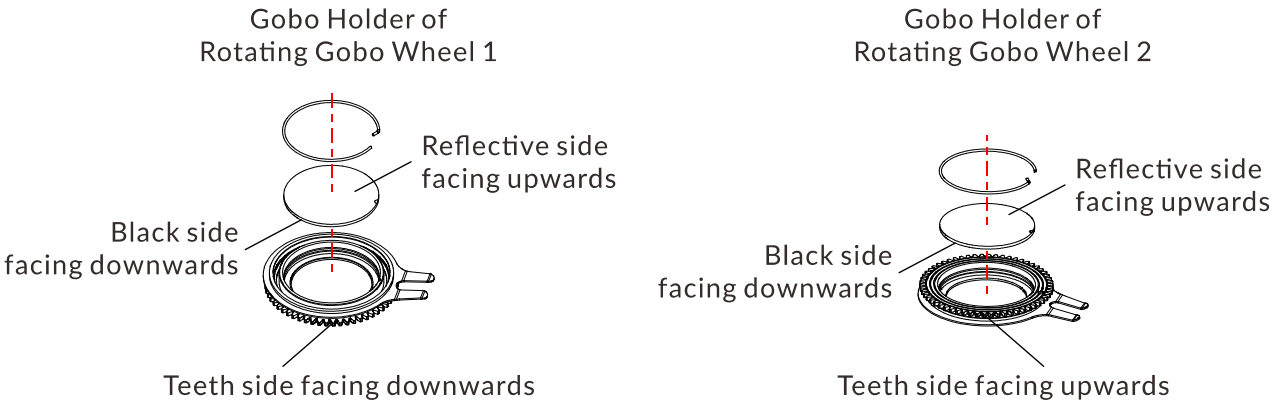
- Note the position of the alignment marks (arrowed) on gobo holders and gobos. Install gobos with the alignment marks next to each other.



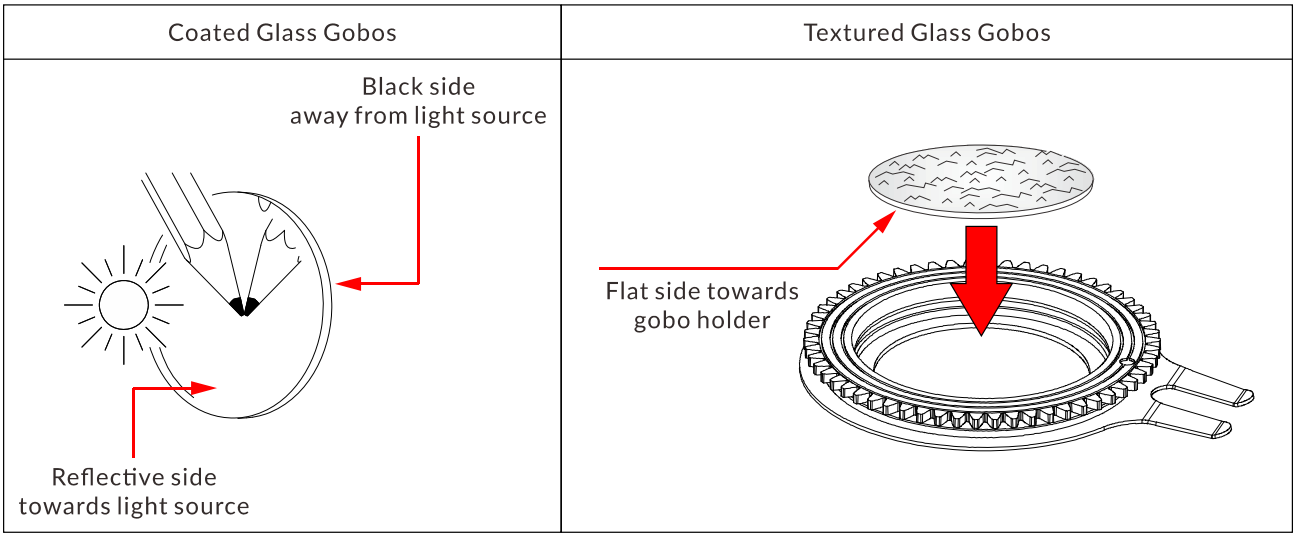
- With the teeth side of the gobo holder of rotating gobo wheel 1 facing downwards (or the teeth side of the gobo holder of rotating gobo wheel 2 facing upwards), remove the gobo retaining spring carefully with an appropriate tool (e.g. plastic lever) and then remove the original gobo.



- Holding the new gobo by its edges, taking care to not leave fingerprints on the gobo, insert it into the gobo holder with the alignment marks on gobo and gobo holder oriented correctly and with the black side (or flat side of the textured glass gobos) facing downwards. Check that the gobo is fully seated in the holder.



Make sure that you install gobos facing in the correct direction - reflective side (or textured side of the textured glass gobos) towards the light source, black side (or flat side of the textured glass gobos) towards the front lens, or they may suffer heat damage.



- Check that the retaining spring is pressed as flat as possible against the gobo and that the gobo is held securely in the gobo holder when reinstalling the retaining spring.
- Line up the reference marks in the gobo holder and gobo drive wheel and push the tongue correctly into its location in the gobo drive wheel when you install the gobo holder. Check that the gobo holder is held securely in the wheel after you have installed it.

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 screen locks after 30 seconds of inactivity.
> Press and hold the [MENU] button to unlock the screen.

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES		
DMX Settings	DMX Address	1-476	(Default=1)	
	DMX Channel Mode	(43) Framing		
		(34) Spot		
		(32) F-Wash		
		(23) Wash		
	No DMX Status	Blackout		
		Hold		
		Manual		
	View DMX Value			
	Connect Option	Auto		
		DMX		
		Art-Net		
		sACN		
	Network	IP Address	Default 1:2.X.X.X	
			Default 2:10.X.X.X	
			Manual:192.X.X.X	
		Subnet Mask	255.000.000.000	
	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		

MAIN MENU	SUBMENU	CHOICES/VALUES	
		Yes	
	Tilt Invert	No	
		Yes	
	P/T Feedback	No	
		Yes	
	Dimmer Speed	Fast	
		Smooth	
	Dimmer Curve	Mode 1	Linear
			Square Law
			Inv SQ Law
			S Curve
		Mode 2	Linear
			Square Law
			Inv SQ Law
			S Curve
	Fan Mode	Auto	
		Quiet	
		Super Quiet	
	Bright Calibration	50-100	(Default=100)
	Blade Mode	Mode 1	
		Mode 2	
	Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10KHz	
		15KHz	
		20KHz	
		25KHz	
	Gobo Short Cut	Enable	
		Disable	
	Color Short Cut	Enable	
		Disable	
	CTB Compensate	Enable	

MAIN MENU	SUBMENU	CHOICES/VALUES	
		Disable	
	Sun Protection Mode	Off	
		On	
Display Settings	Display Invert	No	
		Yes	
	Backlight Intensity	1-10	(Default=10)
	Temperature Unit	℃	
		°F	
	Language	English	
		Chinese	
Fixture Test	Auto Test	Single	Single Test
		Cycle	Cycle Test
	Manual Test	Clear	No/Yes
		Pan	0-255
		Tilt	0-255
		Green Corr.	0-255
		Cyan	0-255
		Magenta	0-255
		Yellow	0-255
		CTO	0-255
		Color 1	0-255
		Color 2	0-255
		Gobo 1	0-255
		R-Gobo 1	0-255
		Gobo 2	0-255
		R-Gobo 2	0-255
		Animation	0-255
		Iris	0-255
		Prism 1	0-255
		R-Prism 1	0-255
		Prism 2	0-255
		R-Prism 2	0-255
		Frost 1	0-255
		Frost 2	0-255
		Zoom	0-255
		Focus	0-255
		Strobe	0-255
		Dimmer	0-255
		Blade	0-255
		Blade DW 1	0-255
		Blade DW 2	0-255

MAIN MENU	SUBMENU	CHOICES/VALUES		
		Blade UP 1	0-255	
		Blade UP 2	0-255	
		Blade LF 1	0-255	
		Blade LF 2	0-255	
		Blade RG 1	0-255	
		Blade RG 2	0-255	
Fixture Information	Use Hour	Fixture		
		Light Source	Total	** Hours
			Light On	** Hours
			Reset	Password=050
	Humidity	Head	Current	
			Max	
		Base	Current	
			Max	
	Temperature	Light Source	Current	
			Max	
	Fan State			
	Firmware Version	V10 B10 。。。		
	RDM UID			
	MAC			
	SN			
	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	USB Upgrade	No		
		Yes		
	Factory Settings	No		
		Yes		

DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **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
(43) Framing	1-470
(34) Spot	1-479
(32) F-Wash	1-481
(23) Wash	1-490

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 **(43) Framing, (34) Spot, (32) F-Wash** and **(23) Wash**, 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, Subnet** 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, Dimmer Speed, Dimmer Curve, Fan Mode, Bright Calibration, Blade Mode, Led Refresh Rate, Gobo Short Cut, Color Short Cut, CTB Compensate** 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.

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.

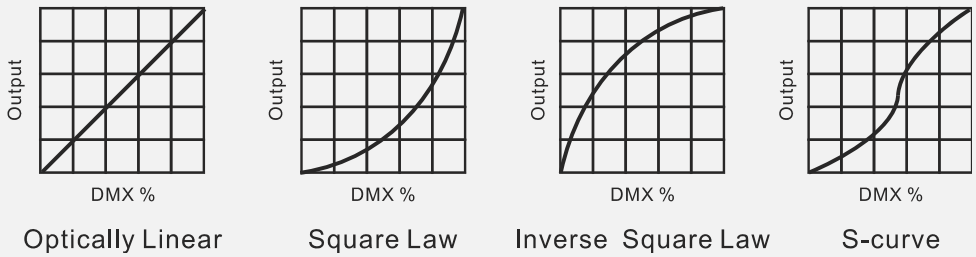
Dimmer Curve

Select **Dimmer Curve,** press ENTER.

Use UP/DOWN button to select **Mode 1** or **Mode 2**, confirm your selection with ENTER.

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

Dimmer Modes



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.

Blade Mode

Select **Blade Mode,** press ENTER.

Use UP/DOWN button to select **Mode 1** or **Mode 2**, confirm your selection with ENTER.

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

Led Refresh Rate

Select **Led Refresh Rate,** press ENTER.
Use UP/DOWN button to select **900Hz, 1000Hz, 1100Hz, 1200Hz, 1300Hz, 1400Hz, 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz** or **25KHz**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

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.

Color Short Cut

Select **Color 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.

CTB Compensate

Select **CTB Compensate,** 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 (Set the 'Sun Protection Mode' to 'On' when using the fixture outdoors.)

Select **Sun Protection Mode,** press ENTER.
Use UP/DOWN button to select **Off** (sun protection mode deactivated) or **On** (The fixture will turn off the light source and automatically turn its head to a horizontal position when no signal is detected, preventing damage to optical components or internal parts from prolonged direct sunlight exposure.), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

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.

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, 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.

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.

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 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 **USB Upgrade** 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.

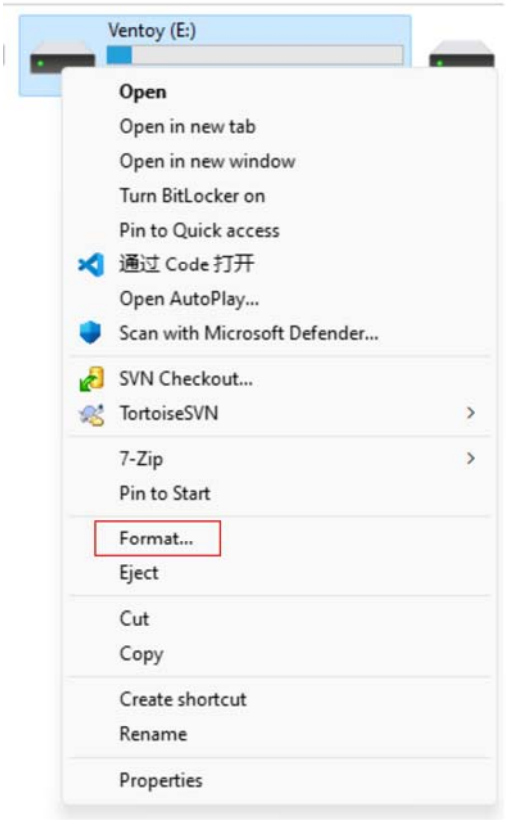
7.2 Updating Software

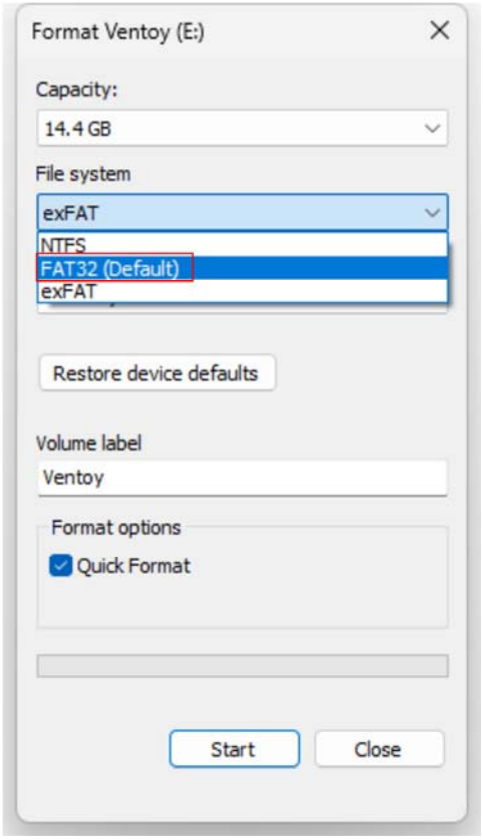
Only qualified technicians should perform this function! Note all menu settings before updating software! Please note, up to 32 fixtures can be connected together and updated at the same time.

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.

<u>Format the USB flash drive:</u>

- 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:

Standard RDM Parameter IDs

PID	Parameter IDs	Command 'Discovery'	Command 'Set'	Command 'Get'
0x0001	DISC_UNIQUE_BRANCH	√		
0x0002	DISC_MUTE	√		
0x0003	DISC_UN_MUTE	√		
0x0050	SUPPORTED_PARAMETERS			√
0x0051	PARAMETER_DESCRIPTION			√
0x0060	DEVICE_INFO			√
0x0080	DEVICE_MODEL_DESCRIPTION			√
0x0081	MANUFACTURER_LABEL			√
0x0082	DEVICE_LABEL		√	√
0x0090	FACTORY_DEFAULTS		√	√
0x00C0	SOFTWARE_VERSION_LABEL			√
0x00C1	BOOT_SOFTWARE_VERSION_ID			√
0x00C2	BOOT_SOFTWARE_VERSION_LABEL			√
0x00E0	DMX_PERSONALITY		√	√
0x00E1	DMX_PERSONALITY_DESCRIPTION			√
0x00F0	DMX_START_ADDRESS		√	√
0x0120	SLOT_INFO			√
0x0121	SLOT_DESCRIPTION			√
0x0200	SENSOR_DEFINITION			√
0x0201	SENSOR_VALUE			√
0x0343	CURVE		√	√
0x0344	CURVE_DESCRIPTION			√
0x0400	DEVICE_HOURS			√
0x0401	LAMP_HOURS			√
0x0600	PAN_INVERT		√	√
0x0601	TILT_INVERT		√	√
0x1000	IDENTIFY_DEVICE		√	√
0x1001	RESET_DEVICE		√	√

√ -Command implemented for the respective parameter ID

Manufacturer-specific RDM Parameter IDs

PID	Parameter IDs	Command 'Discovery'	Command 'Set'	Command 'Get'	Note
0xA004	DMX_STATUS		√	√	0:Blackout 1:Hold 2:Manual
0xA008	DIMMER_SPEED		√	√	0:Fast 1:Smooth
0xA010	FAN_MODE		√	√	0:Standard 1:Quiet
0xA018	ERROR_LOG			√	
0xA020	OFFSET		√	√	
0xA021	PAN_TILT_FEEDBACK		√	√	0:No 1:Yes
0xA025	DIMMER_CURVE		√	√	1:Linear 2:Square Law 3:Inv SQ Law 4:S Curve
0xA026	DIMMER_FREQUENCY		√	√	1:900Hz 2:1000Hz 3:1100Hz 4:1200Hz 5:1300Hz 6:1400Hz 7:1500Hz 8:2500Hz 9:4000Hz 10:5000Hz 11:6000Hz 12:10KHz 13:15KHz 14:20KHz 15:25KHz

√ -Command implemented for the respective parameter ID

7.3 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	0~9999
Dim 1 Offset	0~999
.....	.....
Dim 10 Offset	0~999
Pan	-128~127
Tilt	-128~127
Cyan	-128~127
Magenta	-128~127
Yellow	-128~127
CTO	-128~127
Color 1	-128~127
Color 2	-128~127
Gobo 1	-128~127
R-Gobo 1	-128~127
Gobo 2	-128~127
R-Gobo 2	-128~127
Animation	-128~127
Iris	0~255
Prism 1	-128~127
R-Prism 1	-128~127
Prism 2	-128~127
R-Prism 2	-128~127
Frost 1	-128~127
Frost 2	-128~127
Zoom	-128~127

Focus	-128~127
Blade	-128~127
Blade DW 1	-128~127
Blade DW 2	-128~127
Blade UP 1	-128~127
Blade UP 2	-128~127
Blade LF 1	-128~127
Blade LF 2	-128~127
Blade RG 1	-128~127
Blade RG 2	-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 0 and 9999, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Dim 1 Offset

Select **Dim 1 Offset,** press ENTER.
Use UP/DOWN button to select a value between 0 and 999, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

.....

Dim 10 Offset

Select **Dim 10 Offset,** press ENTER.
Use UP/DOWN button to select a value between 0 and 999, 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 1

Select **Color 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.

Color 2

Select **Color 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.

Gobo 1

Select **Gobo 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-Gobo 1

Select **R-Gobo 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.

Gobo 2

Select **Gobo 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-Gobo 2

Select **R-Gobo 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.

Animation

Select **Animation,** 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.

Iris

Select **Iris,** 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.

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.

Frost 1

Select **Frost 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.

Frost 2

Select **Frost 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.

Blade

Select **Blade,** 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.

Blade DW1

Select **Blade DW 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.

Blade DW 2

Select **Blade DW 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.

Blade UP 1

Select **Blade UP 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.

Blade UP 2

Select **Blade UP 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.

Blade LF 1

Select **Blade LF 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.

Blade LF 2

Select **Blade LF 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.

Blade RG 1

Select **Blade RG 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.

Blade RG 2

Select **Blade RG 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.

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 43 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 44. As the first fixture uses all the first 43 DMX channels, the next available channel is 44 (43+1=44 >> 44).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
43 channels	1	44	87	130	.....
34 channels	1	35	69	103	.....
32 channels	1	33	65	97	.....
23 channels	1	24	47	70	.....

8.2 DMX Protocol

Valid from firmware version: V2.1

CHANNEL				VALUE	FUNCTION
43ch	34ch	32ch	23ch		
1	1	1	1	000-255	**PAN** 0°→540°
2	2	2	2	000-255	**PAN FINE**
3	3	3	3	000-255	**TILT** 0°→270°
4	4	4	4	000-255	**TILT FINE**
5	5	5	5	000-255	**PAN/TILT SPEED** Fast to Slow
6	6	6	6	000-007 008-255	**GREEN CORRECTION** Close Open
7	7	7	7	000-255	**CYAN** 0%→100%
8	8	8	8	000-255	**MAGENTA** 0%→100%
9	9	9	9	000-255	**YELLOW** 0%→100%
10	10	10	10	000-255	**CTO** 0%→100%
11	11	11	11	000-007 008-018 019-029 030-040 041-051 052-063 064-068 069-073 074-078 079-083 084-088 089-093 094-098 099-103 104-108 109-113 114-118 119-123 124-127	**COLOR WHEEL 1** Open Color 1 Color 2 Color 3 Color 4 Color 5 Open Open + Color 1 Color 1 Color 1 + Color 2 Color 2 Color 2 + Color 3 Color 3 Color 3 + Color 4 Color 4 Color 4 + Color 5 Color 5 Color 5 + Open Open

				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
12	**12**	**12**	**12**		**COLOR WHEEL 2**
				000-007	Open
				008-021	CTB
				022-035	Color 1
				036-048	Color 2
				049-063	Reserved
				064-069	Open
				070-075	Open + CTB
				076-081	CTB
				082-087	CTB + Color 1
				088-093	Color 1
				094-099	Color 1 + Color 2
				100-105	Color 2
				106-111	Color 2 + Green Correction
				112-117	Green Correction
				118-123	Green Correction + Open
				124-127	Open
				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
13	**13**				**GOBO WHEEL 1**
				000-007	Open
				008-016	Gobo 1
				017-025	Gobo 2
				026-034	Gobo 3
				035-043	Gobo 4
				044-052	Gobo 5
				053-063	Gobo 6
				064-073	Gobo 1 Shaking, Slow to Fast
				074-083	Gobo 2 Shaking, Slow to Fast
				084-093	Gobo 3 Shaking, Slow to Fast
				094-103	Gobo 4 Shaking, Slow to Fast
				104-113	Gobo 5 Shaking, Slow to Fast
				114-127	Gobo 6 Shaking, Slow to Fast
				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
14	**14**				**R-GOBO WHEEL 1**
				000-127	Index 0°→360°
				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
15	**15**				**R-GOBO WHEEL 1 FINE**
				000-255	0%→100%

16	**16**				**GOBO WHEEL 2**
				000-007	Open
				008-016	Gobo 1
				017-025	Gobo 2
				026-034	Gobo 3
				035-043	Gobo 4
				044-052	Gobo 5
				053-063	Gobo 6
				064-073	Gobo 1 Shaking, Slow to Fast
				074-083	Gobo 2 Shaking, Slow to Fast
				084-093	Gobo 3 Shaking, Slow to Fast
				094-103	Gobo 4 Shaking, Slow to Fast
				104-113	Gobo 5 Shaking, Slow to Fast
				114-127	Gobo 6 Shaking, Slow to Fast
				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
17	**17**				**R-GOBO WHEEL 2**
				000-127	Index 0°→360°
				128-189	Counter-Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Clockwise Rotation, Slow to Fast
18	**18**				**R-GOBO WHEEL 2 FINE**
				000-255	0%→100%
19	**19**				**ANIMATION**
				000-007	Open
				008-129	Counter-Clockwise Rotation, Fast to Slow
				130-133	Stop
				134-255	Clockwise Rotation, Slow to Fast
20	**20**	**13**	**13**		**IRIS**
				000-255	100%→0%
21	**21**				**PRISM 1 (4-facet circular prism)**
				000-007	Close
				008-255	Open
22	**22**				**R-PRISM 1**
				000-127	Index 0°→360°
				128-189	Clockwise Rotation, Fast to Slow
				190-193	Stop
				194-255	Counter-Clockwise Rotation, Slow to Fast
23	**23**				**PRISM 2 (4-facet linear prism)**
				000-007	Close
				008-255	Open
24	**24**				**R-PRISM 2**
				000-127	Index 0°→360°
				128-189	Clockwise Rotation, Fast to Slow
				190-193	Stop

				194-255	Counter-Clockwise Rotation, Slow to Fast
25	25	14	14	000-255	**FROST 1 (Soft)** 0%→100%
26	26	15	15	000-255	**FROST 2 (Heavy)** 0%→100%
27	27	16	16	000-255	**ZOOM** Wide→Narrow
28	28	17	17	000-255	**ZOOM FINE**
29	29	18	18	000-255	**FOCUS** 0%→100%
30	30	19	19	000-255	**FOCUS FINE**
31	31	20	20	**STROBE** 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
32	32	21	21	000-255	**DIMMER** 0%→100%
33	33	22	22	000-255	**DIMMER FINE**
34		23		000-255	**BLADE** 0°→180°
35		24		000-255	**BLADE DW 1** 0%→100%
36		25		000-255	**BLADE DW 2** 0%→100%
37		26		000-255	**BLADE UP 1** 0%→100%
38		27		000-255	**BLADE UP 2** 0%→100%
39		28		000-255	**BLADE LF 1** 0%→100%
40		29		000-255	**BLADE LF 2** 0%→100%
41		30		000-255	**BLADE RG 1** 0%→100%
42		31		000-255	**BLADE RG 2** 0%→100%
43	34	32	23		**FUNCTION**

					(To activate following functions, stop in DMX value for at least 3 seconds.)
				000-009	Null
				010-019	Blade Mode: Mode 1 (Not available on 34ch & 23ch)
				020-029	Blade Mode: Mode 2 (Not available on 34ch & 23ch)
				030-039	Dimmer Curve Square Law
				040-049	Dimmer Curve Inv Square Law
				050-059	Dimmer Curve Linear
				060-069	Dimmer Curve S
				070-079	Fan Mode: Auto
				080-089	Fan Mode: Quiet
				090-099	Fan Mode: Super Quiet
				100-109	Light Source
				110-119	Light Source
				120-122	Null
				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	Null
				140-149	Reset Pan/Tilt
				150-159	Reset Effect
				180-199	Null
				200-209	Reset All
				210-219	Dimmer Speed Fast
				220-229	Dimmer Speed Smooth
				230-231	Gobo Short Cut: Enable (Not available on 32ch & 23ch)
				232-233	Gobo Short Cut: Disable (Not available on 32ch & 23ch)
				234-235	Color Short Cut: Enable
				236-237	Color Short Cut: Disable
				238-239	CTB Compensate: Enable
				240-241	CTB Compensate: Disable
				242-243	Sun Protection Mode: On
				244-245	Sun Protection Mode: Off
				246-255	Null

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.

Pan Reset Error

Check whether the position of the pan where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the pan operating range.
Check whether the Hall element on the pan is damaged.
Check whether the lead connecting the Hall element on the pan and the PCB board is in poor contact or disconnected.
Check whether the motor on the pan is damaged.
Check whether the related circuit of the motor drive board on the pan is damage.

Pan Encode Error

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

Pan Encode No Find

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

Pan Encode Disable

Check whether the encoder on the pan is damaged.

Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the tilt operating range.
Check whether the Hall element on the tilt is damaged.
Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.
Check whether the motor on the tilt is damaged.
Check whether the related circuit of the motor drive board on the tilt is damage.

Tilt Encode Error

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

Tilt Encode No Find

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

Tilt Encode Disable

Check whether the encoder on the tilt is damaged.

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 where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the cto operating range.
Check whether the Hall element on the cto is damaged.
Check whether the lead connecting the Hall element on the cto and the PCB board is in poor contact or disconnected.
Check whether the motor on the cto is damaged.
Check whether the related circuit of the motor drive board on the cto is damage.

Color 1/2 Reset Error

Check whether the position of the color wheel 1/2 where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the color wheel 1/2 operating range.
Check whether the Hall element on the color wheel 1/2 is damaged.
Check whether the lead connecting the Hall element on the color wheel 1/2 and the PCB board is in poor contact or disconnected.
Check whether the motor on the color wheel 1/2 is damaged.
Check whether the related circuit of the motor drive board on the color wheel 1/2 is damage.

Gobo 1/2 Reset Error

Check whether the position of the gobo wheel 1/2 where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the gobo wheel 1/2 operating range.
Check whether the Hall element on the gobo wheel 1/2 is damaged.
Check whether the lead connecting the Hall element on the gobo wheel 1/2 and the PCB board is in poor contact or disconnected.
Check whether the motor on the gobo wheel 1/2 is damaged.
Check whether the related circuit of the motor drive board on the gobo wheel 1/2 is damage.

R-Gobo 1/2 Reset Error

Check whether the position of the gobo wheel 1/2 where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the gobo wheel 1/2 operating range.
Check whether the Hall element on the gobo wheel 1/2 is damaged.
Check whether the lead connecting the Hall element on the gobo wheel 1/2 and the PCB board is in poor contact or disconnected.
Check whether the motor on the gobo wheel 1/2 is damaged.
Check whether the related circuit of the motor drive board on the gobo wheel 1/2 is damage.

Animation Reset Error

Check whether the position of the animation wheel where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the animation wheel operating range.
Check whether the Hall element on the animation wheel is damaged.
Check whether the lead connecting the Hall element on the animation wheel and the PCB board is in poor contact or disconnected.
Check whether the motor on the animation wheel is damaged.
Check whether the related circuit of the motor drive board on the animation wheel is damage.

Prism 1/2 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-Prism 1/2 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.

Blade Reset Error

Check whether the position of the blade where the magnet is installed falls off or is damaged.
Check whether there are obstacles in the blade operating range.
Check whether the Hall element on the blade is damaged.
Check whether the lead connecting the Hall element on the blade and the PCB board is in poor contact or disconnected.
Check whether the motor on the blade is damaged.
Check whether the related circuit of the motor drive board on the blade is damage.

Base Fan 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.

Arm Fan 1 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 1/2/3/4/5/6/7/8/9/10/11 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 Temp. Error

Check whether the temperature detecting board is normal.
Check whether the components of the temperature detecting board are damaged.
Check whether the lead on the temperature detecting board is installed in place or disconnected.

LED Timeout Use

LED Too Hot Off

When the fixture temperature reaches 87℃, it will automatically turn off to protect the fixture.

Head Humi. Too High

Disassemble the housing of the fixture to dehumidify.

Base Humi. Too High

Disassemble the housing of the fixture to dehumidify.

Head Humidity Error

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

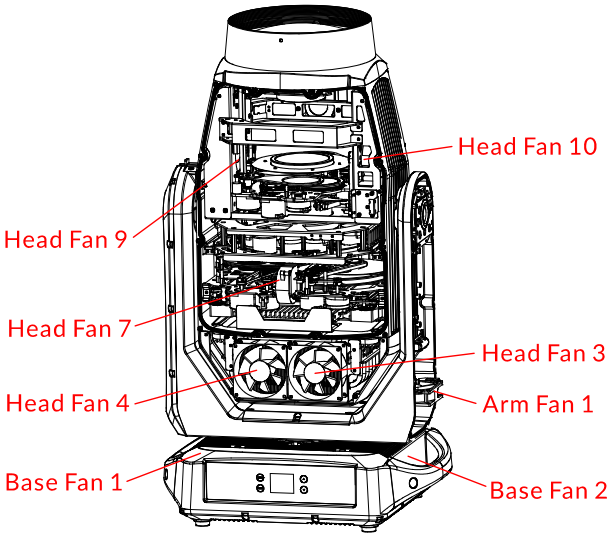
Base Humidity Error

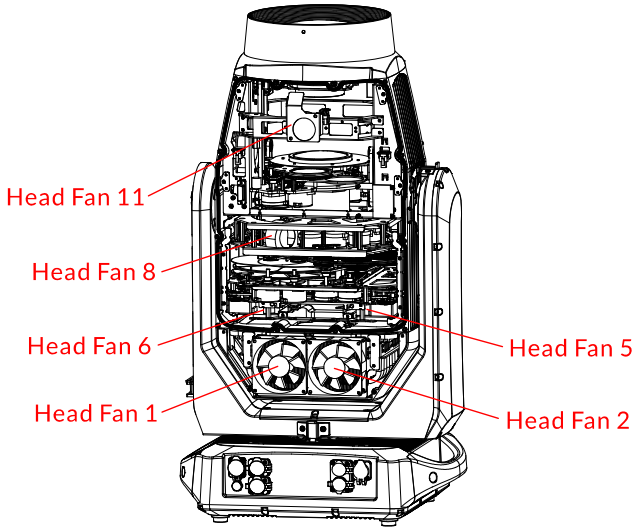
Check whether the humidity sensor is faulty.
Check whether the lead connecting the humidity sensor is installed in place or disconnected.

Memory Error

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

Position of cooling fans:





Cooling Fans	Part Number	V	W	Position
Base Fan 1	3014001264	DC 24V	4.8W	Base - A
Base Fan 2				
Arm Fan 1	3014001368	DC 24V	3.8W	Arm - B
Head Fan 1	3014001399	DC 24V	12.5W	Head - F
Head Fan 2				
Head Fan 3				
Head Fan 4				
Head Fan 5	3014001256	DC 24V	4.8W	Head - C
Head Fan 6				
Head Fan 7	3014001304	DC 24V	4.8W	Head - C
Head Fan 8				Head - E
Head Fan 9	3014001256	DC 24V	4.8W	Head - F
Head Fan 10				Arm - B
Head Fan 11	3014001300	DC 24V	2.9W	Head - F

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

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

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

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



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

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