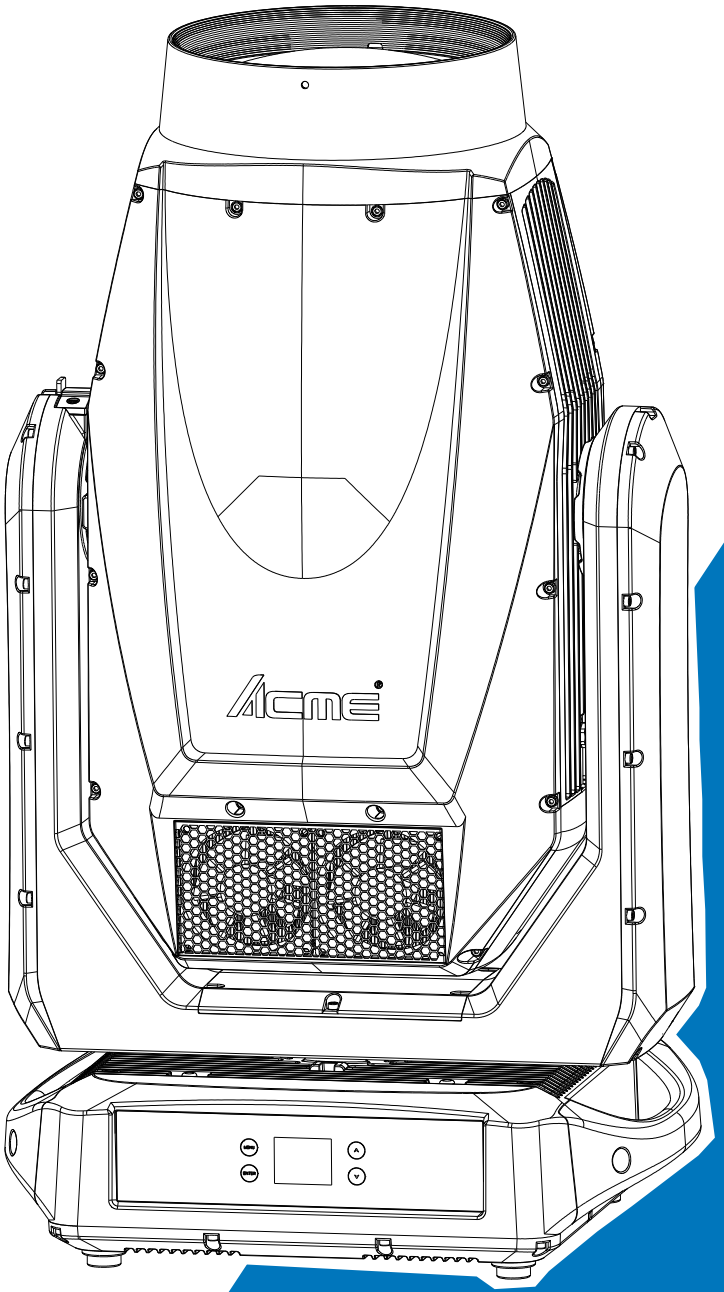
ACME

ECO 30 IP



User Manual

Please read the instruction carefully before use

CONTENTS

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:

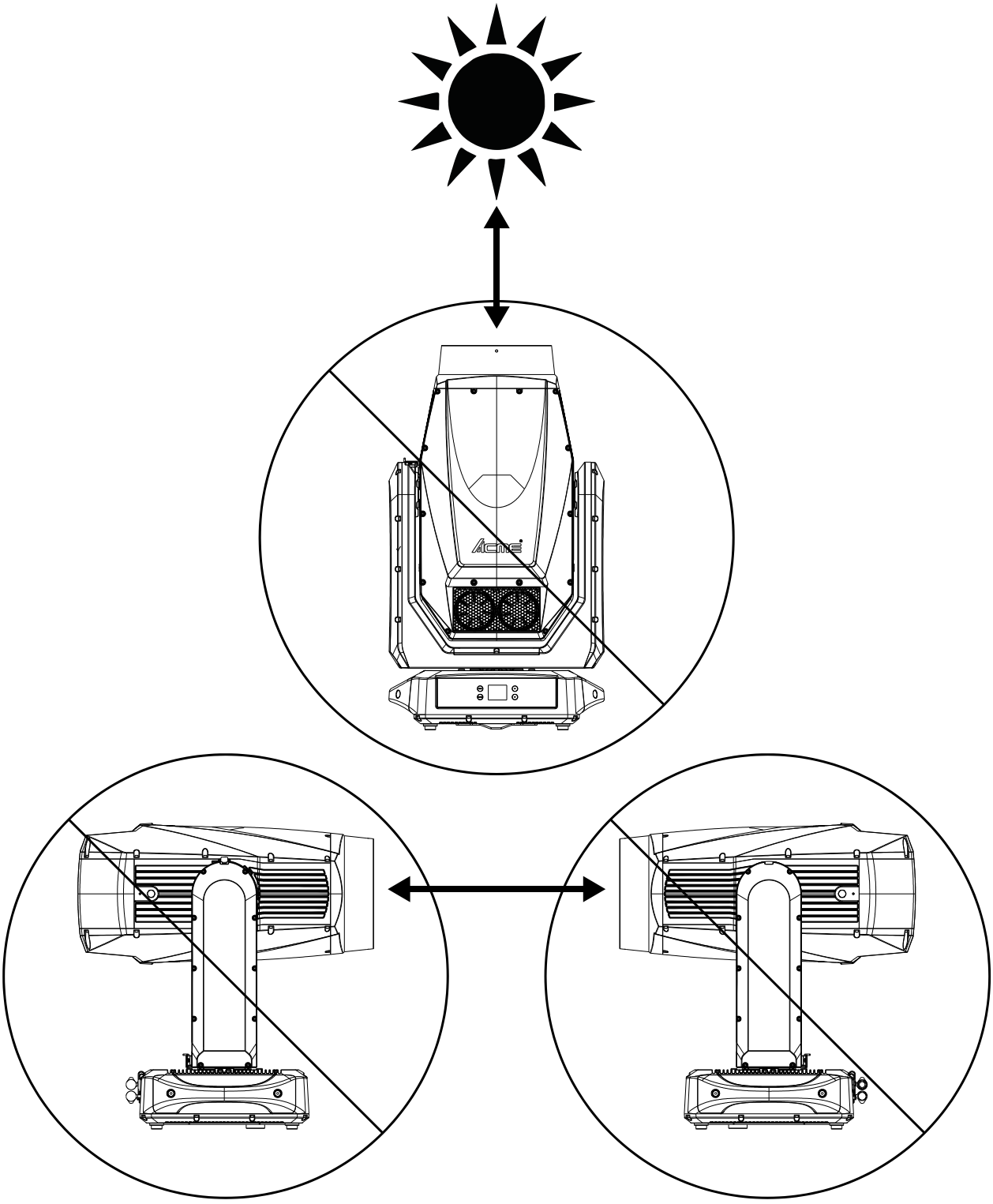
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is 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 chain (made of steel, min. diameter 4.0mm) when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -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.
- Unit's surface temperature may reach up to 70˚C. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. 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 4 meters.
- 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/ Consignes de sécurité

Veuillez lire attentivement les instructions qui contiennent des informations importantes sur l'installation, l'utilisation et l'entretien.

ATTENTION

Veuillez conserver ce guide de l'utilisateur pour une 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 résultent.

- Déballez et vérifiez soigneusement qu'il n'y a pas de dommages dus au transport avant d'utiliser l'appareil.
- Ce produit convient aux endroits humides. Ne pas immerger dans l'eau.
- L'installation et la mise en fonctionnement doit être effectué par un opérateur qualifié.
- NE PAS permettre aux enfants d'utiliser l'appareil.
- Utilisez une chaîne de sécurité lors de la fixation de l'unité. Manipulez l'appareil en portant sa base au lieu de la tête uniquement.
- L'unité doit être installée dans un endroit avec une ventilation adéquate, à au moins 50cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente d'aération du luminaire n'est obstruée, sinon il risque de surchauffer.
- Avant toute utilisation, assurez-vous que vous connectez ce luminaire à la tension appropriée conformément aux spécifications que vous trouverez dans ce manuel ou sur l'étiquette des spécifications collée sur la base du luminaire.
- Il est important de relier le file jaune/vert à la terre afin d'éviter tout choc électrique.
- Température ambiante minimale TA: -10˚C. Température ambiante maximale TA: 40˚C. N'utilisez pas ce luminaire à des températures inférieures ou supérieures.
- NE PAS connecter le luminaire à un pack de gradateurs.
- Gardez les matériaux inflammables à l'écart du luminaire pendant le fonctionnement pour éviter tout risque d'incendie.

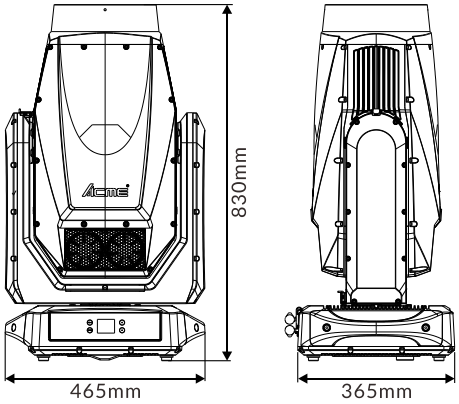
- Assurez-vous que le cordon d'alimentation n'est pas pincé ou endommagé; remplacez-le immédiatement s'il est endommagé.
- La température de surface de l'unité peut atteindre 70℃. NE PAS toucher les capots à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou du métal ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation secteur.
- NE PAS utiliser le luminaire dans un environnement sale ou poussiéreux. Cette appareil doit être nettoyer régulièrement.
- NE touchez AUCUN file pendant le fonctionnement car il pourrait y avoir un risque de choc électrique.
- Évitez l'enchevêtrement du cordon d'alimentation avec d'autres fils.
- La distance minimale de projection sur des objets ou sur des surfaces doit être supérieure à 4 mètres.
- En cas de problème de fonctionnement grave, arrêtez immédiatement d'utiliser l'appareil.
- N'allumez et n'éteignez jamais ce luminaire à maintes 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 réparable par l'utilisateur.
- NE PAS mettre ce luminaire en fonctionnement s'il est endommagé. N'effectuez pas de réparations vous-même. Les réparations ne doivent être effectuées par des personnes non qualifiées, cela peut entraîner des dommages ou des dysfonctionnements. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez ce produit du secteur avant de procéder à l'entretien.
- Utiliser l'emballage d'origine si l'appareil doit être transporté.
- Vérifiez que le verrouillage de l'inclinaison de la tête est déverrouillé avant de l'emballer pour le transport.
- Évitez une exposition directe des yeux à la source lumineuse lorsque le produit est allumé.
- N'utilisez PAS ce produit si vous constatez des dommages sur le boîtier, les blindages ou les câbles. Faites remplacer immédiatement les pièces endommagées par un technicien agréé.

- Les sources externes de rayons lumineux provenant de la lumière directe du soleil ou de toute autre source de lumière forte, qui pénètrent la lentille avant des appareils d'éclairage, peuvent causer de graves dommages internes. N'exposez PAS la lentille frontale du projecteur à des faisceaux lumineux provenant de la lumière directe du soleil ou de toute autre source de lumière intense, quel que soit l'angle, pendant le déballage, l'installation, l'utilisation et les périodes d'inactivité prolongées à l'extérieur. NE concentrez PAS un faisceau lumineux provenant d'un appareil d'éclairage directement vers un autre.

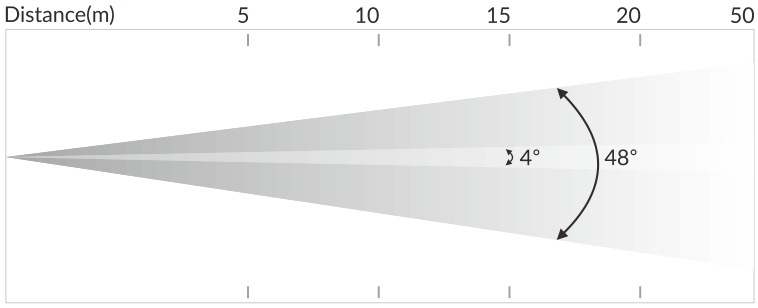
02/ Technical Specifications

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
	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

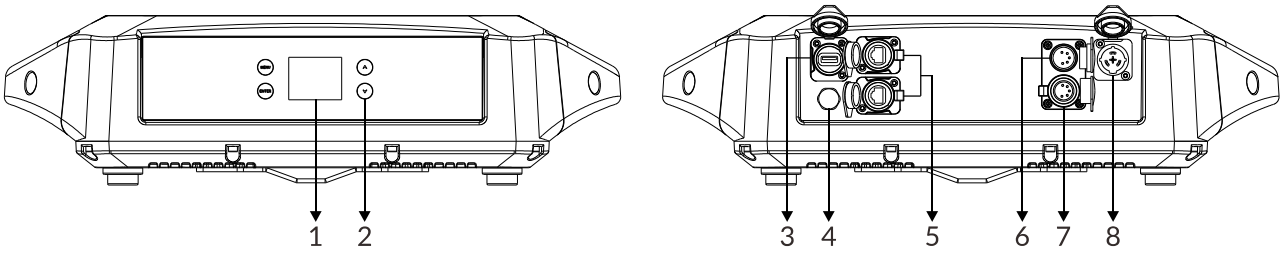


Photometric Diagram:



4° Lux	101,600	25,400	11,288	6,350	1,016
Diameter(m)	0.35	0.70	1.04	1.40	3.50
48° Lux	4,560	1,140	506	285	45
Diameter(m)	4.45	8.90	13.30	17.80	44.50

03/ Overview



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

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!

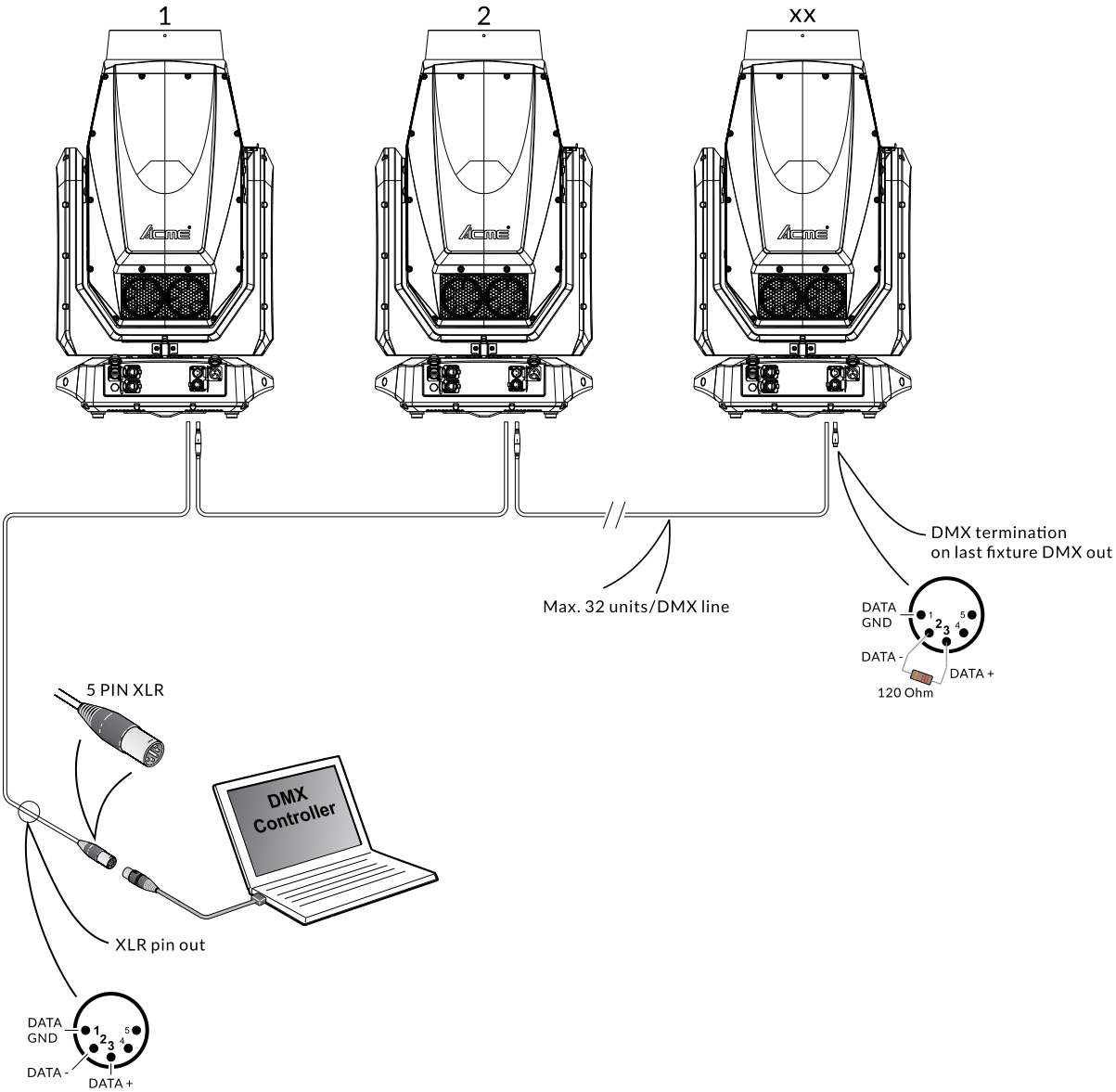
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

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

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

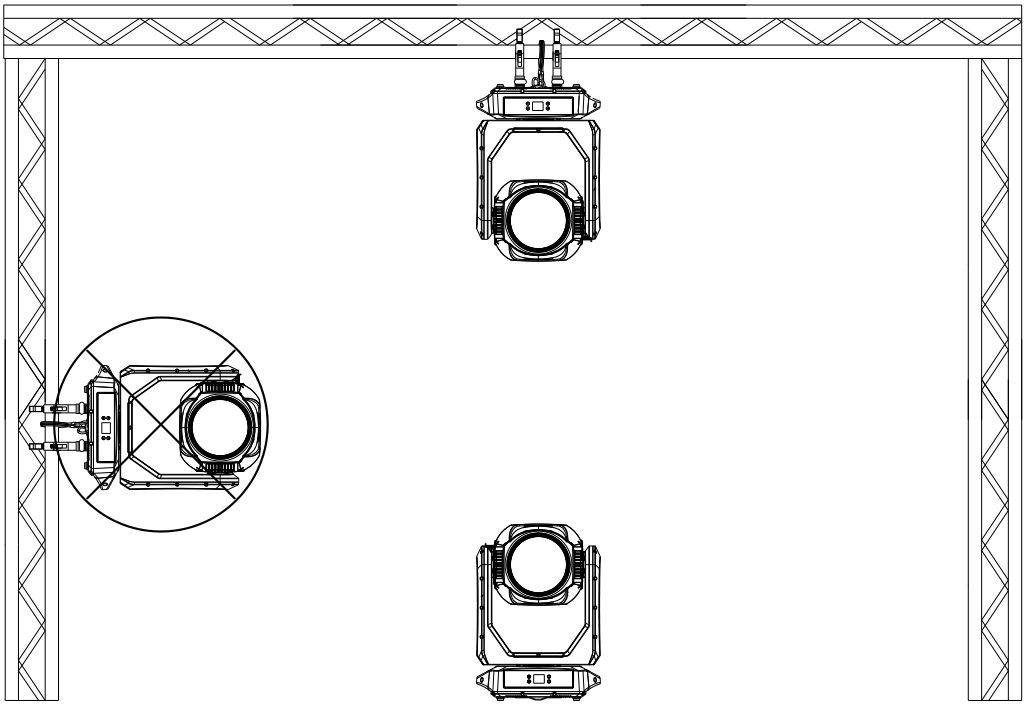
The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

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

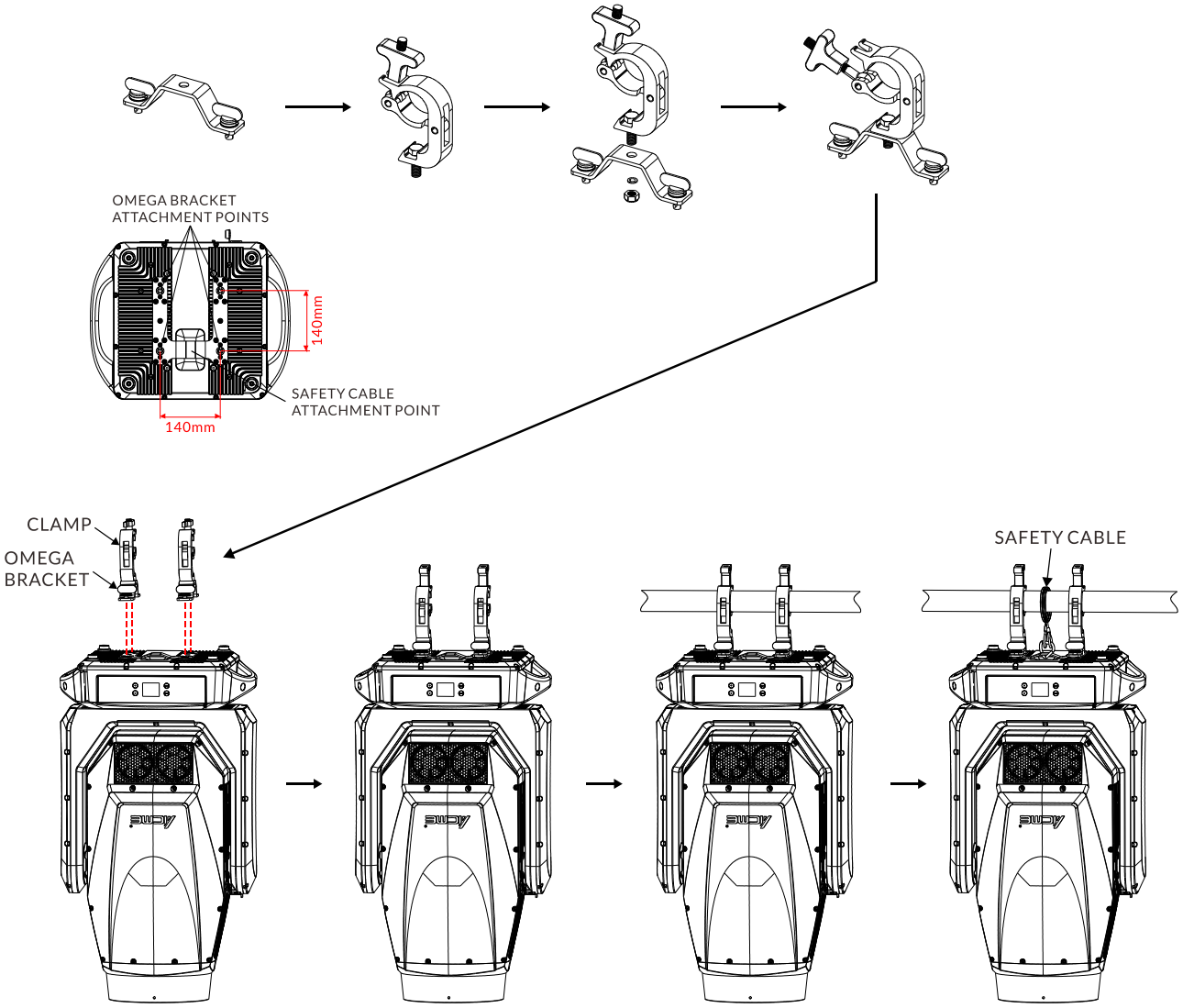
DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

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.

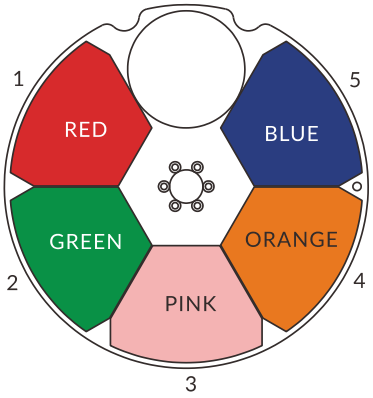
This fixture is fully operational in two different mounting positions: hanging upside-down, or standing on the floor. DO NOT mount this fixture sideways on trussing. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



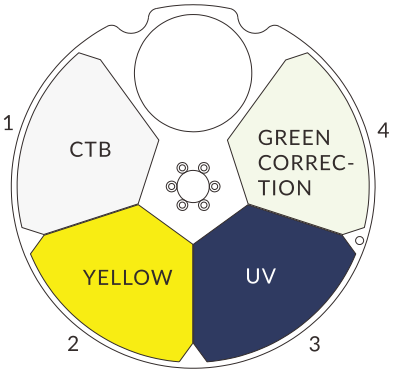
Steps for installing omega brackets to the fixture:



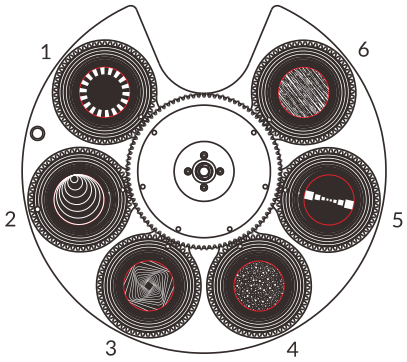
06/ Effect Wheels



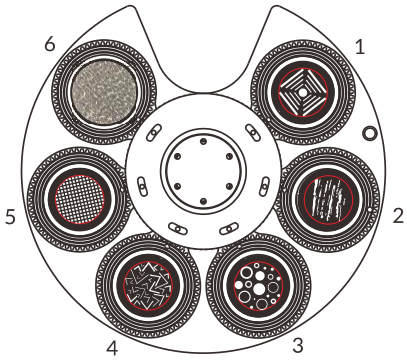
Color Wheel 1



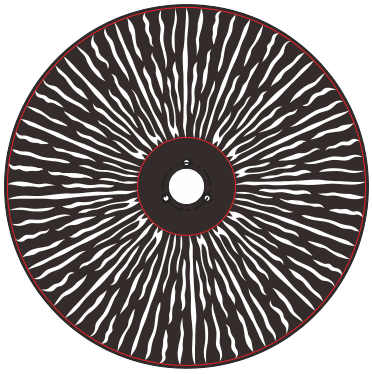
Color Wheel 2



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

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 will be automatically locked if there is no operation for a long time, and can be unlocked by long-pressing the [MENU] button.

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES		
DMX Settings	DMX Address	1-470 (43 CH)	(Default=1)	
		1-479 (34 CH)		
		1-481 (32 CH)		
		1-490 (23 CH)		
	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 1:002.xxx.xxx.xxx	
			Default 2:010.xxx.xxx.xxx	
			Manual:xxx.xxx.xxx.xxx	
		Sub-Net Mask	xxx.xxx.xxx.xxx	
	Art-Net Settings	Net	0-127	(Default=0)
		Sub-Net	0-15	(Default=0)
		Universe	0-15	(Default=0)
	sACN Settings	Universe	1-32000	(Default=1)
		Priority	0-200	(Default=100)

MAIN MENU	SUBMENU	CHOICES/VALUES	
	Network to DMX	No	
		Yes	
Fixture Settings	Pan Invert	No	
		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
	Cooling Mode	Standard	
		Quiet	
		Theatre	
	Bright Calibration	50-100	(Default=100)
	Blade Mode	Mode 1	
		Mode 2	
	Led Refresh Rate	900Hz	
		1000Hz	
		1100Hz	
		1200Hz	
		1300Hz	
		1400Hz	
		1500Hz	
		2500Hz	
		4000Hz	
		5000Hz	
		6000Hz	
		10KHz	
		15KHz	
		20KHz	
		25KHz	
	Gobo Short Cut	Enable	
		Disable	

MAIN MENU	SUBMENU	CHOICES/VALUES	
	Color Short Cut	Enable	
		Disable	
	CTB Compensate	Enable	
		Disable	
Display Settings	Display Invert	No	
		Yes	
	Backlight Intensity	1-10	(Default=10)
	Temperature Unit	°C	
		°F	
	Language	English	
		Chinese	
Fixture Test	Auto Test	Single	
		Cycle	
	Manual Test	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

MAIN MENU	SUBMENU	CHOICES/VALUES		
		Blade DW 2	0-255	
		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	Fixture Use Hour			
	LED Use Hour	Total LED Hour		
		LED On Hour		
		LED Hours Reset	Password=050	
	Humidity		Cur	Max
		Head		
		Base		
	Temperature		Current	Max
		LED's		
	Fan State	B_FAN 1-2		
		A_FAN 1		
		H_FAN 1-11		
	Upgrade File			
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Log	No	
			Yes	Password=050
Reset Function	Pan/Tilt Reset	No		
		Yes		
	Effect Reset	No		
		Yes		
	All Reset	No		
		Yes		
Special Function	Factory 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, 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, Dimmer Speed, Dimmer Curve, Cooling Mode, Bright Calibration, Blade Mode, Led Refresh Rate, Gobo Short Cut, Color Short Cut** or **CTB Compensate.**

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.

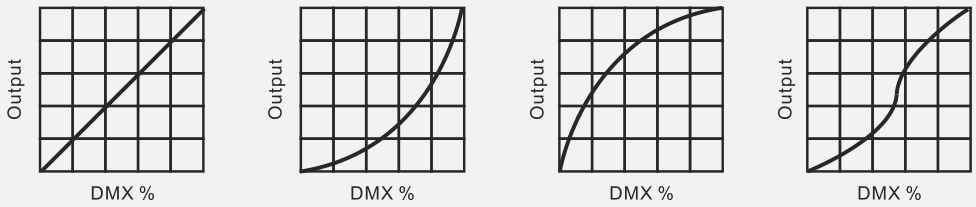
Dimmer Curve

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



Optically Linear Square Law Inverse Square Law S-curve

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

Cooling Mode

Select **Cooling 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.

Display Settings

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

Display Invert

Select **Display Invert,** press ENTER.
Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Backlight Intensity

Select **Backlight Intensity,** press ENTER.
Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Temperature Unit

Select **Temperature Unit,** press ENTER.
Use UP/DOWN button to select **°C** or **°F**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Language

Select **Language,** press ENTER.
Use UP/DOWN button to select **English** or **Chinese**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Fixture Test

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

Auto Test

Select **Auto Test,** press ENTER.
Use UP/DOWN button to select **Single** (the device immediately performs a single automatic self-test) or **Cycle** (the device immediately performs a cyclic automatic self-test), confirm your selection with ENTER.
To exit the menu, press MENU.

Manual Test

Select **Manual Test,** press ENTER.
Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.
Use UP/DOWN button to select a value, confirm your selection with ENTER.
To exit the menu, press MENU.
(The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **Fixture Use Hour, LED Use Hour, Humidity, Temperature, Fan State, Upgrade File, 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.

Upgrade File

Select **Upgrade File,** press ENTER.
The upgrade file is displayed.
To exit the menu, press MENU, or wait 30 seconds.

Firmware Version

Select **Firmware Version,** press ENTER.
The firmware version is displayed.
To exit the menu, press MENU, or wait 30 seconds.

RDM UID

Select **RDM UID,** press ENTER.
The RDM UID is displayed.
To exit the menu, press MENU, or wait 30 seconds.

Error Logs

Select **Error Logs,** press ENTER.
Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.
The error list is displayed.
Use UP/DOWN button to select **Reset Error Log**, confirm your selection with ENTER.
If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.
If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.
To exit the menu, press MENU, or wait 30 seconds.

Reset Function

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

Pan/Tilt Reset

Select **Pan/Tilt Reset,** press ENTER.
Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset pan/tilt to their home positions), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Effect Reset

Select **Effect Reset,** press ENTER.
Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset effect to their home positions), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

All Reset

Select **All Reset,** press ENTER.
Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **Factory Settings.**

Factory Settings

Select **Factory Settings,** press ENTER.
If you wish to reset the device to the factory settings, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

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

The parameter IDs are implemented as follows for different commands:

Parameter ID	Command 'Discovery'	Command 'Set'	Command 'Get'
DISC_UNIQUE_BRANCH	√		
DISC_MUTE	√		
DISC_UN_MUTE	√		
DEVICE_INFO			√
SUPPORTED_PARAMETERS			√
SOFTWARE_VERSION_LABEL			√
DMX_START_ADDRESS		√	√
IDENTIFY_DEVICE		√	√
DEVICE_MODEL_DESCRIPTION			√
PARAMETER_DESCRIPTION			√
MANUFACTURER_LABEL			√
DEVICE_LABEL		√	√
FACTORY_DEFAULTS		√	√
BOOT_SOFTWARE_VERSION_ID			√
BOOT_SOFTWARE_VERSION_LABEL			√
DMX_PERSONALITY		√	√
DMX_PERSONALITY_DESCRIPTION			√
SLOT_INFO			√
SLOT_DESCRIPTION			√
SENSOR_DEFINITION			√
SENSOR_VALUE			√
DEVICE_HOURS			√
LAMP_HOURS			√
PAN_INVERT		√	√
TILT_INVERT		√	√
RESET_DEVICE		√	
CURVE		√	√
DMX_STATE		√	√
DIMMER_SPEED		√	√

√ -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	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

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	000-007 008-018 019-029 030-040 041-051 052-063 064-068 069-073 074-078 079-083 084-088 089-093 094-098 099-103 104-108 109-113 114-118 119-123 124-127 128-189	**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 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.)
				000-005	Null
				006-007	Null
				008-009	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	Cooling Mode: Standard
				080-089	Cooling Mode: Quiet
				090-099	Cooling Mode: Theatre
				100-109	LED Frequency Setting Enable
				110-119	LED Frequency Setting Disable
				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
				160-169	Dimmer Curve: Mode 1
				170-179	Dimmer Curve: Mode 2
				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
				242-255	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.

Base Fan 1/2 Stop Err

Check whether the fan circuit on the motherboard breaks down.
Check whether the component is damaged.

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.

Arm Fan 1 Stop Err

Check whether the fan circuit on the motherboard breaks down.
Check whether the component is damaged.

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.

Head Fan 1/2/3/4/5/6/7/8/9/10/11 Stop Err

Check whether the fan circuit on the motherboard breaks down.
Check whether the component is damaged.

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.

NTC Error

The electronic components of the A board are faulty and the A board needs to be replaced.

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.

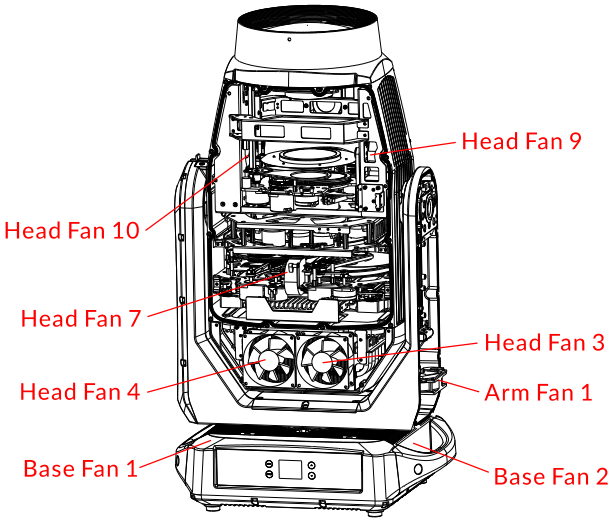
Base Humidity Error

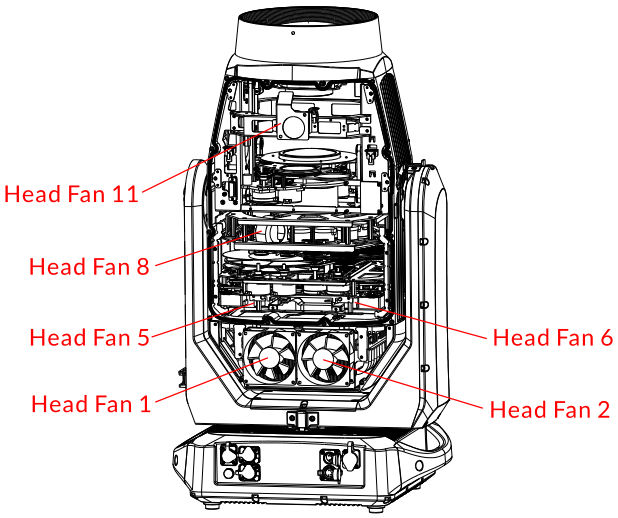
Check whether the humidity sensor is faulty.
Check whether the lead connecting the humidity sensor is installed in place or disconnected.

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.