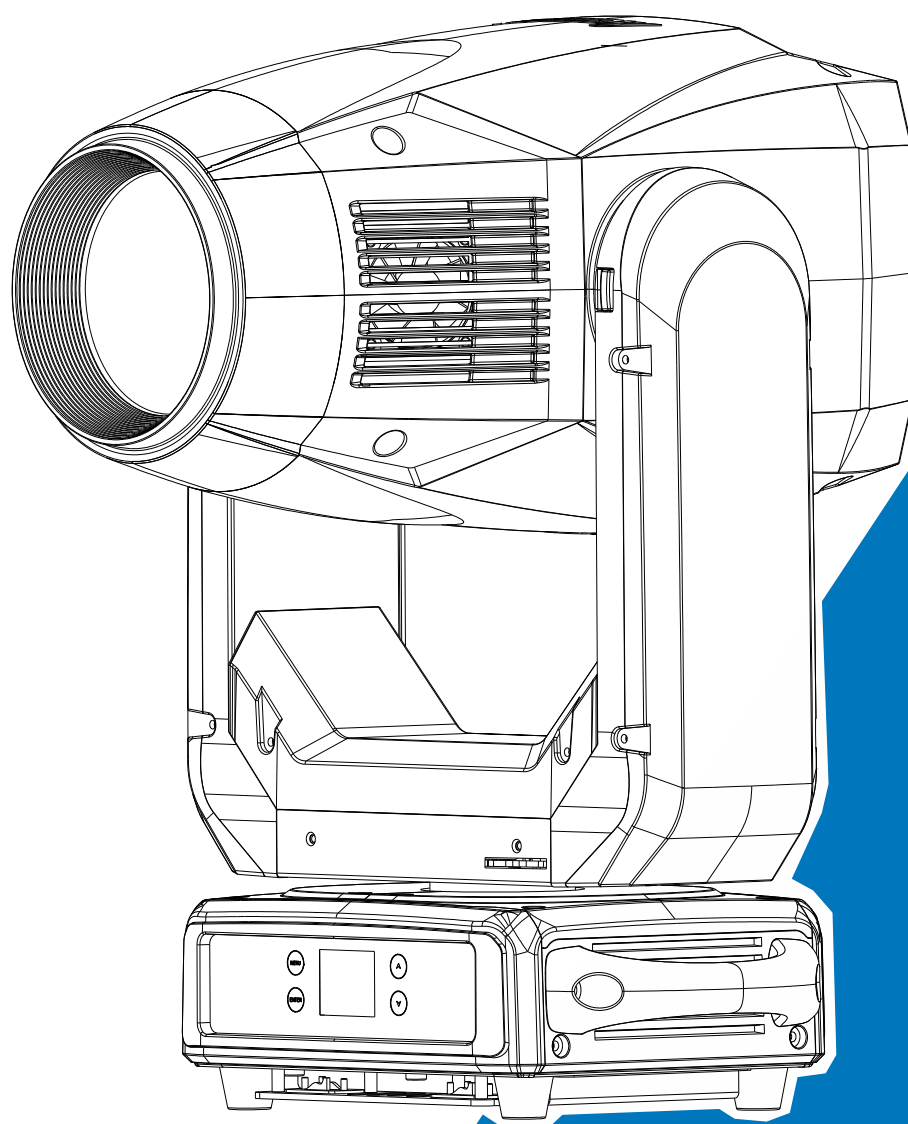




GEIST BSWF



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.....	15
06/ Effect Wheels	17
07/ Operation	21
7.1 Control Menu.....	21
7.2 Home Position Adjustment	33
08/ Configuring the Device for DMX Control.....	39
8.1 Address Setting.....	39
8.2 DMX Protocol.....	40
09/ Error Information	44
10/ Troubleshooting	54
11/ Fixture Cleaning.....	55
12/ Approvals and Certifications	56

01/ Safety Information



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

WARNING

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

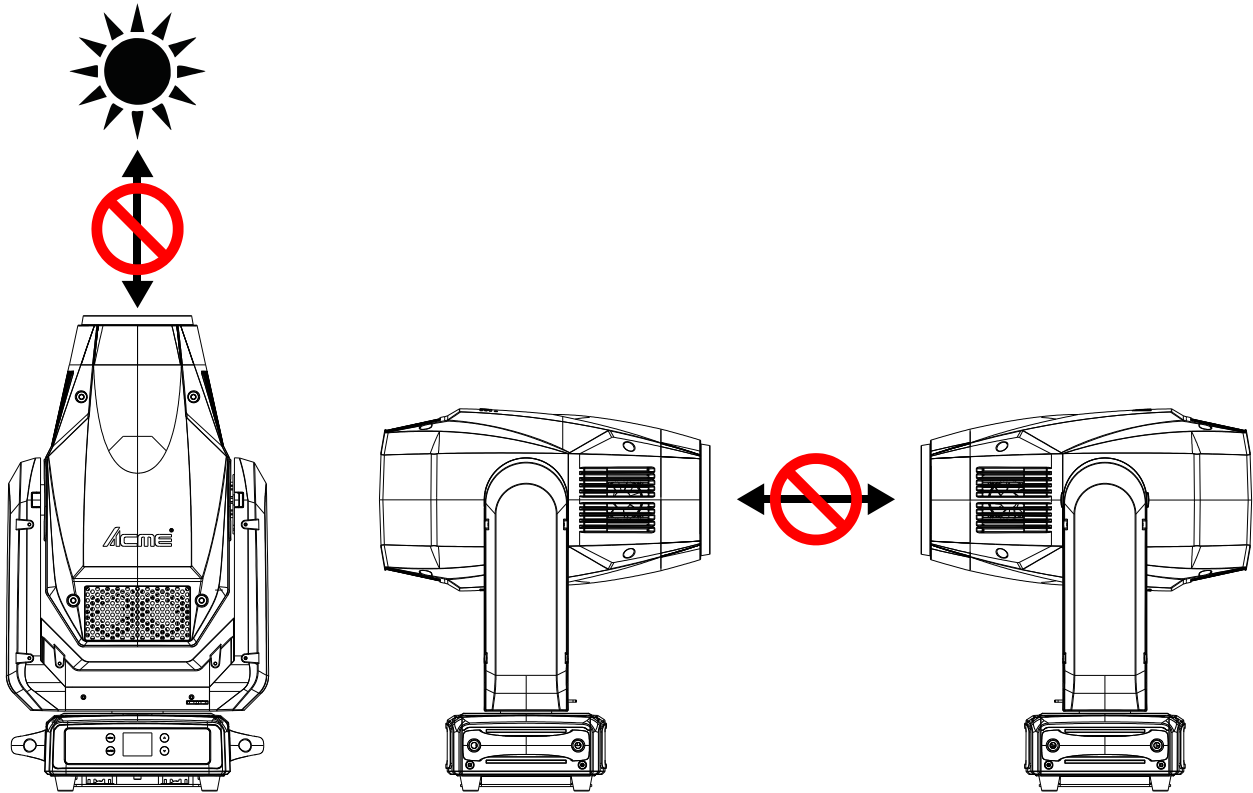
Important:

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

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 65°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 3 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Check that the head tilt lock is released before packing for transportation.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.



01/ Informations de sécurité



AVERTISSEMENT

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 destiné à une utilisation en intérieur uniquement. Utilisez-le uniquement dans un endroit sec.
- FAIRE installer et utiliser par un opérateur qualifié.
- NE PAS laisser les enfants manipuler l'appareil.
- Utiliser une chaîne de sécurité lors de la fixation de l'appareil. Manipuler l'appareil en portant sa base et non uniquement par la tête.
- L'appareil doit être installé dans un endroit bien ventilé, à au moins 50 cm des surfaces adjacentes.
- Assurez-vous qu'aucune fente de ventilation n'est obstruée, sinon l'appareil surchauffera.
- Avant utilisation, assurez-vous de connecter ce produit à la tension appropriée conformément aux spécifications de ce manuel ou à l'étiquette des spécifications du produit.
- Il est important de mettre le conducteur jaune/vert à la terre pour éviter tout risque de choc électrique.
- Température ambiante minimale (TA): 0°C. Température ambiante maximale (TA): 40°C.
Ne pas utiliser ce produit à une température inférieure ou supérieure.
- NE PAS connecter l'appareil à un gradateur (dimmer pack).
- Éloigner les matériaux inflammables de l'appareil pendant son fonctionnement pour éviter tout risque d'incendie.

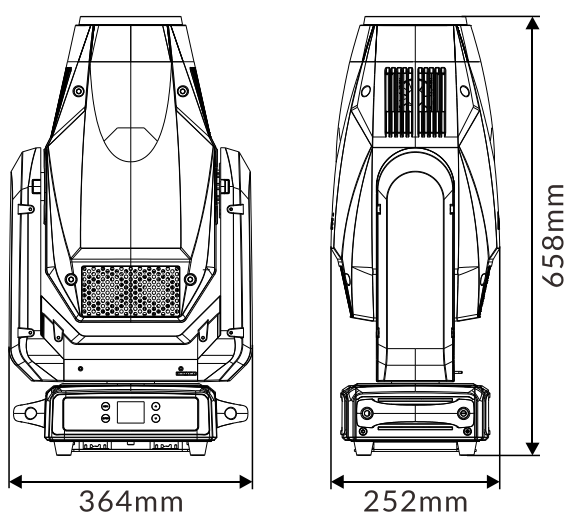
- Vérifier que le cordon d'alimentation n'est ni écrasé ni endommagé; le remplacer immédiatement s'il est endommagé.
- La température de surface de l'appareil peut atteindre jusqu'à 65°C. NE PAS toucher le boîtier à mains nues pendant son fonctionnement.
- Évitez que des liquides inflammables, de l'eau ou des objets métalliques ne pénètrent dans l'appareil. Si cela se produit, coupez immédiatement l'alimentation électrique.
- NE PAS utiliser l'appareil dans un environnement sale ou poussiéreux. Nettoyez régulièrement l'appareil.
- NE PAS toucher de fils pendant le fonctionnement, car cela pourrait présenter un risque de choc électrique.
- Évitez que le cordon d'alimentation ne s'emmêle avec d'autres fils.
- La distance minimale par rapport aux objets/surfaces doit être de plus de 3 mètres.
- Débranchez l'alimentation électrique avant de remplacer le fusible ou d'effectuer toute maintenance.
- Remplacez le fusible uniquement par un modèle de même type.
- En cas de problème de fonctionnement grave, cessez immédiatement d'utiliser l'appareil.
- Ne jamais allumer et éteindre l'appareil à plusieurs reprises.
- Le boîtier, les lentilles ou le filtre ultraviolet doivent être remplacés s'ils sont visiblement endommagés.
- NE PAS ouvrir le boîtier, car il ne contient aucune pièce pouvant être réparée par l'utilisateur.
- NE PAS tenter d'utiliser cet appareil s'il est endommagé. NE PAS tenter de réparations vous-même. Les réparations effectuées par des personnes non qualifiées peuvent entraîner des dommages ou un dysfonctionnement. Veuillez contacter le centre d'assistance technique agréé le plus proche si nécessaire.
- Débranchez l'appareil de sa source d'alimentation avant toute maintenance.
- UTILISEZ l'emballage d'origine si l'appareil doit être transporté.
- Vérifiez que le verrou d'inclinaison de la tête est libéré avant l'emballage pour le transport.
- Évitez une exposition directe des yeux à la source lumineuse lorsque l'appareil est allumé.

- NE PAS utiliser ce produit si vous constatez des dommages sur le boîtier, les protections ou les câbles. Faites remplacer les pièces endommagées par un technicien agréé immédiatement.
- Les sources externes de rayons lumineux, comme la lumière directe du soleil ou toute autre source lumineuse intense, qui pénètrent à travers la lentille frontale des appareils d'éclairage, peuvent causer des dommages internes graves. NE PAS exposer la lentille frontale de l'appareil à des rayons lumineux provenant de la lumière directe du soleil ou de toute autre source lumineuse intense, sous quelque angle que ce soit, lors du déballage, de l'installation, de l'utilisation ou de périodes d'inactivité prolongées à l'extérieur. NE PAS diriger un faisceau lumineux d'un appareil d'éclairage directement vers un autre.

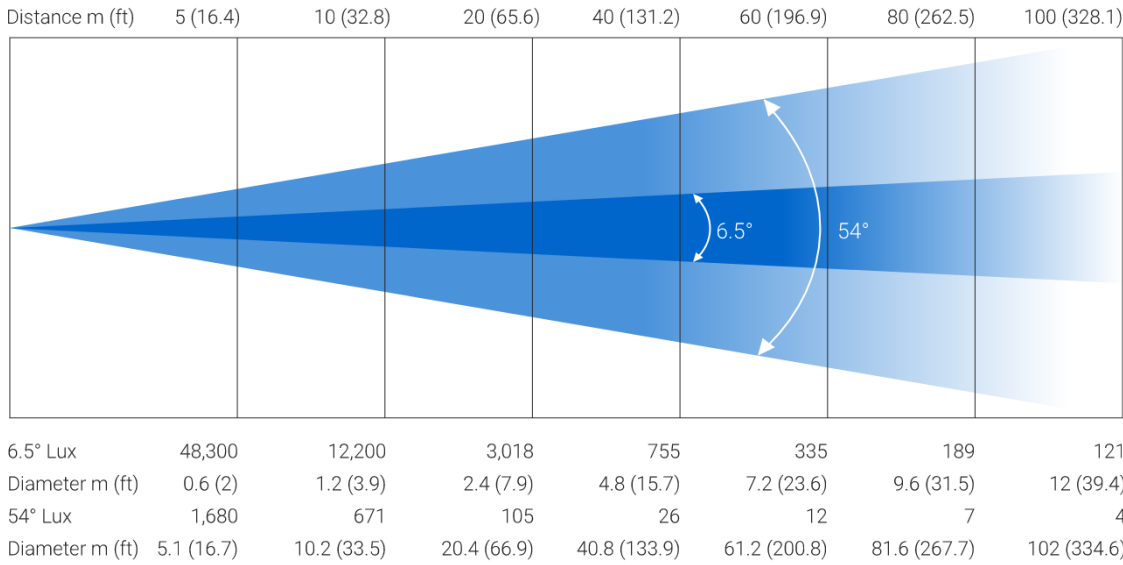
02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	670W	
Light Source	SSL410-80-R72 450W	
Color Temperature	7000K	
Zoom Range	6.5°-54°	
Color Wheel	5 colors + CRI + open	
Gobo Wheels	Static Gobo Wheel	8 gobos + open
	Rotating Gobo Wheel	7 replaceable gobos + open
Movement	Pan	540°
	Tilt	260°
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
	Mechanical pan/tilt lock for safe transportation and maintenance	
Control and Programming	DMX Channels	34/25/29/35
	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	3-pin XLR (optional with 5-pin XLR) RJ45 Connectors
	Power In/Out	Power Connector in/out
	Protection Rating	IP20
Dynamic Effects	Standard Mode: Ra>70	
	High CRI Mode: Ra>90	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	CMY color mixing	
	Variable color temperature control	
	Iris: Variable 0-100%	
	Prism: one indexing/rotating 4-facet circular prism	

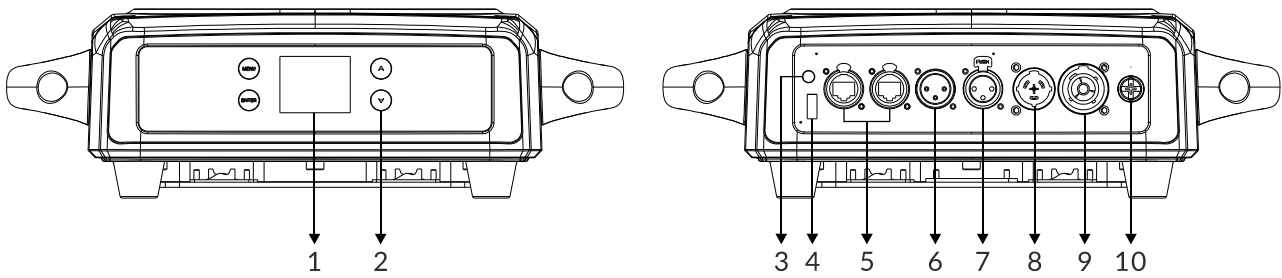
	Frost: soft frost effect and heavy frost effect	
	Motorized zoom	
	Motorized focus	
	Framing: rotatable framing module, +/-45°, 4 x individually controllable full framing blades with variable angle and position	
Included Items	Power Cable	
	Two omega brackets with 1/4-turn fasteners	
	User Manual (this document)	
Dimensions	364x252x658mm	14.3"x9.9"x25.9"
Weight	24.5 kg	54 lbs



Photometric Diagram:



03/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. BATTERY DISPLAY		
4. FIRMWARE UPGRADE	Used to upgrade the fixture's firmware	
5. ETHERNET	Transfers fixture's information to a main controller	
6. DMX IN	For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 5-pin XLR)	
7. DMX OUT	For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin XLR)	
8. POWER IN	To connect to supply power	
9. POWER OUT	To connect to the next fixture	
10. FUSE(T 10A)	Protects the unit from damage of over-voltage or short circuit	

3.1 Battery Power

This product contains a rechargeable battery.

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



Do not expose the fixture or battery to excessive temperatures.

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

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

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

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

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

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

Do not use modified or damaged batteries.

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

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

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

Using the control panel with battery power:

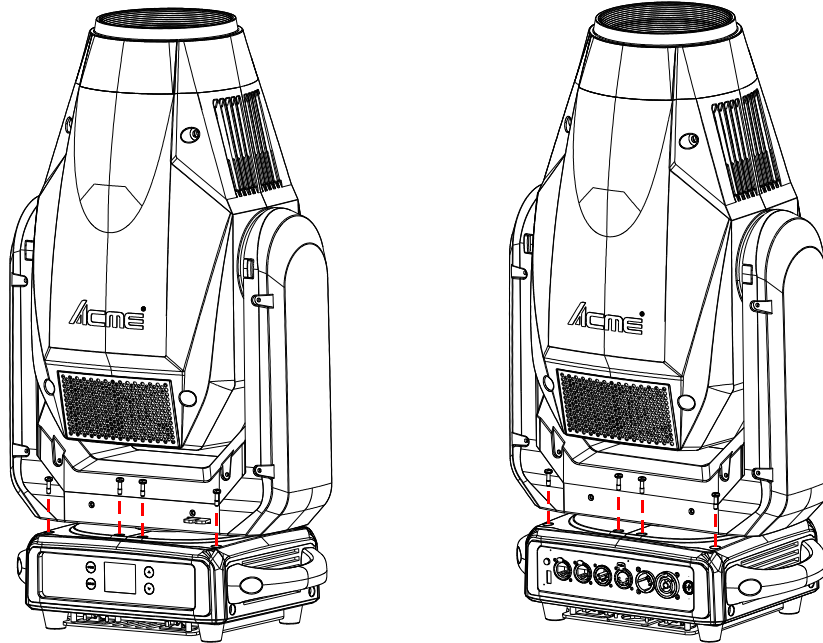
The fixture contains a battery that enables you to use the control panel to set up the fixture even when it is not connected to the main power supply. The battery charges during fixture operation. All of the main setup options in the control panel are accessible on battery power, but the 'Fixture Test'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

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

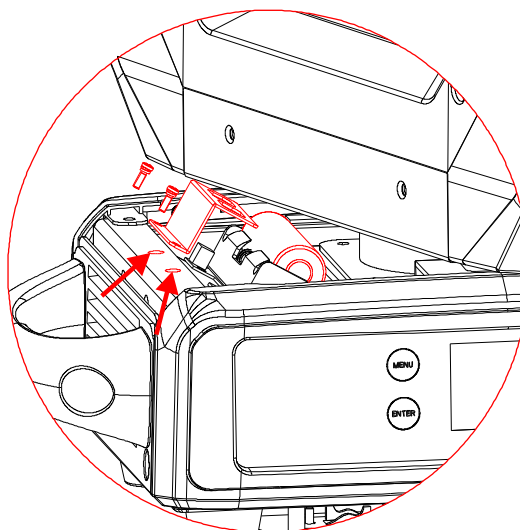
Battery Replacement:

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

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



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



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

04/ Connecting Power and Data

4.1 Connecting Power

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

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

The maximum power consumption is 670W.

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

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

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

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

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

CAUTION!

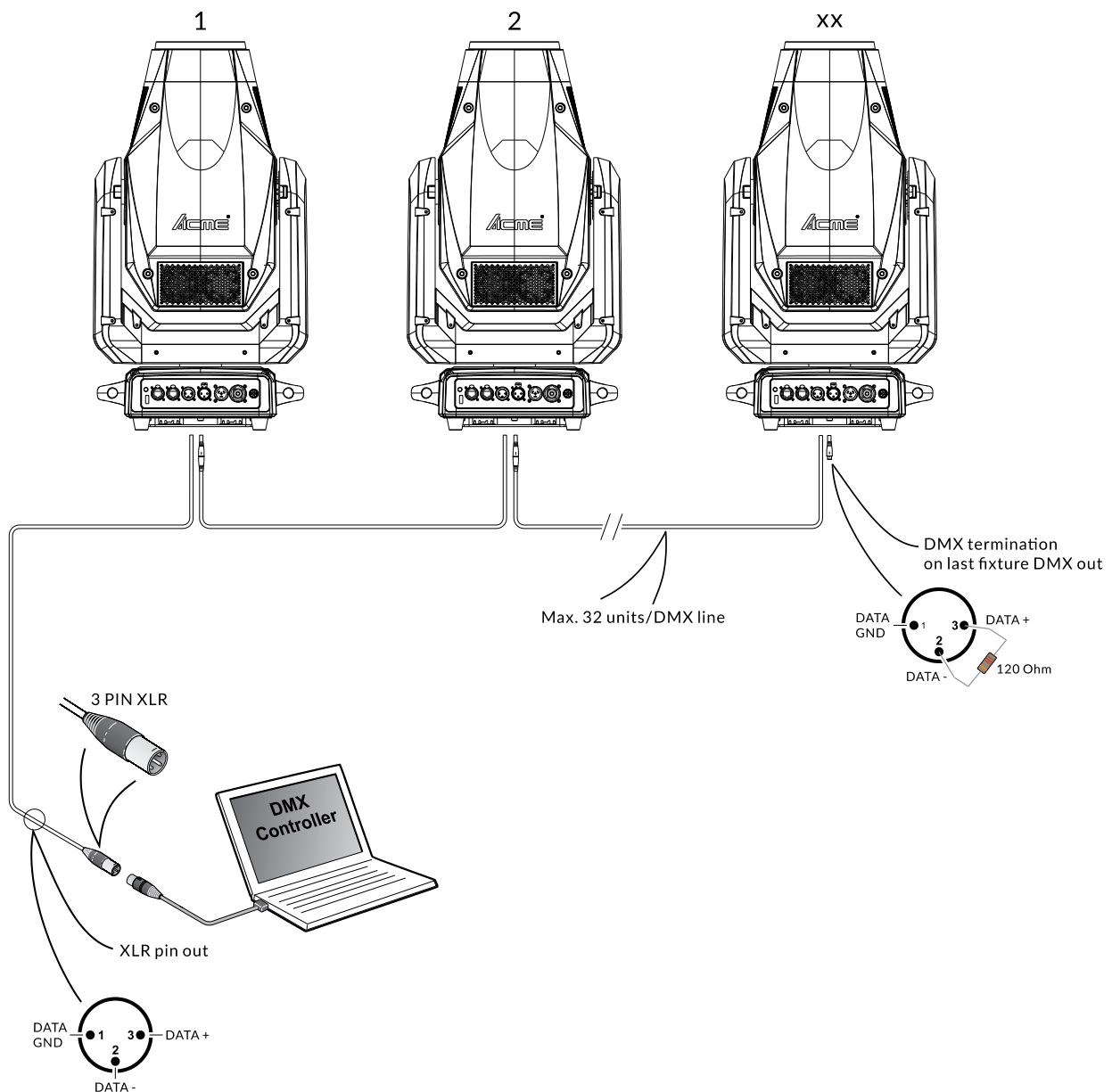
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

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

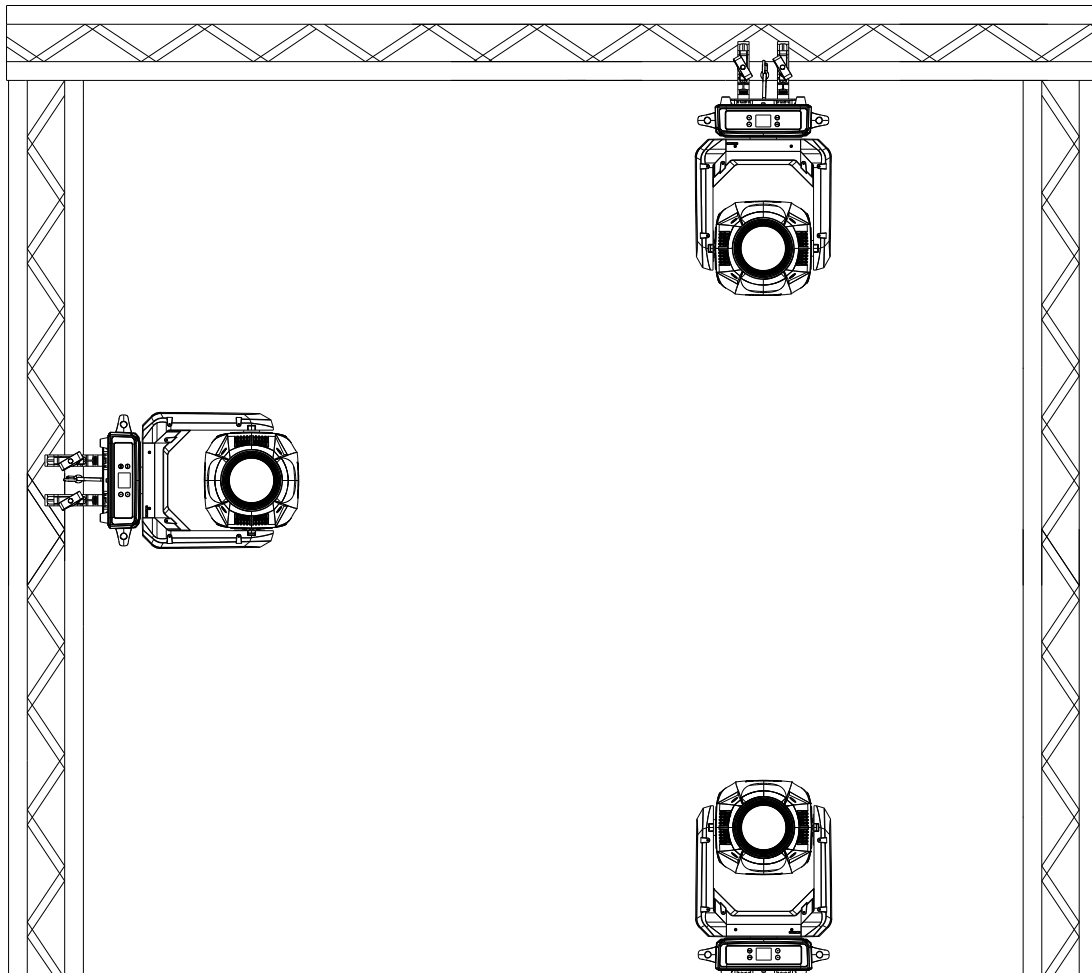
Building a serial DMX chain:

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

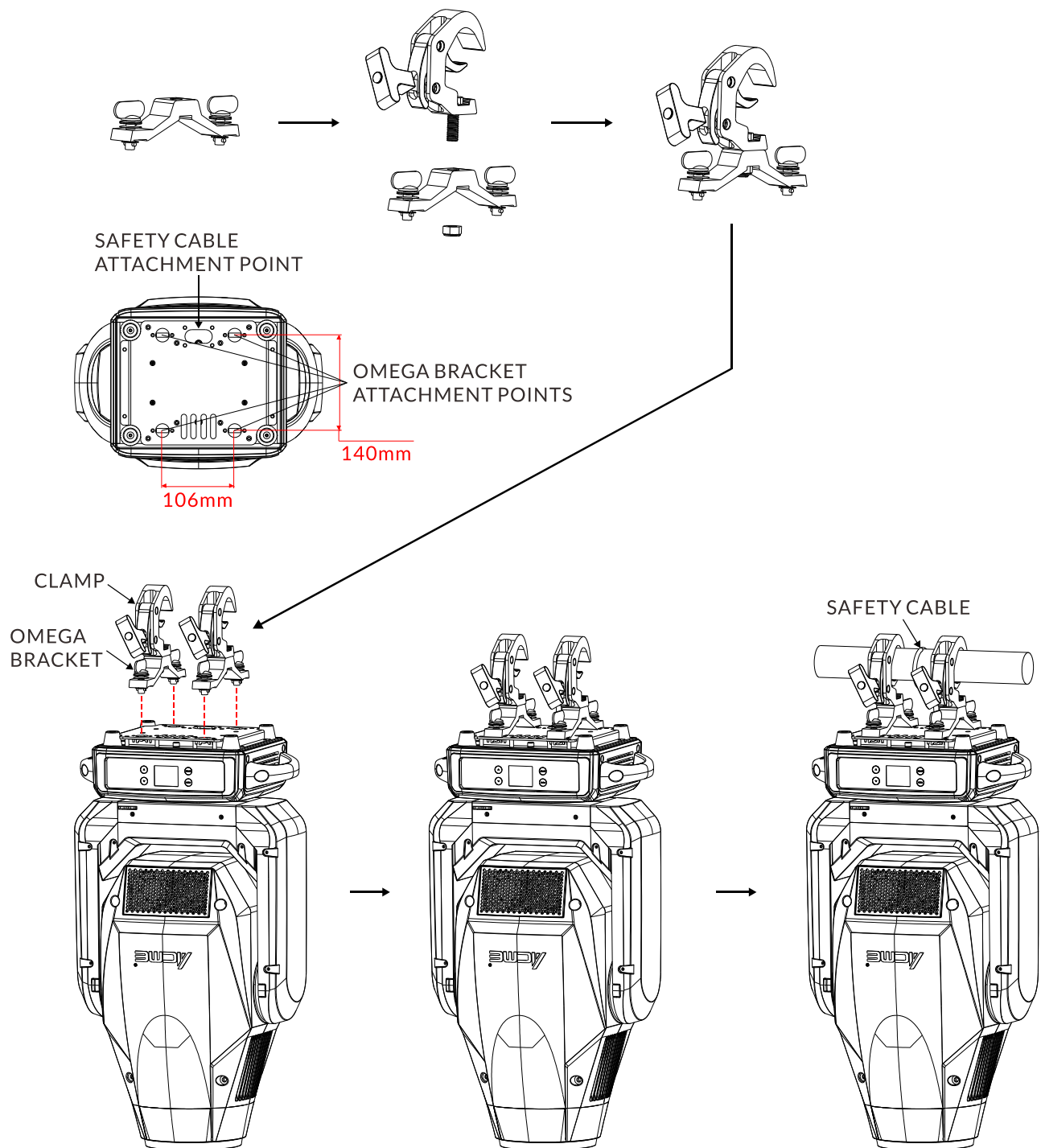


05/ Fixture Installation

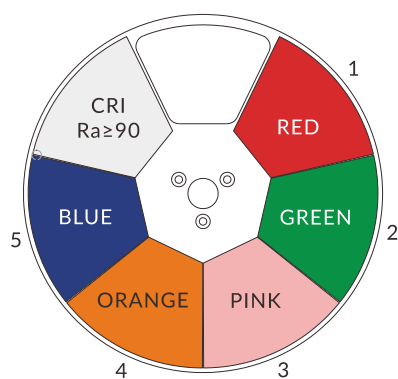
- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- ▶ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.
- ▶ This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on trussing, or standing on the floor. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



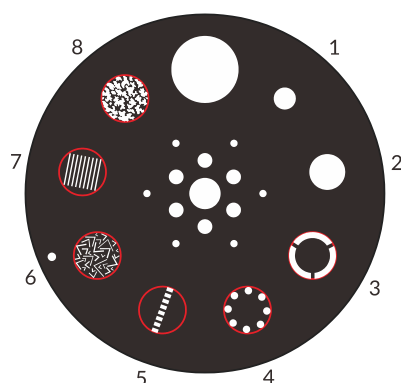
Steps for installing omega brackets:



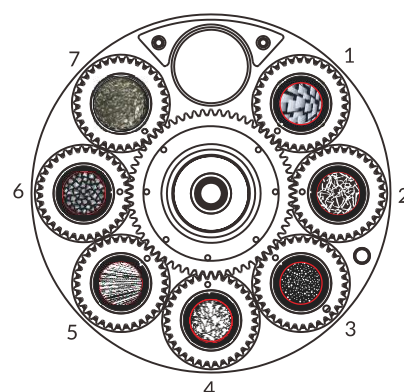
06/ Effect Wheels



Color Wheel



Static Gobo Wheel



Rotating Gobo Wheel

DANGER!

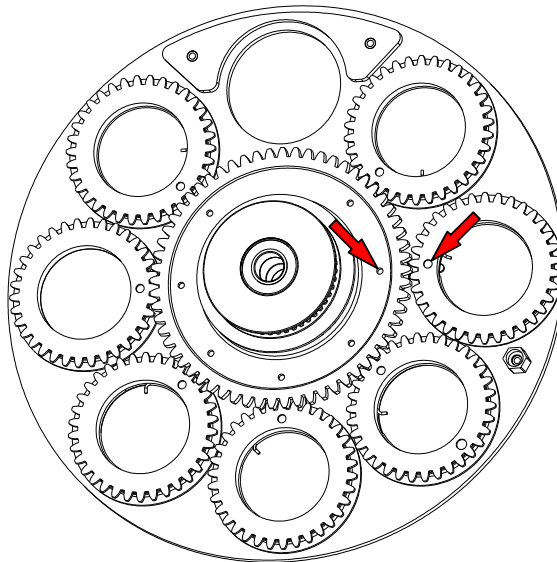
Replace the rotating gobos with the device switched off only.
Unplug from mains before replacing the rotating gobos!

Rotating Gobo Wheel		
Slot	Name	Part Number
Open	Empty	/
1	Draughtboard	3011001097
2	Shredded Paper	3011001098
3	Tiny Bubbles	3011001099
4	Leafy Branches	3011001100
5	Bamboo Forest	3011001101
6	Gravel	3011001102
7	Diamond Glass	3015000886

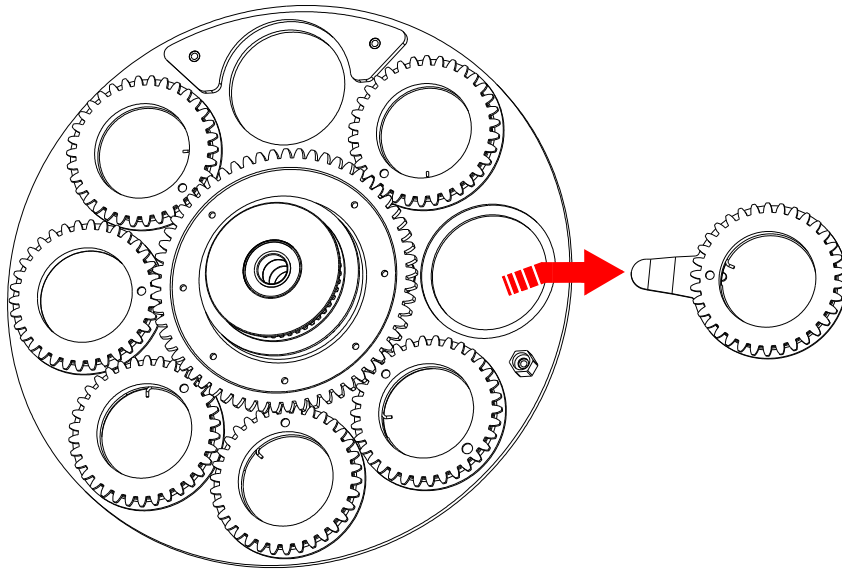
Size of Rotating Gobos				
Slot	Gobo Diameter	Image Area Diameter	Gobo Thickness	Material
1~6	22.5mm±0.3mm	17mm	1.2mm	Quartz Glass
7	22.5mm	/	2.5mm	Borosilicate Glass

Follow these precautions when using and handling rotating gobos:

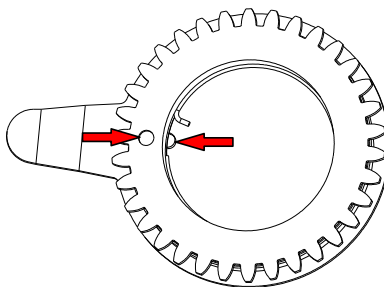
- ▶ Original gobos have a special coating designed specifically to resist to high temperatures. Must use high temperature quartz glass or better glass. Replacement gobos must match the dimensions, construction, materials and quality as the gobos supplied as standard. Using gobos that do not meet this 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.



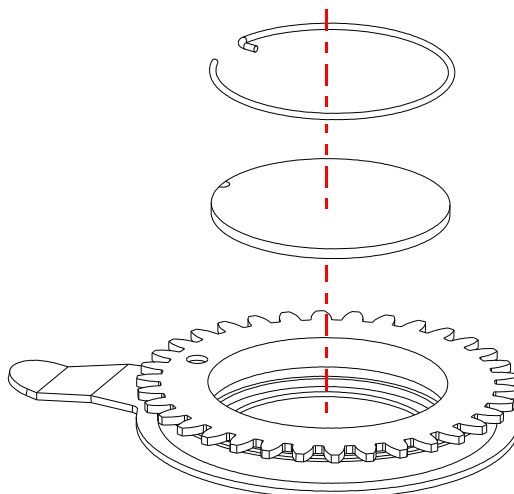
- ▶ Note how the gobo holder tongue engages in a recess in the gobo drive wheel when pulling the gobo holder out of the gobo wheel. You will need to reinstall the gobo holder with the tongue in the same position in the drive wheel.



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

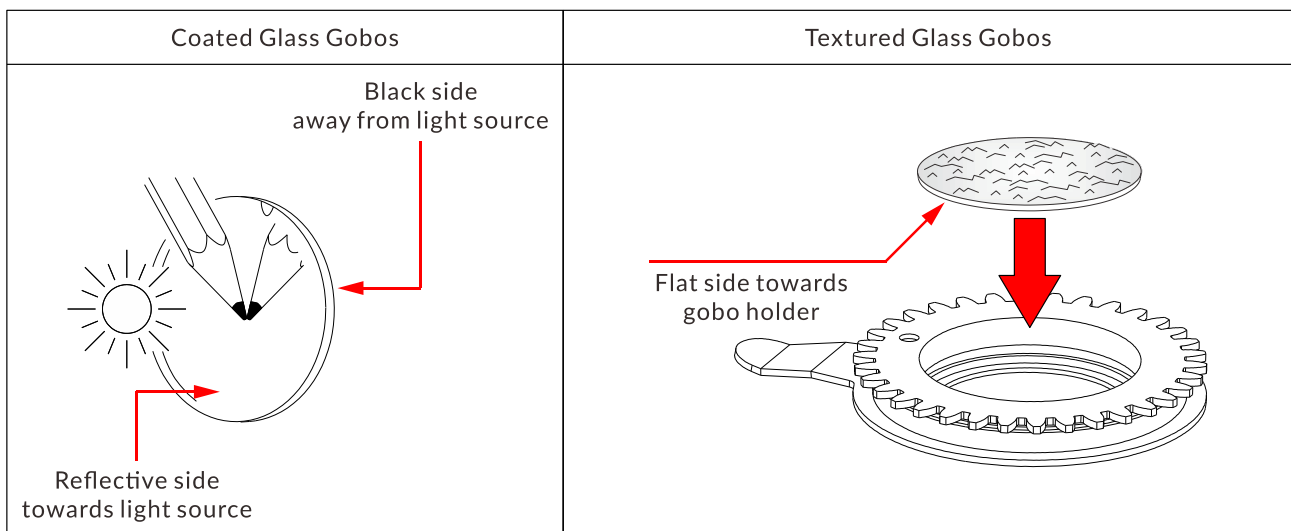


- ▶ With the teeth side of the gobo holder facing upwards, remove the gobo retaining spring carefully with an appropriate tool (e.g. plastic lever) and then remove the original gobo.



- ▶ 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 main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES		
DMX Settings	DMX Address	1-479 (34 CH)	(Default=1)	
		1-488 (25 CH)		
		1-484 (29 CH)		
		1-478 (35 CH)		
	DMX Channel Mode	Mode 1 (34)		
		Mode 2 (25)		
		Mode 3 (29)		
		Mode 4 (35)		
	No DMX Status	Blackout		
		Hold		
		Manual		
	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	sACN Universe	1-32000	(Default=1)
		sACN Priority	0-200	(Default=100)
	Network to DMX	No		
		Yes		

MAIN MENU	SUBMENU	CHOICES/VALUES		
	View DMX Value			
Fixture Settings	Pan Invert	No		
		Yes		
	Tilt Invert	No		
		Yes		
	P/T Feedback	No		
		Yes		
	Dimmer Speed	Fast		
		Smooth		
	Dimmer Curve	Linear		
		Square Law		
		Inv SQ Law		
		S Curve		
Cooling Mode	Auto			
	Quiet			
Display Settings	Display Invert	No		
		Yes		
	Backlight Intensity	1-10	(Default=10)	
	Temperature Unit	°C		
		°F		
	Language	English		
		Chinese		
Fixture Test	Auto Test			
	Manual Test			
Fixture Information	Fixture Use Hour			
	LED Use Hour	Total LED Hour		
		LED On Hour		
		LED Hours Reset	Password=050	
	Temperature			
	Fan State	Head Fan 1-7		
		Base Fan 1-2		
		Arm Fan 1		
	USB Upgrade File			
	Firmware Version			
	Error Logs	Fixture Errors		
		Reset Error Log	No	
			Yes	Password=050

MAIN MENU	SUBMENU	CHOICES/VALUES
Reset Functions	Pan/Tilt Reset	No
		Yes
	Effect Reset	No
		Yes
	All Reset	No
		Yes
Special Functions	Factory Restore	No
		Yes

DMX Settings

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

DMX Address

Select **DMX Address**, press ENTER.

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

CHANNEL MODE	DMX ADDRESS
Mode 1 (34)	1-479
Mode 2 (25)	1-488
Mode 3 (29)	1-484
Mode 4 (35)	1-478

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 **Mode 1 (34)**, **Mode 2 (25)**, **Mode 3 (29)** and **Mode 4 (35)**, 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.

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 **sACN Universe** or **sACN Priority**, confirm your selection with ENTER.

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

Network to DMX

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

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

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

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.

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** or **Cooling 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.

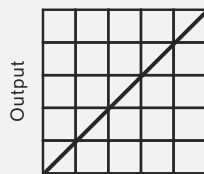
To exit the menu, press MENU, or wait 30 seconds.

Dimmer Curve

Select **Dimmer Curve**, press ENTER.

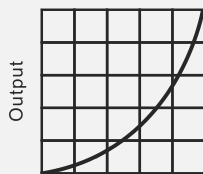
Use UP/DOWN button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

Dimmer Modes



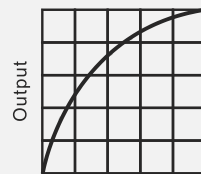
DMX %

Optically Linear



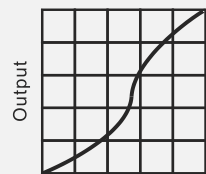
DMX %

Square Law



DMX %

Inverse Square Law



DMX %

S-curve

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

Cooling Mode

Select **Cooling Mode**, press ENTER.

Use UP/DOWN button to select **Auto** or **Quiet**, 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.

The device immediately performs an automatic self-test.

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

Manual Test

Select **Manual Test**, press ENTER.

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

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

To exit the menu, press MENU.

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

Fixture Information

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

Fixture Use Hour

Select **Fixture Use Hour**, press ENTER.
The operating hours is displayed.
To exit the menu, press MENU, or wait 30 seconds.

LED Use Hour

Select **LED Use Hour**, press ENTER.
Use UP/DOWN button to select **Total LED Hour** (total time) or **LED On Hour** (current switch-on time), confirm your selection with ENTER.
The total time or current switch-on time is displayed.
Use UP/DOWN button to select **LED Hours Reset**, confirm your selection with ENTER.
Use UP/DOWN button to set the password 050, confirm your selection with ENTER. The LED operating hours is reset.
To exit the menu, press MENU, or wait 30 seconds.

Temperature

Select **Temperature**, press ENTER.
The device temperature is displayed.
To exit the menu, press MENU, or wait 30 seconds.

Fan State

Select **Fan State**, press ENTER.
The fan status is displayed.
To exit the menu, press MENU, or wait 30 seconds.

USB Upgrade File

Select **USB 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.

Error Logs

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

Reset Functions

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

Pan/Tilt Reset

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

Effect Reset

Select **Effect Reset**, press ENTER.

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

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

All Reset

Select **All Reset**, press ENTER.

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

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

Special Functions

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

Factory Restore

Select **Factory Restore**, press ENTER.

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

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

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

The parameter IDs are implemented as follows for different commands:

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

✓ -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
Dimmer	0~999
Frequency(Hz)	1072~1327
Pan	-128~127
Tilt	-128~127
Cyan	-128~127
Magenta	-128~127
Yellow	-128~127
Color	-128~127
CTO	-128~127
Gobo 1	-128~127
R-Gobo 1	-128~127
Gobo 2	-128~127
Prism	-128~127
R-Prism	-128~127
Iris	-128~127
Frost 1	-128~127
Frost 2	-128~127
Focus	-128~127
Zoom	-128~127
Blade DW 1	0~255
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
Framing	-128~127

Dimmer

Select **Dimmer**, 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.

Frequency(Hz)

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

Use UP/DOWN button to select a value between 1072 and 1327, 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.

Color

Select **Color**, press ENTER.

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

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

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.

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.

Prism

Select **Prism**, 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

Select **R-Prism**, 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 -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.

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.

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.

Blade DW 1

Select **Blade DW 1**, press ENTER.

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

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

Blade DW 2

Select **Blade DW 2**, 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.

Blade UP 1

Select **Blade UP 1**, press ENTER.

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

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

Blade UP 2

Select **Blade UP 2**, 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.

Blade LF 1

Select **Blade LF 1**, press ENTER.

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

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

Blade LF 2

Select **Blade LF 2**, 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.

Blade RG 1

Select **Blade RG 1**, press ENTER.

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

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

Blade RG 2

Select **Blade RG 2**, 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.

Framing

Select **Framing**, 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 34 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 35. As the first fixture uses all the first 34 DMX channels, the next available channel is 35 ($34+1=35 \gg 35$).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
34 channels	1	35	69	103	
25 channels	1	26	51	76	
29 channels	1	30	59	88	
35 channels	1	36	71	106	

8.2 DMX Protocol

CHANNEL				VALUE	FUNCTION
34ch	25ch	29ch	35ch		
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°→260°
4	4	4	4	000-255	TILT FINE
5	5	5	5	000-255	PAN/TILT SPEED Fast to Slow
6	6	6	6	000-255	CYAN 0%→100%
7	7	7	7	000-255	MAGENTA 0%→100%
8	8	8	8	000-255	YELLOW 0%→100%
9	9	9	9	000-255	CTO 0%→100%
10	10	10	10	000-009 010-018 019-027 028-036 037-045 046-063 064-127 128-189 190-193 194-255	COLOR WHEEL Open Color 1 Color 2 Color 3 Color 4 Color 5 Color Wheel Indexing Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
11	11		11	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-072 073-081 082-090	GOBO WHEEL 1 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast

				091-099 100-108 109-117 118-127 128-189 190-193 194-255	Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
12	12		12	000-127 128-189 190-193 194-255	R-GOBO WHEEL 1 Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
			13	000-255	R-GOBO WHEEL 1 FINE 0%→100%
13	13		14	000-007 008-014 015-021 022-028 029-035 036-042 043-049 050-056 057-063 064-071 072-079 080-087 088-095 096-103 104-111 112-119 120-127 128-189 190-193 194-255	GOBO WHEEL 2 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 1 Shaking, Slow to Fast Gobo 2 Shaking, Slow to Fast Gobo 3 Shaking, Slow to Fast Gobo 4 Shaking, Slow to Fast Gobo 5 Shaking, Slow to Fast Gobo 6 Shaking, Slow to Fast Gobo 7 Shaking, Slow to Fast Gobo 8 Shaking, Slow to Fast Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
14	14	11	15	000-255	IRIS 100%→0%
15	15		16	000-007 008-255	PRISM (4-facet circular prism) Close Open
16	16		17	000-127 128-189 190-193 194-255	R-PRISM Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
17	17	12	18	000-007	CRI Close

				008-255	Open
18	18	13	19	000-007 008-255	FROST 1 (Soft) Close Open
19	19	14	20	000-007 008-255	FROST 2 (Heavy) Close Open
20	20	15	21	000-255	ZOOM Wide→Narrow
21	21	16	22	000-255	FOCUS 0%→100%
22	22	17	23	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 Fast Open Slow Close from Slow to Fast Open Slow Open Fast Close from Slow to Fast Open Random Strobe from Slow to Fast Open
23	23	18	24	000-255	DIMMER 0%→100%
24	24	19	25	000-255	DIMMER FINE
25		20	26	000-255	BLADE 0°-180°
26		21	27	000-255	BLADE DW 1 0%→100%
27		22	28	000-255	BLADE DW 2 0%→100%
28		23	29	000-255	BLADE UP 1 0%→100%
29		24	30	000-255	BLADE UP 2 0%→100%
30		25	31	000-255	BLADE LF 1 0%→100%
31		26	32	000-255	BLADE LF 2 0%→100%
32		27	33	000-255	BLADE RG 1 0%→100%
33		28	34	000-255	BLADE RG 2 0%→100%
34	25	29	35		SPECIAL FUNCTION

					(To activate following functions, stop in DMX value for at least 3 seconds.)
				000-029	Null
				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: Auto
				080-089	Cooling Mode: Quiet
				090-099	Null
				100-109	LED Frequency Setting Enable
				110-119	LED Frequency Setting Disable
				120-179	Null
				180-189	Dimmer Speed Fast
				190-199	Dimmer Speed Smooth
				200-209	Reset All
				210-219	Reset Effect
				220-229	Reset Pan/Tilt
				230-255	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/H Error

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

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

Pan Reset Error

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

Check whether there are obstacles in the pan operating range.

Check whether the Hall element on the pan is damaged.

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

Check whether the motor on the pan is damaged.

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

Pan Encode Error

Check whether the encoder on the pan is damaged.

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

Tilt Reset Error

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

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

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

Check whether the motor on the tilt is damaged.

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

Tilt Encode Error

Check whether the encoder on the tilt is damaged.

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

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 Reset Error

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

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

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

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

Check whether the motor on the color wheel is damaged.

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

Gobo1/2 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-Gobo1 Reset Error

Check whether the position of the gobo wheel 1 where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the gobo wheel 1 operating range.

Check whether the Hall element on the gobo wheel 1 is damaged.

Check whether the lead connecting the Hall element on the gobo wheel 1 and the PCB board is in poor contact or disconnected.

Check whether the motor on the gobo wheel 1 is damaged.

Check whether the related circuit of the motor drive board on the gobo wheel 1 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.

Prism Reset Error

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

Check whether there are obstacles in the prism operating range.

Check whether the Hall element on the prism is damaged.

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

Check whether the motor on the prism is damaged.

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

R-Prism Reset Error

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

Check whether there are obstacles in the prism operating range.

Check whether the Hall element on the prism is damaged.

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

Check whether the motor on the prism is damaged.

Check whether the related circuit of the motor drive board on the prism 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 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 Temp. Too High

Check if the fan is working properly.

Check if the fan speed is normal.

Check if the ambient temperature is abnormal.

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.

Head Fan 1/2/3/4/5/6/7 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.

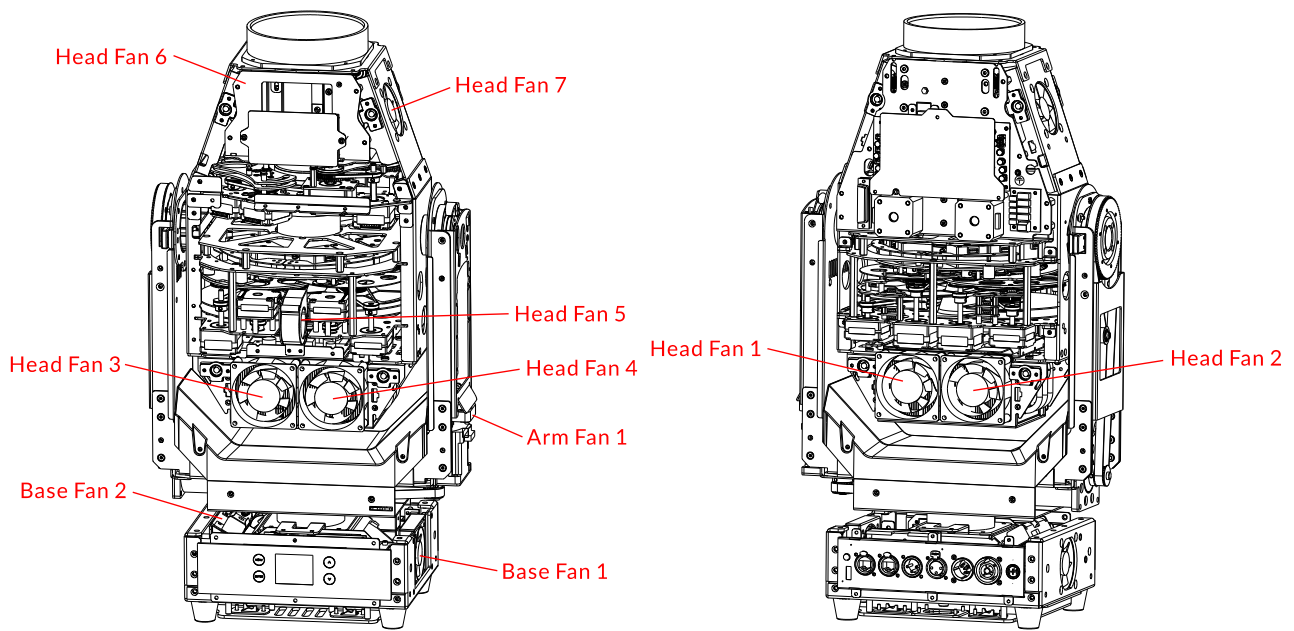
Arm Fan 1 Start Err

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.

Network Error

Check whether the net model is installed in place.
Check whether the net model is damaged.
Check whether the network is normal.

Position of cooling fans:



Cooling Fans	Part Number	V	W	Position
Base Fan 1	3014001305	DC 24V	1.4W	Base - A
Base Fan 2				
Arm Fan 1	3014001183	DC 24V	2.2W	Arm - B
Head Fan 1	3014001256	DC 24V	4.8W	Head - H
Head Fan 2				
Head Fan 3				
Head Fan 4				
Head Fan 5	3014001259	DC 24V	2.4W	
Head Fan 6	3014001305	DC 24V	1.4W	Head - FG
Head Fan 7				

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)



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

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



www.acmelighting.com