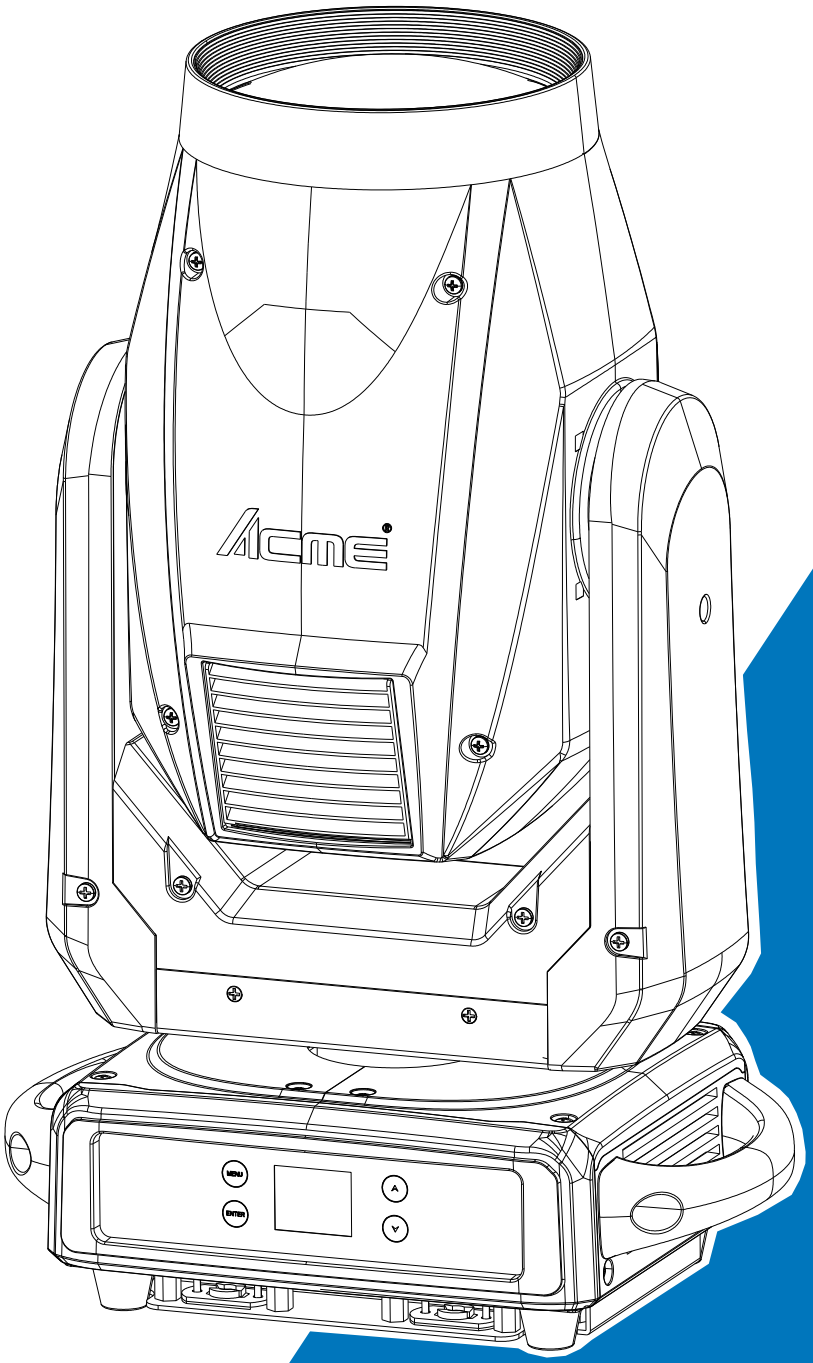
SAGITTA



User Manual

Please read the instruction carefully before use

CONTENTS

01/ Safety Information 2
02/ Technical Specifications 5
03/ Overview 7
3.1 Battery Power 8
04/ Connecting Power and Data 10
4.1 Connecting Power 10
4.2 Connecting Data 11
05/ Fixture Installation 12
06/ Effect Wheels & Lamp 14
6.1 Effect Wheels 14
6.2 Light Source 14
6.3 Lamp Replacement 15
6.4 Lamp Replacement Warning 17
07/ Operation 17
7.1 Control Menu 17
7.2 Home Position Adjustment 29
08/ Configuring the Device for DMX Control 32
8.1 Address Setting 32
8.2 DMX Protocol 33
09/ Error Information 39
10/ Troubleshooting 46
11/ Fixture Cleaning 47
12/ Approvals and Certifications 48

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.

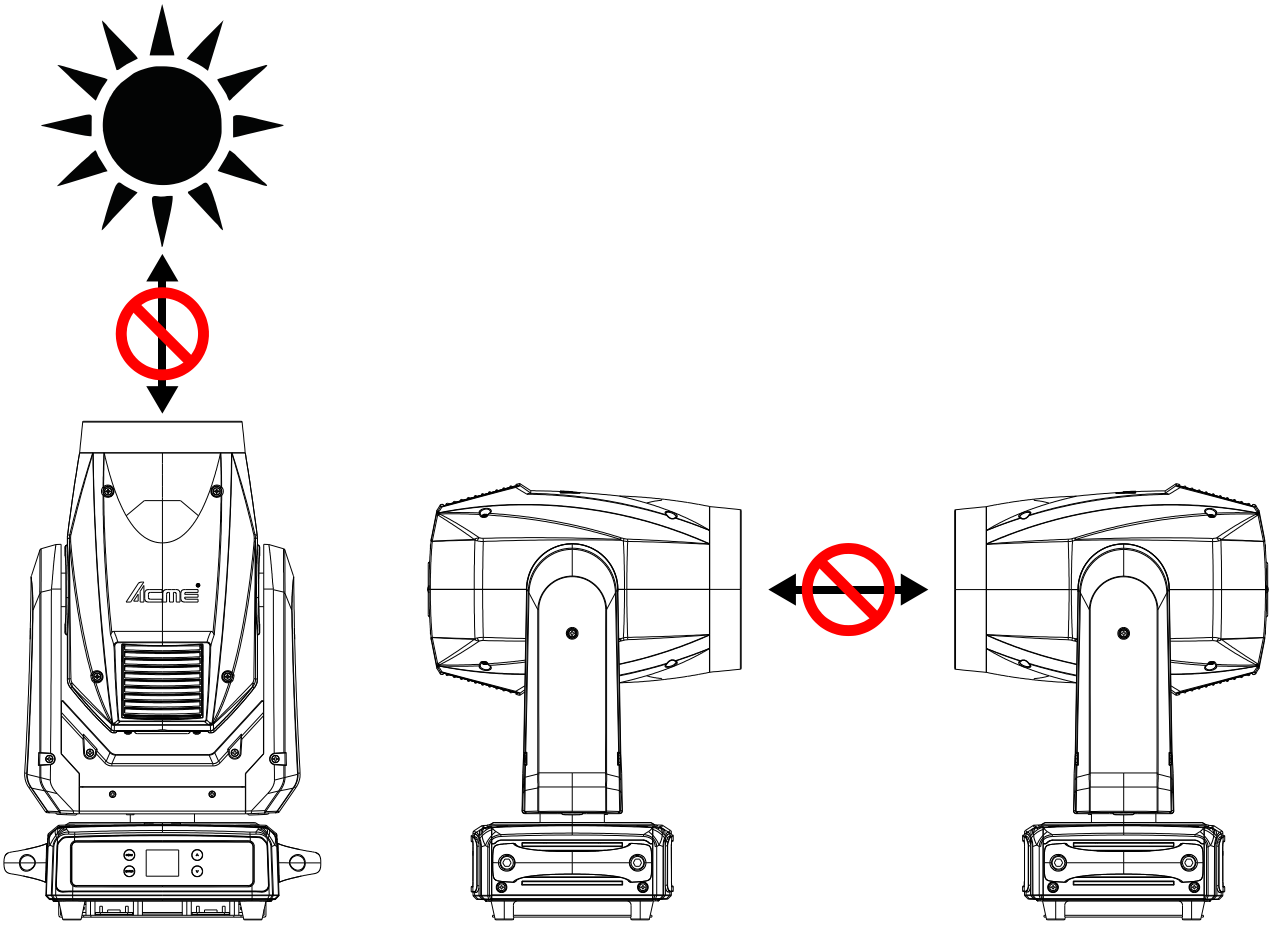
Important:

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.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- 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℃. 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 12 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp 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.
- Hot lamp explosion hazard. DO NOT open the unit within 15 minutes after switching off.
- DO replace the bulb once it is damaged, deformed or life-expired.
- Avoid direct eye exposure to the light source while the product is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- 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.

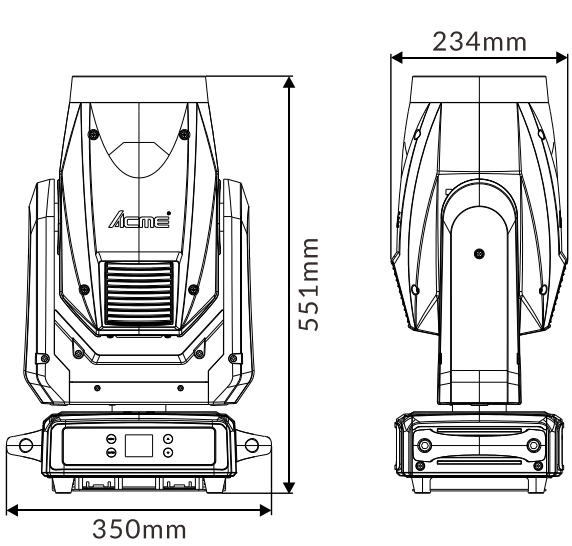
- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while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



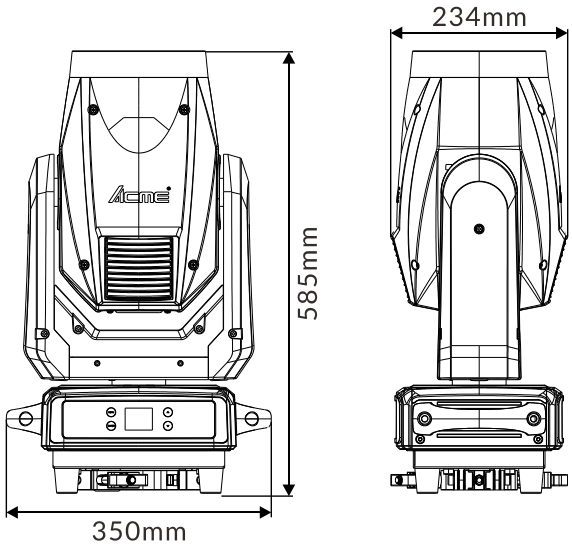
02/ Technical Specifications

AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	490W	
Light Source	PHILIPS MSD Platinum 18 R LL	
Color Temperature	6800K	
Beam Angle	2°	
Color Wheel	14 colors + open	
Gobo Wheel	Static Gobo Wheel	13 gobos + open
Movement	Pan	540°
	Tilt	260°
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
Control and Programming	DMX Channels	19/17
	Protocols	DMX512
		RDM
	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/5-pin XLR
	Power In/Out	Power Connector in/out
	Protection Rating	IP20
Dynamic Effects	0-100% continuous dimming and strobe effects	
	2 x soft filters provide soft and even light beam	
	Prisms: two indexing/rotating prisms (8-facet circular prism and 24-facet circular prism)	
	Frost: Variable 0%-100%	
	Motorized focus	
	2 x fixed foldable clamps for 50mm truss (version with fixed foldable clamps)	

Dimensions	350x234x551mm (version with omega bracket holes)	13.8"x9.2"x21.7"
Dimensions	350x234x585mm (version with fixed foldable clamps)	13.8"x9.2"x23"
Weight	21 kg (version with omega bracket holes)	46.3 lbs
Weight	21.5 kg (version with fixed foldable clamps)	47.4 lbs

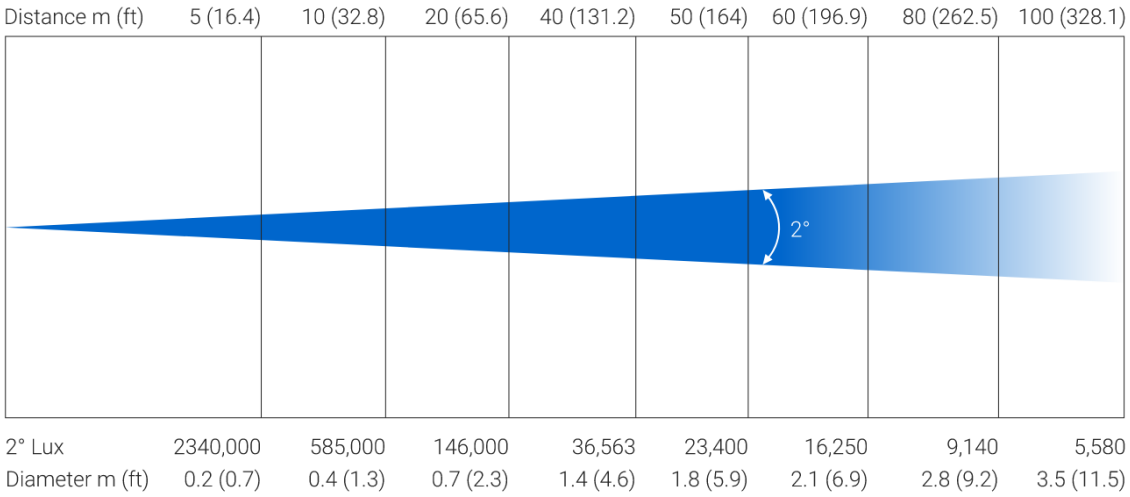


version with omega bracket holes

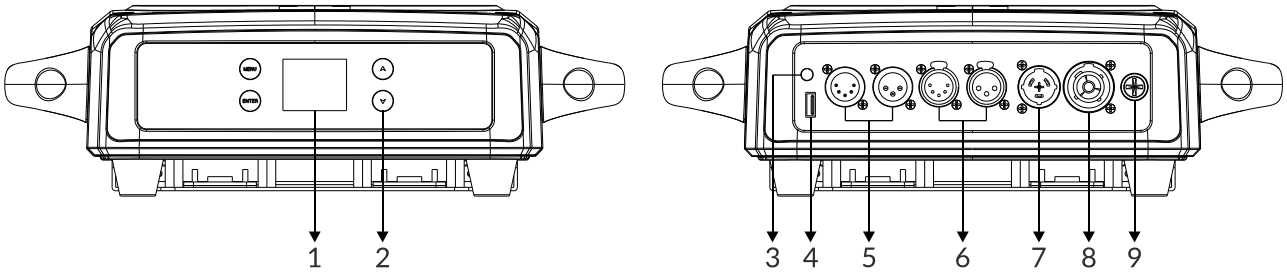


version with fixed foldable clamps

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. DMX IN	For DMX512 link, use 3/5-pin XLR cable to link the unit and DMX controller to input DMX signal	
6. DMX OUT	For DMX512 link, use 3/5-pin XLR cable to link the next units to output DMX signal	
7. POWER IN	To connect to supply power	
8. POWER OUT	To connect to the next fixture	
9. 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 Function’ are not available.

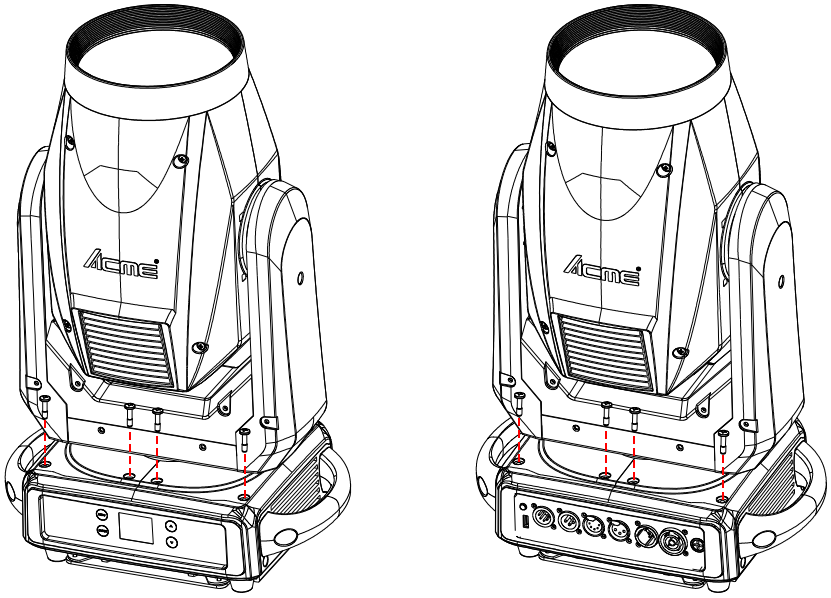
To activate the display when the fixture is not connected to power, press and hold the ‘BATTERY DISPLAY’ button in the rear panel for 3 seconds. The display extinguishes after 30 seconds with no user input. Press and hold the ‘BATTERY DISPLAY’ button for 3 seconds again to re-activate.

Battery Replacement:

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

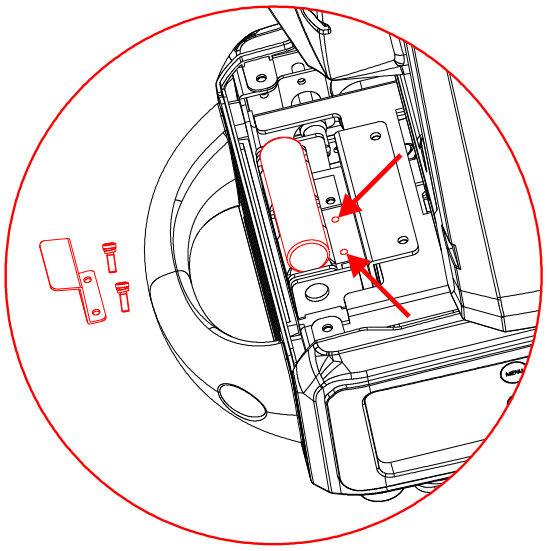
1. Disconnect the fixture from AC mains power and allow to cool.

2. Remove eight screws in the top covers of the fixture base and remove the top covers.



3. Remove two screws of the battery bracket that holds the battery in place and remove the battery bracket.

4. Remove the exhausted battery and insert a new one (only the same type) into the battery holder (Negative (-) towards the spring, Positive (+) away from the spring).



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

04/ Connecting Power and Data

4.1 Connecting Power

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

The maximum power consumption is 490W.

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)

CAUTION!

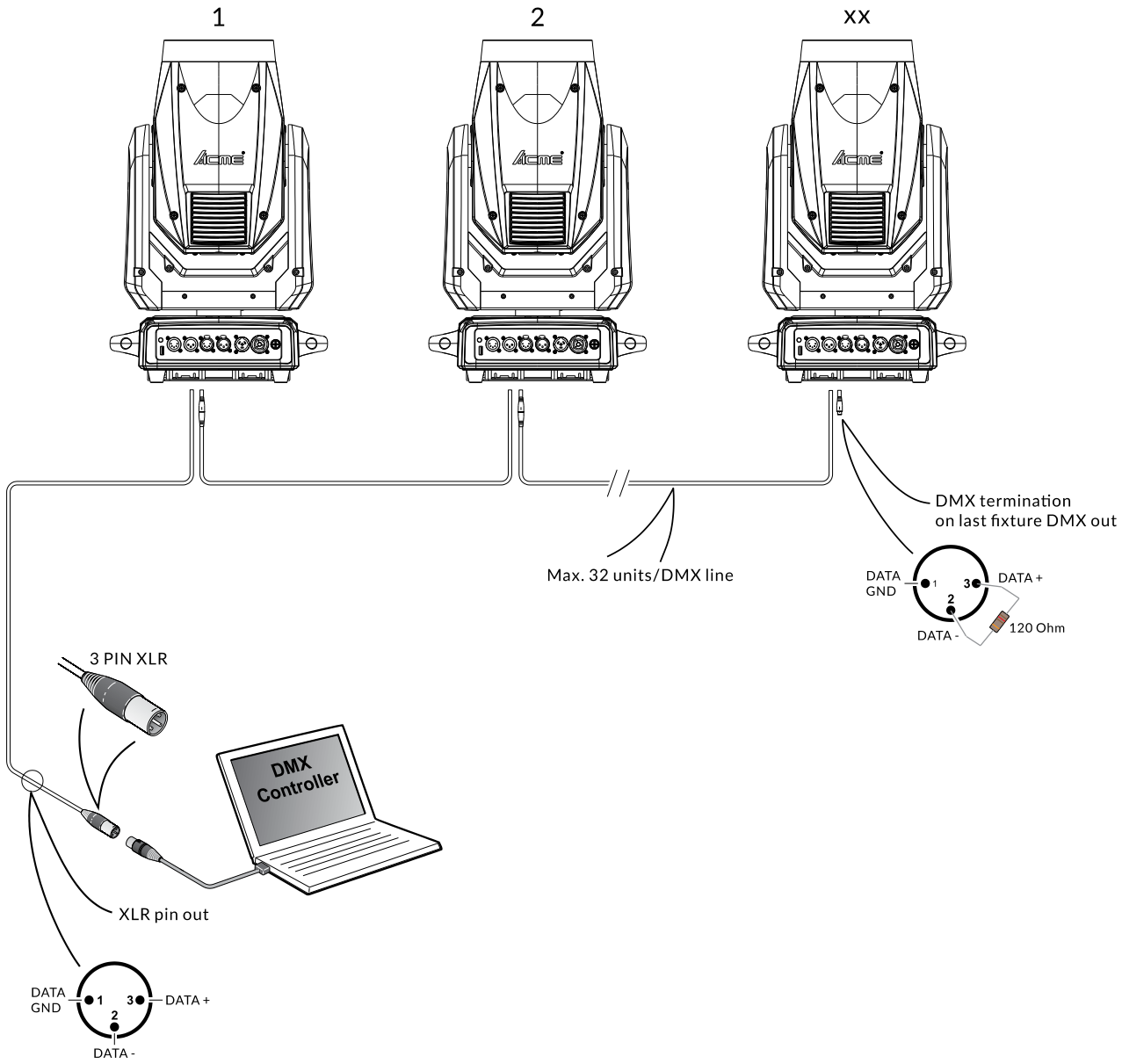
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

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.

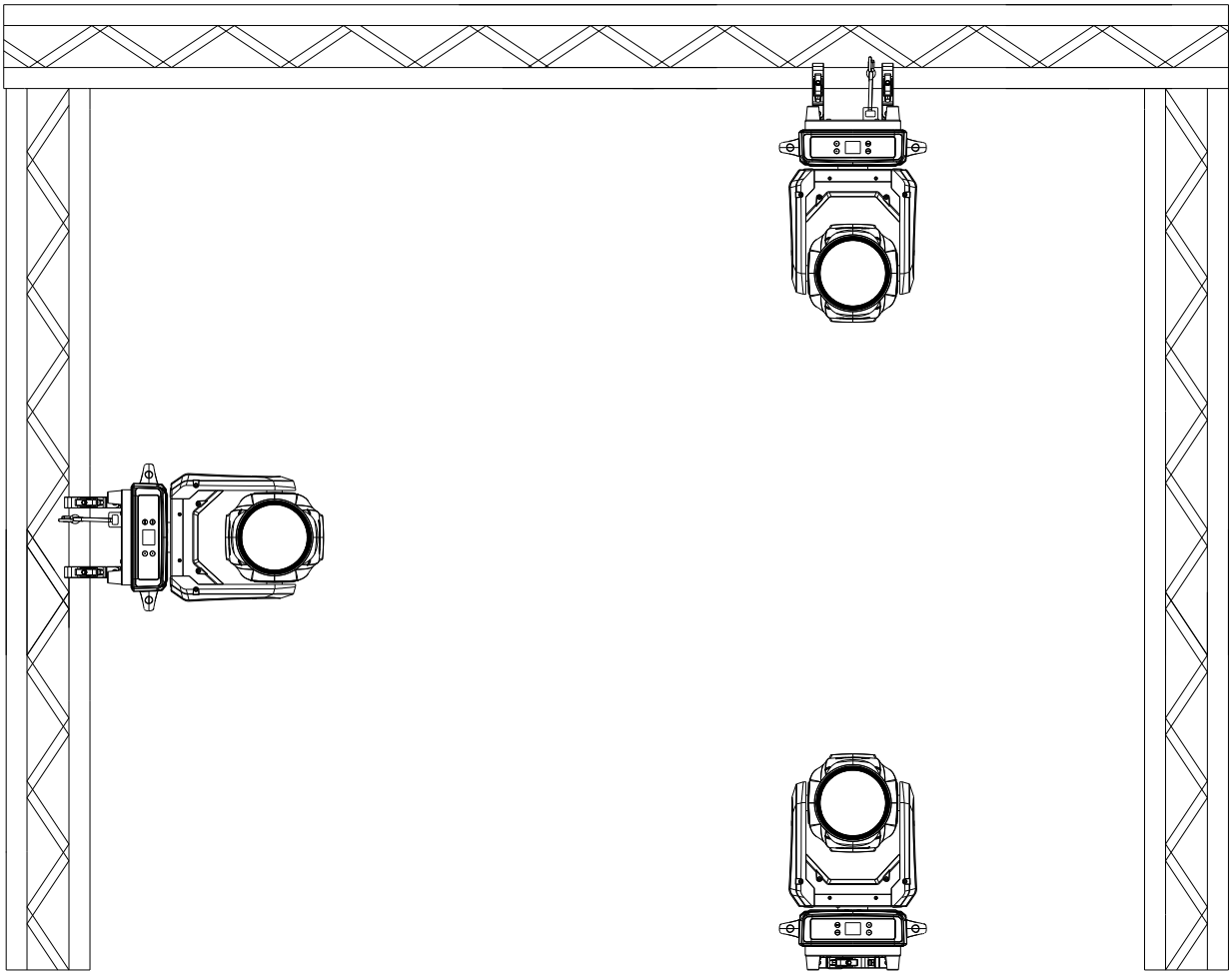
Building a serial DMX chain:

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.

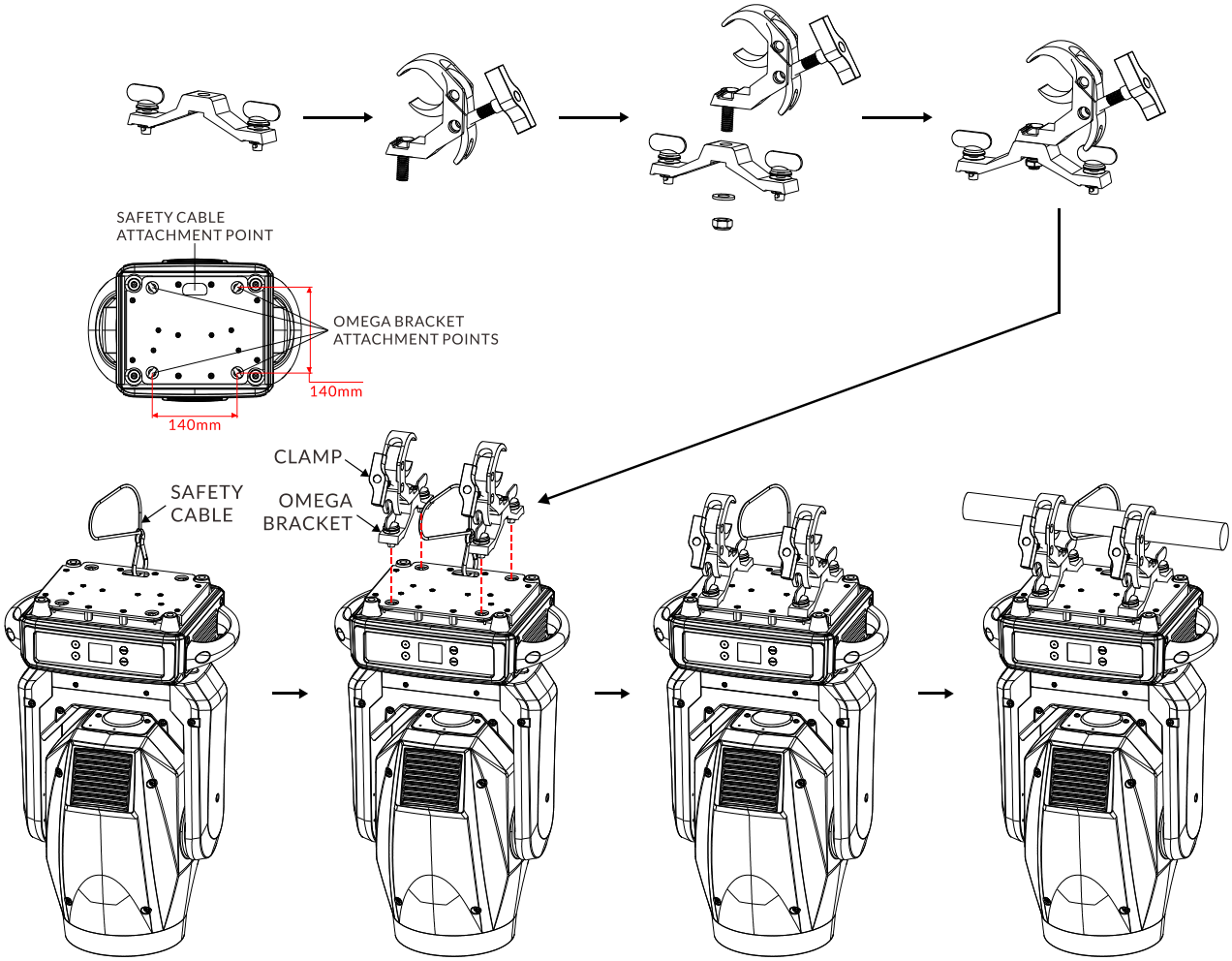


05/ Fixture Installation

- DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas 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 three different mounting positions: hanging upside-down, mounted sideways on trussing, or standing on the floor. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

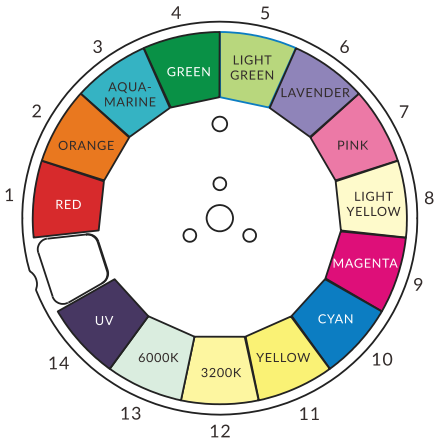


Steps for installing omega brackets to the fixture:

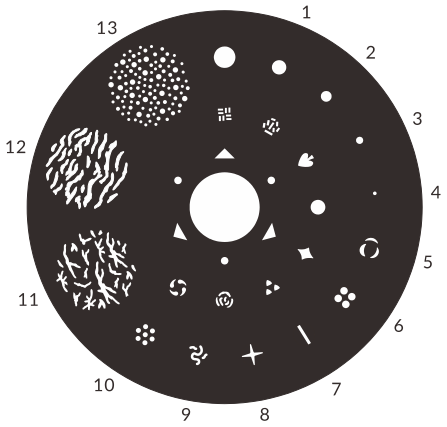


06/ Effect Wheels & Lamp

6.1 Effect Wheels



Color Wheel



Static Gobo Wheel

DANGER!
Replace the color wheel / gobo wheel with the device switched off only.
Unplug from mains before replacing the color wheel / gobo wheel!

6.2 Light Source

PHILIPS MSD Platinum 18 R LL

Because of its high internal pressure, there might be a risk that the discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.

- To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.
- Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
- The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
- When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
- Make sure the lamp is located in the center of the reflector for the best projection.

6.3 Lamp Replacement

ATTENTION

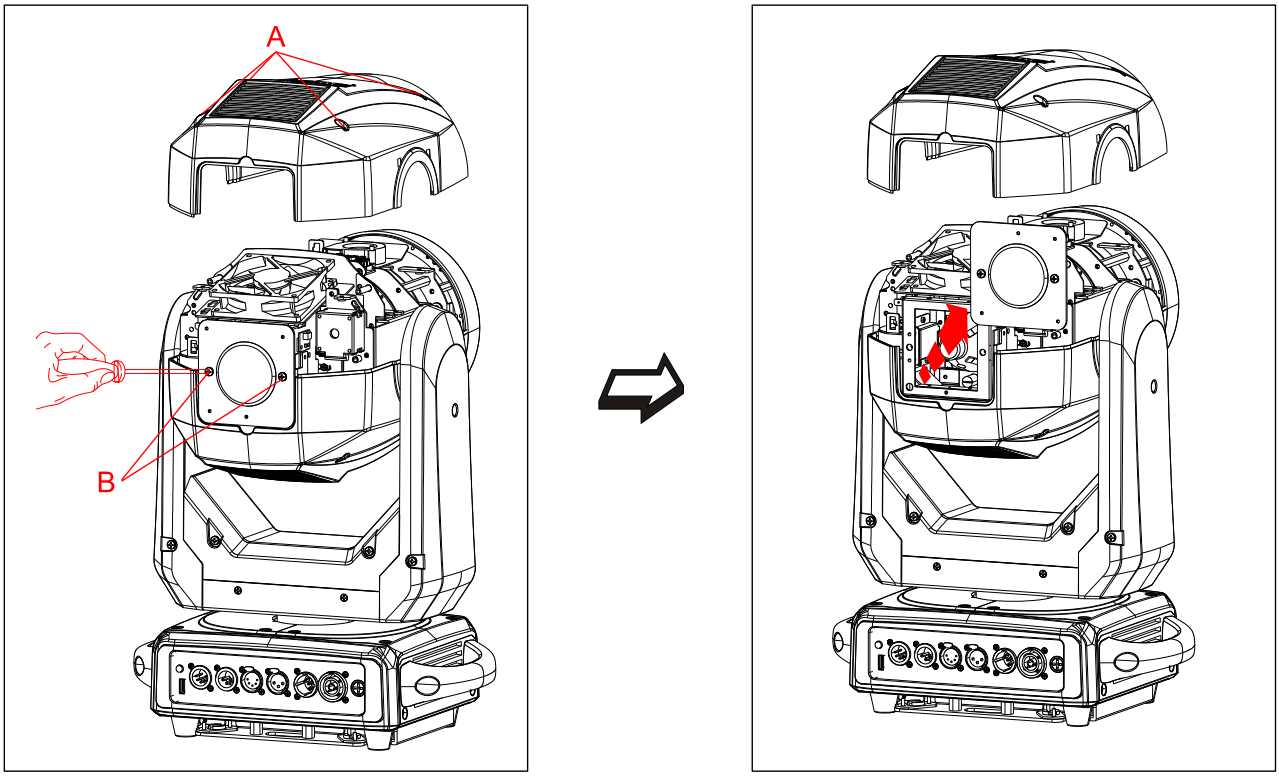
The entire light path and lens of the luminaire must be thoroughly cleaned before replacing the lamp.

In the Work Mode, the lamp life is 1500 hours; when the Work Mode and the Sleep Mode are used alternately, the lamp life is between 1500 and 6000 hours according to the ratio of lamp use time; in the Sleep Mode, the lamp life is 6000 hours. Do not use the lamp beyond its lifetime, using the lamp any longer than its set life could seriously damage the fixture. Periodically checking the lamp running time, when the lamp replacement warning appears, we strongly suggest you switch the lamp out. Reset the lamp time after you have replaced the lamp.

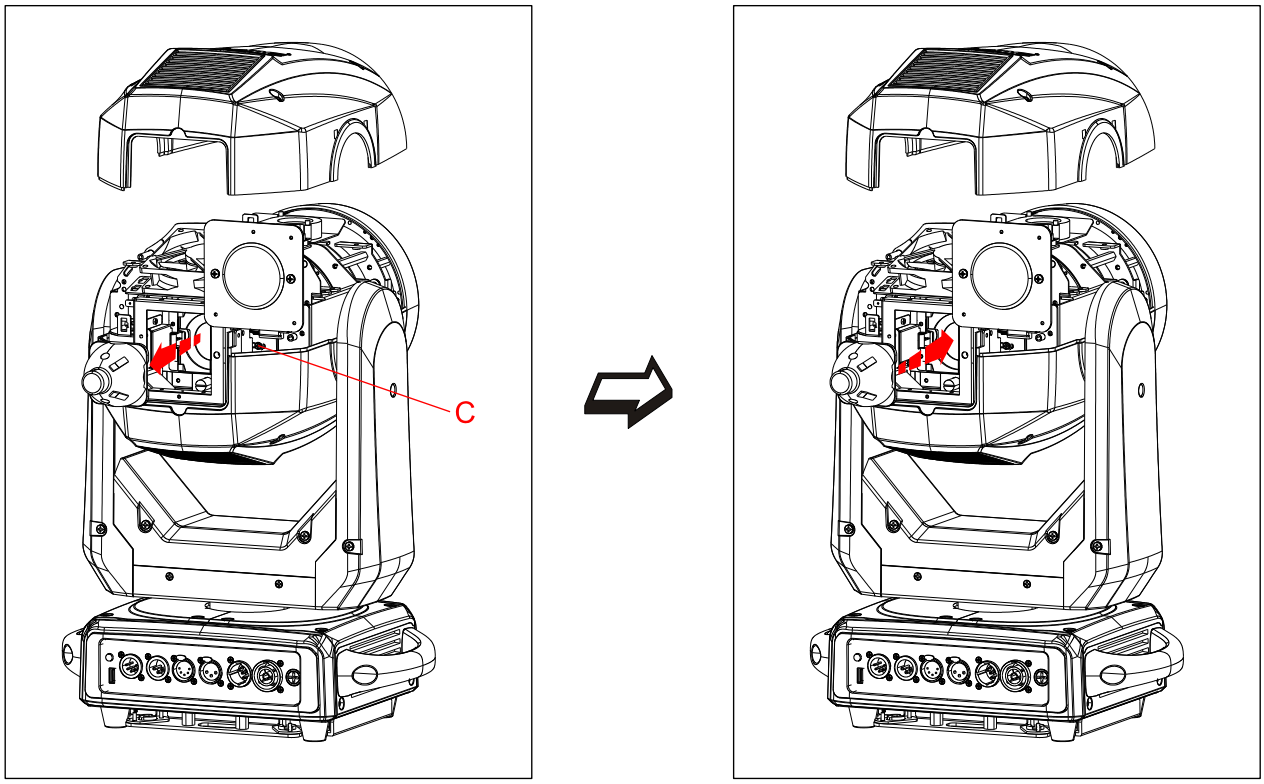
To replace the lamp:

Ensure that the fixture is detached from power and has cooled down completely. It is a good idea to allow the fixture to run for 15 minutes after the lamp has been turned off, so that the cooling fans have time to work.

Loosen the screws on the head of the fixture and open the fixture head covers.

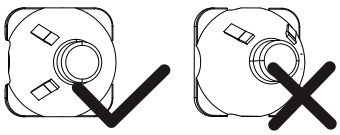


Loosen the screw that holds the lamp in place. Unplug the leads of the lamp and lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.



Finally reinstall the head cover, fastening it securely before reapplying power.

The installing direction of lamp:



6.4 Lamp Replacement Warning

- When the lamp reaches 300 hours before its service time, the display will flash the message “Replace Lamp Soon” for up to 5 minutes. During this period, the fixture will still work normally.
- When the lamp reaches its service time, the display will flash the message “Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.
- When the lamp is continuously used overtime, the display will flash the message “Lamp Timeout Use, Replace Lamp Now” for up to 10 minutes. After 10 minutes, the fixture will return to normal operation.

ATTENTION

Damages caused by the failure to replace the bulb in time are not subject to warranty.

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	1-494 (19 CH)	(Default=1)
		1-496 (17 CH)	
	DMX Channel Mode	Mode 1 (19)	
		Mode 2 (17)	
	No DMX Status	Blackout	
		Hold	
		Manual	
	View DMX Value		
Fixture Settings	Pan Invert	No	
		Yes	
	Tilt Invert	No	
		Yes	
	P/T Feedback	No	
		Yes	
	Gobo Short Cut	Enable	
		Disable	
	Color Short Cut	Enable	
		Disable	
Lamp Settings	Lamp On/Off	Off	
		On	
	Lamp ON with Power	Off	
		On	
	Lamp ON via DMX	Off	
		On	
	Lamp OFF via DMX	Off	
		On	
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	Clear	No/Yes
		Pan	0-255
		Tilt	0-255

MAIN MENU	SUBMENU	CHOICES/VALUES		
		Color	0-255	
		Gobo	0-255	
		Soften	0-255	
		8 Prism	0-255	
		8 R-Prism	0-255	
		24 Prism	0-255	
		24 R-Prism	0-255	
		Frost	0-255	
		Focus	0-255	
		Strobe	0-255	
		Dimmer	0-255	
Fixture Information	Fixture Use Hour			
	Lamp Use Time	Password=050	Work Mode	
			Sleep Mode	
			Sleep Ratio	
	Lamp Time Reset	Password=050		
	Lamp State	Driver State		
		Lamp Voltage		
		Fault Mode		
	Temperature		Current	Max temp
		Head		
	Fan State	Head Fan 1-5		
		Base Fan 1-2		
	Upgrade File			
	Firmware Version			
	RDM UID			
	Error Logs	Fixture Errors		
		Reset Error Logs	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** 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 (19)	1-494
Mode 2 (17)	1-496

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 (19)** and **Mode 2 (17)**, 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.

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, Gobo Short Cut** or **Color Short Cut.**

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.

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.

Lamp Settings

Enter the control menu and select **Lamp Settings**, press ENTER. Use the UP/DOWN button to select **Lamp On/Off, Lamp ON with Power, Lamp ON via DMX** or **Lamp OFF via DMX.**

Lamp On/Off

Select **Lamp On/Off,** press ENTER.
Use UP/DOWN button to select **Off** (lamp off) or **On** (lamp on), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Lamp ON with Power

Select **Lamp ON with Power,** press ENTER.
Use UP/DOWN button to select **Off** (lamp off while power on) or **On** (lamp on while power on), confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Lamp ON via DMX

Select **Lamp ON via DMX,** press ENTER.
Use UP/DOWN button to select **Off** or **On**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Lamp OFF via DMX

Select **Lamp OFF via DMX,** press ENTER.
Use UP/DOWN button to select **Off** or **On**, confirm your selection with ENTER.
To exit the menu, press MENU, or wait 30 seconds.

Display Settings

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

Display Invert

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

Backlight Intensity

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

Temperature Unit

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

Language

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

Fixture Test

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

Auto Test

Select **Auto Test,** press ENTER.
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, Lamp Use Time, Lamp Time Reset, Lamp State, 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.

Lamp Use Time

Select **Lamp Use Time,** press ENTER.
The lamp operating hours is displayed.
Long press ENTER, use UP/DOWN button to set the password 050, press ENTER. The lamp operating hours of work mode, sleep mode and sleep ratio is displayed.
To exit the menu, press MENU, or wait 30 seconds.

Lamp Time Reset

Select **Lamp Time Reset,** press ENTER.
Use UP/DOWN button to set the password 050, confirm your selection with ENTER. The lamp operating hours is reset.
To exit the menu, press MENU, or wait 30 seconds.

Lamp State

Select **Lamp State,** press ENTER.
The lamp status 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 device 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 Logs**, confirm your selection with ENTER.
If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.
If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.
To exit the menu, press MENU, or wait 30 seconds.

Reset Function

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

Pan/Tilt Reset

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

Effect Reset

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

All Reset

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

Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **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			√
LAMP_STATE		√	√
PAN_INVERT		√	√
TILT_INVERT		√	√
RESET_DEVICE		√	

√ -Command implemented for the respective parameter ID

7.2 Home Position Adjustment

- To access the control menus, press the [MENU] button.
- To access the offset menus, long-press the [ENTER] button.
- Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- To select a menu option or to confirm a selection, press the [ENTER] button.
- To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

OFFSET MENU	VALUES
Pan	-128~127
Tilt	-128~127
Strobe	-128~127
Color	-128~127
Gobo	-128~127
8 Prism	-128~127
8 R-Prism	-128~127
24 Prism	-128~127
24 R-Prism	-128~127
Frost	-128~127
Focus	-128~127
Soften	-128~127

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.

Strobe

Select **Strobe,** press ENTER.
Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Color

Select **Color,** press ENTER.
Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Gobo

Select **Gobo,** press ENTER.
Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

8 Prism

Select **8 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.

8 R-Prism

Select **8 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.

24 Prism

Select **24 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.

24 R-Prism

Select **24 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.

Frost

Select **Frost,** press ENTER.
Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

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.

Soften

Select **Soften,** 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 19 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 20. As the first fixture uses all the first 19 DMX channels, the next available channel is 20 (19+1=20 >> 20).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
19 channels	1	20	39	58	.....
17 channels	1	18	35	52	.....

8.2 DMX Protocol

19 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	**PAN** 0°→540°
2	000-255	**PAN FINE**
3	000-255	**TILT** 0°→260°
4	000-255	**TILT FINE**
5	000-255	**PAN/TILT SPEED** Fast to Slow
6		**COLOR WHEEL**
	000-007	Open
	008-011	Color 1
	012-015	Color 2
	016-019	Color 3
	020-023	Color 4
	024-027	Color 5
	028-031	Color 6
	032-035	Color 7
	036-039	Color 8
	040-043	Color 9
	044-047	Color 10
	048-051	Color 11
	052-055	Color 12
	056-059	Color 13
	060-063	Color 14
	064	Open
	065	Open + Color 1
	066	Color 1
	067	Color 1 + Color 2
	068	Color 2
	069	Color 2 + Color 3
	070	Color 3
	071	Color 3 + Color 4
	072	Color 4
	073	Color 4 + Color 5
	074	Color 5
	075	Color 5 + Color 6
	076	Color 6
	077	Color 6 + Color 7
	078	Color 7
	079	Color 7 + Color 8

	080	Color 8
	081	Color 8 + Color 9
	082	Color 9
	083	Color 9 + Color 10
	084	Color 10
	085	Color 10 + Color 11
	086	Color 11
	087	Color 11 + Color 12
	088	Color 12
	089	Color 12 + Color 13
	090	Color 13
	091	Color 13 + Color 14
	092	Color 14
	093	Color 14 + Open
	094-127	Open
	128-189	Counter-Clockwise Rotation, Fast to Slow
	190-193	Stop
	194-255	Clockwise Rotation, Slow to Fast
7		GOBO WHEEL
	000-007	Open
	008-011	Gobo 1
	012-014	Gobo 2
	015-018	Gobo 3
	019-021	Gobo 4
	022-025	Gobo 5
	026-028	Gobo 6
	029-032	Gobo 7
	033-035	Gobo 8
	036-039	Gobo 9
	040-042	Gobo 10
	043-049	Gobo 11
	050-056	Gobo 12
	057-063	Gobo 13
	064-067	Gobo 1 Shaking, Slow to Fast
	068-071	Gobo 2 Shaking, Slow to Fast
	072-075	Gobo 3 Shaking, Slow to Fast
	076-079	Gobo 4 Shaking, Slow to Fast
	080-083	Gobo 5 Shaking, Slow to Fast
	084-087	Gobo 6 Shaking, Slow to Fast
	088-091	Gobo 7 Shaking, Slow to Fast
	092-095	Gobo 8 Shaking, Slow to Fast
	096-099	Gobo 9 Shaking, Slow to Fast
	100-103	Gobo 10 Shaking, Slow to Fast
	104-111	Gobo 11 Shaking, Slow to Fast
	112-119	Gobo 12 Shaking, Slow to Fast
	120-127	Gobo 13 Shaking, Slow to Fast
	128-189	Clockwise Rotation, Fast to Slow

	190-193 194-255	Stop Counter-Clockwise Rotation, Slow to Fast
8		**SOFT FILTER**
	000-007 008-131 132-255	Open Soft Filter 1 Soft Filter 2
9		**PRISM 1 (8-facet circular prism)**
	000-007 008-255	Close Open
10		**PRISM 1 ROTATION**
	000-127 128-189 190-193 194-255	Prism Index Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
11		**PRISM 2 (24-facet circular prism)**
	000-007 008-255	Close Open
12		**PRISM 2 ROTATION**
	000-127 128-189 190-193 194-255	Prism Index Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13		**FROST**
	000-007 008-255	Close Open
14		**FOCUS**
	000-255	0%→100%
15	000-255	**FOCUS FINE**
16		**STROBE**
	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	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
17		**DIMMER**
	000-255	0%→100%
18	000-255	**DIMMER FINE**
19		**SPECIAL FUNCTION** (To activate following functions, stop in DMX value for at least 3 seconds.)

	000-129	Null
	130-139	Lamp On
	140-149	Pan/Tilt Reset
	150-159	Effect Reset
	160-199	Null
	200-209	Reset All
	210-211	Gobo Short Cut: Enable
	212-213	Gobo Short Cut: Disable
	214-215	Color Short Cut: Enable
	216-217	Color Short Cut: Disable
	218-229	Null
	230-239	Lamp Off
	240-255	Null

17 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→260°
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED Fast to Slow
6	000-003	COLOR WHEEL Open
	004-007	Color 1
	008-011	Color 2
	012-015	Color 3
	016-019	Color 4
	020-023	Color 5
	024-027	Color 6
	028-031	Color 7
	032-035	Color 8
	036-039	Color 9
	040-043	Color 10
	044-047	Color 11
	048-051	Color 12
	052-055	Color 13
	056-059	Color 14
	060-127	Color Wheel Indexing
	128-189	Counter-Clockwise Rotation, Fast to Slow
	190-193	Stop
	194-255	Clockwise Rotation, Slow to Fast

7		GOBO WHEEL
	000-007	Open
	008-010	Gobo 1
	011-013	Gobo 2
	014-016	Gobo 3
	017-019	Gobo 4
	020-022	Gobo 5
	023-025	Gobo 6
	026-028	Gobo 7
	029-031	Gobo 8
	032-034	Gobo 9
	035-037	Gobo 10
	038-040	Gobo 11
	041-043	Gobo 12
	044-046	Gobo 13
	047-049	Gobo 14
	050-052	Gobo 15
	053-055	Gobo 16
	056-059	Open Shaking, Slow to Fast
	060-063	Gobo 1 Shaking, Slow to Fast
	064-067	Gobo 2 Shaking, Slow to Fast
	068-071	Gobo 3 Shaking, Slow to Fast
	072-075	Gobo 4 Shaking, Slow to Fast
	076-079	Gobo 5 Shaking, Slow to Fast
	080-083	Gobo 6 Shaking, Slow to Fast
	084-087	Gobo 7 Shaking, Slow to Fast
	088-091	Gobo 8 Shaking, Slow to Fast
	092-095	Gobo 9 Shaking, Slow to Fast
	096-099	Gobo 10 Shaking, Slow to Fast
	100-103	Gobo 11 Shaking, Slow to Fast
	104-107	Gobo 12 Shaking, Slow to Fast
	108-111	Gobo 13 Shaking, Slow to Fast
	112-115	Gobo 14 Shaking, Slow to Fast
	116-119	Gobo 15 Shaking, Slow to Fast
	120-127	Gobo 16 Shaking, Slow to Fast
	128-189	Clockwise Rotation, Fast to Slow
	190-193	Stop
	194-255	Counter-Clockwise Rotation, Slow to Fast
8		PRISM 1 (8-facet circular prism)
	000-007	Close
	008-255	Open
9		PRISM 1 ROTATION
	000-127	Prism Index
	128-189	Clockwise Rotation, Fast to Slow
	190-193	Stop
	194-255	Counter-Clockwise Rotation, Slow to Fast
10		PRISM 2 (24-facet circular prism)

	000-007 008-255	Close Open
11		**PRISM 2 ROTATION**
	000-127 128-189 190-193 194-255	Prism Index Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
12		**STROBE**
	000-007 008-015 016-131 132-167 168-203 204-239 240-247 248-255	Close Open Strobe from Slow to Fast Slow Open Fast Close from Slow to Fast Fast Open Slow Close from Slow to Fast Pulsation from Slow to Fast Random Strobe from Slow to Fast Open
13		**DIMMER**
	000-255	0%→100%
14		**FOCUS**
	000-255	0%→100%
15	000-255	**FOCUS FINE**
16		**FROST**
	000-007 008-255	Close Open
17		**SPECIAL FUNCTION** (To activate following functions, stop in DMX value for at least 3 seconds.)
	000-129 130-139 140-149 150-159 160-169 170-179 180-199 200-209 210-211 212-213 214-215 216-217 218-229 230-239 240-255	Null Lamp On Pan/Tilt Reset Effect Reset Soft Filter Out Soft Filter 1 Soft Filter 2 Reset All Gobo Short Cut: Enable Gobo Short Cut: Disable Color Short Cut: Enable Color Short Cut: Disable Null Lamp Off 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 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 Not 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 Not 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.

Color Reset Fail

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.

Gobo Reset Fail

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

Focus Reset Fail

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.

8/24 Prism Reset Fail

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.

8/24 R-Prism Reset Fail

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.

Frost Reset Fail

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

Head Fan 1/2/3/4/5 Start Error

Check whether the fan is not running.
Check whether the fan leads are installed in place or disconnected.
Check whether the fan is damaged.
Check whether there are obstacles in the fan operating range.

Head Fan 1 Too Low

Check whether the fan is out of order.
Check whether there are obstacles in the fan operating range.

Head Fan 1 Too High

Check whether the fan is out of order.
Check whether the fan circuit on the motherboard breaks down.

Base Fan 1/2 Start Error

Check whether the fan is not running.
Check whether the fan leads are installed in place or disconnected.
Check whether the fan is damaged.
Check whether there are obstacles in the fan operating range.

NTC-A Error

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

G Sensor Error

Check whether the gravity sensor on board E is damaged.

Lamp temp. sensor Err

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

Ballast Comm Err

Check whether the output voltage of the ballast reaches 380V.
Check whether the ballast is damaged.
Check whether the telecommunication lines are installed in place or disconnected.

Ballast Temp. high

Check whether the ambient temperature exceeds 45˚C.
Check if the ballast fan speed is too slow.
Check if the ballast is damaged.

Lamp On Error

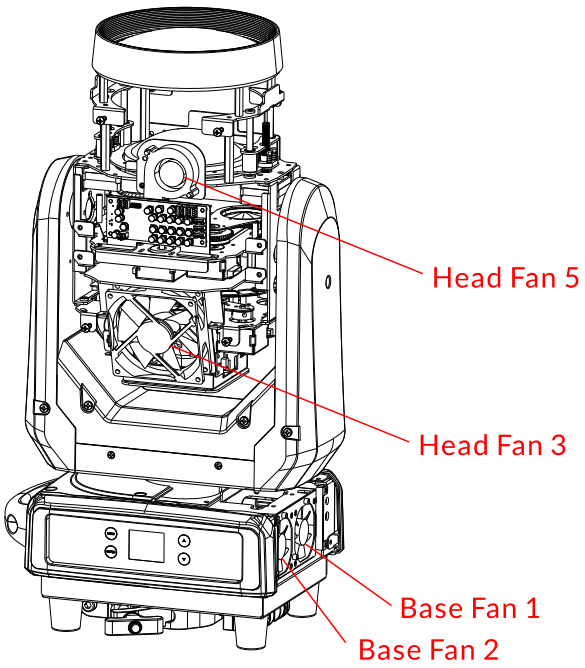
Check whether the bulb or ballast is faulty.

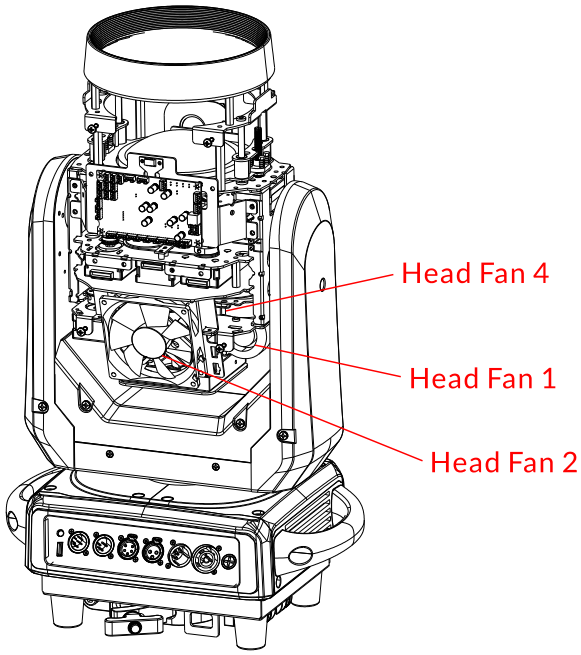
Lamp Too Hot Off

Check whether the temperature switch of the lamp is off.

Check whether the fans are still running properly.

Position of cooling fans:





Cooling Fans	Part Number	V	W	Position
Base Fan 1	3014001362	DC 24V	2.9W	Base - A
Base Fan 2				
Head Fan 1	3014001300	DC 24V	2.9W	Head - D
Head Fan 2	3014001310	DC 24V	3.8W	
Head Fan 3				
Head Fan 4	3014001318	DC 24V	2.4W	
Head Fan 5				

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	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.

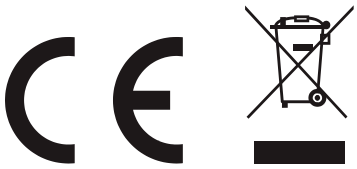
Follow these precautions when cleaning the fixture:

- 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)



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

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