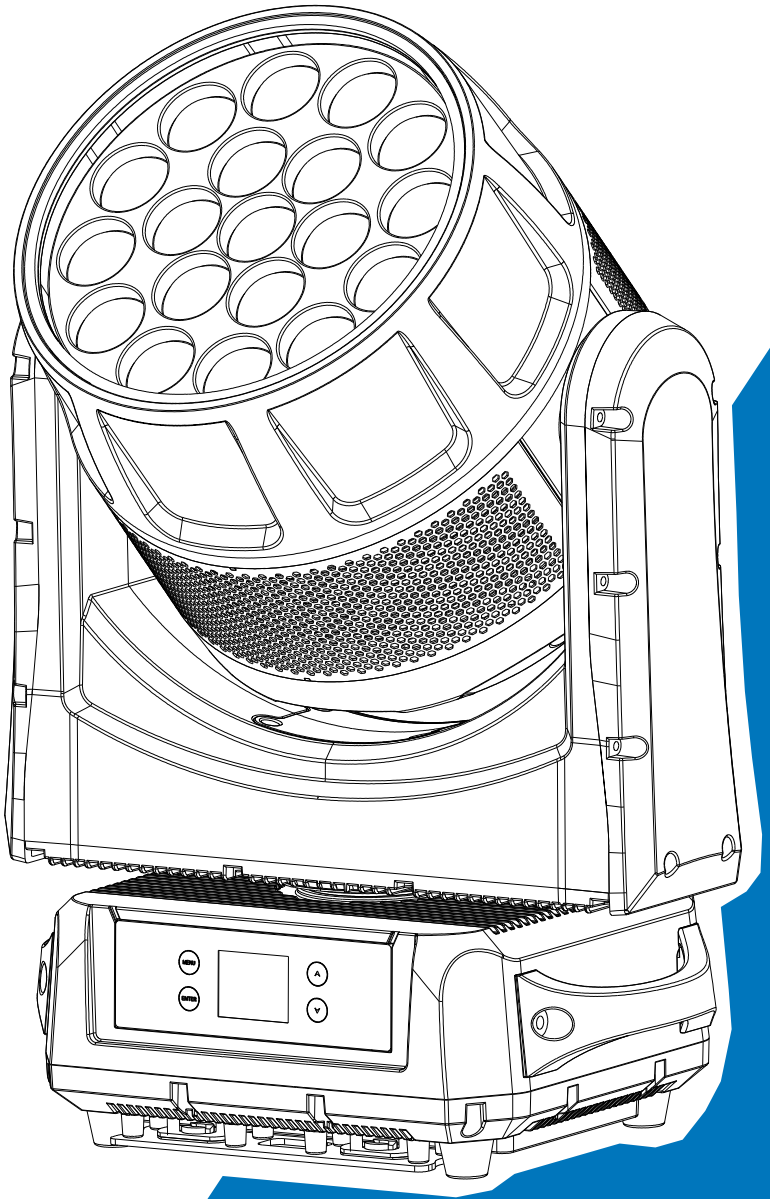
ACME®

O4xozone



User Manual

Please read the instruction carefully before use

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01/ Safety Information



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

WARNING

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

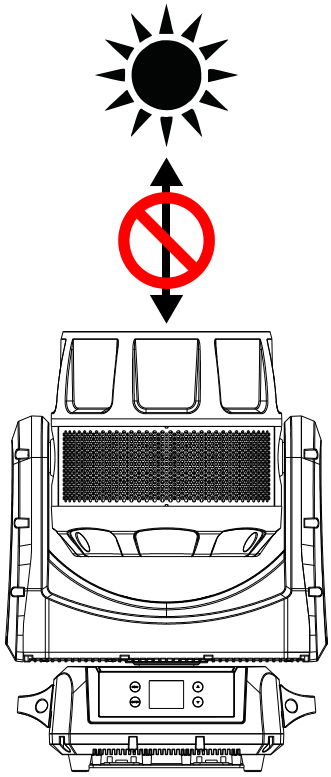
Important:

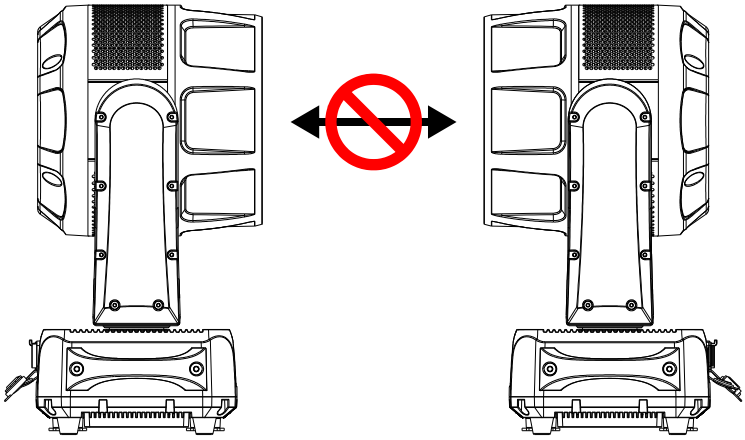
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- This product is suitable for wet locations. Do not immerse in water.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -10˚C. Maximum ambient temperature TA: 40˚C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 75˚C. DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 0.5 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.
- The device MUST NOT be switched on immediately if it has been exposed to strong temperature fluctuations (e.g. after transport) as condensation may occur inside. Please leave the device switched off until it has reached to room temperature.

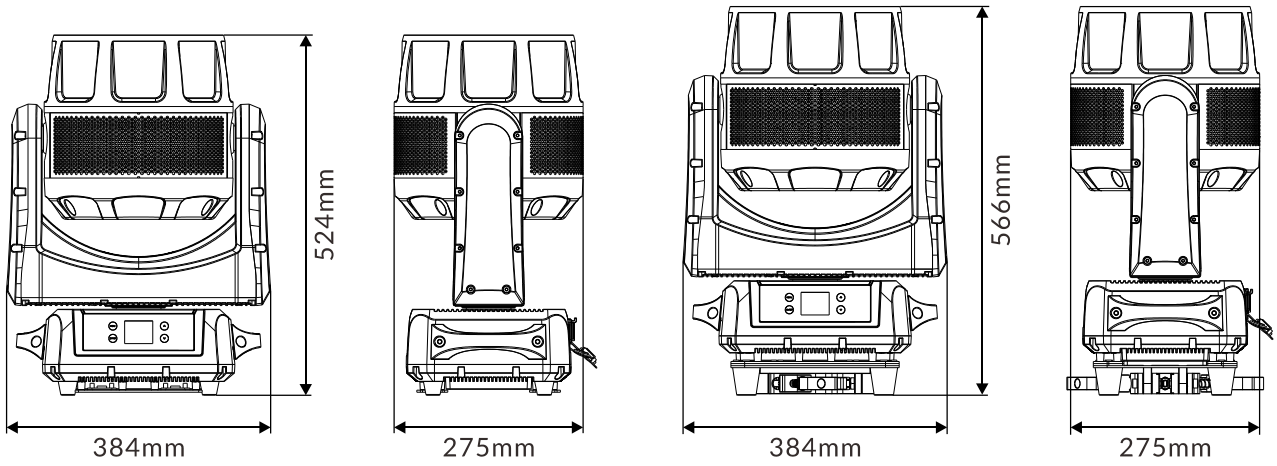
- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while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





02/ Technical Specifications

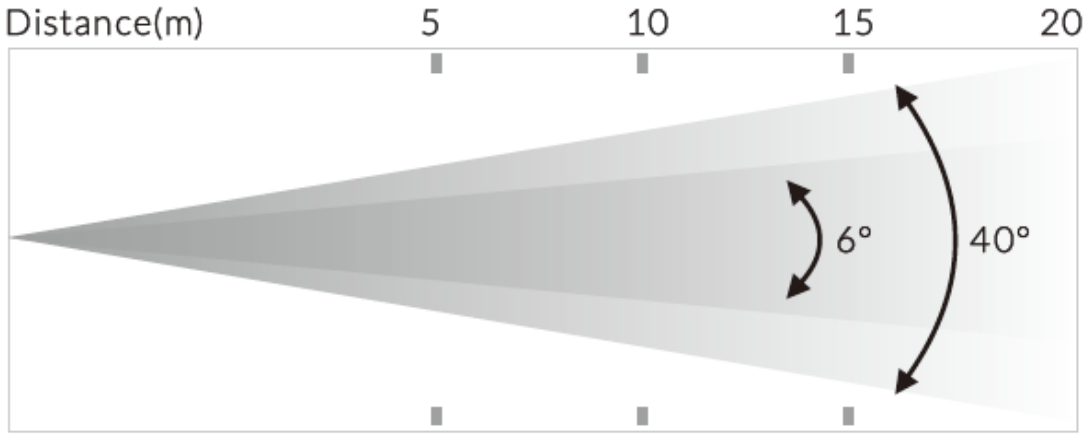
AC Power	100-240Vac; 50/60Hz	
Max. Power Consumption	990W	
Light Source	19x40W RGBW LED	
Color Temperature	2500K-8000K	
Zoom Range	6°-40°	
Movement	Pan	540°
	Tilt	220°
	16 bit movement resolution	
	Automatic pan/tilt repositioning	
Control and Programming	DMX Channels	17/21/86
	Protocols	DMX512
		RDM
	Firmware Update	via DMX or USB memory device
Construction	Display	LCD display
	DMX and RDM Data In/Out	5-pin IP XLR (optional with 3-pin IP XLR)
	Power In/Out	Waterproof Power Connector in/out
	Protection Rating	IP66
Dynamic Effects	19 x RGBW LEDs with individual control	
	0-100% continuous dimming and strobe effects	
	Choice of four dimming curves	
	Motorized zoom	
	Variable color temperature control	
	Outstanding color mixing	
	2 x fixed foldable clamps for 50mm truss (version with fixed foldable clamps)	
Dimensions	384x275x524mm (version with omega bracket holes)	15.1"x10.8"x20.6"
Dimensions	384x275x566mm (version with fixed foldable clamps)	15.1"x10.8"x22.3"
Weight	24 kg (version with omega bracket holes)	52.9 lbs
Weight	25.8 kg (version with fixed foldable clamps)	56.9 lbs



Version with omega bracket holes

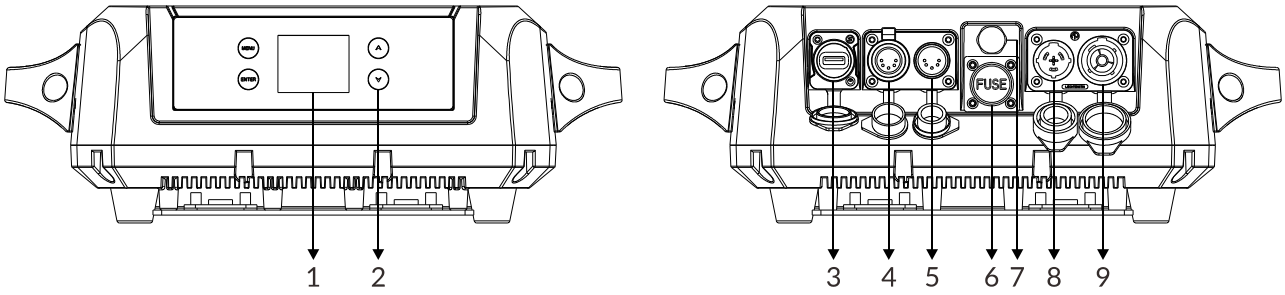
Version with fixed foldable clamps

Photometric Diagram:



6°Lux	20500	5100	2270	1280
Diameter(m)	0.5	1.0	1.6	2.1
40°Lux	1280	320	140	80
Diameter(m)	3.6	7.3	10.8	14.4

03/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	▲ UP	To go backward to move up in the menu
	▼ DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3. FIRMWARE UPGRADE	Used to upgrade fixture's firmware	
4. DMX OUT	For DMX512 link, use 5-pin IP XLR cable to link the next units to output DMX signal (optional with 3-pin IP XLR)	
5. DMX IN	For DMX512 link, use 5-pin IP XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin IP XLR)	
6. FUSE(T 15A)	Protects the unit from damage of over current or short circuit	
7. RELEASE VALVE		
8. POWER IN	To connect to supply power	
9. POWER OUT	To connect to the next fixture	

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 990W.

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!

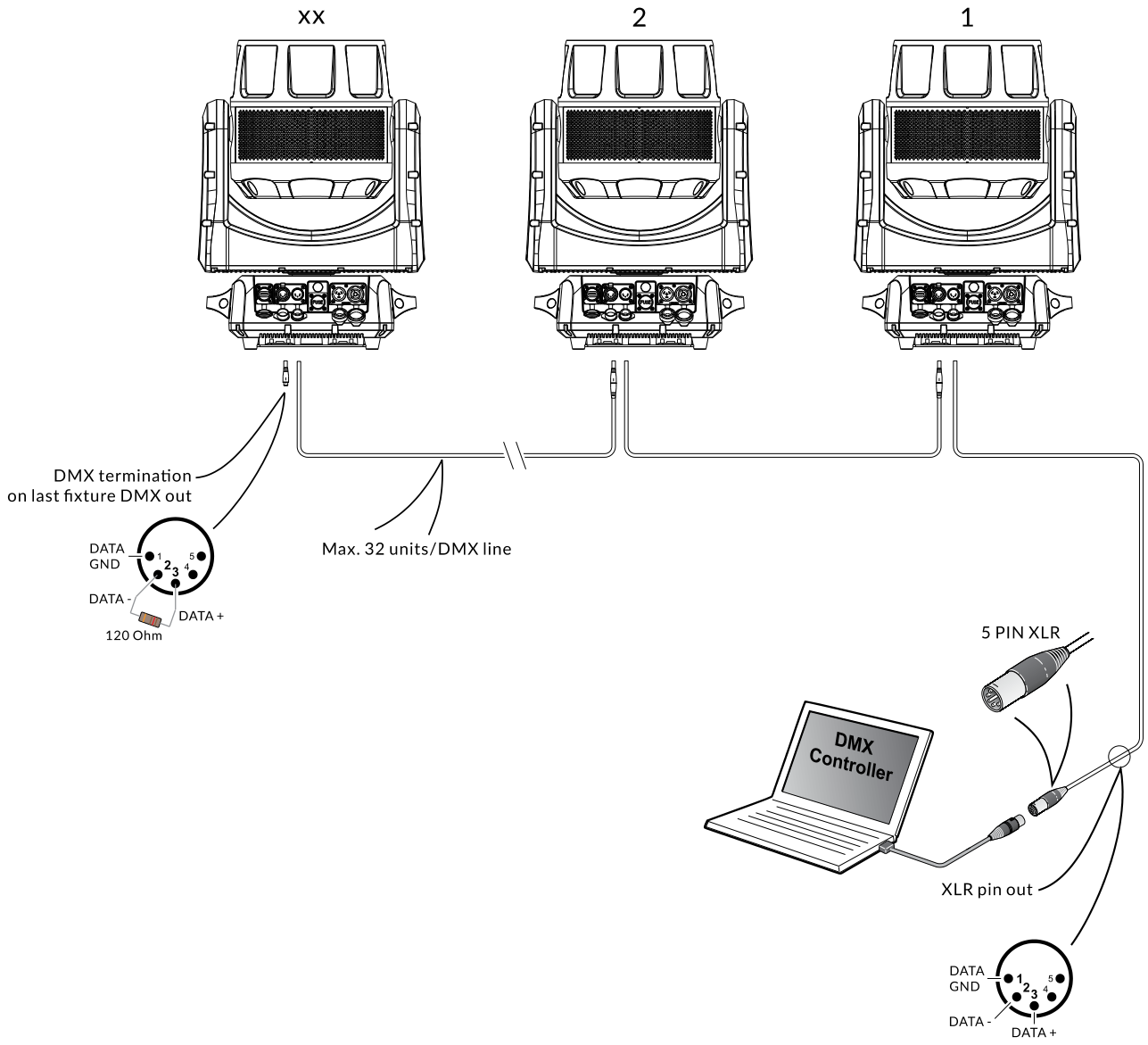
DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.

4.2 Connecting Data

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

Building a serial DMX chain:

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



05/ Fixture Installation

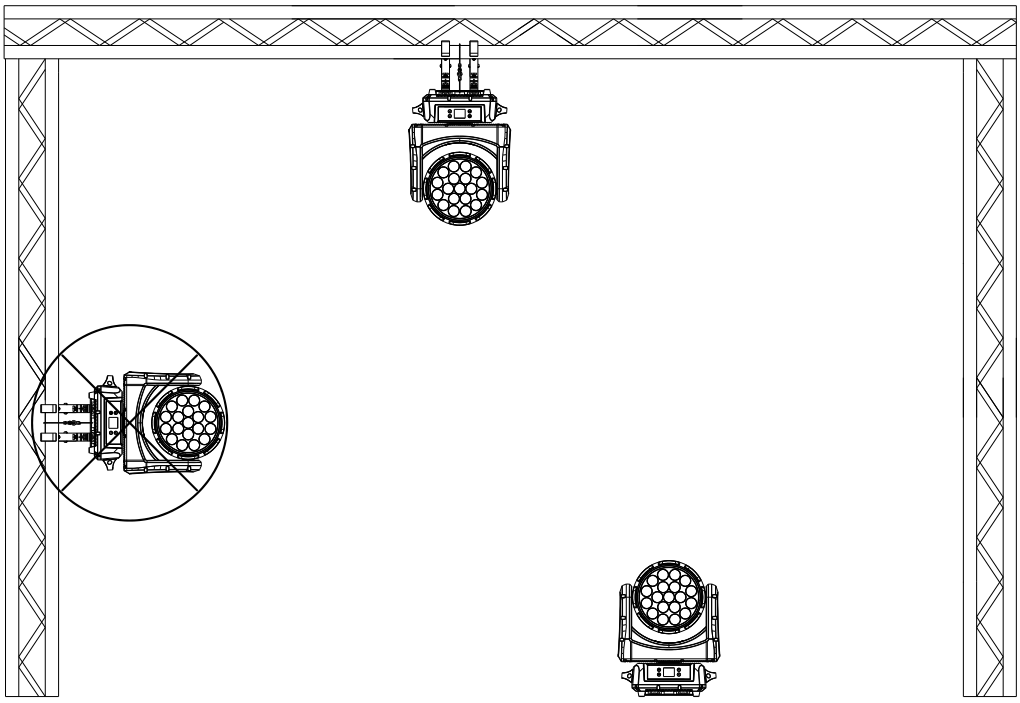
The fixture is IP66-rated and designed for both indoor and outdoor events. This means that it is protected from:

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

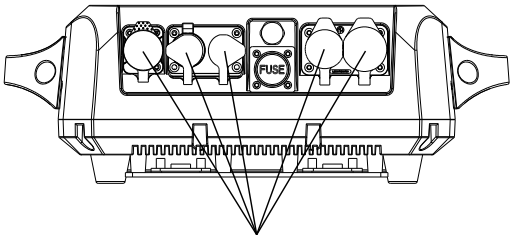
DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas were unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.

Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.

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

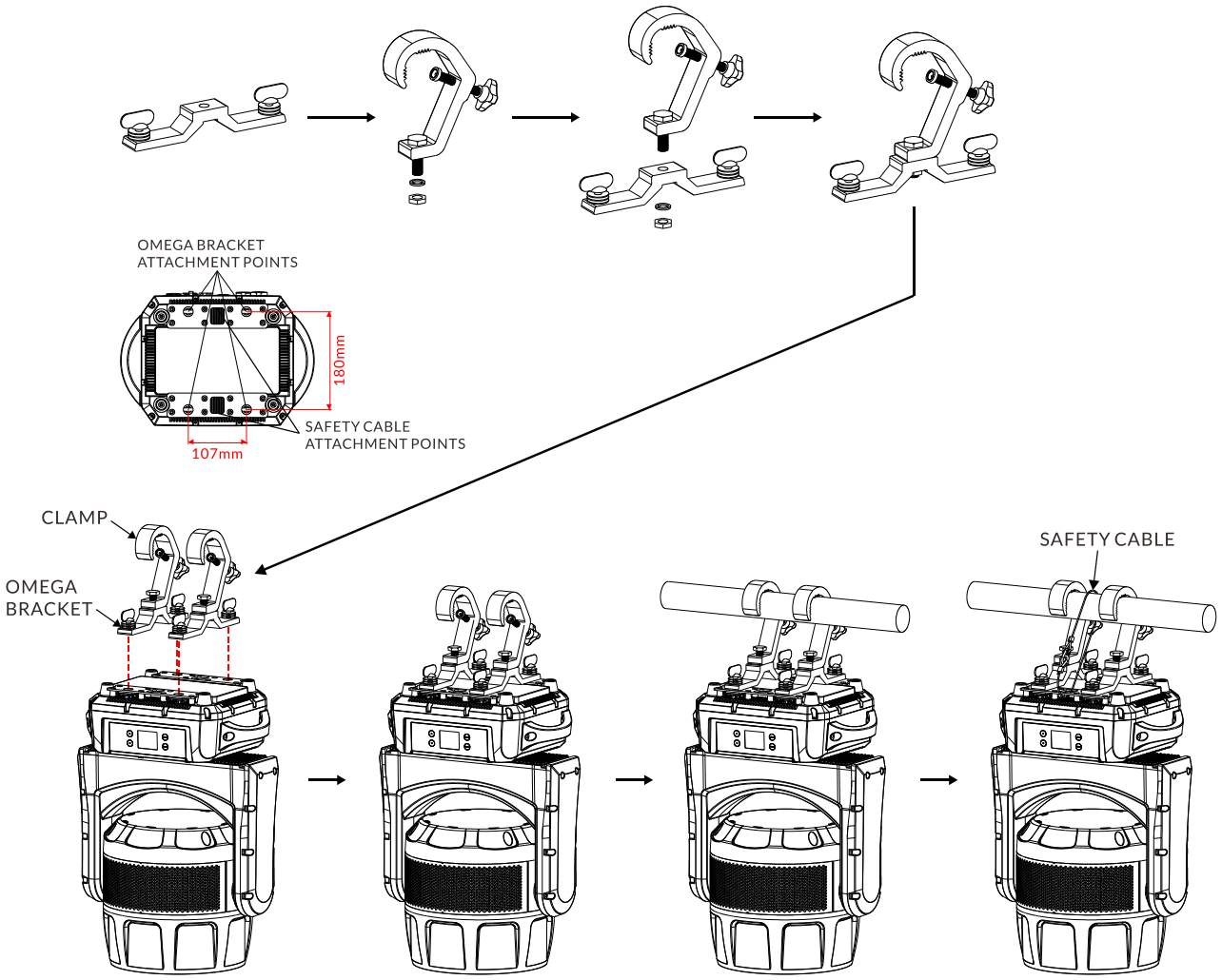


- Use only IP-rated power cords and connectors suitable for outdoor use.
- Visually check panel connectors on accidental water leaks and dust before connecting related cable connectors.
  If some water appears in panel connectors, do not connect cable connectors, especially power!
- Fixtures require regular maintenance.
  Carefully check panel connectors for corrosion and scorching, and replace them promptly if damaged.



All unused panel connectors have to be sealed by the rubber caps to avoid contact with water, especially seawater.

Steps for installing omega brackets to the fixture:



06/ Operation

6.1 Control Menu

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

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

The main functions are shown below:

MAIN MENU	SUBMENU	CHOICES/VALUES	
DMX Settings	DMX Address	1-496 (17 CH)	(Default=1)
		1-492 (21 CH)	
		1-427 (86 CH)	
	DMX Channel Mode	Mode 1 (17)	
		Mode 2 (21)	
		Mode 3 (86)	
	No DMX Status	Blackout	
		Hold	
		Manual	
	View DMX Value		
Fixture Settings	Pan Invert	No	
		Yes	
	Tilt Invert	No	
		Yes	
	P/T Feedback	No	
		Yes	
	Fan Mode	Auto	
		Silent	
	Dimmer Speed	Fast	
		Smooth	
	Dimmer Curve	Linear	
		Square Law	
		Inv SQ Law	
		S Curve	

MAIN MENU	SUBMENU	CHOICES/VALUES	
	White Balance	Red	125-255
		Green	125-255
		Blue	125-255
		Red 1	125-255
		Green 1	125-255
		Blue 1	125-255
		.....	.....
		Red 19	125-255
		Green 19	125-255
		Blue 19	125-255
Display Settings	Display Inverse	No	
		Yes	
	Backlight Intensity	1-10	(Default=10)
	Temperature Unit	°C	
		°F	
	Language	English	
		Chinese	
Fixture Test	Auto Test		
	Manual Test	Pan	0-255
		Pan Fine	0-255
		Tilt	0-255
		Tilt Fine	0-255
		Zoom	0-255
		Function	0-255
		Dimmer	0-255
		Dimmer Fine	0-255
		Shutter	0-255
		Red 1	0-255
		Green 1	0-255
		Blue 1	0-255
		White 1	0-255
		.....	.....
		Red 3	0-255
		Green 3	0-255
		Blue 3	0-255
		White 3	0-255

MAIN MENU	SUBMENU	CHOICES/VALUES	
Fixture Information	Fixture Use Hour		
	LED Use Hour	Total LED Hour	
		LED On Hour	
		LED Hours Reset	Password=050
	Temperature		
	Humidity		
	USB Upgrade File		
	Fan State	Head Fan 1-3	
		LED Fan 1-2	
		Base Fan 1-2	
		Arm Fan 1-2	
	Firmware Version		
	RDM UID		
	Error Logs	Fixture Errors	
		Reset Error Log	No
			Yes Password=050
Reset Functions	Pan/Tilt Reset	No	
		Yes	
	Zoom 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** 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 (17)	1-496
Mode 2 (21)	1-492
Mode 3 (86)	1-427

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 (17), Mode 2 (21)** and **Mode 3 (86)**, 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, Fan Mode, Dimmer Speed, Dimmer Curve** or **White Balance.**

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.

Fan Mode

Select **Fan Mode,** press ENTER.

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

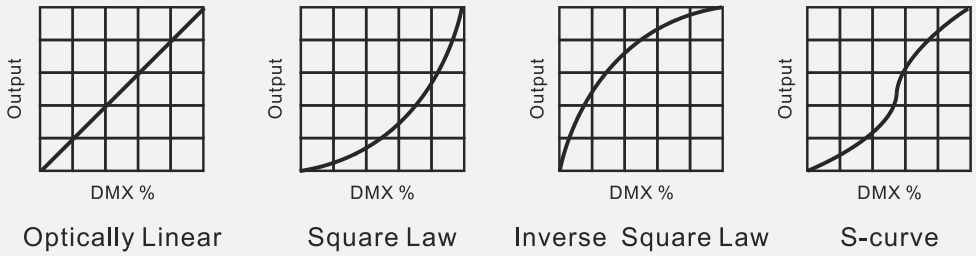
To exit the menu, press MENU, or wait 30 seconds.

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



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

White Balance

Select **White Balance,** press ENTER.

Use UP/DOWN button to select **Red, Green, Blue, Red 1, Green 1, Blue 1.....** or **Red 19, Green 19, Blue 19**, confirm your selection with ENTER.

Use UP/DOWN button to select a value between **125** and **255**, 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 Inverse, Backlight Intensity, Temperature Unit** or **Language.**

Display Inverse

Select **Display Inverse,** 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, Humidity, USB Upgrade File, Fan State, Firmware Version, RDM UID** or **Error Logs.**

Fixture Use Hour

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

LED Use Hour

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

Temperature

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

Humidity

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

USB Upgrade File

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

Fan State

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

Firmware Version

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

RDM UID

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

Error Logs

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

Reset Functions

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

Zoom Reset

Select **Zoom Reset,** press ENTER.
Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset zoom to its 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		√	
CURVE		√	√
DMX_STATE		√	√
DIMMER_SPEED		√	√
FAN_MODE		√	√

√ -Command implemented for the respective parameter ID

6.2 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
Zoom	-128~127
Red	0~255
Green	0~255
Blue	0~255
White	0~255
CPU CD Red	-128~127
CPU CD Green	-128~127
CPU CD Blue	-128~127
CPU CD White	-128~127
CPU EF Red	-128~127
CPU EF Green	-128~127
CPU EF Blue	-128~127
CPU EF White	-128~127
CPU GH Red	-128~127
CPU GH Green	-128~127
CPU GH Blue	-128~127
CPU GH White	-128~127
Red 1	0~1000
Green 1	0~1000
Blue 1	0~1000
White 1	0~1000
.....	.....
Red 19	0~1000
Green 19	0~1000
Blue 19	0~1000
White 19	0~1000

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.

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.

Red

Select **Red,** 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.

Green

Select **Green,** 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.

Blue

Select **Blue,** 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.

White

Select **White,** 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.

CPU CD Red

Select **CPU CD Red,** 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.

CPU CD Green

Select **CPU CD Green,** 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.

CPU CD Blue

Select **CPU CD Blue,** 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.

CPU CD White

Select **CPU CD White,** 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.

CPU EF Red

Select **CPU EF Red,** 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.

CPU EF Green

Select **CPU EF Green,** 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.

CPU EF Blue

Select **CPU EF Blue,** 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.

CPU EF White

Select **CPU EF White,** 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.

CPU GH Red

Select **CPU GH Red,** 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.

CPU GH Green

Select **CPU GH Green,** 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.

CPU GH Blue

Select **CPU GH Blue,** 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.

CPU GH White

Select **CPU GH White,** 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.

Red 1

Select **Red 1,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Green 1

Select **Green 1,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Blue 1

Select **Blue 1,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

White 1

Select **White 1,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

……

Red 19

Select **Red 19,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Green 19

Select **Green 19,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

Blue 19

Select **Blue 19,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

White 19

Select **White 19,** press ENTER.
Use UP/DOWN button to select a value between 0 and 1000, confirm your selection with ENTER.
To exit the offset menu, press MENU, or wait 30 seconds.

07/ Configuring the Device for DMX Control

7.1 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 17 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 18. As the first fixture uses all the first 17 DMX channels, the next available channel is 18 (17+1=18 >> 18).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
17 channels	1	18	35	52	.....
21 channels	1	22	43	64	.....
86 channels	1	87	173	259	.....

7.2 DMX Protocol

Valid from firmware version: V3.4

CHANNEL			VALUE	FUNCTION
17ch	21ch	86ch		
1	1	1	000-255	**PAN** 0°→540°
2	2	2	000-255	**PAN FINE**
3	3	3	000-255	**TILT** 0°→220°
4	4	4	000-255	**TILT FINE**
		5	000-255	**PAN/TILT SPEED** Fast to Slow
5	5	6	000-255	**ZOOM** Narrow→Wide
6	6	86		**FUNCTION** (To activate following functions, stop in DMX value for at least 3 seconds.)
			000-029	Null
			030-039	Dimmer Curve Linear
			040-049	Dimmer Curve Square Law
			050-059	Dimmer Curve Inv Square Law
			060-069	Dimmer Curve S
			070-079	Null
			080-089	Dimmer Speed Smooth
			090-099	Dimmer Speed Fast
			100-139	Null
			140-149	Reset Pan/Tilt
			150-159	Reset Zoom
			160-199	Null
			200-209	Reset All
			210-219	Null
			220-229	Fan Mode: Auto
			230-239	Fan Mode: Silent
			240-255	Null
7	7	8	000-255	**DIMMER** 0%→100%
8	8	9	000-255	**DIMMER FINE**
9	9	7		**STROBE**
			000-007	Close
			008-015	Open
			016-131	Strobe from Slow to Fast
			132-139	Open

			140-181 182-189 190-231 232-239 240-247 248-255	Slow Open Fast Close from Slow to Fast Open Fast Open Slow Close from Slow to Fast Open Random Strobe from Fast to Slow Open
10			000-255	**RED** 0%→100%
11			000-255	**GREEN** 0%→100%
12			000-255	**BLUE** 0%→100%
13			000-255	**WHITE** 0%→100%
	10	**10**	000-255	**RED 1** 0%→100%
	11	**11**	000-255	**GREEN 1** 0%→100%
	12	**12**	000-255	**BLUE 1** 0%→100%
	13	**13**	000-255	**WHITE 1** 0%→100%
	14	**14**	000-255	**RED 2** 0%→100%
	15	**15**	000-255	**GREEN 2** 0%→100%
	16	**16**	000-255	**BLUE 2** 0%→100%
	17	**17**	000-255	**WHITE 2** 0%→100%
	18	**18**	000-255	**RED 3** 0%→100%
	19	**19**	000-255	**GREEN 3** 0%→100%
	20	**20**	000-255	**BLUE 3** 0%→100%
	21	**21**	000-255	**WHITE 3** 0%→100%
		22	000-255	**RED 4** 0%→100%
		23	000-255	**GREEN 4** 0%→100%
		24	000-255	**BLUE 4** 0%→100%

		25	000-255	WHITE 4 0%→100%
		26	000-255	RED 5 0%→100%
		27	000-255	GREEN 5 0%→100%
		28	000-255	BLUE 5 0%→100%
		29	000-255	WHITE 5 0%→100%
		30	000-255	RED 6 0%→100%
		31	000-255	GREEN 6 0%→100%
		32	000-255	BLUE 6 0%→100%
		33	000-255	WHITE 6 0%→100%
		34	000-255	RED 7 0%→100%
		35	000-255	GREEN 7 0%→100%
		36	000-255	BLUE 7 0%→100%
		37	000-255	WHITE 7 0%→100%
		38	000-255	RED 8 0%→100%
		39	000-255	GREEN 8 0%→100%
		40	000-255	BLUE 8 0%→100%
		41	000-255	WHITE 8 0%→100%
		42	000-255	RED 9 0%→100%
		43	000-255	GREEN 9 0%→100%
		44	000-255	BLUE 9 0%→100%
		45	000-255	WHITE 9 0%→100%
		46	000-255	RED 10 0%→100%

		47	000-255	**GREEN 10** 0%→100%
		48	000-255	**BLUE 10** 0%→100%
		49	000-255	**WHITE 10** 0%→100%
		50	000-255	**RED 11** 0%→100%
		51	000-255	**GREEN 11** 0%→100%
		52	000-255	**BLUE 11** 0%→100%
		53	000-255	**WHITE 11** 0%→100%
		54	000-255	**RED 12** 0%→100%
		55	000-255	**GREEN 12** 0%→100%
		56	000-255	**BLUE 12** 0%→100%
		57	000-255	**WHITE 12** 0%→100%
		58	000-255	**RED 13** 0%→100%
		59	000-255	**GREEN 13** 0%→100%
		60	000-255	**BLUE 13** 0%→100%
		61	000-255	**WHITE 13** 0%→100%
		62	000-255	**RED 14** 0%→100%
		63	000-255	**GREEN 14** 0%→100%
		64	000-255	**BLUE 14** 0%→100%
		65	000-255	**WHITE 14** 0%→100%
		66	000-255	**RED 15** 0%→100%
		67	000-255	**GREEN 15** 0%→100%
		68	000-255	**BLUE 15** 0%→100%

		69	000-255	**WHITE 15** 0%→100%
		70	000-255	**RED 16** 0%→100%
		71	000-255	**GREEN 16** 0%→100%
		72	000-255	**BLUE 16** 0%→100%
		73	000-255	**WHITE 16** 0%→100%
		74	000-255	**RED 17** 0%→100%
		75	000-255	**GREEN 17** 0%→100%
		76	000-255	**BLUE 17** 0%→100%
		77	000-255	**WHITE 17** 0%→100%
		78	000-255	**RED 18** 0%→100%
		79	000-255	**GREEN 18** 0%→100%
		80	000-255	**BLUE 18** 0%→100%
		81	000-255	**WHITE 18** 0%→100%
		82	000-255	**RED 19** 0%→100%
		83	000-255	**GREEN 19** 0%→100%
		84	000-255	**BLUE 19** 0%→100%
		85	000-255	**WHITE 19** 0%→100%
14			000 001-004 005-009 010-013 014-018 019-022 023-027 028-031 032-036 037-040	**CTO (8000K-2500K)** Null 8000K 7900K 7800K 7700K 7600K 7500K 7400K 7300K 7200K

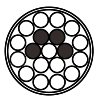
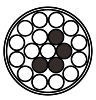
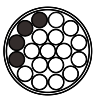
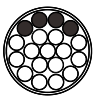
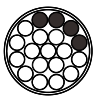
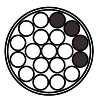
			041-045	7100K
			046-049	7000K
			050-054	6900K
			055-058	6800K
			059-063	6700K
			064-067	6600K
			068-072	6500K
			073-076	6400K
			077-081	6300K
			082-085	6200K
			086-090	6100K
			091-094	6000K
			095-099	5900K
			100-103	5800K
			104-108	5700K
			109-112	5600K
			113-117	5500K
			118-121	5400K
			122-126	5300K
			127-130	5200K
			131-135	5100K
			136-139	5000K
			140-144	4900K
			145-148	4800K
			149-153	4700K
			154-157	4600K
			158-162	4500K
			163-166	4400K
			167-171	4300K
			172-175	4200K
			176-180	4100K
			181-184	4000K
			185-189	3900K
			190-193	3800K
			194-198	3700K
			199-202	3600K
			203-207	3500K
			208-211	3400K
			212-216	3300K
			217-220	3200K
			221-225	3100K
			226-229	3000K
			230-234	2900K
			235-238	2800K
			239-243	2700K
			244-247	2600K
			248-255	2500K

15				**COLOR MACRO**
			000-007	Null
			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
			064-067	Color 15
			068-071	Color 16
			072-075	Color 17
			076-079	Color 18
			080-083	Color 19
			084-087	Color 20
			088-091	Color 21
			092-095	Color 22
			096-099	Color 23
			100-103	Color 24
			104-107	Color 25
			108-111	Color 26
			112-115	Color 27
			116-119	Color 28
			120-123	Color 29
			124-127	Color 30
			128-131	Color 31
			132-135	Color 32
			136-165	Clockwise Rotation from Fast to Slow
			166-195	Counter-Clockwise Rotation from Slow to Fast
			196-205	Red → Green
			206-215	Red → Blue
			216-225	Red → White
			226-235	Green → Blue
			236-245	Green → White
			246-255	Blue → White
16				**PIXEL (See “Pixel of 16 CH” in detail)**
			000	Null
			001	Open
			002-245	Pattern 1-244
			246	Built-in Mode 1

			247	Built-in Mode 2
			248	Built-in Mode 3
			249	One pixel lights up randomly
			250	Two pixels light up randomly
			251-255	Open
17				**PIXEL ROTATION**
			000-031	Null
			032-091	Clockwise Rotation from Fast to Slow
			092-101	Null
			102-161	Counter-Clockwise Rotation from Slow to Fast
			162-255	Null

Pixel of 16 CH:

 Value : 000	 Value : 001	 Value : 002	 Value : 003	 Value : 004	 Value : 005	 Value : 006	 Value : 007
 Value : 008	 Value : 009	 Value : 010	 Value : 011	 Value : 012	 Value : 013	 Value : 014	 Value : 015
 Value : 016	 Value : 017	 Value : 018	 Value : 019	 Value : 020	 Value : 021	 Value : 022	 Value : 023
 Value : 024	 Value : 025	 Value : 026	 Value : 027	 Value : 028	 Value : 029	 Value : 030	 Value : 031
 Value : 032	 Value : 033	 Value : 034	 Value : 035	 Value : 036	 Value : 037	 Value : 038	 Value : 039
Value : 040	Value : 041	Value : 042	Value : 043	Value : 044	Value : 045	Value : 046	Value : 047
Value : 048	Value : 049	Value : 050	Value : 051	Value : 052	Value : 053	Value : 054	Value : 055
Value : 056	Value : 057	Value : 058	Value : 059	Value : 060	Value : 061	Value : 062	Value : 063
Value : 064	Value : 065	Value : 066	Value : 067	Value : 068	Value : 069	Value : 070	Value : 071
Value : 072	Value : 073	Value : 074	Value : 075	Value : 076	Value : 077	Value : 078	Value : 079
Value : 080	Value : 081	Value : 082	Value : 083	Value : 084	Value : 085	Value : 086	Value : 087

 Value : 088	 Value : 089	 Value : 090	 Value : 091	 Value : 092	 Value : 093	 Value : 094	 Value : 095
 Value : 096	 Value : 097	 Value : 098	 Value : 099	 Value : 100	 Value : 101	 Value : 102	 Value : 103
 Value : 104	 Value : 105	 Value : 106	 Value : 107	 Value : 108	 Value : 109	 Value : 110	 Value : 111
 Value : 112	 Value : 113	 Value : 114	 Value : 115	 Value : 116	 Value : 117	 Value : 118	 Value : 119
 Value : 120	 Value : 121	 Value : 122	 Value : 123	 Value : 124	 Value : 125	 Value : 126	 Value : 127
Value : 128	Value : 129	Value : 130	Value : 131	Value : 132	Value : 133	Value : 134	Value : 135
Value : 136	Value : 137	Value : 138	Value : 139	Value : 140	Value : 141	Value : 142	Value : 143
Value : 144	Value : 145	Value : 146	Value : 147	Value : 148	Value : 149	Value : 150	Value : 151
Value : 152	Value : 153	Value : 154	Value : 155	Value : 156	Value : 157	Value : 158	Value : 159
Value : 160	Value : 161	Value : 162	Value : 163	Value : 164	Value : 165	Value : 166	Value : 167
Value : 168	Value : 169	Value : 170	Value : 171	Value : 172	Value : 173	Value : 174	Value : 175

 Value : 176	 Value : 177	 Value : 178	 Value : 179	 Value : 180	 Value : 181	 Value : 182	 Value : 183
 Value : 184	 Value : 185	 Value : 186	 Value : 187	 Value : 188	 Value : 189	 Value : 190	 Value : 191
 Value : 192	 Value : 193	 Value : 194	 Value : 195	 Value : 196	 Value : 197	 Value : 198	 Value : 199
 Value : 200	 Value : 201	 Value : 202	 Value : 203	 Value : 204	 Value : 205	 Value : 206	 Value : 207
 Value : 208	 Value : 209	 Value : 210	 Value : 211	 Value : 212	 Value : 213	 Value : 214	 Value : 215
Value : 216	Value : 217	Value : 218	Value : 219	Value : 220	Value : 221	Value : 222	Value : 223
Value : 224	Value : 225	Value : 226	Value : 227	Value : 228	Value : 229	Value : 230	Value : 231
Value : 232	Value : 233	Value : 234	Value : 235	Value : 236	Value : 237	Value : 238	Value : 239
Value : 240	Value : 241	Value : 242	Value : 243	Value : 244	Value : 245		
Value : 246			Value : 247				
Value : 248			Value : 249 Randomly	Value : 250 Randomly	Value : 251-255		

08/ 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 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.

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.

Zoom Reset Error

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

Base Fan 1/2 can’t start

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

LED Fan 1/2 can’t start

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 can’t start

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 1/2 can’t start

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

LED Temp. Error

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

LED Temp. Too High

Check if the fan is working properly.
Check if the fan speed is normal.
Check if the ambient temperature is abnormal.

Head Humidity Error

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

Head Humidity High

Disassemble the housing of the fixture to dehumidify.

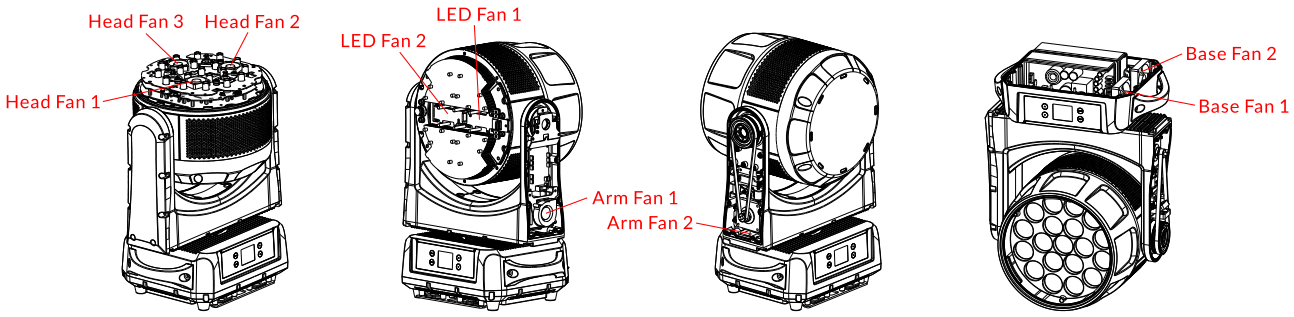
Base Humidity Error

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

Base Humidity High

Disassemble the housing of the fixture to dehumidify.

Position of cooling fans:



Cooling Fans	Part Number	V	W	Position
Head Fan 1	3014001313	DC 24V	1.2W	Head - GH
Head Fan 2				
Head Fan 3				
LED Fan 1	3014003006	DC 12V	4.8W	Head - EF
LED Fan 2				
Arm Fan 1	3014001318	DC 24V	2.4W	Arm - B
Arm Fan 2				
Base Fan 1	3014001269	DC 12V	4.2W	Base - A
Base Fan 2				

09/ 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.

10/ 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.

11/ 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.

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