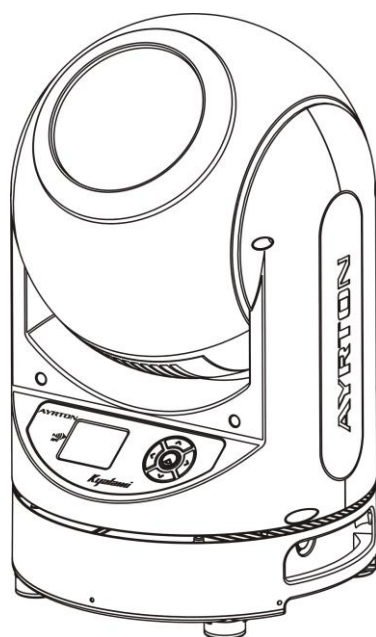




# AYRTON

Digital Lighting



***Kyalami***  
**ULTRA BEAM**

## User Information



SCAN FOR  
SUPPORT

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2. GETTING STARTED	4
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# 1. SAFETY INSTRUCTIONS

## 1.1. IMPORTANT SAFETY WARNINGS

This product has left the factory in perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to read and follow the safety instructions and warning notes written in this user information manual.

For safety reasons, please be aware that all modifications to the product are forbidden.

We will not be liable for any damage or injury caused by installation, use, maintenance or service that not follow this manual.


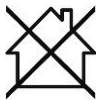
In order to install, operate and maintain the lighting fixture safely and correctly we suggest that the installation and operation be carried out by qualified technicians and these instructions be carefully followed.

## 1.2. PHOTOBIOLOGICAL SAFETY

The light source of this product is based on laser diodes.

This product qualifies for the laser products safety standard **IEC 60825-1:2014**, edition 3, "part 4.4, Laser products designed to function as conventional lamps", under which it is classified as **CLASS 1 LASER PRODUCT**. Alternately evaluated under the standard **IEC 62471-5:2015** "Photobiological safety of lamps and lamp systems", the photobiological risk classification is assigned as **RISK GROUP 3 (RG3)**.



	<b>RISK GROUP 3</b>
	<b>WARNING!</b> POSSIBLY HAZARDOUS OPTICAL RADIATION EMITTED FROM THIS PRODUCT. DO NOT LOOK AT OPERATING LAMP SOURCE. EYE INJURY MAY RESULT. RG3 HAZARD DISTANCE: REFER TO THE MANUAL. NOT FOR HOUSHOLD USE. <b>EN/IEC 62471-5</b>





- Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The US Food and Drug Administration (FDA) requires that the owner of the product be a holder of a valid FDA CDRH laser light show variance and operate the product in accordance with the terms of the variance. (variance is a "permit" issued by FDA)
- It requires the operator (if not the owner) of the product to be a legal employee of the variance holder and to have completed a laser safety training course and an operators training course.
- This product is in conformity with performance standards for laser products under 21 CFR 1040, except with respect to those characteristics authorized by Variance Number FDA-2023-V-1465 effective (September 27, 2023), Accession # 23A0187.
- The product is in excess of the Exempt Risk Group, the viewer-related risk is dependent upon how the user installs and uses the product.
- Operators shall control access to the beam within the hazard distance or install the product at the height that will prevent spectators' eyes from being within the hazard distance.

- Hazard Distance (HD) is the distance from the projector's nearest point of human access where the beam radiance or irradiance exceeds the applicable exposure limit. The operators shall control the product to prevent human exposure to the luminaire(s) light within the HD. Hazard distances (according to different settings):

HD (Hazard Distance) = 122 meters (400 ft)  
 Hazard Distance (worst case) is calculated at full power and narrowest beam angle. However, do not illuminate personnel closer than this distance under any circumstances.

Do not operate with personnel exposure shorter than the declared hazard distance due to risk of skin or corneal burns.

- This Laser Product is designated as Class 1 / RG3 during all procedures of operation.
- Internal (embedded) laser parameters:  
 Laser Wavelengths: 449-461nm  
 Laser Power max: 15W (at light engine aperture)  
 Beam Diameter: 18mm  
 Emissions: 1.2KHz, varying duty cycle: 0 — 97%
- Luminaire Wavelengths: 445nm – 700nm.  
 Divergence: 1°
- Warning: The user must not modify the unit or remove protective covers or housings except as required for service. The laser product is never to be operated if the unit is defective or the cover or seal is damaged.  
 Danger - class 4 laser light when open. Avoid eye or skin exposure to direct or scattered light.
- No maintenance is required or allowed by the user.
- Service is only to be performed by trained and authorized personnel. Consult service manual for laser safety procedures before opening unit.
- As required by US state and federal OSHA requirements, maintenance and service is to be performed under the terms of ANSI Z136.1, "Safe Use of Lasers". Wear laser safety eyewear when servicing the unit.
- All laser light shows shall be under the direct and personal control of trained, competent operator(s). The operator(s) shall:
  - (1) Be an employee of the variance holder who will be responsible for the training and the conduct of the operator.
  - (2) Be located where all beam paths can be directly observed at all times.
  - (3) Immediately terminate the emission of light show radiation in the event of any unsafe condition; or for outdoor shows, upon request by any air traffic control officials.
- Hazard distances (HD) for all relevant viewer-related risk groups below RG3: Not Applicable. In no case expose personnel closer than the Hazard Distance indicated above.

	<b>CAUTION!</b> HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK.
	<b>CAUTION!</b> ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS.
	<b>CAUTION!</b> NEVER TOUCH THE DEVICE DURING OPERATION. COVERS MAY BE HOT.
	<b>CAUTION!</b> NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE.

	<p style="text-align: center;"><b>DANGER</b></p> <p>CLASS 4 LASER LIGHT WHEN OPEN, AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED LIGHT</p>
	<p>LIGHT COLLIMATION SYSTEM THIS PRODUCT CONTAINS INTERNAL LIGHT COLLIMATION SYSTEM. AVOID INTENSE LIGHT FROM ANY ANGLE.</p>
	<p>NOT SUITABLE FOR HOUSEHOLD ILLUMINATION</p>
	<p>NOT FOR RESIDENTIAL USE</p>
	<p style="text-align: center;"><b>DISPOSING</b></p> <p>THIS PRODUCT IS SUPPLIED IN COMPLIANCE WITH EUROPEAN DIRECTIVE 2012/19/EU - WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE). TO PRESERVE THE ENVIRONMENT PLEASE DISPOSE / RECYCLE THIS PRODUCT AT THE END OF ITS LIFE ACCORDING TO THE LOCAL REGULATION.</p>
	<p style="text-align: center;"><b>CAUTION!</b></p> <p><b>WARNING:</b> CHANGES OR MODIFICATIONS TO THIS UNIT NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.</p> <p><b>NOTE:</b> THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.</p>

### 1.3. GENERAL GUIDELINES

- Damage caused by the disregard of this user manual is not subject to warranty. The dealer and manufacturer will not accept liability for any resulting defects or problems.
- Under no circumstances should the fixture be pointed at the sun. Sunlight, combined with the high efficiency lenses used in the product can cause significant damage to the fixture.
- Be aware that even when lens is not pointed directly at the sun damage may occur. It is best practice to ensure that the lens is pointed away from the sun, preferably in the opposite direction.
- Always dry and clean your fixture before storing it for any length of time.
- Never use any abrasive cleaning products on the fixture as this may damage the coating of the fixture impacting its anti-corrosion protection.
- This product is intended for the following applications:  
trade show or convention, indoor arena, outdoor arena, outdoor unenclosed arena, stage, studio, theater, event, venues, theme parks, architecture and similar applications.
- If the device has been exposed to temperature changes due to environmental conditions, do not power on immediately. The resulting condensation could damage the device. Leave the device powered off until it has reached room temperature.
- Ensure the sealing rubber covers of powerCON and XLR connectors are fitted properly

when the device is not in use, to avoid water ingress.

- This device falls under protection-class I. Therefore, it is essential that the device be earthed.
- If either lenses or display are damaged (damage may include cracks or gashes in the material) they must be replaced.
- Electrical connections, such as replacing the power plug, must be performed by a qualified person.
- Make sure that the available voltage is not higher than that which is stated in this manual.
- Make sure the power cord is never crushed or damaged by sharp edges. If this should be the case, replacement of the cable must be done by an authorized dealer.
- If the external flexible power cord of this device is damaged, it shall be exclusively replaced by the manufacturer or their service agent or a similar qualified person in order to avoid injury.
- When the device is not in use or before performing maintenance or service, always disconnect the device from the mains. Only handle the power cord from the plug. Never pull the plug out of a socket by tugging the power cord.
- When powered on for the first time, some smoke or smell may occur. This is caused by coating on metal parts when heated and is normal. If you are concerned, please contact your distributor.
- Do not focus the beam onto flammable surfaces. The minimum distance between the exiting lens of the device and the illuminated surface must be min. 15.0m. The minimum distance from fixture head to combustible materials must be min. 0.1m.  
(for personnel exposure distances, refer to the above mentioned Hazard Distances)
- The projection system shall be securely mounted or immobilized to prevent unintended movement or misalignment. Beam masking will be provided as an inherent part of the system design to prevent overfilling of screens, beam stops, targets, etc.
- This fixture is only allowed to be operated within the maximum alternating current as stated in the technical specifications in section 2 of this manual.
- Handle the device with care, avoid shaking or using force when installing or maintaining the device.
- If you use the quick lock cam when rigging the device, make sure the quick lock fasteners are located in the quick lock holes correctly and securely.
- Operate the device only after having familiarized yourself with its functions. Do not permit operation by persons not qualified for operating the device. Most damage is the result of unprofessional operation.
- Please use the original packaging if the device is to be transported.
- The applicable temperature for the device is between -20°C and 45°C. Do not use the device outside of this temperature range. (Note: When the temperature detected by laser source between -20°C and 0°C, the fixture needs to wait for the heater to increase the internal temperature to be above 0°C before illumination will occur.)

## **2. GETTING STARTED**

### **2.1 UNPACKING**


After unpacking, you will find the following items in the package:

- |                           |   |
|---------------------------|---|
| • KYALAMI fixture         | 1 |
| • User Information manual | 1 |
| • Power Cable             | 1 |
| • Omega Bracket           | 2 |

## 2.2 PLACEMENT OF LABELS


Please check and read carefully the labels on the fixture before using:



 CONFORMS TO UL STD. 1573  
 CERTIFIED TO CSA STD. C22.2 NO:166  
 MODEL: KYALAMI. 100-240VAC, 50/60Hz; 200W

Max. load of outlet:  
 total 10.0A /100-120Vac or 10.5A/200-240Vac  
 Max. Charge de sortie:  
 total 10.0A /100-120Vac or 10.5A/200-240Vac  
 NOT FOR RESIDENTIAL USE  
 NON DESTINÉ À UN USAGE DOMESTIQUE  
 NOT FOR HOUSEHOLD USE  
 NON DESTINÉ À UN USAGE DOMESTIQUE  
 SUIABLE FOR WET LOCATIONS  
 CONVIENT AUX EMPLACEMENTS MOUILLÉS

Trade Mark: AYRTON  
 Model Number: KYALAMI  
 CAN ICES-3(A)/NMB-3(A)



This device complies with part 15 of the FCC Rules.  
 Operation is subject to the following two conditions:  
 (1) this device may not cause harmful interference, and  
 (2) this device must accept any interference received,  
 including interference that may cause undesired  
 operation.

Minimum distance to illuminated surface =  $\approx 15.0m$   
 Minimum distance from fixture head to  
 combustible materials = 0.1m


Distance minimum à surface éclairée =  $\approx 15.0m$   
 Distance minimum de la tête de l'appareil aux  
 Matériaux combustibles = 0.1m

AYRTON  
 2 rue Vitruve 91140  
 Villebon-sur-Yvette, France  
 Model: KYALAMI  
 Place of MFG: Hao yang

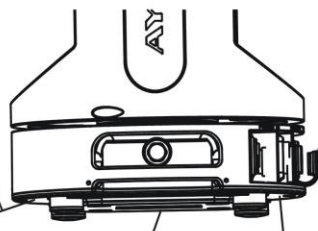
This product is in conformity with  
 performance standards for laser  
 products under 21 CFR 1040, except  
 with respect to those characteristics  
 authorized by Variance Number  
 FDA-2023-V-1465 effective on  
 September 27, 2023.

Date of manufacture:  
 \_\_\_\_\_  
 month/year

**CLASS 1 / RG3 LASER PRODUCT**  
 EN/BS 60825-1:2014/A11:2021 EU & UK  
 IEC 60825-1 Ed 3, 2014 US  
 + IEC/EN 62471-5:2015  
 See Manual for Hazard Distance (HD)

 CAUTION: LASER LIGHT IS BRIGHT AND  
 MAY CAUSE VISUAL INTERFERENCE.  
 DO NOT SHINE AT AIRCRAFT OR  
 VEHICLES AT ANY DISTANCE.

Serial Number:  
 XXXXXXXXX





**Kyalami** **ULTRA BEAM**  
 by AYRTON

 CAUTION! Risk of electric shock, disconnect input power before opening.  
 PRUDENCE! Risque de choc électrique, débrancher l'alimentation avant d'ouvrir.  
 Warning: This apparatus must be earthed.  
 Avertissement: Cet appareil doit être relié à la terre.






 CAUTION! Fixture exposed to salt water should not be stored in its foam insert  
 without being cleaned with fresh water first. It is best practice that fixture be  
 stored dry.

 SCAN FOR SUPPORT

 **Warning!** Possibly hazardous optical radiation emitted from this product.  
 Do not look at operating lamp source. Eye injury may result.  
**RG3**  
 Hazard Distance: Refer to the manual

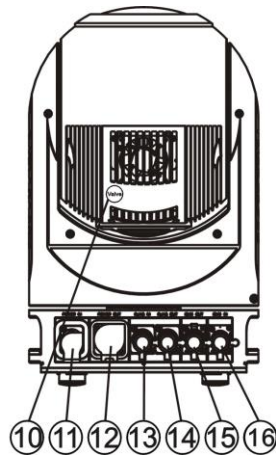
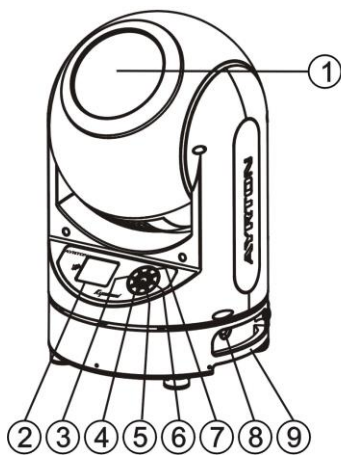
 **Attention:** ce produit peut émettre un rayonnement lumineux nocif.  
 Ne regardez pas la source en fonctionnement.  
 Groupe de risque 3  
 Des blessures oculaires peuvent en résulter.

Not for household use.  
 Emitted Laser Wavelength:  
 449 - 461nm.  
 Luminaire emissions:  
 445 - 700nm.

Designed by AYRTON in France, Made in China | [www.ayrton.eu](http://www.ayrton.eu) |  $t_a = 45^\circ C$  |       $\approx 15.0m$

**AYRTON**

## 2.3 FIXTURE OVERVIEW



- |                 |             |
|-----------------|-------------|
| ① Front Lens    | ⑩ Valve     |
| ② Display       | ⑪ Power In  |
| ③ Left-button   | ⑫ Power Out |
| ④ Down-button   | ⑬ RJ45 In   |
| ⑤ Center-button | ⑭ RJ45 Out  |
| ⑥ Right-button  | ⑮ DMX In    |
| ⑦ Up-button     | ⑯ DMX Out   |
| ⑧ Valve         |             |
| ⑨ Handle        |             |

## 2.4 INSTALLATION INSTRUCTIONS - RIGGING THE FIXTURES



### CAUTION!

PLEASE CONSIDER THE RESPECTIVE NATIONAL NORMS DURING THE INSTALLATION. THE INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

- The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety rope.
- Never stand directly below the device when mounting, removing or servicing the fixture.
- The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
- These installations have to be approved by a skilled person once a year.

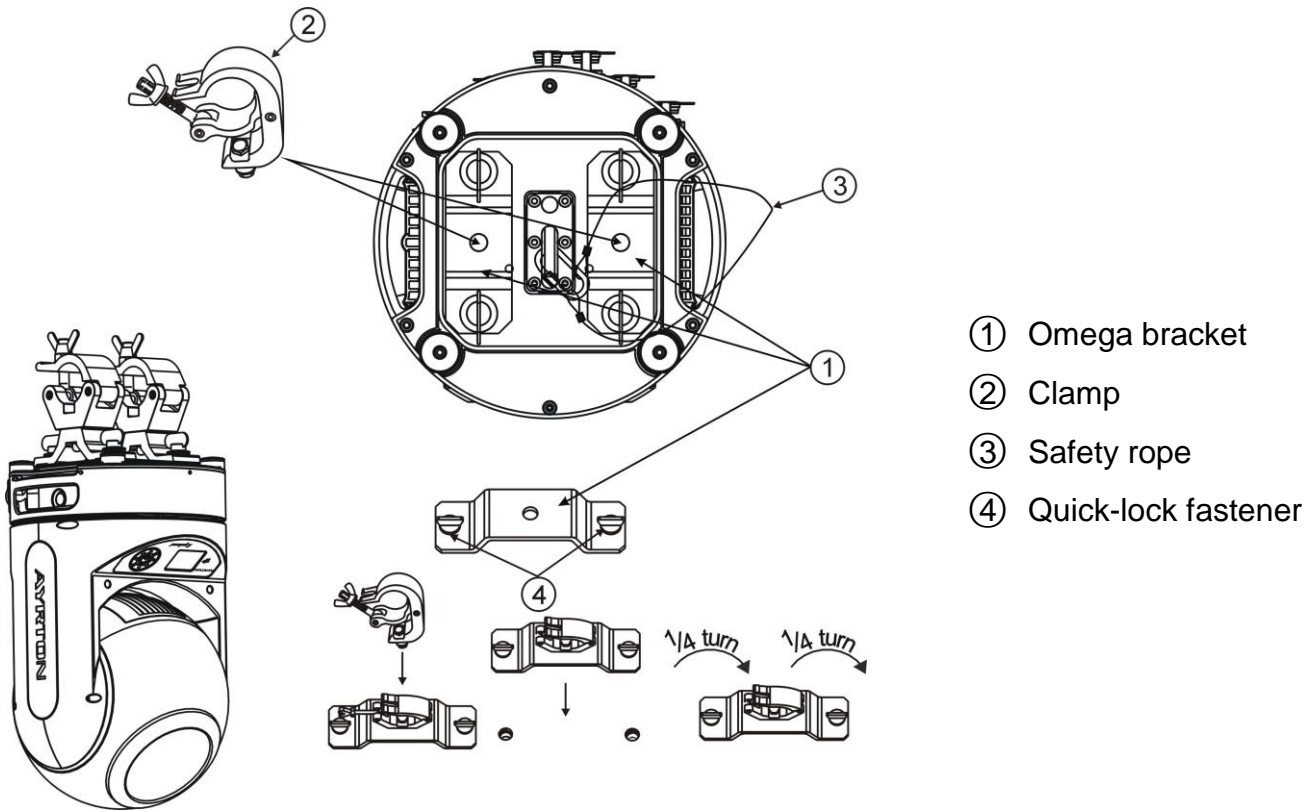
### Rigging Using The Omega Brackets

- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the  $\Phi 13$  hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega holder.
- Pull the safety cable through the holes on the bottom of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.

### Important:

This step is very important to ensure safe rigging of the fixture.

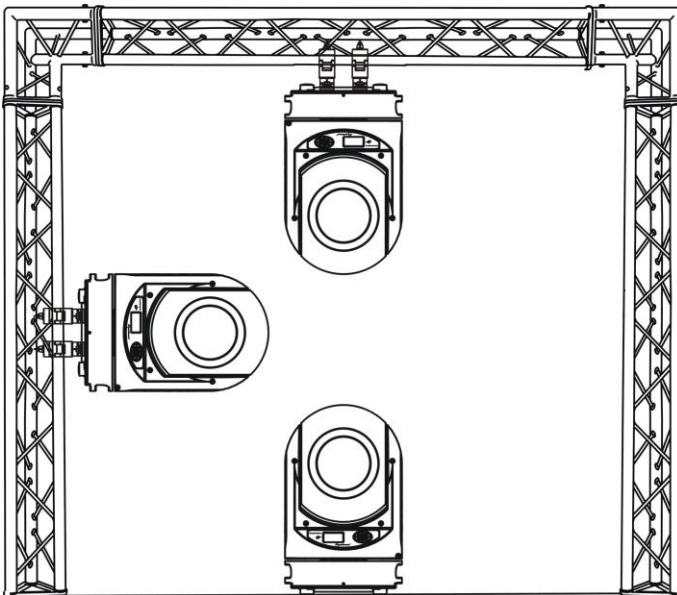




- ① Omega bracket
- ② Clamp
- ③ Safety rope
- ④ Quick-lock fastener

## Rigging Drawings

The fixtures can be installed by sitting on floor, hanging on truss upside down (on ceiling) or hanging vertically (on wall), as shown on the drawing below:



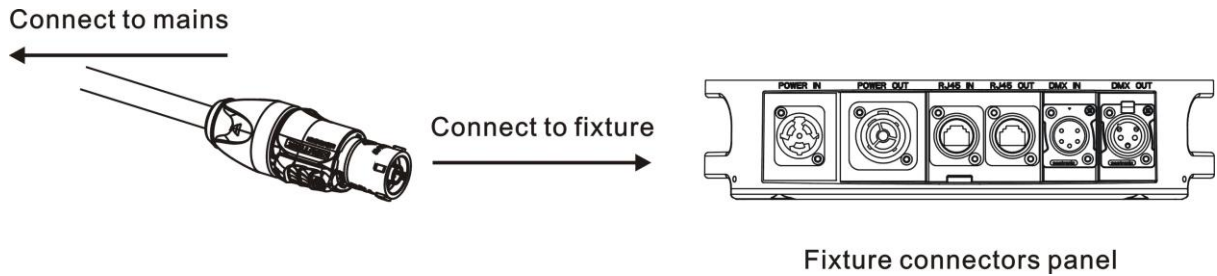
- Warnings! Please DO NOT let other external intense lights to shine through the fixture front lens, it may cause significant internal damages!
- When install fixture outdoor at day time (with power off), please make sure that the fixture front lens is NOT facing the sun.
- When use fixture outdoor at day time (with power on), please avoid fixture front lens facing the sun.
- When fixture is on standby outdoor at day time (with power on), please make sure the "sun protection" mode is ON (default).

- Be sure this fixture is kept at least 0.1m away from any flammable materials (decoration etc.).
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.
- Rig the projector high enough to provide clearance for people who may walk beneath the beam path or establishing a restricted access area that extends beyond the beam hazard distance.

## 2.5 CONNECTIONS – CONNECTING POWER AND SIGNAL CABLES

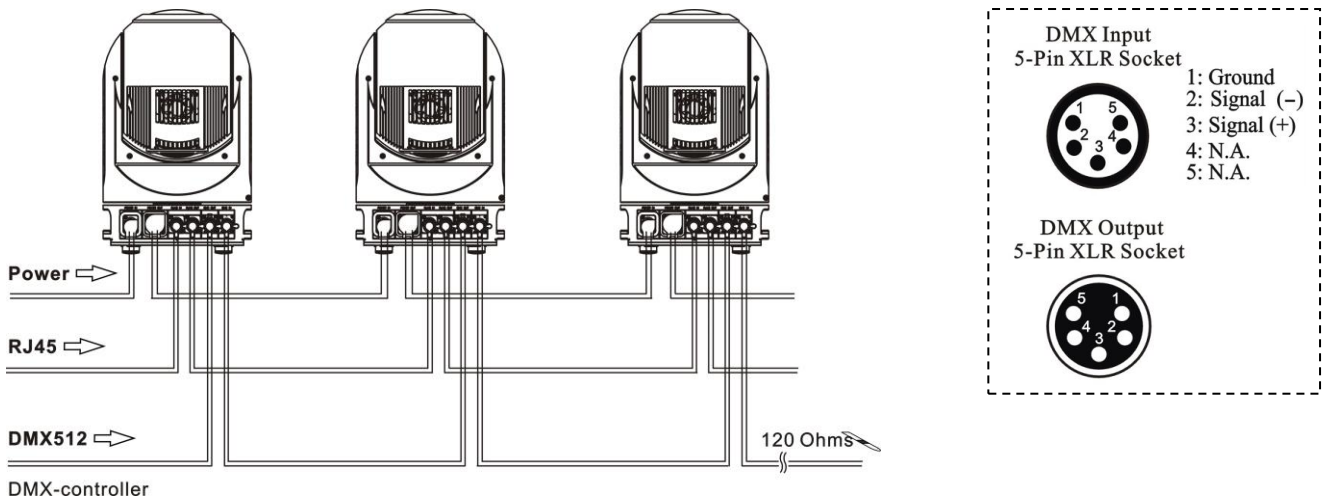
### Power Connection

- Connect the power cable to the “Power In” socket of the fixture: insert the power cable connector and turn clockwise until it clicks to lock.
- Connect the power cable plug to the mains: AC100-240V~, 50/60Hz, Power 200W.



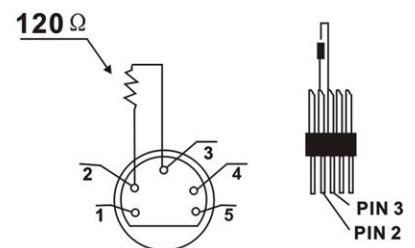
### DMX-512 / Art-Net Control Connection

Connect the provided male side of the XLR cable to the female XLR output of your controller and the female side of the XLR cable to the male XLR input of the device. You can connect multiple devices together in a serial fashion. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.



### DMX-512 Connection With DMX Terminator

For installations where the DMX cable has to run over a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal caused by electrical noise. The DMX terminator is an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output (female) XLR socket of the last fixture in the chain. Please see illustrations below.



### Device DMX Start Address Setting

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct address number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or set different

addresses for each fixture individually.

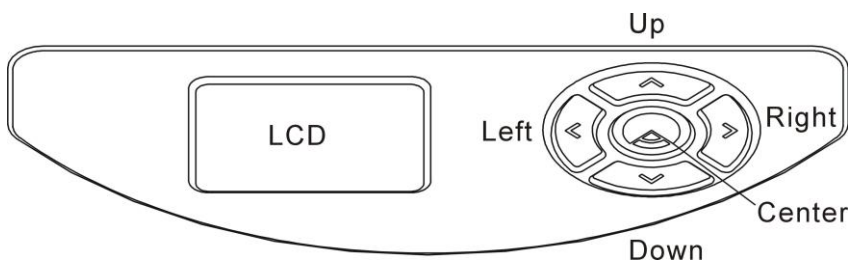
If you set the same address on all devices, all the devices will start to “listen” to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to “listen” to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected device.

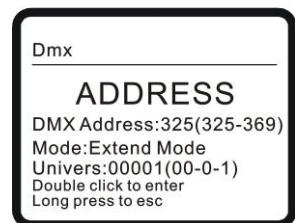
In the case of the moving head, in 33 channel mode, you should set the starting address of the first unit to 1, the second unit to 34 (33 + 1), the third unit to 67 (33 + 34), and so on.

## 2.6 DISPLAY SETTINGS OPERATION

The fixture offers LCD Display and Buttons for setting display menus, you can use the buttons to set or check the Address, Mode, Options, Test, Info and Preset menus.



Main menu:



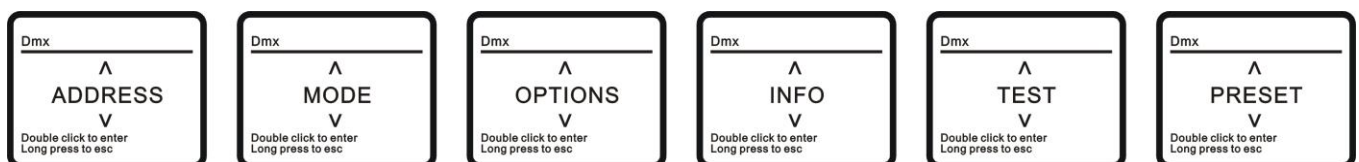
- Center button: Double click to activate display, or confirm setting, or go into submenu;  
Long pressing 2 s on main menu to access the shortcut menus;  
Long pressing 2 s on submenu to exit or go back to previous menu.
- Left button: Click to go left to other submenu.
- Right button: Click to go right to other submenu.
- Up button: Click to go up to other submenu, or increase the setting values.
- Down button: Click to go down to other submenu, or decrease the setting values.

After accessing the submenu in edit mode, if no operation, it will automatically exit to the main menu after 15 seconds from the last button operation.

When the fixture is powered on and the signal is connected, after 5 minutes, the display will switch off automatically.

### Using The Display Menus

Double click to activate display, then on the main menu double click to enter into the following menus, click the up button or down button to browse and select the desired menus:



- ADDRESS menu: To set the DMX address.
- MODE menu: To set the user mode.
- OPTIONS menu: To set the status setting, fan control, signal, dimming curve and others.
- INFO menu: To check the time, software version, fan info and others.
- TEST menu: To reset the fixture, do the calibration and others.
- PRESET menu: To e edit prog. and scenes.

Scan the QR code on the cover page to download the MANUAL to check the DISPLAY MENU.

## 2.7 NFC

When the fixture is powered on, you can use a NFC smartphone installed with the Ayrton NFC App to scan the NFC tag area of the fixture to read some of the information or settings inside the display menu, such as product name, software version, UID, DMX Start Address, Universe, User Mode, Options, Information, etc. You can also change some of the settings and push to write inside the fixture menu.

When the fixture is not powered on, you can still use the App to read the NFC info and write the settings into the NFC tag, the written data will be automatically synchronized into the fixture menu at next time the fixture is powered on.

NOTE:

- Before using, make sure there is NFC function on your smartphone and it is activated, Download and install the Ayrton NFC App;
- The NFC tag on the fixture is right under the LCD window;
- The NFC reader area vary on different smartphones, identify the correct area on your smartphone before scanning the NFC tag on the fixture;
- When scanning, make sure the NFC reader area of your smartphone close enough to the LCD window and hold still the smartphone for 3 seconds until reading successfully.

Scan the QR code on the cover page to download the MANUAL to check the NFC operating.

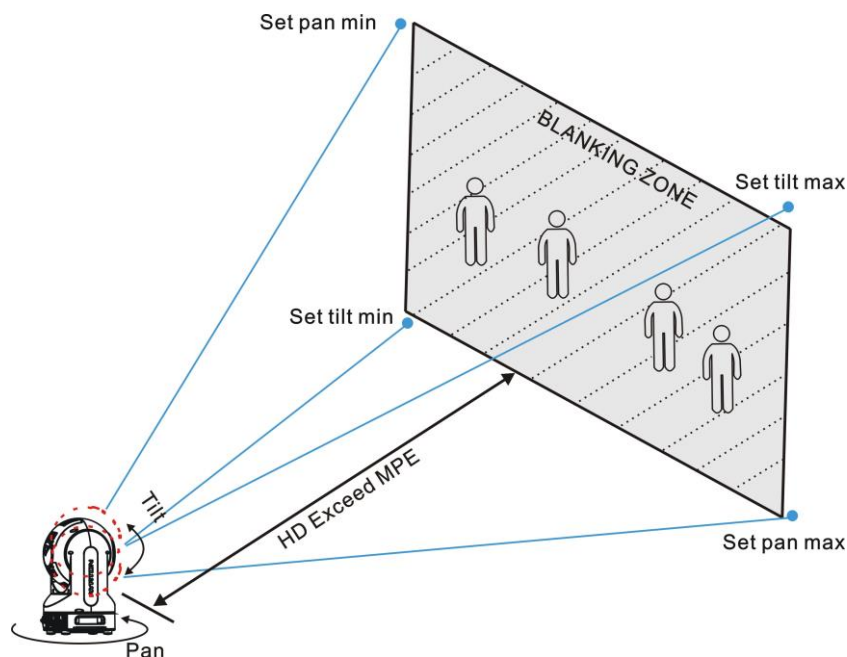
## 2.8 DMX PROTOCOL

Scan the QR code on the cover page to download the DMX CHART.

## 2.9 SAFETY SETTINGS

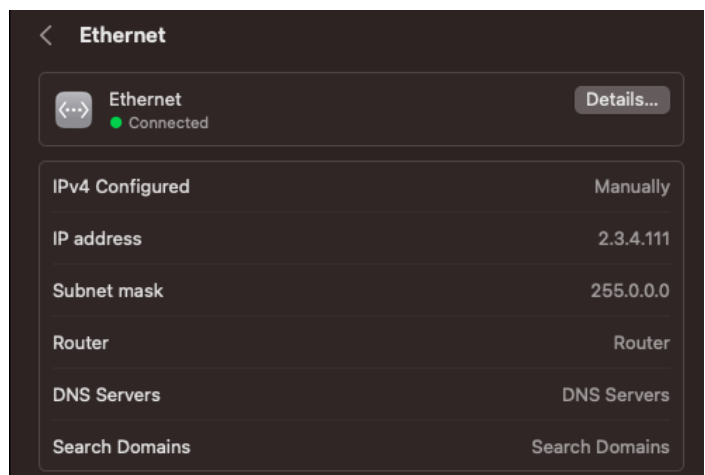
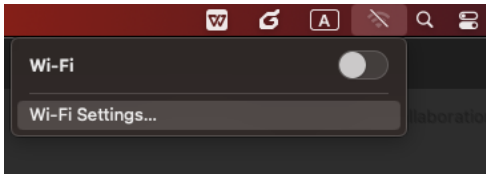
For safety purposes, before the operator begins to control the fixture remotely, the operator must pre-define, from a computer (MAC or PC) App a safety (blanking) zone which prevents operations above the MPE (Maximum Permissible Exposure) within the safety zone(or other). The safety (blanking) zone should be set to include any area in which the fixture may be pointed where there is a reasonable expectation of the public being present. Where the operator determines there will be no members of the public present or no members of the public present within the Hazard Distance of the product (please see table below), no safety (blanking) zone is needed to be set.

### BLANKING ZONE SETTINGS



Steps to set blanking zone:

- Download and install the “Ayrton Fixture Manager” App;
- After the KYALAMI fixture(s) have been rigged, determine the areas which, where public members are present, are within the Hazard Distance of the fixture(s);
- Prepare a computer, download and install the “Ayrton Fixture Manager” software into the computer. (Note: software version should be after V200);
- Settings of the computer: choose “Wi-Fi Settings” on the computer toolbar, click “Network”, in the setting “Ethernet”: set “Ipv4 Configured” to “Manually”, set “IP Address” to “2.x.x.x”, set “Subnet mask” to be same as of the fixture’s.  
(Note: set IP address to be in same network segment as fixture’s, set Subnet mask to be same as fixture’s)



- Connect a DMX console to the fixture(s), use the console to define the blanking zone (by 4 points), steps as follows:  
First, on DMX chanel 21: go to “Blanking Zone#1”;  
Second, on DMX chanel 22:
  - go to “Set pan min” and move the Pan/Tilt channels (1-4) to desired position;
  - go to “Set pan max”, move the Pan/Tilt channels (1-4) to desired position;
  - go to “Set tilt max”, move the Pan/Tilt channels (1-4) to desired position;
  - go to “Set tilt min”, move the Pan/Tilt channels (1-4) to desired position.

If need to set more blanking zones, then go to the next zone on the DMX chanel 21 “Blanking Zone #2 or #3 or #4” ..... and repeat the above procedure on DMX chanel 22.

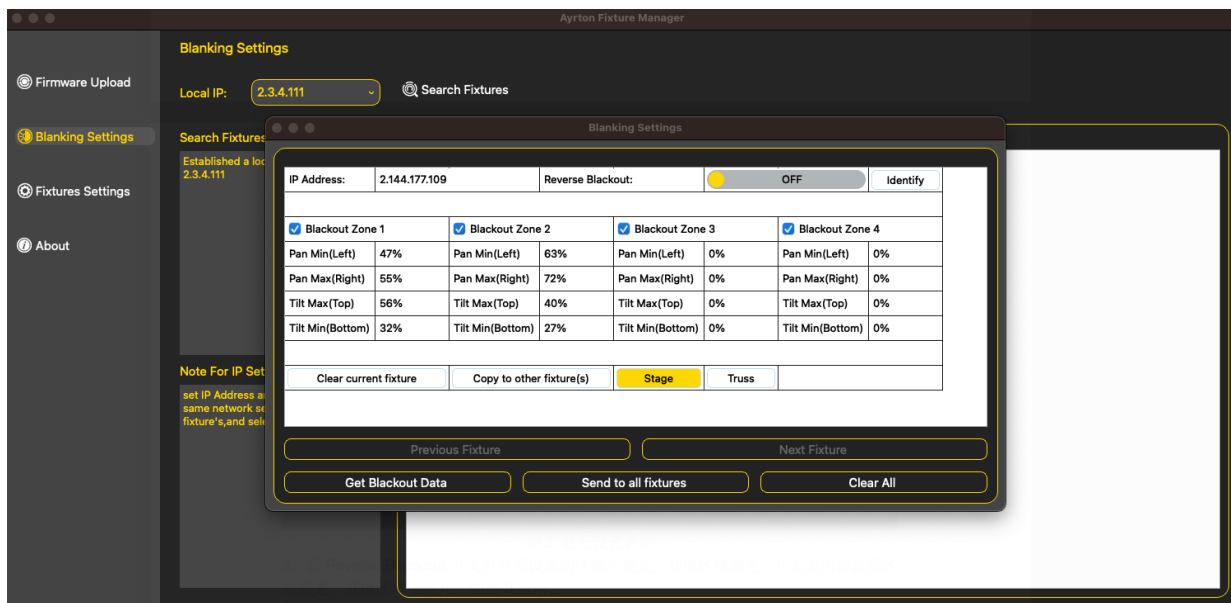
Channel	Value	Function
21		<u>Blanking Zone Number (different zone)</u>
	0-9	No Blanking
	10-19	Blanking Zone #1
	20-29	Blanking Zone #2
	30-39	Blanking Zone #3
	40-49	Blanking Zone #4
	50-255	unused

22		<u>Blanking Zone Settings (4 points)</u>
	0-49	No Blanking
	50-99	Set pan min
	100-149	Set pan max
	150-199	Set tilt max
	200-255	Set tilt min

Note:

When defining the Blanking Zone Settings (4 points), the “pan min” point value must be less than the “pan max” value and the “tilt min” value must be less than the “tilt max” value; When setting the “Blanking Zone Number”, it is best to set it in order. If not, then the Blanking Zone Settings (4 points) should be set to value 0 before switching between different Blanking Zone Number.

- Open the computer software “Ayrton Fixture Manager”, click “Blanking Settings” menu on the left. Select the “Local IP” as above set in the network settings in the computer. Then click “Search Fixtures” to discover the fixtures list, and click the “Blanking Setting” on the corresponding fixture, the setting window comes up and displays the current fixture. (Note: the “Reverse Blackout” switch default is off, if it switches on, the set area will not be blackout, but the rest areas will be blackout)

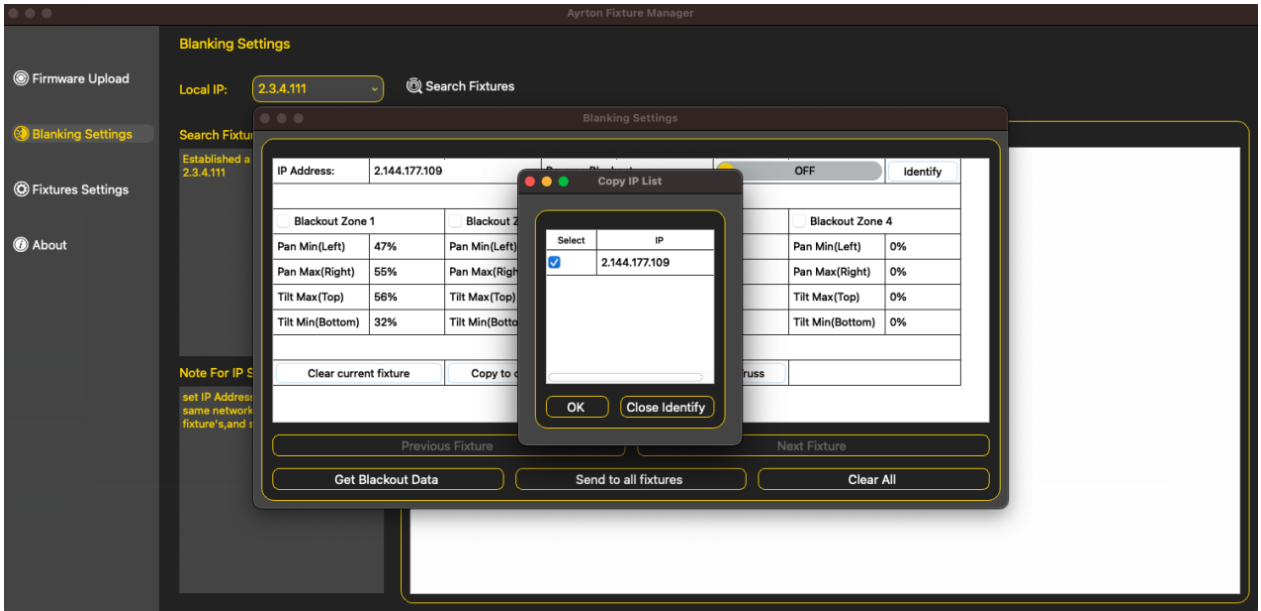


Click “Identify” to identify the corresponding fixture with light on, click it again to turn off. (click “Previous fixture” or “Next fixture” to choose the previous or next fixture)

Click “Get Blackout Data”, it reads automatically the blackout data defined by the console. Then click “Send to all fixtures” to store the defined blackout data into the fixture(s).

After the blackout data is stored into the fixture, it can not be cleared by the DMX console. If need to clear the blackout data, then click “Clear current fixture” to clear the blackout data of the current fixture; click “Clear All” to clear the blackout data of all fixtures.

“Copy to other fixture(s)” is used for copying the current fixture’s blackout data to other fixtures, the “Identify” function is off by default when open the list, once the IP address is selected, the “Identify” function is turned on, you can use “Close Identify” to turn it off.



Once both the Blanking Settings have been done, the fixture is ready to be used and control via a DMX console. The operator is not able to remotely (ie: DMX commands from a lighting console) override the Blanking Zone.

At the end of each unique use it is incumbent on the owner of the fixture to clear the previous settings on the fixture to factory defaults, thus ensuring that the fixture must be set up to be used with the correct safety settings in the environment in which it is next used.

### Safety Protection

This fixture had been designed with Safety Protection feature: when error occurs, not only the light output itself will be cut immediately, but also the CMY filters, Color filter and Frost filter will be brought into the light path.

### Safety Monitoring System - Separate Redundancy Control

This fixture had been designed with a Safety Monitoring System with Separate Redundancy Control, the failure safety system shuts down or dims to safe level immediately when any safety monitored value is reported outside of expected value:  
 when light output (as measured by current) is out of expected range;  
 when Pan or Tilt are forced from proper location, or do not arrive at proper location;

## 3 CONTROLS AND FUNCTIONS

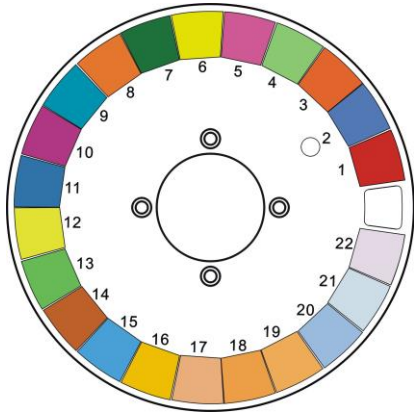
3.1 Pan and Tilt movement, DMX channels 1 to 7:

3.2 Dimmer intensity (use with Strobe channel 8 at full), DMX channels 9-10:



3.3 Focus, DMX channels 11 to 12:

### 3.4 Color wheel, DMX channels 13-14:



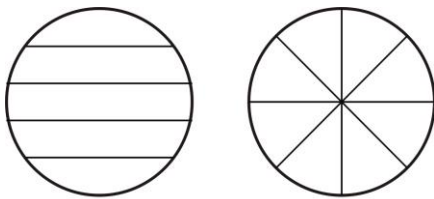
### 3.5 Fixed gobos, DMX channels 24:



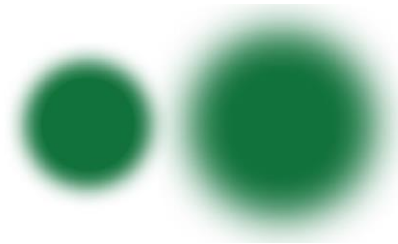
### 3.6 CMY, DMX channels 15-20:



### 3.7 Prisms, DMX channels 25-30:



### 3.8 Frosts, DMX channels 31-32:



## 4 SPECIFICATIONS

### POWER SUPPLY

- AC100-240V~, 50/60Hz
- Power: 200W maximum

### OPTICS

- Beam aperture: 1°

### LIGHT SOURCE

- Laser 100W, White, Color Temperature 9000K
- Rated life (L70): up to 12,000 hours

### MOVEMENT

- Highly accurate positioning; moving-head operated via either 16-bit resolution
- Pan and tilt Infinite rotation

### COLOURS

- Sophisticated colour mix system providing CMY color mixing
- Fixed colour wheel, 22 colour filters

### GOBOS

- Fixed gobo wheel with instant access to 29 metal gobos

### FROST

- 2 frost filters: one light, one heavy

### EFFECTS

- 2 combinable rotating and indexable prisms: one 8-facet circular, one 5-facet linear



## DIMMER / STROBE

- Electronic dimmer, allowing perfect light adjustment from 0 to 100% without colour variation
- Strobe effect, with speed adjustment from 1 to 25 flashes per second

## SOFTWARE FEATURES

- Local DMX addressing and optional parameters through its built-in LCD control panel
- Remote DMX addressing and optional parameters through a standard RDM DMX controller
- Information menu including hour counter, temperature, software version

## HARDWARE FEATURES

- Graphic LCD display for addressing and special functions settings, with flip function
- 5 menu buttons to set functions
- Integrated wireless CRMX TiMo RDM receiver from LumenRadio
- IP65 XLR-5 pin male and female connectors for DMX connection
- IP65 RJ45 IN / OUT connectors for ArtNet connection
- IP65 powerCON TRUE1 TOP male connector for power connection

## CONTROL

- DMX 512 protocol, through DMX cable or a wireless system
- DMX-RDM compatible
- ArtNet & sACN protocol through Ethernet cable
- Local control panel, with IP65 LCD display

## COOLING SYSTEM

- Advanced liquid cooling system
- Self-adjusting variable speed fans for quiet operation (Auto mode)
- Selectable ventilation user modes with a new Silent Mode
- Safety protection against excess temperature

## HOUSING

- IP65 protection rating

## INSTALLATION

- Fastening bracket system: two Omega ¼ turn brackets designed for use with standard clamps
- Mounting points: four ¼ turn locking fittings allowing installation of Omega brackets
- Safety cable attachment point

## OPERATING PARAMETERS

- Operating positions: all (device on floor or fixed to a support)
- Maximum permitted ambient temperature (Ta max): 45° C (113° F)
- Minimum permitted ambient temperature (Ta min): -20° C (-4° F)

## COMPLIANCE

- CE
- UKCA
- ETL

## SIZE

- Product: 265 x 430 x 265 mm (l x h x d)

## WEIGHT

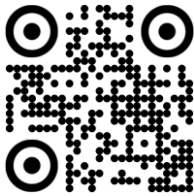
- Product: 14.5 kg

- *Errors and omissions for all information given in this user manual are expected* -  
- *All information is subject to change without prior notice* -

Manufacturer: Guangzhou Haoyang Electronic Co.,Ltd.  
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Tel: +86 20 39966388







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[www.ayrton.eu](http://www.ayrton.eu)



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