# 200W LED MOVING HEAD SPOT BEAM WASH LIGHT FO-LM200C



# **USER MANUAL**

Caution: please read this user manual carefully before you initially start-up.

http://www.forelite.cn

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#### I GENERAL

Thank you for using our product! Please read this manual carefully and completely. For technical reference in future, please keep this user manual well. This user manual contains all installation and operation information of this Aura LED Moving Head Wash Light, it's very useful for user to install and operate the light. Please strictly abide by the relevant instruction for the installation and operation.

This 150W LED Beam Light is made of a new type of high temperature strength of engineering plastics and case aluminum casting with nice outlook. The fixture is designed manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live performances, theater, studio, nightclubs and discos.

This light meets the following criteria: GB7000.1-2007/IEC60598-1:2003 GB7000.217-2008/IEC60598-2-17:1984+A2:1990

Once receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are presented, and have been received in a good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows, sign of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing. FO-SBW200------1pc

Signal Cable-----1pc Power Cable ------1pc User Manual-----1pc

#### **II SAFETY INFORMATION**

#### **%Important**

Every person involved with the installation, operation and maintenance of this device has to be qualified and follow the instructions of this manual. Manufacturer will not with responsibility for those operations which are not according to this Instruction.

Verify that the voltage matches the rated voltage.

When the voltage is 110V, Do not connect more than 10 lightings in total to AC mains power in one interconnected daisy chain

When the voltage is 220V, Do not connect more than 20 lightings in total to AC mains power in one interconnected daisy chain

Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices. Always ground (earth) the fixture electrically.

Avoiding hit the Light when you are move or install the light.

The minimum distance between light-output and the illuminated surface must be more than 0.5 meters. Keep all combustible materials (for example fabric, wood, paper) at least 0.2 meters away from the fixture.

Do not expose the fixture to rain or moisture.

Avoid looking directly into the light source (especially those who suffer from epileptic fits) Maximum ambient temperature (Ta) is 40°C. Do not operate fixture at temperatures higher than this.

The Maximum surface temperature is 50°C

When suspending the fixture above ground level, verify that the structure can hold at least 10 times the weight of all installed devices.

Verify that all external covers and rigging hardware are securely fastened and use an

approved means of secondary attachment such as a safety cable.

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixtures specifications chart. A fixture listed current rating is its average current draw under normal conditions. All fixtures must be directly powered off a switched circuit and cannot be run off a rheostat(variable resistor) or dimmer circuit, even if the rheostat or dimmer source voltage matches the fixtures requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it sets to the correct line voltage you will use.

**Warning!** Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Earth ground.

#### **III OPERATION INSTRUCTIONS**

- The moving head is an LED wash light for onsite decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause electronic shock to the people.
- Make sure the installation place is in good safety condition before installing the

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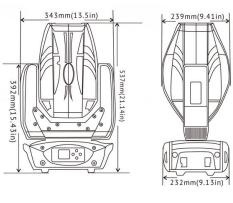
fixture.

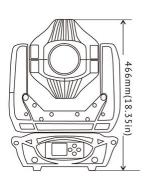
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who knows the fixture before using.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

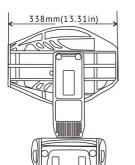
#### **IV FEATURES AND SPECIFICATION**

Voltage: AC100-240V,50-60Hz Power: 300W Led source: 200W White LED Color Temperature: 7500K Led Life Time: Average 50000 Hours Channel: 18 DMX channel Control: DMX/Master-slave/Auto/Sound activated Pan: 540 degree + fine Tilt: 270 degree + fine Zoom range: 7-21° Dimmer: 0-100% smooth linear dimmer Strobe: 1-25 Hz with pulse effect Color Wheel: 9 colors + open, with half color effect Static Gobo Wheel: 9 gobos + open, with rotation and running water effect Rotation gobo wheel: 7 gobos + open Prism: 4 facet prism with bi-direction rotating Frost: With frost effect Screen: LCD screen with Chinese and English, can adjust 180 degree to fit different installation position Size of Dimension: 343\*239\*537 mm Packing Dimension: 46\*46\*58cm Net Weight: 14.5kg Gross Weight: 23kg

#### V DIMENSION







15.5kg(34.17lb)

Unit: mm

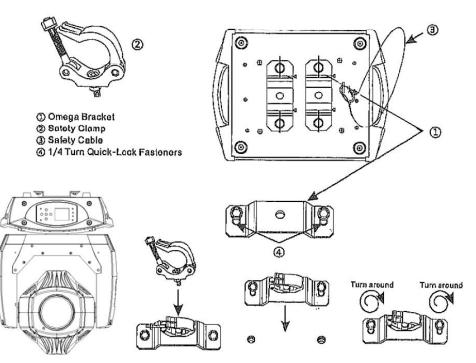
#### **VI INSTALLATION AND CONNECTION**

#### 1. Installation

Be sure to install this product should be at least 0.5 m from the flammable materials Screw one clamp each via a M12 screw and nut onto the Omega holders.

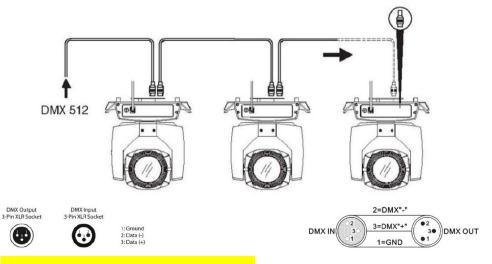
Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise. Install the second Omega holder.

Pull the safety-rope through the holes on the bottom of the base and over the trussing system or a safe fixation spot. Insert the end in the cabinet and tighten the safety screw. Please refer to the picture below:



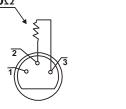
#### 2. DMX connection

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. 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 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 by electrical noise. The DMX terminator is simply an XLR plug with a 120  $\Omega$  resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below: 120 $\Omega$ 

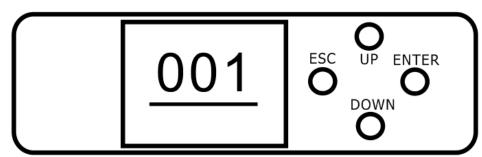




PIN 3

#### **VII OPERATION AND CONTROL**

#### 1. Control panel



#### Button:

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

#### DMX input:

For DMX512 link, use 3/5-pin XLR cable to link the unit together.

#### DMX output:

For DMX512 link, use 3/5-pin XLR cable to link the unit together.

#### Mains input:

Connect to power supply.

#### Mains output:

Connect to supply power to the next unit.

#### Fuse (T 6.3A):

Protect the unit from damage of the over-current.

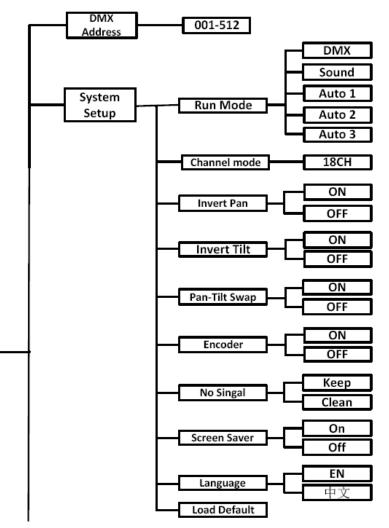
#### 2. Main Functions

To select any of the given functions, press the **MENU** button up to when the required one is

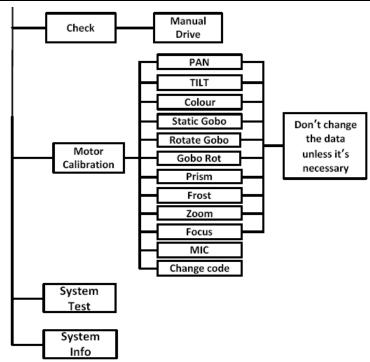
showing on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press the **ENTER** button to setup, to go back to the functions without any change press the **MENU** button again. Hold and press the **MENU** button about one second or wait for one minute to exit the menu mode.

#### menu map:

MENU



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#### **VII** ADDRESS SETTING AND DMX CHANNEL OPERATION

If you use a universal DMX controller to control the units, you have to set DMX address

from 1 to 512 so that the units can receive DMX signal.

Please refer to the following diagram to address your DN	MX512 channel for the first 4 units:
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Channel mode	Unit 1 address	Unit 2 address	Unit 3 address	Unit 4 address
18 channels	1	19	37	55

#### 18 DMX Channels mode

DMX CH	DMX Value	Function
CH1	000255	Pan 0~540degree
CH2	000255	Pan fine 1.8 degree, 16bit
CH3	000255	Tilt 0~270degree

CH4	000255	Tilt fine 1.8 degree, 16bit
CH5	000255	Pan/tilt speed from fast to slow
CH6	000255	Dimmer, 0-100% linear
		Strobe
	000003	No function
	004099	Strobe from slow to fast
CH7	100149	Pulse strobe from slow to fast
	150199	Thunder strobe from slow to fast
	200249	Random strobe from fast to slow
	250255	Light on
		Color wheel
	000019	Color 1 linear control
	020039	Color 2 linear control
CH8	160179	Color 9 linear control
	180199	Open linear control
	200226	Color wheel colockwise rotation from fast to slow
	227278	No function
	229255	Color wheel anti-clockwise rotation from slow to fast
		Static Gobo Wheel
	000004	Open
	005054	10 Static gobo(Each 5 DMX value is a gobo)
CH9	055154	10 static gobo shake effect(Each 10 DMX value is a gobo)
	155204	Static Gobo wheel colockwise rotation from fast to slow
	205205	Stop
	206255	Static Gobo wheel anti-clockwise rotation from slow to fast
CH10		Rotation Gobo Wheel

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	000009	Open	
	010079	7 Rotation gobo(Each 10DMX value is a gobo)	
	080159	7 Gobo+open shake effect (Each 10 DMX value is a gobo)	
	160206	Gobo wheel clockwise rotation from fast to slow	
	207208	Stop	
	209255	Gobo wheel anti-clockwise rotation from slow to fast	
		Rotation gobo rotates	
CU11	000127	Change position	
CH11	128191	Clockwise continuous rotation from fast to slow	
	192255	Anti-Clockwise continuous rotation from slow to fast	
		Prism	
CH12	000127	No prism	
	128255	Prism	
		4 Facet prism rotation	
	000127	Change position	
CH13	128190	Clockwise continuous rotation from fast to slow	
	191192	Stop	
	193255	Anti-colokwise continuous rotation from slow to fast	
		Frost	
CH14	000127	No frost	
	128255	Frost effect	
		Focus	
CH15	000255	Focus effect	
		Zoom	
CH16	000255	Zoom effect	
		Macro effect	
CH17	000050	No function	
·			

	051100	System detection
	101150	Auto 1
	151200	Auto 2
	201255	Sound activated
		Reset & Macro
CH18	000250	No function
	251255	Reset within 5 seconds

### IX TECHNICAL SPECIFICATION Light Source LEDs: 1pc white 200W LED lamp Color: pure white Service life: 500000h Color temperature: 6800K **Optical System** Beam angle: 7-21° Dimmer: 0-100 linear dimmer Strobe: 1-25time/s, random pulse strobe Light Output Optimal projection distance: 3-50m Illuminance: 25200lux@4m Electromechanical Effects Color wheel: 9 colors + white Gobo wheel: 9 gobos + white Prism: 4 face prism Focus: electric focus Movement Pan: 540°, pan fine function Tilt: 270°, tilt fine function **Control and Programming**

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Control mode: DMX-512; Master/slave mode; Demo mode

DMX channel: 18CH

Control panel: LCD display + 4 buttons

#### **Thermal Specification**

Maximum ambient temperature: 45 °C (113 °F)

Maximum surface temperature: 170 °C (338 °F)

#### **Electrical Specification**

Power supply: Electronic auto-ranging

Input voltage range: AC90-240V, 50/60Hz

Power consumption: 300W

#### **Mechanical Specification**

Light size: 343Dx239Wx537Hmm

Weight: 15.4kg

Material: ABS

Appearance color: black/white

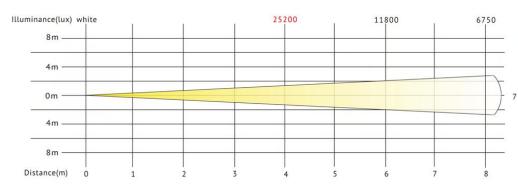
#### **Using Environment**

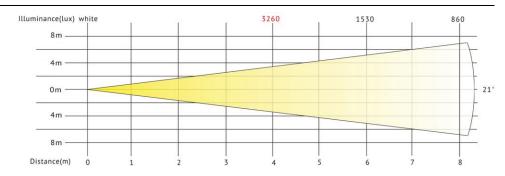
IP rating: IP20

Working temperature: -25-40°C

Cool system: Fan

#### **X PHOTOMETRIC DATA**





#### XI TROUBLE SHOOTING

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

#### A. The unit does not work, no light and the fan does not work

- 1. Check the connection of power and main fuse.
- 2. Measure the mains voltage on the main connector.
- 3. Check the power on LED.

#### **B.** Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.

3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.

4. Try to use another DMX controller.

5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

#### C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.

2. The motor's drive IC on the PCB might be out of condition.

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#### XII MAINTENANCE AND CLEANING

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

 $\hfill\square$  Clean with soft cloth using normal glass cleaning fluid.

 $\hfill\square$  Always dry the parts carefully.

 $\square$  Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

The following points have to be considered during the inspection:

1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.

2) There must not be any deformations on the housing, color lenses, fixations and

installation spots (ceiling, suspension, trussing).

3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.

4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.

 A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.

Technology, Innovate, Service, Create Max. Value for Clients!

Forelite, working for your lights!