


250W 3in1 Zoom LED Moving Head Light

VG-LM250C



CE RoHS

User Manual

 Please read this user manual before using this product!

Keep it for further reference!

<http://www.vangaa.com>

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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 250W LED Moving Head 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 light has very beautiful appearance. Our 250W LED Moving Head is a very small and smart light. But the brightness is very powerful. It owns very good light output, and very wonderful gobo effect. As a led spot moving head light, it's small, but it runs extremely fast. This light is very suitable for bar, disco, stage, theatre, decoration etc.

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.

VG-LM250C-----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

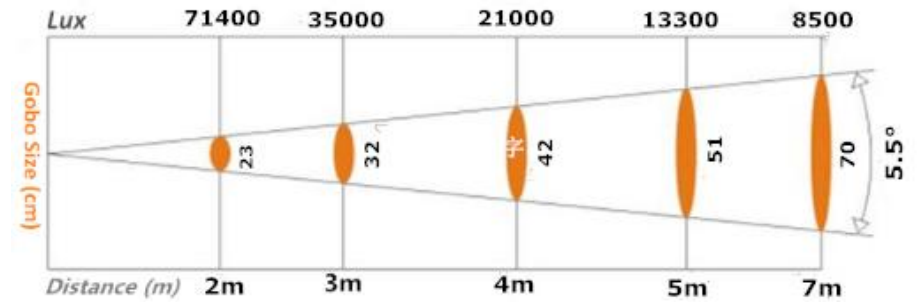
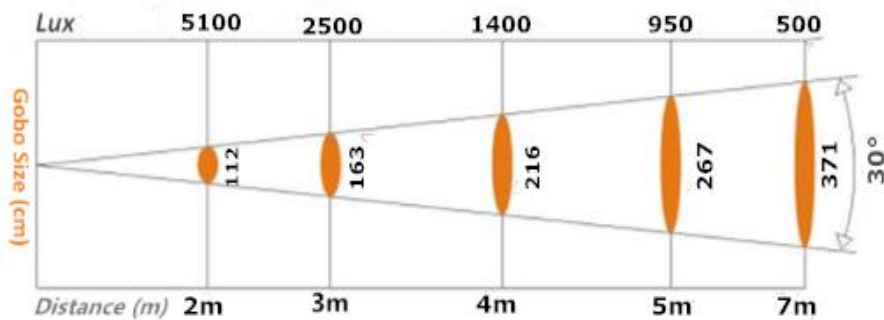
- The moving head is an LED wash light for onsite decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- 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

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 LUX

PHOTOMETRIC DATA



V INSTALLATION AND CONNECTION

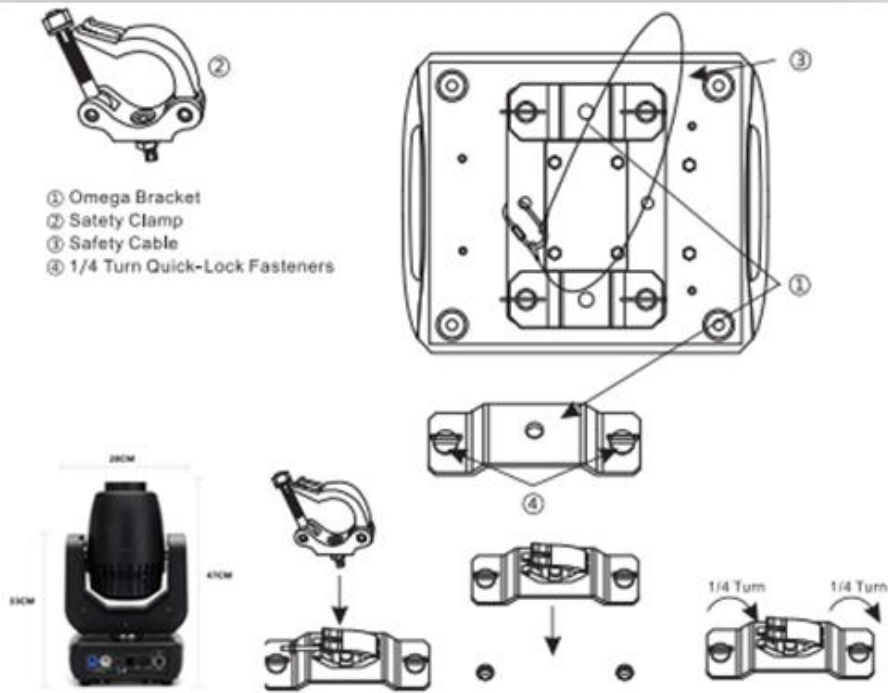
1. Installation

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.

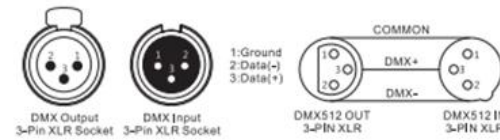
Please refer to the picture below:



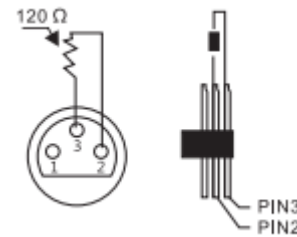
2. DMX connection

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.

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 Ω 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:

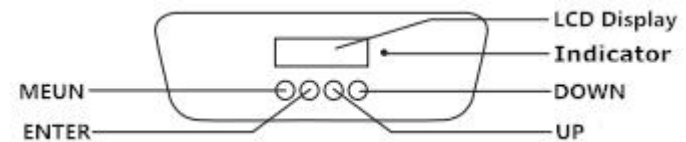


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VI OPERATION AND CONTROL

1. Control panel



Display:

To show the various menus and the selected functions

LED:

POWER	ON	Power on
-------	----	----------

NULL		No function
NULL		No function
DMX	ON	DMX input present

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:

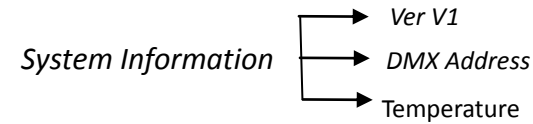
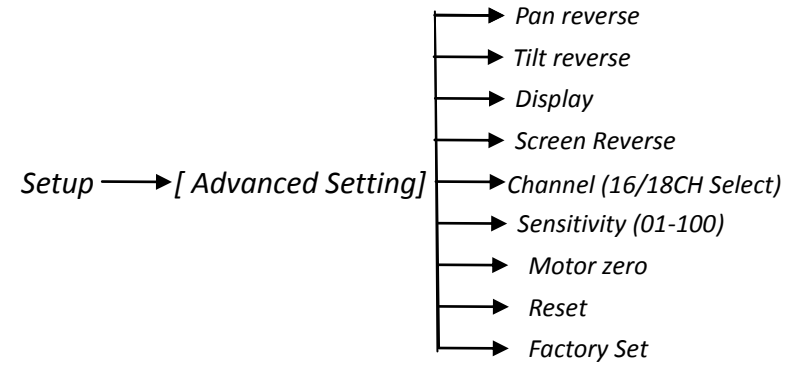
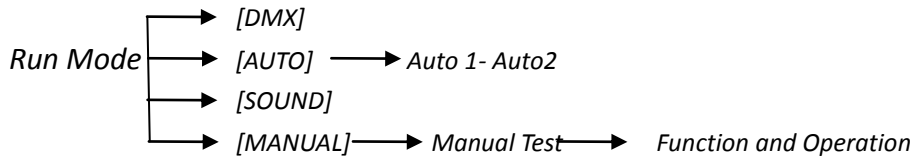
Connect to supply power to the next unit.

Fuse (T 6.3A):

Protect the unit from damage of the over-current.

2. Main Menu

Address Set → [Set Address Numbers]



VII DMX CHANNEL CHART

16 DMX CHANNELS MODE

DMX CH	DMX Value	Function
CH1	000←→255	Pan 0~540degree
CH2	000←→255	Tilt 0~270degree
CH3	000←→255	X, Y speed, from fast to slow
CH4	000←→255	LED Dimmer, from dark to bright
CH5	000←→007	LED Strobe Turn on
	008←→250	Strobe from slow to fast
	251←→255	Turn on

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CH6	000↔015	7 color + White White Lighting
	016↔031	Color 1
	032↔047	Color 2
	048↔063	Color 3
	064↔079	Color 4
	080↔095	Color 5
	096↔111	Color 6
	112↔127	Color 7
	128↔191	CW from slow to fast
	192↔255	CCW from slow to fast
CH7	000↔010	Color effect No function
	011↔209	Color fine tuning
	210↔255	Color shake from fast to slow
CH8	000↔006	Static gobo wheel open
	007↔013	Gobo1
	014↔020	Gobo2
	021↔027	Gobo3
	028↔034	Gobo4
	035↔041	Gobo5
	042↔048	Gobo6
	049↔055	Gobo7
	056↔063	Gobo 8
	064↔070	Gobo 8 shake
	071↔077	Gobo 7 shake
	078↔084	Gobo 6 shake
	085↔091	Gobo 5 shake
	092↔098	Gobo 4 shake
	099↔105	Gobo 3 shake

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	106↔112	Gobo 2 shake
	113↔119	Gobo 1 shake
	120↔127	open
	128↔191	Gobo rotate CW from slow to fast
	192↔255	Gobo rotate CCW from slow to fast
CH9	000↔015	7 rotation gobos + White open
	016↔031	Gobo1
	032↔047	Gobo2
	048↔063	Gobo3
	064↔079	Gobo4
	080↔095	Gobo5
	096↔111	Gobo6
	112↔127	Gobo7
	128↔191	Gobo Rotate CW from slow to fast
	192↔255	Gobo Rotate CCW from slow to fast
CH10	000↔015	Gobo Rotation open
	016↔095	Gobo Fine 0-250
	096↔135	Gobo Rotating 0-90
	136↔155	Gobo Rotating 0-250
	156↔175	Gobo Rotating 0-360
	176↔215	Gobo self-rotating CW from slow to fast
	216↔255	Gobo self-rotating CCW rotating from slow to fast
CH11	000↔255	Focus, gobo hazy to clear
CH12	000↔255	ZOOM, angle from narrow to wider
CH13	000↔063	Prism Open
	064↔255	Prism in
CH14		Prism Rotation

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	000↔015 016↔095 096↔135 136↔155 156↔175 176↔215 216↔255	open Prism Fine 0-250 Prism Rotating 0-90 Prism Rotating 0-250 Prism Rotating 0-360 Prism self-rotating CW from slow to fast Prism self-rotating CCW rotating from slow to fast
CH15	000↔063 064↔255	Frost open Frost effect
CH16	000↔007 008↔131 132↔249 250↔253 254↔255	Self-setting Program No action Auto mode Soud mode Reset No action

18 DMX CHANNELS MODE

DMX CH	DMX Value	Function
CH1	000↔255	Pan 0~540degree
CH2	000↔255	Pan fine
CH3	000↔255	Tilt 0~270degree
CH4	000↔255	Tilt Fine
CH5	000↔255	X, Y speed, from fast to slow
CH6	000↔255	LED Dimmer, from dark to bright
CH7	000↔007 008↔250 251↔255	LED Strobe Turn on Strobe from slow to fast Turn on

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	000↔015 016↔031 032↔047 048↔063 064↔079 080↔095 096↔111 112↔127 128↔191 192↔255	7 color + White White Lighting Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 CW from slow to fast CCW from slow to fast
CH8		
CH9	000↔010 011↔209 210↔255	Color effect No function Color fine tuning Color shake from fast to slow
CH10	000↔006 007↔013 014↔020 021↔027 028↔034 035↔041 042↔048 049↔055 056↔063 064↔070 071↔077 078↔084 085↔091 092↔098 099↔105	Static gobo wheel open Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo 8 Gobo 8 shake Gobo 7 shake Gobo 6 shake Gobo 5 shake Gobo 4 shake Gobo 3 shake

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	106↔112 113↔119 120↔127 128↔191 192↔255	Gobo 2 shake Gobo 1 shake open Gobo rotate CW from slow to fast Gobo rotate CCW from slow to fast
CH11	000↔015 016↔031 032↔047 048↔063 064↔079 080↔095 096↔111 112↔127 128↔191 192↔255	7 rotation gobos +White open Gobo1 Gobo2 Gobo3 Gobo4 Gobo5 Gobo6 Gobo7 Gobo Rotate CW from slow to fast Gobo Rotate CCW from slow to fast
CH12	000↔015 016↔095 096↔135 136↔155 156↔175 176↔215 216↔255	Gobo Rotation open Gobo Fine 0-250 Gobo Rotating 0-90 Gobo Rotating 0-250 Gobo Rotating 0-360 Gobo self-rotating CW from slow to fast Gobo self-rotating CCW rotating from slow to fast
CH13	000↔255	Focus, gobo hazy to clear
CH14	000↔255	ZOOM, angle from narrow to wider
CH15	000↔063 064↔255	Prism Open Prism in
		Prism Rotation

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CH16	000↔015 016↔095 096↔135 136↔155 156↔175 176↔215 216↔255	open Prism Fine 0-250 Prism Rotating 0-90 Prism Rotating 0-250 Prism Rotating 0-360 Prism self-rotating CW from slow to fast Prism self-rotating CCW rotating from slow to fast
CH17	000↔063 064↔255	Frost open Frost effect
CH18	000↔007 008↔131 132↔249 250↔253 254↔255	Self-setting Program No action Auto mode Soud mode Reset No action

VIII TECHNICAL SPECIFICATION

Light Source

LEDs: 1pc 250W High Output White LED

Color: white

Service life: 50000h

Optical System

Beam angle: 5.5~30°, focus function

High light output, 13300LUX@5M at White light zoom in

Electromechanical Effects

Color Wheel: 7 colors +white, color fine tuning, rotation with variable direction and speed

1 static Gobo Wheel: 8 gobos + white, wheel rotation and shake

1 Rotation Gobo Wheel: 6 gobos +white, wheel rotation and shake

Prism: 8-facet Prism, bi-directional rotatable at variable speeds

Frost effect

Dimmer: linear dimmer 0-100%

Strobe: 1-25time/s

Pan: 540°

Tilt: 270°

Control and Programming

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

DMX channel: 16CH, 18CH

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: AC90-260V 50/60Hz

Power consumption: 250W

Mechanical Specification

Light size: 320Dx220Wx480Hmm

Weight: 16.5kg

Material: ABS

Appearance color: black

Using Environment

IP rating: IP20

Working temperature: -25-45°C

Cool system: Fan

IX 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.

X 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.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- 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.

1) 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.

3) 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 21 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.

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VanGaa, Achieving Users Value!