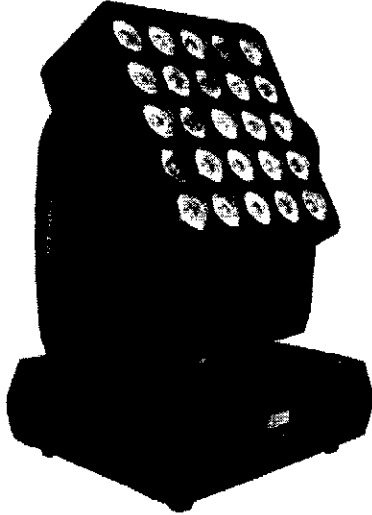



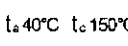




# 5\*5 Matrix moving head

25pcs 12W CREE RGBW 4-in-1



CE   IP20 LED  0.2m  t<sub>a</sub> 40°C t<sub>c</sub> 150°C

**User Manual**

**KEEP THIS MANUAL FOR FUTURE NEEDS**

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## 1. Unpacking

Thank you for choosing LED matrix moving head. For your own safety, please read this manual before installing the device. This manual covers the important information on installation and applications. Please install and operate the fixture with following instructions. Meanwhile, please keep this manual well for future needs.

LED Matrix moving head is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook. The fixture is designed and 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.

4-IN-1 LEDs(RGBW) which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

Moving Head———One	Signal Cable——One
Hanging Bracket——Two	Power Cable——One
Safety Cable———One	User Manual——One

## 2. Safety Instructions



### CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

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

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

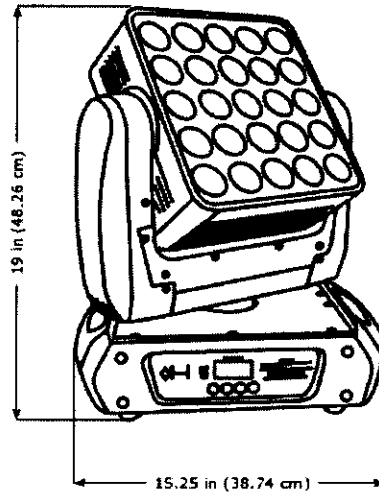
Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

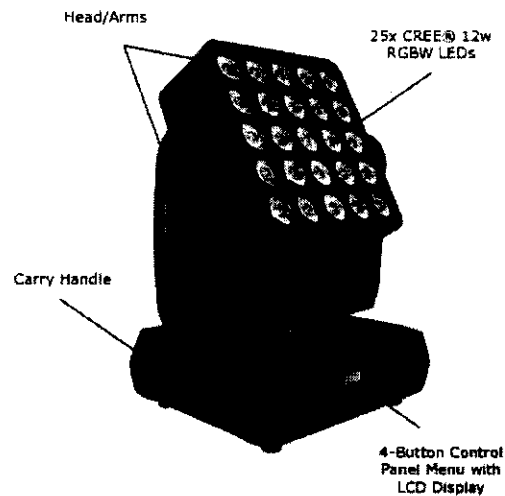
If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

### 3. Fixture instruction

#### Size details.



#### Main parts.



.3.

### 4. Operation Instructions

- The moving head is for wash effect for on-site 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.

### 5. Mounting and Installation

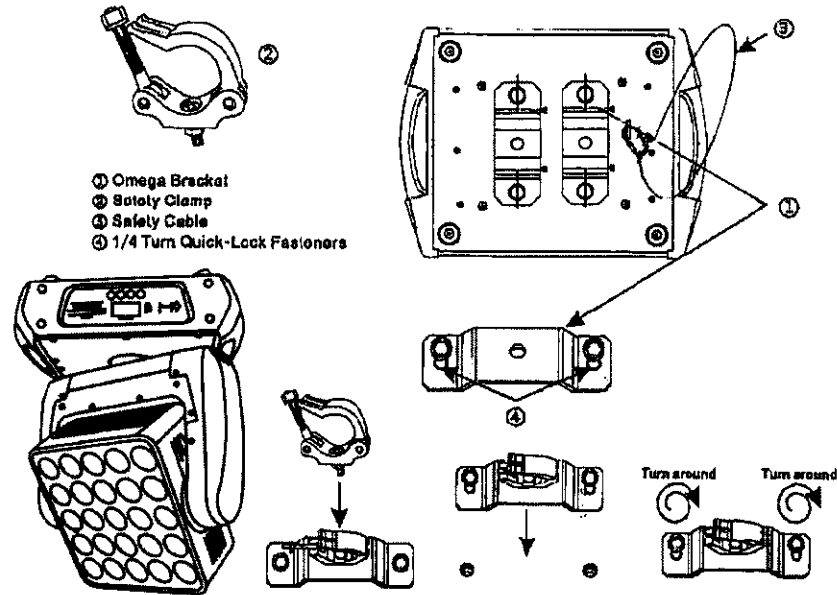
- Cautions:** For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.
- Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.
- Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

.4.

Never stand directly below the device when mounting, removing, or servicing the fixture from a periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

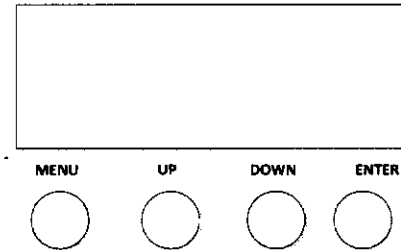
**Clamp Mounting:** The LED Matrix moving head provides a unique mounting bracket assembly that integrates the bottom of the base, the included "Omega Bracket," and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "omega bracket". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly



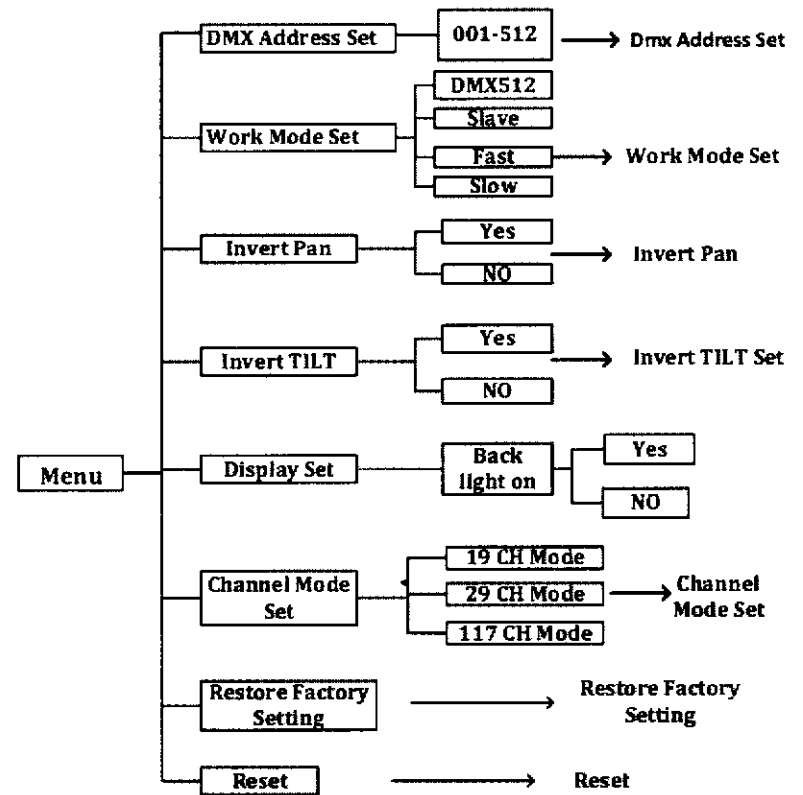
Regardless of the rigging option you choose for our Matrix moving head, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

## 6. Menu Operations

Button instruction:



Operate instruction details



## 7. DMX channels

CH	Function	value	Details
1	Pan movement	0-255	0~540 degree
2	Unlimited Pan movement	0-55	Tilt non movement
		56-155	Pan unlimited clockwise rotate slow to fast
		156-255	Pan unlimited reversely rotate slow to fast
3	Tilt	0-255	0~270 degree
4	Unlimited Tilt movement	0-55	Pan non movement
		56-155	Tilt unlimited clockwise rotate slow to fast
		156-255	Tilt unlimited reversely rotate slow to fast
5	Pan/Tilt speed	0-255	From fast to slow
6	Dimmer	0-255	Linear dimmer from dark to bright
7	Strobe	0-3	No function
		4-95	Strobe with the same step from slow to fast
		96-176	Random strobe
		177-255	Thunder strobe
8	R dimmer	0-255	Red dimmer from dark to bright
9	G dimmer	0-255	Green dimmer from dark to bright
10	B dimmer	0-255	Blue dimmer from dark to bright
11	W dimmer	0-255	white dimmer from dark to bright
12	Effect show of numbers and punctuations	0-89	Effect show of numbers from 0 to 9
		90-233	Effect show of punctuations
		234-235	Running water effect
13	Effect show of letters	0-234	Effect show of letters from A to Z
		234-235	Running water effect
14	Effect show of static gobos	0-234	Effect show of static gobos
		234-235	Running water effect
15	Color of letters	0-255	Color choice for the letters
16	Dynamic gobos show	0-234	Effect show of dynamic gobos
		234-235	Running water effect
17	Speed of effects	0-255	From fast to slow
18	Macro Function	0-49	No function
		50-74	Numbers and punctuations show(Against CH 12)
		75-99	Letters show(Operate against CH 13)
		100-124	Static gobos show(Operate against CH 14)
		125-149	Dynamic gobos show(Operate against CH 16)
		150-199	Auto Run
		200-255	Sound activated
19	Reset	0-250	No function
		251-255	Reset within 3 seconds

## 29 channels mode:

CH	Function	value	Details
1	Pan movement	0-255	0~540 degree
2	Unlimited Pan movement	0-55	Tilt non movement
		56-155	Pan unlimited clockwise rotate slow to fast
		156-255	Pan unlimited reversely rotate slow to fast
3	Pan fine	0-255	16 bit Pan fine adjustment
4	Tilt	0-255	0~270 degree
5	Unlimited Tilt movement	0-55	Pan non movement
		56-155	Tilt unlimited clockwise rotate slow to fast
		156-255	Tilt unlimited reversely rotate slow to fast
6	Tilt fine	0-255	16 bit Tilt fine adjustment
7	Pan/Tilt speed	0-255	From fast to slow
8	Dimmer	0-255	Linear dimmer from dark to bright
9	Strobe	0-3	No function
		4-95	Strobe with the same step from slow to fast
		96-176	Random strobe
		177-255	Thunder strobe
10	R1 dimmer	0-255	Area 1 Red dimmer from dark to bright
11	G1 dimmer	0-255	Area 1 Green dimmer from dark to bright
12	B1 dimmer	0-255	Area 1 Blue dimmer from dark to bright
13	W1 dimmer	0-255	Area 1 white dimmer from dark to bright
14	R2 dimmer	0-255	Area 2 Red dimmer from dark to bright
15	G2 dimmer	0-255	Area 2 Green dimmer from dark to bright
16	B3 dimmer	0-255	Area 2 Blue dimmer from dark to bright
17	W4 dimmer	0-255	Area 2 white dimmer from dark to bright
18	R3 dimmer	0-255	Area 3 Red dimmer from dark to bright
19	G3 dimmer	0-255	Area 3 Green dimmer from dark to bright
20	B3 dimmer	0-255	Area 3 Blue dimmer from dark to bright
21	W3 dimmer	0-255	Area 3 white dimmer from dark to bright
22	Effect show of numbers and punctuations	0-89	Effect show of numbers from 0 to 9
		90-233	Effect show of punctuations
		234-235	Running water effect
23	Effect show of letters	0-234	Effect show of letters from A to Z
		234-235	Running water effect
24	Effect show of static gobos	0-234	Effect show of static gobos
		234-235	Running water effect
25	Color of letters	0-255	Color choice for the letters
26	Dynamic gobos show	0-234	Effect show of dynamic gobos
		234-235	Running water effect
27	Speed of effects	0-255	From fast to slow
28	Macro Function	0-49	No function
		50-74	Numbers and punctuations show(Against CH 12)
		75-99	Letters show(Operate against CH 13)
		100-124	Static gobos show(Operate against CH 14)
		125-149	Dynamic gobos show(Operate against CH 16)
		150-199	Auto Run
200-255	Sound activated		
29	Reset	0-250	No function
		251-255	Reset within 3 seconds

## 117 Channels mode

CH	Function	value	Details
1	Pan movement	0-255	0-540 degree
2	Unlimited Pan movement	0-55	Tilt non movement
		56-155	Pan unlimited clockwise rotate slow to fast
		156-255	Pan unlimited reversely rotate slow to fast
3	Pan fine	0-255	16 bit Pan fine adjustment
4	Tilt	0-255	0-270 degree
5	Unlimited Tilt movement	0-55	Pan non movement
		56-155	Tilt unlimited clockwise rotate slow to fast
		156-255	Tilt unlimited reversely rotate slow to fast
6	Tilt fine	0-255	16 bit Tilt fine adjustment
7	Pan/Tilt speed	0-255	From fast to slow
8	Dimmer	0-255	Linear dimmer from dark to bright
9	Strobe	0-3	No function
		4-95	Strobe with the same step from slow to fast
		96-176	Random strobe
		177-255	Thunder strobe
10	R1 dimmer	0-255	LED 1 Red dimmer from dark to bright
11	G1 dimmer	0-255	LED 1 Green dimmer from dark to bright
12	B1 dimmer	0-255	LED 1 Blue dimmer from dark to bright
13	W1 dimmer	0-255	LED 2 white dimmer from dark to bright
.....	.....	.....	.....
.....	.....	.....	.....
106	R25 dimmer	0-255	LED 25 Red dimmer from dark to bright
107	G25 dimmer	0-255	LED 25 Green dimmer from dark to bright
108	B25 dimmer	0-255	LED 25 Blue dimmer from dark to bright
109	W25 dimmer	0-255	LED 25 white dimmer from dark to bright
110	Effect show of numbers and punctuations	0-89	Effect show of numbers from 0 to 9
		90-233	Effect show of punctuations
		234-235	Running water effect
111	Effect show of letters	0-234	Effect show of letters from A to Z
		234-235	Running water effect
112	Effect show of static gobos	0-234	Effect show of static gobos
		234-235	Running water effect
113	Color of letters	0-255	Color choice for the letters
114	Dynamic gobos show	0-234	Effect show of dynamic gobos
		234-235	Running water effect
115	Speed of effects	0-255	From fast to slow
116	Macro Function	0-49	No function
		50-74	Numbers and punctuations show(Against CH 12)
		75-99	Letters show(Operate against CH 13)
		100-124	Static gobos show(Operate against CH 14)
		125-149	Dynamic gobos show(Operate against CH 16)
		150-199	Auto Run
117	Reset	200-255	Sound activated
		0-250	No function
		251-255	Reset within 3 seconds

## 8. Key Features

Voltage: AC90-260V,50-60Hz

Power: 400W

Led source: 25pcs 12W CREE RGBW 4-in-1 LEDs

Channel: 19/29/117 three channels modes

Control: DMX/Master-slave/Auto/Sound activated

Pan: Unlimited+16 bit fine

Tilt: Unlimited+16 bit fine

Beam angle: 7°

Dimmer: 0-100% linear dimming

Strobe: 0-25 Hz

Function

1. Each LED controllable individually to bring more options designing.
2. Super fast unlimited Pan/Tilt movement to bring more dynamic effect.
3. Super low noise with as many as 117 channels to bring an unprecedented experience.
4. The excellent beam wash and effect light for big event and high level club, bar, etc.

## **9. Maintenance and Cleaning**

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.



### **CAUTION!**

Disconnect from mains before starting maintenance operation.

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 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