

# RAZOR LASER



## USER MANUAL



## ***1. Unpacking***

Thank you for choosing our products. 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, make sure the power is off before opening the light or repairing. Meanwhile, please keep this manual well for future needs.

It 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.

6 modules RGB laser light which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation.

.1.

## 2. Safety Instructions

	<p style="text-align: center;"><b>CAUTION!</b></p> <p>Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!</p>
---	--

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is 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.

.2.

### **3. Key Features**

Voltage: AC100-240V,50/60HZ

Laser color: RGB full color

Laser power: 3W

RGB 500mw\*6PCS (R:100mw G:200mw B:200mw)

Laser pattern: a variety of rough beam effect patterns.

Y Axis rotating: 240°

Rotation angle: 270°

Control mode: Music / Automatic / DMX512 (11/26/38CH)

Scanning system: stepping motor

Scanning angle of motor: 25 degrees

Rated power: <180W

Working environment: indoor Lamp

Product size: 85 x 16 x 45 cm

Size of carton case (1in1): 92 x 16 x 32 cm

N.W: 11kgs / G.W: 12.6kgs

Size of carton case (2in1): 94.5 x 34 x 33.5 cm

N.W: 23kgs / G.W: 26.5kgs

.3.

#### **4. Operation Instructions**

- The moving head is for laser 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 kept 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 is 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.

.4.

### **5. Display menu control**

Press MENU to choose Address / DMX/ Color/ Manual/ Demo /Auto/Sound/ Temp /Version /Hours, then press ENTER to confirm or to enter the next step.if there are more function for options, press UP/DOWN to choose, then press ENTER to confirm, then press MENU to exit, or wait for 10 and exit automatically.

Remarks: if no operation on any button, the display will turn off automatically in 20seconds; if no DMX signal, the first dot of the display will turn on statically, if with DMX signal, the dot will flash

DMX Address A001---A512 Address Code

Channel Mode 11CH, 26CH, 38CH channel selection

Show Mode SOUND AUTO, effect selection

Slave Mode MASTER, SLAVE, main and auxiliary machine selection

Black Out YES, NO Standby mode

Sound State ON, OFF voice switch

Sound Sense sound sensitivity (0 off, 100 most sensitive)

Pan Inverse YES, NO level reverse

Tilt1 Inverse YES, NO vertical reverse

Tilt2 Inverse YES, NO vertical reverse

Tilt3 Inverse YES, NO vertical reverse

Tilt4 Inverse YES, NO vertical reverse

Tilt5 Inverse YES, NO vertical reverse

Tilt6 Inverse YES, NO vertical reverse

Back Light ON, OFF backlight switch

Auto Test Auto Test

Firmware Version V104 software version number

Defaults YES, NO Restore factory settings

System Reset YES, NO Machine reset

.5.

**6.DMX Channels**

**11Channel Mode**

CH	Function	DMX Value	Details
1	Pan Motor	0-255	0-360°positioning
2	Pan Motor speed	0-255	From fast to slow
3	Tilt1---Tilt6 motor stroke	0-255	0 no function 1-255 0°-360° positioning
4	Tilt motor speed	0-255	From fast to slow
5	Self-propelled	0-55	No function
		56-80	Self-propelled effect 1 (XY uncontrollable)
		81-105 106-130 131---155 156---180	Self-propelled effect 2 (XY uncontrollable)...Self-propelled effect 5 (XY uncontrollable)
		181---205	Sound control (XY uncontrollable)
		206---230	Self-propelled effect 6 (XY uncontrollable)
		231---255	Sound control (XY uncontrollable)
		6	Self-propelled speed
7	Dimmer	0-255	0-100% total dimming
8	Strobe	0-9	No strobe
		10-255	Strobe speed from slow to fast
9	Laser effect	0-15	No function
		16-27	Effect 1
		.....	Every time the DMX value is increased by 12, there will be an effect
		232-243	Effect 19
		244-255	Effect 20
10	Laser effect	0-255	self-propelled speed from fast

	speed		to slow
11	Reset	0-249	No function
		250-255	machine reset (value stays for 5 seconds)

.6.

**26Channel Mode**

CH	Function	DMX Value	Details
1	Pan Motor	0-255	0-360° positioning
2	Pan Motor speed	0-255	From fast to slow
3	Tilt1 motor	0-255	0°-360° positioning
4	Tilt2 motor	0-255	0°-360° positioning
5	Tilt3 motor	0-255	0°-360° positioning
6	Tilt4 motor	0-255	0°-360° positioning
7	Tilt5 motor	0-255	0°-360° positioning
8	Tilt6 motor	0-255	0°-360° positioning
9	Tilt1-Tilt6 motor	0-255	0 no function 1-255 0°-360° positioning
10	Tilt motor speed	0-255	speed from fast to slow
11	Self-propelled	0-55	No function
		56-80	Self-propelled effect 1 (XY uncontrollable)
		81-105 106-130 131---155 156---180	Self-propelled effect 2 (XY uncontrollable)...Self-propelled effect 5 (XY uncontrollable)
		181---205	Sound control (XY uncontrollable)
		206---230	Self-propelled effect 6 (XY uncontrollable)
		231---255	Sound control (XY uncontrollable)
		12	Self-propelled speed
13	Dimmer	0-255	0-100% total dimming
14	Strobe	0-9	No strobe
		10-255	Strobe speed from slow to fast
15	Red laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming
16	Green laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming



17	Blue laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming
18	The first group of RGB lasers	0-31	Off
		32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
19	The second group of RGB lasers	0-31	Off
		31-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
20	The third group of RGB lasers	0-31	Off
		32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
21	The fourth group of RGB lasers	0-31	Off
		32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
22	The fifth group of RGB lasers	0-31	Off
		32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
23	The sixth	0-31	Off

	group of RGB lasers	32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Purple
		192-223	Cyan
		224-255	Full bright
24	Laser effect	0-15	No function
		16-27	Effect 1
		.....	Every time the DMX value is increased by 12, there will be an effect
		232-243	Effect 19
		244-255	Effect 20
25	Laser effect speed	0-255	self-propelled speed from fast to slow
26	Reset	0-249	No function
		250-255	machine reset (value stays for 5 seconds)

### **38Channel Mode**

CH	Function	DMX Value	Details
1	Pan Motor	0-255	0-360°positioning
2	Pan Motor speed	0-255	From fast to slow
3	Tilt1 motor	0-255	0-360°positioning
4	Tilt2 motor	0-255	0-360°positioning
5	Tilt3 motor	0-255	0-360°positioning
6	Tilt4 motor	0-255	0-360°positioning
7	Tilt5 motor	0-255	0-360°positioning
8	Tilt6 motor	0-255	0-360°positioning
9	Tilt1---Tilt6 motor stroke	0-255	0 no function 1-255 0°-360° positioning
10	Tilt motor speed	0-255	speed from fast to slow
11	Self-propelled	0-55	No function
		56-80	Self-propelled effect 1 (XY uncontrollable)
		81-105 106-130 131---155 156---180	Self-propelled effect 2 (XY uncontrollable)...Self-propelled effect 5 (XY uncontrollable)
		181---205	Sound control (XY uncontrollable)
		206---230	Self-propelled effect 6 (XY

			uncontrollable)
		231---255	Sound control (XY uncontrollable)
12	Self-propelled speed	0-255	self-propelled speed and Sound-activated sensitivity
13	Dimmer	0-255	0-100% total dimming
14	Strobe	0-9	No strobe
		10-255	Strobe speed from slow to fast
15	Red laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming
16	Green laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming
17	Blue laser 1-6 dimming	0-255	0 no function 1-255 1-100% dimming
18	The first group of red lasers	0-255	0-100% dimming
19	The first group of green lasers	0-255	0-100% dimming
20	The first group of blue lasers	0-255	0-100% dimming
21	The second group of red lasers	0-255	0-100% dimming
.....	.....	.....	.....
33	The sixth group of red lasers	0-255	0-100% dimming
34	The sixth group of green lasers	0-255	0-100% dimming
35	The sixth group of blue lasers	0-255	0-100% dimming
36	Laser effect	0-15	No function
		16-27	Effect 1
		.....	Every time the DMX value is increased by 12, there will be an effect
		232-243	Effect 19
		244-255	Effect 20
37	Laser effect speed	0-255	self-propelled speed from fast to slow
38	Reset	0-249	No function
		250-255	machine reset (value stays for 5 seconds)

### **7. Maintenance and Cleaning**

The following points must be considered during the inspection:

1. All screws for installing the devices or parts of the device must 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 must 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 lifetime, 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”.