# User Manual 60W RGBW LED BEAM MOVING HEAD

**Professional Stage Lighting** 

## 1. Specification

Input voltage: 90-240V AC, 50/60Hz

Light source :1pcs 60W RGBW 4in1 Osram LEDs

Power Consumption: 100W

Beam angle: 4 degree

Control Modes: DMX512, Master-slave, Stand-Alone, Sound-Control

DMX Channel: 17/15 CHs Display: LCD display Dimming: 0-100%

## 2. Notes on safety

#### **Before Operation**







#### ATTENTION: DANGER OF LIFE! RISKOF FIRE! RISK OF SHORT CIRCUIT!

Prior to the initial operation of this product, please do the followings

-Read these operating instructions with great care; -Study and observe all instructions carefully;

-Ensure that everybody and anybody involved in the installation, operation, transport and storage of this product is suitably qualified;

-Verify whether any visible damage was caused during transport. If the power cord. housing or the light are damaged ,do not operate the device; contact your specialized dealer immediately.

#### 2.1 Supply Voltage, Mains Cord and Connection to Mains

The handling of supply voltage ,mains cords and connections to mains calls for particular care considering the risk from a life-threatening electric shock, the risk of fire and the risk of short

circuits please observe the following notes in particular:
Products operating on supply voltage should be kept out of the reach of children. Therefore ensure the permanent supervision if children are in the immediate vicinity of the product! For commercial facilities the regulations on the prevention of accidents of the respective trade association must be observed. The operation of this equipment at schools, training facilities, and yourself-help workshops must be supervised responsibly by trained personnel.

Check the product regularly for any damage to the mains cord! Should you discover any damage to the mains cord, do not operate or disconnect this product! Secure the product

against accidental operation and contact your specialized dealer. Always separate the product from mains by holding the mains plug by the handling surface. Never disconnect by holding the line cord! Be sure to connect the product exclusively to AC110~127V/59~60Hz!

Always be sure during installation, operation, transport and when storing the product that the mains cord is not exposed to possible mechanical damage, or damage caused by humidity, fluids, heat or cold!

The products cable entry must not be exposed to stress from pull! Create the mains connection once the product has been installed only. Always connect the mains plug last!

The product must only be connected to a proper outlet of the public supply grid. Connect the mains cord to suitable outlets only! Use extensions cords in compliance with specifications only! Do not allow the mains cord to come into contact with other cords!

Ensure during institution, operation, transport and storage that none of the cables are freely

Never touch the mains cord, mains plug and outlet with wet or damp hands!

When not using the product, and to cleaning always disconnect the product from mains! To do

so, hold the mains plug by the handling surface and never pull the mains cord! Never connect the device to dimmer pack!

#### 2.2 Housing







#### ATTENTION: DANGER OF LIFE!RISKOF FIRE! RISK OF SHORT CIRCUIT!

Always ensure during installation, operation, transport and when storing the product that no shocks or other forces impact the housing!

The housing must not touch onto any other devices or objects during operation!

Easily flammable materials, e.g. decoration material and other surfaces and objects, must maintain a minimum distance of 3m to the housing !Walls must maintain a minimum distance of 50cm to the housing! The device must be installed on a fireproof surface only (no carpet)1 Always ensure appropriate circulation of air.

Do not touch the housing during operation it will heat up .The housing is safe to touch approx .5 minutes following the end of operation!

The device must never be carried via the projector ans. Use the carrying handles only!

Fluids must not enter the housing as this could reduce the protective insulation and may trigger short circuits which may lead to fatal electro shocks !If fluid have entered, disconnect the mains plug immediately and secure the product against unintentional operation and contact yours specialized dealer! Damage caused as a result of fluids entering the housing is exempt from warranty .

No metal parts or other items must enter the housing as this may reduce the protective insulation or trigger short circuits which may lead to fatal electric shocks !If metal parts or other items have entered ,disconnect the mains plug immediately, secure the product against unintentional operation and contact your specialized dealer! Damage caused by metal parts or other items in the housing is exempt from warranty.

#### 2. 3 Operating Environment







#### ATTENTION: DANGER OF LIFE!RISKOF FIRE! RISK OF SHORT CIRCUIT!

The product must be operated and stored in a dry environment only !Splash water ,rain, humidity, fog may reduce the protective insulation which may lead to fatal electric shocks! The limit value for relactive humidity is 50% at 45%.A minimum distance of 1.5m to a fog machine must be observed ;fog saturation in the room must not reduce the visibility to below 10m.

The product must be operated at a temperature range of between  $-5^{\circ}$ C and  $45^{\circ}$ C only. Protect the product against direct exposure to sunlight or other heat, such as from radiators! If the product is taken from a cold environment into a warm environment it must only be taken into operation once it has reached ambient temperature, since the condensation created by the difference in temperature may destroy the device!

Protect the product against dust! Dust may reduce the protective insulation, which may cause fatal electric shocks!

The product must be operated at altitudes ranging between 20m below and 3000m above sea level only!

The product must not be operated during thunder storms; risk of destruction from surge voltages!

The product must be operated at a minimum distance of 1.5m to lit objects only!

#### 2.4 Installation







#### ATTENTION: RISK OF SHORT CIRCUIT!

This product can be operated suspended or as stand-alone system.

Should your lighting effect show any signs of damage, do not install the device! In this case, have your lighting effect repaired by your specialized dealer. The manufacturer does not accept responsibility or liability for damage to property or personal injury resulting from an improperly installation!

As a stand-alone system the device must be installed vertically on an absolute planar, firm, fireproof, shock-

and vibration-free surface. The installation of this lighting effect must be carried out by trained and professional staff! The installation of this lighting must only be carried out with the appropriate materials!

The suspended installation of this lighting effect necessitates a suitable suspension system! The lighting effect must never be fixed swinging freely in the room. No individuals should linger underneath the lighting effect during suspended installation!

It is a must to install this device with a second independent fixture. Such second fixture must guarantee in the event of failure of the main fixture that no assembly parts will fall down. Use the fixture on the undersurface only.

The light effect unit must be attached via two certified hooks and omega bracket to a tie-bar system. Use the screw threads on the undersurface only.

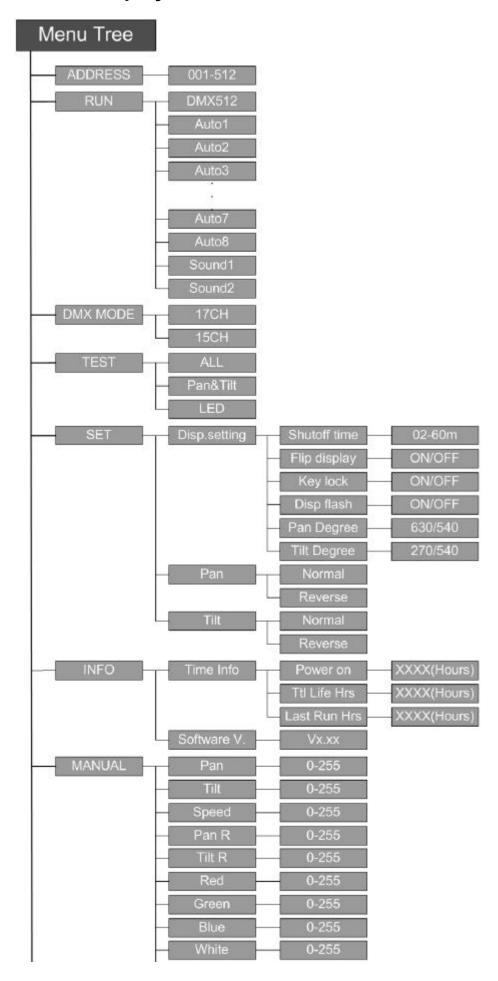
It must be ensured that an expert inspects the mechanical and safety-relevant installation prior to the initial operation and following major modifications, prior to the renewed operation. It must be ensured that an expert inspects the mechanical and safety-relevant installation at least once a year. It must be ensured that an expert inspects the mechanical installation and the installation of relevance to safety within the framework of an acceptance test at least every four years.

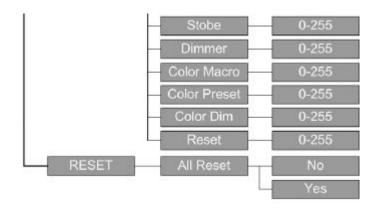
The installation fixture must be as such that it can withstand for a period of 60minutes 10 times the load capacity without harmful deformation.

It is prohibited for any individual to unnecessarily stay or pass beneath the installation during any type of assembly work

The light effect unit must be secured by a safety arrester cable if fly-mounted. The cable must withstand 12 times the weigh of the light effect unit Use arrester cables equipped with quick closing links. The dropping distance must not exceed 20 cm. Defect arrester cables or arrester cables that have already been exposed to stress must not be used.

## 3. LED Display window function table





# 4. Operation of controller

# **Channel list**

DMX channel '			S functions and their values(17 DMX CHANNELS)
Mode/Channel		Value	Function
17CH	15CH		
1	1		PAN Movement 8bit
		0-255	Pan Movement
2			Pan Fine 16bit
		0-255	Fine control of Pan Movement
3	2		TILT Movement 8bit
		0-255	Tilt Movement
4			Tilt Fine 16bit
		0-255	Fine control of Tilt Movement
	3		Speed Pan/Tilt movement
_		0-225	max to min speed
5		226-2 35	Blackout by movement
		236-2 55	No function
	4		Pan Motor continuous rotation
6		0-127	no function
		128-1 89	Forwards Pan rotation from fast to slow
		190-1 93	No rotation
		194-2 55	Backwards Pan rotation from slow to fast
	5		Tilt Motor continuous rotation
		0-127	No function
7		128-1 89	Forwards Tilt rotation from fast to slow
•		190-1 93	No rotation
		194-2 55	Backwards Tilt rotation from slow to fast
8	6		Red LED – all arrays
0		0-255	Red(0-Black, 255-100% Red)
9	7		Green LED – all arrays
J		0-255	Green (0-Black, 255-100% Green)
10	8		Blue LED – all arrays

		0-255	Blue (0-Black, 255-100% Blue)
11	9		White LED – all arrays
	J	0-255	White (0-Black, 255-100% White)
12			Shutter, Strobe
		0-31	Led turn off
		32-63	Led turn on
		64-95	Strobe effect slow to fast
	10	96-12 7	Led turn on
	10	128-1 59	Pulse-effect in sequences
		160-1 91	Led turn on
		192-2 23	Random strobe effect slow to fast
		224-2 55	Led turn on
13	11		Dimmer intensity:
13		0-255	Intensity 0 to 100%
			Color Macro:
		0-7	No function
		8-39	From RED to YELLOW
		40-71	from YELLOW to GREEN
		72-10 3	from GREEN to CYAN
14	12	104-1 35	from CYAN to BLUE
		136-1 67	from BLUE to MAGENTA
		168-1 99	from MAGENTA to RED
		200-2 31	from RED to WHITE
		232-2 55	Cross fading colours from slow to fast
15	13		Chase Fade:
	10	0-255	Fade Chase
16	14		Color Presets Dimmer
	'	0-255	Dimmer 100 to 0%

DMX channel 'S functions and their values(17 DMX CHANNELS)								
Mode/Channel		Value Function						
17CH	15CH							
			Reset ,internal Auto					
		0-79	Normal					
		80-84	All motor reset					
		85-99	No function					
		100-11 9	Internal Auto1					
		120-13 9	Internal Auto2					
17	15	140-15 9	Internal Auto3					
		160-17 9	Internal Auto4					
		180-19 9	Internal Auto5					
		200-21 9	Internal Auto6					
		220-23 9	Internal Auto7					
		240-25 5	Internal Auto8					