

11. 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.

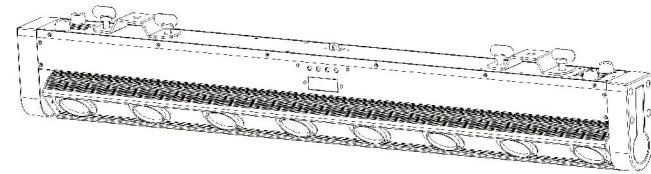
There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

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

MICROH



LED REVOLVER WH



User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

1. Unpacking

Thank you for choosing Microh's LED REVOLVER WH. 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.

Microh's LED REVOLVER WH 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 small to medium live performances, theater, studio, nightclubs and discos.

LED REVOLVER WH adopts 8PCS high power 8W White LEDs 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:

LED REVOLVER WH-----One	Signal Cable----One
Omega Clamp-----Two	Power Cable----One
Safety Chain-----One	User Manual----One

9. Key Features

- 8PCS 8W high power WHITE LEDs
- 100,000 hours lifespan and low power consumption
- 8 pixels (each LED is a pixel), controllable individually
- Outstanding white BEAM effect
- Specific optic system
- High light output with 4870LUX@7M for 8 BEAMS, 1770LUX@7M for 1 BEAM
- High efficiency LED shutter
- Strobe effect with 18 flashes per second and pulse effect
- 0-100% smooth linear dimmer
- Amazing streaming effect
- 8 built-in default programs for easy performance
- 12 default pixel macros effect
- 6/15 DMX channels
- DMX512, master-slave and sound activated controllable or auto operation
- LED display
- Efficient Noise free aluminum cooling system
- Powercon IN/OUT as default
- 3-pin XLR connectors
- Two 1/4 turn fastening Omega Clamps

10. Technical Specifications

- Input Voltage: AC90-260V 50/60Hz
- LED Quantities: 8PCS 8W WHITE LEDs
- Control Signal: DMX512, master-slave and sound activated or auto operation
- Control Channel: 6/15 DMX Channels switchable
- Power Consumption: 125W
- Dimensions: 84(D)x1064(W)x180(H)mm
- Packing Dimensions: 165(D)x1165(W)x220(H)mm
- Net Weight: 7.5kg
- Gross Weight: 10kg

14		Pixel 8	0-255	Pixel 8 saturation control (0-100%)
15	6	Pixel Macro	0-015	No function
			016-035	Macro 1 from slow to fast
			036-055	Macro 2 from slow to fast
			056-075	Macro 3 from slow to fast
			076-095	Macro 4 from slow to fast
			096-115	Macro 5 from slow to fast
			116-135	Macro 6 from slow to fast
			136-155	Macro 7 from slow to fast
			156-175	Macro 8 from slow to fast
			176-195	Macro 9 from slow to fast
			196-215	Macro 10 from slow to fast
			216-235	Macro 11 from slow to fast
			236-255	Macro 12 from slow to fast

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. Operation Instructions

- The LED REVOLVER WH is for beam 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.

4. 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.

Never stand directly below the device when mounting, removing, or servicing the fixture.

8.DMX Channels

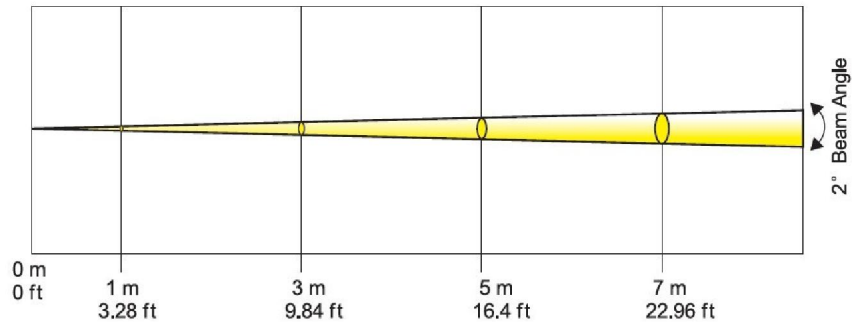
Channel		Function	Values	Description
MOD1	MOD 2			
1	1	Dimmer	0-255	Dimmer 0%...100%
2	2	Shutter	0-009	No Function
			010-249	Strobe effect slow to fast
			250-255	No Function
3	3	TILT	0-255	TILT movement
4		TILT Fine	0-255	Fine control of Tilt movement
5	4	Speed	0-255	Max to min speed for TILT
6	5	Special	0-019	No Function
			020-029	No Function
			030-039	No Function
			040-079	No Function
			080-099	Motor reset
			100-119	Internal program 1
			120-139	Internal program 2
			140-159	Internal program 3
			160-179	Internal program 4
			180-199	Internal program 5
			200-219	Internal program 6
220-239	Internal program 7			
240-255	Internal program 8			
7		Pixel 1	0-255	Pixel 1 saturation control (0-100%)
8		Pixel 2	0-255	Pixel 2 saturation control (0-100%)
9		Pixel 3	0-255	Pixel 3 saturation control (0-100%)
10		Pixel 4	0-255	Pixel 4 saturation control (0-100%)
11		Pixel 5	0-255	Pixel 5 saturation control (0-100%)
12		Pixel 6	0-255	Pixel 6 saturation control (0-100%)
13		Pixel 7	0-255	Pixel 7 saturation control (0-100%)

7. Photometric Data

Photometric Beam Angle Data

2° Beam Angle $LUX \times 0.0929 = FC$

1 LED 6968FC / 75000LUX 920FC / 9900LUX 307FC / 3300LUX 165FC / 1770LUX



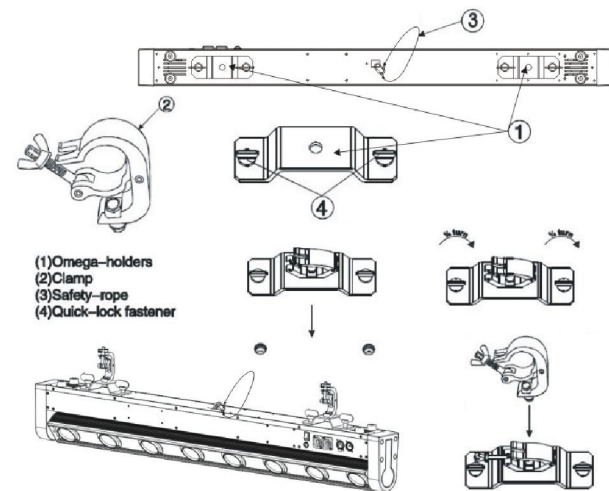
from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.).

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points: Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and 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 REVOLVER WH provides two unique mounting brackets 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



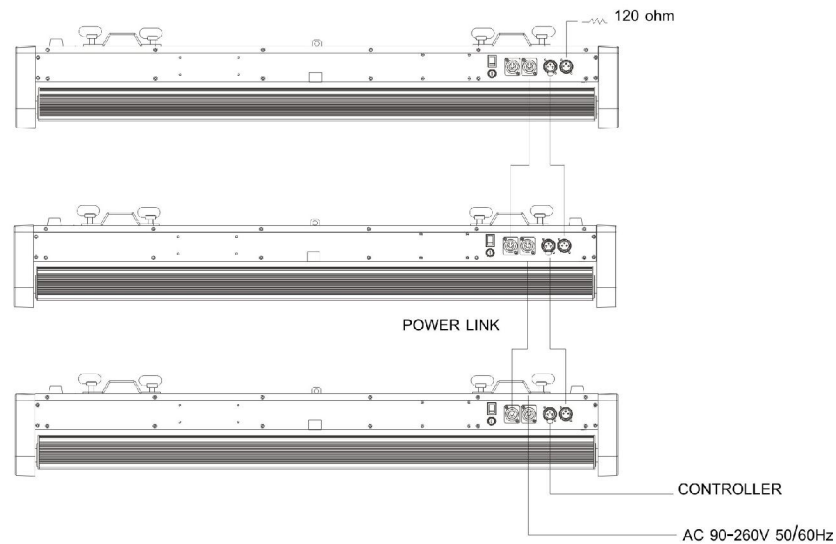
Regardless of the rigging option you choose for your LED REVOLVER WH, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety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

5. DMX-512 control connections

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



DMX Output
3-Pin XLR Socket

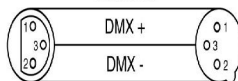


DMX Input
3-Pin XLR Socket



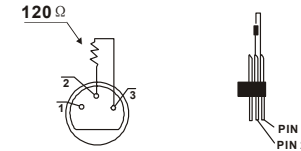
- 1: Ground
- 2: Data (-)
- 3: Data (+)

DMX512 OUT
3-PIN XLR



DMX512 IN
3-PIN XLR

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.



6. Menu Operations

MODE	ADDR	VALU	A001~AXXX (AXXX)	DMX address setting
		SLAV	ON/OFF (SLAV)	
AUTO	IP1~8	ALON (AU-A)		Running built-in program alone
		MAST (AU-M)		Set to master (Auto running)
SOUN	IP1~8	ALON (SO-A)		Set to sound control alone
		MAST (SO-M)		Set to master (Sound control)
SET	MIC	M-XX		Mic sensitivity
	LODA	ON/OFF		Reload data
	VER	V-1.0~V-9.9		Software version
DMX	MOD1			15 DMX channel mode
	MOD2			6 DMX channel mode
REST	ON/OFF			All reset