IM-MH90S
90W LED SPOT MOVING HEAD

USER MANUAL

Ver1.0

Table of contents

1. Preface

1.1 Packing list

Product name	quantity
moving head light	1 pcs
Power -line	1 base
User manual	1pcs

1.2 Unpacking instructions

On 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 should be returned in original factory box and packing.

1.3 AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or referred to the fixtures specification 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 is set 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.

1.4 Safety instructions

Please read these instructions, it includes important information about the installation, usage and maintenance of this product.

Please keep this user guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
Always make sure that you are connecting to the proper voltage, and that the

line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.

Before the first time to use it, Please check whether the damage in transit, if happen damages in transit, please do not use this lamp, and please asap contact distributors or manufacturers.

Please don't install the lamp in the ordinary combustible material on the surface. Lamp should be installed in the well ventilated place, and the distance of the wall to keep it over 10 cm, at the same time, please check the fan hole was clear.

Do not use lamp direct project in flammable objects, lamp and the radiation of the distance between the objects please keep it over 12 m.

Do not use direct lamp project light source , to avoid damage the eyes.

Before installation, please make sure your use power supply voltage and marked voltage

Note: before any install, maintain and clean lamp, please confirm cut off the power supply.

2. Introduction

2.1 Features
*Light source:1pcs 90W white LED
*Electronic dimmer 0~100%
*Fan Cooling /Forced convection
*Pan movement:540°
*Tilt movement:270°
*Pan/Tilt resolution:8-16bit
*Prism rotating 3-facet prism
*Focus:linear focus from close to far
*1 fixed gobo wheel: 8gobos plus blank
*1 rotated gobo wheel: 6gobos plus blank,gobo rotating 360°
*1 color wheel:7colors plus white
*Strobe:0-16Hz, from slow to fast, adjusting
*Control mode:Auto, sound active , DMX512
*DMX channel:15CH
* LCD display

2.2 DMX channel

3. Setup

Disconnect the power cord before replacing a fuse and always replace with the same type fuse.

3.1 Fuse replacement

With a flat head screwdriver wedge the fuse hold out of its housing. Remove

the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.

3.2 Fixture linking

You will need a serial data link to run light show of one or more fixtures using a DMX-512 controller or to run synchronized on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

3.3   3-Pin to 5-Pin conversion chart

Note! If you use a controller with a 5 pin DMX output connector. You will need to use a 5pin to 3 pin as apter
CHAUVET Model No: DMX5M. Or DMX 5F
The chart below details a proper cable conversion:

Occupation of the XLR-connection:
DMX - output
XLR mounting-sockets (rear view):

1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not connected
5 - Not connected

DMX-input
XLR mounting-plugs (rear view):
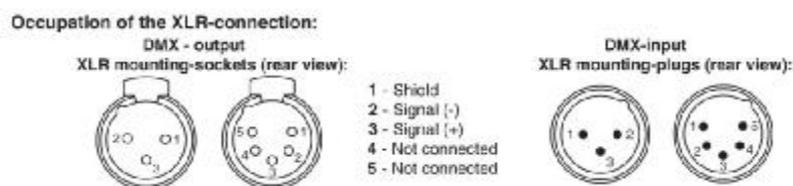
3.4 Setting up a DMX serial data link

At first link the first light and DMX control through XLR-connection signal cable, then connect the light in series, as the follow：

DMX 512   DMX 512

DMX Controller
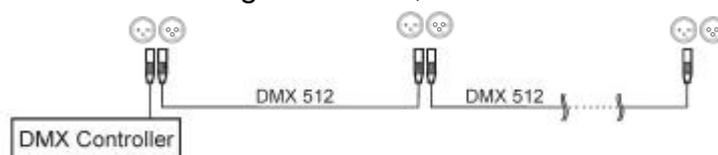
1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

3.6 orientations

This fixture may be mounted in any position provided there is adequate room for ventilation.

4. Operating instructions

4.1 Description of operation panel
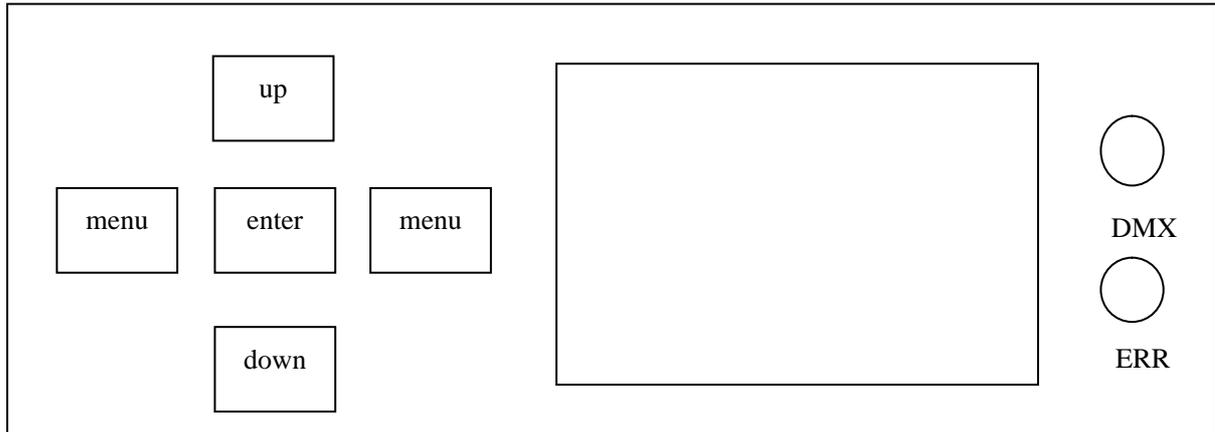
4.2 Menu map

Setting	running mode	Controller
		sound
		performance 1
		performance 2
		performance 3
		performance 4
		random
	Address	1-512
	DMX	15CH
	sound sensitivity	1-99
	Pan Reverse	ON/OFF
	Tilt Reverse	ON/OFF
	Pan/Tilt exchange swap	ON/OFF
	coding mask	ON/OFF
	Signal timeout	Blackout /keep
	Screen save	ON/OFF
	color liner	ON/OFF
	reset	Confirm
Manual mode	dimmer	0-255
	strobe	0-255
	pan	0-255
	pan fine	0-255

	tilt	0-255
	tilt fine	0-255
	pan/tilt speed	0-255
	color	0-255
	gobo	0-255
	gobo2	0-255
	gobo2 rotate	0-255
	focus	0-255
	prism rotate	0-255
	auto	0-255
	reset	>
offset value	pan offset	（-128）-（+127）
	tilt offset	（-128）-（+127）
	color wheel offset	（-128）-（+127）
	gobo wheel offset	（-128）-（+127）
offset value	gobo wheel2 offset	（-128）-（+127）
	focus offset	（-128）-（+127）
Advance setting	language switch	Confirm
	The screen upside down	Confirm
	Time to reset	Confirm
	Protect the temperature	0-120
Hardware information	color wheel　Hoare	X
	gobo wheel　Hoare	X
	gobo wheel2　Hoare	X
	focus　Hoare	X
	pan coding mask	XX
	pan route	XXXXX
	tilt coding mask	XX
	tilt route	XXXXX
System information	Version	XXXXXXXXXX
	Use time of fixture	XXXXX
	Turn on time	XXXXX
	temperature	XXX

When the Temperature resistance has problem, the screen will have the following tips:
Thermistor Open
Thermistor Short
Thermistor Hot

4.3DMX channels
15CH

15 channel	Function	channel value	description
1	dimmer	0-255	from dark to bright
2	strobe	0-10	no strobe
		11-255	from slow to fast strobe
3	pan	0-255	pan
4	pan fine	0-255	pan 16 bit
5	tilt	0-255	tilt
6	tilt fine	0-255	tilt 16 bit
7	pan tilt speed	0-255	pan tilt speed slow
8	color	0-9	white
		10-19	white+color 1
		20-29	color 1
		30-39	color 1+color 2
		40-49	color 2
		50-59	color 2+color 3
		60-69	color 3
		70-79	color 3+color 4
		80-89	color 4
		90-99	color 4+color 5
		100-109	color 5
		110-119	color 5+color 6
		120-129	color 6
		130-139	color 6+color 7
		140-149	color 7
		150-159	color 7+white
		160-255	color anticlockwise from slow to fast water
9	fix gobo wheel	0-9	white
		10-19	gobo 1
		20-29	gobo 2
		30-39	gobo 3
		40-49	gobo 4
		50-59	gobo 5
		60-69	gobo 6
		70-79	gobo 7
		80-89	gobo 8
		90-99	white

9	fix gobo wheel	100-109	gobo 1 shake
		110-119	gobo 2 shake
		120-129	gobo 3 shake
		130-139	gobo 4 shake
		140-149	gobo 5 shake
		150-159	gobo 6 shake
		160-169	gobo 7 shake
		170-179	gobo 8 shake
		180-214	gobo clockwise from fast to slow
		215-219	stop
		220-255	gobo anticlockwise from slow to fast
10	gobo 2	0-9	white
		10-19	rotated gobo 1
		20-29	rotated gobo 2
		30-39	rotated gobo 3
		40-49	rotated gobo 4
		50-59	rotated gobo 5
		60-69	rotated gobo 6
		70-79	white shake
		80-89	rotated gobo 1 shake
		90-99	rotated gobo 2 shake
		100-109	rotated gobo 3 shake
		110-119	rotated gobo 4 shake
		120-129	rotated gobo 5 shake
		130-139	rotated gobo 6 shake
		140-194	rotated gobo clockwise from
		195-199	stop
		200-255	rotated gobo anticlockwise from
11	gobo 2 rotated	0-127	gobo degree
		128-190	gobo clockwise from fast to slow
		191-192	stop
		193-255	gobo anticlockwise from slow to fast
12	focus	0-255	focus
13	prism rotated	0-127	invalid
		128-136	valid
		137-255	prism from slow to fast rotated
14	Macro Function	0-255	from dark to bright
		0-5	invalid
		6-55	Perform 1
		56-105	Perform 2

		106-155	Perform 3
		156-205	Perform 4
		206-255	random model
15	reset	0-25	invalid
		26-76	Motor reset
		77-127	XY reset
		128-255	Whole reset

5.Technical specifications

Voltage	AC100-240v 50/60Hz
LED	90W LED
Color wheel	7 colors+open
Gobo wheel	1 fixed gobo wheel: 8gobos plus blank 1 rotated gobo wheel: 6gobos plus blank,gobo rotating 360°
Max temperature	104°F(40°C)
Data input/output	3pin XLR-connection、anode socket
Outside size	270*190*390mm
N.W	9kg