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*FL-2R MOVING HEAD 120W*

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# USER MANUAL

Ver1.0

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## 1. Preface

### 1.1 Packing list

Product name	quantity
Moving head light	1 pcs
Powercon in cable	1 pcs
Powercon extension cord	1 pcs
Mounting Bracket	2 pcs (attached)
User manual	1 pcs

### 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 exist 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 because, 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.

This product is intended for indoor use only!

To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure that there are no flammable materials close to the unit while operating.

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The unit must be installed in a location with adequate ventilation, at least 20in(50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked. Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse size and type.

Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.

Maximum ambient temperature (Ta) is 104°F (40°C). Do not operate fixture at temperatures higher than this.

In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

Don't connect the device to a dimmer device.

Make sure the power cord never crimped or damaged.

Never disconnect the power cord by pulling for the cord.

Avoid direct eye exposure to the light source while it is on.

## **2. Introduction**

### **2.1 Features**

14 channel DMX-512 .

Pan :540 / tilt:270°,Pan / Tilt no limit.

Color wheel : 13 colors+open,rainbow effect.

Gobo wheel : 14 gobos +open,gobo wheel spin effect.

Variable electronic strobe.

Variable electronic dimmer(0-100%).

LED display menu with invert.

Reset to factory settings option.

Pan/tilt invert option.

Optional controllers.

### **2.2 DMX channel**

Channel	Function
1	Color wheel
2	Strobe
3	Dimmer
4	Gobo wheel
5	Prism
6	Prism rotating
7	Focus
8	Pan
9	Pan fine
10	Tilt
11	Tilt fine
12	Pan /tilt speed
13	Lamp switch
14	Reset

## **3. Setup**

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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.

Maximum recommended serial data link distance:500 meters(1640ft).

Maximum recommended number of fixtures on a serial data link:32 fixtures.

### Data cabling

To link fixtures together you must obtain data cables. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

### DMX data cable

Use a belden 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

2-conductor twisted pair plus a shield.

maximum capacitance between conductors-30 pF/ft.

maximum capacitance between conductor and shield -55 pF/ft.

maximum resistance of 20 ohms/1000ft.

nominal impedance 100-140 ohms.

### 3.3 3-Pin to 5-Pin conversion chart

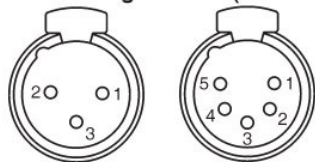
Note! If you use a controller with a 5 pin DMX output connector. you will need to use a 5pin to 3 pin adapter

CHAUVET Model No:DMX5M. or DMX 5F

The chart below details a proper cable conversion:

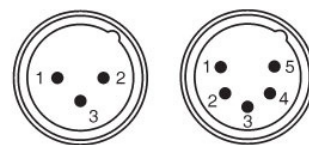
#### Occupation of the XLR-connection:

DMX - output  
XLR mounting-sockets (rear view):



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

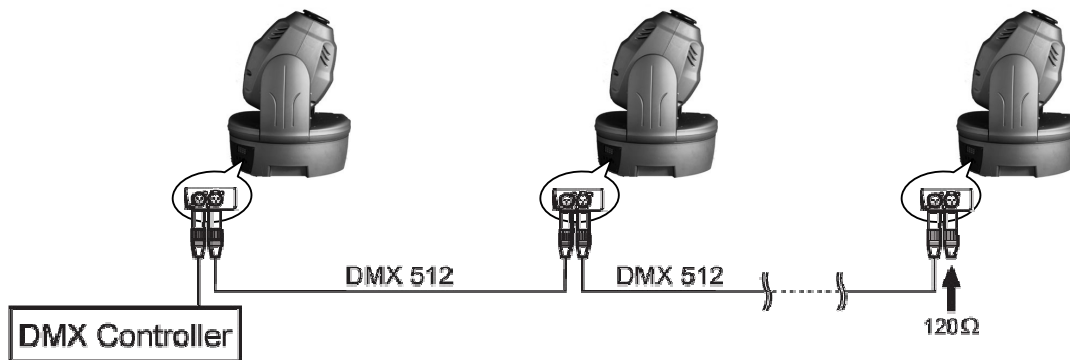
DMX-input  
XLR mounting-plugs (rear view):



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### 3.4 Setting up a DMX serial data link

at first link the first light and DMX control through XLR-connection signal cable, then join the light in series ,as the follow



### 3.5 Master/Slave fixture linking

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 orientation

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

## 4. Operating instructions

### 4.1 Menu map

1.SETUP	
	DMX MOD
	AUTO MOD
	ADJUST
	ESC

2.OPTION	
	PAN
	TILT
	DISPLAY
	COLOR
	LAMP
	CHINESE
	ESC

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3.INFORMATION	
	DISPLAY SYSTEM
	XY MOTOR SYSTEM
	TINY MOTOR SYSTEM
	LAMP
	FIXTURE
	ESC

4.MANUAL CONTROL	
	COLOR
	STROBE
	DIMMER
	GOBO
	PRISM INS
	PRISM ROT
	FOCUS
	PAN
	PAN FINE
	TILT
	TILT FINE
	PAN ROTATE
	TILT ROTATE
	XY SPEED
	LAMP OFF
	RESET
	ESC

5.RESET	
	ALL RESET
	XY RESET
	GOBO RESET
	COLOR RESET
	FOCUS RESET
	DIMMER RESET
	PRISM RESET
	FROST RSEST
	PRISM M RESET
	FACTORY DEFAULT
	ESC

6.ESC	
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### **DMX mode**

This mode allows the until to be controlled by any universal DMX controller.  
The default mode for the fixture is DMX, as follow.

### **4.2 DMX channel values**

<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0-8	<b>Color wheel</b> No color
	9-17	Color1
	18-28	Color2
	27-35	Color3
	36-44	Color4
	45-53	Color5
	54-62	Color6
	63-71	Color7
	72-80	Color8
	81-89	Color9
	90-98	Color10
	99-107	Color11
	108-116	Color12
	117-127	Color13
128-191	Color wheel positive turn, slow to fast	
192-127	Color wheel reversal turn, slow to fast	
2	0-4	<b>Strobe</b> No
	5-251	Slow to fast
	252-255	Light ON
3	0-255	<b>Dimmer</b> 0-100%
4	0-4	<b>Gobo wheel</b> No
	5-9	Gobo 1
	10-14	Gobo 2
	15-19	Gobo 3
	20-24	Gobo 4
	25-29	Gobo 5
	30-34	Gobo 6
	35-39	Gobo7
	40-44	Gobo8
	45-49	Gobo9
	50-54	Gobo10
	55-59	Gobo11
	60-64	Gobo12
	65-69	Gobo13
	70-71	Gobo14
	72-113	Gobo wheel positive turn, fast to slow
114-118	Light ON, effect stop	
119-160	Gobo wheel reversal speed, slow to fast	
161-165	Light ON, effect stop	
166-172	Gobo2 shake, slow to fast	
173-179	Gobo3 shake, slow to fast	
180-186	Gobo4 shake, slow to fast	



	187-193 194-200 201-207 208-214 215-221 222-228 229-235 236-242 243-249 250-255	Gobo5 shake, slow to fast Gobo6 shake, slow to fast Gobo7 shake, slow to fast Gobo8 shake, slow to fast Gobo9 shake, slow to fast Gobo10 shake, slow to fast Gobo11 shake, slow to fast Gobo12 shake, slow to fast Gobo13 shake, slow to fast Gobo14 shake, slow to fast
5	0-127 128-255	<b>Prism</b> No effect Prism effect
6	0-127 128-190 191-192 193-255	<b>Rotating prism</b> Gobo positioning Forward rotating prism   slow to fast Stop rotating Reverse rotating prism   slow to fast
7	0-255	<b>Focus</b>
8	0-255	<b>Pan</b>
9	0-255	<b>Pan fine</b>
10	0-225	<b>Tilt</b>
11	0-255	<b>Tilt fine</b>
12	0-225	<b>Pan /tilt speed</b> Speed from fast to slow
13	101-110 201-255	<b>Lamp switch</b> Light OFF Light ON
14	120-149 170-255	<b>Reset</b> reset(delay 3 second) Auto

## 5. techno-specification

<b>Lamp socket</b>	Phillips MSD Platinum 2r or similar
<b>Color housing</b>	black
<b>Voltage</b>	120-240V 50/60Hz
<b>Pan</b>	540°,Pan no limit
<b>Tilt</b>	270°,Tilt no limit
<b>Tiptop environment temperature</b>	104°F(40°C)
<b>Date input/output</b>	3pin XLR-connection powercon socket
<b>N.W</b>	10.2kg
<b>Packing size</b>	400×320×520mm(L×W×H)(1pcs/package)
<b>G.W</b>	12.2kg(1pcs/package)