LED Mini Moving head light

15W Led Spot

USER MANUAL

Ver2.0

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1. Before you begin

1.1 What is included

1 ini spot/wash
User manual

1.2 Unpacking instructions

Immediately upon receriving a fixture, carefully unpack the carton, check the contents to enrure that all parts are present, and have been received in good condition. Notlfy the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shous sings 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 be returned in the original factory box and packing.

1.3 AC Power

To determin the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixtures specifications chart. A fixtures listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat(variable resisto) 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 exsits 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 rosult 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.

Figure 1 AC voltage switch

Not all fixtures have a voltage select switch.Please be sue to connect to the proer voltage.

1.4 Safety instructions

Pleese read these instructions careflly, it includes important information about the installation, usage and mantenance 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 connectiong 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 there are no flammable materials close to the unit while opearating.
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 poer source before servicing or replacing fuse and be sure to repalce with same fuse size and type.
Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its heda. Use its carrying handles.
Maximum ambient temperature (Ta) is 104℉(40℃). 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. Plesse contact the nearest authorized technical assistance center. Always use the same type spare parts.
Don't connect the device to a dimmer pack.
Make sure the power cord is never crimped or damaged.
Never disconnect the power cord by pulling or gugging on the cord.
Avoid direct eye exposure to the light source while it is on.

2. Introduction
2.1 Features
Control features
8 or 13-channel DMX-512
Pan :540? tilt:270?
RGB color mixing
Gobo wheel :9 gobos +open,gobo whell spin effect
Variable electronic strobe
Variable electronic dimmer(0-100%)
Vector speed channel for pan/tilt, RGB color mixing and color macros
Built-in movement macros via master/slave or DMX
Pan/tilt invert option
Fan cooled
Optional controllers
Easy controller
DMX channel summary
-13 channel mode for spot

Channel	Function
1	Pan
2	Tilt
3	Pan fine
4	Tilt fine
5	Vector speed (pan/tilt)

6	Open/strobe
7	Red
8	Green
9	Blue
10	Color macros
11	Color changing
12	Auto-operation or sound activated
13	Gobo

----8 channel mode fo spot

Channel	Function
1	Pan
2	Tilt
3	Vector speed(pan/tilt)
4	Open /strobe
5	Dimmer
6	Color macros
7	Auto-color
8	Gobo

2.2 Product overview

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 holde 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.

The fuse is located inside this compartment. Remove using a flat head screwdriver

3.2 Fixture linking

You will need a serial data link to run light shouw 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.

Important:fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 32 devices should be connected on one data link. Connectiong more than 32 fixtures on one seral data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance:500 meters(1640ft).
Mavimim recommended number of fixtures on a serial dqta link:32 fixtures.

Data cabling

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

3.3 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 datat reliably over long distances. The cable will have the following characterstics:
2-conductor twisted pair plus a shield.
maximum capacitance between conductors-30 pF/ft.
maximum capacitance between conductor and shield -55 pF/ft.
mavimum resistance of 20 ohms/1000ft.
nominal impedance 100-140 ohms.

3.4 Cable connectors

Cable must have a male XLR connector on one end and a female XLR connector on the other end.

CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop.and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.
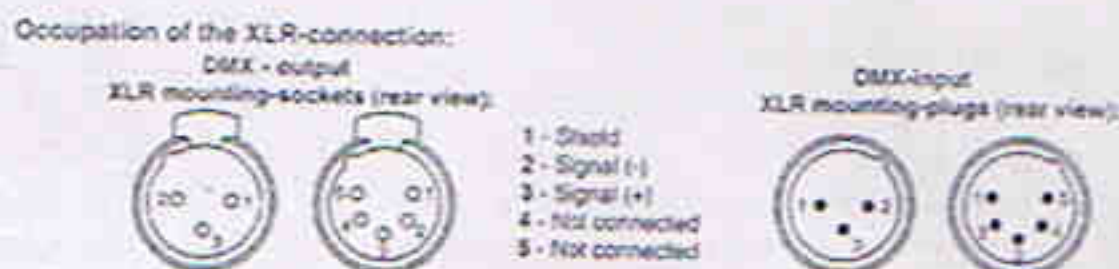
3.5 3-Pin to 5-Pin conversion chart

Note! If you use a controller with a 5 pin DMX output connetor. you will need to   use
a 5pin to 3 pinasapter
CHAUVET Model No:DMX5M. orDMX 5F
The chart below details a proper cable conversion:

3-Pin to 5-Pin conversion chart

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

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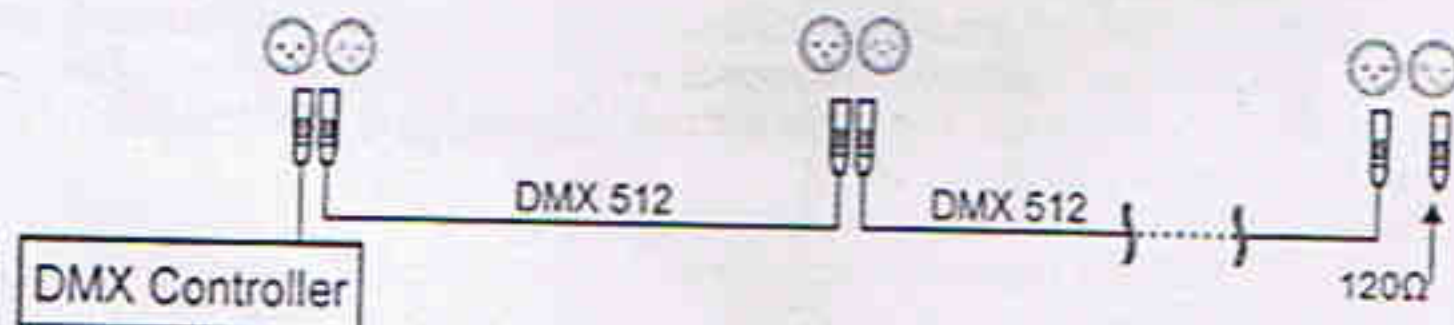5 - Not connected

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

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

DMX Data Cables

Order code	Description	
DMX1.5	DMX Cable	1.5m.4.9 ft
DMX4.5	DMX Cable	4.5/14ft
DMX10	DMX Cable	10m/32.8 ft

DMX 512   DMX 512

DMX Controller   120Ω

3.7 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.

3.8 Mounting
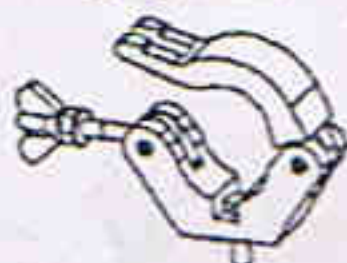
DMX connector configuration

Resistance 120 ohm 1/4w between pin 2 (DMX -) and pin 3 (DMX +) of the last fixture.

OUTPUT

Termination reduces signal errors. To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

3.8.1 orientation

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

3.8.2 Rigging

Hanging Clamp

Note!
Clamp is sold separately.

It is important never to obstruct the fan or vents pathway.Mount the fixture using,a suitable"C" or "o" type clamp.Adjust the angle of the fixture by loosening both knobs and tilting the fixture.After finding the desired position,retighten both knobs.

When selecting installation location, take into consideration lamp replacement access and routine maintenance.
Safety cables must always be uesd.
Never mount in places where the fixture will be exposed to rain,high humidity,extreme temperature changes or restricted ventilation.

4. Operating instructions

4.1 Navigating the control panel

Access control panel functions using the four panel bottons llcated directly underneathe the LCD Display.

Button	Function
<MODE/ESC>	Used to access the menu or return to a previous menu option.
<DOWN>	Scrolls through menu options in descending order.
<UP>	Scrolls through menu options in ascending order.

MODE/ESC   UP   DOWN   ENTER

<ENTER>	Used to select and store the current menu or option within a menu.

The control panel LED display shows the menu items you select from the menu map on page#9. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press<ENTER>.

Press the <MENU> button repeatedly until you reach the desired menu function. Use the <UP> and <DOWN> buttons to navigate the menu options. Press the <ENTER> button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the <MENU> button.

4.2 Menu map

A001 (Address code of setting)*
```
|_____A001
|
|          ......
|_____A512
```
Dnpr(通道切换)
```
|_____nod1(13 channels)
|_____nod2(8 channels)
```
Test(运行模式)
```
|_____Aod1
|                    |_____Auto
|_____nAst(Master/slave mode)
                     |_____ON(Master/slave on)
                     |_____OFF(Master/slave off)
```
Audi(Sound active)
```
|_____ON(Sound active on)**
|_____OFF(Sound active off)
```
rPAN(Pan)
```
|_____ON(Set pan to inverting)
|_____OFF(Set pan to non-inverting)
```
rtlt(tilt)
```
|_____ON(Set tilt to inverting)
|_____OFF(Set tilt to non-inverting)
```
rest(Reset)

Note：*default setting address code is A001, pan is positive circumrotate、tilt is positive circumrotate.

**When AUDI is ON, then to choose run mode.namely sound activated.Or itwillrun the built-in program.

4.3 User configurations

4.3.1 To set the pan to invertion or non-inverting
1. Press the Mode button untill it shows PAn
2. Use the Up/Down buttons to set to the desited incersion,press enter to confirm.

4.3.2 To set the tilt to invertion or non-inverting
1. Press the Mode button untill it shows rTilt .
2. Use the Up/Down buttons to set to the desired incersion,press enter to confirm.

4.3.3 To set the DMX channel configuration:
1. Press the Mode button untill the display shows 13CH or 8CH .
2. Press enter to confirm your selection.

4.3.4 To set sound-active
"ON" is sound activated, "OFF" is not sound activated,both of them auto-controlled by test mode.When you set up揾N? audio signal light will flash according to music when the test mode is working.

4.3.5 To reset the fixture
1. Press the Mode button untill the display shows rESt
2. Press enter to confirm your selection.

4.3.6 Master/slave mode(master sound,master auto)
When you want to master/slave mode,please set up DN.Pr. as "nod.1".
This mode will allow you to link up 32 units together without a controller.
1. Use standard DMX cables to daisy chain your until together via the DMX connector on the rear of the units.Proper performance it may be necessary to use a terminator at the last fixture.
2. Choose a unit to function as the Master.Select nAst depending upon which master mode your require. The master until must be the first until in line.Finally ,chain the units together using DMX cable.

4.3.7 DMX mode

This mode allows the until to be controlled by any universal DMX controller.If you are unfamiliar withe DMX.
The default mode for the fixture is DMX, which appears as A001   on the LED readout.

4.4 DMX channel values(13 channel for spot)

Channel	Value	Function
1		Pan

	0-255	0-540
2	0-255	**Tilt** 0-270
3	0-255	**Pan Fine** 0-2.1
4	0-255	**Tilt Fine** 0-1.0
5	0-251 0-251 252-255	**Vector Speed** Normal-slow Pan/Tilt shutter lighting
6	0-1 2-100 101-199 200-207 208-217 218-255	**Open/Strobe** Closed strobe(slow-fast) strobe as random(slow-fast) Open Prolong reset open
7	0-225	**Red** 0-100%
8	0-225	**Green** 0-100%
9	0-225	**Blue** 0-100%
10	0-72 3-6 7-11 12-16 17-21 22-26 27-31 32-36 37-49 50-255	**Color Macros** Red Green Blue Red Red Green Green Green Blue Blue Blue Red Red Green Blue Red Green Blue Red Green Blue color changing
11	0-5 6-130 131-255	**Color changing** No All colors are changed to rainbow（slow—fast) 7 color changed to rainbow（slow—fast)
12	0-127 128-191 192-249 250-255	自动或声控 No function **Auto or sound actived** No Sound activated
13	0-7 8-15 16-23 24-31 32-39 40-47 48-55 56-63 64-71 72-85 86-100 99-111	**Gobo** Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 1 shake(slow-fast)- Gobo 2 shake(slow-fast)

112-124	Gobo 3 shake(slow-fast)	
125-137	Gobo 4 shake(slow-fast)	
138-150	Gobo 5 shake(slow-fast)	
151-163	Gobo 6 shake(slow-fast)	
164-176	Gobo 7 shake(slow-fast)	
177-189	Gobo 8 shake(slow-fast)	
190-203	Gobo 9 shake(slow-fast)	
204-299	Positive rainbow effect with increasing speed(slow-fast)	
230-255	Negative rainbow effect with increasing speed(slow-fast)	

4.5 DMX channel values(8 channel for spot)

Channel	Value	Function
1	0-255	Pan 0-540
2	0-255	Tilt 0-270
3	0-255	Vector Speed Normal to slow
4	0-19 20-39 40-249 250-255	Open/Strobe Closed Open strobe(slow to fast) open
5	0-255	Dimmer 0-100%
6	0-4 5-9 10-14 15-19 20-24 25-29 30-24 35-49 50-255	Color macros Red Red green Green Green blue Blue Blue red Red green blue Red green blue Red green blue 渐变
7	0-5 6-130 131-255	Color changing No All colors are changed to rainbow（slow—fast) 7 color changed to rainbow（slow—fast)
8	0-7 8-15 16-23 24-31 32-39 40-47 48-55 56-63 64-71 72-85 86-100 99-111 112-124 125-137	Gobo Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 1 shake(slow-fast)- Gobo 2 shake(slow-fast) Gobo 3 shake(slow-fast) Gobo 4 shake(slow-fast)

138-150	Gobo 5 shake(slow-fast)
151-163	Gobo 6 shake(slow-fast)
164-176	Gobo 7 shake(slow-fast)
177-189	Gobo 8 shake(slow-fast)
190-203	Gobo 9 shake(slow-fast)
204-299	Positive rainbow effect with increasing speed(slow-fast)
230-255	Negative rainbow effect with increasing speed(slow-fast)

5. Technical specification

Voltage	120V 60HZ AC OR 230V 50HZ
Fuse	2A 250V
Lamp resource	RGB LED , life is 50,000 hours
Pan	540? 16bit fine
Tilt	270? 16bit fine
Beam Angle	13☐
Illuminance at 1M.	100fc(1,076 lux)
Tiptop environment temperature	104度(40度)
Date input/output	3pin XLR-connection、anide socket
Outside size	173 ? 73? 49mm(L宽 高)
N.W	3.8kg