



User Manual

Model: LM80

Big Dipper Laser Science And Technology Co., Ltd REV;1.01

Please read this manual carefully before operating

LM80 User Manual

Attention

1. Do not look directly at the bulb while the light is on Follow the instructions. Do not disassemble the unit by yourself. Please contact the skilled people in the event of a operating problem. **3.** The unit shall be installed by professionals **4.** Place the unit away from the strobe light 5. Keep the unit dry. Do not expose the unit to rain, moisture or dust. Waterproof protection is needed when the unit is exposed outdoors 6. Do not touch the unit and pull the power cable with wet hand 7. Do not turn on or off the unit frequently. Otherwise, the service time will be affected. Besides, keeping working for a long time should be avoided. **8.** Fixed installation to prevent the unit from strong vibration or shock. **9.** Prevent foreign objects from entering the unit to avoid malfunction. 10. Keep the distance between the unit and the objects in the lighting 50CM at least. **11.** Do not connect the power cable or turn on the light before installation. 12. Make sure the plug has been wired up properly before being powered on. **13.** Use the original shake-proof packing for re-transportation.

14. This symbol indicates separate collection of electronics and electronic equipment

The Company reserves the right to interpret the above terms.

Fixture Cleaning

The cleaning must be carried out periodically to optimize light Cleaning frequency

depends on the environment in which the fixture operates: damp, smoky or particularly dirty

surrounding can cause greater accumulation of dirt on the unit's optics.

- *Clean with soft cloth using normal glass cleaning fluid.
- *Always dry the parts carefully.
- *Clean the external optics at least every 30 days.

Declare

The unit is with good performance and complete package when it is delivered. The end-user of this unit should follow all the above instructions and warnings. Any damage caused by misuse, malfunction and problem caused by ignoring the instructions are not included in the repair guarantees of the manufacturer or dealers.

Inspection

In order to use the product securely and properly, please read the manual before using and follow the instructions strictly to prevent personal safety trouble and product damage caused by misuse. Take care of the product, check the possibility of the product damage caused by transportation and check all the listed items are present upon receipt of the product.

1 x User manual

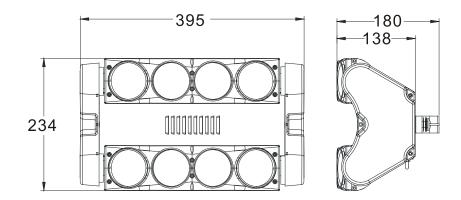
1 x Spider Light 1 x Power cable

Warning :

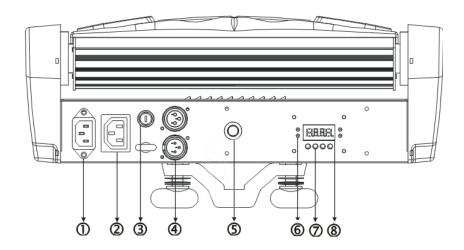
Do not touch the lamp during operation to prevent burns.

Do not operate the unit without lamp shade or with lamp case damage.

How To Set The Unit Dimension



Operationpanel



1. POWER IN: Used to connect to supply power;

2. POWER OUT: Used to connect to supply power to the next unit;
3. Fuse (T 3.15A): Used to protect the unit from the damage of the over - current;

4. DMX IN/OUT: For DM X512 links, use 3 -p in XLR plug cable to

link the unit together

5. Microphone: Used to receive music for the sound activation;

6. LED:

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode
SOUND	Flashing	Sound activation

7. If single machine works, please make the

MENU	To select the programming functions		
▼ DOWN	To go backward in the selected functions		
▲ UP	To go forward in the selected functions		
ENTER	To confirm the selected functions		

8. Function Display: Used to show the various menus and the selected functions.

Troubleshooting

Following are a few common problems that may occur during operation. Here are some

suggestions for easy troubleshooting:

A. The fixture does not work, no light

- 1. Check the connection of power and main fuse.
- 2. Measure the mains voltage on the main connector.
- 3. Check the power LED

B. Not responding to DMX controller

- 1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
- 2. If the DMX LED is on and no response to the channel, check the address settings and DMX

polarity.

- 3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the fixture or the previous one.
- 4. Try to use another DMX controller.
- 5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

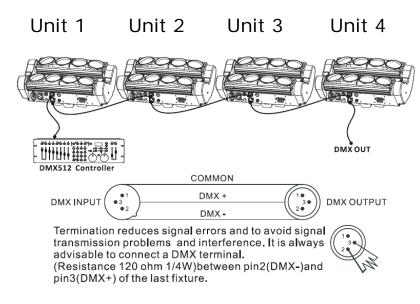
C. No response to the sound

- 1. Make sure the fixture does not receive DMX signal.
- 2. Check microphone to see if it is good by tapping the microphone.

D. One of the channels is not working well

- 1. The stepper motor might be damaged or the cable connected to the PCB is broken.
- 2. The motor's drive IC on the PCB might be out of condition.

DMX Connection



1. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors.

Solder a 120 - ohm 1/4W resistor between pin 2 (DMX -) and pin 3 (DMX+) into a 3 - pin XLR - plug and plug it in the DMX - output of the last fixture.

- Connect the fixture together in a "daisy chain" by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a "Y" cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system
- 3. The DMX output and input connectors are pass through to maintain the DMX circuit when one of the units' power is disconnected.
- 4. Each lighting fixture needs to have an address set to receive the data sent by the controller.

The address num ber is between 0 - 511 (usually 0 & 1 are equal to 1).

5. 3 pin XLR connectors are more popular than 5 pins XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive

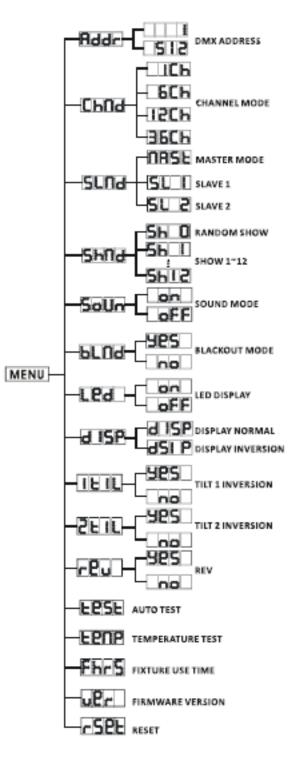
signal (+)

Technical Specifications

Model Parameters	LM80
LED source	8 x 8W RGBW LEDs
Power supply	AC 100~240V, 50/60Hz
Rated power	100W
Control mode	DMX/Mast-slave/ Sound/ Auto
DMX Channel	1/6/12 /36 :
Max link Qty	120V/60Hz: 6pcs; 230V/50Hz: 10pcs
Dimension	395 x 234 x 180mm
N.G./G.W.	5.3/6.3KGS
Standard configuration	Power cable x1, handle x1, screw x2, use manuelx1
Effect	Great built - in programs under master/slave operation triggered by music. Electronic dimming and various strobe effects. unique design, 2 movable LED bars, great multi-beam effects and perfect for bar, pub, club, disco, mobile DJ, private parties and more operating environments.

Main Function

To select any functions, press the MENU button until the required function is showing on the display. Select the function by pressing the ENTER button and the display will blink. Use the DOWN and UP button to change the mode. Once the required mode has been selected, press the ENTER button to setup to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode. The main functions are shown below:



36 Channel Mode							
Ch13	Ch14	Ch15	Ch16	Ch17	•		
RED LED3	GREEN LED 3	BLUE LED 3	WHITE LED 3	RED LED 4	•		
255 [100%		255 - 100%			• •		
Ch31	Ch32	Ch33	Ch34	Ch35	Ch36		
BLUE LED7	WHITE LED 7	RED LED B	GREEN LED 8	BLUE LED 8	WHITE LED 8		
255 [100%		255 100%		255 100%	255 100%		

36 Channel Mode

		36 Char	nnel Mode					
Ch1	Ch2	Ch3	Ch4		Ch5		Ch6	
TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE		RED LED 1		GREEN LED 1	
255 - 150	255 Г 150	255 - 100%	248-255 Open 240-247 Stroce 232-239 Open 190-231 Fast open 180-189 Open 140-181 Fast close 132-139 Open 908-131 # # #		255 F 100			100%
⁰ 60.	0 60.	₀L ₀‰	000-007 Open		٥٢ ٥%	6	0	0%
Ch7	Ch8	Ch9	Ch10	С	h11		Ch1	2
BLUE	WHITE	RED	GREEN		LUE		WHI	
LED1	255 0 100%	255 100%	LED 2		- 0%			

Rddr DMX 512 ADDRESS

To select the **Bobb**, press the ENTER button to show the DMX ADDRESS on the display. Use the DOWN/UP button to adjust the address from 1 to 512. Once the address has been selected, press

the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the

menu mode.

CHANNEL MODE

To select the **Child**, press the ENTER button to show the DMX CHANNEL MODE on the display. Use the DOWN/UP button to select the 1, 6, 12, 36 channel modes. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

SLAG SLAVE MODE

To select the **SLND**, press the ENTER button to show the SLAVE MODE on the display. Use the DOWN/UP button to select the **NRSE** (MASTER), **SLI**(SLAVE 1),**SL2** (SLAVE 2) modes. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

Shind SHOW MODE

To select the **Sour**, press the ENTER button to show the SHOW MODE on the display. Use the DOWN/UP button to select the **On** (Random show), (Show 1) or ... or **OFF** (Show 12) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

Solin SOUND MODE

To select the **Soun**, press the ENTER button to show the SOUND MODE on the display. Use the DOWN/UP button to select the **on** (sound on) or **oFF** (sound off) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

BLACKOUT MODE

To select the **bL nd**, press the ENTER button to show the BALCKOUT MODE on the display. Use the DOWN/UP button to select the **BES** (blackout) or **no** (normal) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

LED DISPLAY

To select the LED, press the ENTER button to show the LED DISPLAY on the display. Use the DOWN/UP button to select the lon (LED on) or lof (LED off) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

DISPLAY INVERSE

To select the **d ISP**, press the ENTER button to show the DISPLAY on the display. Use the DOWN/UP button to select the **d ISP** (normal) or **d S I P** (inversion), press ENTER button to setup. Back to the functions without any change press MENU button.

DMX512 Channel 1 / 6 / 12 Channel mode

1 Channel Mode	6 Channel Mode							
Ch 1	Ch 1 Ch2		Ch3	Ch4	Ch5	Ch6		
SHOW	TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE	CHASE	CHASE SPEE		
248-255 Random Show 228-247 Show 12 208-227 Show 11 188-207 Show 10 168-187 Show 9 148-167 Show 8 128-147 Show 7 108-127 Show 6 088-107 Show 5 068-087 Show 4 048-067 Show 3 028-047 Show 2 008-027 Show 1 000-007 Elackout	0 60°	255 1 50 [.]	255	248-255 Open 240-247 Strobe 232-239 Open 190-231 Fast open 182-189 Open 140-181 Strok open 132-139 Open 132-139 Open 008-131 ### 000-007 Open	248-255 Full On 233-247 Chase 16 218-252 Chase 15 203-217 Chase 14 173-187 Chase 14 188-202 Chase 13 173-187 Chase 10 128-172 Chase 1 143-157 Chase 10 128-142 Chase 9 113-127 Chase 6 098-112 Chase 6 098-112 Chase 6 068-082 Chase 5 053-067 Chase 4 038-052 Chase 3 023-037 Chase 1 000-007 Blackout	255 Fast		

12 Channel Mode							
Ch1	Ch2	Ch3	Ch4	Ch5-12			
TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE	RED GREEN LED 1 ~ 8			
255 1 50 ⁻	255 1 50 -	255 1 00%	248-255 Open 240-247 Strope 232-239 Open 190-231 Fast open 180-231 Slow close 182-189 Open 140-181 Slow open Fast close Open 132-139 Open 008-131 # # # 000-007 Open	248-255 Color Change by sound 128-247 Color Change slow to fast 120-127 red-green+blue+white 112-119 green+blue+white 104-111 red+blue+white 096-103 red+green+white 088-095 red+green+blue 088-095 red+green+blue 064-071 green+blue 056-063 red+white 048-055 red+blue 048-055 red+blue 048-055 red+blue 048-051 blue 016-023 green 008-015 red 000-007 open			

DMX Controller

Using a universal DMX controller to control the units, you have to set DMX address from 1 to $512\,$

channel so that the units can receive DMX signal.

Press the MENU button up to when the Boder is showing on the display. Press ENTER button and

the display will blink. Use DOWN and UP button to change the DMX512 address. Once the address

has been selected, press and keep $\ensuremath{\mathsf{ENTER}}$ button pressed up to when the display stops blinking or

storing automatically 7 seconds later. To go back to the functions without any change press the

MENU button again.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

1 CHANNEL MODE:	5	3	4
6 CHANNEL MODE:		13	9
12 CHANNEL MODE:	B	25	37
36 CHANNEL MODE:	31	- 13	109



To select the ILIL , press the ENTER button to show the TILT 1 INVERSE on the display. Use the DOWN/UP button to select the **UPS** (tilt 1 inversion) or

(normal) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

2EIL TILT 2 INVERSE

To select the **ZEIL**, press the ENTER button to show the TILT 2 INVERSE on the display. Use the DOWN/UP button to select the **BES** (tilt 2 inversion) or

(normal) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

To select the **Pu**, press the ENTER button to show the REV on the display. Use the DOWN/UP button to select the **BPS** (the projector lenses will light up right to left) or **Inc** (normal, the projector lenses will light up right to left) mode. Once the mode has been selected, press the ENTER button to setup, to go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

LESE AUTO TEST

To select the **EPSE**, press the ENTER button to show the TEST on the display and the unit will run a self-test. To go back to the functions without any changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.

FLCS FIXTURE USE HOURS

To select the $\ensuremath{\mathsf{FhrS}}$, press the ENTER button to show the FIXTURE USE HOURS on the display and

the display will show the number of working hours of the unit . To go back to the functions

without any changes press the MENU button again. Hold and press the MENU button for one

second to exit the menu mode.



SOFTWARE VERSION

To select the error of the ENTER button to show the SOFTWARE VERSION on the display and

the display will show the version of software of the unit . To go back to the functions without any

changes press the MENU button again. Hold and press the MENU button for one second to exit the menu mode.



To select the **FSEE**, press the ENTER button to show the RESET on the display. Press the ENTER

button and all channels of the unit will return to their standard position.

How to Control the Unit

You can operate the unit in three ways:

1. By master/slave built-in preprogram function

2. By easy controller

3. By DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will

be affected at once. Each time you turn the unit on, it will show " **EBBE**" on the display. After

that the unit will be ready to receive DMX signal or run the

built in programs.

Master/Slave Built In Preprogrammed

Function

By linking the units in master/slave connection, the first unit will control the other units to give an

automatic, sound activated, synchronized light show. This function is good when you want an

instant show. You have to set the first unit in master mode and select **5h 0** (random

show), 5h (show 1) or ... or (5h 12 show 12). Its DMX input jack will have nothing plugged

into it, and its master LED will be constantly on and sound LED will flash to the music. The other

units will have to select 5111 (normal) or 5122 (2 light show) mode, Their DMX cables plugged

into the DMX input jacks (daisy chain) and the slave LED lights will be constantly on.

